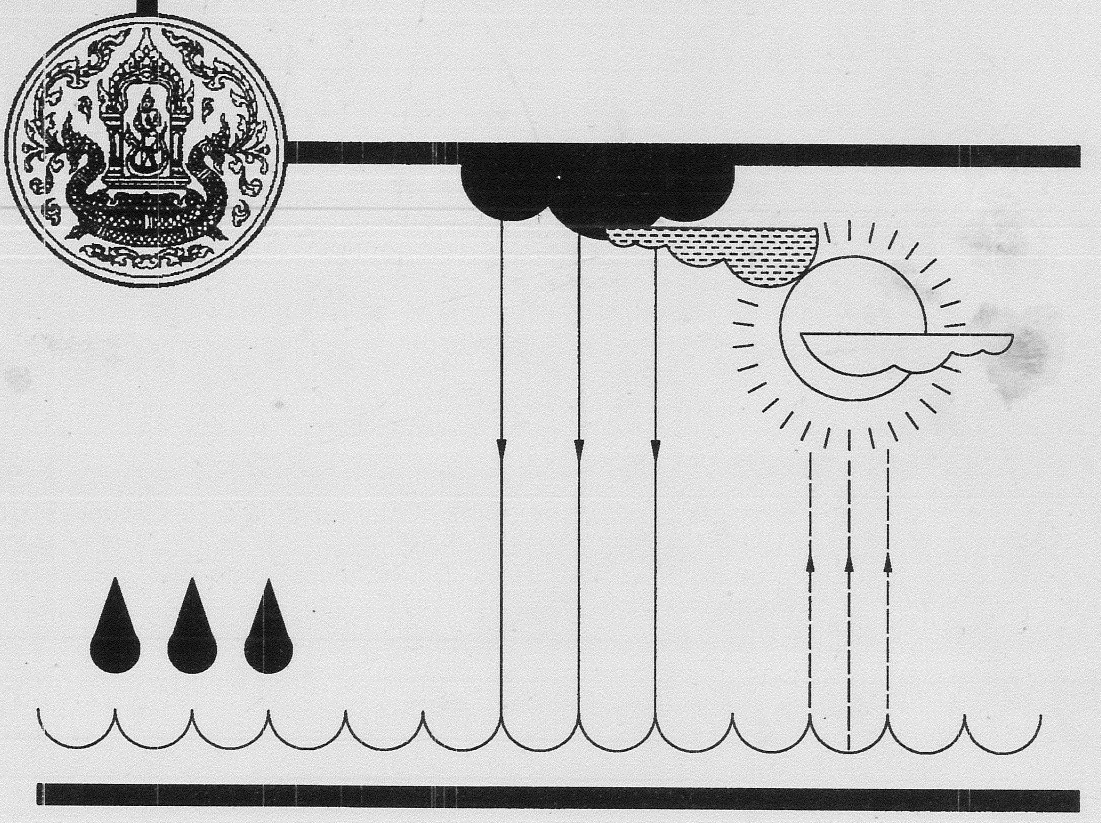
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WATER YEAR 2001

VOLUME 44



ROYAL IRRIGATION DEPARTMENT

HYDROLOGY DIVISION

OFFICE OF HYDROLOGY AND WATER MANAGEMENT

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FOREWORD

The programme of Thailand Hydrological yearbook publication was initiated in 1966. The first issues was published in 1968 as volume 8. The first volume comprise of stage and discharge data water year 1912 –1937. Up to now 43 volume of hydrological yearbook presenting stream flow data of main and tributary stream all over country had been published.

This Volume which is forty – four (44) issues of the series and CD Version for distribution was prepared by the Hydrological Information and Forceast Group.

Hydrology Division

October 2004

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The editorial staff of this hydrological yearbook publication feels particularly indebted to Mr. Boonchob Kanchanalak, former senior engineer hydrologist of the Royal Irrigation Department, Who had initiated and directed the editing work of yearbook publication in 1966. He made a great attempt in setting up procedure for yearbook publication and adopting engineering standard, method and steps for implementation upon which the further publication of the series will be based.

Special Thanks are conveyed to the Budget Bureau, Office of the Prime Minister, who always renders great support to this work, also others who gave valuable advice in improving the work standard are kindly pleased to accept our sincere thanks.

Thank to Mr. Charoon Pojsoontorn, Director, Office of Hydrology and Water Management, Mr.Rangsan Sirayayon, Director, Hydrology Division and Mr.Thada Sukhabunnaphan, Director of Hydrology and Water Management for Upper Northern Region, for the initiative and encourage of Hydrology Data Processing and also for the valuable advice.

Also may we express our sincere wish to Hydrological Information and Forceast Group for the Complete issue of Thailand Hydrological yearbook Volume 44.

Hydrology Division

Office of Hydrology and Water Management

October 2004

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ILLUSTRATION OF STREAM GAGING ACTIVITIES

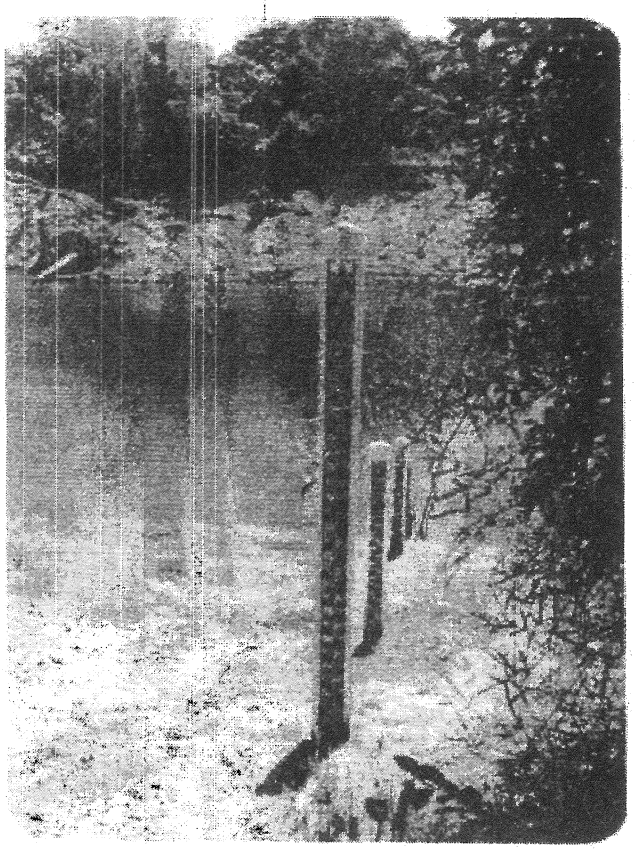


Fig. 1 Typical vertical staff gage

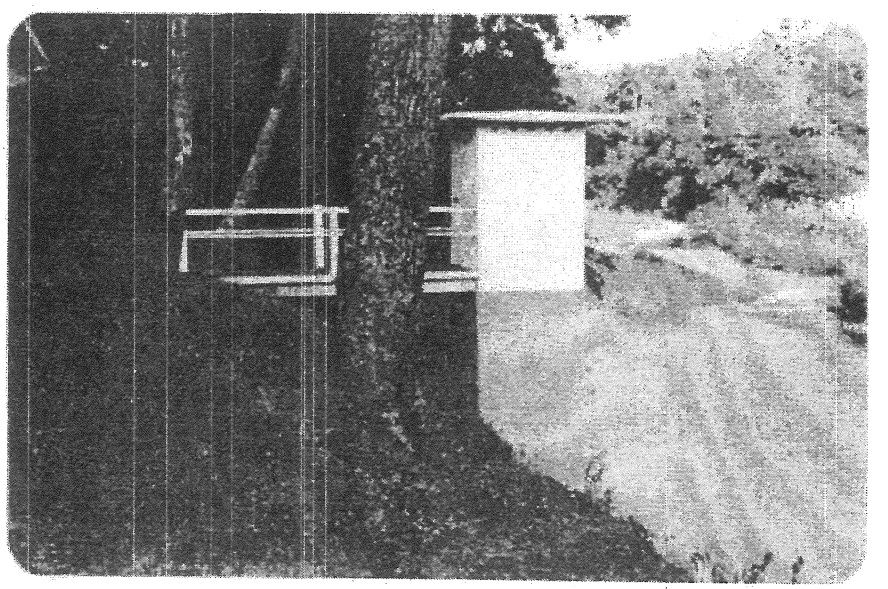
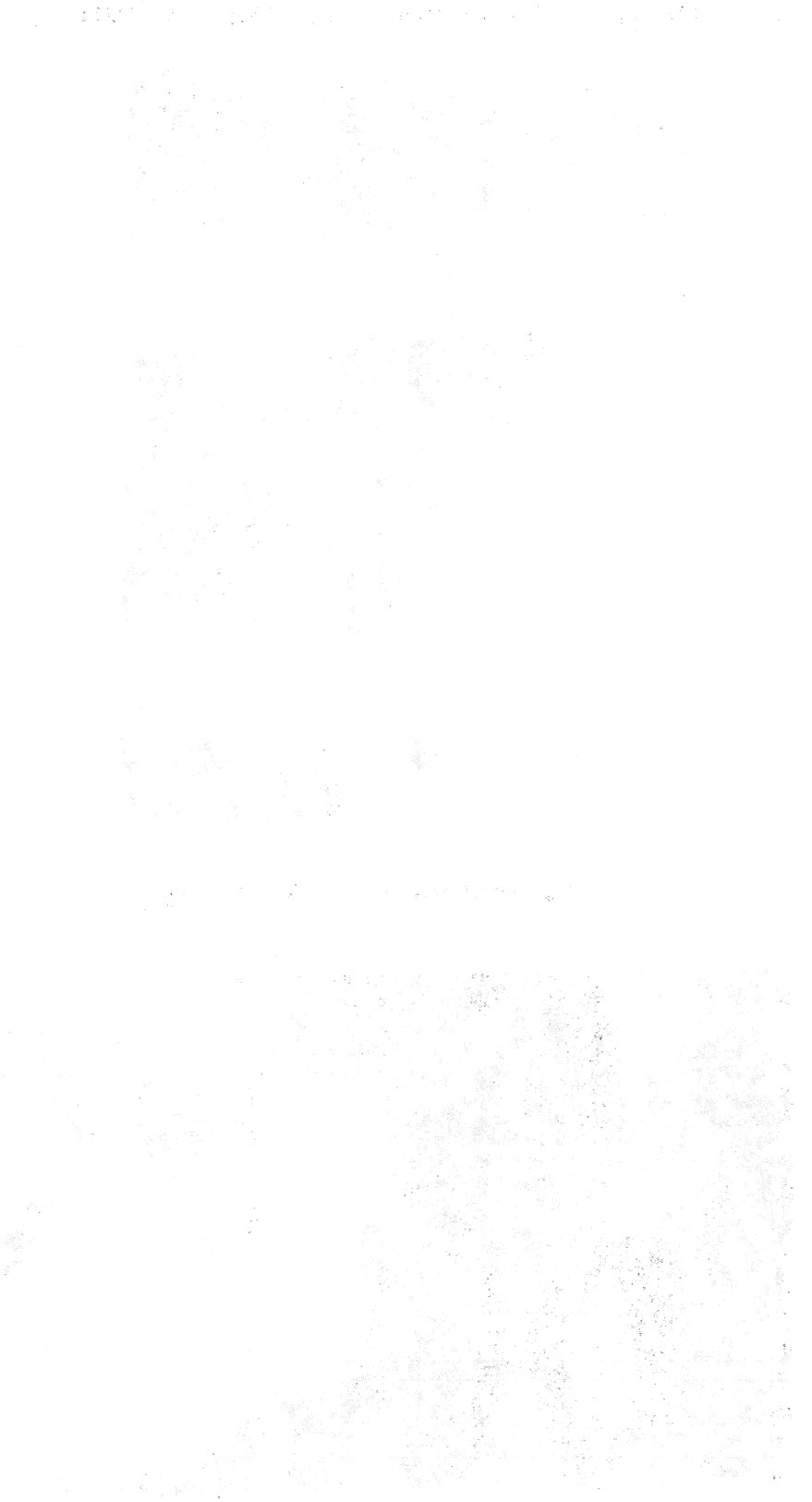
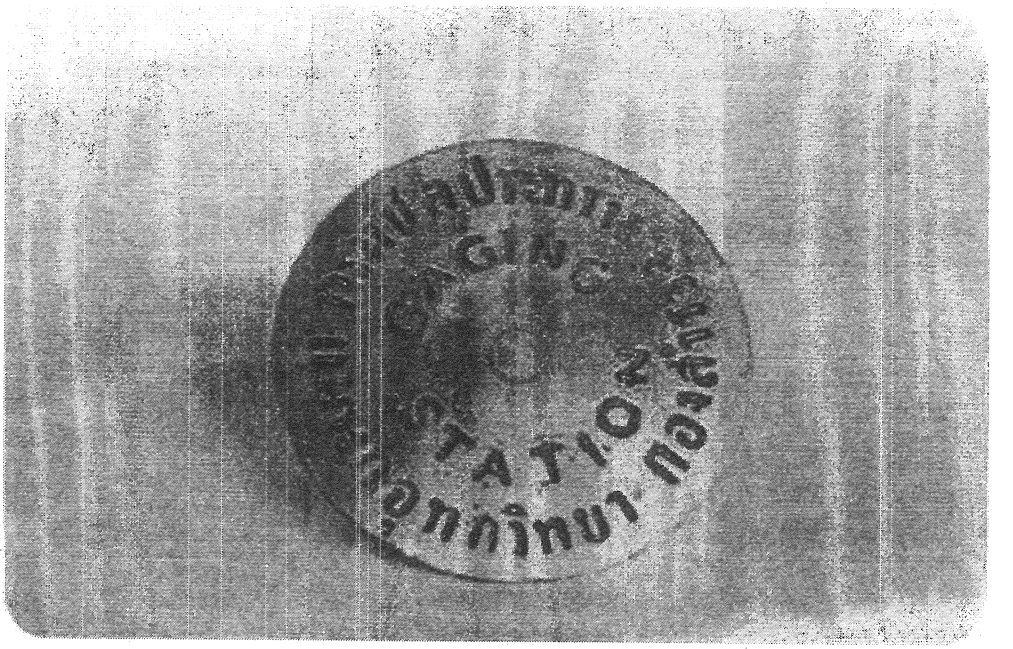


Fig. 2 Typical shelter for water level recorder (Float Type)





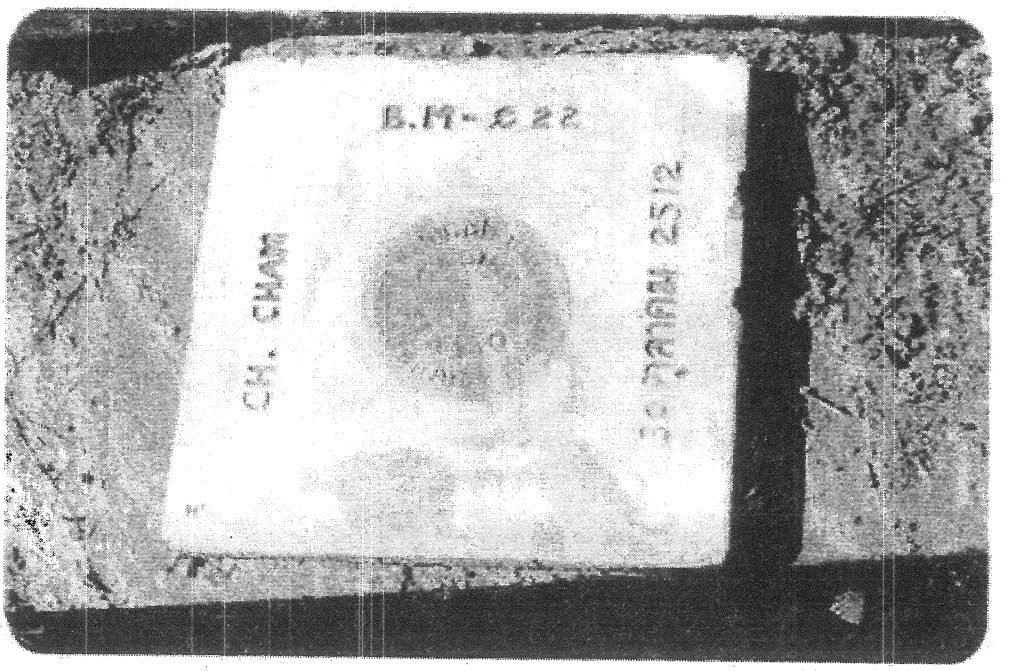
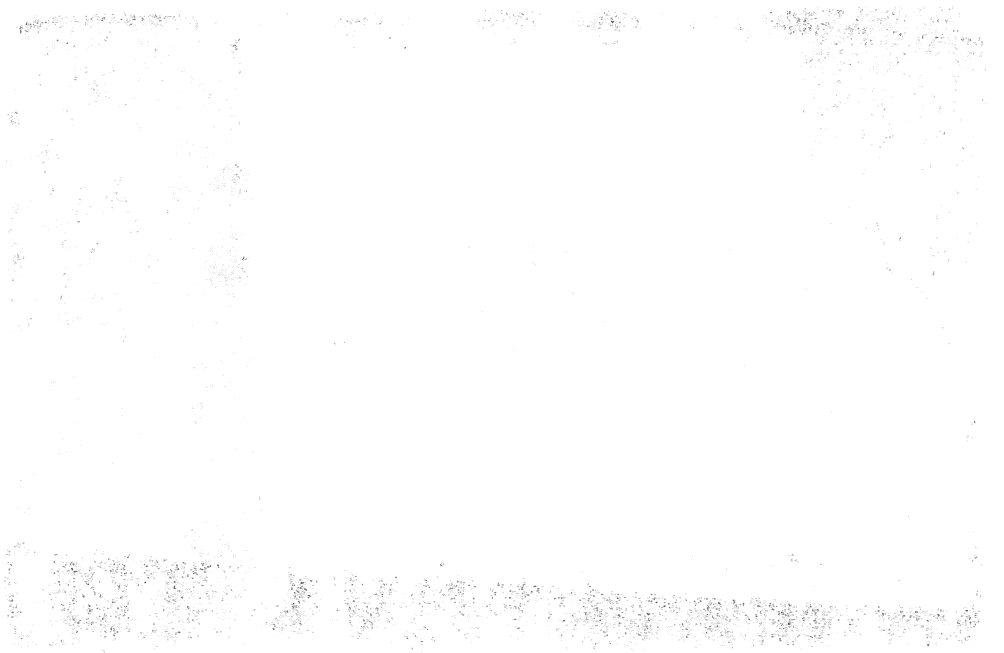


Fig. 3 Standard bench mark





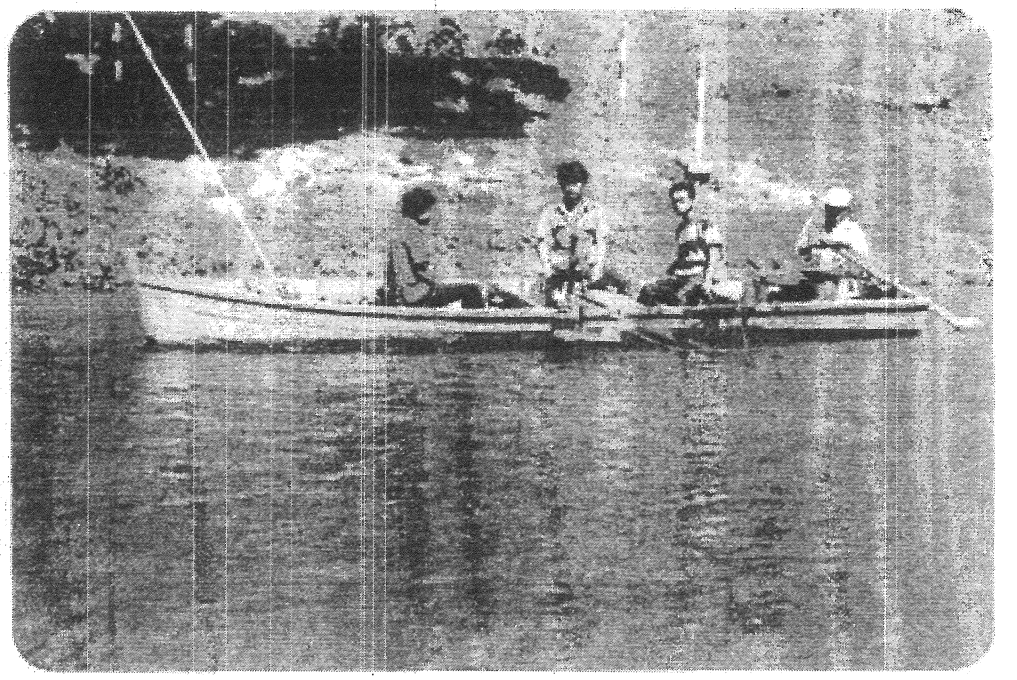


Fig. 4 Close - up of rating operation

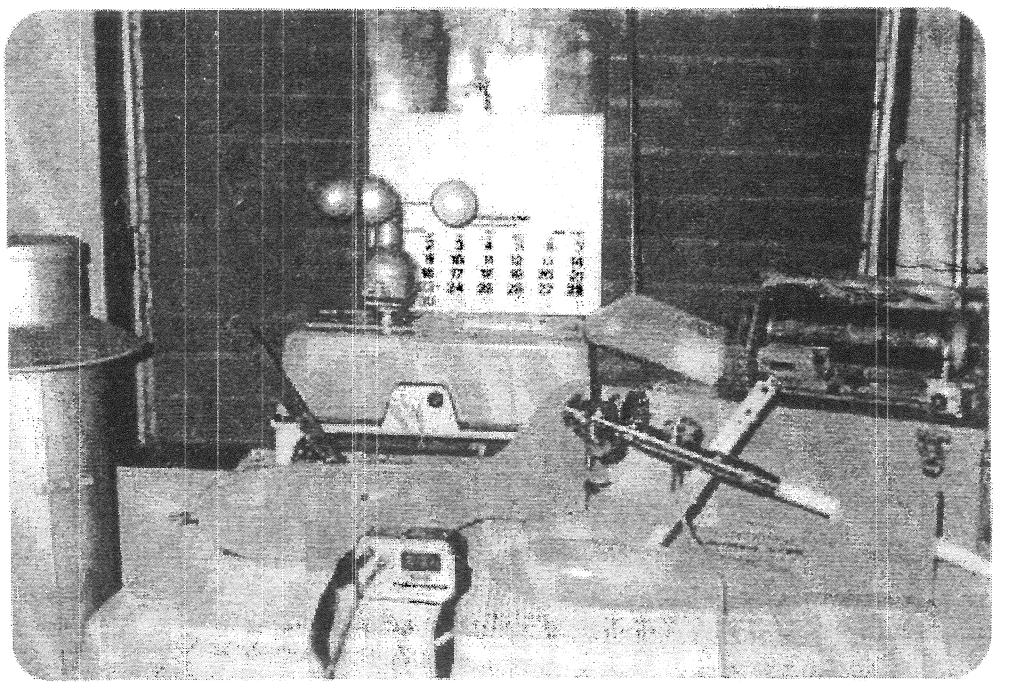
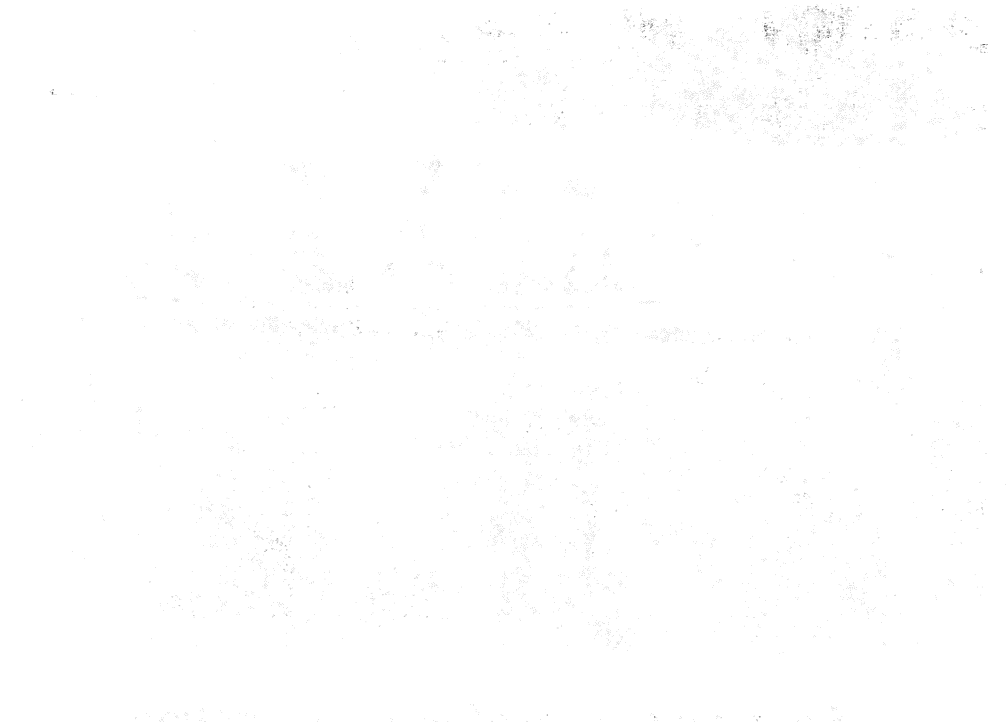


Fig. 5 Standard hydrologic equipment





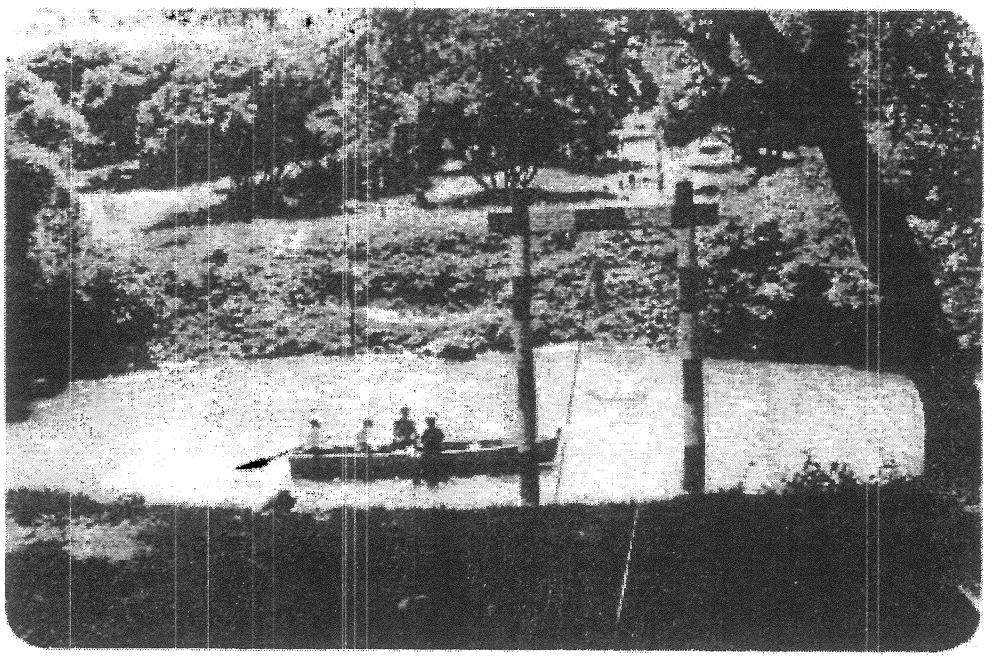


Fig. 6 Measuring line



Fig. 7 Camp for hydrological station





HYDROLOGICAL YEAR BOOK PUBLICATION

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

Introduction

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

Definition of terms and abbreviations

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Order of listing of gauging data

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

Series of yearbook publications

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

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

Volume	Water Years	No. of station – years	Date of Issuance
34	1991	227	July 1993
35	1992	220	May 1994
36	1993	228	April 1995
37	1994	224	August 1996
38	1995	232	July 1997
39	1996	244	August 1998
40	1997	269	August 1999
41	1998	258	August 2000
42	1999		

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

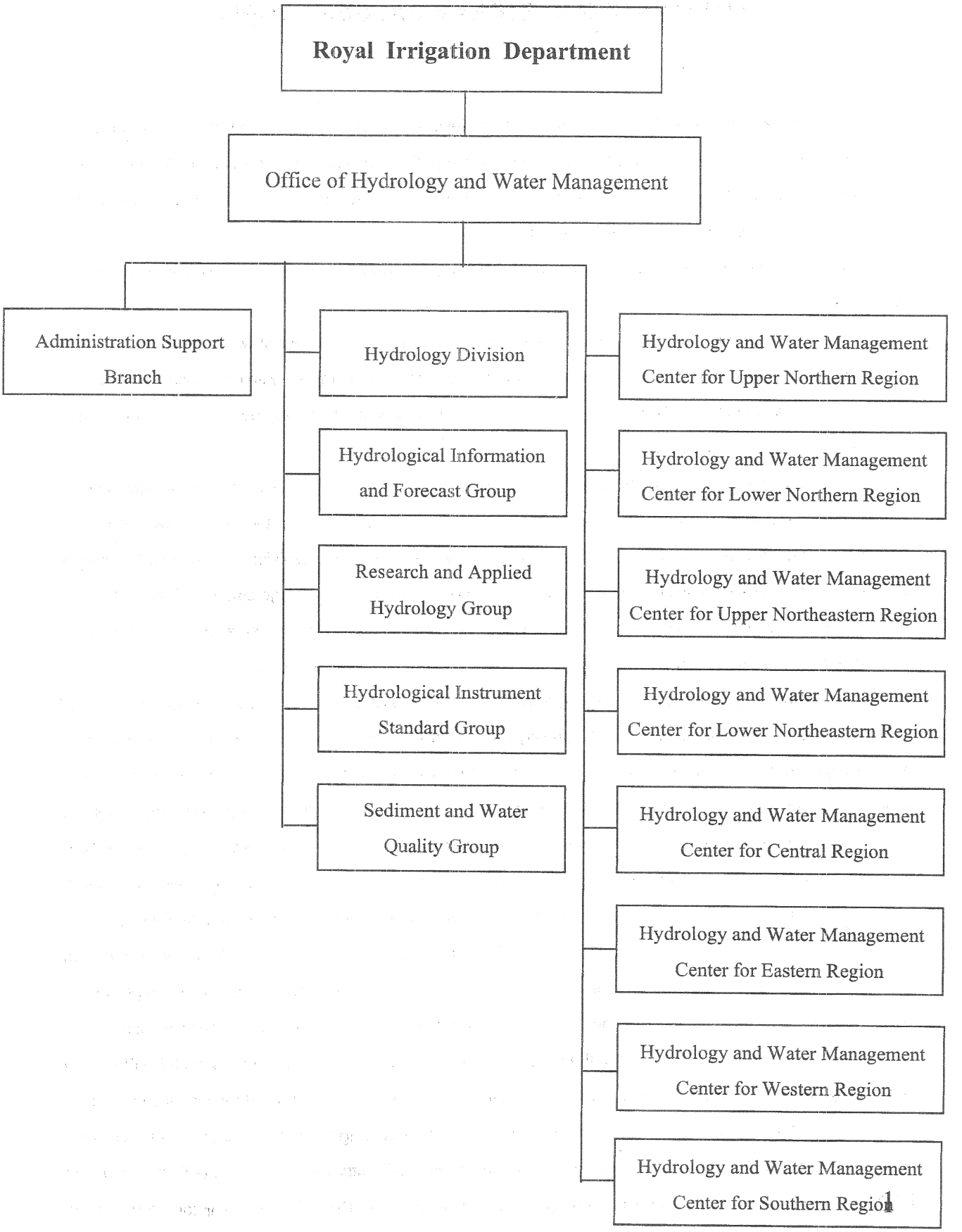
The Royal Irrigation Department (RID) has developed data system which include computerization of storage, Processing and retrieval of rainfall data since 1969. During the stream flow data system was being developed at RID in 1976, the National Economic and Social Development Board has made in agreement 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 Hydrology and Water Management
Administration Support Branch
Hydrology Division
Hydrological Information and Forecast Group
Research and Applied Hydrology Group
Hydrological Instrument Standard Group
Sediment and Water Quality Group
Hydrology and Water Management Center for Upper Northern Region
Hydrology and Water Management Center for Lower Northern Region
Hydrology and Water Management Center for Upper Northeastern Region
Hydrology and Water Management Center for Lower Northeastern Region
Hydrology and Water Management Center for Central Region
Hydrology and Water Management Center for Eastern Region
Hydrology and Water Management Center for Western Region
Hydrology and Water Management Center for Southern Region

PARTICIPATION IN STREAM GAUGING WORKS

* * * * * * *

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

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

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

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

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

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

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

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

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

HYDROLOGICAL YEAR BOOK PUBLICATION

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

Introduction

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

Definition of terms and abbreviations

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

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

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

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

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

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

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

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

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 2001

WATER YEAR : 2001

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 - **Amphoe** Mueang **Changwat** Chiang Mai

Drainage Area 6,355 sq.km.

Type of Gage Water - stage recorder

Zero Gage at Bottom +300.500 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank near automatic gage building.

Elevation +305.310 m. (M.S.L.)

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 Float 1936 - 1938

Rated by Current Meter 1954 - 1960 , 1967 to date.

Stability of Channel Regimes Stable.

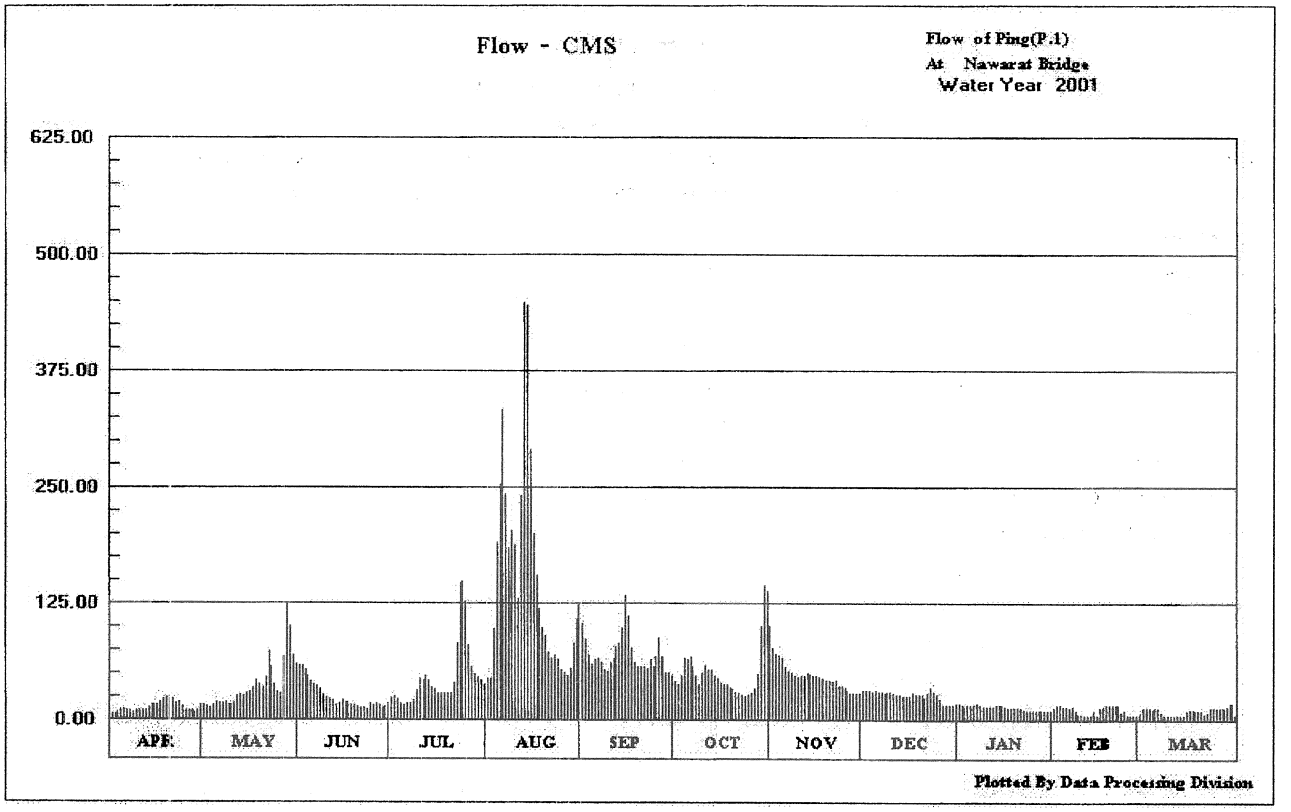
Overbank Flow Conditions No overbank flow

General Description Records good. Flow regulated by Mae Ngat Dam and Mae Taeng Weir above gage site.
Phaya Kham weir situated about 2 Kilometers downstream form the gage site.
Stage-discharge relation defined by 46 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	301.70	301.80	302.14	301.89	302.04	302.45	302.02	302.43	301.95	301.82	301.77	301.69	
2	301.70	301.79	302.14	301.90	302.04	302.33	302.00	302.27	301.95	301.80	301.80	301.76	
3	301.71	301.76	302.11	301.86	302.41	302.22	302.07	302.23	301.95	301.79	301.80	301.77	
4	301.75	301.80	302.06	301.82	303.00	302.15	302.19	302.22	301.94	301.81	301.79	301.76	
5	301.75	301.83	302.02	301.81	303.37	302.18	302.18	302.19	301.95	301.81	301.78	301.75	
6	301.73	301.82	302.00	301.82	303.81	302.19	302.21	302.13	301.94	301.81	301.76	301.76	
7	301.73	301.82	301.99	301.82	303.31	302.16	302.14	302.10	301.94	301.82	301.78	301.76	
8	301.72	301.84	301.96	301.85	302.96	302.11	302.07	302.09	301.93	301.81	301.74	301.72	
9	301.74	301.81	301.91	301.95	303.08	302.10	302.00	302.06	301.94	301.79	301.69	301.65	
10	301.74	301.80	301.89	302.04	302.98	302.16	302.09	302.05	301.94	301.78	301.68	301.63	
11	301.73	301.82	301.87	302.03	302.62	302.19	302.14	302.06	301.92	301.79	301.67	301.62	
12	301.73	301.90	301.85	302.07	303.30	302.28	302.11	302.06	301.91	301.79	301.67	301.61	
13	301.77	301.91	301.81	302.03	304.42	302.30	302.11	302.09	301.91	301.80	301.67	301.60	
14	301.80	301.90	301.82	301.97	304.40	302.42	302.07	302.08	301.90	301.81	301.65	301.58	
15	301.80	301.93	301.85	301.96	303.58	302.64	302.04	302.07	301.90	301.80	301.67	301.62	
16	301.80	301.94	301.84	301.93	303.06	302.50	302.01	302.07	301.90	301.79	301.76	301.72	
17	301.83	301.98	301.84	301.92	302.77	302.27	302.00	302.05	301.92	301.77	301.79	301.75	
18	301.87	302.03	301.81	301.93	302.55	302.16	302.00	302.04	301.91	301.76	301.80	301.75	
19	301.88	302.00	301.80	301.92	302.42	302.13	301.98	302.03	301.91	301.76	301.81	301.74	
20	301.86	301.98	301.78	301.93	302.35	302.13	301.96	302.03	301.91	301.76	301.80	301.74	
21	301.86	302.05	301.76	302.01	302.24	302.13	301.94	302.02	301.88	301.76	301.80	301.74	
22	301.82	302.25	301.76	302.30	302.19	302.12	301.93	302.03	301.92	301.75	301.80	301.70	
23	301.83	302.13	301.75	302.72	302.22	302.18	301.91	301.99	301.97	301.74	301.71	301.71	
24	301.79	302.00	301.82	302.73	302.18	302.13	301.90	301.99	301.94	301.74	301.67	301.76	
25	301.74	301.94	301.81	302.60	302.11	302.20	301.91	301.97	301.91	301.73	301.66	301.77	
26	301.73	301.93	301.82	302.29	302.09	302.34	301.93	301.95	301.87	301.73	301.64	301.77	
27	301.74	302.21	301.80	302.13	302.06	302.20	301.96	301.93	301.81	301.73	301.61	301.77	
28	301.72	302.59	301.77	302.08	302.12	302.09	302.08	301.93	301.81	301.74	301.62	301.77	
29	301.74	302.43	301.78	302.05	302.30	302.09	302.43	301.93	301.81	301.74		301.79	
30	301.81	302.22	301.82	302.03	302.48	302.06	302.71	301.93	301.81	301.73		301.82	
31		302.15		302.00	302.58		302.67		301.82	301.74		301.82	
Mean	301.77	301.98	301.88	302.04	302.74	302.22	302.09	302.07	301.91	301.77	301.73	301.72	
Max	301.88	302.59	302.14	302.73	304.42	302.64	302.71	302.43	301.97	301.82	301.81	301.82	304.42
Min	301.70	301.76	301.75	301.81	302.04	302.06	301.90	301.93	301.81	301.73	301.61	301.58	301.58

Annual Max Momentary Gage Height 304.68 M (MSL), at 24.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 300.50 M (MSL), River Bed 300.16 M (MSL)
Left Bank Elevation 307.78 M (MSL)
Right Bank Elevation 307.65 M (MSL), Drainage Area 6355 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.80	17.20	59.80	26.29	45.30	105.50	42.40	102.50	33.40	19.22	14.68	8.37	
2	8.80	16.36	59.80	27.30	45.30	87.50	39.50	78.65	33.40	17.20	17.20	13.84	
3	9.64	13.84	55.45	23.26	99.50	71.40	49.65	72.85	33.40	16.36	17.20	14.68	
4	13.00	17.20	48.20	19.22	193.00	61.25	67.05	71.40	32.18	18.21	16.36	13.84	
5	13.00	20.23	42.40	18.21	255.60	65.60	65.60	67.05	33.40	18.21	15.52	13.00	
6	11.32	19.22	39.50	19.22	334.90	67.05	69.95	58.35	32.18	18.21	13.84	13.84	
7	11.32	19.22	38.28	19.22	244.80	62.70	59.80	54.00	32.18	19.22	15.52	13.84	
8	10.48	21.24	34.62	22.25	186.60	55.45	49.65	52.55	30.96	18.21	12.16	10.48	
9	12.16	18.21	28.52	33.40	205.80	54.00	39.50	48.20	32.18	16.36	8.37	6.65	
10	12.16	17.20	26.29	45.30	189.80	62.70	52.55	46.75	32.18	15.52	7.94	5.79	
11	11.32	19.22	24.27	43.85	132.20	67.05	59.80	48.20	29.74	16.36	7.51	5.36	
12	11.32	27.30	22.25	49.65	243.00	80.10	55.45	48.20	28.52	16.36	7.51	4.93	
13	14.68	28.52	18.21	43.85	450.80	83.00	55.45	52.55	28.52	17.20	7.51	4.50	
14	17.20	27.30	19.22	35.84	447.00	101.00	49.65	51.10	27.30	18.21	6.65	4.16	
15	17.20	30.96	22.25	34.62	293.40	135.40	45.30	49.65	27.30	17.20	7.51	5.36	
16	17.20	32.18	21.24	30.96	202.60	113.00	40.95	49.65	27.30	16.36	13.84	10.48	
17	20.23	37.06	21.24	29.74	156.20	78.65	39.50	46.75	29.74	14.68	16.36	13.00	
18	24.27	43.85	18.21	30.96	121.00	62.70	39.50	45.30	28.52	13.84	17.20	13.00	
19	25.28	39.50	17.20	29.74	101.00	58.35	37.06	43.85	28.52	13.84	18.21	12.16	
20	23.26	37.06	15.52	30.96	90.50	58.35	34.62	43.85	28.52	13.84	17.20	12.16	
21	23.26	46.75	13.84	40.95	74.30	58.35	32.18	42.40	25.28	13.84	17.20	12.16	
22	19.22	75.75	13.84	83.00	67.05	56.90	30.96	43.85	29.74	13.00	17.20	8.80	
23	20.23	58.35	13.00	148.20	71.40	65.60	28.52	38.28	35.84	12.16	9.64	9.64	
24	16.36	39.50	19.22	149.80	65.60	58.35	27.30	38.28	32.18	12.16	7.51	13.84	
25	12.16	32.18	18.21	129.00	55.45	68.50	28.52	35.84	28.52	11.32	7.08	14.68	
26	11.32	30.96	19.22	81.55	52.55	89.00	30.96	33.40	24.27	11.32	6.22	14.68	
27	12.16	69.95	17.20	58.35	48.20	68.50	34.62	30.96	18.21	11.32	4.93	14.68	
28	10.48	127.40	14.68	51.10	56.90	52.55	51.10	30.96	18.21	12.16	5.36	14.68	
29	12.16	102.50	15.52	46.75	83.00	52.55	102.50	30.96	18.21	12.16		16.36	
30	18.21	71.40	19.22	43.85	110.00	48.20	146.60	30.96	18.21	11.32		19.22	
31		61.25		39.50	125.80		140.20		19.22	12.16		19.22	
Total	448.20	1218.86	796.42	1485.89	4848.55	2149.25	1646.39	1487.29	877.33	467.53	333.43	357.40	16116.54 CMSDAY
Mean	14.94	39.32	26.55	47.93	156.40	71.64	53.11	49.58	28.30	15.08	11.91	11.53	44.15 CMS
Max	25.28	127.40	59.80	149.80	450.80	135.40	146.60	102.50	35.84	19.22	18.21	19.22	450.80 CMS
Min	8.80	13.84	13.00	18.21	45.30	48.20	27.30	30.96	18.21	11.32	4.93	4.16	4.16 CMS
Runoff	38.724	105.310	68.811	128.381	418.915	185.695	142.248	128.502	75.801	40.395	28.808	30.879	1392.469 MCM

Momentary Peak 502.00 CMS, at 304.68 M (MSL), at 24:00 Hours, on Aug 13, 2001

Runoff Yield 6.95 Liters/Second/Square KM, Momentary Peak Yield 78.993 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Ping River at Ban Chiang Ngoen,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 Chiang Ngoen **Amphoe** Mueang **Changwat** Tak

Drainage Area 38,862 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +104.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near automatic gage building.

Elevation +108.00 m. (M.S.L.)

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 Float -

Rated by Current Meter 1952-1960, 1963-1967, 1971 to date.

Stability of Channel Regimes Fair stable by some silting.

Overbank Flow Conditions No overbank flow.

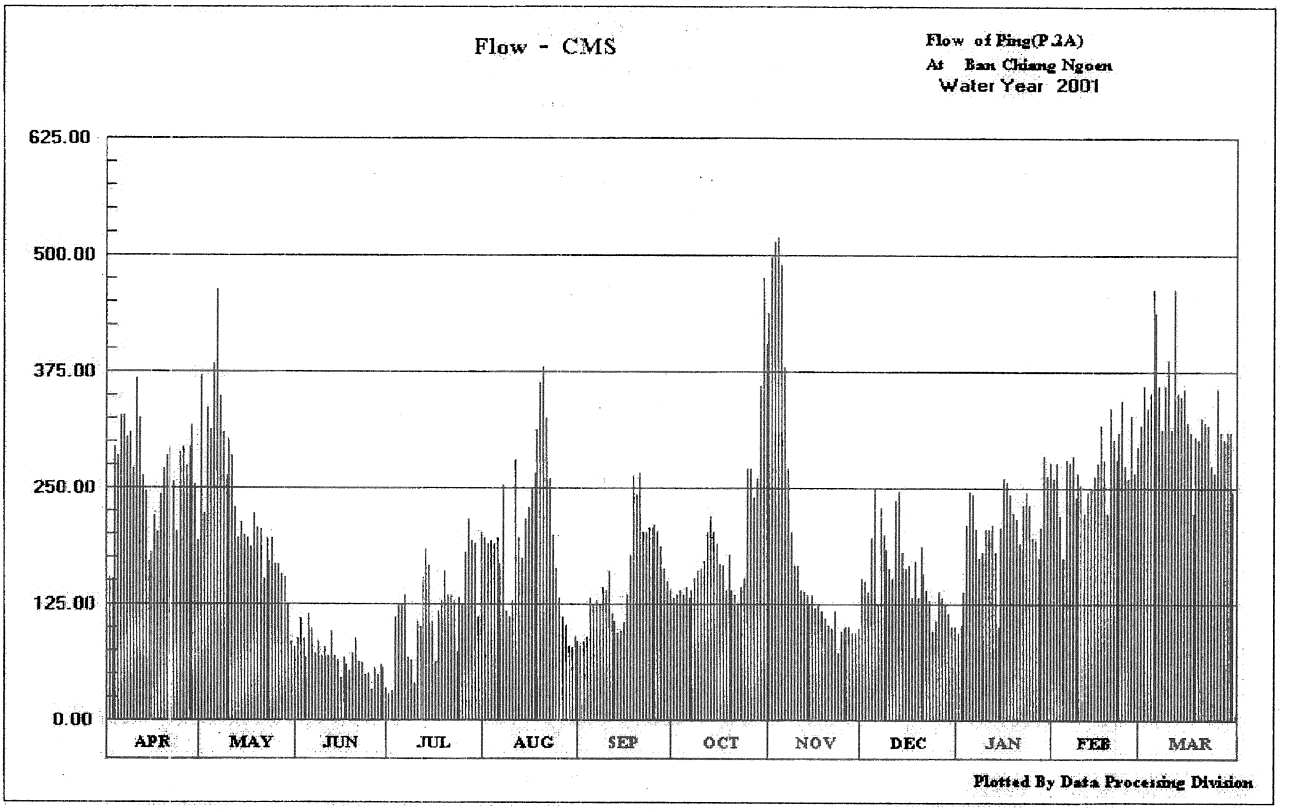
General Description Records good. Flow regulated by Phumiphol Dam reservoir since 1964.

Stage-discharge relation defined by 49 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	104.96	105.60	104.70	104.35	105.10	104.67	104.88	105.76	104.95	104.73	105.30	105.46	
2	104.95	105.19	104.80	104.38	105.08	104.69	104.89	105.90	104.94	104.77	105.35	105.57	
3	105.40	105.51	104.70	104.81	105.09	104.71	104.91	105.94	104.90	104.90	105.18	105.51	
4	105.37	105.45	104.61	104.85	105.08	104.88	104.89	105.95	105.10	105.15	105.03	105.55	
5	105.49	105.63	104.82	104.85	105.10	104.85	104.92	105.88	105.27	105.26	105.36	105.82	
6	105.49	105.82	104.75	104.89	105.01	104.87	104.88	105.62	104.86	105.25	105.35	105.76	
7	105.43	105.54	104.63	104.61	105.28	104.86	104.91	105.33	105.21	105.13	105.37	105.57	
8	105.44	105.44	104.69	104.59	104.83	104.92	104.95	105.12	105.11	105.03	105.24	105.45	
9	105.33	105.31	104.62	104.43	104.81	104.91	104.98	105.00	105.06	105.05	105.32	105.57	
10	105.59	105.42	104.66	104.79	104.87	104.98	104.99	105.00	104.99	105.13	105.28	105.64	
11	105.48	105.37	104.62	104.76	105.36	104.82	105.02	104.91	104.95	105.13	105.19	105.45	
12	105.31	105.21	104.74	104.96	105.10	104.79	105.12	104.90	105.23	105.15	105.26	105.82	
13	105.26	105.10	104.62	105.06	105.03	104.73	105.18	104.89	105.26	105.05	105.27	105.55	
14	105.02	105.16	104.59	105.00	105.17	104.74	105.12	104.86	105.05	104.76	105.31	105.54	
15	105.05	105.11	104.47	104.79	105.21	104.78	105.08	104.89	104.99	105.14	105.35	105.56	
16	105.18	105.10	104.61	104.58	105.27	104.89	105.01	104.84	105.00	105.30	105.46	105.47	
17	105.12	105.07	104.56	104.83	105.32	105.04	105.00	104.85	104.88	105.29	105.36	105.44	
18	105.25	105.19	104.52	104.87	105.45	105.31	104.91	104.83	105.02	105.25	105.19	105.19	
19	105.33	105.14	104.63	104.98	105.58	105.25	105.04	104.80	104.88	105.19	105.51	105.43	
20	105.37	105.13	104.70	104.89	105.62	105.32	104.91	104.77	105.07	105.17	105.42	105.42	
21	105.40	104.95	104.58	104.89	105.48	105.12	104.89	104.75	104.97	105.08	105.36	105.48	
22	105.29	105.10	104.57	104.87	105.30	105.12	104.86	104.83	104.91	105.22	105.44	105.47	
23	105.12	105.02	104.49	104.64	105.11	105.14	104.92	104.63	104.87	105.26	105.53	105.46	
24	105.38	105.10	104.50	104.88	104.99	105.14	104.95	104.74	104.74	105.22	105.34	105.34	
25	105.40	105.01	104.39	104.86	104.88	105.15	105.33	104.75	104.79	105.10	105.30	105.32	
26	105.34	105.01	104.54	105.05	104.81	105.12	105.33	104.76	104.90	105.09	105.49	105.56	
27	105.40	104.97	104.49	105.17	104.77	105.07	105.24	104.76	104.88	105.03	105.32	105.44	
28	105.46	104.96	104.56	105.09	104.67	104.99	105.30	104.73	104.86	105.14	105.40	105.42	
29	105.28	104.85	104.54	105.08	104.66	104.94	105.57	104.73	104.82	105.37		105.44	
30	105.09	104.69	104.40	104.81	104.71	104.91	105.85	104.75	104.76	105.31		105.44	
31		104.66		105.12	104.69		105.68		104.76	105.35		105.26	
Mean	105.30	105.19	104.60	104.83	105.08	104.96	105.08	105.05	104.97	105.13	105.33	105.50	
Max	105.59	105.82	104.82	105.17	105.62	105.32	105.85	105.95	105.27	105.37	105.53	105.82	105.95
Min	104.95	104.66	104.39	104.35	104.66	104.67	104.86	104.63	104.74	104.73	105.03	105.19	104.35

Annual Max Momentary Gage Height 106.37 M (MSL), at 5.00 Hours, on May 6, 2001
Zero Gage at Bottom Elevation 104.00 M (MSL), River Bed 103.05 M (MSL)
Left Bank Elevation 115.88 M (MSL)
Right Bank Elevation 115.87 M (MSL), Drainage Area 38862 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	155.8	373.0	89.0	30.7	197.0	82.4	133.4	439.4	153.0	95.6	261.5	319.1	
2	153.0	224.0	111.0	33.9	191.0	86.8	136.2	499.5	150.2	104.4	278.7	361.5	
3	296.0	338.4	89.0	113.8	194.0	91.2	141.8	516.9	139.0	139.0	221.0	338.4	
4	285.7	315.2	69.2	125.0	191.0	133.4	136.2	521.2	197.0	212.0	176.0	353.8	
5	330.6	385.4	116.6	125.0	197.0	125.0	144.6	490.8	251.1	247.7	282.2	464.7	
6	330.6	464.7	100.0	136.2	170.0	130.6	133.4	381.3	127.8	244.3	278.7	439.4	
7	307.5	349.9	73.6	69.2	254.6	127.8	141.8	271.9	230.5	206.0	285.7	361.5	
8	311.4	311.4	86.8	65.4	119.4	144.6	153.0	203.0	200.0	176.0	240.8	315.2	
9	271.9	264.9	71.4	40.6	113.8	141.8	161.4	167.0	185.0	182.0	268.4	361.5	
10	369.1	303.7	80.2	108.8	130.6	161.4	164.2	167.0	164.2	206.0	254.6	389.6	
11	326.8	285.7	71.4	102.2	282.2	116.6	173.0	141.8	153.0	206.0	224.0	315.2	
12	264.9	230.5	97.8	155.8	197.0	108.8	203.0	139.0	237.4	212.0	247.7	464.7	
13	247.7	197.0	71.4	185.0	176.0	95.6	221.0	136.2	247.7	182.0	251.1	353.8	
14	173.0	215.0	65.4	167.0	218.0	97.8	203.0	127.8	182.0	102.2	264.9	349.9	
15	182.0	200.0	46.9	108.8	230.5	106.6	191.0	136.2	164.2	209.0	278.7	357.6	
16	221.0	197.0	69.2	63.9	251.1	136.2	170.0	122.2	167.0	261.5	319.1	323.0	
17	203.0	188.0	60.8	119.4	268.4	179.0	167.0	125.0	133.4	258.1	282.2	311.4	
18	244.3	224.0	54.6	130.6	315.2	264.9	141.8	119.4	173.0	244.3	224.0	224.0	
19	271.9	209.0	73.6	161.4	365.3	244.3	179.0	111.0	133.4	224.0	338.4	307.5	
20	285.7	206.0	89.0	136.2	381.3	268.4	141.8	104.4	188.0	218.0	303.7	303.7	
21	296.0	153.0	63.9	136.2	326.8	203.0	136.2	100.0	158.6	191.0	282.2	326.8	
22	258.1	197.0	62.4	130.6	261.5	203.0	127.8	119.4	141.8	233.9	311.4	323.0	
23	203.0	173.0	49.9	75.8	200.0	209.0	144.6	73.6	130.6	247.7	346.0	319.1	
24	289.1	197.0	51.5	133.4	164.2	209.0	153.0	97.8	97.8	233.9	275.3	275.3	
25	296.0	170.0	34.9	127.8	133.4	212.0	271.9	100.0	108.8	197.0	261.5	268.4	
26	275.3	170.0	57.7	182.0	113.8	203.0	271.9	102.2	139.0	194.0	330.6	357.6	
27	296.0	158.6	49.9	218.0	104.4	188.0	240.8	102.2	133.4	176.0	268.4	311.4	
28	319.1	155.8	60.8	194.0	82.4	164.2	261.5	95.6	127.8	209.0	296.0	303.7	
29	254.6	125.0	57.7	191.0	80.2	150.2	361.5	95.6	116.6	285.7		311.4	
30	194.0	86.8	36.0	113.8	91.2	141.8	477.7	100.0	102.2	264.9		311.4	
31		80.2		203.0	86.8		406.2		102.2	278.7		247.7	
Total	7913.1	7149.2	2111.6	3884.5	6088.1	4726.4	6089.7	5907.4	4935.7	6441.9	7652.8	10371.3	73271.7 CMSDAY
Mean	263.8	230.6	70.4	125.3	196.4	157.5	196.4	196.9	159.2	207.8	273.3	334.6	200.7 CMS
Max	369.1	464.7	116.6	218.0	381.3	268.4	477.7	521.2	251.1	285.7	346.0	464.7	521.2 CMS
Min	153.0	80.2	34.9	30.7	80.2	82.4	127.8	73.6	97.8	95.6	176.0	224.0	30.7 CMS
Runoff	683.69	617.69	182.44	335.62	526.01	408.36	526.15	510.40	426.44	556.58	661.20	896.08	6330.68 MCM

Momentary Peak 711.90 CMS, at 106.37 M (MSL), at 5.00 Hours, on May 6, 2001

Runoff Yield 5.17 Liters/Second/Square KM, Momentary Peak Yield 18.319 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Mae Taeng at Ban Sanmahaphon, Chiang Mai (P.4A)

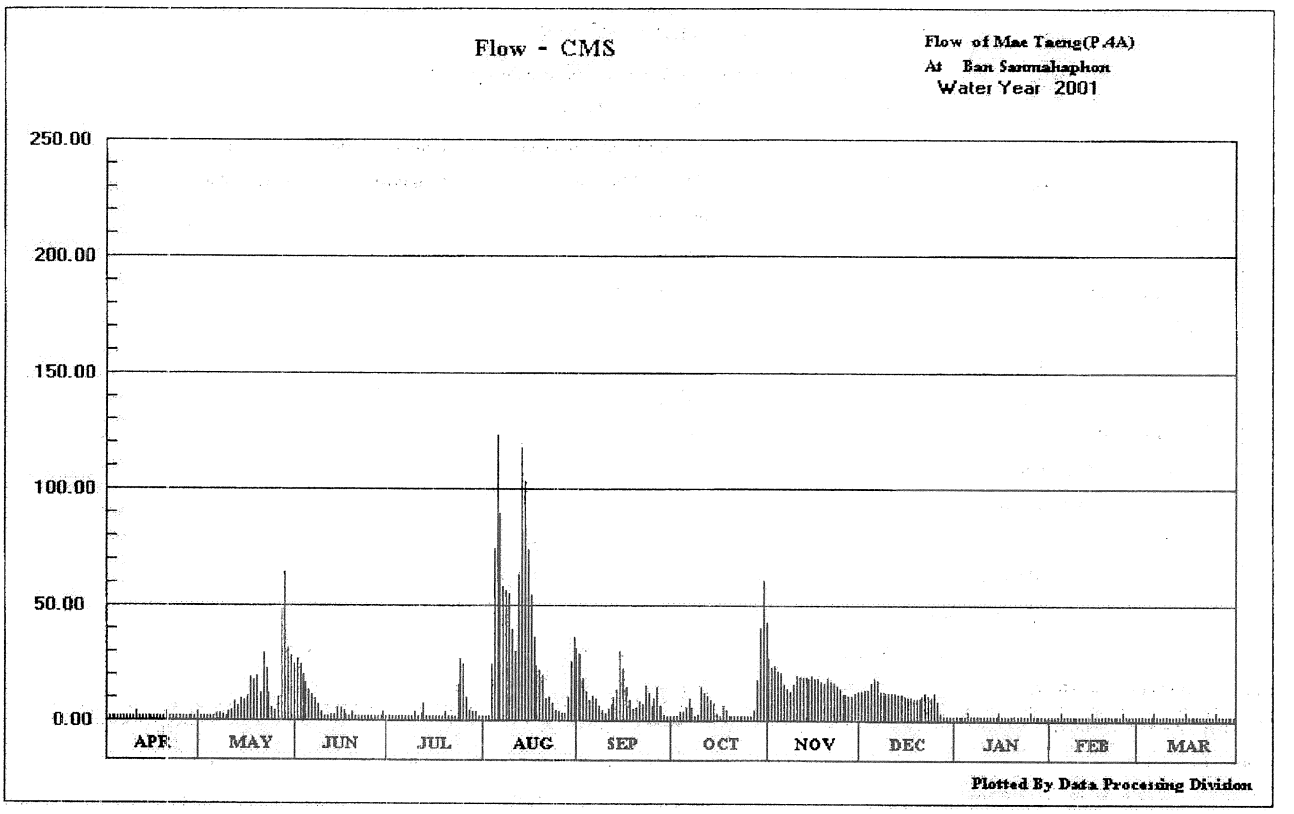
Lat 19 - 07 - 15 N. **Long** 98 - 56 - 53 E.

Location		on right bank at the bridge of Chiang Mai from Fang Highway.
	Ban Sanmahaphon	**Amphoe** Mae Taeng **Changwat** Chiang Mai
Drainage Area		1,902 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+334.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	In the vicinity of Amphoe Mae Taeng office.
	Elevation	+338.736 m. (M.S.L.)
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 Float	-
	Rated by Current Meter	1955-1960, 1967 to date.
Stability of Channel Regimes		Fairly stable by some silting.
Overbank Flow Conditions		Overbank flow starts at elevation +337.75 m. (M.S.L.) and is including overbank flow.
General Description		Records good. Flow regulated by Mae Taeng weir about 7 kilometers above gage site. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	334.34	334.28	336.07	334.34	334.65	336.14	334.60	336.08	335.40	334.50	334.90	334.80	
2	334.34	334.26	335.96	334.34	334.50	335.67	334.60	335.91	335.43	334.50	334.90	334.80	
3	334.31	334.23	335.77	334.34	335.96	335.40	334.83	335.94	335.43	334.49	334.92	334.80	
4	334.24	334.23	335.59	334.34	337.29	335.19	334.84	335.83	335.57	334.50	334.94	334.74	
5	334.24	334.22	335.42	334.34	337.99	335.28	335.00	335.78	335.68	334.47	334.94	334.72	
6	334.25	334.78	335.32	334.34	337.52	335.22	335.20	335.55	335.64	334.46	335.08	334.70	
7	334.25	334.78	335.20	334.35	336.99	335.03	334.98	335.45	335.40	334.46	335.15	334.70	
8	334.25	334.73	335.05	334.40	336.95	334.91	334.62	335.38	335.40	334.43	334.93	334.78	
9	334.25	334.72	334.76	334.44	336.92	334.80	334.77	335.56	335.36	334.43	334.92	334.79	
10	334.24	334.74	334.62	334.46	336.52	334.94	335.47	335.72	335.34	334.43	334.89	334.80	
11	334.25	334.90	334.64	334.80	336.20	335.08	335.34	335.71	335.34	334.41	334.84	334.80	
12	334.25	335.14	334.74	335.11	337.09	335.25	335.28	335.70	335.34	334.43	334.82	334.80	
13	334.25	335.03	334.74	334.60	337.91	335.41	335.18	335.69	335.32	334.46	334.82	334.80	
14	334.25	335.22	334.97	334.56	337.72	336.20	335.10	335.68	335.31	334.48	334.82	334.80	
15	334.25	335.18	335.00	334.39	337.28	335.88	334.79	335.73	335.28	334.50	334.82	334.92	
16	334.25	335.27	334.89	334.38	336.90	335.48	334.59	335.66	335.26	334.55	334.82	334.90	
17	334.70	335.70	334.75	334.38	336.42	335.16	335.03	335.66	335.26	334.61	334.82	334.80	
18	334.70	335.63	334.40	334.38	335.94	334.95	334.90	335.62	335.23	334.69	334.81	334.80	
19	334.68	335.73	334.39	334.38	335.84	334.99	334.64	335.59	335.23	334.71	334.80	334.80	
20	334.66	335.35	334.40	334.38	335.72	335.15	334.58	335.66	335.22	334.76	334.80	334.80	
21	334.65	336.17	334.40	334.40	335.21	335.06	334.51	335.61	335.30	334.84	334.80	334.84	
22	334.65	335.89	334.40	334.54	335.26	335.53	334.46	335.58	335.34	334.87	334.80	334.80	
23	334.65	335.36	334.37	335.56	335.11	335.36	334.49	335.53	335.30	334.87	334.80	334.80	
24	334.66	334.98	334.37	336.08	334.90	335.01	334.50	335.46	335.24	334.88	334.80	334.80	
25	334.66	334.90	334.37	335.95	334.84	335.22	334.50	335.31	335.34	334.88	334.80	334.80	
26	334.62	335.26	334.35	335.26	334.82	335.49	334.69	335.32	335.14	334.88	334.74	334.80	
27	334.60	336.77	334.35	334.91	334.81	335.01	334.90	335.30	334.78	334.89	334.74	334.80	
28	334.59	337.11	334.35	334.84	335.24	334.75	335.63	335.30	334.52	334.88	334.72	334.80	
29	334.40	336.24	334.35	334.67	336.03	334.71	336.54	335.34	334.50	334.86		334.80	
30	334.40	336.13	334.34	334.54	336.41	334.65	337.04	335.38	334.50	334.90		334.78	
31		335.97		334.51	336.25		336.62		334.50	334.90		334.78	
Mean	334.43	335.25	334.81	334.66	336.17	335.23	335.04	335.60	335.22	334.64	334.85	334.80	
Max	334.70	337.11	336.07	336.08	337.99	336.20	337.04	336.08	335.68	334.90	335.15	334.92	337.99
Min	334.24	334.22	334.34	334.34	334.50	334.65	334.46	335.30	334.50	334.41	334.72	334.70	334.22

Annual Max Momentary Gage Height 338.20 M (MSL), at 14.00 Hours, on Aug 5, 2001
Zero Gage at Bottom Elevation 334.00 M (MSL), River Bed 333.95 M (MSL)
Left Bank Elevation 337.74 M (MSL)
Right Bank Elevation 338.46 M (MSL), Drainage Area 1902 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.51	0.28	27.75	0.51	2.25	29.50	1.80	28.00	13.60	1.20	0.70	0.30	
2	0.51	0.21	25.12	0.51	1.20	18.97	1.80	24.02	14.17	1.20	0.70	0.30	
3	0.39	0.11	21.07	0.51	25.12	13.60	4.32	24.68	14.17	1.15	0.80	0.30	
4	0.14	0.11	17.30	0.51	75.42	9.83	4.46	22.33	16.90	1.20	0.90	0.18	
5	0.14	0.07	13.98	0.51	124.23	11.36	6.70	21.28	19.18	1.07	0.90	0.14	
6	0.18	3.66	12.08	0.51	90.14	10.34	10.00	16.50	18.34	1.02	1.80	0.10	
7	0.18	3.66	10.00	0.55	59.05	7.18	6.42	14.55	13.60	1.02	2.37	0.10	
8	0.18	3.06	7.50	0.75	57.25	5.44	1.98	13.22	13.60	0.88	0.85	0.26	
9	0.18	2.94	3.42	0.93	55.90	3.90	3.54	16.70	12.84	0.88	0.80	0.28	
10	0.14	3.18	1.98	1.02	39.98	5.86	14.93	20.02	12.46	0.88	0.66	0.30	
11	0.18	5.30	2.16	3.90	31.00	7.98	12.46	19.81	12.46	0.80	0.46	0.30	
12	0.18	8.98	3.18	8.47	64.18	10.85	11.36	19.60	12.46	0.00	0.38	0.30	
13	0.18	7.18	3.18	1.80	118.07	13.79	9.66	19.39	12.08	0.00	0.38	0.30	
14	0.18	10.34	6.28	1.56	103.94	31.00	8.30	19.18	11.89	0.00	0.38	0.30	
15	0.18	9.66	6.70	0.71	74.84	23.38	3.78	20.23	11.36	0.00	0.38	0.80	
16	0.18	11.19	5.16	0.67	55.00	15.12	1.74	18.76	11.02	0.00	0.38	0.70	
17	2.70	19.60	3.30	0.67	37.06	9.32	7.18	18.76	11.02	0.01	0.38	0.30	
18	2.70	18.13	0.75	0.67	24.68	6.00	5.30	17.92	10.51	0.09	0.34	0.30	
19	2.52	20.23	0.71	0.67	22.54	6.56	2.16	17.30	10.51	0.12	0.30	0.30	
20	2.34	12.65	0.75	0.67	20.02	9.15	1.68	18.76	10.34	0.22	0.30	0.30	
21	2.25	30.25	0.75	0.75	10.17	7.66	1.26	17.71	11.70	0.46	0.30	0.46	
22	2.25	23.59	0.75	1.44	11.02	16.10	1.02	17.10	12.46	0.58	0.30	0.30	
23	2.25	12.84	0.63	16.70	8.47	12.84	1.15	16.10	11.70	0.58	0.30	0.30	
24	2.34	6.42	0.63	28.00	5.30	6.86	1.20	14.74	10.68	0.62	0.30	0.30	
25	2.34	5.30	0.63	24.90	4.46	10.34	1.20	11.89	12.46	0.62	0.30	0.30	
26	1.98	11.02	0.55	11.02	4.18	15.31	2.61	12.08	8.98	0.62	0.18	0.30	
27	1.80	49.27	0.55	5.44	4.04	6.86	5.30	11.70	3.66	0.66	0.18	0.30	
28	1.74	65.25	0.55	4.46	10.68	3.30	18.13	11.70	1.32	0.62	0.14	0.30	
29	0.75	32.08	0.55	2.43	26.75	2.82	40.66	12.46	1.20	0.54		0.30	
30	0.75	29.25	0.51	1.44	36.78	2.25	61.58	13.22	1.20	0.70		0.26	
31		25.34		1.26	32.35		43.44		1.20	0.70		0.26	
Total	32.34	431.15	178.47	123.94	1236.07	333.47	297.12	529.71	339.07	18.44	16.16	9.54	3545.48 CMSDAY
Mean	1.08	13.91	5.95	4.00	39.87	11.12	9.58	17.66	10.94	0.59	0.58	0.31	9.71 CMS
Max	2.70	65.25	27.75	28.00	124.23	31.00	61.58	28.00	19.18	1.20	2.37	0.80	124.23 CMS
Min	0.14	0.07	0.51	0.51	1.20	2.25	1.02	11.70	1.20	0.00	0.14	0.10	0.00 CMS
Runoff	2.794	37.251	15.420	10.708	106.796	28.812	25.671	45.767	29.296	1.593	1.396	0.824	306.330 MCM

Momentary Peak 141.80 CMS, at 338.20 M (MSL), at 14.00 Hours, on Aug 5, 2001

Runoff Yield 5.11 Liters/Second/Square KM. Momentary Peak Yield 74.553 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Ping River at Ban Huai Yang, Kamphaeng Phet (P.7A)

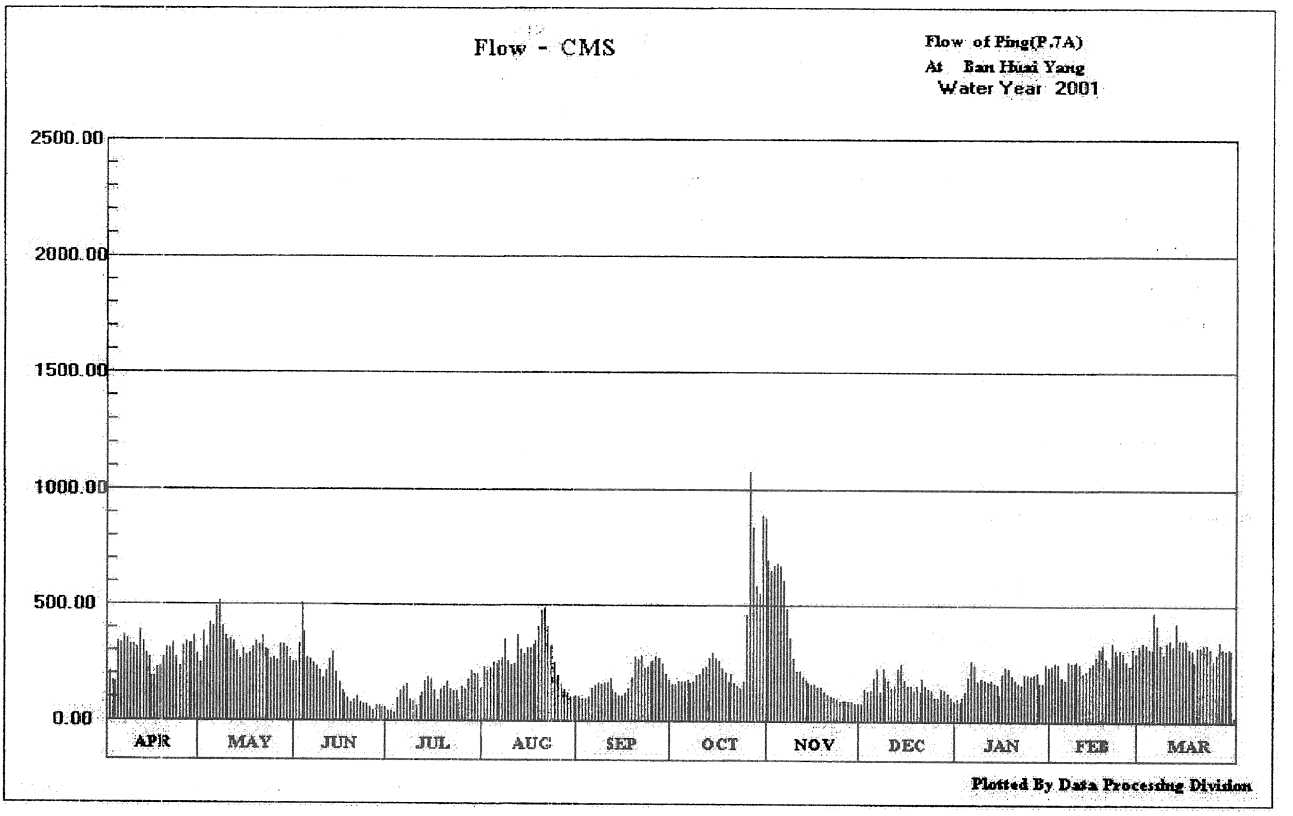
Lat 16 - 28 - 41 N. **Long** 99 - 31 - 19 E.

Location		on left bank about 100 meters upstream from the bridge on highway.
	Ban Huai Yang	**Amphoe** Mueang **Changwat** Kamphaeng Phet
Drainage Area		42,700 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+71.730 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	Near the gage observer's house.
	Elevation	+77.717 m. (M.S.L)
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 Float	-
	Rated by Current Meter	1960-1961 1967 to date.
Stability of Channel Regimes		Fairly stable by some silting.
Overbank Flow Conditions		No overbank flow.
General Description		Records good. Flow regulated by Phumiphol Dam reservior above gage site.
		Stage-discharge relation defined by 36 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.80	72.91	72.92	72.16	72.88	72.45	72.66	73.94	72.35	72.42	72.89	73.12	
2	72.70	73.27	73.15	72.14	72.82	72.42	72.65	73.86	72.60	72.38	72.92	73.16	
3	72.67	73.09	73.56	72.12	72.86	72.43	72.70	73.90	72.56	72.45	72.90	73.15	
4	73.16	73.37	73.27	72.42	72.92	72.44	72.70	73.92	72.58	72.54	72.76	73.10	
5	73.15	73.33	72.97	72.54	72.90	72.59	72.70	73.89	72.74	72.75	72.71	73.09	
6	73.22	73.52	72.96	72.61	72.94	72.63	72.71	73.77	72.86	72.95	72.94	73.48	
7	73.20	73.57	72.91	72.66	72.97	72.67	72.68	73.51	72.56	72.89	72.93	73.35	
8	73.12	73.33	72.88	72.41	73.20	72.66	72.69	73.21	72.86	72.69	72.93	73.14	
9	73.12	73.23	72.82	72.36	72.95	72.68	72.77	72.97	72.76	72.73	72.94	73.03	
10	73.10	73.18	72.74	72.27	72.89	72.68	72.79	72.83	72.72	72.71	72.91	73.16	
11	73.29	73.20	72.82	72.45	72.90	72.74	72.86	72.83	72.61	72.69	72.80	73.19	
12	73.17	73.16	72.96	72.52	73.25	72.57	72.88	72.75	72.64	72.72	72.82	73.13	
13	73.03	73.04	73.04	72.70	73.07	72.52	72.97	72.72	72.85	72.67	72.89	73.39	
14	72.97	72.96	72.80	72.76	73.02	72.48	73.04	72.67	72.91	72.65	72.93	73.20	
15	72.76	73.08	72.68	72.71	73.09	72.47	72.98	72.65	72.72	72.51	72.99	73.19	
16	72.75	73.01	72.54	72.56	73.10	72.52	72.95	72.66	72.63	72.79	73.09	73.19	
17	72.86	73.03	72.50	72.39	73.12	72.59	72.86	72.62	72.63	72.88	73.13	73.10	
18	72.88	73.09	72.43	72.57	73.18	72.74	72.81	72.61	72.57	72.85	72.98	73.07	
19	72.98	73.16	72.34	72.62	73.33	73.00	72.69	72.56	72.64	72.77	72.88	72.94	
20	73.09	73.13	72.39	72.69	73.49	72.96	72.78	72.51	72.56	72.72	73.16	73.11	
21	73.10	73.23	72.44	72.58	73.52	73.01	72.67	72.48	72.73	72.67	73.07	73.11	
22	73.14	73.08	72.34	72.55	73.34	72.86	72.63	72.44	72.64	72.65	73.03	73.15	
23	72.98	73.06	72.32	72.56	73.13	72.88	72.60	72.42	72.59	72.79	73.08	73.15	
24	72.88	72.96	72.30	72.39	72.92	72.92	72.69	72.36	72.57	72.79	73.04	73.09	
25	73.11	72.98	72.24	72.62	72.77	72.94	73.46	72.39	72.44	72.77	72.94	72.96	
26	73.16	72.95	72.18	72.58	72.66	72.99	74.61	72.39	72.45	72.79	72.89	73.02	
27	73.15	73.13	72.27	72.71	72.57	72.98	74.20	72.38	72.59	72.80	73.09	73.18	
28	73.14	73.12	72.29	72.82	72.52	72.90	73.72	72.38	72.57	72.67	73.04	73.09	
29	73.23	73.09	72.26	72.79	72.44	72.79	73.66	72.33	72.53	72.67		73.08	
30	73.01	72.97	72.25	72.78	72.45	72.71	74.29	72.35	72.46	72.91		73.09	
31		72.93		72.60	72.47		74.27		72.41	72.88		73.08	
Mean	73.03	73.13	72.65	72.54	72.96	72.71	73.05	72.88	72.62	72.71	72.95	73.14	
Max	73.29	73.57	73.56	72.82	73.52	73.01	74.61	73.94	72.91	72.95	73.16	73.48	74.61
Min	72.67	72.91	72.18	72.12	72.44	72.42	72.60	72.33	72.35	72.38	72.71	72.94	72.12

Annual Max Momentary Gage Height 74.74 M (MSL), at 9.00 Hours, on Oct 26, 2001
Zero Gage at Bottom Elevation 71.73 M (MSL), River Bed 70.77 M (MSL)
Left Bank Elevation 82.44 M (MSL)
Right Bank Elevation 84.56 M (MSL), Drainage Area 42700 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	212.0	252.7	256.4	48.0	241.6	108.5	165.8	700.8	85.5	101.0	245.3	330.4	
2	179.0	388.0	341.5	45.0	219.4	101.0	162.5	659.2	146.0	91.8	256.4	345.2	
3	169.1	319.3	513.6	42.0	234.2	103.5	179.0	680.0	136.0	108.5	249.0	341.5	
4	345.2	428.0	388.0	101.0	256.4	106.0	179.0	690.4	141.0	131.0	198.8	323.0	
5	341.5	412.0	274.9	131.0	249.0	143.5	179.0	674.8	192.2	195.5	182.3	319.3	
6	368.0	495.2	271.2	149.3	263.8	155.9	182.3	613.6	234.2	267.5	263.8	476.8	
7	360.0	518.2	252.7	165.8	274.9	169.1	172.4	490.6	136.0	245.3	260.1	420.0	
8	330.4	412.0	241.6	98.5	360.0	165.8	175.7	364.0	234.2	175.7	260.1	337.8	
9	330.4	372.0	219.4	87.6	267.5	172.4	202.1	274.9	198.8	188.9	263.8	297.1	
10	323.0	352.6	192.2	68.7	245.3	172.4	208.7	223.1	185.6	182.3	252.7	345.2	
11	396.0	360.0	219.4	108.5	249.0	192.2	234.2	223.1	149.3	175.7	212.0	356.3	
12	348.9	345.2	271.2	126.0	380.0	138.5	241.6	195.5	159.2	185.6	219.4	334.1	
13	297.1	300.8	300.8	179.0	311.9	126.0	274.9	185.6	230.5	169.1	245.3	436.0	
14	274.9	271.2	212.0	198.8	293.4	116.0	300.8	169.1	252.7	162.5	260.1	360.0	
15	198.8	315.6	172.4	182.3	319.3	113.5	278.6	162.5	185.6	123.5	282.3	356.3	
16	195.5	289.7	131.0	136.0	323.0	126.0	267.5	165.8	155.9	208.7	319.3	356.3	
17	234.2	297.1	121.0	93.9	330.4	143.5	234.2	152.6	155.9	241.6	334.1	323.0	
18	241.6	319.3	103.5	138.5	352.6	192.2	215.7	149.3	138.5	230.5	278.6	311.9	
19	278.6	345.2	83.4	152.6	412.0	286.0	175.7	136.0	159.2	202.1	241.6	263.8	
20	319.3	334.1	93.9	175.7	481.4	271.2	205.4	123.5	136.0	185.6	345.2	326.7	
21	323.0	372.0	106.0	141.0	495.2	289.7	169.1	116.0	188.9	169.1	311.9	326.7	
22	337.8	315.6	83.4	133.5	416.0	234.2	155.9	106.0	159.2	162.5	297.1	341.5	
23	278.6	308.2	79.2	136.0	334.1	241.6	146.0	101.0	143.5	208.7	315.6	341.5	
24	241.6	271.2	75.0	93.9	256.4	256.4	175.7	87.6	138.5	208.7	300.8	319.3	
25	326.7	278.6	62.4	152.6	202.1	263.8	467.6	93.9	106.0	202.1	263.8	271.2	
26	345.2	267.5	51.0	141.0	165.8	282.3	1086.0	93.9	108.5	208.7	245.3	293.4	
27	341.5	334.1	68.7	182.3	138.5	278.6	844.0	91.8	143.5	212.0	319.3	352.6	
28	337.8	330.4	72.9	219.4	126.0	249.0	589.6	91.8	138.5	169.1	300.8	319.3	
29	372.0	319.3	66.6	208.7	106.0	208.7	560.8	81.3	128.5	169.1		315.6	
30	289.7	274.9	64.5	205.4	108.5	182.3	897.1	85.5	111.0	252.7		319.3	
31		260.1		146.0	113.5		885.3		98.5	241.6		315.6	
Total	8937.4	10460.1	5389.8	4188.0	8527.2	5589.8	10212.2	7983.2	4876.9	5776.7	7524.8	10476.7	89942.8 CMSDAY
Mean	297.9	337.4	179.7	135.1	275.1	186.3	329.4	266.1	157.3	186.3	268.7	338.0	246.4 CMS
Max	396.0	518.2	513.6	219.4	495.2	289.7	1086.0	700.8	252.7	267.5	345.2	476.8	1086.0 CMS
Min	169.1	252.7	51.0	42.0	106.0	101.0	146.0	81.3	85.5	91.8	182.3	263.8	42.0 CMS
Runoff	772.19	903.75	465.68	361.84	736.75	482.96	882.33	689.75	421.36	499.11	650.14	905.19	7771.06 MCM

Momentary Peak 1164.00 CMS, at 74.74 M (MSL), at 9.00 Hours, on Oct 26, 2001

Runoff Yield 5.77 Liters/Second/Square KM, Momentary Peak Yield 27.260 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Ping River at Ban Wang Kra Chao, Tak (P.12C)

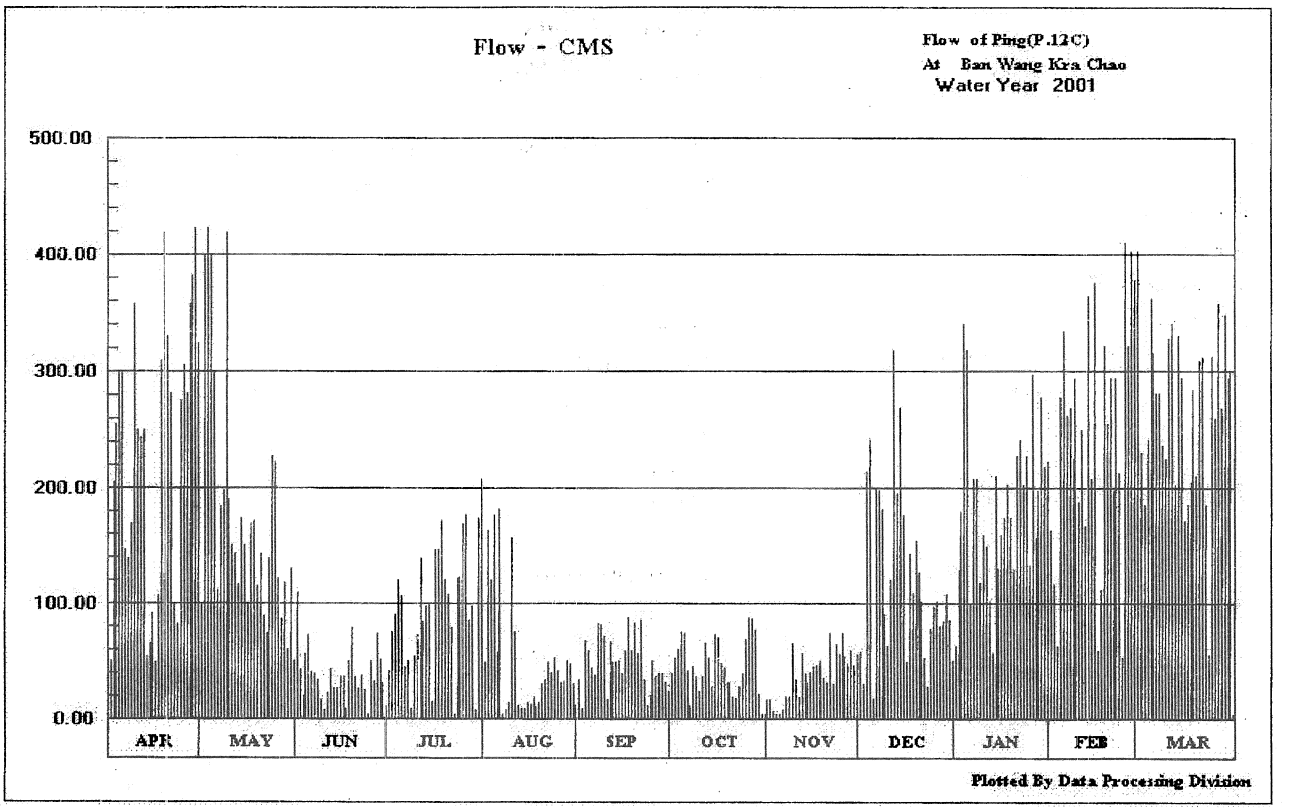
Lat 17 - 14 - 17 N. **Long** 99 - 01 - 32 E.

Location			on left bank about 3 kilometers from Phumiphol Dam reservoir.		
	Ban	Wang Kra Chao	**Amphoe** Sam Ngao	**Changwat**	Tak
Drainage Area			26,401 sq.km.		
Type of Gage			Staff gage.		
Zero Gage at Bottom			+129.000 m. (M.S.L.)		
Bench Mark			B.M.- H.D.		
	Location BM		On left bank at the pier of the bridge.		
	Elevation		+134.00 m. (M.S.L.)		
Gage Reading Frequency			5-time daily readings at 06.00, 09.00, 12.00, 15.00, and 18.00 hours.		
Basis of Mean Daily Gage Height			Arithmetic mean of 5 readings.		
Period of Available Gage Records			1995 to date.		
Rating Operation					
	Period of Rating		1996 to date.		
	Rated by Float		-		
	Rated by Current Meter		1996 to date.		
Stability of Channel Regimes			Unstable because of backwater effect.		
Overbank Flow Conditions			No overbank flow.		
General Description			Records good. Flow requlated by Phumiphol Dam reservior downstream from the gage site.		
			Stage-discharge relation defined by 21 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.00	130.44	130.50	129.88	129.98	129.78	129.86	129.48	130.08	130.14	130.78	131.61	
2	130.96	131.60	129.90	130.26	130.78	129.33	130.03	129.48	129.73	130.61	130.54	131.06	
3	131.15	131.66	129.56	130.38	130.56	130.19	130.11	129.27	131.00	130.85	130.13	130.88	
4	131.30	131.60	130.06	130.56	130.84	130.10	130.26	129.20	131.10	131.43	131.23	131.10	
5	131.30	131.30	130.23	130.48	130.08	129.92	130.24	129.09	129.50	131.36	131.41	131.49	
6	130.70	130.51	129.87	129.93	130.86	129.84	129.88	129.11	130.94	130.44	131.18	131.35	
7	130.66	130.87	129.86	129.99	129.16	130.32	129.37	129.52	130.93	130.97	131.20	131.24	
8	130.81	130.93	129.80	129.34	129.15	130.31	129.93	129.53	130.86	130.97	131.04	131.24	
9	131.48	131.65	129.48	130.04	129.44	130.22	129.83	130.16	130.38	130.55	131.28	131.08	
10	131.13	130.90	129.30	130.23	130.75	129.48	129.62	129.79	130.14	130.76	130.89	131.04	
11	131.11	130.72	129.60	130.66	130.26	130.17	129.83	129.54	130.56	130.71	131.13	131.39	
12	131.13	130.68	129.90	130.33	129.39	129.98	130.16	130.06	131.36	130.45	130.80	131.43	
13	130.04	130.54	129.66	130.43	129.33	129.98	130.02	129.86	130.92	130.06	131.50	130.95	
14	130.16	130.83	129.66	130.44	129.34	129.99	129.68	129.74	131.20	130.98	130.97	131.40	
15	130.39	130.72	129.82	129.46	129.42	129.85	130.23	129.87	130.84	130.62	131.53	131.28	
16	129.98	130.44	129.83	130.70	129.40	130.10	130.21	129.94	129.98	130.76	130.10	130.82	
17	130.48	130.81	129.32	130.70	129.52	130.36	129.96	129.95	130.68	130.83	130.51	130.88	
18	131.33	130.82	130.00	130.82	129.36	130.09	129.92	129.99	130.50	130.95	131.37	130.96	
19	131.65	130.53	130.29	130.56	129.42	130.32	129.74	129.81	130.74	130.83	131.15	131.25	
20	131.40	130.68	129.82	130.49	129.72	130.06	129.75	129.75	130.60	130.61	131.28	130.98	
21	131.24	130.37	129.67	130.29	129.80	130.34	129.54	130.24	130.45	131.05	130.93	131.33	
22	130.44	130.25	129.84	129.24	129.98	129.80	129.50	129.73	130.03	131.10	131.28	131.34	
23	130.31	130.66	129.64	130.57	129.87	129.39	129.69	130.15	129.69	130.95	130.99	130.88	
24	131.22	131.05	129.19	130.58	130.03	129.56	129.86	130.05	130.28	131.05	130.02	130.05	
25	131.32	131.03	130.00	130.81	129.89	130.00	130.20	130.24	130.42	130.63	131.63	131.34	
26	131.24	130.57	129.77	130.84	129.74	129.83	130.36	130.04	130.45	131.29	131.37	131.17	
27	131.48	130.35	130.24	130.34	129.77	129.86	130.35	129.96	130.30	130.75	131.61	131.48	
28	131.55	130.55	130.01	130.43	129.99	129.85	130.27	130.10	130.33	130.93	131.54	131.20	
29	131.66	130.11	129.75	129.12	129.96	129.74	129.58	129.95	130.49	131.23		131.45	
30	131.38	130.62	129.37	130.83	129.72	129.62	129.24	130.05	130.34	131.01		131.28	
31		130.00		130.97	129.37		129.06		129.99	131.03		131.30	
Mean	130.97	130.77	129.80	130.31	129.83	129.95	129.88	129.79	130.48	130.84	131.05	131.17	
Max	131.66	131.66	130.50	130.97	130.86	130.36	130.36	130.24	131.36	131.43	131.63	131.61	131.66
Min	129.98	130.00	129.19	129.12	129.15	129.33	129.06	129.09	129.50	130.06	130.02	130.05	129.06

Annual Max Momentary Gage Height 132.68 M (MSL), at 15.00 Hours, on Mar 19, 2001
Zero Gage at Bottom Elevation 129.00 M (MSL), River Bed 127.60 M (MSL)
Left Bank Elevation 133.10 M (MSL)
Right Bank Elevation 133.44 M (MSL), Drainage Area 26401 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	52.00	100.80	111.00	42.40	50.40	34.80	40.80	18.00	59.20	64.60	164.00	404.00	
2	206.40	400.00	44.00	77.20	164.00	10.50	54.70	18.00	31.80	130.00	117.80	232.20	
3	256.50	424.00	22.00	91.60	121.20	69.10	61.90	7.50	216.00	180.00	63.70	187.20	
4	301.00	400.00	57.40	121.20	177.60	61.00	77.20	4.00	243.00	342.20	279.30	243.00	
5	301.00	301.00	73.60	107.60	59.20	45.60	74.80	0.00	19.00	319.60	335.40	362.60	
6	148.00	112.70	41.60	46.40	182.40	39.20	42.40	0.40	201.60	100.80	264.60	316.50	
7	140.00	184.80	40.80	51.20	2.40	84.40	12.50	20.00	199.20	208.80	270.00	282.40	
8	170.40	199.20	36.00	11.00	2.00	83.20	46.40	20.50	182.40	208.80	226.80	282.40	
9	359.20	420.00	18.00	55.60	16.00	72.40	38.40	66.40	91.60	119.50	294.80	237.60	
10	251.10	192.00	9.00	73.60	158.00	18.00	25.20	35.40	64.60	160.00	189.60	226.80	
11	245.70	152.00	24.00	140.00	77.20	67.30	38.40	21.00	121.20	150.00	251.10	328.90	
12	251.10	144.00	44.00	85.60	13.50	50.40	66.40	57.40	319.60	102.50	168.00	342.20	
13	55.60	117.80	27.60	99.10	10.50	50.40	53.80	40.80	196.80	57.40	366.00	204.00	
14	66.40	175.20	27.60	100.80	11.00	51.20	28.80	32.40	270.00	211.20	208.80	332.00	
15	92.80	152.00	37.60	17.00	15.00	40.00	73.60	41.60	177.60	132.00	376.20	294.80	
16	50.40	100.80	38.40	148.00	14.00	61.00	71.20	47.20	50.40	160.00	61.00	172.80	
17	107.60	170.40	10.00	148.00	20.00	89.20	48.80	48.00	144.00	175.20	112.70	187.20	
18	310.30	172.80	52.00	172.80	12.00	60.10	45.60	51.20	111.00	204.00	322.70	206.40	
19	420.00	116.10	80.80	121.20	15.00	84.40	32.40	36.80	156.00	175.20	256.50	285.50	
20	332.00	144.00	37.60	109.30	31.20	57.40	33.00	33.00	128.00	130.00	294.80	211.20	
21	282.40	90.40	28.20	80.80	36.00	86.80	21.00	74.80	102.50	229.50	199.20	310.30	
22	100.80	76.00	39.20	6.00	50.40	36.00	19.00	31.80	54.70	243.00	294.80	313.40	
23	83.20	140.00	26.40	122.90	41.60	13.50	29.40	65.50	29.40	204.00	213.60	187.20	
24	276.20	229.50	3.60	124.60	54.70	22.00	40.80	56.50	79.60	229.50	53.80	56.50	
25	307.20	224.10	52.00	170.40	43.20	52.00	70.00	74.80	97.40	134.00	412.00	313.40	
26	282.40	122.90	34.20	177.60	32.40	38.40	89.20	55.60	102.50	297.90	322.70	261.90	
27	359.20	88.00	74.80	86.80	34.20	40.80	88.00	48.80	82.00	158.00	404.00	359.20	
28	383.00	119.50	52.90	99.10	51.20	40.00	78.40	61.00	85.60	199.20	379.60	270.00	
29	424.00	61.90	33.00	0.80	48.80	32.40	23.00	48.00	109.30	279.30		349.00	
30	325.80	132.00	12.50	175.20	31.20	25.20	6.00	56.50	86.80	218.70		294.80	
31		52.00		208.80	12.50		0.00		51.20	224.10		301.00	
Total	6941.70	5515.90	1189.80	3072.60	1588.80	1516.70	1431.10	1172.90	3864.00	5749.00	6903.50	8356.40	47302.41 CMSDAY
Mean	231.39	177.93	39.66	99.12	51.25	50.56	46.16	39.10	124.65	185.45	246.55	269.56	129.60 CMS
Max	424.00	424.00	111.00	208.80	182.40	89.20	89.20	74.80	319.60	342.20	412.00	404.00	424.00 CMS
Min	50.40	52.00	3.60	0.80	2.00	10.50	0.00	0.00	19.00	57.40	53.80	56.50	0.00 CMS
Runoff	599.763	476.574	102.799	265.473	137.272	131.043	123.647	101.339	333.850	496.714	596.462	721.993	4086.928 MCM

Momentary Peak 914.00 CMS, at 132.68 M (MSL), at 15.00 Hours, on Mar 19, 2001
Runoff Yield 4.91 Liters/Second/Square KM, Momentary Peak Yield 34.620 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Chaem at Kaeng Ob Luang, Chiang Mai (P.14)

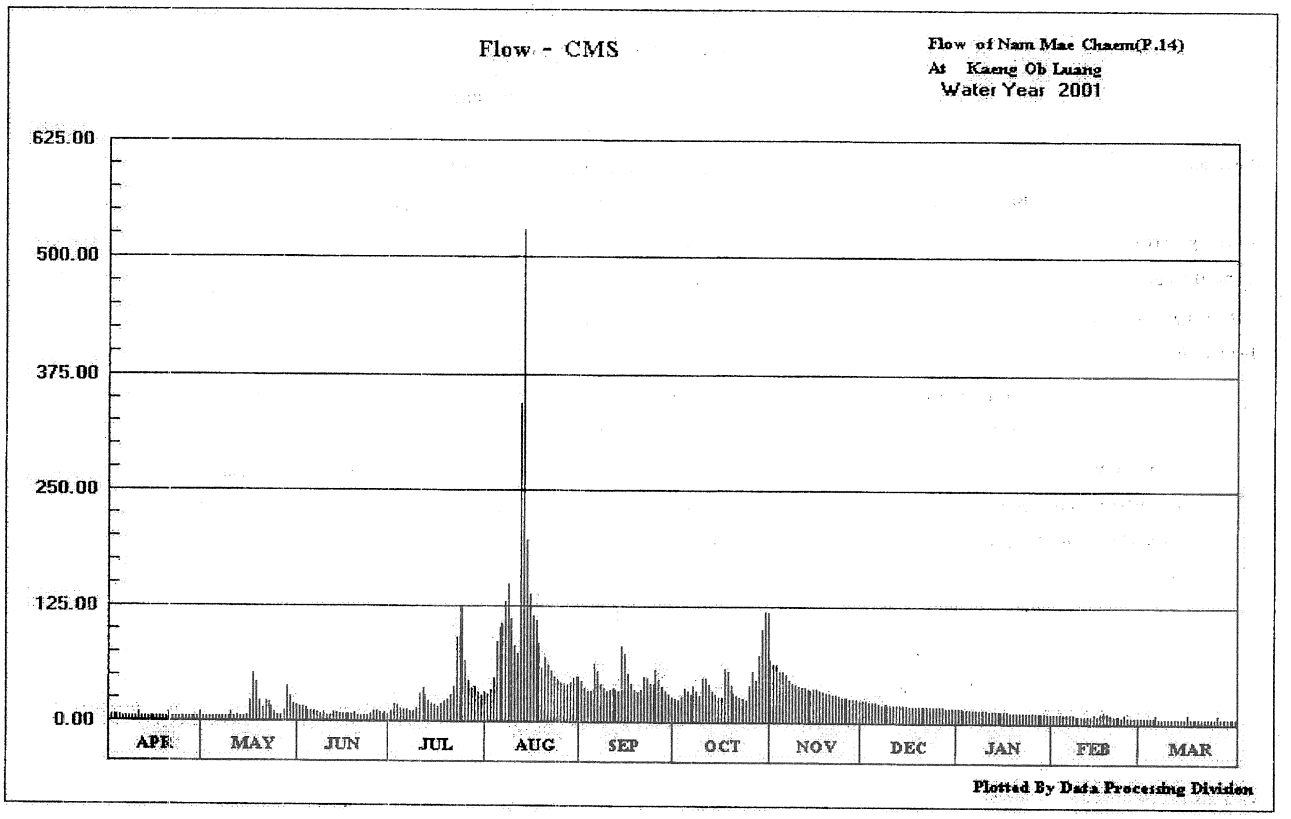
Lat 18 - 13 - 50 N. **Long** 98 - 33 - 38 E.

Location		on right bank near the bridge of Hot-Mae Sariang Highway at guidepost 7+500.
	Ban -	**Amphoe** Hot **Changwat** Chiang Mai
Drainage Area		3,853 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+275.800 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	About 10 meters in front of automatic gage building.
	Elevation	+282.200 m. (M.S.L.)
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 Float	-
	Rated by Current Meter	1954 - 1960, 1967 to date.
Stability of Channel Regimes		Rather unstable.
Overbank Flow Conditions		Overbank flow starts at elevation +282.160 m.(M.S.L.) and is including overbank flow.
General Description		Records good. The concrete weir situated about 6 Kilometers downstream from the gage site.
		Stage-discharge relation defined by 101 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	278.31	278.16	278.57	278.44	278.84	279.05	278.75	279.37	278.65	278.48	278.31	278.20	
2	278.30	278.19	278.56	278.64	278.90	278.93	278.72	279.32	278.64	278.47	278.31	278.20	
3	278.29	278.21	278.50	278.59	279.10	278.88	278.79	279.32	278.63	278.45	278.32	278.20	
4	278.29	278.22	278.44	278.51	279.61	278.87	278.94	279.20	278.62	278.45	278.32	278.20	
5	278.28	278.24	278.42	278.49	279.79	279.32	278.89	279.20	278.61	278.45	278.30	278.19	
6	278.28	278.24	278.42	278.48	279.85	279.21	278.83	279.15	278.58	278.45	278.30	278.18	
7	278.28	278.23	278.40	278.45	280.08	279.02	278.99	279.03	278.57	278.44	278.29	278.17	
8	278.27	278.23	278.36	278.44	280.25	278.93	278.87	278.99	278.58	278.43	278.28	278.17	
9	278.26	278.23	278.36	278.50	279.89	278.89	278.80	278.96	278.58	278.42	278.28	278.16	
10	278.25	278.23	278.33	278.82	279.55	278.90	279.11	278.93	278.57	278.42	278.26	278.16	
11	278.25	278.21	278.33	278.93	279.45	278.94	279.10	278.91	278.56	278.41	278.26	278.16	
12	278.25	278.29	278.39	278.80	281.65	278.90	279.02	278.91	278.55	278.40	278.25	278.16	
13	278.24	278.28	278.40	278.68	282.61	278.89	278.89	278.88	278.54	278.40	278.25	278.16	
14	278.23	278.26	278.36	278.61	280.65	279.56	278.82	278.85	278.54	278.40	278.25	278.16	
15	278.23	278.29	278.34	278.58	280.16	279.45	278.78	278.89	278.54	278.40	278.27	278.15	
16	278.23	278.68	278.35	278.56	279.92	279.17	278.77	278.87	278.53	278.40	278.36	278.14	
17	278.22	279.17	278.36	278.62	279.87	279.02	279.26	278.84	278.52	278.39	278.40	278.13	
18	278.21	279.03	278.36	278.68	279.59	278.90	279.20	278.81	278.52	278.35	278.34	278.13	
19	278.20	278.70	278.34	278.71	279.25	278.86	278.98	278.79	278.51	278.35	278.30	278.13	
20	278.20	278.52	278.31	278.81	279.39	278.91	278.86	278.78	278.51	278.35	278.28	278.13	
21	278.20	278.68	278.31	278.96	279.29	279.13	278.81	278.76	278.51	278.35	278.26	278.13	
22	278.20	278.65	278.31	279.67	279.21	279.11	278.77	278.75	278.50	278.34	278.25	278.13	
23	278.20	278.54	278.30	280.03	279.13	279.01	278.75	278.73	278.51	278.34	278.23	278.13	
24	278.19	278.40	278.36	280.01	279.08	279.02	278.72	278.72	278.53	278.34	278.23	278.13	
25	278.19	278.32	278.44	279.35	279.04	279.23	278.99	278.70	278.51	278.35	278.22	278.15	
26	278.18	278.30	278.46	279.06	279.00	279.08	279.22	278.70	278.51	278.37	278.22	278.15	
27	278.17	278.45	278.41	278.93	278.98	278.96	279.07	278.69	278.50	278.36	278.20	278.14	
28	278.17	278.97	278.36	278.97	279.03	278.88	279.44	278.68	278.49	278.35	278.20	278.12	
29	278.16	278.79	278.34	278.86	279.09	278.83	279.78	278.67	278.49	278.34		278.11	
30	278.15	278.62	278.34	278.80	279.13	278.78	279.97	278.66	278.48	278.33		278.11	
31		278.59		278.86	279.13		279.97		278.47	278.31		278.10	
Mean	278.23	278.45	278.38	278.83	279.63	279.02	279.03	278.90	278.54	278.39	278.28	278.15	
Max	278.31	279.17	278.57	280.03	282.61	279.56	279.97	279.37	278.65	278.48	278.40	278.20	282.61
Min	278.15	278.16	278.30	278.44	278.84	278.78	278.72	278.66	278.47	278.31	278.20	278.10	278.10

Annual Max Momentary Gage Height 283.78 M (MSL), at 4:00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 275.80 M (MSL), River Bed 277.65 M (MSL)
Left Bank Elevation 285.00 M (MSL)
Right Bank Elevation 282.15 M (MSL), Drainage Area 3853 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.4	4.3	18.3	13.1	32.4	45.5	27.1	68.8	25.6	17.8	11.5	8.1	
2	8.1	5.0	17.9	21.5	36.0	37.8	25.4	65.0	25.1	17.4	11.5	8.1	
3	7.8	5.5	15.4	19.2	49.0	34.8	29.4	65.0	24.5	16.7	11.8	8.1	
4	7.8	5.8	13.1	15.8	87.8	34.2	38.4	57.0	24.0	16.7	11.8	8.1	
5	7.5	6.4	12.3	15.0	103.2	65.0	35.4	57.0	23.4	16.7	11.1	7.8	
6	7.5	6.4	12.3	14.6	109.0	56.7	31.8	54.0	22.0	16.7	11.1	7.5	
7	7.5	6.1	11.5	13.5	132.0	43.4	41.4	46.8	21.6	16.3	10.8	7.2	
8	7.2	6.1	10.1	13.1	150.0	37.8	34.2	44.4	22.0	15.9	10.5	7.2	
9	6.9	6.1	10.1	15.4	113.0	35.4	30.0	42.7	22.0	15.5	10.5	6.9	
10	6.7	6.1	9.1	31.2	83.0	36.0	49.7	41.0	21.6	15.5	9.9	6.9	
11	6.7	5.5	9.1	37.8	75.0	38.4	49.0	39.9	21.2	15.1	9.9	6.9	
12	6.7	7.8	11.2	30.0	345.7	36.0	43.4	39.9	20.7	14.7	9.6	6.9	
13	6.4	7.5	11.5	23.4	530.1	35.4	35.4	38.2	20.3	14.7	9.6	6.9	
14	6.1	6.9	10.1	20.1	197.7	83.8	31.2	36.5	20.3	14.7	9.6	6.9	
15	6.1	7.8	9.5	18.8	140.3	75.0	28.9	38.7	20.3	14.7	10.2	6.6	
16	6.1	23.4	9.8	17.9	116.0	53.9	28.3	37.6	19.9	14.7	13.3	6.3	
17	5.8	53.9	10.1	20.5	111.0	43.4	60.5	35.9	19.5	14.3	14.7	6.0	
18	5.5	44.1	10.1	23.4	86.2	36.0	56.0	34.3	19.5	12.9	12.5	6.0	
19	5.2	24.3	9.5	24.9	59.7	33.6	40.8	33.2	19.0	12.9	11.1	6.0	
20	5.2	16.2	8.4	30.6	70.3	36.6	33.6	32.6	19.0	12.9	10.5	6.0	
21	5.2	23.4	8.4	39.6	62.8	51.1	30.6	31.5	19.0	12.9	9.9	6.0	
22	5.2	21.9	8.4	93.0	56.7	49.7	28.3	31.0	18.6	12.5	9.6	6.0	
23	5.2	17.1	8.1	127.0	51.1	42.7	27.1	29.9	19.0	12.5	9.0	6.0	
24	5.0	11.5	10.1	125.0	47.6	43.4	25.4	29.4	19.9	12.5	9.0	6.0	
25	5.0	8.8	13.1	67.3	44.8	58.3	41.4	28.3	19.0	12.9	8.7	6.6	
26	4.7	8.1	13.8	46.2	42.0	47.6	57.5	28.3	19.0	13.6	8.7	6.6	
27	4.5	13.5	11.9	37.8	40.8	39.6	46.9	27.8	18.6	13.3	8.1	6.3	
28	4.5	40.2	10.1	40.2	44.1	34.8	74.2	27.2	18.2	12.9	8.1	5.7	
29	4.3	29.4	9.5	33.6	48.3	31.8	102.3	26.7	18.2	12.5		5.4	
30	4.0	20.5	9.5	30.0	51.1	28.9	121.0	26.1	17.8	12.2		5.4	
31		19.2		33.6	51.1		121.0		17.4	11.5		5.1	
Total	182.8	468.8	332.3	1093.1	3167.8	1326.6	1425.6	1194.7	636.2	446.1	292.6	205.5	10772.1 CMSDAY
Mean	6.1	15.1	11.1	35.3	102.2	44.2	46.0	39.8	20.5	14.4	10.5	6.6	29.5 CMS
Max	8.4	53.9	18.3	127.0	530.1	83.8	121.0	68.8	25.6	17.8	14.7	8.1	530.1 CMS
Min	4.0	4.3	8.1	13.1	32.4	28.9	25.4	26.1	17.4	11.5	8.1	5.1	4.0 CMS
Runoff	15.79	40.50	28.71	94.44	273.70	114.62	123.17	103.22	54.97	38.54	25.28	17.76	930.71 MCM

Momentary Peak 789.40 CMS, at 283.78 M (MSL), at 4.00 Hours, on Aug 13, 2001

Runoff Yield 7.66 Liters/Second/Square KM, Momentary Peak Yield 204.879 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Ping River at Ban Khlong Khlung, 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 Khlong Khlung **Amphoe** Khlong Khlung **Changwat** Kamphaeng Phet

Drainage Area 43,805 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +51.560 m.(M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 30 meters from the south of Wat Si Phirom.

Elevation +56.617 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1954 to date.

Rating Operation

Period of Rating 1964 - 1974, 1997 to date.

Rated by Float -

Rated by Current Meter 1964 - 1974, 1997 to date.

Stability of Channel Regimes Fairly stable.

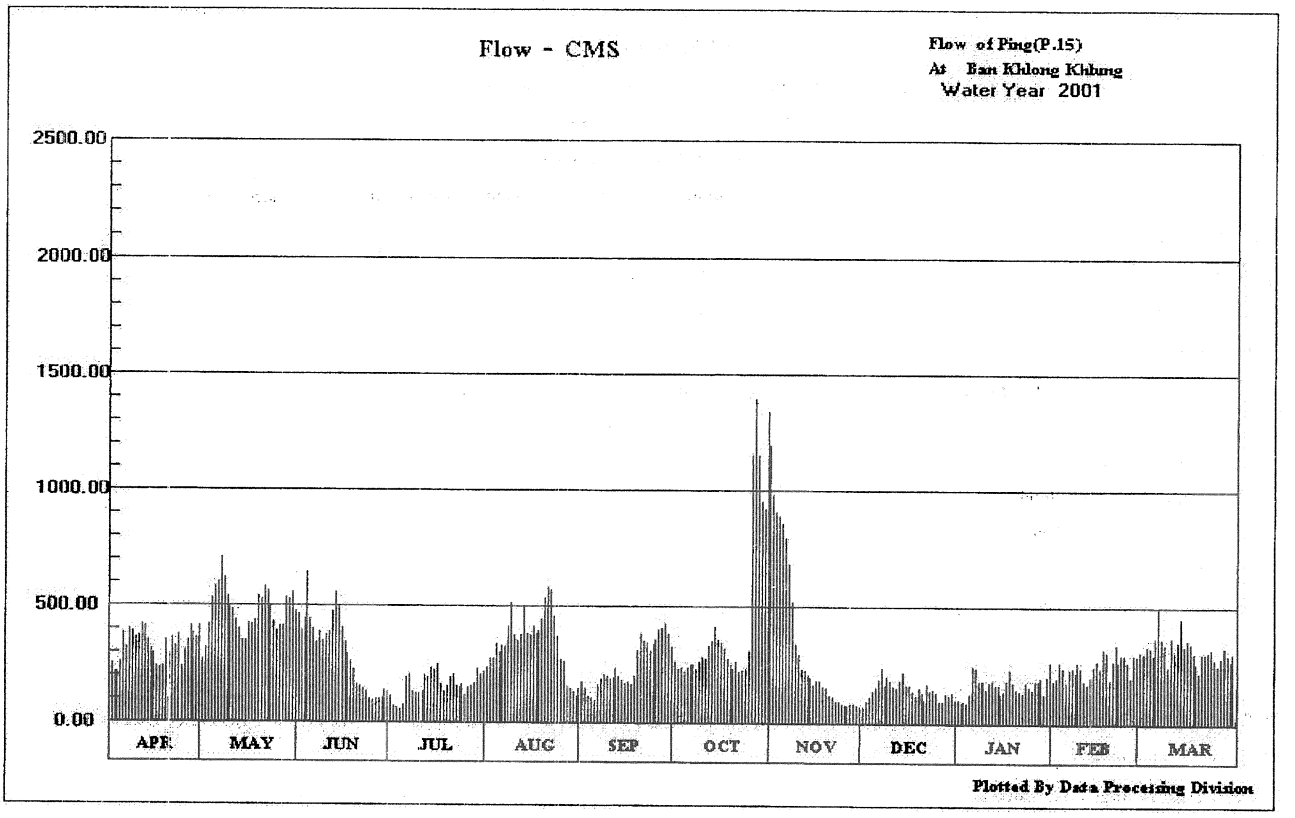
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.65	53.69	54.13	53.23	53.62	53.43	53.68	55.39	53.08	53.19	53.46	53.79	
2	53.55	53.81	53.98	53.08	53.71	53.34	53.59	55.06	53.16	53.15	53.50	53.77	
3	53.54	54.04	54.10	53.04	53.71	53.23	53.61	54.94	53.24	53.16	53.68	53.85	
4	53.66	54.28	54.49	53.02	53.86	53.21	53.57	54.91	53.32	53.15	53.61	53.83	
5	53.96	54.38	54.10	53.10	53.77	53.18	53.61	54.86	53.37	53.28	53.43	53.76	
6	53.81	54.41	54.00	53.49	53.85	53.41	53.64	54.75	53.47	53.63	53.60	53.93	
7	54.00	54.61	53.87	53.53	53.83	53.47	53.65	54.56	53.61	53.62	53.62	54.22	
8	53.97	54.45	53.97	53.29	54.02	53.53	53.60	54.25	53.40	53.46	53.56	53.91	
9	53.91	54.29	53.88	53.28	54.24	53.51	53.67	53.86	53.51	53.46	53.67	53.86	
10	53.92	54.20	53.94	53.27	53.94	53.47	53.73	53.75	53.45	53.34	53.62	53.63	
11	54.04	54.18	53.97	53.29	53.89	53.49	53.71	53.59	53.38	53.43	53.46	53.93	
12	54.02	54.08	54.16	53.51	53.94	53.59	53.85	53.58	53.36	53.46	53.42	53.79	
13	53.88	53.99	54.33	53.50	54.21	53.51	53.89	53.53	53.46	53.41	53.51	53.88	
14	53.80	53.89	54.20	53.60	53.95	53.46	54.03	53.50	53.56	53.40	53.63	54.11	
15	53.76	53.89	54.01	53.58	53.94	53.42	53.90	53.41	53.40	53.27	53.69	53.84	
16	53.61	54.05	53.87	53.65	54.03	53.44	53.87	53.46	53.40	53.32	53.62	53.90	
17	53.59	54.04	53.76	53.40	53.96	53.41	53.81	53.45	53.31	53.45	53.81	53.87	
18	53.61	54.08	53.67	53.30	53.98	53.51	53.71	53.39	53.25	53.59	53.78	53.77	
19	53.88	54.29	53.58	53.38	54.10	53.80	53.65	53.37	53.36	53.43	53.48	53.66	
20	53.76	54.27	53.40	53.49	54.28	53.95	53.60	53.25	53.30	53.33	53.69	53.56	
21	53.91	54.38	53.38	53.53	54.38	53.88	53.67	53.23	53.20	53.32	53.86	53.77	
22	53.83	54.34	53.33	53.38	54.36	53.87	53.57	53.18	53.42	53.29	53.67	53.77	
23	53.94	54.21	53.30	53.36	54.12	53.78	53.58	53.18	53.32	53.43	53.75	53.79	
24	53.62	54.07	53.19	53.40	53.93	53.86	53.59	53.11	53.34	53.38	53.76	53.81	
25	53.78	53.98	53.17	53.26	53.69	53.90	53.79	53.10	53.30	53.35	53.67	53.71	
26	53.89	54.02	53.19	53.36	53.68	53.99	55.32	53.10	53.17	53.46	53.50	53.65	
27	54.02	54.03	53.20	53.39	53.39	54.01	55.67	53.11	53.16	53.46	53.75	53.73	
28	53.96	54.28	53.21	53.42	53.35	54.05	55.32	53.12	53.27	53.49	53.74	53.83	
29	53.91	54.27	53.32	53.60	53.29	53.95	55.01	53.10	53.26	53.27		53.76	
30	54.03	54.33	53.30	53.53	53.24	53.83	54.96	53.08	53.29	53.51		53.70	
31		54.16		53.57	53.35		55.59		53.20	53.68		53.77	
Mean	53.83	54.16	53.73	53.38	53.86	53.62	54.01	53.74	53.33	53.39	53.63	53.81	
Max	54.04	54.61	54.49	53.65	54.38	54.05	55.67	55.39	53.61	53.68	53.86	54.22	55.67
Min	53.54	53.69	53.17	53.02	53.24	53.18	53.57	53.08	53.08	53.15	53.42	53.56	53.02

Annual Max Momentary Gage Height 55.70 M (MSL), at 6.00 Hours, on Oct 27, 2001
Zero Gage at Bottom Elevation 51.56 M (MSL), River Bed 51.65 M (MSL)
Left Bank Elevation 57.48 M (MSL)
Right Bank Elevation 57.53 M (MSL), Drainage Area 43805 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	260.0	276.0	468.5	119.0	248.0	180.5	272.0	1203.5	80.0	107.5	191.0	316.0	
2	222.5	324.5	401.0	80.0	284.0	152.0	236.5	989.0	100.0	97.5	205.0	308.0	
3	219.0	428.0	455.0	70.0	284.0	119.0	244.0	914.0	122.0	100.0	272.0	342.5	
4	264.0	540.0	649.5	65.0	347.0	113.0	229.5	896.0	146.0	97.5	244.0	333.5	
5	392.0	590.0	455.0	85.0	308.0	105.0	244.0	866.0	161.0	134.0	180.5	304.0	
6	324.5	605.5	410.0	201.5	342.5	173.5	256.0	800.0	194.5	252.0	240.0	378.5	
7	410.0	716.0	351.5	215.5	333.5	194.5	260.0	688.0	244.0	248.0	248.0	510.0	
8	396.5	627.5	396.5	137.0	419.0	215.5	240.0	525.0	170.0	191.0	226.0	369.5	
9	369.5	545.0	356.0	134.0	520.0	208.5	268.0	347.0	208.5	191.0	268.0	347.0	
10	374.0	500.0	383.0	131.0	383.0	194.5	292.0	300.0	187.5	152.0	248.0	252.0	
11	428.0	491.0	396.5	137.0	360.5	201.5	284.0	236.5	164.0	180.5	191.0	378.5	
12	419.0	446.0	482.0	208.5	383.0	236.5	342.5	233.0	158.0	191.0	177.0	316.0	
13	356.0	405.5	565.0	205.0	505.0	208.5	360.5	215.5	191.0	173.5	208.5	356.0	
14	320.0	360.5	500.0	240.0	387.5	191.0	423.5	205.0	226.0	170.0	252.0	459.5	
15	304.0	360.5	414.5	233.0	383.0	177.0	365.0	173.5	170.0	131.0	276.0	338.0	
16	244.0	432.5	351.5	260.0	423.5	184.0	351.5	191.0	170.0	146.0	248.0	365.0	
17	236.5	428.0	304.0	170.0	392.0	173.5	324.5	187.5	143.0	187.5	324.5	351.5	
18	244.0	446.0	268.0	140.0	401.0	208.5	284.0	167.0	125.0	236.5	312.0	308.0	
19	356.0	545.0	233.0	164.0	455.0	320.0	260.0	161.0	158.0	180.5	198.0	264.0	
20	304.0	535.0	170.0	201.5	540.0	387.5	240.0	125.0	140.0	149.0	276.0	226.0	
21	369.5	590.0	164.0	215.5	590.0	356.0	268.0	119.0	110.0	146.0	347.0	308.0	
22	333.5	570.0	149.0	164.0	580.0	351.5	229.5	105.0	177.0	137.0	268.0	308.0	
23	383.0	505.0	140.0	158.0	464.0	312.0	233.0	105.0	146.0	180.5	300.0	316.0	
24	248.0	441.5	107.5	170.0	378.5	347.0	236.5	87.5	152.0	164.0	304.0	324.5	
25	312.0	401.0	102.5	128.0	276.0	365.0	316.0	85.0	140.0	155.0	268.0	284.0	
26	360.5	419.0	107.5	158.0	272.0	405.5	1158.0	85.0	102.5	191.0	205.0	260.0	
27	419.0	423.5	110.0	167.0	167.0	414.5	1399.0	87.5	100.0	191.0	300.0	292.0	
28	392.0	540.0	113.0	177.0	155.0	432.5	1158.0	90.0	131.0	201.5	296.0	333.5	
29	369.5	535.0	146.0	240.0	137.0	387.5	956.5	85.0	128.0	131.0		304.0	
30	423.5	565.0	140.0	215.5	122.0	333.5	926.0	80.0	137.0	208.5		280.0	
31		482.0		229.5	155.0		1343.0		110.0	272.0		308.0	
Total	10054.0	15074.5	9290.0	5219.5	10996.0	7649.0	14001.0	10352.5	4692.0	5293.5	7073.5	10141.5	109837.0 CMSDAY
Mean	335.1	486.3	309.7	168.4	354.7	255.0	451.6	345.1	151.4	170.8	252.6	327.1	300.9 CMS
Max	428.0	716.0	649.5	260.0	590.0	432.5	1399.0	1203.5	244.0	272.0	347.0	510.0	1399.0 CMS
Min	219.0	276.0	102.5	65.0	122.0	105.0	229.5	80.0	80.0	97.5	177.0	226.0	65.0 CMS
Runoff	868.67	1302.44	802.66	450.96	950.05	660.87	1209.69	894.46	405.39	457.36	611.15	876.23	9489.92 MCM

Momentary Peak 1462.00 CMS, at 55.70 M (MSL), at 6.00 Hours, on Oct 27, 2001

Runoff Yield 6.87 Liters/Second/Square KM, Momentary Peak Yield 33.375 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Ping River at Khanu Woralaksaburi, Kamphaeng Phet (P.16)

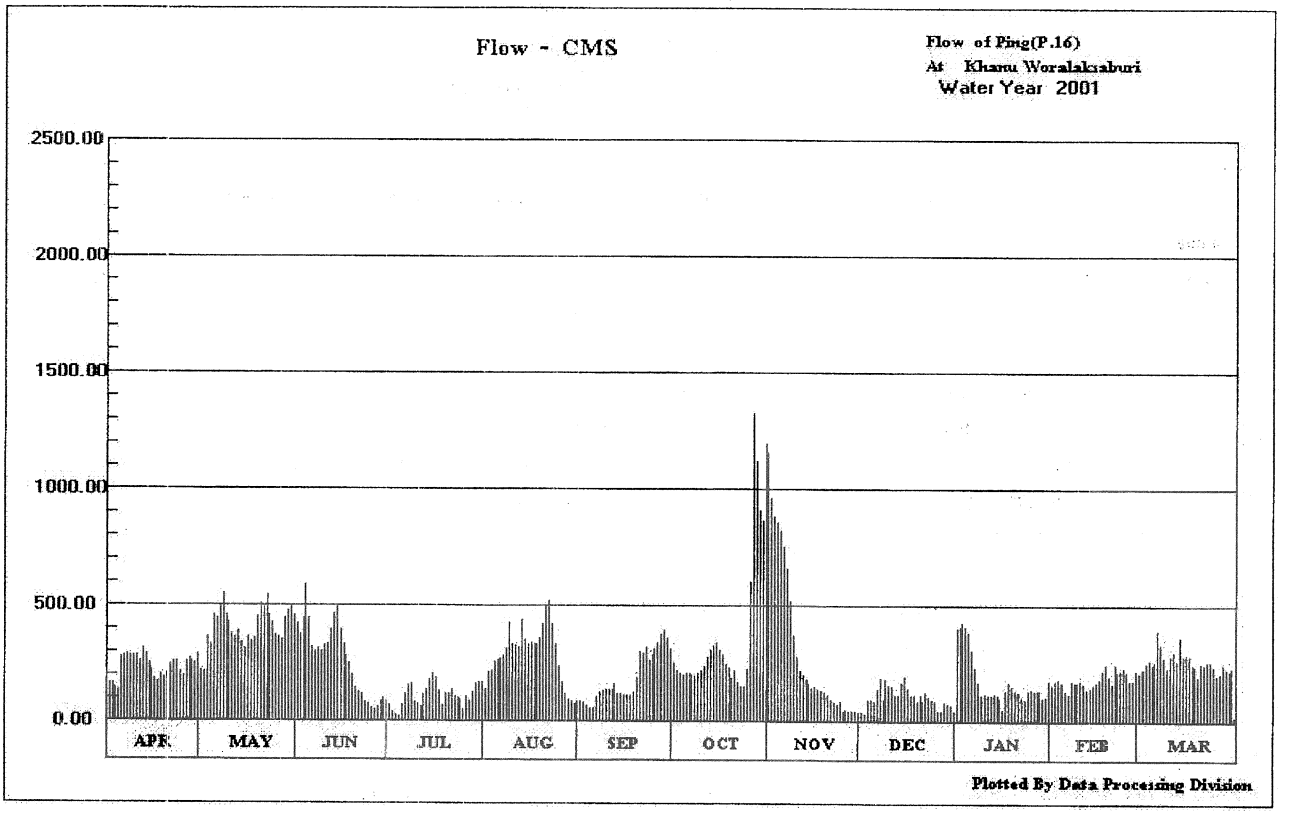
Lat 16 - 03 - 45 N. **Long** 99 - 51 - 48 E.

Location		on right bank behind the Post Office.
	Ban -	**Amphoe** Khanu Woralaksaburi **Changwat** Kamphaeng Phet
Drainage Area		45,677 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+41.780 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On right bank near the automatic gage building.
	Elevation	+46.604 m. (M.S.L.)
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 Float	-
	Rated by Current Meter	1960, 1964 - 1975, 1979, 1990 to
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 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.62	41.86	42.57	41.21	41.52	41.31	41.97	44.58	41.07	42.52	41.60	41.80	
2	41.63	41.83	42.42	41.07	41.82	41.27	41.85	44.10	41.04	42.54	41.67	41.88	
3	41.55	42.39	42.65	40.99	41.85	41.21	41.79	43.90	41.32	42.60	41.71	41.98	
4	41.48	42.27	43.10	40.94	42.00	41.17	41.78	43.83	41.33	42.53	41.64	42.02	
5	42.06	42.70	42.66	41.21	42.03	41.15	41.79	43.74	41.31	42.45	41.49	41.96	
6	42.09	42.65	42.22	41.45	42.05	41.39	41.79	43.55	41.52	42.17	41.45	41.99	
7	42.12	42.83	42.16	41.60	42.09	41.46	41.77	43.30	41.72	41.89	41.67	42.50	
8	42.10	42.98	42.21	41.63	42.20	41.50	41.76	42.88	41.33	41.64	41.65	42.27	
9	42.08	42.70	42.15	41.28	42.59	41.51	41.81	42.41	41.69	41.42	41.66	42.06	
10	42.10	42.59	42.24	41.24	42.28	41.51	41.86	42.07	41.60	41.45	41.67	41.89	
11	42.01	42.42	42.28	41.18	42.24	41.51	41.93	41.84	41.58	41.42	41.63	42.10	
12	42.21	42.39	42.48	41.40	42.22	41.62	42.06	41.77	41.40	41.42	41.51	42.15	
13	42.11	42.46	42.71	41.51	42.64	41.45	42.17	41.69	41.41	41.43	41.54	42.02	
14	41.97	42.29	42.80	41.71	42.34	41.45	42.24	41.63	41.65	41.41	41.61	42.38	
15	41.86	42.20	42.50	41.80	42.26	41.42	42.29	41.54	41.76	41.37	41.66	42.09	
16	41.70	42.38	42.28	41.73	42.30	41.41	42.18	41.57	41.54	41.12	41.71	42.11	
17	41.64	42.31	42.09	41.48	42.28	41.40	42.12	41.51	41.40	41.49	41.86	42.09	
18	41.77	42.37	41.98	41.21	42.26	41.46	41.96	41.48	41.40	41.65	41.94	41.96	
19	41.73	42.68	41.77	41.43	42.37	41.72	41.90	41.46	41.30	41.58	41.75	41.92	
20	41.79	42.84	41.54	41.44	42.58	42.16	41.73	41.40	41.40	41.48	41.63	41.74	
21	41.94	42.81	41.47	41.52	42.83	42.14	41.84	41.33	41.29	41.47	41.96	41.98	
22	41.99	42.96	41.45	41.39	42.88	42.22	41.64	41.28	41.47	41.36	41.83	41.94	
23	41.99	42.70	41.26	41.35	42.58	42.02	41.58	41.23	41.38	41.33	41.84	41.99	
24	41.83	42.60	41.25	41.34	42.27	42.11	41.56	41.29	41.34	41.49	41.90	42.00	
25	41.75	42.41	41.15	41.13	41.92	42.21	41.87	41.09	41.29	41.51	41.82	41.92	
26	41.99	42.38	41.14	41.38	41.65	42.29	43.14	41.13	41.10	41.48	41.67	41.78	
27	42.04	42.34	41.18	41.31	41.44	42.43	44.98	41.11	41.10	41.50	41.67	41.79	
28	41.99	42.66	41.30	41.46	41.32	42.49	44.50	41.11	41.27	41.49	41.86	41.95	
29	41.97	42.75	41.37	41.62	41.29	42.36	43.96	41.09	41.24	41.36		41.87	
30	42.11	42.83	41.31	41.64	41.25	42.21	43.85	41.06	41.20	41.38		41.86	
31		42.70		41.65	41.30		44.67		41.10	41.67		41.90	
Mean	41.91	42.53	41.99	41.40	42.09	41.72	42.33	42.07	41.37	41.67	41.70	42.00	
Max	42.21	42.98	43.10	41.80	42.88	42.49	44.98	44.58	41.76	42.60	41.96	42.50	44.98
Min	41.48	41.83	41.14	40.94	41.25	41.15	41.56	41.06	41.04	41.12	41.45	41.74	40.94

Annual Max Momentary Gage Height 45.01 M (MSL), at 9.00 Hours, on Oct 27, 2001
Zero Gage at Bottom Elevation 41.78 M (MSL), River Bed 39.23 M (MSL)
Left Bank Elevation 49.12 M (MSL)
Right Bank Elevation 51.45 M (MSL), Drainage Area 45677 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	170.0	230.0	426.0	76.2	146.2	98.2	257.5	1162.0	46.7	411.0	165.0	215.0	
2	172.5	222.5	381.0	46.7	220.0	89.4	227.5	970.0	40.4	417.0	182.5	235.0	
3	153.3	372.2	451.3	30.4	227.5	76.2	212.5	890.0	100.4	435.0	192.5	260.0	
4	136.8	339.2	597.5	22.4	265.0	67.7	210.0	862.0	102.6	414.0	175.0	270.5	
5	281.5	467.5	454.5	76.2	273.2	63.5	212.5	827.5	98.2	390.0	139.2	255.0	
6	289.7	451.3	325.5	129.8	278.7	115.8	212.5	756.2	146.2	311.7	129.8	262.5	
7	298.0	509.8	309.0	165.0	289.7	132.1	207.5	665.0	195.0	237.5	182.5	405.0	
8	292.5	558.5	322.7	172.5	320.0	141.5	205.0	526.0	102.6	175.0	177.5	339.2	
9	287.0	467.5	306.3	91.6	432.0	143.8	217.5	378.0	187.5	122.7	180.0	281.5	
10	292.5	432.0	331.0	82.8	342.0	143.8	230.0	284.2	165.0	129.8	182.5	237.5	
11	267.7	381.0	342.0	69.8	331.0	143.8	247.5	225.0	160.3	122.7	172.5	292.5	
12	322.7	372.2	399.0	118.0	325.5	170.0	281.5	207.5	118.0	122.7	143.8	306.3	
13	295.3	393.0	470.8	143.8	448.0	129.8	311.7	187.5	120.3	125.0	150.9	270.5	
14	257.5	344.7	500.0	192.5	358.5	129.8	331.0	172.5	177.5	120.3	167.5	369.5	
15	230.0	320.0	405.0	215.0	336.5	122.7	344.7	150.9	205.0	111.4	180.0	289.7	
16	190.0	369.5	342.0	197.5	347.5	120.3	314.5	158.0	150.9	57.2	192.5	295.3	
17	175.0	350.3	289.7	136.8	342.0	118.0	298.0	143.8	118.0	139.2	230.0	289.7	
18	207.5	366.7	260.0	76.2	336.5	132.1	255.0	136.8	118.0	177.5	250.0	255.0	
19	197.5	461.0	207.5	125.0	366.7	195.0	240.0	132.1	96.0	160.3	202.5	245.0	
20	212.5	513.0	150.9	127.4	429.0	309.0	197.5	118.0	118.0	136.8	172.5	200.0	
21	250.0	503.3	134.5	146.2	509.8	303.5	225.0	102.6	93.8	134.5	255.0	260.0	
22	262.5	552.0	129.8	115.8	526.0	325.5	175.0	91.6	134.5	109.2	222.5	250.0	
23	262.5	467.5	87.2	107.0	429.0	270.5	160.3	80.6	113.6	102.6	225.0	262.5	
24	222.5	435.0	85.0	104.8	339.2	295.3	155.6	93.8	104.8	139.2	240.0	265.0	
25	202.5	378.0	63.5	59.3	245.0	322.7	232.5	50.9	93.8	143.8	220.0	245.0	
26	262.5	369.5	61.4	113.6	177.5	344.7	610.5	59.3	53.0	136.8	182.5	210.0	
27	276.0	358.5	69.8	98.2	127.4	384.0	1331.5	55.1	53.0	141.5	182.5	212.5	
28	262.5	454.5	96.0	132.1	100.4	402.0	1130.0	55.1	89.4	139.2	230.0	252.5	
29	257.5	483.8	111.4	170.0	93.8	364.0	914.0	50.9	82.8	109.2		232.5	
30	295.3	509.8	98.2	175.0	85.0	322.7	870.0	44.6	74.0	113.6		230.0	
31		467.5		177.5	96.0		1199.7		53.0	182.5		240.0	
Total	7283.3	12901.3	8208.5	3695.1	9144.6	5977.4	12018.0	9637.5	3512.3	5768.9	5326.2	8234.7	91707.8 CMSDAY
Mean	242.8	416.2	273.6	119.2	295.0	199.2	387.7	321.2	113.3	186.1	190.2	265.6	251.3 CMS
Max	322.7	558.5	597.5	215.0	526.0	402.0	1331.5	1162.0	205.0	435.0	255.0	405.0	1331.5 CMS
Min	136.8	222.5	61.4	22.4	85.0	63.5	155.6	44.6	40.4	57.2	129.8	200.0	22.4 CMS
Runoff	629.28	1114.67	709.21	319.26	790.09	516.45	1038.36	832.68	303.46	498.43	460.18	711.48	7923.55 MCM

Momentary Peak 1344.25 CMS, at 45.01 M (MSL), at 9.00 Hours, on Oct 27, 2001

Runoff Yield 5.50 Liters/Second/Square KM, Momentary Peak Yield 29.429 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Ping River at Ban Tha Ngiu, Nakhon Sawan (P.17)

Lat 15 - 56 - 02 N. **Long** 99 - 58 - 49 E.

Location on right bank at Som Sieo Market.

Ban Tha Ngiu **Amphoe** Banphot Phisai **Changwat** Nakhon Sawan

Drainage Area 45,851 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +32.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 5.00 meters from the top staff gage.

Elevation +37.940 m. (M.S.L.)

Gage Reading Frequency 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 Float -

Rated by Current Meter 1954 - 1979, 1990 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

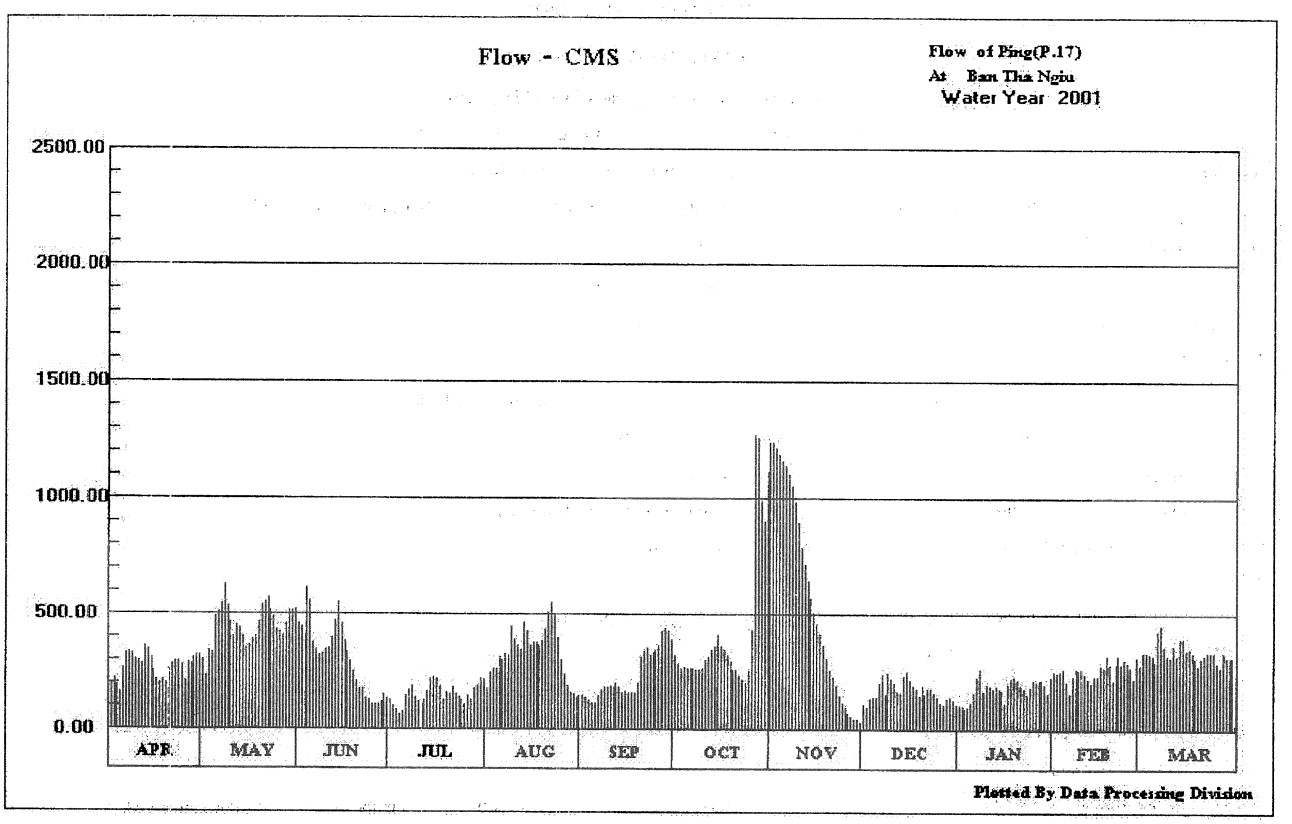
General Description Records good. Flow effected by Phumiphol Dam.

Stage-discharge relation defined by 61 measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	34.78	35.14	35.62	34.48	34.68	34.58	35.21	37.52	34.40	34.39	34.97	35.07	
2	34.85	34.92	35.58	34.37	34.95	34.54	35.09	37.53	34.34	34.37	34.96	35.26	
3	34.74	35.28	35.49	34.28	35.03	34.49	35.01	37.47	34.51	34.31	34.97	35.26	
4	34.63	35.26	36.04	34.20	35.02	34.45	35.04	37.40	34.54	34.34	35.02	35.24	
5	35.02	35.70	35.89	34.27	35.18	34.44	35.01	37.34	34.54	34.45	34.82	35.22	
6	35.24	35.75	35.39	34.56	35.14	34.56	35.03	37.30	34.80	34.63	34.63	35.12	
7	35.25	35.86	35.29	34.67	35.23	34.66	35.02	37.22	34.94	34.89	34.90	35.54	
8	35.23	36.07	35.22	34.74	35.22	34.71	35.00	37.10	34.59	35.01	35.01	35.61	
9	35.15	35.83	35.23	34.55	35.58	34.71	34.99	36.94	34.96	34.65	34.99	35.33	
10	35.12	35.64	35.29	34.46	35.43	34.74	35.03	36.73	34.87	34.77	35.01	35.20	
11	35.08	35.47	35.32	34.41	35.36	34.72	35.15	36.49	34.79	34.74	34.94	35.19	
12	35.33	35.61	35.45	34.50	35.30	34.78	35.18	36.30	34.64	34.69	34.85	35.35	
13	35.30	35.57	35.65	34.64	35.64	34.72	35.30	36.12	34.63	34.74	34.80	35.21	
14	35.17	35.46	35.87	34.86	35.54	34.63	35.34	35.93	34.90	34.69	34.90	35.44	
15	34.98	35.32	35.63	34.89	35.35	34.65	35.48	35.76	34.98	34.67	34.90	35.45	
16	34.83	35.36	35.41	34.85	35.38	34.63	35.33	35.62	34.84	34.45	35.07	35.29	
17	34.79	35.43	35.26	34.74	35.39	34.62	35.29	35.50	34.74	34.76	35.05	35.32	
18	34.83	35.46	35.12	34.49	35.35	34.61	35.20	35.36	34.69	34.86	35.22	35.25	
19	34.79	35.64	34.97	34.61	35.41	34.80	35.13	35.17	34.56	34.88	35.08	35.17	
20	35.01	35.84	34.81	34.60	35.55	35.19	35.00	34.99	34.74	34.84	34.83	35.06	
21	35.08	35.88	34.70	34.71	35.75	35.27	35.00	34.88	34.60	34.74	35.09	35.16	
22	35.13	35.93	34.69	34.60	35.87	35.32	34.92	34.74	34.70	34.68	35.20	35.22	
23	35.13	35.78	34.53	34.55	35.73	35.20	34.84	34.57	34.69	34.60	35.09	35.26	
24	35.07	35.71	34.49	34.50	35.44	35.25	34.79	34.45	34.61	34.71	35.14	35.26	
25	34.82	35.55	34.41	34.41	35.15	35.29	34.97	34.36	34.55	34.83	35.11	35.26	
26	35.10	35.52	34.40	34.58	34.94	35.35	35.55	34.22	34.44	34.81	35.04	35.10	
27	35.09	35.49	34.41	34.49	34.75	35.53	37.60	34.17	34.41	34.83	34.86	35.04	
28	35.17	35.63	34.46	34.68	34.62	35.57	37.57	34.12	34.51	34.83	35.18	35.26	
29	35.21	35.78	34.60	34.74	34.60	35.54	36.96	34.10	34.55	34.77		35.18	
30	35.20	35.78	34.53	34.87	34.54	35.42	36.75	34.04	34.50	34.61		35.17	
31		35.80		34.83	34.57		37.25		34.42	34.89		35.18	
Mean	35.04	35.60	35.13	34.58	35.22	34.90	35.45	35.78	34.64	34.69	34.99	35.25	
Max	35.33	36.07	36.04	34.89	35.87	35.57	37.60	37.53	34.98	35.01	35.22	35.61	37.60
Min	34.63	34.92	34.40	34.20	34.54	34.44	34.79	34.04	34.34	34.31	34.63	35.04	34.04

Annual Max Momentary Gage Height 37.79 M (MSL), at 18.00 Hours, on Oct 28, 2001
Zero Gage at Bottom Elevation 32.00 M (MSL), River Bed 32.77 M (MSL)
Left Bank Elevation 38.14 M (MSL)
Right Bank Elevation 38.07 M (MSL), Drainage Area 45851 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	206.2	306.0	463.4	130.4	180.5	155.0	327.0	1243.6	112.0	109.9	256.6	285.3	
2	226.7	242.6	449.0	105.7	251.0	145.0	291.1	1248.1	99.4	105.7	253.8	342.0	
3	195.9	348.0	417.6	86.8	273.7	132.7	267.9	1220.9	137.5	93.1	256.6	342.0	
4	167.7	342.0	619.7	70.0	270.8	123.5	276.6	1189.0	145.0	99.4	270.8	336.0	
5	270.8	493.0	563.8	84.7	318.0	121.2	267.9	1162.3	145.0	123.5	216.5	330.0	
6	336.0	511.6	383.7	150.0	306.0	150.0	273.7	1144.5	211.3	167.7	167.7	300.0	
7	339.0	552.6	351.0	178.0	333.0	175.4	270.8	1108.9	248.2	234.4	237.0	435.0	
8	333.0	630.8	330.0	195.9	330.0	188.2	265.0	1056.5	157.5	267.9	267.9	459.7	
9	309.0	541.4	333.0	147.5	449.0	188.2	262.2	987.7	253.8	172.8	262.2	363.9	
10	300.0	470.8	351.0	125.8	397.2	195.9	273.7	899.1	229.3	203.6	267.9	324.0	
11	288.2	410.8	360.6	114.3	373.8	190.8	309.0	797.9	208.8	195.9	248.2	321.0	
12	363.9	459.7	404.0	135.0	354.0	206.2	318.0	720.0	170.3	183.1	224.2	370.5	
13	354.0	445.5	474.5	170.3	470.8	190.8	354.0	649.8	167.7	195.9	211.3	327.0	
14	315.0	407.4	556.3	226.7	435.0	167.7	367.2	578.7	237.0	183.1	237.0	400.6	
15	259.4	360.6	467.1	234.4	370.5	172.8	414.2	515.3	259.4	178.0	237.0	404.0	
16	219.0	373.8	390.4	224.2	380.4	167.7	363.9	463.4	221.6	123.5	285.3	351.0	
17	208.8	397.2	342.0	195.9	383.7	165.1	351.0	421.0	195.9	201.1	279.5	360.6	
18	219.0	407.4	300.0	132.7	370.5	162.6	324.0	373.8	183.1	226.7	330.0	339.0	
19	208.8	470.8	256.6	162.6	390.4	211.3	303.0	315.0	150.0	231.9	288.2	315.0	
20	267.9	545.2	213.9	160.0	438.5	321.0	265.0	262.2	195.9	221.6	219.0	282.4	
21	288.2	560.1	185.7	188.2	511.6	345.0	265.0	231.9	160.0	195.9	291.1	312.0	
22	303.0	578.7	183.1	160.0	556.3	360.6	242.6	195.9	185.7	180.5	324.0	330.0	
23	303.0	522.8	142.5	147.5	504.2	324.0	221.6	152.5	183.1	160.0	291.1	342.0	
24	285.3	496.7	132.7	135.0	400.6	339.0	208.8	123.5	162.6	188.2	306.0	342.0	
25	216.5	438.5	114.3	114.3	309.0	351.0	256.6	103.6	147.5	219.0	297.0	342.0	
26	294.0	428.0	112.0	155.0	248.2	370.5	438.5	74.2	121.2	213.9	276.6	294.0	
27	291.1	417.6	114.3	132.7	198.5	431.5	1280.0	64.0	114.3	219.0	226.7	276.6	
28	315.0	467.1	125.8	180.5	165.1	445.5	1266.4	54.0	137.5	219.0	318.0	342.0	
29	327.0	522.8	160.0	195.9	160.0	435.0	996.1	50.0	147.5	203.6		318.0	
30	324.0	522.8	142.5	229.3	145.0	393.8	907.5	39.2	135.0	162.6		315.0	
31		530.2		219.0	152.5		1122.2		116.6	234.4		318.0	
Total	8335.4	14202.5	9440.5	4888.3	10427.8	7327.0	13350.5	17446.5	5339.7	5714.9	7347.2	10520.6	114340.9 CMSDAY
Mean	277.8	458.1	314.7	157.7	336.4	244.2	430.7	581.5	172.2	184.4	262.4	339.4	313.3 CMS
Max	363.9	630.8	619.7	234.4	556.3	445.5	1280.0	1248.1	259.4	267.9	330.0	459.7	1280.0 CMS
Min	167.7	242.6	112.0	70.0	145.0	121.2	208.8	39.2	99.4	93.1	167.7	276.6	39.2 CMS
Runoff	720.18	1227.10	815.66	422.35	900.96	633.05	1153.48	1507.38	461.35	493.77	634.80	908.98	9879.05 MCM

Momentary Peak 1368.03 CMS, at 37.79 M (MSL), at 18.00 Hours, on Oct 28, 2001

Runoff Yield 6.83 Liters/Second/Square KM, Momentary Peak Yield 29.836 Liters/Second/Square KM

WATER YEAR : 2001

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 Wat Inthra Ram.

Ban Chiang Dao **Amphoe** Chiang Dao **Changwat** Chiang Mai

Drainage Area 1,355 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 About 2 meters from automatic gage building.

Elevation +4.133 m. (A.D.)

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 Float -

Rated by Current Meter 1979 - 1982, 1989 to date.

Stability of Channel Regimes Fairly stable.

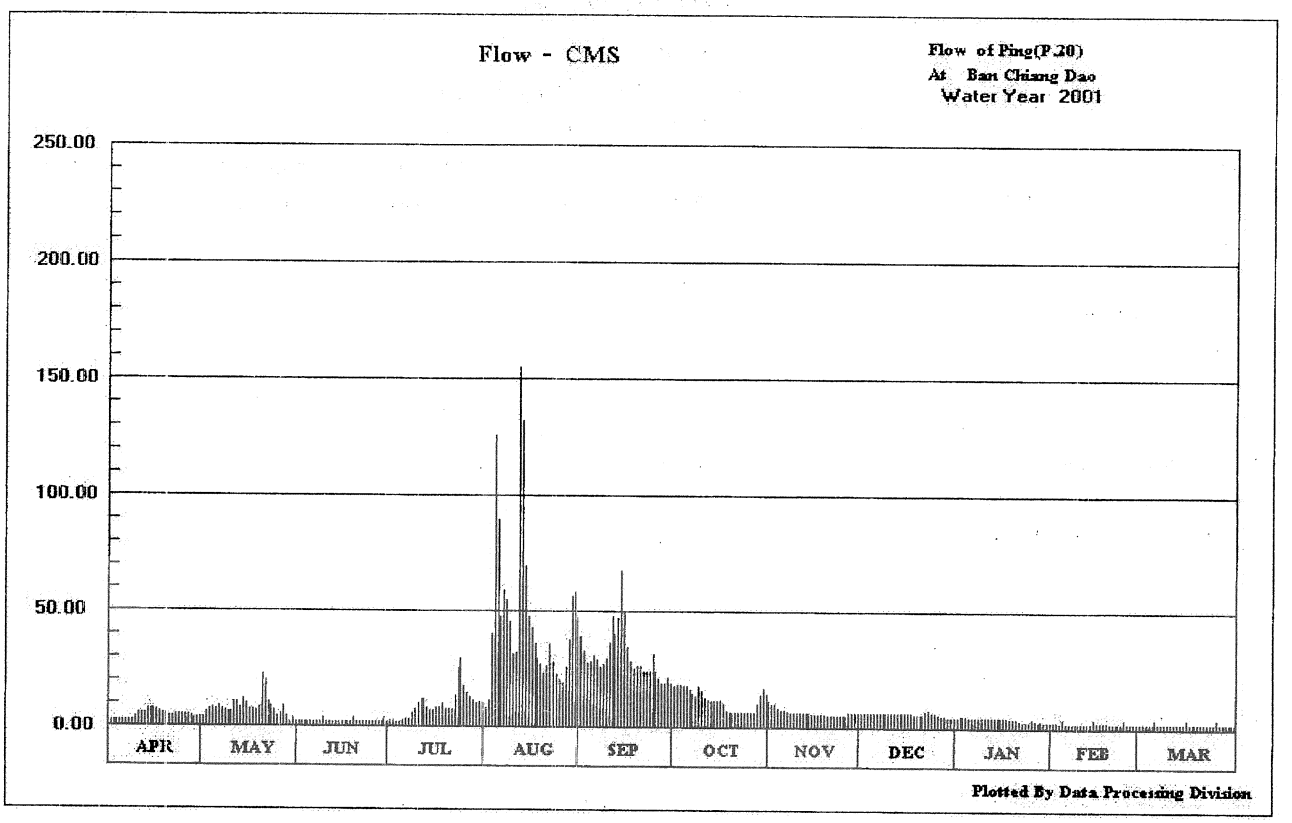
Overbank Flow Conditions No overbank flow.

General Description Records good. Flow effected by the local weir about 300 meters downstream from the gage site. Stage-discharge relation defined by 34 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.40	0.48	0.34	0.39	0.69	1.33	0.94	0.77	0.58	0.50	0.39	0.31	
2	0.40	0.59	0.33	0.39	0.78	1.23	0.95	0.73	0.58	0.53	0.38	0.33	
3	0.41	0.66	0.31	0.35	1.35	1.15	0.95	0.74	0.58	0.54	0.36	0.33	
4	0.38	0.69	0.24	0.33	2.15	1.16	0.93	0.68	0.58	0.53	0.36	0.33	
5	0.39	0.65	0.30	0.38	1.88	1.20	0.93	0.66	0.58	0.52	0.36	0.33	
6	0.39	0.71	0.21	0.42	1.45	1.17	0.91	0.65	0.59	0.51	0.34	0.33	
7	0.40	0.66	0.16	0.42	1.58	1.11	0.85	0.63	0.60	0.51	0.34	0.31	
8	0.39	0.61	0.14	0.56	1.53	1.14	0.83	0.60	0.59	0.50	0.33	0.29	
9	0.46	0.58	0.15	0.66	1.42	1.18	0.93	0.60	0.60	0.50	0.33	0.31	
10	0.55	0.58	0.15	0.73	1.21	1.29	0.89	0.60	0.59	0.50	0.34	0.31	
11	0.55	0.75	0.15	0.79	1.22	1.45	0.81	0.60	0.58	0.50	0.32	0.31	
12	0.56	0.76	0.15	0.79	2.33	1.35	0.79	0.60	0.58	0.50	0.31	0.30	
13	0.64	0.68	0.15	0.67	2.19	1.44	0.78	0.60	0.58	0.50	0.30	0.30	
14	0.64	0.80	0.14	0.61	1.69	1.67	0.78	0.58	0.58	0.51	0.30	0.29	
15	0.64	0.73	0.14	0.61	1.45	1.48	0.78	0.57	0.60	0.52	0.37	0.27	
16	0.63	0.66	0.15	0.68	1.39	1.26	0.78	0.57	0.60	0.52	0.39	0.27	
17	0.60	0.64	0.15	0.67	1.28	1.16	0.73	0.57	0.59	0.50	0.38	0.28	
18	0.56	0.61	0.14	0.74	1.18	1.10	0.61	0.55	0.57	0.48	0.40	0.28	
19	0.55	0.68	0.14	0.66	1.14	1.12	0.60	0.55	0.57	0.48	0.36	0.28	
20	0.51	1.05	0.14	0.65	1.06	1.12	0.60	0.54	0.56	0.47	0.34	0.28	
21	0.51	0.99	0.14	0.64	1.12	1.08	0.60	0.53	0.56	0.42	0.34	0.27	
22	0.54	0.76	0.14	0.83	1.28	1.08	0.59	0.53	0.62	0.40	0.33	0.26	
23	0.54	0.70	0.15	1.10	1.15	1.08	0.59	0.54	0.64	0.41	0.32	0.27	
24	0.54	0.62	0.15	1.18	1.05	1.21	0.59	0.54	0.60	0.41	0.32	0.27	
25	0.53	0.52	0.15	0.94	0.99	1.08	0.59	0.54	0.58	0.43	0.32	0.27	
26	0.53	0.55	0.17	0.85	0.97	1.01	0.59	0.54	0.56	0.42	0.32	0.27	
27	0.52	0.71	0.19	0.81	1.11	0.96	0.59	0.59	0.54	0.41	0.32	0.26	
28	0.48	0.49	0.19	0.78	1.31	0.97	0.74	0.60	0.54	0.42	0.31	0.26	
29	0.48	0.35	0.18	0.73	1.55	1.02	0.84	0.60	0.52	0.40		0.25	
30	0.48	0.32	0.26	0.76	1.57	0.97	0.92	0.60	0.51	0.40		0.25	
31		0.29		0.73	1.44		0.86		0.50	0.39		0.26	
Mean	0.51	0.64	0.18	0.67	1.37	1.19	0.77	0.60	0.58	0.47	0.34	0.29	
Max	0.64	1.05	0.34	1.18	2.33	1.67	0.95	0.77	0.64	0.54	0.40	0.33	2.33
Min	0.38	0.29	0.14	0.33	0.69	0.96	0.59	0.53	0.50	0.39	0.30	0.25	0.14

Annual Max Momentary Gage Height 2.76 M (A.D), at 16.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.64 M (A.D)
Left Bank Elevation 3.88 M (A.D)
Right Bank Elevation 3.43 M (A.D), Drainage Area 1355 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.40	4.76	2.68	3.28	9.27	39.44	18.48	11.95	6.78	5.10	3.28	2.32	
2	3.40	6.99	2.56	3.28	12.30	33.06	18.90	10.55	6.78	5.73	3.16	2.56	
3	3.57	8.58	2.32	2.80	40.80	28.50	18.90	10.90	6.78	5.94	2.92	2.56	
4	3.16	9.27	1.66	2.56	126.50	29.04	18.06	9.04	6.78	5.73	2.92	2.56	
5	3.28	8.35	2.20	3.16	90.08	31.20	18.06	8.58	6.78	5.52	2.92	2.56	
6	3.28	9.85	1.39	3.74	48.20	29.58	17.22	8.35	6.99	5.31	2.68	2.56	
7	3.40	8.58	0.98	3.74	59.64	26.34	14.90	7.89	7.20	5.31	2.68	2.32	
8	3.28	7.43	0.82	6.36	54.99	27.96	14.14	7.20	6.99	5.10	2.56	2.11	
9	4.42	6.78	0.90	8.58	45.80	30.12	18.06	7.20	7.20	5.10	2.56	2.32	
10	6.15	6.78	0.90	10.55	31.82	36.78	16.42	7.20	6.99	5.10	2.68	2.32	
11	6.15	11.25	0.90	12.65	32.44	48.20	13.38	7.20	6.78	5.10	2.44	2.32	
12	6.36	11.60	0.90	12.65	156.05	40.80	12.65	7.20	6.78	5.10	2.32	2.20	
13	8.12	9.04	0.90	8.81	132.50	47.40	12.30	7.20	6.78	5.10	2.20	2.20	
14	8.12	13.00	0.82	7.43	70.23	68.29	12.30	6.78	6.78	5.31	2.20	2.11	
15	8.12	10.55	0.82	7.43	48.20	50.60	12.30	6.57	7.20	5.52	3.04	1.93	
16	7.89	8.58	0.90	9.04	43.52	34.92	12.30	6.57	7.20	5.52	3.28	1.93	
17	7.20	8.12	0.90	8.81	36.16	29.04	10.55	6.57	6.99	5.10	3.16	2.02	
18	6.36	7.43	0.82	10.90	30.12	25.80	7.43	6.15	6.57	4.76	3.40	2.02	
19	6.15	9.04	0.82	8.58	27.96	26.88	7.20	6.15	6.57	4.76	2.92	2.02	
20	5.31	23.40	0.82	8.35	23.88	26.88	7.20	5.94	6.36	4.59	2.68	2.02	
21	5.31	20.58	0.82	8.12	26.88	24.84	7.20	5.73	6.36	3.74	2.68	1.93	
22	5.94	11.60	0.82	14.14	36.16	24.84	6.99	5.73	7.66	3.40	2.56	1.84	
23	5.94	9.50	0.90	25.80	28.50	24.84	6.99	5.94	8.12	3.57	2.44	1.93	
24	5.94	7.66	0.90	30.12	23.40	31.82	6.99	5.94	7.20	3.57	2.44	1.93	
25	5.73	5.52	0.90	18.48	20.58	24.84	6.99	5.94	6.78	3.91	2.44	1.93	
26	5.73	6.15	1.06	14.90	19.74	21.48	6.99	5.94	6.36	3.74	2.44	1.93	
27	5.52	9.85	1.22	13.36	26.34	19.32	6.99	6.99	5.94	3.57	2.44	1.84	
28	4.76	4.93	1.22	12.30	38.08	19.74	10.90	7.20	5.94	3.74	2.32	1.84	
29	4.76	2.80	1.14	10.55	56.85	21.96	14.52	7.20	5.52	3.40		1.75	
30	4.76	2.44	1.84	11.60	58.71	19.74	17.64	7.20	5.31	3.40		1.75	
31		2.11		10.55	47.40		15.28		5.10	3.28		1.84	
Total	161.51	272.52	35.83	312.64	1503.10	944.25	388.23	219.00	207.57	144.12	75.76	65.47	4330.00 CMSDAY
Mean	5.38	8.79	1.19	10.09	48.49	31.48	12.52	7.30	6.70	4.65	2.71	2.11	11.86 CMS
Max	8.12	23.40	2.68	30.12	156.05	68.29	18.90	11.95	8.12	5.94	3.40	2.56	156.05 CMS
Min	3.16	2.11	0.82	2.56	9.27	19.32	6.99	5.73	5.10	3.28	2.20	1.75	0.82 CMS
Runoff	13.954	23.546	3.096	27.012	129.868	81.583	33.543	18.922	17.934	12.452	6.546	5.657	374.112 MCM

Momentary Peak 241.60 CMS, at 2.76 M (A.D), at 16.00 Hours, on Aug 12, 2001.
Runoff Yield 8.75 Liters/Second/Square KM, Momentary Peak Yield 178.303 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Rim at Mae Rim Tai, Chiang Mai (P.21)

Lat 18 - 55 - 45 N. **Long** 98 - 56 - 40 E.

Location on right bank about 100 meters downstream from the bridge of Chiang Mai - Fang Highway.

Ban Mae Rim Tai **Amphoe** Mae Rim **Changwat** Chiang Mai

Drainage Area 515 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +319.700 m.(M.S.L.)

Bench Mark B.M.- H.D.

Location BM B.M.1 in the vicinity of gage observer's house. ,B.M.2 on left bank

Elevation B.M.1 =+323.982 m. (M.S.L.),

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00,15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1954 to date.

Rating Operation

Period of Rating 1954 - 1960, 1977 to date.

Rated by Float -

Rated by Current Meter 1954 - 1960, 1977 to date.

Stability of Channel Regimes Stable.

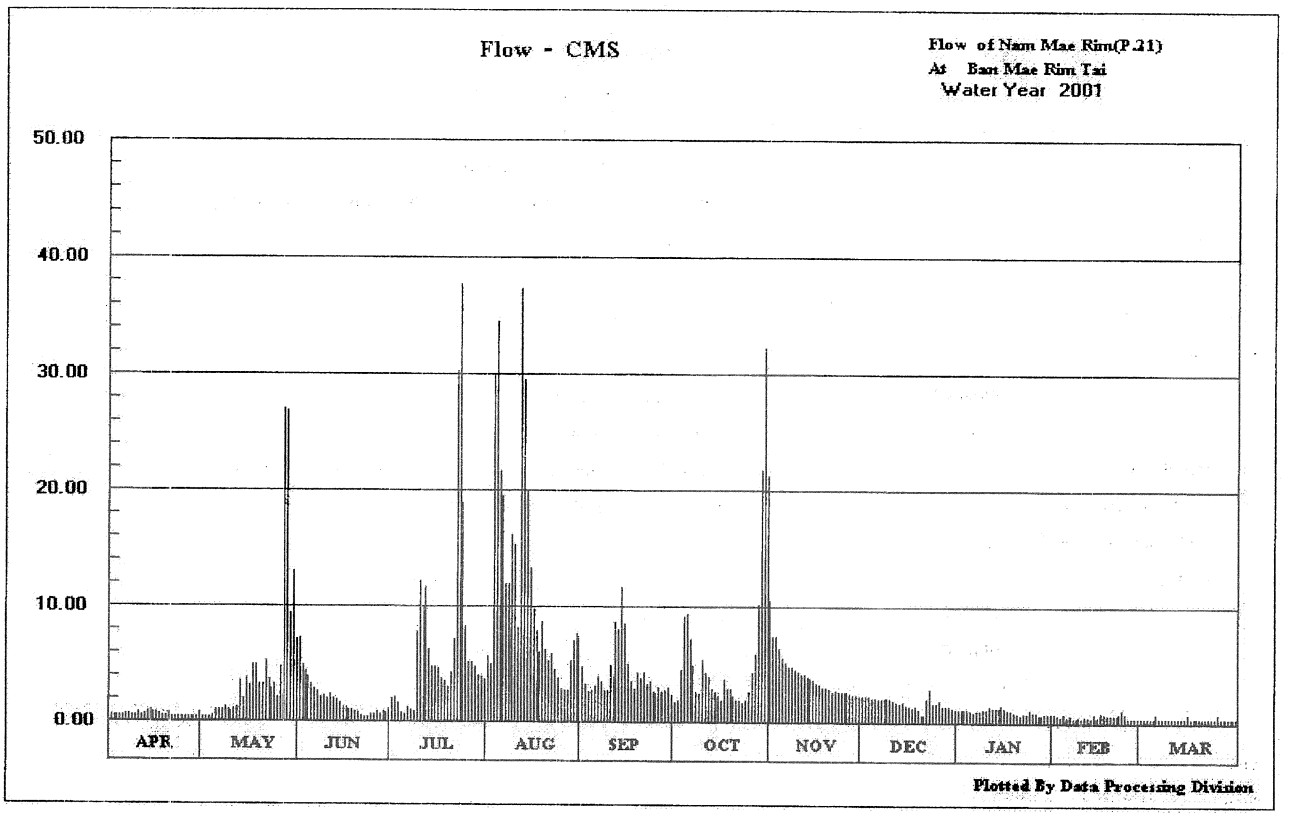
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	320.54	320.36	321.35	320.82	321.21	321.13	320.78	321.61	320.84	320.69	320.59	320.43	
2	320.54	320.34	321.14	320.83	321.15	320.96	320.80	321.36	320.85	320.67	320.55	320.45	
3	320.53	320.35	321.09	320.75	322.73	320.89	321.10	321.36	320.84	320.69	320.54	320.47	
4	320.53	320.53	321.04	320.58	322.94	320.91	321.51	321.28	320.83	320.68	320.51	320.43	
5	320.53	320.64	320.97	320.57	322.31	320.95	321.52	321.20	320.83	320.66	320.51	320.42	
6	320.55	320.64	320.92	320.71	322.19	321.03	321.34	321.16	320.82	320.63	320.55	320.44	
7	320.55	320.64	320.90	320.65	321.71	320.99	321.14	321.12	320.82	320.64	320.50	320.39	
8	320.54	320.71	320.83	320.63	321.71	320.91	320.90	321.12	320.83	320.66	320.50	320.36	
9	320.53	320.65	320.84	321.39	321.98	320.91	320.87	321.10	320.83	320.67	320.52	320.35	
10	320.52	320.61	320.82	321.72	321.93	321.14	321.18	321.09	320.81	320.69	320.50	320.34	
11	320.53	320.68	320.86	321.56	321.42	321.03	321.07	321.06	320.79	320.72	320.53	320.35	
12	320.57	320.70	320.81	321.69	323.06	321.46	321.03	321.06	320.78	320.70	320.54	320.37	
13	320.63	321.00	320.79	321.26	322.71	321.41	320.93	321.03	320.77	320.70	320.49	320.37	
14	320.64	320.81	320.75	321.13	322.21	321.69	320.89	321.02	320.78	320.71	320.47	320.39	
15	320.60	321.02	320.70	321.12	321.80	321.45	320.85	321.01	320.74	320.74	320.54	320.37	
16	320.60	320.95	320.70	321.11	321.55	321.15	320.80	320.98	320.73	320.70	320.61	320.35	
17	320.56	321.14	320.64	321.02	321.40	320.99	321.01	320.96	320.71	320.67	320.59	320.36	
18	320.54	321.14	320.64	321.00	321.24	320.93	320.92	320.94	320.72	320.65	320.56	320.36	
19	320.51	320.97	320.63	320.94	321.47	321.07	320.92	320.94	320.67	320.62	320.56	320.36	
20	320.50	320.97	320.60	321.07	321.27	321.02	320.84	320.92	320.55	320.58	320.57	320.35	
21	320.49	321.17	320.53	321.34	321.17	321.08	320.80	320.90	320.55	320.56	320.55	320.36	
22	320.48	321.01	320.49	322.75	321.23	320.97	320.80	320.91	320.82	320.59	320.58	320.34	
23	320.46	320.93	320.50	323.08	321.10	320.99	320.75	320.90	320.92	320.58	320.69	320.34	
24	320.40	320.96	320.55	322.15	321.02	320.89	320.80	320.90	320.76	320.68	320.50	320.35	
25	320.39	320.83	320.56	321.43	320.93	320.87	320.90	320.89	320.75	320.63	320.46	320.36	
26	320.34	321.12	320.63	321.16	320.91	320.94	321.07	320.89	320.79	320.61	320.44	320.35	
27	320.35	322.59	320.57	321.16	320.91	320.89	321.23	320.87	320.72	320.56	320.47	320.35	
28	320.33	322.58	320.61	321.12	321.17	320.91	321.58	320.86	320.72	320.55	320.47	320.35	
29	320.33	321.52	320.59	321.05	321.33	320.94	322.32	320.86	320.73	320.59		320.35	
30	320.36	321.78	320.68	321.03	321.38	320.86	322.84	320.84	320.71	320.58		320.35	
31		321.34		321.01	321.36		322.29		320.69	320.59		320.35	
Mean	320.50	320.99	320.76	321.22	321.63	321.05	321.15	321.04	320.76	320.64	320.53	320.37	
Max	320.64	322.59	321.35	323.08	323.06	321.69	322.84	321.61	320.92	320.74	320.69	320.47	323.08
Min	320.33	320.34	320.49	320.57	320.91	320.86	320.75	320.84	320.55	320.55	320.44	320.34	320.33

Annual Max Momentary Gage Height 323.42 M (MSL), at 17.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 319.70 M (MSL), River Bed 319.43 M (MSL)
Left Bank Elevation 324.25 M (MSL)
Right Bank Elevation 324.69 M (MSL), Drainage Area 515 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.72	0.28	7.40	2.21	5.81	4.96	1.92	10.67	2.37	1.35	0.90	0.42	
2	0.72	0.24	5.07	2.29	5.17	3.36	2.05	7.52	2.45	1.26	0.76	0.47	
3	0.69	0.26	4.55	1.73	30.03	2.77	4.65	7.52	2.37	1.35	0.72	0.51	
4	0.69	0.69	4.08	0.87	34.62	2.94	9.35	6.58	2.29	1.31	0.62	0.42	
5	0.69	1.12	3.45	0.83	21.78	3.28	9.48	5.70	2.29	1.22	0.62	0.40	
6	0.76	1.12	3.02	1.46	19.68	3.98	7.28	5.28	2.21	1.08	0.76	0.44	
7	0.76	1.12	2.85	1.17	12.09	3.61	5.07	4.86	2.21	1.12	0.58	0.33	
8	0.72	1.46	2.29	1.08	12.09	2.94	2.85	4.86	2.29	1.22	0.58	0.28	
9	0.69	1.17	2.37	7.88	16.23	2.94	2.61	4.65	2.29	1.26	0.65	0.26	
10	0.65	0.99	2.21	12.24	15.43	5.07	5.49	4.55	2.13	1.35	0.58	0.24	
11	0.69	1.31	2.53	10.01	8.24	3.98	4.37	4.27	1.99	1.53	0.69	0.26	
12	0.83	1.40	2.13	11.81	37.38	8.73	3.98	4.27	1.92	1.40	0.72	0.30	
13	1.08	3.70	1.99	6.36	29.61	8.12	3.10	3.98	1.85	1.40	0.56	0.30	
14	1.12	2.13	1.73	4.96	20.02	11.81	2.77	3.89	1.92	1.46	0.51	0.33	
15	0.94	3.89	1.40	4.86	13.40	8.61	2.45	3.80	1.66	1.66	0.72	0.30	
16	0.94	3.28	1.40	4.75	9.87	5.17	2.05	3.53	1.60	1.40	0.99	0.26	
17	0.80	5.07	1.12	3.89	8.00	3.61	3.80	3.36	1.46	1.26	0.90	0.28	
18	0.72	5.07	1.12	3.70	6.14	3.10	3.02	3.19	1.53	1.17	0.80	0.28	
19	0.62	3.45	1.08	3.19	8.85	4.37	3.02	3.19	1.26	1.03	0.80	0.28	
20	0.58	3.45	0.94	4.37	6.47	3.89	2.37	3.02	0.76	0.87	0.83	0.26	
21	0.56	5.39	0.69	7.28	5.39	4.46	2.05	2.85	0.76	0.80	0.76	0.28	
22	0.53	3.80	0.56	30.45	6.03	3.45	2.05	2.94	2.21	0.90	0.87	0.24	
23	0.49	3.10	0.58	37.84	4.65	3.61	1.73	2.85	3.02	0.87	1.35	0.24	
24	0.35	3.36	0.76	19.02	3.89	2.77	2.05	2.85	1.79	1.31	0.58	0.26	
25	0.33	2.29	0.80	8.37	3.10	2.61	2.85	2.77	1.73	1.08	0.49	0.28	
26	0.24	4.86	1.08	5.28	2.94	3.19	4.37	2.77	1.99	0.99	0.44	0.26	
27	0.26	27.20	0.83	5.28	2.94	2.77	6.03	2.61	1.53	0.80	0.51	0.26	
28	0.22	27.00	0.99	4.86	5.39	2.94	10.27	2.53	1.53	0.76	0.51	0.26	
29	0.22	9.48	0.90	4.17	7.16	3.19	21.96	2.53	1.60	0.90		0.26	
30	0.28	13.11	1.31	3.98	7.76	2.53	32.38	2.37	1.46	0.87		0.26	
31		7.28		3.80	7.52		21.43		1.35	0.90		0.26	
Total	18.89	148.07	61.23	219.99	377.68	128.76	188.85	125.76	57.82	35.88	19.80	9.48	1392.21 CMSDAY
Mean	0.63	4.78	2.04	7.10	12.18	4.29	6.09	4.19	1.87	1.16	0.71	0.31	3.81 CMS
Max	1.12	27.20	7.40	37.84	37.38	11.81	32.38	10.67	3.02	1.66	1.35	0.51	37.84 CMS
Min	0.22	0.24	0.56	0.83	2.94	2.53	1.73	2.37	0.76	0.76	0.44	0.24	0.22 CMS
Runoff	1.632	12.793	5.290	19.007	32.632	11.125	16.317	10.866	4.996	3.100	1.711	0.819	120.287 MCM

Momentary Peak 46.00 CMS, at 323.42 M (MSL), at 17.00 Hours, on Aug 12, 2001
Runoff Yield 7.41 Liters/Second/Square KM, Momentary Peak Yield 89.320 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Klang at Pracha Uthit Bridge, Chaing Mai (P.24A)

Lat 18 - 25 - 02 N. **Long** 98 - 40 - 29 E.

Location on left bank at Pracha Uthit Bridge.

Ban - **Amphoe** Chom Thong **Changwat** Chaing Mai

Drainage Area 460 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +275.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM B.M.1 near the gage observer's house, B.M.2 on left bank near the

Elevation B.M.1 =+277.954 m. (M.S.L.), B.M.2

Gage Reading Frequency 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 Float -

Rated by Current Meter 1973 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

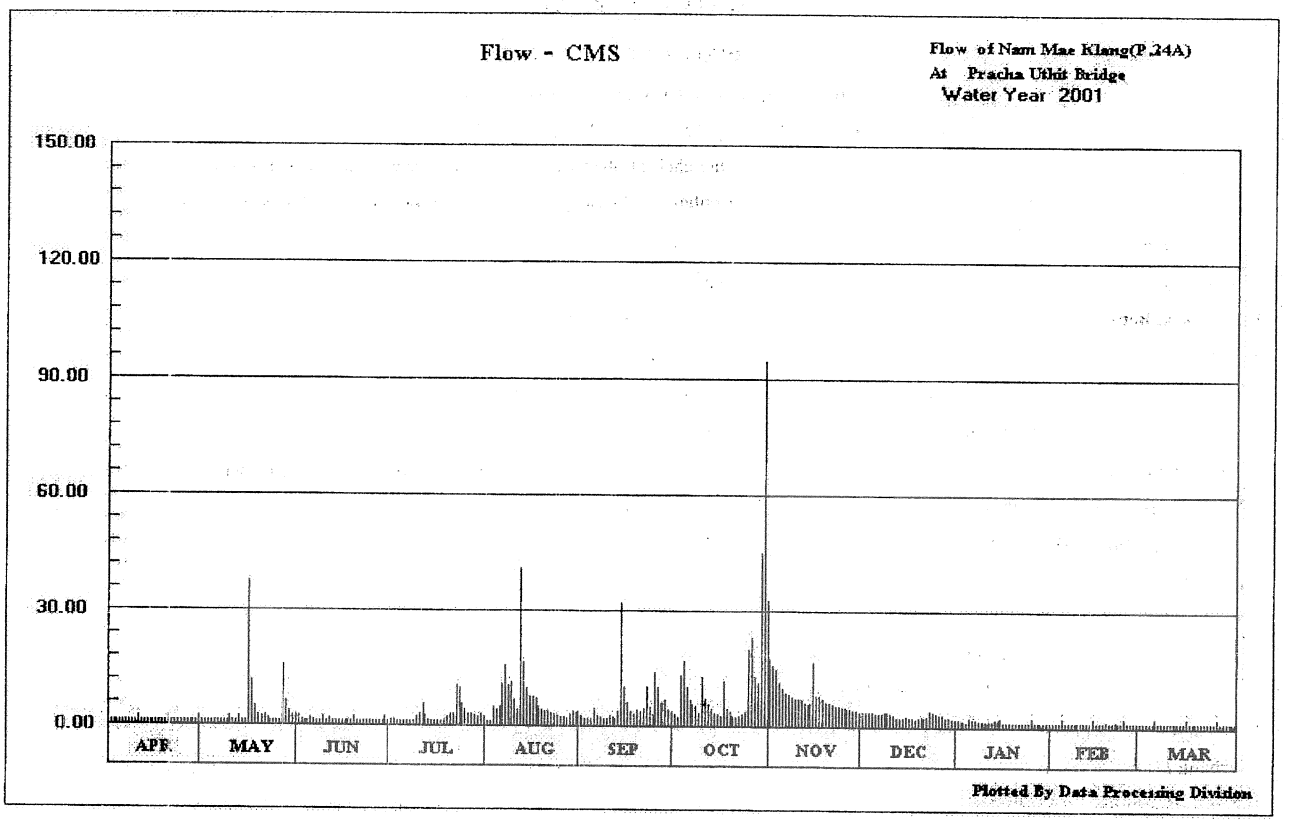
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (MSL). Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	275.55	275.51	275.75	275.67	275.66	275.77	275.78	276.51	275.85	275.72	275.61	275.52	
2	275.55	275.52	275.69	275.67	275.64	275.70	275.74	276.43	275.85	275.69	275.61	275.52	
3	275.55	275.53	275.62	275.61	275.92	275.70	276.32	276.39	275.84	275.68	275.60	275.52	
4	275.55	275.62	275.64	275.55	275.87	275.70	276.49	276.24	275.84	275.65	275.59	275.53	
5	275.55	275.59	275.72	275.60	275.91	275.88	276.19	276.16	275.82	275.67	275.62	275.53	
6	275.53	275.59	275.69	275.61	276.21	275.77	276.02	276.11	275.81	275.71	275.60	275.51	
7	275.53	275.63	275.62	275.60	276.44	275.72	275.96	276.10	275.82	275.70	275.62	275.53	
8	275.53	275.55	275.63	275.61	276.20	275.72	275.93	276.05	275.84	275.68	275.60	275.53	
9	275.53	275.54	275.62	275.70	276.24	275.71	275.82	276.03	275.85	275.68	275.61	275.63	
10	275.53	275.53	275.59	275.80	276.01	275.75	276.30	276.03	275.81	275.68	275.55	275.71	
11	275.53	275.52	275.71	275.95	275.86	275.73	276.03	276.01	275.80	275.68	275.58	275.74	
12	275.53	275.58	275.62	275.77	277.23	275.71	275.95	275.98	275.74	275.68	275.56	275.77	
13	275.53	275.73	275.58	275.67	276.46	275.83	275.88	275.96	275.74	275.70	275.58	275.77	
14	275.53	275.60	275.54	275.61	276.17	276.98	275.82	275.97	275.74	275.72	275.58	275.73	
15	275.53	275.61	275.54	275.60	276.06	276.18	275.79	276.46	275.75	275.74	275.57	275.73	
16	275.53	277.14	275.54	275.60	276.06	275.97	275.77	276.08	275.74	275.66	275.64	275.73	
17	275.53	276.26	275.53	275.61	276.03	275.85	276.26	276.07	275.74	275.65	275.62	275.74	
18	275.53	275.92	275.53	275.67	275.92	275.79	275.89	276.04	275.72	275.64	275.68	275.74	
19	275.52	275.75	275.53	275.74	275.87	275.86	275.85	275.98	275.74	275.63	275.62	275.76	
20	275.51	275.66	275.54	275.78	275.84	275.85	275.75	275.97	275.75	275.63	275.65	275.75	
21	275.50	275.77	275.53	275.79	275.83	275.89	275.74	275.95	275.73	275.63	275.67	275.75	
22	275.50	275.71	275.51	276.20	275.81	276.18	275.75	275.94	275.77	275.63	275.62	275.75	
23	275.50	275.65	275.53	276.17	275.78	275.91	275.79	275.93	275.86	275.64	275.60	275.67	
24	275.50	275.60	275.54	275.95	275.76	275.79	275.83	275.91	275.83	275.61	275.59	275.68	
25	275.50	275.59	275.60	275.86	275.74	276.35	276.59	275.90	275.81	275.61	275.56	275.70	
26	275.50	275.60	275.61	275.79	275.73	276.18	276.70	275.89	275.80	275.62	275.55	275.74	
27	275.51	276.44	275.57	275.78	275.72	275.98	276.31	275.88	275.79	275.66	275.55	275.68	
28	275.49	276.00	275.56	275.77	275.79	276.01	276.23	275.86	275.74	275.61	275.54	275.72	
29	275.49	275.83	275.56	275.74	275.84	275.87	277.33	275.86	275.74	275.60		275.73	
30	275.50	275.76	275.58	275.78	275.82	275.82	278.37	275.85	275.72	275.62		275.69	
31		275.76		275.74	275.84		277.00		275.72	275.62		275.65	
Mean	275.52	275.74	275.59	275.74	275.98	275.91	276.17	276.05	275.78	275.66	275.60	275.67	
Max	275.55	277.14	275.75	276.20	277.23	276.98	278.37	276.51	275.86	275.74	275.68	275.77	278.37
Min	275.49	275.51	275.51	275.55	275.64	275.70	275.74	275.85	275.72	275.60	275.54	275.51	275.49

Annual Max Momentary Gage Height 278.40 M (MSL), at 13.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 275.00 M (MSL), River Bed 275.05 M (MSL)
Left Bank Elevation 278.50 M (MSL)
Right Bank Elevation 278.43 M (MSL), Drainage Area 460 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.69	0.38	2.95	1.90	1.78	3.23	3.37	18.09	4.43	2.53	1.20	0.46	
2	0.69	0.46	2.13	1.90	1.55	2.25	2.81	16.11	4.43	2.13	1.20	0.46	
3	0.69	0.53	1.31	1.20	5.56	2.25	13.58	15.16	4.27	2.02	1.08	0.46	
4	0.69	1.31	1.55	0.69	4.74	2.25	17.56	11.85	4.27	1.66	1.00	0.53	
5	0.69	1.00	2.53	1.08	5.38	4.89	10.79	10.17	3.96	1.90	1.31	0.53	
6	0.53	1.00	2.13	1.20	11.21	3.23	7.39	9.14	3.81	2.39	1.08	0.38	
7	0.53	1.43	1.31	1.08	16.35	2.53	6.28	8.93	3.96	2.25	1.31	0.53	
8	0.53	0.69	1.43	1.20	11.00	2.53	5.74	7.96	4.27	2.02	1.08	0.10	
9	0.53	0.61	1.31	2.25	11.85	2.39	3.96	7.58	4.43	2.02	1.20	0.19	
10	0.53	0.53	1.00	3.65	7.19	2.95	13.13	7.58	3.81	2.02	0.69	0.26	
11	0.53	0.46	2.39	6.10	4.58	2.67	7.58	7.19	3.65	2.02	0.92	0.29	
12	0.53	0.92	1.31	3.23	41.40	2.39	6.10	6.64	2.81	2.02	0.77	0.32	
13	0.53	2.67	0.92	1.90	16.83	4.11	4.89	6.28	2.81	2.25	0.92	0.32	
14	0.53	1.08	0.61	1.20	10.38	32.34	3.96	6.46	2.81	2.53	0.92	0.28	
15	0.53	1.20	0.61	1.08	8.16	10.59	3.51	16.83	2.95	2.81	0.85	0.28	
16	0.53	37.98	0.61	1.08	8.16	6.46	3.23	8.54	2.81	1.78	1.55	0.28	
17	0.53	12.28	0.53	1.20	7.58	4.43	12.28	8.35	2.81	1.66	1.31	0.29	
18	0.53	5.56	0.53	1.90	5.56	3.51	5.05	7.77	2.53	1.55	2.02	0.29	
19	0.46	2.95	0.53	2.81	4.74	4.58	4.43	6.64	2.81	1.43	1.31	0.31	
20	0.38	1.78	0.61	3.37	4.27	4.43	2.95	6.46	2.95	1.43	1.66	0.30	
21	0.30	3.23	0.53	3.51	4.11	5.05	2.81	6.10	2.67	1.43	1.90	0.30	
22	0.30	2.39	0.38	11.00	3.81	10.59	2.95	5.92	3.23	1.43	1.31	0.30	
23	0.30	1.66	0.53	10.38	3.37	5.38	3.51	5.74	4.58	1.55	1.08	0.22	
24	0.30	1.08	0.61	6.10	3.09	3.51	4.11	5.38	4.11	1.20	1.00	0.23	
25	0.30	1.00	1.08	4.58	2.81	14.26	20.36	5.20	3.81	1.20	0.77	0.25	
26	0.30	1.08	1.20	3.51	2.67	10.59	23.50	5.05	3.65	1.31	0.69	0.29	
27	0.38	16.35	0.85	3.37	2.53	6.64	13.36	4.89	3.51	1.78	0.69	0.23	
28	0.27	7.00	0.77	3.23	3.51	7.19	11.64	4.58	2.81	1.20	0.61	0.27	
29	0.27	4.11	0.77	2.81	4.27	4.74	45.43	4.58	2.81	1.08		0.28	
30	0.30	3.09	0.92	3.37	3.96	3.96	95.15	4.43	2.53	1.31		0.24	
31		3.09		2.81	4.27		33.00		2.53	1.31		0.20	
Total	14.20	118.90	33.94	94.69	226.67	175.92	394.41	245.60	106.82	55.22	31.43	9.67	1507.47 CMSDAY
Mean	0.47	3.84	1.13	3.05	7.31	5.86	12.72	8.19	3.45	1.78	1.12	0.31	4.13 CMS
Max	0.69	37.98	2.95	11.00	41.40	32.34	95.15	18.09	4.58	2.81	2.02	0.53	95.15 CMS
Min	0.27	0.38	0.38	0.69	1.55	2.25	2.81	4.43	2.53	1.08	0.61	0.10	0.10 CMS
Runoff	1.227	10.273	2.932	8.181	19.584	15.199	34.077	21.220	9.229	4.771	2.716	0.835	130.245 MCM

Momentary Peak 96.80 CMS, at 278.40 M (MSL), at 13.00 Hours, on Oct 30, 2001

Runoff Yield 8.98 Liters/Second/Square KM, Momentary Peak Yield 210.435 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Khlong Suan Mak at Ban Mai, Kamphaeng Phet (P.26A)

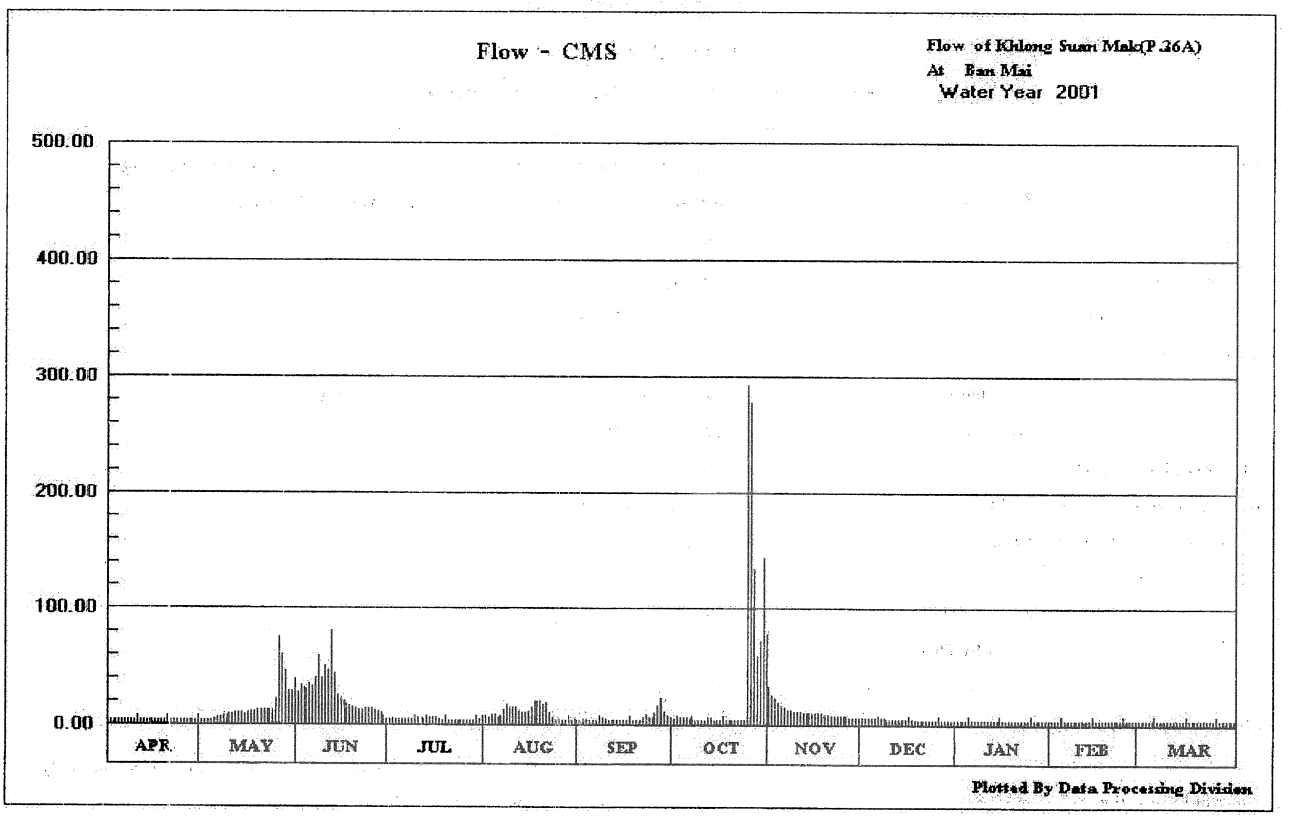
Lat 16 - 26 - 55 N. **Long** 99 - 26 - 28 E.

Location		On right bank about 615 meters downstream from Tha Kradan Weir.			
	Ban Mai	**Amphoe** Mueang		**Changwat**	Kamphaeng Phet
Drainage Area		969 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+84.110 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	Near the automatic gage building.			
	Elevation	+85.744 m. (M.S.L.)			
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.			
Period of Available Gage Records		1971 to date.			
Rating Operation					
	Period of Rating	1972 - 1974, 1980 to date.			
	Rated by Float	-			
	Rated by Current Meter	1972 - 1974, 1980 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		Overbank flow starts at elevation +85.420 m.(M.S.L.) and is including overbank flow.			
General Description		Records good. Flow effected by Tha Kradan weir about 3.5 kilometers above gage site.			
		Stage-discharge relation defined by 34 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	84.23	83.94	85.67	84.43	84.62	84.34	84.37	85.87	84.51	84.23	84.08	83.97	
2	84.21	83.92	85.92	84.41	84.48	84.46	84.58	85.61	84.50	84.22	84.08	83.97	
3	84.21	83.98	85.84	84.39	84.66	84.46	84.54	85.46	84.49	84.21	84.07	83.97	
4	84.19	84.16	85.78	84.38	84.67	84.36	84.51	85.27	84.49	84.20	84.06	83.96	
5	84.17	84.40	85.94	84.41	84.54	84.32	84.52	85.14	84.48	84.19	84.05	83.96	
6	84.15	84.49	85.89	84.43	84.62	84.28	84.42	85.07	84.48	84.18	84.03	83.96	
7	84.13	84.55	86.11	84.40	84.98	84.49	84.34	84.98	84.47	84.17	84.03	83.96	
8	84.13	84.61	86.51	84.39	85.19	84.48	84.29	84.93	84.47	84.16	84.02	83.98	
9	84.13	84.65	86.12	84.46	85.06	84.37	84.23	84.89	84.46	84.15	84.01	84.00	
10	84.13	84.69	86.36	84.49	85.06	84.35	84.23	84.84	84.45	84.14	84.00	84.00	
11	84.13	84.73	86.27	84.47	85.06	84.34	84.31	84.83	84.44	84.13	84.01	83.99	
12	84.12	84.74	86.83	84.44	84.89	84.32	84.54	84.81	84.43	84.12	84.00	83.98	
13	84.12	84.75	86.21	84.60	84.81	84.30	84.48	84.79	84.43	84.12	83.99	83.97	
14	84.12	84.76	85.58	84.56	84.79	84.27	84.31	84.79	84.43	84.12	83.98	83.96	
15	84.12	84.73	85.46	84.54	84.83	84.24	84.24	84.79	84.43	84.10	84.06	83.95	
16	84.11	84.79	85.31	84.52	85.07	84.21	84.30	84.78	84.43	84.09	84.05	83.94	
17	84.11	84.84	85.20	84.39	85.36	84.19	84.44	84.78	84.41	84.08	84.05	83.95	
18	84.11	84.89	85.15	84.35	85.32	84.16	84.34	84.75	84.33	84.08	84.04	83.97	
19	84.10	84.92	85.08	84.33	85.31	84.33	84.27	84.70	84.31	84.07	84.04	84.14	
20	84.10	84.92	85.05	84.33	85.23	84.23	84.26	84.67	84.31	84.07	84.03	84.16	
21	84.09	84.93	84.98	84.31	85.27	84.53	84.23	84.64	84.30	84.06	84.03	84.25	
22	84.09	84.95	84.97	84.31	84.81	84.70	84.21	84.61	84.30	84.06	84.02	84.24	
23	84.09	84.95	85.01	84.31	84.55	84.53	84.23	84.61	84.29	84.05	84.01	84.18	
24	84.08	84.98	85.00	84.30	84.46	84.50	84.34	84.59	84.29	84.05	84.00	84.16	
25	84.08	85.40	85.00	84.23	84.41	84.80	88.70	84.58	84.28	84.05	83.99	84.10	
26	84.08	86.75	84.96	84.18	84.34	85.12	88.61	84.57	84.28	84.04	83.98	84.04	
27	84.06	86.52	84.85	84.16	84.27	85.45	87.47	84.56	84.28	84.04	83.97	84.02	
28	84.03	86.26	84.74	84.12	84.27	84.88	86.50	84.55	84.27	84.04	83.97	84.00	
29	84.01	85.76	84.63	84.19	84.33	84.64	86.70	84.54	84.26	84.03		83.99	
30	84.00	85.76	84.41	84.38	84.42	84.49	87.57	84.52	84.25	84.04		83.97	
31		86.06		84.58	84.36		86.78		84.24	84.05		83.95	
Mean	84.11	84.96	85.49	84.38	84.78	84.47	85.06	84.85	84.38	84.11	84.02	84.02	
Max	84.23	86.75	86.83	84.60	85.36	85.45	88.70	85.87	84.51	84.23	84.08	84.25	88.70
Min	84.00	83.92	84.41	84.12	84.27	84.16	84.21	84.52	84.24	84.03	83.97	83.94	83.92

Annual Max Momentary Gage Height 89.72 M (MSL), at 18.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 84.11 M (MSL), River Bed 78.93 M (MSL)
Left Bank Elevation 85.41 M (MSL)
Right Bank Elevation 87.58 M (MSL), Drainage Area 969 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.38	1.33	28.75	6.88	9.30	5.75	6.13	34.10	7.88	4.38	2.77	1.64	
2	4.13	1.13	35.60	6.63	7.50	7.25	8.75	27.25	7.75	4.25	2.77	1.64	
3	4.13	1.74	33.20	6.38	9.90	7.25	8.25	24.20	7.62	4.13	2.67	1.64	
4	3.90	3.59	31.50	6.25	10.05	6.00	7.88	20.40	7.62	4.00	2.56	1.54	
5	3.69	6.50	36.20	6.63	8.25	5.50	8.00	17.80	7.50	3.90	2.46	1.54	
6	3.49	7.62	34.70	6.88	9.30	5.00	6.75	16.40	7.50	3.79	2.26	1.54	
7	3.28	8.38	41.85	6.50	14.70	7.62	5.75	14.70	7.38	3.69	2.26	1.54	
8	3.28	9.15	60.60	6.38	18.80	7.50	5.13	13.95	7.38	3.59	2.15	1.74	
9	3.28	9.75	42.20	7.25	16.20	6.13	4.38	13.35	7.25	3.49	2.05	1.95	
10	3.28	10.35	52.20	7.62	16.20	5.88	4.38	12.60	7.12	3.38	1.95	1.95	
11	3.28	10.95	48.15	7.38	16.20	5.75	5.38	12.45	7.00	3.28	2.05	1.85	
12	3.18	11.10	82.10	7.00	13.35	5.50	8.25	12.15	6.88	3.18	1.95	1.74	
13	3.18	11.25	45.45	9.00	12.15	5.25	7.50	11.85	6.88	3.18	1.85	1.64	
14	3.18	11.40	26.60	8.50	11.85	4.87	5.38	11.85	6.88	3.18	1.74	1.54	
15	3.18	10.95	24.20	8.25	12.45	4.50	4.50	11.85	6.88	2.97	2.56	1.44	
16	3.08	11.85	21.20	8.00	16.40	4.13	5.25	11.70	6.88	2.87	2.46	1.33	
17	3.08	12.60	19.00	6.38	22.20	3.90	7.00	11.70	6.63	2.77	2.46	1.44	
18	3.08	13.35	18.00	5.88	21.40	3.59	5.75	11.25	5.63	2.77	2.36	1.64	
19	2.97	13.80	16.60	5.63	21.20	5.63	4.87	10.50	5.38	2.67	2.36	3.38	
20	2.97	13.80	16.00	5.63	19.60	4.38	4.75	10.05	5.38	2.67	2.26	3.59	
21	2.87	13.95	14.70	5.38	20.40	8.13	4.38	9.60	5.25	2.56	2.26	4.63	
22	2.87	14.25	14.55	5.38	12.15	10.50	4.13	9.15	5.25	2.56	2.15	4.50	
23	2.87	14.25	15.20	5.38	8.38	8.13	4.38	9.15	5.13	2.46	2.05	3.79	
24	2.77	14.70	15.00	5.25	7.25	7.75	5.75	8.87	5.13	2.46	1.95	3.59	
25	2.77	23.00	15.00	4.38	6.63	12.00	294.00	8.75	5.00	2.46	1.85	2.97	
26	2.77	76.50	14.40	3.79	5.75	17.40	279.60	8.63	5.00	2.36	1.74	2.36	
27	2.56	61.20	12.75	3.59	4.87	24.00	135.00	8.50	5.00	2.36	1.64	2.15	
28	2.26	47.70	11.10	3.18	4.87	13.20	60.00	8.38	4.87	2.36	1.64	1.95	
29	2.05	31.00	9.45	3.90	5.63	9.60	73.00	8.25	4.75	2.26		1.85	
30	1.95	31.00	6.63	6.25	6.75	7.62	145.00	8.00	4.63	2.36		1.64	
31		40.10		8.75	6.00		78.60		4.50	2.46		1.44	
Total	93.76	548.24	842.88	194.28	375.68	229.71	1207.87	397.38	193.93	94.80	61.23	67.18	4306.94 CMSDAY
Mean	3.13	17.69	28.10	6.27	12.12	7.66	38.96	13.25	6.26	3.06	2.19	2.17	11.80 CMS
Max	4.38	76.50	82.10	9.00	22.20	24.00	294.00	34.10	7.88	4.38	2.77	4.63	294.00 CMS
Min	1.95	1.13	6.63	3.18	4.87	3.59	4.13	8.00	4.50	2.26	1.64	1.33	1.13 CMS
Runoff	8.101	47.368	72.825	16.786	32.459	19.847	104.360	34.334	16.756	8.191	5.290	5.804	372.120 MCM

Momentary Peak 484.40 CMS, at 89.72 M (MSL); at 18.00 Hours, on Oct 25, 2001

Runoff Yield 12.18 Liters/Second/Square KM, Momentary Peak Yield 499.897 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Khlong Khlung at Ban Pang Ta Wai, Kamphaeng Phet (P.35)

Lat 16 - 04 - 22 N. **Long** 99 - 24 - 18 E.

Location on right bank at Ban Pang Wai about 1.5 kilometers from Khao Song Phi Nong.

Ban Pang Ta Wai **Amphoe** Khlong Khlung **Changwat** Kamphaeng Phet

Drainage Area 730 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +106.040 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 34 meters from the top staff gage.

Elevation +110.466 m. (M.S.L.)

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 1974 to date.

Rating Operation

Period of Rating 1974 to date.

Rated by Float -

Rated by Current Meter 1974 to date.

Stability of Channel Regimes Fairly stable.

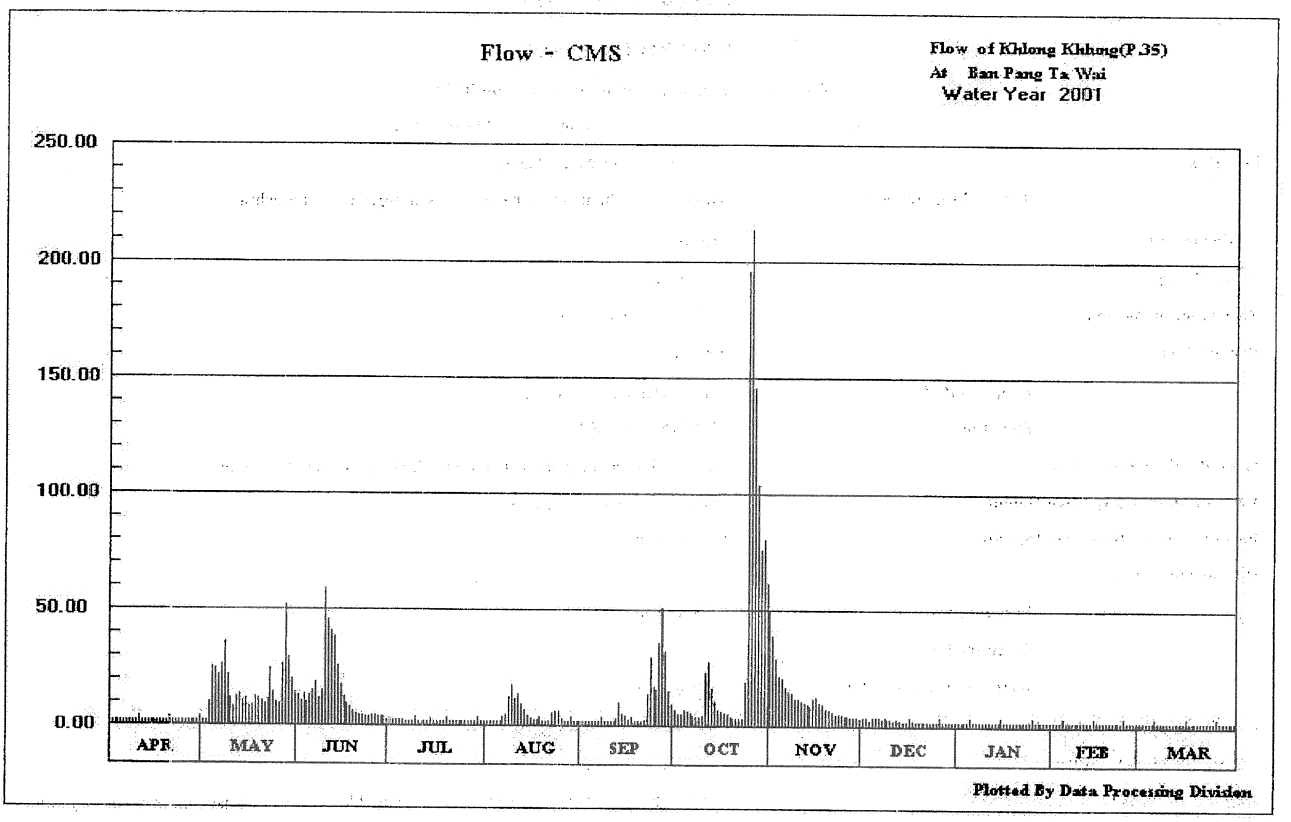
Overbank Flow Conditions Overbank flow starts at elevation +110.580 m.(M.S.L.) and records are channel flow only.

General Description Records good. Stage-discharge relation defined by 100 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	106.03	106.06	107.35	106.49	106.16	106.19	106.93	108.84	106.60	106.23	106.08	105.99	
2	106.02	106.14	107.18	106.45	106.10	106.20	106.76	108.56	106.59	106.24	106.08	105.99	
3	106.01	107.15	107.39	106.43	106.10	106.18	106.78	108.19	106.45	106.24	106.17	105.98	
4	106.01	108.04	107.17	106.44	106.19	106.14	106.90	107.84	106.61	106.29	106.11	105.98	
5	106.00	108.01	107.35	106.45	106.38	106.11	106.86	107.82	106.57	106.26	106.08	105.96	
6	106.00	107.98	107.48	106.38	106.63	106.24	106.83	107.63	106.46	106.19	106.09	105.97	
7	105.88	108.09	107.71	106.33	106.72	106.51	106.71	107.50	106.55	106.17	106.09	106.09	
8	105.88	108.45	107.30	106.32	107.33	106.40	106.64	107.43	106.60	106.17	106.09	106.07	
9	105.87	107.87	107.48	106.25	107.65	106.29	106.58	107.29	106.56	106.16	106.09	106.02	
10	105.86	107.29	109.06	106.17	107.26	106.37	106.66	107.26	106.52	106.35	106.08	106.00	
11	105.85	107.00	108.74	106.35	107.40	106.37	107.96	107.21	106.45	106.18	106.08	105.99	
12	105.85	107.31	108.61	106.38	107.08	106.53	108.13	107.14	106.49	106.18	106.08	105.98	
13	105.88	107.39	108.53	106.38	106.89	107.16	107.56	107.11	106.42	106.17	106.07	105.98	
14	105.88	107.18	108.06	106.50	106.68	106.78	107.18	107.05	106.38	106.18	106.07	105.97	
15	105.87	107.29	107.66	106.39	106.51	106.68	106.93	107.29	106.30	106.17	106.06	105.97	
16	105.86	107.01	107.33	106.33	106.42	106.45	106.86	107.34	106.30	106.17	106.06	105.96	
17	105.85	107.07	107.12	106.28	106.41	106.48	106.83	107.17	106.45	106.17	106.05	105.96	
18	105.85	107.32	106.99	106.20	106.30	106.38	106.78	107.08	106.38	106.17	106.04	105.96	
19	105.84	107.29	106.84	106.19	106.29	106.37	106.63	106.98	106.37	106.17	106.04	105.96	
20	105.84	107.18	106.77	106.20	106.29	106.34	106.55	106.90	106.34	106.16	106.02	106.14	
21	105.90	107.10	106.68	106.20	106.31	106.42	106.53	106.85	106.34	106.14	106.00	106.08	
22	106.04	107.25	106.66	106.19	106.83	107.41	106.53	106.78	106.34	106.14	106.00	106.05	
23	106.01	108.01	106.60	106.22	106.87	108.21	106.50	106.76	106.34	106.14	106.00	106.03	
24	105.97	107.44	106.62	106.25	106.86	107.62	107.71	106.73	106.33	106.14	106.00	106.02	
25	105.84	107.17	106.67	106.17	106.56	107.52	110.56	106.70	106.30	106.13	105.99	106.00	
26	105.81	107.12	106.71	106.15	106.39	108.45	110.67	106.67	106.25	106.10	105.99	105.99	
27	105.83	108.09	106.63	106.13	106.30	108.87	110.19	106.61	106.25	106.09	105.99	105.98	
28	105.83	108.90	106.58	106.04	106.26	108.31	109.79	106.63	106.25	106.09	105.99	105.97	
29	105.84	108.21	106.52	106.10	106.22	107.49	109.39	106.59	106.23	106.09		105.96	
30	105.83	107.78	106.48	106.10	106.21	107.10	109.46	106.50	106.24	106.08		105.95	
31		107.46		106.14	106.19		109.11		106.24	106.08		105.95	
Mean	105.90	107.47	107.28	106.28	106.57	106.85	107.60	107.21	106.40	106.17	106.05	106.00	
Max	106.04	108.90	109.06	106.50	107.65	108.87	110.67	108.84	106.61	106.35	106.17	106.14	110.67
Min	105.81	106.06	106.48	106.04	106.10	106.11	106.50	106.50	106.23	106.08	105.99	105.95	105.81

Annual Max Momentary Gage Height 110.95 M (MSL), at 3.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 106.04 M (MSL), River Bed 105.82 M (MSL)
Left Bank Elevation 112.93 M (MSL)
Right Bank Elevation 110.57 M (MSL), Drainage Area 730 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.80	13.75	3.67	1.30	1.45	7.99	50.14	4.50	1.73	0.90	0.48	
2	0.60	1.20	11.24	3.37	1.00	1.50	5.94	39.80	4.42	1.80	0.90	0.48	
3	0.55	10.85	14.35	3.23	1.00	1.40	6.12	29.75	3.37	1.80	1.35	0.46	
4	0.55	26.00	11.11	3.30	1.45	1.20	7.60	21.80	4.59	2.18	1.05	0.46	
5	0.50	25.25	13.75	3.37	2.85	1.05	7.08	21.40	4.28	1.95	0.90	0.42	
6	0.50	22.60	15.70	2.85	4.77	1.80	6.69	18.02	3.45	1.45	0.95	0.44	
7	0.26	27.25	19.42	2.48	5.58	3.83	5.49	16.00	4.13	1.35	0.95	0.95	
8	0.26	36.50	13.00	2.40	13.45	3.00	4.86	14.95	4.50	1.35	0.95	0.85	
9	0.24	22.40	15.70	1.88	18.38	2.18	4.35	12.85	4.20	1.30	0.95	0.60	
10	0.22	12.85	59.64	1.35	12.40	2.78	5.04	12.40	3.90	2.63	0.90	0.50	
11	0.20	8.90	46.25	2.63	14.50	2.78	24.20	11.65	3.37	1.40	0.90	0.48	
12	0.20	13.15	41.38	2.85	9.94	3.98	28.25	10.72	3.67	1.40	0.90	0.46	
13	0.26	14.35	38.90	2.85	7.47	10.98	16.90	10.33	3.15	1.35	0.85	0.46	
14	0.26	11.24	26.50	3.75	5.22	6.12	11.24	9.55	2.85	1.40	0.85	0.44	
15	0.24	12.85	18.55	2.93	3.83	5.22	7.99	12.85	2.25	1.35	0.80	0.44	
16	0.22	9.03	13.45	2.48	3.15	3.37	7.08	13.60	2.25	1.35	0.80	0.42	
17	0.20	9.81	10.46	2.10	3.08	3.60	6.69	11.11	3.37	1.35	0.75	0.42	
18	0.20	13.30	8.77	1.50	2.25	2.85	6.12	9.94	2.85	1.35	0.70	0.42	
19	0.18	12.85	6.82	1.45	2.18	2.78	4.77	8.64	2.78	1.35	0.70	0.42	
20	0.18	11.24	6.03	1.50	2.18	2.55	4.13	7.60	2.55	1.30	0.60	1.20	
21	0.30	10.20	5.22	1.50	2.33	3.15	3.98	6.95	2.55	1.20	0.50	0.90	
22	0.70	12.25	5.04	1.45	6.69	14.65	3.98	6.12	2.55	1.20	0.50	0.75	
23	0.55	25.25	4.50	1.65	7.21	30.25	3.75	5.94	2.55	1.20	0.50	0.65	
24	0.44	15.10	4.68	1.88	7.08	17.85	19.42	5.67	2.48	1.20	0.50	0.60	
25	0.18	11.11	5.13	1.35	4.20	16.30	196.50	5.40	2.25	1.15	0.48	0.50	
26	0.12	10.46	5.49	1.25	2.93	36.50	214.75	5.13	1.88	1.00	0.48	0.48	
27	0.16	27.25	4.77	1.15	2.25	51.37	146.33	4.59	1.88	0.95	0.48	0.46	
28	0.16	52.60	4.35	0.70	1.95	32.75	104.70	4.77	1.88	0.95	0.48	0.44	
29	0.18	30.25	3.90	1.00	1.65	15.85	76.47	4.42	1.73	0.95		0.42	
30	0.16	20.65	3.60	1.00	1.58	10.20	80.75	3.75	1.80	0.90		0.40	
31		15.40		1.20	1.45		62.09		1.80	0.90		0.40	
Total	9.42	532.94	451.45	66.07	155.30	293.29	1091.25	395.84	93.78	42.74	21.57	16.80	3170.45 CMSDAY
Mean	0.31	17.19	15.05	2.13	5.01	9.78	35.20	13.19	3.03	1.38	0.77	0.54	8.69 CMS
Max	0.70	52.60	59.64	3.75	18.38	51.37	214.75	50.14	4.59	2.63	1.35	1.20	214.75 CMS
Min	0.12	0.80	3.60	0.70	1.00	1.05	3.75	3.75	1.73	0.90	0.48	0.40	0.12 CMS
Runoff	0.814	46.046	39.005	5.708	13.418	25.340	94.284	34.201	8.103	3.693	1.864	1.452	273.927 MCM

Momentary Peak 266.37 CMS, at 110.95 M (MSL), at 3.00 Hours, on Oct 25, 2001

Runoff Yield 11.90 Liters/Second/Square KM, Momentary Peak Yield 364.890 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Li at Ban Mae Bon Mai, Lamphun (P.42)

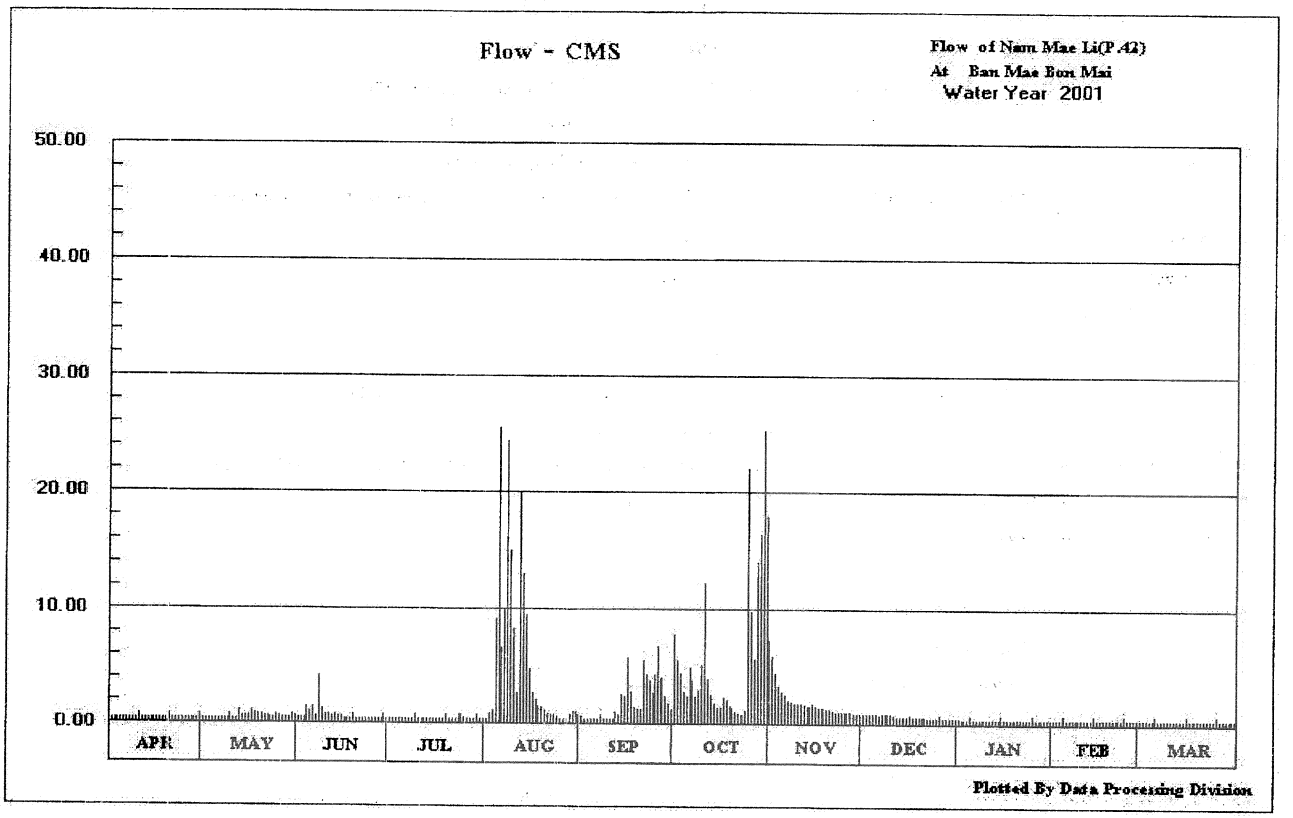
Lat 17 - 53 - 15 N. **Long** 99 - 05 - 20 E.

Location		on right bank near Ban Puang.			
	Ban	Mae Bon Mai	**Amphoe**	Thung Hua Chang	**Changwat**	Lamphun
Drainage Area		315 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+500.100 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On right bank at the staff gage.			
	Elevation	+505.708 m. (M.S.L.)			
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.			
Period of Available Gage Records		1978 to date.			
Rating Operation					
	Period of Rating	1978 to date.			
	Rated by Float	-			
	Rated by Current Meter	1978 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 2 kilometers downstream from the gage site.			
		Stage-discharge relation defined by 112 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	500.57	500.41	500.73	500.49	500.51	500.75	501.33	501.30	500.80	500.72	500.72	500.68	
2	500.54	500.41	500.72	500.49	500.80	500.70	501.19	501.22	500.80	500.74	500.72	500.66	
3	500.48	500.41	500.72	500.48	500.84	500.67	501.12	501.12	500.80	500.75	500.72	500.67	
4	500.48	500.46	500.87	500.48	501.41	500.60	501.00	501.04	500.80	500.75	500.71	500.67	
5	500.48	500.45	500.83	500.48	502.21	500.55	500.97	501.00	500.80	500.75	500.71	500.65	
6	500.47	500.44	500.87	500.49	501.26	500.53	501.15	500.98	500.78	500.75	500.71	500.62	
7	500.46	500.55	500.76	500.49	501.45	500.55	501.07	500.94	500.80	500.75	500.71	500.59	
8	500.46	500.55	501.10	500.48	502.16	500.62	500.97	500.93	500.80	500.75	500.71	500.58	
9	500.57	500.62	500.85	500.48	501.72	500.61	501.01	500.91	500.80	500.75	500.71	500.55	
10	500.69	500.67	500.78	500.48	501.36	500.56	501.17	500.91	500.80	500.75	500.71	500.53	
11	500.67	500.67	500.77	500.48	500.99	500.56	501.58	500.91	500.78	500.75	500.71	500.53	
12	500.65	500.67	500.75	500.48	501.95	500.82	501.08	500.90	500.76	500.75	500.70	500.52	
13	500.62	500.84	500.79	500.48	501.62	500.77	500.98	500.89	500.75	500.75	500.65	500.52	
14	500.59	500.75	500.76	500.48	501.43	500.98	500.92	500.89	500.75	500.75	500.65	500.52	
15	500.56	500.76	500.74	500.48	501.14	500.97	500.88	500.92	500.76	500.75	500.68	500.52	
16	500.55	500.74	500.70	500.48	500.99	501.21	500.87	500.89	500.75	500.75	500.69	500.53	
17	500.55	500.84	500.69	500.48	500.94	501.00	500.96	500.88	500.75	500.75	500.69	500.45	
18	500.54	500.81	500.68	500.48	500.89	500.88	500.94	500.87	500.75	500.75	500.69	500.45	
19	500.47	500.78	500.62	500.48	500.88	500.86	500.89	500.85	500.74	500.75	500.69	500.45	
20	500.45	500.79	500.57	500.48	500.84	500.86	500.88	500.85	500.74	500.75	500.69	500.44	
21	500.44	500.76	500.51	500.47	500.81	501.19	500.83	500.84	500.74	500.74	500.68	500.44	
22	500.42	500.75	500.50	500.49	500.79	501.11	500.80	500.83	500.73	500.74	500.68	500.43	
23	500.41	500.73	500.47	500.77	500.78	501.07	500.78	500.83	500.72	500.74	500.67	500.43	
24	500.41	500.72	500.47	500.79	500.74	500.99	500.84	500.83	500.72	500.73	500.67	500.43	
25	500.41	500.77	500.52	500.72	500.62	501.11	502.05	500.83	500.72	500.73	500.67	500.43	
26	500.41	500.74	500.50	500.68	500.55	501.27	501.44	500.82	500.72	500.73	500.64	500.43	
27	500.41	500.73	500.50	500.57	500.53	501.09	501.20	500.82	500.72	500.73	500.65	500.42	
28	500.41	500.73	500.50	500.55	500.76	500.97	501.67	500.81	500.72	500.73	500.67	500.42	
29	500.41	500.72	500.50	500.52	500.82	500.92	501.79	500.81	500.72	500.73		500.42	
30	500.41	500.77	500.50	500.51	500.82	500.86	502.20	500.80	500.72	500.73		500.42	
31		500.75		500.51	500.78		501.86		500.72	500.73		500.42	
Mean	500.50	500.67	500.68	500.52	501.08	500.85	501.17	500.91	500.76	500.74	500.69	500.51	
Max	500.69	500.84	501.10	500.79	502.21	501.27	502.20	501.30	500.80	500.75	500.72	500.68	502.21
Min	500.41	500.41	500.47	500.47	500.51	500.53	500.78	500.80	500.72	500.72	500.64	500.42	500.41

Annual Max Momentary Gage Height 502.46 M (MSL), at 15.00 Hours, on Aug 5, 2001
Zero Gage at Bottom Elevation 500.10 M (MSL), River Bed 500.24 M (MSL)
Left Bank Elevation 505.28 M (MSL)
Right Bank Elevation 506.01 M (MSL), Drainage Area 315 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.27	0.09	0.69	0.15	0.18	0.78	7.92	7.40	1.00	0.64	0.25	0.22	
2	0.22	0.09	0.64	0.15	1.00	0.55	5.63	6.10	1.00	0.26	0.25	0.20	
3	0.14	0.09	0.64	0.14	1.30	0.48	4.58	4.58	1.00	0.27	0.25	0.21	
4	0.14	0.13	1.52	0.14	9.33	0.31	2.90	3.45	1.00	0.27	0.24	0.21	
5	0.14	0.12	1.22	0.14	25.67	0.23	2.55	2.90	1.00	0.27	0.24	0.19	
6	0.14	0.11	1.52	0.15	6.75	0.20	5.03	2.67	0.91	0.27	0.24	0.17	
7	0.12	0.23	0.82	0.15	10.05	0.23	3.87	2.20	1.00	0.27	0.24	0.15	
8	0.13	0.23	4.28	0.14	24.57	0.36	2.55	2.09	1.00	0.27	0.24	0.15	
9	0.27	0.36	1.37	0.14	15.20	0.33	3.04	1.86	1.00	0.27	0.24	0.13	
10	0.53	0.48	0.91	0.14	8.45	0.25	5.33	1.86	1.00	0.27	0.24	0.12	
11	0.48	0.48	0.86	0.14	2.78	0.25	12.43	1.86	0.91	0.27	0.24	0.12	
12	0.43	0.48	0.78	0.14	19.98	1.15	4.00	1.74	0.82	0.27	0.23	0.11	
13	0.36	1.30	0.96	0.14	13.20	0.86	2.67	1.67	0.78	0.27	0.19	0.11	
14	0.29	0.78	0.82	0.14	9.69	2.67	1.97	1.67	0.78	0.27	0.19	0.11	
15	0.25	0.82	0.73	0.14	4.88	2.55	1.59	1.97	0.82	0.27	0.22	0.11	
16	0.23	0.73	0.55	0.14	2.78	5.94	1.52	1.67	0.78	0.27	0.22	0.12	
17	0.23	1.30	0.53	0.14	2.20	2.90	2.44	1.59	0.78	0.27	0.22	0.07	
18	0.22	1.07	0.50	0.14	1.67	1.59	2.20	1.52	0.78	0.27	0.22	0.07	
19	0.14	0.91	0.36	0.14	1.59	1.44	1.67	1.37	0.73	0.27	0.22	0.07	
20	0.12	0.96	0.27	0.14	1.30	1.44	1.59	1.37	0.73	0.27	0.22	0.06	
21	0.11	0.82	0.18	0.14	1.07	5.63	1.22	1.30	0.73	0.26	0.22	0.06	
22	0.10	0.78	0.16	0.15	0.96	4.43	1.00	1.22	0.69	0.26	0.22	0.06	
23	0.09	0.69	0.14	0.86	0.91	3.87	0.91	1.22	0.64	0.26	0.21	0.06	
24	0.09	0.64	0.14	0.96	0.73	2.78	1.30	1.22	0.64	0.25	0.21	0.06	
25	0.09	0.86	0.19	0.64	0.36	4.43	22.15	1.22	0.64	0.25	0.21	0.06	
26	0.09	0.73	0.16	0.50	0.23	6.91	9.87	1.15	0.64	0.25	0.19	0.06	
27	0.09	0.69	0.16	0.27	0.20	4.14	5.78	1.15	0.64	0.25	0.19	0.05	
28	0.09	0.69	0.16	0.23	0.82	2.55	14.20	1.07	0.64	0.25	0.21	0.05	
29	0.09	0.64	0.16	0.19	1.15	1.97	16.60	1.07	0.64	0.25		0.05	
30	0.09	0.86	0.16	0.18	1.15	1.44	25.45	1.00	0.64	0.25		0.05	
31		0.78		0.18	0.91		18.06		0.64	0.25		0.05	
Total	5.78	18.94	21.58	7.14	171.06	62.66	192.02	63.16	25.00	8.54	6.26	3.31	585.45 CMSDAY
Mean	0.19	0.61	0.72	0.23	5.52	2.09	6.19	2.11	0.81	0.28	0.22	0.11	1.60 CMS
Max	0.53	1.30	4.28	0.96	25.67	6.91	25.45	7.40	1.00	0.64	0.25	0.22	25.67 CMS
Min	0.09	0.09	0.14	0.14	0.18	0.20	0.91	1.00	0.64	0.25	0.19	0.05	0.05 CMS
Runoff	0.499	1.636	1.865	0.617	14.780	5.414	16.591	5.457	2.160	0.738	0.541	0.286	50.583 MCM

Momentary Peak 31.39 CMS, at 502.46 M (MSL), at 15.00 Hours, on Aug 5, 2001

Runoff Yield 5.09 Liters/Second/Square KM, Momentary Peak Yield 99.651 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Khlong Suan Mak at Ban Pong Nam Ron, Kamphaeng Phet (P.47)

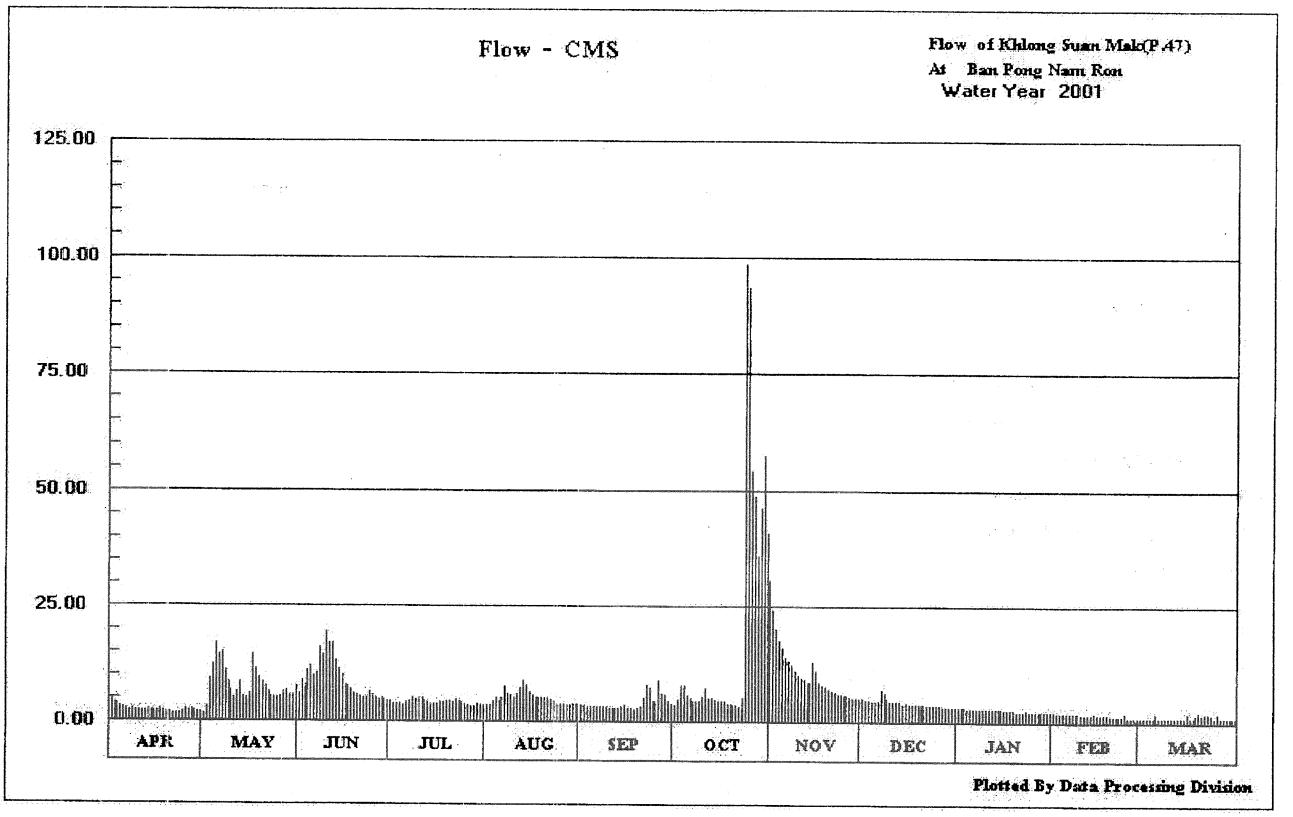
Lat 16 - 20 - 04 N. **Long** 99 - 16 - 28 E.

Location		on right bank at Ban Pong Nam Ron.			
	Ban	Pong Nam Ron	**Amphoe**	Khlong Lan	**Changwat** Kamphaeng Phet
Drainage Area		521 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+143.770 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On right bank about 9 meters from the top staff gage.			
	Elevation	+153.134 m. (M.S.L.)			
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 Float	-			
	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 90 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	144.01	143.83	144.07	144.00	143.94	143.95	143.95	144.81	144.02	143.92	143.86	143.79	
2	143.97	143.92	144.18	143.97	143.94	143.94	144.01	144.65	144.01	143.92	143.85	143.79	
3	143.96	144.20	144.15	143.97	144.00	143.93	144.14	144.54	144.01	143.92	143.85	143.79	
4	143.92	144.30	144.26	143.96	144.02	143.93	144.14	144.47	144.00	143.91	143.85	143.79	
5	143.90	144.45	144.29	143.95	144.00	143.93	144.05	144.42	144.00	143.91	143.85	143.79	
6	143.88	144.38	144.22	143.98	144.02	143.92	144.03	144.36	143.99	143.91	143.85	143.79	
7	143.87	144.40	144.24	143.99	144.13	143.93	144.00	144.33	144.10	143.91	143.84	143.79	
8	143.89	144.26	144.42	144.02	144.07	143.92	143.99	144.30	144.08	143.91	143.84	143.79	
9	143.87	144.17	144.38	144.01	144.05	143.93	143.99	144.26	144.02	143.91	143.84	143.80	
10	143.86	144.09	144.52	144.03	144.03	143.91	144.04	144.23	144.00	143.90	143.83	143.80	
11	143.86	144.03	144.45	144.03	144.07	143.91	144.12	144.21	144.00	143.90	143.83	143.80	
12	143.87	144.08	144.45	144.00	144.12	143.91	144.03	144.20	143.99	143.90	143.83	143.80	
13	143.88	144.17	144.33	143.98	144.19	143.91	144.03	144.17	143.99	143.90	143.83	143.79	
14	143.87	144.04	144.27	143.97	144.14	143.92	144.01	144.17	143.97	143.90	143.83	143.79	
15	143.86	144.03	144.23	143.96	144.08	143.94	143.99	144.32	143.98	143.90	143.82	143.79	
16	143.86	144.06	144.15	143.96	144.05	143.91	143.99	144.26	143.97	143.89	143.82	143.79	
17	143.88	144.38	144.13	143.98	144.03	143.90	143.99	144.17	143.96	143.89	143.82	143.78	
18	143.87	144.27	144.10	143.98	144.02	143.89	143.96	144.14	143.96	143.88	143.82	143.78	
19	143.85	144.21	144.07	144.00	144.02	143.90	143.96	144.13	143.96	143.88	143.81	143.82	
20	143.84	144.17	144.05	143.99	144.02	143.92	143.95	144.10	143.96	143.87	143.81	143.87	
21	143.83	144.13	144.04	143.98	144.03	144.02	143.94	144.09	143.96	143.87	143.81	143.83	
22	143.83	144.08	144.03	144.01	144.01	144.14	143.93	144.08	143.95	143.87	143.81	143.85	
23	143.83	144.04	144.03	144.00	143.99	144.12	144.03	144.07	143.94	143.88	143.81	143.84	
24	143.84	144.03	144.08	143.98	143.97	144.00	145.99	144.06	143.94	143.87	143.81	143.82	
25	143.89	144.02	144.05	143.96	143.96	143.99	145.92	144.05	143.94	143.87	143.80	143.80	
26	143.86	144.04	144.02	143.94	143.96	144.19	145.29	144.05	143.94	143.86	143.80	143.79	
27	143.88	144.08	144.01	143.93	143.95	144.07	145.19	144.04	143.93	143.86	143.80	143.78	
28	143.87	144.09	144.02	143.93	143.94	144.05	144.92	144.03	143.93	143.86	143.80	143.78	
29	143.85	144.05	144.01	143.96	143.97	143.99	145.14	144.02	143.93	143.86		143.78	
30	143.84	144.05	144.00	143.95	143.96	143.97	145.35	144.02	143.93	143.87		143.78	
31		144.13		143.94	143.97		145.03		143.93	143.86		143.78	
Mean	143.88	144.13	144.18	143.98	144.02	143.96	144.36	144.23	143.98	143.89	143.83	143.80	
Max	144.01	144.45	144.52	144.03	144.19	144.19	145.99	144.81	144.10	143.92	143.86	143.87	145.99
Min	143.83	143.83	144.00	143.93	143.94	143.89	143.93	144.02	143.93	143.86	143.80	143.78	143.78

Annual Max Momentary Gage Height 146.41 M (MSL), at 6.00 Hours, on Oct 24, 2001
Zero Gage at Bottom Elevation 143.77 M (MSL), River Bed 143.37 M (MSL)
Left Bank Elevation 148.93 M (MSL)
Right Bank Elevation 149.64 M (MSL), Drainage Area 521 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.03	1.99	6.45	4.80	3.81	3.97	3.97	31.16	5.27	3.48	2.49	1.35	
2	4.31	3.48	9.03	4.31	3.81	3.81	5.03	24.55	5.03	3.48	2.33	1.35	
3	4.14	9.50	8.32	4.31	4.80	3.64	8.09	20.40	5.03	3.48	2.33	1.35	
4	3.48	12.50	11.30	4.14	5.27	3.64	8.09	17.95	4.80	3.32	2.33	1.35	
5	3.15	17.25	12.20	3.97	4.80	3.64	5.98	16.20	4.80	3.32	2.33	1.35	
6	2.82	14.90	10.10	4.47	5.27	3.48	5.50	14.30	4.64	3.32	2.33	1.35	
7	2.65	15.50	10.70	4.64	7.86	3.64	4.80	13.40	7.15	3.32	2.16	1.35	
8	2.98	11.30	16.20	5.27	6.45	3.48	4.64	12.50	6.68	3.32	2.16	1.35	
9	2.65	8.80	14.90	5.03	5.98	3.64	4.64	11.30	5.27	3.32	2.16	1.50	
10	2.49	6.91	19.70	5.50	5.50	3.32	5.74	10.40	4.80	3.15	1.99	1.50	
11	2.49	5.50	17.25	5.50	6.45	3.32	7.62	9.80	4.80	3.15	1.99	1.50	
12	2.65	6.68	17.25	4.80	7.62	3.32	5.50	9.50	4.64	3.15	1.99	1.50	
13	2.82	8.80	13.40	4.47	9.27	3.32	5.50	8.80	4.64	3.15	1.99	1.35	
14	2.65	5.74	11.60	4.31	8.09	3.48	5.03	8.80	4.31	3.15	1.99	1.35	
15	2.49	5.50	10.40	4.14	6.68	3.81	4.64	13.10	4.47	3.15	1.83	1.35	
16	2.49	6.21	8.32	4.14	5.98	3.32	4.64	11.30	4.31	2.98	1.83	1.35	
17	2.82	14.90	7.86	4.47	5.50	3.15	4.64	8.80	4.14	2.98	1.83	1.20	
18	2.65	11.60	7.15	4.47	5.27	2.98	4.14	8.09	4.14	2.82	1.83	1.20	
19	2.33	9.80	6.45	4.80	5.27	3.15	4.14	7.86	4.14	2.82	1.66	1.83	
20	2.16	8.80	5.98	4.64	5.27	3.48	3.97	7.15	4.14	2.65	1.66	2.65	
21	1.99	7.86	5.74	4.47	5.50	5.27	3.81	6.91	4.14	2.65	1.66	1.99	
22	1.99	6.68	5.50	5.03	5.03	8.09	3.64	6.68	3.97	2.65	1.66	2.33	
23	1.99	5.74	5.50	4.80	4.64	7.62	5.50	6.45	3.81	2.82	1.66	2.16	
24	2.16	5.50	6.68	4.47	4.31	4.80	98.80	6.21	3.81	2.65	1.66	1.83	
25	2.98	5.27	5.98	4.14	4.14	4.64	93.90	5.98	3.81	2.65	1.50	1.50	
26	2.49	5.74	5.27	3.81	4.14	9.27	54.56	5.98	3.81	2.49	1.50	1.35	
27	2.82	6.68	5.03	3.64	3.97	6.45	49.22	5.74	3.64	2.49	1.50	1.20	
28	2.65	6.91	5.27	3.64	3.81	5.98	36.28	5.50	3.64	2.49	1.50	1.20	
29	2.33	5.98	5.03	4.14	4.31	4.64	46.79	5.27	3.64	2.49		1.20	
30	2.16	5.98	4.80	3.97	4.14	4.31	57.80	5.27	3.64	2.65		1.20	
31		7.86		3.81	4.31		41.45		3.64	2.49		1.20	
Total	82.81	255.86	279.36	138.10	167.25	130.66	598.05	325.35	138.75	92.03	53.85	46.24	2308.31 CMSDAY
Mean	2.76	8.25	9.31	4.45	5.40	4.36	19.29	10.85	4.48	2.97	1.92	1.49	6.32 CMS
Max	5.03	17.25	19.70	5.50	9.27	9.27	98.80	31.16	7.15	3.48	2.49	2.65	98.80 CMS
Min	1.99	1.99	4.80	3.64	3.81	2.98	3.64	5.27	3.64	2.49	1.50	1.20	1.20 CMS
Runoff	7.155	22.106	24.137	11.932	14.450	11.289	51.672	28.110	11.988	7.951	4.653	3.995	199.438 MCM

Momentary Peak 129.78 CMS, at 146.41 M (A.D), at 6.00 Hours, on Oct 24, 2001

Runoff Yield 12.14 Liters/Second/Square KM, Momentary Peak Yield 249.098 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Khlong Wang Chao at Ban Thai Tawee, Kamphaeng Phet (P.50A)

Lat 16 - 32 - 45 N. **Long** 99 - 14 - 57 E.

Location on right bank at BanThai Tawee.

Ban Thai Tawee **Amphoe** Kosamphi Nakhon **Changwat** Kamphaeng Phet

Drainage Area 477 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +104.360 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 10 meters from the top staff gage.

Elevation +109.873 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1999 to date.

Rating Operation

Period of Rating 1999 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable.

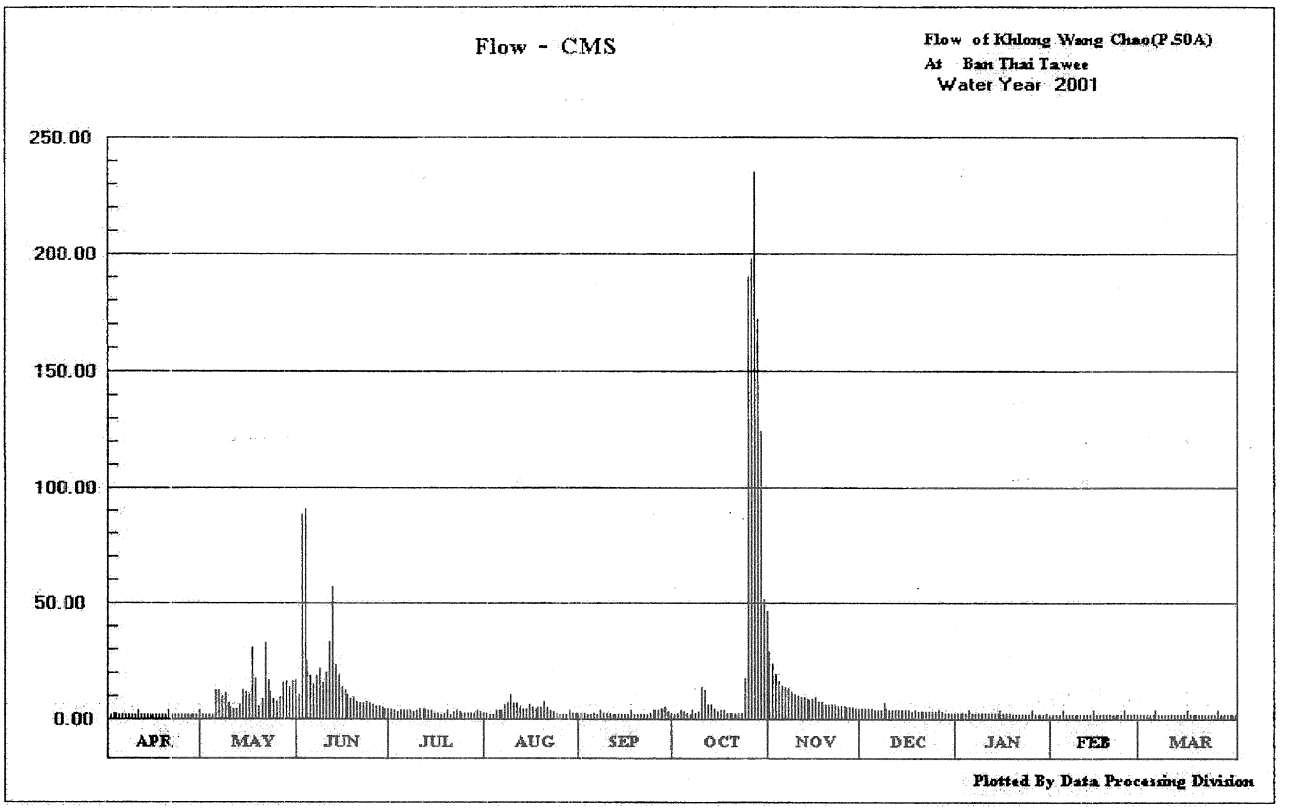
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 32 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	105.36	105.16	106.20	105.62	105.38	105.45	105.37	107.06	105.64	105.41	105.36	105.14	
2	105.40	105.16	107.72	105.55	105.35	105.42	105.43	106.93	105.64	105.44	105.35	105.15	
3	105.38	105.20	107.74	105.53	105.35	105.37	105.60	106.76	105.62	105.44	105.33	105.14	
4	105.37	105.24	106.99	105.59	105.57	105.37	105.48	106.61	105.61	105.45	105.33	105.14	
5	105.36	106.33	106.74	105.56	105.54	105.38	105.43	106.45	105.59	105.44	105.32	105.14	
6	105.35	106.32	106.52	105.58	105.54	105.37	105.37	106.43	105.58	105.44	105.33	105.13	
7	105.34	106.13	106.73	105.55	105.83	105.42	105.42	106.38	105.60	105.44	105.33	105.11	
8	105.31	106.23	106.86	105.53	105.87	105.41	105.41	106.28	105.86	105.43	105.32	105.10	
9	105.30	105.88	106.57	105.57	106.17	105.40	105.46	106.19	105.67	105.43	105.31	105.12	
10	105.26	105.70	106.80	105.61	105.90	105.38	106.42	106.15	105.60	105.44	105.30	105.17	
11	105.24	105.66	107.15	105.67	105.87	105.37	106.35	106.10	105.56	105.44	105.27	105.16	
12	105.23	105.67	107.44	105.66	105.77	105.35	105.84	106.09	105.56	105.43	105.26	105.15	
13	105.22	105.84	106.92	105.56	105.63	105.33	105.80	106.04	105.54	105.44	105.25	105.14	
14	105.23	106.32	106.72	105.55	105.63	105.33	105.63	106.01	105.56	105.43	105.25	105.14	
15	105.26	106.28	106.41	105.45	105.85	105.36	105.49	106.05	105.55	105.41	105.25	105.13	
16	105.26	106.20	106.31	105.41	105.72	105.33	105.55	106.09	105.54	105.39	105.24	105.12	
17	105.25	107.10	106.19	105.37	105.66	105.31	105.52	105.96	105.53	105.38	105.23	105.12	
18	105.23	106.66	106.06	105.40	105.70	105.28	105.44	105.93	105.54	105.38	105.22	105.11	
19	105.22	105.76	106.08	105.37	105.73	105.29	105.41	105.85	105.52	105.37	105.20	105.12	
20	105.21	106.05	105.96	105.34	105.92	105.30	105.45	105.84	105.52	105.36	105.17	105.14	
21	105.20	107.13	105.87	105.47	105.68	105.29	105.39	105.81	105.51	105.36	105.19	105.17	
22	105.19	106.64	105.87	105.57	105.56	105.29	105.38	105.80	105.52	105.35	105.18	105.22	
23	105.18	106.27	105.95	105.53	105.49	105.40	105.42	105.77	105.50	105.35	105.18	105.20	
24	105.17	106.04	105.86	105.45	105.39	105.57	106.66	105.76	105.49	105.36	105.19	105.16	
25	105.16	105.95	105.80	105.40	105.36	105.57	108.45	105.74	105.49	105.37	105.18	105.15	
26	105.16	106.09	105.75	105.38	105.34	105.55	108.50	105.71	105.49	105.36	105.17	105.13	
27	105.21	106.56	105.75	105.41	105.32	105.66	108.73	105.70	105.47	105.35	105.16	105.12	
28	105.19	106.60	105.70	105.39	105.39	105.70	108.33	105.70	105.45	105.33	105.15	105.12	
29	105.16	106.40	105.65	105.39	105.41	105.48	108.00	105.67	105.45	105.31		105.13	
30	105.13	106.58	105.66	105.46	105.41	105.40	107.38	105.65	105.44	105.38		105.07	
31		106.63		105.41	105.42		107.32		105.43	105.37		105.10	
Mean	105.25	106.12	106.40	105.49	105.60	105.40	106.18	106.08	105.55	105.40	105.25	105.14	
Max	105.40	107.13	107.74	105.67	106.17	105.70	108.73	107.06	105.86	105.45	105.36	105.22	108.73
Min	105.13	105.16	105.65	105.34	105.32	105.28	105.37	105.65	105.43	105.31	105.15	105.07	105.07

Annual Max Momentary Gage Height 108.86 M (MSL), at 6.00 Hours, on Oct 27, 2001
Zero Gage at Bottom Elevation 104.36 M (MSL), River Bed 104.60 M (MSL)
Left Bank Elevation 109.90 M (MSL)
Right Bank Elevation 109.87 M (MSL), Drainage Area 477 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.96	1.80	11.60	5.00	3.08	3.60	3.02	29.52	5.20	3.28	2.96	1.70	
2	3.20	1.80	89.04	4.40	2.90	3.36	3.44	24.51	5.20	3.52	2.90	1.75	
3	3.08	2.00	91.38	4.24	2.90	3.02	4.80	20.24	5.00	3.52	2.78	1.70	
4	3.02	2.24	26.13	4.72	4.56	3.02	3.84	17.39	4.90	3.60	2.78	1.70	
5	2.96	13.36	19.86	4.48	4.32	3.08	3.44	15.02	4.72	3.52	2.72	1.70	
6	2.90	13.22	16.04	4.64	4.32	3.02	3.02	14.73	4.64	3.52	2.78	1.65	
7	2.84	10.72	19.67	4.40	7.14	3.36	3.36	14.03	4.80	3.52	2.78	1.55	
8	2.66	12.01	22.62	4.24	7.61	3.28	3.28	12.68	7.49	3.44	2.72	1.50	
9	2.60	7.72	16.77	4.56	11.23	3.20	3.68	11.48	5.50	3.44	2.66	1.60	
10	2.36	5.80	21.00	4.90	7.95	3.08	14.59	10.98	4.80	3.52	2.60	1.85	
11	2.24	5.40	34.20	5.50	7.61	3.02	13.62	10.35	4.48	3.52	2.42	1.80	
12	2.18	5.50	57.88	5.40	6.50	2.90	7.26	10.22	4.48	3.44	2.36	1.75	
13	2.12	7.26	24.24	4.48	5.10	2.78	6.80	9.60	4.32	3.52	2.30	1.70	
14	2.18	13.22	19.48	4.40	5.10	2.78	5.10	9.23	4.48	3.44	2.30	1.70	
15	2.36	12.68	14.45	3.60	7.37	2.96	3.92	9.73	4.40	3.28	2.30	1.65	
16	2.36	11.60	13.08	3.28	6.00	2.78	4.40	10.22	4.32	3.14	2.24	1.60	
17	2.30	31.60	11.48	3.02	5.40	2.66	4.16	8.64	4.24	3.08	2.18	1.60	
18	2.18	18.34	9.85	3.20	5.80	2.48	3.52	8.29	4.32	3.08	2.12	1.55	
19	2.12	6.40	10.10	3.02	6.10	2.54	3.28	7.37	4.16	3.02	2.00	1.60	
20	2.06	9.73	8.64	2.84	8.18	2.60	3.60	7.26	4.16	2.96	1.85	1.70	
21	2.00	33.16	7.61	3.76	5.60	2.54	3.14	6.91	4.08	2.96	1.95	1.85	
22	1.95	17.96	7.61	4.56	4.48	2.54	3.08	6.80	4.16	2.90	1.90	2.12	
23	1.90	12.54	8.52	4.24	3.92	3.20	3.36	6.50	4.00	2.90	1.90	2.00	
24	1.85	9.60	7.49	3.60	3.14	4.56	18.34	6.40	3.92	2.96	1.95	1.80	
25	1.80	8.52	6.80	3.20	2.96	4.56	190.75	6.20	3.92	3.02	1.90	1.75	
26	1.80	10.22	6.30	3.08	2.84	4.40	198.50	5.90	3.92	2.96	1.85	1.65	
27	2.06	16.62	6.30	3.28	2.72	5.40	236.10	5.80	3.76	2.90	1.80	1.60	
28	1.95	17.20	5.80	3.14	3.14	5.80	172.50	5.80	3.60	2.78	1.75	1.60	
29	1.80	14.30	5.30	3.14	3.28	3.84	125.00	5.50	3.60	2.66		1.65	
30	1.65	16.91	5.40	3.68	3.28	3.20	51.92	5.30	3.52	3.08		1.35	
31		17.77		3.28	3.36		46.88		3.44	3.02		1.50	
Total	69.44	367.20	604.64	123.28	157.89	99.56	1151.70	322.60	137.53	99.50	64.75	52.22	3250.31 CMSDAY
Mean	2.31	11.85	20.15	3.98	5.09	3.32	37.15	10.75	4.44	3.21	2.31	1.68	8.90 CMS
Max	3.20	33.16	91.38	5.50	11.23	5.80	236.10	29.52	7.49	3.60	2.96	2.12	236.10 CMS
Min	1.65	1.80	5.30	2.84	2.72	2.48	3.02	5.30	3.44	2.66	1.75	1.35	1.35 CMS
Runoff	6.000	31.726	52.241	10.651	13.642	8.602	99.507	27.873	11.883	8.597	5.594	4.512	280.827 MCM

Momentary Peak 258.20 CMS, at 108.86 M (MSL), at 6.00 Hours, on Oct 27, 2001
Runoff Yield 18.67 Liters/Second/Square KM, Momentary Peak Yield 541.300 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Huai Tak at Ban Tak,Tak (P.52)

Lat 17 - 02 - 13 N. **Long** 99 - 03 - 09 E.

Location on right bank at the bridge on road.

Ban Tak **Amphoe** Ban Tak **Changwat** Tak

Drainage Area 341 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +120.230 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 10 meters from the top staff gage.

Elevation +125.393 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1983 to date.

Rating Operation

Period of Rating 1997 to date.

Rated by Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Unstable by some scouring.

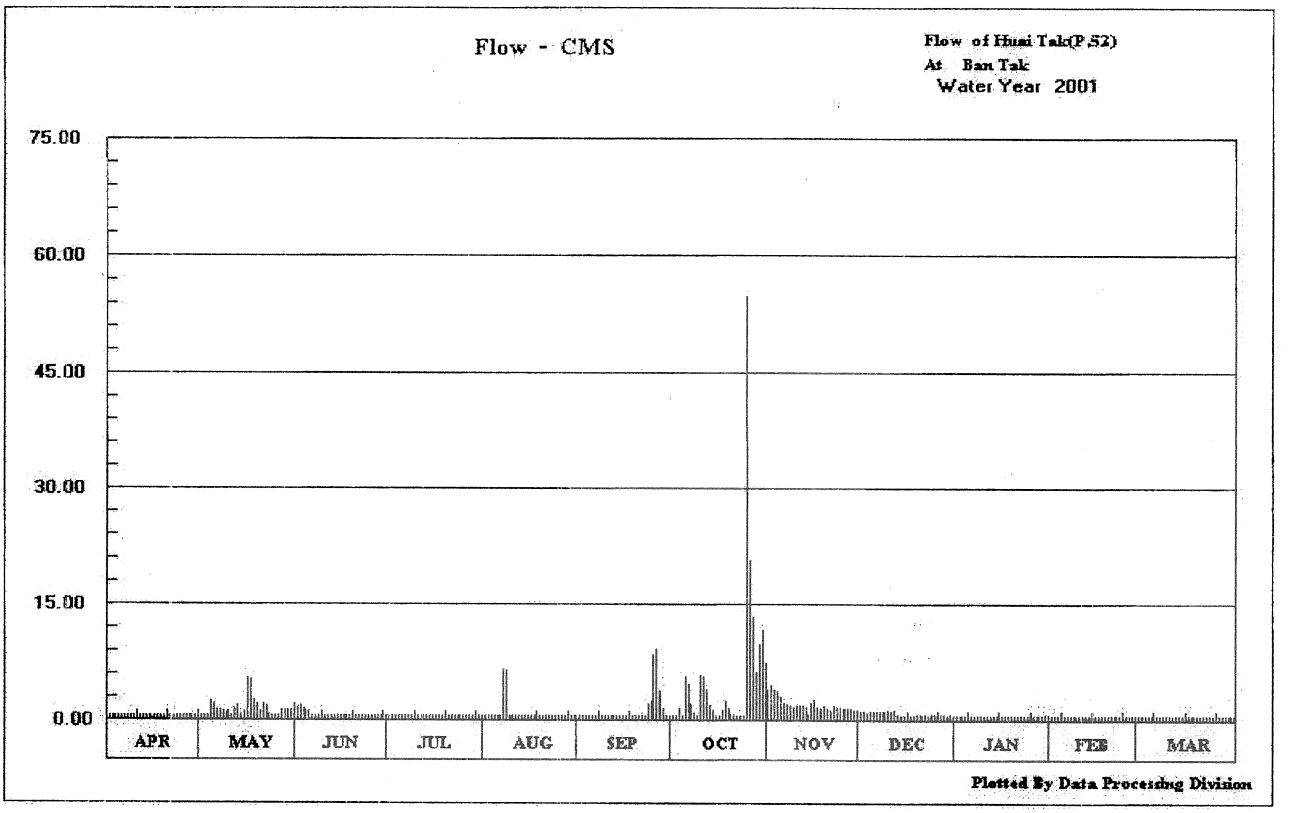
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 12 discharge measurements made 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	119.77	119.73	119.92	119.72	119.70	119.68	119.67	120.14	119.85	119.76	119.75	119.35	
2	119.76	119.73	119.96	119.72	119.72	119.68	119.77	120.19	119.85	119.78	119.75	119.35	
3	119.75	119.78	119.90	119.72	119.72	119.68	119.90	120.15	119.83	119.76	119.75	119.35	
4	119.74	120.02	119.88	119.71	119.71	119.67	119.73	120.13	119.86	119.75	119.75	119.35	
5	119.73	119.98	119.85	119.71	119.71	119.67	120.27	120.06	119.86	119.74	119.75	119.35	
6	119.63	119.88	119.75	119.71	119.75	119.67	120.21	119.99	119.84	119.74	119.75	119.35	
7	119.63	119.88	119.74	119.71	120.32	119.67	119.97	119.97	119.86	119.71	119.75	119.38	
8	119.63	119.86	119.73	119.71	120.31	119.66	119.82	119.95	119.86	119.69	119.75	119.38	
9	119.63	119.83	119.73	119.71	119.77	119.66	119.77	119.93	119.86	119.70	119.75	119.38	
10	119.63	119.74	119.73	119.71	119.71	119.66	120.28	119.95	119.87	119.69	119.75	119.38	
11	119.63	119.73	119.73	119.71	119.70	119.66	120.27	119.96	119.85	119.69	119.75	119.38	
12	119.63	119.89	119.73	119.71	119.70	119.66	120.14	119.96	119.87	119.68	119.75	119.36	
13	119.63	119.96	119.73	119.71	119.72	119.66	119.96	119.93	119.80	119.68	119.75	119.36	
14	119.63	119.81	119.73	119.71	119.72	119.67	119.87	119.81	119.76	119.68	119.75	119.35	
15	119.63	119.86	119.73	119.71	119.70	119.67	119.75	119.99	119.70	119.68	119.75	119.35	
16	119.63	120.26	119.73	119.71	119.69	119.67	119.73	120.04	119.74	119.71	119.76	119.34	
17	119.63	120.24	119.73	119.71	119.69	119.67	119.88	119.93	119.74	119.70	119.76	119.34	
18	119.63	120.04	119.73	119.71	119.69	119.67	120.02	119.89	119.74	119.68	119.76	119.34	
19	119.63	119.98	119.73	119.71	119.69	119.67	119.90	119.94	119.79	119.68	119.76	119.33	
20	119.74	119.83	119.73	119.71	119.70	119.67	119.79	119.91	119.81	119.68	119.76	119.33	
21	119.63	119.98	119.73	119.71	119.70	119.71	119.79	119.87	119.78	119.68	119.76	119.32	
22	119.63	119.95	119.73	119.71	119.68	119.67	119.78	119.94	119.79	119.68	119.76	119.32	
23	119.63	119.80	119.72	119.71	119.68	119.97	119.75	119.93	119.78	119.68	119.75	119.32	
24	119.63	119.75	119.72	119.71	119.68	120.02	119.76	119.93	119.81	119.68	119.75	119.31	
25	119.63	119.75	119.72	119.71	119.68	120.44	121.94	119.90	119.81	119.67	119.73	119.31	
26	119.63	119.72	119.71	119.70	119.68	120.48	120.97	119.90	119.79	119.67	119.75	119.31	
27	119.63	119.88	119.71	119.70	119.68	120.13	120.68	119.90	119.80	119.67	119.75	119.31	
28	119.63	119.88	119.71	119.70	119.68	119.91	120.30	119.89	119.80	119.67	119.74	119.31	
29	119.63	119.87	119.71	119.70	119.68	119.73	120.51	119.88	119.77	119.70		119.31	
30	119.63	119.88	119.71	119.70	119.68	119.69	120.60	119.87	119.79	119.81		119.31	
31		119.97		119.70	119.68		120.37		119.77	119.81		119.31	
Mean	119.65	119.89	119.76	119.71	119.74	119.77	120.10	119.96	119.81	119.71	119.75	119.34	
Max	119.77	120.26	119.96	119.72	120.32	120.48	121.94	120.19	119.87	119.81	119.76	119.38	121.94
Min	119.63	119.72	119.71	119.70	119.68	119.66	119.67	119.81	119.70	119.67	119.73	119.31	119.31

Annual Max Momentary Gage Height 122.38 M (MSL), at 9.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 120.23 M (MSL), River Bed 119.61 M (MSL)
Left Bank Elevation 125.17 M (MSL)
Right Bank Elevation 125.19 M (MSL), Drainage Area 341 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.82	0.59	1.90	0.53	0.41	0.29	0.24	4.11	1.37	0.76	0.71	0.00	
2	0.76	0.59	2.20	0.53	0.53	0.29	0.82	4.69	1.37	0.88	0.71	0.00	
3	0.71	0.88	1.75	0.53	0.53	0.29	1.75	4.23	1.22	0.76	0.71	0.00	
4	0.65	2.73	1.60	0.47	0.47	0.24	0.59	3.99	1.45	0.71	0.71	0.00	
5	0.59	2.35	1.37	0.47	0.47	0.24	5.92	3.19	1.45	0.65	0.71	0.00	
6	0.00	1.60	0.71	0.47	0.71	0.24	4.96	2.42	1.30	0.65	0.71	0.00	
7	0.00	1.60	0.65	0.47	6.72	0.24	2.28	2.28	1.45	0.47	0.71	0.00	
8	0.00	1.45	0.59	0.47	6.56	0.18	1.15	2.12	1.45	0.35	0.71	0.00	
9	0.00	1.22	0.59	0.47	0.82	0.18	0.82	1.97	1.45	0.41	0.71	0.00	
10	0.00	0.65	0.59	0.47	0.47	0.18	6.08	2.12	1.53	0.35	0.71	0.00	
11	0.00	0.59	0.59	0.47	0.41	0.18	5.92	2.20	1.37	0.35	0.71	0.00	
12	0.00	1.67	0.59	0.47	0.41	0.18	4.11	2.20	1.53	0.29	0.71	0.00	
13	0.00	2.20	0.59	0.47	0.53	0.18	2.20	1.97	1.00	0.29	0.71	0.00	
14	0.00	1.07	0.59	0.47	0.53	0.24	1.53	1.07	0.76	0.29	0.71	0.00	
15	0.00	1.45	0.59	0.47	0.41	0.24	0.71	2.42	0.41	0.29	0.71	0.00	
16	0.00	5.76	0.59	0.47	0.35	0.24	0.59	2.96	0.65	0.47	0.76	0.00	
17	0.00	5.44	0.59	0.47	0.35	0.24	1.60	1.97	0.65	0.41	0.76	0.00	
18	0.00	2.96	0.59	0.47	0.35	0.24	2.73	1.67	0.65	0.29	0.76	0.00	
19	0.00	2.35	0.59	0.47	0.35	0.24	1.75	2.05	0.94	0.29	0.76	0.00	
20	0.65	1.22	0.59	0.47	0.41	0.24	0.94	1.83	1.07	0.29	0.76	0.00	
21	0.00	2.35	0.59	0.47	0.41	0.47	0.94	1.53	0.88	0.29	0.76	0.00	
22	0.00	2.12	0.59	0.47	0.29	0.24	0.88	2.05	0.94	0.29	0.76	0.00	
23	0.00	1.00	0.53	0.47	0.29	2.28	0.71	1.97	0.88	0.29	0.71	0.00	
24	0.00	0.71	0.53	0.47	0.29	2.73	0.76	1.97	1.07	0.29	0.71	0.00	
25	0.00	0.71	0.53	0.47	0.29	8.76	55.02	1.75	1.07	0.24	0.59	0.00	
26	0.00	0.53	0.47	0.41	0.29	9.52	20.82	1.75	0.94	0.24	0.71	0.00	
27	0.00	1.60	0.47	0.41	0.29	3.99	13.64	1.75	1.00	0.24	0.71	0.00	
28	0.00	1.60	0.47	0.41	0.29	1.83	6.40	1.67	1.00	0.24	0.65	0.00	
29	0.00	1.53	0.47	0.41	0.29	0.59	10.09	1.60	0.82	0.41		0.00	
30	0.00	1.60	0.47	0.41	0.29	0.35	11.80	1.53	0.94	1.07		0.00	
31		2.28		0.41	0.29		7.52		0.82	1.07		0.00	
Total	4.18	54.40	22.97	14.39	25.10	35.35	175.27	69.03	33.43	13.92	20.05	0.00	468.09 CMSDAY
Mean	0.14	1.75	0.77	0.46	0.81	1.18	5.65	2.30	1.08	0.45	0.72	0.00	1.28 CMS
Max	0.82	5.76	2.20	0.53	6.72	9.52	55.02	4.69	1.53	1.07	0.76	0.00	55.02 CMS
Min	0.00	0.53	0.47	0.41	0.29	0.18	0.24	1.07	0.41	0.24	0.59	0.00	0.00 CMS
Runoff	0.361	4.700	1.985	1.243	2.169	3.054	15.143	5.964	2.888	1.203	1.732	0.000	40.443 MCM

Momentary Peak 75.44 CMS, at 122.38 M (MSL), at 9.00 Hours, on Oct 25, 2001

Runoff Yield 3.76 Liters/Second/Square KM, Momentary Peak Yield 221.232 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Ngat at Ban Sahakorn Rom Klao, Chiang Mai (P.56A)

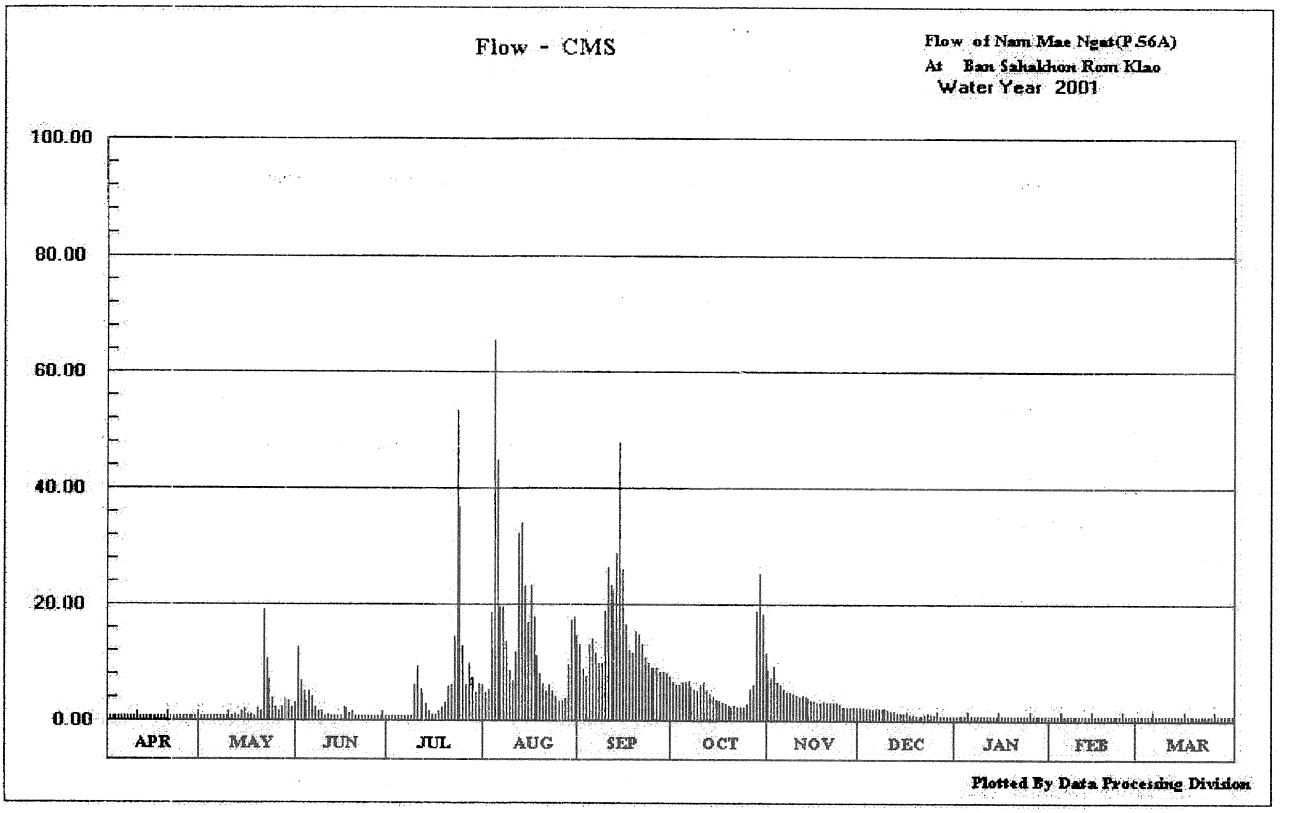
Lat 19 - 17 - 04 N. **Long** 99 - 11 - 23 E.

Location		on left bank at the bridge near land Cooperative Office.
	Ban Sahakorn Rom Klao	**Amphoe** Phrao **Changwat** Chiang Mai
Drainage Area		554 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 about 10 meters from the top staff gage.
	Elevation	+6.000 m. (A.D.)
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 Float	-
	Rated by Current Meter	1999 to date.
Stability of Channel Regimes		Fairly stable.
Overbank Flow Conditions		No overbank flow.
General Description		Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.66	0.59	2.06	0.76	1.40	2.11	1.58	1.75	1.08	0.84	0.76	0.64	
2	0.66	0.59	1.59	0.74	1.45	1.77	1.51	1.64	1.07	0.84	0.76	0.64	
3	0.66	0.60	1.41	0.72	2.49	1.66	1.51	1.80	1.05	0.84	0.76	0.65	
4	0.64	0.74	1.22	0.70	4.09	2.10	1.58	1.58	1.03	0.82	0.76	0.65	
5	0.64	0.73	1.43	0.69	3.69	2.18	1.56	1.51	1.03	0.81	0.75	0.66	
6	0.63	0.74	1.31	0.70	2.54	1.99	1.59	1.44	1.03	0.78	0.75	0.66	
7	0.62	0.74	1.07	0.76	2.54	1.84	1.50	1.39	1.03	0.80	0.70	0.67	
8	0.64	0.72	0.96	0.80	2.13	1.84	1.45	1.39	1.04	0.78	0.70	0.67	
9	0.64	0.71	0.86	1.51	1.74	2.50	1.42	1.38	1.04	0.80	0.70	0.68	
10	0.64	0.69	0.83	1.81	1.60	2.95	1.53	1.35	1.01	0.76	0.71	0.69	
11	0.66	0.79	0.89	1.45	2.00	2.78	1.56	1.32	0.98	0.79	0.71	0.69	
12	0.66	0.87	0.84	1.37	3.25	2.72	1.45	1.33	0.95	0.80	0.70	0.69	
13	0.66	0.85	0.80	1.16	3.33	3.08	1.37	1.30	0.93	0.80	0.70	0.69	
14	0.64	0.95	0.80	0.98	2.76	3.76	1.30	1.27	0.92	0.80	0.70	0.68	
15	0.64	1.04	0.83	0.87	2.38	2.94	1.25	1.24	0.94	0.82	0.70	0.64	
16	0.64	0.90	1.07	0.89	2.78	2.35	1.23	1.22	0.92	0.84	0.80	0.62	
17	0.62	0.86	1.05	0.96	2.43	2.02	1.20	1.20	0.88	0.83	0.82	0.60	
18	0.62	0.85	0.93	1.10	1.94	1.98	1.17	1.20	0.87	0.80	0.85	0.62	
19	0.62	1.06	0.84	1.18	1.70	2.27	1.13	1.21	0.83	0.78	0.84	0.62	
20	0.62	0.86	0.81	1.49	1.55	2.23	1.10	1.20	0.82	0.78	0.82	0.63	
21	0.60	2.52	0.80	1.51	1.42	2.10	1.11	1.19	0.82	0.76	0.78	0.60	
22	0.60	1.91	0.77	2.19	1.53	1.93	1.10	1.19	0.88	0.75	0.79	0.58	
23	0.60	1.61	0.73	3.88	1.41	1.84	1.08	1.18	0.93	0.75	0.77	0.54	
24	0.60	1.27	0.71	3.45	1.30	1.79	1.09	1.14	0.90	0.75	0.72	0.55	
25	0.60	1.08	0.69	2.08	1.23	1.79	1.15	1.10	0.87	0.77	0.70	0.56	
26	0.62	0.96	0.68	1.51	1.23	1.79	1.44	1.10	0.86	0.77	0.68	0.54	
27	0.60	1.09	0.67	1.85	1.29	1.72	1.51	1.10	0.84	0.77	0.66	0.54	
28	0.60	1.28	0.71	1.64	1.83	1.73	2.50	1.10	0.82	0.71	0.66	0.52	
29	0.59	1.21	0.69	1.40	2.41	1.71	2.90	1.10	0.83	0.71		0.52	
30	0.59	1.07	0.76	1.54	2.44	1.66	2.46	1.09	0.84	0.70		0.52	
31		1.20		1.52	2.21		1.98		0.82	0.74		0.52	
Mean	0.63	1.00	0.96	1.39	2.13	2.17	1.49	1.30	0.93	0.78	0.74	0.62	
Max	0.66	2.52	2.06	3.88	4.09	3.76	2.90	1.80	1.08	0.84	0.85	0.69	4.09
Min	0.59	0.59	0.67	0.69	1.23	1.66	1.08	1.09	0.82	0.70	0.66	0.52	0.52

Annual Max Momentary Gage Height 4.20 M (A.D), at 20.00 Hours, on Jul 23, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.49 M (A.D)
Left Bank Elevation 7.42 M (A.D)
Right Bank Elevation 7.45 M (A.D), Drainage Area 554 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.39	0.20	12.78	0.76	5.12	13.44	6.95	8.90	2.55	1.14	0.76	0.33	
2	0.39	0.20	7.05	0.68	5.61	9.14	6.21	7.62	2.49	1.14	0.76	0.33	
3	0.39	0.22	5.22	0.59	18.94	7.84	6.21	9.50	2.36	1.14	0.76	0.36	
4	0.33	0.68	3.56	0.50	65.94	13.30	6.95	6.95	2.24	1.04	0.76	0.36	
5	0.33	0.63	5.41	0.47	45.04	14.38	6.74	6.21	2.24	0.99	0.72	0.39	
6	0.30	0.68	4.30	0.50	19.74	11.88	7.05	5.51	2.24	0.85	0.72	0.39	
7	0.28	0.68	2.49	0.76	19.74	10.00	6.10	5.03	2.24	0.94	0.50	0.42	
8	0.33	0.59	1.81	0.94	13.71	10.00	5.61	5.03	2.30	0.85	0.50	0.42	
9	0.33	0.54	1.25	6.21	8.78	19.10	5.32	4.94	2.30	0.94	0.50	0.44	
10	0.33	0.47	1.09	9.63	7.16	26.50	6.42	4.67	2.11	0.76	0.54	0.47	
11	0.39	0.90	1.40	5.61	12.00	23.58	6.74	4.39	1.93	0.90	0.54	0.47	
12	0.39	1.30	1.14	4.85	32.55	22.62	5.61	4.48	1.75	0.94	0.50	0.47	
13	0.39	1.20	0.94	3.11	34.26	29.00	4.85	4.21	1.63	0.94	0.50	0.47	
14	0.33	1.75	0.94	1.93	23.26	47.98	4.21	3.97	1.57	0.94	0.50	0.44	
15	0.33	2.30	1.09	1.30	17.20	26.32	3.81	3.72	1.69	1.04	0.50	0.33	
16	0.33	1.45	2.49	1.40	23.58	16.75	3.64	3.56	1.57	1.14	0.94	0.28	
17	0.28	1.25	2.36	1.81	17.98	12.26	3.40	3.40	1.35	1.09	1.04	0.22	
18	0.28	1.20	1.63	2.68	11.25	11.75	3.18	3.40	1.30	0.94	1.20	0.28	
19	0.28	2.43	1.14	3.26	8.30	15.60	2.90	3.48	1.09	0.85	1.14	0.28	
20	0.28	1.25	0.99	6.00	6.63	15.06	2.68	3.40	1.04	0.85	1.04	0.30	
21	0.22	19.42	0.94	6.21	5.32	13.30	2.75	3.33	1.04	0.76	0.85	0.22	
22	0.22	10.88	0.81	14.52	6.42	11.13	2.68	3.33	1.35	0.72	0.90	0.19	
23	0.22	7.27	0.63	53.46	5.22	10.00	2.55	3.26	1.63	0.72	0.81	0.12	
24	0.22	3.97	0.54	37.20	4.21	9.38	2.62	2.97	1.45	0.72	0.59	0.14	
25	0.22	2.55	0.47	13.04	3.64	9.38	3.04	2.68	1.30	0.81	0.50	0.15	
26	0.28	1.81	0.44	6.21	3.64	9.38	5.51	2.68	1.25	0.81	0.44	0.12	
27	0.22	2.62	0.42	10.13	4.13	8.54	6.21	2.68	1.14	0.81	0.39	0.12	
28	0.22	4.05	0.54	7.62	9.88	8.66	19.10	2.68	1.04	0.54	0.39	0.08	
29	0.20	3.48	0.47	5.12	17.66	8.42	25.60	2.68	1.09	0.54		0.08	
30	0.20	2.49	0.76	6.52	18.14	7.84	18.46	2.62	1.14	0.50		0.08	
31		3.40		6.31	14.79		11.75		1.04	0.68		0.08	
Total	8.90	81.86	65.10	219.33	489.84	452.53	204.85	131.28	51.46	27.03	19.29	8.83	1760.30 CMSDAY
Mean	0.30	2.64	2.17	7.08	15.80	15.08	6.61	4.38	1.66	0.87	0.69	0.28	4.82 CMS
Max	0.39	19.42	12.78	53.46	65.94	47.98	25.60	9.50	2.55	1.14	1.20	0.47	65.94 CMS
Min	0.20	0.20	0.42	0.47	3.64	7.84	2.55	2.62	1.04	0.50	0.39	0.08	0.08 CMS
Runoff	0.769	7.073	5.625	18.950	42.322	39.099	17.699	11.343	4.446	2.335	1.667	0.763	152.090 MCM

Momentary Peak 74.80 CMS, at 4.20 H (A.D), at 20.00 Hours, on Jul 23, 2001
Runoff Yield 8.71 Liters/Second/Square KM, Momentary Peak Yield 135.018 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Tun at Ban Luang, Chiang Mai (P.64)

Lat 17 - 46 - 56 N. **Long** 98 - 22 - 29 E.

Location on rigth bank at the bridge on Highway.

Ban Luang **Amphoe** Omkoi **Changwat** Chiang Mai

Drainage Area 503 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 35.00 meters from the top staff gage.

Elevation +9.000 m.(A.D.)

Gage Reading Frequency 5-time 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 Float -

Rated by Current Meter 1990 to date.

Stability of Channel Regimes Stable.

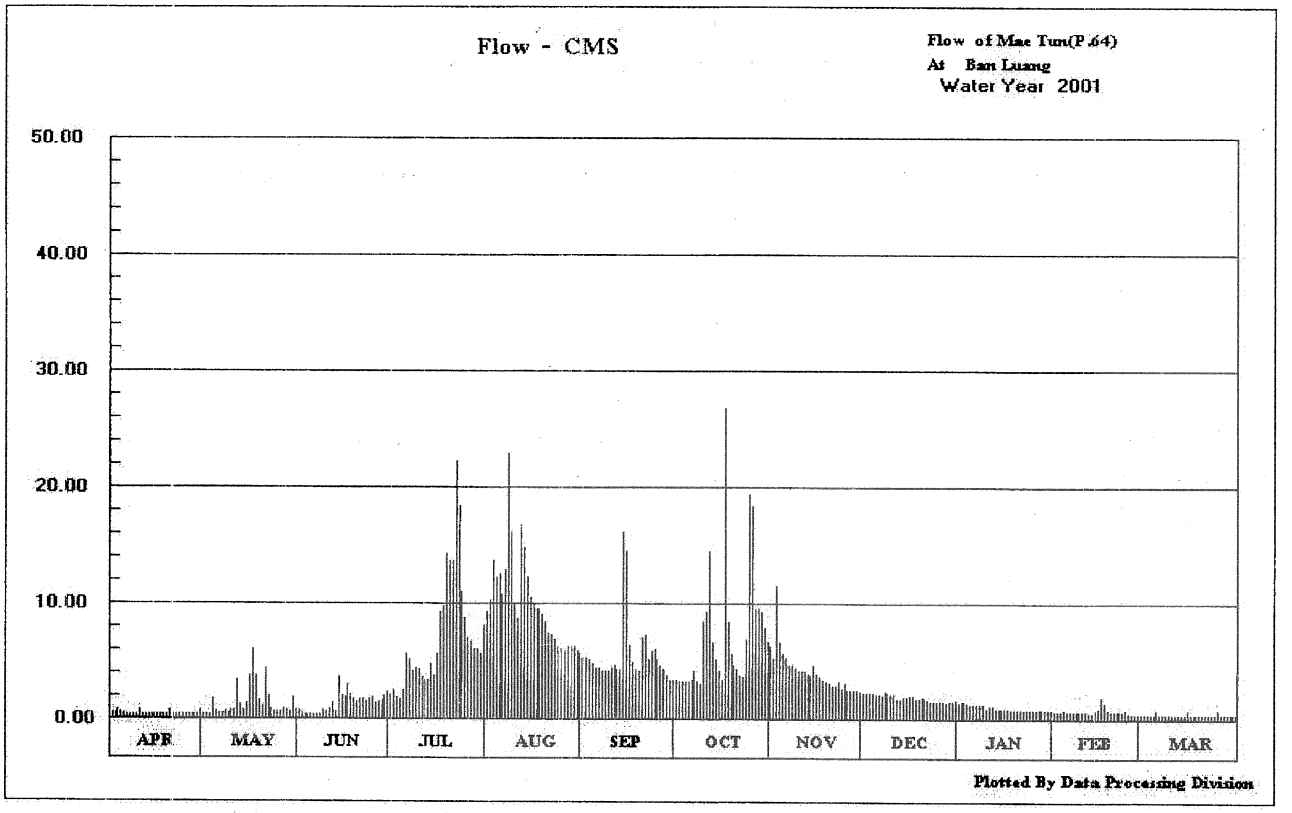
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 141 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.35	0.34	0.38	0.48	0.88	0.69	0.58	0.74	0.50	0.43	0.37	0.34	
2	0.35	0.33	0.35	0.52	0.92	0.69	0.57	0.69	0.50	0.44	0.37	0.34	
3	0.38	0.34	0.32	0.47	1.05	0.68	0.57	0.97	0.50	0.44	0.37	0.33	
4	0.37	0.46	0.31	0.46	1.00	0.66	0.57	0.76	0.50	0.43	0.36	0.33	
5	0.35	0.37	0.32	0.52	1.01	0.64	0.57	0.71	0.49	0.42	0.36	0.33	
6	0.34	0.35	0.30	0.71	0.94	0.64	0.58	0.69	0.49	0.42	0.36	0.33	
7	0.33	0.35	0.30	0.68	1.02	0.62	0.62	0.65	0.48	0.42	0.36	0.33	
8	0.33	0.36	0.30	0.62	1.36	0.62	0.57	0.65	0.51	0.42	0.36	0.32	
9	0.33	0.35	0.30	0.64	1.14	0.62	0.55	0.64	0.50	0.42	0.36	0.32	
10	0.33	0.35	0.36	0.63	0.91	0.64	0.84	0.62	0.49	0.40	0.36	0.33	
11	0.32	0.38	0.40	0.59	0.85	0.65	0.88	0.62	0.49	0.41	0.36	0.33	
12	0.32	0.58	0.43	0.58	1.16	0.63	1.08	0.62	0.46	0.41	0.35	0.33	
13	0.32	0.42	0.37	0.58	1.09	0.63	0.76	0.61	0.46	0.40	0.35	0.33	
14	0.32	0.38	0.59	0.66	1.00	1.14	0.68	0.60	0.47	0.40	0.35	0.32	
15	0.32	0.43	0.48	0.60	0.93	1.08	0.62	0.65	0.47	0.40	0.40	0.30	
16	0.32	0.60	0.47	0.71	0.91	0.75	0.58	0.61	0.48	0.40	0.47	0.31	
17	0.30	0.73	0.55	0.88	0.89	0.67	1.47	0.59	0.48	0.39	0.43	0.29	
18	0.30	0.60	0.49	0.90	0.89	0.63	0.84	0.58	0.46	0.38	0.38	0.32	
19	0.30	0.45	0.46	1.07	0.87	0.62	0.71	0.57	0.46	0.38	0.36	0.31	
20	0.30	0.41	0.44	1.05	0.84	0.78	0.65	0.56	0.47	0.38	0.37	0.31	
21	0.31	0.64	0.46	1.05	0.80	0.79	0.63	0.54	0.46	0.38	0.36	0.32	
22	0.30	0.48	0.46	1.34	0.79	0.68	0.60	0.54	0.45	0.38	0.36	0.31	
23	0.30	0.40	0.44	1.22	0.77	0.72	0.59	0.57	0.44	0.38	0.36	0.30	
24	0.30	0.37	0.46	0.95	0.74	0.73	0.77	0.53	0.44	0.38	0.36	0.30	
25	0.29	0.37	0.47	0.86	0.73	0.68	1.25	0.56	0.44	0.38	0.35	0.30	
26	0.29	0.37	0.43	0.78	0.72	0.65	1.22	0.52	0.44	0.38	0.34	0.29	
27	0.29	0.40	0.44	0.76	0.74	0.63	0.89	0.52	0.44	0.38	0.33	0.31	
28	0.29	0.38	0.45	0.73	0.74	0.60	0.89	0.52	0.43	0.38	0.32	0.29	
29	0.28	0.37	0.48	0.73	0.74	0.58	0.88	0.52	0.44	0.38		0.30	
30	0.28	0.47	0.51	0.71	0.72	0.58	0.82	0.51	0.44	0.38		0.30	
31		0.38		0.83	0.71		0.76		0.45	0.38		0.29	
Mean	0.32	0.43	0.42	0.75	0.90	0.69	0.76	0.62	0.47	0.40	0.37	0.31	
Max	0.38	0.73	0.59	1.34	1.36	1.14	1.47	0.97	0.51	0.44	0.47	0.34	1.47
Min	0.28	0.33	0.30	0.46	0.71	0.58	0.55	0.51	0.43	0.38	0.32	0.29	0.28

Annual Max Momentary Gage Height 2.02 M (A.D), at 10.00 Hours, on Oct 17, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.08 M (A.D)
Left Bank Elevation 4.51 M (A.D)
Right Bank Elevation 4.53 M (A.D), Drainage Area 503 Square kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.56	0.92	2.14	9.44	5.43	3.60	6.39	2.40	1.49	0.83	0.56	
2	0.65	0.47	0.65	2.70	10.41	5.43	3.45	5.43	2.40	1.62	0.83	0.56	
3	0.92	0.56	0.38	2.01	13.81	5.26	3.45	11.69	2.40	1.62	0.83	0.47	
4	0.83	1.88	0.29	1.88	12.45	4.92	3.45	6.79	2.40	1.49	0.74	0.47	
5	0.65	0.83	0.38	2.70	12.72	4.58	3.45	5.80	2.27	1.36	0.74	0.47	
6	0.56	0.65	0.20	5.80	10.92	4.58	3.60	5.43	2.27	1.36	0.74	0.47	
7	0.47	0.65	0.20	5.26	13.00	4.24	4.24	4.75	2.14	1.36	0.74	0.47	
8	0.47	0.74	0.20	4.24	23.04	4.24	3.45	4.75	2.55	1.36	0.74	0.38	
9	0.47	0.65	0.20	4.58	16.31	4.24	3.15	4.58	2.40	1.36	0.74	0.38	
10	0.47	0.65	0.74	4.41	10.16	4.58	8.51	4.24	2.27	1.10	0.74	0.47	
11	0.38	0.92	1.10	3.75	8.74	4.75	9.44	4.24	2.27	1.23	0.74	0.47	
12	0.38	3.60	1.49	3.60	16.87	4.41	14.63	4.24	1.88	1.23	0.65	0.47	
13	0.38	1.36	0.83	3.60	14.91	4.41	6.79	4.07	1.88	1.10	0.65	0.47	
14	0.38	0.92	3.75	4.92	12.45	16.31	5.26	3.90	2.01	1.10	0.65	0.38	
15	0.38	1.49	2.14	3.90	10.67	14.63	4.24	4.75	2.01	1.10	1.10	0.20	
16	0.38	3.90	2.01	5.80	10.16	6.59	3.60	4.07	2.14	1.10	2.01	0.29	
17	0.20	6.19	3.15	9.44	9.67	5.09	26.92	3.75	2.14	1.01	1.49	0.18	
18	0.20	3.90	2.27	9.90	9.67	4.41	8.51	3.60	1.88	0.92	0.92	0.38	
19	0.20	1.75	1.88	14.36	9.20	4.24	5.80	3.45	1.88	0.92	0.74	0.29	
20	0.20	1.23	1.62	13.81	8.51	7.18	4.75	3.30	2.01	0.92	0.83	0.29	
21	0.29	4.58	1.88	13.81	7.58	7.38	4.41	3.00	1.88	0.92	0.74	0.38	
22	0.20	2.14	1.88	22.36	7.38	5.26	3.90	3.00	1.75	0.92	0.74	0.29	
23	0.20	1.10	1.62	18.60	6.99	6.00	3.75	3.45	1.62	0.92	0.74	0.20	
24	0.20	0.83	1.88	11.18	6.39	6.19	6.99	2.85	1.62	0.92	0.74	0.20	
25	0.18	0.83	2.01	8.97	6.19	5.26	19.50	3.30	1.62	0.92	0.65	0.20	
26	0.18	0.83	1.49	7.18	6.00	4.75	18.60	2.70	1.62	0.92	0.56	0.18	
27	0.18	1.10	1.62	6.79	6.39	4.41	9.67	2.70	1.62	0.92	0.47	0.29	
28	0.18	0.92	1.75	6.19	6.39	3.90	9.67	2.70	1.49	0.92	0.38	0.18	
29	0.16	0.83	2.14	6.19	6.39	3.60	9.44	2.70	1.62	0.92		0.20	
30	0.16	2.01	2.55	5.80	6.00	3.60	8.04	2.55	1.62	0.92		0.20	
31		0.92		8.28	5.80		6.79		1.75	0.92		0.18	
Total	11.15	48.99	43.22	224.15	314.61	169.87	231.05	128.17	61.81	34.87	22.47	10.62	1300.98 CMSDAY
Mean	0.37	1.58	1.44	7.23	10.15	5.66	7.45	4.27	1.99	1.12	0.80	0.34	3.56 CMS
Max	0.92	6.19	3.75	22.36	23.04	16.31	26.92	11.69	2.55	1.62	2.01	0.56	26.92 CMS
Min	0.16	0.47	0.20	1.88	5.80	3.60	3.15	2.55	1.49	0.92	0.38	0.18	0.16 CMS
Runoff	0.963	4.233	3.734	19.367	27.182	14.677	19.963	11.074	5.340	3.013	1.941	0.918	112.405 MCM

Momentary Peak 52.40 CMS, at 2.02 M (A.D), at 10.00 Hours, on Oct 17, 2001

Runoff Yield 7.09 Liters/Second/Square KM, Momentary Peak Yield 104.175 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Mae Taeng at Ban Muang Pok , Chiang Mai (P.65)

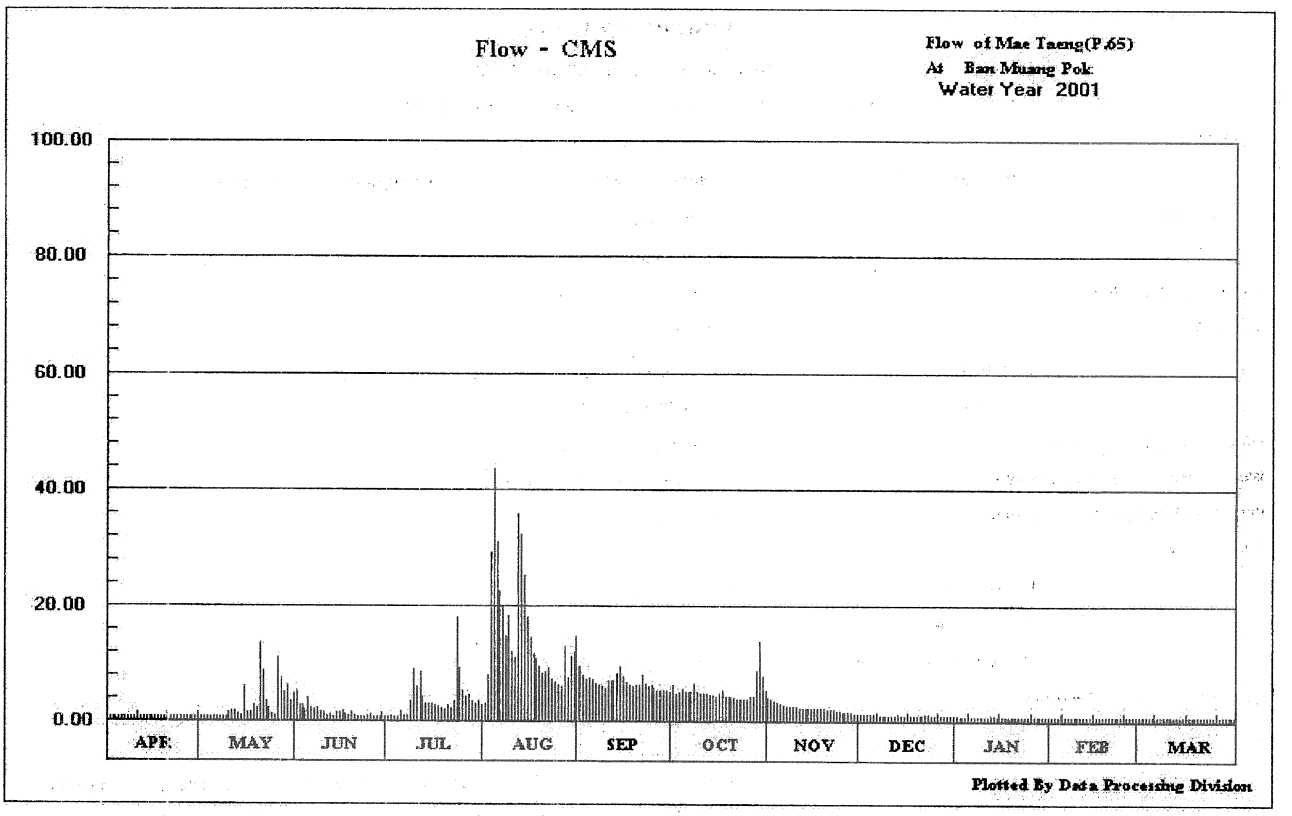
Lat 19 - 38 - 12 N. **Long** 98 - 38 - 20 E.

Location		on left bank in front of King Amphoe Wiang Haeng Office.			
	Ban Muang Pok	**Amphoe**	Wiang Haeng	**Changwat**	Chiang Mai
Drainage Area		240 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 the station office.			
	Elevation	−3.900 m. (A.D.)			
Gage Reading Frequency		5-time 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		1992 to date.			
Rating Operation					
	Period of Rating	1992 to date.			
	Rated by Float	-			
	Rated by Current Meter	1992 to date.			
Stability of Channel Regimes		Fair stable because of backwater effect.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records fair. The concrete weir situated about 300 meters above gage site.			
		Stage-discharge relation defined by 71 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.72	0.60	1.17	0.68	0.95	1.53	1.26	1.22	0.92	0.87	0.80	0.76	
2	0.72	0.61	0.92	0.69	1.42	1.42	1.14	1.18	0.92	0.86	0.78	0.76	
3	0.71	0.61	0.92	0.67	2.57	1.36	1.15	1.16	0.91	0.86	0.78	0.76	
4	0.71	0.63	0.84	0.65	3.05	1.38	1.21	1.14	0.91	0.86	0.78	0.75	
5	0.66	0.62	1.06	0.81	2.63	1.36	1.15	1.11	0.90	0.86	0.78	0.75	
6	0.66	0.62	0.85	0.70	2.29	1.30	1.16	1.08	0.90	0.86	0.77	0.75	
7	0.65	0.65	0.82	0.69	2.18	1.27	1.15	1.07	0.89	0.86	0.77	0.76	
8	0.65	0.65	0.86	0.99	1.91	1.25	1.30	1.06	0.89	0.86	0.76	0.77	
9	0.65	0.63	0.72	1.49	2.10	1.23	1.16	1.06	0.89	0.86	0.77	0.78	
10	0.65	0.61	0.78	1.24	1.72	1.34	1.14	1.05	0.89	0.86	0.77	0.78	
11	0.65	0.79	0.71	1.45	1.65	1.33	1.14	1.04	0.89	0.86	0.77	0.77	
12	0.65	0.79	0.74	1.08	2.80	1.34	1.13	1.03	0.89	0.87	0.76	0.77	
13	0.65	0.74	0.68	0.95	2.68	1.43	1.12	1.03	0.90	0.88	0.77	0.77	
14	0.65	0.71	0.75	0.95	2.41	1.53	1.10	1.03	0.89	0.85	0.76	0.76	
15	0.65	1.24	0.78	0.93	2.09	1.40	1.08	1.03	0.89	0.85	0.76	0.75	
16	0.65	0.75	0.81	0.91	1.88	1.32	1.14	1.03	0.89	0.85	0.82	0.75	
17	0.65	0.76	0.72	0.88	1.69	1.27	1.19	1.03	0.88	0.85	0.79	0.76	
18	0.64	0.91	0.71	0.87	1.62	1.25	1.09	1.02	0.88	0.85	0.78	0.76	
19	0.61	0.87	0.72	0.82	1.53	1.28	1.07	1.02	0.88	0.85	0.78	0.76	
20	0.62	1.82	0.70	0.92	1.44	1.26	1.05	1.01	0.87	0.84	0.77	0.76	
21	0.61	1.48	0.68	0.87	1.46	1.41	1.05	1.01	0.87	0.84	0.77	0.76	
22	0.61	1.01	0.67	1.01	1.51	1.29	1.04	1.01	0.90	0.84	0.77	0.76	
23	0.60	0.85	0.68	2.09	1.36	1.24	1.03	0.96	0.90	0.84	0.76	0.76	
24	0.60	0.73	0.71	1.51	1.31	1.26	1.03	0.96	0.88	0.84	0.76	0.76	
25	0.60	0.70	0.72	1.19	1.28	1.23	1.04	0.93	0.87	0.85	0.76	0.76	
26	0.60	1.64	0.68	1.08	1.25	1.19	1.09	0.93	0.88	0.82	0.76	0.76	
27	0.60	1.37	0.67	1.12	1.78	1.18	1.08	0.93	0.87	0.78	0.76	0.76	
28	0.60	1.15	0.66	1.00	1.37	1.18	1.48	0.93	0.87	0.78	0.76	0.76	
29	0.60	1.28	0.66	0.94	1.66	1.17	1.84	0.92	0.87	0.78		0.76	
30	0.61	1.00	0.65	1.00	1.72	1.15	1.52	0.92	0.87	0.78		0.76	
31		1.13		0.92	1.91		1.33		0.87	0.79		0.75	
Mean	0.64	0.90	0.77	1.00	1.85	1.31	1.18	1.03	0.89	0.84	0.77	0.76	
Max	0.72	1.82	1.17	2.09	3.05	1.53	1.84	1.22	0.92	0.88	0.82	0.78	3.05
Min	0.60	0.60	0.65	0.65	0.95	1.15	1.03	0.92	0.87	0.78	0.76	0.75	0.60

Annual Max Momentary Gage Height 3.40 M (A.D), at 6.00 Hours, on Aug 4, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.76 M (A.D)
Left Bank Elevation 5.06 M (A.D)
Right Bank Elevation 5.06 M (A.D), Drainage Area 240 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.38	0.13	5.46	1.20	3.39	9.78	6.46	4.38	1.66	1.26	0.70	0.54	
2	0.38	0.15	3.12	1.28	8.36	8.36	5.15	3.97	1.66	1.18	0.62	0.54	
3	0.34	0.15	3.12	1.13	29.62	7.63	5.25	3.78	1.58	1.18	0.62	0.54	
4	0.34	0.18	2.44	0.98	43.90	7.86	5.88	3.58	1.58	1.18	0.62	0.50	
5	0.23	0.16	4.38	2.19	31.21	7.63	5.25	3.30	1.50	1.18	0.62	0.50	
6	0.23	0.16	2.53	1.35	22.78	6.92	5.36	3.02	1.50	1.18	0.58	0.50	
7	0.21	0.21	2.27	1.28	20.36	6.57	5.25	2.93	1.42	1.18	0.58	0.54	
8	0.21	0.21	2.61	3.73	15.17	6.34	6.92	2.84	1.42	1.18	0.54	0.58	
9	0.21	0.18	1.50	9.25	18.60	6.11	5.36	2.84	1.42	1.18	0.58	0.62	
10	0.21	0.15	1.95	6.22	12.40	7.39	5.15	2.75	1.42	1.18	0.58	0.62	
11	0.21	2.03	1.42	8.74	11.41	7.27	5.15	2.66	1.42	1.18	0.58	0.58	
12	0.21	2.03	1.65	4.56	36.00	7.39	5.05	2.57	1.42	1.26	0.54	0.58	
13	0.21	1.65	1.20	3.39	32.56	8.48	4.95	2.57	1.50	1.34	0.58	0.58	
14	0.21	1.42	1.73	3.39	25.55	9.78	4.75	2.57	1.42	1.10	0.54	0.54	
15	0.21	6.22	1.95	3.21	18.41	8.10	4.56	2.57	1.42	1.10	0.54	0.50	
16	0.21	1.73	2.19	3.04	14.71	7.16	5.15	2.57	1.42	1.10	0.86	0.50	
17	0.21	1.80	1.50	2.78	11.98	6.57	5.66	2.57	1.34	1.10	0.66	0.54	
18	0.20	3.04	1.42	2.70	10.98	6.34	4.66	2.48	1.34	1.10	0.62	0.54	
19	0.15	2.70	1.50	2.27	9.78	6.69	4.47	2.48	1.34	1.10	0.62	0.54	
20	0.16	13.83	1.35	3.12	8.61	6.46	4.28	2.39	1.26	1.02	0.58	0.54	
21	0.15	9.12	1.20	2.70	8.87	8.23	4.28	2.39	1.26	1.02	0.58	0.54	
22	0.15	3.91	1.13	3.91	9.51	6.80	4.19	2.39	1.50	1.02	0.58	0.54	
23	0.13	2.53	1.20	18.41	7.63	6.22	4.10	1.98	1.50	1.02	0.54	0.54	
24	0.13	1.58	1.42	9.51	7.04	6.46	4.10	1.98	1.34	1.02	0.54	0.54	
25	0.13	1.35	1.50	5.66	6.69	6.11	4.19	1.74	1.26	1.10	0.54	0.54	
26	0.13	11.27	1.20	4.56	6.34	5.66	4.66	1.74	1.34	0.86	0.54	0.54	
27	0.13	7.75	1.13	4.95	13.26	5.56	4.56	1.74	1.26	0.62	0.54	0.54	
28	0.13	5.25	1.06	3.82	7.75	5.56	9.12	1.74	1.26	0.62	0.54	0.54	
29	0.13	6.69	1.06	3.30	11.55	5.46	14.12	1.66	1.26	0.62		0.54	
30	0.15	3.82	0.98	3.82	12.40	5.25	8.11	1.66	1.26	0.62		0.54	
31		5.05		3.12	15.17		5.62		1.26	0.66		0.50	
Total	6.08	96.45	57.17	129.57	491.99	210.14	171.76	77.84	43.54	32.46	16.56	16.82	1350.38 CMSDAY
Mean	0.20	3.11	1.91	4.18	15.87	7.00	5.54	2.59	1.40	1.05	0.59	0.54	3.70 CMS
Max	0.38	13.83	5.46	18.41	43.90	9.78	14.12	4.38	1.66	1.34	0.86	0.62	43.90 CMS
Min	0.13	0.13	0.98	0.98	3.39	5.25	4.10	1.66	1.26	0.62	0.54	0.50	0.13 CMS
Runoff	0.525	8.333	4.939	11.195	42.508	18.156	14.840	6.725	3.762	2.805	1.431	1.453	116.673 MCM

Momentary Peak 57.10 CMS, at 3.40 M (A.D), at 6.00 Hours, on Aug 4, 2001
Runoff Yield 15.42 Liters/Second/Square KM, Momentary Peak Yield 237.917 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 5,289 sq. km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +315.930 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 20 meters from the top staff gage.

Elevation +323.690 m. (M.S.L.).

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 Float -

Rated by Current Meter 1995 to date.

Stability of Channel Regimes Fair stable by some scouring.

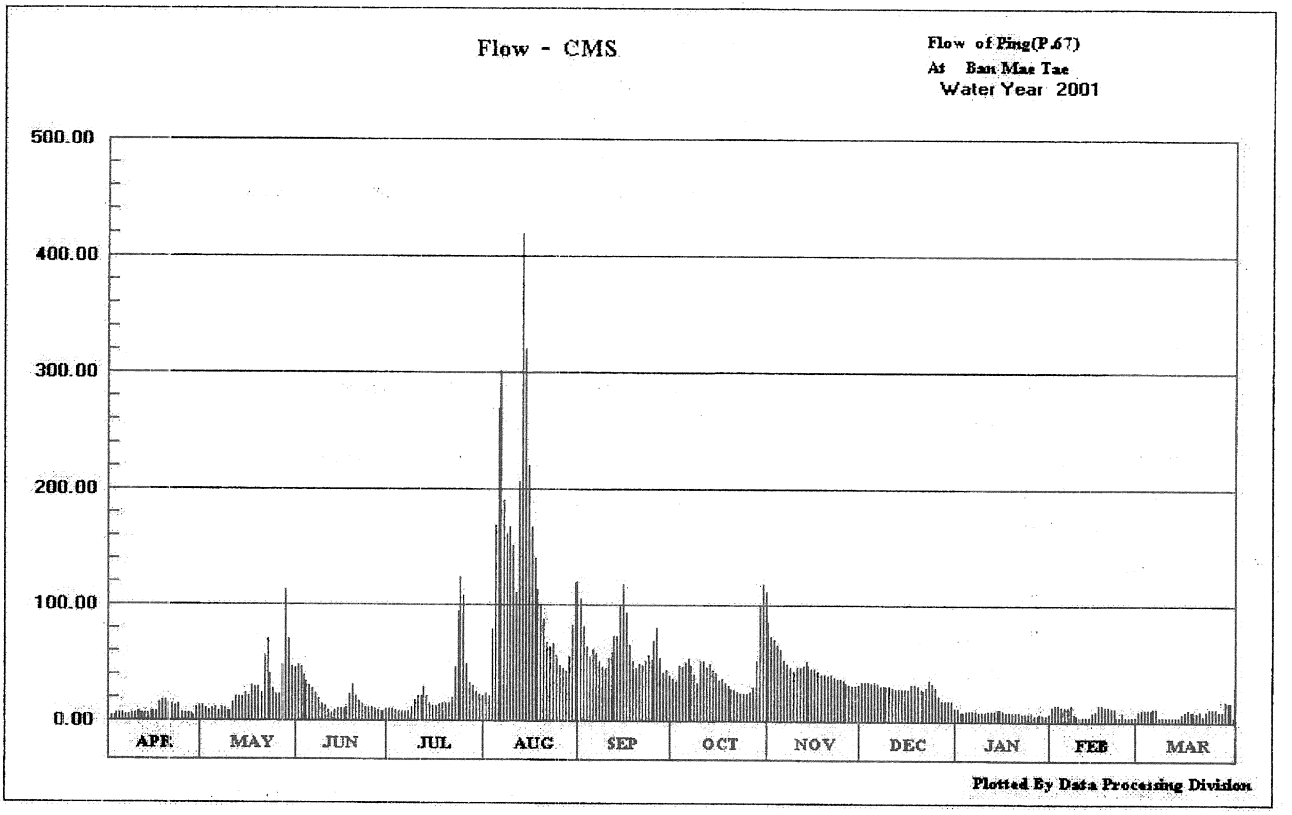
Overbank Flow Conditions No overbank flow.

General Description Records good. Flow regulated by Mae Faek and Mae Taeng weir situated above gage site.
Flow effected by the sand-dredger about 10 kilometers downstream from the gage site.
Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	316.33	316.75	317.60	316.69	317.11	318.40	317.39	318.15	317.33	316.95	316.98	316.87	
2	316.30	316.65	317.58	316.67	317.04	318.10	317.33	317.98	317.34	316.85	317.01	316.92	
3	316.49	316.60	317.45	316.61	318.06	317.86	317.60	317.95	317.33	316.83	317.01	316.92	
4	316.53	316.68	317.33	316.57	319.13	317.73	317.59	317.88	317.32	316.89	316.99	316.90	
5	316.51	316.74	317.25	316.57	320.05	317.82	317.64	317.83	317.34	316.89	316.96	316.92	
6	316.46	316.58	317.20	316.57	320.27	317.77	317.71	317.68	317.30	316.89	316.97	316.93	
7	316.47	316.74	317.09	316.59	319.36	317.66	317.61	317.63	317.26	316.87	317.00	316.94	
8	316.50	316.67	316.97	316.70	319.05	317.58	317.46	317.58	317.25	316.85	316.80	316.72	
9	316.53	316.57	316.79	316.92	319.12	317.57	317.32	317.52	317.26	316.84	316.76	316.68	
10	316.41	316.57	316.75	317.04	318.94	317.71	317.67	317.58	317.25	316.85	316.70	316.66	
11	316.50	316.84	316.60	317.05	318.45	317.79	317.67	317.58	317.23	316.87	316.68	316.65	
12	316.53	316.99	316.53	317.23	319.52	317.98	317.58	317.61	317.21	316.88	316.66	316.62	
13	316.54	316.99	316.61	317.05	320.74	317.98	317.63	317.66	317.19	316.89	316.65	316.61	
14	316.56	316.99	316.67	316.86	320.39	318.33	317.55	317.61	317.20	316.91	316.65	316.60	
15	316.57	317.10	316.69	316.77	319.64	318.54	317.49	317.57	317.20	316.90	316.88	316.82	
16	316.58	317.03	316.68	316.75	319.12	318.24	317.36	317.56	317.19	316.87	317.00	316.89	
17	316.87	317.25	316.70	316.79	318.81	317.88	317.38	317.51	317.27	316.85	317.02	316.90	
18	316.94	317.23	317.08	316.83	318.48	317.66	317.31	317.48	317.27	316.85	316.98	316.89	
19	316.94	317.23	317.27	316.84	318.32	317.56	317.26	317.47	317.26	316.84	316.96	316.86	
20	316.86	317.10	317.03	316.83	318.17	317.63	317.19	317.45	317.21	316.84	316.94	316.84	
21	316.81	317.75	316.90	317.01	317.92	317.60	317.16	317.47	317.18	316.84	316.94	316.86	
22	316.77	317.96	316.79	317.58	317.86	317.66	317.14	317.41	317.23	316.81	316.72	316.75	
23	316.80	317.47	316.74	318.26	317.90	317.74	317.12	317.39	317.37	316.81	316.69	316.87	
24	316.54	317.21	316.72	318.61	317.74	317.68	317.11	317.38	317.30	316.80	316.67	316.93	
25	316.49	317.06	316.73	318.42	317.61	317.94	317.12	317.35	317.22	316.78	316.66	316.94	
26	316.49	317.07	316.65	317.63	317.56	318.09	317.13	317.30	317.03	316.78	316.65	316.93	
27	316.45	317.61	316.60	317.32	317.52	317.70	317.22	317.28	316.95	316.78	316.65	316.89	
28	316.37	318.49	316.56	317.25	317.72	317.50	317.66	317.26	316.93	316.79	316.65	316.86	
29	316.71	317.96	316.55	317.15	318.12	317.54	318.31	317.26	316.94	316.78		317.09	
30	316.76	317.59	316.65	317.08	318.56	317.45	318.55	317.28	316.94	316.77		317.08	
31		317.56		317.03	318.57		318.47		316.95	316.79		317.08	
Mean	316.59	317.13	316.89	317.07	318.61	317.82	317.51	317.56	317.20	316.84	316.83	316.85	
Max	316.94	318.49	317.60	318.61	320.74	318.54	318.55	318.15	317.37	316.95	317.02	317.09	320.74
Min	316.30	316.57	316.53	316.57	317.04	317.45	317.11	317.26	316.93	316.77	316.65	316.60	316.30

Annual Max Momentary Gage Height 320.96 M (MSL), at 18.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 315.93 M (MSL), River Bed 315.76 M (MSL)
Left Bank Elevation 321.54 M (MSL)
Right Bank Elevation 323.31 M (MSL), Drainage Area 5289 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.27	13.80	48.80	12.15	25.61	107.00	37.94	87.00	35.18	13.20	14.28	10.32	
2	3.70	11.15	47.68	11.65	22.92	83.00	35.18	73.60	35.64	9.60	15.42	12.12	
3	7.40	9.90	40.80	10.15	79.80	65.28	48.80	71.50	35.18	8.88	15.42	12.12	
4	8.29	11.90	35.18	9.21	170.20	56.72	48.24	66.64	34.72	11.04	14.64	11.40	
5	7.83	13.52	31.55	9.21	270.50	62.56	51.20	63.24	35.64	11.04	13.56	12.12	
6	6.80	9.44	29.30	9.21	302.90	59.28	55.44	53.60	33.80	11.04	13.92	12.48	
7	7.00	13.52	24.82	9.67	192.00	52.40	49.40	50.60	32.00	10.32	15.00	12.84	
8	7.60	11.65	20.41	12.40	163.00	47.68	41.28	47.68	31.55	9.60	7.80	5.40	
9	8.29	9.21	14.92	18.76	169.30	47.12	34.72	44.32	32.00	9.24	6.60	4.32	
10	5.80	9.21	13.80	22.92	153.10	55.44	53.00	47.68	31.55	9.60	4.80	3.84	
11	7.60	16.36	9.90	23.30	111.25	60.56	53.00	47.68	30.65	10.32	4.32	3.60	
12	8.29	21.07	8.29	30.65	208.20	73.60	47.68	49.40	29.75	10.68	3.84	2.88	
13	8.52	21.07	10.15	23.30	420.80	73.60	50.60	52.40	28.89	11.04	3.60	2.64	
14	8.98	21.07	11.65	16.94	321.50	101.40	46.00	49.40	29.30	11.76	3.60	2.40	
15	9.21	25.20	12.15	14.36	221.40	118.90	42.72	47.12	29.30	11.40	10.68	8.52	
16	9.44	22.54	11.90	13.80	169.30	94.20	36.56	46.56	28.89	10.32	15.00	11.04	
17	17.23	31.55	12.40	14.92	141.85	66.64	37.48	43.76	32.45	9.60	15.84	11.40	
18	19.42	30.65	24.44	16.07	113.80	52.40	34.26	42.24	32.45	9.60	14.28	11.04	
19	19.42	30.65	32.45	16.36	100.60	46.56	32.00	41.76	32.00	9.24	13.56	9.96	
20	16.94	25.20	22.54	16.07	88.60	50.60	28.89	40.80	29.75	9.24	12.84	9.24	
21	15.49	58.00	18.10	21.78	69.40	48.80	27.66	41.76	28.48	9.24	12.84	9.96	
22	14.36	72.20	14.92	47.68	65.28	52.40	26.84	38.88	30.65	8.16	5.40	6.30	
23	15.20	41.76	13.52	95.80	68.00	57.36	26.02	37.94	37.02	8.16	4.56	10.32	
24	8.52	29.75	12.96	124.85	57.36	53.60	25.61	37.48	33.80	7.80	4.08	12.48	
25	7.40	23.68	13.24	108.70	49.40	70.80	26.02	36.10	30.20	7.20	3.84	12.84	
26	7.40	24.06	11.15	50.60	46.56	82.20	26.43	33.80	22.54	7.20	3.60	12.48	
27	6.60	49.40	9.90	34.72	44.32	54.80	30.20	32.90	19.75	7.20	3.60	11.04	
28	5.03	114.65	8.98	31.55	56.08	43.20	52.40	32.00	19.09	7.50	3.60	9.96	
29	12.68	72.20	8.75	27.25	84.60	45.44	99.80	32.00	19.42	7.20		18.78	
30	14.08	48.24	11.15	24.44	120.60	40.80	119.75	32.90	19.42	6.90		18.36	
31		46.56		22.54	121.45		112.95		13.20	7.50		18.36	
Total	298.79	939.16	585.80	901.01	4229.68	1924.34	1438.07	1422.74	914.26	290.82	260.52	310.56	13515.75 CMSDAY
Mean	9.96	30.30	19.53	29.06	136.44	64.14	46.39	47.42	29.49	9.38	9.30	10.02	37.03 CMS
Max	19.42	114.65	48.80	124.85	420.80	118.90	119.75	87.00	37.02	13.20	15.84	18.78	420.80 CMS
Min	3.70	9.21	8.29	9.21	22.92	40.80	25.61	32.00	13.20	6.90	3.60	2.40	2.40 CMS
Runoff	25.815	81.143	50.613	77.847	365.444	166.263	124.249	122.925	78.992	25.127	22.509	26.832	1167.761 MCM

Momentary Peak 524.40 CMS, at 320.96 M (MSL), at 18.00 Hours, on Aug 13, 2001

Runoff Yield 7.00 Liters/Second/Square KM, Momentary Peak Yield 99.149 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Ping River at Ban Klang, Chiang Mai (P.71)

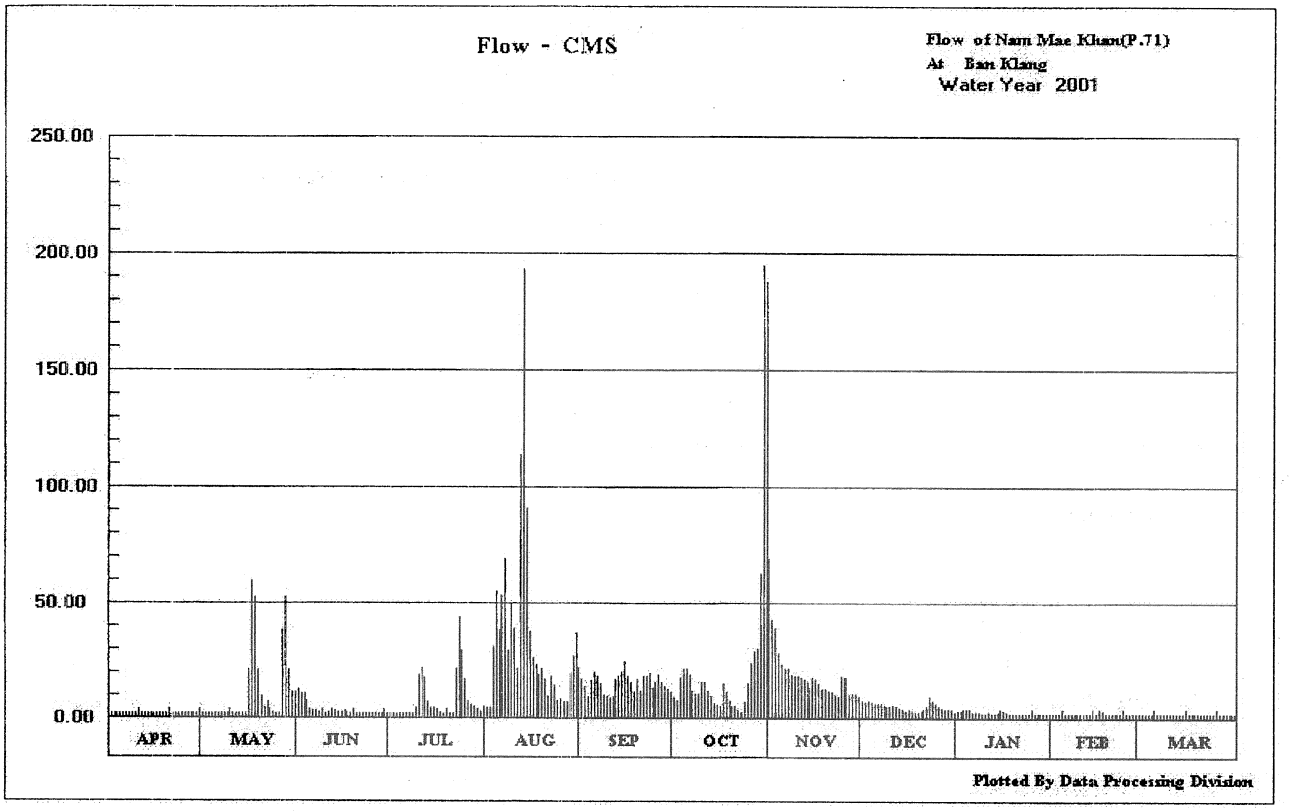
Lat 18 - 32 - 13 N. **Long** 98 - 51 - 45 E.

Location		on left bank at the bridge on highway.			
	Ban Klang	**Amphoe** San Pa Tong		**Changwat** Chiang Mai	
Drainage Area		1,771 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 3 meters from the top staff gage.			
	Elevation	+6.400 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		1996 to date.			
Rating Operation					
	Period of Rating	1996 to date.			
	Rated by Float	-			
	Rated by Current Meter	1996 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		Overbank flow starts at elevation +4.490 m.(A.D.) and is including 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 38 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.58	0.52	1.28	0.83	0.96	1.44	1.16	3.30	1.12	0.90	0.78	0.55	
2	0.56	0.60	1.22	0.76	0.96	1.32	1.12	2.62	1.09	0.90	0.75	0.51	
3	0.55	0.61	1.22	0.72	2.20	1.18	1.51	2.51	1.10	0.94	0.73	0.51	
4	0.55	0.65	1.11	0.66	2.98	1.39	1.74	2.10	1.08	0.93	0.68	0.50	
5	0.52	0.64	0.92	0.66	2.48	1.66	1.75	1.87	1.05	0.82	0.65	0.48	
6	0.52	0.70	0.90	0.62	2.93	1.52	1.58	1.76	1.05	0.87	0.65	0.44	
7	0.51	0.70	0.90	0.59	3.29	1.35	1.27	1.75	1.04	0.85	0.65	0.43	
8	0.50	0.69	0.84	0.67	2.15	1.20	1.23	1.59	1.02	0.84	0.65	0.48	
9	0.53	0.68	0.85	0.95	2.83	1.18	1.22	1.55	1.01	0.82	0.57	0.50	
10	0.52	0.65	0.80	1.60	2.51	1.16	1.37	1.54	1.00	0.82	0.56	0.49	
11	0.55	0.60	0.86	1.81	1.74	1.18	1.38	1.48	1.02	0.84	0.55	0.47	
12	0.53	0.55	0.93	1.46	4.01	1.45	1.26	1.45	1.00	0.83	0.53	0.46	
13	0.50	0.61	0.89	1.09	4.89	1.54	1.17	1.37	0.96	0.82	0.55	0.44	
14	0.52	0.60	0.87	0.95	3.68	1.66	1.05	1.31	0.92	0.84	0.55	0.42	
15	0.54	0.68	0.87	0.96	2.46	1.93	1.02	1.51	0.90	0.93	0.58	0.42	
16	0.54	1.70	0.90	0.92	2.01	1.54	1.00	1.44	0.90	0.90	0.93	0.41	
17	0.52	3.08	0.84	0.84	1.86	1.37	1.36	1.35	0.90	0.86	0.89	0.41	
18	0.50	2.91	0.79	0.75	1.60	1.25	1.25	1.29	0.85	0.81	0.81	0.40	
19	0.48	1.70	0.70	0.72	1.75	1.41	1.11	1.29	0.86	0.81	0.77	0.39	
20	0.50	1.18	0.60	0.73	1.43	1.26	1.00	1.27	0.90	0.80	0.71	0.40	
21	0.48	0.95	0.56	0.79	1.18	1.54	1.00	1.25	0.94	0.80	0.79	0.40	
22	0.47	1.08	0.56	1.77	1.54	1.53	0.90	1.21	0.98	0.78	0.75	0.41	
23	0.46	0.93	0.57	2.67	1.34	1.63	0.86	1.19	1.19	0.75	0.75	0.41	
24	0.47	0.86	0.59	2.15	1.12	1.31	1.07	1.54	1.11	0.75	0.60	0.42	
25	0.46	0.77	0.80	1.42	1.13	1.37	1.36	1.50	1.06	0.78	0.55	0.42	
26	0.47	0.75	0.82	1.11	1.08	1.56	1.90	1.48	1.01	0.73	0.52	0.42	
27	0.47	2.48	0.68	1.02	1.08	1.37	2.13	1.21	0.96	0.75	0.55	0.42	
28	0.47	2.92	0.68	1.01	1.65	1.33	2.19	1.23	0.93	0.70	0.60	0.42	
29	0.45	1.72	0.68	0.90	2.05	1.28	3.16	1.22	0.94	0.71		0.42	
30	0.45	1.24	0.72	0.85	2.44	1.25	4.90	1.19	0.94	0.77		0.42	
31		1.25		1.00	1.81		4.83		0.87	0.82		0.42	
Mean	0.51	1.13	0.83	1.06	2.10	1.41	1.61	1.58	0.99	0.82	0.67	0.44	
Max	0.58	3.08	1.28	2.67	4.89	1.93	4.90	3.30	1.19	0.94	0.93	0.55	4.90
Min	0.45	0.52	0.56	0.59	0.96	1.16	0.86	1.19	0.85	0.70	0.52	0.39	0.39

Annual Max Momentary Gage Height 5.04 M (A.D), at 22.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.01 M (A.D)
Left Bank Elevation 4.90 M (A.D)
Right Bank Elevation 4.48 M (A.D), Drainage Area 1771 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.59	0.33	13.14	3.01	5.18	17.90	9.66	69.80	8.62	4.10	2.31	0.46	
2	0.50	0.67	11.31	2.07	5.18	14.50	8.62	43.24	7.88	4.10	1.95	0.29	
3	0.46	0.74	11.31	1.59	31.20	10.18	18.63	39.81	8.10	4.82	1.71	0.29	
4	0.46	1.01	8.36	1.08	55.90	17.12	21.84	28.80	7.66	4.64	1.21	0.25	
5	0.33	0.94	4.46	1.08	38.92	20.64	22.00	24.13	7.00	2.86	1.01	0.22	
6	0.33	1.35	4.10	0.81	53.90	18.76	19.54	22.16	7.00	3.64	1.01	0.16	
7	0.29	1.35	4.10	0.63	69.34	15.63	12.84	22.00	6.78	3.33	1.01	0.15	
8	0.25	1.28	3.17	1.15	30.00	10.70	11.61	19.67	6.34	3.17	1.01	0.22	
9	0.38	1.21	3.33	5.00	50.25	10.18	11.31	19.15	6.12	2.86	0.54	0.25	
10	0.33	1.01	2.55	19.80	39.81	9.66	16.38	19.02	5.90	2.86	0.50	0.24	
11	0.46	0.67	3.48	22.99	21.84	10.18	16.75	18.30	6.34	3.17	0.46	0.21	
12	0.38	0.46	4.64	18.10	114.75	18.00	12.53	18.00	5.90	3.01	0.38	0.19	
13	0.25	0.74	3.95	7.88	194.20	19.02	9.92	16.38	5.18	2.86	0.46	0.16	
14	0.33	0.67	3.64	5.00	91.40	20.64	7.00	14.13	4.46	3.17	0.46	0.13	
15	0.42	1.21	3.64	5.18	38.34	25.30	6.34	18.63	4.10	4.64	0.59	0.13	
16	0.42	21.20	4.10	4.46	26.91	19.02	5.90	17.90	4.10	4.10	4.64	0.11	
17	0.33	59.98	3.17	3.17	23.94	16.38	16.00	15.63	4.10	3.48	3.95	0.11	
18	0.25	53.10	2.43	1.95	19.80	12.23	12.23	13.44	3.33	2.71	2.71	0.10	
19	0.22	21.20	1.35	1.59	22.00	17.60	8.36	13.44	3.48	2.71	2.19	0.09	
20	0.25	10.18	0.67	1.71	17.80	12.53	5.90	12.84	4.10	2.55	1.47	0.10	
21	0.22	5.00	0.50	2.43	10.18	19.02	5.90	12.23	4.82	2.55	2.43	0.10	
22	0.21	7.66	0.50	22.32	19.02	18.89	4.10	11.01	5.54	2.31	1.95	0.11	
23	0.19	4.64	0.54	44.84	15.25	20.22	3.48	10.44	10.44	1.95	1.95	0.11	
24	0.21	3.48	0.63	30.00	8.62	14.13	7.44	19.02	8.36	1.95	0.67	0.13	
25	0.19	2.19	2.55	17.70	8.88	16.38	16.00	18.50	7.22	2.31	0.46	0.13	
26	0.21	1.95	2.86	8.36	7.66	19.28	24.70	18.30	6.12	1.71	0.33	0.13	
27	0.21	38.92	1.21	6.34	7.66	16.38	29.52	11.01	5.18	1.95	0.46	0.13	
28	0.21	53.50	1.21	6.12	20.50	14.88	30.96	11.61	4.64	1.35	0.67	0.13	
29	0.17	21.52	1.21	4.10	27.75	13.14	63.44	11.31	4.82	1.47		0.13	
30	0.17	11.92	1.59	3.33	37.76	12.23	195.20	10.44	4.82	2.19		0.13	
31		12.23		5.90	22.99		188.20		3.64	2.86		0.13	
Total	9.22	342.31	109.70	259.69	1136.93	480.72	822.30	600.34	182.09	91.38	38.49	5.22	4078.39 CMSDAY
Mean	0.31	11.04	3.66	8.38	36.68	16.02	26.53	20.01	5.87	2.95	1.37	0.17	11.17 CMS
Max	0.59	59.98	13.14	44.84	194.20	25.30	195.20	69.80	10.44	4.82	4.64	0.46	195.20 CMS
Min	0.17	0.33	0.50	0.63	5.18	9.66	3.48	10.44	3.33	1.35	0.33	0.09	0.09 CMS
Runoff	0.797	29.576	9.478	22.437	98.231	41.534	71.047	51.869	15.733	7.895	3.326	0.451	352.373 MCM

Momentary Peak 209.32 CMS, at 5.04 M (A.D), at 22.00 Hours, on Oct 30, 2001
Runoff Yield 6.31 Liters/Second/Square KM, Momentary Peak Yield 118.193 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 13,353 sq. km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +261.750 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 15 meters from the abutment of the bridge.

Elevation +267.505 m. (M.S.L.)

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 Float -

Rated by Current Meter 1998 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

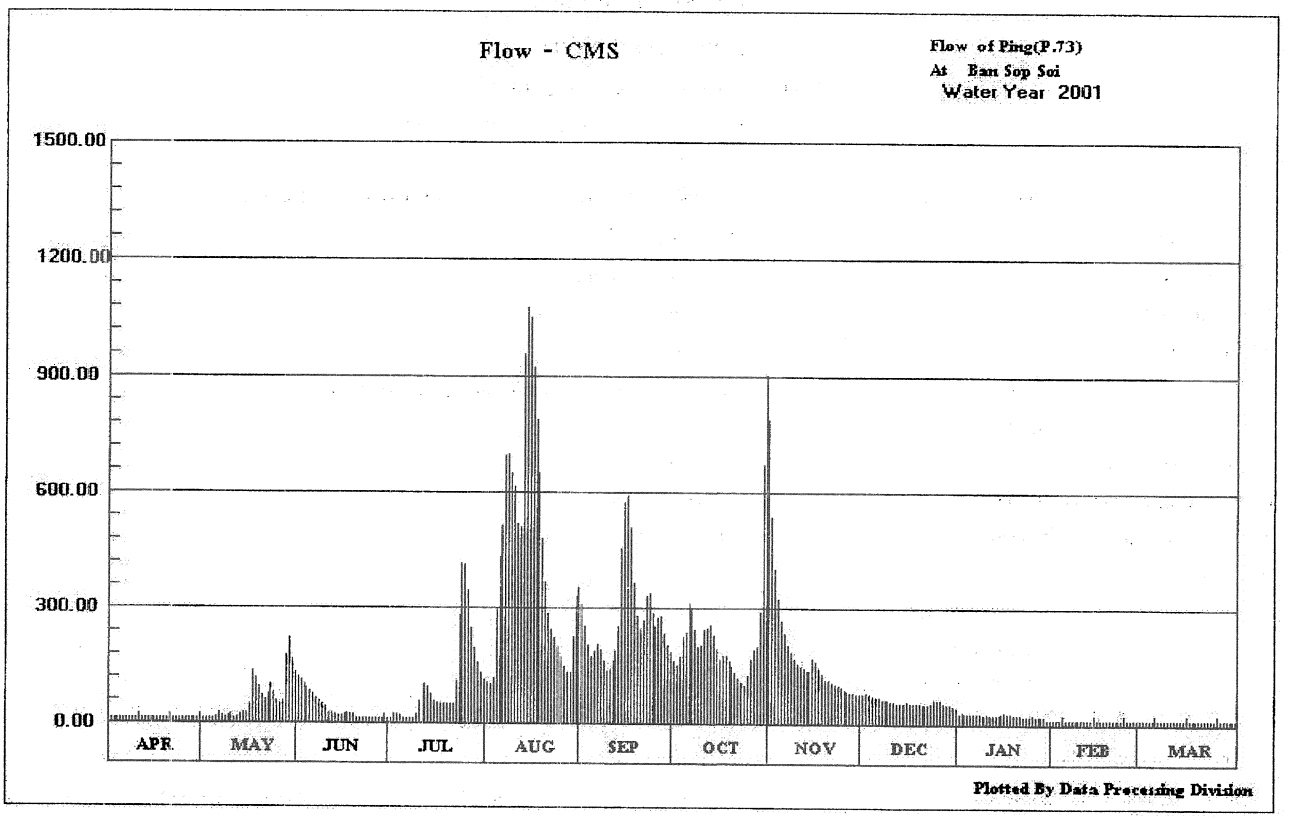
General Description Records good. No gage height in the drought period.

Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	262.20	261.99	263.22	262.31	263.11	264.30	263.49	266.39	262.87	262.48	262.25	261.88	
2	262.22	262.02	263.15	262.42	263.09	264.01	263.42	265.34	262.90	262.49	262.27	261.92	
3	262.20	262.12	263.08	262.42	263.20	263.74	263.55	264.74	262.88	262.48	262.29	261.87	
4	262.13	262.27	263.00	262.37	264.24	263.55	263.87	264.37	262.85	262.46	262.27	261.95	
5	262.11	262.33	262.94	262.29	264.88	263.65	263.93	264.09	262.83	262.45	262.26	262.06	
6	262.14	262.46	262.89	262.27	265.25	263.76	264.32	263.90	262.83	262.46	262.24	262.03	
7	262.11	262.37	262.80	262.25	266.00	263.66	264.24	263.74	262.77	262.47	262.23	262.03	
8	262.13	262.35	262.72	262.25	266.02	263.48	263.97	263.63	262.75	262.46	262.22	262.02	
9	262.07	262.40	262.62	262.31	265.81	263.32	263.70	263.51	262.75	262.44	262.19	262.03	
10	262.03	262.34	262.52	262.74	265.67	263.35	263.73	263.44	262.72	262.45	262.16	261.98	
11	262.01	262.32	262.48	263.05	265.26	263.48	263.96	263.40	262.72	262.42	262.13	261.83	
12	262.00	262.33	262.46	263.08	265.22	263.65	263.98	263.37	262.71	262.42	262.11	261.83	
13	262.00	262.43	262.42	263.01	267.05	264.00	264.02	263.32	262.70	262.42	262.03	261.83	
14	261.99	262.47	262.39	262.88	267.50	264.98	263.88	263.33	262.71	262.42	261.92	261.82	
15	261.98	262.46	262.39	262.74	267.39	265.51	263.66	263.54	262.72	262.46	261.93	261.76	
16	261.99	262.61	262.43	262.67	266.92	265.56	263.51	263.48	262.71	262.49	262.05	261.66	
17	261.98	263.31	262.45	262.63	266.38	265.22	263.58	263.36	262.68	262.47	262.22	261.67	
18	261.95	263.20	262.42	262.60	265.82	264.56	263.58	263.26	262.70	262.45	262.31	261.68	
19	262.15	263.01	262.37	262.61	265.09	264.14	263.50	263.17	262.67	262.42	262.31	261.64	
20	262.12	262.86	262.29	262.62	264.58	263.97	263.40	263.16	262.63	262.42	262.28	261.64	
21	262.14	262.75	262.28	262.65	264.18	264.08	263.29	263.12	262.60	262.41	262.29	261.64	
22	262.16	262.87	262.24	263.14	263.96	264.40	263.20	263.09	262.62	262.39	262.28	261.83	
23	262.22	263.07	262.23	264.15	263.83	264.44	263.10	263.05	262.71	262.39	262.23	261.86	
24	262.15	262.91	262.21	264.82	263.70	264.18	263.04	263.02	262.76	262.39	262.14	261.84	
25	262.17	262.72	262.23	264.79	263.55	264.01	263.25	262.96	262.76	262.39	262.07	261.81	
26	262.11	262.53	262.31	264.47	263.40	264.11	263.51	262.95	262.76	262.39	262.00	261.86	
27	262.11	262.73	262.30	263.98	263.29	264.14	263.67	262.92	262.68	262.38	261.96	261.90	
28	262.03	263.59	262.27	263.68	263.30	263.90	263.71	262.91	262.62	262.38	261.92	261.86	
29	261.98	263.83	262.25	263.46	263.85	263.73	264.19	262.89	262.60	262.38		261.88	
30	261.97	263.51	262.27	263.28	264.41	263.63	265.91	262.87	262.57	262.31		261.87	
31		263.29		263.17	264.52		266.85		262.51	262.23		261.98	
Mean	262.09	262.70	262.52	263.00	264.85	264.08	263.84	263.54	262.72	262.42	262.16	261.85	
Max	262.22	263.83	263.22	264.82	267.50	265.56	266.85	266.39	262.90	262.49	262.31	262.06	267.50
Min	261.95	261.99	262.21	262.25	263.09	263.32	263.04	262.87	262.51	262.23	261.92	261.64	261.64

Annual Max Momentary Gage Height 267.51 M (MSL), at 4.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 261.75 M (MSL), River Bed 260.60 M (MSL)
Left Bank Elevation 267.71 M (MSL)
Right Bank Elevation 268.01 M (MSL), Drainage Area 13353 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.2	3.5	125.8	16.5	110.4	314.0	166.4	793.5	79.2	33.0	12.4	2.0	
2	10.5	4.1	116.0	27.0	107.6	257.9	155.6	541.2	83.0	34.0	13.7	2.5	
3	9.2	6.5	106.3	27.0	123.0	209.0	176.2	405.1	80.5	33.0	15.0	1.9	
4	6.8	13.7	95.5	22.2	302.3	176.2	231.8	328.0	76.8	31.0	13.7	3.0	
5	6.1	18.4	88.0	15.0	435.6	193.2	242.7	273.1	74.2	30.0	13.0	5.0	
6	7.2	31.0	81.8	13.7	520.5	212.5	318.0	237.0	74.2	31.0	11.8	4.3	
7	6.1	22.2	70.5	12.4	698.0	195.0	302.3	209.0	66.7	32.0	11.1	4.3	
8	6.8	20.3	60.5	12.4	702.8	164.9	250.3	189.8	64.2	31.0	10.5	4.1	
9	5.2	25.0	53.2	16.5	652.4	140.3	202.0	169.7	64.2	29.0	8.9	4.3	
10	4.3	19.4	47.2	63.0	618.8	144.9	207.3	158.7	60.5	30.0	7.8	3.4	
11	3.9	17.5	33.0	102.2	522.8	164.9	248.4	152.5	60.5	27.0	6.8	1.4	
12	3.7	18.4	31.0	106.3	513.6	193.2	252.2	147.9	59.2	27.0	6.1	1.4	
13	3.7	28.0	27.0	96.9	961.5	256.0	259.8	140.3	58.0	27.0	4.3	1.4	
14	3.5	32.0	24.1	80.5	1083.0	458.4	233.5	141.8	59.2	27.0	2.5	1.3	
15	3.4	31.0	24.1	63.0	1053.3	580.4	195.0	174.6	60.5	31.0	2.6	0.8	
16	3.5	52.6	28.0	56.2	927.2	592.4	169.7	164.9	59.2	34.0	4.7	0.2	
17	3.4	138.7	30.0	53.8	791.0	513.6	181.2	146.4	56.8	32.0	10.5	0.3	
18	3.0	123.0	27.0	52.0	654.8	367.1	181.2	131.5	58.0	30.0	16.5	0.3	
19	7.5	96.9	22.2	52.6	483.7	282.8	168.0	118.8	56.2	27.0	16.5	0.2	
20	6.5	78.0	15.0	53.2	371.3	250.3	152.5	117.4	53.8	27.0	14.3	0.2	
21	7.2	64.2	14.3	55.0	290.6	271.2	135.8	111.8	52.0	26.0	15.0	0.2	
22	7.8	79.2	11.8	114.6	248.4	334.0	123.0	107.6	53.2	24.1	14.3	1.4	
23	10.5	105.0	11.1	284.7	224.7	342.2	109.0	102.2	59.2	24.1	11.1	1.8	
24	7.5	84.3	9.8	422.4	202.0	290.6	100.9	98.2	65.5	24.1	7.2	1.5	
25	8.2	60.5	11.1	415.9	176.2	257.9	130.1	90.5	65.5	24.1	5.2	1.2	
26	6.1	53.8	16.5	348.4	152.5	276.9	169.7	89.3	65.5	24.1	3.7	1.8	
27	6.1	61.7	15.6	252.2	135.8	282.8	196.8	85.5	56.8	23.1	3.1	2.2	
28	4.3	182.8	13.7	198.5	137.2	237.0	203.7	84.3	53.2	23.1	2.5	1.8	
29	3.4	224.7	12.4	161.8	228.3	207.3	292.6	81.8	52.0	23.1		2.0	
30	3.3	169.7	13.7	134.4	336.1	189.8	676.4	79.2	50.2	16.5		1.9	
31		135.8		118.8	358.7		909.0		46.6	11.1		3.4	
Total	177.9	2001.9	1236.2	3449.1	14124.1	8356.7	7341.1	5671.6	1924.6	846.4	264.8	61.5	45455.9 CMSDAY
Mean	5.9	64.6	41.2	111.3	455.6	278.6	236.8	189.1	62.1	27.3	9.5	2.0	124.5 CMS
Max	10.5	224.7	125.8	422.4	1083.0	592.4	909.0	793.5	83.0	34.0	16.5	5.0	1083.0 CMS
Min	3.0	3.5	9.8	12.4	107.6	140.3	100.9	79.2	46.6	11.1	2.5	0.2	0.2 CMS
Runoff	15.37	172.96	106.81	298.00	1220.32	722.02	634.27	490.03	166.29	73.13	22.88	5.31	3927.39 MCM

Momentary Peak 1085.70 CMS, at 267.51 M (MSL), at 4.00 Hours, on Aug 14, 2001
Runoff Yield 9.33 Liters/Second/Square KM, Momentary Peak Yield 81.308 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 3,090 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 about 3.00 meters from the top staff gage.

Elevation +4.205 m. (A.D.)

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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

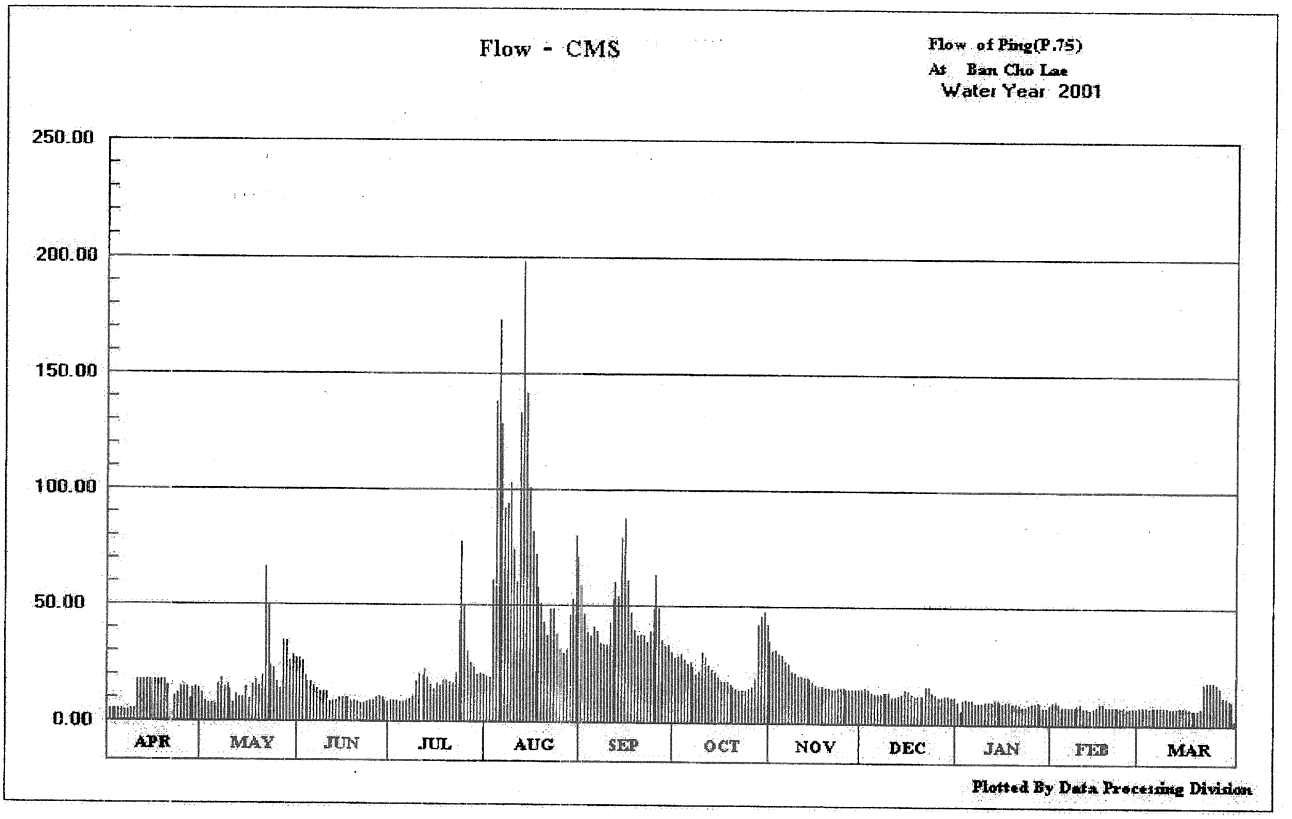
Overbank Flow Conditions No overbank flow.

General Description Records fair. This station is situated about 3 kilometers downstream from Mae Ngat Dam. Stage-discharge relation defined by 42 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.52	0.80	1.20	0.68	1.02	1.83	1.21	1.37	0.88	0.71	0.72	0.64	
2	0.54	0.66	1.17	0.68	1.00	1.60	1.22	1.29	0.90	0.57	0.71	0.64	
3	0.53	0.63	1.02	0.68	1.86	1.44	1.26	1.30	0.87	0.73	0.68	0.64	
4	0.53	0.63	0.94	0.66	2.99	1.41	1.20	1.25	0.83	0.75	0.65	0.62	
5	0.53	0.60	0.94	0.66	3.44	1.49	1.16	1.24	0.81	0.74	0.64	0.63	
6	0.50	0.92	0.90	0.68	2.85	1.45	1.17	1.19	0.81	0.74	0.63	0.64	
7	0.50	0.99	0.85	0.71	2.34	1.35	1.12	1.16	0.82	0.68	0.64	0.63	
8	0.54	0.88	0.81	0.76	2.37	1.34	1.05	1.09	0.84	0.70	0.65	0.64	
9	0.54	0.91	0.81	0.94	2.50	1.34	1.08	1.07	0.84	0.70	0.66	0.65	
10	0.97	0.84	0.81	1.03	2.07	1.53	1.27	1.04	0.83	0.71	0.70	0.64	
11	0.97	0.64	0.67	1.01	1.85	1.72	1.22	1.03	0.78	0.72	0.60	0.62	
12	0.97	0.77	0.70	1.10	2.92	1.85	1.14	1.02	0.77	0.72	0.61	0.60	
13	0.97	0.74	0.68	1.00	3.75	1.74	1.10	1.01	0.79	0.73	0.59	0.62	
14	0.97	0.74	0.73	0.91	3.03	2.16	1.06	1.00	0.81	0.73	0.62	0.64	
15	0.97	0.87	0.74	0.86	2.47	2.28	1.02	0.97	0.87	0.71	0.65	0.64	
16	0.97	0.72	0.74	0.93	2.20	1.86	0.97	0.93	0.85	0.70	0.68	0.63	
17	0.97	0.91	0.73	0.92	2.04	1.61	0.96	0.92	0.82	0.72	0.69	0.62	
18	0.97	0.97	0.70	0.97	1.81	1.46	0.96	0.92	0.80	0.71	0.65	0.59	
19	0.97	0.90	0.69	0.96	1.68	1.41	0.93	0.90	0.79	0.69	0.64	0.58	
20	0.90	1.02	0.67	0.94	1.53	1.43	0.90	0.90	0.80	0.70	0.63	0.58	
21	0.58	1.95	0.65	0.93	1.42	1.41	0.88	0.88	0.80	0.67	0.65	0.62	
22	0.75	1.66	0.65	1.05	1.64	1.36	0.85	0.87	0.91	0.65	0.65	0.97	
23	0.80	1.12	0.66	1.54	1.64	1.45	0.85	0.90	0.91	0.64	0.64	0.99	
24	0.87	1.10	0.69	2.13	1.43	1.63	0.85	0.90	0.84	0.66	0.64	0.99	
25	0.87	0.94	0.68	1.67	1.30	1.90	0.87	0.89	0.81	0.68	0.62	0.98	
26	0.88	0.86	0.74	1.27	1.25	1.65	0.89	0.88	0.78	0.68	0.60	0.96	
27	0.71	1.36	0.75	1.16	1.29	1.38	1.00	0.87	0.77	0.71	0.60	0.91	
28	0.86	1.36	0.74	1.11	1.59	1.33	1.51	0.88	0.79	0.68	0.61	0.79	
29	0.87	1.17	0.70	1.04	1.71	1.34	1.59	0.88	0.79	0.62		0.78	
30	0.86	1.22	0.67	1.05	2.17	1.27	1.62	0.87	0.78	0.61		0.76	
31		1.20		1.04	2.02		1.51		0.78	0.67		0.74	
Mean	0.78	0.97	0.78	1.00	2.04	1.57	1.11	1.01	0.82	0.69	0.64	0.71	
Max	0.97	1.95	1.20	2.13	3.75	2.28	1.62	1.37	0.91	0.75	0.72	0.99	3.75
Min	0.50	0.50	0.65	0.66	1.00	1.27	0.85	0.87	0.77	0.57	0.59	0.58	0.50

Annual Max Momentary Gage Height 4.02 M (A.D), at 6.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.96 M (A.D)
Left Bank Elevation 7.51 M (A.D)
Right Bank Elevation 7.56 M (A.D), Drainage Area 3090 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.56	12.80	27.80	9.32	20.36	59.80	28.24	35.56	15.36	10.10	10.40	8.36	
2	6.02	8.84	26.48	9.32	19.60	47.00	28.68	31.76	16.00	6.71	10.10	8.36	
3	5.79	8.12	20.36	9.32	61.60	39.00	30.44	32.20	15.04	10.70	9.32	8.36	
4	5.79	8.12	17.44	8.84	139.25	37.50	27.80	30.00	13.76	11.30	8.60	7.88	
5	5.79	7.40	17.44	8.84	173.70	41.50	26.04	29.56	13.12	11.00	8.36	8.12	
6	5.10	16.72	16.00	9.32	128.75	39.50	26.48	27.36	13.12	11.00	8.12	8.36	
7	5.10	19.24	14.40	10.10	92.56	34.60	24.28	26.04	13.44	9.32	8.36	8.12	
8	6.02	15.36	13.12	11.60	94.63	34.12	21.50	23.02	14.08	9.80	8.60	8.36	
9	6.02	16.36	13.12	17.44	103.60	34.12	22.64	22.26	14.08	9.80	8.84	8.60	
10	18.52	14.08	13.12	20.74	74.55	43.50	30.88	21.12	13.76	10.10	9.80	8.36	
11	18.52	8.36	9.08	19.98	61.00	53.60	28.68	20.74	12.20	10.40	7.40	7.88	
12	18.52	11.90	9.80	23.40	134.00	61.00	25.16	20.36	11.90	10.40	7.64	7.40	
13	18.52	11.00	9.32	19.60	199.25	54.70	23.40	19.98	12.50	10.70	7.17	7.88	
14	18.52	11.00	10.70	16.36	142.25	80.40	21.88	19.60	13.12	10.70	7.88	8.36	
15	18.52	15.04	11.00	14.72	101.53	88.44	20.36	18.52	15.04	10.10	8.60	8.36	
16	18.52	10.40	11.00	17.08	83.00	61.60	18.52	17.08	14.40	9.80	9.32	8.12	
17	18.52	16.36	10.70	16.72	72.60	47.55	18.16	16.72	13.44	10.40	9.56	7.88	
18	18.52	18.52	9.80	18.52	58.60	40.00	18.16	16.72	12.80	10.10	8.60	7.17	
19	18.52	16.00	9.56	18.16	51.40	37.50	17.08	16.00	12.50	9.56	8.36	6.94	
20	16.00	20.36	9.08	17.44	43.50	38.50	16.00	16.00	12.80	9.80	8.12	6.94	
21	6.94	67.00	8.60	17.08	38.00	37.50	15.36	15.36	12.80	9.08	8.60	7.88	
22	11.30	50.30	8.60	21.50	49.20	35.08	14.40	15.04	16.36	8.60	8.60	18.52	
23	12.80	24.28	8.84	44.00	49.20	39.50	14.40	16.00	16.36	8.36	8.36	19.24	
24	15.04	23.40	9.56	78.45	38.50	48.65	14.40	16.00	14.08	8.84	8.36	19.24	
25	15.04	17.44	9.32	50.85	32.20	64.00	15.04	15.68	13.12	9.32	7.88	18.88	
26	15.36	14.72	11.00	30.88	30.00	49.75	15.68	15.36	12.20	9.32	7.40	18.16	
27	10.10	35.08	11.30	26.04	31.76	36.04	19.60	15.04	11.90	10.10	7.40	16.36	
28	14.72	35.08	11.00	23.84	46.50	33.64	42.50	15.36	12.50	9.32	7.64	12.50	
29	15.04	26.48	9.80	21.12	53.05	34.12	46.50	15.36	12.50	7.88		12.20	
30	14.72	28.68	9.08	21.50	81.05	30.88	48.10	15.04	12.20	7.64		11.60	
31		27.80		21.12	71.30		42.50		12.20	9.08		11.00	
Total	383.45	616.24	376.42	653.20	2376.49	1383.09	762.86	614.84	418.68	299.33	237.39	325.39	8447.38 CMSDAY
Mean	12.78	19.88	12.55	21.07	76.66	46.10	24.61	20.49	13.51	9.66	8.48	10.50	23.14 CMS
Max	18.52	67.00	27.80	78.45	199.25	88.44	48.10	35.56	16.36	11.30	10.40	19.24	199.25 CMS
Min	5.10	7.40	8.60	8.84	19.60	30.88	14.40	15.04	11.90	6.71	7.17	6.94	5.10 CMS
Runoff	33.130	53.243	32.523	56.436	205.329	119.499	65.911	53.122	36.174	25.862	20.510	28.114	729.854 MCM

Momentary Peak 222.20 CMS, at 4.02 M (A.D), at 6.00 Hours, on Aug 13, 2001

Runoff Yield 7.49 Liters/Second/Square KM, Momentary Peak Yield 71.909 Liters/Second/Square KM

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Li at Ban Mae E - Hai, Lumphun (P.76)

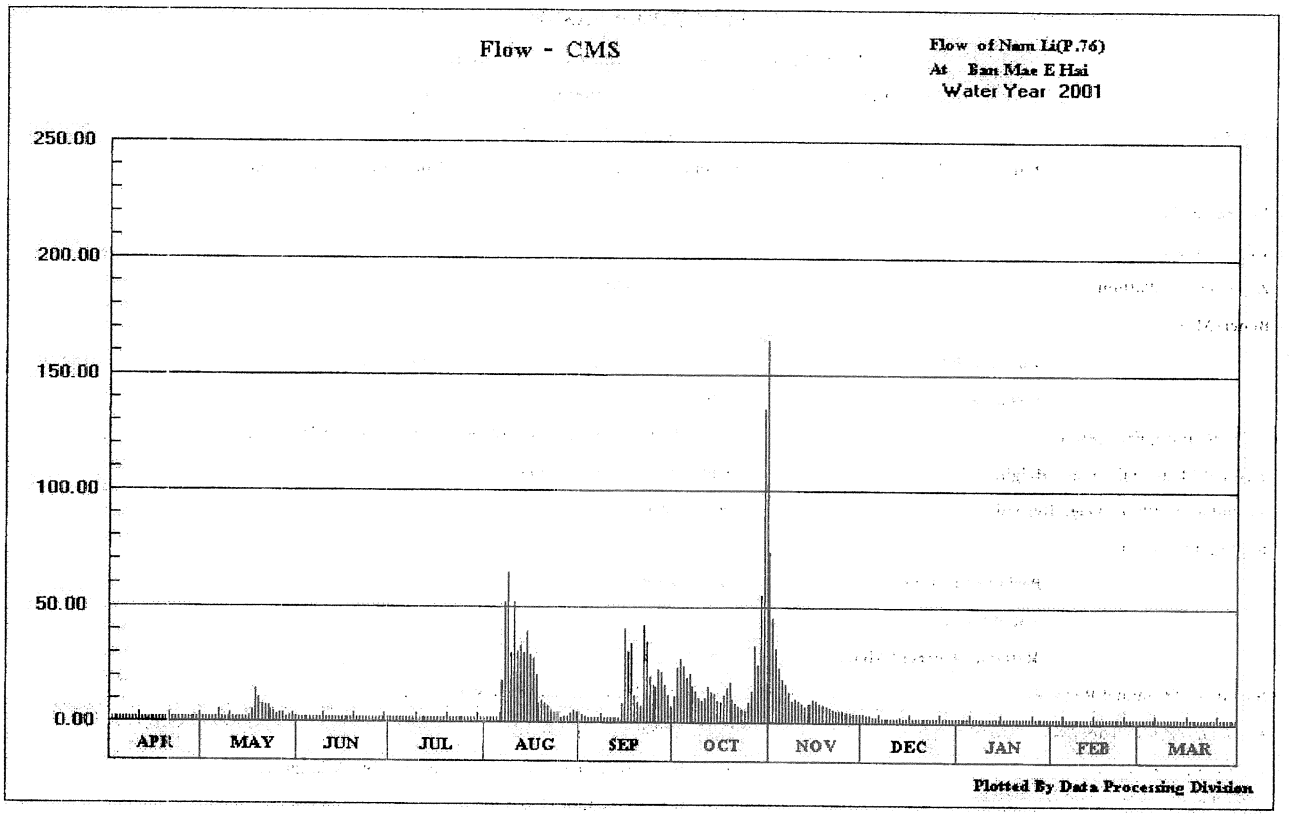
Lat 18 - 08 - 23 N **Long** 98 - 53 - 58 E.

Location		on right bank near the bridge of Li - Ban Mae E - Hai road.	
	Ban Mae E - Hai	**Amphoe** Li	**Changwat** Lamphun
Drainage Area		1,541 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	+7.320 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 Float	-	
	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 38 discharge measurements made in 2001.	

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.73	0.55	0.75	0.61	0.65	0.94	1.45	3.42	0.96	0.65	0.58	0.51	
2	0.81	0.56	0.73	0.61	0.65	0.88	1.98	2.68	0.94	0.68	0.59	0.49	
3	0.81	0.57	0.71	0.62	0.68	0.84	2.13	2.29	0.93	0.66	0.56	0.46	
4	0.75	0.58	0.69	0.63	0.85	0.84	2.00	1.98	0.89	0.64	0.54	0.44	
5	0.68	0.58	0.68	0.63	0.99	0.82	1.82	1.77	0.88	0.65	0.52	0.38	
6	0.73	1.06	0.68	0.63	1.75	0.81	1.89	1.71	0.84	0.64	0.50	0.36	
7	0.68	0.85	0.69	0.63	2.88	0.84	1.65	1.53	0.72	0.62	0.48	0.37	
8	0.66	0.83	0.75	0.62	3.22	0.82	1.55	1.36	0.77	0.62	0.47	0.36	
9	0.66	0.80	0.76	0.65	2.22	0.79	1.42	1.38	0.75	0.63	0.44	0.32	
10	0.64	0.74	0.82	0.63	2.88	0.75	1.36	1.36	0.72	0.63	0.38	0.32	
11	0.65	0.72	0.80	0.62	2.23	0.76	1.42	1.29	0.79	0.64	0.38	0.32	
12	0.63	0.74	0.78	0.62	2.32	0.72	1.65	1.21	0.80	0.62	0.40	0.32	
13	0.62	0.74	0.77	0.61	2.22	0.80	1.53	1.27	0.88	0.64	0.40	0.31	
14	0.61	0.75	0.72	0.60	2.52	1.28	1.50	1.28	0.84	0.65	0.44	0.30	
15	0.59	0.80	0.75	0.59	2.19	2.55	1.33	1.39	0.81	0.64	0.59	0.30	
16	0.58	0.88	0.74	0.58	2.12	2.23	1.30	1.36	0.80	0.54	0.58	0.32	
17	0.60	1.09	0.72	0.56	1.86	2.36	1.46	1.28	0.76	0.50	0.63	0.36	
18	0.61	1.59	0.68	0.55	1.29	1.48	1.62	1.23	0.71	0.49	0.59	0.38	
19	0.59	1.40	0.65	0.57	1.35	1.31	1.74	1.19	0.74	0.56	0.55	0.38	
20	0.60	1.24	0.64	0.56	1.26	1.22	1.39	1.15	0.71	0.57	0.52	0.38	
21	0.58	1.22	0.63	0.57	1.19	2.60	1.28	1.13	0.73	0.54	0.50	0.36	
22	0.55	1.20	0.63	0.60	1.09	2.38	1.19	1.10	0.70	0.52	0.47	0.35	
23	0.55	1.10	0.59	0.63	1.04	1.83	1.11	1.09	0.73	0.54	0.44	0.35	
24	0.55	1.03	0.58	0.61	1.02	1.68	1.09	1.07	0.72	0.55	0.42	0.36	
25	0.56	0.94	0.59	0.60	0.83	1.65	1.32	1.05	0.73	0.56	0.38	0.38	
26	0.58	0.96	0.59	0.61	0.89	1.97	1.55	1.03	0.74	0.58	0.40	0.38	
27	0.57	0.98	0.58	0.61	0.89	1.90	2.32	1.02	0.58	0.55	0.46	0.39	
28	0.56	0.82	0.58	0.62	0.95	1.66	2.03	1.00	0.66	0.53	0.51	0.39	
29	0.55	0.90	0.57	0.60	1.07	1.46	2.96	0.99	0.65	0.54		0.38	
30	0.55	0.87	0.61	0.62	1.03	1.19	4.25	0.97	0.65	0.56		0.38	
31		0.88		0.65	1.01		4.50		0.64	0.58		0.38	
Mean	0.63	0.90	0.68	0.61	1.52	1.38	1.80	1.42	0.77	0.59	0.49	0.37	
Max	0.81	1.59	0.82	0.65	3.22	2.60	4.50	3.42	0.96	0.68	0.63	0.51	4.50
Min	0.55	0.55	0.57	0.55	0.65	0.72	1.09	0.97	0.58	0.49	0.38	0.30	0.30

Annual Max Momentary Gage Height 4.88 M (A.D), at 24.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.18 M (A.D)
Left Bank Elevation 7.86 M (A.D)
Right Bank Elevation 7.84 M (A.D), Drainage Area 1541 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.65	0.58	1.85	0.81	1.05	4.02	12.25	73.92	4.28	1.05	0.68	0.43	
2	2.47	0.61	1.65	0.81	1.05	3.27	24.50	45.64	4.02	1.23	0.71	0.38	
3	2.47	0.64	1.45	0.87	1.23	2.81	28.41	33.00	3.89	1.11	0.61	0.31	
4	1.85	0.68	1.29	0.93	2.93	2.81	25.00	24.50	3.39	0.99	0.54	0.27	
5	1.23	0.68	1.23	0.93	4.67	2.58	20.50	19.31	3.27	1.05	0.47	0.15	
6	1.65	5.58	1.23	0.93	18.85	2.47	22.25	17.93	2.81	0.99	0.40	0.13	
7	1.23	2.93	1.29	0.93	52.68	2.81	16.57	13.91	1.55	0.87	0.36	0.14	
8	1.11	2.69	1.85	0.87	65.30	2.58	14.35	10.49	2.05	0.87	0.33	0.13	
9	1.11	2.35	1.95	1.05	30.90	2.25	11.65	10.87	1.85	0.93	0.27	0.08	
10	0.99	1.75	2.58	0.93	52.68	1.85	10.49	10.49	1.55	0.93	0.15	0.08	
11	1.05	1.55	2.35	0.87	31.20	1.95	11.65	9.18	2.25	0.99	0.15	0.08	
12	0.93	1.75	2.15	0.87	33.94	1.55	16.57	7.78	2.35	0.87	0.18	0.08	
13	0.87	1.75	2.05	0.81	30.90	2.35	13.91	8.82	3.27	0.99	0.18	0.06	
14	0.81	1.85	1.55	0.75	40.36	9.00	13.25	9.00	2.81	1.05	0.27	0.05	
15	0.71	2.35	1.85	0.71	30.03	41.35	9.92	11.06	2.47	0.99	0.71	0.05	
16	0.68	3.27	1.75	0.68	28.14	31.20	9.35	10.49	2.35	0.54	0.68	0.08	
17	0.75	5.97	1.55	0.61	21.50	35.22	12.45	9.00	1.95	0.40	0.93	0.13	
18	0.81	15.23	1.23	0.58	9.18	12.85	15.90	8.13	1.45	0.38	0.71	0.15	
19	0.71	11.25	1.05	0.64	10.30	9.54	18.62	7.45	1.75	0.61	0.58	0.15	
20	0.75	8.30	0.99	0.61	8.65	7.95	11.06	6.85	1.45	0.64	0.47	0.15	
21	0.68	7.95	0.93	0.64	7.45	43.00	9.00	6.55	1.65	0.54	0.40	0.13	
22	0.58	7.60	0.93	0.75	5.97	35.86	7.45	6.10	1.35	0.47	0.33	0.11	
23	0.58	6.10	0.71	0.93	5.32	20.75	6.25	5.97	1.65	0.54	0.27	0.11	
24	0.58	5.19	0.68	0.81	5.06	17.25	5.97	5.71	1.55	0.58	0.22	0.13	
25	0.61	4.02	0.71	0.75	2.69	16.57	9.73	5.45	1.65	0.61	0.15	0.15	
26	0.68	4.28	0.71	0.81	3.39	24.25	14.35	5.19	1.75	0.68	0.18	0.15	
27	0.64	4.54	0.68	0.81	3.39	22.50	33.94	5.06	0.68	0.58	0.31	0.17	
28	0.61	2.58	0.68	0.87	4.15	16.80	25.78	4.80	1.11	0.50	0.43	0.17	
29	0.58	3.50	0.64	0.75	5.71	12.45	55.56	4.67	1.05	0.54		0.15	
30	0.58	3.16	0.81	0.87	5.19	7.45	135.60	4.41	1.05	0.61		0.15	
31		3.27		1.05	4.93		165.50		0.99	0.68		0.15	
Total	29.95	123.95	40.37	25.23	528.79	397.29	787.78	401.73	65.24	23.81	11.67	4.65	2440.46 CMSDAY
Mean	1.00	4.00	1.35	0.81	17.06	13.24	25.41	13.39	2.10	0.77	0.42	0.15	6.69 CMS
Max	2.47	15.23	2.58	1.05	65.30	43.00	165.50	73.92	4.28	1.23	0.93	0.43	165.50 CMS
Min	0.58	0.58	0.64	0.58	1.05	1.55	5.97	4.41	0.68	0.38	0.15	0.05	0.05 CMS
Runoff	2.588	10.709	3.488	2.180	45.687	34.326	68.064	34.709	5.637	2.057	1.008	0.402	210.856 MCM

Momentary Peak 226.00 CMS, at 4.88 M (A.D), at 24.00 Hours, on Oct 30, 2001
Runoff Yield 4.34 Liters/Second/Square KM, Momentary Peak Yield 146.658 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 547 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 +4.908 m. (A.D.)

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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Rather unstable because of backwater effect.

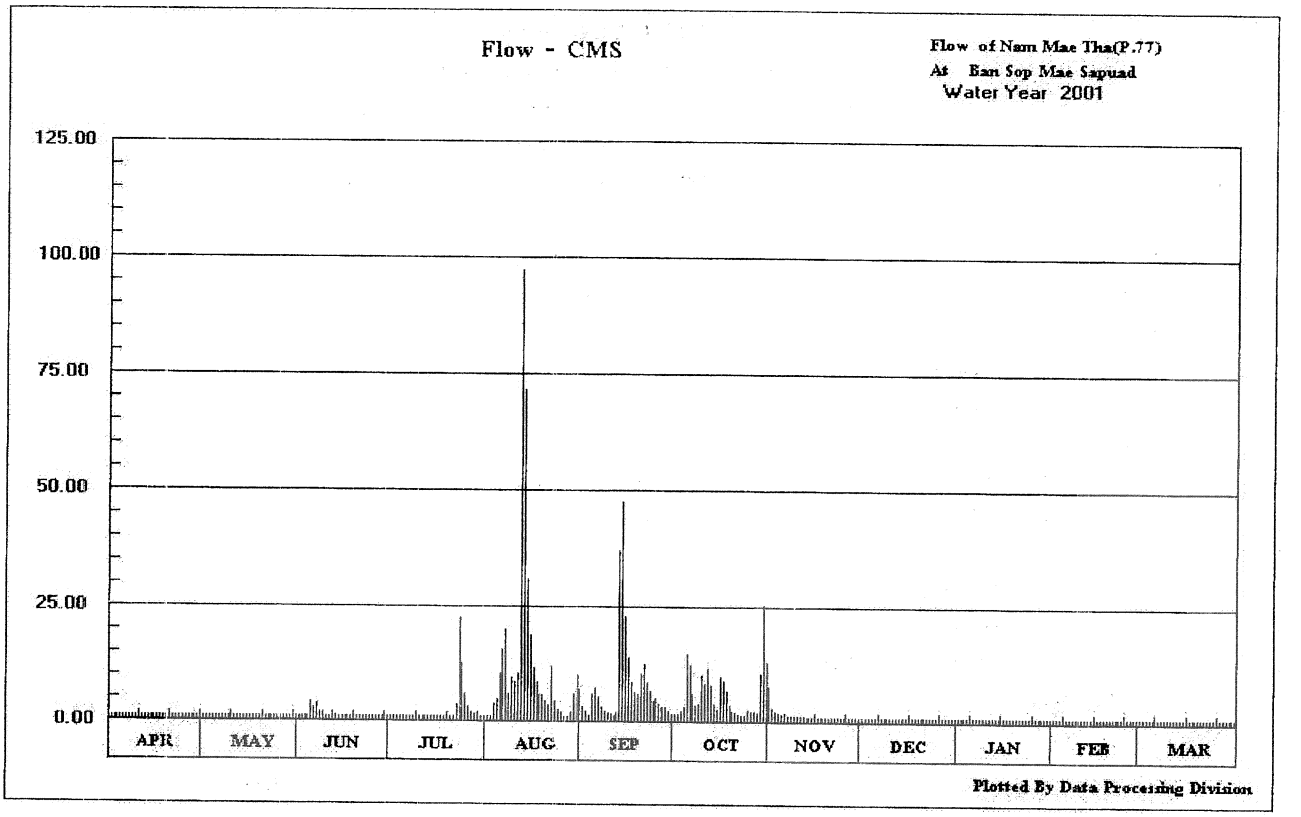
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.23	0.20	0.25	0.37	0.53	0.57	0.40	0.78	0.18	0.08	0.06	0.04	
2	0.23	0.20	0.25	0.37	0.55	0.48	0.40	0.53	0.18	0.09	0.05	0.04	
3	0.23	0.21	0.25	0.37	1.04	0.37	0.48	0.47	0.16	0.09	0.05	0.03	
4	0.23	0.21	0.41	0.37	1.17	0.72	0.57	0.43	0.16	0.09	0.05	0.03	
5	0.23	0.21	1.10	0.37	1.61	0.77	1.05	0.41	0.15	0.08	0.05	0.03	
6	0.23	0.21	0.88	0.37	1.92	0.68	0.97	0.39	0.14	0.07	0.05	0.03	
7	0.23	0.21	1.02	0.37	2.13	0.57	0.71	0.36	0.14	0.07	0.05	0.02	
8	0.23	0.21	0.74	0.37	1.27	0.47	0.60	0.37	0.12	0.07	0.05	0.02	
9	0.23	0.21	0.64	0.37	1.53	0.42	0.61	0.36	0.12	0.08	0.05	0.02	
10	0.23	0.21	0.57	0.42	1.47	0.40	0.89	0.35	0.11	0.08	0.05	0.02	
11	0.23	0.21	0.49	0.56	1.60	0.37	0.81	0.33	0.10	0.09	0.05	0.02	
12	0.23	0.21	0.75	0.53	3.41	0.44	0.95	0.34	0.09	0.09	0.05	-0.02	
13	0.23	0.21	0.67	0.47	2.26	1.63	0.80	0.31	0.07	0.09	0.05	-0.02	
14	0.23	0.21	0.57	0.45	1.50	1.84	0.62	0.29	0.05	0.08	0.05	-0.02	
15	0.23	0.21	0.51	0.46	1.18	1.29	0.52	0.29	0.05	0.08	0.05	-0.03	
16	0.23	0.21	0.47	0.45	0.95	1.02	0.87	0.28	0.05	0.09	0.05	-0.03	
17	0.23	0.21	0.47	0.45	0.82	0.83	0.84	0.27	0.04	0.09	0.05	-0.03	
18	0.23	0.21	0.45	0.45	0.70	0.73	0.75	0.25	0.03	0.08	0.05	-0.02	
19	0.22	0.22	0.45	0.45	0.70	0.72	0.59	0.25	0.00	0.07	0.04	-0.02	
20	0.22	0.22	0.45	0.45	0.65	0.90	0.48	0.24	0.02	0.07	0.04	-0.03	
21	0.21	0.22	0.44	0.45	0.59	0.98	0.43	0.23	0.04	0.07	0.05	-0.02	
22	0.21	0.22	0.43	1.01	0.96	0.83	0.39	0.23	0.05	0.08	0.05	-0.02	
23	0.21	0.22	0.43	2.23	0.64	0.74	0.37	0.22	0.05	0.08	0.05	-0.02	
24	0.21	0.22	0.45	1.75	0.52	0.65	0.36	0.22	0.05	0.08	0.05	-0.02	
25	0.21	0.23	0.45	1.27	0.45	0.67	0.52	0.21	0.06	0.08	0.05	-0.02	
26	0.21	0.25	0.42	0.92	0.32	0.61	0.47	0.20	0.06	0.07	0.04	-0.03	
27	0.21	0.24	0.40	0.77	0.29	0.56	0.48	0.20	0.06	0.07	0.04	-0.03	
28	0.21	0.24	0.39	0.69	0.43	0.55	0.44	0.18	0.06	0.07	0.04	-0.04	
29	0.20	0.25	0.38	0.61	0.72	0.46	0.90	0.19	0.06	0.05		-0.04	
30	0.20	0.25	0.37	0.51	0.89	0.40	1.35	0.19	0.06	0.05		-0.06	
31		0.25		0.54	0.76		0.99		0.06	0.05		-0.06	
Mean	0.22	0.22	0.52	0.62	1.08	0.72	0.66	0.31	0.08	0.08	0.05	-0.01	
Max	0.23	0.25	1.10	2.23	3.41	1.84	1.35	0.78	0.18	0.09	0.06	0.04	3.41
Min	0.20	0.20	0.25	0.37	0.29	0.37	0.36	0.18	0.00	0.05	0.04	-0.06	-0.06

Annual Max Momentary Gage Height 4.45 M (A.D), at 16.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.27 M (A.D)
Left Bank Elevation 5.97 M (A.D)
Right Bank Elevation 10.01 M (A.D), Drainage Area 547 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	0.0	0.0	0.3	1.0	3.6	2.0	7.8	0.8	0.4	0.3	0.2	
2	0.0	0.0	0.0	0.3	1.1	2.6	2.0	3.1	0.8	0.4	0.3	0.2	
3	0.0	0.0	0.0	0.3	4.2	1.8	2.6	2.6	0.7	0.4	0.3	0.2	
4	0.0	0.0	0.4	0.3	5.2	6.4	3.6	2.2	0.7	0.4	0.3	0.2	
5	0.0	0.0	4.6	0.3	10.7	7.5	15.0	2.1	0.6	0.4	0.3	0.2	
6	0.0	0.0	3.1	0.3	15.9	5.6	12.7	1.9	0.6	0.3	0.3	0.2	
7	0.0	0.0	4.1	0.3	20.4	3.6	6.2	1.8	0.6	0.3	0.3	0.2	
8	0.0	0.0	2.2	0.3	6.3	2.6	3.9	1.8	0.5	0.3	0.3	0.2	
9	0.0	0.0	1.6	0.3	9.7	2.2	4.1	1.8	0.5	0.4	0.3	0.2	
10	0.0	0.0	1.2	0.4	8.9	2.0	10.5	1.7	0.5	0.4	0.3	0.2	
11	0.0	0.0	0.8	1.2	10.6	1.8	8.5	1.6	0.4	0.4	0.3	0.2	
12	0.0	0.0	2.3	1.0	97.5	2.3	12.1	1.6	0.4	0.4	0.3	0.1	
13	0.0	0.0	1.8	0.7	71.9	37.6	8.2	1.4	0.3	0.4	0.3	0.1	
14	0.0	0.0	1.2	0.6	31.5	47.8	4.3	1.3	0.3	0.4	0.3	0.1	
15	0.0	0.0	0.9	0.7	19.3	23.2	3.0	1.3	0.3	0.4	0.3	0.1	
16	0.0	0.0	0.7	0.6	12.1	14.2	10.0	1.3	0.3	0.4	0.3	0.1	
17	0.0	0.0	0.7	0.6	8.7	9.0	9.2	1.2	0.2	0.4	0.3	0.1	
18	0.0	0.0	0.6	0.6	6.0	6.7	7.1	1.1	0.2	0.4	0.3	0.1	
19	0.0	0.0	0.6	0.6	6.0	6.4	3.8	1.1	0.1	0.3	0.2	0.1	
20	0.0	0.0	0.6	0.6	4.9	10.7	2.6	1.1	0.2	0.3	0.2	0.1	
21	0.0	0.0	0.5	0.6	3.8	13.0	2.2	1.0	0.2	0.3	0.3	0.1	
22	0.0	0.0	0.5	4.0	12.4	9.0	1.9	1.0	0.3	0.4	0.3	0.1	
23	0.0	0.0	0.5	22.8	4.7	6.9	1.8	0.9	0.3	0.4	0.3	0.1	
24	0.0	0.0	0.6	12.9	3.0	4.9	1.8	0.9	0.3	0.4	0.3	0.1	
25	0.0	0.0	0.6	6.3	2.4	5.4	3.0	0.9	0.3	0.4	0.3	0.1	
26	0.0	0.0	0.4	3.4	1.5	4.1	2.6	0.8	0.3	0.3	0.2	0.1	
27	0.0	0.0	0.3	2.4	1.3	3.5	2.6	0.8	0.3	0.3	0.2	0.1	
28	0.0	0.0	0.3	1.9	2.2	3.4	2.3	0.8	0.3	0.3	0.2	0.1	
29	0.0	0.0	0.3	1.5	6.4	2.5	10.7	0.8	0.3	0.3		0.1	
30	0.0	0.0	0.3	0.9	10.5	2.0	25.6	0.8	0.3	0.3		0.0	
31		0.0		1.1	7.3		13.3		0.3	0.3		0.0	
Total	0.0	0.0	31.7	68.1	407.4	252.3	199.2	48.5	12.2	11.2	7.9	4.0	1042.5 CMSDAY
Mean	0.0	0.0	1.1	2.2	13.1	8.4	6.4	1.6	0.4	0.4	0.3	0.1	2.9 CMS
Max	0.0	0.0	4.6	22.8	97.5	47.8	25.6	7.8	0.8	0.4	0.3	0.2	97.5 CMS
Min	0.0	0.0	0.0	0.3	1.0	1.8	1.8	0.8	0.1	0.3	0.2	0.0	0.0 CMS
Runoff	0.00	0.00	2.74	5.88	35.20	21.80	17.21	4.19	1.05	0.97	0.68	0.35	90.07 MCM

Momentary Peak 284.25 CMS, at 4.45 M (A.D), at 16.00 Hours, on Aug 12, 2001
Runoff Yield 5.22 Liters/Second/Square KM, Momentary Peak Yield 519.653 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage 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 left bank at the approach of the bridge.

Elevation +4.857 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 Float -

Rated by Current Meter 2001 to date.

Stability of Channel Regimes Stable.

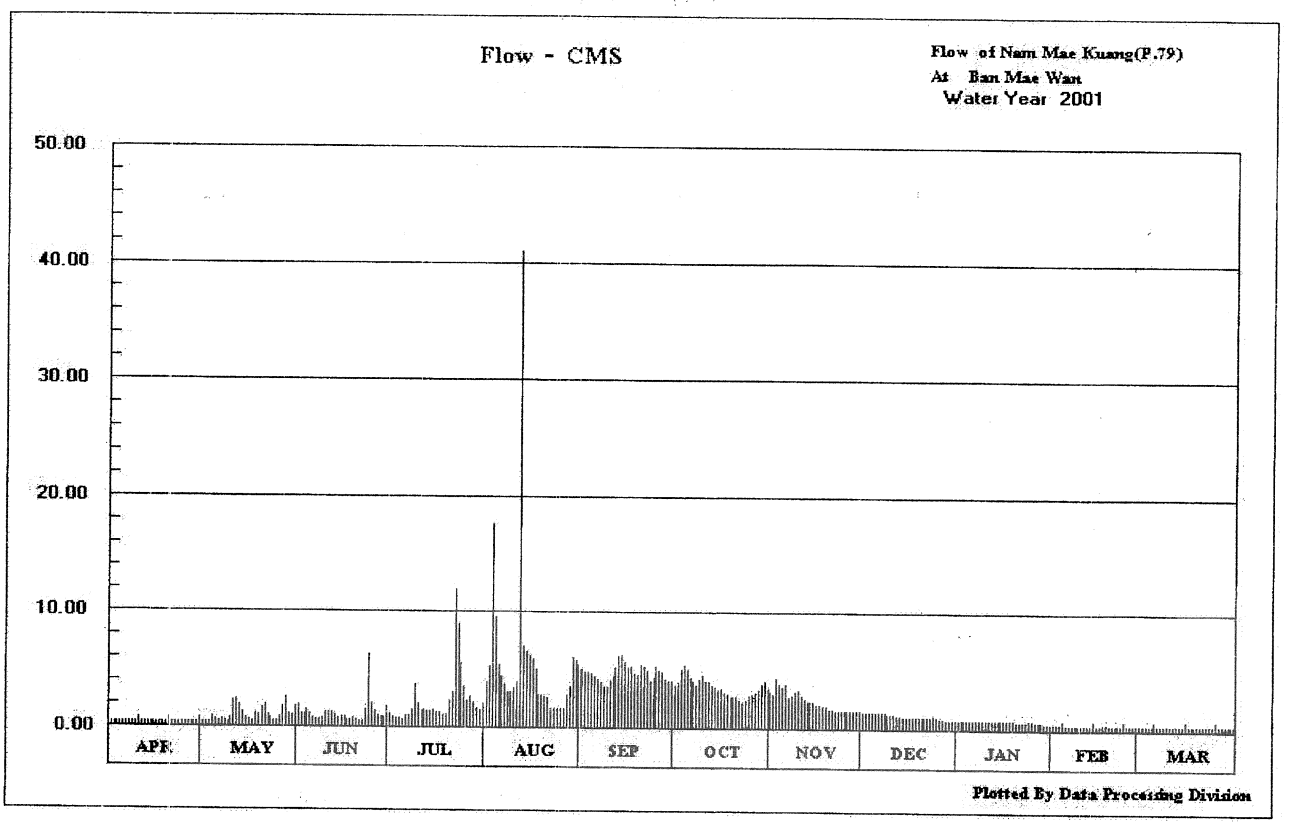
Overbank Flow Conditions Overbank flow starts at elevation +3.820 m.(A.D.) and is including overbank flow.

General Description Records fair. Stage-discharge relation defined by 36 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.44	0.38	0.62	0.54	0.79	0.88	0.77	0.73	0.57	0.50	0.46	0.40	
2	0.44	0.39	0.54	0.51	0.90	0.86	0.79	0.71	0.57	0.50	0.46	0.40	
3	0.43	0.40	0.54	0.49	1.64	0.86	0.88	0.82	0.57	0.50	0.46	0.40	
4	0.42	0.51	0.58	0.49	1.19	0.85	0.91	0.78	0.57	0.50	0.45	0.39	
5	0.41	0.48	0.54	0.48	0.91	0.83	0.88	0.76	0.57	0.50	0.45	0.39	
6	0.40	0.46	0.50	0.53	0.83	0.81	0.82	0.78	0.57	0.50	0.45	0.38	
7	0.39	0.47	0.48	0.53	0.77	0.79	0.80	0.69	0.57	0.50	0.45	0.38	
8	0.39	0.46	0.48	0.59	0.72	0.76	0.77	0.70	0.57	0.50	0.44	0.40	
9	0.39	0.40	0.47	0.77	0.72	0.76	0.81	0.73	0.56	0.50	0.43	0.40	
10	0.39	0.41	0.55	0.63	0.75	0.80	0.84	0.74	0.56	0.50	0.43	0.39	
11	0.39	0.65	0.56	0.57	0.79	0.83	0.80	0.70	0.55	0.50	0.43	0.39	
12	0.39	0.66	0.55	0.58	2.49	0.89	0.80	0.67	0.54	0.49	0.43	0.39	
13	0.39	0.62	0.52	0.57	1.03	0.97	0.77	0.65	0.54	0.49	0.43	0.39	
14	0.41	0.56	0.50	0.57	1.00	0.98	0.76	0.65	0.53	0.49	0.43	0.39	
15	0.41	0.49	0.51	0.58	0.97	0.93	0.74	0.65	0.53	0.49	0.42	0.39	
16	0.40	0.47	0.51	0.56	0.95	0.89	0.75	0.63	0.53	0.49	0.45	0.39	
17	0.40	0.46	0.48	0.55	0.88	0.90	0.72	0.63	0.53	0.49	0.46	0.38	
18	0.39	0.54	0.48	0.52	0.70	0.85	0.71	0.62	0.53	0.49	0.46	0.38	
19	0.39	0.52	0.47	0.54	0.70	0.84	0.69	0.62	0.53	0.49	0.45	0.38	
20	0.39	0.50	0.47	0.65	0.68	0.91	0.68	0.60	0.52	0.48	0.44	0.38	
21	0.39	0.52	0.46	0.72	0.67	0.90	0.68	0.60	0.52	0.48	0.44	0.38	
22	0.39	0.53	0.46	1.33	0.60	0.87	0.66	0.59	0.52	0.47	0.43	0.38	
23	0.39	0.50	0.58	1.15	0.60	0.80	0.64	0.59	0.53	0.47	0.43	0.39	
24	0.39	0.46	0.98	0.92	0.60	0.82	0.66	0.59	0.54	0.50	0.42	0.40	
25	0.39	0.46	0.63	0.76	0.60	0.90	0.70	0.59	0.53	0.48	0.41	0.39	
26	0.39	0.51	0.57	0.65	0.60	0.87	0.71	0.59	0.51	0.47	0.41	0.39	
27	0.39	0.61	0.53	0.68	0.70	0.86	0.72	0.59	0.51	0.47	0.41	0.38	
28	0.39	0.67	0.51	0.64	0.76	0.81	0.74	0.59	0.50	0.47	0.41	0.38	
29	0.38	0.54	0.51	0.60	0.96	0.80	0.78	0.59	0.50	0.46		0.38	
30	0.38	0.53	0.61	0.59	0.94	0.80	0.80	0.58	0.50	0.46		0.38	
31		0.61		0.63	0.91		0.75		0.50	0.46		0.38	
Mean	0.40	0.52	0.54	0.64	0.88	0.85	0.76	0.66	0.54	0.49	0.44	0.39	
Max	0.44	0.67	0.98	1.33	2.49	0.98	0.91	0.82	0.57	0.50	0.46	0.40	2.49
Min	0.38	0.38	0.46	0.48	0.60	0.76	0.64	0.58	0.50	0.46	0.41	0.38	0.38

Annual Max Momentary Gage Height 4.70 M (A.D), at 5.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.10 M (A.D)
Left Bank Elevation 4.65 M (A.D)
Right Bank Elevation 3.81 M (A.D), Drainage Area 134 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.53	0.21	2.03	1.28	4.08	5.19	3.83	3.33	1.54	0.94	0.67	0.26	
2	0.53	0.23	1.28	1.03	5.44	4.94	4.08	3.08	1.54	0.94	0.67	0.26	
3	0.46	0.26	1.28	0.87	17.80	4.94	5.19	4.45	1.54	0.94	0.67	0.26	
4	0.40	1.03	1.63	0.87	9.64	4.82	5.57	3.95	1.54	0.94	0.60	0.23	
5	0.33	0.80	1.28	0.80	5.57	4.57	5.19	3.70	1.54	0.94	0.60	0.23	
6	0.26	0.67	0.94	1.20	4.57	4.32	4.45	3.95	1.54	0.94	0.60	0.21	
7	0.23	0.74	0.80	1.20	3.83	4.08	4.20	2.84	1.54	0.94	0.60	0.21	
8	0.23	0.67	0.80	1.71	3.21	3.70	3.83	2.96	1.54	0.94	0.53	0.26	
9	0.23	0.26	0.74	3.83	3.21	3.70	4.32	3.33	1.46	0.94	0.46	0.26	
10	0.23	0.33	1.37	2.15	3.58	4.20	4.70	3.46	1.46	0.94	0.46	0.23	
11	0.23	2.38	1.46	1.54	4.08	4.57	4.20	2.96	1.37	0.94	0.46	0.23	
12	0.23	2.50	1.37	1.63	41.15	5.32	4.20	2.61	1.28	0.87	0.46	0.23	
13	0.23	2.03	1.11	1.54	7.15	6.32	3.83	2.38	1.28	0.87	0.46	0.23	
14	0.33	1.46	0.94	1.54	6.70	6.45	3.70	2.38	1.20	0.87	0.46	0.23	
15	0.33	0.87	1.03	1.63	6.32	5.82	3.46	2.38	1.20	0.87	0.40	0.23	
16	0.26	0.74	1.03	1.46	6.07	5.32	3.58	2.15	1.20	0.87	0.60	0.23	
17	0.26	0.67	0.80	1.37	5.19	5.44	3.21	2.15	1.20	0.87	0.67	0.21	
18	0.23	1.28	0.80	1.11	2.96	4.82	3.08	2.03	1.20	0.87	0.67	0.21	
19	0.23	1.11	0.74	1.28	2.96	4.70	2.84	2.03	1.20	0.87	0.60	0.21	
20	0.23	1.80	0.74	2.38	2.73	5.57	2.73	1.80	1.11	0.80	0.53	0.21	
21	0.23	2.03	0.67	3.21	2.61	5.44	2.73	1.80	1.11	0.80	0.53	0.21	
22	0.23	1.20	0.67	12.01	1.80	5.07	2.50	1.71	1.11	0.74	0.46	0.21	
23	0.23	0.94	1.63	9.00	1.80	4.20	2.26	1.71	1.20	0.74	0.46	0.23	
24	0.23	0.67	6.45	5.69	1.80	4.45	2.50	1.71	1.28	0.94	0.40	0.26	
25	0.23	0.67	2.15	3.70	1.80	5.44	2.96	1.71	1.20	0.80	0.33	0.23	
26	0.23	1.03	1.54	2.38	1.80	5.07	3.08	1.71	1.03	0.74	0.33	0.23	
27	0.23	1.92	1.20	2.73	2.96	4.94	3.21	1.71	1.03	0.74	0.33	0.21	
28	0.23	2.61	1.03	2.26	3.70	4.32	3.46	1.71	0.94	0.74	0.33	0.21	
29	0.21	1.28	1.03	1.80	6.20	4.20	3.95	1.71	0.94	0.67		0.21	
30	0.21	1.20	1.92	1.71	5.94	4.20	4.20	1.63	0.94	0.67		0.21	
31		1.92		2.15	5.57		3.58		0.94	0.67		0.21	
Total	8.25	35.51	40.46	77.06	182.22	146.12	114.62	75.03	39.20	26.35	14.34	7.05	766.21 CMSDAY
Mean	0.28	1.15	1.35	2.49	5.88	4.87	3.70	2.50	1.26	0.85	0.51	0.23	2.10 CMS
Max	0.53	2.61	6.45	12.01	41.15	6.45	5.57	4.45	1.54	0.94	0.67	0.26	41.15 CMS
Min	0.21	0.21	0.67	0.80	1.80	3.70	2.26	1.63	0.94	0.67	0.33	0.21	0.21 CMS
Runoff	0.713	3.068	3.496	6.658	15.744	12.625	9.903	6.483	3.387	2.277	1.239	0.609	66.201 MCM

Momentary Peak 274.00 CMS, at 4.70 M (A.D), at 5.00 Hours, on Aug 12, 2001

Runoff Yield 15.67 Liters/Second/Square KM, Momentary Peak Yield 2044.776 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 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 at the approach of the bridge.

Elevation +6.802 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 Float -

Rated by Current Meter 2001 to date.

Stability of Channel Regimes Stable.

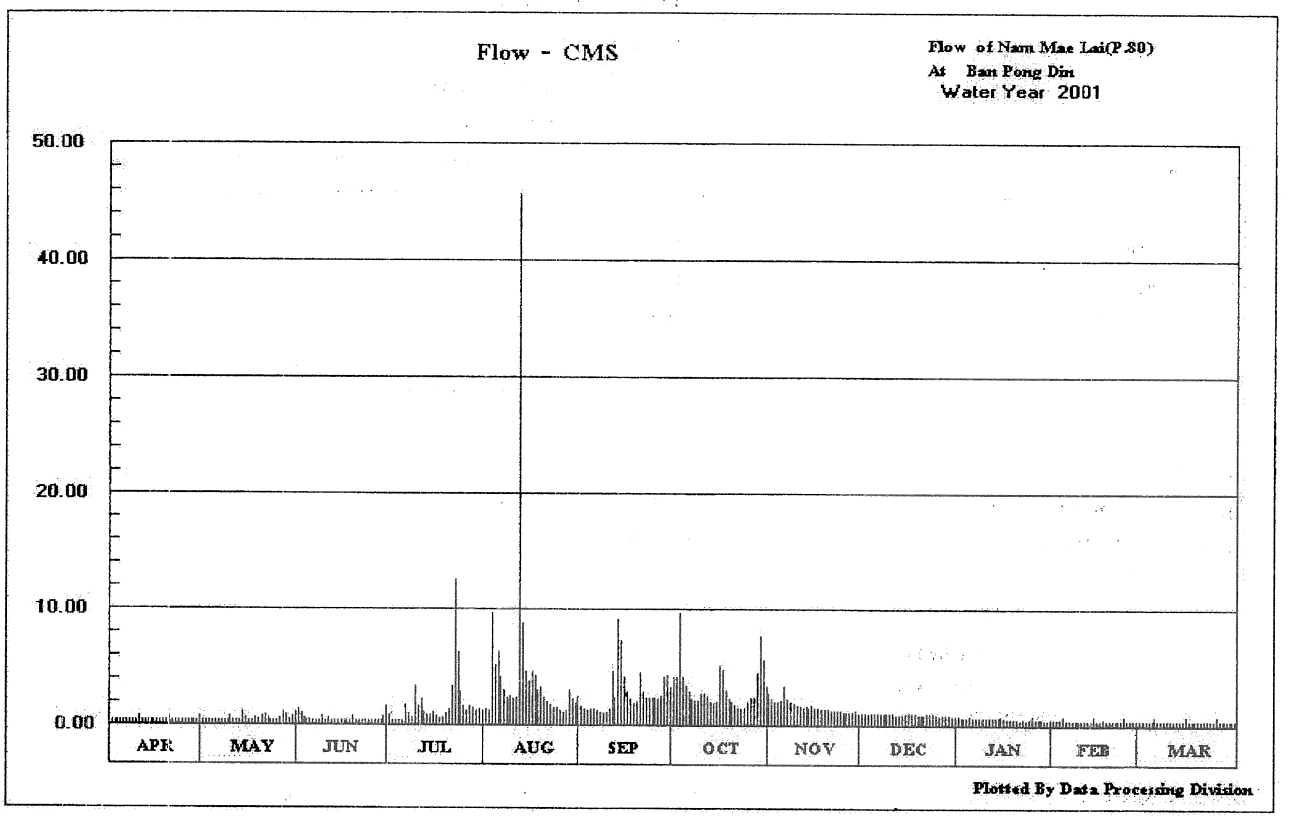
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.55	0.49	0.71	0.65	0.71	0.73	0.89	0.81	0.67	0.64	0.61	0.58	
2	0.54	0.50	0.66	0.60	0.69	0.70	0.89	0.78	0.67	0.63	0.61	0.58	
3	0.53	0.58	0.63	0.57	1.20	0.69	1.20	0.76	0.66	0.63	0.61	0.58	
4	0.52	0.59	0.61	0.56	0.95	0.70	0.89	0.76	0.66	0.63	0.61	0.57	
5	0.52	0.58	0.61	0.58	1.02	0.71	0.85	0.77	0.66	0.63	0.60	0.56	
6	0.53	0.54	0.59	0.74	0.89	0.69	0.82	0.85	0.66	0.63	0.60	0.56	
7	0.53	0.53	0.58	0.66	0.83	0.68	0.78	0.78	0.66	0.63	0.59	0.56	
8	0.52	0.55	0.56	0.63	0.79	0.66	0.77	0.76	0.66	0.63	0.59	0.58	
9	0.53	0.55	0.55	0.85	0.80	0.68	0.77	0.75	0.66	0.63	0.59	0.58	
10	0.53	0.55	0.56	0.73	0.78	0.71	0.81	0.74	0.66	0.62	0.59	0.56	
11	0.53	0.55	0.63	0.78	0.79	0.92	0.81	0.73	0.66	0.62	0.59	0.57	
12	0.51	0.60	0.60	0.68	2.64	0.79	0.80	0.72	0.65	0.62	0.59	0.56	
13	0.53	0.60	0.60	0.65	1.15	1.17	0.76	0.73	0.65	0.63	0.59	0.55	
14	0.52	0.68	0.59	0.65	0.92	1.07	0.75	0.72	0.65	0.63	0.59	0.55	
15	0.52	0.62	0.59	0.68	0.87	0.89	0.76	0.74	0.67	0.62	0.59	0.55	
16	0.52	0.60	0.58	0.64	0.92	0.82	0.95	0.72	0.66	0.62	0.60	0.56	
17	0.51	0.59	0.58	0.63	0.90	0.78	0.93	0.72	0.66	0.61	0.61	0.56	
18	0.51	0.62	0.57	0.63	0.83	0.75	0.83	0.71	0.66	0.61	0.60	0.56	
19	0.49	0.61	0.57	0.66	0.84	0.76	0.78	0.71	0.65	0.61	0.60	0.56	
20	0.47	0.59	0.57	0.71	0.79	0.91	0.76	0.70	0.65	0.61	0.60	0.56	
21	0.49	0.65	0.57	0.85	0.76	0.82	0.74	0.69	0.65	0.60	0.60	0.57	
22	0.49	0.62	0.56	1.35	0.74	0.79	0.72	0.69	0.66	0.61	0.59	0.57	
23	0.49	0.59	0.52	1.01	0.72	0.79	0.71	0.69	0.66	0.60	0.59	0.55	
24	0.50	0.58	0.53	0.82	0.72	0.79	0.72	0.69	0.66	0.61	0.59	0.55	
25	0.49	0.58	0.59	0.73	0.69	0.79	0.76	0.68	0.65	0.62	0.58	0.55	
26	0.49	0.62	0.56	0.69	0.68	0.78	0.79	0.68	0.64	0.61	0.56	0.55	
27	0.50	0.68	0.54	0.73	0.69	0.80	0.79	0.68	0.65	0.61	0.56	0.55	
28	0.49	0.65	0.53	0.72	0.83	0.89	0.91	0.68	0.65	0.61	0.56	0.55	
29	0.49	0.61	0.54	0.69	0.78	0.90	1.09	0.69	0.65	0.60		0.55	
30	0.49	0.64	0.73	0.70	0.75	0.84	0.98	0.67	0.64	0.60		0.55	
31		0.68		0.69	0.80		0.85		0.64	0.61		0.54	
Mean	0.51	0.59	0.59	0.72	0.89	0.80	0.83	0.73	0.66	0.62	0.59	0.56	
Max	0.55	0.68	0.73	1.35	2.64	1.17	1.20	0.85	0.67	0.64	0.61	0.58	2.64
Min	0.47	0.49	0.52	0.56	0.68	0.66	0.71	0.67	0.64	0.60	0.56	0.54	0.47

Annual Max Momentary Gage Height 4.37 M (A.D), at 9.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.29 M (A.D)
Left Bank Elevation 6.91 M (A.D)
Right Bank Elevation 7.10 M (A.D), Drainage Area 129 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.34	0.11	1.60	1.02	1.60	1.84	4.26	2.86	1.20	0.93	0.65	0.47	
2	0.30	0.12	1.11	0.56	1.39	1.48	4.26	2.44	1.20	0.84	0.65	0.47	
3	0.25	0.47	0.84	0.43	9.80	1.39	9.80	2.20	1.11	0.84	0.65	0.47	
4	0.21	0.52	0.65	0.38	5.32	1.48	4.26	2.20	1.11	0.84	0.65	0.43	
5	0.21	0.47	0.65	0.47	6.56	1.60	3.56	2.32	1.11	0.84	0.56	0.38	
6	0.25	0.30	0.52	1.96	4.26	1.39	3.03	3.56	1.11	0.84	0.56	0.38	
7	0.25	0.25	0.47	1.11	3.21	1.30	2.44	2.44	1.11	0.84	0.52	0.38	
8	0.21	0.34	0.38	0.84	2.56	1.11	2.32	2.20	1.11	0.84	0.52	0.47	
9	0.25	0.34	0.34	3.56	2.68	1.30	2.32	2.08	1.11	0.84	0.52	0.47	
10	0.25	0.34	0.38	1.84	2.44	1.60	2.86	1.96	1.11	0.74	0.52	0.38	
11	0.25	0.34	0.84	2.44	2.56	4.79	2.86	1.84	1.11	0.74	0.52	0.43	
12	0.16	0.56	0.56	1.30	45.78	2.56	2.68	1.72	1.02	0.74	0.52	0.38	
13	0.25	0.56	0.56	1.02	8.90	9.26	2.20	1.84	1.02	0.84	0.52	0.34	
14	0.21	1.30	0.52	1.02	4.79	7.46	2.08	1.72	1.02	0.84	0.52	0.34	
15	0.21	0.74	0.52	1.30	3.91	4.26	2.20	1.96	1.20	0.74	0.52	0.34	
16	0.21	0.56	0.47	0.93	4.79	3.03	5.32	1.72	1.11	0.74	0.56	0.38	
17	0.16	0.52	0.47	0.84	4.44	2.44	4.97	1.72	1.11	0.65	0.65	0.38	
18	0.16	0.74	0.43	0.84	3.21	2.08	3.21	1.60	1.11	0.65	0.56	0.38	
19	0.11	0.65	0.43	1.11	3.38	2.20	2.44	1.60	1.02	0.65	0.56	0.38	
20	0.08	0.52	0.43	1.60	2.56	4.62	2.20	1.48	1.02	0.65	0.56	0.38	
21	0.11	1.02	0.43	3.56	2.20	3.03	1.96	1.39	1.02	0.56	0.56	0.43	
22	0.11	0.74	0.38	12.70	1.96	2.56	1.72	1.39	1.11	0.65	0.52	0.43	
23	0.11	0.52	0.21	6.38	1.72	2.56	1.60	1.39	1.11	0.56	0.52	0.34	
24	0.12	0.47	0.25	3.03	1.72	2.56	1.72	1.39	1.11	0.65	0.52	0.34	
25	0.11	0.47	0.52	1.84	1.39	2.56	2.20	1.30	1.02	0.74	0.47	0.34	
26	0.11	0.74	0.38	1.39	1.30	2.44	2.56	1.30	0.93	0.65	0.38	0.34	
27	0.12	1.30	0.30	1.84	1.39	2.68	2.56	1.30	1.02	0.65	0.38	0.34	
28	0.11	1.02	0.25	1.72	3.21	4.26	4.62	1.30	1.02	0.65	0.38	0.34	
29	0.11	0.65	0.30	1.39	2.44	4.44	7.82	1.39	1.02	0.56		0.34	
30	0.11	0.93	1.84	1.48	2.08	3.38	5.85	1.20	0.93	0.56		0.34	
31		1.30		1.39	2.68		3.56		0.93	0.65		0.30	
Total	5.44	18.91	17.03	61.29	146.23	87.66	105.44	54.81	33.24	22.51	15.02	11.91	579.49 CMSDAY
Mean	0.18	0.61	0.57	1.98	4.72	2.92	3.40	1.83	1.07	0.73	0.54	0.38	1.59 CMS
Max	0.34	1.30	1.84	12.70	45.78	9.26	9.80	3.56	1.20	0.93	0.65	0.47	45.78 CMS
Min	0.08	0.11	0.21	0.38	1.30	1.11	1.60	1.20	0.93	0.56	0.38	0.30	0.08 CMS
Runoff	0.470	1.634	1.471	5.295	12.634	7.574	9.110	4.736	2.872	1.945	1.298	1.029	50.068 MCM

Momentary Peak 109.80 CMS, at 4.37 M (A.D), at 9.00 Hours, on Aug 12, 2001
Runoff Yield 12.31 Liters/Second/Square KM, Momentary Peak Yield 851.163 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 8,985 sq. km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +161.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 15 meters from automatic gage building.

Elevation +167.074 m. (M.S.L.)

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 Float -

Rated by Current Meter 1967 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

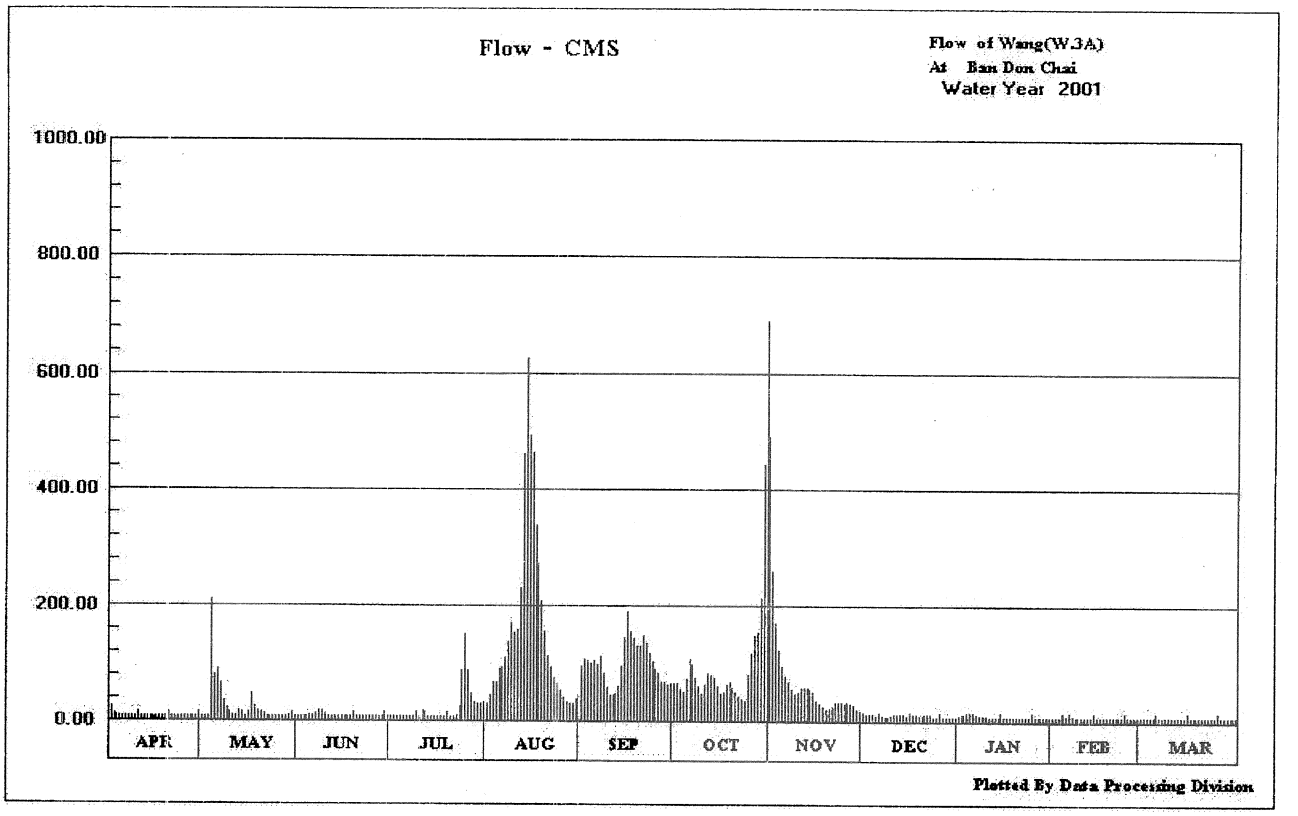
General Description Records good. The channel is fulled of the Mimosa pudica plants.

Stage-discharge relation defined by 46 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	161.71	160.78	161.29	161.08	161.83	162.86	162.43	165.80	161.48	161.36	161.12	161.50	
2	161.45	160.81	161.30	161.08	162.10	163.02	162.43	164.46	161.46	161.41	161.11	161.43	
3	161.33	160.83	161.30	161.10	162.48	162.99	162.28	163.71	161.44	161.43	161.11	161.34	
4	161.18	164.08	161.31	161.09	162.49	162.95	162.20	163.22	161.41	161.47	161.27	161.42	
5	161.10	162.67	161.34	161.05	162.80	163.00	162.57	162.88	161.40	161.41	161.36	161.48	
6	160.99	162.79	161.38	161.06	162.83	162.90	163.04	162.63	161.38	161.50	161.49	161.49	
7	160.97	162.42	161.45	161.07	163.05	163.08	162.90	162.47	161.37	161.43	161.38	161.57	
8	160.95	161.90	161.53	161.13	163.38	162.71	162.60	162.30	161.32	161.40	161.21	161.49	
9	160.90	161.65	161.54	161.17	163.71	162.33	162.34	162.17	161.26	161.40	161.12	161.45	
10	160.83	161.50	161.42	161.32	163.55	162.12	162.16	162.22	161.38	161.35	161.07	161.41	
11	160.85	161.40	161.25	161.57	163.59	162.11	162.40	162.33	161.43	161.20	161.04	161.37	
12	160.83	161.40	161.24	161.48	164.23	162.18	162.71	162.33	161.44	161.10	161.06	161.35	
13	160.81	161.57	161.16	161.30	165.67	162.34	162.65	162.31	161.46	161.13	161.15	161.32	
14	160.83	161.49	161.15	161.21	166.27	162.87	162.58	162.27	161.41	161.16	161.12	161.36	
15	160.87	161.31	161.17	161.05	165.81	163.47	162.36	162.22	161.40	161.21	161.18	161.25	
16	160.87	161.47	161.13	161.00	165.68	163.91	162.18	161.93	161.38	161.17	161.25	161.23	
17	160.88	162.15	161.05	160.97	165.00	163.58	162.22	161.80	161.41	161.25	161.18	161.23	
18	160.93	161.73	161.00	160.90	164.54	163.43	162.39	161.69	161.42	161.24	161.27	161.22	
19	160.94	161.56	160.95	160.85	164.05	163.30	162.48	161.62	161.38	161.22	161.21	161.27	
20	160.98	161.47	160.90	160.97	163.58	163.28	162.33	161.66	161.40	161.17	161.26	161.29	
21	160.98	161.42	160.88	161.14	163.08	163.48	162.19	161.73	161.43	161.16	161.25	161.41	
22	160.96	161.32	160.91	161.37	162.83	163.35	162.07	161.85	161.43	161.13	161.29	161.43	
23	160.91	161.22	160.93	161.71	162.58	163.14	161.97	161.88	161.44	161.13	161.24	161.35	
24	160.84	161.20	160.93	162.77	162.44	162.98	161.92	161.87	161.28	161.14	161.09	161.30	
25	160.75	161.10	160.91	163.51	162.23	162.82	162.65	161.84	161.21	161.25	161.02	161.27	
26	160.74	161.19	160.89	162.78	162.04	162.68	163.16	161.85	161.17	161.29	160.99	161.25	
27	160.75	161.14	160.90	162.14	161.88	162.49	163.49	161.84	161.15	161.29	160.92	161.20	
28	160.76	161.10	160.95	161.88	161.82	162.46	163.54	161.76	161.17	161.30	161.16	161.19	
29	160.75	161.39	160.98	161.82	161.83	162.39	164.09	161.58	161.16	161.30		161.19	
30	160.70	161.28	161.01	161.83	161.97	162.44	165.58	161.52	161.23	161.19		161.15	
31		161.22		161.85	162.11		166.45		161.29	161.16		161.12	
Mean	160.94	161.57	161.14	161.46	163.27	162.89	162.79	162.32	161.35	161.27	161.18	161.33	
Max	161.71	164.08	161.54	163.51	166.27	163.91	166.45	165.80	161.48	161.50	161.49	161.57	166.45
Min	160.70	160.78	160.88	160.85	161.82	162.11	161.92	161.52	161.15	161.10	160.92	161.12	160.70

Annual Max Momentary Gage Height 166.56 M (MSL), at 18.00 Hours, on Oct 31, 2001
Zero Gage at Bottom Elevation 161.00 M (MSL), River Bed 159.45 M (MSL)
Left Bank Elevation 169.05 M (MSL)
Right Bank Elevation 167.24 M (MSL), Drainage Area 8985 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.37	2.05	11.21	6.32	34.01	97.50	67.95	493.00	17.92	13.24	7.08	7.00	
2	16.60	2.33	11.50	6.32	47.50	109.70	67.95	264.10	17.04	14.84	6.89	6.16	
3	12.37	2.59	11.50	6.70	71.20	107.25	58.20	172.55	16.16	15.72	6.89	5.26	
4	8.22	214.00	11.79	6.51	71.85	104.25	53.00	126.80	14.84	17.48	10.63	6.04	
5	6.70	83.90	12.66	5.75	93.00	108.00	77.05	99.00	14.40	14.84	13.24	6.76	
6	4.67	92.30	13.82	5.94	95.25	100.50	111.40	81.10	13.82	18.80	18.36	6.88	
7	4.41	67.30	16.60	6.13	112.25	114.80	100.50	70.55	13.53	15.72	13.82	8.05	
8	4.15	37.30	20.12	7.27	141.20	86.70	79.00	59.50	12.08	14.40	8.89	6.88	
9	3.50	25.55	20.56	8.03	172.55	61.45	62.10	51.35	10.34	14.40	7.08	6.40	
10	2.59	18.80	15.28	12.08	156.50	48.60	50.80	54.30	13.82	12.95	6.13	5.92	
11	2.85	14.40	10.05	21.88	160.10	48.05	66.00	61.45	15.72	8.60	5.56	5.53	
12	2.59	14.40	9.76	17.92	233.05	51.90	86.70	61.45	16.16	6.70	5.94	5.35	
13	2.33	21.88	7.84	11.50	464.40	62.10	82.50	60.15	17.04	7.27	7.65	5.08	
14	2.59	18.36	7.65	8.89	629.15	98.25	77.70	57.55	14.84	7.84	7.08	5.44	
15	3.11	11.79	8.03	5.75	495.65	149.30	63.40	54.30	14.40	8.89	8.22	4.45	
16	3.11	17.48	7.27	4.80	466.60	194.10	51.90	38.71	13.82	8.03	10.05	4.27	
17	3.24	50.25	5.75	4.41	341.00	159.20	54.30	32.60	14.84	10.05	8.22	4.27	
18	3.89	29.31	4.80	3.50	274.90	145.70	65.35	27.43	15.28	9.76	10.63	4.18	
19	4.02	21.44	4.15	2.85	210.25	134.00	71.20	24.14	13.82	9.18	8.89	4.63	
20	4.54	17.48	3.50	4.41	159.20	132.20	61.45	26.02	14.40	8.03	10.34	4.81	
21	4.54	15.28	3.24	7.46	114.80	150.20	52.45	29.31	15.72	7.84	10.05	5.92	
22	4.28	12.08	3.63	13.53	95.25	138.50	45.85	34.95	15.72	7.27	11.21	6.16	
23	3.63	9.18	3.89	28.37	77.70	119.90	40.59	36.36	16.16	7.27	9.76	5.35	
24	2.72	8.60	3.89	90.90	68.60	106.50	38.24	35.89	10.92	7.46	6.51	4.90	
25	1.82	6.70	3.63	152.90	54.95	94.50	82.50	34.48	8.89	10.05	5.18	4.63	
26	1.75	8.41	3.37	91.60	44.20	84.60	121.60	34.95	8.03	11.21	4.67	4.45	
27	1.82	7.46	3.50	49.70	36.36	71.85	151.10	34.48	7.65	11.21	3.76	4.00	
28	1.90	6.70	4.15	36.36	33.54	69.90	155.60	30.72	8.03	11.50	3.68	3.92	
29	1.82	14.11	4.54	33.54	34.01	65.35	215.25	22.32	7.84	11.50		3.92	
30	1.45	10.92	4.99	34.01	40.59	68.60	444.80	19.68	9.47	8.41		3.60	
31		9.18		34.95	48.05		694.00		11.21	7.84		3.36	
Total	149.58	871.53	252.67	730.28	5077.66	3083.45	3450.43	2229.19	413.91	338.30	236.41	163.57	16996.98 CMSDAY
Mean	4.99	28.11	8.42	23.56	163.80	102.78	111.30	74.31	13.35	10.91	8.44	5.28	46.57 CMS
Max	28.37	214.00	20.56	152.90	629.15	194.10	694.00	493.00	17.92	18.80	18.36	8.05	694.00 CMS
Min	1.45	2.05	3.24	2.85	33.54	48.05	38.24	19.68	7.65	6.70	3.68	3.36	1.45 CMS
Runoff	12.924	75.300	21.831	63.096	438.710	266.410	298.117	192.602	35.762	29.229	20.426	14.132	1468.539 MCM

Momentary Peak 738.00 CMS, at 166.56 M (MSL), at 18.00 Hours, on Oct 31, 2001

Runoff Yield 5.18 Liters/Second/Square KM, Momentary Peak Yield 82.137 Liters/Second/Square KM

WATER YEAR : 2001

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 upsteam from the bridge on Highway.

Ban Wang Man **Amphoe** Sam Ngao **Changwat** Tak

Drainage Area 10,507 sq. km.

Type of Gage Staff gage.

Zero Gage at Bottom +130.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of Wat Wang Man.

Elevation +136.000 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1968 to date.

Rating Operation

Period of Rating 1971 to date.

Rated by Float -

Rated by Current Meter 1971 to date.

Stability of Channel Regimes Fairly stable.

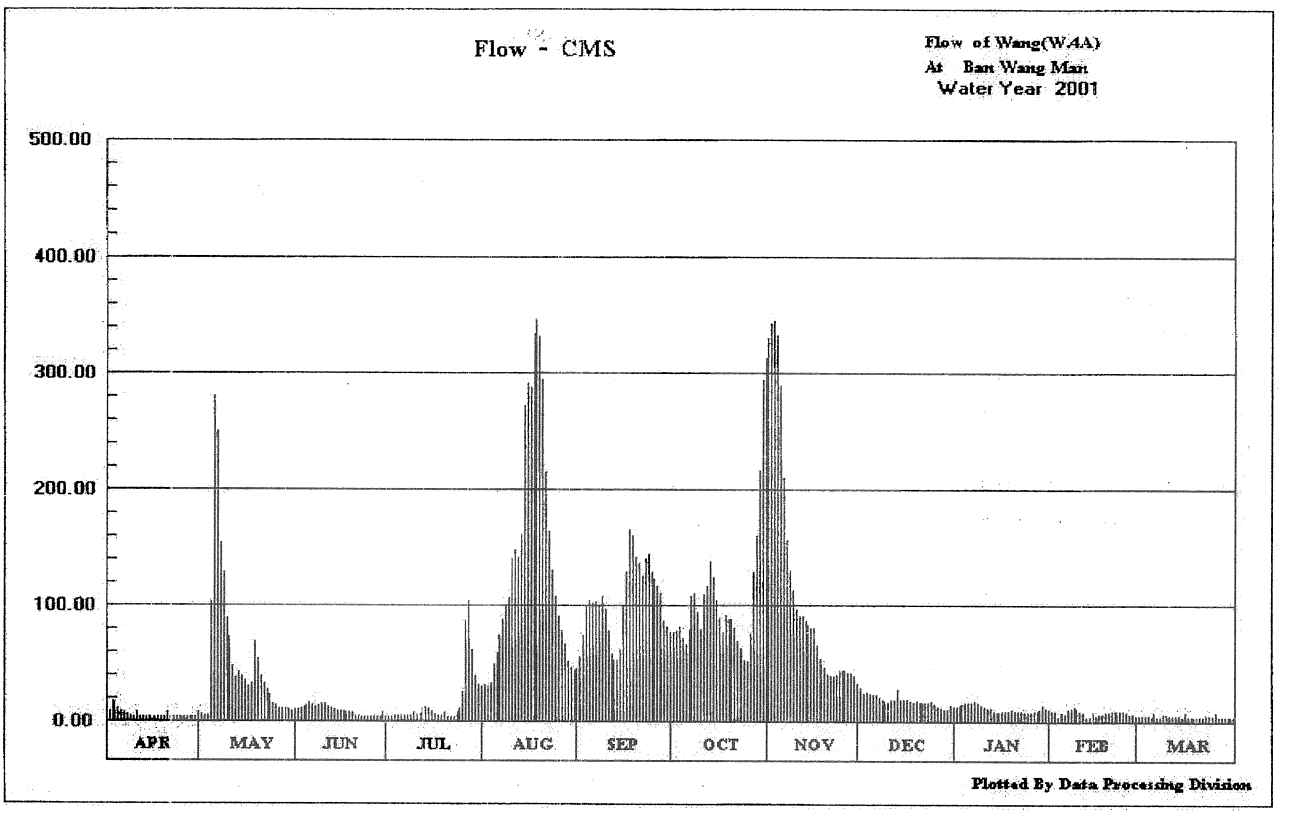
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 31 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	131.01	130.86	131.07	130.75	131.75	132.44	132.94	136.33	131.69	131.18	131.03	130.80	
2	131.33	130.78	131.11	130.73	131.73	132.88	132.99	136.43	131.55	131.21	130.99	130.77	
3	131.30	130.77	131.18	130.79	131.81	133.47	133.06	136.45	131.58	131.25	130.66	130.79	
4	131.12	133.53	131.23	130.81	132.26	133.56	132.83	136.35	131.55	131.28	130.83	130.80	
5	131.04	135.92	131.31	130.81	132.53	133.51	132.72	136.00	131.51	131.30	130.88	130.73	
6	130.95	135.67	131.20	130.79	132.90	133.53	133.00	135.27	131.49	131.31	131.05	130.62	
7	130.85	134.54	131.18	130.78	133.21	133.46	133.64	134.59	131.42	131.32	131.13	130.50	
8	130.79	134.08	131.22	130.78	133.48	133.64	133.69	134.12	131.37	131.31	131.16	130.43	
9	130.76	133.25	131.24	130.82	133.62	133.42	133.36	133.74	131.34	131.23	131.12	130.87	
10	130.73	132.86	131.27	130.86	134.31	132.98	133.02	133.41	131.30	131.16	131.00	130.85	
11	130.70	132.22	131.18	130.90	134.43	132.48	133.66	133.26	131.37	131.10	130.96	130.84	
12	130.66	131.95	131.12	131.10	134.33	132.35	133.83	133.26	131.36	131.10	130.62	130.81	
13	130.66	132.09	131.07	131.15	134.66	132.38	134.25	133.19	131.65	130.99	130.72	130.78	
14	130.64	131.99	131.04	131.14	135.85	132.57	133.99	133.10	131.38	130.97	130.62	130.77	
15	130.62	131.87	131.02	131.00	136.02	133.46	133.56	133.04	131.37	130.98	130.83	130.76	
16	130.62	131.72	131.00	130.90	135.98	134.08	133.25	133.03	131.36	131.02	130.85	130.75	
17	130.61	131.79	130.97	130.83	136.36	134.72	132.95	132.69	131.33	131.01	130.90	130.71	
18	130.58	132.77	130.93	130.78	136.46	134.64	133.31	132.41	131.31	131.00	130.95	130.75	
19	130.60	132.40	130.86	130.71	136.34	134.32	133.22	132.20	131.33	131.05	130.95	130.76	
20	130.65	132.00	130.83	130.68	136.04	134.24	133.21	132.03	131.31	131.04	130.99	130.76	
21	130.67	131.80	130.79	130.68	135.32	134.02	133.04	131.97	131.30	131.03	131.00	130.72	
22	130.66	131.67	130.76	130.73	134.70	134.30	132.78	131.97	131.31	131.00	131.00	130.73	
23	130.66	131.49	130.76	130.92	134.11	134.36	132.61	132.01	131.31	130.95	131.00	130.84	
24	130.65	131.27	130.76	131.11	133.64	134.08	132.38	132.13	131.33	130.93	131.01	130.83	
25	130.56	131.21	130.76	131.57	133.28	133.97	132.33	132.12	131.26	130.94	130.93	130.81	
26	130.55	131.14	130.73	133.19	132.98	133.82	132.93	132.12	131.19	131.00	130.90	130.76	
27	130.54	131.11	130.70	133.56	132.70	133.69	134.09	132.07	131.12	131.03	130.88	130.74	
28	130.53	131.12	130.69	132.59	132.34	133.18	134.64	132.04	131.08	131.08	130.83	130.73	
29	130.53	131.08	130.69	131.99	132.20	133.06	135.33	132.00	131.08	131.22		130.72	
30	130.55	131.04	130.72	131.77	132.12	132.96	136.04	131.82	131.22	131.12		130.72	
31		131.06		131.73	132.16		136.19		131.19	131.09		130.74	
Mean	130.74	132.16	130.98	131.19	133.86	133.52	133.51	133.37	131.35	131.10	130.92	130.75	
Max	131.33	135.92	131.31	133.56	136.46	134.72	136.19	136.45	131.69	131.32	131.16	130.87	136.46
Min	130.53	130.77	130.69	130.68	131.73	132.35	132.33	131.82	131.08	130.93	130.62	130.43	130.43

Annual Max Momentary Gage Height 136.47 M (MSL), at 6.00 Hours, on Aug 18, 2001
Zero Gage at Bottom Elevation 130.00 M (MSL), River Bed 129.28 M (MSL)
Left Bank Elevation 141.80 M (MSL)
Right Bank Elevation 141.87 M (MSL), Drainage Area 10507 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.25	7.55	11.75	5.75	32.37	57.10	77.45	331.25	30.43	14.50	10.75	6.50	
2	18.90	6.20	12.75	5.45	31.72	74.90	79.58	344.05	25.88	15.30	9.83	6.05	
3	18.00	6.05	14.50	6.35	34.35	100.83	82.55	346.75	26.85	16.50	4.40	6.35	
4	13.00	103.68	15.90	6.67	50.25	105.10	72.77	333.75	25.88	17.40	7.02	6.50	
5	11.00	281.40	18.30	6.67	60.70	102.72	68.30	291.00	24.57	18.00	7.90	5.45	
6	9.12	252.05	15.00	6.35	75.75	103.68	80.00	211.65	23.93	18.30	11.25	3.80	
7	7.38	155.40	14.50	6.20	88.95	100.35	108.90	158.40	21.65	18.60	13.25	2.25	
8	6.35	130.00	15.60	6.20	101.30	108.90	111.28	132.00	20.10	18.30	14.00	1.37	
9	5.90	90.75	16.20	6.85	107.95	98.45	95.70	113.65	19.20	15.90	13.00	7.72	
10	5.45	74.05	17.10	7.55	142.05	79.15	80.85	97.98	18.00	14.00	10.00	7.38	
11	5.00	48.75	14.50	8.25	148.80	58.70	109.85	91.20	20.10	12.50	9.30	7.20	
12	4.40	39.25	13.00	12.50	143.15	53.63	117.93	91.20	19.80	12.50	3.80	6.67	
13	4.40	44.15	11.75	13.75	162.90	54.75	138.75	88.08	29.12	9.83	5.30	6.20	
14	4.10	40.65	11.00	13.50	273.00	62.30	125.53	84.25	20.40	9.48	3.80	6.05	
15	3.80	36.45	10.50	10.00	293.40	100.35	105.10	81.70	20.10	9.65	7.02	5.90	
16	3.80	31.40	10.00	8.25	288.60	130.00	90.75	81.27	19.80	10.50	7.38	5.75	
17	3.65	33.67	9.48	7.02	335.00	166.80	77.87	67.10	18.90	10.25	8.25	5.15	
18	3.25	70.30	8.77	6.20	348.10	161.60	93.45	55.90	18.30	10.00	9.12	5.75	
19	3.50	55.50	7.55	5.15	332.50	142.60	89.40	48.00	18.90	11.25	9.12	5.90	
20	4.25	41.00	7.02	4.70	295.80	138.20	88.95	42.05	18.30	11.00	9.83	5.90	
21	4.55	34.00	6.35	4.70	216.40	127.00	81.70	39.95	18.00	10.75	10.00	5.30	
22	4.40	29.77	5.90	5.45	165.50	141.50	70.70	39.95	18.30	10.00	10.00	5.45	
23	4.40	23.93	5.90	8.60	131.50	144.80	63.90	41.35	18.30	9.12	10.00	7.20	
24	4.25	17.10	5.90	12.75	108.90	130.00	54.75	45.55	18.90	8.77	10.25	7.02	
25	3.00	15.30	5.90	26.53	92.10	124.58	52.88	45.20	16.80	8.95	8.77	6.67	
26	2.88	13.50	5.45	88.08	79.15	117.45	77.02	45.20	14.75	10.00	8.25	5.90	
27	2.75	12.75	5.00	105.10	67.50	111.28	130.50	43.45	13.00	10.75	7.90	5.60	
28	2.62	13.00	4.85	63.10	53.25	87.65	161.60	42.40	12.00	12.00	7.02	5.45	
29	2.62	12.00	4.85	40.65	48.00	82.55	217.35	41.00	12.00	15.60		5.30	
30	2.88	11.00	5.30	33.03	45.20	78.30	295.80	34.70	15.60	13.00		5.30	
31		11.50		31.72	46.60		313.80		14.75	12.25		5.60	
Total	179.85	1742.10	310.57	573.07	4400.74	3145.22	3414.96	3509.98	612.61	394.95	246.51	178.63	18709.19 CMSDAY
Mean	5.99	56.20	10.35	18.49	141.96	104.84	110.16	117.00	19.76	12.74	8.80	5.76	51.26 CMS
Max	18.90	281.40	18.30	105.10	348.10	166.80	313.80	346.75	30.43	18.60	14.00	7.72	348.10 CMS
Min	2.62	6.05	4.85	4.70	31.72	53.63	52.88	34.70	12.00	8.77	3.80	1.37	1.37 CMS
Runoff	15.539	150.517	26.833	49.513	380.224	271.747	295.053	303.262	52.929	34.124	21.298	15.434	1616.474 MCM

Momentary Peak 349.45 CMS, at 136.47 M (MSL), at 6.00 Hours, on Aug 18, 2001

Runoff Yield 4.88 Liters/Second/Square KM, Momentary Peak Yield 33.259 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,379 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 about 10.00 meters from the top staff gage.

Elevation +6.177 m.(A.D.)

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 Float -

Rated by Current Meter 1995 to date.

Stability of Channel Regimes Fairly stable.

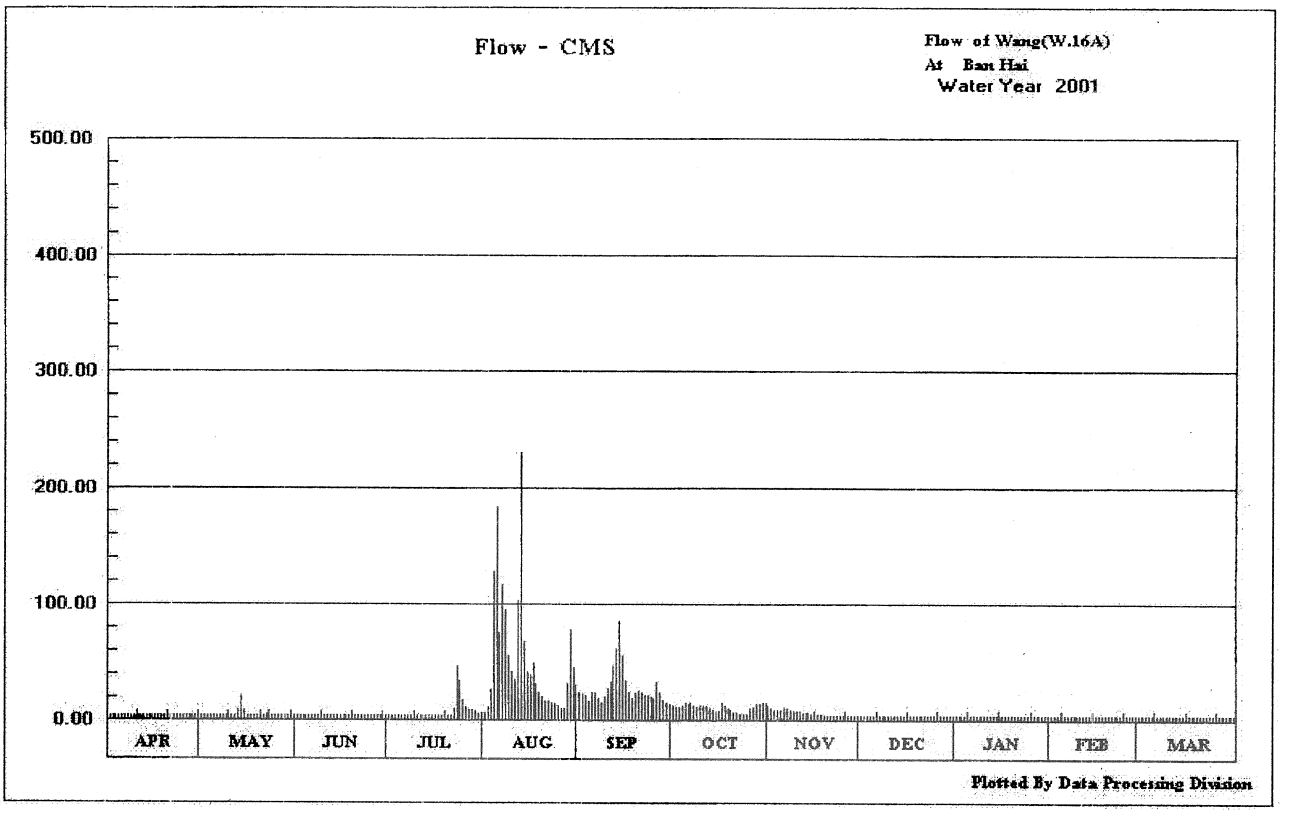
Overbank Flow Conditions No overbank flow.

General Description Records good. The pumping station is located about 150 meters upstream from the gage site. Stage-discharge relation defined by 43 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.15	1.03	1.32	1.14	1.77	2.57	2.10	2.11	1.61	1.38	1.29	1.23	
2	1.11	1.06	1.34	1.13	2.05	2.54	2.05	2.03	1.58	1.37	1.29	1.24	
3	1.10	1.08	1.28	1.11	2.64	2.46	2.05	1.98	1.59	1.36	1.29	1.23	
4	1.10	1.20	1.30	1.10	4.25	2.28	2.07	1.98	1.58	1.39	1.28	1.23	
5	1.07	1.19	1.48	1.10	4.68	2.57	2.25	1.98	1.55	1.39	1.26	1.23	
6	1.07	1.14	1.41	1.06	3.69	2.57	2.18	2.05	1.53	1.40	1.27	1.23	
7	1.08	1.11	1.37	1.09	4.14	2.36	2.23	2.04	1.53	1.39	1.26	1.23	
8	1.07	1.09	1.46	1.08	3.93	2.23	2.12	1.98	1.51	1.38	1.25	1.21	
9	1.06	1.08	1.44	1.43	3.38	2.45	2.07	1.93	1.51	1.36	1.25	1.20	
10	1.07	1.08	1.41	1.49	3.07	2.71	2.14	1.90	1.49	1.36	1.23	1.23	
11	1.08	1.19	1.39	1.41	2.93	2.85	2.10	1.89	1.48	1.36	1.23	1.24	
12	1.07	1.42	1.32	1.34	4.01	3.20	2.11	1.87	1.45	1.34	1.24	1.24	
13	1.06	1.89	1.31	1.29	5.00	3.48	2.03	1.85	1.45	1.40	1.25	1.24	
14	1.06	2.50	1.24	1.30	3.59	3.81	1.96	1.82	1.44	1.44	1.25	1.24	
15	1.06	1.89	1.36	1.26	3.08	3.37	1.93	1.81	1.43	1.42	1.26	1.22	
16	1.05	1.55	1.37	1.33	3.01	2.90	1.91	1.79	1.42	1.40	1.28	1.19	
17	1.05	1.43	1.31	1.32	3.26	2.59	2.21	1.78	1.42	1.40	1.30	1.18	
18	1.05	1.39	1.28	1.28	2.82	2.37	2.14	1.76	1.43	1.40	1.28	1.18	
19	1.05	1.36	1.22	1.25	2.56	2.55	2.03	1.74	1.42	1.39	1.26	1.20	
20	1.04	1.31	1.20	1.27	2.41	2.61	1.96	1.73	1.41	1.36	1.25	1.20	
21	1.04	1.35	1.18	1.38	2.28	2.55	1.88	1.72	1.41	1.33	1.25	1.19	
22	1.04	1.70	1.19	1.98	2.26	2.46	1.82	1.70	1.42	1.31	1.25	1.19	
23	1.04	1.83	1.20	3.20	2.25	2.48	1.78	1.69	1.42	1.32	1.26	1.20	
24	1.05	1.55	1.19	2.90	2.16	2.42	1.76	1.68	1.42	1.31	1.26	1.20	
25	1.06	1.42	1.16	2.32	2.07	2.36	1.80	1.68	1.44	1.28	1.25	1.18	
26	1.04	1.41	1.14	2.06	1.99	2.87	2.04	1.66	1.43	1.27	1.24	1.17	
27	1.03	1.41	1.12	1.89	1.94	2.55	2.07	1.65	1.41	1.28	1.23	1.18	
28	1.02	1.42	1.10	1.91	2.83	2.33	2.16	1.64	1.41	1.27	1.22	1.18	
29	1.01	1.37	1.09	1.80	3.73	2.22	2.19	1.63	1.39	1.27		1.18	
30	1.02	1.33	1.13	1.68	3.17	2.19	2.23	1.62	1.37	1.27		1.18	
31		1.28		1.72	2.79		2.21		1.38	1.28		1.19	
Mean	1.06	1.39	1.28	1.54	3.02	2.63	2.05	1.82	1.46	1.35	1.26	1.21	
Max	1.15	2.50	1.48	3.20	5.00	3.81	2.25	2.11	1.61	1.44	1.30	1.24	5.00
Min	1.01	1.03	1.09	1.06	1.77	2.19	1.76	1.62	1.37	1.27	1.22	1.17	1.01

Annual Max Momentary Gage Height 5.81 M (A.D), at 4.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.69 M (A.D)
Left Bank Elevation 6.03 M (A.D)
Right Bank Elevation 6.44 M (A.D), Drainage Area 1379 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.17	0.52	2.55	1.10	8.09	25.36	14.10	13.84	3.86	1.55	0.90	0.57	
2	0.87	0.64	2.74	1.02	13.18	24.52	13.18	11.92	3.48	1.48	0.90	0.62	
3	0.80	0.72	2.20	0.87	27.40	22.36	13.18	10.72	3.59	1.40	0.90	0.57	
4	0.80	1.55	2.36	0.80	129.50	17.94	13.55	10.72	3.48	1.63	0.84	0.57	
5	0.68	1.48	4.18	0.80	185.20	25.36	17.25	10.72	3.15	1.63	0.73	0.57	
6	0.68	1.10	3.41	0.64	76.59	25.36	15.52	12.40	2.93	1.70	0.79	0.57	
7	0.72	0.87	3.02	0.76	117.40	19.84	16.75	12.16	2.93	1.63	0.73	0.57	
8	0.68	0.76	3.96	0.72	96.49	16.79	14.08	10.72	2.71	1.55	0.68	0.46	
9	0.64	0.72	3.74	3.63	57.16	22.10	12.88	9.52	2.71	1.40	0.68	0.40	
10	0.68	0.72	3.41	4.29	42.47	29.50	14.56	8.80	2.51	1.40	0.57	0.57	
11	0.72	1.48	3.21	3.41	36.87	33.95	13.60	8.62	2.42	1.40	0.57	0.62	
12	0.68	3.52	2.55	2.74	104.00	48.10	13.84	8.26	2.15	1.25	0.62	0.62	
13	0.64	10.22	2.45	2.28	232.20	62.84	11.92	7.90	2.15	1.70	0.68	0.62	
14	0.64	23.40	1.87	2.36	69.58	86.05	10.24	7.36	2.06	2.06	0.68	0.62	
15	0.64	10.22	2.92	2.04	42.88	56.64	9.52	7.18	1.97	1.88	0.73	0.51	
16	0.60	5.02	3.02	2.64	40.01	35.70	9.04	6.83	1.88	1.70	0.84	0.38	
17	0.60	3.63	2.45	2.55	51.04	25.92	16.25	6.66	1.88	1.70	0.95	0.35	
18	0.60	3.21	2.20	2.20	32.90	20.08	14.56	6.32	1.97	1.70	0.84	0.35	
19	0.60	2.92	1.71	1.95	25.08	24.80	11.92	5.98	1.88	1.63	0.73	0.40	
20	0.56	2.45	1.55	2.12	21.06	26.50	10.24	5.81	1.79	1.40	0.68	0.40	
21	0.56	2.83	1.40	3.11	17.94	24.80	8.44	5.64	1.79	1.18	0.68	0.38	
22	0.56	7.00	1.48	11.88	17.48	22.36	7.36	5.30	1.88	1.02	0.68	0.38	
23	0.56	9.11	1.55	48.10	17.25	22.88	6.66	5.14	1.88	1.10	0.73	0.40	
24	0.60	5.02	1.48	35.70	15.30	21.32	6.32	4.98	1.88	1.02	0.73	0.40	
25	0.64	3.52	1.25	18.88	13.55	19.84	7.00	4.98	2.06	0.84	0.68	0.35	
26	0.56	3.41	1.10	13.36	12.07	34.65	12.16	4.66	1.97	0.79	0.62	0.33	
27	0.52	3.41	0.95	10.22	11.14	24.80	12.88	4.50	1.79	0.84	0.57	0.35	
28	0.48	3.52	0.80	10.59	33.25	19.12	15.04	4.34	1.79	0.79	0.51	0.35	
29	0.44	3.02	0.76	8.55	79.67	16.56	15.76	4.18	1.63	0.79		0.35	
30	0.48	2.64	1.02	6.73	46.78	15.90	16.75	4.02	1.48	0.79		0.35	
31		2.20		7.31	31.90		16.25		1.55	0.84		0.38	
Total	19.40	120.83	67.29	213.35	1705.43	871.94	390.80	230.18	71.20	41.79	20.24	14.36	3766.81 CMSDAY
Mean	0.65	3.90	2.24	6.88	55.01	29.06	12.61	7.67	2.30	1.35	0.72	0.46	10.32 CMS
Max	1.17	23.40	4.18	48.10	232.20	86.05	17.25	13.84	3.86	2.06	0.95	0.62	232.20 CMS
Min	0.44	0.52	0.76	0.64	8.09	15.90	6.32	4.02	1.48	0.79	0.51	0.33	0.33 CMS
Runoff	1.676	10.440	5.814	18.433	147.349	75.336	33.765	19.888	6.152	3.611	1.749	1.241	325.452 MCM

Momentary Peak 425.20 CMS, at 5.81 M (A.D), at 4.00 Hours, on Aug 13, 2001
Runoff Yield 7.48 Liters/Second/Square KM, Momentary Peak Yield 308.339 Liters/Second/Square KM

WATER YEAR : 2001

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 bank at the bridge of Lampang - Wang Nua Road.

Ban Nong Nao **Amphoe** Chae Hom **Changwat** Lampang

Drainage Area 619 sq. km.

Type of Gage Staff gage.

Zero Gage at Bottom +292.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM About 21 meters from the top staff gage.

Elevation +295.790 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00,15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1980 to date.

Rating Operation

Period of Rating 1980 to date.

Rated by Float -

Rated by Current Meter 1980 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

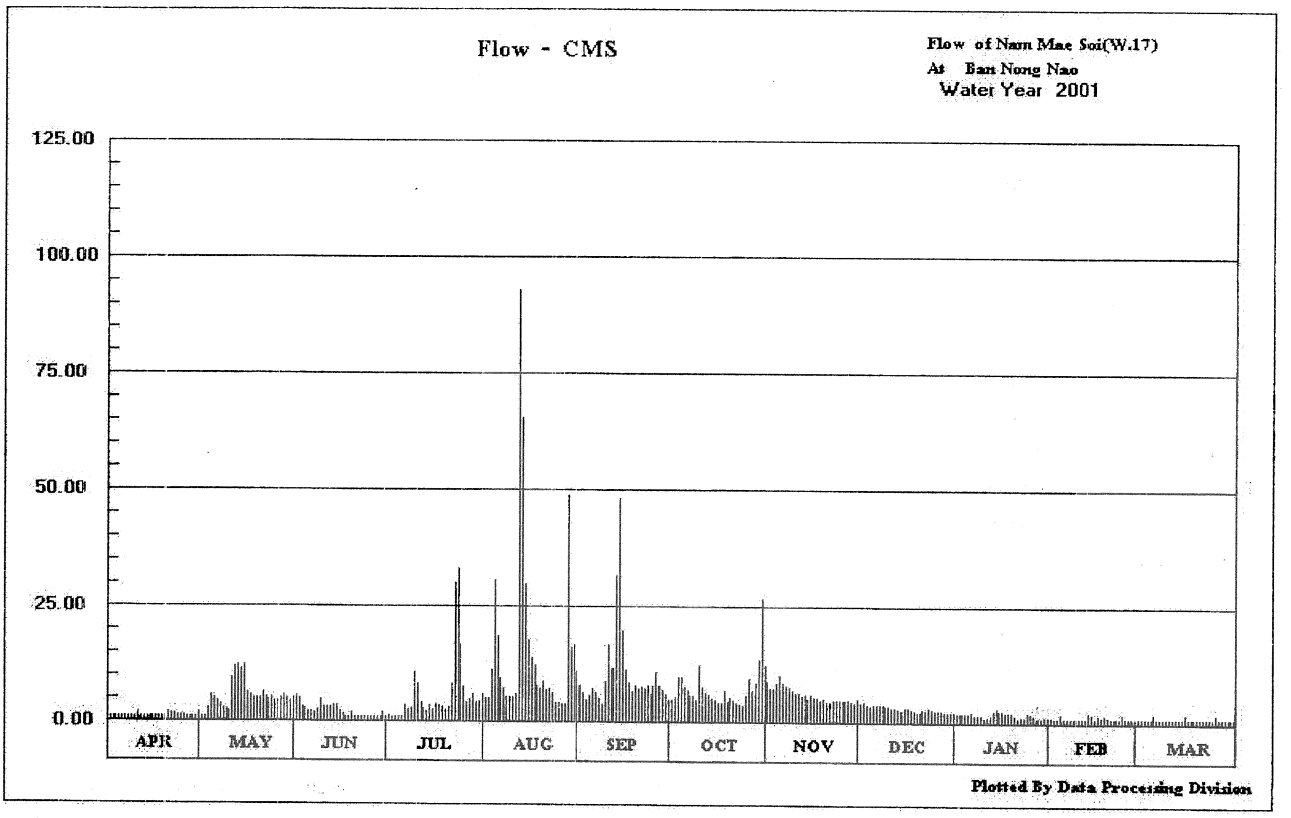
General Description Records fair. The local weir situated about 500 meters downstream from the gage site.

Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	291.55	291.49	291.90	291.60	291.87	292.03	291.85	292.07	291.81	291.66	291.60	292.32	
2	291.55	291.51	291.87	291.58	291.87	291.95	291.88	292.00	291.83	291.66	291.59	292.28	
3	291.55	291.73	291.75	291.55	292.19	291.84	292.12	292.00	291.79	291.65	291.58	292.28	
4	291.55	291.91	291.72	291.54	292.69	291.91	292.12	292.06	291.77	291.65	291.56	292.27	
5	291.56	291.87	291.69	291.55	292.44	292.00	292.01	292.13	291.78	291.64	291.58	292.26	
6	291.55	291.82	291.67	291.76	292.11	291.94	291.98	292.06	291.78	291.67	291.57	292.26	
7	291.55	291.78	291.65	291.70	291.99	291.86	291.91	292.03	291.78	291.63	291.53	292.25	
8	291.54	291.72	291.71	291.73	291.89	291.78	291.91	292.01	291.78	291.63	291.53	292.26	
9	291.53	291.70	291.85	292.16	291.88	292.08	291.84	291.97	291.77	291.63	291.50	292.26	
10	291.53	291.69	291.74	292.04	291.89	292.39	292.22	291.95	291.76	291.59	291.48	292.26	
11	291.52	292.11	291.74	291.81	291.92	292.20	292.01	291.94	291.74	291.61	291.49	292.28	
12	291.52	292.21	291.74	291.72	293.59	292.20	291.94	291.91	291.75	291.62	291.51	292.31	
13	291.55	292.22	291.76	291.67	293.26	292.71	291.92	291.92	291.73	291.70	291.68	292.23	
14	291.56	292.19	291.76	291.76	292.67	293.00	291.87	291.86	291.71	291.74	291.53	292.23	
15	291.56	292.22	291.69	291.71	292.42	292.47	291.85	291.92	291.74	291.70	291.50	292.22	
16	291.55	291.94	291.63	291.78	292.29	292.19	291.81	291.89	291.74	291.70	291.63	292.18	
17	291.54	291.90	291.59	291.77	292.23	292.06	291.81	291.89	291.72	291.69	291.61	292.20	
18	291.56	291.86	291.57	291.74	292.02	291.96	291.97	291.85	291.70	291.69	291.62	292.19	
19	291.58	291.87	291.54	291.70	291.99	292.02	291.83	291.87	291.69	291.68	291.60	292.18	
20	291.62	291.86	291.52	291.75	292.07	291.99	291.88	291.83	291.68	291.62	291.58	292.18	
21	291.62	291.94	291.50	292.04	291.98	292.01	291.85	291.83	291.72	291.59	291.58	292.18	
22	291.62	291.89	291.50	292.68	291.99	291.99	291.81	291.85	291.70	291.60	291.57	292.18	
23	291.61	291.85	291.50	292.74	291.94	292.03	291.79	291.85	291.74	291.60	291.55	292.18	
24	291.60	291.89	291.49	292.40	291.81	291.92	291.77	291.85	291.72	291.67	291.52	292.20	
25	291.60	291.82	291.52	292.01	291.80	292.02	291.91	291.85	291.71	291.66	291.48	292.20	
26	291.59	291.83	291.51	291.81	291.78	292.16	292.11	291.84	291.71	291.62	291.50	292.20	
27	291.58	291.87	291.51	291.84	291.79	292.02	291.98	291.84	291.71	291.59	291.75	292.19	
28	291.55	291.91	291.50	291.92	293.01	291.97	292.05	291.83	291.69	291.59	292.15	292.17	
29	291.53	291.87	291.50	291.81	292.37	291.92	292.27	291.81	291.69	291.59		292.17	
30	291.52	291.83	291.53	291.82	292.40	291.85	292.61	291.86	291.69	291.60		292.17	
31		291.86		291.92	292.17		292.23		291.68	291.60		292.17	
Mean	291.56	291.88	291.64	291.86	292.20	292.08	291.97	291.92	291.74	291.64	291.58	292.22	
Max	291.62	292.22	291.90	292.74	293.59	293.00	292.61	292.13	291.83	291.74	292.15	292.32	293.59
Min	291.52	291.49	291.49	291.54	291.78	291.78	291.77	291.81	291.68	291.59	291.48	292.17	291.48

Annual Max Momentary Gage Height 294.96 M (MSL), at 15.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 292.00 M (MSL), River Bed 291.03 M (MSL)
Left Bank Elevation 296.42 M (MSL)
Right Bank Elevation 296.42 M (MSL), Drainage Area 619 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.08	0.53	5.90	1.60	5.44	8.30	5.13	9.10	4.51	2.35	1.60	1.37	
2	1.08	0.67	5.44	1.39	5.44	6.80	5.59	7.70	4.81	2.35	1.50	1.29	
3	1.08	3.30	3.60	1.08	11.72	4.97	10.15	7.70	4.20	2.22	1.39	1.29	
4	1.08	6.08	3.15	0.98	31.00	6.08	10.15	8.90	3.90	2.22	1.19	1.28	
5	1.19	5.44	2.72	1.08	18.86	7.70	7.90	10.37	4.05	2.10	1.39	1.26	
6	1.08	4.66	2.48	3.75	9.92	6.62	7.34	8.90	4.05	2.48	1.29	1.26	
7	1.08	4.05	2.22	2.85	7.52	5.28	6.08	8.30	4.05	1.97	0.88	1.24	
8	0.98	3.15	3.00	3.30	5.75	4.05	6.08	7.90	4.05	1.97	0.88	1.26	
9	0.88	2.85	5.13	11.05	5.59	9.30	4.97	7.16	3.90	1.97	0.57	1.26	
10	0.88	2.72	3.45	8.50	5.75	16.84	12.45	6.80	3.75	1.50	0.49	1.26	
11	0.78	9.92	3.45	4.51	6.26	11.95	7.90	6.62	3.45	1.72	0.53	1.29	
12	0.78	12.20	3.45	3.15	93.10	11.95	6.62	6.08	3.60	1.85	0.67	1.35	
13	1.08	12.45	3.75	2.48	65.70	32.00	6.26	6.26	3.30	2.85	2.60	1.20	
14	1.19	11.72	3.75	3.75	30.00	48.50	5.44	5.28	3.00	3.45	0.88	1.20	
15	1.19	12.45	2.72	3.00	17.98	20.18	5.13	6.26	3.45	2.85	0.57	1.19	
16	1.08	6.62	1.97	4.05	14.20	11.72	4.51	5.75	3.45	2.85	1.97	1.12	
17	0.98	5.90	1.50	3.90	12.70	8.90	4.51	5.75	3.15	2.72	1.72	1.15	
18	1.19	5.28	1.29	3.45	8.10	6.98	7.16	5.13	2.85	2.72	1.85	1.13	
19	1.39	5.44	0.98	2.85	7.52	8.10	4.81	5.44	2.72	2.60	1.60	1.12	
20	1.85	5.28	0.78	3.60	9.10	7.52	5.59	4.81	2.60	1.85	1.39	1.12	
21	1.85	6.62	0.57	8.50	7.34	7.90	5.13	4.81	3.15	1.50	1.39	1.12	
22	1.85	5.75	0.57	30.50	7.52	7.52	4.51	5.13	2.85	1.60	1.29	1.12	
23	1.72	5.13	0.57	33.50	6.62	8.30	4.20	5.13	3.45	1.60	1.08	1.12	
24	1.60	5.75	0.53	17.10	4.51	6.26	3.90	5.13	3.15	2.48	0.78	1.15	
25	1.60	4.66	0.78	7.90	4.35	8.10	6.08	5.13	3.00	2.35	0.49	1.15	
26	1.50	4.81	0.67	4.51	4.05	11.05	9.92	4.97	3.00	1.85	0.57	1.15	
27	1.39	5.44	0.67	4.97	4.20	8.10	7.34	4.97	3.00	1.50	0.45	1.13	
28	1.08	6.08	0.57	6.26	49.12	7.16	8.70	4.81	2.72	1.50	1.06	1.10	
29	0.88	5.44	0.57	4.51	16.31	6.26	13.70	4.51	2.72	1.50		1.10	
30	0.78	4.81	0.88	4.66	17.10	5.13	27.00	5.28	2.72	1.60		1.10	
31		5.28		6.26	11.28		12.70		2.60	1.60		1.10	
Total	36.17	180.48	67.11	198.99	504.05	319.52	236.95	190.08	105.20	65.67	32.07	36.98	1973.27 CMSDAY
Mean	1.21	5.82	2.24	6.42	16.26	10.65	7.64	6.34	3.39	2.12	1.15	1.19	5.41 CMS
Max	1.85	12.45	5.90	33.50	93.10	48.50	27.00	10.37	4.81	3.45	2.60	1.37	93.10 CMS
Min	0.78	0.53	0.53	0.98	4.05	4.05	3.90	4.51	2.60	1.50	0.45	1.10	0.45 CMS
Runoff	3.125	15.593	5.798	17.193	43.550	27.607	20.472	16.423	9.089	5.674	2.771	3.195	170.491 MCM

Momentary Peak 285.40 CMS, at 294.96 M (MSL), at 15.00 Hours, on Aug 12, 2001
Runoff Yield 8.73 Liters/Second/Square KM, Momentary Peak Yield 461.066 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,065 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 +7.710 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 1993 to date.

Rating Operation

Period of Rating 1993 to date.

Rated by Float -

Rated by Current Meter 1993 to date.

Stability of Channel Regimes Fairly stable with variable water surface slope.

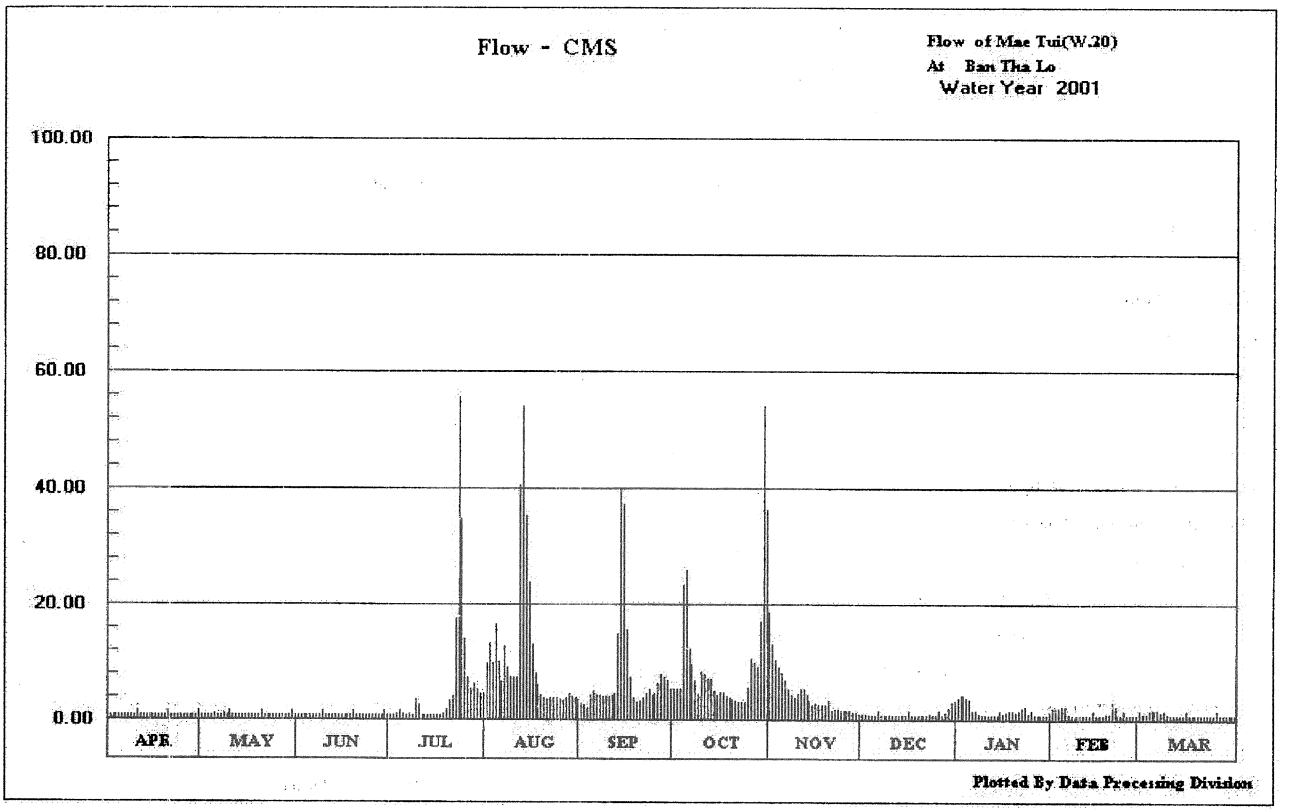
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the local weir about 200 meters downstream from the gage site. Stage-discharge relation defined by 44 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.48	0.35	0.35	0.57	1.16	0.79	0.95	1.50	0.59	0.86	0.71	0.64	
2	0.46	0.44	0.34	0.61	1.30	0.75	0.94	1.29	0.56	0.90	0.71	0.60	
3	0.47	0.44	0.31	0.68	1.16	0.71	0.95	1.18	0.55	0.89	0.70	0.60	
4	0.43	0.63	0.32	0.73	1.42	0.90	1.68	1.13	0.54	0.86	0.73	0.66	
5	0.39	0.66	0.35	0.68	1.17	0.93	1.78	1.08	0.53	0.83	0.73	0.69	
6	0.39	0.60	0.34	0.65	1.01	0.90	1.26	1.02	0.53	0.65	0.57	0.66	
7	0.40	0.56	0.34	0.67	1.28	0.89	1.15	0.94	0.52	0.64	0.46	0.69	
8	0.39	0.67	0.33	0.61	1.13	0.87	1.02	0.89	0.51	0.59	0.37	0.63	
9	0.39	0.55	0.33	0.89	1.04	0.87	0.91	0.85	0.49	0.49	0.34	0.64	
10	0.38	0.49	0.33	0.82	1.05	0.87	1.10	0.91	0.47	0.39	0.32	0.59	
11	0.40	0.46	0.33	0.55	1.04	0.90	1.07	0.95	0.45	0.34	0.30	0.49	
12	0.39	0.45	0.33	0.46	2.27	0.91	1.03	0.95	0.45	0.39	0.30	0.42	
13	0.39	0.44	0.33	0.40	2.69	1.36	1.03	0.90	0.44	0.43	0.32	0.39	
14	0.40	0.44	0.33	0.38	2.09	2.25	0.93	0.82	0.43	0.42	0.40	0.34	
15	0.40	0.44	0.32	0.35	1.70	2.16	0.90	0.76	0.43	0.41	0.41	0.30	
16	0.40	0.43	0.31	0.35	1.29	1.39	0.92	0.79	0.38	0.60	0.44	0.29	
17	0.39	0.43	0.31	0.39	1.08	1.05	0.92	0.76	0.35	0.62	0.41	0.28	
18	0.39	0.54	0.31	0.59	0.98	0.86	0.87	0.76	0.35	0.64	0.59	0.29	
19	0.39	0.52	0.31	0.69	0.89	0.80	0.85	0.76	0.35	0.64	0.59	0.28	
20	0.38	0.49	0.31	0.82	0.86	0.82	0.83	0.82	0.35	0.63	0.80	0.27	
21	0.38	0.43	0.30	0.88	0.84	0.86	0.82	0.66	0.34	0.66	0.73	0.27	
22	0.37	0.42	0.30	1.46	0.85	0.91	0.80	0.68	0.31	0.71	0.54	0.25	
23	0.37	0.40	0.30	2.74	0.85	0.94	0.80	0.68	0.56	0.73	0.42	0.19	
24	0.37	0.40	0.30	2.08	0.85	0.90	0.81	0.65	0.49	0.56	0.34	0.36	
25	0.37	0.40	0.31	1.33	0.83	0.91	0.96	0.65	0.49	0.48	0.29	0.41	
26	0.36	0.39	0.31	1.05	0.82	1.00	1.19	0.65	0.50	0.39	0.29	0.34	
27	0.36	0.39	0.30	0.94	0.86	1.07	1.16	0.64	0.51	0.35	0.50	0.35	
28	0.36	0.39	0.30	0.99	0.91	1.04	1.13	0.62	0.62	0.34	0.53	0.32	
29	0.36	0.37	0.30	0.94	0.88	1.02	1.44	0.61	0.72	0.50		0.29	
30	0.36	0.36	0.49	0.91	0.86	0.95	2.69	0.60	0.80	0.53		0.27	
31		0.35		0.91	0.84		2.13		0.82	0.62		0.25	
Mean	0.39	0.46	0.32	0.84	1.16	1.02	1.13	0.85	0.50	0.58	0.49	0.42	
Max	0.48	0.67	0.49	2.74	2.69	2.25	2.69	1.50	0.82	0.90	0.80	0.69	2.74
Min	0.36	0.35	0.30	0.35	0.82	0.71	0.80	0.60	0.31	0.34	0.29	0.19	0.19

Annual Max Momentary Gage Height 3.00 M (A.D), at 15.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.21 M (A.D)
Left Bank Elevation 7.93 M (A.D)
Right Bank Elevation 7.93 M (A.D), Drainage Area 1065 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.42	0.15	0.15	0.76	10.08	3.19	5.70	18.80	1.39	4.14	2.34	1.76	
2	0.37	0.33	0.14	0.94	13.60	2.77	5.50	13.34	1.21	4.70	2.34	1.45	
3	0.40	0.33	0.09	1.34	10.08	2.34	5.70	10.54	1.15	4.56	2.23	1.45	
4	0.30	1.05	0.11	1.74	16.72	4.70	23.64	9.39	1.09	4.14	2.55	1.92	
5	0.21	1.23	0.15	1.34	10.31	5.30	26.44	8.30	1.03	3.72	2.55	2.15	
6	0.21	0.88	0.14	1.17	6.90	4.70	12.56	7.10	1.03	1.84	1.27	1.92	
7	0.23	0.72	0.14	1.29	13.08	4.56	9.85	5.50	0.97	1.76	0.68	2.15	
8	0.21	1.29	0.13	0.94	9.39	4.28	7.10	4.56	0.91	1.39	0.35	1.68	
9	0.21	0.68	0.13	3.78	7.50	4.28	4.90	4.00	0.81	0.81	0.26	1.76	
10	0.20	0.45	0.13	2.71	7.70	4.28	8.70	4.90	0.72	0.40	0.21	1.39	
11	0.23	0.37	0.13	0.68	7.50	4.70	8.10	5.70	0.64	0.26	0.15	0.81	
12	0.21	0.35	0.13	0.37	40.90	4.90	7.30	5.70	0.64	0.40	0.15	0.51	
13	0.21	0.33	0.13	0.23	54.28	15.16	7.30	4.70	0.60	0.56	0.21	0.40	
14	0.23	0.33	0.13	0.20	35.50	40.30	5.30	3.58	0.56	0.51	0.43	0.26	
15	0.23	0.33	0.11	0.15	24.20	37.60	4.70	2.87	0.56	0.47	0.47	0.15	
16	0.23	0.30	0.09	0.15	13.34	15.94	5.10	3.19	0.37	1.45	0.60	0.14	
17	0.21	0.30	0.09	0.40	8.30	7.70	5.10	2.87	0.29	1.61	0.47	0.13	
18	0.21	0.63	0.09	1.39	6.30	4.14	4.28	2.87	0.29	1.76	1.39	0.14	
19	0.21	0.55	0.09	2.15	4.56	3.30	4.00	2.87	0.29	1.76	1.39	0.13	
20	0.20	0.45	0.09	3.58	4.14	3.58	3.72	3.58	0.29	1.68	3.30	0.11	
21	0.20	0.30	0.08	4.42	3.86	4.14	3.58	1.92	0.26	1.92	2.55	0.11	
22	0.19	0.28	0.08	17.76	4.00	4.90	3.30	2.07	0.18	2.34	1.09	0.09	
23	0.19	0.23	0.08	55.88	4.00	5.50	3.30	2.07	1.21	2.55	0.51	0.03	
24	0.19	0.23	0.08	35.20	4.00	4.70	3.44	1.84	0.81	1.21	0.26	0.32	
25	0.19	0.23	0.09	14.38	3.72	4.90	5.90	1.84	0.81	0.77	0.14	0.47	
26	0.17	0.21	0.09	7.70	3.58	6.70	10.77	1.84	0.85	0.40	0.14	0.26	
27	0.17	0.21	0.08	5.50	4.14	8.10	10.08	1.76	0.91	0.29	0.85	0.29	
28	0.17	0.21	0.08	6.50	4.90	7.50	9.39	1.61	1.61	0.26	1.03	0.21	
29	0.17	0.19	0.08	5.50	4.42	7.10	17.24	1.53	2.44	0.85		0.14	
30	0.17	0.17	0.45	4.90	4.14	5.70	54.28	1.45	3.30	1.03		0.11	
31		0.15		4.90	3.86		36.70		3.58	1.61		0.09	
Total	6.74	13.46	3.58	187.95	349.00	236.96	322.97	142.29	30.80	51.15	29.91	22.53	1397.34 CMSDAY
Mean	0.22	0.43	0.12	6.06	11.26	7.90	10.42	4.74	0.99	1.65	1.07	0.73	3.83 CMS
Max	0.42	1.29	0.45	55.88	54.28	40.30	54.28	18.80	3.58	4.70	3.30	2.15	55.88 CMS
Min	0.17	0.15	0.08	0.15	3.58	2.34	3.30	1.45	0.18	0.26	0.14	0.03	0.03 CMS
Runoff	0.582	1.163	0.309	16.239	30.154	20.473	27.905	12.294	2.661	4.419	2.584	1.947	120.730 MCM

Momentary Peak 64.40 CMS, at 3.00 H (A.D), at 15.00 Hours, on Oct 30, 2001
Runoff Yield 3.59 Liters/Second/Square KM, Momentary Peak Yield 60.469 Liters/Second/Square KM

WATER YEAR : 2001

WANG RIVER BASIN

Wang River at Ban Tha Dua, Lampang (W.21)

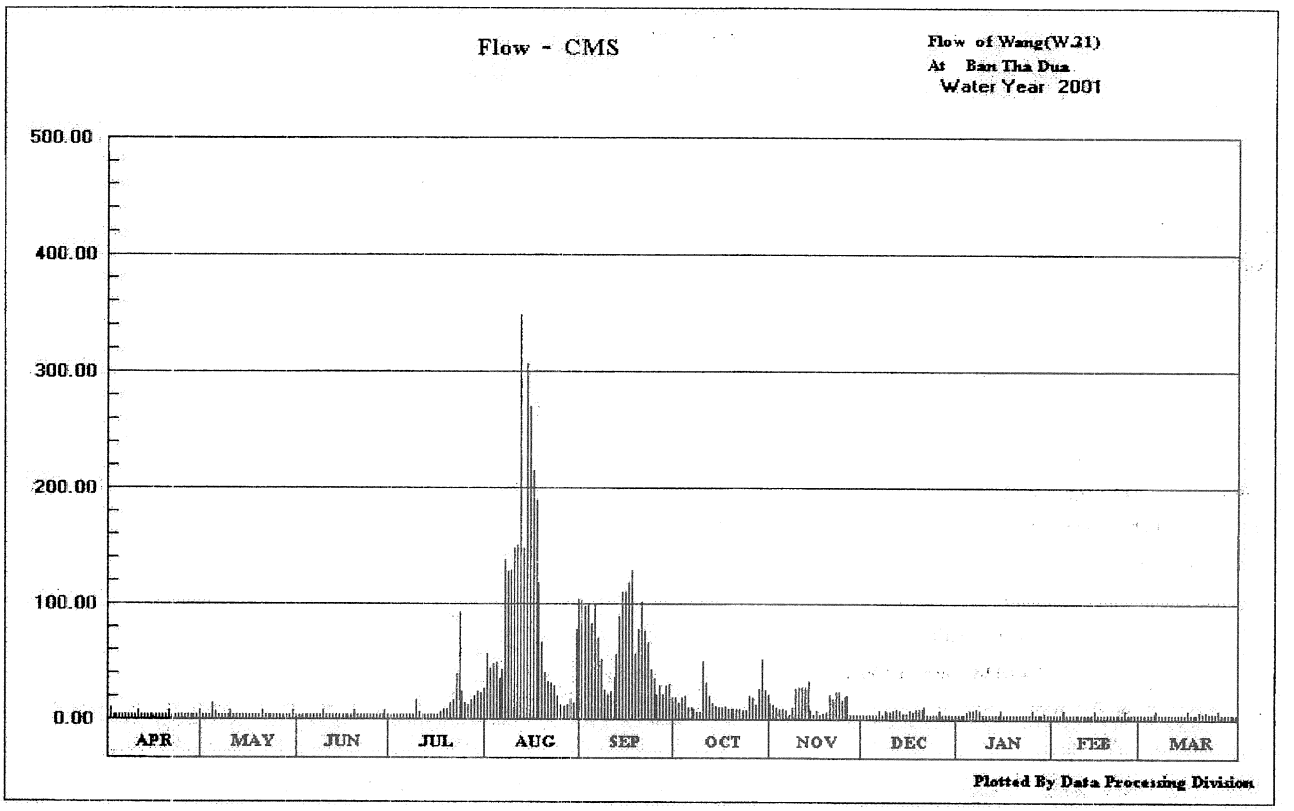
Lat 18 -20 - 18 N. **Long** 99 - 32 - 27 E.

Location		on left bank at the bridge on highway.
	Ban Tha Dua	**Amphoe** Mueang **Changwat** Lampang
Drainage Area		3,415 sq. km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+232.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank about 5.00 meters from the top staff gage.
	Elevation	+236.495 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		1999 to date.
Rating Operation		
	Period of Rating	1999 to date.
	Rated by Float	-
	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 46 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	232.57	232.31	232.18	232.31	233.67	234.47	232.72	232.58	232.17	232.14	232.05	232.07	
2	232.32	232.32	232.23	232.34	233.40	234.41	232.56	232.51	232.17	232.14	232.16	232.10	
3	232.25	232.37	232.20	232.34	233.49	234.42	232.72	232.45	232.17	232.14	232.17	232.13	
4	232.23	232.63	232.20	232.32	233.52	234.16	232.73	232.40	232.11	232.32	232.19	232.14	
5	232.20	232.44	232.21	232.32	233.17	234.42	232.45	232.42	232.09	232.37	232.12	232.28	
6	232.19	232.31	232.20	232.33	233.36	233.95	232.45	232.30	232.10	232.37	232.02	232.17	
7	232.18	232.29	232.18	232.34	234.98	233.56	232.38	232.23	232.11	232.38	231.97	232.14	
8	232.18	232.29	232.15	232.37	234.84	232.88	232.29	232.44	232.36	232.35	232.09	232.13	
9	232.18	232.28	232.15	232.67	234.87	232.79	232.31	232.91	232.33	232.08	231.96	232.13	
10	232.17	232.34	232.15	232.44	235.12	232.85	233.53	232.95	232.29	232.05	232.20	232.10	
11	232.17	232.26	232.17	232.33	235.15	233.19	233.06	232.95	232.37	232.00	232.20	232.05	
12	232.17	232.24	232.23	232.24	237.43	233.64	232.76	232.95	232.39	231.96	232.13	231.99	
13	232.20	232.21	232.18	232.23	235.13	234.27	232.57	233.11	232.34	232.04	232.19	231.96	
14	232.26	232.21	232.16	232.26	236.99	234.59	232.50	232.35	232.26	231.96	232.21	232.00	
15	232.29	232.22	232.14	232.23	236.59	234.60	232.43	232.23	232.24	232.00	232.21	231.93	
16	232.27	232.21	232.14	232.23	235.97	234.71	232.45	232.15	232.30	232.19	232.18	231.98	
17	232.31	232.20	232.14	232.29	235.65	234.86	232.49	232.13	232.30	232.20	232.13	232.22	
18	232.35	232.37	232.24	232.41	234.70	233.67	232.42	232.26	232.39	232.12	232.15	232.22	
19	232.21	232.33	232.25	232.41	233.88	234.08	232.39	232.31	232.39	232.09	232.16	232.22	
20	232.19	232.24	232.24	232.57	233.30	234.46	232.39	232.78	232.39	232.11	232.18	232.29	
21	232.18	232.21	232.19	232.65	233.11	234.05	232.38	232.68	232.50	232.10	232.13	232.28	
22	232.19	232.19	232.19	233.26	233.08	233.88	232.38	232.85	232.15	232.15	232.05	232.29	
23	232.19	232.25	232.19	234.32	232.99	233.35	232.35	232.85	232.10	232.16	232.05	232.27	
24	232.19	232.26	232.19	232.86	232.73	233.16	232.36	232.65	232.07	232.16	232.04	232.27	
25	232.18	232.22	232.20	232.56	232.52	232.80	232.75	232.75	232.12	232.20	232.07	232.26	
26	232.16	232.25	232.20	232.53	232.49	232.98	232.70	232.75	232.05	232.18	231.93	232.24	
27	232.20	232.20	232.27	232.63	232.53	232.79	232.51	232.20	232.02	232.17	231.91	232.20	
28	232.21	232.20	232.28	232.75	232.69	232.98	232.91	232.18	232.10	232.17	232.04	232.20	
29	232.22	232.21	232.27	232.84	232.56	233.02	233.56	232.20	232.11	232.26		232.20	
30	232.22	232.21	232.29	232.82	234.07	232.72	232.90	232.18	232.11	232.14		232.20	
31		232.19		232.94	234.50		232.80		232.14	232.05		232.20	
Mean	232.23	232.27	232.20	232.55	234.14	233.72	232.62	232.52	232.22	232.15	232.10	232.16	
Max	232.57	232.63	232.29	234.32	237.43	234.86	233.56	233.11	232.50	232.38	232.21	232.29	237.43
Min	232.16	232.19	232.14	232.23	232.49	232.72	232.29	232.13	232.02	231.96	231.91	231.93	231.91

Annual Max Momentary Gage Height 237.80 M (MSL), at 12.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 232.00 M (MSL), River Bed 231.03 M (MSL)
Left Bank Elevation 239.82 M (MSL)
Right Bank Elevation 240.71 M (MSL), Drainage Area 3415 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.24	3.77	0.72	3.77	58.00	103.55	20.70	15.86	4.41	3.72	2.28	2.49	
2	4.04	4.04	1.61	4.58	46.00	99.65	15.22	13.62	4.41	3.72	4.18	2.80	
3	2.15	5.39	0.80	4.58	49.60	100.30	20.70	11.85	4.41	3.72	4.41	3.49	
4	1.61	15.45	0.80	4.04	50.90	84.10	21.05	10.40	3.03	8.16	4.87	3.72	
5	0.80	7.44	1.07	4.04	36.80	100.30	11.85	10.98	2.69	9.56	3.26	7.10	
6	0.76	3.77	0.80	4.31	44.40	72.25	11.85	7.60	2.80	9.56	1.96	4.41	
7	0.72	3.23	0.72	4.58	138.60	52.70	9.84	5.85	3.03	9.84	1.53	3.72	
8	0.72	3.23	0.60	5.39	128.80	26.30	7.35	11.56	9.28	9.00	2.69	3.49	
9	0.72	2.96	0.60	18.05	130.90	23.15	7.88	27.35	8.44	2.59	1.45	3.49	
10	0.68	4.58	0.60	7.44	149.00	25.25	51.35	28.75	7.35	2.28	5.10	2.80	
11	0.68	2.42	0.68	4.31	151.25	37.60	32.60	28.75	9.56	1.75	5.10	2.28	
12	0.68	1.88	1.61	1.88	348.85	56.50	22.10	28.75	10.12	1.45	3.49	1.68	
13	0.80	1.07	0.72	1.61	149.75	90.70	15.54	34.40	8.72	2.17	4.87	1.45	
14	2.42	1.07	0.64	2.42	307.60	111.35	13.30	9.00	6.60	1.45	5.35	1.75	
15	3.23	1.34	0.56	1.61	271.60	112.00	11.27	5.85	6.10	1.75	5.35	1.22	
16	2.69	1.07	0.56	1.61	216.95	119.70	11.85	3.95	7.60	4.87	4.64	1.60	
17	3.77	0.80	0.56	7.35	190.50	130.20	13.01	3.49	7.60	5.10	3.49	5.60	
18	4.85	5.39	1.88	10.69	119.00	58.00	10.98	6.60	10.12	3.26	3.95	5.60	
19	1.07	4.31	2.15	10.69	68.50	79.40	10.12	7.88	10.12	2.69	4.18	5.60	
20	0.76	1.88	1.88	15.54	42.00	102.90	10.12	22.80	10.12	3.03	4.64	7.35	
21	0.72	1.07	0.76	18.25	34.40	77.75	9.84	19.30	13.30	2.80	3.49	7.10	
22	0.76	0.76	0.76	40.40	33.30	68.50	9.84	25.25	3.95	3.95	2.28	7.35	
23	0.76	2.15	0.76	93.80	30.15	44.00	9.00	25.25	2.80	4.18	2.28	6.85	
24	0.76	2.42	0.76	25.60	21.05	36.40	9.28	18.25	2.49	4.18	2.17	6.85	
25	0.72	1.34	0.80	15.22	13.94	23.50	21.75	21.75	3.26	5.10	2.49	6.60	
26	0.64	2.15	0.80	14.26	13.01	29.80	20.00	21.75	2.28	4.64	1.22	6.10	
27	0.80	0.80	2.69	17.55	14.26	23.15	13.62	5.10	1.96	4.41	1.08	5.10	
28	1.07	0.80	2.96	21.75	19.65	29.80	27.35	4.64	2.80	4.41	2.17	5.10	
29	1.34	1.07	2.69	24.90	15.22	31.20	52.70	5.10	3.03	6.60		5.10	
30	1.34	1.07	3.23	24.20	78.85	20.70	27.00	4.64	3.03	3.72		5.10	
31		0.76		28.40	105.50		23.50		3.72	2.28		5.10	
Total	54.30	89.48	35.77	442.82	3078.33	1970.70	552.56	446.32	179.13	135.94	93.97	137.99	7217.31 CMSDAY
Mean	1.81	2.89	1.19	14.28	99.30	65.69	17.82	14.88	5.78	4.39	3.36	4.45	19.77 CMS
Max	12.24	15.45	3.23	93.80	348.85	130.20	52.70	34.40	13.30	9.84	5.35	7.35	348.85 CMS
Min	0.64	0.76	0.56	1.61	13.01	20.70	7.35	3.49	1.96	1.45	1.08	1.22	0.56 CMS
Runoff	4.692	7.731	3.091	38.260	265.968	170.268	47.741	38.562	15.477	11.745	8.119	11.922	623.576 MCM

Momentary Peak 384.00 CMS, at 237.80 M (MSL), at 12.00 Hours, on Aug 12, 2001

Runoff Yield 5.79 Liters/Second/Square KM, Momentary Peak Yield = 112.445 Liters/Second/Square KM

WATER YEAR : 2001

WANG RIVER BASIN

Nam Mae Chang at Ban Wang Phrao, Lampang (W.22)

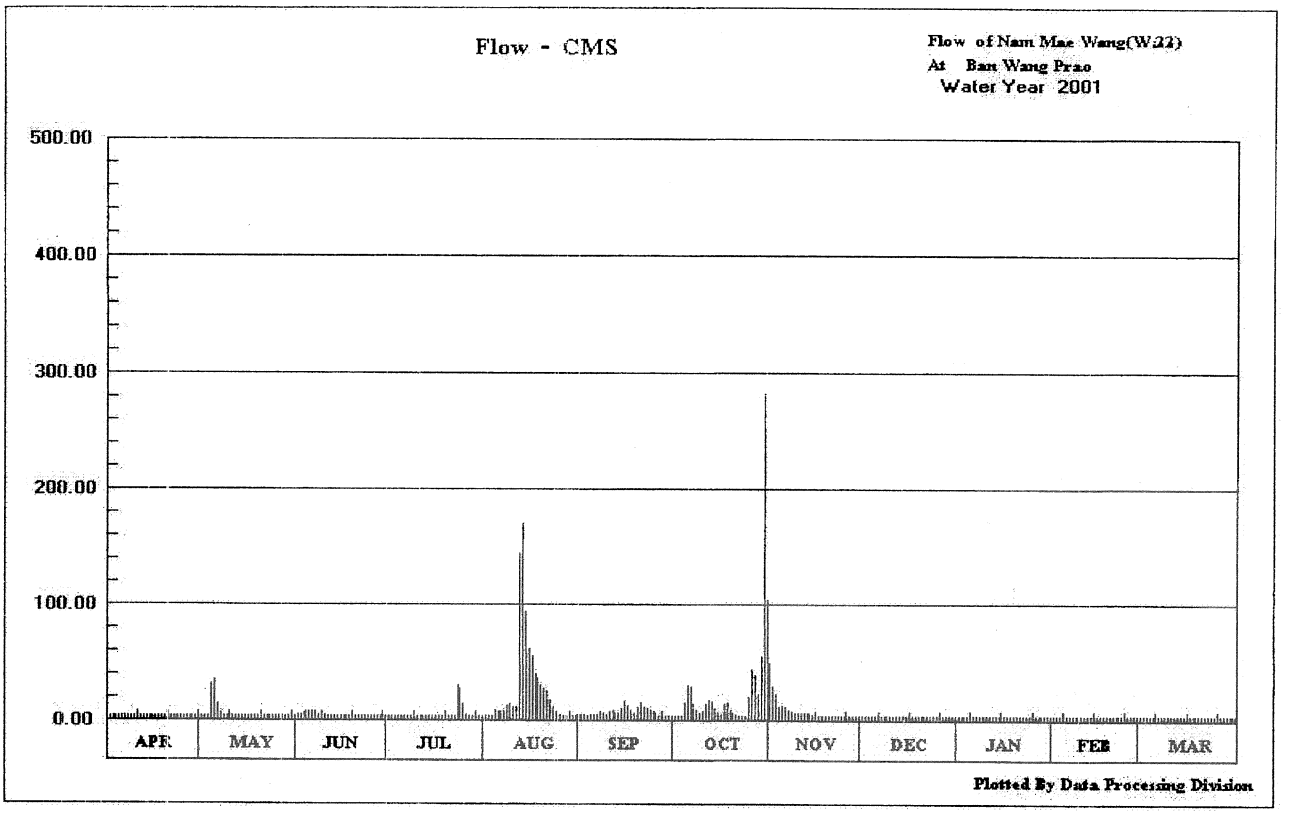
Lat 18 - 08 - 35 N. **Long** 99 - 24 - 48 E.

Location		on left bank at the bridge.
	Ban Wang Phrao	**Amphoe** Ko Kha **Changwat** Lampang
Drainage Area		1,586 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 approach of the bridge.
	Elevation	+6.065 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 Float	-
	Rated by Current Meter	2001 to date.
Stability of Channel Regimes		Fairy stable by some scouring.
Overbank Flow Conditions		Overbank flow starts at elevation +5.210 m.(A.D.), records are channel flow only.
General Description		Records good. Stage-discharge relation defined by 51 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.75	0.69	1.18	0.75	1.01	0.95	0.83	2.26	0.78	0.57	0.41	0.41	
2	0.77	0.69	1.14	0.62	1.01	0.93	0.86	1.83	0.79	0.54	0.46	0.38	
3	0.77	0.68	1.23	0.64	1.13	0.92	0.90	1.65	0.79	0.50	0.49	0.36	
4	0.71	2.17	1.29	0.72	1.38	0.94	1.43	1.30	0.79	0.48	0.46	0.36	
5	0.69	2.29	1.33	0.71	1.33	0.97	1.88	1.35	0.77	0.48	0.43	0.35	
6	0.69	1.55	1.29	0.94	1.29	0.99	1.84	1.26	0.76	0.48	0.42	0.35	
7	0.69	1.23	1.30	0.93	1.31	1.07	1.39	1.17	0.75	0.48	0.44	0.35	
8	0.69	1.13	1.21	0.81	1.53	1.04	1.17	1.07	0.75	0.48	0.45	0.35	
9	0.69	1.04	1.14	0.74	1.56	0.98	1.06	1.02	0.76	0.48	0.44	0.35	
10	0.69	0.99	1.14	0.74	1.46	1.11	1.11	1.00	0.68	0.48	0.44	0.36	
11	0.69	0.96	1.13	0.69	1.47	1.14	1.40	1.02	0.67	0.52	0.43	0.35	
12	0.68	0.94	1.07	0.68	4.00	1.04	1.50	1.00	0.66	0.53	0.42	0.36	
13	0.69	0.95	1.06	0.66	4.28	1.00	1.48	1.00	0.66	0.54	0.42	0.42	
14	0.69	1.00	1.01	0.61	3.02	1.22	1.21	1.06	0.67	0.53	0.42	0.43	
15	0.75	1.00	0.92	0.57	2.51	1.49	1.03	0.98	0.67	0.50	0.43	0.43	
16	0.78	0.98	0.86	0.54	2.39	1.33	0.97	0.93	0.72	0.51	0.43	0.44	
17	0.71	0.98	0.81	0.53	2.10	1.15	1.37	0.85	0.70	0.51	0.43	0.43	
18	0.69	1.00	0.74	0.53	2.00	1.00	1.43	0.80	0.70	0.49	0.42	0.43	
19	0.68	0.97	0.78	0.53	1.87	1.28	1.18	0.82	0.67	0.49	0.42	0.43	
20	0.68	0.95	0.81	0.53	1.80	1.42	1.04	0.82	0.66	0.49	0.42	0.44	
21	0.68	0.95	0.82	0.57	1.73	1.25	0.94	0.82	0.65	0.49	0.43	0.43	
22	0.69	0.91	0.87	0.78	1.51	1.19	0.88	0.80	0.67	0.48	0.43	0.43	
23	0.69	0.89	0.79	2.15	1.30	1.14	0.82	0.80	0.66	0.49	0.43	0.43	
24	0.69	0.91	0.79	2.04	1.12	1.07	0.87	0.79	0.66	0.48	0.43	0.39	
25	0.69	0.94	0.79	1.56	0.94	1.00	1.59	0.79	0.64	0.47	0.42	0.39	
26	0.69	0.91	0.85	1.20	0.85	0.90	2.17	0.79	0.63	0.48	0.42	0.39	
27	0.69	0.94	0.83	1.00	0.81	0.88	2.06	0.80	0.60	0.49	0.42	0.39	
28	0.69	1.09	0.81	0.91	0.86	0.88	1.67	0.79	0.58	0.42	0.42	0.39	
29	0.69	1.10	0.85	0.87	0.92	0.86	2.40	0.79	0.54	0.40		0.39	
30	0.69	1.07	0.91	0.85	0.91	0.84	4.90	0.79	0.53	0.41		0.39	
31		1.08		0.87	0.96		3.14		0.57	0.41		0.39	
Mean	0.70	1.06	0.99	0.85	1.62	1.07	1.50	1.04	0.68	0.49	0.43	0.39	
Max	0.78	2.29	1.33	2.15	4.28	1.49	4.90	2.26	0.79	0.57	0.49	0.44	4.90
Min	0.68	0.68	0.74	0.53	0.81	0.84	0.82	0.79	0.53	0.40	0.41	0.35	0.35

Annual Max Momentary Gage Height 5.46 M (A.D), at 12.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.71 M (A.D)
Left Bank Elevation 5.20 M (A.D)
Right Bank Elevation 5.83 M (A.D), Drainage Area 1586 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.10	0.61	6.72	1.10	4.09	6.48	4.55	50.00	3.83	1.26	0.15	0.15	
2	1.28	0.61	6.06	0.29	4.09	6.13	5.00	30.34	3.97	0.96	0.38	0.09	
3	1.28	0.56	7.65	0.38	5.89	5.95	5.60	23.90	3.97	0.57	0.52	0.08	
4	0.74	32.60	8.85	0.83	10.89	6.30	16.56	13.40	3.97	0.48	0.38	0.08	
5	0.61	36.65	9.74	0.74	9.74	6.83	32.24	14.50	3.69	0.48	0.24	0.08	
6	0.61	15.20	8.85	3.20	8.85	7.18	30.72	12.54	3.56	0.48	0.19	0.08	
7	0.61	7.65	9.05	3.08	9.28	8.68	15.38	10.65	3.43	0.48	0.29	0.08	
8	0.61	5.89	7.25	1.66	14.68	8.11	10.65	8.68	3.43	0.48	0.33	0.08	
9	0.61	4.53	6.06	1.01	15.46	7.00	8.49	7.73	3.56	0.48	0.29	0.08	
10	0.61	3.83	6.06	1.01	12.88	9.45	9.45	7.35	2.51	0.48	0.29	0.08	
11	0.61	3.45	5.89	0.61	13.14	10.05	15.60	7.73	2.39	0.77	0.24	0.08	
12	0.56	3.20	4.97	0.56	145.00	8.11	18.80	7.35	2.27	0.86	0.19	0.08	
13	0.61	3.33	4.82	0.47	172.00	7.35	18.16	7.35	2.27	0.96	0.19	0.19	
14	0.61	3.95	4.09	0.24	96.00	11.68	11.47	8.49	2.39	0.86	0.19	0.24	
15	1.10	3.95	2.95	0.14	63.10	18.48	7.92	7.00	2.39	0.57	0.24	0.24	
16	1.37	3.70	2.24	0.08	56.50	14.06	6.83	6.13	3.02	0.67	0.24	0.29	
17	0.74	3.70	1.66	0.06	42.00	10.25	14.94	4.85	2.75	0.67	0.24	0.24	
18	0.61	3.95	1.01	0.06	37.50	7.35	16.56	4.10	2.75	0.52	0.19	0.24	
19	0.56	3.58	1.37	0.06	31.86	12.97	10.85	4.40	2.39	0.52	0.19	0.24	
20	0.56	3.33	1.66	0.06	29.20	16.24	8.11	4.40	2.27	0.52	0.19	0.29	
21	0.56	3.33	1.78	0.14	26.68	12.32	6.30	4.40	2.15	0.52	0.24	0.24	
22	0.61	2.83	2.36	1.37	19.14	11.05	5.30	4.10	2.39	0.48	0.24	0.24	
23	0.61	2.59	1.46	32.00	13.40	10.05	4.40	4.10	2.27	0.52	0.24	0.24	
24	0.61	2.83	1.46	28.70	9.65	8.68	5.15	3.97	2.27	0.48	0.24	0.09	
25	0.61	3.20	1.46	15.46	6.30	7.35	21.86	3.97	2.03	0.43	0.19	0.09	
26	0.61	2.83	2.13	7.05	4.85	5.60	45.50	3.97	1.91	0.48	0.19	0.09	
27	0.61	3.20	1.89	3.95	4.25	5.30	40.20	4.10	1.55	0.52	0.19	0.09	
28	0.61	5.26	1.66	2.83	5.00	5.30	24.58	3.97	1.35	0.19	0.19	0.09	
29	0.61	5.40	2.13	2.36	5.95	5.00	57.00	3.97	0.96	0.10		0.09	
30	0.61	4.97	2.83	2.13	5.78	4.70	284.00	3.97	0.86	0.15		0.09	
31		5.11		2.36	6.65		105.00		1.26	0.15		0.09	
Total	21.44	185.82	126.11	113.99	889.80	264.00	867.17	281.41	79.81	17.09	6.88	4.45	2857.97 CMSDAY
Mean	0.71	5.99	4.20	3.68	28.70	8.80	27.97	9.38	2.57	0.55	0.25	0.14	7.83 CMS
Max	1.37	36.65	9.74	32.00	172.00	18.48	284.00	50.00	3.97	1.26	0.52	0.29	284.00 CMS
Min	0.56	0.56	1.01	0.06	4.09	4.70	4.40	3.97	0.86	0.10	0.15	0.08	0.06 CMS
Runoff	1.852	16.055	10.896	9.849	76.879	22.810	74.923	24.314	6.896	1.477	0.594	0.384	246.929 MCM

Momentary Peak 398.40 CMS, at 5.46 M (A.D), at 12.00 Hours, on Oct 30, 2001
Runoff Yield 4.94 Liters/Second/Square KM, Momentary Peak Yield 251.198 Liters/Second/Square KM

WATER YEAR : 2001

WANG RIVER BASIN

Wang River at Sam Ngao, Tak (W.23)

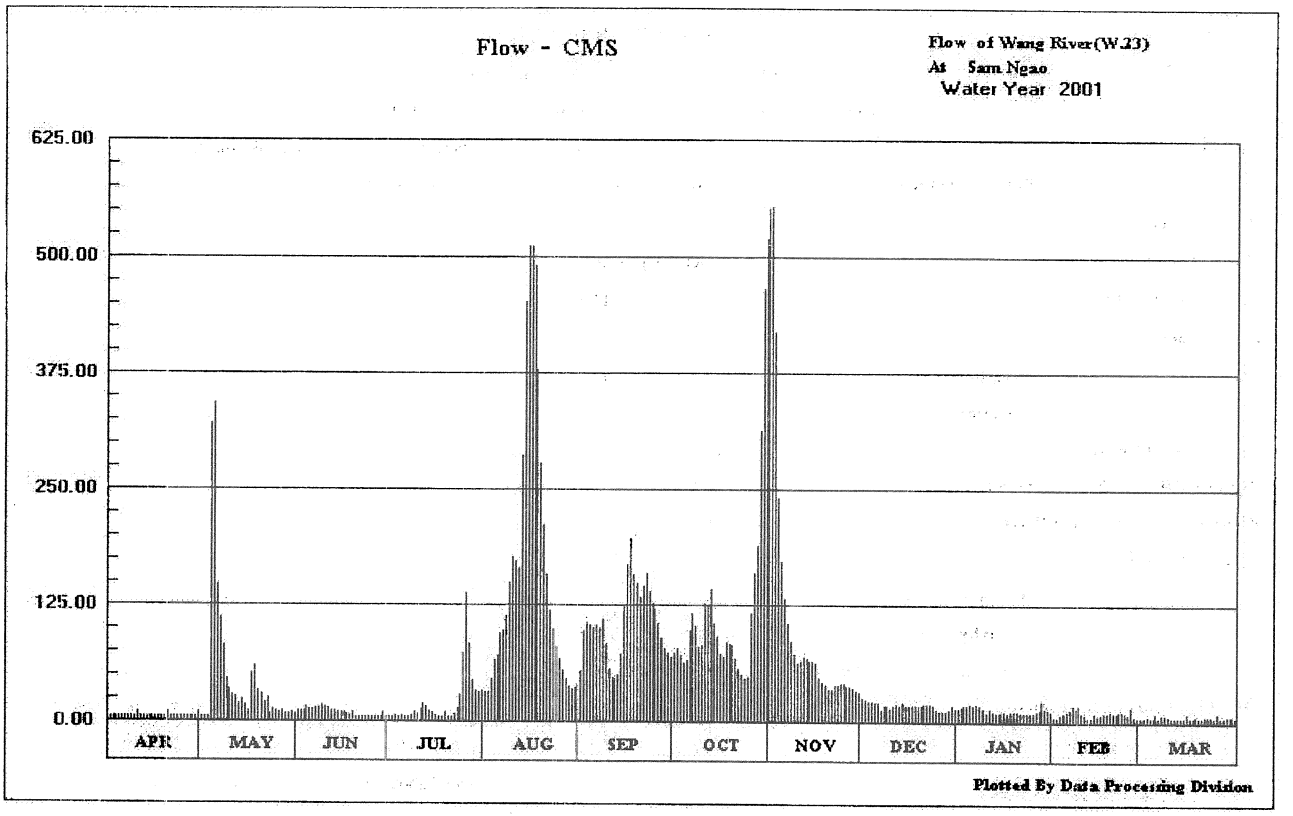
Lat 17 - 22 - 01 N. **Long** 99 - 06 - 55 E.

Location		on right bank about 200 meters upstream from the bridge on highway.
	Ban -	**Amphoe** Sam Ngao **Changwat** Tak
Drainage Area		9,930 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+0.000 m. (A.D.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank near the gage site.
	Elevation	+7.687 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		2001 to date.
Rating Operation		
	Period of Rating	2001 to date.
	Rated by Float	-
	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 31 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.46	0.26	0.74	0.45	1.32	1.81	2.22	7.15	1.17	0.88	0.53	0.49	
2	0.45	0.20	0.79	0.54	1.33	2.61	2.30	7.16	1.13	0.92	0.39	0.49	
3	0.44	0.21	0.78	0.57	1.64	2.78	2.16	6.12	1.10	0.95	0.61	0.55	
4	0.44	5.26	0.90	0.54	2.07	2.73	2.00	4.46	1.08	0.97	0.62	0.50	
5	0.44	5.45	0.83	0.56	2.17	2.68	2.07	3.69	1.05	0.99	0.74	0.36	
6	0.44	3.36	0.83	0.53	2.59	2.73	2.62	3.14	1.03	0.94	0.82	0.28	
7	0.44	2.85	0.86	0.52	2.63	2.69	2.91	2.75	0.81	1.01	0.94	0.52	
8	0.43	2.38	0.88	0.55	2.87	2.82	2.70	2.46	0.94	0.96	0.84	0.64	
9	0.43	1.65	0.96	0.57	3.39	2.39	2.33	2.19	0.95	0.84	0.93	0.61	
10	0.42	1.40	0.89	0.64	3.75	1.90	2.36	2.01	0.87	0.70	0.69	0.58	
11	0.41	1.24	0.85	0.82	3.69	1.69	3.08	2.03	0.94	0.84	0.64	0.54	
12	0.41	1.23	0.78	0.98	3.59	1.67	3.04	2.15	0.99	0.73	0.39	0.54	
13	0.40	1.01	0.74	0.89	4.92	1.76	3.30	2.10	0.96	0.69	0.32	0.52	
14	0.39	1.14	0.70	0.78	6.38	2.20	2.75	2.04	1.02	0.70	0.59	0.48	
15	0.38	0.94	0.70	0.69	6.84	3.06	2.53	2.04	0.97	0.72	0.60	0.53	
16	0.38	0.79	0.68	0.58	6.84	3.65	2.21	2.00	0.96	0.74	0.65	0.47	
17	0.38	1.78	0.63	0.52	6.68	3.99	2.15	1.70	0.93	0.72	0.72	0.45	
18	0.39	1.94	0.58	0.45	5.78	3.51	2.43	1.59	0.97	0.78	0.68	0.45	
19	0.39	1.39	0.54	0.39	4.84	3.40	2.40	1.50	0.95	0.77	0.74	0.55	
20	0.40	1.28	0.49	0.40	4.15	3.16	2.36	1.40	0.94	0.77	0.69	0.46	
21	0.39	1.06	0.46	0.45	3.52	3.34	2.11	1.40	0.98	0.71	0.72	0.46	
22	0.39	1.17	0.45	0.63	2.96	3.53	1.90	1.51	0.98	0.69	0.73	0.58	
23	0.37	0.61	0.46	0.85	2.65	3.26	1.76	1.53	1.00	0.67	0.75	0.60	
24	0.35	0.80	0.48	1.26	2.33	3.07	1.65	1.55	0.95	0.67	0.68	0.56	
25	0.35	0.75	0.46	2.22	2.11	3.00	1.70	1.54	0.83	0.69	0.61	0.51	
26	0.36	0.69	0.42	3.23	1.85	2.76	2.93	1.48	0.79	0.77	0.90	0.47	
27	0.37	0.74	0.42	2.41	1.64	2.49	3.54	1.48	0.75	0.82	0.58	0.46	
28	0.37	0.66	0.41	1.63	1.47	2.31	3.89	1.46	0.76	1.08	0.52	0.45	
29	0.38	0.65	0.41	1.36	1.40	2.23	5.18	1.38	0.82	0.84		0.56	
30	0.39	0.65	0.40	1.35	1.43	2.15	6.49	1.33	0.95	0.83		0.55	
31		0.65		1.36	1.50		6.90		0.85	0.74		0.56	
Mean	0.40	1.43	0.65	0.93	3.24	2.71	2.84	2.48	0.95	0.81	0.67	0.51	
Max	0.46	5.45	0.96	3.23	6.84	3.99	6.90	7.16	1.17	1.08	0.94	0.64	7.16
Min	0.35	0.20	0.40	0.39	1.32	1.67	1.65	1.33	0.75	0.67	0.32	0.28	0.20

Annual Max Momentary Gage Height 7.28 M (A.D), at 6.00 Hours on Nov 2, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.15 M (A.D)
Left Bank Elevation 8.02 M (A.D)
Right Bank Elevation 7.73 M (A.D), Drainage Area 9930 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.50	1.20	12.50	5.25	32.80	54.50	75.10	554.25	26.95	16.80	7.25	6.25	
2	5.25	0.00	13.75	7.50	33.20	97.65	79.50	555.60	25.55	18.20	3.80	6.25	
3	5.00	0.20	13.50	8.25	46.80	108.70	72.00	421.40	24.50	19.25	9.25	7.75	
4	5.00	322.60	17.50	7.50	67.50	105.45	64.00	242.00	23.80	19.95	9.50	6.50	
5	5.00	343.50	15.05	8.00	72.50	102.20	67.50	174.20	22.75	20.65	12.50	3.20	
6	5.00	148.20	15.05	7.25	96.40	105.45	98.30	132.80	22.05	18.90	14.70	1.60	
7	5.00	113.25	16.10	7.00	98.95	102.85	117.15	106.75	14.35	21.35	18.90	7.00	
8	4.75	83.90	16.80	7.75	114.55	111.30	103.50	88.60	18.90	19.60	15.40	10.00	
9	4.75	47.25	19.60	8.25	150.30	84.45	81.15	73.50	19.25	15.40	18.55	9.25	
10	4.50	36.00	17.15	10.00	179.00	59.00	82.80	64.50	16.45	11.50	11.25	8.50	
11	4.25	29.60	15.75	14.70	174.20	49.05	128.60	65.50	18.90	15.40	10.00	7.50	
12	4.25	29.20	13.50	20.30	166.20	48.15	125.80	71.50	20.65	12.25	3.80	7.50	
13	4.00	21.35	12.50	17.15	288.00	52.20	144.00	69.00	19.60	11.25	2.40	7.00	
14	3.80	25.90	11.50	13.50	453.50	74.00	106.75	66.00	21.70	11.50	8.75	6.00	
15	3.60	18.90	11.50	11.25	513.20	127.20	92.80	66.00	19.95	12.00	9.00	7.25	
16	3.60	13.75	11.00	8.50	513.20	171.00	74.55	64.00	19.60	12.50	10.25	5.75	
17	3.60	53.10	9.75	7.00	492.40	199.15	71.50	49.50	18.55	12.00	12.00	5.25	
18	3.80	61.00	8.50	5.25	380.70	159.80	86.80	44.55	19.95	13.50	11.00	5.25	
19	3.80	35.60	7.50	3.80	280.00	151.00	85.00	40.50	19.25	13.25	12.50	7.75	
20	4.00	31.20	6.25	4.00	213.50	134.20	82.80	36.00	18.90	13.25	11.25	5.50	
21	3.80	23.10	5.50	5.25	160.60	146.80	69.50	36.00	20.30	11.75	12.00	5.50	
22	3.80	26.95	5.25	9.75	120.40	161.40	59.00	40.95	20.30	11.25	12.25	8.50	
23	3.40	9.25	5.50	15.75	100.25	141.20	52.20	41.85	21.00	10.75	12.75	9.00	
24	3.00	14.00	6.00	30.40	81.15	127.90	47.25	42.75	19.25	10.75	11.00	8.00	
25	3.00	12.75	5.50	75.10	69.50	123.00	49.50	42.30	15.05	11.25	9.25	6.75	
26	3.20	11.25	4.50	139.10	56.50	107.40	118.45	39.60	13.75	13.25	17.50	5.75	
27	3.40	12.50	4.50	85.60	46.80	90.40	162.20	39.60	12.75	14.70	8.50	5.50	
28	3.40	10.50	4.25	46.35	39.15	80.05	190.65	38.70	13.00	23.80	7.00	5.25	
29	3.60	10.25	4.25	34.40	36.00	75.65	314.00	35.20	14.70	15.40		8.00	
30	3.80	10.25	4.00	34.00	37.35	71.50	467.70	33.20	19.25	15.05		7.75	
31		10.25		34.40	40.50		521.00		15.75	12.50		8.00	
Total	122.85	1566.75	314.00	692.30	5155.10	3222.60	3891.05	3376.30	596.70	458.95	302.30	209.05	19907.95 CMSDAY
Mean	4.10	50.54	10.47	22.33	166.29	107.42	125.52	112.54	19.25	14.80	10.80	6.74	54.54 CMS
Max	5.50	343.50	19.60	139.10	513.20	199.15	521.00	555.60	26.95	23.80	18.90	10.00	555.60 CMS
Min	3.00	0.00	4.00	3.80	32.80	48.15	47.25	33.20	12.75	10.75	2.40	1.60	0.00 CMS
Runoff	10.614	135.367	27.130	59.815	445.401	278.433	336.187	291.712	51.555	39.653	26.119	18.062	1720.047 MCM

Momentary Peak 571.80 CMS, at 7.28 M (A.D), at 6.00 Hours, on Nov 2, 2001

Runoff Yield 5.49 Liters/Second/Square KM, Momentary Peak Yield 57.583 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 7,624 sq. km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +143.500 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of the station office.

Elevation +153.908 m. (M.S.L.)

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 Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions Overbank flow starts at elevation +152.710 m.(M.S.L.), records are channel flow only.

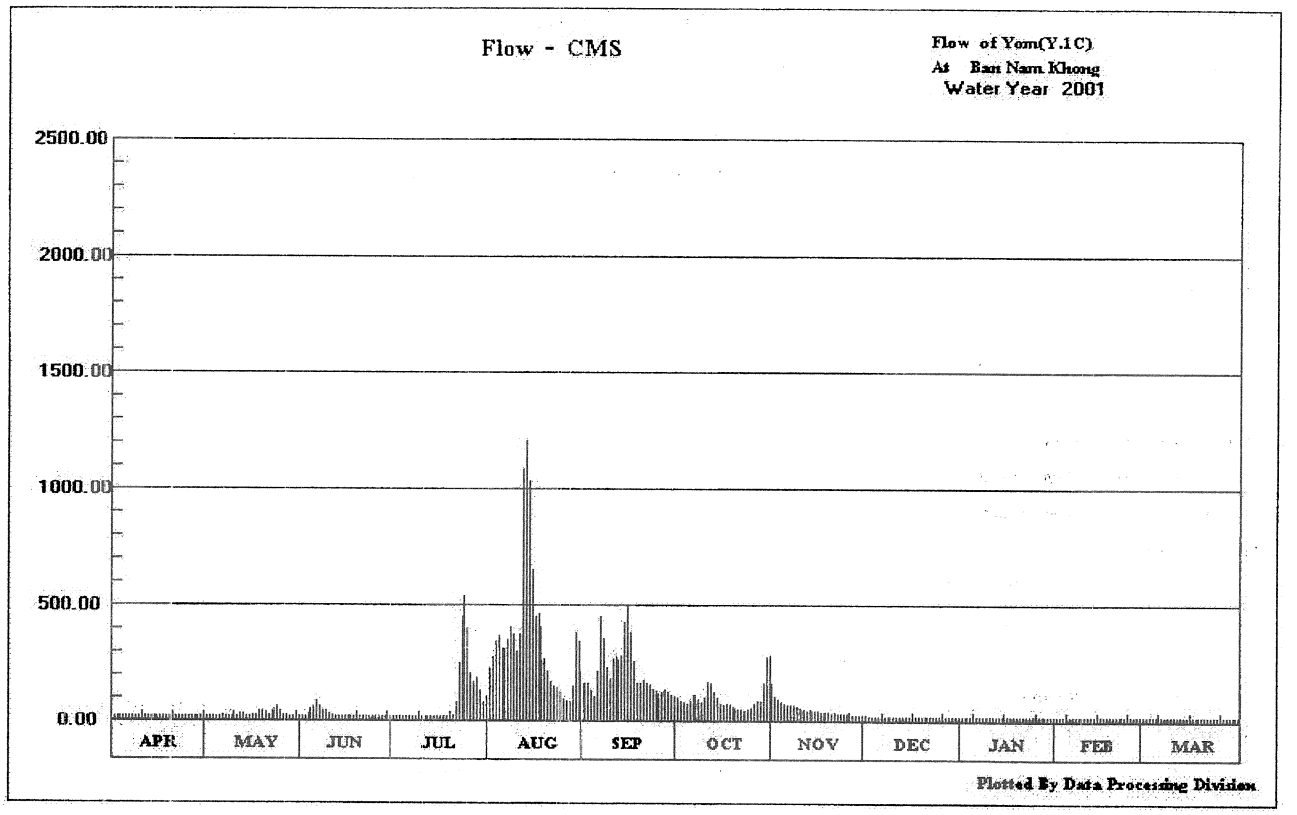
General Description Records good. Mae Yom weir situated about 76 kilometers above gage site.

Stage-discharge relation defined by 61 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	143.99	143.84	144.20	143.99	146.66	146.04	145.30	146.04	144.28	143.92	143.92	144.27	
2	143.97	143.82	144.22	143.99	147.13	145.99	145.14	145.31	144.25	143.92	143.92	144.26	
3	143.95	143.83	144.36	143.96	147.72	145.63	145.01	145.17	144.22	143.93	143.92	144.26	
4	143.95	143.85	144.63	143.92	147.91	145.32	144.98	145.00	144.23	143.92	143.91	144.25	
5	143.96	144.23	144.82	143.92	147.46	146.56	145.14	144.93	144.20	143.92	143.90	144.25	
6	143.92	144.30	145.11	143.93	147.44	148.55	145.38	144.85	144.21	143.93	143.85	144.25	
7	143.91	144.18	144.78	143.96	147.79	147.81	145.44	144.86	144.15	143.94	143.93	144.24	
8	143.90	144.11	144.57	144.02	148.21	146.73	145.18	144.84	144.13	143.95	143.96	144.23	
9	143.90	144.08	144.54	144.09	147.97	146.25	145.03	144.80	144.10	143.94	144.04	144.23	
10	143.89	144.06	144.41	144.23	147.36	147.09	145.25	144.69	144.11	143.93	144.14	144.23	
11	143.89	144.09	144.30	144.21	147.99	147.15	146.11	144.65	144.09	143.93	144.23	144.24	
12	143.89	144.42	144.11	144.25	152.92	147.05	146.04	144.57	144.08	143.92	144.22	144.23	
13	143.89	144.35	143.96	144.21	153.71	147.20	145.54	144.59	144.06	143.92	144.26	144.23	
14	143.89	144.26	143.93	144.18	152.59	148.36	145.24	144.54	144.04	143.92	144.26	144.23	
15	143.92	144.24	143.91	144.15	150.03	148.97	144.95	144.55	144.01	143.93	144.26	144.23	
16	143.92	144.27	143.90	144.16	148.57	148.05	144.91	144.51	143.99	143.91	144.23	144.23	
17	143.92	144.28	143.90	144.26	148.66	146.95	144.93	144.50	143.98	143.91	144.25	144.23	
18	143.93	144.51	143.91	144.23	148.25	146.01	144.90	144.49	143.96	143.90	144.28	144.23	
19	143.91	144.51	143.91	144.23	147.10	146.05	144.80	144.49	143.96	143.89	144.26	144.24	
20	143.90	144.40	143.92	144.31	146.52	146.17	144.71	144.39	143.96	143.89	144.26	144.24	
21	143.87	144.33	143.92	145.05	146.12	146.01	144.62	144.43	143.96	143.91	144.26	144.25	
22	143.88	144.53	143.90	146.88	145.86	145.96	144.59	144.39	143.98	143.93	144.25	144.25	
23	143.86	144.60	143.90	148.56	145.79	145.75	144.56	144.38	143.96	143.91	144.25	144.22	
24	143.84	144.76	143.89	149.22	145.57	145.65	144.60	144.37	143.96	143.87	144.27	144.22	
25	143.92	144.52	143.88	148.16	145.22	145.49	144.68	144.36	143.96	143.89	144.28	144.18	
26	143.90	144.33	143.88	146.48	145.13	145.55	144.97	144.34	143.95	143.89	144.27	143.97	
27	143.87	144.29	143.88	146.11	145.07	145.71	145.14	144.33	143.94	143.89	144.26	143.92	
28	143.87	144.24	143.91	146.30	145.89	145.59	145.13	144.33	143.94	143.88	144.27	144.00	
29	143.87	144.18	143.92	145.61	148.04	145.43	146.04	144.30	143.93	143.89		143.94	
30	143.84	144.16	143.95	145.05	147.71	145.31	147.16	144.31	143.92	143.89		143.88	
31		144.18		145.33	146.54		147.20		143.92	143.91		143.88	
Mean	143.90	144.25	144.15	145.00	147.71	146.48	145.25	144.64	144.05	143.91	144.15	144.18	
Max	143.99	144.76	145.11	149.22	153.71	148.97	147.20	146.04	144.28	143.95	144.28	144.27	153.71
Min	143.84	143.82	143.88	143.92	145.07	145.31	144.56	144.30	143.92	143.87	143.85	143.88	143.82

Annual Max Momentary Gage Height 153.80 M (MSL), at 12.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 143.50 M (MSL), River Bed 142.35 M (MSL)
Left Bank Elevation 152.70 M (MSL)
Right Bank Elevation 152.90 M (MSL), Drainage Area 7624 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.7	5.4	25.2	10.7	233.0	172.9	111.3	172.9	31.4	8.2	8.2	4.0	
2	10.0	4.7	26.8	10.7	283.0	168.4	98.3	112.1	29.1	8.2	8.2	3.9	
3	9.2	5.0	37.6	9.6	351.6	138.5	88.0	100.6	26.8	8.5	8.2	3.9	
4	9.2	5.8	58.5	8.2	374.8	112.9	85.6	87.2	27.5	8.2	7.9	3.9	
5	9.6	27.5	73.3	8.2	321.3	223.0	98.3	81.8	25.2	8.2	7.5	3.9	
6	8.2	33.0	95.9	8.5	319.0	455.8	117.9	75.6	26.0	8.5	5.8	3.9	
7	7.9	23.8	70.1	9.6	359.8	362.2	122.8	76.4	21.6	8.9	8.5	3.8	
8	7.5	18.8	53.9	12.4	412.3	240.0	101.4	74.8	20.2	9.2	9.6	3.7	
9	7.5	16.7	51.5	17.4	382.3	192.4	89.6	71.7	18.1	8.9	13.8	3.7	
10	7.1	15.3	41.5	27.5	309.6	278.3	107.1	63.2	18.8	8.5	3.3	3.7	
11	7.1	17.4	33.0	26.0	384.8	285.2	179.3	60.1	17.4	8.5	3.7	3.8	
12	7.1	42.3	18.8	29.1	1090.6	273.8	172.9	53.9	16.7	8.2	3.7	3.7	
13	7.1	36.8	9.6	26.0	1213.6	291.0	131.0	55.4	15.3	8.2	3.9	3.7	
14	7.1	29.8	8.5	23.8	1039.4	431.5	106.3	51.5	13.8	8.2	3.9	3.7	
15	8.2	28.3	7.9	21.6	656.8	511.0	83.3	52.3	11.7	8.5	3.9	3.7	
16	8.2	30.6	7.5	22.4	458.4	392.3	80.2	49.2	10.7	7.9	3.7	3.7	
17	8.2	31.4	7.5	29.8	469.9	262.7	81.8	48.5	10.3	7.9	3.9	3.7	
18	8.5	49.2	7.9	27.5	417.4	170.1	79.4	47.7	9.6	7.5	4.0	3.7	
19	7.9	49.2	7.9	27.5	279.5	173.8	71.7	47.7	9.6	7.1	3.9	3.8	
20	7.5	40.7	8.2	33.7	219.0	184.8	64.7	39.9	9.6	7.1	3.9	3.8	
21	6.4	35.3	8.2	91.2	180.2	170.1	57.7	43.0	9.6	7.9	3.9	3.9	
22	6.8	50.8	7.5	255.4	157.6	165.9	55.4	39.9	10.3	8.5	3.9	3.9	
23	6.1	56.2	7.5	457.1	151.8	148.4	53.1	39.2	9.6	7.9	3.9	3.7	
24	5.4	68.6	7.1	545.3	133.5	140.1	56.2	38.4	9.6	6.4	4.0	3.7	
25	8.2	50.0	6.8	406.0	104.7	126.9	62.4	37.6	9.6	7.1	4.0	3.5	
26	7.5	35.3	6.8	215.0	97.5	131.9	84.9	36.0	9.2	7.1	4.0	10.0	
27	6.4	32.2	6.8	179.3	92.7	145.1	98.3	35.3	8.9	7.1	3.9	8.2	
28	6.4	28.3	7.9	197.3	160.1	135.2	97.5	35.3	8.9	6.8	4.0	11.0	
29	6.4	23.8	8.2	136.8	391.0	122.0	172.9	33.0	8.5	7.1		8.9	
30	5.4	22.4	9.2	91.2	350.5	112.1	286.4	33.7	8.2	7.1		6.8	
31		23.8		113.7	221.0		291.0		8.2	7.9		6.8	
Total	228.8	938.4	727.1	3078.5	11616.7	6718.3	3386.7	1793.9	470.0	245.3	151.1	146.1	29500.9 CMSDAY
Mean	7.6	30.3	24.2	99.3	374.7	223.9	109.2	59.8	15.2	7.9	5.4	4.7	80.8 CMS
Max	10.7	68.6	95.9	545.3	1213.6	511.0	291.0	172.9	31.4	9.2	13.8	11.0	1213.6 CMS
Min	5.4	4.7	6.8	8.2	92.7	112.1	53.1	33.0	8.2	6.4	3.3	3.5	3.3 CMS
Runoff	19.77	81.08	62.82	265.98	1003.68	580.46	292.61	154.99	40.61	21.19	13.06	12.62	2548.88 MCM

Momentary Peak 1228.00 CMS, at 153.80 M (MSL), at 12.00 Hours, on Aug 13, 2001

Runoff Yield 10.60 Liters/Second/Square KM, Momentary Peak Yield 161.070 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Yom River at Sawankhalok, 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 - **Amphoe** Sawankhalok **Changwat** Sukhothai

Drainage Area 13,583 sq. km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +51.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of automatic gage building.

Elevation +65.350 m. (M.S.L.)

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 Float -

Rated by Current Meter 1967 to date.

Stability of Channel Regimes Fairly stable.

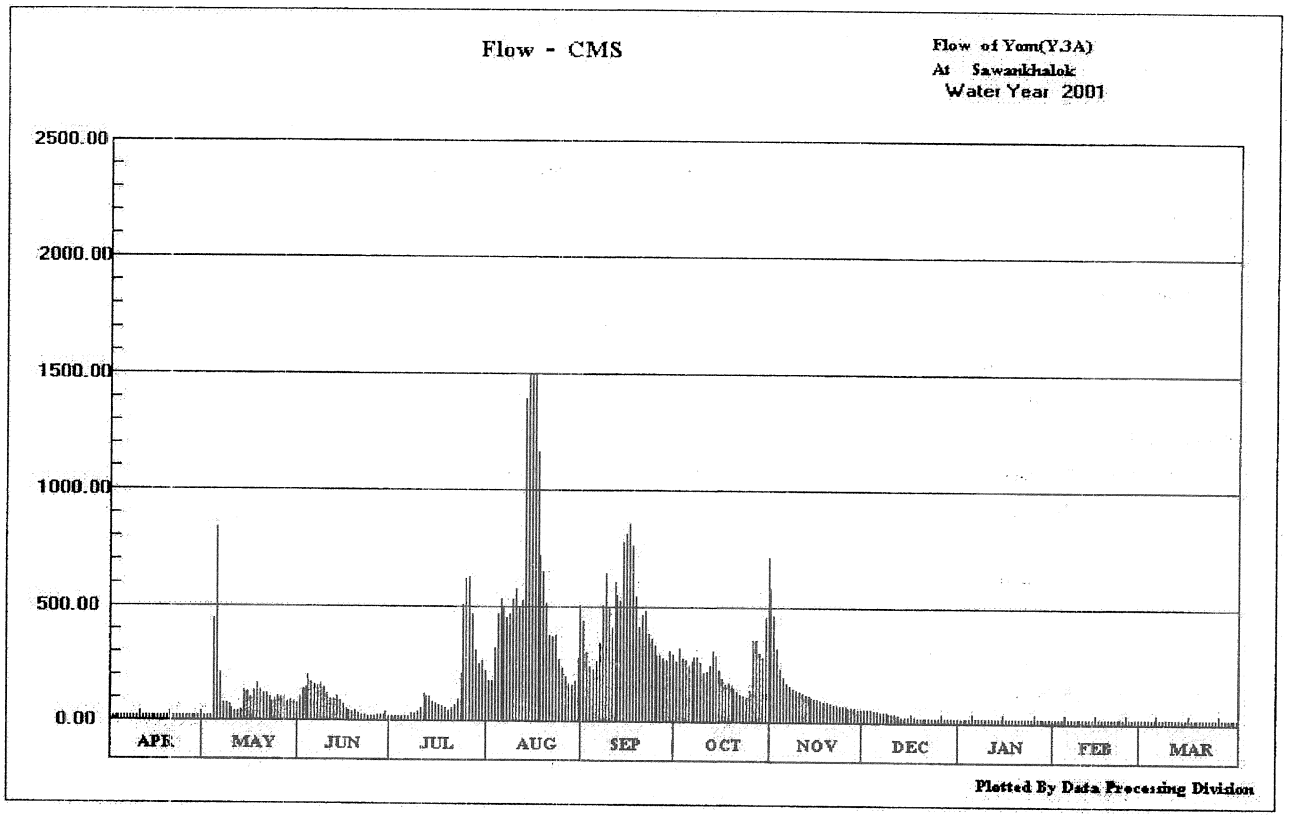
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	51.23	51.03	52.76	51.40	53.68	56.20	54.58	57.40	52.08	51.43	51.26	51.05	
2	51.22	51.02	53.25	51.42	53.66	54.98	55.15	56.41	52.06	51.42	51.25	51.03	
3	51.21	51.02	53.28	51.41	55.16	54.37	54.74	55.17	52.04	51.40	51.18	51.02	
4	51.20	56.26	54.00	51.46	56.47	54.22	54.66	54.27	52.02	51.40	51.18	51.02	
5	51.19	58.99	53.64	51.46	57.00	54.60	54.42	53.88	51.99	51.39	51.18	51.02	
6	51.18	54.03	53.43	51.41	56.76	55.38	54.61	53.60	51.94	51.39	51.19	51.01	
7	51.17	52.41	53.37	51.68	56.32	56.78	54.80	53.45	51.91	51.39	51.17	51.01	
8	51.15	52.35	53.57	51.67	56.49	57.88	54.76	53.30	51.85	51.38	51.16	51.00	
9	51.12	52.24	53.31	51.65	57.00	56.70	54.52	53.24	51.83	51.37	51.15	50.99	
10	51.08	51.96	52.95	52.04	57.35	55.93	54.08	53.15	51.81	51.36	51.12	50.98	
11	51.07	51.82	52.66	52.99	56.72	57.62	54.18	53.10	51.78	51.36	51.11	50.97	
12	51.06	51.78	52.65	52.86	56.97	57.15	54.42	52.98	51.73	51.35	51.11	50.96	
13	51.05	51.92	52.83	52.82	61.00	56.93	55.04	52.91	51.61	51.35	51.10	50.95	
14	51.04	53.19	52.58	52.50	61.31	58.66	54.84	52.78	51.58	51.38	51.06	50.96	
15	51.03	53.10	52.26	52.38	61.32	58.84	54.26	52.75	51.57	51.37	51.06	50.97	
16	51.03	52.73	52.00	52.28	61.29	59.06	53.85	52.74	51.56	51.36	51.06	50.98	
17	51.02	53.16	51.90	52.21	60.26	58.58	53.56	52.66	51.55	51.35	51.06	50.99	
18	51.01	53.51	51.78	52.04	58.37	57.12	53.63	52.56	51.53	51.34	51.06	51.00	
19	51.00	53.18	51.85	51.88	57.92	55.96	53.50	52.51	51.53	51.33	51.05	51.01	
20	50.99	52.96	51.70	52.05	56.86	56.40	53.34	52.44	51.52	51.32	51.05	51.03	
21	50.98	52.98	51.60	52.27	55.65	56.60	53.16	52.41	51.51	51.31	51.05	51.04	
22	50.99	52.70	51.54	52.60	55.60	55.70	53.01	52.36	51.50	51.30	51.05	51.05	
23	51.00	52.42	51.51	54.01	55.66	55.53	52.88	52.31	51.49	51.29	51.04	51.06	
24	51.01	52.62	51.49	56.80	54.68	55.28	52.78	52.31	51.48	51.26	51.04	51.08	
25	51.01	52.80	51.46	57.71	54.28	54.86	53.25	52.26	51.47	51.25	51.02	51.05	
26	51.02	52.75	51.56	57.74	53.92	54.82	55.46	52.20	51.46	51.24	51.02	51.05	
27	51.02	52.69	51.57	56.47	53.55	54.72	55.46	52.18	51.45	51.23	51.01	51.05	
28	51.03	52.48	51.60	55.00	53.46	54.65	54.96	52.16	51.44	51.22	51.00	51.02	
29	51.03	52.52	51.51	54.47	53.67	55.04	54.77	52.09	51.43	51.23		51.01	
30	51.03	52.42	51.42	54.59	54.72	54.91	56.35	52.08	51.43	51.24		51.06	
31		52.41		54.17	56.77		58.32		51.42	51.28		51.16	
Mean	51.07	52.82	52.37	53.08	56.58	56.18	54.43	53.12	51.66	51.33	51.10	51.02	
Max	51.23	58.99	54.00	57.74	61.32	59.06	58.32	57.40	52.08	51.43	51.26	51.16	61.32
Min	50.98	51.02	51.42	51.40	53.46	54.22	52.78	52.08	51.42	51.22	51.00	50.95	50.95

Annual Max Momentary Gage Height 61.32 M (MSL), at 1.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 51.00 M (MSL), River Bed 49.25 M (MSL)
Left Bank Elevation 65.46 M (MSL)
Right Bank Elevation 65.35 M (MSL), Drainage Area 13583 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.5	7.0	110.2	23.0	182.8	445.2	268.0	587.0	64.2	24.6	16.0	7.7	
2	14.0	6.7	147.0	24.1	181.1	309.9	327.8	469.2	62.9	24.1	15.5	7.0	
3	13.5	6.7	149.4	23.5	328.8	247.0	284.7	329.8	61.6	23.0	12.3	6.7	
4	13.0	452.1	211.0	26.3	476.2	232.0	276.3	237.0	60.3	23.0	12.3	6.7	
5	12.6	848.0	179.4	26.3	538.5	270.0	252.0	200.2	58.4	22.5	12.3	6.7	
6	12.3	213.8	161.5	23.5	510.3	352.8	271.1	176.0	55.1	22.5	12.6	6.3	
7	11.9	86.0	156.6	38.8	458.9	512.6	291.0	163.2	53.2	22.5	11.9	6.3	
8	11.3	82.0	173.4	38.2	478.6	651.6	286.8	151.0	49.2	22.0	11.6	6.0	
9	10.2	74.7	151.8	37.0	538.5	503.2	262.0	146.2	48.0	21.5	11.3	5.8	
10	8.8	56.4	124.3	61.6	580.9	414.5	218.6	139.3	46.7	21.0	10.2	5.6	
11	8.4	47.3	103.2	127.3	505.6	614.8	228.1	135.5	44.8	21.0	9.9	5.4	
12	8.1	44.8	102.5	117.5	535.0	556.5	252.0	126.5	41.8	20.5	9.9	5.2	
13	7.7	53.8	115.3	114.5	1404.0	530.3	316.2	121.3	34.6	20.5	9.5	5.0	
14	7.4	142.2	97.6	92.2	1507.4	783.4	295.2	111.6	32.9	22.0	8.1	5.2	
15	7.0	135.5	76.0	84.0	1510.8	818.0	236.0	109.5	32.4	21.5	8.1	5.4	
16	7.0	108.1	59.0	77.3	1500.6	863.8	197.5	108.8	31.8	21.0	8.1	5.6	
17	6.7	140.0	52.5	72.7	1173.4	768.3	172.6	103.2	31.2	20.5	8.1	5.8	
18	6.3	168.3	44.8	61.6	729.7	552.9	178.6	96.3	30.1	20.0	8.1	6.0	
19	6.0	141.5	49.2	51.2	657.4	417.9	167.5	92.8	30.1	19.5	7.7	6.3	
20	5.8	125.0	40.0	62.2	522.1	468.0	154.2	88.0	29.6	19.0	7.7	7.0	
21	5.6	126.5	34.0	76.7	382.7	491.5	140.0	86.0	29.0	18.5	7.7	7.4	
22	5.8	106.0	30.7	99.0	377.0	388.4	128.7	82.6	28.5	18.0	7.7	7.7	
23	6.0	86.7	29.0	211.9	383.8	369.3	119.0	79.3	28.0	17.5	7.4	8.1	
24	6.3	100.4	28.0	515.0	278.4	341.8	111.6	79.3	27.4	16.0	7.4	8.8	
25	6.3	113.0	26.3	627.4	238.0	297.3	147.0	76.0	26.9	15.5	6.7	7.7	
26	6.7	109.5	31.8	631.6	203.8	293.1	361.6	72.0	26.3	15.0	6.7	7.7	
27	6.7	105.3	32.4	476.2	171.7	282.6	361.6	70.7	25.7	14.5	6.3	7.7	
28	7.0	90.8	34.0	312.0	164.1	275.3	307.8	69.4	25.2	14.0	6.0	6.7	
29	7.0	93.5	29.0	257.0	181.9	316.2	287.9	64.8	24.6	14.5		6.3	
30	7.0	86.7	24.1	269.0	282.6	302.6	462.3	64.2	24.6	15.0		8.1	
31		86.0		227.1	511.5		721.0		24.1	17.0		11.6	
Total	256.9	4044.3	2604.0	4885.7	17496.1	13670.8	8084.7	4436.7	1189.2	607.7	267.1	209.5	57752.7 CMSDAY
Mean	8.6	130.5	86.8	157.6	564.4	455.7	260.8	147.9	38.4	19.6	9.5	6.8	158.2 CMS
Max	14.5	848.0	211.0	631.6	1510.8	863.8	721.0	587.0	64.2	24.6	16.0	11.6	1510.8 CMS
Min	5.6	6.7	24.1	23.0	164.1	232.0	111.6	64.2	24.1	14.0	6.0	5.0	5.0 CMS
Runoff	22.20	349.43	224.99	422.12	1511.66	1181.16	698.52	383.33	102.75	52.51	23.08	18.10	4989.83 MCM

Momentary Peak 1510.80 CMS, at 61.32 M (MSL), at 1.00 Hours, on Aug 15, 2001

Runoff Yield 11.65 Liters/Second/Square KM, Momentary Peak Yield 111.227 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 12,658 sq. km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +59.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the automatic gage building.

Elevation +68.928 m. (M.S.L.)

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 Float -

Rated by Current Meter 1952 to date.

Stability of Channel Regimes Fairly stable.

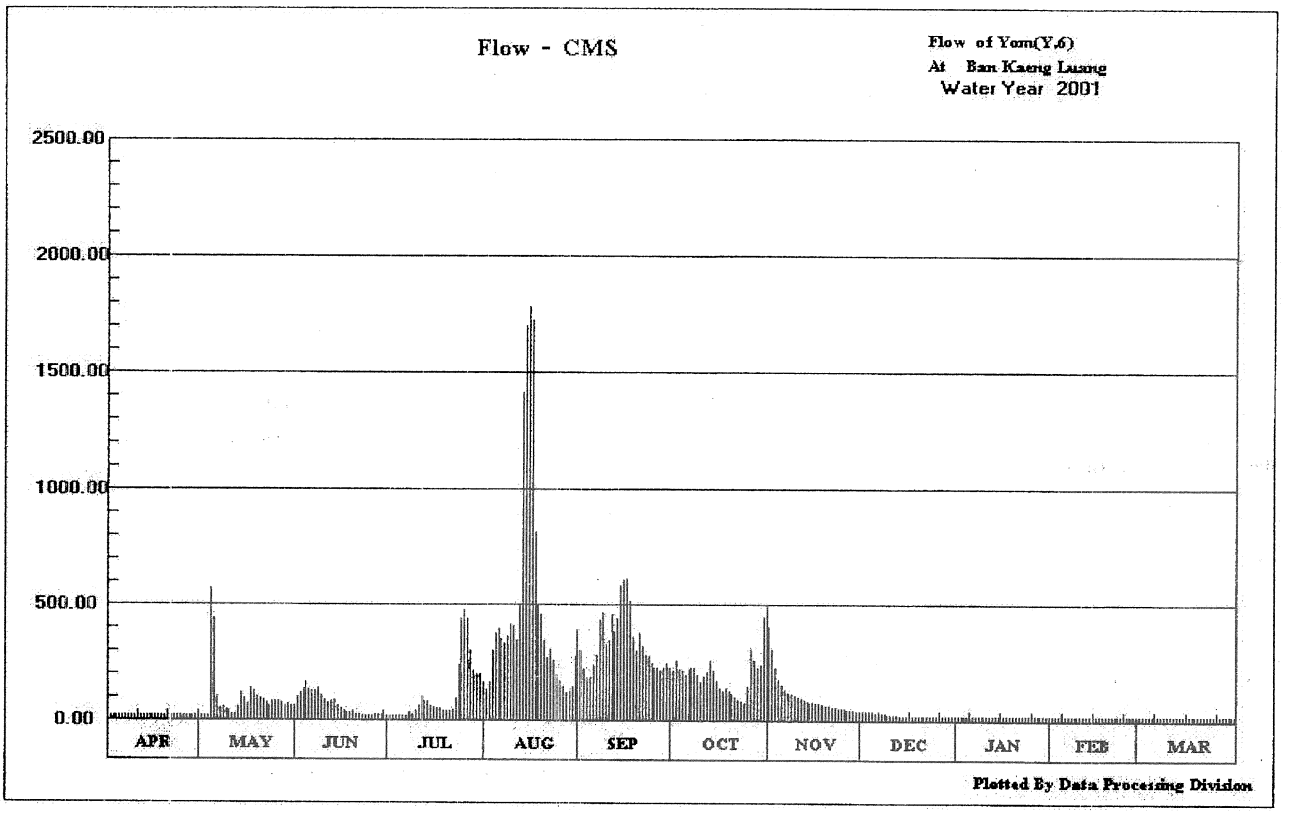
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	59.84	59.59	61.32	60.03	61.66	62.87	62.30	63.43	60.57	59.96	59.73	59.50	
2	59.85	59.56	61.54	60.07	61.91	62.35	62.59	62.93	60.53	59.94	59.68	59.46	
3	59.83	59.65	61.63	60.08	62.87	62.09	62.32	62.40	60.51	59.93	59.64	59.45	
4	59.81	64.24	61.92	60.14	63.30	62.08	62.27	62.02	60.49	59.91	59.66	59.42	
5	59.78	63.62	61.66	60.11	63.41	62.46	62.15	61.83	60.45	59.90	59.66	59.41	
6	59.75	61.32	61.59	60.11	63.19	62.75	62.34	61.66	60.45	59.91	59.66	59.43	
7	59.73	60.74	61.58	60.45	63.05	63.61	62.38	61.56	60.41	59.90	59.64	59.43	
8	59.71	60.84	61.72	60.32	63.23	63.77	62.36	61.45	60.37	59.88	59.62	59.43	
9	59.70	60.64	61.42	60.38	63.52	63.04	62.15	61.42	60.36	59.88	59.61	59.42	
10	59.65	60.43	61.20	60.94	63.49	63.13	61.93	61.35	60.34	59.87	59.58	59.38	
11	59.63	60.30	61.04	61.34	63.14	63.73	62.13	61.31	60.30	59.87	59.55	59.37	
12	59.62	60.30	61.11	61.18	63.93	63.35	62.26	61.23	60.26	59.86	59.54	59.39	
13	59.61	60.79	61.19	61.13	67.08	63.63	62.59	61.16	60.24	59.86	59.51	59.39	
14	59.59	61.55	60.94	60.90	67.84	64.31	62.28	61.09	60.21	59.89	59.50	59.38	
15	59.59	61.29	60.72	60.82	68.06	64.42	61.97	61.11	60.17	59.87	59.49	59.32	
16	59.58	61.02	60.56	60.76	67.91	64.44	61.73	61.08	60.15	59.84	59.49	59.35	
17	59.56	61.68	60.46	60.68	65.22	63.98	61.62	61.03	60.11	59.84	59.49	59.45	
18	59.57	61.58	60.46	60.55	63.93	63.20	61.70	60.95	60.06	59.86	59.48	59.36	
19	59.60	61.34	60.50	60.54	63.73	62.88	61.57	60.92	60.05	59.84	59.52	59.38	
20	59.61	61.27	60.35	60.55	63.12	63.30	61.47	60.86	60.05	59.81	59.52	59.42	
21	59.59	61.23	60.26	60.60	62.66	63.01	61.33	60.85	60.04	59.81	59.50	59.49	
22	59.59	61.03	60.20	61.27	62.90	62.75	61.23	60.79	60.02	59.80	59.48	59.49	
23	59.56	60.87	60.19	62.46	62.57	62.72	61.13	60.76	60.00	59.78	59.49	59.47	
24	59.54	61.14	60.15	63.62	62.18	62.52	61.09	60.75	59.98	59.76	59.48	59.46	
25	59.52	61.13	60.15	63.81	62.00	62.37	61.77	60.70	59.99	59.74	59.46	59.46	
26	59.55	61.15	60.28	63.62	61.77	62.40	62.90	60.65	59.99	59.75	59.45	59.47	
27	59.59	61.04	60.25	62.86	61.56	62.29	62.61	60.64	59.95	59.71	59.47	59.44	
28	59.60	60.94	60.26	62.30	61.61	62.36	62.36	60.62	59.95	59.67	59.47	59.43	
29	59.59	60.95	60.12	62.20	61.76	62.51	62.46	60.57	59.94	59.73		59.48	
30	59.64	60.90	60.05	62.22	62.72	62.36	63.67	60.56	59.94	59.76		59.64	
31		60.90		61.91	63.37		63.93		59.96	59.75		59.61	
Mean	59.65	61.07	60.83	61.22	63.51	63.02	62.15	61.26	60.19	59.83	59.55	59.44	
Max	59.85	64.24	61.92	63.81	68.06	64.44	63.93	63.43	60.57	59.96	59.73	59.64	68.06
Min	59.52	59.56	60.05	60.03	61.56	62.08	61.09	60.56	59.94	59.67	59.45	59.32	59.32

Annual Max Momentary Gage Height 68.19 M (MSL), at 6.00 Hours, on Aug 16, 2001
Zero Gage at Bottom Elevation 59.00 M (MSL), River Bed 57.86 M (MSL)
Left Bank Elevation 68.73 M (MSL)
Right Bank Elevation 68.42 M (MSL), Drainage Area 12658 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.4	7.9	106.0	21.2	140.6	307.2	222.0	405.8	48.2	18.6	11.3	6.5	
2	14.7	7.4	128.0	22.8	169.2	229.0	264.5	316.8	45.8	17.9	10.0	5.9	
3	14.1	9.3	137.3	23.2	307.2	192.6	224.8	236.0	44.6	17.6	9.0	5.8	
4	13.4	575.2	170.4	25.6	381.5	191.2	217.8	182.8	43.4	16.9	9.5	5.3	
5	12.5	443.1	140.6	24.4	401.9	245.0	201.0	159.6	41.0	16.5	9.5	5.1	
6	11.8	106.0	133.0	24.4	361.2	288.5	227.6	140.6	41.0	16.9	9.5	5.4	
7	11.3	59.8	132.0	41.0	336.7	441.1	233.2	130.0	38.6	16.5	9.0	5.4	
8	10.8	66.8	147.2	34.0	368.5	473.9	230.4	119.0	36.5	15.8	8.5	5.4	
9	10.5	52.8	116.0	37.0	423.4	335.0	201.0	116.0	36.0	15.8	8.3	5.3	
10	9.3	39.8	94.0	73.8	417.6	350.8	171.6	109.0	35.0	15.4	7.7	4.8	
11	8.8	33.0	81.2	108.0	352.5	465.7	198.2	105.0	33.0	15.4	7.3	4.7	
12	8.5	33.0	86.8	92.4	507.3	390.7	216.4	97.0	31.0	15.1	7.1	4.9	
13	8.3	63.3	93.2	88.4	1423.2	445.2	264.5	90.8	30.0	15.1	6.6	4.9	
14	7.9	129.0	73.8	71.0	1705.6	591.3	219.2	85.2	28.5	16.1	6.5	4.8	
15	7.9	103.0	58.4	65.4	1792.0	616.8	176.4	86.8	26.8	15.4	6.4	4.2	
16	7.7	79.6	47.6	61.2	1732.9	621.6	148.3	84.4	26.0	14.4	6.4	4.5	
17	7.4	142.8	41.6	55.6	820.5	517.8	136.2	80.4	24.4	14.4	6.4	5.8	
18	7.6	132.0	41.6	47.0	507.3	363.0	145.0	74.5	22.4	15.1	6.2	4.6	
19	8.0	108.0	44.0	46.4	465.7	308.8	131.0	72.4	22.0	14.4	6.8	4.8	
20	8.3	101.0	35.5	47.0	349.0	381.5	121.0	68.2	22.0	13.4	6.8	5.3	
21	7.9	97.0	31.0	50.0	275.0	329.7	107.0	67.5	21.6	13.4	6.5	6.4	
22	7.9	80.4	28.0	101.0	312.0	288.5	97.0	63.3	20.8	13.0	6.2	6.4	
23	7.4	68.9	27.6	245.0	261.5	284.0	88.4	61.2	20.0	12.5	6.4	6.1	
24	7.1	89.2	26.0	443.1	205.2	254.0	85.2	60.5	19.3	12.0	6.2	5.9	
25	6.8	88.4	26.0	482.1	180.0	231.8	152.7	57.0	19.7	11.5	5.9	5.9	
26	7.3	90.0	32.0	443.1	152.7	236.0	312.0	53.5	19.7	11.8	5.8	6.1	
27	7.9	81.2	30.5	305.6	130.0	220.6	267.5	52.8	18.3	10.8	6.1	5.6	
28	8.0	73.8	31.0	222.0	135.1	230.4	230.4	51.4	18.3	9.7	6.1	5.4	
29	7.9	74.5	24.8	208.0	151.6	252.5	245.0	48.2	17.9	11.3		6.2	
30	9.0	71.0	22.0	210.8	284.0	230.4	453.3	47.6	17.9	12.0		9.0	
31		71.0		169.2	394.4		507.3		18.6	11.8		8.3	
Total	280.4	3178.2	2187.1	3889.7	15445.3	10314.6	6495.9	3323.3	888.3	446.5	208.0	174.7	46832.0 CMSDAY
Mean	9.3	102.5	72.9	125.5	498.2	343.8	209.5	110.8	28.7	14.4	7.4	5.6	128.3 CMS
Max	14.7	575.2	170.4	482.1	1792.0	621.6	507.3	405.8	48.2	18.6	11.3	9.0	1792.0 CMS
Min	6.8	7.4	22.0	21.2	130.0	191.2	85.2	47.6	17.9	9.7	5.8	4.2	4.2 CMS
Runoff	24.23	274.60	188.97	336.07	1334.47	891.18	561.25	287.13	76.75	38.58	17.97	15.09	4046.28 MCM

Momentary Peak 1844.00 CMS, at 68.19 M (MSL), at 6.00 Hours, on Aug 16, 2001

Runoff Yield 10.14 Liters/Second/Square KM, Momentary Peak Yield 145.679 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Nam Ngao at Ban Luang Nua, Lampang (Y.13A)

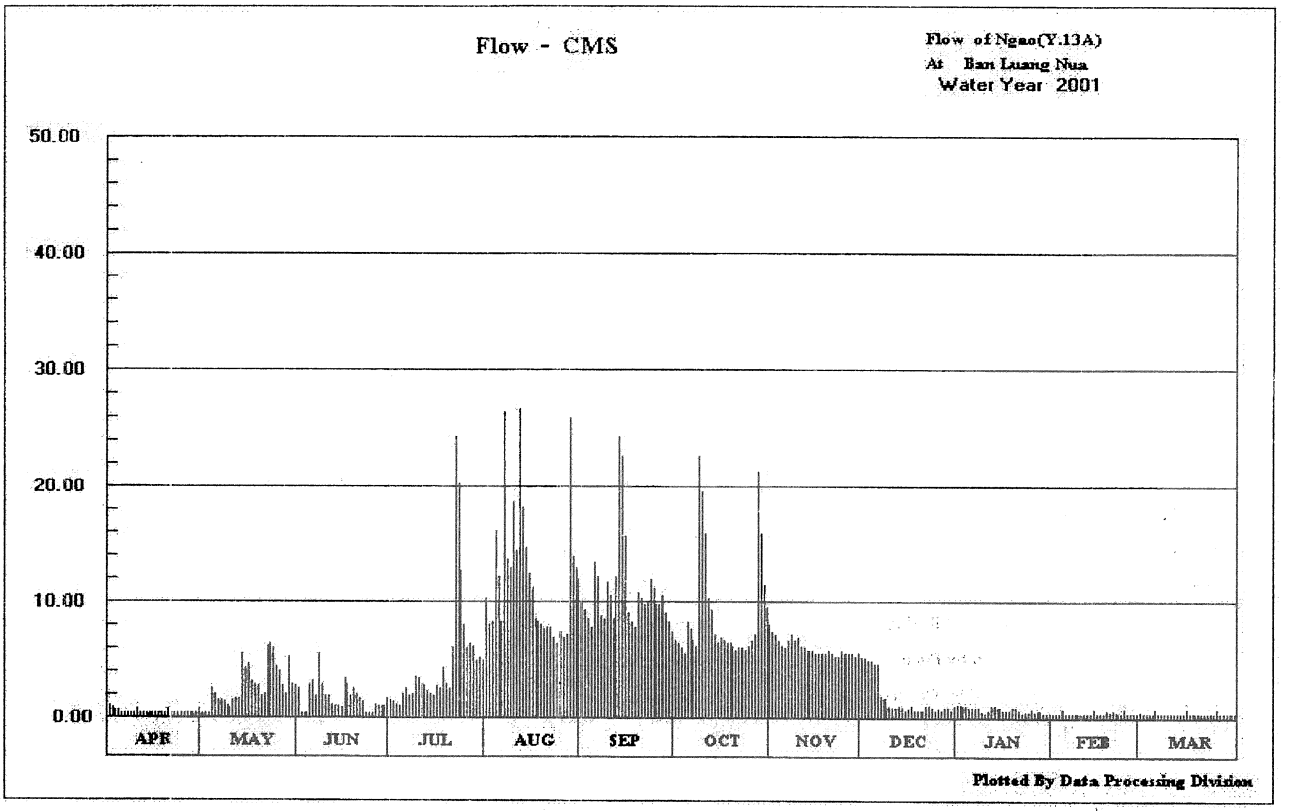
Lat 18 - 45 - 32 N. **Long** 99 - 58 - 33 E.

Location			on right bank at the bridge on highway about 1,600 meters upstream from station Y.13.
	Ban Luang Nua	**Amphoe** Ngao	**Changwat** Lampang
Drainage Area			380 sq.km.
Type of Gage			Staff gage.
Zero Gage at Bottom			+268.300 m. (M.S.L.)
Bench Mark			B.M.- H.D.
	Location BM		On right bank about 10 meters from the top staff gage.
	Elevation		B.M.1= +275.006 m.(M.S.L.), B.M. 2 = +274.976 m.(M.S.L.)
Gage Reading Frequency			5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height			Arithmetic mean of 5 readings.
Period of Available Gage Records			1988 - 1995, 2001 to date.
Rating Operation			
	Period of Rating		1988 - 1992, 2001 to date.
	Rated by Float		-
	Rated by Current Meter		1988 - 1992, 2001 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 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	268.95	268.72	269.03	268.98	269.37	269.36	269.22	269.28	269.15	268.96	268.91	268.92	
2	268.94	268.73	268.86	268.97	269.28	269.33	269.21	269.25	269.15	268.96	268.90	268.90	
3	268.93	268.75	268.74	268.96	269.29	269.30	269.19	269.24	269.14	268.95	268.90	268.89	
4	268.93	269.03	268.75	268.95	269.61	269.27	269.17	269.22	269.14	268.95	268.90	268.89	
5	268.90	269.01	269.05	269.01	269.45	269.50	269.29	269.20	269.13	268.94	268.89	268.80	
6	268.87	268.98	269.06	269.03	269.29	269.45	269.26	269.19	269.13	268.94	268.89	268.80	
7	268.86	268.98	269.00	269.00	270.00	269.31	269.22	269.22	269.00	268.94	268.90	268.79	
8	268.85	268.97	269.17	269.01	269.51	269.30	269.20	269.24	268.99	268.94	268.90	268.79	
9	268.84	268.95	269.05	269.08	269.48	269.43	269.86	269.22	268.99	268.92	268.90	268.79	
10	268.83	268.94	269.00	269.07	269.71	269.38	269.74	269.23	268.95	268.91	268.87	268.79	
11	268.81	268.98	269.00	269.05	269.54	269.30	269.60	269.20	268.94	268.93	268.87	268.79	
12	268.80	268.99	268.96	269.04	270.01	269.45	269.37	269.19	268.94	268.95	268.90	268.79	
13	268.80	268.99	268.95	269.02	269.69	269.92	269.33	269.18	268.95	268.95	268.91	268.79	
14	268.80	269.17	268.95	269.01	269.55	269.86	269.24	269.18	268.94	268.94	268.88	268.82	
15	268.79	269.11	268.94	269.00	269.46	269.59	269.21	269.18	268.93	268.94	268.87	268.81	
16	268.79	269.13	269.07	269.04	269.41	269.32	269.23	269.17	268.92	268.93	268.86	268.80	
17	268.82	269.06	269.05	269.03	269.30	269.29	269.22	269.17	268.95	268.93	268.87	268.80	
18	268.85	269.05	269.00	269.11	269.29	269.27	269.21	269.17	268.93	268.93	268.93	268.80	
19	268.80	269.04	269.03	269.05	269.28	269.39	269.21	269.17	268.93	268.94	268.92	268.79	
20	268.81	269.00	269.01	269.03	269.26	269.37	269.20	269.18	268.93	268.94	268.93	268.80	
21	268.87	269.01	268.99	269.19	269.27	269.35	269.18	269.17	268.93	268.93	268.92	268.81	
22	268.91	269.20	268.97	269.92	269.27	269.36	269.19	269.16	268.95	268.91	268.90	268.82	
23	268.87	269.21	268.90	269.77	269.23	269.44	269.19	269.16	268.95	268.92	268.90	268.82	
24	268.81	269.19	268.87	269.47	269.21	269.41	269.18	269.18	268.94	268.92	268.89	268.84	
25	268.82	269.12	268.90	269.28	269.25	269.35	269.20	269.17	268.93	268.93	268.89	268.84	
26	268.79	269.10	268.96	269.19	269.23	269.35	269.22	269.17	268.93	268.92	268.84	268.83	
27	268.80	269.04	268.95	269.21	269.24	269.38	269.24	269.17	268.93	268.93	268.90	268.83	
28	268.80	269.01	268.95	269.20	269.98	269.32	269.81	269.17	268.94	268.93	268.90	268.82	
29	268.79	269.16	268.95	269.14	269.52	269.29	269.60	269.16	268.94	268.90		268.85	
30	268.69	269.05	268.99	269.15	269.48	269.25	269.42	269.17	268.93	268.90		268.80	
31		269.04		269.14	269.44		269.34		268.95	268.90		268.80	
Mean	268.84	269.02	268.97	269.13	269.45	269.40	269.31	269.19	268.98	268.93	268.89	268.82	
Max	268.95	269.21	269.17	269.92	270.01	269.92	269.86	269.28	269.15	268.96	268.93	268.92	270.01
Min	268.69	268.72	268.74	268.95	269.21	269.25	269.17	269.16	268.92	268.90	268.84	268.79	268.69

Annual Max Momentary Gage Height 270.42 M (MSL), at 19.00 Hours, on Jul 22, 2001
Zero Gage at Bottom Elevation 268.30 M (MSL), River Bed 268.37 M (MSL)
Left Bank Elevation 274.84 M (MSL)
Right Bank Elevation 274.80 M (MSL), Drainage Area 380 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.17	0.09	2.64	1.67	10.37	10.12	6.81	8.19	5.25	1.34	0.51	0.67	
2	1.00	0.09	0.26	1.50	8.19	9.38	6.58	7.50	5.25	1.34	0.34	0.34	
3	0.84	0.11	0.10	1.34	8.42	8.65	6.13	7.27	5.03	1.17	0.34	0.32	
4	0.84	2.64	0.11	1.17	16.30	7.96	5.69	6.81	5.03	1.17	0.34	0.32	
5	0.34	2.22	3.07	2.22	12.33	13.55	8.42	6.35	4.81	1.00	0.32	0.15	
6	0.28	1.67	3.29	2.64	8.42	12.33	7.73	6.13	4.81	1.00	0.32	0.15	
7	0.26	1.67	2.00	2.00	26.55	8.90	6.81	6.81	2.00	1.00	0.34	0.14	
8	0.25	1.50	5.69	2.22	13.80	8.65	6.35	7.27	1.83	1.00	0.34	0.14	
9	0.23	1.17	3.07	3.72	13.06	11.83	22.79	6.81	1.83	0.67	0.34	0.14	
10	0.21	1.00	2.00	3.51	18.81	10.61	19.61	7.04	1.17	0.51	0.28	0.14	
11	0.17	1.67	2.00	3.07	14.55	8.65	16.05	6.35	1.00	0.84	0.28	0.14	
12	0.15	1.83	1.34	2.86	26.82	12.33	10.37	6.13	1.00	1.17	0.34	0.14	
13	0.15	1.83	1.17	2.43	18.30	24.39	9.38	5.91	1.17	1.17	0.51	0.14	
14	0.15	5.69	1.17	2.22	14.80	22.79	7.27	5.91	1.00	1.00	0.30	0.19	
15	0.14	4.37	1.00	2.00	12.57	15.80	6.58	5.91	0.84	1.00	0.28	0.17	
16	0.14	4.81	3.51	2.86	11.35	9.14	7.04	5.69	0.67	0.84	0.26	0.15	
17	0.19	3.29	3.07	2.64	8.65	8.42	6.81	5.69	1.17	0.84	0.28	0.15	
18	0.25	3.07	2.00	4.37	8.42	7.96	6.58	5.69	0.84	0.84	0.84	0.15	
19	0.15	2.86	2.64	3.07	8.19	10.86	6.58	5.69	0.84	1.00	0.67	0.14	
20	0.17	2.00	2.22	2.64	7.73	10.37	6.35	5.91	0.84	1.00	0.84	0.15	
21	0.28	2.22	1.83	6.13	7.96	9.88	5.91	5.69	0.84	0.84	0.67	0.17	
22	0.51	6.35	1.50	24.39	7.96	10.12	6.13	5.47	1.17	0.51	0.34	0.19	
23	0.28	6.58	0.34	20.40	7.04	12.08	6.13	5.47	1.17	0.67	0.34	0.19	
24	0.17	6.13	0.28	12.82	6.58	11.35	5.91	5.91	1.00	0.67	0.32	0.23	
25	0.19	4.59	0.34	8.19	7.50	9.88	6.35	5.69	0.84	0.84	0.32	0.23	
26	0.14	4.15	1.34	6.13	7.04	9.88	6.81	5.69	0.84	0.67	0.23	0.21	
27	0.15	2.86	1.17	6.58	7.27	10.61	7.27	5.69	0.84	0.84	0.34	0.21	
28	0.15	2.22	1.17	6.35	26.01	9.14	21.46	5.69	1.00	0.84	0.34	0.19	
29	0.14	5.47	1.17	5.03	14.05	8.42	16.05	5.47	1.00	0.34		0.25	
30	0.06	3.07	1.83	5.25	13.06	7.50	11.59	5.69	0.84	0.34		0.15	
31		2.86		5.03	12.08		9.63		1.17	0.34		0.15	
Total	9.15	90.08	53.32	156.45	384.18	331.55	283.17	185.52	57.09	26.80	10.97	6.20	1594.48 CMSDAY
Mean	0.31	2.91	1.78	5.05	12.39	11.05	9.13	6.18	1.84	0.86	0.39	0.20	4.37 CMS
Max	1.17	6.58	5.69	24.39	26.82	24.39	22.79	8.19	5.25	1.34	0.84	0.67	26.82 CMS
Min	0.06	0.09	0.10	1.17	6.58	7.50	5.69	5.47	0.67	0.34	0.23	0.14	0.06 CMS
Runoff	0.791	7.783	4.607	13.517	33.193	28.646	24.466	16.029	4.933	2.316	0.948	0.536	137.763 MCM

Momentary Peak 38.32 CMS, at 270.42 M (MSL), at 19.00 Hours, on Jul 22, 2001

Runoff Yield 11.50 Liters/Second/Square KM, Momentary Peak Yield 100.842 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Yom River at Ban Don Rabiang, Sukhothai (Y.14)

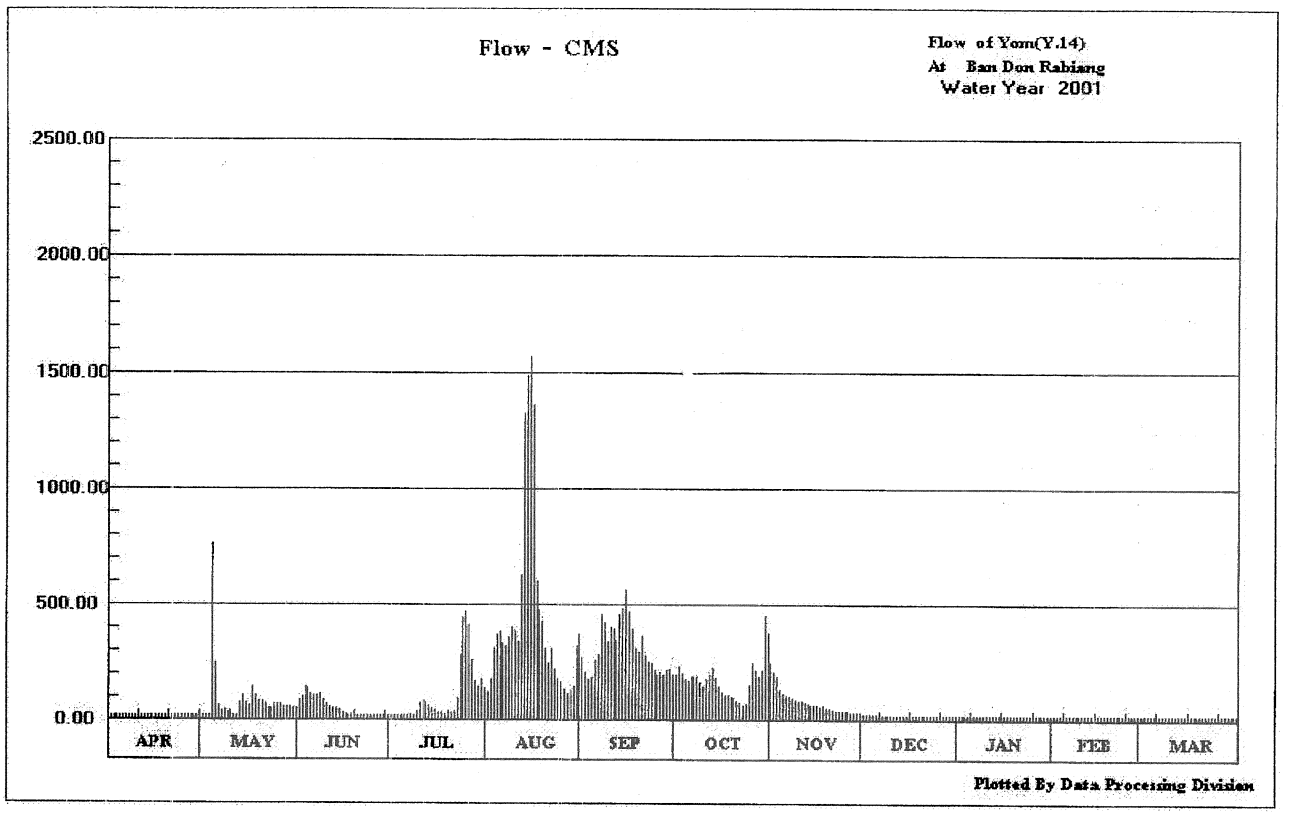
Lat 17 - 35 - 42 N. **Long** 99 - 43 - 06 E.

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
Drainage Area			12,131 sq. km.
Type of Gage			Staff gage.
Zero Gage at Bottom			+65.100 m. (M.S.L.)
Bench Mark			B.M.- H.D.
	Location BM		In front of gage observer's house.
	Elevation		+78.363 m. (M.S.L.)
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			1964 to date.
Rating Operation			
	Period of Rating		1964 to date.
	Rated by Float		-
	Rated by Current Meter		1964 to date.
Stability of Channel Regimes			Fairly stable.
Overbank Flow Conditions			No overbank flow.
General Description			Records good. Stage-discharge relation defined by 38 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	66.06	65.94	67.56	66.24	67.91	69.29	68.68	69.09	66.63	66.19	66.06	65.92	
2	66.05	65.96	67.68	66.26	68.47	68.79	68.97	68.77	66.60	66.19	66.03	65.91	
3	66.05	66.05	68.15	66.28	69.60	68.46	68.74	68.58	66.58	66.18	66.02	65.91	
4	66.04	72.23	68.13	66.27	70.03	68.52	68.49	68.06	66.57	66.18	66.03	65.91	
5	66.02	69.12	67.86	66.26	70.11	69.19	68.41	67.85	66.57	66.17	66.03	65.90	
6	66.00	67.18	67.80	66.32	69.76	69.42	68.60	67.80	66.53	66.17	66.02	65.90	
7	65.98	66.76	67.79	66.54	69.67	70.58	68.62	67.70	66.51	66.16	66.01	65.89	
8	65.97	66.95	67.86	66.46	69.93	70.37	68.60	67.61	66.49	66.15	65.99	65.89	
9	65.96	66.66	67.55	66.61	70.25	69.82	68.36	67.54	66.47	66.15	65.98	65.89	
10	65.95	66.47	67.30	67.33	70.12	70.23	68.18	67.50	66.45	66.15	65.96	65.88	
11	65.94	66.41	67.13	67.43	69.82	70.20	68.46	67.42	66.41	66.15	65.96	65.88	
12	65.93	66.45	67.05	67.36	71.53	69.84	68.64	67.34	66.40	66.15	65.95	65.87	
13	65.92	67.38	66.98	67.21	74.63	70.58	68.94	67.26	66.40	66.15	65.95	65.87	
14	65.91	67.80	66.92	66.99	75.26	70.73	68.54	67.20	66.37	66.15	65.93	65.87	
15	65.91	67.41	66.71	66.88	75.57	71.21	68.16	67.24	66.35	66.14	65.93	65.86	
16	65.91	67.24	66.60	66.75	74.79	70.66	67.93	67.17	66.33	66.14	65.92	65.86	
17	65.91	68.16	66.51	66.72	71.42	70.20	67.79	67.14	66.29	66.14	65.92	65.86	
18	65.92	67.75	66.57	66.64	70.71	69.60	67.74	67.18	66.26	66.13	65.95	65.86	
19	65.94	67.48	66.53	66.67	70.39	69.50	67.73	67.03	66.26	66.12	65.95	65.85	
20	65.93	67.50	66.43	66.65	69.59	69.98	67.64	66.96	66.26	66.11	65.94	65.83	
21	65.92	67.28	66.37	66.84	69.12	69.36	67.46	66.90	66.25	66.11	65.93	65.88	
22	65.92	66.97	66.34	67.63	69.59	69.16	67.34	66.84	66.23	66.11	65.93	65.92	
23	65.91	67.02	66.33	69.41	68.90	69.09	67.22	66.85	66.22	66.11	65.93	65.91	
24	65.89	67.30	66.30	70.52	68.48	68.84	67.30	66.81	66.21	66.10	65.93	65.91	
25	65.87	67.28	66.31	70.66	68.33	68.69	68.22	66.77	66.21	66.08	65.92	65.92	
26	65.91	67.29	66.40	70.32	68.04	68.75	69.11	66.74	66.20	66.06	65.91	65.92	
27	65.93	67.13	66.40	69.19	67.84	68.68	68.83	66.74	66.20	66.06	65.92	65.90	
28	65.95	67.13	66.38	68.45	67.97	68.83	68.63	66.71	66.20	66.05	65.93	65.94	
29	65.96	67.11	66.26	68.19	68.16	68.91	68.84	66.68	66.20	66.07		65.98	
30	65.94	67.01	66.22	68.48	69.67	68.68	70.56	66.65	66.19	66.08		66.00	
31		67.00		68.13	70.03		70.08		66.19	66.08		66.01	
Mean	65.95	67.27	66.95	67.47	70.18	69.54	68.41	67.34	66.36	66.13	65.96	65.90	
Max	66.06	72.23	68.15	70.66	75.57	71.21	70.56	69.09	66.63	66.19	66.06	66.01	75.57
Min	65.87	65.94	66.22	66.24	67.84	68.46	67.22	66.65	66.19	66.05	65.91	65.83	65.83

Annual Max Momentary Gage Height 75.76 M (MSL), at 21.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 65.10 M (MSL), River Bed 63.09 M (MSL)
Left Bank Elevation 78.28 M (MSL)
Right Bank Elevation 78.33 M (MSL), Drainage Area 12131 Square kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.8	9.8	97.0	18.6	127.5	274.2	203.8	250.4	35.7	16.7	12.8	9.4	
2	12.5	10.2	106.8	19.4	182.0	215.9	236.6	213.7	34.0	16.7	11.9	9.2	
3	12.5	12.5	150.3	20.2	315.0	181.0	210.4	193.0	33.1	16.4	11.6	9.2	
4	12.2	771.0	148.4	19.8	377.5	187.0	184.0	141.7	32.7	16.4	11.9	9.2	
5	11.6	253.8	122.7	19.4	389.5	261.8	176.0	121.8	32.7	16.1	11.9	9.0	
6	11.0	69.7	117.0	21.8	338.2	290.7	195.0	117.0	30.8	16.1	11.6	9.0	
7	10.6	42.8	116.2	31.3	325.1	461.8	197.2	108.5	30.0	15.8	11.3	8.8	
8	10.4	54.7	122.7	27.7	362.8	428.5	195.0	100.9	29.0	15.5	10.8	8.8	
9	10.2	37.3	96.3	34.5	410.5	346.9	171.0	95.5	28.1	15.5	10.6	8.8	
10	10.0	28.1	78.0	80.1	391.0	407.5	153.1	92.5	27.2	15.5	10.2	8.6	
11	9.8	25.5	66.5	87.3	346.9	403.0	181.0	86.5	25.5	15.5	10.2	8.6	
12	9.6	27.2	61.2	82.2	631.0	349.8	199.4	80.8	25.0	15.5	10.0	8.4	
13	9.4	83.6	56.7	71.7	1332.5	461.8	233.1	75.2	25.0	15.5	10.0	8.4	
14	9.2	117.0	52.8	57.3	1495.9	487.7	189.0	71.0	23.8	15.5	9.6	8.4	
15	9.2	85.8	40.0	50.2	1578.9	571.7	151.2	73.8	23.0	15.2	9.6	8.2	
16	9.2	73.8	34.0	42.2	1372.5	475.5	129.4	69.1	22.2	15.2	9.4	8.2	
17	9.2	151.2	30.0	40.6	609.0	403.0	116.2	67.1	20.6	15.2	9.4	8.2	
18	9.4	112.8	32.7	36.2	484.2	315.0	111.9	69.7	19.4	14.9	10.0	8.2	
19	9.8	91.0	30.8	37.8	431.5	301.5	111.1	60.0	19.4	14.6	10.0	8.0	
20	9.6	92.5	26.3	36.7	313.6	370.1	103.4	55.4	19.4	14.3	9.8	7.6	
21	9.4	76.6	23.8	47.6	253.8	283.0	89.5	51.5	19.0	14.3	9.6	8.6	
22	9.4	56.0	22.6	102.6	313.6	258.4	80.8	47.6	18.2	14.3	9.6	9.4	
23	9.2	59.3	22.2	289.3	228.5	250.4	72.4	48.2	17.8	14.3	9.6	9.2	
24	8.8	78.0	21.0	452.2	183.0	221.6	78.0	45.7	17.4	14.0	9.6	9.2	
25	8.4	76.6	21.4	475.5	168.0	204.9	157.0	43.3	17.4	13.4	9.4	9.4	
26	9.2	77.3	25.0	421.0	139.8	211.5	252.6	41.7	17.0	12.8	9.2	9.4	
27	9.6	66.5	25.0	261.8	120.8	203.8	220.5	41.7	17.0	12.8	9.4	9.0	
28	10.0	66.5	24.2	180.0	133.1	220.5	198.3	40.0	17.0	12.5	9.6	9.8	
29	10.2	65.2	19.4	154.1	151.2	229.6	221.6	38.4	17.0	13.1		10.6	
30	9.8	58.7	17.8	183.0	325.1	203.8	458.6	36.7	16.7	13.4		11.0	
31		58.0		148.4	377.5		385.0		16.7	13.4		11.3	
Total	302.2	2889.0	1808.8	3550.5	14209.5	9481.9	5662.1	2578.4	727.8	460.4	288.6	279.1	42238.3 CMSDAY
Mean	10.1	93.2	60.3	114.5	458.4	316.1	182.6	85.9	23.5	14.9	10.3	9.0	115.7 CMS
Max	12.8	771.0	150.3	475.5	1578.9	571.7	458.6	250.4	35.7	16.7	12.8	11.3	1578.9 CMS
Min	8.4	9.8	17.8	18.6	120.8	181.0	72.4	36.7	16.7	12.5	9.2	7.6	7.6 CMS
Runoff	26.11	249.61	156.28	306.76	1227.70	819.24	489.21	222.77	62.88	39.78	24.94	24.11	3649.39 MCM

Momentary Peak 1631.00 CMS, at 75.76 M (MSL), at 21.00 Hours, on Aug 15, 2001

Runoff Yield 9.54 Liters/Second/Square KM, Momentary Peak Yield 134.449 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 20,841 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +31.630 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 13 meters from the top staff gage.

Elevation +41.630 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1967 to date.

Rating Operation

Period of Rating 1967 , 1995 to date.

Rated by Float -

Rated by Current Meter 1967 , 1995 to date.

Stability of Channel Regimes Fairly stable.

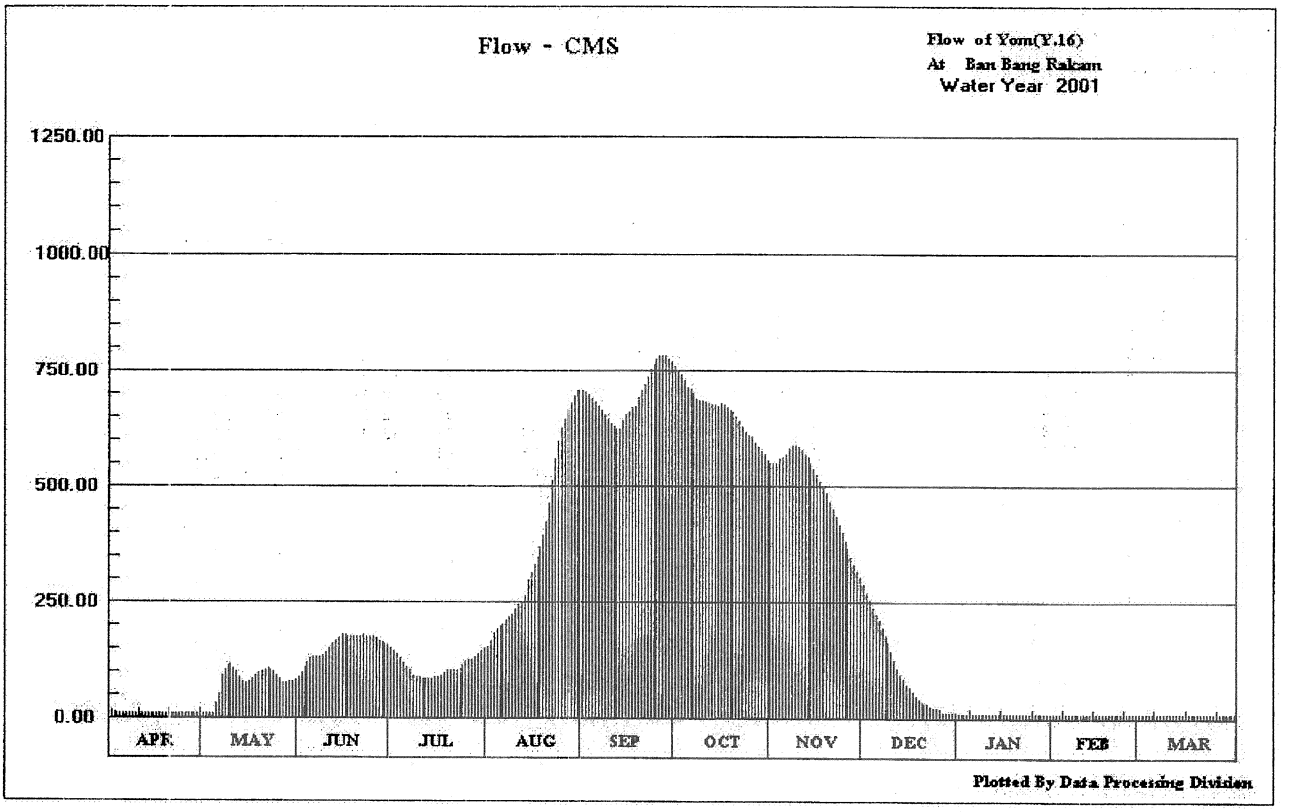
Overbank Flow Conditions Overbank flow starts at elevation +39.040 m.(M.S.L.) and is including overbank flow.

General Description Records good. Stage-discharge relation defined by 21 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	33.22	31.90	35.53	36.87	36.94	41.14	41.45	40.28	38.44	32.98	32.01	32.42	
2	33.09	31.92	35.78	36.76	37.15	41.13	41.39	40.27	38.28	32.98	32.01	32.42	
3	32.97	31.98	36.08	36.64	37.35	41.10	41.33	40.28	38.14	33.00	32.00	32.53	
4	32.95	32.23	36.27	36.47	37.47	41.05	41.26	40.32	37.97	32.95	31.98	32.63	
5	32.95	33.87	36.44	36.27	37.52	41.00	41.19	40.34	37.81	32.84	31.98	32.65	
6	32.91	34.45	36.51	36.11	37.59	40.96	41.16	40.39	37.68	32.76	31.98	32.66	
7	32.91	35.62	36.53	35.92	37.70	40.91	41.11	40.45	37.48	32.70	31.98	32.64	
8	32.87	35.97	36.53	35.63	37.75	40.86	41.05	40.48	37.29	32.66	31.97	32.50	
9	32.81	36.15	36.58	35.57	37.82	40.80	41.03	40.48	37.08	32.64	31.98	32.42	
10	32.78	36.20	36.69	35.53	37.94	40.74	41.02	40.47	36.76	32.64	32.00	32.40	
11	32.73	36.00	36.88	35.44	38.04	40.72	41.00	40.43	36.40	32.63	32.05	32.40	
12	32.70	35.85	37.01	35.44	38.08	40.67	40.99	40.39	36.03	32.63	32.06	32.38	
13	32.69	35.54	37.14	35.46	38.23	40.68	40.98	40.34	35.70	32.63	32.06	32.37	
14	32.67	35.33	37.23	35.50	38.53	40.79	40.97	40.28	35.45	32.65	32.06	32.36	
15	32.65	35.21	37.29	35.56	38.66	40.85	40.96	40.20	35.17	32.49	32.06	32.36	
16	32.63	35.28	37.30	35.58	38.80	40.89	40.99	40.12	34.92	32.40	32.03	32.36	
17	32.63	35.46	37.26	35.64	38.93	40.93	40.97	40.02	34.69	32.35	32.03	32.37	
18	32.61	35.62	37.27	35.79	39.09	40.95	40.94	39.95	34.39	32.31	32.02	32.38	
19	32.57	35.77	37.27	35.95	39.27	41.06	40.91	39.86	34.14	32.29	32.00	32.39	
20	32.42	35.89	37.27	35.96	39.46	41.15	40.88	39.74	34.00	32.26	31.99	32.40	
21	32.45	35.96	37.28	35.94	39.73	41.22	40.84	39.65	33.88	32.23	31.99	32.42	
22	32.47	36.00	37.30	35.91	40.04	41.31	40.78	39.53	33.79	32.21	31.99	32.70	
23	32.54	35.96	37.28	35.99	40.32	41.41	40.71	39.42	33.57	32.17	32.08	32.78	
24	32.50	35.84	37.28	36.12	40.54	41.46	40.64	39.30	33.46	32.13	32.18	32.83	
25	32.42	35.61	37.25	36.32	40.70	41.53	40.61	39.18	33.45	32.10	32.31	32.83	
26	32.27	35.44	37.21	36.39	40.80	41.56	40.59	39.06	33.32	32.09	32.50	32.82	
27	32.12	35.20	37.13	36.41	40.91	41.56	40.53	38.94	33.12	32.07	32.66	32.78	
28	32.00	35.24	37.09	36.50	40.99	41.56	40.47	38.81	33.06	32.04	32.56	32.75	
29	31.96	35.31	37.01	36.64	41.08	41.53	40.42	38.69	33.11	32.05		32.74	
30	31.90	35.33	36.98	36.76	41.14	41.49	40.38	38.58	33.11	32.05		32.73	
31		35.40		36.85	41.15		40.30		33.05	32.02		32.73	
Mean	32.61	35.08	36.89	36.06	39.02	41.10	40.90	39.88	35.31	32.45	32.09	32.55	
Max	33.22	36.20	37.30	36.87	41.15	41.56	41.45	40.48	38.44	33.00	32.66	32.83	41.56
Min	31.90	31.90	35.53	35.44	36.94	40.67	40.30	38.58	33.05	32.02	31.97	32.36	31.90

Annual Max Momentary Gage Height 41.56 M (MSL), at 12.00 Hours, on Sep 26, 2001
Zero Gage at Bottom Elevation 31.63 M (MSL), River Bed 31.04 M (MSL)
Left Bank Elevation 39.03 M (MSL)
Right Bank Elevation 43.08 M (MSL), Drainage Area 20841 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	19.5	0.8	90.9	154.2	158.4	709.2	765.0	555.6	290.8	14.6	1.6	5.3	
2	16.8	0.9	100.7	147.8	171.0	707.4	754.2	553.9	272.8	14.6	1.6	5.3	
3	14.4	1.3	113.6	141.2	186.0	702.0	743.4	555.6	258.0	15.0	1.5	6.9	
4	14.0	3.3	122.5	132.5	195.6	693.0	730.8	562.4	241.0	14.0	1.3	8.5	
5	14.0	36.4	131.0	122.5	199.6	684.0	718.2	565.8	225.0	11.8	1.3	8.8	
6	13.2	53.5	134.5	115.0	205.2	676.8	712.8	574.3	213.2	10.4	1.3	8.9	
7	13.2	94.3	135.5	106.6	215.0	667.8	703.8	585.0	196.4	9.5	1.3	8.6	
8	12.4	108.7	135.5	94.7	219.5	658.8	693.0	590.4	181.2	8.9	1.3	6.5	
9	11.2	116.8	138.0	92.4	226.0	648.0	689.4	590.4	166.8	8.6	1.3	5.3	
10	10.7	119.0	144.0	90.9	238.0	637.2	687.6	588.6	147.8	8.6	1.5	5.0	
11	9.9	110.0	154.8	87.5	248.0	633.6	684.0	581.4	129.0	8.5	1.9	5.0	
12	9.5	103.6	162.6	87.5	252.0	624.6	682.2	574.3	111.3	8.5	2.0	4.8	
13	9.3	91.3	170.4	88.2	267.3	626.4	680.4	565.8	97.5	8.5	2.0	4.7	
14	9.0	83.4	176.4	89.8	301.6	646.2	678.6	555.6	87.9	8.8	2.0	4.6	
15	8.8	78.9	181.2	92.0	317.2	657.0	676.8	542.0	77.4	6.4	2.0	4.6	
16	8.5	81.5	182.0	92.8	334.0	664.2	682.2	529.2	68.7	5.0	1.7	4.6	
17	8.5	88.2	178.8	95.1	350.9	671.4	678.6	513.2	60.9	4.5	1.7	4.7	
18	8.2	94.3	179.6	101.1	372.6	675.0	673.2	502.0	51.7	4.1	1.7	4.8	
19	7.5	100.3	179.6	107.9	398.5	694.8	667.8	487.6	44.2	3.9	1.5	4.9	
20	5.3	105.3	179.6	108.3	427.0	711.0	662.4	469.0	40.0	3.6	1.4	5.0	
21	5.7	108.3	180.4	107.4	467.5	723.6	655.2	455.5	36.7	3.3	1.4	5.3	
22	6.1	110.0	182.0	106.2	516.4	739.8	644.4	437.5	34.2	3.1	1.4	9.5	
23	7.1	108.3	180.4	109.6	562.4	757.8	631.8	421.0	28.2	2.8	2.1	10.7	
24	6.5	103.2	180.4	115.4	601.2	766.8	619.2	403.0	25.1	2.5	2.8	11.6	
25	5.3	93.9	178.0	125.0	630.0	779.4	613.8	385.2	24.9	2.2	4.1	11.6	
26	3.7	87.5	174.8	128.5	648.0	784.8	610.2	368.4	21.7	2.2	6.5	11.4	
27	2.4	78.5	169.8	129.5	667.8	784.8	599.4	352.2	17.4	2.0	8.9	10.7	
28	1.5	80.0	167.4	134.0	682.2	784.8	588.6	335.3	16.2	1.8	7.4	10.3	
29	1.2	82.6	162.6	141.2	698.4	779.4	579.6	320.8	17.2	1.9		10.1	
30	0.8	83.4	160.8	147.8	709.2	772.2	572.6	307.6	17.2	1.9		9.9	
31		86.0		153.0	711.0		559.0		16.0	1.7		9.9	
Total	264.2	2493.5	4727.8	3545.6	12177.5	21061.8	20638.2	14828.6	3216.4	203.2	66.5	227.8	83451.1 CMSDAY
Mean	8.8	80.4	157.6	114.4	392.8	702.1	665.7	494.3	103.8	6.6	2.4	7.3	228.6 CMS
Max	19.5	119.0	182.0	154.2	711.0	784.8	765.0	590.4	290.8	15.0	8.9	11.6	784.8 CMS
Min	0.8	0.8	90.9	87.5	158.4	624.6	559.0	307.6	16.0	1.7	1.3	4.6	0.8 CMS
Runoff	22.83	215.44	408.48	306.34	1052.14	1819.74	1783.14	1281.19	277.90	17.56	5.75	19.68	7210.18 MCM

Momentary Peak 784.80 CMS, at 41.56 M (MSL), at 12.00 Hours, on Sep 26, 2001
Runoff Yield 10.97 Liters/Second/Square KM, Momentary Peak Yield 37.657 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 21,415 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +31.490 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 50 meters from Amphoe Sam Ngam Office.

Elevation +41.843 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1967 to date.

Rating Operation

Period of Rating 1967 , 1990 to date.

Rated by Float -

Rated by Current Meter 1967 , 1990 to date.

Stability of Channel Regimes Fairly stable.

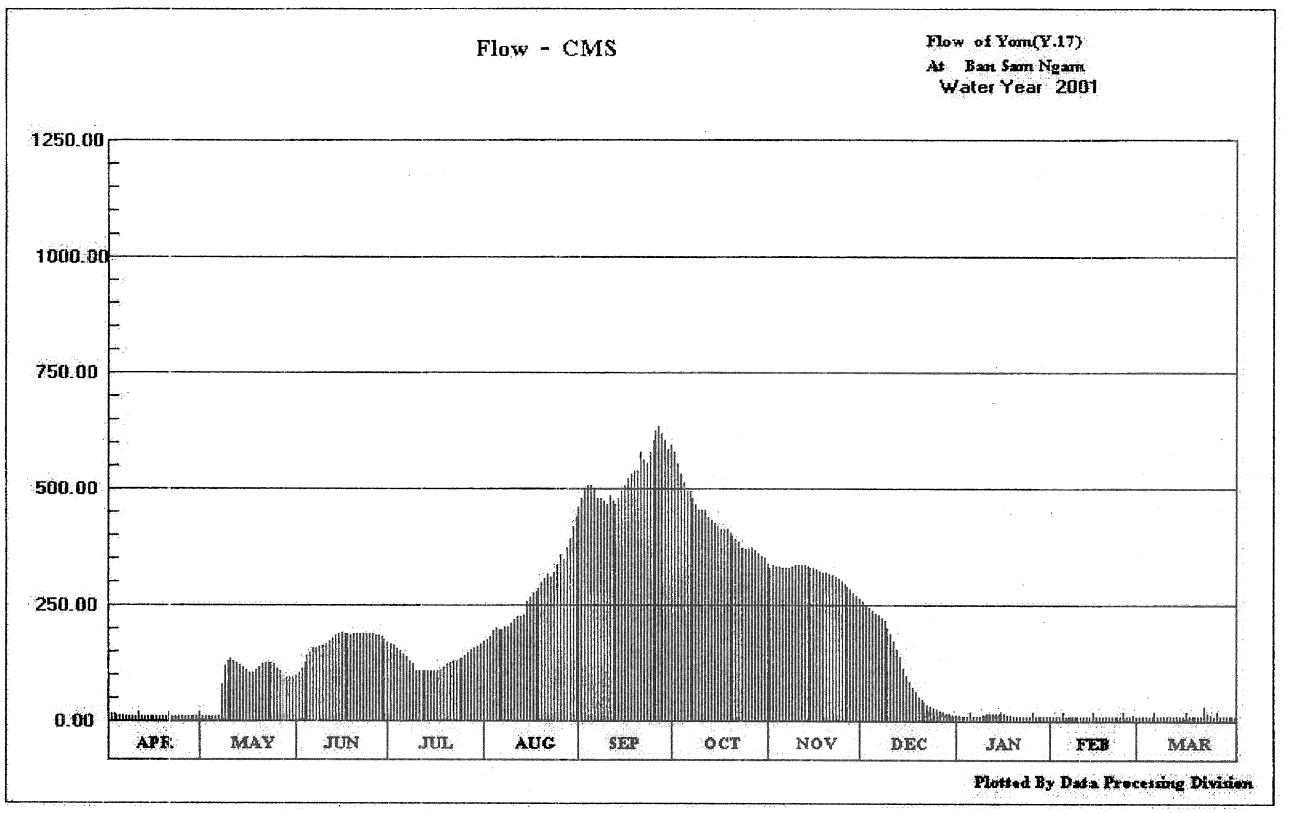
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.58	31.51	34.24	35.23	35.38	37.36	37.49	37.03	36.46	32.45	31.91	32.27	
2	32.53	31.52	34.43	35.16	35.44	37.39	37.46	37.06	36.38	32.39	31.93	32.26	
3	32.50	31.68	34.63	35.09	35.64	37.40	37.43	37.05	36.30	32.37	31.95	32.25	
4	32.48	31.88	34.85	34.99	35.72	37.40	37.41	37.05	36.21	32.37	31.97	32.25	
5	32.44	32.11	34.96	34.89	35.69	37.39	37.38	37.04	36.12	32.38	32.04	32.29	
6	32.40	32.40	35.07	34.79	35.69	37.36	37.38	37.04	36.08	32.39	32.03	32.32	
7	32.36	33.84	35.10	34.69	35.75	37.36	37.36	37.04	36.03	32.41	32.06	32.33	
8	32.32	34.49	35.12	34.57	35.77	37.35	37.34	37.05	35.91	32.35	32.07	32.28	
9	32.31	34.69	35.18	34.32	35.84	37.34	37.32	37.06	35.73	32.43	32.08	32.23	
10	32.30	34.74	35.24	34.33	35.96	37.37	37.32	37.06	35.55	32.52	32.10	32.18	
11	32.27	34.67	35.31	34.31	36.04	37.35	37.32	37.06	35.31	32.55	32.13	32.14	
12	32.24	34.60	35.41	34.31	36.05	37.34	37.30	37.06	35.03	32.56	32.16	32.13	
13	32.21	34.53	35.50	34.30	36.11	37.36	37.29	37.05	34.83	32.57	32.16	32.12	
14	32.18	34.47	35.55	34.31	36.45	37.38	37.28	37.04	34.42	32.58	32.13	32.12	
15	32.15	34.37	35.60	34.32	36.55	37.40	37.27	37.04	34.17	32.54	32.10	32.10	
16	32.12	34.27	35.56	34.33	36.63	37.42	37.26	37.02	33.95	32.51	32.07	32.10	
17	32.09	34.23	35.52	34.35	36.68	37.43	37.26	37.01	33.75	32.47	32.05	32.10	
18	32.07	34.36	35.51	34.46	36.74	37.44	37.26	37.00	33.58	32.43	32.04	32.11	
19	32.04	34.46	35.55	34.57	36.84	37.44	37.25	37.00	33.33	32.40	32.03	32.14	
20	32.07	34.56	35.55	34.62	36.90	37.49	37.24	36.98	33.23	32.37	32.01	32.13	
21	32.11	34.64	35.55	34.65	36.97	37.47	37.23	36.96	33.10	32.35	31.98	32.22	
22	32.15	34.63	35.54	34.68	36.94	37.46	37.22	36.94	33.01	32.32	32.01	32.89	
23	32.19	34.62	35.53	34.71	36.99	37.49	37.20	36.90	32.91	32.29	32.06	32.55	
24	32.19	34.58	35.52	34.76	37.06	37.52	37.19	36.86	32.82	32.24	32.11	32.47	
25	32.09	34.43	35.52	34.86	37.14	37.55	37.19	36.81	32.78	32.18	32.16	32.40	
26	32.00	34.29	35.51	34.95	37.11	37.56	37.20	36.76	32.73	32.12	32.33	32.31	
27	31.91	34.15	35.50	35.04	37.20	37.54	37.18	36.71	32.64	32.07	32.44	32.30	
28	31.78	34.12	35.43	35.09	37.23	37.52	37.16	36.64	32.53	32.02	32.37	32.29	
29	31.65	34.10	35.34	35.13	37.27	37.50	37.13	36.58	32.51	31.98		32.29	
30	31.51	34.12	35.29	35.23	37.30	37.51	37.12	36.52	32.48	31.97		32.33	
31		34.15		35.30	37.33		37.07		32.47	31.94		32.37	
Mean	32.17	33.91	35.29	34.72	36.46	37.43	37.27	36.95	34.27	32.34	32.09	32.27	
Max	32.58	34.74	35.60	35.30	37.33	37.56	37.49	37.06	36.46	32.58	32.44	32.89	37.56
Min	31.51	31.51	34.24	34.30	35.38	37.34	37.07	36.52	32.47	31.94	31.91	32.10	31.51

Annual Max Momentary Gage Height 37.57 M (MSL), at 6.00 Hours, on Sep 26, 2001
Zero Gage at Bottom Elevation 31.49 M (MSL), River Bed 30.75 M (MSL)
Left Bank Elevation 41.85 M (MSL)
Right Bank Elevation 41.88 M (MSL), Drainage Area 21415 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.2	0.0	106.4	170.1	180.6	483.0	582.0	330.8	261.7	16.0	1.7	10.1	
2	19.2	0.0	117.8	165.2	184.8	503.2	558.0	338.6	254.4	13.7	2.0	9.8	
3	18.0	0.0	130.0	160.3	198.8	510.0	534.0	336.0	248.0	13.1	2.3	9.5	
4	17.2	1.2	144.2	153.4	204.4	510.0	518.0	336.0	240.8	13.1	2.5	9.5	
5	15.6	5.8	151.4	146.8	202.3	503.2	496.5	333.4	234.0	13.4	4.0	10.7	
6	14.0	14.0	158.9	140.4	202.3	483.0	496.5	333.4	231.0	13.7	3.7	11.6	
7	12.8	82.4	161.0	133.8	206.5	483.0	483.0	333.4	227.2	14.4	4.5	11.9	
8	11.6	121.4	162.4	126.2	207.9	476.2	469.5	336.0	218.3	12.5	4.7	10.4	
9	11.3	133.8	166.6	111.2	213.0	469.5	456.0	338.6	205.1	15.2	5.0	8.9	
10	11.0	137.1	170.8	111.8	222.0	489.7	456.0	338.6	192.5	18.8	5.5	7.5	
11	10.1	132.5	175.7	110.6	228.0	476.2	456.0	338.6	175.7	20.0	6.3	6.5	
12	9.2	128.0	182.7	110.6	228.7	469.5	442.5	338.6	156.1	20.4	7.0	6.3	
13	8.3	123.8	189.0	110.0	233.3	483.0	435.7	336.0	143.0	20.8	7.0	6.0	
14	7.5	120.2	192.5	110.6	260.7	496.5	429.0	333.4	117.2	21.2	6.3	6.0	
15	6.8	114.2	196.0	111.2	270.2	510.0	422.2	333.4	102.2	19.6	5.5	5.5	
16	6.0	108.2	193.2	111.8	278.2	526.0	415.5	328.2	89.0	18.4	4.7	5.5	
17	5.2	105.8	190.4	113.0	283.4	534.0	415.5	325.6	77.3	16.8	4.2	5.5	
18	4.7	113.6	189.7	119.6	289.7	542.0	415.5	323.0	67.9	15.2	4.0	5.8	
19	4.0	119.6	192.5	126.2	301.4	542.0	408.7	323.0	54.5	14.0	3.7	6.5	
20	4.7	125.6	192.5	129.3	309.5	582.0	402.0	320.3	49.5	13.1	3.2	6.3	
21	5.8	130.6	192.5	131.3	319.0	566.0	395.2	317.6	43.5	12.5	2.7	8.6	
22	6.8	130.0	191.8	133.2	314.9	558.0	388.5	314.9	39.4	11.6	3.2	34.0	
23	7.7	129.3	191.1	135.2	321.7	582.0	375.0	309.5	35.0	10.7	4.5	20.0	
24	7.7	126.8	190.4	138.4	338.6	606.0	372.4	304.1	30.9	9.2	5.8	16.8	
25	5.2	117.8	190.4	144.9	359.4	630.0	372.4	297.4	29.2	7.5	7.0	14.0	
26	3.0	109.4	189.7	150.8	351.6	638.0	375.0	291.8	27.2	6.0	11.9	11.3	
27	1.7	101.0	189.0	156.8	375.0	622.0	369.8	286.6	23.6	4.7	15.6	11.0	
28	0.0	99.2	184.1	160.3	395.2	606.0	364.6	279.2	19.2	3.5	13.1	10.7	
29	0.0	98.0	177.8	163.1	422.2	590.0	356.8	273.1	18.4	2.7		10.7	
30	0.0	99.2	174.3	170.1	442.5	598.0	354.2	267.4	17.2	2.5		11.9	
31		101.0		175.0	462.8		341.2		16.8	2.1		13.1	
Total	256.3	2929.5	5234.8	4231.2	8808.6	16068.0	13357.2	9596.5	3645.8	396.4	151.6	321.9	64997.8 CMSDAY
Mean	8.5	94.5	174.5	136.5	284.1	535.6	430.9	319.9	117.6	12.8	5.4	10.4	178.1 CMS
Max	21.2	137.1	196.0	175.0	462.8	638.0	582.0	338.6	261.7	21.2	15.6	34.0	638.0 CMS
Min	0.0	0.0	106.4	110.0	180.6	469.5	341.2	267.4	16.8	2.1	1.7	5.5	0.0 CMS
Runoff	22.14	253.11	452.29	365.58	761.06	1388.28	1154.06	829.14	315.00	34.25	13.10	27.81	5615.81 MCM

Momentary Peak 646.00 CMS, at 37.57 M (MSL), at 6.00 Hours, on Sep 26, 2001
Runoff Yield 8.32 Liters/Second/Square KM, Momentary Peak Yield 30.166 Liters/Second/Square KM

WATER YEAR : 2001

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 downsteam from Sop Ngao.

Ban Huai Sak **Amphoe** Song **Changwat** Phrae

Drainage Area 5,410 sq. km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +181.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the automatic gage building.

Elevation +193.552 m. (M.S.L.)

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 Float -

Rated by Current Meter 1972 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

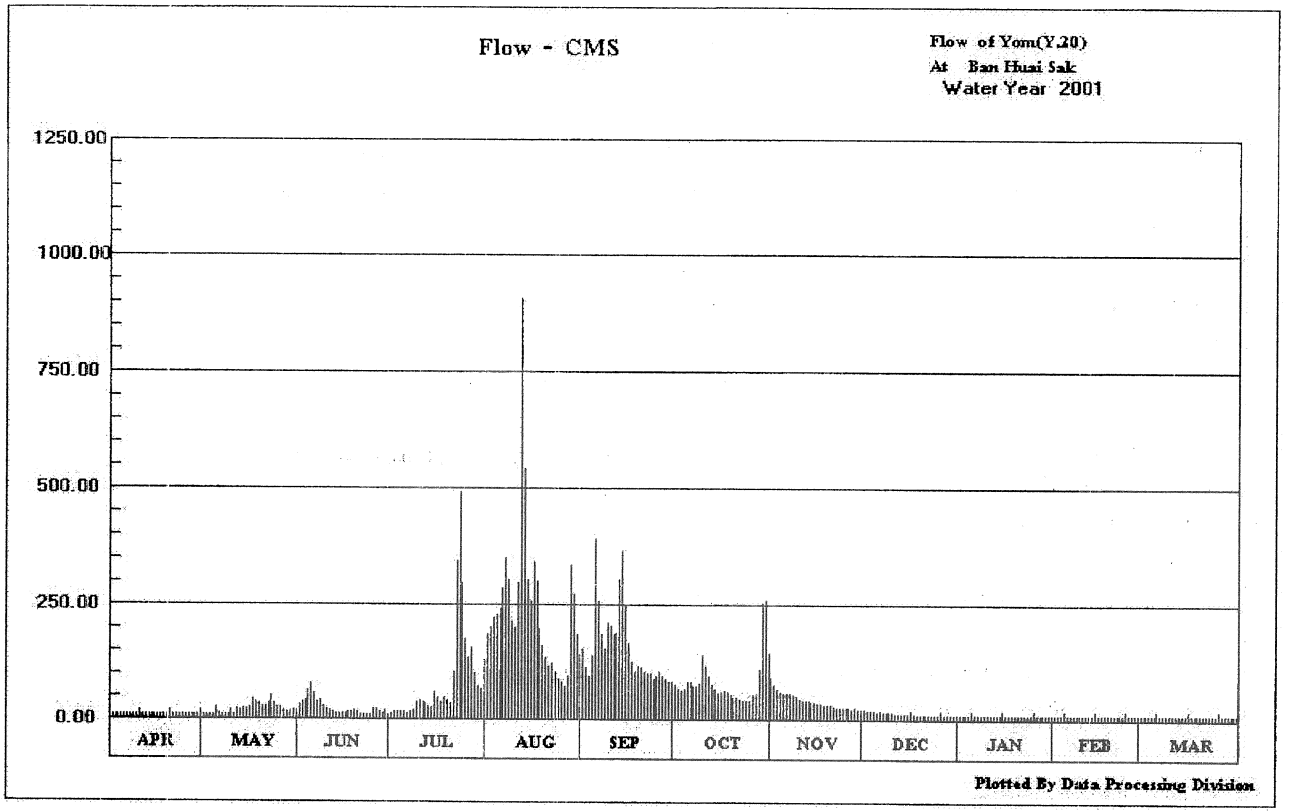
General Description Records good. Mae yom weir situated about 15 kilometers above site.

Stage-discharge relation defined by 92 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	182.18	182.00	182.90	182.46	184.99	184.67	183.69	183.95	182.65	182.31	182.15	182.03	
2	182.18	182.00	182.99	182.57	185.13	184.24	183.55	183.69	182.63	182.31	182.15	182.03	
3	182.24	182.03	183.08	182.54	185.31	183.98	183.44	183.50	182.63	182.30	182.15	182.02	
4	182.16	182.27	183.44	182.55	185.37	184.51	183.50	183.43	182.61	182.30	182.14	182.00	
5	182.15	182.76	183.73	182.51	185.49	186.50	183.79	183.38	182.54	182.29	182.12	182.00	
6	182.15	182.49	183.35	182.47	185.80	185.61	183.79	183.33	182.56	182.27	182.12	182.00	
7	182.13	182.42	183.02	182.51	186.26	184.98	183.65	183.36	182.56	182.28	182.12	182.00	
8	182.12	182.39	183.07	182.62	185.95	184.68	183.61	183.30	182.55	182.26	182.11	182.00	
9	182.11	182.40	182.82	183.01	185.25	185.21	183.72	183.22	182.53	182.26	182.11	182.00	
10	182.10	182.31	182.71	183.04	185.13	185.17	184.53	183.15	182.51	182.25	182.10	182.00	
11	182.10	182.40	182.59	182.98	185.89	184.99	184.28	183.09	182.49	182.25	182.10	182.00	
12	182.09	182.69	182.52	182.92	188.78	185.02	183.99	183.07	182.47	182.25	182.09	182.00	
13	182.13	182.61	182.47	182.80	187.32	185.95	183.69	183.06	182.45	182.27	182.09	182.00	
14	182.18	182.71	182.46	182.78	185.94	186.35	183.50	183.01	182.45	182.34	182.08	182.00	
15	182.15	182.71	182.45	183.42	185.60	185.54	183.38	182.98	182.45	182.38	182.09	182.00	
16	182.15	182.72	182.49	183.17	186.19	184.79	183.42	182.95	182.43	182.38	182.08	182.00	
17	182.14	183.14	182.52	182.98	185.93	184.37	183.46	182.92	182.44	182.34	182.09	182.00	
18	182.13	183.00	182.54	183.18	185.10	184.12	183.39	182.90	182.40	182.30	182.10	182.01	
19	182.10	182.91	182.56	183.05	184.73	184.27	183.27	182.87	182.40	182.28	182.10	182.00	
20	182.08	182.82	182.50	182.93	184.49	184.23	183.19	182.86	182.39	182.26	182.10	182.00	
21	182.06	182.81	182.35	184.13	184.26	184.12	183.17	182.84	182.38	182.24	182.10	182.00	
22	182.05	182.92	182.33	186.22	184.34	184.06	183.14	182.78	182.37	182.21	182.09	182.00	
23	182.05	183.24	182.27	187.07	184.13	184.07	183.07	182.77	182.36	182.20	182.08	182.00	
24	182.04	182.94	182.22	185.89	183.92	183.89	183.04	182.76	182.36	182.19	182.06	182.00	
25	182.04	182.75	182.70	184.90	183.80	184.01	183.08	182.74	182.35	182.19	182.05	182.00	
26	182.03	182.72	182.68	184.48	183.66	184.13	183.31	182.73	182.34	182.21	182.05	182.00	
27	182.02	182.64	182.52	184.71	183.99	184.01	183.38	182.71	182.35	182.20	182.04	182.00	
28	182.01	182.53	182.48	184.09	186.16	183.87	184.21	182.72	182.34	182.19	182.04	181.99	
29	182.01	182.55	182.41	183.66	185.73	183.78	185.58	182.69	182.32	182.18		181.99	
30	182.01	182.56	182.39	183.52	184.98	183.77	185.62	182.68	182.31	182.16		181.98	
31		182.60		184.42	184.53		184.57		182.31	182.15		181.98	
Mean	182.10	182.61	182.69	183.53	185.30	184.63	183.71	183.05	182.45	182.26	182.10	182.00	
Max	182.24	183.24	183.73	187.07	188.78	186.50	185.62	183.95	182.65	182.38	182.15	182.03	188.78
Min	182.01	182.00	182.22	182.46	183.66	183.77	183.04	182.68	182.31	182.15	182.04	181.98	181.98

Annual Max Momentary Gage Height 189.97 M (MSL), at 9.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 181.00 M (MSL), River Bed 180.63 M (MSL)
Left Bank Elevation 193.51 M (MSL)
Right Bank Elevation 195.00 M (MSL), Drainage Area 5410 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.55	2.50	36.50	16.55	189.00	157.00	79.40	95.00	24.75	10.85	5.87	3.17	
2	6.55	2.50	41.00	21.23	204.30	117.60	71.25	79.40	23.85	10.85	5.87	3.17	
3	8.40	3.17	45.70	19.95	224.65	96.80	65.20	68.50	23.85	10.50	5.87	2.95	
4	6.10	9.45	65.20	20.37	231.55	141.90	68.50	64.65	22.95	10.50	5.65	2.50	
5	5.87	29.70	81.80	18.67	246.25	393.50	85.40	61.90	19.95	10.15	5.20	2.50	
6	5.87	17.83	60.25	16.98	287.00	261.35	85.40	59.15	20.80	9.45	5.20	2.50	
7	5.43	14.85	42.55	18.67	354.60	188.00	77.00	60.80	20.80	9.80	5.20	2.50	
8	5.20	13.65	45.18	23.40	308.00	158.00	74.60	57.50	20.37	9.10	4.98	2.50	
9	4.98	14.00	32.50	42.02	217.75	213.15	81.20	53.10	19.52	9.10	4.98	2.50	
10	4.75	10.85	27.45	43.60	204.30	208.70	143.70	49.37	18.67	8.75	4.75	2.50	
11	4.75	14.00	22.07	40.50	299.60	189.00	121.20	46.22	17.83	8.75	4.75	2.50	
12	4.52	26.55	19.10	37.50	909.30	192.20	97.40	45.18	16.98	8.75	4.52	2.50	
13	5.43	22.95	16.98	31.50	545.20	308.00	79.40	44.65	16.12	9.45	4.52	2.50	
14	6.55	27.45	16.55	30.60	306.60	369.00	68.50	42.02	16.12	11.90	4.30	2.50	
15	5.87	27.45	16.12	64.10	260.00	252.50	61.90	40.50	16.12	13.30	4.52	2.50	
16	5.87	27.90	17.83	50.43	343.50	169.00	64.10	39.00	15.27	13.30	4.30	2.50	
17	5.65	48.85	19.10	40.50	305.20	129.30	66.30	37.50	15.70	11.90	4.52	2.50	
18	5.43	41.50	19.95	50.95	201.00	107.60	62.45	36.50	14.00	10.50	4.75	2.72	
19	4.75	37.00	20.80	44.13	163.00	120.30	55.85	35.00	14.00	9.80	4.75	2.50	
20	4.30	32.50	18.25	38.00	140.10	116.70	51.48	34.50	13.65	9.10	4.75	2.50	
21	3.85	32.00	12.25	108.40	119.40	107.60	50.43	33.50	13.30	8.40	4.75	2.50	
22	3.63	37.50	11.55	348.20	126.60	102.80	48.85	30.60	12.95	7.35	4.52	2.50	
23	3.63	54.20	9.45	495.30	108.40	103.60	45.18	30.15	12.60	7.00	4.30	2.50	
24	3.40	38.50	7.70	299.60	93.20	91.40	43.60	29.70	12.60	6.78	3.85	2.50	
25	3.40	29.25	27.00	180.00	86.00	98.80	45.70	28.80	12.25	6.78	3.63	2.50	
26	3.17	27.90	26.10	139.20	77.60	108.40	58.05	28.35	11.90	7.35	3.63	2.50	
27	2.95	24.30	19.10	161.00	97.40	98.80	61.90	27.45	12.25	7.00	3.40	2.50	
28	2.72	19.52	17.40	105.20	339.00	90.20	114.90	27.90	11.90	6.78	3.40	2.38	
29	2.72	20.37	14.43	77.60	277.55	84.80	257.50	26.55	11.20	6.55		2.38	
30	2.72	20.80	13.65	69.60	188.00	84.20	262.70	26.10	10.85	6.10		2.25	
31		22.50		133.80	143.70		147.30		10.85	5.87		2.25	
Total	145.01	751.49	823.51	2787.55	7597.75	4860.20	2696.34	1339.54	503.95	281.76	130.73	78.77	21996.60 CMSDAY
Mean	4.83	24.24	27.45	89.92	245.09	162.01	86.98	44.65	16.26	9.09	4.67	2.54	60.26 CMS
Max	8.40	54.20	81.80	495.30	909.30	393.50	262.70	95.00	24.75	13.30	5.87	3.17	909.30 CMS
Min	2.72	2.50	7.70	16.55	77.60	84.20	43.60	26.10	10.85	5.87	3.40	2.25	2.25 CMS
Runoff	12.529	64.929	71.151	240.844	656.446	419.921	232.964	115.736	43.541	24.344	11.295	6.806	1900.506 MCM

Momentary Peak 1275.25 CMS, at 189.97 M (MSL), at 9.00 Hours, on Aug 12, 2001

Runoff Yield 11.14 Liters/Second/Square KM, Momentary Peak Yield 235.721 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Huai Mae Sin at Ban Na Pla Kang, Phrae (Y.21)

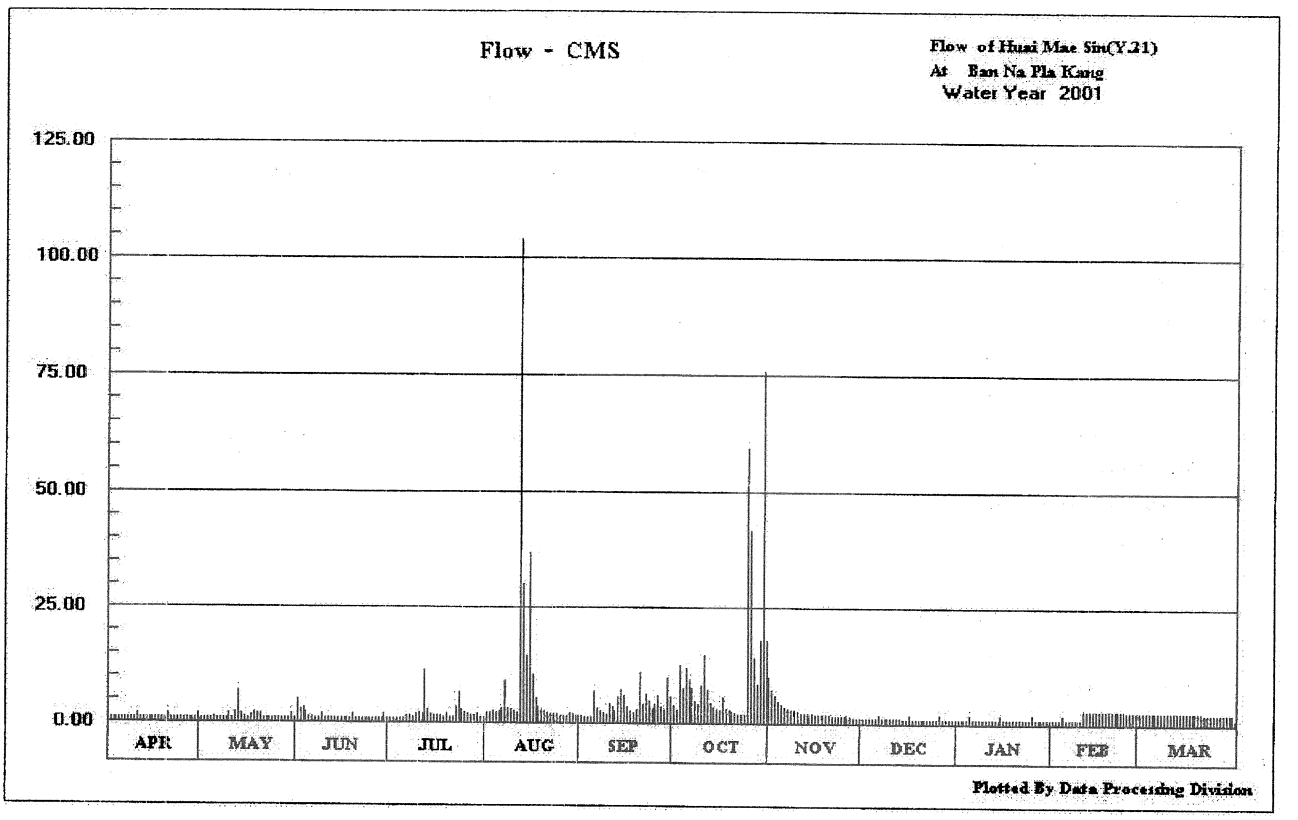
Lat 17 - 47 - 31 N. **Long** 99 - 47 - 27 E.

Location		on left bank at the bridge on road near Wat Amorn Tham.
	Ban Na Pla Kang	**Amphoe** Wang Chin **Changwat** Phrae
Drainage Area		306 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	+2.000 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		1972 to date.
Rating Operation		
	Period of Rating	1982 - 1986, 1989 -1996, 2001 to date.
	Rated by Float	-
	Rated by Current Meter	1982 - 1986, 1989 -1996, 2001 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 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.45	0.39	1.12	0.48	0.82	0.74	1.01	1.49	0.71	0.63	0.53	0.88	
2	0.44	0.45	0.90	0.47	0.83	0.73	0.91	1.30	0.71	0.63	0.53	0.87	
3	0.44	0.50	0.95	0.47	0.86	0.72	1.64	1.20	0.71	0.62	0.52	0.87	
4	0.43	0.59	0.83	0.46	0.83	0.71	1.32	1.08	0.70	0.62	0.52	0.87	
5	0.43	0.73	0.71	0.53	0.86	1.26	1.60	1.03	0.70	0.61	0.51	0.87	
6	0.42	0.64	0.69	0.74	0.93	0.94	1.45	0.98	0.70	0.61	0.51	0.87	
7	0.41	0.59	0.63	0.74	1.43	0.86	1.32	0.94	0.70	0.61	0.50	0.87	
8	0.40	0.55	0.59	0.72	0.95	0.82	1.08	0.92	0.70	0.60	0.50	0.87	
9	0.39	0.52	0.57	0.71	0.90	0.79	1.02	0.90	0.70	0.60	0.49	0.87	
10	0.39	0.51	0.54	0.83	0.86	1.03	1.35	0.88	0.70	0.60	0.58	0.87	
11	0.37	0.48	0.57	0.80	0.85	0.98	1.77	0.85	0.69	0.60	0.92	0.87	
12	0.35	0.84	0.56	1.57	3.45	0.86	1.30	0.84	0.69	0.60	0.92	0.87	
13	0.32	1.27	0.63	0.89	2.41	1.16	1.05	0.83	0.69	0.59	0.92	0.87	
14	0.30	0.78	0.59	0.81	1.76	1.28	0.98	0.81	0.68	0.59	0.92	0.86	
15	0.29	0.69	0.56	0.77	2.58	1.20	0.92	0.82	0.68	0.59	0.91	0.86	
16	0.28	0.64	0.56	0.75	1.50	0.96	0.92	0.81	0.68	0.59	0.91	0.86	
17	0.28	0.74	0.57	0.74	1.15	0.88	1.16	0.80	0.67	0.59	0.91	0.86	
18	0.29	0.82	0.64	0.72	0.97	0.85	0.94	0.78	0.67	0.58	0.91	0.86	
19	0.30	0.79	0.63	0.71	0.91	0.89	0.89	0.78	0.67	0.58	0.90	0.86	
20	0.31	0.78	0.57	0.70	0.87	1.55	0.86	0.78	0.66	0.57	0.90	0.86	
21	0.31	0.62	0.54	0.70	0.84	1.04	0.84	0.77	0.66	0.57	0.90	0.86	
22	0.32	0.58	0.52	0.96	0.81	1.21	0.81	0.76	0.65	0.56	0.89	0.85	
23	0.32	0.56	0.51	1.24	0.80	1.10	0.80	0.75	0.65	0.56	0.89	0.85	
24	0.33	0.54	0.50	0.91	0.78	0.95	0.79	0.74	0.65	0.56	0.89	0.85	
25	0.35	0.52	0.49	0.83	0.77	1.03	2.98	0.74	0.64	0.56	0.88	0.85	
26	0.36	0.51	0.48	0.79	0.76	1.19	2.68	0.74	0.64	0.55	0.88	0.85	
27	0.38	0.50	0.48	0.76	0.75	0.97	1.74	0.74	0.64	0.55	0.88	0.85	
28	0.40	0.51	0.49	0.75	0.85	0.91	1.39	0.73	0.64	0.55	0.88	0.85	
29	0.41	0.55	0.47	0.73	0.80	1.46	1.95	0.72	0.64	0.55		0.85	
30	0.40	0.61	0.46	0.71	0.77	1.17	3.18	0.72	0.63	0.54		0.84	
31		0.59		0.69	0.75		1.95		0.63	0.54		0.84	
Mean	0.36	0.63	0.61	0.76	1.11	1.01	1.37	0.87	0.67	0.58	0.76	0.86	
Max	0.45	1.27	1.12	1.57	3.45	1.55	3.18	1.49	0.71	0.63	0.92	0.88	3.45
Min	0.28	0.39	0.46	0.46	0.75	0.71	0.79	0.72	0.63	0.54	0.49	0.84	0.28

Annual Max Momentary Gage Height 4.00 M (A.D), at 6.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.68 M (A.D)
Left Bank Elevation 7.32 M (A.D)
Right Bank Elevation 7.33 M (A.D), Drainage Area 306 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.45	0.28	5.48	0.54	2.48	1.88	4.21	10.50	1.67	1.11	0.69	3.02	
2	0.42	0.45	3.20	0.51	2.57	1.81	3.29	7.75	1.67	1.11	0.69	2.93	
3	0.42	0.60	3.65	0.51	2.84	1.74	12.88	6.40	1.67	1.04	0.66	2.93	
4	0.39	0.87	2.57	0.48	2.57	1.67	8.02	5.02	1.60	1.04	0.66	2.93	
5	0.39	1.81	1.67	0.69	2.84	7.21	12.20	4.44	1.60	0.97	0.63	2.93	
6	0.36	1.18	1.53	1.88	3.47	3.56	9.88	3.92	1.60	0.97	0.63	2.93	
7	0.33	0.87	1.11	1.88	9.56	2.84	8.02	3.56	1.60	0.97	0.60	2.93	
8	0.30	0.75	0.87	1.74	3.65	2.48	5.02	3.38	1.60	0.90	0.60	2.93	
9	0.28	0.66	0.81	1.67	3.20	2.23	4.33	3.20	1.60	0.90	0.57	2.93	
10	0.28	0.63	0.72	2.57	2.84	4.44	8.43	3.02	1.60	0.90	0.84	2.93	
11	0.24	0.54	0.81	2.30	2.75	3.92	15.09	2.75	1.53	0.90	3.38	2.93	
12	0.20	2.66	0.78	11.74	104.55	2.84	7.75	2.66	1.53	0.90	3.38	2.93	
13	0.14	7.34	1.11	3.11	30.40	5.94	4.67	2.57	1.53	0.87	3.38	2.93	
14	0.10	2.16	0.87	2.39	14.92	7.48	3.92	2.39	1.46	0.87	3.38	2.84	
15	0.08	1.53	0.78	2.09	37.20	6.40	3.38	2.48	1.46	0.87	3.29	2.84	
16	0.06	1.18	0.78	1.95	10.65	3.74	3.38	2.39	1.46	0.87	3.29	2.84	
17	0.06	1.88	0.81	1.88	5.82	3.02	5.94	2.30	1.39	0.87	3.29	2.84	
18	0.08	2.48	1.18	1.74	3.83	2.75	3.56	2.16	1.39	0.84	3.29	2.84	
19	0.10	2.23	1.11	1.67	3.29	3.11	3.11	2.16	1.39	0.84	3.20	2.84	
20	0.12	2.16	0.81	1.60	2.93	11.42	2.84	2.16	1.32	0.81	3.20	2.84	
21	0.12	1.04	0.72	1.60	2.66	4.56	2.66	2.09	1.32	0.81	3.20	2.84	
22	0.14	0.84	0.66	3.74	2.39	6.53	2.39	2.02	1.25	0.78	3.11	2.75	
23	0.14	0.78	0.63	6.94	2.30	5.25	2.30	1.95	1.25	0.78	3.11	2.75	
24	0.16	0.72	0.60	3.29	2.16	3.65	2.23	1.88	1.25	0.78	3.11	2.75	
25	0.20	0.66	0.57	2.57	2.09	4.44	59.89	1.88	1.18	0.78	3.02	2.75	
26	0.22	0.63	0.54	2.23	2.02	6.29	42.04	1.88	1.18	0.75	3.02	2.75	
27	0.26	0.60	0.54	2.02	1.95	3.83	14.58	1.88	1.18	0.75	3.02	2.75	
28	0.30	0.63	0.57	1.95	2.75	3.29	8.97	1.81	1.18	0.75	3.02	2.75	
29	0.33	0.75	0.51	1.81	2.30	10.03	18.30	1.74	1.18	0.75		2.75	
30	0.30	0.97	0.48	1.67	2.09	6.05	75.96	1.74	1.11	0.72		2.66	
31		0.87		1.53	1.95		18.30		1.11	0.72		2.66	
Total	6.97	40.75	36.47	72.29	277.02	134.40	377.54	94.08	43.86	26.92	64.26	88.22	1262.78 CMSDAY
Mean	0.23	1.31	1.22	2.33	8.94	4.48	12.18	3.14	1.41	0.87	2.30	2.85	3.46 CMS
Max	0.45	7.34	5.48	11.74	104.55	11.42	75.96	10.50	1.67	1.11	3.38	3.02	104.55 CMS
Min	0.06	0.28	0.48	0.48	1.95	1.67	2.23	1.74	1.11	0.72	0.57	2.66	0.06 CMS
Runoff	0.602	3.521	3.151	6.246	23.935	11.612	32.619	8.129	3.790	2.326	5.552	7.622	109.104 MCM

Momentary Peak 187.00 CMS, at 4:00 M (MSL), at 6.00 Hours, on Oct 30, 2001

Runoff Yield 11.31 Liters/Second/Square KM, Momentary Peak Yield 611.111 Liters/Second/Square KM

WATER YEAR : 2001

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 of Pong Sanuk - Chiang Muan road.

Ban Mang **Amphoe** Chiang Muan **Changwat** Phayao

Drainage Area 597 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 +7.035 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 1979 - 1986, 1996 to date

Rated by Float -

Rated by Current Meter 1979 - 1986, 1996 to date.

Stability of Channel Regimes Fairly stable.

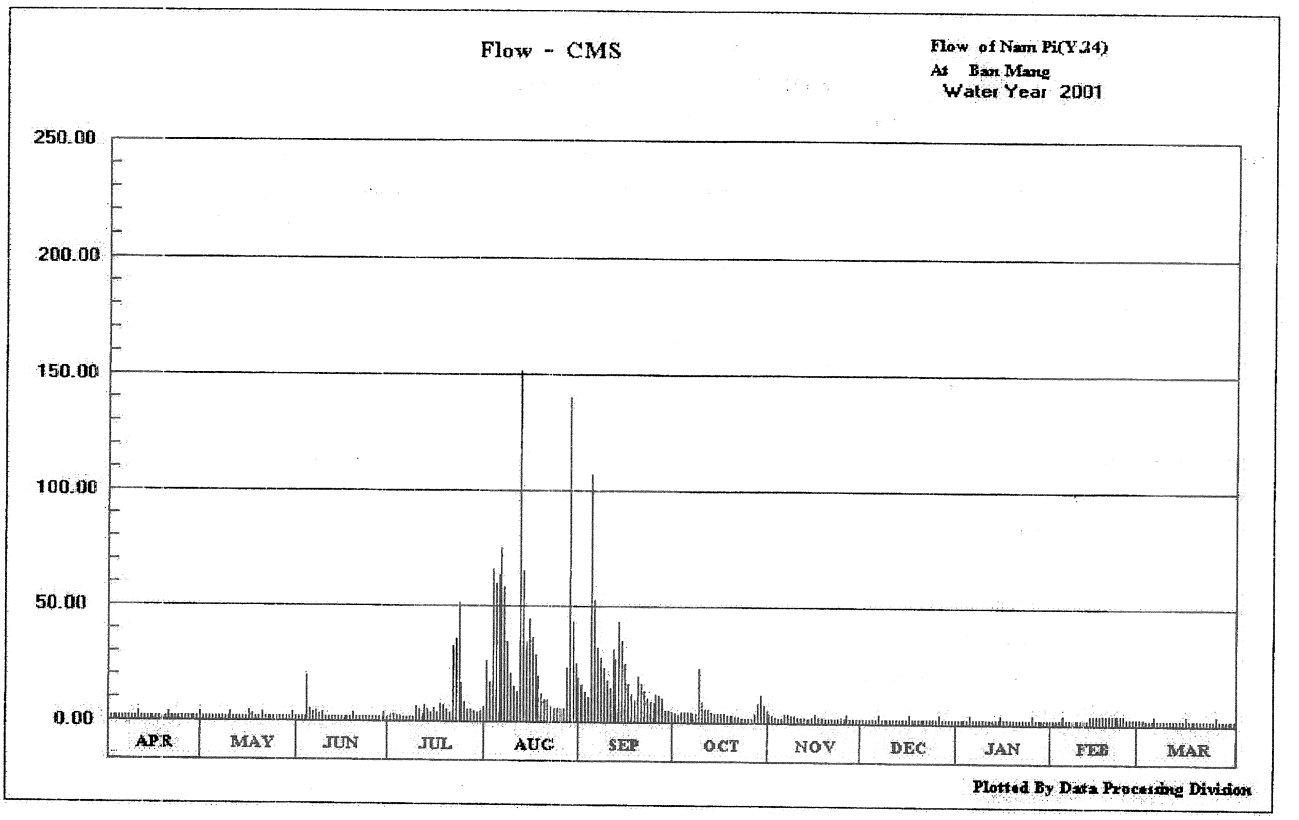
Overbank Flow Conditions No overbank flow.

General Description Records fair. The channel flow silted about 100 meters downstream from the gage site.
Stage-discharge relation defined by 51 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.54	1.44	1.60	1.76	2.72	2.40	1.84	1.84	1.63	1.52	1.45	1.51	
2	1.53	1.44	1.59	1.78	2.44	2.29	1.80	1.80	1.63	1.52	1.43	1.71	
3	1.53	1.55	1.56	1.76	3.54	2.20	1.90	1.74	1.62	1.52	1.43	1.88	
4	1.51	1.55	2.52	1.73	3.44	4.07	1.87	1.71	1.62	1.53	1.44	2.04	
5	1.51	1.55	1.91	1.70	3.50	3.32	1.89	1.70	1.61	1.53	1.40	1.99	
6	1.51	1.53	1.85	1.67	3.68	2.88	1.87	1.86	1.61	1.52	1.39	1.95	
7	1.51	1.52	1.89	1.65	3.42	2.76	1.85	1.83	1.60	1.51	1.40	1.93	
8	1.51	1.50	1.79	1.70	2.94	2.62	1.85	1.81	1.60	1.52	1.41	1.92	
9	1.51	1.49	1.73	2.00	2.56	2.46	2.62	1.78	1.60	1.52	1.40	1.93	
10	1.51	1.49	1.65	1.93	2.37	2.36	2.12	1.75	1.60	1.52	1.40	1.95	
11	1.51	1.54	1.61	1.81	2.29	2.86	1.98	1.76	1.57	1.51	1.36	1.94	
12	1.51	1.53	1.60	2.02	4.52	2.74	1.96	1.76	1.57	1.48	1.35	1.92	
13	1.51	1.53	1.63	1.93	3.53	3.14	1.90	1.71	1.56	1.45	1.86	1.95	
14	1.51	1.62	1.62	1.84	2.94	2.95	1.85	1.71	1.54	1.52	1.48	1.90	
15	1.50	1.62	1.61	1.98	3.16	2.68	1.85	1.72	1.54	1.49	1.47	1.81	
16	1.50	1.89	1.61	1.84	2.98	2.41	1.85	1.73	1.55	1.49	1.40	1.46	
17	1.50	1.80	1.60	2.08	2.79	2.26	1.85	1.72	1.55	1.52	1.45	1.38	
18	1.50	1.74	1.64	2.03	2.51	2.15	1.80	1.73	1.53	1.51	1.44	1.36	
19	1.49	1.70	1.59	1.93	2.25	2.51	1.78	1.70	1.53	1.51	1.50	1.35	
20	1.48	1.68	1.55	1.84	2.14	2.41	1.77	1.71	1.54	1.51	1.50	1.33	
21	1.47	1.63	1.53	2.89	2.14	2.30	1.75	1.70	1.55	1.50	1.49	1.31	
22	1.47	1.60	1.53	2.97	2.00	2.18	1.73	1.68	1.53	1.49	1.50	1.33	
23	1.46	1.60	1.64	3.30	1.96	2.13	1.69	1.70	1.52	1.45	1.50	1.33	
24	1.45	1.60	1.69	2.41	1.95	2.10	1.68	1.73	1.52	1.45	1.48	1.32	
25	1.44	1.60	1.64	2.10	1.95	2.26	1.68	1.71	1.52	1.51	1.48	1.32	
26	1.44	1.66	1.61	1.93	1.96	2.23	1.67	1.61	1.52	1.50	1.48	1.32	
27	1.44	1.65	1.58	1.92	2.63	2.17	1.69	1.65	1.54	1.48	1.50	1.30	
28	1.43	1.63	1.56	1.88	4.41	1.93	2.09	1.67	1.54	1.45	1.50	1.30	
29	1.44	1.66	1.56	1.85	3.13	1.93	2.26	1.70	1.52	1.44		1.30	
30	1.44	1.64	1.65	1.90	2.68	1.89	2.07	1.65	1.52	1.42		1.30	
31		1.60		2.00	2.50		1.92		1.53	1.45		1.28	
Mean	1.49	1.60	1.67	2.00	2.81	2.49	1.88	1.73	1.56	1.49	1.46	1.60	
Max	1.54	1.89	2.52	3.30	4.52	4.07	2.62	1.86	1.63	1.53	1.86	2.04	4.52
Min	1.43	1.44	1.53	1.65	1.95	1.89	1.67	1.61	1.52	1.42	1.35	1.28	1.28

Annual Max Momentary Gage Height 4.76 M (A.D), at 15.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -1.82 M (A.D)
Left Bank Elevation 7.61 M (A.D)
Right Bank Elevation 6.22 M (A.D), Drainage Area 597 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.63	0.18	1.07	3.54	27.04	16.70	4.61	4.61	1.95	0.84	0.43	3.17	
2	0.55	0.18	1.00	3.79	17.90	13.46	4.05	4.05	1.95	0.84	0.33	3.17	
3	0.55	0.70	0.77	3.54	66.60	11.25	5.45	3.28	1.83	0.84	0.33	2.95	
4	0.40	0.70	20.36	3.15	60.22	107.45	5.03	2.90	1.83	0.93	0.38	2.50	
5	0.40	0.70	5.61	2.77	64.00	53.30	5.31	2.77	1.72	0.93	0.20	2.50	
6	0.40	0.55	4.75	2.42	76.10	32.96	5.03	4.89	1.72	0.84	0.18	2.50	
7	0.40	0.48	5.31	2.18	58.96	28.52	4.75	4.47	1.60	0.74	0.20	2.50	
8	0.40	0.33	3.92	2.77	35.34	23.66	4.75	4.19	1.60	0.84	0.24	2.50	
9	0.40	0.31	3.15	7.10	21.68	18.50	23.66	3.79	1.60	0.84	0.20	2.50	
10	0.40	0.31	2.18	5.94	15.80	15.50	9.45	3.41	1.60	0.84	0.20	2.50	
11	0.40	0.63	1.72	4.19	13.46	32.22	6.77	3.54	1.32	0.74	0.13	2.50	
12	0.40	0.55	1.60	7.48	152.10	27.78	6.44	3.54	1.32	0.56	0.12	2.50	
13	0.40	0.55	1.95	5.94	65.95	44.15	5.45	2.90	1.22	0.43	4.52	2.50	
14	0.40	1.32	1.83	4.61	35.34	35.75	4.75	2.90	1.03	0.84	4.30	2.50	
15	0.33	1.32	1.72	6.77	45.10	25.64	4.75	3.03	1.03	0.61	4.52	2.50	
16	0.33	5.24	1.72	4.61	36.98	17.00	4.75	3.15	1.12	0.61	4.30	2.50	
17	0.33	3.78	1.60	8.62	29.63	12.72	4.75	3.03	1.12	0.84	4.52	2.50	
18	0.33	2.91	2.07	7.67	20.03	10.13	4.05	3.15	0.93	0.74	4.75	2.72	
19	0.31	2.33	1.51	5.94	12.48	20.03	3.79	2.77	0.93	0.74	4.75	2.50	
20	0.28	2.08	1.12	4.61	9.90	17.00	3.67	2.90	1.03	0.74	4.75	2.50	
21	0.26	1.45	0.93	33.33	9.90	13.70	3.41	2.77	1.12	0.65	4.75	2.50	
22	0.26	1.07	0.93	36.57	7.10	10.80	3.15	2.54	0.93	0.61	4.52	2.50	
23	0.23	1.07	2.07	52.20	6.44	9.68	2.65	2.77	0.84	0.43	4.30	2.50	
24	0.21	1.07	2.65	17.00	6.28	9.00	2.54	3.15	0.84	0.43	3.85	2.50	
25	0.18	1.07	2.07	9.00	6.28	12.72	2.54	2.90	0.84	0.74	3.63	2.50	
26	0.18	1.83	1.72	5.94	6.44	11.98	2.42	1.72	0.84	0.65	3.63	2.50	
27	0.18	1.70	1.41	5.78	23.99	10.58	2.65	2.18	1.03	0.56	3.40	2.50	
28	0.15	1.45	1.22	5.17	140.55	5.94	8.81	2.42	1.03	0.43	3.40	2.38	
29	0.18	1.83	1.22	4.75	43.68	5.94	12.72	2.77	0.84	0.38		2.38	
30	0.18	1.57	2.18	5.45	25.64	5.31	8.43	2.18	0.84	0.29		2.25	
31		1.07		7.10	19.70		5.78		0.93	0.43		2.25	
Total	10.05	40.33	81.36	279.93	1160.61	659.37	176.36	94.67	38.53	20.93	70.83	78.77	2711.74 CMSDAY
Mean	0.34	1.30	2.71	9.03	37.44	21.98	5.69	3.16	1.24	0.68	2.53	2.54	7.43 CMS
Max	0.63	5.24	20.36	52.20	152.10	107.45	23.66	4.89	1.95	0.93	4.75	3.17	152.10 CMS
Min	0.15	0.18	0.77	2.18	6.28	5.31	2.42	1.72	0.84	0.29	0.12	2.25	0.12 CMS
Runoff	0.868	3.485	7.030	24.186	100.277	56.970	15.238	8.179	3.329	1.808	6.120	6.806	234.294 MCM

Momentary Peak 178.00 CMS, at 4.76 M (A.D), at 15.00 Hours, on Aug 12, 2001
Runoff Yield 12.44 Liters/Second/Square KM, Momentary Peak Yield 298.157 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Nam Mae Mok at Ban Mae Phu, Lampang (Y.26)

Lat 17 - 19 - 37 N. **Long** 99 - 27 - 42 E.

Location on left bank downstream from Ban Mae Phu Tambon Wiang Mok.

Ban Mae Phu **Amphoe** Thoen **Changwat** Lampang

Drainage Area 785 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +100.380 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank along the gage line.

Elevation +108.388 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1979 to date.

Rating Operation

Period of Rating 1979 to date.

Rated by Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

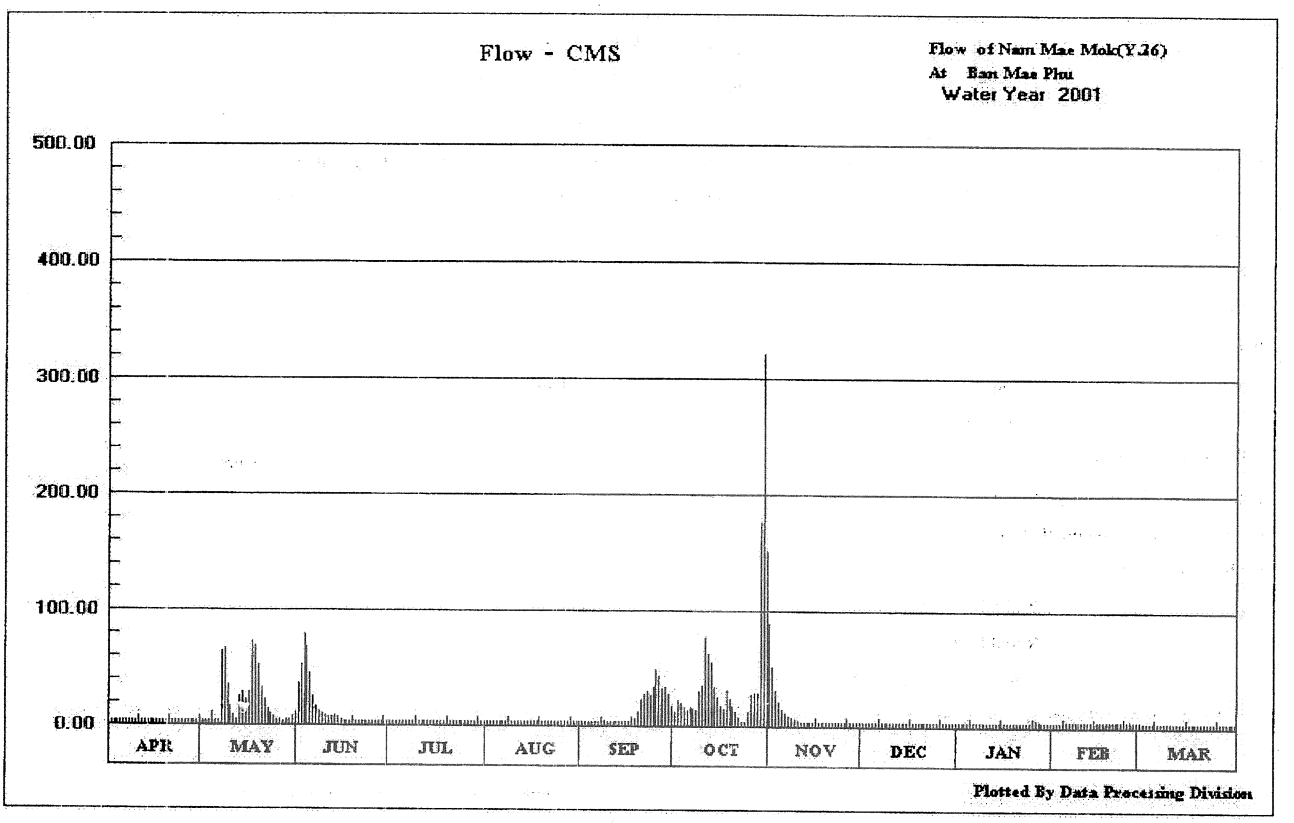
Overbank Flow Conditions Overbank flow starts at elevation +106.560 m.(M.S.L.) and is including overbank flow.

General Description Records good. Stage-discharge relation defined by 34 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	101.55	100.90	102.96	101.47	101.24	101.63	102.15	104.10	101.18	101.10	101.08	101.71	
2	101.56	100.91	103.36	101.47	101.41	101.62	102.52	103.31	101.18	101.10	101.07	101.52	
3	101.57	101.08	103.90	101.46	101.42	101.61	102.44	102.82	101.18	101.16	101.59	101.41	
4	101.54	102.04	103.69	101.45	101.43	101.62	102.33	102.51	101.17	101.54	101.69	101.41	
5	101.32	101.08	103.19	101.45	101.42	101.63	102.21	102.27	101.17	101.58	101.69	101.40	
6	101.31	101.05	102.63	101.45	101.46	101.64	102.29	102.09	101.16	101.59	101.69	101.40	
7	101.31	103.61	102.31	101.45	101.52	101.87	102.26	101.97	101.16	101.57	101.69	101.37	
8	101.31	103.66	102.14	101.45	101.52	101.70	102.22	101.86	101.15	101.57	101.69	101.11	
9	101.30	102.90	101.99	101.46	101.49	101.62	102.77	101.76	101.14	101.58	101.69	101.10	
10	101.24	102.30	101.91	101.54	101.46	101.59	102.90	101.68	101.14	101.58	101.69	101.09	
11	101.00	101.95	101.85	101.52	101.46	101.59	103.86	101.64	101.13	101.57	101.69	101.08	
12	100.99	101.73	101.90	101.47	101.50	101.62	103.57	101.60	101.11	101.57	101.69	101.08	
13	100.99	102.63	101.96	101.46	101.47	101.65	103.40	101.55	101.10	101.57	101.70	101.08	
14	100.99	102.73	101.87	101.47	101.44	101.66	102.89	101.53	101.10	101.63	101.70	101.08	
15	100.97	102.54	101.75	101.47	101.43	101.61	102.63	101.59	101.08	101.59	101.69	101.07	
16	100.96	102.74	101.62	101.43	101.43	101.65	102.34	101.52	101.08	101.57	101.69	101.07	
17	100.95	103.79	101.53	101.33	101.42	101.79	102.24	101.47	101.08	101.57	101.69	101.07	
18	100.94	103.71	101.45	101.32	101.42	101.78	102.82	101.43	101.08	101.57	101.69	101.07	
19	100.92	103.34	101.40	101.33	101.41	102.11	102.58	101.40	101.08	101.56	101.69	101.14	
20	100.93	102.85	101.35	101.33	101.41	102.54	102.36	101.33	101.08	101.56	101.69	101.63	
21	100.94	102.53	101.34	101.34	101.41	102.70	102.12	101.33	101.07	101.56	101.70	101.63	
22	100.95	102.22	101.43	101.38	101.48	102.79	101.86	101.32	101.06	101.56	101.69	101.64	
23	100.94	102.01	101.44	101.34	101.43	102.65	101.53	101.29	101.06	101.56	101.69	101.65	
24	100.93	101.88	101.45	101.29	101.42	102.89	101.61	101.27	101.06	101.62	101.69	101.65	
25	100.92	101.75	101.45	101.11	101.42	103.27	102.15	101.25	101.07	101.77	101.69	101.64	
26	100.91	101.69	101.46	101.05	101.41	103.12	102.69	101.23	101.07	101.77	101.69	101.64	
27	100.91	101.63	101.46	101.05	101.45	102.86	102.74	101.22	101.09	101.71	101.70	101.63	
28	100.92	101.71	101.45	101.04	101.62	102.87	102.74	101.21	101.10	101.49	101.70	101.63	
29	100.91	101.68	101.48	101.03	101.64	102.69	105.47	101.20	101.11	101.24		101.63	
30	100.90	101.66	101.46	101.03	101.64	102.37	107.12	101.18	101.11	101.11		101.63	
31		102.04		101.03	101.63		105.13		101.10	101.09		101.63	
Mean	101.10	102.20	101.97	101.34	101.46	102.09	102.84	101.73	101.11	101.50	101.64	101.38	
Max	101.57	103.79	103.90	101.54	101.64	103.27	107.12	104.10	101.18	101.77	101.70	101.71	107.12
Min	100.90	100.90	101.34	101.03	101.24	101.59	101.53	101.18	101.06	101.09	101.07	101.07	100.90

Annual Max Momentary Gage Height 107.29 M (MSL), at 6.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 100.38 M (MSL), River Bed 100.76 M (MSL)
Left Bank Elevation 107.76 M (MSL)
Right Bank Elevation 106.55 M (MSL), Drainage Area 785 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.41	0.08	38.50	3.47	1.45	5.45	14.50	90.50	1.05	0.65	0.55	6.65	
2	4.53	0.08	54.70	3.47	2.77	5.30	23.60	52.45	1.05	0.65	0.50	4.06	
3	4.65	0.55	80.00	3.35	2.88	5.15	21.20	33.25	1.05	0.95	4.88	2.77	
4	4.30	12.30	69.78	3.24	3.00	5.30	18.43	23.30	1.00	4.30	6.35	2.77	
5	2.05	0.55	47.13	3.24	2.88	5.45	15.73	17.07	1.00	4.77	6.35	2.65	
6	1.97	0.40	26.97	3.24	3.35	5.60	17.53	13.30	0.95	4.88	6.35	2.65	
7	1.97	65.98	17.97	3.24	4.06	9.23	16.85	10.98	0.95	4.65	6.35	2.43	
8	1.97	68.35	14.30	3.24	4.06	6.50	15.95	9.05	0.90	4.65	6.35	0.70	
9	1.90	36.25	11.32	3.35	3.71	5.30	31.52	7.40	0.85	4.77	6.35	0.65	
10	1.45	17.75	9.93	4.30	3.35	4.88	36.25	6.20	0.85	4.77	6.35	0.60	
11	0.15	10.62	8.87	4.06	3.35	4.88	78.00	5.60	0.80	4.65	6.35	0.55	
12	0.14	6.95	9.75	3.47	3.83	5.30	64.15	5.00	0.70	4.65	6.35	0.55	
13	0.14	26.97	10.80	3.35	3.47	5.75	56.50	4.41	0.65	4.65	6.50	0.55	
14	0.14	30.23	9.23	3.47	3.12	5.90	35.87	4.18	0.65	5.45	6.50	0.55	
15	0.13	24.20	7.25	3.47	3.00	5.15	26.97	4.88	0.55	4.88	6.35	0.50	
16	0.12	30.55	5.30	3.00	3.00	5.75	18.65	4.06	0.55	4.65	6.35	0.50	
17	0.11	74.52	4.18	2.13	2.88	7.85	16.40	3.47	0.55	4.65	6.35	0.50	
18	0.11	70.72	3.24	2.05	2.88	7.70	33.25	3.00	0.55	4.65	6.35	0.50	
19	0.09	53.80	2.65	2.13	2.77	13.70	25.40	2.65	0.55	4.53	6.35	0.85	
20	0.10	34.37	2.27	2.13	2.77	24.20	19.10	2.13	0.55	4.53	6.35	5.45	
21	0.11	23.90	2.20	2.20	2.77	29.25	13.90	2.13	0.50	4.53	6.50	5.45	
22	0.11	15.95	3.00	2.50	3.59	32.17	9.05	2.05	0.45	4.53	6.35	5.60	
23	0.11	11.70	3.12	2.20	3.00	27.63	4.18	1.83	0.45	4.53	6.35	5.75	
24	0.10	9.40	3.24	1.83	2.88	35.87	5.15	1.67	0.45	5.30	6.35	5.75	
25	0.09	7.25	3.24	0.70	2.88	50.65	14.50	1.53	0.50	7.55	6.35	5.60	
26	0.08	6.35	3.35	0.40	2.77	44.50	28.93	1.38	0.50	7.55	6.35	5.60	
27	0.08	5.45	3.35	0.40	3.24	34.75	30.55	1.30	0.60	6.65	6.50	5.45	
28	0.09	6.65	3.24	0.35	5.30	35.13	30.55	1.23	0.65	3.71	6.50	5.45	
29	0.08	6.20	3.59	0.30	5.60	28.93	177.75	1.15	0.70	1.45		5.45	
30	0.08	5.90	3.35	0.30	5.60	19.33	323.50	1.05	0.70	0.70		5.45	
31		12.30		0.30	5.45		152.77		0.65	0.60		5.45	
Total	31.36	676.27	465.82	74.88	105.66	482.55	1376.68	318.20	21.90	129.43	165.43	97.43	3945.61 CMSDAY
Mean	1.05	21.82	15.53	2.42	3.41	16.08	44.41	10.61	0.71	4.18	5.91	3.14	10.81 CMS
Max	4.65	74.52	80.00	4.30	5.60	50.65	323.50	90.50	1.05	7.55	6.50	6.65	323.50 CMS
Min	0.08	0.08	2.20	0.30	1.45	4.88	4.18	1.05	0.45	0.60	0.50	0.50	0.08 CMS
Runoff	2.710	58.430	40.247	6.470	9.129	41.692	118.945	27.492	1.892	11.183	14.293	8.418	340.901 MCM

Momentary Peak 340.73 CMS, at 107.29 M (MSL), at 6.00 Hours, on Oct 30, 2001

Runoff Yield 13.77 Liters/Second/Square KM, Momentary Peak Yield 434.051 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Huai Mae Phuak at Ban Pak Chua, 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 Chua **Amphoe** Den Chai **Changwat** Phrae

Drainage 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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

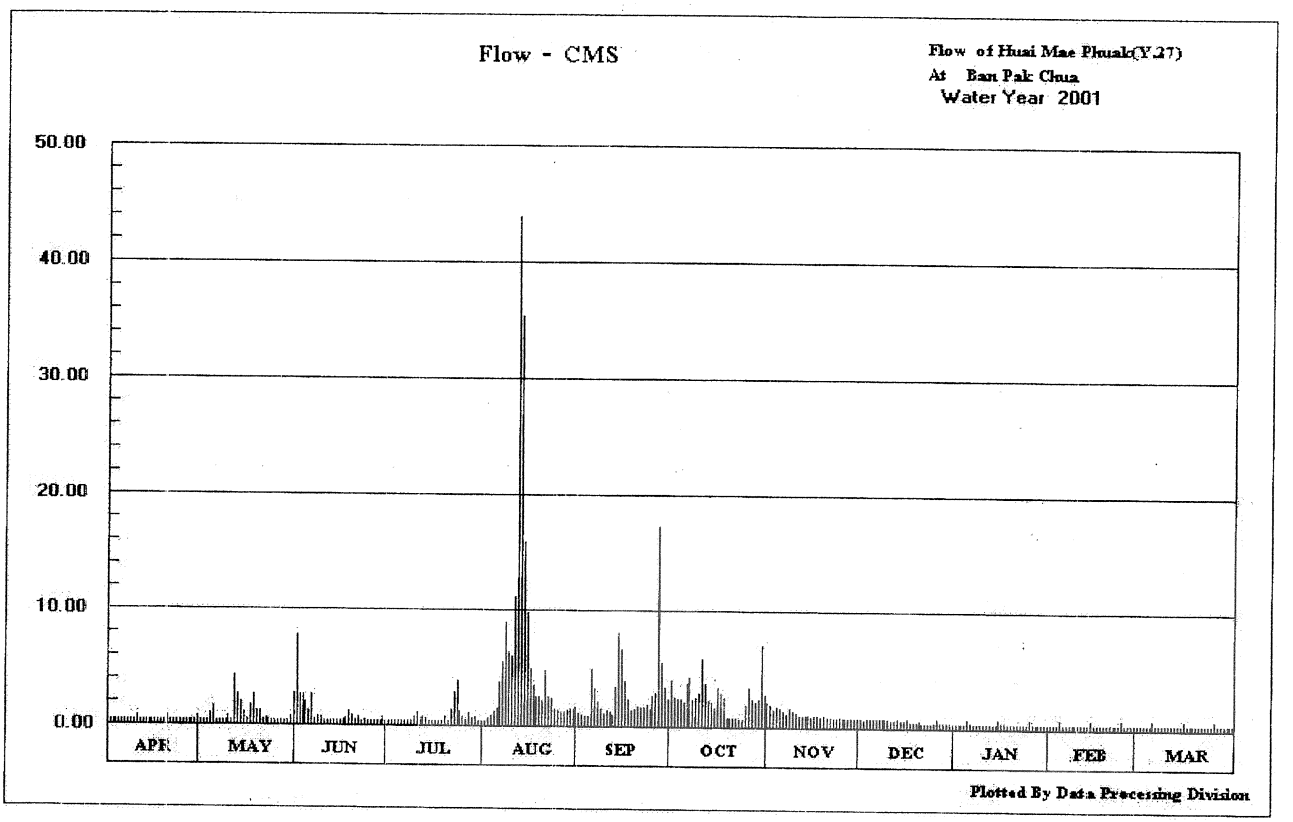
General Description Records fair. The weir situated about 3 kilometers above gage site.

Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.62	0.49	1.63	0.68	0.66	0.88	1.27	1.05	0.79	0.72	0.64	0.61	
2	0.59	0.48	1.11	0.65	0.76	0.84	1.10	1.01	0.78	0.71	0.64	0.61	
3	0.63	0.51	1.11	0.65	0.82	0.83	1.08	0.95	0.79	0.70	0.64	0.61	
4	0.61	0.86	1.03	0.64	0.89	0.83	1.07	0.98	0.79	0.70	0.64	0.61	
5	0.60	0.97	0.89	0.69	0.95	1.36	1.05	0.97	0.79	0.70	0.64	0.60	
6	0.63	0.72	1.11	0.65	1.24	1.19	1.25	0.93	0.79	0.73	0.64	0.60	
7	0.63	0.64	0.75	0.66	1.42	1.05	1.30	0.88	0.79	0.72	0.64	0.60	
8	0.64	0.65	0.80	0.65	1.72	0.94	1.08	0.96	0.79	0.71	0.64	0.60	
9	0.58	0.59	0.50	0.65	1.51	0.88	1.09	0.93	0.79	0.70	0.64	0.60	
10	0.57	0.58	0.70	0.87	1.47	0.91	1.14	0.90	0.79	0.70	0.64	0.60	
11	0.51	0.55	0.66	0.77	1.90	0.90	1.46	0.85	0.77	0.72	0.64	0.61	
12	0.53	1.30	0.67	0.80	3.77	0.84	1.25	0.84	0.76	0.72	0.64	0.61	
13	0.53	1.11	0.70	0.77	3.34	1.20	1.06	0.85	0.79	0.72	0.64	0.61	
14	0.60	1.03	0.65	0.64	2.24	1.65	1.04	0.85	0.76	0.72	0.64	0.60	
15	0.59	0.88	0.65	0.68	1.79	1.53	0.97	0.83	0.76	0.72	0.64	0.61	
16	0.58	0.75	0.73	0.66	1.37	1.26	1.21	0.84	0.75	0.73	0.63	0.60	
17	0.60	0.98	0.76	0.65	1.22	1.06	1.15	0.84	0.75	0.73	0.63	0.60	
18	0.57	1.11	0.90	0.63	1.10	0.91	1.10	0.83	0.75	0.72	0.64	0.59	
19	0.56	0.89	0.83	0.64	1.09	0.95	0.80	0.84	0.73	0.70	0.64	0.58	
20	0.51	0.89	0.74	0.62	1.05	0.98	0.80	0.83	0.76	0.70	0.65	0.59	
21	0.59	0.73	0.79	0.93	1.35	0.96	0.80	0.82	0.70	0.70	0.65	0.59	
22	0.58	0.78	0.65	1.15	1.10	0.97	0.80	0.80	0.70	0.70	0.64	0.59	
23	0.57	0.75	0.73	1.26	1.07	1.01	0.76	0.81	0.71	0.70	0.64	0.59	
24	0.56	0.65	0.67	0.90	0.95	0.95	0.78	0.82	0.71	0.70	0.63	0.59	
25	0.55	0.65	0.66	0.79	0.91	1.11	1.01	0.80	0.73	0.70	0.63	0.59	
26	0.48	0.63	0.64	0.75	0.90	1.14	1.20	0.80	0.74	0.68	0.62	0.59	
27	0.44	0.63	0.62	0.87	0.90	2.33	1.08	0.80	0.73	0.68	0.61	0.59	
28	0.44	0.62	0.67	0.78	0.92	1.42	1.04	0.80	0.73	0.68	0.60	0.59	
29	0.48	0.64	0.67	0.74	0.94	1.20	1.08	0.80	0.73	0.68		0.58	
30	0.49	0.75	0.65	0.69	0.95	1.08	1.56	0.80	0.73	0.68		0.57	
31		1.12		0.69	0.96		1.13		0.72	0.68		0.56	
Mean	0.56	0.77	0.79	0.75	1.33	1.11	1.08	0.87	0.75	0.70	0.64	0.60	
Max	0.64	1.30	1.63	1.26	3.77	2.33	1.56	1.05	0.79	0.73	0.65	0.61	3.77
Min	0.44	0.48	0.50	0.62	0.66	0.83	0.76	0.80	0.70	0.68	0.60	0.56	0.44

Annual Max Momentary Gage Height 4.07 M (A.D), at 14.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.98 M (A.D)
Left Bank Elevation 8.80 M (A.D)
Right Bank Elevation 8.32 M (A.D), Drainage Area 229 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.20	0.02	7.92	0.41	0.34	1.32	4.13	2.35	0.86	0.56	0.27	0.16	
2	0.12	0.02	2.78	0.30	0.73	1.11	2.70	2.07	0.82	0.52	0.27	0.16	
3	0.23	0.03	2.78	0.30	1.00	1.06	2.56	1.71	0.86	0.48	0.27	0.16	
4	0.16	1.21	2.21	0.27	1.37	1.06	2.49	1.88	0.86	0.48	0.27	0.16	
5	0.13	1.83	1.37	0.45	1.71	5.00	2.35	1.83	0.86	0.48	0.27	0.13	
6	0.23	0.56	2.78	0.30	3.86	3.42	3.95	1.59	0.86	0.61	0.27	0.13	
7	0.23	0.27	0.69	0.34	5.61	2.35	4.40	1.32	0.86	0.56	0.27	0.13	
8	0.27	0.30	0.90	0.30	9.01	1.65	2.56	1.77	0.86	0.52	0.27	0.13	
9	0.11	0.12	0.02	0.30	6.56	1.32	2.63	1.59	0.86	0.48	0.27	0.13	
10	0.10	0.11	0.48	1.26	6.14	1.48	3.02	1.42	0.86	0.48	0.27	0.13	
11	0.03	0.08	0.34	0.77	11.30	1.42	6.03	1.16	0.77	0.56	0.27	0.16	
12	0.05	4.40	0.38	0.90	44.10	1.11	3.95	1.11	0.73	0.56	0.27	0.16	
13	0.05	2.78	0.48	0.77	35.50	3.50	2.42	1.16	0.86	0.56	0.27	0.16	
14	0.13	2.21	0.30	0.27	16.04	8.16	2.28	1.16	0.73	0.56	0.27	0.13	
15	0.12	1.32	0.30	0.41	9.88	6.78	1.83	1.06	0.73	0.56	0.27	0.16	
16	0.11	0.69	0.61	0.34	5.10	4.04	3.59	1.11	0.69	0.61	0.23	0.13	
17	0.13	1.88	0.73	0.30	3.68	2.42	3.10	1.11	0.69	0.61	0.23	0.13	
18	0.10	2.78	1.42	0.23	2.70	1.48	2.70	1.06	0.69	0.56	0.27	0.12	
19	0.09	1.37	1.06	0.27	2.63	1.71	0.90	1.11	0.61	0.48	0.27	0.11	
20	0.03	1.37	0.65	0.20	2.35	1.88	0.90	1.06	0.73	0.48	0.30	0.12	
21	0.12	0.61	0.86	1.59	4.90	1.77	0.90	1.00	0.48	0.48	0.30	0.12	
22	0.11	0.82	0.30	3.10	2.70	1.83	0.90	0.90	0.48	0.48	0.27	0.12	
23	0.10	0.69	0.61	4.04	2.49	2.07	0.73	0.95	0.52	0.48	0.27	0.12	
24	0.09	0.30	0.38	1.42	1.71	1.71	0.82	1.00	0.52	0.48	0.23	0.12	
25	0.08	0.30	0.34	0.86	1.48	2.78	2.07	0.90	0.61	0.48	0.23	0.12	
26	0.02	0.23	0.27	0.69	1.42	3.02	3.50	0.90	0.65	0.41	0.20	0.12	
27	0.01	0.23	0.20	1.26	1.42	17.41	2.56	0.90	0.61	0.41	0.16	0.12	
28	0.01	0.20	0.38	0.82	1.54	5.61	2.28	0.90	0.61	0.41	0.13	0.12	
29	0.02	0.27	0.38	0.65	1.65	3.50	2.56	0.90	0.61	0.41		0.11	
30	0.02	0.69	0.30	0.45	1.71	2.56	7.12	0.90	0.61	0.41		0.10	
31		2.86		0.45	1.77		2.94		0.56	0.41		0.09	
Total	3.20	30.55	32.22	24.02	192.40	94.53	84.87	37.88	22.05	15.57	7.14	4.06	548.49 CMSDAY
Mean	0.11	0.99	1.07	0.77	6.21	3.15	2.74	1.26	0.71	0.50	0.26	0.13	1.50 CMS
Max	0.27	4.40	7.92	4.04	44.10	17.41	7.12	2.35	0.86	0.61	0.30	0.16	44.10 CMS
Min	0.01	0.02	0.02	0.20	0.34	1.06	0.73	0.90	0.48	0.41	0.13	0.09	0.01 CMS
Runoff	0.276	2.640	2.784	2.075	16.623	8.167	7.333	3.273	1.905	1.345	0.617	0.351	47.390 MCM

Momentary Peak 50.27 CMS, at 4.07 M (A.D), at 14.00 Hours, on Aug 12, 2001

Runoff Yield 6.56 Liters/Second/Square KM, Momentary Peak Yield 219.520 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Huai Mae Hu at Ban Mae Hu, Sukhothai (Y.29)

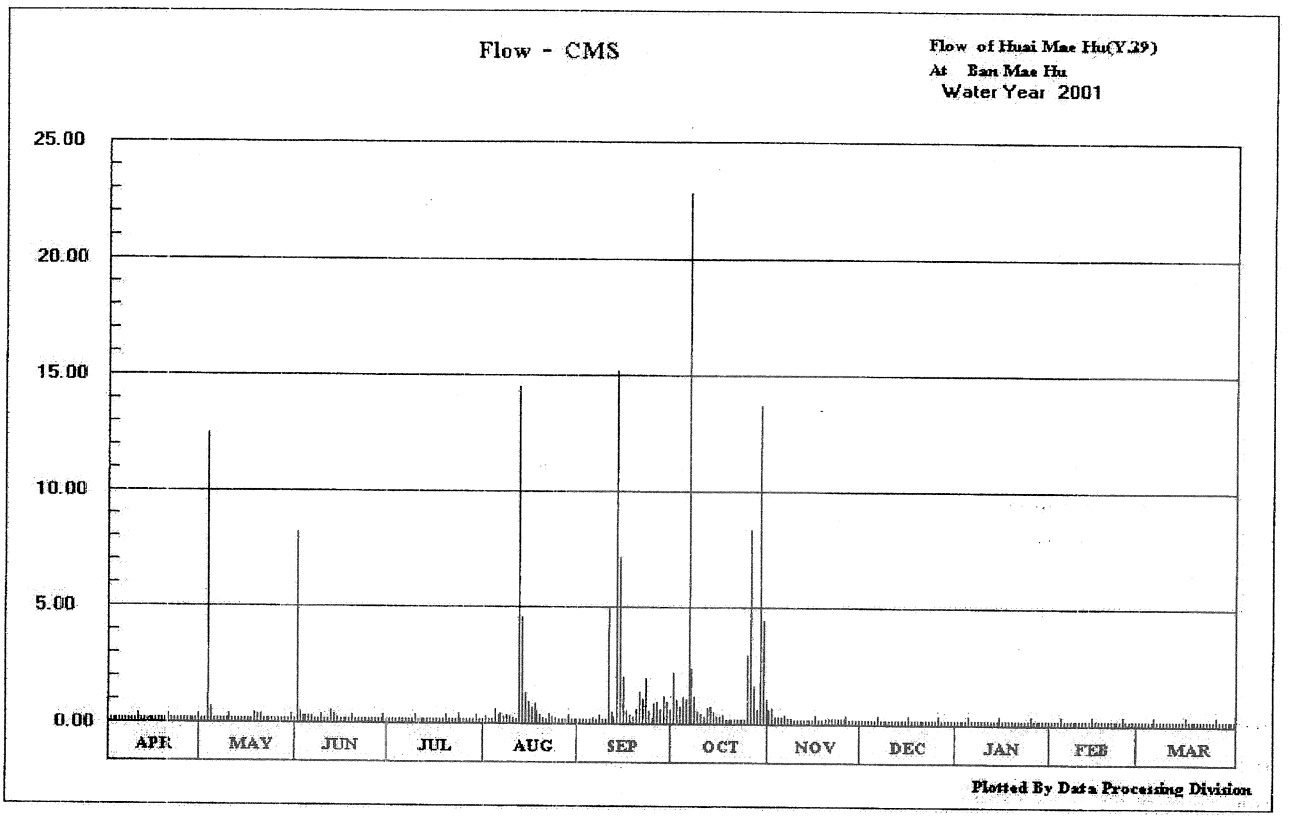
Lat 17 - 42 - 11 N. **Long** 99 - 44 - 24 E.

Location		on right bank at the bridge.
	Ban Mae Hu	**Amphoe** Si Satchanalai **Changwat** Sukhothai
Drainage 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 right bank about 25 meters from 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 mean of 5 readings.
Period of Available Gage Records		1983 to date.
Rating Operation		
	Period of Rating	2001 to date.
	Rated by Float	-
	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 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	1.28	0.03	0.21	0.08	0.67	0.33	0.04	0.02	-0.04	-0.06	
2	0.00	0.00	0.28	0.03	0.13	0.06	0.44	0.34	0.04	0.02	-0.04	-0.06	
3	0.00	1.58	0.19	0.03	0.10	0.04	0.38	0.21	0.04	0.02	-0.04	-0.06	
4	0.00	0.36	0.20	0.03	0.31	0.04	0.47	0.20	0.04	0.02	-0.04	-0.06	
5	0.00	0.11	0.20	0.03	0.22	0.18	0.46	0.20	0.04	0.02	-0.04	-0.06	
6	0.00	0.08	0.19	0.03	0.25	0.13	2.11	0.18	0.04	0.01	-0.04	-0.06	
7	0.00	0.08	0.14	0.03	0.20	0.11	0.69	0.18	0.04	0.01	-0.04	-0.06	
8	0.00	0.07	0.09	0.03	0.18	0.09	0.49	0.16	0.04	0.01	-0.04	-0.06	
9	0.00	0.07	0.07	0.05	0.19	0.06	0.29	0.15	0.04	0.00	-0.04	-0.06	
10	0.00	0.06	0.06	0.14	0.17	1.00	0.24	0.12	0.04	0.00	-0.04	-0.06	
11	0.00	0.06	0.06	0.05	0.10	0.28	0.21	0.08	0.04	0.00	-0.04	-0.06	
12	0.00	0.06	0.29	0.09	1.70	0.19	0.36	0.08	0.04	-0.01	-0.04	-0.05	
13	0.00	0.05	0.22	0.04	0.96	1.74	0.37	0.06	0.03	-0.01	-0.05	-0.05	
14	0.00	0.04	0.17	0.03	0.51	1.20	0.28	0.04	0.03	-0.01	-0.05	-0.05	
15	0.00	0.03	0.14	0.03	0.43	0.64	0.20	0.04	0.03	-0.01	-0.05	-0.05	
16	0.00	0.02	0.11	0.03	0.35	0.30	0.19	0.04	0.03	-0.02	-0.06	-0.05	
17	0.00	0.02	0.10	0.03	0.41	0.22	0.19	0.03	0.03	-0.02	-0.06	-0.05	
18	0.00	0.26	0.09	0.03	0.29	0.20	0.15	0.03	0.03	-0.02	-0.06	-0.05	
19	0.00	0.23	0.08	0.03	0.23	0.31	0.14	0.17	0.03	-0.02	-0.06	-0.05	
20	0.00	0.14	0.08	0.03	0.16	0.53	0.14	0.17	0.03	-0.02	-0.06	-0.05	
21	0.00	0.08	0.07	0.03	0.14	0.46	0.12	0.17	0.03	-0.03	-0.06	-0.06	
22	0.00	0.06	0.07	0.09	0.25	0.63	0.07	0.17	0.03	-0.03	-0.06	-0.06	
23	0.00	0.06	0.07	0.24	0.20	0.29	0.06	0.17	0.03	-0.03	-0.06	-0.06	
24	0.00	0.05	0.06	0.15	0.17	0.16	0.06	0.17	0.02	-0.03	-0.06	-0.06	
25	0.00	0.05	0.06	0.09	0.15	0.41	0.77	0.17	0.02	-0.03	-0.06	-0.06	
26	0.00	0.04	0.06	0.08	0.10	0.43	1.29	0.16	0.02	-0.04	-0.06	-0.06	
27	0.00	0.03	0.05	0.06	0.09	0.32	0.58	0.10	0.02	-0.04	-0.06	-0.06	
28	0.00	0.03	0.05	0.05	0.17	0.49	0.32	0.07	0.02	-0.04	-0.06	-0.06	
29	0.00	0.02	0.05	0.04	0.14	0.42	1.65	0.05	0.02	-0.04		-0.06	
30	0.00	0.02	0.04	0.15	0.11	0.32	0.95	0.04	0.02	-0.04		-0.06	
31		0.02		0.08	0.10		0.46		0.02	-0.04		-0.06	
Mean	0.00	0.12	0.15	0.06	0.28	0.38	0.48	0.14	0.03	-0.01	-0.05	-0.06	
Max	0.00	1.58	1.28	0.24	1.70	1.74	2.11	0.34	0.04	0.02	-0.04	-0.05	2.11
Min	0.00	0.00	0.04	0.03	0.09	0.04	0.06	0.03	0.02	-0.04	-0.06	-0.06	-0.06

Annual Max Momentary Gage Height 2.30 M (A.D), at 9.00 Hours, on Oct 6, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.07 M (A.D)
Left Bank Elevation 4.29 M (A.D)
Right Bank Elevation 4.28 M (A.D), Drainage Area 57 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	8.28	0.06	0.42	0.16	2.29	0.73	0.10	0.07	0.02	0.01	
2	0.00	0.00	0.60	0.06	0.26	0.12	1.08	0.75	0.10	0.07	0.02	0.01	
3	0.00	12.60	0.38	0.06	0.20	0.08	0.85	0.42	0.10	0.07	0.02	0.01	
4	0.00	0.80	0.40	0.06	0.68	0.08	1.21	0.40	0.10	0.07	0.02	0.01	
5	0.00	0.22	0.40	0.06	0.45	0.36	1.17	0.40	0.10	0.07	0.02	0.01	
6	0.00	0.16	0.38	0.06	0.52	0.26	22.88	0.36	0.10	0.06	0.02	0.01	
7	0.00	0.16	0.28	0.06	0.40	0.22	2.43	0.36	0.10	0.06	0.02	0.01	
8	0.00	0.14	0.18	0.06	0.36	0.18	1.30	0.32	0.10	0.06	0.02	0.01	
9	0.00	0.14	0.14	0.10	0.38	0.12	0.62	0.30	0.10	0.05	0.02	0.01	
10	0.00	0.12	0.12	0.28	0.34	5.00	0.50	0.24	0.10	0.05	0.02	0.01	
11	0.00	0.12	0.12	0.10	0.20	0.60	0.42	0.16	0.10	0.05	0.02	0.01	
12	0.00	0.12	0.62	0.18	14.60	0.38	0.80	0.16	0.10	0.04	0.02	0.01	
13	0.00	0.10	0.45	0.08	4.64	15.28	0.83	0.12	0.09	0.04	0.01	0.01	
14	0.00	0.08	0.34	0.06	1.39	7.20	0.60	0.08	0.09	0.04	0.01	0.01	
15	0.00	0.06	0.28	0.06	1.03	2.08	0.40	0.08	0.09	0.04	0.01	0.01	
16	0.00	0.04	0.22	0.06	0.78	0.65	0.38	0.08	0.09	0.04	0.01	0.01	
17	0.00	0.04	0.20	0.06	0.94	0.45	0.38	0.06	0.09	0.04	0.01	0.01	
18	0.00	0.55	0.18	0.06	0.62	0.40	0.30	0.06	0.09	0.04	0.01	0.01	
19	0.00	0.48	0.16	0.06	0.48	0.68	0.28	0.34	0.09	0.04	0.01	0.01	
20	0.00	0.28	0.16	0.06	0.32	1.48	0.28	0.34	0.09	0.04	0.01	0.01	
21	0.00	0.16	0.14	0.06	0.28	1.17	0.24	0.34	0.09	0.03	0.01	0.01	
22	0.00	0.12	0.14	0.18	0.52	2.01	0.14	0.34	0.09	0.03	0.01	0.01	
23	0.00	0.12	0.14	0.50	0.40	0.62	0.12	0.34	0.09	0.03	0.01	0.01	
24	0.00	0.10	0.12	0.30	0.34	0.32	0.12	0.34	0.09	0.03	0.01	0.01	
25	0.00	0.10	0.12	0.18	0.30	0.94	2.99	0.34	0.07	0.03	0.01	0.01	
26	0.00	0.08	0.12	0.16	0.20	1.03	8.41	0.24	0.07	0.03	0.01	0.01	
27	0.00	0.06	0.10	0.12	0.18	0.70	1.71	0.17	0.07	0.02	0.01	0.01	
28	0.00	0.06	0.10	0.10	0.34	1.30	0.70	0.13	0.07	0.02	0.01	0.01	
29	0.00	0.04	0.10	0.08	0.28	0.99	13.75	0.11	0.07	0.02	0.01	0.01	
30	0.00	0.04	0.08	0.30	0.22	0.70	4.55	0.10	0.07	0.02		0.01	
31		0.04		0.16	0.20		1.17		0.07	0.02		0.01	
Total	0.00	17.13	15.05	3.78	32.27	45.56	72.90	8.21	2.75	1.31	0.40	0.31	199.67 CMSDAY
Mean	0.00	0.55	0.50	0.12	1.04	1.52	2.35	0.27	0.09	0.04	0.01	0.01	0.55 CMS
Max	0.00	12.60	8.28	0.50	14.60	15.28	22.88	0.75	0.10	0.07	0.02	0.01	22.88 CMS
Min	0.00	0.00	0.08	0.06	0.18	0.08	0.12	0.06	0.07	0.02	0.01	0.01	0.00 CMS
Runoff	0.000	1.480	1.300	0.327	2.788	3.936	6.299	0.709	0.238	0.113	0.035	0.027	17.251 MCM

Momentary Peak 27.70 CMS, at 2.30 M (A.D), at 9.00 Hours, on Oct 6, 2001
Runoff Yield 9.60 Liters/Second/Square KM, Momentary Peak Yield 485.965 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Huai Pong at Ban Pong, Lampang (Y.30)

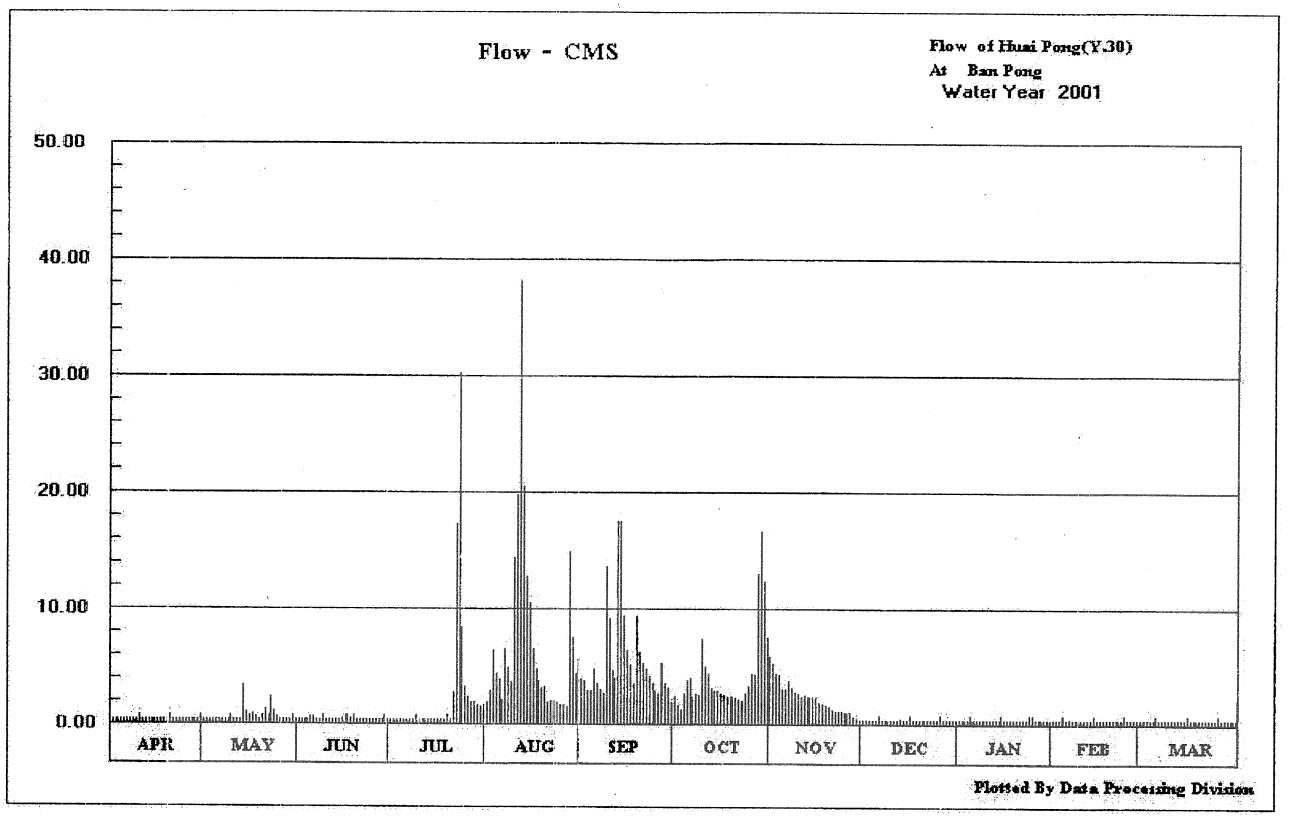
Lat 18 - 42 - 29 N. **Long** 99 - 57 - 40 E.

Location		on right bank at the bridge on highway.
	Ban Pong	**Amphoe** Ngao **Changwat** Lampang
Drainage Area		96 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 25 meters from the top staff gage.
	Elevation	+6.620 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 Float	-
	Rated by Current Meter	1983 to date.
Stability of Channel Regimes		Fairly stable because of back water effect.
Overbank Flow Conditions		No overbank flow.
General Description		Records fair. The carcass of the bridge is near the gage site.
		Stage-discharge relation defined by 36 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.64	0.66	0.66	0.78	0.96	0.82	1.10	0.52	0.51	0.50	0.55	
2	0.64	0.64	0.64	0.66	0.88	0.95	0.75	1.06	0.56	0.50	0.50	0.53	
3	0.63	0.64	0.65	0.65	1.13	0.87	0.71	1.00	0.53	0.49	0.55	0.53	
4	0.63	0.66	0.64	0.67	1.00	0.87	0.85	0.99	0.50	0.53	0.54	0.53	
5	0.63	0.65	0.74	0.66	0.96	1.02	0.95	0.89	0.52	0.55	0.56	0.54	
6	0.63	0.64	0.74	0.67	0.80	0.93	0.97	0.89	0.56	0.54	0.59	0.54	
7	0.64	0.64	0.68	0.67	1.14	0.89	0.82	0.95	0.53	0.54	0.58	0.55	
8	0.63	0.63	0.67	0.67	1.03	0.85	0.85	0.90	0.58	0.54	0.54	0.56	
9	0.62	0.63	0.67	0.69	0.94	1.53	0.84	0.86	0.57	0.56	0.55	0.56	
10	0.63	0.63	0.65	0.68	1.57	1.29	1.19	0.85	0.55	0.55	0.55	0.56	
11	0.63	0.71	0.64	0.68	1.83	1.01	1.04	0.83	0.48	0.56	0.55	0.56	
12	0.63	0.67	0.66	0.68	2.59	0.97	1.00	0.84	0.56	0.57	0.56	0.56	
13	0.64	0.65	0.65	0.68	1.86	1.72	0.90	0.83	0.59	0.56	0.41	0.54	
14	0.63	1.01	0.66	0.68	1.49	1.72	0.88	0.83	0.53	0.53	0.50	0.51	
15	0.63	0.79	0.72	0.68	1.37	1.31	0.87	0.83	0.56	0.52	0.49	0.48	
16	0.66	0.75	0.76	0.69	1.14	1.13	0.85	0.83	0.53	0.49	0.51	0.48	
17	0.64	0.77	0.75	0.69	1.02	1.05	0.84	0.78	0.56	0.50	0.54	0.51	
18	0.65	0.73	0.72	0.70	0.95	0.93	0.83	0.76	0.55	0.51	0.49	0.47	
19	0.65	0.67	0.65	0.69	0.90	1.31	0.83	0.75	0.57	0.52	0.56	0.48	
20	0.65	0.67	0.67	0.69	0.91	1.12	0.82	0.73	0.53	0.54	0.55	0.49	
21	0.66	0.81	0.65	0.86	0.78	1.06	0.81	0.70	0.57	0.53	0.55	0.49	
22	0.66	0.75	0.65	1.71	0.79	1.02	0.80	0.69	0.56	0.53	0.51	0.54	
23	0.66	0.92	0.64	2.29	0.79	0.98	0.79	0.69	0.56	0.54	0.56	0.54	
24	0.67	0.80	0.65	1.25	0.77	0.93	0.85	0.68	0.56	0.63	0.55	0.52	
25	0.66	0.73	0.64	0.91	0.75	0.87	0.91	0.67	0.53	0.50	0.56	0.49	
26	0.67	0.67	0.64	0.82	0.74	0.85	1.00	0.67	0.52	0.48	0.55	0.47	
27	0.67	0.67	0.64	0.78	0.73	1.06	0.99	0.67	0.51	0.48	0.55	0.50	
28	0.66	0.64	0.65	0.77	1.60	0.93	1.50	0.62	0.52	0.47	0.56	0.47	
29	0.65	0.71	0.67	0.74	1.20	0.90	1.68	0.60	0.54	0.49		0.49	
30	0.65	0.67	0.66	0.73	1.00	0.78	1.47	0.57	0.51	0.49		0.52	
31		0.66		0.75	1.08		1.20		0.53	0.48		0.48	
Mean	0.64	0.70	0.67	0.81	1.11	1.06	0.96	0.80	0.54	0.52	0.54	0.52	
Max	0.67	1.01	0.76	2.29	2.59	1.72	1.68	1.10	0.59	0.63	0.59	0.56	2.59
Min	0.62	0.63	0.64	0.65	0.73	0.78	0.71	0.57	0.48	0.47	0.41	0.47	0.41

Annual Max Momentary Gage Height 2.65 M (A.D), at 12.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.16 M (A.D)
Left Bank Elevation 8.16 M (A.D)
Right Bank Elevation 9.20 M (A.D), Drainage Area 96 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.24	0.19	0.29	0.29	2.10	4.08	2.48	6.05	0.30	0.25	0.20	0.44	
2	0.19	0.19	0.19	0.29	3.10	3.95	1.83	5.47	0.49	0.20	0.20	0.34	
3	0.14	0.19	0.24	0.24	6.54	2.99	1.46	4.60	0.34	0.18	0.44	0.34	
4	0.14	0.29	0.19	0.34	4.60	2.99	2.79	4.47	0.20	0.34	0.39	0.34	
5	0.14	0.24	0.81	0.29	4.08	4.89	3.95	3.20	0.30	0.44	0.49	0.39	
6	0.14	0.19	0.81	0.34	2.28	3.69	4.21	3.20	0.49	0.39	0.63	0.39	
7	0.19	0.19	0.38	0.34	6.71	3.20	2.48	3.95	0.34	0.39	0.58	0.44	
8	0.14	0.14	0.34	0.34	5.03	2.79	2.79	3.30	0.58	0.39	0.39	0.49	
9	0.10	0.14	0.34	0.43	3.82	13.73	2.69	2.89	0.54	0.49	0.44	0.49	
10	0.14	0.14	0.24	0.38	14.51	9.23	7.54	2.79	0.44	0.44	0.44	0.49	
11	0.14	0.56	0.19	0.38	19.96	4.75	5.18	2.59	0.16	0.49	0.44	0.49	
12	0.14	0.34	0.29	0.38	38.24	4.21	4.60	2.69	0.49	0.54	0.49	0.49	
13	0.19	0.24	0.24	0.38	20.62	17.62	3.30	2.59	0.63	0.49	0.02	0.39	
14	0.14	3.56	0.29	0.38	12.95	17.62	3.10	2.59	0.34	0.34	0.20	0.25	
15	0.14	1.22	0.64	0.38	10.66	9.58	2.99	2.59	0.49	0.30	0.18	0.16	
16	0.29	0.89	0.97	0.43	6.71	6.54	2.79	2.59	0.34	0.18	0.25	0.16	
17	0.19	1.05	0.89	0.43	4.89	5.32	2.69	2.10	0.49	0.20	0.39	0.25	
18	0.24	0.73	0.64	0.48	3.95	3.69	2.59	1.92	0.44	0.25	0.18	0.14	
19	0.24	0.34	0.24	0.43	3.30	9.58	2.59	1.83	0.54	0.30	0.49	0.16	
20	0.24	0.34	0.34	0.43	3.43	6.38	2.48	1.64	0.34	0.39	0.44	0.18	
21	0.29	1.39	0.24	2.89	2.10	5.47	2.38	1.37	0.54	0.34	0.44	0.18	
22	0.29	0.89	0.24	17.41	2.19	4.89	2.28	1.30	0.49	0.34	0.25	0.39	
23	0.29	2.49	0.19	30.47	2.19	4.34	2.19	1.30	0.49	0.39	0.49	0.39	
24	0.34	1.30	0.24	8.55	2.01	3.69	2.79	1.23	0.49	0.89	0.44	0.30	
25	0.29	0.73	0.19	3.43	1.83	2.99	3.43	1.16	0.34	0.20	0.49	0.18	
26	0.34	0.34	0.19	2.48	1.73	2.79	4.60	1.16	0.30	0.16	0.44	0.14	
27	0.34	0.34	0.19	2.10	1.64	5.47	4.47	1.16	0.25	0.16	0.44	0.20	
28	0.29	0.19	0.24	2.01	15.10	3.69	13.14	0.82	0.30	0.14	0.49	0.14	
29	0.24	0.56	0.34	1.73	7.70	3.30	16.78	0.68	0.39	0.18		0.18	
30	0.24	0.34	0.29	1.64	4.60	2.10	12.56	0.54	0.25	0.18		0.30	
31		0.29		1.83	5.76		7.70		0.34	0.16		0.16	
Total	6.46	20.03	10.91	81.92	224.33	175.56	136.85	73.77	12.46	10.13	10.76	9.38	772.56 CMSDAY
Mean	0.22	0.65	0.36	2.64	7.24	5.85	4.41	2.46	0.40	0.33	0.38	0.30	2.12 CMS
Max	0.34	3.56	0.97	30.47	38.24	17.62	16.78	6.05	0.63	0.89	0.63	0.49	38.24 CMS
Min	0.10	0.14	0.19	0.24	1.64	2.10	1.46	0.54	0.16	0.14	0.02	0.14	0.02 CMS
Runoff	0.558	1.731	0.943	7.078	19.382	15.168	11.824	6.374	1.077	0.875	0.930	0.810	66.749 MCM

Momentary Peak 39.85 CMS, at 2.65 M (A.D), at 12.00 Hours, on Aug 12, 2001

Runoff Yield 22.05 Liters/Second/Square KM, Momentary Peak Yield 415.104 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Yom River at Ban Thung Nong, Phayao (Y.31)

Lat 18 - 57 - 28 N. **Long** 100 - 15 - 58 E.

Location on left bank downsteam of the bridge of Pong-Chiang Muan road.

Ban Thung Nong **Amphoe** Chiang Muan **Changwat** Phayao

Drainage Area 1,976 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 +8.255 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 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

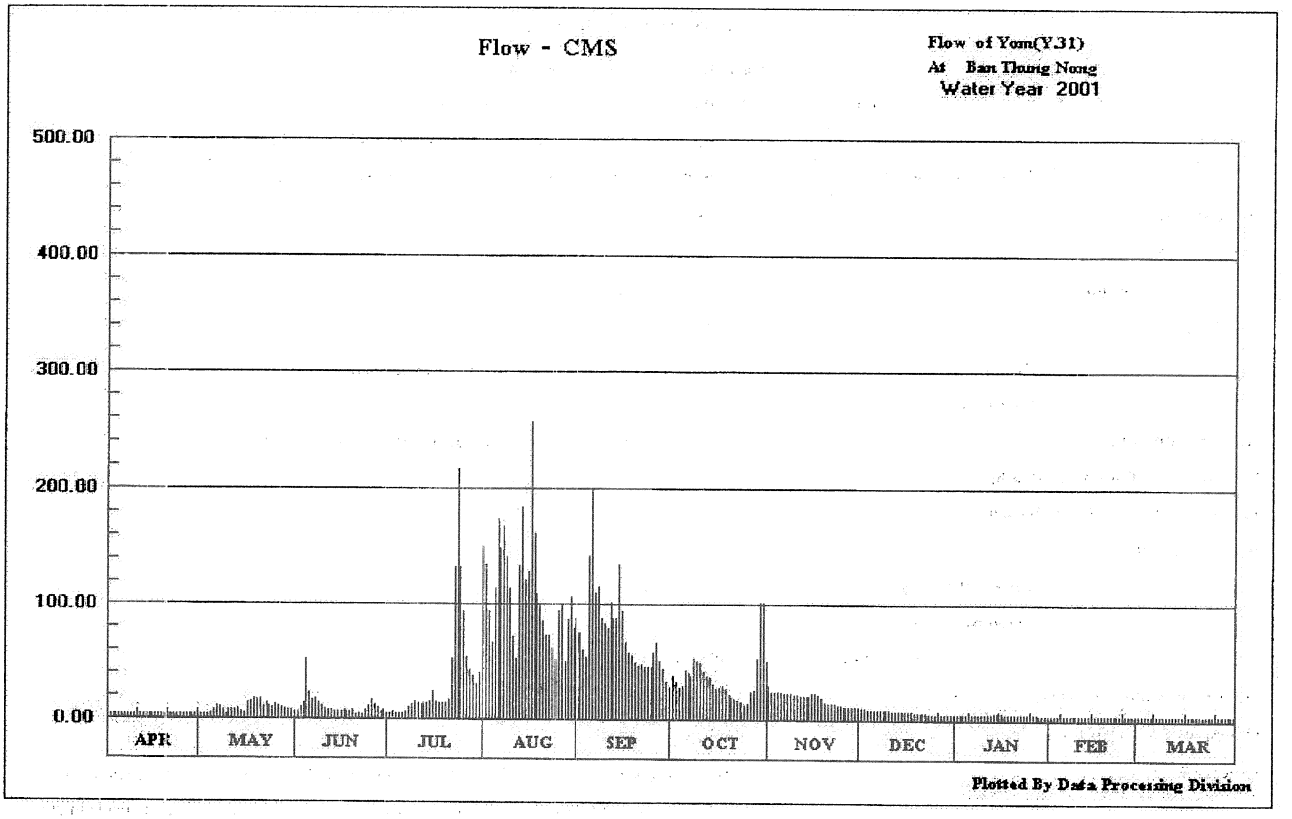
General Description Records fair. Flow effected by the islet about 200 meters downstream from the gage site.

Stage-discharge relation defined by 57 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.02	0.93	1.27	1.21	3.82	2.93	2.16	1.95	1.39	1.20	1.13	0.99	
2	1.02	0.94	1.38	1.26	3.25	2.64	2.03	1.82	1.39	1.20	1.12	0.97	
3	1.02	1.12	1.53	1.23	2.77	2.52	1.92	1.80	1.37	1.20	1.12	0.98	
4	1.02	1.24	2.46	1.20	3.55	3.91	1.96	1.80	1.36	1.20	1.11	0.99	
5	1.02	1.30	1.76	1.22	4.20	4.39	2.27	1.79	1.35	1.20	1.10	1.00	
6	1.01	1.42	1.60	1.27	3.97	3.49	2.23	1.78	1.35	1.20	1.09	1.00	
7	1.00	1.38	1.63	1.41	4.15	3.56	2.16	1.77	1.34	1.20	1.08	1.00	
8	0.98	1.30	1.52	1.46	3.90	3.14	2.48	1.76	1.34	1.20	1.07	1.00	
9	0.98	1.19	1.45	1.54	3.54	3.05	2.43	1.75	1.34	1.20	1.06	1.00	
10	0.98	1.15	1.34	1.52	2.86	3.00	2.40	1.72	1.34	1.20	1.03	1.00	
11	0.97	1.32	1.30	1.49	2.49	3.37	2.26	1.71	1.33	1.20	1.04	1.00	
12	0.98	1.31	1.30	1.52	3.81	3.15	2.17	1.71	1.33	1.20	1.05	1.00	
13	0.98	1.34	1.28	1.52	4.28	3.14	2.14	1.70	1.32	1.27	1.07	1.00	
14	0.98	1.28	1.27	1.54	3.65	3.82	1.97	1.71	1.30	1.27	1.05	1.00	
15	0.97	1.23	1.26	1.79	3.75	3.24	1.86	1.76	1.30	1.25	1.04	0.99	
16	0.97	1.52	1.30	1.56	4.67	2.75	1.91	1.76	1.30	1.25	1.04	0.99	
17	0.97	1.57	1.28	1.52	4.09	2.58	1.93	1.75	1.30	1.24	1.04	0.99	
18	0.96	1.63	1.25	1.50	3.48	2.53	1.86	1.66	1.27	1.24	1.04	0.99	
19	0.96	1.58	1.22	1.52	3.35	2.42	1.74	1.56	1.27	1.23	1.04	0.98	
20	0.96	1.62	1.16	1.61	3.11	2.36	1.65	1.53	1.26	1.23	1.04	0.98	
21	0.95	1.42	1.20	2.48	2.87	2.38	1.64	1.53	1.25	1.21	1.04	0.98	
22	0.95	1.50	1.18	3.79	2.87	2.33	1.61	1.51	1.25	1.21	1.04	0.97	
23	0.95	1.44	1.29	4.48	2.67	2.34	1.54	1.49	1.24	1.21	1.04	0.97	
24	0.94	1.41	1.45	3.80	2.45	2.34	1.49	1.47	1.24	1.20	1.04	0.97	
25	0.94	1.46	1.59	3.25	3.25	2.59	1.53	1.45	1.23	1.20	1.04	0.96	
26	0.93	1.43	1.46	2.52	3.35	2.76	1.80	1.44	1.23	1.20	1.03	0.96	
27	0.93	1.41	1.39	2.28	2.44	2.44	1.85	1.44	1.23	1.20	1.02	0.95	
28	0.92	1.37	1.28	2.16	3.12	2.31	2.48	1.43	1.23	1.19	1.00	0.95	
29	0.92	1.32	1.23	1.99	3.45	2.04	3.36	1.43	1.22	1.17		0.94	
30	0.91	1.29	1.21	2.22	2.99	1.90	3.37	1.42	1.22	1.15		0.94	
31		1.26		3.99	3.14		2.44		1.21	1.13		0.93	
Mean	0.97	1.34	1.39	2.00	3.40	2.85	2.09	1.65	1.29	1.21	1.06	0.98	
Max	1.02	1.53	2.46	4.48	4.67	4.39	3.37	1.95	1.39	1.27	1.13	1.00	4.67
Min	0.91	0.93	1.16	1.20	2.44	1.90	1.49	1.42	1.21	1.13	1.00	0.93	0.91

Annual Max Momentary Gage Height 4.88 M (A.D), at 24.00 Hours, on Sep 4, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -3.60 M (A.D)
Left Bank Elevation 10.64 M (A.D)
Right Bank Elevation 10.25 M (A.D), Drainage Area 1976 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.51	1.20	8.09	6.47	136.20	76.92	39.08	30.60	11.56	6.20	4.66	2.01	
2	2.51	1.34	11.26	7.82	95.45	62.00	33.63	25.92	11.56	6.20	4.44	1.74	
3	2.51	4.44	15.76	7.01	68.50	56.00	29.52	25.20	10.97	6.20	4.44	1.87	
4	2.51	7.28	53.00	6.20	115.65	144.00	30.96	25.20	10.67	6.20	4.22	2.01	
5	2.51	8.90	23.76	6.74	175.00	201.55	43.95	24.84	10.38	6.20	4.00	2.14	
6	2.33	12.44	18.00	8.09	150.00	111.30	42.15	24.48	10.38	6.20	3.81	2.14	
7	2.14	11.26	19.08	12.14	169.25	116.38	39.08	24.12	10.08	6.20	3.63	2.14	
8	1.87	8.90	15.44	13.62	143.00	88.86	54.00	23.76	10.08	6.20	3.44	2.14	
9	1.87	5.98	13.33	16.08	114.92	83.60	51.50	23.40	10.08	6.20	3.26	2.14	
10	1.87	5.10	10.08	15.44	73.18	80.70	50.00	22.32	10.08	6.20	2.70	2.14	
11	1.74	9.49	8.90	14.51	54.50	103.05	43.50	21.96	9.79	6.20	2.88	2.14	
12	1.87	9.19	8.90	15.44	135.35	89.45	39.51	21.96	9.79	6.20	3.07	2.14	
13	1.87	10.08	8.36	15.44	185.80	88.86	38.22	21.60	9.49	8.09	3.44	2.14	
14	1.87	8.36	8.09	16.08	122.95	136.20	31.32	21.96	8.90	8.09	3.07	2.14	
15	1.74	7.01	7.82	24.84	130.55	94.84	27.36	23.76	8.90	7.55	2.88	2.01	
16	1.74	15.44	8.90	16.72	258.10	67.50	29.16	23.76	8.90	7.55	2.88	2.01	
17	1.74	17.04	8.36	15.44	162.45	59.00	29.88	23.40	8.90	7.28	2.88	2.01	
18	1.60	19.08	7.55	14.80	110.60	56.50	27.36	20.16	8.09	7.28	2.88	2.01	
19	1.60	17.36	6.74	15.44	101.75	51.00	23.04	16.72	8.09	7.01	2.88	1.87	
20	1.60	18.72	5.32	18.36	87.09	48.12	19.80	15.76	7.82	7.01	2.88	1.87	
21	1.47	12.44	6.20	54.00	73.71	49.06	19.44	15.76	7.55	6.47	2.88	1.87	
22	1.47	14.80	5.76	133.71	73.71	46.71	18.36	15.12	7.55	6.47	2.88	1.74	
23	1.47	13.03	8.63	217.40	63.50	47.18	16.08	14.51	7.28	6.47	2.88	1.74	
24	1.34	12.14	13.33	134.50	52.50	47.18	14.51	13.92	7.28	6.20	2.88	1.74	
25	1.34	13.62	17.68	95.45	95.45	59.50	15.76	13.33	7.01	6.20	2.88	1.60	
26	1.20	12.73	13.62	56.00	101.75	68.00	25.20	13.03	7.01	6.20	2.70	1.60	
27	1.20	12.14	11.56	44.40	52.00	52.00	27.00	13.03	7.01	6.20	2.51	1.47	
28	1.07	10.97	8.36	39.08	87.68	45.77	54.00	12.73	7.01	5.98	2.14	1.47	
29	1.07	9.49	7.01	32.04	108.50	34.04	102.40	12.73	6.74	5.54		1.34	
30	0.93	8.63	6.47	41.70	80.16	28.80	103.05	12.44	6.74	5.10		1.34	
31		7.82		152.00	88.86		52.00		6.47	4.66		1.20	
Total	52.56	326.42	365.36	1266.96	3468.11	2294.07	1170.82	597.48	272.16	199.75	90.09	57.92	10161.70 CMSDAY
Mean	1.75	10.53	12.18	40.87	111.87	76.47	37.77	19.92	8.78	6.44	3.22	1.87	27.84 CMS
Max	2.51	19.08	53.00	217.40	258.10	201.55	103.05	30.60	11.56	8.09	4.66	2.14	258.10 CMS
Min	0.93	1.20	5.32	6.20	52.00	28.80	14.51	12.44	6.47	4.66	2.14	1.20	0.93 CMS
Runoff	4.541	28.203	31.567	109.465	299.645	198.208	101.159	51.622	23.515	17.258	7.784	5.004	877.971 MCM

Momentary Peak 316.90 CMS, at 4.88 M (A.D), at 24.00 Hours, on Sep 4, 2001
Runoff Yield 14.09 Liters/Second/Square KM, Momentary Peak Yield 160.374 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Yom River at Ban Khlong Tan , Sukhothai (Y.33)

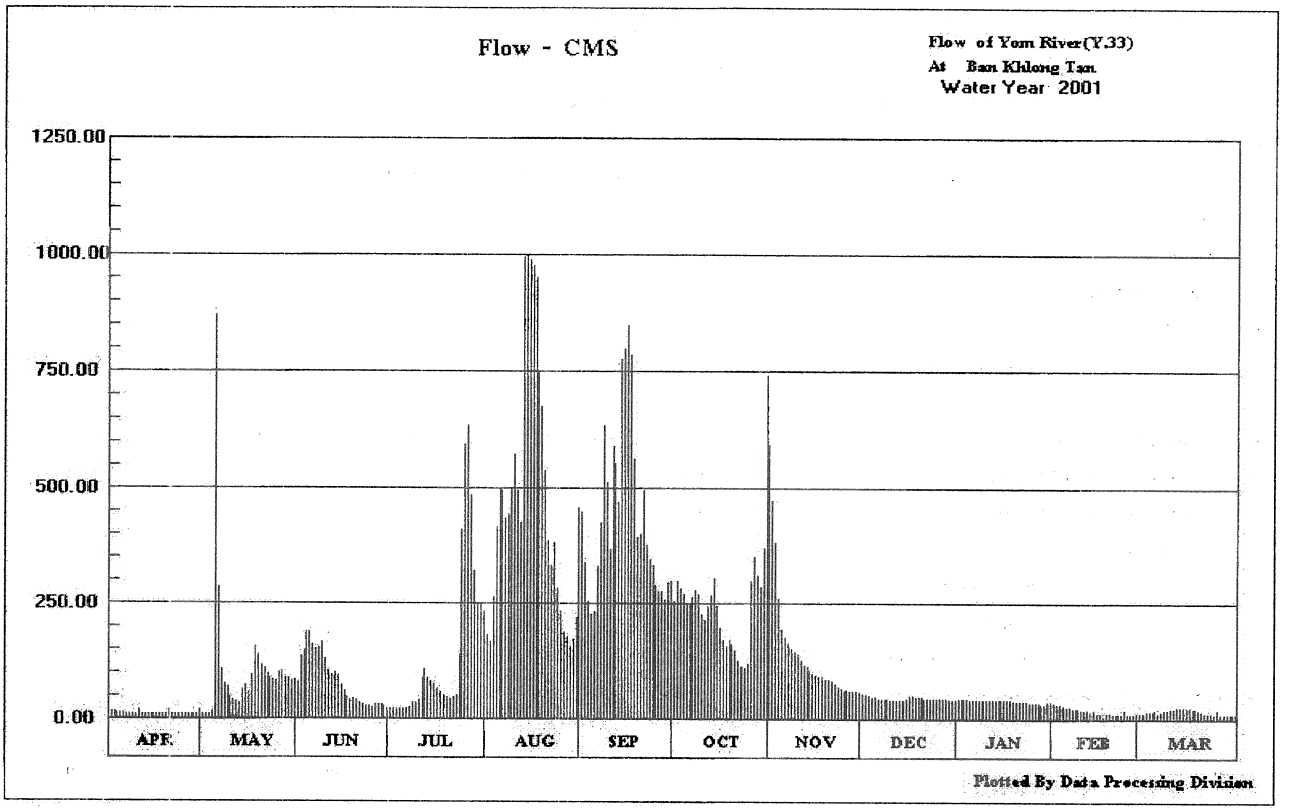
Lat 17 - 10 - 06 N. **Long** 99 - 51 - 52 E.

Location		on left bank at the bridge on road from Tambon Khlong Tan.
	Ban Khlong Tan	**Amphoe** Si Samrong **Changwat** Sukhothai
Drainage Area		13,948 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+45.820 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank about 20.30 meters from the top staff gage.
	Elevation	+55.420 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		1990 to date.
Rating Operation		
	Period of Rating	1990 to date.
	Rated by Float	-
	Rated by Current Meter	1990 to date.
Stability of Channel Regimes		Fairly stable.
Overbank Flow Conditions		No overbank flow.
General Description		Records good. Flow effected by the temporary weir about 500 meters downstream from the gage site. Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	47.09	46.84	48.43	47.21	50.12	53.10	51.07	54.16	47.92	47.70	47.49	46.97	
2	47.07	46.82	49.36	47.21	49.88	52.07	51.60	53.29	47.89	47.69	47.45	47.01	
3	47.02	46.87	49.56	47.20	51.20	51.08	51.40	52.53	47.82	47.68	47.40	47.06	
4	46.98	47.05	50.23	47.19	52.86	50.71	51.25	51.15	47.80	47.68	47.34	47.09	
5	46.96	55.59	50.19	47.24	53.50	50.80	51.00	50.31	47.75	47.67	47.32	47.07	
6	46.94	51.43	49.76	47.23	53.47	51.95	50.99	50.02	47.74	47.67	47.28	47.03	
7	46.92	48.89	49.64	47.27	53.01	52.92	51.18	49.82	47.73	47.66	47.25	47.02	
8	46.91	48.35	49.70	47.48	53.07	54.40	51.36	49.63	47.70	47.65	47.22	47.07	
9	46.90	48.22	49.89	47.47	53.50	53.60	51.26	49.51	47.68	47.64	47.19	47.13	
10	46.89	47.79	49.29	47.66	54.01	52.37	50.71	49.42	47.65	47.64	47.16	47.17	
11	46.87	47.61	48.88	48.58	53.45	54.14	50.55	49.22	47.64	47.64	47.14	47.23	
12	46.85	47.57	48.71	48.89	52.94	53.89	50.95	49.08	47.63	47.64	47.12	47.25	
13	46.84	47.50	48.78	48.62	56.15	53.28	51.23	48.99	47.66	47.63	47.08	47.26	
14	46.83	48.14	48.70	48.49	56.19	55.13	51.68	48.83	47.67	47.63	47.04	47.28	
15	46.82	48.28	48.30	48.34	56.13	55.24	50.98	48.76	47.70	47.65	47.00	47.32	
16	46.81	47.96	48.02	48.15	56.08	55.49	50.33	48.69	47.86	47.65	46.97	47.29	
17	46.81	48.72	47.77	47.98	55.97	55.18	49.93	48.67	47.83	47.64	46.96	47.27	
18	46.80	49.73	47.67	47.86	55.00	53.95	49.73	48.63	47.80	47.62	46.96	47.25	
19	46.79	49.45	47.70	47.79	54.61	52.67	49.90	48.55	47.76	47.59	46.95	47.21	
20	46.79	49.04	47.64	47.74	53.78	52.73	49.78	48.53	47.76	47.58	46.94	47.15	
21	46.78	48.98	47.51	47.78	52.58	53.47	49.59	48.50	47.74	47.57	46.94	47.09	
22	46.78	48.76	47.44	47.87	52.00	52.45	49.22	48.37	47.73	47.55	46.93	46.99	
23	46.78	48.58	47.36	49.45	52.53	52.13	49.01	48.26	47.72	47.54	46.93	46.97	
24	46.77	48.52	47.34	52.79	51.40	51.99	48.96	48.18	47.71	47.53	46.92	46.96	
25	46.76	48.47	47.32	54.16	50.82	51.47	49.09	48.12	47.70	47.52	46.92	46.94	
26	46.76	48.79	47.46	54.40	50.20	51.33	51.59	48.09	47.69	47.50	46.91	46.93	
27	46.82	48.85	47.43	53.40	50.00	51.32	52.21	48.07	47.69	47.47	46.92	46.92	
28	46.81	48.60	47.42	51.84	49.68	51.10	51.72	48.05	47.68	47.46	46.95	46.91	
29	46.80	48.57	47.39	50.99	49.97	51.55	51.46	48.02	47.67	47.44		46.90	
30	46.80	48.47	47.25	51.05	50.62	51.58	52.41	47.98	47.66	47.56		46.89	
31		48.52		50.80	53.17		54.97		47.65	47.54		46.88	
Mean	46.86	48.61	48.40	49.04	52.84	52.77	50.87	49.31	47.73	47.60	47.10	47.08	
Max	47.09	55.59	50.23	54.40	56.19	55.49	54.97	54.16	47.92	47.70	47.49	47.32	56.19
Min	46.76	46.32	47.25	47.19	49.68	50.71	48.96	47.98	47.63	47.44	46.91	46.88	46.76

Annual Max Momentary Gage Height 56.21 M (MSL), at 6.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 45.82 M (MSL), River Bed 44.77 M (MSL)
Left Bank Elevation 56.50 M (MSL)
Right Bank Elevation 56.42 M (MSL), Drainage Area 13948 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.6	11.8	83.1	25.4	185.8	451.0	256.9	598.6	57.4	47.5	38.1	16.0	
2	19.8	11.2	137.6	25.4	170.2	342.3	302.0	475.7	56.0	47.0	36.3	17.4	
3	17.8	12.8	149.6	25.0	268.0	257.8	285.0	385.3	52.9	46.6	34.0	19.4	
4	16.3	19.0	193.1	24.6	420.5	228.2	272.2	263.8	52.0	46.6	31.3	20.6	
5	15.7	871.9	190.3	26.8	503.0	235.0	251.0	198.7	49.7	46.1	30.4	19.8	
6	15.0	287.6	162.4	26.3	499.1	331.8	250.2	179.3	49.3	46.1	28.6	18.2	
7	14.4	109.4	154.6	28.1	439.3	428.0	266.3	166.3	48.8	45.7	27.2	17.8	
8	14.1	78.9	158.5	37.6	447.1	640.0	281.6	154.0	47.5	45.3	25.9	19.8	
9	13.8	72.1	170.8	37.2	503.0	516.0	273.1	146.6	46.6	44.8	24.6	22.2	
10	13.4	51.6	133.4	45.7	574.6	370.1	228.2	141.2	45.3	44.8	23.4	23.8	
11	12.8	43.5	108.8	91.0	496.5	595.4	216.2	129.2	44.8	44.8	22.6	26.3	
12	12.1	41.6	98.6	109.4	430.5	557.0	247.0	120.8	44.4	44.8	21.8	27.2	
13	11.8	38.5	102.8	93.2	996.5	474.4	270.5	115.4	45.7	44.4	20.2	27.7	
14	11.5	68.0	98.0	86.2	1005.7	778.0	308.8	105.8	46.1	44.4	18.6	28.6	
15	11.2	75.2	76.2	78.4	991.9	800.0	249.4	101.6	47.5	45.3	17.0	30.4	
16	10.8	59.2	62.0	68.5	980.4	850.9	200.1	97.4	54.7	45.3	16.0	29.1	
17	10.8	99.2	50.7	60.1	955.1	788.0	173.5	96.2	53.4	44.8	15.7	28.1	
18	10.5	160.5	46.1	54.7	752.0	565.8	160.5	93.8	52.0	43.9	15.7	27.2	
19	10.2	143.0	47.5	51.6	677.8	399.3	171.5	89.4	50.2	42.5	15.4	25.4	
20	10.2	118.4	44.8	49.3	541.2	405.7	163.7	88.3	50.2	42.1	15.0	23.0	
21	9.8	114.8	38.9	51.1	390.1	499.1	151.4	86.8	49.3	41.6	15.0	20.6	
22	9.8	101.6	35.8	55.1	336.0	377.8	129.2	79.9	48.8	40.7	14.7	16.7	
23	9.8	91.0	32.2	143.0	385.3	347.7	116.6	74.1	48.4	40.3	14.7	16.0	
24	9.5	87.8	31.3	412.0	285.0	335.2	113.6	70.0	47.9	39.8	14.4	15.7	
25	9.2	85.2	30.4	598.6	236.6	291.0	121.4	67.0	47.5	39.4	14.4	15.0	
26	9.2	103.4	36.7	640.0	191.0	279.1	301.2	65.5	47.0	38.5	14.1	14.7	
27	11.2	107.0	35.3	490.0	178.0	278.2	354.9	64.5	47.0	37.2	14.4	14.4	
28	10.8	92.0	34.9	322.4	157.2	259.5	312.2	63.5	46.6	36.7	15.4	14.1	
29	10.5	90.4	33.5	250.2	176.1	297.7	290.1	62.0	46.1	35.8		13.8	
30	10.5	85.2	27.2	255.2	221.5	300.3	374.0	60.1	45.7	41.2		13.4	
31		87.8		235.0	460.1		746.0		45.3	40.3		13.1	
Total	373.1	3419.6	2605.1	4497.1	14855.1	13280.3	7838.3	4440.8	1514.1	1334.3	594.9	635.5	55388.2 CMSDAY
Mean	12.4	110.3	86.8	145.1	479.2	442.7	252.8	148.0	48.8	43.0	21.2	20.5	151.7 CMS
Max	20.6	871.9	193.1	640.0	1005.7	850.9	746.0	598.6	57.4	47.5	38.1	30.4	1005.7 CMS
Min	9.2	11.2	27.2	24.6	157.2	228.2	113.6	60.1	44.4	35.8	14.1	13.1	9.2 CMS
Runoff	32.24	295.45	225.08	388.55	1283.48	1147.42	677.23	383.69	130.82	115.28	51.40	54.91	4785.54 MCM

Momentary Peak 1010.30 CMS, at 56.21 M (MSL), at 6.00 Hours, on Aug 14, 2001

Runoff Yield 10.88 Liters/Second/Square KM, Momentary Peak Yield 72.433 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 331 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 +4.464 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 Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

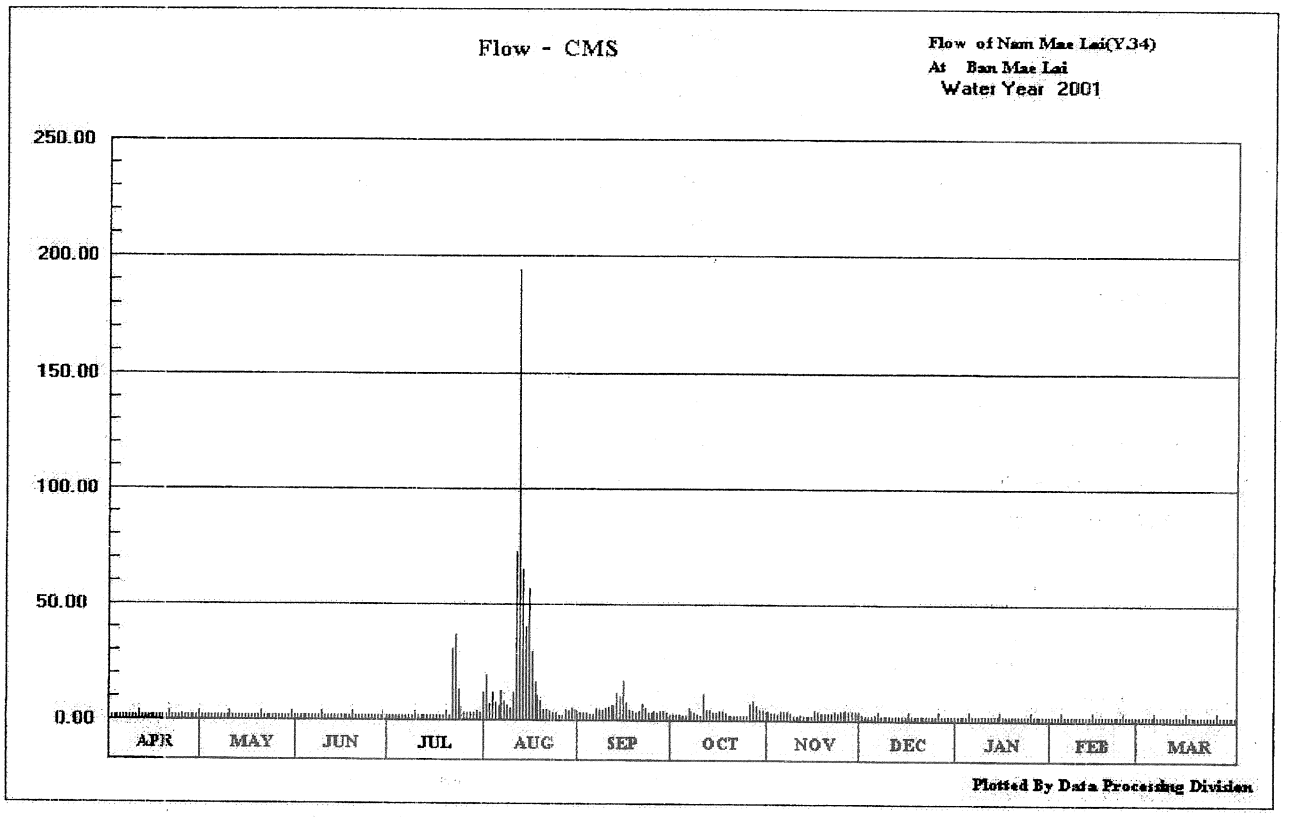
Overbank Flow Conditions Overbank flow starts at elevation +3.440 m.(A.D.), records are channel flow only.

General Description Records fair. Flow effected by the temporary weir about 300 meters downstream from the gage site. Stage-discharge relation defined by 44 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.97	0.38	0.49	0.56	1.38	0.76	0.70	0.81	0.69	0.44	0.47	1.08	
2	0.97	0.42	0.46	0.54	0.97	0.73	0.69	0.77	0.68	0.44	0.71	1.08	
3	0.97	0.43	0.44	0.52	1.16	0.73	0.69	0.73	0.68	0.44	0.77	1.07	
4	0.98	0.42	0.40	0.51	1.01	0.72	0.67	0.72	0.68	0.45	0.92	1.07	
5	0.98	0.40	0.42	0.52	0.94	0.71	0.68	0.79	0.70	0.45	1.09	1.07	
6	0.92	0.40	0.54	0.57	1.18	0.89	0.86	0.77	0.70	0.48	1.09	1.07	
7	0.92	0.39	0.52	0.59	1.04	0.85	0.76	0.78	0.67	0.53	1.06	1.07	
8	0.94	0.38	0.49	0.61	0.93	0.83	0.74	0.73	0.49	0.53	1.05	1.07	
9	0.97	0.38	0.47	0.64	0.86	0.87	0.69	0.68	0.48	0.56	1.05	1.06	
10	0.97	0.45	0.45	0.65	1.16	0.91	0.66	0.67	0.46	0.57	1.05	1.06	
11	0.97	0.46	0.43	0.67	2.37	0.94	1.13	0.69	0.44	0.57	1.05	1.06	
12	1.00	0.43	0.40	0.68	3.46	0.96	0.85	0.68	0.43	0.55	1.04	1.06	
13	1.00	0.39	0.40	0.64	2.26	1.15	0.82	0.67	0.43	0.49	1.04	1.06	
14	1.00	0.37	0.42	0.62	1.85	1.10	0.74	0.67	0.43	0.45	1.09	1.06	
15	1.02	0.37	0.42	0.60	2.14	1.30	0.74	0.67	0.42	0.45	1.09	1.07	
16	1.02	0.39	0.41	0.59	1.62	1.00	0.78	0.83	0.42	0.44	1.08	1.07	
17	1.00	0.39	0.41	0.58	1.29	0.83	0.74	0.81	0.42	0.44	1.07	1.07	
18	1.00	0.39	0.41	0.60	1.11	0.79	0.75	0.77	0.44	0.44	1.06	1.07	
19	1.06	0.38	0.40	0.63	1.03	0.77	0.66	0.74	0.48	0.42	1.05	1.06	
20	1.00	0.37	0.41	0.62	0.85	0.78	0.66	0.74	0.48	0.42	1.05	1.06	
21	1.01	0.37	0.40	1.65	0.82	0.97	0.67	0.76	0.52	0.43	1.05	1.06	
22	1.01	0.37	0.41	1.78	0.78	0.86	0.66	0.78	0.49	0.44	1.05	1.06	
23	1.01	0.36	0.42	1.19	0.74	0.77	0.65	0.77	0.42	0.42	1.05	1.07	
24	0.72	0.36	0.43	0.90	0.73	0.74	0.62	0.79	0.42	0.43	1.05	1.07	
25	0.57	0.37	0.40	0.74	0.68	0.79	0.62	0.81	0.42	0.43	1.10	1.07	
26	0.46	0.36	0.40	0.74	0.68	0.76	0.97	0.82	0.43	0.42	1.09	0.45	
27	0.45	0.36	0.40	0.77	0.83	0.78	1.04	0.80	0.44	0.42	1.09	0.44	
28	0.45	0.36	0.46	0.74	0.77	0.79	0.95	0.79	0.44	0.42	1.09	0.45	
29	0.40	0.36	0.47	0.73	0.89	0.75	0.84	0.79	0.44	0.41		0.79	
30	0.38	0.37	0.59	0.76	0.85	0.70	0.82	0.80	0.44	0.44		0.83	
31		0.38		1.15	0.81		0.79		0.44	0.46		0.89	
Mean	0.87	0.39	0.44	0.74	1.20	0.85	0.76	0.75	0.50	0.46	1.02	0.98	
Max	1.06	0.46	0.59	1.78	3.46	1.30	1.13	0.83	0.70	0.57	1.10	1.08	3.46
Min	0.38	0.36	0.40	0.51	0.68	0.70	0.62	0.67	0.42	0 41	0.47	0.44	0.36

Annual Max Momentary Gage Height 4.30 M (A.D), at 1.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.58 M (A.D)
Left Bank Elevation 3.88 M (A.D)
Right Bank Elevation 3.43 M (A.D), Drainage Area 331 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.35	0.33	1.08	1.72	20.30	4.06	3.25	4.77	3.14	0.70	0.93	0.43	
2	0.35	0.55	0.85	1.53	7.55	3.66	3.14	4.19	3.02	0.70	0.21	0.43	
3	0.35	0.63	0.70	1.34	12.80	3.66	3.14	3.66	3.02	0.70	0.24	0.43	
4	0.36	0.55	0.40	1.24	8.39	3.52	2.91	3.52	3.02	0.77	0.31	0.43	
5	0.36	0.40	0.55	1.34	6.99	3.38	3.02	4.47	3.25	0.77	0.44	0.43	
6	0.31	0.40	1.53	1.81	13.40	6.09	5.59	4.19	3.25	1.00	0.44	0.43	
7	0.31	0.36	1.34	2.00	9.26	5.43	4.06	4.33	2.91	1.43	0.42	0.43	
8	0.33	0.33	1.08	2.22	6.81	5.09	3.79	3.66	1.08	1.43	0.41	0.43	
9	0.35	0.33	0.93	2.56	5.59	5.76	3.14	3.02	1.00	1.72	0.41	0.42	
10	0.35	0.77	0.77	2.67	12.80	6.44	2.79	2.91	0.85	1.81	0.41	0.42	
11	0.35	0.85	0.63	2.91	73.37	6.99	11.90	3.14	0.70	1.81	0.41	0.42	
12	0.37	0.63	0.40	3.02	194.80	7.36	5.43	3.02	0.63	1.63	0.40	0.42	
13	0.37	0.36	0.40	2.56	65.56	12.50	4.93	2.91	0.63	1.08	0.40	0.42	
14	0.37	0.29	0.55	2.33	40.95	11.00	3.79	2.91	0.63	0.77	0.44	0.42	
15	0.39	0.29	0.55	2.10	57.52	17.50	3.79	2.91	0.55	0.77	0.44	0.43	
16	0.39	0.36	0.47	2.00	30.20	8.10	4.33	5.09	0.55	0.70	0.43	0.43	
17	0.37	0.36	0.47	1.91	17.15	5.09	3.79	4.77	0.55	0.70	0.43	0.43	
18	0.37	0.36	0.47	2.10	11.30	4.47	3.93	4.19	0.70	0.70	0.42	0.43	
19	0.42	0.33	0.40	2.44	8.97	4.19	2.79	3.79	1.00	0.55	0.41	0.42	
20	0.37	0.29	0.47	2.33	5.43	4.33	2.79	3.79	1.00	0.55	0.41	0.42	
21	0.38	0.29	0.40	31.55	4.93	7.55	2.91	4.06	1.34	0.63	0.41	0.42	
22	0.38	0.29	0.47	37.48	4.33	5.59	2.79	4.33	1.08	0.70	0.41	0.42	
23	0.38	0.26	0.55	13.70	3.79	4.19	2.67	4.19	0.55	0.55	0.41	0.43	
24	3.52	0.26	0.63	6.25	3.66	3.79	2.33	4.47	0.55	0.63	0.41	0.43	
25	1.81	0.29	0.40	3.79	3.02	4.47	2.33	4.77	0.55	0.63	0.45	0.43	
26	0.85	0.26	0.40	3.79	3.02	4.06	7.55	4.93	0.63	0.55	0.44	0.08	
27	0.77	0.26	0.40	4.19	5.09	4.33	9.26	4.60	0.70	0.55	0.44	0.08	
28	0.77	0.26	0.85	3.79	4.19	4.47	7.18	4.47	0.70	0.55	0.44	0.08	
29	0.40	0.26	0.93	3.66	6.09	3.93	5.26	4.47	0.70	0.47		0.25	
30	0.33	0.29	2.00	4.06	5.43	3.25	4.93	4.60	0.70	0.70		0.27	
31		0.33		12.50	4.77		4.47		0.70	0.85		0.30	
Total	16.78	11.82	21.07	166.89	657.46	174.25	133.98	120.13	39.68	27.10	11.82	11.71	1392.69 CMSDAY
Mean	0.56	0.38	0.70	5.38	21.21	5.81	4.32	4.00	1.28	0.87	0.42	0.38	3.82 CMS
Max	3.52	0.85	2.00	37.48	194.80	17.50	11.90	5.09	3.25	1.81	0.93	0.43	194.80 CMS
Min	0.31	0.26	0.40	1.24	3.02	3.25	2.33	2.91	0.55	0.47	0.21	0.08	0.08 CMS
Runoff	1.450	1.021	1.820	14.419	56.805	15.055	11.576	10.379	3.428	2.341	1.021	1.012	120.328 MCM

Momentary Peak 350.50 CMS, at 4.30 M (A.D), at 1.00 Hours, on Aug 12, 2001

Runoff Yield 11.53 Liters/Second/Square KM, Momentary Peak Yield 1058.912 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Nam Mae Khuan at Ban Pa Kha, Phayao (Y.36)

Lat 19 - 09 - 24 N. **Long** 100 - 19 - 36 E.

Location on left bank at the bridge.

Ban Pa Kha **Amphoe** Pong **Changwat** Phayao

Drainage Area 822 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 abutment of the bridge.

Elevation +9.178 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 to date.

Rating Operation

Period of Rating 1998 to date.

Rated by Float -

Rated by Current Meter 1998 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

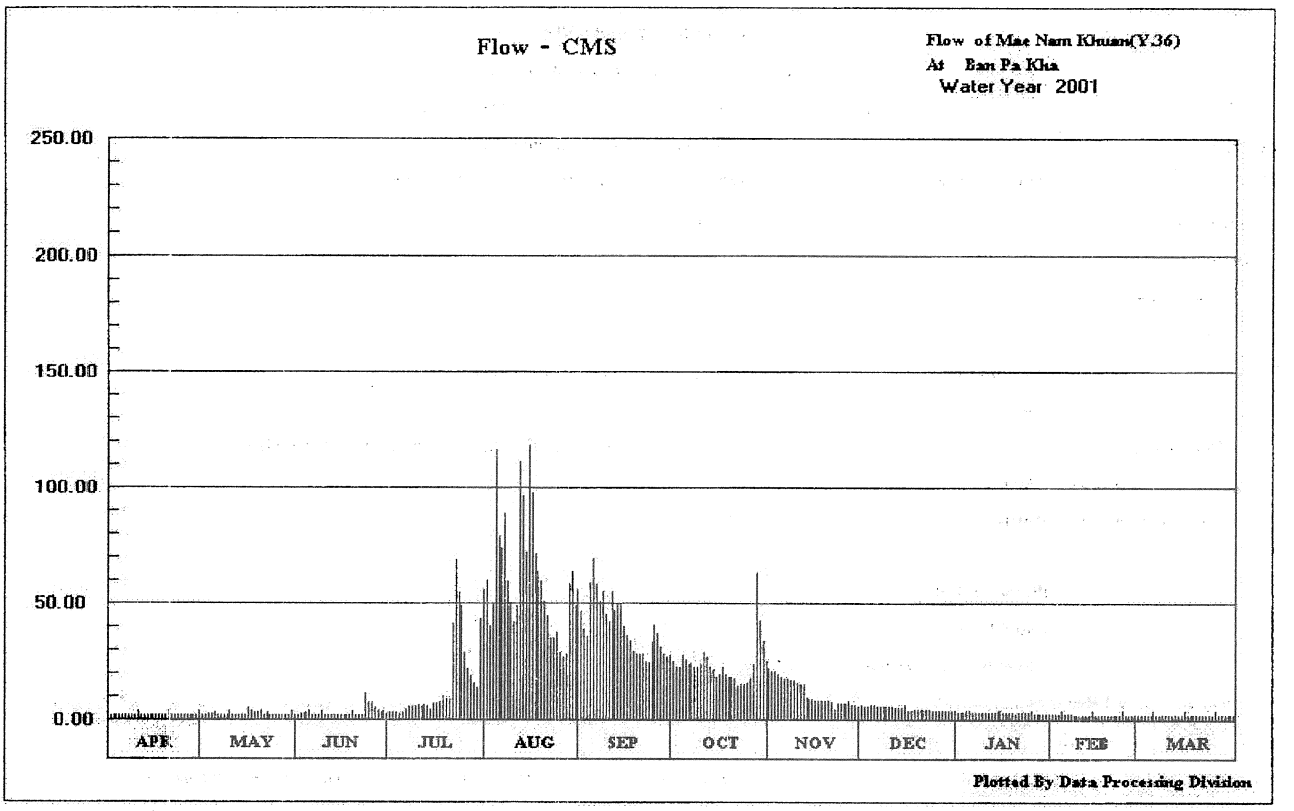
General Description Records fair. Flow effected by the islet at the gage site.

Stage-discharge relation defined by 56 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.68	1.67	1.73	1.79	3.02	2.75	2.29	2.21	1.71	1.78	1.76	1.68	
2	1.68	1.73	1.75	1.79	2.62	2.60	2.23	2.17	1.69	1.78	1.76	1.71	
3	1.68	1.75	1.76	1.77	2.82	2.53	2.22	2.17	1.68	1.78	1.76	1.71	
4	1.70	1.76	1.78	1.76	3.87	2.99	2.35	2.14	1.88	1.80	1.75	1.71	
5	1.67	1.79	1.80	1.77	3.33	3.18	2.31	2.11	1.88	1.79	1.76	1.72	
6	1.66	1.70	1.74	1.83	3.25	2.98	2.26	2.09	1.87	1.79	1.75	1.71	
7	1.66	1.49	1.67	1.87	3.48	2.84	2.27	2.09	1.86	1.79	1.75	1.72	
8	1.59	1.51	1.68	1.87	3.00	2.92	2.22	2.07	1.86	1.79	1.74	1.72	
9	1.60	1.49	1.65	1.86	2.83	2.73	2.22	2.07	1.86	1.79	1.74	1.72	
10	1.65	1.48	1.63	1.89	2.66	2.66	2.25	2.05	1.86	1.79	1.74	1.72	
11	1.68	1.65	1.64	1.87	2.80	2.92	2.38	2.03	1.86	1.78	1.74	1.73	
12	1.68	1.64	1.61	1.89	3.80	2.76	2.34	2.02	1.85	1.78	1.74	1.73	
13	1.70	1.58	1.60	1.87	3.59	2.83	2.22	1.84	1.85	1.79	1.74	1.72	
14	1.70	1.60	1.62	1.82	3.22	2.81	2.19	1.82	1.85	1.80	1.73	1.72	
15	1.69	1.73	1.58	1.92	3.89	2.62	2.11	1.81	1.88	1.79	1.73	1.72	
16	1.68	1.84	1.62	1.90	3.61	2.54	2.15	1.80	1.81	1.78	1.72	1.71	
17	1.67	1.80	1.61	1.94	3.21	2.49	2.22	1.79	1.81	1.78	1.73	1.70	
18	1.67	1.79	1.60	2.01	3.08	2.39	2.14	1.78	1.82	1.77	1.73	1.70	
19	1.65	1.78	1.44	1.97	3.00	2.37	2.12	1.78	1.83	1.77	1.72	1.70	
20	1.62	1.78	1.49	1.98	2.84	2.37	2.11	1.78	1.82	1.76	1.74	1.70	
21	1.57	1.73	1.52	2.84	2.72	2.36	2.09	1.77	1.82	1.77	1.73	1.70	
22	1.57	1.79	1.70	3.37	2.52	2.29	2.00	1.82	1.82	1.77	1.73	1.70	
23	1.58	1.72	2.06	3.11	2.52	2.28	2.03	1.92	1.82	1.77	1.73	1.70	
24	1.58	1.67	1.93	3.00	2.57	2.47	2.03	1.92	1.80	1.77	1.73	1.70	
25	1.41	1.71	1.93	2.57	2.38	2.64	2.05	1.92	1.81	1.76	1.73	1.70	
26	1.40	1.66	1.85	2.37	2.33	2.56	2.09	1.92	1.81	1.76	1.73	1.70	
27	1.38	1.64	1.80	2.29	2.36	2.43	2.25	1.79	1.81	1.76	1.73	1.70	
28	1.49	1.67	1.78	2.19	2.98	2.37	3.07	1.72	1.81	1.76	1.73	1.70	
29	1.54	1.64	1.77	2.12	3.08	2.33	2.68	1.71	1.80	1.76		1.70	
30	1.60	1.65	1.76	2.69	2.80	2.35	2.49	1.70	1.80	1.76		1.69	
31		1.52		2.94	2.93		2.29		1.80	1.76		1.69	
Mean	1.61	1.68	1.70	2.16	3.00	2.61	2.25	1.93	1.82	1.78	1.74	1.71	
Max	1.70	1.84	2.06	3.37	3.89	3.18	3.07	2.21	1.88	1.80	1.76	1.73	3.89
Min	1.38	1.48	1.44	1.76	2.33	2.28	2.00	1.70	1.68	1.76	1.72	1.68	1.38

Annual Max Momentary Gage Height 4.25 M (A.D), at 17.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.33 M (A.D)
Left Bank Elevation 8.79 M (A.D)
Right Bank Elevation 8.90 M (A.D), Drainage Area 822 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.54	1.41	2.61	4.23	61.14	47.00	25.90	22.70	6.95	3.96	3.42	1.54	
2	1.54	2.61	3.15	4.23	40.66	39.70	23.50	21.15	6.47	3.96	3.42	2.07	
3	1.54	3.15	3.42	3.69	50.50	36.41	23.10	21.15	6.23	3.96	3.42	2.07	
4	1.80	3.42	3.96	3.42	117.21	59.45	28.40	19.99	6.82	4.50	3.15	2.07	
5	1.41	4.23	4.50	3.69	79.65	70.42	26.72	18.83	6.82	4.23	3.42	2.34	
6	1.28	1.80	2.88	5.37	74.65	58.90	24.70	18.11	6.53	4.23	3.15	2.07	
7	1.28	0.19	1.41	6.53	89.40	51.50	25.10	18.11	6.24	4.23	3.15	2.34	
8	0.47	0.23	1.54	6.53	60.00	55.60	23.10	17.42	6.24	4.23	2.88	2.34	
9	0.50	0.19	1.15	6.24	51.00	46.00	23.10	17.42	6.24	4.23	2.88	2.34	
10	1.15	0.18	0.89	7.11	42.58	42.58	24.30	16.72	6.24	4.23	2.88	2.34	
11	1.54	1.15	1.02	6.53	49.50	55.60	29.66	16.03	6.24	3.96	2.88	2.61	
12	1.54	1.02	0.63	7.11	112.10	47.50	27.98	15.69	5.95	3.96	2.88	2.61	
13	1.80	0.44	0.50	6.53	96.82	51.00	23.10	10.32	5.95	4.23	2.88	2.34	
14	1.80	0.50	0.76	5.08	72.82	50.00	21.92	9.76	5.95	4.50	2.61	2.34	
15	1.67	2.61	0.44	8.02	118.67	40.66	18.83	9.48	6.82	4.23	2.61	2.34	
16	1.54	5.66	0.76	7.40	98.23	36.88	20.38	9.20	4.79	3.96	2.34	2.07	
17	1.41	4.50	0.63	8.64	72.21	34.55	23.10	8.95	4.79	3.96	2.61	1.80	
18	1.41	4.23	0.50	10.81	64.56	30.08	19.99	8.70	5.08	3.69	2.61	1.80	
19	1.15	3.96	0.14	9.57	60.00	29.24	19.22	8.70	5.37	3.69	2.34	1.80	
20	0.76	3.96	0.19	9.88	51.50	29.24	18.83	8.70	5.08	3.42	2.88	1.80	
21	0.41	2.61	0.26	41.88	45.50	28.82	18.11	8.45	5.08	3.69	2.61	1.80	
22	0.41	4.23	1.80	69.76	35.94	25.90	15.00	5.08	5.08	3.69	2.61	1.80	
23	0.44	2.34	12.39	55.23	35.94	25.50	16.03	8.02	5.08	3.69	2.61	1.80	
24	0.44	1.41	8.33	49.50	38.29	33.65	16.03	8.02	4.50	3.69	2.61	1.80	
25	0.11	2.07	8.33	29.83	29.66	41.62	16.72	8.02	4.79	3.42	2.61	1.80	
26	0.10	1.28	5.95	22.58	27.56	37.82	18.11	8.02	4.79	3.42	2.61	1.80	
27	0.08	1.02	4.50	19.87	28.82	31.85	24.30	8.95	4.79	3.42	2.61	1.80	
28	0.19	1.41	3.96	16.57	58.90	29.24	63.99	7.20	4.79	3.42	2.61	1.80	
29	0.32	1.02	3.69	14.30	64.56	27.56	43.54	6.95	4.50	3.42		1.80	
30	0.50	1.15	3.42	44.02	49.50	28.40	34.55	6.70	4.50	3.42		1.67	
31		0.76		56.70	56.15		25.90		4.50	3.42		1.67	
Total	30.13	64.74	83.71	550.85	1934.02	1222.67	763.21	372.54	173.20	120.06	79.29	62.57	5456.99 CMSDAY
Mean	1.00	2.09	2.79	17.77	62.39	40.76	24.62	12.42	5.59	3.87	2.83	2.02	14.95 CMS
Max	1.80	5.66	12.39	69.76	118.67	70.42	63.99	22.70	6.95	4.50	3.42	2.61	118.67 CMS
Min	0.08	0.18	0.14	3.42	27.56	25.50	15.00	5.08	4.50	3.42	2.34	1.54	0.08 CMS
Runoff	2.603	5.594	7.233	47.593	167.099	105.639	65.941	32.187	14.964	10.373	6.851	5.406	471.484 MCM

Momentary Peak 155.90 CMS, at 4.25 M (A.D), at 17.00 Hours, on Aug 15, 2001

Runoff Yield 18.19 Liters/Second/Square KM, Momentary Peak Yield 189.659 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 10,306 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 +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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Stable.

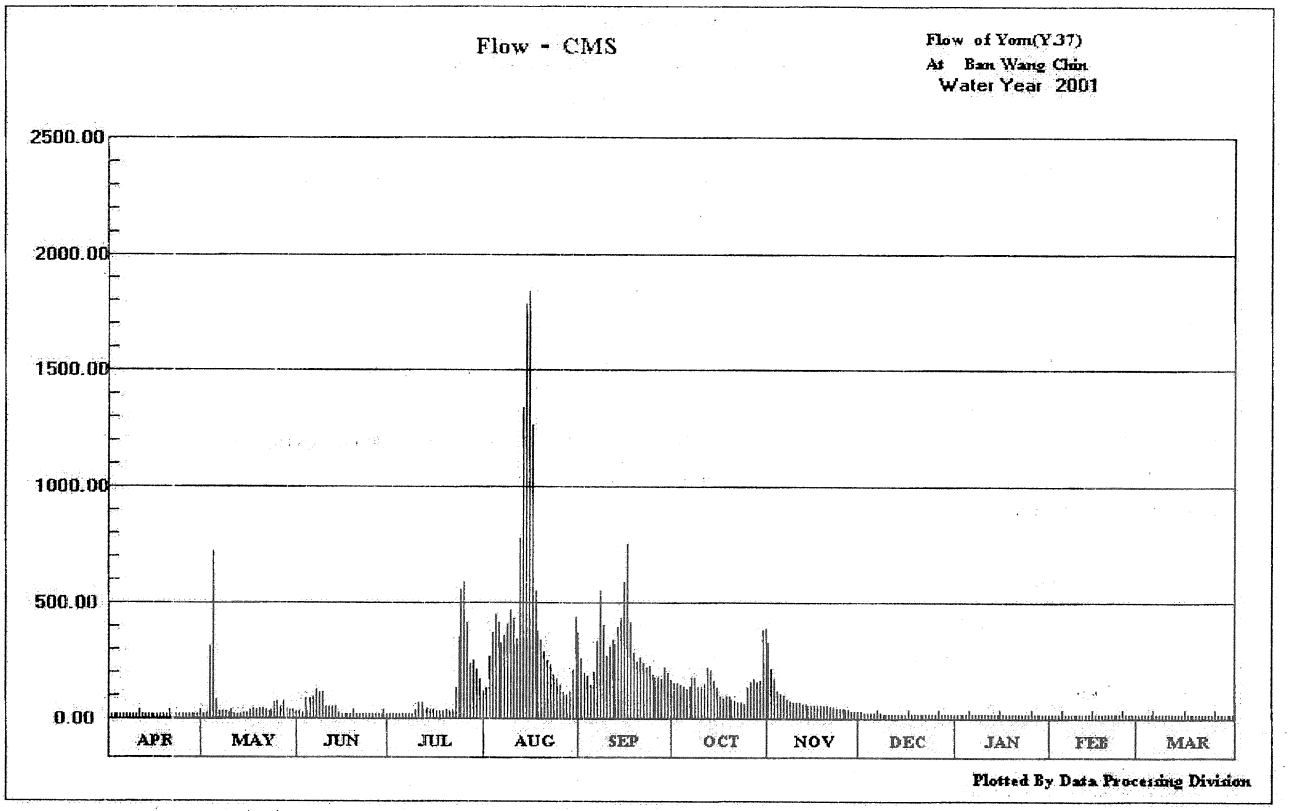
Overbank Flow Conditions No overbank flow.

General Description Records fair.The weir situated about 1 kilometer downstream from the gage site.
Stage-discharge relation defined by 31 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.10	1.87	2.53	2.02	3.91	5.03	4.13	5.55	2.55	2.01	1.87	2.19	
2	2.07	2.41	2.48	2.16	5.15	4.50	4.13	4.67	2.49	2.00	1.87	2.18	
3	2.06	5.46	3.44	2.15	5.89	4.41	4.08	4.26	2.47	2.00	1.86	2.18	
4	2.06	7.53	2.61	2.14	6.31	4.05	3.97	3.81	2.44	2.00	1.86	2.18	
5	2.04	3.36	3.43	2.14	6.14	4.59	3.85	3.64	2.42	1.98	1.85	2.18	
6	2.04	2.60	3.46	2.14	5.56	5.60	4.01	3.55	2.40	1.97	1.85	2.18	
7	2.02	2.58	3.85	2.13	5.78	6.79	4.33	3.32	2.39	1.98	1.84	2.14	
8	2.02	2.57	3.72	2.13	6.08	6.05	4.32	3.25	2.37	1.98	1.83	2.14	
9	2.02	2.51	3.73	2.22	6.40	5.14	4.02	3.21	2.35	1.97	1.82	2.14	
10	2.01	2.07	2.94	3.21	6.22	5.44	3.98	3.18	2.33	1.97	1.83	2.13	
11	2.01	2.06	2.87	3.13	5.69	5.68	4.04	3.14	2.28	1.97	1.92	2.13	
12	2.01	2.27	2.89	2.70	7.74	5.51	4.72	3.12	2.27	1.97	2.11	2.13	
13	2.01	2.38	2.90	2.74	9.74	6.02	4.63	3.07	2.26	1.97	2.11	2.12	
14	2.01	2.43	2.46	2.69	11.17	6.22	4.20	3.00	2.21	1.96	2.09	2.12	
15	2.00	2.39	2.24	2.64	11.35	6.97	3.90	2.99	2.16	1.96	2.09	2.13	
16	2.00	2.67	2.17	2.62	9.49	7.64	3.50	3.01	2.13	1.96	2.06	2.13	
17	1.98	2.75	2.14	2.60	6.78	6.14	3.44	3.01	2.09	1.96	2.11	2.13	
18	1.97	2.67	2.13	2.60	5.90	5.25	3.47	2.98	2.07	1.95	2.13	2.12	
19	1.97	2.76	2.11	2.65	5.64	4.93	3.48	2.99	2.07	1.95	2.15	2.13	
20	1.96	2.82	2.12	2.62	5.30	5.08	3.34	2.95	2.06	1.94	2.18	2.16	
21	1.90	2.64	2.10	2.71	4.99	4.88	3.24	2.90	2.06	1.94	2.20	2.15	
22	1.89	2.62	2.08	3.95	4.85	4.71	3.14	2.87	2.04	1.94	2.20	2.15	
23	1.96	2.66	2.07	5.75	4.48	4.76	3.15	2.80	2.04	1.94	2.21	2.15	
24	1.95	3.14	2.08	6.83	4.31	4.48	3.10	2.77	2.04	1.94	2.21	2.15	
25	1.80	3.22	2.06	6.95	4.07	4.33	3.95	2.74	2.02	1.93	2.21	2.14	
26	1.82	2.92	2.05	6.11	3.73	4.32	4.15	2.70	2.02	1.95	2.21	2.14	
27	1.82	3.27	2.09	4.91	3.60	4.27	4.28	2.65	2.02	1.94	2.20	2.13	
28	1.81	2.75	2.07	5.01	3.75	4.71	4.19	2.59	2.03	1.93	2.20	2.13	
29	1.80	2.72	2.00	4.68	4.64	4.50	4.24	2.57	2.02	1.92		2.18	
30	1.80	2.67	1.98	4.28	6.24	4.20	5.95	2.57	2.01	1.89		2.21	
31		2.56		3.76	5.86		5.98		2.01	1.87		2.20	
Mean	1.96	2.88	2.56	3.37	6.02	5.21	4.03	3.20	2.20	1.96	2.04	2.15	
Max	2.10	7.53	3.85	6.95	11.35	7.64	5.98	5.55	2.55	2.01	2.21	2.21	11.35
Min	1.80	1.87	1.98	2.02	3.60	4.05	3.10	2.57	2.01	1.87	1.82	2.12	1.80

Annual Max Momentary Gage Height 11.60 M (A.D), at 22.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.37 M (A.D)
Left Bank Elevation 12.99 M (A.D)
Right Bank Elevation 14.06 M (A.D), Drainage Area 10306 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.6	9.5	37.4	14.6	138.2	261.8	160.5	330.3	38.5	14.2	9.5	21.1	
2	16.5	31.3	34.9	20.0	276.8	200.8	160.5	220.1	35.4	13.8	9.5	20.7	
3	16.1	318.1	97.7	19.6	379.9	190.6	155.1	174.5	34.4	13.8	9.2	20.7	
4	16.1	729.9	41.6	19.2	457.0	151.9	143.7	128.9	32.8	13.8	9.2	20.7	
5	15.3	91.4	96.9	19.2	423.6	210.9	132.6	114.0	31.8	13.1	8.9	20.7	
6	15.3	41.0	99.3	19.2	331.6	337.0	147.6	106.5	30.8	12.8	8.9	20.7	
7	14.6	40.0	132.6	18.8	363.1	557.8	182.0	88.3	30.3	13.1	8.6	19.2	
8	14.6	39.5	121.0	18.8	412.2	406.5	180.9	82.9	29.4	13.1	8.2	19.2	
9	14.6	36.4	121.9	22.4	475.0	275.5	148.6	79.8	28.5	12.8	7.9	19.2	
10	14.2	16.5	61.3	79.8	439.0	315.4	144.7	77.6	27.5	12.8	8.2	18.8	
11	14.2	16.1	56.9	74.1	350.1	348.6	150.8	74.8	25.2	12.8	11.2	18.8	
12	14.2	24.8	58.1	46.8	782.0	324.9	225.8	73.4	24.8	12.8	18.0	18.8	
13	14.2	29.9	58.8	49.1	1347.0	400.8	215.5	69.9	24.3	12.8	18.0	18.4	
14	14.2	32.3	33.9	46.2	1790.3	439.0	168.0	65.0	22.0	12.5	17.3	18.4	
15	13.8	30.3	23.4	43.3	1848.8	598.2	137.3	64.4	20.0	12.5	17.3	18.8	
16	13.8	45.0	20.3	42.1	1272.0	757.0	102.5	65.7	18.8	12.5	16.1	18.8	
17	13.1	49.6	19.2	41.0	555.7	423.6	97.7	65.7	17.3	12.5	18.0	18.8	
18	12.8	45.0	18.8	41.0	381.5	289.8	100.1	63.7	16.5	12.2	18.8	18.4	
19	12.8	50.2	18.0	43.9	342.8	249.9	100.9	64.4	16.5	12.2	19.6	18.8	
20	12.5	53.7	18.4	42.1	296.5	268.0	89.8	61.9	16.1	11.8	20.7	20.0	
21	10.5	43.3	17.6	47.3	256.8	244.2	82.1	58.8	16.1	11.8	21.5	19.6	
22	10.2	42.1	16.9	141.9	240.8	224.7	74.8	56.9	15.3	11.8	21.5	19.6	
23	12.5	44.5	16.5	358.7	198.5	230.4	75.5	52.5	15.3	11.8	22.0	19.6	
24	12.2	74.8	16.9	566.7	179.8	198.5	72.0	50.8	15.3	11.8	22.0	19.6	
25	7.3	80.5	16.1	593.7	154.0	182.0	141.9	49.1	14.6	11.5	22.0	19.2	
26	7.9	60.0	15.7	417.9	121.9	180.9	162.6	46.8	14.6	12.2	22.0	19.2	
27	7.9	84.4	17.3	247.6	110.5	175.5	176.6	43.9	14.6	11.8	21.5	18.8	
28	7.6	49.6	16.5	259.3	123.6	224.7	166.9	40.5	15.0	11.5	21.5	18.8	
29	7.3	47.9	13.8	221.2	216.6	200.8	172.3	39.5	14.6	11.2		20.7	
30	7.3	45.0	13.1	176.6	443.0	168.0	389.2	39.5	14.2	10.2		22.0	
31		39.0		124.5	375.3		393.9		14.2	9.5		21.5	
Total	381.2	2341.6	1330.8	3876.6	15083.9	9037.7	4852.4	2550.1	684.7	383.0	437.1	607.6	41566.7 CMSDAY
Mean	12.7	75.5	44.4	125.1	486.6	301.3	156.5	85.0	22.1	12.4	15.6	19.6	113.9 CMS
Max	17.6	729.9	132.6	593.7	1848.8	757.0	393.9	330.3	38.5	14.2	22.0	22.0	1848.8 CMS
Min	7.3	9.5	13.1	14.6	110.5	151.9	72.0	39.5	14.2	9.5	7.9	18.4	7.3 CMS
Runoff	32.94	202.31	114.98	334.94	1303.25	780.86	419.25	220.33	59.16	33.09	37.77	52.50	3591.36 MCM

Momentary Peak 1930.00 CMS, at 11.60 M (A.D), at 22.00 Hours, on Aug 14, 2001

Runoff Yield 11.05 Liters/Second/Square KM, Momentary Peak Yield 187.270 Liters/Second/Square KM

WATER YEAR : 2001

YOM RIVER BASIN

Nam Mae Kham Mi at Ban Mae Kham Mi Tamnak Tham, Phrae (Y.38)

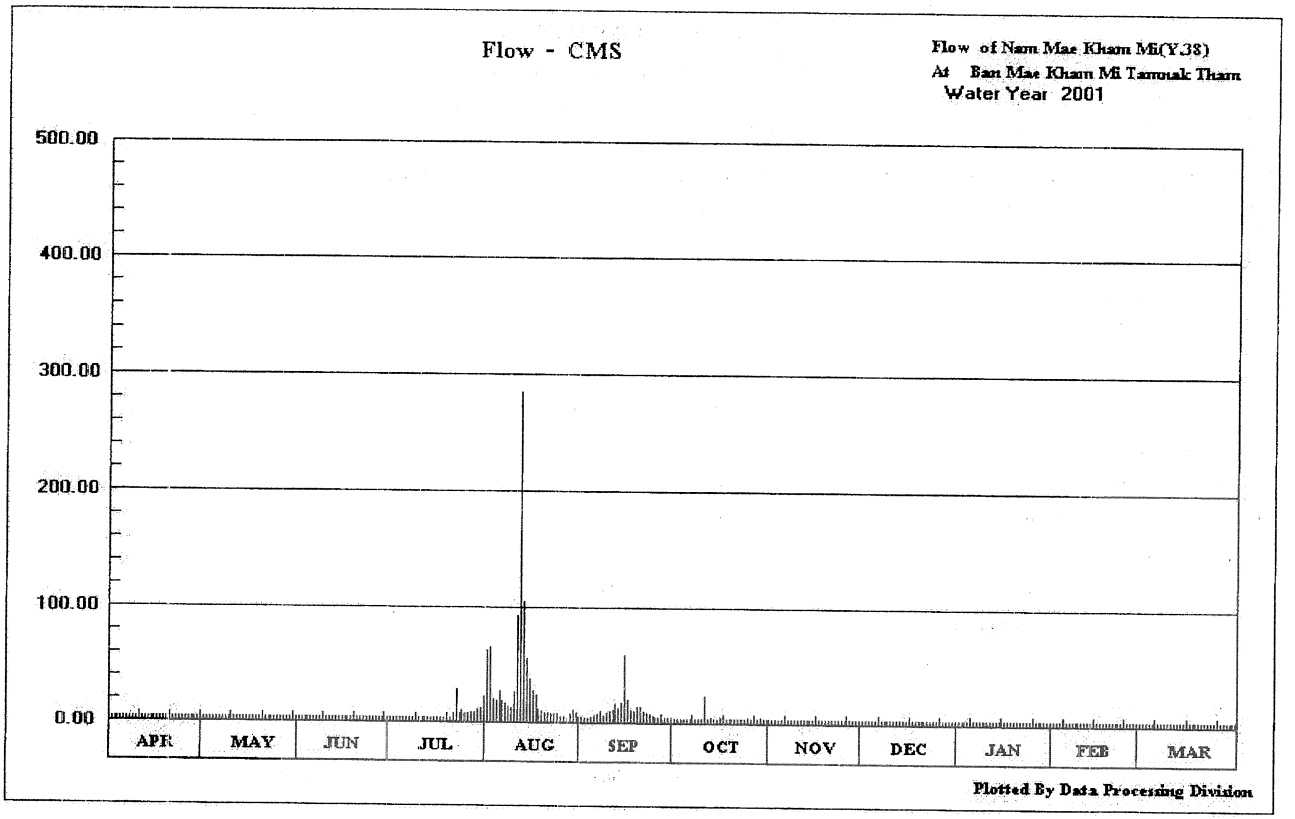
Lat 18 - 15 - 54 N. **Long** 100 - 14 - 28 E.

Location		on left bank at the bridge on road.
	Ban Mae Kham Mi	**Amphoe** Nong Muang Kai **Changwat** Phrae
Drainage Area		452 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 15.00 meters from the top staff gage.
	Elevation	+5.284 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 Float	-
	Rated by Current Meter	1999 to date.
Stability of Channel Regimes		Rather unstable because of backwater effect.
Overbank Flow Conditions		No overbank flow.
General Description		Records fair. The islet situated of the gage site.
		Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.42	2.30	2.79	2.50	4.08	2.66	2.63	2.58	2.34	2.15	2.17	2.14	
2	2.45	2.30	2.95	2.48	4.13	2.61	2.60	2.57	2.33	2.18	2.17	2.10	
3	2.40	2.32	2.90	2.48	3.20	2.55	2.63	2.56	2.33	2.17	2.17	2.06	
4	2.35	2.40	2.90	2.47	3.16	2.66	2.59	2.55	2.31	2.16	2.17	2.07	
5	2.32	2.42	2.89	2.47	3.41	2.73	2.58	2.54	2.30	2.17	2.16	2.09	
6	2.30	2.41	2.87	2.47	3.18	2.77	2.59	2.50	2.30	2.20	2.15	2.08	
7	2.25	2.41	2.85	2.50	3.09	2.87	2.62	2.49	2.29	2.25	2.14	2.09	
8	2.22	2.42	2.82	2.52	3.02	2.75	2.60	2.48	2.28	2.24	2.14	2.08	
9	2.21	2.44	2.80	2.54	2.98	2.85	2.63	2.46	2.28	2.15	2.13	2.11	
10	2.21	2.45	2.80	2.54	3.38	2.88	2.59	2.44	2.27	2.14	2.13	2.12	
11	2.21	2.48	2.80	2.55	4.50	2.94	3.31	2.44	2.25	2.15	2.14	2.15	
12	2.20	2.49	2.78	2.61	6.09	3.09	2.65	2.43	2.23	2.19	2.14	2.13	
13	2.18	2.45	2.70	2.65	4.65	2.99	2.69	2.43	2.20	2.20	2.14	2.13	
14	2.16	2.37	2.59	2.69	3.96	3.14	2.64	2.43	2.20	2.20	2.12	2.13	
15	2.16	2.35	2.74	2.67	3.64	4.03	2.65	2.44	2.20	2.19	2.10	2.14	
16	2.25	2.37	2.62	2.55	3.43	3.22	2.66	2.44	2.20	2.18	2.14	2.15	
17	2.25	2.36	2.60	2.52	3.33	2.93	2.66	2.43	2.19	2.15	2.15	2.13	
18	2.21	2.41	2.60	2.50	2.91	2.88	2.64	2.42	2.19	2.15	2.16	2.13	
19	2.20	2.46	2.60	2.71	2.90	3.01	2.59	2.40	2.19	2.13	2.15	2.16	
20	2.20	2.50	2.54	2.90	2.85	3.03	2.58	2.40	2.20	2.16	2.14	2.17	
21	2.20	2.49	2.54	3.25	2.82	2.89	2.54	2.40	2.17	2.17	2.14	2.16	
22	2.19	2.53	2.52	4.25	2.78	2.83	2.53	2.39	2.17	2.17	2.14	2.17	
23	2.18	2.55	2.50	3.21	2.78	2.77	2.50	2.39	2.17	2.18	2.14	2.17	
24	2.19	2.50	2.45	3.40	2.77	2.74	2.49	2.39	2.18	2.18	2.13	2.17	
25	2.39	2.48	2.42	3.25	2.69	2.71	2.69	2.38	2.18	2.18	2.13	2.18	
26	2.38	2.48	2.45	3.26	2.66	2.71	2.63	2.38	2.17	2.17	2.13	2.19	
27	2.38	2.49	2.50	3.27	2.63	2.69	2.56	2.38	2.06	2.17	2.13	2.13	
28	2.38	2.45	2.54	3.30	2.79	2.68	2.56	2.37	2.05	2.16	2.14	2.02	
29	2.36	2.45	2.54	3.44	2.94	2.69	2.69	2.36	2.05	2.15		2.13	
30	2.31	2.48	2.52	3.50	2.85	2.67	2.62	2.35	2.04	2.16		2.13	
31		2.51		3.98	2.68		2.60		2.11	2.18		2.16	
Mean	2.27	2.44	2.67	2.88	3.30	2.87	2.63	2.44	2.21	2.17	2.14	2.13	
Max	2.45	2.55	2.95	4.25	6.09	4.03	3.31	2.58	2.34	2.25	2.17	2.19	6.09
Min	2.16	2.30	2.42	2.47	2.63	2.55	2.49	2.35	2.04	2.13	2.10	2.02	2.02

Annual Max Momentary Gage Height 6.50 M (A.D), at 6.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.60 M (A.D)
Left Bank Elevation 9.68 M (A.D)
Right Bank Elevation 9.70 M (A.D), Drainage Area 452 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.54	0.16	3.21	0.90	63.60	6.18	5.57	4.62	1.38	0.30	0.34	0.28	
2	0.68	0.16	5.05	0.81	66.84	5.15	4.95	4.46	1.28	0.36	0.34	0.20	
3	0.45	0.22	4.40	0.81	21.20	4.13	5.57	4.29	1.28	0.34	0.34	0.16	
4	0.30	0.45	4.40	0.77	19.92	6.18	4.79	4.13	1.09	0.32	0.34	0.17	
5	0.22	0.54	4.29	0.77	28.82	7.72	4.62	3.96	1.00	0.34	0.32	0.19	
6	0.16	0.50	4.07	0.77	20.56	8.68	4.79	3.30	1.00	0.40	0.30	0.18	
7	0.11	0.50	3.85	0.90	17.70	11.36	5.36	3.17	0.94	0.70	0.28	0.19	
8	0.07	0.54	3.52	1.04	15.60	8.20	4.95	3.03	0.88	0.64	0.28	0.18	
9	0.06	0.63	3.30	1.18	14.44	10.80	5.57	2.76	0.88	0.30	0.26	0.22	
10	0.06	0.68	3.30	1.18	27.68	11.64	4.79	2.49	0.82	0.28	0.26	0.24	
11	0.06	0.81	3.30	1.25	94.00	13.32	25.16	2.49	0.70	0.30	0.28	0.30	
12	0.05	0.86	3.12	1.68	286.80	17.70	5.98	2.36	0.58	0.38	0.28	0.26	
13	0.04	0.68	2.40	2.00	106.55	14.72	6.80	2.36	0.40	0.40	0.28	0.26	
14	0.03	0.36	1.53	2.32	56.48	19.28	5.77	2.36	0.40	0.40	0.24	0.26	
15	0.03	0.30	2.76	2.16	39.00	60.60	5.98	2.49	0.40	0.38	0.20	0.28	
16	0.11	0.36	1.76	1.25	29.66	21.92	6.18	2.49	0.40	0.36	0.28	0.30	
17	0.11	0.33	1.60	1.04	25.88	13.04	6.18	2.36	0.38	0.30	0.30	0.26	
18	0.06	0.50	1.60	0.90	12.48	11.64	5.77	2.22	0.38	0.30	0.32	0.26	
19	0.05	0.72	1.60	2.49	12.20	15.30	4.79	1.95	0.38	0.26	0.30	0.32	
20	0.05	0.90	1.18	4.40	10.80	15.90	4.62	1.95	0.40	0.32	0.28	0.34	
21	0.05	0.86	1.18	9.50	9.96	11.92	3.96	1.95	0.34	0.34	0.28	0.32	
22	0.05	1.11	1.04	30.35	8.92	10.24	3.79	1.86	0.34	0.34	0.28	0.34	
23	0.04	1.25	0.90	8.86	8.92	8.68	3.30	1.86	0.34	0.36	0.28	0.34	
24	0.05	0.90	0.68	12.00	8.68	7.96	3.17	1.86	0.36	0.36	0.26	0.34	
25	0.42	0.81	0.54	9.50	6.80	7.24	6.80	1.76	0.36	0.36	0.26	0.36	
26	0.39	0.81	0.68	9.66	6.18	7.24	5.57	1.76	0.34	0.34	0.26	0.38	
27	0.39	0.86	0.90	9.82	5.57	6.80	4.29	1.76	0.16	0.34	0.26	0.26	
28	0.39	0.68	1.18	10.30	9.16	6.59	4.29	1.66	0.15	0.32	0.28	0.12	
29	0.33	0.68	1.18	12.72	13.32	6.80	6.80	1.57	0.15	0.30		0.26	
30	0.19	0.81	1.04	13.80	10.80	6.39	5.36	1.47	0.14	0.32		0.26	
31		0.97		23.76	6.59		4.95		0.22	0.36		0.32	
Total	5.54	19.94	69.56	178.89	1065.11	363.32	180.47	76.75	17.87	11.12	7.98	8.15	2004.70 CMSDAY
Mean	0.18	0.64	2.32	5.77	34.36	12.11	5.82	2.56	0.58	0.36	0.29	0.26	5.49 CMS
Max	0.68	1.25	5.05	30.35	286.80	60.60	25.16	4.62	1.38	0.70	0.34	0.38	286.80 CMS
Min	0.03	0.16	0.54	0.77	5.57	4.13	3.17	1.47	0.14	0.26	0.20	0.12	0.03 CMS
Runoff	0.479	1.723	6.010	15.456	92.025	31.391	15.593	6.631	1.544	0.961	0.689	0.704	173.206 MCM

Momentary Peak 364.50 CMS, at 6.50 M (A.D), at 6.00 Hours, on Aug 12, 2001
Runoff Yield 12.15 Liters/Second/Square KM, Momentary Peak Yield 806.416 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Forestry Office, Nan (N.1)

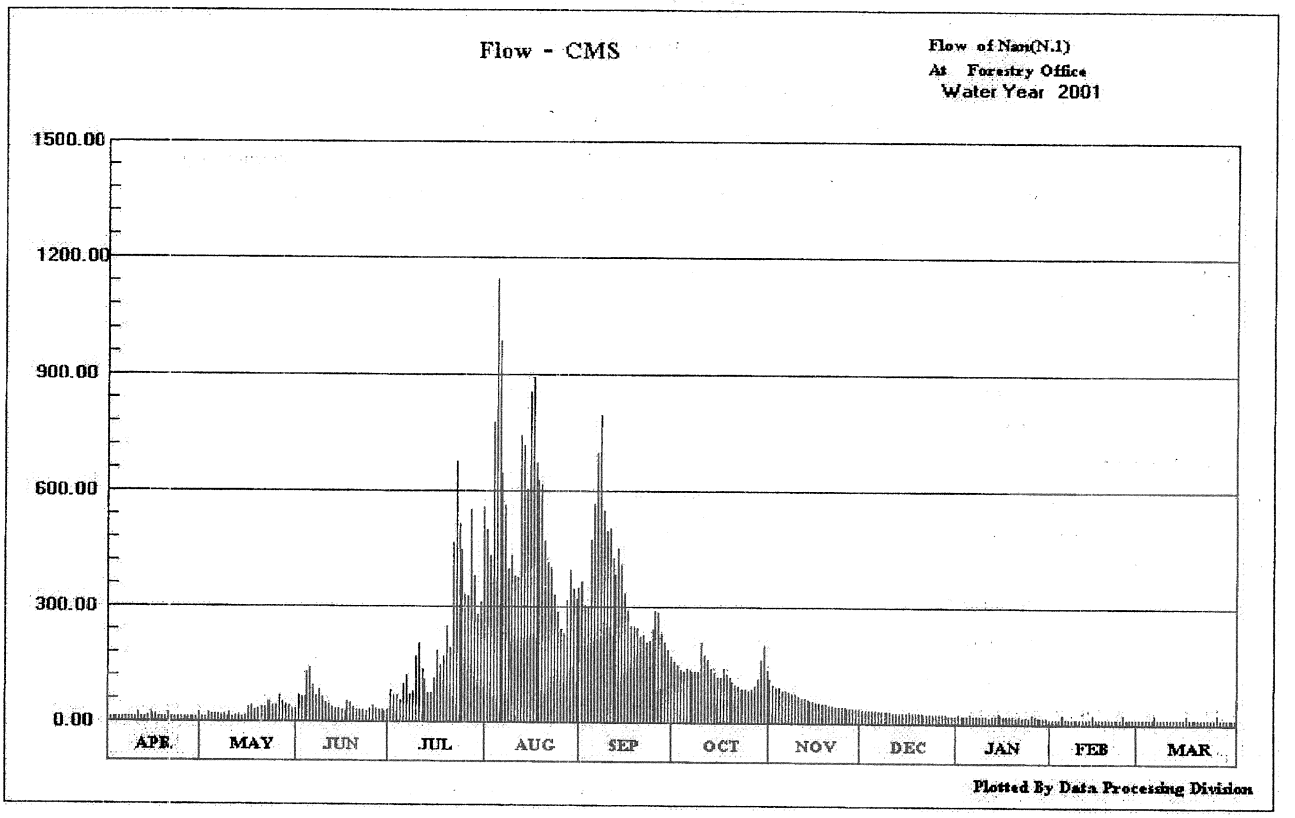
Lat 18 - 46 - 26 N. **Long** 100 - 46 - 56 E.

Location		on right bank infront of Forestry Office.
	Ban -	**Amphoe** Mueang **Changwat** Nan
Drainage Area		4,609 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+192.200 m. (M.S.L)
Bench Mark		B.M.- H.D.
	Location BM	On west side of automatic gage building.
	Elevation	+199.868 m.(M.S.L.)
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 Float	-
	Rated by Current Meter	1954 - 1956, 1979 to date.
Stability of Channel Regimes		Fairly stable.
Overbank Flow Conditions		No overbank flow.
General Description		Records good. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.56	192.49	193.28	193.44	196.42	195.62	194.09	193.70	192.94	192.77	192.66	192.57	
2	192.56	192.51	193.24	193.29	196.03	195.20	194.00	193.58	192.93	192.76	192.66	192.57	
3	192.56	192.77	193.25	193.27	197.68	195.16	193.92	193.51	192.92	192.76	192.66	192.57	
4	192.60	192.72	193.84	193.17	198.85	196.28	193.89	193.50	192.91	192.75	192.65	192.56	
5	192.59	192.72	193.95	193.57	198.38	196.77	193.93	193.43	192.91	192.74	192.65	192.56	
6	192.56	192.76	193.53	193.78	197.15	197.37	193.90	193.43	192.90	192.74	192.63	192.56	
7	192.55	192.67	193.28	193.33	196.75	197.75	193.88	193.40	192.89	192.74	192.63	192.56	
8	192.54	192.72	193.42	193.41	195.83	196.67	193.87	193.35	192.89	192.73	192.63	192.55	
9	192.53	192.65	193.24	194.20	196.03	196.39	193.87	193.34	192.88	192.72	192.63	192.55	
10	192.52	192.61	193.09	194.46	195.71	196.45	194.49	193.29	192.88	192.72	192.62	192.55	
11	192.52	192.63	193.04	193.92	195.68	196.00	194.23	193.26	192.86	192.71	192.61	192.55	
12	192.51	192.70	192.99	193.69	197.55	195.73	194.13	193.24	192.85	192.72	192.61	192.54	
13	192.69	192.67	192.93	193.37	197.44	196.15	193.95	193.21	192.85	192.75	192.61	192.54	
14	192.83	192.66	192.94	193.37	196.95	195.90	193.83	193.19	192.86	192.82	192.61	192.54	
15	192.75	192.71	192.89	193.71	197.95	195.42	193.75	193.16	192.86	192.80	192.61	192.53	
16	192.73	192.96	192.86	194.32	198.08	195.10	193.76	193.13	192.89	192.75	192.61	192.53	
17	192.60	193.00	193.14	193.99	197.26	194.81	193.94	193.12	192.86	192.74	192.61	192.53	
18	192.58	192.87	193.08	194.19	197.06	194.80	193.82	193.10	192.85	192.73	192.61	192.52	
19	192.56	192.92	192.95	194.81	197.02	194.77	193.76	193.08	192.84	192.72	192.61	192.52	
20	192.54	192.97	192.90	194.38	196.24	194.59	193.65	193.07	192.82	192.71	192.61	192.51	
21	192.53	192.96	192.87	196.22	195.92	194.63	193.58	193.05	192.81	192.72	192.61	192.51	
22	192.52	193.15	192.87	197.28	195.86	194.49	193.52	193.03	192.81	192.69	192.60	192.51	
23	192.51	193.13	192.82	196.50	195.39	194.51	193.46	193.02	192.81	192.68	192.59	192.51	
24	192.50	193.03	192.92	196.12	195.06	194.75	193.45	193.00	192.80	192.68	192.59	192.51	
25	192.50	193.03	193.02	195.39	194.74	195.09	193.44	193.00	192.79	192.68	192.58	192.53	
26	192.50	193.30	192.94	195.36	194.66	195.08	193.46	192.98	192.78	192.75	192.58	192.53	
27	192.50	193.13	192.89	196.70	195.29	194.66	193.52	192.97	192.77	192.71	192.58	192.52	
28	192.51	193.05	192.88	195.72	195.81	194.48	193.71	192.95	192.77	192.69	192.58	192.51	
29	192.49	193.02	192.85	195.02	195.48	194.35	194.14	192.95	192.76	192.67		192.51	
30	192.48	192.93	192.88	195.25	195.31	194.18	194.44	192.95	192.76	192.67		192.50	
31		192.92		196.74	195.52		193.92		192.76	192.66		192.49	
Mean	192.56	192.85	193.09	194.58	196.42	195.44	193.85	193.20	192.85	192.73	192.62	192.53	
Max	192.83	193.30	193.95	197.28	198.85	197.75	194.49	193.70	192.94	192.82	192.66	192.57	198.85
Min	192.48	192.49	192.82	193.17	194.66	194.18	193.44	192.95	192.76	192.66	192.58	192.49	192.48

Annual Max Momentary Gage Height 198.94 M (MSL), at 5.00 Hours, on Aug 4, 2001
Zero Gage at Bottom Elevation 192.20 M (MSL), River Bed 189.24 M (MSL)
Left Bank Elevation 199.64 M (MSL)
Right Bank Elevation 199.42 M (MSL), Drainage Area 4609 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.4	5.9	72.2	88.7	503.7	370.0	161.8	116.5	39.9	25.8	17.5	11.1	
2	10.4	7.1	68.1	73.2	435.2	308.0	151.0	103.4	39.0	25.0	17.5	11.1	
3	10.4	25.8	69.1	71.2	782.0	302.4	141.6	96.0	38.2	25.0	17.5	11.1	
4	13.0	22.0	132.2	61.2	1147.5	479.0	138.1	95.0	37.4	24.2	16.7	10.4	
5	12.3	22.0	145.1	102.4	990.8	571.0	142.8	87.6	37.4	23.5	16.7	10.4	
6	10.4	25.0	98.1	125.3	650.7	702.8	139.2	87.6	36.5	23.5	15.2	10.4	
7	9.8	18.2	72.2	77.3	567.0	801.2	136.9	84.5	35.6	23.5	15.2	10.4	
8	9.1	22.0	86.6	85.6	401.9	551.0	135.7	79.4	35.6	22.7	15.2	9.8	
9	8.4	16.7	68.1	175.0	435.2	498.3	135.7	78.4	34.8	22.0	15.2	9.8	
10	7.8	13.7	53.5	207.8	383.5	509.2	211.7	73.2	34.8	22.0	14.5	9.8	
11	7.8	15.2	48.8	141.6	379.0	430.0	178.7	70.1	33.1	21.3	13.7	9.8	
12	7.1	20.5	44.2	115.4	747.5	386.5	166.6	68.1	32.3	22.0	13.7	9.1	
13	19.7	18.2	39.0	81.4	720.0	456.2	145.1	65.0	32.3	24.2	13.7	9.1	
14	30.5	17.5	39.9	81.4	607.0	413.5	131.0	63.1	33.1	29.7	13.7	9.1	
15	24.2	21.3	35.6	117.6	860.0	340.0	122.0	60.2	33.1	28.0	13.7	8.4	
16	22.7	41.6	33.1	190.0	899.0	294.0	123.1	57.4	35.6	24.2	13.7	8.4	
17	13.0	45.0	58.3	149.8	676.4	253.4	144.0	56.4	33.1	23.5	13.7	8.4	
18	11.7	33.9	52.6	173.8	630.5	252.0	129.9	54.5	32.3	22.7	13.7	7.8	
19	10.4	38.2	40.7	253.4	621.5	248.1	123.1	52.6	31.4	22.0	13.7	7.8	
20	9.1	42.5	36.5	197.5	472.0	224.7	111.0	51.7	29.7	21.3	13.7	7.1	
21	8.4	41.6	33.9	468.5	416.8	229.9	103.4	49.8	28.8	22.0	13.7	7.1	
22	7.8	59.2	33.9	681.2	406.9	211.7	97.1	47.8	28.8	19.7	13.0	7.1	
23	7.1	57.4	29.7	518.5	335.6	214.3	90.8	46.9	28.8	19.0	12.3	7.1	
24	6.5	47.8	38.2	451.0	288.4	245.5	89.8	45.0	28.0	19.0	12.3	7.1	
25	6.5	47.8	46.9	335.6	244.2	292.6	88.7	45.0	27.2	19.0	11.7	8.4	
26	6.5	74.3	39.9	331.2	233.8	291.2	90.8	43.3	26.5	24.2	11.7	8.4	
27	6.5	57.4	35.6	557.0	321.0	233.8	97.1	42.5	25.8	21.3	11.7	7.8	
28	7.1	49.8	34.8	385.0	398.6	210.4	117.6	40.7	25.8	19.7	11.7	7.1	
29	5.9	46.9	32.3	282.8	349.0	193.8	167.8	40.7	25.0	18.2		7.1	
30	5.2	39.0	34.8	315.3	324.0	172.6	205.2	40.7	25.0	18.2		6.5	
31		38.2		565.0	355.0		141.6		25.0	17.5		5.9	
Total	325.7	1031.7	1653.9	7460.7	16583.7	10687.1	4158.9	1943.1	989.9	693.9	396.3	268.9	46193.8 CMSDAY
Mean	10.9	33.3	55.1	240.7	535.0	356.2	134.2	64.8	31.9	22.4	14.2	8.7	126.6 CMS
Max	30.5	74.3	145.1	681.2	1147.5	801.2	211.7	116.5	39.9	29.7	17.5	11.1	1147.5 CMS
Min	5.2	5.9	29.7	61.2	233.8	172.6	88.7	40.7	25.0	17.5	11.7	5.9	5.2 CMS
Runoff	28.14	89.14	142.90	644.60	1432.83	923.37	359.33	167.88	85.53	59.95	34.24	23.23	3991.14 MCM

Momentary Peak 1179.00 CMS, at 198.94 M (MSL), at 5.00 Hours, on Aug 4, 2001
Runoff Yield 27.46 Liters/Second/Square KM, Momentary Peak Yield 255.804 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Mueang , Phitsunulok (N.5A)

Lat 16 - 49 - 19 N. **Long** 100 - 15 - 49 E.

Location on left bank near the post office and about 1 kilometer upstream from gaging station N.5.

Ban - **Amphoe** Mueang **Changwat** Phitsanulok

Drainage Area 25,286 sq. km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +34.500 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the automatic gage building.

Elevation +45.739 m. (M.S.L.)

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 Float -

Rated by Current Meter 1966 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

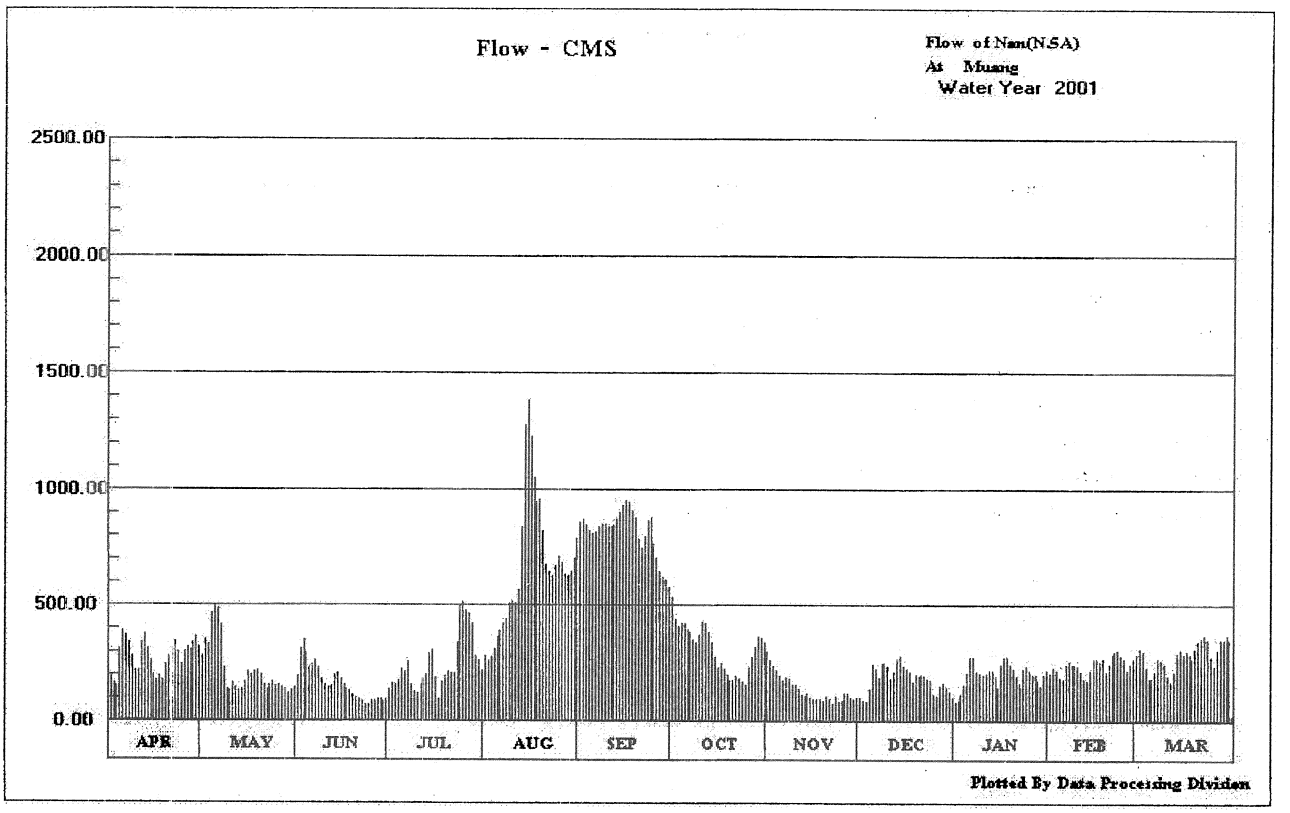
General Description Records good. Flow effected by Naresuan Dam.

Stage-discharge relation defined by 24 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	36.96	37.87	36.99	36.37	37.82	42.18	39.92	37.99	35.92	35.70	37.13	37.88	
2	36.67	38.42	38.14	36.66	37.64	42.24	39.16	37.69	35.79	35.79	37.33	38.11	
3	36.53	38.27	38.42	36.60	37.80	42.10	38.91	37.44	35.69	36.04	37.24	38.03	
4	38.11	39.37	37.95	36.77	38.10	41.97	39.03	37.24	36.38	36.60	36.89	37.35	
5	38.75	39.66	37.38	37.29	38.57	41.88	39.00	36.97	37.47	37.09	36.83	36.88	
6	38.62	39.53	37.49	37.16	38.75	41.91	38.84	36.78	37.27	37.78	37.46	36.85	
7	38.33	38.99	37.66	37.59	39.00	42.05	38.73	36.94	36.94	37.77	37.61	37.17	
8	37.82	37.34	37.33	36.59	39.18	42.15	38.46	36.88	37.53	37.17	37.50	37.70	
9	37.22	36.34	36.87	36.19	39.72	42.13	38.32	36.57	37.54	37.13	37.50	37.64	
10	37.25	36.28	36.55	36.13	39.78	42.05	38.62	36.57	37.41	37.02	37.40	37.47	
11	38.33	36.62	36.44	36.57	39.70	42.05	39.08	36.34	36.87	37.13	37.18	36.95	
12	38.65	36.40	36.48	36.82	40.18	42.10	39.04	36.08	37.15	37.21	36.85	36.73	
13	38.14	36.30	37.06	37.03	42.05	42.23	38.72	35.98	37.75	37.26	36.80	37.18	
14	37.66	36.38	37.13	37.93	44.23	42.43	38.34	36.15	37.84	36.97	37.23	37.96	
15	37.03	36.68	36.86	38.08	44.69	42.58	37.81	35.93	37.42	36.40	37.73	38.07	
16	36.77	37.18	36.59	36.93	44.01	42.69	37.37	35.87	37.31	37.50	37.73	37.88	
17	36.95	37.05	36.33	35.80	43.21	42.66	37.55	35.85	37.19	37.81	37.59	37.99	
18	36.81	37.18	36.26	36.73	42.67	42.46	37.31	35.80	36.70	37.79	37.74	37.90	
19	37.46	37.23	36.10	36.96	42.73	42.29	37.05	35.77	37.04	37.49	37.17	37.72	
20	37.86	37.06	35.95	37.14	41.97	41.75	36.80	36.03	36.96	37.30	37.51	38.12	
21	38.19	36.59	35.80	37.12	41.03	41.52	36.75	35.84	37.05	36.98	37.89	38.41	
22	38.38	36.34	35.77	37.10	40.76	41.81	36.96	35.62	36.95	36.64	38.02	38.49	
23	37.99	36.58	35.53	38.32	40.66	42.22	36.88	35.99	36.83	37.31	38.09	38.62	
24	37.48	36.72	35.47	39.61	40.97	42.26	36.72	35.68	36.76	37.44	37.83	38.44	
25	38.03	36.48	35.73	39.79	41.22	41.62	36.54	35.77	36.05	37.21	37.73	37.78	
26	38.19	36.55	35.76	39.49	41.06	41.20	37.35	36.12	36.00	37.04	37.25	37.41	
27	38.08	36.41	35.83	39.38	40.68	40.79	37.78	36.14	36.52	37.07	37.45	38.04	
28	38.35	36.35	35.80	39.05	40.62	40.58	38.20	35.94	36.65	36.80	37.75	38.42	
29	38.56	36.11	35.79	37.85	40.79	40.49	38.56	35.80	36.46	36.52		38.43	
30	38.17	36.32	35.87	37.69	41.20	40.24	38.51	35.88	36.23	37.05		38.59	
31		36.41		37.21	41.78		38.34		35.93	37.22		38.42	
Mean	37.78	37.13	36.58	37.42	40.73	41.89	38.09	36.32	36.83	37.04	37.44	37.83	
Max	38.75	39.66	38.42	39.79	44.69	42.69	39.92	37.99	37.84	37.81	38.09	38.62	44.69
Min	36.53	36.11	35.47	35.80	37.64	40.24	36.54	35.62	35.69	35.70	36.80	36.73	35.47

Annual Max Momentary Gage Height 44.76 M (MSL), at 10.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 34.50 M (MSL), River Bed 33.17 M (MSL)
Left Bank Elevation 45.79 M (MSL)
Right Bank Elevation 45.87 M (MSL), Drainage Area 25286 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	200.2	292.7	203.1	146.4	287.2	866.5	539.6	305.9	108.6	91.5	217.0	293.8	
2	173.3	355.3	323.1	172.4	268.2	877.0	444.0	273.4	98.3	98.3	237.0	319.7	
3	160.7	338.1	355.3	167.0	285.0	852.5	413.2	248.0	90.7	118.4	228.0	310.4	
4	319.7	470.2	301.5	182.3	318.5	829.8	427.7	228.0	147.3	167.0	193.5	239.0	
5	394.0	506.5	242.0	233.0	372.6	814.0	424.0	201.2	251.0	213.0	187.9	192.6	
6	378.4	490.2	253.0	220.0	394.0	819.3	404.8	183.2	231.0	282.9	250.0	189.7	
7	345.0	422.8	270.3	263.0	424.0	843.7	391.6	198.3	198.3	281.9	265.1	221.0	
8	287.2	238.0	237.0	166.1	446.5	861.3	359.9	192.6	257.0	221.0	254.0	274.5	
9	226.0	143.9	191.6	131.1	514.0	857.8	343.8	164.3	258.0	217.0	254.0	268.2	
10	229.0	138.8	162.5	126.1	521.5	843.7	378.4	164.3	245.0	206.0	244.0	251.0	
11	345.0	168.8	152.6	164.3	511.5	843.7	434.0	143.9	191.6	217.0	222.0	199.3	
12	382.0	149.0	156.2	186.9	573.4	852.5	429.0	121.8	219.0	225.0	189.7	178.7	
13	323.1	140.5	210.0	207.0	843.7	875.2	390.4	113.4	279.8	230.0	185.0	222.0	
14	270.3	147.3	217.0	299.3	1281.7	910.5	346.1	127.8	289.4	201.2	227.0	302.6	
15	207.0	174.2	190.7	316.2	1388.6	938.3	286.1	109.4	246.0	149.0	277.7	315.0	
16	182.3	222.0	166.1	197.4	1232.2	958.6	241.0	104.6	235.0	254.0	277.7	293.8	
17	199.3	209.0	143.1	99.0	1059.1	953.1	259.0	103.0	223.0	286.1	263.0	305.9	
18	186.0	222.0	137.1	178.7	954.9	916.1	235.0	99.0	176.0	284.0	278.7	296.0	
19	250.0	227.0	123.5	200.2	966.0	885.7	209.0	96.8	208.0	253.0	221.0	276.6	
20	291.6	210.0	111.0	218.0	829.8	791.8	185.0	117.5	200.2	234.0	255.0	320.8	
21	328.8	166.1	99.0	216.0	686.0	755.0	180.5	102.2	209.0	202.1	294.9	354.2	
22	350.7	143.9	96.8	214.0	649.6	801.8	200.2	85.5	199.3	170.6	309.3	363.4	
23	305.9	165.2	79.1	343.8	636.1	873.5	192.6	114.2	187.9	235.0	317.4	378.4	
24	252.0	177.8	74.9	500.3	678.0	880.5	177.8	90.0	181.4	248.0	288.3	357.6	
25	310.4	156.2	93.8	522.8	711.8	770.3	161.6	96.8	119.2	225.0	277.7	282.9	
26	328.8	162.5	96.0	485.3	690.1	709.0	239.0	125.2	115.0	208.0	229.0	245.0	
27	316.2	149.9	101.4	471.5	638.8	653.7	282.9	126.9	159.8	211.0	249.0	311.6	
28	347.2	144.7	99.0	430.2	630.7	625.4	330.0	110.2	171.5	185.0	279.8	355.3	
29	371.4	124.4	98.3	290.5	653.7	613.7	371.4	99.0	154.4	159.8		356.5	
30	326.5	142.2	104.6	273.4	709.0	581.2	365.6	105.4	134.5	209.0		374.9	
31		149.9		225.0	796.7		346.1		109.4	226.0		355.3	
Total	8588.0	5949.1	5089.6	7847.2	20952.9	24655.2	9989.3	4351.8	5894.6	6509.8	6972.7	9005.7	116805.9 CMSDAY
Mean	286.3	224.2	169.7	253.1	675.9	821.8	322.2	145.1	190.1	210.0	249.0	290.5	320.0 CMS
Max	394.0	506.5	355.3	522.8	1388.6	958.6	539.6	305.9	289.4	286.1	317.4	378.4	1388.6 CMS
Min	160.7	124.4	74.9	99.0	268.2	581.2	161.6	85.5	90.7	91.5	185.0	178.7	74.9 CMS
Runoff	742.00	500.40	439.74	678.00	1810.33	2130.21	863.08	376.00	509.29	562.45	602.44	778.09	10092.03 MCM

Momentary Peak 1383.80 CMS, at 44.76 M (MSL), at 10.00 Hours, on Aug 15, 2001

Runoff Yield 12.66 Liters/Second/Square KM, Momentary Peak Yield 54.726 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Mueang, Phichit (N.7A)

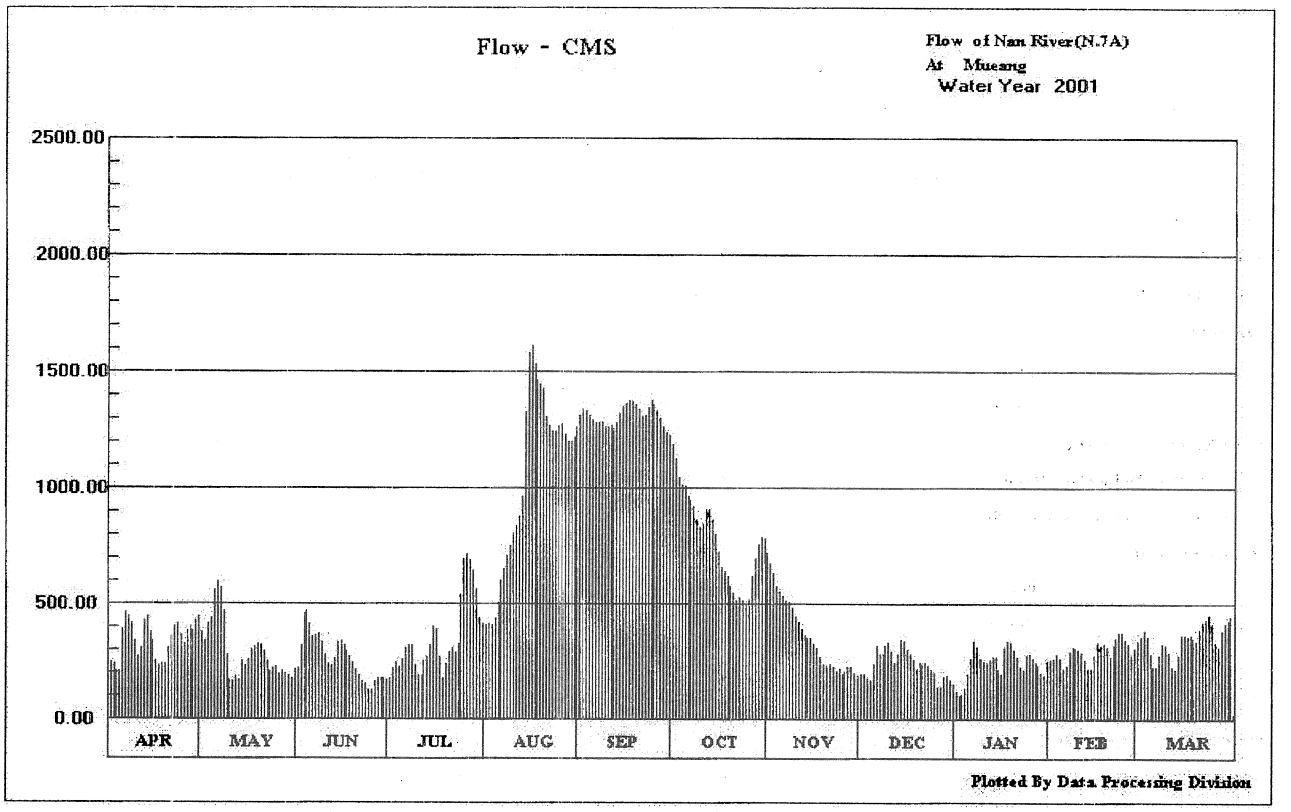
Lat 16 - 28 - 03 N. **Long** 100 - 20 - 05 E.

Location		on right bank in front of Phichit Phitthaya Khom School.
	Ban -	**Amphoe** Mueang **Changwat** Phichit
Drainage Area		29,153 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+26.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	In front of Phichit Phitthaya Khom School.
	Elevation	+42.146 m. (M.S.L.)
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 Float	-
	Rated by Current Meter	2000 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 31 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.91	30.02	28.73	28.31	30.23	35.65	35.15	32.54	28.47	27.70	29.05	29.70	
2	28.86	29.73	29.55	28.72	30.28	35.74	34.88	32.24	28.47	27.49	29.11	29.85	
3	28.59	30.31	30.65	28.91	30.23	35.72	34.52	31.93	28.31	27.58	29.26	30.07	
4	28.62	30.50	30.75	28.80	30.48	35.65	34.38	31.54	28.26	27.87	29.08	29.89	
5	30.09	31.41	30.32	29.06	31.04	35.58	34.33	31.33	28.87	28.50	28.72	29.24	
6	30.69	31.66	29.86	29.46	31.72	35.52	34.11	31.23	29.56	29.10	28.81	28.79	
7	30.56	31.47	29.93	29.56	32.06	35.52	34.01	31.09	29.27	29.72	29.37	28.77	
8	30.30	30.75	29.97	29.58	32.46	35.52	33.84	31.02	29.24	29.51	29.49	29.19	
9	29.71	29.20	29.65	28.82	32.72	35.45	33.48	30.82	29.58	29.10	29.43	29.59	
10	29.16	28.23	29.20	28.41	33.13	35.45	33.29	30.52	29.66	29.01	29.42	29.58	
11	29.48	28.17	28.90	28.46	33.31	35.48	33.38	30.34	29.35	28.96	29.29	29.32	
12	30.40	28.36	28.83	28.97	33.55	35.44	33.75	30.09	28.96	29.04	29.03	28.80	
13	30.53	28.23	29.11	29.16	34.11	35.52	33.75	29.92	29.27	29.14	28.70	28.65	
14	30.01	28.98	29.68	29.58	35.69	35.67	33.49	29.81	29.76	29.16	28.72	29.22	
15	29.69	28.83	29.69	30.20	36.65	35.78	33.08	29.80	29.69	28.69	29.22	29.93	
16	28.99	29.06	29.55	30.10	36.77	35.85	32.56	29.59	29.40	28.48	29.66	29.93	
17	28.82	29.41	29.36	29.14	36.47	35.89	32.09	29.44	29.24	29.45	29.54	29.87	
18	28.88	29.51	29.13	28.34	36.22	35.86	31.99	29.12	29.02	29.74	29.63	29.92	
19	28.87	29.62	28.94	28.90	36.16	35.81	31.82	28.90	28.72	29.67	29.53	29.84	
20	29.48	29.54	28.64	29.32	36.08	35.74	31.54	28.85	28.92	29.41	29.15	29.73	
21	29.86	29.33	28.41	29.47	35.63	35.62	31.29	28.87	28.90	29.16	29.54	30.13	
22	30.22	28.97	28.16	29.30	35.47	35.65	31.07	28.79	28.96	28.76	29.82	30.36	
23	30.32	28.63	28.03	29.61	35.38	35.76	31.18	28.63	28.81	28.65	30.00	30.42	
24	29.92	28.73	27.80	31.27	35.39	35.88	31.06	28.74	28.68	29.22	30.02	30.59	
25	29.59	28.75	27.79	32.37	35.47	35.82	30.90	28.52	28.53	29.26	29.75	30.30	
26	30.06	28.52	28.16	32.50	35.51	35.72	31.09	28.58	27.89	29.08	29.63	29.66	
27	30.18	28.62	28.31	32.32	35.34	35.59	31.83	28.75	27.89	28.93	29.21	29.52	
28	30.07	28.52	28.30	32.01	35.19	35.45	32.34	28.75	28.40	28.82	29.47	30.08	
29	30.39	28.42	28.29	31.42	35.20	35.36	32.78	28.57	28.43	28.56		30.31	
30	30.52	28.31	28.24	30.49	35.29	35.31	32.99	28.45	28.27	28.44		30.39	
31		28.65		30.31	35.46		32.94		28.02	28.98		30.55	
Mean	29.73	29.30	29.06	29.77	34.15	35.63	32.87	29.89	28.86	28.88	29.34	29.75	
Max	30.69	31.66	30.75	32.50	36.77	35.89	35.15	32.54	29.76	29.74	30.02	30.59	36.77
Min	28.59	28.17	27.79	28.31	30.23	35.31	30.90	28.45	27.89	27.49	28.70	28.65	27.49

Annual Max Momentary Gage Height 36.84 M (MSL), at 1.00 Hours, on Aug 16, 2001
Zero Gage at Bottom Elevation 26.00 M (MSL), River Bed 22.10 M (MSL)
Left Bank Elevation 41.87 M (MSL)
Right Bank Elevation 41.98 M (MSL), Drainage Area 29153 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	249.2	384.6	228.3	183.0	411.9	1321.0	1196.0	729.0	199.7	127.0	266.0	344.0	
2	243.2	347.6	326.0	227.2	418.4	1344.4	1132.4	684.0	199.7	108.1	273.2	362.5	
3	212.9	422.3	466.5	249.2	411.9	1339.2	1051.2	640.2	183.0	116.2	291.2	391.1	
4	216.2	447.0	479.5	236.0	444.4	1321.0	1022.0	585.6	178.0	142.3	269.6	367.7	
5	393.7	567.4	423.6	267.2	517.2	1302.8	1012.0	556.2	244.4	203.0	227.2	288.8	
6	471.7	602.4	363.8	315.2	610.8	1287.2	970.7	542.2	327.2	272.0	237.2	234.9	
7	454.8	575.8	372.9	327.2	658.4	1287.2	953.7	523.7	292.4	346.4	304.4	232.7	
8	421.0	479.5	378.1	329.6	717.0	1287.2	926.4	514.6	288.8	321.2	318.8	282.8	
9	345.2	284.0	338.0	238.4	756.0	1269.0	870.0	488.6	329.6	272.0	311.6	330.8	
10	279.2	175.0	284.0	193.1	817.5	1269.0	841.5	449.6	339.2	261.2	310.4	329.6	
11	317.6	169.3	248.0	198.6	844.5	1276.8	855.0	426.2	302.0	255.2	294.8	298.4	
12	434.0	188.0	239.6	256.4	880.5	1266.4	912.0	393.7	255.2	264.8	263.6	236.0	
13	450.9	175.0	273.2	279.2	970.7	1287.2	912.0	371.6	292.4	276.8	225.0	219.5	
14	383.3	257.6	341.6	329.6	1331.4	1326.2	871.5	357.3	351.2	279.2	227.2	286.4	
15	342.8	239.6	342.8	408.0	1590.0	1354.8	810.0	356.0	342.8	223.9	286.4	372.9	
16	258.8	267.2	326.0	395.0	1623.6	1373.0	732.0	330.8	308.0	200.8	339.2	372.9	
17	238.4	309.2	303.2	276.8	1539.6	1383.4	662.6	312.8	288.8	314.0	324.8	365.1	
18	245.6	321.2	275.6	186.0	1469.6	1375.6	648.6	274.4	262.4	348.8	335.6	371.6	
19	244.4	334.4	252.8	248.0	1453.6	1362.6	624.8	248.0	227.2	340.4	323.6	361.2	
20	317.6	324.8	218.4	298.4	1432.8	1344.4	585.6	242.0	250.4	309.2	278.0	347.6	
21	363.8	299.6	193.1	316.4	1315.8	1313.2	550.6	244.4	248.0	279.2	324.8	398.9	
22	410.6	256.4	168.4	296.0	1274.2	1321.0	521.1	234.9	255.2	231.6	358.6	428.8	
23	423.6	217.3	156.7	333.2	1251.2	1349.6	535.4	217.3	237.2	219.5	382.0	436.6	
24	371.6	228.3	136.0	547.8	1253.6	1380.8	519.8	229.4	222.8	286.4	384.6	458.7	
25	330.8	230.5	135.1	703.5	1274.2	1365.2	499.0	205.2	206.3	291.2	350.0	421.0	
26	389.8	205.2	168.4	723.0	1284.6	1339.2	523.7	211.8	144.1	269.6	335.6	339.2	
27	405.4	216.2	183.0	696.0	1241.6	1305.4	626.2	230.5	144.1	251.6	285.2	322.4	
28	391.1	205.2	182.0	651.4	1205.6	1269.0	699.0	230.5	192.0	238.4	316.4	392.4	
29	432.7	194.2	181.0	568.8	1208.0	1246.4	765.0	210.7	195.3	209.6		422.3	
30	449.6	183.0	176.0	445.7	1229.6	1234.4	796.5	197.5	179.0	196.4		432.7	
31		219.5		422.3	1271.6		789.0		155.8	257.6		453.5	
Total	10489.5	9327.3	8161.6	11146.2	32709.8	39502.6	24415.3	11238.7	7642.2	7713.6	8445.0	10903.0	181694.8 CMSDAY
Mean	349.6	300.9	272.1	359.6	1055.2	1316.8	787.6	374.6	246.5	248.8	301.6	351.7	497.8 CMS
Max	471.7	602.4	479.5	723.0	1623.6	1383.4	1196.0	729.0	351.2	348.8	384.6	458.7	1623.6 CMS
Min	212.9	169.3	135.1	183.0	411.9	1234.4	499.0	197.5	144.1	108.1	225.0	219.5	108.1 CMS
Runoff	906.29	805.88	705.16	963.03	2826.13	3413.02	2109.48	971.02	660.29	666.46	729.65	942.02	15698.43 MCM

Momentary Peak 1643.20 CMS, at 36.84 M (MSL), at 1.00 Hours, on Aug 16, 2001

Runoff Yield 17.08 Liters/Second/Square KM, Momentary Peak Yield 56.365 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Ban Bang Mun Nak, Phichit (N.8A)

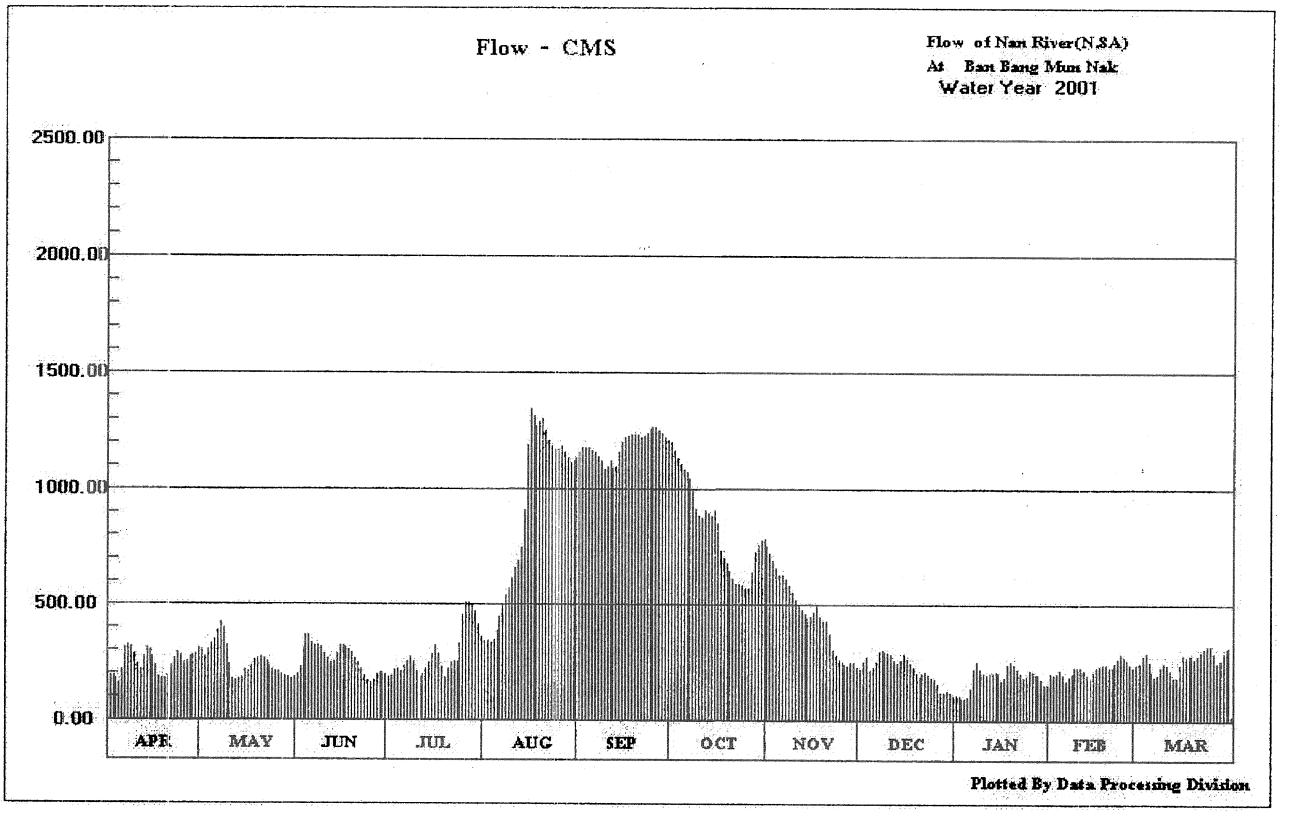
Lat 16 - 04 - 45 N. **Long** 100 - 24 - 00 E.

Location		on left bank opposite to Wat Bang Mun Nak.
	Ban Bang Mun Nak	**Amphoe** Bang Mun Nak **Changwat** Phichit
Drainage Area		32,878 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+20.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank about 89 meters upstream from the top staff gage.
	Elevation	+31.333 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		2000 to date.
Rating Operation		
	Period of Rating	2000 to date.
	Rated by Float	-
	Rated by Current Meter	2000 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 25 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	23.37	24.71	23.43	23.29	25.15	30.28	30.39	28.74	23.77	22.15	23.51	23.98	
2	23.33	24.38	23.82	23.36	25.20	30.33	30.30	28.57	24.15	22.13	23.48	24.10	
3	23.16	24.74	24.84	23.68	25.14	30.33	30.21	28.41	24.39	21.93	23.52	24.43	
4	22.90	25.05	25.46	23.73	25.25	30.33	30.13	28.21	23.67	21.96	23.67	24.57	
5	23.68	25.28	25.46	23.62	25.68	30.30	30.06	28.01	23.88	22.00	23.43	24.16	
6	24.80	25.64	25.10	23.95	26.37	30.27	30.01	27.98	24.18	22.67	23.13	23.60	
7	24.96	26.10	24.95	24.19	26.89	30.23	29.94	27.84	24.65	23.75	23.32	23.34	
8	24.87	25.83	24.96	24.41	27.31	30.16	29.79	27.65	24.71	24.12	23.53	23.44	
9	24.53	24.93	24.88	24.16	27.57	30.06	29.46	27.41	24.67	23.79	23.82	23.88	
10	23.96	23.98	24.56	23.58	27.89	30.10	29.34	27.14	24.63	23.55	23.88	24.09	
11	23.68	23.19	24.28	23.24	28.20	30.16	29.31	26.88	24.55	23.43	23.85	24.03	
12	24.37	23.08	24.07	23.43	28.38	30.07	29.45	26.68	24.24	23.49	23.68	23.72	
13	24.83	23.18	24.16	23.80	28.69	30.10	29.39	26.45	24.09	23.56	23.41	23.30	
14	24.73	23.26	24.56	24.09	29.45	30.28	29.33	26.29	24.24	23.62	23.28	23.27	
15	24.37	23.69	24.97	24.56	30.36	30.39	29.43	26.38	24.50	23.53	23.63	24.03	
16	23.92	23.58	24.98	24.95	30.74	30.44	29.20	26.54	24.30	23.08	23.84	24.45	
17	23.31	23.95	24.89	24.52	30.68	30.46	28.65	26.88	24.10	23.29	23.92	24.40	
18	23.21	24.20	24.75	23.87	30.57	30.48	28.48	26.32	23.85	23.96	23.97	24.45	
19	23.15	24.27	24.57	23.31	30.61	30.48	28.30	26.18	23.56	24.12	24.03	24.42	
20	23.36	24.40	24.34	23.74	30.65	30.47	28.13	26.17	23.39	24.00	23.83	24.30	
21	23.94	24.34	24.10	24.08	30.52	30.44	27.88	25.50	23.51	23.79	23.82	24.43	
22	24.29	24.14	23.76	24.18	30.41	30.46	27.73	24.73	23.58	23.55	24.08	24.69	
23	24.59	23.91	23.39	24.14	30.35	30.49	27.70	24.43	23.43	23.26	24.29	24.84	
24	24.48	23.68	23.12	25.07	30.31	30.54	27.66	24.26	23.27	23.33	24.52	24.97	
25	24.10	23.63	22.94	26.44	30.32	30.55	27.56	24.12	23.16	23.68	24.41	25.00	
26	24.18	23.60	23.11	26.98	30.34	30.55	27.55	23.98	22.90	23.63	24.21	24.57	
27	24.41	23.46	23.44	27.03	30.28	30.53	28.08	23.91	22.37	23.47	24.03	24.07	
28	24.45	23.38	23.56	26.97	30.21	30.49	28.60	24.06	22.37	23.41	23.87	24.20	
29	24.52	23.30	23.53	26.60	30.15	30.44	28.75	24.05	22.47	23.19		24.58	
30	24.80	23.15	23.43	25.93	30.17	30.41	28.85	23.86	22.34	22.80		24.79	
31		23.31		25.37	30.21		28.90		22.15	22.87		24.92	
Mean	24.08	24.11	24.25	24.52	28.84	30.35	28.99	26.25	23.71	23.26	23.78	24.23	
Max	24.96	26.10	25.46	27.03	30.74	30.55	30.39	28.74	24.71	24.12	24.52	25.00	30.74
Min	22.90	23.08	22.94	23.24	25.14	30.06	27.55	23.86	22.15	21.93	23.13	23.27	21.93

Annual Max Momentary Gage Height 30.76 M (MSL), at 12.00 Hours, on Aug 16, 2001
Zero Gage at Bottom Elevation 20.00 M (MSL), River Bed 19.28 M (MSL)
Left Bank Elevation 31.25 M (MSL)
Right Bank Elevation 31.28 M (MSL), Drainage Area 32878 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	196.8	305.3	201.2	190.8	343.5	1165.8	1205.4	759.6	227.6	115.2	207.2	244.4	
2	193.7	277.3	231.6	196.0	348.0	1183.8	1173.0	727.6	258.0	114.1	205.0	254.0	
3	181.2	307.9	316.4	220.4	342.6	1183.8	1140.6	698.8	278.1	103.2	208.0	281.5	
4	163.0	334.5	371.4	224.4	352.5	1183.8	1114.2	665.6	219.6	104.8	219.6	293.4	
5	220.4	355.2	371.4	215.6	391.2	1173.0	1091.5	635.5	236.4	107.0	201.2	258.8	
6	313.0	387.6	339.0	242.0	454.2	1162.2	1075.3	631.2	260.4	146.9	179.1	214.0	
7	326.6	429.0	325.8	261.2	503.5	1147.8	1054.0	611.6	300.2	226.0	193.0	194.5	
8	319.0	404.7	326.6	279.8	546.1	1124.0	1009.2	586.5	305.3	255.6	208.8	202.0	
9	290.1	324.1	319.8	258.8	576.4	1091.5	919.6	557.2	301.9	229.2	231.6	236.4	
10	242.8	244.4	292.6	212.5	618.6	1104.5	889.6	528.0	298.5	210.2	236.4	253.2	
11	220.4	183.3	268.8	187.0	664.0	1124.0	882.4	502.6	291.7	201.2	234.0	248.4	
12	276.5	175.6	251.6	201.2	693.7	1094.7	917.0	483.6	265.4	205.7	220.4	223.6	
13	315.5	182.6	258.8	230.0	750.1	1104.5	901.6	461.8	253.2	211.0	199.7	191.5	
14	307.0	188.5	292.6	253.2	917.0	1165.8	887.2	446.6	265.4	215.6	190.0	189.2	
15	276.5	221.2	327.4	292.6	1194.6	1205.4	911.8	455.1	287.5	208.8	216.4	248.4	
16	239.6	212.5	328.3	325.8	1349.9	1225.0	856.0	470.3	270.5	175.6	233.2	283.3	
17	192.2	242.0	320.6	289.2	1323.8	1233.0	742.5	502.6	254.0	190.8	239.6	279.0	
18	184.7	262.0	308.7	235.6	1277.0	1241.0	711.4	449.4	234.0	242.8	243.6	283.3	
19	180.5	267.9	293.4	192.2	1293.4	1241.0	680.5	436.2	211.0	255.6	248.4	280.7	
20	196.0	279.0	273.9	225.2	1310.7	1237.0	653.5	435.3	198.2	246.0	232.4	270.5	
21	241.2	273.9	254.0	252.4	1257.0	1225.0	617.2	375.0	207.2	229.2	231.6	281.5	
22	269.7	257.2	226.8	260.4	1213.0	1233.0	596.9	307.0	212.5	210.2	252.4	303.7	
23	295.1	238.8	198.2	257.2	1191.0	1245.0	593.0	281.5	201.2	188.5	269.7	316.4	
24	285.8	220.4	178.4	336.3	1176.6	1265.0	587.8	267.1	189.2	193.7	289.2	327.4	
25	254.0	216.4	165.8	460.8	1180.2	1269.0	575.2	255.6	181.2	220.4	279.8	330.0	
26	260.4	214.0	177.7	512.1	1187.4	1269.0	574.0	244.4	163.0	216.4	262.8	293.4	
27	279.8	203.5	202.0	517.0	1165.8	1261.0	646.0	238.8	128.2	204.2	248.4	251.6	
28	283.3	197.5	211.0	511.1	1140.6	1245.0	733.0	250.8	128.2	199.7	235.6	262.0	
29	289.2	191.5	208.8	476.0	1120.7	1225.0	761.5	250.0	134.2	183.3		294.3	
30	313.0	180.5	201.2	413.7	1127.2	1213.0	781.3	234.8	126.4	156.0		312.2	
31		192.2		363.3	1140.6		791.5		115.2	160.9		323.2	
Total	7607.0	7970.5	8043.8	9093.8	28150.9	35841.6	26073.7	13750.1	7003.4	5927.8	6417.1	8225.8	164105.5 CMSDAY
Mean	253.6	257.1	268.1	293.3	908.1	1194.7	841.1	458.3	225.9	191.2	229.2	265.3	449.6 CMS
Max	326.6	429.0	371.4	517.0	1349.9	1269.0	1205.4	759.6	305.3	255.6	289.2	330.0	1349.9 CMS
Min	163.0	175.6	165.8	187.0	342.6	1091.5	574.0	234.8	115.2	103.2	179.1	189.2	103.2 CMS
Runoff	657.24	688.65	694.98	785.70	2432.24	3096.71	2252.77	1188.01	605.09	512.16	554.44	710.71	14178.72 MCM

Momentary Peak 1358.60 CMS, at 30.76 M (MSL), at 12.00 Hours, on Aug 16, 2001
Runoff Yield 13.67 Liters/Second/Square KM, Momentary Peak Yield 41.322 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at 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 - **Amphoe** Taphan Hin **Changwat** Phichit

Drainage Area 30,765 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +22.280 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank near automatic gage buiding.

Elevation +33.300 m. (M.S.L.)

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 Float -

Rated by Current Meter 1974 - 1982, 1987, 1991 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

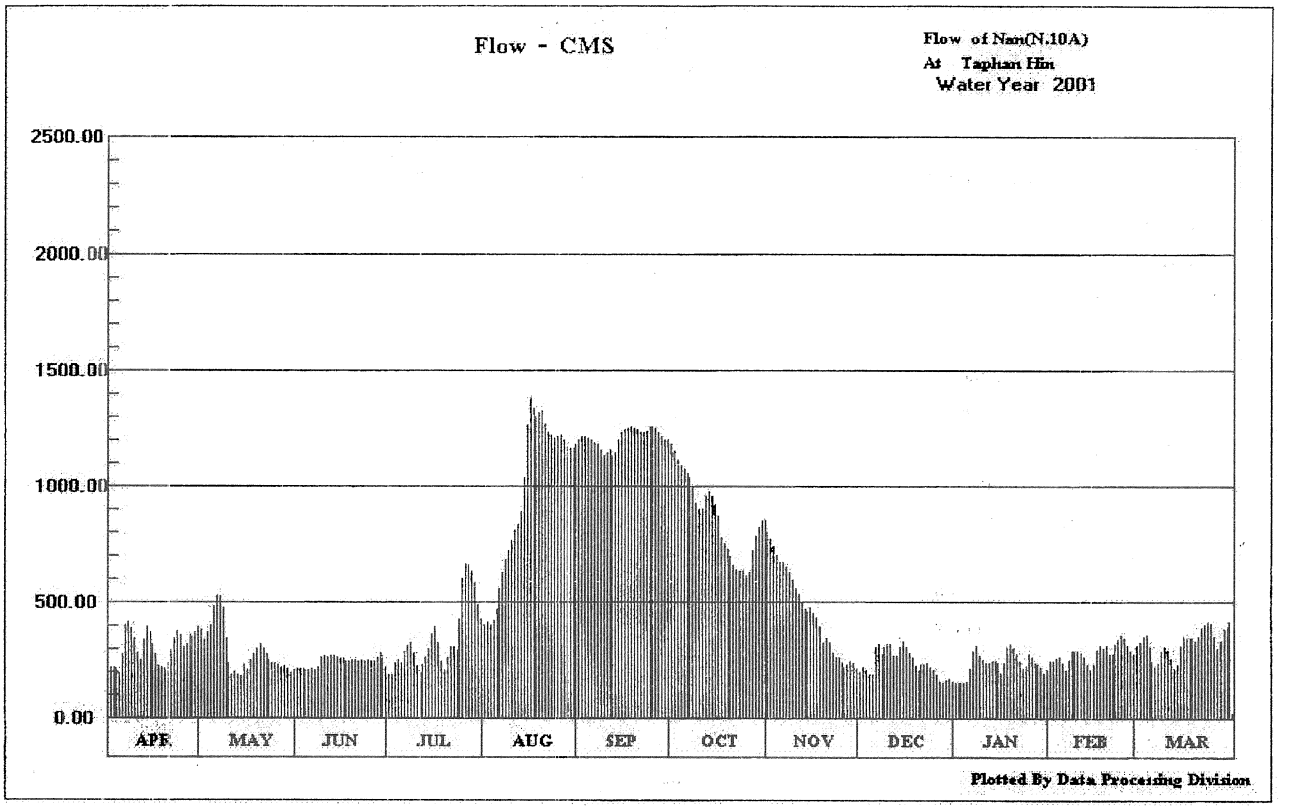
General Description Records good. Flow effected by Naresuan Dam.

Stage-discharge relation defined by 26 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.66	26.19	24.56	24.31	26.41	31.98	31.89	29.61	24.48	23.91	24.94	25.53	
2	24.66	25.82	24.57	24.33	26.51	32.03	31.78	29.39	24.68	23.91	24.90	25.73	
3	24.59	26.11	24.59	24.87	26.41	32.03	31.60	29.16	24.49	23.91	25.04	25.95	
4	24.37	26.40	24.52	24.95	26.56	32.01	31.48	28.86	24.33	23.91	25.12	25.98	
5	25.21	27.11	24.54	24.82	27.01	31.98	31.41	28.63	24.31	23.97	24.87	25.51	
6	26.38	27.45	24.56	25.33	27.73	31.93	31.30	28.64	25.51	24.60	24.55	24.91	
7	26.49	27.45	24.54	25.58	28.25	31.89	31.21	28.49	25.64	25.33	25.00	24.66	
8	26.27	27.02	24.66	25.71	28.69	31.79	30.98	28.26	25.21	25.59	25.36	24.83	
9	25.86	25.86	25.11	25.31	28.99	31.68	30.50	28.02	25.51	25.16	25.37	25.37	
10	25.29	24.82	25.14	24.70	29.35	31.73	30.32	27.73	25.65	24.95	25.34	25.54	
11	24.99	24.32	25.13	24.41	29.65	31.79	30.32	27.49	25.62	24.84	25.28	25.44	
12	25.81	24.44	25.19	24.76	29.85	31.68	30.71	27.26	25.19	24.86	25.08	25.03	
13	26.33	24.33	25.18	25.12	30.27	31.74	30.84	26.97	25.15	24.92	24.80	24.61	
14	26.10	24.29	25.13	25.48	31.21	31.97	30.71	26.85	25.53	24.94	24.54	24.79	
15	25.66	24.76	25.06	26.06	32.21	32.10	30.48	27.02	25.77	24.87	24.79	25.59	
16	25.21	24.49	25.03	26.30	32.61	32.15	30.12	26.81	25.50	24.41	25.40	25.94	
17	24.71	25.00	24.93	25.73	32.47	32.18	29.44	26.64	25.29	24.87	25.56	25.85	
18	24.68	25.26	24.91	24.90	32.35	32.19	29.24	26.33	25.09	25.55	25.46	25.90	
19	24.59	25.48	25.01	24.54	32.40	32.17	29.05	25.72	24.69	25.65	25.59	25.86	
20	24.85	25.65	24.96	25.10	32.43	32.15	28.82	25.87	24.55	25.46	25.22	25.75	
21	25.42	25.48	24.91	25.51	32.25	32.09	28.54	25.69	24.77	25.22	25.22	25.95	
22	25.86	25.26	24.98	25.50	32.11	32.09	28.35	25.31	24.81	24.94	25.63	26.25	
23	26.14	24.96	24.92	25.44	32.05	32.12	28.34	25.08	24.85	24.57	25.80	26.37	
24	25.97	24.82	24.99	26.62	32.01	32.19	28.31	25.09	24.66	24.73	26.01	26.50	
25	25.53	24.82	24.90	28.05	32.03	32.19	28.18	24.87	24.50	25.24	25.87	26.45	
26	25.67	24.79	24.94	28.59	32.05	32.17	28.29	24.63	24.31	25.09	25.61	25.95	
27	25.96	24.58	25.10	28.54	31.97	32.11	28.98	24.79	23.99	24.87	25.35	25.47	
28	25.95	24.72	25.27	28.33	31.86	32.03	29.45	24.93	23.91	24.76	25.25	25.76	
29	26.09	24.58	25.20	27.92	31.83	31.98	29.76	24.84	24.04	24.63		26.20	
30	26.35	24.42	24.67	27.14	31.83	31.97	29.98	24.61	24.11	24.41		26.32	
31		24.53		26.60	31.89		29.96		24.00	24.55		26.47	
Mean	25.52	25.33	24.91	25.82	30.43	32.00	30.01	26.79	24.84	24.79	25.25	25.69	
Max	26.49	27.45	25.27	28.59	32.61	32.19	31.89	29.61	25.77	25.65	26.01	26.50	32.61
Min	24.37	24.29	24.52	24.31	26.41	31.68	28.18	24.61	23.91	23.91	24.54	24.61	23.91

Annual Max Momentary Gage Height 32.63 M (MSL), at 11.00 Hours, on Aug 16, 2001
Zero Gage at Bottom Elevation 22.28 M (MSL), River Bed 20.11 M (MSL)
Left Bank Elevation 33.17 M (MSL)
Right Bank Elevation 33.28 M (MSL), Drainage Area 30765 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	227.7	386.9	218.2	194.4	411.2	1210.0	1187.5	808.4	210.6	158.3	254.3	314.7	
2	227.7	346.2	219.1	196.3	422.7	1222.5	1160.5	778.6	229.6	158.3	250.5	336.3	
3	221.0	378.1	221.0	247.7	411.2	1222.5	1120.0	747.8	211.5	158.3	264.0	360.5	
4	200.2	410.0	214.4	255.3	428.4	1217.5	1096.0	708.8	196.3	158.3	272.0	363.8	
5	281.0	492.2	216.3	242.9	480.2	1210.0	1082.0	678.9	194.4	163.4	247.7	312.5	
6	407.8	533.0	218.2	293.6	566.6	1197.5	1062.0	680.2	312.5	222.0	217.2	251.4	
7	420.3	533.0	216.3	319.9	631.2	1187.5	1045.8	661.2	326.4	293.6	260.0	227.7	
8	395.7	481.4	227.7	334.1	686.7	1162.8	1004.8	632.5	281.0	320.9	296.8	243.8	
9	350.6	350.6	271.0	291.5	725.7	1138.0	931.5	602.5	312.5	276.0	297.9	297.9	
10	289.5	242.9	274.0	231.5	773.2	1149.3	905.8	566.6	327.5	255.3	294.7	315.7	
11	259.0	195.4	273.0	203.9	813.7	1162.8	905.8	537.8	324.2	244.8	288.4	305.2	
12	345.1	206.8	279.0	237.2	840.8	1138.0	962.5	510.2	279.0	246.7	268.0	263.0	
13	402.3	196.3	278.0	272.0	898.8	1151.5	982.4	475.5	275.0	252.4	241.0	223.0	
14	377.0	192.6	273.0	309.4	1045.8	1207.5	962.5	461.8	314.7	254.3	216.3	240.1	
15	328.6	237.2	265.0	372.6	1268.0	1240.0	928.6	481.4	340.7	247.7	240.1	320.9	
16	281.0	211.5	263.0	399.0	1388.3	1252.5	877.8	457.1	311.5	203.9	301.0	359.4	
17	232.4	260.0	253.4	336.3	1346.0	1260.0	785.4	437.6	289.5	247.7	317.8	349.5	
18	229.6	286.3	251.4	250.5	1310.0	1262.5	758.4	402.3	269.0	316.7	307.3	355.0	
19	221.0	309.4	261.0	216.3	1325.0	1257.5	733.5	335.2	230.6	327.5	320.9	350.6	
20	245.8	327.5	256.2	270.0	1334.0	1252.5	703.6	351.7	217.2	307.3	282.1	338.5	
21	303.1	309.4	251.4	312.5	1280.0	1237.5	667.5	331.9	238.2	282.1	282.1	360.5	
22	350.6	286.3	258.1	311.5	1242.5	1237.5	643.8	291.5	241.9	254.3	325.3	393.5	
23	381.4	256.2	252.4	305.2	1227.5	1245.0	642.5	268.0	245.8	219.1	344.0	406.7	
24	362.7	242.9	259.0	435.3	1217.5	1262.5	638.7	269.0	227.7	234.3	367.1	421.5	
25	314.7	242.9	250.5	606.2	1222.5	1262.5	622.5	247.7	212.5	284.2	351.7	415.8	
26	329.7	240.1	254.3	673.7	1227.5	1257.5	636.3	224.8	194.4	269.0	323.1	360.5	
27	361.6	229.6	270.0	667.5	1207.5	1242.5	724.4	240.1	165.1	247.7	295.7	308.3	
28	360.5	233.4	287.3	641.2	1180.0	1222.5	786.8	253.4	158.3	237.2	285.2	339.6	
29	375.9	220.1	280.0	590.0	1172.5	1210.0	828.6	244.8	169.6	224.8		388.0	
30	404.5	204.9	228.6	495.8	1172.5	1207.5	858.3	223.0	175.9	203.9		401.2	
31		215.4		433.0	1187.5		855.6		166.0	217.2		418.0	
Total	9488.0	9258.5	7541.8	10946.3	30445.0	36487.4	27101.4	13910.3	7649.1	7487.2	8012.2	10343.1	178670.3 CMSDAY
Mean	316.3	298.7	251.4	353.1	982.1	1216.2	874.2	463.7	246.7	241.5	286.1	333.6	489.5 CMS
Max	420.3	533.0	287.3	673.7	1388.3	1262.5	1187.5	808.4	340.7	327.5	367.1	421.5	1388.3 CMS
Min	200.2	192.6	214.4	194.4	411.2	1138.0	622.5	223.0	158.3	158.3	216.3	223.0	158.3 CMS
Runoff	819.76	799.93	651.61	945.76	2630.45	3152.51	2341.56	1201.85	660.88	646.89	692.25	893.64	15437.11 MCM

Momentary Peak 1394.75 CMS, at 32.63 M (MSL), at 11.00 Hours, on Aug 16, 2001
Runoff Yield 15.91 Liters/Second/Square KM, Momentary Peak Yield 45.336 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Ban Hat Phai, Uttaradit (N.12A)

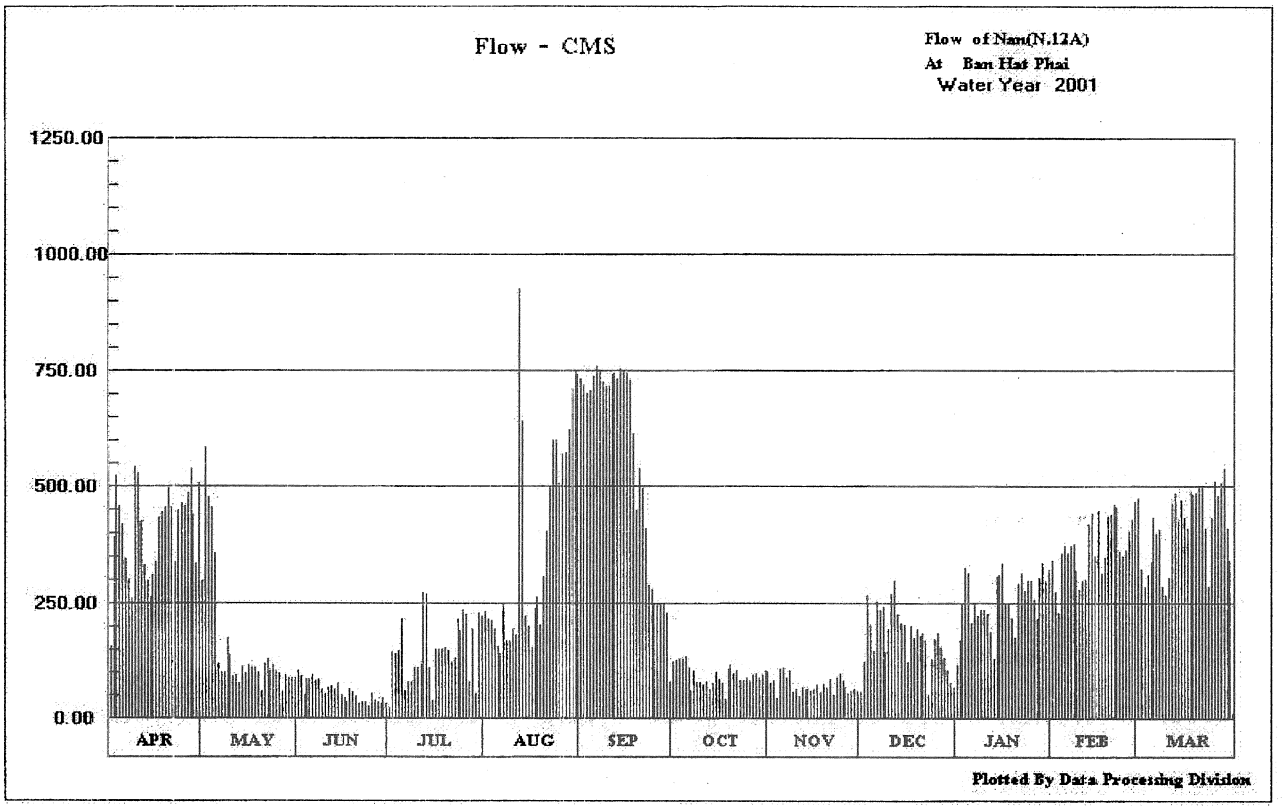
Lat 17 - 44 - 11 N. **Long** 100 - 32 - 27 E.

Location		on right bank about 4 kilometers downstream, Sirikit Dam Site,along Phasom - Silot road.
	Ban Hat Phai	**Amphoe** Tha Pla **Changwat** Uttaradit
Drainage Area		15,718 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+69.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On right bank in front of gage observer's house.
	Elevation	+84.000 m. (M.S.L.)
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 Float	-
	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 good. Flow regulated by Sirikit Dam reservoir about 6 kilometers above gage site. Stage-discharge relation defined by 86 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	71.24	72.14	70.82	70.00	71.74	74.31	70.98	70.80	70.41	70.94	72.38	73.03	
2	72.65	73.51	70.72	71.14	71.65	74.25	71.00	70.60	70.98	71.33	72.01	72.28	
3	73.25	73.04	70.36	71.13	71.62	74.14	71.03	70.64	71.96	71.84	71.72	72.08	
4	72.96	72.95	70.68	71.18	71.49	74.18	71.03	70.29	71.55	72.30	72.46	72.22	
5	72.79	72.46	70.66	71.64	71.23	74.35	71.07	70.86	71.17	72.24	72.54	72.36	
6	72.40	70.96	70.74	70.44	71.12	74.47	70.89	70.87	71.89	71.59	72.46	72.84	
7	72.17	70.81	70.64	70.61	71.87	74.40	70.46	70.69	71.77	71.84	72.55	72.68	
8	71.92	70.81	70.66	70.63	71.33	74.28	70.82	70.82	71.81	71.68	72.57	72.72	
9	73.33	71.37	70.48	70.89	71.32	74.23	70.62	70.43	71.15	71.77	72.27	72.07	
10	73.27	71.11	70.38	70.89	71.50	74.23	70.62	70.49	71.49	71.77	72.04	71.96	
11	72.81	70.72	70.51	70.98	71.41	74.37	70.55	70.31	71.99	71.70	72.15	72.19	
12	72.34	70.76	70.53	72.00	75.42	74.38	70.61	70.52	72.14	71.46	72.16	72.99	
13	72.15	70.60	70.48	71.98	73.80	74.31	70.49	70.48	71.71	71.04	72.78	73.09	
14	71.94	70.90	70.58	70.89	71.69	74.45	70.60	70.49	71.58	72.21	72.89	72.81	
15	72.22	70.78	70.36	70.21	71.53	74.40	70.81	70.45	71.56	72.22	72.43	73.02	
16	72.37	70.94	70.28	71.20	71.22	74.38	70.67	70.47	70.99	72.35	72.92	72.85	
17	72.84	70.89	70.20	71.19	71.78	74.30	70.60	70.57	71.54	71.85	72.24	72.73	
18	72.90	70.89	70.48	71.20	71.94	73.63	70.24	70.43	71.36	71.87	72.42	73.10	
19	72.95	70.81	70.42	71.22	71.55	72.91	70.86	70.56	71.50	71.64	72.86	73.07	
20	73.13	70.44	70.33	71.18	72.21	73.31	70.92	70.51	71.39	71.36	72.87	73.09	
21	72.95	70.95	70.11	70.98	72.71	73.13	70.78	70.66	71.43	72.11	72.97	73.14	
22	72.36	71.03	70.18	71.05	73.15	72.73	70.82	70.37	71.33	72.23	72.95	73.16	
23	72.91	70.85	70.17	71.64	73.57	72.09	70.65	70.70	70.37	72.03	72.49	72.73	
24	72.99	70.94	70.02	71.48	73.58	72.04	70.65	70.77	71.04	72.14	72.44	72.08	
25	72.96	70.82	70.38	71.77	73.19	71.84	70.71	70.64	71.34	72.14	72.50	72.85	
26	73.08	70.77	70.22	71.70	73.44	71.84	70.64	70.50	71.44	71.91	72.70	73.20	
27	73.31	70.42	70.20	70.62	73.46	71.86	70.75	70.38	71.21	71.64	72.83	73.06	
28	72.87	70.76	70.11	71.49	73.70	71.84	70.78	70.45	71.05	72.19	73.00	73.19	
29	72.35	70.70	70.29	70.40	74.20	71.73	70.70	70.48	70.83	72.35		73.31	
30	73.19	70.69	70.14	71.72	74.43	70.62	70.75	70.43	70.60	72.14		72.74	
31		70.71		71.68	74.37		70.82		70.52	72.28		72.38	
Mean	72.69	71.15	70.40	71.13	72.49	73.43	70.74	70.56	71.33	71.88	72.52	72.74	
Max	73.33	73.51	70.82	72.00	75.42	74.47	71.07	70.87	72.14	72.35	73.00	73.31	75.42
Min	71.24	70.42	70.02	70.00	71.12	70.62	70.24	70.29	70.37	70.94	71.72	71.96	70.00

Annual Max Momentary Gage Height 75.80 M (MSL), at 13.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 69.00 M (MSL), River Bed 68.02 M (MSL)
Left Bank Elevation 82.79 M (MSL)
Right Bank Elevation 81.36 M (MSL), Drainage Area 15718 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	160.8	299.5	106.4	27.0	234.7	734.2	125.6	104.0	59.1	120.8	344.2	475.7	
2	396.0	588.4	94.4	146.9	220.8	723.8	128.0	80.0	125.6	173.9	276.8	325.2	
3	526.0	478.0	54.4	145.5	216.1	704.5	132.0	84.8	268.8	250.2	231.6	289.0	
4	460.4	458.2	89.6	152.3	197.0	711.5	132.0	48.1	205.8	329.0	359.4	313.8	
5	424.0	359.4	87.2	219.2	159.4	741.2	137.5	111.2	151.0	317.6	374.6	340.4	
6	348.0	123.2	96.8	62.4	144.2	762.3	114.8	112.4	257.9	211.5	359.4	434.6	
7	304.8	105.2	84.8	81.2	254.9	750.0	64.6	90.8	239.3	250.2	376.5	402.0	
8	262.6	105.2	87.2	83.6	173.9	729.0	106.4	106.4	245.5	225.4	380.3	410.0	
9	545.2	179.7	66.8	114.8	172.4	720.3	82.4	61.3	148.3	239.3	323.3	287.3	
10	530.8	142.9	56.2	114.8	198.5	720.3	82.4	67.9	197.0	239.3	282.0	268.8	
11	428.1	94.4	70.1	125.6	185.5	744.8	74.5	49.9	273.4	228.5	301.3	308.3	
12	336.6	99.2	72.3	275.0	928.5	746.5	81.2	71.2	299.5	192.7	303.0	466.8	
13	301.3	80.0	66.8	271.9	645.0	734.2	67.9	66.8	230.1	133.4	422.0	489.2	
14	265.7	116.0	77.8	114.8	227.0	758.7	80.0	67.9	210.1	311.9	445.3	428.1	
15	313.8	101.6	54.4	40.9	202.9	750.0	105.2	63.5	207.2	313.8	353.7	473.5	
16	342.3	120.8	47.2	155.0	157.9	746.5	88.4	65.7	126.8	338.5	451.8	436.7	
17	434.6	114.8	40.0	153.7	240.9	732.5	80.0	76.7	204.3	251.7	317.6	412.0	
18	447.5	114.8	66.8	155.0	265.7	615.2	43.6	61.3	178.2	254.9	351.8	491.5	
19	458.2	105.2	60.2	157.9	205.8	449.7	111.2	75.6	198.5	219.2	438.9	484.8	
20	498.2	62.4	51.7	152.3	311.9	540.4	118.4	70.1	182.6	178.2	441.1	489.2	
21	458.2	122.0	34.2	125.6	408.0	498.2	101.6	87.2	188.4	294.3	462.6	500.5	
22	340.4	132.0	38.7	134.8	502.8	412.0	106.4	55.3	173.9	315.7	458.2	505.0	
23	449.7	110.0	38.1	219.2	602.8	290.7	86.0	92.0	55.3	280.2	365.1	412.0	
24	466.8	120.8	28.3	195.6	605.2	282.0	86.0	100.4	133.4	299.5	355.6	289.0	
25	460.4	106.4	56.2	239.3	511.8	250.2	93.2	84.8	175.3	299.5	367.0	436.7	
26	487.0	100.4	41.8	228.5	571.6	250.2	84.8	69.0	189.8	261.1	406.0	514.0	
27	540.4	60.2	40.0	82.4	576.4	253.3	98.0	56.2	156.5	219.2	432.4	482.5	
28	441.1	99.2	34.2	197.0	627.5	250.2	101.6	63.5	134.8	308.3	469.0	511.8	
29	338.5	92.0	48.1	58.0	715.0	233.2	92.0	66.8	107.6	338.5		540.4	
30	511.8	90.8	36.1	231.6	755.3	82.4	98.0	61.3	80.0	299.5		414.0	
31		93.2		225.4	744.8		106.4		71.2	325.2		344.2	
Total	12279.2	4975.9	1826.8	4687.2	11964.2	16918.0	3010.1	2272.1	5475.2	8021.0	10450.5	12977.0	94857.2 CMSDAY
Mean	409.3	160.5	60.9	151.2	385.9	563.9	97.1	75.7	176.6	258.7	373.2	418.6	259.9 CMS
Max	545.2	588.4	106.4	275.0	928.5	762.3	137.5	112.4	299.5	338.5	469.0	540.4	928.5 CMS
Min	160.8	60.2	28.3	27.0	144.2	82.4	43.6	48.1	55.3	120.8	231.6	268.8	27.0 CMS
Runoff	1060.92	429.92	157.84	404.97	1033.71	1461.72	260.07	196.31	473.06	693.01	902.92	1121.21	8195.66 MCM

Momentary Peak 1216.00 CMS, at 75.80 M (MSL), at 13.00 Hours, on Aug 12, 2001
Runoff Yield 16.53 Liters/Second/Square KM, Momentary Peak Yield 77.364 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 8,784 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +177.400 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +192.690 m. (M.S.L.)

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 Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Fairly stable with variable water surface slope.

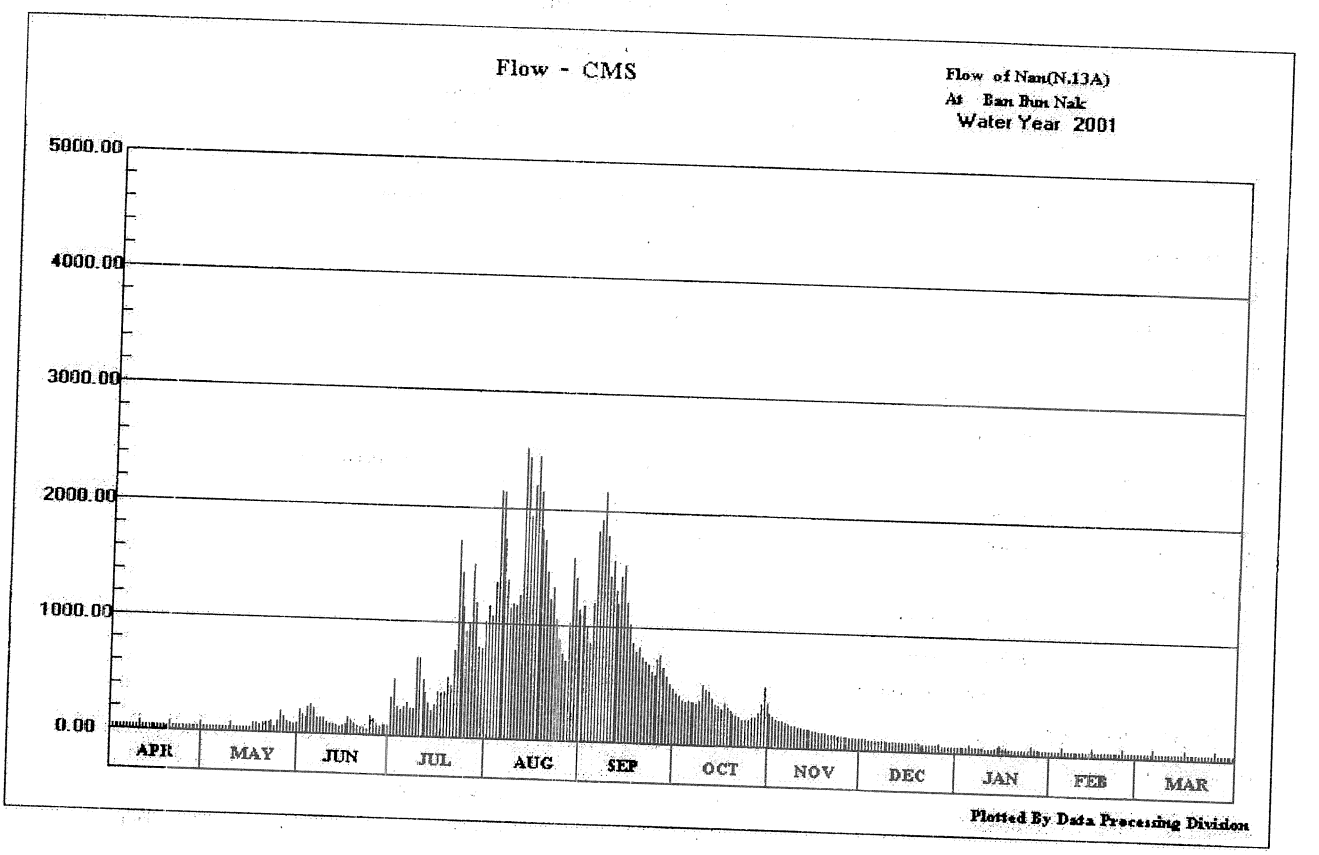
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 74 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	178.14	178.05	178.97	179.42	182.04	181.40	179.50	179.09	178.47	178.31	178.23	178.14	
2	178.12	178.05	178.84	179.96	181.77	180.96	179.43	179.00	178.47	178.31	178.23	178.13	
3	178.11	178.10	178.76	179.18	182.67	180.61	179.33	178.93	178.46	178.31	178.23	178.13	
4	178.12	178.21	179.05	179.05	184.84	181.47	179.30	178.90	178.46	178.31	178.23	178.13	
5	178.14	178.22	179.14	179.16	184.79	182.91	179.31	178.88	178.45	178.30	178.23	178.12	
6	178.12	178.26	179.01	179.31	183.72	183.13	179.29	178.84	178.45	178.30	178.23	178.12	
7	178.10	178.22	178.75	179.13	182.74	183.67	179.29	178.83	178.43	178.30	178.22	178.12	
8	178.09	178.18	178.74	179.13	182.02	182.82	179.24	178.80	178.43	178.29	178.21	178.11	
9	178.08	178.15	178.72	180.58	182.11	182.03	179.32	178.78	178.42	178.29	178.21	178.11	
10	178.07	178.13	178.61	180.58	182.07	182.35	179.72	178.75	178.41	178.28	178.20	178.11	
11	178.07	178.13	178.56	179.96	182.34	181.73	179.62	178.73	178.40	178.28	178.19	178.11	
12	178.07	178.27	178.54	179.59	185.79	181.46	179.56	178.71	178.39	178.27	178.19	178.10	
13	178.11	178.24	178.48	179.31	185.60	182.01	179.41	178.70	178.39	178.29	178.18	178.10	
14	178.34	178.27	178.46	179.08	184.26	182.25	179.25	178.68	178.39	178.34	178.18	178.10	
15	178.28	178.24	178.49	179.27	183.75	181.51	179.21	178.66	178.38	178.34	178.18	178.10	
16	178.19	178.34	178.56	179.64	184.26	181.04	179.15	178.64	178.40	178.31	178.18	178.09	
17	178.14	178.51	178.77	179.62	183.62	180.65	179.28	178.62	178.40	178.29	178.17	178.09	
18	178.12	178.49	178.67	179.64	182.92	180.43	179.17	178.61	178.39	178.28	178.17	178.08	
19	178.10	178.47	178.59	180.05	182.72	180.53	179.12	178.60	178.38	178.27	178.17	178.08	
20	178.09	178.52	178.51	179.85	182.07	180.33	179.04	178.59	178.37	178.26	178.16	178.07	
21	178.08	178.55	178.47	180.83	181.53	180.22	179.02	178.58	178.36	178.25	178.16	178.08	
22	178.06	178.53	178.43	183.63	181.75	180.14	178.95	178.56	178.35	178.26	178.16	178.08	
23	178.06	178.61	178.42	182.87	181.09	180.00	178.91	178.55	178.35	178.25	178.16	178.07	
24	178.05	178.42	178.82	182.02	180.67	179.93	178.89	178.54	178.35	178.25	178.16	178.08	
25	178.05	178.62	178.76	181.34	180.34	180.29	178.90	178.53	178.35	178.25	178.15	178.10	
26	178.04	178.91	178.60	181.57	180.20	180.39	178.95	178.52	178.34	178.29	178.15	178.10	
27	178.12	178.74	178.48	183.10	181.03	180.09	178.98	178.51	178.33	178.29	178.15	178.09	
28	178.07	178.60	178.53	182.12	182.38	179.90	179.08	178.50	178.32	178.26	178.15	178.08	
29	178.06	178.55	178.55	180.94	181.95	179.73	179.30	178.49	178.31	178.25		178.07	
30	178.04	178.49	178.53	180.91	181.31	179.62	179.71	178.48	178.31	178.25		178.06	
31		178.54		181.63	181.20		179.34		178.31	178.24		178.06	
Mean	178.11	178.37	178.66	180.40	182.57	181.12	179.24	178.69	178.39	178.28	178.19	178.10	
Max	178.34	178.91	179.14	183.63	185.79	183.67	179.72	179.09	178.47	178.34	178.23	178.14	185.79
Min	178.04	178.05	178.42	179.05	180.20	179.62	178.89	178.48	178.31	178.24	178.15	178.06	178.04

Annual Max Momentary Gage Height 186.49 M (MSL), at 18.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 177.40 M (MSL), River Bed 174.59 M (MSL)
Left Bank Elevation 187.80 M (MSL)
Right Bank Elevation 192.62 M (MSL), Drainage Area 8784 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.4	19.1	215.9	339.6	1164.0	1188.0	453.0	309.5	111.3	67.6	46.8	31.5	
2	26.3	19.1	180.8	498.0	1075.3	1009.0	428.5	278.0	111.3	67.6	46.8	30.3	
3	25.3	24.3	159.4	272.6	1384.5	869.0	393.5	254.2	108.4	67.6	46.8	30.3	
4	26.3	36.1	237.5	237.5	2170.0	1218.1	383.0	244.0	108.4	67.6	46.8	30.3	
5	28.4	37.7	261.8	267.2	2151.2	1843.0	386.5	237.2	105.5	65.0	46.8	29.0	
6	26.3	44.1	226.7	308.8	1758.8	1940.9	379.5	223.6	105.5	65.0	46.8	29.0	
7	24.3	37.7	156.7	259.1	1409.0	2185.2	379.5	220.2	99.7	65.0	44.2	29.0	
8	23.2	32.4	154.1	259.1	1157.0	1802.9	362.0	210.0	99.7	62.4	41.6	27.8	
9	22.2	29.4	148.8	688.5	1188.5	1458.9	390.0	203.9	96.8	62.4	41.6	27.8	
10	21.2	27.3	119.6	688.5	1174.5	1596.5	531.2	194.7	93.9	59.6	39.0	27.8	
11	21.2	27.3	106.9	498.0	1269.0	1329.9	495.2	188.6	91.0	59.8	37.8	27.8	
12	21.2	45.7	101.8	387.2	2526.2	1213.8	474.0	182.6	88.4	57.2	37.8	26.5	
13	25.3	40.9	86.7	308.8	2455.0	1450.3	421.5	179.5	88.4	62.4	36.5	26.5	
14	56.9	45.7	81.7	245.6	1955.9	1553.5	365.5	173.4	88.4	75.4	36.5	26.5	
15	47.3	40.9	89.2	297.6	2222.0	1235.3	351.5	167.3	85.8	75.4	36.5	26.5	
16	33.5	56.9	106.9	402.0	2463.5	1041.0	330.5	161.2	91.0	67.6	36.5	25.2	
17	28.4	94.3	162.1	396.0	2162.2	885.0	376.0	155.1	91.0	62.4	35.3	25.2	
18	26.3	89.2	135.5	402.0	1847.4	798.7	337.5	152.0	88.4	59.8	35.3	24.0	
19	24.3	84.2	114.5	525.0	1758.4	837.7	320.0	149.0	85.8	57.2	35.3	24.0	
20	23.2	96.8	94.3	465.0	1476.1	760.1	292.0	146.1	83.2	54.6	34.0	22.8	
21	22.2	104.4	84.2	769.8	1243.9	717.7	285.0	143.2	80.6	52.0	34.0	24.0	
22	20.1	99.3	74.1	1726.0	1338.5	687.5	261.0	137.4	78.0	54.6	34.0	24.0	
23	20.1	119.6	71.6	1454.5	1061.0	635.0	247.4	134.5	78.0	52.0	34.0	22.8	
24	19.1	71.6	175.4	1157.0	893.0	608.7	240.6	131.6	78.0	52.0	34.0	24.0	
25	19.1	122.3	159.4	935.5	763.9	744.6	244.0	128.7	78.0	52.0	32.7	26.5	
26	18.1	199.7	117.0	1010.3	710.0	783.2	261.0	125.8	75.4	62.4	32.7	26.5	
27	26.3	154.1	86.7	1535.0	1037.0	668.7	271.2	122.9	72.8	62.4	32.7	25.2	
28	21.2	117.0	99.3	1192.0	1609.4	597.5	306.0	120.0	70.2	54.6	32.7	24.0	
29	20.1	104.4	104.4	805.5	1424.5	534.8	383.0	117.1	67.6	52.0		22.8	
30	18.1	89.2	99.3	795.8	1150.7	495.2	527.6	114.2	67.6	52.0		21.5	
31		101.8		1029.8	1105.0		397.0		67.6	49.4		21.5	
Total	763.9	2212.5	4012.3	20157.3	47105.4	32689.7	11274.2	5305.5	2735.7	1877.2	1075.5	810.6	130019.8 CMSDAY
Mean	25.5	71.4	133.7	650.2	1519.5	1089.7	363.7	176.9	88.2	60.6	38.4	26.1	356.2 CMS
Max	56.9	199.7	261.8	1726.0	2526.2	2185.2	531.2	309.5	111.3	75.4	46.8	31.5	2526.2 CMS
Min	18.1	19.1	71.6	237.5	710.0	495.2	240.6	114.2	67.6	49.4	32.7	21.5	18.1 CMS
Runoff	66.00	191.16	346.66	1741.59	4069.91	2824.39	974.09	458.40	236.36	162.19	92.92	70.04	11233.71 MCM

Momentary Peak 2796.10 CMS, at 186.49 M (MSL), at 18.00 Hours, on Aug 12, 2001

Runoff Yield 40.55 Liters/Second/Square KM, Momentary Peak Yield 318.317 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Wat Luang Pho Kaeo, Nakhon Sawan (N.14A)

Lat 15 - 53 - 56 N. **Long** 100 - 18 - 34 E.

Location on right bank in front of Wat Luang Pho Kaeo about 1 kilometer upstream from station N.14

Ban - **Amphoe** Chum Saeng **Changwat** Nakhon Sawan

Drainage Area 33,182 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +19.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank in front of automatic gage building.

Elevation +27.842 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1971 to date.

Rating Operation

Period of Rating 1973 - 1979, 1991 to date.

Rated by Float -

Rated by Current Meter 1972 - 1980, 1991 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

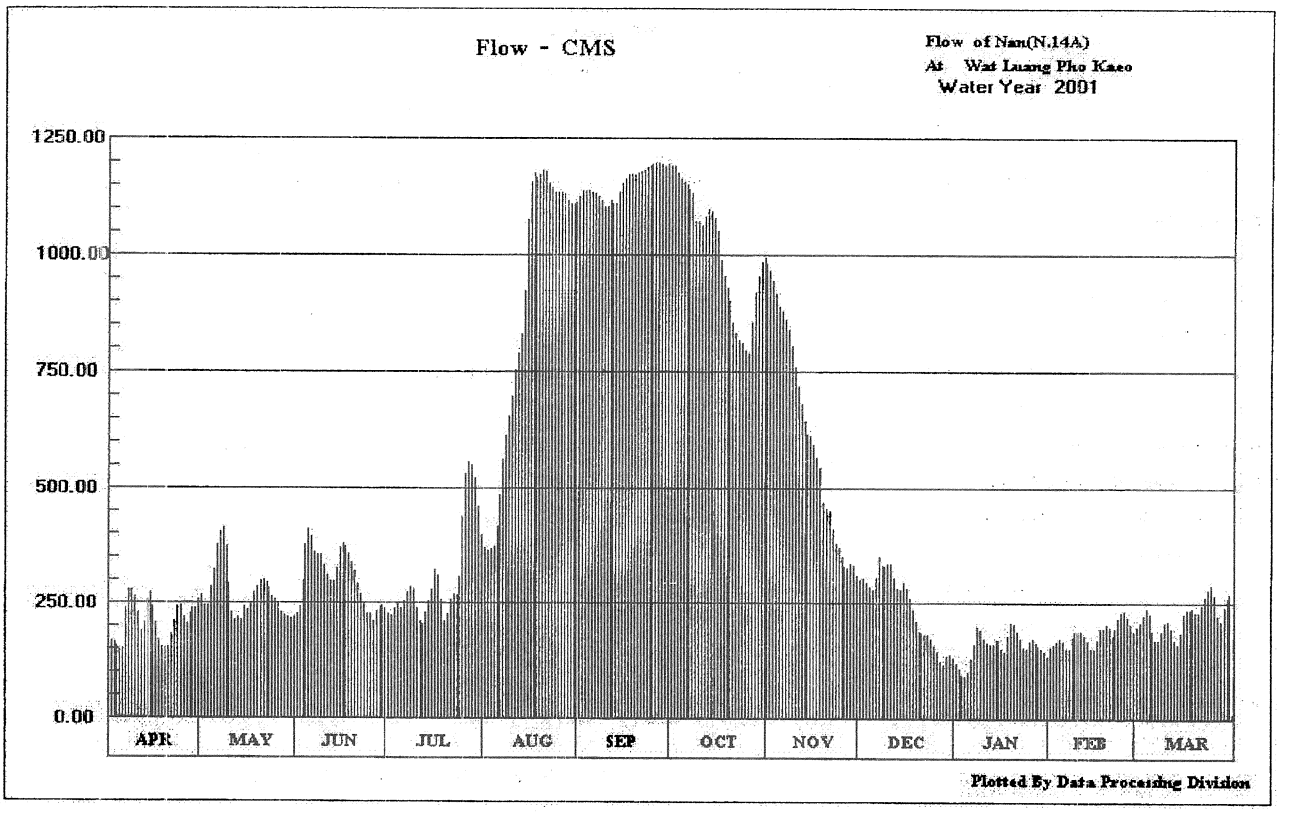
General Description Records fair. Flow effected by Naresuan Dam .

Stage-discharge relation defined by 60 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.23	22.46	22.02	22.01	23.46	27.71	27.98	27.05	22.85	20.49	21.03	21.67	
2	21.20	22.21	22.17	21.98	23.43	27.76	27.98	26.98	22.88	20.20	21.15	21.80	
3	21.12	22.22	22.80	22.16	23.44	27.76	27.92	26.88	22.78	19.98	21.23	21.99	
4	20.92	22.65	23.53	22.25	23.50	27.76	27.87	26.75	22.65	19.93	21.34	22.15	
5	20.98	23.05	23.79	22.14	23.84	27.74	27.84	26.61	22.58	20.11	21.24	22.02	
6	22.15	23.53	23.67	22.32	24.34	27.73	27.81	26.56	22.87	20.65	21.01	21.58	
7	22.61	23.73	23.40	22.54	24.86	27.70	27.77	26.47	23.31	21.16	21.02	21.32	
8	22.61	23.80	23.35	22.68	25.16	27.66	27.73	26.35	23.14	21.70	21.40	21.32	
9	22.42	23.50	23.33	22.60	25.40	27.61	27.46	26.18	23.11	21.61	21.55	21.58	
10	22.03	22.72	23.16	22.16	25.64	27.61	27.47	25.96	23.18	21.34	21.55	21.81	
11	21.57	22.05	22.93	21.82	25.93	27.66	27.43	25.76	23.17	21.20	21.55	21.82	
12	21.78	21.89	22.81	21.77	26.10	27.64	27.51	25.56	22.86	21.13	21.45	21.66	
13	22.37	21.93	22.81	22.06	26.31	27.64	27.58	25.35	22.63	21.15	21.25	21.30	
14	22.52	21.88	23.09	22.33	26.77	27.75	27.56	25.18	22.61	21.29	21.00	21.14	
15	22.18	22.18	23.48	22.58	27.48	27.83	27.49	25.17	22.77	21.28	20.99	21.51	
16	21.81	22.11	23.54	23.07	27.84	27.87	27.37	25.04	22.64	21.00	21.29	22.02	
17	21.31	22.30	23.50	22.92	27.92	27.90	27.09	24.88	22.38	20.89	21.66	22.10	
18	21.07	22.51	23.38	22.37	27.88	27.91	26.93	24.74	22.13	21.44	21.66	22.11	
19	21.03	22.68	23.21	21.84	27.91	27.91	26.80	24.23	21.82	21.79	21.77	22.14	
20	21.07	22.81	23.02	22.02	27.95	27.92	26.66	24.12	21.58	21.76	21.67	22.05	
21	21.48	22.84	22.74	22.34	27.93	27.93	26.44	24.10	21.54	21.57	21.43	22.03	
22	21.83	22.78	22.50	22.49	27.83	27.94	26.32	23.79	21.47	21.35	21.66	22.22	
23	22.17	22.62	22.26	22.46	27.79	27.97	26.24	23.55	21.47	21.03	21.90	22.42	
24	22.23	22.43	22.01	22.90	27.75	27.99	26.21	23.47	21.35	20.97	22.06	22.58	
25	21.95	22.37	22.01	24.01	27.75	28.00	26.14	23.32	21.10	21.24	22.09	22.69	
26	21.77	22.25	21.84	24.66	27.75	28.01	26.10	23.11	20.90	21.33	21.93	22.45	
27	22.01	22.05	22.08	24.82	27.73	28.01	26.44	23.08	20.52	21.21	21.77	21.99	
28	22.14	21.99	22.20	24.78	27.67	28.00	26.76	23.17	20.41	21.10	21.57	21.85	
29	22.16	21.95	22.22	24.59	27.64	27.99	26.93	23.14	20.73	21.01		22.18	
30	22.37	21.90	22.15	24.17	27.63	28.00	27.07	22.94	20.80	20.88		22.40	
31		21.93		23.69	27.65		27.12		20.70	20.76		22.50	
Mean	21.80	22.49	22.83	22.79	26.46	27.83	27.16	24.98	22.09	21.05	21.47	21.95	
Max	22.61	23.80	23.79	24.82	27.95	28.01	27.98	27.05	23.31	21.79	22.09	22.69	28.01
Min	20.92	21.88	21.84	21.77	23.43	27.61	26.10	22.94	20.41	19.93	20.99	21.14	19.93

Annual Max Momentary Gage Height 28.01 M (MSL), at 17.00 Hours, on Sep 26, 2001
Zero Gage at Bottom Elevation 19.00 M (MSL), River Bed 14.42 M (MSL)
Left Bank Elevation 29.84 M (MSL)
Right Bank Elevation 32.01 M (MSL), Drainage Area 33182 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	168.6	270.0	229.9	229.0	371.5	1130.3	1193.3	984.3	305.5	124.4	156.3	199.8	
2	166.8	247.2	243.6	226.3	367.8	1142.0	1193.3	969.4	308.2	109.6	163.7	210.7	
3	161.9	248.1	300.9	242.7	369.0	1142.0	1179.3	948.1	299.1	98.3	168.6	227.2	
4	149.6	287.2	380.3	250.9	376.5	1142.0	1167.7	920.9	287.2	95.8	175.3	241.8	
5	153.3	325.5	414.0	240.8	420.6	1137.3	1160.7	892.8	280.9	105.0	169.2	229.9	
6	241.8	380.3	398.2	257.2	488.3	1135.0	1153.7	882.7	307.3	133.1	155.1	192.5	
7	283.6	406.1	364.0	277.2	567.7	1128.0	1144.3	864.6	353.6	164.3	155.7	174.1	
8	283.6	415.3	358.3	290.0	616.3	1119.1	1135.0	840.5	334.8	202.3	179.0	174.1	
9	266.3	376.5	355.9	282.7	656.5	1108.0	1074.8	806.3	331.7	194.8	190.2	192.5	
10	230.8	293.6	336.9	242.7	699.9	1108.0	1077.0	762.1	338.9	175.3	190.2	211.5	
11	191.7	232.6	313.1	212.3	756.0	1119.1	1068.1	722.7	337.9	166.8	190.2	212.3	
12	209.0	218.2	301.8	208.2	790.2	1114.7	1085.9	685.1	306.4	162.5	182.8	199.0	
13	261.8	221.7	301.8	233.6	832.5	1114.7	1101.4	647.8	285.4	163.7	169.8	172.9	
14	275.4	217.3	329.6	258.1	925.0	1139.7	1097.0	619.6	283.6	172.3	154.5	163.1	
15	244.5	244.5	374.0	280.9	1079.2	1158.3	1081.4	617.9	298.2	171.7	153.9	187.3	
16	211.5	238.1	381.5	327.6	1160.7	1167.7	1054.9	596.9	286.3	154.5	172.3	229.9	
17	173.5	255.4	376.5	312.1	1179.3	1174.7	992.9	571.0	262.7	147.8	199.0	237.2	
18	158.8	274.5	361.7	261.8	1170.0	1177.0	958.7	548.9	239.9	182.0	199.0	238.1	
19	156.3	290.0	342.1	214.0	1177.0	1177.0	931.0	472.3	212.3	209.8	208.2	240.8	
20	158.8	301.8	322.4	229.9	1186.3	1179.3	902.8	457.5	192.5	207.3	199.8	232.6	
21	185.0	304.5	295.4	259.0	1181.7	1181.7	858.6	454.8	189.5	191.7	181.3	230.8	
22	213.2	299.1	273.6	272.7	1158.3	1184.0	834.5	414.0	184.2	175.9	199.0	248.1	
23	243.6	284.5	251.8	270.0	1149.0	1191.0	818.4	382.7	184.2	156.3	219.0	266.3	
24	249.0	267.2	229.0	310.0	1139.7	1195.7	812.3	372.7	175.9	152.7	233.6	280.9	
25	223.6	261.8	229.0	443.0	1139.7	1198.0	798.3	354.8	160.6	169.2	236.3	290.9	
26	208.2	250.9	214.0	536.7	1139.7	1200.4	790.2	331.7	148.4	174.7	221.7	269.1	
27	229.0	232.6	235.4	561.2	1135.0	1200.4	858.6	328.6	125.9	167.4	208.2	227.2	
28	240.8	227.2	246.3	555.0	1121.3	1198.0	923.0	337.9	120.3	160.6	191.7	214.8	
29	242.7	223.6	248.1	526.0	1114.7	1195.7	958.7	334.8	138.0	155.1		244.5	
30	261.8	219.0	241.8	464.0	1112.5	1198.0	988.6	314.1	142.2	147.1		264.5	
31		221.7		400.8	1116.9		999.4		136.1	139.8		273.6	
Total	6444.5	8536.0	9250.9	9676.4	27698.8	34756.8	31393.8	18437.5	7557.7	4931.8	5223.6	6978.0	170885.8 CMSDAY
Mean	214.8	275.4	308.4	312.1	893.5	1158.6	1012.7	614.6	243.8	159.1	186.6	225.1	468.2 CMS
Max	283.6	415.3	414.0	561.2	1186.3	1200.4	1193.3	984.3	353.6	209.8	236.3	290.9	1200.4 CMS
Min	149.6	217.3	214.0	208.2	367.8	1108.0	790.2	314.1	120.3	95.8	153.9	163.1	95.8 CMS
Runoff	556.80	737.51	799.28	836.04	2393.18	3002.99	2712.42	1593.00	652.99	426.11	451.32	602.90	14764.53 MCM

Momentary Peak 1200.40 CMS, at 28.01 M (MSL), at 17.00 Hours, on Sep 26, 2001
Runoff Yield 14.11 Liters/Second/Square KM, Momentary Peak Yield 36.176 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Khwae Noi 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

Drainage Area 4,841 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +42.670 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of the Meteorological Station.

Elevation +51.975 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1963 to date.

Rating Operation

Period of Rating 1963 - 1974, 1996 to date.

Rated by Float -

Rated by Current Meter 1963 - 1974, 1996 to date.

Stability of Channel Regimes Stable.

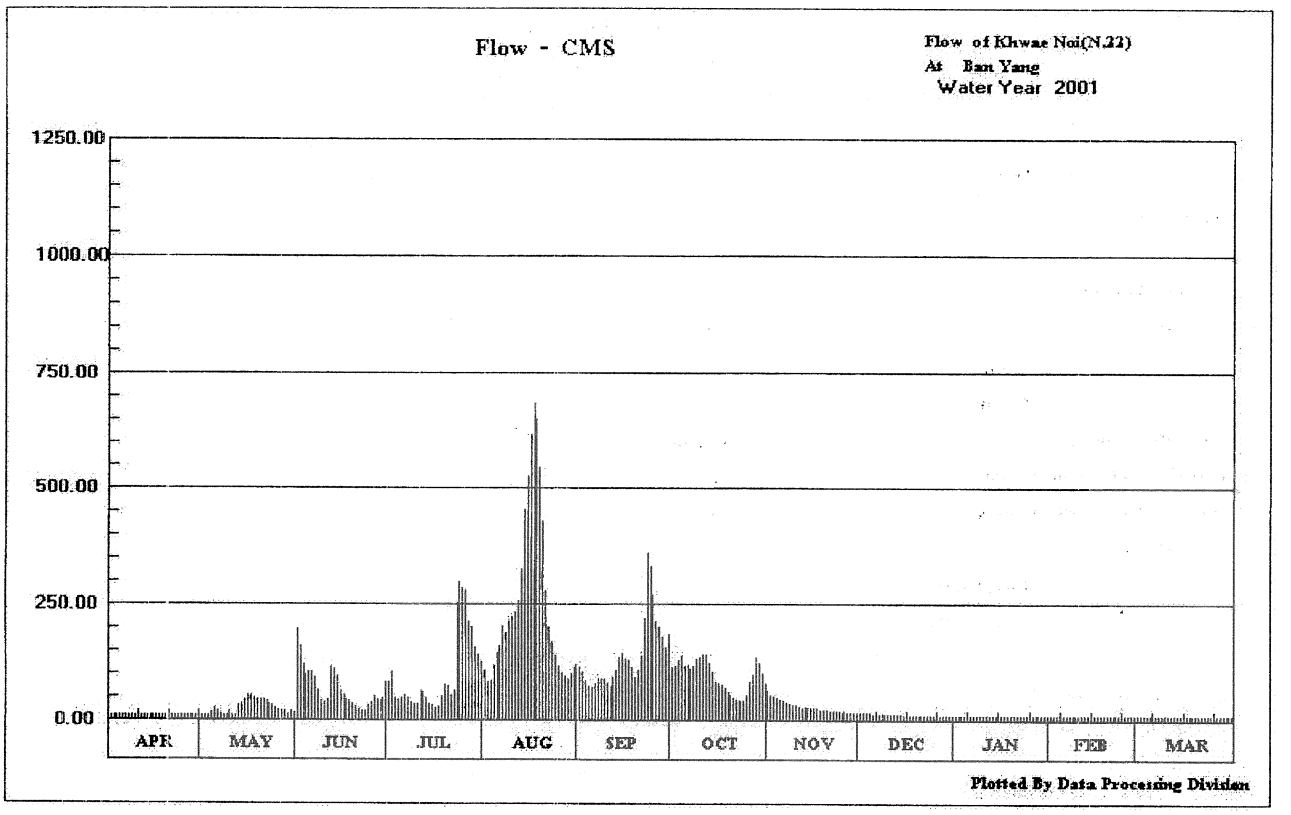
Overbank Flow Conditions Overbank flow starts at elevation +50.720 m.(M.S.L.), records are channel flow only.

General Description Records good. Stage-discharge relation defined by 31 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.70	42.79	46.97	45.01	45.52	45.63	45.64	44.61	43.30	42.96	42.76	42.60	
2	42.70	42.86	46.38	45.44	44.98	45.45	45.67	44.42	43.31	42.96	42.76	42.60	
3	42.70	43.02	45.74	44.27	45.09	45.07	45.87	44.34	43.30	42.95	42.76	42.60	
4	42.70	43.31	45.30	44.20	45.65	44.84	46.04	44.26	43.30	42.94	42.75	42.59	
5	42.70	43.65	45.43	44.26	46.14	44.78	45.65	44.15	43.28	42.93	42.75	42.59	
6	42.69	43.49	45.44	44.41	46.38	44.93	45.74	44.10	43.26	42.92	42.75	42.59	
7	42.69	43.23	45.18	44.22	47.05	45.13	45.55	44.00	43.26	42.92	42.73	42.58	
8	42.69	43.13	44.63	43.99	46.82	45.13	45.69	43.92	43.25	42.90	42.73	42.58	
9	42.69	43.00	44.08	43.89	47.19	45.15	45.92	43.85	43.23	42.90	42.73	42.58	
10	42.69	42.86	44.04	43.93	47.31	44.93	46.01	43.82	43.24	42.88	42.73	42.57	
11	42.69	42.81	44.16	44.63	47.46	44.81	46.09	43.79	43.24	42.87	42.72	42.57	
12	42.69	42.84	45.62	44.53	47.76	45.22	46.12	43.68	43.21	42.86	42.72	42.57	
13	42.68	43.84	45.56	44.29	48.65	45.48	45.78	43.71	43.18	42.86	42.71	42.56	
14	42.68	43.92	45.23	43.92	50.12	46.00	45.42	43.68	43.17	42.88	42.70	42.56	
15	42.68	44.21	44.64	43.82	50.88	46.15	45.00	43.66	43.15	42.90	42.69	42.56	
16	42.68	44.37	44.39	43.68	51.35	45.96	44.97	43.70	43.13	42.92	42.69	42.55	
17	42.68	44.37	44.15	43.79	51.57	45.90	44.91	43.69	43.11	42.94	42.69	42.55	
18	42.68	44.29	44.07	44.34	51.47	45.59	44.72	43.60	43.10	42.93	42.67	42.54	
19	42.68	44.21	43.91	44.89	51.00	45.20	44.52	43.56	43.09	42.90	42.64	42.54	
20	42.68	44.20	43.77	44.83	49.84	45.52	44.37	43.52	43.10	42.87	42.63	42.54	
21	42.68	44.17	43.57	44.40	48.05	46.07	44.29	43.50	43.13	42.85	42.63	42.54	
22	42.68	44.13	43.51	44.59	47.02	47.27	44.20	43.46	43.11	42.84	42.63	42.53	
23	42.68	43.92	43.45	47.74	46.53	49.05	44.12	43.43	43.13	42.82	42.62	42.53	
24	42.68	43.81	43.88	48.28	46.06	48.73	44.10	43.42	43.10	42.82	42.62	42.53	
25	42.68	43.70	44.01	48.14	45.68	47.95	44.38	43.41	43.07	42.80	42.62	42.52	
26	42.68	43.59	44.35	48.04	45.40	47.21	45.01	43.40	43.04	42.80	42.62	42.52	
27	42.68	43.49	44.15	47.21	45.23	47.03	45.33	43.40	43.03	42.79	42.61	42.52	
28	42.68	43.42	44.09	47.00	45.12	46.68	45.98	43.36	43.01	42.79	42.61	42.51	
29	42.69	43.24	44.24	46.33	45.39	46.36	45.77	43.34	42.99	42.78		42.51	
30	42.69	43.29	45.01	46.10	45.59	46.81	45.37	43.33	42.98	42.78		42.51	
31		43.34		45.86	45.75		44.93		42.97	42.77		42.51	
Mean	42.69	43.56	44.63	45.16	47.36	46.00	45.26	43.74	43.15	42.87	42.69	42.55	
Max	42.70	44.37	46.97	48.28	51.57	49.05	46.12	44.61	43.31	42.96	42.76	42.60	51.57
Min	42.68	42.79	43.45	43.68	44.98	44.78	44.10	43.33	42.97	42.77	42.61	42.51	42.51

Annual Max Momentary Gage Height 51.62 M (MSL), at 18.00 Hours, on Aug 17, 2001
Zero Gage at Bottom Elevation 42.67 M (MSL), River Bed 41.72 M (MSL)
Left Bank Elevation 51.85 M (MSL)
Right Bank Elevation 50.71 M (MSL), Drainage Area 4841 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.50	6.85	200.90	85.50	111.60	117.65	118.20	66.45	18.50	10.20	6.40	4.00	
2	5.50	8.20	162.25	107.20	84.00	107.75	119.85	57.90	18.75	10.20	6.40	4.00	
3	5.50	11.50	123.70	51.80	89.50	88.50	131.20	54.60	18.50	10.00	6.40	4.00	
4	5.50	18.75	100.00	49.00	118.75	77.00	141.40	51.40	18.50	9.80	6.25	3.90	
5	5.50	28.75	106.65	51.40	147.40	74.10	118.75	47.00	18.00	9.60	6.25	3.90	
6	5.35	23.70	107.20	57.45	162.25	81.50	123.70	45.00	17.50	9.40	6.25	3.90	
7	5.35	16.75	94.00	49.80	206.50	91.50	113.25	41.00	17.50	9.40	5.95	3.80	
8	5.35	14.25	67.35	40.65	190.40	91.50	120.95	38.20	17.25	9.00	5.95	3.80	
9	5.35	11.00	44.20	37.15	216.30	92.50	134.20	35.75	16.75	9.00	5.95	3.80	
10	5.35	8.20	42.60	38.55	225.25	81.50	139.60	34.70	17.00	8.60	5.95	3.70	
11	5.35	7.20	47.40	67.35	236.50	75.50	144.40	33.65	17.00	8.40	5.80	3.70	
12	5.35	7.80	117.10	62.85	259.40	96.00	146.20	29.80	16.25	8.20	5.80	3.70	
13	5.20	35.40	113.80	52.60	330.13	109.40	125.90	30.85	15.50	8.20	5.65	3.60	
14	5.20	38.20	96.50	38.20	455.80	139.00	106.10	29.80	15.25	8.60	5.50	3.60	
15	5.20	49.40	67.80	34.70	530.20	148.00	85.00	29.10	14.75	9.00	5.35	3.60	
16	5.20	55.80	56.60	29.80	618.75	136.60	83.50	30.50	14.25	9.40	5.35	3.50	
17	5.20	55.80	47.00	33.65	689.65	133.00	80.50	30.15	13.75	9.80	5.35	3.50	
18	5.20	52.60	43.80	54.60	655.15	115.45	71.40	27.00	13.50	9.60	5.05	3.40	
19	5.20	49.40	37.85	79.50	547.00	95.00	62.40	25.80	13.25	9.00	4.60	3.40	
20	5.20	49.00	32.95	76.50	431.00	111.60	55.80	24.60	13.50	8.40	4.45	3.40	
21	5.20	47.80	26.10	57.00	282.00	143.20	52.60	24.00	14.25	8.00	4.45	3.40	
22	5.20	46.20	24.30	65.55	204.40	222.25	49.00	22.80	13.75	7.80	4.45	3.30	
23	5.20	38.20	22.50	257.85	171.63	363.25	45.80	21.90	14.25	7.40	4.30	3.30	
24	5.20	34.35	36.80	300.40	142.60	336.73	45.00	21.60	13.50	7.40	4.30	3.30	
25	5.20	30.50	41.40	289.20	120.40	274.13	56.20	21.30	12.75	7.00	4.30	3.20	
26	5.20	26.70	55.00	281.20	105.00	217.75	85.50	21.00	12.00	7.00	4.30	3.20	
27	5.20	23.70	47.00	217.75	96.50	205.10	101.50	21.00	11.75	6.85	4.15	3.20	
28	5.20	21.60	44.60	203.00	91.00	181.20	137.80	20.00	11.25	6.85	4.15	3.10	
29	5.35	17.00	50.60	159.13	104.50	161.00	125.35	19.50	10.80	6.70		3.10	
30	5.35	18.25	85.50	145.00	115.45	189.70	103.50	19.25	10.60	6.70		3.10	
31		19.50		130.60	124.25		81.50		10.40	6.55		3.10	
Total	158.85	872.35	2143.45	3204.93	7863.26	4357.36	3106.05	975.60	460.55	262.05	149.05	109.50	23663.00 CMSDAY
Mean	5.29	28.14	71.45	103.38	253.65	145.25	100.20	32.52	14.86	8.45	5.32	3.53	64.83 CMS
Max	5.50	55.80	200.90	300.40	689.65	363.25	146.20	66.45	18.75	10.20	6.40	4.00	689.65 CMS
Min	5.20	6.85	22.50	29.80	84.00	74.10	45.00	19.25	10.40	6.55	4.15	3.10	3.10 CMS
Runoff	13.725	75.371	185.194	276.906	679.386	376.476	268.363	84.292	39.792	22.641	12.878	9.461	2044.484 MCM

Momentary Peak 711.20 CMS, at 51.62 M (MSL), at 18.00 Hours, on Aug 17, 2001

Runoff Yield 13.39 Liters/Second/Square KM, Momentary Peak Yield 146.912 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,861 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +40.710 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the gage site.

Elevation +55.246 m. (M.S.L.)

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 Float -

Rated by Current Meter 1965 - 1974, 1980 to date.

Stability of Channel Regimes Fairly stable.

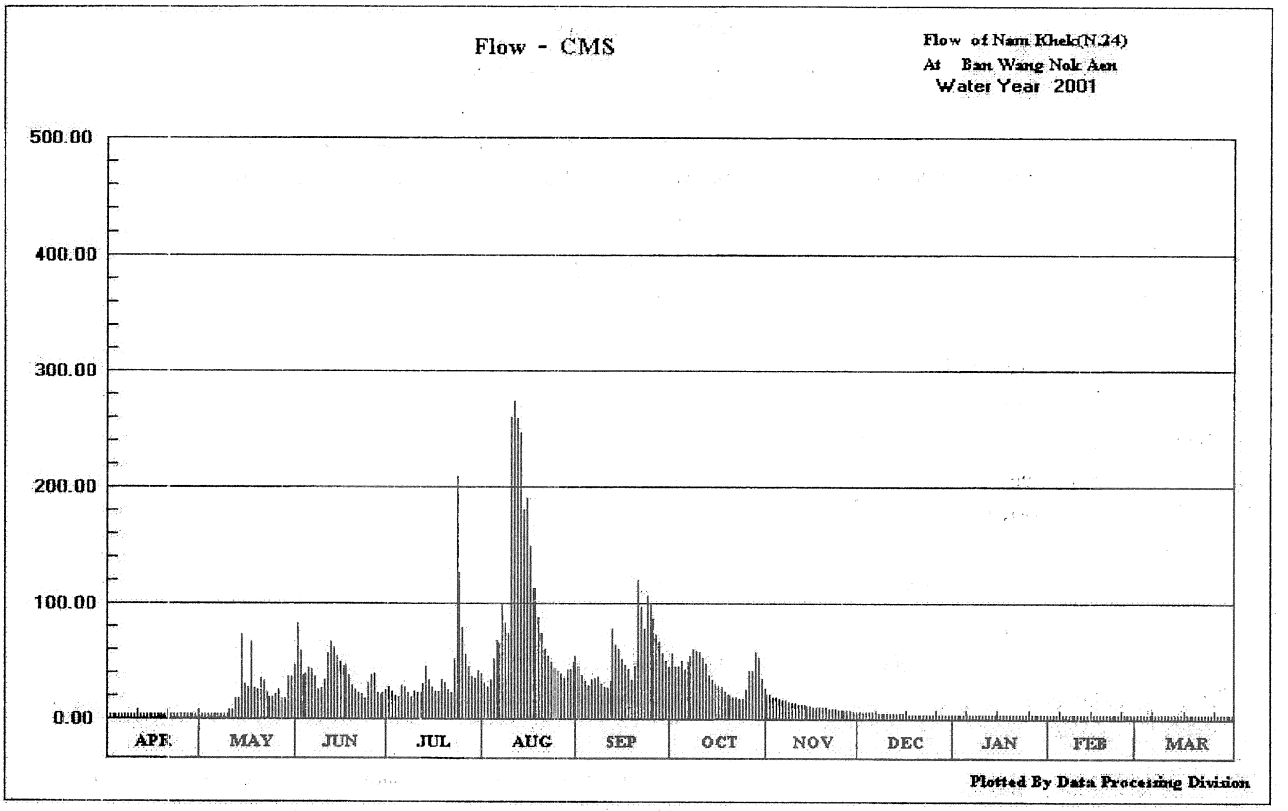
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 29 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.87	41.70	45.52	43.31	43.50	44.09	44.54	43.04	42.15	41.89	41.70	41.57	
2	41.86	41.71	44.64	43.17	43.34	43.74	44.11	42.99	42.13	41.89	41.68	41.57	
3	41.83	41.80	43.74	42.98	43.62	43.53	44.09	42.90	42.11	41.89	41.67	41.57	
4	41.80	41.96	43.84	42.86	44.38	43.38	44.29	42.87	42.10	41.87	41.65	41.57	
5	41.80	41.89	44.02	43.38	44.99	43.61	44.01	42.83	42.09	41.86	41.62	41.57	
6	41.79	41.87	43.99	43.31	44.91	43.64	44.27	42.77	42.08	41.84	41.61	41.57	
7	41.79	41.86	43.70	43.09	46.03	43.69	44.48	42.73	42.08	41.83	41.60	41.57	
8	41.80	41.85	43.20	42.91	45.49	43.42	44.71	42.70	42.07	41.83	41.59	41.57	
9	41.84	41.85	43.27	43.16	45.21	43.30	44.66	42.60	42.06	41.83	41.59	41.57	
10	41.83	41.87	43.61	43.09	50.36	43.29	44.63	42.57	42.06	41.82	41.59	41.59	
11	41.82	42.17	44.58	43.11	50.65	43.55	44.41	42.55	42.06	41.82	41.58	41.57	
12	41.81	42.81	44.96	43.44	50.31	45.35	44.23	42.52	42.06	41.81	41.58	41.57	
13	41.81	42.80	44.75	44.11	50.05	44.87	43.77	42.49	42.05	41.79	41.57	41.55	
14	41.80	45.19	44.46	43.61	48.43	44.71	43.58	42.46	42.03	41.78	41.57	41.54	
15	41.80	43.41	44.28	43.32	48.70	44.34	43.44	42.43	42.02	41.81	41.57	41.54	
16	41.79	43.31	44.11	43.12	47.54	44.17	43.38	42.41	42.01	41.81	41.56	41.53	
17	41.78	44.95	44.16	43.14	46.48	44.00	43.31	42.39	42.00	41.80	41.55	41.53	
18	41.77	43.25	43.75	43.61	46.51	43.60	43.13	42.37	42.00	41.79	41.55	41.53	
19	41.76	43.18	43.37	43.48	45.68	44.07	43.03	42.36	41.99	41.78	41.55	41.53	
20	41.76	43.63	43.20	43.19	45.23	46.73	42.95	42.35	41.99	41.78	41.55	41.53	
21	41.74	43.52	43.11	43.08	44.72	45.98	42.90	42.32	41.98	41.78	41.59	41.53	
22	41.74	43.11	43.02	44.37	44.47	45.32	42.85	42.27	41.97	41.78	41.58	41.53	
23	41.74	42.86	42.81	49.17	44.25	46.30	42.80	42.26	41.96	41.77	41.58	41.53	
24	41.73	42.91	43.46	46.90	44.06	46.07	42.79	42.22	41.96	41.77	41.57	41.51	
25	41.71	43.04	43.77	45.38	43.91	45.61	43.22	42.20	41.94	41.76	41.57	41.49	
26	41.68	43.19	43.80	44.50	43.81	45.17	43.92	42.19	41.91	41.76	41.57	41.49	
27	41.51	42.80	43.10	44.12	43.65	44.94	43.91	42.18	41.90	41.76	41.57	41.49	
28	41.50	42.82	43.01	43.70	44.00	44.58	44.62	42.17	41.90	41.76	41.57	41.50	
29	41.48	43.72	43.09	43.67	43.96	44.29	44.39	42.16	41.90	41.75		41.52	
30	41.56	43.71	43.18	43.95	44.25	44.09	43.63	42.15	41.90	41.74		41.52	
31		44.13		43.84	44.48		43.25		41.90	41.73		41.51	
Mean	41.75	42.87	43.78	43.81	45.71	44.45	43.78	42.48	42.01	41.80	41.59	41.54	
Max	41.87	45.19	45.52	49.17	50.65	46.73	44.71	43.04	42.15	41.89	41.70	41.59	50.65
Min	41.48	41.70	42.81	42.86	43.34	43.29	42.79	42.15	41.90	41.73	41.55	41.49	41.48

Annual Max Momentary Gage Height 51.84 M (MSL), at 15.00 Hours, on Aug 10, 2001
Zero Gage at Bottom Elevation 40.71 M (MSL), River Bed 41.37 M (MSL)
Left Bank Elevation 54.40 M (MSL)
Right Bank Elevation 56.18 M (MSL), Drainage Area 1861 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.05	2.00	84.60	28.98	33.25	46.52	57.50	23.30	8.25	4.35	2.00	0.85	
2	3.90	2.10	60.00	25.90	29.65	38.65	46.97	22.33	7.95	4.35	1.80	0.85	
3	3.45	3.00	38.65	22.15	35.95	33.92	46.52	20.75	7.65	4.35	1.70	0.85	
4	3.00	5.40	40.90	20.05	53.50	30.55	51.25	20.22	7.50	4.05	1.50	0.85	
5	3.00	4.35	44.95	30.55	69.23	35.72	44.72	19.53	7.35	3.90	1.20	0.85	
6	2.90	4.05	44.28	28.98	67.03	36.40	50.75	18.47	7.20	3.60	1.10	0.85	
7	2.90	3.90	37.75	24.30	99.90	37.52	56.00	17.77	7.20	3.45	1.00	0.85	
8	3.00	3.75	26.50	20.92	83.70	31.45	61.75	17.25	7.05	3.45	0.95	0.85	
9	3.60	3.75	28.07	25.70	75.30	28.75	60.50	15.50	6.90	3.45	0.95	0.85	
10	3.45	4.05	35.72	24.30	262.20	28.53	59.75	14.97	6.90	3.30	0.95	0.95	
11	3.30	8.55	58.50	24.70	275.88	34.37	54.25	14.62	6.90	3.30	0.90	0.85	
12	3.15	19.18	68.40	31.90	259.95	79.50	49.75	14.10	6.90	3.15	0.90	0.85	
13	3.15	19.00	62.75	46.97	248.25	65.92	39.32	13.58	6.75	2.90	0.85	0.75	
14	3.00	74.72	55.50	35.72	181.63	61.75	35.05	13.05	6.45	2.80	0.85	0.70	
15	3.00	31.22	51.00	29.20	192.00	52.50	31.90	12.52	6.30	3.15	0.85	0.70	
16	2.90	28.98	46.97	24.90	149.90	48.32	30.55	12.17	6.15	3.15	0.80	0.65	
17	2.80	68.13	48.10	25.30	113.60	44.50	28.98	11.85	6.00	3.00	0.75	0.65	
18	2.70	27.62	38.87	35.72	114.57	35.50	25.10	11.55	6.00	2.90	0.75	0.65	
19	2.60	26.10	30.32	32.80	89.40	46.07	23.10	11.40	5.85	2.80	0.75	0.65	
20	2.60	36.18	26.50	26.30	75.90	121.72	21.63	11.25	5.85	2.80	0.75	0.65	
21	2.40	33.70	24.70	24.10	62.00	98.40	20.75	10.80	5.70	2.80	0.95	0.65	
22	2.40	24.70	22.90	53.25	55.75	78.60	19.87	10.05	5.55	2.80	0.90	0.65	
23	2.40	20.05	19.18	210.80	50.25	108.00	19.00	9.90	5.40	2.70	0.90	0.65	
24	2.30	20.92	32.35	127.50	45.85	101.10	18.83	9.30	5.40	2.70	0.85	0.55	
25	2.10	23.30	39.32	80.40	42.47	87.30	26.95	9.00	5.10	2.60	0.85	0.45	
26	1.80	26.30	40.00	56.50	40.23	74.17	42.70	8.85	4.65	2.60	0.85	0.45	
27	0.55	19.00	24.50	47.20	36.63	67.85	42.47	8.70	4.50	2.60	0.85	0.45	
28	0.50	19.35	22.70	37.75	44.50	58.50	59.50	8.55	4.50	2.60	0.85	0.50	
29	0.40	38.20	24.30	37.07	43.60	51.25	53.75	8.40	4.50	2.50		0.60	
30	0.80	37.97	26.10	43.38	50.25	46.52	36.18	8.25	4.50	2.40		0.60	
31		47.43		40.90	56.00		27.62		4.50	2.30		0.55	
Total	78.10	586.95	1204.38	1324.19	3038.32	1709.85	1242.96	407.98	191.40	96.80	28.30	21.80	10031.03 CMSDAY
Mean	2.60	22.16	40.15	42.72	98.01	57.00	40.10	13.60	6.17	3.12	1.01	0.70	27.48 CMS
Max	4.05	74.72	84.60	210.80	275.88	121.72	61.75	23.30	8.25	4.35	2.00	0.95	275.88 CMS
Min	0.40	2.00	19.18	20.05	29.65	28.53	18.83	8.25	4.50	2.30	0.75	0.45	0.40 CMS
Runoff	6.748	59.352	104.058	114.410	262.511	147.731	107.392	35.249	16.537	8.364	2.445	1.884	866.681 MCM

Momentary Peak 342.40 CMS, at 51.84 M (MSL), at 15.00 Hours, on Aug 10, 2001
Runoff Yield 14.77 Liters/Second/Square KM, Momentary Peak Yield 183.987 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Ban Nong Kham, Phitsanulok (N.27A)

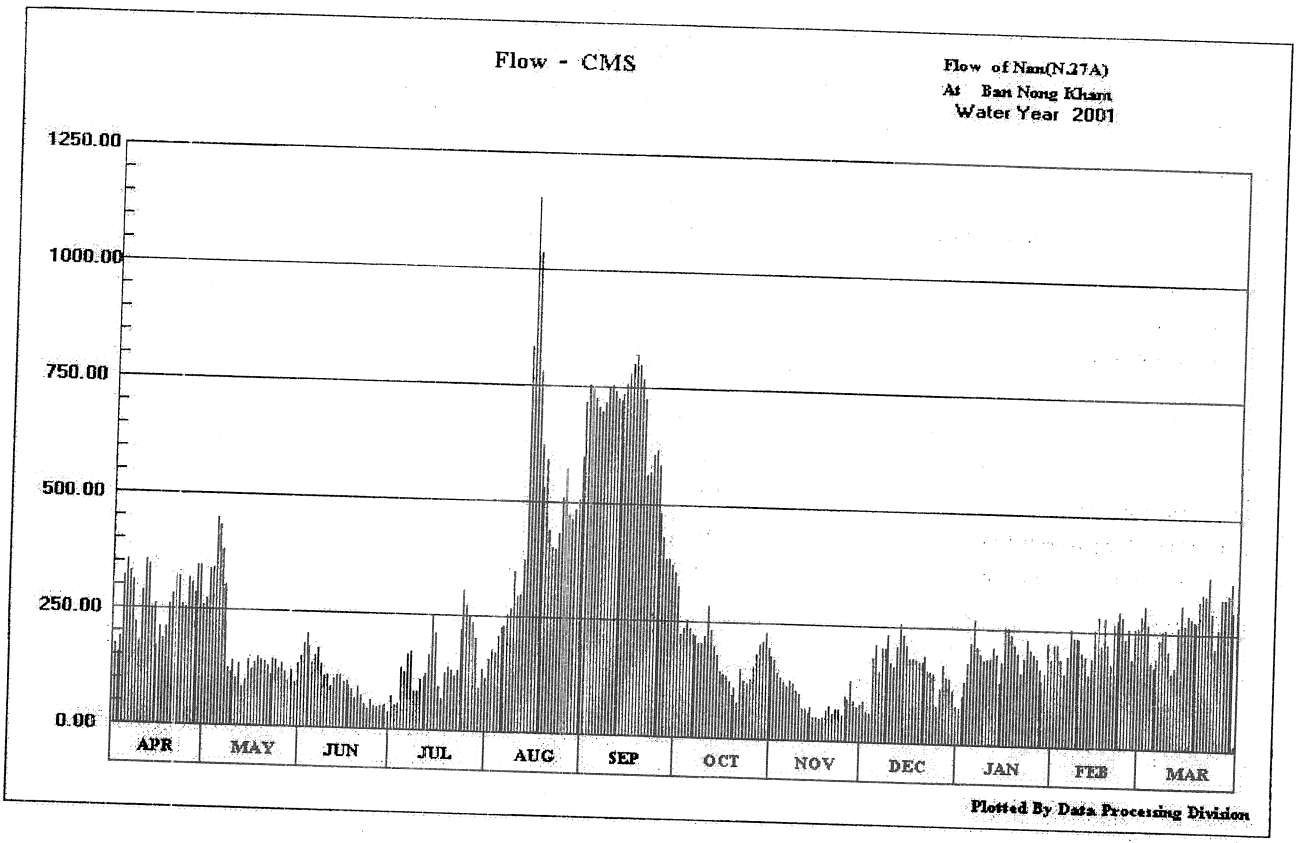
Lat 17 - 01 - 46 N. **Long** 100 - 11 - 00 E.

Location		on right bank about 1,800 meters downstream from Phrom Phiram Dam.			
	Ban	Nong Kham	**Amphoe**	Phrom Phiram	**Changwat** Phitsanulok
Drainage Area		19,540 sq.km.			
Type of Gage		Water - stage recorder.			
Zero Gage at Bottom		+38.430 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	About 10 meters from the top staff gage.			
	Elevation	+48.572 m. (M.S.L.)			
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 Float	-			
	Rated by Current Meter	1980 to date.			
Stability of Channel Regimes		Fairly stable because of backwater effect.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records good. Flow regulated by Naresuan Dam about 2 kilometers above gage site.			
		Stage-discharge relation defined by 23 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	40.66	41.84	40.44	39.27	40.49	45.86	42.39	40.77	39.48	39.38	41.23	41.96	
2	40.43	42.53	40.80	38.98	40.73	45.82	41.28	40.67	39.16	39.74	41.26	42.21	
3	40.86	42.55	41.05	38.99	40.67	45.68	41.43	40.30	39.10	40.20	40.87	41.76	
4	42.33	43.56	40.70	40.17	41.10	45.55	41.62	40.19	40.80	40.72	40.46	40.84	
5	42.67	43.42	40.28	40.03	41.31	45.47	41.42	40.03	41.13	41.24	40.94	40.73	
6	42.42	42.93	40.49	40.55	41.36	45.60	41.28	39.93	40.41	41.81	41.65	40.93	
7	42.22	42.17	40.68	40.65	41.64	45.81	41.25	40.09	41.05	41.13	41.44	41.44	
8	41.23	40.05	40.23	39.47	41.77	45.86	41.05	40.00	41.05	40.93	41.42	41.63	
9	40.77	39.91	39.88	39.44	42.60	45.78	41.05	39.77	41.38	40.79	41.38	41.67	
10	42.02	40.28	39.92	39.80	42.06	45.66	41.23	39.67	40.69	40.84	41.08	41.13	
11	42.66	39.73	39.57	39.93	42.11	45.65	41.98	39.21	40.57	40.84	40.94	40.55	
12	42.58	40.16	39.77	40.01	42.86	45.74	41.39	39.20	41.11	41.13	40.48	40.71	
13	41.61	39.46	39.92	40.55	46.39	45.88	40.97	39.05	41.66	40.95	40.91	41.74	
14	41.71	39.67	39.93	41.60	48.44	46.04	40.77	39.28	41.41	40.16	41.65	42.24	
15	40.64	40.30	39.67	41.12	47.71	46.19	40.31	38.88	41.13	40.74	41.93	41.79	
16	41.15	40.00	39.72	39.60	46.03	46.32	40.21	38.92	40.78	41.64	41.25	42.00	
17	40.84	40.24	39.58	39.22	44.93	46.17	40.16	38.85	40.78	41.63	41.92	41.93	
18	41.15	40.39	39.46	40.03	44.25	45.95	40.02	38.88	40.74	41.48	41.27	41.88	
19	41.70	40.30	39.15	40.21	44.70	45.66	39.62	39.17	40.73	41.22	40.79	41.85	
20	41.94	40.26	39.53	40.12	43.47	44.50	39.83	39.31	40.71	41.00	41.77	42.34	
21	42.35	40.12	39.24	39.96	43.14	44.55	39.37	39.04	40.87	40.46	41.87	42.48	
22	42.33	39.87	38.93	40.13	43.11	44.82	40.37	39.22	40.47	40.87	42.08	42.46	
23	41.69	40.35	38.78	41.26	43.42	44.90	40.04	39.23	40.43	41.35	41.95	42.85	
24	41.63	40.30	39.13	42.18	44.09	44.66	39.95	38.99	40.37	41.09	41.42	42.08	
25	42.29	40.04	38.88	41.84	44.56	43.86	40.08	39.66	39.40	40.97	41.66	41.23	
26	42.21	40.22	38.87	41.61	43.78	43.39	40.41	39.54	39.97	40.86	40.92	41.72	
27	41.96	39.95	38.88	41.43	43.68	42.95	40.81	40.15	40.64	40.61	41.66	42.39	
28	42.59	39.70	38.92	41.02	43.87	42.94	41.06	39.48	40.29	40.26	41.70	42.38	
29	42.57	40.00	38.94	39.58	44.06	42.82	41.14	39.33	40.26	40.48		42.50	
30	41.69	39.66	38.67	40.18	44.76	42.67	41.34	39.39	39.90	41.27		42.75	
31		40.21		39.92	45.61		40.97		39.41	40.86		42.09	
Mean	41.76	40.55	39.67	40.29	43.51	45.09	40.80	39.54	40.51	40.86	41.35	41.81	
Max	42.67	43.56	41.05	42.18	48.44	46.32	42.39	40.77	41.66	41.81	42.08	42.85	48.44
Min	40.43	39.46	38.67	38.98	40.49	42.67	39.37	38.85	39.10	39.38	40.46	40.55	38.67

Annual Max Momentary Gage Height 48.53 M (MSL), at 15.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 38.43 M (MSL), River Bed 37.30 M (MSL)
Left Bank Elevation 49.11 M (MSL)
Right Bank Elevation 49.06 M (MSL), Drainage Area 19540 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	174.8	275.8	158.0	76.6	161.8	756.7	329.0	183.6	90.2	83.7	221.5	287.2	
2	157.3	343.0	186.0	58.8	180.4	750.9	225.8	175.6	69.6	107.8	224.1	311.0	
3	190.8	345.0	206.2	59.4	175.6	730.6	238.7	147.5	66.0	140.0	191.6	268.4	
4	323.0	451.6	178.0	137.9	210.5	711.7	255.8	139.3	186.0	179.6	159.5	189.2	
5	357.0	436.2	146.0	128.1	228.4	700.1	237.8	128.1	213.1	222.4	197.2	180.4	
6	332.0	383.7	161.8	166.3	232.6	719.0	225.8	121.1	155.8	273.0	258.5	196.4	
7	312.0	307.1	176.4	174.0	257.6	749.5	223.2	132.3	206.2	213.1	239.6	239.6	
8	221.5	129.5	142.2	89.6	269.3	756.7	206.2	126.0	206.2	196.4	237.8	256.7	
9	183.6	119.7	117.6	87.6	350.0	745.1	206.2	109.9	234.3	185.2	234.3	260.3	
10	292.9	146.0	120.4	112.0	296.7	727.7	221.5	102.9	177.2	189.2	208.8	213.1	
11	356.0	107.1	96.1	121.1	301.5	726.3	289.1	72.6	167.8	189.2	197.2	166.3	
12	348.0	137.2	109.9	126.7	376.3	739.3	235.1	72.0	211.4	213.1	161.0	178.8	
13	254.9	88.9	120.4	166.3	834.5	759.6	199.6	63.0	259.4	198.0	194.8	266.6	
14	263.9	102.9	121.1	254.0	1157.6	782.8	183.6	77.2	236.9	137.2	258.5	314.0	
15	173.2	147.5	102.9	212.2	1037.6	804.5	148.3	52.8	213.1	181.2	284.4	271.1	
16	214.8	126.0	106.4	98.0	781.3	824.0	140.7	55.2	184.4	257.6	223.2	291.0	
17	189.2	143.0	96.7	73.3	624.6	801.6	137.2	51.0	184.4	256.7	283.4	284.4	
18	214.8	154.2	88.9	128.1	534.5	769.7	127.4	52.8	181.2	243.2	224.9	279.6	
19	263.0	147.5	69.0	140.7	593.5	727.7	99.4	70.2	180.4	220.7	185.2	276.7	
20	285.3	144.5	93.5	134.4	441.7	567.0	114.1	79.2	178.8	202.0	269.3	324.0	
21	325.0	134.4	74.6	123.2	405.7	573.5	83.0	62.4	191.6	159.5	278.6	338.0	
22	323.0	116.9	55.8	135.1	402.6	609.7	152.7	73.3	160.3	191.6	298.6	336.0	
23	262.1	151.2	46.9	224.1	436.2	620.5	128.8	73.9	157.3	231.7	286.3	375.2	
24	256.7	147.5	67.8	308.1	514.2	588.1	122.5	59.4	152.7	209.6	237.8	298.6	
25	319.0	128.8	52.8	275.8	574.8	486.2	131.6	102.2	85.0	199.6	259.4	221.5	
26	311.0	141.5	52.2	254.9	476.7	432.9	155.8	94.1	123.9	190.8	195.6	264.8	
27	287.2	122.5	52.8	238.7	465.2	385.8	186.8	136.5	173.2	170.8	259.4	329.0	
28	349.0	105.0	55.2	203.7	487.4	384.7	207.1	90.2	146.8	144.5	263.0	328.0	
29	347.0	126.0	56.4	96.7	510.5	372.1	213.9	80.5	144.5	161.0		340.0	
30	262.1	102.2	40.8	138.6	601.6	357.0	230.9	84.3	119.0	224.9		365.0	
31		140.7		120.4	720.4		199.6		85.7	190.8		299.5	
Total	8150.1	5653.1	3152.8	4664.4	14641.3	19661.0	5857.2	2869.1	5142.4	5964.1	6533.5	8550.4	90839.4 CMSDAY
Mean	271.7	182.4	105.1	150.5	472.3	655.4	188.9	95.6	165.9	192.4	233.3	275.8	248.9 CMS
Max	357.0	451.6	206.2	308.1	1157.6	824.0	329.0	183.6	259.4	273.0	298.6	375.2	1157.6 CMS
Min	157.3	88.9	40.8	58.8	161.8	357.0	83.0	51.0	66.0	83.7	159.5	166.3	40.8 CMS
Runoff	704.17	488.43	272.40	403.00	1265.01	1698.71	506.06	247.89	444.30	515.30	564.49	738.75	7848.52 MCM

Momentary Peak 1172.45 CMS, at 48.53 M (MSL), at 15.00 Hours, on Aug 14, 2001

Runoff Yield 12.74 Liters/Second/Square KM, Momentary Peak Yield 60.003 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,651 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +191.880 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank along the measuring line.

Elevation +200.293 m. (M.S.L.)

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 Float -

Rated by Current Meter 1971 - 1979, 1993 to date.

Stability of Channel Regimes Fairly stable.

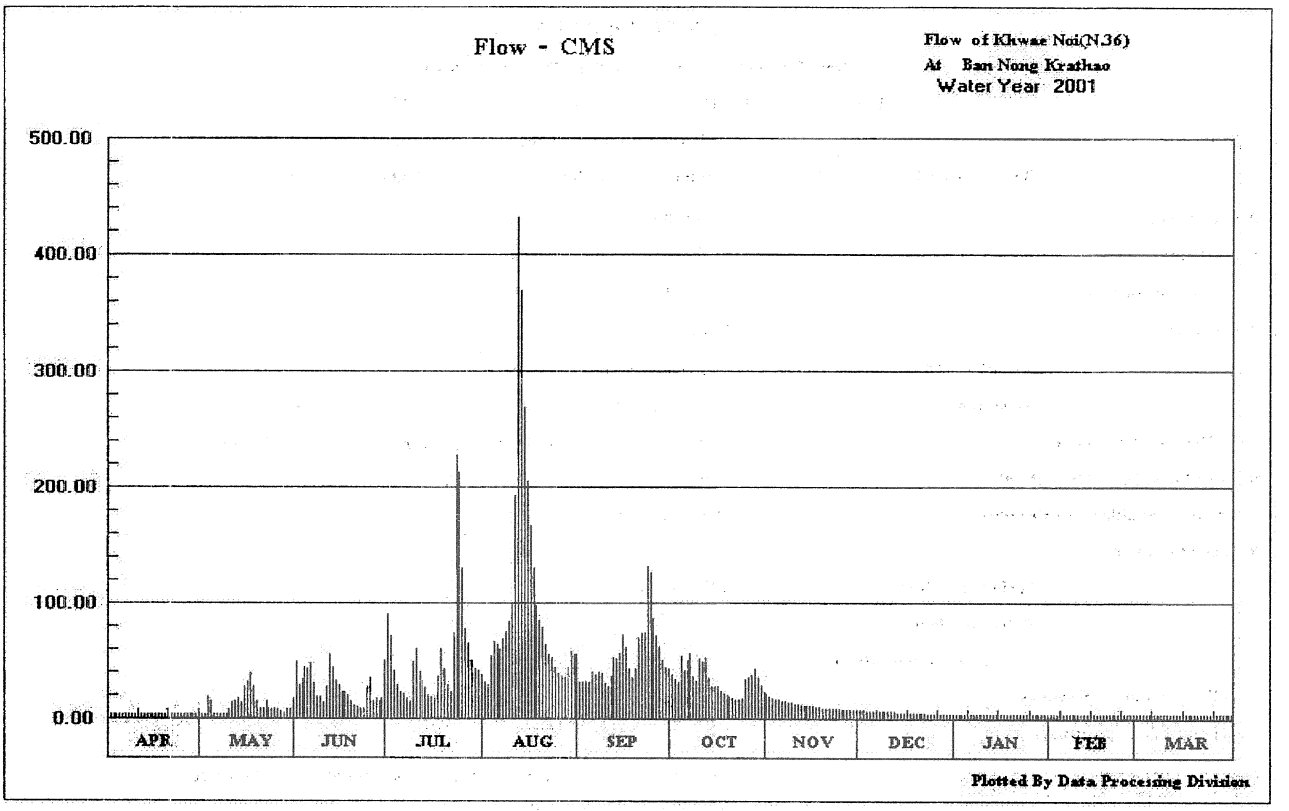
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 45 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.94	193.16	196.31	198.28	195.23	195.24	195.58	194.52	193.54	193.27	193.10	193.04	
2	193.01	193.14	195.06	197.52	195.10	195.22	195.35	194.38	193.53	193.26	193.10	193.03	
3	192.97	194.42	195.41	195.82	196.53	195.21	195.26	194.29	193.52	193.25	193.14	193.03	
4	192.94	194.12	196.03	195.07	197.22	195.23	196.55	194.22	193.51	193.24	193.13	193.04	
5	192.91	193.25	195.95	194.61	197.07	195.81	195.88	194.18	193.50	193.23	193.13	193.12	
6	192.88	193.30	196.20	194.58	196.90	195.59	196.37	194.15	193.49	193.23	193.13	193.07	
7	192.93	193.21	195.13	194.31	197.37	195.75	196.67	194.10	193.48	193.22	193.13	193.04	
8	192.86	193.16	194.40	194.10	197.67	195.66	195.54	194.05	193.47	193.22	193.13	193.03	
9	192.85	193.11	194.42	196.31	198.10	195.12	195.27	194.01	193.46	193.22	193.12	193.02	
10	192.83	193.22	194.02	196.93	198.48	194.98	196.42	193.97	193.45	193.21	193.12	193.01	
11	192.82	194.00	194.95	195.78	199.13	195.53	196.25	193.94	193.44	193.21	193.11	193.01	
12	192.81	194.17	196.62	195.33	199.69	196.51	196.52	193.91	193.43	193.21	193.11	193.00	
13	192.82	194.29	195.99	194.88	199.57	196.40	195.46	193.90	193.42	193.21	193.11	193.00	
14	192.83	194.01	195.32	194.48	199.36	196.72	194.99	193.87	193.41	193.21	193.10	192.98	
15	192.91	194.95	195.10	194.36	199.18	197.54	194.98	193.84	193.40	193.25	193.10	192.98	
16	192.90	195.21	194.63	194.34	199.02	197.00	194.98	193.83	193.39	193.24	193.09	192.97	
17	192.89	195.73	194.63	195.51	198.82	195.92	194.77	193.81	193.38	193.22	193.09	192.96	
18	192.90	194.99	194.45	196.92	198.46	195.46	194.56	193.76	193.37	193.21	193.09	192.96	
19	193.02	194.17	194.11	195.91	198.13	195.94	194.45	193.72	193.35	193.20	193.09	192.95	
20	192.88	193.67	193.89	195.07	197.88	197.45	194.36	193.70	193.33	193.19	193.08	192.95	
21	192.86	193.63	193.75	194.67	197.12	197.65	194.29	193.67	193.32	193.18	193.08	192.97	
22	192.84	194.17	193.63	197.65	196.65	197.63	194.25	193.65	193.31	193.17	193.08	193.01	
23	192.88	193.64	193.72	199.25	196.50	198.83	194.18	193.64	193.30	193.16	193.07	193.14	
24	193.03	193.54	195.01	199.21	196.01	198.80	194.29	193.63	193.29	193.17	193.07	193.15	
25	193.07	193.64	195.48	198.82	195.69	198.21	195.41	193.62	193.29	193.16	193.07	193.15	
26	193.07	193.56	194.16	197.79	195.56	197.48	195.47	193.61	193.28	193.16	193.06	193.30	
27	193.29	193.45	194.26	197.16	195.44	196.94	195.64	193.60	193.28	193.15	193.06	193.29	
28	193.22	193.37	194.16	196.34	196.02	196.33	195.93	193.58	193.27	193.13	193.06	193.28	
29	193.15	193.59	194.27	195.90	196.77	195.96	195.43	193.57	193.27	193.12		193.27	
30	193.16	193.48	196.37	195.84	196.64	195.92	195.05	193.56	193.26	193.11		193.27	
31		194.28		195.62	196.62		194.63		193.26	193.10		193.27	
Mean	192.95	193.86	194.91	196.08	197.35	196.40	195.32	193.88	193.39	193.20	193.10	193.07	
Max	193.29	195.73	196.62	199.25	199.69	198.83	196.67	194.52	193.54	193.27	193.14	193.30	199.69
Min	192.81	193.11	193.63	194.10	195.10	194.98	194.18	193.56	193.26	193.10	193.06	192.95	192.81

Annual Max Momentary Gage Height 199.77 M (MSL), at 18.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 191.88 M (MSL), River Bed 193.20 M (MSL)
Left Bank Elevation 203.08 M (MSL)
Right Bank Elevation 203.31 M (MSL), Drainage Area 1651 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.05	4.70	50.93	91.20	32.98	33.14	38.58	22.34	8.75	5.70	4.25	3.80	
2	3.57	4.55	30.33	73.28	30.95	32.82	34.90	20.31	8.63	5.60	4.25	3.72	
3	3.28	20.89	35.86	42.44	54.84	32.66	33.46	19.00	8.50	5.50	4.55	3.72	
4	3.05	16.54	46.02	30.49	67.58	32.98	55.20	17.99	8.37	5.40	4.48	3.80	
5	2.83	5.50	44.65	23.64	64.80	42.27	43.46	17.41	8.25	5.30	4.48	4.40	
6	2.60	6.00	49.00	23.21	61.65	38.74	51.98	16.97	8.13	5.30	4.48	4.03	
7	2.97	5.10	31.42	19.29	70.43	41.30	57.39	16.25	8.00	5.20	4.48	3.80	
8	2.45	4.70	20.60	16.25	76.20	39.86	37.94	15.53	7.88	5.20	4.48	3.72	
9	2.38	4.33	20.89	50.93	85.40	31.26	33.62	14.94	7.75	5.20	4.40	3.65	
10	2.22	5.20	15.09	62.20	100.80	29.10	52.86	14.38	7.63	5.10	4.40	3.57	
11	2.15	14.80	28.65	41.78	194.55	37.78	49.88	13.96	7.50	5.10	4.33	3.57	
12	2.07	17.26	56.47	34.58	432.65	54.48	54.66	13.54	7.37	5.10	4.33	3.50	
13	2.15	19.00	45.33	27.60	370.00	52.50	36.66	13.40	7.25	5.10	4.33	3.50	
14	2.22	14.94	34.42	21.76	270.20	58.32	29.25	12.98	7.13	5.10	4.25	3.35	
15	2.83	28.65	30.95	20.02	206.30	73.66	29.10	12.56	7.00	5.50	4.25	3.35	
16	2.75	32.66	23.94	19.73	168.70	63.50	29.10	12.42	6.90	5.40	4.17	3.28	
17	2.67	40.98	23.94	37.46	131.15	44.14	25.97	12.14	6.80	5.20	4.17	3.20	
18	2.75	29.25	21.32	62.02	99.60	36.66	22.92	11.50	6.70	5.10	4.17	3.20	
19	3.65	17.26	16.40	43.97	86.18	44.48	21.32	11.00	6.50	5.00	4.17	3.12	
20	2.60	10.37	13.26	30.49	80.40	71.95	20.02	10.75	6.30	4.93	4.10	3.12	
21	2.45	9.88	11.37	24.51	65.72	75.80	19.00	10.37	6.20	4.85	4.10	3.28	
22	2.30	17.26	9.88	75.80	57.02	75.40	18.42	10.12	6.10	4.78	4.10	3.57	
23	2.60	10.00	11.00	229.50	54.30	132.97	17.41	10.00	6.00	4.70	4.03	4.55	
24	3.72	8.75	29.55	214.70	45.67	127.50	19.00	9.88	5.90	4.78	4.03	4.62	
25	4.03	10.00	36.98	131.15	40.34	88.40	35.86	9.75	5.90	4.70	4.03	4.62	
26	4.03	9.00	17.12	78.60	38.26	72.52	36.82	9.63	5.80	4.70	3.95	6.00	
27	5.90	7.63	18.57	66.46	36.34	62.39	39.54	9.50	5.80	4.62	3.95	5.90	
28	5.20	6.70	17.12	51.45	45.85	51.28	44.31	9.25	5.70	4.48	3.95	5.80	
29	4.62	9.37	18.72	43.80	59.25	44.82	36.18	9.13	5.70	4.40		5.70	
30	4.70	8.00	51.98	42.78	56.84	44.14	30.18	9.00	5.60	4.33		5.70	
31		18.86		39.22	56.47		23.94		5.60	4.25		5.70	
Total	93.79	418.13	861.76	1770.31	3241.42	1666.82	1078.93	396.00	215.64	155.62	118.66	126.84	10143.92 CMSDAY
Mean	3.13	13.49	28.73	57.11	104.56	55.56	34.80	13.20	6.96	5.02	4.24	4.09	27.79 CMS
Max	5.90	40.98	56.47	229.50	432.65	132.97	57.39	22.34	8.75	5.70	4.55	6.00	432.65 CMS
Min	2.07	4.33	9.88	16.25	30.95	29.10	17.41	9.00	5.60	4.25	3.95	3.12	2.07 CMS
Runoff	8.103	36.126	74.456	152.955	280.059	144.013	93.220	34.214	18.631	13.446	10.252	10.959	876.435 MCM

Momentary Peak 475.00 CMS, at 199.77 M (MSL), at 18.00 Hours, on Aug 12, 2001

Runoff Yield 16.83 Liters/Second/Square KM, Momentary Peak Yield 287.704 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nam Khwae Noi at Ban Nong Bon, Phitsanulok (N.40)

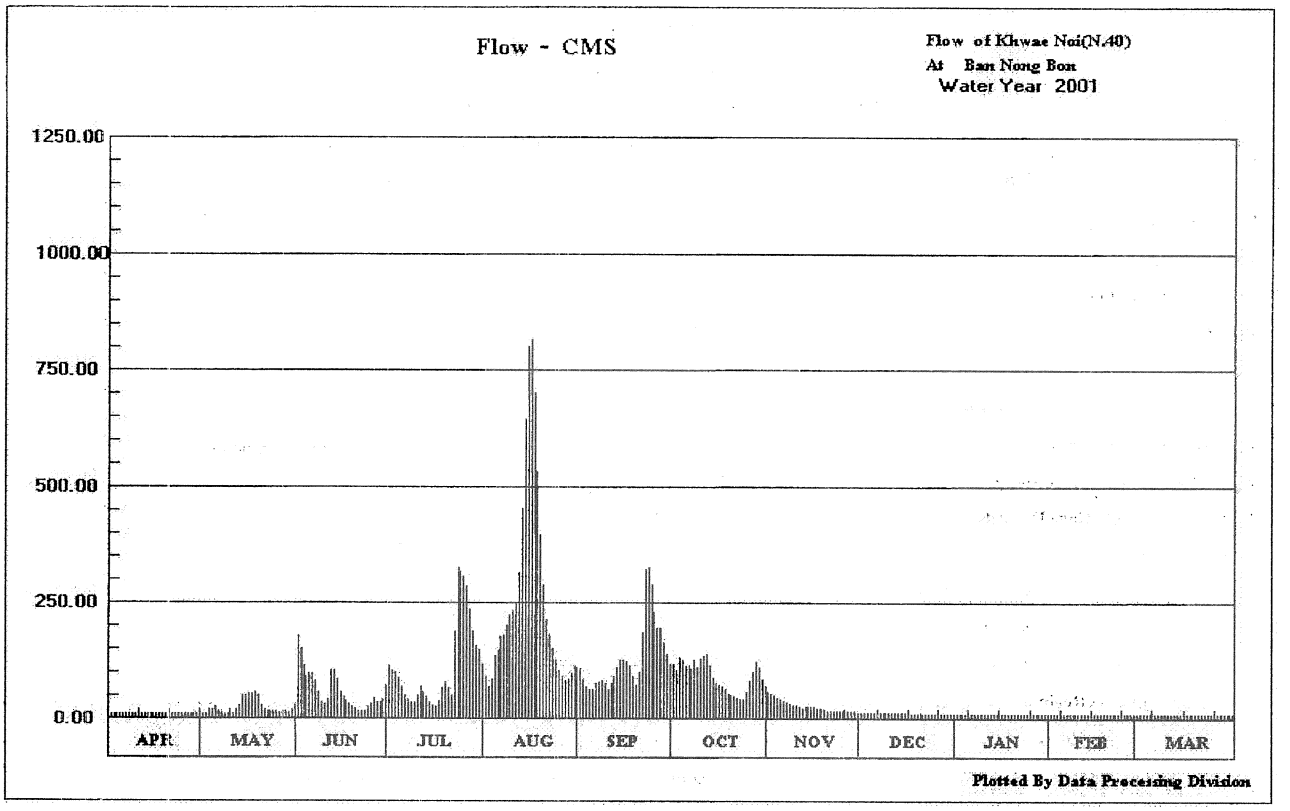
Lat 17 - 13 - 07 N. **Long** 100 - 21 - 14 E.

Location			on left bank about 2 kilometers upstream, Ban Nong Bon.		
	Ban	Nong Bon	**Amphoe** Wat Bot	**Changwat**	Phitsanulok
Drainage Area			4,340 sq.km.		
Type of Gage			Staff gage.		
Zero Gage at Bottom			+47.450 m. (M.S.L.)		
Bench Mark			B.M.- H.D.		
	Location BM		Near the gage site.		
	Elevation		+61.392 m. (M.S.L.)		
Gage Reading Frequency			5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height			Arithmetic mean of 5 readings.		
Period of Available Gage Records			1967 -1968, 1972 to date.		
Rating Operation					
	Period of Rating		1977 to date.		
	Rated by Float		-		
	Rated by Current Meter		1977 to date.		
Stability of Channel Regimes			Stable.		
Overbank Flow Conditions			No overbank flow.		
General Description			Records very good. Stage-discharge relation defined by 133 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	48.18	48.17	52.56	51.31	50.90	51.18	51.40	50.06	48.71	48.41	48.24	48.14	
2	48.18	48.26	52.10	51.15	50.43	50.78	51.14	49.97	48.71	48.41	48.24	48.14	
3	48.19	48.86	51.36	51.10	50.77	50.38	51.69	49.90	48.69	48.40	48.24	48.14	
4	48.21	48.89	50.87	50.81	51.80	50.23	51.57	49.70	48.67	48.40	48.25	48.13	
5	48.19	49.14	51.00	50.42	51.99	50.25	51.31	49.61	48.67	48.39	48.25	48.13	
6	48.16	48.73	51.00	49.87	52.53	50.52	51.31	49.52	48.67	48.38	48.25	48.13	
7	48.13	48.62	50.69	49.63	52.55	50.62	51.22	49.42	48.65	48.37	48.24	48.17	
8	48.12	48.53	50.03	49.38	52.92	50.68	51.58	49.33	48.65	48.37	48.24	48.15	
9	48.11	48.36	49.40	49.42	53.31	50.59	51.25	49.27	48.66	48.35	48.23	48.13	
10	48.10	48.28	49.33	49.82	53.45	50.25	51.65	49.20	48.67	48.34	48.23	48.13	
11	48.09	48.26	49.60	50.42	53.73	50.54	51.79	49.11	48.64	48.34	48.22	48.12	
12	48.08	48.90	51.14	50.07	54.69	50.92	51.82	49.02	48.61	48.34	48.22	48.12	
13	48.06	49.28	51.14	49.78	56.55	51.25	51.33	49.11	48.59	48.34	48.21	48.12	
14	48.06	49.85	50.74	49.46	58.20	51.58	50.86	49.09	48.58	48.35	48.21	48.11	
15	48.08	49.83	50.07	49.21	59.17	51.60	50.55	49.09	48.57	48.37	48.24	48.11	
16	48.10	49.96	49.76	49.09	59.27	51.49	50.45	49.16	48.55	48.40	48.22	48.11	
17	48.11	49.91	49.48	49.50	58.57	51.35	50.43	49.08	48.53	48.41	48.20	48.10	
18	48.14	50.05	49.37	50.35	57.30	50.87	50.21	48.99	48.52	48.39	48.18	48.09	
19	48.12	49.83	49.18	50.66	55.88	50.50	49.98	48.94	48.55	48.37	48.18	48.08	
20	48.09	49.24	49.01	50.35	54.33	51.11	49.83	48.82	48.56	48.35	48.17	48.08	
21	48.07	48.88	48.85	49.87	53.16	52.70	49.74	48.84	48.54	48.33	48.17	48.10	
22	48.06	48.72	48.76	52.75	52.63	54.84	49.65	48.84	48.52	48.32	48.17	48.14	
23	48.05	48.83	48.72	54.88	52.10	54.88	49.59	48.82	48.50	48.31	48.17	48.14	
24	48.04	48.78	49.19	54.75	51.61	54.33	49.58	48.81	48.48	48.30	48.16	48.12	
25	48.03	48.72	49.36	54.61	51.16	53.41	50.00	48.80	48.46	48.29	48.15	48.10	
26	48.02	48.71	49.68	54.30	50.88	52.83	50.67	48.79	48.44	48.29	48.15	48.09	
27	48.01	48.84	49.46	53.52	50.71	52.85	51.10	48.77	48.44	48.28	48.14	48.09	
28	48.03	48.76	49.39	52.73	50.79	52.32	51.54	48.75	48.43	48.27	48.14	48.09	
29	48.08	48.63	49.60	52.23	51.01	51.85	51.28	48.72	48.43	48.26		48.09	
30	48.16	48.62	50.49	52.05	51.36	51.38	50.80	48.71	48.42	48.25		48.08	
31		49.23		51.38	51.29		50.38		48.42	48.24		48.08	
Mean	48.10	48.96	50.04	51.12	53.39	51.60	50.83	49.14	48.57	48.34	48.20	48.11	
Max	48.21	50.05	52.56	54.88	59.27	54.88	51.82	50.06	48.71	48.41	48.25	48.17	59.27
Min	48.01	48.17	48.72	49.09	50.43	50.23	49.58	48.71	48.42	48.24	48.14	48.08	48.01

Annual Max Momentary Gage Height 59.38 M (MSL), at 24.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 47.45 M (MSL), River Bed 46.40 M (MSL)
Left Bank Elevation 60.75 M (MSL)
Right Bank Elevation 59.81 M (MSL), Drainage Area 4340 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.60	7.40	181.60	115.50	95.00	109.00	120.00	61.10	18.20	12.20	8.80	6.80	
2	7.60	9.20	155.00	107.50	74.20	89.10	107.00	57.95	18.20	12.20	8.80	6.80	
3	7.80	21.50	118.00	105.00	88.65	72.30	134.50	55.50	17.80	12.00	8.80	6.80	
4	8.20	22.25	93.50	90.50	140.00	67.05	128.50	48.50	17.40	12.00	9.00	6.60	
5	7.80	29.20	100.00	73.80	149.50	67.75	115.50	45.35	17.40	11.80	9.00	6.60	
6	7.20	18.60	100.00	54.45	179.80	77.80	115.50	42.20	17.40	11.60	9.00	6.60	
7	6.60	16.40	85.05	46.05	181.00	81.90	111.00	38.70	17.00	11.40	8.80	7.40	
8	6.40	14.60	60.05	37.30	203.20	84.60	129.00	35.55	17.00	11.40	8.80	7.00	
9	6.20	11.20	38.00	38.70	226.60	80.60	112.50	33.45	17.20	11.00	8.60	6.60	
10	6.00	9.60	35.55	52.70	235.00	67.75	132.50	31.00	17.40	10.80	8.60	6.60	
11	5.80	9.20	45.00	73.80	251.80	78.60	139.50	28.30	16.80	10.80	8.40	6.40	
12	5.60	22.50	107.00	61.45	316.30	96.00	141.00	25.60	16.20	10.80	8.40	6.40	
13	5.20	33.80	107.00	51.30	457.50	112.50	116.50	28.30	15.80	10.80	8.20	6.40	
14	5.20	53.75	87.30	40.10	648.00	129.00	93.00	27.70	15.60	11.00	8.20	6.20	
15	5.60	53.05	61.45	31.35	802.90	130.00	79.00	27.70	15.40	11.40	8.80	6.20	
16	6.00	57.60	50.60	27.70	820.60	124.50	75.00	29.80	15.00	12.00	8.40	6.20	
17	6.20	55.85	40.80	41.50	705.20	117.50	74.20	27.40	14.60	12.20	8.00	6.00	
18	6.80	60.75	36.95	71.25	535.00	93.50	66.35	24.75	14.40	11.80	7.60	5.80	
19	6.40	53.05	30.40	83.70	402.40	77.00	58.30	23.50	15.00	11.40	7.60	5.60	
20	5.80	32.40	25.30	71.25	291.10	105.50	53.05	20.50	15.20	11.00	7.40	5.60	
21	5.40	22.00	21.25	54.45	217.60	190.00	49.90	21.00	14.80	10.60	7.40	6.00	
22	5.20	18.40	19.20	193.00	185.80	326.80	46.75	21.00	14.40	10.40	7.40	6.80	
23	5.00	20.75	18.40	329.60	155.00	329.60	44.65	20.50	14.00	10.20	7.40	6.80	
24	4.80	19.60	30.70	320.50	130.50	291.10	44.30	20.25	13.60	10.00	7.20	6.40	
25	4.60	18.40	36.60	310.70	108.00	232.60	59.00	20.00	13.20	9.80	7.00	6.00	
26	4.40	18.20	47.80	289.00	94.00	197.80	84.15	19.80	12.80	9.80	7.00	5.80	
27	4.20	21.00	40.10	239.20	85.95	199.00	105.00	19.40	12.80	9.60	6.80	5.80	
28	4.60	19.20	37.65	191.80	89.55	167.20	127.00	19.00	12.60	9.40	6.80	5.80	
29	5.60	16.60	45.00	161.80	100.50	142.50	114.00	18.40	12.60	9.20		5.80	
30	7.20	16.40	76.60	152.50	118.00	119.00	90.00	18.20	12.40	9.00		5.60	
31		32.05		119.00	114.50		72.30		12.40	8.80		5.60	
Total	181.00	814.50	1931.85	3636.45	8203.15	4057.55	2938.95	910.40	474.60	336.40	226.20	195.00	23906.05 CMSDAY
Mean	6.03	26.27	64.39	117.30	264.62	135.25	94.80	30.35	15.31	10.85	8.08	6.29	65.50 CMS
Max	8.20	60.75	181.60	329.60	820.60	329.60	141.00	61.10	18.20	12.20	9.00	7.40	820.60 CMS
Min	4.20	7.40	18.40	27.70	74.20	67.05	44.30	18.20	12.40	8.80	6.80	5.60	4.20 CMS
Runoff	15.638	70.373	166.912	314.189	708.752	350.572	253.925	78.659	41.005	29.065	19.544	16.848	2065.483 MCM

Momentary Peak 840.40 CMS, at 59.38 M (MSL), at 24.00 Hours, on Aug 15, 2001
Runoff Yield 15.09 Liters/Second/Square KM, Momentary Peak Yield 193.641 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nam Wa at Ban Hat Khao San, Nan (N.42)

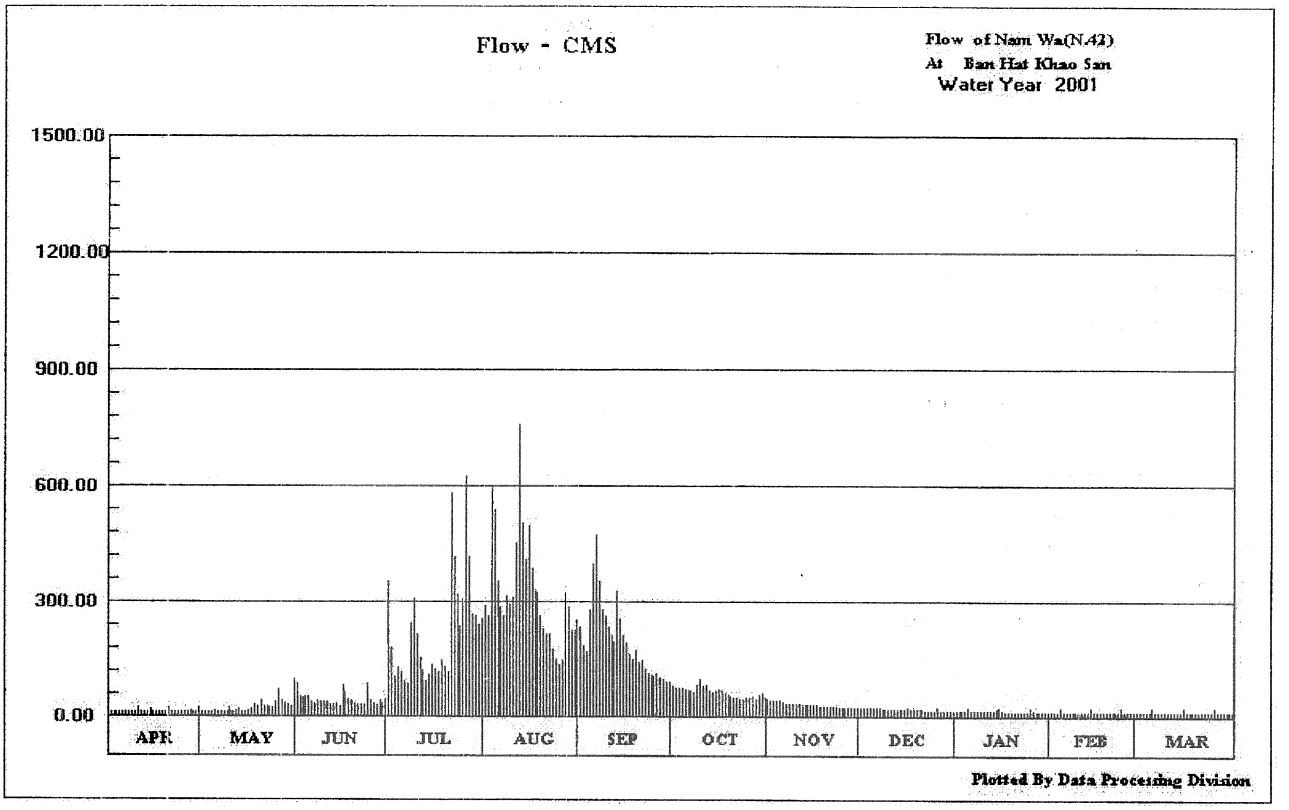
Lat 18 - 34 - 05 N. **Long** 100 - 52 - 28 E.

Location		on right bank at Ban Hat Khao San, Tambon Lai Nan.			
	Ban	Hat Khao San	**Amphoe**	Wiang Sa	**Changwat** Nan
Drainage Area		2,107 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+0.000 m. (A.D.)			
Bench Mark		B.M.- H.D.			
	Location BM	On right bank near the gage site.			
	Elevation	+11.892 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	1977 to date.			
	Rated by Float	-			
	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 146 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.50	1.43	2.77	5.78	5.21	4.62	2.65	2.08	1.71	1.58	1.51	1.45	
2	1.49	1.41	2.20	4.02	4.94	4.05	2.58	2.04	1.71	1.58	1.51	1.44	
3	1.49	1.50	2.16	3.01	7.33	3.88	2.56	2.03	1.71	1.58	1.51	1.44	
4	1.53	1.52	2.24	3.35	7.00	5.09	2.56	2.02	1.70	1.57	1.51	1.44	
5	1.50	1.62	2.20	3.17	5.77	6.12	2.50	2.02	1.70	1.57	1.51	1.43	
6	1.47	1.55	2.00	2.87	5.18	6.63	2.47	1.98	1.69	1.57	1.51	1.43	
7	1.46	1.48	1.93	2.77	4.93	5.78	2.46	1.95	1.69	1.57	1.50	1.43	
8	1.46	1.47	2.03	4.72	5.44	5.09	2.40	1.93	1.68	1.57	1.50	1.42	
9	1.45	1.46	1.99	5.37	5.25	4.92	2.71	1.91	1.68	1.57	1.50	1.42	
10	1.45	1.45	1.98	4.41	5.43	4.60	2.93	1.90	1.67	1.56	1.49	1.42	
11	1.44	1.50	1.98	3.69	6.49	4.36	2.64	1.89	1.67	1.56	1.49	1.42	
12	1.44	1.57	1.88	3.26	8.07	4.19	2.71	1.88	1.66	1.56	1.49	1.42	
13	1.55	1.65	1.83	2.88	6.81	5.55	2.47	1.86	1.66	1.58	1.49	1.42	
14	1.67	1.54	1.91	3.08	6.21	4.87	2.42	1.85	1.66	1.64	1.49	1.41	
15	1.53	1.54	1.81	3.45	6.78	4.37	2.45	1.85	1.66	1.58	1.49	1.41	
16	1.49	1.60	2.70	3.28	6.05	4.14	2.51	1.83	1.65	1.56	1.48	1.41	
17	1.47	1.68	2.40	3.17	5.55	3.79	2.44	1.82	1.64	1.55	1.48	1.41	
18	1.45	1.83	2.08	3.60	5.52	3.66	2.34	1.81	1.64	1.55	1.47	1.41	
19	1.44	1.80	2.05	3.40	4.95	3.93	2.26	1.80	1.64	1.54	1.47	1.40	
20	1.43	2.06	1.90	3.17	4.59	3.52	2.22	1.79	1.63	1.54	1.47	1.40	
21	1.43	1.80	1.84	7.26	4.41	3.60	2.17	1.78	1.63	1.53	1.47	1.40	
22	1.42	1.77	1.83	6.26	4.38	3.29	2.15	1.77	1.62	1.53	1.46	1.40	
23	1.42	1.71	1.84	5.50	3.96	3.14	2.12	1.76	1.62	1.53	1.46	1.40	
24	1.41	1.72	2.75	4.64	3.67	3.10	2.10	1.75	1.61	1.53	1.46	1.40	
25	1.41	2.01	2.07	5.38	3.44	3.05	2.14	1.75	1.61	1.54	1.45	1.44	
26	1.41	2.52	1.95	7.48	3.60	3.14	2.14	1.74	1.60	1.56	1.45	1.42	
27	1.57	2.06	1.85	6.25	5.51	2.95	2.21	1.74	1.59	1.55	1.45	1.41	
28	1.46	1.91	2.05	4.97	5.18	2.93	2.12	1.73	1.59	1.53	1.45	1.40	
29	1.43	1.86	1.93	4.92	4.54	2.82	2.31	1.72	1.59	1.52		1.39	
30	1.42	1.79	2.11	4.68	4.55	2.78	2.36	1.72	1.58	1.52		1.39	
31		2.90		4.87	4.83		2.14		1.58	1.52		1.39	
Mean	1.47	1.73	2.08	4.34	5.34	4.13	2.39	1.86	1.65	1.56	1.48	1.42	
Max	1.67	2.90	2.77	7.48	8.07	6.63	2.93	2.08	1.71	1.64	1.51	1.45	8.07
Min	1.41	1.41	1.81	2.77	3.44	2.78	2.10	1.72	1.58	1.52	1.45	1.39	1.39

Annual Max Momentary Gage Height 9.35 M (A.D). at 17.00 Hours, on Jul 26, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D). River Bed -0.16 M (A.D)
Left Bank Elevation 13.24 M (A.D)
Right Bank Elevation 12.28 M (A.D). Drainage Area 2107 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.3	11.6	92.7	358.5	294.1	237.9	84.8	48.5	26.8	19.5	15.8	12.6	
2	14.7	10.5	56.0	186.7	268.3	189.3	80.2	46.0	26.8	19.5	15.8	12.1	
3	14.7	15.3	53.5	108.7	602.0	174.8	78.9	45.4	26.8	19.5	15.8	12.1	
4	16.8	16.3	58.5	133.3	540.0	282.6	78.9	44.7	26.3	18.9	15.8	12.1	
5	15.3	21.6	56.0	119.9	357.2	401.6	75.0	44.7	26.3	18.9	15.8	11.6	
6	13.7	17.9	43.5	99.4	291.1	476.8	73.1	42.4	25.7	18.9	15.8	11.6	
7	13.2	14.2	39.5	92.7	267.3	358.5	72.4	40.6	25.7	18.9	15.3	11.6	
8	13.2	13.7	45.4	247.4	318.4	282.6	68.5	39.5	25.1	18.9	15.3	11.0	
9	12.6	13.2	42.9	310.8	298.2	266.4	88.8	38.3	25.1	18.9	15.3	11.0	
10	12.6	12.6	42.4	219.8	317.3	236.0	103.3	37.7	24.5	18.4	14.7	11.0	
11	12.1	15.3	42.4	159.2	455.5	215.6	84.1	37.2	24.5	18.4	14.7	11.0	
12	12.1	18.9	36.6	126.5	764.1	201.2	88.8	36.6	23.9	18.4	14.7	11.0	
13	17.9	23.4	33.7	100.0	505.8	330.5	73.1	35.5	23.9	19.5	14.7	11.0	
14	24.5	17.3	38.3	113.6	413.5	261.6	69.8	34.9	23.9	22.8	14.7	10.5	
15	16.8	17.3	32.6	140.8	500.8	216.5	71.8	34.9	23.9	19.5	14.7	10.5	
16	14.7	20.5	88.1	128.0	392.5	196.9	75.7	33.7	23.4	18.4	14.2	10.5	
17	13.7	25.1	68.5	119.9	330.5	167.2	71.1	33.2	22.8	17.9	14.2	10.5	
18	12.6	33.7	48.5	152.0	327.2	156.8	64.7	32.6	22.8	17.9	13.7	10.5	
19	12.1	32.0	46.6	137.0	269.2	179.1	59.7	32.0	22.8	17.3	13.7	10.0	
20	11.6	47.2	37.7	119.9	235.2	146.0	57.2	31.4	22.2	17.3	13.7	10.0	
21	11.6	32.0	34.3	588.0	219.8	152.0	54.1	30.8	22.2	16.8	13.7	10.0	
22	11.0	30.3	33.7	421.0	217.3	128.8	52.9	30.3	21.6	16.8	13.2	10.0	
23	11.0	26.8	34.3	325.0	181.6	117.8	51.0	29.7	21.6	16.8	13.2	10.0	
24	10.5	27.4	91.4	239.8	157.6	115.0	49.7	29.1	21.1	16.8	13.2	10.0	
25	10.5	44.1	47.9	311.9	140.0	111.5	52.3	29.1	21.1	17.3	12.6	12.1	
26	10.5	76.3	40.6	632.0	152.0	117.8	52.3	28.5	20.5	18.4	12.6	11.0	
27	18.9	47.2	34.9	419.5	326.1	104.7	56.6	28.5	20.0	17.9	12.6	10.5	
28	13.2	38.3	46.6	271.1	291.1	103.3	51.0	28.0	20.0	16.8	12.6	10.0	
29	11.6	35.5	39.5	266.4	230.9	96.0	62.9	27.4	20.0	16.3		9.5	
30	11.0	31.4	50.4	243.6	231.8	93.4	66.0	27.4	19.5	16.3		9.5	
31		101.4		261.6	257.8		52.3		19.5	16.3		9.5	
Total	410.0	888.3	1457.0	7154.0	10154.2	6118.2	2121.0	1058.6	720.3	564.2	402.1	334.3	31382.2 CMSDAY
Mean	13.7	28.7	48.6	230.8	327.6	203.9	68.4	35.3	23.2	18.2	14.4	10.8	86.0 CMS
Max	24.5	101.4	92.7	632.0	764.1	476.8	103.3	48.5	26.8	22.8	15.8	12.6	764.1 CMS
Min	10.5	10.5	32.6	92.7	140.0	93.4	49.7	27.4	19.5	16.3	12.6	9.5	9.5 CMS
Runoff	35.42	76.75	125.88	618.11	877.32	528.61	183.25	91.46	62.23	48.75	34.74	28.88	2711.42 MCM

Momentary Peak 1105.50 CMS, at 9.35 M (A.D), at 17.00 Hours, on Jul 26, 2001

Runoff Yield 40.81 Liters/Second/Square KM, Momentary Peak Yield 524.680 Liters/Second/Square KM

WATER YEAR : 2001

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 at Ban Nam Yao.

Ban Nam Yao **Amphoe** Pua **Changwat** Nan

Drainage Area 155 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 +6.052 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 Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

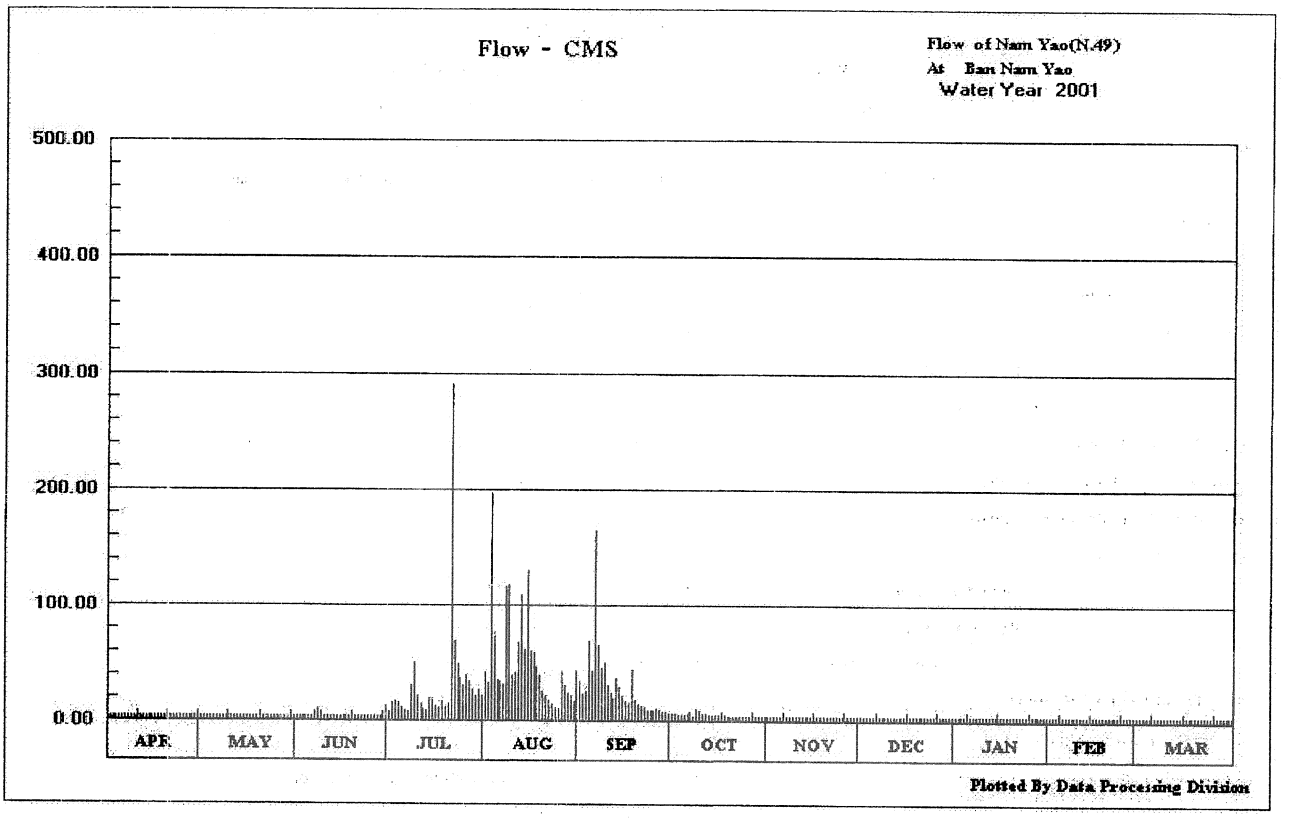
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.41	1.39	1.58	1.83	2.39	2.31	1.79	1.65	1.56	1.85	1.63	1.56	
2	1.41	1.40	1.55	2.02	2.29	2.14	1.78	1.65	1.56	1.85	1.63	1.56	
3	1.40	1.42	1.58	2.04	3.30	2.19	1.75	1.65	1.56	1.85	1.63	1.56	
4	1.40	1.44	1.60	2.03	2.71	2.65	1.75	1.64	1.56	1.85	1.61	1.56	
5	1.40	1.46	1.64	1.94	2.32	2.41	1.75	1.64	1.56	1.85	1.60	1.56	
6	1.40	1.43	1.57	1.87	2.30	3.18	1.78	1.63	1.55	1.85	1.60	1.56	
7	1.40	1.41	1.84	1.84	2.27	2.62	1.72	1.63	1.55	1.85	1.60	1.55	
8	1.40	1.41	1.90	2.25	2.96	2.43	1.71	1.63	1.55	1.85	1.59	1.55	
9	1.40	1.40	1.68	2.49	2.97	2.49	1.90	1.63	1.55	1.85	1.59	1.55	
10	1.40	1.40	1.64	2.13	2.37	2.25	1.86	1.62	1.55	1.85	1.59	1.55	
11	1.39	1.44	1.60	2.01	2.39	2.16	1.79	1.61	1.54	1.85	1.58	1.55	
12	1.39	1.46	1.58	1.92	2.64	2.08	1.78	1.61	1.54	1.85	1.58	1.55	
13	1.47	1.43	1.58	1.86	2.92	2.33	1.75	1.60	1.54	1.85	1.58	1.55	
14	1.45	1.47	1.58	2.09	2.60	2.24	1.74	1.60	1.54	1.85	1.58	1.55	
15	1.42	1.53	1.58	2.08	3.03	2.13	1.73	1.59	1.54	1.85	1.58	1.55	
16	1.41	1.48	1.71	1.96	2.58	2.05	1.73	1.59	1.54	1.84	1.58	1.60	
17	1.40	1.45	1.63	1.94	2.57	2.02	1.75	1.59	1.86	1.84	1.58	1.64	
18	1.40	1.47	1.60	2.05	2.45	2.42	1.74	1.59	1.87	1.84	1.57	1.64	
19	1.40	1.46	1.58	1.95	2.36	2.07	1.71	1.58	1.87	1.84	1.57	1.64	
20	1.40	1.49	1.60	2.01	2.18	2.01	1.70	1.58	1.87	1.84	1.57	1.64	
21	1.40	1.47	1.71	3.60	2.12	1.98	1.69	1.58	1.87	1.84	1.56	1.64	
22	1.40	1.48	1.64	2.65	2.06	1.94	1.68	1.58	1.87	1.81	1.56	1.75	
23	1.40	1.48	1.62	2.47	2.00	1.89	1.67	1.57	1.87	1.81	1.56	1.75	
24	1.39	1.64	1.61	2.34	1.95	1.87	1.67	1.57	1.87	1.81	1.56	1.75	
25	1.39	1.72	1.58	2.26	1.92	1.88	1.67	1.57	1.87	1.81	1.56	1.75	
26	1.40	1.60	1.56	2.36	2.41	1.90	1.67	1.57	1.87	1.81	1.56	1.75	
27	1.40	1.55	1.66	2.30	2.26	1.86	1.69	1.56	1.86	1.66	1.56	1.74	
28	1.40	1.54	1.65	2.21	2.16	1.84	1.68	1.56	1.85	1.66	1.56	1.74	
29	1.39	1.54	1.64	2.13	2.13	1.82	1.72	1.56	1.85	1.64		1.74	
30	1.39	1.51	1.97	2.20	2.05	1.81	1.69	1.56	1.85	1.64		1.74	
31		1.54		2.13	2.41		1.66		1.85	1.64		1.74	
Mean	1.40	1.48	1.64	2.16	2.42	2.17	1.73	1.60	1.70	1.81	1.58	1.63	
Max	1.47	1.72	1.97	3.60	3.30	3.18	1.90	1.65	1.87	1.85	1.63	1.75	3.60
Min	1.39	1.39	1.55	1.83	1.92	1.81	1.66	1.56	1.54	1.64	1.56	1.55	1.39

Annual Max Momentary Gage Height 3.66 M (A.D), at 12.00 Hours, on Jul 21, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.12 M (A.D)
Left Bank Elevation 9.20 M (A.D)
Right Bank Elevation 11.24 M (A.D), Drainage Area 155 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.95	0.79	3.01	8.88	42.65	35.85	7.64	4.30	2.72	1.46	0.87	0.70	
2	0.95	0.85	2.57	16.44	34.25	23.60	7.38	4.30	2.72	1.46	0.87	0.70	
3	0.85	1.05	3.01	17.58	198.00	26.85	6.60	4.30	2.72	1.46	0.87	0.70	
4	0.85	1.25	3.30	17.01	77.90	70.00	6.60	4.10	2.72	1.46	0.82	0.70	
5	0.85	1.45	4.10	12.81	36.70	44.45	6.60	4.10	2.72	1.46	0.80	0.70	
6	0.85	1.15	2.87	10.18	35.00	166.10	7.38	3.90	2.57	1.46	0.80	0.70	
7	0.85	0.95	9.20	9.20	32.75	66.10	5.82	3.90	2.57	1.46	0.80	0.67	
8	0.85	0.95	11.15	31.25	117.30	46.35	5.56	3.90	2.57	1.46	0.78	0.67	
9	0.85	0.85	4.90	52.05	119.10	52.05	11.15	3.90	2.57	1.46	0.78	0.67	
10	0.85	0.85	4.10	22.95	40.95	31.25	9.85	3.70	2.57	1.46	0.78	0.67	
11	0.79	1.25	3.30	15.87	42.65	24.90	7.64	3.50	2.43	1.46	0.75	0.67	
12	0.79	1.45	3.01	11.98	68.70	19.86	7.38	3.50	2.43	1.46	0.75	0.67	
13	1.55	1.15	3.01	9.85	110.10	37.55	6.60	3.30	2.43	1.46	0.75	0.67	
14	1.35	1.55	3.01	20.43	63.50	30.50	6.34	3.30	2.43	1.46	0.75	0.67	
15	1.05	2.28	3.01	19.86	131.10	22.95	6.08	3.16	2.43	1.46	0.75	0.67	
16	0.95	1.65	5.56	13.64	61.40	18.15	6.08	3.16	2.43	1.43	0.75	0.80	
17	0.85	1.35	3.90	12.81	60.35	16.44	6.60	3.16	1.49	1.43	0.75	0.90	
18	0.85	1.55	3.30	18.15	48.25	45.40	6.34	3.16	1.52	1.43	0.73	0.90	
19	0.85	1.45	3.01	13.23	40.10	19.29	5.56	3.01	1.52	1.43	0.73	0.90	
20	0.85	1.75	3.30	15.87	26.20	15.87	5.30	3.01	1.52	1.43	0.73	0.90	
21	0.85	1.55	5.56	293.50	22.30	14.47	5.10	3.01	1.52	1.43	0.70	0.90	
22	0.85	1.65	4.10	70.00	18.72	12.81	4.90	3.01	1.52	1.35	0.70	1.19	
23	0.85	1.65	3.70	50.15	15.30	10.82	4.70	2.87	1.52	1.35	0.70	1.19	
24	0.79	4.10	3.50	38.40	13.23	10.18	4.70	2.87	1.52	1.35	0.70	1.19	
25	0.79	5.82	3.01	32.00	11.98	10.50	4.70	2.87	1.52	1.35	0.70	1.19	
26	0.85	3.30	2.72	40.10	44.45	11.15	4.70	2.87	1.52	1.35	0.70	1.19	
27	0.85	2.57	4.50	35.00	32.00	9.85	5.10	2.72	1.49	0.95	0.70	1.16	
28	0.85	2.43	4.30	28.25	24.90	9.20	4.90	2.72	1.46	0.95	0.70	1.16	
29	0.79	2.43	4.10	22.95	22.95	8.55	5.82	2.72	1.46	0.90		1.16	
30	0.79	1.99	14.06	27.50	18.15	8.22	5.10	2.72	1.46	0.90		1.16	
31		2.43		22.95	44.45		4.50		1.46	0.90		1.16	
Total	26.84	55.49	132.17	1010.84	1655.38	919.26	192.72	101.04	63.53	41.83	21.21	27.28	4247.59 CMSDAY
Mean	0.89	1.79	4.41	32.61	53.40	30.64	6.22	3.37	2.05	1.35	0.76	0.88	11.64 CMS
Max	1.55	5.82	14.06	293.50	198.00	166.10	11.15	4.30	2.72	1.46	0.87	1.19	293.50 CMS
Min	0.79	0.79	2.57	8.88	11.98	8.22	4.50	2.72	1.46	0.90	0.70	0.67	0.67 CMS
Runoff	2.319	4.794	11.419	87.337	143.025	79.424	16.651	8.730	5.489	3.614	1.833	2.357	366.992 MCM

Momentary Peak 315.40 CMS, at 3.66 M (A.D), at 12.00 Hours, on Jul 21, 2001

Runoff Yield 75.08 Liters/Second/Square KM, Momentary Peak Yield 2034.839 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 111 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +140.210 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +148.696 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1979 to date.

Rating Operation

Period of Rating 1979 to date.

Rated by Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Fairly stable.

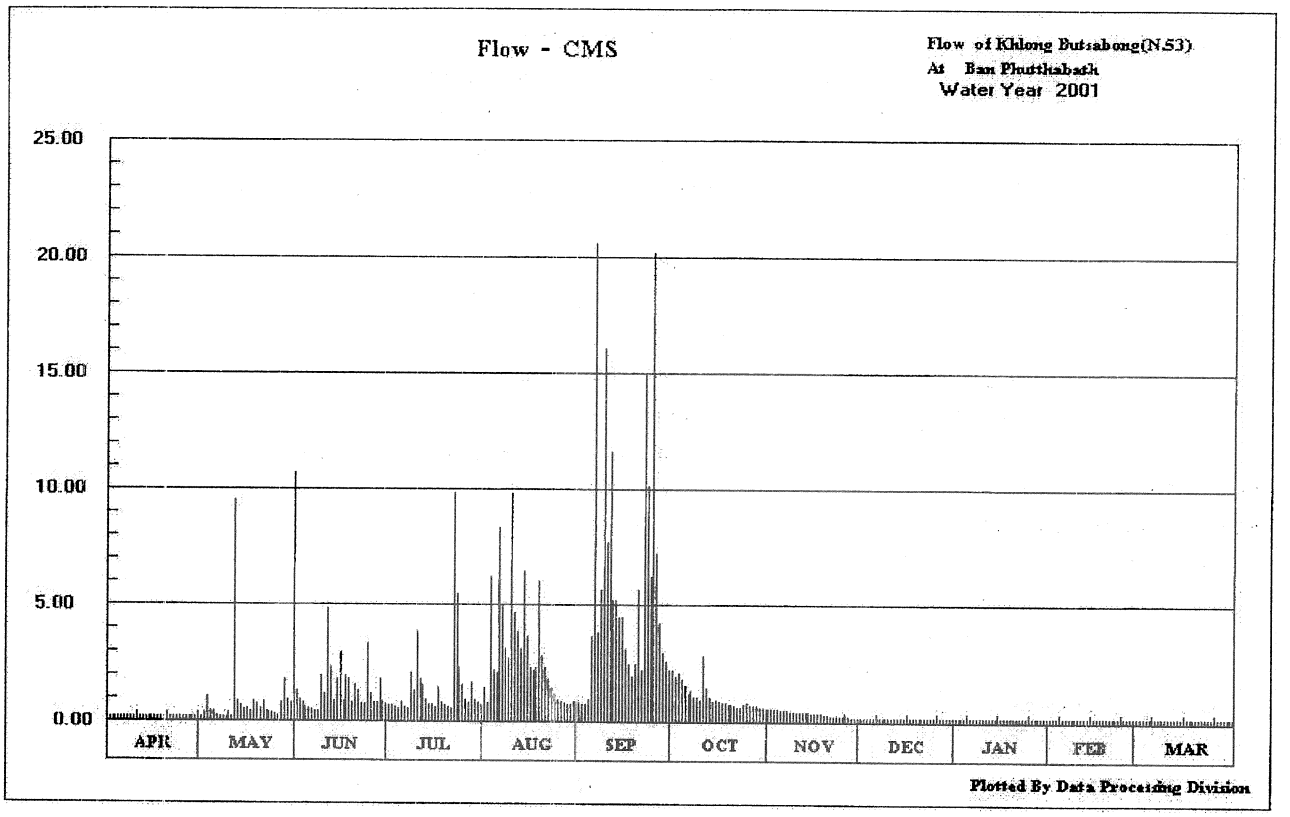
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	140.41	140.38	140.83	140.72	140.84	140.77	140.90	140.69	140.56	140.45	140.25	140.21	
2	140.51	140.61	140.80	140.72	140.77	140.75	140.88	140.69	140.56	140.44	140.24	140.21	
3	140.49	140.81	140.76	140.71	141.14	140.74	140.89	140.68	140.56	140.45	140.23	140.21	
4	140.47	140.64	140.70	140.69	140.90	140.80	140.87	140.68	140.56	140.44	140.20	140.21	
5	140.46	140.63	140.68	140.77	140.89	141.01	140.85	140.67	140.56	140.44	140.19	140.21	
6	140.45	140.58	140.66	140.70	141.23	141.59	140.82	140.67	140.55	140.44	140.20	140.21	
7	140.44	140.56	140.64	140.69	141.08	141.02	140.83	140.66	140.55	140.43	140.20	140.21	
8	140.42	140.55	140.63	140.89	140.97	141.11	140.81	140.64	140.55	140.43	140.21	140.21	
9	140.42	140.54	140.88	140.83	140.94	141.47	140.81	140.64	140.54	140.42	140.21	140.21	
10	140.40	140.51	140.82	141.02	141.28	141.21	140.80	140.63	140.54	140.42	140.21	140.21	
11	140.39	140.52	141.07	140.87	141.06	141.34	140.95	140.63	140.54	140.41	140.21	140.21	
12	140.39	141.27	140.91	140.85	141.02	141.09	140.84	140.63	140.53	140.41	140.21	140.21	
13	140.38	140.79	140.78	140.80	140.97	141.09	140.81	140.63	140.53	140.40	140.21	140.21	
14	140.36	140.73	140.87	140.75	141.15	141.05	140.79	140.63	140.53	140.40	140.21	140.21	
15	140.34	140.67	140.96	140.74	141.01	141.05	140.80	140.62	140.52	140.39	140.21	140.21	
16	140.40	140.69	140.79	140.71	140.91	140.97	140.78	140.62	140.52	140.39	140.21	140.21	
17	140.40	140.65	140.88	140.84	140.90	140.92	140.76	140.62	140.51	140.38	140.21	140.21	
18	140.39	140.79	140.87	140.76	140.91	140.88	140.76	140.61	140.51	140.38	140.21	140.21	
19	140.38	140.74	140.77	140.73	141.13	140.92	140.75	140.60	140.51	140.37	140.21	140.21	
20	140.37	140.68	140.85	140.71	140.95	141.11	140.74	140.60	140.50	140.36	140.21	140.21	
21	140.35	140.78	140.83	140.69	140.91	140.90	140.73	140.59	140.50	140.36	140.21	140.21	
22	140.35	140.55	140.75	141.28	140.87	141.44	140.71	140.59	140.49	140.35	140.21	140.21	
23	140.33	140.52	140.74	141.10	140.84	141.29	140.71	140.59	140.49	140.34	140.21	140.21	
24	140.32	140.61	140.99	140.91	140.82	141.14	140.74	140.58	140.48	140.33	140.21	140.21	
25	140.31	140.60	140.82	140.85	140.80	141.58	140.77	140.58	140.48	140.33	140.21	140.21	
26	140.30	140.59	140.77	140.80	140.78	141.19	140.73	140.58	140.47	140.32	140.21	140.21	
27	140.29	140.76	140.76	140.77	140.77	141.04	140.72	140.58	140.46	140.31	140.21	140.21	
28	140.28	140.87	140.87	140.86	140.74	140.96	140.73	140.57	140.46	140.30	140.21	140.21	
29	140.27	140.80	140.78	140.80	140.74	140.93	140.71	140.57	140.46	140.29		140.21	
30	140.26	140.77	140.74	140.76	140.79	140.90	140.70	140.57	140.46	140.28		140.21	
31		141.31		140.74	140.79		140.68		140.45	140.27		140.21	
Mean	140.38	140.70	140.81	140.81	140.93	141.08	140.79	140.62	140.51	140.38	140.21	140.21	
Max	140.51	141.31	141.07	141.28	141.28	141.59	140.95	140.69	140.56	140.45	140.25	140.21	141.59
Min	140.26	140.38	140.63	140.69	140.74	140.74	140.68	140.57	140.45	140.27	140.19	140.21	140.19

Annual Max Momentary Gage Height 142.21 M (MSL), at 6.00 Hours, on Sep 6, 2001
Zero Gage at Bottom Elevation 140.21 M (MSL), River Bed 140.03 M (MSL)
Left Bank Elevation 148.67 M (MSL)
Right Bank Elevation 148.65 M (MSL), Drainage Area 111 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	1.37	0.76	1.50	0.91	2.25	0.67	0.22	0.00	0.00	0.00	
2	0.00	0.43	1.00	0.76	0.91	0.85	2.00	0.67	0.22	0.00	0.00	0.00	
3	0.00	1.12	0.88	0.73	6.30	0.82	2.12	0.64	0.22	0.00	0.00	0.00	
4	0.00	0.52	0.70	0.67	2.25	1.00	1.87	0.64	0.22	0.00	0.00	0.00	
5	0.00	0.49	0.64	0.91	2.12	3.70	1.63	0.61	0.22	0.00	0.00	0.00	
6	0.00	0.31	0.58	0.70	8.40	20.62	1.25	0.61	0.18	0.00	0.00	0.00	
7	0.00	0.22	0.52	0.67	5.10	3.90	1.37	0.58	0.18	0.00	0.00	0.00	
8	0.00	0.18	0.49	2.12	3.13	5.70	1.12	0.52	0.18	0.00	0.00	0.00	
9	0.00	0.13	2.00	1.37	2.75	16.13	1.12	0.52	0.13	0.00	0.00	0.00	
10	0.00	0.00	1.25	3.90	9.90	7.80	1.00	0.49	0.13	0.00	0.00	0.00	
11	0.00	0.04	4.90	1.87	4.70	11.70	2.87	0.49	0.13	0.00	0.00	0.00	
12	0.00	9.60	2.38	1.63	3.90	5.30	1.50	0.49	0.09	0.00	0.00	0.00	
13	0.00	0.97	0.94	1.00	3.13	5.30	1.12	0.49	0.09	0.00	0.00	0.00	
14	0.00	0.79	1.87	0.85	6.50	4.50	0.97	0.49	0.09	0.00	0.00	0.00	
15	0.00	0.61	3.00	0.82	3.70	4.50	1.00	0.46	0.04	0.00	0.00	0.00	
16	0.00	0.67	0.97	0.73	2.38	3.13	0.94	0.46	0.04	0.00	0.00	0.00	
17	0.00	0.55	2.00	1.50	2.25	2.50	0.88	0.46	0.00	0.00	0.00	0.00	
18	0.00	0.97	1.87	0.88	2.38	2.00	0.88	0.43	0.00	0.00	0.00	0.00	
19	0.00	0.82	0.91	0.79	6.10	2.50	0.85	0.40	0.00	0.00	0.00	0.00	
20	0.00	0.64	1.63	0.73	2.87	5.70	0.82	0.40	0.00	0.00	0.00	0.00	
21	0.00	0.94	1.37	0.67	2.38	2.25	0.79	0.36	0.00	0.00	0.00	0.00	
22	0.00	0.55	0.85	9.90	1.87	15.00	0.73	0.36	0.00	0.00	0.00	0.00	
23	0.00	0.46	0.82	5.50	1.50	10.20	0.73	0.36	0.00	0.00	0.00	0.00	
24	0.00	0.43	3.38	2.38	1.25	6.30	0.82	0.31	0.00	0.00	0.00	0.00	
25	0.00	0.40	1.25	1.63	1.00	20.25	0.91	0.31	0.00	0.00	0.00	0.00	
26	0.00	0.36	0.91	1.00	0.94	7.30	0.79	0.31	0.00	0.00	0.00	0.00	
27	0.00	0.88	0.88	0.91	0.91	4.30	0.76	0.31	0.00	0.00	0.00	0.00	
28	0.00	1.87	1.87	1.75	0.82	3.00	0.79	0.27	0.00	0.00	0.00	0.00	
29	0.00	1.00	0.94	1.00	0.82	2.62	0.73	0.27	0.00	0.00		0.00	
30	0.00	0.91	0.82	0.88	0.97	2.25	0.70	0.27	0.00	0.00		0.00	
31		10.80		0.82	0.97		0.64		0.00	0.00		0.00	
Total	0.00	37.66	42.99	49.83	93.70	182.03	35.95	13.65	2.38	0.00	0.00	0.00	458.19 CMSDAY
Mean	0.00	1.21	1.43	1.61	3.02	6.07	1.16	0.46	0.08	0.00	0.00	0.00	1.26 CMS
Max	0.00	10.80	4.90	9.90	9.90	20.62	2.87	0.67	0.22	0.00	0.00	0.00	20.62 CMS
Min	0.00	0.00	0.49	0.67	0.82	0.82	0.64	0.27	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.000	3.254	3.714	4.305	8.096	15.727	3.106	1.179	0.206	0.000	0.000	0.000	39.588 MCM

Momentary Peak 55.13 CMS, at 142.21 M (MSL), at 6.00 Hours, on Sep 6, 2001
Runoff Yield 11.31 Liters/Second/Square KM, Momentary Peak Yield 496.667 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Khlong Wang Prong at Ban Wang Prong, Phetchabun (N.54)

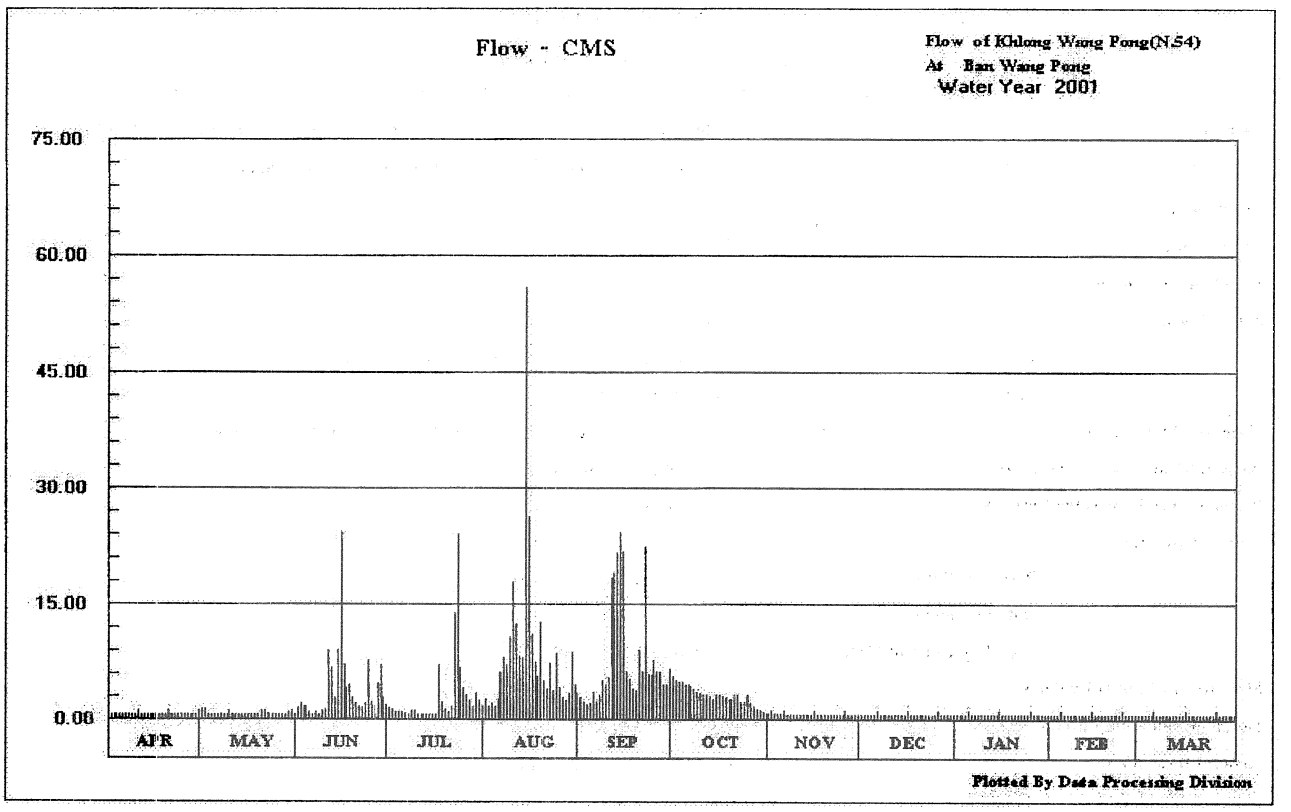
Lat 16 - 19 - 34 N. **Long** 100 - 48 - 17 E.

Location		on left bank at the bridge on road.			
	Ban Wang Prong	**Amphoe** Wang Prong		**Changwat** Phetchabun	
Drainage Area		185 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+104.350 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On left bank at the abutment of the bridge.			
	Elevation	+110.240 m. (M.S.L.)			
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.			
Period of Available Gage Records		1982 to date.			
Rating Operation					
	Period of Rating	1999 to date.			
	Rated by Float	-			
	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 27 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	104.05	104.34	104.36	104.35	104.47	104.48	104.72	104.26	104.14	104.02	104.00	103.97	
2	104.03	104.34	104.42	104.32	104.38	104.44	104.67	104.30	104.12	104.03	104.00	103.97	
3	104.05	104.24	104.39	104.28	104.42	104.40	104.65	104.25	104.09	104.02	104.00	103.97	
4	104.05	104.14	104.37	104.28	104.39	104.41	104.66	104.26	104.08	104.01	104.00	103.97	
5	104.04	104.12	104.29	104.27	104.47	104.55	104.63	104.25	104.07	104.01	103.99	103.97	
6	104.04	104.12	104.23	104.25	104.76	104.43	104.63	104.24	104.06	104.01	103.99	103.97	
7	104.00	104.09	104.27	104.22	104.88	104.50	104.61	104.24	104.06	104.01	103.99	103.97	
8	104.00	104.09	104.23	104.30	104.83	104.67	104.59	104.23	104.06	104.01	103.99	103.97	
9	104.01	104.09	104.20	104.25	105.05	104.62	104.55	104.23	104.05	104.01	103.99	103.97	
10	104.00	104.09	104.32	104.16	105.44	104.70	104.54	104.22	104.05	104.01	104.00	103.97	
11	103.99	104.09	104.95	104.10	105.15	105.47	104.51	104.21	104.05	104.01	104.00	103.97	
12	104.00	104.09	104.80	104.16	104.90	105.49	104.52	104.20	104.05	104.01	103.99	103.97	
13	103.99	104.09	104.48	104.12	104.89	105.62	104.50	104.20	104.05	104.01	103.99	103.97	
14	103.99	104.06	104.95	104.09	106.96	105.75	104.46	104.20	104.05	104.02	103.99	103.97	
15	104.00	104.05	105.75	104.16	105.84	105.63	104.51	104.23	104.05	104.01	103.99	103.97	
16	104.00	104.05	104.82	104.09	105.07	104.75	104.51	104.21	104.05	104.01	103.99	103.97	
17	104.00	104.15	104.60	104.82	104.85	104.69	104.50	104.20	104.05	104.04	103.99	103.97	
18	104.00	104.23	104.63	104.44	104.71	104.59	104.48	104.19	104.05	104.04	103.99	103.97	
19	103.99	104.15	104.48	104.34	105.16	104.56	104.46	104.19	104.05	104.03	103.99	103.97	
20	103.99	104.26	104.41	104.29	104.67	104.94	104.46	104.17	104.05	104.03	103.99	103.97	
21	104.00	104.31	104.38	104.38	104.59	104.76	104.52	104.17	104.04	104.03	103.99	103.97	
22	104.00	104.25	104.36	105.23	104.84	105.66	104.52	104.17	104.04	104.02	103.99	103.97	
23	104.00	104.16	104.42	105.74	104.57	104.73	104.43	104.17	104.04	104.02	103.99	103.97	
24	104.00	104.13	104.86	104.80	104.92	104.73	104.43	104.17	104.04	104.02	103.99	103.97	
25	104.00	104.14	104.44	104.60	104.60	104.86	104.51	104.16	104.04	104.01	103.99	103.97	
26	103.98	104.14	104.37	104.52	104.49	104.75	104.41	104.16	104.04	104.01	103.99	103.97	
27	103.98	104.11	104.64	104.45	104.45	104.75	104.39	104.16	104.04	104.01	103.99	103.97	
28	103.98	104.15	104.82	104.39	104.54	104.63	104.34	104.16	104.03	104.01	103.99	103.97	
29	103.98	104.29	104.48	104.54	104.93	104.63	104.31	104.16	104.03	104.01		103.97	
30	103.98	104.21	104.40	104.45	104.62	104.79	104.29	104.15	104.03	104.01		103.97	
31		104.23		104.39	104.53		104.26		104.03	104.00		103.97	
Mean	104.00	104.16	104.54	104.41	104.85	104.83	104.50	104.20	104.05	104.02	103.99	103.97	
Max	104.05	104.34	105.75	105.74	106.96	105.75	104.72	104.30	104.14	104.04	104.00	103.97	106.96
Min	103.98	104.05	104.20	104.09	104.38	104.40	104.26	104.15	104.03	104.00	103.99	103.97	103.97

Annual Max Momentary Gage Height 107.55 M (MSL), at 9.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 104.35 M (MSL), River Bed 102.66 M (MSL)
Left Bank Elevation 110.22 M (MSL)
Right Bank Elevation 110.25 M (MSL), Drainage Area 185 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.30	1.65	1.80	1.72	2.91	3.02	5.96	1.05	0.48	0.24	0.20	0.15	
2	0.26	1.65	2.33	1.50	1.95	2.56	5.31	1.35	0.44	0.26	0.20	0.15	
3	0.30	0.90	2.02	1.20	2.33	2.10	5.05	0.98	0.38	0.24	0.20	0.15	
4	0.30	0.48	1.88	1.20	2.02	2.22	5.18	1.05	0.36	0.22	0.20	0.15	
5	0.28	0.44	1.28	1.12	2.91	3.83	4.79	0.98	0.34	0.22	0.18	0.15	
6	0.28	0.44	0.83	0.98	6.48	2.44	4.79	0.90	0.32	0.22	0.18	0.15	
7	0.20	0.38	1.12	0.75	8.24	3.25	4.53	0.90	0.32	0.22	0.18	0.15	
8	0.20	0.38	0.83	1.35	7.46	5.31	4.28	0.83	0.32	0.22	0.18	0.15	
9	0.22	0.38	0.60	0.98	10.95	4.66	3.83	0.83	0.30	0.22	0.18	0.15	
10	0.20	0.38	1.50	0.52	18.10	5.70	3.71	0.75	0.30	0.22	0.20	0.15	
11	0.18	0.38	9.32	0.40	12.65	18.70	3.37	0.68	0.30	0.22	0.20	0.15	
12	0.20	0.38	7.00	0.52	8.55	19.10	3.48	0.60	0.30	0.22	0.18	0.15	
13	0.18	0.38	3.02	0.44	8.39	21.73	3.25	0.60	0.30	0.22	0.18	0.15	
14	0.18	0.32	9.32	0.38	56.06	24.52	2.79	0.60	0.30	0.24	0.18	0.15	
15	0.20	0.30	24.52	0.52	26.54	21.94	3.37	0.83	0.30	0.22	0.18	0.15	
16	0.20	0.30	7.31	0.38	11.29	6.35	3.37	0.68	0.30	0.22	0.18	0.15	
17	0.20	0.50	4.40	7.31	7.77	5.57	3.25	0.60	0.30	0.28	0.18	0.15	
18	0.20	0.83	4.79	2.56	5.83	4.28	3.02	0.58	0.30	0.28	0.18	0.15	
19	0.18	0.50	3.02	1.65	12.82	3.94	2.79	0.58	0.30	0.26	0.18	0.15	
20	0.18	1.05	2.22	1.28	5.31	9.17	2.79	0.54	0.30	0.26	0.18	0.15	
21	0.20	1.42	1.95	1.95	4.28	6.48	3.48	0.54	0.28	0.26	0.18	0.15	
22	0.20	0.98	1.80	14.07	7.62	22.59	3.48	0.54	0.28	0.24	0.18	0.15	
23	0.20	0.52	2.33	24.31	4.06	6.09	2.44	0.54	0.28	0.24	0.18	0.15	
24	0.20	0.46	7.93	7.00	8.86	6.09	2.44	0.54	0.28	0.24	0.18	0.15	
25	0.20	0.48	2.56	4.40	4.40	7.93	3.37	0.52	0.28	0.22	0.18	0.15	
26	0.16	0.48	1.88	3.48	3.13	6.35	2.22	0.52	0.28	0.22	0.18	0.15	
27	0.16	0.42	4.92	2.67	2.67	6.35	2.02	0.52	0.28	0.22	0.18	0.15	
28	0.16	0.50	7.31	2.02	3.71	4.79	1.65	0.52	0.26	0.22	0.18	0.15	
29	0.16	1.28	3.02	3.71	9.01	4.79	1.42	0.52	0.26	0.22		0.15	
30	0.16	0.68	2.10	2.67	4.66	6.87	1.28	0.50	0.26	0.22		0.15	
31		0.83		2.02	3.59		1.05		0.26	0.20		0.15	
Total	6.24	20.07	124.91	95.06	274.55	248.72	103.76	21.17	9.56	7.20	5.16	4.65	921.05 CMSDAY
Mean	0.21	0.65	4.16	3.07	8.86	8.29	3.35	0.71	0.31	0.23	0.18	0.15	2.52 CMS
Max	0.30	1.65	24.52	24.31	56.06	24.52	5.96	1.35	0.48	0.28	0.20	0.15	56.06 CMS
Min	0.16	0.30	0.60	0.38	1.95	2.10	1.05	0.50	0.26	0.20	0.18	0.15	0.15 CMS
Runoff	0.539	1.734	10.792	8.213	23.721	21.489	8.965	1.829	0.826	0.622	0.446	0.402	79.579 MCM

Momentary Peak 73.48 CMS, at 107.55 M (MSL), at 18.00 Hours, on Aug 14, 2001

Runoff Yield 13.64 Liters/Second/Square KM, Momentary Peak Yield 397.189 Liters/Second/Square KM

WATER YEAR : 2001

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 Trakarn road from Tambon Pa Daeng.

Ban Tha Sakae **Amphoe** Chat Trakan **Changwat** Phitsanulok

Drainage Area 967 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +182.830 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 13 meters from the top staff gage.

Elevation +191.414 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1983 to date.

Rating Operation

Period of Rating 1994 to date.

Rated by Float -

Rated by Current Meter 1994 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

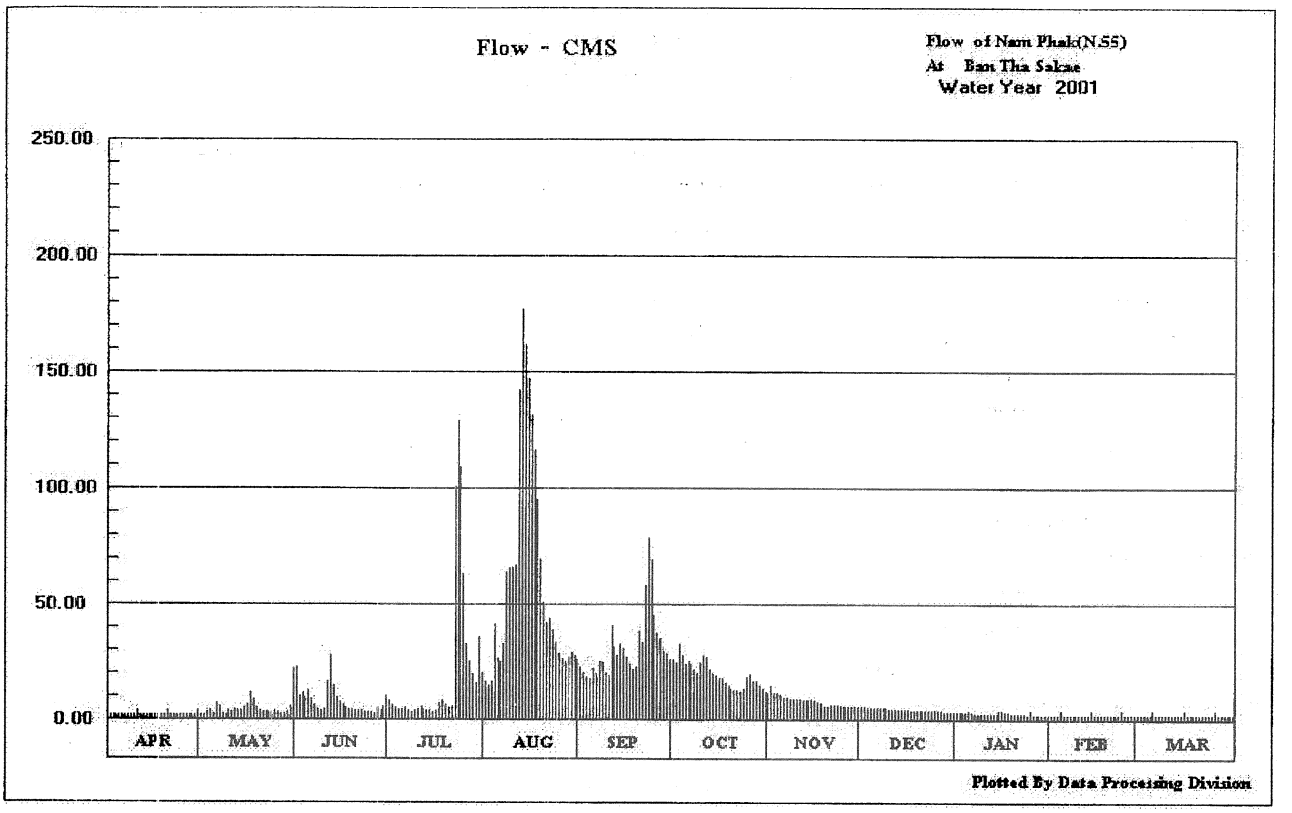
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	183.48	183.50	185.09	184.14	184.71	185.08	185.27	184.35	183.90	183.70	183.58	183.49	
2	183.50	183.54	184.28	183.97	184.57	184.93	185.17	184.59	183.90	183.70	183.57	183.49	
3	183.52	183.70	184.38	183.87	184.72	184.82	185.64	184.38	183.89	183.69	183.56	183.48	
4	183.51	183.78	184.22	183.84	186.07	184.79	185.37	184.37	183.88	183.69	183.56	183.48	
5	183.48	183.65	184.44	183.81	185.28	185.05	185.13	184.30	183.87	183.68	183.56	183.48	
6	183.47	184.02	184.18	183.86	185.22	184.91	185.23	184.22	183.87	183.67	183.55	183.50	
7	183.47	183.93	183.97	183.76	185.64	185.22	185.14	184.20	183.86	183.66	183.54	183.48	
8	183.46	183.56	183.84	183.70	187.08	185.17	185.01	184.17	183.86	183.65	183.55	183.48	
9	183.45	183.56	183.69	183.74	187.15	184.92	184.93	184.15	183.85	183.65	183.56	183.48	
10	183.44	183.52	183.81	183.80	187.15	184.86	185.20	184.15	183.84	183.64	183.56	183.48	
11	183.43	183.57	184.72	183.91	187.21	186.06	185.37	184.16	183.83	183.64	183.56	183.48	
12	183.43	183.82	185.37	183.82	189.84	185.58	185.33	184.14	183.82	183.64	183.55	183.48	
13	183.43	183.73	184.59	183.78	190.95	185.37	184.99	184.11	183.82	183.63	183.54	183.49	
14	183.51	183.74	184.23	183.73	190.48	185.63	184.89	184.13	183.81	183.63	183.53	183.49	
15	183.49	183.87	184.05	183.69	190.00	185.53	184.87	184.18	183.81	183.75	183.52	183.49	
16	183.47	183.96	183.98	183.78	189.48	185.32	184.79	184.11	183.80	183.73	183.51	183.49	
17	183.46	184.36	183.89	184.04	188.98	185.13	184.79	184.07	183.78	183.68	183.53	183.49	
18	183.44	184.17	183.82	184.11	188.25	185.01	184.66	184.04	183.78	183.67	183.51	183.49	
19	183.44	183.85	183.80	183.97	187.30	185.08	184.56	183.94	183.78	183.65	183.51	183.53	
20	183.43	183.75	183.76	183.86	186.54	185.93	184.48	183.90	183.77	183.64	183.50	183.60	
21	183.42	183.68	183.76	183.94	186.12	185.66	184.45	183.96	183.77	183.63	183.50	183.59	
22	183.41	183.67	183.73	188.46	186.20	186.85	184.44	183.96	183.76	183.62	183.50	183.54	
23	183.41	183.67	183.69	189.41	185.96	187.66	184.41	183.96	183.75	183.61	183.50	183.52	
24	183.41	183.65	183.68	188.73	185.66	187.32	184.49	183.95	183.74	183.60	183.50	183.51	
25	183.40	183.75	183.71	187.07	185.41	186.26	184.84	183.94	183.74	183.59	183.50	183.50	
26	183.40	183.69	183.66	185.65	185.28	185.89	184.91	183.94	183.73	183.59	183.50	183.49	
27	183.39	183.66	183.85	185.21	185.22	185.77	184.70	183.93	183.73	183.58	183.50	183.49	
28	183.53	183.66	183.78	184.91	185.32	185.47	184.70	183.93	183.72	183.58	183.50	183.48	
29	183.49	183.70	183.91	184.68	185.43	185.39	184.58	183.92	183.71	183.57		183.48	
30	183.47	183.91	184.27	185.79	185.37	185.25	184.49	183.92	183.71	183.57		183.48	
31		185.03		184.92	185.25		184.41		183.70	183.56		183.47	
Mean	183.45	183.80	184.07	184.71	186.70	185.53	184.88	184.10	183.80	183.64	183.53	183.50	
Max	183.53	185.03	185.37	189.41	190.95	187.66	185.64	184.59	183.90	183.75	183.58	183.60	190.95
Min	183.39	183.50	183.66	183.69	184.57	184.79	184.41	183.90	183.70	183.56	183.50	183.47	183.39

Annual Max Momentary Gage Height 191.21 M (MSL), at 6.00 Hours, on Aug 13, 2001

Zero Gage at Bottom Elevation 182.83 M (MSL), River Bed 182.66 M (MSL)

Left Bank Elevation 191.29 M (MSL)

Right Bank Elevation 191.25 M (MSL), Drainage Area 967 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.03	2.19	23.57	9.25	17.15	23.40	26.72	11.88	6.25	4.00	2.84	2.11	
2	2.19	2.51	11.00	7.13	15.05	20.77	24.97	15.35	6.25	4.00	2.76	2.11	
3	2.35	4.00	12.25	5.87	17.30	18.85	33.30	12.25	6.12	3.90	2.68	2.03	
4	2.27	4.80	10.25	5.50	41.90	18.35	28.47	12.13	6.00	3.90	2.68	2.03	
5	2.03	3.50	13.10	5.12	26.90	22.87	24.28	11.25	5.87	3.80	2.68	2.03	
6	1.95	7.75	9.75	5.75	25.85	20.43	26.02	10.25	5.87	3.70	2.59	2.19	
7	1.95	6.62	7.13	4.60	33.30	25.85	24.45	10.00	5.75	3.60	2.51	2.03	
8	1.86	3.60	5.50	4.00	64.50	24.97	22.17	9.63	5.75	3.50	2.59	2.03	
9	1.78	2.68	3.90	4.40	66.25	20.60	20.77	9.37	5.63	3.50	2.68	2.03	
10	1.70	2.35	5.12	5.00	66.25	19.55	25.50	9.37	5.50	3.40	2.68	2.03	
11	1.62	3.70	17.30	6.38	67.75	41.70	28.47	9.50	5.37	3.40	2.68	2.03	
12	1.62	5.25	28.47	5.25	142.70	32.15	27.77	9.25	5.25	3.40	2.59	2.03	
13	1.62	4.30	15.35	4.80	177.87	28.47	21.83	8.88	5.25	3.30	2.51	2.11	
14	2.27	4.40	10.37	4.30	162.60	33.10	20.07	9.13	5.12	3.30	2.43	2.11	
15	2.11	5.87	8.13	3.90	147.50	31.27	19.72	9.75	5.12	4.50	2.35	2.11	
16	1.95	7.00	7.25	4.80	131.90	27.60	18.35	8.88	5.00	4.30	2.27	2.11	
17	1.86	12.00	6.12	8.00	116.90	24.28	18.35	8.38	4.80	3.80	2.43	2.11	
18	1.70	9.63	5.25	8.88	95.87	22.17	16.40	8.00	4.80	3.70	2.27	2.11	
19	1.70	5.63	5.00	7.13	70.00	23.40	14.90	6.75	4.80	3.50	2.27	2.43	
20	1.62	4.50	4.60	5.75	51.65	39.10	13.70	6.25	4.70	3.40	2.19	3.00	
21	1.54	3.80	4.60	6.75	42.90	33.70	13.25	7.00	4.70	3.30	2.19	2.92	
22	1.46	3.70	4.30	101.65	44.50	58.75	13.10	7.00	4.60	3.20	2.19	2.51	
23	1.46	3.70	3.90	129.80	39.70	79.65	12.65	7.00	4.50	3.10	2.19	2.35	
24	1.46	3.50	3.80	109.40	33.70	70.50	13.85	6.87	4.40	3.00	2.19	2.27	
25	1.38	4.50	4.10	64.25	29.17	45.70	19.20	6.75	4.40	2.92	2.19	2.19	
26	1.38	3.90	3.60	33.50	26.90	38.30	20.43	6.75	4.30	2.92	2.19	2.11	
27	1.30	3.60	5.63	25.68	25.85	35.90	17.00	6.62	4.30	2.84	2.19	2.11	
28	2.43	3.60	4.80	20.43	27.60	30.22	17.00	6.62	4.20	2.84	2.19	2.03	
29	2.11	4.00	6.38	16.70	29.52	28.82	15.20	6.50	4.10	2.76		2.03	
30	1.95	6.38	10.88	36.30	28.47	26.37	13.85	6.50	4.10	2.76		2.03	
31		22.52		20.60	26.37		12.65		4.00	2.68		1.95	
Total	54.65	165.48	261.40	680.87	1893.87	966.79	624.39	263.86	156.80	106.22	68.20	67.27	5309.80 CMSDAY
Mean	1.82	5.34	8.71	21.96	61.09	32.23	20.14	8.80	5.06	3.43	2.44	2.17	14.55 CMS
Max	2.43	22.52	28.47	129.80	177.87	79.65	33.30	15.35	6.25	4.50	2.84	3.00	177.87 CMS
Min	1.30	2.19	3.60	3.90	15.05	18.35	12.65	6.25	4.00	2.68	2.19	1.95	1.30 CMS
Runoff	4.722	14.297	22.585	58.827	163.630	83.531	53.947	22.798	13.548	9.177	5.892	5.812	458.767 MCM

Momentary Peak 186.85 CMS, at 191.21 M (MSL), at 6.00 Hours, on Aug 13, 2001

Runoff Yield 15.04 Liters/Second/Square KM, Momentary Peak Yield 193.226 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nam Fua at Ban Kok Muang, 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 at the guidepost 11.5.

Ban Kok Muang **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainage Area 322 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +208.360 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 16.00 meters from the top staff gage.

Elevation +214.931 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1984 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

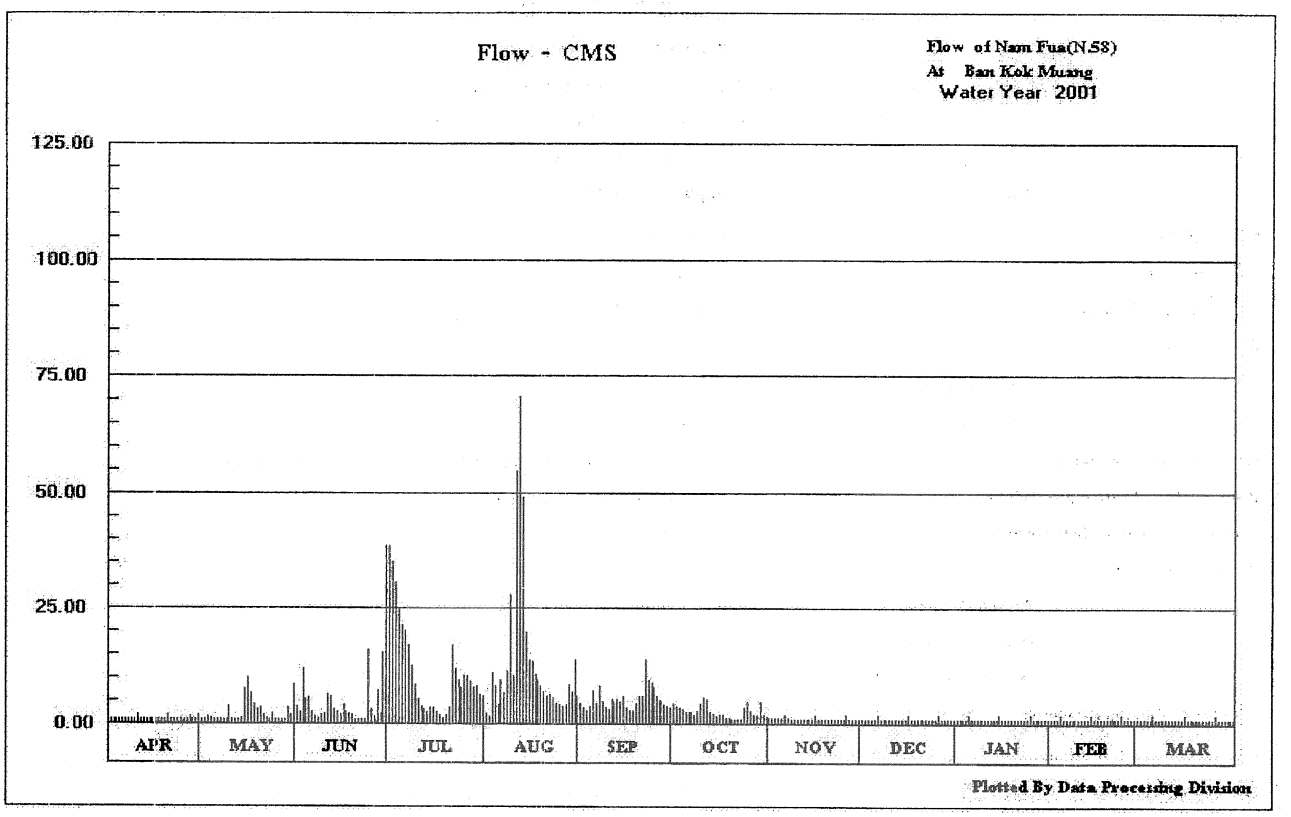
Overbank Flow Conditions Overbank flow starts at elevation +214.110 m.(M.S.L.) and is including overbank flow.

General Description Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	208.79	208.80	209.22	212.40	209.06	209.28	209.29	208.96	208.79	208.71	208.70	208.69	
2	208.78	208.79	209.10	212.09	209.01	209.20	209.21	208.96	208.79	208.71	208.70	208.69	
3	208.76	209.00	210.03	211.72	209.94	209.13	209.18	208.96	208.78	208.71	208.70	208.69	
4	208.75	208.92	209.36	211.22	209.64	209.21	209.14	208.95	208.78	208.71	208.71	208.68	
5	208.75	208.84	209.41	210.89	209.26	209.57	209.10	208.94	208.78	208.70	208.71	208.68	
6	208.74	208.82	209.08	210.76	209.79	209.28	209.08	208.93	208.78	208.70	208.71	208.68	
7	208.74	208.79	209.00	210.49	209.51	209.64	209.10	208.92	208.77	208.70	208.71	208.68	
8	208.74	208.78	208.96	210.07	209.97	209.30	209.04	208.91	208.87	208.69	208.70	208.68	
9	208.76	208.77	208.96	209.69	211.46	209.19	209.11	208.90	208.79	208.69	208.70	208.68	
10	208.76	209.21	209.07	209.38	209.86	209.16	209.28	208.89	208.78	208.69	208.69	208.67	
11	208.76	208.87	209.48	209.23	213.76	209.38	209.40	208.88	208.77	208.68	208.69	208.67	
12	208.76	208.88	209.45	209.14	214.82	209.32	209.36	208.87	208.77	208.68	208.69	208.67	
13	208.78	208.87	209.16	209.09	213.28	209.36	209.09	208.86	208.76	208.68	208.69	208.67	
14	208.78	208.95	209.08	209.17	210.75	209.30	209.06	208.89	208.76	208.73	208.69	208.67	
15	208.78	209.58	209.02	209.18	210.21	209.43	209.00	208.88	208.75	208.74	208.69	208.67	
16	208.78	209.85	209.26	209.10	210.16	209.20	209.03	208.88	208.75	208.74	208.69	208.66	
17	208.77	209.49	209.10	209.02	209.91	209.12	208.98	208.90	208.74	208.73	208.69	208.66	
18	208.75	209.24	209.06	208.94	209.77	209.12	208.94	208.89	208.74	208.73	208.69	208.65	
19	208.74	209.15	208.95	208.96	209.66	209.29	208.92	208.88	208.73	208.72	208.69	208.65	
20	208.74	209.18	208.91	209.17	209.52	209.44	208.90	208.87	208.73	208.72	208.69	208.65	
21	208.74	209.04	208.89	210.49	209.43	209.43	208.88	208.86	208.72	208.72	208.69	208.65	
22	208.74	208.96	208.87	210.04	209.47	210.20	208.86	208.85	208.72	208.72	208.69	208.65	
23	208.74	208.88	208.87	209.78	209.41	209.78	208.85	208.84	208.71	208.72	208.69	208.65	
24	208.80	209.06	210.40	209.63	209.29	209.73	209.18	208.82	208.71	208.71	208.70	208.65	
25	208.77	208.89	209.16	209.87	209.24	209.62	209.32	208.80	208.71	208.71	208.70	208.63	
26	208.76	208.85	209.00	209.86	209.22	209.42	209.12	208.79	208.71	208.71	208.70	208.64	
27	208.99	208.85	209.55	209.74	209.24	209.34	209.03	208.78	208.70	208.71	208.70	208.64	
28	208.87	208.83	209.06	209.63	209.70	209.25	209.02	208.81	208.70	208.70	208.70	208.64	
29	208.84	209.18	210.33	209.64	209.52	209.23	209.32	208.80	208.70	208.70		208.63	
30	208.82	208.99	212.40	209.46	210.20	209.17	209.03	208.80	208.69	208.69		208.63	
31		209.68		209.42	209.42		208.98		208.69	208.69		208.63	
Mean	208.78	209.03	209.34	209.91	210.11	209.37	209.09	208.88	208.75	208.71	208.70	208.66	
Max	208.99	209.85	212.40	212.40	214.82	210.20	209.40	208.96	208.87	208.74	208.71	208.69	214.82
Min	208.74	208.77	208.87	208.94	209.01	209.12	208.85	208.78	208.69	208.68	208.69	208.63	208.63

Annual Max Momentary Gage Height 215.66 M (MSL), at 15.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 208.36 M (MSL), River Bed 208.51 M (MSL)
Left Bank Elevation 214.10 M (MSL)
Right Bank Elevation 215.38 M (MSL), Drainage Area 322 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.86	0.90	4.20	39.00	2.60	4.80	4.90	1.78	0.86	0.54	0.50	0.46	
2	0.82	0.86	3.00	35.43	2.10	4.00	4.10	1.78	0.86	0.54	0.50	0.46	
3	0.74	2.00	12.33	31.18	11.40	3.30	3.80	1.78	0.82	0.54	0.50	0.46	
4	0.70	1.56	5.60	25.43	8.40	4.10	3.40	1.72	0.82	0.54	0.54	0.42	
5	0.70	1.12	6.10	21.79	4.60	7.70	3.00	1.67	0.82	0.50	0.54	0.42	
6	0.66	1.01	2.80	20.36	9.90	4.80	2.80	1.61	0.82	0.50	0.54	0.42	
7	0.66	0.86	2.00	17.39	7.10	8.40	3.00	1.56	0.78	0.50	0.54	0.42	
8	0.66	0.82	1.78	12.77	11.70	5.00	2.40	1.51	1.28	0.46	0.50	0.42	
9	0.74	0.78	1.78	8.90	28.19	3.90	3.10	1.45	0.86	0.46	0.50	0.42	
10	0.74	4.10	2.70	5.80	10.60	3.60	4.80	1.39	0.82	0.46	0.46	0.38	
11	0.74	1.28	6.80	4.30	55.12	5.80	6.00	1.34	0.78	0.42	0.46	0.38	
12	0.74	1.34	6.50	3.40	71.00	5.20	5.60	1.28	0.78	0.42	0.46	0.38	
13	0.82	1.28	3.60	2.90	49.36	5.60	2.90	1.23	0.74	0.42	0.46	0.38	
14	0.82	1.72	2.80	3.70	20.25	5.00	2.60	1.39	0.74	0.62	0.46	0.38	
15	0.82	7.80	2.20	3.80	14.31	6.30	2.00	1.34	0.70	0.66	0.46	0.38	
16	0.82	10.50	4.60	3.00	13.76	4.00	2.30	1.34	0.70	0.66	0.46	0.34	
17	0.78	6.90	3.00	2.20	11.10	3.20	1.89	1.45	0.66	0.62	0.46	0.34	
18	0.70	4.40	2.60	1.67	9.70	3.20	1.67	1.39	0.66	0.62	0.46	0.30	
19	0.66	3.50	1.72	1.78	8.60	4.90	1.56	1.34	0.62	0.58	0.46	0.30	
20	0.66	3.80	1.51	3.70	7.20	6.40	1.45	1.28	0.62	0.58	0.46	0.30	
21	0.66	2.40	1.39	17.39	6.30	6.30	1.34	1.23	0.58	0.58	0.46	0.30	
22	0.66	1.78	1.28	12.44	6.70	14.20	1.23	1.18	0.58	0.58	0.46	0.30	
23	0.66	1.34	1.28	9.80	6.10	9.80	1.18	1.12	0.54	0.58	0.46	0.30	
24	0.90	2.60	16.40	8.30	4.90	9.30	3.80	1.01	0.54	0.54	0.50	0.30	
25	0.78	1.39	3.60	10.70	4.40	8.20	5.20	0.90	0.54	0.54	0.50	0.22	
26	0.74	1.18	2.00	10.60	4.20	6.20	3.20	0.86	0.54	0.54	0.50	0.26	
27	1.95	1.18	7.50	9.40	4.40	5.40	2.30	0.82	0.50	0.54	0.50	0.26	
28	1.28	1.06	2.60	8.30	9.00	4.50	2.20	0.95	0.50	0.50	0.50	0.26	
29	1.12	3.80	15.63	8.40	7.20	4.30	5.20	0.90	0.50	0.50		0.22	
30	1.01	1.95	39.00	6.60	14.20	3.70	2.30	0.90	0.46	0.46		0.22	
31		8.80		6.20	6.20		1.89		0.46	0.46		0.22	
Total	24.60	84.01	168.30	356.63	430.59	171.10	93.11	39.50	21.48	16.46	13.60	10.62	1430.00 CMSDAY
Mean	0.82	2.71	5.61	11.50	13.89	5.70	3.00	1.32	0.69	0.53	0.49	0.34	3.92 CMS
Max	1.95	10.50	39.00	39.00	71.00	14.20	6.00	1.78	1.28	0.66	0.54	0.46	71.00 CMS
Min	0.66	0.78	1.28	1.67	2.10	3.20	1.18	0.82	0.46	0.42	0.46	0.22	0.22 CMS
Runoff	2.125	7.258	14.541	30.813	37.203	14.783	8.045	3.413	1.856	1.422	1.175	0.918	123.552 MCM

Momentary Peak 113.30 CMS, at 215.56 M (MSL), at 15.00 Hours, on Aug 11, 2001

Runoff Yield 12.17 Liters/Second/Square KM, Momentary Peak Yield 351.863 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Lam Nam Khan at Ban Na Chan, Phitsanulok (N.59)

Lat 17 - 01 - 49 N. **Long** 100 - 50 - 35 E.

Location on left bank at Ban Na Chan.

Ban Na Chan **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainage Area 405 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +197.680 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 25 meters from the top staff gage.

Elevation +206.935 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00, and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1984 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

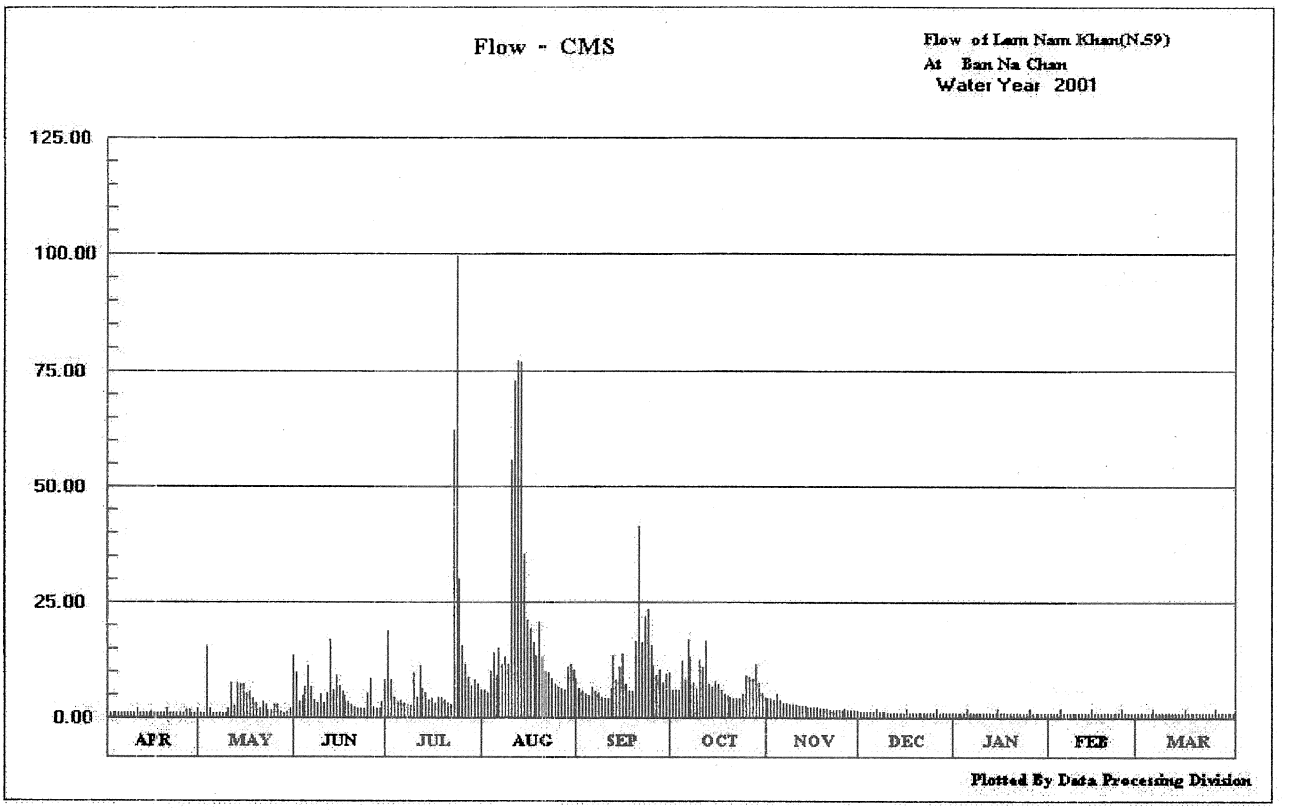
Overbank Flow Conditions Overbank flow starts at elevation +205.430 m.(M.S.L.) and is including overbank flow.

General Description Records good. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	199.14	199.07	201.40	202.72	200.71	200.80	200.72	200.32	199.62	199.36	199.26	199.12	
2	199.17	199.10	200.20	201.11	200.57	200.66	200.68	200.35	199.61	199.34	199.23	199.11	
3	199.12	202.25	200.46	200.42	201.44	200.53	200.74	200.25	199.60	199.33	199.21	199.11	
4	199.13	199.81	200.82	200.20	202.05	200.48	201.79	200.55	199.59	199.32	199.21	199.48	
5	199.08	199.39	201.66	200.28	201.27	200.82	201.13	200.24	199.58	199.31	199.23	199.27	
6	199.07	199.25	200.84	200.10	202.22	200.67	202.46	200.12	199.57	199.31	199.25	199.18	
7	199.06	199.17	200.21	200.01	201.70	200.59	201.95	200.07	199.56	199.31	199.23	199.15	
8	199.08	199.14	200.11	199.96	201.94	200.41	201.00	200.04	199.55	199.30	199.22	199.13	
9	199.06	199.11	200.53	201.37	201.68	200.30	200.76	200.01	199.54	199.29	199.21	199.13	
10	199.04	199.19	200.06	200.39	204.97	200.29	201.85	199.98	199.53	199.29	199.20	199.12	
11	199.02	201.01	200.60	201.62	205.45	200.79	201.59	199.94	199.52	199.28	199.19	199.11	
12	199.03	199.93	202.45	200.80	205.55	201.96	202.41	199.93	199.51	199.28	199.39	199.11	
13	199.02	201.04	200.74	200.56	205.54	201.14	200.99	199.91	199.50	199.28	199.37	199.10	
14	199.02	200.98	201.29	200.28	204.08	201.58	200.82	199.89	199.49	199.31	199.24	199.10	
15	199.63	200.94	200.91	200.32	203.01	202.03	201.09	199.88	199.48	199.39	199.22	199.08	
16	199.18	200.56	200.66	200.09	202.77	200.96	200.98	199.85	199.47	199.33	199.20	199.07	
17	199.09	200.65	200.45	200.39	202.36	200.62	200.68	199.82	199.46	199.30	199.16	199.07	
18	199.06	200.32	200.18	200.39	201.97	200.64	200.52	199.80	199.45	199.28	199.15	199.06	
19	199.04	200.08	200.01	200.28	202.94	202.43	200.43	199.77	199.44	199.26	199.16	199.07	
20	199.03	199.72	199.89	200.09	201.94	204.38	200.37	199.74	199.43	199.26	199.15	199.07	
21	199.01	200.15	199.81	200.01	201.46	202.36	200.32	199.72	199.42	199.25	199.16	199.06	
22	198.99	200.03	199.74	205.16	201.39	203.06	200.30	199.71	199.41	199.24	199.15	199.05	
23	198.96	199.68	199.74	206.04	201.16	203.23	200.32	199.70	199.40	199.24	199.14	199.04	
24	199.01	199.66	200.56	203.75	200.96	202.29	200.55	199.70	199.39	199.23	199.13	199.05	
25	199.05	200.04	201.18	202.29	200.83	201.63	201.29	199.69	199.39	199.23	199.13	199.05	
26	199.72	200.01	199.89	201.69	200.77	201.28	201.25	199.68	199.38	199.22	199.12	199.03	
27	199.64	199.63	199.76	201.24	200.68	201.50	201.19	199.68	199.38	199.22	199.15	199.01	
28	199.25	199.52	199.76	200.91	201.60	201.02	201.69	199.67	199.37	199.21	199.15	199.02	
29	199.13	199.61	200.15	201.10	201.72	201.31	201.01	199.66	199.37	199.21		199.01	
30	199.08	199.55	201.11	200.98	201.47	201.37	200.60	199.64	199.36	199.20		199.01	
31		201.97		200.68	201.15		200.42		199.36	199.20		199.01	
Mean	199.13	200.02	200.51	201.14	202.17	201.37	201.03	199.91	199.48	199.28	199.20	199.10	
Max	199.72	202.25	202.45	206.04	205.55	204.38	202.46	200.55	199.62	199.39	199.39	199.48	206.04
Min	198.96	199.07	199.74	199.96	200.57	200.29	200.30	199.64	199.36	199.20	199.12	199.01	198.96

Annual Max Momentary Gage Height 206.47 M (MSL), at 6.00 Hours, on Jul 23, 2001
Zero Gage at Bottom Elevation 197.68 M (MSL), River Bed 198.98 M (MSL)
Left Bank Elevation 205.96 M (MSL)
Right Bank Elevation 205.42 M (MSL), Drainage Area 405 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.49	0.36	10.20	19.10	6.35	6.80	6.40	4.48	1.77	1.00	0.75	0.45	
2	0.54	0.41	4.00	8.46	5.65	6.10	6.20	4.60	1.73	0.95	0.67	0.43	
3	0.45	15.75	5.10	4.90	10.44	5.45	6.50	4.20	1.70	0.93	0.63	0.43	
4	0.47	2.44	6.90	4.00	14.35	5.20	12.54	5.55	1.67	0.90	0.63	1.34	
5	0.38	1.08	11.76	4.32	9.42	6.90	8.58	4.16	1.64	0.88	0.67	0.78	
6	0.36	0.73	7.00	3.60	15.54	6.15	17.22	3.68	1.61	0.88	0.73	0.56	
7	0.34	0.54	4.04	3.24	12.00	5.75	13.65	3.48	1.58	0.88	0.67	0.51	
8	0.38	0.49	3.64	3.04	13.58	4.85	7.80	3.36	1.55	0.85	0.65	0.47	
9	0.34	0.43	5.45	10.02	11.88	4.40	6.60	3.24	1.52	0.82	0.63	0.47	
10	0.30	0.58	3.44	4.76	56.16	4.36	12.95	3.12	1.49	0.82	0.60	0.45	
11	0.26	7.86	5.80	11.52	73.25	6.75	11.34	2.96	1.46	0.80	0.58	0.43	
12	0.28	2.92	17.15	6.80	77.75	13.72	16.87	2.92	1.43	0.80	1.08	0.43	
13	0.26	8.04	6.50	5.60	77.30	8.64	7.75	2.84	1.40	0.80	1.03	0.41	
14	0.26	7.70	9.54	4.32	35.72	11.28	6.90	2.76	1.37	0.88	0.70	0.41	
15	1.80	7.50	7.35	4.48	21.50	14.21	8.34	2.72	1.34	1.08	0.65	0.38	
16	0.56	5.60	6.10	3.56	19.48	7.60	7.70	2.60	1.31	0.93	0.60	0.36	
17	0.39	6.05	5.05	4.76	16.52	5.90	6.20	2.48	1.28	0.85	0.53	0.36	
18	0.34	4.48	3.92	4.76	13.79	6.00	5.40	2.40	1.25	0.80	0.51	0.34	
19	0.30	3.52	3.24	4.32	20.89	17.01	4.95	2.30	1.22	0.75	0.53	0.36	
20	0.28	2.12	2.76	3.56	13.58	41.60	4.68	2.19	1.19	0.75	0.51	0.36	
21	0.24	3.80	2.44	3.24	10.56	16.52	4.48	2.12	1.16	0.73	0.53	0.34	
22	0.21	3.32	2.19	62.60	10.14	22.00	4.40	2.09	1.13	0.70	0.51	0.32	
23	0.15	1.98	2.19	99.80	8.76	23.76	4.48	2.05	1.10	0.70	0.49	0.30	
24	0.24	1.91	5.60	30.45	7.60	16.03	5.55	2.05	1.08	0.67	0.47	0.32	
25	0.32	3.36	8.88	16.03	6.95	11.58	9.54	2.01	1.08	0.67	0.47	0.32	
26	2.12	3.24	2.76	11.94	6.65	9.48	9.30	1.98	1.05	0.65	0.45	0.28	
27	1.84	1.80	2.26	9.24	6.20	10.80	8.94	1.98	1.05	0.65	0.51	0.24	
28	0.73	1.46	2.26	7.35	11.40	7.92	11.94	1.94	1.03	0.63	0.51	0.26	
29	0.47	1.73	3.80	8.40	12.12	9.66	7.86	1.91	1.03	0.63		0.24	
30	0.38	1.55	8.46	7.70	10.62	10.02	5.80	1.84	1.00	0.60		0.24	
31		13.79		6.20	8.70		4.90		1.00	0.60		0.24	
Total	15.48	116.54	169.78	382.07	624.85	326.44	255.76	86.01	41.22	24.58	17.29	12.83	2072.85 CMSDAY
Mean	0.52	3.76	5.66	12.32	20.16	10.88	8.25	2.87	1.33	0.79	0.62	0.41	5.68 CMS
Max	2.12	15.75	17.15	99.80	77.75	41.60	17.22	5.55	1.77	1.08	1.08	1.34	99.80 CMS
Min	0.15	0.36	2.19	3.04	5.65	4.36	4.40	1.84	1.00	0.60	0.45	0.24	0.15 CMS
Runoff	1.337	10.069	14.669	33.011	53.987	28.204	22.098	7.431	3.561	2.124	1.494	1.109	179.094 MCM

Momentary Peak 122.20 CMS, at 206.47 M (MSL), at 6.00 Hours, on Jul 23, 2001

Runoff Yield 14.02 Liters/Second/Square KM, Momentary Peak Yield 301.728 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Ban Hat Song Khwae, Uttaradit (N.60)

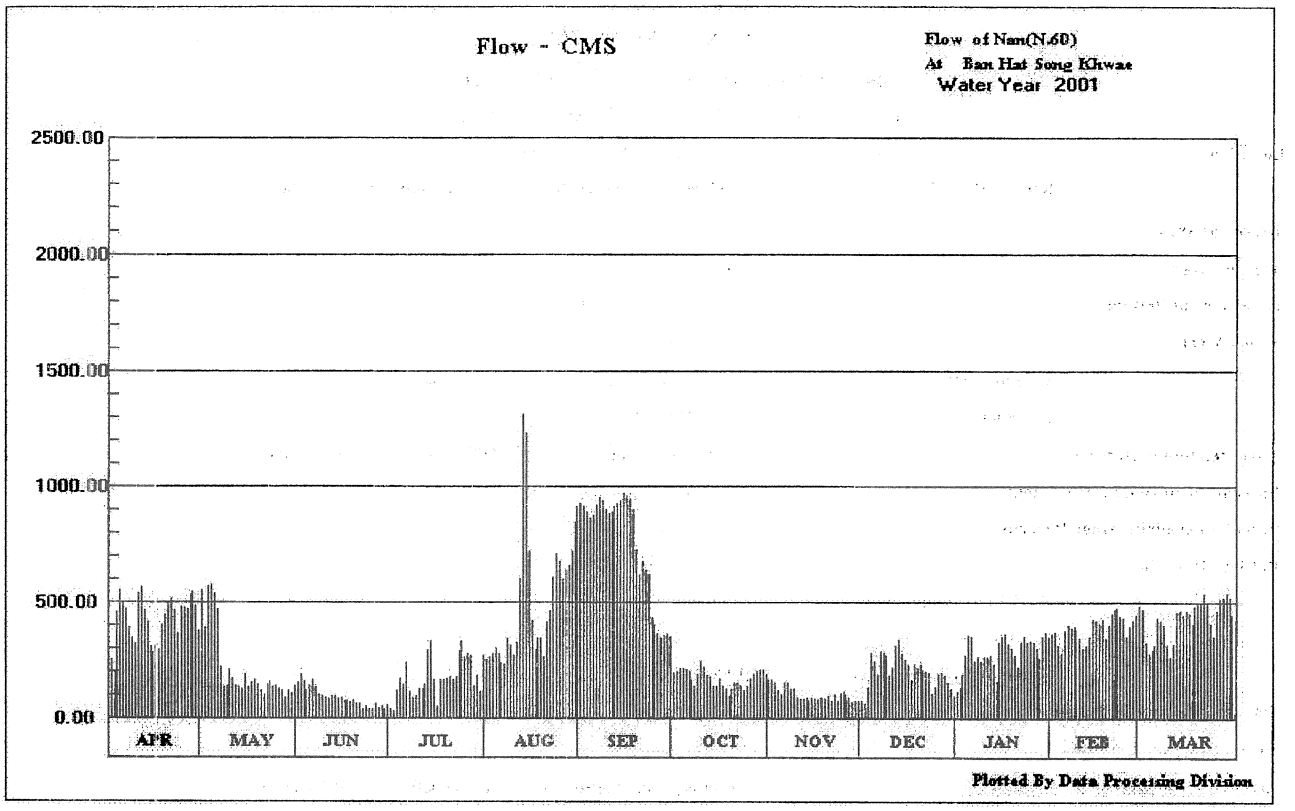
Lat 17 - 24 - 54 N. **Long** 100 - 07 - 58 E.

Location		on right bank about 1 kilometer downstream from Wat Hat Song Khwae.			
	Ban Hat Song Khwae	**Amphoe** Tron		**Changwat** Uttaradit	
Drainage Area		18,692 sq.km.			
Type of Gage		Water - stage recorder.			
Zero Gage at Bottom		+48.500 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On right bank near the Meteorological Station.			
	Elevation	+57.592 m. (M.S.L.)			
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 Float	-			
	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 100 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	50.67	52.37	49.96	49.09	50.66	54.14	50.30	50.07	49.38	49.67	51.36	52.01	
2	50.28	51.50	50.24	48.98	50.76	54.08	50.31	50.05	49.28	49.84	51.37	51.96	
3	51.88	52.47	50.04	49.76	50.83	53.98	50.40	49.95	49.83	50.24	51.04	51.12	
4	52.37	52.52	49.74	50.09	50.97	53.88	50.42	49.73	50.85	50.77	50.81	50.84	
5	52.11	52.33	49.88	49.94	50.84	53.93	50.37	49.59	50.61	51.30	51.43	50.95	
6	51.96	51.95	50.05	50.59	50.57	54.11	50.35	49.98	50.18	51.27	51.56	51.07	
7	51.49	50.48	49.84	49.68	50.54	54.27	50.06	49.97	50.89	50.63	51.51	51.73	
8	51.23	49.85	49.59	49.50	51.25	54.20	49.88	49.80	50.85	50.76	51.53	51.67	
9	51.09	49.89	49.56	49.53	51.07	54.04	50.23	49.81	50.78	50.63	51.46	51.55	
10	52.31	50.38	49.50	49.79	50.77	53.96	50.62	49.52	50.21	50.73	51.22	51.07	
11	52.45	50.13	49.45	49.79	51.14	53.98	50.46	49.45	50.46	50.73	50.98	50.74	
12	51.92	49.90	49.54	49.93	52.64	54.09	50.20	49.47	51.06	50.77	51.05	51.10	
13	51.65	49.84	49.55	50.94	55.80	54.15	50.14	49.51	51.19	50.53	51.27	51.88	
14	51.02	49.80	49.47	51.17	55.47	54.21	49.86	49.39	50.81	50.01	51.70	51.91	
15	50.87	50.25	49.48	50.05	53.21	54.33	49.90	49.50	50.65	51.14	51.67	51.80	
16	51.07	49.85	49.41	49.20	51.67	54.30	50.13	49.45	50.56	51.28	51.62	51.91	
17	50.94	49.98	49.39	50.08	50.92	54.22	49.89	49.44	50.05	51.34	51.70	51.84	
18	51.56	50.08	49.33	50.05	51.22	54.05	49.77	49.52	50.56	51.10	51.24	51.62	
19	51.80	49.92	49.38	50.10	51.23	53.24	49.57	49.45	50.41	50.98	51.56	52.03	
20	52.09	49.73	49.32	50.15	50.75	52.72	49.81	49.53	50.53	50.78	51.85	52.08	
21	52.17	49.60	49.30	50.07	51.65	53.01	49.97	49.40	50.39	50.44	51.96	52.11	
22	51.92	49.92	49.04	50.16	51.93	52.83	49.97	49.58	50.35	51.12	51.99	52.33	
23	51.34	50.01	49.19	50.90	52.67	52.74	49.86	49.39	50.29	51.26	51.78	52.11	
24	51.97	49.85	49.09	51.17	53.16	51.73	49.72	49.66	49.64	51.12	51.73	51.60	
25	51.99	49.90	49.07	50.73	53.00	51.57	49.88	49.69	49.83	51.15	51.26	51.27	
26	51.95	49.80	49.32	50.81	52.65	51.33	50.12	49.61	50.22	51.13	51.54	51.93	
27	52.27	49.74	49.15	50.78	52.84	51.25	50.22	49.50	50.28	50.98	51.69	52.17	
28	52.35	49.51	49.18	49.87	52.91	51.32	50.31	49.37	50.19	50.70	51.81	52.20	
29	52.01	49.76	49.00	50.20	53.21	51.34	50.36	49.42	49.98	51.26		52.31	
30	51.42	49.64	49.25	49.70	53.77	51.28	50.38	49.39	49.77	51.40		52.21	
31		49.88		50.77	54.10		50.23		49.55	51.26		51.80	
Mean	51.67	50.35	49.48	50.12	52.07	53.28	50.12	49.61	50.31	50.85	51.49	51.71	
Max	52.45	52.52	50.24	51.17	55.80	54.33	50.62	50.07	51.19	51.40	51.99	52.33	55.80
Min	50.28	49.51	49.00	48.98	50.54	51.25	49.57	49.37	49.28	49.67	50.81	50.74	48.98

Annual Max Momentary Gage Height 56.24 M (MSL), at 21.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 48.50 M (MSL), River Bed 47.54 M (MSL)
Left Bank Elevation 58.09 M (MSL)
Right Bank Elevation 57.26 M (MSL), Drainage Area 18692 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	259.2	556.3	156.6	48.0	257.6	931.5	204.0	171.8	80.6	118.1	373.2	487.9	
2	201.2	397.0	195.6	37.4	273.6	918.0	205.4	169.0	68.6	140.4	374.9	478.8	
3	464.4	575.3	167.6	129.8	284.8	895.6	218.0	155.3	139.1	195.6	318.8	332.4	
4	556.3	584.8	127.2	174.6	307.2	873.6	221.0	125.9	288.0	275.2	281.6	286.4	
5	506.9	548.7	145.8	153.9	286.4	884.6	213.8	107.7	249.6	363.0	385.1	304.0	
6	478.8	477.0	169.0	246.5	243.5	924.8	211.0	159.3	187.2	357.9	407.2	323.9	
7	395.3	230.0	140.4	119.4	239.0	960.7	170.4	158.0	294.4	252.8	398.7	437.4	
8	351.1	141.7	107.7	96.0	354.5	945.0	145.8	135.0	288.0	273.6	402.1	426.6	
9	327.3	147.1	103.8	99.9	323.9	909.0	194.2	136.4	276.8	252.8	390.2	405.5	
10	544.9	215.2	96.0	133.7	275.2	891.2	251.2	98.6	191.4	268.8	349.4	323.9	
11	571.5	180.2	89.5	133.7	335.8	895.6	227.0	89.5	227.0	268.8	308.8	270.4	
12	471.6	148.5	101.2	152.6	608.0	920.2	190.0	92.1	322.2	275.2	320.5	329.0	
13	423.0	140.4	102.5	302.4	1318.0	933.8	181.6	97.3	344.3	237.5	357.9	464.4	
14	315.4	135.0	92.1	340.9	1239.5	947.2	143.1	81.8	291.6	163.4	432.0	469.8	
15	291.2	197.0	93.4	169.0	726.2	974.3	148.5	96.0	2[illegible].0	335.8	426.6	450.0	
16	323.9	141.7	84.3	59.0	426.6	967.5	180.2	89.5	2[illegible].0	359.6	417.6	469.8	
17	302.4	159.3	81.8	173.2	299.2	949.5	147.1	88.2	169.0	369.8	432.0	457.2	
18	407.2	173.2	74.6	169.0	349.4	911.2	131.1	98.6	242.0	329.0	352.8	417.6	
19	450.0	151.2	80.6	176.0	351.1	732.8	105.1	89.5	219.5	308.8	407.2	491.7	
20	503.1	125.9	73.4	183.0	272.0	624.0	136.4	99.9	237.5	276.8	459.0	501.2	
21	518.3	109.0	71.0	171.8	423.0	684.1	158.0	83.0	216.6	224.0	478.8	506.9	
22	471.6	151.2	43.0	184.4	473.4	646.3	158.0	106.4	211.0	332.4	484.2	548.7	
23	369.8	163.4	58.0	296.0	614.0	628.0	143.1	81.8	202.6	356.2	446.4	506.9	
24	480.6	141.7	48.0	340.9	715.6	437.4	124.6	116.8	114.2	332.4	437.4	414.0	
25	484.2	148.5	46.0	268.8	682.0	408.9	145.8	120.7	139.1	337.5	356.2	357.9	
26	477.0	135.0	73.4	281.6	610.0	368.1	178.8	110.3	192.8	334.1	403.8	473.4	
27	537.3	127.2	54.0	276.8	648.4	354.5	192.8	96.0	201.2	308.8	430.2	518.3	
28	552.5	97.3	57.0	144.4	663.1	366.4	205.4	79.4	188.6	264.0	451.8	524.0	
29	487.9	129.8	39.0	190.0	726.2	369.8	212.4	85.6	159.3	356.2		544.9	
30	383.4	114.2	65.0	122.0	849.4	359.6	215.2	81.8	131.1	380.0		525.9	
31		145.8		275.2	922.5		194.2		102.5	356.2		450.0	
Total	12907.3	6888.6	2837.5	5649.9	16099.1	22613.2	5553.2	3301.2	6463.8	9004.7	11084.4	13498.8	115901.7 CMSDAY
Mean	430.2	222.2	94.6	182.3	519.3	753.8	179.1	110.0	208.5	290.5	395.9	435.4	317.5 CMS
Max	571.5	584.8	195.6	340.9	1318.0	974.3	251.2	171.8	344.3	380.0	484.2	548.7	1318.0 CMS
Min	201.2	97.3	39.0	37.4	239.0	354.5	105.1	79.4	68.6	118.1	281.6	270.4	37.4 CMS
Runoff	1115.19	595.18	245.16	488.15	1390.96	1953.78	479.80	285.22	558.47	778.01	957.69	1166.30	10013.91 MCM

Momentary Peak 1426.20 CMS, at 56.24 M (MSL), at 21.00 Hours, on Aug 13, 2001

Runoff Yield 16.99 Liters/Second/Square KM, Momentary Peak Yield 76.300 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 350 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +190.310 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 60 meters from the top staff gage.

Elevation +196.900 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1986 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

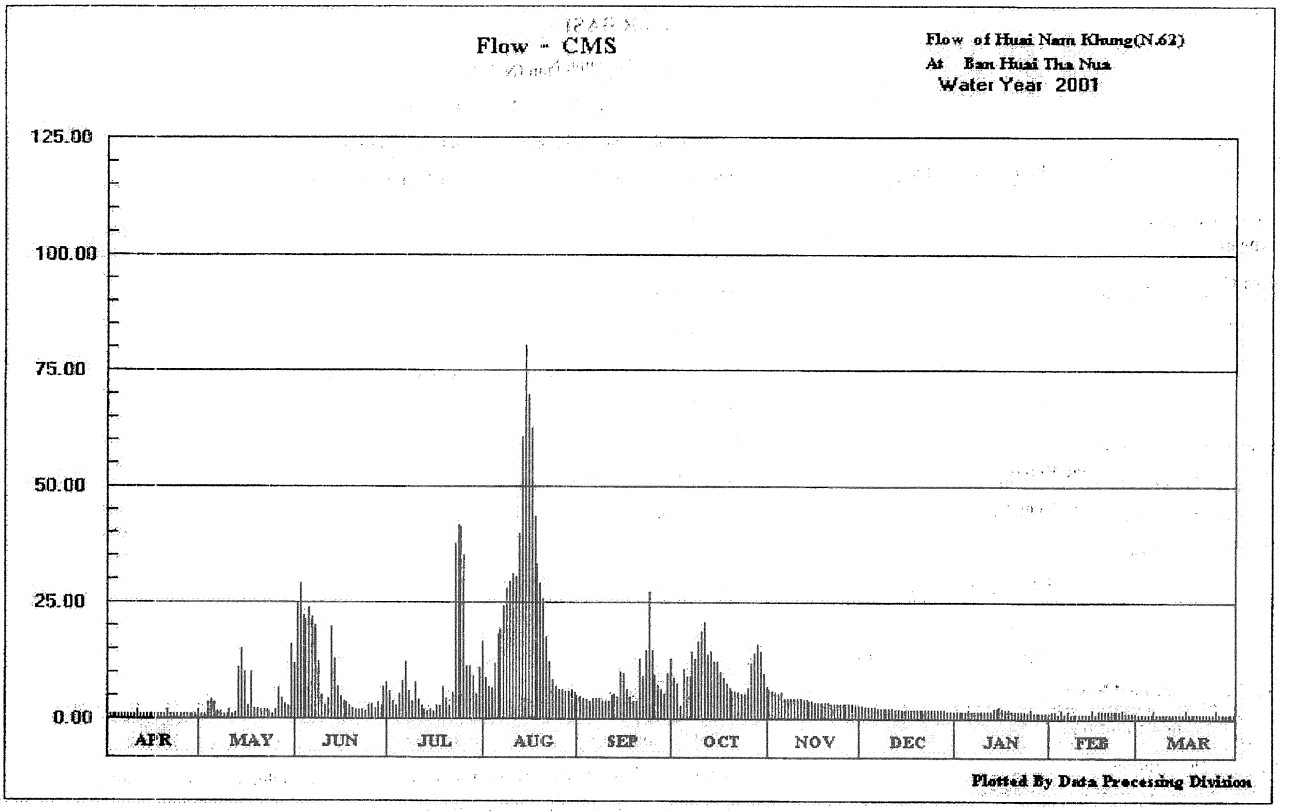
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	191.11	191.07	193.45	191.90	192.18	191.73	192.19	191.94	191.48	191.34	191.31	191.24	
2	191.11	191.15	193.71	191.61	192.00	191.69	192.07	191.90	191.47	191.34	191.31	191.21	
3	191.09	191.57	193.27	191.51	191.99	191.66	191.51	191.88	191.46	191.34	191.21	191.21	
4	191.09	191.68	193.19	191.81	192.47	191.61	192.36	191.83	191.45	191.34	191.21	191.18	
5	191.09	191.58	193.37	192.14	192.98	191.70	192.21	191.88	191.44	191.33	191.21	191.16	
6	191.09	191.31	193.24	192.49	193.06	191.69	192.21	191.70	191.43	191.33	191.31	191.16	
7	191.09	191.31	193.11	191.91	193.38	191.69	192.69	191.70	191.42	191.32	191.21	191.16	
8	191.09	191.21	192.51	191.63	193.63	191.62	192.57	191.69	191.41	191.32	191.25	191.21	
9	191.09	191.19	191.78	192.10	193.73	191.62	192.86	191.70	191.41	191.31	191.21	191.21	
10	191.03	191.16	191.51	191.67	193.82	191.62	193.04	191.69	191.40	191.31	191.21	191.20	
11	191.03	191.11	191.71	191.51	193.79	191.78	193.15	191.69	191.40	191.31	191.21	191.20	
12	191.03	191.29	193.09	191.36	194.35	191.81	192.64	191.68	191.39	191.31	191.21	191.21	
13	191.03	192.39	192.57	191.31	195.46	191.75	192.69	191.66	191.39	191.40	191.21	191.19	
14	191.03	192.74	192.01	191.36	196.40	192.30	192.50	191.64	191.38	191.42	191.21	191.16	
15	191.03	192.31	191.76	191.31	195.91	192.26	192.51	191.61	191.38	191.46	191.21	191.16	
16	191.11	191.48	191.63	191.50	195.66	191.95	192.31	191.60	191.38	191.41	191.31	191.14	
17	191.11	192.31	191.56	191.48	194.57	191.74	192.19	191.59	191.37	191.39	191.31	191.11	
18	191.11	191.41	191.48	192.00	193.96	191.64	192.08	191.58	191.37	191.36	191.31	191.11	
19	191.11	191.41	191.41	191.71	193.71	191.62	191.99	191.57	191.37	191.34	191.31	191.16	
20	191.10	191.39	191.39	191.51	193.49	192.55	191.91	191.56	191.37	191.31	191.31	191.18	
21	191.10	191.39	191.36	191.87	192.95	192.21	191.91	191.55	191.36	191.31	191.31	191.20	
22	191.09	191.36	191.36	194.21	192.49	192.70	191.88	191.55	191.36	191.31	191.31	191.16	
23	191.09	191.31	191.34	194.45	192.16	193.60	191.82	191.54	191.36	191.31	191.31	191.11	
24	191.08	191.21	191.51	194.43	192.02	192.71	191.83	191.54	191.36	191.30	191.31	191.11	
25	191.08	191.36	191.55	194.06	191.95	192.24	191.99	191.53	191.35	191.30	191.26	191.05	
26	191.08	191.99	191.41	192.41	191.95	192.05	192.48	191.53	191.35	191.29	191.26	191.09	
27	191.08	191.71	191.59	192.41	191.91	191.92	192.67	191.52	191.35	191.29	191.26	191.07	
28	191.07	191.53	191.51	192.21	191.89	191.84	192.81	191.52	191.35	191.28	191.26	191.06	
29	191.07	191.50	192.01	191.81	191.95	192.27	192.69	191.51	191.34	191.28		191.06	
30	191.07	192.80	192.11	192.39	191.86	192.57	192.28	191.51	191.34	191.27		191.05	
31		192.46		192.85	191.80		192.01		191.34	191.27		191.04	
Mean	191.08	191.60	192.12	192.16	193.21	192.00	192.32	191.65	191.39	191.33	191.26	191.15	
Max	191.11	192.80	193.71	194.45	196.40	193.60	193.15	191.94	191.48	191.46	191.31	191.24	196.40
Min	191.03	191.07	191.34	191.31	191.80	191.61	191.51	191.51	191.34	191.27	191.21	191.04	191.03

Annual Max Momentary Gage Height 196.81 M (MSL), at 6.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 190.31 M (MSL), River Bed 190.57 M (MSL)
Left Bank Elevation 197.02 M (MSL)
Right Bank Elevation 197.00 M (MSL), Drainage Area 350 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.58	0.35	25.45	6.35	9.09	4.97	9.20	6.69	3.10	2.08	1.87	1.38	
2	0.58	0.81	29.52	4.08	7.20	4.68	7.94	6.35	3.03	2.08	1.87	1.17	
3	0.46	3.78	22.75	3.32	7.12	4.45	3.32	6.18	2.95	2.08	1.17	1.17	
4	0.46	4.60	21.55	5.58	12.27	4.08	11.06	5.75	2.88	2.08	1.17	0.98	
5	0.46	3.85	24.25	8.67	18.45	4.75	9.41	6.18	2.80	2.01	1.17	0.87	
6	0.46	1.87	22.30	12.49	19.60	4.68	9.41	4.75	2.72	2.01	1.87	0.87	
7	0.46	1.87	20.35	6.44	24.40	4.68	14.82	4.75	2.65	1.94	1.17	0.87	
8	0.46	1.17	12.71	4.23	28.19	4.15	13.37	4.68	2.58	1.94	1.45	1.17	
9	0.46	1.04	5.35	8.25	29.84	4.15	16.95	4.75	2.58	1.87	1.17	1.17	
10	0.12	0.87	3.32	4.52	31.33	4.15	19.30	4.68	2.50	1.87	1.17	1.10	
11	0.12	0.58	4.83	3.32	30.83	5.35	20.95	4.68	2.50	1.87	1.17	1.10	
12	0.12	1.73	20.05	2.22	40.15	5.58	14.20	4.60	2.43	1.87	1.17	1.17	
13	0.12	11.39	13.37	1.87	60.90	5.12	14.82	4.45	2.43	2.50	1.17	1.04	
14	0.12	15.45	7.30	2.22	80.70	10.40	12.60	4.30	2.36	2.65	1.17	0.87	
15	0.12	10.51	5.20	1.87	70.21	9.96	12.71	4.08	2.36	2.95	1.17	0.87	
16	0.58	3.10	4.23	3.25	62.90	6.77	10.51	4.00	2.36	2.58	1.87	0.75	
17	0.58	10.51	3.70	3.10	43.98	5.05	9.20	3.92	2.29	2.43	1.87	0.58	
18	0.58	2.58	3.10	7.20	33.64	4.30	8.04	3.85	2.29	2.22	1.87	0.58	
19	0.58	2.58	2.58	4.83	29.52	4.15	7.12	3.78	2.29	2.08	1.87	0.87	
20	0.52	2.43	2.43	3.32	26.05	13.15	6.44	3.70	2.29	1.87	1.87	0.98	
21	0.52	2.43	2.22	6.09	18.07	9.41	6.44	3.63	2.22	1.87	1.87	1.10	
22	0.46	2.22	2.22	37.77	12.49	14.95	6.18	3.63	2.22	1.87	1.87	0.87	
23	0.46	1.87	2.08	41.88	8.88	27.70	5.67	3.55	2.22	1.87	1.87	0.58	
24	0.41	1.17	3.32	41.52	7.41	15.08	5.75	3.55	2.22	1.80	1.87	0.58	
25	0.41	2.22	3.63	35.29	6.77	9.74	7.12	3.48	2.15	1.80	1.52	0.23	
26	0.41	7.12	2.58	11.61	6.77	7.73	12.38	3.48	2.15	1.73	1.52	0.46	
27	0.41	4.83	3.92	11.61	6.44	6.52	14.57	3.40	2.15	1.73	1.52	0.35	
28	0.35	3.48	3.32	9.41	6.26	5.84	16.32	3.40	2.15	1.66	1.52	0.29	
29	0.35	3.25	7.30	5.58	6.77	10.07	14.82	3.32	2.08	1.66		0.29	
30	0.35	16.20	8.36	11.39	6.01	13.37	10.18	3.32	2.08	1.59		0.23	
31		12.16		16.83	5.50		7.30		2.08	1.59		0.17	
Total	12.07	138.02	293.29	326.11	757.74	234.98	338.10	130.88	75.11	62.15	42.84	24.71	2436.00 CMSDAY
Mean	0.40	4.45	9.78	10.52	24.44	7.83	10.91	4.36	2.42	2.00	1.53	0.80	6.67 CMS
Max	0.58	16.20	29.52	41.88	80.70	27.70	20.95	6.69	3.10	2.95	1.87	1.38	80.70 CMS
Min	0.12	0.35	2.08	1.87	5.50	4.08	3.32	3.32	2.08	1.59	1.17	0.17	0.12 CMS
Runoff	1.043	11.925	25.340	28.176	65.469	20.302	29.212	11.308	6.490	5.370	3.701	2.135	210.470 MCM

Momentary Peak 89.73 CMS, at 196.81 M (MSL), at 6.00 Hours, on Aug 14, 2001
Runoff Yield 19.07 Liters/Second/Square KM, Momentary Peak Yield 256.371 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 788 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 about 34 meters from the first staff gage.

Elevation +11.000 m. (A.D.)

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 Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

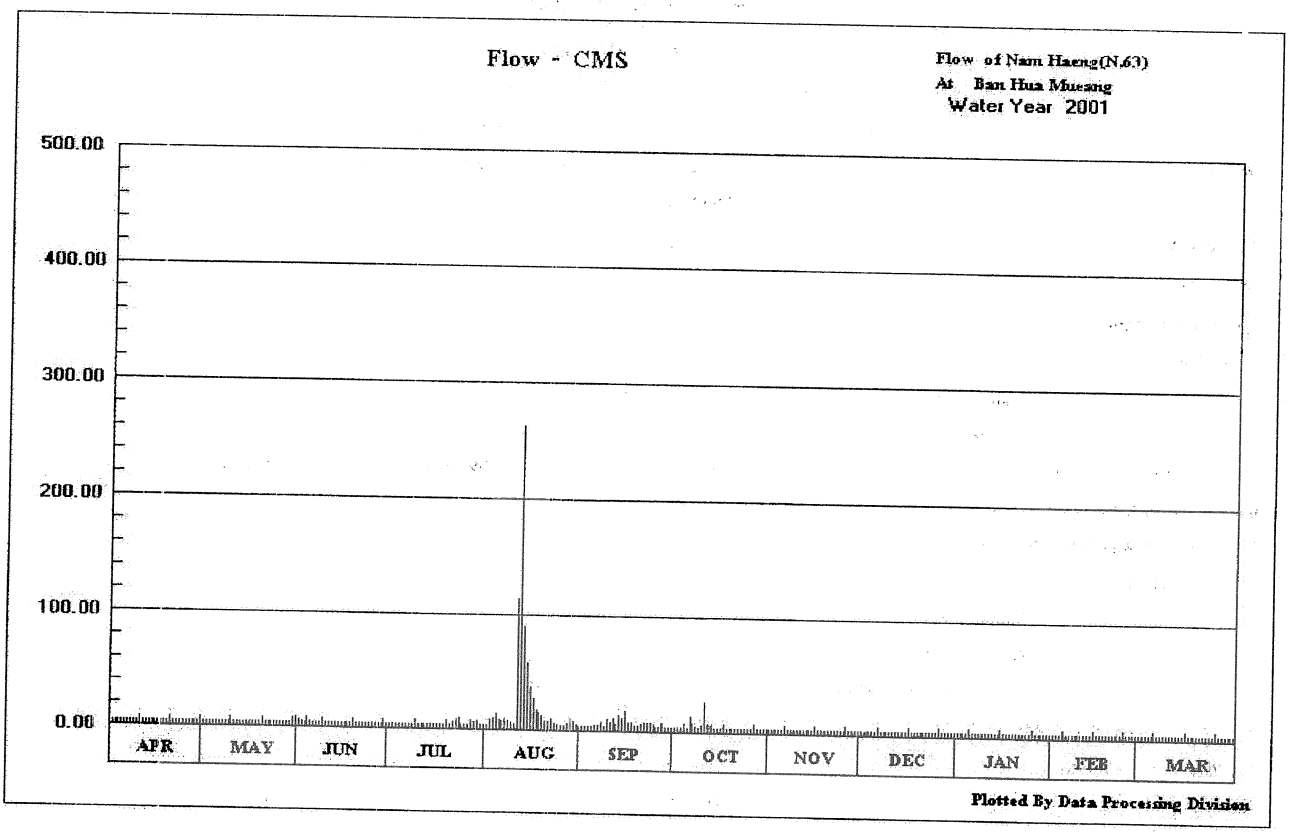
Overbank Flow Conditions Overbank flow starts at elevation +6.810 m.(A.D.) and is including overbank flow.

General Description Records fair. Flow effected by Nam Ngae reservoir about 6 kilometers above gage site.
Stage-discharge relation defined by 38 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.92	0.84	1.56	1.08	1.30	1.60	1.60	1.55	1.33	1.21	1.21	1.15	
2	0.90	0.88	1.47	1.09	1.77	1.55	1.60	1.53	1.27	1.21	1.18	1.15	
3	0.90	0.94	1.31	1.09	1.90	1.52	1.58	1.51	1.25	1.21	1.20	1.14	
4	0.89	1.18	1.74	1.08	2.10	1.62	1.99	1.50	1.25	1.20	1.20	1.13	
5	0.88	0.97	1.51	1.08	1.78	1.75	1.69	1.45	1.25	1.22	1.21	1.13	
6	0.88	0.91	1.33	1.08	1.69	1.72	2.41	1.43	1.27	1.22	1.21	1.13	
7	0.87	0.90	1.30	1.08	1.88	1.81	1.88	1.39	1.27	1.21	1.25	1.16	
8	0.87	0.88	1.19	1.09	1.71	1.60	1.75	1.39	1.30	1.20	1.26	1.19	
9	0.86	0.88	1.14	1.18	1.63	2.11	1.64	1.39	1.25	1.19	1.18	1.19	
10	0.86	0.88	1.10	1.17	1.76	2.02	1.88	1.37	1.23	1.18	1.16	1.17	
11	0.86	0.87	1.14	1.14	5.40	2.22	3.04	1.37	1.22	1.15	1.18	1.16	
12	0.85	0.89	1.11	1.10	7.33	1.87	2.00	1.37	1.21	1.15	1.20	1.15	
13	0.85	0.92	1.10	1.10	4.96	2.38	1.85	1.38	1.21	1.25	1.22	1.15	
14	0.87	0.92	1.07	1.10	4.23	2.19	1.70	1.43	1.23	1.23	1.22	1.15	
15	0.87	0.91	1.05	1.12	3.53	2.60	1.65	1.41	1.21	1.23	1.23	1.13	
16	0.87	1.00	1.12	1.12	3.13	2.00	1.67	1.40	1.20	1.25	1.23	1.13	
17	0.88	1.18	1.12	1.12	2.62	1.86	1.60	1.39	1.20	1.25	1.24	1.15	
18	0.88	1.14	1.11	1.10	2.47	1.80	1.57	1.39	1.20	1.23	1.25	1.15	
19	0.86	1.10	1.08	1.10	2.27	1.81	1.55	1.37	1.20	1.20	1.25	1.13	
20	0.83	1.06	1.02	1.11	2.00	1.84	1.53	1.37	1.19	1.20	1.23	1.14	
21	0.83	1.04	1.00	1.58	2.00	2.00	1.53	1.35	1.19	1.18	1.20	1.15	
22	0.82	1.12	0.98	1.80	2.15	1.99	1.53	1.35	1.19	1.13	1.18	1.15	
23	0.82	1.08	0.98	1.85	1.92	1.99	1.52	1.35	1.19	1.10	1.17	1.15	
24	0.82	1.01	0.98	1.25	1.80	1.82	1.55	1.35	1.19	1.24	1.18	1.15	
25	0.87	1.00	0.97	1.20	1.70	1.70	1.61	1.35	1.20	1.25	1.18	1.13	
26	0.88	0.98	0.96	1.26	1.70	1.68	1.63	1.35	1.20	1.23	1.18	1.13	
27	0.89	0.94	0.95	1.66	1.89	1.63	1.65	1.37	1.20	1.21	1.17	1.13	
28	0.88	1.03	0.93	1.58	2.12	1.67	1.66	1.35	1.20	1.20	1.17	1.12	
29	0.85	1.03	0.92	1.30	1.99	1.65	1.61	1.35	1.19	1.16		1.10	
30	0.85	1.70	1.00	1.25	1.81	1.60	1.58	1.31	1.18	1.19		1.09	
31		1.74		1.22	1.69		1.55		1.20	1.22		1.09	
Mean	0.87	1.03	1.14	1.23	2.46	1.85	1.73	1.40	1.22	1.20	1.20	1.14	
Max	0.92	1.74	1.74	1.85	7.33	2.60	3.04	1.55	1.33	1.25	1.26	1.19	7.33
Min	0.82	0.84	0.92	1.08	1.30	1.52	1.52	1.31	1.18	1.10	1.16	1.09	0.82

Annual Max Momentary Gage Height 9.45 M (A.D), at 22.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.54 M (A.D)
Left Bank Elevation 10.00 M (A.D)
Right Bank Elevation 6.80 M (A.D), Drainage Area 788 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.84	0.40	7.60	2.08	4.44	4.75	4.75	4.18	1.88	0.84	0.84	0.61	
2	0.73	0.62	6.48	2.18	10.44	4.18	4.75	3.96	1.36	0.84	0.69	0.61	
3	0.73	0.95	4.56	2.18	12.27	3.85	4.52	3.73	1.19	0.84	0.75	0.58	
4	0.67	3.08	10.02	2.08	15.13	4.98	9.33	3.62	1.19	0.75	0.75	0.55	
5	0.62	1.12	6.98	2.08	10.57	6.48	5.79	3.06	1.19	0.92	0.84	0.55	
6	0.62	0.79	4.79	2.08	9.33	6.13	15.88	2.84	1.36	0.92	0.84	0.55	
7	0.57	0.73	4.44	2.08	11.99	7.18	8.01	2.41	1.36	0.84	1.19	0.64	
8	0.57	0.62	3.18	2.18	9.61	4.75	6.48	2.41	1.62	0.75	1.27	0.72	
9	0.51	0.62	2.68	3.08	8.51	11.12	5.21	2.41	1.19	0.72	0.69	0.72	
10	0.51	0.62	2.28	2.98	6.50	9.75	8.01	2.24	1.01	0.69	0.64	0.67	
11	0.51	0.57	2.68	2.68	115.40	12.82	27.84	2.24	0.92	0.61	0.69	0.64	
12	0.46	0.67	2.38	2.28	264.35	7.89	9.45	2.24	0.84	0.61	0.75	0.61	
13	0.46	0.84	2.28	2.28	91.50	15.38	7.66	2.32	0.84	1.19	0.92	0.61	
14	0.57	0.84	1.98	2.28	59.96	12.35	5.90	2.84	1.01	1.01	0.92	0.61	
15	0.57	0.79	1.78	2.48	39.12	19.20	5.32	2.61	0.84	1.01	1.01	0.55	
16	0.57	1.28	2.48	2.48	29.73	9.45	5.55	2.50	0.75	1.19	1.01	0.55	
17	0.62	3.08	2.48	2.48	19.56	7.77	4.75	2.41	0.75	1.19	1.10	0.61	
18	0.62	2.68	2.38	2.28	16.92	7.06	4.41	2.41	0.75	1.01	1.19	0.61	
19	0.51	2.28	2.08	2.28	13.62	7.18	4.18	2.24	0.75	0.75	1.19	0.55	
20	0.34	1.88	1.48	2.38	9.45	7.54	3.96	2.24	0.72	0.75	1.01	0.58	
21	0.34	1.68	1.28	7.85	9.45	9.45	3.96	2.06	0.72	0.69	0.75	0.61	
22	0.29	2.48	1.17	10.85	11.74	9.33	3.96	2.06	0.72	0.55	0.69	0.61	
23	0.29	2.08	1.17	11.56	8.49	9.33	3.85	2.06	0.72	0.47	0.67	0.61	
24	0.29	1.38	1.17	3.86	7.06	7.30	4.18	2.06	0.72	1.10	0.69	0.61	
25	0.57	1.28	1.12	3.28	5.90	5.90	4.86	2.06	0.75	1.19	0.69	0.55	
26	0.62	1.17	1.06	3.98	5.90	5.67	5.09	2.06	0.75	1.01	0.69	0.55	
27	0.67	0.95	1.00	8.92	8.13	5.09	5.32	2.24	0.75	0.84	0.67	0.55	
28	0.62	1.58	0.90	7.85	11.28	5.55	5.44	2.06	0.75	0.75	0.67	0.53	
29	0.46	1.58	0.84	4.44	9.33	5.32	4.86	2.06	0.72	0.64		0.47	
30	0.46	9.47	1.28	3.86	7.18	4.75	4.52	1.71	0.69	0.72		0.44	
31		10.02		3.51	5.79		4.18		0.75	0.92		0.44	
Total	16.21	58.13	86.00	116.86	848.75	237.50	201.97	75.34	29.56	26.31	23.81	18.09	1738.53 CMSDAY
Mean	0.54	1.88	2.87	3.77	27.38	7.92	6.52	2.51	0.95	0.85	0.85	0.58	4.76 CMS
Max	0.84	10.02	10.02	11.56	264.35	19.20	27.84	4.18	1.88	1.19	1.27	0.72	264.35 CMS
Min	0.29	0.40	0.84	2.08	4.44	3.85	3.85	1.71	0.69	0.47	0.64	0.44	0.29 CMS
Runoff	1.401	5.022	7.430	10.097	73.332	20.520	17.450	6.509	2.554	2.273	2.057	1.563	150.209 MCM

Momentary Peak 514.00 CMS, at 9.45 H (A.D), at 22.00 Hours, on Aug 11, 2001

Runoff Yield 6.04 Liters/Second/Square KM, Momentary Peak Yield 652.284 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 3,432 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.000 m. (A.D.)

Bench Mark B.M.- Temporary.

Location BM On right bank at the approach of the bridge.

Elevation +13.195 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 Float -

Rated by Current Meter 1994 to date.

Stability of Channel Regimes Fairly stable.

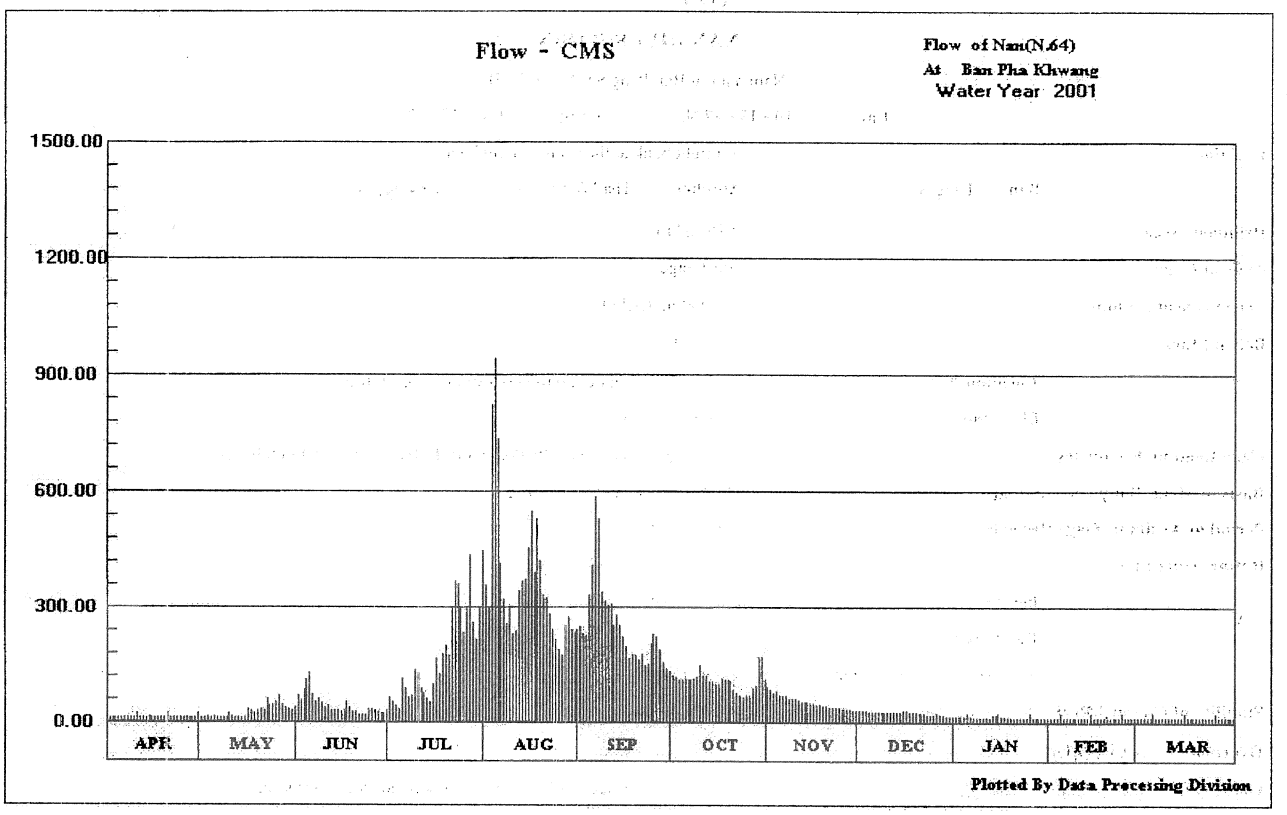
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.01	0.95	1.87	1.83	5.05	3.97	2.49	2.13	1.43	1.24	1.15	1.04	
2	1.00	1.09	1.73	1.68	4.52	3.73	2.43	2.05	1.42	1.24	1.14	1.04	
3	1.01	1.22	2.04	1.54	7.83	3.71	2.36	1.98	1.40	1.24	1.14	1.02	
4	1.06	1.18	2.34	1.48	8.34	4.81	2.36	1.99	1.39	1.23	1.13	1.03	
5	1.02	1.22	2.59	2.39	7.44	5.49	2.39	1.89	1.39	1.22	1.12	1.03	
6	1.00	1.17	1.91	2.11	5.53	6.69	2.37	1.87	1.39	1.21	1.12	1.02	
7	0.99	1.10	1.70	1.85	4.70	6.37	2.34	1.86	1.38	1.20	1.10	1.02	
8	0.99	1.17	1.81	1.90	4.06	4.86	2.39	1.80	1.38	1.20	1.10	1.02	
9	0.98	1.08	1.63	2.67	4.51	4.67	2.45	1.79	1.38	1.19	1.10	1.02	
10	0.96	1.10	1.50	2.59	3.74	4.55	2.80	1.78	1.38	1.19	1.08	1.02	
11	0.96	1.22	1.57	2.12	3.82	4.58	2.48	1.74	1.38	1.19	1.08	1.01	
12	0.94	1.15	1.44	1.95	4.90	3.99	2.50	1.70	1.37	1.18	1.08	1.01	
13	1.18	1.14	1.40	1.77	5.16	4.30	2.33	1.70	1.37	1.30	1.09	1.01	
14	1.22	1.11	1.40	1.72	5.18	4.01	2.31	1.68	1.37	1.30	1.09	1.01	
15	1.11	1.18	1.36	2.25	5.84	3.68	2.25	1.65	1.40	1.25	1.09	1.00	
16	1.06	1.45	1.40	3.02	6.48	3.34	2.25	1.64	1.40	1.23	1.08	1.00	
17	1.03	1.42	1.68	2.54	5.34	3.01	2.39	1.62	1.35	1.21	1.08	1.00	
18	1.01	1.34	1.51	3.15	6.35	3.13	2.38	1.60	1.35	1.20	1.08	1.00	
19	1.00	1.42	1.39	3.41	5.57	3.09	2.37	1.58	1.35	1.20	1.07	1.00	
20	0.99	1.48	1.36	3.08	4.79	2.95	2.32	1.54	1.34	1.20	1.08	0.99	
21	0.98	1.44	1.30	4.51	4.74	3.12	2.05	1.53	1.34	1.19	1.08	0.99	
22	0.96	1.81	1.28	5.15	4.32	2.81	1.95	1.52	1.34	1.17	1.06	0.99	
23	0.95	1.57	1.29	5.10	3.89	2.85	1.88	1.50	1.30	1.17	1.06	0.98	
24	0.94	1.59	1.45	4.47	3.59	3.46	1.85	1.50	1.29	1.16	1.06	0.99	
25	0.94	1.70	1.45	3.78	3.29	3.75	1.87	1.49	1.29	1.18	1.05	0.99	
26	0.94	1.89	1.40	4.49	3.08	3.65	1.90	1.47	1.28	1.18	1.05	1.00	
27	0.94	1.62	1.36	5.70	4.01	3.25	2.10	1.45	1.27	1.18	1.05	0.99	
28	0.93	1.52	1.33	4.08	4.23	2.90	2.18	1.45	1.26	1.15	1.05	0.99	
29	0.93	1.45	1.30	3.57	3.87	2.69	3.04	1.44	1.25	1.15		0.99	
30	0.93	1.41	1.44	4.50	3.77	2.61	3.05	1.44	1.24	1.15		0.98	
31		1.50		5.78	3.87		2.34		1.24	1.15		0.98	
Mean	1.00	1.34	1.57	3.10	4.90	3.87	2.33	1.68	1.35	1.20	1.09	1.01	
Max	1.22	1.89	2.59	5.78	8.34	6.69	3.05	2.13	1.43	1.30	1.15	1.04	8.34
Min	0.93	0.95	1.28	1.48	3.08	2.61	1.85	1.44	1.24	1.15	1.05	0.98	0.93

Annual Max Momentary Gage Height 8.38 M (A.D), at 18.00 Hours, on Aug 4, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.12 M (A.D)
Left Bank Elevation 15.80 M (A.D)
Right Bank Elevation 12.63 M (A.D), Drainage Area 3432 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.3	6.2	71.7	68.3	361.1	253.1	125.1	93.9	35.7	21.1	15.4	9.8	
2	7.8	12.4	60.0	56.0	305.8	232.3	119.9	87.0	34.9	21.1	14.9	9.8	
3	8.3	19.5	86.2	44.6	827.9	230.6	113.8	81.0	33.3	21.1	14.9	8.8	
4	10.8	17.0	112.1	39.8	946.9	335.5	113.8	81.9	32.5	20.3	14.4	9.3	
5	8.8	19.5	133.7	116.4	740.6	413.2	116.4	73.4	32.5	19.5	13.9	9.3	
6	7.8	16.5	75.0	92.2	418.3	591.2	114.7	71.7	32.5	18.8	13.9	8.8	
7	7.5	12.9	57.6	70.0	324.2	535.3	112.1	70.8	31.8	18.0	12.9	8.8	
8	7.5	16.5	66.5	74.2	261.2	340.8	116.4	65.7	31.8	18.0	12.9	8.8	
9	7.2	11.8	51.9	140.7	304.8	321.2	121.6	64.9	31.8	17.5	12.9	8.8	
10	6.5	12.9	41.4	133.7	233.2	308.9	151.9	64.1	31.8	17.5	11.8	8.8	
11	6.5	19.5	47.1	93.1	240.1	311.9	124.2	60.8	31.8	17.5	11.8	8.3	
12	6.0	15.4	36.5	78.5	345.0	254.8	126.0	57.6	31.0	17.0	11.8	8.3	
13	17.0	14.9	33.3	63.3	373.5	283.8	111.2	57.6	31.0	25.6	12.4	8.3	
14	19.5	13.4	33.3	59.2	375.7	256.6	109.5	56.0	31.0	25.6	12.4	8.3	
15	13.4	17.0	30.2	104.3	458.4	228.0	104.3	53.5	33.3	21.8	12.4	7.8	
16	10.8	37.4	33.3	170.9	554.0	198.6	104.3	52.7	33.3	20.3	11.8	7.8	
17	9.3	34.9	56.0	129.4	394.8	170.1	116.4	51.1	29.5	18.8	11.8	7.8	
18	8.3	28.7	42.2	182.2	532.2	180.4	115.6	49.5	29.5	18.0	11.8	7.8	
19	7.8	34.9	32.5	204.7	423.3	177.0	114.7	47.9	29.5	18.0	11.3	7.8	
20	7.5	39.8	30.2	176.1	333.5	164.9	110.4	44.6	28.7	18.0	11.8	7.5	
21	7.2	36.5	25.6	304.8	328.3	179.6	87.0	43.8	28.7	17.5	11.8	7.5	
22	6.5	66.5	24.1	372.4	285.7	152.8	78.5	43.0	28.7	16.5	10.8	7.5	
23	6.2	47.1	24.9	366.7	246.2	156.2	72.5	41.4	25.6	16.5	10.8	7.2	
24	6.0	48.7	37.4	300.7	220.2	209.0	70.0	41.4	24.9	15.9	10.8	7.5	
25	6.0	57.6	37.4	236.7	194.3	234.1	71.7	40.6	24.9	17.0	10.3	7.5	
26	6.0	73.4	33.3	302.7	176.1	225.4	74.2	39.0	24.1	17.0	10.3	7.8	
27	6.0	51.1	30.2	440.0	256.6	190.8	91.3	37.4	23.4	17.0	10.3	7.5	
28	5.7	43.0	27.9	263.0	276.9	160.6	98.3	37.4	22.6	15.4	10.3	7.5	
29	5.7	37.4	25.6	218.5	244.5	142.4	172.7	36.5	21.8	15.4		7.5	
30	5.7	34.1	36.5	303.7	235.8	135.5	173.5	36.5	21.1	15.4		7.2	
31		41.4		450.4	244.5		112.1		21.1	15.4		7.2	
Total	247.6	937.9	1433.6	5657.2	11463.6	7574.6	3444.1	1682.7	904.1	572.5	342.6	252.6	34513.1 CMSDAY
Mean	8.3	30.3	47.8	182.5	369.8	252.5	111.1	56.1	29.2	18.5	12.2	8.1	94.6 CMS
Max	19.5	73.4	133.7	450.4	946.9	591.2	173.5	93.9	35.7	25.6	15.4	9.8	946.9 CMS
Min	5.7	6.2	24.1	39.8	176.1	135.5	70.0	36.5	21.1	15.4	10.3	7.2	5.7 CMS
Runoff	21.39	81.03	123.86	488.78	990.46	654.45	297.57	145.39	78.11	49.46	29.60	21.82	2981.93 MCM

Momentary Peak 956.30 CMS, at 8.38 M (A.D), at 18.00 Hours, on Aug 4, 2001

Runoff Yield 27.55 Liters/Second/Square KM, Momentary Peak Yield 278.642 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 615 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 Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Rather unstable.

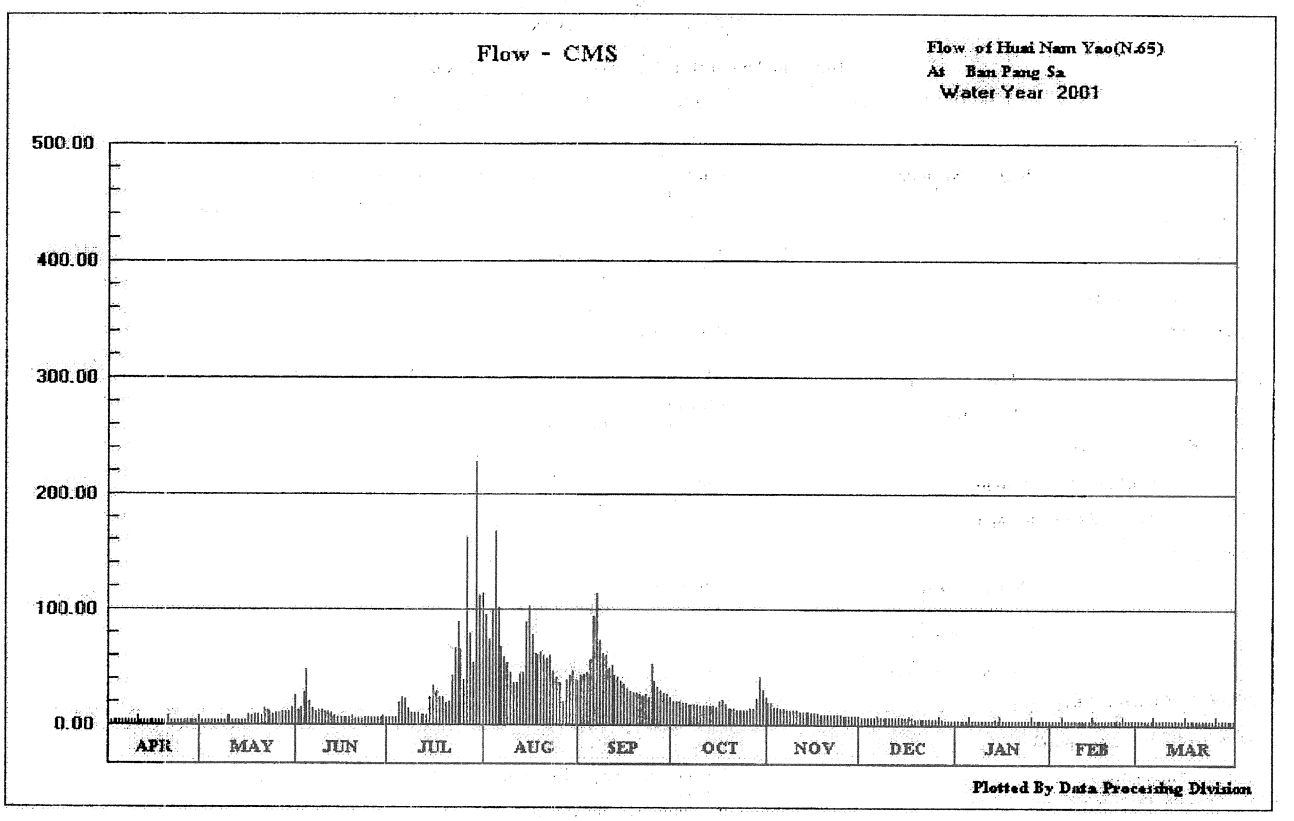
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.85	0.87	1.19	1.02	2.91	1.73	1.35	1.31	1.05	0.98	0.95	0.90	
2	0.84	0.87	1.23	1.02	2.50	1.76	1.35	1.31	1.05	0.98	0.95	0.90	
3	0.84	0.87	1.47	1.02	2.99	1.82	1.35	1.25	1.05	0.98	0.94	0.89	
4	0.84	0.86	1.89	1.31	4.05	2.09	1.32	1.23	1.05	0.97	0.94	0.89	
5	0.84	0.85	1.34	1.40	3.02	2.89	1.31	1.22	1.05	0.97	0.94	0.88	
6	0.84	0.85	1.20	1.38	2.36	3.23	1.30	1.20	1.05	0.97	0.94	0.88	
7	0.84	0.84	1.15	1.20	2.17	2.46	1.28	1.19	1.04	0.97	0.93	0.88	
8	0.84	0.95	1.19	1.12	2.05	2.23	1.28	1.18	1.04	0.97	0.93	0.88	
9	0.86	1.06	1.18	1.13	1.81	2.18	1.28	1.17	1.04	0.97	0.93	0.88	
10	0.83	1.00	1.16	1.13	1.62	1.92	1.27	1.17	1.03	0.97	0.93	0.88	
11	0.83	0.94	1.15	1.10	1.62	1.96	1.27	1.16	1.03	0.97	0.93	0.88	
12	0.82	0.91	1.13	1.09	1.76	1.74	1.26	1.16	1.03	0.96	0.93	0.88	
13	0.82	0.93	1.06	1.09	1.81	1.70	1.26	1.16	1.03	1.01	0.93	0.88	
14	0.81	0.98	1.05	1.40	2.81	1.64	1.26	1.15	1.03	0.96	0.93	0.88	
15	0.81	0.98	1.05	1.57	3.04	1.60	1.25	1.13	1.02	0.96	0.93	0.88	
16	0.81	1.10	1.05	1.50	2.58	1.54	1.35	1.13	1.02	0.95	0.93	0.87	
17	0.81	1.07	1.05	1.41	2.22	1.50	1.37	1.12	1.02	0.95	0.93	0.87	
18	0.81	1.09	1.04	1.40	2.18	1.47	1.28	1.11	1.01	0.95	0.93	0.87	
19	0.80	1.10	1.04	1.32	2.24	1.48	1.22	1.11	1.01	0.95	0.92	0.87	
20	0.80	1.05	1.00	1.34	2.20	1.46	1.20	1.10	1.01	0.95	0.92	0.87	
21	0.80	1.21	1.00	1.72	2.12	1.42	1.20	1.10	1.00	0.95	0.91	0.86	
22	0.80	1.17	1.00	2.34	2.19	1.45	1.19	1.10	1.00	0.95	0.91	0.86	
23	0.80	1.16	1.03	2.79	1.84	1.40	1.18	1.09	1.00	0.95	0.91	0.85	
24	0.80	1.11	1.03	2.29	1.71	2.01	1.17	1.09	1.00	0.95	0.90	0.85	
25	0.80	1.12	1.04	1.65	1.62	1.63	1.17	1.08	0.99	0.95	0.90	0.85	
26	0.80	1.12	1.03	3.96	1.34	1.56	1.20	1.08	0.99	0.94	0.90	0.85	
27	0.79	1.14	1.03	2.59	1.65	1.50	1.22	1.08	0.99	0.94	0.90	0.85	
28	0.79	1.16	1.02	2.05	1.74	1.48	1.39	1.08	0.98	0.94	0.90	0.85	
29	0.78	1.15	1.02	4.87	1.83	1.45	1.71	1.07	0.98	0.94		0.85	
30	0.78	1.25	1.02	3.20	1.65	1.40	1.52	1.07	0.98	0.94		0.85	
31		1.44		3.23	1.64		1.40		0.98	0.94		0.85	
Mean	0.82	1.04	1.13	1.79	2.17	1.79	1.30	1.15	1.02	0.96	0.92	0.87	
Max	0.86	1.44	1.89	4.87	4.05	3.23	1.71	1.31	1.05	1.01	0.95	0.90	4.87
Min	0.78	0.84	1.00	1.02	1.34	1.40	1.17	1.07	0.98	0.94	0.90	0.85	0.78

Annual Max Momentary Gage Height 6.00 M (A.D), at 15.00 Hours, on Jul 29, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.30 M (A.D)
Left Bank Elevation 8.14 M (A.D)
Right Bank Elevation 7.98 M (A.D), Drainage Area 615 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.00	2.40	14.55	7.30	96.10	44.02	22.25	20.05	8.50	5.80	4.75	3.00	
2	1.80	2.40	16.35	7.30	75.50	45.04	22.25	20.05	8.50	5.80	4.75	3.00	
3	1.80	2.40	28.92	7.30	100.90	47.12	22.25	17.25	8.50	5.80	4.40	2.80	
4	1.80	2.20	49.64	20.05	169.50	57.60	20.60	16.35	8.50	5.45	4.40	2.80	
5	1.80	2.00	21.70	25.00	102.70	94.98	20.05	15.90	8.50	5.45	4.40	2.60	
6	1.80	2.00	15.00	23.90	69.20	115.36	19.50	15.00	8.50	5.45	4.40	2.60	
7	1.80	1.80	12.75	15.00	60.80	73.70	18.60	14.55	8.10	5.45	4.05	2.60	
8	1.80	4.75	14.55	11.40	56.00	63.35	18.60	14.10	8.10	5.45	4.05	2.60	
9	2.20	8.90	14.10	11.85	46.76	61.20	18.60	13.65	8.10	5.45	4.05	2.60	
10	1.60	6.50	13.20	11.85	38.20	50.80	18.15	13.65	7.70	5.45	4.05	2.60	
11	1.60	4.40	12.75	10.50	38.20	52.40	18.15	13.20	7.70	5.45	4.05	2.60	
12	1.40	3.35	11.85	10.10	45.04	44.36	17.70	13.20	7.70	5.10	4.05	2.60	
13	1.40	4.05	8.90	10.10	46.76	43.00	17.70	13.20	7.70	6.90	4.05	2.60	
14	1.20	5.80	8.50	25.00	90.82	39.40	17.70	12.75	7.70	5.10	4.05	2.60	
15	1.20	5.80	8.50	35.08	103.90	37.00	17.25	11.85	7.30	5.10	4.05	2.60	
16	1.20	10.50	8.50	30.60	79.34	33.16	22.25	11.85	7.30	4.75	4.05	2.40	
17	1.20	9.30	8.50	25.56	62.90	30.60	23.35	11.40	7.30	4.75	4.05	2.40	
18	1.20	10.10	8.10	25.00	61.20	28.92	18.60	10.95	6.90	4.75	4.05	2.40	
19	1.00	10.50	8.10	20.60	63.80	29.48	15.90	10.95	6.90	4.75	3.70	2.40	
20	1.00	8.50	6.50	21.70	62.00	28.36	15.00	10.50	6.90	4.75	3.70	2.40	
21	1.00	15.45	6.50	43.68	58.80	26.12	15.00	10.50	6.50	4.75	3.35	2.20	
22	1.00	13.65	6.50	68.30	61.60	27.80	14.55	10.50	6.50	4.75	3.35	2.20	
23	1.00	13.20	7.70	89.80	47.84	25.00	14.10	10.10	6.50	4.75	3.35	2.00	
24	1.00	10.95	7.70	66.05	43.34	54.40	13.65	10.10	6.50	4.75	3.00	2.00	
25	1.00	11.40	8.10	40.00	38.20	38.80	13.65	9.70	6.15	4.75	3.00	2.00	
26	1.00	11.40	7.70	163.20	21.70	34.44	15.00	9.70	6.15	4.40	3.00	2.00	
27	0.90	12.30	7.70	79.82	40.00	30.60	15.90	9.70	6.15	4.40	3.00	2.00	
28	0.90	13.20	7.30	56.00	44.36	29.48	24.45	9.70	5.80	4.40	3.00	2.00	
29	0.80	12.75	7.30	228.75	47.48	27.80	43.34	9.30	5.80	4.40		2.00	
30	0.80	17.25	7.30	113.50	40.00	25.00	31.88	9.30	5.80	4.40		2.00	
31		27.24		115.36	39.40		25.00		5.80	4.40		2.00	
Total	40.20	266.44	364.76	1419.65	1952.34	1339.29	610.97	379.00	224.05	157.10	108.15	74.60	6936.55 CMSDAY
Mean	1.34	8.59	12.16	45.80	62.98	44.64	19.71	12.63	7.23	5.07	3.86	2.41	19.00 CMS
Max	2.20	27.24	49.64	228.75	169.50	115.36	43.34	20.05	8.50	6.90	4.75	3.00	228.75 CMS
Min	0.80	1.80	6.50	7.30	21.70	25.00	13.65	9.30	5.80	4.40	3.00	2.00	0.80 CMS
Runoff	3.473	23.020	31.515	122.658	168.682	115.715	52.788	32.746	19.358	13.573	9.344	6.445	599.318 MCM

Momentary Peak 315.00 CMS, at 6.00 M (A.D), at 15.00 Hours, on Jul 29, 2001
Runoff Yield 29.83 Liters/Second/Square KM, Momentary Peak Yield 494.505 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Huai Om Sing at Ban Noen Phoem, Phitsanulok (N.66)

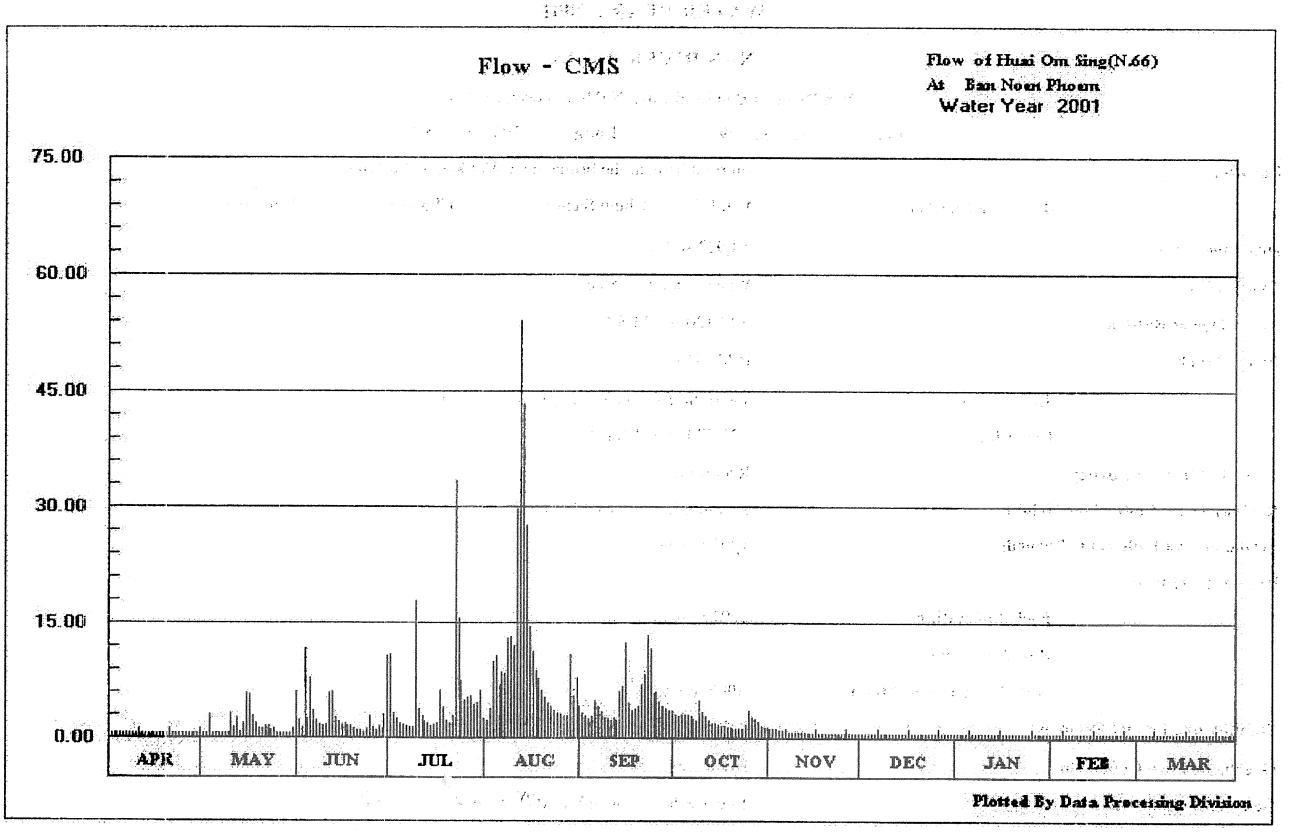
Lat 17 - 07 - 22 N. **Long** 100 - 53 - 58 E.

Location		on right bank at Ban Om Sing.			
	Ban Noen Phoem	**Amphoe**	Nakhon Thai	**Changwat**	Phitsanulok
Drainage Area		152 sq.km.			
Type of Gage		Water - stage recorder.			
Zero Gage at Bottom		+201.220 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On right bank about 8 meters from the top staff gage.			
	Elevation	+208.617 m. (M.S.L.)			
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 Float	-			
	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 38 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	201.63	201.57	202.43	204.28	202.43	202.68	202.64	202.10	201.78	201.64	201.58	201.55	
2	201.62	201.78	202.17	202.70	202.83	202.57	202.59	202.08	201.78	201.65	201.57	201.52	
3	201.64	202.52	204.39	202.46	204.11	202.50	202.66	202.07	201.77	201.64	201.57	201.49	
4	201.61	201.87	202.50	202.34	204.25	202.60	202.65	202.06	201.77	201.63	201.56	201.50	
5	201.58	201.78	203.73	202.29	203.54	203.10	202.65	202.02	201.77	201.63	201.57	201.52	
6	201.58	201.76	202.80	202.21	203.87	202.94	202.59	202.00	201.76	201.62	201.57	201.52	
7	201.56	201.68	202.43	202.17	203.82	202.74	202.48	201.98	201.76	201.62	201.59	201.53	
8	201.55	201.65	202.29	202.16	204.61	202.54	202.45	201.98	201.75	201.61	201.57	201.51	
9	201.54	201.61	202.23	205.14	204.62	202.47	203.11	201.96	201.75	201.61	201.56	201.51	
10	201.53	202.58	202.29	202.83	204.46	202.45	202.75	201.95	201.74	201.61	201.55	201.50	
11	201.53	202.18	203.31	202.60	205.76	202.52	202.57	201.93	201.74	201.60	201.55	201.51	
12	201.53	202.56	203.35	202.40	206.58	202.45	202.44	201.93	201.73	201.60	201.54	201.50	
13	201.55	201.95	202.54	202.32	206.27	203.33	202.34	201.92	201.73	201.61	201.55	201.50	
14	201.51	202.31	202.37	202.24	205.67	203.51	202.31	201.91	201.72	201.61	201.55	201.49	
15	201.52	203.29	202.26	202.28	204.81	204.51	202.28	201.90	201.72	201.64	201.53	201.49	
16	201.53	203.28	202.33	202.32	204.34	203.01	202.24	201.90	201.71	201.65	201.54	201.43	
17	201.51	202.60	202.20	203.39	203.90	202.80	202.20	201.88	201.70	201.62	201.54	201.47	
18	201.51	202.30	202.19	202.89	203.68	202.84	202.18	201.87	201.70	201.61	201.53	201.43	
19	201.49	202.11	202.10	202.41	203.40	202.90	202.13	201.86	201.69	201.60	201.52	201.41	
20	201.47	201.98	202.03	202.30	203.16	203.54	202.11	201.84	201.69	201.59	201.52	201.50	
21	201.48	202.22	202.00	202.57	203.01	203.81	202.10	201.83	201.68	201.59	201.54	201.52	
22	201.48	202.23	201.98	205.91	202.90	204.66	202.09	201.83	201.68	201.58	201.54	201.50	
23	201.49	202.00	202.08	204.94	202.80	204.40	202.09	201.83	201.67	201.57	201.53	201.49	
24	201.58	202.07	202.60	203.66	202.70	203.32	202.28	201.82	201.67	201.56	201.53	201.50	
25	201.65	201.90	202.18	203.09	202.63	203.36	202.76	201.81	201.67	201.57	201.53	201.51	
26	201.58	201.86	202.05	203.16	202.59	203.06	202.56	201.80	201.67	201.58	201.53	201.49	
27	201.70	201.84	202.24	203.21	202.58	202.91	202.49	201.80	201.66	201.57	201.53	201.50	
28	201.58	201.81	202.09	202.97	204.26	202.81	202.35	201.79	201.66	201.60	201.53	201.50	
29	201.57	201.91	202.63	202.99	203.22	202.80	202.21	201.79	201.65	201.60		201.48	
30	201.55	201.80	204.24	203.37	203.74	202.77	202.16	201.78	201.65	201.60		201.47	
31		203.36		202.51	202.94		202.13		201.65	201.59		201.46	
Mean	201.56	202.15	202.53	202.97	203.85	203.06	202.41	201.91	201.71	201.61	201.55	201.49	
Max	201.70	203.36	204.39	205.91	206.58	204.66	203.11	202.10	201.78	201.65	201.59	201.55	206.58
Min	201.47	201.57	201.98	202.16	202.43	202.45	202.09	201.78	201.65	201.56	201.52	201.41	201.41

Annual Max Momentary Gage Height 207.51 M (MSL), at 21.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 201.22 M (MSL), River Bed 201.31 M (MSL)
Left Bank Elevation 208.40 M (MSL)
Right Bank Elevation 208.38 M (MSL), Drainage Area 152 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.26	0.18	2.50	11.18	2.50	3.42	3.26	1.40	0.56	0.28	0.19	0.16	
2	0.24	0.56	1.61	3.50	4.02	3.00	3.06	1.34	0.56	0.30	0.18	0.14	
3	0.28	3.18	11.84	2.61	10.21	2.75	3.34	1.31	0.54	0.28	0.18	0.12	
4	0.22	0.77	2.75	2.19	11.00	3.10	3.30	1.28	0.54	0.26	0.17	0.13	
5	0.19	0.56	8.15	2.01	7.20	5.15	3.30	1.16	0.54	0.26	0.18	0.14	
6	0.19	0.52	3.90	1.74	8.88	4.46	3.06	1.10	0.52	0.24	0.18	0.14	
7	0.17	0.36	2.50	1.61	8.61	3.66	2.68	1.05	0.52	0.24	0.19	0.15	
8	0.16	0.30	2.01	1.58	13.27	2.89	2.57	1.05	0.50	0.22	0.18	0.14	
9	0.16	0.22	1.80	18.08	13.34	2.64	5.20	1.00	0.50	0.22	0.17	0.14	
10	0.15	3.42	2.01	4.02	12.29	2.57	3.70	0.97	0.48	0.22	0.16	0.13	
11	0.15	1.64	6.10	3.10	29.88	2.82	3.00	0.92	0.48	0.20	0.16	0.14	
12	0.15	2.96	6.28	2.40	54.28	2.57	2.54	0.92	0.46	0.20	0.16	0.13	
13	0.16	0.97	2.89	2.12	43.64	6.19	2.19	0.90	0.46	0.22	0.16	0.13	
14	0.14	2.08	2.29	1.84	27.81	7.05	2.08	0.88	0.44	0.22	0.16	0.12	
15	0.14	6.00	1.91	1.98	14.69	12.61	1.98	0.85	0.44	0.28	0.15	0.12	
16	0.15	5.96	2.16	2.12	11.54	4.74	1.84	0.85	0.42	0.30	0.16	0.08	
17	0.14	3.10	1.70	6.46	9.05	3.90	1.70	0.80	0.40	0.24	0.16	0.11	
18	0.14	2.05	1.67	4.26	7.90	4.06	1.64	0.77	0.40	0.22	0.15	0.08	
19	0.12	1.43	1.40	2.44	6.50	4.30	1.49	0.75	0.38	0.20	0.14	0.06	
20	0.11	1.05	1.19	2.05	5.42	7.20	1.43	0.70	0.38	0.19	0.14	0.13	
21	0.11	1.77	1.10	3.00	4.74	8.55	1.40	0.67	0.36	0.19	0.16	0.14	
22	0.11	1.80	1.05	33.66	4.30	13.62	1.37	0.67	0.36	0.19	0.16	0.13	
23	0.12	1.10	1.34	15.86	3.90	11.90	1.37	0.67	0.34	0.18	0.15	0.12	
24	0.19	1.31	3.10	7.80	3.50	6.14	1.98	0.65	0.34	0.17	0.15	0.13	
25	0.30	0.85	1.64	5.10	3.22	6.32	3.74	0.62	0.34	0.18	0.15	0.14	
26	0.19	0.75	1.25	5.42	3.06	4.97	2.96	0.60	0.34	0.19	0.15	0.12	
27	0.40	0.70	1.84	5.65	3.03	4.34	2.72	0.60	0.32	0.18	0.15	0.13	
28	0.19	0.62	1.37	4.58	11.06	3.94	2.23	0.58	0.32	0.20	0.15	0.13	
29	0.18	0.88	3.22	4.66	5.69	3.90	1.74	0.58	0.30	0.20		0.11	
30	0.16	0.60	10.94	6.37	8.20	3.78	1.58	0.56	0.30	0.20		0.11	
31		6.32		2.78	4.46		1.49		0.30	0.19		0.10	
Total	5.37	54.01	93.51	172.17	357.19	156.54	75.94	26.20	13.14	6.86	4.54	3.85	969.32 CMSDAY
Mean	0.18	1.74	3.12	5.55	11.52	5.22	2.45	0.87	0.42	0.22	0.16	0.12	2.66 CMS
Max	0.40	6.32	11.84	33.66	54.28	13.62	5.20	1.40	0.56	0.30	0.19	0.16	54.28 CMS
Min	0.11	0.18	1.05	1.58	2.50	2.57	1.37	0.56	0.30	0.17	0.14	0.06	0.06 CMS
Runoff	0.464	4.666	8.079	14.875	30.861	13.525	6.561	2.264	1.135	0.593	0.392	0.333	83.749 MCM

Momentary Peak 91.75 CMS, at 207.51 M (MSL), at 21.00 Hours, on Aug 11, 2001
Runoff Yield 17.47 Liters/Second/Square KM, Momentary Peak Yield 603.618 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Ban Koei Chai, Nakhon Sawan (N.67)

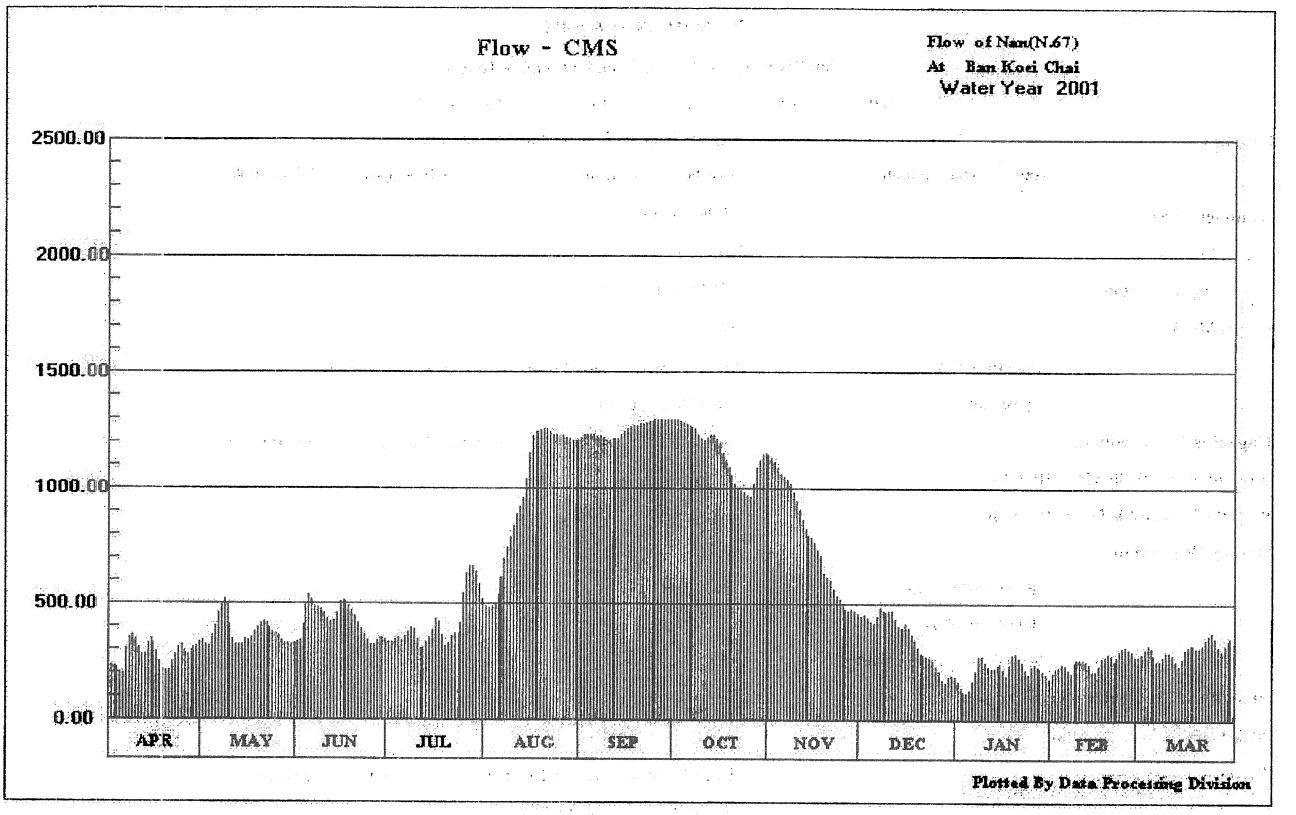
Lat 15 - 52 - 09 N. **Long** 100 - 16 - 06 E.

Location		on right bank at the bridge near Wat Koei Chai Nua.			
	Ban Koei Chai	**Amphoe** Chum Saeng		**Changwat**	Nakhon Sawan
Drainage Area		54,923 sq.km.			
Type of Gage		Water - stage recorder.			
Zero Gage at Bottom		+13.120 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On right bank near the gage observe's house.			
	Elevation	+27.470 m. (M.S.L.)			
Gage Reading Frequency		Recording.			
Basis of Mean Daily Gage Height		Arithmetic mean of 24 readings.			
Period of Available Gage Records		1997 to date.			
Rating Operation					
	Period of Rating	1997 to date.			
	Rated by Float	-			
	Rated by Current Meter	1997 to date.			
Stability of Channel Regimes		Fairly stable because of backwater effect.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records fair. Flow effected by Mae Yom side flow.			
		Stage - discharge relation defined by 131 measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.82	21.88	21.81	21.81	23.10	27.05	27.40	26.68	22.76	20.10	20.50	21.18	
2	20.77	21.70	21.89	21.77	23.06	27.09	27.40	26.63	22.78	19.81	20.71	21.31	
3	20.69	21.63	22.48	21.91	23.09	27.10	27.36	26.55	22.70	19.59	20.77	21.50	
4	20.48	22.03	23.14	22.00	23.14	27.11	27.32	26.44	22.58	19.54	20.86	21.65	
5	20.40	22.40	23.42	21.89	23.44	27.09	27.30	26.32	22.50	19.70	20.82	21.56	
6	21.50	22.86	23.31	22.03	23.91	27.08	27.28	26.26	22.75	20.11	20.63	21.23	
7	21.99	23.12	23.09	22.23	24.38	27.07	27.25	26.19	23.06	20.58	20.52	20.97	
8	22.06	23.31	23.03	22.34	24.69	27.05	27.22	26.08	22.94	21.15	20.91	21.01	
9	21.90	23.13	23.01	22.29	24.93	27.00	27.11	25.91	22.90	21.18	21.07	21.17	
10	21.57	22.46	22.86	21.92	25.17	27.00	27.03	25.72	22.94	20.91	21.08	21.34	
11	21.22	21.94	22.68	21.54	25.43	27.02	26.99	25.52	22.92	20.77	21.08	21.39	
12	21.25	21.65	22.57	21.52	25.58	27.02	27.04	25.32	22.67	20.70	21.01	21.25	
13	21.74	21.69	22.59	21.77	25.78	27.03	27.10	25.12	22.43	20.70	20.85	20.98	
14	21.93	21.66	22.86	21.97	26.17	27.11	27.09	24.96	22.39	20.79	20.57	20.82	
15	21.71	21.91	23.20	22.27	26.73	27.17	27.03	24.91	22.50	20.85	20.53	21.09	
16	21.37	21.85	23.25	22.65	27.08	27.21	26.94	24.79	22.38	20.60	20.79	21.51	
17	20.91	22.01	23.22	22.56	27.17	27.25	26.72	24.61	22.11	20.37	21.11	21.62	
18	20.63	22.21	23.10	22.09	27.16	27.27	26.56	24.46	21.86	20.83	21.20	21.66	
19	20.57	22.36	22.94	21.62	27.19	27.27	26.44	24.04	21.56	21.26	21.28	21.67	
20	20.57	22.50	22.76	21.74	27.23	27.29	26.29	23.90	21.31	21.29	21.24	21.58	
21	20.93	22.56	22.52	22.02	27.22	27.30	26.09	23.85	21.25	21.12	20.99	21.56	
22	21.26	22.52	22.29	22.17	27.16	27.32	25.98	23.59	21.16	20.92	21.15	21.70	
23	21.56	22.39	22.07	22.17	27.11	27.35	25.95	23.38	21.13	20.63	21.40	21.90	
24	21.67	22.21	21.84	22.53	27.09	27.37	25.91	23.28	21.02	20.45	21.55	22.09	
25	21.44	22.15	21.66	23.47	27.08	27.38	25.84	23.14	20.74	20.72	21.59	22.20	
26	21.23	22.02	21.66	24.05	27.08	27.39	25.82	22.97	20.55	20.87	21.48	21.98	
27	21.45	21.83	21.85	24.22	27.06	27.39	26.10	22.94	20.14	20.77	21.45	21.64	
28	21.57	21.76	21.98	24.20	27.02	27.38	26.42	23.01	20.00	20.66	21.17	21.44	
29	21.63	21.73	22.00	24.08	26.99	27.38	26.58	22.96	20.26	20.57		21.68	
30	21.77	21.70	21.94	23.73	26.98	27.40	26.68	22.83	20.37	20.40		21.89	
31		21.72		23.31	27.00		26.71		20.30	20.23		22.00	
Mean	21.29	22.16	22.57	22.45	25.88	27.20	26.74	24.75	21.84	20.59	21.01	21.50	
Max	22.08	23.31	23.42	24.22	27.23	27.40	27.40	26.68	23.06	21.29	21.59	22.20	27.40
Min	20.40	21.63	21.66	21.52	23.06	27.00	25.82	22.83	20.00	19.54	20.50	20.82	19.54

Annual Max Momentary Gage Height 27.42 M (MSL), at 8.00 Hours, on Oct 2, 2001
Zero Gage at Bottom Elevation 13.12 M (MSL), River Bed 13.44 M (MSL)
Left Bank Elevation 28.27 M (MSL)
Right Bank Elevation 27.70 M (MSL), Drainage Area 54923 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	241.2	347.9	340.9	340.9	498.0	1228.0	1305.0	1149.3	453.2	172.6	209.0	277.5	
2	236.2	329.8	348.9	336.8	492.7	1236.8	1305.0	1138.8	455.9	146.3	230.1	290.5	
3	228.1	322.8	416.5	350.9	496.7	1239.0	1296.2	1121.9	445.3	126.3	236.2	309.7	
4	207.2	363.4	503.8	360.0	503.8	1241.2	1287.4	1098.6	429.5	121.7	245.2	324.8	
5	199.9	406.5	545.2	348.9	548.2	1236.8	1283.0	1073.2	419.0	136.3	241.2	315.7	
6	309.7	466.4	528.5	363.4	619.7	1234.6	1278.6	1061.0	451.9	173.5	222.1	282.5	
7	359.0	500.9	496.7	386.1	699.3	1232.4	1272.0	1046.9	492.7	217.1	211.0	256.3	
8	369.1	528.5	488.8	399.0	754.7	1228.0	1265.4	1024.7	476.9	274.4	250.3	260.3	
9	349.9	502.3	486.1	392.9	798.8	1217.0	1241.2	990.5	471.7	277.5	266.4	276.4	
10	316.7	414.0	466.4	351.9	844.8	1217.0	1223.6	952.3	476.9	250.3	267.4	293.6	
11	281.5	354.0	442.7	313.7	894.6	1221.4	1214.9	912.0	474.3	236.2	267.4	298.6	
12	284.5	324.8	428.2	311.7	924.1	1221.4	1225.8	873.5	441.4	229.1	260.3	284.5	
13	333.8	328.8	430.8	336.8	964.4	1223.6	1239.0	835.2	410.3	229.1	244.2	257.3	
14	353.0	325.8	466.4	357.0	1042.8	1241.2	1236.8	804.5	405.2	238.2	216.0	241.2	
15	330.8	350.9	512.5	390.6	1159.9	1254.4	1223.6	794.9	419.0	244.2	212.0	268.4	
16	296.6	344.9	519.8	438.7	1234.6	1263.2	1204.3	772.9	404.0	219.1	238.2	310.7	
17	250.3	361.1	515.4	426.9	1254.4	1272.0	1157.8	740.1	372.5	197.2	270.4	321.7	
18	222.1	383.8	498.0	370.2	1252.2	1276.4	1124.0	713.1	345.9	242.2	279.5	325.8	
19	216.0	401.5	476.9	321.7	1258.8	1276.4	1098.6	641.1	315.7	285.5	287.5	326.8	
20	216.0	419.0	453.2	333.8	1267.6	1280.8	1067.0	618.0	290.5	288.5	283.5	317.7	
21	252.3	426.9	421.6	362.3	1265.4	1283.0	1026.7	610.4	284.5	271.4	258.3	315.7	
22	285.5	421.6	392.9	379.3	1252.2	1287.4	1004.6	571.0	275.4	251.3	274.4	329.8	
23	315.7	405.2	367.9	379.3	1241.2	1294.0	998.6	539.1	272.4	222.1	299.6	349.9	
24	326.8	383.8	343.9	423.0	1236.8	1298.4	990.5	524.1	261.3	204.5	314.7	370.2	
25	303.6	377.0	325.8	552.8	1234.6	1300.6	976.4	503.8	233.2	231.1	318.7	382.7	
26	282.5	362.3	325.8	642.7	1234.6	1302.8	972.4	480.9	214.0	246.2	307.7	358.0	
27	304.6	342.9	344.9	671.7	1230.2	1302.8	1028.8	476.9	176.3	236.2	304.6	323.8	
28	316.7	335.8	358.0	668.3	1221.4	1300.6	1094.4	486.1	163.5	225.1	276.4	303.6	
29	322.8	332.8	360.0	647.7	1214.9	1300.6	1128.2	479.6	187.2	216.0		327.8	
30	336.8	329.8	354.0	592.2	1212.8	1305.0	1149.3	462.4	197.2	199.9		348.9	
31		331.8		528.5	1217.0		1155.7		190.8	184.5		360.0	
Total	8648.9	11827.0	12960.5	13079.7	31071.2	37816.8	36074.8	23496.8	10907.6	6793.6	7292.3	9610.4	209579.6 CMSDAY
Mean	288.3	381.5	432.0	421.9	1002.3	1260.6	1163.7	783.2	351.9	219.1	260.4	310.0	574.2 CMS
Max	369.1	528.5	545.2	671.7	1267.6	1305.0	1305.0	1149.3	492.7	288.5	318.7	382.7	1305.0 CMS
Min	199.9	322.8	325.8	311.7	492.7	1217.0	972.4	462.4	163.5	121.7	209.0	241.2	121.7 CMS
Runoff	747.27	1021.85	1119.79	1130.09	2684.55	3267.37	3116.86	2030.12	942.42	586.97	630.05	830.34	18107.68 MCM

Momentary Peak 1309.40 CMS, at 27.42 M (MSL), at 8.00 Hours, on Oct 2, 2001

Runoff Yield 10.45 Liters/Second/Square KM, Momentary Peak Yield 23.841 Liters/Second/Square KM

WATER YEAR : 2001

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 in front of Wat Tha Takhian.

Ban Tha Takhian **Amphoe** Mueang **Changwat** Phitsanulok

Drainage Area 24,960 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +35.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 5.00 meters from the top staff gage.

Elevation +48.620 m.(M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1999 to date.

Rating Operation

Period of Rating 1999 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable.

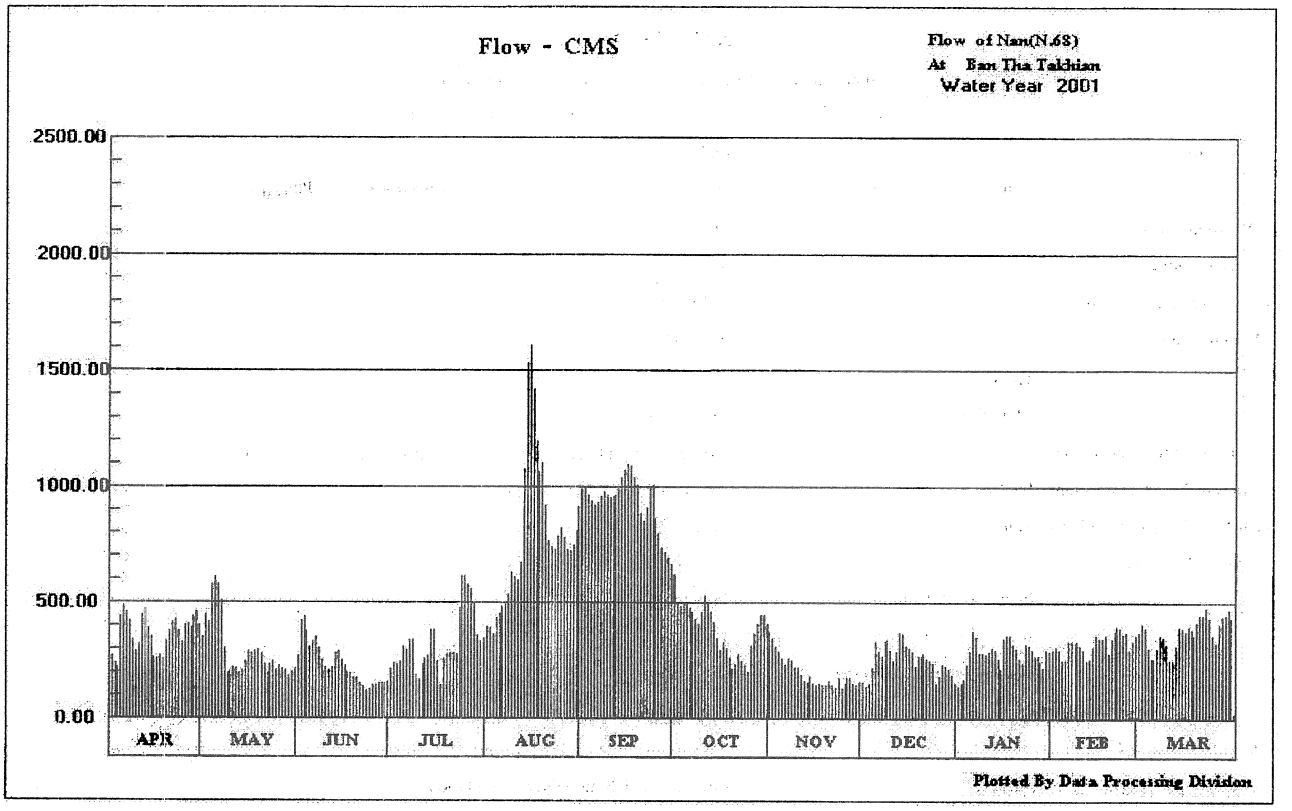
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 27 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	38.10	38.81	38.12	37.64	39.12	43.21	40.83	38.94	37.12	36.91	38.32	38.96	
2	37.82	39.53	39.33	37.83	39.08	43.25	39.94	38.73	36.92	37.05	38.44	39.27	
3	37.69	39.28	39.51	37.76	38.91	43.10	39.85	38.42	37.04	37.24	38.33	39.09	
4	39.48	40.50	38.98	37.92	39.43	42.95	39.97	38.28	37.65	37.80	37.95	38.37	
5	39.85	40.75	38.42	38.44	39.60	42.86	39.95	38.00	38.66	38.26	37.97	37.99	
6	39.63	40.54	38.65	38.33	39.81	42.92	39.80	37.79	38.27	38.97	38.66	38.03	
7	39.33	40.01	38.81	38.71	39.90	43.07	39.65	38.01	38.10	38.79	38.66	38.37	
8	38.70	38.40	38.39	38.68	40.22	43.17	39.38	37.94	38.63	38.20	38.60	38.82	
9	38.26	37.45	37.95	37.38	40.88	43.10	39.25	37.65	38.68	38.24	38.64	38.77	
10	38.52	37.50	37.67	37.23	40.75	43.03	39.62	37.65	38.33	38.17	38.51	38.55	
11	39.53	37.68	37.58	37.77	40.67	43.05	40.17	37.37	37.94	38.28	38.33	37.97	
12	39.71	37.64	37.70	37.99	41.18	43.11	39.95	37.18	38.29	38.36	37.96	37.93	
13	39.08	37.43	38.23	38.14	43.64	43.25	39.63	37.08	38.93	38.35	38.00	38.48	
14	38.77	37.58	38.27	39.03	45.53	43.46	39.29	37.34	38.88	38.02	38.42	39.15	
15	38.06	37.89	37.97	39.07	45.84	43.60	38.76	37.05	38.48	37.62	38.84	39.11	
16	37.98	38.27	37.74	37.87	45.08	43.72	38.35	36.99	38.40	38.72	38.72	38.99	
17	38.11	38.20	37.48	36.96	44.15	43.68	38.61	37.04	38.29	38.86	38.75	39.12	
18	38.02	38.30	37.43	38.02	43.59	43.47	38.36	36.97	37.75	38.85	38.82	39.05	
19	38.63	38.33	37.27	38.18	43.76	43.31	38.04	36.98	38.14	38.53	38.20	38.86	
20	38.97	38.18	37.27	38.22	42.85	42.64	37.64	37.16	38.09	38.37	38.74	39.30	
21	39.30	37.80	37.04	38.21	41.87	42.46	37.76	36.98	38.20	38.03	39.01	39.52	
22	39.41	37.46	36.94	38.18	41.69	42.80	38.19	36.83	38.00	37.86	39.14	39.55	
23	39.01	37.81	36.73	39.78	41.59	43.26	37.87	37.26	37.95	38.52	39.11	39.78	
24	38.58	37.89	36.80	40.78	41.99	43.31	37.75	36.86	37.86	38.49	38.88	39.43	
25	39.19	37.58	37.01	40.79	42.24	42.50	37.51	37.02	37.06	38.32	38.93	38.85	
26	39.26	37.72	36.99	40.50	41.97	42.09	38.49	37.27	37.32	38.12	38.32	38.59	
27	39.08	37.59	37.06	40.37	41.60	41.66	38.89	37.27	37.77	38.09	38.65	39.23	
28	39.48	37.57	37.02	39.91	41.56	41.52	39.24	37.05	37.73	37.89	38.85	39.49	
29	39.63	37.32	37.04	38.82	41.73	41.34	39.55	37.00	37.62	37.70		39.53	
30	39.21	37.48	37.10	38.66	42.17	41.16	39.52	37.10	37.41	38.34		39.72	
31		37.59		38.74	42.81		39.26		37.03	38.29		39.43	
Mean	38.88	38.26	37.75	38.58	41.78	42.87	39.07	37.44	37.95	38.17	38.56	38.95	
Max	39.85	40.75	39.51	40.79	45.84	43.72	40.83	38.94	38.93	38.97	39.14	39.78	45.84
Min	37.69	37.32	36.73	36.96	38.91	41.16	37.51	36.83	36.92	36.91	37.95	37.93	36.73

Annual Max Momentary Gage Height 45.89 M (MSL), at 12.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 35.00 M (MSL), River Bed 32.23 M (MSL)
Left Bank Elevation 48.63 M (MSL)
Right Bank Elevation 48.63 M (MSL), Drainage Area 24960 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	275.5	360.3	277.8	223.4	399.0	992.9	625.2	376.5	166.6	145.0	300.8	379.0	
2	243.3	450.9	425.3	244.5	394.0	1000.7	504.9	350.3	146.0	159.2	314.8	417.7	
3	228.9	419.0	448.3	236.6	372.8	971.5	492.7	312.4	158.2	179.4	302.0	395.2	
4	444.4	580.5	381.5	254.8	437.9	943.0	509.0	296.2	224.5	241.0	258.3	306.5	
5	492.7	614.3	312.4	314.8	460.0	926.8	506.3	264.0	341.5	293.9	260.6	262.9	
6	463.9	585.9	340.3	302.0	487.4	937.6	486.0	239.9	295.0	380.3	341.5	267.4	
7	425.3	514.3	360.3	347.8	499.5	965.6	466.5	265.1	275.5	357.8	341.5	306.5	
8	346.5	310.0	308.8	344.0	542.7	985.1	431.5	257.1	337.8	287.0	334.0	361.5	
9	293.9	202.5	258.3	194.8	632.2	971.5	415.2	224.5	344.0	291.6	339.0	355.3	
10	324.4	208.0	226.7	178.3	614.3	957.8	462.6	224.5	302.0	283.5	323.2	328.0	
11	450.9	227.8	216.8	237.7	603.4	961.7	535.9	193.7	257.1	296.2	302.0	260.6	
12	474.3	223.4	230.0	262.9	674.2	973.5	506.3	172.9	297.3	305.4	259.4	256.0	
13	394.0	200.3	290.4	280.1	1084.0	1000.7	463.9	162.4	375.3	304.2	264.0	319.6	
14	355.3	216.8	295.0	387.7	1538.5	1043.5	420.2	190.4	369.0	266.3	312.4	402.8	
15	270.9	251.3	260.6	392.7	1616.0	1075.0	354.0	159.2	319.6	221.2	364.0	397.8	
16	261.7	295.0	234.4	249.0	1427.6	1102.0	304.2	153.0	310.0	349.0	349.0	382.8	
17	276.7	287.0	205.8	150.0	1201.3	1093.0	335.3	158.2	297.3	366.5	352.8	399.0	
18	266.3	298.5	200.3	266.3	1072.7	1045.8	305.4	151.0	235.5	365.2	361.5	390.2	
19	337.8	302.0	182.7	284.7	1111.0	1012.5	268.6	152.0	280.1	325.6	287.0	366.5	
20	380.3	284.7	182.7	289.3	925.0	887.2	223.4	170.8	274.3	306.5	351.5	421.5	
21	421.5	241.0	158.2	288.1	770.8	857.6	236.6	152.0	287.0	267.4	385.2	449.6	
22	435.3	203.6	148.0	284.7	745.6	916.0	285.8	137.0	264.0	247.9	401.5	453.5	
23	385.2	242.2	127.4	483.4	731.6	1002.7	249.0	181.6	258.3	324.4	397.8	483.4	
24	331.6	251.3	134.0	618.3	787.6	1012.5	235.5	140.0	247.9	320.8	369.0	437.9	
25	407.7	216.8	155.0	619.7	824.0	864.0	209.1	156.1	160.3	300.8	375.3	365.2	
26	416.5	232.2	153.0	580.5	784.8	802.0	320.8	182.7	188.2	277.8	300.8	332.8	
27	394.0	217.9	160.3	562.9	733.0	741.4	370.2	182.7	237.7	274.3	340.3	412.7	
28	444.4	215.7	156.1	500.9	727.4	721.8	414.0	159.2	233.3	251.3	365.2	445.7	
29	463.9	188.2	158.2	361.5	751.2	696.6	453.5	154.0	221.2	230.0		450.9	
30	410.2	205.8	164.5	341.5	813.6	671.4	449.6	164.5	198.1	303.1		475.6	
31		217.9		351.5	917.8		416.5		157.1	297.3		437.9	
Total	11117.3	9265.1	7153.1	10434.4	24680.9	28133.4	12257.7	6083.9	8059.7	8819.9	9254.4	11722.0	146981.8 CMSDAY
Mean	370.6	298.9	238.4	336.6	796.2	937.8	395.4	202.8	260.0	284.5	330.5	378.1	402.7 CMS
Max	492.7	614.3	448.3	619.7	1616.0	1102.0	625.2	376.5	375.3	380.3	401.5	483.4	1616.0 CMS
Min	228.9	188.2	127.4	150.0	372.8	671.4	209.1	137.0	146.0	145.0	258.3	256.0	127.4 CMS
Runoff	960.53	800.50	618.03	901.53	2132.43	2430.73	1059.07	525.65	696.36	762.04	799.58	1012.78	12699.23 MCM

Momentary Peak 1628.50 CMS, at 45.89 M (MSL), at 12.00 Hours, on Aug 15, 2001

Runoff Yield 16.13 Liters/Second/Square KM, Momentary Peak Yield 65.244 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Huai Nam Kup River at Ban Khok Phakwan, Phitsanulok (N.70)

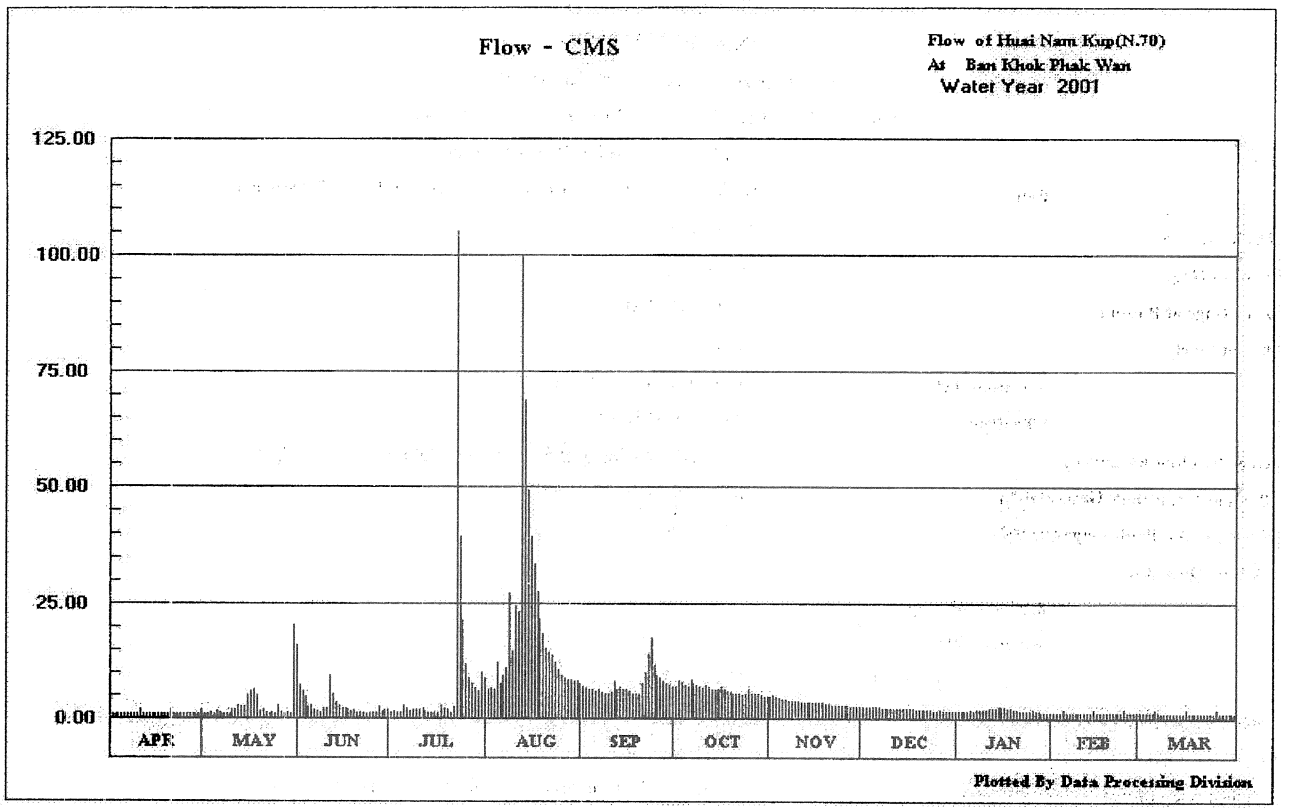
Lat 17 - 18 - 21 N. **Long** 100 - 38 - 46 E.

Location			on left bank at Ban Khok Phakwan.			
	Ban	Khok Phakwan	**Amphoe**	Chat Trakan	**Changwat**	Phitsanulok
Drainage Area			260 sq.km.			
Type of Gage			Staff gage.			
Zero Gage at Bottom			+188.210 m. (M.S.L.)			
Bench Mark			B.M.- H.D.			
	Location BM		-			
	Elevation		+195.837 m. (M.S.L.)			
Gage Reading Frequency			5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height			Arithmetic mean of 5 readings.			
Period of Available Gage Records			1999 to date.			
Rating Operation						
	Period of Rating		1999 to date.			
	Rated by Float		-			
	Rated by Current Meter		1999 to date.			
Stability of Channel Regimes			Fairly stable.			
Overbank Flow Conditions			Overbank flow starts at elevation +193.760 m.(M.S.L.) and is including overbank flow.			
General Description			Records good. Stage-discharge relation defined by 38 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	188.86	188.92	189.68	189.00	189.57	189.65	189.67	189.38	189.14	189.02	188.98	188.96	
2	188.86	188.94	189.55	189.04	189.63	189.62	189.80	189.44	189.14	189.01	188.98	188.96	
3	188.85	188.99	189.39	188.96	189.57	189.58	189.76	189.40	189.13	189.01	188.98	188.96	
4	188.85	188.94	189.15	188.97	190.13	189.59	189.70	189.37	189.13	189.03	188.98	188.95	
5	188.85	189.04	189.16	189.19	189.73	189.56	189.65	189.33	189.12	189.03	188.98	188.95	
6	188.85	188.99	189.07	189.10	189.89	189.57	189.81	189.31	189.12	189.04	188.98	188.95	
7	188.85	188.90	189.02	189.02	190.04	189.52	189.71	189.30	189.11	189.05	188.98	188.95	
8	188.85	188.86	188.98	189.05	191.17	189.49	189.68	189.28	189.11	189.07	188.98	188.94	
9	188.85	188.84	189.09	189.02	190.31	189.49	189.65	189.28	189.10	189.07	188.98	188.94	
10	188.85	188.98	189.09	189.07	191.00	189.52	189.63	189.27	189.10	189.07	188.98	188.94	
11	188.85	189.07	189.90	189.10	190.93	189.80	189.69	189.26	189.10	189.08	188.97	188.94	
12	188.85	189.17	189.46	189.01	193.82	189.59	189.67	189.25	189.09	189.08	188.97	188.94	
13	188.84	189.12	189.26	188.98	192.86	189.62	189.60	189.25	189.09	189.09	188.97	188.94	
14	188.84	189.12	189.16	188.97	192.14	189.59	189.60	189.25	189.09	189.15	188.97	188.94	
15	188.84	189.45	189.09	188.97	191.75	189.60	189.57	189.25	189.08	189.14	188.97	188.94	
16	188.84	189.54	189.08	188.99	191.49	189.54	189.66	189.24	189.08	189.13	188.97	188.94	
17	188.84	189.57	189.06	189.18	191.19	189.49	189.58	189.24	189.08	189.11	188.97	188.94	
18	188.85	189.43	189.02	189.09	190.81	189.48	189.53	189.23	189.07	189.09	188.97	188.93	
19	188.86	189.03	188.99	189.02	190.59	189.49	189.51	189.21	189.07	189.07	188.97	188.93	
20	188.86	188.98	188.99	188.98	190.36	189.73	189.48	189.20	189.06	189.05	188.97	188.93	
21	188.85	188.95	188.98	189.14	190.30	189.94	189.47	189.18	189.06	189.04	188.97	188.93	
22	188.85	188.93	188.96	193.96	190.24	190.27	189.46	189.18	189.05	189.03	188.97	188.93	
23	188.85	188.96	188.93	191.75	190.12	190.53	189.45	189.17	189.05	189.03	188.97	188.93	
24	188.84	188.92	188.95	190.79	190.01	190.07	189.49	189.17	189.04	189.02	188.97	188.92	
25	188.85	189.16	188.95	190.11	189.91	189.89	189.58	189.16	189.04	189.02	188.97	188.92	
26	188.86	188.99	188.95	189.84	189.85	189.86	189.48	189.16	189.04	189.01	188.97	188.92	
27	188.87	188.94	189.15	189.72	189.82	189.79	189.47	189.15	189.04	189.01	188.97	188.92	
28	188.88	188.95	189.03	189.62	189.81	189.73	189.49	189.15	189.03	188.99	188.97	188.91	
29	188.89	188.92	189.02	189.55	189.80	189.69	189.45	189.14	189.03	188.99		188.91	
30	188.90	190.73	189.06	189.96	189.79	189.65	189.39	189.14	189.02	188.98		188.91	
31		190.41		189.85	189.71		189.38		189.02	188.98		188.91	
Mean	188.85	189.15	189.14	189.52	190.53	189.70	189.58	189.24	189.08	189.05	188.97	188.93	
Max	188.90	190.73	189.90	193.96	193.82	190.53	189.81	189.44	189.14	189.15	188.98	188.96	193.96
Min	188.84	188.84	188.93	188.96	189.57	189.48	189.38	189.14	189.02	188.98	188.97	188.91	188.84

Annual Max Momentary Gage Height 194.45 M (MSL), at 6.00 Hours, on Jul 22, 2001
Zero Gage at Bottom Elevation 188.21 M (MSL). River Bed 188.57 M (MSL)
Left Bank Elevation 193.75 M (MSL)
Right Bank Elevation 194.13 M (MSL). Drainage Area 260 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.03	1.36	7.52	1.80	6.55	7.25	7.43	4.97	2.97	1.97	1.69	1.58	
2	1.03	1.47	6.38	2.13	7.07	6.98	8.60	5.47	2.97	1.88	1.69	1.58	
3	0.98	1.75	5.05	1.58	6.55	6.63	8.24	5.13	2.88	1.88	1.69	1.58	
4	0.98	1.47	3.05	1.64	12.63	6.72	7.70	4.88	2.88	2.05	1.69	1.52	
5	0.98	2.13	3.13	3.38	7.97	6.47	7.25	4.55	2.80	2.05	1.69	1.52	
6	0.98	1.75	2.38	2.63	9.68	6.55	8.72	4.38	2.80	2.13	1.69	1.52	
7	0.98	1.25	1.97	1.97	11.50	6.13	7.79	4.30	2.72	2.22	1.69	1.52	
8	0.98	1.03	1.69	2.22	27.51	5.88	7.52	4.13	2.72	2.38	1.69	1.47	
9	0.98	0.92	2.55	1.97	14.99	5.88	7.25	4.13	2.63	2.38	1.69	1.47	
10	0.98	1.69	2.55	2.38	24.70	6.13	7.07	4.05	2.63	2.38	1.69	1.47	
11	0.98	2.38	9.80	2.63	23.68	8.60	7.61	3.97	2.63	2.47	1.64	1.47	
12	0.98	3.22	5.63	1.88	100.42	6.72	7.43	3.88	2.55	2.47	1.64	1.47	
13	0.92	2.80	3.97	1.69	69.27	6.98	6.80	3.88	2.55	2.55	1.64	1.47	
14	0.92	2.80	3.13	1.64	49.50	6.72	6.80	3.88	2.55	3.05	1.64	1.47	
15	0.92	5.55	2.55	1.64	39.77	6.80	6.55	3.88	2.47	2.97	1.64	1.47	
16	0.92	6.30	2.47	1.75	33.85	6.30	7.34	3.80	2.47	2.88	1.64	1.47	
17	0.92	6.55	2.30	3.30	27.84	5.88	6.63	3.80	2.47	2.72	1.64	1.47	
18	0.98	5.38	1.97	2.55	21.94	5.80	6.22	3.72	2.38	2.55	1.64	1.41	
19	1.03	2.05	1.75	1.97	18.86	5.88	6.05	3.55	2.38	2.38	1.64	1.41	
20	1.03	1.69	1.75	1.69	15.66	7.97	5.80	3.47	2.30	2.22	1.64	1.41	
21	0.98	1.52	1.69	2.97	14.85	10.28	5.72	3.30	2.30	2.13	1.64	1.41	
22	0.98	1.41	1.58	105.46	14.04	14.45	5.63	3.30	2.22	2.05	1.64	1.41	
23	0.98	1.58	1.41	39.77	12.50	18.02	5.55	3.22	2.22	2.05	1.64	1.41	
24	0.92	1.36	1.52	21.66	11.12	11.88	5.88	3.22	2.13	1.97	1.64	1.36	
25	0.98	3.13	1.52	12.38	9.92	9.68	6.63	3.13	2.13	1.97	1.64	1.36	
26	1.03	1.75	1.52	9.08	9.20	9.32	5.80	3.13	2.13	1.88	1.64	1.36	
27	1.08	1.47	3.05	7.88	8.84	8.51	5.72	3.05	2.13	1.88	1.64	1.36	
28	1.14	1.52	2.05	6.98	8.72	7.97	5.88	3.05	2.05	1.75	1.64	1.31	
29	1.19	1.36	1.97	6.38	8.60	7.61	5.55	2.97	2.05	1.75		1.31	
30	1.25	20.82	2.30	10.52	8.51	7.25	5.05	2.97	1.97	1.69		1.31	
31		16.34		9.20	7.79		4.97		1.97	1.69		1.31	
Total	30.03	105.80	90.20	274.72	644.03	237.24	207.18	115.16	76.05	68.39	46.42	44.66	1939.88 CMSDAY
Mean	1.00	3.41	3.01	8.86	20.78	7.91	6.68	3.84	2.45	2.21	1.66	1.44	5.31 CMS
Max	1.25	20.82	9.80	105.46	100.42	18.02	8.72	5.47	2.97	3.05	1.69	1.58	105.46 CMS
Min	0.92	0.92	1.41	1.58	6.55	5.80	4.97	2.97	1.97	1.69	1.64	1.31	0.92 CMS
Runoff	2.595	9.141	7.793	23.736	55.644	20.498	17.900	9.950	6.571	5.909	4.011	3.859	167.606 MCM

Momentary Peak 123.44 CMS, at 194.45 M (MSL), at 6.00 Hours, on Jul 22, 2001
Runoff Yield 20.44 Liters/Second/Square KM, Momentary Peak Yield 474.769 Liters/Second/Square KM

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Bang Krathum, Phitsanulok (N.74)

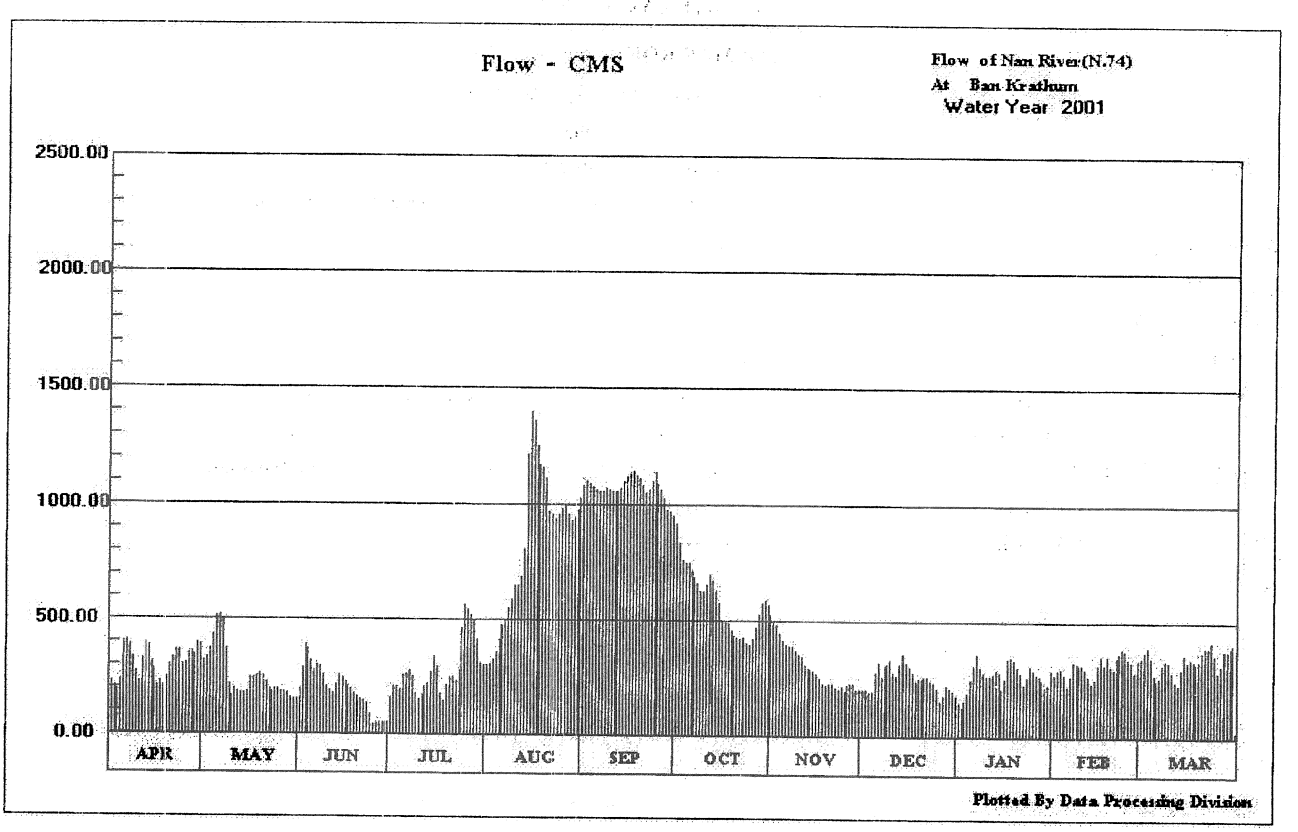
Lat 16 - 34 - 38 N. **Long** 100 - 14 - 33 E.

Location		on left bank at Amphoe Bang Krathum.
	Ban -	**Amphoe** Bang Krathum **Changwat** Phitsanulok
Drainage Area		25,489 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+29.360 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank near the gage site.
	Elevation	+44.486 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		2001 to date.
Rating Operation		
	Period of Rating	2001 to date.
	Rated by Float	-
	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 25 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.31	33.09	32.06	31.69	32.94	37.77	36.91	34.57	32.13	31.56	32.67	33.28	
2	32.19	33.20	32.84	32.16	32.99	37.88	36.46	34.36	32.12	31.40	32.86	33.46	
3	31.97	33.49	33.62	32.15	33.14	37.81	36.03	34.28	31.98	31.63	32.91	33.61	
4	32.38	33.93	33.49	32.07	33.38	37.74	35.98	34.00	32.02	31.97	32.68	33.27	
5	33.68	34.48	33.08	32.58	33.81	37.67	35.97	33.77	32.75	32.46	32.29	32.67	
6	33.76	34.55	32.76	32.63	34.23	37.63	35.80	33.63	33.07	32.97	32.66	32.47	
7	33.59	34.40	32.94	32.76	34.42	37.66	35.61	33.61	32.58	33.37	33.11	32.57	
8	33.16	33.49	32.91	32.54	34.75	37.71	35.44	33.62	32.97	32.92	33.07	33.05	
9	32.71	32.24	32.57	31.88	34.96	37.69	35.19	33.48	33.06	32.73	33.04	33.20	
10	32.35	31.78	32.15	31.66	35.35	37.66	35.19	33.32	33.16	32.62	33.03	33.15	
11	33.13	32.04	31.99	31.82	35.35	37.66	35.40	33.27	32.74	32.66	32.87	32.81	
12	33.65	31.92	31.86	32.16	35.59	37.63	35.66	33.01	32.62	32.71	32.65	32.41	
13	33.57	31.86	32.20	32.30	36.29	37.72	35.50	32.89	33.02	32.84	32.37	32.34	
14	33.04	31.86	32.60	32.69	38.46	37.86	35.25	32.84	33.36	32.76	32.56	32.91	
15	32.81	31.95	32.49	33.25	39.39	37.97	34.90	32.81	33.09	32.19	33.06	33.36	
16	32.19	32.47	32.33	32.91	39.21	38.05	34.42	32.68	32.92	32.55	33.34	33.14	
17	32.31	32.48	32.19	31.90	38.65	38.09	34.37	32.56	32.76	33.24	33.03	33.21	
18	32.19	32.55	32.03	31.59	38.23	38.02	34.32	32.34	32.45	33.30	33.34	33.18	
19	32.46	32.65	31.87	32.22	38.16	37.95	34.11	32.30	32.52	33.17	32.98	33.08	
20	32.94	32.54	31.75	32.49	37.95	37.79	33.91	32.31	32.56	32.95	32.88	33.18	
21	33.17	32.32	31.63	32.54	37.19	37.61	33.87	32.32	32.58	32.75	33.27	33.48	
22	33.44	32.05	31.54	32.38	37.10	37.68	33.83	32.16	32.61	32.32	33.40	33.61	
23	33.40	31.94	31.46	32.74	37.00	37.86	33.89	32.12	32.41	32.57	33.58	33.62	
24	32.94	32.08	31.02	34.16	37.11	38.08	33.71	32.24	32.37	32.98	33.51	33.78	
25	32.99	32.07	30.44	34.82	37.26	37.81	33.64	32.08	32.15	32.84	33.21	33.39	
26	33.34	31.91	30.46	34.69	37.34	37.67	33.86	32.26	31.64	32.70	33.13	32.79	
27	33.35	31.96	30.51	34.55	37.11	37.48	34.21	32.35	31.89	32.62	32.81	33.04	
28	33.27	31.85	30.53	34.37	36.99	37.21	34.56	32.35	32.30	32.50	33.19	33.50	
29	33.63	31.72	30.50	33.80	37.05	37.19	34.90	32.14	32.15	32.23		33.51	
30	33.59	31.65	30.49	33.00	37.21	37.08	34.96	32.10	32.06	32.32		33.61	
31		31.66		32.93	37.49		34.84		31.85	32.82		33.71	
Mean	32.98	32.52	31.94	32.76	36.33	37.72	34.93	32.93	32.51	32.60	32.98	33.17	
Max	33.76	34.55	33.62	34.82	39.39	38.09	36.91	34.57	33.36	33.37	33.58	33.78	39.39
Min	31.97	31.65	30.44	31.59	32.94	37.08	33.64	32.08	31.64	31.40	32.29	32.34	30.44

Annual Max Momentary Gage Height 39.46 M (MSL), at 18.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 29.36 M (MSL), River Bed 29.08 M (MSL)
Left Bank Elevation 44.38 M (MSL)
Right Bank Elevation 44.47 M (MSL), Drainage Area 25489 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	231.2	327.7	202.6	164.0	308.5	1088.3	927.8	532.5	210.3	151.0	274.7	352.4	
2	216.9	342.0	296.0	213.6	314.8	1109.2	846.8	501.0	209.2	135.0	298.5	376.1	
3	192.8	380.2	397.7	212.5	334.2	1095.9	769.4	489.0	193.9	158.0	304.8	396.3	
4	239.6	439.6	380.2	203.7	365.4	1082.6	760.6	449.0	198.2	192.8	276.0	351.1	
5	405.8	519.0	326.4	263.6	423.4	1069.3	758.9	417.9	284.8	249.2	228.8	274.7	
6	416.6	529.5	286.0	269.8	481.5	1061.7	730.0	399.1	325.1	312.3	273.5	250.4	
7	393.6	507.0	308.5	286.0	510.0	1067.4	698.7	396.3	263.6	364.1	330.3	262.4	
8	336.8	380.2	304.8	258.8	560.3	1076.9	670.6	397.7	312.3	306.0	325.1	322.5	
9	279.8	222.8	262.4	183.4	593.6	1073.1	630.4	378.8	323.8	282.3	321.2	342.0	
10	236.0	173.0	212.5	161.0	656.0	1067.4	630.4	357.6	336.8	268.5	319.9	335.5	
11	332.9	200.4	194.9	177.1	656.0	1067.4	664.0	351.1	283.5	273.5	299.7	292.3	
12	401.8	187.6	181.3	213.6	695.3	1061.7	706.9	317.3	268.5	279.8	272.3	243.2	
13	390.9	181.3	218.0	230.0	816.2	1078.8	680.5	302.2	318.6	296.0	238.4	234.8	
14	321.2	181.3	266.0	277.2	1219.4	1105.4	640.0	296.0	362.8	286.0	261.2	304.8	
15	292.3	190.8	252.8	348.5	1400.0	1126.3	584.0	292.3	327.7	216.9	323.8	362.8	
16	216.9	250.4	233.6	304.8	1364.9	1141.5	510.0	276.0	306.0	260.0	360.2	334.2	
17	231.2	251.6	216.9	185.5	1255.8	1149.1	502.5	261.2	286.0	347.2	319.9	343.3	
18	216.9	260.0	199.3	154.0	1175.7	1135.8	495.0	234.8	248.0	355.0	360.2	339.4	
19	249.2	272.3	182.4	220.4	1162.4	1122.5	464.4	230.0	256.4	338.1	313.5	326.4	
20	308.5	258.8	170.0	252.8	1122.5	1092.1	436.8	231.2	261.2	309.8	301.0	339.4	
21	338.1	232.4	158.0	258.8	979.1	1057.9	431.4	232.4	263.6	284.8	351.1	378.8	
22	373.4	201.5	149.0	239.6	962.5	1071.2	426.1	213.6	267.3	232.4	368.0	396.3	
23	368.0	189.7	141.0	283.5	944.0	1105.4	434.1	209.2	243.2	262.4	392.3	397.7	
24	308.5	204.8	98.8	471.4	964.4	1147.2	409.8	222.8	238.4	313.5	382.8	419.3	
25	314.8	203.7	54.8	571.2	992.1	1095.9	400.4	204.8	212.5	296.0	343.3	366.7	
26	360.2	186.6	56.2	550.9	1006.9	1069.3	430.1	225.2	159.0	278.5	332.9	289.8	
27	361.5	191.8	59.7	529.5	964.4	1033.2	478.5	236.0	184.4	268.5	292.3	321.2	
28	351.1	180.3	61.1	502.5	942.2	982.8	531.0	236.0	230.0	254.0	340.7	381.5	
29	399.1	167.0	59.0	422.0	953.2	979.1	584.0	211.4	212.5	221.6		382.8	
30	393.6	160.0	58.3	316.0	982.8	958.8	593.6	207.0	202.6	232.4		396.3	
31		161.0		307.3	1035.1		574.4		180.3	293.5		409.8	
Total	9479.2	8134.3	5988.2	9033.0	26142.6	32373.2	18401.1	9309.4	7970.5	8319.1	8806.4	10524.2	154481.2 CMSDAY
Mean	316.0	262.4	199.6	291.4	843.3	1079.1	593.6	310.3	257.1	268.4	314.5	339.5	423.2 CMS
Max	416.6	529.5	397.7	571.2	1400.0	1149.1	927.8	532.5	362.8	364.1	392.3	419.3	1400.0 CMS
Min	192.8	160.0	54.8	154.0	308.5	958.8	400.4	204.8	159.0	135.0	228.8	234.8	54.8 CMS
Runoff	819.00	702.80	517.38	780.45	2258.72	2797.04	1589.86	804.33	688.65	718.77	760.87	909.29	13347.18 MCM

Momentary Peak 1413.70 CMS, at 39.46 M (MSL), at 18.00 Hours, on Aug 15, 2001

Runoff Yield 16.60 Liters/Second/Square KM, Momentary Peak Yield 55.463 Liters/Second/Square KM

WATER YEAR : 2001

NAM MAE KOK RIVER BASIN

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

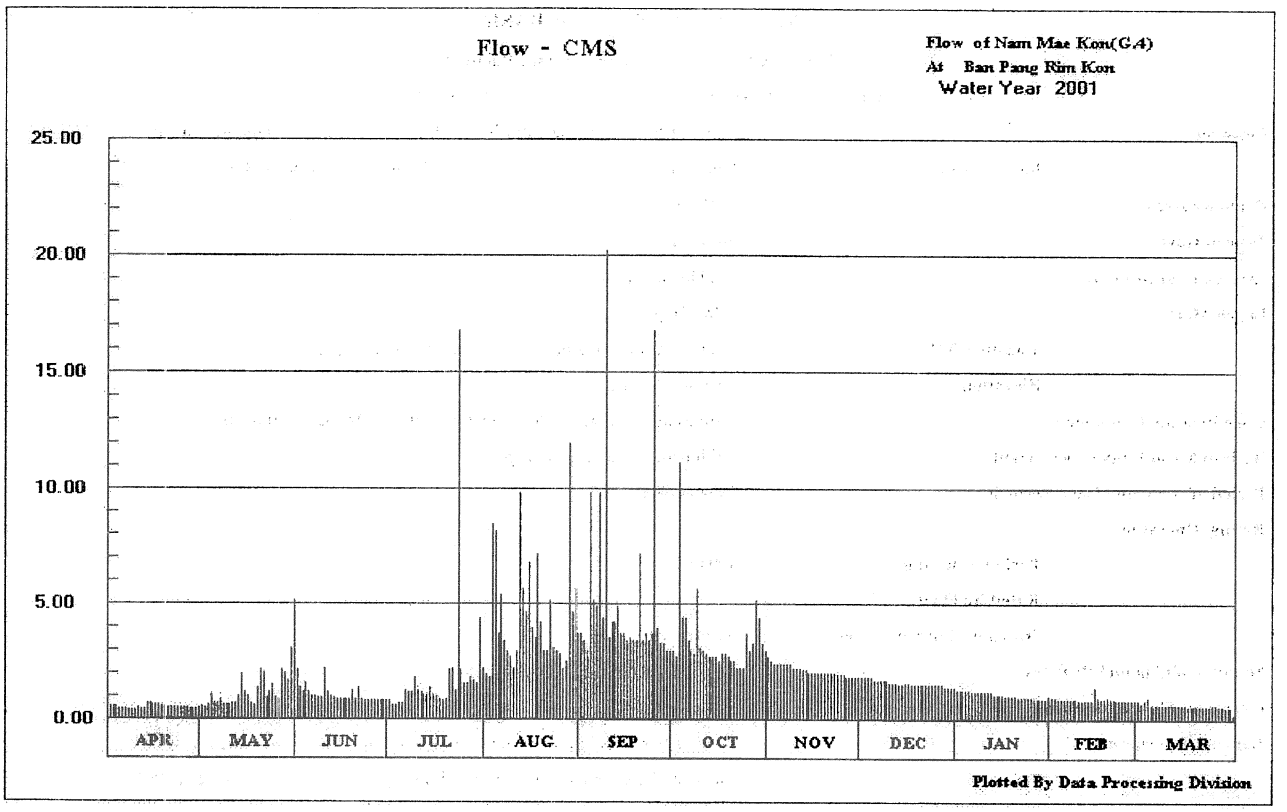
Lat 19 - 50 - 23 N. **Long** 99 - 40 - 27 E.

Location		on left bank at Ban Pang Rim Kon.			
	Ban	Pang Rim Kon	**Amphoe**	Mueang	**Changwat** Chiang Rai
Drainage Area		50 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 66.50 meters from the top staff gage.			
	Elevation	+3.400 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		1983 to date.			
Rating Operation					
	Period of Rating	2000 to date.			
	Rated by Float	-			
	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 43 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.52	0.52	0.69	0.55	0.67	0.80	0.75	0.73	0.66	0.61	0.57	0.55	
2	0.52	0.51	0.62	0.53	0.66	0.78	0.73	0.72	0.66	0.61	0.57	0.54	
3	0.52	0.53	0.60	0.53	0.97	0.75	1.04	0.71	0.66	0.61	0.56	0.55	
4	0.50	0.59	0.64	0.54	0.96	1.01	0.83	0.71	0.66	0.61	0.56	0.57	
5	0.50	0.54	0.60	0.54	0.80	0.86	0.83	0.71	0.65	0.61	0.56	0.53	
6	0.50	0.54	0.58	0.61	0.87	0.85	0.78	0.71	0.65	0.60	0.56	0.52	
7	0.49	0.56	0.58	0.60	0.78	1.01	0.75	0.71	0.65	0.60	0.56	0.53	
8	0.49	0.53	0.57	0.60	0.75	0.83	0.74	0.71	0.65	0.60	0.56	0.53	
9	0.49	0.53	0.57	0.66	0.73	1.22	0.88	0.70	0.65	0.60	0.56	0.53	
10	0.51	0.53	0.70	0.61	0.70	0.79	0.76	0.70	0.64	0.60	0.55	0.53	
11	0.50	0.54	0.60	0.60	0.75	0.82	0.75	0.70	0.64	0.60	0.55	0.53	
12	0.50	0.54	0.58	0.59	1.01	0.82	0.74	0.69	0.64	0.60	0.55	0.53	
13	0.54	0.58	0.57	0.59	0.88	0.85	0.73	0.69	0.63	0.59	0.55	0.53	
14	0.54	0.67	0.56	0.62	0.84	0.80	0.73	0.68	0.63	0.59	0.55	0.53	
15	0.53	0.60	0.56	0.59	0.92	0.80	0.73	0.68	0.64	0.59	0.62	0.53	
16	0.53	0.58	0.56	0.58	0.81	0.78	0.72	0.68	0.64	0.59	0.57	0.53	
17	0.53	0.54	0.56	0.56	0.79	0.79	0.74	0.68	0.63	0.58	0.56	0.52	
18	0.52	0.53	0.56	0.55	0.93	0.78	0.74	0.68	0.63	0.58	0.56	0.52	
19	0.52	0.62	0.61	0.56	0.82	0.78	0.73	0.68	0.63	0.58	0.57	0.52	
20	0.51	0.69	0.56	0.69	0.75	0.93	0.72	0.68	0.63	0.58	0.56	0.52	
21	0.51	0.68	0.62	0.70	0.75	0.78	0.72	0.68	0.63	0.57	0.56	0.52	
22	0.51	0.67	0.56	0.61	0.86	0.80	0.70	0.68	0.63	0.57	0.55	0.52	
23	0.51	0.60	0.55	1.16	0.76	0.78	0.70	0.67	0.63	0.57	0.55	0.52	
24	0.51	0.63	0.55	0.69	0.75	0.80	0.70	0.67	0.63	0.57	0.55	0.52	
25	0.51	0.67	0.55	0.64	0.74	1.16	0.80	0.67	0.63	0.57	0.55	0.53	
26	0.51	0.56	0.55	0.64	0.70	0.81	0.75	0.66	0.63	0.56	0.55	0.53	
27	0.50	0.69	0.55	0.66	0.72	0.77	0.77	0.66	0.63	0.56	0.55	0.52	
28	0.50	0.68	0.55	0.65	1.06	0.77	0.86	0.66	0.62	0.56	0.55	0.52	
29	0.50	0.65	0.55	0.64	0.84	0.75	0.83	0.66	0.62	0.56		0.51	
30	0.51	0.76	0.55	0.83	0.88	0.75	0.77	0.66	0.62	0.56		0.51	
31		0.86		0.70	0.80		0.75		0.62	0.58		0.51	
Mean	0.51	0.60	0.58	0.63	0.81	0.84	0.77	0.69	0.64	0.59	0.56	0.53	
Max	0.54	0.86	0.70	1.16	1.06	1.22	1.04	0.73	0.66	0.61	0.62	0.57	1.22
Min	0.49	0.51	0.55	0.53	0.66	0.75	0.70	0.66	0.62	0.56	0.55	0.51	0.49

Annual Max Momentary Gage Height 1.85 M (A.D), at 6.00 Hours, on Sep 9, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.16 M (A.D)
Left Bank Elevation 3.24 M (A.D)
Right Bank Elevation 2.01 M (A.D), Drainage Area 50 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.65	2.20	0.88	1.99	3.75	3.03	2.74	1.88	1.35	1.02	0.88	
2	0.65	0.57	1.46	0.72	1.88	3.46	2.74	2.59	1.88	1.35	1.02	0.80	
3	0.65	0.72	1.25	0.72	8.51	3.03	11.20	2.44	1.88	1.35	0.95	0.88	
4	0.50	1.17	1.67	0.80	8.18	9.92	4.48	2.44	1.88	1.35	0.95	1.02	
5	0.50	0.80	1.25	0.80	3.75	5.22	4.48	2.44	1.77	1.35	0.95	0.72	
6	0.50	0.80	1.10	1.35	5.47	4.98	3.46	2.44	1.77	1.25	0.95	0.65	
7	0.45	0.95	1.10	1.25	3.46	9.92	3.03	2.44	1.77	1.25	0.95	0.72	
8	0.45	0.72	1.02	1.25	3.03	4.48	2.88	2.44	1.77	1.25	0.95	0.72	
9	0.45	0.72	1.02	1.88	2.74	20.24	5.71	2.30	1.77	1.25	0.95	0.72	
10	0.57	0.72	2.30	1.35	2.30	3.61	3.17	2.30	1.67	1.25	0.88	0.72	
11	0.50	0.80	1.25	1.25	3.03	4.24	3.03	2.30	1.67	1.25	0.88	0.72	
12	0.50	0.80	1.10	1.17	9.92	4.24	2.88	2.20	1.67	1.25	0.88	0.72	
13	0.80	1.10	1.02	1.17	5.71	4.98	2.74	2.20	1.56	1.17	0.88	0.72	
14	0.80	1.99	0.95	1.46	4.73	3.75	2.74	2.09	1.56	1.17	0.88	0.72	
15	0.72	1.25	0.95	1.17	6.86	3.75	2.74	2.09	1.67	1.17	1.46	0.72	
16	0.72	1.10	0.95	1.10	4.00	3.46	2.59	2.09	1.67	1.17	1.02	0.72	
17	0.72	0.80	0.95	0.95	3.61	3.61	2.88	2.09	1.56	1.10	0.95	0.65	
18	0.65	0.72	0.95	0.88	7.19	3.46	2.88	2.09	1.56	1.10	0.95	0.65	
19	0.65	1.46	1.35	0.95	4.24	3.46	2.74	2.09	1.56	1.10	1.02	0.65	
20	0.57	2.20	0.95	2.20	3.03	7.19	2.59	2.09	1.56	1.10	0.95	0.65	
21	0.57	2.09	1.46	2.30	3.03	3.46	2.59	2.09	1.56	1.02	0.95	0.65	
22	0.57	1.02	0.95	1.35	5.22	3.75	2.30	2.09	1.56	1.02	0.88	0.65	
23	0.57	1.25	0.88	16.84	3.17	3.46	2.30	1.99	1.56	1.02	0.88	0.65	
24	0.57	1.56	0.88	2.20	3.03	3.75	2.30	1.99	1.56	1.02	0.88	0.65	
25	0.57	1.02	0.88	1.67	2.88	16.84	3.75	1.99	1.56	1.02	0.88	0.72	
26	0.57	0.95	0.88	1.67	2.30	4.00	3.03	1.88	1.56	0.95	0.88	0.72	
27	0.50	2.20	0.88	1.88	2.59	3.31	3.31	1.88	1.56	0.95	0.88	0.65	
28	0.50	2.09	0.88	1.77	12.05	3.31	5.22	1.88	1.46	0.95	0.88	0.65	
29	0.50	1.77	0.88	1.67	4.73	3.03	4.48	1.88	1.46	0.95		0.57	
30	0.57	3.17	0.88	4.48	5.71	3.03	3.31	1.88	1.46	0.95		0.57	
31		5.22		2.30	3.75		3.03		1.46	1.10		0.57	
Total	17.49	42.38	34.24	61.43	142.09	158.69	107.61	65.45	50.84	35.53	26.55	21.80	764.10 CMSDAY
Mean	0.58	1.37	1.14	1.98	4.58	5.29	3.47	2.18	1.64	1.15	0.95	0.70	2.09 CMS
Max	0.80	5.22	2.30	16.84	12.05	20.24	11.20	2.74	1.88	1.35	1.46	1.02	20.24 CMS
Min	0.45	0.57	0.88	0.72	1.88	3.03	2.30	1.88	1.46	0.95	0.88	0.57	0.45 CMS
Runoff	1.511	3.662	2.958	5.308	12.277	13.711	9.298	5.655	4.393	3.070	2.294	1.884	66.018 MCM

Momentary Peak 92.00 CMS, at 1.85 M (A.D), at 6.00 Hours, on Sep 9, 2001
Runoff Yield 41.87 Liters/Second/Square KM, Momentary Peak Yield 1840.000 Liters/Second/Square KM

WATER YEAR : 2001

NAM MAE KOK RIVER BASIN

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

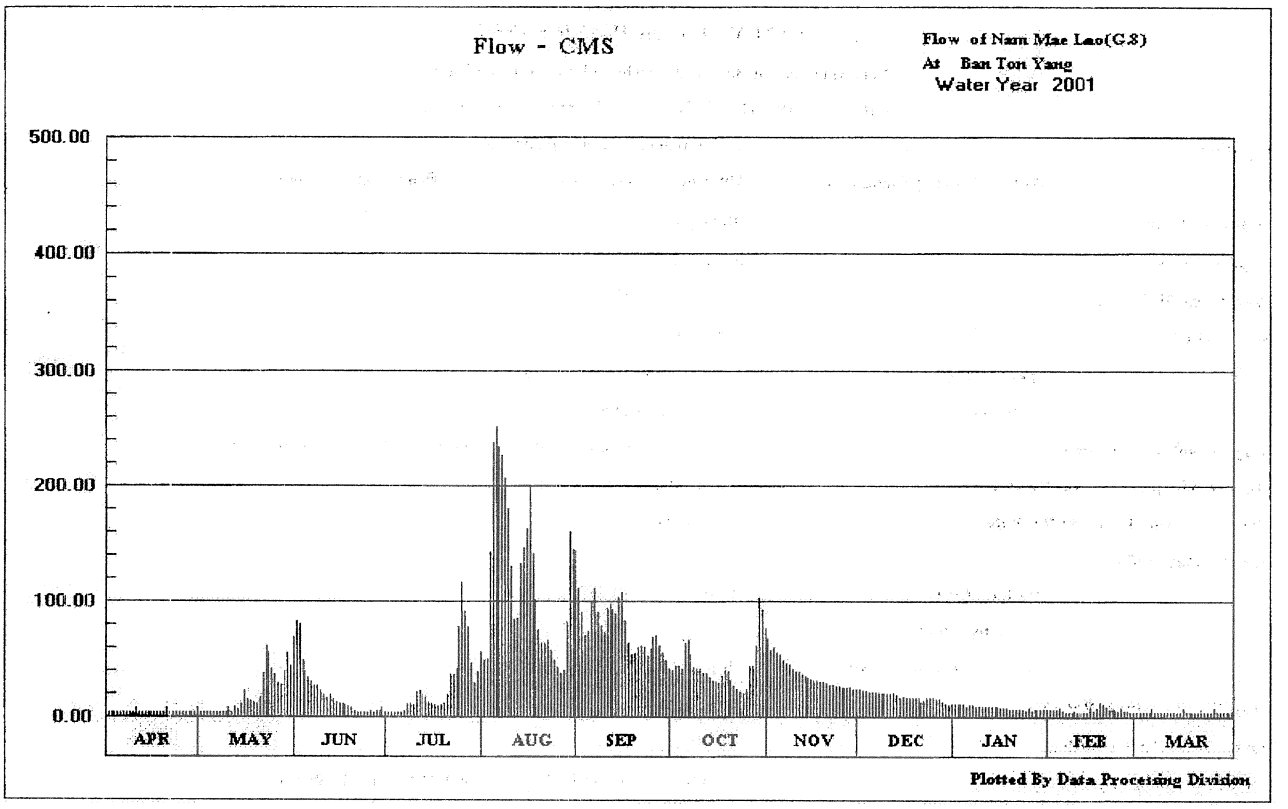
Lat 19 - 47 - 32 N. **Long** 99 - 45 - 11 E.

Location		on left bank at the bridge of Chiang - Rai Payao Highway, Tambon Bua Sali.		
	Ban Ton Yang	**Amphoe** Mae Lao	**Changwat** Chiang Rai	
Drainage Area		2,934 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 8.00 meters from the top staff gage.		
	Elevation	+5.118 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 Float	-		
	Rated by Current Meter	1994 to date.		
Stability of Channel Regimes		Fairly stable because of backwater effect.		
Overbank Flow Conditions		No overbank flow.		
General Description		Records fair. Mae Lao weir situated about 10 kilometers above gage site.		
		Stage-discharge relation defined by 61 discharge measurements made in 2001.		

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.20	0.07	2.20	0.38	1.62	2.61	1.43	1.95	1.05	0.73	0.55	0.39	
2	0.21	0.07	2.17	0.40	1.64	2.32	1.51	1.78	1.04	0.71	0.54	0.30	
3	0.21	0.06	1.62	0.40	3.03	2.01	1.52	1.83	1.03	0.73	0.52	0.30	
4	0.20	0.21	1.42	0.34	4.16	2.07	1.47	1.72	1.00	0.71	0.51	0.30	
5	0.20	0.29	1.30	0.34	4.31	2.45	1.89	1.70	0.99	0.64	0.47	0.29	
6	0.19	0.24	1.21	0.49	4.12	2.62	1.94	1.62	0.99	0.69	0.43	0.28	
7	0.17	0.20	1.11	0.71	4.03	2.31	1.71	1.57	0.97	0.67	0.38	0.28	
8	0.16	0.20	1.11	0.71	3.81	2.15	1.48	1.53	0.97	0.64	0.38	0.30	
9	0.13	0.16	1.03	0.69	3.50	2.05	1.45	1.47	0.98	0.64	0.46	0.30	
10	0.13	0.16	0.93	0.99	2.87	2.37	1.46	1.41	0.95	0.61	0.35	0.29	
11	0.11	0.16	0.86	1.03	2.22	2.43	1.39	1.40	0.95	0.63	0.34	0.30	
12	0.11	0.61	0.92	0.94	2.24	2.36	1.38	1.36	0.95	0.65	0.34	0.29	
13	0.10	0.55	0.82	0.88	2.91	2.30	1.30	1.33	0.92	0.63	0.34	0.29	
14	0.33	0.73	0.74	0.75	3.09	2.50	1.24	1.30	0.88	0.63	0.38	0.28	
15	0.28	1.02	0.70	0.70	3.29	2.56	1.22	1.28	0.89	0.61	0.49	0.27	
16	0.28	0.82	0.70	0.66	3.72	2.21	1.18	1.25	0.87	0.60	0.60	0.26	
17	0.27	0.78	0.67	0.64	3.02	1.90	1.32	1.25	0.87	0.57	0.76	0.28	
18	0.25	0.74	0.61	0.68	2.47	1.71	1.43	1.21	0.87	0.56	0.71	0.26	
19	0.21	0.72	0.55	0.70	2.08	1.72	1.40	1.21	0.86	0.55	0.65	0.26	
20	0.17	0.85	0.47	0.93	1.88	1.82	1.23	1.18	0.85	0.54	0.53	0.28	
21	0.16	1.38	0.40	1.35	1.88	1.85	1.11	1.15	0.76	0.52	0.51	0.28	
22	0.11	1.84	0.36	1.35	1.93	1.83	1.06	1.14	0.81	0.52	0.51	0.36	
23	0.11	1.72	0.38	1.45	1.78	1.69	1.01	1.13	0.87	0.53	0.47	0.27	
24	0.10	1.45	0.37	2.13	1.60	1.79	0.96	1.11	0.88	0.50	0.46	0.24	
25	0.10	1.36	0.49	2.69	1.48	1.98	1.07	1.10	0.87	0.52	0.48	0.21	
26	0.08	1.17	0.45	2.33	1.38	2.01	1.50	1.09	0.84	0.49	0.46	0.17	
27	0.08	1.15	0.46	2.12	1.44	1.85	1.51	1.10	0.82	0.51	0.43	0.13	
28	0.08	1.42	0.49	1.56	2.19	1.72	1.85	1.09	0.75	0.52	0.38	0.13	
29	0.08	1.74	0.38	1.20	3.26	1.61	2.50	1.07	0.73	0.53		0.13	
30	0.08	1.52	0.35	1.41	3.06	1.47	2.35	1.05	0.68	0.53		0.16	
31		1.98		1.75	3.05		2.10		0.72	0.52		0.28	
Mean	0.16	0.82	0.84	1.05	2.68	2.08	1.48	1.35	0.89	0.59	0.48	0.26	
Max	0.33	1.98	2.20	2.69	4.31	2.62	2.50	1.95	1.05	0.73	0.76	0.39	4.31
Min	0.08	0.06	0.35	0.34	1.38	1.47	0.96	1.05	0.68	0.49	0.34	0.13	0.06

Annual Max Momentary Gage Height 4.39 M (A.D), at 17.00 Hours, on Aug 4, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.24 M (A.D)
Left Bank Elevation 5.43 M (A.D)
Right Bank Elevation 5.42 M (A.D), Drainage Area 2934 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.40	0.07	84.00	4.42	51.00	112.43	41.50	68.75	25.00	13.40	8.34	4.61	
2	1.55	0.07	82.05	4.80	52.00	91.90	45.50	59.40	24.60	12.76	8.09	2.90	
3	1.55	0.06	51.00	4.80	143.84	72.10	46.00	62.15	24.20	13.40	7.58	2.90	
4	1.40	1.55	41.00	3.66	239.60	75.70	43.50	56.10	23.00	12.76	7.33	2.90	
5	1.40	2.75	35.50	3.66	253.10	101.00	65.45	55.00	22.62	10.74	6.40	2.75	
6	1.27	2.00	31.45	6.85	236.00	113.16	68.20	51.00	22.62	12.17	5.48	2.60	
7	1.01	1.40	27.40	12.76	227.90	91.20	55.55	48.50	21.86	11.60	4.42	2.60	
8	0.88	1.40	27.40	12.76	208.37	80.75	44.00	46.50	21.86	10.74	4.42	2.90	
9	0.49	0.88	24.20	12.17	182.00	74.50	42.50	43.50	22.24	10.74	6.17	2.90	
10	0.49	0.88	20.34	22.62	131.75	95.40	43.00	40.50	21.10	9.89	3.85	2.75	
11	0.23	0.88	17.76	24.20	85.30	99.60	39.55	40.00	21.10	10.46	3.66	2.90	
12	0.23	9.89	19.96	20.72	86.60	94.70	39.10	38.20	21.10	11.02	3.66	2.75	
13	0.10	8.34	16.32	18.48	134.75	90.50	35.50	36.85	19.96	10.46	3.66	2.75	
14	3.47	13.40	13.71	14.03	148.52	104.50	32.80	35.50	18.48	10.46	4.42	2.60	
15	2.60	23.80	12.45	12.45	164.40	108.82	31.90	34.60	18.84	9.89	6.85	2.45	
16	2.60	16.32	12.45	11.31	200.70	84.65	30.20	33.25	18.12	9.60	9.60	2.30	
17	2.45	14.97	11.60	10.74	143.06	66.00	36.40	33.25	18.12	8.84	14.34	2.60	
18	2.15	13.71	9.89	11.88	102.40	55.55	41.50	31.45	18.12	8.59	12.76	2.30	
19	1.55	13.08	8.34	12.45	76.30	56.10	40.00	31.45	17.76	8.34	11.02	2.30	
20	1.01	17.40	6.40	20.34	64.90	61.60	32.35	30.20	17.40	8.09	7.84	2.60	
21	0.88	39.10	4.80	37.75	64.90	63.25	27.40	29.00	14.34	7.58	7.33	2.60	
22	0.23	62.70	4.04	37.75	67.65	62.15	25.40	28.60	15.96	7.58	7.33	4.04	
23	0.23	56.10	4.42	42.50	59.40	54.50	23.40	28.20	18.12	7.84	6.40	2.45	
24	0.10	42.50	4.23	79.45	50.00	59.95	21.48	27.40	18.48	7.08	6.17	2.00	
25	0.10	38.20	6.85	118.27	44.00	70.40	25.80	27.00	18.12	7.58	6.62	1.55	
26	0.08	29.80	5.94	92.60	39.10	72.10	45.00	26.60	17.04	6.85	6.17	1.01	
27	0.08	29.00	6.17	78.80	42.00	63.25	45.50	27.00	16.32	7.33	5.48	0.49	
28	0.08	41.00	6.85	48.00	83.35	56.10	63.25	26.60	14.03	7.58	4.42	0.49	
29	0.08	57.20	4.42	31.00	162.00	50.50	104.50	25.80	13.40	7.84		0.49	
30	0.08	46.00	3.85	40.50	146.18	43.50	94.00	25.00	11.88	7.84		0.88	
31		70.40		57.75	145.40		77.50		13.08	7.58		2.60	
Total	29.77	554.85	604.79	909.47	3836.47	2325.86	1407.73	1147.35	588.87	296.63	189.81	73.96	12065.56 CMSDAY
Mean	0.99	21.12	20.16	29.34	123.76	77.53	45.41	38.25	19.00	9.57	6.78	2.39	33.06 CMS
Max	3.47	70.40	84.00	118.27	253.10	113.16	104.50	68.75	25.00	13.40	14.34	4.61	253.10 CMS
Min	0.08	0.06	3.85	3.66	39.10	43.50	21.48	25.00	11.88	6.85	3.66	0.49	0.06 CMS
Runoff	2.572	56.579	52.254	78.578	331.471	200.954	121.628	99.131	50.878	25.629	16.400	6.390	1042.464 MCM

Momentary Peak 260.30 CMS, at 4.39 M (A.D), at 17.00 Hours, on Aug 4, 2001

Runoff Yield 11.27 Liters/Second/Square KM, Momentary Peak Yield 88.718 Liters/Second/Square KM

WATER YEAR : 2001

NAM MAE KOK RIVER BASIN

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

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

Location on left bank at the bridge on road.

Ban Kariang Thung Phrao **Amphoe** Mae Suai **Changwat** Chiang Mai

Drainage Area 382 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 +7.435 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 1998 to date.

Rating Operation

Period of Rating 1998 to date.

Rated by Float -

Rated by Current Meter 1998 to date.

Stability of Channel Regimes Fairly stable.

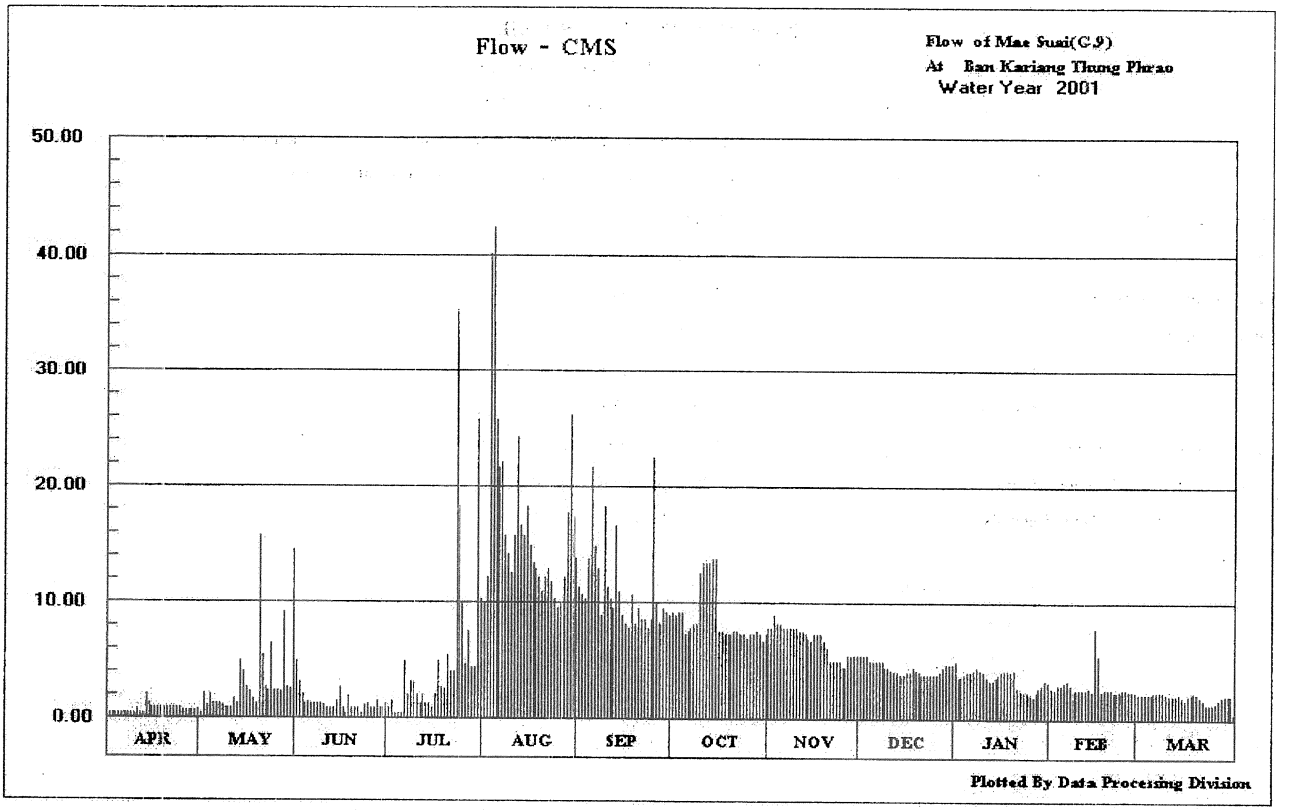
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 45 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.40	0.40	0.70	0.45	0.86	0.90	0.84	0.80	0.72	0.70	0.60	0.56	
2	0.40	0.56	0.62	0.52	0.92	0.88	0.83	0.80	0.72	0.64	0.59	0.56	
3	0.40	0.48	0.55	0.40	1.52	0.87	0.84	0.83	0.72	0.64	0.61	0.56	
4	0.40	0.55	0.50	0.40	1.56	0.96	0.84	0.81	0.70	0.65	0.61	0.56	
5	0.40	0.50	0.51	0.40	1.24	1.15	0.78	0.81	0.70	0.66	0.62	0.56	
6	0.40	0.50	0.50	0.70	1.15	0.99	0.79	0.80	0.70	0.66	0.63	0.57	
7	0.40	0.50	0.50	0.55	1.16	0.94	0.80	0.80	0.70	0.67	0.61	0.57	
8	0.40	0.48	0.50	0.62	1.01	0.83	0.81	0.80	0.70	0.68	0.58	0.58	
9	0.40	0.46	0.50	0.62	0.97	1.07	0.81	0.80	0.68	0.67	0.59	0.57	
10	0.40	0.46	0.48	0.55	0.93	0.90	0.93	0.80	0.68	0.66	0.59	0.56	
11	0.40	0.45	0.45	0.50	1.01	0.87	0.95	0.79	0.67	0.64	0.59	0.55	
12	0.40	0.53	0.45	0.55	1.21	0.85	0.95	0.79	0.66	0.63	0.59	0.55	
13	0.55	0.50	0.45	0.50	1.03	1.03	0.95	0.78	0.66	0.63	0.60	0.55	
14	0.50	0.70	0.52	0.50	1.01	0.89	0.96	0.77	0.65	0.64	0.58	0.56	
15	0.45	0.56	0.60	0.46	1.07	0.83	0.96	0.76	0.65	0.65	0.80	0.54	
16	0.45	0.50	0.45	0.55	0.99	0.81	0.79	0.78	0.66	0.66	0.72	0.53	
17	0.45	0.57	0.40	0.70	0.95	0.80	0.79	0.78	0.66	0.67	0.58	0.55	
18	0.45	0.53	0.54	0.60	0.94	0.88	0.78	0.78	0.68	0.67	0.59	0.56	
19	0.45	0.50	0.45	0.59	0.92	0.81	0.78	0.76	0.67	0.66	0.59	0.57	
20	0.45	1.01	0.45	0.72	0.89	0.85	0.78	0.74	0.66	0.67	0.59	0.56	
21	0.45	0.72	0.45	0.66	0.92	0.82	0.79	0.70	0.65	0.60	0.57	0.54	
22	0.45	0.50	0.40	0.66	0.94	0.82	0.79	0.70	0.65	0.58	0.57	0.53	
23	0.45	0.58	0.48	1.43	0.91	0.80	0.78	0.70	0.65	0.57	0.58	0.49	
24	0.45	0.75	0.50	1.07	0.87	0.82	0.78	0.70	0.65	0.57	0.59	0.49	
25	0.42	0.58	0.45	0.86	0.85	1.17	0.77	0.68	0.65	0.55	0.59	0.49	
26	0.42	0.58	0.45	0.69	0.86	0.86	0.78	0.68	0.65	0.54	0.58	0.51	
27	0.42	0.57	0.52	0.79	0.92	0.81	0.78	0.72	0.66	0.57	0.58	0.53	
28	0.42	0.84	0.45	0.68	1.06	0.85	0.79	0.72	0.68	0.60	0.57	0.54	
29	0.42	0.60	0.45	0.68	1.25	0.84	0.78	0.72	0.69	0.61		0.55	
30	0.42	0.59	0.50	1.24	1.05	0.83	0.76	0.72	0.69	0.63		0.55	
31		0.98		0.87	0.96		0.78		0.69	0.62		0.55	
Mean	0.43	0.59	0.49	0.66	1.03	0.89	0.82	0.76	0.68	0.63	0.60	0.55	
Max	0.55	1.01	0.70	1.43	1.56	1.17	0.96	0.83	0.72	0.70	0.80	0.58	1.56
Min	0.40	0.40	0.40	0.40	0.85	0.80	0.76	0.68	0.65	0.54	0.57	0.49	0.40

Annual Max Momentary Gage Height 1.90 M (A.D), at 18.00 Hours, on Jul 23, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.11 M (A.D)
Left Bank Elevation 6.92 M (A.D)
Right Bank Elevation 6.90 M (A.D), Drainage Area 382 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.55	0.55	5.00	1.00	10.05	11.45	9.35	7.95	5.59	5.00	2.80	2.26	
2	0.55	2.26	3.24	1.72	12.26	10.75	9.00	7.95	5.59	3.68	2.66	2.26	
3	0.55	1.27	2.13	0.55	40.32	10.40	9.35	9.00	5.59	3.68	3.02	2.26	
4	0.55	2.13	1.45	0.55	42.56	13.88	9.35	8.30	5.00	3.90	3.02	2.26	
5	0.55	1.45	1.58	0.55	25.88	21.80	7.36	8.30	5.00	4.12	3.24	2.26	
6	0.55	1.45	1.45	5.00	21.80	15.10	7.66	7.95	5.00	4.12	3.46	2.39	
7	0.55	1.45	1.45	2.13	22.24	13.07	7.95	7.95	5.00	4.34	3.02	2.39	
8	0.55	1.27	1.45	3.24	15.91	9.00	8.30	7.95	5.00	4.56	2.53	2.53	
9	0.55	1.09	1.45	3.24	14.29	18.37	8.30	7.95	4.56	4.34	2.66	2.39	
10	0.55	1.09	1.27	2.13	12.67	11.45	12.67	7.95	4.56	4.12	2.66	2.26	
11	0.55	1.00	1.00	1.45	15.91	10.40	13.48	7.66	4.34	3.68	2.66	2.13	
12	0.55	1.85	1.00	2.13	24.47	9.70	13.48	7.66	4.12	3.46	2.66	2.13	
13	2.13	1.45	1.00	1.45	16.73	16.73	13.48	7.36	4.12	3.46	2.80	2.13	
14	1.45	5.00	1.72	1.45	15.91	11.10	13.88	7.06	3.90	3.68	2.53	2.26	
15	1.00	4.12	2.80	1.09	18.37	9.00	13.88	6.77	3.90	3.90	7.95	1.99	
16	1.00	2.80	1.00	2.13	15.10	8.30	7.66	7.36	4.12	4.12	5.59	1.85	
17	1.00	2.39	0.55	5.00	13.48	7.95	7.66	7.36	4.12	4.34	2.53	2.13	
18	1.00	1.85	1.99	2.80	13.07	10.75	7.36	7.36	4.56	4.34	2.66	2.26	
19	1.00	1.45	1.00	2.66	12.26	8.30	7.36	6.77	4.34	4.12	2.66	2.39	
20	1.00	15.91	1.00	5.59	11.10	9.70	7.36	6.18	4.12	4.34	2.66	2.26	
21	1.00	5.59	1.00	4.12	12.26	8.65	7.66	5.00	3.90	2.80	2.39	1.99	
22	1.00	2.80	0.55	4.12	13.07	8.65	7.66	5.00	3.90	2.53	2.39	1.85	
23	1.00	2.53	1.27	35.42	11.86	7.95	7.36	5.00	3.90	2.39	2.53	1.36	
24	1.00	6.48	1.45	18.37	10.40	8.65	7.36	5.00	3.90	2.39	2.66	1.36	
25	0.73	2.53	1.00	10.05	9.70	22.68	7.06	4.56	3.90	2.13	2.66	1.36	
26	0.73	2.53	1.00	4.78	10.05	10.05	7.36	4.56	3.90	1.99	2.53	1.58	
27	0.73	2.39	1.72	7.66	12.26	8.30	7.36	5.59	4.12	2.39	2.53	1.85	
28	0.73	9.35	1.00	4.56	17.96	9.70	7.66	5.59	4.56	2.80	2.39	1.99	
29	0.73	2.80	1.00	4.56	26.35	9.35	7.36	5.59	4.78	3.02		2.13	
30	0.73	2.66	1.45	25.88	17.55	9.00	6.77	5.59	4.78	3.46		2.13	
31		14.69		10.40	13.88		7.36		4.78	3.24		2.13	
Total	24.56	106.18	44.97	175.78	529.72	340.18	275.86	204.27	138.95	110.44	83.85	64.52	2099.28 CMSDAY
Mean	0.82	3.43	1.50	5.67	17.09	11.34	8.90	6.81	4.48	3.56	2.99	2.08	5.75 CMS
Max	2.13	15.91	5.00	35.42	42.56	22.68	13.88	9.00	5.59	5.00	7.95	2.53	42.56 CMS
Min	0.55	0.55	0.55	0.55	9.70	7.95	6.77	4.56	3.90	1.99	2.39	1.36	0.55 CMS
Runoff	2.122	9.174	3.885	15.187	45.768	29.392	23.834	17.649	12.005	9.542	7.245	5.575	181.378 MCM

Momentary Peak 62.50 CMS, at 1.90 H (A.D), at 18.00 Hours, on Jul 23, 2001

Runoff Yield 15.06 Liters/Second/Square KM, Momentary Peak Yield 163.613 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 146 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 Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Fairly stable.

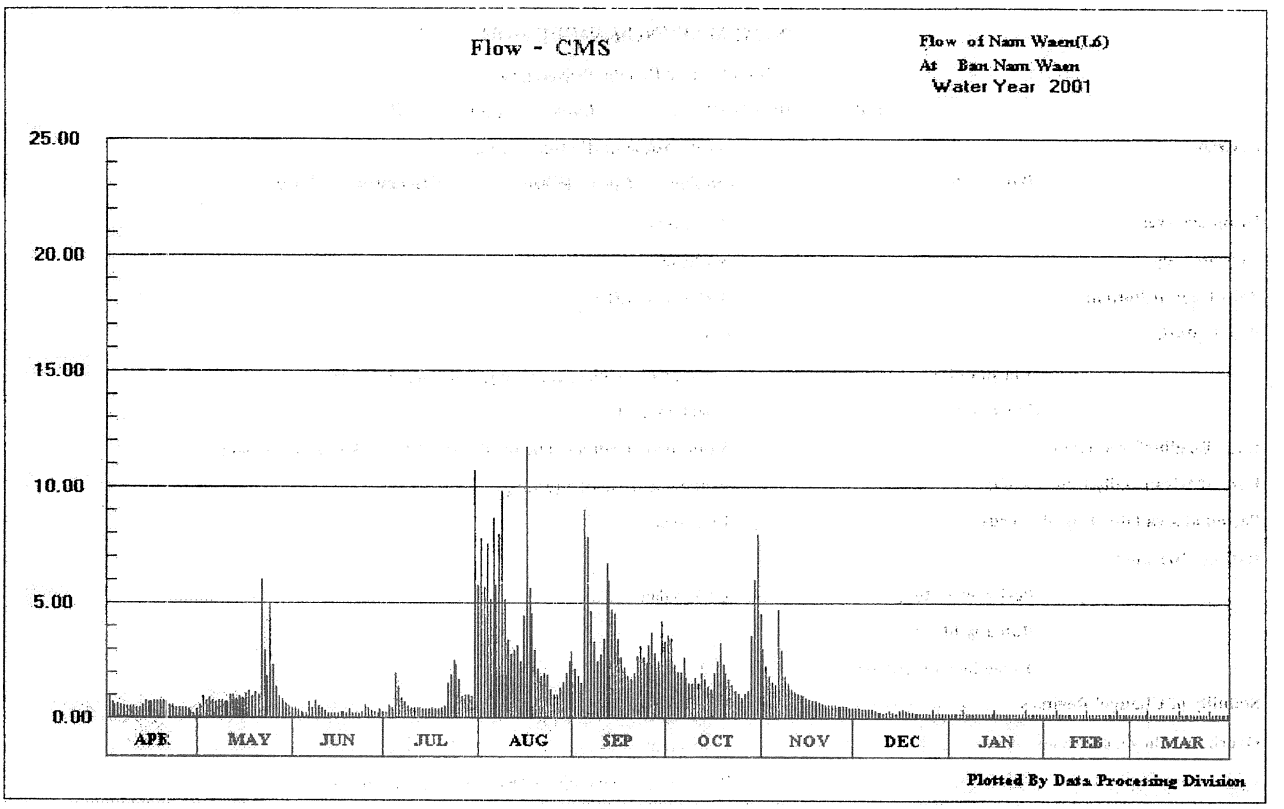
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by Nam Waen reservoir about 4 - 5 kilometers above gage site.
Stage-discharge relation defined by 58 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.63	0.49	0.45	0.35	1.69	0.92	1.18	1.09	0.44	0.32	0.20	0.19	
2	0.54	0.63	0.39	0.49	1.46	0.86	1.16	0.95	0.44	0.30	0.21	0.18	
3	0.50	0.57	0.36	0.46	1.67	0.79	0.96	0.86	0.43	0.29	0.23	0.18	
4	0.51	0.60	0.34	0.89	1.39	1.82	0.90	0.80	0.42	0.29	0.23	0.19	
5	0.49	0.57	0.31	0.74	1.78	1.70	0.90	0.76	0.41	0.29	0.23	0.18	
6	0.48	0.53	0.53	0.60	1.47	1.33	1.03	1.34	0.41	0.28	0.22	0.18	
7	0.48	0.57	0.46	0.55	1.71	1.14	0.84	1.08	0.40	0.28	0.21	0.18	
8	0.47	0.56	0.56	0.47	1.90	0.99	0.78	0.85	0.37	0.28	0.21	0.18	
9	0.48	0.55	0.48	0.45	1.39	1.05	0.79	0.78	0.35	0.28	0.20	0.22	
10	0.44	0.53	0.44	0.46	1.15	1.17	0.84	0.72	0.34	0.26	0.19	0.19	
11	0.44	0.65	0.39	0.44	1.05	1.58	0.79	0.68	0.36	0.27	0.20	0.19	
12	0.50	0.64	0.34	0.45	1.08	1.49	0.88	0.66	0.38	0.28	0.20	0.17	
13	0.56	0.58	0.32	0.41	1.11	1.34	0.82	0.64	0.36	0.30	0.20	0.18	
14	0.53	0.63	0.31	0.43	0.99	1.32	0.74	0.62	0.34	0.31	0.19	0.17	
15	0.53	0.61	0.31	0.43	1.31	1.16	0.71	0.60	0.40	0.24	0.19	0.17	
16	0.57	0.66	0.36	0.46	2.05	1.02	0.89	0.58	0.39	0.26	0.21	0.17	
17	0.57	0.69	0.36	0.43	1.45	0.94	0.99	0.57	0.39	0.25	0.23	0.17	
18	0.57	0.62	0.33	0.42	1.32	0.85	1.13	0.56	0.36	0.25	0.23	0.17	
19	0.57	0.67	0.30	0.44	1.08	0.82	0.97	0.54	0.35	0.25	0.24	0.17	
20	0.55	0.65	0.32	0.47	0.92	0.88	0.88	0.52	0.30	0.24	0.23	0.18	
21	0.50	1.50	0.31	0.78	0.86	1.04	0.82	0.50	0.31	0.22	0.23	0.18	
22	0.50	1.08	0.30	0.87	0.88	1.11	0.76	0.49	0.31	0.25	0.21	0.17	
23	0.46	0.85	0.35	1.00	0.87	1.02	0.70	0.49	0.32	0.25	0.20	0.17	
24	0.46	1.37	0.50	0.96	0.71	0.98	0.66	0.49	0.34	0.28	0.20	0.18	
25	0.46	0.96	0.46	0.82	0.65	1.11	0.61	0.48	0.33	0.26	0.20	0.18	
26	0.44	0.75	0.40	0.63	0.64	1.20	0.66	0.48	0.31	0.26	0.20	0.18	
27	0.43	0.63	0.35	0.65	0.73	1.06	0.70	0.47	0.32	0.27	0.20	0.17	
28	0.36	0.58	0.33	0.65	0.80	0.99	1.18	0.47	0.31	0.25	0.20	0.17	
29	0.34	0.52	0.33	0.62	0.88	1.28	1.50	0.46	0.31	0.23		0.17	
30	0.34	0.47	0.36	1.97	0.99	1.14	1.71	0.44	0.30	0.23		0.17	
31		0.46		1.47	1.07		1.32		0.31	0.20		0.18	
Mean	0.49	0.58	0.38	0.65	1.20	1.14	0.93	0.67	0.36	0.27	0.21	0.18	
Max	0.63	1.50	0.56	1.97	2.05	1.82	1.71	1.34	0.44	0.32	0.24	0.22	2.05
Min	0.34	0.46	0.30	0.35	0.64	0.79	0.61	0.44	0.30	0.20	0.19	0.17	0.17

Annual Max Momentary Gage Height 2.22 M (A.D), at 12.00 Hours, on Aug 16, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.24 M (A.D)
Left Bank Elevation 8.78 M (A.D)
Right Bank Elevation 8.81 M (A.D), Drainage Area 146 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.04	0.63	0.53	0.31	7.81	2.18	3.62	3.07	0.51	0.25	0.07	0.06	
2	0.77	1.04	0.39	0.63	5.76	1.91	3.49	2.33	0.51	0.21	0.08	0.06	
3	0.65	0.85	0.33	0.55	7.61	1.61	2.37	1.91	0.48	0.20	0.11	0.06	
4	0.68	0.94	0.29	2.04	5.18	9.10	2.08	1.65	0.46	0.20	0.11	0.06	
5	0.63	0.85	0.23	1.43	8.70	7.90	2.08	1.50	0.43	0.20	0.11	0.06	
6	0.60	0.74	0.74	0.94	5.85	4.69	2.73	4.77	0.43	0.18	0.10	0.06	
7	0.60	0.85	0.55	0.80	8.00	3.37	1.82	3.01	0.41	0.18	0.08	0.06	
8	0.58	0.82	0.82	0.58	9.90	2.52	1.58	1.87	0.35	0.18	0.08	0.06	
9	0.60	0.80	0.60	0.53	5.18	2.84	1.61	1.58	0.31	0.18	0.07	0.10	
10	0.51	0.74	0.51	0.55	3.43	3.55	1.82	1.35	0.29	0.15	0.06	0.06	
11	0.51	1.11	0.39	0.51	2.84	6.78	1.61	1.21	0.33	0.17	0.07	0.06	
12	0.65	1.08	0.29	0.53	3.01	6.02	1.99	1.14	0.37	0.18	0.07	0.05	
13	0.82	0.88	0.25	0.43	3.18	4.77	1.74	1.08	0.33	0.21	0.07	0.06	
14	0.74	1.04	0.23	0.48	2.52	4.60	1.43	1.01	0.29	0.23	0.06	0.05	
15	0.74	0.97	0.23	0.48	4.52	3.49	1.32	0.94	0.41	0.13	0.06	0.05	
16	0.85	1.14	0.33	0.55	11.75	2.68	2.04	0.88	0.39	0.15	0.08	0.05	
17	0.85	1.25	0.33	0.48	5.68	2.28	2.52	0.85	0.39	0.14	0.11	0.05	
18	0.85	1.01	0.27	0.46	4.60	1.87	3.31	0.82	0.33	0.14	0.11	0.05	
19	0.85	1.18	0.21	0.51	3.01	1.74	2.42	0.77	0.31	0.14	0.13	0.05	
20	0.80	1.11	0.25	0.58	2.18	1.99	1.99	0.71	0.21	0.13	0.11	0.06	
21	0.65	6.10	0.23	1.58	1.91	2.79	1.74	0.65	0.23	0.10	0.11	0.06	
22	0.65	3.01	0.21	1.95	1.99	3.18	1.50	0.63	0.23	0.14	0.08	0.05	
23	0.55	1.87	0.31	2.57	1.95	2.68	1.28	0.63	0.25	0.14	0.07	0.05	
24	0.55	5.01	0.65	2.37	1.32	2.47	1.14	0.63	0.29	0.18	0.07	0.06	
25	0.55	2.37	0.55	1.74	1.11	3.18	0.97	0.60	0.27	0.15	0.07	0.06	
26	0.51	1.47	0.41	1.04	1.08	3.74	1.14	0.60	0.23	0.15	0.07	0.06	
27	0.48	1.04	0.31	1.11	1.39	2.90	1.28	0.58	0.25	0.17	0.07	0.05	
28	0.33	0.88	0.27	1.11	1.65	2.52	3.62	0.58	0.23	0.14	0.07	0.05	
29	0.29	0.71	0.27	1.01	1.99	4.30	6.10	0.55	0.23	0.11		0.05	
30	0.29	0.58	0.33	10.74	2.52	3.37	8.00	0.51	0.21	0.11		0.05	
31		0.55		5.85	2.96		4.60		0.23	0.07		0.06	
Total	19.17	42.62	11.31	44.44	130.58	107.02	74.94	38.41	10.19	5.01	2.35	1.77	487.81 CMSDAY
Mean	0.64	1.37	0.38	1.43	4.21	3.57	2.42	1.28	0.33	0.16	0.08	0.06	1.34 CMS
Max	1.04	6.10	0.82	10.74	11.75	9.10	8.00	4.77	0.51	0.25	0.13	0.10	11.75 CMS
Min	0.29	0.55	0.21	0.31	1.08	1.61	0.97	0.51	0.21	0.07	0.06	0.05	0.05 CMS
Runoff	1.656	3.682	0.977	3.840	11.282	9.247	6.475	3.319	0.880	0.433	0.203	0.153	42.147 MCM

Momentary Peak 14.04 CMS, at 2.22 M (A.D) at 12.00 Hours, on Aug 16, 2001
Runoff Yield 9.15 Liters/Second/Square KM, Momentary Peak Yield 96 164 Liters/Second/Square KM

WATER YEAR : 2001

NAM MAE ING RIVER BASIN

Nam Yuan at Ban Pu, Phayao (I.10)

Lat 19 - 31 - 25 N. **Long** 100 - 20 - 06 E.

Location on left bank at the bridge on road.

Ban Pu **Amphoe** Chiang Kham **Changwat** Phayao

Drainage Area 185 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 +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 1983 to date.

Rating Operation

Period of Rating 1997 to date.

Rated by Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Fairly stable.

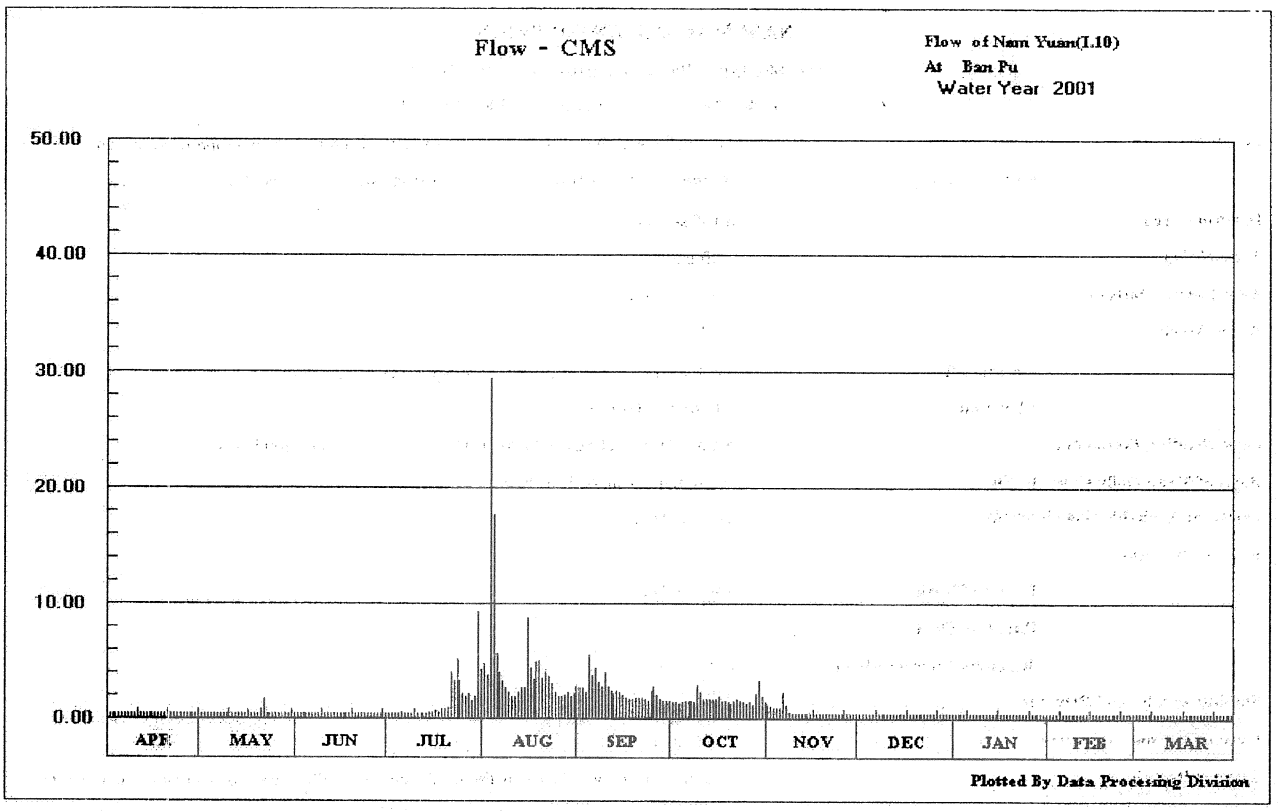
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 59 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.79	0.80	0.93	0.91	1.61	1.33	1.16	1.12	0.79	0.86	0.84	0.79	
2	0.80	0.89	0.92	0.97	1.48	1.33	1.16	1.09	0.79	0.88	0.83	0.81	
3	0.80	0.87	0.90	0.95	3.70	1.29	1.13	1.08	0.79	0.88	0.80	0.77	
4	0.80	0.85	0.90	0.96	2.82	1.69	1.16	1.08	0.78	0.84	0.83	0.77	
5	0.82	0.85	0.92	0.99	1.71	1.48	1.17	1.08	0.77	0.86	0.85	0.82	
6	0.81	0.85	0.94	0.95	1.51	1.57	1.18	1.29	0.76	0.84	0.84	0.80	
7	0.82	0.86	0.91	0.98	1.42	1.41	1.17	1.11	0.76	0.83	0.79	0.81	
8	0.80	0.85	0.91	0.95	1.34	1.36	1.16	1.00	0.76	0.83	0.74	0.81	
9	0.80	0.84	0.96	0.93	1.29	1.52	1.38	0.95	0.77	0.85	0.83	0.81	
10	0.78	0.83	0.97	0.97	1.24	1.36	1.28	0.95	0.77	0.85	0.81	0.78	
11	0.76	0.81	0.96	0.97	1.23	1.31	1.20	0.94	0.77	0.87	0.80	0.81	
12	0.79	0.81	0.94	0.97	1.28	1.26	1.19	0.91	0.77	0.88	0.81	0.78	
13	0.89	0.80	0.95	0.97	1.34	1.30	1.19	0.82	0.77	0.86	0.81	0.76	
14	0.89	0.81	0.93	1.01	1.34	1.29	1.20	0.83	0.79	0.79	0.83	0.76	
15	0.86	0.87	0.91	1.01	2.04	1.25	1.19	0.84	0.77	0.87	0.78	0.76	
16	0.84	1.02	0.91	1.03	1.57	1.22	1.23	0.80	0.78	0.82	0.82	0.78	
17	0.81	0.96	0.88	1.01	1.43	1.20	1.18	0.79	0.81	0.82	0.79	0.76	
18	0.80	0.91	0.86	1.06	1.62	1.19	1.18	0.78	0.79	0.81	0.82	0.79	
19	0.82	0.90	0.89	1.03	1.64	1.21	1.15	0.79	0.80	0.85	0.81	0.78	
20	0.79	0.89	0.90	1.08	1.45	1.21	1.13	0.79	0.86	0.79	0.79	0.79	
21	0.80	1.19	0.91	1.52	1.51	1.22	1.17	0.79	0.89	0.87	0.81	0.78	
22	0.80	0.95	0.91	1.42	1.47	1.20	1.19	0.79	0.86	0.80	0.83	0.74	
23	0.79	0.89	0.85	1.65	1.39	1.17	1.17	0.79	0.86	0.81	0.80	0.75	
24	0.78	0.88	0.85	1.42	1.28	1.30	1.15	0.79	0.85	0.88	0.81	0.80	
25	0.79	0.90	0.96	1.27	1.23	1.35	1.14	0.79	0.85	0.81	0.81	0.79	
26	0.76	0.86	0.91	1.24	1.23	1.25	1.15	0.79	0.85	0.85	0.81	0.77	
27	0.76	0.91	0.85	1.26	1.25	1.20	1.11	0.78	0.85	0.85	0.76	0.78	
28	0.77	0.90	0.85	1.18	1.28	1.18	1.27	0.78	0.85	0.85	0.78	0.78	
29	0.76	0.87	0.83	1.23	1.23	1.18	1.42	0.79	0.86	0.85		0.75	
30	0.78	0.85	0.87	2.08	1.27	1.17	1.23	0.80	0.83	0.85		0.73	
31		0.90		1.55	1.35		1.15		0.83	0.84		0.73	
Mean	0.80	0.88	0.91	1.15	1.53	1.30	1.19	0.90	0.81	0.84	0.81	0.78	
Max	0.89	1.19	0.97	2.08	3.70	1.69	1.42	1.29	0.89	0.88	0.85	0.82	3.70
Min	0.76	0.80	0.83	0.91	1.23	1.17	1.11	0.78	0.76	0.79	0.74	0.73	0.73

Annual Max Momentary Gage Height 4.14 M (A.D), at 7.00 Hours, on Aug 3, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.37 M (A.D)
Left Bank Elevation 5.42 M (A.D)
Right Bank Elevation 5.48 M (A.D), Drainage Area 185 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.11	0.12	0.42	0.35	4.91	2.74	1.57	1.32	0.11	0.24	0.20	0.11	
2	0.12	0.30	0.39	0.55	3.87	2.74	1.57	1.14	0.11	0.28	0.18	0.14	
3	0.12	0.26	0.32	0.48	29.60	2.45	1.38	1.08	0.11	0.28	0.12	0.08	
4	0.12	0.22	0.32	0.52	17.80	5.61	1.57	1.08	0.10	0.20	0.18	0.08	
5	0.16	0.22	0.39	0.62	5.79	3.87	1.63	1.08	0.08	0.24	0.22	0.16	
6	0.14	0.22	0.45	0.48	4.11	4.58	1.69	2.45	0.07	0.20	0.20	0.12	
7	0.16	0.24	0.35	0.58	3.41	3.33	1.63	1.25	0.07	0.18	0.11	0.14	
8	0.12	0.22	0.35	0.48	2.81	2.96	1.57	0.65	0.07	0.18	0.05	0.14	
9	0.12	0.20	0.52	0.42	2.45	4.19	3.10	0.48	0.08	0.22	0.18	0.14	
10	0.10	0.18	0.55	0.55	2.10	2.96	2.38	0.48	0.08	0.22	0.14	0.10	
11	0.07	0.14	0.52	0.55	2.03	2.59	1.82	0.45	0.08	0.26	0.12	0.14	
12	0.11	0.14	0.45	0.55	2.38	2.24	1.76	0.35	0.08	0.28	0.14	0.10	
13	0.30	0.12	0.48	0.55	2.81	2.52	1.76	0.16	0.08	0.24	0.14	0.07	
14	0.30	0.14	0.42	0.70	2.81	2.45	1.82	0.18	0.11	0.11	0.18	0.07	
15	0.24	0.26	0.35	0.70	8.97	2.17	1.76	0.20	0.08	0.26	0.10	0.07	
16	0.20	0.76	0.35	0.81	4.58	1.96	2.03	0.12	0.10	0.16	0.16	0.10	
17	0.14	0.52	0.28	0.70	3.48	1.82	1.69	0.11	0.14	0.16	0.11	0.07	
18	0.12	0.35	0.24	0.97	5.00	1.76	1.69	0.10	0.11	0.14	0.16	0.11	
19	0.16	0.32	0.30	0.81	5.17	1.89	1.50	0.11	0.12	0.22	0.14	0.10	
20	0.11	0.30	0.32	1.08	3.64	1.89	1.38	0.11	0.24	0.11	0.11	0.11	
21	0.12	1.76	0.35	4.19	4.11	1.96	1.63	0.11	0.30	0.26	0.14	0.10	
22	0.12	0.48	0.35	3.41	3.80	1.82	1.76	0.11	0.24	0.12	0.18	0.05	
23	0.11	0.30	0.22	5.26	3.18	1.63	1.63	0.11	0.24	0.14	0.12	0.06	
24	0.10	0.28	0.22	3.41	2.38	2.52	1.50	0.11	0.22	0.28	0.14	0.12	
25	0.11	0.32	0.52	2.31	2.03	2.89	1.44	0.11	0.22	0.14	0.14	0.11	
26	0.07	0.24	0.35	2.10	2.03	2.17	1.50	0.11	0.22	0.22	0.14	0.08	
27	0.07	0.35	0.22	2.24	2.17	1.82	1.25	0.10	0.22	0.22	0.07	0.10	
28	0.08	0.32	0.22	1.69	2.38	1.69	2.31	0.10	0.22	0.22	0.10	0.10	
29	0.07	0.26	0.18	2.03	2.03	1.69	3.41	0.11	0.24	0.22		0.06	
30	0.10	0.22	0.26	9.39	2.31	1.63	2.03	0.12	0.18	0.22		0.04	
31		0.32		4.42	2.89		1.50		0.18	0.20		0.04	
Total	3.97	10.08	10.66	52.90	147.03	76.54	55.26	13.99	4.50	6.42	3.97	3.01	388.33 CMSDAY
Mean	0.13	0.33	0.36	1.71	4.74	2.55	1.78	0.47	0.15	0.21	0.14	0.10	1.06 CMS
Max	0.30	1.76	0.55	9.39	29.60	5.61	3.41	2.45	0.30	0.28	0.22	0.16	29.60 CMS
Min	0.07	0.12	0.18	0.35	2.03	1.63	1.25	0.10	0.07	0.11	0.05	0.04	0.04 CMS
Runoff	0.343	0.871	0.921	4.571	12.703	6.613	4.774	1.209	0.389	0.555	0.343	0.260	33.552 MCM

Momentary Peak 35.95 CMS, at 4.14 M (A.D), at 7.00 Hours on Aug 3, 2001

Runoff Yield 5.75 Liters/Second/Square KM, Momentary Peak Yield 194.324 Liters/Second/Square KM

WATER YEAR : 2001

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 the on road about 2 kilometers from Amphoe Khun Tan.

Ban Nam Ing **Amphoe** Khun Tan **Changwat** Chiang Rai

Drainage Area 6,155 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 approach of the bridge.

Elevation +10.680 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 1993 to date.

Rating Operation

Period of Rating 1993 to date.

Rated by Float -

Rated by Current Meter 1993 to date.

Stability of Channel Regimes Fairly stable.

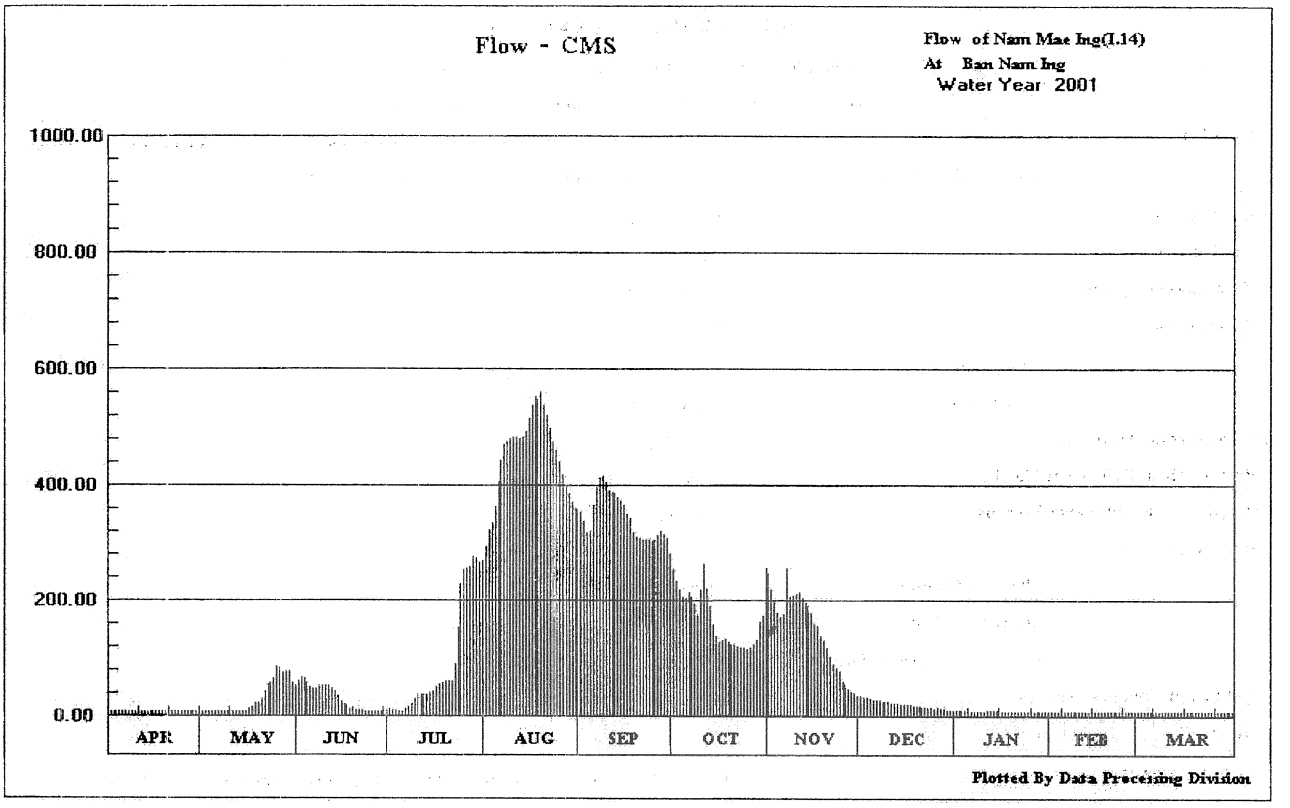
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the local weir about 100 meters downstream from the gage site. Stage-discharge relation defined by 44 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.73	0.55	2.81	1.50	6.83	7.37	6.33	6.22	2.15	1.40	1.19	0.95	
2	0.74	0.58	3.01	1.39	7.12	7.25	6.04	5.81	2.09	1.39	1.18	0.93	
3	0.71	0.61	2.92	1.36	7.23	7.08	5.81	5.50	2.05	1.37	1.16	0.92	
4	0.69	0.67	2.73	1.31	7.44	7.10	5.62	5.19	2.02	1.35	1.15	0.91	
5	0.67	0.78	2.54	1.28	7.72	7.45	5.58	5.05	1.97	1.34	1.14	0.88	
6	0.64	1.04	2.50	1.44	7.91	7.65	5.75	5.13	1.94	1.31	1.13	0.86	
7	0.62	1.07	2.50	1.53	8.04	7.76	5.62	6.38	1.93	1.30	1.07	0.85	
8	0.60	1.06	2.59	1.73	8.06	7.77	5.43	5.62	1.89	1.29	1.05	0.84	
9	0.61	1.04	2.61	1.99	8.09	7.71	5.06	5.68	1.87	1.30	1.01	0.86	
10	0.64	1.03	2.64	2.23	8.10	7.63	5.81	5.70	1.83	1.32	0.98	0.88	
11	0.65	1.02	2.60	2.21	8.10	7.61	6.45	5.74	1.81	1.39	0.97	0.90	
12	0.69	1.01	2.52	2.24	8.09	7.59	5.85	5.58	1.79	1.40	0.96	0.89	
13	0.75	1.05	2.40	2.22	8.10	7.55	5.37	5.48	1.76	1.37	0.95	0.87	
14	0.77	1.13	2.16	2.30	8.14	7.50	4.81	5.37	1.73	1.36	0.95	0.86	
15	0.78	1.26	1.87	2.34	8.23	7.45	4.46	5.17	1.70	1.34	0.94	0.83	
16	0.80	1.43	1.73	2.57	8.32	7.35	4.27	4.84	1.72	1.31	0.98	0.82	
17	0.81	1.56	1.61	2.71	8.38	7.28	4.31	4.77	1.70	1.26	1.11	0.81	
18	0.79	1.77	1.51	2.77	8.36	7.08	4.33	4.42	1.67	1.25	1.13	0.80	
19	0.78	1.82	1.46	2.79	8.41	7.00	4.27	4.32	1.65	1.25	1.12	0.78	
20	0.75	2.00	1.40	2.81	8.32	6.98	4.18	4.08	1.61	1.24	1.10	0.77	
21	0.75	2.35	1.38	2.80	8.25	6.96	4.15	3.78	1.58	1.23	1.08	0.75	
22	0.71	2.68	1.33	3.50	8.16	6.95	4.12	3.50	1.55	1.22	1.06	0.74	
23	0.69	2.72	1.01	4.72	8.07	6.96	4.08	3.33	1.54	1.21	1.06	0.73	
24	0.68	2.95	1.13	5.98	8.00	6.93	4.04	3.20	1.52	1.21	1.05	0.72	
25	0.67	3.39	1.22	6.33	7.90	6.95	4.03	2.81	1.50	1.22	1.01	0.73	
26	0.65	3.33	1.25	6.37	7.78	7.02	4.07	2.66	1.47	1.23	0.98	0.74	
27	0.63	3.18	1.23	6.39	7.68	7.09	4.15	2.51	1.45	1.22	0.96	0.73	
28	0.60	3.23	1.16	6.63	7.60	7.04	4.30	2.39	1.44	1.21	0.94	0.72	
29	0.58	3.22	1.14	6.59	7.48	6.97	4.89	2.28	1.42	1.19		0.72	
30	0.57	2.77	1.40	6.49	7.41	6.68	5.10	2.18	1.41	1.08		0.71	
31		2.54		6.53	7.39		6.36		1.40	1.07		0.72	
Mean	0.69	1.77	1.95	3.32	7.89	7.26	4.99	4.49	1.71	1.28	1.05	0.81	
Max	0.81	3.39	3.01	6.63	8.41	7.77	6.45	6.38	2.15	1.40	1.19	0.95	8.41
Min	0.57	0.55	1.01	1.28	6.83	6.68	4.03	2.18	1.40	1.07	0.94	0.71	0.55

Annual Max Momentary Gage Height 8.41 M (A.D), at 6.00 Hours, on Aug 19, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.10 M (A.D)
Left Bank Elevation 10.63 M (A.D)
Right Bank Elevation 9.38 M (A.D), Drainage Area 6155 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.8	1.0	63.4	16.6	296.8	356.9	255.8	247.5	38.3	13.7	8.9	5.4	
2	2.9	1.3	71.9	13.5	325.6	340.8	234.8	219.6	36.1	13.5	8.7	5.1	
3	2.6	1.5	68.1	12.8	338.1	321.4	219.6	200.0	34.7	13.0	8.4	5.0	
4	2.3	2.1	60.2	11.6	366.6	323.5	207.3	182.0	33.7	12.5	8.2	4.9	
5	2.1	3.3	52.6	10.9	409.4	368.0	204.8	174.3	32.0	12.3	8.1	4.5	
6	1.8	6.6	51.0	14.9	445.0	397.5	215.8	178.7	30.9	11.6	7.9	4.3	
7	1.6	7.1	51.0	17.5	472.4	416.2	207.3	259.5	30.5	11.3	7.1	4.1	
8	1.4	6.9	54.6	23.7	477.1	417.9	195.8	207.3	29.2	11.1	6.7	4.0	
9	1.5	6.6	55.4	32.7	484.2	407.7	174.8	211.2	28.5	11.3	6.1	4.3	
10	1.8	6.4	56.6	41.0	486.5	394.1	219.6	212.5	27.1	11.8	5.8	4.5	
11	1.9	6.3	55.0	40.3	486.5	390.7	264.9	215.1	26.3	13.5	5.6	4.7	
12	2.3	6.1	51.8	41.4	484.2	387.6	222.3	204.8	25.7	13.7	5.5	4.6	
13	3.0	6.7	47.0	40.7	486.5	382.0	192.3	198.8	24.7	13.0	5.4	4.4	
14	3.2	7.9	38.6	43.5	495.9	375.0	161.1	192.3	23.7	12.8	5.4	4.3	
15	3.3	10.4	28.5	44.9	517.6	368.0	141.8	180.9	22.8	12.3	5.3	3.9	
16	3.5	14.6	23.7	53.8	540.6	354.2	131.7	162.7	23.4	11.6	5.8	3.7	
17	3.6	18.3	19.8	59.4	555.9	344.8	133.8	158.9	22.8	10.4	7.6	3.6	
18	3.4	25.0	16.9	61.8	550.8	321.4	134.8	139.6	21.8	10.2	7.9	3.5	
19	3.3	26.7	15.4	62.6	563.9	313.0	131.7	134.3	21.1	10.2	7.8	3.3	
20	3.0	33.0	13.7	63.4	540.6	311.1	127.0	122.0	19.8	9.9	7.5	3.2	
21	3.0	45.2	13.2	63.0	522.8	309.2	125.5	107.0	18.9	9.7	7.2	3.0	
22	2.6	58.2	12.1	93.5	500.6	308.2	124.0	93.5	18.0	9.5	6.9	2.9	
23	2.3	59.8	6.1	156.1	479.4	309.2	122.0	85.9	17.8	9.2	6.9	2.8	
24	2.2	69.4	7.9	230.7	463.0	306.3	120.0	80.0	17.2	9.2	6.7	2.7	
25	2.1	88.6	9.5	255.8	443.0	308.2	119.5	63.4	16.6	9.5	6.1	2.8	
26	1.9	85.9	10.2	258.7	419.6	315.1	121.5	57.4	15.7	9.7	5.8	2.9	
27	1.7	79.2	9.7	260.2	402.6	322.5	125.5	51.4	15.2	9.5	5.5	2.8	
28	1.4	81.4	8.4	279.1	389.0	317.2	133.3	46.7	14.9	9.2	5.3	2.7	
29	1.3	80.9	8.1	275.7	372.2	310.1	165.5	42.8	14.3	8.9		2.7	
30	1.2	61.8	13.7	268.0	362.4	283.5	177.0	39.3	14.0	7.2		2.6	
31		56.6		271.1	359.6		258.0		13.7	7.1		2.7	
Total	71.0	964.8	994.1	3118.9	14038.4	10381.3	5368.8	4469.4	729.4	338.4	190.1	115.9	40780.5 CMSDAY
Mean	2.4	31.1	33.1	100.6	452.9	346.0	173.2	149.0	23.5	10.9	6.8	3.7	111.7 CMS
Max	3.6	88.6	71.9	279.1	563.9	417.9	264.9	259.5	38.3	13.7	8.9	5.4	563.9 CMS
Min	1.2	1.0	6.1	10.9	296.8	283.5	119.5	39.3	13.7	7.1	5.3	2.6	1.0 CMS
Runoff	6.13	83.36	85.89	269.47	1212.92	896.94	463.86	386.16	63.02	29.24	16.42	10.01	3523.44 MCM

Momentary Peak 563.90 CMS, at 8.41 M (A.D), at 6.00 Hours, on Aug 19, 2001
Runoff Yield 18.15 Liters/Second/Square KM, Momentary Peak Yield 91.617 Liters/Second/Square KM

WATER YEAR : 2001

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Phai Lom, Nakhon Sawan (C.2)

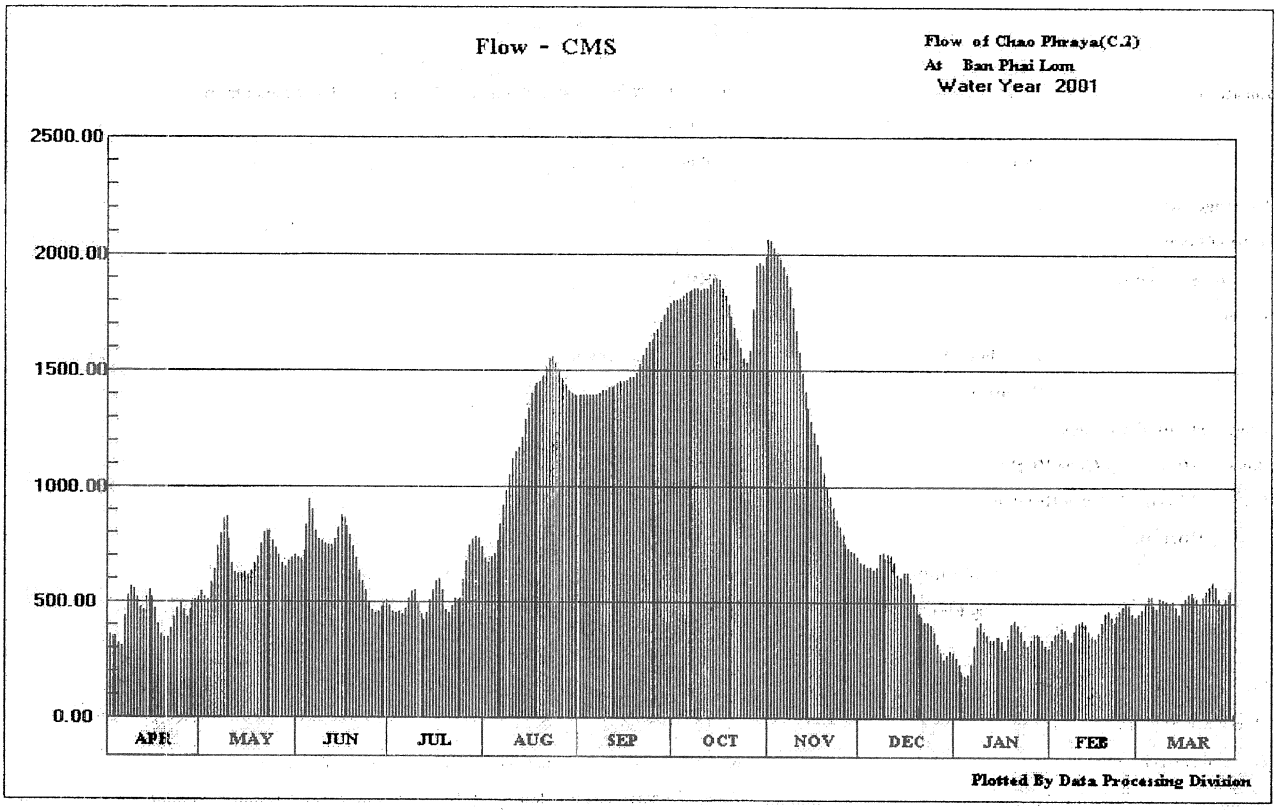
Lat 15 - 40 - 15 N. **Long** 100 - 06 - 45 E.

Location		on left bank at Khai Chira Prawat about 3 kilometers downstream from Dechatiwong Bridge.		
	Ban Phai Lom	**Amphoe** Mueang	**Changwat** Nakhon Sawan	
Drainage Area		110,569 sq.km.		
Type of Gage		Water - stage recorder.		
Zero Gage at Bottom		+0.000 m. (M.S.L.)		
Bench Mark		B.M.- H.D.		
	Location BM	About 20 meters west of the gage site.		
	Elevation	+25.628 m. (M.S.L.)		
Gage Reading Frequency		Recordings.		
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 Float	-		
	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 71 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.98	19.78	20.37	19.53	20.38	22.50	23.49	24.08	20.31	18.49	18.89	19.41	
2	18.95	19.57	20.35	19.43	20.29	22.50	23.50	24.07	20.27	18.34	19.01	19.47	
3	18.94	19.54	20.49	19.39	20.40	22.50	23.51	23.99	20.23	18.18	19.04	19.60	
4	18.79	19.35	20.89	19.43	20.45	22.50	23.54	23.93	20.22	18.07	19.12	19.71	
5	18.74	20.17	21.24	19.38	20.64	22.50	23.56	23.88	20.17	18.11	19.10	19.72	
6	19.33	20.56	21.11	19.47	20.91	22.50	23.58	23.82	20.23	18.34	18.91	19.56	
7	19.72	20.76	20.80	19.65	21.18	22.53	23.60	23.74	20.45	18.72	18.84	19.49	
8	19.87	20.97	20.67	19.78	21.37	22.55	23.61	23.62	20.47	19.14	19.07	19.69	
9	19.83	21.00	20.65	19.80	21.57	22.55	23.61	23.42	20.37	19.22	19.19	19.66	
10	19.67	20.66	20.60	19.59	21.78	22.58	23.60	23.18	20.45	19.06	19.24	19.63	
11	19.49	20.28	20.58	19.36	21.86	22.58	23.61	22.96	20.43	18.98	19.25	19.58	
12	19.44	20.11	20.58	19.25	21.92	22.60	23.61	22.74	20.30	18.89	19.20	19.63	
13	19.69	20.09	20.66	19.39	22.03	22.63	23.65	22.54	20.10	18.87	19.06	19.52	
14	19.80	20.09	20.85	19.62	22.24	22.65	23.70	22.36	20.05	18.93	18.95	19.41	
15	19.68	20.11	21.03	19.80	22.37	22.65	23.71	22.22	20.13	18.95	18.92	19.60	
16	19.47	20.06	20.98	19.96	22.52	22.67	23.69	22.09	20.12	18.84	19.04	19.69	
17	19.18	20.16	20.87	20.01	22.60	22.70	23.61	21.95	19.94	18.66	19.24	19.76	
18	18.97	20.28	20.73	19.80	22.63	22.70	23.54	21.81	19.76	18.91	19.40	19.78	
19	18.91	20.40	20.55	19.46	22.65	22.74	23.45	21.59	19.58	19.19	19.45	19.72	
20	18.92	20.61	20.38	19.41	22.71	22.83	23.33	21.40	19.40	19.27	19.34	19.67	
21	19.08	20.77	20.16	19.52	22.81	22.93	23.21	21.28	19.34	19.17	19.22	19.59	
22	19.30	20.81	19.97	19.65	22.89	23.01	23.10	21.13	19.24	19.05	19.38	19.71	
23	19.48	20.80	19.81	19.64	22.91	23.06	23.00	20.97	19.24	18.89	19.46	19.80	
24	19.60	20.64	19.60	19.66	22.85	23.09	22.89	20.86	19.17	18.76	19.53	19.90	
25	19.46	20.54	19.45	19.99	22.76	23.15	22.85	20.76	19.02	18.89	19.59	19.97	
26	19.32	20.41	19.39	20.33	22.68	23.20	22.97	20.61	18.80	19.01	19.55	19.89	
27	19.44	20.27	19.43	20.59	22.61	23.27	23.41	20.53	18.60	19.01	19.41	19.67	
28	19.59	20.23	19.50	20.67	22.56	23.35	23.83	20.50	18.45	18.96	19.35	19.57	
29	19.63	20.32	19.59	20.72	22.53	23.42	23.86	20.47	18.55	18.89		19.69	
30	19.67	20.36	19.64	20.69	22.51	23.46	23.83	20.40	18.64	18.76		19.77	
31		20.41		20.55	22.49		23.91		18.60	18.68		19.82	
Mean	19.36	20.35	20.36	19.79	22.00	22.80	23.50	22.23	19.70	18.81	19.21	19.67	
Max	19.87	21.00	21.24	20.72	22.91	23.46	23.91	24.08	20.47	19.27	19.59	19.97	24.08
Min	18.74	19.64	19.39	19.25	20.29	22.50	22.85	20.40	18.45	18.07	18.84	19.41	18.07

Annual Max Momentary Gage Height 24.10 M (MSL), at 12.00 Hours, on Nov 1, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed 14.04 M (MSL)
Left Bank Elevation 25.77 M (MSL)
Right Bank Elevation 26.33 M (MSL), Drainage Area 110569 Square Kilometers



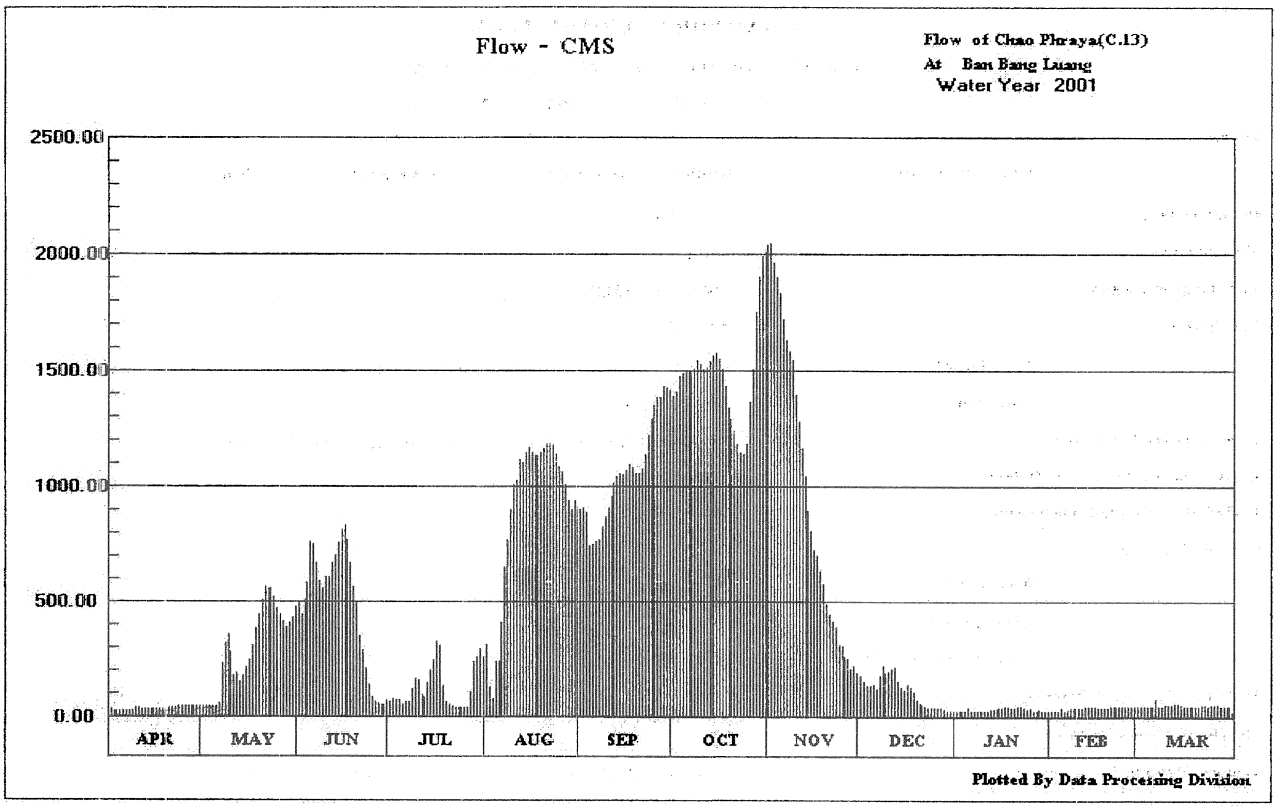
Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	367.1	550.6	695.4	490.2	697.9	1399.0	1806.1	2071.8	680.0	267.0	348.0	461.4	
2	360.7	524.0	690.3	466.2	675.0	1399.0	1810.5	2067.2	669.9	237.6	373.5	475.8	
3	358.5	516.8	727.3	456.7	703.0	1399.0	1814.9	2030.5	659.6	208.6	379.9	507.1	
4	327.7	591.6	841.0	466.2	716.5	1399.0	1827.9	2003.3	657.1	190.3	396.9	533.7	
5	317.6	644.8	949.1	454.5	768.5	1399.0	1836.6	1980.6	644.8	196.7	392.7	536.1	
6	443.2	746.5	908.2	475.8	847.1	1399.0	1845.3	1953.4	659.6	237.6	352.1	497.5	
7	536.1	802.4	814.0	519.2	930.2	1411.1	1854.0	1917.1	716.5	313.5	337.9	480.6	
8	572.3	865.3	776.7	550.6	990.8	1419.1	1858.5	1863.0	721.9	401.2	386.3	528.9	
9	562.7	874.5	771.2	555.4	1056.4	1419.1	1858.5	1775.7	695.4	418.5	411.9	521.6	
10	524.0	774.0	757.5	504.7	1128.0	1431.2	1854.0	1674.4	716.5	384.1	423.0	514.4	
11	480.6	672.4	752.0	450.0	1156.6	1431.2	1858.5	1583.9	711.1	367.1	425.2	502.3	
12	468.6	630.3	752.0	425.2	1178.3	1439.2	1858.5	1495.5	677.5	348.0	414.0	514.4	
13	528.9	625.4	774.0	456.7	1218.5	1451.3	1876.5	1415.1	627.9	343.9	384.1	487.8	
14	555.4	625.4	829.0	512.0	1297.4	1459.3	1899.0	1343.6	615.8	356.4	360.7	461.4	
15	526.5	630.3	883.7	555.4	1347.5	1459.3	1903.5	1289.7	635.1	360.7	354.3	507.1	
16	475.8	618.2	868.4	594.1	1407.0	1467.3	1894.5	1240.4	632.7	337.9	379.9	528.9	
17	409.7	642.3	835.0	606.1	1439.2	1479.4	1858.5	1189.3	589.2	301.4	423.0	545.8	
18	364.9	672.4	793.7	555.4	1451.3	1479.4	1827.9	1138.6	545.8	352.1	459.0	550.6	
19	352.1	703.0	743.7	473.4	1459.3	1495.5	1788.8	1063.1	502.3	411.9	471.0	536.1	
20	354.3	760.3	697.9	461.4	1483.4	1531.7	1736.9	1000.5	459.0	429.8	445.5	524.0	
21	388.4	805.3	642.3	487.8	1523.6	1571.9	1686.8	961.7	445.5	407.6	418.5	504.7	
22	436.5	817.0	596.5	519.2	1555.8	1604.1	1641.3	914.4	423.0	382.0	454.5	533.7	
23	478.2	814.0	557.8	516.8	1563.8	1624.8	1600.0	865.3	423.0	348.0	473.4	555.4	
24	507.1	768.5	507.1	521.6	1539.7	1637.2	1555.8	832.0	407.6	321.7	490.2	579.6	
25	473.4	741.0	471.0	601.3	1503.5	1662.0	1539.7	802.4	375.6	348.0	504.7	596.5	
26	441.0	705.7	456.7	685.1	1471.4	1682.7	1587.9	760.3	329.7	373.5	495.1	577.2	
27	468.6	669.9	466.2	754.7	1443.2	1711.6	1771.4	738.3	289.3	373.5	461.4	524.0	
28	504.7	659.6	483.0	776.7	1423.1	1745.5	1957.9	730.0	259.0	362.8	447.8	499.9	
29	514.4	682.6	504.7	790.8	1411.1	1775.7	1971.5	721.9	279.1	348.0		528.9	
30	524.0	692.8	516.8	782.2	1403.0	1793.1	1957.9	703.0	297.3	321.7		548.2	
31		705.7		743.7	1395.0		1994.2		289.3	305.5		560.3	
Total	13623.0	21532.6	21062.2	17209.1	38185.1	45576.7	56133.3	40126.0	16636.1	10356.6	11664.5	16223.9	308329.1 CMSDAY
Mean	454.1	694.6	702.1	555.1	1231.8	1519.2	1810.8	1337.5	536.6	334.1	416.6	523.4	844.7 CMS
Max	572.3	874.5	949.1	790.8	1563.8	1793.1	1994.2	2071.8	721.9	429.8	504.7	596.5	2071.8 CMS
Min	317.6	516.8	456.7	425.2	675.0	1399.0	1539.7	703.0	259.0	190.3	337.9	461.4	190.3 CMS
Runoff	1177.03	1860.42	1819.77	1486.87	3299.19	3937.83	4849.92	3466.89	1437.36	894.81	1007.81	1401.74	26639.64 MCM

Momentary Peak 2081.00 CMS, at 24.10 M (MSL), at 12.00 Hours, on Nov 1, 2001

Runoff Yield 7.64 Liters/Second/Square KM, Momentary Peak Yield 18.821 Liters/Second/Square KM





Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	37.5	54.1	505.2	70.0	323.5	906.6	1394.4	2044.3	180.8	34.0	34.5	54.7	
2	35.3	54.7	452.4	82.9	134.1	912.6	1416.0	2054.1	155.8	35.8	34.5	54.1	
3	35.3	55.2	514.9	76.8	83.8	897.5	1481.9	1970.6	141.3	34.5	34.5	54.1	
4	35.3	55.2	588.1	75.3	244.8	751.4	1496.9	1906.8	141.3	34.5	34.5	54.7	
5	34.5	55.2	771.0	61.4	244.8	759.7	1504.3	1836.5	143.4	34.5	34.9	54.7	
6	34.5	62.8	759.7	68.5	416.4	768.0	1508.1	1725.1	124.8	34.5	38.4	54.7	
7	34.5	236.9	674.4	72.3	661.2	777.0	1504.3	1640.8	185.8	34.5	44.5	84.7	
8	34.5	327.4	593.0	127.9	780.0	834.2	1515.5	1586.6	226.0	34.5	44.0	54.1	
9	43.6	365.2	566.1	172.0	906.6	879.5	1552.9	1549.2	194.0	34.5	44.0	53.1	
10	45.6	292.6	612.5	164.5	1017.1	912.6	1530.5	1405.2	201.0	34.5	44.0	55.7	
11	39.7	183.3	614.9	105.2	1036.1	966.9	1515.5	1280.9	213.6	34.9	47.2	55.7	
12	37.9	195.4	679.7	91.9	1121.4	1023.4	1519.3	1168.3	218.1	36.6	53.1	57.3	
13	39.7	159.9	707.1	153.7	1108.0	1049.0	1545.4	1052.3	158.9	39.7	54.7	62.1	
14	39.7	183.3	762.5	210.8	1151.6	1062.1	1567.9	903.6	132.0	39.2	54.7	62.1	
15	39.7	222.8	822.1	252.6	1178.4	1058.9	1582.8	813.1	120.7	42.7	52.5	57.9	
16	39.2	252.6	837.2	331.3	1154.9	1078.5	1560.4	734.8	146.5	46.7	44.5	53.1	
17	38.8	317.7	780.0	311.9	1141.5	1104.7	1511.8	709.9	131.0	55.2	44.0	53.1	
18	37.9	391.4	679.7	139.3	1141.5	1088.3	1441.2	640.0	116.5	49.3	44.5	52.5	
19	37.1	452.4	573.4	68.5	1151.6	1065.4	1345.8	583.2	74.5	43.6	45.6	52.5	
20	40.1	517.3	507.6	58.9	1171.6	1065.4	1298.0	493.2	63.5	46.7	53.6	53.1	
21	45.6	571.0	359.2	51.5	1188.7	1085.1	1246.8	452.4	57.9	53.1	54.7	52.5	
22	46.1	563.7	296.5	48.3	1192.1	1144.9	1188.7	418.6	50.4	52.5	54.7	58.9	
23	49.9	566.1	212.2	47.2	1181.8	1226.3	1154.9	393.5	47.2	45.6	54.7	55.7	
24	55.2	527.1	147.5	44.5	1148.2	1298.0	1144.9	323.5	46.7	38.8	54.7	54.1	
25	53.6	474.5	88.3	44.0	1088.3	1356.1	1188.7	317.7	45.1	34.0	54.7	57.9	
26	53.6	450.3	68.5	48.3	1068.7	1387.2	1369.8	267.7	44.0	35.3	54.7	59.5	
27	53.6	420.7	62.1	117.6	1013.9	1390.8	1515.5	257.3	44.0	34.0	54.7	58.9	
28	53.6	397.5	58.9	246.3	942.8	1437.6	1757.9	212.2	40.5	36.6	54.7	54.1	
29	54.1	412.2	59.5	262.0	909.6	1434.0	1906.8	227.5	34.9	32.3		54.7	
30	54.1	441.8	75.3	304.2	945.8	1423.2	1995.1	195.4	34.0	34.0		54.1	
31		481.4		262.0	918.7		2014.8		35.3	34.5		54.1	
Total	1279.8	9741.7	14429.5	4171.6	27767.5	32144.9	46276.8	29164.3	3549.5	1211.1	1319.8	1748.5	172805.0 CMSDAY
Mean	42.7	314.2	481.0	134.6	895.7	1071.5	1492.8	972.1	114.5	39.1	47.1	56.4	473.4 CMS
Max	55.2	571.0	837.2	331.3	1192.1	1437.6	2014.8	2054.1	226.0	55.2	54.7	84.7	2054.1 CMS
Min	34.5	54.1	58.9	44.0	83.8	751.4	1144.9	195.4	34.0	32.3	34.5	52.5	32.3 CMS
Runoff	110.57	841.68	1246.71	360.43	2399.11	2777.32	3998.32	2519.80	306.68	104.64	114.03	151.07	14930.35 MCM

Momentary Peak 2068.86 CMS, at 13.95 M (MSL), at 15.00 Hours, on Nov 1, 2001

Runoff Yield 3.92 Liters/Second/Square KM, Momentary Peak Yield 17.142 Liters/Second/Square KM

WATER YEAR : 2001

CHAO PHRAYA RIVER BASIN

Huai Khun Kaeo at Ban Samo Thong, Uthai Thani (C.30)

Lat 15 - 21 - 04 N. **Long** 99 - 32 - 22 E.

Location on right bank in front of Wat Samo Thong School.

Ban Samo Thong **Amphoe** Huai Khot **Changwat** Uthai Thani

Drainage Area 219 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom -101.530 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 60 meters from the top staff gage.

Elevation +113.280 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1982 to date.

Rating Operation

Period of Rating 1983 to date.

Rated by Float -

Rated by Current Meter 1983 to date.

Stability of Channel Regimes Fairly stable.

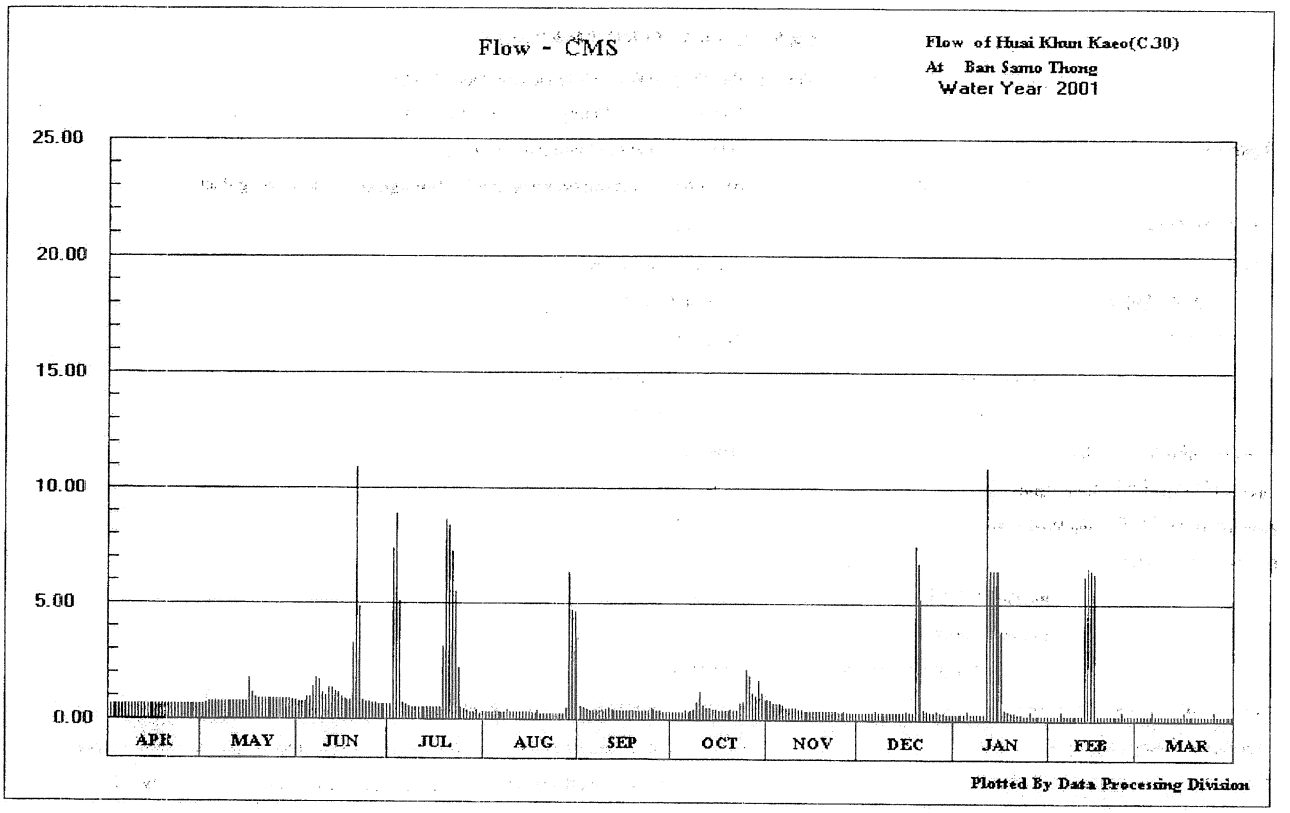
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 12 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	102.50	102.50	102.53	102.49	102.38	102.48	102.39	102.58	102.39	102.36	102.25	102.24	
2	102.50	102.51	102.53	103.43	102.37	102.45	102.39	102.57	102.39	102.36	102.25	102.24	
3	102.50	102.55	102.53	103.55	102.37	102.42	102.39	102.52	102.39	102.36	102.25	102.24	
4	102.50	102.54	102.61	103.23	102.37	102.41	102.39	102.51	102.39	102.36	102.24	102.24	
5	102.49	102.53	102.60	102.51	102.37	102.40	102.40	102.51	102.39	102.36	102.24	102.24	
6	102.49	102.53	102.72	102.49	102.37	102.40	102.39	102.49	102.39	102.35	102.24	102.24	
7	102.49	102.53	102.81	102.47	102.38	102.40	102.39	102.45	102.39	102.35	102.24	102.31	
8	102.49	102.53	102.80	102.46	102.42	102.41	102.42	102.44	102.39	102.35	102.24	102.24	
9	102.49	102.53	102.66	102.46	102.39	102.41	102.54	102.45	102.39	102.35	102.24	102.24	
10	102.49	102.53	102.63	102.46	102.39	102.46	102.68	102.45	102.39	102.35	102.24	102.24	
11	102.49	102.53	102.71	102.46	102.38	102.43	102.49	102.43	102.38	103.70	102.24	102.24	
12	102.49	102.53	102.71	102.45	102.38	102.41	102.45	102.42	102.38	103.35	103.33	102.24	
13	102.49	102.53	102.67	102.45	102.38	102.41	102.44	102.41	102.38	103.35	103.36	102.24	
14	102.49	102.53	102.65	102.44	102.37	102.41	102.43	102.41	102.38	103.35	103.35	102.24	
15	102.50	102.53	102.61	102.44	102.37	102.41	102.42	102.41	102.38	103.35	103.34	102.24	
16	102.50	102.81	102.58	102.44	102.36	102.40	102.41	102.40	102.38	103.11	102.32	102.26	
17	102.50	102.65	102.57	102.44	102.36	102.40	102.41	102.40	102.38	102.43	102.29	102.25	
18	102.50	102.61	102.56	103.03	102.36	102.40	102.40	102.40	102.38	102.41	102.27	102.24	
19	102.50	102.58	103.04	103.53	102.36	102.40	102.40	102.40	103.44	102.39	102.26	102.24	
20	102.50	102.58	103.70	103.51	102.36	102.40	102.42	102.40	103.38	102.38	102.26	102.24	
21	102.50	102.58	103.21	103.42	102.36	102.40	102.41	102.40	103.24	102.36	102.26	102.24	
22	102.50	102.58	102.56	103.27	102.36	102.40	102.40	102.40	102.43	102.35	102.25	102.24	
23	102.50	102.58	102.55	102.90	102.36	102.40	102.52	102.40	102.40	102.34	102.25	102.24	
24	102.50	102.58	102.53	102.44	102.36	102.45	102.54	102.39	102.39	102.33	102.25	102.23	
25	102.50	102.58	102.51	102.42	102.36	102.42	102.88	102.39	102.38	102.33	102.25	102.23	
26	102.50	102.58	102.51	102.40	102.35	102.40	102.83	102.39	102.37	102.33	102.25	102.23	
27	102.50	102.58	102.50	102.39	102.44	102.40	102.66	102.39	102.37	102.31	102.24	102.23	
28	102.50	102.58	102.50	102.38	103.34	102.39	102.63	102.39	102.37	102.31	102.24	102.23	
29	102.50	102.58	102.50	102.38	103.20	102.39	102.79	102.39	102.36	102.28		102.23	
30	102.50	102.56	102.49	102.35	103.19	102.39	102.65	102.39	102.36	102.28		102.23	
31		102.56		102.38	103.07		102.57		102.36	102.26		102.23	
Mean	102.50	102.56	102.67	102.69	102.48	102.41	102.50	102.43	102.48	102.54	102.41	102.24	
Max	102.50	102.81	103.70	103.55	103.34	102.48	102.88	102.58	103.44	103.70	103.36	102.31	103.70
Min	102.49	102.50	102.49	102.35	102.35	102.39	102.39	102.39	102.36	102.26	102.24	102.23	102.23

Annual Max Momentary Gage Height 103.79 M (MSL), at 15.00 Hours, on Jun 19, 2001
Zero Gage at Bottom Elevation 101.53 M (MSL), River Bed 102.15 M (MSL)
Left Bank Elevation 108.27 M (MSL)
Right Bank Elevation 108.35 M (MSL), Drainage Area 219 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.73	0.73	0.81	0.70	0.40	0.67	0.42	0.95	0.42	0.35	0.10	0.08	
2	0.73	0.75	0.81	7.47	0.38	0.59	0.42	0.92	0.42	0.35	0.10	0.08	
3	0.73	0.86	0.81	8.97	0.38	0.50	0.42	0.78	0.42	0.35	0.10	0.08	
4	0.73	0.84	1.04	5.13	0.38	0.48	0.42	0.75	0.42	0.35	0.08	0.08	
5	0.70	0.81	1.00	0.75	0.38	0.45	0.45	0.75	0.42	0.35	0.08	0.08	
6	0.70	0.81	1.45	0.70	0.38	0.45	0.42	0.70	0.42	0.32	0.08	0.08	
7	0.70	0.81	1.84	0.64	0.40	0.45	0.42	0.59	0.42	0.32	0.08	0.22	
8	0.70	0.81	1.79	0.61	0.50	0.48	0.50	0.56	0.42	0.32	0.08	0.08	
9	0.70	0.81	1.22	0.61	0.42	0.48	0.84	0.59	0.42	0.32	0.08	0.08	
10	0.70	0.81	1.11	0.61	0.42	0.61	1.30	0.59	0.42	0.32	0.08	0.08	
11	0.70	0.81	1.41	0.61	0.40	0.53	0.70	0.53	0.40	10.95	0.08	0.08	
12	0.70	0.81	1.41	0.59	0.40	0.48	0.59	0.50	0.40	6.50	6.27	0.08	
13	0.70	0.81	1.26	0.59	0.40	0.48	0.56	0.48	0.40	6.50	6.62	0.08	
14	0.70	0.81	1.19	0.56	0.38	0.48	0.53	0.48	0.40	6.50	6.50	0.08	
15	0.73	0.81	1.04	0.56	0.38	0.48	0.50	0.48	0.40	6.50	6.39	0.08	
16	0.73	1.84	0.95	0.56	0.35	0.45	0.48	0.45	0.40	3.90	0.25	0.12	
17	0.73	1.19	0.92	0.56	0.35	0.45	0.48	0.45	0.40	0.53	0.18	0.10	
18	0.73	1.04	0.89	3.23	0.35	0.45	0.45	0.45	0.40	0.48	0.14	0.08	
19	0.73	0.95	3.31	8.71	0.35	0.45	0.45	0.45	7.59	0.42	0.12	0.08	
20	0.73	0.95	10.95	8.45	0.35	0.45	0.50	0.45	6.86	0.40	0.12	0.08	
21	0.73	0.95	4.91	7.34	0.35	0.45	0.48	0.45	5.24	0.35	0.12	0.08	
22	0.73	0.95	0.89	5.58	0.35	0.45	0.45	0.45	0.53	0.32	0.10	0.08	
23	0.73	0.95	0.86	2.30	0.35	0.45	0.78	0.45	0.45	0.30	0.10	0.08	
24	0.73	0.95	0.81	0.56	0.35	0.59	0.84	0.42	0.42	0.27	0.10	0.06	
25	0.73	0.95	0.75	0.50	0.35	0.50	2.20	0.42	0.40	0.27	0.10	0.06	
26	0.73	0.95	0.75	0.45	0.32	0.45	1.94	0.42	0.38	0.27	0.10	0.06	
27	0.73	0.95	0.73	0.42	0.56	0.45	1.22	0.42	0.38	0.22	0.08	0.06	
28	0.73	0.95	0.73	0.40	6.39	0.42	1.11	0.42	0.38	0.22	0.08	0.06	
29	0.73	0.95	0.73	0.40	4.80	0.42	1.75	0.42	0.35	0.16		0.06	
30	0.73	0.89	0.70	0.32	4.70	0.42	1.19	0.42	0.35	0.16		0.06	
31		0.89		0.40	3.56		0.92		0.35	0.12		0.06	
Total	21.60	28.39	47.07	69.28	29.83	14.46	23.73	16.19	31.08	48.69	28.31	2.52	361.15 CMSDAY
Mean	0.72	0.92	1.57	2.23	0.96	0.48	0.77	0.54	1.00	1.57	1.01	0.08	0.99 CMS
Max	0.73	1.84	10.95	8.97	6.39	0.67	2.20	0.95	7.59	10.95	6.62	0.22	10.95 CMS
Min	0.70	0.73	0.70	0.32	0.32	0.42	0.42	0.42	0.35	0.12	0.08	0.06	0.06 CMS
Runoff	1.866	2.453	4.067	5.986	2.577	1.249	2.050	1.399	2.685	4.207	2.446	0.218	31.203 MCM

Momentary Peak 12.16 CMS, at 103.79 M (MSL), at 15:00 Hours, on Jun 19, 2001

Runoff Yield 4.52 Liters/Second/Square KM, Momentary Peak Yield 55.525 Liters/Second/Square KM

WATER YEAR : 2001

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet (Ct.5A)

Lat 15 - 55 - 34 N. **Long** 99 - 30 - 22 E.

Location on left bank behind Wat Pang Makha.

Ban Pang Makha **Amphoe** Khanu Woralaksaburi **Changwat** Kamphaeng Phet

Drainage Area 979 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +102.480 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of the station office.

Elevation +108.090 m. (M.S.L.)

Gage Reading Frequency Recordings.

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 Float -

Rated by Current Meter 1969 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions Overbank flow starts at elevation + 106.690 m.(M.S.L.) , record are channel flow only.

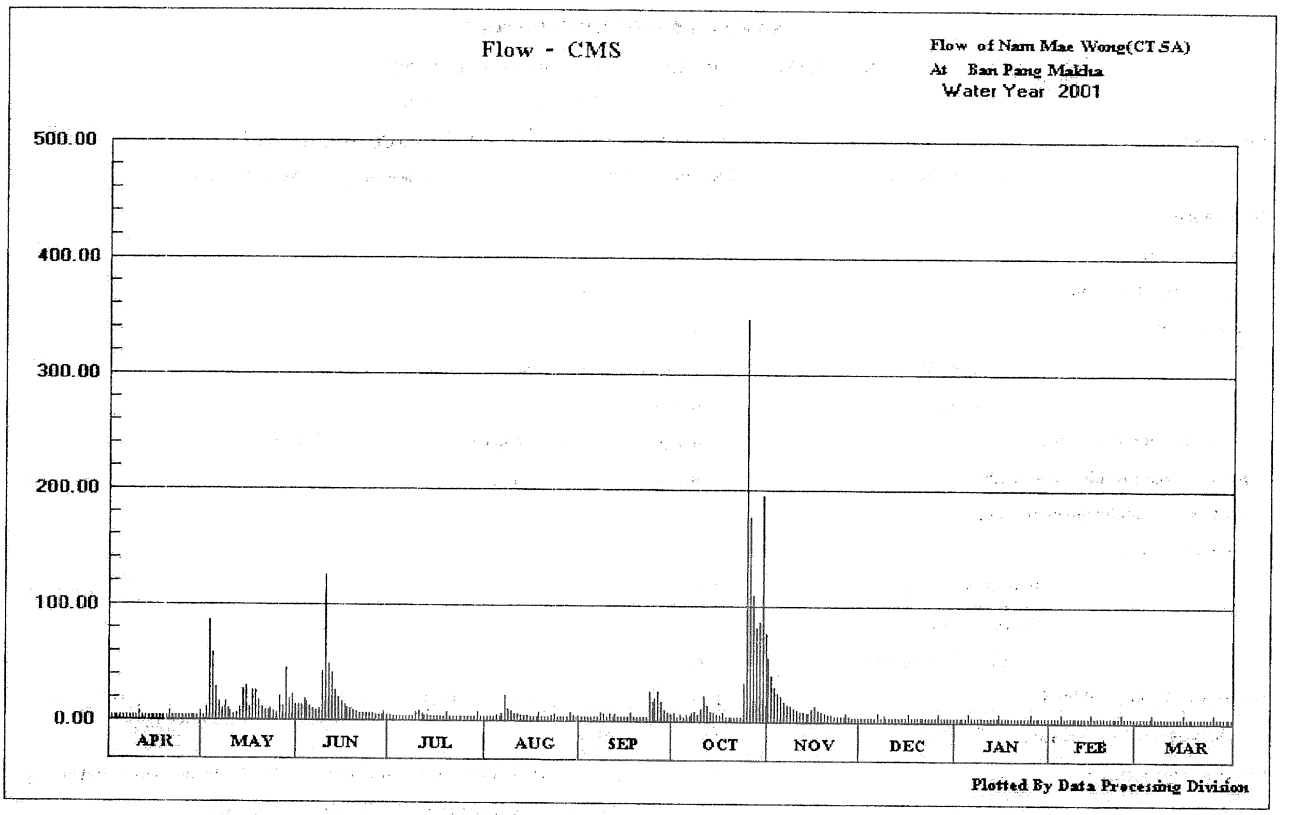
General Description Records good. Flow effected by the local weir above gage site on Apr.1 - May. 11, 98, Mar.3 - 31, 99 discharge estimated by recession equation.

Stage-discharge relation defined by 73 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	103.34	103.29	103.90	103.54	103.42	103.45	103.68	104.83	103.48	103.33	103.20	103.09	
2	103.33	103.82	103.91	103.50	103.39	103.44	103.51	104.53	103.47	103.32	103.19	103.09	
3	103.32	105.37	104.06	103.49	103.38	103.42	103.62	104.33	103.46	103.32	103.18	103.09	
4	103.31	104.90	103.97	103.49	103.53	103.40	103.52	104.20	103.45	103.32	103.17	103.09	
5	103.30	104.31	103.86	103.46	103.48	103.38	103.59	104.14	103.44	103.31	103.16	103.10	
6	103.30	104.00	103.78	103.49	103.64	103.38	103.56	104.02	103.43	103.31	103.16	103.09	
7	103.29	103.80	103.71	103.50	104.14	103.44	103.60	103.96	103.42	103.31	103.15	103.09	
8	103.28	103.99	103.76	103.51	103.80	103.62	103.74	103.91	103.62	103.30	103.15	103.08	
9	103.30	103.76	104.58	103.58	103.70	103.48	103.60	103.84	103.48	103.29	103.15	103.08	
10	103.28	103.63	105.84	103.70	103.60	103.59	103.81	103.79	103.45	103.29	103.14	103.09	
11	103.25	103.58	104.71	103.63	103.60	103.48	104.15	103.74	103.43	103.28	103.14	103.09	
12	103.23	103.59	104.55	103.57	103.54	103.60	103.89	103.71	103.42	103.28	103.13	103.09	
13	103.22	103.83	104.25	103.53	103.58	103.49	103.74	103.68	103.41	103.28	103.13	103.08	
14	103.22	104.26	104.08	103.51	103.57	103.44	103.68	103.66	103.41	103.28	103.14	103.08	
15	103.23	104.33	103.97	103.49	103.51	103.42	103.60	103.82	103.41	103.28	103.14	103.07	
16	103.28	103.81	103.89	103.47	103.49	103.41	103.54	103.91	103.40	103.27	103.13	103.07	
17	103.27	104.24	103.82	103.47	103.48	103.40	103.52	103.77	103.39	103.26	103.13	103.06	
18	103.25	104.25	103.77	103.45	103.47	103.38	103.51	103.71	103.38	103.25	103.13	103.06	
19	103.25	104.01	103.73	103.43	103.46	103.42	103.45	103.66	103.44	103.24	103.13	103.06	
20	103.24	103.81	103.68	103.45	103.46	103.44	103.43	103.63	103.40	103.23	103.12	103.04	
21	103.23	103.74	103.64	103.41	103.48	103.43	103.42	103.60	103.39	103.23	103.12	103.10	
22	103.22	103.74	103.60	103.41	103.57	103.46	103.42	103.58	103.38	103.23	103.12	103.09	
23	103.21	103.77	103.59	103.48	103.60	104.24	103.44	103.57	103.37	103.22	103.11	103.22	
24	103.23	103.65	103.59	103.45	103.52	104.01	104.41	103.56	103.36	103.22	103.11	103.17	
25	103.23	103.59	103.61	103.42	103.47	104.08	107.35	103.55	103.36	103.21	103.11	103.12	
26	103.22	104.13	103.57	103.39	103.44	104.23	106.27	103.53	103.35	103.21	103.11	103.09	
27	103.23	103.87	103.56	103.38	103.43	104.02	105.67	103.53	103.35	103.20	103.11	103.07	
28	103.24	104.54	103.54	103.37	103.42	103.80	105.28	103.51	103.34	103.19	103.10	103.06	
29	103.26	104.05	103.58	103.37	103.53	103.66	105.37	103.49	103.34	103.20		103.05	
30	103.25	104.14	103.55	103.40	103.48	103.64	106.41	103.48	103.34	103.20		103.05	
31		103.91		103.41	103.57		105.22		103.33	103.20		103.05	
Mean	103.26	103.99	103.92	103.48	103.54	103.59	104.16	103.81	103.41	103.26	103.14	103.09	
Max	103.34	105.37	105.84	103.70	104.14	104.24	107.35	104.83	103.62	103.33	103.20	103.22	107.35
Min	103.21	103.29	103.54	103.37	103.38	103.38	103.42	103.48	103.33	103.19	103.10	103.04	103.04

Annual Max Momentary Gage Height 107.48 M (MSL), at 9.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 102.48 M (MSL), River Bed 103.15 M (MSL)
Left Bank Elevation 106.68 M (MSL)
Right Bank Elevation 107.00 M (MSL), Drainage Area 979 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.7	1.8	15.2	6.4	4.1	4.6	9.4	56.3	5.2	2.5	0.5	0.0	
2	2.5	12.6	15.5	5.5	3.6	4.5	5.7	41.4	5.0	2.3	0.4	0.0	
3	2.3	88.2	20.7	5.3	3.4	4.1	8.1	31.9	4.8	2.3	0.3	0.0	
4	2.2	60.0	17.5	5.3	6.1	3.7	5.9	26.2	4.6	2.3	0.1	0.0	
5	2.0	31.0	13.9	4.8	5.2	3.4	7.4	23.8	4.5	2.2	0.0	0.0	
6	2.0	18.5	11.6	5.3	8.5	3.4	6.8	19.2	4.3	2.2	0.0	0.0	
7	1.8	12.0	10.0	5.5	23.8	4.5	7.7	17.2	4.1	2.2	0.0	0.0	
8	1.7	18.2	11.1	5.7	12.0	8.1	10.7	15.5	8.1	2.0	0.0	0.0	
9	2.0	11.1	43.8	7.2	9.8	5.2	7.7	13.3	5.2	1.8	0.0	0.0	
10	1.7	8.3	127.2	9.8	7.7	7.4	12.3	11.8	4.6	1.8	0.0	0.0	
11	1.2	7.2	50.2	8.3	7.7	5.2	24.2	10.7	4.3	1.7	0.0	0.0	
12	1.0	7.4	42.4	7.0	6.4	7.7	14.9	10.0	4.1	1.7	0.0	0.0	
13	0.8	13.0	28.3	6.1	7.2	5.3	10.7	9.4	3.9	1.7	0.0	0.0	
14	0.8	28.8	21.5	5.7	7.0	4.5	9.4	9.0	3.9	1.7	0.0	0.0	
15	1.0	31.9	17.5	5.3	5.7	4.1	7.7	12.6	3.9	1.7	0.0	0.0	
16	1.7	12.3	14.9	5.0	5.3	3.9	6.4	15.5	3.7	1.5	0.0	0.0	
17	1.5	27.9	12.6	5.0	5.2	3.7	5.9	11.3	3.6	1.4	0.0	0.0	
18	1.2	28.3	11.3	4.6	5.0	3.4	5.7	10.0	3.4	1.2	0.0	0.0	
19	1.2	18.9	10.5	4.3	4.8	4.1	4.6	9.0	4.5	1.1	0.0	0.0	
20	1.1	12.3	9.4	4.6	4.8	4.5	4.3	8.3	3.7	1.0	0.0	0.0	
21	1.0	10.7	8.5	3.9	5.2	4.3	4.1	7.7	3.6	1.0	0.0	0.0	
22	0.8	10.7	7.7	3.9	7.0	4.8	4.1	7.2	3.4	1.0	0.0	0.0	
23	0.7	11.3	7.4	5.2	7.7	27.9	4.5	7.0	3.2	0.8	0.0	0.8	
24	1.0	8.8	7.4	4.6	5.9	18.9	35.6	6.8	3.0	0.8	0.0	0.1	
25	1.0	7.4	7.9	4.1	5.0	21.5	348.6	6.6	3.0	0.7	0.0	0.0	
26	0.8	23.4	7.0	3.6	4.5	27.5	178.0	6.1	2.9	0.7	0.0	0.0	
27	1.0	14.2	6.8	3.4	4.3	19.2	110.9	6.1	2.9	0.5	0.0	0.0	
28	1.1	46.8	6.4	3.2	4.1	12.0	82.3	5.7	2.7	0.4	0.0	0.0	
29	1.4	20.4	7.2	3.2	6.1	9.0	88.2	5.3	2.7	0.5		0.0	
30	1.2	23.8	6.6	3.7	5.2	8.5	196.6	5.2	2.7	0.5		0.0	
31		15.5		3.9	7.0		78.5		2.5	0.5		0.0	
Total	42.4	642.7	578.0	159.4	205.3	248.9	1306.9	426.1	122.0	43.7	1.3	0.9	3777.6 CMSDAY
Mean	1.4	20.7	19.3	5.1	6.6	8.3	42.2	14.2	3.9	1.4	0.0	0.0	10.3 CMS
Max	2.7	88.2	127.2	9.8	23.8	27.9	348.6	56.3	8.1	2.5	0.5	0.8	348.6 CMS
Min	0.7	1.8	6.4	3.2	3.4	3.4	4.1	5.2	2.5	0.4	0.0	0.0	0.0 CMS
Runoff	3.66	55.53	49.94	13.77	17.74	21.50	112.92	36.82	10.54	3.78	0.11	0.08	326.38 MCM

Momentary Peak 372.13 CMS, at 107.48 M (MSL), at 9.00 Hours, on Oct 25, 2001

Runoff Yield 10.57 Liters/Second/Square KM, Momentary Peak Yield 380.112 Liters/Second/Square KM

WATER YEAR : 2001

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 right bank 8 kilometers upstream from Ct.5A, Tambon Mae Lay.

Ban Khao Chon Kan **Amphoe** Lat Yao **Changwat** Nakhon Sawan

Drainage Area 930 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +103.410 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 7.00 meters from the top staff gage.

Elevation +116.583 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1987 to date.

Rating Operation

Period of Rating 1988 to date.

Rated by Float -

Rated by Current Meter 1988 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

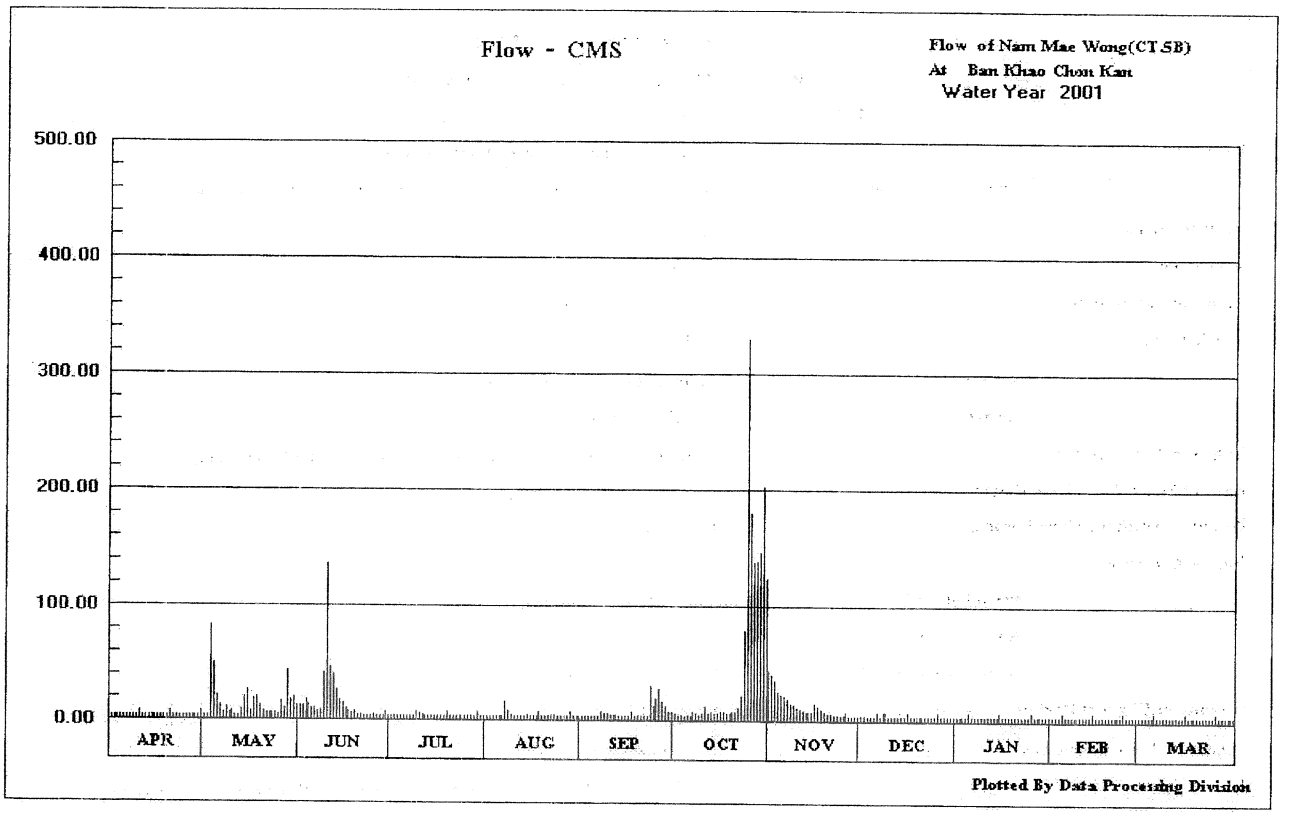
Overbank Flow Conditions No overbank flow.

General Description Records good. Flow effected by the local weir during Mar.14 - 31, 99 discharge estimated by recession equation. Stage-discharge relation defined by 47 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	108.16	108.16	108.83	108.40	108.32	108.35	108.56	109.62	108.48	108.27	108.19	108.06	
2	108.16	108.36	108.83	108.36	108.21	108.28	108.39	109.54	108.47	108.26	108.19	108.06	
3	108.15	110.21	108.99	108.35	108.21	108.22	108.50	109.44	108.46	108.25	108.18	108.05	
4	108.14	109.73	108.89	108.35	108.34	108.21	108.40	109.19	108.45	108.24	108.18	108.04	
5	108.12	109.12	108.77	108.34	108.31	108.23	108.47	109.13	108.43	108.24	108.17	108.03	
6	108.12	108.83	108.76	108.35	108.46	108.27	108.44	109.11	108.40	108.23	108.17	108.03	
7	108.11	108.62	108.65	108.37	108.98	108.44	108.48	109.05	108.39	108.23	108.16	108.02	
8	108.11	108.81	108.70	108.37	108.70	108.61	108.62	108.92	108.66	108.23	108.13	108.02	
9	108.11	108.61	109.55	108.37	108.47	108.56	108.48	108.88	108.64	108.22	108.11	108.01	
10	108.11	108.51	110.82	108.57	108.36	108.51	108.57	108.80	108.42	108.22	108.11	108.01	
11	108.14	108.43	109.66	108.53	108.41	108.52	108.83	108.74	108.40	108.22	108.11	108.03	
12	108.17	108.46	109.54	108.46	108.35	108.51	108.57	108.71	108.38	108.21	108.10	108.03	
13	108.17	108.72	109.22	108.41	108.40	108.37	108.67	108.68	108.37	108.21	108.10	108.02	
14	108.17	109.06	109.02	108.38	108.48	108.32	108.62	108.66	108.36	108.21	108.10	108.02	
15	108.17	109.22	108.92	108.33	108.41	108.28	108.56	108.64	108.35	108.22	108.10	108.02	
16	108.11	108.56	108.74	108.31	108.41	108.24	108.67	108.92	108.34	108.21	108.09	108.01	
17	108.11	109.04	108.65	108.31	108.40	108.22	108.65	108.84	108.33	108.21	108.09	108.01	
18	108.11	109.07	108.59	108.29	108.40	108.21	108.62	108.74	108.31	108.20	108.09	108.01	
19	108.13	108.85	108.55	108.26	108.39	108.27	108.60	108.68	108.41	108.19	108.08	107.99	
20	108.13	108.65	108.51	108.29	108.39	108.30	108.66	108.60	108.39	108.18	108.08	107.99	
21	108.15	108.56	108.47	108.26	108.39	108.31	108.63	108.56	108.38	108.17	108.08	108.04	
22	108.15	108.59	108.46	108.24	108.50	108.34	108.80	108.53	108.37	108.17	108.06	108.04	
23	108.06	108.62	108.46	108.29	108.47	109.33	109.10	108.51	108.36	108.17	108.06	108.08	
24	108.01	108.55	108.46	108.38	108.43	108.86	110.16	108.49	108.35	108.17	108.06	108.09	
25	107.99	108.54	108.47	108.36	108.36	109.04	112.50	108.48	108.34	108.17	108.06	108.03	
26	107.98	108.98	108.43	108.31	108.32	109.25	111.24	108.46	108.29	108.18	108.05	108.01	
27	107.99	108.74	108.42	108.28	108.30	108.96	110.83	108.46	108.29	108.18	108.05	108.00	
28	108.01	109.61	108.41	108.27	108.29	108.84	110.84	108.46	108.28	108.17	108.05	108.00	
29	108.06	108.99	108.46	108.28	108.36	108.67	110.91	108.43	108.28	108.17		107.99	
30	108.14	109.09	108.46	108.31	108.31	108.68	111.45	108.42	108.28	108.19		107.98	
31		108.87		108.27	108.41		110.69		108.27	108.20		107.98	
Mean	108.11	108.85	108.82	108.34	108.40	108.51	109.24	108.79	108.38	108.21	108.11	108.02	
Max	108.17	110.21	110.82	108.57	108.98	109.33	112.50	109.62	108.66	108.27	108.19	108.09	112.50
Min	107.98	108.16	108.41	108.24	108.21	108.21	108.39	108.42	108.27	108.17	108.05	107.98	107.98

Annual Max Momentary Gage Height 112.51 M (MSL), at 6.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 103.41 M (MSL), River Bed 107.70 M (MSL)
Left Bank Elevation 116.86 M (MSL)
Right Bank Elevation 116.58 M (MSL), Drainage Area 930 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.5	2.5	13.6	5.0	4.0	4.4	7.5	46.0	6.2	3.5	2.8	1.6	
2	2.5	4.5	13.6	4.5	2.9	3.6	4.9	42.0	6.1	3.4	2.8	1.6	
3	2.4	83.8	18.7	4.4	2.9	3.0	6.5	37.1	5.9	3.3	2.7	1.6	
4	2.3	51.7	15.3	4.4	4.3	2.9	5.0	26.1	5.7	3.2	2.7	1.5	
5	2.1	23.4	11.9	4.3	3.9	3.1	6.1	23.8	5.4	3.2	2.6	1.4	
6	2.1	13.6	11.6	4.4	5.9	3.5	5.6	23.0	5.0	3.1	2.6	1.4	
7	2.0	8.5	9.1	4.6	18.3	5.6	6.2	20.8	4.9	3.1	2.5	1.3	
8	2.0	13.0	10.0	4.6	10.0	8.3	8.5	16.3	9.2	3.1	2.2	1.3	
9	2.0	8.3	42.5	4.6	6.1	7.5	6.2	15.0	8.9	3.0	2.0	1.3	
10	2.0	6.7	138.5	7.6	4.5	6.7	7.6	12.7	5.3	3.0	2.0	1.3	
11	2.3	5.4	48.0	7.0	5.2	6.8	13.6	11.1	5.0	3.0	2.0	1.4	
12	2.6	5.9	42.0	5.9	4.4	6.7	7.6	10.3	4.8	2.9	1.9	1.4	
13	2.6	10.5	27.3	5.2	5.0	4.6	9.4	9.6	4.6	2.9	1.9	1.3	
14	2.6	21.2	19.7	4.8	6.2	4.0	8.5	9.2	4.5	2.9	1.9	1.3	
15	2.6	27.3	16.3	4.2	5.2	3.6	7.5	8.9	4.4	3.0	1.9	1.3	
16	2.0	9.2	11.1	3.9	5.2	3.2	9.4	16.3	4.3	2.9	1.8	1.3	
17	2.0	20.4	9.1	3.9	5.0	3.0	9.1	13.9	4.2	2.9	1.8	1.3	
18	2.0	21.5	7.9	3.7	5.0	2.9	8.5	11.1	3.9	2.8	1.8	1.3	
19	2.2	14.1	7.3	3.4	4.9	3.5	8.1	9.6	5.2	2.8	1.8	1.1	
20	2.2	9.1	6.7	3.7	4.9	3.8	9.2	8.1	4.9	2.7	1.8	1.1	
21	2.4	7.5	6.1	3.4	4.9	3.9	8.7	7.5	4.8	2.6	1.8	1.5	
22	2.4	7.9	5.9	3.2	6.5	4.3	12.7	7.0	4.6	2.6	1.6	1.5	
23	1.6	8.5	5.9	3.7	6.1	32.0	22.6	6.7	4.5	2.6	1.6	1.8	
24	1.3	7.3	5.9	4.8	5.4	14.4	80.0	6.3	4.4	2.6	1.6	1.8	
25	1.1	7.1	6.1	4.5	4.5	20.4	332.2	6.2	4.3	2.6	1.6	1.4	
26	1.1	18.3	5.4	3.9	4.0	28.6	181.4	5.9	3.7	2.7	1.6	1.3	
27	1.1	11.1	5.3	3.6	3.8	17.6	139.5	5.9	3.7	2.7	1.6	1.2	
28	1.3	45.5	5.2	3.5	3.7	13.9	140.5	5.9	3.6	2.6	1.6	1.2	
29	1.6	18.7	5.9	3.6	4.5	9.4	147.5	5.4	3.6	2.6		1.1	
30	2.3	22.2	5.9	3.9	3.9	9.6	204.7	5.3	3.6	2.8		1.1	
31		14.7		3.5	5.2		125.7		3.5	2.8		1.1	
Total	61.2	529.4	537.8	135.7	166.3	244.8	1550.5	433.0	152.7	89.9	56.5	42.1	3999.9 CMSDAY
Mean	2.0	17.1	17.9	4.4	5.4	8.2	50.0	14.4	4.9	2.9	2.0	1.4	11.0 CMS
Max	2.6	83.8	138.5	7.6	18.3	32.0	332.2	46.0	9.2	3.5	2.8	1.8	332.2 CMS
Min	1.1	2.5	5.2	3.2	2.9	2.9	4.9	5.3	3.5	2.6	1.6	1.1	1.1 CMS
Runoff	5.29	45.74	46.47	11.72	14.37	21.15	133.96	37.41	13.19	7.77	4.88	3.64	345.59 MCM

Momentary Peak 333.48 CMS, at 112.51 M (MSL), at 6.00 Hours, on Oct 25, 2001
Runoff Yield 11.78 Liters/Second/Square KM, Momentary Peak Yield 358.581 Liters/Second/Square KM

WATER YEAR : 2001

SAKAE KRANG RIVER BASIN

Khlong Pho at Ban Mai Khlong Charoen, Nakhon Sawan (Ct.7)

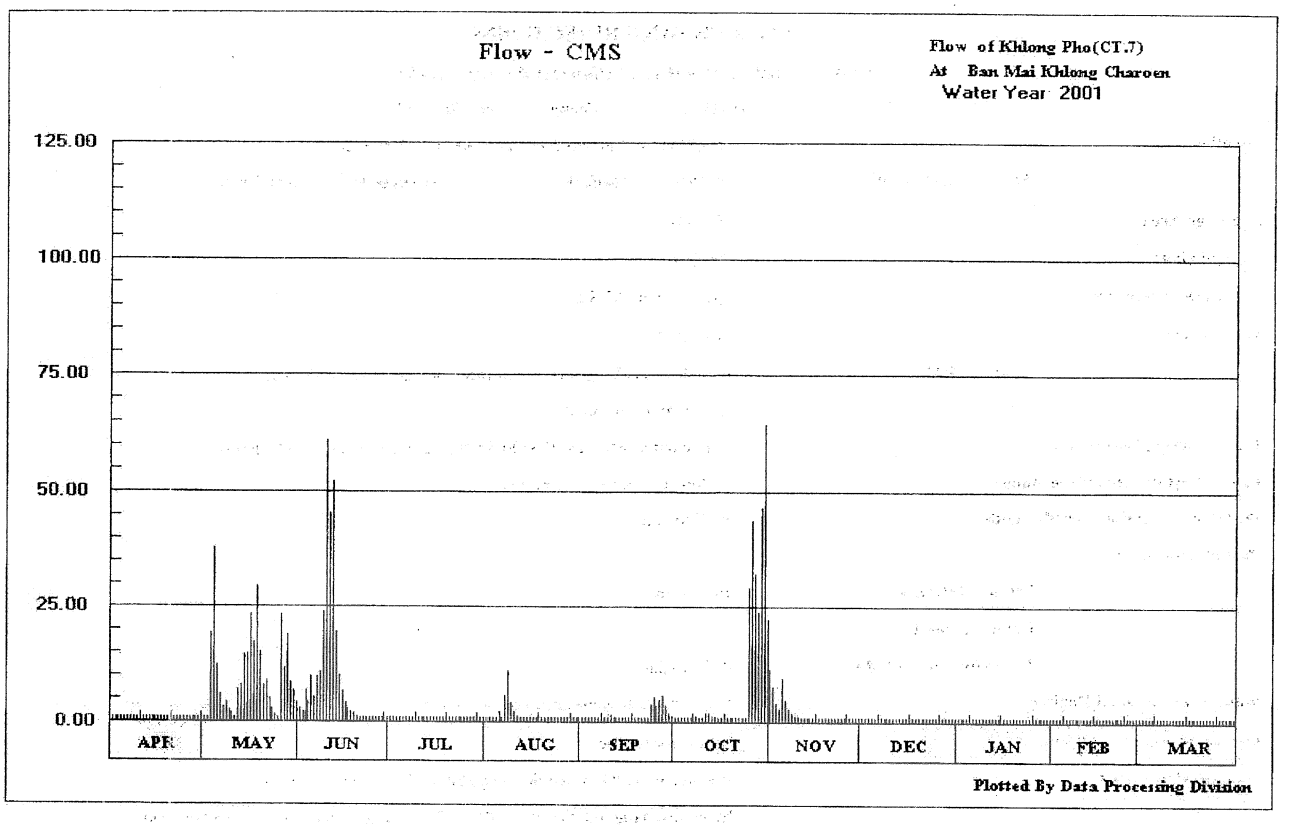
Lat 15 - 38 - 23 N. **Long** 99 - 32 - 20 E.

Location			on right bank near the gage of server's house.		
	Ban	Mai Khlong Charoen	**Amphoe** K.A. Mae Poen	**Changwat**	Nakhon Sawan
Drainage Area			457 sq.km.		
Type of Gage			Staff gage.		
Zero Gage at Bottom			+100.070 m. (M.S.L.)		
Bench Mark			B.M.- H.D.		
	Location BM		In front of gage observer's house.		
	Elevation		+104.520 m. (M.S.L.)		
Gage Reading Frequency			5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height			Arithmetic mean of 5 readings.		
Period of Available Gage Records			1975 to date.		
Rating Operation					
	Period of Rating		1975 to 1984, 1988 to date.		
	Rated by Float		-		
	Rated by Current Meter		1975 to 1984, 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 about 500 meters above gage site.		
			Stage-discharge relation defined by 43 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	100.43	100.36	100.85	100.52	100.54	100.43	100.64	101.41	100.43	100.36	100.30	100.24	
2	100.48	100.47	100.79	100.51	100.48	100.43	100.60	101.20	100.43	100.36	100.30	100.23	
3	100.50	101.78	101.14	100.50	100.43	100.42	100.57	100.98	100.43	100.35	100.30	100.22	
4	100.52	102.45	101.00	100.49	100.48	100.40	100.56	100.87	100.43	100.35	100.30	100.22	
5	100.49	101.46	101.33	100.48	100.80	100.39	100.56	101.31	100.42	100.35	100.30	100.22	
6	100.47	101.09	101.06	100.47	100.62	100.40	100.58	101.01	100.42	100.34	100.30	100.22	
7	100.45	100.88	101.32	100.46	101.07	100.45	100.62	100.85	100.42	100.34	100.31	100.22	
8	100.44	100.98	101.37	100.46	101.40	100.50	100.69	100.78	100.42	100.34	100.30	100.22	
9	100.43	100.83	101.96	100.45	100.97	100.50	100.65	100.70	100.41	100.34	100.30	100.22	
10	100.42	100.72	103.10	100.49	100.80	100.72	100.64	100.67	100.41	100.33	100.30	100.21	
11	100.42	100.62	102.68	100.51	100.71	100.63	100.76	100.64	100.41	100.33	100.30	100.21	
12	100.41	101.16	102.87	100.50	100.64	100.54	100.76	100.62	100.40	100.33	100.30	100.21	
13	100.40	101.22	101.79	100.50	100.61	100.51	100.69	100.60	100.40	100.33	100.30	100.21	
14	100.39	101.57	101.34	100.48	100.57	100.52	100.71	100.58	100.40	100.35	100.30	100.21	
15	100.38	101.58	101.13	100.46	100.53	100.50	100.66	100.62	100.40	100.34	100.30	100.21	
16	100.38	101.94	100.97	100.45	100.51	100.47	100.64	100.70	100.40	100.34	100.30	100.20	
17	100.39	101.69	100.86	100.44	100.48	100.46	100.63	100.66	100.39	100.34	100.29	100.18	
18	100.38	102.17	100.81	100.43	100.46	100.44	100.62	100.62	100.39	100.33	100.29	100.17	
19	100.37	101.59	100.74	100.43	100.43	100.43	100.58	100.60	100.40	100.33	100.29	100.16	
20	100.37	101.22	100.67	100.42	100.42	100.42	100.55	100.57	100.40	100.33	100.28	100.15	
21	100.36	101.28	100.63	100.41	100.42	100.45	100.52	100.55	100.39	100.33	100.27	100.15	
22	100.35	101.03	100.61	100.40	100.46	100.46	100.50	100.53	100.39	100.32	100.26	100.14	
23	100.33	100.86	100.60	100.40	100.56	100.94	100.50	100.52	100.38	100.32	100.26	100.13	
24	100.34	100.74	100.58	100.39	100.64	101.06	100.61	100.50	100.38	100.32	100.25	100.13	
25	100.33	100.66	100.56	100.38	100.52	100.93	102.16	100.50	100.38	100.31	100.25	100.12	
26	100.34	101.94	100.55	100.38	100.46	101.02	102.63	100.49	100.38	100.31	100.26	100.12	
27	100.36	101.43	100.54	100.37	100.44	101.08	102.27	100.47	100.37	100.31	100.25	100.11	
28	100.39	101.76	100.54	100.36	100.42	100.93	101.96	100.46	100.38	100.31	100.25	100.10	
29	100.38	101.25	100.53	100.36	100.42	100.77	102.71	100.45	100.37	100.31		100.10	
30	100.37	101.13	100.53	100.37	100.45	100.69	103.19	100.44	100.36	100.31		100.09	
31		100.97		100.53	100.45		101.90		100.36	100.31		100.09	
Mean	100.40	101.25	101.12	100.45	100.59	100.60	101.02	100.70	100.40	100.33	100.29	100.17	
Max	100.52	102.45	103.10	100.53	101.40	101.08	103.19	101.41	100.43	100.36	100.31	100.24	103.19
Min	100.33	100.36	100.53	100.36	100.42	100.39	100.50	100.44	100.36	100.31	100.25	100.09	100.09

Annual Max Momentary Gage Height 103.26 M (MSL), at 11.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 100.07 M (MSL), River Bed 100.34 M (MSL)
Left Bank Elevation 103.87 M (MSL)
Right Bank Elevation 104.46 M (MSL), Drainage Area 457 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.4	0.1	3.1	0.8	0.9	0.4	1.4	11.6	0.4	0.1	0.0	0.0	
2	0.6	0.6	2.5	0.8	0.6	0.4	1.2	8.0	0.4	0.1	0.0	0.0	
3	0.7	19.6	7.0	0.7	0.4	0.4	1.1	4.6	0.4	0.0	0.0	0.0	
4	0.8	38.2	4.9	0.7	0.6	0.3	1.0	3.3	0.4	0.0	0.0	0.0	
5	0.7	12.6	10.1	0.6	2.6	0.2	1.0	9.8	0.4	0.0	0.0	0.0	
6	0.6	6.2	5.8	0.6	1.3	0.3	1.1	5.1	0.4	0.0	0.0	0.0	
7	0.5	3.4	10.0	0.5	6.0	0.5	1.3	3.1	0.4	0.0	0.0	0.0	
8	0.5	4.6	10.9	0.5	11.4	0.7	1.7	2.4	0.4	0.0	0.0	0.0	
9	0.4	2.9	24.2	0.5	4.5	0.7	1.5	1.7	0.3	0.0	0.0	0.0	
10	0.4	1.9	61.3	0.7	2.6	1.9	1.4	1.6	0.3	0.0	0.0	0.0	
11	0.4	1.3	45.8	0.8	1.8	1.3	2.2	1.4	0.3	0.0	0.0	0.0	
12	0.3	7.4	52.6	0.7	1.4	0.9	2.2	1.3	0.3	0.0	0.0	0.0	
13	0.3	8.3	19.9	0.7	1.3	0.8	1.7	1.2	0.3	0.0	0.0	0.0	
14	0.2	14.9	10.3	0.6	1.1	0.8	1.8	1.1	0.3	0.0	0.0	0.0	
15	0.2	15.1	6.9	0.5	0.8	0.7	1.5	1.3	0.3	0.0	0.0	0.0	
16	0.2	23.6	4.5	0.5	0.8	0.6	1.4	1.7	0.3	0.0	0.0	0.0	
17	0.2	17.5	3.2	0.5	0.6	0.5	1.3	1.5	0.2	0.0	0.0	0.0	
18	0.2	29.8	2.7	0.4	0.5	0.5	1.3	1.3	0.2	0.0	0.0	0.0	
19	0.1	15.3	2.1	0.4	0.4	0.4	1.1	1.2	0.3	0.0	0.0	0.0	
20	0.1	8.3	1.6	0.4	0.4	0.4	1.0	1.1	0.3	0.0	0.0	0.0	
21	0.1	9.3	1.3	0.3	0.4	0.5	0.8	1.0	0.2	0.0	0.0	0.0	
22	0.0	5.3	1.3	0.3	0.5	0.5	0.7	0.8	0.2	0.0	0.0	0.0	
23	0.0	3.2	1.2	0.3	1.0	4.1	0.7	0.8	0.2	0.0	0.0	0.0	
24	0.0	2.1	1.1	0.2	1.4	5.8	1.3	0.7	0.2	0.0	0.0	0.0	
25	0.0	1.5	1.0	0.2	0.8	4.0	29.5	0.7	0.2	0.0	0.0	0.0	
26	0.0	23.6	1.0	0.2	0.5	5.2	44.1	0.7	0.2	0.0	0.0	0.0	
27	0.1	12.0	0.9	0.1	0.5	6.1	32.6	0.6	0.1	0.0	0.0	0.0	
28	0.2	19.2	0.9	0.1	0.4	4.0	24.2	0.5	0.2	0.0	0.0	0.0	
29	0.2	8.8	0.8	0.1	0.4	2.3	46.9	0.5	0.1	0.0		0.0	
30	0.1	6.9	0.8	0.1	0.5	1.7	64.9	0.5	0.1	0.0		0.0	
31		4.5		0.8	0.5		22.6		0.1	0.0		0.0	
Total	8.5	328.0	299.7	14.6	46.9	46.9	296.5	71.1	8.4	0.2	0.0	0.0	1120.8 CMSDAY
Mean	0.3	10.6	10.0	0.5	1.5	1.6	9.6	2.4	0.3	0.0	0.0	0.0	3.1 CMS
Max	0.8	38.2	61.3	0.8	11.4	6.1	64.9	11.6	0.4	0.1	0.0	0.0	64.9 CMS
Min	0.0	0.1	0.8	0.1	0.4	0.2	0.7	0.5	0.1	0.0	0.0	0.0	0.0 CMS
Runoff	0.73	28.34	25.89	1.26	4.05	4.05	25.62	6.14	0.73	0.02	0.00	0.00	96.84 MCM

Momentary Peak 67.64 CMS, at 103.26 M (MSL), at 11.00 Hours, on Oct 30, 2001

Runoff Yield 6.72 Liters/Second/Square KM, Momentary Peak Yield 148.009 Liters/Second/Square KM

WATER YEAR : 2001

SAKAE KRANG RIVER BASIN

Huai Thap Salao at Ban Bang Ai Chiam, Uthai Thani (Ct.9)

Lat 15 - 31 - 38 N. **Long** 99 - 28 - 10 E.

Location on left bank about 9 kilometers upstream from Ct.6.

Ban Bang Ai Chiam **Amphoe** Lan Sak **Changwat** Uthai Thani

Drainage Area 522 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +123.450 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 100 meters from the gage observer's house.

Elevation +129.000 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1977 to date.

Rating Operation

Period of Rating 1977 to date.

Rated by Float -

Rated by Current Meter 1977 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

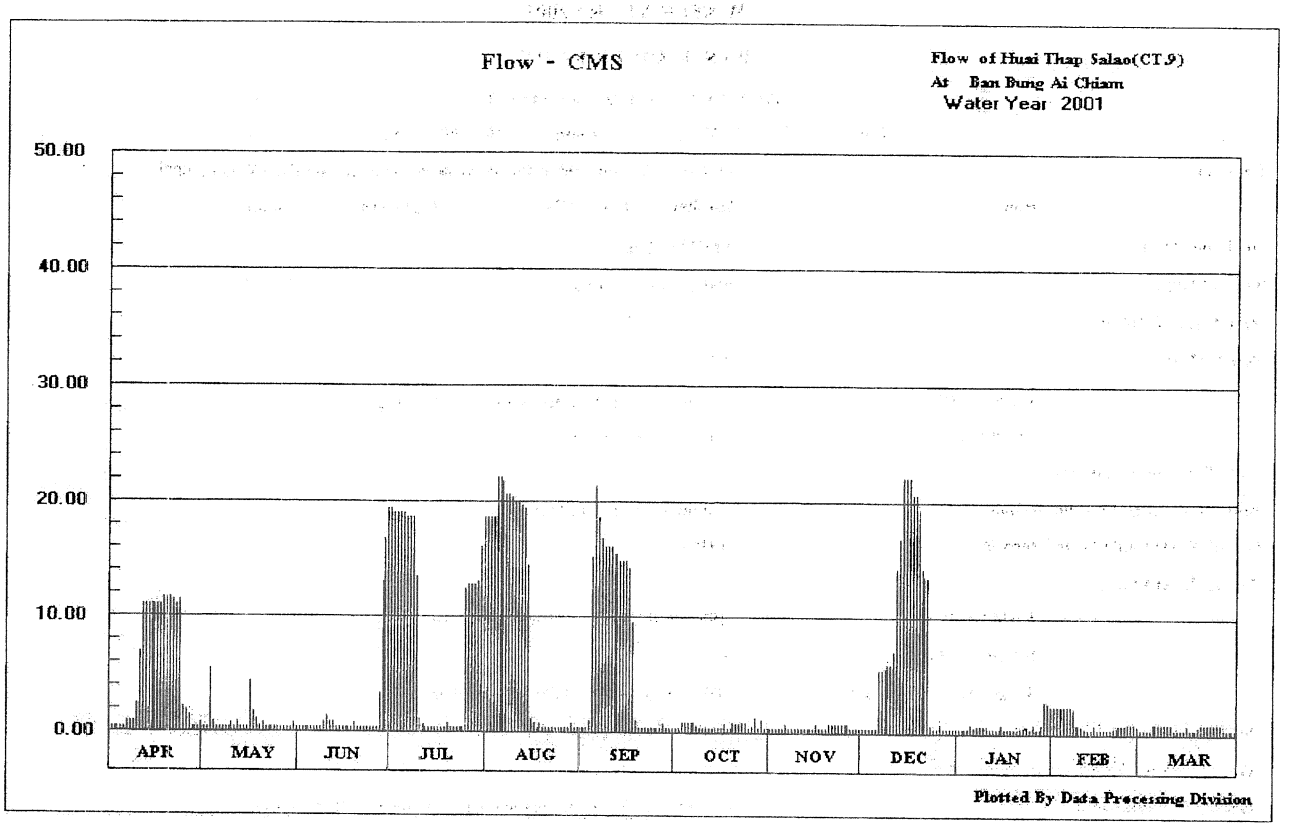
General Description Records good. Flow regulated by Rabum Dam above gage site.

Stage-discharge relation defined by 23 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.68	123.62	123.66	124.56	124.54	123.63	123.63	123.62	123.58	123.62	123.88	123.61	
2	123.68	123.64	123.68	124.55	124.54	123.63	123.65	123.61	123.57	123.62	123.88	123.59	
3	123.67	124.05	123.68	124.55	124.54	123.77	123.75	123.60	123.57	123.61	123.88	123.58	
4	123.67	123.75	123.68	124.55	124.64	124.43	123.75	123.60	123.56	123.61	123.88	123.58	
5	123.66	123.70	123.68	124.55	124.64	124.62	123.75	123.66	123.58	123.72	123.88	123.75	
6	123.75	123.66	123.66	124.54	124.63	124.54	123.75	123.62	124.05	123.72	123.88	123.76	
7	123.75	123.65	123.64	124.54	124.60	124.48	123.75	123.60	124.05	123.73	123.86	123.76	
8	123.76	123.65	123.64	124.54	124.60	124.46	123.73	123.60	124.06	123.73	123.74	123.76	
9	123.87	123.66	123.76	124.37	124.59	124.46	123.62	123.60	124.08	123.73	123.74	123.76	
10	124.12	123.65	123.80	123.78	124.58	124.46	123.57	123.59	124.08	123.73	123.73	123.76	
11	124.29	123.54	123.76	123.73	124.58	124.44	123.56	123.58	124.13	123.61	123.72	123.76	
12	124.29	123.75	123.75	123.71	124.57	124.44	123.56	123.58	124.40	123.60	123.65	123.60	
13	124.29	123.68	123.68	123.68	124.56	124.42	123.57	123.58	124.48	123.59	123.63	123.57	
14	124.29	123.69	123.66	123.67	124.41	124.42	123.56	123.58	124.64	123.58	123.62	123.56	
15	124.29	123.69	123.65	123.65	123.78	124.42	123.56	123.58	124.64	123.58	123.62	123.55	
16	124.29	124.00	123.65	123.65	123.74	124.40	123.56	123.58	124.64	123.57	123.61	123.55	
17	124.29	123.83	123.65	123.63	123.71	124.23	123.56	123.58	124.60	123.57	123.60	123.55	
18	124.31	123.78	123.65	123.63	123.70	123.77	123.56	123.58	124.60	123.57	123.60	123.54	
19	124.31	123.72	123.65	123.62	123.69	123.71	123.56	123.62	124.56	123.57	123.60	123.54	
20	124.31	123.70	123.63	123.61	123.68	123.69	123.75	123.74	124.40	123.57	123.72	123.73	
21	124.30	123.68	123.63	123.61	123.67	123.68	123.74	123.74	124.38	123.56	123.73	123.75	
22	124.29	123.67	123.63	123.61	123.66	123.67	123.74	123.74	124.37	123.72	123.74	123.75	
23	124.30	123.66	123.63	123.60	123.68	123.71	123.75	123.74	123.73	123.73	123.74	123.75	
24	123.86	123.65	123.62	123.60	123.66	123.68	123.75	123.74	123.69	123.71	123.74	123.75	
25	123.84	123.64	123.62	124.34	123.65	123.67	123.68	123.74	123.66	123.71	123.75	123.75	
26	123.81	123.70	123.62	124.35	123.64	123.65	123.72	123.74	123.65	123.71	123.75	123.75	
27	123.68	123.67	123.94	124.35	123.65	123.64	123.79	123.70	123.65	123.71	123.75	123.75	
28	123.66	123.65	124.36	124.35	123.64	123.63	123.68	123.60	123.64	123.74	123.73	123.64	
29	123.64	123.64	124.48	124.36	123.63	123.63	123.78	123.59	123.63	123.90		123.62	
30	123.63	123.64	124.56	124.46	123.66	123.63	123.67	123.58	123.62	123.89		123.60	
31		123.69		124.54	123.64		123.63		123.62	123.88		123.59	
Mean	123.99	123.70	123.76	124.07	124.08	124.03	123.67	123.63	124.03	123.67	123.74	123.66	
Max	124.31	124.05	124.56	124.56	124.64	124.62	123.79	123.74	124.64	123.90	123.88	123.76	124.64
Min	123.63	123.62	123.62	123.60	123.63	123.63	123.56	123.58	123.56	123.56	123.60	123.54	123.54

Annual Max Momentary Gage Height 124.65 M (MSL), at 6.00 Hours, on Aug 4, 2001
Zero Gage at Bottom Elevation 123.45 M (MSL), River Bed 123.63 M (MSL)
Left Bank Elevation 127.53 M (MSL)
Right Bank Elevation 127.79 M (MSL), Drainage Area 522 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.4	0.2	0.3	19.5	18.8	0.2	0.2	0.2	0.1	0.2	2.6	0.1	
2	0.4	0.3	0.4	19.2	18.8	0.2	0.3	0.1	0.1	0.2	2.6	0.1	
3	0.4	5.5	0.4	19.2	18.8	1.2	1.0	0.1	0.1	0.1	2.6	0.1	
4	0.4	1.0	0.4	19.2	22.3	15.3	1.0	0.1	0.1	0.1	2.6	0.1	
5	0.3	0.5	0.4	19.2	22.3	21.5	1.0	0.3	0.1	0.7	2.6	1.0	
6	1.0	0.3	0.3	18.8	21.9	18.8	1.0	0.2	5.5	0.7	2.6	1.1	
7	1.0	0.3	0.3	18.8	20.8	16.9	1.0	0.1	5.5	0.8	2.3	1.1	
8	1.1	0.3	0.3	18.8	20.8	16.2	0.8	0.1	5.7	0.8	0.9	1.1	
9	2.5	0.3	1.1	13.5	20.5	16.2	0.2	0.1	6.1	0.8	0.9	1.1	
10	7.0	0.3	1.5	1.3	20.1	16.2	0.1	0.1	6.1	0.8	0.8	1.1	
11	11.2	0.3	1.1	0.8	20.1	15.6	0.1	0.1	7.2	0.1	0.7	1.1	
12	11.2	1.0	1.0	0.6	19.8	15.6	0.1	0.1	14.3	0.1	0.3	0.1	
13	11.2	0.4	0.4	0.4	19.5	14.9	0.1	0.1	16.9	0.1	0.2	0.1	
14	11.2	0.5	0.3	0.4	14.6	14.9	0.1	0.1	22.3	0.1	0.2	0.1	
15	11.2	0.5	0.3	0.3	1.3	14.9	0.1	0.1	22.3	0.1	0.2	0.1	
16	11.2	4.5	0.3	0.3	0.9	14.3	0.1	0.1	22.3	0.1	0.1	0.1	
17	11.2	1.9	0.3	0.2	0.6	9.7	0.1	0.1	20.8	0.1	0.1	0.1	
18	11.8	1.3	0.3	0.2	0.5	1.2	0.1	0.1	20.8	0.1	0.1	0.0	
19	11.8	0.7	0.3	0.2	0.5	0.6	0.1	0.2	19.5	0.1	0.1	0.0	
20	11.8	0.5	0.2	0.1	0.4	0.5	1.0	0.9	14.3	0.1	0.7	0.8	
21	11.5	0.4	0.2	0.1	0.4	0.4	0.9	0.9	13.7	0.1	0.8	1.0	
22	11.2	0.4	0.2	0.1	0.3	0.4	0.9	0.9	13.5	0.7	0.9	1.0	
23	11.5	0.3	0.2	0.1	0.4	0.6	1.0	0.9	0.8	0.8	0.9	1.0	
24	2.3	0.3	0.2	0.1	0.3	0.4	1.0	0.9	0.5	0.6	0.9	1.0	
25	2.1	0.3	0.2	12.6	0.3	0.4	0.4	0.9	0.3	0.6	1.0	1.0	
26	1.6	0.5	0.2	12.9	0.3	0.3	0.7	0.9	0.3	0.6	1.0	1.0	
27	0.4	0.4	3.5	12.9	0.3	0.3	1.4	0.5	0.3	0.6	1.0	1.0	
28	0.3	0.3	13.2	12.9	0.3	0.2	0.4	0.1	0.3	0.9	0.8	0.3	
29	0.3	0.3	16.9	13.2	0.2	0.2	1.3	0.1	0.2	2.9		0.2	
30	0.2	0.3	19.5	16.2	0.3	0.2	0.4	0.1	0.2	2.8		0.1	
31		0.5		18.8	0.3		0.2		0.2	2.6		0.1	
Total	169.7	24.6	64.2	270.9	286.7	228.3	17.1	9.5	240.4	19.4	30.5	17.1	1378.4 CMSDAY
Mean	5.7	0.8	2.1	8.7	9.2	7.6	0.6	0.3	7.8	0.6	1.1	0.6	3.8 CMS
Max	11.8	5.5	19.5	19.5	22.3	21.5	1.4	0.9	22.3	2.9	2.6	1.1	22.3 CMS
Min	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0 CMS
Runoff	14.66	2.13	5.55	23.41	24.77	19.73	1.48	0.82	20.77	1.68	2.64	1.48	119.09 MCM

Momentary Peak 22.65 CMS, at 124.65 M (MSL), at 6.00 Hours, on Aug 4, 2001

Runoff Yield 7.23 Liters/Second/Square KM, Momentary Peak Yield 43.391 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Pasak River at Ban Pa, Saraburi (S.2)

Lat 14 - 35 - 32 N. **Long** 101 - 00 - 23 E.

Location on left bank about 100 meters downstream from Kaeng Khoi Water Supply.

Ban Pa **Amphoe** Kaeng Khoi **Changwat** Saraburi

Drainage Area 14,522 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom -6.110 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank near the automatic gage building.

Elevation +20.130 m. (M.S.L.)

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 1959 - 1962, 1965 - 1966, 1993 to date.

Rated by Float -

Rated by Current Meter 1959 - 1962, 1965 - 1966, 1993 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

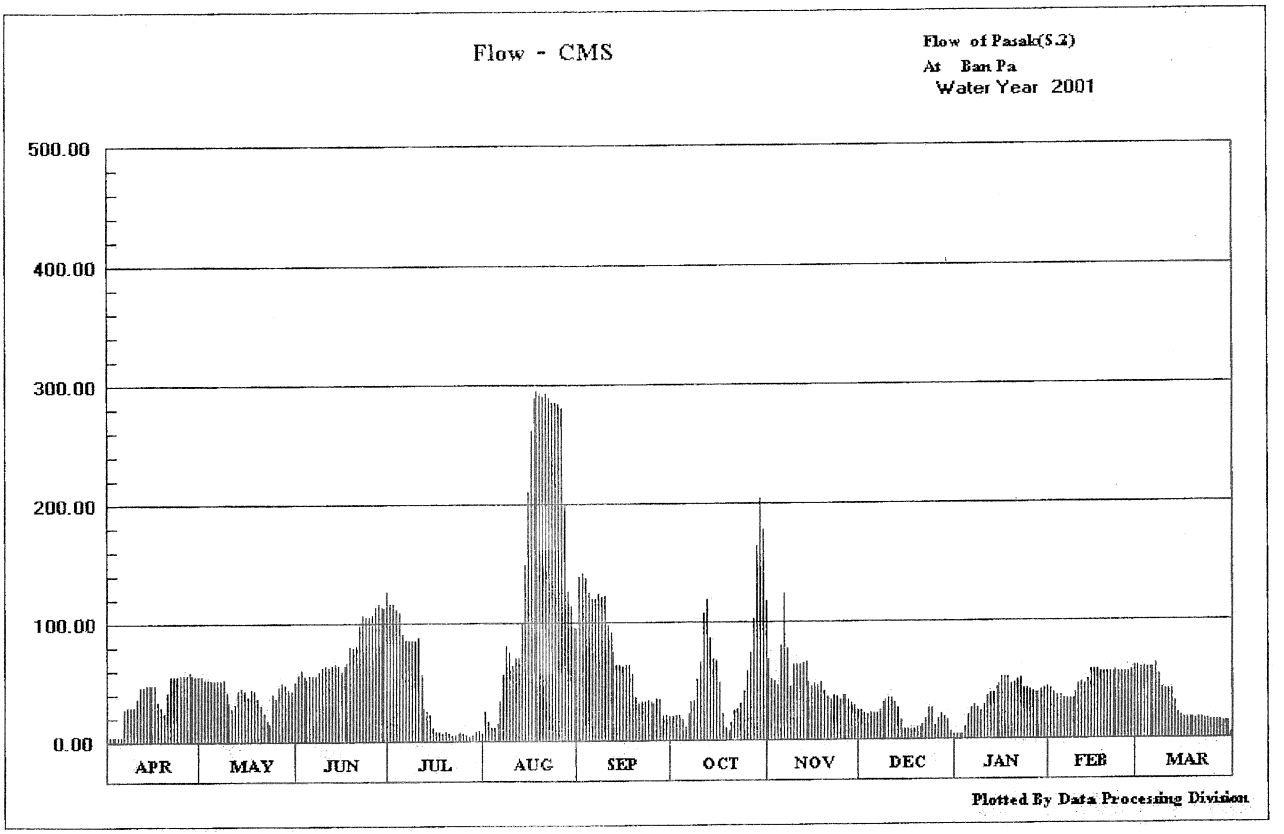
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.06	8.00	8.02	8.81	7.51	9.07	7.43	8.18	7.50	6.98	7.80	8.09	
2	7.04	7.96	8.06	8.81	7.37	9.09	7.44	7.93	7.47	7.04	7.74	8.06	
3	7.04	7.95	7.99	8.74	7.28	9.06	7.44	7.92	7.45	7.10	7.70	8.06	
4	7.03	7.94	7.96	8.71	7.27	8.91	7.38	7.85	7.46	7.24	7.68	8.06	
5	7.11	7.94	8.00	8.48	7.33	8.85	7.28	8.34	7.46	7.43	7.66	8.06	
6	7.55	7.94	8.00	8.41	7.65	8.85	7.46	8.89	7.46	7.52	7.64	8.07	
7	7.56	7.94	7.99	8.41	8.01	8.90	7.63	8.30	7.51	7.57	7.64	8.11	
8	7.56	7.96	8.05	8.41	8.34	8.87	7.65	7.84	7.60	7.53	7.64	7.98	
9	7.57	7.78	8.10	8.41	8.28	8.88	7.94	8.11	7.65	7.48	7.74	7.80	
10	7.70	7.63	8.11	8.44	8.11	8.58	8.15	8.11	7.67	7.56	7.86	7.77	
11	7.86	7.54	8.10	8.02	8.21	8.50	8.69	8.11	7.67	7.70	7.87	7.77	
12	7.86	7.61	8.11	7.54	8.21	8.27	8.83	8.14	7.61	7.73	7.85	7.77	
13	7.87	7.80	8.14	7.50	8.61	8.11	8.43	8.15	7.53	7.73	7.92	7.60	
14	7.88	7.84	8.11	7.46	9.17	8.11	8.19	7.90	7.36	7.81	8.04	7.45	
15	7.88	7.79	8.04	7.28	9.77	8.10	8.17	7.83	7.23	7.86	8.05	7.40	
16	7.88	7.71	8.11	7.20	10.22	8.11	7.90	7.88	7.22	7.96	8.04	7.38	
17	7.65	7.82	8.16	7.21	10.44	8.11	7.46	7.85	7.21	7.95	8.02	7.38	
18	7.56	7.79	8.35	7.19	10.49	8.02	7.24	7.89	7.23	7.96	8.02	7.38	
19	7.48	7.69	8.33	7.17	10.46	7.69	7.20	7.78	7.24	7.86	8.02	7.38	
20	7.78	7.58	8.34	7.17	10.45	7.60	7.34	7.68	7.24	7.87	8.02	7.37	
21	8.00	7.48	8.58	7.16	10.47	7.62	7.50	7.66	7.30	7.92	8.02	7.38	
22	8.00	7.39	8.68	7.16	10.44	7.62	7.52	7.72	7.39	7.94	8.03	7.38	
23	8.00	7.33	8.66	7.18	10.41	7.64	7.60	7.68	7.53	7.79	8.02	7.37	
24	8.01	7.76	8.66	7.21	10.41	7.62	7.77	7.64	7.53	7.80	8.02	7.36	
25	8.02	7.68	8.68	7.18	10.40	7.60	8.05	7.71	7.26	7.77	8.02	7.34	
26	8.02	7.85	8.78	7.15	10.37	7.67	8.25	7.72	7.38	7.75	8.02	7.35	
27	8.04	7.89	8.81	7.14	9.67	7.67	8.63	7.65	7.45	7.73	8.03	7.34	
28	8.02	7.88	8.78	7.15	8.93	7.44	9.33	7.61	7.41	7.74	8.08	7.34	
29	8.00	7.81	8.76	7.16	8.77	7.44	9.71	7.56	7.36	7.78		7.32	
30	8.00	7.79	8.92	7.22	8.55	7.42	9.47	7.51	7.19	7.80		7.32	
31		7.91		7.17	8.55		8.82		6.95	7.82		7.32	
Mean	7.70	7.77	8.31	7.69	9.04	8.18	8.00	7.90	7.40	7.67	7.90	7.61	
Max	8.04	8.00	8.92	8.81	10.49	9.09	9.71	8.89	7.67	7.96	8.08	8.11	10.49
Min	7.03	7.33	7.96	7.14	7.27	7.42	7.20	7.51	6.95	6.98	7.64	7.32	6.95

Annual Max Momentary Gage Height 10.50 M (MSL), at 18.00 Hours, on Aug 18, 2001
Zero Gage at Bottom Elevation 6.11 M (MSL), River Bed 4.17 M (MSL)
Left Bank Elevation 21.62 M (MSL)
Right Bank Elevation 21.59 M (MSL), Drainage Area 14522 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.4	57.0	58.4	118.4	26.8	140.5	21.8	70.0	26.2	0.0	44.7	63.5	
2	1.6	54.5	61.3	118.4	18.3	142.4	22.5	52.7	24.3	1.6	41.0	61.3	
3	1.6	53.9	56.4	112.7	13.4	139.6	22.5	52.1	23.1	4.0	38.5	61.3	
4	1.2	53.3	54.5	110.2	12.9	126.6	18.9	47.7	23.7	11.2	37.3	61.3	
5	4.5	53.3	57.0	91.6	16.1	121.7	13.4	81.5	23.7	21.8	36.0	61.3	
6	29.3	53.3	57.0	86.5	35.4	121.7	23.7	125.0	23.7	27.4	34.8	62.0	
7	29.9	53.3	56.4	86.5	57.7	125.8	34.2	78.6	26.8	30.5	34.8	64.9	
8	29.9	54.5	60.6	86.5	81.5	123.3	35.4	47.1	32.3	28.0	34.8	55.8	
9	30.5	43.4	64.2	86.5	77.2	124.2	53.3	64.9	35.4	24.9	41.0	44.7	
10	38.5	34.2	64.9	88.7	64.9	99.6	67.8	64.9	36.7	29.9	48.4	42.8	
11	48.4	28.6	64.2	58.4	72.1	93.0	108.6	64.9	36.7	38.5	49.0	42.8	
12	48.4	33.0	64.9	28.6	72.1	76.4	120.1	67.1	33.0	40.3	47.7	42.8	
13	49.0	44.7	67.1	26.2	102.0	64.9	88.0	67.8	28.0	40.3	52.1	32.3	
14	49.6	47.1	64.9	23.7	149.9	64.9	70.7	50.8	17.8	45.3	59.9	23.1	
15	49.6	44.0	59.9	13.4	212.0	64.2	69.2	46.5	10.7	48.4	60.6	20.0	
16	49.6	39.1	64.9	9.0	262.5	64.9	50.8	49.6	10.1	54.5	59.9	18.9	
17	35.4	45.9	68.5	9.6	290.3	64.9	23.7	47.7	9.6	53.9	58.4	18.9	
18	29.9	44.0	82.2	8.5	296.8	58.4	11.2	50.2	10.7	54.5	58.4	18.9	
19	24.9	37.9	80.8	7.5	292.9	37.9	9.0	43.4	11.2	48.4	58.4	18.9	
20	43.4	31.1	81.5	7.5	291.6	32.3	16.7	37.3	11.2	49.0	58.4	18.3	
21	57.0	24.9	99.6	7.0	294.2	33.6	26.2	36.0	14.5	52.1	58.4	18.9	
22	57.0	19.4	107.8	7.0	290.3	33.6	27.4	39.7	19.4	53.3	59.2	18.9	
23	57.0	16.1	106.1	8.0	286.3	34.8	32.3	37.3	28.0	44.0	58.4	18.3	
24	57.7	42.2	106.1	9.6	286.3	33.6	42.8	34.8	28.0	44.7	58.4	17.8	
25	58.4	37.3	107.8	8.0	285.0	32.3	60.6	39.1	12.3	42.8	58.4	16.7	
26	58.4	47.7	116.0	6.5	281.3	36.7	75.0	39.7	18.9	41.6	58.4	17.2	
27	59.9	50.2	118.4	6.0	200.8	36.7	103.7	35.4	23.1	40.3	59.2	16.7	
28	58.4	49.6	116.0	6.5	128.3	22.5	165.1	33.0	20.6	41.0	62.8	16.7	
29	57.0	45.3	114.3	7.0	115.1	22.5	205.3	29.9	17.8	43.4		15.6	
30	57.0	44.0	127.4	10.1	97.1	21.2	179.6	26.8	8.5	44.7		15.6	
31		51.4		7.5	97.1		119.2		0.0	45.9		15.6	
Total	1175.4	1334.2	2409.1	1261.6	4808.2	2194.7	1918.7	1561.5	646.0	1146.2	1427.3	1021.8	20904.7 CMSDAY
Mean	39.2	43.0	80.3	40.7	155.1	73.2	61.9	52.1	20.8	37.0	51.0	33.0	57.3 CMS
Max	59.9	57.0	127.4	118.4	296.8	142.4	205.3	125.0	36.7	54.5	62.8	64.9	296.8 CMS
Min	1.2	16.1	54.5	6.0	12.9	21.2	9.0	26.8	0.0	0.0	34.8	15.6	0.0 CMS
Runoff	101.55	115.27	208.15	109.00	415.43	189.62	165.78	134.91	55.81	99.03	123.32	88.28	1806.17 MCM

Momentary Peak 298.17 CMS, at 10.50 M (MSL), at 18.00 Hours, on Aug 18, 2001

Runoff Yield 3.94 Liters/Second/Square KM, Momentary Peak Yield 20.532 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,047 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +136.630 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank at the staff gage.

Elevation +146.409 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1950 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

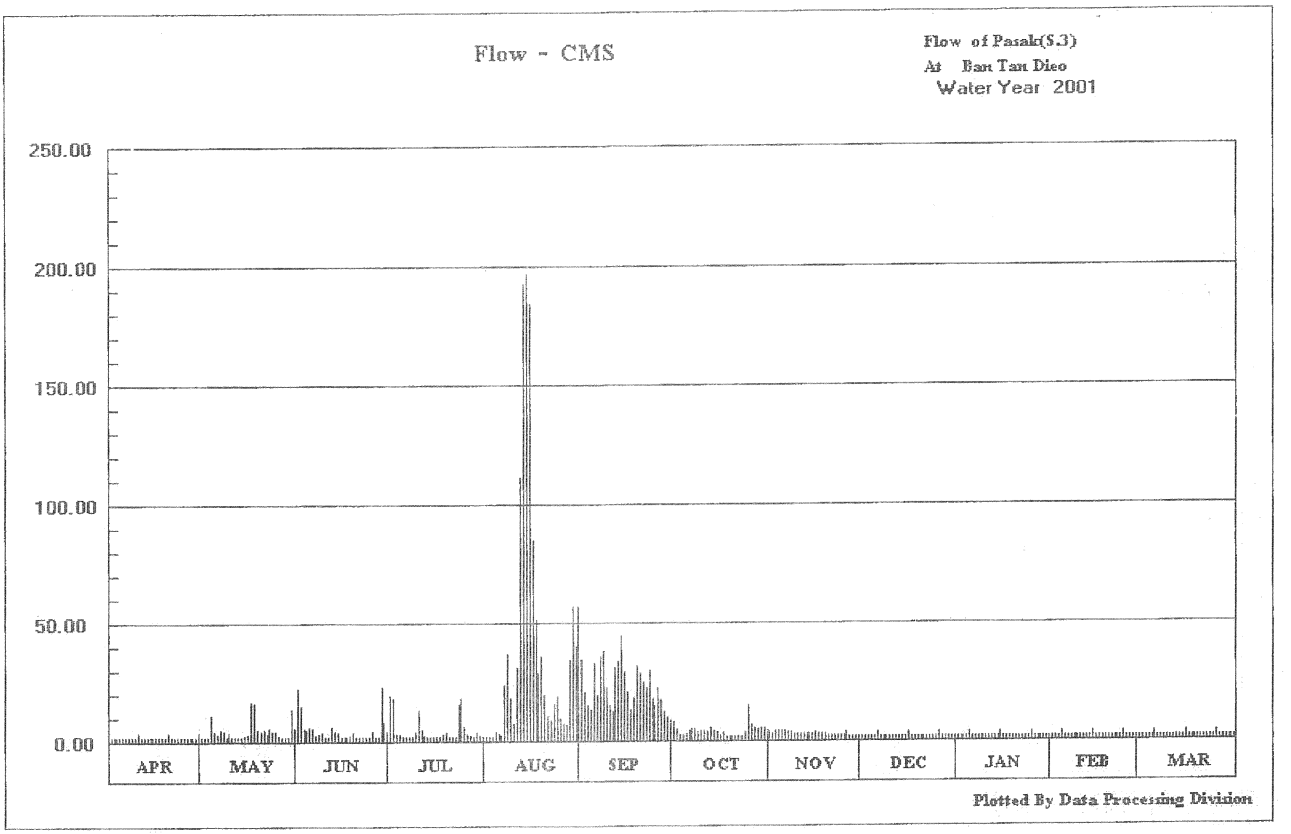
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the concrete weir about 150 meters downstream from the gage site. Stage-discharge relation defined by 27 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.50	137.45	139.77	139.58	137.78	140.47	138.82	138.43	138.23	137.80	137.75	137.39	
2	137.50	137.41	139.28	139.49	137.60	139.66	138.60	138.41	138.22	137.75	137.57	137.33	
3	137.65	138.15	138.63	138.39	138.04	139.30	138.33	138.53	138.22	137.61	137.49	137.34	
4	137.59	139.03	138.60	138.36	138.42	139.14	138.28	138.53	138.21	137.54	137.63	137.33	
5	137.66	138.48	138.66	137.88	138.38	140.40	138.36	138.51	138.21	137.47	137.49	137.33	
6	137.55	138.37	138.62	137.77	138.33	139.58	138.53	138.48	138.21	137.43	137.61	137.33	
7	137.47	138.58	138.31	138.10	139.87	140.55	138.55	138.44	138.21	137.40	137.53	137.33	
8	137.46	138.51	138.37	137.77	140.59	140.66	138.59	138.42	138.21	137.41	137.47	137.38	
9	137.40	138.18	138.38	137.75	139.47	139.79	138.43	138.41	138.25	137.38	137.53	137.36	
10	137.46	137.92	138.06	139.15	138.80	139.29	138.52	138.40	138.23	137.42	137.53	137.33	
11	137.44	138.00	138.24	138.55	140.27	139.11	138.53	138.40	138.21	137.44	137.59	137.34	
12	137.41	138.17	138.66	138.28	143.70	140.29	138.42	138.39	138.18	137.45	137.54	137.38	
13	137.39	138.08	138.49	137.81	144.88	140.43	138.61	138.38	138.16	137.45	137.60	137.45	
14	137.39	138.11	138.45	137.66	144.92	141.03	138.53	138.38	138.16	137.64	137.46	137.42	
15	137.39	138.26	138.06	137.82	144.81	140.16	138.42	138.37	138.15	137.66	137.55	137.42	
16	137.41	138.36	137.82	138.15	142.90	139.64	138.26	138.37	138.13	137.80	137.52	137.42	
17	137.38	139.39	138.18	138.25	141.36	139.15	138.22	138.36	138.12	137.86	137.50	137.42	
18	137.38	139.36	138.33	138.39	140.15	139.49	138.16	138.36	138.09	137.93	137.43	137.41	
19	137.38	138.57	138.29	138.31	140.54	140.32	138.16	138.35	138.06	138.01	137.41	137.39	
20	137.37	138.50	137.58	138.24	139.56	140.13	138.16	138.33	138.05	137.86	137.44	137.33	
21	137.37	138.56	137.53	137.99	138.98	139.93	138.22	138.31	138.02	137.84	137.48	137.33	
22	137.37	138.35	137.53	138.25	138.88	139.80	138.24	138.29	138.01	137.51	137.41	137.33	
23	137.36	138.65	137.48	139.33	139.31	140.23	138.16	138.28	137.97	137.41	137.49	137.32	
24	137.35	138.51	137.48	139.50	139.53	139.46	138.47	138.27	137.93	137.48	137.48	137.36	
25	137.33	138.49	138.51	138.70	138.90	139.28	139.29	138.26	137.92	137.68	137.38	137.34	
26	137.33	138.29	138.10	138.39	138.78	139.80	138.75	138.26	137.91	137.69	137.36	137.35	
27	137.33	138.11	137.61	138.29	138.73	139.46	138.63	138.25	137.91	137.65	137.34	137.36	
28	137.76	138.07	139.82	138.24	140.45	139.11	138.55	138.24	137.91	137.44	137.33	137.33	
29	137.59	137.95	138.83	138.43	141.66	138.96	138.63	138.23	137.90	137.68		137.44	
30	137.48	139.20	138.52	138.27	140.80	138.85	138.62	138.23	137.90	137.69		137.48	
31		138.64		138.09	141.66		138.50		137.89	137.72		137.48	
Mean	137.45	138.38	138.34	138.36	140.26	139.78	138.47	138.36	138.09	137.62	137.50	137.37	
Max	137.76	139.39	139.82	139.58	144.92	141.03	139.29	138.53	138.25	138.01	137.75	137.48	144.92
Min	137.33	137.41	137.48	137.66	137.60	138.85	138.16	138.23	137.89	137.38	137.33	137.32	137.32

Annual Max Momentary Gage Height 144.94 M (MSL), at 9.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 136.63 M (MSL), River Bed 136.48 M (MSL)
Left Bank Elevation 146.29 M (MSL)
Right Bank Elevation 146.22 M (MSL), Drainage Area 1047 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.55	0.47	23.15	20.30	0.97	35.33	8.90	4.40	2.82	1.00	0.92	0.39	
2	0.55	0.42	15.80	18.95	0.70	21.50	6.10	4.20	2.75	0.92	0.66	0.30	
3	0.77	2.35	6.47	4.03	1.80	16.10	3.58	5.40	2.75	0.71	0.54	0.31	
4	0.68	12.05	6.10	3.80	4.30	13.70	3.20	5.40	2.68	0.61	0.75	0.30	
5	0.79	4.90	6.85	1.24	3.95	34.10	3.80	5.20	2.68	0.51	0.54	0.30	
6	0.63	3.88	6.35	0.96	3.58	20.30	5.40	4.90	2.68	0.44	0.71	0.30	
7	0.51	5.90	3.43	2.10	24.82	36.73	5.60	4.50	2.68	0.40	0.59	0.30	
8	0.49	5.20	3.88	0.96	37.42	38.65	6.00	4.30	2.68	0.42	0.51	0.37	
9	0.40	2.50	3.95	0.92	18.65	23.45	4.40	4.20	2.98	0.37	0.59	0.34	
10	0.49	1.36	1.90	13.85	8.60	15.95	5.30	4.10	2.82	0.43	0.59	0.30	
11	0.46	1.60	2.90	5.60	31.83	13.25	5.40	4.10	2.68	0.46	0.68	0.31	
12	0.42	2.45	6.85	3.20	111.85	32.17	4.30	4.03	2.50	0.47	0.61	0.37	
13	0.39	2.00	5.00	1.03	193.05	34.62	6.22	3.95	2.40	0.47	0.70	0.47	
14	0.39	2.15	4.60	0.79	197.65	45.20	5.40	3.95	2.40	0.76	0.49	0.43	
15	0.39	3.05	1.90	1.06	185.00	29.90	4.30	3.88	2.35	0.79	0.63	0.43	
16	0.42	3.80	1.06	2.35	85.60	21.20	3.05	3.88	2.25	1.00	0.58	0.43	
17	0.37	17.45	2.50	2.98	51.80	13.85	2.75	3.80	2.20	1.18	0.55	0.43	
18	0.37	17.00	3.58	4.03	29.72	18.95	2.40	3.80	2.05	1.39	0.44	0.42	
19	0.37	5.80	3.27	3.43	36.55	32.70	2.40	3.73	1.90	1.65	0.42	0.39	
20	0.35	5.10	0.67	2.90	20.00	29.38	2.40	3.58	1.85	1.18	0.46	0.30	
21	0.35	5.70	0.59	1.57	11.30	25.87	2.75	3.43	1.70	1.12	0.52	0.30	
22	0.35	3.73	0.59	2.98	9.80	23.60	2.90	3.27	1.65	0.56	0.42	0.30	
23	0.34	6.72	0.52	16.55	16.25	31.12	2.40	3.20	1.51	0.42	0.54	0.28	
24	0.33	5.20	0.52	19.10	19.55	18.50	4.80	3.13	1.39	0.52	0.52	0.34	
25	0.30	5.00	5.20	7.35	10.10	15.80	15.95	3.05	1.36	0.82	0.37	0.31	
26	0.30	3.27	2.10	4.03	8.35	23.60	7.97	3.05	1.33	0.84	0.34	0.33	
27	0.30	2.15	0.71	3.27	7.72	18.50	6.47	2.98	1.33	0.77	0.31	0.34	
28	0.94	1.95	23.95	2.90	34.97	13.25	5.60	2.90	1.33	0.46	0.30	0.30	
29	0.68	1.45	9.05	4.40	57.80	11.00	6.47	2.82	1.30	0.82		0.46	
30	0.52	14.60	5.30	3.13	41.10	9.35	6.35	2.82	1.30	0.84		0.52	
31		6.60		2.05	57.80		5.10		1.27	0.88		0.52	
Total	14.20	155.80	158.74	161.81	1322.58	717.62	157.66	115.95	65.57	23.21	15.28	11.19	2919.61 CMSDAY
Mean	0.47	5.03	5.29	5.22	42.66	23.92	5.09	3.87	2.12	0.75	0.55	0.36	8.00 CMS
Max	0.94	17.45	23.95	20.30	197.65	45.20	15.95	5.40	2.98	1.65	0.92	0.52	197.65 CMS
Min	0.30	0.42	0.52	0.79	0.70	9.35	2.40	2.82	1.27	0.37	0.30	0.28	0.28 CMS
Runoff	1.227	13.461	13.715	13.980	114.271	62.002	13.622	10.018	5.665	2.005	1.320	0.967	252.254 MCM

Momentary Peak 199.95 CMS, at 144.94 M (MSL), at 9.00 Hours, on Aug 14, 2001

Runoff Yield 7.64 Liters/Second/Square KM, Momentary Peak Yield 190.974 Liters/Second/Square KM

WATER YEAR : 2001

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, Phathana Phak Nua 2 bridge.

Ban - **Amphoe** Mueang **Changwat** Phetchabun

Drainage Area 3,566 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +106.500 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank in front town - hall Changwat Phetchabun.

Elevation +116.106 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1996 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

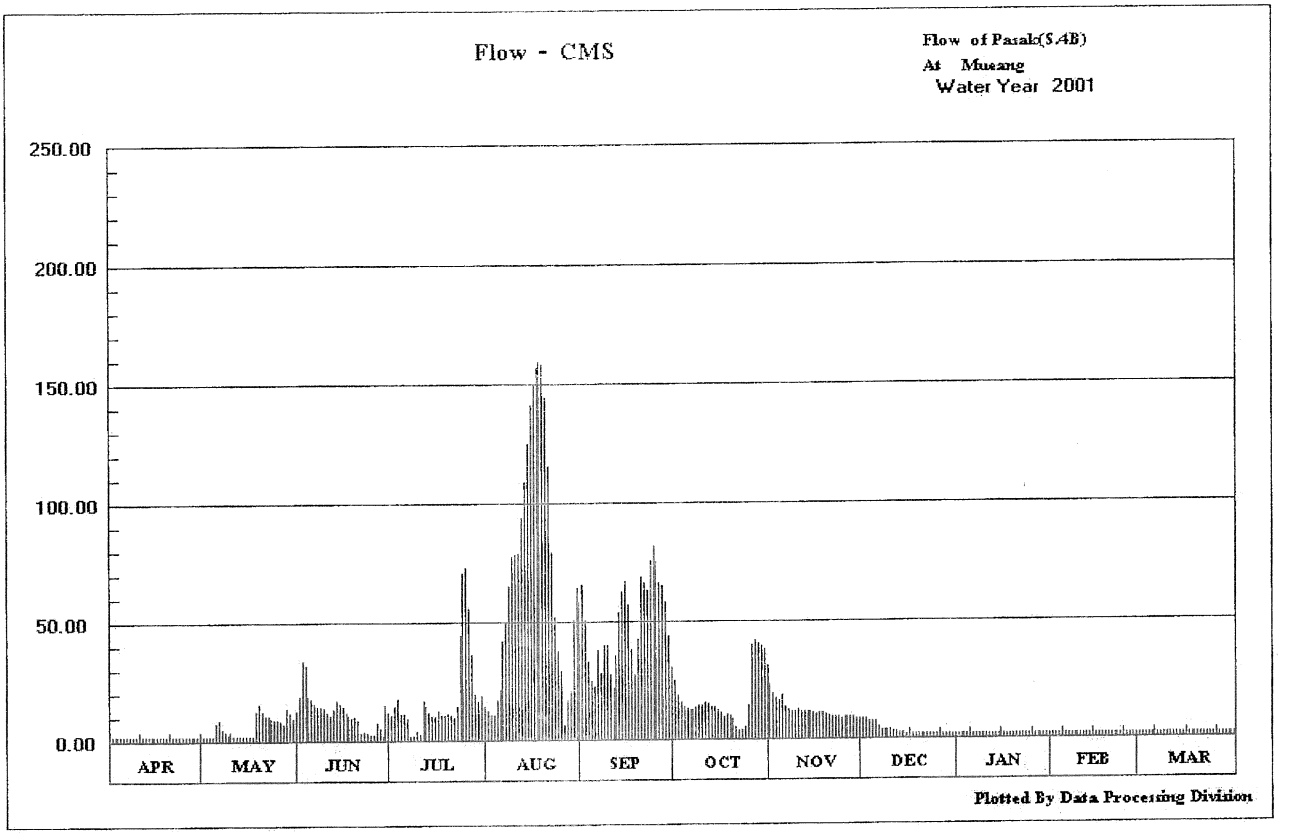
Overbank Flow Conditions No overbank flow.

General Description Records good. Flow effected by the local weir about 400 meters downstream from the gage site. Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.54	109.33	110.26	109.84	109.94	112.46	110.57	110.46	109.75	109.50	109.35	109.32	
2	109.54	109.34	110.99	110.05	109.84	111.80	110.25	110.27	109.75	109.46	109.35	109.32	
3	109.54	109.35	110.92	110.20	109.85	110.97	110.09	110.20	109.74	109.44	109.35	109.32	
4	109.54	109.41	110.25	109.87	110.15	110.56	110.01	110.14	109.74	109.42	109.35	109.32	
5	109.53	109.74	110.19	109.88	110.39	110.44	109.97	110.25	109.74	109.42	109.35	109.32	
6	109.52	109.75	110.10	109.77	111.41	111.23	109.94	110.01	109.72	109.42	109.35	109.32	
7	109.51	109.72	110.03	109.66	111.76	110.73	109.95	109.95	109.71	109.42	109.35	109.32	
8	109.51	109.71	110.03	109.65	112.43	111.33	110.00	109.91	109.71	109.42	109.35	109.32	
9	109.49	109.68	109.99	109.61	113.00	111.32	110.03	109.92	109.71	109.42	109.35	109.32	
10	109.48	109.65	109.91	109.69	113.03	110.70	110.05	109.93	109.71	109.42	109.35	109.32	
11	109.48	109.62	109.86	110.15	113.04	110.42	110.11	109.92	109.70	109.42	109.35	109.30	
12	109.46	109.62	109.96	110.04	113.64	111.11	110.08	109.91	109.70	109.42	109.35	109.30	
13	109.46	109.62	110.17	109.92	114.24	111.95	110.01	109.90	109.69	109.42	109.34	109.30	
14	109.45	109.62	110.11	109.82	114.77	112.33	110.01	109.90	109.68	109.42	109.34	109.30	
15	109.44	109.61	110.02	109.81	115.23	112.52	109.93	109.87	109.66	109.42	109.33	109.30	
16	109.44	109.64	109.91	109.95	115.45	112.09	109.88	109.86	109.64	109.42	109.32	109.30	
17	109.44	109.63	109.84	109.85	115.61	111.22	109.80	109.87	109.60	109.42	109.32	109.30	
18	109.43	109.95	109.79	109.86	115.66	110.68	109.85	109.87	109.60	109.42	109.32	109.30	
19	109.42	110.11	109.82	109.88	115.63	111.45	109.82	109.84	109.59	109.42	109.32	109.30	
20	109.41	109.93	109.76	109.85	115.31	112.61	109.75	109.82	109.58	109.42	109.32	109.30	
21	109.40	109.84	109.70	109.78	114.47	112.50	109.72	109.80	109.57	109.40	109.32	109.30	
22	109.40	109.86	109.71	110.02	113.06	112.36	109.71	109.78	109.55	109.40	109.32	109.30	
23	109.39	109.77	109.70	111.51	111.86	112.92	109.71	109.79	109.55	109.40	109.32	109.30	
24	109.38	109.76	109.68	112.70	111.18	113.18	109.72	109.75	109.54	109.38	109.32	109.30	
25	109.37	109.75	109.67	112.80	110.79	112.87	110.05	109.78	109.53	109.35	109.32	109.30	
26	109.36	109.73	109.74	112.02	109.63	112.48	111.32	109.77	109.52	109.36	109.32	109.30	
27	109.35	109.67	109.72	111.12	110.16	112.45	111.41	109.77	109.50	109.39	109.32	109.30	
28	109.35	110.00	109.65	110.29	110.34	112.13	111.34	109.77	109.50	109.42	109.32	109.30	
29	109.34	109.92	110.07	110.14	111.81	111.50	111.28	109.76	109.50	109.44		109.30	
30	109.33	109.79	109.92	110.24	112.42	110.86	111.21	109.75	109.50	109.45		109.30	
31		109.93		110.05	112.12		110.89		109.50	109.49		109.30	
Mean	109.44	109.71	109.98	110.26	112.52	111.71	110.21	109.92	109.63	109.42	109.33	109.31	
Max	109.54	110.11	110.99	112.80	115.66	113.18	111.41	110.46	109.75	109.50	109.35	109.32	115.66
Min	109.33	109.33	109.65	109.61	109.63	110.42	109.71	109.75	109.50	109.35	109.32	109.30	109.30

Annual Max Momentary Gage Height 115.66 M (MSL), at 18.00 Hours, on Aug 18, 2001
Zero Gage at Bottom Elevation 106.50 M (MSL), River Bed 107.00 M (MSL)
Left Bank Elevation 115.88 M (MSL)
Right Bank Elevation 115.89 M (MSL), Drainage Area 3566 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.10	0.16	19.70	11.30	13.30	66.35	25.90	23.70	9.50	0.70	0.20	0.14	
2	1.10	0.18	34.30	15.50	11.30	51.50	19.50	19.90	9.50	0.54	0.20	0.14	
3	1.10	0.20	32.90	18.50	11.50	33.90	16.30	18.50	8.34	0.46	0.20	0.14	
4	1.10	0.34	19.50	11.90	17.50	25.70	14.70	17.30	8.34	0.38	0.20	0.14	
5	1.10	8.34	18.30	12.10	22.30	23.30	13.90	19.50	8.34	0.38	0.20	0.14	
6	0.90	9.50	16.50	9.90	42.73	39.10	13.30	14.70	6.02	0.38	0.20	0.14	
7	0.80	6.02	15.10	2.90	50.60	29.10	13.50	13.50	4.86	0.38	0.20	0.14	
8	0.80	4.86	15.10	2.70	65.67	41.10	14.50	12.70	4.86	0.38	0.20	0.14	
9	0.66	3.30	14.30	1.90	78.50	40.90	15.10	12.90	4.86	0.38	0.20	0.14	
10	0.62	2.70	12.70	3.50	79.25	28.50	15.50	13.10	4.86	0.38	0.20	0.14	
11	0.62	2.10	11.70	17.50	79.50	22.90	16.70	12.90	3.70	0.38	0.20	0.10	
12	0.54	2.10	13.70	15.30	94.50	36.70	16.10	12.70	3.70	0.38	0.20	0.10	
13	0.54	2.10	17.90	12.90	109.70	54.87	14.70	12.50	3.50	0.38	0.18	0.10	
14	0.50	2.10	16.70	10.90	126.02	63.43	14.70	12.50	3.30	0.38	0.18	0.10	
15	0.46	1.90	14.90	10.70	142.20	67.70	13.10	11.90	2.90	0.38	0.16	0.10	
16	0.46	2.50	12.70	13.50	151.12	58.02	12.10	11.70	2.50	0.38	0.14	0.10	
17	0.46	2.30	11.30	11.50	157.92	38.90	10.50	11.90	1.70	0.38	0.14	0.10	
18	0.42	13.50	10.30	11.70	160.05	28.10	11.50	11.90	1.70	0.38	0.14	0.10	
19	0.38	16.70	10.90	12.10	158.77	43.62	10.90	11.30	1.60	0.38	0.14	0.10	
20	0.34	13.10	9.70	11.50	145.40	69.73	9.50	10.90	1.50	0.38	0.14	0.10	
21	0.30	11.30	3.70	10.10	116.60	67.25	6.02	10.50	1.40	0.30	0.14	0.10	
22	0.30	11.70	4.86	14.90	80.00	64.10	4.86	10.10	1.20	0.30	0.14	0.10	
23	0.28	9.90	3.70	44.98	52.85	76.70	4.86	10.30	1.10	0.30	0.14	0.10	
24	0.26	9.70	3.30	71.75	38.10	83.00	6.02	9.50	1.00	0.26	0.14	0.10	
25	0.24	9.50	3.10	74.00	30.30	75.58	15.50	10.10	0.90	0.20	0.14	0.10	
26	0.22	9.10	8.34	56.45	7.10	66.80	40.90	9.90	0.70	0.22	0.14	0.10	
27	0.20	7.90	6.02	36.90	17.70	66.12	42.73	9.90	0.70	0.28	0.14	0.10	
28	0.20	14.50	2.70	20.30	21.30	58.92	41.30	9.90	0.70	0.38	0.14	0.10	
29	0.18	12.90	15.90	17.30	51.72	44.75	40.10	9.70	0.70	0.46		0.10	
30	0.16	10.30	12.90	19.30	65.45	31.70	38.70	9.50	0.70	0.50		0.10	
31		13.10		15.50	58.70		32.30		0.70	0.66		0.10	
Total	16.34	213.90	392.72	599.28	2257.65	1498.34	565.29	385.40	105.38	12.02	4.74	3.50	6054.56 CMSDAY
Mean	0.54	6.90	13.09	19.33	72.83	49.94	18.24	12.85	3.40	0.39	0.17	0.11	16.59 CMS
Max	1.10	16.70	34.30	74.00	160.05	83.00	42.73	23.70	9.50	0.70	0.20	0.14	160.05 CMS
Min	0.16	0.16	2.70	1.90	7.10	22.90	4.86	9.50	0.70	0.20	0.14	0.10	0.10 CMS
Runoff	1.412	18.481	33.931	51.778	195.061	129.457	48.841	33.299	9.105	1.039	0.410	0.302	523.114 MCM

Momentary Peak 160.05 CMS, at 115.66 M (MSL), at 18.00 Hours, on Aug 18, 2001

Runoff Yield 4.65 Liters/Second/Square KM, Momentary Peak Yield 44.882 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Pasak River at Ban Pa, Saraburi (S.9)

Lat 14 - 37 - 33 N. **Long** 101 - 01 - 00 E.

Location on left bank at Ban Mueang Nua railway bridge.

Ban Pa **Amphoe** Kaeng Khoi **Changwat** Saraburi

Drainage Area 14,374 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +7.490 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank under tamarind tree along the measuring line.

Elevation +23.099 m. (M.S.L.)

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 Float -

Rated by Current Meter 1973 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

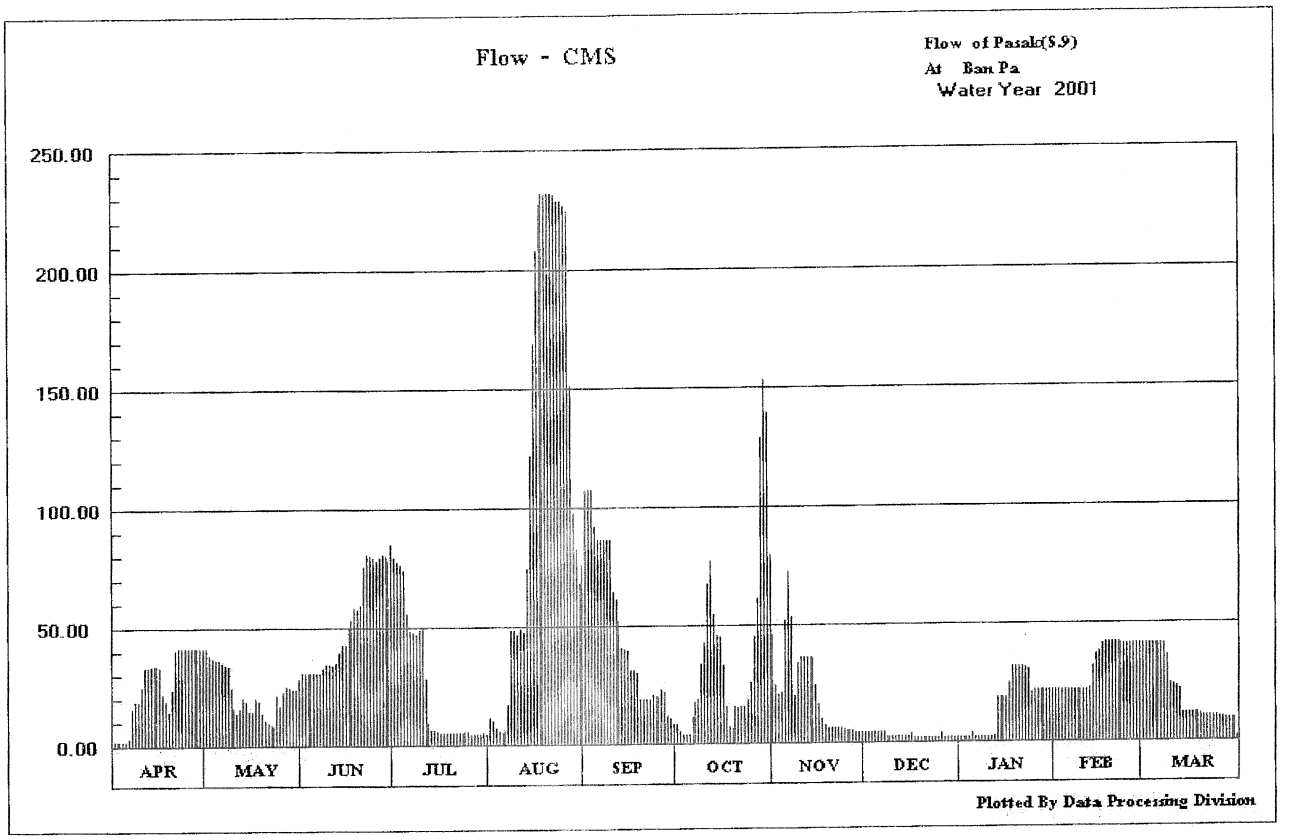
General Description Records good. Flow regulated by Pasak Dam above gage site.

Stage-discharge relation defined by 24 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.49	9.49	9.29	10.09	8.85	10.44	8.74	9.57	8.61	8.51	9.11	9.49	
2	8.51	9.43	9.29	10.07	8.81	10.45	8.62	9.16	8.61	8.51	9.11	9.49	
3	8.51	9.40	9.28	10.05	8.69	10.45	8.57	9.09	8.61	8.51	9.11	9.49	
4	8.49	9.39	9.28	10.02	8.64	10.26	8.57	9.10	8.61	8.51	9.11	9.49	
5	8.49	9.39	9.29	9.75	8.63	10.19	8.57	9.70	8.61	8.51	9.11	9.49	
6	8.55	9.37	9.28	9.62	8.64	10.19	8.84	10.00	8.61	8.51	9.11	9.49	
7	8.97	9.36	9.29	9.61	9.00	10.19	9.02	9.71	8.61	8.51	9.11	9.49	
8	9.04	9.35	9.32	9.60	9.62	10.19	9.04	9.07	8.54	8.51	9.11	9.49	
9	9.05	9.17	9.36	9.63	9.62	10.19	9.34	9.35	8.54	8.51	9.11	9.39	
10	9.18	8.97	9.36	9.66	9.59	9.89	9.51	9.39	8.54	8.51	9.11	9.16	
11	9.33	8.91	9.35	9.24	9.63	9.84	9.93	9.39	8.53	8.51	9.11	9.15	
12	9.33	8.97	9.37	8.80	9.61	9.69	10.06	9.39	8.53	8.54	9.13	9.14	
13	9.34	9.07	9.45	8.67	10.03	9.48	9.73	9.39	8.53	9.05	9.31	9.12	
14	9.34	9.05	9.52	8.67	10.63	9.47	9.57	9.39	8.53	9.05	9.41	8.87	
15	9.34	8.94	9.52	8.65	11.17	9.46	9.56	9.16	8.53	9.05	9.43	8.87	
16	9.33	8.93	9.64	8.62	11.58	9.30	9.33	8.99	8.53	9.05	9.49	8.87	
17	9.11	9.08	9.71	8.62	11.76	9.30	8.97	8.81	8.52	9.18	9.50	8.87	
18	9.04	9.05	9.79	8.63	11.80	9.27	8.69	8.72	8.52	9.31	9.50	8.86	
19	8.94	8.92	9.78	8.63	11.79	9.05	8.66	8.68	8.52	9.31	9.50	8.86	
20	9.15	8.83	9.81	8.63	11.80	9.05	8.97	8.66	8.52	9.31	9.50	8.85	
21	9.48	8.79	10.04	8.63	11.80	9.05	8.96	8.66	8.52	9.31	9.50	8.83	
22	9.49	8.77	10.11	8.62	11.79	9.05	8.97	8.66	8.52	9.30	9.49	8.83	
23	9.49	8.75	10.10	8.62	11.77	9.09	8.97	8.66	8.51	9.29	9.49	8.83	
24	9.49	9.10	10.09	8.64	11.77	9.08	9.03	8.64	8.51	9.09	9.49	8.82	
25	9.49	9.00	10.08	8.64	11.75	9.08	9.19	8.62	8.51	9.11	9.49	8.82	
26	9.49	9.13	10.09	8.60	11.73	9.14	9.56	8.62	8.51	9.11	9.49	8.81	
27	9.49	9.18	10.11	8.60	10.98	9.11	9.84	8.62	8.51	9.11	9.49	8.81	
28	9.49	9.17	10.10	8.61	10.33	8.87	10.71	8.61	8.51	9.11	9.49	8.80	
29	9.49	9.15	10.08	8.60	10.14	8.82	11.00	8.61	8.51	9.11		8.80	
30	9.49	9.15	10.17	8.62	9.94	8.74	10.84	8.61	8.51	9.11		8.80	
31		9.24		8.60	10.04		10.09		8.51	9.11		8.80	
Mean	9.15	9.11	9.66	9.03	10.38	9.55	9.34	9.03	8.54	8.91	9.32	9.06	
Max	9.49	9.49	10.17	10.09	11.80	10.45	11.00	10.00	8.61	9.31	9.50	9.49	11.80
Min	8.49	8.75	9.28	8.60	8.63	8.74	8.57	8.61	8.51	8.51	9.11	8.80	8.49

Annual Max Momentary Gage Height 11.80 M (MSL), at 18.00 Hours, on Aug 20, 2001
Zero Gage at Bottom Elevation 7.49 M (MSL), River Bed 5.35 M (MSL)
Left Bank Elevation 23.10 M (MSL)
Right Bank Elevation 22.57 M (MSL), Drainage Area 14374 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.2	42.1	31.7	79.9	12.3	107.5	8.9	46.2	5.4	2.8	22.5	42.1	
2	2.8	39.0	31.7	78.5	10.9	108.4	5.7	25.0	5.4	2.8	22.5	42.1	
3	2.8	37.4	31.2	77.0	7.6	108.4	4.4	21.5	5.4	2.8	22.5	42.1	
4	2.2	36.9	31.2	74.8	6.2	92.9	4.4	22.0	5.4	2.8	22.5	42.1	
5	2.2	36.9	31.7	56.3	6.0	87.3	4.4	53.0	5.4	2.8	22.5	42.1	
6	3.8	35.8	31.2	48.8	6.2	87.3	11.9	73.3	5.4	2.8	22.5	42.1	
7	16.5	35.3	31.7	48.3	17.5	87.3	18.4	53.7	5.4	2.8	22.5	42.1	
8	19.3	34.8	33.2	47.8	48.8	87.3	19.3	20.6	3.6	2.8	22.5	42.1	
9	19.7	25.5	35.3	49.4	48.8	87.3	34.3	34.8	3.6	2.8	22.5	36.9	
10	26.0	16.5	35.3	50.9	47.3	65.4	43.1	36.9	3.6	2.8	22.5	25.0	
11	33.8	14.3	34.8	29.1	49.4	62.1	68.2	36.9	3.3	2.8	22.5	24.5	
12	33.8	16.5	35.8	10.5	48.3	52.5	77.7	36.9	3.3	3.6	23.5	24.0	
13	34.3	20.6	40.0	7.0	75.5	41.6	54.9	36.9	3.3	19.7	32.7	23.0	
14	34.3	19.7	43.6	7.0	123.0	41.0	46.2	36.9	3.3	19.7	37.9	12.9	
15	34.3	15.4	43.6	6.5	169.8	40.5	45.7	25.0	3.3	19.7	39.0	12.9	
16	33.8	15.1	49.9	5.7	208.8	32.2	33.8	17.1	3.3	19.7	42.1	12.9	
17	22.5	21.1	53.7	5.7	228.6	32.2	16.5	10.9	3.0	26.0	42.6	12.9	
18	19.3	19.7	58.9	6.0	233.0	30.6	7.6	8.4	3.0	32.7	42.6	12.6	
19	15.4	14.7	58.2	6.0	231.9	19.7	6.8	7.3	3.0	32.7	42.6	12.6	
20	24.5	11.5	60.2	6.0	233.0	19.7	16.5	6.8	3.0	32.7	42.6	12.3	
21	41.6	10.2	76.3	6.0	233.0	19.7	16.1	6.8	3.0	32.7	42.6	11.5	
22	42.1	9.7	81.4	5.7	231.9	19.7	16.5	6.8	3.0	32.2	42.1	11.5	
23	42.1	9.2	80.7	5.7	229.7	21.5	16.5	6.8	2.8	31.7	42.1	11.5	
24	42.1	22.0	79.9	6.2	229.7	21.1	18.8	6.2	2.8	21.5	42.1	11.2	
25	42.1	17.5	79.2	6.2	227.5	21.1	26.5	5.7	2.8	22.5	42.1	11.2	
26	42.1	23.5	79.9	5.2	225.3	24.0	45.7	5.7	2.8	22.5	42.1	10.9	
27	42.1	26.0	81.4	5.2	152.3	22.5	62.1	5.7	2.8	22.5	42.1	10.9	
28	42.1	25.5	80.7	5.4	98.6	12.9	129.5	5.4	2.8	22.5	42.1	10.5	
29	42.1	24.5	79.2	5.2	83.6	11.2	154.2	5.4	2.8	22.5		10.5	
30	42.1	24.5	85.8	5.7	68.9	8.9	140.1	5.4	2.8	22.5		10.5	
31		29.1		5.2	76.3		79.9		2.8	22.5		10.5	
Total	804.0	730.5	1607.4	762.9	3669.7	1473.8	1234.6	670.0	111.6	512.9	930.4	680.0	13187.8 CMSDAY
Mean	26.8	23.6	53.6	24.6	118.4	49.1	39.8	22.3	3.6	16.5	33.2	21.9	36.1 CMS
Max	42.1	42.1	85.8	79.9	233.0	108.4	154.2	73.3	5.4	32.7	42.6	42.1	233.0 CMS
Min	2.2	9.2	31.2	5.2	6.0	8.9	4.4	5.4	2.8	2.8	22.5	10.5	2.2 CMS
Runoff	69.47	63.12	138.88	65.91	317.06	127.34	106.67	57.89	9.64	44.31	80.39	58.75	1139.43 MCM

Momentary Peak 233.00 CMS, at 11.80 M (MSL), at 18.00 Hours, on Aug 20, 2001

Runoff Yield 2.51 Liters/Second/Square KM, Momentary Peak Yield 16.210 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Lam Kong at Ban Wang Tha Di, Phetchabun (S.12)

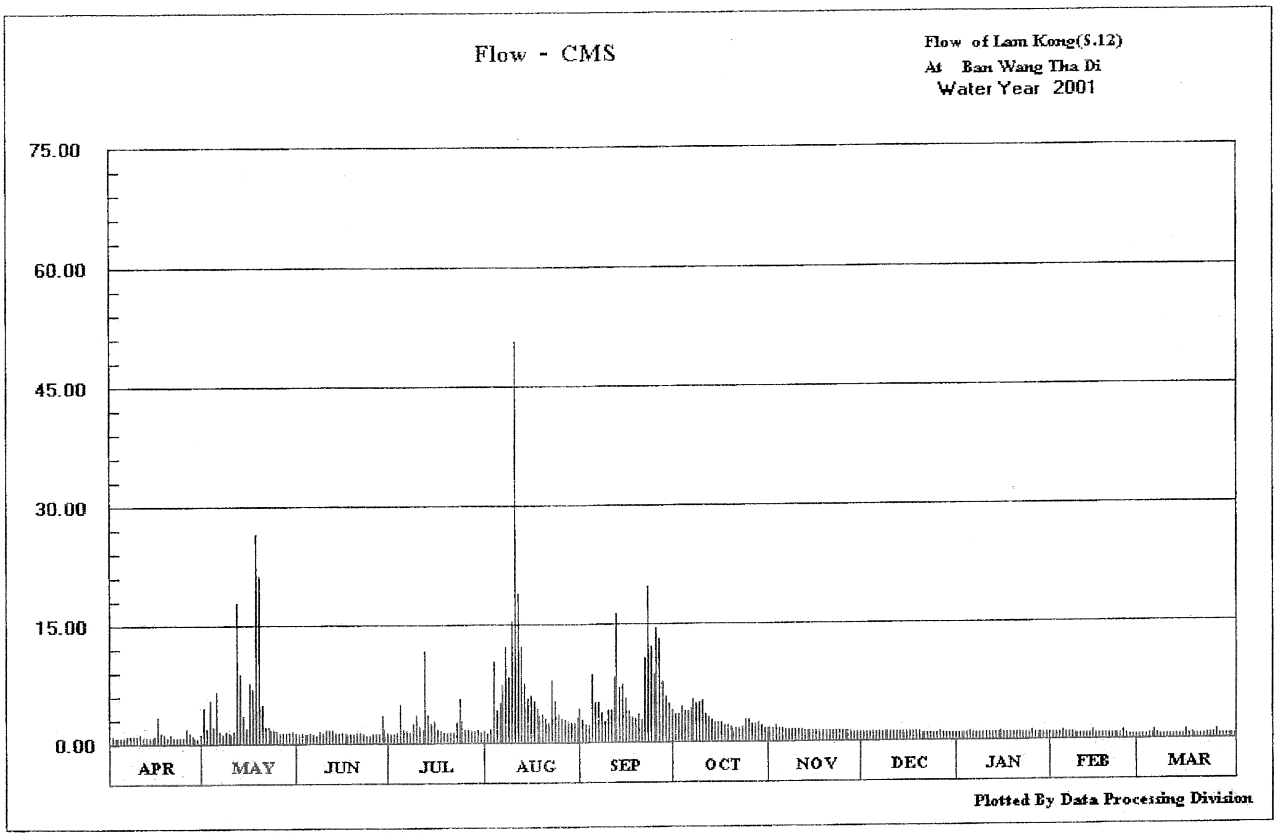
Lat 15 - 59 - 50 N. **Long** 101 - 14 - 31 E.

Location		on left bank at Ban Wang Tha Di.			
	Ban Wang Tha Di	**Amphoe** Nong Phai		**Changwat**	Phetchabun
Drainage Area		471 sq.km.			
Type of Gage		Water - stage recorder.			
Zero Gage at Bottom		+108.590 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On left bank along the gage line.			
	Elevation	+114.345 m. (M.S.L.)			
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 Float	-			
	Rated by Current Meter	1978 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records good. Stage-discharge relation defined by 106 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.22	109.62	109.29	109.29	109.29	109.48	109.55	109.39	109.29	109.24	109.22	109.17	
2	109.21	109.41	109.31	109.29	109.39	109.44	109.55	109.38	109.29	109.24	109.22	109.17	
3	109.21	109.68	109.29	109.32	109.97	109.42	109.62	109.43	109.29	109.24	109.22	109.17	
4	109.21	109.43	109.28	109.64	109.59	109.88	109.57	109.40	109.29	109.24	109.22	109.19	
5	109.21	109.75	109.30	109.38	109.65	109.65	109.57	109.38	109.29	109.24	109.22	109.19	
6	109.22	109.36	109.26	109.35	109.80	109.66	109.61	109.36	109.29	109.24	109.22	109.19	
7	109.23	109.28	109.25	109.32	110.07	109.56	109.68	109.35	109.29	109.24	109.22	109.18	
8	109.24	109.34	109.36	109.46	109.86	109.47	109.64	109.36	109.29	109.23	109.21	109.17	
9	109.23	109.31	109.33	109.55	110.23	109.59	109.65	109.35	109.28	109.23	109.21	109.17	
10	109.23	109.26	109.38	109.43	111.38	109.59	109.67	109.35	109.28	109.23	109.21	109.17	
11	109.20	109.34	109.38	109.37	110.39	109.86	109.54	109.34	109.27	109.23	109.21	109.17	
12	109.18	110.34	109.38	110.04	110.07	110.27	109.51	109.33	109.28	109.23	109.21	109.17	
13	109.18	109.89	109.33	109.55	109.81	109.78	109.48	109.33	109.27	109.23	109.21	109.17	
14	109.18	109.54	109.32	109.45	109.69	109.80	109.46	109.33	109.27	109.23	109.21	109.16	
15	109.24	109.41	109.33	109.48	109.72	109.69	109.45	109.33	109.26	109.24	109.21	109.16	
16	109.53	109.83	109.30	109.40	109.67	109.58	109.45	109.33	109.26	109.24	109.20	109.15	
17	109.32	109.78	109.29	109.36	109.60	109.52	109.43	109.32	109.26	109.24	109.20	109.14	
18	109.27	110.67	109.29	109.33	109.53	109.50	109.42	109.31	109.26	109.24	109.20	109.18	
19	109.21	110.48	109.28	109.30	109.54	109.55	109.41	109.31	109.26	109.24	109.20	109.17	
20	109.19	109.64	109.30	109.33	109.50	109.49	109.39	109.31	109.25	109.24	109.20	109.15	
21	109.18	109.43	109.32	109.32	109.46	110.00	109.39	109.31	109.25	109.23	109.20	109.15	
22	109.18	109.43	109.26	109.47	109.84	110.42	109.39	109.31	109.25	109.23	109.20	109.14	
23	109.18	109.40	109.24	109.69	109.67	110.07	109.41	109.31	109.24	109.23	109.19	109.18	
24	109.19	109.37	109.25	109.49	109.54	109.88	109.49	109.30	109.24	109.22	109.19	109.20	
25	109.41	109.35	109.27	109.40	109.50	110.18	109.49	109.30	109.24	109.23	109.19	109.20	
26	109.31	109.33	109.26	109.37	109.48	110.12	109.44	109.30	109.24	109.23	109.17	109.18	
27	109.24	109.30	109.29	109.34	109.47	109.82	109.44	109.30	109.24	109.22	109.17	109.17	
28	109.19	109.32	109.54	109.35	109.46	109.70	109.46	109.29	109.24	109.22	109.17	109.17	
29	109.17	109.33	109.37	109.39	109.45	109.64	109.42	109.29	109.24	109.22		109.16	
30	109.15	109.34	109.30	109.33	109.51	109.59	109.40	109.29	109.24	109.22		109.15	
31		109.31		109.34	109.60		109.38		109.24	109.22		109.15	
Mean	109.23	109.56	109.31	109.42	109.73	109.74	109.50	109.33	109.26	109.23	109.20	109.17	
Max	109.53	110.67	109.54	110.04	111.38	110.42	109.68	109.43	109.29	109.24	109.22	109.20	111.38
Min	109.15	109.26	109.24	109.29	109.29	109.42	109.38	109.29	109.24	109.22	109.17	109.14	109.14

Annual Max Momentary Gage Height 112.69 M (MSL), at 16.00 Hours, on Aug 10, 2001
Zero Gage at Bottom Elevation 108.59 M (MSL), River Bed 107.89 M (MSL)
Left Bank Elevation 113.19 M (MSL)
Right Bank Elevation 112.88 M (MSL), Drainage Area 471 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.10	4.80	1.45	1.45	1.45	3.00	3.88	1.95	1.45	1.20	1.10	0.89	
2	1.05	2.13	1.55	1.45	1.95	2.50	3.88	1.90	1.45	1.20	1.10	0.89	
3	1.05	5.70	1.45	1.60	10.48	2.25	4.80	2.37	1.45	1.20	1.10	0.89	
4	1.05	2.37	1.40	5.10	4.37	8.90	4.13	2.00	1.45	1.20	1.10	0.96	
5	1.05	6.75	1.50	1.90	5.25	5.25	4.13	1.90	1.45	1.20	1.10	0.96	
6	1.10	1.80	1.30	1.75	7.50	5.40	4.65	1.80	1.45	1.20	1.10	0.96	
7	1.15	1.40	1.25	1.60	12.40	4.00	5.70	1.75	1.45	1.20	1.10	0.93	
8	1.20	1.70	1.80	2.75	8.55	2.88	5.10	1.80	1.45	1.15	1.05	0.89	
9	1.15	1.55	1.65	3.88	15.68	4.37	5.25	1.75	1.40	1.15	1.05	0.89	
10	1.15	1.30	1.90	2.37	50.80	4.37	5.55	1.75	1.40	1.15	1.05	0.89	
11	1.00	1.70	1.90	1.85	19.27	8.55	3.75	1.70	1.35	1.15	1.05	0.89	
12	0.93	18.15	1.90	11.80	12.40	16.57	3.38	1.65	1.40	1.15	1.05	0.89	
13	0.93	9.07	1.65	3.88	7.67	7.20	3.00	1.65	1.35	1.15	1.05	0.89	
14	0.93	3.75	1.60	2.62	5.85	7.50	2.75	1.65	1.35	1.15	1.05	0.85	
15	1.20	2.13	1.65	3.00	6.30	5.85	2.62	1.65	1.30	1.20	1.05	0.85	
16	3.62	8.02	1.50	2.00	5.55	4.25	2.62	1.65	1.30	1.20	1.00	0.81	
17	1.60	7.20	1.45	1.80	4.50	3.50	2.37	1.60	1.30	1.20	1.00	0.78	
18	1.35	26.60	1.45	1.65	3.62	3.25	2.25	1.55	1.30	1.20	1.00	0.93	
19	1.05	21.50	1.40	1.50	3.75	3.88	2.13	1.55	1.30	1.20	1.00	0.89	
20	0.96	5.10	1.50	1.65	3.25	3.12	1.95	1.55	1.25	1.20	1.00	0.81	
21	0.93	2.37	1.60	1.60	2.75	11.00	1.95	1.55	1.25	1.15	1.00	0.81	
22	0.93	2.37	1.30	2.88	8.20	20.00	1.95	1.55	1.25	1.15	1.00	0.78	
23	0.93	2.00	1.20	5.85	5.55	12.40	2.13	1.55	1.20	1.15	0.96	0.93	
24	0.96	1.85	1.25	3.12	3.75	8.90	3.12	1.50	1.20	1.10	0.96	1.00	
25	2.13	1.75	1.35	2.00	3.25	14.60	3.12	1.50	1.20	1.15	0.96	1.00	
26	1.55	1.65	1.30	1.85	3.00	13.40	2.50	1.50	1.20	1.15	0.89	0.93	
27	1.20	1.50	1.45	1.70	2.88	7.85	2.50	1.50	1.20	1.10	0.89	0.89	
28	0.96	1.60	3.75	1.75	2.75	6.00	2.75	1.45	1.20	1.10	0.89	0.89	
29	0.89	1.65	1.85	1.95	2.62	5.10	2.25	1.45	1.20	1.10		0.85	
30	0.81	1.70	1.50	1.65	3.38	4.37	2.00	1.45	1.20	1.10		0.81	
31		1.55		1.70	4.50		1.90		1.20	1.10		0.81	
Total	35.91	152.71	47.80	81.65	233.22	210.21	100.06	50.17	40.90	36.00	28.65	27.44	1044.72 CMSDAY
Mean	1.20	4.93	1.59	2.63	7.52	7.01	3.23	1.67	1.32	1.16	1.02	0.89	2.86 CMS
Max	3.62	26.60	3.75	11.80	50.80	20.00	5.70	2.37	1.45	1.20	1.10	1.00	50.80 CMS
Min	0.81	1.30	1.20	1.45	1.45	2.25	1.90	1.45	1.20	1.10	0.89	0.78	0.78 CMS
Runoff	3.103	13.194	4.130	7.055	20.150	18.162	8.645	4.335	3.534	3.110	2.475	2.371	90.264 MCM

Momentary Peak 111.00 CMS, at 112.69 M (MSL), at 16.00 Hours, on Aug 10, 2001

Runoff Yield 6.08 Liters/Second/Square KM, Momentary Peak Yield 235.669 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Lam Sonthi at Ban Tha Yiam, Lop Buri (S.13)

Lat 15 - 20 - 21 N. **Long** 101 - 22 - 30 E.

Location on left bank near Wat Tha Yiam.

Ban Tha Yiam **Amphoe** Chai Badan **Changwat** Lop Buri

Drainage Area 359 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 15 meters from the top staff gage.

Elevation +8.697 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 1978 to date

Rating Operation

Period of Rating 1978 to date.

Rated by Float -

Rated by Current Meter 1978 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

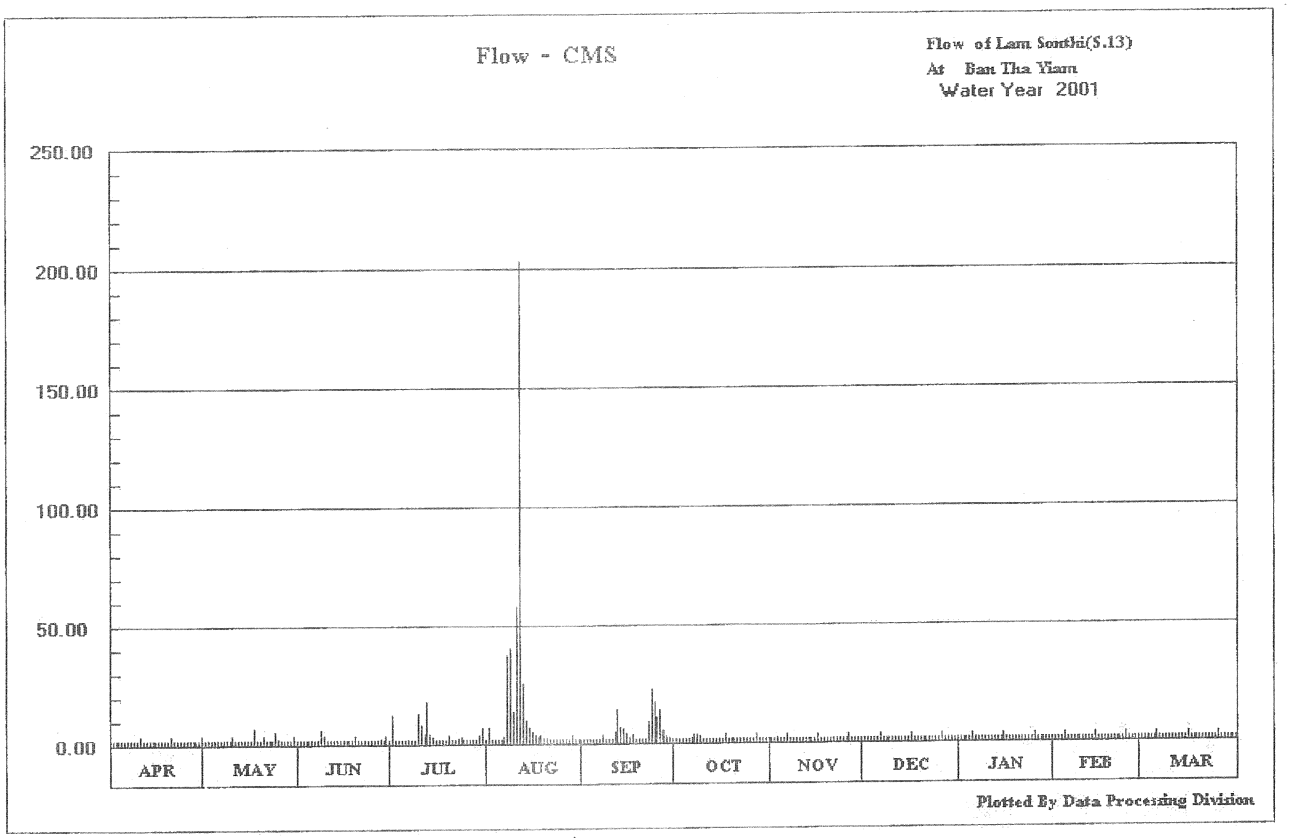
Overbank Flow Conditions Overbank flow stars at elevation +8.180 m.(A.D.), record are channel flow only.

General Description Records good. Flow effected by the local weir about 200 meters downstream from the gage site during Nov.20, 98 - Jan.31, 99, discharge estimated by recession equation. Stage-discharge relation defined by 54 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.39	0.39	0.50	2.39	1.69	0.94	0.95	0.80	0.65	0.59	0.60	0.58	
2	0.39	0.44	0.50	0.94	0.82	0.94	0.91	0.78	0.65	0.59	0.60	0.58	
3	0.44	0.63	0.78	0.71	0.67	0.87	0.90	1.02	0.64	0.59	0.60	0.58	
4	0.41	0.53	0.52	0.64	0.62	0.90	0.90	0.92	0.64	0.58	0.60	0.58	
5	0.41	0.52	0.50	0.53	0.70	0.92	0.88	0.86	0.63	0.58	0.60	0.58	
6	0.41	0.47	0.47	0.53	1.10	0.91	0.98	0.79	0.63	0.58	0.59	0.57	
7	0.41	0.43	0.47	0.51	4.46	0.87	0.98	0.77	0.63	0.57	0.59	0.57	
8	0.41	0.41	1.58	0.49	4.62	0.83	1.19	0.75	0.62	0.57	0.59	0.57	
9	0.41	0.43	1.00	2.48	2.51	0.81	1.15	0.74	0.62	0.57	0.59	0.57	
10	0.41	0.41	0.66	1.82	5.48	0.83	0.97	0.73	0.62	0.57	0.59	0.57	
11	0.40	0.41	0.57	1.27	8.91	1.41	0.91	0.73	0.61	0.57	0.59	0.57	
12	0.40	0.41	0.52	2.97	3.64	2.57	0.85	0.73	0.60	0.57	0.59	0.56	
13	0.40	0.41	0.50	1.28	2.10	1.64	0.82	0.72	0.60	0.57	0.58	0.56	
14	0.40	0.61	0.61	1.11	1.71	1.60	0.81	0.72	0.60	0.56	0.58	0.56	
15	0.40	0.54	0.57	0.93	1.40	1.35	0.80	0.71	0.59	0.56	0.58	0.56	
16	0.40	0.63	0.66	0.83	1.23	1.06	0.79	0.71	0.59	0.56	0.58	0.56	
17	0.40	1.69	0.52	0.73	1.13	0.97	0.79	0.70	0.58	0.56	0.58	0.55	
18	0.40	0.69	0.50	0.65	1.03	0.91	0.78	0.70	0.61	0.56	0.58	0.55	
19	0.40	0.60	0.50	0.63	1.02	0.94	0.77	0.69	0.62	0.62	0.58	0.55	
20	0.40	0.58	0.45	0.59	0.99	0.90	0.77	0.69	0.64	0.62	0.58	0.55	
21	0.39	0.50	0.43	0.55	0.90	0.88	0.76	0.68	0.61	0.62	0.57	0.54	
22	0.39	0.47	0.43	1.04	0.90	1.97	0.76	0.67	0.61	0.62	0.57	0.54	
23	0.39	0.45	0.43	1.16	0.88	3.44	0.78	0.67	0.61	0.62	0.57	0.54	
24	0.40	1.47	0.52	0.86	0.88	2.90	0.86	0.68	0.62	0.62	0.57	0.54	
25	0.40	0.99	0.49	0.71	0.87	2.26	0.89	0.67	0.62	0.62	0.60	0.54	
26	0.39	0.56	0.56	0.64	0.85	2.61	0.85	0.65	0.60	0.61	0.60	0.53	
27	0.39	0.50	1.04	0.59	0.90	1.48	0.86	0.68	0.60	0.61	0.59	0.53	
28	0.39	0.47	0.95	0.56	0.86	1.15	0.89	0.68	0.60	0.61	0.59	0.53	
29	0.39	0.53	0.86	1.06	0.85	1.06	0.94	0.68	0.59	0.61		0.53	
30	0.39	1.19	0.81	1.68	0.90	0.96	0.84	0.66	0.59	0.61		0.53	
31		0.61		0.83	0.97		0.82		0.59	0.61		0.53	
Mean	0.40	0.61	0.63	1.02	1.79	1.36	0.88	0.73	0.61	0.59	0.59	0.55	
Max	0.44	1.69	1.58	2.97	8.91	3.44	1.19	1.02	0.65	0.62	0.60	0.58	8.91
Min	0.39	0.39	0.43	0.49	0.62	0.81	0.76	0.65	0.58	0.56	0.57	0.53	0.39

Annual Max Momentary Gage Height 9.73 M (A.D), at 6.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.14 M (A.D)
Left Bank Elevation 8.91 M (A.D)
Right Bank Elevation 8.17 M (A.D), Drainage Area 359 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.2	0.2	0.5	13.4	7.8	2.9	2.9	2.0	1.1	0.9	0.9	0.8	
2	0.2	0.3	0.5	2.9	2.1	2.9	2.7	1.9	1.1	0.9	0.9	0.8	
3	0.3	1.0	1.9	1.5	1.3	2.4	2.6	3.4	1.1	0.9	0.9	0.8	
4	0.2	0.6	0.6	1.1	1.0	2.6	2.6	2.7	1.1	0.8	0.9	0.8	
5	0.2	0.6	0.5	0.6	1.4	2.7	2.5	2.4	1.0	0.8	0.9	0.8	
6	0.2	0.4	0.4	0.6	3.9	2.7	3.1	1.9	1.0	0.8	0.9	0.8	
7	0.2	0.3	0.4	0.5	38.5	2.4	3.1	1.8	1.0	0.8	0.9	0.8	
8	0.2	0.2	7.0	0.5	41.4	2.2	4.4	1.7	1.0	0.8	0.9	0.8	
9	0.2	0.3	3.2	14.2	14.5	2.1	4.2	1.6	1.0	0.8	0.9	0.8	
10	0.2	0.2	1.2	8.7	58.7	2.2	3.0	1.6	1.0	0.8	0.9	0.8	
11	0.2	0.2	0.8	4.9	203.9	5.8	2.7	1.6	0.9	0.8	0.9	0.8	
12	0.2	0.2	0.6	18.7	26.5	15.1	2.3	1.6	0.9	0.8	0.9	0.7	
13	0.2	0.2	0.5	5.0	11.0	7.4	2.1	1.5	0.9	0.8	0.8	0.7	
14	0.2	0.9	0.9	3.9	7.9	7.1	2.1	1.5	0.9	0.7	0.8	0.7	
15	0.2	0.7	0.8	2.8	5.7	5.4	2.0	1.5	0.9	0.7	0.8	0.7	
16	0.2	1.0	1.2	2.2	4.7	3.6	1.9	1.5	0.9	0.7	0.8	0.7	
17	0.2	7.8	0.6	1.6	4.0	3.0	1.9	1.4	0.8	0.7	0.8	0.7	
18	0.2	1.3	0.5	1.1	3.4	2.7	1.9	1.4	0.9	0.7	0.8	0.7	
19	0.2	0.9	0.5	1.0	3.4	2.9	1.8	1.3	1.0	1.0	0.8	0.7	
20	0.2	0.8	0.3	0.9	3.2	2.6	1.8	1.3	1.1	1.0	0.8	0.7	
21	0.2	0.5	0.3	0.7	2.6	2.5	1.8	1.3	0.9	1.0	0.8	0.7	
22	0.2	0.4	0.3	3.5	2.6	9.9	1.8	1.3	0.9	1.0	0.8	0.7	
23	0.2	0.3	0.3	4.2	2.5	23.9	1.9	1.3	0.9	1.0	0.8	0.7	
24	0.2	6.2	0.6	2.4	2.5	18.1	2.4	1.3	1.0	1.0	0.8	0.7	
25	0.2	3.2	0.5	1.5	2.4	12.3	2.6	1.3	1.0	1.0	0.9	0.7	
26	0.2	0.7	0.7	1.1	2.3	15.4	2.3	1.1	0.9	0.9	0.9	0.6	
27	0.2	0.5	3.5	0.9	2.6	6.3	2.4	1.3	0.9	0.9	0.9	0.6	
28	0.2	0.4	2.9	0.7	2.4	4.2	2.6	1.3	0.9	0.9	0.9	0.6	
29	0.2	0.6	2.4	3.6	2.3	3.6	2.9	1.3	0.9	0.9		0.6	
30	0.2	4.4	2.1	7.7	2.6	3.0	2.2	1.2	0.9	0.9		0.6	
31		0.9		2.2	3.0		2.1		0.9	0.9		0.6	
Total	6.1	36.2	36.5	114.6	472.1	179.9	76.6	48.3	29.7	26.6	24.0	22.2	1072.8 CMSDAY
Mean	0.2	1.2	1.2	3.7	15.2	6.0	2.5	1.6	1.0	0.9	0.9	0.7	2.9 CMS
Max	0.3	7.8	7.0	18.7	203.9	23.9	4.4	3.4	1.1	1.0	0.9	0.8	203.9 CMS
Min	0.2	0.2	0.3	0.5	1.0	2.1	1.8	1.1	0.8	0.7	0.8	0.6	0.2 CMS
Runoff	0.53	3.13	3.15	9.90	40.79	15.54	6.62	4.17	2.57	2.30	2.07	1.92	92.69 MCM

Momentary Peak 260.67 CMS, at 9.73 M (A.D), at 6.00 Hours, on Aug 11, 2001

Runoff Yield 8.19 Liters/Second/Square KM, Momentary Peak Yield 726.100 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Lam Sonthi at Ban Tha Ruak, Lop Buri (S.14)

Lat 15 - 13 - 24 N. **Long** 101 - 16 - 51 E.

Location on left bank at the bridge on road, Tambon Nong Yi To.

Ban Tha Ruak **Amphoe** Chai Badan **Changwat** Lop Buri

Drainage Area 1,247 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 gage observer's house.

Elevation +10.065 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 1978 to date.

Rating Operation

Period of Rating 1980 to date.

Rated by Float -

Rated by Current Meter 1980 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

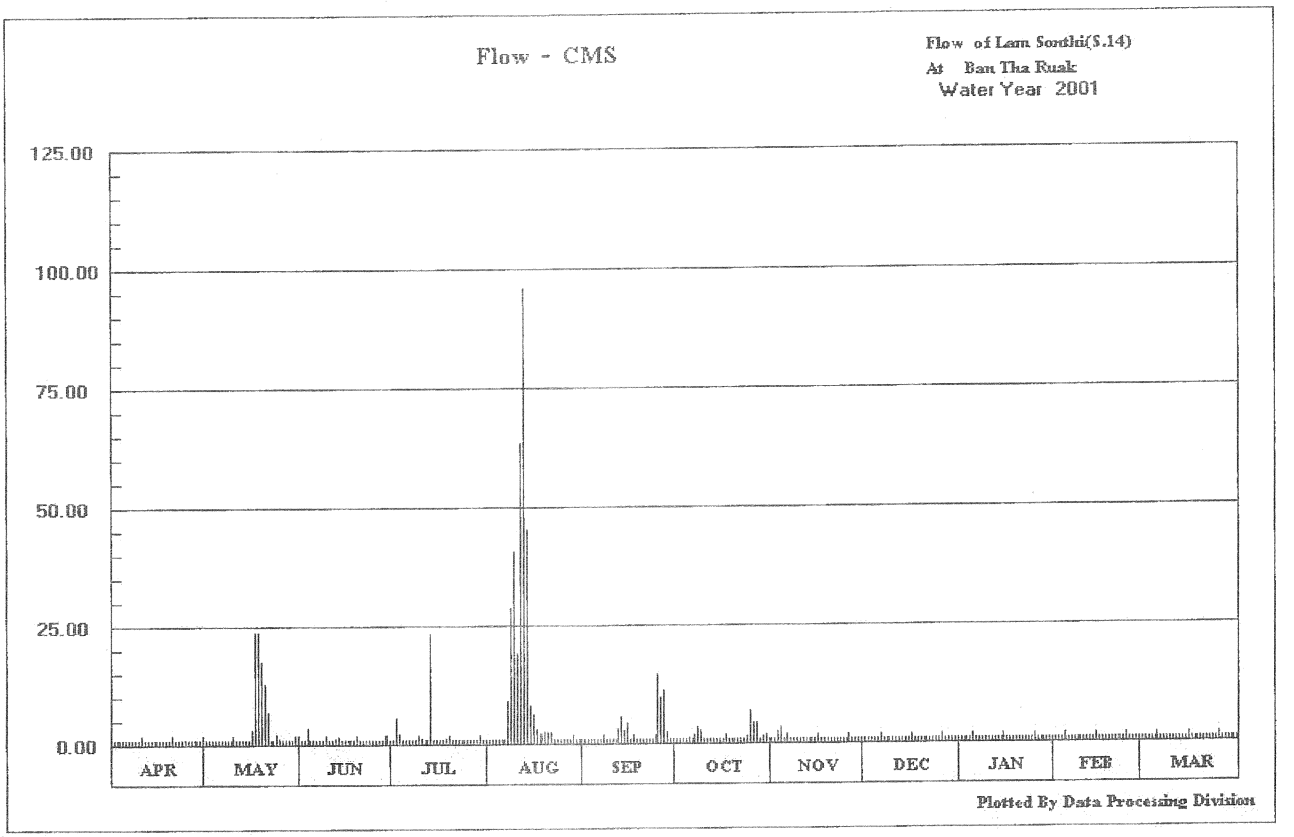
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 8 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.54	1.55	1.89	1.44	1.82	1.50	1.85	1.86	1.77	1.40	1.36	1.40	
2	1.54	1.54	1.50	3.09	1.82	1.49	1.81	1.69	1.69	1.70	1.36	1.44	
3	1.54	1.55	2.74	2.43	1.84	1.48	1.48	2.51	1.40	1.50	1.36	1.44	
4	1.54	1.55	1.71	1.52	1.84	1.48	1.86	2.74	1.40	1.50	1.36	1.46	
5	1.54	1.55	1.80	1.52	1.68	1.79	2.23	1.80	1.40	1.50	1.36	1.45	
6	1.53	1.55	1.56	1.52	1.44	1.95	2.09	1.47	1.40	1.49	1.35	1.47	
7	1.53	1.65	1.55	1.52	3.58	1.48	1.99	1.45	1.39	1.44	1.36	1.51	
8	1.53	1.55	1.53	1.52	5.49	1.47	2.67	1.46	1.39	1.41	1.37	1.56	
9	1.53	1.55	2.11	1.52	6.36	1.46	2.58	1.46	1.39	1.41	1.37	1.55	
10	1.53	1.55	1.89	2.23	4.66	1.47	1.76	1.46	1.39	1.41	1.37	1.55	
11	1.54	1.55	1.54	1.70	7.75	1.89	1.77	1.46	1.39	1.40	1.38	1.55	
12	1.54	1.55	2.19	2.09	9.42	2.63	1.79	1.66	1.39	1.40	1.39	1.56	
13	1.54	1.55	2.26	5.04	6.68	3.08	1.76	1.91	1.40	1.40	1.39	1.54	
14	1.54	1.55	1.54	1.54	3.43	2.57	1.70	1.96	1.40	1.40	1.40	1.52	
15	1.54	1.61	1.54	1.54	3.17	2.90	1.57	1.96	1.40	1.40	1.40	1.52	
16	1.54	2.61	1.52	1.54	2.63	1.84	1.46	1.96	1.40	1.40	1.40	1.52	
17	1.53	5.08	1.90	1.68	2.42	1.43	1.44	1.95	1.40	1.40	1.40	1.52	
18	1.53	5.08	1.54	2.18	2.46	1.46	1.44	1.95	1.40	1.40	1.40	1.52	
19	1.53	4.50	1.52	2.05	2.51	1.46	1.44	1.82	1.39	1.40	1.40	1.48	
20	1.53	4.00	1.52	1.66	2.52	1.44	1.44	1.42	1.53	1.40	1.40	1.42	
21	1.52	3.27	1.52	1.72	2.51	1.46	1.44	1.42	2.10	1.40	1.40	1.41	
22	1.52	2.01	1.52	1.92	2.05	1.54	1.44	1.41	1.45	1.40	1.40	1.40	
23	1.52	1.69	1.52	1.74	1.54	1.92	1.44	1.41	1.41	1.40	1.40	1.41	
24	1.52	2.46	1.52	1.66	1.52	2.40	2.25	1.41	1.41	1.54	1.40	1.96	
25	1.52	2.22	1.52	1.65	1.51	4.22	3.28	1.41	1.41	1.71	1.40	1.47	
26	1.52	2.09	1.52	1.64	1.52	3.64	2.90	1.41	1.41	1.58	1.40	1.44	
27	1.52	1.50	1.54	1.63	1.52	3.86	2.88	1.41	1.41	1.41	1.40	1.44	
28	1.52	1.80	2,37	1.61	1.53	2.53	1.94	1.41	1.40	1.40	1.40	1.44	
29	1.52	2.00	1.82	1.54	1.53	1.62	2.30	1.92	1.40	1.39		1.44	
30	1.53	2.04	1.59	1.48	1.53	1.49	2.40	1.74	1.40	1.39		1.44	
31		2.36		1.50	1.51		1.83		1.40	1.39		1.42	
Mean	1.53	2.20	1.73	1.85	2.96	2.03	1.94	1.70	1.45	1.44	1.39	1.49	
Max	1.54	5.08	2.74	5.04	9.42	4.22	3.28	2.74	2.10	1.71	1.40	1.96	9.42
Min	1.52	1.50	1.50	1.44	1.44	1.43	1.44	1.41	1.39	1.39	1.35	1.40	1.35

Annual Max Momentary Gage Height 9.65 M (A.D), at 7.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.77 M (A.D)
Left Bank Elevation 11.28 M (A.D)
Right Bank Elevation 11.26 M (A.D), Drainage Area 1247 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.3	0.3	1.0	0.2	0.9	0.3	0.9	1.0	0.8	0.1	0.1	0.1	
2	0.3	0.3	0.3	6.1	0.9	0.2	0.9	0.6	0.6	0.6	0.1	0.2	
3	0.3	0.3	4.0	2.5	0.9	0.2	0.2	2.9	0.1	0.3	0.1	0.2	
4	0.3	0.3	0.6	0.3	0.9	0.2	1.0	4.0	0.1	0.3	0.1	0.2	
5	0.3	0.3	0.8	0.3	0.6	0.8	1.8	0.8	0.1	0.3	0.1	0.2	
6	0.3	0.3	0.3	0.3	0.2	1.2	1.5	0.2	0.1	0.2	0.1	0.2	
7	0.3	0.5	0.3	0.3	9.5	0.2	1.2	0.2	0.1	0.2	0.1	0.3	
8	0.3	0.3	0.3	0.3	29.1	0.2	3.7	0.2	0.1	0.1	0.1	0.3	
9	0.3	0.3	1.5	0.3	40.9	0.2	3.2	0.2	0.1	0.1	0.1	0.3	
10	0.3	0.3	1.0	1.8	19.5	0.2	0.7	0.2	0.1	0.1	0.1	0.3	
11	0.3	0.3	0.3	0.6	64.0	1.0	0.8	0.2	0.1	0.1	0.1	0.3	
12	0.3	0.3	1.7	1.5	96.5	3.5	0.8	0.5	0.1	0.1	0.1	0.3	
13	0.3	0.3	1.9	23.7	45.8	6.0	0.7	1.1	0.1	0.1	0.1	0.3	
14	0.3	0.3	0.3	0.3	8.5	3.2	0.6	1.2	0.1	0.1	0.1	0.3	
15	0.3	0.4	0.3	0.3	6.6	4.9	0.4	1.2	0.1	0.1	0.1	0.3	
16	0.3	3.4	0.3	0.3	3.5	0.9	0.2	1.2	0.1	0.1	0.1	0.3	
17	0.3	24.2	1.0	0.6	2.5	0.1	0.2	1.2	0.1	0.1	0.1	0.3	
18	0.3	24.2	0.3	1.7	2.7	0.2	0.2	1.2	0.1	0.1	0.1	0.3	
19	0.3	17.8	0.3	1.4	2.9	0.2	0.2	0.9	0.1	0.1	0.1	0.2	
20	0.3	13.1	0.3	0.5	2.9	0.2	0.2	0.1	0.3	0.1	0.1	0.1	
21	0.3	7.3	0.3	0.7	2.9	0.2	0.2	0.1	1.5	0.1	0.1	0.1	
22	0.3	1.3	0.3	1.1	1.4	0.3	0.2	0.1	0.2	0.1	0.1	0.1	
23	0.3	0.6	0.3	0.7	0.3	1.1	0.2	0.1	0.1	0.1	0.1	0.1	
24	0.3	2.7	0.3	0.5	0.3	2.4	1.9	0.1	0.1	0.3	0.1	1.2	
25	0.3	1.8	0.3	0.5	0.3	15.1	7.4	0.1	0.1	0.6	0.1	0.2	
26	0.3	1.5	0.3	0.5	0.3	10.0	4.9	0.1	0.1	0.4	0.1	0.2	
27	0.3	0.3	0.3	0.5	0.3	11.8	4.8	0.1	0.1	0.1	0.1	0.2	
28	0.3	0.8	2.3	0.4	0.3	3.0	1.1	0.1	0.1	0.1	0.1	0.2	
29	0.3	1.3	0.9	0.3	0.3	0.4	2.0	1.1	0.1	0.1		0.2	
30	0.3	1.4	0.4	0.2	0.3	0.2	2.4	0.7	0.1	0.1		0.2	
31		2.3		0.3	0.3		0.9		0.1	0.1		0.1	
Total	9.0	108.8	22.5	49.0	346.3	68.4	45.4	21.7	6.0	5.4	2.8	7.8	693.1 CMSDAY
Mean	0.3	3.5	0.7	1.6	11.2	2.3	1.5	0.7	0.2	0.2	0.1	0.3	1.9 CMS
Max	0.3	24.2	4.0	23.7	96.5	15.1	7.4	4.0	1.5	0.6	0.1	1.2	96.5 CMS
Min	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1 CMS
Runoff	0.78	9.40	1.94	4.23	29.92	5.91	3.92	1.87	0.52	0.47	0.24	0.67	59.88 MCM

Momentary Peak 101.09 CMS, at 9.65 M (A.D), at 7.00 Hours, on Aug 12, 2001
Runoff Yield 1.52 Liters/Second/Square KM, Momentary Peak Yield 81.067 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Huai Nam Chun at Ban Nam Chun, Phetchabun (S.17)

Lat 16 - 45 - 42 N. **Long** 101 - 08 - 42 E.

Location on left bank near the bridge of Phitsanulok - Lomsak Road.

Ban Nam Chun **Amphoe** Lom Sak **Changwat** Phetchabun

Drainage Area 67 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +184.330 m (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +190.740 m. (M.S.L.)

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 Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Rather unstable.

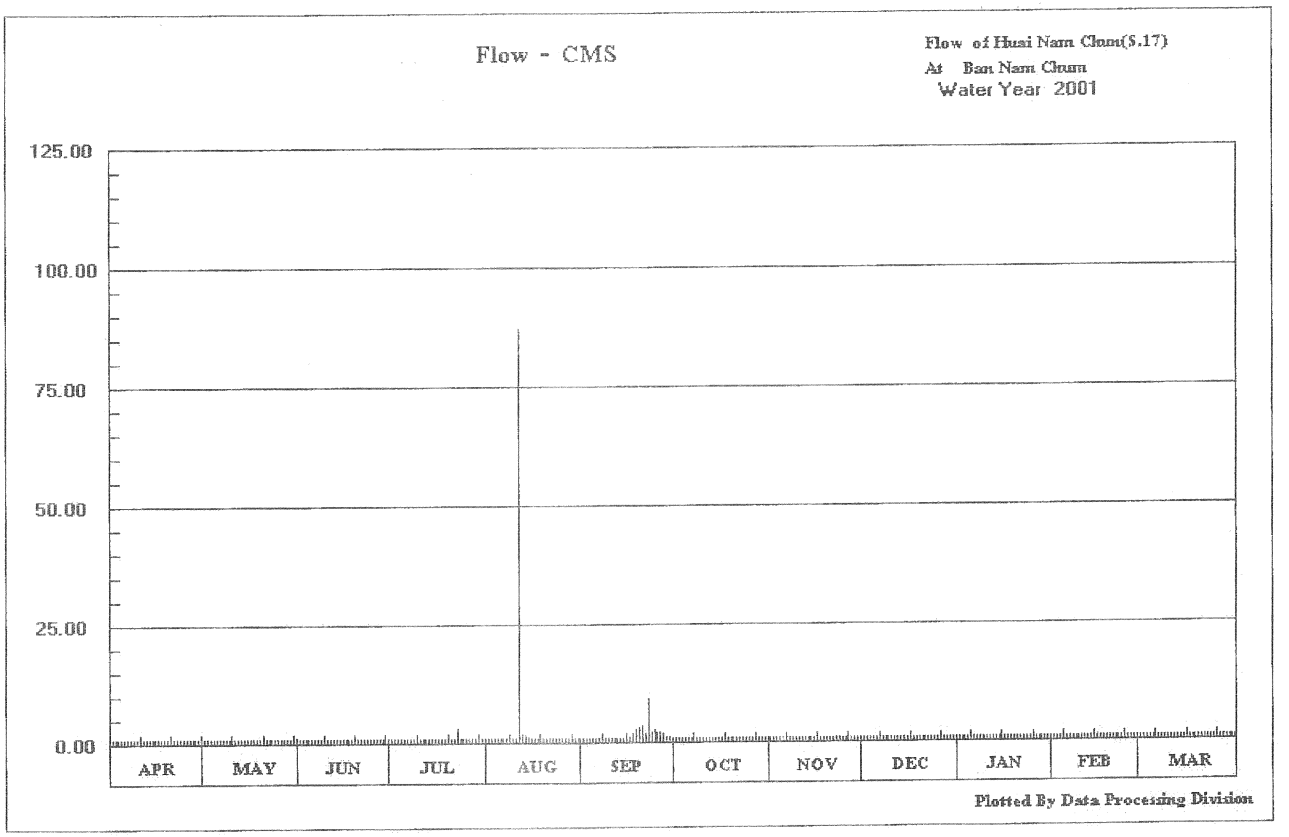
Overbank Flow Conditions Overbank flow starts at elevation +190.270 m.(M.S.L.) and is including overbank flow.

General Description Records fair. Stage-discharge relation defined by 23 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	184.42	184.45	184.50	184.49	184.46	184.61	184.73	184.61	184.58	184.56	184.54	184.51	
2	184.45	184.53	184.53	184.48	184.51	184.59	184.72	184.60	184.58	184.56	184.54	184.51	
3	184.49	184.54	184.49	184.47	184.52	184.56	184.71	184.60	184.58	184.56	184.54	184.51	
4	184.46	184.50	184.46	184.46	184.53	184.56	184.71	184.60	184.58	184.56	184.54	184.51	
5	184.43	184.51	184.43	184.45	184.53	184.56	184.71	184.60	184.58	184.56	184.54	184.51	
6	184.43	184.48	184.46	184.44	184.69	184.64	184.70	184.60	184.58	184.56	184.54	184.51	
7	184.43	184.45	184.56	184.43	184.64	184.59	184.69	184.60	184.58	184.55	184.54	184.51	
8	184.42	184.43	184.60	184.43	184.59	184.57	184.68	184.59	184.58	184.55	184.54	184.51	
9	184.42	184.42	184.52	184.48	184.57	184.56	184.68	184.59	184.58	184.55	184.54	184.51	
10	184.41	184.44	184.51	184.46	184.73	184.56	184.68	184.59	184.58	184.55	184.53	184.51	
11	184.46	184.47	184.58	184.48	187.67	184.59	184.67	184.59	184.58	184.55	184.53	184.51	
12	184.43	184.49	184.56	184.51	184.88	184.60	184.67	184.59	184.58	184.55	184.53	184.51	
13	184.42	184.48	184.51	184.45	184.83	184.59	184.66	184.58	184.58	184.55	184.53	184.51	
14	184.42	184.52	184.51	184.43	184.78	184.59	184.65	184.58	184.57	184.56	184.53	184.51	
15	184.42	184.51	184.48	184.43	184.72	184.85	184.64	184.59	184.57	184.56	184.53	184.51	
16	184.43	184.54	184.49	184.43	184.67	184.81	184.64	184.58	184.57	184.56	184.52	184.51	
17	184.45	184.55	184.54	184.46	184.61	184.68	184.63	184.59	184.57	184.55	184.52	184.50	
18	184.46	184.55	184.51	184.43	184.54	184.97	184.62	184.58	184.57	184.55	184.52	184.50	
19	184.47	184.55	184.46	184.42	184.49	185.01	184.62	184.58	184.57	184.55	184.52	184.50	
20	184.43	184.53	184.42	184.42	184.45	185.02	184.62	184.58	184.57	184.54	184.52	184.49	
21	184.41	184.50	184.45	184.46	184.69	184.88	184.61	184.58	184.56	184.54	184.52	184.70	
22	184.40	184.46	184.53	185.01	184.64	185.34	184.61	184.58	184.56	184.54	184.52	184.55	
23	184.40	184.48	184.52	184.67	184.62	184.90	184.65	184.58	184.56	184.54	184.52	184.53	
24	184.41	184.50	184.71	184.57	184.62	184.98	184.74	184.58	184.56	184.54	184.52	184.53	
25	184.42	184.62	184.54	184.54	184.62	184.89	184.72	184.58	184.56	184.54	184.51	184.51	
26	184.45	184.52	184.52	184.53	184.61	184.90	184.67	184.58	184.56	184.54	184.51	184.50	
27	184.46	184.48	184.50	184.52	184.63	184.84	184.63	184.58	184.56	184.54	184.51	184.50	
28	184.48	184.53	184.49	184.52	184.71	184.78	184.62	184.58	184.56	184.54	184.51	184.50	
29	184.47	184.49	184.49	184.50	184.66	184.76	184.62	184.58	184.56	184.54		184.50	
30	184.44	184.46	184.48	184.48	184.64	184.74	184.61	184.58	184.56	184.54		184.50	
31		184.77		184.46	184.65		184.61		184.56	184.54		184.62	
Mean	184.44	184.51	184.51	184.49	184.73	184.75	184.66	184.59	184.57	184.55	184.53	184.52	
Max	184.49	184.77	184.71	185.01	187.67	185.34	184.74	184.61	184.58	184.56	184.54	184.70	187.67
Min	184.40	184.42	184.42	184.42	184.45	184.56	184.61	184.58	184.56	184.54	184.51	184.49	184.40

Annual Max Momentary Gage Height 190.65 M (MSL), at 5.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 184.33 M (MSL), River Bed 184.06 M (MSL)
Left Bank Elevation 190.55 M (MSL)
Right Bank Elevation 190.26 M (MSL), Drainage Area 67 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.37	0.48	0.65	0.62	0.51	1.04	1.45	1.04	0.93	0.86	0.79	0.68	
2	0.48	0.76	0.76	0.58	0.68	0.96	1.42	1.00	0.93	0.86	0.79	0.68	
3	0.62	0.79	0.62	0.55	0.72	0.86	1.39	1.00	0.93	0.86	0.79	0.68	
4	0.51	0.65	0.51	0.51	0.76	0.86	1.39	1.00	0.93	0.86	0.79	0.68	
5	0.40	0.68	0.40	0.48	0.76	0.86	1.39	1.00	0.93	0.86	0.79	0.68	
6	0.40	0.58	0.51	0.44	1.32	1.14	1.35	1.00	0.93	0.86	0.79	0.68	
7	0.40	0.48	0.86	0.40	1.14	0.96	1.32	1.00	0.93	0.83	0.79	0.68	
8	0.37	0.40	1.00	0.40	0.96	0.90	1.28	0.96	0.93	0.83	0.79	0.68	
9	0.37	0.37	0.72	0.58	0.90	0.86	1.28	0.96	0.93	0.83	0.79	0.68	
10	0.34	0.44	0.68	0.51	1.45	0.86	1.28	0.96	0.93	0.83	0.76	0.68	
11	0.51	0.55	0.93	0.58	87.65	0.96	1.24	0.96	0.93	0.83	0.76	0.68	
12	0.40	0.62	0.86	0.68	2.42	1.00	1.24	0.96	0.93	0.83	0.76	0.68	
13	0.37	0.58	0.68	0.48	1.97	0.96	1.21	0.93	0.93	0.83	0.76	0.68	
14	0.37	0.72	0.68	0.40	1.63	0.96	1.17	0.93	0.90	0.86	0.76	0.68	
15	0.37	0.68	0.58	0.40	1.42	2.15	1.14	0.96	0.90	0.86	0.76	0.68	
16	0.40	0.79	0.62	0.40	1.24	1.79	1.14	0.93	0.90	0.86	0.72	0.68	
17	0.48	0.83	0.79	0.51	1.04	1.28	1.11	0.96	0.90	0.83	0.72	0.65	
18	0.51	0.83	0.68	0.40	0.79	3.23	1.07	0.93	0.90	0.83	0.72	0.65	
19	0.55	0.83	0.51	0.37	0.62	3.67	1.07	0.93	0.90	0.83	0.72	0.65	
20	0.40	0.76	0.37	0.37	0.48	3.85	1.07	0.93	0.90	0.79	0.72	0.62	
21	0.34	0.65	0.48	0.51	1.32	2.42	1.04	0.93	0.86	0.79	0.72	1.35	
22	0.30	0.51	0.76	3.67	1.14	9.80	1.04	0.93	0.86	0.79	0.72	0.83	
23	0.30	0.58	0.72	1.24	1.07	2.60	1.17	0.93	0.86	0.79	0.72	0.76	
24	0.34	0.65	1.39	0.90	1.07	3.32	1.49	0.93	0.86	0.79	0.72	0.76	
25	0.37	1.07	0.79	0.79	1.07	2.51	1.42	0.93	0.86	0.79	0.68	0.68	
26	0.48	0.72	0.72	0.76	1.04	2.60	1.24	0.93	0.86	0.79	0.68	0.65	
27	0.51	0.58	0.65	0.72	1.11	2.06	1.11	0.93	0.86	0.79	0.68	0.65	
28	0.58	0.76	0.62	0.72	1.39	1.63	1.07	0.93	0.86	0.79	0.68	0.65	
29	0.55	0.62	0.62	0.65	1.21	1.56	1.07	0.93	0.86	0.79		0.65	
30	0.44	0.51	0.58	0.58	1.14	1.49	1.04	0.93	0.86	0.79		0.65	
31		1.60		0.51	1.17		1.04		0.86	0.79		1.07	
Total	12.83	21.07	20.74	20.71	121.19	59.14	37.74	28.64	27.85	25.52	20.87	22.15	418.45 CMSDAY
Mean	0.43	0.68	0.69	0.67	3.91	1.97	1.22	0.95	0.90	0.82	0.75	0.71	1.15 CMS
Max	0.62	1.60	1.39	3.67	87.65	9.80	1.49	1.04	0.93	0.86	0.79	1.35	87.65 CMS
Min	0.30	0.37	0.37	0.37	0.48	0.86	1.04	0.93	0.86	0.79	0.68	0.62	0.30 CMS
Runoff	1.109	1.820	1.792	1.789	10.471	5.110	3.261	2.474	2.406	2.205	1.803	1.914	36.154 MCM

Momentary Peak 280.25 CMS, at 190.65 M (MSL), at 5.00 Hours, on Aug 11, 2001
Runoff Yield 17.11 Liters/Second/Square KM, Momentary Peak Yield 4182.836 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Pasak River at Ban Kaeng Sua Ten, Lop Buri (S.28)

Lat 14 - 50 - 21 N. **Long** 101 - 04 - 08 E.

Location on right bank about 100 meters from the bridge of Ban Kaeng Sua Ten Wang Mueang road.

Ban Kaeng Sua Ten **Amphoe** Phatthana Nikhom **Changwat** Lop Buri

Drainage Area 8,778 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +15.140 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 100 meters from the top staff gage.

Elevation +33.055 m. (M.S.L.)

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 Float -

Rated by Current Meter 1998 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

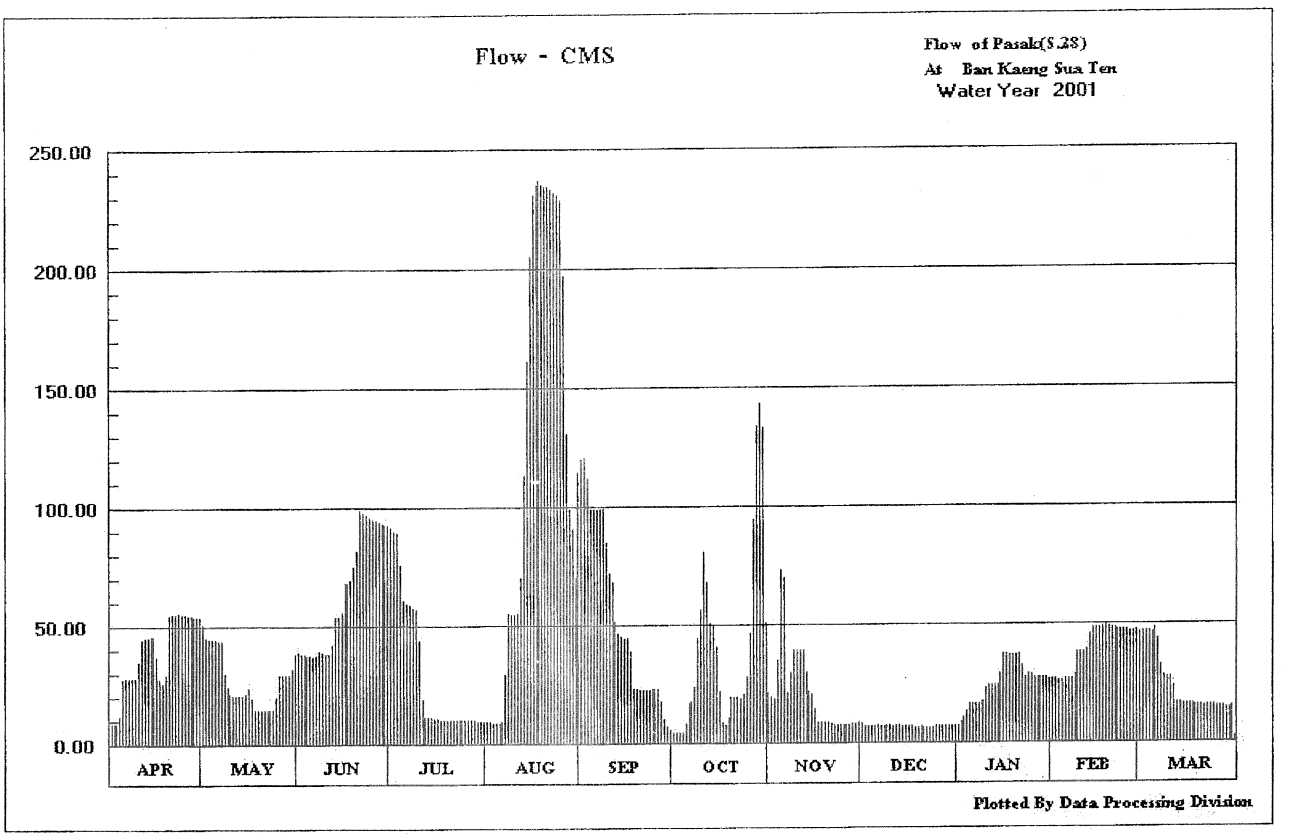
General Description Records fair. Flow effected by Pasak Cholasit Dam.

Stage-discharge relation defined by 63 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.66	18.38	17.98	19.62	16.69	20.36	16.47	17.28	16.65	16.58	17.52	18.23	
2	16.67	18.19	17.96	19.59	16.69	20.37	16.46	17.19	16.58	16.66	17.52	18.25	
3	16.67	18.17	17.96	19.56	16.68	20.15	16.45	17.15	16.58	16.77	17.51	18.26	
4	16.84	18.17	17.94	19.19	16.68	19.82	16.44	17.85	16.58	16.89	17.51	18.26	
5	17.56	18.16	17.93	18.70	16.68	19.82	16.63	19.12	16.58	17.03	17.52	18.23	
6	17.57	18.15	17.92	18.66	16.69	19.82	17.07	19.01	16.62	17.03	17.52	18.29	
7	17.57	18.15	17.93	18.64	17.61	19.83	17.09	17.29	16.59	17.04	17.52	18.15	
8	17.57	17.65	18.00	18.61	18.53	19.84	17.41	17.65	16.59	17.04	17.59	17.74	
9	17.58	17.42	17.98	18.58	18.49	19.44	18.18	18.00	16.60	17.11	17.96	17.57	
10	17.83	17.27	17.97	18.14	18.51	19.08	18.56	18.00	16.60	17.36	17.96	17.55	
11	18.18	17.26	17.97	17.16	18.52	18.95	19.33	18.01	16.59	17.44	17.96	17.55	
12	18.19	17.26	18.08	16.79	19.02	18.39	18.96	18.00	16.60	17.43	18.00	17.39	
13	18.20	17.25	18.48	16.79	20.19	18.23	18.38	17.65	16.61	17.43	18.22	17.07	
14	18.21	17.25	18.48	16.78	21.37	18.19	18.35	17.30	16.58	17.44	18.29	17.06	
15	18.22	17.29	18.55	16.76	22.35	18.17	18.05	17.25	16.57	17.63	18.30	17.04	
16	17.92	17.39	18.95	16.75	22.92	18.18	17.32	16.94	16.57	17.93	18.30	17.04	
17	17.55	17.18	18.95	16.74	23.02	17.99	16.66	16.66	16.57	17.93	18.32	17.03	
18	17.47	16.96	18.99	16.73	23.06	17.36	16.62	16.66	16.56	17.92	18.33	17.03	
19	17.61	16.95	19.16	16.72	23.02	17.36	16.75	16.67	16.56	17.92	18.32	17.01	
20	18.50	16.95	19.36	16.72	23.01	17.34	17.18	16.66	16.57	17.92	18.30	17.00	
21	18.52	16.95	19.82	16.72	23.00	17.34	17.19	16.64	16.55	17.93	18.30	17.00	
22	18.52	16.95	19.80	16.72	22.98	17.34	17.18	16.62	16.54	17.75	18.28	16.99	
23	18.54	16.96	19.78	16.72	22.95	17.35	17.16	16.62	16.54	17.55	18.27	17.00	
24	18.53	16.96	19.75	16.73	22.92	17.36	17.24	16.62	16.55	17.62	18.27	17.00	
25	18.52	17.23	19.72	16.73	22.88	17.36	17.58	16.62	16.58	17.59	18.28	17.00	
26	18.51	17.62	19.71	16.73	22.17	17.36	18.23	16.62	16.58	17.56	18.26	16.99	
27	18.50	17.62	19.69	16.72	20.62	17.09	19.70	16.62	16.58	17.55	18.26	16.99	
28	18.48	17.62	19.68	16.72	19.82	16.72	20.70	16.65	16.58	17.54	18.27	16.97	
29	18.48	17.61	19.66	16.71	19.60	16.57	20.92	16.65	16.58	17.54		16.95	
30	18.48	17.71	19.65	16.70	19.02	16.52	20.68	16.66	16.58	17.54		16.95	
31		17.97		16.70	20.21		18.37		16.58	17.53		16.97	
Mean	17.92	17.50	18.79	17.46	20.19	18.32	17.85	17.22	16.58	17.43	18.02	17.37	
Max	18.54	18.38	19.82	19.62	23.06	20.37	20.92	19.12	16.65	17.93	18.33	18.29	23.06
Min	16.66	16.95	17.92	16.70	16.68	16.52	16.44	16.62	16.54	16.58	17.51	16.95	16.44

Annual Max Momentary Gage Height 20.99 M (MSL), at 7.00 Hours, on Oct 29, 2001
Zero Gage at Bottom Elevation 15.14 M (MSL), River Bed 14.58 M (MSL)
Left Bank Elevation 32.98 M (MSL)
Right Bank Elevation 33.06 M (MSL), Drainage Area 8778 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.4	51.6	39.5	92.1	10.0	121.1	5.5	22.0	9.2	7.7	27.6	47.0	
2	9.6	45.8	39.0	91.0	10.0	121.5	5.3	20.2	7.7	9.4	27.6	47.6	
3	9.6	45.2	39.0	89.9	9.8	112.6	5.1	19.4	7.7	11.6	27.3	47.9	
4	13.0	45.2	38.5	76.7	9.8	99.3	4.9	36.1	7.7	14.1	27.3	47.9	
5	28.6	44.9	38.2	61.3	9.8	99.3	8.7	74.2	7.7	16.9	27.6	47.0	
6	28.9	44.6	37.9	60.1	10.0	99.3	17.8	70.8	8.5	16.9	27.6	48.8	
7	28.9	44.6	38.2	59.5	29.9	99.7	18.2	22.3	7.9	17.1	27.6	44.6	
8	28.9	31.0	40.0	58.6	56.1	100.1	24.8	31.0	7.9	17.1	29.4	33.3	
9	29.2	25.0	39.5	57.7	54.9	85.6	45.5	40.0	8.1	18.6	39.0	28.9	
10	35.6	21.8	39.2	44.3	55.5	72.9	57.1	40.0	8.1	23.7	39.0	28.4	
11	45.5	21.6	39.2	19.6	55.8	68.9	81.7	40.3	7.9	25.5	39.0	28.4	
12	45.8	21.6	42.4	12.0	71.1	51.9	69.2	40.0	8.1	25.3	40.0	24.3	
13	46.1	21.4	54.6	12.0	114.2	47.0	51.6	31.0	8.3	25.3	46.7	17.8	
14	46.4	21.4	54.6	11.8	161.8	45.8	50.7	22.5	7.7	25.5	48.8	17.5	
15	46.7	22.3	56.7	11.4	205.8	45.2	41.5	21.4	7.5	30.4	49.1	17.1	
16	37.9	24.3	68.9	11.2	231.4	45.5	22.9	15.1	7.5	38.2	49.1	17.1	
17	28.4	20.0	68.9	11.0	235.9	39.7	9.4	9.4	7.5	38.2	49.7	16.9	
18	26.3	15.5	70.1	10.8	237.7	23.7	8.5	9.4	7.3	37.9	50.0	16.9	
19	29.9	15.3	75.6	10.6	235.9	23.7	11.2	9.6	7.3	37.9	49.7	16.5	
20	55.2	15.3	82.8	10.6	235.4	23.3	20.0	9.4	7.5	37.9	49.1	16.3	
21	55.8	15.3	99.3	10.6	235.0	23.3	20.2	9.0	7.1	38.2	49.1	16.3	
22	55.8	15.3	98.5	10.6	234.1	23.3	20.0	8.5	6.9	33.5	48.5	16.1	
23	56.4	15.5	97.8	10.6	232.8	23.5	19.6	8.5	6.9	28.4	48.2	16.3	
24	56.1	15.5	96.7	10.8	231.4	23.7	21.2	8.5	7.1	30.2	48.2	16.3	
25	55.8	21.0	95.6	10.8	229.6	23.7	29.2	8.5	7.7	29.4	48.5	16.3	
26	55.5	30.2	95.3	10.8	197.7	23.7	47.0	8.5	7.7	28.6	47.9	16.1	
27	55.2	30.2	94.6	10.6	131.6	18.2	94.9	8.5	7.7	28.4	47.9	16.1	
28	54.6	30.2	94.2	10.6	99.3	10.6	134.8	9.2	7.7	28.1	48.2	15.7	
29	54.6	29.9	93.5	10.4	91.4	7.5	143.7	9.2	7.7	28.1		15.3	
30	54.6	32.5	93.1	10.2	71.1	6.5	134.0	9.4	7.7	28.1		15.3	
31		39.2		10.2	115.0		51.3		7.7	27.9		15.7	
Total	1184.3	873.2	1961.4	928.4	3909.8	1610.1	1275.5	671.9	239.0	804.1	1157.7	785.7	15401.1 CMSDAY
Mean	39.5	28.2	65.4	29.9	126.1	53.7	41.1	22.4	7.7	25.9	41.3	25.3	42.2 CMS
Max	56.4	51.6	99.3	92.1	237.7	121.5	143.7	74.2	9.2	38.2	50.0	48.8	237.7 CMS
Min	9.4	15.3	37.9	10.2	9.8	6.5	4.9	8.5	6.9	7.7	27.3	15.3	4.9 CMS
Runoff	102.32	75.44	169.46	80.21	337.81	139.11	110.20	58.05	20.65	69.47	100.03	67.88	1330.66 MCM

Momentary Peak 146.47 CMS, at 20.99 M (MSL), at 7.00 Hours, on Oct 29, 2001

Runoff Yield 4.81 Liters/Second/Square KM, Momentary Peak Yield 16.686 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Pasak River at Ban Tha Hai Yong, Phetchabun (S.33)

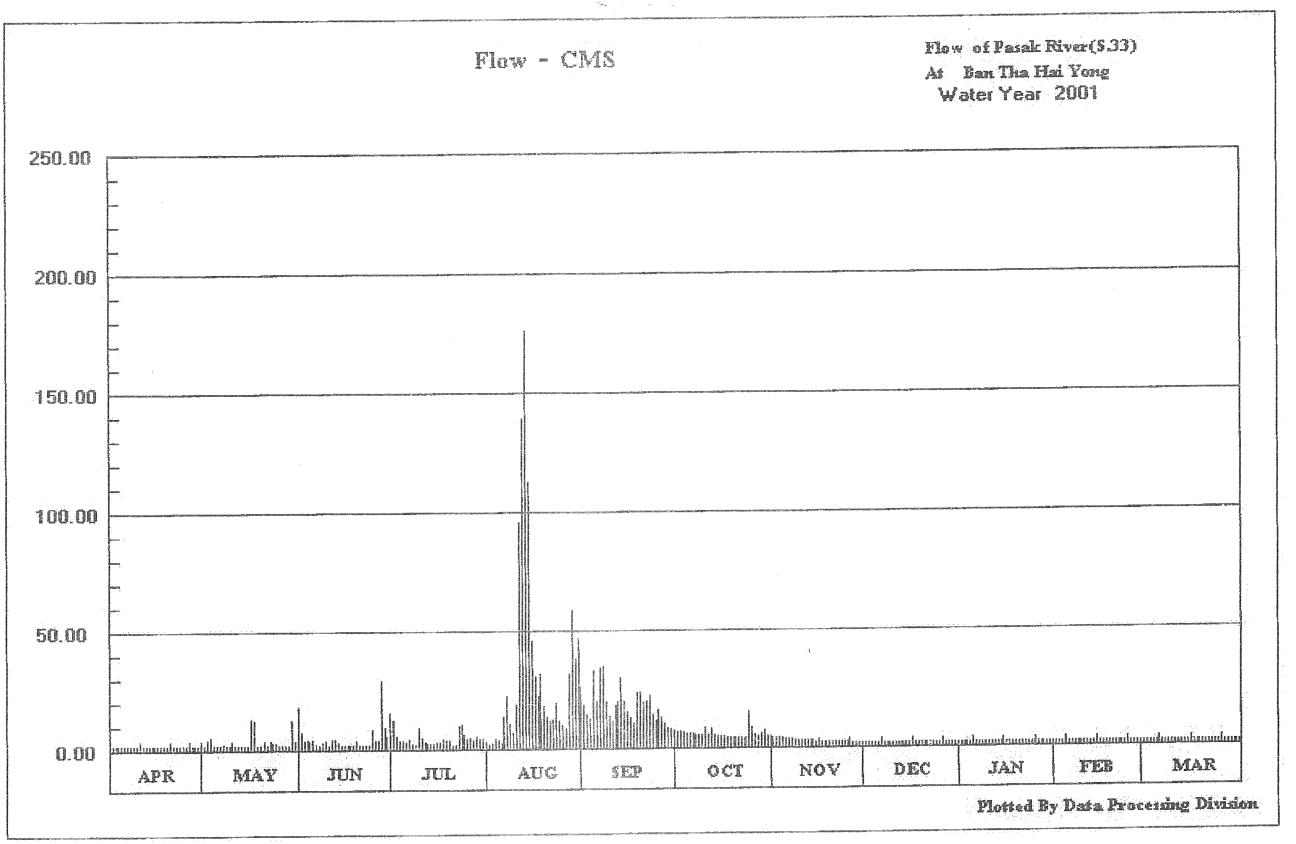
Lat 17 - 00 - 10 N. **Long** 101 - 21 - 23 E.

Location		on left bank at Ban Tha Hai Yong.			
	Ban Tha Hi Yong	**Amphoe** Lom Kao		**Changwat**	Phetchabun
Drainage Area		516 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+190.090 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	-			
	Elevation	+198.009 m. (M.S.L.)			
Gage Reading Frequency		13-time daily readings at 03.00, 06.00 - 15.00, 18.00 and 24.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 13 readings.			
Period of Available Gage Records		1999 to date.			
Rating Operation					
	Period of Rating	1999 to date.			
	Rated by Float	-			
	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 97 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.53	190.50	190.87	191.06	190.62	191.28	190.86	190.73	190.62	190.57	190.54	190.51	
2	190.54	190.73	190.69	190.79	190.63	191.13	190.84	190.72	190.62	190.57	190.54	190.50	
3	190.52	190.80	190.72	190.71	190.75	191.06	190.84	190.72	190.61	190.57	190.54	190.50	
4	190.51	190.61	190.70	190.69	190.69	191.81	190.83	190.72	190.61	190.57	190.54	190.50	
5	190.51	190.57	190.74	190.67	190.65	191.34	190.83	190.71	190.61	190.57	190.54	190.50	
6	190.50	190.56	190.64	190.75	191.11	191.87	190.82	190.70	190.61	190.57	190.54	190.50	
7	190.50	190.63	190.60	190.65	191.43	191.88	190.81	190.69	190.61	190.57	190.54	190.54	
8	190.49	190.53	190.66	190.62	191.00	191.34	190.80	190.68	190.61	190.56	190.54	190.52	
9	190.49	190.50	190.59	190.94	190.85	191.12	190.81	190.68	190.61	190.56	190.53	190.51	
10	190.49	190.50	190.57	190.77	191.30	191.04	190.92	190.68	190.61	190.56	190.52	190.50	
11	190.48	190.54	190.72	190.68	193.98	191.28	190.80	190.67	190.60	190.56	190.52	190.50	
12	190.48	190.55	190.74	190.65	195.25	191.35	190.91	190.66	190.60	190.56	190.52	190.50	
13	190.48	190.54	190.66	190.63	195.95	191.71	190.79	190.66	190.60	190.55	190.52	190.50	
14	190.47	190.56	190.62	190.63	194.52	191.35	190.77	190.66	190.60	190.60	190.52	190.49	
15	190.47	190.57	190.60	190.67	192.27	191.17	190.76	190.65	190.60	190.60	190.52	190.49	
16	190.47	191.09	190.61	190.68	191.73	191.08	190.76	190.65	190.60	190.57	190.52	190.49	
17	190.50	191.07	190.61	190.74	191.42	191.01	190.75	190.65	190.60	190.56	190.52	190.49	
18	190.49	190.62	190.62	190.69	191.78	191.47	190.75	190.65	190.60	190.56	190.51	190.49	
19	190.51	190.60	190.57	190.65	191.27	191.48	190.74	190.64	190.59	190.56	190.51	190.49	
20	190.48	190.63	190.55	190.62	191.12	191.32	190.74	190.64	190.59	190.55	190.51	190.48	
21	190.47	190.60	190.54	190.62	191.05	191.33	190.73	190.64	190.58	190.55	190.51	190.48	
22	190.46	190.69	190.53	190.98	191.06	191.43	190.73	190.63	190.58	190.55	190.51	190.48	
23	190.46	190.66	190.52	191.01	191.31	191.13	190.73	190.63	190.58	190.55	190.51	190.48	
24	190.46	190.66	190.92	190.82	191.04	191.05	191.18	190.63	190.58	190.54	190.51	190.48	
25	190.49	190.59	190.69	190.75	190.97	191.20	190.92	190.63	190.58	190.54	190.51	190.48	
26	190.71	190.56	190.69	190.76	190.93	191.09	190.79	190.63	190.57	190.54	190.51	190.48	
27	190.54	190.55	191.67	190.69	191.78	191.00	190.77	190.62	190.57	190.54	190.51	190.48	
28	190.50	190.54	190.96	190.80	192.75	190.93	190.83	190.62	190.57	190.54	190.51	190.47	
29	190.48	191.06	190.79	190.73	191.99	190.90	190.88	190.62	190.57	190.54		190.47	
30	190.47	190.69	191.19	190.73	192.32	190.88	190.78	190.62	190.57	190.54		190.47	
31		191.28		190.66	191.57		190.78		190.57	190.54		190.47	
Mean	190.50	190.66	190.72	190.74	191.78	191.27	190.81	190.66	190.59	190.56	190.52	190.49	
Max	190.71	191.28	191.67	191.06	195.95	191.88	191.18	190.73	190.62	190.60	190.54	190.54	195.95
Min	190.46	190.50	190.52	190.62	190.62	190.88	190.73	190.62	190.57	190.54	190.51	190.47	190.46

Annual Max Momentary Gage Height 197.64 M (MSL), at 3.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 190.09 M (MSL), River Bed 190.01 M (MSL)
Left Bank Elevation 198.90 M (MSL)
Right Bank Elevation 198.93 M (MSL), Drainage Area 516 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.80	1.50	8.25	13.15	2.90	19.20	8.00	5.10	2.90	2.20	1.90	1.60	
2	1.90	5.10	4.30	6.30	3.10	15.08	7.50	4.90	2.90	2.20	1.90	1.50	
3	1.70	6.50	4.90	4.70	5.50	13.15	7.50	4.90	2.70	2.20	1.90	1.50	
4	1.60	2.70	4.50	4.30	4.30	33.77	7.25	4.90	2.70	2.20	1.90	1.50	
5	1.60	2.20	5.30	3.90	3.50	20.85	7.25	4.70	2.70	2.20	1.90	1.50	
6	1.50	2.10	3.30	5.50	14.53	35.42	7.00	4.50	2.70	2.20	1.90	1.50	
7	1.50	3.10	2.50	3.50	23.32	35.70	6.75	4.30	2.70	2.20	1.90	1.90	
8	1.40	1.80	3.70	2.90	11.50	20.85	6.50	4.10	2.70	2.10	1.90	1.70	
9	1.40	1.50	2.40	10.00	7.75	14.80	6.75	4.10	2.70	2.10	1.80	1.60	
10	1.40	1.50	2.20	5.90	19.75	12.60	9.50	4.10	2.70	2.10	1.70	1.50	
11	1.30	1.90	4.90	4.10	96.40	19.20	6.50	3.90	2.50	2.10	1.70	1.50	
12	1.30	2.00	5.30	3.50	140.25	21.13	9.25	3.70	2.50	2.10	1.70	1.50	
13	1.30	1.90	3.70	3.10	177.00	31.03	6.30	3.70	2.50	2.00	1.70	1.50	
14	1.20	2.10	2.90	3.10	113.40	21.13	5.90	3.70	2.50	2.50	1.70	1.40	
15	1.20	2.20	2.50	3.90	46.43	16.17	5.70	3.50	2.50	2.50	1.70	1.40	
16	1.20	13.97	2.70	4.10	31.57	13.70	5.70	3.50	2.50	2.20	1.70	1.40	
17	1.50	13.43	2.70	5.30	23.05	11.77	5.50	3.50	2.50	2.10	1.70	1.40	
18	1.40	2.90	2.90	4.30	32.95	24.43	5.50	3.50	2.50	2.10	1.60	1.40	
19	1.60	2.50	2.20	3.50	18.93	24.70	5.30	3.30	2.40	2.10	1.60	1.40	
20	1.30	3.10	2.00	2.90	14.80	20.30	5.30	3.30	2.40	2.00	1.60	1.30	
21	1.20	2.50	1.90	2.90	12.88	20.58	5.10	3.30	2.30	2.00	1.60	1.30	
22	1.10	4.30	1.80	11.00	13.15	23.32	5.10	3.10	2.30	2.00	1.60	1.30	
23	1.10	3.70	1.70	11.77	20.02	15.08	5.10	3.10	2.30	2.00	1.60	1.30	
24	1.10	3.70	9.50	7.00	12.60	12.88	16.45	3.10	2.30	1.90	1.60	1.30	
25	1.40	2.40	4.30	5.50	10.75	17.00	9.50	3.10	2.30	1.90	1.60	1.30	
26	4.70	2.10	4.30	5.70	9.75	13.97	6.30	3.10	2.20	1.90	1.60	1.30	
27	1.90	2.00	29.92	4.30	32.95	11.50	5.90	2.90	2.20	1.90	1.60	1.30	
28	1.50	1.90	10.50	6.50	59.62	9.75	7.25	2.90	2.20	1.90	1.60	1.20	
29	1.30	13.15	6.30	5.10	38.73	9.00	8.50	2.90	2.20	1.90		1.20	
30	1.20	4.30	16.73	5.10	47.80	8.50	6.10	2.90	2.20	1.90		1.20	
31		19.20		3.70	27.18		6.10		2.20	1.90		1.20	
Total	45.60	133.25	160.10	166.52	1076.36	566.56	216.35	111.60	76.90	64.60	48.20	43.90	2709.94 CMSDAY
Mean	1.52	4.30	5.34	5.37	34.72	18.89	6.98	3.72	2.48	2.08	1.72	1.42	7.42 CMS
Max	4.70	19.20	29.92	13.15	177.00	35.70	16.45	5.10	2.90	2.50	1.90	1.90	177.00 CMS
Min	1.10	1.50	1.70	2.90	2.90	8.50	5.10	2.90	2.20	1.90	1.60	1.20	1.10 CMS
Runoff	3.940	11.513	13.833	14.387	92.998	48.951	18.693	9.642	6.644	5.581	4.164	3.793	234.139 MCM

Momentary Peak 327.20 CMS, at 197.64 M (MSL), at 3.00 Hours, on Aug 12, 2001

Runoff Yield 14.39 Liters/Second/Square KM, Momentary Peak Yield 634.109 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 6,478 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +65.300 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 50 meters from the gage observer's house.

Elevation +75.857 m. (M.S.L.)

Gage Reading Frequency 13-time daily readings at 03.00, 06.00 - 15.00, 18.00 and 24.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 13 readings.

Period of Available Gage Records 1999 to date.

Rating Operation

Period of Rating 1999 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable.

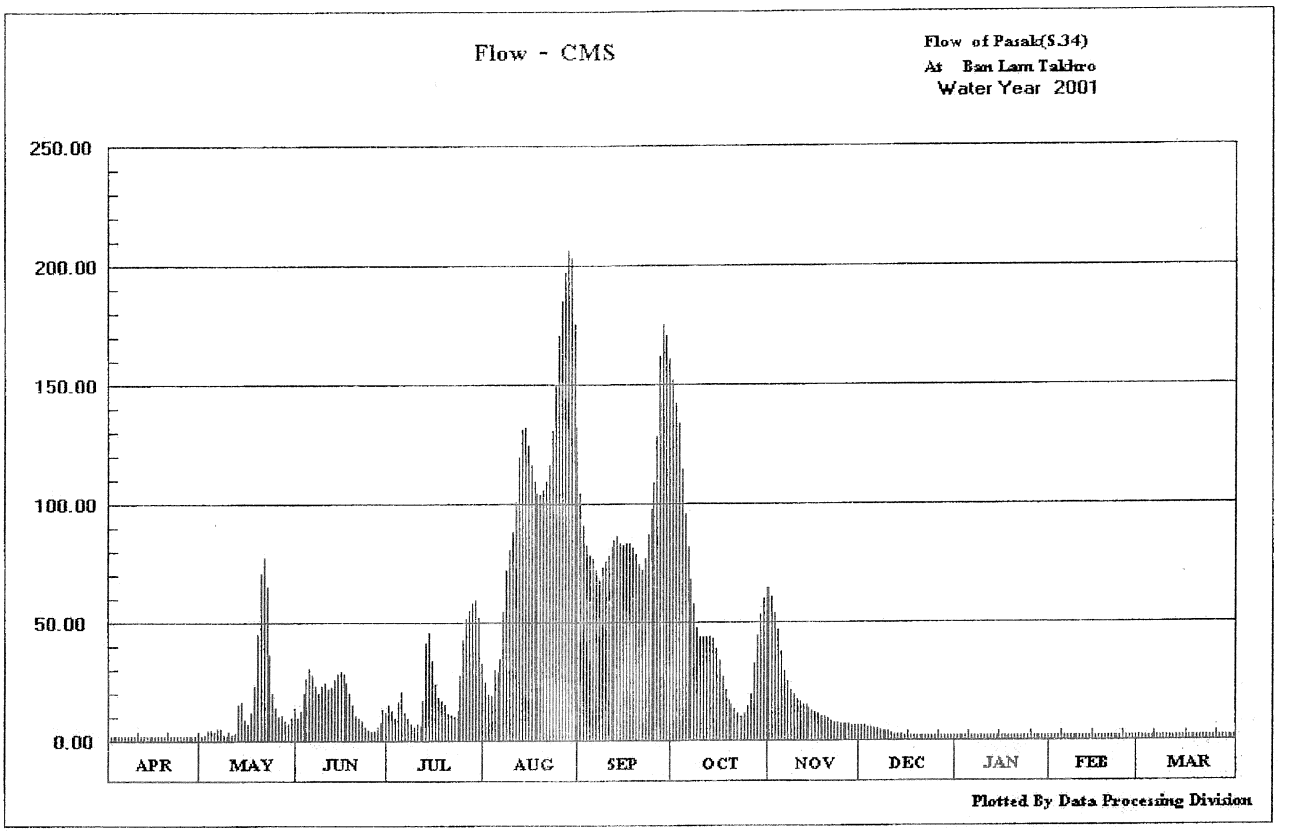
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 22 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	68.01	67.90	68.90	69.24	69.88	73.90	74.92	72.11	68.60	65.92	66.01	65.86	
2	68.03	68.17	69.07	69.07	69.56	73.39	74.78	71.92	68.61	65.59	66.01	65.86	
3	68.03	68.41	69.59	68.86	69.50	73.03	74.61	71.59	68.57	65.72	66.01	65.86	
4	68.03	68.42	70.02	69.34	70.25	72.81	74.20	71.22	68.55	65.76	66.01	65.86	
5	67.95	68.33	70.30	69.62	70.18	72.72	73.57	70.75	68.49	65.76	66.02	65.86	
6	67.89	68.46	70.08	69.06	70.55	72.48	72.98	70.23	68.48	65.76	66.02	65.86	
7	67.82	68.49	69.78	68.88	71.61	72.33	72.29	69.94	68.45	65.76	66.02	65.86	
8	67.78	68.19	69.60	68.66	72.47	72.55	71.76	69.69	68.37	65.84	66.02	65.86	
9	67.72	68.11	69.81	68.52	72.91	72.68	71.28	69.54	68.36	65.85	66.02	65.86	
10	67.68	68.15	69.90	68.68	73.29	72.80	71.09	69.43	68.33	65.86	66.02	65.87	
11	67.63	68.17	69.73	68.63	73.79	72.98	71.07	69.35	68.27	65.87	66.02	65.87	
12	67.60	68.30	69.75	69.38	74.31	73.11	71.07	69.27	68.23	65.88	66.02	65.87	
13	67.54	69.27	69.98	70.94	74.56	73.21	71.09	69.26	68.20	65.89	66.02	65.87	
14	67.50	69.32	70.14	71.18	74.57	73.04	71.04	69.18	68.17	65.91	65.84	65.87	
15	67.49	68.84	70.22	70.50	74.42	73.01	70.81	69.10	68.07	65.91	65.85	65.87	
16	67.48	68.67	70.14	69.84	74.25	73.05	70.49	69.05	68.03	65.92	65.85	65.87	
17	67.46	69.06	69.86	69.46	74.06	73.04	70.03	68.99	67.98	65.97	65.85	65.87	
18	67.48	69.78	69.59	69.37	73.91	72.96	69.67	68.94	67.97	66.04	65.85	65.86	
19	67.60	71.14	69.24	69.25	73.88	72.82	69.36	68.91	67.91	66.01	65.85	65.86	
20	67.70	72.41	68.98	69.01	73.94	72.60	69.27	68.86	67.82	65.99	65.85	65.86	
21	67.76	72.77	68.89	68.97	74.06	72.49	69.15	68.81	67.73	65.99	65.85	65.86	
22	67.74	72.15	68.81	68.91	74.24	72.74	68.99	68.74	67.62	65.97	65.85	65.86	
23	67.68	70.66	68.56	69.09	74.55	73.22	68.91	68.71	67.47	66.00	65.85	65.86	
24	67.59	69.60	68.42	70.09	74.90	73.65	68.99	68.69	67.36	66.00	65.85	65.87	
25	67.48	69.17	68.33	71.01	75.17	74.04	69.23	68.69	67.28	66.00	65.85	65.87	
26	67.42	68.94	68.35	71.44	75.33	74.50	69.54	68.67	67.20	66.00	65.86	65.87	
27	67.53	68.96	68.55	71.65	75.46	75.06	70.43	68.64	67.08	66.00	65.86	65.87	
28	67.74	68.79	68.75	71.81	75.55	75.22	71.10	68.60	66.95	66.01	65.86	65.86	
29	67.87	68.70	69.11	71.85	75.52	75.17	71.55	68.61	66.79	66.01		65.86	
30	67.89	68.89	69.06	71.50	75.23	75.04	71.89	68.62	66.59	66.01		65.87	
31		69.17		70.41	74.57		72.11		66.24	66.01		65.87	
Mean	67.70	69.21	69.38	69.81	73.43	73.32	71.20	69.47	67.86	65.91	65.93	65.86	
Max	68.03	72.77	70.30	71.85	75.55	75.22	74.92	72.11	68.61	66.04	66.02	65.87	75.55
Min	67.42	67.90	68.33	68.52	69.50	72.33	68.91	68.60	66.24	65.59	65.84	65.86	65.59

Annual Max Momentary Gage Height 75.57 M (MSL), at 24.00 Hours, on Aug 28, 2001
Zero Gage at Bottom Elevation 65.30 M (MSL), River Bed 64.19 M (MSL)
Left Bank Elevation 78.72 M (MSL)
Right Bank Elevation 78.82 M (MSL), Drainage Area 6478 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.06	1.40	10.50	15.60	25.20	105.00	152.40	65.20	7.00	0.00	0.00	0.00	
2	2.19	3.09	13.05	13.05	20.40	91.75	143.00	61.40	7.10	0.00	0.00	0.00	
3	2.19	5.10	20.85	9.90	19.50	83.60	134.50	54.80	6.70	0.00	0.00	0.00	
4	2.19	5.20	27.30	17.10	30.75	79.20	115.00	47.40	6.50	0.00	0.00	0.00	
5	1.70	4.40	31.50	21.30	29.70	77.40	96.25	38.63	5.90	0.00	0.00	0.00	
6	1.34	5.60	28.20	12.90	35.25	72.60	82.60	30.45	5.80	0.00	0.00	0.00	
7	0.92	5.90	23.70	10.20	55.20	69.60	68.80	26.10	5.50	0.00	0.00	0.00	
8	0.75	3.22	21.00	7.60	72.40	74.00	58.20	22.35	4.74	0.00	0.00	0.00	
9	0.60	2.70	24.15	6.20	81.20	76.60	48.60	20.10	4.66	0.00	0.00	0.00	
10	0.50	2.96	25.50	7.80	89.25	79.00	44.80	18.45	4.40	0.00	0.00	0.00	
11	0.37	3.09	22.95	7.30	101.75	82.60	44.40	17.25	3.88	0.00	0.00	0.00	
12	0.30	4.14	23.25	17.70	119.95	85.20	44.40	16.05	3.54	0.00	0.00	0.00	
13	0.24	16.05	26.70	41.95	132.00	87.25	44.80	15.90	3.28	0.00	0.00	0.00	
14	0.20	16.80	29.10	46.60	132.50	83.80	43.80	14.70	3.09	0.00	0.00	0.00	
15	0.19	9.60	30.30	34.50	125.00	83.20	39.67	13.50	2.45	0.00	0.00	0.00	
16	0.18	7.70	29.10	24.60	117.25	84.00	34.35	12.75	2.19	0.00	0.00	0.00	
17	0.16	12.90	24.90	18.90	110.10	83.80	27.45	11.85	1.88	0.00	0.00	0.00	
18	0.18	23.70	20.85	17.55	105.30	82.20	22.05	11.10	1.82	0.00	0.00	0.00	
19	0.30	45.80	15.60	15.75	104.40	79.40	17.40	10.65	1.46	0.00	0.00	0.00	
20	0.55	71.20	11.70	12.15	106.20	75.00	16.05	9.90	0.92	0.00	0.00	0.00	
21	0.70	78.40	10.35	11.55	110.10	72.80	14.25	9.15	0.63	0.00	0.00	0.00	
22	0.65	66.00	9.15	10.65	116.80	77.80	11.85	8.40	0.35	0.00	0.00	0.00	
23	0.50	37.05	6.60	13.35	131.50	87.50	10.65	8.10	0.17	0.00	0.00	0.00	
24	0.29	21.00	5.20	28.35	151.00	98.25	11.85	7.90	0.06	0.00	0.00	0.00	
25	0.18	14.55	4.40	43.20	171.60	109.40	15.45	7.90	0.00	0.00	0.00	0.00	
26	0.12	11.10	4.57	51.80	185.70	129.00	20.10	7.70	0.00	0.00	0.00	0.00	
27	0.23	11.40	6.50	56.00	198.00	162.80	33.45	7.40	0.00	0.00	0.00	0.00	
28	0.65	8.90	8.50	59.20	207.00	175.80	45.00	7.00	0.00	0.00	0.00	0.00	
29	1.22	8.00	13.65	60.00	204.00	171.60	54.00	7.10	0.00	0.00		0.00	
30	1.34	10.35	12.90	53.00	176.70	161.20	60.80	7.20	0.00	0.00		0.00	
31		14.55		33.15	132.50		65.20		0.00	0.00		0.00	
Total	22.99	531.85	542.02	778.90	3398.20	2881.35	1621.12	596.38	84.02	0.00	0.00	0.00	10456.83 CMSDAY
Mean	0.77	17.16	18.07	25.13	109.62	96.05	52.29	19.88	2.71	0.00	0.00	0.00	28.65 CMS
Max	2.19	78.40	31.50	60.00	207.00	175.80	152.40	65.20	7.10	0.00	0.00	0.00	207.00 CMS
Min	0.12	1.40	4.40	6.20	19.50	69.60	10.65	7.00	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	1.986	45.952	46.831	67.297	293.604	248.949	140.065	51.527	7.259	0.000	0.000	0.000	903.470 MCM

Momentary Peak 209.00 CMS, at 75.57 M (MSL), at 24.00 Hours, on Aug 28, 2001

Runoff Yield 4.42 Liters/Second/Square KM, Momentary Peak Yield 32.263 Liters/Second/Square KM

WATER YEAR : 2001

PASAK RIVER BASIN

Pasak River at Ban Non Thong, Phetchabun (S.36)

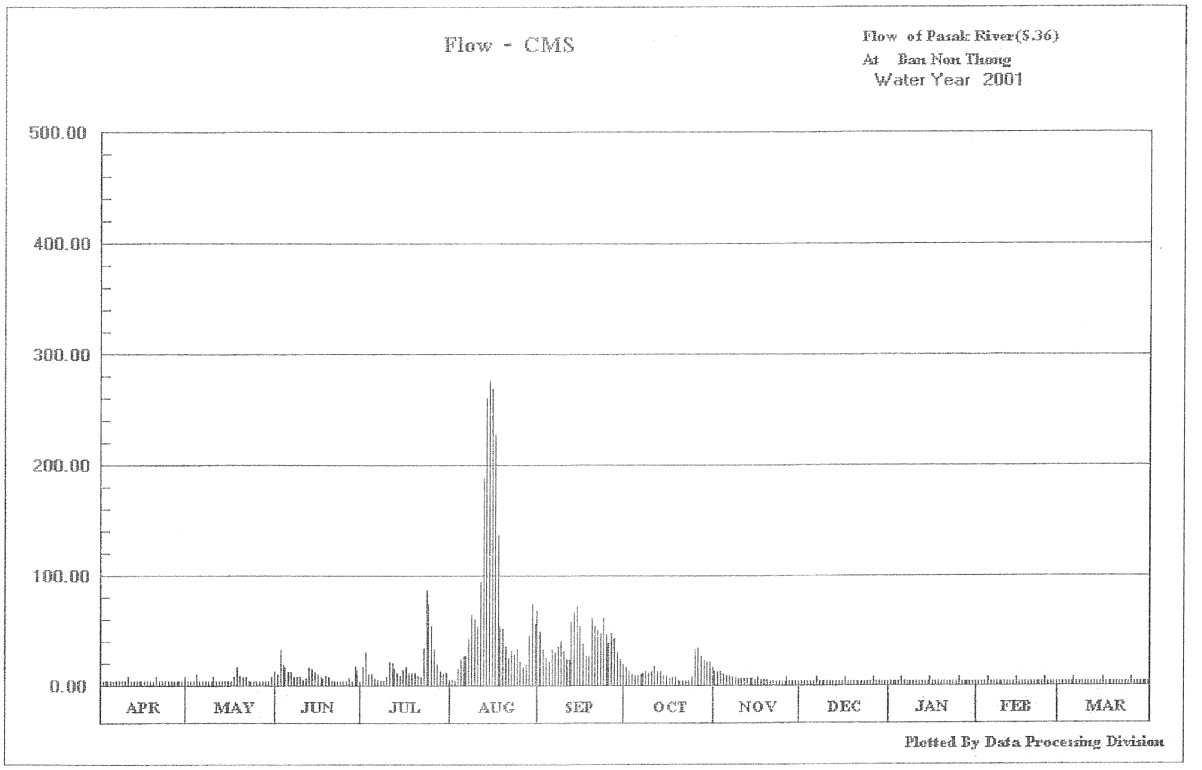
Lat 16 - 43 - 42 N. **Long** 101 - 14 - 32 E.

Location		on left bank near the bridge of Ban Non Thong.
	Ban Non Thong	**Amphoe** Lom Sak **Changwat** Phetchabun
Drainage Area		2,511 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+130.950 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	-
	Elevation	+143.140 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		1999 to date.
Rating Operation		
	Period of Rating	1999 to date.
	Rated by Float	-
	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 33 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	134.45	134.28	135.06	135.30	134.82	136.35	135.27	135.17	134.72	134.55	134.20	134.15	
2	134.45	134.26	135.84	135.76	134.79	135.86	135.13	135.14	134.72	134.53	134.34	134.13	
3	134.43	134.27	135.37	135.05	135.22	135.59	135.05	135.14	134.72	134.50	134.37	134.10	
4	134.40	135.03	135.27	135.05	135.55	135.47	135.00	135.06	134.72	134.45	134.44	134.10	
5	134.38	134.76	135.13	134.89	135.66	135.86	134.99	135.02	134.71	134.42	134.43	134.10	
6	134.39	134.68	135.13	134.81	135.63	135.78	135.04	134.97	134.71	134.41	134.48	134.09	
7	134.40	134.62	134.92	134.76	136.17	135.92	135.12	134.94	134.70	134.37	134.49	134.08	
8	134.41	134.69	134.95	134.75	136.75	136.09	135.17	134.93	134.70	134.35	134.50	134.07	
9	134.40	134.68	134.94	134.90	136.64	135.80	135.09	134.88	134.70	134.32	134.50	134.06	
10	134.37	134.56	134.81	135.45	136.49	135.54	135.15	134.90	134.72	134.30	134.46	134.06	
11	134.33	134.54	134.89	135.44	137.45	135.55	135.32	134.90	134.70	134.28	134.39	134.05	
12	134.32	134.59	135.29	135.22	139.21	136.58	135.17	134.86	134.69	134.26	134.40	134.06	
13	134.28	134.60	135.26	135.10	140.01	136.80	135.14	134.86	134.67	134.23	134.38	134.09	
14	134.25	134.62	135.17	134.98	140.15	136.91	135.02	134.86	134.66	134.22	134.42	134.15	
15	134.23	134.63	135.03	135.18	140.08	136.49	134.97	134.84	134.65	134.23	134.39	134.18	
16	134.20	134.66	134.92	135.29	139.68	136.00	134.90	134.84	134.65	134.32	134.40	134.21	
17	134.18	134.92	134.89	135.08	138.33	135.63	134.95	134.83	134.64	134.51	134.42	134.22	
18	134.16	135.29	134.98	135.10	136.49	135.64	134.95	134.81	134.62	134.56	134.38	134.20	
19	134.15	134.98	134.92	135.12	136.41	136.66	134.81	134.81	134.62	134.58	134.32	134.20	
20	134.12	134.88	134.68	134.98	135.93	136.47	134.79	134.80	134.62	134.55	134.29	134.19	
21	134.09	134.95	134.58	134.92	135.60	136.38	134.78	134.78	134.61	134.52	134.25	134.17	
22	134.07	134.80	134.52	135.89	135.80	136.29	134.79	134.78	134.60	134.48	134.25	134.13	
23	134.04	134.80	134.47	137.27	135.68	136.67	134.75	134.78	134.60	134.42	134.24	134.12	
24	134.02	134.77	134.52	136.98	135.86	136.26	134.96	134.76	134.58	134.38	134.22	134.10	
25	133.99	134.76	134.80	136.47	135.45	136.05	135.85	134.76	134.57	134.34	134.22	134.10	
26	133.97	134.77	134.90	135.87	135.31	136.30	135.90	134.76	134.57	134.29	134.21	134.09	
27	133.97	134.68	134.71	135.39	135.36	136.15	135.65	134.76	134.55	134.26	134.18	134.07	
28	134.06	134.68	135.34	135.13	136.25	135.79	135.52	134.76	134.55	134.23	134.18	134.07	
29	134.22	134.63	135.20	135.04	136.98	135.54	135.49	134.75	134.54	134.23		134.07	
30	134.29	134.86	134.78	135.09	136.54	135.39	135.46	134.75	134.53	134.20		134.06	
31		135.13		134.85	136.82		135.28		134.52	134.18		134.06	
Mean	134.23	134.72	134.98	135.33	136.68	136.06	135.14	134.87	134.64	134.37	134.35	134.11	
Max	134.45	135.29	135.84	137.27	140.15	136.91	135.90	135.17	134.72	134.58	134.50	134.22	140.15
Min	133.97	134.26	134.47	134.75	134.79	135.39	134.75	134.75	134.52	134.18	134.18	134.05	133.97

Annual Max Momentary Gage Height 140.16 M (MSL), at 6.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 130.95 M (MSL), River Bed 130.89 M (MSL)
Left Bank Elevation 143.22 M (MSL)
Right Bank Elevation 143.16 M (MSL), Drainage Area 2511 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.73	0.88	12.00	18.25	6.45	50.75	17.43	14.75	4.80	2.58	0.60	0.45	
2	1.73	0.81	33.80	31.30	5.85	34.45	13.75	14.00	4.80	2.40	1.09	0.39	
3	1.55	0.85	20.17	11.75	16.05	26.22	11.75	14.00	4.80	2.15	1.20	0.30	
4	1.30	11.25	17.43	11.75	25.12	22.92	10.50	12.00	4.80	1.73	1.64	0.30	
5	1.23	5.40	13.75	8.02	28.30	34.45	10.28	11.00	4.65	1.47	1.55	0.30	
6	1.27	4.20	13.75	6.22	27.40	31.90	11.50	9.83	4.65	1.39	1.98	0.27	
7	1.30	3.30	8.70	5.40	44.53	36.40	13.50	9.15	4.50	1.20	2.07	0.24	
8	1.39	4.35	9.37	5.25	66.00	41.92	14.75	8.92	4.50	1.13	2.15	0.21	
9	1.30	4.20	9.15	8.25	61.60	32.50	12.75	7.80	4.50	1.02	2.15	0.18	
10	1.20	2.66	6.22	22.37	55.88	24.85	14.25	8.25	4.80	0.95	1.81	0.18	
11	1.06	2.49	8.02	22.10	95.75	25.12	18.80	8.25	4.50	0.88	1.27	0.15	
12	1.02	2.91	17.97	16.05	189.28	59.25	14.75	7.35	4.35	0.81	1.30	0.18	
13	0.88	3.00	17.15	13.00	262.15	68.00	14.00	7.35	4.05	0.70	1.23	0.27	
14	0.78	3.30	14.75	10.05	278.25	72.40	11.00	7.35	3.90	0.67	1.47	0.45	
15	0.70	3.45	11.25	15.00	270.20	55.88	9.83	6.90	3.75	0.70	1.27	0.54	
16	0.60	3.90	8.70	17.97	228.60	39.00	8.25	6.90	3.75	1.02	1.30	0.64	
17	0.54	8.70	8.02	12.50	137.50	27.40	9.37	6.67	3.60	2.23	1.47	0.67	
18	0.48	17.97	10.05	13.00	55.88	27.70	9.37	6.22	3.30	2.66	1.23	0.60	
19	0.45	10.05	8.70	13.50	52.88	62.40	6.22	6.22	3.30	2.83	1.02	0.60	
20	0.36	7.80	4.20	10.05	36.72	55.13	5.85	6.00	3.30	2.58	0.91	0.57	
21	0.27	9.37	2.83	8.70	26.50	51.80	5.70	5.70	3.15	2.32	0.78	0.51	
22	0.21	6.00	2.32	35.42	32.50	48.65	5.85	5.70	3.00	1.98	0.78	0.39	
23	0.12	6.00	1.90	87.65	28.90	62.80	5.25	5.70	3.00	1.47	0.74	0.36	
24	0.06	5.55	2.32	75.20	34.45	47.60	9.60	5.40	2.83	1.23	0.67	0.30	
25	0.00	5.40	6.00	55.13	22.37	40.63	34.13	5.40	2.75	1.09	0.67	0.30	
26	0.00	5.55	8.25	34.77	18.52	49.00	35.75	5.40	2.75	0.91	0.64	0.27	
27	0.00	4.20	4.65	20.72	19.90	43.87	28.00	5.40	2.58	0.81	0.54	0.21	
28	0.18	4.20	19.35	13.75	47.25	32.20	24.30	5.40	2.58	0.70	0.54	0.21	
29	0.67	3.45	15.50	11.50	75.20	24.85	23.48	5.25	2.49	0.70		0.21	
30	0.91	7.35	5.70	12.75	57.75	20.72	22.65	5.25	2.40	0.60		0.18	
31		13.75		7.13	68.80		17.70		2.32	0.54		0.18	
Total	23.29	172.29	321.97	634.50	2376.53	1250.76	450.31	233.51	114.45	43.45	34.07	10.61	5665.74 CMSDAY
Mean	0.78	5.56	10.73	20.47	76.66	41.69	14.53	7.78	3.69	1.40	1.22	0.34	15.52 CMS
Max	1.73	17.97	33.80	87.65	278.25	72.40	35.75	14.75	4.80	2.83	2.15	0.67	278.25 CMS
Min	0.00	0.81	1.90	5.25	5.85	20.72	5.25	5.25	2.32	0.54	0.54	0.15	0.00 CMS
Runoff	2.012	14.886	27.818	54.821	205.332	108.066	38.907	20.175	9.888	3.754	2.944	0.917	489.520 MCM

Momentary Peak 279.40 CMS, at 140.16 M (MSL), at 6.00 Hours, on Aug 14, 2001

Runoff Yield 6.18 Liters/Second/Square KM, Momentary Peak Yield 111.270 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 4,466 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 station office.

Elevation +8.372 m. (A.D.)

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 1984 to date.

Rated by Float -

Rated by Current Meter 1984 to date.

Stability of Channel Regimes Stable.

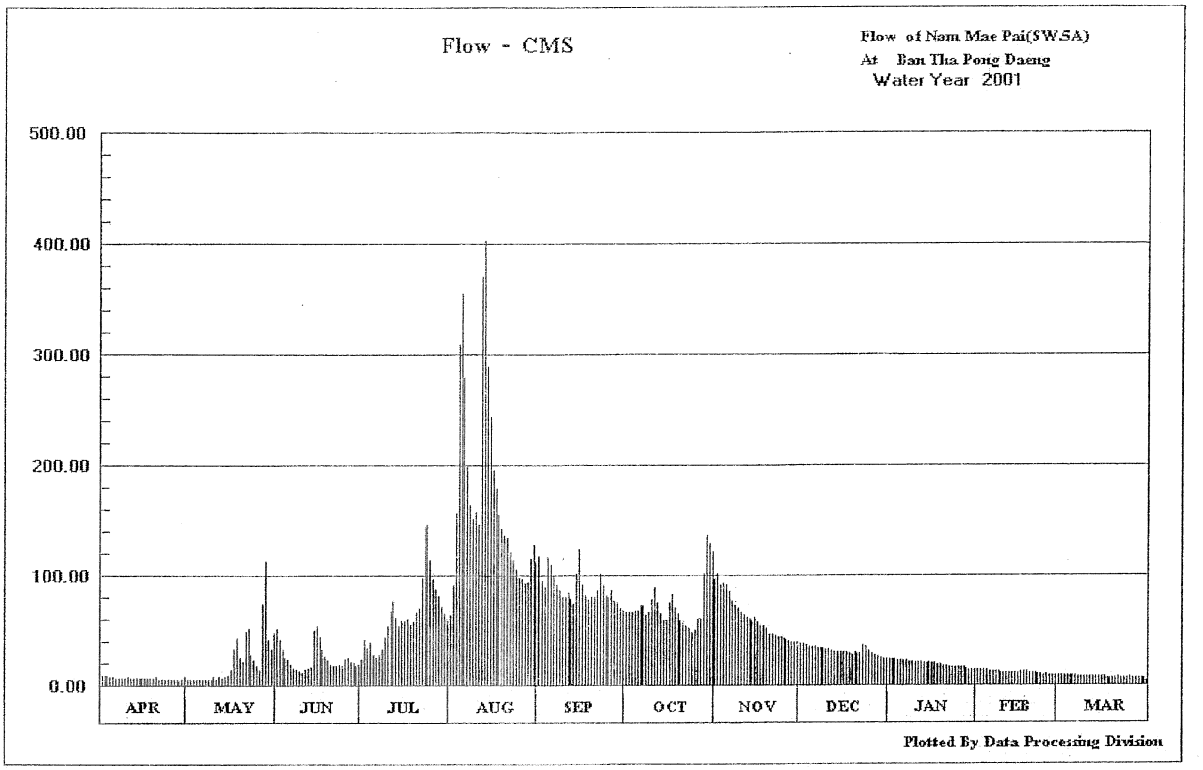
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 75 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.05	-0.20	0.55	0.25	0.63	1.16	0.65	0.93	0.42	0.25	0.08	-0.04	
2	-0.05	-0.20	0.46	0.46	0.86	0.92	0.65	0.98	0.42	0.25	0.09	-0.05	
3	-0.06	-0.20	0.36	0.38	1.53	0.84	0.65	0.86	0.41	0.25	0.08	-0.06	
4	-0.07	-0.19	0.27	0.44	2.59	1.14	0.66	0.88	0.40	0.24	0.08	-0.06	
5	-0.08	-0.18	0.25	0.30	2.86	1.08	0.66	0.87	0.40	0.24	0.06	-0.05	
6	-0.10	-0.18	0.18	0.28	2.41	0.96	0.69	0.79	0.39	0.23	0.06	-0.05	
7	-0.11	-0.17	0.12	0.31	1.87	0.86	0.69	0.72	0.38	0.23	0.06	-0.06	
8	-0.11	-0.16	0.10	0.37	1.59	0.80	0.63	0.69	0.38	0.22	0.05	-0.07	
9	-0.11	-0.17	0.05	0.49	1.48	0.75	0.65	0.67	0.38	0.22	0.04	-0.07	
10	-0.12	-0.18	0.03	0.56	1.54	0.75	0.73	0.65	0.37	0.22	0.04	-0.07	
11	-0.13	-0.18	0.08	0.66	1.43	0.78	0.84	0.63	0.36	0.21	0.03	-0.07	
12	-0.13	-0.09	0.11	0.72	2.94	0.74	0.71	0.62	0.35	0.21	0.02	-0.07	
13	-0.14	-0.10	0.13	0.62	3.12	0.70	0.64	0.61	0.34	0.20	0.02	-0.08	
14	-0.14	-0.07	0.54	0.56	2.47	0.99	0.60	0.60	0.34	0.20	0.02	-0.08	
15	-0.13	-0.03	0.56	0.60	2.19	1.23	0.60	0.62	0.34	0.21	0.02	-0.08	
16	-0.12	0.09	0.48	0.60	1.84	0.87	0.71	0.59	0.34	0.20	0.05	-0.08	
17	-0.14	0.36	0.37	0.61	1.72	0.76	0.77	0.56	0.34	0.20	0.06	-0.09	
18	-0.14	0.47	0.29	0.57	1.52	0.73	0.67	0.56	0.32	0.19	0.07	-0.10	
19	-0.15	0.28	0.23	0.59	1.40	0.75	0.64	0.55	0.31	0.17	0.04	-0.10	
20	-0.16	0.22	0.19	0.65	1.35	0.75	0.60	0.51	0.33	0.16	0.02	-0.10	
21	-0.17	0.53	0.16	0.67	1.32	0.81	0.58	0.51	0.32	0.15	0.02	-0.10	
22	-0.20	0.55	0.16	0.94	1.20	0.98	0.56	0.50	0.32	0.14	0.00	-0.09	
23	-0.21	0.31	0.17	1.41	1.12	0.87	0.55	0.49	0.41	0.14	-0.02	-0.10	
24	-0.21	0.24	0.16	1.44	1.03	0.76	0.52	0.48	0.40	0.14	-0.03	-0.10	
25	-0.20	0.15	0.25	1.12	0.94	0.75	0.54	0.47	0.35	0.14	-0.02	-0.10	
26	-0.20	0.09	0.27	0.93	0.93	0.80	0.61	0.46	0.32	0.14	-0.03	-0.10	
27	-0.20	0.70	0.22	0.82	0.88	0.72	0.61	0.45	0.30	0.13	-0.03	-0.11	
28	-0.22	1.11	0.20	0.76	0.90	0.71	0.98	0.44	0.29	0.12	-0.04	-0.11	
29	-0.21	0.46	0.16	0.68	1.13	0.67	1.34	0.44	0.27	0.10		-0.12	
30	-0.20	0.36	0.17	0.64	1.26	0.66	1.28	0.43	0.26	0.10		-0.12	
31		0.52		0.60	1.11		1.20		0.25	0.09		-0.13	
Mean	-0.14	0.13	0.24	0.65	1.59	0.84	0.72	0.62	0.35	0.18	0.03	-0.08	
Max	-0.05	1.11	0.56	1.44	3.12	1.23	1.34	0.98	0.42	0.25	0.09	-0.04	3.12
Min	-0.22	-0.20	0.03	0.25	0.63	0.66	0.52	0.43	0.25	0.09	-0.04	-0.13	-0.22

Annual Max Momentary Gage Height 3.61 M (A.D), at 1.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.00 M (A.D)
Left Bank Elevation 7.75 M (A.D)
Right Bank Elevation 5.26 M (A.D), Drainage Area 4466 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.15	6.30	53.50	25.10	64.80	119.20	68.00	98.05	39.00	25.10	15.16	10.48	
2	10.15	6.30	43.00	43.00	92.30	97.20	68.00	102.30	39.00	25.10	15.58	10.15	
3	9.82	6.30	33.64	35.32	158.30	90.70	68.00	92.30	38.00	25.10	15.16	9.82	
4	9.49	6.52	26.50	41.00	310.30	117.30	69.60	93.90	37.00	24.40	15.16	9.82	
5	9.16	6.74	25.10	28.60	357.00	111.60	69.60	93.10	37.00	24.40	14.32	10.15	
6	8.50	6.74	20.48	27.20	280.60	100.60	74.40	86.35	36.16	23.70	14.32	10.15	
7	8.28	6.96	17.12	29.44	200.10	92.30	74.40	78.30	35.32	23.70	14.32	9.82	
8	8.28	7.18	16.00	34.48	164.90	87.50	64.80	74.40	35.32	23.00	13.90	9.49	
9	8.28	6.96	13.90	46.00	152.80	81.75	68.00	71.20	35.32	23.00	13.48	9.49	
10	8.06	6.74	13.06	54.80	159.40	81.75	79.45	68.00	34.48	23.00	13.48	9.49	
11	7.84	6.74	15.16	69.60	147.30	85.20	90.70	64.80	33.64	22.30	13.06	9.49	
12	7.84	8.83	16.56	78.30	371.20	80.60	77.15	63.20	32.80	22.30	12.64	9.49	
13	7.62	8.50	17.68	63.20	403.80	76.00	66.40	61.60	31.96	21.60	12.64	9.16	
14	7.62	9.49	52.20	54.80	290.20	103.15	60.00	60.00	31.96	21.60	12.64	9.16	
15	7.84	10.81	54.80	60.00	245.50	126.00	60.00	63.20	31.96	22.30	12.64	9.16	
16	8.06	15.58	45.00	60.00	196.20	93.10	77.15	58.70	31.96	21.60	13.90	9.16	
17	7.62	33.64	34.48	61.60	181.00	82.90	84.05	54.80	31.96	21.60	14.32	8.83	
18	7.62	44.00	27.90	56.10	157.20	79.45	71.20	54.80	30.28	21.04	14.74	8.50	
19	7.40	27.20	23.70	58.70	144.00	81.75	66.40	53.50	29.44	19.92	13.48	8.50	
20	7.18	23.00	21.04	68.00	138.50	81.75	60.00	48.30	31.12	19.36	12.64	8.50	
21	6.96	50.90	19.36	71.20	135.20	88.30	57.40	48.30	30.28	18.80	12.64	8.50	
22	6.30	53.50	19.36	98.90	123.00	102.30	54.80	47.00	30.28	18.24	11.80	8.83	
23	6.14	29.44	19.92	145.10	115.40	93.10	53.50	46.00	38.00	18.24	11.14	8.50	
24	6.14	24.40	19.36	148.40	106.85	82.90	49.60	45.00	37.00	18.24	10.81	8.50	
25	6.30	18.80	25.10	115.40	98.90	81.75	52.20	44.00	32.80	18.24	11.14	8.50	
26	6.30	15.58	26.50	98.05	98.05	87.50	61.60	43.00	30.28	18.24	10.81	8.50	
27	6.30	76.00	23.00	89.10	93.90	78.30	61.60	42.00	28.60	17.68	10.81	8.28	
28	5.98	114.45	21.60	82.90	95.50	77.15	102.30	41.00	27.90	17.12	10.48	8.28	
29	6.14	43.00	19.36	72.80	116.35	71.20	137.40	41.00	26.50	16.00		8.06	
30	6.30	33.64	19.92	66.40	129.00	69.60	131.00	40.00	25.80	16.00		8.06	
31		49.60		60.00	114.45		123.00		25.10	15.58		7.84	
Total	229.67	763.84	784.30	2043.49	5442.00	2701.90	2301.70	1878.10	1016.22	646.50	367.21	280.66	18455.59 CMSDAY
Mean	7.66	24.64	26.14	65.92	175.55	90.06	74.25	62.60	32.78	20.85	13.11	9.05	50.56 CMS
Max	10.15	114.45	54.80	148.40	403.80	126.00	137.40	102.30	39.00	25.10	15.58	10.48	403.80 CMS
Min	5.98	6.30	13.06	25.10	64.80	69.60	49.60	40.00	25.10	15.58	10.48	7.84	5.98 CMS
Runoff	19.843	65.996	67.764	176.558	470.189	233.444	198.867	162.268	87.801	55.858	31.727	24.249	1594.563 MCM

Momentary Peak 499.00 CMS, at 3.61 M (A.D), at 1.00 Hours, on Aug 13, 2001
Runoff Yield 11.32 Liters/Second/Square KM, Momentary Peak Yield 111.733 Liters/Second/Square KM

WATER YEAR : 2001

SALAWIN RIVER BASIN

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

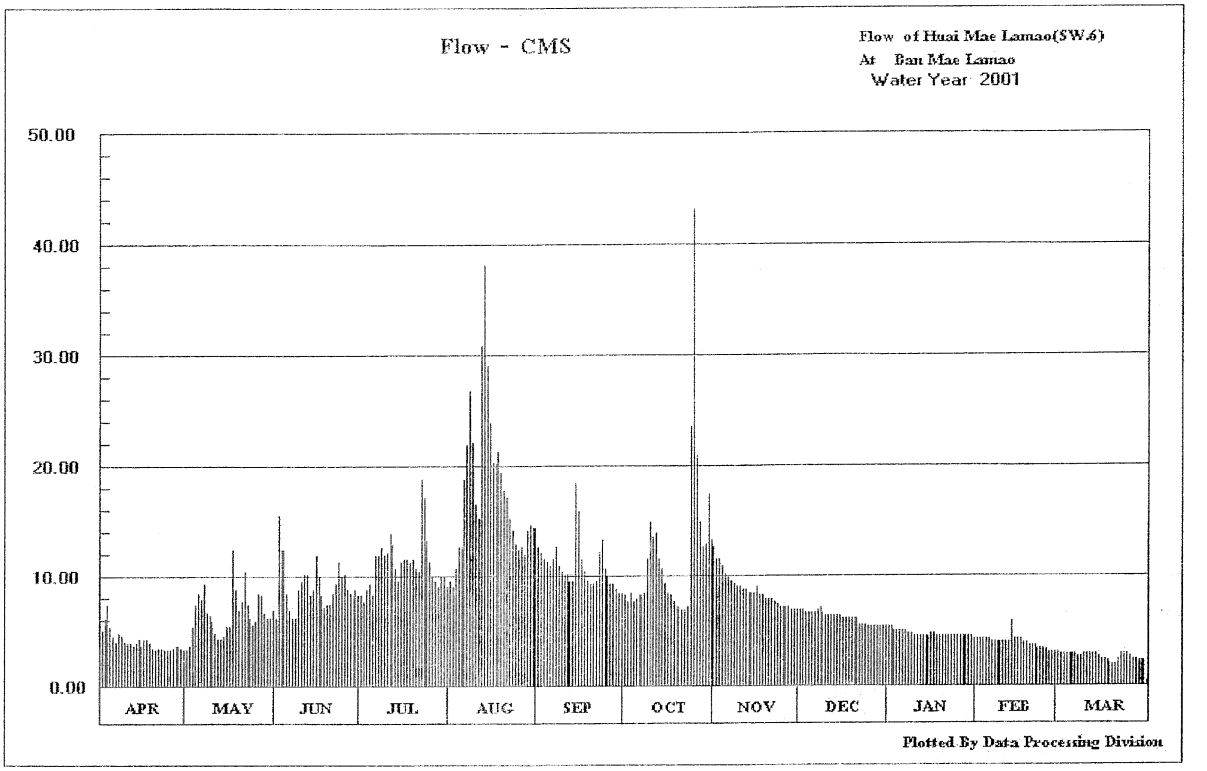
Lat 16 - 45 - 36 N. **Long** 98 - 45 - 16 E.

Location		on left bank downstream from the bridge on Highway.
	Ban Mae Lamao	**Amphoe** Mae Sot **Changwat** Tak
Drainage Area		1,038 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+268.470 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	About 6.25 meters from the automatic gage building.
	Elevation	+278.845 m. (M.S.L.)
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 Float	-
	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 106 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	269.03	268.95	269.07	269.15	269.20	269.31	269.15	269.31	269.10	269.04	269.00	268.94	
2	269.07	268.97	269.41	269.13	269.18	269.29	269.13	269.27	269.10	269.04	269.00	268.93	
3	269.12	269.04	269.30	269.17	269.24	269.27	269.16	269.27	269.09	269.03	269.00	268.93	
4	269.04	269.12	269.30	269.19	269.31	269.26	269.13	269.25	269.09	269.03	269.00	268.93	
5	269.01	269.16	269.16	269.15	269.31	269.25	269.14	269.22	269.09	269.03	269.00	268.93	
6	268.99	269.14	269.10	269.28	269.51	269.27	269.15	269.21	269.09	269.03	268.99	268.93	
7	269.02	269.19	269.07	269.28	269.61	269.31	269.15	269.20	269.10	269.03	268.99	268.93	
8	269.01	269.09	269.07	269.31	269.76	269.25	269.16	269.19	269.11	269.02	268.99	268.92	
9	268.99	269.08	269.17	269.28	269.62	269.23	269.27	269.18	269.09	269.02	268.99	268.92	
10	268.98	269.06	269.20	269.29	269.44	269.22	269.39	269.18	269.08	269.01	268.99	268.93	
11	268.98	269.02	269.22	269.35	269.40	269.22	269.34	269.17	269.08	269.01	268.99	268.93	
12	268.97	269.00	269.22	269.32	269.88	269.20	269.35	269.17	269.08	269.01	268.99	268.93	
13	268.98	269.00	269.15	269.24	270.09	269.20	269.27	269.16	269.08	269.01	269.06	268.93	
14	269.00	269.01	269.17	269.20	269.83	269.50	269.24	269.16	269.08	269.01	269.00	268.93	
15	268.97	269.04	269.28	269.26	269.67	269.42	269.19	269.16	269.08	269.01	269.00	268.92	
16	269.00	269.04	269.21	269.27	269.56	269.27	269.16	269.18	269.07	269.02	269.00	268.91	
17	269.00	269.30	269.15	269.27	269.56	269.23	269.15	269.15	269.07	269.02	268.98	268.91	
18	268.98	269.17	269.11	269.26	269.59	269.20	269.13	269.15	269.07	269.01	268.98	268.90	
19	268.96	269.10	269.12	269.27	269.53	269.19	269.11	269.14	269.07	269.01	268.97	268.89	
20	268.95	269.13	269.12	269.24	269.48	269.19	269.11	269.14	269.07	269.01	268.97	268.88	
21	268.96	269.23	269.16	269.23	269.46	269.20	269.10	269.14	269.07	269.01	268.97	268.88	
22	268.96	269.12	269.19	269.51	269.40	269.29	269.10	269.13	269.05	269.01	268.96	268.91	
23	268.95	269.07	269.26	269.46	269.36	269.33	269.11	269.12	269.05	269.01	268.96	268.93	
24	268.95	269.05	269.21	269.33	269.32	269.24	269.66	269.11	269.05	269.01	268.96	268.93	
25	268.95	269.06	269.22	269.26	269.30	269.21	270.23	269.11	269.04	269.01	268.95	268.93	
26	268.96	269.16	269.17	269.21	269.31	269.19	269.58	269.11	269.04	269.01	268.94	268.92	
27	268.97	269.15	269.16	269.20	269.28	269.19	269.39	269.11	269.04	269.01	268.94	268.91	
28	268.97	269.09	269.15	269.18	269.36	269.17	269.31	269.10	269.04	269.01	268.94	268.91	
29	268.96	269.07	269.17	269.21	269.38	269.16	269.32	269.10	269.04	269.01		268.90	
30	268.95	269.07	269.15	269.21	269.37	269.16	269.47	269.10	269.04	269.01		268.90	
31		269.10		269.18	269.37		269.33		269.04	269.00		268.90	
Mean	268.99	269.09	269.18	269.25	269.47	269.25	269.27	269.17	269.07	269.02	268.98	268.92	
Max	269.12	269.30	269.41	269.51	270.09	269.50	270.23	269.31	269.11	269.04	269.06	268.94	270.23
Min	268.95	268.95	269.07	269.13	269.18	269.16	269.10	269.10	269.04	269.00	268.94	268.88	268.88

Annual Max Momentary Gage Height 270.81 M (MSL), at 4.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 268.47 M (MSL), River Bed 268.36 M (MSL)
Left Bank Elevation 277.64 M (MSL)
Right Bank Elevation 276.21 M (MSL), Drainage Area 1038 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.20	3.40	6.30	8.40	9.70	12.80	8.40	12.80	7.10	5.50	4.40	3.20	
2	6.30	3.80	15.70	7.80	9.20	12.30	7.80	11.70	7.10	5.50	4.40	3.00	
3	7.60	5.50	12.50	8.90	10.80	11.70	8.60	11.70	6.80	5.20	4.40	3.00	
4	5.50	7.60	12.50	9.40	12.80	11.40	7.80	11.10	6.80	5.20	4.40	3.00	
5	4.70	8.60	8.60	8.40	12.80	11.10	8.10	10.30	6.80	5.20	4.40	3.00	
6	4.20	8.10	7.10	12.00	18.90	11.70	8.40	10.00	6.80	5.20	4.20	3.00	
7	4.90	9.40	6.30	12.00	22.00	12.80	8.40	9.70	7.10	5.20	4.20	3.00	
8	4.70	6.80	6.30	12.80	26.90	11.10	8.60	9.40	7.30	4.90	4.20	2.80	
9	4.20	6.50	8.90	12.00	22.30	10.60	11.70	9.20	6.80	4.90	4.20	2.80	
10	4.00	6.00	9.70	12.30	16.70	10.30	15.10	9.20	6.50	4.70	4.20	3.00	
11	4.00	4.90	10.30	14.00	15.40	10.30	13.70	8.90	6.50	4.70	4.20	3.00	
12	3.80	4.40	10.30	13.10	31.00	9.70	14.00	8.90	6.50	4.70	4.20	3.00	
13	4.00	4.40	8.40	10.80	38.30	9.70	11.70	8.60	6.50	4.70	6.00	3.00	
14	4.40	4.70	8.90	9.70	29.20	18.60	10.80	8.60	6.50	4.70	4.40	3.00	
15	3.80	5.50	12.00	11.40	24.00	16.00	9.40	8.60	6.50	4.70	4.40	2.80	
16	4.40	5.50	10.00	11.70	20.40	11.70	8.60	9.20	6.30	4.90	4.40	2.60	
17	4.40	12.50	8.40	11.70	20.40	10.60	8.40	8.40	6.30	4.90	4.00	2.60	
18	4.00	8.90	7.30	11.40	21.40	9.70	7.80	8.40	6.30	4.70	4.00	2.40	
19	3.60	7.10	7.60	11.70	19.50	9.40	7.30	8.10	6.30	4.70	3.80	2.20	
20	3.40	7.80	7.60	10.80	17.90	9.40	7.30	8.10	6.30	4.70	3.80	2.00	
21	3.60	10.60	8.60	10.60	17.30	9.70	7.10	8.10	6.30	4.70	3.80	2.00	
22	3.60	7.60	9.40	18.90	15.40	12.30	7.10	7.80	5.70	4.70	3.60	2.60	
23	3.40	6.30	11.40	17.30	14.30	13.40	7.30	7.60	5.70	4.70	3.60	3.00	
24	3.40	5.70	10.00	13.40	13.10	10.80	23.70	7.30	5.70	4.70	3.60	3.00	
25	3.40	6.00	10.30	11.40	12.50	10.00	43.30	7.30	5.50	4.70	3.40	3.00	
26	3.60	8.60	8.90	10.00	12.80	9.40	21.10	7.30	5.50	4.70	3.20	2.80	
27	3.80	8.40	8.60	9.70	12.00	9.40	15.10	7.30	5.50	4.70	3.20	2.60	
28	3.80	6.80	8.40	9.20	14.30	8.90	12.80	7.10	5.50	4.70	3.20	2.60	
29	3.60	6.30	8.90	10.00	14.80	8.50	13.10	7.10	5.50	4.70		2.40	
30	3.40	6.30	8.40	10.00	14.50	8.60	17.60	7.10	5.50	4.70		2.40	
31		7.10		9.20	14.50		13.40		5.50	4.40		2.40	
Total	126.70	211.10	277.60	350.00	555.10	332.00	373.50	264.90	195.00	150.30	113.80	85.20	3035.20 CMSDAY
Mean	4.22	6.81	9.25	11.29	17.91	11.07	12.05	8.83	6.29	4.85	4.06	2.75	8.32 CMS
Max	7.60	12.50	15.70	18.90	38.30	18.60	43.30	12.80	7.30	5.50	6.00	3.20	43.30 CMS
Min	3.40	3.40	6.30	7.80	9.20	8.60	7.10	7.10	5.50	4.40	3.20	2.00	2.00 CMS
Runoff	10.947	18.239	23.985	30.240	47.961	28.685	32.270	22.887	16.848	12.986	9.832	7.361	262.241 MCM

Momentary Peak 65.19 CMS, at 270.81 M (MSL), at 4.00 Hours, on Oct 25, 2001

Runoff Yield 8.01 Liters/Second/Square KM, Momentary Peak Yield 62.803 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,307 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +183.430 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the automatic gage building.

Elevation +191.432 m. (M.S.L)

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 Float -

Rated by Current Meter 1957 - 1959, 1965 - 1966, 1974 - 1980, 1979 to date.

Stability of Channel Regimes Fairly stable.

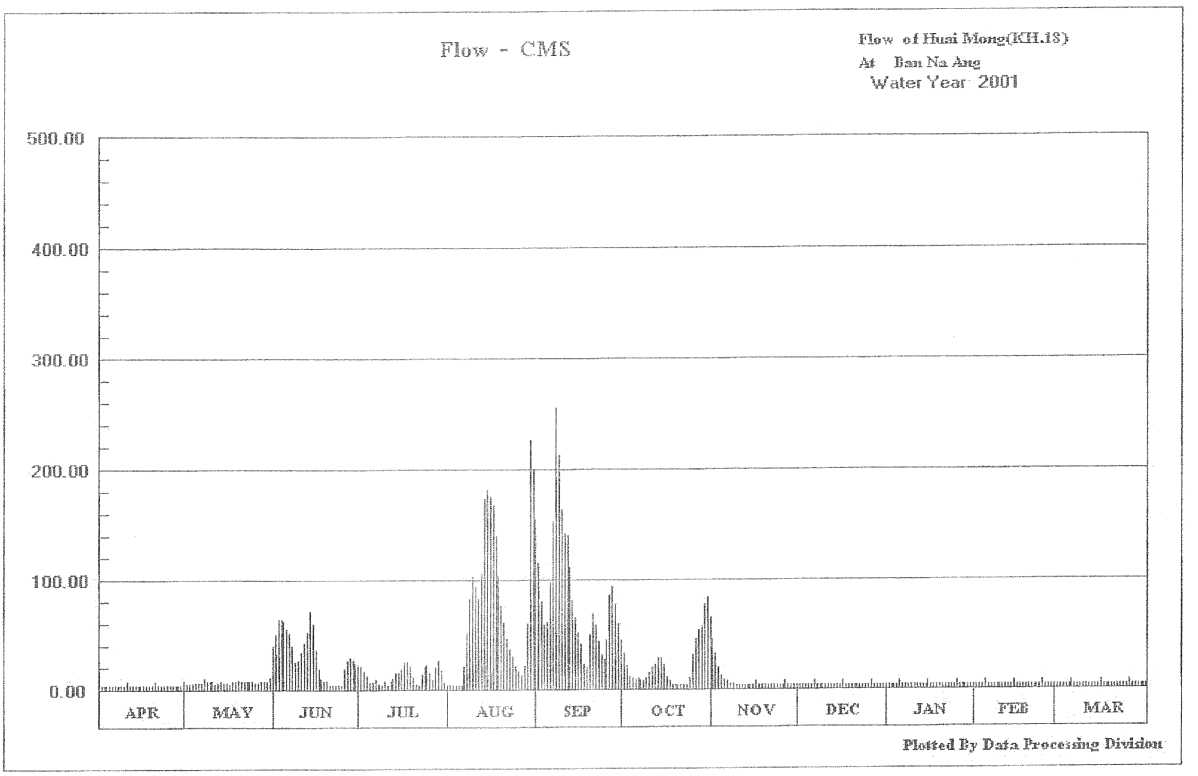
Overbank Flow Conditions Overbank flow starts at elevation +190.910 m.(M.S.L.) and is including overbank flow.

General Description Records good. Stage-discharge relation defined by 23 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	185.26	186.18	189.96	187.84	185.80	191.03	188.83	189.74	185.38	185.38	185.21	184.87	
2	185.25	186.17	190.41	187.42	185.68	190.71	187.86	188.81	185.36	185.38	185.19	184.87	
3	185.23	186.19	190.41	187.06	185.51	190.27	186.91	187.82	185.36	185.36	185.19	184.87	
4	185.20	186.29	190.36	186.34	185.54	190.34	186.76	187.00	185.36	185.37	185.19	184.87	
5	185.12	186.32	190.15	186.40	186.00	190.89	186.69	186.64	185.35	185.27	185.18	184.85	
6	185.18	186.31	190.01	186.67	187.94	191.28	186.72	186.33	185.33	185.32	185.18	184.85	
7	185.13	186.73	189.31	186.14	190.02	191.74	186.64	186.15	185.30	185.27	185.17	184.87	
8	185.15	186.52	188.22	185.98	190.73	191.59	186.52	186.08	185.24	185.27	185.14	184.85	
9	185.14	186.42	188.33	185.85	190.93	191.35	186.75	185.97	185.19	185.33	185.12	184.84	
10	185.06	186.28	188.86	185.92	190.85	191.21	187.21	185.88	185.19	185.36	185.22	184.84	
11	184.99	186.20	189.44	186.44	190.73	191.20	187.78	185.79	185.13	185.29	185.22	184.84	
12	184.98	186.27	190.07	186.79	190.96	191.01	188.03	185.77	185.07	185.24	185.16	184.82	
13	185.15	186.45	190.57	187.23	191.40	190.72	188.54	185.73	185.03	185.30	185.27	184.81	
14	185.23	186.40	190.29	187.25	191.44	190.43	188.52	185.72	185.00	185.29	185.27	184.79	
15	185.17	186.24	189.04	187.66	191.41	190.00	187.99	185.73	184.97	185.31	185.22	184.75	
16	185.15	186.21	187.68	188.18	191.37	189.36	186.94	185.73	184.98	185.38	185.18	184.74	
17	185.19	186.51	186.74	188.24	191.20	188.00	186.27	185.72	185.15	185.25	185.07	184.73	
18	185.24	186.57	186.42	187.88	190.94	187.80	185.97	185.65	185.20	185.32	185.03	184.76	
19	185.21	186.63	186.09	186.83	190.66	189.93	185.83	185.59	185.28	185.32	185.00	184.80	
20	185.17	186.50	185.74	186.12	190.34	190.51	185.78	185.54	185.18	185.32	184.98	184.79	
21	185.13	186.49	185.39	186.07	189.71	190.26	185.74	185.52	185.38	185.33	184.96	184.79	
22	185.12	186.45	185.32	187.09	189.08	189.53	185.61	185.49	185.29	185.29	184.92	184.79	
23	185.11	186.55	185.31	187.84	188.59	188.66	185.73	185.49	185.36	185.30	184.89	184.79	
24	185.11	186.45	185.67	188.00	187.94	188.45	186.81	185.48	185.37	185.26	184.87	184.79	
25	185.11	186.36	187.60	187.27	187.41	189.64	188.73	185.47	185.36	185.29	184.88	184.79	
26	185.11	186.38	188.31	186.58	186.96	190.78	189.69	185.45	185.36	185.24	184.88	184.85	
27	185.11	186.52	188.55	187.78	187.85	190.85	190.11	185.44	185.37	185.26	184.86	184.86	
28	185.11	186.45	188.35	188.27	190.31	190.67	190.24	185.43	185.42	185.19	184.86	184.86	
29	185.10	186.43	188.13	187.49	191.64	190.30	190.67	185.41	185.37	185.26		184.86	
30	185.09	186.93	188.03	186.26	191.53	189.67	190.75	185.41	185.35	185.29		184.83	
31		189.33		185.98	191.30		190.44		185.32	185.24		184.80	
Mean	185.14	186.51	188.29	187.00	189.41	190.27	187.65	186.07	185.26	185.30	185.08	184.82	
Max	185.26	189.33	190.57	188.27	191.64	191.74	190.75	189.74	185.42	185.38	185.27	184.87	191.74
Min	184.98	186.17	185.31	185.85	185.51	187.80	185.61	185.41	184.97	185.19	184.86	184.73	184.73

Annual Max Momentary Gage Height 191.79 M (MSL), at 18.00 Hours, on Sep 7, 2001
Zero Gage at Bottom Elevation 183.43 M (MSL), River Bed 182.90 M (MSL)
Left Bank Elevation 190.90 M (MSL)
Right Bank Elevation 192.28 M (MSL), Drainage Area 1307 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	6.85	52.20	22.40	4.30	116.50	34.62	48.10	2.22	2.22	1.54	0.34	
2	0.00	6.77	65.45	18.20	3.58	81.90	22.60	34.34	2.14	2.22	1.46	0.34	
3	0.00	6.93	65.45	14.60	2.74	60.45	13.10	22.20	2.14	2.14	1.46	0.34	
4	0.01	7.67	63.60	8.05	2.86	62.90	11.60	14.00	2.14	2.18	1.46	0.34	
5	0.02	7.90	56.75	8.50	5.50	99.00	10.90	10.40	2.10	1.78	1.42	0.30	
6	0.04	7.82	53.25	10.70	23.40	154.00	11.20	7.97	2.02	1.98	1.42	0.30	
7	0.07	11.30	41.65	6.55	53.50	257.00	10.40	6.62	1.90	1.78	1.38	0.34	
8	0.11	9.40	26.66	5.38	83.70	214.70	9.40	6.10	1.66	1.78	1.26	0.30	
9	0.18	8.65	28.09	4.60	103.60	166.00	11.50	5.32	1.46	2.02	1.18	0.28	
10	0.29	7.60	35.04	5.02	95.00	143.50	16.10	4.78	1.46	2.14	1.58	0.28	
11	0.48	7.00	43.60	8.80	83.70	142.00	21.80	4.24	1.22	1.86	1.58	0.28	
12	0.79	7.53	54.75	11.90	107.20	113.50	24.36	4.12	0.98	1.66	1.34	0.24	
13	1.30	8.87	72.65	16.30	175.00	82.80	30.82	3.88	0.82	1.90	1.78	0.22	
14	1.62	8.50	61.15	16.50	182.60	66.35	30.56	3.82	0.70	1.86	1.78	0.18	
15	1.38	7.30	37.60	20.60	176.90	53.00	23.90	3.88	0.61	1.94	1.58	0.10	
16	1.30	7.08	20.80	26.16	169.60	42.40	13.40	3.88	0.64	2.22	1.42	0.08	
17	1.46	9.32	11.40	26.92	142.00	24.00	7.53	3.82	1.30	1.70	0.98	0.06	
18	1.66	9.78	8.65	22.80	104.80	22.00	5.32	3.40	1.50	1.98	0.82	0.12	
19	1.54	10.30	6.17	12.30	78.20	51.60	4.48	3.06	1.82	1.98	0.70	0.20	
20	1.38	9.25	3.94	6.40	62.90	69.95	4.18	2.86	1.42	1.98	0.64	0.18	
21	1.22	9.18	2.26	6.03	47.65	60.10	3.94	2.78	2.22	2.02	0.58	0.18	
22	1.18	8.87	1.98	14.90	38.20	44.95	3.16	2.66	1.86	1.86	0.46	0.18	
23	1.14	9.62	1.94	22.40	31.47	32.38	3.88	2.66	2.14	1.90	0.38	0.18	
24	1.14	8.87	3.52	24.00	23.40	29.55	12.10	2.62	2.18	1.74	0.34	0.18	
25	1.14	8.20	20.00	16.70	18.10	46.60	33.29	2.58	2.14	1.86	0.36	0.18	
26	1.14	8.35	27.83	9.85	13.60	88.20	47.35	2.50	2.14	1.66	0.36	0.30	
27	1.14	9.40	30.95	21.80	22.50	95.00	55.75	2.46	2.18	1.74	0.32	0.32	
28	1.14	8.87	28.35	27.31	61.85	78.90	59.40	2.42	2.38	1.46	0.32	0.32	
29	1.10	8.72	25.56	18.90	228.20	61.50	78.90	2.34	2.18	1.74		0.32	
30	1.06	13.30	24.36	7.45	200.90	47.05	85.50	2.34	2.10	1.86		0.26	
31		41.95		5.38	157.00		66.80		1.98	1.66		0.20	
Total	25.03	301.15	975.60	447.40	2503.95	2607.88	767.84	222.15	53.75	58.82	29.90	7.44	8000.91 CMSDAY
Mean	0.83	9.71	32.52	14.43	80.77	86.93	24.77	7.41	1.73	1.90	1.07	0.24	21.92 CMS
Max	1.66	41.95	72.65	27.31	228.20	257.00	85.50	48.10	2.38	2.22	1.78	0.34	257.00 CMS
Min	0.00	6.77	1.94	4.60	2.74	22.00	3.16	2.34	0.61	1.46	0.32	0.06	0.00 CMS
Runoff	2.163	26.019	84.292	38.655	216.341	225.321	66.341	19.194	4.644	5.082	2.583	0.643	691.279 MCM

Momentary Peak 272.00 CMS, at 191.79 M (MSL), at 18.00 Hours, on Sep 7, 2001
Runoff Yield 16.77 Liters/Second/Square KM, Momentary Peak Yield 208.110 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

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

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

Ban Na Lak **Amphoe** Wang Saphung **Changwat** Loei

Drainage Area 1,262 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +239.620 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank upstream at the footpath of the bridge.

Elevation +253.928 m. (M.S.L.)

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 Float -

Rated by Current Meter 1994 to date.

Stability of Channel Regimes Stable.

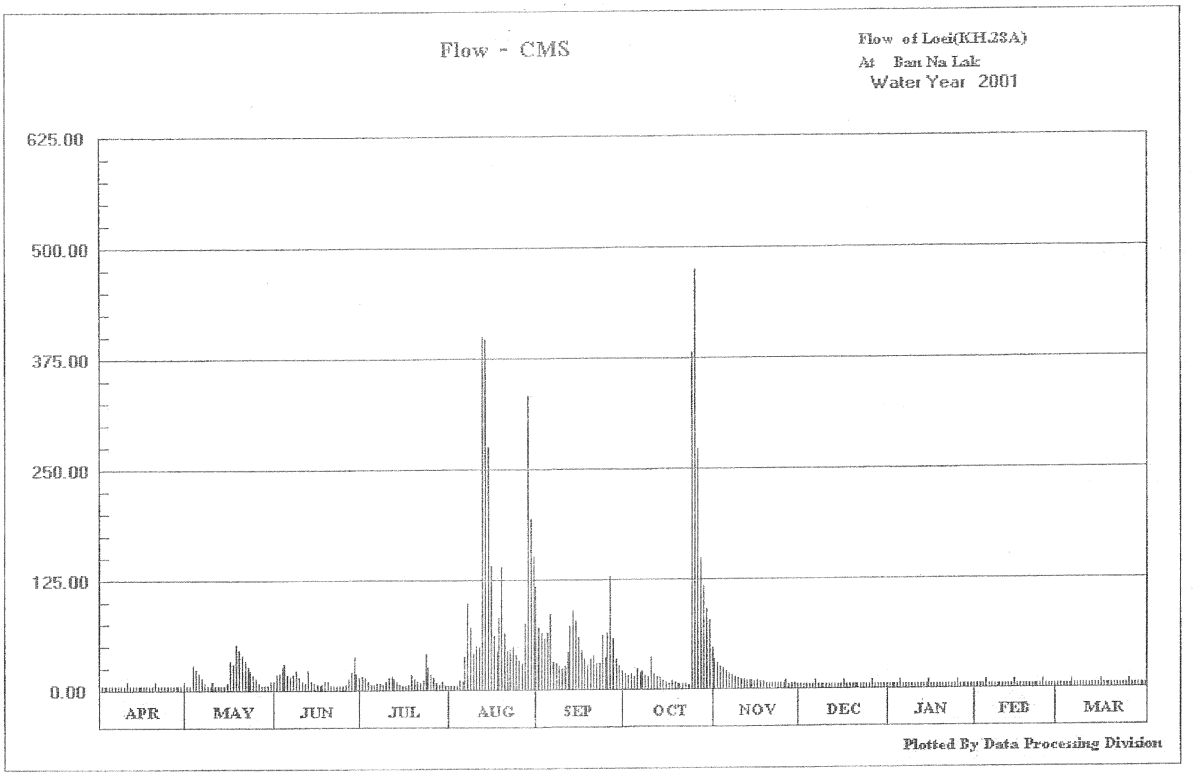
Overbank Flow Conditions Overbank flow starts at elevation +246.140 m.(M.S.L.) and is including overbank flow.

General Description Records good. Stage-discharge relation defined by 38 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	239.84	239.79	240.54	240.49	240.15	241.84	240.55	241.01	240.16	239.94	239.83	239.90	
2	239.84	239.81	240.58	240.46	240.12	241.73	240.52	240.91	240.16	239.90	239.83	239.91	
3	239.84	240.87	240.83	240.29	240.07	241.57	240.56	240.79	240.15	239.91	239.82	239.92	
4	239.84	240.74	240.90	240.21	240.35	241.73	240.48	240.74	240.11	239.90	239.83	239.93	
5	239.85	240.58	240.54	240.22	240.29	242.13	240.73	240.63	240.10	239.90	239.82	239.92	
6	239.85	240.47	240.47	240.24	241.10	240.96	240.61	240.55	240.08	239.90	239.83	239.93	
7	239.85	240.27	240.56	240.26	242.37	240.89	240.62	240.51	240.05	239.89	239.82	239.93	
8	239.86	240.13	240.69	240.23	241.84	240.80	240.52	240.46	240.01	239.89	239.83	239.93	
9	239.86	239.98	240.47	240.19	241.18	240.75	240.45	240.42	239.99	239.87	239.82	239.93	
10	239.86	239.84	240.31	240.45	241.39	240.81	241.05	240.38	239.98	239.85	239.81	239.91	
11	239.87	239.87	240.25	240.51	241.38	241.22	240.54	240.36	239.97	239.86	239.79	239.87	
12	239.87	239.93	240.69	240.41	246.42	241.88	240.48	240.34	240.00	239.88	239.82	239.84	
13	239.88	240.00	240.33	240.30	246.38	242.20	240.42	240.33	240.00	239.89	239.82	239.84	
14	239.88	240.06	240.26	240.22	244.97	242.00	240.33	240.29	240.00	239.89	239.82	239.85	
15	239.89	240.27	240.19	240.16	243.13	241.60	240.26	240.27	239.99	239.93	239.81	239.85	
16	239.89	240.97	240.16	240.16	241.66	241.24	240.23	240.28	239.98	239.89	239.82	239.86	
17	239.90	240.92	240.22	240.22	241.26	241.03	240.30	240.28	239.98	239.89	239.83	239.85	
18	239.90	241.44	240.33	240.54	242.04	240.82	240.27	240.28	239.97	239.88	239.80	239.85	
19	239.91	241.28	240.24	240.41	243.12	241.02	240.22	240.23	239.96	239.86	239.82	239.84	
20	239.91	241.14	240.14	240.33	241.73	241.11	240.21	240.23	239.96	239.85	239.78	239.78	
21	239.92	240.99	240.08	240.27	241.25	240.92	240.20	240.22	239.95	239.84	239.77	239.83	
22	239.92	240.82	240.09	240.36	241.30	240.92	240.18	240.21	239.94	239.84	239.79	239.84	
23	239.93	240.69	240.10	241.19	241.35	241.63	240.17	240.19	239.94	239.85	239.80	239.85	
24	239.94	240.56	240.12	240.84	241.14	241.07	246.22	240.19	239.93	239.85	239.81	239.85	
25	239.95	240.43	240.22	240.57	240.98	241.70	247.26	240.18	239.92	239.85	239.83	239.85	
26	240.17	240.24	240.41	240.47	240.89	242.91	244.93	240.17	239.93	239.85	239.80	239.83	
27	240.09	240.16	240.64	240.28	241.94	241.57	243.26	240.17	239.92	239.86	239.82	239.86	
28	240.02	240.09	241.09	240.22	245.68	241.02	242.71	240.18	239.93	239.85	239.78	239.82	
29	239.97	240.04	240.58	240.19	243.89	240.80	242.23	240.18	239.94	239.85		239.82	
30	239.90	240.25	240.45	240.16	243.30	240.63	242.00	240.17	239.94	239.83		239.86	
31		240.34		240.17	242.71		241.33		239.94	239.83		239.83	
Mean	239.91	240.42	240.42	240.36	242.11	241.35	241.29	240.37	240.00	239.87	239.81	239.87	
Max	240.17	241.44	241.09	241.19	246.42	242.91	247.26	241.01	240.16	239.94	239.83	239.93	247.26
Min	239.84	239.79	240.08	240.16	240.07	240.63	240.17	240.17	239.92	239.83	239.77	239.78	239.77

Annual Max Momentary Gage Height 247.78 M (MSL), at 3.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 239.62 M (MSL), River Bed 238.62 M (MSL)
Left Bank Elevation 246.13 M (MSL)
Right Bank Elevation 246.77 M (MSL), Drainage Area 1262 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.40	0.97	18.90	17.15	7.00	72.17	19.25	35.90	7.20	2.80	1.30	2.00	
2	1.40	1.10	20.30	16.10	6.40	66.85	18.20	31.90	7.20	2.00	1.30	2.20	
3	1.40	30.45	29.05	10.70	5.40	59.65	19.60	27.65	7.00	2.20	1.20	2.40	
4	1.40	25.90	31.50	8.30	12.50	66.85	16.80	25.90	6.20	2.00	1.30	2.60	
5	1.50	20.30	18.90	8.60	10.70	87.91	25.55	22.05	6.00	2.00	1.20	2.40	
6	1.50	16.45	16.45	9.20	39.50	33.90	21.35	19.25	5.60	2.00	1.30	2.60	
7	1.50	10.10	19.60	9.80	100.94	31.15	21.70	17.85	5.00	1.90	1.20	2.60	
8	1.60	6.60	24.15	8.90	72.17	28.00	18.20	16.10	4.20	1.90	1.30	2.60	
9	1.60	3.60	16.45	7.80	42.70	26.25	15.75	14.70	3.80	1.70	1.20	2.60	
10	1.60	1.40	11.30	15.75	51.55	28.35	37.50	13.40	3.60	1.50	1.10	2.20	
11	1.70	1.70	9.50	17.85	51.10	44.30	18.90	12.80	3.40	1.60	0.97	1.70	
12	1.70	2.60	24.15	14.35	401.80	74.34	16.80	12.20	4.00	1.80	1.20	1.40	
13	1.80	4.00	11.90	11.00	398.20	91.71	14.70	11.90	4.00	1.90	1.20	1.40	
14	1.80	5.20	9.80	8.60	277.60	80.85	11.90	10.70	4.00	1.90	1.20	1.50	
15	1.90	10.10	7.80	7.20	142.20	61.00	9.80	10.10	3.80	2.60	1.10	1.50	
16	1.90	34.30	7.20	7.20	63.70	45.10	8.90	10.40	3.60	1.90	1.20	1.60	
17	2.00	32.30	8.60	8.60	45.90	36.70	11.00	10.40	3.60	1.90	1.30	1.50	
18	2.00	53.80	11.90	18.90	83.03	28.70	10.10	10.40	3.40	1.80	1.00	1.50	
19	2.20	46.70	9.20	14.35	141.66	36.30	8.60	8.90	3.20	1.60	1.20	1.40	
20	2.20	41.10	6.80	11.90	66.85	39.90	8.30	8.90	3.20	1.50	0.95	0.95	
21	2.40	35.10	5.60	10.10	45.50	32.30	8.00	8.60	3.00	1.40	0.93	1.30	
22	2.40	28.70	5.80	12.80	47.50	32.30	7.60	8.30	2.80	1.40	0.97	1.40	
23	2.60	24.15	6.00	43.10	49.75	62.35	7.40	7.80	2.80	1.50	1.00	1.50	
24	2.80	19.60	6.40	29.40	41.10	38.30	383.80	7.80	2.60	1.50	1.10	1.50	
25	3.00	15.05	8.60	19.95	34.70	65.50	477.40	7.60	2.40	1.50	1.30	1.50	
26	7.40	9.20	14.35	16.45	31.15	130.26	274.40	7.40	2.60	1.50	1.00	1.30	
27	5.80	7.20	22.40	10.40	77.60	59.65	150.30	7.40	2.40	1.60	1.20	1.60	
28	4.40	5.80	39.10	8.60	335.20	36.30	119.40	7.60	2.60	1.50	0.95	1.20	
29	3.40	4.80	20.30	7.80	195.45	28.00	93.34	7.60	2.80	1.50		1.20	
30	2.00	9.50	15.75	7.20	153.17	22.05	80.86	7.40	2.80	1.30		1.60	
31		12.20		7.40	119.40		48.85		2.80	1.30		1.30	
Total	70.30	519.97	457.75	405.45	3151.42	1547.00	1984.25	408.90	121.60	54.50	32.17	54.05	8807.36 CMSDAY
Mean	2.34	16.77	15.26	13.08	101.66	51.57	64.01	13.63	3.92	1.76	1.15	1.74	24.13 CMS
Max	7.40	53.80	39.10	43.10	401.80	130.26	477.40	35.90	7.20	2.80	1.30	2.60	477.40 CMS
Min	1.40	0.97	5.60	7.20	5.40	22.05	7.40	7.40	2.40	1.30	0.93	0.95	0.93 CMS
Runoff	6.074	44.925	39.550	35.031	272.283	133.661	171.439	35.329	10.506	4.709	2.779	4.670	760.956 MCM

Momentary Peak 526.00 CMS, at 247.78 M (MSL), at 3.00 Hours, on Oct 25, 2001

Runoff Yield 19.12 Liters/Second/Square KM, Momentary Peak Yield 416.799 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

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

Location on left bank at the bridge of Udon Thani - Nong Bua Lamphu Highway at guidepost 26.50.

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

Drainage Area 436 sq.km.

Type of Gage Water -stage recorder.

Zero Gage at Bottom +201.314 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank downstream side at the footpath of the bridge.

Elevation +208.000 m. (M.S.L.)

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 Float -

Rated by Current Meter 1975 - 1986, 1997 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions Overbank flow starts at elevation +205.840 m.(M.S.L.) and is including overbank flow.

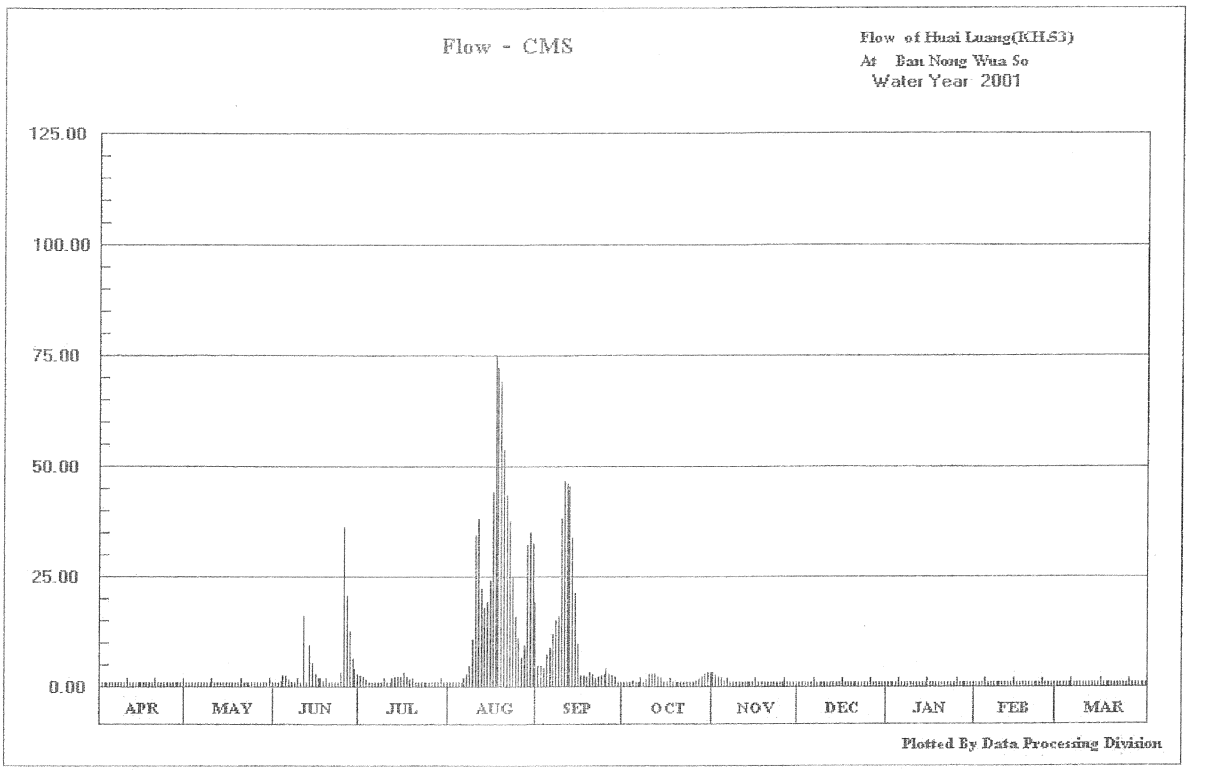
General Description Records good. Flow regulated by Huai Luang barrage.

Stage-discharge relation defined by 10 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	204.05	203.89	204.08	204.40	204.09	204.56	204.20	204.45	204.10	204.08	204.07	204.06	
2	204.05	203.89	204.20	204.37	204.08	204.55	204.20	204.40	204.10	204.08	204.07	204.06	
3	204.03	203.89	204.26	204.29	204.16	204.52	204.24	204.36	204.10	204.08	204.07	204.06	
4	204.03	203.89	204.38	204.25	204.15	204.66	204.26	204.34	204.10	204.08	204.07	204.06	
5	204.03	203.91	204.39	204.19	204.16	204.71	204.17	204.28	204.10	204.08	204.07	204.05	
6	204.01	203.91	204.31	204.20	204.34	204.82	204.15	204.27	204.09	204.08	204.07	204.04	
7	204.03	203.91	204.24	204.19	204.43	204.91	204.16	204.24	204.09	204.08	204.07	204.04	
8	204.03	203.91	204.15	204.18	204.56	204.93	204.18	204.23	204.09	204.08	204.07	204.04	
9	204.03	203.91	204.21	204.19	204.78	205.39	204.29	204.21	204.09	204.08	204.07	204.04	
10	204.03	203.91	204.21	204.24	205.33	205.53	204.41	204.19	204.09	204.07	204.07	204.04	
11	204.03	203.91	204.93	204.24	205.39	205.52	204.43	204.18	204.09	204.07	204.07	204.04	
12	204.03	203.90	204.25	204.33	205.09	205.51	204.41	204.16	204.09	204.07	204.06	204.02	
13	204.03	203.90	204.74	204.36	204.98	205.32	204.35	204.16	204.09	204.07	204.06	204.01	
14	204.03	203.89	204.59	204.35	205.01	205.07	204.32	204.16	204.09	204.07	204.06	204.01	
15	203.93	203.86	204.43	204.37	205.13	204.75	204.25	204.16	204.09	204.07	204.06	204.01	
16	203.93	203.85	204.34	204.44	205.49	204.40	204.20	204.17	204.09	204.07	204.06	204.01	
17	203.93	203.85	204.32	204.37	205.90	204.39	204.18	204.18	204.09	204.07	204.06	204.01	
18	203.93	203.86	204.26	204.29	205.87	204.36	204.16	204.18	204.09	204.07	204.06	203.98	
19	203.93	203.87	204.20	204.22	205.83	204.44	204.15	204.17	204.08	204.07	204.06	203.98	
20	203.88	204.12	204.19	204.19	205.63	204.41	204.14	204.16	204.08	204.07	204.06	203.98	
21	203.85	204.13	204.13	204.12	205.48	204.34	204.15	204.15	204.08	204.07	204.06	203.96	
22	203.84	204.09	204.13	204.24	205.38	204.37	204.14	204.15	204.08	204.06	204.06	203.96	
23	203.84	204.07	204.14	204.20	205.15	204.39	204.14	204.14	204.08	204.06	204.06	203.96	
24	203.84	204.07	204.44	204.19	204.93	204.43	204.18	204.14	204.08	204.06	204.06	203.96	
25	203.84	204.07	205.36	204.19	204.80	204.52	204.22	204.11	204.08	204.06	204.06	203.94	
26	203.84	204.09	205.05	204.16	204.64	204.43	204.26	204.11	204.08	204.06	204.06	203.94	
27	203.83	204.11	204.84	204.14	204.74	204.40	204.29	204.11	204.08	204.06	204.06	203.94	
28	203.83	204.13	204.63	204.12	205.29	204.37	204.36	204.11	204.08	204.06	204.06	203.94	
29	203.83	204.13	204.52	204.11	205.34	204.25	204.43	204.10	204.08	204.06		203.94	
30	203.83	204.12	204.43	204.09	205.30	204.21	204.46	204.10	204.08	204.06		203.92	
31		204.12		204.09	205.01		204.45		204.08	204.06		203.92	
Mean	203.94	203.97	204.41	204.24	204.98	204.68	204.26	204.20	204.09	204.07	204.06	204.00	
Max	204.05	204.13	205.36	204.44	205.90	205.53	204.46	204.45	204.10	204.08	204.07	204.06	205.90
Min	203.83	203.85	204.08	204.09	204.08	204.21	204.14	204.10	204.08	204.06	204.06	203.92	203.83

Annual Max Momentary Gage Height 205.91 M (MSL), at 18.00 Hours, on Aug 17, 2001
Zero Gage at Bottom Elevation 201.31 M (MSL), River Bed 199.78 M (MSL)
Left Bank Elevation 205.83 M (MSL)
Right Bank Elevation 206.17 M (MSL), Drainage Area 436 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	3.00	0.00	5.20	1.00	3.50	0.00	0.00	0.00	0.00	
2	0.00	0.00	1.00	2.70	0.00	5.00	1.00	3.00	0.00	0.00	0.00	0.00	
3	0.00	0.00	1.60	1.90	0.60	4.40	1.40	2.60	0.00	0.00	0.00	0.00	
4	0.00	0.00	2.80	1.50	0.50	7.65	1.60	2.40	0.00	0.00	0.00	0.00	
5	0.00	0.00	2.90	0.90	0.60	9.03	0.70	1.80	0.00	0.00	0.00	0.00	
6	0.00	0.00	2.10	1.00	2.40	12.20	0.50	1.70	0.00	0.00	0.00	0.00	
7	0.00	0.00	1.40	0.90	3.30	15.40	0.60	1.40	0.00	0.00	0.00	0.00	
8	0.00	0.00	0.50	0.80	5.20	16.20	0.80	1.30	0.00	0.00	0.00	0.00	
9	0.00	0.00	1.10	0.90	10.95	38.40	1.90	1.10	0.00	0.00	0.00	0.00	
10	0.00	0.00	1.10	1.40	34.80	47.10	3.10	0.90	0.00	0.00	0.00	0.00	
11	0.00	0.00	16.20	1.40	38.40	46.40	3.30	0.80	0.00	0.00	0.00	0.00	
12	0.00	0.00	1.50	2.30	22.60	45.70	3.10	0.60	0.00	0.00	0.00	0.00	
13	0.00	0.00	9.85	2.60	18.20	34.20	2.50	0.60	0.00	0.00	0.00	0.00	
14	0.00	0.00	5.80	2.50	19.40	21.80	2.20	0.60	0.00	0.00	0.00	0.00	
15	0.00	0.00	3.30	2.70	24.50	10.12	1.50	0.60	0.00	0.00	0.00	0.00	
16	0.00	0.00	2.40	3.40	44.40	3.00	1.00	0.70	0.00	0.00	0.00	0.00	
17	0.00	0.00	2.20	2.70	75.00	2.90	0.80	0.80	0.00	0.00	0.00	0.00	
18	0.00	0.00	1.60	1.90	72.60	2.60	0.60	0.80	0.00	0.00	0.00	0.00	
19	0.00	0.00	1.00	1.20	69.40	3.40	0.50	0.70	0.00	0.00	0.00	0.00	
20	0.00	0.20	0.90	0.90	54.10	3.10	0.40	0.60	0.00	0.00	0.00	0.00	
21	0.00	0.30	0.30	0.20	43.80	2.40	0.50	0.50	0.00	0.00	0.00	0.00	
22	0.00	0.00	0.30	1.40	37.80	2.70	0.40	0.50	0.00	0.00	0.00	0.00	
23	0.00	0.00	0.40	1.00	25.50	2.90	0.40	0.40	0.00	0.00	0.00	0.00	
24	0.00	0.00	3.40	0.90	16.20	3.30	0.80	0.40	0.00	0.00	0.00	0.00	
25	0.00	0.00	36.60	0.90	11.50	4.40	1.20	0.10	0.00	0.00	0.00	0.00	
26	0.00	0.00	21.00	0.60	7.10	3.30	1.60	0.10	0.00	0.00	0.00	0.00	
27	0.00	0.10	12.90	0.40	9.85	3.00	1.90	0.10	0.00	0.00	0.00	0.00	
28	0.00	0.30	6.82	0.20	32.50	2.70	2.60	0.10	0.00	0.00	0.00	0.00	
29	0.00	0.30	4.40	0.10	35.40	1.50	3.30	0.00	0.00	0.00		0.00	
30	0.00	0.20	3.30	0.00	33.00	1.10	3.60	0.00	0.00	0.00		0.00	
31		0.20		0.00	19.40		3.50		0.00	0.00		0.00	
Total	0.00	1.60	148.67	42.30	769.00	361.10	48.30	28.70	0.00	0.00	0.00	0.00	1399.67 CMSDAY
Mean	0.00	0.05	4.96	1.36	24.81	12.04	1.56	0.96	0.00	0.00	0.00	0.00	3.83 CMS
Max	0.00	0.30	36.60	3.40	75.00	47.10	3.60	3.50	0.00	0.00	0.00	0.00	75.00 CMS
Min	0.00	0.00	0.00	0.00	0.00	1.10	0.40	0.00	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.000	0.138	12.845	3.655	66.442	31.199	4.173	2.480	0.000	0.000	0.000	0.000	120.931 MCM

Momentary Peak 75.80 CMS. at 205.91 M (MSL), at 18 00 Hours. on Aug 17, 2001

Runoff Yield 8.80 Liters/Second/Square KM. Momentary Peak Yield 173.853 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

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

Location on left bank at the bridge on road.

Ban Fak Na **Amphoe** Mueang **Changwat** Loei

Drainage Area 3,101 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +229.000 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank upstream side at the abutment of the bridge.

Elevation +240.622 m. (M.S.L.)

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 Float -

Rated by Current Meter 1990 to date.

Stability of Channel Regimes Rather unstable by some silting.

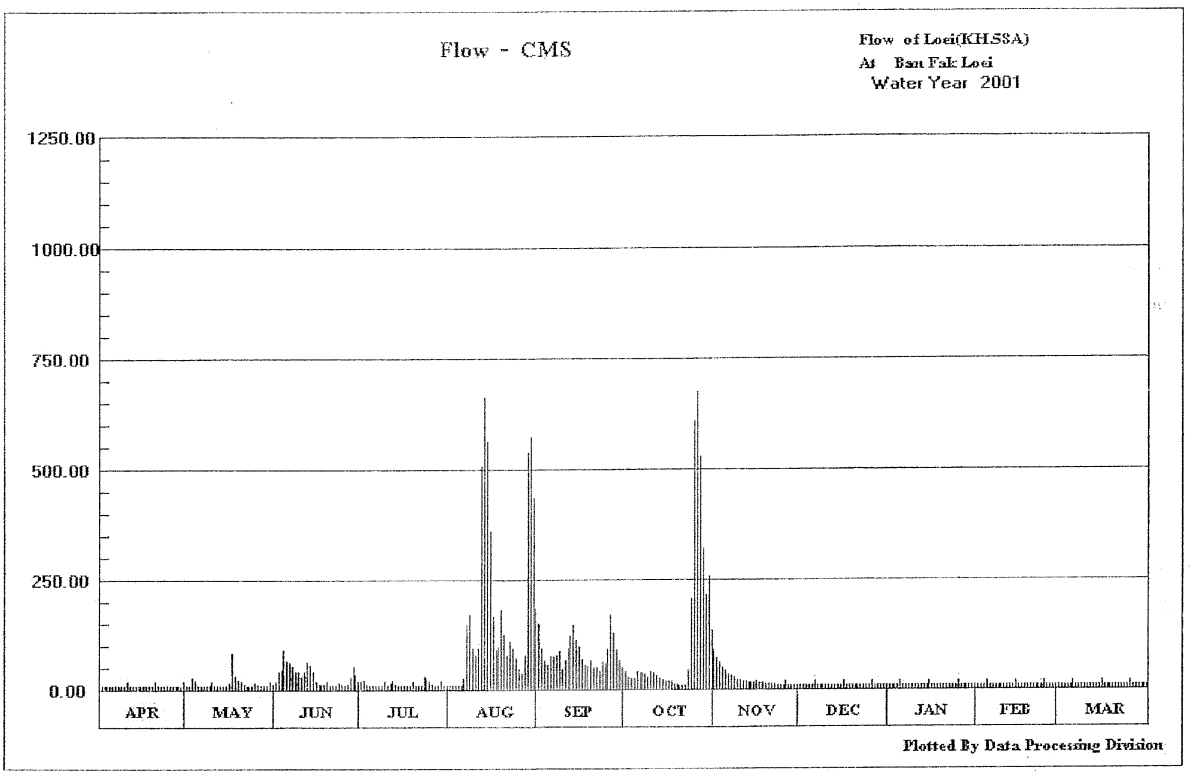
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	230.33	230.36	231.10	231.11	230.58	233.53	231.64	232.63	230.59	230.34	230.27	230.25	
2	230.32	230.34	231.67	231.18	230.53	232.64	231.39	232.30	230.57	230.35	230.27	230.27	
3	230.29	231.36	231.78	230.86	230.49	232.17	231.25	232.11	230.54	230.34	230.23	230.25	
4	230.27	231.24	232.61	230.73	230.64	231.99	231.25	231.91	230.54	230.34	230.24	230.24	
5	230.28	230.77	232.19	230.63	230.81	232.36	231.70	231.75	230.54	230.33	230.24	230.24	
6	230.27	230.58	232.15	230.59	231.29	232.36	231.59	231.55	230.56	230.32	230.23	230.22	
7	230.27	230.48	231.92	230.68	233.50	232.43	231.57	231.44	230.52	230.32	230.23	230.17	
8	230.28	230.40	231.69	230.75	233.77	232.55	231.55	231.34	230.50	230.34	230.26	230.17	
9	230.27	230.34	231.65	230.62	232.67	231.81	231.32	231.24	230.47	230.31	230.24	230.22	
10	230.28	230.37	231.33	230.67	232.39	232.22	231.66	231.20	230.46	230.30	230.23	230.25	
11	230.25	230.59	231.67	231.03	232.66	232.64	231.59	231.13	230.43	230.28	230.19	230.24	
12	230.21	230.80	232.16	231.19	237.19	233.13	231.44	231.05	230.40	230.28	230.21	230.21	
13	230.21	230.57	232.02	230.84	238.42	233.50	231.31	231.00	230.40	230.29	230.23	230.17	
14	230.21	230.51	231.64	230.75	237.65	232.97	231.18	230.98	230.39	230.38	230.24	230.16	
15	230.21	230.66	231.12	230.61	235.91	232.72	231.13	231.00	230.39	230.55	230.23	230.16	
16	230.22	231.03	230.92	230.55	233.73	232.27	231.05	231.04	230.38	230.46	230.20	230.13	
17	230.23	232.50	230.93	230.56	232.63	232.00	231.03	231.00	230.38	230.40	230.20	230.12	
18	230.23	231.46	230.94	230.82	232.70	231.96	230.94	230.96	230.36	230.38	230.20	230.13	
19	230.23	231.17	230.88	230.87	233.94	232.21	230.84	230.89	230.36	230.39	230.16	230.12	
20	230.24	231.01	230.78	230.75	233.18	231.85	230.81	230.85	230.36	230.37	230.16	230.12	
21	230.23	230.86	230.69	230.67	232.42	231.91	230.80	230.84	230.37	230.34	230.17	230.10	
22	230.20	230.76	230.60	230.64	232.95	231.68	230.78	230.84	230.37	230.34	230.14	230.09	
23	230.41	230.69	230.98	231.45	232.64	232.14	231.74	230.80	230.36	230.34	230.15	230.13	
24	230.24	230.79	230.92	231.36	232.28	232.07	234.25	230.76	230.34	230.31	230.19	230.13	
25	230.24	231.00	230.69	231.11	231.82	232.61	238.02	230.69	230.48	230.31	230.23	230.12	
26	230.42	230.92	230.93	230.85	231.58	233.77	238.52	230.68	230.41	230.32	230.23	230.14	
27	230.54	230.75	231.33	230.71	232.40	233.21	237.37	230.70	230.36	230.32	230.22	230.15	
28	230.57	230.68	231.93	230.63	237.44	232.61	235.53	230.69	230.34	230.31	230.24	230.14	
29	230.48	230.77	231.55	230.60	237.72	232.18	234.37	230.63	230.34	230.30		230.14	
30	230.39	230.76	231.05	230.60	236.58	231.87	234.83	230.62	230.34	230.28		230.15	
31		230.94		230.57	234.00		233.31		230.35	230.28		230.16	
Mean	230.29	230.82	231.39	230.81	233.44	232.45	232.44	231.15	230.43	230.34	230.22	230.17	
Max	230.57	232.50	232.61	231.45	238.42	233.77	238.52	232.63	230.59	230.55	230.27	230.27	238.52
Min	230.20	230.34	230.60	230.55	230.49	231.68	230.78	230.62	230.34	230.28	230.14	230.09	230.09

Annual Max Momentary Gage Height 238.72 M (MSL), at 3.00 Hours, on Oct 26, 2001
Zero Gage at Bottom Elevation 229.00 M (MSL), River Bed 229.42 M (MSL)
Left Bank Elevation 240.43 M (MSL)
Right Bank Elevation 240.40 M (MSL), Drainage Area 3101 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.60	5.20	23.00	23.30	9.60	154.25	43.60	95.80	9.80	4.80	3.40	3.00	
2	4.40	4.80	44.80	25.40	8.60	96.40	33.60	76.00	9.40	5.00	3.40	3.40	
3	3.80	32.40	49.60	16.00	7.80	68.50	28.00	65.50	8.80	4.80	2.60	3.00	
4	3.40	27.60	94.60	12.75	10.80	59.50	28.00	55.50	8.80	4.80	2.80	2.80	
5	3.60	13.75	69.50	10.60	14.75	79.60	46.00	48.25	8.80	4.60	2.80	2.80	
6	3.40	9.60	67.50	9.80	29.60	79.60	41.60	40.00	9.20	4.40	2.60	2.40	
7	3.40	7.60	56.00	11.60	152.00	83.80	40.80	35.60	8.40	4.40	2.60	1.55	
8	3.60	6.00	45.60	13.25	172.25	91.00	40.00	31.60	8.00	4.80	3.20	1.55	
9	3.40	4.80	44.00	10.40	98.20	50.95	30.80	27.60	7.40	4.20	2.80	2.40	
10	3.60	5.40	31.20	11.40	81.40	71.20	44.40	26.00	7.20	4.00	2.60	3.00	
11	3.00	9.80	44.80	20.90	97.60	96.40	41.60	23.90	6.60	3.60	1.85	2.80	
12	2.20	14.50	68.00	25.70	510.80	126.10	35.60	21.50	6.00	3.60	2.20	2.20	
13	2.20	9.40	61.00	15.50	666.60	152.00	30.40	20.00	6.00	3.80	2.60	1.55	
14	2.20	8.20	43.60	13.25	566.75	116.20	25.40	19.40	5.80	5.60	2.80	1.40	
15	2.20	11.20	23.60	10.20	364.55	101.20	23.90	20.00	5.80	9.00	2.60	1.40	
16	2.40	20.90	17.60	9.00	169.25	74.20	21.50	21.20	5.60	7.20	2.00	0.95	
17	2.60	88.00	17.90	9.20	95.80	60.00	20.90	20.00	5.60	6.00	2.00	0.80	
18	2.60	36.40	18.20	15.00	100.00	58.00	18.20	18.80	5.20	5.60	2.00	0.95	
19	2.60	25.10	16.50	16.25	185.20	70.60	15.50	16.75	5.20	5.80	1.40	0.80	
20	2.80	20.30	14.00	13.25	129.60	52.75	14.75	15.75	5.20	5.40	1.40	0.80	
21	2.60	16.00	11.80	11.40	83.20	55.50	14.50	15.50	5.40	4.80	1.55	0.50	
22	2.00	13.50	10.00	10.80	115.00	45.20	14.00	15.50	5.40	4.80	1.10	0.47	
23	6.20	11.80	19.40	36.00	96.40	67.00	47.80	14.50	5.20	4.80	1.25	0.95	
24	2.80	14.25	17.60	32.40	74.80	63.50	210.00	13.50	4.80	4.20	1.85	0.95	
25	2.80	20.00	11.80	23.30	51.40	94.60	614.60	11.80	7.60	4.20	2.60	0.80	
26	6.40	17.60	17.90	15.75	41.20	172.25	679.60	11.60	6.20	4.40	2.60	1.10	
27	8.80	13.25	31.20	12.25	82.00	131.70	532.40	12.00	5.20	4.40	2.40	1.25	
28	9.40	11.60	56.50	10.60	540.80	94.60	326.35	11.80	4.80	4.20	2.80	1.10	
29	7.60	13.75	40.00	10.00	575.60	69.00	219.60	10.60	4.80	4.00		1.10	
30	5.80	13.50	21.50	10.00	437.80	53.65	259.85	10.40	4.80	3.60		1.25	
31		18.20		9.40	190.00		138.70		5.00	3.60		1.40	
Total	116.40	524.40	1088.70	474.65	5759.35	2589.25	3681.95	826.35	202.00	148.40	65.80	50.42	15527.67 CMSDAY
Mean	3.88	16.92	36.29	15.31	185.79	86.31	118.77	27.55	6.52	4.79	2.35	1.63	42.54 CMS
Max	9.40	88.00	94.60	36.00	666.60	172.25	679.60	95.80	9.80	9.00	3.40	3.40	679.60 CMS
Min	2.00	4.80	10.00	9.00	7.80	45.20	14.00	10.40	4.80	3.60	1.10	0.47	0.47 CMS
Runoff	10.057	45.308	94.064	41.010	497.608	223.711	318.121	71.397	17.453	12.822	5.685	4.356	1341.591 MCM

Momentary Peak 705.60 CMS, at 238.72 M (MSL), at 3.00 Hours, on Oct 26, 2001

Runoff Yield 13.72 Liters/Second/Square KM, Momentary Peak Yield 227.540 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

Lat 17 - 07 - 44 N. **Long** 101 - 04 - 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

Drainage Area 562 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +258.361 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank downstream side at the footpath of the bridge.

Elevation +266.940 m. (M.S.L.)

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 Float -

Rated by Current Meter 1993 to date.

Stability of Channel Regimes Fairly stable.

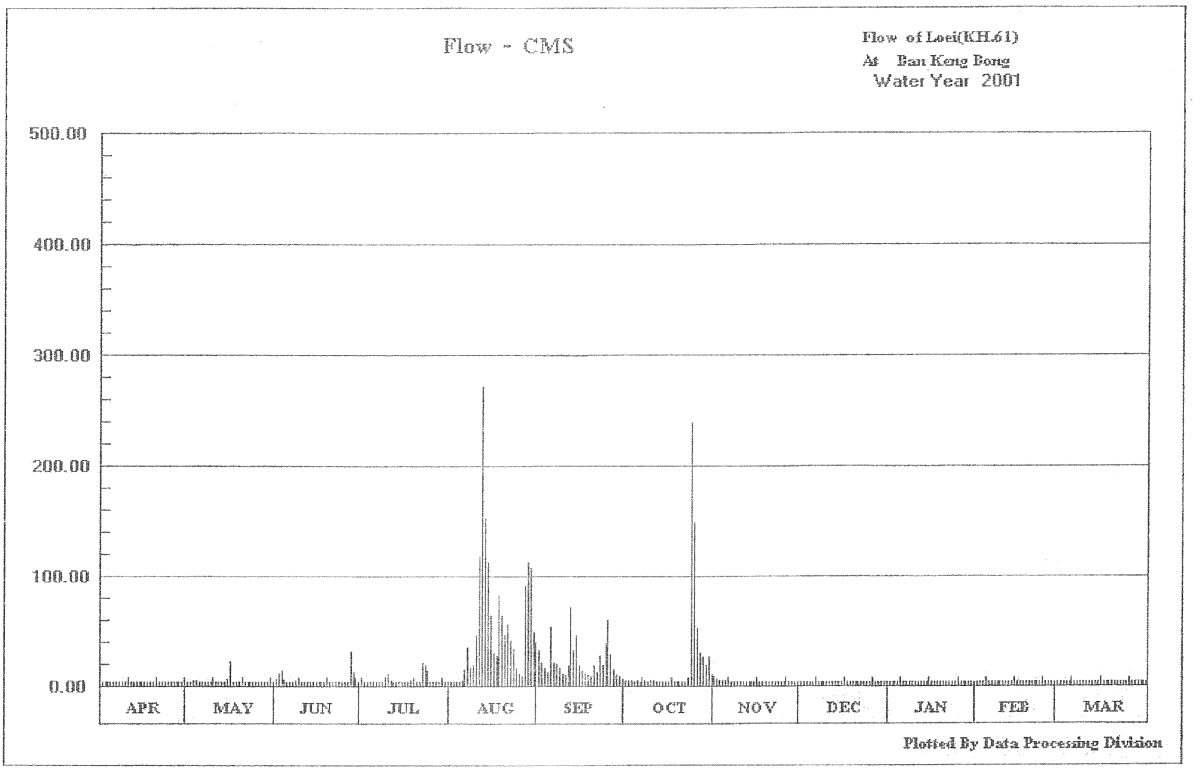
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 38 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	258.74	258.82	259.12	259.19	258.84	259.95	259.07	259.21	258.90	258.81	258.80	258.77	
2	258.74	258.82	259.30	259.00	258.84	259.61	259.06	259.12	258.90	258.81	258.79	258.74	
3	258.74	259.06	259.39	259.01	258.84	259.46	259.05	259.08	258.90	258.82	258.79	258.71	
4	258.74	259.06	259.12	258.99	258.88	259.34	259.04	259.07	258.89	258.82	258.78	258.71	
5	258.74	259.01	259.00	258.92	259.06	260.49	259.05	259.06	258.88	258.82	258.78	258.71	
6	258.74	258.78	258.96	258.92	259.42	259.61	259.04	259.05	258.86	258.82	258.78	258.72	
7	258.74	258.80	258.95	259.01	260.01	259.58	259.05	259.01	258.86	258.82	258.77	258.71	
8	258.74	258.82	259.06	258.96	259.46	259.46	259.05	259.01	258.86	258.82	258.77	258.71	
9	258.74	258.78	258.85	258.93	259.56	259.31	259.04	258.95	258.86	258.81	258.77	258.71	
10	258.74	258.77	258.85	259.30	260.31	259.26	259.07	258.95	258.86	258.82	258.76	258.71	
11	258.74	258.78	258.86	259.05	261.76	259.54	259.06	258.96	258.86	258.81	258.76	258.71	
12	258.74	258.78	258.97	259.01	263.67	260.90	259.04	258.96	258.85	258.81	258.76	258.71	
13	258.74	258.82	258.95	258.96	262.31	259.96	259.01	258.96	258.85	258.81	258.77	258.71	
14	258.74	258.82	258.91	258.95	261.66	260.31	258.96	258.93	258.85	258.82	258.77	258.71	
15	258.74	259.10	258.90	258.91	260.71	259.54	258.94	258.93	258.85	258.82	258.78	258.71	
16	258.74	259.65	258.85	258.88	259.86	259.36	258.94	258.93	258.85	258.81	258.78	258.71	
17	258.74	258.99	258.85	259.01	259.81	259.31	258.96	258.92	258.84	258.81	258.78	258.71	
18	258.74	258.87	258.87	259.08	261.12	259.24	258.97	258.92	258.84	258.81	258.78	258.70	
19	258.70	258.85	258.86	259.05	260.71	259.20	258.96	258.92	258.84	258.81	258.78	258.70	
20	258.69	258.84	258.91	259.01	260.31	259.56	258.96	258.92	258.83	258.81	258.77	258.70	
21	258.73	258.83	258.91	258.96	260.55	259.32	258.96	258.91	258.83	258.81	258.77	258.70	
22	258.74	258.83	258.84	259.61	260.21	259.79	258.95	258.91	258.83	258.80	258.77	258.70	
23	258.74	258.82	258.85	259.55	259.97	259.53	259.18	258.91	258.83	258.79	258.77	258.70	
24	258.74	258.96	258.84	259.36	259.46	260.12	263.35	258.91	258.82	258.81	258.78	258.70	
25	258.97	258.87	259.01	259.04	259.31	260.63	262.26	258.91	258.82	258.81	258.78	258.70	
26	258.84	258.85	259.00	259.02	259.22	259.83	260.46	258.91	258.82	258.81	258.78	258.70	
27	258.92	258.84	259.92	259.01	261.29	259.44	259.88	258.91	258.82	258.80	258.77	258.68	
28	258.92	258.83	259.33	258.96	261.66	259.26	259.76	258.91	258.81	258.80	258.77	258.67	
29	258.83	258.85	259.05	258.86	261.59	259.22	259.56	258.91	258.81	258.80		258.67	
30	258.83	259.06	259.04	258.86	260.39	259.10	259.76	258.91	258.81	258.80		258.67	
31		258.95		258.84	260.16		259.27		258.81	258.80		258.90	
Mean	258.77	258.90	259.01	259.04	260.29	259.64	259.41	258.97	258.85	258.81	258.78	258.71	
Max	258.97	259.65	259.92	259.61	263.67	260.90	263.35	259.21	258.90	258.82	258.80	258.90	263.67
Min	258.69	258.77	258.84	258.84	258.84	259.10	258.94	258.91	258.81	258.79	258.76	258.67	258.67

Annual Max Momentary Gage Height 264.61 M (MSL), at 6.00 Hours, on Aug 12, 2001
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 265.28 M (MSL), Drainage Area 562 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.40	1.06	8.00	9.75	1.42	34.25	6.75	10.30	2.50	0.88	0.70	0.55	
2	0.40	1.06	13.00	5.00	1.42	22.35	6.50	8.00	2.50	0.88	0.65	0.40	
3	0.40	6.50	15.70	5.25	1.42	17.80	6.25	7.00	2.50	1.06	0.65	0.25	
4	0.40	6.50	8.00	4.75	2.14	14.20	6.00	6.75	2.32	1.06	0.60	0.25	
5	0.40	5.25	5.00	3.00	6.50	55.05	6.25	6.50	2.14	1.06	0.60	0.25	
6	0.40	0.60	4.00	3.00	16.60	22.35	6.00	6.25	1.78	1.06	0.60	0.30	
7	0.40	0.70	3.75	5.25	36.35	21.40	6.25	5.25	1.78	1.06	0.55	0.25	
8	0.40	1.06	6.50	4.00	17.80	17.80	6.25	5.25	1.78	1.06	0.55	0.25	
9	0.40	0.60	1.60	3.25	20.80	13.30	6.00	3.75	1.78	0.88	0.55	0.25	
10	0.40	0.55	1.60	13.00	47.40	11.80	6.75	3.75	1.78	1.06	0.50	0.25	
11	0.40	0.60	1.78	6.25	119.60	20.20	6.50	4.00	1.78	0.88	0.50	0.25	
12	0.40	0.60	4.25	5.25	273.00	73.50	6.00	4.00	1.60	0.88	0.50	0.25	
13	0.40	1.06	3.75	4.00	154.15	34.60	5.25	4.00	1.60	0.88	0.55	0.25	
14	0.40	1.06	2.75	3.75	113.60	47.40	4.00	3.25	1.60	1.06	0.55	0.25	
15	0.40	7.50	2.50	2.75	64.95	20.20	3.50	3.25	1.60	1.06	0.60	0.25	
16	0.40	23.75	1.60	2.14	31.10	14.80	3.50	3.25	1.60	0.88	0.60	0.25	
17	0.40	4.75	1.60	5.25	29.35	13.30	4.00	3.00	1.42	0.88	0.60	0.25	
18	0.40	1.96	1.96	7.00	84.00	11.20	4.25	3.00	1.42	0.88	0.60	0.20	
19	0.20	1.60	1.78	6.25	64.95	10.00	4.00	3.00	1.42	0.88	0.60	0.20	
20	0.18	1.42	2.75	5.25	47.40	20.80	4.00	3.00	1.24	0.88	0.55	0.20	
21	0.35	1.24	2.75	4.00	57.75	13.60	4.00	2.75	1.24	0.88	0.55	0.20	
22	0.40	1.24	1.42	22.35	43.40	28.65	3.75	2.75	1.24	0.70	0.55	0.20	
23	0.40	1.06	1.60	20.50	34.95	19.90	9.50	2.75	1.24	0.65	0.55	0.20	
24	0.40	4.00	1.42	14.60	17.80	40.20	241.00	2.75	1.06	0.88	0.60	0.20	
25	4.25	1.96	5.25	6.00	13.30	61.35	150.90	2.75	1.06	0.88	0.60	0.20	
26	1.42	1.60	5.00	5.50	10.60	30.05	53.70	2.75	1.06	0.88	0.60	0.20	
27	3.00	1.42	33.20	5.25	92.95	17.20	31.80	2.75	1.06	0.70	0.55	0.16	
28	3.00	1.24	13.90	4.00	113.60	11.80	27.60	2.75	0.88	0.70	0.55	0.14	
29	1.24	1.60	6.25	1.78	109.45	10.60	20.80	2.75	0.88	0.70		0.14	
30	1.24	6.50	6.00	1.78	50.60	7.50	27.60	2.75	0.88	0.70		0.14	
31		3.75		1.42	41.60		12.10		0.88	0.70		2.50	
Total	23.28	93.79	168.66	191.52	1719.95	737.15	690.75	124.05	47.62	27.59	16.15	9.63	3850.14 CMSDAY
Mean	0.78	3.03	5.62	6.18	55.48	24.57	22.28	4.14	1.54	0.89	0.58	0.31	10.55 CMS
Max	4.25	23.75	33.20	22.35	273.00	73.50	241.00	10.30	2.50	1.06	0.70	2.50	273.00 CMS
Min	0.18	0.55	1.42	1.42	1.42	7.50	3.50	2.75	0.88	0.65	0.50	0.14	0.14 CMS
Runoff	2.011	8.103	14.572	16.547	148.604	63.690	59.681	10.718	4.114	2.384	1.395	0.832	332.652 MCM

Momentary Peak 406.00 CMS, at 264.61 M (MSL), at 6.00 Hours, on Aug 12, 2001

Runoff Yield 18.77 Liters/Second/Square KM, Momentary Peak Yield 722.420 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

Huai Nam Kam at Ban Dan Muang Kham, Sakon Nakhon (Kh.63)

Lat 17 - 06 - 08 N. **Long** 104 - 21 - 28 E.

Location on left bank at the bridge on road.

Ban Dan Muang Kham **Amphoe** Khok Si Suphan **Changwat** Sakon Nakhon

Drainage Area 1,764 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +147.530 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank at the abutment of the bridge.

Elevation +155.198 m. (M.S.L.)

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 1982 - 1985, 1997 to date.

Rated by Float -

Rated by Current Meter 1982 - 1985, 1997 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions Overbank flow starts at elevation +151.830 m.(M.S.L.) and is including overbank flow.

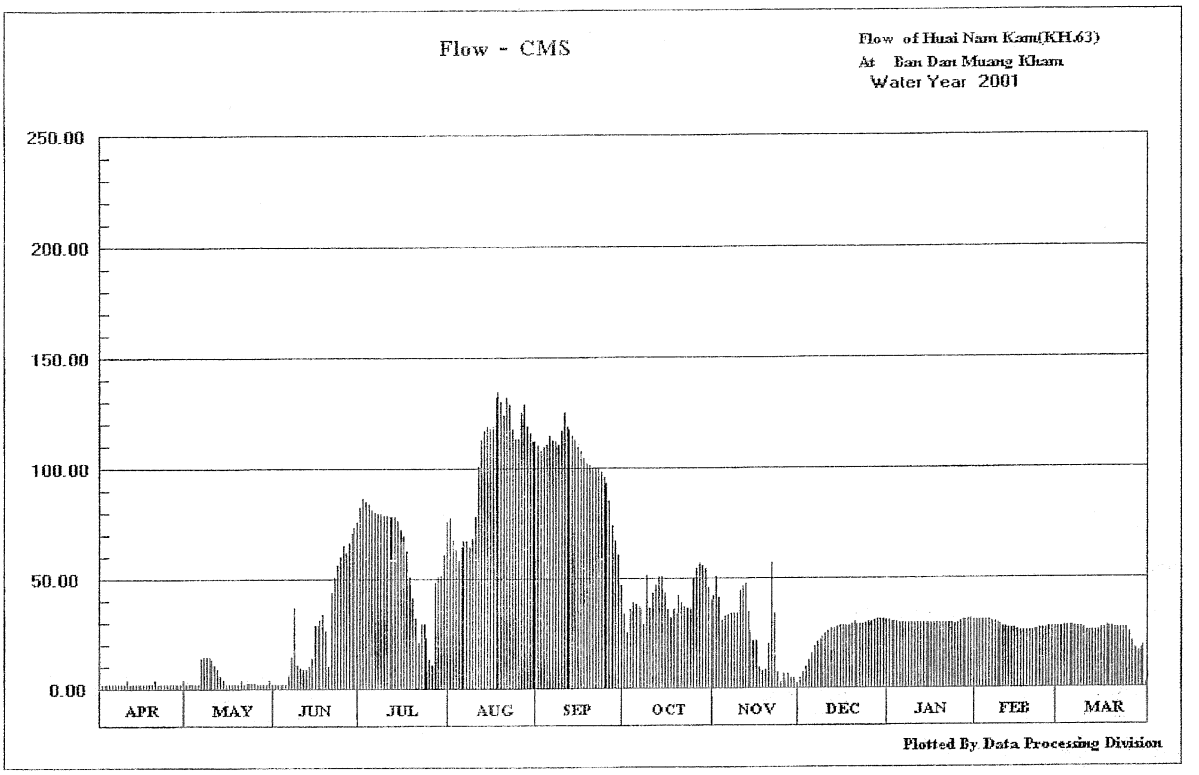
General Description Records fair. The weir situated downstream from the gage site.

Stage-discharge relation defined by 28 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	150.39	150.31	150.49	152.59	152.46	153.15	150.78	151.10	148.84	150.63	150.62	150.48	
2	150.39	150.33	149.81	152.68	152.13	153.12	150.35	151.46	149.06	150.60	150.62	150.47	
3	150.39	150.35	149.69	152.66	151.96	153.14	150.86	151.08	149.32	150.58	150.61	150.49	
4	150.38	150.62	149.39	152.63	151.77	153.16	150.98	150.62	149.55	150.58	150.61	150.51	
5	150.37	150.61	150.17	152.56	152.00	153.20	150.97	150.72	149.78	150.56	150.61	150.51	
6	150.37	150.96	150.78	152.53	152.12	153.18	150.92	150.76	149.99	150.56	150.60	150.49	
7	150.37	150.97	150.97	152.52	152.12	153.17	150.88	150.77	150.11	150.56	150.60	150.46	
8	150.36	150.97	151.08	152.51	152.01	153.16	150.52	150.77	150.19	150.55	150.57	150.47	
9	150.36	150.97	150.91	152.50	152.17	153.22	151.48	150.77	150.25	150.55	150.52	150.48	
10	150.36	150.95	150.88	152.50	152.48	153.29	150.89	151.22	150.31	150.56	150.48	150.43	
11	150.34	150.91	150.86	152.49	153.02	153.24	151.15	151.28	150.36	150.56	150.47	150.36	
12	150.33	150.87	150.87	152.49	153.18	153.23	151.30	151.33	150.42	150.55	150.45	150.36	
13	150.33	150.79	150.89	152.49	153.22	153.20	151.45	150.81	150.45	150.55	150.44	150.37	
14	150.33	150.71	150.96	152.42	153.24	153.18	151.46	150.38	150.47	150.55	150.43	150.38	
15	150.33	150.65	151.05	152.31	153.23	153.14	151.17	150.13	150.49	150.56	150.40	150.38	
16	150.33	150.58	151.05	152.20	153.24	153.12	150.85	150.12	150.49	150.55	150.37	150.43	
17	150.33	150.53	151.06	151.93	153.35	153.08	150.68	149.33	150.49	150.55	150.36	150.43	
18	150.33	150.54	151.07	151.47	153.37	153.04	150.85	149.13	150.50	150.55	150.36	150.49	
19	150.33	150.57	151.04	151.09	153.33	153.03	150.77	149.22	150.52	150.56	150.37	150.47	
20	150.33	150.61	150.90	150.70	153.28	153.01	151.12	150.05	150.59	150.56	150.37	150.46	
21	150.32	150.64	151.18	150.10	153.35	153.01	150.99	151.72	150.53	150.56	150.40	150.45	
22	150.32	150.67	151.45	150.56	153.32	153.00	150.92	150.77	150.53	150.55	150.41	150.44	
23	150.31	150.68	151.68	150.55	153.23	152.98	150.88	149.10	150.54	150.55	150.43	150.43	
24	150.31	150.67	151.83	150.25	153.19	152.92	150.88	148.65	150.57	150.54	150.43	150.44	
25	150.31	150.67	152.03	149.61	153.19	152.86	151.43	149.03	150.58	150.56	150.45	150.45	
26	150.31	150.64	151.90	149.43	153.29	152.66	151.60	148.68	150.60	150.60	150.46	150.35	
27	150.31	150.58	152.09	151.37	153.32	152.35	151.71	149.03	150.62	150.63	150.47	150.09	
28	150.31	150.59	152.25	151.47	153.24	152.11	151.67	148.83	150.64	150.63	150.47	149.87	
29	150.31	150.58	152.33	151.49	153.21	151.85	151.60	148.84	150.65	150.64		149.82	
30	150.31	150.56	152.40	151.85	153.17	151.30	151.27	148.58	150.64	150.64		149.88	
31		150.54		152.40	153.17		151.04		150.63	150.63		149.98	
Mean	150.34	150.67	151.10	151.75	152.88	152.94	151.08	150.14	150.28	150.57	150.48	150.36	
Max	150.39	150.97	152.40	152.68	153.37	153.29	151.71	151.72	150.65	150.64	150.62	150.51	153.37
Min	150.31	150.31	149.39	149.43	151.77	151.30	150.35	148.58	148.84	150.54	150.36	149.82	148.58

Annual Max Momentary Gage Height 153.38 M (MSL), at 5.00 Hours, on Aug 18, 2001
Zero Gage at Bottom Elevation 147.53 M (MSL), River Bed 147.59 M (MSL)
Left Bank Elevation 151.82 M (MSL)
Right Bank Elevation 154.58 M (MSL), Drainage Area 1764 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.90	83.19	78.23	110.75	34.60	42.50	5.40	31.60	31.40	28.60	
2	0.00	0.00	0.00	86.88	68.25	108.20	26.00	51.50	7.60	31.00	31.40	28.40	
3	0.00	0.00	0.00	86.06	64.00	109.90	36.50	42.00	10.20	30.60	31.20	28.80	
4	0.00	2.40	0.00	84.83	59.25	111.60	39.50	31.40	13.25	30.60	31.20	29.20	
5	0.00	2.20	0.00	81.96	65.00	115.00	39.25	33.40	16.70	30.20	31.20	29.20	
6	0.00	14.60	6.40	80.73	68.00	113.30	38.00	34.20	19.85	30.20	31.00	28.80	
7	0.00	15.20	15.20	80.32	68.00	112.45	37.00	34.40	21.65	30.20	31.00	28.20	
8	0.00	15.20	37.40	79.91	65.25	111.60	29.40	34.40	22.85	30.00	30.40	28.40	
9	0.00	15.20	11.60	79.50	69.25	117.40	52.00	34.40	24.00	30.00	29.40	28.60	
10	0.00	14.00	10.20	79.50	78.87	125.80	37.25	45.50	25.20	30.20	28.60	27.60	
11	0.00	11.60	9.40	79.18	101.30	119.80	43.75	47.00	26.20	30.20	28.40	26.20	
12	0.00	9.80	9.80	79.18	113.30	118.60	47.50	48.25	27.40	30.00	28.00	26.20	
13	0.00	6.70	10.60	79.18	117.40	115.00	51.25	35.25	28.00	30.00	27.80	26.40	
14	0.00	4.30	14.60	76.97	119.80	113.30	51.50	26.60	28.40	30.00	27.60	26.60	
15	0.00	3.00	29.75	73.48	118.60	109.90	44.25	21.95	28.80	30.20	27.00	26.60	
16	0.00	1.80	29.75	70.00	119.80	108.20	36.25	21.80	28.80	30.00	26.40	27.60	
17	0.00	1.30	32.30	63.25	133.00	105.20	32.60	10.30	28.80	30.00	26.20	27.60	
18	0.00	1.40	34.85	51.75	135.40	102.60	36.25	8.30	29.00	30.00	26.20	28.80	
19	0.00	1.70	27.20	42.25	130.60	101.95	34.40	9.20	29.40	30.20	26.40	28.40	
20	0.00	2.20	11.00	33.00	124.60	100.65	43.00	20.75	30.80	30.20	26.40	28.20	
21	0.00	2.80	44.50	21.50	133.00	100.65	39.75	58.00	29.60	30.20	27.00	28.00	
22	0.00	3.40	51.25	30.20	129.40	100.00	38.00	34.40	29.60	30.00	27.20	27.80	
23	0.00	3.60	57.00	30.00	118.60	99.18	37.00	8.00	29.80	30.00	27.60	27.60	
24	0.00	3.40	60.75	24.00	114.15	96.72	37.00	3.50	30.40	29.80	27.60	27.80	
25	0.00	3.40	65.75	14.15	114.15	94.26	50.75	7.30	30.60	30.20	28.00	28.00	
26	0.00	2.80	62.50	11.45	125.80	86.06	55.00	3.80	31.00	31.00	28.20	26.00	
27	0.00	1.80	67.25	49.25	129.40	74.75	57.75	7.30	31.40	31.60	28.40	21.35	
28	0.00	1.90	71.58	51.75	119.80	67.75	56.75	5.30	31.80	31.60	28.40	18.05	
29	0.00	1.80	74.12	52.25	116.20	61.25	55.00	5.40	32.00	31.80		17.30	
30	0.00	1.60	76.33	61.25	112.45	47.50	46.75	2.91	31.80	31.80		18.20	
31		1.40		76.33	112.45		41.00		31.60	31.60		19.70	
Total	0.00	150.50	921.98	1893.25	3223.30	3059.32	1305.00	769.01	791.90	945.00	799.60	818.20	14677.06 CMSDAY
Mean	0.00	4.85	30.73	61.07	103.98	101.98	42.10	25.63	25.55	30.48	28.56	26.39	40.21 CMS
Max	0.00	15.20	76.33	86.88	135.40	125.80	57.75	58.00	32.00	31.80	31.40	29.20	135.40 CMS
Min	0.00	0.00	0.00	11.45	59.25	47.50	26.00	2.91	5.40	29.80	26.20	17.30	0.00 CMS
Runoff	0.000	13.003	79.659	163.577	278.493	264.325	112.752	66.442	68.420	81.648	69.085	70.692	1268.098 MCM

Momentary Peak 136.60 CMS, at 153.38 M (MSL), at 5.00 Hours, on Aug 18, 2001

Runoff Yield 22.80 Liters/Second/Square KM, Momentary Peak Yield 77.438 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

Nam Kam at Ban Don Khao, Nakhon Phanom (Kh.64A)

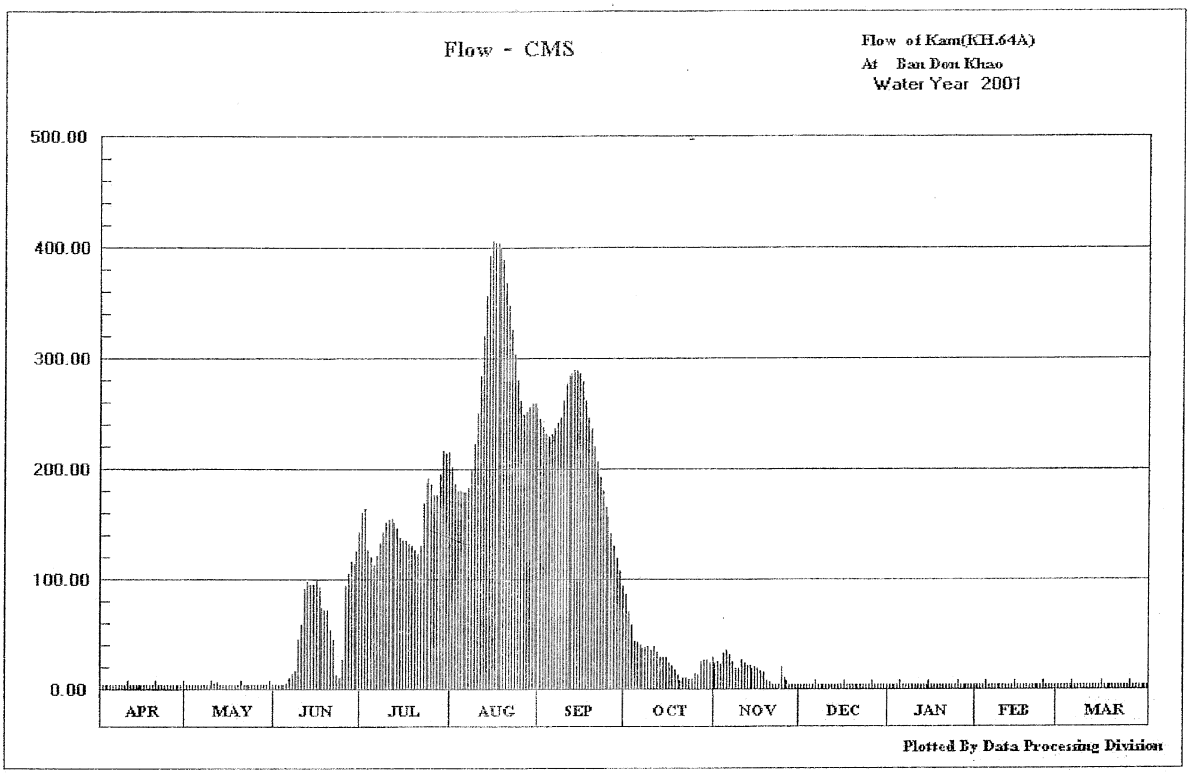
Lat 16 - 57 - 22 N. **Long** 104 - 37 - 27 E.

Location		on left bank at the bridge on highway.			
	Ban Don Khao	**Amphoe** Renu Nakhon		**Changwat**	Nakhon Phanom
Drainage Area		3,345 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+132.030 m. (M.S.L.)			
Bench Mark		B.M.- Highways Dept.			
	Location BM	On left bank downstream side at the abutment of the bridge.			
	Elevation	+141.813 m. (M.S.L.)			
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.			
Period of Available Gage Records		1996 to date.			
Rating Operation					
	Period of Rating	1996 to date.			
	Rated by Float	-			
	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 +137.780 m.(M.S.L.) and is including overbank flow.			
General Description		Records poor. Stage-discharge relation defined by 34 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	132.66	132.63	133.08	137.78	138.48	139.16	136.19	134.33	132.83	132.81	132.67	132.69	
2	132.65	132.63	133.05	137.85	138.24	139.06	135.77	134.37	132.84	132.81	132.64	132.68	
3	132.65	132.63	133.01	137.14	138.15	138.99	135.44	134.27	132.85	132.81	132.67	132.66	
4	132.65	132.69	132.99	137.02	138.14	138.94	135.05	134.69	132.86	132.80	132.67	132.68	
5	132.65	132.74	133.34	136.83	138.13	138.98	135.00	134.75	132.85	132.80	132.73	132.67	
6	132.63	132.66	133.70	137.03	138.12	139.05	134.94	134.63	132.83	132.80	132.71	132.66	
7	132.63	132.63	133.90	137.26	138.18	139.11	134.82	134.38	132.83	132.80	132.69	132.66	
8	132.63	132.85	134.00	137.45	138.44	139.17	134.82	134.10	132.83	132.79	132.69	132.66	
9	132.63	132.85	135.06	137.61	138.84	139.34	134.86	134.14	132.83	132.79	132.71	132.66	
10	132.62	132.83	135.46	137.66	139.22	139.50	134.75	134.42	132.83	132.79	132.71	132.66	
11	132.61	133.39	136.33	137.68	139.57	139.58	134.86	134.35	132.85	132.78	132.68	132.66	
12	132.61	133.47	136.48	137.61	139.93	139.60	134.73	134.21	132.85	132.78	132.67	132.65	
13	132.61	133.00	136.41	137.52	140.21	139.62	134.53	134.25	132.84	132.78	132.68	132.66	
14	132.61	132.98	136.42	137.34	140.45	139.63	134.56	134.12	132.84	132.78	132.68	132.67	
15	132.61	132.86	136.51	137.30	140.53	139.60	134.55	134.20	132.85	132.77	132.74	132.66	
16	132.61	132.81	136.35	137.29	140.52	139.52	134.36	134.15	132.85	132.77	132.72	132.66	
17	132.61	132.73	135.86	137.24	140.52	139.35	134.25	134.00	132.85	132.77	132.70	132.66	
18	132.61	132.71	135.82	137.21	140.50	139.17	134.06	133.96	133.12	132.77	132.69	132.66	
19	132.60	132.73	135.81	137.14	140.43	139.05	133.79	133.55	133.05	132.77	132.68	132.66	
20	132.60	132.73	135.33	137.06	140.29	138.80	133.55	133.49	132.87	132.77	132.82	132.66	
21	132.60	132.72	135.07	137.21	140.15	138.57	133.68	133.14	132.85	132.76	132.83	132.65	
22	132.60	133.03	133.80	137.96	139.98	138.35	133.70	133.05	132.83	132.76	132.78	132.63	
23	132.60	132.88	133.69	138.27	139.77	138.15	133.59	133.14	132.83	132.76	132.76	132.63	
24	132.60	132.79	134.44	138.33	139.54	137.88	133.64	134.18	132.83	132.76	132.82	132.68	
25	132.67	132.78	136.37	138.25	139.35	137.70	133.85	133.66	132.83	132.76	132.82	132.67	
26	132.66	132.79	136.64	138.08	139.21	137.41	133.79	133.05	132.82	132.75	132.82	132.63	
27	132.64	132.80	136.94	138.09	139.23	137.21	134.40	133.00	132.95	132.75	132.78	132.63	
28	132.63	132.84	136.85	138.39	139.28	136.99	134.42	132.97	132.93	132.75	132.72	132.63	
29	132.63	133.01	137.11	138.73	139.31	136.70	134.41	132.90	132.85	132.74		132.72	
30	132.63	133.12	137.44	138.69	139.32	136.39	134.34	132.86	132.83	132.74		132.90	
31		133.09		138.72	139.28		134.55		132.82	132.74		132.92	
Mean	132.62	132.85	135.24	137.67	139.40	138.69	134.49	133.88	132.86	132.77	132.72	132.68	
Max	132.67	133.47	137.44	138.73	140.53	139.63	136.19	134.75	133.12	132.81	132.83	132.92	140.53
Min	132.60	132.63	132.99	136.83	138.12	136.39	133.55	132.86	132.82	132.74	132.64	132.63	132.60

Annual Max Momentary Gage Height 140.54 M (MSL), at 12.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 132.03 M (MSL), River Bed 130.55 M (MSL)
Left Bank Elevation 138.26 M (MSL)
Right Bank Elevation 137.77 M (MSL), Drainage Area 3345 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.8	0.7	3.8	161.6	202.3	246.8	87.8	25.3	1.7	1.6	0.9	1.0	
2	0.7	0.7	3.5	165.2	187.6	238.8	71.7	26.2	1.7	1.6	0.7	0.9	
3	0.7	0.7	3.1	128.3	182.1	233.4	59.8	23.8	1.8	1.6	0.9	0.8	
4	0.7	1.0	2.9	122.0	181.5	230.3	45.8	34.7	1.8	1.5	0.9	0.9	
5	0.7	1.2	6.4	114.0	180.9	232.8	44.0	36.5	1.8	1.5	1.1	0.9	
6	0.7	0.8	12.0	122.6	180.3	238.0	42.2	32.9	1.7	1.5	1.1	0.8	
7	0.7	0.7	16.0	134.5	184.0	242.8	38.6	26.5	1.7	1.5	1.0	0.8	
8	0.7	1.8	18.0	144.4	199.8	247.6	38.6	20.0	1.7	1.4	1.0	0.8	
9	0.7	1.8	46.2	152.7	224.2	262.6	39.8	20.8	1.7	1.4	1.1	0.8	
10	0.6	1.7	60.6	155.3	251.8	278.0	36.5	27.5	1.7	1.4	1.1	0.8	
11	0.6	6.9	93.5	156.4	285.0	286.0	39.8	25.8	1.8	1.4	0.9	0.8	
12	0.6	8.1	99.7	152.7	321.6	288.0	35.9	22.3	1.8	1.4	0.9	0.7	
13	0.6	3.0	96.8	148.0	357.5	290.0	30.2	23.3	1.7	1.4	0.9	0.8	
14	0.6	2.8	97.2	138.7	394.0	291.0	31.0	20.4	1.7	1.4	0.9	0.9	
15	0.6	1.8	100.9	136.6	406.8	288.0	30.7	22.0	1.8	1.4	1.2	0.8	
16	0.6	1.6	94.4	136.1	405.2	280.0	26.0	21.0	1.8	1.4	1.1	0.8	
17	0.6	1.1	75.0	133.5	405.2	263.5	23.3	18.0	1.8	1.4	1.0	0.8	
18	0.6	1.1	73.5	131.9	402.0	247.6	19.2	17.2	4.2	1.4	1.0	0.8	
19	0.5	1.1	73.2	128.3	390.8	238.0	13.8	9.3	3.5	1.4	0.9	0.8	
20	0.5	1.1	55.9	124.1	369.5	221.8	9.3	8.4	1.9	1.4	1.6	0.8	
21	0.5	1.1	46.5	131.9	349.5	207.8	11.6	4.4	1.8	1.3	1.7	0.7	
22	0.5	3.3	14.0	170.9	327.6	194.4	12.0	3.5	1.7	1.3	1.4	0.7	
23	0.5	1.9	11.8	189.5	305.0	182.1	9.8	4.4	1.7	1.3	1.3	0.7	
24	0.5	1.4	28.0	193.1	282.0	166.8	10.8	21.6	1.7	1.3	1.6	0.9	
25	0.9	1.4	95.2	188.3	263.5	157.4	15.0	11.2	1.7	1.3	1.6	0.9	
26	0.8	1.4	106.2	177.9	250.9	142.3	13.8	3.5	1.6	1.3	1.6	0.7	
27	0.7	1.5	118.5	178.5	252.7	131.9	27.0	3.0	2.5	1.3	1.4	0.7	
28	0.7	1.7	114.9	196.8	257.2	120.6	27.5	2.7	2.3	1.3	1.1	0.7	
29	0.7	3.1	126.7	217.5	259.9	108.7	27.3	2.0	1.8	1.2		1.1	
30	0.7	4.2	143.9	215.1	260.8	96.0	25.5	1.8	1.7	1.2		2.0	
31		3.9		216.9	257.2		30.7		1.6	1.2		2.2	
Total	19.3	64.6	1838.3	4863.3	8778.4	6653.0	975.0	520.0	59.4	43.0	31.9	27.8	23874.0 CMSDAY
Mean	0.6	2.1	61.3	156.9	283.2	221.8	31.5	17.3	1.9	1.4	1.1	0.9	65.4 CMS
Max	0.9	8.1	143.9	217.5	406.8	291.0	87.8	36.5	4.2	1.6	1.7	2.2	406.8 CMS
Min	0.5	0.7	2.9	114.0	180.3	96.0	9.3	1.8	1.6	1.2	0.7	0.7	0.5 CMS
Runoff	1.67	5.58	158.83	420.19	758.45	574.82	84.24	44.93	5.13	3.72	2.76	2.40	2062.71 MCM

Momentary Peak 408.40 CMS, at 140.54 M (MSL), at 12.00 Hours, on Aug 15, 2001
Runoff Yield 19.55 Liters/Second/Square KM, Momentary Peak Yield 122.093 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

Lam Nam Bang at Ban Sang Mek, Nakhon Phanom (Kh.68)

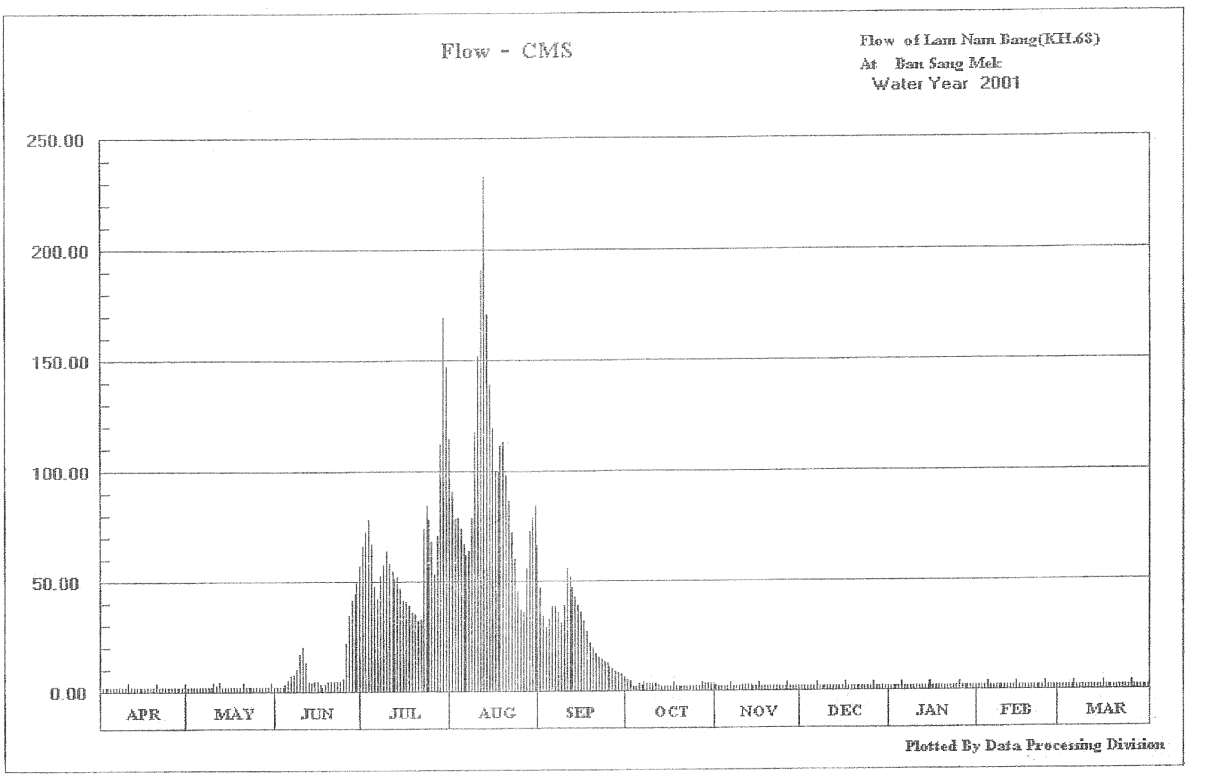
Lat 17 - 00 - 41 N. **Long** 104 - 34 - 16 E.

Location		on left bank at the bridge on highway.			
	Ban Sang Mek	**Amphoe** Renu Nakhon		**Changwat**	Nakhon Phanom
Drainage Area		697 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+135.110 m. (M.S.L.)			
Bench Mark		B.M.- Highways Dept.			
	Location BM	On left bank downstream side at the footpath of the bridge.			
	Elevation	+144.948 m. (M.S.L.)			
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.			
Period of Available Gage Records		1982 to date.			
Rating Operation					
	Period of Rating	1982 - 1985, 1996 to date.			
	Rated by Float	-			
	Rated by Current Meter	1982 - 1985, 1996 to date.			
Stability of Channel Regimes		Rather unstable because of backwater effect.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records fair. The local weir situated downstream from the gage site.			
		Stage-discharge relation defined by 18 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	135.38	135.36	136.10	139.17	139.74	141.08	137.88	136.82	135.66	135.61	135.53	135.45	
2	135.38	135.36	136.02	139.34	139.47	140.89	137.58	136.56	135.66	135.61	135.52	135.45	
3	135.38	135.39	135.91	139.47	139.48	140.79	136.75	136.46	135.65	135.61	135.52	135.44	
4	135.37	135.46	136.29	139.19	139.36	140.87	136.68	136.46	135.65	135.61	135.51	135.44	
5	135.37	135.67	136.50	138.68	139.20	140.97	137.28	136.52	135.65	135.61	135.51	135.44	
6	135.37	135.81	136.77	138.49	139.07	140.97	136.96	136.60	135.65	135.61	135.50	135.43	
7	135.37	135.83	136.83	138.83	139.11	140.92	137.02	136.40	135.65	135.61	135.50	135.43	
8	135.37	135.85	136.98	138.96	139.48	140.83	137.18	136.05	135.64	135.61	135.49	135.43	
9	135.36	135.97	137.44	139.12	140.26	140.98	137.18	136.41	135.64	135.61	135.49	135.43	
10	135.36	136.10	137.63	138.98	140.83	141.19	137.11	136.86	135.64	135.60	135.49	135.42	
11	135.36	136.22	137.21	138.87	141.39	141.15	137.08	136.88	135.64	135.60	135.48	135.42	
12	135.36	136.45	136.45	138.79	141.92	141.08	136.89	136.86	135.64	135.60	135.48	135.42	
13	135.36	135.85	136.39	138.80	141.86	141.03	136.46	136.85	135.63	135.59	135.48	135.42	
14	135.36	135.76	136.45	138.65	141.75	140.98	136.45	136.78	135.63	135.59	135.48	135.42	
15	135.36	135.65	136.45	138.46	141.66	140.92	136.33	136.64	135.63	135.59	135.47	135.42	
16	135.36	135.54	136.31	138.44	141.55	140.86	136.24	136.54	135.63	135.59	135.47	135.41	
17	135.35	135.48	136.17	138.38	141.55	140.74	136.46	136.41	135.63	135.59	135.47	135.41	
18	135.35	135.48	136.29	138.29	141.62	140.62	136.44	136.32	135.63	135.59	135.47	135.41	
19	135.35	135.48	136.47	138.27	141.63	140.51	136.40	136.20	135.63	135.59	135.48	135.40	
20	135.35	135.48	136.47	138.15	141.54	140.36	136.33	136.01	135.63	135.59	135.49	135.40	
21	135.35	135.48	136.46	138.18	141.46	140.14	136.21	135.71	135.64	135.59	135.50	135.39	
22	135.35	135.56	136.44	139.36	141.35	140.02	136.20	135.70	135.63	135.58	135.51	135.39	
23	135.35	135.74	136.48	139.60	141.24	139.84	136.21	135.80	135.62	135.58	135.50	135.42	
24	135.35	135.63	136.60	139.47	141.06	139.67	136.27	135.94	135.62	135.57	135.47	135.44	
25	135.35	135.58	137.73	139.22	140.95	139.43	136.43	136.26	135.62	135.57	135.47	135.45	
26	135.35	135.55	138.25	138.85	140.92	139.17	136.66	136.20	135.62	135.57	135.46	135.47	
27	135.35	135.51	138.46	139.28	141.19	138.95	137.23	136.10	135.62	135.57	135.46	135.51	
28	135.35	135.50	138.57	140.16	141.36	138.72	137.06	135.89	135.62	135.56	135.45	135.59	
29	135.35	135.57	138.76	141.09	141.41	138.55	137.29	135.67	135.62	135.55		135.64	
30	135.35	135.70	138.94	140.76	141.45	138.28	137.19	135.66	135.62	135.54		135.78	
31		135.90		140.20	141.30		137.08		135.61	135.53		135.82	
Mean	135.36	135.67	136.93	139.08	140.84	140.35	136.79	136.32	135.63	135.59	135.49	135.46	
Max	135.38	136.45	138.94	141.09	141.92	141.19	137.88	136.88	135.66	135.61	135.53	135.82	141.92
Min	135.35	135.36	135.91	138.15	139.07	138.28	136.20	135.66	135.61	135.53	135.45	135.39	135.35

Annual Max Momentary Gage Height 141.96 M (MSL), at 18.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 135.11 M (MSL), River Bed 134.60 M (MSL)
Left Bank Elevation 143.48 M (MSL)
Right Bank Elevation 143.73 M (MSL), Drainage Area 697 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.01	0.01	2.50	66.80	91.30	47.40	5.70	3.05	0.43	0.35	0.22	0.09	
2	0.01	0.01	2.10	73.60	79.15	34.50	4.95	2.40	0.43	0.35	0.20	0.09	
3	0.01	0.01	1.55	79.15	79.60	29.60	2.88	2.15	0.41	0.35	0.20	0.07	
4	0.01	0.03	3.92	67.60	74.40	33.50	2.70	2.15	0.41	0.35	0.19	0.07	
5	0.01	0.38	5.60	48.40	68.00	39.20	4.20	2.30	0.41	0.35	0.19	0.07	
6	0.01	1.05	7.76	42.70	62.80	39.20	3.40	2.50	0.41	0.35	0.17	0.06	
7	0.01	1.15	8.45	53.55	64.40	36.20	3.55	2.00	0.41	0.35	0.17	0.06	
8	0.01	1.25	10.70	58.40	79.60	31.50	3.95	1.13	0.39	0.35	0.15	0.06	
9	0.01	1.85	17.60	64.80	118.30	39.80	3.95	2.03	0.39	0.35	0.15	0.06	
10	0.01	2.50	20.60	59.20	152.45	56.20	3.78	3.15	0.39	0.33	0.15	0.04	
11	0.01	3.40	14.15	54.95	191.30	53.00	3.70	3.20	0.39	0.33	0.14	0.04	
12	0.01	5.20	5.20	52.15	233.60	47.40	3.22	3.15	0.39	0.33	0.14	0.04	
13	0.01	1.25	4.72	52.50	171.40	43.40	2.15	3.13	0.38	0.31	0.14	0.04	
14	0.01	0.80	5.20	47.50	139.50	39.80	2.12	2.95	0.38	0.31	0.14	0.04	
15	0.01	0.30	5.20	41.80	120.00	36.20	1.83	2.60	0.38	0.31	0.12	0.04	
16	0.01	0.07	4.08	41.20	100.50	33.00	1.60	2.35	0.38	0.31	0.12	0.03	
17	0.01	0.04	3.02	39.40	100.50	27.60	2.15	2.03	0.38	0.31	0.12	0.03	
18	0.01	0.04	3.92	36.70	112.00	22.80	2.10	1.80	0.38	0.31	0.12	0.03	
19	0.01	0.04	5.36	36.10	114.00	20.20	2.00	1.50	0.38	0.31	0.14	0.01	
20	0.01	0.04	5.36	32.50	99.00	17.70	1.83	1.02	0.38	0.31	0.15	0.01	
21	0.01	0.04	5.28	33.40	87.00	16.05	1.53	0.51	0.39	0.31	0.17	0.01	
22	0.01	0.08	5.12	74.40	72.50	15.15	1.50	0.49	0.38	0.30	0.19	0.01	
23	0.01	0.70	5.44	85.00	61.00	14.20	1.53	0.66	0.36	0.30	0.17	0.04	
24	0.01	0.22	6.40	79.15	45.80	13.35	1.68	0.90	0.36	0.28	0.12	0.07	
25	0.01	0.09	22.60	68.80	38.00	12.15	2.07	1.65	0.36	0.28	0.12	0.09	
26	0.01	0.08	35.50	54.25	36.20	10.85	2.65	1.50	0.36	0.28	0.11	0.12	
27	0.01	0.05	41.80	71.20	56.20	9.80	4.07	1.25	0.36	0.28	0.11	0.19	
28	0.01	0.05	45.10	112.80	73.60	8.88	3.65	0.81	0.36	0.27	0.09	0.31	
29	0.01	0.09	51.10	170.30	79.50	8.20	4.22	0.44	0.36	0.25		0.39	
30	0.01	0.50	57.60	147.90	85.50	7.12	3.98	0.43	0.36	0.23		0.63	
31		1.50		115.00	67.00		3.70		0.35	0.22		0.69	
Total	0.30	22.82	412.93	2061.20	2954.10	843.95	92.34	55.23	11.90	9.62	4.20	3.53	6472.12 CMSDAY
Mean	0.01	0.74	13.76	66.49	95.29	28.13	2.98	1.84	0.38	0.31	0.15	0.11	17.73 CMS
Max	0.01	5.20	57.60	170.30	233.60	56.20	5.70	3.20	0.43	0.35	0.22	0.69	233.60 CMS
Min	0.01	0.01	1.55	32.50	36.20	7.12	1.50	0.43	0.35	0.22	0.09	0.01	0.01 CMS
Runoff	0.026	1.972	35.677	178.088	255.234	72.917	7.978	4.772	1.028	0.831	0.363	0.305	559.191 MCM

Momentary Peak 236.80 CMS, at 141.96 M (MSL), at 18.00 Hours, on Aug 12, 2001
Runoff Yield 25.44 Liters/Second/Square KM, Momentary Peak Yield 339.742 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

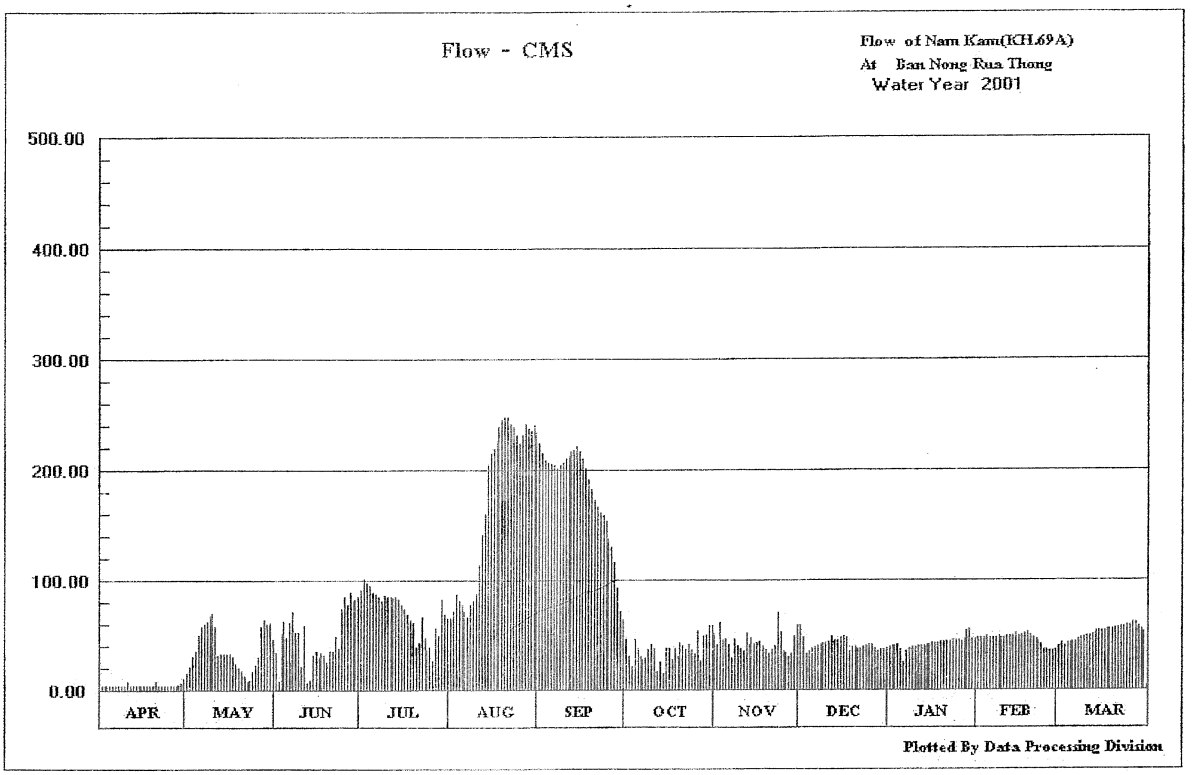
Lat 16 - 57 - 32 N. **Long** 104 - 28 - 02 E.

Location		on right bank at the bridge on highway.			
	Ban	Nong Rua Thong	**Amphoe** Na Kae	**Changwat**	Nakhon Phanom
Drainage Area		1,932 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+139.410 m. (M.S.L.)			
Bench Mark		B.M.- Highways Dept.			
	Location BM	On left bank downstream side at the footpath of the bridge.			
	Elevation	+149.406 m. (M.S.L.)			
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.			
Period of Available Gage Records		1996 to date.			
Rating Operation					
	Period of Rating	1996 to date.			
	Rated by Float	-			
	Rated by Current Meter	1996 to date.			
Stability of Channel Regimes		Fairly stable because of backwater effect.			
Overbank Flow Conditions		Overbank flow starts at elevation +145.510 m.(M.S.L.) and is including overbank flow.			
General Description		Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	143.19	142.39	142.48	143.23	142.74	145.37	142.36	142.46	142.62	142.19	142.39	142.21	
2	143.19	142.39	141.99	143.42	142.85	145.24	141.98	142.25	142.38	142.21	142.39	142.27	
3	143.18	142.42	142.71	143.35	143.17	145.14	141.76	142.67	142.06	142.22	142.39	142.22	
4	143.18	142.49	142.83	143.31	143.05	145.11	142.36	142.33	142.11	142.25	142.41	142.26	
5	143.18	142.70	142.66	143.18	142.98	145.10	142.16	142.34	142.16	142.14	142.39	142.28	
6	143.18	142.78	142.82	143.16	142.87	145.08	141.98	142.25	142.19	141.87	142.39	142.30	
7	143.18	142.81	142.93	143.12	142.76	145.05	141.93	141.95	142.21	142.11	142.39	142.31	
8	143.17	142.83	142.73	143.06	142.99	145.07	141.96	142.36	142.25	142.16	142.41	142.36	
9	143.17	142.88	142.72	143.14	143.06	145.12	142.12	142.22	142.27	142.19	142.39	142.39	
10	143.17	142.91	142.26	143.11	143.16	145.16	142.24	142.15	142.28	142.19	142.39	142.39	
11	143.16	142.78	142.80	143.11	143.62	145.20	142.16	142.10	142.30	142.21	142.41	142.41	
12	143.15	142.43	141.95	143.10	144.09	145.25	141.65	142.45	142.41	142.21	142.41	142.42	
13	143.14	142.45	142.00	143.11	144.39	145.28	141.86	142.23	142.33	142.22	142.42	142.44	
14	143.13	142.45	142.43	143.08	145.09	145.32	141.59	142.37	142.32	142.24	142.45	142.50	
15	143.13	142.45	142.50	142.99	145.24	145.26	142.17	142.24	142.38	142.25	142.42	142.50	
16	143.12	142.46	142.42	142.91	145.29	145.17	142.17	142.26	142.41	142.26	142.43	142.50	
17	143.11	142.41	142.48	142.80	145.39	145.04	141.93	142.30	142.37	142.28	142.45	142.51	
18	143.11	142.31	142.44	142.72	145.58	144.89	142.17	142.21	142.09	142.26	142.48	142.53	
19	143.10	142.24	142.33	142.61	145.67	144.76	141.98	142.13	142.20	142.30	142.43	142.53	
20	143.10	142.21	142.50	142.18	145.71	144.61	142.27	142.06	142.19	142.30	142.39	142.54	
21	143.07	142.10	142.49	142.27	145.70	144.49	142.22	142.12	142.17	142.31	142.36	142.56	
22	143.04	141.99	142.68	142.76	145.62	144.41	142.14	142.22	142.16	142.31	142.31	142.57	
23	142.99	142.02	142.53	142.39	145.57	144.37	142.25	142.84	142.19	142.32	142.23	142.59	
24	143.01	142.19	142.95	142.13	145.47	144.28	142.14	142.48	142.21	142.33	142.13	142.59	
25	143.06	142.28	143.13	142.18	145.36	144.01	142.06	142.11	142.23	142.33	142.12	142.61	
26	143.06	142.41	142.99	141.91	145.47	143.90	142.51	142.08	142.24	142.31	142.11	142.61	
27	143.07	142.78	143.18	142.57	145.61	143.66	141.89	141.98	142.15	142.36	142.11	142.65	
28	143.07	142.85	143.06	142.74	145.56	143.26	142.40	142.06	142.10	142.51	142.12	142.67	
29	143.06	142.81	143.07	143.07	145.53	142.87	142.44	142.42	142.12	142.54		142.59	
30	143.07	142.82	143.12	142.81	145.59	142.71	142.61	142.60	142.13	142.35		142.53	
31		142.65		142.73	145.50		142.62		142.15	142.35		142.49	
Mean	143.12	142.51	142.64	142.85	144.54	144.67	142.13	142.27	142.24	142.26	142.35	142.46	
Max	143.19	142.91	143.18	143.42	145.71	145.37	142.62	142.84	142.62	142.54	142.48	142.67	145.71
Min	142.99	141.99	141.95	141.91	142.74	142.71	141.59	141.95	142.06	141.87	142.11	142.21	141.59

Annual Max Momentary Gage Height 145.71 M (MSL), at 12.00 Hours, on Aug 20, 2001
Zero Gage at Bottom Elevation 139.41 M (MSL), River Bed 139.34 M (MSL)
Left Bank Elevation 146.45 M (MSL)
Right Bank Elevation 145.50 M (MSL), Drainage Area 1932 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	16.55	35.80	92.65	67.00	225.90	48.20	53.00	61.00	40.55	49.55	41.45	
2	0.00	23.09	9.70	103.20	72.50	216.80	31.20	43.25	49.10	41.45	49.55	44.15	
3	0.00	32.20	52.90	99.25	89.35	209.80	22.40	63.50	34.70	41.90	49.55	41.90	
4	0.00	36.40	63.85	97.05	82.75	207.70	48.20	46.85	36.95	43.25	50.50	43.70	
5	0.00	52.00	48.80	89.90	79.00	207.90	39.20	47.30	39.20	38.30	49.55	44.60	
6	0.00	59.20	62.90	88.80	73.50	205.60	31.20	43.25	40.55	26.80	49.55	45.50	
7	0.00	61.95	73.35	86.60	68.00	203.50	29.20	30.00	41.45	36.95	49.55	45.95	
8	0.05	63.85	54.70	83.30	79.50	204.90	30.40	48.20	43.25	39.20	50.50	48.20	
9	0.01	68.60	53.80	87.70	83.30	208.40	37.40	41.90	44.15	40.55	49.55	49.55	
10	0.01	71.45	22.60	86.05	88.80	211.20	42.80	38.75	44.60	40.55	49.55	49.55	
11	0.01	59.20	61.00	86.05	115.20	214.00	39.20	36.50	45.50	41.45	50.50	50.50	
12	0.02	32.80	8.50	85.50	143.40	217.50	18.25	52.50	50.50	41.45	50.50	51.00	
13	0.03	34.00	10.00	86.05	161.40	219.60	26.40	42.35	46.85	41.90	51.00	52.00	
14	0.04	34.00	32.80	84.40	206.30	222.40	16.15	48.65	46.40	42.80	52.50	55.00	
15	0.06	34.00	37.00	79.50	216.80	218.20	39.65	42.80	49.10	43.25	51.00	55.00	
16	0.08	34.60	32.20	75.50	220.30	211.90	39.65	43.70	50.50	43.70	51.50	55.00	
17	0.11	31.60	35.80	70.00	227.30	202.80	29.20	45.50	48.65	44.60	52.50	55.50	
18	0.12	25.60	33.40	66.00	240.60	192.85	39.65	41.45	36.05	43.70	54.00	56.50	
19	0.22	21.40	26.80	62.50	246.90	184.40	31.20	37.85	41.00	45.50	51.50	56.50	
20	0.30	19.60	37.00	40.10	249.70	174.65	44.15	34.70	40.55	45.50	49.55	57.00	
21	0.43	14.00	36.40	44.15	249.00	167.40	41.90	37.40	39.65	45.95	48.20	58.00	
22	0.60	9.70	50.40	68.00	243.40	162.60	38.30	41.90	39.20	45.95	45.95	58.50	
23	1.16	10.80	39.10	49.55	239.90	160.20	43.25	72.00	40.55	46.40	42.35	59.50	
24	1.61	18.50	75.25	37.85	232.90	154.80	38.30	54.00	41.45	46.85	37.85	59.50	
25	2.25	23.80	87.15	40.10	225.20	138.60	34.70	36.95	42.35	46.85	37.40	60.50	
26	3.14	31.60	79.05	28.40	232.90	132.00	55.50	35.60	42.80	45.95	36.95	60.50	
27	4.37	59.20	89.90	58.50	242.70	117.60	27.60	31.20	38.75	48.20	36.95	62.50	
28	6.10	65.75	83.30	50.00	239.20	94.30	50.00	34.70	36.50	55.50	37.40	63.50	
29	8.51	61.95	83.85	83.85	237.10	73.50	52.00	51.00	37.40	57.00		59.50	
30	11.87	62.90	86.60	70.50	241.30	65.50	60.50	60.00	37.85	47.75		56.50	
31		48.00		66.50	235.00		61.00		38.75	47.75		54.50	
Total	41.10	1218.29	1503.90	2247.50	5430.20	5425.60	1186.75	1336.75	1325.30	1357.50	1335.00	1651.55	24059.44 CMSDAY
Mean	1.37	39.30	50.13	72.50	175.17	180.85	38.28	44.56	42.75	43.79	47.68	53.28	65.92 CMS
Max	11.87	71.45	89.90	103.20	249.70	225.90	61.00	72.00	61.00	57.00	54.00	63.50	249.70 CMS
Min	0.00	9.70	8.50	28.40	67.00	65.50	16.15	30.00	34.70	26.80	36.95	41.45	0.00 CMS
Runoff	3.551	105.260	129.937	194.184	469.169	468.772	102.535	115.495	114.506	117.288	115.344	142.694	2078.736 MCM

Momentary Peak 249.70 CMS, at 145.71 M (MSL), at 12.00 Hours, on Aug 20, 2001
Runoff Yield 34.12 Liters/Second/Square KM, Momentary Peak Yield 129.244 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

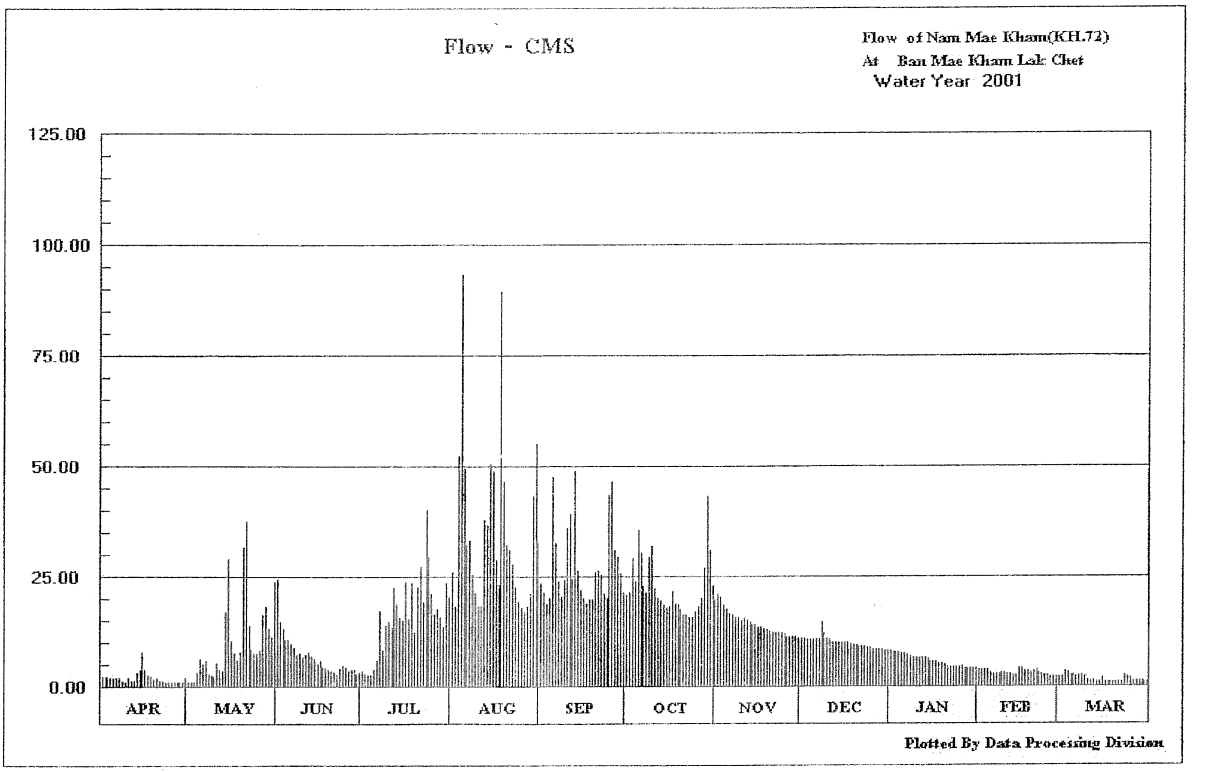
Lat 20 - 13 - 01 N. **Long** 99 - 51 - 38 E.

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
Drainage Area			644 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		+6.245 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		1993 to date.		
	Rated by Float		-		
	Rated by Current Meter		1993 to date.		
Stability of Channel Regimes			Stable.		
Overbank Flow Conditions			No overbank flow.		
General Description			Records fair. Flow effected by the bridge of Chiang Rai - Mae Sai highway construction.		
			Stage-discharge relation defined by 43 discharge measurements made in 2001.		

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.65	1.47	2.71	1.75	2.75	2.67	2.57	2.54	2.19	2.05	1.78	1.64	
2	1.65	1.52	2.35	1.70	2.48	2.59	2.59	2.58	2.19	2.04	1.78	1.64	
3	1.63	1.49	2.28	1.67	3.37	2.50	2.84	2.56	2.18	2.04	1.77	1.75	
4	1.61	1.71	2.18	1.68	3.86	2.55	2.68	2.49	2.17	2.03	1.76	1.73	
5	1.60	1.94	2.17	1.76	3.32	3.29	3.02	2.45	2.17	2.02	1.72	1.67	
6	1.60	1.87	2.13	1.93	2.93	2.94	2.88	2.42	2.17	2.01	1.70	1.66	
7	1.60	1.92	2.08	2.44	2.96	2.69	2.65	2.40	2.17	2.00	1.70	1.65	
8	1.56	1.70	2.00	2.05	2.73	2.56	2.59	2.38	2.35	1.98	1.70	1.66	
9	1.51	1.66	2.02	2.31	2.59	2.70	2.85	2.38	2.24	1.96	1.73	1.67	
10	1.52	1.64	1.95	2.34	2.47	3.03	2.92	2.36	2.19	1.95	1.73	1.64	
11	1.55	1.89	1.99	2.30	2.48	3.11	2.63	2.37	2.17	1.95	1.70	1.55	
12	1.55	1.77	2.03	2.64	3.08	2.71	2.55	2.36	2.15	1.95	1.69	1.55	
13	1.71	1.75	1.98	2.50	3.05	3.31	2.52	2.34	2.14	1.96	1.68	1.54	
14	1.78	2.43	1.94	2.38	3.34	2.76	2.49	2.32	2.14	1.94	1.66	1.51	
15	2.03	2.84	1.85	2.36	3.31	2.62	2.46	2.32	2.15	1.90	1.80	1.50	
16	1.77	2.16	1.92	2.69	2.83	2.55	2.47	2.30	2.15	1.90	1.79	1.50	
17	1.67	2.01	1.82	2.37	2.66	2.50	2.61	2.29	2.14	1.90	1.75	1.50	
18	1.63	1.92	1.79	2.67	3.83	2.53	2.50	2.28	2.13	1.89	1.74	1.50	
19	1.59	2.04	1.76	2.25	3.27	2.53	2.49	2.27	2.11	1.88	1.72	1.50	
20	1.56	2.91	1.74	2.64	2.93	2.75	2.45	2.26	2.11	1.86	1.75	1.50	
21	1.56	3.07	1.72	2.79	2.90	2.76	2.40	2.25	2.10	1.81	1.77	1.49	
22	1.54	2.31	1.68	2.51	2.81	2.73	2.40	2.25	2.10	1.81	1.73	1.50	
23	1.53	2.06	1.79	3.13	2.64	2.58	2.38	2.25	2.10	1.81	1.70	1.49	
24	1.51	2.02	1.84	2.85	2.51	2.55	2.38	2.24	2.08	1.82	1.68	1.66	
25	1.50	2.01	1.81	2.58	2.46	3.21	2.43	2.23	2.08	1.81	1.66	1.65	
26	1.46	2.05	1.75	2.41	2.43	3.27	2.47	2.21	2.07	1.84	1.65	1.62	
27	1.48	2.41	1.76	2.45	2.47	2.90	2.55	2.21	2.07	1.80	1.65	1.55	
28	1.49	2.47	1.77	2.38	2.58	2.85	2.78	2.21	2.06	1.80	1.64	1.55	
29	1.47	2.28	1.70	2.29	3.20	2.74	3.20	2.20	2.06	1.79		1.54	
30	1.45	2.20	1.71	2.67	3.42	2.59	2.90	2.19	2.05	1.79		1.54	
31		2.69		2.56	2.95		2.65		2.05	1.79		1.50	
Mean	1.59	2.07	1.94	2.36	2.92	2.77	2.62	2.33	2.14	1.91	1.72	1.58	
Max	2.03	3.07	2.71	3.13	3.86	3.31	3.20	2.58	2.35	2.05	1.80	1.75	3.86
Min	1.45	1.47	1.68	1.67	2.43	2.50	2.38	2.19	2.05	1.79	1.64	1.49	1.45

Annual Max Momentary Gage Height 4.13 M (A.D), at 19.00 Hours, on Sep 25, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.09 M (A.D)
Left Bank Elevation 6.26 M (A.D)
Right Bank Elevation 6.02 M (A.D), Drainage Area 644 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.72	0.97	24.94	3.93	26.30	23.78	21.05	20.26	11.34	8.55	4.30	2.61	
2	2.72	1.37	15.25	3.30	18.67	21.59	21.59	21.32	11.34	8.37	4.30	2.61	
3	2.49	1.10	13.47	2.95	52.49	19.20	29.40	20.79	11.13	8.37	4.18	3.93	
4	2.26	3.43	11.13	3.07	93.50	20.52	24.05	18.93	10.92	8.19	4.05	3.68	
5	2.15	6.66	10.92	4.05	49.64	48.00	35.80	17.87	10.92	8.01	3.55	2.95	
6	2.15	5.57	10.08	6.49	32.55	32.90	30.80	17.08	10.92	7.83	3.30	2.84	
7	2.15	6.33	9.09	17.61	33.60	24.32	23.23	16.55	10.92	7.65	3.30	2.72	
8	1.76	3.30	7.65	8.55	25.62	20.79	21.59	16.03	15.25	7.32	3.30	2.84	
9	1.27	2.84	8.01	14.21	21.59	24.60	29.75	16.03	12.51	6.99	3.68	2.95	
10	1.37	2.61	6.83	14.99	18.40	36.20	32.20	15.51	11.34	6.83	3.68	2.61	
11	1.66	5.86	7.49	13.95	18.67	39.45	22.68	15.77	10.92	6.83	3.30	1.66	
12	1.66	4.18	8.19	22.95	38.20	24.94	20.52	15.51	10.50	6.83	3.19	1.66	
13	3.43	3.93	7.32	19.20	37.00	49.07	19.73	14.99	10.29	6.99	3.07	1.56	
14	4.30	17.34	6.66	16.03	50.78	26.64	18.93	14.47	10.29	6.66	2.84	1.27	
15	8.19	29.40	5.28	15.51	49.07	22.40	18.14	14.47	10.50	6.00	4.55	1.17	
16	4.18	10.71	6.33	24.32	29.05	20.52	18.40	13.95	10.50	6.00	4.43	1.17	
17	2.95	7.83	4.84	15.77	23.50	19.20	22.12	13.71	10.29	6.00	3.93	1.17	
18	2.49	6.33	4.43	23.78	89.75	20.00	19.20	13.47	10.08	5.86	3.80	1.17	
19	2.05	8.37	4.05	12.75	47.00	20.00	18.93	13.23	9.66	5.71	3.55	1.17	
20	1.76	31.85	3.80	22.95	32.55	26.30	17.87	12.99	9.66	5.42	3.93	1.17	
21	1.76	37.80	3.55	27.66	31.50	26.64	16.55	12.75	9.45	4.70	4.18	1.10	
22	1.56	14.21	3.07	19.46	28.35	25.62	16.55	12.75	9.45	4.70	3.68	1.17	
23	1.46	8.73	4.43	40.35	22.95	21.32	16.03	12.75	9.45	4.70	3.30	1.10	
24	1.27	8.01	5.13	29.75	19.46	20.52	16.03	12.51	9.09	4.84	3.07	2.84	
25	1.17	7.83	4.70	21.32	18.14	44.00	17.34	12.27	9.09	4.70	2.84	2.72	
26	0.90	8.55	3.93	16.81	17.34	47.00	18.40	11.79	8.91	5.13	2.72	2.38	
27	1.04	16.81	4.05	17.87	18.40	31.50	20.52	11.79	8.91	4.55	2.72	1.66	
28	1.10	18.40	4.18	16.03	21.32	29.75	27.32	11.79	8.73	4.55	2.61	1.66	
29	0.97	13.47	3.30	13.71	43.50	25.96	43.50	11.55	8.73	4.43		1.56	
30	0.84	11.55	3.43	23.78	55.46	21.59	31.50	11.34	8.55	4.43		1.56	
31		24.32		20.79	33.25		23.23		8.55	4.43		1.17	
Total	65.78	329.66	215.53	513.89	1097.60	834.32	712.95	444.22	318.19	191.57	99.35	61.83	4884.89 CMSDAY
Mean	2.19	10.63	7.18	16.58	35.41	27.81	23.00	14.81	10.26	6.18	3.55	1.99	13.38 CMS
Max	8.19	37.80	24.94	40.35	93.50	49.07	43.50	21.32	15.25	8.55	4.55	3.93	93.50 CMS
Min	0.84	0.97	3.07	2.95	17.34	19.20	16.03	11.34	8.55	4.43	2.61	1.10	0.84 CMS
Runoff	5.683	28.483	18.622	44.400	94.833	72.085	61.599	38.381	27.492	16.552	8.584	5.342	422.055 MCM

Momentary Peak 140.80 CMS, at 4.13 M (A.D), at 19.00 Hours, on Sep 25, 2001
Runoff Yield 20.78 Liters/Second/Square KM, Momentary Peak Yield 218.634 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

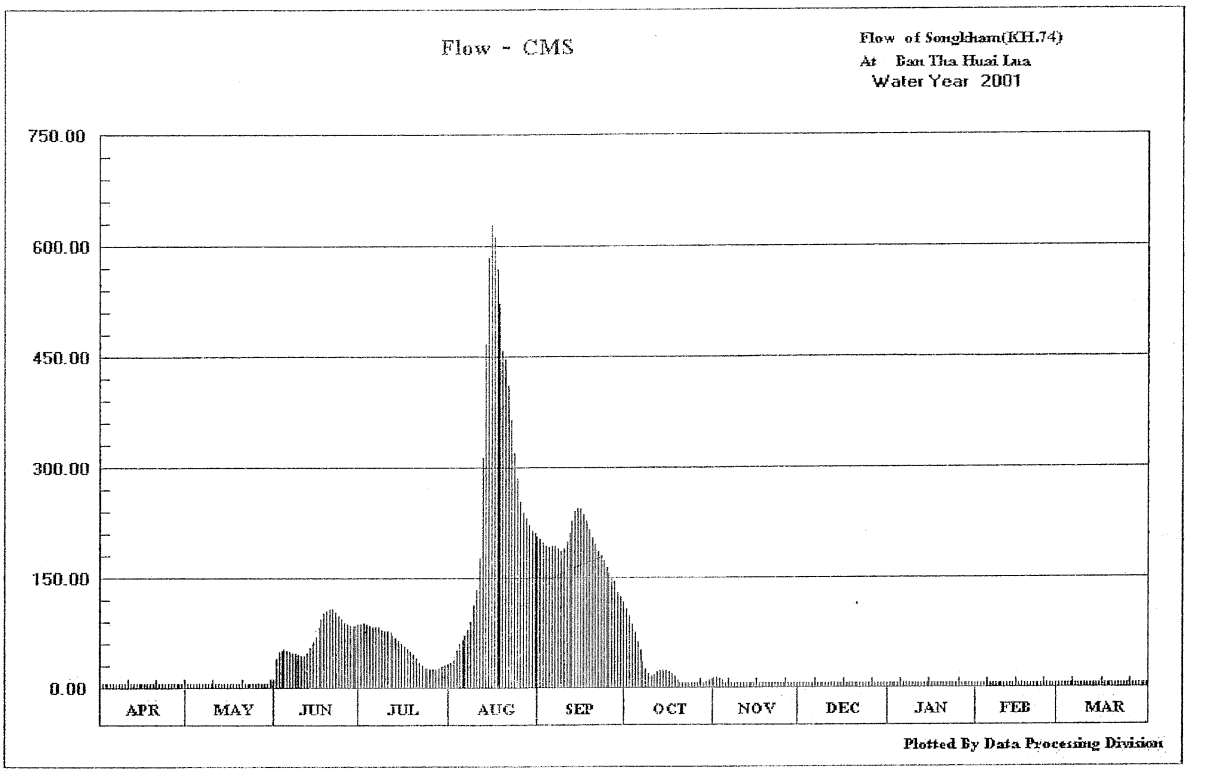
Lat 17 - 49 - 07 N. **Long** 103 - 23 - 16 E.

Location		on left bank at Ban Tha Huai Lua.
	Ban Tha Huai Lua	**Amphoe** Ban Muang **Changwat** Sakon Nakhon
Drainage Area		2,145 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+144.850 m. (M.S.L.)
Bench Mark		B.M.- Highways Dept.
	Location BM	On left bank at the abutment of the bridge.
	Elevation	+156.483 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		1983 to date.
Rating Operation		
	Period of Rating	1984 to date.
	Rated by Float	-
	Rated by Current Meter	1984 to date.
Stability of Channel Regimes		Fairly stable because of backwater effect.
Overbank Flow Conditions		Overbank flow starts at elevation +150.810 m.(M.S.L.) and is including overbank flow.
General Description		Records very good. Stage-discharge relation defined by 78 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	146.73	146.71	149.49	151.45	149.21	154.05	152.10	147.92	146.86	146.74	146.75	146.70	
2	146.73	146.81	149.95	151.46	149.37	153.99	151.79	147.93	146.86	146.74	146.75	146.69	
3	146.72	146.80	150.09	151.43	150.02	153.94	151.44	147.81	146.86	146.74	146.75	146.63	
4	146.72	146.79	150.17	151.38	150.47	153.92	151.04	147.70	146.86	146.74	146.75	146.57	
5	146.72	146.78	150.07	151.32	150.71	153.94	150.52	147.47	146.86	146.74	146.75	146.56	
6	146.72	146.79	149.95	151.31	150.88	153.94	150.01	147.30	146.86	146.74	146.74	146.57	
7	146.71	146.88	149.90	151.27	151.15	153.91	149.26	147.18	146.86	146.73	146.74	146.57	
8	146.71	147.00	149.89	151.20	151.55	153.86	148.71	147.11	146.86	146.73	146.74	146.58	
9	146.71	147.13	149.73	151.13	152.24	153.91	148.33	147.08	146.86	146.73	146.74	146.58	
10	146.71	147.11	149.72	151.09	152.82	154.02	148.11	147.04	146.86	146.73	146.74	146.58	
11	146.71	147.04	149.66	151.02	153.70	154.14	148.28	147.01	146.85	146.74	146.75	146.58	
12	146.71	146.97	149.85	150.92	154.69	154.26	148.45	146.99	146.84	146.74	146.75	146.58	
13	146.71	146.91	150.23	150.77	155.20	154.34	148.54	146.95	146.84	146.75	146.75	146.59	
14	146.71	146.88	150.54	150.61	155.50	154.36	148.56	146.91	146.83	146.75	146.75	146.59	
15	146.71	146.86	150.87	150.48	155.61	154.36	148.56	146.89	146.83	146.75	146.75	146.59	
16	146.71	146.83	151.28	150.33	155.57	154.32	148.48	146.93	146.82	146.75	146.73	146.58	
17	146.71	146.82	151.69	150.14	155.46	154.26	148.34	146.92	146.82	146.75	146.72	146.58	
18	146.71	146.82	151.93	149.95	155.34	154.18	148.08	146.91	146.82	146.75	146.72	146.57	
19	146.70	146.87	152.06	149.74	155.17	154.08	147.74	146.91	146.83	146.74	146.71	146.57	
20	146.70	146.93	152.10	149.47	155.14	153.97	147.48	146.91	146.85	146.74	146.71	146.56	
21	146.70	146.93	152.07	149.20	155.03	153.86	147.28	146.90	146.86	146.74	146.71	146.56	
22	146.69	146.93	151.96	148.99	154.88	153.76	147.22	146.90	146.81	146.75	146.71	146.56	
23	146.69	146.93	151.83	148.87	154.71	153.64	147.21	146.89	146.76	146.75	146.72	146.56	
24	146.68	146.94	151.67	148.82	154.58	153.49	147.19	146.89	146.75	146.75	146.72	146.56	
25	146.68	146.95	151.50	148.73	154.42	153.34	147.22	146.88	146.75	146.75	146.71	146.56	
26	146.68	147.03	151.40	148.68	154.33	153.16	147.28	146.88	146.75	146.74	146.70	146.56	
27	146.68	147.06	151.37	148.68	154.28	153.10	147.39	146.88	146.75	146.73	146.69	146.57	
28	146.69	147.08	151.35	148.83	154.22	152.70	147.50	146.88	146.75	146.72	146.69	146.57	
29	146.70	147.13	151.39	148.91	154.17	152.58	147.60	146.87	146.75	146.71		146.57	
30	146.70	147.20	151.42	149.05	154.13	152.35	147.74	146.87	146.74	146.73		146.57	
31		147.87		149.11	154.09		147.88		146.74	146.75		146.57	
Mean	146.70	146.96	150.84	150.14	153.50	153.79	148.56	147.09	146.82	146.74	146.73	146.58	
Max	146.73	147.87	152.10	151.46	155.61	154.36	152.10	147.93	146.86	146.75	146.75	146.70	155.61
Min	146.68	146.71	149.49	148.68	149.21	152.35	147.19	146.87	146.74	146.71	146.69	146.56	146.56

Annual Max Momentary Gage Height 155.61 M (MSL), at 6.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 144.85 M (MSL), River Bed 144.51 M (MSL)
Left Bank Elevation 150.80 M (MSL)
Right Bank Elevation 151.23 M (MSL), Drainage Area 2145 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.87	0.69	41.80	89.50	36.20	204.50	109.50	14.80	2.10	0.96	1.05	0.60	
2	0.87	1.60	51.00	89.80	39.40	199.20	99.70	14.95	2.10	0.96	1.05	0.48	
3	0.78	1.50	53.80	88.90	52.40	195.20	89.20	13.15	2.10	0.96	1.05	0.00	
4	0.78	1.41	55.68	87.40	62.88	193.60	77.20	11.50	2.10	0.96	1.05	0.00	
5	0.78	1.32	53.40	85.60	68.75	195.20	64.08	8.47	2.10	0.96	1.05	0.00	
6	0.78	1.41	51.00	85.30	73.00	195.20	52.20	6.60	2.10	0.96	0.96	0.00	
7	0.69	2.30	50.00	84.10	80.50	192.80	37.20	5.30	2.10	0.87	0.96	0.00	
8	0.69	3.50	49.80	82.00	92.50	188.80	26.65	4.60	2.10	0.87	0.96	0.00	
9	0.69	4.80	46.60	79.90	114.40	192.80	20.95	4.30	2.10	0.87	0.96	0.00	
10	0.69	4.60	46.40	78.70	135.80	201.80	17.65	3.90	2.10	0.87	0.96	0.00	
11	0.69	3.90	45.20	76.60	178.00	213.40	20.20	3.60	2.00	0.96	1.05	0.00	
12	0.69	3.20	49.00	74.00	315.40	229.60	22.75	3.40	1.90	0.96	1.05	0.00	
13	0.69	2.60	57.12	70.25	470.00	242.40	24.10	3.00	1.90	1.05	1.05	0.00	
14	0.69	2.30	64.56	66.25	586.00	245.60	24.40	2.60	1.80	1.05	1.05	0.00	
15	0.69	2.10	72.75	63.12	630.40	245.60	24.40	2.40	1.80	1.05	1.05	0.00	
16	0.69	1.80	84.40	59.52	614.00	239.20	23.20	2.80	1.70	1.05	0.87	0.00	
17	0.69	1.70	96.70	54.96	570.00	229.60	21.10	2.70	1.70	1.05	0.78	0.00	
18	0.69	1.70	103.90	51.00	523.20	217.80	17.20	2.60	1.70	1.05	0.78	0.00	
19	0.60	2.20	108.10	46.80	459.80	207.20	12.10	2.60	1.80	0.96	0.69	0.00	
20	0.60	2.80	109.50	41.40	449.60	197.60	8.58	2.60	2.00	0.96	0.69	0.00	
21	0.60	2.80	108.45	36.00	412.20	188.80	6.38	2.50	2.10	0.96	0.69	0.00	
22	0.48	2.80	104.80	31.80	366.40	181.60	5.72	2.50	1.60	1.05	0.69	0.00	
23	0.48	2.80	100.90	29.40	320.60	174.40	5.61	2.40	1.14	1.05	0.78	0.00	
24	0.36	2.90	96.10	28.40	288.00	166.50	5.40	2.40	1.05	1.05	0.78	0.00	
25	0.36	3.00	91.00	26.95	256.00	159.00	5.72	2.30	1.05	1.05	0.69	0.00	
26	0.36	3.80	88.00	26.20	240.80	150.20	6.38	2.30	1.05	0.96	0.60	0.00	
27	0.36	4.10	87.10	26.20	232.80	147.50	7.59	2.30	1.05	0.87	0.48	0.00	
28	0.48	4.30	86.50	28.60	223.20	131.00	8.80	2.30	1.05	0.78	0.48	0.00	
29	0.60	4.80	87.70	30.20	216.70	126.30	10.00	2.20	1.05	0.69		0.00	
30	0.60	5.50	88.60	33.00	212.30	118.25	12.10	2.20	0.96	0.87		0.00	
31		14.05		34.20	208.10		14.20		0.96	1.05		0.00	
Total	19.02	98.28	2229.86	1786.05	8529.33	5770.65	880.26	139.27	52.36	29.76	24.30	1.08	19560.22 CMSDAY
Mean	0.63	3.17	74.33	57.61	275.14	192.36	28.40	4.64	1.69	0.96	0.87	0.03	53.59 CMS
Max	0.87	14.05	109.50	89.80	630.40	245.60	109.50	14.95	2.10	1.05	1.05	0.60	630.40 CMS
Min	0.36	0.69	41.80	26.20	36.20	118.25	5.40	2.20	0.96	0.69	0.48	0.00	0.00 CMS
Runoff	1.643	8.491	192.660	154.315	736.934	498.584	76.054	12.033	4.524	2.571	2.100	0.093	1690.003 MCM

Momentary Peak 630.40 CMS, at 155.61 M (MSL), at 6.00 Hours, on Aug 15, 2001

Runoff Yield 24.98 Liters/Second/Square KM, Momentary Peak Yield 293.893 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 385 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +346.573 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank downstream side at the abutment of the bridge.

Elevation +356.602 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 17.00 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 Float -

Rated by Current Meter 1994 to date.

Stability of Channel Regimes Fairly stable.

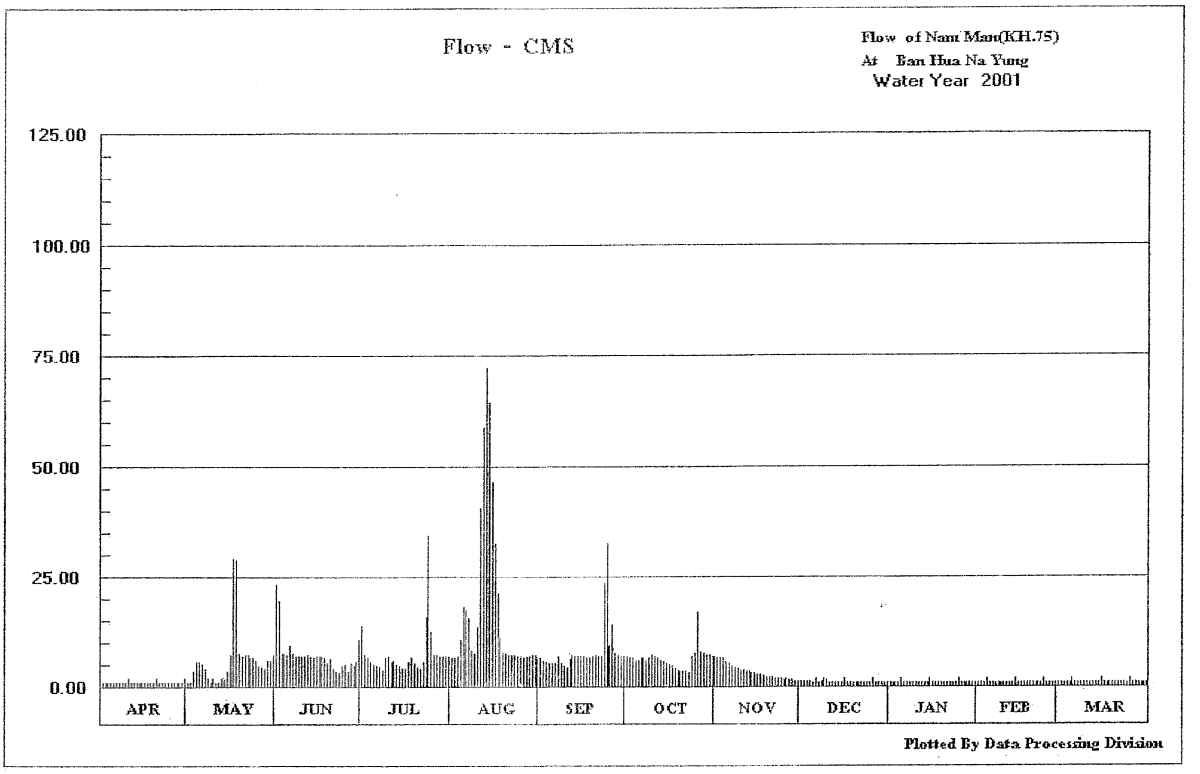
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 38 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	349.18	349.27	352.55	352.16	350.84	350.84	350.97	351.00	349.74	349.46	349.34	349.29	
2	349.16	349.14	352.39	351.29	350.78	350.69	350.88	350.92	349.72	349.45	349.34	349.25	
3	349.16	350.18	351.90	350.78	351.28	350.59	350.79	350.82	349.72	349.44	349.32	349.29	
4	349.15	350.59	351.85	350.59	352.02	350.53	350.70	350.79	349.71	349.44	349.32	349.24	
5	349.19	350.58	351.57	350.46	352.34	350.54	350.64	350.63	349.70	349.43	349.32	349.24	
6	349.16	350.50	351.98	350.41	352.31	350.55	350.77	350.53	349.70	349.43	349.31	349.24	
7	349.16	350.32	351.71	350.34	352.23	351.21	350.86	350.42	349.69	349.42	349.31	349.33	
8	349.14	349.85	351.26	350.23	351.92	350.57	350.69	350.37	349.73	349.42	349.31	349.28	
9	349.23	349.67	351.12	350.86	351.90	350.40	350.92	350.31	349.86	349.42	349.30	349.26	
10	349.16	349.83	351.02	351.00	352.14	350.37	351.42	350.26	349.79	349.42	349.30	349.25	
11	349.13	349.67	350.97	350.61	353.32	350.73	351.08	350.22	349.70	349.41	349.30	349.25	
12	349.10	349.68	351.51	350.68	354.07	351.59	350.79	350.19	349.67	349.40	349.30	349.25	
13	349.09	349.84	351.14	350.50	354.50	351.13	350.68	350.15	349.66	349.40	349.29	349.25	
14	349.10	349.82	350.77	350.42	354.26	351.25	350.58	350.12	349.65	349.42	349.29	349.24	
15	349.09	350.16	351.07	350.30	353.60	351.05	350.54	350.08	349.62	349.44	349.23	349.24	
16	349.13	351.40	351.21	350.28	352.94	351.00	350.49	350.05	349.60	349.57	349.25	349.23	
17	349.18	352.79	351.04	350.61	352.47	350.80	350.40	350.03	349.58	349.48	349.25	349.23	
18	349.21	352.78	350.79	350.78	352.05	350.92	350.32	349.99	349.57	349.42	349.26	349.25	
19	349.22	351.75	350.57	350.54	351.85	351.27	350.26	349.94	349.57	349.41	349.29	349.29	
20	349.15	350.95	350.72	350.37	351.66	351.29	350.20	349.92	349.56	349.40	349.27	349.23	
21	349.14	351.49	350.27	350.32	351.42	351.13	350.17	349.89	349.55	349.39	349.28	349.21	
22	349.12	351.46	350.18	350.60	351.45	351.09	350.14	349.87	349.54	349.38	349.25	349.20	
23	349.15	350.87	350.11	352.25	351.45	352.56	350.12	349.86	349.53	349.36	349.25	349.19	
24	349.09	350.85	350.43	353.02	351.24	352.93	350.98	349.84	349.52	349.35	349.27	349.19	
25	349.09	350.70	350.48	352.11	351.08	351.98	351.90	349.82	349.51	349.35	349.26	349.19	
26	349.27	350.45	350.17	351.30	350.94	352.17	352.28	349.81	349.50	349.35	349.29	349.19	
27	349.46	350.38	350.54	351.41	351.00	351.76	351.91	349.80	349.49	349.34	349.25	349.18	
28	349.36	350.28	350.42	351.20	351.08	351.52	351.66	349.78	349.49	349.34	349.25	349.20	
29	349.22	350.67	350.60	350.99	351.33	351.27	351.60	349.75	349.48	349.34		349.18	
30	349.59	350.67	352.02	351.05	351.42	351.09	351.41	349.74	349.47	349.33		349.17	
31		351.54		351.23	351.08		351.16		349.46	349.33		349.25	
Mean	349.19	350.58	351.08	350.93	352.00	351.16	350.88	350.16	349.62	349.40	349.29	349.23	
Max	349.59	352.79	352.55	353.02	354.50	352.93	352.28	351.00	349.86	349.57	349.34	349.33	354.50
Min	349.09	349.14	350.11	350.23	350.78	350.37	350.12	349.74	349.46	349.33	349.23	349.17	349.09

Annual Max Momentary Gage Height 354.72 M (MSL), at 18.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 346.57 M (MSL), River Bed 348.21 M (MSL)
Left Bank Elevation 356.66 M (MSL)
Right Bank Elevation 356.55 M (MSL), Drainage Area 385 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.32	0.45	23.66	14.26	7.04	7.04	7.15	7.18	1.70	0.74	0.56	0.49	
2	0.29	0.26	19.80	7.45	6.90	6.45	7.07	7.11	1.60	0.73	0.56	0.42	
3	0.29	3.90	8.00	6.90	7.44	5.95	6.95	7.02	1.60	0.71	0.53	0.49	
4	0.27	5.95	7.95	5.95	10.89	5.65	6.50	6.95	1.55	0.71	0.53	0.41	
5	0.33	5.90	7.70	5.30	18.60	5.70	6.20	6.15	1.50	0.69	0.53	0.41	
6	0.29	5.50	9.93	5.05	17.88	5.75	6.85	5.65	1.50	0.69	0.51	0.41	
7	0.29	4.60	7.83	4.70	15.95	7.37	7.05	5.10	1.45	0.68	0.51	0.54	
8	0.26	2.25	7.42	4.15	8.48	5.85	6.45	4.85	1.65	0.68	0.51	0.47	
9	0.40	1.35	7.29	7.05	8.00	5.00	7.11	4.55	2.30	0.68	0.50	0.44	
10	0.29	2.15	7.20	7.18	13.78	4.85	7.56	4.30	1.95	0.68	0.50	0.42	
11	0.24	1.35	7.15	6.05	40.90	6.65	7.25	4.10	1.50	0.67	0.50	0.42	
12	0.20	1.40	7.65	6.40	59.10	7.72	6.95	3.95	1.35	0.65	0.50	0.42	
13	0.19	2.20	7.31	5.50	72.50	7.30	6.40	3.75	1.30	0.65	0.49	0.42	
14	0.20	2.10	6.85	5.10	64.80	7.41	5.90	3.60	1.25	0.68	0.49	0.41	
15	0.19	3.80	7.25	4.50	47.00	7.23	5.70	3.40	1.10	0.71	0.40	0.41	
16	0.24	7.55	7.37	4.40	33.05	7.18	5.45	3.25	1.00	0.94	0.42	0.40	
17	0.32	29.44	7.22	6.05	21.73	7.00	5.00	3.15	0.96	0.77	0.42	0.40	
18	0.36	29.20	6.95	6.90	11.61	7.11	4.60	2.95	0.94	0.68	0.44	0.42	
19	0.38	7.86	5.85	5.70	7.95	7.43	4.30	2.70	0.94	0.67	0.49	0.49	
20	0.27	7.14	6.60	4.85	7.78	7.45	4.00	2.60	0.92	0.65	0.45	0.40	
21	0.26	7.63	4.35	4.60	7.56	7.30	3.85	2.45	0.90	0.64	0.47	0.36	
22	0.23	7.60	3.90	6.00	7.59	7.26	3.70	2.35	0.88	0.62	0.42	0.35	
23	0.27	7.06	3.55	16.43	7.59	23.90	3.60	2.30	0.86	0.59	0.42	0.33	
24	0.19	7.05	5.15	34.90	7.40	32.81	7.16	2.20	0.84	0.58	0.45	0.33	
25	0.19	6.50	5.40	13.06	7.25	9.93	8.00	2.10	0.82	0.58	0.44	0.33	
26	0.45	5.25	3.85	7.45	7.13	14.50	17.15	2.05	0.80	0.58	0.49	0.33	
27	0.74	4.90	5.70	7.55	7.18	7.87	8.24	2.00	0.78	0.56	0.42	0.32	
28	0.59	4.40	5.10	7.36	7.25	7.65	7.78	1.90	0.78	0.56	0.42	0.35	
29	0.38	6.35	6.00	7.17	7.48	7.43	7.73	1.75	0.77	0.56		0.32	
30	0.98	6.35	10.89	7.23	7.56	7.26	7.55	1.70	0.76	0.54		0.31	
31		7.67		7.39	7.25		7.33		0.74	0.54		0.42	
Total	9.90	195.11	230.87	242.58	562.62	258.00	206.53	113.11	36.99	20.41	13.37	12.44	1901.93 CMSDAY
Mean	0.33	6.29	7.70	7.83	18.15	8.60	6.66	3.77	1.19	0.66	0.48	0.40	5.21 CMS
Max	0.98	29.44	23.66	34.90	72.50	32.81	17.15	7.18	2.30	0.94	0.56	0.54	72.50 CMS
Min	0.19	0.26	3.55	4.15	6.90	4.85	3.60	1.70	0.74	0.54	0.40	0.31	0.19 CMS
Runoff	0.855	16.858	19.947	20.959	48.610	22.291	17.844	9.773	3.196	1.763	1.155	1.075	164.327 MCM

Momentary Peak 80.20 CMS, at 354.72 M (MSL), at 18.00 Hours, on Aug 11, 2001

Runoff Yield 13.53 Liters/Second/Square KM, Momentary Peak Yield 208.312 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

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

Location on right bank at Ban Kok So.

Ban Kok So **Amphoe** Wang Saphung **Changwat** Loei

Drainage Area 142 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +260.980 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On right bank at the abutment of the bridge.

Elevation +268.630 (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1983 to date.

Rating Operation

Period of Rating 1984 to date.

Rated by Float -

Rated by Current Meter 1984 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

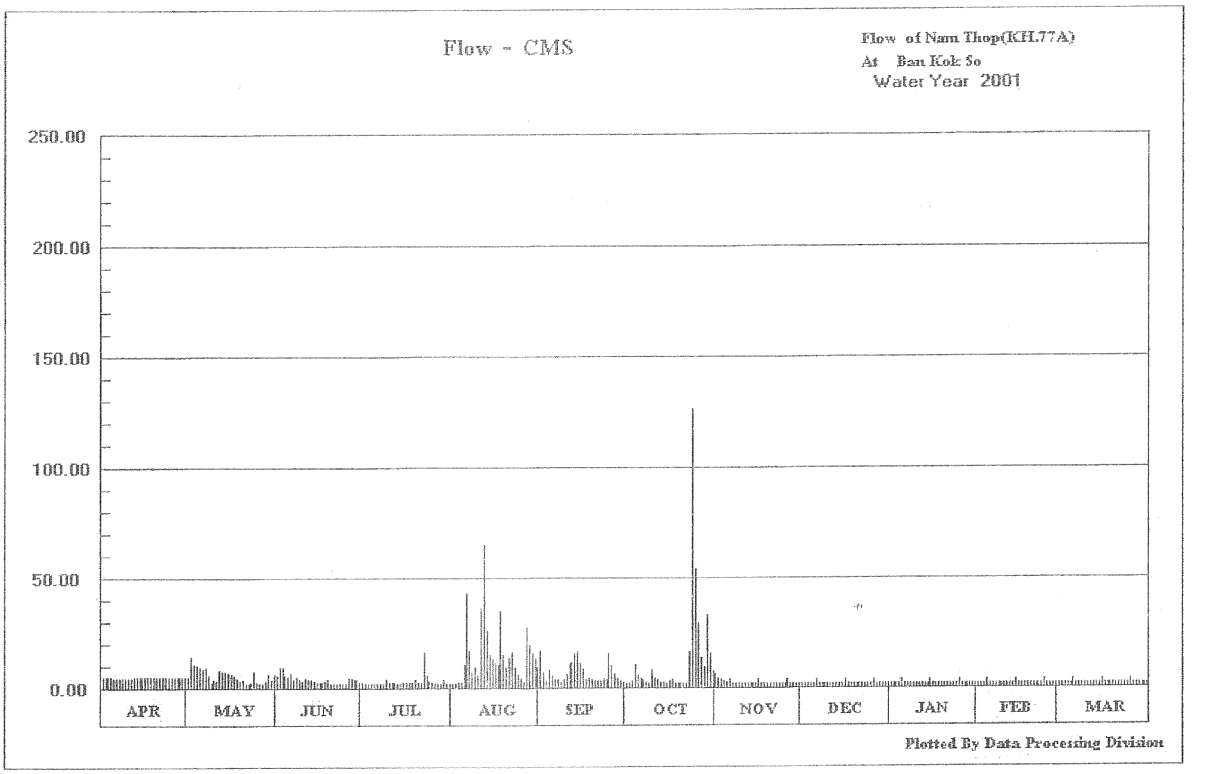
General Description Records fair. The cataract situated downstream from the gage site.

Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	261.86	261.86	261.88	261.73	261.59	262.33	261.65	261.90	261.54	261.41	261.33	261.27	
2	261.86	262.24	262.02	261.69	261.58	261.93	261.65	261.85	261.53	261.40	261.33	261.27	
3	261.86	262.06	262.00	261.63	261.75	261.79	261.80	261.81	261.53	261.40	261.32	261.27	
4	261.86	262.03	261.89	261.59	261.73	261.97	262.08	261.77	261.53	261.38	261.31	261.27	
5	261.85	262.00	261.86	261.62	262.08	261.89	261.88	261.76	261.53	261.38	261.31	261.27	
6	261.85	261.99	261.92	261.62	262.95	261.81	261.83	261.74	261.53	261.37	261.32	261.27	
7	261.85	262.01	261.82	261.61	262.34	261.79	261.81	261.70	261.52	261.37	261.34	261.26	
8	261.84	261.88	261.86	261.62	261.92	261.75	261.73	261.66	261.52	261.36	261.36	261.25	
9	261.84	261.74	261.78	261.62	262.02	261.81	261.69	261.66	261.52	261.35	261.37	261.25	
10	261.84	261.55	261.79	261.76	261.88	261.90	261.96	261.65	261.52	261.34	261.37	261.25	
11	261.85	261.80	261.85	261.72	262.81	262.09	261.85	261.65	261.49	261.34	261.38	261.25	
12	261.86	261.96	261.82	261.71	263.29	262.13	261.82	261.64	261.47	261.35	261.37	261.25	
13	261.86	261.94	261.81	261.70	262.57	262.30	261.76	261.63	261.48	261.35	261.36	261.25	
14	261.86	261.94	261.78	261.70	262.26	262.34	261.72	261.64	261.49	261.35	261.35	261.25	
15	261.86	261.92	261.76	261.72	262.18	262.10	261.69	261.65	261.49	261.35	261.34	261.25	
16	261.87	261.90	261.76	261.72	262.10	261.98	261.78	261.66	261.49	261.34	261.33	261.25	
17	261.87	261.88	261.76	261.71	262.06	261.79	261.72	261.65	261.49	261.34	261.32	261.25	
18	261.87	261.83	261.78	261.73	262.78	261.85	261.68	261.64	261.48	261.34	261.32	261.25	
19	261.87	261.79	261.70	261.75	262.27	261.81	261.68	261.62	261.48	261.34	261.31	261.25	
20	261.87	261.69	261.69	261.75	262.00	261.80	261.67	261.60	261.48	261.34	261.31	261.25	
21	261.87	261.67	261.65	261.72	262.21	261.78	261.62	261.60	261.47	261.34	261.27	261.24	
22	261.87	261.64	261.60	262.31	262.32	261.80	261.62	261.58	261.46	261.34	261.27	261.24	
23	261.87	261.73	261.68	261.89	262.01	261.85	262.31	261.58	261.45	261.35	261.27	261.24	
24	261.87	261.95	261.67	261.80	261.91	261.82	263.95	261.56	261.40	261.33	261.26	261.24	
25	261.86	261.73	261.65	261.71	261.84	262.28	263.13	261.56	261.45	261.33	261.26	261.24	
26	261.86	261.68	261.84	261.68	261.73	262.03	262.65	261.56	261.45	261.33	261.26	261.24	
27	261.86	261.67	261.85	261.64	262.61	261.90	262.22	261.56	261.45	261.33	261.26	261.24	
28	261.86	261.80	261.81	261.64	262.41	261.83	262.01	261.56	261.44	261.33	261.26	261.24	
29	261.86	261.90	261.70	261.60	262.29	261.77	262.74	261.56	261.44	261.33		261.24	
30	261.86	261.71	261.73	261.58	262.19	261.73	262.29	261.55	261.42	261.33		261.24	
31		261.91		261.63	262.02		261.95		261.42	261.33		261.24	
Mean	261.86	261.85	261.79	261.71	262.18	261.93	262.00	261.65	261.48	261.35	261.32	261.25	
Max	261.87	262.24	262.02	262.31	263.29	262.34	263.95	261.90	261.54	261.41	261.38	261.27	263.95
Min	261.84	261.55	261.60	261.58	261.58	261.73	261.62	261.55	261.40	261.33	261.26	261.24	261.24

Annual Max Momentary Gage Height 264.33 M (MSL), at 12.00 Hours, on Oct 24, 2001
Zero Gage at Bottom Elevation 260.98 M (MSL), River Bed 260.90 M (MSL)
Left Bank Elevation 268.68 M (MSL)
Right Bank Elevation 268.64 M (MSL), Drainage Area 142 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.80	5.80	6.40	3.30	1.93	17.62	2.50	7.00	1.58	0.67	0.46	0.34	
2	5.80	15.28	10.44	2.90	1.86	7.90	2.50	5.50	1.51	0.60	0.46	0.34	
3	5.80	11.32	10.00	2.30	3.50	3.90	4.00	4.30	1.51	0.60	0.44	0.34	
4	5.80	10.66	6.70	1.93	3.30	9.10	11.76	3.70	1.51	0.56	0.42	0.34	
5	5.50	10.00	5.80	2.20	11.76	6.70	6.40	3.60	1.51	0.56	0.42	0.34	
6	5.50	9.70	7.60	2.20	44.00	4.30	4.90	3.40	1.51	0.54	0.44	0.34	
7	5.50	10.22	4.60	2.10	17.96	3.90	4.30	3.00	1.44	0.54	0.48	0.32	
8	5.20	6.40	5.80	2.20	7.60	3.50	3.30	2.60	1.44	0.52	0.52	0.30	
9	5.20	3.40	3.80	2.20	10.44	4.30	2.90	2.60	1.44	0.50	0.54	0.30	
10	5.20	1.65	3.90	3.60	6.40	7.00	8.80	2.50	1.44	0.48	0.54	0.30	
11	5.50	4.00	5.50	3.20	37.00	11.98	5.50	2.50	1.23	0.48	0.56	0.30	
12	5.80	8.80	4.60	3.10	65.80	12.86	4.60	2.40	1.09	0.50	0.54	0.30	
13	5.80	8.20	4.30	3.00	26.80	16.60	3.60	2.30	1.16	0.50	0.52	0.30	
14	5.80	8.20	3.80	3.00	15.72	17.96	3.20	2.40	1.23	0.50	0.50	0.30	
15	5.80	7.60	3.60	3.20	13.96	12.20	2.90	2.50	1.23	0.50	0.48	0.30	
16	6.10	7.00	3.60	3.20	12.20	9.40	3.80	2.60	1.23	0.48	0.46	0.30	
17	6.10	6.40	3.60	3.10	11.32	3.90	3.20	2.50	1.23	0.48	0.44	0.30	
18	6.10	4.90	3.80	3.30	35.60	5.50	2.80	2.40	1.16	0.48	0.44	0.30	
19	6.10	3.90	3.00	3.50	15.94	4.30	2.80	2.20	1.16	0.48	0.42	0.30	
20	6.10	2.90	2.90	3.50	10.00	4.00	2.70	2.00	1.16	0.48	0.42	0.30	
21	6.10	2.70	2.50	3.20	14.62	3.80	2.20	2.00	1.09	0.48	0.34	0.28	
22	6.10	2.40	2.00	16.94	17.28	4.00	2.20	1.86	1.02	0.48	0.34	0.28	
23	6.10	3.30	2.80	6.70	10.22	5.50	16.94	1.86	0.95	0.50	0.34	0.28	
24	6.10	8.50	2.70	4.00	7.30	4.60	127.00	1.72	0.60	0.46	0.32	0.28	
25	5.80	3.30	2.50	3.10	5.20	16.16	54.60	1.72	0.95	0.46	0.32	0.28	
26	5.80	2.80	5.20	2.80	3.30	10.66	30.00	1.72	0.95	0.46	0.32	0.28	
27	5.80	2.70	5.50	2.40	28.40	7.00	14.84	1.72	0.95	0.46	0.32	0.28	
28	5.80	4.00	4.30	2.40	20.40	4.90	10.22	1.72	0.88	0.46	0.32	0.28	
29	5.80	7.00	3.00	2.00	16.38	3.70	33.80	1.72	0.88	0.46		0.28	
30	5.80	3.10	3.30	1.86	14.18	3.30	16.38	1.65	0.74	0.46		0.28	
31		7.30		2.30	10.44		8.50		0.74	0.46		0.28	
Total	173.70	193.43	137.54	104.73	500.81	230.54	403.14	79.69	36.52	15.59	12.12	9.34	1897.15 CMSDAY
Mean	5.79	6.24	4.58	3.38	16.16	7.68	13.00	2.66	1.18	0.50	0.43	0.30	5.20 CMS
Max	6.10	15.28	10.44	16.94	65.80	17.96	127.00	7.00	1.58	0.67	0.56	0.34	127.00 CMS
Min	5.20	1.65	2.00	1.86	1.86	3.30	2.20	1.65	0.60	0.46	0.32	0.28	0.28 CMS
Runoff	15.008	16.712	11.883	9.049	43.270	19.919	34.831	6.885	3.155	1.347	1.047	0.807	163.914 MCM

Momentary Peak 171.60 CMS, at 264.33 M (MSL), at 12.00 Hours, on Oct 24, 2001

Runoff Yield 36.60 Liters/Second/Square KM, Momentary Peak Yield 1208.451 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

Huai Bang I at Ban Non Yang, Muk Dahan (Kh.79)

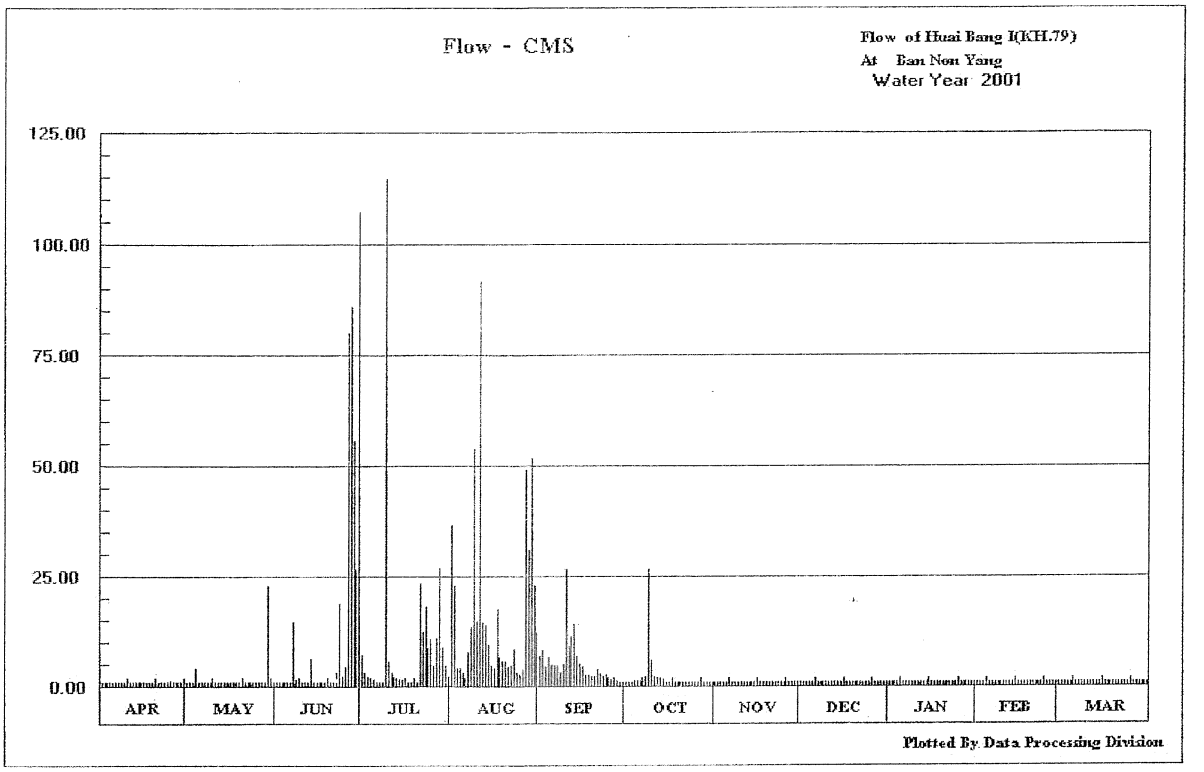
Lat 16 - 28 - 56 N. **Long** 104 - 20 - 08 E.

Location		on right bank at the bridge on highway.			
	Ban Non Yang	**Amphoe** Nong Sung		**Changwat**	Muk Dahan
Drainage Area		110 sq.km.			
Type of Gage		Water - stage recorder.			
Zero Gage at Bottom		+186.130 m. (M.S.L.)			
Bench Mark		B.M.- Highways Dept.			
	Location BM	On right bank at the abutment of the bridge.			
	Elevation	+195.802 m. (M.S.L.)			
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 Float	-			
	Rated by Current Meter	1984 to date.			
Stability of Channel Regimes		Fairly stable by some silting.			
Overbank Flow Conditions		Overbank flow starts at elevation +190.060 m.(M.S.L.) and is including overbank flow.			
General Description		Records good. Stage-discharge relation defined by 41 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	186.31	186.27	186.38	187.35	188.85	187.33	186.57	186.47	186.28	186.23	186.19	186.19	
2	186.31	186.37	186.36	186.96	188.31	187.45	186.58	186.47	186.27	186.23	186.19	186.20	
3	186.31	186.37	186.36	186.79	187.05	187.09	186.58	186.47	186.27	186.23	186.19	186.20	
4	186.23	187.06	186.36	186.73	187.05	187.29	186.63	186.43	186.27	186.23	186.19	186.20	
5	186.23	186.49	186.60	186.71	186.96	187.12	186.63	186.43	186.27	186.23	186.19	186.20	
6	186.23	186.37	186.53	186.53	186.78	187.11	186.63	186.41	186.27	186.23	186.19	186.20	
7	186.23	186.21	187.95	186.53	187.41	187.10	186.73	186.41	186.27	186.23	186.19	186.20	
8	186.23	186.21	186.69	186.52	187.90	186.94	186.83	186.41	186.27	186.23	186.19	186.20	
9	186.23	186.21	186.41	191.28	189.47	187.13	188.46	186.41	186.29	186.23	186.20	186.20	
10	186.23	186.23	186.41	187.21	187.95	188.46	187.22	186.41	186.29	186.23	186.20	186.20	
11	186.23	186.57	186.49	186.96	190.66	187.56	186.83	186.40	186.27	186.23	186.20	186.20	
12	186.23	186.37	186.43	186.79	187.94	187.76	186.73	186.40	186.27	186.23	186.19	186.20	
13	186.23	186.30	187.26	186.73	187.91	187.92	186.73	186.40	186.27	186.23	186.19	186.20	
14	186.26	186.27	186.60	186.71	187.57	187.32	186.68	186.40	186.25	186.23	186.19	186.20	
15	186.23	186.27	186.53	186.67	187.11	187.13	186.58	186.40	186.25	186.23	186.21	186.20	
16	186.23	186.23	186.51	186.74	187.05	187.09	186.53	186.39	186.25	186.23	186.21	186.20	
17	186.23	186.23	186.44	186.56	188.09	186.90	186.53	186.39	186.25	186.23	186.21	186.20	
18	186.23	186.31	186.39	186.53	187.31	186.88	186.53	186.39	186.25	186.23	186.21	186.20	
19	186.23	186.31	186.39	186.53	187.21	186.83	186.51	186.38	186.25	186.23	186.21	186.20	
20	186.23	186.31	186.39	186.53	187.21	186.83	186.51	186.36	186.25	186.23	186.21	186.20	
21	186.23	186.30	186.43	188.33	187.08	187.01	186.53	186.34	186.25	186.21	186.21	186.20	
22	186.29	186.33	186.96	187.84	187.10	186.93	186.53	186.34	186.25	186.21	186.21	186.20	
23	186.29	186.28	188.15	188.12	187.48	186.83	186.53	186.34	186.25	186.21	186.21	186.19	
24	186.50	186.28	186.83	187.51	186.94	186.87	186.59	186.33	186.25	186.21	186.21	186.20	
25	186.65	186.31	187.09	187.70	186.90	186.73	186.59	186.33	186.25	186.21	186.21	186.20	
26	186.48	186.38	190.33	187.12	187.02	186.67	186.59	186.32	186.25	186.21	186.21	186.20	
27	186.33	186.33	190.50	187.73	189.30	186.66	186.53	186.32	186.25	186.21	186.21	186.19	
28	186.29	186.31	189.53	188.47	188.63	186.63	186.51	186.31	186.25	186.21	186.21	186.19	
29	186.27	188.31	188.46	187.53	189.39	186.60	186.51	186.31	186.25	186.21		186.19	
30	186.27	186.54	191.09	187.11	188.31	186.60	186.47	186.30	186.25	186.21		186.19	
31		186.40		186.82	187.83		186.47		186.25	186.21		186.19	
Mean	186.28	186.41	187.23	187.21	187.80	187.09	186.67	186.38	186.26	186.22	186.20	186.20	
Max	186.65	188.31	191.09	191.28	190.66	188.46	188.46	186.47	186.29	186.23	186.21	186.20	191.28
Min	186.23	186.21	186.36	186.52	186.78	186.60	186.47	186.30	186.25	186.21	186.19	186.19	186.19

Annual Max Momentary Gage Height 191.93 M (MSL), at 6.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 186.13 M (MSL), River Bed 185.36 M (MSL)
Left Bank Elevation 190.05 M (MSL)
Right Bank Elevation 190.34 M (MSL), Drainage Area 110 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.01	0.16	0.44	7.50	36.90	7.30	1.35	0.85	0.17	0.09	0.05	0.05	
2	0.01	0.41	0.38	3.60	23.25	8.50	1.40	0.85	0.16	0.09	0.05	0.05	
3	0.01	0.41	0.38	2.45	4.50	4.90	1.40	0.85	0.16	0.09	0.05	0.05	
4	0.01	4.60	0.38	2.15	4.50	6.90	1.65	0.65	0.16	0.09	0.05	0.05	
5	0.02	0.95	1.50	2.05	3.60	5.20	1.65	0.65	0.16	0.09	0.05	0.05	
6	0.02	0.41	1.15	1.15	2.40	5.10	1.65	0.55	0.16	0.09	0.05	0.05	
7	0.03	0.07	15.00	1.15	8.10	5.00	2.15	0.55	0.16	0.09	0.05	0.05	
8	0.03	0.07	1.95	1.10	14.00	3.40	2.65	0.55	0.16	0.09	0.05	0.05	
9	0.04	0.07	0.55	115.20	54.16	5.30	27.00	0.55	0.18	0.09	0.05	0.05	
10	0.05	0.09	0.55	6.10	15.00	27.00	6.20	0.55	0.18	0.09	0.05	0.05	
11	0.06	1.35	0.95	3.60	92.10	9.60	2.65	0.50	0.16	0.09	0.05	0.05	
12	0.08	0.41	0.65	2.45	14.80	11.60	2.15	0.50	0.16	0.09	0.05	0.05	
13	0.10	0.20	6.60	2.15	14.20	14.40	2.15	0.50	0.16	0.09	0.05	0.05	
14	0.14	0.16	1.50	2.05	9.70	7.20	1.90	0.50	0.13	0.09	0.05	0.05	
15	0.09	0.16	1.15	1.85	5.10	5.30	1.40	0.50	0.13	0.09	0.07	0.05	
16	0.09	0.09	1.05	2.20	4.50	4.90	1.15	0.47	0.13	0.09	0.07	0.05	
17	0.09	0.09	0.70	1.30	17.80	3.00	1.15	0.47	0.13	0.09	0.07	0.05	
18	0.09	0.23	0.47	1.15	7.10	2.90	1.15	0.47	0.13	0.09	0.07	0.05	
19	0.09	0.23	0.47	1.15	6.10	2.65	1.05	0.44	0.13	0.09	0.07	0.05	
20	0.09	0.23	0.47	1.15	6.10	2.65	1.05	0.38	0.13	0.09	0.07	0.05	
21	0.09	0.20	0.65	23.75	4.80	4.10	1.15	0.32	0.13	0.07	0.07	0.05	
22	0.18	0.29	3.60	12.80	5.00	3.30	1.15	0.32	0.13	0.07	0.07	0.05	
23	0.18	0.17	19.25	18.50	8.80	2.65	1.15	0.32	0.13	0.07	0.07	0.05	
24	1.00	0.17	2.65	9.10	3.40	2.85	1.45	0.29	0.13	0.07	0.07	0.05	
25	1.75	0.23	4.90	11.00	3.00	2.15	1.45	0.29	0.13	0.07	0.07	0.05	
26	0.90	0.44	80.55	5.20	4.20	1.85	1.45	0.26	0.13	0.07	0.07	0.05	
27	0.29	0.29	86.50	11.30	49.40	1.80	1.15	0.26	0.13	0.07	0.07	0.05	
28	0.18	0.23	55.90	27.25	31.25	1.65	1.05	0.23	0.13	0.07	0.07	0.05	
29	0.16	23.25	27.00	9.30	51.92	1.50	1.05	0.23	0.13	0.07		0.05	
30	0.16	1.20	107.60	5.10	23.25	1.50	0.85	0.20	0.13	0.07		0.05	
31		0.50		2.60	12.60		0.85		0.13	0.07		0.05	
Total	6.04	37.36	424.89	297.40	541.53	166.15	75.65	14.05	4.47	2.57	1.68	1.55	1573.34 CMSDAY
Mean	0.20	1.21	14.16	9.59	17.47	5.54	2.44	0.47	0.14	0.08	0.06	0.05	4.31 CMS
Max	1.75	23.25	107.60	115.20	92.10	27.00	27.00	0.85	0.18	0.09	0.07	0.05	115.20 CMS
Min	0.01	0.07	0.38	1.10	2.40	1.50	0.85	0.20	0.13	0.07	0.05	0.05	0.01 CMS
Runoff	0.522	3.228	36.710	25.695	46.788	14.355	6.536	1.214	0.386	0.222	0.145	0.134	135.937 MCM

Momentary Peak 141.20 CMS, at 191.93 M (MSL), at 6.00 Hours, on Jul 9, 2001

Runoff Yield 39.19 Liters/Second/Square KM. Momentary Peak Yield 1283.636 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

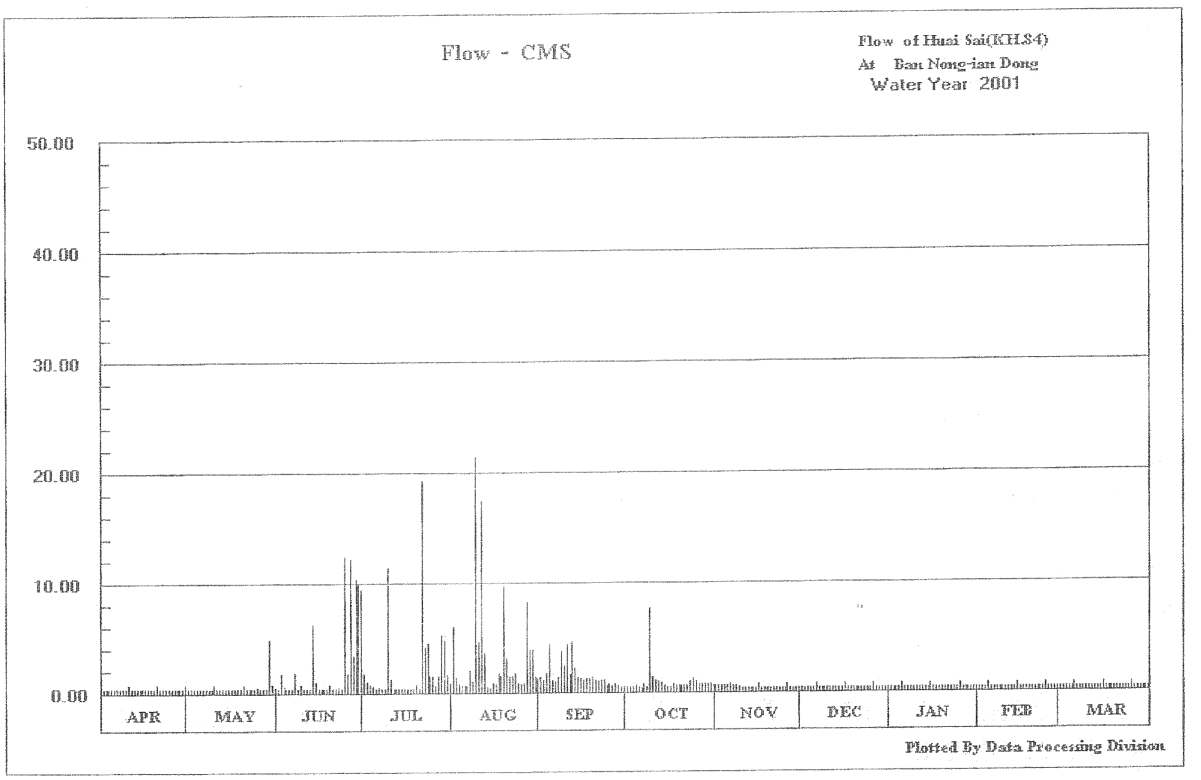
Lat 16 - 32 - 17 N. **Long** 104 - 24 - 12 E.

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
Drainage Area		48 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+184.730 m. (M.S.L.)			
Bench Mark		B.M.- Highways Dept.			
	Location BM	On left bank downstream side at the footpath of the bridge.			
	Elevation	+190.766 m. (M.S.L.)			
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.			
Period of Available Gage Records		1987 to date.			
Rating Operation					
	Period of Rating	1987 to date.			
	Rated by Float	-			
	Rated by Current Meter	1987 to date.			
Stability of Channel Regimes		Rather unstable.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records good. Stage-discharge relation defined by 37 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	185.30	185.36	185.43	185.79	186.11	185.70	185.53	185.56	185.46	185.43	185.45	185.42	
2	185.29	185.37	185.78	185.63	185.72	185.65	185.53	185.56	185.46	185.43	185.45	185.42	
3	185.29	185.33	185.57	185.59	185.59	185.79	185.53	185.56	185.46	185.43	185.44	185.42	
4	185.28	185.39	185.47	185.57	185.55	186.00	185.56	185.56	185.46	185.43	185.44	185.42	
5	185.27	185.44	185.47	185.38	185.56	185.66	185.54	185.56	185.46	185.43	185.44	185.42	
6	185.26	185.40	185.41	185.53	185.55	185.64	185.52	185.56	185.46	185.43	185.44	185.42	
7	185.26	185.32	185.81	185.50	185.82	185.70	185.52	185.56	185.45	185.43	185.44	185.42	
8	185.26	185.32	185.47	185.49	185.64	185.96	185.53	185.55	185.45	185.43	185.44	185.42	
9	185.25	185.35	185.57	186.40	186.75	185.87	186.22	185.53	185.45	185.43	185.44	185.42	
10	185.24	185.47	185.41	185.68	186.02	186.00	185.72	185.52	185.45	185.43	185.43	185.42	
11	185.24	185.48	185.36	185.48	186.62	185.76	185.66	185.51	185.44	185.43	185.43	185.43	
12	185.24	185.47	185.51	185.39	185.95	186.02	185.63	185.51	185.44	185.43	185.43	185.43	
13	185.24	185.41	186.13	185.46	185.53	185.84	185.62	185.51	185.44	185.43	185.43	185.43	
14	185.24	185.36	185.64	185.43	185.50	185.70	185.56	185.50	185.43	185.43	185.43	185.43	
15	185.24	185.33	185.49	185.43	185.62	185.68	185.54	185.50	185.43	185.43	185.43	185.43	
16	185.24	185.33	185.41	185.41	185.59	185.65	185.54	185.49	185.43	185.43	185.43	185.44	
17	185.24	185.33	185.38	185.39	185.79	185.68	185.54	185.49	185.43	185.43	185.43	185.44	
18	185.23	185.43	185.35	185.38	185.73	185.68	185.55	185.49	185.43	185.43	185.43	185.44	
19	185.23	185.43	185.32	185.38	186.33	185.71	185.56	185.49	185.43	185.43	185.42	185.44	
20	185.23	185.41	185.30	185.38	185.92	185.65	185.56	185.49	185.43	185.43	185.42	185.44	
21	185.23	185.32	185.30	186.68	185.74	185.63	185.55	185.48	185.43	185.43	185.42	185.44	
22	185.23	185.33	185.54	185.99	185.73	185.67	185.55	185.48	185.43	185.43	185.42	185.44	
23	185.23	185.29	185.36	186.01	185.79	185.66	185.63	185.48	185.43	185.43	185.42	185.44	
24	185.23	185.32	186.44	185.73	185.61	185.57	185.69	185.48	185.43	185.43	185.42	185.45	
25	185.40	185.53	185.79	185.74	185.58	185.58	185.64	185.48	185.43	185.43	185.42	185.43	
26	185.27	185.50	186.43	185.56	185.61	185.57	185.59	185.47	185.43	185.43	185.42	185.43	
27	185.30	185.43	185.94	185.73	186.26	185.56	185.58	185.46	185.43	185.43	185.42	185.43	
28	185.30	185.43	186.36	186.06	185.97	185.56	185.58	185.46	185.43	185.43	185.42	185.42	
29	185.32	186.04	186.34	186.03	185.97	185.54	185.58	185.46	185.43	185.43		185.42	
30	185.33	185.56	186.32	185.75	185.71	185.54	185.58	185.46	185.43	185.43		185.42	
31		185.53		185.61	185.68		185.57		185.43	185.43		185.47	
Mean	185.26	185.42	185.67	185.66	185.82	185.71	185.60	185.51	185.44	185.43	185.43	185.43	
Max	185.40	186.04	186.44	186.68	186.75	186.02	186.22	185.56	185.46	185.43	185.45	185.47	186.75
Min	185.23	185.29	185.30	185.38	185.50	185.54	185.52	185.46	185.43	185.43	185.42	185.42	185.23

Annual Max Momentary Gage Height 187.29 M (MSL), at 12.00 Hours, on Aug 9, 2001
Zero Gage at Bottom Elevation 184.73 M (MSL), River Bed 184.44 M (MSL)
Left Bank Elevation 188.92 M (MSL)
Right Bank Elevation 188.13 M (MSL), Drainage Area 48 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.05	0.11	0.25	1.95	6.15	1.50	0.65	0.80	0.36	0.25	0.33	0.22	
2	0.05	0.12	1.90	1.15	1.60	1.25	0.65	0.80	0.36	0.25	0.33	0.22	
3	0.05	0.08	0.85	0.95	0.95	1.95	0.65	0.80	0.36	0.25	0.29	0.22	
4	0.04	0.14	0.40	0.85	0.75	4.50	0.80	0.80	0.36	0.25	0.29	0.22	
5	0.04	0.29	0.40	0.13	0.80	1.30	0.70	0.80	0.36	0.25	0.29	0.22	
6	0.03	0.15	0.19	0.65	0.75	1.20	0.60	0.80	0.36	0.25	0.29	0.22	
7	0.03	0.07	2.10	0.50	2.20	1.50	0.60	0.80	0.33	0.25	0.29	0.22	
8	0.03	0.07	0.40	0.47	1.20	3.90	0.65	0.75	0.33	0.25	0.29	0.22	
9	0.03	0.10	0.85	11.50	21.50	2.70	7.80	0.65	0.33	0.25	0.29	0.22	
10	0.03	0.40	0.19	1.40	4.80	4.50	1.60	0.60	0.33	0.25	0.25	0.22	
11	0.03	0.43	0.11	0.43	17.60	1.80	1.30	9.55	0.29	0.25	0.25	0.25	
12	0.03	0.40	0.55	0.14	3.75	4.80	1.15	0.55	0.29	0.25	0.25	0.25	
13	0.03	0.19	6.45	0.36	0.65	2.40	1.10	0.55	0.29	0.25	0.25	0.25	
14	0.03	0.11	1.20	0.25	0.50	1.50	0.80	0.50	0.25	0.25	0.25	0.25	
15	0.03	0.08	0.47	0.25	1.10	1.40	0.70	0.50	0.25	0.25	0.25	0.25	
16	0.03	0.08	0.19	0.19	0.95	1.25	0.70	0.47	0.25	0.25	0.25	0.29	
17	0.03	0.08	0.13	0.14	1.95	1.40	0.70	0.47	0.25	0.25	0.25	0.29	
18	0.02	0.25	0.10	0.13	1.65	1.40	0.75	0.47	0.25	0.25	0.25	0.29	
19	0.02	0.25	0.07	0.13	9.75	1.55	0.80	0.47	0.25	0.25	0.22	0.29	
20	0.02	0.19	0.05	0.13	3.30	1.25	0.80	0.47	0.25	0.25	0.22	0.29	
21	0.02	0.07	0.05	19.40	1.70	1.15	0.75	0.43	0.25	0.25	0.22	0.29	
22	0.02	0.08	0.70	4.35	1.65	1.35	0.75	0.43	0.25	0.25	0.22	0.29	
23	0.02	0.05	0.11	4.65	1.95	1.30	1.15	0.43	0.25	0.25	0.22	0.29	
24	0.02	0.07	12.50	1.65	1.05	0.85	1.45	0.43	0.25	0.25	0.22	0.33	
25	0.15	0.65	1.95	1.70	0.90	0.90	1.20	0.43	0.25	0.25	0.22	0.25	
26	0.04	0.50	12.25	0.80	1.05	0.85	0.95	0.40	0.25	0.25	0.22	0.25	
27	0.05	0.25	3.60	1.65	8.40	0.80	0.90	0.36	0.25	0.25	0.22	0.25	
28	0.05	0.25	10.50	5.40	4.05	0.80	0.90	0.36	0.25	0.25	0.22	0.22	
29	0.07	5.10	10.00	4.95	4.05	0.70	0.90	0.36	0.25	0.25		0.22	
30	0.08	0.80	9.50	1.75	1.55	0.70	0.90	0.36	0.25	0.25		0.22	
31		0.65		1.05	1.40		0.85		0.25	0.25		0.40	
Total	1.17	12.06	78.01	69.05	109.65	52.45	34.20	16.59	8.85	7.75	7.14	7.91	404.83 CMSDAY
Mean	0.04	0.39	2.60	2.23	3.54	1.75	1.10	0.55	0.29	0.25	0.25	0.26	1.11 CMS
Max	0.15	5.10	12.50	19.40	21.50	4.80	7.80	0.80	0.36	0.25	0.33	0.40	21.50 CMS
Min	0.02	0.05	0.05	0.13	0.50	0.70	0.60	0.36	0.25	0.25	0.22	0.22	0.02 CMS
Runoff	0.101	1.042	6.740	5.966	9.474	4.532	2.955	1.433	0.765	0.670	0.617	0.683	34.977 MCM

Momentary Peak 50.30 CMS, at 187.29 M (MSL), at 12.00 Hours, on Aug 9, 2001

Runoff Yield 23.11 Liters/Second/Square KM, Momentary Peak Yield 1047.917 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

Lat 20 - 09 - 25 N. **Long** 90 - 51 - 45 E.

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

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

Drainage Area 255 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.000 m. (A.D.)

Bench Mark B.M.- Temporary.

Location BM On left bank at the footpath of the bridge.

Elevation +5.470 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 1993 to date.

Rating Operation

Period of Rating 1993 to date.

Rated by Float -

Rated by Current Meter 1993 to date.

Stability of Channel Regimes Rather unstable.

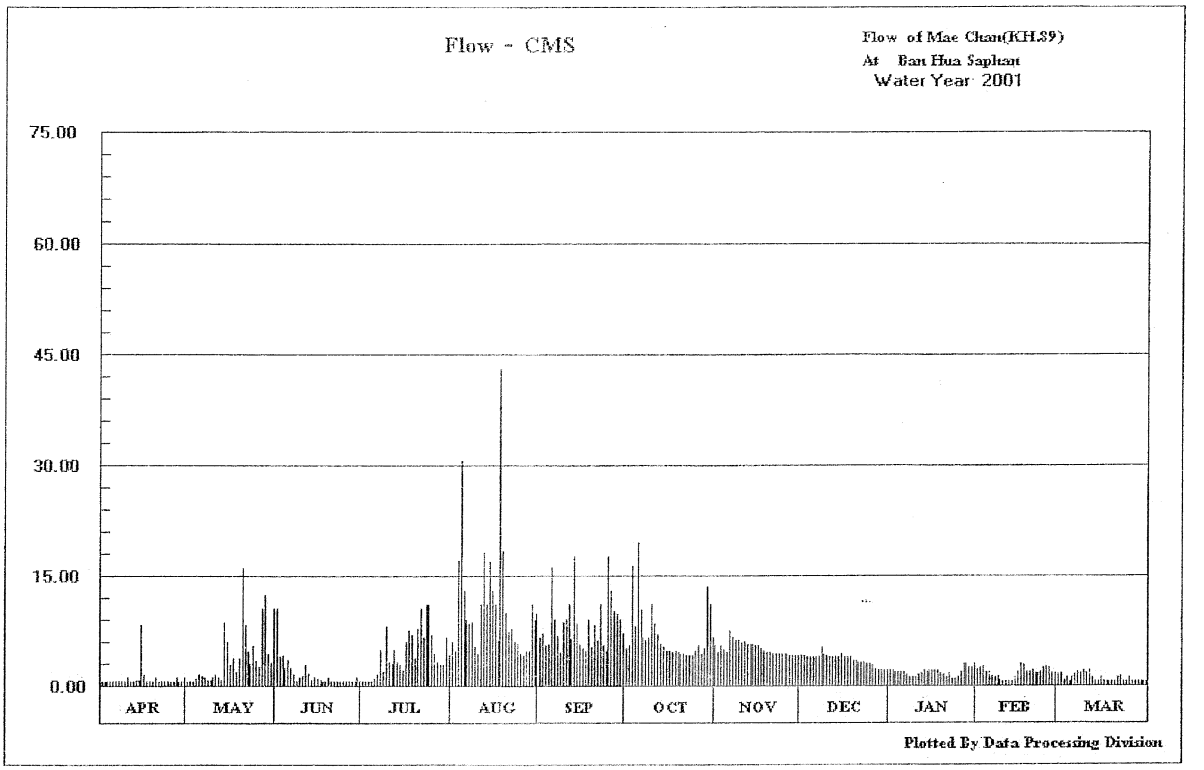
Overbank Flow Conditions No overbank flow.

General Description Records fair. The local weir situated about 300 meters downstream from the gage site.
Stage-discharge relation defined by 43 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.06	0.16	0.97	0.18	0.72	0.75	0.66	0.68	0.59	0.40	0.43	0.35	
2	0.09	0.22	0.58	0.17	0.63	0.79	0.69	0.61	0.59	0.41	0.45	0.37	
3	0.06	0.21	0.59	0.17	1.25	0.68	1.22	0.69	0.58	0.39	0.46	0.24	
4	0.05	0.28	0.44	0.20	1.66	0.70	0.84	0.64	0.58	0.39	0.39	0.29	
5	0.05	0.34	0.54	0.26	1.08	1.21	1.34	0.62	0.58	0.39	0.38	0.19	
6	0.05	0.31	0.44	0.33	0.90	0.90	0.96	0.81	0.57	0.39	0.32	0.18	
7	0.07	0.29	0.35	0.64	0.87	0.77	0.76	0.76	0.57	0.33	0.29	0.35	
8	0.07	0.25	0.22	0.38	0.88	0.62	0.73	0.73	0.67	0.29	0.32	0.39	
9	0.07	0.23	0.22	0.84	0.67	0.88	0.76	0.73	0.60	0.30	0.23	0.37	
10	0.12	0.20	0.31	0.52	0.60	0.90	1.00	0.71	0.59	0.30	0.16	0.40	
11	0.12	0.35	0.47	0.50	1.00	1.00	0.87	0.72	0.58	0.33	0.16	0.36	
12	0.10	0.30	0.37	0.64	1.29	0.74	0.78	0.70	0.58	0.36	0.13	0.41	
13	0.23	0.25	0.25	0.52	1.00	1.27	0.70	0.70	0.57	0.41	0.20	0.30	
14	0.23	0.88	0.30	0.47	1.24	0.87	0.67	0.70	0.57	0.39	0.25	0.10	
15	0.85	0.72	0.28	0.40	1.08	0.70	0.63	0.69	0.60	0.41	0.39	0.12	
16	0.34	0.48	0.24	0.72	1.00	0.65	0.63	0.69	0.58	0.41	0.49	0.09	
17	0.22	0.56	0.21	0.81	0.73	0.63	0.62	0.65	0.57	0.41	0.48	0.20	
18	0.18	0.39	0.21	0.78	1.93	0.90	0.63	0.63	0.57	0.40	0.39	0.19	
19	0.17	0.56	0.20	0.56	1.30	0.67	0.61	0.62	0.53	0.37	0.38	0.18	
20	0.17	1.20	0.20	0.82	0.94	0.86	0.60	0.61	0.53	0.33	0.40	0.20	
21	0.15	0.85	0.20	0.97	0.80	0.73	0.60	0.60	0.52	0.29	0.37	0.19	
22	0.13	0.63	0.20	0.76	0.82	1.00	0.59	0.60	0.52	0.37	0.37	0.30	
23	0.13	0.50	0.19	1.00	0.72	0.69	0.59	0.60	0.51	0.27	0.38	0.32	
24	0.11	0.69	0.19	1.00	0.70	0.63	0.59	0.60	0.50	0.27	0.45	0.10	
25	0.11	0.53	0.19	0.78	0.60	1.27	0.63	0.60	0.49	0.29	0.46	0.08	
26	0.11	0.46	0.19	0.60	0.59	1.08	0.68	0.60	0.48	0.38	0.44	0.10	
27	0.30	0.97	0.18	0.51	0.63	0.95	0.60	0.59	0.42	0.49	0.37	0.10	
28	0.09	1.05	0.17	0.48	0.63	0.93	0.65	0.59	0.40	0.50	0.37	0.07	
29	0.09	0.60	0.17	0.47	1.00	0.90	1.10	0.59	0.40	0.45		0.10	
30	0.10	0.52	0.17	0.75	0.90	0.79	1.00	0.59	0.41	0.45		0.10	
31		0.97		0.59	0.93		0.75		0.41	0.50		0.10	
Mean	0.15	0.51	0.31	0.57	0.94	0.85	0.76	0.66	0.54	0.38	0.35	0.22	
Max	0.85	1.20	0.97	1.00	1.93	1.27	1.34	0.81	0.67	0.50	0.49	0.41	1.93
Min	0.05	0.16	0.17	0.17	0.59	0.62	0.59	0.59	0.40	0.27	0.13	0.07	0.05

Annual Max Momentary Gage Height 2.40 M (A.D), at 18.00 Hours, on Aug 18, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.42 M (A.D)
Left Bank Elevation 5.22 M (A.D)
Right Bank Elevation 5.22 M (A.D), Drainage Area 255 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.18	0.56	10.77	0.65	6.24	6.73	5.36	5.64	4.40	2.25	2.56	1.82	
2	0.27	0.87	4.27	0.61	4.94	7.37	5.78	4.66	4.40	2.35	2.77	2.00	
3	0.18	0.81	4.40	0.61	17.36	5.64	16.62	5.78	4.27	2.17	2.87	1.00	
4	0.15	1.27	2.66	0.74	30.76	5.92	8.24	5.08	4.27	2.17	2.17	1.33	
5	0.15	1.74	3.78	1.14	13.28	16.38	19.70	4.80	4.27	2.17	2.08	0.70	
6	0.15	1.48	2.66	1.66	9.30	9.30	10.56	7.71	4.15	2.17	1.57	0.65	
7	0.21	1.33	1.82	5.08	8.77	7.05	6.89	6.89	4.15	1.66	1.33	1.82	
8	0.21	1.07	0.87	2.08	8.95	4.80	6.40	6.40	5.50	1.33	1.57	2.17	
9	0.21	0.94	0.87	8.24	5.50	8.95	6.89	6.40	4.52	1.40	0.94	2.00	
10	0.39	0.74	1.48	3.53	4.52	9.30	11.40	6.08	4.40	1.40	0.56	2.25	
11	0.39	1.82	2.97	3.28	11.40	11.40	8.77	6.24	4.27	1.66	0.56	1.91	
12	0.30	1.40	2.00	5.08	18.35	6.56	7.21	5.92	4.27	1.91	0.43	2.35	
13	0.94	1.07	1.07	3.53	11.40	17.86	5.92	5.92	4.15	2.35	0.74	1.40	
14	0.94	8.95	1.40	2.97	17.12	8.77	5.50	5.92	4.15	2.17	1.07	0.30	
15	8.42	6.24	1.27	2.25	13.28	5.92	4.94	5.78	4.52	2.35	2.17	0.39	
16	1.74	3.07	1.00	6.24	11.40	5.22	4.94	5.78	4.27	2.35	3.18	0.27	
17	0.87	4.02	0.81	7.71	6.40	4.94	4.80	5.22	4.15	2.35	3.07	0.74	
18	0.65	2.17	0.81	7.21	43.15	9.30	4.94	4.94	4.15	2.25	2.17	0.70	
19	0.61	4.02	0.74	4.02	18.60	5.50	4.66	4.80	3.65	2.00	2.08	0.65	
20	0.61	16.13	0.74	7.88	10.14	8.59	4.52	4.66	3.65	1.66	2.25	0.74	
21	0.52	8.42	0.74	10.77	7.53	6.40	4.52	4.52	3.53	1.33	2.00	0.70	
22	0.43	4.94	0.74	6.89	7.88	11.40	4.40	4.52	3.53	2.00	2.00	1.40	
23	0.43	3.28	0.70	11.40	6.24	5.78	4.40	4.52	3.40	1.20	2.08	1.57	
24	0.34	5.78	0.70	11.40	5.92	4.94	4.40	4.52	3.28	1.20	2.77	0.30	
25	0.34	3.65	0.70	7.21	4.52	17.86	4.94	4.52	3.18	1.33	2.87	0.24	
26	0.34	2.87	0.70	4.52	4.40	13.28	5.64	4.52	3.07	2.08	2.66	0.30	
27	1.40	10.77	0.65	3.40	4.94	10.35	4.52	4.40	2.46	3.18	2.00	0.30	
28	0.27	12.57	0.61	3.07	4.94	9.93	5.22	4.40	2.25	3.28	2.00	0.21	
29	0.27	4.52	0.61	2.97	11.40	9.30	13.75	4.40	2.25	2.77		0.30	
30	0.30	3.53	0.61	6.73	9.30	7.37	11.40	4.40	2.35	2.77		0.30	
31		10.77		4.40	9.93		6.73		2.35	3.28		0.30	
Total	22.21	130.80	53.15	147.27	347.86	262.11	223.96	159.34	117.21	64.54	54.52	31.11	1614.08 CMSDAY
Mean	0.74	4.22	1.77	4.75	11.22	8.74	7.22	5.31	3.78	2.08	1.95	1.00	4.42 CMS
Max	8.42	16.13	10.77	11.40	43.15	17.86	19.70	7.71	5.50	3.28	3.18	2.35	43.15 CMS
Min	0.15	0.56	0.61	0.61	4.40	4.80	4.40	4.40	2.25	1.20	0.43	0.21	0.15 CMS
Runoff	1.919	11.301	4.592	12.724	30.055	22.646	19.350	13.767	10.127	5.576	4.711	2.688	139.457 MCM

Momentary Peak 71.40 CMS, at 2.40 M (A.D), at 18.00 Hours, on Aug 18, 2001
Runoff Yield 17.34 Liters/Second/Square KM, Momentary Peak Yield 280.000 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

Lam Nam Phung at Ban Tong Khop, Sakhon 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** Sakhon Nakhon

Drainage Area 848 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +158.500 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On right bank at the footpath of the bridge.

Elevation +167.456 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1996 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

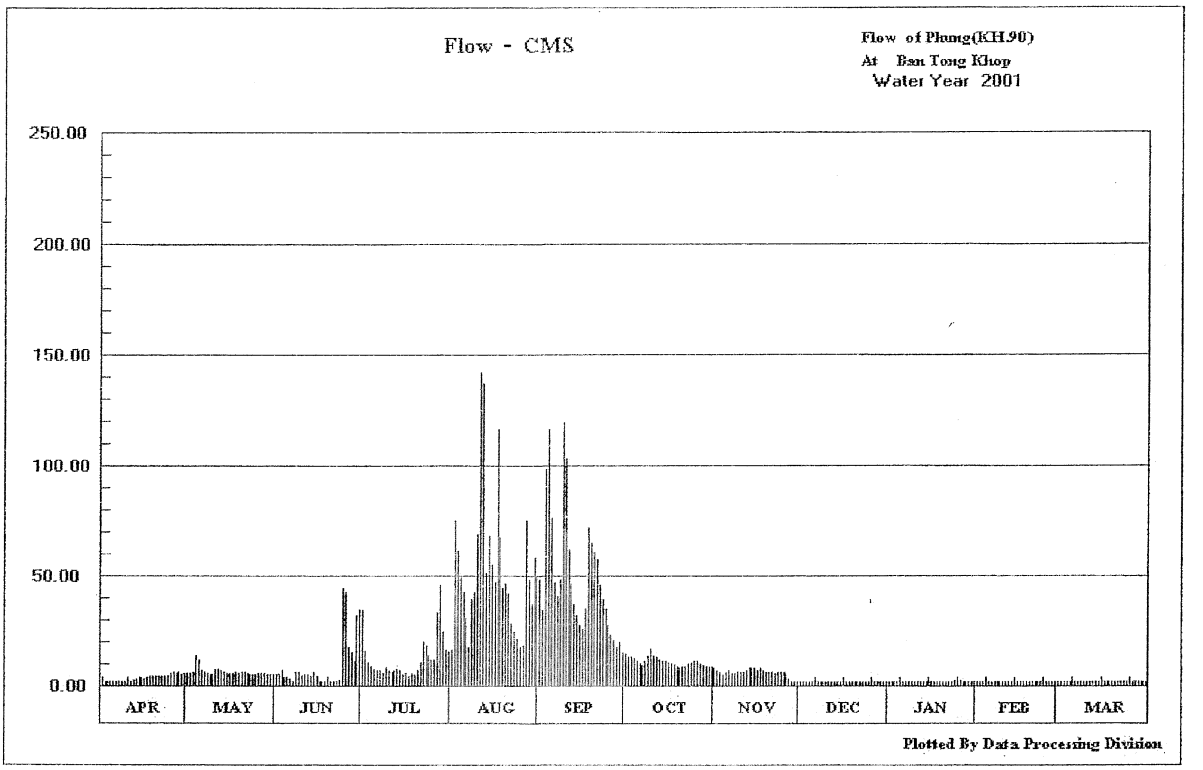
Overbank Flow Conditions Overbank flow starts at elevation +163.460 m.(M.S.L.) and is including overbank flow.

General Description Records good. Stage-discharge relation defined by 38 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	159.32	159.42	159.40	160.60	159.96	161.06	159.86	159.55	159.10	159.04	159.20	159.18	
2	159.24	159.42	159.40	159.92	161.89	160.60	159.80	159.49	159.10	159.04	159.21	159.18	
3	159.21	159.44	159.47	159.68	161.50	162.47	159.80	159.46	159.10	159.04	159.21	159.18	
4	159.22	159.83	159.33	159.57	161.13	162.93	159.76	159.40	159.08	159.05	159.20	159.21	
5	159.21	159.73	159.33	159.52	160.88	161.93	159.70	159.45	159.06	159.04	159.20	159.21	
6	159.22	159.49	159.30	159.48	160.48	161.03	159.64	159.47	159.06	159.05	159.20	159.18	
7	159.23	159.46	159.24	159.48	160.02	160.81	159.61	159.42	159.05	159.05	159.21	159.18	
8	159.22	159.43	159.45	159.42	160.77	161.07	159.69	159.42	159.06	159.05	159.20	159.18	
9	159.24	159.40	159.44	159.56	160.87	163.00	159.84	159.45	159.09	159.05	159.20	159.18	
10	159.22	159.40	159.37	159.50	161.72	162.60	159.99	159.45	159.10	159.05	159.20	159.18	
11	159.22	159.52	159.40	159.45	163.53	161.53	159.84	159.45	159.10	159.05	159.19	159.18	
12	159.28	159.52	159.38	159.49	163.43	161.00	159.81	159.47	159.08	159.05	159.20	159.18	
13	159.31	159.49	159.35	159.51	161.17	160.70	159.74	159.55	159.07	159.06	159.20	159.17	
14	159.32	159.45	159.45	159.49	161.70	160.53	159.70	159.56	159.06	159.06	159.20	159.16	
15	159.32	159.42	159.37	159.40	161.29	160.38	159.70	159.54	159.07	159.12	159.18	159.16	
16	159.31	159.43	159.25	159.43	161.03	160.32	159.68	159.50	159.06	159.21	159.12	159.16	
17	159.32	159.43	159.20	159.35	162.93	160.63	159.64	159.55	159.07	159.22	159.12	159.18	
18	159.35	159.46	159.20	159.42	161.68	161.80	159.61	159.50	159.06	159.18	159.17	159.20	
19	159.35	159.41	159.20	159.40	160.95	161.61	159.59	159.46	159.07	159.20	159.16	159.20	
20	159.37	159.44	159.20	159.50	161.00	161.49	159.54	159.45	159.07	159.19	159.17	159.21	
21	159.37	159.44	159.20	159.68	160.86	161.37	159.58	159.45	159.06	159.23	159.17	159.21	
22	159.37	159.42	159.18	160.12	160.40	160.98	159.57	159.43	159.06	159.23	159.18	159.23	
23	159.37	159.40	159.28	160.05	160.27	160.78	159.64	159.45	159.05	159.23	159.18	159.19	
24	159.37	159.40	160.93	159.82	160.17	160.62	159.66	159.45	159.05	159.26	159.18	159.20	
25	159.41	159.40	160.88	159.73	160.02	160.37	159.71	159.45	159.05	159.25	159.18	159.20	
26	159.46	159.42	160.02	159.75	160.05	160.24	159.69	159.42	159.05	159.27	159.18	159.21	
27	159.42	159.42	159.88	160.57	161.90	160.14	159.64	159.30	159.05	159.21	159.18	159.17	
28	159.44	159.41	159.70	160.98	161.07	160.03	159.60	159.10	159.05	159.21	159.18	159.17	
29	159.40	159.40	160.53	160.28	160.70	160.13	159.57	159.11	159.05	159.21		159.21	
30	159.42	159.40	160.60	159.95	161.40	159.90	159.57	159.10	159.05	159.20		159.21	
31		159.40		159.92	161.11		159.58		159.05	159.24		159.21	
Mean	159.32	159.45	159.56	159.74	161.16	161.07	159.69	159.43	159.07	159.14	159.18	159.19	
Max	159.46	159.83	160.93	160.98	163.53	163.00	159.99	159.56	159.10	159.27	159.21	159.23	163.53
Min	159.21	159.40	159.18	159.35	159.96	159.90	159.54	159.10	159.05	159.04	159.12	159.16	159.04

Annual Max Momentary Gage Height 164.00 M (MSL), at 18.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 158.50 M (MSL), River Bed 158.00 M (MSL)
Left Bank Elevation 164.45 M (MSL)
Right Bank Elevation 163.45 M (MSL), Drainage Area 848 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.4	6.4	6.0	35.0	17.2	48.8	15.2	9.0	1.3	0.8	2.0	1.8	
2	2.8	6.4	6.0	16.4	75.7	35.0	14.0	7.8	1.3	0.8	2.2	1.8	
3	2.2	6.8	7.4	11.6	62.0	98.8	14.0	7.2	1.3	0.8	2.2	1.8	
4	2.4	14.6	4.6	9.4	50.9	117.2	13.2	6.0	1.1	0.9	2.0	2.2	
5	2.2	12.6	4.6	8.4	43.4	77.2	12.0	7.0	0.9	0.8	2.0	2.2	
6	2.4	7.8	4.0	7.6	31.4	47.9	10.8	7.4	0.9	0.9	2.0	1.8	
7	2.6	7.2	2.8	7.6	18.4	41.3	10.2	6.4	0.9	0.9	2.2	1.8	
8	2.4	6.6	7.0	6.4	40.1	49.1	11.8	6.4	0.9	0.9	2.0	1.8	
9	2.8	6.0	6.8	9.2	43.1	120.0	14.8	7.0	1.2	0.9	2.0	1.8	
10	2.4	6.0	5.4	8.0	69.7	104.0	17.8	7.0	1.3	0.9	2.0	1.8	
11	2.4	8.4	6.0	7.0	142.5	63.0	14.8	7.0	1.3	0.9	1.9	1.8	
12	3.6	8.4	5.6	7.8	137.5	47.0	14.2	7.4	1.1	0.9	2.0	1.8	
13	4.2	7.8	5.0	8.2	52.1	38.0	12.8	9.0	1.0	0.9	2.0	1.8	
14	4.4	7.0	7.0	7.8	69.0	32.9	12.0	9.2	0.9	0.9	2.0	1.7	
15	4.4	6.4	5.4	6.0	55.7	28.4	12.0	8.8	1.0	1.4	1.8	1.7	
16	4.2	6.6	3.0	6.6	47.9	26.6	11.6	8.0	0.9	2.2	1.4	1.7	
17	4.4	6.6	2.0	5.0	117.2	35.9	10.8	9.0	1.0	2.4	1.4	1.8	
18	5.0	7.2	2.0	6.4	68.3	72.5	10.2	8.0	0.9	1.8	1.8	2.0	
19	5.0	6.2	2.0	6.0	45.5	65.9	9.8	7.2	1.0	2.0	1.7	2.0	
20	5.4	6.8	2.0	8.0	47.0	61.7	8.8	7.0	1.0	1.9	1.8	2.2	
21	5.4	6.8	2.0	11.6	42.8	58.1	9.6	7.0	0.9	2.6	1.8	2.2	
22	5.4	6.4	1.8	20.6	29.0	46.4	9.4	6.6	0.9	2.6	1.8	2.6	
23	5.4	6.0	3.6	19.0	25.1	40.4	10.8	7.0	0.9	2.6	1.8	1.9	
24	5.4	6.0	44.9	14.4	22.1	35.6	11.2	7.0	0.9	3.2	1.8	2.0	
25	6.2	6.0	43.4	12.6	18.4	28.1	12.2	7.0	0.9	3.0	1.8	2.0	
26	7.2	6.4	18.4	13.0	19.0	24.2	11.8	6.4	0.9	3.4	1.8	2.2	
27	6.4	6.4	15.6	34.1	76.0	21.2	10.8	4.0	0.9	2.2	1.8	1.8	
28	6.8	6.2	12.0	46.4	49.1	18.6	10.0	1.3	0.9	2.2	1.8	1.8	
29	6.0	6.0	32.9	25.4	38.0	20.9	9.4	1.3	0.9	2.2		2.2	
30	6.4	6.0	35.0	17.0	59.0	16.0	9.4	1.3	0.9	2.0		2.2	
31		6.0		16.4	50.3		9.6		0.9	2.8		2.2	
Total	130.2	220.0	304.2	418.9	1663.4	1520.7	365.0	200.7	31.1	52.7	52.8	60.4	5020.1 CMSDAY
Mean	4.3	7.1	10.1	13.5	53.7	50.7	11.8	6.7	1.0	1.7	1.9	1.9	13.8 CMS
Max	7.2	14.6	44.9	46.4	142.5	120.0	17.8	9.2	1.3	3.4	2.2	2.6	142.5 CMS
Min	2.2	6.0	1.8	5.0	17.2	16.0	8.8	1.3	0.9	0.8	1.4	1.7	0.8 CMS
Runoff	11.25	19.01	26.28	36.19	143.72	131.39	31.54	17.34	2.69	4.55	4.56	5.22	433.74 MCM

Momentary Peak 166.00 CMS, at 164.00 M (MSL), at 18.00 Hours, on Aug 11, 2001

Runoff Yield 16.22 Liters/Second/Square KM, Momentary Peak Yield 195.755 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

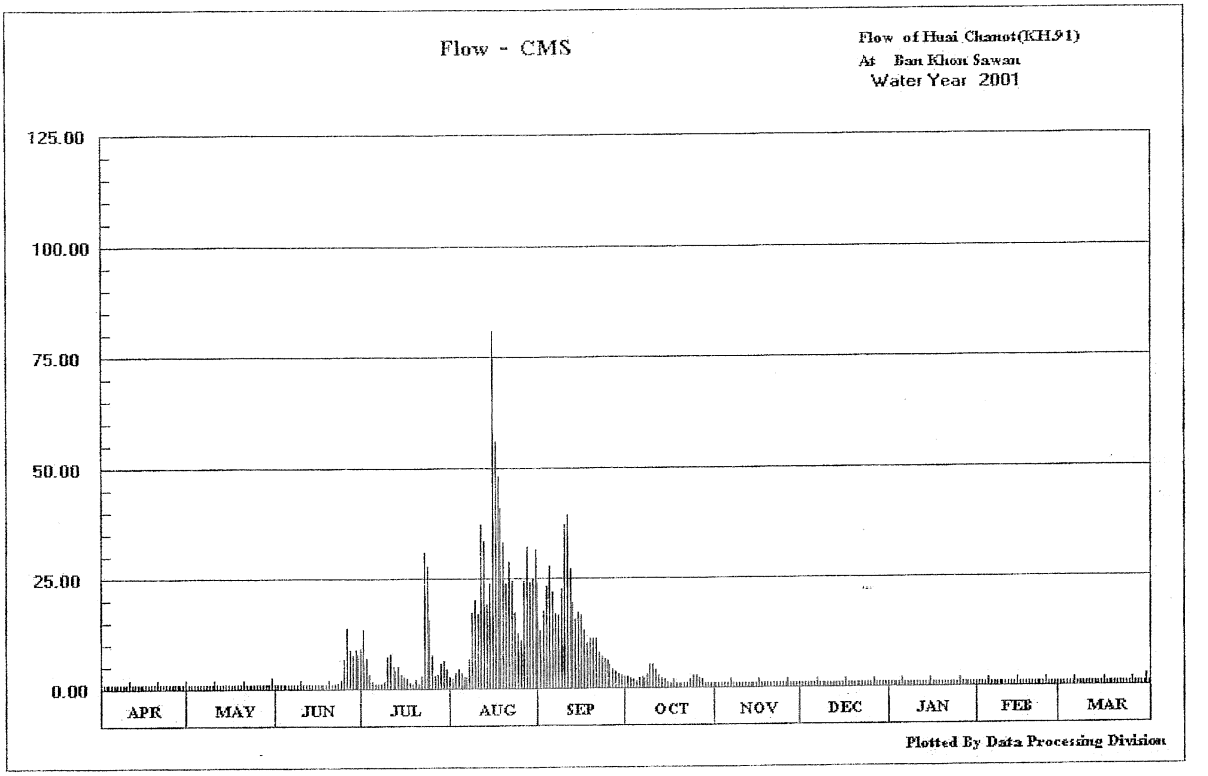
Lat 16 - 47 - 48 N. **Long** 104 - 39 - 45 E.

Location		on left bank at the bridge on highway.
	Ban Khon Sawan	**Amphoe** That Phanom **Changwat** Nakhon Phanom
Drainage Area		167 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+149.000 m. (M.S.L.)
Bench Mark		B.M.- Highways Dept.
	Location BM	On left bank at the footpath of the bridge.
	Elevation	+159.228 m. (M.S.L.)
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.
Period of Available Gage Records		1996 to date.
Rating Operation		
	Period of Rating	1996 to date.
	Rated by Float	-
	Rated by Current Meter	1996 to date.
Stability of Channel Regimes		Fairly stable.
Overbank Flow Conditions		Overbank flow starts at elevation +152.410 m.(M.S.L.) and is including overbank flow.
General Description		Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	149.96	149.78	150.29	152.34	150.73	152.32	150.76	150.36	150.06	150.00	149.94	150.04	
2	149.96	149.79	150.17	151.52	150.94	152.78	150.69	150.35	150.05	150.00	149.90	149.96	
3	149.93	149.79	150.14	150.91	151.16	153.27	150.67	150.35	150.06	149.98	149.93	149.94	
4	149.92	149.80	150.15	150.62	150.94	153.60	150.60	150.35	150.07	149.98	149.92	149.93	
5	149.91	149.96	150.08	150.43	150.78	153.18	150.74	150.30	150.16	149.98	149.94	149.91	
6	149.93	149.93	150.16	150.33	150.78	152.73	150.80	150.32	150.16	150.02	149.93	149.88	
7	149.92	149.94	150.11	150.27	151.49	152.70	150.70	150.37	150.12	150.03	149.94	149.87	
8	149.92	149.86	150.09	150.59	152.76	153.22	150.92	150.39	150.06	150.09	149.95	149.92	
9	149.87	149.81	150.25	151.57	153.04	154.08	151.30	150.36	150.05	150.09	149.98	149.93	
10	149.87	149.80	150.20	151.67	152.72	154.17	151.30	150.26	150.03	150.06	149.94	149.93	
11	149.89	149.84	150.09	151.28	154.09	153.55	151.08	150.20	150.03	150.02	149.93	149.90	
12	149.89	149.82	150.07	151.07	153.93	152.98	150.85	150.18	150.05	150.01	149.95	149.96	
13	149.90	149.81	150.22	151.25	152.95	152.58	150.74	150.21	150.17	149.97	150.00	149.98	
14	149.86	149.77	150.37	150.92	153.31	152.76	150.64	150.23	150.12	150.00	150.01	150.03	
15	149.87	149.79	150.33	150.77	155.14	152.69	150.54	150.21	150.07	149.99	150.06	149.99	
16	149.82	149.79	150.21	150.73	154.66	152.29	150.50	150.19	150.03	149.96	149.98	149.86	
17	149.80	149.81	150.18	150.51	154.45	151.99	150.45	150.13	150.01	150.01	149.96	149.89	
18	149.81	149.89	150.36	150.38	154.22	152.10	150.45	150.16	150.01	150.02	149.94	149.84	
19	149.80	150.03	150.31	150.32	153.91	152.08	150.43	150.18	150.01	150.03	149.94	149.83	
20	149.79	150.02	150.17	150.25	153.31	152.10	150.40	150.19	150.01	149.99	149.90	149.86	
21	149.78	149.92	150.12	150.85	153.66	151.71	150.37	150.15	149.98	149.97	149.90	149.83	
22	149.77	149.88	150.52	153.80	153.35	151.56	150.37	150.09	149.98	150.04	149.88	149.86	
23	149.77	149.87	150.68	153.60	152.74	151.50	150.63	150.08	149.97	150.05	149.96	149.89	
24	149.79	149.83	151.49	152.58	152.25	151.46	150.87	150.09	149.98	150.04	149.96	149.92	
25	149.78	149.85	152.36	151.63	152.05	151.31	150.85	150.09	150.03	150.02	150.00	150.00	
26	149.84	149.85	151.78	150.85	153.35	151.13	150.73	150.06	150.13	149.98	150.02	149.93	
27	149.83	149.82	151.61	150.90	153.87	151.01	150.58	150.06	150.17	149.96	150.03	149.94	
28	149.78	149.86	151.79	151.37	153.33	150.93	150.49	150.08	150.16	149.97	150.04	149.87	
29	149.75	150.23	151.64	151.45	153.40	150.84	150.45	150.05	150.04	149.99		149.90	
30	149.77	150.76	151.83	151.15	153.84	150.78	150.41	150.08	150.01	149.98		150.02	
31		150.48		150.80	153.33		150.38		150.02	149.95		150.79	
Mean	149.85	149.92	150.59	151.18	152.92	152.31	150.67	150.20	150.06	150.01	149.96	149.95	
Max	149.96	150.76	152.36	153.80	155.14	154.17	151.30	150.39	150.17	150.09	150.06	150.79	155.14
Min	149.75	149.77	150.07	150.25	150.73	150.78	150.37	150.05	149.97	149.95	149.88	149.83	149.75

Annual Max Momentary Gage Height 155.15 M (MSL), at 12.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 149.00 M (MSL), River Bed 149.33 M (MSL)
Left Bank Elevation 153.86 M (MSL)
Right Bank Elevation 152.40 M (MSL), Drainage Area 167 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.42	0.18	1.08	13.86	2.65	13.68	2.80	1.22	0.62	0.50	0.38	0.58	
2	0.42	0.19	0.84	7.24	3.70	17.82	2.45	1.20	0.60	0.50	0.30	0.42	
3	0.36	0.19	0.78	3.55	4.80	23.58	2.35	1.20	0.62	0.46	0.36	0.38	
4	0.34	0.20	0.80	2.10	3.70	28.30	2.00	1.20	0.64	0.46	0.34	0.36	
5	0.32	0.42	0.66	1.36	2.90	22.34	2.70	1.10	0.82	0.46	0.38	0.32	
6	0.36	0.36	0.82	1.16	2.90	17.37	3.00	1.14	0.82	0.54	0.36	0.28	
7	0.34	0.38	0.72	1.04	7.03	17.10	2.50	1.24	0.74	0.56	0.38	0.27	
8	0.34	0.26	0.68	1.95	17.64	22.88	3.60	1.28	0.62	0.68	0.40	0.34	
9	0.27	0.21	1.00	7.59	20.52	37.46	5.70	1.22	0.60	0.68	0.46	0.36	
10	0.27	0.20	0.90	8.29	17.28	39.89	5.70	1.02	0.56	0.62	0.38	0.36	
11	0.29	0.24	0.68	5.56	37.73	27.55	4.40	0.90	0.56	0.54	0.36	0.30	
12	0.29	0.22	0.64	4.35	33.90	19.80	3.25	0.86	0.60	0.52	0.40	0.42	
13	0.30	0.21	0.94	5.35	19.50	16.02	2.70	0.92	0.84	0.44	0.50	0.46	
14	0.26	0.17	1.24	3.60	24.14	17.64	2.20	0.96	0.74	0.50	0.52	0.56	
15	0.27	0.19	1.16	2.85	81.30	17.01	1.70	0.92	0.64	0.48	0.62	0.48	
16	0.22	0.19	0.92	2.65	56.50	13.41	1.50	0.88	0.56	0.42	0.46	0.26	
17	0.20	0.21	0.86	1.55	48.60	10.71	1.40	0.76	0.52	0.52	0.42	0.29	
18	0.21	0.29	1.22	1.26	41.30	11.70	1.40	0.82	0.52	0.54	0.38	0.24	
19	0.20	0.56	1.12	1.14	33.50	11.52	1.36	0.86	0.52	0.56	0.38	0.23	
20	0.19	0.54	0.84	1.00	24.14	11.70	1.30	0.88	0.52	0.48	0.30	0.26	
21	0.18	0.34	0.74	3.25	29.20	8.57	1.24	0.80	0.46	0.44	0.30	0.23	
22	0.17	0.28	1.60	31.30	24.70	7.52	1.24	0.68	0.46	0.58	0.28	0.26	
23	0.17	0.27	2.40	28.30	17.46	7.10	2.15	0.66	0.44	0.60	0.42	0.29	
24	0.19	0.23	7.03	16.02	13.05	6.82	3.35	0.68	0.46	0.58	0.42	0.34	
25	0.18	0.25	14.04	8.01	11.25	5.77	3.25	0.68	0.56	0.54	0.50	0.50	
26	0.24	0.25	9.06	3.25	24.70	4.65	2.65	0.62	0.76	0.46	0.54	0.36	
27	0.23	0.22	7.87	3.50	32.70	4.05	1.90	0.62	0.84	0.42	0.56	0.38	
28	0.18	0.26	9.13	6.19	24.42	3.65	1.48	0.66	0.82	0.44	0.58	0.27	
29	0.15	0.96	8.08	6.75	25.40	3.20	1.40	0.60	0.58	0.48		0.30	
30	0.17	2.80	9.41	4.75	32.10	2.90	1.32	0.66	0.52	0.46		0.54	
31		1.46		3.00	24.42		1.26		0.54	0.40		2.95	
Total	7.73	12.73	87.26	191.77	743.13	451.71	75.25	27.24	19.10	15.86	11.68	13.59	1657.05 CMSDAY
Mean	0.26	0.41	2.91	6.19	23.97	15.06	2.43	0.91	0.62	0.51	0.42	0.44	4.54 CMS
Max	0.42	2.80	14.04	31.30	81.30	39.89	5.70	1.28	0.84	0.68	0.62	2.95	81.30 CMS
Min	0.15	0.17	0.64	1.00	2.65	2.90	1.24	0.60	0.44	0.40	0.28	0.23	0.15 CMS
Runoff	0.668	1.100	7.539	16.569	64.206	39.028	6.502	2.354	1.650	1.370	1.009	1.174	143.159 MCM

Momentary Peak 82.00 CMS, at 155.15 M (MSL), at 12.00 Hours, on Aug 15, 2001

Runoff Yield 27.18 Liters/Second/Square KM, Momentary Peak Yield 491.018 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,118 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +147.840 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank at the footpath of the bridge.

Elevation +158.890 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1996 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable by some silting.

Overbank Flow Conditions Overbank flow starts at elevation +155.060 m.(M.S.L.) and is including overbank flow.

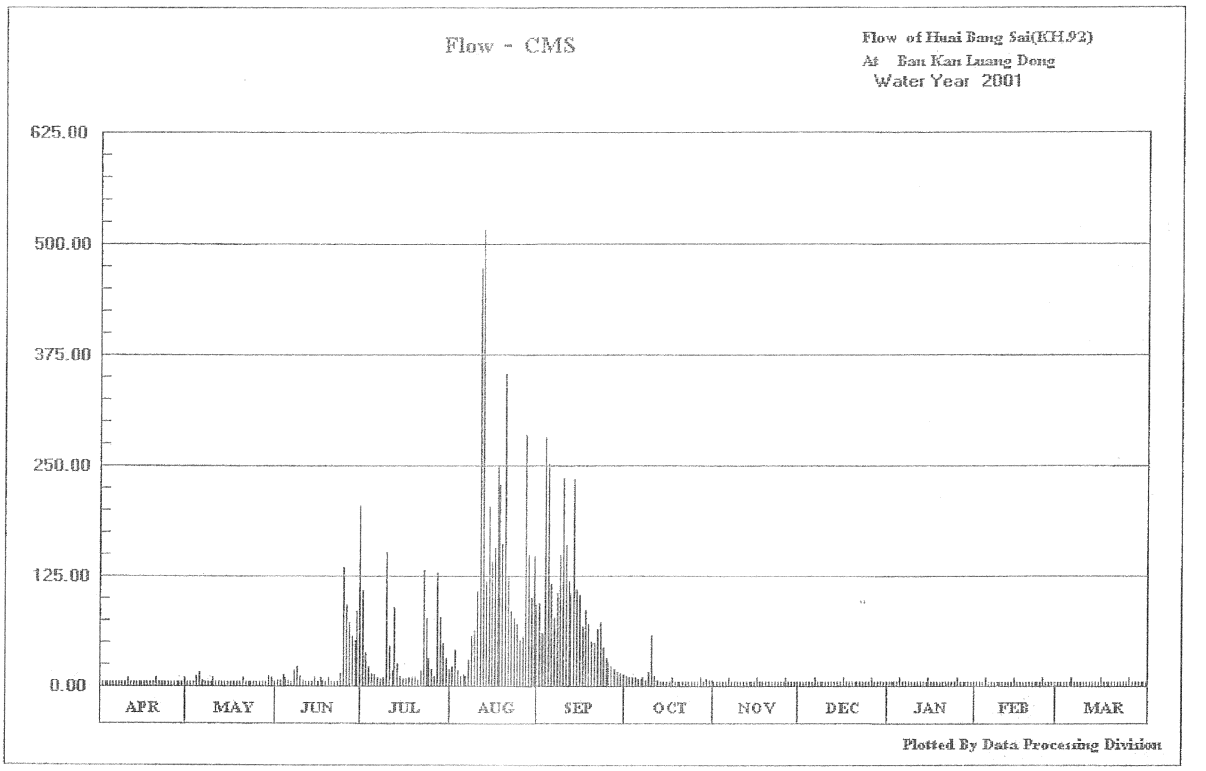
General Description Records good. The local weir situated downstream from the gage site.

Stage-discharge relation defined by 42 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	149.51	149.51	149.82	151.63	150.17	151.41	149.91	149.45	149.29	149.07	149.40	149.05	
2	149.51	149.52	149.81	150.47	150.53	150.85	149.90	149.44	149.25	149.07	149.23	149.04	
3	149.50	149.51	149.95	150.19	150.09	153.67	149.88	149.42	149.23	149.08	149.19	149.04	
4	149.50	149.94	149.88	150.00	149.93	153.37	149.87	149.42	149.25	149.08	149.09	149.06	
5	149.50	150.04	149.82	149.95	149.96	151.74	149.85	149.42	149.25	149.08	149.06	149.05	
6	149.50	149.80	149.77	149.88	149.91	151.13	149.84	149.41	149.24	149.08	149.05	149.05	
7	149.50	149.76	150.09	149.85	150.32	151.57	149.79	149.40	149.24	149.08	149.05	149.05	
8	149.49	149.70	150.19	149.88	150.80	152.20	149.81	149.39	149.24	149.08	149.08	149.04	
9	149.48	149.66	149.94	152.24	150.89	153.20	150.03	149.38	149.24	149.14	149.06	149.04	
10	149.47	149.62	149.79	150.60	151.64	152.33	150.81	149.38	149.23	149.14	149.04	149.04	
11	149.47	149.65	149.62	150.08	155.43	151.80	149.94	149.37	149.23	149.14	149.04	149.04	
12	149.46	149.76	149.65	151.33	155.81	151.57	149.79	149.36	149.23	149.14	149.04	149.04	
13	149.46	149.68	149.67	150.25	151.78	153.18	149.66	149.36	149.23	149.14	149.04	149.04	
14	149.45	149.65	149.90	149.92	152.83	151.65	149.60	149.39	149.22	149.14	149.05	149.04	
15	149.45	149.64	149.78	149.85	152.08	151.55	149.60	149.39	149.22	149.15	149.04	149.04	
16	149.46	149.62	149.87	149.86	152.29	150.96	149.60	149.38	149.21	149.15	149.04	149.04	
17	149.45	149.62	149.79	149.90	153.34	151.29	149.61	149.36	149.21	149.15	149.04	149.03	
18	149.46	149.61	149.42	149.89	153.12	151.03	149.60	149.35	149.21	149.13	149.07	149.03	
19	149.47	149.67	149.28	149.83	152.35	150.69	149.59	149.34	149.20	149.12	149.08	149.02	
20	149.47	149.65	149.24	149.81	154.38	150.67	149.61	149.33	149.20	149.12	149.08	149.02	
21	149.47	149.67	149.21	150.09	151.87	150.91	149.62	149.32	149.20	149.12	149.08	149.03	
22	149.47	149.66	149.27	151.96	151.27	151.04	149.62	149.31	149.19	149.11	149.07	149.03	
23	149.47	149.64	149.99	151.12	151.14	150.59	149.61	149.31	149.19	149.10	149.07	149.03	
24	149.46	149.62	152.00	150.36	151.03	150.34	149.61	149.30	149.18	149.10	149.07	149.07	
25	149.60	149.70	151.40	150.11	150.71	150.27	149.62	149.30	149.08	149.10	149.06	149.07	
26	149.50	149.70	151.05	149.94	150.80	150.19	149.63	149.30	149.08	149.06	149.04	149.06	
27	149.49	149.70	150.80	151.92	153.71	150.12	149.65	149.30	149.08	149.12	149.04	149.05	
28	149.52	149.68	150.72	151.15	152.20	150.05	149.72	149.29	149.08	149.12	149.04	149.04	
29	149.53	149.94	151.26	150.67	151.51	150.01	149.83	149.29	149.08	149.13		149.03	
30	149.51	149.85	152.85	150.34	152.18	149.96	149.82	149.29	149.11	149.11		149.05	
31		149.77		150.11	151.39		149.81		149.10	149.26		149.14	
Mean	149.49	149.69	150.13	150.43	151.79	151.31	149.77	149.36	149.19	149.12	149.08	149.05	
Max	149.60	150.04	152.85	152.24	155.81	153.67	150.81	149.45	149.29	149.26	149.40	149.14	155.81
Min	149.45	149.51	149.21	149.81	149.91	149.96	149.59	149.29	149.08	149.06	149.04	149.02	149.02

Annual Max Momentary Gage Height 156.19 M (MSL), at 24.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 147.84 M (MSL), River Bed 149.20 M (MSL)
Left Bank Elevation 155.05 M (MSL)
Right Bank Elevation 157.97 M (MSL), Drainage Area 1118 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.6	1.6	8.8	110.0	23.7	95.7	12.4	1.2	0.5	0.0	1.0	0.0	
2	1.6	1.7	8.4	39.8	43.1	62.0	12.0	1.2	0.3	0.0	0.2	0.0	
3	1.5	1.6	14.0	24.6	20.0	283.0	11.2	1.1	0.2	0.0	0.0	0.0	
4	1.5	13.6	11.2	16.0	13.2	254.1	10.8	1.1	0.3	0.0	0.0	0.0	
5	1.5	17.8	8.8	14.0	14.4	117.3	10.0	1.1	0.3	0.0	0.0	0.0	
6	1.5	8.0	7.1	11.2	12.4	78.8	9.6	1.1	0.2	0.0	0.0	0.0	
7	1.5	6.8	20.0	10.0	31.6	106.1	7.7	1.0	0.2	0.0	0.0	0.0	
8	1.5	5.0	24.6	11.2	59.0	151.0	8.4	0.9	0.2	0.0	0.0	0.0	
9	1.4	4.0	13.6	154.2	64.4	238.0	17.3	0.9	0.2	0.0	0.0	0.0	
10	1.4	3.0	7.7	47.0	110.6	161.4	59.6	0.9	0.2	0.0	0.0	0.0	
11	1.4	3.7	3.0	19.6	474.4	121.5	13.6	0.8	0.2	0.0	0.0	0.0	
12	1.3	6.8	3.7	90.8	518.2	106.1	7.7	0.8	0.2	0.0	0.0	0.0	
13	1.3	4.5	4.2	27.8	120.1	236.2	4.0	0.8	0.2	0.0	0.0	0.0	
14	1.2	3.7	12.0	12.8	204.7	111.2	2.5	0.9	0.1	0.0	0.0	0.0	
15	1.2	3.5	7.4	10.0	142.0	104.8	2.5	0.9	0.1	0.0	0.0	0.0	
16	1.3	3.0	10.8	10.4	158.2	68.6	2.5	0.9	0.1	0.0	0.0	0.0	
17	1.2	3.0	7.7	12.0	251.3	88.4	2.7	0.8	0.1	0.0	0.0	0.0	
18	1.3	2.7	1.1	11.6	230.8	72.8	2.5	0.8	0.1	0.0	0.0	0.0	
19	1.4	4.2	0.4	9.2	163.0	52.4	2.4	0.7	0.0	0.0	0.0	0.0	
20	1.4	3.7	0.2	8.4	355.8	51.2	2.7	0.6	0.0	0.0	0.0	0.0	
21	1.4	4.2	0.1	20.0	126.4	65.6	3.0	0.6	0.0	0.0	0.0	0.0	
22	1.4	4.0	0.4	133.0	87.2	73.4	3.0	0.5	0.0	0.0	0.0	0.0	
23	1.4	3.5	15.6	78.2	79.4	46.4	2.7	0.5	0.0	0.0	0.0	0.0	
24	1.3	3.0	136.0	33.8	72.8	32.7	2.7	0.5	0.0	0.0	0.0	0.0	
25	2.5	5.0	95.0	21.0	53.6	28.9	3.0	0.5	0.0	0.0	0.0	0.0	
26	1.5	5.0	74.0	13.6	59.0	24.6	3.3	0.5	0.0	0.0	0.0	0.0	
27	1.5	5.0	59.0	130.0	287.0	21.4	3.7	0.5	0.0	0.0	0.0	0.0	
28	1.7	4.5	54.2	80.0	151.0	18.3	5.6	0.5	0.0	0.0	0.0	0.0	
29	1.8	13.6	86.6	51.2	102.1	16.4	9.2	0.5	0.0	0.0		0.0	
30	1.6	10.0	206.5	32.7	149.5	14.4	8.8	0.5	0.0	0.0		0.0	
31		7.1		21.0	94.4		8.4		0.0	0.3		0.0	
Total	44.1	166.8	902.1	1265.1	4273.3	2902.7	255.5	23.6	3.7	0.3	1.2	0.0	9838.4 CMSDAY
Mean	1.5	5.4	30.1	40.8	137.8	96.8	8.2	0.8	0.1	0.0	0.0	0.0	27.0 CMS
Max	2.5	17.8	206.5	154.2	518.2	283.0	59.6	1.2	0.5	0.3	1.0	0.0	518.2 CMS
Min	1.2	1.6	0.1	8.4	12.4	14.4	2.4	0.5	0.0	0.0	0.0	0.0	0.0 CMS
Runoff	3.81	14.41	77.94	109.30	369.21	250.79	22.08	2.04	0.32	0.03	0.10	0.00	850.04 MCM

Momentary Peak 564.75 CMS, at 156.19 M (MSL), at 24.00 Hours, on Aug 11, 2001
Runoff Yield 24.11 Liters/Second/Square KM, Momentary Peak Yield 505.143 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

Nam Songkhram 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

Drainage Area 707 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +153.120 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank downstream side at the footpath of the bridge.

Elevation +161.354 m. (M.S.L.)

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 Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Fairly stable by some silting.

Overbank Flow Conditions Overbank flow starts at elevation +157.430 m.(M.S.L.) and is including overbank flow.

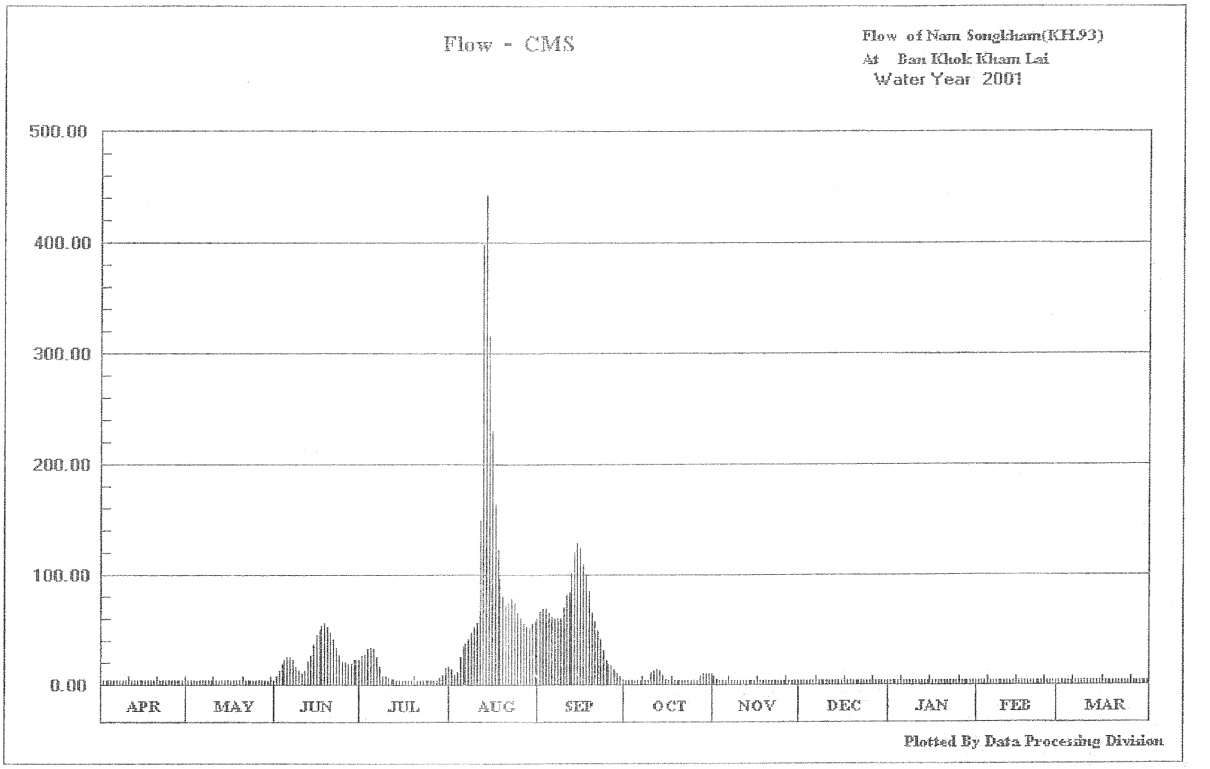
General Description Records good. The weir situated downstream from the gage site.

Stage-discharge relation defined by 18 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	154.54	154.51	155.64	156.80	156.06	158.09	155.02	155.57	154.56	154.62	154.56	154.58	
2	154.54	154.65	155.94	156.91	155.68	158.15	154.86	155.36	154.56	154.62	154.53	154.58	
3	154.54	154.71	156.36	157.11	155.89	158.15	154.84	155.18	154.54	154.63	154.52	154.57	
4	154.53	154.77	156.61	157.14	156.78	158.07	154.80	155.05	154.60	154.63	154.53	154.56	
5	154.52	155.04	156.76	157.08	157.19	158.02	154.76	154.95	154.60	154.63	154.54	154.55	
6	154.52	155.13	156.77	156.73	157.31	158.00	154.76	154.89	154.60	154.62	154.54	154.54	
7	154.52	155.15	156.58	156.21	157.43	158.00	154.76	154.82	154.60	154.62	154.54	154.54	
8	154.50	155.16	156.23	155.65	157.66	157.99	154.74	154.78	154.61	154.62	154.54	154.54	
9	154.50	154.91	155.92	155.51	157.79	158.17	155.25	154.77	154.60	154.61	154.53	154.46	
10	154.50	154.79	155.75	155.45	157.91	158.31	155.89	154.75	154.60	154.61	154.53	154.43	
11	154.50	154.71	155.96	155.42	158.97	158.35	155.96	154.74	154.61	154.61	154.53	154.43	
12	154.50	154.70	156.53	155.32	160.28	158.53	156.04	154.74	154.60	154.60	154.53	154.43	
13	154.48	154.68	156.85	155.18	160.45	158.72	155.97	154.73	154.64	154.60	154.52	154.43	
14	154.48	154.67	157.24	155.02	159.94	158.80	155.68	154.68	154.63	154.60	154.53	154.43	
15	154.48	154.65	157.59	154.95	159.50	158.75	155.42	154.68	154.62	154.60	154.54	154.43	
16	154.47	154.63	157.74	155.00	159.08	158.61	155.22	154.68	154.74	154.59	154.54	154.43	
17	154.46	154.62	157.84	155.08	158.74	158.50	155.09	154.68	154.83	154.59	154.54	154.42	
18	154.46	154.62	157.91	155.11	158.48	158.36	154.90	154.65	154.76	154.59	154.53	154.42	
19	154.46	154.67	157.80	155.10	158.30	158.08	154.85	154.64	154.71	154.59	154.52	154.45	
20	154.45	154.80	157.66	155.07	158.18	157.92	154.81	154.64	154.68	154.59	154.52	154.47	
21	154.45	154.85	157.44	154.98	158.21	157.70	154.80	154.64	154.66	154.58	154.51	154.55	
22	154.43	154.76	157.12	155.00	158.26	157.43	154.80	154.62	154.65	154.58	154.50	154.57	
23	154.42	154.73	156.80	155.12	158.21	157.06	154.86	154.62	154.65	154.58	154.50	154.57	
24	154.42	154.72	156.50	155.20	158.07	156.59	154.88	154.60	154.65	154.58	154.49	154.57	
25	154.45	154.87	156.42	155.13	158.00	156.33	155.02	154.58	154.67	154.58	154.49	154.57	
26	154.46	154.94	156.34	155.01	157.87	156.28	155.11	154.55	154.67	154.58	154.48	154.57	
27	154.47	154.85	156.35	155.25	157.80	156.04	155.28	154.57	154.64	154.57	154.48	154.57	
28	154.47	154.82	156.60	155.43	157.78	155.78	155.74	154.60	154.64	154.57	154.48	154.57	
29	154.50	154.80	156.59	155.67	157.87	155.57	155.77	154.58	154.62	154.57		154.58	
30	154.50	154.85	156.60	156.09	157.93	155.35	155.79	154.57	154.63	154.57		154.57	
31		155.18		156.20	158.00		155.79		154.63	154.57		154.57	
Mean	154.48	154.80	156.75	155.64	158.05	157.66	155.21	154.76	154.64	154.60	154.52	154.51	
Max	154.54	155.18	157.91	157.14	160.45	158.80	156.04	155.57	154.83	154.63	154.56	154.58	160.45
Min	154.42	154.51	155.64	154.95	155.68	155.35	154.74	154.55	154.54	154.57	154.48	154.42	154.42

Annual Max Momentary Gage Height 160.58 M (MSL), at 18.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 153.12 M (MSL), River Bed 152.62 M (MSL)
Left Bank Elevation 158.00 M (MSL)
Right Bank Elevation 157.42 M (MSL), Drainage Area 707 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.02	0.00	9.60	27.50	15.90	67.40	3.20	8.70	0.02	0.18	0.02	0.03	
2	0.02	0.39	14.10	29.75	10.20	71.00	1.86	6.60	0.02	0.18	0.01	0.03	
3	0.02	0.81	20.40	34.75	13.35	71.00	1.72	4.80	0.02	0.25	0.01	0.03	
4	0.01	1.23	24.15	35.50	27.10	66.20	1.44	3.50	0.04	0.25	0.01	0.02	
5	0.01	3.40	26.70	34.00	36.75	63.20	1.16	2.57	0.04	0.25	0.02	0.02	
6	0.01	4.30	26.90	26.10	39.75	62.00	1.16	2.07	0.04	0.18	0.02	0.02	
7	0.01	4.50	23.70	18.15	42.75	62.00	1.16	1.58	0.04	0.18	0.02	0.02	
8	0.00	4.60	18.45	9.75	49.30	61.60	1.02	1.30	0.11	0.18	0.02	0.02	
9	0.00	2.23	13.80	8.10	53.65	72.20	5.50	1.23	0.04	0.11	0.01	0.00	
10	0.00	1.37	11.25	7.50	58.40	82.80	13.35	1.09	0.04	0.11	0.01	0.00	
11	0.00	0.81	14.40	7.20	150.40	86.00	14.40	1.02	0.11	0.11	0.01	0.00	
12	0.00	0.74	22.95	6.20	398.80	103.00	15.60	1.02	0.04	0.04	0.01	0.00	
13	0.00	0.60	28.50	4.80	444.50	122.00	14.55	0.95	0.32	0.04	0.01	0.00	
14	0.00	0.53	38.00	3.20	316.80	130.00	10.20	0.60	0.25	0.04	0.01	0.00	
15	0.00	0.39	47.20	2.57	232.00	125.00	7.20	0.60	0.18	0.04	0.02	0.00	
16	0.00	0.25	51.90	3.00	165.20	111.00	5.20	0.60	1.02	0.04	0.02	0.00	
17	0.00	0.18	55.60	3.80	124.00	100.00	3.90	0.60	1.65	0.04	0.02	0.00	
18	0.00	0.18	58.40	4.10	98.00	86.80	2.14	0.39	1.16	0.04	0.01	0.00	
19	0.00	0.53	54.00	4.00	82.00	66.80	1.79	0.32	0.81	0.04	0.01	0.00	
20	0.00	1.44	49.30	3.70	72.80	58.80	1.51	0.32	0.60	0.04	0.01	0.00	
21	0.00	1.79	43.00	2.83	74.80	50.50	1.44	0.32	0.46	0.03	0.00	0.02	
22	0.00	1.16	35.00	3.00	78.80	42.75	1.44	0.18	0.39	0.03	0.00	0.03	
23	0.00	0.95	27.50	4.20	74.80	33.50	1.86	0.18	0.39	0.03	0.00	0.03	
24	0.00	0.88	22.50	5.00	66.20	23.85	2.00	0.04	0.39	0.03	0.00	0.03	
25	0.00	1.93	21.30	4.30	62.00	19.95	3.20	0.03	0.53	0.03	0.00	0.03	
26	0.00	2.48	20.10	3.10	56.80	19.20	4.10	0.02	0.53	0.03	0.00	0.03	
27	0.00	1.79	20.25	5.50	54.00	15.60	5.80	0.03	0.32	0.03	0.00	0.03	
28	0.00	1.58	24.00	7.30	53.30	11.70	11.10	0.04	0.32	0.03	0.00	0.03	
29	0.00	1.44	23.85	10.05	56.80	8.70	11.55	0.03	0.18	0.03		0.03	
30	0.00	1.79	24.00	16.35	59.20	6.50	11.85	0.03	0.25	0.03		0.03	
31		4.80		18.00	62.00		11.85		0.25	0.03		0.03	
Total	0.10	49.07	870.80	353.30	3130.35	1901.05	174.25	40.76	10.56	2.67	0.28	0.51	6533.70 CMSDAY
Mean	0.00	1.58	29.03	11.40	100.98	63.37	5.62	1.36	0.34	0.09	0.01	0.02	17.90 CMS
Max	0.02	4.80	58.40	35.50	444.50	130.00	15.60	8.70	1.65	0.25	0.02	0.03	444.50 CMS
Min	0.00	0.00	9.60	2.57	10.20	6.50	1.02	0.02	0.02	0.03	0.00	0.00	0.00 CMS
Runoff	0.009	4.240	75.237	30.525	270.462	164.251	15.055	3.522	0.912	0.231	0.024	0.044	564.512 MCM

Momentary Peak 482.20 CMS, at 160.58 M (MSL), at 18.00 Hours, on Aug 12, 2001

Runoff Yield 25.32 Liters/Second/Square KM, Momentary Peak Yield 682.037 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 869 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +173.240 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On right bank downstream side at the footpath of the bridge.

Elevation +181.632 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1997 to date.

Rating Operation

Period of Rating 1997 to date.

Rated by Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Fairly stable.

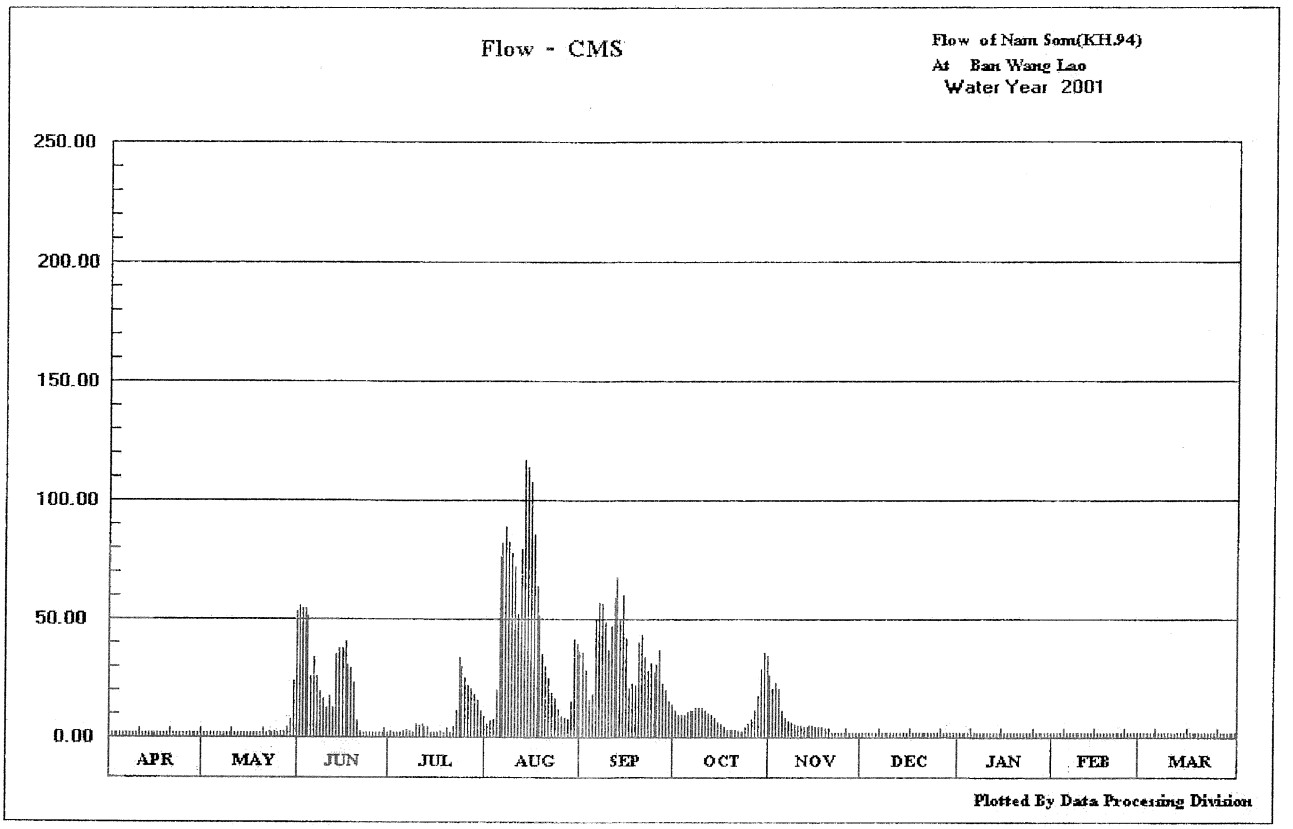
Overbank Flow Conditions Overbank flow starts at elevation +178.720 m.(M.S.L.), records are channel flow only.

General Description Records good. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	173.89	174.03	177.78	174.33	174.67	176.72	175.14	176.17	174.18	174.05	173.88	173.89	
2	173.91	174.01	177.70	174.14	174.74	176.29	175.02	175.85	174.06	174.03	173.86	173.87	
3	173.90	174.02	177.71	174.05	174.81	175.47	175.03	175.99	173.91	174.02	173.87	173.88	
4	173.89	174.07	177.56	174.12	175.80	175.65	175.04	175.85	174.08	174.01	173.86	173.88	
5	173.91	174.06	176.16	174.31	178.71	177.46	175.10	175.15	174.22	174.02	173.89	173.89	
6	173.90	174.09	176.63	174.40	178.95	177.84	175.14	174.87	174.25	174.01	173.86	173.89	
7	173.92	174.14	176.16	174.35	179.26	177.79	175.16	174.77	174.23	173.98	173.88	173.88	
8	173.90	174.17	175.74	174.28	178.99	177.43	175.24	174.72	174.23	173.95	173.89	173.88	
9	173.91	174.13	175.54	174.62	178.77	176.79	175.27	174.65	173.95	173.99	173.89	173.86	
10	173.84	174.05	175.26	174.60	178.53	177.33	175.26	174.60	174.06	173.98	173.88	173.84	
11	173.84	173.98	175.63	174.64	177.58	177.93	175.15	174.57	174.00	173.98	173.86	173.85	
12	173.86	173.91	175.27	174.55	178.84	178.32	175.08	174.54	174.01	173.96	173.86	173.86	
13	173.87	173.94	176.71	174.51	180.40	177.48	175.02	174.55	174.11	173.98	173.88	173.86	
14	173.85	174.05	176.85	174.24	180.27	177.98	174.88	174.58	174.21	174.01	173.88	173.88	
15	173.87	174.11	176.83	174.22	180.02	177.09	174.71	174.59	174.02	174.07	173.87	173.87	
16	173.84	174.15	177.01	174.26	179.12	175.82	174.62	174.54	174.05	174.08	173.86	173.86	
17	173.79	174.16	176.43	174.31	178.17	175.97	174.54	174.50	174.01	174.12	173.87	173.84	
18	173.74	174.16	176.38	174.24	177.56	175.90	174.40	174.52	174.03	174.05	173.87	173.84	
19	173.76	174.10	175.99	174.18	176.71	176.99	174.41	174.48	174.01	174.07	173.88	173.84	
20	173.77	174.11	174.74	174.28	176.42	177.16	174.38	174.43	174.01	174.06	173.85	173.84	
21	173.77	174.11	174.32	174.53	176.12	176.63	174.37	174.30	174.02	174.02	173.88	173.84	
22	173.75	174.35	174.24	175.14	175.72	176.30	174.35	174.22	174.03	174.02	173.89	173.87	
23	173.77	174.28	174.07	176.64	175.51	176.46	174.33	174.27	173.98	174.05	173.88	173.87	
24	173.85	174.32	174.05	176.42	175.19	176.24	174.49	174.29	173.96	174.04	173.88	173.87	
25	173.91	174.25	174.00	176.10	174.98	176.43	174.63	174.27	173.98	174.04	173.87	173.87	
26	173.95	174.31	174.30	175.92	174.92	176.82	174.86	174.26	174.01	174.10	173.88	173.86	
27	174.01	174.35	174.18	175.82	174.86	175.96	175.16	174.26	174.00	174.12	173.88	173.86	
28	174.05	174.50	174.11	175.67	175.44	175.77	175.59	174.24	174.02	174.11	173.87	173.85	
29	174.06	174.84	174.05	175.47	177.04	175.45	176.33	174.23	173.99	174.00		173.84	
30	174.04	176.05	174.18	175.18	176.94	175.32	176.73	174.25	174.02	173.89		173.84	
31		177.66		174.94	176.76		176.65		174.04	173.86		173.86	
Mean	173.88	174.34	175.65	174.79	177.15	176.69	175.03	174.68	174.05	174.02	173.87	173.86	
Max	174.06	177.66	177.78	176.64	180.40	178.32	176.73	176.17	174.25	174.12	173.89	173.89	180.40
Min	173.74	173.91	174.00	174.05	174.67	175.32	174.33	174.22	173.91	173.86	173.85	173.84	173.74

Annual Max Momentary Gage Height 180.47 M (MSL), at 16.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 173.24 M (MSL), River Bed 173.16 M (MSL)
Left Bank Elevation 178.71 M (MSL)
Right Bank Elevation 179.33 M (MSL), Drainage Area 869 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.70	1.35	56.60	3.30	6.70	36.24	11.82	26.89	2.22	1.45	0.66	0.70	
2	0.80	1.25	55.00	1.96	7.40	28.93	10.26	21.75	1.50	1.35	0.57	0.61	
3	0.75	1.30	55.20	1.45	8.10	16.38	10.39	23.85	0.80	1.30	0.61	0.66	
4	0.70	1.55	52.20	1.83	21.00	18.90	10.52	21.75	1.60	1.25	0.57	0.66	
5	0.80	1.50	26.72	3.10	77.13	50.20	11.30	11.95	2.48	1.30	0.70	0.70	
6	0.75	1.65	34.71	4.00	82.65	57.80	11.82	8.70	2.67	1.25	0.57	0.70	
7	0.84	1.96	26.72	3.50	89.78	56.80	12.08	7.70	2.54	1.11	0.66	0.66	
8	0.75	2.15	20.16	2.87	83.57	49.60	13.16	7.20	2.54	0.97	0.70	0.66	
9	0.80	1.89	17.36	6.20	78.51	37.43	13.58	6.50	0.97	1.16	0.70	0.57	
10	0.48	1.45	13.44	6.00	72.99	47.60	13.44	6.00	1.50	1.11	0.66	0.48	
11	0.48	1.11	18.62	6.40	52.60	59.60	11.95	5.70	1.20	1.11	0.57	0.53	
12	0.57	0.80	13.58	5.50	80.12	68.20	11.04	5.40	1.25	1.02	0.57	0.57	
13	0.61	0.93	36.07	5.10	118.00	50.60	10.26	5.50	1.76	1.11	0.66	0.57	
14	0.53	1.45	38.45	2.61	114.75	60.60	8.80	5.80	2.42	1.25	0.66	0.66	
15	0.61	1.76	38.11	2.48	108.50	42.80	7.10	5.90	1.30	1.55	0.61	0.61	
16	0.48	2.02	41.20	2.74	86.56	21.30	6.20	5.40	1.45	1.60	0.57	0.57	
17	0.27	2.09	31.31	3.10	64.83	23.55	5.40	5.00	1.25	1.83	0.61	0.48	
18	0.12	2.09	30.46	2.61	52.20	22.50	4.00	5.20	1.35	1.45	0.61	0.48	
19	0.18	1.70	23.85	2.22	36.07	40.83	4.10	4.80	1.25	1.55	0.66	0.48	
20	0.21	1.76	7.40	2.87	31.14	44.20	3.80	4.30	1.25	1.50	0.53	0.48	
21	0.21	1.76	3.20	5.30	26.04	34.71	3.70	3.00	1.30	1.30	0.66	0.48	
22	0.15	3.50	2.61	11.82	19.88	29.10	3.50	2.48	1.35	1.30	0.70	0.61	
23	0.21	2.87	1.55	34.88	16.94	31.82	3.30	2.81	1.11	1.45	0.66	0.61	
24	0.53	3.20	1.45	31.14	12.47	28.08	4.90	2.93	1.02	1.40	0.66	0.61	
25	0.80	2.67	1.20	25.70	9.80	31.31	6.30	2.81	1.11	1.40	0.61	0.61	
26	0.97	3.10	3.00	22.80	9.20	37.94	8.60	2.74	1.25	1.70	0.66	0.57	
27	1.25	3.50	2.22	21.30	8.60	23.40	12.08	2.74	1.20	1.83	0.66	0.57	
28	1.45	5.00	1.76	19.18	15.96	20.58	18.06	2.61	1.30	1.76	0.61	0.53	
29	1.50	8.40	1.45	16.38	41.80	16.10	29.61	2.54	1.16	1.20		0.48	
30	1.40	24.85	2.22	12.34	39.98	14.28	36.41	2.67	1.30	0.70		0.48	
31		54.20		9.40	36.92		35.05		1.40	0.57		0.57	
Total	19.90	144.81	657.82	280.08	1510.19	1101.38	352.53	222.62	46.80	40.83	17.67	17.95	4412.58 CMSDAY
Mean	0.66	4.67	21.93	9.03	48.72	36.71	11.37	7.42	1.51	1.32	0.63	0.58	12.09 CMS
Max	1.50	54.20	56.60	34.88	118.00	68.20	36.41	26.89	2.67	1.83	0.70	0.70	118.00 CMS
Min	0.12	0.80	1.20	1.45	6.70	14.28	3.30	2.48	0.80	0.57	0.53	0.48	0.12 CMS
Runoff	1.719	12.512	56.836	24.199	130.480	95.159	30.459	19.234	4.044	3.528	1.527	1.551	381.247 MCM

Momentary Peak 119.75 CMS, at 180.47 M (MSL), at 16.00 Hours, on Aug 13, 2001

Runoff Yield 13.91 Liters/Second/Square KM, Momentary Peak Yield 137.802 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 354 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +593.920 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank upstream side at the footpath of the bridge.

Elevation +605.713 m. (M.S.L.)

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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable.

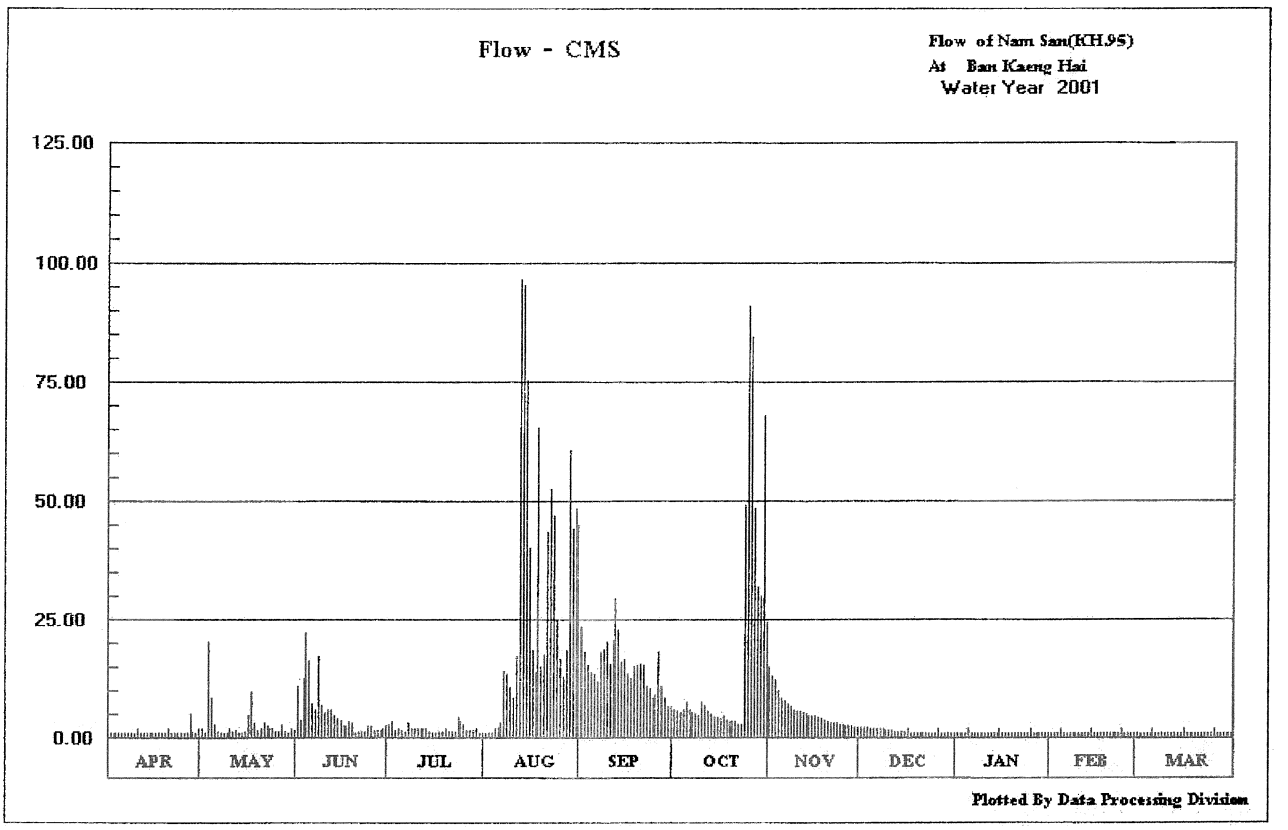
Overbank Flow Conditions Overbank flow starts at elevation +602.290 m.(M.S.L.), records are channel flow only.

General Description Records fair. Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	594.68	595.47	596.92	595.66	595.12	598.18	596.27	597.35	595.50	595.04	594.89	594.72	
2	594.69	595.10	595.87	595.81	595.12	597.65	596.21	597.14	595.50	595.04	594.89	594.70	
3	594.73	597.86	597.09	595.42	595.12	597.38	596.16	597.06	595.50	595.02	594.88	594.70	
4	594.70	596.62	598.06	595.47	595.46	597.23	596.29	596.81	595.48	595.00	594.88	594.83	
5	594.70	595.63	597.47	595.39	595.52	597.17	596.48	596.63	595.48	594.98	594.90	594.84	
6	594.69	595.29	596.43	595.33	595.71	597.04	596.25	596.53	595.48	594.96	594.90	594.91	
7	594.69	595.14	596.27	595.71	597.25	597.66	596.17	596.43	595.46	594.96	594.88	594.90	
8	594.68	595.00	597.55	595.47	597.19	597.71	596.10	596.35	595.44	594.94	594.88	594.93	
9	594.68	594.95	596.41	595.44	596.86	597.86	596.02	596.27	595.42	594.95	594.88	594.89	
10	594.63	595.45	596.13	595.45	596.63	597.39	596.48	596.22	595.40	594.97	594.86	594.88	
11	594.57	595.32	596.28	595.48	597.56	597.89	596.41	596.18	595.37	594.94	594.85	594.85	
12	594.56	595.38	596.26	595.48	602.55	598.71	596.19	596.13	595.34	594.96	594.81	594.77	
13	594.55	595.25	596.03	595.44	602.49	598.12	596.07	596.07	595.31	594.96	594.79	594.74	
14	594.62	595.08	595.91	595.27	601.45	597.43	595.97	596.02	595.28	594.98	594.77	594.72	
15	594.63	595.31	595.85	595.24	599.42	597.51	595.95	596.01	595.28	595.00	594.76	594.70	
16	594.65	596.01	595.57	595.24	597.68	597.20	595.92	596.03	595.26	595.03	594.76	594.70	
17	594.68	596.77	595.60	595.28	597.21	597.10	596.02	595.97	595.24	595.04	594.76	594.68	
18	594.74	595.71	595.75	595.32	600.92	597.33	595.85	595.90	595.24	595.02	594.76	594.76	
19	594.67	595.37	595.69	595.34	597.35	597.38	595.80	595.87	595.23	595.00	594.74	594.84	
20	594.64	595.42	595.22	595.30	597.58	597.41	595.78	595.77	595.22	594.98	594.72	594.83	
21	594.58	595.68	595.31	595.30	599.65	597.37	595.75	595.72	595.20	594.96	594.72	594.76	
22	594.56	595.57	595.28	595.35	600.21	596.93	595.67	595.70	595.19	594.96	594.86	594.74	
23	594.54	595.47	595.28	595.99	599.89	596.85	595.64	595.68	595.17	594.92	594.84	594.70	
24	594.54	595.44	595.57	595.79	598.33	596.63	600.02	595.66	595.16	594.94	594.77	594.70	
25	594.51	595.34	595.56	595.64	597.49	596.70	602.27	595.62	595.13	594.92	594.73	594.68	
26	595.20	595.32	595.39	595.40	597.12	597.64	601.93	595.61	595.10	594.91	594.71	594.64	
27	596.06	595.62	595.36	595.42	597.68	596.90	599.98	595.58	595.10	594.90	594.72	594.62	
28	595.31	595.30	595.42	595.37	600.67	596.59	598.89	595.56	595.08	594.90	594.70	594.62	
29	594.91	595.17	595.37	595.39	599.69	596.38	598.75	595.54	595.06	594.92		594.56	
30	594.77	595.24	595.59	595.20	599.99	596.36	601.07	595.52	595.06	594.90		594.70	
31		595.42		595.16	599.75		598.27		595.04	594.90		594.67	
Mean	594.74	595.54	596.02	595.44	598.21	597.32	597.12	596.10	595.28	594.96	594.81	594.75	
Max	596.06	597.86	598.06	595.99	602.55	598.71	602.27	597.35	595.50	595.04	594.90	594.93	602.55
Min	594.51	594.95	595.22	595.16	595.12	596.36	595.64	595.52	595.04	594.90	594.70	594.56	594.51

Annual Max Momentary Gage Height 603.16 M (MSL), at 7.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 593.92 M (MSL), River Bed 593.57 M (MSL)
Left Bank Elevation 604.83 M (MSL)
Right Bank Elevation 602.28 M (MSL), Drainage Area 354 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.3	2.3	11.4	3.3	1.2	23.8	6.4	15.5	2.5	0.9	0.6	0.3	
2	0.3	1.1	4.3	4.0	1.2	18.5	6.1	13.4	2.5	0.9	0.6	0.3	
3	0.3	20.6	12.9	2.1	1.2	15.8	5.8	12.6	2.5	0.9	0.6	0.3	
4	0.3	9.0	22.6	2.3	2.3	14.3	6.4	10.5	2.4	0.8	0.6	0.5	
5	0.3	3.1	16.7	2.0	2.6	13.7	7.8	9.0	2.4	0.8	0.6	0.5	
6	0.3	1.7	7.5	1.8	3.6	12.4	6.3	8.2	2.4	0.7	0.6	0.6	
7	0.3	1.2	6.4	3.6	14.5	18.6	5.8	7.5	2.3	0.7	0.6	0.6	
8	0.3	0.8	17.5	2.3	13.9	19.1	5.5	6.9	2.2	0.7	0.6	0.7	
9	0.3	0.7	7.3	2.2	10.9	20.6	5.1	6.4	2.1	0.7	0.6	0.6	
10	0.2	2.2	5.7	2.2	9.0	15.9	7.8	6.1	2.0	0.7	0.5	0.6	
11	0.2	1.8	6.4	2.4	17.6	20.9	7.3	5.9	1.9	0.7	0.5	0.5	
12	0.2	1.9	6.3	2.4	97.0	29.7	6.0	5.7	1.8	0.7	0.4	0.4	
13	0.1	1.5	5.2	2.2	95.8	23.2	5.4	5.4	1.7	0.7	0.4	0.3	
14	0.2	1.0	4.5	1.6	75.6	16.3	4.8	5.1	1.6	0.8	0.4	0.3	
15	0.2	1.7	4.2	1.5	40.3	17.1	4.8	5.1	1.6	0.8	0.4	0.3	
16	0.3	5.1	2.8	1.5	18.8	14.0	4.6	5.2	1.6	0.9	0.4	0.3	
17	0.3	10.2	3.0	1.6	14.1	13.0	5.1	4.8	1.5	0.9	0.4	0.3	
18	0.3	3.6	3.7	1.8	65.6	15.3	4.2	4.5	1.5	0.9	0.4	0.4	
19	0.3	1.9	3.4	1.8	15.5	15.8	4.0	4.3	1.5	0.8	0.3	0.5	
20	0.2	2.1	1.5	1.7	17.8	16.1	3.9	3.9	1.5	0.8	0.3	0.5	
21	0.2	3.4	1.7	1.7	43.8	15.7	3.7	3.6	1.4	0.7	0.3	0.4	
22	0.2	2.8	1.6	1.8	52.8	11.4	3.3	3.5	1.4	0.7	0.5	0.3	
23	0.1	2.3	1.6	4.9	47.4	10.8	3.2	3.4	1.3	0.6	0.5	0.3	
24	0.1	2.2	2.8	3.9	25.3	9.0	49.4	3.3	1.3	0.7	0.4	0.3	
25	0.1	1.8	2.8	3.2	16.9	9.6	91.4	3.1	1.2	0.6	0.3	0.3	
26	1.4	1.8	2.0	2.0	13.2	18.4	84.7	3.0	1.1	0.6	0.3	0.2	
27	5.3	3.1	1.9	2.1	18.8	11.2	48.7	2.9	1.1	0.6	0.3	0.2	
28	1.7	1.7	2.1	1.9	61.1	8.7	32.4	2.8	1.0	0.6	0.3	0.2	
29	0.6	1.3	1.9	2.0	44.4	7.1	30.3	2.7	1.0	0.6		0.2	
30	0.4	1.5	3.0	1.4	48.8	6.9	68.3	2.6	1.0	0.6		0.3	
31		2.1		1.3	45.3		24.7		0.9	0.6		0.3	
Total	15.3	97.5	174.7	70.5	936.3	462.9	553.2	176.9	52.2	22.7	12.7	11.8	2586.7 CMSDAY
Mean	0.5	3.1	5.8	2.3	30.2	15.4	17.8	5.9	1.7	0.7	0.5	0.4	7.1 CMS
Max	5.3	20.6	22.6	4.9	97.0	29.7	91.4	15.5	2.5	0.9	0.6	0.7	97.0 CMS
Min	0.1	0.7	1.5	1.3	1.2	6.9	3.2	2.6	0.9	0.6	0.3	0.2	0.1 CMS
Runoff	1.32	8.42	15.09	6.09	80.90	39.99	47.80	15.28	4.51	1.96	1.10	1.02	223.49 MCM

Momentary Peak 109.20 CMS, at 603.16 M (MSL), at 7.00 Hours, on Aug 13, 2001

Runoff Yield 20.02 Liters/Second/Square KM, Momentary Peak Yield 308.475 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 252 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +589.200 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank down side on the footpath of the bridge.

Elevation +597.706 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1998 to date.

Rating Operation

Period of Rating 1998 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable by some scouring.

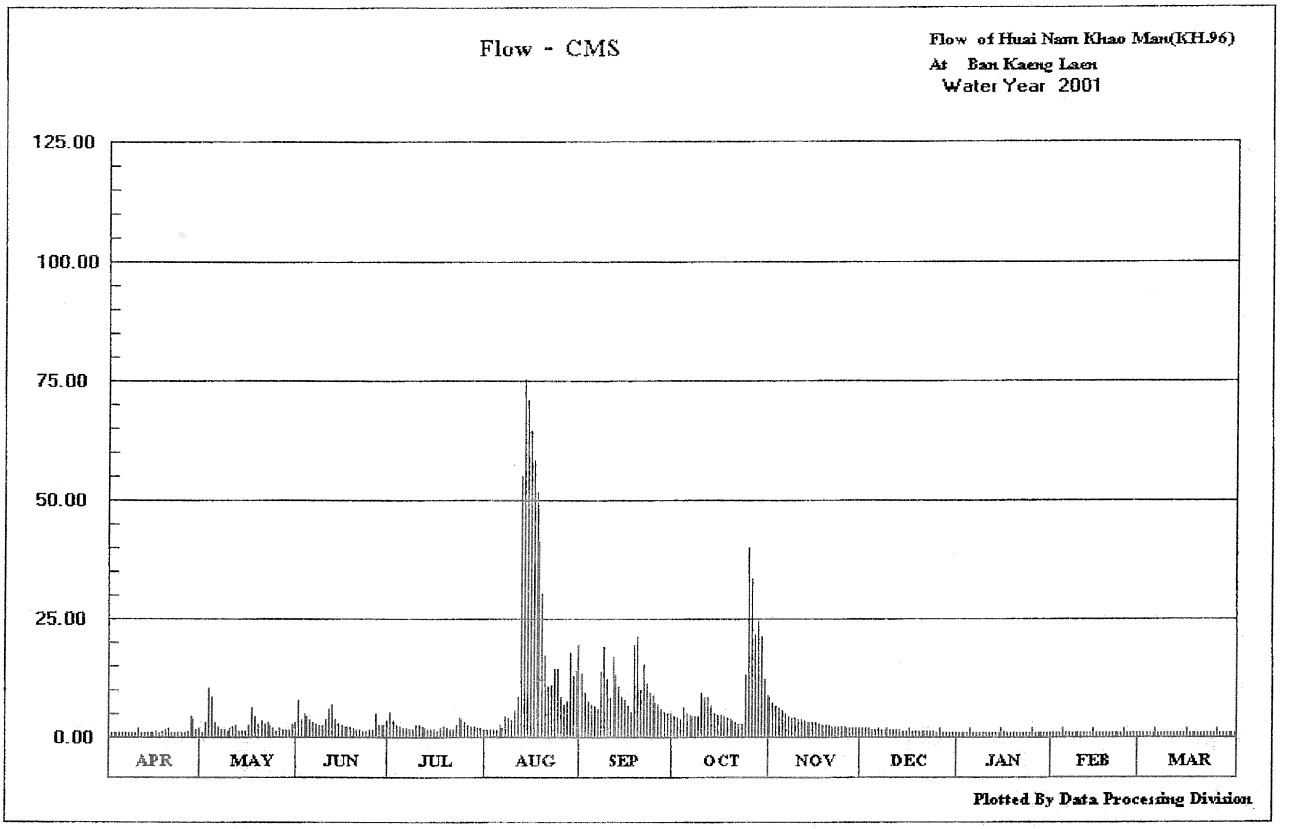
Overbank Flow Conditions Overbank flow starts at elevation +594.850 m.(M.S.L.), records are channel flow only.

General Description Records fair. Stage-discharge relation defined by 34 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	590.17	590.25	591.90	591.51	590.62	592.46	591.31	591.96	590.66	590.49	590.39	590.32	
2	590.17	591.00	591.20	591.07	590.61	592.08	591.24	591.79	590.66	590.49	590.40	590.32	
3	590.23	592.16	591.46	590.86	590.60	591.85	591.19	591.73	590.66	590.48	590.39	590.31	
4	590.26	591.99	591.33	590.78	590.65	591.75	591.68	591.67	590.64	590.48	590.38	590.31	
5	590.29	591.00	591.18	590.73	590.88	591.72	591.45	591.55	590.63	590.48	590.38	590.31	
6	590.33	590.75	591.04	590.68	590.73	591.59	591.40	591.45	590.62	590.47	590.38	590.30	
7	590.30	590.60	590.91	590.65	591.34	592.49	591.33	591.33	590.62	590.47	590.38	590.30	
8	590.18	590.60	590.84	590.65	591.26	592.90	591.33	591.28	590.62	590.47	590.38	590.30	
9	590.17	590.54	590.84	590.84	591.07	592.36	591.30	591.21	590.69	590.46	590.38	590.29	
10	590.18	590.53	591.14	590.84	591.56	591.92	592.09	591.16	590.63	590.46	590.38	590.29	
11	590.19	590.77	591.59	590.74	591.96	592.73	591.96	591.14	590.62	590.45	590.38	590.29	
12	590.19	590.84	591.74	590.69	594.73	592.44	591.98	591.08	590.60	590.45	590.38	590.29	
13	590.18	590.57	591.15	590.65	595.51	592.20	591.69	591.04	590.59	590.45	590.37	590.29	
14	590.19	590.55	590.97	590.60	595.35	592.00	591.47	591.04	590.58	590.45	590.37	590.28	
15	590.31	590.58	590.88	590.60	595.10	591.88	591.40	591.00	590.57	590.57	590.36	590.28	
16	590.56	590.87	590.81	590.56	594.85	591.71	591.39	590.98	590.56	590.52	590.36	590.28	
17	590.47	591.68	590.78	590.66	594.58	591.53	591.32	590.93	590.55	590.45	590.36	590.28	
18	590.56	591.32	590.74	590.77	594.12	592.92	591.23	590.89	590.54	590.44	590.36	590.28	
19	590.59	590.96	590.69	590.67	593.58	593.04	591.18	590.85	590.54	590.44	590.36	590.28	
20	590.58	591.10	590.63	590.65	592.76	592.13	591.11	590.82	590.53	590.44	590.36	590.27	
21	590.42	590.93	590.60	590.65	592.21	592.62	591.01	590.79	590.53	590.43	590.35	590.30	
22	590.36	590.98	590.57	590.83	592.25	592.26	590.97	590.78	590.52	590.43	590.35	590.30	
23	590.29	590.88	590.56	591.26	592.53	592.08	590.93	590.77	590.51	590.42	590.35	590.30	
24	590.30	590.70	590.59	591.18	592.53	592.01	592.45	590.76	590.52	590.42	590.34	590.29	
25	590.31	590.58	590.61	590.99	592.00	591.79	594.07	590.74	590.50	590.42	590.34	590.29	
26	590.52	590.70	591.44	590.88	591.76	591.77	593.75	590.73	590.50	590.42	590.34	590.29	
27	591.33	590.60	590.86	590.81	591.85	591.60	593.07	590.71	590.50	590.41	590.33	590.28	
28	591.17	590.62	590.85	590.75	592.81	591.49	593.29	590.69	590.49	590.41	590.32	590.28	
29	590.62	590.63	590.88	590.71	592.41	591.44	593.05	590.67	590.49	590.40		590.28	
30	590.52	590.97	591.07	590.67	592.52	591.42	592.37	590.67	590.49	590.40		590.28	
31		591.01		590.63	592.91		592.02		590.49	590.40		590.27	
Mean	590.40	590.88	591.00	590.79	592.50	592.07	591.81	591.07	590.57	590.45	590.37	590.29	
Max	591.33	592.16	591.90	591.51	595.51	593.04	594.07	591.96	590.69	590.57	590.40	590.32	595.51
Min	590.17	590.25	590.56	590.56	590.60	591.42	590.93	590.67	590.49	590.40	590.32	590.27	590.17

Annual Max Momentary Gage Height 595.58 M (MSL), at 6.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 589.20 M (MSL), River Bed 590.08 M (MSL)
Left Bank Elevation 594.84 M (MSL)
Right Bank Elevation 597.63 M (MSL), Drainage Area 252 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.24	0.50	8.30	5.76	1.98	13.78	4.75	8.72	2.14	1.46	1.06	0.78	
2	0.24	3.50	4.30	3.78	1.94	9.80	4.46	7.53	2.14	1.46	1.10	0.78	
3	0.42	10.60	5.50	2.94	1.90	7.95	4.26	7.11	2.14	1.42	1.06	0.74	
4	0.54	8.93	4.85	2.62	2.10	7.25	6.78	6.72	2.06	1.42	1.02	0.74	
5	0.66	3.50	4.22	2.42	3.02	7.04	5.45	6.00	2.02	1.42	1.02	0.74	
6	0.82	2.50	3.66	2.22	2.42	6.24	5.20	5.45	1.98	1.38	1.02	0.70	
7	0.70	1.90	3.14	2.10	4.90	14.17	4.85	4.85	1.98	1.38	1.02	0.70	
8	0.26	1.90	2.86	2.10	4.54	19.60	4.85	4.62	1.98	1.38	1.02	0.70	
9	0.24	1.66	2.86	2.86	3.78	12.60	4.70	4.34	2.26	1.34	1.02	0.66	
10	0.26	1.62	4.06	2.86	6.06	8.44	9.90	4.14	2.02	1.34	1.02	0.66	
11	0.28	2.58	6.24	2.46	8.72	17.29	8.72	4.06	1.98	1.30	1.02	0.66	
12	0.28	2.86	7.18	2.26	55.52	13.52	8.86	3.82	1.90	1.30	1.02	0.66	
13	0.26	1.78	4.10	2.10	75.77	11.00	6.84	3.66	1.86	1.30	0.98	0.66	
14	0.28	1.70	3.38	1.90	71.45	9.00	5.55	3.66	1.82	1.30	0.98	0.62	
15	0.74	1.82	3.02	1.90	64.70	8.16	5.20	3.50	1.78	1.78	0.94	0.62	
16	1.74	2.98	2.74	1.74	58.40	6.97	5.15	3.42	1.74	1.58	0.94	0.62	
17	1.38	6.78	2.62	2.14	51.92	5.88	4.80	3.22	1.70	1.30	0.94	0.62	
18	1.74	4.80	2.46	2.58	41.64	19.88	4.42	3.06	1.66	1.26	0.94	0.62	
19	1.86	3.34	2.26	2.18	30.74	21.53	4.22	2.90	1.66	1.26	0.94	0.62	
20	1.82	3.90	2.02	2.10	17.68	10.30	3.94	2.78	1.62	1.26	0.94	0.58	
21	1.18	3.22	1.90	2.10	11.10	15.86	3.54	2.66	1.62	1.22	0.90	0.70	
22	0.94	3.42	1.78	2.82	11.50	11.60	3.38	2.62	1.58	1.22	0.90	0.70	
23	0.66	3.02	1.74	4.54	14.69	9.80	3.22	2.58	1.54	1.18	0.90	0.70	
24	0.70	2.30	1.86	4.22	14.69	9.10	13.65	2.54	1.58	1.18	0.86	0.66	
25	0.74	1.82	1.94	3.46	9.00	7.53	40.54	2.46	1.50	1.18	0.86	0.66	
26	1.58	2.30	5.40	3.02	7.32	7.39	34.00	2.42	1.50	1.18	0.86	0.66	
27	4.85	1.90	2.94	2.74	7.95	6.30	21.93	2.34	1.50	1.14	0.82	0.62	
28	4.18	1.98	2.90	2.50	18.34	5.65	24.87	2.26	1.46	1.14	0.78	0.62	
29	1.98	2.02	3.02	2.34	13.13	5.40	21.67	2.18	1.46	1.10		0.62	
30	1.58	3.38	3.78	2.18	14.56	5.30	12.70	2.18	1.46	1.10		0.62	
31		3.54		2.02	19.74		9.20		1.46	1.10		0.58	
Total	33.15	98.05	107.03	82.96	651.20	314.33	301.60	117.80	55.10	40.38	26.88	20.62	1849.10 CMSDAY
Mean	1.11	3.16	3.57	2.68	21.01	10.48	9.73	3.93	1.78	1.30	0.96	0.67	5.07 CMS
Max	4.85	10.60	8.30	5.76	75.77	21.53	40.54	8.72	2.26	1.78	1.10	0.78	75.77 CMS
Min	0.24	0.50	1.74	1.74	1.90	5.30	3.22	2.18	1.46	1.10	0.78	0.58	0.24 CMS
Runoff	2.864	8.472	9.247	7.168	56.264	27.158	26.058	10.178	4.761	3.489	2.322	1.782	159.762 MCM

Momentary Peak 77.66 CMS, at 595.58 M (MSL), at 6.00 Hours, on Aug 13, 2001

Runoff Yield 20.10 Liters/Second/Square KM, Momentary Peak Yield 308.175 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

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

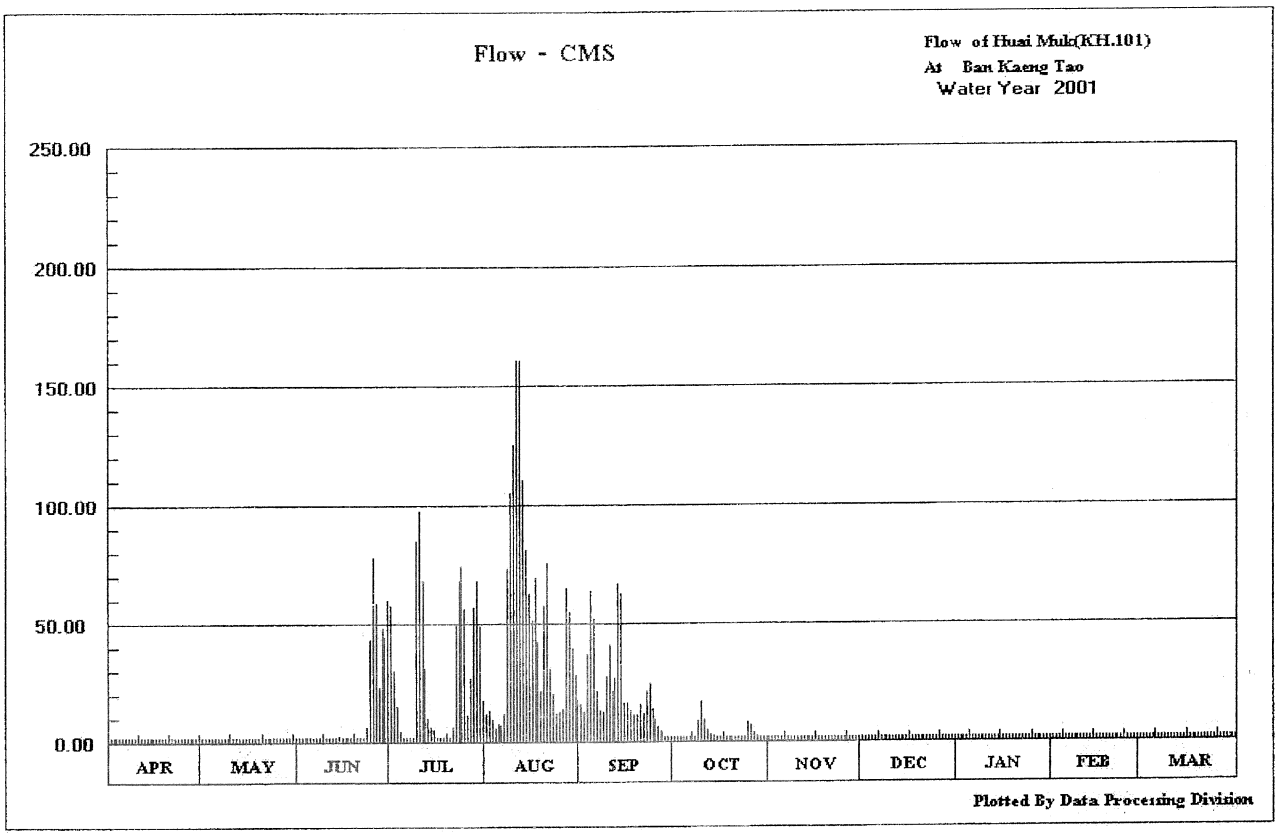
Lat 16 - 35 - 07 N. **Long** 104 - 37 - 13 E.

Location		on right bank at the bridge of Amphoe Dong Luang - Muk Dahan Highway.
	Ban Kaen Tao	**Amphoe** Mueang **Changwat** Muk Dahan
Drainage Area		407 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+136.900 m. (M.S.L.)
Bench Mark		B.M.- Highways Dept.
	Location BM	On right bank about 1.00 meter from the top staff gage.
	Elevation	+146.237 m. (M.S.L.)
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.
Period of Available Gage Records		1999 to date.
Rating Operation		
	Period of Rating	1999 to date.
	Rated by Float	-
	Rated by Current Meter	1999 to date.
Stability of Channel Regimes		Fairly stable.
Overbank Flow Conditions		Overbank flow starts at elevation +143.010 m.(M.S.L.), records are channel flow only.
General Description		Records good. Stage-discharge relation defined by 31 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.60	137.45	137.86	142.15	139.43	139.76	138.26	138.17	137.75	137.70	137.61	137.59	
2	137.57	137.45	137.80	140.73	139.56	139.48	138.17	138.35	137.75	137.69	137.61	137.61	
3	137.55	137.48	138.01	139.70	139.24	141.18	138.15	138.26	137.75	137.68	137.61	137.65	
4	137.54	137.51	137.94	138.74	138.86	142.46	138.42	138.23	137.74	137.68	137.61	137.61	
5	137.53	137.51	137.90	138.38	139.04	141.91	138.28	138.13	137.73	137.68	137.61	137.60	
6	137.57	137.50	137.81	138.38	138.95	140.13	138.18	138.08	137.72	137.67	137.61	137.60	
7	137.57	137.53	137.77	138.31	139.43	139.58	138.15	138.04	137.71	137.67	137.61	137.59	
8	137.56	137.52	137.73	138.39	142.89	139.47	138.17	137.99	137.72	137.66	137.61	137.59	
9	137.55	137.52	137.73	143.25	143.64	140.57	139.15	137.97	137.74	137.65	137.61	137.59	
10	137.54	137.52	137.76	143.51	143.91	141.36	139.83	137.93	137.73	137.65	137.61	137.59	
11	137.52	137.55	137.75	142.66	144.21	140.13	139.21	137.91	137.73	137.65	137.60	137.58	
12	137.52	137.55	137.79	140.82	144.21	140.52	138.81	137.91	137.73	137.65	137.60	137.58	
13	137.52	137.52	137.98	139.26	143.72	142.59	138.57	137.90	137.73	137.66	137.59	137.58	
14	137.51	137.52	138.51	138.91	143.12	142.39	138.46	137.90	137.72	137.66	137.59	137.58	
15	137.51	137.52	138.41	138.77	142.39	139.79	138.35	137.90	137.71	137.65	137.59	137.57	
16	137.51	137.51	138.15	138.41	141.86	139.79	138.24	137.85	137.71	137.65	137.58	137.56	
17	137.50	137.52	138.01	138.21	142.71	139.57	138.17	137.84	137.70	137.65	137.59	137.55	
18	137.49	137.54	137.99	138.23	141.42	139.41	138.09	137.83	137.70	137.65	137.65	137.55	
19	137.48	137.52	137.80	138.06	140.14	139.40	138.04	137.81	137.70	137.65	137.63	137.54	
20	137.47	137.52	137.72	138.00	142.16	139.77	138.04	137.81	137.70	137.65	137.62	137.53	
21	137.46	137.52	137.74	138.88	142.97	139.43	138.05	137.81	137.68	137.64	137.60	137.53	
22	137.45	137.52	137.93	141.77	140.77	140.14	138.02	137.79	137.68	137.63	137.60	137.52	
23	137.45	137.52	138.90	142.66	140.04	140.35	138.04	137.79	137.68	137.59	137.59	137.57	
24	137.44	137.52	141.50	142.94	139.45	139.62	138.33	137.79	137.67	137.61	137.59	137.57	
25	137.51	137.52	143.04	142.10	139.48	139.22	139.10	137.78	137.67	137.63	137.58	137.54	
26	137.48	137.52	142.23	139.41	139.60	138.93	139.00	137.77	137.69	137.63	137.58	137.55	
27	137.46	137.52	140.28	140.52	142.53	138.71	138.56	137.76	137.68	137.62	137.61	137.55	
28	137.46	137.61	141.72	142.14	142.05	138.32	138.47	137.76	137.68	137.62	137.61	137.55	
29	137.45	138.12	141.55	142.65	141.31	138.43	138.39	137.76	137.70	137.61		137.54	
30	137.45	138.05	142.28	141.75	140.61	138.32	138.32	137.75	137.74	137.61		137.54	
31		137.98		139.90	139.90		138.32		137.74	137.61		137.78	
Mean	137.51	137.57	138.85	140.24	141.28	140.02	138.43	137.92	137.71	137.65	137.60	137.58	
Max	137.60	138.12	143.04	143.51	144.21	142.59	139.83	138.35	137.75	137.70	137.65	137.78	144.21
Min	137.44	137.45	137.72	138.00	138.86	138.32	138.02	137.75	137.67	137.59	137.58	137.52	137.44

Annual Max Momentary Gage Height 144.29 M (MSL), at 6.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 136.90 M (MSL), River Bed 137.26 M (MSL)
Left Bank Elevation 143.96 M (MSL)
Right Bank Elevation 143.00 M (MSL), Drainage Area 407 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.42	58.06	12.59	16.58	1.82	1.41	0.20	0.10	0.06	0.04	
2	0.00	0.00	0.30	30.95	14.05	13.15	1.41	2.35	0.20	0.10	0.06	0.06	
3	0.00	0.00	0.83	15.80	10.45	37.90	1.32	1.82	0.20	0.09	0.06	0.07	
4	0.00	0.00	0.62	5.40	6.60	64.65	2.84	1.68	0.18	0.09	0.06	0.06	
5	0.00	0.00	0.50	2.56	8.40	52.96	1.91	1.23	0.16	0.09	0.06	0.05	
6	0.00	0.00	0.32	2.56	7.50	21.95	1.46	1.04	0.14	0.09	0.06	0.05	
7	0.00	0.01	0.24	2.07	12.59	14.27	1.32	0.92	0.12	0.09	0.06	0.04	
8	0.00	0.01	0.16	2.63	73.79	13.04	1.41	0.77	0.14	0.08	0.06	0.04	
9	0.00	0.01	0.16	85.57	105.80	28.55	9.50	0.71	0.18	0.07	0.06	0.04	
10	0.00	0.01	0.22	98.05	126.00	41.27	17.52	0.59	0.16	0.07	0.06	0.04	
11	0.00	0.03	0.20	68.90	161.50	21.95	10.11	0.53	0.16	0.07	0.05	0.04	
12	0.00	0.03	0.28	32.30	161.50	27.80	6.10	0.53	0.16	0.07	0.05	0.04	
13	0.00	0.01	0.74	10.67	111.40	67.41	3.89	0.50	0.16	0.08	0.04	0.04	
14	0.00	0.01	3.47	7.10	81.89	63.16	3.12	0.50	0.14	0.08	0.04	0.04	
15	0.00	0.01	2.77	5.70	63.16	16.97	2.35	0.50	0.12	0.07	0.04	0.04	
16	0.00	0.00	1.32	2.77	51.90	16.97	1.73	0.40	0.12	0.07	0.04	0.03	
17	0.00	0.01	0.83	1.60	69.96	14.16	1.41	0.38	0.10	0.07	0.04	0.03	
18	0.00	0.02	0.77	1.68	42.55	12.36	1.07	0.36	0.10	0.07	0.07	0.03	
19	0.00	0.01	0.30	0.98	22.10	12.25	0.92	0.32	0.10	0.07	0.07	0.02	
20	0.00	0.01	0.14	0.80	58.28	16.71	0.92	0.32	0.10	0.07	0.06	0.01	
21	0.00	0.01	0.18	6.80	76.56	12.59	0.95	0.32	0.09	0.07	0.05	0.01	
22	0.00	0.01	0.59	49.99	31.55	22.10	0.86	0.28	0.09	0.07	0.05	0.01	
23	0.00	0.01	7.00	68.90	20.60	25.25	0.92	0.28	0.09	0.04	0.04	0.04	
24	0.00	0.01	44.25	75.46	12.81	14.76	2.21	0.28	0.09	0.06	0.04	0.04	
25	0.00	0.01	79.12	57.00	13.15	10.23	9.00	0.26	0.09	0.07	0.04	0.02	
26	0.00	0.01	59.76	12.36	14.50	7.30	8.00	0.24	0.10	0.07	0.04	0.03	
27	0.00	0.01	24.20	27.80	66.14	5.10	3.82	0.22	0.09	0.06	0.06	0.03	
28	0.00	0.06	48.93	57.85	55.94	2.14	3.19	0.22	0.09	0.06	0.06	0.03	
29	0.00	1.19	45.31	68.69	40.21	2.91	2.63	0.22	0.10	0.06		0.02	
30	0.00	0.95	60.83	49.56	29.15	2.14	2.14	0.20	0.18	0.06		0.02	
31		0.74		18.50	18.50		2.14		0.18	0.06		0.26	
Total	0.00	3.19	384.76	929.06	1581.12	678.58	107.99	19.38	4.13	2.27	1.48	1.32	3713.28 CMSDAY
Mean	0.00	0.10	12.83	29.97	51.00	22.62	3.48	0.65	0.13	0.07	0.05	0.04	10.17 CMS
Max	0.00	1.19	79.12	98.05	161.50	67.41	17.52	2.35	0.20	0.10	0.07	0.26	161.50 CMS
Min	0.00	0.00	0.14	0.80	6.60	2.14	0.86	0.20	0.09	0.04	0.04	0.01	0.00 CMS
Runoff	0.000	0.276	33.243	80.271	136.609	58.629	9.330	1.674	0.357	0.196	0.128	0.114	320.827 MCM

Momentary Peak 173.50 CMS, at 144.29 M (MSL), at 6.00 Hours, on Aug 12, 2001

Runoff Yield 25.00 Liters/Second/Square KM, Momentary Peak Yield 426.290 Liters/Second/Square KM

WATER YEAR : 2001

KHONG RIVER BASIN

Huai Nam Suai at Ban Pong Si Thon, Loei (Kh.102)

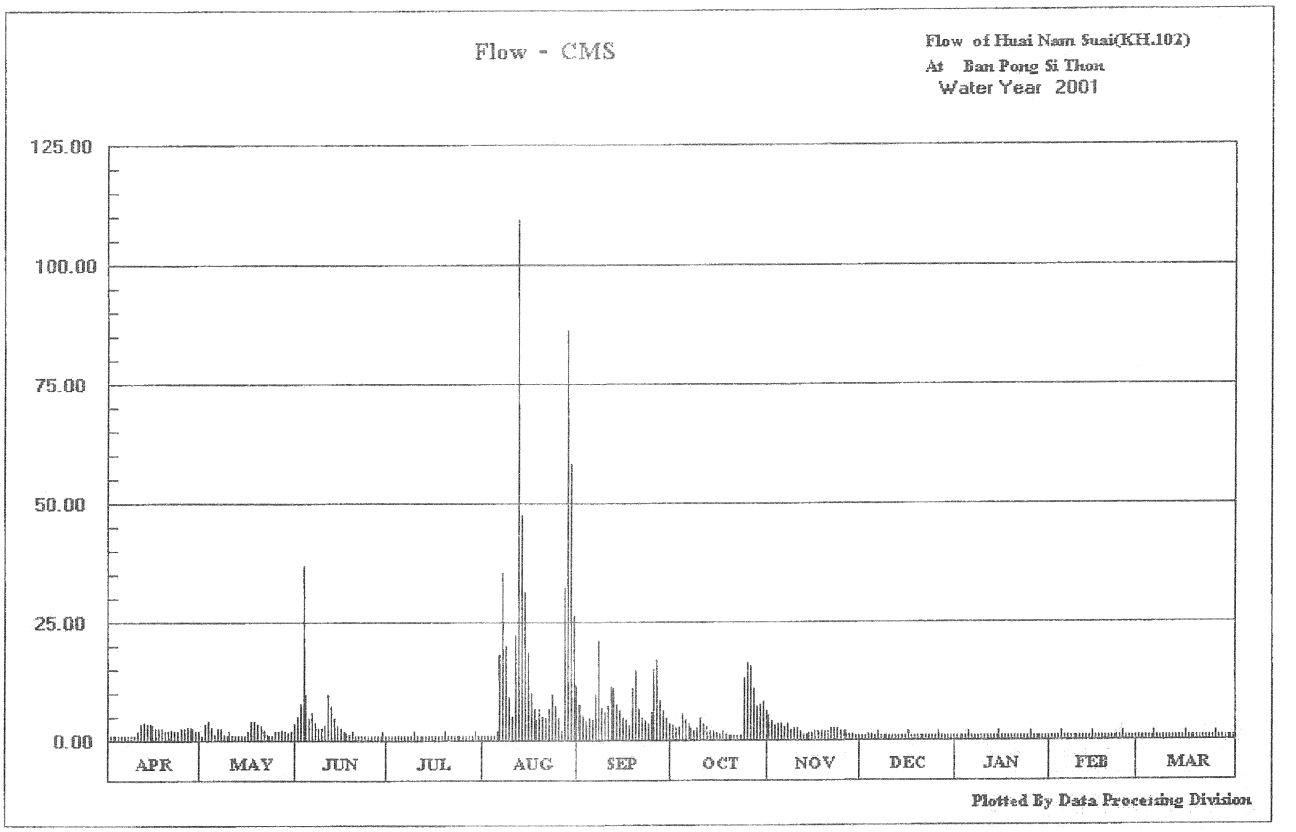
Lat 17 - 21 - 51 N. **Long** 101 - 54 - 57 E.

Location		on left bank at the bridge of Na Duang - Erawan Highway.		
	Ban Pong Si Thon	**Amphoe** Erawan	**Changwat** Loei	
Drainage Area		211 sq.km.		
Type of Gage		Staff gage.		
Zero Gage at Bottom		+273.300 m. (M.S.L.)		
Bench Mark		B.M.- H.D.		
	Location BM	On left bank about 8.00 meters from the top staff gage.		
	Elevation	+279.716 m. (M.S.L.)		
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 17.00 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 Float	-		
	Rated by Current Meter	1999 to date.		
Stability of Channel Regimes		Fairly stable because of backwater effect.		
Overbank Flow Conditions		Overbank flow starts at elevation +277.070 m.(M.S.L.), records are channel flow only.		
General Description		Records fair. Stage-discharge relation defined by 16 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	276.19	276.22	276.42	276.20	276.17	276.52	276.32	276.43	276.22	274.87	274.64	274.55	
2	276.20	276.35	276.53	276.19	276.16	276.43	276.30	276.38	276.22	274.86	274.61	274.58	
3	276.19	276.37	277.30	276.15	276.15	276.37	276.31	276.33	276.23	274.83	274.61	274.61	
4	276.19	276.31	276.61	276.14	276.21	276.41	276.44	276.34	276.24	274.81	274.58	274.59	
5	276.18	276.23	276.41	276.10	276.27	276.39	276.39	276.34	276.22	274.79	274.56	274.62	
6	276.17	276.30	276.46	276.02	276.87	276.60	276.34	276.31	276.22	274.77	274.54	274.65	
7	276.13	276.29	276.36	276.00	277.27	276.95	276.29	276.35	276.22	274.82	274.54	274.64	
8	276.12	276.23	276.29	275.98	276.93	276.49	276.26	276.28	276.22	274.83	274.53	274.65	
9	276.17	276.22	276.29	275.99	276.58	276.46	276.30	276.29	276.22	274.77	274.52	274.73	
10	276.19	276.23	276.33	276.06	276.42	276.50	276.41	276.29	276.22	274.73	274.55	275.77	
11	276.35	276.19	276.60	276.17	276.99	276.67	276.35	276.27	276.21	274.76	274.61	275.80	
12	276.36	276.20	276.51	276.15	278.33	276.65	276.31	276.24	276.20	274.78	274.62	275.77	
13	276.35	276.20	276.40	276.08	277.50	276.52	276.27	276.24	276.20	274.77	274.62	275.77	
14	276.34	276.19	276.33	276.04	277.19	276.47	276.26	276.25	276.20	274.75	274.65	275.77	
15	276.32	276.19	276.29	276.16	276.88	276.41	276.25	276.25	276.19	274.73	274.66	275.79	
16	276.30	276.26	276.26	276.15	276.62	276.39	276.24	276.25	276.18	274.76	274.63	275.83	
17	276.29	276.37	276.25	276.19	276.48	276.33	276.24	276.26	275.96	274.73	274.54	275.88	
18	276.29	276.37	276.24	276.19	276.39	276.65	276.23	276.26	275.56	274.68	274.56	275.93	
19	276.27	276.35	276.22	276.16	276.48	276.77	276.20	276.27	275.43	274.61	274.61	275.95	
20	276.26	276.33	276.19	276.15	276.42	276.48	276.17	276.27	275.53	274.67	274.62	275.97	
21	276.28	276.28	276.20	276.18	276.40	276.41	276.15	276.29	275.81	274.72	274.57	275.98	
22	276.27	276.24	276.20	276.20	276.48	276.37	276.17	276.30	275.52	274.78	274.51	276.10	
23	276.27	276.22	276.18	276.20	276.61	276.34	276.22	276.29	275.10	274.69	274.52	276.17	
24	276.29	276.20	276.15	276.20	276.51	276.45	276.73	276.27	274.95	274.65	274.57	276.20	
25	276.30	276.27	276.20	276.21	276.41	276.78	276.82	276.26	274.77	274.55	274.58	276.19	
26	276.31	276.26	276.21	276.21	276.27	276.84	276.80	276.25	274.88	274.52	274.58	276.18	
27	276.31	276.28	276.20	276.21	277.21	276.55	276.65	276.24	274.74	274.62	274.58	276.18	
28	276.30	276.26	276.19	276.19	278.07	276.47	276.50	276.23	274.86	274.68	274.56	276.17	
29	276.27	276.25	276.22	276.19	277.69	276.40	276.52	276.22	274.88	274.63		276.17	
30	276.27	276.22	276.20	276.19	277.09	276.35	276.54	276.22	274.77	274.62		276.20	
31		276.35		276.18	276.68		276.47		274.88	274.68		276.20	
Mean	276.26	276.27	276.34	276.14	276.77	276.51	276.37	276.28	275.71	274.72	274.58	275.60	
Max	276.36	276.37	277.30	276.21	278.33	276.95	276.82	276.43	276.24	274.87	274.66	276.20	278.33
Min	276.12	276.19	276.15	275.98	276.15	276.33	276.15	276.22	274.74	274.52	274.51	274.55	274.51

Annual Max Momentary Gage Height 278.39 M (MSL), at 9.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 273.30 M (MSL), River Bed 273.92 M (MSL)
Left Bank Elevation 279.07 M (MSL)
Right Bank Elevation 277.06 M (MSL), Drainage Area 211 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	1.40	5.50	1.00	0.99	8.00	3.40	5.75	1.40	0.33	0.22	0.10	
2	0.01	4.00	8.25	0.99	0.98	5.75	3.00	4.60	1.40	0.33	0.20	0.16	
3	0.02	4.40	37.40	0.97	0.97	4.40	3.20	3.60	1.60	0.31	0.20	0.20	
4	0.04	3.20	10.25	0.97	1.20	5.25	6.00	3.80	1.80	0.30	0.16	0.18	
5	0.07	1.60	5.25	0.95	2.40	4.80	4.80	3.80	1.40	0.30	0.12	0.21	
6	0.14	3.00	6.50	0.91	18.45	10.00	3.80	3.20	1.40	0.28	0.08	0.22	
7	0.28	2.80	4.20	0.90	35.84	21.25	2.80	4.00	1.40	0.31	0.08	0.22	
8	0.54	1.60	2.80	0.89	20.55	7.25	2.20	2.60	1.40	0.31	0.06	0.22	
9	1.05	1.40	2.80	0.89	9.50	6.50	3.00	2.80	1.40	0.28	0.04	0.27	
10	2.05	1.60	3.60	0.93	5.50	7.50	5.25	2.80	1.40	0.27	0.10	0.78	
11	4.00	0.99	10.00	0.99	22.65	11.75	4.00	2.40	1.20	0.28	0.20	0.80	
12	4.20	1.00	7.75	0.97	109.70	11.25	3.20	1.80	1.00	0.29	0.21	0.78	
13	4.00	1.00	5.00	0.94	47.80	8.00	2.40	1.80	1.00	0.28	0.21	0.78	
14	3.80	0.99	3.60	0.92	31.68	6.75	2.20	2.00	1.00	0.27	0.22	0.78	
15	3.40	0.99	2.80	0.98	18.80	5.25	2.00	2.00	0.99	0.27	0.23	0.79	
16	3.00	2.20	2.20	0.97	10.50	4.80	1.80	2.00	0.99	0.28	0.21	0.81	
17	2.80	4.40	2.00	0.99	7.00	3.60	1.80	2.20	0.88	0.27	0.08	0.84	
18	2.80	4.40	1.80	0.99	4.80	11.25	1.60	2.20	0.68	0.24	0.12	0.86	
19	2.40	4.00	1.40	0.98	7.00	14.95	1.00	2.40	0.61	0.20	0.20	0.88	
20	2.20	3.60	0.99	0.97	5.50	7.00	0.99	2.40	0.66	0.24	0.21	0.88	
21	2.60	2.60	1.00	0.99	5.00	5.25	0.97	2.80	0.80	0.26	0.14	0.89	
22	2.40	1.80	1.00	1.00	7.00	4.40	0.99	3.00	0.66	0.29	0.02	0.95	
23	2.40	1.40	0.99	1.00	10.25	3.80	1.40	2.80	0.45	0.24	0.04	0.99	
24	2.80	1.00	0.97	1.00	7.75	6.25	13.55	2.40	0.38	0.22	0.14	1.00	
25	3.00	2.40	1.00	1.20	5.25	15.30	16.70	2.20	0.28	0.10	0.16	0.90	
26	3.20	2.20	1.20	1.20	2.40	17.40	16.00	2.00	0.34	0.04	0.16	0.80	
27	3.20	2.60	1.00	1.20	32.72	8.75	11.25	1.80	0.27	0.21	0.16	0.80	
28	3.00	2.20	0.99	0.99	86.60	6.75	7.50	1.60	0.33	0.24	0.12	0.70	
29	2.40	2.00	1.40	0.99	58.40	5.00	8.00	1.40	0.34	0.21		0.70	
30	2.40	1.40	1.00	0.99	26.60	4.00	8.50	1.40	0.28	0.21		1.00	
31		4.00		0.99	12.00		6.75		0.34	0.24		1.00	
Total	64.20	72.17	134.64	30.65	615.78	242.20	150.05	79.55	28.08	7.90	4.09	20.49	1449.80 CMSDAY
Mean	2.14	2.33	4.49	0.99	19.86	8.07	4.84	2.65	0.91	0.25	0.15	0.66	3.97 CMS
Max	4.20	4.40	37.40	1.20	109.70	21.25	16.70	5.75	1.80	0.33	0.23	1.00	109.70 CMS
Min	0.00	0.99	0.97	0.89	0.97	3.60	0.97	1.40	0.27	0.04	0.02	0.10	0.00 CMS
Runoff	5.547	6.235	11.633	2.648	53.203	20.926	12.964	6.873	2.426	0.683	0.353	1.770	125.263 MCM

Momentary Peak 115.10 CMS, at 278.39 M (MSL), at 9.00 Hours, on Aug 12, 2001

Runoff Yield 18.82 Liters/Second/Square KM, Momentary Peak Yield 545.498 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 29,788 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +136.640 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right at the footpath of the bridge.

Elevation +149.341 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic 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 Float -

Rated by Current Meter 1965 - 1973, 1981 to date.

Stability of Channel Regimes Fairly stable because of backwater effect..

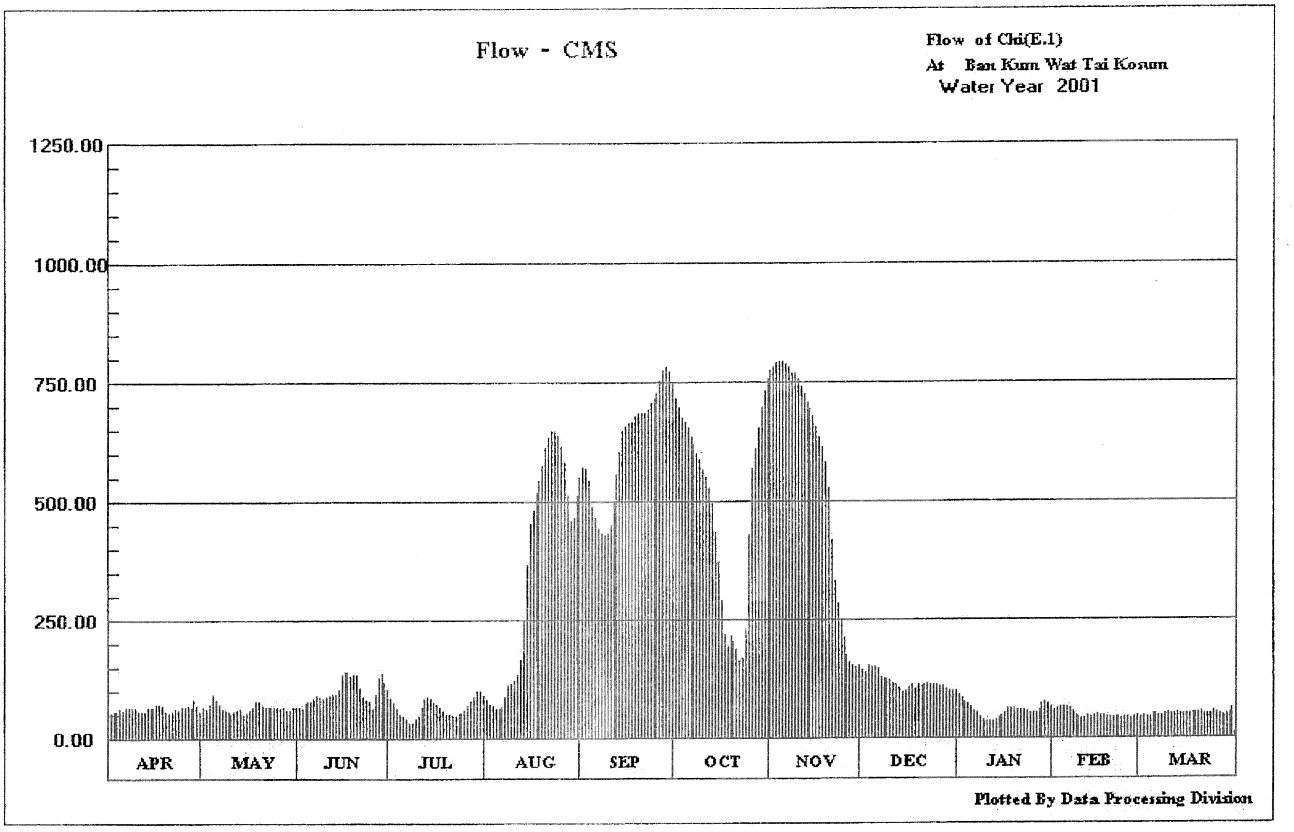
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow regulated by Maha Sarakham Barrage above gage site.
Stage-discharge relation defined by 33 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.79	138.00	137.99	138.34	138.33	143.86	144.95	145.37	139.37	138.51	137.92	137.58	
2	137.85	137.98	137.93	138.20	138.15	143.85	144.80	145.42	139.29	138.35	137.98	137.64	
3	137.81	138.16	138.17	137.98	138.08	143.64	144.65	145.48	139.54	138.19	137.99	137.59	
4	137.98	138.54	138.27	137.73	137.93	143.15	144.58	145.51	139.49	138.14	137.99	137.60	
5	137.87	138.33	138.25	137.67	137.94	142.97	144.47	145.49	139.49	138.01	138.00	137.72	
6	138.01	138.13	138.37	137.50	138.04	142.74	144.34	145.46	139.41	137.86	137.98	137.71	
7	138.04	137.96	138.48	137.29	138.43	142.67	144.23	145.40	139.16	137.75	137.81	137.68	
8	138.00	137.87	138.42	137.28	138.89	142.64	144.08	145.33	139.11	137.59	137.64	137.67	
9	137.99	137.82	138.36	137.52	138.97	142.65	143.99	145.31	139.09	137.45	137.61	137.74	
10	137.84	137.71	138.41	137.66	139.04	142.82	143.83	145.23	139.03	137.40	137.53	137.75	
11	137.86	137.84	138.47	137.99	139.26	143.23	143.68	145.11	138.97	137.39	137.52	137.69	
12	137.83	137.89	138.54	138.35	139.74	143.76	143.50	145.01	138.90	137.38	137.65	137.73	
13	138.04	137.94	138.55	138.41	140.77	144.11	143.22	144.88	138.79	137.48	137.61	137.78	
14	137.99	137.74	138.74	138.34	142.06	144.42	142.70	144.77	138.59	137.61	137.67	137.73	
15	138.01	137.76	139.25	138.22	142.84	144.49	142.12	144.66	138.69	137.65	137.72	137.69	
16	138.13	137.91	139.33	138.14	143.10	144.54	141.26	144.51	138.81	137.80	137.68	137.69	
17	138.12	138.04	139.34	138.02	143.41	144.58	140.41	144.33	138.89	137.98	137.63	137.70	
18	138.09	138.24	139.19	137.89	143.65	144.66	140.07	144.17	138.74	137.95	137.61	137.76	
19	137.83	138.24	139.23	137.74	143.90	144.70	140.37	143.93	138.89	137.93	137.59	137.78	
20	137.79	138.09	139.24	137.74	144.18	144.71	140.21	143.51	138.82	137.89	137.59	137.79	
21	137.82	138.01	138.79	137.66	144.34	144.72	140.00	142.54	138.91	137.88	137.59	137.81	
22	137.94	137.99	138.44	137.65	144.42	144.75	139.67	141.70	138.94	137.89	137.57	137.74	
23	137.92	137.99	138.32	137.80	144.44	144.88	139.79	141.18	138.90	137.84	137.55	137.69	
24	138.04	138.01	138.26	137.79	144.35	144.94	140.46	140.77	138.89	137.80	137.57	137.70	
25	138.02	138.02	137.93	137.91	144.20	145.03	142.64	140.34	138.89	137.77	137.57	137.82	
26	138.06	137.94	138.57	138.09	143.95	145.20	143.84	139.84	138.83	137.80	137.55	137.80	
27	138.03	137.99	139.15	138.28	143.36	145.36	144.16	139.64	138.82	137.92	137.57	137.72	
28	138.30	137.91	139.29	138.45	142.91	145.41	144.47	139.54	138.75	138.13	137.63	137.67	
29	138.06	137.89	138.99	138.64	142.97	145.35	144.81	139.49	138.69	138.18		137.69	
30	137.84	137.99	138.75	138.65	143.38	145.16	145.05	139.51	138.69	138.11		137.75	
31		137.99		138.47	143.68		145.24		138.66	138.01		137.94	
Mean	137.96	138.00	138.63	137.98	141.57	144.17	142.95	143.45	138.97	137.86	137.69	137.72	
Max	138.30	138.54	139.34	138.65	144.44	145.41	145.24	145.51	139.54	138.51	138.00	137.94	145.51
Min	137.79	137.71	137.93	137.28	137.93	142.64	139.67	139.49	138.59	137.38	137.52	137.58	137.28

Annual Max Momentary Gage Height 145.51 M (MSL), at 6.00 Hours, on Nov 4, 2001
Zero Gage at Bottom Elevation 136.64 M (MSL), River Bed 132.94 M (MSL)
Left Bank Elevation 146.54 M (MSL)
Right Bank Elevation 149.15 M (MSL), Drainage Area 29788 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	58.0	69.1	68.6	87.0	86.5	574.5	721.2	779.8	147.0	95.9	64.9	47.2	
2	61.2	68.0	65.4	79.6	77.0	573.2	700.8	786.8	141.8	87.5	68.0	50.1	
3	59.1	77.5	78.0	68.0	73.3	548.1	680.5	795.2	158.1	79.1	68.6	47.6	
4	68.0	97.5	83.3	54.8	65.4	491.7	671.1	799.4	154.9	76.5	68.6	48.0	
5	62.2	86.5	82.3	51.7	65.9	471.0	656.3	796.6	154.9	69.6	69.1	54.3	
6	69.6	75.9	88.6	44.0	71.2	444.6	638.9	792.4	149.7	61.7	68.0	53.8	
7	71.2	67.0	94.4	35.6	91.7	436.5	624.1	784.0	133.4	55.9	59.1	52.2	
8	69.1	62.2	91.2	35.2	116.0	433.1	604.0	774.2	130.2	47.6	50.1	51.7	
9	68.6	59.6	88.0	44.8	121.1	434.2	592.0	771.4	128.9	42.0	48.5	55.4	
10	60.6	53.8	90.7	51.2	125.6	453.8	570.5	760.2	125.0	40.0	45.2	55.9	
11	61.7	60.6	93.8	68.6	139.9	500.9	552.7	743.4	121.1	39.6	44.8	52.7	
12	60.1	63.3	97.5	87.5	171.1	561.9	532.0	729.4	116.5	39.2	50.6	54.8	
13	71.2	65.9	98.1	90.7	252.6	608.0	499.8	711.6	110.7	43.2	48.5	57.5	
14	68.6	55.4	108.1	87.0	370.0	649.6	440.0	696.8	100.2	48.5	51.7	54.8	
15	69.6	56.4	139.3	80.7	456.1	659.0	376.0	681.9	105.4	50.6	54.3	52.7	
16	75.9	64.3	144.5	76.5	486.0	665.7	294.4	661.6	111.8	58.5	52.2	52.7	
17	75.4	71.2	145.1	70.1	521.7	671.1	223.8	637.5	116.0	68.0	49.6	53.3	
18	73.8	81.7	135.4	63.3	549.2	681.9	196.6	616.1	108.1	66.4	48.5	56.4	
19	60.1	81.7	137.9	55.4	579.9	687.3	220.6	583.9	116.0	65.4	47.6	57.5	
20	58.0	73.8	138.6	55.4	617.4	688.7	207.8	533.1	112.3	63.3	47.6	58.0	
21	59.6	69.6	110.7	51.2	638.9	690.0	191.0	421.6	117.2	62.8	47.6	59.1	
22	65.9	68.6	92.3	50.6	649.6	694.1	166.5	334.0	119.1	63.3	46.8	55.4	
23	64.9	68.6	85.9	58.5	652.3	711.6	174.3	287.2	116.5	60.6	46.0	52.7	
24	71.2	69.6	82.8	58.0	640.2	719.8	227.8	252.6	116.0	58.5	46.8	53.3	
25	70.1	70.1	65.4	64.3	620.1	732.2	433.1	218.2	116.0	57.0	46.8	59.6	
26	72.2	65.9	99.1	73.8	586.6	756.0	571.9	178.2	112.8	58.5	46.0	58.5	
27	70.7	68.6	132.7	83.8	515.9	778.4	614.7	164.6	112.3	64.9	46.8	54.3	
28	84.9	64.3	141.8	92.8	464.2	785.4	656.3	158.1	108.6	75.9	49.6	51.7	
29	72.2	63.3	122.4	102.8	471.0	777.0	702.2	154.9	105.4	78.6		52.7	
30	60.6	68.6	108.6	103.3	518.2	750.4	735.0	156.1	105.4	74.9		55.9	
31		68.6		93.8	552.7		761.6		103.9	69.6		65.9	
Total	2014.3	2137.2	3110.5	2120.0	11347.3	18629.7	15237.5	16760.8	3775.2	1923.1	1481.9	1685.7	80223.2 CMSDAY
Mean	67.1	68.9	103.7	68.4	366.0	621.0	491.5	558.7	121.8	62.0	52.9	54.4	219.8 CMS
Max	84.9	97.5	145.1	103.3	652.3	785.4	761.6	799.4	158.1	95.9	69.1	65.9	799.4 CMS
Min	58.0	53.8	65.4	35.2	65.4	433.1	166.5	154.9	100.2	39.2	44.8	47.2	35.2 CMS
Runoff	174.04	184.65	268.75	183.17	980.41	1609.61	1316.52	1448.13	326.18	166.16	128.04	145.64	6931.29 MCM

Momentary Peak 799.40 CMS, at 145.51 M (MSL), at 6.00 Hours, on Nov 4, 2001

Runoff Yield 7.38 Liters/Second/Square KM, Momentary Peak Yield 26.836 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 4,254 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +186.070 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of the station office.

Elevation +197.540 m. (M.S.L.)

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 Float -

Rated by Current Meter 1967 - 1971, 1973, 1979, 1982 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

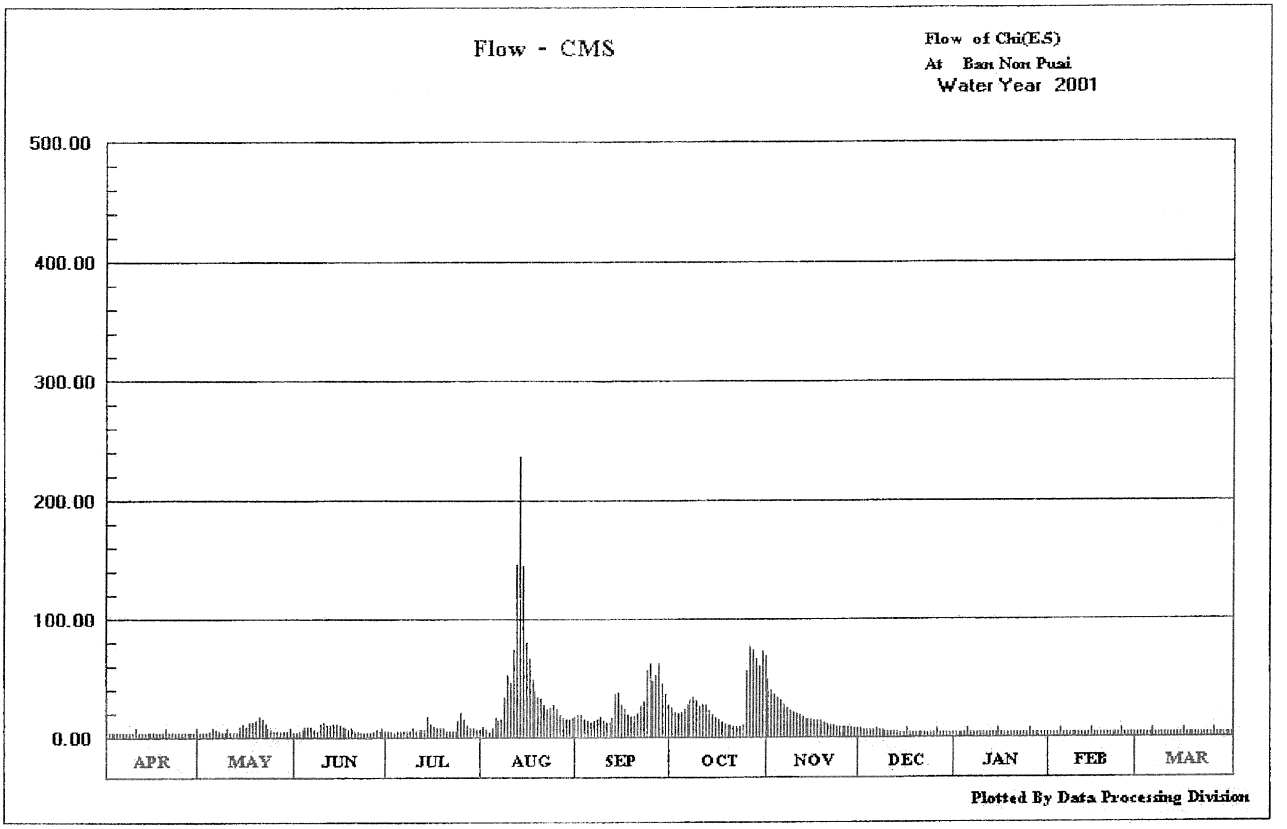
General Description Records fair. The local weir situated about 100 meters downstream from the gage site.

Stage-discharge relation defined by 31 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.00	190.01	190.10	190.12	190.22	190.45	190.53	190.82	190.19	190.02	189.97	190.00	
2	189.99	190.00	190.13	190.12	190.15	190.43	190.49	190.73	190.18	190.02	189.96	190.00	
3	189.98	190.07	190.16	190.10	190.10	190.38	190.46	190.68	190.18	190.02	189.96	189.96	
4	189.97	190.13	190.24	190.12	190.20	190.35	190.48	190.66	190.17	190.00	189.96	189.96	
5	189.97	190.19	190.24	190.12	190.40	190.32	190.52	190.62	190.16	190.01	189.96	189.96	
6	189.96	190.15	190.23	190.13	190.34	190.34	190.57	190.57	190.15	190.00	189.96	189.96	
7	189.96	190.11	190.18	190.13	190.38	190.38	190.62	190.54	190.15	189.99	189.96	190.01	
8	189.96	190.10	190.14	190.11	190.65	190.41	190.66	190.51	190.15	189.99	189.96	189.98	
9	189.95	190.07	190.31	190.12	190.86	190.35	190.63	190.48	190.14	189.98	189.95	189.98	
10	189.95	190.06	190.33	190.13	190.80	190.32	190.56	190.47	190.14	189.98	189.95	189.95	
11	189.94	190.04	190.26	190.17	191.15	190.32	190.57	190.44	190.11	189.98	189.95	189.94	
12	189.93	190.08	190.28	190.17	193.36	190.39	190.57	190.41	190.11	189.97	189.95	189.92	
13	189.93	190.09	190.29	190.16	194.91	190.68	190.50	190.38	190.11	189.96	189.95	189.92	
14	189.93	190.25	190.31	190.41	193.33	190.70	190.44	190.38	190.10	189.96	189.92	189.92	
15	189.93	190.30	190.28	190.31	191.51	190.58	190.40	190.38	190.10	189.96	189.92	189.92	
16	189.94	190.24	190.23	190.23	190.97	190.52	190.38	190.36	190.10	190.00	189.92	189.92	
17	189.98	190.32	190.19	190.20	190.82	190.44	190.33	190.36	190.10	190.00	189.92	189.92	
18	190.00	190.32	190.17	190.19	190.71	190.41	190.30	190.35	190.09	190.00	189.92	189.90	
19	190.00	190.36	190.18	190.16	190.65	190.42	190.28	190.33	190.08	190.00	189.90	189.84	
20	189.98	190.41	190.14	190.13	190.64	190.46	190.26	190.31	190.08	189.99	189.89	189.84	
21	189.96	190.37	190.11	190.11	190.58	190.55	190.24	190.28	190.07	189.99	189.88	189.84	
22	189.94	190.29	190.09	190.13	190.52	190.61	190.24	190.27	190.06	189.98	189.88	189.84	
23	189.92	190.21	190.09	190.13	190.54	190.90	190.24	190.25	190.06	189.98	189.88	189.83	
24	189.91	190.17	190.08	190.36	190.58	190.94	190.28	190.25	190.06	189.98	189.88	189.83	
25	189.91	190.14	190.08	190.49	190.52	190.81	190.90	190.24	190.04	189.98	189.88	190.08	
26	189.92	190.12	190.12	190.38	190.44	190.86	191.28	190.24	190.04	189.98	189.88	190.04	
27	189.92	190.12	190.16	190.28	190.39	190.94	191.16	190.23	190.04	189.98	189.92	189.98	
28	189.96	190.12	190.13	190.21	190.37	190.79	190.97	190.22	190.03	189.98	189.92	189.94	
29	190.00	190.11	190.11	190.19	190.38	190.69	190.93	190.21	190.02	189.98		189.95	
30	190.00	190.11	190.13	190.16	190.39	190.58	191.10	190.20	190.02	189.98		189.94	
31		190.10		190.15	190.41		190.99		190.02	189.98		189.92	
Mean	189.96	190.17	190.18	190.19	190.88	190.54	190.58	190.41	190.10	189.99	189.93	189.94	
Max	190.00	190.41	190.33	190.49	194.91	190.94	191.28	190.82	190.19	190.02	189.97	190.08	194.91
Min	189.91	190.00	190.08	190.10	190.10	190.32	190.24	190.20	190.02	189.96	189.88	189.83	189.83

Annual Max Momentary Gage Height 195.09 M (MSL), at 12.00 Hours, on Aug 13, 2001
Zero Gage at Bottom Elevation 186.07 M (MSL), River Bed 185.92 M (MSL)
Left Bank Elevation 197.06 M (MSL)
Right Bank Elevation 197.94 M (MSL), Drainage Area 4254 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.0	4.2	6.0	6.6	9.8	21.0	26.1	50.0	8.7	4.4	3.4	4.0	
2	3.8	4.0	6.9	6.6	7.5	19.8	23.4	41.7	8.4	4.4	3.2	4.0	
3	3.6	5.4	7.8	6.0	6.0	17.0	21.6	37.4	8.4	4.4	3.2	3.2	
4	3.4	6.9	10.6	6.6	9.0	15.5	22.8	35.8	8.1	4.0	3.2	3.2	
5	3.4	8.7	10.6	6.6	18.0	14.0	25.4	32.6	7.8	4.2	3.2	3.2	
6	3.2	7.5	10.2	6.9	15.0	15.0	28.9	28.9	7.5	4.0	3.2	3.2	
7	3.2	6.3	8.4	6.9	17.0	17.0	32.6	26.8	7.5	3.8	3.2	4.2	
8	3.2	6.0	7.2	6.3	35.0	18.6	35.8	24.7	7.5	3.8	3.2	3.6	
9	3.0	5.4	13.5	6.6	54.0	15.5	33.4	22.8	7.2	3.6	3.0	3.6	
10	3.0	5.2	14.5	6.9	48.0	14.0	28.2	22.2	7.2	3.6	3.0	3.0	
11	2.8	4.8	11.4	8.1	75.0	14.0	28.9	20.4	6.3	3.6	3.0	2.8	
12	2.6	5.6	12.2	8.1	148.0	17.5	28.9	18.6	6.3	3.4	3.0	2.4	
13	2.6	5.8	12.6	7.8	237.7	37.4	24.0	17.0	6.3	3.2	3.0	2.4	
14	2.6	11.0	13.5	18.6	146.5	39.0	20.4	17.0	6.0	3.2	2.4	2.4	
15	2.6	13.0	12.2	13.5	82.2	29.6	18.0	17.0	6.0	3.2	2.4	2.4	
16	2.8	10.6	10.2	10.2	67.8	25.4	17.0	16.0	6.0	4.0	2.4	2.4	
17	3.6	14.0	8.7	9.0	50.0	20.4	14.5	16.0	6.0	4.0	2.4	2.4	
18	4.0	14.0	8.1	8.7	39.9	18.6	13.0	15.5	5.8	4.0	2.4	2.0	
19	4.0	16.0	8.4	7.8	35.0	19.2	12.2	14.5	5.6	4.0	2.0	1.4	
20	3.6	18.6	7.2	6.9	34.2	21.6	11.4	13.5	5.6	3.8	1.9	1.4	
21	3.2	16.5	6.3	6.3	29.6	27.5	10.6	12.2	5.4	3.8	1.8	1.4	
22	2.8	12.6	5.8	6.9	25.4	31.8	10.6	11.8	5.2	3.6	1.8	1.4	
23	2.4	9.4	5.8	6.9	26.8	58.0	10.6	11.0	5.2	3.6	1.8	1.3	
24	2.2	8.1	5.6	16.0	29.6	63.6	12.2	11.0	5.2	3.6	1.8	1.3	
25	2.2	7.2	5.6	23.4	25.4	49.0	58.0	10.6	4.8	3.6	1.8	5.6	
26	2.4	6.6	6.6	17.0	20.4	54.0	77.6	10.6	4.8	3.6	1.8	4.8	
27	2.4	6.6	7.8	12.2	17.5	63.6	75.2	10.2	4.8	3.6	2.4	3.6	
28	3.2	6.6	6.9	9.4	16.5	47.1	67.8	9.8	4.6	3.6	2.4	2.8	
29	4.0	6.3	6.3	8.7	17.0	38.2	62.2	9.4	4.4	3.6		3.0	
30	4.0	6.3	6.9	7.8	17.5	29.6	74.0	9.0	4.4	3.6		2.8	
31		6.0		7.5	18.6		70.6		4.4	3.6		2.4	
Total	93.8	265.2	263.8	286.8	1379.9	872.5	995.9	594.0	191.4	116.4	72.3	87.6	5219.6 CMSDAY
Mean	3.1	8.6	8.8	9.3	44.5	29.1	32.1	19.8	6.2	3.8	2.6	2.8	14.3 CMS
Max	4.0	18.6	14.5	23.4	237.7	63.6	77.6	50.0	8.7	4.4	3.4	5.6	237.7 CMS
Min	2.2	4.0	5.6	6.0	6.0	14.0	10.6	9.0	4.4	3.2	1.8	1.3	1.3 CMS
Runoff	8.10	22.91	22.79	24.78	119.22	75.38	86.05	51.32	16.54	10.06	6.25	7.57	450.97 MCM

Momentary Peak 250.30 CMS, at 195.09 M (MSL), at 12.00 Hours, on Aug 13, 2001

Runoff Yield 3.36 Liters/Second/Square KM, Momentary Peak Yield 58.839 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 300 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +192.700 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM About 2 meters from the sling pole.

Elevation +199.546 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1973 to date.

Rating Operation

Period of Rating 1973 to date.

Rated by Float -

Rated by Current Meter 1973 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

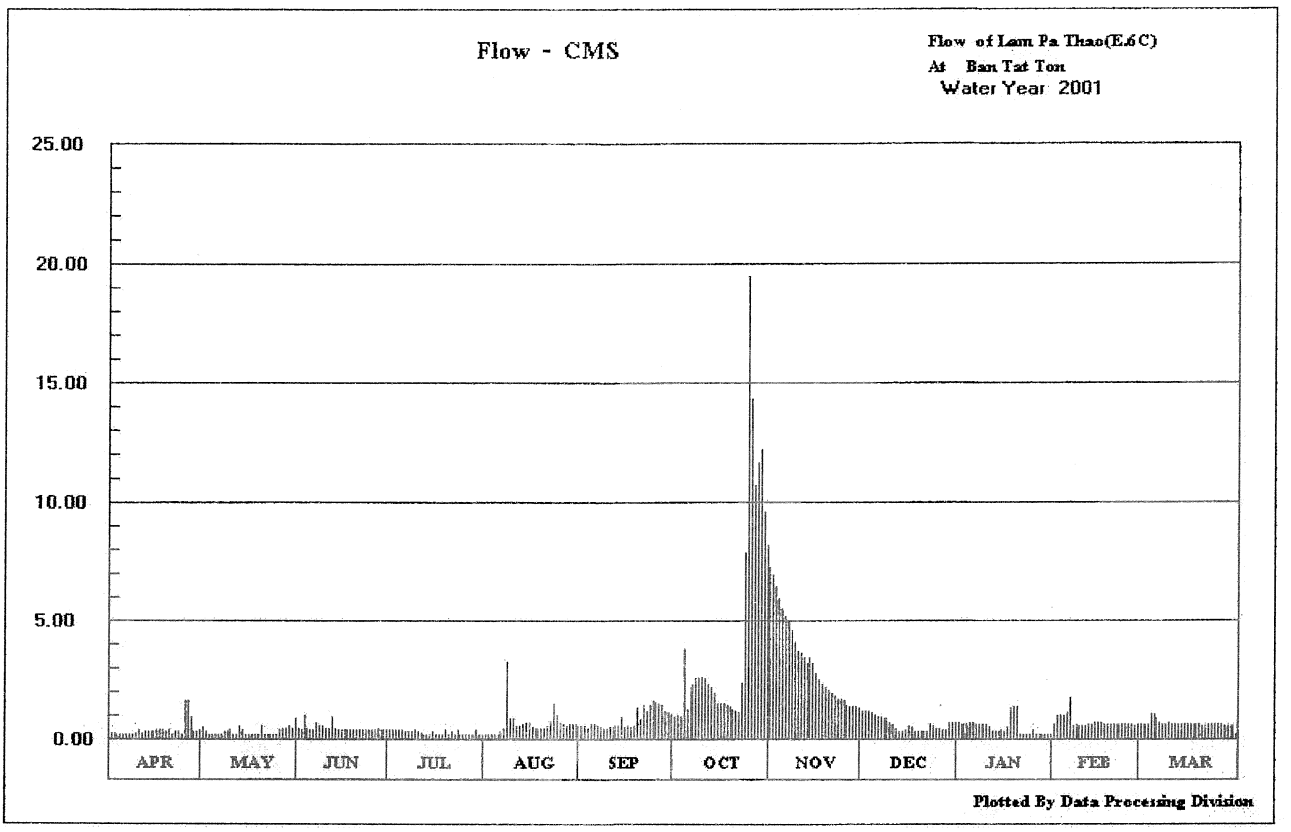
Overbank Flow Conditions No overbank flow.

General Description Records fair. Lam Pa Thao Dam situated about 5 kilometers and the weir situated about 2 kilometers upstream from the gage site. Stage-discharge relation defined by 48 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.54	192.61	192.60	192.58	192.51	192.62	192.74	194.07	192.81	192.66	192.64	192.65	
2	192.54	192.56	192.58	192.57	192.51	192.62	192.75	194.01	192.81	192.64	192.75	192.65	
3	192.53	192.49	192.76	192.57	192.51	192.60	192.74	193.90	192.80	192.64	192.75	192.65	
4	192.53	192.48	192.60	192.57	192.51	192.64	193.38	193.80	192.79	192.64	192.75	192.77	
5	192.53	192.48	192.58	192.57	192.52	192.64	192.83	193.72	192.76	192.66	192.79	192.77	
6	192.53	192.48	192.58	192.56	192.55	192.62	193.05	193.65	192.74	192.66	192.96	192.71	
7	192.53	192.51	192.67	192.56	192.59	192.61	193.08	193.61	192.73	192.64	192.62	192.66	
8	192.53	192.55	192.62	192.56	193.27	192.59	193.13	193.53	192.72	192.64	192.64	192.65	
9	192.54	192.55	192.62	192.56	192.71	192.59	193.13	193.43	192.71	192.64	192.63	192.65	
10	192.54	192.43	192.59	192.55	192.72	192.61	193.14	193.35	192.66	192.64	192.63	192.66	
11	192.54	192.44	192.60	192.54	192.62	192.61	193.13	193.34	192.65	192.61	192.63	192.64	
12	192.55	192.44	192.73	192.53	192.63	192.63	193.08	193.31	192.60	192.56	192.65	192.64	
13	192.55	192.62	192.59	192.50	192.65	192.62	193.05	193.26	192.56	192.56	192.65	192.64	
14	192.56	192.58	192.58	192.52	192.67	192.74	193.00	193.30	192.56	192.56	192.66	192.64	
15	192.56	192.48	192.58	192.56	192.67	192.61	192.90	193.25	192.57	192.55	192.66	192.64	
16	192.57	192.48	192.58	192.52	192.61	192.62	192.90	193.17	192.62	192.56	192.66	192.64	
17	192.57	192.48	192.58	192.42	192.60	192.61	192.89	193.12	192.61	192.61	192.65	192.64	
18	192.57	192.48	192.58	192.45	192.60	192.62	192.87	193.08	192.56	192.84	192.65	192.64	
19	192.56	192.48	192.58	192.45	192.60	192.84	192.85	193.05	192.56	192.85	192.65	192.64	
20	192.49	192.63	192.57	192.52	192.59	192.69	192.82	193.03	192.56	192.85	192.65	192.64	
21	192.49	192.48	192.57	192.55	192.62	192.87	192.80	193.00	192.55	192.52	192.64	192.63	
22	192.55	192.48	192.57	192.52	192.68	192.81	192.79	192.97	192.55	192.49	192.65	192.63	
23	192.56	192.48	192.57	192.57	192.89	192.88	193.09	192.95	192.64	192.46	192.65	192.65	
24	192.52	192.48	192.58	192.53	192.75	192.92	194.19	192.94	192.63	192.47	192.65	192.65	
25	192.93	192.48	192.58	192.51	192.67	192.91	195.85	192.92	192.60	192.46	192.65	192.64	
26	192.92	192.58	192.58	192.50	192.65	192.89	195.31	192.88	192.60	192.47	192.64	192.64	
27	192.74	192.60	192.60	192.50	192.62	192.88	194.76	192.86	192.58	192.46	192.63	192.64	
28	192.56	192.60	192.57	192.50	192.64	192.81	194.94	192.85	192.57	192.46	192.64	192.63	
29	192.56	192.62	192.58	192.50	192.65	192.78	195.05	192.85	192.66	192.46		192.63	
30	192.56	192.60	192.58	192.50	192.65	192.77	194.53	192.84	192.66	192.46		192.63	
31		192.71		192.51	192.62		194.26		192.66	192.46		192.63	
Mean	192.58	192.53	192.60	192.53	192.65	192.71	193.45	193.27	192.65	192.59	192.67	192.65	
Max	192.93	192.71	192.76	192.58	193.27	192.92	195.85	194.07	192.81	192.85	192.96	192.77	195.85
Min	192.49	192.43	192.57	192.42	192.51	192.59	192.74	192.84	192.55	192.46	192.62	192.63	192.42

Annual Max Momentary Gage Height 195.91 M (MSL), at 6.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 192.70 M (MSL), River Bed 192.21 M (MSL)
Left Bank Elevation 199.83 M (MSL)
Right Bank Elevation 199.63 M (MSL), Drainage Area 300 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.34	0.59	0.55	0.48	0.23	0.62	1.04	7.35	1.29	0.76	0.69	0.72	
2	0.34	0.41	0.48	0.45	0.23	0.62	1.08	7.05	1.29	0.69	1.08	0.72	
3	0.30	0.19	1.11	0.45	0.23	0.55	1.04	6.50	1.25	0.69	1.08	0.72	
4	0.30	0.17	0.55	0.45	0.23	0.69	3.90	6.00	1.21	0.69	1.08	1.15	
5	0.30	0.17	0.48	0.45	0.27	0.69	1.36	5.60	1.11	0.76	1.21	1.15	
6	0.30	0.17	0.48	0.41	0.38	0.62	2.25	5.25	1.04	0.76	1.84	0.94	
7	0.30	0.23	0.80	0.41	0.51	0.59	2.40	5.05	1.00	0.69	0.62	0.76	
8	0.30	0.38	0.62	0.41	3.35	0.51	2.65	4.65	0.97	0.69	0.69	0.72	
9	0.34	0.38	0.62	0.41	0.94	0.51	2.65	4.15	0.94	0.69	0.66	0.72	
10	0.34	0.09	0.51	0.38	0.97	0.59	2.70	3.75	0.76	0.69	0.66	0.76	
11	0.34	0.11	0.55	0.34	0.62	0.59	2.65	3.70	0.72	0.59	0.66	0.69	
12	0.38	0.11	1.00	0.30	0.66	0.66	2.40	3.55	0.55	0.41	0.72	0.69	
13	0.38	0.62	0.51	0.20	0.72	0.62	2.25	3.30	0.41	0.41	0.72	0.69	
14	0.41	0.48	0.48	0.27	0.80	1.04	2.00	3.50	0.41	0.41	0.76	0.69	
15	0.41	0.17	0.48	0.41	0.80	0.59	1.60	3.25	0.45	0.38	0.76	0.69	
16	0.45	0.17	0.48	0.27	0.59	0.62	1.60	2.85	0.62	0.41	0.76	0.69	
17	0.45	0.17	0.48	0.08	0.55	0.59	1.57	2.60	0.59	0.59	0.72	0.69	
18	0.45	0.17	0.48	0.13	0.55	0.62	1.50	2.40	0.41	1.39	0.72	0.69	
19	0.41	0.17	0.48	0.13	0.55	1.39	1.43	2.25	0.41	1.43	0.72	0.69	
20	0.19	0.66	0.45	0.27	0.51	0.87	1.32	2.15	0.41	1.43	0.72	0.69	
21	0.19	0.17	0.45	0.38	0.62	1.50	1.25	2.00	0.38	0.27	0.69	0.66	
22	0.38	0.17	0.45	0.27	0.83	1.29	1.21	1.88	0.38	0.19	0.72	0.66	
23	0.41	0.17	0.45	0.45	1.57	1.53	2.45	1.80	0.69	0.14	0.72	0.72	
24	0.27	0.17	0.48	0.30	1.08	1.68	7.95	1.76	0.66	0.16	0.72	0.72	
25	1.72	0.17	0.48	0.23	0.80	1.64	19.50	1.68	0.55	0.14	0.72	0.69	
26	1.68	0.48	0.48	0.20	0.72	1.57	14.39	1.53	0.55	0.16	0.69	0.69	
27	1.04	0.55	0.55	0.20	0.62	1.53	10.80	1.46	0.48	0.14	0.66	0.69	
28	0.41	0.55	0.45	0 20	0.69	1.29	11.70	1.43	0.45	0.14	0.69	0.66	
29	0.41	0.62	0.48	0.20	0.72	1.18	12.25	1.43	0.76	0.14		0.66	
30	0.41	0.55	0.48	0.20	0.72	1.15	9.65	1.39	0.76	0.14		0.66	
31		0.94		0.23	0.62		8.30		0.76	0.14		0.66	
Total	13.95	10.15	16.34	9.56	22.68	27.94	138.84	101.26	22.26	16.32	22.48	22.73	424.51 CMSDAY
Mean	0.47	0.33	0.54	0.31	0.73	0.93	4.48	3.38	0.72	0.53	0.80	0.73	1.16 CMS
Max	1.72	0.94	1.11	0.48	3.35	1.68	19.50	7.35	1.29	1.43	1.84	1.15	19.50 CMS
Min	0.19	0.09	0.45	0.08	0.23	0.51	1.04	1.39	0.38	0.14	0.62	0.66	0.08 CMS
Runoff	1.205	0.877	1.412	0.826	1.960	2.414	11.996	8.749	1.923	1.410	1.942	1.964	36.678 MCM

Momentary Peak 20.10 CMS, at 195.91 M (MSL), at 6.00 Hours, on Oct 25, 2001

Runoff Yield 3.88 Liters/Second/Square KM, Momentary Peak Yield 67.000 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

Chi River at Ban Din Dam, Maha Sarakham (E.8A)

Lat 16 - 13 - 51 N. **Long** 103 - 16 - 28 E.

Location on right bank at the bridge of Maha Sarakham - Kalasin Highway.

Ban Din Dam **Amphoe** Mueang **Changwat** Maha Sarakham

Drainage Area 30,764 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +133.210 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the automatic gage building.

Elevation +142.420 m. (M.S.L.)

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 - 1957, 1965 - 1976, 1982 to date.

Rated by Float -

Rated by Current Meter 1955 - 1957, 1965 - 1976, 1982 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

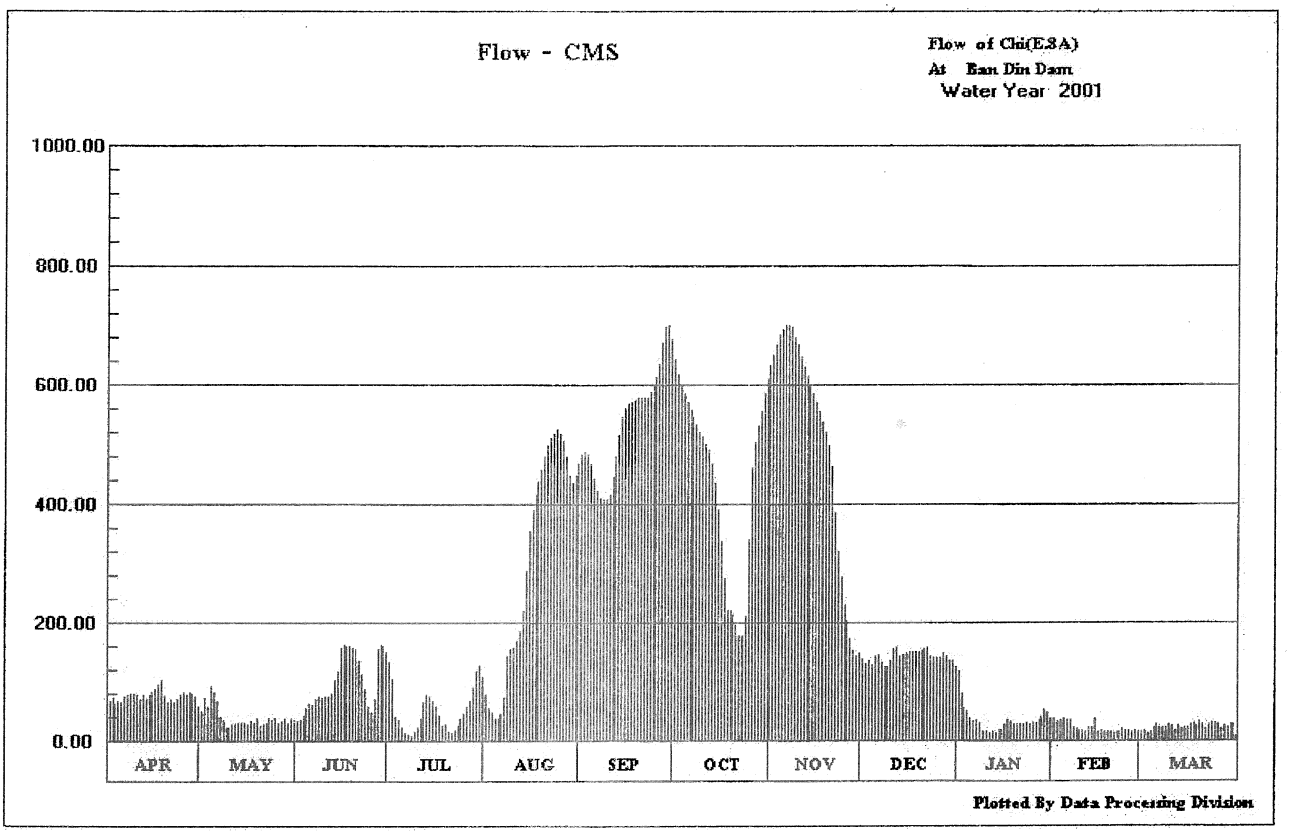
General Description Records fair. Wang Yang barrage situated downstream from the gage site.

Stage-discharge relation defined by 29 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	136.66	136.59	136.50	136.86	136.70	141.31	142.59	142.55	136.76	136.82	136.53	136.38	
2	136.68	136.68	136.51	136.79	136.61	141.38	142.48	142.62	136.61	136.71	136.50	136.41	
3	136.64	136.62	136.55	136.54	136.57	141.32	142.39	142.67	136.69	136.61	136.51	136.36	
4	136.66	136.75	136.61	136.51	136.52	141.15	142.28	142.72	136.56	136.59	136.52	136.39	
5	136.65	136.72	136.64	136.43	136.53	140.88	142.18	142.74	136.85	136.53	136.51	136.43	
6	136.69	136.66	136.63	136.36	136.56	140.64	142.07	142.76	136.86	136.50	136.51	136.46	
7	136.70	136.54	136.67	136.34	136.68	140.48	141.96	142.76	136.68	136.51	136.44	136.43	
8	136.71	136.51	136.69	136.32	136.89	140.45	141.85	142.75	136.52	136.48	136.42	136.44	
9	136.71	136.44	136.68	136.38	137.04	140.45	141.74	142.71	136.53	136.38	136.41	136.43	
10	136.70	136.44	136.69	136.44	137.10	140.56	141.64	142.67	136.69	136.39	136.40	136.46	
11	136.67	136.46	136.69	136.52	137.24	140.89	141.52	142.61	137.04	136.37	136.39	136.45	
12	136.70	136.47	136.71	136.65	137.52	141.29	141.39	142.54	137.08	136.39	136.43	136.41	
13	136.67	136.48	136.78	136.70	138.05	141.68	141.14	142.47	136.83	136.37	136.43	136.45	
14	136.70	136.48	136.82	136.69	138.98	141.96	140.78	142.40	136.86	136.40	136.52	136.42	
15	136.72	136.49	137.07	136.66	139.84	142.10	140.25	142.29	136.92	136.41	136.38	136.43	
16	136.73	136.46	137.16	136.62	140.25	142.16	139.61	142.18	136.96	136.47	136.41	136.43	
17	136.76	136.50	137.14	136.55	140.56	142.18	138.83	142.05	136.96	136.51	136.39	136.46	
18	136.78	136.49	137.12	136.45	140.81	142.20	138.06	141.91	136.94	136.50	136.38	136.48	
19	136.69	136.52	137.08	136.46	141.05	142.23	138.03	141.74	136.97	136.46	136.39	136.45	
20	136.65	136.45	137.02	136.38	141.29	142.23	137.92	141.49	136.98	136.47	136.37	136.50	
21	136.67	136.46	136.87	136.37	141.48	142.23	137.67	141.09	137.03	136.47	136.38	136.46	
22	136.65	136.49	136.81	136.40	141.63	142.24	137.41	140.21	137.07	136.46	136.39	136.42	
23	136.67	136.52	136.73	136.45	141.71	142.31	137.43	139.40	136.89	136.49	136.42	136.46	
24	136.70	136.51	136.62	136.52	141.79	142.40	137.91	138.84	136.88	136.46	136.40	136.48	
25	136.72	136.53	136.57	136.56	141.71	142.46	139.64	138.19	136.88	136.49	136.41	136.48	
26	136.70	136.49	136.67	136.62	141.55	142.56	141.07	137.77	136.88	136.49	136.38	136.46	
27	136.72	136.50	137.05	136.66	141.30	142.68	141.54	137.34	136.90	136.51	136.40	136.42	
28	136.71	136.52	137.17	136.74	140.93	142.75	141.84	137.00	136.89	136.54	136.39	136.45	
29	136.69	136.49	137.12	136.82	140.78	142.76	142.06	136.82	136.87	136.60		136.44	
30	136.62	136.52	136.96	136.85	140.93	142.70	142.29	136.91	136.87	136.57		136.46	
31		136.51		136.80	141.14		142.45		136.84	136.53		136.47	
Mean	136.69	136.53	136.81	136.56	139.28	141.75	140.65	141.07	136.85	136.50	136.43	136.44	
Max	136.78	136.75	137.17	136.86	141.79	142.76	142.59	142.76	137.08	136.82	136.53	136.50	142.76
Min	136.62	136.44	136.50	136.32	136.52	140.45	137.41	136.82	136.52	136.37	136.37	136.36	136.32

Annual Max Momentary Gage Height 142.77 M (MSL), at 6.00 Hours, on Sep 29, 2001
Zero Gage at Bottom Elevation 133.21 M (MSL), River Bed 133.57 M (MSL)
Left Bank Elevation 143.84 M (MSL)
Right Bank Elevation 144.25 M (MSL), Drainage Area 30764 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	70.4	54.0	36.0	134.8	80.0	485.4	645.6	636.0	141.6	119.6	42.0	17.6	
2	75.2	75.2	38.0	108.8	58.4	491.7	620.0	654.4	132.6	83.2	36.0	21.6	
3	65.6	60.8	46.0	44.0	50.0	486.3	602.6	670.4	137.4	58.4	38.0	15.2	
4	70.4	96.0	58.4	38.0	40.0	470.8	587.2	688.0	129.6	54.0	40.0	18.8	
5	68.0	86.4	65.6	24.8	42.0	446.3	573.6	696.0	147.0	42.0	38.0	24.8	
6	77.6	70.4	63.2	15.2	48.0	425.9	560.4	704.0	147.6	36.0	38.0	29.6	
7	80.0	44.0	72.8	12.8	75.2	412.3	547.2	704.0	136.8	38.0	26.4	24.8	
8	83.2	38.0	77.6	10.4	146.2	409.7	535.0	700.0	127.2	32.8	23.2	26.4	
9	83.2	26.4	75.2	17.6	158.4	409.7	524.5	684.0	127.8	17.6	21.6	24.8	
10	80.0	26.4	77.6	26.4	162.0	419.1	515.4	670.4	137.4	18.8	20.0	29.6	
11	72.8	29.6	77.6	40.0	170.4	447.2	504.5	651.2	158.4	16.4	18.8	28.0	
12	80.0	31.2	83.2	68.0	187.9	483.5	492.6	633.6	160.8	18.8	24.8	21.6	
13	72.8	32.8	105.6	80.0	223.6	519.1	469.9	618.0	145.8	16.4	24.8	28.0	
14	80.0	32.8	119.6	77.6	290.4	547.2	437.8	604.0	147.6	20.0	40.0	23.2	
15	86.4	34.4	160.2	70.4	359.2	564.0	392.7	588.6	151.2	21.6	17.6	24.8	
16	89.6	29.6	165.6	60.8	392.7	571.2	340.8	573.6	153.6	31.2	21.6	24.8	
17	99.2	36.0	164.4	46.0	419.1	573.6	278.9	558.0	153.6	38.0	18.8	29.6	
18	105.6	34.4	163.2	28.0	440.4	576.0	224.2	541.2	152.4	36.0	17.6	32.8	
19	77.6	40.0	160.8	29.6	461.7	580.2	222.2	524.5	154.2	29.6	18.8	28.0	
20	68.0	28.0	157.2	17.6	483.5	580.2	214.7	501.8	154.8	31.2	16.4	36.0	
21	72.8	29.6	138.6	16.4	500.8	580.2	198.0	465.3	157.8	31.2	17.6	29.6	
22	68.0	34.4	115.8	20.0	514.5	581.6	180.7	389.4	160.2	29.6	18.8	23.2	
23	72.8	40.0	89.6	28.0	521.8	591.4	182.0	324.0	146.2	34.4	23.2	29.6	
24	80.0	38.0	60.8	40.0	529.1	604.0	214.1	279.7	142.4	29.6	20.0	32.8	
25	86.4	42.0	50.0	48.0	521.8	616.0	343.2	233.3	142.4	34.4	21.6	32.8	
26	80.0	34.4	72.8	60.8	507.2	638.4	463.5	204.7	142.4	34.4	17.6	29.6	
27	86.4	36.0	159.0	70.4	484.4	673.6	506.3	176.4	150.0	38.0	20.0	23.2	
28	83.2	40.0	166.2	92.8	450.7	700.0	534.0	156.0	146.2	44.0	18.8	28.0	
29	77.6	34.4	163.2	119.6	437.8	704.0	559.2	145.2	138.6	56.0		26.4	
30	60.8	40.0	153.6	131.0	450.7	680.0	588.6	150.6	138.6	50.0		29.6	
31		38.0		112.0	469.9		614.0		127.2	42.0		31.2	
Total	2353.6	1313.2	3137.4	1689.8	9677.8	16268.6	13673.4	15126.3	4489.4	1183.2	700.0	826.0	70438.7 CMSDAY
Mean	78.5	42.4	104.6	54.5	312.2	542.3	441.1	504.2	144.8	38.2	25.0	26.6	193.0 CMS
Max	105.6	96.0	166.2	134.8	529.1	704.0	645.6	704.0	160.8	119.6	42.0	36.0	704.0 CMS
Min	60.8	26.4	36.0	10.4	40.0	409.7	180.7	145.2	127.2	16.4	16.4	15.2	10.4 CMS
Runoff	203.35	113.46	271.07	146.00	836.16	1405.61	1181.38	1306.91	387.88	102.23	60.48	71.37	6085.90 MCM

Momentary Peak 708.00 CMS, at 142.77 M (MSL), at 6.00 Hours, on Sep 29, 2001

Runoff Yield 6.27 Liters/Second/Square KM, Momentary Peak Yield 23.014 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 11,020 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +151.113 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 25 meters from the top staff gage.

Elevation +163.044 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00,12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic 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 Float -

Rated by Current Meter 1967 - 1980, 1983 - 1987, 1992 to date.

Stability of Channel Regimes Fair stable.

Overbank Flow Conditions No overbank flow.

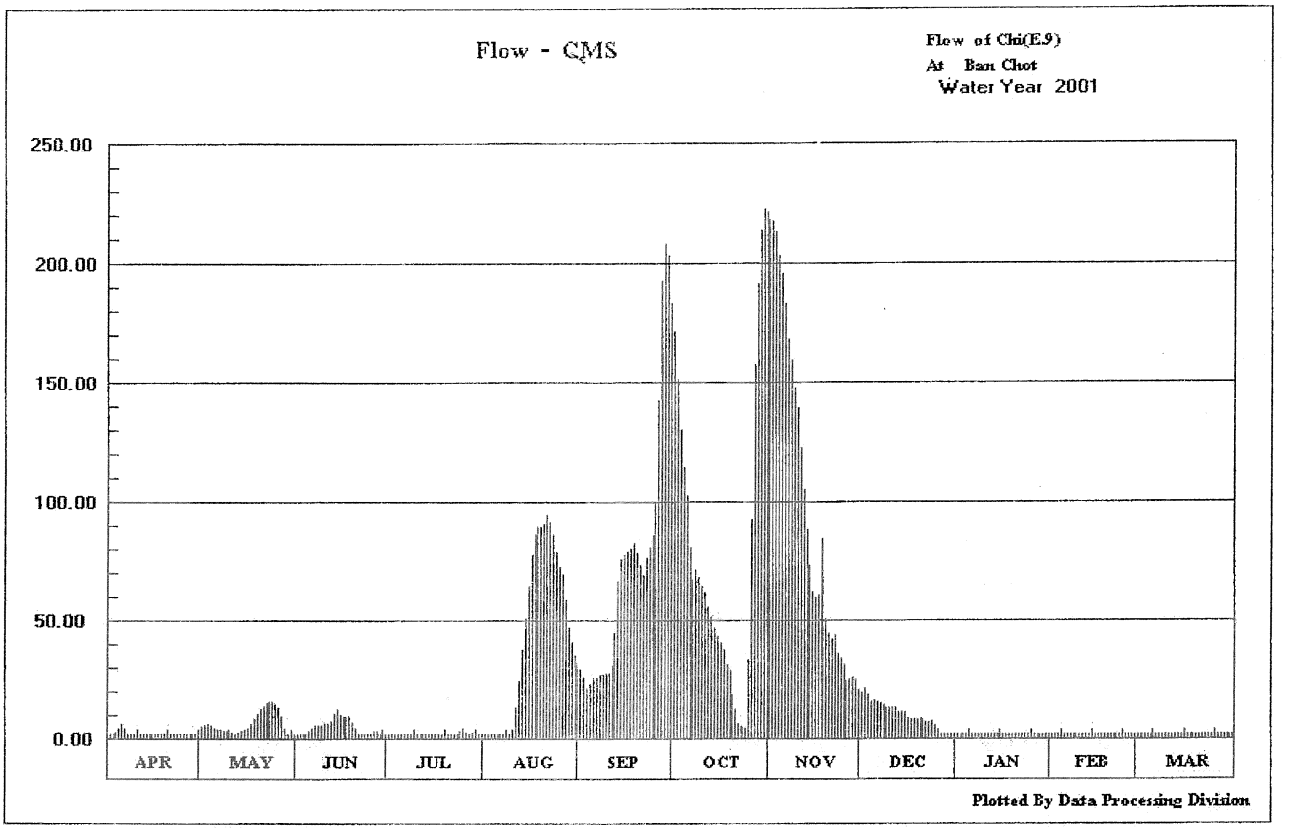
General Description Records good. The barrage situated above gage site.

Stage-discharge relation defined by 34 discharge measurement made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	152.39	152.80	152.21	152.45	152.40	154.62	159.59	160.77	154.03	152.55	152.47	152.01	
2	152.47	152.87	152.25	152.38	152.37	154.42	159.05	160.76	154.14	152.53	152.30	152.01	
3	152.59	152.90	152.34	152.29	152.28	154.14	158.43	160.64	153.95	152.49	152.26	152.04	
4	152.79	152.85	152.49	152.25	152.21	154.26	157.95	160.39	153.73	152.48	152.23	152.06	
5	152.90	152.79	152.64	152.24	152.24	154.41	157.57	160.20	153.75	152.46	152.23	152.10	
6	152.78	152.73	152.76	152.24	152.25	154.41	156.84	159.89	153.71	152.45	152.21	152.15	
7	152.54	152.70	152.86	152.23	152.21	154.47	156.31	159.51	153.65	152.44	152.22	152.19	
8	152.41	152.68	152.88	152.21	152.26	154.49	156.48	159.28	153.59	152.44	152.23	152.16	
9	152.25	152.67	152.88	152.19	152.53	154.51	156.35	158.95	153.51	152.44	152.23	152.15	
10	152.14	152.63	152.94	152.16	152.72	154.51	156.21	158.70	153.49	152.44	152.20	152.09	
11	152.12	152.59	152.91	152.06	153.49	154.72	156.11	158.20	153.49	152.43	152.16	152.03	
12	152.13	152.58	153.03	152.06	154.31	155.41	155.85	157.65	153.48	152.43	152.11	151.99	
13	152.15	152.62	153.31	152.06	155.13	156.28	155.69	157.09	153.33	152.40	152.05	151.95	
14	152.25	152.68	153.45	152.03	155.66	156.64	155.52	156.55	153.35	152.39	152.05	151.94	
15	152.30	152.73	153.25	152.01	156.21	156.71	155.37	156.10	153.33	152.38	152.05	151.94	
16	152.30	152.77	153.21	151.96	156.71	156.76	155.26	156.01	153.11	152.37	152.06	151.93	
17	152.25	152.92	153.21	151.89	157.03	156.81	155.12	156.06	153.09	152.37	152.06	151.92	
18	152.19	153.08	153.16	151.89	157.15	156.90	154.77	156.96	153.08	152.36	152.07	151.91	
19	152.18	153.31	153.00	151.93	157.15	156.75	154.61	155.67	153.06	152.34	152.08	151.91	
20	152.17	153.44	152.78	152.02	157.19	156.55	153.99	155.41	153.15	152.33	152.09	151.91	
21	152.15	153.54	152.51	152.19	157.30	156.39	153.46	155.31	153.07	152.29	152.10	151.89	
22	152.08	153.65	152.31	152.33	157.21	156.68	152.92	155.39	152.99	152.28	152.09	151.89	
23	152.05	153.72	152.20	152.54	157.03	156.84	152.80	155.01	152.97	152.28	152.08	151.90	
24	152.23	153.71	152.24	152.68	156.77	157.02	152.78	154.90	153.01	152.28	152.06	151.91	
25	152.28	153.58	152.46	152.78	156.52	157.50	154.87	154.75	152.85	152.27	152.06	151.93	
26	152.32	153.51	152.67	152.63	156.41	158.80	157.25	154.31	152.72	152.27	152.04	151.93	
27	152.35	153.16	152.66	152.33	155.99	160.13	159.22	154.37	152.57	152.27	152.06	151.94	
28	152.40	152.77	152.52	152.59	155.50	160.52	160.09	154.41	152.56	152.26	152.07	151.97	
29	152.54	152.49	152.50	152.61	155.26	160.40	160.67	154.35	152.56	152.26		151.99	
30	152.70	152.35	152.50	152.53	154.98	159.89	160.87	154.11	152.55	152.23		152.02	
31		152.27		152.47	154.81		160.85		152.55	152.27		152.04	
Mean	152.35	152.94	152.74	152.27	154.88	156.40	156.54	157.06	153.24	152.37	152.14	151.99	
Max	152.90	153.72	153.45	152.78	157.30	160.52	160.87	160.77	154.14	152.55	152.47	152.19	160.87
Min	152.05	152.27	152.20	151.89	152.21	154.14	152.78	154.11	152.55	152.23	152.04	151.89	151.89

Annual Max Momentary Gage Height 160.87 M (MSL), at 6.00 Hours, on Oct 30, 2001
Zero Gage at Bottom Elevation 151.11 M (MSL), River Bed 150.37 M (MSL)
Left Bank Elevation 164.40 M (MSL)
Right Bank Elevation 162.01 M (MSL), Drainage Area 11020 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.57	5.60	1.03	1.80	1.60	29.92	172.16	218.81	20.48	2.60	1.88	0.43	
2	1.88	6.44	1.15	1.54	1.51	26.72	151.86	218.42	22.24	2.36	1.30	0.43	
3	3.08	6.80	1.42	1.27	1.24	22.24	130.99	213.67	19.40	1.96	1.18	0.52	
4	5.48	6.20	1.96	1.15	1.03	24.16	115.40	203.79	16.76	1.92	1.09	0.58	
5	6.80	5.48	3.68	1.12	1.12	26.56	103.24	196.28	17.00	1.84	1.09	0.70	
6	5.36	4.76	5.12	1.12	1.15	26.56	81.68	184.02	16.52	1.80	1.03	0.85	
7	2.48	4.40	6.32	1.09	1.03	27.52	67.75	169.00	15.80	1.76	1.06	0.97	
8	1.64	4.16	6.56	1.03	1.18	27.84	72.00	160.42	15.08	1.76	1.09	0.88	
9	1.15	4.04	6.56	0.97	2.36	28.16	68.75	148.32	14.12	1.76	1.09	0.85	
10	0.82	3.56	7.28	0.88	4.64	28.16	65.25	139.95	13.88	1.76	1.00	0.67	
11	0.76	3.08	6.92	0.58	13.88	31.52	62.75	123.50	13.88	1.72	0.88	0.49	
12	0.79	2.96	8.36	0.58	24.96	45.25	56.25	105.80	13.76	1.72	0.73	0.37	
13	0.85	3.44	11.72	0.58	38.60	67.00	52.25	88.70	11.96	1.60	0.55	0.25	
14	1.15	4.16	13.40	0.49	51.50	76.28	48.00	73.85	12.20	1.57	0.55	0.22	
15	1.30	4.76	11.00	0.43	65.25	78.17	44.25	62.50	11.96	1.54	0.55	0.22	
16	1.30	5.24	10.52	0.28	78.17	79.52	41.50	60.25	9.32	1.51	0.58	0.19	
17	1.15	7.04	10.52	0.09	86.90	80.87	38.40	61.50	9.08	1.51	0.58	0.16	
18	0.97	8.96	9.92	0.09	90.50	83.30	32.32	84.92	8.96	1.48	0.61	0.13	
19	0.94	11.72	8.00	0.19	90.50	79.25	29.76	51.75	8.72	1.42	0.64	0.13	
20	0.91	13.28	5.36	0.46	91.70	73.85	19.88	45.25	9.80	1.39	0.67	0.13	
21	0.85	14.48	2.12	0.97	95.00	69.75	13.52	42.75	8.84	1.27	0.70	0.09	
22	0.64	15.80	1.33	1.39	92.30	77.36	7.04	44.75	7.88	1.24	0.67	0.09	
23	0.55	16.64	1.00	2.48	86.90	81.68	5.60	36.20	7.64	1.24	0.64	0.10	
24	1.09	16.52	1.12	4.16	79.79	86.60	5.36	34.40	8.12	1.24	0.58	0.13	
25	1.24	14.96	1.84	5.36	73.04	101.00	33.92	32.00	6.20	1.21	0.58	0.19	
26	1.36	14.12	4.04	3.56	70.25	143.30	93.50	24.96	4.64	1.21	0.52	0.19	
27	1.45	9.92	3.92	1.39	59.75	193.51	158.18	25.92	2.84	1.21	0.58	0.22	
28	1.60	5.24	2.24	3.08	47.50	208.93	191.93	26.56	2.72	1.18	0.61	0.31	
29	2.48	1.96	2.00	3.32	41.50	204.18	214.86	25.60	2.72	1.18		0.37	
30	4.40	1.45	2.00	2.36	35.68	184.02	223.15	21.76	2.60	1.09		0.46	
31		1.21		1.88	32.96		222.25		2.60	1.21		0.52	
Total	56.04	228.38	158.41	45.69	1363.49	2313.18	2623.75	2925.60	337.72	48.26	23.03	11.84	10135.39 CMSDAY
Mean	1.87	7.37	5.28	1.47	43.98	77.11	84.64	97.52	10.89	1.56	0.82	0.38	27.77 CMS
Max	6.80	16.64	13.40	5.36	95.00	208.93	223.15	218.81	22.24	2.60	1.88	0.97	223.15 CMS
Min	0.55	1.21	1.00	0.09	1.03	22.24	5.36	21.76	2.60	1.09	0.52	0.09	0.09 CMS
Runoff	4.842	19.732	13.687	3.948	117.806	199.859	226.692	252.772	29.179	4.170	1.990	1.023	875.698 MCM

Momentary Peak 223.15 CMS, at 160.87 M (MSL), at 6.00 Hours, on Oct 30, 2001

Runoff Yield 2.52 Liters/Second/Square KM. Momentary Peak Yield 20.250 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

Chi River at Ban Tha Phra, Khon Kaen (E.16A)

Lat 16 - 21 - 13 N. **Long** 102 - 48 - 10 E.

Location on left bank about 400 meters upstream from the bridge on highway.

Ban Tha Phra **Amphoe** Mueang **Changwat** Khon Kaen

Drainage Area 13,171 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +142.710 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank at the abutment of the bridge.

Elevation +154.907 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1957 to date.

Rating Operation

Period of Rating 1963, 1965 to date.

Rated by Float -

Rated by Current Meter 1963, 1965 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

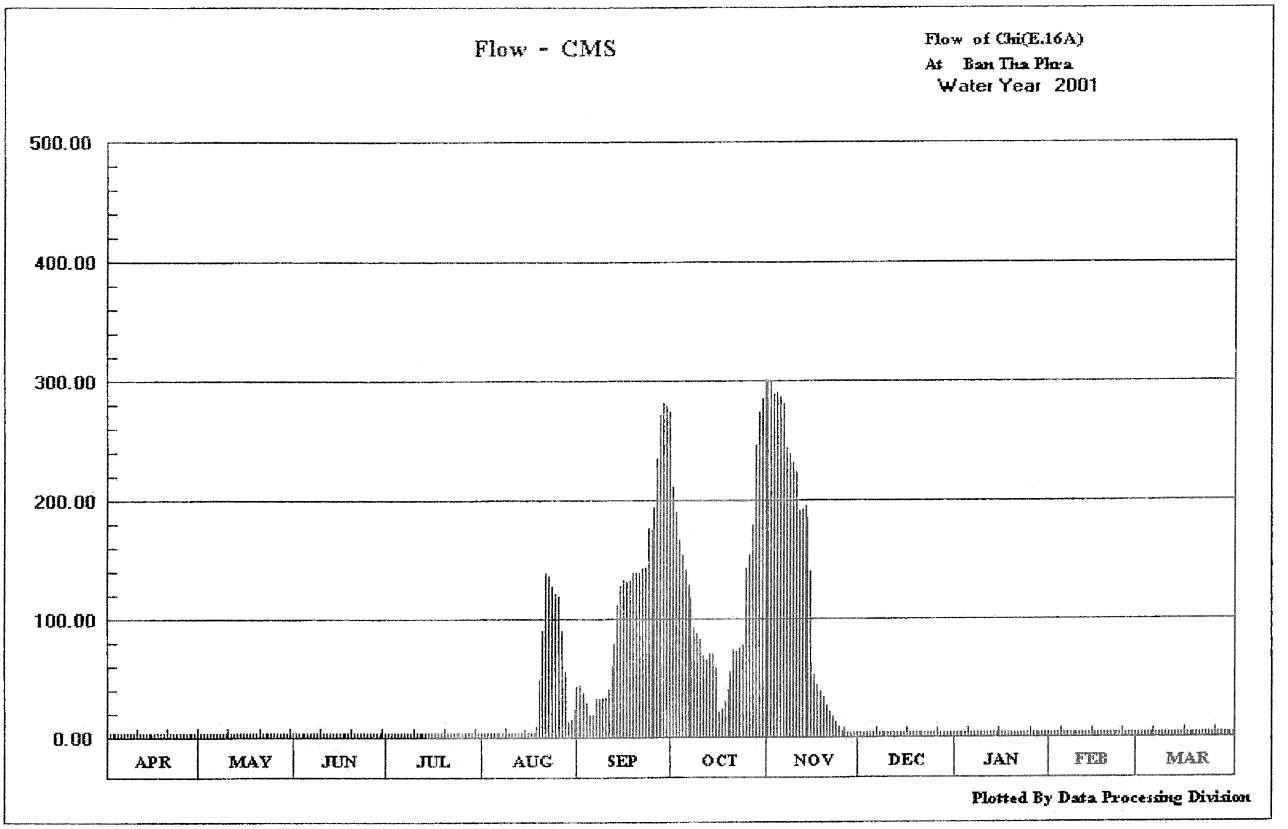
General Description Records good. Flow regulated by Kui Chuak barrage above gage site.

Stage-discharge relation defined by 18 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	146.79	146.45	146.76	146.76	146.72	146.01	149.10	150.27	146.71	146.73	146.76	146.74	
2	146.71	146.45	146.77	146.76	146.72	145.85	148.79	150.24	146.67	146.72	146.76	146.75	
3	146.70	146.46	146.77	146.77	146.72	145.61	148.46	150.13	146.69	146.72	146.76	146.75	
4	146.69	146.50	146.79	146.77	146.72	145.21	148.26	150.14	146.69	146.73	146.75	146.75	
5	146.69	146.58	146.79	146.77	146.72	145.21	148.06	150.10	146.68	146.73	146.75	146.75	
6	146.69	146.63	146.79	146.76	146.74	145.69	147.86	150.04	146.68	146.73	146.75	146.75	
7	146.68	146.75	146.79	146.77	146.75	145.71	147.64	149.56	146.71	146.74	146.74	146.75	
8	146.68	146.74	146.80	146.76	146.75	145.71	147.19	149.49	146.73	146.74	146.74	146.75	
9	146.67	146.73	146.79	146.78	146.75	145.75	147.09	149.39	146.74	146.75	146.75	146.75	
10	146.67	146.71	146.80	146.78	146.77	145.91	146.98	149.27	146.76	146.75	146.75	146.75	
11	146.66	146.69	146.80	146.78	146.77	146.50	146.70	148.81	146.74	146.75	146.76	146.74	
12	146.65	146.69	146.80	146.78	146.79	146.92	146.61	148.83	146.76	146.75	146.76	146.74	
13	146.64	146.68	146.79	146.78	146.79	147.53	146.71	148.87	146.71	146.75	146.76	146.74	
14	146.62	146.70	146.79	146.78	146.92	147.84	146.71	148.72	146.71	146.76	146.76	146.73	
15	146.59	146.69	146.79	146.78	146.43	147.91	146.46	148.04	146.71	146.76	146.76	146.73	
16	146.56	146.69	146.78	146.78	146.55	147.89	145.32	147.46	146.72	146.76	146.75	146.72	
17	146.53	146.73	146.78	146.71	146.64	147.91	145.43	147.39	146.72	146.76	146.75	146.72	
18	146.51	146.77	146.78	146.73	146.94	148.03	145.64	147.34	146.73	146.77	146.75	146.72	
19	146.50	146.77	146.78	146.73	147.43	148.02	145.91	147.29	146.74	146.77	146.75	146.71	
20	146.49	146.77	146.79	146.73	147.76	148.03	146.36	147.19	146.75	146.77	146.75	146.71	
21	146.49	146.77	146.79	146.73	148.02	148.09	146.81	147.12	146.76	146.77	146.76	146.72	
22	146.48	146.77	146.79	146.73	147.99	148.11	146.78	147.07	146.77	146.77	146.76	146.72	
23	146.48	146.77	146.79	146.73	147.84	148.60	146.82	147.01	146.78	146.76	146.76	146.73	
24	146.47	146.77	146.77	146.73	147.71	148.58	146.87	146.95	146.79	146.77	146.76	146.73	
25	146.47	146.77	146.77	146.75	147.67	148.84	148.09	146.90	146.79	146.77	146.76	146.73	
26	146.47	146.77	146.77	146.75	147.14	149.44	148.26	146.85	146.78	146.76	146.75	146.73	
27	146.47	146.77	146.76	146.75	146.36	149.93	148.64	146.83	146.77	146.76	146.75	146.73	
28	146.46	146.77	146.76	146.75	144.91	150.05	149.60	146.81	146.79	146.76	146.75	146.74	
29	146.46	146.78	146.76	146.75	145.01	150.01	149.96	146.81	146.79	146.76		146.72	
30	146.45	146.78	146.76	146.75	145.46	149.96	150.09	146.80	146.78	146.76		146.72	
31		146.78		146.73	145.98		150.26		146.79	146.76		146.71	
Mean	146.58	146.70	146.78	146.76	146.79	147.50	147.53	148.26	146.74	146.75	146.75	146.73	
Max	146.79	146.78	146.80	146.78	148.02	150.05	150.26	150.27	146.79	146.77	146.76	146.75	150.27
Min	146.45	146.45	146.76	146.71	144.91	145.21	145.32	146.80	146.67	146.72	146.74	146.71	144.91

Annual Max Momentary Gage Height 150.30 M (MSL), at 6.00 Hours, on Nov 2, 2001
Zero Gage at Bottom Elevation 142.71 M (MSL), River Bed 143.12 M (MSL)
Left Bank Elevation 153.31 M (MSL)
Right Bank Elevation 154.04 M (MSL), Drainage Area 13171 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	0.0	0.0	0.0	0.0	44.8	213.0	303.3	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	39.3	191.3	300.6	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	30.9	168.4	290.7	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	20.2	155.4	291.6	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	20.2	142.6	288.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	33.7	130.8	282.6	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	34.4	118.7	245.2	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	34.4	94.0	240.3	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	35.8	89.0	233.3	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	41.4	83.6	224.9	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	62.0	71.0	192.7	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	80.9	67.0	194.1	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	112.7	71.5	196.9	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	8.4	129.7	71.5	186.4	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	133.6	60.6	141.4	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	132.5	22.4	53.6	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	133.6	25.0	45.9	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	9.8	140.8	32.0	40.4	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	50.3	140.2	41.4	35.2	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	91.4	140.8	57.1	27.3	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	140.2	144.4	75.9	22.4	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	138.4	145.6	74.6	18.9	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	129.7	178.0	76.4	14.7	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	122.6	176.6	78.6	10.5	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	120.4	194.8	144.4	7.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	91.5	236.8	155.4	3.5	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	57.1	273.4	180.8	2.1	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	14.2	283.5	248.0	0.7	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	16.2	279.9	275.8	0.7	0.0	0.0		0.0	
30	0.0	0.0	0.0	0.0	26.0	275.8	287.1	0.0	0.0	0.0		0.0	
31		0.0		0.0	43.8		302.4		0.0	0.0		0.0	
Total	0.0	0.0	0.0	0.0	1060.0	3730.7	3805.7	3894.9	0.0	0.0	0.0	0.0	12491.3 CMSDAY
Mean	0.0	0.0	0.0	0.0	34.2	124.4	122.8	129.8	0.0	0.0	0.0	0.0	34.2 CMS
Max	0.0	0.0	0.0	0.0	140.2	283.5	302.4	303.3	0.0	0.0	0.0	0.0	303.3 CMS
Min	0.0	0.0	0.0	0.0	0.0	20.2	22.4	0.0	0.0	0.0	0.0	0.0	0.0 CMS
Runoff	0.00	0.00	0.00	0.00	91.58	322.33	328.81	336.52	0.00	0.00	0.00	0.00	1079.25 MCM

Momentary Peak 306.00 CMS, at 150.30 M (MSL), at 6.00 Hours, on Nov 2, 2001

Runoff Yield 2.60 Liters/Second/Square KM, Momentary Peak Yield 23.233 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

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

Location on left bank at Ban Tha Khrai.

Ban Tha Khrai **Amphoe** Selaphum **Changwat** Roi Et

Drainage Area 41,594 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +122.240 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank at the abutment of the bridge.

Elevation +135.187 m. (M.S.L.)

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 Float -

Rated by Current Meter 1974 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

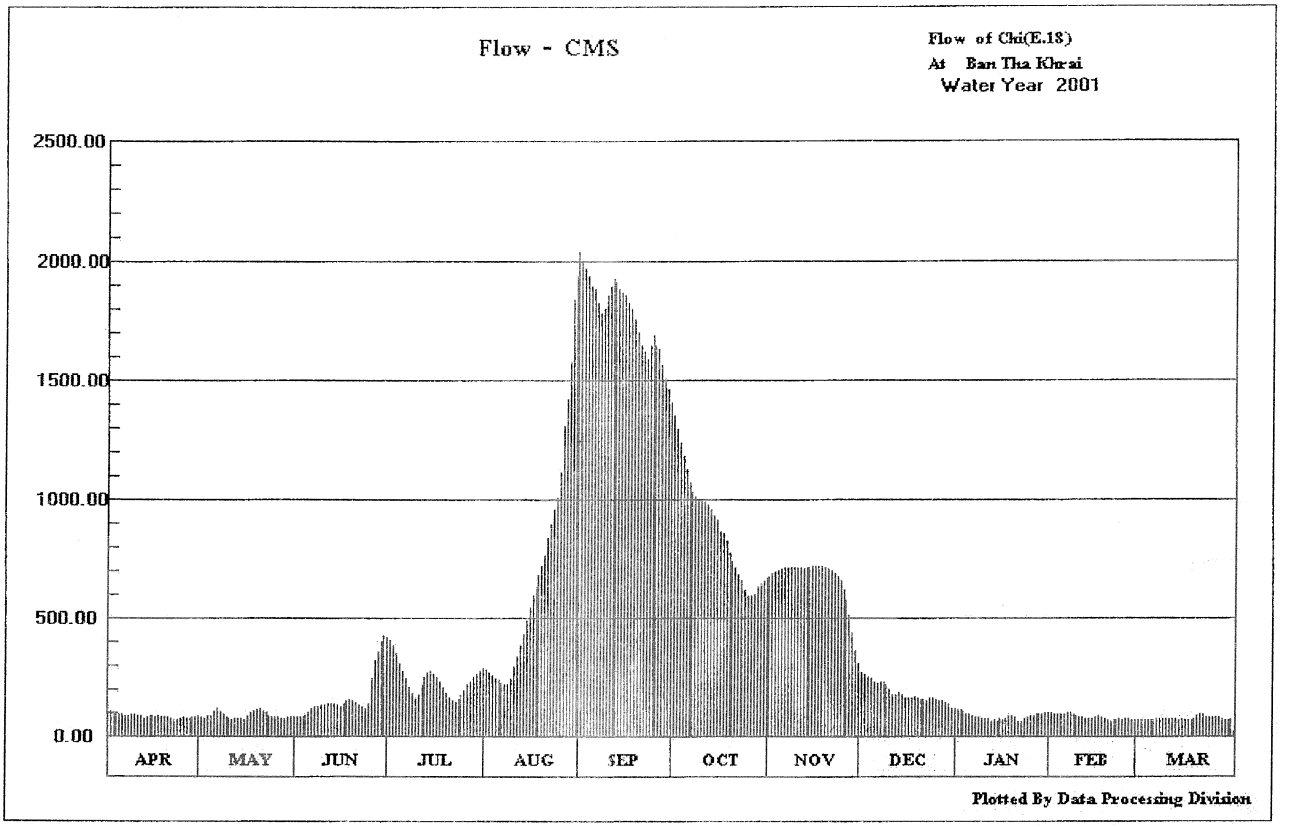
Overbank Flow Conditions Overbank flow starts at elevation +132.550 m.(M.S.L) and is including overbank flow.

General Description Records very good. Stage-discharge relation defined by 162 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	124.75	124.35	124.37	128.10	126.86	132.68	132.22	130.45	126.78	124.89	124.66	124.14	
2	124.68	124.26	124.33	127.87	126.72	132.66	132.18	130.52	126.65	124.89	124.63	124.13	
3	124.64	124.50	124.35	127.55	126.60	132.64	132.14	130.59	126.55	124.78	124.54	124.14	
4	124.59	124.53	124.43	127.17	126.51	132.61	132.10	130.63	126.45	124.62	124.56	124.17	
5	124.55	124.82	124.68	126.81	126.40	132.60	132.06	130.67	126.36	124.54	124.60	124.21	
6	124.46	124.93	124.97	126.45	126.26	132.56	132.02	130.69	126.29	124.46	124.64	124.22	
7	124.51	124.78	125.02	126.08	126.19	132.53	131.96	130.71	126.31	124.40	124.65	124.28	
8	124.54	124.59	125.08	125.75	126.22	132.54	131.89	130.72	126.33	124.33	124.57	124.28	
9	124.59	124.39	125.11	125.46	126.50	132.58	131.85	130.72	126.21	124.30	124.51	124.28	
10	124.49	124.24	125.15	125.68	127.01	132.61	131.84	130.72	126.03	124.30	124.40	124.28	
11	124.51	124.21	125.20	126.19	127.44	132.63	131.81	130.70	125.70	124.24	124.39	124.32	
12	124.29	124.24	125.24	126.53	127.89	132.62	131.76	130.68	125.70	124.11	124.23	124.32	
13	124.39	124.28	125.18	126.75	128.33	132.60	131.70	130.71	125.82	124.17	124.27	124.24	
14	124.48	124.24	125.15	126.81	128.87	132.59	131.62	130.73	125.68	124.07	124.30	124.13	
15	124.46	124.20	125.08	126.70	129.39	132.58	131.56	130.74	125.52	124.23	124.41	124.24	
16	124.39	124.51	125.23	126.54	129.82	132.56	131.38	130.76	125.51	124.22	124.48	124.15	
17	124.43	124.70	125.39	126.32	130.09	132.54	131.37	130.76	125.56	124.32	124.35	124.13	
18	124.42	124.80	125.42	126.10	130.48	132.51	131.25	130.74	125.58	124.53	124.28	124.12	
19	124.41	124.91	125.38	125.80	130.76	132.47	131.08	130.70	125.52	124.47	124.15	124.24	
20	124.34	124.96	125.25	125.57	131.04	132.43	130.90	130.66	125.46	124.40	124.11	124.51	
21	124.24	124.81	125.15	125.39	131.30	132.41	130.71	130.61	125.48	124.07	124.15	124.55	
22	124.21	124.66	125.06	125.32	131.50	132.39	130.48	130.53	125.39	124.11	124.16	124.55	
23	124.13	124.45	124.95	125.43	131.70	132.43	130.30	130.43	125.57	124.28	124.23	124.42	
24	124.26	124.33	125.24	125.69	131.88	132.46	130.01	130.27	125.56	124.41	124.22	124.35	
25	124.36	124.33	126.51	125.93	132.05	132.43	129.81	130.00	125.47	124.49	124.24	124.33	
26	124.31	124.35	127.26	126.19	132.19	132.42	129.80	129.64	125.41	124.52	124.31	124.36	
27	124.31	124.32	127.61	126.36	132.27	132.37	129.87	129.12	125.35	124.57	124.21	124.34	
28	124.34	124.32	128.06	126.56	132.38	132.33	130.08	128.40	125.30	124.54	124.21	124.26	
29	124.39	124.41	128.27	126.68	132.57	132.30	130.18	127.72	125.19	124.58		124.16	
30	124.49	124.37	128.25	126.85	132.64	132.26	130.28	127.14	124.97	124.69		124.15	
31		124.40		126.93	132.71		130.37		124.92	124.73		124.24	
Mean	124.43	124.49	125.55	126.37	129.44	132.51	131.18	130.25	125.76	124.43	124.37	124.27	
Max	124.75	124.96	128.27	128.10	132.71	132.68	132.22	130.76	126.78	124.89	124.66	124.55	132.71
Min	124.13	124.20	124.33	125.32	126.19	132.26	129.80	127.14	124.92	124.07	124.11	124.12	124.07

Annual Max Momentary Gage Height 132.71 M (MSL), at 6.00 Hours, on Aug 31, 2001
Zero Gage at Bottom Elevation 122.24 M (MSL), River Bed 120.19 M (MSL)
Left Bank Elevation 133.47 M (MSL)
Right Bank Elevation 132.54 M (MSL), Drainage Area 41594 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	112.5	88.0	89.2	412.8	287.1	2002.0	1358.0	686.3	279.8	122.3	106.6	75.4	
2	107.8	82.6	86.8	388.7	274.2	1974.0	1302.0	695.7	267.8	122.3	104.8	74.8	
3	105.4	97.0	88.0	356.1	263.2	1946.0	1246.0	705.1	258.6	114.6	99.4	75.4	
4	102.4	98.8	92.8	317.3	254.9	1904.0	1190.0	710.4	249.4	104.2	100.6	77.2	
5	100.0	117.4	107.8	282.5	244.8	1890.0	1134.0	715.8	241.1	99.4	103.0	79.6	
6	94.6	125.1	127.9	249.4	231.9	1834.0	1078.0	718.5	234.7	94.6	105.4	80.2	
7	97.6	114.6	131.5	215.4	225.5	1792.0	1038.4	721.1	236.5	91.0	106.0	83.8	
8	99.4	102.4	136.1	187.8	228.2	1806.0	1018.1	722.5	238.4	86.8	101.2	83.8	
9	102.4	90.4	138.4	165.0	254.0	1862.0	1006.5	722.5	227.3	85.0	97.6	83.8	
10	96.4	81.4	141.4	182.1	301.0	1904.0	1003.6	722.5	210.8	85.0	91.0	83.8	
11	97.6	79.6	145.2	225.5	344.9	1932.0	994.9	719.8	183.7	81.4	90.4	86.2	
12	84.4	81.4	148.2	256.8	390.8	1918.0	980.4	717.1	183.7	73.6	80.8	86.2	
13	90.4	83.8	143.7	277.0	437.6	1890.0	963.0	721.1	193.4	77.2	83.2	81.4	
14	95.8	81.4	141.4	282.5	496.0	1876.0	939.8	723.8	182.1	71.2	85.0	74.8	
15	94.6	79.0	136.1	272.4	555.2	1862.0	922.4	725.2	169.5	80.8	91.6	81.4	
16	90.4	97.6	147.5	257.7	605.1	1834.0	870.2	727.8	168.8	80.2	95.8	76.0	
17	92.8	109.0	159.6	237.4	638.1	1806.0	867.3	727.8	172.6	86.2	88.0	74.8	
18	92.2	116.0	161.9	217.2	690.3	1764.0	832.5	725.2	174.1	98.8	83.8	74.2	
19	91.6	123.7	158.9	191.8	727.8	1708.0	783.2	719.8	169.5	95.2	76.0	81.4	
20	87.4	127.2	149.0	173.3	771.6	1652.0	746.6	714.4	165.0	91.0	73.6	97.6	
21	81.4	116.7	141.4	159.6	847.0	1624.0	721.1	707.7	166.5	71.2	76.0	100.0	
22	79.6	106.6	134.6	154.3	905.0	1596.0	690.3	697.0	159.6	73.6	76.6	100.0	
23	74.8	94.0	126.5	162.7	963.0	1652.0	666.2	683.6	173.3	83.8	80.8	92.2	
24	82.6	86.8	148.2	182.9	1015.2	1694.0	627.3	662.2	172.6	91.6	80.2	88.0	
25	88.6	86.8	254.9	202.3	1120.0	1652.0	604.0	626.0	165.7	96.4	81.4	86.8	
26	85.6	88.0	326.5	225.5	1316.0	1638.0	602.8	584.2	161.2	98.2	85.6	88.6	
27	85.6	86.2	362.2	241.1	1428.0	1568.0	610.9	523.9	156.6	101.2	79.6	87.4	
28	87.4	86.2	408.5	259.5	1582.0	1512.0	636.7	445.2	152.8	99.4	79.6	82.6	
29	90.4	91.6	431.2	270.6	1848.0	1470.0	650.1	373.4	144.4	101.8		76.6	
30	96.4	89.2	429.0	286.2	1946.0	1414.0	663.5	314.3	127.9	108.4		76.0	
31		91.0		293.6	2044.0		675.6		124.4	111.1		81.4	
Total	2788.1	2999.5	5394.4	7587.0	23236.4	52976.0	27423.4	19959.9	5911.8	2877.5	2503.6	2571.4	156229.0 CMSDAY
Mean	92.9	96.8	179.8	244.7	749.6	1765.9	884.6	665.3	190.7	92.8	89.4	82.9	428.0 CMS
Max	112.5	127.2	431.2	412.8	2044.0	2002.0	1358.0	727.8	279.8	122.3	106.6	100.0	2044.0 CMS
Min	74.8	79.0	86.8	154.3	225.5	1414.0	602.8	314.3	124.4	71.2	73.6	74.2	71.2 CMS
Runoff	240.89	259.16	466.08	655.52	2007.63	4577.13	2369.38	1724.54	510.78	248.62	216.31	222.17	13498.19 MCM

Momentary Peak 2044.01 CMS, at 132.71 M (MSL), at 6.00 Hours, on Aug 31, 2001

Runoff Yield 10.29 Liters/Second/Square KM, Momentary Peak Yield 49.142 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

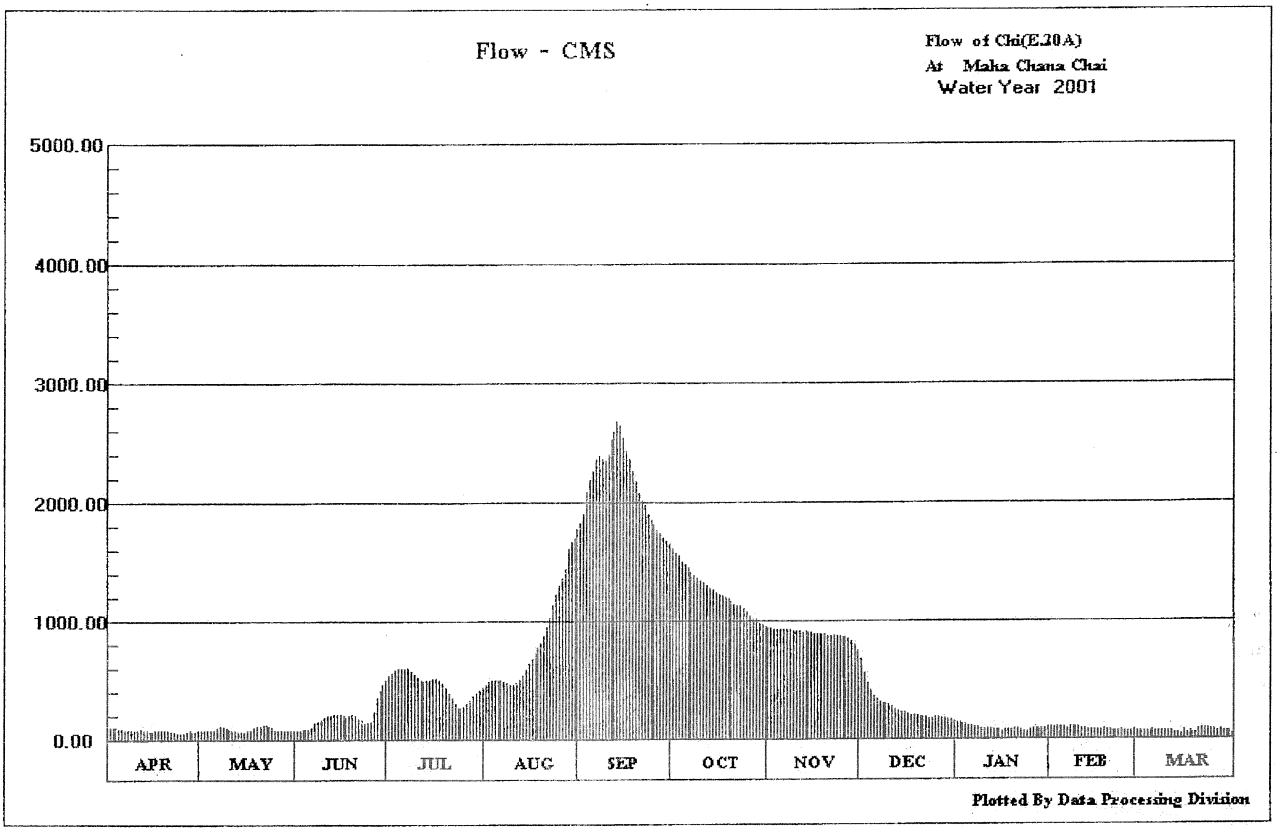
Lat 15 - 31 - 22 N. Long 104 - 15 - 13 E.

Location		on right bank about 800 meters upstream from E.20 station.
	Ban -	**Amphoe** Maha Chana Chai **Changwat** Yasothon
Drainage Area		47,818 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+112.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On right bank at the abutment of the bridge.
	Elevation	+127.137 m. (M.S.L.)
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.
Period of Available Gage Records		1973 to date.
Rating Operation		
	Period of Rating	1974 to date.
	Rated by Float	-
	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 +118.960 m.(M.S.L.) and is including overbank flow.
General Description		Records very good. Tat Noi barrage situated downstream from the gage site.
		Stage-discharge relation defined by 157 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	115.96	115.64	115.69	119.30	118.90	122.92	122.68	121.44	120.16	116.35	115.95	115.58	
2	115.95	115.71	115.70	119.48	119.01	123.01	122.63	121.43	119.52	116.29	115.97	115.54	
3	115.93	115.66	115.76	119.62	119.10	123.18	122.60	121.42	118.95	116.26	115.94	115.50	
4	115.85	115.61	115.75	119.69	119.13	123.27	122.54	121.41	118.50	116.22	115.91	115.48	
5	115.75	115.71	115.76	119.72	119.13	123.33	122.50	121.41	118.17	116.14	115.88	115.48	
6	115.71	115.89	115.92	119.74	119.10	123.42	122.46	121.40	117.96	116.03	115.87	115.50	
7	115.70	116.06	116.30	119.69	119.03	123.44	122.41	121.40	117.81	115.94	115.88	115.53	
8	115.66	116.14	116.45	119.57	118.92	123.42	122.37	121.39	117.71	115.90	115.93	115.55	
9	115.68	115.99	116.62	119.42	118.84	123.41	122.33	121.38	117.66	115.83	115.92	115.54	
10	115.73	115.83	116.75	119.26	118.84	123.45	122.30	121.37	117.60	115.79	115.88	115.56	
11	115.74	115.65	116.86	119.10	118.94	123.55	122.26	121.36	117.50	115.76	115.82	115.56	
12	115.71	115.64	116.94	119.05	119.11	123.60	122.22	121.34	117.32	115.77	115.76	115.53	
13	115.65	115.58	116.97	119.07	119.34	123.65	122.18	121.35	117.18	115.70	115.68	115.40	
14	115.55	115.55	116.98	119.14	119.62	123.63	122.16	121.33	117.12	115.63	115.62	115.31	
15	115.56	115.56	116.95	119.19	119.91	123.56	122.13	121.31	117.08	115.59	115.62	115.04	
16	115.65	115.62	116.86	119.18	120.18	123.47	122.11	121.29	116.98	115.58	115.65	115.03	
17	115.70	115.65	116.84	119.12	120.42	123.42	122.09	121.28	116.89	115.65	115.72	115.43	
18	115.61	115.90	116.93	118.95	120.67	123.34	122.06	121.27	116.86	115.63	115.74	115.47	
19	115.60	116.02	116.96	118.70	120.93	123.26	122.04	121.26	116.85	115.70	115.68	115.31	
20	115.61	116.07	116.90	118.36	121.22	123.17	122.00	121.25	116.83	115.78	115.61	115.38	
21	115.58	116.15	116.70	118.07	121.47	123.11	121.96	121.24	116.79	115.83	115.53	115.65	
22	115.49	116.17	116.54	117.73	121.71	123.07	121.92	121.23	116.76	115.73	115.50	115.82	
23	115.40	116.02	116.34	117.44	121.94	123.01	121.92	121.23	116.73	115.58	115.50	115.80	
24	115.38	115.89	116.35	117.35	122.11	122.95	121.88	121.21	116.73	115.57	115.50	115.75	
25	115.39	115.66	116.41	117.45	122.23	122.91	121.82	121.19	116.78	115.65	115.55	115.67	
26	115.55	115.61	117.24	117.66	122.34	122.86	121.74	121.15	116.77	115.75	115.57	115.63	
27	115.60	115.63	118.06	117.90	122.45	122.82	121.67	121.09	116.74	115.79	115.58	115.54	
28	115.54	115.64	118.54	118.15	122.67	122.79	121.66	121.01	116.65	115.84	115.60	115.60	
29	115.53	115.61	118.85	118.36	122.73	122.75	121.58	120.87	116.61	115.85		115.58	
30	115.57	115.70	119.11	118.56	122.78	122.72	121.52	120.59	116.55	115.86		115.52	
31		115.73		118.73	122.87		121.47		116.46	115.90		115.48	
Mean	115.64	115.78	116.80	118.80	120.50	123.22	122.10	121.26	117.36	115.84	115.73	115.51	
Max	115.96	116.17	119.11	119.74	122.87	123.65	122.68	121.44	120.16	116.35	115.97	115.82	123.65
Min	115.38	115.55	115.69	117.35	118.84	122.72	121.47	120.59	116.46	115.57	115.50	115.03	115.03

Annual Max Momentary Gage Height 123.66 M (MSL), at 15.00 Hours, on Sep 31, 2001
Zero Gage at Bottom Elevation 112.00 M (MSL), River Bed 112.51 M (MSL)
Left Bank Elevation 1I8.95 M (MSL)
Right Bank Elevation 120.18 M (MSL), Drainage Area 47818 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	118.2	89.9	94.1	548.0	485.0	1838.0	1634.0	952.0	693.8	155.0	117.2	84.9	
2	117.2	95.7	94.9	576.8	501.6	1921.0	1594.0	949.0	583.4	149.1	119.1	81.6	
3	115.4	91.6	99.9	600.4	516.0	2108.0	1570.0	946.0	492.5	146.3	116.3	78.3	
4	107.9	87.4	99.0	612.3	520.8	2207.0	1522.0	943.0	425.0	142.5	113.5	76.6	
5	99.0	95.7	99.9	617.4	520.8	2273.0	1490.0	943.0	378.8	135.0	110.7	76.6	
6	95.7	111.6	114.4	620.8	516.0	2376.0	1462.0	940.0	350.0	124.7	109.8	78.3	
7	94.9	127.5	150.0	612.3	504.8	2402.0	1427.0	940.0	331.2	116.3	110.7	80.8	
8	91.6	135.0	165.0	591.9	488.0	2376.0	1402.0	937.0	318.7	112.6	115.4	82.5	
9	93.2	121.0	182.5	567.2	476.0	2363.0	1378.0	934.0	312.5	106.0	114.4	81.6	
10	97.4	106.0	198.8	541.6	476.0	2415.0	1360.0	931.0	305.0	102.4	110.7	83.3	
11	98.2	90.7	212.5	516.0	491.0	2545.0	1336.0	928.0	292.5	99.9	105.1	83.3	
12	95.7	89.9	222.5	508.0	517.6	2610.0	1312.0	922.0	270.0	100.7	99.9	80.8	
13	90.7	84.9	226.3	511.2	554.4	2690.0	1288.0	925.0	252.5	94.9	93.2	70.0	
14	82.5	82.5	227.5	522.4	600.4	2658.0	1276.0	919.0	245.0	89.1	88.3	62.6	
15	83.3	83.3	223.7	530.4	649.7	2558.0	1258.0	913.0	240.0	85.8	88.3	44.4	
16	90.7	88.3	212.5	528.8	697.4	2441.0	1246.0	907.5	227.5	84.9	90.7	43.7	
17	94.9	90.7	210.0	519.2	740.6	2376.0	1234.0	905.0	216.3	90.7	96.6	72.5	
18	87.4	112.6	221.3	492.5	785.6	2284.0	1216.0	902.5	212.5	89.1	98.2	75.8	
19	86.6	123.8	225.0	455.0	832.4	2196.0	1204.0	900.0	211.2	94.9	93.2	62.6	
20	87.4	128.5	217.5	405.4	890.0	2097.0	1180.0	897.5	208.8	101.5	87.4	68.4	
21	84.9	136.0	192.5	364.8	961.0	2031.0	1160.0	895.0	203.8	106.0	80.8	90.7	
22	77.5	137.8	174.0	321.3	1044.0	1987.0	1140.0	892.5	200.0	97.4	78.3	105.1	
23	70.0	123.8	154.0	285.0	1150.0	1921.0	1140.0	892.5	196.3	84.9	78.3	103.2	
24	68.4	111.6	155.0	273.7	1246.0	1865.0	1120.0	887.5	196.3	84.1	78.3	99.0	
25	69.2	91.6	161.0	286.2	1318.0	1829.0	1090.0	883.0	202.5	90.7	82.5	92.4	
26	82.5	87.4	260.0	312.5	1384.0	1784.0	1056.0	875.0	201.2	99.0	84.1	89.1	
27	86.6	89.1	363.4	342.5	1455.0	1748.0	1028.0	863.0	197.5	102.4	84.9	81.6	
28	81.6	89.9	431.0	376.0	1626.0	1722.0	1024.0	847.0	186.3	106.9	86.6	86.6	
29	80.8	87.4	477.5	405.4	1674.0	1690.0	994.0	821.6	181.3	107.9		84.9	
30	84.1	94.9	517.6	434.0	1714.0	1666.0	976.0	771.2	175.0	108.8		80.0	
31		97.4		459.5	1793.0		961.0		166.0	112.6		76.6	
Total	2713.5	3183.5	6383.3	14738.5	27129.1	64977.0	39078.0	27162.8	8673.4	3322.1	2732.5	2457.8	202551.5 CMSDAY
Mean	90.5	102.7	212.8	475.4	875.1	2165.9	1260.6	905.4	279.8	107.2	97.6	79.3	554.9 CMS
Max	118.2	137.8	517.6	620.8	1793.0	2690.0	1634.0	952.0	693.8	155.0	119.1	105.1	2690.0 CMS
Min	68.4	82.5	94.1	273.7	476.0	1666.0	961.0	771.2	166.0	84.1	78.3	43.7	43.7 CMS
Runoff	234.45	275.05	551.52	1273.41	2343.95	5614.01	3376.34	2346.87	749.38	287.03	236.09	212.35	17500.45 MCM

Momentary Peak 2706.01 CMS, at 123.66 M (MSL), at 15.00 Hours, on Sep 31, 2001

Runoff Yield 11.61 Liters/Second/Square KM, Momentary Peak Yield 56.590 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

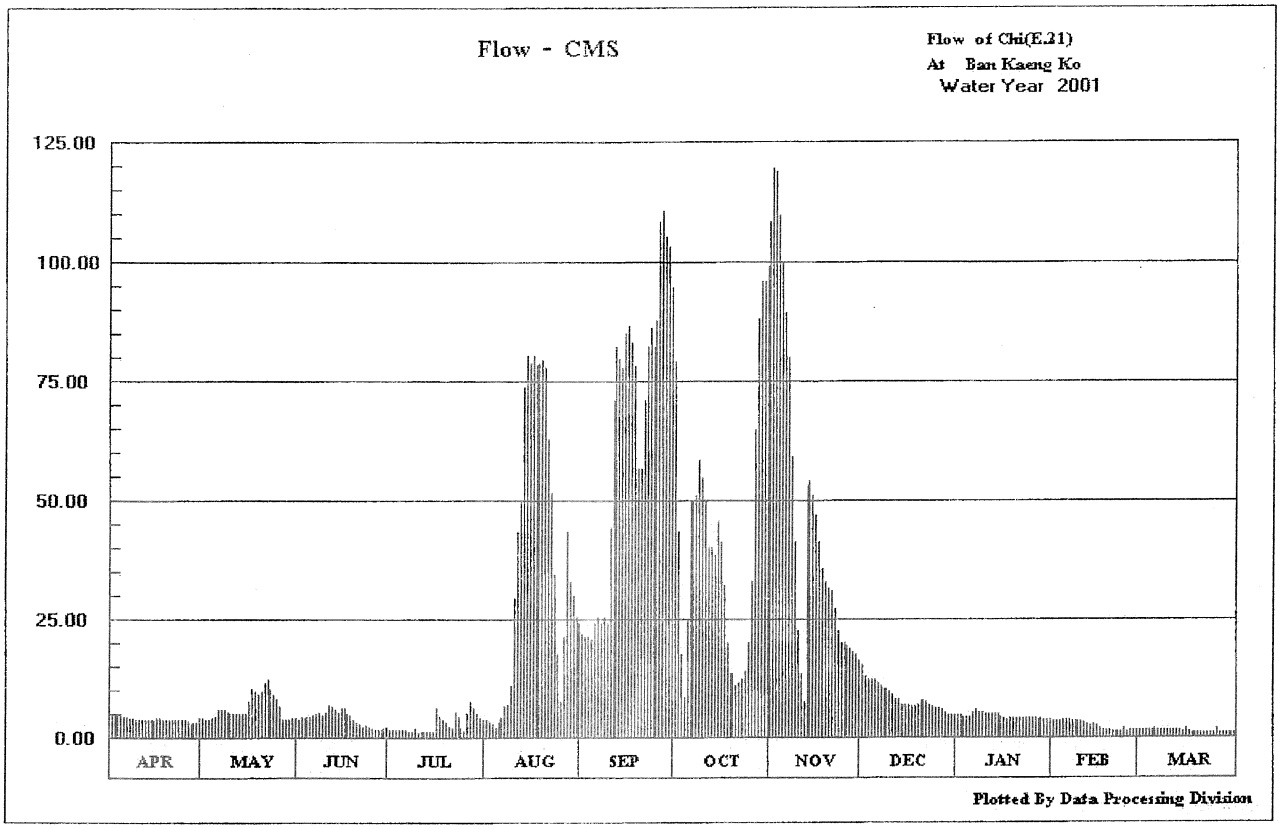
Lat 15 - 45 - 07 N. **Long** 102 - 15 - 25 E.

Location			on left bank about 75 meters upstream from the bridge on highway.		
	Ban	Kaeng Ko	**Amphoe** Mueang	**Changwat**	Chaiyaphum
Drainage Area			8,912 sq.km.		
Type of Gage			Water - stage recorder.		
Zero Gage at Bottom			+164.980 m. (M.S.L.)		
Bench Mark			B.M.- H.D.		
	Location BM		In front of the automatic gage building.		
	Elevation		+174.414 m. (M.S.L.)		
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 Float		-		
	Rated by Current Meter		1968 - 1971, 1973 - 1974, 1982 to date.		
Stability of Channel Regimes			Fairly stable because of backwater effect.		
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 39 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	167.60	167.58	167.57	167.50	167.57	167.92	168.65	169.40	167.81	167.60	167.56	167.49	
2	167.60	167.57	167.59	167.50	167.55	167.91	168.24	169.66	167.77	167.60	167.56	167.49	
3	167.61	167.57	167.58	167.48	167.54	167.91	167.85	169.65	167.76	167.59	167.56	167.49	
4	167.61	167.58	167.59	167.48	167.51	167.90	167.70	169.43	167.76	167.59	167.57	167.49	
5	167.59	167.59	167.59	167.48	167.55	167.96	167.97	169.18	167.76	167.59	167.57	167.50	
6	167.59	167.63	167.60	167.47	167.58	167.98	168.33	168.92	167.75	167.62	167.57	167.50	
7	167.58	167.63	167.61	167.44	167.65	167.96	168.33	168.68	167.74	167.63	167.56	167.50	
8	167.58	167.63	167.62	167.44	167.66	167.98	168.34	168.44	167.73	167.62	167.56	167.50	
9	167.57	167.62	167.60	167.44	167.74	167.96	168.43	168.21	167.73	167.62	167.56	167.50	
10	167.57	167.61	167.62	167.40	168.04	168.25	168.39	167.93	167.72	167.61	167.56	167.50	
11	167.57	167.61	167.66	167.43	168.24	168.55	168.33	167.78	167.71	167.61	167.55	167.50	
12	167.57	167.61	167.65	167.44	168.33	168.74	168.19	167.67	167.69	167.61	167.54	167.50	
13	167.57	167.61	167.63	167.41	168.57	168.67	168.19	168.37	167.69	167.61	167.53	167.50	
14	167.57	167.61	167.62	167.41	168.69	168.61	168.17	168.38	167.66	167.61	167.54	167.48	
15	167.57	167.61	167.64	167.42	168.64	168.81	168.27	168.34	167.66	167.59	167.53	167.46	
16	167.58	167.67	167.64	167.64	168.69	168.85	168.21	168.29	167.66	167.58	167.51	167.43	
17	167.58	167.73	167.61	167.59	168.63	168.76	168.08	168.21	167.65	167.57	167.50	167.43	
18	167.57	167.72	167.60	167.57	168.64	168.62	167.89	168.13	167.65	167.58	167.48	167.40	
19	167.57	167.71	167.57	167.55	168.66	168.41	167.78	168.09	167.66	167.58	167.47	167.38	
20	167.57	167.72	167.55	167.52	168.61	168.41	167.78	168.07	167.68	167.58	167.46	167.36	
21	167.57	167.75	167.54	167.51	168.48	168.55	167.74	168.06	167.68	167.58	167.44	167.33	
22	167.57	167.76	167.52	167.62	168.35	168.74	167.75	168.01	167.67	167.58	167.44	167.32	
23	167.57	167.73	167.53	167.59	168.11	168.84	167.76	167.93	167.66	167.58	167.43	167.29	
24	167.57	167.71	167.52	167.51	167.85	168.74	167.79	167.89	167.65	167.58	167.41	167.28	
25	167.57	167.69	167.51	167.45	167.67	168.88	167.89	167.89	167.64	167.58	167.45	167.28	
26	167.56	167.65	167.50	167.61	167.91	169.40	168.09	167.88	167.64	167.58	167.48	167.27	
27	167.54	167.57	167.50	167.67	168.24	169.45	168.50	167.87	167.63	167.57	167.49	167.26	
28	167.55	167.57	167.50	167.64	168.09	169.32	168.89	167.86	167.62	167.58	167.49	167.25	
29	167.55	167.57	167.51	167.61	168.05	169.26	169.08	167.85	167.60	167.57		167.25	
30	167.58	167.58	167.52	167.58	167.98	169.05	169.08	167.83	167.60	167.57		167.24	
31		167.58		167.57	167.96		169.16		167.60	167.57		167.23	
Mean	167.58	167.64	167.58	167.52	168.09	168.55	168.22	168.33	167.68	167.59	167.51	167.40	
Max	167.61	167.76	167.66	167.67	168.69	169.45	169.16	169.66	167.81	167.63	167.57	167.50	169.66
Min	167.54	167.57	167.50	167.40	167.51	167.90	167.70	167.67	167.60	167.57	167.41	167.23	167.23

Annual Max Momentary Gage Height 169.69 M (MSL), at 6.00 Hours, on Nov 3, 2001
Zero Gage at Bottom Elevation 164.98 M (MSL), River Bed 163.31 M (MSL)
Left Bank Elevation 176.46 M (MSL)
Right Bank Elevation 174.88 M (MSL), Drainage Area 8912 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.00	4.40	4.10	2.00	4.10	22.20	79.50	109.00	15.60	5.00	3.80	1.95	
2	5.00	4.10	4.70	2.00	3.50	21.60	43.80	119.72	13.20	5.00	3.80	1.95	
3	5.40	4.10	4.40	1.90	3.20	21.60	18.00	119.30	12.60	4.70	3.80	1.95	
4	5.40	4.40	4.70	1.90	2.30	21.00	9.00	110.20	12.60	4.70	4.10	1.95	
5	4.70	4.70	4.70	1.90	3.50	24.60	25.20	100.20	12.60	4.70	4.10	2.00	
6	4.70	6.20	5.00	1.85	4.40	25.80	50.40	89.80	12.00	5.80	4.10	2.00	
7	4.40	6.20	5.40	1.70	7.00	24.60	50.40	80.40	11.40	6.20	3.80	2.00	
8	4.40	6.20	5.80	1.70	7.40	25.80	51.20	59.60	10.80	5.80	3.80	2.00	
9	4.10	5.80	5.00	1.70	11.40	24.60	58.70	41.70	10.80	5.80	3.80	2.00	
10	4.10	5.40	5.80	1.50	29.80	44.50	55.20	22.80	10.20	5.40	3.80	2.00	
11	4.10	5.40	7.40	1.65	43.80	71.50	50.40	13.80	9.60	5.40	3.50	2.00	
12	4.10	5.40	7.00	1.70	50.40	82.60	40.30	7.80	8.60	5.40	3.20	2.00	
13	4.10	5.40	6.20	1.55	74.10	80.10	40.30	53.60	8.60	5.40	2.90	2.00	
14	4.10	5.40	5.80	1.55	80.70	78.30	38.90	54.40	7.40	5.40	3.20	1.90	
15	4.10	5.40	6.60	1.60	79.20	85.40	45.90	51.20	7.40	4.70	2.90	1.80	
16	4.40	7.80	6.60	6.60	80.70	87.00	41.70	47.30	7.40	4.40	2.30	1.65	
17	4.40	10.80	5.40	4.70	78.90	83.40	32.60	41.70	7.00	4.10	2.00	1.65	
18	4.10	10.20	5.00	4.10	79.20	78.60	20.40	36.10	7.00	4.40	1.90	1.50	
19	4.10	9.60	4.10	3.50	79.80	56.90	13.80	33.30	7.40	4.40	1.85	1.40	
20	4.10	10.20	3.50	2.60	78.30	56.90	13.80	31.90	8.20	4.40	1.80	1.30	
21	4.10	12.00	3.20	2.30	63.20	71.50	11.40	31.20	8.20	4.40	1.70	1.15	
22	4.10	12.60	2.60	5.80	52.00	82.60	12.00	27.70	7.80	4.40	1.70	1.10	
23	4.10	10.80	2.90	4.70	34.70	86.60	12.60	22.80	7.40	4.40	1.65	0.95	
24	4.10	9.60	2.60	2.30	18.00	82.60	14.40	20.40	7.00	4.40	1.55	0.90	
25	4.10	8.60	2.30	1.75	7.80	88.20	20.40	20.40	6.60	4.40	1.75	0.90	
26	3.80	7.00	2.00	5.40	21.60	109.00	33.30	19.80	6.60	4.40	1.90	0.85	
27	3.20	4.10	2.00	7.80	43.80	111.00	65.00	19.20	6.20	4.10	1.95	0.80	
28	3.50	4.10	2.00	6.60	33.30	105.80	88.60	18.60	5.80	4.40	1.95	0.75	
29	3.50	4.10	2.30	5.40	30.50	103.40	96.20	18.00	5.00	4.10		0.75	
30	4.40	4.40	2.60	4.40	25.80	95.00	96.20	16.80	5.00	4.10		0.70	
31		4.40		4.10	24.60		99.40		5.00	4.10		0.65	
Total	127.70	208.80	131.70	98.25	1157.00	1952.70	1329.00	1438.72	271.00	148.30	78.60	46.50	6988.27 CMSDAY
Mean	4.26	6.74	4.39	3.17	37.32	65.09	42.87	47.96	8.74	4.78	2.81	1.50	19.15 CMS
Max	5.40	12.60	7.40	7.80	80.70	111.00	99.40	119.72	15.60	6.20	4.10	2.00	119.72 CMS
Min	3.20	4.10	2.00	1.50	2.30	21.00	9.00	7.80	5.00	4.10	1.55	0.65	0.65 CMS
Runoff	11.033	18.040	11.379	8.489	99.965	168.713	114.826	124.305	23.414	12.813	6.791	4.018	603.787 MCM

Momentary Peak 120.98 CMS, at 169.69 M (MSL), at 6.00 Hours, on Nov 3, 2001

Runoff Yield 2.15 Liters/Second/Square KM, Momentary Peak Yield 13.575 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

Lam Nam Phong at Ban Hin Kong Noi, Khon Kaen (E.22A)

Lat 16 - 43 - 29 N. **Long** 102 - 48 - 21 E.

Location on left bank about 500 meters downstream from the bridge of Khon Kaen – Udon Thani Highway.

Ban Hin Kong Noi **Amphoe** Nam Phong **Changwat** Khon Kaen

Drainage Area 13,183 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +150.920 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank at the automatic gage building.

Elevation +163.911 m. (M.S.L.)

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 1966 - 1972, 1982 - 1987, 1992 to date.

Rated by Float -

Rated by Current Meter 1966 - 1972, 1982 - 1987, 1992 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

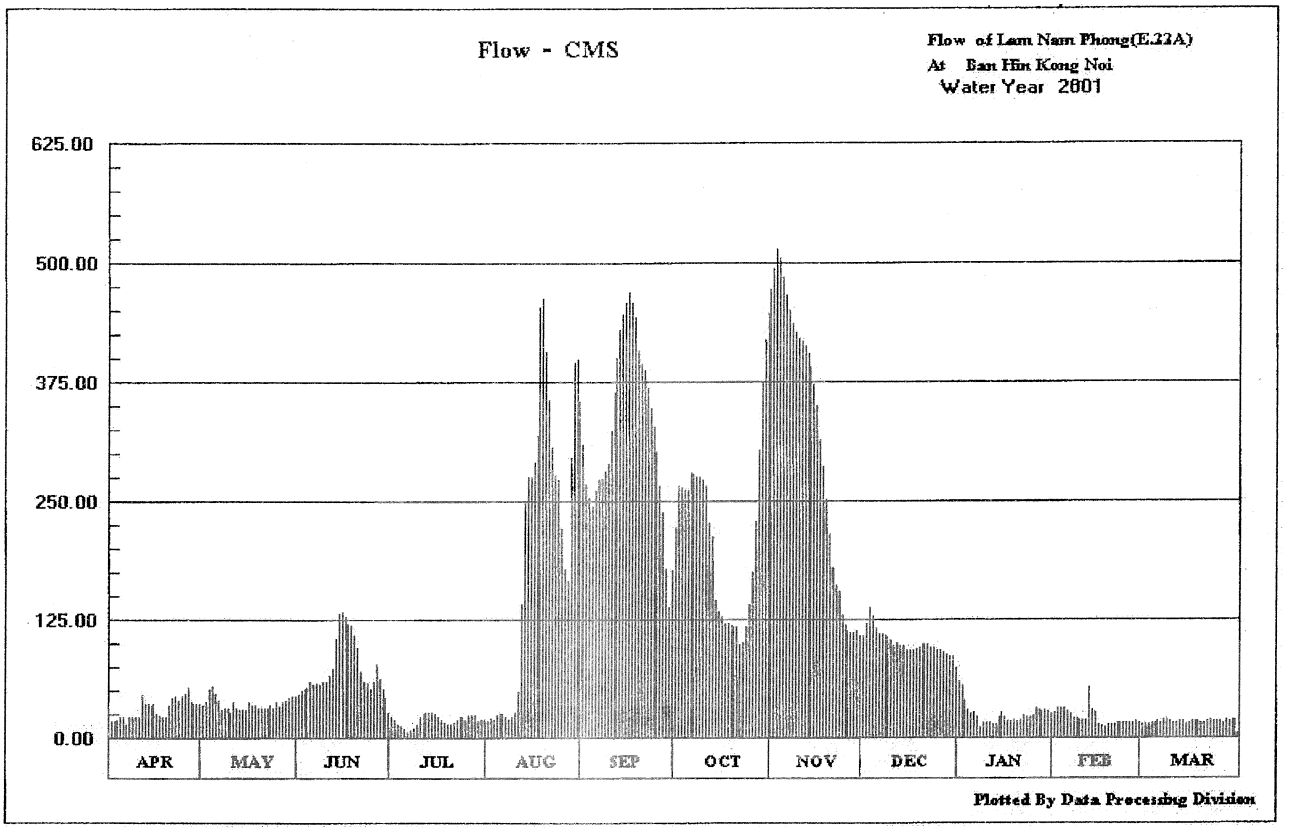
General Description Records fair. Flow regulated by Ubonrat Dam about 35 kilometers above gage site and Nong Wai weir situated about 5 kilometers above gage site.

Stage-discharge relation defined by 34 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	153.76	154.23	154.50	153.86	153.77	160.31	158.77	161.69	156.13	154.90	154.02	153.68	
2	153.76	154.29	154.61	153.80	153.85	159.65	159.62	161.80	156.44	154.74	154.15	153.66	
3	153.81	154.67	154.65	153.65	153.81	159.38	159.61	161.89	156.87	154.32	154.15	153.65	
4	153.87	154.75	154.72	153.62	153.91	159.19	159.55	161.85	156.64	154.08	154.15	153.70	
5	153.87	154.54	154.90	153.55	153.98	159.55	159.54	161.75	156.33	153.98	154.05	153.73	
6	153.69	154.35	154.80	153.44	153.97	159.74	159.86	161.65	156.18	153.99	153.95	153.74	
7	153.86	154.08	154.82	153.49	153.87	159.77	159.83	161.56	156.15	153.86	153.85	153.71	
8	153.87	154.11	154.81	153.52	153.79	159.89	159.78	161.47	156.12	153.59	153.83	153.79	
9	153.88	154.11	154.88	153.67	153.90	160.03	159.78	161.41	156.07	153.72	153.80	153.81	
10	153.89	154.02	154.88	153.90	154.01	160.46	159.72	161.36	156.00	153.72	153.79	153.76	
11	154.49	154.28	155.03	153.95	154.57	160.88	159.62	161.34	155.86	153.72	153.80	153.71	
12	154.25	154.12	155.25	154.01	156.94	161.22	158.84	161.30	155.92	153.65	154.71	153.73	
13	154.26	154.09	156.04	154.02	159.32	161.43	158.57	161.25	155.85	153.69	154.10	153.76	
14	154.22	154.07	156.69	154.00	159.78	161.53	157.04	161.13	155.83	153.86	154.01	153.77	
15	154.27	154.07	156.74	153.96	159.78	161.61	156.76	160.95	155.72	153.99	153.68	153.68	
16	153.95	154.28	156.63	153.87	160.04	161.67	156.63	160.74	155.75	153.87	153.62	153.73	
17	153.91	154.23	156.43	153.79	160.41	161.61	156.45	160.36	155.74	153.77	153.58	153.75	
18	153.86	154.20	156.40	153.72	161.58	161.51	156.45	159.98	155.79	153.76	153.67	153.76	
19	153.86	154.11	156.13	153.68	161.64	161.27	156.38	159.36	155.81	153.79	153.67	153.75	
20	154.22	154.11	155.80	153.65	161.26	161.16	156.35	158.60	155.88	153.77	153.66	153.71	
21	154.40	154.13	155.18	153.71	160.81	161.11	156.34	157.85	155.90	153.81	153.72	153.70	
22	154.46	154.13	154.88	153.79	160.27	160.93	155.88	157.41	155.90	153.92	153.73	153.76	
23	154.33	154.20	154.82	153.87	159.82	160.71	155.91	157.28	155.80	153.89	153.73	153.79	
24	154.46	154.14	154.68	153.87	159.74	160.51	156.37	156.68	155.81	153.90	153.71	153.75	
25	154.53	154.29	154.90	153.81	158.73	160.20	156.95	156.40	155.73	153.94	153.73	153.74	
26	154.72	154.18	155.39	153.93	157.82	159.63	157.72	156.23	155.73	154.11	153.72	153.74	
27	154.29	154.29	154.96	153.92	157.53	159.06	158.88	156.22	155.70	154.10	153.74	153.72	
28	154.27	154.34	154.68	153.92	160.11	157.81	160.23	156.22	155.63	154.06	153.71	153.79	
29	154.26	154.42	154.42	153.77	161.18	156.86	160.97	156.23	155.59	154.10		153.77	
30	154.24	154.47	154.00	153.78	161.20	157.76	161.35	156.14	155.59	154.03		153.79	
31		154.47		153.81	160.79		161.54		155.25	153.96		153.78	
Mean	154.12	154.25	155.22	153.78	157.81	160.21	158.43	159.60	155.93	153.95	153.86	153.74	
Max	154.72	154.75	156.74	154.02	161.64	161.67	161.54	161.89	156.87	154.90	154.71	153.81	161.89
Min	153.69	154.02	154.00	153.44	153.77	156.86	155.88	156.14	155.25	153.59	153.58	153.65	153.44

Annual Max Momentary Gage Height 161.90 M (MSL), at 6.00 Hours, on Nov 3, 2001
Zero Gage at Bottom Elevation 150.92 M (MSL), River Bed 150.83 M (MSL)
Left Bank Elevation 164.44 M (MSL)
Right Bank Elevation 163.90 M (MSL), Drainage Area 13183 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	19.5	37.1	47.3	23.2	19.9	311.9	224.5	474.2	110.2	62.2	29.3	16.6	
2	19.5	39.4	51.4	21.0	22.9	269.0	267.2	496.0	122.6	56.3	34.1	15.9	
3	21.4	53.6	52.9	15.5	21.4	255.0	266.6	515.8	140.0	40.5	34.1	15.5	
4	23.6	56.6	55.5	14.4	25.1	245.5	263.5	507.0	130.6	31.5	34.1	17.3	
5	23.6	48.7	62.2	11.9	27.7	263.5	263.0	486.0	118.2	27.7	30.4	18.4	
6	16.9	41.6	58.5	7.9	27.4	274.4	281.6	467.0	112.2	28.1	26.6	18.8	
7	23.2	31.5	59.3	9.7	23.6	276.2	279.8	451.6	111.0	23.2	22.9	17.7	
8	23.6	32.6	58.9	10.8	20.6	283.4	276.8	437.8	109.8	13.3	22.1	20.6	
9	24.0	32.6	61.5	16.2	24.7	291.8	276.8	429.4	107.8	18.0	21.0	21.4	
10	24.4	29.3	61.5	24.7	28.9	325.4	273.2	422.4	105.0	18.0	20.6	19.5	
11	46.9	39.0	67.1	26.6	49.9	366.0	267.2	419.6	99.4	18.0	21.0	17.7	
12	37.9	33.0	75.4	28.9	142.9	402.8	228.0	414.0	101.8	15.5	55.1	18.4	
13	38.2	31.9	106.6	29.3	252.0	432.2	214.7	407.0	99.0	16.9	32.3	19.5	
14	36.8	31.1	132.6	28.5	276.8	446.8	147.2	392.3	98.2	23.2	28.9	19.9	
15	38.6	31.1	134.6	27.0	276.8	459.8	135.4	373.2	93.8	28.1	16.6	16.6	
16	26.6	39.0	130.2	23.6	292.4	470.6	130.2	352.0	95.0	23.6	14.4	18.4	
17	25.1	37.1	122.2	20.6	320.9	459.8	123.0	316.4	94.6	19.9	13.0	19.1	
18	23.2	36.0	121.0	18.0	454.8	443.6	123.0	288.8	96.6	19.5	16.2	19.5	
19	23.2	32.6	110.2	16.6	465.2	409.8	120.2	254.0	97.4	20.6	16.2	19.1	
20	36.8	32.6	97.0	15.5	408.4	395.6	119.0	216.0	100.2	19.9	15.9	17.7	
21	43.5	33.4	72.7	17.7	359.0	390.1	118.6	182.3	101.0	21.4	18.0	17.3	
22	45.8	33.4	61.5	20.6	308.6	371.1	100.2	162.9	101.0	25.5	18.4	19.5	
23	40.9	36.0	59.3	23.6	279.2	349.0	101.4	157.4	97.0	24.4	18.4	20.6	
24	45.8	33.7	54.0	23.6	274.4	329.9	119.8	132.2	97.4	24.7	17.7	19.1	
25	48.4	39.4	62.2	21.4	222.5	303.0	143.4	121.0	94.2	26.3	18.4	18.8	
26	55.5	35.2	80.6	25.9	180.9	267.8	176.4	114.2	94.2	32.6	18.0	18.8	
27	39.4	39.4	64.5	25.5	168.0	239.0	230.0	113.8	93.0	32.3	18.8	18.0	
28	38.6	41.2	54.0	25.5	296.7	180.4	305.4	113.8	90.2	30.7	17.7	20.6	
29	38.2	44.2	44.2	19.9	397.8	139.5	375.4	114.2	88.6	32.3		19.9	
30	37.5	46.1	28.5	20.3	400.0	178.2	421.0	110.6	88.6	29.6		20.6	
31		46.1		21.4	357.0		448.4		75.4	27.0		20.3	
Total	986.6	1174.5	2247.4	635.3	6426.4	9831.1	6820.9	9442.9	3164.0	830.8	650.2	581.1	42791.2 CMSDAY
Mean	32.9	37.9	74.9	20.5	207.3	327.7	220.0	314.8	102.1	26.8	23.2	18.7	117.2 CMS
Max	55.5	56.6	134.6	29.3	465.2	470.6	448.4	515.8	140.0	62.2	55.1	21.4	515.8 CMS
Min	16.9	29.3	28.5	7.9	19.9	139.5	100.2	110.6	75.4	13.3	13.0	15.5	7.9 CMS
Runoff	85.24	101.48	194.18	54.89	555.24	849.41	589.33	815.87	273.37	71.78	56.18	50.21	3697.16 MCM

Momentary Peak 518.00 CMS, at 161.90 M (MSL), at 6.00 Hours, on Nov 3, 2001

Runoff Yield 8.89 Liters/Second/Square KM, Momentary Peak Yield 39.293 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 6,835 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +174.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 20 meters from the automatic gage building.

Elevation +184.753 m. (M.S.L.)

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 Float -

Rated by Current Meter 1968 - 1974, 1982 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

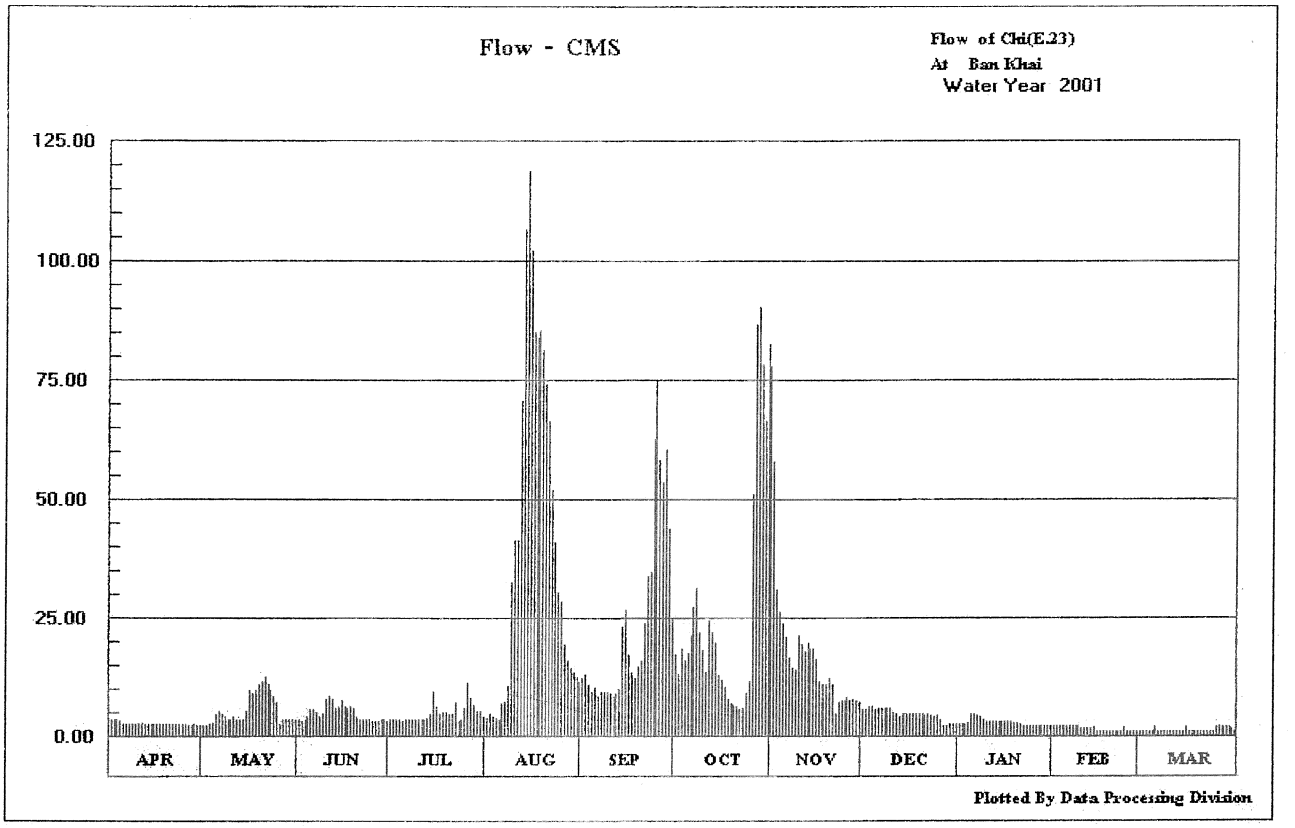
General Description Records fair. The local weir situated about 50 meters downstream from the gage site.

Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	177.48	177.34	177.47	177.47	177.51	177.91	178.10	179.93	177.60	177.40	177.35	176.63	
2	177.48	177.35	177.46	177.48	177.56	177.94	177.94	179.43	177.60	177.39	177.34	176.70	
3	177.48	177.38	177.50	177.47	177.53	177.85	178.16	178.64	177.63	177.40	177.34	176.70	
4	177.44	177.41	177.52	177.47	177.51	177.79	178.05	178.47	177.63	177.41	177.34	176.68	
5	177.40	177.56	177.60	177.46	177.50	177.83	178.12	178.37	177.60	177.55	177.34	176.64	
6	177.36	177.59	177.60	177.47	177.67	177.75	178.27	178.25	177.62	177.55	177.34	176.58	
7	177.36	177.56	177.57	177.47	177.68	177.79	178.50	178.08	177.62	177.54	177.30	176.53	
8	177.39	177.52	177.53	177.48	177.84	177.79	178.65	177.99	177.62	177.52	177.29	176.53	
9	177.40	177.50	177.55	177.48	178.69	177.79	178.29	177.98	177.62	177.49	177.32	176.53	
10	177.40	177.50	177.71	177.47	178.95	177.78	178.14	178.27	177.62	177.46	177.20	176.50	
11	177.43	177.52	177.75	177.49	178.95	177.75	177.96	178.19	177.57	177.46	177.17	176.46	
12	177.39	177.49	177.71	177.50	179.75	177.77	178.39	178.13	177.55	177.45	177.17	176.54	
13	177.39	177.49	177.61	177.51	180.62	177.82	178.29	178.21	177.53	177.45	177.17	176.63	
14	177.40	177.49	177.63	177.55	180.88	178.34	178.20	178.16	177.55	177.45	177.07	176.67	
15	177.40	177.58	177.69	177.79	180.52	178.48	177.93	178.15	177.55	177.45	177.03	176.68	
16	177.40	177.80	177.63	177.64	180.11	178.11	177.89	178.07	177.55	177.44	177.00	176.70	
17	177.39	177.77	177.61	177.55	180.08	177.96	177.83	177.88	177.55	177.44	176.96	176.75	
18	177.36	177.81	177.64	177.57	180.12	177.90	177.71	177.86	177.55	177.44	176.89	176.68	
19	177.36	177.85	177.62	177.57	180.02	178.00	177.67	177.86	177.56	177.43	176.83	176.62	
20	177.38	177.88	177.53	177.56	179.84	178.05	177.65	177.90	177.56	177.42	176.75	176.57	
21	177.39	177.92	177.50	177.56	179.64	178.37	177.63	177.86	177.54	177.40	176.77	176.52	
22	177.37	177.85	177.49	177.68	179.26	178.73	177.60	177.56	177.55	177.33	176.76	176.49	
23	177.36	177.81	177.48	177.46	178.94	178.76	177.61	177.68	177.54	177.35	176.84	176.44	
24	177.36	177.75	177.48	177.47	178.62	179.55	177.78	177.69	177.53	177.35	176.72	176.38	
25	177.36	177.68	177.45	177.61	178.55	179.86	177.88	177.70	177.54	177.35	176.66	176.33	
26	177.34	177.40	177.44	177.87	178.19	179.44	179.24	177.72	177.49	177.34	176.62	176.46	
27	177.35	177.47	177.45	177.72	178.05	179.31	180.15	177.70	177.35	177.34	176.61	177.34	
28	177.36	177.49	177.49	177.65	177.99	179.49	180.24	177.71	177.35	177.34	176.63	177.24	
29	177.35	177.49	177.49	177.58	177.95	179.03	179.94	177.70	177.36	177.33		177.25	
30	177.35	177.49	177.46	177.58	177.92	178.42	179.64	177.68	177.39	177.33		177.23	
31		177.47		177.52	177.88		180.05		177.38	177.33		177.21	
Mean	177.39	177.59	177.56	177.55	178.78	178.31	178.37	178.09	177.54	177.42	177.03	176.68	
Max	177.48	177.92	177.75	177.87	180.88	179.86	180.24	179.93	177.63	177.55	177.35	177.34	180.88
Min	177.34	177.34	177.44	177.46	177.50	177.75	177.60	177.56	177.35	177.33	176.61	176.33	176.33

Annual Max Momentary Gage Height 180.93 M (MSL), at 6.00 Hours, on Aug 14, 2001
Zero Gage at Bottom Elevation 174.00 M (MSL), River Bed 175.40 M (MSL)
Left Bank Elevation 183.86 M (MSL)
Right Bank Elevation 184.17 M (MSL), Drainage Area 6835 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.80	2.70	3.70	3.70	4.20	12.75	17.50	78.20	6.00	3.00	2.75	0.07	
2	3.80	2.75	3.60	3.80	5.20	13.50	13.50	58.20	6.00	2.95	2.70	0.25	
3	3.80	2.90	4.00	3.70	4.60	11.25	19.00	31.28	6.60	3.00	2.70	0.25	
4	3.40	3.10	4.40	3.70	4.20	9.80	16.25	26.75	6.60	3.10	2.70	0.20	
5	3.00	5.20	6.00	3.60	4.00	10.75	18.00	24.25	6.00	5.00	2.70	0.10	
6	2.80	5.80	6.00	3.70	7.40	9.00	21.75	21.25	6.40	5.00	2.70	0.00	
7	2.80	5.20	5.40	3.70	7.60	9.80	27.50	17.00	6.40	4.80	2.50	0.00	
8	2.95	4.40	4.60	3.80	11.00	9.80	31.60	14.75	6.40	4.40	2.45	0.00	
9	3.00	4.00	5.00	3.80	32.88	9.80	22.25	14.50	6.40	3.90	2.60	0.00	
10	3.00	4.00	8.20	3.70	41.55	9.60	18.50	21.75	6.40	3.60	2.00	0.00	
11	3.30	4.40	9.00	3.90	41.55	9.00	14.00	19.75	5.40	3.60	1.85	0.00	
12	2.95	3.90	8.20	4.00	71.00	9.40	24.75	18.25	5.00	3.50	1.85	0.00	
13	2.95	3.90	6.20	4.20	107.12	10.50	22.25	20.25	4.60	3.50	1.85	0.07	
14	3.00	3.90	6.60	5.00	119.08	23.50	20.00	19.00	5.00	3.50	1.35	0.17	
15	3.00	5.60	7.80	9.80	102.52	27.00	13.25	18.75	5.00	3.50	1.15	0.20	
16	3.00	10.00	6.60	6.80	85.40	17.75	12.25	16.75	5.00	3.40	1.00	0.25	
17	2.95	9.40	6.20	5.00	84.20	14.00	10.75	12.00	5.00	3.40	0.90	0.37	
18	2.80	10.25	6.80	5.40	85.80	12.50	8.20	11.50	5.00	3.40	0.72	0.20	
19	2.80	11.25	6.40	5.40	81.80	15.00	7.40	11.50	5.20	3.30	0.57	0.05	
20	2.90	12.00	4.60	5.20	74.60	16.25	7.00	12.50	5.20	3.20	0.37	0.00	
21	2.95	13.00	4.00	5.20	66.60	24.25	6.60	11.50	4.80	3.00	0.43	0.00	
22	2.85	11.25	3.90	7.60	52.19	34.16	6.00	5.20	5.00	2.65	0.40	0.00	
23	2.80	10.25	3.80	3.60	41.21	35.12	6.20	7.60	4.80	2.75	0.60	0.00	
24	2.80	9.00	3.80	3.70	30.64	63.00	9.60	7.80	4.60	2.75	0.30	0.00	
25	2.80	7.60	3.50	6.20	28.75	75.40	12.00	8.00	4.80	2.75	0.15	0.00	
26	2.70	3.00	3.40	11.75	19.75	58.60	51.51	8.40	3.90	2.70	0.05	0.00	
27	2.75	3.70	3.50	8.40	16.25	53.91	87.00	8.00	2.75	2.70	0.02	2.70	
28	2.80	3.90	3.90	7.00	14.75	60.60	90.60	8.20	2.75	2.70	0.07	2.20	
29	2.75	3.90	3.90	5.60	13.75	44.30	78.60	8.00	2.80	2.65		2.25	
30	2.75	3.90	3.60	5.60	13.00	25.50	66.60	7.60	2.95	2.65		2.15	
31		3.70		4.40	12.00		83.00		2.90	2.65		2.05	
Total	89.95	187.85	156.60	160.95	1284.59	735.79	843.41	548.48	155.65	103.00	39.43	13.53	4319.23 CMSDAY
Mean	3.00	6.06	5.22	5.19	41.44	24.53	27.21	18.28	5.02	3.32	1.41	0.44	11.83 CMS
Max	3.80	13.00	9.00	11.75	119.08	75.40	90.60	78.20	6.60	5.00	2.75	2.70	119.08 CMS
Min	2.70	2.70	3.40	3.60	4.00	9.00	6.00	5.20	2.75	2.65	0.02	0.00	0.00 CMS
Runoff	7.772	16.230	13.530	13.906	110.989	63.572	72.871	47.389	13.448	8.899	3.407	1.169	373.181 MCM

Momentary Peak 121.50 CMS, at 180.93 M (MSL), at 6.00 Hours, on Aug 14, 2001

Runoff Yield 1.73 Liters/Second/Square KM, Momentary Peak Yield 17.776 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

Lam Phan at Ban Hua Khua, Kalasin (E.26)

Lat 16 - 24 - 33 N. **Long** 103 - 28 - 16 E.

Location on right bank at the bridge on the road.

Ban Hua Khua **Amphoe** Yang Talat **Changwat** Kalasin

Drainage Area 6,565 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +134.630 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank upstream side at the abutment of the bridge.

Elevation +145.416 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1954 to date.

Rating Operation

Period of Rating 1971 - 1976, 1982 to date.

Rated by Float -

Rated by Current Meter 1971 - 1976, 1982 to date.

Stability of Channel Regimes Rather unstable by some scouring.

Overbank Flow Conditions Overbank flow starts at elevation +140.680 m.(M.S.L.) and is including overbank flow.

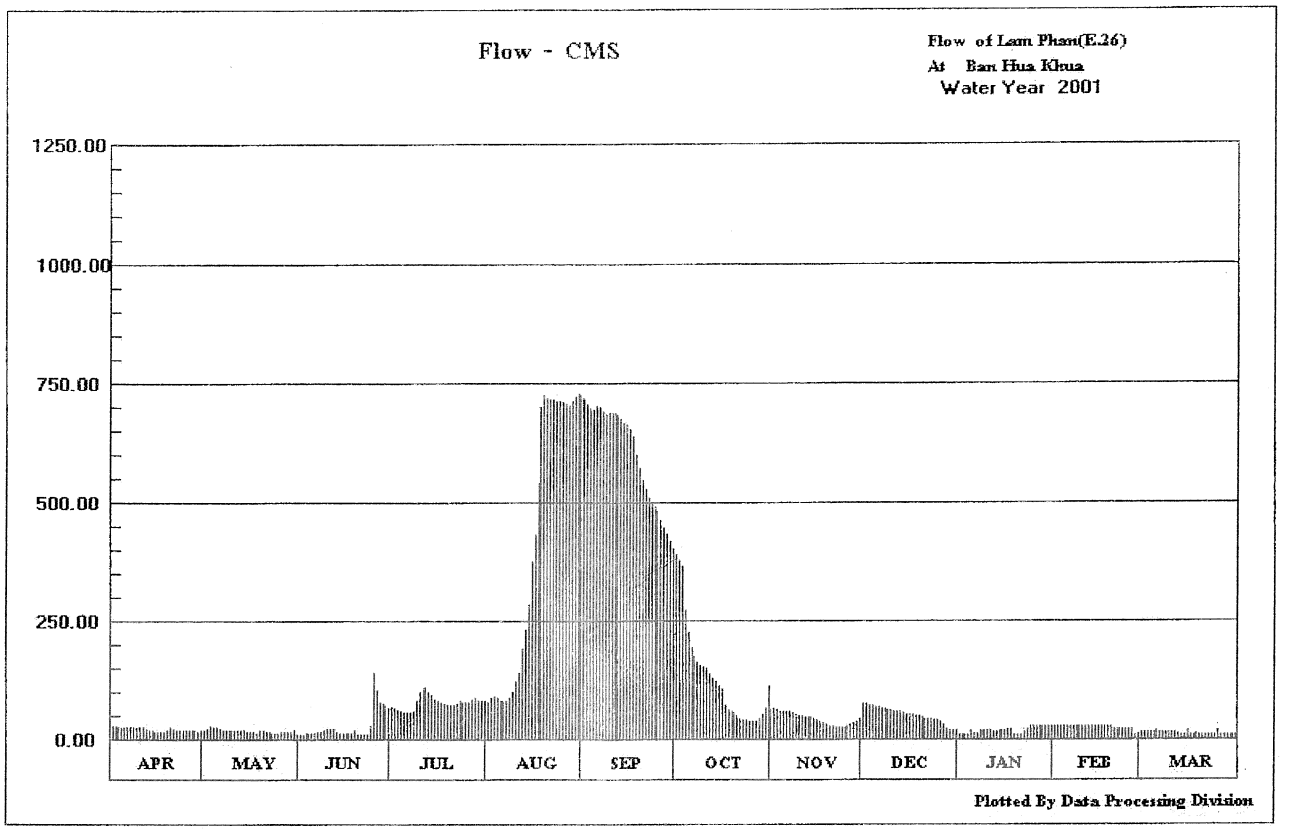
General Description Records fair. Flow regulated by Lam Pao Dam.

Stage-discharge relation defined by 34 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	135.69	135.40	134.93	136.97	137.20	141.25	140.41	137.08	137.13	135.03	135.73	135.28	
2	135.66	135.52	135.05	136.90	137.36	141.16	140.37	137.22	137.11	135.03	135.72	135.30	
3	135.62	135.67	135.16	136.81	137.43	141.09	140.33	136.92	137.06	135.04	135.69	135.31	
4	135.58	135.61	135.20	136.72	137.36	141.07	139.95	136.87	137.03	135.08	135.68	135.31	
5	135.56	135.58	135.20	136.67	137.26	141.13	139.68	136.83	136.99	135.17	135.68	135.31	
6	135.58	135.46	135.20	136.62	137.25	141.11	139.46	136.79	136.97	135.17	135.67	135.31	
7	135.56	135.44	135.30	136.60	137.23	141.06	139.27	136.72	136.93	135.17	135.69	135.31	
8	135.56	135.43	135.31	136.77	137.37	141.03	139.14	136.63	136.89	135.35	135.68	135.31	
9	135.56	135.37	135.37	137.22	137.69	141.05	139.05	136.50	136.83	135.43	135.67	135.31	
10	135.56	135.35	135.45	137.64	138.09	141.04	139.03	136.46	136.82	135.43	135.72	135.30	
11	135.56	135.35	135.50	137.84	138.45	141.05	138.96	136.41	136.76	135.44	135.72	135.29	
12	135.51	135.35	135.47	137.86	139.27	141.03	138.81	136.36	136.70	135.27	135.71	135.25	
13	135.41	135.36	135.23	137.67	139.87	140.99	138.68	136.32	136.70	135.26	135.70	135.15	
14	135.36	135.36	135.14	137.50	140.46	140.96	138.55	136.29	136.65	135.41	135.69	134.89	
15	135.33	135.31	135.13	137.34	141.02	140.95	138.41	136.24	136.53	135.41	135.68	134.80	
16	135.33	135.30	135.11	137.23	141.17	140.92	138.29	136.17	136.51	135.40	135.67	134.81	
17	135.32	135.27	135.11	137.21	141.35	140.89	137.42	136.06	136.50	135.48	135.67	134.83	
18	135.32	135.21	135.11	137.11	141.52	140.84	137.02	135.94	136.49	135.48	135.67	135.02	
19	135.38	135.36	135.06	137.06	141.33	140.80	136.77	135.84	136.45	134.75	135.66	135.17	
20	135.56	135.33	134.99	137.03	141.25	140.76	136.66	135.74	136.35	134.70	135.51	135.01	
21	135.52	135.29	134.98	137.04	141.24	140.73	136.43	135.66	136.26	134.69	135.50	134.96	
22	135.42	135.27	134.96	137.12	141.24	140.70	136.28	135.62	136.26	135.27	135.49	134.95	
23	135.37	135.21	134.95	137.22	141.21	140.68	136.13	135.60	136.23	135.53	135.50	134.95	
24	135.37	135.18	135.70	137.17	141.20	140.66	136.10	135.59	136.17	135.68	135.50	134.95	
25	135.38	135.21	138.41	137.17	141.17	140.64	136.04	135.60	136.13	135.68	135.50	134.95	
26	135.37	135.28	137.70	137.15	141.16	140.60	136.02	135.72	135.99	135.71	135.49	134.90	
27	135.36	135.28	137.19	137.30	141.13	140.56	136.03	135.86	135.85	135.72	135.10	134.90	
28	135.35	135.26	137.09	137.40	141.20	140.53	136.26	135.92	135.55	135.73	135.18	134.89	
29	135.34	135.28	137.03	137.28	141.30	140.49	136.58	136.05	135.43	135.71		134.89	
30	135.33	135.21	136.93	137.23	141.35	140.45	137.12	136.26	135.40	135.71		134.88	
31		134.96		137.22	141.33		138.38		135.35	135.73		135.10	
Mean	135.46	135.34	135.63	137.16	139.79	140.87	137.99	136.24	136.45	135.34	135.60	135.08	
Max	135.69	135.67	138.41	137.86	141.52	141.25	140.41	137.22	137.13	135.73	135.73	135.31	141.52
Min	135.32	134.96	134.93	136.60	137.20	140.45	136.02	135.59	135.35	134.69	135.10	134.80	134.69

Annual Max Momentary Gage Height 141.55 M (MSL), at 7.00 Hours, on Aug 18, 2001
Zero Gage at Bottom Elevation 134.63 M (MSL), River Bed 131.77 M (MSL)
Left Bank Elevation 140.67 M (MSL)
Right Bank Elevation 141.03 M (MSL), Drainage Area 6565 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	31.7	23.0	11.6	72.8	83.0	721.5	393.7	67.7	79.9	13.6	32.9	19.5	
2	30.8	26.6	14.0	70.0	90.2	710.8	381.0	70.4	79.0	13.6	32.6	20.0	
3	29.6	31.1	16.5	66.4	93.4	700.9	369.0	65.3	76.7	13.8	31.7	20.3	
4	28.4	29.3	17.5	63.2	90.2	696.7	275.0	64.6	75.4	14.6	31.4	20.3	
5	27.8	28.4	17.5	61.5	85.7	706.9	228.2	64.0	73.6	16.7	31.4	20.3	
6	28.4	24.8	17.5	59.7	85.3	704.3	198.6	63.4	72.8	16.7	31.1	20.3	
7	27.8	24.2	20.0	59.0	84.4	694.6	179.3	62.7	71.2	16.7	31.7	20.3	
8	27.8	23.9	20.3	65.0	90.7	688.3	167.6	60.0	69.6	21.5	31.4	20.3	
9	27.8	22.1	22.1	83.9	105.5	692.5	160.0	56.0	67.2	23.9	31.1	20.3	
10	27.8	21.5	24.5	103.0	125.5	690.4	158.4	54.8	66.8	23.9	32.6	20.0	
11	27.8	21.5	26.0	113.0	146.0	692.5	152.8	53.3	64.6	24.2	32.6	19.7	
12	26.3	21.5	25.1	114.0	195.6	688.3	141.7	51.8	62.5	19.2	32.3	18.7	
13	23.3	21.8	18.2	104.5	236.6	678.8	132.8	50.6	62.5	19.0	32.0	16.2	
14	21.8	21.8	16.0	96.5	288.0	669.2	125.0	49.7	60.7	23.3	31.7	10.8	
15	20.9	20.3	15.8	89.3	379.4	666.0	117.1	48.2	56.9	23.3	31.4	9.0	
16	20.9	20.0	15.3	84.4	435.3	656.4	110.5	46.1	56.3	23.0	31.1	9.2	
17	20.6	19.2	15.3	83.5	545.5	642.6	75.6	42.8	56.0	25.4	31.1	9.6	
18	20.6	17.7	15.3	79.0	703.6	605.6	66.8	39.2	55.7	25.4	31.1	13.4	
19	22.4	21.8	14.2	76.7	730.0	576.0	63.2	36.2	54.5	8.3	30.8	16.7	
20	27.8	20.9	12.8	75.4	721.5	550.8	61.1	33.2	51.5	7.5	26.3	13.2	
21	26.6	19.7	12.6	75.8	720.4	531.9	53.9	30.8	48.8	7.4	26.0	12.2	
22	23.6	19.2	12.2	79.4	720.4	513.0	49.4	29.6	48.8	19.2	25.7	12.0	
23	22.1	17.7	12.0	83.9	717.1	503.6	44.9	29.0	47.9	26.9	26.0	12.0	
24	22.1	17.0	32.0	81.7	716.0	494.2	44.0	28.7	46.1	31.4	26.0	12.0	
25	22.4	17.7	143.6	81.7	712.1	484.8	42.2	29.0	44.9	31.4	26.0	12.0	
26	22.1	19.5	106.0	80.8	710.8	466.0	41.6	32.6	40.7	32.3	25.7	11.0	
27	21.8	19.5	82.6	87.5	706.9	450.4	41.9	36.8	36.5	32.6	15.0	11.0	
28	21.5	19.0	78.1	92.0	716.0	438.7	48.8	38.6	27.5	32.9	17.0	10.8	
29	21.2	19.5	75.4	86.6	727.0	423.3	58.4	42.5	23.9	32.3		10.8	
30	20.9	17.7	71.2	84.4	732.0	408.5	68.4	48.8	23.0	32.3		10.6	
31		12.2		83.9	730.0		115.4		21.5	32.9		15.0	
Total	744.6	660.1	981.2	2538.5	13224.1	18147.5	4166.3	1426.4	1723.0	685.2	815.7	467.5	45580.1 CMSDAY
Mean	24.8	21.3	32.7	81.9	426.6	604.9	134.4	47.5	55.6	22.1	29.1	15.1	124.9 CMS
Max	31.7	31.1	143.6	114.0	732.0	721.5	393.7	70.4	79.9	32.9	32.9	20.3	732.0 CMS
Min	20.6	12.2	11.6	59.0	83.0	408.5	41.6	28.7	21.5	7.4	15.0	9.0	7.4 CMS
Runoff	64.33	57.03	84.78	219.33	1142.56	1567.94	359.97	123.24	148.87	59.20	70.48	40.39	3938.12 MCM

Momentary Peak 748.00 CMS, at 141.55 M (MSL), at 7.00 Hours, on Aug 18, 2001

Runoff Yield 19.02 Liters/Second/Square KM, Momentary Peak Yield 113.938 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 945 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +225.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of the automatic gage building.

Elevation +236.945 m. (M.S.L.)

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 Float -

Rated by Current Meter 1978 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions Overbank flow starts at elevation +237.990 m.(M.S.L.), records are channel flow only.

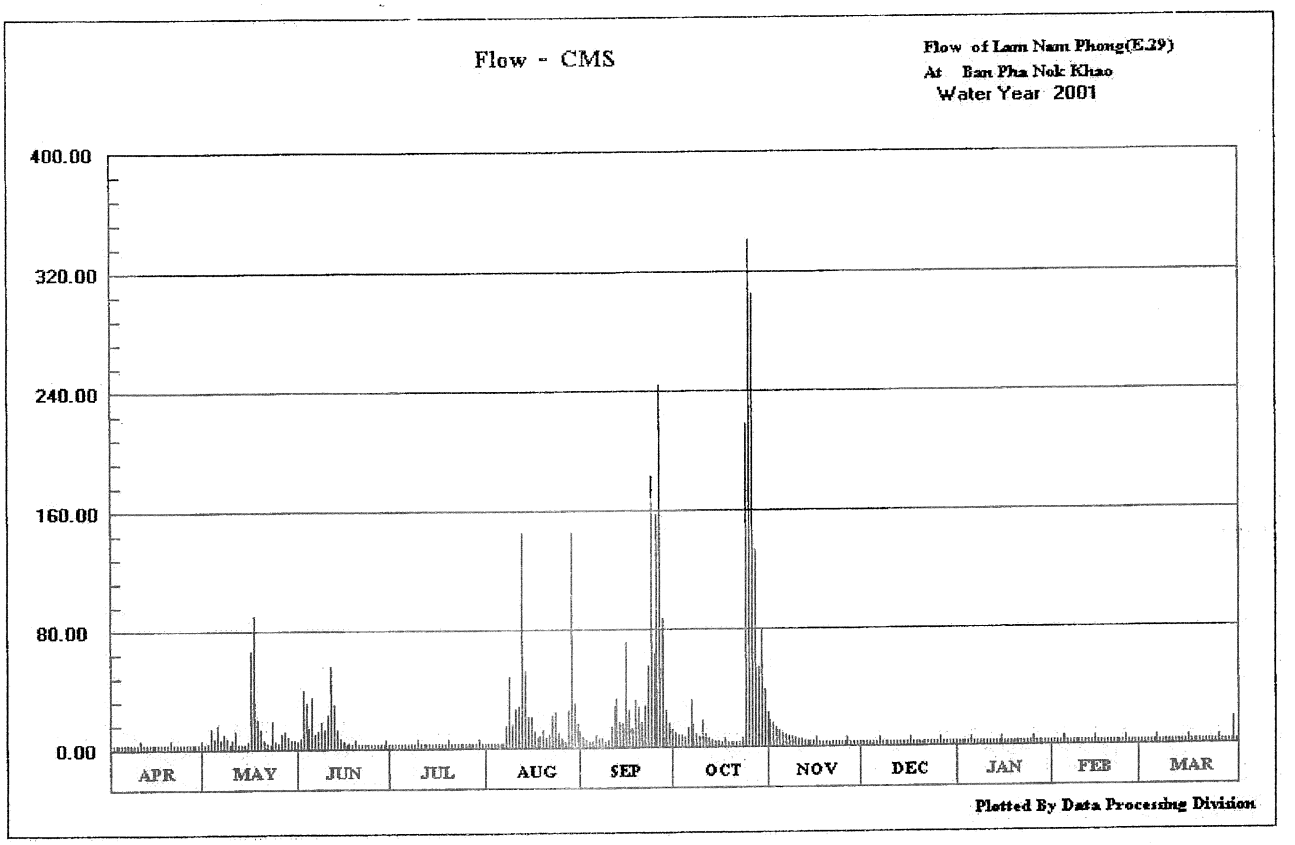
General Description Records good. Flow effected by Ubonrat Dam.

Stage-discharge relation defined by 124 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	226.04	226.34	227.08	226.13	225.89	227.07	227.32	227.99	226.20	225.94	225.83	225.83	
2	226.10	226.63	229.47	226.13	225.87	226.82	227.16	227.87	226.18	225.93	225.83	225.80	
3	225.98	227.74	228.94	226.08	225.90	226.67	227.10	227.62	226.13	225.92	225.82	225.77	
4	225.95	227.06	227.72	226.06	225.90	226.65	227.07	227.42	226.11	225.91	225.82	225.77	
5	226.07	227.87	229.20	226.05	225.90	227.11	227.66	227.28	226.11	225.91	225.81	225.78	
6	225.98	226.91	227.34	226.01	226.20	226.91	229.05	227.14	226.10	225.90	225.81	225.78	
7	225.95	227.34	227.56	225.98	227.78	226.87	227.82	227.07	226.09	225.90	225.81	225.84	
8	225.95	227.01	228.01	225.97	229.86	226.66	227.20	227.00	226.08	225.89	225.81	225.89	
9	225.92	226.31	227.59	225.96	227.85	226.78	227.05	226.92	226.07	225.89	225.81	225.88	
10	225.88	226.17	228.44	226.03	228.62	227.72	228.00	226.84	226.05	225.89	225.81	225.85	
11	225.86	227.49	230.28	226.06	228.76	228.76	227.20	226.79	226.05	225.89	225.80	225.82	
12	225.85	226.48	228.91	226.02	233.53	229.10	226.93	226.71	226.03	225.89	225.80	225.80	
13	225.86	226.26	227.63	225.98	230.08	227.95	226.80	226.66	226.03	225.88	225.80	225.78	
14	225.89	226.27	227.08	225.95	228.28	227.89	226.72	226.63	226.02	225.88	225.79	225.78	
15	225.84	226.80	226.75	225.97	228.28	230.86	226.62	226.63	226.02	225.88	225.78	225.77	
16	225.85	230.67	226.56	225.97	227.42	228.53	226.57	226.64	226.02	225.87	225.78	225.76	
17	225.89	231.62	226.63	225.93	227.04	227.64	226.60	226.60	226.01	225.87	225.78	225.75	
18	225.84	228.22	226.49	225.92	227.09	228.99	226.56	226.52	226.01	225.87	225.78	225.76	
19	225.83	227.61	226.40	225.92	227.52	228.70	226.55	226.46	226.01	225.87	225.77	225.77	
20	225.82	226.87	226.22	225.92	227.07	227.97	226.56	226.43	226.00	225.87	225.77	225.78	
21	225.79	226.65	226.17	225.92	227.28	228.75	226.52	226.40	226.00	225.86	225.77	225.77	
22	225.78	226.45	226.12	225.93	228.33	230.21	226.48	226.36	226.00	225.86	225.77	225.76	
23	225.78	228.13	226.48	225.94	228.51	234.60	226.95	226.34	226.00	225.85	225.77	225.75	
24	225.77	226.81	226.57	226.04	227.37	230.54	235.48	226.30	225.97	225.85	225.77	225.82	
25	225.78	226.64	226.45	226.01	226.95	233.89	238.17	226.30	225.97	225.85	225.79	225.78	
26	226.09	227.36	226.34	225.96	226.63	236.12	237.45	226.29	225.96	225.84	225.80	225.76	
27	225.92	227.52	226.28	225.92	228.58	231.53	233.13	226.27	225.95	225.83	225.84	225.74	
28	225.95	227.16	226.19	225.90	233.55	228.58	230.19	226.26	225.95	225.83	225.85	225.73	
29	225.95	226.86	226.17	225.89	228.86	227.90	231.21	226.24	225.95	225.83		225.74	
30	226.19	226.64	226.16	225.94	227.89	227.55	229.42	226.22	225.95	225.83		225.73	
31		226.73		225.89	227.44		228.44		225.95	225.83		228.03	
Mean	225.91	227.25	227.24	225.98	227.94	228.84	228.58	226.74	226.03	225.87	225.80	225.86	
Max	226.19	231.62	230.28	226.13	233.55	236.12	238.17	227.99	226.20	225.94	225.85	228.03	238.17
Min	225.77	226.17	226.12	225.89	225.87	226.65	226.48	226.22	225.95	225.83	225.77	225.73	225.73

Annual Max Momentary Gage Height 238.30 M (MSL), at 17.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 225.00 M (MSL), River Bed 225.37 M (MSL)
Left Bank Elevation 237.98 M (MSL)
Right Bank Elevation 237.99 M (MSL), Drainage Area 945 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.24	3.04	8.80	1.78	0.67	8.70	11.20	18.88	2.20	0.82	0.49	0.49	
2	1.60	5.04	41.40	1.78	0.61	6.56	9.60	17.37	2.08	0.79	0.49	0.40	
3	0.94	15.75	32.10	1.48	0.70	5.36	9.00	14.25	1.78	0.76	0.46	0.34	
4	0.85	8.60	15.50	1.36	0.70	5.20	8.70	12.20	1.66	0.73	0.46	0.34	
5	1.42	17.37	36.00	1.30	0.70	9.10	14.75	10.80	1.66	0.73	0.43	0.36	
6	0.94	7.28	11.40	1.06	2.20	7.28	33.75	9.40	1.60	0.70	0.43	0.36	
7	0.85	11.40	13.60	0.94	16.25	6.96	16.75	8.70	1.54	0.70	0.43	0.52	
8	0.85	8.10	19.12	0.91	49.20	5.28	10.00	8.00	1.48	0.67	0.43	0.67	
9	0.76	2.86	13.90	0.88	17.13	6.24	8.50	7.36	1.42	0.67	0.43	0.64	
10	0.64	2.02	24.66	1.18	27.30	15.50	19.00	6.72	1.30	0.67	0.43	0.55	
11	0.58	12.90	57.60	1.36	29.40	29.40	10.00	6.32	1.30	0.67	0.40	0.46	
12	0.55	3.88	31.65	1.12	146.05	34.50	7.44	5.68	1.18	0.67	0.40	0.40	
13	0.58	2.56	14.37	0.94	53.60	18.37	6.40	5.28	1.18	0.64	0.40	0.36	
14	0.67	2.62	8.80	0.85	22.54	17.62	5.76	5.04	1.12	0.64	0.38	0.36	
15	0.52	6.40	6.00	0.91	22.54	72.00	4.96	5.04	1.12	0.64	0.36	0.34	
16	0.55	67.25	4.48	0.91	12.20	25.95	4.56	5.12	1.12	0.61	0.36	0.32	
17	0.67	91.00	5.04	0.79	8.40	14.50	4.80	4.80	1.06	0.61	0.36	0.30	
18	0.52	21.76	3.94	0.76	8.90	32.85	4.48	4.16	1.06	0.61	0.36	0.32	
19	0.49	14.12	3.40	0.76	13.20	28.50	4.40	3.76	1.06	0.61	0.34	0.34	
20	0.46	6.96	2.32	0.76	8.70	18.63	4.48	3.58	1.00	0.61	0.34	0.36	
21	0.38	5.20	2.02	0.76	10.80	29.25	4.16	3.40	1.00	0.58	0.34	0.34	
22	0.36	3.70	1.72	0.79	23.19	56.20	3.88	3.16	1.00	0.58	0.34	0.32	
23	0.36	20.63	3.88	0.82	25.65	184.00	7.60	3.04	1.00	0.55	0.34	0.30	
24	0.34	6.48	4.56	1.24	11.70	64.00	219.20	2.80	0.91	0.55	0.34	0.46	
25	0.36	5.12	3.70	1.06	7.60	158.65	342.00	2.80	0.91	0.55	0.38	0.36	
26	1.54	11.60	3.04	0.88	5.04	245.40	306.00	2.74	0.88	0.52	0.40	0.32	
27	0.76	13.20	2.68	0.76	26.70	88.75	133.90	2.62	0.85	0.49	0.52	0.28	
28	0.85	9.60	2.14	0.70	146.75	26.70	55.80	2.56	0.85	0.49	0.55	0.26	
29	0.85	6.88	2.02	0.67	30.90	17.75	80.75	2.44	0.85	0.49		0.28	
30	2.14	5.12	1.96	0.82	17.62	13.50	40.40	2.32	0.85	0.49		0.26	
31		5.84		0.67	12.40		24.66		0.85	0.49		19.37	
Total	23.62	404.28	381.80	31.00	759.34	1252.70	1416.88	190.34	37.87	19.33	11.39	33.78	4559.33 CMSDAY
Mean	0.79	13.04	12.73	1.00	24.49	41.76	45.71	6.34	1.22	0.62	0.41	0.99	12.49 CMS
Max	2.14	91.00	57.60	1.78	146.75	245.40	342.00	18.88	2.20	0.82	0.55	19.37	342.00 CMS
Min	0.34	2.02	1.72	0.67	0.61	5.20	3.88	2.32	0.85	0.49	0.34	0.26	0.26 CMS
Runoff	2.041	34.930	32.988	2.678	65.607	108.233	122.418	16.445	3.272	1.670	0.984	2.659	393.926 MCM

Momentary Peak 348.50 CMS, at 238.20 M (MSL), at 17.00 Hours, on Oct 25, 2001
Runoff Yield 13.22 Liters/Second/Square KM, Momentary Peak Yield 368.783 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

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

Location on left 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

Drainage Area 2,905 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +198.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the measuring line.

Elevation +210.661 m. (M.S.L.)

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 Float -

Rated by Current Meter 1968 to date.

Stability of Channel Regimes Fairly stable.

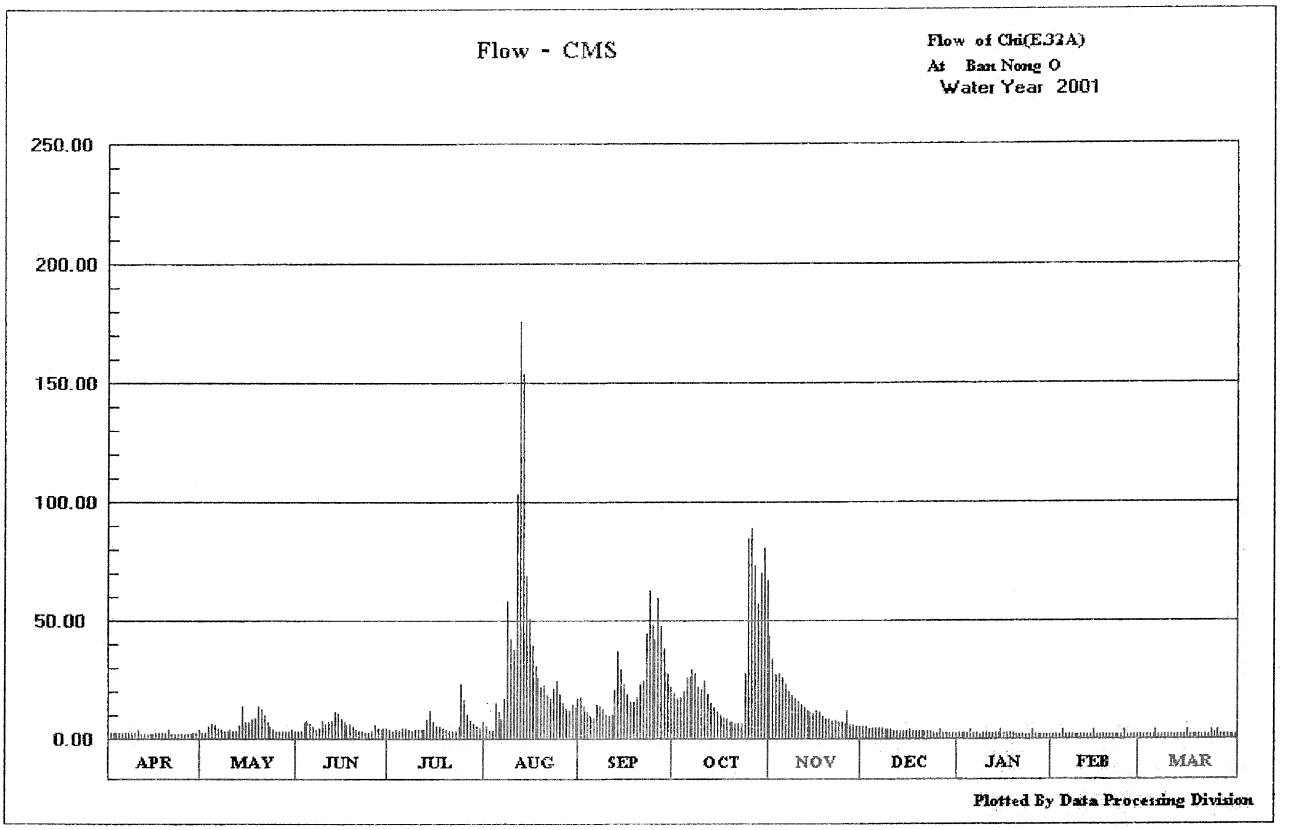
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 105 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	198.90	198.84	199.01	199.04	199.11	199.82	199.90	201.00	199.13	198.87	198.76	198.71	
2	198.86	198.90	199.00	199.01	199.00	199.62	199.78	200.62	199.12	198.86	198.76	198.69	
3	198.85	199.12	199.23	199.02	199.00	199.51	199.82	200.28	199.10	198.85	198.76	198.67	
4	198.86	199.22	199.27	199.00	199.70	199.42	199.95	200.31	199.10	198.85	198.75	198.65	
5	198.88	199.18	199.22	199.06	199.49	199.38	200.21	200.23	199.08	198.85	198.76	198.79	
6	198.88	199.07	199.11	199.08	199.34	199.65	200.25	200.09	199.07	198.83	198.76	198.76	
7	198.84	199.05	199.04	199.02	199.77	199.64	200.42	199.94	199.06	198.81	198.76	198.74	
8	198.83	199.00	199.06	198.99	201.53	199.58	200.32	199.84	199.05	198.80	198.75	198.72	
9	198.82	198.95	199.28	198.99	200.95	199.44	200.05	199.78	199.04	198.84	198.73	198.71	
10	198.80	198.92	199.19	199.05	200.77	199.40	199.97	199.73	199.02	198.84	198.75	198.69	
11	198.79	198.95	199.26	199.05	202.91	199.45	200.15	199.66	199.01	198.83	198.74	198.67	
12	198.77	198.95	199.30	199.02	204.81	199.98	199.87	199.59	199.00	198.83	198.73	198.66	
13	198.77	199.18	199.49	199.35	204.27	200.75	199.69	199.55	199.00	198.83	198.70	198.66	
14	198.78	199.64	199.48	199.54	201.86	200.41	199.59	199.50	198.99	198.83	198.67	198.65	
15	198.78	199.24	199.31	199.24	201.27	200.11	199.51	199.48	198.98	198.83	198.69	198.64	
16	198.86	199.26	199.23	199.12	200.83	199.87	199.43	199.52	198.98	198.82	198.68	198.64	
17	198.88	199.31	199.16	199.14	200.46	199.71	199.36	199.49	198.96	198.81	198.68	198.61	
18	198.91	199.39	199.22	199.07	200.21	199.71	199.31	199.42	198.94	198.82	198.64	198.59	
19	198.85	199.64	199.11	199.02	200.03	199.82	199.26	199.35	198.94	198.81	198.63	198.60	
20	198.81	199.58	199.05	198.99	200.06	200.09	199.24	199.33	198.94	198.79	198.65	198.58	
21	198.79	199.43	199.00	198.99	199.85	200.17	199.22	199.29	198.94	198.78	198.64	198.58	
22	198.78	199.23	198.94	198.99	199.80	201.04	199.21	199.28	198.94	198.79	198.65	198.58	
23	198.78	199.12	198.92	199.14	200.01	201.66	199.21	199.25	198.93	198.77	198.62	198.59	
24	198.75	199.05	198.92	200.09	200.16	201.18	200.31	199.23	198.90	198.77	198.61	199.03	
25	198.73	199.01	198.94	199.75	199.87	200.95	202.36	199.21	198.89	198.77	198.64	198.81	
26	198.74	198.97	199.16	199.44	199.69	201.56	202.48	199.53	198.89	198.77	198.64	198.73	
27	198.79	198.99	199.06	199.27	199.58	201.15	202.00	199.18	198.89	198.76	198.73	198.69	
28	198.86	198.96	199.05	199.20	199.54	200.80	201.50	199.16	198.88	198.74	198.78	198.67	
29	198.84	198.98	199.09	199.13	199.65	200.32	201.91	199.14	198.87	198.75		198.62	
30	198.83	198.95	199.09	199.10	199.60	200.05	202.23	199.13	198.86	198.76		198.63	
31		198.97		199.24	199.80		201.80		198.87	198.76		198.61	
Mean	198.82	199.13	199.14	199.17	200.42	200.14	200.27	199.64	198.98	198.81	198.70	198.68	
Max	198.91	199.64	199.49	200.09	204.81	201.66	202.48	201.00	199.13	198.87	198.78	199.03	204.81
Min	198.73	198.84	198.92	198.99	199.00	199.38	199.21	199.13	198.86	198.74	198.61	198.58	198.58

Annual Max Momentary Gage Height 205.26 M (MSL), at 18.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 198.00 M (MSL), River Bed 197.46 M (MSL)
Left Bank Elevation 210.62 M (MSL)
Right Bank Elevation 211.07 M (MSL), Drainage Area 2905 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.50	3.20	4.15	4.60	5.65	18.40	20.00	44.00	5.95	3.35	2.80	2.55	
2	3.30	3.50	4.00	4.15	4.00	14.40	17.60	34.88	5.80	3.30	2.80	2.45	
3	3.25	5.80	7.45	4.30	4.00	12.20	18.40	27.60	5.50	3.25	2.80	2.35	
4	3.30	7.30	8.05	4.00	16.00	10.40	21.00	28.20	5.50	3.25	2.75	2.25	
5	3.40	6.70	7.30	4.90	11.80	9.70	26.20	26.60	5.20	3.25	2.80	2.95	
6	3.40	5.05	5.65	5.20	9.10	15.00	27.00	23.80	5.05	3.15	2.80	2.80	
7	3.20	4.75	4.60	4.30	17.40	14.80	30.40	20.80	4.90	3.05	2.80	2.70	
8	3.15	4.00	4.90	3.95	58.96	13.60	28.40	18.80	4.75	3.00	2.75	2.60	
9	3.10	3.75	8.20	3.95	42.80	10.80	23.00	17.60	4.60	3.20	2.65	2.55	
10	3.00	3.60	6.85	4.75	38.48	10.00	21.40	16.60	4.30	3.20	2.75	2.45	
11	2.95	3.75	7.90	4.75	103.76	11.00	25.00	15.20	4.15	3.15	2.70	2.35	
12	2.85	3.75	8.50	4.30	176.40	21.60	19.40	13.80	4.00	3.15	2.65	2.30	
13	2.85	6.70	11.80	9.25	154.80	38.00	15.80	13.00	4.00	3.15	2.50	2.30	
14	2.90	14.80	11.60	12.80	69.52	30.20	13.80	12.00	3.95	3.15	2.35	2.25	
15	2.90	7.60	8.65	7.60	51.56	24.20	12.20	11.60	3.90	3.15	2.45	2.20	
16	3.30	7.90	7.45	5.80	39.92	19.40	10.60	12.40	3.90	3.10	2.40	2.20	
17	3.40	8.65	6.40	6.10	31.20	16.20	9.40	11.80	3.80	3.05	2.40	2.05	
18	3.55	9.85	7.30	5.05	26.20	16.20	8.65	10.40	3.70	3.10	2.20	1.95	
19	3.25	14.80	5.65	4.30	22.60	18.40	7.90	9.25	3.70	3.05	2.15	2.00	
20	3.05	13.60	4.75	3.95	23.20	23.80	7.60	8.95	3.70	2.95	2.25	1.90	
21	2.95	10.60	4.00	3.95	19.00	25.40	7.30	8.35	3.70	2.90	2.20	1.90	
22	2.90	7.45	3.70	3.95	18.00	45.12	7.15	8.20	3.70	2.95	2.25	1.90	
23	2.90	5.80	3.60	6.10	22.20	63.12	7.15	7.75	3.65	2.85	2.10	1.95	
24	2.75	4.75	3.60	23.80	25.20	49.04	28.20	7.45	3.50	2.85	2.05	4.45	
25	2.65	4.15	3.70	17.00	19.40	42.80	85.52	7.15	3.45	2.85	2.20	3.05	
26	2.70	3.85	6.40	10.80	15.80	59.92	89.36	12.60	3.45	2.85	2.20	2.65	
27	2.95	3.95	4.90	8.05	13.60	48.20	74.00	6.70	3.45	2.80	2.65	2.45	
28	3.30	3.80	4.75	7.00	12.80	39.20	58.00	6.40	3.40	2.70	2.90	2.35	
29	3.20	3.90	5.35	5.95	15.00	28.40	71.12	6.10	3.35	2.75		2.10	
30	3.15	3.75	5.35	5.50	14.00	23.00	81.36	5.95	3.30	2.80		2.15	
31		3.85		7.60	18.00		67.60		3.35	2.80		2.05	
Total	93.05	194.90	186.50	207.70	1100.35	772.50	940.51	453.93	128.65	94.10	70.30	74.15	4316.64 CMSDAY
Mean	3.10	6.29	6.22	6.70	35.50	25.75	30.34	15.13	4.15	3.04	2.51	2.39	11.83 CMS
Max	3.55	14.80	11.80	23.80	176.40	63.12	89.36	44.00	5.95	3.35	2.90	4.45	176.40 CMS
Min	2.65	3.20	3.60	3.95	4.00	9.70	7.15	5.95	3.30	2.70	2.05	1.90	1.90 CMS
Runoff	8.040	16.839	16.114	17.945	95.070	66.744	81.260	39.220	11.115	8.130	6.074	6.407	372.958 MCM

Momentary Peak 194.40 CMS, at 205.26 M (MSL), at 18.00 Hours, on Aug 12, 2001
Runoff Yield 4.07 Liters/Second/Square KM, Momentary Peak Yield 66.919 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

Lam Chi Long at Ban Lup Pho, Chaiyaphum (E.49B)

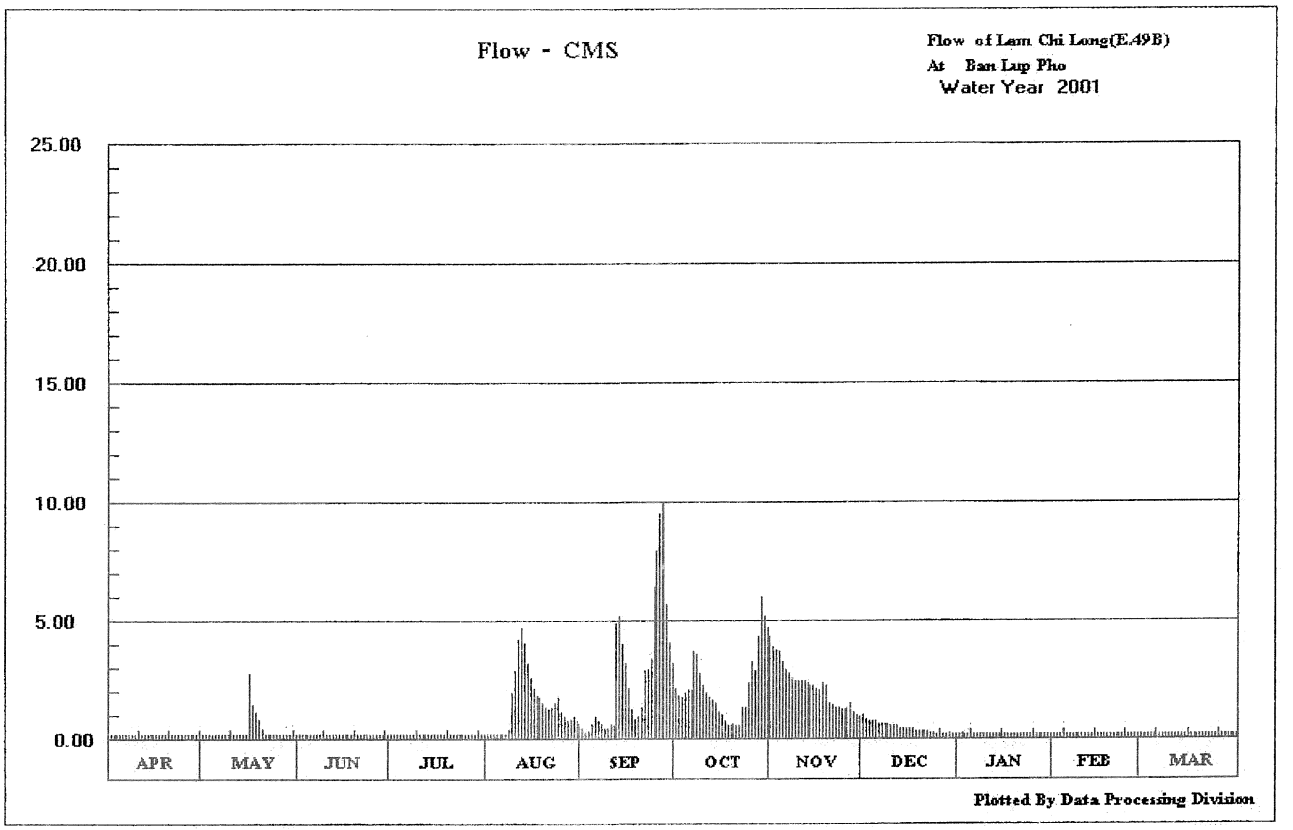
Lat 15 - 47 - 28 N. **Long** 101 - 52 - 20 E.

Location		on right bank at the bridge on road Ban Lup Pho from Tumbom Talat Raeng.
	Ban Lup Pho	**Amphoe** Ban Khwao **Changwat** Chaiyaphum
Drainage Area		331 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+196.180 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank upstream site at the abutment of the bridge.
	Elevation	+200.251 m. (M.S.L.)
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.
Period of Available Gage Records		1987 to date.
Rating Operation		
	Period of Rating	1987 to date
	Rated by Float	-
	Rated by Current Meter	1987 to date.
Stability of Channel Regimes		Fairly stable because of backwater effect.
Overbank Flow Conditions		No overbank flow.
General Description		Records fair. Flow effected by the local weir about 1.8 kilometers downstream from the gage site. Stage-discharge relation defined by 24 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	196.94	196.51	196.84	196.46	196.38	197.05	197.22	197.43	197.11	197.02	196.41	196.46	
2	196.65	196.52	196.85	196.42	196.38	197.03	197.19	197.39	197.09	197.03	196.41	196.46	
3	196.56	196.64	196.88	196.41	196.38	197.04	197.18	197.38	197.08	197.02	196.41	196.45	
4	196.55	196.75	196.88	196.40	196.38	197.07	197.20	197.37	197.08	197.02	196.41	196.45	
5	196.55	196.72	196.87	196.40	196.38	197.10	197.21	197.33	197.08	197.01	196.41	196.44	
6	196.53	196.68	196.86	196.39	196.38	197.08	197.21	197.30	197.07	197.01	196.41	196.44	
7	196.52	196.64	196.84	196.39	196.38	197.07	197.37	197.28	197.07	197.00	196.41	196.43	
8	196.52	196.62	196.86	196.39	197.03	197.05	197.36	197.26	197.07	196.94	196.41	196.43	
9	196.52	196.61	196.92	196.39	197.20	197.05	197.28	197.25	197.07	196.84	196.41	196.43	
10	196.52	196.54	196.91	196.39	197.29	197.07	197.23	197.25	197.06	196.65	196.41	196.43	
11	196.52	196.52	196.92	196.39	197.42	197.06	197.20	197.25	197.06	196.50	196.41	196.43	
12	196.52	196.41	196.91	196.39	197.47	197.49	197.18	197.25	197.06	196.52	196.41	196.42	
13	196.52	196.66	196.94	196.39	197.41	197.52	197.17	197.24	197.05	196.56	196.41	196.42	
14	196.52	196.83	196.98	196.39	197.32	197.40	197.16	197.23	197.05	196.55	196.41	196.41	
15	196.52	196.93	196.96	196.39	197.26	197.32	197.12	197.23	197.05	196.48	196.41	196.41	
16	196.52	197.28	196.91	196.39	197.22	197.22	197.11	197.22	197.05	196.48	196.41	196.41	
17	196.52	197.15	196.88	196.39	197.19	197.13	197.08	197.21	197.05	196.48	196.41	196.41	
18	196.52	197.12	196.84	196.39	197.18	197.09	197.06	197.24	197.04	196.48	196.41	196.41	
19	196.52	197.09	196.78	196.39	197.16	197.10	197.06	197.23	197.04	196.48	196.41	196.41	
20	196.52	197.05	196.73	196.39	197.14	197.14	197.07	197.16	197.04	196.48	196.41	196.41	
21	196.52	197.01	196.70	196.39	197.13	197.29	197.06	197.15	197.04	196.48	196.41	196.41	
22	196.51	197.00	196.68	196.39	197.14	197.30	197.06	197.14	197.04	196.48	196.41	196.41	
23	196.51	197.00	196.63	196.39	197.16	197.34	197.14	197.14	197.03	196.48	196.41	196.41	
24	196.51	196.97	196.52	196.39	197.18	197.62	197.14	197.13	197.03	196.48	196.41	196.41	
25	196.51	196.95	196.51	196.39	197.12	197.70	197.24	197.13	197.02	196.48	196.41	196.41	
26	196.51	196.90	196.50	196.39	197.10	197.78	197.33	197.14	197.02	196.48	196.41	196.41	
27	196.51	196.87	196.47	196.39	197.08	197.80	197.29	197.16	197.02	196.48	196.41	196.41	
28	196.51	196.86	196.47	196.38	197.09	197.57	197.43	197.12	197.02	196.48	196.41	196.41	
29	196.51	196.85	196.47	196.38	197.10	197.41	197.60	197.11	197.03	196.48		196.41	
30	196.51	196.85	196.47	196.38	197.08	197.32	197.52	197.10	197.02	196.48		196.41	
31		196.84		196.38	197.07		197.47		197.02	196.48		196.41	
Mean	196.54	196.82	196.77	196.39	197.01	197.27	197.22	197.23	197.05	196.64	196.41	196.42	
Max	196.94	197.28	196.98	196.46	197.47	197.80	197.60	197.43	197.11	197.03	196.41	196.46	197.80
Min	196.51	196.41	196.47	196.38	196.38	197.03	197.06	197.10	197.02	196.48	196.41	196.41	196.38

Annual Max Momentary Gage Height 197.83 M (MSL), at 6.00 Hours, on Sep 27, 2001
Zero Gage at Bottom Elevation 196.18 M (MSL), River Bed 196.38 M (MSL)
Left Bank Elevation 199.28 M (MSL)
Right Bank Elevation 199.38 M (MSL), Drainage Area 331 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.03	0.00	0.01	0.00	0.00	0.52	2.22	4.37	1.10	0.23	0.00	0.00	
2	0.00	0.00	0.01	0.00	0.00	0.33	1.92	3.96	0.90	0.33	0.00	0.00	
3	0.00	0.00	0.02	0.00	0.00	0.42	1.82	3.86	0.81	0.23	0.00	0.00	
4	0.00	0.00	0.02	0.00	0.00	0.71	2.02	3.75	0.81	0.23	0.00	0.00	
5	0.00	0.00	0.01	0.00	0.00	1.00	2.12	3.35	0.81	0.14	0.00	0.00	
6	0.00	0.00	0.01	0.00	0.00	0.81	2.12	3.04	0.71	0.14	0.00	0.00	
7	0.00	0.00	0.01	0.00	0.00	0.71	3.75	2.84	0.71	0.04	0.00	0.00	
8	0.00	0.00	0.01	0.00	0.33	0.52	3.65	2.63	0.71	0.03	0.00	0.00	
9	0.00	0.00	0.02	0.00	2.02	0.52	2.84	2.53	0.71	0.01	0.00	0.00	
10	0.00	0.00	0.02	0.00	2.94	0.71	2.33	2.53	0.62	0.00	0.00	0.00	
11	0.00	0.00	0.02	0.00	4.26	0.62	2.02	2.53	0.62	0.00	0.00	0.00	
12	0.00	0.00	0.02	0.00	4.77	4.98	1.82	2.53	0.62	0.00	0.00	0.00	
13	0.00	0.00	0.03	0.00	4.16	5.28	1.71	2.43	0.52	0.00	0.00	0.00	
14	0.00	0.01	0.04	0.00	3.24	4.06	1.61	2.33	0.52	0.00	0.00	0.00	
15	0.00	0.03	0.03	0.00	2.63	3.24	1.20	2.33	0.52	0.00	0.00	0.00	
16	0.00	2.84	0.02	0.00	2.22	2.22	1.10	2.22	0.52	0.00	0.00	0.00	
17	0.00	1.51	0.02	0.00	1.92	1.31	0.81	2.12	0.52	0.00	0.00	0.00	
18	0.00	1.20	0.01	0.00	1.82	0.90	0.62	2.43	0.42	0.00	0.00	0.00	
19	0.00	0.90	0.00	0.00	1.61	1.00	0.62	2.33	0.42	0.00	0.00	0.00	
20	0.00	0.52	0.00	0.00	1.41	1.41	0.71	1.61	0.42	0.00	0.00	0.00	
21	0.00	0.14	0.00	0.00	1.31	2.94	0.62	1.51	0.42	0.00	0.00	0.00	
22	0.00	0.04	0.00	0.00	1.41	3.04	0.62	1.41	0.42	0.00	0.00	0.00	
23	0.00	0.04	0.00	0.00	1.61	3.45	1.41	1.41	0.33	0.00	0.00	0.00	
24	0.00	0.03	0.00	0.00	1.82	6.49	1.41	1.31	0.33	0.00	0.00	0.00	
25	0.00	0.03	0.00	0.00	1.20	8.05	2.43	1.31	0.23	0.00	0.00	0.00	
26	0.00	0.02	0.00	0.00	1.00	9.61	3.35	1.41	0.23	0.00	0.00	0.00	
27	0.00	0.01	0.00	0.00	0.81	10.00	2.94	1.61	0.23	0.00	0.00	0.00	
28	0.00	0.01	0.00	0.00	0.90	5.79	4.37	1.20	0.23	0.00	0.00	0.00	
29	0.00	0.01	0.00	0.00	1.00	4.16	6.10	1.10	0.33	0.00		0.00	
30	0.00	0.01	0.00	0.00	0.81	3.24	5.28	1.00	0.23	0.00		0.00	
31		0.01		0.00	0.71		4.77		0.23	0.00		0.00	
Total	0.03	7.36	0.33	0.00	45.91	88.04	70.31	68.99	16.20	1.38	0.00	0.00	298.55 CMSDAY
Mean	0.00	0.24	0.01	0.00	1.48	2.93	2.27	2.30	0.52	0.04	0.00	0.00	0.82 CMS
Max	0.03	2.84	0.04	0.00	4.77	10.00	6.10	4.37	1.10	0.33	0.00	0.00	10.00 CMS
Min	0.00	0.00	0.00	0.00	0.00	0.33	0.62	1.00	0.23	0.00	0.00	0.00	0.00 CMS
Runoff	0.003	0.636	0.029	0.000	3.967	7.607	6.075	5.961	1.400	0.119	0.000	0.000	25.795 MCM

Momentary Peak 10.60 CMS, at 197.83 M (MSL), at 6.00 Hours, on Sep 27, 2001

Runoff Yield 2.47 Liters/Second/Square KM, Momentary Peak Yield 32.024 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

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

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

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

Drainage Area 1,511 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +138.340 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +149.988 m. (M.S.L.)

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 Float -

Rated by Current Meter 1969 - 1977, 1983 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

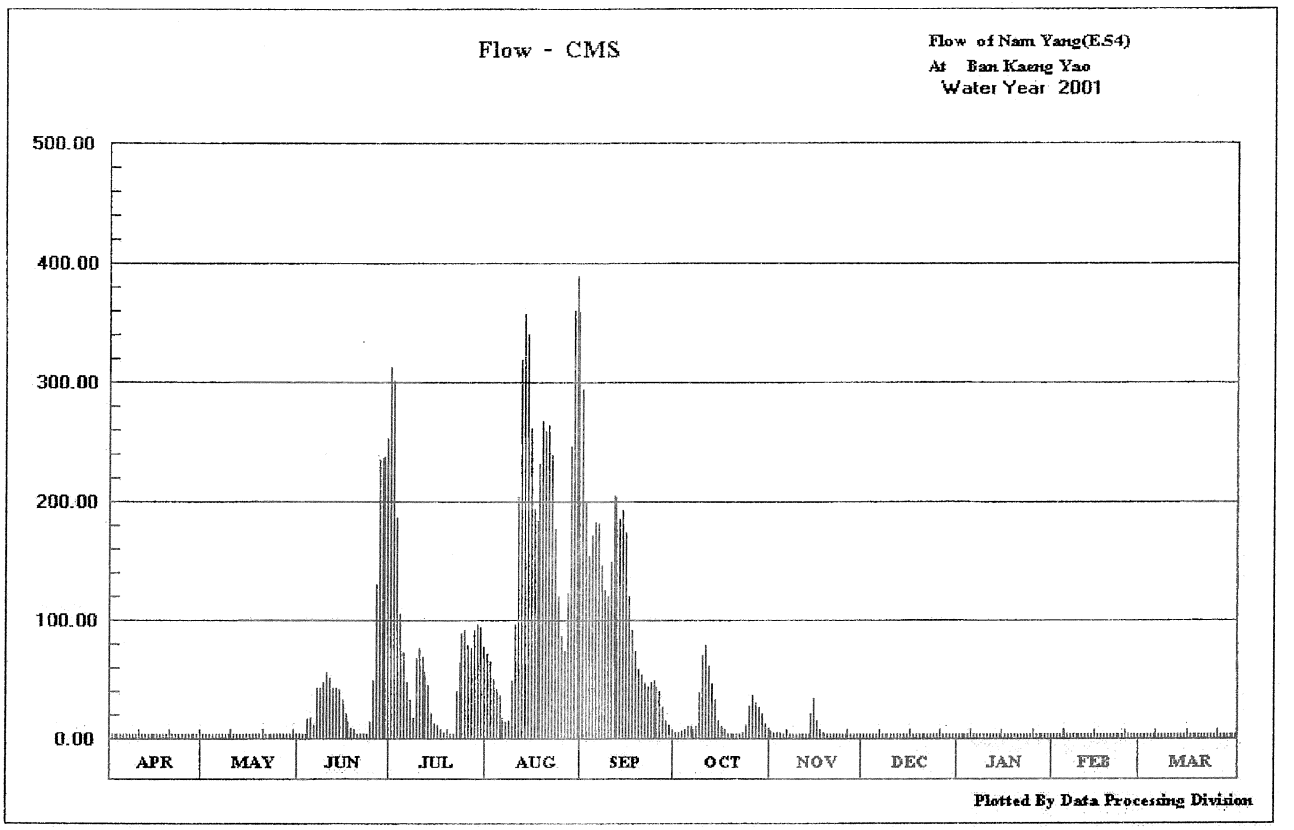
Overbank Flow Conditions Overbank flow starts at elevation +144.690 m.(M.S.L.), records are channel flow only.

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 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	140.36	140.29	140.41	145.64	141.61	145.38	140.59	140.62	140.42	140.35	140.35	140.31	
2	140.35	140.30	140.44	145.49	141.49	143.93	140.60	140.60	140.40	140.36	140.35	140.31	
3	140.34	140.40	140.46	143.72	141.18	143.18	140.62	140.59	140.40	140.35	140.34	140.31	
4	140.33	140.54	140.79	142.29	140.98	143.47	140.64	140.60	140.39	140.35	140.34	140.30	
5	140.32	140.52	140.80	141.64	140.89	143.66	140.67	140.57	140.39	140.35	140.34	140.30	
6	140.32	140.46	140.70	141.13	140.80	143.64	140.67	140.53	140.39	140.35	140.35	140.29	
7	140.28	140.42	140.99	140.87	140.74	143.05	140.64	140.51	140.38	140.35	140.34	140.29	
8	140.28	140.39	140.99	140.80	140.76	142.68	140.67	140.49	140.38	140.35	140.34	140.29	
9	140.29	140.38	141.14	141.54	141.16	142.58	140.92	140.47	140.38	140.35	140.35	140.29	
10	140.27	140.35	141.31	141.73	142.13	143.10	141.60	140.46	140.38	140.35	140.33	140.29	
11	140.26	140.39	141.22	141.57	144.01	144.02	141.77	140.44	140.38	140.35	140.33	140.30	
12	140.24	140.42	141.01	141.33	145.74	144.00	141.43	140.44	140.38	140.35	140.34	140.29	
13	140.23	140.43	140.99	141.07	146.29	143.69	141.09	140.48	140.38	140.36	140.35	140.31	
14	140.22	140.42	140.97	140.82	146.03	143.81	140.87	140.82	140.38	140.37	140.35	140.31	
15	140.22	140.38	140.87	140.72	144.89	143.51	140.77	140.88	140.37	140.37	140.35	140.31	
16	140.19	140.38	140.82	140.69	143.83	142.59	140.67	140.77	140.35	140.37	140.34	140.30	
17	140.16	140.38	140.73	140.63	143.67	142.03	140.62	140.64	140.36	140.36	140.34	140.30	
18	140.11	140.41	140.65	140.59	144.43	141.66	140.56	140.58	140.36	140.37	140.34	140.30	
19	140.07	140.45	140.60	140.54	144.99	141.38	140.55	140.53	140.37	140.36	140.34	140.31	
20	140.02	140.42	140.50	140.52	144.86	141.28	140.53	140.50	140.37	140.36	140.34	140.32	
21	139.99	140.39	140.46	140.56	144.93	141.10	140.53	140.47	140.37	140.36	140.33	140.34	
22	139.92	140.38	140.46	140.93	144.54	141.04	140.53	140.45	140.37	140.36	140.33	140.32	
23	139.89	140.36	140.48	141.48	143.55	141.13	140.59	140.44	140.37	140.36	140.33	140.32	
24	139.88	140.36	140.74	141.98	142.58	141.15	140.69	140.44	140.36	140.36	140.31	140.32	
25	139.94	140.37	141.16	142.01	141.93	141.05	140.85	140.44	140.34	140.36	140.32	140.31	
26	140.00	140.37	142.77	141.77	141.66	140.94	140.89	140.44	140.35	140.36	140.31	140.30	
27	140.30	140.36	144.49	141.73	142.64	140.84	140.86	140.43	140.34	140.35	140.30	140.29	
28	140.31	140.35	144.50	142.01	144.66	140.76	140.84	140.42	140.34	140.35	140.31	140.29	
29	140.30	140.35	144.53	142.13	146.32	140.69	140.82	140.42	140.34	140.35		140.29	
30	140.30	140.41	144.75	142.07	146.73	140.64	140.71	140.42	140.34	140.35		140.30	
31		140.41		141.74	146.30		140.65		140.34	140.35		140.32	
Mean	140.19	140.39	141.36	141.67	143.43	142.40	140.79	140.53	140.37	140.36	140.34	140.30	
Max	140.36	140.54	144.75	145.64	146.73	145.38	141.77	140.88	140.42	140.37	140.35	140.34	146.73
Min	139.88	140.29	140.41	140.52	140.74	140.64	140.53	140.42	140.34	140.35	140.30	140.29	139.88

Annual Max Momentary Gage Height 146.78 M (MSL), at 5.00 Hours, on Aug 30, 2001
Zero Gage at Bottom Elevation 138.34 M (MSL), River Bed 138.12 M (MSL)
Left Bank Elevation 144.68 M (MSL)
Right Bank Elevation 146.30 M (MSL), Drainage Area 1511 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.64	0.22	1.10	313.80	72.50	295.65	6.59	8.20	1.30	0.58	0.58	0.31	
2	0.58	0.25	1.70	303.30	66.50	200.80	7.00	7.00	0.90	0.64	0.58	0.31	
3	0.51	0.90	2.10	188.20	51.20	155.80	8.20	6.59	0.90	0.58	0.51	0.31	
4	0.45	4.54	18.40	106.50	43.20	173.20	9.40	7.00	0.84	0.58	0.51	0.25	
5	0.38	3.72	19.00	74.00	37.90	184.60	11.20	5.77	0.84	0.58	0.51	0.25	
6	0.38	2.10	13.00	49.20	19.00	183.40	11.20	4.13	0.84	0.58	0.58	0.22	
7	0.20	1.30	43.60	33.70	15.40	148.00	9.40	3.31	0.77	0.58	0.51	0.22	
8	0.20	0.84	43.60	19.00	16.60	126.90	11.20	2.70	0.77	0.58	0.51	0.22	
9	0.22	0.77	49.60	69.00	50.40	121.40	40.80	2.30	0.77	0.58	0.58	0.22	
10	0.18	0.58	57.50	78.50	98.50	151.00	72.00	2.10	0.77	0.58	0.45	0.22	
11	0.15	0.84	53.00	70.50	205.65	206.30	80.50	1.70	0.77	0.58	0.45	0.25	
12	0.10	1.30	44.40	58.50	320.80	205.00	63.50	1.70	0.77	0.58	0.51	0.22	
13	0.07	1.50	43.60	46.80	359.30	186.40	47.60	2.50	0.77	0.64	0.58	0.31	
14	0.05	1.30	42.80	23.20	341.10	193.60	33.70	23.20	0.77	0.70	0.58	0.31	
15	0.05	0.77	33.70	14.20	262.85	175.60	17.20	35.80	0.70	0.70	0.58	0.31	
16	0.00	0.77	23.20	12.40	194.80	121.95	11.20	17.20	0.58	0.70	0.51	0.25	
17	0.00	0.77	14.80	8.80	185.20	93.50	8.20	9.40	0.64	0.64	0.51	0.25	
18	0.00	1.10	10.00	6.59	232.95	75.00	5.36	6.18	0.64	0.70	0.51	0.25	
19	0.00	1.90	7.00	4.54	269.35	61.00	4.95	4.13	0.70	0.64	0.51	0.31	
20	0.00	1.30	2.90	3.72	260.90	56.00	4.13	2.90	0.70	0.64	0.51	0.38	
21	0.00	0.84	2.10	5.36	265.45	48.00	4.13	2.30	0.70	0.64	0.45	0.51	
22	0.00	0.77	2.10	41.20	240.10	45.60	4.13	1.90	0.70	0.64	0.45	0.38	
23	0.00	0.64	2.50	66.00	178.00	49.20	6.59	1.70	0.70	0.64	0.45	0.38	
24	0.00	0.64	15.40	91.00	121.40	50.00	12.40	1.70	0.64	0.64	0.31	0.38	
25	0.00	0.70	50.40	92.50	88.50	46.00	29.50	1.70	0.51	0.64	0.38	0.31	
26	0.00	0.70	131.85	80.50	75.00	41.60	37.90	1.70	0.58	0.64	0.31	0.25	
27	0.25	0.64	236.85	78.50	124.70	27.40	31.60	1.50	0.51	0.58	0.25	0.22	
28	0.31	0.58	237.50	92.50	247.90	16.60	27.40	1.30	0.51	0.58	0.31	0.22	
29	0.25	0.58	239.45	98.50	361.40	12.40	23.20	1.30	0.51	0.58		0.22	
30	0.25	1.10	253.75	95.50	390.92	9.40	13.60	1.30	0.51	0.58		0.25	
31		1.10		79.00	360.00		10.00		0.51	0.58		0.38	
Total	5.22	35.06	1696.90	2305.01	5557.47	3461.30	663.78	170.21	22.12	19.12	13.48	8.87	13958.54 CMSDAY
Mean	0.17	1.13	56.56	74.36	179.27	115.38	21.41	5.67	0.71	0.62	0.48	0.29	38.24 CMS
Max	0.64	4.54	253.75	313.80	390.92	295.65	80.50	35.80	1.30	0.70	0.58	0.51	390.92 CMS
Min	0.00	0.22	1.10	3.72	15.40	9.40	4.13	1.30	0.51	0.58	0.25	0.22	0.00 CMS
Runoff	0.451	3.029	146.612	199.153	480.165	299.056	57.351	14.706	1.911	1.652	1.165	0.766	1206.018 MCM

Momentary Peak 394.55 CMS, at 146.78 M (MSL), at 5.00 Hours, on Aug 30, 2001

Runoff Yield 25.31 Liters/Second/Square KM, Momentary Peak Yield 261.118 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

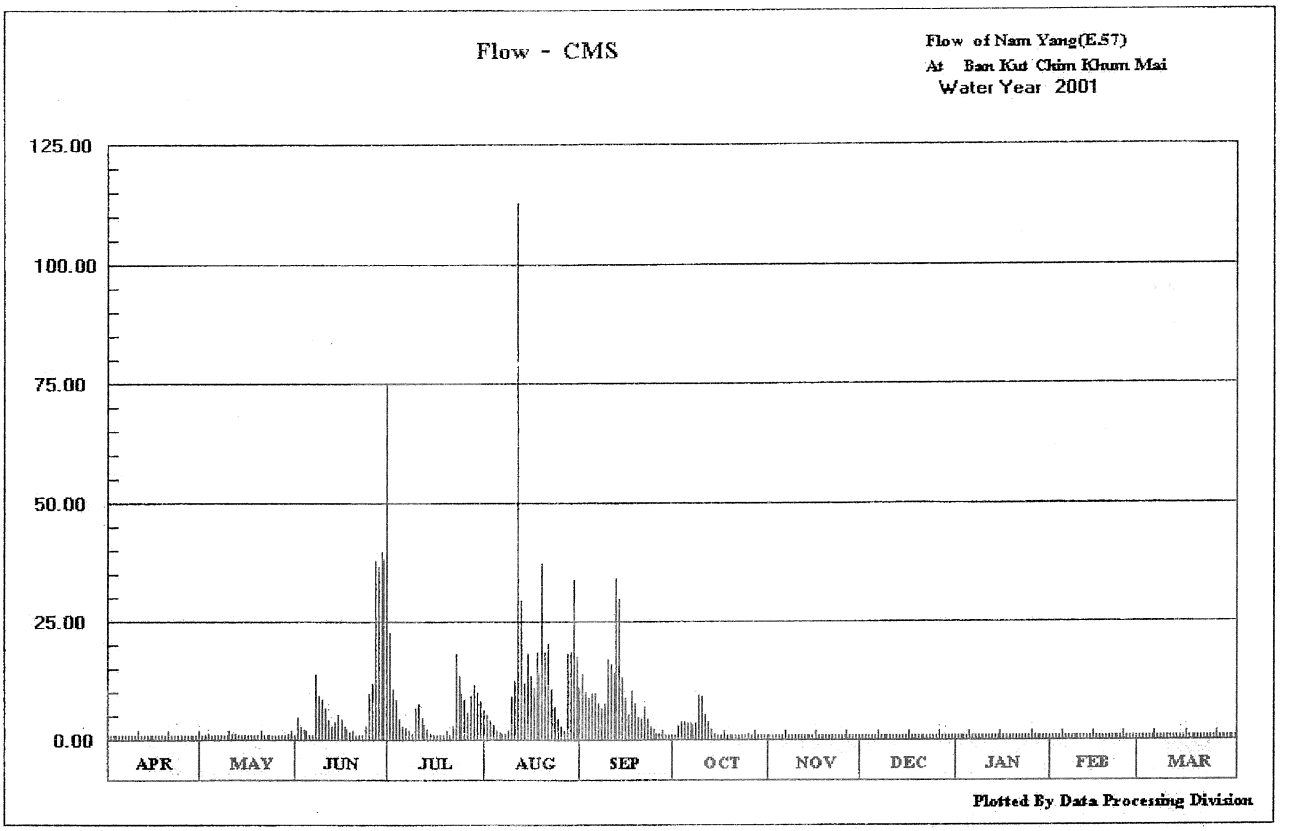
Lat 16 - 41 - 02 N. **Long** 104 - 05 - 06 E.

Location		on right bank at the bridge on highway Ban Kut Chim Khum Mai.
	Ban Kut Chim Khum Mai	**Amphoe** Khao Wong **Changwat** Kalasin
Drainage Area		98 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+170.100 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On right bank at the footpath of the bridge.
	Elevation	+177.855 m. (M.S.L.)
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic 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 Float	-
	Rated by Current Meter	1969 - 1970, 1984 to date.
Stability of Channel Regimes		Stable.
Overbank Flow Conditions		Overbank flow starts at elevation +173.340 m.(M.S.L.), records are channel flow only.
General Description		Records fair. The local weir situated about 100 meters from the gage site.
		Stage-discharge relation defined by 59 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	169.80	170.10	170.91	171.83	170.94	171.41	170.45	170.35	169.96	169.86	169.80	169.80	
2	169.80	170.16	170.69	171.25	170.86	171.22	170.68	170.38	169.96	169.85	169.80	169.80	
3	169.80	170.51	170.60	171.14	170.72	171.16	170.81	170.42	169.96	169.84	169.80	169.80	
4	169.80	170.24	170.57	170.89	170.58	171.21	170.81	170.39	169.96	169.83	169.80	169.80	
5	169.80	170.42	170.46	170.68	170.54	171.21	170.76	170.36	169.95	169.83	169.80	169.80	
6	169.80	170.27	170.37	170.67	170.47	171.08	170.76	170.25	169.95	169.82	169.80	169.80	
7	169.80	170.22	171.41	170.57	170.47	171.03	170.75	170.19	169.95	169.80	169.80	169.80	
8	169.80	170.18	171.18	170.48	170.51	171.08	170.78	170.17	169.95	169.80	169.80	169.80	
9	169.80	170.15	171.13	171.03	171.17	171.56	171.19	170.14	169.95	169.80	169.80	169.80	
10	169.80	170.15	171.02	171.09	171.35	171.52	171.17	170.13	169.95	169.80	169.80	169.80	
11	169.80	170.50	170.86	170.91	174.02	171.42	170.94	170.09	169.94	169.80	169.80	169.80	
12	169.80	170.48	170.71	170.75	172.06	172.22	170.82	170.08	169.94	169.80	169.80	169.80	
13	169.80	170.38	170.83	170.60	171.31	172.07	170.62	170.20	169.94	169.80	169.80	169.80	
14	169.80	170.26	170.94	170.47	171.62	171.37	170.47	170.23	169.93	169.80	169.80	169.80	
15	169.80	170.19	170.87	170.39	171.39	171.16	170.40	170.21	169.93	169.80	169.80	169.80	
16	169.80	170.15	170.71	170.34	171.26	170.95	170.39	170.18	169.93	169.80	169.80	169.80	
17	169.80	170.15	170.61	170.32	171.64	171.24	170.35	170.15	169.94	169.80	169.80	169.80	
18	169.80	170.16	170.53	170.29	171.43	171.09	170.29	170.11	169.94	169.80	169.80	169.80	
19	169.80	170.17	170.42	170.24	172.32	170.90	170.30	170.09	169.93	169.80	169.80	169.80	
20	169.80	170.22	170.33	170.23	171.65	170.87	170.26	170.08	169.92	169.80	169.80	169.80	
21	169.80	170.20	170.27	170.69	171.73	171.04	170.26	170.05	169.92	169.80	169.80	169.80	
22	169.80	170.20	170.29	171.62	171.25	170.88	170.23	170.04	169.92	169.80	169.80	169.80	
23	169.80	170.20	170.70	171.40	171.05	170.71	170.33	170.02	169.92	169.80	169.80	169.80	
24	169.80	170.18	171.21	171.20	170.89	170.60	170.39	170.01	169.92	169.80	169.80	169.80	
25	169.80	170.26	171.31	171.14	170.69	170.51	170.48	170.00	169.92	169.80	169.80	169.80	
26	169.80	170.30	172.34	170.97	170.59	170.47	170.45	169.98	169.91	169.80	169.80	169.80	
27	169.80	170.25	172.30	171.19	171.62	170.43	170.44	169.97	169.90	169.80	169.80	169.80	
28	169.80	170.23	172.40	171.30	171.65	170.37	170.43	169.96	169.90	169.80	169.80	169.80	
29	169.80	170.50	172.35	171.22	172.21	170.32	170.41	169.96	169.89	169.80		169.80	
30	169.80	170.48	173.27	171.12	171.60	170.25	170.38	169.96	169.88	169.80		169.80	
31		170.46		171.01	171.27		170.36		169.87	169.80		169.80	
Mean	169.80	170.27	171.05	170.87	171.32	171.05	170.55	170.14	169.93	169.81	169.80	169.80	
Max	169.80	170.51	173.27	171.83	174.02	172.22	171.19	170.42	169.96	169.86	169.80	169.80	174.02
Min	169.80	170.10	170.27	170.23	170.47	170.25	170.23	169.96	169.87	169.80	169.80	169.80	169.80

Annual Max Momentary Gage Height 174.35 M (MSL), at 12.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 170.10 M (MSL), River Bed 169.90 M (MSL)
Left Bank Elevation 173.33 M (MSL)
Right Bank Elevation 173.39 M (MSL), Drainage Area 98 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.01	5.15	22.90	5.60	14.20	1.38	0.75	0.00	0.00	0.00	0.00	
2	0.00	0.15	3.18	11.00	4.60	10.40	3.10	0.90	0.00	0.00	0.00	0.00	
3	0.00	1.82	2.50	8.95	3.40	9.30	4.10	1.15	0.00	0.00	0.00	0.00	
4	0.00	0.35	2.28	4.90	2.35	10.20	4.10	0.95	0.00	0.00	0.00	0.00	
5	0.00	1.15	1.45	3.10	2.05	10.20	3.70	0.80	0.00	0.00	0.00	0.00	
6	0.00	0.43	0.85	3.02	1.53	7.90	3.70	0.38	0.00	0.00	0.00	0.00	
7	0.00	0.30	14.20	2.28	1.53	7.02	3.62	0.23	0.00	0.00	0.00	0.00	
8	0.00	0.20	9.65	1.60	1.82	7.90	3.85	0.18	0.00	0.00	0.00	0.00	
9	0.00	0.13	8.78	7.02	9.48	17.20	9.83	0.11	0.00	0.00	0.00	0.00	
10	0.00	0.13	6.85	8.07	13.00	16.40	9.48	0.08	0.00	0.00	0.00	0.00	
11	0.00	1.75	4.60	5.15	113.20	14.40	5.60	0.01	0.00	0.00	0.00	0.00	
12	0.00	1.60	3.33	3.62	29.80	34.60	4.20	0.01	0.00	0.00	0.00	0.00	
13	0.00	0.90	4.30	2.50	12.20	30.10	2.65	0.25	0.00	0.00	0.00	0.00	
14	0.00	0.40	5.60	1.53	18.40	13.40	1.53	0.32	0.00	0.00	0.00	0.00	
15	0.00	0.23	4.70	0.95	13.80	9.30	1.00	0.28	0.00	0.00	0.00	0.00	
16	0.00	0.13	3.33	0.70	11.20	5.75	0.95	0.20	0.00	0.00	0.00	0.00	
17	0.00	0.13	2.58	0.60	18.80	10.80	0.75	0.13	0.00	0.00	0.00	0.00	
18	0.00	0.15	1.98	0.47	14.60	8.07	0.47	0.03	0.00	0.00	0.00	0.00	
19	0.00	0.18	1.15	0.35	37.60	5.00	0.50	0.01	0.00	0.00	0.00	0.00	
20	0.00	0.30	0.65	0.32	19.00	4.70	0.40	0.01	0.00	0.00	0.00	0.00	
21	0.00	0.25	0.43	3.18	20.60	7.20	0.40	0.01	0.00	0.00	0.00	0.00	
22	0.00	0.25	0.47	18.40	11.00	4.80	0.32	0.00	0.00	0.00	0.00	0.00	
23	0.00	0.25	3.25	14.00	7.38	3.33	0.65	0.00	0.00	0.00	0.00	0.00	
24	0.00	0.20	10.20	10.00	4.90	2.50	0.95	0.00	0.00	0.00	0.00	0.00	
25	0.00	0.40	12.20	8.95	3.18	1.82	1.60	0.00	0.00	0.00	0.00	0.00	
26	0.00	0.50	38.20	6.05	2.42	1.53	1.38	0.00	0.00	0.00	0.00	0.00	
27	0.00	0.38	37.00	9.83	18.40	1.22	1.30	0.00	0.00	0.00	0.00	0.00	
28	0.00	0.32	40.00	12.00	19.00	0.85	1.22	0.00	0.00	0.00	0.00	0.00	
29	0.00	1.75	38.50	10.40	34.30	0.60	1.08	0.00	0.00	0.00		0.00	
30	0.00	1.60	75.50	8.60	18.00	0.38	0.90	0.00	0.00	0.00		0.00	
31		1.45		6.67	11.40		0.80		0.00	0.00		0.00	
Total	0.00	17.79	342.86	197.11	484.54	271.07	75.51	6.79	0.00	0.00	0.00	0.00	1395.67 CMSDAY
Mean	0.00	0.57	11.43	6.36	15.63	9.04	2.44	0.23	0.00	0.00	0.00	0.00	3.82 CMS
Max	0.00	1.82	75.50	22.90	113.20	34.60	9.83	1.15	0.00	0.00	0.00	0.00	113.20 CMS
Min	0.00	0.01	0.43	0.32	1.53	0.38	0.32	0.00	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.000	1.537	29.623	17.030	41.864	23.420	6.524	0.587	0.000	0.000	0.000	0.000	120.586 MCM

Momentary Peak 133.00 CMS, at 174.35 M (MSL), at 12.00 Hours, on Aug 11, 2001

Runoff Yield 39.02 Liters/Second/Square KM, Momentary Peak Yield 1357.143 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 358 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +254.473 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On right bank downstream side at the footpath of the bridge.

Elevation +261.680 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1979 to date.

Rating Operation

Period of Rating 1979 - 1980, 1997 to date.

Rated by Float -

Rated by Current Meter 1979 - 1980, 1997 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions Overbank flow starts at elevation +259.140 m.(M.S.L.), records are channel flow only.

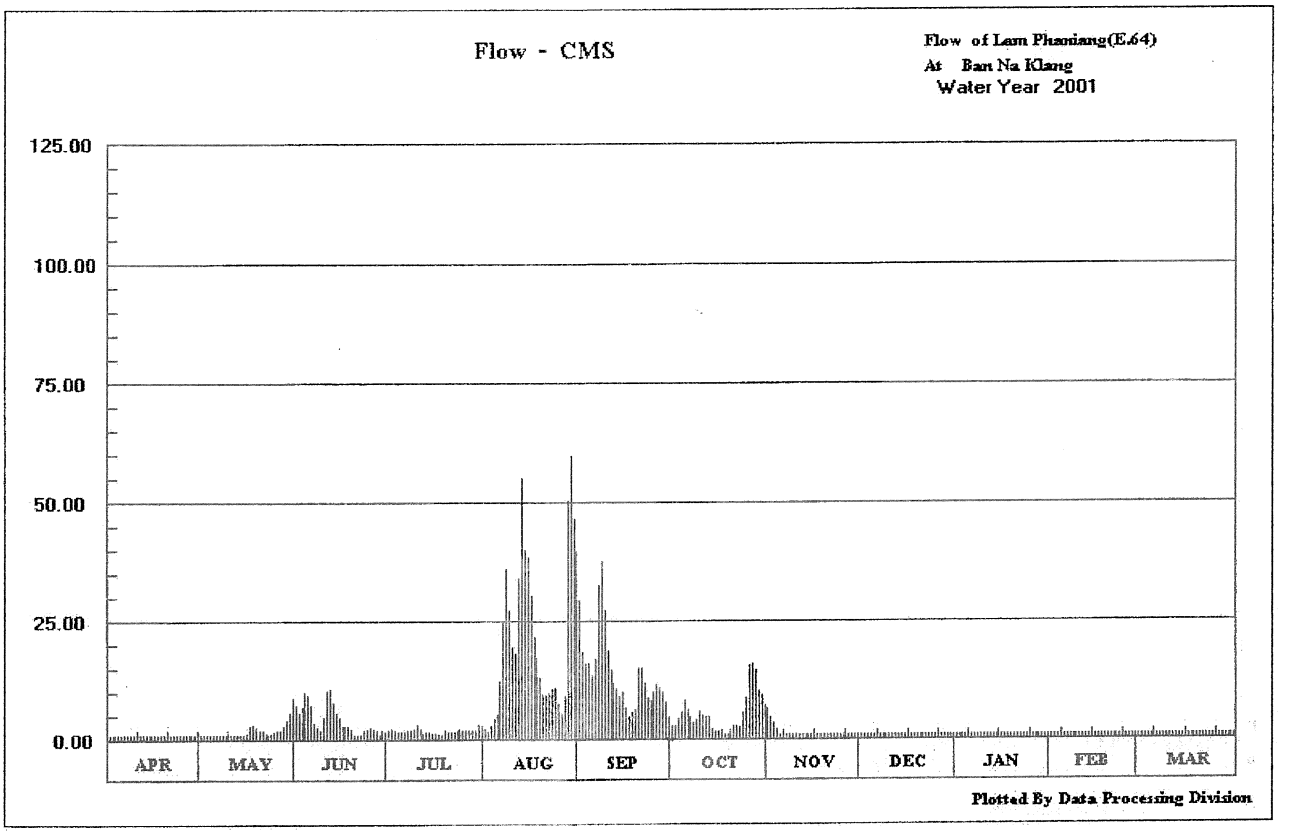
General Description Records good. The concrete weir situated downstream from the gage site.

Stage-discharge relation defined by 22 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	256.87	256.86	258.01	257.59	257.60	258.94	257.67	257.96	256.98	257.12	256.85	257.16	
2	256.87	256.86	257.90	257.62	257.56	258.55	257.67	257.82	256.96	257.11	256.85	257.15	
3	256.86	256.87	257.99	257.57	257.66	258.44	257.81	257.72	256.92	257.07	256.84	257.14	
4	256.86	256.87	258.14	257.56	257.81	258.44	257.90	257.61	256.90	257.07	256.84	257.14	
5	256.86	256.88	258.11	257.55	257.87	258.32	258.05	257.49	256.90	257.03	256.86	257.11	
6	256.85	256.89	258.01	257.56	258.26	258.49	257.95	257.39	256.90	257.00	257.02	257.07	
7	256.85	256.85	257.73	257.57	258.80	259.02	257.84	257.30	256.89	256.97	257.23	257.08	
8	256.86	256.87	257.63	257.59	259.09	259.12	257.73	257.25	256.89	256.98	257.21	257.07	
9	256.86	256.88	257.53	257.60	258.87	258.87	257.79	257.18	256.88	257.06	257.19	257.07	
10	256.86	256.89	257.82	257.71	258.59	258.57	257.92	257.11	256.86	257.11	257.16	256.97	
11	256.85	256.91	258.16	257.60	258.54	258.38	257.86	257.05	256.84	257.09	257.15	256.92	
12	256.85	256.92	258.17	257.53	259.05	258.24	257.83	257.01	256.82	257.08	257.12	256.92	
13	256.85	256.94	258.04	257.56	259.38	258.17	257.82	256.99	256.77	257.03	257.11	256.95	
14	256.85	256.94	257.89	257.55	259.17	258.10	257.61	256.97	256.75	257.01	257.10	256.97	
15	256.85	257.10	257.82	257.52	259.14	258.14	257.56	256.96	256.73	256.99	257.10	256.97	
16	256.85	257.53	257.67	257.51	258.96	257.97	257.56	256.96	256.69	256.98	257.13	256.95	
17	256.85	257.67	257.68	257.45	258.68	257.82	257.51	256.97	256.61	256.97	257.17	256.95	
18	256.86	257.69	257.66	257.41	258.51	257.90	257.49	256.95	256.57	256.97	257.19	256.95	
19	256.86	257.64	257.60	257.50	258.30	257.93	257.49	256.95	256.57	256.97	257.20	256.95	
20	256.86	257.57	257.50	257.54	258.11	258.39	257.58	256.94	256.57	256.96	257.20	256.88	
21	256.86	257.57	257.46	257.55	258.11	258.39	257.66	256.93	256.56	256.96	257.19	256.84	
22	256.86	257.53	257.44	257.56	258.13	258.24	257.66	257.00	256.57	256.84	256.97	256.84	
23	256.86	257.48	257.58	257.58	258.17	258.09	257.63	257.06	256.57	256.84	257.03	256.84	
24	256.87	257.52	257.62	257.61	258.20	258.05	257.90	256.96	256.67	256.84	257.12	256.84	
25	256.87	257.54	257.64	257.57	258.02	258.15	258.08	256.96	256.91	256.85	257.14	256.85	
26	256.87	257.57	257.61	257.59	257.88	258.22	258.43	256.95	257.09	256.85	257.15	256.86	
27	256.87	257.57	257.58	257.58	258.10	258.19	258.45	256.95	257.15	256.85	257.16	256.89	
28	256.87	257.66	257.49	257.57	259.32	258.14	258.38	256.95	257.15	256.84	257.17	256.89	
29	256.87	257.79	257.50	257.57	259.43	258.04	258.16	256.95	257.08	256.83		256.87	
30	256.86	257.89	257.56	257.69	259.27	257.82	258.11	256.95	257.08	256.83		256.86	
31		258.09		257.66	259.16		258.01		257.12	256.82		256.86	
Mean	256.86	257.29	257.75	257.57	258.51	258.30	257.84	257.14	256.84	256.97	257.09	256.96	
Max	256.87	258.09	258.17	257.71	259.43	259.12	258.45	257.96	257.15	257.12	257.23	257.16	259.43
Min	256.85	256.85	257.44	257.41	257.56	257.82	257.49	256.93	256.56	256.82	256.84	256.84	256.56

Annual Max Momentary Gage Height 259.57 M (MSL), at 18.00 Hours, on Aug 28, 2001
Zero Gage at Bottom Elevation 254.47 M (MSL), River Bed 254.76 M (MSL)
Left Bank Elevation 259.25 M (MSL)
Right Bank Elevation 259.13 M (MSL), Drainage Area 358 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.01	7.70	2.40	2.50	29.90	3.20	6.94	0.09	0.00	0.00	0.00	
2	0.00	0.01	6.10	2.70	2.10	18.75	3.20	4.98	0.07	0.00	0.00	0.00	
3	0.00	0.01	7.36	2.20	3.10	16.30	4.84	3.74	0.05	0.00	0.00	0.00	
4	0.00	0.01	10.30	2.10	4.84	16.30	6.10	2.60	0.03	0.00	0.00	0.00	
5	0.00	0.02	9.70	2.00	5.68	13.90	8.50	1.45	0.03	0.00	0.00	0.00	
6	0.00	0.03	7.70	2.10	12.70	17.30	6.80	0.97	0.03	0.00	0.00	0.00	
7	0.00	0.00	3.86	2.20	25.50	33.00	5.26	0.70	0.03	0.00	0.00	0.00	
8	0.00	0.01	2.80	2.40	36.50	38.00	3.86	0.60	0.03	0.00	0.00	0.00	
9	0.00	0.02	1.80	2.50	27.60	27.60	4.58	0.46	0.02	0.00	0.00	0.00	
10	0.00	0.03	4.98	3.62	19.75	19.25	6.38	0.32	0.01	0.00	0.00	0.00	
11	0.00	0.04	10.70	2.50	18.50	15.10	5.54	0.20	0.00	0.00	0.00	0.00	
12	0.00	0.05	10.90	1.80	34.50	12.30	5.12	0.12	0.00	0.00	0.00	0.00	
13	0.00	0.06	8.30	2.10	55.40	10.90	4.98	0.09	0.00	0.00	0.00	0.00	
14	0.00	0.06	5.96	2.00	40.50	9.50	2.60	0.08	0.00	0.00	0.00	0.00	
15	0.00	0.30	4.98	1.70	39.00	10.30	2.10	0.07	0.00	0.00	0.00	0.00	
16	0.00	1.80	3.20	1.60	30.60	7.08	2.10	0.07	0.00	0.00	0.00	0.00	
17	0.00	3.20	3.30	1.25	22.00	4.98	1.60	0.08	0.00	0.00	0.00	0.00	
18	0.01	3.40	3.10	1.05	17.75	6.10	1.45	0.07	0.00	0.00	0.00	0.00	
19	0.01	2.90	2.50	1.50	13.50	6.52	1.45	0.07	0.00	0.00	0.00	0.00	
20	0.01	2.20	1.50	1.90	9.70	15.30	2.30	0.06	0.00	0.00	0.00	0.00	
21	0.01	2.20	1.30	2.00	9.70	15.30	3.10	0.05	0.00	0.00	0.00	0.00	
22	0.01	1.80	1.20	2.10	10.10	12.30	3.10	0.10	0.00	0.00	0.00	0.00	
23	0.01	1.40	2.30	2.30	10.90	9.30	2.80	0.22	0.00	0.00	0.00	0.00	
24	0.01	1.70	2.70	2.60	11.50	8.50	6.10	0.07	0.00	0.00	0.00	0.00	
25	0.01	1.90	2.90	2.20	7.90	10.50	9.10	0.07	0.00	0.00	0.00	0.00	
26	0.01	2.20	2.60	2.40	5.82	11.90	16.10	0.07	0.00	0.00	0.00	0.00	
27	0.01	2.20	2.30	2.30	9.50	11.30	16.50	0.07	0.00	0.00	0.00	0.00	
28	0.01	3.10	1.45	2.20	50.60	10.30	15.10	0.07	0.00	0.00	0.00	0.00	
29	0.01	4.58	1.50	2.20	60.15	8.30	10.70	0.07	0.00	0.00		0.00	
30	0.01	5.96	2.10	3.40	46.90	4.98	9.70	0.07	0.00	0.00		0.00	
31		9.30		3.10	40.00		7.70		0.00	0.00		0.00	
Total	0.13	50.50	137.09	68.42	684.79	431.06	181.96	24.53	0.39	0.00	0.00	0.00	1578.87 CMSDAY
Mean	0.00	1.63	4.57	2.21	22.09	14.37	5.87	0.82	0.01	0.00	0.00	0.00	4.33 CMS
Max	0.01	9.30	10.90	3.62	60.15	38.00	16.50	6.94	0.09	0.00	0.00	0.00	60.15 CMS
Min	0.00	0.00	1.20	1.05	2.10	4.98	1.45	0.05	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.011	4.363	11.845	5.911	59.166	37.244	15.721	2.119	0.034	0.000	0.000	0.000	136.414 MCM

Momentary Peak 78.35 CMS, at 259.57 M (MSL), at 18.00 Hours, on Aug 28, 2001

Runoff Yield 12.08 Liters/Second/Square KM, Momentary Peak Yield 218.855 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

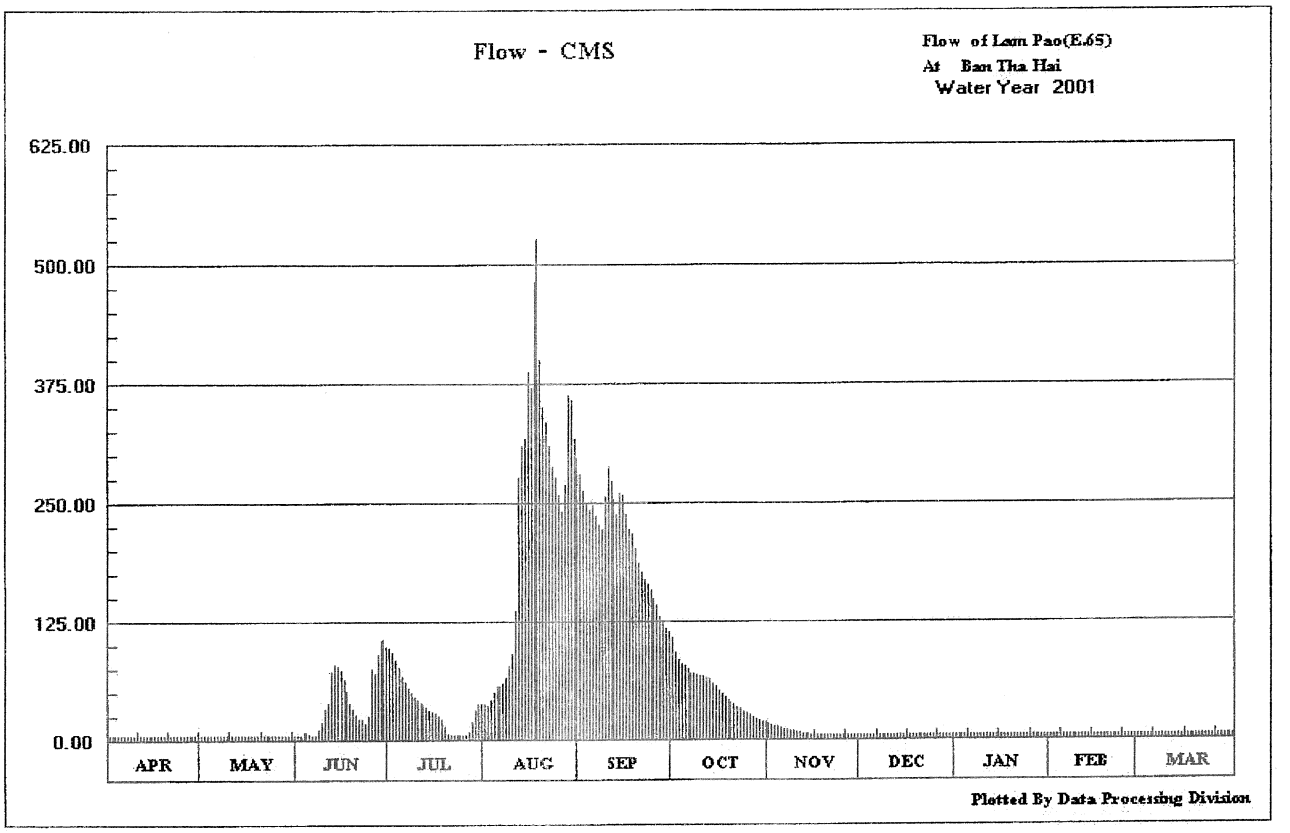
Lat 16 - 57 - 02 N. **Long** 103 - 10 - 16 E.

Location		on left bank at the bridge on highway.
	Ban Tha Hai	**Amphoe** Si That **Changwat** Udon Thani
Drainage Area		1,949 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+158.900 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank at the abutment of the bridge.
	Elevation	+169.686 m. (M.S.L.)
Gage Reading Frequency		Recording.
Basis of Mean Daily Gage Height		Arithmetic mean of 24 readings.
Period of Available Gage Records		1983 to date.
Rating Operation		
	Period of Rating	1983 to date
	Rated by Float	-
	Rated by Current Meter	1983 to date.
Stability of Channel Regimes		Fairly stable because of backwater effect.
Overbank Flow Conditions		Overbank flow starts at elevation +165.860 m.(M.S.L.), records are channel flow only.
General Description		Records fair. Flow effected by Lam Pao Dam.
		Stage-discharge relation defined by 15 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	161.19	161.07	161.58	164.41	163.11	166.17	164.61	164.71	163.58	162.83	162.11	161.38	
2	161.16	161.06	161.74	164.31	163.07	166.11	164.34	164.65	163.56	162.81	162.06	161.33	
3	161.14	161.20	162.08	164.17	163.24	166.05	164.17	164.56	163.53	162.78	162.02	161.32	
4	161.11	161.31	162.13	164.00	163.45	166.02	164.09	164.47	163.50	162.75	162.00	161.32	
5	161.11	161.32	161.98	163.83	163.57	166.04	164.03	164.39	163.47	162.73	161.97	161.31	
6	161.11	161.29	161.72	163.68	163.59	165.99	163.98	164.30	163.45	162.71	161.91	161.29	
7	161.10	161.28	161.71	163.56	163.66	165.94	163.90	164.23	163.45	162.68	161.88	161.28	
8	161.09	161.24	162.25	163.45	163.80	165.91	163.88	164.11	163.41	162.66	161.85	161.27	
9	161.07	161.21	162.56	163.34	164.03	166.08	163.86	163.92	163.38	162.65	161.81	161.27	
10	161.06	161.27	163.01	163.25	164.28	166.20	163.82	163.85	163.34	162.62	161.79	161.28	
11	161.05	161.25	163.18	163.19	165.10	166.14	163.81	163.82	163.33	162.61	161.77	161.28	
12	161.03	161.21	163.93	163.12	166.16	166.07	163.78	163.78	163.32	162.59	161.74	161.27	
13	161.03	161.19	164.06	163.05	166.27	166.00	163.76	163.77	163.31	162.58	161.70	161.26	
14	161.03	161.19	164.04	162.96	166.30	166.10	163.75	163.77	163.29	162.56	161.67	161.25	
15	161.02	161.22	163.94	162.90	166.47	166.09	163.75	163.75	163.26	162.54	161.65	161.24	
16	161.02	161.43	163.76	162.85	166.43	166.00	163.74	163.75	163.25	162.50	161.63	161.25	
17	161.02	161.63	163.49	162.78	166.67	165.91	163.76	163.75	163.25	162.48	161.61	161.25	
18	161.02	161.62	163.16	162.68	166.74	165.88	163.80	163.74	163.23	162.45	161.61	161.27	
19	161.01	161.55	163.00	162.36	166.50	165.78	163.81	163.71	163.20	162.44	161.61	161.27	
20	161.00	161.59	162.83	162.01	166.38	165.67	163.79	163.70	163.17	162.43	161.59	161.26	
21	161.00	161.55	162.64	161.84	166.34	165.59	163.78	163.70	163.15	162.43	161.58	161.25	
22	161.00	161.49	162.67	161.77	166.27	165.51	163.74	163.69	163.11	162.39	161.57	161.25	
23	161.00	161.45	162.50	161.74	166.20	165.46	163.74	163.69	163.08	162.37	161.56	161.23	
24	161.00	161.44	162.78	161.67	166.16	165.39	163.72	163.68	163.04	162.33	161.54	161.23	
25	161.01	161.45	163.99	161.76	166.09	165.29	163.90	163.66	163.01	162.31	161.51	161.23	
26	161.03	161.56	163.89	161.85	166.01	165.18	164.07	163.64	162.96	162.30	161.48	161.23	
27	161.03	161.68	164.30	162.07	166.13	164.99	164.07	163.62	162.94	162.27	161.44	161.23	
28	161.03	161.66	164.55	162.57	166.41	164.92	164.14	163.60	162.92	162.22	161.43	161.23	
29	161.03	161.67	164.58	162.94	166.40	164.80	164.14	163.60	162.90	162.21		161.21	
30	161.05	161.67	164.44	163.13	166.30	164.72	164.37	163.58	162.87	162.17		161.21	
31		161.69		163.14	166.23		164.66		162.85	162.14		161.22	
Mean	161.05	161.40	163.08	162.92	165.40	165.73	163.96	163.91	163.23	162.50	161.72	161.26	
Max	161.19	161.69	164.58	164.41	166.74	166.20	164.66	164.71	163.58	162.83	162.11	161.38	166.74
Min	161.00	161.06	161.58	161.67	163.07	164.72	163.72	163.58	162.85	162.14	161.43	161.21	161.00

Annual Max Momentary Gage Height 166.79 M (MSL), at 6.00 Hours, on Aug 18, 2001
Zero Gage at Bottom Elevation 158.90 M (MSL), River Bed 158.94 M (MSL)
Left Bank Elevation 165.90 M (MSL)
Right Bank Elevation 165.85 M (MSL), Drainage Area 1949 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.19	2.80	98.55	38.85	281.60	109.55	18.84	2.59	0.33	0.04	0.01	
2	0.00	0.17	4.40	93.50	37.45	264.80	95.00	17.64	2.42	0.31	0.04	0.01	
3	0.00	0.50	9.60	86.50	43.60	251.00	86.50	16.51	2.27	0.29	0.04	0.01	
4	0.00	0.78	10.60	78.00	52.25	244.40	82.50	15.45	2.12	0.27	0.03	0.00	
5	0.00	0.80	7.70	69.50	57.65	248.80	79.50	14.49	1.99	0.25	0.03	0.00	
6	0.00	0.72	4.20	62.60	58.55	238.20	77.00	13.54	1.86	0.24	0.03	0.00	
7	0.00	0.70	4.10	57.20	61.70	229.20	73.00	12.67	1.74	0.22	0.03	0.00	
8	0.00	0.60	13.25	52.25	68.00	223.80	72.00	11.86	1.63	0.21	0.03	0.00	
9	0.00	0.53	21.00	47.60	79.50	257.60	71.00	11.10	1.52	0.20	0.02	0.00	
10	0.00	0.68	35.35	44.00	92.00	290.00	69.00	10.39	1.43	0.18	0.02	0.00	
11	0.00	0.63	41.30	41.65	138.50	273.20	68.50	9.72	1.34	0.17	0.02	0.00	
12	0.01	0.53	74.50	39.20	278.80	255.40	67.10	9.10	1.25	0.16	0.02	0.00	
13	0.01	0.48	81.00	36.75	311.00	240.00	66.20	8.52	1.17	0.15	0.02	0.00	
14	0.01	0.48	80.00	33.60	320.00	262.00	61.96	7.97	1.10	0.14	0.02	0.00	
15	0.01	0.55	75.00	31.50	389.40	259.80	58.00	7.46	1.03	0.13	0.01	0.00	
16	0.02	1.30	66.20	29.75	372.60	240.00	54.28	6.99	0.96	0.12	0.01	0.00	
17	0.02	3.30	54.05	27.40	483.80	223.80	50.81	6.54	0.90	0.11	0.01	0.00	
18	0.03	3.20	40.60	24.40	528.00	218.80	47.56	6.12	0.84	0.11	0.01	0.00	
19	0.04	2.50	35.00	16.00	402.00	203.20	44.52	5.73	0.79	0.10	0.01	0.00	
20	0.05	2.90	29.05	8.20	352.00	188.40	41.67	5.36	0.74	0.09	0.01	0.00	
21	0.05	2.50	23.20	5.60	336.00	179.00	39.00	5.02	0.69	0.09	0.01	0.00	
22	0.05	1.90	24.10	4.70	311.00	171.00	36.51	4.70	0.64	0.08	0.01	0.00	
23	0.05	1.50	19.50	4.40	290.00	166.00	34.17	4.40	0.60	0.08	0.01	0.00	
24	0.05	1.40	27.40	3.70	278.80	159.20	31.98	4.11	0.56	0.07	0.01	0.00	
25	0.07	1.50	77.50	4.60	259.80	151.30	29.92	3.88	0.53	0.07	0.01	0.00	
26	0.11	2.60	72.50	5.75	242.20	143.70	28.02	3.60	0.50	0.06	0.01	0.00	
27	0.11	3.80	93.00	9.40	270.40	131.40	26.23	3.37	0.46	0.06	0.01	0.00	
28	0.11	3.60	106.25	21.25	364.20	127.20	24.55	3.16	0.43	0.05	0.01	0.00	
29	0.11	3.70	107.90	32.90	360.00	120.00	22.98	2.91	0.41	0.05		0.00	
30	0.15	3.70	100.20	39.55	320.00	115.60	21.51	2.77	0.38	0.05		0.00	
31		3.90		39.90	299.00		20.13		0.36	0.04		0.00	
Total	1.06	51.64	1341.25	1149.90	7497.05	6358.40	1690.65	253.92	35.25	4.48	0.53	0.03	18384.16 CMSDAY
Mean	0.04	1.67	44.71	37.09	241.84	211.95	54.54	8.46	1.14	0.14	0.02	0.00	50.37 CMS
Max	0.15	3.90	107.90	98.55	528.00	290.00	109.55	18.84	2.59	0.33	0.04	0.01	528.00 CMS
Min	0.00	0.17	2.80	3.70	37.45	115.60	20.13	2.77	0.36	0.04	0.01	0.00	0.00 CMS
Runoff	0.092	4.462	115.884	99.351	647.745	549.366	146.072	21.939	3.046	0.387	0.046	0.003	1588.391 MCM

Momentary Peak 562.99 CMS, at 166.79 M (MSL), at 6.00 Hours, on Aug 18, 2001

Runoff Yield 25.84 Liters/Second/Square KM, Momentary Peak Yield 288.861 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

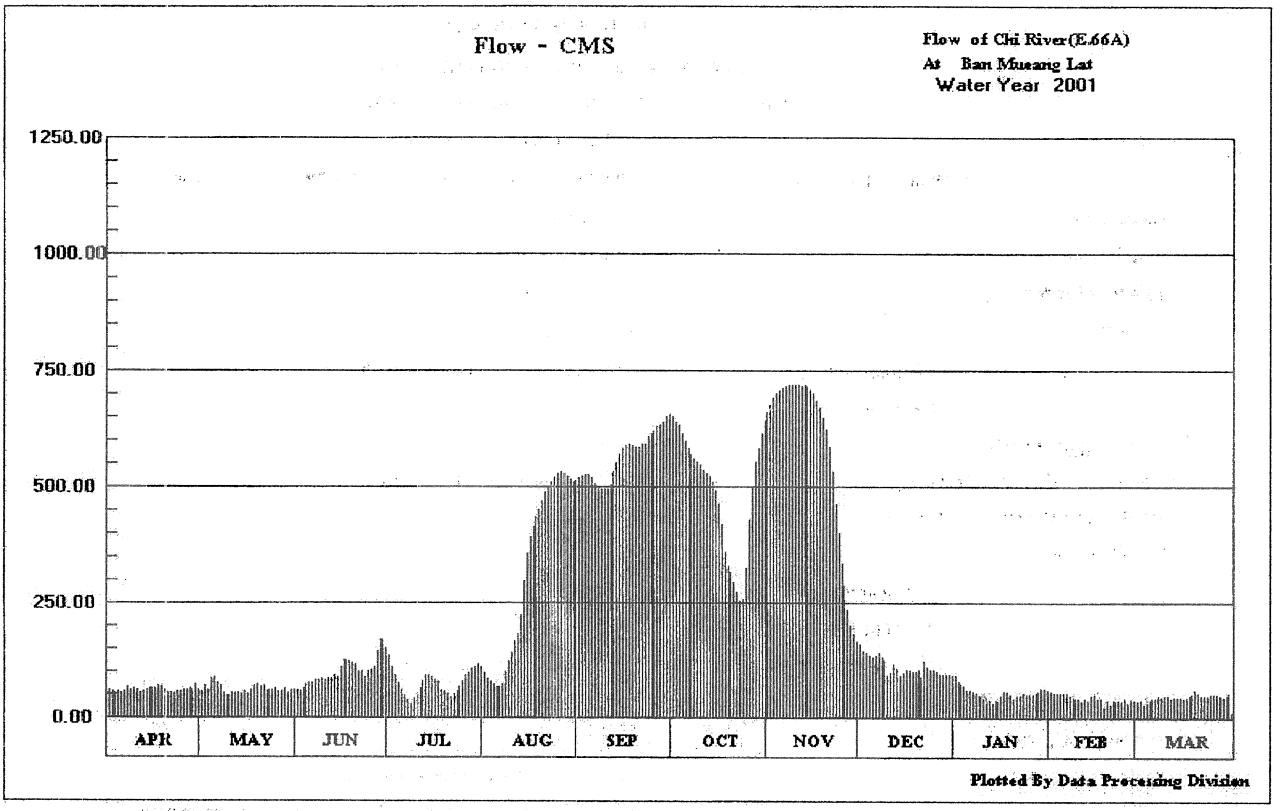
Lat 16 - 12 - 08 N. **Long** 103 - 31 - 41 E.

Location		on right bank at the bridge.			
	Ban Muang Lat	**Amphoe** Chang Han		**Changwat**	Roi Et
Drainage Area		32,190 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+126.900 m. (M.S.L.)			
Bench Mark		B.M.- Highways Dept.			
	Location BM	On right bank at the abutment of the bridge.			
	Elevation	143.406 m. (M.S.L.)			
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.			
Period of Available Gage Records		1999 to date.			
Rating Operation					
	Period of Rating	1999 to date.			
	Rated by Float	-			
	Rated by Current Meter	1999 to date.			
Stability of Channel Regimes		Fairly stable because of backwater effect.			
Overbank Flow Conditions		Overbank flow starts at elevation +137.830 m.(M.S.L.), records are channel flow only.			
General Description		Records good. Stage-discharge relation defined by 38 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.70	130.62	130.68	132.26	131.51	137.68	138.48	137.86	132.73	131.39	130.64	130.08	
2	130.63	130.90	130.63	131.77	131.28	137.74	138.45	137.94	132.48	131.13	130.50	130.14	
3	130.53	130.68	130.79	131.41	131.10	137.76	138.43	138.02	132.37	130.95	130.54	129.94	
4	130.62	131.23	130.95	131.06	130.96	137.75	138.37	138.08	132.28	130.88	130.56	130.02	
5	130.56	131.32	131.08	130.65	130.86	137.67	138.31	138.11	132.23	130.71	130.56	130.13	
6	130.64	131.03	131.03	130.36	130.87	137.53	138.23	138.15	132.27	130.66	130.56	130.21	
7	130.80	130.89	131.19	130.15	131.00	137.41	138.16	138.17	132.42	130.62	130.37	130.22	
8	130.71	130.57	131.19	129.90	131.59	137.36	138.10	138.19	132.18	130.54	130.32	130.39	
9	130.74	130.40	131.27	130.20	132.05	137.36	138.05	138.19	132.09	130.37	130.21	130.28	
10	130.71	130.40	131.21	130.52	132.38	137.37	137.98	138.19	131.40	130.22	130.19	130.34	
11	130.50	130.52	131.23	130.76	132.86	137.51	137.90	138.18	131.53	129.98	130.04	130.37	
12	130.61	130.50	131.22	131.12	133.12	137.80	137.80	138.16	131.89	130.17	130.20	130.22	
13	130.67	130.52	131.40	131.40	133.76	138.03	137.72	138.18	131.69	129.98	130.17	130.32	
14	130.78	130.44	131.30	131.42	134.78	138.16	137.57	138.16	131.39	130.16	130.34	130.28	
15	130.73	130.60	131.76	131.32	135.59	138.23	137.32	138.12	131.55	130.08	130.42	130.28	
16	130.76	130.45	132.09	131.15	136.03	138.26	136.99	138.08	131.62	130.34	130.21	130.23	
17	130.89	130.65	132.11	131.14	136.35	138.27	136.43	137.99	131.66	130.62	130.20	130.31	
18	130.85	130.91	132.01	130.68	136.61	138.26	135.62	137.90	131.56	130.58	129.76	130.39	
19	130.69	130.98	131.96	130.61	136.83	138.25	135.22	137.78	131.57	130.47	130.12	130.45	
20	130.52	130.80	131.90	130.46	137.07	138.25	135.04	137.64	131.67	130.23	129.91	130.66	
21	130.56	130.90	131.58	130.32	137.28	138.27	134.76	137.43	131.31	130.36	130.16	130.53	
22	130.42	130.64	131.57	130.46	137.47	138.28	134.44	137.05	132.01	130.41	130.07	130.39	
23	130.58	130.65	131.35	130.58	137.57	138.34	134.22	136.51	131.76	130.54	130.14	130.38	
24	130.62	130.68	131.59	130.81	137.70	138.37	134.24	135.95	131.67	130.44	130.07	130.37	
25	130.71	130.74	131.63	131.10	137.79	138.39	135.19	135.31	131.62	130.49	130.24	130.49	
26	130.67	130.60	131.75	131.39	137.83	138.42	136.23	134.67	131.58	130.47	129.96	130.46	
27	130.73	130.63	132.43	131.53	137.82	138.43	136.79	133.95	131.48	130.51	130.11	130.42	
28	130.72	130.74	132.91	131.68	137.74	138.45	137.20	133.43	131.44	130.58	130.11	130.41	
29	130.98	130.56	132.90	131.80	137.63	138.48	137.41	133.09	131.45	130.77		130.28	
30	130.70	130.71	132.61	131.87	137.57	138.49	137.60	132.85	131.43	130.75		130.36	
31		130.72		131.76	137.62		137.75		131.37	130.65		130.55	
Mean	130.68	130.71	131.58	131.02	134.86	138.02	136.97	137.04	131.80	130.52	130.24	130.32	
Max	130.98	131.32	132.91	132.26	137.83	138.49	138.48	138.19	132.73	131.39	130.64	130.66	138.49
Min	130.42	130.40	130.63	129.90	130.86	137.36	134.22	132.85	131.31	129.98	129.76	129.94	129.76

Annual Max Momentary Gage Height 138.49 M (MSL), at 6.00 Hours, on Sep 30, 2001
Zero Gage at Bottom Elevation 126.90 M (MSL). River Bed 127.20 M (MSL)
Left Bank Elevation 137.82 M (MSL)
Right Bank Elevation 139.20 M (MSL). Drainage Area 32190 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	64.0	60.8	63.2	138.0	100.5	522.4	652.8	664.8	162.8	94.9	61.6	39.2	
2	61.2	72.6	61.2	113.5	89.9	527.2	642.0	679.2	149.0	83.0	56.0	41.6	
3	57.2	63.2	67.9	95.9	81.6	528.8	634.8	693.6	143.5	74.8	57.6	33.6	
4	60.8	87.6	74.8	79.8	75.2	528.0	616.8	704.4	139.0	71.7	58.4	36.8	
5	58.4	91.7	80.7	62.0	70.9	521.6	602.4	709.8	136.5	64.4	58.4	41.2	
6	61.6	78.4	78.4	50.4	71.3	510.4	586.0	717.0	138.5	62.4	58.4	44.4	
7	68.3	72.2	85.7	42.0	77.0	500.8	573.6	720.6	146.0	60.8	50.8	44.8	
8	64.4	58.8	85.7	32.0	104.5	496.8	564.0	724.2	134.0	57.6	48.8	51.6	
9	65.7	52.0	89.4	44.0	127.5	496.8	558.0	724.2	129.5	50.8	44.4	47.2	
10	64.4	52.0	86.7	56.8	144.0	497.6	549.6	724.2	95.4	44.8	43.6	49.6	
11	56.0	56.8	87.6	66.6	170.6	508.8	540.0	722.4	101.5	35.2	37.6	50.8	
12	60.4	56.0	87.1	82.5	186.2	532.0	532.0	718.8	119.5	42.8	44.0	44.8	
13	62.8	56.8	95.4	95.4	226.9	555.6	525.6	722.4	109.5	35.2	42.8	48.8	
14	67.4	53.6	90.8	96.3	300.0	573.6	513.6	718.8	94.9	42.4	49.6	47.2	
15	65.3	60.0	113.0	91.7	360.7	586.0	493.6	711.6	102.5	39.2	52.8	47.2	
16	66.6	54.0	129.5	83.9	393.8	592.0	467.2	704.4	106.0	49.6	44.4	45.2	
17	72.2	62.0	130.5	83.4	417.8	594.0	423.7	688.2	108.0	60.8	44.0	48.4	
18	70.5	73.0	125.5	63.2	437.3	592.0	363.0	672.0	103.0	59.2	26.8	51.6	
19	63.6	76.1	123.0	60.4	454.4	590.0	333.0	650.4	103.5	54.8	40.8	54.0	
20	56.8	68.3	120.0	54.4	473.6	590.0	319.5	625.2	108.5	45.2	32.4	62.4	
21	58.4	72.6	104.0	48.8	490.4	594.0	298.5	588.8	91.3	50.4	42.4	57.2	
22	52.8	61.6	103.5	54.4	505.6	596.0	274.5	535.0	125.5	52.4	38.8	51.6	
23	59.2	62.0	93.1	59.2	513.6	609.6	258.4	465.2	113.0	57.6	41.6	51.2	
24	60.8	63.2	104.5	68.7	524.0	616.8	259.8	403.0	108.5	53.6	38.8	50.8	
25	64.4	65.7	106.5	81.6	531.2	621.6	330.7	340.0	106.0	55.6	45.6	55.6	
26	62.8	60.0	112.5	94.9	534.4	631.2	431.6	291.7	104.0	54.8	34.4	54.4	
27	65.3	61.2	146.5	101.5	533.6	634.8	500.7	239.5	99.1	56.4	40.4	52.8	
28	64.9	65.7	173.6	109.0	527.2	642.0	556.0	205.6	97.2	59.2	40.4	52.4	
29	76.1	58.4	173.0	115.0	518.4	652.8	585.6	184.4	97.7	67.0		47.2	
30	64.0	64.4	155.6	118.5	513.6	656.4	618.0	170.0	96.8	66.2		50.4	
31		64.9		113.0	517.6		645.0		94.0	62.0		58.0	
Total	1896.3	2005.6	3148.9	2456.8	10073.3	17099.6	15250.0	17419.4	3564.2	1764.8	1275.6	1512.0	77466.5 CMSDAY
Mean	63.2	64.7	105.0	79.3	324.9	570.0	491.9	580.6	115.0	56.9	45.6	48.8	212.2 CMS
Max	76.1	91.7	173.6	138.0	534.4	656.4	652.8	724.2	162.8	94.9	61.6	62.4	724.2 CMS
Min	52.8	52.0	61.2	32.0	70.9	496.8	258.4	170.0	91.3	35.2	26.8	33.6	26.8 CMS
Runoff	163.84	173.28	272.07	212.27	870.33	1477.41	1317.60	1505.04	307.95	152.48	110.21	130.64	6693.11 MCM

Momentary Peak 656.40 CMS, at 138.49 M (MSL), at 6.00 Hours, on Sep 30, 2001

Runoff Yield 6.59 Liters/Second/Square KM, Momentary Peak Yield 20.391 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

Lam Phan Chat at Ban Tha Ngam, Kalasin (E.67)

Lat 16 - 57 - 09 N. **Long** 103 - 29 - 48 E.

Location on left bank at the bridge on road.

Ban Tha Ngam **Amphoe** Kham Muang **Changwat** Kalasin

Drainage Area 420 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +158.870 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank downstream side at the abutment of the bridge.

Elevation +172.518 m. (M.S.L.)

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 1987 to date.

Rated by Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

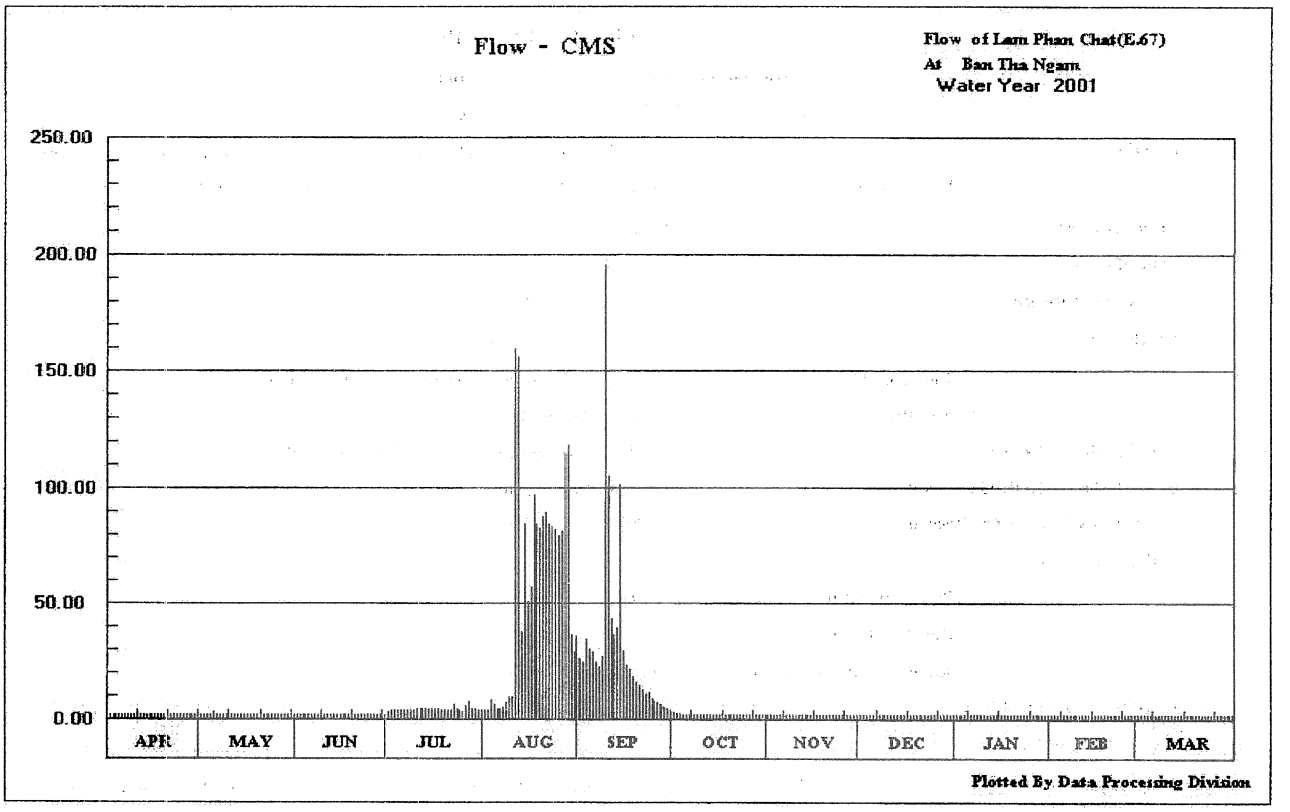
General Description Records fair. Flow effected by Lam Pao Dam.

Stage-discharge relation defined by 29 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	159.52	159.42	159.85	160.72	160.78	164.62	163.42	162.96	162.70	161.98	161.18	160.27	
2	159.50	160.35	159.85	160.77	160.80	164.60	163.32	162.97	162.70	161.96	161.14	160.22	
3	159.47	160.32	160.11	160.81	161.27	164.74	163.25	162.98	162.69	161.93	161.11	160.20	
4	159.46	160.09	160.17	160.77	161.09	164.68	163.18	162.98	162.67	161.91	161.11	160.20	
5	159.46	160.74	159.90	160.78	160.93	164.66	163.15	162.98	162.62	161.89	161.11	160.17	
6	159.43	160.21	159.75	160.77	160.91	164.60	163.10	162.97	162.61	161.88	161.07	159.63	
7	159.40	159.95	160.41	160.80	160.98	164.56	163.05	162.97	162.59	161.85	161.05	160.08	
8	159.45	159.81	160.27	160.80	161.18	164.64	163.00	162.97	162.56	161.82	161.02	159.54	
9	159.42	159.73	160.10	160.83	161.37	166.53	162.99	162.97	162.54	161.79	160.99	159.51	
10	159.40	159.72	159.93	160.87	161.39	165.14	163.00	162.95	162.51	161.77	160.94	159.97	
11	159.39	160.11	160.01	160.88	165.80	164.83	162.95	162.92	162.49	161.75	160.91	159.95	
12	159.38	159.83	160.15	160.88	165.73	164.76	162.91	162.92	162.47	161.73	160.88	159.92	
13	159.41	159.72	160.04	160.89	162.73	164.80	162.88	162.92	162.46	161.70	160.85	159.86	
14	159.41	159.68	160.06	160.88	164.20	165.13	162.84	162.94	162.42	161.67	160.81	159.85	
15	159.42	159.65	160.28	160.87	163.20	164.67	162.82	162.88	162.40	161.65	160.77	159.81	
16	159.42	159.62	159.99	160.86	163.41	164.57	162.77	162.87	162.38	161.62	160.73	159.79	
17	159.41	159.60	159.87	160.86	164.51	164.53	162.77	162.86	162.36	161.60	160.70	159.78	
18	159.40	159.63	159.80	160.82	164.20	164.45	162.75	162.84	162.33	161.57	160.66	159.73	
19	159.38	159.60	159.77	160.80	164.15	164.38	162.74	162.83	162.31	161.55	160.62	159.69	
20	159.37	159.59	159.72	160.78	164.28	164.32	162.72	162.83	162.29	161.53	160.59	159.67	
21	159.35	159.59	159.68	160.82	164.33	164.25	162.71	162.84	162.26	161.51	160.55	159.65	
22	159.34	159.60	159.66	161.09	164.20	164.15	162.71	162.86	162.22	161.49	160.52	159.64	
23	159.33	159.60	159.73	160.91	164.18	164.21	162.70	162.85	162.20	161.46	160.49	159.61	
24	159.33	159.57	160.43	160.81	164.14	164.05	162.71	162.84	162.16	161.43	160.47	159.60	
25	159.37	159.58	160.30	160.76	164.08	163.96	162.78	162.83	162.13	161.40	160.41	159.59	
26	159.37	159.61	160.40	161.02	164.12	163.86	162.82	162.81	162.09	161.36	160.34	159.59	
27	159.46	159.63	160.40	161.21	164.91	163.79	162.83	162.80	162.08	161.33	160.32	159.57	
28	159.46	159.60	160.42	160.93	164.98	163.70	162.89	162.79	162.06	161.30	160.29	159.57	
29	159.44	159.61	160.49	160.87	164.76	163.60	162.93	162.77	162.03	161.27		159.57	
30	159.45	159.90	160.57	160.83	164.66	163.53	162.94	162.76	162.02	161.25		159.57	
31		159.80		160.78	164.75		162.94		162.00	161.21		159.55	
Mean	159.41	159.79	160.07	160.85	163.29	164.48	162.92	162.89	162.37	161.62	160.77	159.79	
Max	159.52	160.74	160.57	161.21	165.80	166.53	163.42	162.98	162.70	161.98	161.18	160.27	166.53
Min	159.33	159.42	159.66	160.72	160.78	163.53	162.70	162.76	162.00	161.21	160.29	159.51	159.33

Annual Max Momentary Gage Height 167.85 M (MSL), at 2.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 158.87 M (MSL), River Bed 158.69 M (MSL)
Left Bank Elevation 170.66 M (MSL)
Right Bank Elevation 171.88 M (MSL). Drainage Area 420 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.01	0.17	3.90	4.35	26.50	4.10	0.47	0.01	0.00	0.00	0.00	
2	0.00	1.75	0.17	4.28	4.50	25.00	3.60	0.41	0.01	0.00	0.00	0.00	
3	0.00	1.60	0.78	4.57	8.88	35.50	3.25	0.36	0.01	0.00	0.00	0.00	
4	0.00	0.72	0.93	4.28	6.90	31.00	2.95	0.31	0.00	0.00	0.00	0.00	
5	0.00	4.05	0.27	4.35	5.47	29.50	2.87	0.27	0.00	0.00	0.00	0.00	
6	0.00	1.05	0.06	4.28	5.33	25.00	2.75	0.24	0.00	0.00	0.00	0.00	
7	0.00	0.39	2.05	4.50	5.85	23.40	2.63	0.21	0.00	0.00	0.00	0.00	
8	0.00	0.09	1.35	4.50	7.80	28.00	2.50	0.18	0.00	0.00	0.00	0.00	
9	0.00	0.05	0.75	4.72	10.13	196.50	2.48	0.16	0.00	0.00	0.00	0.00	
10	0.00	0.05	0.34	5.02	10.38	106.00	2.50	0.14	0.00	0.00	0.00	0.00	
11	0.00	0.78	0.52	5.10	160.00	43.90	2.37	0.12	0.00	0.00	0.00	0.00	
12	0.00	0.13	0.87	5.10	156.50	37.00	2.28	0.11	0.00	0.00	0.00	0.00	
13	0.00	0.05	0.60	5.17	38.25	40.00	2.20	0.09	0.00	0.00	0.00	0.00	
14	0.00	0.04	0.65	5.10	85.00	102.00	2.10	0.08	0.00	0.00	0.00	0.00	
15	0.00	0.03	1.40	5.02	51.50	30.25	2.05	0.07	0.00	0.00	0.00	0.00	
16	0.00	0.03	0.48	4.95	57.81	23.80	1.93	0.06	0.00	0.00	0.00	0.00	
17	0.00	0.03	0.21	4.95	97.73	22.20	1.93	0.05	0.00	0.00	0.00	0.00	
18	0.00	0.03	0.07	4.65	85.00	19.00	1.88	0.05	0.00	0.00	0.00	0.00	
19	0.00	0.03	0.06	4.50	83.12	16.50	1.85	0.04	0.00	0.00	0.00	0.00	
20	0.00	0.03	0.05	4.35	88.20	15.00	1.80	0.04	0.00	0.00	0.00	0.00	
21	0.00	0.03	0.04	4.65	90.20	13.25	1.77	0.03	0.00	0.00	0.00	0.00	
22	0.00	0.03	0.04	6.90	85.00	11.25	1.77	0.03	0.00	0.00	0.00	0.00	
23	0.00	0.03	0.05	5.33	84.25	12.25	1.75	0.02	0.00	0.00	0.00	0.00	
24	0.00	0.03	2.15	4.57	82.75	9.75	1.53	0.02	0.00	0.00	0.00	0.00	
25	0.01	0.03	1.50	4.20	80.50	8.60	1.34	0.02	0.00	0.00	0.00	0.00	
26	0.01	0.03	2.00	6.20	82.00	7.60	1.17	0.02	0.00	0.00	0.00	0.00	
27	0.02	0.03	2.00	8.13	115.73	6.90	1.02	0.01	0.00	0.00	0.00	0.00	
28	0.02	0.03	2.10	5.47	119.05	6.00	0.89	0.01	0.00	0.00	0.00	0.00	
29	0.01	0.03	2.45	5.02	37.00	5.00	0.78	0.01	0.00	0.00		0.00	
30	0.01	0.27	2.85	4.72	29.50	4.65	0.68	0.01	0.00	0.00		0.00	
31		0.07		4.35	36.25		0.60		0.00	0.00		0.00	
Total	0.08	11.55	26.96	152.83	1814.93	961.30	63.32	3.64	0.03	0.00	0.00	0.00	3034.64 CMSDAY
Mean	0.00	0.37	0.90	4.93	58.55	32.04	2.04	0.12	0.00	0.00	0.00	0.00	8.31 CMS
Max	0.02	4.05	2.85	8.13	160.00	196.50	4.10	0.47	0.01	0.00	0.00	0.00	196.50 CMS
Min	0.00	0.01	0.04	3.90	4.35	4.65	0.60	0.01	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.007	0.998	2.329	13.205	156.810	83.056	5.471	0.314	0.003	0.000	0.000	0.000	262.193 MCM

Momentary Peak 273.25 CMS, at 167.85 M (MSL), at 2.00 Hours, on Aug 12, 2001

Runoff Yield 19.80 Liters/Second/Square KM, Momentary Peak Yield 650.595 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

Lam Phaniang at Ban Khong Po, Nong Bua Lumphu (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

Drainage Area 1,342 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +194.730 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank downstream site at the footpath of the bridge.

Elevation +201.740 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1997 to date.

Rating Operation

Period of Rating 1997 to date.

Rated by Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Rather unstable by some scouring.

Overbank Flow Conditions Overbank flow starts at elevation +198.940 m.(M.S.L.), records are channel flow only.

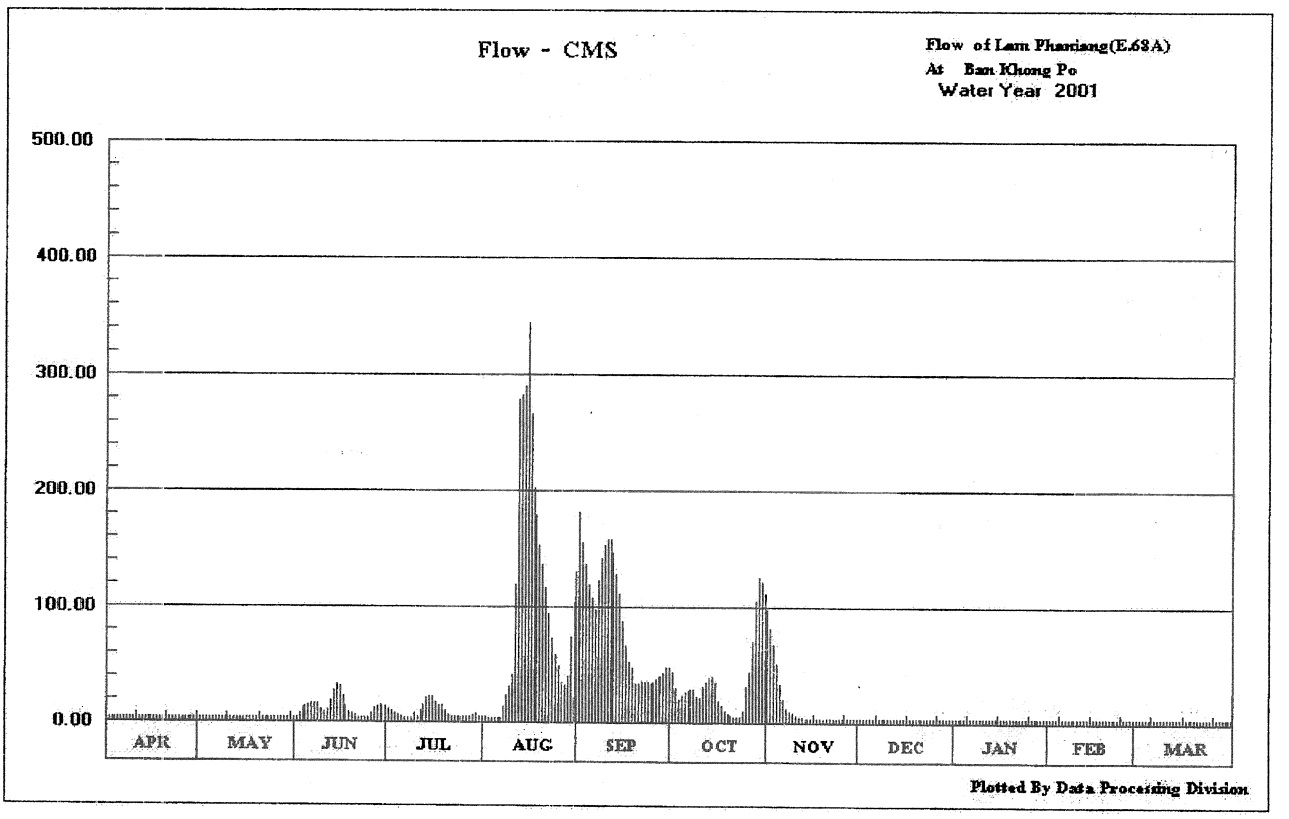
General Description Records good. The concrete weir situated downstream from the gage site.

Stage-discharge relation defined by 24 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	196.59	196.61	197.06	197.54	197.14	199.84	198.57	199.37	196.87	196.71	196.81	196.67	
2	196.58	196.61	197.33	197.46	197.08	199.73	198.24	199.21	196.87	196.70	196.80	196.67	
3	196.57	196.65	197.60	197.33	197.09	199.63	197.95	199.03	196.88	196.69	196.80	196.66	
4	196.57	196.66	197.67	197.26	197.00	199.53	198.07	198.75	196.88	196.69	196.79	196.66	
5	196.71	196.67	197.73	197.13	197.00	199.45	198.14	198.35	196.88	196.73	196.78	196.66	
6	196.72	196.67	197.77	197.06	197.08	199.37	198.17	197.96	196.88	196.92	196.78	196.67	
7	196.73	196.66	197.80	197.02	197.64	199.55	198.21	197.61	196.88	196.91	196.77	196.67	
8	196.73	196.65	197.78	197.02	198.08	199.66	198.20	197.49	196.87	196.90	196.77	196.67	
9	196.72	196.65	197.54	197.05	198.27	199.72	198.03	197.39	196.87	196.89	196.76	196.66	
10	196.71	196.64	197.40	197.13	198.51	199.74	198.01	197.27	196.87	196.88	196.76	196.66	
11	196.71	196.64	197.53	197.50	199.53	199.74	198.27	197.17	196.87	196.87	196.75	196.66	
12	196.71	196.63	197.90	197.76	200.15	199.69	198.37	197.13	196.88	196.86	196.75	196.66	
13	196.70	196.62	198.18	198.01	200.16	199.58	198.45	197.08	196.88	196.85	196.75	196.66	
14	196.70	196.62	198.29	198.04	200.18	199.48	198.49	197.06	196.87	196.88	196.75	196.64	
15	196.70	196.62	198.26	198.02	200.29	199.27	198.38	197.03	196.86	196.91	196.74	196.63	
16	196.70	196.62	198.02	197.84	200.12	199.01	197.93	196.99	196.86	196.91	196.73	196.62	
17	196.70	196.61	197.66	197.73	199.92	198.76	197.74	196.96	196.86	196.89	196.73	196.61	
18	196.70	196.61	197.43	197.74	199.83	198.66	197.48	196.93	196.85	196.89	196.73	196.60	
19	196.70	196.66	197.26	197.50	199.72	198.32	197.36	196.91	196.85	196.88	196.72	196.59	
20	196.70	196.82	197.23	197.30	199.63	198.34	197.30	196.89	196.85	196.87	196.72	196.59	
21	196.69	197.01	197.07	197.15	199.51	198.36	197.21	196.88	196.85	196.87	196.71	196.58	
22	196.69	197.09	197.02	197.19	199.34	198.37	197.18	196.87	196.85	196.87	196.71	196.58	
23	196.68	197.08	197.00	197.19	199.10	198.37	197.20	196.87	196.85	196.88	196.71	196.57	
24	196.68	196.99	197.06	197.18	198.89	198.35	197.49	196.86	196.84	196.88	196.69	196.58	
25	196.67	196.79	197.36	197.18	198.70	198.37	198.28	196.93	196.83	196.87	196.69	196.57	
26	196.67	196.92	197.61	197.16	198.38	198.43	198.57	196.92	196.83	196.86	196.68	196.57	
27	196.66	196.88	197.66	197.19	198.30	198.49	199.06	196.91	196.72	196.86	196.68	196.56	
28	196.65	196.96	197.73	197.27	198.48	198.56	199.43	196.90	196.72	196.85	196.67	196.55	
29	196.63	196.94	197.68	197.30	199.12	198.66	199.57	196.89	196.72	196.84		196.54	
30	196.63	196.98	197.64	197.14	199.42	198.67	199.54	196.88	196.71	196.83		196.53	
31		196.99		197.14	199.60		199.48		196.71	196.81		196.52	
Mean	196.68	196.76	197.58	197.37	198.81	199.06	198.21	197.38	196.84	196.85	196.74	196.61	
Max	196.73	197.09	198.29	198.04	200.29	199.84	199.57	199.37	196.88	196.92	196.81	196.67	200.29
Min	196.57	196.61	197.00	197.02	197.00	198.32	197.18	196.86	196.71	196.69	196.67	196.52	196.52

Annual Max Momentary Gage Height 200.31 M (MSL), at 9.00 Hours, on Aug 15, 2001
Zero Gage at Bottom Elevation 194.73 M (MSL), River Bed 194.72 M (MSL)
Left Bank Elevation 199.25 M (MSL)
Right Bank Elevation 198.93 M (MSL), Drainage Area 1342 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.01	5.60	12.80	6.40	182.40	44.80	99.00	0.76	0.00	0.00	0.00	
2	0.00	0.01	8.95	11.20	5.80	156.60	31.60	83.00	0.61	0.00	0.00	0.00	
3	0.00	0.01	14.00	8.95	5.90	137.40	21.50	69.10	0.49	0.00	0.00	0.00	
4	0.00	0.02	15.40	7.90	5.00	120.80	25.10	53.50	0.39	0.00	0.00	0.00	
5	0.00	0.02	16.60	6.30	5.00	109.00	27.60	36.00	0.31	0.00	0.00	0.00	
6	0.00	0.03	17.40	5.60	5.80	99.00	28.80	21.80	0.25	0.00	0.00	0.00	
7	0.00	0.04	18.00	5.20	14.80	124.00	30.40	14.20	0.20	0.00	0.00	0.00	
8	0.00	0.05	17.60	5.20	25.40	142.80	30.00	11.80	0.16	0.00	0.00	0.00	
9	0.00	0.06	12.80	5.50	32.80	154.40	23.90	9.85	0.13	0.00	0.00	0.00	
10	0.00	0.07	10.00	6.30	42.40	158.80	23.30	8.05	0.10	0.00	0.00	0.00	
11	0.00	0.09	12.60	12.00	120.80	158.80	32.80	6.70	0.08	0.00	0.00	0.00	
12	0.00	0.11	20.00	17.20	280.00	148.20	36.80	6.30	0.07	0.00	0.00	0.00	
13	0.00	0.14	29.20	23.30	284.00	128.80	40.00	5.80	0.05	0.00	0.00	0.00	
14	0.00	0.17	33.60	24.20	292.00	113.20	41.60	5.60	0.04	0.00	0.00	0.00	
15	0.00	0.22	32.40	23.60	345.00	89.00	37.20	5.30	0.03	0.00	0.00	0.00	
16	0.00	0.27	23.60	18.80	268.00	67.70	20.90	4.90	0.03	0.00	0.00	0.00	
17	0.00	0.34	15.20	16.60	203.60	54.00	16.80	4.60	0.02	0.00	0.00	0.00	
18	0.00	0.42	10.60	16.80	179.80	49.00	11.60	4.30	0.02	0.00	0.00	0.00	
19	0.00	0.53	7.90	12.00	154.40	34.80	9.40	4.10	0.01	0.00	0.00	0.00	
20	0.00	0.66	7.45	8.50	137.40	35.60	8.50	3.90	0.01	0.00	0.00	0.00	
21	0.00	0.82	5.70	6.50	117.60	36.40	7.15	3.80	0.01	0.00	0.00	0.00	
22	0.00	1.03	5.20	6.90	96.00	36.80	6.80	3.70	0.01	0.00	0.00	0.00	
23	0.00	1.28	5.00	6.90	74.00	36.80	7.00	3.70	0.01	0.00	0.00	0.00	
24	0.00	1.60	5.60	6.80	60.50	36.00	11.80	3.60	0.00	0.00	0.00	0.00	
25	0.00	2.90	9.40	6.80	51.00	36.80	33.20	2.88	0.00	0.00	0.00	0.00	
26	0.00	4.20	14.20	6.60	37.20	39.20	44.80	2.31	0.00	0.00	0.00	0.00	
27	0.00	3.80	15.20	6.90	34.00	41.60	71.20	1.85	0.00	0.00	0.00	0.00	
28	0.00	4.60	16.60	8.05	41.20	44.40	106.20	1.48	0.00	0.00	0.00	0.00	
29	0.01	4.40	15.60	8.50	75.60	49.00	127.20	1.19	0.00	0.00		0.00	
30	0.01	4.80	14.80	6.40	104.80	49.50	122.40	0.95	0.00	0.00		0.00	
31		4.90		6.40	132.00		113.20		0.00	0.00		0.00	
Total	0.02	37.60	436.20	324.70	3238.20	2670.80	1193.55	483.26	3.79	0.00	0.00	0.00	8388.12 CMSDAY
Mean	0.00	1.21	14.54	10.47	104.46	89.03	38.50	16.11	0.12	0.00	0.00	0.00	22.98 CMS
Max	0.01	4.90	33.60	24.20	345.00	182.40	127.20	99.00	0.76	0.00	0.00	0.00	345.00 CMS
Min	0.00	0.01	5.00	5.20	5.00	34.80	6.80	0.95	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.002	3.249	37.688	28.054	279.780	230.757	103.123	41.754	0.327	0.000	0.000	0.000	724.734 MCM

Momentary Peak 356.60 CMS, at 200.31 M (MSL), at 9.00 Hours, on Aug 15, 2001

Runoff Yield 17.12 Liters/Second/Square KM, Momentary Peak Yield 265.723 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

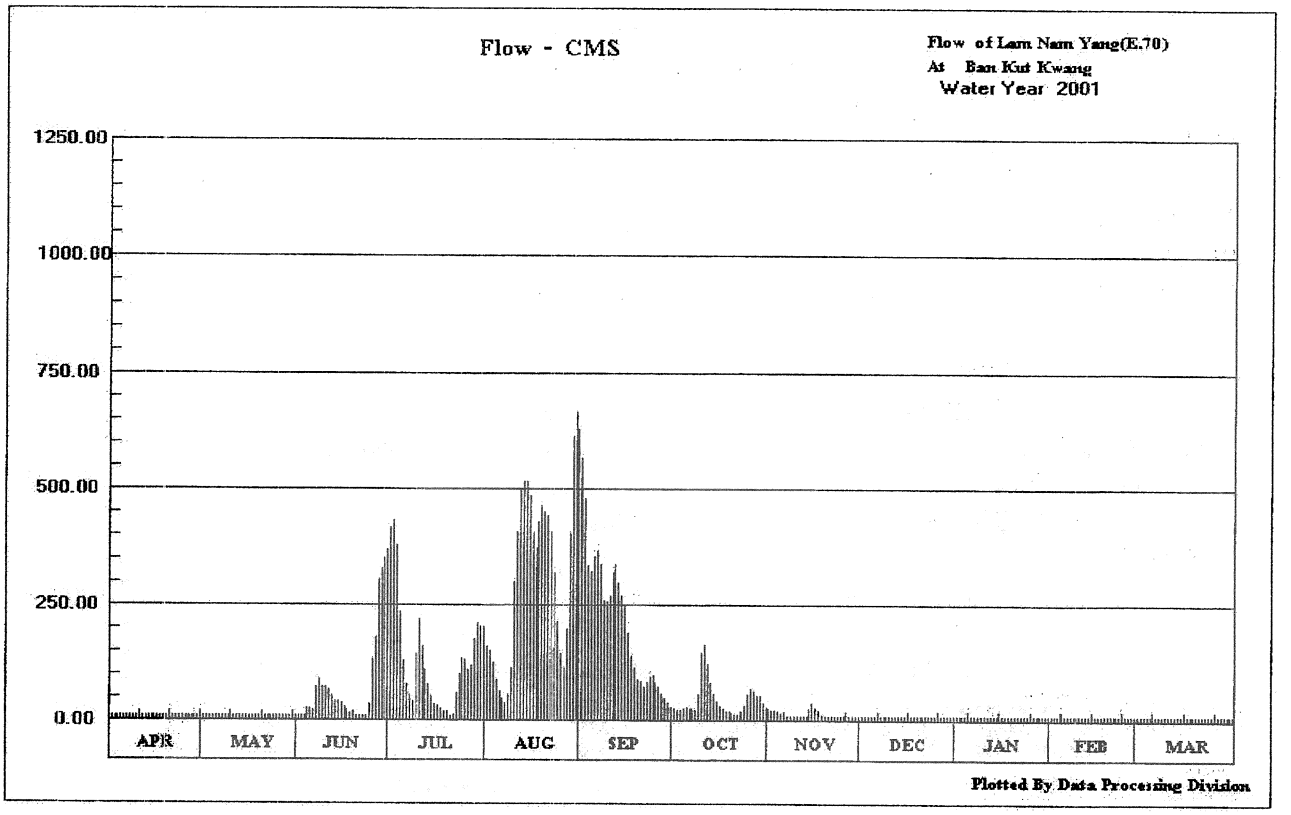
Lat 16 - 17 - 14 N. **Long** 104 - 00 - 34 E.

Location			on right bank at bridge on highway.		
	Ban	Kut Kwang	**Amphoe** Phon Thong	**Changwat**	Roi Et
Drainage Area			3,168 sq.km.		
Type of Gage			Staff gage.		
Zero Gage at Bottom			+132.120 m. (M.S.L.)		
Bench Mark			B.M.- H.D.		
	Location BM		On right bank at the abutment of the bridge.		
	Elevation		+144.037 m. (M.S.L.)		
Gage Reading Frequency			3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height			Arithmetic mean of 3 readings.		
Period of Available Gage Records			1983 to date		
Rating Operation					
	Period of Rating		1984 to date		
	Rated by Float		-		
	Rated by Current Meter		1984 to date.		
Stability of Channel Regimes			Rather unstable by some silting.		
Overbank Flow Conditions			Overbank flow starts at elevation +138.790 m.(M.S.L.), records are channel flow only.		
General Description			Records good. Stage-discharge relation defined by 43 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	132.22	132.23	132.53	139.43	136.27	140.66	133.36	133.38	132.47	132.27	132.13	132.02	
2	132.19	132.17	132.53	139.60	136.09	140.03	133.26	133.30	132.46	132.27	132.13	132.02	
3	132.15	132.42	132.69	139.05	135.68	138.62	133.33	133.28	132.46	132.27	132.12	132.02	
4	132.12	132.59	133.44	137.36	134.95	138.48	133.45	133.20	132.45	132.26	132.11	132.02	
5	132.10	132.68	133.45	135.73	134.37	138.81	133.51	133.10	132.44	132.25	132.11	132.01	
6	132.10	132.55	133.33	134.74	134.00	138.95	133.44	132.97	132.43	132.25	132.10	131.98	
7	132.05	132.41	134.64	134.11	133.76	138.66	133.36	132.89	132.42	132.24	132.10	131.97	
8	132.02	132.32	134.93	133.79	134.23	137.68	133.30	132.86	132.42	132.24	132.09	131.94	
9	132.00	132.25	134.58	136.02	135.45	137.63	134.24	132.80	132.42	132.26	132.09	131.95	
10	131.99	132.19	134.60	137.14	138.20	137.80	136.07	132.74	132.40	132.25	132.09	132.00	
11	131.98	132.27	134.48	136.24	139.34	138.42	136.30	132.69	132.36	132.22	132.08	132.02	
12	131.98	132.41	134.12	135.40	140.18	138.66	135.58	132.66	132.36	132.21	132.09	132.02	
13	131.98	132.40	133.83	134.72	140.31	138.16	134.85	132.73	132.35	132.22	132.08	132.00	
14	131.93	132.34	133.81	134.14	140.31	137.79	134.21	133.43	132.35	132.22	132.11	132.00	
15	131.96	132.29	133.72	133.68	140.07	137.56	133.83	133.77	132.39	132.22	132.09	131.97	
16	131.98	132.32	133.54	133.61	139.32	136.66	133.60	133.54	132.36	132.22	132.08	131.96	
17	131.98	132.37	133.32	133.40	138.99	135.88	133.39	133.25	132.35	132.32	132.08	131.97	
18	131.96	132.37	133.06	133.19	139.57	135.43	133.23	133.04	132.34	132.31	132.07	131.96	
19	131.94	132.49	132.88	133.01	139.88	134.97	133.15	132.90	132.33	132.27	132.05	131.95	
20	131.92	132.48	132.67	132.92	139.79	134.86	133.09	132.78	132.31	132.22	132.04	131.97	
21	131.97	132.41	132.56	133.02	139.69	134.61	132.99	132.71	132.31	132.20	132.03	132.04	
22	131.92	132.37	132.50	134.32	139.33	134.83	132.96	132.65	132.32	132.17	132.02	132.10	
23	131.91	132.32	132.59	135.21	138.43	135.10	133.16	132.52	132.31	132.15	132.03	132.04	
24	131.92	132.26	133.69	135.83	137.02	135.15	133.58	132.58	132.29	132.15	132.02	132.01	
25	131.99	132.26	135.78	135.77	135.98	134.84	134.23	132.57	132.27	132.15	132.02	132.00	
26	131.93	132.29	136.52	135.38	135.45	134.59	134.50	132.55	132.26	132.16	132.01	132.02	
27	132.02	132.26	138.24	135.57	136.83	134.22	134.33	132.52	132.25	132.15	132.03	132.00	
28	131.99	132.23	138.56	136.49	139.30	133.96	134.13	132.50	132.25	132.14	132.02	131.96	
29	132.03	132.23	138.79	137.01	140.91	133.73	134.10	132.50	132.26	132.13		131.95	
30	132.02	132.32	138.96	136.90	141.16	133.53	133.75	132.47	132.27	132.13		131.94	
31		132.51		136.89	141.00		133.53		132.28	132.13		132.06	
Mean	132.01	132.36	134.34	135.47	137.93	136.68	133.86	132.90	132.35	132.21	132.07	132.00	
Max	132.22	132.68	138.96	139.60	141.16	140.66	136.30	133.77	132.47	132.32	132.13	132.10	141.16
Min	131.91	132.17	132.50	132.92	133.76	133.53	132.96	132.47	132.25	132.13	132.01	131.94	131.91

Annual Max Momentary Gage Height 141.19 M (MSL), at 6.00 Hours, on Aug 30, 2001
Zero Gage at Bottom Elevation 132.12 M (MSL), River Bed 130.09 M (MSL)
Left Bank Elevation 140.11 M (MSL)
Right Bank Elevation 138.78 M (MSL), Drainage Area 3168 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.2	2.3	6.6	419.0	164.6	570.8	27.8	28.4	5.4	2.7	1.3	0.6	
2	1.9	1.7	6.6	436.0	153.4	483.6	24.8	26.0	5.2	2.7	1.3	0.6	
3	1.5	4.4	9.8	381.0	130.4	338.0	26.9	25.4	5.2	2.7	1.2	0.6	
4	1.2	7.8	30.2	240.0	91.5	326.4	30.5	23.0	5.0	2.6	1.1	0.6	
5	1.0	9.6	30.5	133.1	66.8	357.0	32.4	20.0	4.8	2.5	1.1	0.5	
6	1.0	7.0	26.9	81.6	52.0	371.0	30.2	16.3	4.6	2.5	1.0	0.4	
7	0.8	4.2	77.6	56.4	42.4	342.0	27.8	14.2	4.4	2.4	1.0	0.4	
8	0.6	3.2	90.5	43.6	61.2	264.0	26.0	13.5	4.4	2.4	0.9	0.2	
9	0.5	2.5	75.2	149.2	117.7	260.3	61.6	12.0	4.4	2.6	0.9	0.3	
10	0.5	1.9	76.0	223.8	304.0	273.0	152.2	10.8	4.0	2.5	0.9	0.5	
11	0.4	2.7	71.2	162.6	410.0	321.6	166.5	9.8	3.6	2.2	0.9	0.6	
12	0.4	4.2	56.8	115.0	501.6	342.0	124.9	9.2	3.6	2.1	0.9	0.6	
13	0.4	4.0	45.2	80.8	519.4	300.8	86.5	10.6	3.5	2.2	0.9	0.5	
14	0.2	3.4	44.4	57.6	519.4	272.2	60.4	29.9	3.5	2.2	1.1	0.5	
15	0.3	2.9	40.8	39.2	488.4	255.0	45.2	42.8	3.9	2.2	0.9	0.4	
16	0.4	3.2	33.6	36.4	408.0	190.2	36.0	33.6	3.6	2.2	0.9	0.3	
17	0.4	3.7	26.6	29.0	375.0	141.4	28.7	24.5	3.5	3.2	0.9	0.4	
18	0.3	3.7	18.8	22.7	433.0	116.6	23.9	18.2	3.4	3.1	0.9	0.3	
19	0.2	5.8	14.0	17.3	465.6	92.5	21.5	14.5	3.3	2.7	0.8	0.3	
20	0.1	5.6	9.4	15.0	455.0	87.0	19.7	11.6	3.1	2.2	0.7	0.4	
21	0.4	4.2	7.2	17.6	445.0	76.4	16.8	10.2	3.1	2.0	0.6	0.7	
22	0.1	3.7	6.0	64.8	409.0	85.5	16.0	9.0	3.2	1.7	0.6	1.0	
23	0.1	3.2	7.8	104.6	322.4	99.0	21.8	6.4	3.1	1.5	0.6	0.7	
24	0.1	2.6	39.6	138.7	215.4	101.5	35.2	7.6	2.9	1.5	0.6	0.5	
25	0.5	2.6	135.9	135.4	146.9	86.0	61.2	7.4	2.7	1.5	0.6	0.5	
26	0.2	2.9	180.8	113.9	117.7	75.6	72.0	7.0	2.6	1.6	0.5	0.6	
27	0.6	2.6	307.2	124.4	202.1	60.8	65.2	6.4	2.5	1.5	0.6	0.5	
28	0.5	2.3	332.8	178.9	406.0	50.4	57.2	6.0	2.5	1.4	0.6	0.3	
29	0.6	2.3	355.0	214.7	615.8	41.2	56.0	6.0	2.6	1.3		0.3	
30	0.6	3.2	372.0	207.0	670.4	33.2	42.0	5.4	2.7	1.3		0.2	
31		6.2		206.3	632.0		33.2		2.8	1.3		0.8	
Total	18.0	119.6	2535.0	4245.6	9942.1	6415.0	1530.1	465.7	113.1	66.5	24.3	15.1	25490.1 CMSDAY
Mean	0.6	3.9	84.5	137.0	320.7	213.8	49.4	15.5	3.6	2.1	0.9	0.5	69.8 CMS
Max	2.2	9.6	372.0	436.0	670.4	570.8	166.5	42.8	5.4	3.2	1.3	1.0	670.4 CMS
Min	0.1	1.7	6.0	15.0	42.4	33.2	16.0	5.4	2.5	1.3	0.5	0.2	0.1 CMS
Runoff	1.56	10.33	219.02	366.82	859.00	554.26	132.20	40.24	9.77	5.75	2.10	1.30	2202.34 MCM

Momentary Peak 677.60 CMS, at 141.19 M (MSL), at 6.00 Hours, on Aug 30, 2001

Runoff Yield 22.04 Liters/Second/Square KM, Momentary Peak Yield 213.889 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

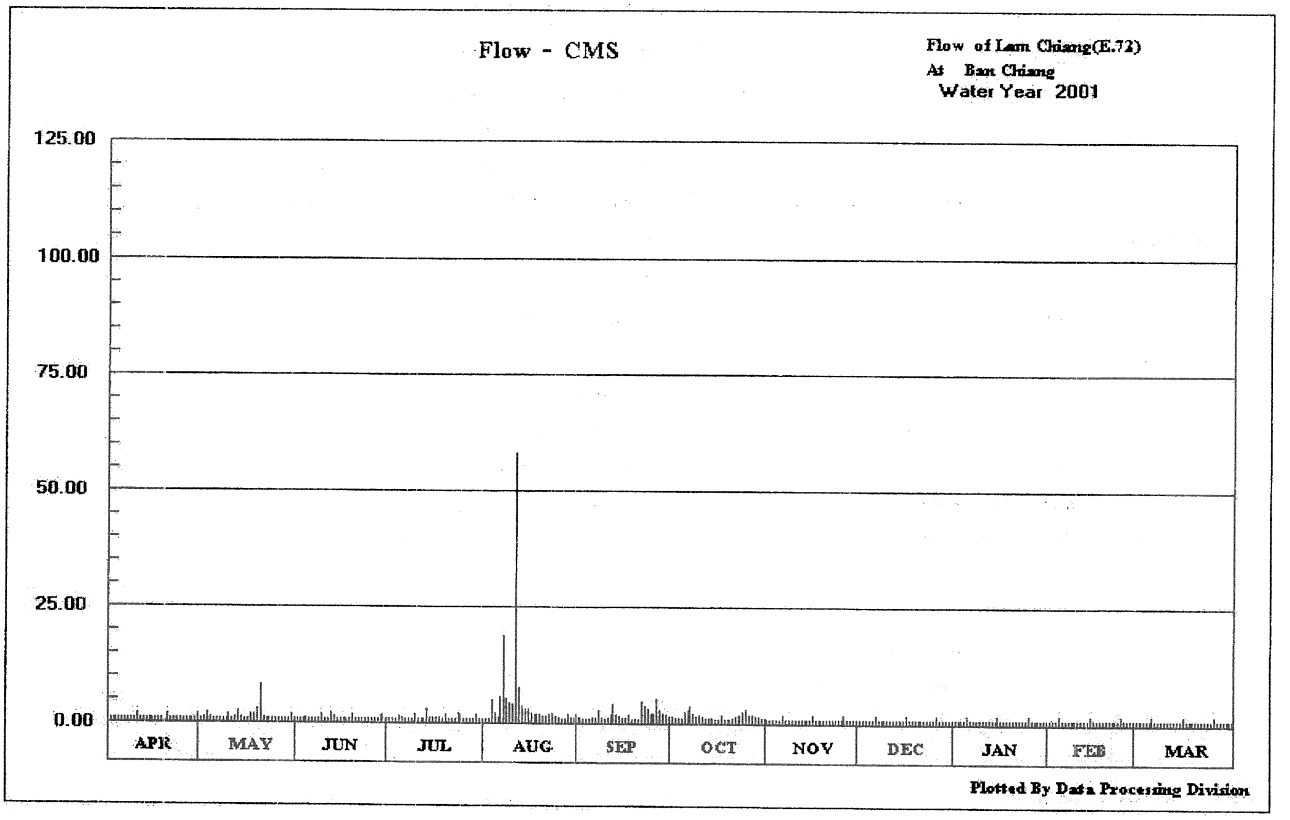
Lat 16 - 01 - 26 N. **Long** 101 - 30 - 12 E.

Location		on left bank at Ban Chiang School.			
	Ban Chiang	**Amphoe** Phak Di		**Changwat** Chaiyaphum	
Drainage Area		325 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+234.120 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On left bank downstream at the footpath of the bridge.			
	Elevation	+243.534 m. (M.S.L.)			
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.			
Period of Available Gage Records		1984 to date.			
Rating Operation					
	Period of Rating	1987 to date.			
	Rated by Float	-			
	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 47 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	234.56	234.69	234.63	234.70	234.62	234.80	234.81	234.73	234.62	234.56	234.51	234.48	
2	234.56	234.78	234.62	234.69	234.63	234.74	234.80	234.73	234.61	234.56	234.51	234.44	
3	234.56	234.95	234.61	234.65	235.32	234.71	234.79	234.72	234.61	234.56	234.51	234.47	
4	234.56	234.79	234.78	234.85	234.96	234.70	234.78	234.71	234.61	234.57	234.51	234.47	
5	234.56	234.68	234.67	234.79	234.76	234.77	234.97	234.70	234.61	234.59	234.51	234.51	
6	234.55	234.65	234.66	234.71	235.40	234.77	235.03	234.69	234.61	234.58	234.51	234.51	
7	234.55	234.60	234.65	234.68	236.56	235.03	235.17	234.68	234.61	234.58	234.51	234.49	
8	234.60	234.57	234.64	234.67	235.35	234.77	234.92	234.67	234.61	234.60	234.51	234.48	
9	234.60	234.64	234.71	234.72	235.23	234.74	234.84	234.67	234.60	234.58	234.50	234.47	
10	234.58	234.79	234.75	234.72	235.20	234.77	234.87	234.66	234.60	234.59	234.50	234.47	
11	234.57	234.71	234.73	234.70	238.92	234.87	234.82	234.66	234.59	234.60	234.51	234.46	
12	234.57	234.78	234.95	234.72	235.58	235.20	234.80	234.66	234.59	234.56	234.50	234.44	
13	234.56	234.99	234.81	235.08	235.18	234.88	234.78	234.65	234.59	234.58	234.49	234.44	
14	234.55	234.76	234.71	234.77	235.09	234.82	234.76	234.65	234.59	234.57	234.48	234.44	
15	234.55	234.66	234.70	234.77	235.07	234.80	234.75	234.65	234.58	234.56	234.48	234.44	
16	234.54	234.65	234.69	234.80	234.94	234.77	234.74	234.64	234.58	234.56	234.48	234.44	
17	234.72	234.87	234.66	234.80	234.90	234.73	234.72	234.66	234.58	234.54	234.48	234.44	
18	234.68	234.89	234.65	234.74	234.85	234.72	234.71	234.65	234.57	234.56	234.48	234.44	
19	234.66	235.11	234.62	234.66	234.88	234.72	234.71	234.63	234.57	234.56	234.48	234.32	
20	234.63	235.64	234.61	234.64	234.85	234.72	234.74	234.63	234.57	234.56	234.47	234.27	
21	234.62	234.79	234.60	234.62	234.83	235.29	234.78	234.62	234.57	234.55	234.47	234.45	
22	234.59	234.71	234.59	234.66	234.87	235.18	234.82	234.62	234.57	234.53	234.47	234.44	
23	234.59	234.67	234.59	234.92	234.92	235.07	234.90	234.62	234.57	234.51	234.47	234.44	
24	234.59	234.64	234.60	234.87	234.81	234.95	234.98	234.62	234.56	234.50	234.46	234.32	
25	234.72	234.62	234.65	234.70	234.77	234.93	235.07	234.62	234.56	234.51	234.47	234.47	
26	234.68	234.67	234.64	234.67	234.75	235.35	234.90	234.62	234.55	234.51	234.47	234.46	
27	234.60	234.65	234.63	234.65	234.74	235.03	234.83	234.62	234.55	234.51	234.48	234.45	
28	234.60	234.64	234.82	234.62	234.77	234.91	234.84	234.62	234.55	234.52	234.49	234.43	
29	234.60	234.63	234.81	234.62	234.76	234.87	234.85	234.62	234.55	234.52		234.42	
30	234.59	234.62	234.70	234.62	234.76	234.83	234.77	234.62	234.55	234.52		234.42	
31		234.62		234.61	234.88		234.76		234.55	234.53		234.42	
Mean	234.60	234.76	234.68	234.72	235.13	234.88	234.84	234.65	234.58	234.55	234.49	234.44	
Max	234.72	235.64	234.95	235.08	238.92	235.35	235.17	234.73	234.62	234.60	234.51	234.51	238.92
Min	234.54	234.57	234.59	234.61	234.62	234.70	234.71	234.62	234.55	234.50	234.46	234.27	234.27

Annual Max Momentary Gage Height 239.52 M (MSL), at 6.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 234.12 M (MSL), River Bed 234.43 M (MSL)
Left Bank Elevation 242.28 M (MSL)
Right Bank Elevation 242.26 M (MSL), Drainage Area 325 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.54	1.15	0.85	1.20	0.80	1.80	1.86	1.38	0.80	0.54	0.34	0.24	
2	0.54	1.68	0.80	1.15	0.85	1.44	1.80	1.38	0.75	0.54	0.34	0.12	
3	0.54	2.70	0.75	0.95	5.36	1.26	1.74	1.32	0.75	0.54	0.34	0.21	
4	0.54	1.74	1.68	2.10	2.76	1.20	1.68	1.26	0.75	0.58	0.34	0.21	
5	0.54	1.10	1.05	1.74	1.56	1.62	2.82	1.20	0.75	0.66	0.34	0.34	
6	0.50	0.95	1.00	1.26	6.00	1.62	3.18	1.15	0.75	0.62	0.34	0.34	
7	0.50	0.70	0.95	1.10	19.08	3.18	4.16	1.10	0.75	0.62	0.34	0.27	
8	0.70	0.58	0.90	1.05	5.60	1.62	2.52	1.05	0.75	0.70	0.34	0.24	
9	0.70	0.90	1.26	1.32	4.64	1.44	2.04	1.05	0.70	0.62	0.30	0.21	
10	0.62	1.74	1.50	1.32	4.40	1.62	2.22	1.00	0.70	0.66	0.30	0.21	
11	0.58	1.26	1.38	1.20	58.48	2.22	1.92	1.00	0.66	0.70	0.34	0.18	
12	0.58	1.68	2.70	1.32	7.80	4.40	1.80	1.00	0.66	0.54	0.30	0.12	
13	0.54	2.94	1.86	3.48	4.24	2.28	1.68	0.95	0.66	0.62	0.27	0.12	
14	0.50	1.56	1.26	1.62	3.54	1.92	1.56	0.95	0.66	0.58	0.24	0.12	
15	0.50	1.00	1.20	1.62	3.42	1.80	1.50	0.95	0.62	0.54	0.24	0.12	
16	0.46	0.95	1.15	1.80	2.64	1.62	1.44	0.90	0.62	0.54	0.24	0.12	
17	1.32	2.22	1.00	1.80	2.40	1.38	1.32	1.00	0.62	0.46	0.24	0.12	
18	1.10	2.34	0.95	1.44	2.10	1.32	1.26	0.95	0.58	0.54	0.24	0.12	
19	1.00	3.68	0.80	1.00	2.28	1.32	1.26	0.85	0.58	0.54	0.24	0.00	
20	0.85	8.40	0.75	0.90	2.10	1.32	1.44	0.85	0.58	0.54	0.21	0.00	
21	0.80	1.74	0.70	0.80	1.98	5.12	1.68	0.80	0.58	0.50	0.21	0.15	
22	0.66	1.26	0.66	1.00	2.22	4.24	1.92	0.80	0.58	0.42	0.21	0.12	
23	0.66	1.05	0.66	2.52	2.52	3.42	2.40	0.80	0.58	0.34	0.21	0.12	
24	0.66	0.90	0.70	2.22	1.86	2.70	2.88	0.80	0.54	0.30	0.18	0.00	
25	1.32	0.80	0.95	1.20	1.62	2.58	3.42	0.80	0.54	0.34	0.21	0.21	
26	1.10	1.05	0.90	1.05	1.50	5.60	2.40	0.80	0.50	0.34	0.21	0.18	
27	0.70	0.95	0.85	0.95	1.44	3.18	1.98	0.80	0.50	0.34	0.24	0.15	
28	0.70	0.90	1.92	0.80	1.62	2.46	2.04	0.80	0.50	0.38	0.27	0.09	
29	0.70	0.85	1.86	0.80	1.56	2.22	2.10	0.80	0.50	0.38		0.06	
30	0.66	0.80	1.20	0.80	1.56	1.98	1.62	0.80	0.50	0.38		0.06	
31		0.80		0.75	2.28		1.56		0.50	0.42		0.06	
Total	21.11	50.37	34.19	42.26	160.21	69.88	63.20	29.29	19.51	15.82	7.62	4.61	518.07 CMSDAY
Mean	0.70	1.62	1.14	1.36	5.17	2.33	2.04	0.98	0.63	0.51	0.27	0.15	1.42 CMS
Max	1.32	8.40	2.70	3.48	58.48	5.60	4.16	1.38	0.80	0.70	0.34	0.34	58.48 CMS
Min	0.46	0.58	0.66	0.75	0.80	1.20	1.26	0.80	0.50	0.30	0.18	0.00	0.00 CMS
Runoff	1.824	4.352	2.954	3.651	13.842	6.038	5.460	2.531	1.686	1.367	0.658	0.398	44.761 MCM

Momentary Peak 70.44 CMS, at 239.52 M (MSL), at 6.00 Hours, on Aug 11, 2001

Runoff Yield 4.37 Liters/Second/Square KM, Momentary Peak Yield 216.738 Liters/Second/Square KM

WATER YEAR : 2001

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 **Changwat** Chaiyaphum

Drainage Area 243 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +247.240 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 2.00 meters from the top staff gage.

Elevation +254.832 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1984 to date.

Rating Operation

Period of Rating 1987 to date.

Rated by Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Fairly stable.

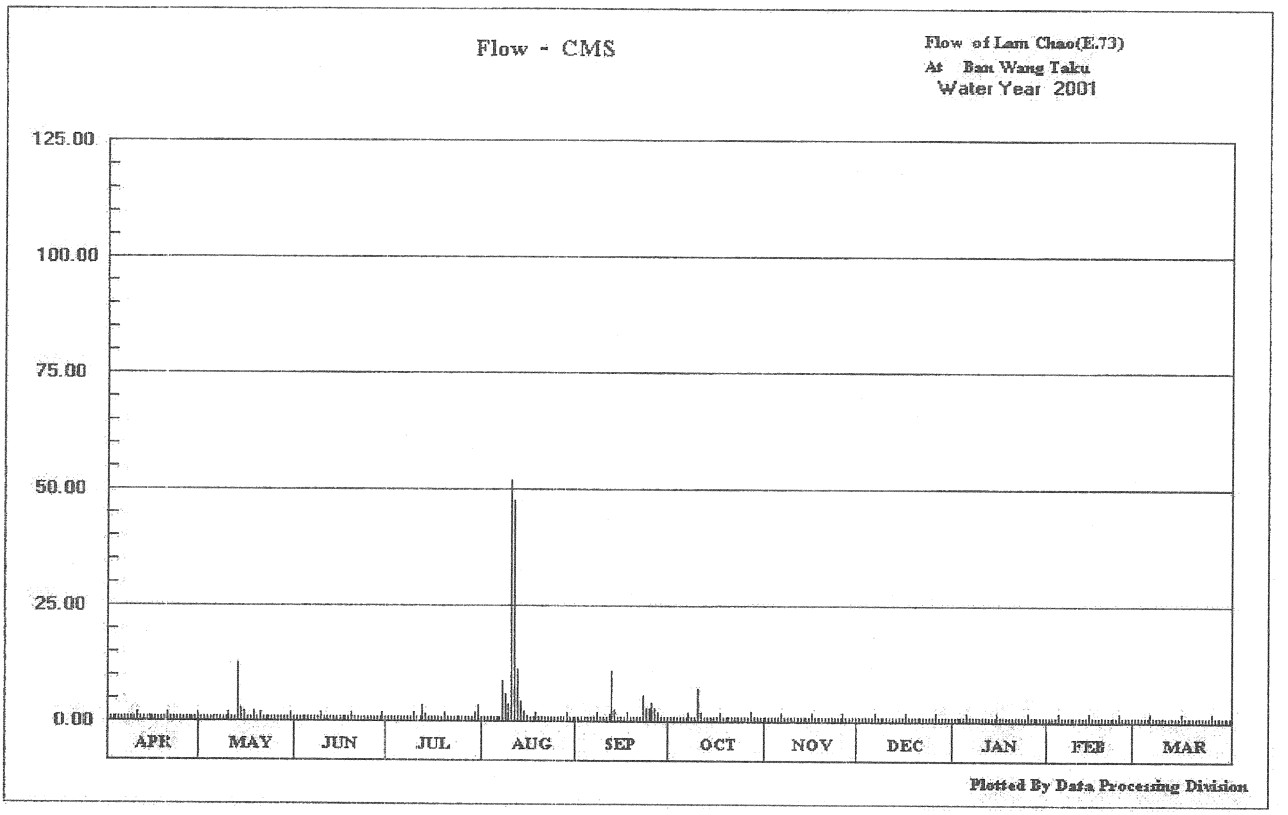
Overbank Flow Conditions No overbank flow.

General Description Records fair. The local weir situated about 4 kilometers downstream from the gage site. Stage-discharge relation defined by 36 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	249.66	249.66	249.67	249.67	249.69	249.69	249.73	249.71	249.68	249.66	249.65	249.45	
2	249.66	249.69	249.67	249.71	249.68	249.70	249.73	249.71	249.68	249.66	249.65	249.45	
3	249.66	249.68	249.67	249.70	249.68	249.70	249.74	249.71	249.68	249.66	249.64	249.44	
4	249.66	249.68	249.69	249.69	249.68	249.70	249.74	249.71	249.68	249.65	249.64	249.43	
5	249.66	249.67	249.67	249.68	249.67	249.70	249.73	249.71	249.68	249.65	249.64	249.43	
6	249.66	249.66	249.67	249.68	249.71	249.70	249.73	249.70	249.68	249.65	249.63	249.43	
7	249.66	249.66	249.67	249.68	250.38	249.70	249.76	249.71	249.68	249.65	249.63	249.42	
8	249.66	249.66	249.68	249.68	250.19	249.69	249.76	249.70	249.68	249.65	249.63	249.41	
9	249.65	249.66	249.69	249.75	250.02	249.69	249.77	249.70	249.67	249.65	249.62	249.40	
10	249.64	249.66	249.68	249.71	252.53	249.70	250.28	249.70	249.67	249.65	249.62	249.39	
11	249.64	249.66	249.68	249.70	252.34	249.84	249.86	249.69	249.67	249.65	249.61	249.38	
12	249.64	249.69	249.68	249.99	250.53	250.50	249.78	249.68	249.67	249.65	249.60	249.36	
13	249.64	250.61	249.67	249.84	250.05	249.92	249.76	249.68	249.67	249.65	249.59	249.33	
14	249.64	249.94	249.67	249.71	249.88	249.80	249.74	249.68	249.66	249.65	249.58	249.32	
15	249.64	249.89	249.67	249.69	249.82	249.75	249.75	249.68	249.66	249.65	249.57	249.31	
16	249.65	249.79	249.67	249.69	249.80	249.73	249.71	249.68	249.66	249.65	249.57	249.30	
17	249.65	249.74	249.67	249.68	249.78	249.72	249.71	249.68	249.66	249.65	249.57	249.30	
18	249.65	249.90	249.67	249.68	249.76	249.72	249.70	249.68	249.66	249.65	249.57	249.28	
19	249.65	249.78	249.67	249.67	249.74	249.72	249.70	249.68	249.66	249.65	249.57	249.27	
20	249.65	249.70	249.67	249.68	249.73	249.72	249.70	249.69	249.66	249.65	249.56	249.26	
21	249.64	249.69	249.67	249.68	249.72	249.75	249.69	249.69	249.66	249.65	249.54	249.26	
22	249.64	249.68	249.67	249.69	249.72	250.16	249.69	249.69	249.66	249.65	249.54	249.24	
23	249.64	249.68	249.67	249.69	249.75	249.93	249.70	249.70	249.66	249.65	249.52	249.25	
24	249.64	249.68	249.67	249.69	249.74	249.95	249.79	249.70	249.66	249.65	249.52	249.27	
25	249.64	249.68	249.67	249.68	249.72	250.04	249.79	249.70	249.66	249.65	249.50	249.29	
26	249.68	249.68	249.67	249.68	249.70	249.94	249.75	249.69	249.66	249.65	249.49	249.29	
27	249.67	249.67	249.67	249.68	249.70	249.84	249.88	249.69	249.66	249.65	249.47	249.28	
28	249.66	249.68	249.68	249.68	249.70	249.78	249.76	249.69	249.66	249.65	249.47	249.27	
29	249.66	249.68	249.68	249.67	249.70	249.75	249.75	249.68	249.66	249.65		249.26	
30	249.66	249.68	249.67	250.00	249.70	249.74	249.73	249.68	249.66	249.65		249.26	
31		249.68		249.72	249.71		249.72		249.66	249.65		249.25	
Mean	249.65	249.74	249.67	249.71	249.98	249.81	249.76	249.69	249.67	249.65	249.58	249.33	
Max	249.68	250.61	249.69	250.00	252.53	250.50	250.28	249.71	249.68	249.66	249.65	249.45	252.53
Min	249.64	249.66	249.67	249.67	249.67	249.69	249.69	249.68	249.66	249.65	249.47	249.24	249.24

Annual Max Momentary Gage Height 255.44 M (MSL), at 18.00 Hours, on Aug 10, 2001
Zero Gage at Bottom Elevation 247.24 M (MSL), River Bed 247.72 M (MSL)
Left Bank Elevation 258.94 M (MSL)
Right Bank Elevation 255.66 M (MSL), Drainage Area 243 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.43	0.43	0.50	0.50	0.63	0.63	0.94	0.78	0.57	0.43	0.37	0.00	
2	0.43	0.63	0.50	0.78	0.57	0.70	0.94	0.78	0.57	0.43	0.37	0.00	
3	0.43	0.57	0.50	0.70	0.57	0.70	1.02	0.78	0.57	0.43	0.30	0.00	
4	0.43	0.57	0.63	0.63	0.57	0.70	1.02	0.78	0.57	0.37	0.30	0.00	
5	0.43	0.50	0.50	0.57	0.50	0.70	0.94	0.78	0.57	0.37	0.30	0.00	
6	0.43	0.43	0.50	0.57	0.78	0.70	0.94	0.70	0.57	0.37	0.23	0.00	
7	0.43	0.43	0.50	0.57	9.20	0.70	1.18	0.78	0.57	0.37	0.23	0.00	
8	0.43	0.43	0.57	0.57	6.47	0.63	1.18	0.70	0.57	0.37	0.23	0.00	
9	0.37	0.43	0.63	1.10	4.26	0.63	1.26	0.70	0.50	0.37	0.15	0.00	
10	0.30	0.43	0.57	0.78	52.19	0.70	7.72	0.70	0.50	0.37	0.15	0.00	
11	0.30	0.43	0.57	0.70	47.82	1.98	2.22	0.63	0.50	0.37	0.07	0.00	
12	0.30	0.63	0.57	3.87	11.71	11.20	1.34	0.57	0.50	0.37	0.00	0.00	
13	0.30	13.07	0.50	1.98	4.65	2.96	1.18	0.57	0.50	0.37	0.00	0.00	
14	0.30	3.22	0.50	0.78	2.46	1.50	1.02	0.57	0.43	0.37	0.00	0.00	
15	0.30	2.58	0.50	0.63	1.74	1.10	1.10	0.57	0.43	0.37	0.00	0.00	
16	0.37	1.42	0.50	0.63	1.50	0.94	0.78	0.57	0.43	0.37	0.00	0.00	
17	0.37	1.02	0.50	0.57	1.34	0.86	0.78	0.57	0.43	0.37	0.00	0.00	
18	0.37	2.70	0.50	0.57	1.18	0.86	0.70	0.57	0.43	0.37	0.00	0.00	
19	0.37	1.34	0.50	0.50	1.02	0.86	0.70	0.57	0.43	0.37	0.00	0.00	
20	0.37	0.70	0.50	0.57	0.94	0.86	0.70	0.63	0.43	0.37	0.00	0.00	
21	0.30	0.63	0.50	0.57	0.86	1.10	0.63	0.63	0.43	0.37	0.00	0.00	
22	0.30	0.57	0.50	0.63	0.86	6.08	0.63	0.63	0.43	0.37	0.00	0.00	
23	0.30	0.57	0.50	0.63	1.10	3.09	0.70	0.70	0.43	0.37	0.00	0.00	
24	0.30	0.57	0.50	0.63	1.02	3.35	1.42	0.70	0.43	0.37	0.00	0.00	
25	0.30	0.57	0.50	0.57	0.86	4.52	1.42	0.70	0.43	0.37	0.00	0.00	
26	0.57	0.57	0.50	0.57	0.70	3.22	1.10	0.63	0.43	0.37	0.00	0.00	
27	0.50	0.50	0.50	0.57	0.70	1.98	2.46	0.63	0.43	0.37	0.00	0.00	
28	0.43	0.57	0.57	0.57	0.70	1.34	1.18	0.63	0.43	0.37	0.00	0.00	
29	0.43	0.57	0.57	0.50	0.70	1.10	1.10	0.57	0.43	0.37		0.00	
30	0.43	0.57	0.50	4.00	0.70	1.02	0.94	0.57	0.43	0.37		0.00	
31		0.57		0.86	0.78		0.86		0.43	0.37		0.00	
Total	11.32	38.22	15.68	27.67	159.08	56.71	40.10	19.69	14.80	11.65	2.70	0.00	397.62 CMSDAY
Mean	0.38	1.23	0.52	0.89	5.13	1.89	1.29	0.66	0.48	0.38	0.10	0.00	1.09 CMS
Max	0.57	13.07	0.63	4.00	52.19	11.20	7.72	0.78	0.57	0.43	0.37	0.00	52.19 CMS
Min	0.30	0.43	0.50	0.50	0.50	0.63	0.63	0.57	0.43	0.37	0.00	0.00	0.00 CMS
Runoff	0.978	3.302	1.355	2.391	13.745	4.900	3.465	1.701	1.279	1.007	0.233	0.000	34.354 MCM

Momentary Peak 126.32 CMS, at 255.44 M (MSL), at 18.00 Hours, on Aug 10, 2001

Runoff Yield 4.48 Liters/Second/Square KM, Momentary Peak Yield 519.835 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

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

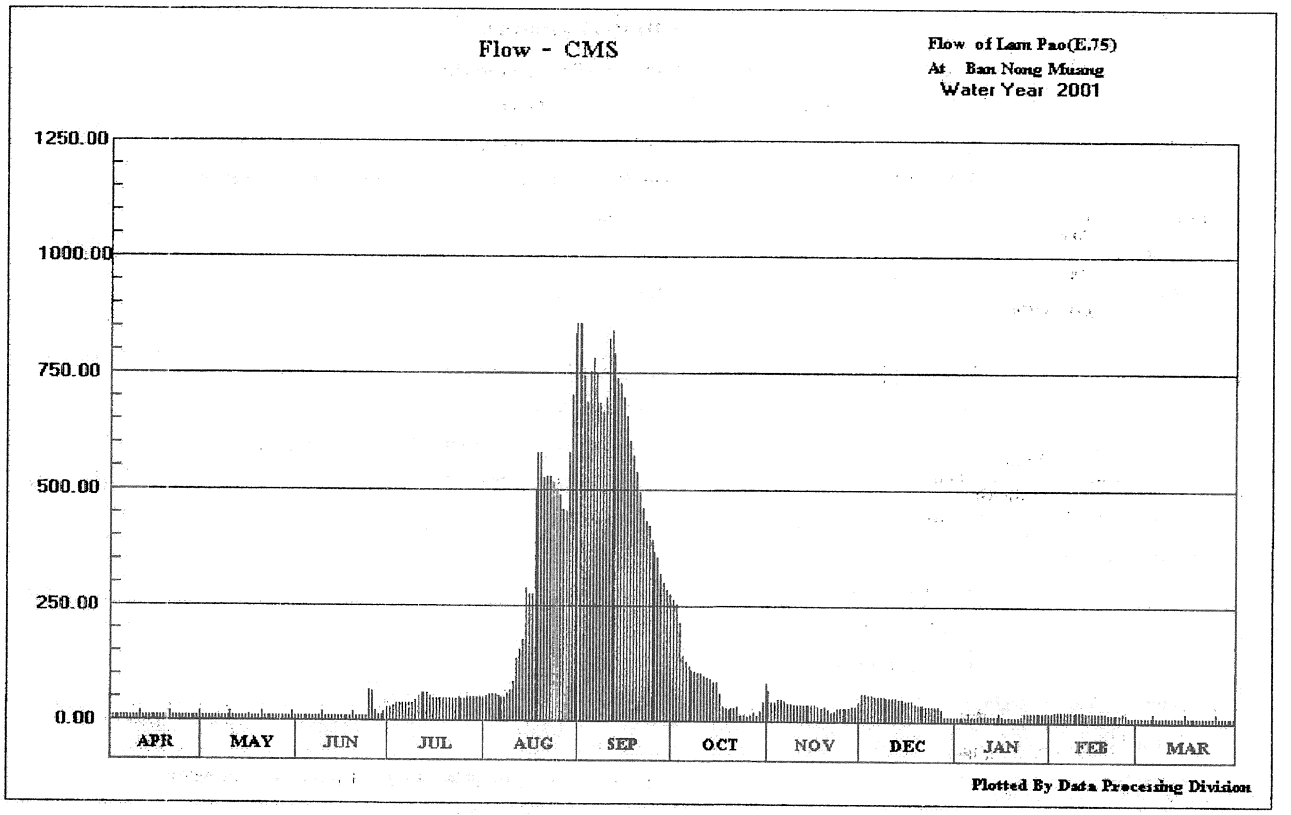
Lat 16 - 34 - 36 N. **Long** 103 - 26 - 35 E.

Location		on left bank about 3 kilometers downstream from Lam Pao Damsite.
	Ban Nong Muang	**Amphoe** Mueang **Changwat** Kalasin
Drainage Area		6,054 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+138.018 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank in front of gage observer's house.
	Elevation	+149.762 m. (M.S.L.)
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.
Period of Available Gage Records		1987 to date
Rating Operation		
	Period of Rating	1987 to date.
	Rated by Float	-
	Rated by Current Meter	1987 to date.
Stability of Channel Regimes		Fairly stable.
Overbank Flow Conditions		No overbank flow.
General Description		Records fair. Flow regulated by Lam Pao Dam.
		Stage-discharge relation defined by 33 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	138.70	138.65	138.28	139.22	139.88	145.80	143.54	140.21	140.10	138.52	138.97	138.60	
2	138.67	138.67	138.27	139.33	140.04	145.59	143.43	139.60	140.05	138.52	139.01	138.60	
3	138.67	138.67	138.29	139.47	139.97	145.47	142.83	139.60	140.01	138.52	139.02	138.60	
4	138.67	138.67	138.29	139.47	140.03	145.61	141.70	139.72	140.00	138.52	139.02	138.60	
5	138.67	138.67	138.27	139.51	139.95	145.66	141.47	139.72	139.94	138.60	139.02	138.60	
6	138.67	138.67	138.25	139.52	139.87	145.60	141.34	139.68	139.90	138.62	139.02	138.60	
7	138.67	138.67	138.27	139.52	139.87	145.46	141.18	139.52	139.90	138.62	138.99	138.57	
8	138.67	138.67	138.32	139.52	140.05	145.42	141.10	139.48	139.90	138.76	138.98	138.55	
9	138.67	138.67	138.30	139.63	140.28	145.49	141.04	139.40	139.85	138.78	138.99	138.57	
10	138.67	138.67	138.30	139.88	140.63	145.74	141.03	139.40	139.82	138.77	139.02	138.57	
11	138.67	138.67	138.30	140.05	141.62	145.77	140.90	139.40	139.82	138.77	139.02	138.57	
12	138.56	138.67	138.27	140.07	141.92	145.68	140.82	139.40	139.81	138.77	138.98	138.42	
13	138.47	138.67	138.27	140.07	142.29	145.58	140.76	139.42	139.77	138.75	138.98	138.35	
14	138.47	138.67	138.27	139.93	143.88	145.56	140.68	139.41	139.72	138.75	138.97	138.23	
15	138.47	138.67	138.27	139.77	143.72	145.49	140.65	139.37	139.62	138.74	138.97	138.17	
16	138.47	138.71	138.27	139.77	143.72	145.40	140.07	139.37	139.62	138.72	138.97	138.17	
17	138.47	138.70	138.26	139.77	144.99	145.28	139.34	139.31	139.62	138.60	138.97	138.17	
18	138.57	138.70	138.26	139.77	145.22	145.21	139.20	139.22	139.49	138.52	138.97	138.27	
19	138.62	138.69	138.26	139.77	145.22	145.11	139.09	139.27	139.42	138.22	138.89	138.22	
20	138.62	138.67	138.26	139.77	145.07	144.98	139.22	139.09	139.38	138.10	138.82	138.22	
21	138.62	138.67	138.26	139.77	145.08	144.86	139.22	138.93	139.37	138.29	138.82	138.22	
22	138.62	138.67	138.26	139.77	145.08	144.76	139.29	139.07	139.33	138.72	138.82	138.22	
23	138.62	138.67	138.26	139.82	145.05	144.72	138.77	139.17	139.32	138.97	138.82	138.22	
24	138.62	138.67	140.27	139.79	145.00	144.59	138.76	139.22	139.32	138.97	138.82	138.22	
25	138.62	138.67	140.19	139.79	144.96	144.46	138.66	139.22	139.29	138.97	138.82	138.22	
26	138.65	138.67	138.99	139.80	144.85	144.39	138.73	139.22	139.27	138.97	138.33	138.22	
27	138.67	138.67	138.77	139.80	144.84	144.15	138.69	139.22	139.10	138.97	138.52	138.22	
28	138.67	138.67	138.72	139.80	145.22	143.99	138.75	139.32	138.53	138.97	138.64	138.22	
29	138.67	138.53	138.93	139.80	145.50	143.85	139.07	139.32	138.55	138.97		138.22	
30	138.67	138.32	139.22	139.80	145.76	143.70	139.55	139.61	138.52	138.97		138.22	
31		138.30		139.80	145.80		140.60		138.52	138.97		138.22	
Mean	138.62	138.65	138.51	139.73	143.08	145.11	140.31	139.40	139.51	138.71	138.90	138.36	
Max	138.70	138.71	140.27	140.07	145.80	145.80	143.54	140.21	140.10	138.97	139.02	138.60	145.80
Min	138.47	138.30	138.25	139.22	139.87	143.70	138.66	138.93	138.52	138.10	138.33	138.17	138.10

Annual Max Momentary Gage Height 145.98 M (MSL), at 6.00 Hours, on Sep 1, 2001
Zero Gage at Bottom Elevation 138.02 M (MSL), River Bed 137.36 M (MSL)
Left Bank Elevation 149.43 M (MSL)
Right Bank Elevation 149.44 M (MSL), Drainage Area 6054 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.0	13.5	5.6	32.7	55.8	860.0	266.5	68.4	64.0	10.4	23.9	12.0	
2	14.1	14.1	5.4	36.6	61.6	747.4	258.2	46.0	62.0	10.4	25.3	12.0	
3	14.1	14.1	5.8	41.4	59.0	692.2	216.1	46.0	60.4	10.4	25.7	12.0	
4	14.1	14.1	5.8	41.4	61.2	757.4	144.0	50.2	60.0	10.4	25.7	12.0	
5	14.1	14.1	5.4	42.8	58.2	784.4	130.8	50.2	57.9	12.0	25.7	12.0	
6	14.1	14.1	5.0	43.2	55.4	752.0	123.7	48.8	56.5	12.6	25.7	12.0	
7	14.1	14.1	5.4	43.2	55.4	687.6	115.0	43.2	56.5	12.6	24.7	11.4	
8	14.1	14.1	6.4	43.2	62.0	669.2	111.0	41.8	56.5	16.8	24.3	11.0	
9	14.1	14.1	6.0	47.1	71.2	701.4	108.0	39.0	54.8	17.4	24.7	11.4	
10	14.1	14.1	6.0	55.8	87.5	827.6	107.5	39.0	53.7	17.1	25.7	11.4	
11	14.1	14.1	6.0	62.0	139.2	843.8	101.0	39.0	53.7	17.1	25.7	11.4	
12	11.2	14.1	5.4	62.8	157.2	795.2	97.0	39.0	53.3	17.1	24.3	8.4	
13	9.4	14.1	5.4	62.8	179.8	742.8	94.0	39.7	52.0	16.5	24.3	7.0	
14	9.4	14.1	5.4	57.5	292.4	733.6	90.0	39.4	50.2	16.5	23.9	4.6	
15	9.4	14.1	5.4	52.0	280.0	701.4	88.5	37.9	46.7	16.2	23.9	3.4	
16	9.4	15.3	5.4	52.0	280.0	660.0	62.8	37.9	46.7	15.6	23.9	3.4	
17	9.4	15.0	5.2	52.0	501.0	607.2	36.9	35.8	46.7	12.0	23.9	3.4	
18	11.4	15.0	5.2	52.0	580.8	576.4	32.0	32.7	42.2	10.4	23.9	5.4	
19	12.6	14.7	5.2	52.0	580.8	541.4	28.1	34.5	39.7	4.4	21.1	4.4	
20	12.6	14.1	5.2	52.0	527.8	498.0	32.7	28.1	38.3	2.0	18.7	4.4	
21	12.6	14.1	5.2	52.0	531.2	462.0	32.7	22.5	37.9	5.8	18.7	4.4	
22	12.6	14.1	5.2	52.0	531.2	434.4	35.1	27.5	36.6	15.6	18.7	4.4	
23	12.6	14.1	5.2	53.7	521.0	424.8	17.1	30.9	36.2	23.9	18.7	4.4	
24	12.6	14.1	70.8	52.6	504.0	394.2	16.8	32.7	36.2	23.9	18.7	4.4	
25	12.6	14.1	67.6	52.6	492.0	370.8	13.8	32.7	35.1	23.9	18.7	4.4	
26	13.5	14.1	24.7	53.0	459.0	358.4	15.9	32.7	34.5	23.9	6.6	4.4	
27	14.1	14.1	17.1	53.0	456.0	322.0	14.7	32.7	28.5	23.9	10.4	4.4	
28	14.1	14.1	15.6	53.0	580.8	303.0	16.5	36.2	10.6	23.9	13.2	4.4	
29	14.1	10.6	22.5	53.0	706.0	290.0	27.5	36.2	11.0	23.9		4.4	
30	14.1	6.4	32.7	53.0	838.4	278.5	44.3	46.3	10.4	23.9		4.4	
31		6.0		53.0	860.0		86.0		10.4	23.9		4.4	
Total	383.7	420.8	377.2	1565.4	10625.9	17817.1	2564.2	1167.0	1339.2	494.4	608.7	221.4	37585.0 CMSDAY
Mean	12.8	13.6	12.6	50.5	342.8	593.9	82.7	38.9	43.2	15.9	21.7	7.1	103.0 CMS
Max	15.0	15.3	70.8	62.8	860.0	860.0	266.5	68.4	64.0	23.9	25.7	12.0	860.0 CMS
Min	9.4	6.0	5.0	32.7	55.4	278.5	13.8	22.5	10.4	2.0	6.6	3.4	2.0 CMS
Runoff	33.15	36.36	32.59	135.25	918.08	1539.40	221.55	100.83	115.71	42.72	52.59	19.13	3247.34 MCM

Momentary Peak 968.00 CMS, at 145.98 M (MSL), at 6.00 Hours, on Sep 1, 2001

Runoff Yield 17.01 Liters/Second/Square KM, Momentary Peak Yield 159.894 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 192 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +163.900 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 2.50 meters from the top staff gage.

Elevation +173.809 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1999 to date.

Rating Operation

Period of Rating 1999 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable.

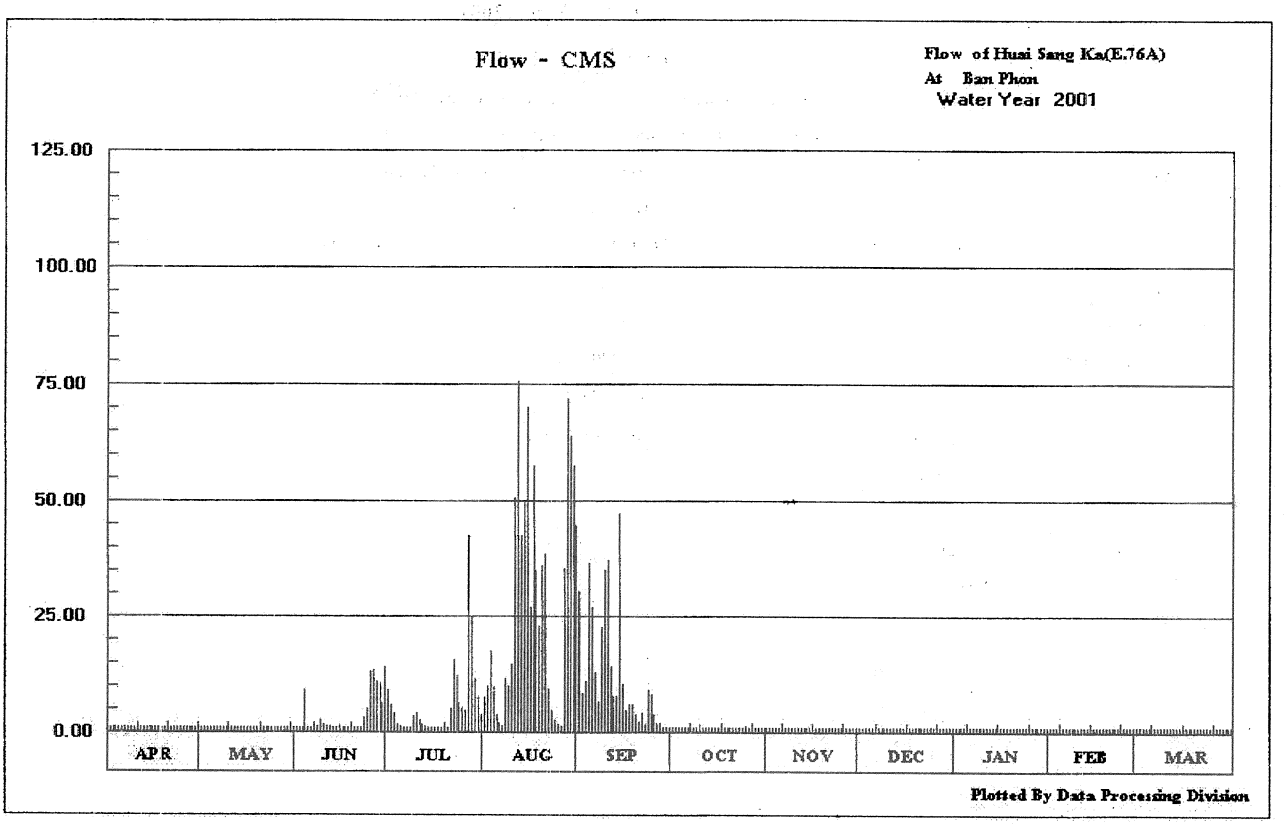
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 30 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	164.32	164.23	164.32	166.25	166.07	167.94	164.72	164.77	164.44	164.35	164.34	164.33	
2	164.31	164.56	164.36	165.89	166.34	166.20	164.78	164.73	164.42	164.35	164.34	164.33	
3	164.30	164.54	165.07	165.64	167.00	166.43	164.75	164.74	164.43	164.35	164.33	164.33	
4	164.29	164.44	166.26	165.17	166.32	168.37	164.73	164.66	164.43	164.35	164.33	164.33	
5	164.29	164.32	164.93	165.14	165.61	167.72	164.70	164.64	164.40	164.35	164.33	164.33	
6	164.29	164.37	164.84	165.02	165.28	166.59	164.65	164.58	164.42	164.35	164.34	164.33	
7	164.29	164.36	165.26	164.94	165.14	165.94	164.64	164.56	164.43	164.35	164.34	164.33	
8	164.28	164.33	165.11	164.96	166.48	167.37	164.73	164.54	164.42	164.35	164.33	164.32	
9	164.28	164.32	165.37	165.54	166.35	168.26	164.99	164.50	164.40	164.35	164.33	164.31	
10	164.27	164.31	165.19	165.62	166.76	168.40	165.21	164.48	164.39	164.35	164.33	164.31	
11	164.25	164.34	165.13	165.38	169.15	166.71	164.97	164.48	164.41	164.35	164.33	164.31	
12	164.24	164.33	165.09	165.21	170.42	166.10	164.85	164.47	164.40	164.35	164.33	164.31	
13	164.23	164.31	165.00	165.15	168.71	166.12	164.79	164.49	164.41	164.35	164.33	164.31	
14	164.23	164.29	165.01	164.93	169.13	168.97	164.74	164.81	164.43	164.37	164.33	164.31	
15	164.22	164.29	165.08	164.71	170.16	166.36	164.71	164.66	164.39	164.35	164.33	164.31	
16	164.21	164.31	164.90	164.72	167.71	165.73	164.65	164.58	164.38	164.35	164.32	164.30	
17	164.20	164.31	164.77	165.01	169.51	165.88	164.60	164.53	164.40	164.35	164.32	164.30	
18	164.19	164.30	164.76	164.95	168.26	165.87	164.54	164.50	164.38	164.35	164.32	164.30	
19	164.18	164.29	164.67	164.85	167.40	165.58	164.54	164.47	164.38	164.38	164.32	164.30	
20	164.17	164.29	164.54	164.97	168.33	165.32	164.59	164.46	164.37	164.35	164.32	164.30	
21	164.16	164.27	164.47	165.74	168.48	165.64	164.53	164.45	164.36	164.34	164.34	164.30	
22	164.15	164.30	164.56	166.85	166.27	165.20	164.49	164.46	164.35	164.34	164.34	164.30	
23	164.14	164.31	165.48	166.54	165.70	166.26	164.52	164.46	164.35	164.35	164.34	164.29	
24	164.13	164.30	165.76	165.91	165.39	166.13	164.81	164.48	164.35	164.35	164.34	164.31	
25	164.12	164.35	166.64	165.75	165.18	165.60	165.08	164.47	164.35	164.35	164.34	164.31	
26	164.12	164.31	166.65	165.70	165.09	165.24	165.01	164.43	164.35	164.34	164.33	164.31	
27	164.12	164.30	166.42	168.72	168.29	164.98	164.93	164.42	164.35	164.35	164.33	164.31	
28	164.17	164.37	166.40	167.54	170.24	164.86	164.88	164.42	164.35	164.35	164.33	164.31	
29	164.21	164.33	165.92	166.49	169.85	164.80	164.89	164.43	164.35	164.35		164.31	
30	164.19	164.33	166.72	166.11	169.51	164.78	164.81	164.43	164.35	164.35		164.30	
31		164.33		165.57	168.85		164.78		164.35	164.35		164.30	
Mean	164.22	164.33	165.29	165.64	167.52	166.31	164.76	164.54	164.39	164.35	164.33	164.31	
Max	164.32	164.56	166.72	168.72	170.42	168.97	165.21	164.81	164.44	164.38	164.34	164.33	170.42
Min	164.12	164.23	164.32	164.71	165.09	164.78	164.49	164.42	164.35	164.34	164.32	164.29	164.12

Annual Max Momentary Gage Height 170.80 M (MSL), at 12.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 163.90 M (MSL), River Bed 164.00 M (MSL)
Left Bank Elevation 171.35 M (MSL)
Right Bank Elevation 169.50 M (MSL), Drainage Area 192 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.12	0.03	0.12	9.50	7.91	30.60	0.55	0.68	0.24	0.15	0.14	0.13	
2	0.11	0.36	0.16	6.47	10.40	9.00	0.70	0.57	0.22	0.15	0.14	0.13	
3	0.10	0.34	1.51	4.55	18.00	11.33	0.63	0.60	0.23	0.15	0.13	0.13	
4	0.09	0.24	9.60	1.88	10.20	37.05	0.57	0.46	0.23	0.15	0.13	0.13	
5	0.09	0.12	1.09	1.76	4.32	27.38	0.50	0.44	0.20	0.15	0.13	0.13	
6	0.09	0.17	0.85	1.36	2.40	13.09	0.45	0.38	0.22	0.15	0.14	0.13	
7	0.09	0.16	2.30	1.12	1.76	6.87	0.44	0.36	0.23	0.15	0.14	0.13	
8	0.08	0.13	1.64	1.18	11.88	22.81	0.57	0.34	0.22	0.15	0.13	0.12	
9	0.08	0.12	2.85	3.86	10.50	35.40	1.27	0.30	0.20	0.15	0.13	0.11	
10	0.07	0.11	1.96	4.40	15.04	37.50	2.05	0.28	0.19	0.15	0.13	0.11	
11	0.05	0.14	1.72	2.90	50.95	14.47	1.21	0.28	0.21	0.15	0.13	0.11	
12	0.04	0.13	1.57	2.05	76.00	8.15	0.88	0.27	0.20	0.15	0.13	0.11	
13	0.03	0.11	1.30	1.80	42.77	8.32	0.72	0.29	0.21	0.15	0.13	0.11	
14	0.03	0.09	1.33	1.09	50.57	47.53	0.60	0.78	0.23	0.17	0.13	0.11	
15	0.02	0.09	1.54	0.53	70.56	10.60	0.53	0.46	0.19	0.15	0.13	0.11	
16	0.01	0.11	1.00	0.55	27.24	5.22	0.45	0.38	0.18	0.15	0.12	0.10	
17	0.00	0.11	0.68	1.33	57.79	6.39	0.40	0.33	0.20	0.15	0.12	0.10	
18	0.00	0.10	0.65	1.15	35.40	6.31	0.34	0.30	0.18	0.15	0.12	0.10	
19	0.00	0.09	0.47	0.88	23.20	4.12	0.34	0.27	0.18	0.18	0.12	0.10	
20	0.00	0.09	0.34	1.21	36.45	2.60	0.39	0.26	0.17	0.15	0.12	0.10	
21	0.00	0.07	0.27	5.30	38.86	4.55	0.33	0.25	0.16	0.14	0.14	0.10	
22	0.00	0.10	0.36	16.13	9.70	2.00	0.29	0.26	0.15	0.14	0.14	0.10	
23	0.00	0.11	3.48	12.54	5.00	9.60	0.32	0.26	0.15	0.15	0.14	0.09	
24	0.00	0.10	5.45	6.63	2.95	8.41	0.78	0.28	0.15	0.15	0.14	0.11	
25	0.00	0.15	13.66	5.37	1.92	4.25	1.54	0.27	0.15	0.15	0.14	0.11	
26	0.00	0.11	13.77	5.00	1.57	2.20	1.33	0.23	0.15	0.14	0.13	0.11	
27	0.00	0.10	11.22	42.94	35.85	1.24	1.09	0.22	0.15	0.15	0.13	0.11	
28	0.00	0.17	11.00	25.02	72.20	0.90	0.95	0.22	0.15	0.15	0.13	0.11	
29	0.01	0.13	6.71	11.99	64.25	0.75	0.98	0.23	0.15	0.15		0.11	
30	0.00	0.13	14.58	8.23	57.79	0.70	0.78	0.23	0.15	0.15		0.10	
31		0.13		4.06	45.25		0.70		0.15	0.15		0.10	
Total	1.11	4.14	113.18	192.78	898.68	379.34	22.68	10.48	5.79	4.67	3.68	3.45	1639.98 CMSDAY
Mean	0.04	0.13	3.77	6.22	28.99	12.64	0.73	0.35	0.19	0.15	0.13	0.11	4.49 CMS
Max	0.12	0.36	14.58	42.94	76.00	47.53	2.05	0.78	0.24	0.18	0.14	0.13	76.00 CMS
Min	0.00	0.03	0.12	0.53	1.57	0.70	0.29	0.22	0.15	0.14	0.12	0.09	0.00 CMS
Runoff	0.095	0.358	9.779	16.656	77.646	32.775	1.960	0.905	0.500	0.403	0.318	0.298	141.694 MCM

Momentary Peak 85.50 CMS, at 170.80 M (MSL), at 12.00 Hours, on Aug 12, 2001

Runoff Yield 23.40 Liters/Second/Square KM, Momentary Peak Yield 445.313 Liters/Second/Square KM

WATER YEAR : 2001

CHI RIVER BASIN

Huai Prong Khunphet at Ban Prong Nok, Chaiyaphum (E.77)

Lat 15 - 49 - 45 N. **Long** 101 - 30 - 42 E.

Location on right bank at the bridge of Chaiyaphum - Nakhon Sawan Highway between guidepost 119 - 120

Ban Prong Nok **Amphoe** Thep Sathit **Changwat** Chaiyaphum

Drainage Area 83 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +304.440 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of gage observer's house.

Elevation +310.804 m. (M.S.L.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1995 to date.

Rating Operation

Period of Rating 1995 to date.

Rated by Float -

Rated by Current Meter 1995 to date.

Stability of Channel Regimes Fairly stable.

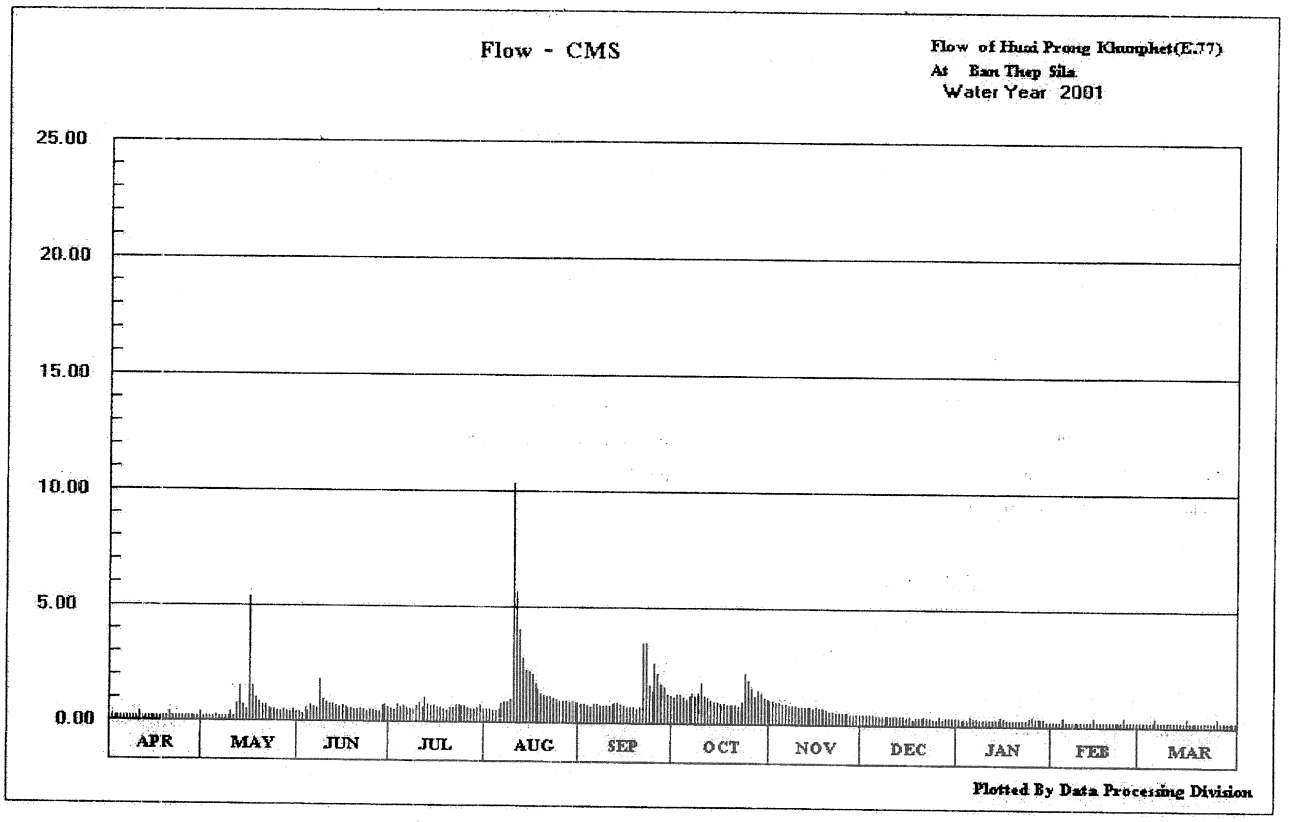
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 57 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	305.04	304.90	305.13	305.34	305.33	305.61	305.85	305.78	305.23	305.08	304.90	304.85	
2	304.98	304.90	305.12	305.31	305.32	305.59	305.92	305.76	305.22	305.03	304.89	304.85	
3	304.93	304.93	305.36	305.52	305.28	305.55	305.91	305.73	305.20	305.03	304.89	304.84	
4	304.91	304.94	305.20	305.38	305.28	305.50	305.84	305.71	305.19	305.02	304.89	304.83	
5	304.91	305.01	305.47	305.47	305.36	305.62	305.80	305.68	305.18	305.03	304.89	304.83	
6	304.88	304.96	305.42	305.37	305.58	305.57	305.87	305.65	305.17	305.09	304.89	304.84	
7	304.87	304.94	305.36	305.36	305.68	305.55	305.94	305.62	305.17	305.07	304.89	304.84	
8	304.87	304.92	306.13	305.36	305.66	305.51	305.87	305.62	305.14	305.06	304.89	304.84	
9	304.86	304.91	305.74	305.47	305.79	305.51	305.95	305.58	305.15	305.06	304.89	304.84	
10	304.86	304.92	305.60	305.58	307.36	305.53	306.11	305.55	305.16	305.05	304.89	304.84	
11	304.84	304.92	305.55	305.43	306.84	305.57	305.89	305.54	305.16	305.04	304.88	304.84	
12	304.84	305.53	305.52	305.82	306.61	305.68	305.84	305.51	305.14	305.04	304.88	304.83	
13	304.84	306.02	305.48	305.55	306.36	305.63	305.78	305.51	305.14	305.04	304.88	304.83	
14	304.83	305.48	305.43	305.49	306.24	305.60	305.74	305.52	305.14	305.05	304.88	304.83	
15	304.91	305.29	305.49	305.45	306.22	305.53	305.70	305.50	305.11	305.06	304.88	304.83	
16	304.94	306.81	305.42	305.41	306.18	305.49	305.65	305.51	305.01	305.07	304.88	304.83	
17	304.95	306.02	305.36	305.39	306.08	305.44	305.63	305.46	305.05	305.06	304.87	304.83	
18	304.93	305.80	305.32	305.33	306.01	305.44	305.61	305.44	305.08	305.05	304.87	304.83	
19	304.91	305.60	305.28	305.30	305.92	305.43	305.59	305.38	305.11	305.05	304.87	304.83	
20	304.90	305.50	305.30	305.42	305.90	305.48	305.57	305.35	305.11	305.05	304.87	304.83	
21	304.88	305.46	305.36	305.40	305.85	306.50	305.57	305.33	305.13	305.04	304.87	304.83	
22	304.88	305.37	305.26	305.55	305.86	306.51	305.53	305.31	305.11	305.03	304.87	304.83	
23	304.86	305.27	305.22	305.54	305.83	306.07	305.73	305.31	305.07	305.01	304.87	304.83	
24	304.87	305.29	305.30	305.50	305.76	305.99	306.22	305.29	305.04	305.07	304.87	304.83	
25	304.89	305.24	305.28	305.44	305.71	306.31	306.14	305.29	305.04	305.08	304.87	304.83	
26	304.92	305.20	305.25	305.40	305.70	306.20	306.04	305.26	305.04	305.08	304.87	304.83	
27	304.89	305.29	305.23	305.37	305.70	306.08	305.90	305.24	305.04	305.08	304.87	304.83	
28	304.89	305.23	305.48	305.33	305.68	306.05	306.01	305.23	305.07	305.07	304.86	304.83	
29	304.89	305.17	305.51	305.38	305.75	305.93	305.95	305.23	305.08	305.07		304.82	
30	304.89	305.29	305.39	305.55	305.68	305.89	305.86	305.23	305.08	304.96		304.83	
31		305.18		305.37	305.65		305.81		305.08	304.96		304.83	
Mean	304.90	305.30	305.40	305.44	305.88	305.75	305.83	305.47	305.12	305.05	304.88	304.83	
Max	305.04	306.81	306.13	305.82	307.36	306.51	306.22	305.78	305.23	305.09	304.90	304.85	307.36
Min	304.83	304.90	305.12	305.30	305.28	305.43	305.53	305.23	305.01	304.96	304.86	304.82	304.82

Annual Max Momentary Gage Height 308.04 M (MSL), at 12.00 Hours, on Aug 10, 2001
Zero Gage at Bottom Elevation 304.44 M (MSL), River Bed 305.18 M (MSL)
Left Bank Elevation 308.21 M (MSL)
Right Bank Elevation 309.62 M (MSL), Drainage Area 83 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.34	0.20	0.43	0.64	0.63	0.91	1.20	1.08	0.53	0.38	0.20	0.15	
2	0.28	0.20	0.42	0.61	0.62	0.89	1.34	1.06	0.52	0.33	0.19	0.15	
3	0.23	0.23	0.66	0.82	0.58	0.85	1.32	1.03	0.50	0.33	0.19	0.14	
4	0.21	0.24	0.50	0.68	0.58	0.80	1.18	1.01	0.49	0.32	0.19	0.13	
5	0.21	0.31	0.77	0.77	0.66	0.92	1.10	0.98	0.48	0.33	0.19	0.13	
6	0.18	0.26	0.72	0.67	0.88	0.87	1.24	0.95	0.47	0.39	0.19	0.14	
7	0.17	0.24	0.66	0.66	0.98	0.85	1.38	0.92	0.47	0.37	0.19	0.14	
8	0.17	0.22	1.92	0.66	0.96	0.81	1.24	0.92	0.44	0.36	0.19	0.14	
9	0.16	0.21	1.04	0.77	1.09	0.81	1.40	0.88	0.45	0.36	0.19	0.14	
10	0.16	0.22	0.90	0.88	10.40	0.83	1.84	0.85	0.46	0.35	0.19	0.14	
11	0.14	0.22	0.85	0.73	5.68	0.87	1.28	0.84	0.46	0.34	0.18	0.14	
12	0.14	0.83	0.82	1.14	4.07	0.98	1.18	0.81	0.44	0.34	0.18	0.13	
13	0.14	1.56	0.78	0.85	2.84	0.93	1.08	0.81	0.44	0.34	0.18	0.13	
14	0.13	0.78	0.73	0.79	2.36	0.90	1.04	0.82	0.44	0.35	0.18	0.13	
15	0.21	0.59	0.79	0.75	2.28	0.83	1.00	0.80	0.41	0.36	0.18	0.13	
16	0.24	5.47	0.72	0.71	2.12	0.79	0.95	0.81	0.31	0.37	0.18	0.13	
17	0.25	1.56	0.66	0.69	1.74	0.74	0.93	0.76	0.35	0.36	0.17	0.13	
18	0.23	1.10	0.62	0.63	1.53	0.74	0.91	0.74	0.38	0.35	0.17	0.13	
19	0.21	0.90	0.58	0.60	1.34	0.73	0.89	0.68	0.41	0.35	0.17	0.13	
20	0.20	0.80	0.60	0.72	1.30	0.78	0.87	0.65	0.41	0.35	0.17	0.13	
21	0.18	0.76	0.66	0.70	1.20	3.50	0.87	0.63	0.43	0.34	0.17	0.13	
22	0.18	0.67	0.56	0.85	1.22	3.55	0.83	0.61	0.41	0.33	0.17	0.13	
23	0.16	0.57	0.52	0.84	1.16	1.71	1.03	0.61	0.37	0.31	0.17	0.13	
24	0.17	0.59	0.60	0.80	1.06	1.48	2.28	0.59	0.34	0.37	0.17	0.13	
25	0.19	0.54	0.58	0.74	1.01	2.64	1.96	0.59	0.34	0.38	0.17	0.13	
26	0.22	0.50	0.55	0.70	1.00	2.20	1.62	0.56	0.34	0.38	0.17	0.13	
27	0.19	0.59	0.53	0.67	1.00	1.74	1.30	0.54	0.34	0.38	0.17	0.13	
28	0.19	0.53	0.78	0.63	0.98	1.65	1.53	0.53	0.37	0.37	0.16	0.13	
29	0.19	0.47	0.81	0.68	1.05	1.36	1.40	0.53	0.38	0.37		0.12	
30	0.19	0.59	0.69	0.85	0.98	1.28	1.22	0.53	0.38	0.26		0.13	
31		0.48		0.67	0.95		1.12		0.38	0.26		0.13	
Total	5.86	22.43	21.45	22.90	54.25	37.94	38.53	23.12	12.94	10.78	5.02	4.13	259.35 CMSDAY
Mean	0.20	0.72	0.72	0.74	1.75	1.26	1.24	0.77	0.42	0.35	0.18	0.13	0.71 CMS
Max	0.34	5.47	1.92	1.14	10.40	3.55	2.28	1.08	0.53	0.39	0.20	0.15	10.40 CMS
Min	0.13	0.20	0.42	0.60	0.58	0.73	0.83	0.53	0.31	0.26	0.16	0.12	0.12 CMS
Runoff	0.506	1.938	1.853	1.979	4.687	3.278	3.329	1.998	1.118	0.931	0.434	0.357	22.408 MCM

Momentary Peak 18.62 CMS, at 308.04 M (MSL), at 12.00 Hours, on Aug 10, 2001
Runoff Yield 8.56 Liters/Second/Square KM, Momentary Peak Yield 224.337 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

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

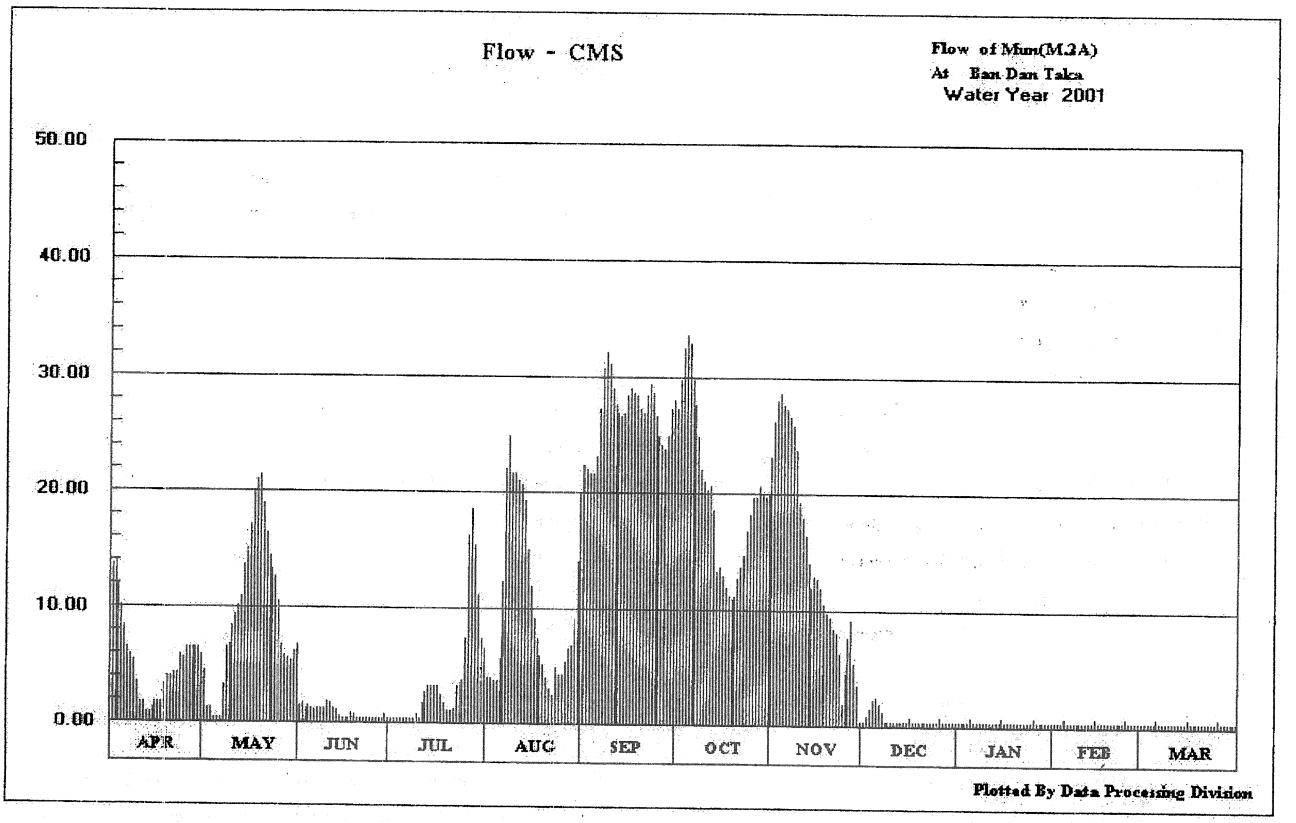
Lat 14 - 57 - 57 N. **Long** 102 - 14 - 38 E.

Location		on left bank at Ban Dan Taka.
	Ban Dan Taka	**Amphoe** Chaloem Phra **Changwat** Nakhon Ratchasima
Drainage Area		4,724 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+161.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On right bank downstream at the footpath.
	Elevation	+169.284 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		2001 to date.
Rating Operation		
	Period of Rating	2001 to date.
	Rated by Float	-
	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 52 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	163.48	163.20	163.08	162.97	163.18	163.73	163.87	163.75	163.01	162.60	162.30	162.02	
2	163.49	163.07	163.09	162.88	163.18	163.72	163.94	163.84	163.05	162.60	162.28	162.01	
3	163.43	163.07	163.07	162.87	163.17	163.71	164.02	163.89	163.08	162.58	162.26	162.00	
4	163.38	163.00	163.08	162.79	163.17	163.71	164.05	163.91	163.11	162.58	162.23	161.99	
5	163.33	163.00	163.07	162.77	163.24	163.75	164.03	163.88	163.12	162.54	162.22	161.99	
6	163.27	163.00	163.06	162.78	163.44	163.87	163.94	163.87	163.10	162.53	162.19	161.98	
7	163.25	163.05	163.07	162.78	163.72	163.97	163.88	163.85	163.07	162.52	162.19	161.98	
8	163.23	163.27	163.07	162.96	163.80	164.01	163.80	163.83	163.01	162.52	162.19	161.96	
9	163.16	163.28	163.07	163.01	163.71	163.98	163.72	163.77	162.92	162.52	162.19	161.95	
10	163.09	163.33	163.10	163.02	163.71	163.92	163.69	163.64	162.84	162.52	162.19	161.95	
11	163.09	163.36	163.09	163.09	163.69	163.88	163.67	163.60	162.79	162.51	162.19	161.94	
12	163.05	163.38	163.07	163.13	163.68	163.86	163.68	163.56	162.84	162.51	162.19	161.92	
13	163.05	163.40	163.06	163.15	163.64	163.85	163.62	163.49	162.88	162.51	162.18	161.90	
14	163.07	163.48	163.04	163.15	163.52	163.86	163.47	163.43	162.92	162.50	162.17	161.87	
15	163.09	163.52	163.00	163.15	163.43	163.90	163.48	163.46	162.98	162.48	162.15	161.84	
16	163.09	163.58	162.90	163.15	163.35	163.92	163.46	163.45	163.02	162.47	162.13	161.83	
17	163.09	163.66	163.00	163.12	163.30	163.91	163.43	163.43	163.00	162.45	162.10	161.81	
18	163.15	163.69	163.05	163.09	163.25	163.90	163.41	163.39	163.00	162.44	162.09	161.80	
19	163.18	163.70	162.81	163.06	163.22	163.87	163.40	163.37	162.95	162.43	162.08	161.79	
20	163.18	163.63	162.80	163.06	163.18	163.86	163.41	163.36	162.93	162.40	162.04	161.79	
21	163.19	163.56	162.58	163.07	163.14	163.90	163.45	163.33	162.91	162.37	162.02	161.78	
22	163.19	163.50	162.69	163.15	163.12	163.93	163.48	163.32	162.90	162.33	162.02	161.78	
23	163.25	163.47	162.64	163.16	163.21	163.91	163.51	163.26	162.86	162.33	162.02	161.77	
24	163.24	163.45	162.64	163.17	163.19	163.85	163.57	163.10	162.80	162.33	162.02	161.77	
25	163.27	163.39	162.60	163.30	163.19	163.80	163.61	163.20	162.78	162.32	162.02	161.77	
26	163.27	163.28	162.57	163.55	163.23	163.78	163.65	163.31	162.76	162.32	162.02	161.76	
27	163.27	163.25	162.56	163.62	163.27	163.77	163.65	163.35	162.71	162.32	162.02	161.76	
28	163.27	163.24	162.57	163.53	163.28	163.80	163.68	163.23	162.69	162.32	162.02	161.76	
29	163.27	163.23	162.58	163.41	163.35	163.87	163.66	163.16	162.65	162.32		161.76	
30	163.25	163.26	162.53	163.30	163.49	163.89	163.65	163.02	162.63	162.32		161.75	
31		163.28		163.27	163.66		163.66		162.61	162.32		161.75	
Mean	163.22	163.34	162.88	163.11	163.38	163.86	163.66	163.50	162.90	162.45	162.13	161.86	
Max	163.49	163.70	163.10	163.62	163.80	164.01	164.05	163.91	163.12	162.60	162.30	162.02	164.05
Min	163.05	163.00	162.53	162.77	163.12	163.71	163.40	163.02	162.61	162.32	162.02	161.75	161.75

Annual Max Momentary Gage Height 164.06 M (MSL), at 6.00 Hours, on Oct 4, 2001
Zero Gage at Bottom Elevation 161.00 M (MSL), River Bed 159.56 M (MSL)
Left Bank Elevation 165.76 M (MSL)
Right Bank Elevation 167.27 M (MSL), Drainage Area 4724 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.80	4.70	1.68	0.00	4.18	22.55	27.45	23.25	Q.21	0.00	0.00	0.00	
2	14.15	1.47	1.89	0.00	4.18	22.20	29.90	26.40	1.05	0.00	0.00	0.00	
3	12.05	1.47	1.47	0.00	3.92	21.85	32.70	28.15	1.68	0.00	0.00	0.00	
4	10.30	0.00	1.68	0.00	3.92	21.85	33.75	28.85	2.36	0.00	0.00	0.00	
5	8.55	0.00	1.47	0.00	5.82	23.25	33.05	27.80	2.62	0.00	0.00	0.00	
6	6.66	0.00	1.26	0.00	12.40	27.45	29.90	27.45	2.10	0.00	0.00	0.00	
7	6.10	3.40	1.47	0.00	22.20	30.95	27.80	26.75	1.47	0.00	0.00	0.00	
8	5.54	6.66	1.47	0.00	25.00	32.35	25.00	26.05	0.21	0.00	0.00	0.00	
9	3.66	6.94	1.47	0.21	21.85	31.30	22.20	23.95	0.00	0.00	0.00	0.00	
10	1.89	8.55	2.10	0.42	21.85	29.20	21.15	19.40	0.00	0.00	0.00	0.00	
11	1.89	9.60	1.89	1.89	21.15	27.80	20.45	18.00	0.00	0.00	0.00	0.00	
12	1.05	10.30	1.47	2.88	20.80	27.10	20.80	16.60	0.00	0.00	0.00	0.00	
13	1.05	11.00	1.26	3.40	19.40	26.75	18.70	14.15	0.00	0.00	0.00	0.00	
14	1.47	13.80	0.84	3.40	15.20	27.10	13.45	12.05	0.00	0.00	0.00	0.00	
15	1.89	15.20	0.00	3.40	12.05	28.50	13.80	13.10	0.00	0.00	0.00	0.00	
16	1.89	17.30	0.00	3.40	9.25	29.20	13.10	12.75	0.42	0.00	0.00	0.00	
17	1.89	20.10	0.00	2.62	7.50	28.85	12.05	12.05	0.00	0.00	0.00	0.00	
18	3.40	21.15	1.05	1.89	6.10	28.50	11.35	10.65	0.00	0.00	0.00	0.00	
19	4.18	21.50	0.00	1.26	5.26	27.45	11.00	9.95	0.00	0.00	0.00	0.00	
20	4.18	19.05	0.00	1.26	4.18	27.10	11.35	9.60	0.00	0.00	0.00	0.00	
21	4.44	16.60	0.00	1.47	3.14	28.50	12.75	8.55	0.00	0.00	0.00	0.00	
22	4.44	14.50	0.00	3.40	2.62	29.55	13.80	8.20	0.00	0.00	0.00	0.00	
23	6.10	13.45	0.00	3.66	4.98	28.85	14.85	6.38	0.00	0.00	0.00	0.00	
24	5.82	12.75	0.00	3.92	4.44	26.75	16.95	2.10	0.00	0.00	0.00	0.00	
25	6.66	10.65	0.00	7.50	4.44	25.00	18.35	4.70	0.00	0.00	0.00	0.00	
26	6.66	6.94	0.00	16.25	5.54	24.30	19.75	7.85	0.00	0.00	0.00	0.00	
27	6.66	6.10	0.00	18.70	6.66	23.95	19.75	9.25	0.00	0.00	0.00	0.00	
28	6.66	5.82	0.00	15.55	6.94	25.00	20.80	5.54	0.00	0.00	0.00	0.00	
29	6.66	5.54	0.00	11.35	9.25	27.45	20.10	3.66	0.00	0.00	0.00	0.00	
30	6.10	6.38	0.00	7.50	14.15	28.15	19.75	0.42	0.00	0.00		0.00	
31		6.94		6.66	20.10		20.10		0.00	0.00		0.00	
Total	165.79	297.86	22.47	121.99	328.47	808.80	625.90	443.60	12.12	0.00	0.00	0.00	2827.00 CMSDAY
Mean	5.53	9.61	0.75	3.94	10.60	26.96	20.19	14.79	0.39	0.00	0.00	0.00	7.75 CMS
Max	14.15	21.50	2.10	18.70	25.00	32.35	33.75	28.85	2.62	0.00	0.00	0.00	33.75 CMS
Min	1.05	0.00	0.00	0.00	2.62	21.85	11.00	0.42	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	14.324	25.735	1.941	10.540	28.380	69.880	54.078	38.327	1.047	0.000	0.000	0.000	244.253 MCM

Momentary Peak 34.10 CMS, at 164.06 M (MSL), at 6.00 Hours, on Oct 4, 2001

Runoff Yield 1.64 Liters/Second/Square KM, Momentary Peak Yield 7.218 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Mun River at Rasi Salai, Si Sa Ket (M.5)

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

Location on left bank in front of Amphoe Rasi Salai Office.

Ban - **Amphoe** Rasi Salai **Changwat** Si Sa Ket

Drainage Area 44,275 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +110.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank downstream side at the footpath of the bridge.

Elevation +124.814 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1955 to date.

Rating Operation

Period of Rating 1972 to date.

Rated by Float -

Rated by Current Meter 1972 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions Overbank flow starts at elevation +118.100 m.(M.S.L.) and is including overbank flow.

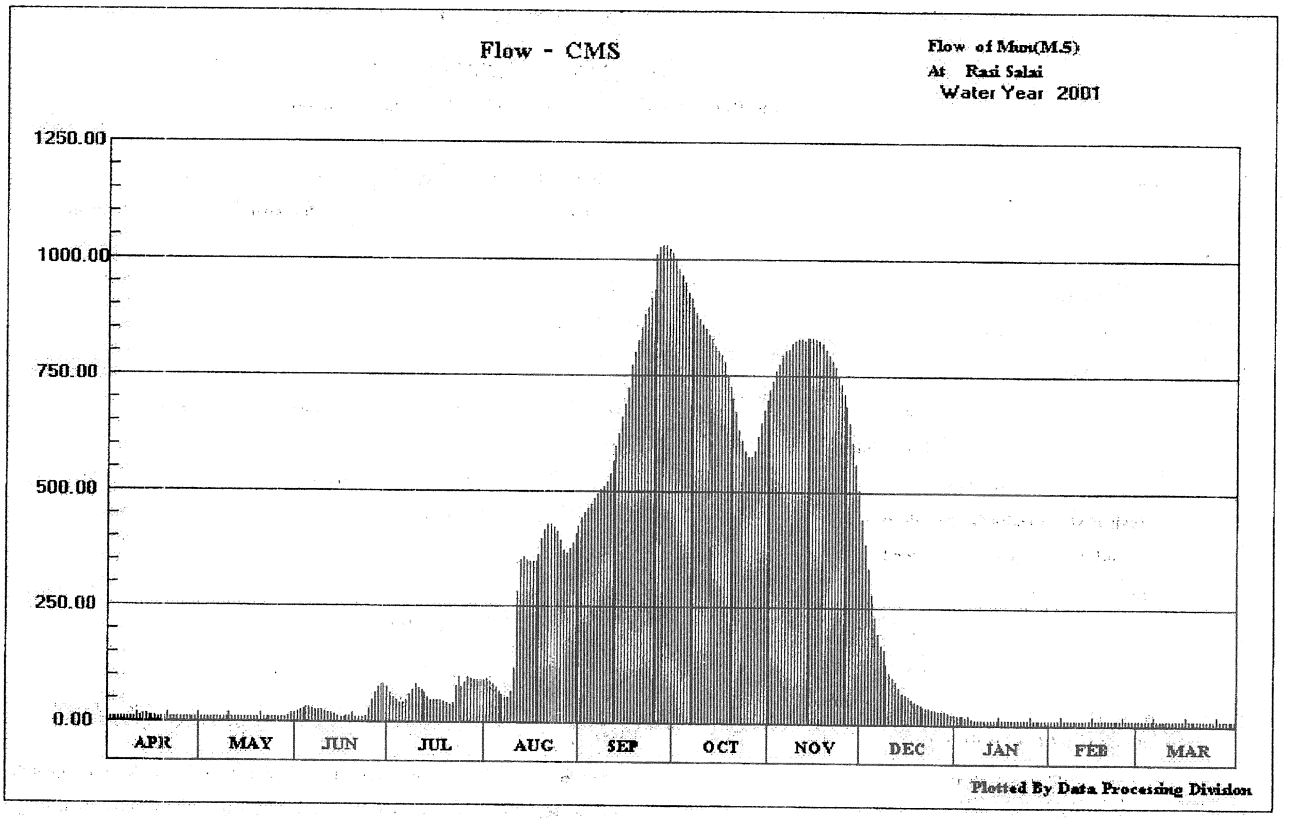
General Description Records fair. Flow effected by Rasi Salai barrage about 10 kilometers above gage site.

Stage-discharge relation defined by 55 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	110.21	110.32	110.63	111.17	111.54	115.71	118.24	116.49	114.60	110.60	110.23	110.08	
2	110.21	110.33	110.69	111.06	111.48	115.87	118.12	116.63	114.21	110.57	110.20	110.09	
3	110.20	110.33	110.73	110.95	111.40	116.00	118.04	116.75	113.79	110.56	110.18	110.22	
4	110.20	110.33	110.77	110.90	111.30	116.12	117.95	116.86	113.35	110.53	110.16	110.16	
5	110.20	110.33	110.77	110.89	111.20	116.25	117.82	116.97	112.93	110.50	110.16	110.08	
6	110.18	110.32	110.74	110.96	111.13	116.37	117.73	117.03	112.60	110.47	110.16	110.05	
7	110.17	110.32	110.69	111.13	111.05	116.46	117.62	117.05	112.37	110.44	110.15	110.03	
8	110.16	110.32	110.67	111.22	111.03	116.53	117.54	117.13	112.27	110.42	110.13	110.03	
9	110.16	110.31	110.66	111.38	111.18	116.65	117.47	117.17	111.97	110.40	110.13	110.02	
10	110.21	110.30	110.64	111.27	111.81	116.85	117.39	117.18	111.76	110.38	110.13	110.02	
11	110.45	110.34	110.60	111.22	113.39	117.10	117.33	117.18	111.62	110.38	110.14	110.02	
12	110.54	110.35	110.58	111.14	114.39	117.36	117.25	117.17	111.50	110.36	110.16	110.01	
13	110.54	110.30	110.53	111.04	114.45	117.55	117.19	117.20	111.36	110.36	110.16	110.01	
14	110.47	110.29	110.46	110.97	114.39	117.73	117.09	117.20	111.20	110.36	110.16	110.04	
15	110.46	110.30	110.43	110.95	114.34	117.84	117.04	117.20	111.16	110.36	110.12	110.03	
16	110.45	110.31	110.40	110.95	114.30	117.97	116.97	117.18	111.11	110.36	110.13	110.01	
17	110.44	110.31	110.45	110.97	114.30	118.09	116.88	117.17	111.06	110.36	110.11	110.00	
18	110.40	110.34	110.50	110.94	114.59	118.15	116.71	117.13	110.97	110.37	110.10	110.16	
19	110.40	110.38	110.49	110.89	115.12	118.20	116.54	117.05	110.93	110.37	110.10	110.09	
20	110.38	110.37	110.44	110.83	115.40	118.23	116.37	116.98	110.90	110.37	110.10	110.05	
21	110.36	110.37	110.40	110.90	115.54	118.26	116.19	116.89	110.86	110.37	110.09	110.02	
22	110.34	110.37	110.40	111.35	115.56	118.28	115.92	116.81	110.82	110.36	110.09	110.00	
23	110.32	110.36	110.45	111.57	115.48	118.30	115.78	116.70	110.80	110.35	110.08	109.99	
24	110.32	110.36	110.71	111.32	115.32	118.31	115.63	116.58	110.78	110.33	110.08	109.98	
25	110.32	110.36	110.97	111.44	115.06	118.30	115.54	116.44	110.76	110.30	110.10	109.98	
26	110.35	110.36	111.15	111.60	114.76	118.39	115.55	116.26	110.73	110.30	110.10	109.96	
27	110.32	110.36	111.32	111.55	114.64	118.41	115.62	116.03	110.71	110.30	110.10	109.96	
28	110.32	110.40	111.40	111.50	114.77	118.41	115.83	115.75	110.70	110.30	110.09	109.96	
29	110.31	110.46	111.39	111.51	115.00	118.37	116.02	115.43	110.67	110.29		109.96	
30	110.30	110.52	111.30	111.50	115.27	118.32	116.20	115.05	110.63	110.27		109.96	
31		110.59		111.51	115.52		116.35		110.61	110.24		109.96	
Mean	110.32	110.36	110.71	111.18	113.70	117.48	116.84	116.76	111.60	110.38	110.13	110.03	
Max	110.54	110.59	111.40	111.60	115.56	118.41	118.24	117.20	114.60	110.60	110.23	110.22	118.41
Min	110.16	110.29	110.40	110.83	111.03	115.71	115.54	115.05	110.61	110.24	110.08	109.96	109.96

Annual Max Momentary Gage Height 118.41 M (MSL), at 6.00 Hours, on Sep 27, 2001
Zero Gage at Bottom Elevation 110.00 M (MSL), River Bed 109.15 M (MSL)
Left Bank Elevation 121.30 M (MSL)
Right Bank Elevation 118.09 M (MSL), Drainage Area 44275 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.3	10.6	26.1	67.6	97.2	443.8	1002.8	721.5	444.0	24.0	7.9	3.6	
2	7.3	10.9	30.3	58.8	92.4	456.6	982.4	742.8	392.3	22.2	7.0	3.8	
3	7.0	10.9	33.1	50.0	86.0	467.0	968.8	762.0	337.7	21.6	6.4	7.6	
4	7.0	10.9	35.9	46.0	78.0	476.6	954.0	779.6	282.0	19.8	5.8	5.8	
5	7.0	10.9	35.9	45.2	70.0	487.5	933.2	797.2	233.3	18.0	5.8	3.6	
6	6.4	10.6	33.8	50.8	64.4	498.3	918.8	806.8	197.0	16.5	5.8	3.0	
7	6.1	10.6	30.3	64.4	58.0	506.4	901.2	810.0	173.0	15.0	5.5	2.6	
8	5.8	10.6	28.9	71.6	56.4	512.7	888.4	822.8	163.0	14.0	4.9	2.6	
9	5.8	10.3	28.2	84.4	68.4	523.5	877.2	829.2	133.3	13.0	4.9	2.4	
10	7.3	10.0	26.8	75.6	118.9	543.0	864.4	830.8	114.8	12.4	4.9	2.4	
11	15.5	11.2	24.0	71.6	286.8	569.0	854.8	830.8	103.6	12.4	5.2	2.4	
12	20.4	11.5	22.8	65.2	355.4	601.4	842.0	829.2	94.0	11.8	5.8	2.2	
13	20.4	10.0	19.8	57.2	359.0	630.0	832.4	834.0	82.8	11.8	5.8	2.2	
14	16.5	9.7	16.0	51.6	355.4	664.9	816.4	834.0	70.0	11.8	5.8	2.8	
15	16.0	10.0	14.5	50.0	352.4	690.6	808.4	834.0	66.8	11.8	4.6	2.6	
16	15.5	10.3	13.0	50.0	350.0	726.0	797.2	830.8	62.8	11.8	4.9	2.2	
17	15.0	10.3	15.5	51.6	350.0	775.5	782.8	829.2	58.8	11.8	4.3	2.0	
18	13.0	11.2	18.0	49.2	367.4	805.0	755.6	822.8	51.6	12.1	4.0	5.8	
19	13.0	12.4	17.5	45.2	401.4	830.0	729.0	810.0	48.4	12.1	4.0	3.8	
20	12.4	12.1	15.0	40.4	421.0	857.0	703.5	798.8	46.0	12.1	4.0	3.0	
21	11.8	12.1	13.0	46.0	430.8	884.0	676.5	784.4	42.8	12.1	3.8	2.4	
22	11.2	12.1	13.0	82.0	432.2	902.0	636.0	771.6	39.6	11.8	3.8	2.0	
23	10.6	11.8	15.5	99.6	426.6	920.0	615.0	754.0	38.0	11.5	3.6	1.9	
24	10.6	11.8	31.7	79.6	415.4	940.0	592.5	735.0	36.6	10.9	3.6	1.8	
25	10.6	11.8	51.6	89.2	397.2	1013.0	579.0	714.0	35.2	10.0	4.0	1.8	
26	11.5	11.8	66.0	102.0	377.6	1028.3	580.5	687.0	33.1	10.0	4.0	1.6	
27	10.6	11.8	79.6	98.0	370.4	1031.7	591.0	652.5	31.7	10.0	4.0	1.6	
28	10.6	13.0	86.0	94.0	378.2	1031.7	622.5	610.5	31.0	10.0	3.8	1.6	
29	10.3	16.0	85.2	94.8	393.0	1024.9	651.0	562.5	28.9	9.7		1.6	
30	10.0	19.2	78.0	94.0	411.9	1016.4	678.0	507.0	26.1	9.1		1.6	
31		23.4		94.8	429.4		700.5		24.7	8.2		1.6	
Total	332.5	369.8	1005.0	2120.4	8851.2	21856.8	24135.8	22934.8	3522.9	409.3	137.9	85.9	85762.3 CMSDAY
Mean	11.1	11.9	33.5	68.4	285.5	728.6	778.6	764.5	113.6	13.2	4.9	2.8	235.0 CMS
Max	20.4	23.4	86.0	102.0	432.2	1031.7	1002.8	834.0	444.0	24.0	7.9	7.6	1031.7 CMS
Min	5.8	9.7	13.0	40.4	56.4	443.8	579.0	507.0	24.7	8.2	3.6	1.6	1.6 CMS
Runoff	28.73	31.95	86.83	183.20	764.74	1888.43	2085.33	1981.57	304.38	35.36	11.91	7.42	7409.86 MCM

Momentary Peak 1031.70 CMS, at 118.41 M (MSL), at 6.00 Hours, on Sep 27, 2001

Runoff Yield 5.31 Liters/Second/Square KM, Momentary Peak Yield 23.302 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

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

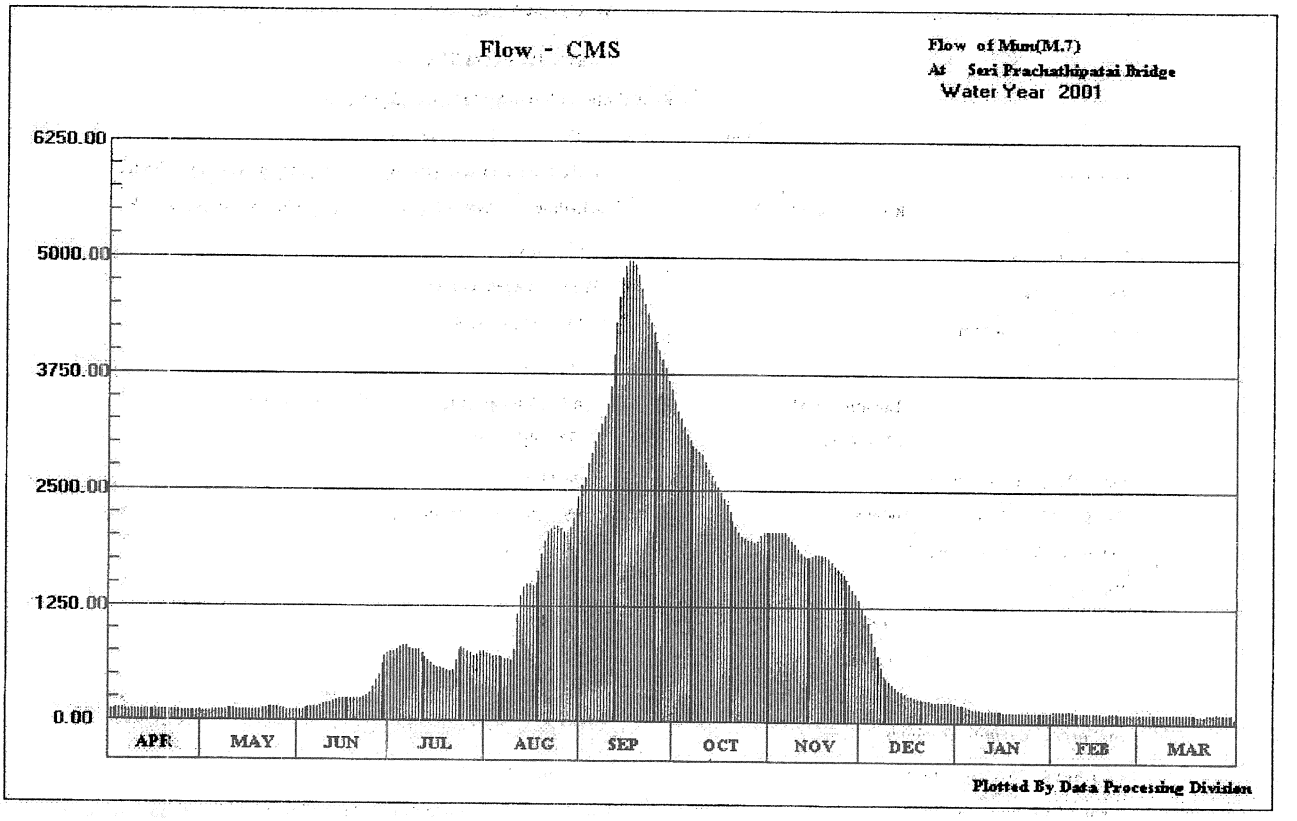
Lat 15 - 13 - 15 N. **Long** 104 - 51 - 41 E.

Location		on left bank at Seri Prachathipatai Bridge.
	Ban -	**Amphoe** Mueang **Changwat** Ubon Ratchathani
Drainage Area		106,603 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+105.000 m. (M.S.L.)
Bench Mark		B.M.- H.D
	Location BM	On left bank at the abutment of 200 years Krung Ratanakosin
	Elevation	+117.645 m. (M.S.L.)
Gage Reading Frequency		3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.
Period of Available Gage Records		1944 to date.
Rating Operation		
	Period of Rating	1956 - 1958, 1964 - 1981, 1983 to date.
	Rated by Float	-
	Rated by Current Meter	1956 - 1958, 1964 - 1981, 1983 to date.
Stability of Channel Regimes		Stable.
Overbank Flow Conditions		Overbank flow starts at elevation +111.310 m.(M.S.L.) records are channel flow only.
General Description		Records very good. Pak Mun barrage situated about 90 kilometers downstream from the gage site. Stage-discharge relation defined by 68 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	106.87	106.81	106.87	108.81	108.78	112.40	113.70	111.54	109.97	107.17	106.91	106.76	
2	106.89	106.81	106.89	108.83	108.75	112.53	113.57	111.53	109.83	107.16	106.90	106.76	
3	106.91	106.81	106.93	108.88	108.72	112.78	113.47	111.55	109.64	107.14	106.92	106.76	
4	106.91	106.82	106.97	108.94	108.71	112.93	113.34	111.55	109.37	107.10	106.92	106.77	
5	106.91	106.83	106.97	108.97	108.72	113.10	113.22	111.55	109.04	107.06	106.93	106.77	
6	106.89	106.83	107.00	108.97	108.68	113.25	113.13	111.53	108.75	107.03	106.93	106.76	
7	106.86	106.83	107.01	108.92	108.65	113.38	113.05	111.47	108.45	106.99	106.91	106.75	
8	106.84	106.86	107.04	108.87	108.63	113.48	112.99	111.38	108.20	106.98	106.89	106.75	
9	106.83	106.90	107.09	108.86	108.59	113.66	112.96	111.32	108.08	106.96	106.89	106.75	
10	106.83	106.93	107.14	108.85	108.87	113.86	112.90	111.23	107.97	106.93	106.89	106.75	
11	106.82	106.94	107.18	108.78	109.80	114.21	112.79	111.15	107.88	106.92	106.89	106.75	
12	106.83	106.89	107.23	108.69	110.21	114.51	112.69	111.07	107.78	106.92	106.89	106.75	
13	106.83	106.86	107.27	108.60	110.40	114.69	112.58	111.04	107.70	106.91	106.89	106.75	
14	106.85	106.84	107.30	108.50	110.45	114.80	112.47	111.04	107.64	106.91	106.85	106.75	
15	106.85	106.84	107.33	108.44	110.44	114.86	112.36	111.06	107.57	106.90	106.84	106.76	
16	106.83	106.83	107.32	108.41	110.43	114.89	112.27	111.10	107.49	106.89	106.84	106.74	
17	106.82	106.84	107.31	108.39	110.48	114.89	112.16	111.10	107.45	106.87	106.80	106.75	
18	106.84	106.86	107.31	108.37	110.73	114.87	112.05	111.10	107.40	106.85	106.80	106.76	
19	106.84	106.87	107.32	108.32	111.10	114.82	111.92	111.06	107.38	106.85	106.83	106.75	
20	106.84	106.90	107.32	108.27	111.35	114.74	111.78	111.01	107.36	106.85	106.83	106.73	
21	106.83	106.95	107.33	108.32	111.53	114.64	111.65	110.94	107.34	106.87	106.83	106.72	
22	106.83	106.97	107.37	108.59	111.60	114.57	111.54	110.87	107.34	106.88	106.81	106.71	
23	106.82	106.99	107.42	108.88	111.65	114.51	111.47	110.79	107.32	106.88	106.78	106.74	
24	106.81	106.98	107.50	108.94	111.65	114.42	111.42	110.74	107.28	106.88	106.77	106.78	
25	106.79	106.97	107.74	108.89	111.60	114.34	111.38	110.66	107.25	106.86	106.75	106.81	
26	106.78	106.92	107.99	108.84	111.54	114.25	111.37	110.57	107.25	106.86	106.75	106.82	
27	106.77	106.91	108.21	108.77	111.51	114.17	111.35	110.47	107.25	106.86	106.76	106.81	
28	106.78	106.89	108.47	108.71	111.64	114.08	111.37	110.37	107.25	106.86	106.76	106.79	
29	106.80	106.88	108.71	108.76	111.79	113.93	111.48	110.25	107.24	106.86		106.78	
30	106.82	106.87	108.79	108.84	111.99	113.83	111.54	110.13	107.24	106.88		106.79	
31		106.86		108.82	112.20		111.54		107.21	106.89		106.79	
Mean	106.84	106.88	107.41	108.71	110.36	114.05	112.31	111.04	107.90	106.93	106.85	106.76	
Max	106.91	106.99	108.79	108.97	112.20	114.89	113.70	111.55	109.97	107.17	106.93	106.82	114.89
Min	106.77	106.81	106.87	108.27	108.59	112.40	111.35	110.13	107.21	106.85	106.75	106.71	106.71

Annual Max Momentary Gage Height 114.89 M (MSL), at 9.00 Hours, on Sep 16, 2001
Zero Gage at Bottom Elevation 105.00 M (MSL), River Bed 100.41 M (MSL)
Left Bank Elevation 115.96 M (MSL)
Right Bank Elevation 111.30 M (MSL), Drainage Area 106673 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	134.	122.	134.	764.	752.	2570.	3480.	2067.	1265.	211.	142.	112.	
2	138.	122.	138.	772.	740.	2648.	3366.	2062.	1195.	208.	140.	112.	
3	142.	122.	146.	792.	728.	2806.	3289.	2073.	1100.	202.	144.	112.	
4	142.	124.	154.	816.	724.	2911.	3198.	2073.	988.	190.	144.	114.	
5	142.	126.	154.	828.	728.	3030.	3114.	2073.	856.	178.	146.	114.	
6	138.	126.	160.	828.	712.	3135.	3051.	2062.	740.	169.	146.	112.	
7	132.	126.	163.	808.	700.	3226.	2995.	2029.	620.	158.	142.	110.	
8	128.	132.	172.	788.	692.	3296.	2953.	1979.	520.	156.	138.	110.	
9	126.	140.	187.	784.	676.	3444.	2932.	1946.	484.	152.	138.	110.	
10	126.	146.	202.	780.	788.	3624.	2890.	1897.	451.	146.	138.	110.	
11	124.	148.	214.	752.	1180.	3976.	2813.	1855.	424.	144.	138.	110.	
12	126.	138.	229.	716.	1385.	4315.	2744.	1815.	394.	144.	138.	110.	
13	126.	132.	241.	680.	1480.	4603.	2678.	1800.	370.	142.	138.	110.	
14	130.	128.	250.	640.	1505.	4800.	2612.	1800.	352.	142.	130.	110.	
15	130.	128.	259.	616.	1500.	4920.	2546.	1810.	331.	140.	128.	112.	
16	126.	126.	256.	604.	1495.	4980.	2492.	1830.	307.	138.	128.	108.	
17	124.	128.	253.	596.	1520.	4980.	2426.	1830.	295.	134.	120.	110.	
18	128.	132.	253.	588.	1645.	4940.	2360.	1830.	280.	130.	120.	112.	
19	128.	134.	256.	568.	1830.	4840.	2282.	1810.	274.	130.	126.	110.	
20	128.	140.	256.	548.	1963.	4692.	2199.	1785.	268.	130.	126.	106.	
21	126.	150.	259.	568.	2062.	4518.	2128.	1750.	262.	134.	126.	104.	
22	126.	154.	271.	676.	2100.	4405.	2067.	1715.	262.	136.	122.	102.	
23	124.	158.	286.	792.	2128.	4315.	2029.	1675.	256.	136.	116.	108.	
24	122.	156.	310.	816.	2128.	4204.	2001.	1650.	244.	136.	114.	116.	
25	118.	154.	382.	796.	2100.	4116.	1979.	1610.	235.	132.	110.	122.	
26	116.	144.	457.	776.	2067.	4019.	1974.	1565.	235.	132.	110.	124.	
27	114.	142.	524.	748.	2051.	3933.	1963.	1515.	235.	132.	112.	122.	
28	116.	138.	628.	724.	2122.	3836.	1974.	1465.	235.	132.	112.	118.	
29	120.	136.	724.	744.	2205.	3687.	2034.	1405.	232.	132.		116.	
30	124.	134.	756.	776.	2324.	3597.	2067.	1345.	232.	136.		118.	
31		132.		768.	2450.		2067.		223.	138.		118.	
Total	3824.	4218.	8674.	22452.	46480.	118366.	78703.	54121.	14165.	4620.	3632.	3482.	362737. CMSDAY
Mean	127.	136.	289.	724.	1499.	3946.	2539.	1804.	457.	149.	130.	112.	994. CMS
Max	142.	158.	756.	828.	2450.	4980.	3480.	2073.	1265.	211.	146.	124.	4980. CMS
Min	114.	122.	134.	548.	676.	2570.	1963.	1345.	223.	130.	110.	102.	102. CMS
Runoff	330.4	364.4	749.4	1939.9	4015.9	10226.8	6799.9	4676.1	1223.9	399.2	313.8	300.8	31340.5 MCM

Momentary Peak 4980.00 CMS, at 114.89 M (MSL), at 9.00 Hours, on Sep 16, 2001

Runoff Yield 9.32 Liters/Second/Square KM, Momentary Peak Yield 46.685 Liters/Second/Square KM

WATER YEAR : 2001

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 Lam Plai Mat **Amphoe** Lam Plai Mat **Changwat** Buri Ram

Drainage Area 5,025 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +149.500 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank near the automatic gage building.

Elevation +155.859 m. (M.S.L.)

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 Float -

Rated by Current Meter 1967, 1998 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

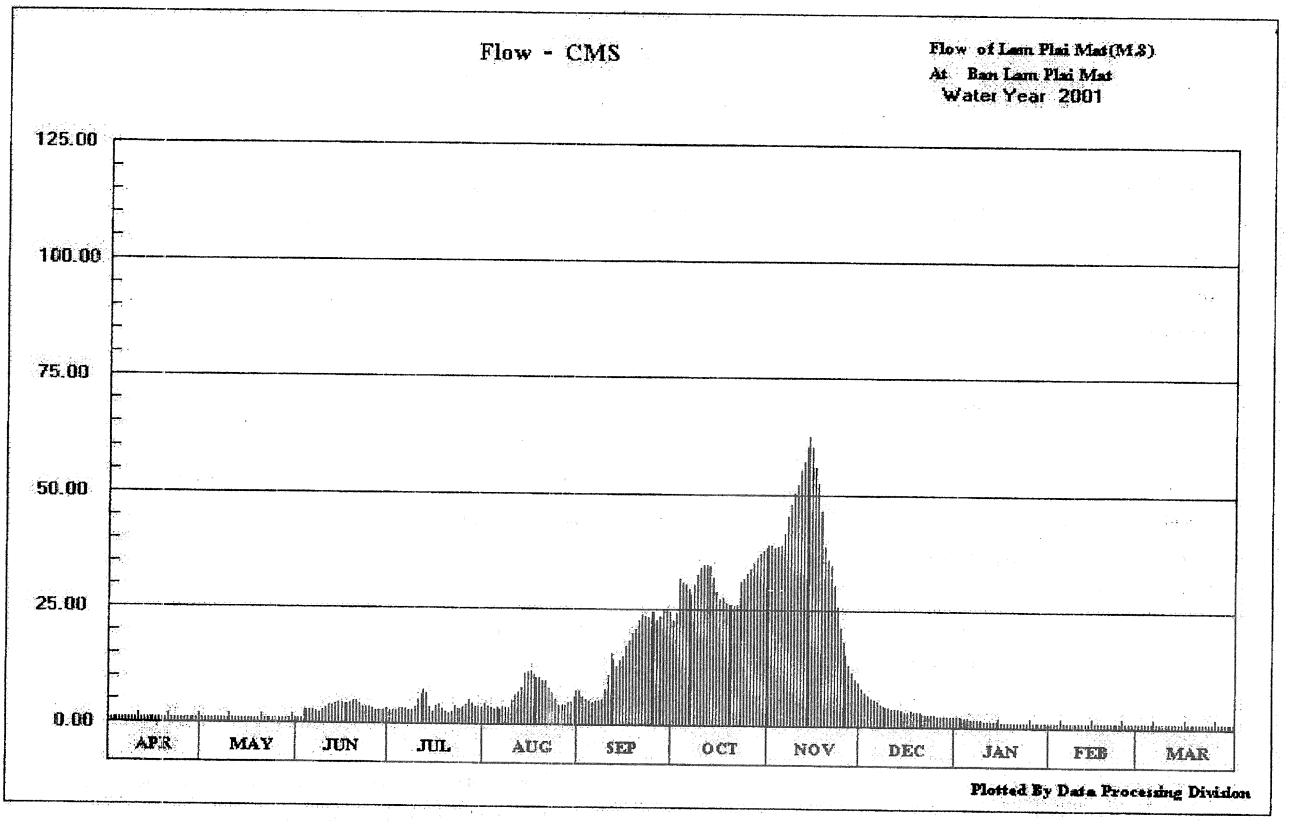
Overbank Flow Conditions No overbank flow.

General Description Records fair. Ban Don Thamung weir situated about 500 meters downstream from the gage site. Stage-discharge relation defined by 61 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	150.80	150.56	151.38	151.72	151.82	151.97	152.68	153.68	152.02	151.67	151.35	151.06	
2	150.79	150.56	151.56	151.72	151.78	151.91	152.75	153.68	151.97	151.66	151.34	151.06	
3	150.78	150.56	151.71	151.72	151.75	151.88	153.07	153.64	151.94	151.65	151.34	151.06	
4	150.78	150.56	151.72	151.73	151.74	151.85	153.03	153.66	151.91	151.64	151.33	151.06	
5	150.77	150.56	151.71	151.73	151.76	151.84	153.02	153.69	151.89	151.63	151.32	151.05	
6	150.76	150.55	151.71	151.73	151.74	151.85	152.98	153.81	151.87	151.63	151.31	151.05	
7	150.76	150.54	151.70	151.71	151.77	151.85	152.93	153.95	151.84	151.62	151.28	151.05	
8	150.76	150.54	151.68	151.71	151.75	151.88	153.02	154.04	151.82	151.62	151.25	151.04	
9	150.76	150.53	151.71	151.75	151.75	151.99	153.11	154.12	151.80	151.61	151.23	151.03	
10	150.75	150.53	151.73	151.86	151.85	152.14	153.18	154.19	151.79	151.60	151.20	151.03	
11	150.75	150.53	151.77	151.92	151.93	152.34	153.22	154.27	151.78	151.60	151.20	151.02	
12	150.75	150.53	151.78	151.98	151.95	152.29	153.20	154.32	151.77	151.60	151.19	151.01	
13	150.74	150.53	151.79	151.94	152.01	152.22	153.19	154.40	151.77	151.59	151.18	151.00	
14	150.74	150.52	151.81	151.76	152.15	152.28	153.09	154.45	151.76	151.58	151.15	150.99	
15	150.73	150.52	151.81	151.69	152.16	152.32	152.96	154.40	151.74	151.57	151.14	150.98	
16	150.73	150.52	151.80	151.77	152.17	152.42	152.89	154.29	151.74	151.56	151.13	150.98	
17	150.72	150.52	151.80	151.79	152.13	152.48	152.90	154.20	151.75	151.56	151.12	150.98	
18	150.72	150.52	151.81	151.73	152.11	152.55	152.85	154.00	151.74	151.55	151.11	150.96	
19	150.71	150.53	151.83	151.69	152.10	152.59	152.83	153.67	151.73	151.54	151.09	150.95	
20	150.70	150.53	151.84	151.68	152.07	152.68	152.83	153.46	151.73	151.52	151.07	150.93	
21	150.70	150.53	151.79	151.69	152.07	152.73	152.82	153.22	151.71	151.50	151.06	150.92	
22	150.70	150.53	151.76	151.77	152.00	152.72	152.83	153.02	151.70	151.49	151.04	150.90	
23	150.69	150.53	151.76	151.74	151.95	152.70	153.05	152.81	151.70	151.47	151.03	150.88	
24	150.68	150.52	151.75	151.73	151.88	152.76	153.07	152.62	151.70	151.44	151.01	150.87	
25	150.67	150.52	151.74	151.76	151.80	152.76	153.13	152.48	151.69	151.43	151.07	150.86	
26	150.66	150.63	151.72	151.80	151.79	152.68	153.16	152.35	151.68	151.42	151.07	150.84	
27	150.62	150.97	151.72	151.85	151.80	152.71	153.29	152.25	151.67	151.41	151.07	150.83	
28	150.59	150.98	151.72	151.82	151.83	152.79	153.47	152.18	151.67	151.39	151.07	150.83	
29	150.57	150.97	151.71	151.78	151.84	152.79	153.55	152.11	151.67	151.38		150.82	
30	150.56	150.99	151.73	151.77	151.90	152.76	153.60	152.07	151.67	151.37		150.80	
31		151.18		151.75	151.98		153.64		151.67	151.37		150.80	
Mean	150.71	150.62	151.74	151.77	151.91	152.36	153.08	153.50	151.77	151.54	151.17	150.96	
Max	150.80	151.18	151.84	151.98	152.17	152.79	153.64	154.45	152.02	151.67	151.35	151.06	154.45
Min	150.56	150.52	151.38	151.68	151.74	151.84	152.68	152.07	151.67	151.37	151.01	150.80	150.52

Annual Max Momentary Gage Height 154.46 M (MSL), at 5.00 Hours, on Nov 8, 2001
Zero Gage at Bottom Elevation 149.50 M (MSL), River Bed 149.55 M (MSL)
Left Bank Elevation 155.89 M (MSL)
Right Bank Elevation 156.65 M (MSL), Drainage Area 5025 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	3.30	4.84	7.53	23.06	39.38	8.54	2.61	0.00	0.00	
2	0.00	0.00	1.34	3.30	4.20	6.39	24.60	39.38	7.53	2.48	0.00	0.00	
3	0.00	0.00	3.15	3.30	3.75	5.86	31.88	38.74	6.96	2.35	0.00	0.00	
4	0.00	0.00	3.30	3.45	3.60	5.35	30.92	39.06	6.39	2.22	0.00	0.00	
5	0.00	0.00	3.15	3.45	3.90	5.18	30.68	39.54	6.03	2.09	0.00	0.00	
6	0.00	0.00	3.15	3.45	3.60	5.35	29.74	41.95	5.69	2.09	0.00	0.00	
7	0.00	0.00	3.00	3.15	4.05	5.35	28.59	45.60	5.18	1.96	0.00	0.00	
8	0.00	0.00	2.74	3.15	3.75	5.86	30.68	48.20	4.84	1.96	0.00	0.00	
9	0.00	0.00	3.15	3.75	3.75	7.91	32.85	50.60	4.50	1.83	0.00	0.00	
10	0.00	0.00	3.45	5.52	5.35	11.18	34.60	52.70	4.35	1.70	0.00	0.00	
11	0.00	0.00	4.05	6.58	6.77	15.58	35.18	55.59	4.20	1.70	0.00	0.00	
12	0.00	0.00	4.20	7.72	7.15	14.48	35.10	57.50	4.05	1.70	0.00	0.00	
13	0.00	0.00	4.35	6.96	8.32	12.94	34.85	60.70	4.05	1.61	0.00	0.00	
14	0.00	0.00	4.67	3.90	11.40	14.26	32.36	62.85	3.90	1.52	0.00	0.00	
15	0.00	0.00	4.67	2.87	11.62	15.14	29.28	60.70	3.60	1.43	0.00	0.00	
16	0.00	0.00	4.50	4.05	11.84	17.34	27.68	56.33	3.60	1.34	0.00	0.00	
17	0.00	0.00	4.50	4.35	10.96	18.66	27.90	53.00	3.75	1.34	0.00	0.00	
18	0.00	0.00	4.67	3.45	10.52	20.20	26.80	47.00	3.60	1.25	0.00	0.00	
19	0.00	0.00	5.01	2.87	10.30	21.08	26.36	39.22	3.45	1.16	0.00	0.00	
20	0.00	0.00	5.18	2.74	9.64	23.06	26.36	36.48	3.45	0.98	0.00	0.00	
21	0.00	0.00	4.35	2.87	9.64	24.16	26.14	35.18	3.15	0.80	0.00	0.00	
22	0.00	0.00	3.90	4.05	8.10	23.94	26.36	30.68	3.00	0.72	0.00	0.00	
23	0.00	0.00	3.90	3.60	7.15	23.50	31.40	25.92	3.00	0.56	0.00	0.00	
24	0.00	0.00	3.75	3.45	5.86	24.82	31.88	21.74	3.00	0.32	0.00	0.00	
25	0.00	0.00	3.60	3.90	4.50	24.82	33.35	18.66	2.87	0.24	0.00	0.00	
26	0.00	0.00	3.30	4.50	4.35	23.06	34.10	15.80	2.74	0.16	0.00	0.00	
27	0.00	0.00	3.30	5.35	4.50	23.72	35.46	13.60	2.61	0.08	0.00	0.00	
28	0.00	0.00	3.30	4.84	5.01	25.48	36.56	12.06	2.61	0.00	0.00	0.00	
29	0.00	0.00	3.15	4.20	5.18	25.48	37.45	10.52	2.61	0.00		0.00	
30	0.00	0.00	3.45	4.05	6.20	24.82	38.10	9.64	2.61	0.00		0.00	
31		0.00		3.75	7.72		38.74		2.61	0.00		0.00	
Total	0.00	0.00	108.23	125.87	207.52	482.50	969.01	1158.32	128.47	38.20	0.00	0.00	3218.12 CMSDAY
Mean	0.00	0.00	3.61	4.06	6.69	16.08	31.26	38.61	4.14	1.23	0.00	0.00	8.82 CMS
Max	0.00	0.00	5.18	7.72	11.84	25.48	38.74	62.85	8.54	2.61	0.00	0.00	62.85 CMS
Min	0.00	0.00	0.00	2.74	3.60	5.18	23.06	9.64	2.61	0.00	0.00	0.00	0.00 CMS
Runoff	0.000	0.000	9.351	10.875	17.930	41.688	83.722	100.079	11.100	3.300	0.000	0.000	278.046 MCM

Momentary Peak 63.28 CMS, at 154.46 M (MSL), at 23.00 Hours, on Nov 8, 2001

Runoff Yield 1.75 Liters/Second/Square KM, Momentary Peak Yield 12.593 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

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

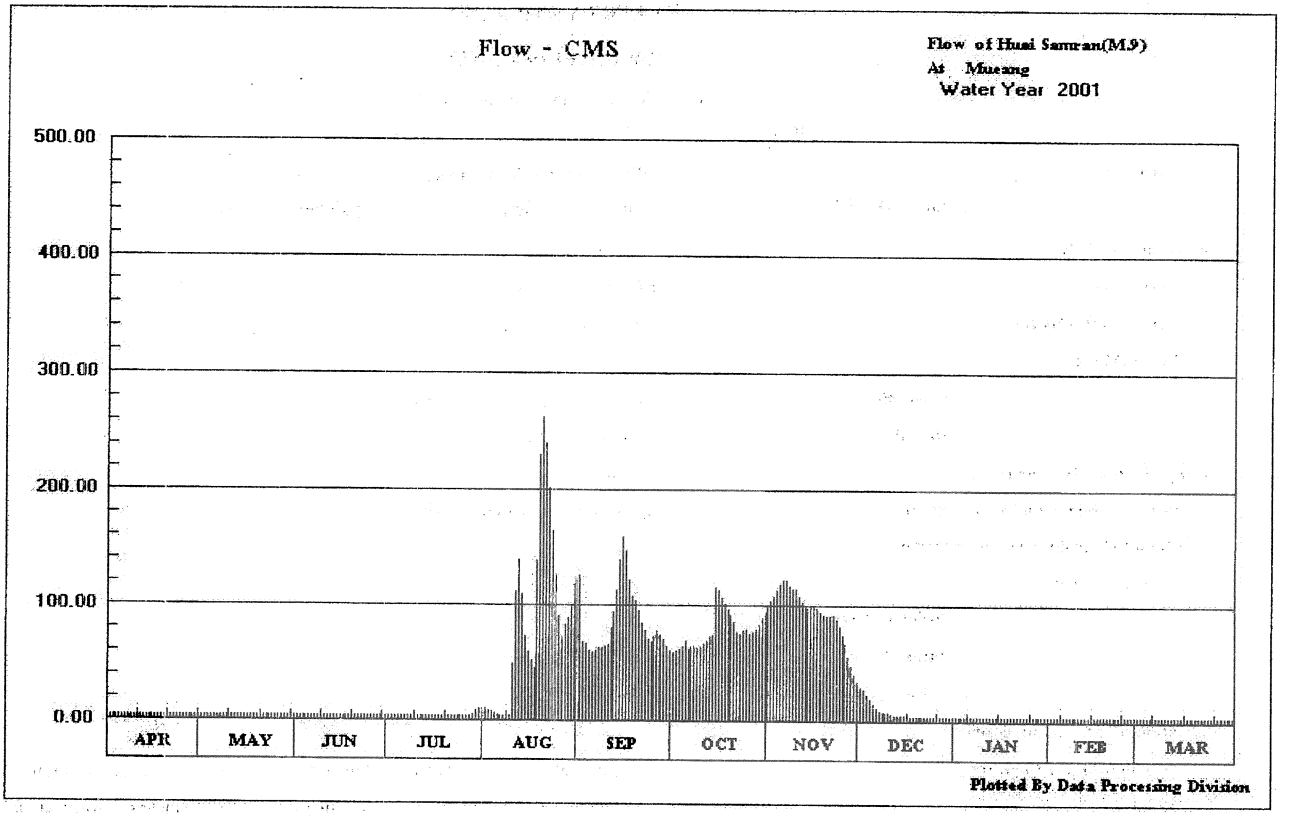
Lat 15 - 06 - 58 N. **Long** 104 - 19 - 21 E.

Location		on right bank at the bridge on Highway.
	Ban -	**Amphoe** Mueang **Changwat** Si Sa Ket
Drainage Area		3,026 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+109.000 m. (M.S.L.)
Bench Mark		B.M.- H.D
	Location BM	On right bank at the top staff gage.
	Elevation	+122.055 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic 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 Float	-
	Rated by Current Meter	1954, 1972 - 1981, 1987 to date.
Stability of Channel Regimes		Rather unstable because of backwater effect.
Overbank Flow Conditions		Overbank flow starts at elevation +116.790 m.(M.S.L.) and is including overbank flow.
General Description		Records good. The Water Supply weir situated above gage site.
		Stage-discharge relation defined by 54 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.30	109.25	109.23	109.78	111.18	116.41	116.69	115.74	113.01	109.63	109.23	109.18	
2	109.23	109.26	109.23	109.71	111.10	116.28	116.53	115.87	112.93	109.60	109.22	109.20	
3	109.22	109.28	109.22	109.70	110.97	116.31	116.46	115.97	112.54	109.57	109.22	109.20	
4	109.22	109.29	109.22	109.72	110.79	116.53	116.36	116.10	112.18	109.54	109.22	109.18	
5	109.21	109.29	109.20	109.76	110.58	116.73	116.26	116.24	111.92	109.52	109.21	109.18	
6	109.21	109.29	109.20	109.74	110.20	116.88	116.44	116.32	111.49	109.56	109.22	109.18	
7	109.21	109.30	109.20	109.74	109.89	116.98	116.38	116.32	111.09	109.50	109.22	109.18	
8	109.21	109.28	109.23	109.77	109.83	116.98	116.37	116.21	110.99	109.46	109.21	109.22	
9	109.21	109.26	109.30	109.80	110.00	117.05	116.39	116.12	110.92	109.45	109.21	109.38	
10	109.21	109.25	109.31	109.80	114.01	117.10	116.37	116.13	110.84	109.44	109.21	109.42	
11	109.21	109.25	109.26	109.74	116.07	117.38	116.31	115.99	110.73	109.41	109.21	109.41	
12	109.21	109.24	109.25	109.66	116.75	117.54	116.27	115.83	110.52	109.40	109.22	109.40	
13	109.22	109.24	109.24	109.52	116.02	117.72	116.20	115.76	110.45	109.37	109.24	109.33	
14	109.23	109.24	109.21	109.41	114.92	117.86	116.17	115.71	110.46	109.34	109.22	109.28	
15	109.25	109.24	109.19	109.34	114.42	117.92	116.16	115.79	110.52	109.34	109.22	109.25	
16	109.25	109.24	109.16	109.32	114.11	117.89	116.09	115.78	110.47	109.32	109.20	109.24	
17	109.27	109.24	109.14	109.29	113.87	117.78	115.94	115.70	110.39	109.30	109.20	109.23	
18	109.28	109.24	109.15	109.25	116.74	117.68	115.81	115.59	110.30	109.29	109.21	109.20	
19	109.27	109.26	109.16	109.23	118.55	117.64	115.66	115.52	110.25	109.26	109.21	109.20	
20	109.27	109.25	109.15	109.21	119.09	117.55	115.52	115.50	110.27	109.22	109.21	109.20	
21	109.26	109.24	109.14	109.84	118.71	117.42	115.33	115.50	110.23	109.27	109.18	109.20	
22	109.25	109.24	109.27	109.54	118.06	117.34	115.08	115.53	109.92	109.26	109.20	109.20	
23	109.23	109.24	109.22	109.73	117.31	117.23	115.04	115.43	109.86	109.23	109.20	109.20	
24	109.23	109.24	109.77	109.91	116.45	117.17	115.11	115.25	109.87	109.22	109.19	109.18	
25	109.23	109.23	109.46	110.00	115.50	117.26	115.16	114.99	109.83	109.24	109.18	109.18	
26	109.23	109.23	109.45	110.05	114.91	117.34	115.02	114.69	109.81	109.24	109.18	109.15	
27	109.23	109.23	109.65	110.06	115.26	117.30	115.05	114.27	109.80	109.20	109.18	109.12	
28	109.24	109.24	109.75	110.60	115.47	117.22	115.14	113.99	109.79	109.17	109.18	109.12	
29	109.25	109.24	109.82	111.17	115.79	117.05	115.29	113.66	109.73	109.20		109.12	
30	109.25	109.23	109.82	111.30	116.24	116.86	115.46	113.27	109.70	109.23		109.15	
31		109.23		111.29	116.35		115.60		109.66	109.23		109.15	
Mean	109.24	109.25	109.32	109.84	114.49	117.21	115.86	115.49	110.66	109.36	109.21	109.22	
Max	109.30	109.30	109.82	111.30	119.09	117.92	116.69	116.32	113.01	109.63	109.24	109.42	119.09
Min	109.21	109.23	109.14	109.21	109.83	116.28	115.02	113.27	109.66	109.17	109.18	109.12	109.12

Annual Max Momentary Gage Height 119.11 M (MSL), at 9.00 Hours, on Aug 20, 2001
Zero Gage at Bottom Elevation 109.00 M (MSL), River Bed 108.91 M (MSL)
Left Bank Elevation 119.39 M (MSL)
Right Bank Elevation 116.78 M (MSL), Drainage Area 3026 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.50	0.45	0.43	2.18	11.06	126.40	60.05	100.40	30.85	1.28	0.43	0.38	
2	0.43	0.46	0.43	1.76	10.50	69.20	61.55	104.95	29.72	1.10	0.42	0.40	
3	0.42	0.48	0.42	1.70	9.59	67.60	62.80	108.80	24.52	1.01	0.42	0.40	
4	0.42	0.49	0.42	1.82	8.33	61.55	65.60	114.00	20.06	0.92	0.42	0.38	
5	0.41	0.49	0.40	2.06	6.98	60.30	70.40	119.60	17.10	0.86	0.41	0.38	
6	0.41	0.49	0.40	1.94	4.70	62.20	63.20	122.80	13.23	0.98	0.42	0.38	
7	0.41	0.50	0.40	1.94	2.84	63.70	64.80	122.80	10.43	0.80	0.42	0.38	
8	0.41	0.48	0.43	2.12	2.48	63.70	65.20	118.40	9.73	0.72	0.41	0.42	
9	0.41	0.46	0.50	2.30	3.50	65.25	64.40	114.80	9.24	0.70	0.41	0.58	
10	0.41	0.45	0.51	2.30	50.15	66.50	65.20	115.20	8.68	0.68	0.41	0.64	
11	0.41	0.45	0.46	1.94	112.80	81.60	67.60	109.60	7.91	0.62	0.41	0.62	
12	0.41	0.44	0.45	1.46	140.00	95.60	69.80	103.55	6.62	0.60	0.42	0.60	
13	0.42	0.44	0.44	0.86	110.80	114.00	74.00	101.10	6.20	0.57	0.44	0.53	
14	0.43	0.44	0.41	0.62	73.78	140.40	75.80	99.35	6.26	0.54	0.42	0.48	
15	0.45	0.44	0.39	0.54	60.62	160.00	116.40	102.15	6.62	0.54	0.42	0.45	
16	0.45	0.44	0.36	0.52	52.65	147.60	113.60	101.80	6.32	0.52	0.40	0.44	
17	0.47	0.44	0.34	0.49	46.68	123.00	107.60	99.00	5.84	0.50	0.40	0.43	
18	0.48	0.44	0.35	0.45	139.60	109.00	102.85	95.15	5.30	0.49	0.41	0.40	
19	0.47	0.46	0.36	0.43	232.04	105.00	97.60	92.70	5.00	0.46	0.41	0.40	
20	0.47	0.45	0.35	0.41	264.49	96.50	92.70	92.00	5.12	0.42	0.41	0.40	
21	0.46	0.44	0.34	2.54	241.66	84.80	86.05	92.00	4.88	0.47	0.38	0.40	
22	0.45	0.44	0.47	0.92	203.00	78.80	78.42	93.05	3.02	0.46	0.40	0.40	
23	0.43	0.44	0.42	1.88	165.50	72.15	77.26	89.55	2.66	0.43	0.40	0.40	
24	0.43	0.44	2.12	2.96	128.00	69.30	79.30	83.50	2.72	0.42	0.39	0.38	
25	0.43	0.43	0.72	3.50	92.00	73.80	80.80	75.81	2.48	0.44	0.38	0.38	
26	0.43	0.43	0.70	3.80	73.49	78.80	76.68	67.64	2.36	0.44	0.38	0.35	
27	0.43	0.43	1.40	3.86	83.80	76.00	77.55	56.72	2.30	0.40	0.38	0.32	
28	0.44	0.44	2.00	7.10	90.95	71.60	80.20	49.65	2.24	0.37	0.38	0.32	
29	0.45	0.44	2.42	10.99	102.15	65.25	84.70	41.76	1.88	0.40		0.32	
30	0.45	0.43	2.42	11.90	119.60	61.90	90.60	34.82	1.70	0.43		0.35	
31		0.43		11.83	124.00		95.50		1.46	0.43		0.35	
Total	13.09	13.98	21.26	89.12	2767.74	2611.50	2468.21	2822.65	262.45	19.00	11.40	13.06	11113.46 CMSDAY
Mean	0.44	0.45	0.71	2.87	89.28	87.05	79.62	94.09	8.47	0.61	0.41	0.42	30.45 CMS
Max	0.50	0.50	2.42	11.90	264.49	160.00	116.40	122.80	30.85	1.28	0.44	0.64	264.49 CMS
Min	0.41	0.43	0.34	0.41	2.48	60.30	60.05	34.82	1.46	0.37	0.38	0.32	0.32 CMS
Runoff	1.131	1.208	1.837	7.700	239.133	225.634	213.253	243.877	22.676	1.642	0.985	1.128	960.203 MCM

Momentary Peak 265.69 CMS, at 119.11 M (MSL), at 9.00 Hours, on Aug 20, 2001

Runoff Yield 10.06 Liters/Second/Square KM, Momentary Peak Yield 87.802 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 2,927 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +127.000 m. (M.S.L.)

Bench Mark B.M.- H.D

Location BM Near the automatic gage building.

Elevation +135.010 m. (M.S.L.)

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 Float -

Rated by Current Meter 1967 - 1968, 1978 to date.

Stability of Channel Regimes Rather unstable.

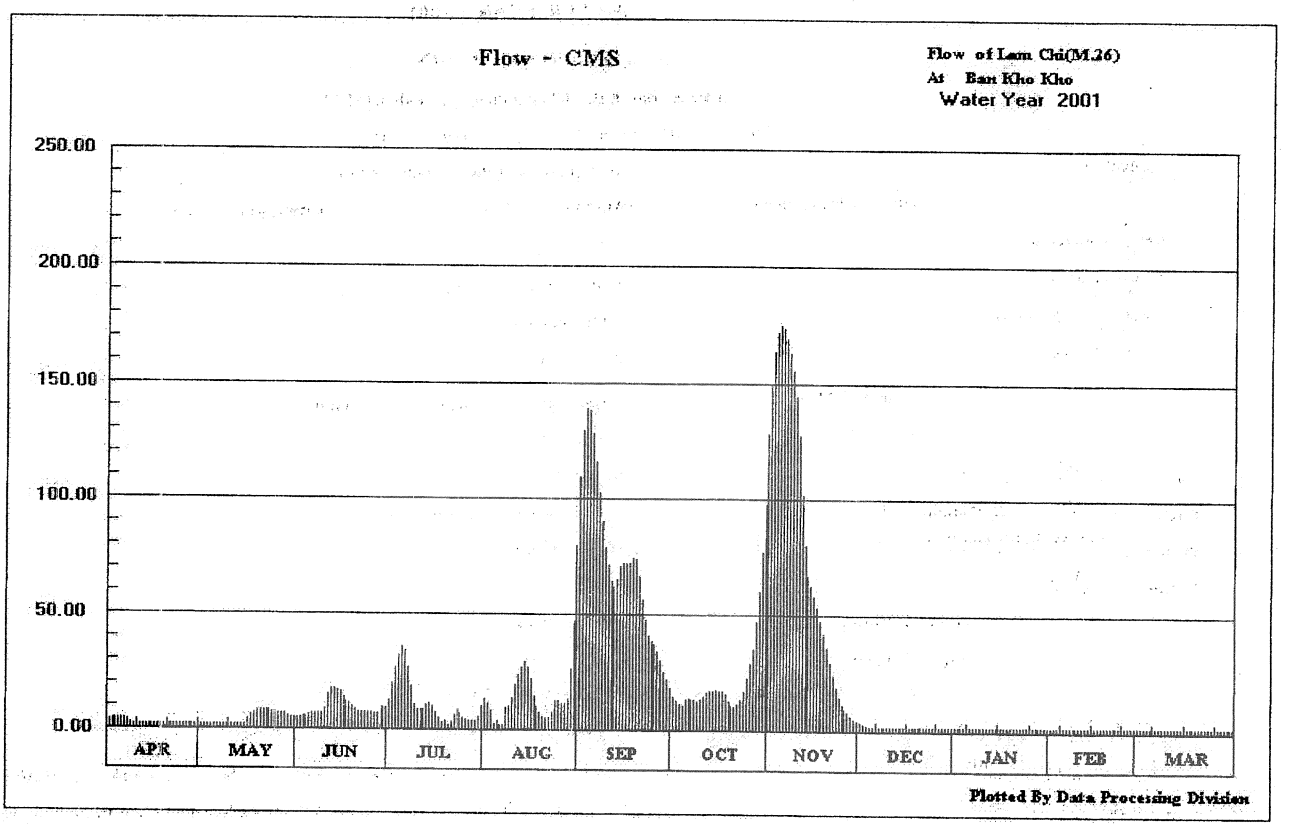
Overbank Flow Conditions Overbank flow starts at elevation +134.46 m.(M.S.L.) and is including overbank flow.

General Description Records fair. Flow effected by Mueang ling weir about 500 meters downstream from the gage site. Stage-discharge relation defined by 71 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	128.69	127.92	128.90	129.69	129.74	133.43	129.82	133.90	128.68	127.82	127.51	127.49	
2	128.79	127.92	128.92	130.15	129.57	133.93	129.68	134.37	128.55	127.83	127.51	127.49	
3	128.82	127.92	128.99	130.50	129.30	134.13	129.58	134.65	128.50	127.83	127.51	127.50	
4	128.82	127.93	129.02	130.81	128.54	134.12	129.54	134.81	128.42	127.82	127.51	127.51	
5	128.83	127.94	129.11	130.99	128.72	133.90	129.74	134.87	128.41	127.82	127.51	127.51	
6	128.79	127.98	129.14	130.90	128.40	133.59	129.75	134.85	128.33	127.81	127.51	127.51	
7	128.72	127.99	129.17	130.52	128.35	133.26	129.74	134.76	128.25	127.79	127.51	127.51	
8	128.46	128.01	129.18	130.08	129.41	132.92	129.72	134.64	128.22	127.78	127.51	127.50	
9	128.11	128.03	129.18	129.54	129.49	132.58	129.69	134.49	128.26	127.79	127.52	127.51	
10	128.10	128.06	129.31	129.31	129.78	132.36	129.73	134.25	128.17	127.65	127.53	127.52	
11	128.11	128.17	129.85	129.33	130.09	132.16	129.82	133.89	128.09	127.60	127.53	127.52	
12	128.08	128.21	129.98	129.34	130.34	132.06	129.91	133.25	128.02	127.60	127.52	127.52	
13	128.08	128.23	129.99	129.51	130.53	132.17	129.97	132.63	127.92	127.60	127.52	127.54	
14	128.08	128.24	129.95	129.59	130.64	132.34	129.97	132.24	127.81	127.60	127.52	127.53	
15	128.08	128.33	129.91	129.45	130.53	132.39	129.98	132.08	127.80	127.60	127.51	127.53	
16	128.09	128.80	129.76	129.20	130.23	132.39	129.97	131.93	127.81	127.65	127.52	127.53	
17	128.09	129.05	129.64	128.91	129.81	132.39	129.96	131.74	127.82	127.66	127.52	127.54	
18	128.09	129.16	129.56	128.55	129.47	132.45	129.87	131.52	127.82	127.64	127.52	127.53	
19	128.08	129.25	129.46	128.26	129.23	132.43	129.67	131.29	127.82	127.64	127.52	127.53	
20	128.08	129.28	129.32	128.13	129.00	132.21	129.53	131.00	127.82	127.64	127.52	127.53	
21	128.06	129.27	129.23	128.66	128.89	131.86	129.49	130.65	127.82	127.64	127.52	127.52	
22	128.03	129.25	129.20	129.06	128.91	131.52	129.57	130.35	127.82	127.63	127.52	127.52	
23	128.03	129.26	129.19	129.34	129.22	131.23	129.71	130.06	127.82	127.64	127.52	127.51	
24	128.04	129.24	129.21	129.14	129.70	131.12	129.94	129.82	127.82	127.64	127.49	127.51	
25	128.02	129.21	129.19	128.95	129.67	131.05	130.28	129.58	127.82	127.57	127.49	127.52	
26	127.94	129.18	129.18	128.83	129.61	130.91	130.61	129.37	127.82	127.49	127.49	127.50	
27	127.93	129.17	129.18	128.75	129.56	130.68	130.97	129.25	127.82	127.50	127.49	127.48	
28	127.94	129.16	129.25	128.73	129.71	130.42	131.50	129.07	127.81	127.50	127.49	127.47	
29	127.93	129.02	129.39	128.67	130.49	130.25	131.99	128.94	127.81	127.50		127.48	
30	127.93	128.92	129.43	129.01	131.50	130.03	132.53	128.85	127.82	127.51		127.48	
31		128.90		129.48	132.61		133.14		127.82	127.51		127.49	
Mean	128.23	128.61	129.36	129.40	129.71	132.21	130.17	132.10	128.02	127.65	127.51	127.51	
Max	128.83	129.28	129.99	130.99	132.61	134.13	133.14	134.87	128.68	127.83	127.53	127.54	134.87
Min	127.93	127.92	128.90	128.13	128.35	130.03	129.49	128.85	127.80	127.49	127.49	127.47	127.47

Annual Max Momentary Gage Height 134.87 M (MSL), at 6.00 Hours, on nov 5, 2001
Zero Gage at Bottom Elevation 127.00 M (MSL), River Bed 127.07 M (MSL)
Left Bank Elevation 134.45 M (MSL)
Right Bank Elevation 135.15 M (MSL), Drainage Area 2927 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.35	0.98	5.60	13.46	14.24	110.20	15.52	129.00	4.30	0.66	0.11	0.09	
2	4.94	0.98	5.76	21.10	11.90	130.26	13.32	150.96	3.65	0.69	0.11	0.09	
3	5.12	0.98	6.32	27.40	9.20	139.44	12.00	164.70	3.40	0.69	0.11	0.10	
4	5.12	1.02	6.58	32.98	3.60	138.96	11.60	172.70	3.00	0.66	0.11	0.11	
5	5.18	1.06	7.39	36.31	4.52	129.00	14.24	175.70	2.95	0.66	0.11	0.11	
6	4.94	1.22	7.66	34.60	2.90	116.60	14.40	174.70	2.62	0.63	0.11	0.11	
7	4.52	1.26	7.93	27.76	2.70	103.40	14.24	170.20	2.30	0.58	0.11	0.11	
8	3.20	1.34	8.02	19.86	10.30	90.88	13.92	164.20	2.18	0.56	0.11	0.10	
9	1.74	1.42	8.02	11.60	11.10	79.32	13.46	156.72	2.34	0.58	0.12	0.11	
10	1.70	1.54	9.30	9.30	14.88	71.98	14.08	145.20	1.98	0.30	0.13	0.12	
11	1.74	1.98	16.00	9.50	20.03	65.50	15.52	128.60	1.66	0.20	0.13	0.12	
12	1.62	2.14	18.16	9.60	24.52	62.58	16.97	103.00	1.38	0.20	0.12	0.12	
13	1.62	2.22	18.33	11.30	27.94	65.80	17.99	81.02	0.98	0.20	0.12	0.14	
14	1.62	2.26	17.65	12.10	29.92	71.32	17.99	68.02	0.63	0.20	0.12	0.13	
15	1.62	2.62	16.97	10.70	27.94	72.97	18.16	63.14	0.60	0.20	0.11	0.13	
16	1.66	5.00	14.56	8.20	22.54	72.97	17.99	58.94	0.63	0.30	0.12	0.13	
17	1.66	6.85	12.76	5.68	15.36	72.97	17.82	54.00	0.66	0.32	0.12	0.14	
18	1.66	7.84	11.80	3.65	10.90	74.95	16.32	48.50	0.66	0.28	0.12	0.13	
19	1.62	8.70	10.80	2.34	8.50	74.29	13.18	42.87	0.66	0.28	0.12	0.13	
20	1.62	9.00	9.40	1.82	6.40	67.03	11.50	36.50	0.66	0.28	0.12	0.13	
21	1.54	8.90	8.50	4.20	5.54	57.06	11.10	30.10	0.66	0.28	0.12	0.12	
22	1.42	8.70	8.20	6.94	5.68	48.50	11.90	24.70	0.66	0.26	0.12	0.12	
23	1.42	8.80	8.11	9.60	8.40	41.49	13.76	19.52	0.66	0.28	0.12	0.11	
24	1.46	8.60	8.30	7.66	13.60	39.04	17.48	15.52	0.66	0.28	0.09	0.11	
25	1.38	8.30	8.11	6.00	13.18	37.55	23.44	12.00	0.66	0.17	0.09	0.12	
26	1.06	8.02	8.02	5.18	12.34	34.79	29.38	9.90	0.66	0.09	0.09	0.10	
27	1.02	7.93	8.02	4.70	11.80	30.64	35.93	8.70	0.66	0.10	0.09	0.08	
28	1.06	7.84	8.70	4.58	13.76	25.96	48.00	7.03	0.63	0.10	0.09	0.07	
29	1.02	6.58	10.10	4.25	27.22	22.90	60.62	5.92	0.63	0.10		0.08	
30	1.02	5.76	10.50	6.49	48.00	19.01	77.62	5.30	0.66	0.11		0.08	
31		5.60		11.00	80.34		98.60		0.66	0.11		0.09	
Total	69.65	145.44	305.57	379.86	519.25	2167.36	728.05	2427.36	44.44	10.35	3.14	3.43	6803.90 CMSDAY
Mean	2.32	4.69	10.19	12.25	16.75	72.25	23.49	80.91	1.43	0.33	0.11	0.11	18.64 CMS
Max	5.18	9.00	18.33	36.31	80.34	139.44	98.60	175.70	4.30	0.69	0.13	0.14	175.70 CMS
Min	1.02	0.98	5.60	1.82	2.70	19.01	11.10	5.30	0.60	0.09	0.09	0.07	0.07 CMS
Runoff	6.018	12.566	26.401	32.820	44.863	187.260	62.904	209.724	3.840	0.894	0.271	0.296	587.857 MCM

Momentary Peak 175.70 CMS, at 134.87 M (MSL), at 6.00 Hours, on nov 5, 2001

Runoff Yield 6.37 Liters/Second/Square KM, Momentary Peak Yield 60.027 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,654 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +120.290 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the automatic gage building.

Elevation +127.626 m. (M.S.L.)

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 Float -

Rated by Current Meter 1968 - 1969, 1997 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions Overbank flow starts at elevation +125.660 m.(M.S.L.) and is including overbank flow.

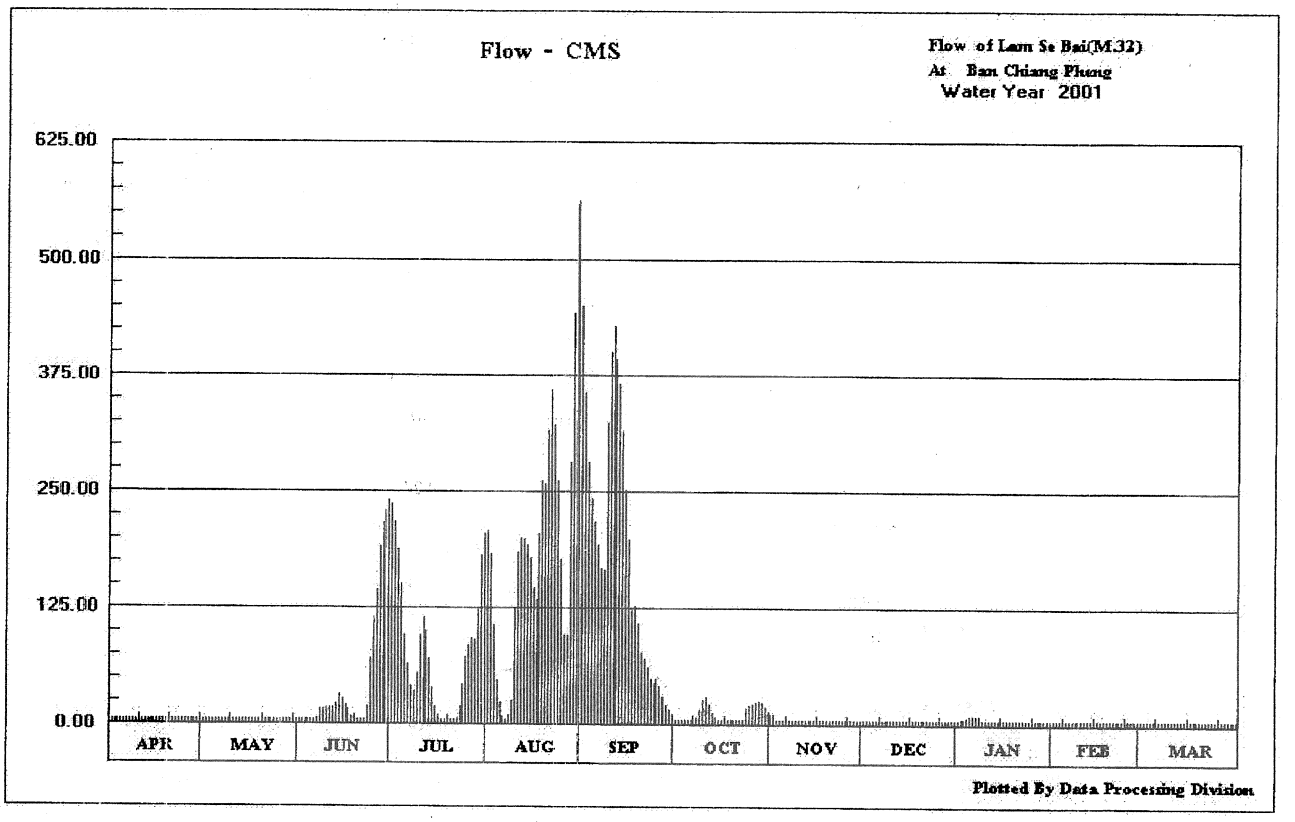
General Description Records fair. The concrete weir situated about 3 kilometers downstream from the gage site.

Stage-discharge relation defined by 29 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.43	123.18	123.76	126.42	126.23	127.64	124.00	124.13	123.74	124.01	123.69	123.57	
2	123.48	123.17	123.76	126.29	126.05	127.17	123.95	124.13	123.74	124.02	123.69	123.56	
3	123.49	123.15	123.79	126.08	125.39	126.72	123.91	123.95	123.73	124.03	123.69	123.56	
4	123.50	123.14	123.85	125.79	124.73	126.46	123.90	123.91	123.73	124.05	123.69	123.56	
5	123.50	123.13	123.96	125.27	124.38	126.30	123.94	123.89	123.73	124.06	123.69	123.56	
6	123.50	123.12	123.98	124.94	124.06	126.12	123.95	123.86	123.73	124.08	123.68	123.55	
7	123.49	123.10	124.03	124.64	123.89	125.93	123.99	123.85	123.73	124.09	123.68	123.55	
8	123.49	123.09	124.21	124.55	123.94	125.92	124.07	123.84	123.72	124.09	123.67	123.55	
9	123.49	123.07	124.22	124.84	124.39	126.99	124.20	123.82	123.73	124.01	123.68	123.55	
10	123.48	123.04	124.24	125.28	125.55	127.41	124.42	123.80	123.74	123.77	123.68	123.53	
11	123.47	123.02	124.25	125.46	126.06	127.54	124.48	123.79	123.74	123.76	123.69	123.51	
12	123.46	123.00	124.26	125.32	126.17	127.37	124.34	123.79	123.73	123.74	123.70	123.48	
13	123.45	122.98	124.33	125.02	126.16	127.22	124.16	123.81	123.73	123.73	123.68	123.47	
14	123.45	122.97	124.51	124.62	126.12	126.93	124.06	123.84	123.73	123.72	123.68	123.45	
15	123.44	122.96	124.44	124.29	126.02	126.52	123.98	123.83	123.73	123.71	123.68	123.44	
16	123.43	122.98	124.32	124.09	125.75	126.16	123.93	123.82	123.74	123.71	123.67	123.43	
17	123.41	123.03	124.20	123.97	125.64	125.56	123.90	123.80	123.77	123.70	123.64	123.42	
18	123.39	123.07	124.06	123.95	126.21	125.58	123.88	123.79	123.82	123.72	123.64	123.40	
19	123.37	123.10	123.89	123.90	126.59	125.40	123.85	123.78	123.87	123.73	123.63	123.39	
20	123.36	123.16	123.84	123.88	126.57	125.08	123.84	123.77	123.88	123.74	123.61	123.39	
21	123.34	123.35	123.82	123.91	126.94	125.02	123.83	123.75	123.89	123.75	123.61	123.38	
22	123.32	123.54	123.89	124.04	127.19	124.91	123.83	123.75	123.90	123.75	123.61	123.37	
23	123.29	123.64	124.29	124.29	126.98	124.76	123.97	123.75	123.92	123.75	123.61	123.36	
24	123.26	123.67	125.02	124.65	126.59	124.68	124.26	123.75	123.95	123.74	123.61	123.36	
25	123.26	123.68	125.46	125.03	126.00	124.75	124.32	123.75	123.97	123.74	123.60	123.35	
26	123.24	123.68	125.73	125.17	125.27	124.64	124.35	123.75	123.97	123.74	123.59	123.33	
27	123.23	123.68	126.10	125.25	125.28	124.49	124.37	123.74	123.99	123.72	123.58	123.32	
28	123.23	123.68	126.28	125.23	126.72	124.30	124.40	123.74	123.99	123.71	123.57	123.31	
29	123.22	123.69	126.38	125.55	127.60	124.21	124.36	123.74	123.99	123.71		123.30	
30	123.21	123.71	126.45	126.04	128.04	124.11	124.28	123.74	124.01	123.69		123.30	
31		123.76		126.20	128.06		124.18		124.01	123.69		123.29	
Mean	123.39	123.28	124.51	124.97	125.95	125.86	124.09	123.82	123.83	123.82	123.65	123.44	
Max	123.50	123.76	126.45	126.42	128.06	127.64	124.48	124.13	124.01	124.09	123.70	123.57	128.06
Min	123.21	122.96	123.76	123.88	123.89	124.11	123.83	123.74	123.72	123.69	123.57	123.29	122.96

Annual Max Momentary Gage Height 128.18 M (MSL), at 1.00 Hours, on aug 31, 2001.
Zero Gage at Bottom Elevation 120.29 M (MSL), River Bed 117.71 M (MSL)
Left Bank Elevation 125.65 M (MSL)
Right Bank Elevation 126.19 M (MSL), Drainage Area 1654 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	2.20	238.00	210.20	452.80	7.00	13.50	1.80	7.50	0.90	0.00	
2	0.00	0.00	2.20	218.60	185.00	358.60	6.00	13.50	1.80	8.00	0.90	0.00	
3	0.00	0.00	2.80	189.20	109.00	283.00	5.20	6.00	1.60	8.50	0.90	0.00	
4	0.00	0.00	4.00	151.90	49.10	244.00	5.00	5.20	1.60	9.50	0.90	0.00	
5	0.00	0.00	6.20	97.00	26.00	220.00	5.80	4.80	1.60	10.00	0.90	0.00	
6	0.00	0.00	6.60	65.60	10.00	194.80	6.00	4.20	1.60	11.00	0.80	0.00	
7	0.00	0.00	8.50	42.80	4.80	168.90	6.80	4.00	1.60	11.50	0.80	0.00	
8	0.00	0.00	17.50	36.50	5.80	167.60	10.50	3.80	1.40	11.50	0.70	0.00	
9	0.00	0.00	18.00	57.20	26.50	326.30	17.00	3.40	1.60	7.50	0.80	0.00	
10	0.00	0.00	19.00	98.00	125.50	402.20	28.20	3.00	1.80	2.40	0.80	0.00	
11	0.00	0.00	19.50	116.00	186.40	430.80	31.80	2.80	1.80	2.20	0.90	0.00	
12	0.00	0.00	20.00	102.00	201.80	394.60	24.00	2.80	1.60	1.80	1.00	0.00	
13	0.00	0.00	23.50	72.80	200.40	367.60	15.00	3.20	1.60	1.60	0.80	0.00	
14	0.00	0.00	33.70	41.40	194.80	316.10	10.00	3.80	1.60	1.40	0.80	0.00	
15	0.00	0.00	29.40	21.50	180.80	253.00	6.60	3.60	1.60	1.20	0.80	0.00	
16	0.00	0.00	23.00	11.50	147.50	200.40	5.60	3.40	1.80	1.20	0.70	0.00	
17	0.00	0.00	17.00	6.40	135.40	126.60	5.00	3.00	2.40	1.00	0.40	0.00	
18	0.00	0.00	10.00	6.00	207.40	128.80	4.60	2.80	3.40	1.40	0.40	0.00	
19	0.00	0.00	4.80	5.00	263.50	110.00	4.00	2.60	4.40	1.60	0.30	0.00	
20	0.00	0.00	3.80	4.60	260.50	78.20	3.80	2.40	4.60	1.80	0.10	0.00	
21	0.00	0.00	3.40	5.20	317.80	72.80	3.60	2.00	4.80	2.00	0.10	0.00	
22	0.00	0.00	4.80	9.00	362.20	62.90	3.60	2.00	5.00	2.00	0.10	0.00	
23	0.00	0.40	21.50	21.50	324.60	51.20	6.40	2.00	5.40	2.00	0.10	0.00	
24	0.00	0.70	72.80	43.50	263.50	45.60	20.00	2.00	6.00	1.80	0.10	0.00	
25	0.00	0.80	116.00	73.70	178.00	50.50	23.00	2.00	6.40	1.80	0.00	0.00	
26	0.00	0.80	145.30	87.00	97.00	42.80	24.50	2.00	6.40	1.80	0.00	0.00	
27	0.00	0.80	192.00	95.00	98.00	32.40	25.50	1.80	6.80	1.40	0.00	0.00	
28	0.00	0.80	217.20	93.00	283.00	22.00	27.00	1.80	6.80	1.20	0.00	0.00	
29	0.00	0.90	232.00	125.50	444.00	17.50	25.00	1.80	6.80	1.20		0.00	
30	0.00	1.20	242.50	183.60	559.20	12.50	21.00	1.80	7.50	0.90		0.00	
31		2.20		206.00	564.20		16.00		7.50	0.90		0.00	
Total	0.00	8.60	1519.20	2525.00	6222.50	5634.50	403.50	111.00	110.60	119.60	15.00	0.00	16669.50 CMSDAY
Mean	0.00	0.28	50.64	81.45	200.73	187.82	13.02	3.70	3.57	3.86	0.54	0.00	45.67 CMS
Max	0.00	2.20	242.50	238.00	564.80	452.80	31.80	13.50	7.50	11.50	1.00	0.00	564.80 CMS
Min	0.00	0.00	2.20	4.60	4.80	12.50	3.60	1.80	1.40	0.90	0.00	0.00	0.00 CMS
Runoff	0.000	0.743	131.259	218.160	537.624	486.821	34.862	9.590	9.556	10.333	1.296	0.000	1440.245 MCM

Momentary Peak 598.40 CMS, at 128.18 M (MSL), at 1.00 Hours, on aug 31, 2001

Runoff Yield 27.61 Liters/Second/Square KM, Momentary Peak Yield 361.790 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

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

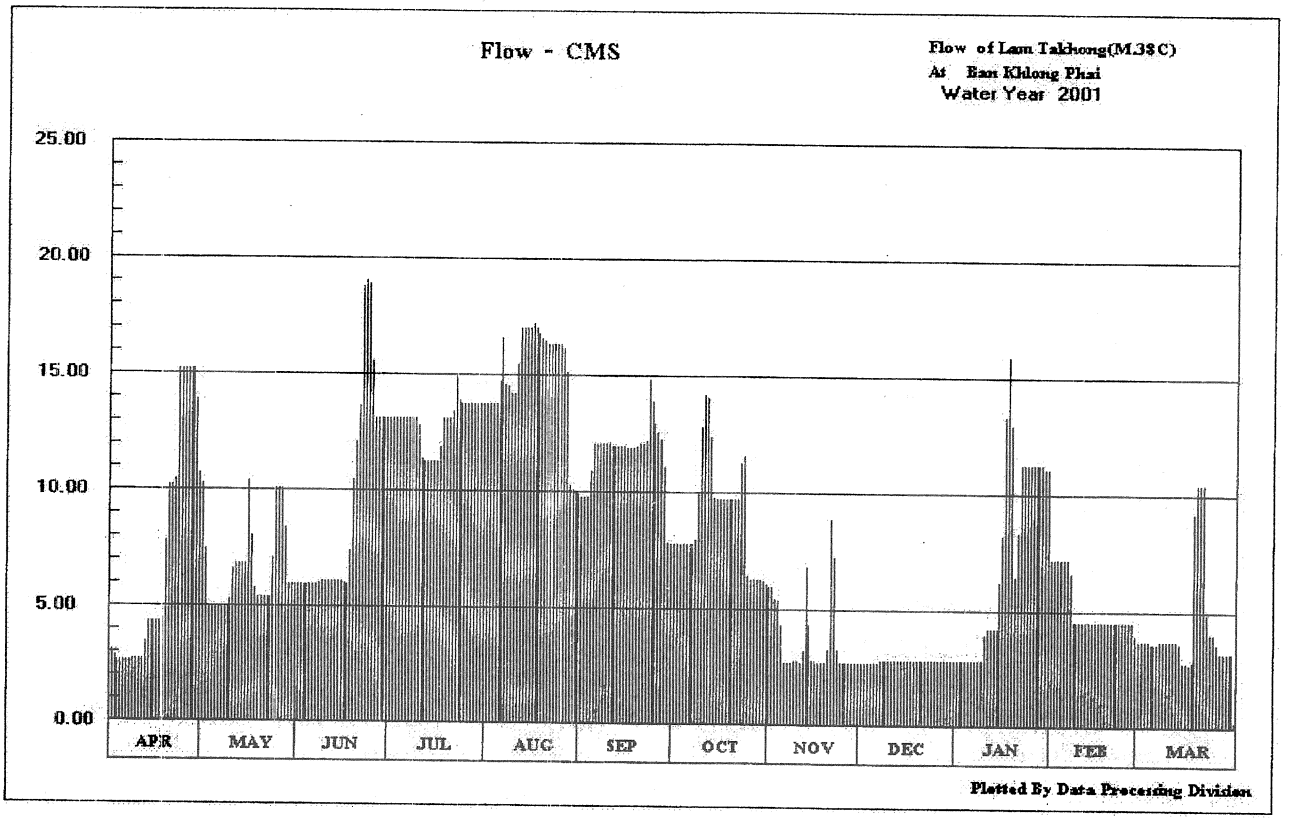
Lat 14 - 52 - 06 N. **Long** 101- 33 - 53 E.

Location			on left bank about 500 meters downstream from Lam Takhong Dam.		
	Ban	Khlong Phai	**Amphoe** Sikhiu	**Changwat**	Nakhon Ratchasima
Drainage Area			1,292 sq.km.		
Type of Gage			Water - stage recorder.		
Zero Gage at Bottom			-242.000 m. (M.S.L.)		
Bench Mark			B.M.- H.D.		
	Location BM		On left bank about 20 meters from the measuring line.		
	Elevation		+251.841 m. (M.S.L.)		
Gage Reading Frequency			Recording.		
Basis of Mean Daily Gage Height			Arithmetic mean of 24 readings.		
Period of Available Gage Records			1962 to date.		
Rating Operation					
	Period of Rating		1962-1965, 1967-1974, 1979-1981, 1983 to date.		
	Rated by Float		-		
	Rated by Current Meter		1962-1965, 1967-1974, 1979-1981, 1983 to date.		
Stability of Channel Regimes			Stable		
Overbank Flow Conditions			No overbank flow.		
General Description			Records good. Flow regulated bu Lam Takhong Dam Reservoir.		
			Stage - discharge relation defined by 83 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	244.63	245.42	244.96	245.70	245.76	245.37	245.16	244.96	244.58	244.60	245.10	244.70	
2	244.60	245.13	244.96	245.70	245.76	245.37	245.16	244.96	244.58	244.60	245.10	244.70	
3	244.57	244.85	244.96	245.70	245.76	245.37	245.16	244.91	244.58	244.60	245.10	244.70	
4	244.57	244.85	244.96	245.70	245.76	245.48	245.16	244.90	244.58	244.60	245.10	244.70	
5	244.57	244.85	244.96	245.70	245.85	245.60	245.16	244.78	244.58	244.60	245.10	244.69	
6	244.57	244.85	244.96	245.70	246.02	245.60	245.16	244.58	244.58	244.60	245.10	244.69	
7	244.57	244.85	244.96	245.70	245.84	245.60	245.16	244.58	244.60	244.60	245.03	244.69	
8	244.58	244.85	244.97	245.70	245.83	245.60	245.18	244.58	244.60	244.60	244.80	244.70	
9	244.58	244.85	244.98	245.70	245.80	245.60	245.39	244.59	244.60	244.60	244.80	244.70	
10	244.58	244.89	244.98	245.67	245.80	245.60	245.67	244.59	244.60	244.73	244.80	244.70	
11	244.58	245.03	244.98	245.53	245.92	245.59	245.80	244.58	244.60	244.76	244.80	244.70	
12	244.67	245.06	244.98	245.52	246.06	245.59	245.79	244.64	244.60	244.76	244.80	244.70	
13	244.78	245.06	244.98	245.52	246.06	245.59	245.63	245.06	244.60	244.76	244.80	244.70	
14	244.78	245.06	244.98	245.52	246.06	245.59	245.37	244.78	244.60	244.76	244.80	244.69	
15	244.78	245.06	244.98	245.52	246.06	245.59	245.36	244.59	244.60	244.99	244.80	244.59	
16	244.78	245.43	244.97	245.52	246.08	245.58	245.36	244.59	244.60	245.21	244.80	244.59	
17	244.78	245.19	244.96	245.58	246.06	245.58	245.36	244.58	244.60	245.72	244.80	244.58	
18	244.79	244.94	245.12	245.70	246.04	245.58	245.36	244.58	244.60	245.96	244.80	244.60	
19	245.16	244.90	245.44	245.70	246.02	245.59	245.36	244.58	244.60	245.68	244.80	245.31	
20	245.41	244.90	245.60	245.70	246.01	245.60	245.36	244.65	244.60	245.02	244.80	245.44	
21	245.41	244.90	245.75	245.73	246.00	245.60	245.36	245.28	244.60	245.22	244.80	245.44	
22	245.44	244.90	246.22	245.88	246.00	245.61	245.36	245.11	244.60	245.52	244.80	245.44	
23	245.90	244.90	246.24	245.77	246.00	245.86	245.52	244.65	244.60	245.52	244.80	244.84	
24	245.90	245.09	246.23	245.76	246.00	245.77	245.55	244.58	244.60	245.52	244.80	244.74	
25	245.90	245.40	245.93	245.76	246.00	245.68	245.02	244.58	244.60	245.52	244.80	244.74	
26	245.90	245.40	245.70	245.76	245.98	245.65	245.00	244.58	244.60	245.52	244.80	244.69	
27	245.90	245.40	245.70	245.76	245.89	245.62	245.00	244.58	244.60	245.52	244.80	244.64	
28	245.90	245.23	245.70	245.76	245.42	245.50	245.00	244.58	244.60	245.52	244.73	244.64	
29	245.77	244.96	245.70	245.76	245.40	245.17	245.00	244.58	244.60	245.52		244.64	
30	245.46	244.96	245.70	245.76	245.39	245.16	244.99	244.58	244.60	245.50		244.64	
31		244.96		245.76	245.38		244.98		244.60	245.50		244.64	
Mean	245.06	245.04	245.32	245.69	245.87	245.56	245.29	244.71	244.60	245.10	244.87	244.77	
Max	245.90	245.43	246.24	245.88	246.08	245.86	245.80	245.28	244.60	245.96	245.10	245.44	246.24
Min	244.57	244.85	244.96	245.52	245.38	245.16	244.98	244.58	244.58	244.60	244.73	244.58	244.57

Annual Max Momentary Gage Height 247.20 M (MSL), at 21.00 Hours, on May 16, 2001
Zero Gage at Bottom Elevation 242.00 M (MSL), River Bed 243.47 M (MSL)
Left Bank Elevation 251.35 M (MSL)
Right Bank Elevation 252.46 M (MSL), Drainage Area 1292 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.166	10.350	5.990	13.200	13.830	9.850	7.820	5.990	2.760	2.920	7.250	3.740	
2	2.920	7.535	5.990	13.200	13.830	9.850	7.820	5.990	2.760	2.920	7.250	3.740	
3	2.680	5.020	5.990	13.200	13.830	9.850	7.820	5.540	2.760	2.920	7.250	3.740	
4	2.680	5.020	5.990	13.200	13.830	10.950	7.820	5.450	2.760	2.920	7.250	3.740	
5	2.680	5.020	5.990	13.200	14.775	12.150	7.820	4.420	2.760	2.920	7.250	3.658	
6	2.680	5.020	5.990	13.200	16.620	12.150	7.820	2.760	2.760	2.920	7.250	3.658	
7	2.680	5.020	5.990	13.200	14.670	12.150	7.820	2.760	2.920	2.920	6.620	3.658	
8	2.760	5.020	6.080	13.200	14.565	12.150	8.010	2.760	2.920	2.920	4.590	3.740	
9	2.760	5.020	6.170	13.200	14.250	12.150	10.050	2.840	2.920	2.920	4.590	3.740	
10	2.760	5.364	6.170	12.885	14.250	12.150	12.885	2.840	2.920	3.995	4.590	3.740	
11	2.760	6.620	6.170	11.450	15.520	12.050	14.250	2.760	2.920	4.250	4.590	3.740	
12	3.494	6.890	6.170	11.350	17.060	12.050	14.145	3.248	2.920	4.250	4.590	3.740	
13	4.420	6.890	6.170	11.350	17.060	12.050	12.465	6.890	2.920	4.250	4.590	3.740	
14	4.420	6.890	6.170	11.350	17.060	12.050	9.850	4.420	2.920	4.250	4.590	3.658	
15	4.420	6.890	6.170	11.350	17.060	12.050	9.750	2.840	2.920	6.260	4.590	2.840	
16	4.420	10.450	6.080	11.350	17.280	11.950	9.750	2.840	2.920	8.295	4.590	2.840	
17	4.420	8.105	5.990	11.950	17.060	11.950	9.750	2.760	2.920	13.410	4.590	2.760	
18	4.505	5.810	7.440	13.200	16.840	11.950	9.750	2.760	2.920	15.960	4.590	2.920	
19	7.820	5.450	10.550	13.200	16.620	12.050	9.750	2.760	2.920	12.990	4.590	9.250	
20	10.250	5.450	12.150	13.200	16.510	12.150	9.750	3.330	2.920	6.530	4.590	10.550	
21	10.250	5.450	13.725	13.515	16.400	12.150	9.750	8.960	2.920	8.390	4.590	10.550	
22	10.550	5.450	18.830	15.090	16.400	12.255	9.750	7.345	2.920	11.350	4.590	10.550	
23	15.300	5.450	19.060	13.935	16.400	14.880	11.350	3.330	2.920	11.350	4.590	4.934	
24	15.300	7.160	18.945	13.830	16.400	13.935	11.650	2.760	2.920	11.350	4.590	4.080	
25	15.300	10.150	15.630	13.830	16.400	12.990	6.530	2.760	2.920	11.350	4.590	4.080	
26	15.300	10.150	13.200	13.830	16.180	12.675	6.350	2.760	2.920	11.350	4.590	3.658	
27	15.300	10.150	13.200	13.830	15.195	12.360	6.350	2.760	2.920	11.350	4.590	3.248	
28	15.300	8.485	13.200	13.830	10.350	11.150	6.350	2.760	2.920	11.350	3.995	3.248	
29	13.935	5.990	13.200	13.830	10.150	7.915	6.350	2.760	2.920	11.350		3.248	
30	10.750	5.990	13.200	13.830	10.050	7.820	6.260	2.760	2.920	11.150		3.248	
31		5.990		13.830	9.950		6.170		2.920	11.150		3 248	
Total	215.980	208.249	285.600	404.615	466.395	351.830	281.755	114.913	89.560	232.210	145.915	137.284	2934.306 CMSDAY
Mean	7.199	6.718	9.520	13.052	15.045	11.728	9.089	3.830	2.889	7.491	5.211	4.429	8.039 CMS
Max	15.300	10.450	19.060	15.090	17.280	14.880	14.250	8.960	2.920	15.960	7.250	10.550	19.060 CMS
Min	2.680	5.020	5.990	11.350	9.950	7.820	6.170	2.760	2.760	2.920	3.995	2.760	2.680 CMS
Runoff	18.661	17.993	24.676	34.959	40.297	30.398	24.344	9.928	7.738	20.063	12.607	11.861	253.524 MCM

Momentary Peak 31.90 CMS, at 247.20 M (MSL), at 21.00 Hours, on May 16, 2001

Runoff Yield 6.22 Liters/Second/Square KM, Momentary Peak Yield 24.690 Liters/Second/Square KM

WATER YEAR : 2001

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 left bank at the bridge on highway.

Ban Huai Thap Than **Amphoe** Huai Thap Thun **Changwat** Si Sa Ket

Drainage Area 1,794 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 +11.591 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 Float -

Rated by Current Meter 1972 - 1981, 1987 to date.

Stability of Channel Regimes Stable.

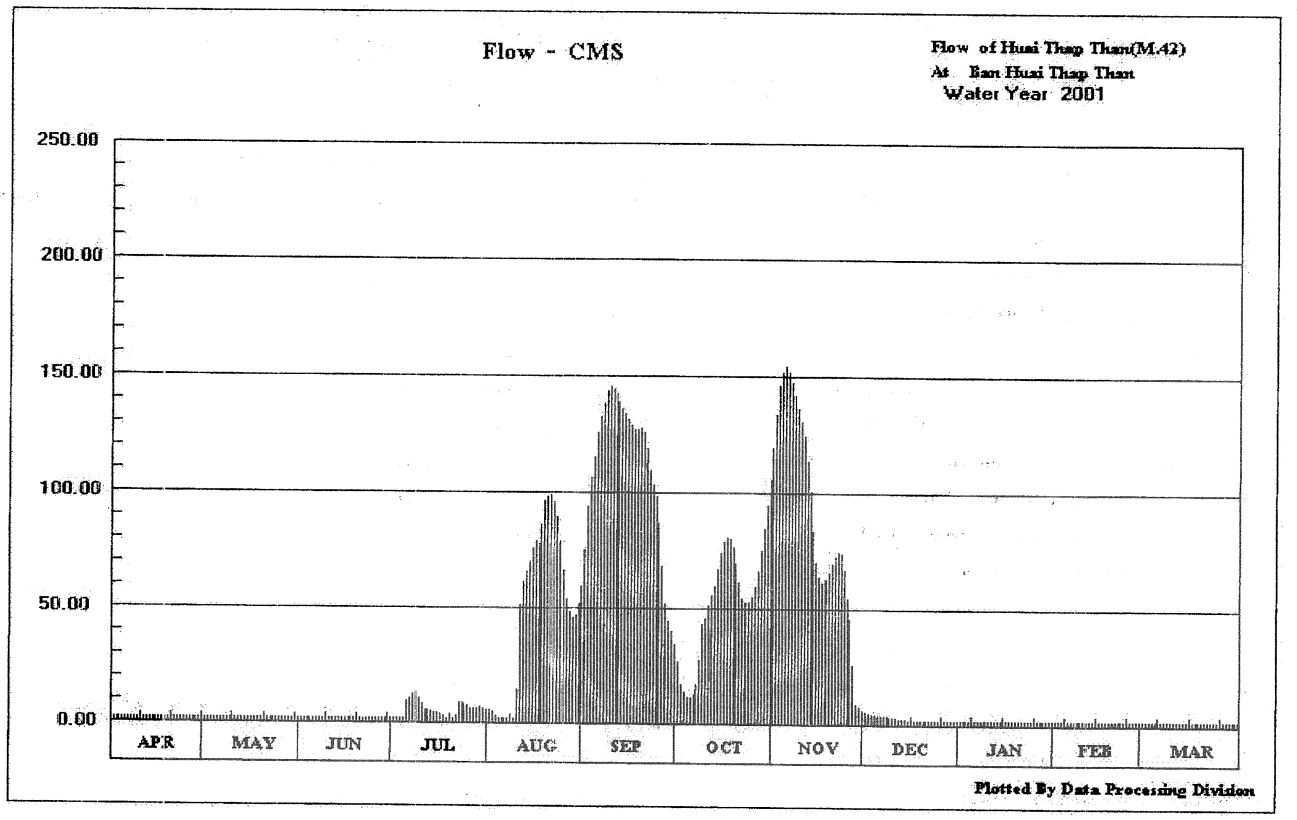
Overbank Flow Conditions Overbank flow starts at elevation +6.000 m.(A.D.), records are channal flow only.

General Description Records fair. Flow effected by the local weir about 800 meters downstream from the gage site. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.28	2.99	2.80	3.16	3.51	6.61	4.11	7.87	3.51	3.37	3.28	3.21	
2	3.26	2.98	2.80	3.16	3.49	7.18	3.87	8.23	3.50	3.36	3.28	3.19	
3	3.26	2.98	2.79	3.15	3.43	7.54	3.78	8.51	3.48	3.35	3.28	3.18	
4	3.25	2.98	2.78	3.15	3.40	7.76	3.71	8.63	3.47	3.34	3.27	3.16	
5	3.25	2.97	2.82	3.65	3.33	8.02	3.70	8.69	3.45	3.33	3.27	3.16	
6	3.24	2.96	2.87	3.69	3.19	8.19	3.74	8.63	3.45	3.32	3.26	3.15	
7	3.23	2.95	2.87	3.74	3.09	8.33	3.86	8.54	3.45	3.32	3.26	3.15	
8	3.20	2.95	2.88	3.76	3.09	8.46	4.14	8.42	3.45	3.31	3.26	3.14	
9	3.20	2.92	2.88	3.68	3.32	8.50	4.53	8.29	3.44	3.31	3.26	3.13	
10	3.19	2.91	2.89	3.59	3.81	8.47	5.01	8.15	3.44	3.31	3.26	3.12	
11	3.18	2.90	2.89	3.51	5.49	8.43	5.48	8.00	3.43	3.31	3.26	3.12	
12	3.16	2.90	2.89	3.51	6.06	8.34	5.78	7.72	3.42	3.31	3.26	3.11	
13	3.15	2.88	2.89	3.50	6.24	8.28	6.00	7.39	3.41	3.30	3.24	3.10	
14	3.14	2.87	2.89	3.48	6.42	8.22	6.28	6.88	3.41	3.30	3.24	3.10	
15	3.12	2.88	2.88	3.47	6.62	8.16	6.57	6.42	3.40	3.30	3.24	3.09	
16	3.11	2.91	2.88	3.46	6.75	8.10	6.74	6.17	3.40	3.30	3.24	3.09	
17	3.09	2.93	2.87	3.44	6.71	8.05	6.82	6.06	3.40	3.30	3.23	3.09	
18	3.08	2.93	2.87	3.40	6.96	8.06	6.80	6.12	3.39	3.30	3.23	3.08	
19	3.08	2.93	2.86	3.40	7.26	8.07	6.66	6.24	3.40	3.30	3.23	3.06	
20	3.07	2.93	2.86	3.40	7.32	8.02	6.40	6.39	3.40	3.30	3.23	3.05	
21	3.05	2.92	2.84	3.44	7.33	7.85	6.07	6.52	3.40	3.29	3.22	3.04	
22	3.03	2.91	2.85	3.61	7.24	7.62	5.66	6.59	3.40	3.30	3.22	3.03	
23	3.01	2.90	2.85	3.62	7.07	7.46	5.55	6.55	3.39	3.30	3.22	3.02	
24	3.01	2.89	3.01	3.60	6.75	7.32	5.57	6.28	3.38	3.30	3.21	3.02	
25	2.99	2.88	3.08	3.57	6.26	6.99	5.74	5.68	3.37	3.30	3.21	3.02	
26	2.98	2.87	3.14	3.53	5.65	6.35	5.99	5.02	3.37	3.30	3.21	3.02	
27	2.98	2.86	3.16	3.53	5.25	5.51	6.26	4.09	3.37	3.29	3.21	3.02	
28	3.00	2.86	3.16	3.53	5.05	4.78	6.60	3.62	3.37	3.29	3.21	3.02	
29	3.00	2.84	3.16	3.55	5.15	4.44	6.92	3.57	3.37	3.29		3.02	
30	3.00	2.83	3.16	3.54	5.50	4.31	7.21	3.53	3.37	3.28		3.02	
31		2.82		3.52	5.99		7.53		3.37	3.28		3.02	
Mean	3.12	2.91	2.92	3.49	5.38	7.45	5.58	6.76	3.41	3.31	3.24	3.09	
Max	3.28	2.99	3.16	3.76	7.33	8.50	7.53	8.69	3.51	3.37	3.28	3.21	8.69
Min	2.98	2.82	2.78	3.15	3.09	4.31	3.70	3.53	3.37	3.28	3.21	3.02	2.78

Annual Max Momentary Gage Height 8.70 M (A.D), at 12.00 Hours, on Nov 5, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.44 M (A.D)
Left Bank Elevation 6.41 M (A.D)
Right Bank Elevation 5.98 M (A.D), Drainage Area 1794 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	0.00	6.30	75.93	27.40	120.30	6.30	2.10	0.00	0.00	
2	0.00	0.00	0.00	0.00	5.70	94.30	17.80	134.70	6.00	1.80	0.00	0.00	
3	0.00	0.00	0.00	0.00	3.90	107.10	14.40	146.95	5.40	1.50	0.00	0.00	
4	0.00	0.00	0.00	0.00	3.00	115.90	12.30	152.50	5.10	1.20	0.00	0.00	
5	0.00	0.00	0.00	10.50	0.90	126.30	12.00	155.50	4.50	0.90	0.00	0.00	
6	0.00	0.00	0.00	11.70	0.00	133.10	13.20	152.50	4.50	0.60	0.00	0.00	
7	0.00	0.00	0.00	13.20	0.00	138.85	17.40	148.30	4.50	0.60	0.00	0.00	
8	0.00	0.00	0.00	13.80	0.00	144.70	28.60	142.90	4.50	0.30	0.00	0.00	
9	0.00	0.00	0.00	11.40	0.60	146.50	44.15	137.10	4.20	0.30	0.00	0.00	
10	0.00	0.00	0.00	8.70	15.40	145.15	46.55	131.50	4.20	0.30	0.00	0.00	
11	0.00	0.00	0.00	6.30	52.35	143.35	52.20	125.50	3.90	0.30	0.00	0.00	
12	0.00	0.00	0.00	6.30	62.00	139.30	56.70	114.30	3.60	0.30	0.00	0.00	
13	0.00	0.00	0.00	6.00	66.50	136.70	60.50	101.65	3.30	0.00	0.00	0.00	
14	0.00	0.00	0.00	5.40	71.00	134.30	67.50	83.80	3.30	0.00	0.00	0.00	
15	0.00	0.00	0.00	5.10	76.20	131.90	74.87	71.00	3.00	0.00	0.00	0.00	
16	0.00	0.00	0.00	4.80	79.67	129.50	79.40	64.75	3.00	0.00	0.00	0.00	
17	0.00	0.00	0.00	4.20	78.60	127.50	81.70	62.00	3.00	0.00	0.00	0.00	
18	0.00	0.00	0.00	3.00	86.60	127.90	81.00	63.50	2.70	0.00	0.00	0.00	
19	0.00	0.00	0.00	3.00	97.10	128.30	77.27	66.50	3.00	0.00	0.00	0.00	
20	0.00	0.00	0.00	3.00	99.20	126.30	70.50	70.25	3.00	0.00	0.00	0.00	
21	0.00	0.00	0.00	4.20	99.55	119.50	62.25	73.53	3.00	0.00	0.00	0.00	
22	0.00	0.00	0.00	9.30	96.40	110.30	54.90	75.40	3.00	0.00	0.00	0.00	
23	0.00	0.00	0.00	9.60	90.45	104.10	53.25	74.33	2.70	0.00	0.00	0.00	
24	0.00	0.00	0.00	9.00	79.67	99.20	53.55	67.50	2.40	0.00	0.00	0.00	
25	0.00	0.00	0.00	8.10	67.00	87.65	56.10	55.20	2.10	0.00	0.00	0.00	
26	0.00	0.00	0.00	6.90	54.75	69.25	60.30	46.60	2.10	0.00	0.00	0.00	
27	0.00	0.00	0.00	6.90	48.75	52.65	67.00	26.60	2.10	0.00	0.00	0.00	
28	0.00	0.00	0.00	6.90	46.75	45.40	75.67	9.60	2.10	0.00	0.00	0.00	
29	0.00	0.00	0.00	7.50	47.50	41.00	85.20	8.10	2.10	0.00	0.00	0.00	
30	0.00	0.00	0.00	7.20	52.50	35.40	95.35	6.90	2.10	0.00		0.00	
31		0.00		6.60	60.30		106.70		2.10	0.00		0.00	
Total	0.00	0.00	0.00	198.60	1548.64	3317.33	1705.71	2689.26	106.80	10.20	0.00	0.00	9576.54 CMSDAY
Mean	0.00	0.00	0.00	6.41	49.96	110.58	55.02	89.64	3.45	0.33	0.00	0.00	26.24 CMS
Max	0.00	0.00	0.00	13.80	99.55	146.50	106.70	155.50	6.30	2.10	0.00	0.00	155.50 CMS
Min	0.00	0.00	0.00	0.00	0.00	35.40	12.00	6.90	2.10	0.00	0.00	0.00	0.00 CMS
Runoff	0.000	0.000	0.000	17.159	133.803	286.617	147.373	232.352	9.228	0.881	0.000	0.000	827.413 MCM

Momentary Peak 156.00 CMS, at 8.70 M (A.D), at 12.00 Hours, on Nov 5, 2001

Runoff Yield 14.62 Liters/Second/Square KM, Momentary Peak Yield 86.957 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Lam Takhong at Ban Mu Si, 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 Mu Si **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

Drainage Area 237 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 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 1989 to date.

Rating Operation

Period of Rating 1989 to date.

Rated by Float -

Rated by Current Meter 1989 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

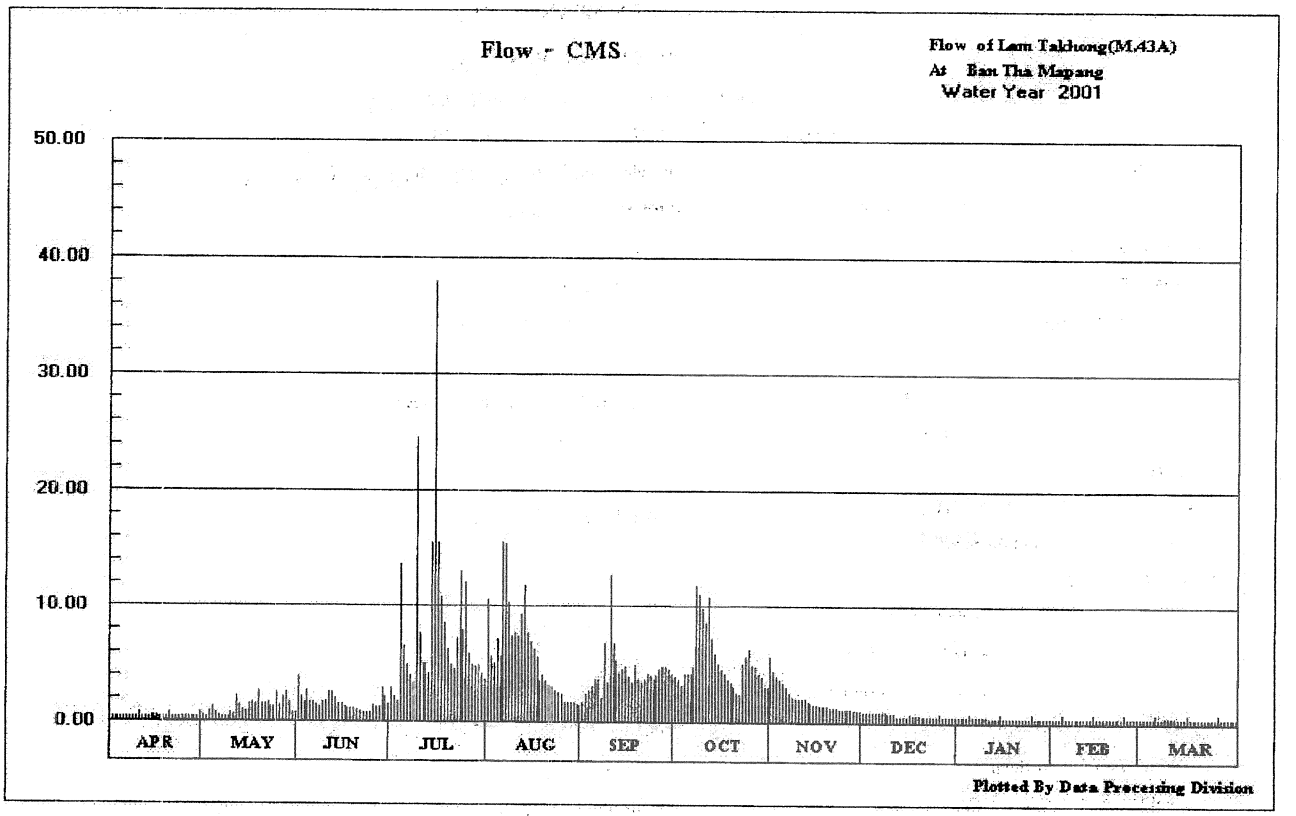
General Description Records fair. The weir situated above gage site.

Stage-discharge relation defined by 58 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.42	-0.32	0.03	-0.03	0.34	-0.11	0.03	0.13	-0.24	-0.32	-0.42	-0.42	
2	-0.42	-0.37	-0.07	-0.07	0.13	-0.06	0.02	0.06	-0.24	-0.32	-0.42	-0.42	
3	-0.42	-0.25	-0.10	-0.09	0.10	-0.04	-0.01	0.03	-0.24	-0.32	-0.42	-0.42	
4	-0.38	-0.16	-0.04	0.45	0.20	-0.02	0.05	0.02	-0.24	-0.32	-0.42	-0.42	
5	-0.40	-0.26	-0.10	0.17	0.13	0.02	0.05	0.00	-0.24	-0.32	-0.42	-0.42	
6	-0.42	-0.32	-0.11	0.09	0.53	0.02	0.05	-0.02	-0.24	-0.32	-0.43	-0.41	
7	-0.42	-0.37	-0.15	0.04	0.52	-0.08	0.08	-0.05	-0.24	-0.32	-0.43	-0.41	
8	-0.42	-0.40	-0.18	0.00	0.33	0.18	0.39	-0.07	-0.25	-0.33	-0.43	-0.35	
9	-0.42	-0.39	-0.11	0.76	0.21	0.00	0.36	-0.08	-0.26	-0.34	-0.43	-0.30	
10	-0.42	-0.38	-0.09	0.22	0.22	0.42	0.31	-0.08	-0.26	-0.34	-0.43	-0.30	
11	-0.42	-0.29	-0.05	0.10	0.21	0.18	0.26	-0.08	-0.26	-0.35	-0.44	-0.30	
12	-0.42	-0.07	-0.05	0.10	0.29	0.11	0.35	-0.08	-0.30	-0.36	-0.45	-0.30	
13	-0.41	-0.15	-0.08	0.05	0.39	0.05	0.20	-0.09	-0.30	-0.37	-0.46	-0.38	
14	-0.34	-0.22	-0.13	0.53	0.22	0.07	0.14	-0.11	-0.30	-0.37	-0.48	-0.38	
15	-0.32	-0.23	-0.12	1.07	0.19	0.08	0.10	-0.12	-0.30	-0.37	-0.48	-0.38	
16	-0.33	-0.13	-0.16	0.53	0.16	0.03	0.07	-0.13	-0.30	-0.38	-0.48	-0.39	
17	-0.36	-0.11	-0.19	0.35	0.12	0.00	0.05	-0.14	-0.29	-0.38	-0.48	-0.39	
18	-0.36	-0.12	-0.20	0.26	0.01	0.09	0.02	-0.14	-0.28	-0.38	-0.48	-0.41	
19	-0.36	-0.04	-0.20	0.16	0.04	0.02	0.00	-0.15	-0.28	-0.38	-0.50	-0.40	
20	-0.36	-0.12	-0.22	0.09	0.01	0.00	-0.02	-0.17	-0.30	-0.38	-0.50	-0.41	
21	-0.39	-0.12	-0.24	0.07	-0.01	0.02	-0.05	-0.18	-0.30	-0.39	-0.49	-0.42	
22	-0.40	-0.10	-0.26	0.20	-0.02	0.05	-0.06	-0.18	-0.30	-0.39	-0.49	-0.43	
23	-0.40	-0.17	-0.26	0.43	-0.04	0.04	0.10	-0.19	-0.31	-0.39	-0.49	-0.43	
24	-0.47	-0.18	-0.27	0.23	-0.05	0.02	0.13	-0.19	-0.31	-0.40	-0.45	-0.43	
25	-0.50	-0.05	-0.14	0.40	-0.06	0.04	0.16	-0.20	-0.31	-0.40	-0.41	-0.45	
26	-0.50	-0.15	-0.16	0.14	-0.10	0.07	0.09	-0.20	-0.31	-0.40	-0.41	-0.46	
27	-0.45	-0.07	-0.16	0.09	-0.10	0.08	0.08	-0.20	-0.32	-0.40	-0.40	-0.47	
28	-0.35	-0.05	-0.03	0.08	-0.10	0.08	0.05	-0.21	-0.32	-0.40	-0.40	-0.48	
29	-0.36	-0.11	-0.07	0.09	-0.10	0.07	0.03	-0.21	-0.32	-0.41		-0.48	
30	-0.39	-0.28	-0.13	0.05	-0.13	0.05	-0.02	-0.21	-0.32	-0.41		-0.48	
31		-0.26		0.02	-0.14		-0.02		-0.32	-0.41		-0.48	
Mean	-0.40	-0.20	-0.13	0.21	0.11	0.05	0.10	-0.11	-0.28	-0.37	-0.45	-0.41	
Max	-0.32	-0.04	0.03	1.07	0.53	0.42	0.39	0.13	-0.24	-0.32	-0.40	-0.30	1.07
Min	-0.50	-0.40	-0.27	-0.09	-0.14	-0.11	-0.06	-0.21	-0.32	-0.41	-0.50	-0.48	-0.50

Annual Max Momentary Gage Height 1.50 M (A.D), at 6.00 Hours, on Jul 15, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.88 M (A.D)
Left Bank Elevation 2.88 M (A.D)
Right Bank Elevation 3.46 M (A.D), Drainage Area 237 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.42	0.65	4.01	2.99	10.64	1.75	4.01	5.83	1.03	0.65	0.42	0.42	
2	0.42	0.54	2.31	2.31	5.83	2.48	3.84	4.52	1.03	0.65	0.42	0.42	
3	0.42	0.98	1.80	1.97	5.20	2.82	3.33	4.01	1.03	0.65	0.42	0.42	
4	0.51	1.47	2.82	13.75	7.30	3.16	4.35	3.84	1.03	0.65	0.42	0.42	
5	0.47	0.92	1.80	6.67	5.83	3.84	4.35	3.50	1.03	0.65	0.42	0.42	
6	0.42	0.65	1.75	5.03	15.69	3.84	4.35	3.16	1.03	0.65	0.40	0.44	
7	0.42	0.54	1.52	4.18	15.56	2.14	4.86	2.65	1.03	0.65	0.40	0.44	
8	0.42	0.47	1.36	3.50	10.38	6.88	11.94	2.31	0.98	0.63	0.40	0.58	
9	0.42	0.49	1.75	24.64	7.53	3.50	11.16	2.14	0.92	0.61	0.40	0.70	
10	0.42	0.51	1.97	7.76	7.76	12.82	9.86	2.14	0.92	0.61	0.40	0.70	
11	0.42	0.76	2.65	5.20	7.53	6.88	8.68	2.14	0.92	0.58	0.37	0.70	
12	0.42	2.31	2.65	5.20	9.37	5.41	10.90	2.14	0.70	0.56	0.35	0.70	
13	0.44	1.52	2.14	4.35	11.94	4.35	7.30	1.97	0.70	0.54	0.33	0.51	
14	0.61	1.14	1.64	15.69	7.76	4.69	6.04	1.75	0.70	0.54	0.28	0.51	
15	0.65	1.09	1.69	38.19	7.09	4.86	5.20	1.69	0.70	0.54	0.28	0.51	
16	0.63	1.64	1.47	15.69	6.46	4.01	4.69	1.64	0.70	0.51	0.28	0.49	
17	0.56	1.75	1.31	10.90	5.62	3.50	4.35	1.58	0.76	0.51	0.28	0.49	
18	0.56	1.69	1.25	8.68	3.67	5.03	3.84	1.58	0.81	0.51	0.28	0.44	
19	0.56	2.82	1.25	6.46	4.18	3.84	3.50	1.52	0.81	0.51	0.23	0.47	
20	0.56	1.69	1.14	5.03	3.67	3.50	3.16	1.41	0.70	0.51	0.23	0.44	
21	0.49	1.69	1.03	4.69	3.33	3.84	2.65	1.36	0.70	0.49	0.26	0.42	
22	0.47	1.80	0.92	7.30	3.16	4.35	2.48	1.36	0.70	0.49	0.26	0.40	
23	0.47	1.41	0.92	13.13	2.82	4.18	5.20	1.31	0.68	0.49	0.26	0.40	
24	0.30	1.36	0.87	7.99	2.65	3.84	5.83	1.31	0.68	0.47	0.35	0.40	
25	0.23	2.65	1.58	12.20	2.48	4.18	6.46	1.25	0.68	0.47	0.44	0.35	
26	0.23	1.52	1.47	6.04	1.80	4.69	5.03	1.25	0.68	0.47	0.44	0.33	
27	0.35	2.31	1.47	5.03	1.80	4.86	4.86	1.25	0.65	0.47	0.47	0.30	
28	0.58	2.65	2.99	4.86	1.80	4.86	4.35	1.20	0.65	0.47	0.47	0.28	
29	0.56	1.75	2.31	5.03	1.80	4.69	4.01	1.20	0.65	0.44		0.28	
30	0.49	0.81	1.64	4.35	1.64	4.35	3.16	1.20	0.65	0.44		0.26	
31		0.92		3.84	1.58		3.16		0.65	0.44		0.26	
Total	13.92	42.50	53.48	262.65	183.87	133.14	166.90	64.21	24.90	16.85	9.96	13.94	986.32 CMSDAY
Mean	0.46	1.37	1.78	8.47	5.93	4.44	5.38	2.14	0.80	0.54	0.36	0.45	2.70 CMS
Max	0.65	2.82	4.01	38.19	15.69	12.82	11.94	5.83	1.03	0.65	0.47	0.70	38.19 CMS
Min	0.23	0.47	0.87	1.97	1.58	1.75	2.48	1.20	0.65	0.44	0.23	0.28	0.23 CMS
Runoff	1.203	3.672	4.621	22.693	15.886	11.503	14.420	5.548	2.151	1.456	0.861	1.204	85.218 MCM

Momentary Peak 62.70 CMS, at 1.50 M (A.D), at 6 00 Hours, on Jul 15, 2001

Runoff Yield 11.40 Liters/Second/Square KM, Momentary Peak Yield 264.557 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 474 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +197.211 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the automatic gage building.

Elevation +202.291 (M.S.L.)

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 Float -

Rated by Current Meter 1965 - 1973, 2000 to date.

Stability of Channel Regimes Rather unstable because of backwater effect.

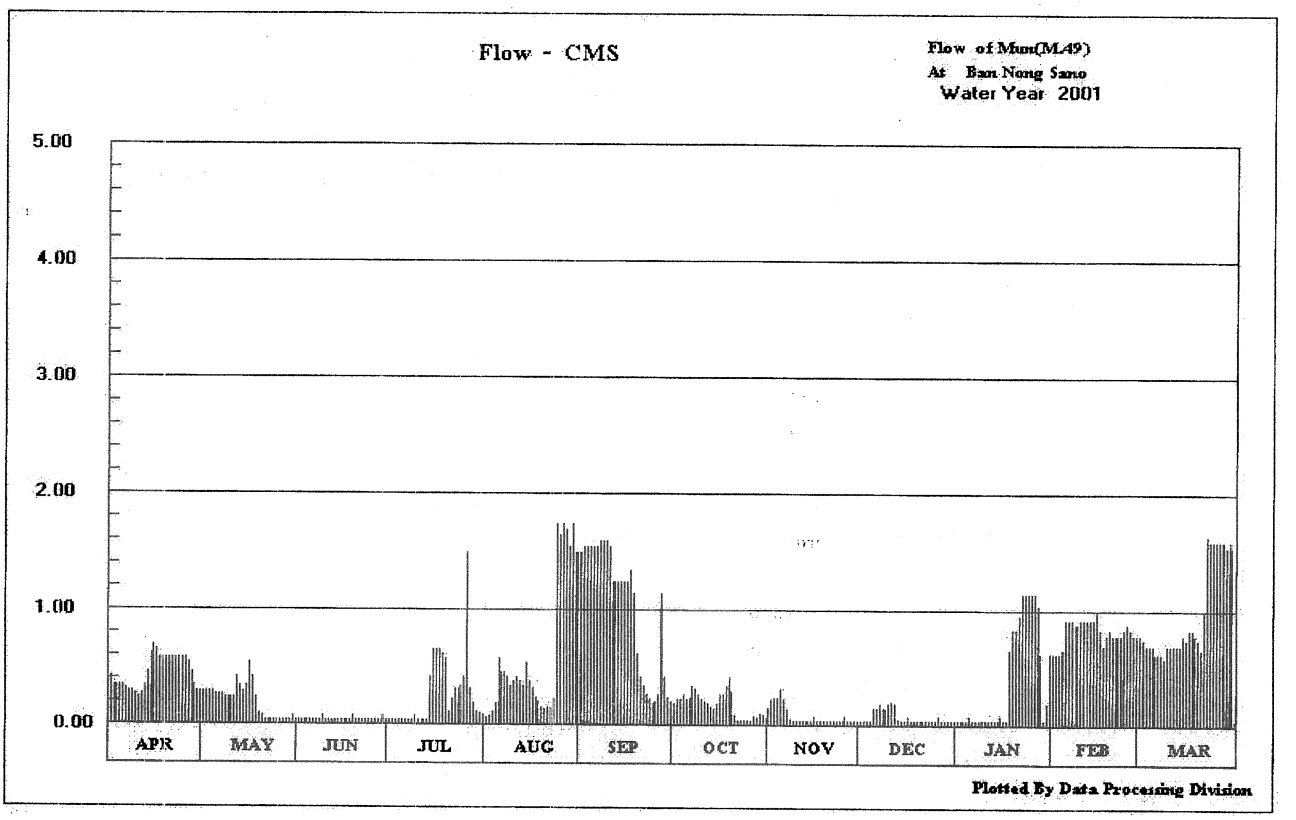
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 57 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	200.02	199.98	199.66	199.66	199.86	200.26	199.93	199.92	199.61	199.37	200.07	200.11	
2	200.00	199.98	199.66	199.64	199.87	200.27	199.95	199.95	199.64	199.40	200.07	200.10	
3	200.00	199.98	199.66	199.64	199.90	200.27	199.95	199.96	199.69	199.40	200.07	200.09	
4	200.00	199.98	199.65	199.62	199.93	200.27	199.97	199.96	199.83	199.41	200.08	200.09	
5	200.00	199.97	199.65	199.60	200.06	200.27	199.95	199.99	199.92	199.42	200.14	200.09	
6	199.99	199.97	199.65	199.56	200.03	200.27	199.96	199.95	199.92	199.41	200.14	200.07	
7	199.98	199.97	199.65	199.50	200.03	200.28	200.00	199.91	199.93	199.41	200.14	200.07	
8	199.98	199.96	199.64	199.51	200.02	200.28	199.99	199.85	199.92	199.41	200.13	200.07	
9	199.97	199.96	199.63	199.54	200.00	200.28	199.97	199.81	199.91	199.44	200.13	200.06	
10	199.96	199.96	199.63	199.54	200.01	200.27	199.95	199.79	199.93	199.45	200.14	200.09	
11	199.97	199.96	199.65	199.54	200.02	200.21	199.94	199.75	199.94	199.41	200.14	200.09	
12	200.00	200.02	199.65	199.56	200.01	200.21	199.93	199.71	199.93	199.42	200.14	200.09	
13	200.03	200.00	199.65	199.63	200.00	200.21	199.92	199.69	199.85	199.44	200.14	200.09	
14	200.07	199.98	199.65	200.02	200.05	200.21	199.91	199.71	199.75	199.44	200.14	200.09	
15	200.09	200.00	199.65	200.08	200.01	200.21	199.93	199.76	199.75	199.48	200.16	200.11	
16	200.08	200.05	199.65	200.08	199.99	200.21	199.97	199.76	199.75	199.52	200.12	200.10	
17	200.06	200.02	199.67	200.08	199.96	200.23	199.97	199.75	199.63	199.60	200.09	200.12	
18	200.06	199.96	199.69	200.07	199.94	200.19	200.00	199.73	199.56	200.08	200.11	200.12	
19	200.06	199.89	199.69	200.06	199.92	200.07	200.02	199.73	199.54	200.12	200.12	200.11	
20	200.06	199.82	199.71	199.90	199.91	200.02	199.98	199.75	199.52	200.12	200.11	200.10	
21	200.06	199.78	199.69	199.95	199.92	200.00	199.88	199.70	199.52	200.15	200.11	200.08	
22	200.06	199.72	199.67	199.99	199.92	199.97	199.81	199.65	199.49	200.19	200.11	200.16	
23	200.06	199.68	199.67	199.99	199.95	199.95	199.81	199.65	199.49	200.19	200.11	200.29	
24	200.06	199.64	199.68	200.00	200.31	199.93	199.81	199.64	199.49	200.19	200.12	200.28	
25	200.06	199.64	199.70	200.02	200.29	199.94	199.81	199.63	199.46	200.19	200.13	200.28	
26	200.05	199.66	199.71	200.26	200.31	199.97	199.82	199.58	199.40	200.19	200.12	200.28	
27	200.03	199.68	199.70	199.99	200.30	200.19	199.86	199.51	199.38	200.17	200.11	200.28	
28	200.00	199.66	199.69	199.93	200.27	200.02	199.86	199.49	199.35	200.07	200.11	200.28	
29	199.98	199.65	199.68	199.90	200.31	199.96	199.89	199.46	199.35	199.79		200.27	
30	199.98	199.64	199.67	199.89	200.26	199.94	199.88	199.56	199.37	199.93		200.28	
31		199.63		199.88	200.26		199.86		199.38	200.07		200.27	
Mean	200.02	199.86	199.67	199.83	200.05	200.15	199.92	199.74	199.65	199.74	200.12	200.15	
Max	200.09	200.05	199.71	200.26	200.31	200.28	200.02	199.99	199.94	200.19	200.16	200.29	200.31
Min	199.96	199.63	199.63	199.50	199.86	199.93	199.81	199.46	199.35	199.37	200.07	200.06	199.35

Annual Max Momentary Gage Height 200.37 M (MSL), at 14.00 Hours, on Aug 29, 2001
Zero Gage at Bottom Elevation 197.21 M (MSL), River Bed 197.10 M (MSL)
Left Bank Elevation 200.82 M (MSL)
Right Bank Elevation 200.67 M (MSL), Drainage Area 474 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.43	0.31	0.00	0.00	0.08	1.50	0.20	0.17	0.00	0.00	0.63	0.79	
2	0.35	0.31	0.00	0.00	0.09	1.55	0.24	0.24	0.00	0.00	0.63	0.75	
3	0.35	0.31	0.00	0.00	0.13	1.55	0.24	0.26	0.00	0.00	0.63	0.71	
4	0.35	0.31	0.00	0.00	0.20	1.55	0.28	0.26	0.04	0.00	0.67	0.71	
5	0.35	0.28	0.00	0.00	0.59	1.55	0.24	0.33	0.17	0.00	0.93	0.71	
6	0.33	0.28	0.00	0.00	0.47	1.55	0.26	0.24	0.17	0.00	0.93	0.63	
7	0.31	0.28	0.00	0.00	0.47	1.60	0.35	0.15	0.20	0.00	0.93	0.63	
8	0.31	0.26	0.00	0.00	0.43	1.60	0.33	0.07	0.17	0.00	0.89	0.63	
9	0.28	0.26	0.00	0.00	0.35	1.60	0.28	0.01	0.15	0.00	0.89	0.59	
10	0.26	0.26	0.00	0.00	0.39	1.55	0.24	0.00	0.20	0.00	0.93	0.71	
11	0.28	0.26	0.00	0.00	0.43	1.25	0.22	0.00	0.22	0.00	0.93	0.71	
12	0.35	0.43	0.00	0.00	0.39	1.25	0.20	0.00	0.20	0.00	0.93	0.71	
13	0.47	0.35	0.00	0.00	0.35	1.25	0.17	0.00	0.07	0.00	0.93	0.71	
14	0.63	0.31	0.00	0.43	0.55	1.25	0.15	0.00	0.00	0.00	0.93	0.71	
15	0.71	0.35	0.00	0.67	0.39	1.25	0.20	0.00	0.00	0.00	1.02	0.79	
16	0.67	0.55	0.00	0.67	0.33	1.25	0.28	0.00	0.00	0.00	0.84	0.75	
17	0.59	0.43	0.00	0.67	0.26	1.35	0.28	0.00	0.00	0.00	0.71	0.84	
18	0.59	0.26	0.00	0.63	0.22	1.16	0.35	0.00	0.00	0.67	0.79	0.84	
19	0.59	0.12	0.00	0.59	0.17	0.63	0.43	0.00	0.00	0.84	0.84	0.79	
20	0.59	0.03	0.00	0.13	0.15	0.43	0.31	0.00	0.00	0.84	0.79	0.75	
21	0.59	0.00	0.00	0.24	0.17	0.35	0.10	0.00	0.00	0.97	0.79	0.67	
22	0.59	0.00	0.00	0.33	0.17	0.28	0.01	0.00	0.00	1.16	0.79	1.02	
23	0.59	0.00	0.00	0.33	0.24	0.24	0.01	0.00	0.00	1.16	0.79	1.65	
24	0.59	0.00	0.00	0.35	1.76	0.20	0.01	0.00	0.00	1.16	0.84	1.60	
25	0.59	0.00	0.00	0.43	1.65	0.22	0.01	0.00	0.00	1.16	0.89	1.60	
26	0.55	0.00	0.00	1.50	1.76	0.28	0.03	0.00	0.00	1.16	0.84	1.60	
27	0.47	0.00	0.00	0.33	1.70	1.16	0.08	0.00	0.00	1.06	0.79	1.60	
28	0.35	0.00	0.00	0.20	1.55	0.43	0.08	0.00	0.00	0.63	0.79	1.60	
29	0.31	0.00	0.00	0.13	1.76	0.26	0.12	0.00	0.00	0.00		1.55	
30	0.31	0.00	0.00	0.12	1.50	0.22	0.10	0.00	0.00	0.20		1.60	
31		0.00		0.10	1.50		0.08		0.00	0.63		1.55	
Total	13.73	5.95	0.00	7.85	20.20	30.31	5.88	1.73	1.59	11.64	23.29	30.50	152.67 CMSDAY
Mean	0.46	0.19	0.00	0.25	0.65	1.01	0.19	0.06	0.05	0.38	0.83	0.98	0.42 CMS
Max	0.71	0.55	0.00	1.50	1.76	1.60	0.43	0.33	0.22	1.16	1.02	1.65	1.76 CMS
Min	0.26	0.00	0.00	0.00	0.08	0.20	0.01	0.00	0.00	0.00	0.63	0.59	0.00 CMS
Runoff	1.186	0.514	0.000	0.678	1.745	2.619	0.508	0.149	0.137	1.006	2.012	2.635	13.191 MCM

Momentary Peak 2.15 CMS, at 200.37 M (MSL), at 14.00 Hours, on Aug 29, 2001

Runoff Yield 0.88 Liters/Second/Square KM, Momentary Peak Yield 4.536 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Lam Sae at 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

Drainage Area 875 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 Float -

Rated by Current Meter 1965 - 1982, 1999 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

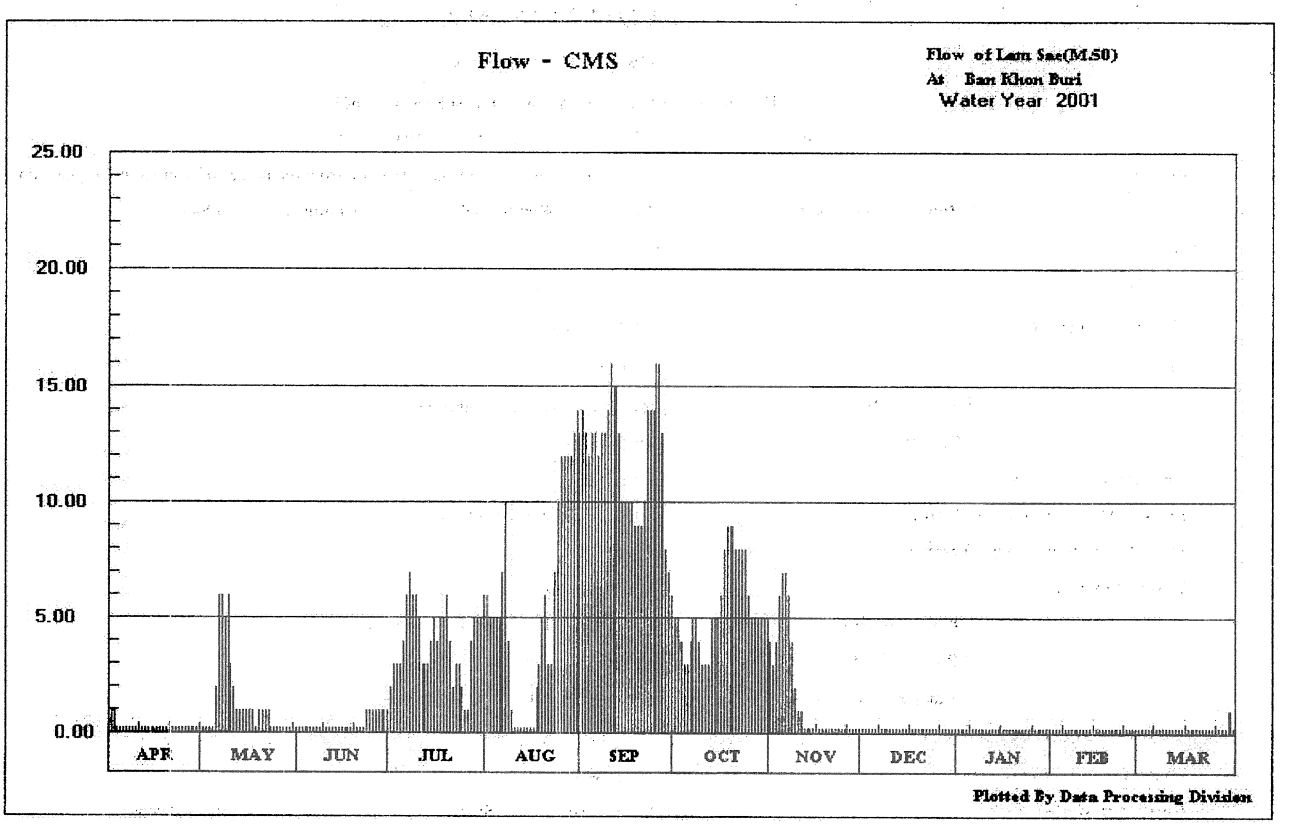
Overbank Flow Conditions No overbank flow.

General Description Records fair. The weir situated about 2 kilometers downstream from the gage site.
Stage-discharge relation defined by 45 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.86	1.68	1.69	1.91	2.02	2.17	1.99	1.97	1.66	1.52	1.77	1.49	
2	1.82	1.68	1.70	1.93	2.00	2.15	2.00	1.94	1.66	1.51	1.76	1.48	
3	1.78	1.65	1.75	1.94	2.00	2.14	1.97	1.97	1.66	1.49	1.76	1.47	
4	1.77	1.72	1.72	1.94	2.00	2.15	1.94	2.01	1.66	1.47	1.76	1.44	
5	1.74	1.92	1.70	1.96	1.99	2.15	1.93	2.04	1.66	1.44	1.76	1.40	
6	1.72	2.01	1.67	2.01	2.03	2.14	1.96	2.04	1.66	1.42	1.76	1.36	
7	1.69	2.01	1.66	2.03	2.09	2.15	1.98	2.01	1.65	1.39	1.76	1.35	
8	1.68	2.00	1.66	2.02	1.97	2.16	1.98	1.97	1.65	1.37	1.75	1.32	
9	1.66	2.01	1.65	2.01	1.87	2.18	1.97	1.91	1.64	1.36	1.75	1.29	
10	1.65	1.95	1.65	1.99	1.81	2.21	1.95	1.86	1.64	1.34	1.75	1.25	
11	1.64	1.90	1.71	1.95	1.79	2.20	1.94	1.82	1.64	1.32	1.75	1.21	
12	1.68	1.88	1.73	1.93	1.76	2.19	1.94	1.80	1.64	1.30	1.74	1.16	
13	1.68	1.89	1.71	1.94	1.73	2.16	2.00	1.76	1.62	1.27	1.73	1.11	
14	1.70	1.87	1.69	1.97	1.72	2.10	2.00	1.75	1.62	1.27	1.72	1.09	
15	1.70	1.86	1.69	1.98	1.72	2.10	2.00	1.73	1.62	1.36	1.70	1.08	
16	1.72	1.85	1.69	1.97	1.78	2.10	2.01	1.72	1.61	1.59	1.71	1.06	
17	1.75	1.83	1.75	1.98	1.90	2.10	2.05	1.71	1.60	1.74	1.67	1.01	
18	1.77	1.81	1.79	2.00	1.93	2.08	2.07	1.71	1.59	1.74	1.65	1.01	
19	1.81	1.83	1.78	2.01	1.98	2.07	2.08	1.71	1.58	1.73	1.65	1.01	
20	1.80	1.83	1.78	1.97	2.01	2.08	2.08	1.70	1.57	1.69	1.58	0.98	
21	1.79	1.85	1.78	1.92	1.95	2.10	2.06	1.72	1.56	1.69	1.57	0.95	
22	1.79	1.83	1.80	1.95	1.94	2.17	2.05	1.70	1.55	1.68	1.57	0.91	
23	1.78	1.79	1.83	1.94	2.04	2.18	2.05	1.70	1.54	1.71	1.56	0.91	
24	1.76	1.75	1.83	1.91	2.09	2.18	2.06	1.70	1.54	1.70	1.54	0.91	
25	1.75	1.72	1.85	1.89	2.13	2.21	2.02	1.68	1.64	1.71	1.53	0.90	
26	1.72	1.72	1.86	1.88	2.13	2.22	2.00	1.68	1.64	1.72	1.52	0.88	
27	1.70	1.70	1.88	1.96	2.13	2.15	2.00	1.66	1.63	1.78	1.52	1.34	
28	1.69	1.70	1.86	1.98	2.14	2.06	2.00	1.67	1.61	1.81	1.50	1.76	
29	1.68	1.70	1.84	1.99	2.16	2.03	2.00	1.67	1.59	1.80		1.78	
30	1.68	1.59	1.88	2.00	2.18	2.02	2.00	1.67	1.56	1.80		1.87	
31		1.59		2.01	2.16		2.00		1.55	1.80		1.86	
Mean	1.73	1.82	1.75	1.96	1.97	2.14	2.00	1.80	1.61	1.57	1.67	1.25	
Max	1.86	2.01	1.88	2.03	2.18	2.22	2.08	2.04	1.66	1.81	1.77	1.87	2.22
Min	1.64	1.55	1.65	1.88	1.72	2.02	1.93	1.66	1.54	1.27	1.50	0.88	0.88

Annual Max Momentary Gage Height 2.24 M (A.D), at 15.00 Hours, on Sep 25, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -1.59 M (A.D)
Left Bank Elevation 2.67 M (A.D)
Right Bank Elevation 3.43 M (A.D), Drainage Area 875 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.0	0.1	0.1	1.9	6.3	13.8	4.9	4.2	0.1	0.0	0.2	0.0	
2	0.5	0.1	0.1	2.6	5.3	12.8	5.3	3.0	0.1	0.0	0.2	0.0	
3	0.2	0.0	0.2	3.0	5.3	12.2	4.2	4.2	0.1	0.0	0.2	0.0	
4	0.2	0.1	0.1	3.0	5.3	12.8	3.0	5.8	0.1	0.0	0.2	0.0	
5	0.1	2.3	0.1	3.8	4.9	12.8	2.6	7.3	0.1	0.0	0.2	0.0	
6	0.1	5.8	0.1	5.8	6.8	12.2	3.8	7.3	0.1	0.0	0.2	0.0	
7	0.1	5.8	0.1	6.8	9.7	12.8	4.5	5.8	0.0	0.0	0.2	0.0	
8	0.1	5.3	0.1	6.3	4.2	13.3	4.5	4.2	0.0	0.0	0.2	0.0	
9	0.1	5.8	0.0	5.8	1.1	14.3	4.2	1.9	0.0	0.0	0.2	0.0	
10	0.0	3.4	0.0	4.9	0.3	15.9	3.4	1.0	0.0	0.0	0.2	0.0	
11	0.0	1.5	0.1	3.4	0.2	15.3	3.0	0.5	0.0	0.0	0.2	0.0	
12	0.1	1.2	0.1	2.6	0.2	14.8	3.0	0.2	0.0	0.0	0.1	0.0	
13	0.1	1.4	0.1	3.0	0.1	13.3	5.3	0.2	0.0	0.0	0.1	0.0	
14	0.1	1.1	0.1	4.2	0.1	10.2	5.3	0.2	0.0	0.0	0.1	0.0	
15	0.1	1.0	0.1	4.5	0.1	10.2	5.3	0.1	0.0	0.0	0.1	0.0	
16	0.1	0.9	0.1	4.2	0.2	10.2	5.8	0.1	0.0	0.0	0.1	0.0	
17	0.2	0.6	0.2	4.5	1.5	10.2	7.8	0.1	0.0	0.1	0.1	0.0	
18	0.2	0.3	0.2	5.3	2.6	9.2	8.7	0.1	0.0	0.1	0.0	0.0	
19	0.3	0.6	0.2	5.8	4.5	8.7	9.2	0.1	0.0	0.1	0.0	0.0	
20	0.2	0.6	0.2	4.2	5.8	9.2	9.2	0.1	0.0	0.1	0.0	0.0	
21	0.2	0.9	0.2	2.3	3.4	10.2	8.2	0.1	0.0	0.1	0.0	0.0	
22	0.2	0.6	0.2	3.4	3.0	13.8	7.8	0.1	0.0	0.1	0.0	0.0	
23	0.2	0.2	0.6	3.0	7.3	14.3	7.8	0.1	0.0	0.1	0.0	0.0	
24	0.2	0.2	0.6	1.9	9.7	14.3	8.2	0.1	0.0	0.1	0.0	0.0	
25	0.2	0.1	0.9	1.4	11.7	15.9	6.3	0.1	0.0	0.1	0.0	0.0	
26	0.1	0.1	1.0	1.2	11.7	16.4	5.3	0.1	0.0	0.1	0.0	0.0	
27	0.1	0.1	1.2	3.8	11.7	12.8	5.3	0.1	0.0	0.2	0.0	0.0	
28	0.1	0.1	1.0	4.5	12.2	8.2	5.3	0.1	0.0	0.3	0.0	0.2	
29	0.1	0.1	0.7	4.9	13.3	6.8	5.3	0.1	0.0	0.2		0.2	
30	0.1	0.1	1.2	5.3	14.3	6.3	5.3	0.1	0.0	0.2		1.1	
31		0.1		5.8	13.3		5.3		0.0	0.2		1.0	
Total	5.3	40.5	9.9	123.1	176.1	363.2	173.1	47.4	0.6	2.1	2.8	2.5	946.6 CMSDAY
Mean	0.2	1.3	0.3	4.0	5.7	12.1	5.6	1.6	0.0	0.1	0.1	0.1	2.6 CMS
Max	1.0	5.8	1.2	6.8	14.3	16.4	9.2	7.3	0.1	0.3	0.2	1.1	16.4 CMS
Min	0.0	0.0	0.0	1.2	0.1	6.3	2.6	0.1	0.0	0.0	0.0	0.0	0.0 CMS
Runoff	0.46	3.50	0.86	10.64	15.22	31.38	14.96	4.10	0.05	0.18	0.24	0.22	81.79 MCM

Momentary Peak 17.58 CMS, at 2.24 M (A.D), at 15.00 Hours, on Sep 25, 2001

Runoff Yield 2.96 Liters/Second/Square KM. Momentary Peak Yield 20.091 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 586 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 mean 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 Float -

Rated by Current Meter 1965 - 1968, 1972 - 1981, 1987 to date.

Stability of Channel Regimes Stable.

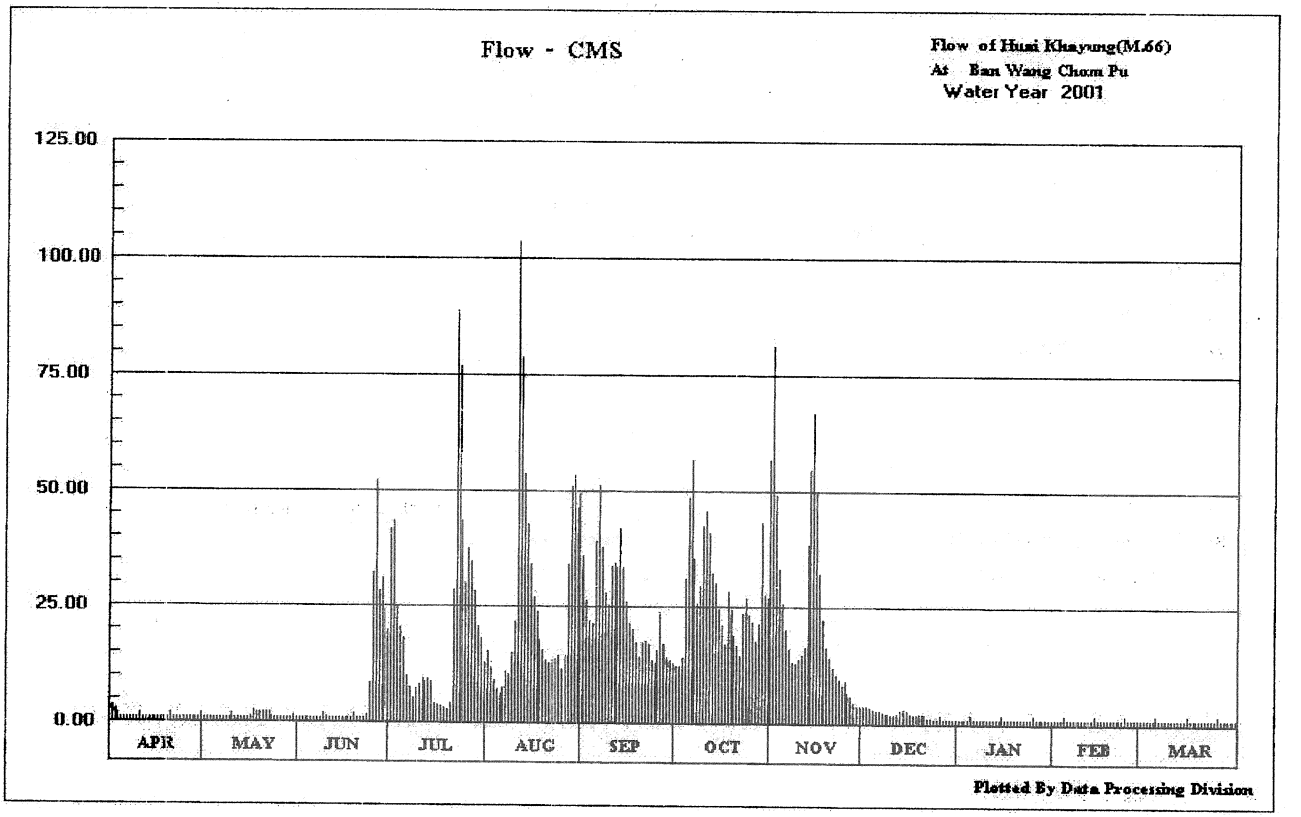
Overbank Flow Conditions No overbank flow.

General Description Records very good. Stage-discharge relation defined by 100 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.53	-1.05	-0.93	1.23	0.19	1.02	0.04	1.75	-0.47	-0.86	-1.11	-1.20	
2	-0.58	-1.06	-0.94	1.30	0.02	0.66	0.04	2.53	-0.48	-0.86	-1.12	-1.20	
3	-0.67	-1.07	-0.95	0.61	-0.13	0.49	0.13	1.49	-0.52	-0.84	-1.12	-1.20	
4	-0.80	-1.07	-0.96	0.42	-0.24	0.46	0.84	0.92	-0.54	-0.82	-1.12	-1.21	
5	-0.92	-1.07	-0.97	0.33	-0.29	1.14	1.47	0.64	-0.57	-0.83	-1.12	-1.21	
6	-0.97	-1.07	-0.98	-0.08	-0.22	1.56	1.75	0.41	-0.59	-0.91	-1.12	-1.21	
7	-1.03	-1.07	-0.99	-0.23	-0.04	1.09	1.00	0.22	-0.62	-0.95	-1.12	-1.21	
8	-1.02	-1.07	-1.04	-0.33	-0.06	0.72	0.64	0.08	-0.63	-0.95	-1.12	-1.20	
9	-1.05	-1.07	-1.03	-0.24	0.18	0.63	0.78	0.07	-0.65	-0.99	-1.13	-1.20	
10	-1.06	-1.06	-0.76	-0.19	0.48	0.94	1.26	0.12	-0.67	-1.00	-1.14	-1.20	
11	-1.07	-0.98	-0.81	-0.12	3.17	0.97	1.37	0.16	-0.67	-1.00	-1.15	-1.20	
12	-1.10	-0.85	-0.90	-0.15	2.46	0.93	1.21	0.24	-0.66	-1.00	-1.15	-1.20	
13	-1.06	-0.85	-0.91	-0.12	1.64	1.24	0.89	1.12	-0.59	-0.98	-1.15	-1.19	
14	-1.03	-0.85	-0.91	-0.16	1.27	0.93	0.81	1.67	-0.56	-0.99	-1.15	-1.19	
15	-1.04	-0.85	-0.92	-0.39	0.96	0.65	0.59	2.08	-0.58	-0.98	-1.16	-1.20	
16	-1.05	-0.77	-0.86	-0.46	0.69	0.46	0.45	1.51	-0.63	-0.99	-1.17	-1.20	
17	-1.07	-0.60	-0.82	-0.51	0.57	0.41	0.26	0.88	-0.67	-0.99	-1.18	-1.21	
18	-1.08	-0.63	-0.82	-0.54	0.31	0.28	0.74	0.50	-0.69	-1.00	-1.18	-1.22	
19	-1.08	-0.65	-0.90	-0.58	0.21	0.13	0.59	0.24	-0.66	-1.01	-1.17	-1.21	
20	-1.08	-0.64	-0.98	-0.39	0.10	0.28	0.35	0.13	-0.64	-1.02	-1.17	-1.20	
21	-1.03	-0.64	-1.00	0.75	0.06	0.30	0.25	0.02	-0.68	-1.03	-1.18	-1.20	
22	-1.04	-0.66	-0.97	2.75	0.09	0.27	0.15	-0.06	-0.75	-1.04	-1.18	-1.19	
23	-1.04	-0.77	-0.73	2.41	0.12	0.09	0.55	-0.12	-0.76	-1.03	-1.19	-1.19	
24	-1.05	-0.81	-0.17	1.29	0.14	0.07	0.69	-0.18	-0.79	-1.02	-1.19	-1.19	
25	-1.06	-0.83	0.89	0.81	0.00	0.21	0.54	-0.13	-0.80	-1.03	-1.18	-1.19	
26	-1.06	-0.83	1.59	1.08	0.14	0.57	0.48	-0.28	-0.83	-1.06	-1.19	-1.19	
27	-1.06	-0.86	0.74	0.98	0.96	0.27	0.30	-0.31	-0.83	-1.08	-1.20	-1.19	
28	-1.06	-0.93	0.84	0.74	1.55	0.13	0.46	-0.38	-0.84	-1.09	-1.18	-1.18	
29	-1.06	-0.92	0.58	0.43	1.63	0.09	1.28	-0.42	-0.84	-1.10		-1.17	
30	-1.05	-0.90	0.40	0.32	1.39	0.06	0.71	-0.43	-0.86	-1.10		-1.17	
31		-0.98		0.07	1.50		0.69		-0.85	-1.10		-1.08	
Mean	-0.99	-0.89	-0.54	0.36	0.61	0.57	0.69	0.48	-0.67	-0.99	-1.16	-1.19	
Max	-0.53	-0.60	1.59	2.75	3.17	1.56	1.75	2.53	-0.47	-0.82	-1.11	-1.08	3.17
Min	-1.10	-1.07	-1.04	-0.58	-0.29	0.06	0.04	-0.43	-0.86	-1.10	-1.20	-1.22	-1.22

Annual Max Momentary Gage Height 3.70 M (A.D), at 18.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -1.51 M (A.D)
Left Bank Elevation 4.42 M (A.D)
Right Bank Elevation 5.40 M (A.D), Drainage Area 586 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.70	0.35	0.76	42.04	15.70	36.24	12.76	57.40	4.06	1.10	0.24	0.10	
2	3.20	0.33	0.72	44.00	12.38	26.56	12.76	81.55	4.04	1.10	0.22	0.10	
3	2.37	0.31	0.68	25.26	9.56	22.27	14.50	49.60	3.80	1.20	0.22	0.10	
4	1.40	0.31	0.63	20.66	7.62	21.58	31.38	33.54	3.60	1.30	0.22	0.09	
5	0.81	0.31	0.58	18.66	6.77	39.52	49.00	26.04	3.30	1.25	0.22	0.09	
6	0.58	0.31	0.54	10.48	7.96	51.70	57.40	20.43	3.10	0.85	0.22	0.09	
7	0.39	0.31	0.49	7.79	11.24	38.13	35.70	16.32	2.82	0.68	0.22	0.09	
8	0.41	0.31	0.37	5.88	10.86	28.14	26.04	13.52	2.73	0.68	0.22	0.10	
9	0.35	0.31	0.39	7.62	15.50	25.78	29.76	13.33	2.55	0.49	0.21	0.10	
10	0.33	0.33	1.68	8.48	22.04	34.08	42.88	14.30	2.37	0.45	0.19	0.10	
11	0.31	0.54	1.35	9.74	103.95	34.89	46.03	15.10	2.37	0.45	0.18	0.10	
12	0.25	1.15	0.90	9.20	79.14	33.81	41.48	16.74	2.46	0.45	0.18	0.10	
13	0.33	1.15	0.85	9.74	54.10	42.32	32.73	38.96	3.10	0.54	0.18	0.11	
14	0.39	1.15	0.85	9.02	43.16	33.81	30.57	55.00	3.40	0.49	0.18	0.11	
15	0.37	1.15	0.81	4.44	34.62	26.30	24.75	67.30	3.20	0.54	0.16	0.10	
16	0.35	1.61	1.10	4.08	27.34	21.58	21.35	50.20	2.73	0.49	0.15	0.10	
17	0.31	3.00	1.30	3.90	24.25	20.43	17.16	32.46	2.37	0.49	0.13	0.09	
18	0.29	2.73	1.30	3.60	18.22	17.58	28.68	22.50	2.19	0.45	0.13	0.08	
19	0.29	2.55	0.90	3.20	16.11	14.50	24.75	16.74	2.46	0.43	0.15	0.09	
20	0.29	2.64	0.54	4.44	13.90	17.58	19.10	14.50	2.64	0.41	0.15	0.10	
21	0.39	2.64	0.45	28.95	13.14	18.00	16.95	12.38	2.28	0.39	0.13	0.10	
22	0.37	2.46	0.58	89.25	13.71	17.37	14.90	10.86	1.75	0.37	0.13	0.11	
23	0.37	1.61	1.89	77.44	14.30	13.71	23.75	9.74	1.68	0.39	0.11	0.11	
24	0.35	1.35	8.84	43.72	14.70	13.33	27.34	8.66	1.47	0.41	0.11	0.11	
25	0.33	1.25	32.73	30.57	12.00	16.11	23.50	9.56	1.40	0.39	0.13	0.11	
26	0.33	1.25	52.60	37.86	14.70	24.25	22.04	6.94	1.25	0.33	0.11	0.11	
27	0.33	1.10	28.68	35.16	34.62	17.37	18.00	6.36	1.25	0.29	0.10	0.11	
28	0.33	0.76	31.38	28.68	51.40	14.50	21.58	4.68	1.20	0.27	0.13	0.13	
29	0.33	0.81	24.50	20.89	53.80	13.71	43.44	4.16	1.20	0.25		0.15	
30	0.35	0.90	20.20	18.44	46.61	13.14	27.87	4.14	1.10	0.25		0.15	
31		0.54		13.33	49.90		27.34		1.15	0.25		0.29	
Total	20.20	35.52	218.59	676.52	853.30	748.29	865.49	733.01	75.02	17.43	4.72	3.42	4251.51 CMSDAY
Mean	0.67	1.15	7.29	21.82	27.53	24.94	27.92	24.43	2.42	0.56	0.17	0.11	11.65 CMS
Max	3.70	3.00	52.60	89.25	103.95	51.70	57.40	81.55	4.06	1.30	0.24	0.29	103.95 CMS
Min	0.25	0.31	0.37	3.20	6.77	13.14	12.76	4.14	1.10	0.25	0.10	0.08	0.08 CMS
Runoff	1.745	3.069	18.886	58.451	73.725	64.652	74.778	63.332	6.482	1.506	0.408	0.295	367.331 MCM

Momentary Peak 124.00 CMS, at 3.70 M (A.D), at 18.00 Hours, on Aug 11, 2001

Runoff Yield 19.88 Liters/Second/Square KM, Momentary Peak Yield 211.604 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,046 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 Float -

Rated by Current Meter 1969 - 1971, 1979, 1981 to date.

Stability of Channel Regimes Stable.

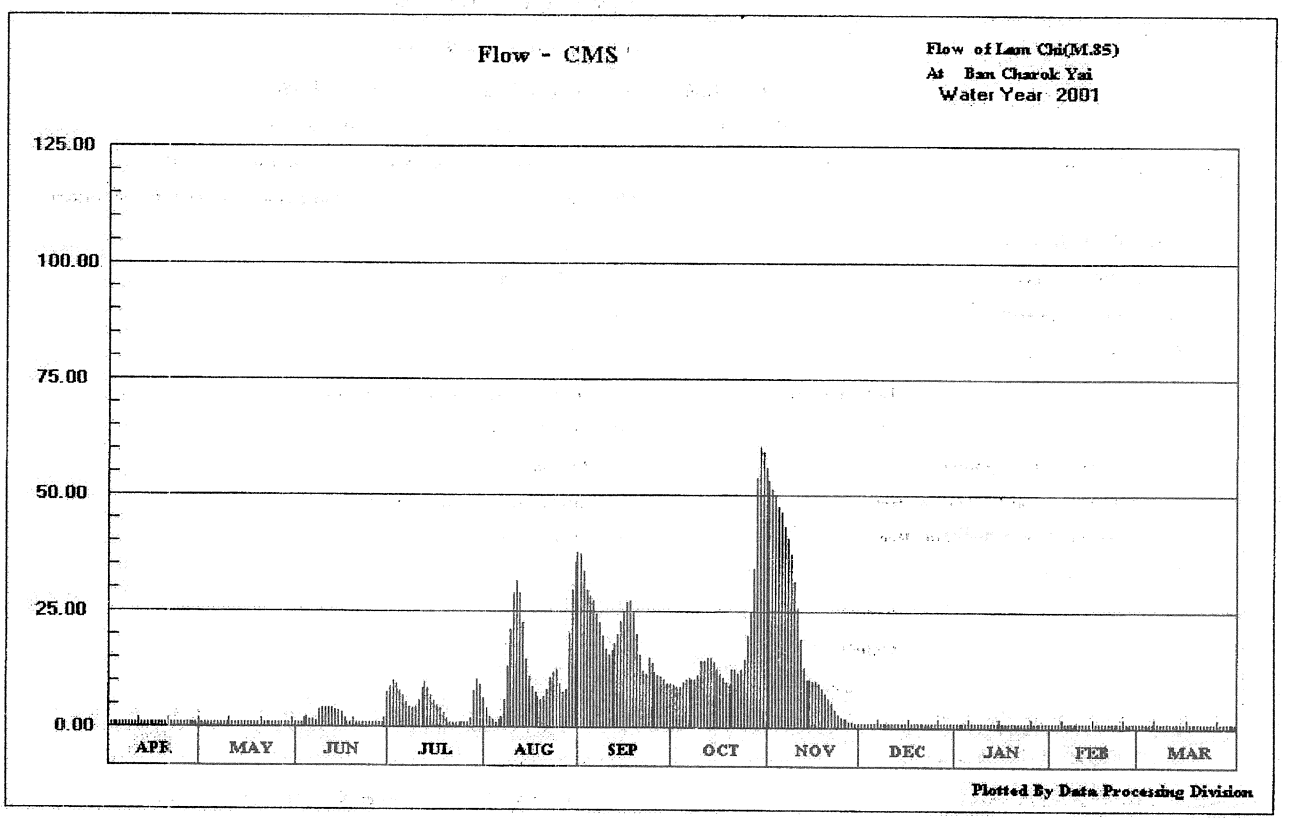
Overbank Flow Conditions Overbank flow starts at elevation +3.830 m.(A.D.) and is including overbank flow.

General Description Records fair. Flow effected by the local weir during Dec. 1, 95 - Mar. 31, 96, discharge estimated by recession equation. Stage-discharge relation by 75 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.15	-0.25	-0.22	1.93	1.37	3.66	1.98	3.97	0.63	0.19	-0.20	-0.30	
2	0.17	-0.25	-0.23	2.06	1.05	3.55	1.95	3.94	0.61	0.16	-0.22	-0.30	
3	0.13	-0.24	0.97	2.01	0.84	3.41	1.93	3.92	0.57	0.16	-0.21	-0.31	
4	0.08	-0.23	1.01	1.85	0.70	3.35	2.03	3.88	0.53	0.13	-0.21	-0.30	
5	0.05	-0.23	0.90	1.73	0.85	3.30	2.09	3.86	0.49	0.04	-0.22	-0.31	
6	0.03	-0.22	0.85	1.55	1.03	3.14	2.11	3.81	0.48	-0.18	-0.23	-0.31	
7	-0.03	-0.22	0.80	1.41	1.61	3.03	2.10	3.75	0.47	-0.04	-0.24	-0.30	
8	-0.06	-0.22	1.29	1.37	2.35	2.85	2.10	3.66	0.46	-0.07	-0.25	-0.29	
9	-0.07	-0.23	1.37	1.38	2.92	2.64	2.18	3.47	0.45	-0.09	-0.26	-0.27	
10	-0.07	-0.23	1.36	1.59	3.39	2.56	2.45	3.22	0.44	-0.12	-0.25	-0.25	
11	-0.09	-0.22	1.35	1.89	3.47	2.62	2.45	2.79	0.43	-0.13	-0.24	-0.28	
12	-0.10	-0.23	1.34	2.03	3.39	2.73	2.52	2.33	0.43	-0.13	-0.24	-0.29	
13	-0.11	-0.23	1.31	1.90	3.03	2.87	2.50	2.10	0.42	-0.13	-0.24	-0.29	
14	-0.12	0.34	1.27	1.72	2.49	3.05	2.43	2.09	0.41	-0.11	-0.25	-0.28	
15	-0.15	0.38	1.18	1.56	2.15	3.19	2.28	2.06	0.38	-0.13	-0.25	-0.27	
16	-0.16	0.20	0.95	1.44	1.94	3.29	2.20	2.06	0.37	-0.13	-0.26	-0.26	
17	-0.18	0.07	0.65	1.34	1.80	3.30	2.13	2.01	0.35	-0.12	-0.24	-0.25	
18	-0.20	0.04	0.35	1.19	1.68	3.18	2.03	1.90	0.34	-0.12	-0.21	-0.22	
19	-0.22	0.03	0.15	0.86	1.63	2.87	1.97	1.76	0.33	-0.12	-0.22	-0.17	
20	-0.23	0.02	0.02	0.51	1.71	2.55	2.30	1.67	0.31	-0.13	-0.24	-0.12	
21	-0.23	-0.07	-0.04	0.38	1.88	2.27	2.30	1.54	0.30	-0.12	-0.25	-0.12	
22	-0.24	-0.10	-0.01	0.31	2.11	2.20	2.22	1.32	0.29	-0.12	-0.25	-0.12	
23	-0.24	-0.16	0.09	0.24	2.24	2.50	2.30	1.17	0.28	-0.13	-0.25	-0.20	
24	-0.25	-0.18	0.10	0.17	2.29	2.41	2.48	0.99	0.26	-0.12	-0.24	-0.20	
25	-0.25	-0.20	0.11	0.12	2.01	2.23	2.85	0.93	0.24	-0.14	-0.24	-0.19	
26	-0.25	-0.21	0.14	0.11	1.79	2.18	3.17	0.83	0.24	-0.18	-0.27	-0.18	
27	-0.25	-0.22	0.29	0.93	1.87	2.16	3.57	0.80	0.23	-0.18	-0.27	-0.18	
28	-0.25	-0.22	0.30	1.83	2.89	2.10	3.98	0.75	0.22	-0.18	-0.27	-0.18	
29	-0.25	-0.22	0.75	2.08	3.41	2.00	4.06	0.71	0.20	-0.19		-0.18	
30	-0.25	-0.22	1.79	1.97	3.61	1.99	4.05	0.68	0.20	-0.19		-0.18	
31		-0.22		1.65	3.67		4.01		0.20	-0.19		-0.22	
Mean	-0.12	-0.13	0.67	1.33	2.17	2.77	2.54	2.27	0.37	-0.09	-0.24	-0.24	
Max	0.17	0.38	1.79	2.08	3.67	3.66	4.06	3.97	0.63	0.19	-0.20	-0.12	4.06
Min	-0.25	-0.25	-0.23	0.11	0.70	1.99	1.93	0.68	0.20	-0.19	-0.27	-0.31	-0.31

Annual Max Momentary Gage Height 4.07 M (A.D), at 6.00 Hours, on Oct 29, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -2.76 M (A.D)
Left Bank Elevation 3.82 M (A.D)



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.30	0.00	0.00	9.10	4.59	37.60	9.60	53.55	1.26	0.38	0.00	0.00	
2	0.34	0.00	0.00	10.40	2.75	34.00	9.30	51.60	1.22	0.32	0.00	0.00	
3	0.26	0.00	2.38	9.90	1.86	29.80	9.10	50.30	1.14	0.32	0.00	0.00	
4	0.16	0.00	2.55	8.35	1.40	28.50	10.10	47.80	1.06	0.26	0.00	0.00	
5	0.10	0.00	2.10	7.27	1.90	27.50	10.70	46.60	0.98	0.08	0.00	0.00	
6	0.06	0.00	1.90	5.85	2.65	24.74	10.91	43.60	0.96	0.00	0.00	0.00	
7	0.00	0.00	1.70	4.87	6.28	22.98	10.80	41.00	0.94	0.00	0.00	0.00	
8	0.00	0.00	4.04	4.59	13.55	20.25	10.80	37.60	0.92	0.00	0.00	0.00	
9	0.00	0.00	4.59	4.66	21.30	17.16	11.68	31.60	0.90	0.00	0.00	0.00	
10	0.00	0.00	4.52	6.13	29.30	16.08	14.70	26.06	0.88	0.00	0.00	0.00	
11	0.00	0.00	4.45	8.71	31.60	16.88	14.70	19.35	0.86	0.00	0.00	0.00	
12	0.00	0.00	4.38	10.10	29.30	18.45	15.56	13.33	0.86	0.00	0.00	0.00	
13	0.00	0.00	4.17	8.80	22.98	20.55	15.30	10.80	0.84	0.00	0.00	0.00	
14	0.00	0.68	3.92	7.18	15.18	23.30	14.46	10.70	0.82	0.00	0.00	0.00	
15	0.00	0.76	3.40	5.92	11.35	25.54	12.78	10.40	0.76	0.00	0.00	0.00	
16	0.00	0.40	2.30	5.08	9.20	27.32	11.90	10.40	0.74	0.00	0.00	0.00	
17	0.00	0.14	1.30	4.38	7.90	27.50	11.13	9.90	0.70	0.00	0.00	0.00	
18	0.00	0.08	0.70	3.45	6.84	25.38	10.10	8.80	0.68	0.00	0.00	0.00	
19	0.00	0.06	0.30	1.94	6.44	20.55	9.50	7.54	0.66	0.00	0.00	0.00	
20	0.00	0.04	0.04	1.02	7.09	15.95	13.00	6.76	0.62	0.00	0.00	0.00	
21	0.00	0.00	0.00	0.76	8.62	12.67	13.00	5.78	0.60	0.00	0.00	0.00	
22	0.00	0.00	0.00	0.62	10.91	11.90	12.12	4.24	0.58	0.00	0.00	0.00	
23	0.00	0.00	0.18	0.48	12.34	15.30	13.00	3.35	0.56	0.00	0.00	0.00	
24	0.00	0.00	0.20	0.34	12.89	14.22	15.06	2.46	0.52	0.00	0.00	0.00	
25	0.00	0.00	0.22	0.24	9.90	12.23	20.25	2.22	0.48	0.00	0.00	0.00	
26	0.00	0.00	0.28	0.22	7.81	11.68	25.22	1.82	0.48	0.00	0.00	0.00	
27	0.00	0.00	0.58	2.22	8.53	11.46	34.60	1.70	0.46	0.00	0.00	0.00	
28	0.00	0.00	0.60	8.17	20.85	10.80	54.20	1.55	0.44	0.00	0.00	0.00	
29	0.00	0.00	1.55	10.60	29.80	9.80	60.60	1.43	0.40	0.00		0.00	
30	0.00	0.00	7.81	9.50	35.85	9.70	59.75	1.36	0.40	0.00		0.00	
31		0.00		6.69	37.95		56.35		0.40	0.00		0.00	
Total	1.22	2.16	60.16	167.45	428.91	599.79	600.27	563.60	23.12	1.36	0.00	0.00	2448.04 CMSDAY
Mean	0.04	0.07	2.01	5.40	13.84	19.99	19.36	18.79	0.75	0.04	0.00	0.00	6.71 CMS
Max	0.34	0.76	7.81	10.60	37.95	37.60	60.60	53.55	1.26	0.38	0.00	0.00	60.60 CMS
Min	0.00	0.00	0.00	0.22	1.40	9.70	9.10	1.36	0.40	0.00	0.00	0.00	0.00 CMS
Runoff	0.105	0.187	5.198	14.468	37.058	51.822	51.863	48.695	1.998	0.118	0.000	0.000	211.511 MCM

Momentary Peak 61.45 CMS, at 4.07 M (A.D), at 6.00 Hours, on Oct 29, 2001
Runoff Yield 6.41 Liters/Second/Square KM, Momentary Peak Yield 58.748 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 665 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 Float -

Rated by Current Meter 1971 to date.

Stability of Channel Regimes Stable.

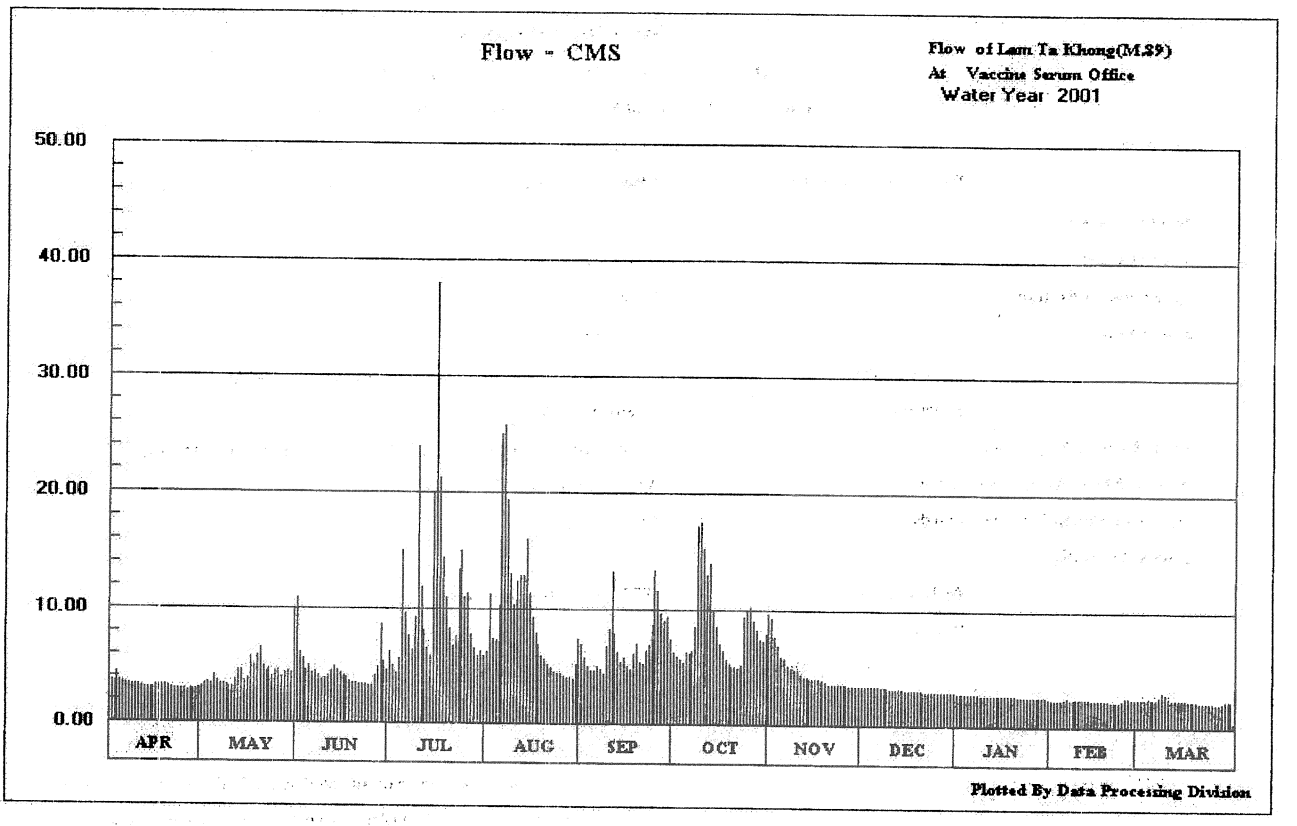
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 58 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.27	1.22	1.70	1.45	1.45	1.49	1.45	1.64	1.25	1.19	1.15	1.16	
2	1.26	1.24	1.44	1.37	1.72	1.42	1.43	1.62	1.24	1.19	1.15	1.16	
3	1.32	1.26	1.41	1.32	1.52	1.37	1.41	1.53	1.24	1.19	1.15	1.16	
4	1.27	1.25	1.34	1.41	1.51	1.34	1.40	1.49	1.24	1.19	1.15	1.16	
5	1.26	1.31	1.37	1.91	1.67	1.34	1.45	1.43	1.24	1.19	1.16	1.16	
6	1.25	1.27	1.32	1.64	2.35	1.37	1.44	1.42	1.24	1.19	1.17	1.16	
7	1.24	1.25	1.33	1.53	2.38	1.35	1.46	1.38	1.23	1.19	1.16	1.16	
8	1.23	1.24	1.31	1.46	2.11	1.32	1.58	1.36	1.23	1.19	1.16	1.18	
9	1.23	1.23	1.28	1.62	1.81	1.48	2.01	1.35	1.23	1.18	1.16	1.21	
10	1.23	1.22	1.29	2.30	1.68	1.57	2.03	1.34	1.22	1.18	1.16	1.20	
11	1.22	1.22	1.31	1.75	1.78	1.82	1.92	1.32	1.22	1.18	1.16	1.17	
12	1.21	1.28	1.33	1.56	1.80	1.55	1.81	1.31	1.22	1.18	1.16	1.16	
13	1.21	1.34	1.36	1.47	1.80	1.45	1.86	1.31	1.22	1.18	1.16	1.16	
14	1.21	1.34	1.34	1.43	1.96	1.40	1.66	1.30	1.22	1.18	1.15	1.16	
15	1.21	1.27	1.32	2.14	1.73	1.42	1.58	1.30	1.21	1.18	1.15	1.16	
16	1.23	1.29	1.31	2.88	1.62	1.37	1.50	1.30	1.21	1.18	1.15	1.16	
17	1.23	1.42	1.30	2.19	1.55	1.35	1.46	1.30	1.21	1.18	1.15	1.15	
18	1.23	1.37	1.27	1.88	1.49	1.44	1.41	1.29	1.21	1.18	1.15	1.15	
19	1.23	1.43	1.26	1.71	1.43	1.50	1.39	1.28	1.21	1.18	1.15	1.15	
20	1.22	1.47	1.26	1.57	1.41	1.40	1.37	1.26	1.21	1.18	1.14	1.15	
21	1.21	1.36	1.24	1.48	1.38	1.39	1.37	1.26	1.20	1.17	1.14	1.14	
22	1.20	1.33	1.25	1.53	1.36	1.46	1.36	1.26	1.20	1.17	1.14	1.14	
23	1.20	1.35	1.24	1.83	1.33	1.49	1.38	1.26	1.20	1.17	1.14	1.14	
24	1.20	1.30	1.23	1.91	1.32	1.59	1.63	1.26	1.20	1.17	1.15	1.14	
25	1.20	1.33	1.23	1.71	1.32	1.83	1.66	1.26	1.20	1.17	1.17	1.14	
26	1.19	1.34	1.31	1.73	1.31	1.74	1.67	1.26	1.20	1.17	1.17	1.13	
27	1.20	1.30	1.36	1.54	1.30	1.64	1.61	1.25	1.20	1.17	1.16	1.13	
28	1.20	1.32	1.59	1.47	1.30	1.61	1.57	1.25	1.20	1.17	1.16	1.14	
29	1.20	1.33	1.40	1.43	1.29	1.63	1.52	1.25	1.20	1.17		1.15	
30	1.21	1.32	1.34	1.45	1.38	1.52	1.51	1.25	1.20	1.17		1.15	
31		1.65		1.43	1.52		1.55		1.20	1.16		1.15	
Mean	1.23	1.32	1.33	1.68	1.60	1.49	1.56	1.34	1.22	1.18	1.15	1.16	
Max	1.32	1.65	1.70	2.88	2.38	1.83	2.03	1.64	1.25	1.19	1.17	1.21	2.88
Min	1.19	1.22	1.23	1.32	1.29	1.32	1.36	1.25	1.20	1.16	1.14	1.13	1.13

Annual Max Momentary Gage Height 3.30 M (A.D), at 4.00 Hours, on Jul 16, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.24 M (A.D)
Left Bank Elevation 7.33 M (A.D)
Right Bank Elevation 7.34 M (A.D), Drainage Area 665 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.84	3.24	11.00	6.40	6.40	7.04	6.40	9.80	3.60	2.88	2.40	2.52	
2	3.72	3.48	6.24	5.18	11.40	5.92	6.08	9.40	3.48	2.88	2.40	2.52	
3	4.48	3.72	5.76	4.48	7.56	5.18	5.76	7.74	3.48	2.88	2.40	2.52	
4	3.84	3.60	4.76	5.76	7.38	4.76	5.60	7.04	3.48	2.88	2.40	2.52	
5	3.72	4.34	5.18	15.20	10.40	4.76	6.40	6.08	3.48	2.88	2.52	2.52	
6	3.60	3.84	4.48	9.80	25.20	5.18	6.24	5.92	3.48	2.88	2.64	2.52	
7	3.48	3.60	4.62	7.74	25.92	4.90	6.56	5.32	3.36	2.88	2.52	2.52	
8	3.36	3.48	4.34	6.56	19.53	4.48	8.64	5.04	3.36	2.88	2.52	2.76	
9	3.36	3.36	3.96	9.40	13.20	6.88	17.23	4.90	3.36	2.76	2.52	3.12	
10	3.36	3.24	4.08	24.00	10.60	8.46	17.69	4.76	3.24	2.76	2.52	3.00	
11	3.24	3.24	4.34	12.00	12.60	13.40	15.40	4.48	3.24	2.76	2.52	2.64	
12	3.12	3.96	4.62	8.28	13.00	8.10	13.20	4.34	3.24	2.76	2.52	2.52	
13	3.12	4.76	5.04	6.72	13.00	6.40	14.20	4.34	3.24	2.76	2.52	2.52	
14	3.12	4.76	4.76	6.08	16.20	5.60	10.20	4.20	3.24	2.76	2.40	2.52	
15	3.12	3.84	4.48	20.22	11.60	5.92	8.64	4.20	3.12	2.76	2.40	2.52	
16	3.36	4.08	4.34	38.20	9.40	5.18	7.20	4.20	3.12	2.76	2.40	2.52	
17	3.36	5.92	4.20	21.37	8.10	4.90	6.56	4.20	3.12	2.76	2.40	2.40	
18	3.36	5.18	3.84	14.60	7.04	6.24	5.76	4.08	3.12	2.76	2.40	2.40	
19	3.36	6.08	3.72	11.20	6.08	7.20	5.46	3.96	3.12	2.76	2.40	2.40	
20	3.24	6.72	3.72	8.46	5.76	5.60	5.18	3.72	3.12	2.76	2.28	2.40	
21	3.12	5.04	3.48	6.88	5.32	5.46	5.18	3.72	3.00	2.64	2.28	2.28	
22	3.00	4.62	3.60	7.74	5.04	6.56	5.04	3.72	3.00	2.64	2.28	2.28	
23	3.00	4.90	3.48	13.60	4.62	7.04	5.32	3.72	3.00	2.64	2.28	2.28	
24	3.00	4.20	3.36	15.20	4.48	8.82	9.60	3.72	3.00	2.64	2.40	2.28	
25	3.00	4.62	3.36	11.20	4.48	13.60	10.20	3.72	3.00	2.64	2.64	2.28	
26	2.88	4.76	4.34	11.60	4.34	11.80	10.40	3.72	3.00	2.64	2.64	2.16	
27	3.00	4.20	5.04	7.92	4.20	9.80	9.20	3.60	3.00	2.64	2.52	2.16	
28	3.00	4.48	8.82	6.72	4.20	9.20	8.46	3.60	3.00	2.64	2.52	2.28	
29	3.00	4.62	5.60	6.08	4.08	9.60	7.56	3.60	3.00	2.64		2.40	
30	3.12	4.48	4.76	5.40	5.32	7.56	7.38	3.60	3.00	2.64		2.40	
31		10.00		6.08	7.56		8.10		3.00	2.52		2.40	
Total	99.28	140.36	143.32	341.07	294.01	215.54	264.84	144.44	99.00	85.08	68.64	76.56	1972.14 CMSDAY
Mean	3.31	4.53	4.78	11.00	9.48	7.18	8.54	4.81	3.19	2.74	2.45	2.47	5.40 CMS
Max	4.48	10.00	11.00	38.20	25.92	13.60	17.69	9.80	3.60	2.88	2.64	3.12	38.20 CMS
Min	2.88	3.24	3.36	4.48	4.08	4.48	5.04	3.60	3.00	2.52	2.28	2.16	2.16 CMS
Runoff	8.578	12.127	12.383	29.468	25.402	18.623	22.882	12.480	8.554	7.351	5.930	6.615	170.393 MCM

Momentary Peak 49.30 CMS, at 3.30 M (A.D), at 4.00 Hours, on Jul 16, 2001

Runoff Yield 8.12 Liters/Second/Square KM, Momentary Peak Yield 74.135 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage 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 right bank downstream at the abutment of the bridge.

Elevation +8.861 m.(A.D.)

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 1977 to date.

Rating Operation

Period of Rating 1977 - 1978, 1983 to date.

Rated by Float -

Rated by Current Meter 1977 - 1978, 1983 to date.

Stability of Channel Regimes Stable.

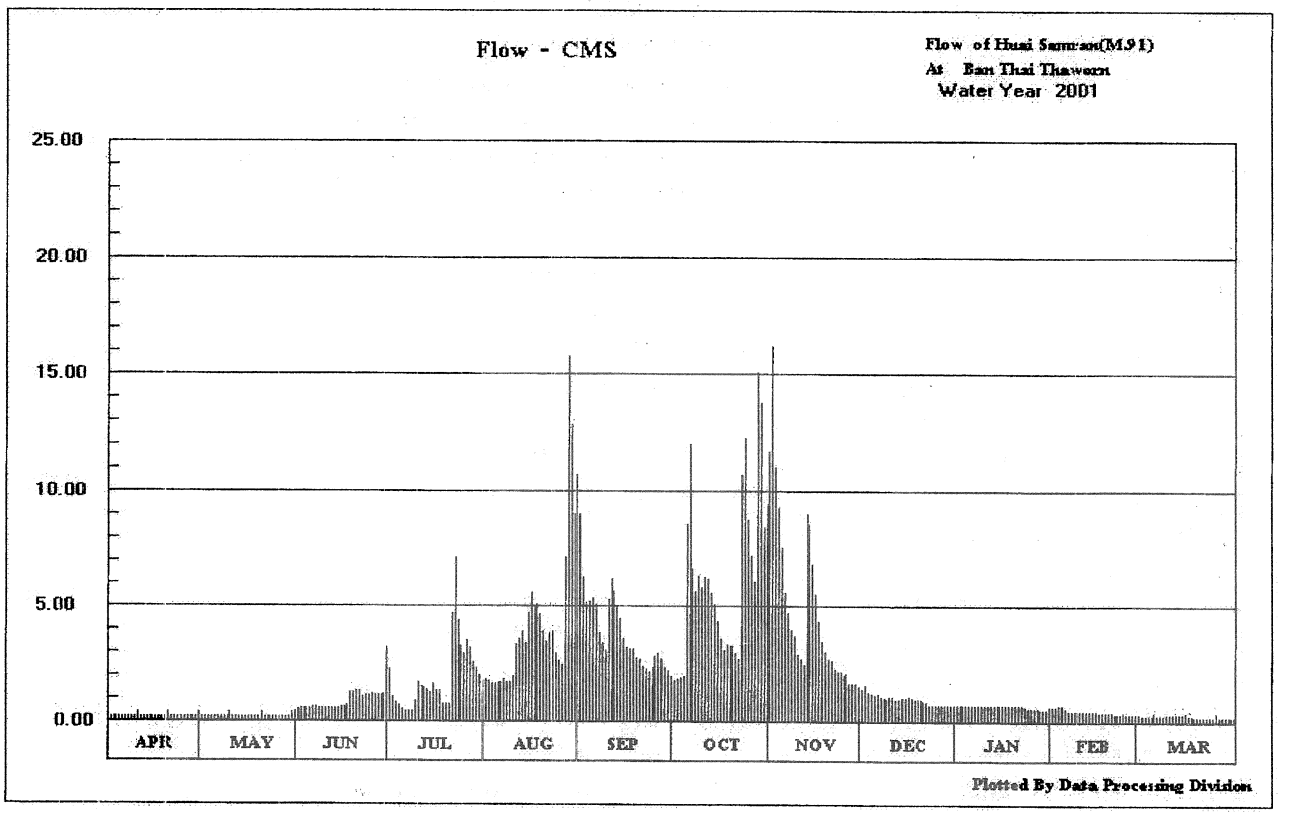
Overbank Flow Conditions No overbank flow.

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 56 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.10	1.00	1.22	1.57	1.48	2.51	1.47	2.81	1.39	1.26	1.24	1.18	
2	1.10	0.99	1.23	1.33	1.47	2.19	1.48	3.31	1.43	1.26	1.24	1.17	
3	1.09	0.98	1.23	1.28	1.44	2.03	1.49	2.73	1.37	1.26	1.25	1.17	
4	1.10	0.98	1.23	1.25	1.44	2.04	1.50	2.54	1.36	1.26	1.25	1.17	
5	1.10	0.97	1.23	1.22	1.46	2.06	2.46	2.35	1.34	1.26	1.23	1.17	
6	1.10	0.98	1.24	1.21	1.45	2.02	2.84	2.09	1.35	1.26	1.20	1.17	
7	1.10	1.00	1.24	1.20	1.48	1.84	2.24	1.97	1.33	1.26	1.21	1.17	
8	1.09	1.00	1.23	1.20	1.45	1.78	2.10	1.86	1.32	1.26	1.21	1.17	
9	1.08	1.00	1.23	1.29	1.46	1.72	2.20	1.82	1.31	1.26	1.21	1.17	
10	1.07	0.99	1.23	1.45	1.51	2.05	2.13	1.69	1.33	1.25	1.20	1.18	
11	1.06	0.99	1.23	1.42	1.77	2.18	2.19	1.66	1.33	1.25	1.20	1.18	
12	1.05	0.98	1.23	1.40	1.81	2.10	2.18	1.61	1.31	1.25	1.20	1.18	
13	1.05	0.98	1.23	1.39	1.85	2.00	2.09	2.51	1.31	1.25	1.20	1.18	
14	1.05	0.98	1.23	1.37	1.78	1.93	2.02	2.46	1.32	1.25	1.20	1.18	
15	1.05	1.05	1.24	1.44	1.97	1.81	1.91	2.26	1.32	1.25	1.20	1.18	
16	1.04	1.07	1.24	1.38	2.09	1.75	1.81	2.08	1.33	1.25	1.19	1.17	
17	1.04	1.08	1.26	1.38	2.01	1.73	1.72	1.91	1.32	1.25	1.19	1.17	
18	1.03	1.08	1.37	1.27	2.02	1.73	1.77	1.79	1.30	1.25	1.19	1.17	
19	1.02	1.09	1.37	1.27	1.96	1.67	1.76	1.71	1.31	1.25	1.19	1.15	
20	1.02	1.09	1.38	1.27	1.85	1.65	1.76	1.65	1.30	1.25	1.19	1.13	
21	1.02	1.08	1.38	1.97	1.79	1.59	1.70	1.64	1.29	1.25	1.18	1.12	
22	1.02	1.07	1.33	2.30	1.84	1.57	1.65	1.57	1.28	1.25	1.18	1.11	
23	1.01	1.06	1.34	1.92	1.85	1.54	2.70	1.54	1.26	1.24	1.18	1.10	
24	1.00	1.05	1.34	1.76	1.70	1.58	2.87	1.54	1.26	1.23	1.18	1.10	
25	1.00	1.04	1.35	1.70	1.64	1.68	2.48	1.52	1.26	1.23	1.18	1.09	
26	1.04	1.03	1.34	1.80	1.61	1.70	2.31	1.53	1.26	1.23	1.18	1.10	
27	1.01	1.04	1.34	1.74	2.30	1.65	2.16	1.44	1.26	1.23	1.18	1.09	
28	1.01	1.05	1.34	1.63	3.26	1.58	3.18	1.44	1.26	1.22	1.18	1.08	
29	1.00	1.07	1.36	1.58	2.93	1.55	3.04	1.44	1.26	1.22		1.08	
30	1.00	1.17	1.75	1.52	2.51	1.50	2.45	1.42	1.26	1.22		1.07	
31		1.21		1.47	2.70		2.56		1.26	1.24		1.06	
Mean	1.05	1.04	1.30	1.48	1.87	1.82	2.14	1.93	1.31	1.25	1.20	1.14	
Max	1.10	1.21	1.75	2.30	3.26	2.51	3.18	3.31	1.43	1.26	1.25	1.18	3.31
Min	1.00	0.97	1.22	1.20	1.44	1.50	1.47	1.42	1.26	1.22	1.18	1.06	0.97

Annual Max Momentary Gage Height 3.46 M (A.D), at 18.00 Hours, on Oct 28, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.31 M (A.D)
Left Bank Elevation 4.90 M (A.D)
Right Bank Elevation 4.07 M (A.D), Drainage Area 128 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.60	2.35	1.90	9.09	1.85	11.79	1.45	0.80	0.70	0.40	
2	0.00	0.00	0.65	1.15	1.85	6.33	1.90	16.30	1.65	0.80	0.70	0.35	
3	0.00	0.00	0.65	0.90	1.70	5.21	1.95	11.07	1.35	0.80	0.75	0.35	
4	0.00	0.00	0.65	0.75	1.70	5.28	2.00	9.36	1.30	0.80	0.75	0.35	
5	0.00	0.00	0.65	0.60	1.80	5.42	8.64	7.65	1.20	0.80	0.65	0.35	
6	0.00	0.00	0.70	0.55	1.75	5.14	12.06	5.63	1.25	0.80	0.50	0.35	
7	0.00	0.00	0.70	0.50	1.90	3.88	6.72	4.79	1.15	0.80	0.55	0.35	
8	0.00	0.00	0.65	0.50	1.75	3.48	5.70	4.02	1.10	0.80	0.55	0.35	
9	0.00	0.00	0.65	0.95	1.80	3.12	6.40	3.74	1.05	0.80	0.55	0.35	
10	0.00	0.00	0.65	1.75	2.05	5.35	5.91	2.95	1.15	0.75	0.50	0.40	
11	0.00	0.00	0.65	1.60	3.42	6.26	6.33	2.80	1.15	0.75	0.50	0.40	
12	0.00	0.00	0.65	1.50	3.67	5.70	6.26	2.55	1.05	0.75	0.50	0.40	
13	0.00	0.00	0.65	1.45	3.95	5.00	5.63	9.09	1.05	0.75	0.50	0.40	
14	0.00	0.00	0.65	1.35	3.48	4.51	5.14	8.64	1.10	0.75	0.50	0.40	
15	0.00	0.00	0.70	1.70	4.79	3.67	4.37	6.88	1.10	0.75	0.50	0.40	
16	0.00	0.00	0.70	1.40	5.63	3.30	3.67	5.56	1.15	0.75	0.45	0.35	
17	0.00	0.00	0.80	1.40	5.07	3.18	3.12	4.37	1.10	0.75	0.45	0.35	
18	0.00	0.00	1.35	0.85	5.14	3.18	3.42	3.54	1.00	0.75	0.45	0.35	
19	0.00	0.00	1.35	0.85	4.72	2.85	3.36	3.06	1.05	0.75	0.45	0.25	
20	0.00	0.00	1.40	0.85	3.95	2.75	3.36	2.75	1.00	0.75	0.45	0.15	
21	0.00	0.00	1.40	4.79	3.54	2.45	3.00	2.70	0.95	0.75	0.40	0.10	
22	0.00	0.00	1.15	7.20	3.88	2.35	2.75	2.35	0.90	0.75	0.40	0.05	
23	0.00	0.00	1.20	4.44	3.95	2.20	10.80	2.20	0.80	0.70	0.40	0.00	
24	0.00	0.00	1.20	3.36	3.00	2.40	12.33	2.20	0.80	0.65	0.40	0.00	
25	0.00	0.00	1.25	3.00	2.70	2.90	8.82	2.10	0.80	0.65	0.40	0.00	
26	0.00	0.00	1.20	3.60	2.55	3.00	7.29	2.15	0.80	0.65	0.40	0.00	
27	0.00	0.00	1.20	3.24	7.20	2.75	6.12	1.70	0.80	0.65	0.40	0.00	
28	0.00	0.00	1.20	2.65	15.84	2.40	15.12	1.70	0.80	0.60	0.40	0.00	
29	0.00	0.00	1.30	2.40	12.87	2.25	13.86	1.70	0.80	0.60		0.00	
30	0.00	0.35	3.30	2.10	9.09	2.00	8.55	1.60	0.80	0.60		0.00	
31		0.55		1.85	10.80		9.54		0.80	0.70		0.00	
Total	0.00	0.90	29.85	61.58	137.44	117.40	195.97	146.94	32.45	22.75	14.15	7.20	766.63 CMSDAY
Mean	0.00	0.03	1.00	1.99	4.43	3.91	6.32	4.90	1.05	0.73	0.51	0.23	2.10 CMS
Max	0.00	0.55	3.30	7.20	15.84	9.09	15.12	16.30	1.65	0.80	0.75	0.40	16.30 CMS
Min	0.00	0.00	0.60	0.50	1.70	2.00	1.85	1.60	0.80	0.60	0.40	0.00	0.00 CMS
Runoff	0.000	0.078	2.579	5.321	11.875	10.143	16.932	12.696	2.804	1.966	1.223	0.622	66.237 MCM

Momentary Peak 17.86 CMS, at 3.46 M (A.D), at 18.00 Hours, on Oct 28, 2001

Runoff Yield 16.41 Liters/Second/Square KM, Momentary Peak Yield 139.531 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

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

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

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

Ban Tam Yae **Amphoe** Phayu **Changwat** Si Sa Ket

Drainage Area 1,092 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 mean of 24 readings.

Period of Available Gage Records 1978 to date.

Rating Operation

Period of Rating 1979 - 1981, 1987 to date.

Rated by Float -

Rated by Current Meter 1979 - 1981, 1987 to date.

Stability of Channel Regimes Rather unstable.

Overbank Flow Conditions No overbank flow.

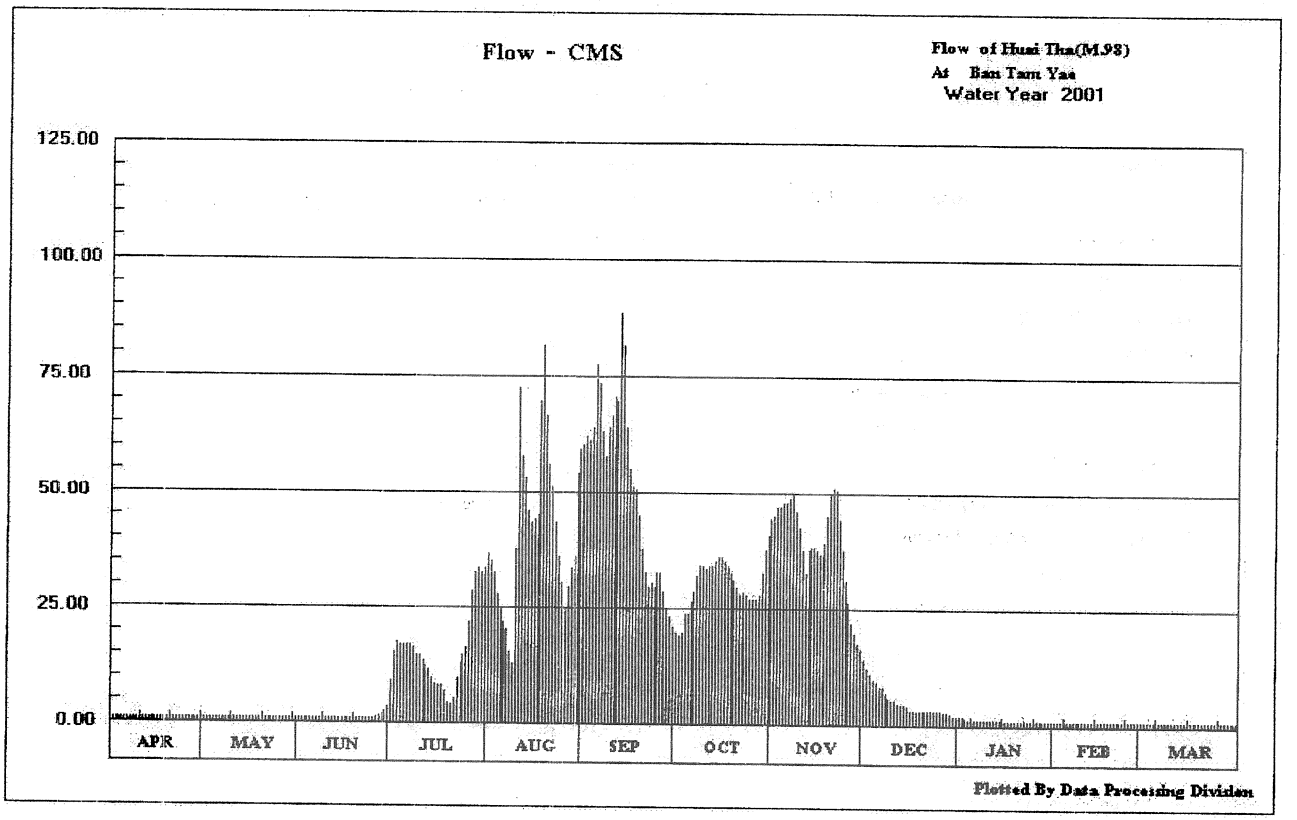
General Description Records fair. The concrete weir situated downstream from the gage site.

Stage-discharge relation defined by 63 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.97	2.90	2.91	3.16	3.55	3.82	3.33	3.64	3.24	3.01	2.96	2.94	
2	2.97	2.90	2.91	3.26	3.53	3.84	3.32	3.65	3.21	3.01	2.96	2.94	
3	2.97	2.89	2.91	3.30	3.50	3.83	3.33	3.67	3.19	3.00	2.96	2.94	
4	2.97	2.89	2.92	3.29	3.44	3.86	3.39	3.67	3.17	2.99	2.95	2.94	
5	2.97	2.90	2.93	3.29	3.40	4.00	3.39	3.68	3.16	2.98	2.95	2.94	
6	2.96	2.90	2.93	3.29	3.36	3.96	3.42	3.68	3.14	2.99	2.95	2.94	
7	2.95	2.90	2.93	3.29	3.34	3.85	3.45	3.69	3.14	2.99	2.95	2.93	
8	2.94	2.89	2.93	3.28	3.26	3.79	3.49	3.70	3.12	2.99	2.95	2.93	
9	2.94	2.88	2.94	3.25	3.22	3.86	3.52	3.66	3.10	2.99	2.95	2.93	
10	2.94	2.88	2.94	3.25	3.56	3.89	3.52	3.62	3.09	2.99	2.95	2.93	
11	2.93	2.88	2.94	3.23	3.95	3.93	3.51	3.56	3.09	2.99	2.95	2.93	
12	2.93	2.88	2.93	3.21	3.79	3.92	3.52	3.50	3.08	2.98	2.95	2.93	
13	2.93	2.87	2.93	3.20	3.74	4.11	3.52	3.56	3.07	2.98	2.95	2.93	
14	2.93	2.87	2.93	3.17	3.66	4.04	3.53	3.57	3.07	2.98	2.95	2.93	
15	2.93	2.87	2.93	3.15	3.63	3.86	3.54	3.57	3.06	2.98	2.95	2.93	
16	2.93	2.89	2.93	3.14	3.64	3.76	3.54	3.56	3.04	2.97	2.95	2.93	
17	2.92	2.89	2.93	3.14	3.65	3.72	3.53	3.55	3.04	2.97	2.95	2.93	
18	2.92	2.90	2.92	3.12	3.92	3.71	3.52	3.58	3.04	2.97	2.95	2.93	
19	2.92	2.93	2.92	3.07	4.04	3.65	3.50	3.65	3.04	2.97	2.95	2.93	
20	2.91	2.93	2.92	3.06	3.89	3.56	3.48	3.70	3.04	2.97	2.95	2.93	
21	2.91	2.92	2.92	3.09	3.77	3.50	3.46	3.72	3.04	2.97	2.95	2.93	
22	2.91	2.92	2.95	3.17	3.72	3.46	3.44	3.71	3.04	2.98	2.95	2.93	
23	2.91	2.91	2.95	3.22	3.63	3.47	3.45	3.64	3.04	2.97	2.95	2.93	
24	2.90	2.93	2.96	3.25	3.54	3.46	3.44	3.56	3.04	2.96	2.95	2.93	
25	2.90	2.92	2.96	3.28	3.47	3.50	3.43	3.48	3.04	2.96	2.94	2.93	
26	2.89	2.92	2.98	3.36	3.40	3.50	3.43	3.42	3.04	2.96	2.94	2.93	
27	2.90	2.93	3.00	3.45	3.46	3.45	3.43	3.36	3.03	2.96	2.94	2.93	
28	2.90	2.93	3.01	3.50	3.51	3.40	3.44	3.33	3.03	2.96	2.94	2.93	
29	2.90	2.93	3.02	3.51	3.54	3.38	3.50	3.30	3.02	2.96		2.93	
30	2.90	2.93	3.05	3.50	3.75	3.35	3.56	3.28	3.01	2.96		2.93	
31		2.93		3.51	3.81		3.60		3.01	2.96		2.93	
Mean	2.93	2.90	2.94	3.26	3.60	3.71	3.47	3.58	3.08	2.98	2.95	2.93	
Max	2.97	2.93	3.05	3.51	4.04	4.11	3.60	3.72	3.24	3.01	2.96	2.94	4.11
Min	2.89	2.87	2.91	3.06	3.22	3.35	3.32	3.28	3.01	2.96	2.94	2.93	2.87

Annual Max Momentary Gage Height 4.15 M (A.D), at 15.00 Hours, on Sep 13, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -1.17 M (A.D)
Left Bank Elevation 4.60 M (A.D)
Right Bank Elevation 5.49 M (A.D), Drainage Area 1092 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.40	0.00	0.20	9.60	37.00	60.80	20.10	44.60	14.40	2.40	1.20	0.80	
2	1.40	0.00	0.20	15.60	35.40	62.60	19.40	45.50	12.60	2.40	1.20	0.80	
3	1.40	0.00	0.20	18.00	33.00	61.70	20.10	47.30	11.40	2.00	1.20	0.80	
4	1.40	0.00	0.40	17.40	28.20	64.40	24.30	47.30	10.20	1.80	1.00	0.80	
5	1.40	0.00	0.60	17.40	25.00	78.00	24.30	48.20	9.60	1.60	1.00	0.80	
6	1.20	0.00	0.60	17.40	22.20	74.00	26.60	48.20	8.40	1.80	1.00	0.80	
7	1.00	0.00	0.60	17.40	20.80	63.50	29.00	49.10	8.40	1.80	1.00	0.60	
8	0.80	0.00	0.60	16.80	15.60	58.10	32.20	50.00	7.20	1.80	1.00	0.60	
9	0.80	0.00	0.80	15.00	13.20	64.40	34.60	46.40	6.00	1.80	1.00	0.60	
10	0.80	0.00	0.80	15.00	37.80	67.10	34.60	42.80	5.60	1.80	1.00	0.60	
11	0.60	0.00	0.80	13.80	73.00	71.00	33.80	37.80	5.60	1.80	1.00	0.60	
12	0.60	0.00	0.60	12.60	58.10	70.00	34.60	33.00	5.20	1.60	1.00	0.60	
13	0.60	0.00	0.60	12.00	53.60	89.00	34.60	37.80	4.80	1.60	1.00	0.60	
14	0.60	0.00	0.60	10.20	46.40	82.00	35.40	38.60	4.80	1.60	1.00	0.60	
15	0.60	0.00	0.60	9.00	43.70	64.40	36.20	38.60	4.40	1.60	1.00	0.60	
16	0.60	0.00	0.60	8.40	44.60	55.40	36.20	37.80	3.60	1.40	1.00	0.60	
17	0.40	0.00	0.60	8.40	45.50	51.80	35.40	37.00	3.60	1.40	1.00	0.60	
18	0.40	0.00	0.40	7.20	70.00	50.90	34.60	39.40	3.60	1.40	1.00	0.60	
19	0.40	0.60	0.40	4.80	82.00	45.50	33.00	45.50	3.60	1.40	1.00	0.60	
20	0.20	0.60	0.40	4.40	67.10	37.80	31.40	50.00	3.60	1.40	1.00	0.60	
21	0.20	0.40	0.40	5.60	56.30	33.00	29.80	51.80	3.60	1.40	1.00	0.60	
22	0.20	0.40	1.00	10.20	51.80	29.80	28.20	50.90	3.60	1.60	1.00	0.60	
23	0.20	0.20	1.00	13.20	43.70	30.60	29.00	44.60	3.60	1.40	1.00	0.60	
24	0.00	0.60	1.20	15.00	36.20	29.80	28.20	37.80	3.60	1.20	1.00	0.60	
25	0.00	0.40	1.20	16.80	30.60	33.00	27.40	31.40	3.60	1.20	0.80	0.60	
26	0.00	0.40	1.60	22.20	25.00	33.00	27.40	26.60	3.60	1.20	0.80	0.60	
27	0.00	0.60	2.00	29.00	29.80	29.00	27.40	22.20	3.20	1.20	0.80	0.60	
28	0.00	0.60	2.40	33.00	33.80	25.00	28.20	20.10	3.20	1.20	0.80	0.60	
29	0.00	0.60	2.80	33.80	36.20	23.60	33.00	18.00	2.80	1.20		0.60	
30	0.00	0.60	4.00	33.00	54.50	21.50	37.80	16.80	2.40	1.20		0.60	
31		0.60		33.80	59.90		41.00		2.40	1.20		0.60	
Total	17.20	6.60	28.20	496.00	1310.00	1560.70	947.80	1185.10	172.20	48.40	27.80	19.80	5819.80 CMSDAY
Mean	0.57	0.21	0.94	16.00	42.26	52.02	30.57	39.50	5.55	1.56	0.99	0.64	15.94 CMS
Max	1.40	0.60	4.00	33.80	82.00	89.00	41.00	51.80	14.40	2.40	1.20	0.80	89.00 CMS
Min	0.00	0.00	0.20	4.40	13.20	21.50	19.40	16.80	2.40	1.20	0.80	0.60	0.00 CMS
Runoff	1.486	0.570	2.436	42.854	113.184	134.844	81.890	102.393	14.878	4.182	2.402	1.711	502.831 MCM

Momentary Peak 93.00 CMS, at 4.15 M (A.D), at 15.00 Hours, on Sep 13, 2001
Runoff Yield 14.60 Liters/Second/Square KM, Momentary Peak Yield 85.165 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

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

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

Location on right bank at the bridge.

Ban Wang Palat **Amphoe** Phutthaisong **Changwat** Buri Ram

Drainage Area 24,841 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 +10.575 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 1980 to date.

Rating Operation

Period of Rating 2001 to date.

Rated by Float -

Rated by Current Meter 2001 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 52 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

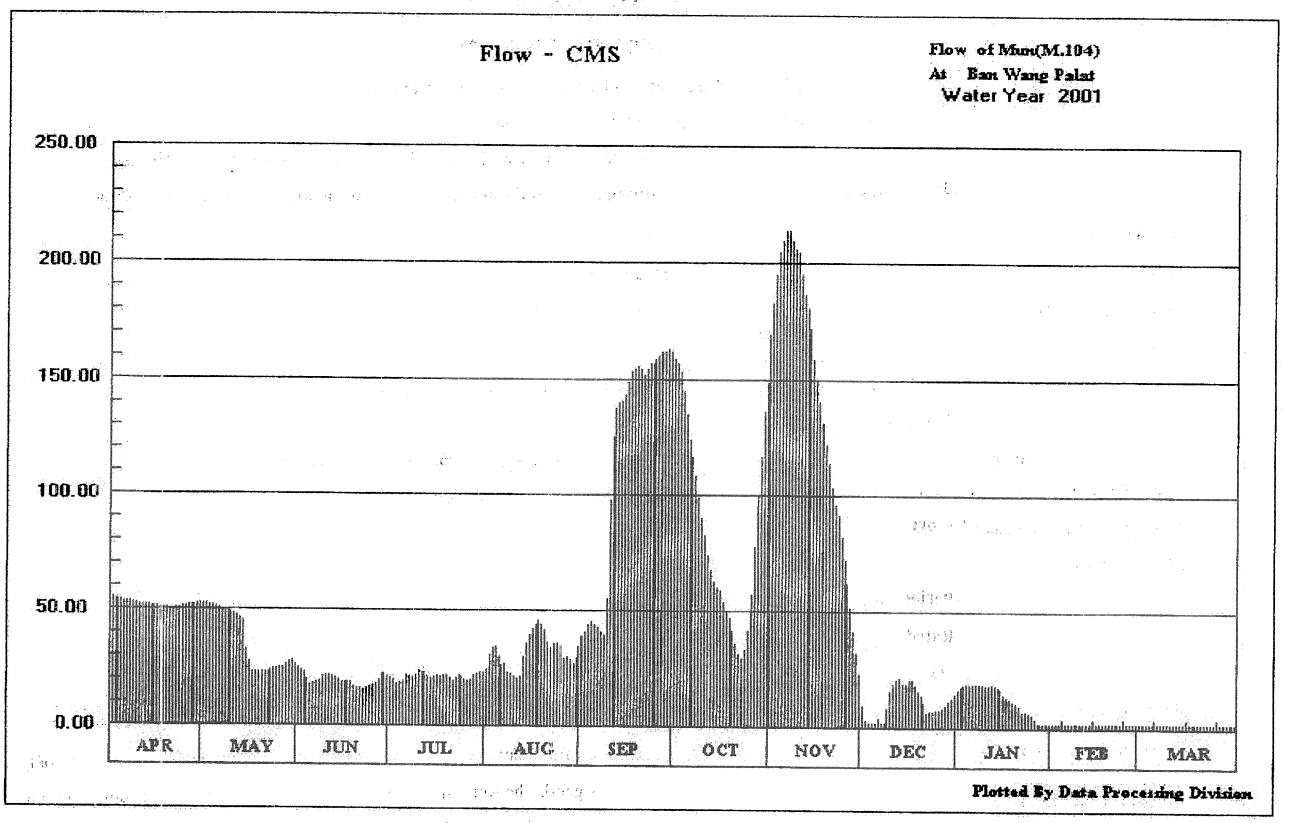
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.33	3.29	2.69	2.60	2.68	3.00	4.61	4.68	2.34	2.50	2.14	1.96	
2	3.32	3.29	2.67	2.58	2.83	3.04	4.60	4.76	2.19	2.52	2.13	1.96	
3	3.31	3.28	2.65	2.54	2.89	3.11	4.57	4.83	2.07	2.54	2.12	1.96	
4	3.31	3.27	2.58	2.56	2.91	3.14	4.51	4.88	1.89	2.55	2.10	1.95	
5	3.30	3.26	2.52	2.57	2.81	3.11	4.43	4.91	1.75	2.56	2.09	1.95	
6	3.30	3.25	2.54	2.62	2.73	3.08	4.33	4.93	1.69	2.56	2.08	1.94	
7	3.30	3.24	2.55	2.61	2.74	3.04	4.25	4.93	1.77	2.56	2.08	1.94	
8	3.29	3.23	2.57	2.60	2.66	3.02	4.16	4.91	2.08	2.56	2.07	1.93	
9	3.29	3.22	2.61	2.63	2.64	3.33	4.04	4.89	2.31	2.55	2.07	1.93	
10	3.28	3.21	2.63	2.67	2.61	4.02	3.91	4.88	2.48	2.54	2.07	1.92	
11	3.28	3.20	2.62	2.65	2.60	4.34	3.80	4.83	2.56	2.54	2.07	1.91	
12	3.27	3.18	2.61	2.65	2.61	4.45	3.66	4.78	2.59	2.55	2.07	1.91	
13	3.27	3.16	2.59	2.61	2.81	4.47	3.56	4.75	2.61	2.54	2.07	1.90	
14	3.26	3.14	2.58	2.60	2.93	4.48	3.47	4.70	2.56	2.53	2.07	1.90	
15	3.26	2.87	2.56	2.61	3.02	4.50	3.43	4.61	2.55	2.51	2.06	1.89	
16	3.26	2.76	2.56	2.62	3.07	4.54	3.40	4.55	2.59	2.46	2.05	1.88	
17	3.25	2.65	2.55	2.61	3.11	4.57	3.31	4.48	2.60	2.43	2.05	1.88	
18	3.25	2.65	2.55	2.63	3.15	4.58	3.23	4.40	2.54	2.41	2.04	1.87	
19	3.25	2.66	2.51	2.63	3.11	4.59	3.17	4.31	2.49	2.38	2.01	1.86	
20	3.24	2.66	2.50	2.60	3.05	4.58	3.05	4.22	2.44	2.37	2.00	1.85	
21	3.24	2.66	2.50	2.57	2.95	4.56	2.94	4.10	2.36	2.34	2.00	1.85	
22	3.25	2.66	2.48	2.60	2.89	4.58	2.84	3.99	2.26	2.28	1.99	1.84	
23	3.25	2.67	2.50	2.63	2.94	4.60	2.80	3.93	2.28	2.28	1.98	1.83	
24	3.26	2.68	2.51	2.61	2.94	4.60	2.88	3.79	2.28	2.27	1.98	1.82	
25	3.26	2.68	2.52	2.58	2.91	4.61	3.06	3.63	2.29	2.25	1.97	1.82	
26	3.27	2.69	2.54	2.57	2.80	4.62	3.37	3.46	2.30	2.20	1.96	1.81	
27	3.28	2.69	2.58	2.58	2.81	4.63	3.72	3.26	2.31	2.17	1.95	1.80	
28	3.28	2.72	2.64	2.63	2.78	4.63	4.05	3.05	2.34	2.15	1.95	1.79	
29	3.29	2.75	2.64	2.64	2.74	4.64	4.25	2.85	2.38	2.15		1.79	
30	3.29	2.77	2.61	2.65	2.80	4.63	4.44	2.65	2.41	2.15		1.78	
31		2.73		2.66	2.90		4.54		2.46	2.15		1.77	
Mean	3.28	2.94	2.57	2.61	2.85	4.10	3.75	4.30	2.32	2.40	2.04	1.88	
Max	3.33	3.29	2.69	2.67	3.15	4.64	4.61	4.93	2.61	2.56	2.14	1.96	4.93
Min	3.24	2.65	2.48	2.54	2.60	3.00	2.80	2.65	1.69	2.15	1.95	1.77	1.69

Annual Max Momentary Gage Height 4.93 M (A.D), at 6.00 Hours, on Nov 6, 2001

Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -2.90 M (A.D)

Left Bank Elevation 10.35 M (A.D)

Right Bank Elevation 10.35 M (A.D), Drainage Area 24841 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	55.62	53.50	25.56	21.60	25.12	39.50	159.50	170.00	10.32	17.20	1.72	0.00	
2	55.08	53.50	24.68	20.72	31.75	41.38	158.00	183.50	3.87	18.08	1.29	0.00	
3	54.54	53.00	23.80	18.96	34.45	44.68	153.86	195.90	0.00	18.96	0.86	0.00	
4	54.54	52.50	20.72	19.84	35.36	46.12	145.58	204.90	0.00	19.40	0.00	0.00	
5	54.00	52.00	18.08	20.28	30.85	44.68	135.66	210.50	0.00	19.84	0.00	0.00	
6	54.00	51.50	18.96	22.48	27.32	43.26	124.72	214.50	0.00	19.84	0.00	0.00	
7	54.00	51.00	19.40	22.04	27.76	41.38	117.05	214.50	0.00	19.84	0.00	0.00	
8	53.50	50.50	20.28	21.60	24.24	40.44	109.10	210.50	0.00	19.84	0.00	0.00	
9	53.50	50.00	22.04	22.92	23.36	55.62	99.80	206.70	9.03	19.40	0.00	0.00	
10	53.00	49.50	22.92	24.68	22.04	98.40	90.88	204.90	16.34	18.96	0.00	0.00	
11	53.00	49.00	22.48	23.80	21.60	125.76	83.40	195.90	19.84	18.96	0.00	0.00	
12	52.50	48.04	22.04	23.80	22.04	138.10	74.60	187.00	21.16	19.40	0.00	0.00	
13	52.50	47.08	21.16	22.04	30.85	140.54	68.64	181.75	22.04	18.96	0.00	0.00	
14	52.00	46.12	20.72	21.60	36.28	141.76	63.39	173.00	19.84	18.52	0.00	0.00	
15	52.00	33.55	19.84	22.04	40.44	144.20	61.11	159.50	19.40	17.64	0.00	0.00	
16	52.00	28.64	19.84	22.48	42.79	149.72	59.40	151.10	21.16	15.48	0.00	0.00	
17	51.50	23.80	19.40	22.04	44.68	153.86	54.54	141.76	21.60	14.19	0.00	0.00	
18	51.50	23.80	19.40	22.92	46.60	155.24	50.50	132.00	18.96	13.33	0.00	0.00	
19	51.50	24.24	17.64	22.92	44.68	156.62	47.56	122.64	16.77	12.04	0.00	0.00	
20	51.00	24.24	17.20	21.60	41.85	155.24	41.85	114.32	14.62	11.61	0.00	0.00	
21	51.00	24.24	17.20	20.28	37.20	152.48	36.74	104.00	11.18	10.32	0.00	0.00	
22	51.50	24.24	16.34	21.60	34.45	155.24	32.20	96.32	6.88	7.74	0.00	0.00	
23	51.50	24.68	17.20	22.92	36.74	158.00	30.40	92.24	7.74	7.74	0.00	0.00	
24	52.00	25.12	17.64	22.04	36.74	158.00	34.00	82.76	7.74	7.31	0.00	0.00	
25	52.00	25.12	18.08	20.72	35.36	159.50	42.32	72.80	8.17	6.45	0.00	0.00	
26	52.50	25.56	18.96	20.28	30.40	161.00	57.78	62.82	8.60	4.30	0.00	0.00	
27	53.00	25.56	20.72	20.72	30.85	162.50	78.28	52.00	9.03	3.01	0.00	0.00	
28	53.00	26.88	23.36	22.92	29.52	162.50	100.50	41.85	10.32	2.15	0.00	0.00	
29	53.50	28.20	23.36	23.36	27.76	164.00	117.05	32.65	12.04	2.15		0.00	
30	53.50	29.08	22.04	23.80	30.40	162.50	136.88	23.80	13.33	2.15		0.00	
31		27.32		24.24	34.90		149.72		15.48	2.15		0.00	
Total	1584.78	1151.51	611.06	683.24	1018.38	3552.22	2715.01	4236.11	345.46	406.96	3.87	0.00	16308.60 CMSDAY
Mean	52.83	37.15	20.37	22.04	32.85	118.41	87.58	141.20	11.14	13.13	0.14	0.00	44.68 CMS
Max	55.62	53.50	25.56	24.68	46.60	164.00	159.50	214.50	22.04	19.84	1.72	0.00	214.50 CMS
Min	51.00	23.80	16.34	18.96	21.60	39.50	30.40	23.80	0.00	2.15	0.00	0.00	0.00 CMS
Runoff	136.925	99.490	52.796	59.032	87.988	306.912	234.577	366.000	29.848	35.161	0.334	0.000	1409.063 MCM

Momentary Peak 214.50 CMS, at 4.93 M (A.D), at 6.00 Hours, on Nov 6, 2001

Runoff Yield 1.80 Liters/Second/Square KM, Momentary Peak Yield 8.635 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 556 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 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1982 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Stable.

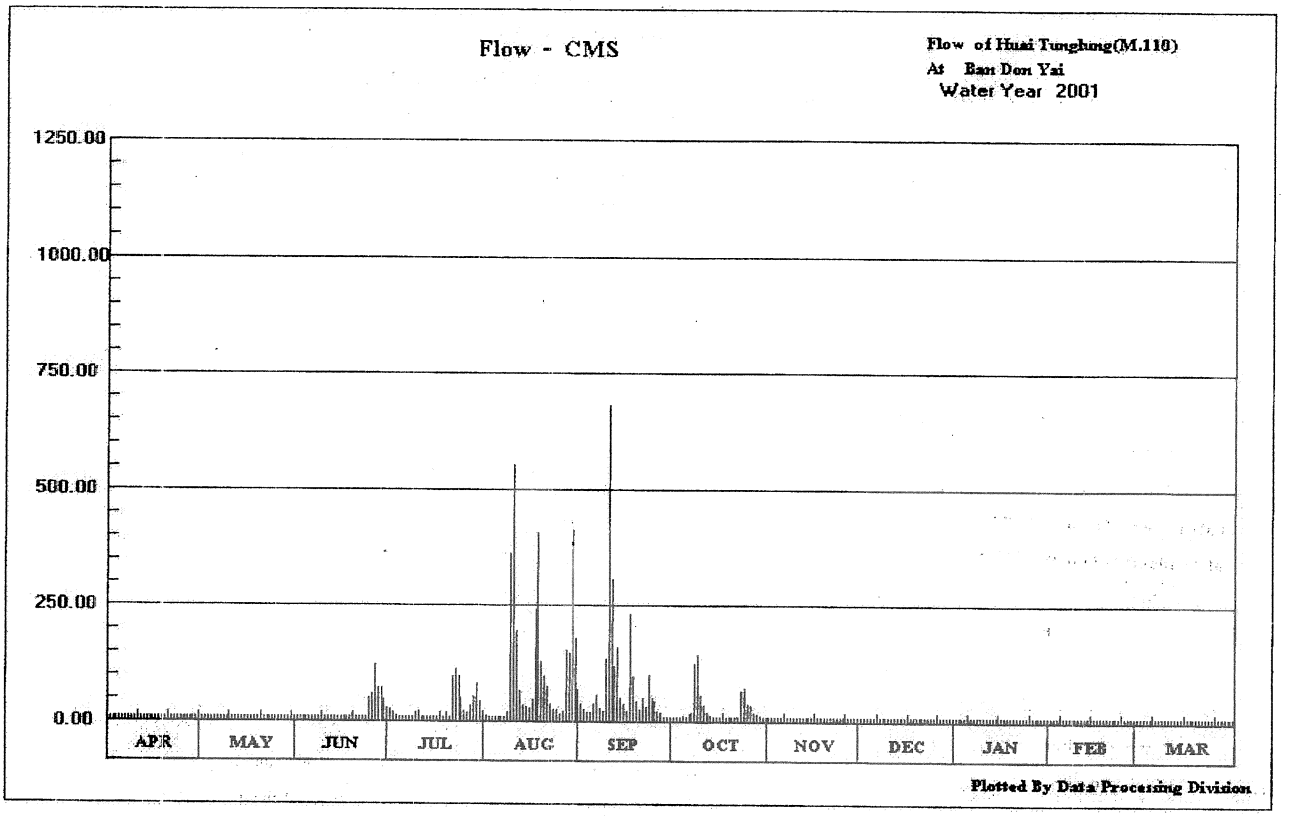
Overbank Flow Conditions Overbank flow starts at elevation +4.150 m.(A.D.), records are channel flow only.

General Description Records good. The weirs situated about 10 kilometers upstream and downstream from the gage site. Stage-discharge relation defined by 61 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.25	-0.32	-0.19	0.84	0.53	1.06	0.34	0.39	-0.04	-0.16	-0.23	-0.27	
2	-0.27	-0.34	-0.21	0.70	0.45	0.84	0.37	0.35	-0.04	-0.16	-0.23	-0.25	
3	-0.28	-0.21	-0.19	0.54	0.45	0.68	0.35	0.33	-0.05	-0.16	-0.22	-0.27	
4	-0.27	-0.27	-0.16	0.45	0.38	0.69	0.51	0.29	-0.06	-0.16	-0.22	-0.26	
5	-0.28	-0.30	-0.05	0.36	0.43	1.05	0.36	0.28	-0.07	-0.16	-0.22	-0.27	
6	-0.27	-0.33	-0.01	0.28	0.39	1.38	0.60	0.28	-0.08	-0.16	-0.23	-0.28	
7	-0.29	-0.33	-0.12	0.31	0.44	0.91	0.64	0.23	-0.08	-0.16	-0.23	-0.28	
8	-0.29	-0.34	0.31	0.37	0.40	0.76	2.12	0.19	-0.09	-0.17	-0.22	-0.28	
9	-0.30	-0.35	-0.01	0.59	3.80	2.20	2.29	0.15	-0.09	-0.17	-0.23	-0.28	
10	-0.30	-0.35	-0.04	0.78	4.74	5.31	1.35	0.12	-0.10	-0.17	-0.23	-0.29	
11	-0.28	-0.34	-0.09	0.49	2.70	3.48	1.01	0.10	-0.10	-0.17	-0.24	-0.29	
12	-0.23	-0.23	0.01	0.33	1.49	2.08	0.69	0.08	-0.10	-0.17	-0.23	-0.28	
13	-0.27	-0.31	-0.05	0.43	1.00	2.43	0.54	0.16	-0.10	-0.18	-0.24	-0.27	
14	-0.27	-0.32	-0.08	0.38	0.92	1.24	0.50	0.20	-0.10	-0.18	-0.24	-0.26	
15	-0.29	-0.31	-0.03	0.38	0.89	1.02	0.42	0.16	-0.10	-0.18	-0.24	-0.26	
16	-0.30	-0.24	-0.05	0.38	1.18	0.74	0.35	0.11	-0.10	-0.18	-0.25	-0.27	
17	-0.30	-0.25	-0.10	0.67	3.05	2.98	0.31	0.09	-0.12	-0.18	-0.25	-0.27	
18	-0.31	0.06	-0.11	0.50	4.03	1.82	0.28	0.08	-0.13	-0.18	-0.25	-0.27	
19	-0.31	-0.02	-0.15	0.31	2.16	1.15	0.25	0.06	-0.13	-0.18	-0.25	-0.24	
20	-0.32	-0.10	-0.15	0.26	1.85	0.85	0.24	0.05	-0.13	-0.19	-0.25	-0.25	
21	-0.32	-0.15	-0.16	1.85	1.60	1.27	0.23	0.04	-0.13	-0.19	-0.25	-0.26	
22	-0.32	-0.16	-0.13	2.01	1.05	0.94	0.25	0.03	-0.13	-0.20	-0.25	-0.27	
23	-0.32	-0.19	0.46	1.84	0.80	1.86	1.48	0.01	-0.13	-0.20	-0.25	-0.27	
24	-0.32	-0.12	1.24	1.24	0.80	1.26	1.55	0.02	-0.13	-0.20	-0.25	-0.28	
25	-0.34	0.06	1.41	0.75	0.61	1.13	1.05	0.01	-0.13	-0.20	-0.26	-0.29	
26	-0.35	-0.06	2.09	0.71	0.74	0.77	1.00	0.01	-0.14	-0.20	-0.27	-0.29	
27	-0.35	-0.15	1.55	0.98	2.38	0.61	0.66	-0.01	-0.14	-0.20	-0.27	-0.30	
28	-0.32	-0.14	1.54	1.33	2.32	0.48	0.62	-0.02	-0.14	-0.20	-0.27	-0.30	
29	-0.35	-0.15	1.19	1.67	4.06	0.43	0.58	-0.04	-0.15	-0.20		-0.30	
30	-0.35	-0.18	0.90	1.16	2.58	0.38	0.46	-0.04	-0.15	-0.20		-0.30	
31		-0.17		0.75	1.52		0.38		-0.15	-0.20		-0.30	
Mean	-0.30	-0.21	0.29	0.76	1.60	1.39	0.70	0.12	-0.11	-0.18	-0.24	-0.28	
Max	-0.23	0.06	2.09	2.01	4.74	5.31	2.29	0.39	-0.04	-0.16	-0.22	-0.24	5.31
Min	-0.35	-0.35	-0.21	0.26	0.38	0.38	0.23	-0.04	-0.15	-0.20	-0.27	-0.30	-0.35

Annual Max Momentary Gage Height 5.50 M (A.D), at 12.00 Hours, on Sep 10, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.42 M (A.D)
Left Bank Elevation 4.77 M (A.D)



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.50	0.80	2.10	30.00	16.20	42.60	10.80	11.80	3.60	2.40	1.70	1.30	
2	1.30	0.60	1.90	23.00	13.50	30.00	11.40	11.00	3.60	2.40	1.70	1.50	
3	1.20	1.90	2.10	16.60	13.50	22.20	11.00	10.60	3.50	2.40	1.80	1.30	
4	1.30	1.30	2.40	13.50	11.60	22.60	15.40	9.80	3.40	2.40	1.80	1.40	
5	1.20	1.00	3.50	11.20	12.90	42.00	11.20	9.60	3.30	2.40	1.80	1.30	
6	1.30	0.70	3.90	9.60	11.80	61.80	19.00	9.60	3.20	2.40	1.70	1.20	
7	1.10	0.70	2.80	10.20	13.20	33.60	20.60	8.60	3.20	2.40	1.70	1.20	
8	1.10	0.60	10.20	11.40	12.00	26.00	128.20	7.80	3.10	2.30	1.80	1.20	
9	1.00	0.50	3.90	18.60	366.00	137.00	147.80	7.00	3.10	2.30	1.70	1.20	
10	1.00	0.50	3.60	27.00	556.80	685.30	60.00	6.40	3.00	2.30	1.70	1.10	
11	1.20	0.60	3.10	14.70	197.00	310.80	39.60	6.00	3.00	2.30	1.60	1.10	
12	1.70	1.70	4.20	10.60	70.20	124.00	22.60	5.60	3.00	2.30	1.70	1.20	
13	1.30	0.90	3.50	12.90	39.00	164.60	16.60	7.20	3.00	2.20	1.60	1.30	
14	1.30	0.80	3.20	11.60	34.20	53.40	15.00	8.00	3.00	2.20	1.60	1.40	
15	1.10	0.90	3.70	11.60	32.50	40.20	12.60	7.20	3.00	2.20	1.60	1.40	
16	1.00	1.60	3.50	11.60	49.80	25.00	11.00	6.20	3.00	2.20	1.50	1.30	
17	1.00	1.50	3.00	21.80	246.00	236.20	10.20	5.80	2.80	2.20	1.50	1.30	
18	0.90	5.20	2.90	15.00	410.00	99.80	9.60	5.60	2.70	2.20	1.50	1.30	
19	0.90	3.80	2.50	10.20	132.60	48.00	9.00	5.20	2.70	2.20	1.50	1.60	
20	0.80	3.00	2.50	9.20	102.50	30.50	8.80	5.00	2.70	2.10	1.50	1.50	
21	0.80	2.50	2.40	102.50	80.00	55.20	8.60	4.80	2.70	2.10	1.50	1.40	
22	0.80	2.40	2.70	117.00	42.00	35.40	9.00	4.60	2.70	2.00	1.50	1.30	
23	0.80	2.10	13.80	101.60	28.00	103.40	69.40	4.20	2.70	2.00	1.50	1.30	
24	0.80	2.80	53.40	53.40	28.00	54.60	75.50	4.40	2.70	2.00	1.50	1.20	
25	0.60	5.20	63.80	25.50	19.40	46.80	42.00	4.20	2.70	2.00	1.40	1.10	
26	0.50	3.40	125.00	23.50	25.00	26.50	39.00	4.20	2.60	2.00	1.30	1.10	
27	0.50	2.50	75.50	37.80	158.60	19.40	21.40	3.90	2.60	2.00	1.30	1.00	
28	0.80	2.60	74.60	58.80	151.40	14.40	19.80	3.80	2.60	2.00	1.30	1.00	
29	0.50	2.50	50.40	86.30	416.00	12.90	18.20	3.60	2.50	2.00		1.00	
30	0.50	2.20	33.00	48.60	182.60	11.60	13.80	3.60	2.50	2.00		1.00	
31		2.30		25.50	72.80		11.60		2.50	2.00		1.00	
Total	29.80	59.10	563.10	980.80	3545.10	2615.80	918.70	195.30	90.70	67.90	44.30	38.50	9149.10 CMSDAY
Mean	0.99	1.91	18.77	31.64	114.36	87.19	29.64	6.51	2.93	2.19	1.58	1.24	25.07 CMS
Max	1.70	5.20	125.00	117.00	556.80	685.30	147.80	11.80	3.60	2.40	1.80	1.60	685.30 CMS
Min	0.50	0.50	1.90	9.20	11.60	11.60	8.60	3.60	2.50	2.00	1.30	1.00	0.50 CMS
Runoff	2.575	5.106	48.652	84.741	306.297	226.005	79.376	16.874	7.836	5.867	3.828	3.326	790.482 MCM

Momentary Peak 729.00 CMS, at 5.50 M (A.D), at 12.00 Hours, on Sep 10, 2001
Runoff Yield 45.08 Liters/Second/Square KM, Momentary Peak Yield 1311.151 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Huai Takhong at Ban Khok Yai, Buri Ram (M.112)

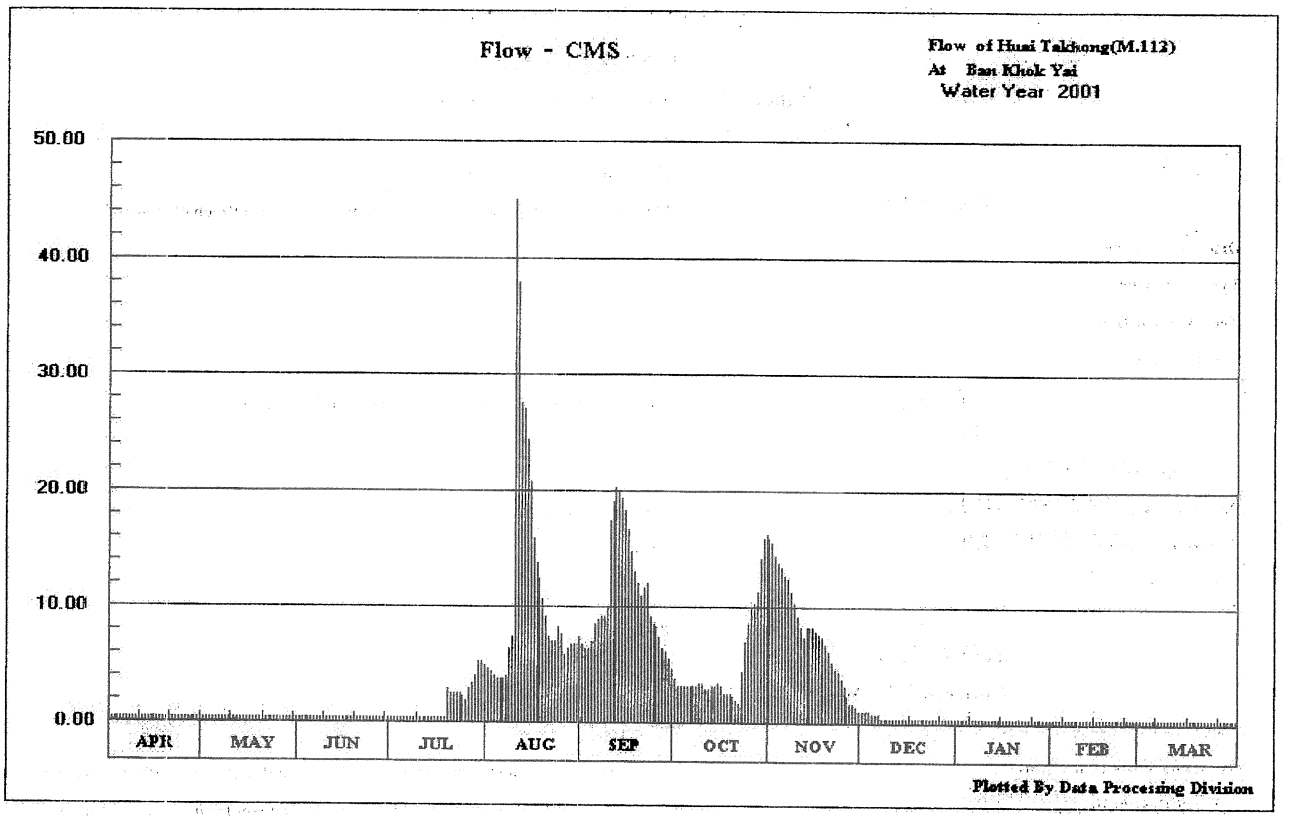
Lat 15 - 11 - 46 N. **Long** 103 - 12 - 22 E.

Location		on left bank at the bridge on highway at Ban Khok Yai.
	Ban Khok Yai	**Amphoe** Satuk **Changwat** Buri Ram
Drainage Area		1,156 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		3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.
Period of Available Gage Records		1982 to date.
Rating Operation		
	Period of Rating	1983 - 1987, 1998 to date.
	Rated by Float	-
	Rated by Current Meter	1983 - 1987, 1998 to date.
Stability of Channel Regimes		Rather unstable because of backwater effect.
Overbank Flow Conditions		Overbank flow starts at elevation +5.180 m.(A.D.) and is including overbank flow.
General Description		Records fair. Ban Don Mon weir situated downstream from the gage site.
		Stage-discharge relation defined by 71 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.49	3.09	3.16	3.19	4.76	4.83	4.73	5.10	4.64	4.51	4.28	4.02	
2	3.46	3.08	3.16	3.19	4.75	4.82	4.71	5.09	4.64	4.50	4.27	4.01	
3	3.43	3.10	3.16	3.20	4.74	4.82	4.71	5.06	4.64	4.49	4.26	4.01	
4	3.43	3.10	3.15	3.22	4.73	4.84	4.71	5.04	4.63	4.49	4.25	4.00	
5	3.43	3.11	3.15	3.25	4.73	4.89	4.71	5.03	4.63	4.48	4.24	3.99	
6	3.42	3.11	3.15	3.27	4.73	4.90	4.71	5.01	4.62	4.48	4.23	3.98	
7	3.41	3.11	3.15	3.25	4.74	4.91	4.71	5.00	4.61	4.47	4.22	3.97	
8	3.39	3.10	3.16	3.25	4.82	4.91	4.71	4.97	4.60	4.46	4.22	3.96	
9	3.38	3.09	3.16	3.25	4.85	4.93	4.72	4.94	4.60	4.44	4.21	3.95	
10	3.37	3.09	3.15	3.26	5.74	5.14	4.72	4.91	4.60	4.43	4.21	3.94	
11	3.36	3.10	3.15	3.25	5.60	5.18	4.70	4.88	4.61	4.43	4.20	3.93	
12	3.33	3.09	3.13	3.21	5.37	5.21	4.70	4.85	4.61	4.43	4.19	3.92	
13	3.30	3.09	3.12	3.20	5.36	5.20	4.71	4.88	4.61	4.42	4.18	3.91	
14	3.29	3.09	3.11	3.17	5.30	5.19	4.71	4.88	4.60	4.41	4.17	3.91	
15	3.31	3.12	3.10	3.15	5.22	5.16	4.72	4.88	4.60	4.41	4.17	3.90	
16	3.31	3.18	3.10	3.19	5.10	5.12	4.71	4.87	4.60	4.40	4.16	3.89	
17	3.28	3.18	3.07	3.59	5.04	5.07	4.69	4.86	4.60	4.40	4.14	3.88	
18	3.26	3.19	3.06	4.61	5.00	5.02	4.69	4.85	4.59	4.39	4.12	3.87	
19	3.25	3.20	3.03	4.70	4.95	4.99	4.69	4.83	4.59	4.38	4.10	3.86	
20	3.24	3.20	2.98	4.69	4.91	4.96	4.68	4.81	4.59	4.37	4.09	3.86	
21	3.23	3.20	2.98	4.69	4.85	4.98	4.67	4.78	4.59	4.36	4.08	3.85	
22	3.23	3.19	2.97	4.69	4.84	4.99	4.66	4.76	4.58	4.36	4.08	3.85	
23	3.20	3.18	3.01	4.69	4.84	4.91	4.75	4.75	4.57	4.35	4.07	3.83	
24	3.17	3.15	3.07	4.68	4.88	4.89	4.84	4.73	4.56	4.34	4.06	3.81	
25	3.14	3.15	3.06	4.67	4.86	4.88	4.89	4.71	4.55	4.33	4.05	3.81	
26	3.10	3.15	3.06	4.70	4.80	4.85	4.93	4.68	4.54	4.33	4.05	3.80	
27	3.10	3.14	3.10	4.72	4.82	4.82	4.94	4.66	4.53	4.32	4.04	3.79	
28	3.10	3.13	3.11	4.74	4.83	4.81	4.97	4.66	4.53	4.32	4.03	3.77	
29	3.09	3.12	3.14	4.78	4.83	4.79	5.05	4.65	4.53	4.31		3.76	
30	3.09	3.15	3.17	4.78	4.83	4.76	5.10	4.64	4.53	4.30		3.75	
31		3.19		4.77	4.85		5.11		4.52	4.29		3.74	
Mean	3.29	3.13	3.10	3.90	4.96	4.96	4.78	4.86	4.59	4.40	4.16	3.89	
Max	3.49	3.20	3.17	4.78	5.74	5.21	5.11	5.10	4.64	4.51	4.28	4.02	5.74
Min	3.09	3.08	2.97	3.15	4.73	4.76	4.66	4.64	4.52	4.29	4.03	3.74	2.97

Annual Max Momentary Gage Height 6.25 M (A.D), at 15.00 Hours, on Aug 10, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.27 M (A.D)
Left Bank Elevation 5.84 M (A.D)
Right Bank Elevation 5.17 M (A.D), Drainage Area 1156 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	0.00	4.80	6.90	3.90	16.00	1.20	0.00	0.00	0.00	
2	0.00	0.00	0.00	0.00	4.50	6.60	3.30	15.65	1.20	0.00	0.00	0.00	
3	0.00	0.00	0.00	0.00	4.20	6.60	3.30	14.60	1.20	0.00	0.00	0.00	
4	0.00	0.00	0.00	0.00	3.90	7.20	3.30	13.90	0.90	0.00	0.00	0.00	
5	0.00	0.00	0.00	0.00	3.90	8.70	3.30	13.55	0.90	0.00	0.00	0.00	
6	0.00	0.00	0.00	0.00	3.90	9.00	3.30	12.85	0.60	0.00	0.00	0.00	
7	0.00	0.00	0.00	0.00	4.20	9.35	3.30	12.50	0.30	0.00	0.00	0.00	
8	0.00	0.00	0.00	0.00	6.60	9.35	3.30	11.45	0.00	0.00	0.00	0.00	
9	0.00	0.00	0.00	0.00	7.50	10.05	3.60	10.40	0.00	0.00	0.00	0.00	
10	0.00	0.00	0.00	0.00	45.20	17.60	3.60	9.35	0.00	0.00	0.00	0.00	
11	0.00	0.00	0.00	0.00	38.00	19.20	3.00	8.40	0.30	0.00	0.00	0.00	
12	0.00	0.00	0.00	0.00	27.65	20.45	3.00	7.50	0.30	0.00	0.00	0.00	
13	0.00	0.00	0.00	0.00	27.20	20.00	3.30	8.40	0.30	0.00	0.00	0.00	
14	0.00	0.00	0.00	0.00	24.50	19.60	3.30	8.40	0.00	0.00	0.00	0.00	
15	0.00	0.00	0.00	0.00	20.90	18.40	3.60	8.40	0.00	0.00	0.00	0.00	
16	0.00	0.00	0.00	0.00	16.00	16.80	3.30	8.10	0.00	0.00	0.00	0.00	
17	0.00	0.00	0.00	0.00	13.90	14.95	2.70	7.80	0.00	0.00	0.00	0.00	
18	0.00	0.00	0.00	0.30	12.50	13.20	2.70	7.50	0.00	0.00	0.00	0.00	
19	0.00	0.00	0.00	3.00	10.75	12.15	2.70	6.90	0.00	0.00	0.00	0.00	
20	0.00	0.00	0.00	2.70	9.35	11.10	2.40	6.30	0.00	0.00	0.00	0.00	
21	0.00	0.00	0.00	2.70	7.50	11.80	2.10	5.40	0.00	0.00	0.00	0.00	
22	0.00	0.00	0.00	2.70	7.20	12.15	1.80	4.80	0.00	0.00	0.00	0.00	
23	0.00	0.00	0.00	2.70	7.20	9.35	4.50	4.50	0.00	0.00	0.00	0.00	
24	0.00	0.00	0.00	2.40	8.40	8.70	7.20	3.90	0.00	0.00	0.00	0.00	
25	0.00	0.00	0.00	2.10	7.80	8.40	8.70	3.30	0.00	0.00	0.00	0.00	
26	0.00	0.00	0.00	3.00	6.00	7.50	10.05	2.40	0.00	0.00	0.00	0.00	
27	0.00	0.00	0.00	3.60	6.60	6.60	10.40	1.80	0.00	0.00	0.00	0.00	
28	0.00	0.00	0.00	4.20	6.90	6.30	11.45	1.80	0.00	0.00	0.00	0.00	
29	0.00	0.00	0.00	5.40	6.90	5.70	14.25	1.50	0.00	0.00		0.00	
30	0.00	0.00	0.00	5.40	6.90	4.80	16.00	1.20	0.00	0.00		0.00	
31		0.00		5.10	7.50		16.40		0.00	0.00		0.00	
Total	0.00	0.00	0.00	45.30	368.35	338.50	167.05	238.55	7.20	0.00	0.00	0.00	1164.95 CMSDAY
Mean	0.00	0.00	0.00	1.46	11.88	11.28	5.39	7.95	0.23	0.00	0.00	0.00	3.19 CMS
Max	0.00	0.00	0.00	5.40	45.20	20.45	16.40	16.00	1.20	0.00	0.00	0.00	45.20 CMS
Min	0.00	0.00	0.00	0.00	3.90	4.80	1.80	1.20	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.000	0.000	0.000	3.914	31.825	29.246	14.433	20.611	0.622	0.000	0.000	0.000	100.652 MCM

Momentary Peak 75.75 CMS, at 6.25 M (A.D), at 15.00 Hours, on Aug 10, 2001
Runoff Yield 2.76 Liters/Second/Square KM, Momentary Peak Yield 65.528 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Huai TaThieo at Ban Na Hai, Ubon Ratchathani (M.127)

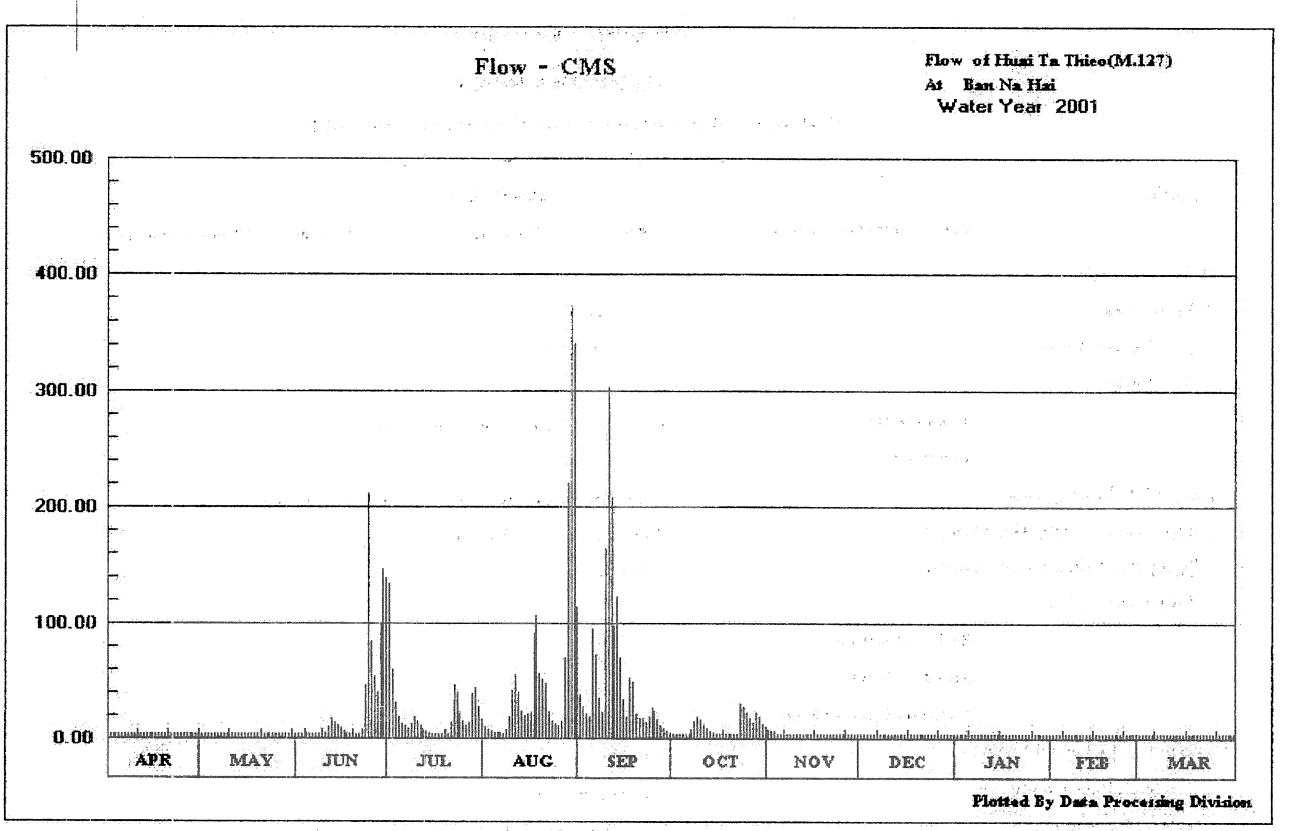
Lat 15 - 38 - 37 N. **Long** 104 - 55 - 57 E.

Location		on left bank at the bridge on road.			
	Ban Na Hai	**Amphoe**	Trakan Phutphon	**Changwat**	Ubon Ratchathani
Drainage Area		414 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 Float	-			
	Rated by Current Meter	1987 to date.			
Stability of Channel Regimes		Rather unstable.			
Overbank Flow Conditions		Overbank flow starts at elevation +6.050 m.(A.D.), records are channel flow only.			
General Description		Records fair. The weir situsted about 300 meters downstream from the gage site.			
		Stage-discharge relation defined by 49 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.96	0.87	1.35	4.22	1.94	2.62	1.72	1.84	1.32	1.25	1.23	1.19	
2	0.96	0.87	1.33	3.03	1.85	2.43	1.67	1.81	1.30	1.25	1.23	1.18	
3	0.95	0.87	1.86	2.49	1.81	2.27	1.66	1.79	1.28	1.25	1.23	1.18	
4	0.95	0.86	1.77	2.20	1.77	2.20	1.66	1.72	1.28	1.25	1.23	1.18	
5	0.95	0.86	1.66	2.03	1.76	3.61	1.66	1.66	1.30	1.25	1.21	1.17	
6	0.95	0.86	1.57	1.95	1.74	3.24	1.72	1.60	1.30	1.24	1.21	1.17	
7	0.94	0.85	1.57	1.88	1.69	2.58	1.82	1.56	1.30	1.24	1.21	1.17	
8	0.94	0.85	1.66	2.02	1.86	2.31	2.10	1.53	1.30	1.24	1.21	1.15	
9	0.94	0.85	1.66	2.22	2.21	4.67	2.20	1.50	1.29	1.24	1.20	1.15	
10	0.94	0.84	1.75	2.11	2.68	6.59	2.12	1.48	1.29	1.24	1.20	1.14	
11	0.94	0.83	1.91	1.98	2.94	5.30	1.98	1.46	1.29	1.24	1.20	1.14	
12	0.94	0.82	2.18	1.86	2.67	3.66	1.88	1.44	1.29	1.25	1.20	1.14	
13	0.93	0.81	2.06	1.80	2.34	4.05	1.81	1.48	1.29	1.25	1.20	1.13	
14	0.93	0.80	1.95	1.75	2.24	3.19	1.77	1.51	1.28	1.25	1.20	1.12	
15	0.92	0.80	1.89	1.68	2.26	2.55	1.67	1.53	1.28	1.26	1.20	1.12	
16	0.89	0.81	1.81	1.64	2.29	2.20	1.62	1.50	1.27	1.27	1.22	1.12	
17	0.86	0.84	1.70	1.60	3.54	2.88	1.55	1.46	1.27	1.27	1.23	1.11	
18	0.86	1.07	1.63	1.60	3.80	2.83	1.52	1.44	1.27	1.27	1.23	1.11	
19	0.86	1.24	1.55	1.55	2.96	2.26	1.53	1.40	1.28	1.27	1.23	1.10	
20	0.86	1.25	1.51	1.53	2.87	2.16	1.52	1.40	1.28	1.26	1.23	1.09	
21	0.86	1.23	1.48	2.05	2.81	2.15	1.50	1.40	1.27	1.26	1.22	1.09	
22	0.86	1.22	1.84	2.78	2.31	2.06	1.61	1.38	1.27	1.25	1.21	1.08	
23	0.86	1.27	2.77	2.67	2.10	2.20	2.48	1.36	1.26	1.25	1.21	1.08	
24	0.85	1.28	5.36	2.31	2.03	2.38	2.43	1.35	1.25	1.24	1.21	1.08	
25	0.85	1.27	3.43	2.09	1.96	2.32	2.31	1.33	1.24	1.24	1.20	1.08	
26	0.85	1.27	2.91	1.97	2.08	2.14	2.18	1.33	1.24	1.24	1.20	1.07	
27	0.86	1.26	2.67	2.06	3.19	1.98	2.05	1.33	1.24	1.24	1.19	1.07	
28	0.86	1.26	3.68	2.65	5.47	1.87	2.29	1.31	1.24	1.24	1.19	1.05	
29	0.86	1.25	4.41	2.74	7.48	1.81	2.20	1.31	1.24	1.24		1.05	
30	0.87	1.54	4.30	2.42	7.09	1.76	2.03	1.33	1.27	1.24		1.04	
31		1.36		2.13	3.92		1.91		1.26	1.23		1.03	
Mean	0.90	1.03	2.24	2.16	2.83	2.81	1.88	1.48	1.28	1.25	1.21	1.12	
Max	0.96	1.54	5.36	4.22	7.48	6.59	2.48	1.84	1.32	1.27	1.23	1.19	7.48
Min	0.85	0.80	1.33	1.53	1.69	1.76	1.50	1.31	1.24	1.23	1.19	1.03	0.80

Annual Max Momentary Gage Height 7.90 M (A.D), at 1.00 Hours, on Aug 30, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.58 M (A.D)
Left Bank Elevation 6.66 M (A.D)
Right Bank Elevation 6.04 M (A.D), Drainage Area 414 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.63	135.34	12.00	39.30	5.90	9.06	0.40	0.13	0.08	0.00	
2	0.00	0.00	0.48	62.14	9.35	29.64	4.80	8.19	0.25	0.13	0.08	0.00	
3	0.00	0.00	9.64	32.52	8.19	22.89	4.60	7.65	0.20	0.13	0.08	0.00	
4	0.00	0.00	7.15	20.30	7.15	20.30	4.60	5.90	0.20	0.13	0.08	0.00	
5	0.00	0.00	4.60	14.70	6.90	96.62	4.60	4.60	0.25	0.13	0.03	0.00	
6	0.00	0.00	2.98	12.30	6.40	74.40	5.90	3.40	0.25	0.10	0.03	0.00	
7	0.00	0.00	2.98	10.22	5.20	37.16	8.48	2.84	0.25	0.10	0.03	0.00	
8	0.00	0.00	4.60	14.40	9.64	24.42	16.80	2.42	0.25	0.10	0.03	0.00	
9	0.00	0.00	4.60	21.04	20.67	165.49	20.30	2.00	0.22	0.10	0.00	0.00	
10	0.00	0.00	6.65	17.15	42.60	304.04	17.50	1.80	0.22	0.10	0.00	0.00	
11	0.00	0.00	11.10	13.20	56.98	209.20	13.20	1.60	0.22	0.10	0.00	0.00	
12	0.00	0.00	19.60	9.64	42.05	99.72	10.22	1.40	0.22	0.13	0.00	0.00	
13	0.00	0.00	15.60	7.90	25.68	124.05	8.19	1.80	0.22	0.13	0.00	0.00	
14	0.00	0.00	12.30	6.65	21.78	71.42	7.15	2.14	0.20	0.13	0.00	0.00	
15	0.00	0.00	10.51	5.00	22.52	35.60	4.80	2.42	0.20	0.15	0.00	0.00	
16	0.00	0.00	8.19	4.20	23.63	20.30	3.80	2.00	0.18	0.18	0.05	0.00	
17	0.00	0.00	5.40	3.40	92.40	53.60	2.70	1.60	0.18	0.18	0.08	0.00	
18	0.00	0.00	4.00	3.40	108.40	50.85	2.28	1.40	0.18	0.18	0.08	0.00	
19	0.00	0.10	2.70	2.70	58.12	22.52	2.42	1.00	0.20	0.18	0.08	0.00	
20	0.00	0.13	2.14	2.42	53.05	18.90	2.28	1.00	0.20	0.15	0.08	0.00	
21	0.00	0.08	1.80	15.30	49.75	18.55	2.00	1.00	0.18	0.15	0.05	0.00	
22	0.00	0.05	9.06	48.10	24.42	15.60	3.60	0.85	0.18	0.13	0.03	0.00	
23	0.00	0.18	47.55	42.05	16.80	20.30	32.04	0.70	0.15	0.13	0.03	0.00	
24	0.00	0.20	213.40	24.42	14.70	27.36	29.64	0.63	0.13	0.10	0.03	0.00	
25	0.00	0.18	85.80	16.50	12.60	24.84	24.42	0.48	0.10	0.10	0.00	0.00	
26	0.00	0.18	55.27	12.90	16.20	18.20	19.60	0.48	0.10	0.10	0.00	0.00	
27	0.00	0.15	42.05	15.60	71.42	13.20	15.30	0.48	0.10	0.10	0.00	0.00	
28	0.00	0.15	100.96	40.95	221.24	9.93	23.63	0.32	0.10	0.10	0.00	0.00	
29	0.00	0.13	148.07	45.90	374.60	8.19	20.30	0.32	0.10	0.10		0.00	
30	0.00	2.56	140.70	29.16	343.40	6.90	14.70	0.48	0.18	0.10		0.00	
31		0.70		17.85	115.84		11.10		0.15	0.08		0.00	
Total	0.00	4.79	980.51	707.35	1893.68	1683.49	346.85	69.96	5.96	3.85	0.95	0.00	5697.39 CMSDAY
Mean	0.00	0.15	32.68	22.82	61.09	56.12	11.19	2.33	0.19	0.12	0.03	0.00	15.61 CMS
Max	0.00	2.56	213.40	135.34	374.60	304.04	32.04	9.06	0.40	0.18	0.08	0.00	374.60 CMS
Min	0.00	0.00	0.48	2.42	5.20	6.90	2.00	0.32	0.10	0.08	0.00	0.00	0.00 CMS
Runoff	0.000	0.414	84.716	61.115	163.614	145.454	29.968	6.045	0.515	0.333	0.082	0.000	492.255 MCM

Momentary Peak 408.20 CMS, at 7.90 M (A.D), at 1.00 Hours, on Aug 30, 2001
Runoff Yield 37.70 Liters/Second/Square KM; Momentary Peak Yield 985.990 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Huai Hin Lap at Ban Hin Phloeng Klang, Nakhon Ratchasima (M.134)

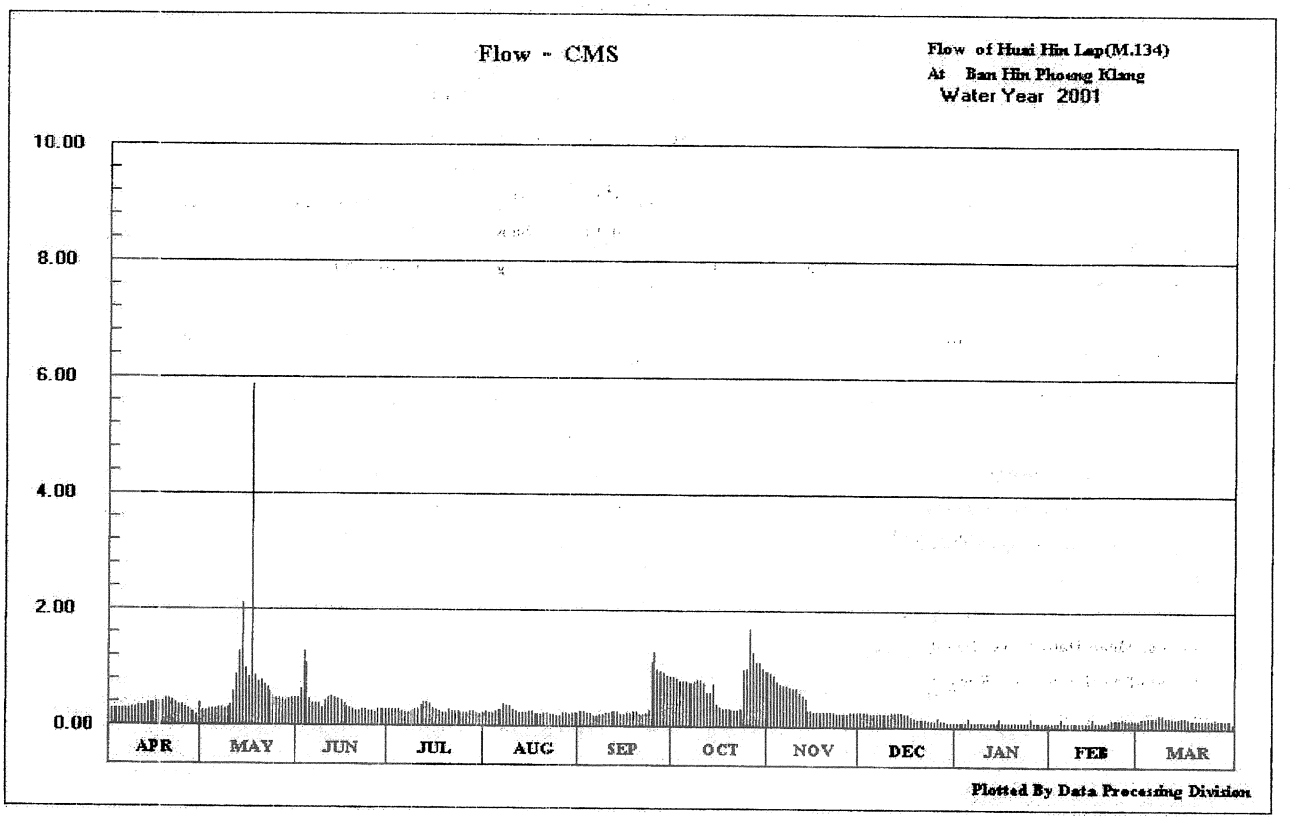
Lat 14 - 43 - 29 N. **Long** 101 - 34 - 21 E.

Location		on left bank at Ban Hin Lap.			
	Ban	Hin Phloeng Klang	**Amphoe**	Pak Chong	**Changwat** Nakhon Ratchasima
Drainage Area		242 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		3-time daily readings at 06.00, 12.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 3 readings.			
Period of Available Gage Records		1986 to date.			
Rating Operation					
	Period of Rating	2001 to date.			
	Rated by Float	-			
	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 38 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.46	0.44	0.55	0.45	0.44	0.44	0.73	0.76	0.44	0.32	0.31	0.37	
2	0.46	0.44	0.63	0.45	0.43	0.44	0.72	0.75	0.44	0.32	0.31	0.38	
3	0.45	0.45	0.87	0.45	0.43	0.43	0.70	0.74	0.44	0.32	0.30	0.38	
4	0.45	0.45	0.80	0.45	0.44	0.43	0.70	0.70	0.43	0.30	0.30	0.40	
5	0.46	0.46	0.54	0.44	0.45	0.41	0.70	0.68	0.43	0.30	0.30	0.41	
6	0.46	0.47	0.51	0.43	0.45	0.41	0.69	0.67	0.43	0.30	0.30	0.41	
7	0.46	0.47	0.51	0.43	0.51	0.42	0.69	0.67	0.43	0.30	0.30	0.41	
8	0.47	0.46	0.50	0.44	0.49	0.42	0.70	0.65	0.43	0.31	0.29	0.43	
9	0.47	0.47	0.47	0.45	0.49	0.43	0.71	0.64	0.43	0.31	0.29	0.43	
10	0.48	0.49	0.53	0.45	0.45	0.43	0.71	0.64	0.43	0.31	0.29	0.40	
11	0.48	0.61	0.56	0.49	0.44	0.44	0.69	0.60	0.44	0.30	0.29	0.40	
12	0.48	0.74	0.57	0.52	0.43	0.44	0.60	0.58	0.44	0.30	0.29	0.39	
13	0.50	0.87	0.55	0.52	0.43	0.44	0.60	0.56	0.44	0.30	0.29	0.39	
14	0.50	1.11	0.54	0.50	0.43	0.42	0.68	0.46	0.44	0.30	0.28	0.39	
15	0.50	0.77	0.53	0.47	0.44	0.42	0.50	0.45	0.43	0.29	0.28	0.40	
16	0.52	0.72	0.51	0.45	0.44	0.43	0.48	0.44	0.43	0.29	0.29	0.40	
17	0.52	1.87	0.48	0.44	0.42	0.43	0.47	0.44	0.41	0.29	0.30	0.38	
18	0.52	0.73	0.47	0.43	0.42	0.44	0.47	0.44	0.39	0.29	0.32	0.36	
19	0.54	0.69	0.45	0.43	0.42	0.44	0.47	0.44	0.36	0.28	0.34	0.36	
20	0.54	0.70	0.44	0.45	0.43	0.42	0.45	0.44	0.36	0.28	0.36	0.36	
21	0.53	0.67	0.44	0.44	0.43	0.42	0.45	0.44	0.35	0.28	0.37	0.36	
22	0.50	0.64	0.45	0.44	0.42	0.43	0.45	0.44	0.35	0.28	0.36	0.37	
23	0.49	0.60	0.45	0.44	0.42	0.46	0.47	0.43	0.34	0.29	0.36	0.37	
24	0.49	0.57	0.44	0.43	0.41	0.81	0.77	0.43	0.34	0.29	0.37	0.36	
25	0.47	0.56	0.44	0.43	0.41	0.87	0.78	0.43	0.34	0.29	0.37	0.36	
26	0.45	0.55	0.43	0.43	0.43	0.77	1.00	0.43	0.33	0.30	0.37	0.36	
27	0.43	0.54	0.45	0.44	0.43	0.76	0.87	0.43	0.33	0.30	0.37	0.35	
28	0.43	0.53	0.46	0.44	0.42	0.75	0.81	0.44	0.33	0.30	0.37	0.36	
29	0.41	0.54	0.46	0.43	0.43	0.74	0.81	0.44	0.32	0.30		0.37	
30	0.51	0.56	0.45	0.42	0.43	0.73	0.78	0.44	0.32	0.31		0.37	
31		0.55		0.43	0.43		0.76		0.32	0.31		0.37	
Mean	0.48	0.64	0.52	0.45	0.44	0.51	0.66	0.54	0.39	0.30	0.32	0.38	
Max	0.54	1.87	0.87	0.52	0.51	0.87	1.00	0.76	0.44	0.32	0.37	0.43	1.87
Min	0.41	0.44	0.43	0.42	0.41	0.41	0.45	0.43	0.32	0.28	0.28	0.35	0.28

Annual Max Momentary Gage Height 2.10 M (A.D), at 11.00 Hours, on May 17, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.22 M (A.D)
Left Bank Elevation 6.16 M (A.D)
Right Bank Elevation 6.15 M (A.D), Drainage Area 242 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.32	0.28	0.50	0.30	0.28	0.28	0.89	0.98	0.28	0.12	0.11	0.17	
2	0.32	0.28	0.66	0.30	0.26	0.28	0.86	0.95	0.28	0.12	0.11	0.18	
3	0.30	0.30	1.31	0.30	0.26	0.26	0.80	0.92	0.28	0.12	0.10	0.18	
4	0.30	0.30	1.10	0.30	0.28	0.26	0.80	0.80	0.26	0.10	0.10	0.20	
5	0.32	0.32	0.48	0.28	0.30	0.22	0.80	0.76	0.26	0.10	0.10	0.22	
6	0.32	0.34	0.42	0.26	0.30	0.22	0.78	0.74	0.26	0.10	0.10	0.22	
7	0.32	0.34	0.42	0.26	0.42	0.24	0.78	0.74	0.26	0.10	0.10	0.22	
8	0.34	0.32	0.40	0.28	0.38	0.24	0.80	0.70	0.26	0.11	0.09	0.26	
9	0.34	0.34	0.34	0.30	0.38	0.26	0.83	0.68	0.26	0.11	0.09	0.26	
10	0.36	0.38	0.46	0.30	0.30	0.26	0.83	0.68	0.26	0.11	0.09	0.20	
11	0.36	0.62	0.52	0.38	0.28	0.28	0.78	0.60	0.28	0.10	0.09	0.20	
12	0.36	0.92	0.54	0.44	0.26	0.28	0.60	0.56	0.28	0.10	0.09	0.19	
13	0.40	1.31	0.50	0.44	0.26	0.28	0.60	0.52	0.28	0.10	0.09	0.19	
14	0.40	2.14	0.48	0.40	0.26	0.24	0.76	0.32	0.28	0.10	0.08	0.19	
15	0.40	1.01	0.46	0.34	0.28	0.24	0.40	0.30	0.26	0.09	0.08	0.20	
16	0.44	0.86	0.42	0.30	0.28	0.26	0.36	0.28	0.26	0.09	0.09	0.20	
17	0.44	5.92	0.36	0.28	0.24	0.26	0.34	0.28	0.22	0.09	0.10	0.18	
18	0.44	0.89	0.34	0.26	0.24	0.28	0.34	0.28	0.19	0.09	0.12	0.16	
19	0.48	0.78	0.30	0.26	0.24	0.28	0.34	0.28	0.16	0.08	0.14	0.16	
20	0.48	0.80	0.28	0.30	0.26	0.24	0.30	0.28	0.16	0.08	0.16	0.16	
21	0.46	0.74	0.28	0.28	0.26	0.24	0.30	0.28	0.15	0.08	0.17	0.16	
22	0.40	0.68	0.30	0.28	0.24	0.26	0.30	0.28	0.15	0.08	0.16	0.17	
23	0.38	0.60	0.30	0.28	0.24	0.32	0.34	0.26	0.14	0.09	0.16	0.17	
24	0.38	0.54	0.28	0.26	0.22	1.13	1.01	0.26	0.14	0.09	0.17	0.16	
25	0.34	0.52	0.28	0.26	0.22	1.31	1.04	0.26	0.14	0.09	0.17	0.16	
26	0.30	0.50	0.26	0.26	0.26	1.01	1.70	0.26	0.13	0.10	0.17	0.16	
27	0.26	0.48	0.30	0.28	0.26	0.98	1.31	0.26	0.13	0.10	0.17	0.15	
28	0.26	0.46	0.32	0.28	0.24	0.95	1.13	0.28	0.13	0.10	0.17	0.16	
29	0.22	0.48	0.32	0.26	0.26	0.92	1.13	0.28	0.12	0.10		0.17	
30	0.42	0.52	0.30	0.24	0.26	0.89	1.04	0.28	0.12	0.11		0.17	
31		0.50		0.26	0.26		0.98		0.12	0.11		0.17	
Total	10.86	24.47	13.23	9.22	8.48	13.17	23.27	14.35	6.50	3.06	3.37	5.74	135.72 CMSDAY
Mean	0.36	0.79	0.44	0.30	0.27	0.44	0.75	0.48	0.21	0.10	0.12	0.19	0.37 CMS
Max	0.48	5.92	1.31	0.44	0.42	1.31	1.70	0.98	0.28	0.12	0.17	0.26	5.92 CMS
Min	0.22	0.28	0.26	0.24	0.22	0.22	0.30	0.26	0.12	0.08	0.08	0.15	0.08 CMS
Runoff	0.938	2.114	1.143	0.797	0.733	1.138	2.011	1.240	0.562	0.264	0.291	0.496	11.726 MCM

Momentary Peak 7.30 CMS, at 2.10 M (A.D), at 11.00 Hours, on May 17, 2001

Runoff Yield 1.54 Liters/Second/Square KM, Momentary Peak Yield 30.165 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Huai Nua at Ban Raka, Si Sa Ket (M.137)

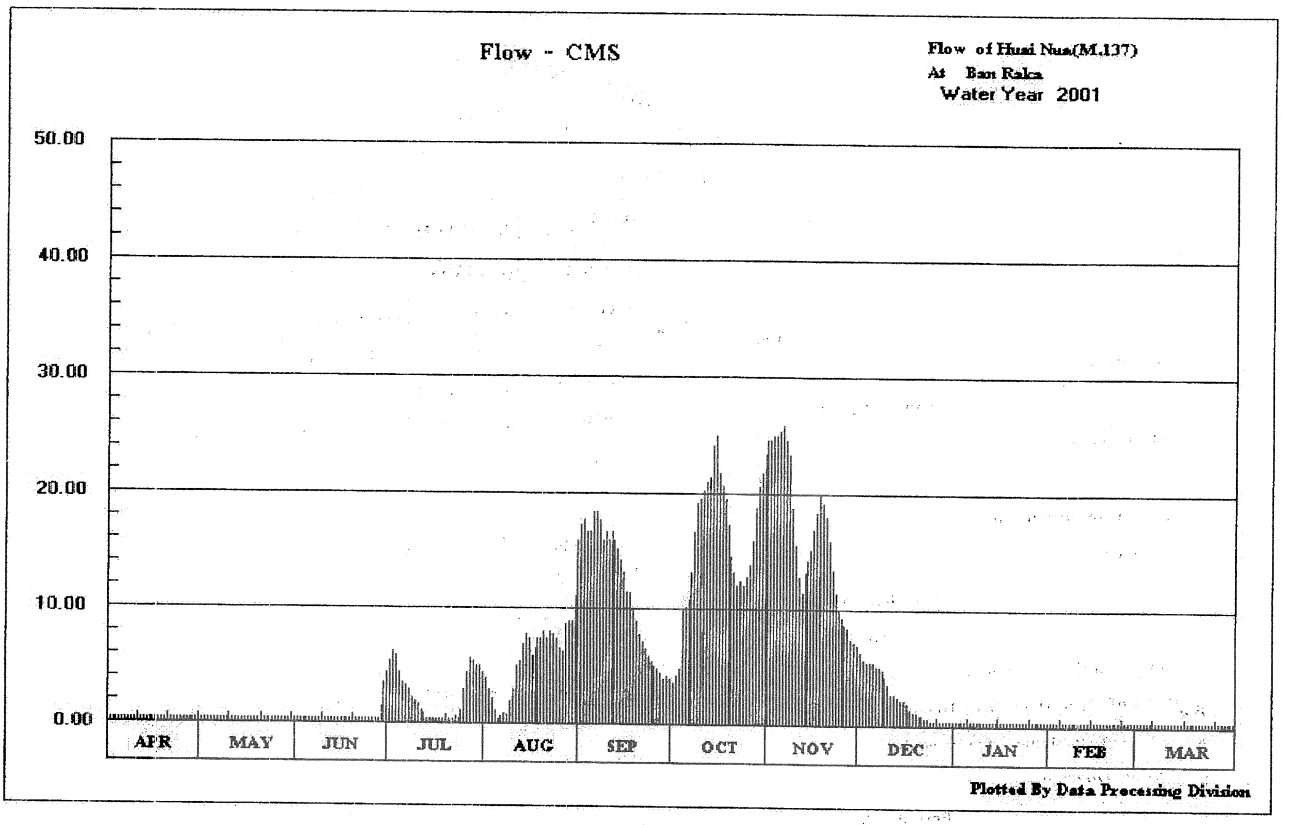
Lat 14 - 47 - 28 N. **Long** 104 - 10 - 35 E.

Location		on right bank at the bridge on road.
	Ban Raka	**Amphoe** Khu Khan **Changwat** Si Sa Ket
Drainage Area		397 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		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 Float	-
	Rated by Current Meter	1987 to date.
Stability of Channel Regimes		Unstable by some scouring.
Overbank Flow Conditions		Overbank flow starts at elevation +1.090 m.(A.D.) and is including overbank flow.
General Description		Records fair. Stage-discharge relation defined by 35 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.21	-0.11	0.21	1.40	1.35	1.77	1.34	1.96	1.43	1.21	0.87	0.59	
2	1.22	-0.12	-0.10	1.43	1.32	1.78	1.36	1.96	1.41	1.21	0.86	0.58	
3	1.10	-0.13	-0.10	1.42	1.29	1.75	1.38	1.97	1.40	1.20	0.85	0.57	
4	0.90	-0.14	-0.09	1.37	1.25	1.75	1.55	1.97	1.40	1.20	0.84	0.56	
5	0.75	-0.15	0.02	1.34	1.22	1.80	1.56	1.98	1.40	1.20	0.83	0.55	
6	0.60	-0.16	0.03	1.33	1.23	1.80	1.58	1.99	1.39	1.19	0.83	0.53	
7	0.45	-0.17	0.03	1.32	1.24	1.78	1.65	1.96	1.39	1.18	0.82	0.51	
8	0.20	-0.17	0.04	1.29	1.23	1.73	1.75	1.93	1.38	1.17	0.81	0.50	
9	0.01	-0.18	0.05	1.28	1.28	1.75	1.82	1.81	1.36	1.16	0.81	0.48	
10	-0.20	-0.18	0.10	1.27	1.32	1.73	1.83	1.72	1.34	1.15	0.80	0.47	
11	-0.26	-0.19	0.11	1.25	1.39	1.75	1.85	1.64	1.31	1.14	0.80	0.46	
12	-0.74	-0.19	0.11	1.24	1.40	1.73	1.87	1.60	1.31	1.12	0.79	0.45	
13	-0.76	-0.19	0.10	1.22	1.45	1.71	1.88	1.65	1.30	1.10	0.78	0.44	
14	-0.75	-0.19	0.10	1.21	1.48	1.68	1.95	1.68	1.29	1.08	0.76	0.43	
15	-0.75	-0.18	0.09	1.21	1.47	1.65	1.97	1.71	1.29	1.06	0.75	0.42	
16	-0.67	-0.16	0.10	1.17	1.42	1.60	1.89	1.76	1.28	1.05	0.74	0.41	
17	0.30	-0.15	0.10	1.15	1.44	1.60	1.86	1.80	1.26	1.05	0.74	0.39	
18	0.23	-0.13	0.08	1.12	1.47	1.55	1.83	1.84	1.25	1.04	0.73	0.37	
19	0.09	-0.05	0.07	1.11	1.47	1.52	1.77	1.82	1.25	1.04	0.72	0.36	
20	-0.01	-0.05	0.07	1.07	1.49	1.48	1.69	1.79	1.24	1.03	0.71	0.34	
21	-0.04	-0.05	0.07	1.12	1.47	1.46	1.65	1.73	1.24	1.03	0.70	0.32	
22	-0.07	-0.05	0.13	1.23	1.49	1.44	1.62	1.66	1.23	1.03	0.69	0.31	
23	-0.07	-0.05	0.17	1.22	1.48	1.42	1.63	1.60	1.23	1.02	0.68	0.30	
24	-0.07	-0.06	0.27	1.25	1.47	1.40	1.62	1.55	1.22	1.01	0.66	0.28	
25	-0.07	-0.07	0.47	1.32	1.44	1.39	1.64	1.53	1.22	0.99	0.64	0.27	
26	-0.08	-0.08	0.67	1.37	1.43	1.38	1.67	1.51	1.22	0.97	0.63	0.26	
27	-0.08	-0.08	0.94	1.41	1.51	1.37	1.73	1.50	1.21	0.95	0.62	0.25	
28	-0.09	-0.08	1.26	1.40	1.52	1.35	1.81	1.47	1.21	0.93	0.60	0.23	
29	-0.10	-0.09	1.34	1.39	1.52	1.36	1.86	1.46	1.21	0.90		0.22	
30	-0.11	-0.09	1.37	1.39	1.59	1.35	1.89	1.45	1.21	0.89		0.20	
31		-0.09		1.37	1.73		1.93		1.21	0.88		0.20	
Mean	0.07	-0.12	0.26	1.28	1.41	1.59	1.72	1.73	1.29	1.07	0.75	0.40	
Max	1.22	-0.05	1.37	1.43	1.73	1.80	1.97	1.99	1.43	1.21	0.87	0.59	1.99
Min	-0.76	-0.19	-0.10	1.07	1.22	1.35	1.34	1.45	1.21	0.88	0.60	0.20	-0.76

Annual Max Momentary Gage Height 1.99 M (A.D), at 6.00 Hours, on Nov 6, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -2.92 M (A.D)
Left Bank Elevation 2.14 M (A.D).
Right Bank Elevation 1.08 M (A.D), Drainage Area 397 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.25	0.00	0.00	5.50	4.00	17.45	3.70	24.76	6.40	0.25	0.00	0.00	
2	0.50	0.00	0.00	6.40	3.10	17.80	4.30	24.76	5.80	0.25	0.00	0.00	
3	0.00	0.00	0.00	6.10	2.25	16.75	4.90	25.17	5.50	0.00	0.00	0.00	
4	0.00	0.00	0.00	4.60	1.25	16.75	10.00	25.17	5.50	0.00	0.00	0.00	
5	0.00	0.00	0.00	3.70	0.50	18.50	10.30	25.58	5.50	0.00	0.00	0.00	
6	0.00	0.00	0.00	3.40	0.75	18.50	10.90	25.99	5.20	0.00	0.00	0.00	
7	0.00	0.00	0.00	3.10	1.00	17.80	13.25	24.76	5.20	0.00	0.00	0.00	
8	0.00	0.00	0.00	2.25	0.75	16.05	16.75	23.53	4.90	0.00	0.00	0.00	
9	0.00	0.00	0.00	2.00	2.00	16.75	19.26	18.88	4.30	0.00	0.00	0.00	
10	0.00	0.00	0.00	1.75	3.10	16.05	19.64	15.70	3.70	0.00	0.00	0.00	
11	0.00	0.00	0.00	1.25	5.20	16.75	20.40	12.90	2.80	0.00	0.00	0.00	
12	0.00	0.00	0.00	1.00	5.50	16.05	21.16	11.50	2.80	0.00	0.00	0.00	
13	0.00	0.00	0.00	0.50	7.00	15.35	21.54	13.25	2.50	0.00	0.00	0.00	
14	0.00	0.00	0.00	0.25	7.90	14.30	24.35	14.30	2.25	0.00	0.00	0.00	
15	0.00	0.00	0.00	0.25	7.60	13.25	25.17	15.35	2.25	0.00	0.00	0.00	
16	0.00	0.00	0.00	0.00	6.10	11.50	21.92	17.10	2.00	0.00	0.00	0.00	
17	0.00	0.00	0.00	0.00	6.70	11.50	20.78	18.50	1.50	0.00	0.00	0.00	
18	0.00	0.00	0.00	0.00	7.60	10.00	19.64	20.02	1.25	0.00	0.00	0.00	
19	0.00	0.00	0.00	0.00	7.60	9.10	17.45	19.26	1.25	0.00	0.00	0.00	
20	0.00	0.00	0.00	0.00	8.20	7.90	14.65	18.15	1.00	0.00	0.00	0.00	
21	0.00	0.00	0.00	0.00	7.60	7.30	13.25	16.05	1.00	0.00	0.00	0.00	
22	0.00	0.00	0.00	0.75	8.20	6.70	12.20	13.60	0.75	0.00	0.00	0.00	
23	0.00	0.00	0.00	0.50	7.90	6.10	12.55	11.50	0.75	0.00	0.00	0.00	
24	0.00	0.00	0.00	1.25	7.60	5.50	12.20	10.00	0.50	0.00	0.00	0.00	
25	0.00	0.00	0.00	3.10	6.70	5.20	12.90	9.40	0.50	0.00	0.00	0.00	
26	0.00	0.00	0.00	4.60	6.40	4.90	13.95	8.80	0.50	0.00	0.00	0.00	
27	0.00	0.00	0.00	5.80	8.80	4.60	16.05	8.50	0.25	0.00	0.00	0.00	
28	0.00	0.00	1.50	5.50	9.10	4.00	18.88	7.60	0.25	0.00	0.00	0.00	
29	0.00	0.00	3.70	5.20	9.10	4.30	20.78	7.30	0.25	0.00		0.00	
30	0.00	0.00	4.60	5.20	11.20	4.00	21.92	7.00	0.25	0.00		0.00	
31		0.00		4.60	16.05		23.53		0.25	0.00		0.00	
Total	0.75	0.00	9.80	78.55	186.75	350.70	498.27	494.38	76.85	0.50	0.00	0.00	1696.55 CMSDAY
Mean	0.03	0.00	0.33	2.53	6.02	11.69	16.07	16.48	2.48	0.02	0.00	0.00	4.65 CMS
Max	0.50	0.00	4.60	6.40	16.05	18.50	25.17	25.99	6.40	0.25	0.00	0.00	25.99 CMS
Min	0.00	0.00	0.00	0.00	0.50	4.00	3.70	7.00	0.25	0.00	0.00	0.00	0.00 CMS
Runoff	0.065	0.000	0.847	6.787	16.135	30.300	43.051	42.714	6.640	0.043	0.000	0.000	146.582 MCM

Momentary Peak 25.99 CMS, at 1.99 M (A.D), at 6.00 Hours, on Nov 6, 2001

Runoff Yield 11.71 Liters/Second/Square KM, Momentary Peak Yield 65.466 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Huai Khulu at Ban Se Pet, Ubon Ratchathani (M.141)

Lat 15 - 32 - 24 N. **Long** 104 - 58 - 46 E.

Location on left bank at the bridge on highway.

Ban Se Pet **Amphoe** Trakan Phutphon **Changwat** Ubon Ratchathani

Drainage Area 382 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 +8.063 m. (A.D.)

Gage Reading Frequency 3-time daily readings at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 3 readings.

Period of Available Gage Records 1994 to date.

Rating Operation

Period of Rating 1994 to date.

Rated by Float -

Rated by Current Meter 1994 to date.

Stability of Channel Reglmes Fairly stable with variable water surface slope.

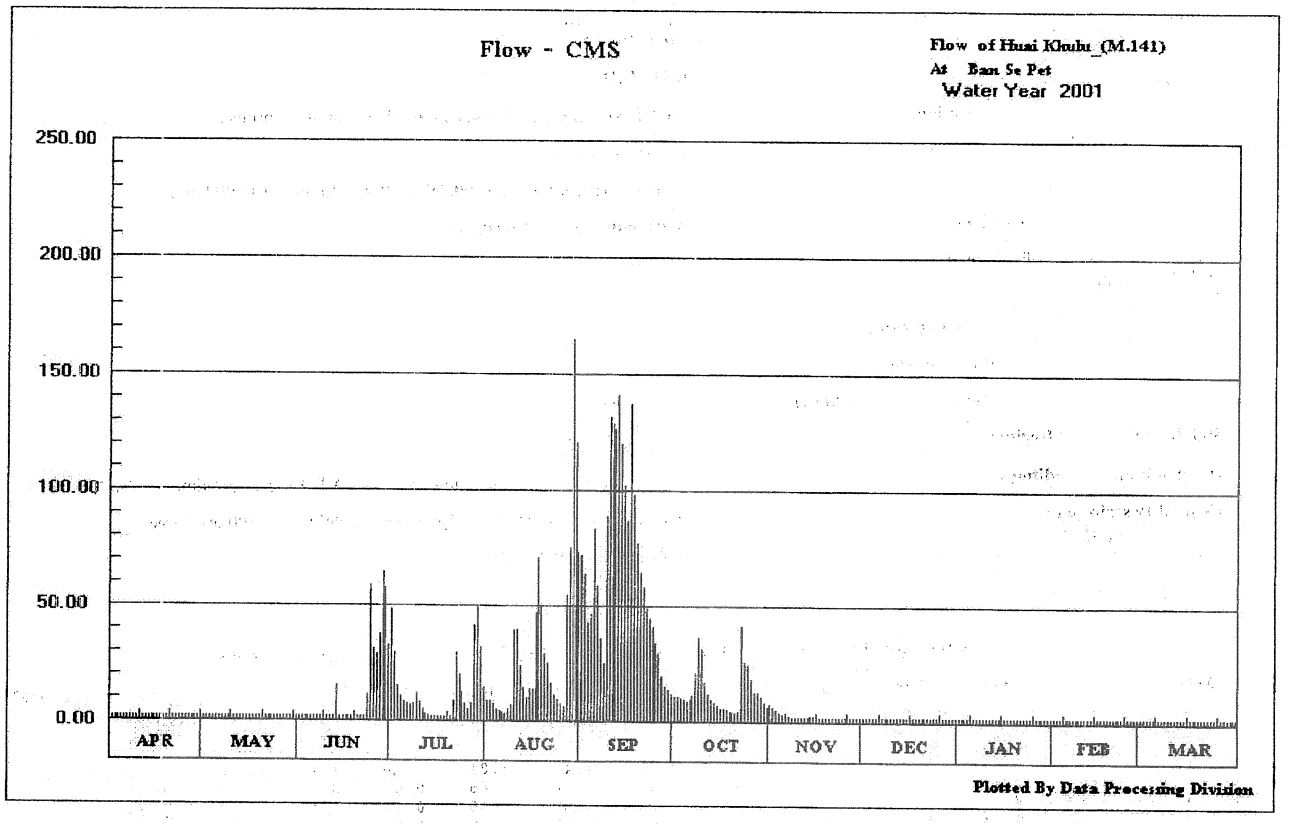
Overbank Flow Conditions Overbank flow starts at elevation +5.320 m.(A.D.) and is including overbank flow.

General Description Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.43	1.45	1.53	3.97	2.53	4.59	2.65	2.43	1.78	1.69	1.59	1.52	
2	1.43	1.44	1.54	3.41	2.52	4.40	2.63	2.35	1.77	1.69	1.59	1.52	
3	1.43	1.44	1.81	2.88	2.43	3.81	2.59	2.28	1.72	1.69	1.60	1.52	
4	1.43	1.44	1.74	2.64	2.28	3.93	2.55	2.19	1.70	1.69	1.64	1.51	
5	1.43	1.43	1.68	2.49	2.24	4.85	2.52	2.13	1.78	1.69	1.64	1.51	
6	1.43	1.43	1.61	2.43	2.18	4.26	2.58	2.08	1.78	1.68	1.64	1.51	
7	1.43	1.43	1.61	2.40	2.12	3.61	2.69	2.05	1.77	1.68	1.63	1.50	
8	1.43	1.42	1.60	2.45	2.27	3.26	3.12	2.02	1.77	1.67	1.62	1.50	
9	1.43	1.42	1.60	2.71	2.41	4.96	3.63	2.01	1.76	1.67	1.61	1.49	
10	1.43	1.41	1.66	2.47	3.73	5.70	3.47	1.98	1.76	1.67	1.61	1.49	
11	1.43	1.41	1.77	2.26	3.73	5.65	2.96	1.97	1.75	1.66	1.60	1.49	
12	1.43	1.41	2.02	2.14	3.22	5.61	2.71	1.96	1.75	1.66	1.58	1.49	
13	1.42	1.40	2.89	2.07	2.83	5.85	2.58	2.01	1.74	1.65	1.58	1.48	
14	1.42	1.40	1.91	2.02	2.61	5.51	2.50	2.07	1.74	1.64	1.54	1.48	
15	1.41	1.40	1.83	1.99	2.81	5.22	2.41	2.05	1.74	1.63	1.54	1.48	
16	1.41	1.43	1.78	1.98	2.82	4.93	2.34	2.02	1.74	1.62	1.53	1.48	
17	1.41	1.47	1.78	2.00	3.95	5.80	2.30	1.98	1.73	1.62	1.53	1.48	
18	1.41	1.47	1.77	1.98	4.56	5.15	2.25	1.94	1.73	1.61	1.53	1.47	
19	1.41	1.52	1.75	1.92	4.02	4.70	2.21	1.91	1.73	1.61	1.52	1.47	
20	1.40	1.56	1.63	1.97	3.39	4.42	2.19	1.89	1.72	1.61	1.52	1.47	
21	1.40	1.53	1.61	2.54	3.26	4.25	2.19	1.89	1.72	1.61	1.52	1.47	
22	1.40	1.53	1.81	3.40	2.93	4.03	2.21	1.88	1.71	1.61	1.52	1.46	
23	1.40	1.52	2.68	3.10	2.67	3.87	3.77	1.86	1.71	1.61	1.52	1.46	
24	1.40	1.52	4.27	2.75	2.57	3.75	3.29	1.86	1.70	1.61	1.52	1.46	
25	1.42	1.51	3.47	2.43	2.44	3.55	3.25	1.85	1.70	1.60	1.52	1.46	
26	1.43	1.54	3.39	2.27	2.38	3.41	3.01	1.83	1.70	1.60	1.52	1.46	
27	1.43	1.54	3.67	2.45	4.16	3.08	2.74	1.82	1.69	1.60	1.52	1.45	
28	1.42	1.54	4.41	3.78	4.66	2.89	2.75	1.82	1.69	1.59	1.52	1.45	
29	1.41	1.54	4.23	4.02	6.19	2.80	2.65	1.80	1.69	1.59		1.45	
30	1.47	1.58	3.51	3.50	5.52	2.72	2.51	1.79	1.69	1.59		1.45	
31		1.57		2.83	4.62		2.37		1.69	1.59		1.45	
Mean	1.42	1.47	2.29	2.62	3.23	4.35	2.70	1.99	1.73	1.64	1.56	1.48	
Max	1.47	1.58	4.41	4.02	6.19	5.85	3.77	2.43	1.78	1.69	1.64	1.52	6.19
Min	1.40	1.40	1.53	1.92	2.12	2.72	2.19	1.79	1.69	1.59	1.52	1.45	1.40

Annual Max Momentary Gage Height 6.55 M (A.D), at 18.00 Hours, on Aug 29, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.82 M (A.D)
Left Bank Elevation 5.31 M (A.D)
Right Bank Elevation 5.64 M (A.D), Drainage Area 382 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.09	0.15	0.40	48.65	9.58	72.57	11.60	8.05	1.32	0.97	0.62	0.37	
2	0.09	0.12	0.44	30.21	9.42	64.70	11.24	6.90	1.28	0.97	0.62	0.37	
3	0.09	0.12	1.45	15.90	8.05	43.14	10.54	5.94	1.08	0.97	0.65	0.37	
4	0.09	0.12	1.16	11.42	5.94	47.25	9.90	4.78	1.00	0.97	0.79	0.33	
5	0.09	0.09	0.93	8.95	5.42	84.25	9.42	4.06	1.32	0.97	0.79	0.33	
6	0.09	0.09	0.68	8.05	4.66	59.28	10.38	3.48	1.32	0.93	0.79	0.33	
7	0.09	0.09	0.68	7.60	3.94	36.53	12.32	3.15	1.28	0.93	0.75	0.30	
8	0.09	0.06	0.65	8.35	5.81	25.70	21.58	2.82	1.28	0.89	0.72	0.30	
9	0.09	0.06	0.65	12.68	7.75	89.50	37.19	2.71	1.24	0.89	0.68	0.27	
10	0.09	0.03	0.86	8.65	40.49	132.40	32.07	2.46	1.24	0.89	0.68	0.27	
11	0.09	0.03	1.28	5.68	40.49	129.30	17.62	2.39	1.20	0.86	0.65	0.27	
12	0.09	0.03	2.82	4.18	24.50	126.82	12.68	2.32	1.20	0.86	0.58	0.27	
13	0.06	0.00	16.10	3.37	14.90	141.80	10.38	2.71	1.16	0.82	0.58	0.24	
14	0.06	0.00	1.97	2.82	10.88	120.62	9.10	3.37	1.16	0.79	0.44	0.24	
15	0.03	0.00	1.55	2.53	14.50	102.96	7.75	3.15	1.16	0.75	0.44	0.24	
16	0.03	0.09	1.32	2.46	14.70	88.00	6.76	2.82	1.16	0.72	0.40	0.24	
17	0.03	0.21	1.32	2.60	47.95	138.60	6.20	2.46	1.12	0.72	0.40	0.24	
18	0.03	0.21	1.28	2.46	71.28	99.15	5.55	2.18	1.12	0.68	0.40	0.21	
19	0.03	0.37	1.20	2.04	50.42	77.50	5.03	1.97	1.12	0.68	0.37	0.21	
20	0.00	0.51	0.75	2.39	29.60	65.50	4.78	1.85	1.08	0.68	0.37	0.21	
21	0.00	0.40	0.68	9.74	25.70	58.90	4.78	1.85	1.08	0.68	0.37	0.21	
22	0.00	0.40	1.45	29.90	16.96	50.78	5.03	1.80	1.04	0.68	0.37	0.18	
23	0.00	0.37	12.14	21.00	11.96	45.18	41.81	1.70	1.04	0.68	0.37	0.18	
24	0.00	0.37	59.66	13.40	10.22	41.15	26.60	1.70	1.00	0.68	0.37	0.18	
25	0.06	0.33	32.07	8.05	8.20	34.60	25.40	1.65	1.00	0.65	0.37	0.18	
26	0.09	0.44	29.60	5.81	7.32	30.21	18.75	1.55	1.00	0.65	0.37	0.18	
27	0.09	0.44	38.51	8.35	55.52	20.50	13.22	1.50	0.97	0.65	0.37	0.15	
28	0.06	0.44	65.10	42.14	75.70	16.10	13.40	1.50	0.97	0.62	0.37	0.15	
29	0.03	0.44	58.14	50.42	165.77	14.30	11.60	1.40	0.97	0.62		0.15	
30	0.21	0.58	33.32	33.00	121.24	12.86	9.26	1.36	0.97	0.62		0.15	
31		0.55		14.90	73.90		7.48		0.97	0.62		0.15	
Total	1.89	7.14	368.16	427.70	992.77	2070.15	429.12	85.58	34.85	24.09	14.68	7.47	4463.60 CMSDAY
Mean	0.06	0.23	12.27	13.80	32.02	69.01	13.84	2.85	1.12	0.78	0.52	0.24	12.23 CMS
Max	0.21	0.58	65.10	50.42	165.77	141.80	41.81	8.05	1.32	0.97	0.79	0.37	165.77 CMS
Min	0.00	0.00	0.40	2.04	3.94	12.86	4.78	1.36	0.97	0.62	0.37	0.15	0.00 CMS
Runoff	0.163	0.617	31.809	36.953	85.775	178.861	37.076	7.394	3.011	2.081	1.268	0.645	385.655 MCM

Momentary Peak 193.90 CMS, at 6.55 M (A.D), at 18.00 Hours, on Aug 29, 2001

Runoff Yield 32.01 Liters/Second/Square KM, Momentary Peak Yield 507.592 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Huai Khayung at Ban Don - ao, Si Sa Ket (M.142)

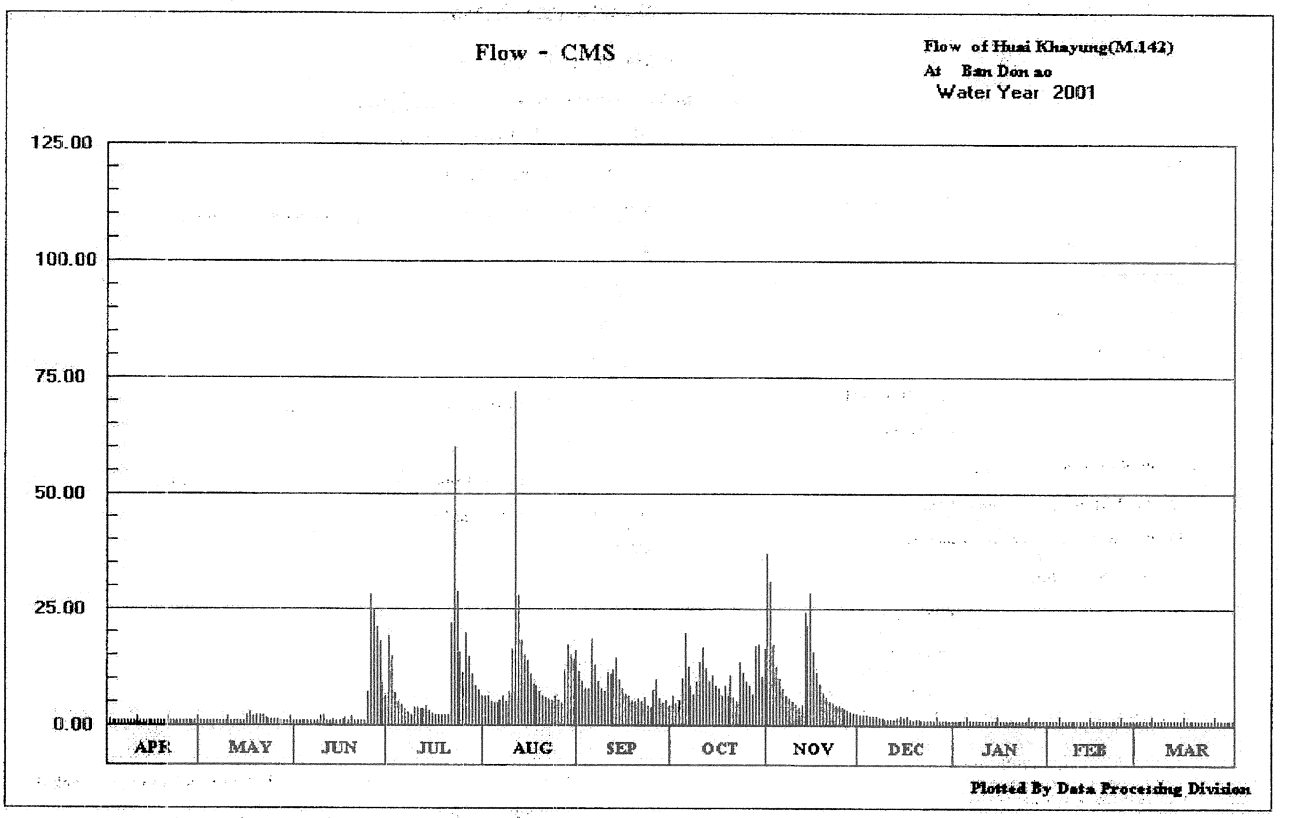
Lat 14 - 30 - 33 N. **Long** 104 - 37 - 27 E.

Location		on left bank at the bridge on road.			
	Ban Don - ao	**Amphoe**	Kantharalak	**Changwat**	Si Sa Ket
Drainage 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 Float	-			
	Rated by Current Meter	1990 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		Overbank flow starts at elevation +6.010 m.(A.D.) and is including overbank flow.			
General Description		Records very good. Stage-discharge relation defined by 100 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.67	0.43	0.54	2.66	1.46	2.01	1.47	3.81	0.90	0.55	0.46	0.38	
2	0.54	0.43	0.53	2.28	1.47	1.78	1.28	3.46	0.88	0.54	0.45	0.38	
3	0.49	0.43	0.48	1.53	1.33	1.63	1.35	2.49	0.86	0.53	0.45	0.38	
4	0.47	0.43	0.46	1.32	1.26	1.62	1.83	2.08	0.83	0.52	0.45	0.38	
5	0.45	0.43	0.43	1.22	1.26	2.60	2.71	1.83	0.81	0.52	0.44	0.38	
6	0.43	0.50	0.46	1.10	1.35	2.12	2.10	1.62	0.78	0.52	0.44	0.38	
7	0.43	0.50	0.47	0.99	1.47	1.78	1.67	1.48	0.76	0.52	0.43	0.39	
8	0.42	0.49	0.43	0.90	1.32	1.61	1.49	1.38	0.74	0.51	0.43	0.39	
9	0.39	0.50	0.66	1.14	1.55	1.56	1.78	1.30	0.71	0.50	0.43	0.39	
10	0.38	0.50	0.85	1.16	2.42	1.96	2.17	1.22	0.71	0.50	0.43	0.39	
11	0.37	0.57	0.59	1.11	5.41	1.92	2.46	1.16	0.70	0.50	0.43	0.39	
12	0.43	0.66	0.58	1.07	3.27	2.04	2.07	1.21	0.70	0.50	0.42	0.38	
13	0.43	0.65	0.67	1.20	2.58	2.27	1.79	3.02	0.77	0.50	0.42	0.38	
14	0.44	0.64	0.56	1.05	2.32	1.82	1.90	2.82	0.84	0.50	0.42	0.38	
15	0.44	0.65	0.63	0.94	2.22	1.62	1.67	3.31	0.77	0.49	0.41	0.38	
16	0.44	0.85	0.68	0.90	1.92	1.50	1.61	2.37	0.72	0.49	0.41	0.41	
17	0.44	0.97	0.77	0.85	1.73	1.47	1.45	1.96	0.68	0.49	0.41	0.44	
18	0.43	0.83	0.63	0.90	1.70	1.37	1.69	1.71	0.65	0.48	0.40	0.44	
19	0.46	0.87	0.57	0.86	1.56	1.30	1.45	1.54	0.72	0.48	0.39	0.45	
20	0.45	0.91	0.53	0.91	1.47	1.38	1.89	1.43	0.69	0.48	0.39	0.48	
21	0.43	0.86	0.49	2.87	1.43	1.33	1.44	1.31	0.65	0.47	0.39	0.48	
22	0.43	0.76	0.65	4.92	1.41	1.43	1.33	1.27	0.63	0.46	0.39	0.48	
23	0.43	0.72	0.61	3.33	1.34	1.20	2.18	1.20	0.62	0.46	0.39	0.48	
24	0.43	0.70	1.55	2.36	1.45	1.15	1.98	1.17	0.59	0.46	0.39	0.48	
25	0.43	0.70	3.44	1.98	1.35	1.59	1.77	1.13	0.59	0.45	0.39	0.48	
26	0.43	0.67	3.06	2.70	1.26	1.80	1.69	1.07	0.58	0.45	0.38	0.47	
27	0.43	0.65	2.80	2.29	2.00	1.38	1.51	1.03	0.58	0.45	0.38	0.47	
28	0.43	0.58	2.55	1.94	2.51	1.25	2.48	1.00	0.57	0.45	0.37	0.47	
29	0.43	0.65	1.76	1.70	2.31	1.35	2.49	0.96	0.56	0.44		0.46	
30	0.43	0.54	1.45	1.60	2.25	1.19	1.86	0.95	0.56	0.46		0.46	
31		0.51		1.45	2.39		2.41		0.56	0.46		0.46	
Mean	0.44	0.63	1.00	1.65	1.90	1.63	1.84	1.74	0.70	0.49	0.41	0.42	
Max	0.67	0.97	3.44	4.92	5.41	2.60	2.71	3.81	0.90	0.55	0.46	0.48	5.41
Min	0.37	0.43	0.43	0.85	1.26	1.15	1.28	0.95	0.56	0.44	0.37	0.38	0.37

Annual Max Momentary Gage Height 6.21 M (A.D), at 6.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.07 M (A.D)
Left Bank Elevation 6.00 M (A.D)
Right Bank Elevation 6.28 M (A.D), Drainage Area 241 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.55	0.59	0.96	19.58	6.64	12.10	6.73	37.19	2.70	1.00	0.68	0.45	
2	0.96	0.59	0.92	14.96	6.73	9.80	5.16	31.20	2.60	0.96	0.65	0.45	
3	0.77	0.59	0.74	7.30	5.54	8.30	5.70	17.48	2.50	0.92	0.65	0.45	
4	0.71	0.59	0.68	5.46	5.02	8.20	10.30	12.80	2.35	0.88	0.65	0.45	
5	0.65	0.59	0.59	4.74	5.02	18.80	20.23	10.30	2.25	0.88	0.62	0.45	
6	0.59	0.80	0.68	3.90	5.70	13.20	13.00	8.20	2.10	0.88	0.62	0.45	
7	0.59	0.80	0.71	3.24	6.73	9.80	8.70	6.82	2.00	0.88	0.59	0.47	
8	0.56	0.77	0.59	2.70	5.46	8.10	6.91	5.94	1.90	0.84	0.59	0.47	
9	0.47	0.80	1.50	4.18	7.50	7.60	9.80	5.30	1.75	0.80	0.59	0.47	
10	0.45	0.80	2.45	4.32	16.64	11.60	13.70	4.74	1.75	0.80	0.59	0.47	
11	0.43	1.08	1.16	3.97	72.37	11.20	17.12	4.32	1.70	0.80	0.59	0.47	
12	0.59	1.50	1.12	3.72	28.35	12.40	12.70	4.67	1.70	0.80	0.56	0.45	
13	0.59	1.45	1.55	4.60	18.56	14.84	9.90	24.60	2.05	0.80	0.56	0.45	
14	0.62	1.40	1.04	3.60	15.44	10.20	11.00	21.68	2.40	0.80	0.56	0.45	
15	0.62	1.45	1.35	2.94	14.24	8.20	8.70	28.95	2.05	0.77	0.53	0.45	
16	0.62	2.45	1.60	2.70	11.20	7.00	8.10	16.04	1.80	0.77	0.53	0.53	
17	0.62	3.12	2.05	2.45	9.30	6.73	6.55	11.60	1.60	0.77	0.53	0.62	
18	0.59	2.35	1.35	2.70	9.00	5.86	8.90	9.10	1.45	0.74	0.50	0.62	
19	0.68	2.55	1.08	2.50	7.60	5.30	6.55	7.40	1.80	0.74	0.47	0.65	
20	0.65	2.76	0.92	2.76	6.73	5.94	10.90	6.37	1.65	0.74	0.47	0.74	
21	0.59	2.50	0.77	22.38	6.37	5.54	6.46	5.38	1.45	0.71	0.47	0.74	
22	0.59	2.00	1.45	60.38	6.19	6.37	5.54	5.09	1.35	0.68	0.47	0.74	
23	0.59	1.80	1.25	29.25	5.62	4.60	13.80	4.60	1.30	0.68	0.47	0.74	
24	0.59	1.70	7.70	15.92	6.55	4.25	11.80	4.39	1.16	0.68	0.47	0.74	
25	0.59	1.70	28.65	11.80	5.70	7.90	9.70	4.11	1.16	0.65	0.47	0.74	
26	0.59	1.55	25.20	20.10	5.02	10.00	8.90	3.72	1.12	0.65	0.45	0.71	
27	0.59	1.45	21.40	15.08	12.00	5.94	7.10	3.48	1.12	0.65	0.45	0.71	
28	0.59	1.12	18.20	11.40	17.72	4.95	17.36	3.30	1.08	0.65	0.43	0.71	
29	0.59	1.45	9.60	9.00	15.32	5.70	17.48	3.06	1.04	0.62		0.68	
30	0.59	0.96	6.55	8.00	14.60	4.53	10.60	3.00	1.04	0.68		0.68	
31		0.84		6.52	16.28		16.52		1.04	0.68		0.68	
Total	19.21	44.10	143.81	312.18	375.14	254.95	325.91	314.83	52.96	23.90	15.21	17.88	1900.08 CMSDAY
Mean	0.64	1.42	4.79	10.07	12.10	8.50	10.51	10.49	1.71	0.77	0.54	0.58	5.21 CMS
Max	1.55	3.12	28.65	60.38	72.37	18.80	20.23	37.19	2.70	1.00	0.68	0.74	72.37 CMS
Min	0.43	0.59	0.59	2.45	5.02	4.25	5.16	3.00	1.04	0.62	0.43	0.45	0.43 CMS
Runoff	1.660	3.810	12.425	26.972	32.412	22.028	28.159	27.201	4.576	2.065	1.314	1.545	164.167 MCM

Momentary Peak 94.52 CMS, at 6.21 M (A.D), at 6:00 Hours, on Aug 11, 2001

Runoff Yield 21.60 Liters/Second/Square KM, Momentary Peak Yield = 392.199 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Huai Sang Kot at Ban Nong Yai, Si Sa Ket (M.143)

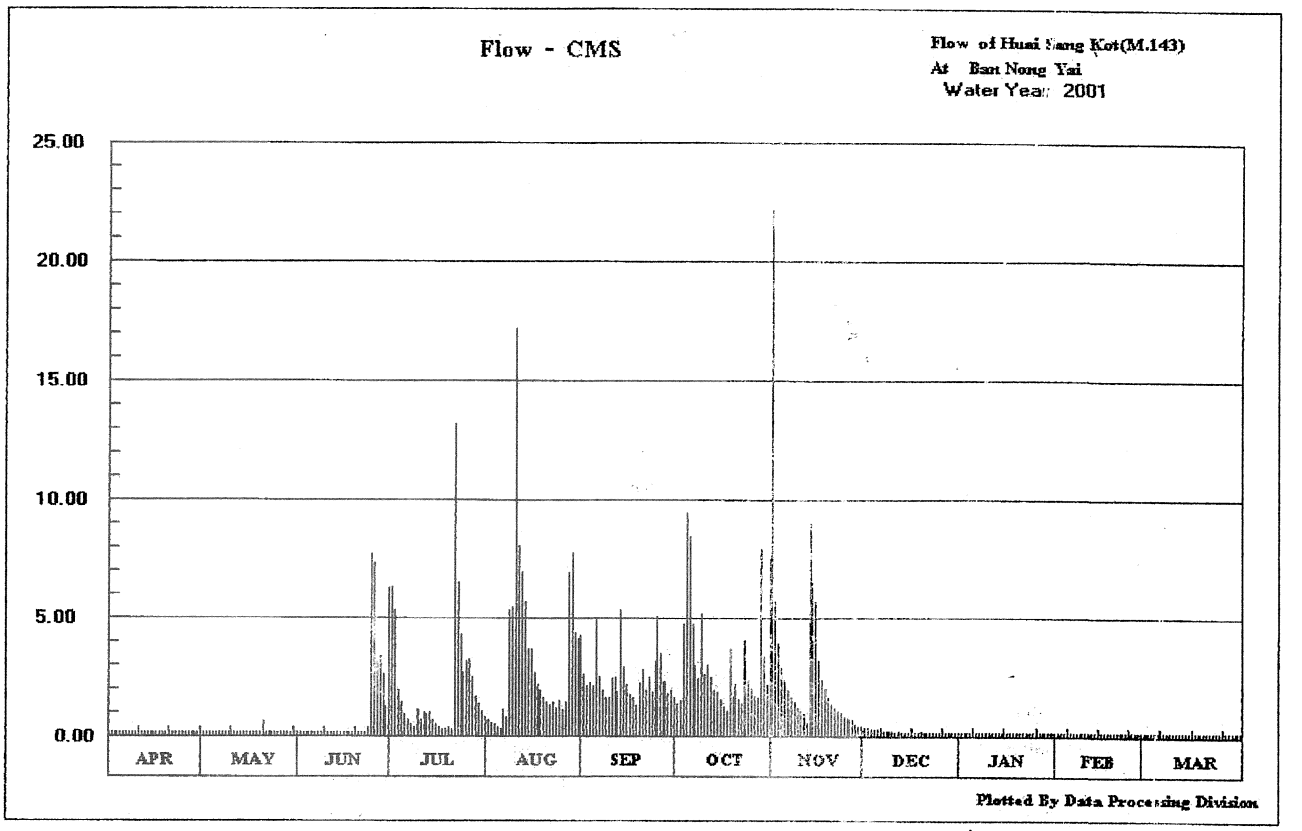
Lat 14 - 29 - 01 N. **Long** 104 - 39 - 52 E.

Location		on left bank at the bridge on road.			
	Ban Nong Yai	**Amphoe** Kantharalak		**Changwat**	Si Sa Ket
Drainage Area		46 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 Float	-			
	Rated by Current Meter	1990 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		Overbank flow starts at elevation + 4.530 m.(A.D.) and is including overbank flow.			
General Description		Records fair. Stage-discharge relation defined by 99 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.74	0.67	0.83	2.67	1.34	1.93	1.57	4.44	1.21	0.96	0.92	0.73	
2	0.74	0.67	0.84	2.48	1.30	1.79	1.60	2.56	1.19	0.95	0.91	0.73	
3	0.73	0.67	0.83	1.73	1.26	1.83	2.37	2.21	1.17	0.95	0.91	0.73	
4	0.73	0.67	0.82	1.58	1.21	1.79	3.19	1.99	1.15	0.95	0.91	0.73	
5	0.67	0.68	0.81	1.43	1.18	2.41	3.04	1.84	1.15	0.94	0.91	0.73	
6	0.67	0.76	0.81	1.34	1.50	1.89	2.37	1.73	1.14	0.94	0.90	0.73	
7	0.65	0.76	0.84	1.27	1.40	1.73	2.02	1.65	1.10	0.94	0.89	0.73	
8	0.65	0.76	0.95	1.21	2.48	1.65	1.87	1.58	1.09	0.93	0.89	0.73	
9	0.66	0.76	0.99	1.50	2.51	1.64	2.45	1.51	1.09	0.93	0.88	0.74	
10	0.68	0.76	1.04	1.35	4.12	1.88	1.92	1.48	1.09	0.92	0.87	0.74	
11	0.69	0.78	0.95	1.45	2.97	1.90	2.02	1.43	1.07	0.92	0.86	0.74	
12	0.69	0.78	0.92	1.44	2.78	1.72	1.90	1.29	1.09	0.92	0.83	0.73	
13	0.69	0.78	0.88	1.46	2.56	2.48	1.74	3.13	1.08	0.92	0.79	0.73	
14	0.69	0.77	0.90	1.35	2.15	2.01	1.71	2.71	1.08	0.91	0.78	0.73	
15	0.69	0.77	0.97	1.27	2.15	1.80	1.62	2.56	1.07	0.91	0.77	0.73	
16	0.69	0.86	1.00	1.21	1.94	1.68	1.54	2.05	1.07	0.91	0.76	0.72	
17	0.68	0.83	1.00	1.18	1.80	1.64	1.48	1.86	1.07	0.91	0.76	0.72	
18	0.68	0.96	0.94	1.15	1.73	1.56	2.16	1.75	1.03	0.91	0.76	0.72	
19	0.68	1.00	0.90	1.14	1.65	1.83	1.66	1.65	1.10	0.91	0.76	0.72	
20	0.68	1.33	0.87	1.15	1.58	1.97	1.80	1.57	1.05	0.90	0.75	0.72	
21	0.68	1.00	0.86	3.72	1.56	1.74	1.62	1.52	1.06	0.90	0.75	0.72	
22	0.68	0.95	0.89	2.71	1.59	1.89	1.57	1.48	1.02	0.90	0.74	0.72	
23	0.68	0.90	1.21	2.28	1.51	1.71	2.23	1.45	1.02	0.90	0.74	0.72	
24	0.68	0.89	2.91	1.95	1.61	2.06	1.85	1.40	1.02	0.92	0.73	0.72	
25	0.68	0.87	2.85	2.06	1.49	2.43	1.76	1.37	1.01	0.92	0.73	0.72	
26	0.67	0.87	2.04	2.07	1.59	2.12	1.67	1.34	1.01	0.92	0.73	0.72	
27	0.67	0.83	2.09	1.90	2.79	1.84	1.64	1.34	1.01	0.92	0.73	0.72	
28	0.67	1.00	1.92	1.66	2.92	1.70	2.95	1.27	0.97	0.92	0.73	0.72	
29	0.67	1.00	1.53	1.57	2.29	1.74	2.09	1.24	0.97	0.92		0.72	
30	0.67	0.94	2.66	1.47	2.24	1.65	1.80	1.23	0.96	0.92		0.72	
31		0.87		1.39	2.27		2.88		0.96	0.92		0.72	
Mean	0.68	0.84	1.24	1.68	1.98	1.87	2.00	1.82	1.07	0.92	0.81	0.73	
Max	0.74	1.33	2.91	3.72	4.12	2.48	3.19	4.44	1.21	0.96	0.92	0.74	4.44
Min	0.65	0.67	0.81	1.14	1.18	1.56	1.48	1.23	0.96	0.90	0.73	0.72	0.65

Annual Max Momentary Gage Height 5.04 M (A.D), at 9.00 Hours, on Nov 1, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.45 M (A.D)
Left Bank Elevation 4.52 M (A.D)
Right Bank Elevation 5.24 M (A.D), Drainage Area 46 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.05	0.02	0.11	6.39	0.74	2.72	1.46	22.20	0.47	0.20	0.17	0.05	
2	0.05	0.02	0.12	5.40	0.64	2.21	1.56	5.80	0.44	0.19	0.17	0.05	
3	0.05	0.02	0.11	2.00	0.56	2.35	4.85	4.05	0.41	0.19	0.17	0.05	
4	0.05	0.02	0.10	1.49	0.47	2.21	9.53	2.96	0.38	0.19	0.17	0.05	
5	0.02	0.02	0.10	1.00	0.42	5.05	8.54	2.38	0.38	0.19	0.17	0.05	
6	0.02	0.07	0.10	0.74	1.22	2.56	4.85	2.00	0.37	0.19	0.16	0.05	
7	0.01	0.07	0.12	0.58	0.90	2.00	3.10	1.73	0.32	0.19	0.15	0.05	
8	0.01	0.07	0.19	0.47	5.40	1.73	2.49	1.49	0.31	0.18	0.15	0.05	
9	0.02	0.07	0.22	1.22	5.55	1.70	5.25	1.25	0.31	0.18	0.15	0.05	
10	0.02	0.07	0.27	0.77	17.24	2.53	2.68	1.16	0.31	0.17	0.14	0.05	
11	0.03	0.08	0.19	1.06	8.12	2.60	3.10	1.00	0.29	0.17	0.13	0.05	
12	0.03	0.08	0.17	1.03	6.99	1.97	2.60	0.62	0.31	0.17	0.11	0.05	
13	0.03	0.08	0.15	1.09	5.80	5.40	2.04	9.11	0.30	0.17	0.08	0.05	
14	0.03	0.07	0.16	0.77	3.75	3.05	1.93	6.61	0.30	0.17	0.08	0.05	
15	0.03	0.07	0.21	0.58	3.75	2.24	1.63	5.80	0.29	0.17	0.07	0.05	
16	0.03	0.13	0.23	0.47	2.76	1.83	1.36	3.25	0.29	0.17	0.07	0.04	
17	0.02	0.11	0.23	0.42	2.24	1.70	1.16	2.46	0.29	0.17	0.07	0.04	
18	0.02	0.20	0.19	0.38	2.00	1.42	3.80	2.07	0.26	0.17	0.07	0.04	
19	0.02	0.23	0.16	0.37	1.73	2.35	1.76	1.73	0.32	0.17	0.07	0.04	
20	0.02	0.72	0.14	0.38	1.49	2.88	2.24	1.46	0.27	0.16	0.06	0.04	
21	0.02	0.23	0.13	13.26	1.42	2.04	1.63	1.29	0.28	0.16	0.06	0.04	
22	0.02	0.19	0.15	6.61	1.53	2.56	1.46	1.16	0.25	0.16	0.05	0.04	
23	0.02	0.16	0.47	4.40	1.25	1.93	4.15	1.06	0.25	0.16	0.05	0.04	
24	0.02	0.15	7.76	2.80	1.59	3.30	2.42	0.90	0.25	0.17	0.05	0.04	
25	0.02	0.14	7.40	3.30	1.19	5.15	2.10	0.82	0.24	0.17	0.05	0.04	
26	0.02	0.14	3.20	3.35	1.53	3.60	1.80	0.74	0.24	0.17	0.05	0.04	
27	0.02	0.11	3.45	2.60	7.05	2.38	1.70	0.74	0.24	0.17	0.05	0.04	
28	0.02	0.23	2.68	1.76	7.82	1.90	8.00	0.58	0.21	0.17	0.05	0.04	
29	0.02	0.23	1.32	1.46	4.45	2.04	3.45	0.53	0.21	0.17		0.04	
30	0.02	0.19	6.33	1.12	4.20	1.73	2.24	0.51	0.20	0.17		0.04	
31		0.14		0.87	4.35		7.58		0.20	0.17		0.04	
Total	0.76	4.13	36.16	68.14	108.15	77.13	102.46	87.46	9.19	5.40	2.82	1.39	503.19 CMSDAY
Mean	0.03	0.13	1.21	2.20	3.49	2.57	3.31	2.92	0.30	0.17	0.10	0.04	1.38 CMS
Max	0.05	0.72	7.76	13.26	17.24	5.40	9.53	22.20	0.47	0.20	0.17	0.05	22.20 CMS
Min	0.01	0.02	0.10	0.37	0.42	1.42	1.16	0.51	0.20	0.16	0.05	0.04	0.01 CMS
Runoff	0.066	0.357	3.124	5.887	9.344	6.664	8.853	7.557	0.794	0.467	0.244	0.120	43.476 MCM

Momentary Peak 38.12 CMS, at 5.04 M (A.D), at 9.00 Hours, on Nov 1, 2001
Runoff Yield 29.97 Liters/Second/Square KM, Momentary Peak Yield 828.696 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Huai Tha at Ban Tamnak Sai, Si Sa Ket (M.144A)

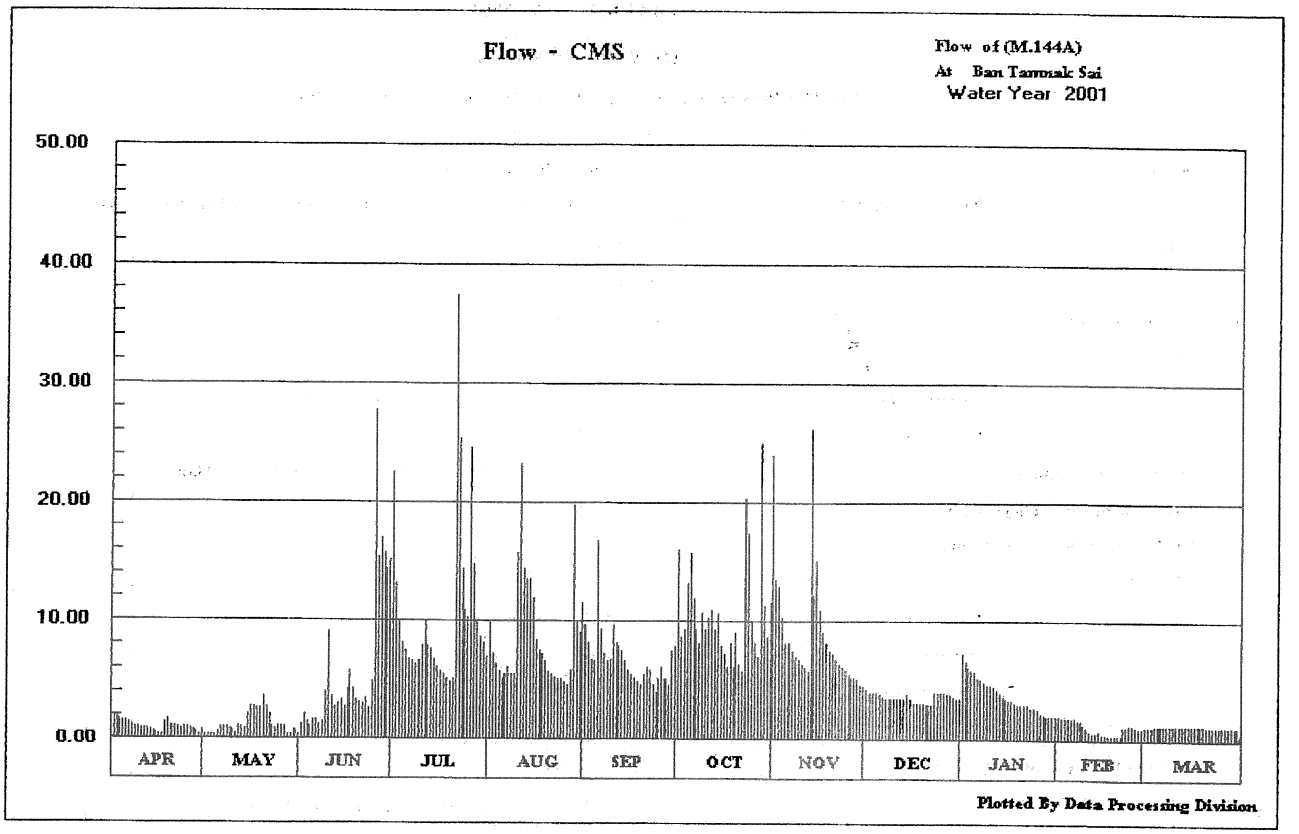
Lat 14 - 32 - 19 N. **Long** 104 - 29 - 29 E.

Location		on left bank at the bridge on road.			
	Ban Tamnak Sai	**Amphoe** Khun Han		**Changwat** Si Sa Ket	
Drainage Area		124 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	+9.717 m. (A.D.)			
Gage Reading Frequency		4-time daily readings at 06.00, 10.00, 14.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 4 readings.			
Period of Available Gage Records		1998 to date.			
Rating Operation					
	Period of Rating	1998 to date.			
	Rated by Float	-			
	Rated by Current Meter	1998 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 55 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.77	5.63	5.73	6.53	6.15	6.14	6.34	6.57	5.91	6.05	5.78	5.72	
2	5.77	5.61	5.79	6.25	6.05	6.09	6.11	6.26	5.90	6.02	5.77	5.72	
3	5.76	5.60	5.75	6.15	6.01	6.03	6.13	6.24	5.90	6.00	5.77	5.72	
4	5.75	5.59	5.72	6.09	5.98	6.02	6.25	6.16	5.90	5.99	5.77	5.73	
5	5.75	5.68	5.76	6.06	5.95	6.36	6.33	6.09	5.89	5.98	5.77	5.73	
6	5.74	5.71	5.76	6.03	5.97	6.13	6.21	6.09	5.88	5.96	5.77	5.73	
7	5.72	5.71	5.73	6.02	6.00	6.05	6.13	6.06	5.87	5.95	5.76	5.73	
8	5.71	5.71	5.75	6.01	5.97	6.02	6.09	6.04	5.87	5.94	5.76	5.73	
9	5.71	5.70	5.90	6.02	5.97	6.03	6.17	6.03	5.87	5.93	5.73	5.73	
10	5.70	5.68	6.12	6.08	6.33	6.14	6.13	6.01	5.87	5.93	5.71	5.73	
11	5.70	5.67	5.88	6.15	6.55	6.09	6.16	6.00	5.87	5.92	5.69	5.73	
12	5.70	5.72	5.83	6.08	6.29	6.08	6.18	5.98	5.87	5.91	5.68	5.73	
13	5.69	5.71	5.84	6.07	6.26	6.06	6.13	6.63	5.87	5.90	5.68	5.73	
14	5.68	5.70	5.86	6.03	6.26	6.02	6.17	6.22	5.89	5.88	5.68	5.73	
15	5.67	5.79	5.83	6.00	6.21	5.99	6.08	6.31	5.87	5.87	5.67	5.73	
16	5.65	5.83	5.91	5.98	6.10	5.97	6.05	6.18	5.85	5.86	5.67	5.73	
17	5.62	5.83	5.98	5.97	6.06	5.96	6.00	6.12	5.85	5.86	5.66	5.73	
18	5.74	5.82	5.91	5.95	6.05	5.94	6.09	6.09	5.85	5.85	5.66	5.73	
19	5.76	5.82	5.86	5.94	6.02	5.93	6.00	6.06	5.85	5.84	5.65	5.73	
20	5.72	5.88	5.85	5.95	5.98	5.97	6.12	6.05	5.84	5.84	5.65	5.73	
21	5.72	5.83	5.84	6.90	5.97	6.00	6.01	6.03	5.84	5.84	5.65	5.72	
22	5.71	5.79	5.87	6.61	5.96	5.99	5.98	6.01	5.84	5.84	5.72	5.72	
23	5.70	5.72	5.82	6.29	5.95	5.93	6.47	6.00	5.90	5.83	5.72	5.72	
24	5.71	5.70	5.94	6.18	5.95	5.90	6.38	5.99	5.90	5.83	5.73	5.72	
25	5.71	5.72	6.67	6.16	5.94	5.95	6.15	5.97	5.90	5.82	5.73	5.72	
26	5.70	5.72	6.32	6.59	5.93	6.00	6.09	5.96	5.90	5.80	5.72	5.72	
27	5.69	5.72	6.37	6.30	5.99	5.95	6.04	5.96	5.89	5.79	5.71	5.72	
28	5.68	5.65	6.33	6.15	6.45	5.93	6.60	5.95	5.89	5.78	5.71	5.72	
29	5.66	5.64	6.29	6.11	6.15	6.06	6.19	5.93	5.88	5.78		5.72	
30	5.64	5.63	6.31	6.09	6.12	6.08	6.11	5.92	5.87	5.78		5.72	
31		5.62		6.04	6.20		6.20		5.87	5.78		5.72	
Mean	5.71	5.71	5.95	6.15	6.09	6.03	6.16	6.10	5.88	5.88	5.71	5.73	
Max	5.77	5.88	6.67	6.90	6.55	6.36	6.60	6.63	5.91	6.05	5.78	5.73	6.90
Min	5.62	5.59	5.72	5.94	5.93	5.90	5.98	5.92	5.84	5.78	5.65	5.72	5.59

Annual Max Momentary Gage Height 7.33 M (A.D), at 14.00 Hours, on Jul 21, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.66 M (A.D)
Left Bank Elevation 8.24 M (A.D)
Right Bank Elevation 7.63 M (A.D), Drainage Area 124 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.98	0.30	1.42	22.68	10.10	9.78	16.22	24.12	4.41	7.40	2.12	1.28	
2	1.98	0.10	2.26	13.30	7.40	8.28	8.82	13.62	4.20	6.74	1.98	1.28	
3	1.84	0.00	1.70	10.10	6.52	6.96	9.46	12.98	4.20	6.30	1.98	1.28	
4	1.70	0.00	1.28	8.28	5.88	6.74	13.30	10.42	4.20	6.09	1.98	1.42	
5	1.70	0.80	1.84	7.62	5.25	16.88	15.89	8.28	4.02	5.88	1.98	1.42	
6	1.56	1.14	1.84	6.96	5.67	9.46	12.02	8.28	3.84	5.46	1.98	1.42	
7	1.28	1.14	1.42	6.74	6.30	7.40	9.46	7.62	3.66	5.25	1.84	1.42	
8	1.14	1.14	1.70	6.52	5.67	6.74	8.28	7.18	3.66	5.04	1.84	1.42	
9	1.14	1.00	4.20	6.74	5.67	6.96	10.74	6.96	3.66	4.83	1.42	1.42	
10	1.00	0.80	9.14	8.06	15.89	9.78	9.46	6.52	3.66	4.83	1.14	1.42	
11	1.00	0.70	3.84	10.10	23.40	8.28	10.42	6.30	3.66	4.62	0.90	1.42	
12	1.00	1.28	2.94	8.06	14.58	8.06	11.06	5.88	3.66	4.41	0.80	1.42	
13	0.90	1.14	3.12	7.84	13.62	7.62	9.46	26.34	3.66	4.20	0.80	1.42	
14	0.80	1.00	3.48	6.96	13.62	6.74	10.74	12.34	4.02	3.84	0.80	1.42	
15	0.70	2.26	2.94	6.30	12.02	6.09	8.06	15.23	3.66	3.66	0.70	1.42	
16	0.50	2.94	4.41	5.88	8.50	5.67	7.40	11.06	3.30	3.48	0.70	1.42	
17	0.20	2.94	5.88	5.67	7.62	5.46	6.30	9.14	3.30	3.48	0.60	1.42	
18	1.56	2.76	4.41	5.25	7.40	5.04	8.28	8.28	3.30	3.30	0.60	1.42	
19	1.84	2.76	3.48	5.04	6.74	4.83	6.30	7.62	3.30	3.12	0.50	1.42	
20	1.28	3.84	3.30	5.25	5.88	5.67	9.14	7.40	3.12	3.12	0.50	1.42	
21	1.28	2.94	3.12	37.50	5.67	6.30	6.52	6.96	3.12	3.12	0.50	1.28	
22	1.14	2.26	3.66	25.58	5.46	6.09	5.88	6.52	3.12	3.12	1.28	1.28	
23	1.00	1.28	2.76	14.58	5.25	4.83	20.58	6.30	4.20	2.94	1.28	1.28	
24	1.14	1.00	5.04	11.06	5.25	4.20	17.54	6.09	4.20	2.94	1.42	1.28	
25	1.14	1.28	27.86	10.42	5.04	5.25	10.10	5.67	4.20	2.76	1.42	1.28	
26	1.00	1.28	15.56	24.84	4.83	6.30	8.28	5.46	4.20	2.40	1.28	1.28	
27	0.90	1.28	17.21	14.90	6.09	5.25	7.18	5.46	4.02	2.26	1.14	1.28	
28	0.80	0.50	15.89	10.10	19.90	4.83	25.20	5.25	4.02	2.12	1.14	1.28	
29	0.60	0.40	14.58	8.82	10.10	7.62	11.38	4.83	3.84	2.12		1.28	
30	0.40	0.30	15.23	8.26	9.14	8.06	8.82	4.62	3.66	2.12		1.28	
31		0.20		7.18	11.70		11.70		3.66	2.12		1.28	
Total	34.50	40.76	185.51	336.61	276.16	211.17	333.99	272.73	116.73	123.07	34.62	42.06	2007.91 CMSDAY
Mean	1.15	1.31	6.18	10.86	8.91	7.04	10.77	9.09	3.77	3.97	1.24	1.36	5.50 CMS
Max	1.98	3.84	27.86	37.50	23.40	16.88	25.20	26.34	4.41	7.40	2.12	1.42	37.50 CMS
Min	0.20	0.00	1.28	5.04	4.83	4.20	5.88	4.62	3.12	2.12	0.50	1.28	0.00 CMS
Runoff	2.981	3.522	16.028	29.083	23.860	18.245	28.857	23.564	10.085	10.633	2.991	3.634	173.483 MCM

Momentary Peak 58.79 CMS, at 7.33 M (A.D), at 14.00 Hours, on Jul 21, 2001

Runoff Yield 44.36 Liters/Second/Square KM, Momentary Peak Yield 474.113 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Lam Phra Phloeng at Ban Wang Takhian , Nakhon Ratchasima (M.145)

Lat 14 - 29 - 24 N. **Long** 101 - 41 - 14 E.

Location on right bank at Ban Wang Takhian .

Ban Wang Takhian **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

Drainage Area 333 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 Float -

Rated by Current Meter 1990 to date.

Stability of Channel Regimes Fairly stable.

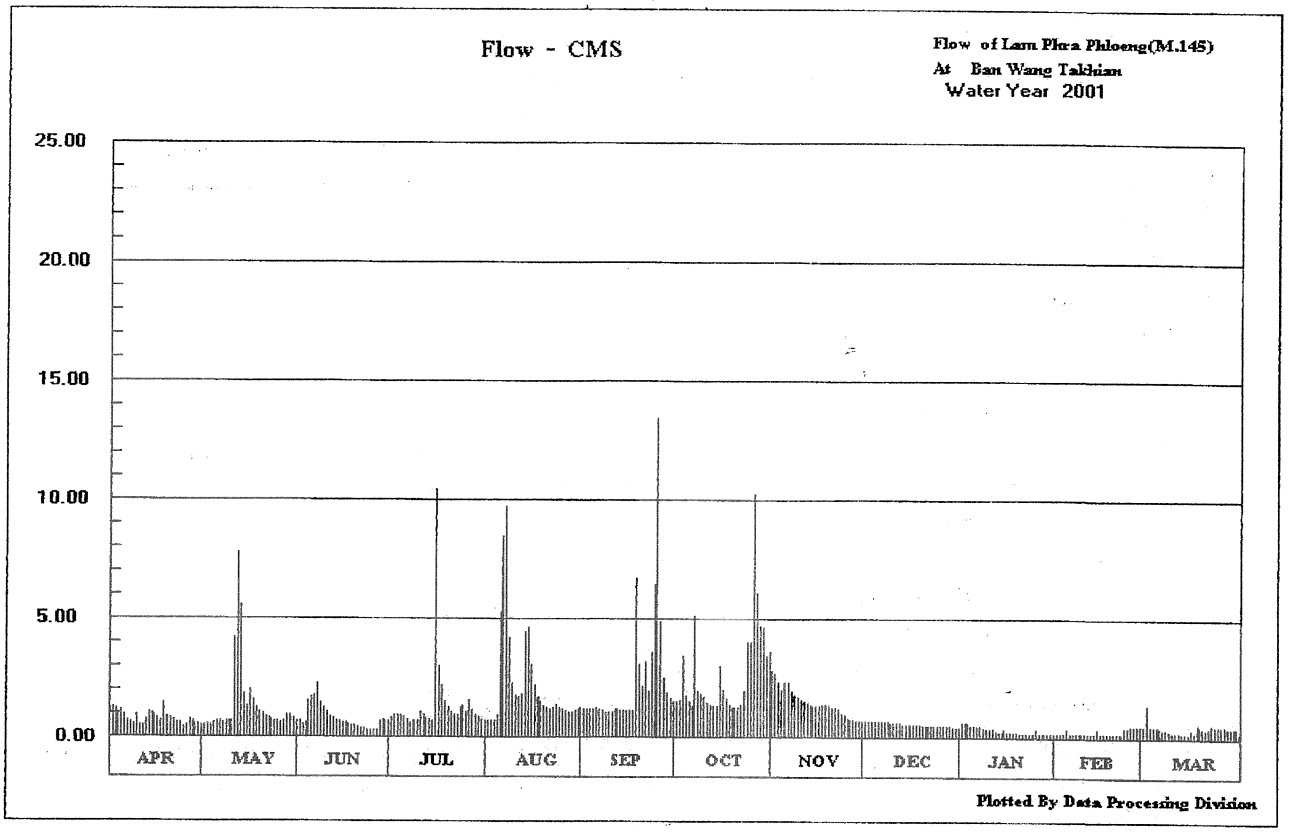
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 48 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.73	3.55	3.59	3.63	3.59	3.72	3.80	4.00	3.60	3.57	3.47	3.54	
2	3.71	3.56	3.56	3.65	3.59	3.71	3.81	3.98	3.60	3.57	3.47	3.76	
3	3.67	3.55	3.58	3.65	3.60	3.71	4.08	3.94	3.60	3.57	3.47	3.55	
4	3.70	3.57	3.80	3.65	3.65	3.71	3.85	3.90	3.60	3.55	3.46	3.55	
5	3.65	3.60	3.84	3.64	4.29	3.73	3.79	3.94	3.59	3.55	3.46	3.54	
6	3.60	3.59	3.85	3.61	4.53	3.71	3.75	3.94	3.59	3.54	3.46	3.53	
7	3.58	3.58	3.93	3.58	4.60	3.70	4.28	3.88	3.59	3.54	3.46	3.52	
8	3.56	3.60	3.78	3.59	4.17	3.69	3.89	3.85	3.59	3.53	3.45	3.51	
9	3.65	3.60	3.74	3.59	3.93	3.69	3.86	3.84	3.58	3.52	3.45	3.50	
10	3.54	3.60	3.68	3.69	3.85	3.69	3.83	3.81	3.58	3.52	3.45	3.49	
11	3.55	4.17	3.64	3.66	3.84	3.71	3.78	3.79	3.57	3.52	3.44	3.48	
12	3.61	4.49	3.62	3.63	3.86	3.71	3.76	3.78	3.57	3.50	3.44	3.48	
13	3.68	4.32	3.60	3.61	4.20	3.70	3.75	3.76	3.56	3.49	3.44	3.47	
14	3.67	3.86	3.59	3.60	4.22	3.70	3.75	3.75	3.56	3.49	3.44	3.47	
15	3.65	3.75	3.58	4.64	4.03	3.70	4.02	3.75	3.56	3.49	3.45	3.47	
16	3.63	3.90	3.57	4.02	3.92	3.70	3.90	3.75	3.56	3.49	3.45	3.46	
17	3.60	3.81	3.56	3.92	3.84	3.70	3.82	3.76	3.56	3.49	3.45	3.49	
18	3.78	3.73	3.55	3.79	3.79	4.42	3.77	3.76	3.56	3.48	3.45	3.56	
19	3.64	3.69	3.54	3.73	3.75	4.03	3.73	3.75	3.55	3.48	3.46	3.54	
20	3.62	3.67	3.53	3.69	3.74	3.91	3.73	3.74	3.55	3.47	3.46	3.53	
21	3.61	3.64	3.52	3.66	3.71	4.05	3.74	3.73	3.55	3.47	3.46	3.52	
22	3.58	3.63	3.51	3.65	3.73	3.88	3.76	3.71	3.55	3.47	3.46	3.53	
23	3.57	3.61	3.50	3.73	3.76	4.09	3.88	3.67	3.55	3.47	3.53	3.56	
24	3.53	3.60	3.50	3.75	3.73	4.40	4.15	3.65	3.54	3.47	3.53	3.55	
25	3.54	3.59	3.50	3.69	3.72	4.80	4.15	3.63	3.54	3.47	3.54	3.55	
26	3.61	3.58	3.50	3.81	3.70	4.25	4.63	3.61	3.54	3.47	3.54	3.54	
27	3.59	3.60	3.60	3.70	3.69	3.96	4.37	3.61	3.54	3.47	3.55	3.54	
28	3.56	3.65	3.61	3.66	3.69	3.87	4.23	3.60	3.54	3.47	3.55	3.53	
29	3.56	3.65	3.60	3.64	3.70	3.82	4.22	3.60	3.53	3.47		3.53	
30	3.55	3.62	3.60	3.61	3.71	3.80	4.08	3.60	3.53	3.47		3.53	
31		3.60		3.60	3.74		4.10		3.53	3.47		3.53	
Mean	3.62	3.71	3.62	3.71	3.87	3.88	3.94	3.77	3.56	3.50	3.47	3.53	
Max	3.78	4.49	3.93	4.64	4.60	4.80	4.63	4.00	3.60	3.57	3.55	3.76	4.80
Min	3.53	3.55	3.50	3.58	3.59	3.69	3.73	3.60	3.53	3.47	3.44	3.46	3.44

Annual Max Momentary Gage Height 5.38 M (A.D), at 18.00 Hours, on Sep 25, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.47 M (A.D)
Left Bank Elevation 7.75 M (A.D)
Right Bank Elevation 6.47 M (A.D), Drainage Area 333 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.32	0.60	0.76	0.92	0.76	1.28	1.60	2.90	0.80	0.68	0.28	0.56	
2	1.24	0.64	0.64	1.00	0.76	1.24	1.65	2.74	0.80	0.68	0.28	1.44	
3	1.08	0.60	0.72	1.00	0.80	1.24	3.54	2.42	0.80	0.68	0.28	0.60	
4	1.20	0.68	1.60	1.00	1.00	1.24	1.85	2.10	0.80	0.60	0.24	0.60	
5	1.00	0.80	1.80	0.96	5.31	1.32	1.56	2.42	0.76	0.60	0.24	0.56	
6	0.80	0.76	1.85	0.84	8.54	1.24	1.40	2.42	0.76	0.56	0.24	0.52	
7	0.72	0.72	2.34	0.72	9.80	1.20	5.22	2.00	0.76	0.56	0.24	0.48	
8	0.64	0.80	1.52	0.76	4.26	1.16	2.05	1.85	0.76	0.52	0.20	0.44	
9	1.00	0.80	1.36	0.76	2.34	1.16	1.90	1.80	0.72	0.48	0.20	0.40	
10	0.56	0.80	1.12	1.16	1.85	1.16	1.75	1.65	0.72	0.48	0.20	0.36	
11	0.60	4.26	0.96	1.04	1.80	1.24	1.52	1.56	0.68	0.48	0.16	0.32	
12	0.84	7.85	0.88	0.92	1.90	1.24	1.44	1.52	0.68	0.40	0.16	0.32	
13	1.12	5.62	0.80	0.84	4.50	1.20	1.40	1.44	0.64	0.36	0.16	0.28	
14	1.08	1.90	0.76	0.80	4.68	1.20	1.40	1.40	0.64	0.36	0.16	0.28	
15	1.00	1.40	0.72	10.52	3.14	1.20	3.06	1.40	0.64	0.36	0.20	0.28	
16	0.92	2.10	0.68	3.06	2.26	1.20	2.10	1.40	0.64	0.36	0.20	0.24	
17	0.80	1.65	0.64	2.26	1.80	1.20	1.70	1.44	0.64	0.36	0.20	0.36	
18	1.52	1.32	0.60	1.56	1.56	6.80	1.48	1.44	0.64	0.32	0.20	0.64	
19	0.96	1.16	0.56	1.32	1.40	3.14	1.32	1.40	0.60	0.32	0.24	0.56	
20	0.88	1.08	0.52	1.16	1.36	2.18	1.32	1.36	0.60	0.28	0.24	0.52	
21	0.84	0.96	0.48	1.04	1.24	3.30	1.36	1.32	0.60	0.28	0.24	0.48	
22	0.72	0.92	0.44	1.00	1.32	2.00	1.44	1.24	0.60	0.28	0.24	0.52	
23	0.68	0.84	0.40	1.32	1.44	3.62	2.00	1.08	0.60	0.28	0.52	0.64	
24	0.52	0.80	0.40	1.40	1.32	6.50	4.10	1.00	0.56	0.28	0.52	0.60	
25	0.56	0.76	0.40	1.16	1.28	13.50	4.10	0.92	0.56	0.28	0.56	0.60	
26	0.84	0.72	0.40	1.65	1.20	4.95	10.34	0.84	0.56	0.28	0.56	0.56	
27	0.76	0.80	0.80	1.20	1.16	2.58	6.17	0.84	0.56	0.28	0.60	0.56	
28	0.64	1.00	0.84	1.04	1.16	1.95	4.77	0.80	0.56	0.28	0.60	0.52	
29	0.64	1.00	0.80	0.96	1.20	1.70	4.68	0.80	0.52	0.28		0.52	
30	0.60	0.88	0.80	0.84	1.24	1.60	3.54	0.80	0.52	0.28		0.52	
31		0.80		0.80	1.36		3.70		0.52	0.28		0.52	
Total	26.08	45.02	26.59	45.01	73.74	74.54	85.46	46.30	20.24	12.52	8.16	15.80	479.46 CMSDAY
Mean	0.87	1.45	0.89	1.45	2.38	2.48	2.76	1.54	0.65	0.40	0.29	0.51	1.31 CMS
Max	1.52	7.85	2.34	10.52	9.80	13.50	10.34	2.90	0.80	0.68	0.60	1.44	13.50 CMS
Min	0.52	0.60	0.40	0.72	0.76	1.16	1.32	0.80	0.52	0.28	0.16	0.24	0.16 CMS
Runoff	2.253	3.890	2.297	3.889	6.371	6.440	7.384	4.000	1.749	1.082	0.705	1.365	41.425 MCM

Momentary Peak 27.20 CMS, at 5.38 M (A.D), at 18.00 Hours, on Sep 25, 2001

Runoff Yield 3.94 Liters/Second/Square KM, Momentary Peak Yield 81.682 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 11,872 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +149.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 35 meters from the measuring line.

Elevation +153.190 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1994 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

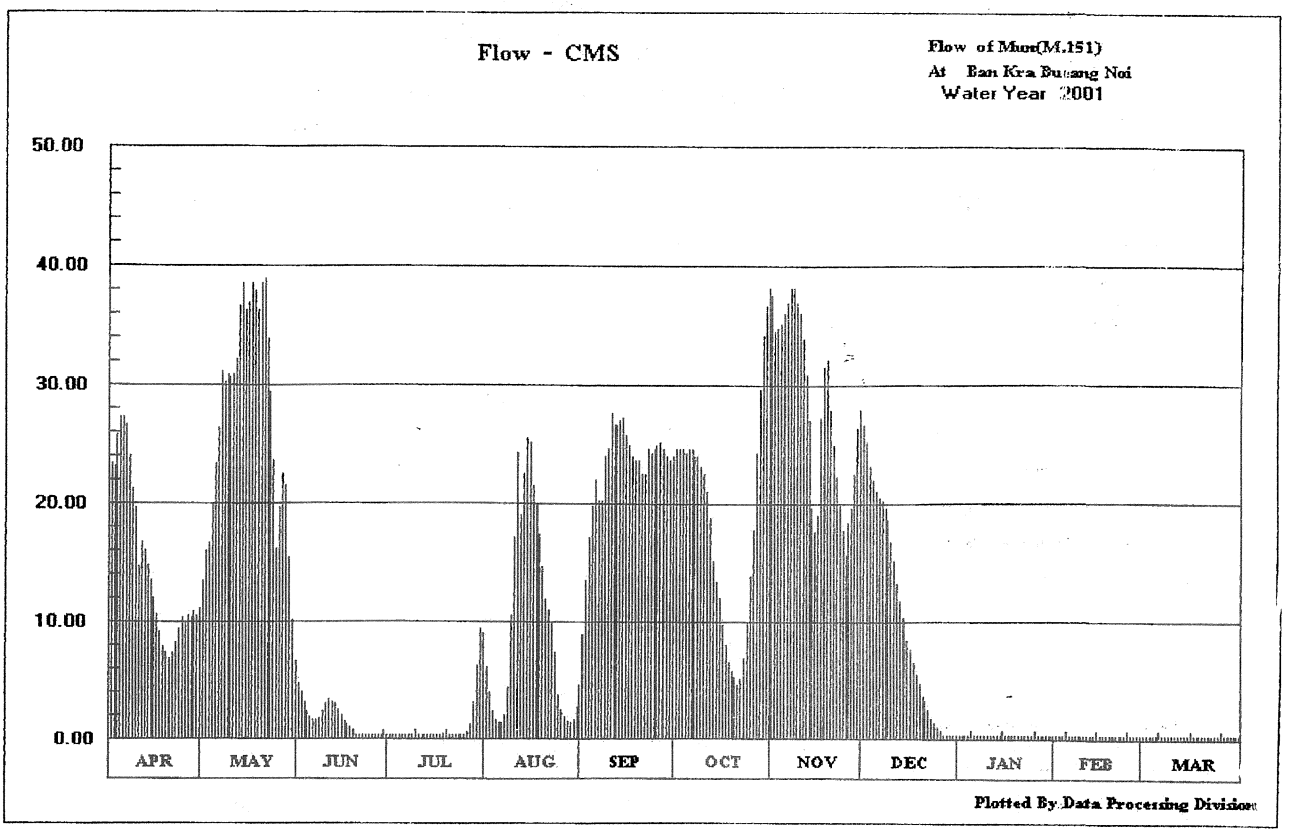
Overbank Flow Conditions Overbank flow starts at elevation +152.380 m.(M.S.L.) and is including overbank flow.

General Description Records fair. Stage-discharge relation defined by 53 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	152.13	151.67	151.02	148.80	151.16	151.36	152.17	152.60	152.24	149.50	148.93	148.61	
2	152.12	151.80	150.93	148.70	150.92	151.67	152.17	152.50	152.19	149.38	148.89	148.56	
3	152.21	151.83	150.80	148.59	150.69	151.86	152.17	152.51	152.12	149.30	148.85	148.56	
4	152.26	152.00	150.67	148.61	150.50	151.99	152.16	152.52	152.08	149.24	148.81	148.58	
5	152.26	152.13	150.58	148.69	150.44	152.08	152.17	152.55	152.04	149.19	148.80	148.57	
6	152.24	152.23	150.50	148.77	150.45	152.01	152.17	152.58	152.02	149.15	148.78	148.55	
7	152.15	152.39	150.51	148.83	150.61	152.01	152.15	152.62	152.01	149.12	148.76	148.57	
8	152.05	152.36	150.55	148.90	150.97	152.15	152.15	152.62	151.98	149.09	148.74	148.58	
9	151.98	152.38	150.69	148.95	151.47	152.17	152.12	152.58	151.93	149.07	148.73	148.57	
10	151.73	152.37	150.79	148.96	151.86	152.27	152.10	152.55	151.84	149.03	148.71	148.57	
11	151.84	152.38	150.85	148.92	152.16	152.24	152.04	152.48	151.76	149.01	148.70	148.58	
12	151.80	152.42	150.81	148.93	151.95	152.24	151.94	152.38	151.65	149.01	148.68	148.58	
13	151.74	152.57	150.79	148.93	152.10	152.25	151.76	152.25	151.55	149.03	148.67	148.59	
14	151.67	152.63	150.71	148.43	152.20	152.26	151.66	151.98	151.46	149.06	148.66	148.56	
15	151.57	152.56	150.59	148.12	152.19	152.21	151.57	151.88	151.33	149.09	148.64	148.58	
16	151.48	152.58	150.49	150.07	152.06	152.18	151.42	151.95	151.28	149.16	148.63	148.60	
17	151.38	152.63	150.38	150.11	152.00	152.15	151.30	152.26	151.20	149.23	148.62	148.60	
18	151.29	152.61	150.29	150.13	151.87	152.14	151.20	152.40	151.10	149.16	148.61	148.60	
19	151.26	152.56	150.20	150.09	151.73	152.14	151.13	152.42	151.02	149.17	148.60	148.63	
20	151.23	152.63	150.11	150.00	151.56	152.10	151.07	152.28	150.87	149.13	148.59	148.66	
21	151.26	152.64	149.98	148.04	151.50	152.10	151.01	152.18	150.82	149.14	148.58	148.65	
22	151.32	152.48	149.87	148.05	151.43	152.17	151.06	152.09	150.70	149.10	148.57	148.65	
23	151.39	152.33	149.77	148.09	151.26	152.16	151.23	152.00	150.55	149.08	148.58	148.64	
24	151.46	152.14	149.68	148.08	150.89	152.17	151.43	151.89	150.42	149.08	148.59	148.65	
25	151.43	151.81	149.58	150.06	150.71	152.18	151.69	151.78	150.30	149.07	148.66	148.65	
26	151.47	151.98	149.50	150.16	150.58	152.19	151.89	151.92	150.18	149.06	148.61	148.63	
27	151.46	152.10	149.50	150.37	150.49	152.17	152.16	151.98	150.10	149.06	148.68	148.63	
28	151.49	152.06	149.44	150.80	150.45	152.15	152.34	152.10	149.96	149.05	148.79	148.64	
29	151.47	151.77	149.35	151.18	150.50	152.14	152.49	152.23	149.85	149.04		148.60	
30	151.51	151.44	149.28	151.39	150.75	152.15	152.57	152.28	149.73	149.02		148.59	
31		151.21		151.37	151.00		152.62		149.63	148.97		148.70	
Mean	151.69	152.22	150.27	149.33	151.24	152.10	151.84	152.28	151.16	149.12	148.70	148.60	
Max	152.26	152.64	151.02	151.39	152.20	152.27	152.62	152.62	152.24	149.50	148.93	148.70	152.64
Min	151.23	151.21	149.28	148.04	150.44	151.36	151.01	151.78	149.63	148.97	148.57	148.55	148.04

Annual Max Momentary Gage Height 152.67 M (MSL), at 15.00 Hours, on May 20, 2001
Zero Gage at Bottom Elevation 149.00 M (MSL), River Bed 148.23 M (MSL)
Left Bank Elevation 152.52 M (MSL)
Right Bank Elevation 152.37 M (MSL), Drainage Area 11872 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	23.55	13.70	4.93	0.00	6.25	9.05	24.75	37.65	26.85	0.04	0.00	0.00	
2	23.25	16.15	4.19	0.00	4.11	13.70	24.75	34.65	25.35	0.02	0.00	0.00	
3	25.95	16.75	3.25	0.00	2.60	17.35	24.75	34.95	23.25	0.01	0.00	0.00	
4	27.45	20.15	2.50	0.00	1.75	19.95	24.45	35.25	22.15	0.00	0.00	0.00	
5	27.45	23.55	2.07	0.00	1.57	22.15	24.75	36.15	21.15	0.00	0.00	0.00	
6	26.85	26.55	1.75	0.00	1.60	20.40	24.75	37.05	20.65	0.00	0.00	0.00	
7	24.15	31.35	1.79	0.00	2.20	20.40	24.15	38.35	20.40	0.00	0.00	0.00	
8	21.40	30.45	1.95	0.00	4.51	24.15	24.15	38.35	19.75	0.00	0.00	0.00	
9	19.75	31.05	2.60	0.00	10.70	24.75	23.25	37.05	18.75	0.00	0.00	0.00	
10	14.75	30.75	3.19	0.00	17.35	27.75	22.65	36.15	16.95	0.00	0.00	0.00	
11	16.95	31.05	3.60	0.00	24.45	26.85	21.15	34.05	15.35	0.00	0.00	0.00	
12	16.15	32.25	3.32	0.00	19.15	26.85	18.95	31.05	13.40	0.00	0.00	0.00	
13	14.95	36.75	3.19	0.00	22.65	27.15	15.35	27.15	11.90	0.00	0.00	0.00	
14	13.70	38.70	2.71	0.00	25.65	27.45	13.55	19.75	10.55	0.00	0.00	0.00	
15	12.20	36.45	2.11	0.00	25.35	25.95	12.20	17.75	8.60	0.00	0.00	0.00	
16	10.85	37.05	1.72	0.49	21.65	25.05	9.95	19.15	7.85	0.00	0.00	0.00	
17	9.35	38.70	1.39	0.58	20.15	24.15	8.15	27.45	6.65	0.00	0.00	0.00	
18	8.00	38.00	1.12	0.64	17.55	23.85	6.65	31.65	5.65	0.00	0.00	0.00	
19	7.55	36.45	0.85	0.53	14.75	23.85	5.95	32.25	4.93	0.00	0.00	0.00	
20	7.10	38.70	0.58	0.35	12.05	22.65	5.38	28.05	3.74	0.00	0.00	0.00	
21	7.55	39.05	0.33	0.00	11.15	22.65	4.84	25.05	3.39	0.00	0.00	0.00	
22	8.45	34.05	0.24	0.00	10.10	24.75	5.29	22.40	2.65	0.00	0.00	0.00	
23	9.50	29.55	0.16	0.00	7.55	24.45	7.10	20.15	1.95	0.00	0.00	0.00	
24	10.55	23.85	0.10	0.00	3.88	24.75	10.10	17.95	1.51	0.00	0.00	0.00	
25	10.10	16.35	0.06	0.47	2.71	25.05	14.00	15.75	1.15	0.00	0.00	0.00	
26	10.70	19.75	0.04	0.73	2.07	25.35	17.95	18.55	0.79	0.00	0.00	0.00	
27	10.55	22.65	0.04	1.36	1.72	24.75	24.45	19.75	0.55	0.00	0.00	0.00	
28	11.00	21.65	0.03	3.25	1.60	24.15	29.85	22.65	0.31	0.00	0.00	0.00	
29	10.70	15.55	0.02	6.45	1.75	23.85	34.35	26.55	0.22	0.00		0.00	
30	11.30	10.25	0.01	9.50	2.95	24.15	36.75	28.05	0.13	0.00		0.00	
31		6.80		9.20	4.75		38.35		0.08	0.00		0.00	
Total	451.75	844.05	49.84	33.55	306.27	697.35	582.71	850.75	316.60	0.07	0.00	0.00	4132.94 CMSDAY
Mean	15.06	27.23	1.66	1.08	9.88	23.25	18.80	28.36	10.21	0.00	0.00	0.00	11.32 CMS
Max	27.45	39.05	4.93	9.50	25.65	27.75	38.35	38.35	26.85	0.04	0.00	0.00	39.05 CMS
Min	7.10	6.80	0.01	0.00	1.57	9.05	4.84	15.75	0.08	0.00	0.00	0.00	0.00 CMS
Runoff	39.031	72.926	4.306	2.899	26.462	60.251	50.346	73.505	27.354	0.006	0.000	0.000	357.086 MCM

Momentary Peak 40.10 CMS, at 152.67 M (MSL), at 15.00 Hours, on May 20, 2001

Runoff Yield 0.95 Liters/Second/Square KM, Momentary Peak Yield 3.378 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 212 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 Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Stable.

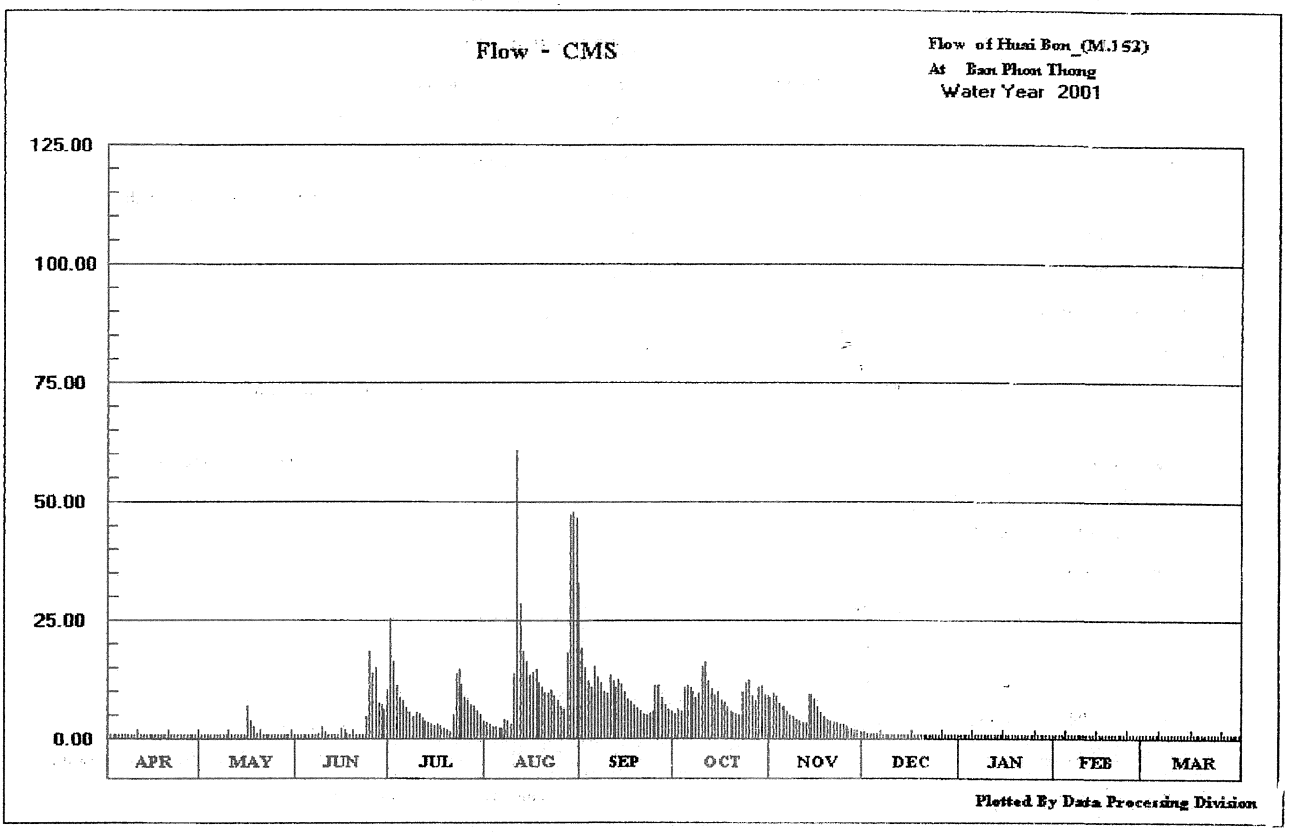
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 58 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.14	1.09	1.14	3.46	1.59	3.01	1.77	2.13	1.38	1.18	1.10	1.07	
2	1.19	1.09	1.14	2.78	1.56	2.70	1.86	2.22	1.35	1.18	1.10	1.07	
3	1.13	1.09	1.13	2.38	1.50	2.45	1.85	2.14	1.35	1.18	1.10	1.06	
4	1.11	1.11	1.12	2.11	1.48	2.34	2.34	1.99	1.34	1.18	1.09	1.07	
5	1.11	1.11	1.12	2.06	1.44	2.72	2.36	1.92	1.33	1.18	1.09	1.06	
6	1.09	1.12	1.15	1.89	1.47	2.54	2.33	1.83	1.32	1.17	1.09	1.06	
7	1.08	1.12	1.21	1.80	1.65	2.43	2.25	1.74	1.32	1.17	1.09	1.06	
8	1.08	1.11	1.35	1.71	1.63	2.24	2.11	1.70	1.31	1.17	1.08	1.06	
9	1.07	1.10	1.49	1.81	1.54	2.22	2.20	1.66	1.29	1.16	1.08	1.06	
10	1.17	1.10	1.37	1.77	2.60	2.55	2.72	1.62	1.29	1.16	1.08	1.06	
11	1.08	1.10	1.25	1.67	5.50	2.46	2.78	1.59	1.28	1.16	1.08	1.06	
12	1.15	1.16	1.23	1.61	3.68	2.33	2.45	1.59	1.29	1.15	1.08	1.06	
13	1.09	1.18	1.20	1.59	2.96	2.47	2.29	2.17	1.32	1.15	1.08	1.06	
14	1.08	1.13	1.19	1.55	2.78	2.40	2.19	2.19	1.32	1.15	1.08	1.06	
15	1.22	1.20	1.47	1.53	2.56	2.24	2.23	2.10	1.29	1.14	1.08	1.07	
16	1.08	1.93	1.42	1.54	2.62	2.09	2.06	1.93	1.28	1.14	1.08	1.06	
17	1.08	1.61	1.35	1.51	2.68	2.03	2.02	1.80	1.27	1.14	1.08	1.06	
18	1.09	1.50	1.30	1.46	2.43	1.95	1.94	1.71	1.27	1.13	1.08	1.06	
19	1.08	1.34	1.26	1.40	2.34	1.89	1.85	1.66	1.26	1.13	1.08	1.06	
20	1.08	1.29	1.22	1.40	2.22	1.84	1.80	1.61	1.25	1.14	1.08	1.05	
21	1.09	1.27	1.19	1.75	2.20	1.78	1.76	1.60	1.24	1.13	1.08	1.05	
22	1.09	1.22	1.27	2.58	2.27	1.75	1.74	1.57	1.23	1.13	1.07	1.05	
23	1.10	1.20	1.71	2.68	2.15	1.76	2.24	1.55	1.22	1.13	1.07	1.05	
24	1.10	1.18	2.97	2.41	2.06	1.83	2.44	1.54	1.21	1.12	1.06	1.05	
25	1.11	1.15	2.58	2.12	1.92	2.37	2.47	1.51	1.20	1.12	1.07	1.06	
26	1.14	1.14	2.69	2.04	1.88	2.37	2.15	1.47	1.20	1.12	1.07	1.08	
27	1.10	1.14	2.00	1.96	2.93	2.11	2.04	1.45	1.20	1.12	1.07	1.07	
28	1.10	1.14	1.95	1.94	4.79	1.96	2.33	1.42	1.20	1.12	1.07	1.10	
29	1.10	1.13	1.88	1.82	4.83	1.88	2.37	1.41	1.19	1.12		1.09	
30	1.10	1.12	2.28	1.73	4.76	1.84	2.19	1.39	1.19	1.11		1.08	
31		1.12		1.63	3.96		2.16		1.18	1.11		1.08	
Mean	1.11	1.20	1.52	1.93	2.58	2.22	2.17	1.74	1.27	1.14	1.08	1.06	
Max	1.22	1.93	2.97	3.46	5.50	3.01	2.78	2.22	1.38	1.18	1.10	1.10	5.50
Min	1.07	1.09	1.12	1.40	1.44	1.75	1.74	1.39	1.18	1.11	1.06	1.05	1.05

Annual Max Momentary Gage Height 5.84 M (A.D), at 6.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.44 M (A.D)
Left Bank Elevation 5.92 M (A.D)
Right Bank Elevation 6.41 M (A.D), Drainage Area 212 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.55	0.43	0.55	25.60	3.90	19.53	5.70	9.30	1.94	0.65	0.45	0.39	
2	0.68	0.43	0.55	16.54	3.60	15.50	6.60	10.20	1.70	0.65	0.45	0.39	
3	0.52	0.43	0.52	11.80	3.00	12.55	6.50	9.40	1.70	0.65	0.45	0.37	
4	0.47	0.47	0.50	9.10	2.82	11.40	11.40	7.90	1.62	0.65	0.43	0.39	
5	0.47	0.47	0.50	8.60	2.46	15.76	11.60	7.20	1.54	0.65	0.43	0.37	
6	0.43	0.50	0.57	6.90	2.73	13.58	11.30	6.30	1.46	0.62	0.43	0.37	
7	0.41	0.50	0.76	6.00	4.50	12.33	10.50	5.40	1.46	0.62	0.43	0.37	
8	0.41	0.47	1.70	5.10	4.30	10.40	9.10	5.00	1.38	0.62	0.41	0.37	
9	0.39	0.45	2.91	6.10	3.40	10.20	10.00	4.60	1.24	0.60	0.41	0.37	
10	0.62	0.45	1.86	5.70	14.30	13.70	15.76	4.20	1.24	0.60	0.41	0.37	
11	0.41	0.45	1.00	4.70	61.00	12.66	16.54	3.90	1.18	0.60	0.41	0.37	
12	0.57	0.60	0.88	4.10	28.90	11.30	12.55	3.90	1.24	0.57	0.41	0.37	
13	0.43	0.65	0.70	3.90	18.88	12.77	10.90	9.70	1.46	0.57	0.41	0.37	
14	0.41	0.52	0.68	3.50	16.54	12.00	9.90	9.90	1.46	0.57	0.41	0.37	
15	0.82	0.70	2.73	3.30	13.82	10.40	10.30	9.00	1.24	0.55	0.41	0.39	
16	0.41	7.30	2.28	3.40	14.54	8.90	8.60	7.30	1.18	0.55	0.41	0.37	
17	0.41	4.10	1.70	3.10	15.26	8.30	8.20	6.00	1.12	0.55	0.41	0.37	
18	0.43	3.00	1.30	2.64	12.33	7.50	7.40	5.10	1.12	0.52	0.41	0.37	
19	0.41	1.62	1.06	2.10	11.40	6.90	6.50	4.60	1.06	0.52	0.41	0.37	
20	0.41	1.24	0.82	2.10	10.20	6.40	6.00	4.10	1.00	0.55	0.41	0.35	
21	0.43	1.12	0.68	5.50	10.00	5.80	5.60	4.00	0.94	0.52	0.41	0.35	
22	0.43	0.82	1.12	14.06	10.70	5.50	5.40	3.70	0.88	0.52	0.39	0.35	
23	0.45	0.70	5.10	15.26	9.50	5.60	10.40	3.50	0.82	0.52	0.39	0.35	
24	0.45	0.65	19.01	12.11	8.60	6.30	12.44	3.40	0.76	0.50	0.37	0.35	
25	0.47	0.57	14.06	9.20	7.20	11.70	12.77	3.10	0.70	0.50	0.39	0.37	
26	0.55	0.55	15.38	8.40	6.80	11.70	9.50	2.73	0.70	0.50	0.39	0.41	
27	0.45	0.55	8.00	7.60	18.49	9.10	8.40	2.55	0.70	0.50	0.39	0.39	
28	0.45	0.55	7.50	7.40	47.51	7.60	11.30	2.28	0.70	0.50	0.39	0.45	
29	0.45	0.52	6.80	6.20	48.27	6.80	11.70	2.19	0.68	0.50		0.43	
30	0.45	0.50	10.80	5.30	46.94	6.40	9.90	2.02	0.68	0.47		0.41	
31		0.50		4.30	33.26		9.60		0.65	0.47		0.41	
Total	14.24	31.81	112.02	229.61	495.15	308.58	302.36	162.47	35.55	17.36	11.52	11.73	1737.40 CMSDAY
Mean	0.47	1.03	3.73	7.41	15.97	10.29	9.75	5.42	1.15	0.56	0.41	0.38	4.75 CMS
Max	0.82	7.30	19.01	25.60	61.00	19.53	16.54	10.20	1.94	0.65	0.45	0.45	61.00 CMS
Min	0.39	0.43	0.50	2.10	2.46	5.50	5.40	2.02	0.65	0.47	0.37	0.35	0.35 CMS
Runoff	1.230	2.748	9.679	19.838	42.781	26.661	26.124	14.037	3.072	1.500	0.995	1.013	149.679 MCM

Momentary Peak 67.56 CMS, at 5.84 M (A.D), at 6.00 Hours, on Aug 11, 2001

Runoff Yield 22.39 Liters/Second/Square KM, Momentary Peak Yield 318.679 Liters/Second/Square KM

WATER YEAR : 2001

MUN RIVER BASIN

Lam Dom Yai at Ban Kut Chiang Mun, Ubon Ratchathani (M.153)

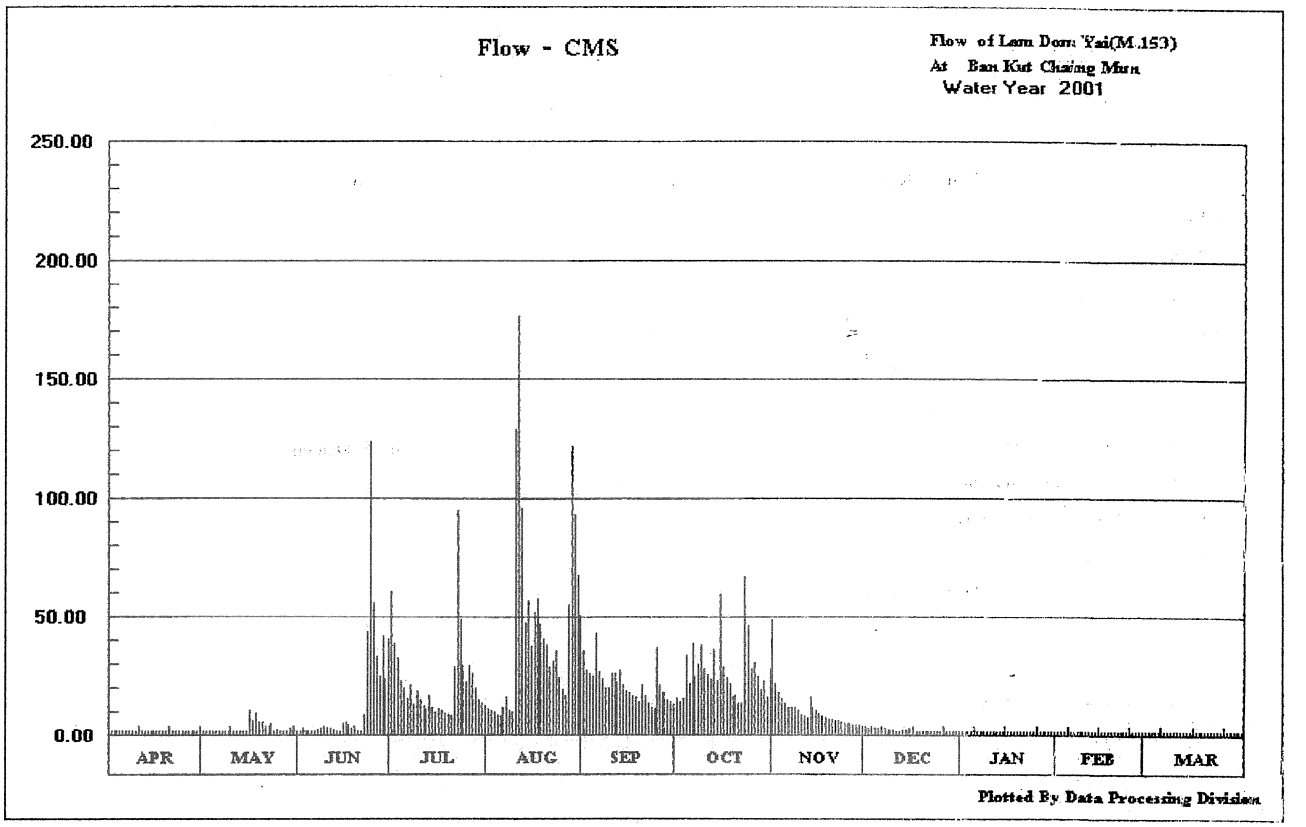
Lat 14 - 26 - 41 N. **Long** 105 - 07 - 30 E.

Location		on right bank at the bridge on road.			
	Ban Kut Chiang Mun	**Amphoe** Nam Yuen		**Changwat** Ubon Ratchathani	
Drainage Area		369 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 Float	-			
	Rated by Current Meter	1996 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		Overbank flow start at elevation +4.440 m.(A.D.) and is including overbank flow.			
General Description		Records good. Stage-discharge relation defined by 59 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.76	0.75	1.10	3.95	1.88	3.01	2.15	3.50	1.26	0.87	0.75	0.66	
2	0.84	0.75	1.20	3.13	1.87	2.68	2.08	2.44	1.24	0.87	0.75	0.66	
3	0.83	0.76	1.02	2.90	1.83	2.63	2.13	2.25	1.25	0.86	0.73	0.71	
4	0.80	0.76	0.79	2.49	1.71	2.56	2.95	2.13	1.24	0.85	0.73	0.68	
5	0.78	0.79	0.98	2.33	1.70	3.29	2.42	2.04	1.23	0.93	0.73	0.66	
6	0.80	0.77	1.09	2.14	1.93	2.66	3.13	1.94	1.22	0.85	0.72	0.67	
7	0.80	0.77	1.14	2.41	2.16	2.52	2.56	1.95	1.21	0.85	0.72	0.68	
8	0.81	0.78	1.23	2.00	1.87	2.34	2.79	1.94	1.18	0.84	0.72	0.66	
9	0.80	0.81	1.23	2.28	1.81	2.33	3.12	1.85	1.16	0.83	0.72	0.65	
10	0.80	0.77	1.23	2.11	5.88	2.63	2.70	1.71	1.14	0.82	0.72	0.69	
11	0.79	0.77	1.24	1.96	6.91	2.62	2.60	1.66	1.12	0.82	0.71	0.67	
12	0.82	0.86	1.13	1.90	4.98	2.45	2.51	1.62	1.11	0.90	0.71	0.66	
13	0.77	1.05	1.09	2.20	3.45	2.68	3.03	2.16	1.13	0.83	0.71	0.66	
14	0.82	1.02	1.09	1.95	3.80	2.39	2.48	1.94	1.16	0.81	0.70	0.81	
15	0.80	0.99	1.40	1.83	3.09	2.28	3.89	1.84	1.19	0.80	0.70	0.67	
16	0.81	1.85	1.46	1.89	3.61	2.26	2.74	1.77	1.10	0.79	0.71	0.67	
17	0.78	1.54	1.32	1.87	3.82	2.19	2.55	1.68	1.07	0.79	0.70	0.66	
18	0.79	1.77	1.22	1.77	3.44	2.16	2.44	1.63	1.06	0.78	0.69	0.65	
19	0.78	1.46	1.14	1.72	3.21	2.06	2.17	1.59	1.05	0.79	0.70	0.65	
20	0.77	1.45	1.12	1.70	3.11	2.41	2.21	1.56	1.04	0.79	0.71	0.63	
21	0.76	1.25	1.05	2.74	2.73	2.20	2.03	1.52	1.02	0.78	0.70	0.70	
22	0.75	1.27	1.74	4.97	2.82	2.03	2.04	1.49	0.98	0.78	0.69	0.67	
23	0.78	1.39	3.31	3.51	3.01	1.93	4.17	1.46	0.95	0.77	0.69	0.66	
24	0.78	1.03	5.76	2.76	2.55	1.91	3.42	1.43	0.92	0.77	0.68	0.66	
25	0.73	1.14	3.75	2.45	2.32	3.06	2.72	1.41	0.93	0.76	0.67	0.65	
26	0.87	1.12	2.91	2.75	2.19	2.40	2.80	1.38	0.92	0.77	0.66	0.66	
27	0.81	1.12	2.58	2.63	3.73	2.26	2.58	1.35	0.91	0.76	0.66	0.65	
28	0.77	1.08	3.25	2.34	5.70	2.10	2.31	1.33	0.90	0.77	0.66	0.65	
29	0.79	1.23	2.51	2.12	4.91	2.09	2.48	1.31	0.89	0.78		0.65	
30	0.76	1.08	3.20	2.03	4.19	2.02	2.17	1.28	0.89	0.76		0.66	
31		1.04		1.98	3.57		2.70		0.88	0.75		0.66	
Mean	0.79	1.07	1.78	2.41	3.22	2.40	2.65	1.77	1.08	0.81	0.70	0.67	
Max	0.87	1.85	5.76	4.97	6.91	3.29	4.17	3.50	1.26	0.93	0.75	0.81	6.91
Min	0.73	0.75	0.79	1.70	1.70	1.91	2.03	1.28	0.88	0.75	0.66	0.63	0.63

Annual Max Momentary Gage Height 7.30 M (A.D), at 6.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.51 M (A.D)
Left Bank Elevation 4.43 M (A.D)
Right Bank Elevation 6.38 M (A.D), Drainage Area 369 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.50	0.45	2.80	61.65	11.80	36.27	16.75	49.50	4.40	1.12	0.45	0.12	
2	0.94	0.45	3.80	39.51	11.65	28.26	15.32	22.98	4.20	1.12	0.45	0.12	
3	0.88	0.50	2.16	33.40	11.05	27.16	16.33	18.85	4.30	1.06	0.35	0.25	
4	0.70	0.50	0.65	24.08	9.34	25.62	34.70	16.33	4.20	1.00	0.35	0.16	
5	0.60	0.65	1.86	20.56	9.20	43.83	22.54	14.56	4.10	1.51	0.35	0.12	
6	0.70	0.55	2.72	16.54	12.61	27.82	39.51	12.78	4.00	1.00	0.30	0.14	
7	0.70	0.55	3.20	22.32	16.96	24.74	25.62	12.95	3.90	1.00	0.30	0.16	
8	0.76	0.60	4.10	13.80	11.65	20.78	31.13	12.78	3.60	0.94	0.30	0.12	
9	0.70	0.76	4.10	19.48	10.75	20.56	39.24	11.35	3.40	0.88	0.30	0.10	
10	0.70	0.55	4.10	15.91	129.32	27.16	28.70	9.34	3.20	0.82	0.30	0.18	
11	0.65	0.55	4.20	13.12	176.87	26.94	26.50	8.72	3.00	0.82	0.25	0.14	
12	0.82	1.06	3.10	12.10	96.38	23.20	24.52	8.24	2.90	1.30	0.25	0.12	
13	0.55	2.40	2.72	17.80	48.15	28.26	36.81	16.96	3.10	0.88	0.25	0.12	
14	0.82	2.16	2.72	12.95	57.60	21.88	23.86	12.78	3.40	0.76	0.20	0.76	
15	0.70	1.93	5.80	11.05	38.43	19.48	60.03	11.20	3.70	0.70	0.20	0.14	
16	0.76	11.35	6.46	11.95	52.47	19.06	29.78	10.18	2.80	0.65	0.25	0.14	
17	0.60	7.34	5.00	11.65	58.14	17.59	25.40	8.96	2.56	0.65	0.20	0.12	
18	0.65	10.18	4.00	10.18	47.88	16.96	22.98	8.36	2.48	0.60	0.18	0.10	
19	0.60	6.46	3.20	9.48	41.67	14.94	17.17	7.89	2.40	0.65	0.20	0.10	
20	0.55	6.35	3.00	9.20	38.97	22.32	18.01	7.56	2.32	0.65	0.25	0.06	
21	0.50	4.30	2.40	29.78	29.51	17.80	14.37	7.12	2.16	0.60	0.20	0.20	
22	0.45	4.50	9.76	96.02	31.80	14.37	14.56	6.79	1.86	0.60	0.18	0.14	
23	0.60	5.70	44.37	49.77	36.27	12.61	67.90	6.46	1.65	0.55	0.18	0.12	
24	0.60	2.24	124.68	30.32	25.40	12.27	47.34	6.13	1.44	0.55	0.16	0.12	
25	0.35	3.20	56.25	23.20	20.34	37.62	29.24	5.91	1.51	0.50	0.14	0.10	
26	1.12	3.00	33.66	30.05	17.59	22.10	31.40	5.60	1.44	0.55	0.12	0.12	
27	0.76	3.00	26.06	27.16	55.71	19.06	26.06	5.30	1.37	0.50	0.12	0.10	
28	0.55	2.64	42.75	20.78	122.40	15.70	20.12	5.10	1.30	0.55	0.12	0.10	
29	0.65	4.10	24.52	16.12	93.86	15.51	23.86	4.90	1.24	0.60		0.10	
30	0.50	2.64	41.40	14.37	68.50	14.18	17.17	4.60	1.24	0.50		0.12	
31		2.32		13.46	54.39		28.70		1.18	0.45		0.12	
Total	19.96	92.98	475.54	737.76	1443.66	674.05	875.62	340.18	84.35	24.06	6.90	4.61	4779.67 CMSDAY
Mean	0.67	3.00	15.85	23.80	46.57	22.47	28.25	11.34	2.72	0.78	0.25	0.15	13.09 CMS
Max	1.12	11.35	124.68	96.02	176.87	43.83	67.90	49.50	4.40	1.51	0.45	0.76	176.87 CMS
Min	0.35	0.45	0.65	9.20	9.20	12.27	14.37	4.60	1.18	0.45	0.12	0.06	0.06 CMS
Runoff	1.725	8.033	41.087	63.742	124.732	58.238	75.654	29.392	7.288	2.079	0.596	0.398	412.964 MCM

Momentary Peak 195.50 CMS, at 7.30 H (A.D), at 6.00 Hours, on Aug 11, 2001

Runoff Yield 35.49 Liters/Second/Square KM, Momentary Peak Yield 529.810 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 209 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 3-time daily readings at 06.00, 12.00, 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 Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Stable.

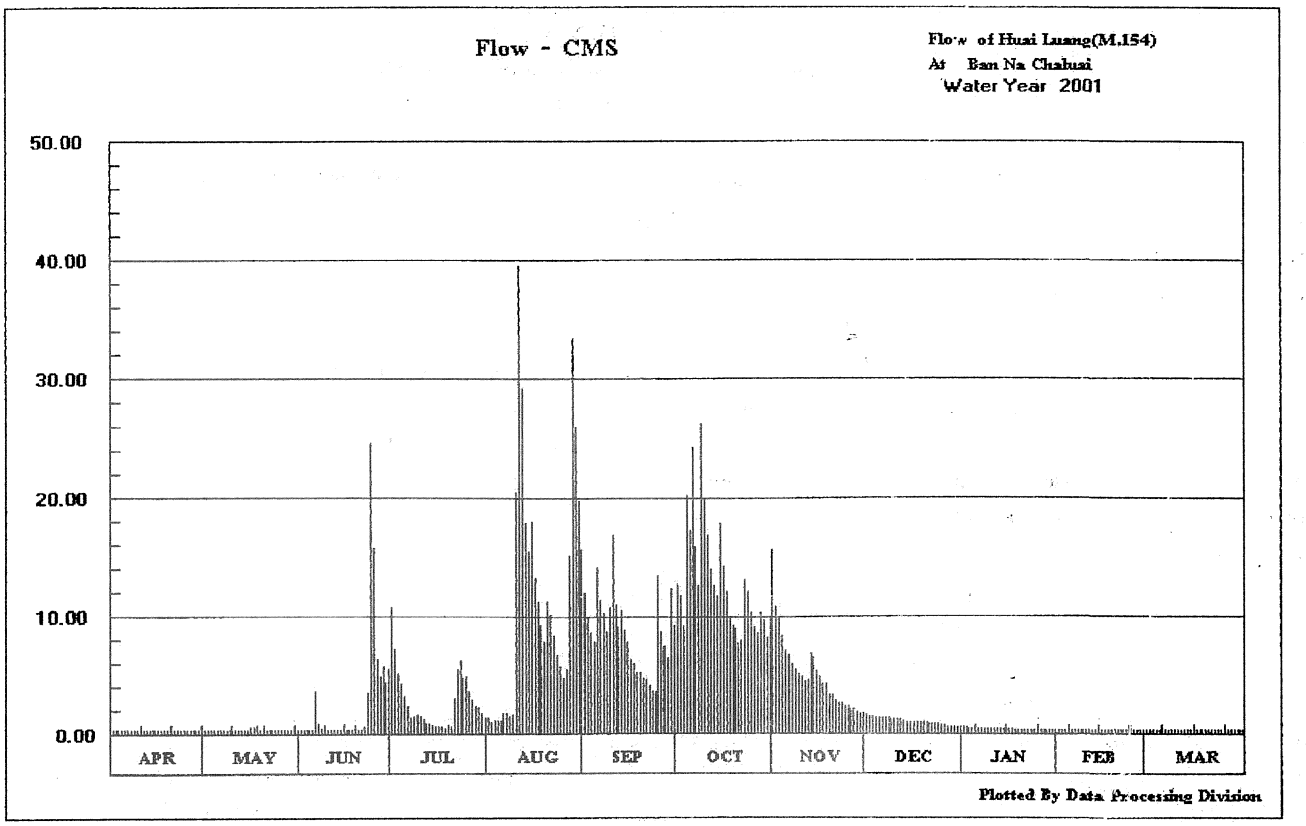
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 60 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.83	0.81	0.84	2.69	1.37	2.83	2.89	3.17	1.45	1.12	0.99	0.96	
2	0.84	0.81	0.83	2.29	1.28	2.61	2.80	2.70	1.42	1.12	0.99	0.95	
3	0.83	0.81	0.87	2.00	1.31	2.46	2.52	2.59	1.41	1.11	0.99	0.95	
4	0.83	0.81	0.84	1.88	1.31	2.37	3.58	2.42	1.40	1.11	0.98	0.95	
5	0.83	0.80	0.84	1.72	1.30	3.04	3.32	2.28	1.39	1.11	0.98	0.95	
6	0.82	0.80	1.79	1.60	1.49	2.76	3.89	2.23	1.38	1.10	0.98	0.94	
7	0.82	0.80	1.22	1.39	1.49	2.63	3.19	2.12	1.38	1.10	0.98	0.94	
8	0.82	0.80	1.07	1.41	1.43	2.47	2.89	2.05	1.37	1.10	0.98	0.94	
9	0.82	0.81	1.00	1.46	1.44	2.69	4.04	1.99	1.36	1.09	0.97	0.94	
10	0.82	0.81	1.00	1.43	3.60	3.28	3.55	1.96	1.35	1.09	0.97	0.94	
11	0.81	0.80	1.00	1.35	4.94	2.72	3.28	1.91	1.34	1.09	0.97	0.93	
12	0.80	0.80	0.98	1.25	4.25	2.51	3.02	1.92	1.34	1.08	0.97	0.93	
13	0.79	0.81	0.96	1.22	3.38	2.66	2.89	2.25	1.31	1.08	0.97	0.93	
14	0.79	0.81	0.92	1.19	3.16	2.48	2.80	2.20	1.29	1.08	0.97	0.93	
15	0.79	0.81	1.22	1.16	3.39	2.37	3.38	2.03	1.29	1.07	0.97	0.93	
16	0.81	1.16	1.04	1.14	2.95	2.18	3.05	1.96	1.28	1.07	0.97	0.93	
17	0.81	1.14	1.01	1.12	2.75	2.13	2.84	1.88	1.28	1.07	0.97	0.93	
18	0.79	1.19	1.00	1.08	2.52	2.02	2.61	1.88	1.26	1.06	0.97	0.93	
19	0.79	1.05	0.96	1.10	2.37	2.01	2.52	1.75	1.26	1.06	0.96	0.92	
20	0.79	1.03	0.95	1.14	2.75	1.94	2.49	1.74	1.26	1.04	0.96	0.92	
21	0.79	0.96	0.95	1.70	2.62	1.93	2.35	1.68	1.23	1.03	0.96	0.92	
22	0.78	0.91	1.12	2.05	2.43	1.86	2.39	1.64	1.23	1.03	0.96	0.92	
23	0.79	0.89	1.76	2.16	2.22	1.79	2.94	1.64	1.23	1.02	0.96	0.92	
24	0.81	0.88	3.92	1.94	2.08	1.78	2.84	1.59	1.21	1.02	0.96	0.92	
25	0.80	0.88	3.18	1.97	1.95	2.98	2.65	1.58	1.19	1.02	0.96	0.92	
26	0.83	0.87	2.17	1.78	2.05	2.47	2.51	1.55	1.16	1.02	0.96	0.91	
27	0.83	0.90	1.97	1.67	3.13	2.32	2.45	1.55	1.13	1.02	0.96	0.91	
28	0.82	0.88	2.09	1.59	4.54	2.19	2.65	1.51	1.13	1.01	0.96	0.91	
29	0.82	0.87	1.89	1.57	4.03	2.87	2.58	1.48	1.13	1.01		0.91	
30	0.81	0.86	2.05	1.48	3.53	2.53	2.41	1.47	1.13	1.01		0.91	
31		0.85		1.38	3.17		2.61		1.12	1.01		0.91	
Mean	0.81	0.88	1.38	1.58	2.59	2.43	2.90	1.96	1.28	1.06	0.97	0.93	
Max	0.84	1.19	3.92	2.69	4.94	3.28	4.04	3.17	1.45	1.12	0.99	0.96	4.94
Min	0.78	0.80	0.83	1.08	1.28	1.78	2.35	1.47	1.12	1.01	0.96	0.91	0.78

Annual Max Momentary Gage Height 5.00 M (A.D), at 18.00 Hours, on Aug 11, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.70 M (A.D)
Left Bank Elevation 6.78 M (A.D)
Right Bank Elevation 5.99 M (A.D), Drainage Area 209 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.19	0.16	0.21	10.91	1.50	12.20	12.80	15.77	1.80	0.75	0.44	0.39	
2	0.21	0.16	0.19	7.42	1.19	10.19	11.90	11.00	1.68	0.75	0.44	0.37	
3	0.19	0.16	0.26	5.30	1.28	8.84	9.38	10.01	1.64	0.72	0.44	0.37	
4	0.19	0.16	0.21	4.46	1.28	8.06	20.46	8.48	1.60	0.72	0.42	0.37	
5	0.19	0.15	0.21	3.34	1.25	14.34	17.42	7.34	1.57	0.72	0.42	0.37	
6	0.18	0.15	3.83	2.60	1.96	11.54	24.37	6.94	1.53	0.70	0.42	0.36	
7	0.18	0.15	1.01	1.57	1.96	10.37	15.99	6.14	1.53	0.70	0.42	0.36	
8	0.18	0.15	0.63	1.64	1.72	8.93	12.80	5.65	1.50	0.70	0.42	0.36	
9	0.18	0.16	0.45	1.84	1.76	10.91	26.36	5.23	1.46	0.68	0.41	0.36	
10	0.18	0.16	0.45	1.72	20.70	16.98	20.10	5.02	1.43	0.68	0.41	0.36	
11	0.16	0.15	0.45	1.43	39.68	11.18	16.98	4.67	1.39	0.68	0.41	0.35	
12	0.15	0.15	0.42	1.10	29.30	9.29	14.12	4.74	1.39	0.65	0.41	0.35	
13	0.14	0.16	0.39	1.01	18.08	10.64	12.80	7.10	1.28	0.65	0.41	0.35	
14	0.14	0.16	0.33	0.93	15.66	9.02	11.90	6.70	1.22	0.65	0.41	0.35	
15	0.14	0.16	1.01	0.85	18.19	8.06	18.08	5.51	1.22	0.63	0.41	0.35	
16	0.16	0.85	0.55	0.80	13.40	6.56	14.45	5.02	1.19	0.63	0.41	0.35	
17	0.16	0.80	0.47	0.75	11.45	6.21	12.30	4.46	1.19	0.63	0.41	0.35	
18	0.14	0.93	0.45	0.65	9.38	5.44	10.19	4.46	1.13	0.60	0.41	0.35	
19	0.14	0.57	0.39	0.70	8.06	5.37	9.38	3.55	1.13	0.60	0.39	0.33	
20	0.14	0.52	0.37	0.80	11.45	4.88	9.11	3.48	1.13	0.55	0.39	0.33	
21	0.14	0.39	0.37	3.20	10.28	4.81	7.90	3.08	1.04	0.52	0.39	0.33	
22	0.13	0.32	0.75	5.65	8.57	4.32	8.22	2.84	1.04	0.52	0.39	0.33	
23	0.14	0.28	3.62	6.42	6.86	3.83	13.30	2.84	1.04	0.50	0.39	0.33	
24	0.16	0.27	24.76	4.88	5.86	3.76	12.30	2.54	0.98	0.50	0.39	0.33	
25	0.15	0.27	15.88	5.09	4.95	13.70	10.55	2.48	0.93	0.50	0.39	0.33	
26	0.19	0.26	6.49	3.76	5.65	8.93	9.29	2.30	0.85	0.50	0.39	0.32	
27	0.19	0.30	5.09	3.02	15.33	7.66	8.75	2.30	0.77	0.50	0.39	0.32	
28	0.18	0.27	5.93	2.54	33.60	6.63	10.55	2.06	0.77	0.47	0.39	0.32	
29	0.18	0.26	4.53	2.42	26.22	12.60	9.92	1.92	0.77	0.47		0.32	
30	0.16	0.24	5.65	1.92	19.86	9.47	8.39	1.88	0.77	0.47		0.32	
31		0.23		1.53	15.77		10.19		0.75	0.47		0.32	
Total	4.96	9.10	85.35	90.25	362.20	264.72	410.25	155.51	37.72	18.81	11.42	10.70	1460.99 CMSDAY
Mean	0.17	0.29	2.85	2.91	11.68	8.82	13.23	5.18	1.22	0.61	0.41	0.35	4.00 CMS
Max	0.21	0.93	24.76	10.91	39.68	16.98	26.36	15.77	1.80	0.75	0.44	0.39	39.68 CMS
Min	0.13	0.15	0.19	0.65	1.19	3.76	7.90	1.88	0.75	0.47	0.39	0.32	0.13 CMS
Runoff	0.429	0.786	7.374	7.798	31.294	22.872	35.446	13.436	3.259	1.625	0.987	0.924	126.230 MCM

Momentary Peak 40.70 CMS, at 5.00 H (A.D), at 18.00 Hours, on Aug 11, 2001
Runoff Yield 19.15 Liters/Second/Square KM, Momentary Peak Yield 194.737 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 221 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 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 Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Stable.

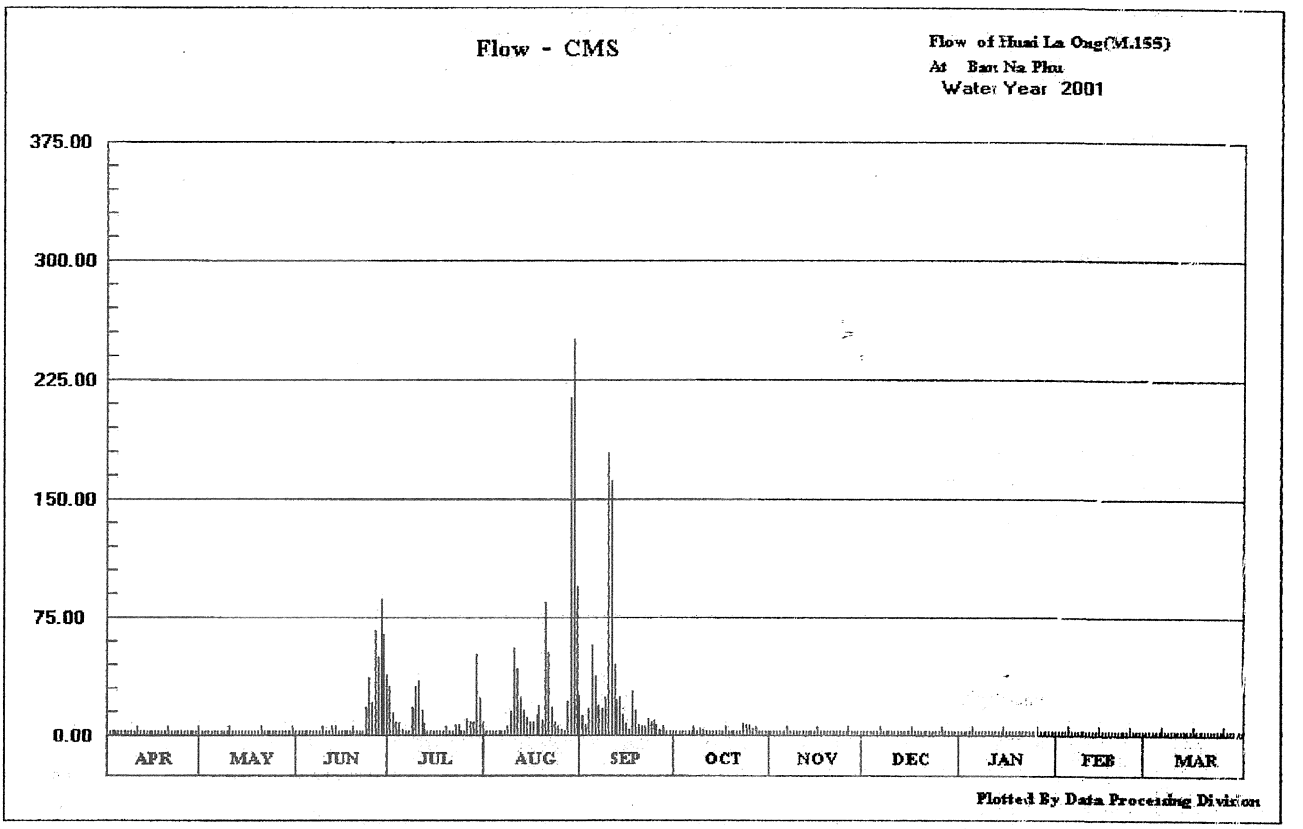
Overbank Flow Conditions Overbank flow starts at elevation +5.790 m.(A.D.) and is including overbank flow.

General Description Records poor. The weir situated about 1.5 kilometers downstream from the gage site.
Stage-discharge relation defined by 33 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.66	0.35	0.59	2.02	1.05	1.43	0.82	0.84	0.50	0.49	0.48	0.48	
2	0.49	0.38	0.55	1.50	1.02	1.19	0.78	0.82	0.50	0.49	0.48	0.48	
3	0.47	0.34	0.75	1.27	0.85	1.59	0.78	0.78	0.50	0.48	0.48	0.48	
4	0.45	0.30	0.80	1.25	0.85	2.59	0.89	0.75	0.49	0.48	0.48	0.47	
5	0.43	0.29	0.81	1.08	0.81	2.19	0.87	0.72	0.49	0.48	0.48	0.47	
6	0.41	0.30	0.74	0.96	0.78	1.65	0.85	0.68	0.49	0.48	0.48	0.47	
7	0.39	0.29	0.87	0.88	0.74	1.60	0.82	0.67	0.49	0.48	0.48	0.47	
8	0.37	0.28	0.90	1.63	0.80	1.85	0.92	0.64	0.49	0.48	0.48	0.47	
9	0.35	0.27	0.88	2.02	1.54	4.45	1.13	0.64	0.49	0.48	0.48	0.47	
10	0.33	0.27	0.85	2.12	2.56	4.23	1.08	0.62	0.54	0.48	0.48	0.47	
11	0.31	0.29	0.95	1.57	2.28	2.36	0.97	0.61	0.60	0.48	0.48	0.47	
12	0.36	0.29	1.15	1.25	1.81	1.80	0.90	0.60	0.59	0.48	0.48	0.53	
13	0.34	0.28	1.15	1.04	1.56	1.85	0.88	0.66	0.59	0.48	0.48	0.54	
14	0.30	0.28	1.05	0.92	1.40	1.45	0.83	0.80	0.60	0.48	0.48	0.53	
15	0.29	0.27	1.03	0.92	1.28	1.24	0.79	0.68	0.58	0.48	0.48	0.54	
16	0.29	0.36	0.97	0.87	1.27	1.08	0.76	0.71	0.58	0.48	0.48	0.54	
17	0.28	0.42	0.90	0.82	1.46	1.94	0.75	0.69	0.58	0.48	0.48	0.54	
18	0.28	0.71	0.81	0.77	1.68	1.58	0.72	0.60	0.60	0.48	0.48	0.54	
19	0.27	0.73	0.72	0.71	1.33	1.20	0.71	0.60	0.57	0.49	0.48	0.54	
20	0.26	0.91	0.63	0.77	3.10	1.16	0.70	0.59	0.54	0.49	0.48	0.54	
21	0.25	0.72	0.62	0.85	2.51	1.15	0.69	0.59	0.52	0.49	0.48	0.52	
22	0.23	0.70	0.92	1.19	1.62	1.35	0.70	0.58	0.51	0.49	0.48	0.50	
23	0.22	0.65	1.63	1.20	1.28	1.30	1.25	0.58	0.51	0.49	0.48	0.48	
24	0.28	0.63	2.16	1.04	1.16	1.33	1.22	0.54	0.50	0.49	0.48	0.48	
25	0.27	0.59	1.73	0.92	1.08	1.19	1.19	0.51	0.49	0.49	0.48	0.48	
26	0.27	0.56	2.78	1.37	1.00	1.08	1.11	0.50	0.49	0.49	0.48	0.48	
27	0.28	0.60	2.45	1.30	1.76	0.99	1.01	0.50	0.49	0.49	0.48	0.48	
28	0.29	0.51	3.13	1.30	4.87	0.91	1.00	0.50	0.54	0.49	0.48	0.48	
29	0.29	0.58	2.73	2.48	5.27	0.85	0.99	0.50	0.52	0.49		0.48	
30	0.29	0.60	2.21	1.81	3.26	0.84	0.93	0.50	0.49	0.48		0.48	
31		0.60		1.28	1.86		0.87		0.49	0.48		0.48	
Mean	0.33	0.46	1.25	1.26	1.74	1.65	0.90	0.63	0.53	0.48	0.48	0.50	
Max	0.66	0.91	3.13	2.48	5.27	4.45	1.25	0.84	0.60	0.49	0.48	0.54	5.27
Min	0.22	0.27	0.55	0.71	0.74	0.84	0.69	0.50	0.49	0.48	0.48	0.47	0.22

Annual Max Momentary Gage Height 6.00 M (A.D), at 15.00 Hours, on Aug 28, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.29 M (A.D)
Left Bank Elevation 6.39 M (A.D)
Right Bank Elevation 5.78 M (A.D), Drainage Area 221 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.41	0.00	0.18	32.30	4.45	13.44	1.32	1.49	0.00	0.00	0.00	0.00	
2	0.00	0.00	0.10	15.40	3.82	7.57	1.03	1.32	0.00	0.00	0.00	0.00	
3	0.00	0.00	0.85	9.41	1.58	17.92	1.03	1.03	0.00	0.00	0.00	0.00	
4	0.00	0.00	1.15	8.95	1.58	58.00	1.92	0.85	0.00	0.00	0.00	0.00	
5	0.00	0.00	1.23	5.08	1.23	39.10	1.75	0.67	0.00	0.00	0.00	0.00	
6	0.00	0.00	0.79	2.84	1.03	19.60	1.58	0.48	0.00	0.00	0.00	0.00	
7	0.00	0.00	1.75	1.83	0.79	18.20	1.32	0.45	0.00	0.00	0.00	0.00	
8	0.00	0.00	2.00	19.04	1.15	25.75	2.28	0.34	0.00	0.00	0.00	0.00	
9	0.00	0.00	1.83	32.30	16.52	180.25	6.19	0.34	0.00	0.00	0.00	0.00	
10	0.00	0.00	1.58	36.30	56.50	162.87	5.08	0.27	0.08	0.00	0.00	0.00	
11	0.00	0.00	2.70	17.36	43.10	46.70	2.98	0.23	0.20	0.00	0.00	0.00	
12	0.00	0.00	6.65	8.95	24.35	24.00	2.00	0.20	0.18	0.00	0.00	0.06	
13	0.00	0.00	6.65	4.24	17.08	25.75	1.83	0.41	0.18	0.00	0.00	0.08	
14	0.00	0.00	4.45	2.28	12.60	14.00	1.40	1.15	0.20	0.00	0.00	0.06	
15	0.00	0.00	4.03	2.28	9.64	8.72	1.09	0.48	0.16	0.00	0.00	0.08	
16	0.00	0.00	2.98	1.75	9.41	5.08	0.91	0.61	0.16	0.00	0.00	0.08	
17	0.00	0.00	2.00	1.32	14.28	29.10	0.85	0.52	0.16	0.00	0.00	0.08	
18	0.00	0.61	1.23	0.97	20.44	17.64	0.67	0.20	0.20	0.00	0.00	0.08	
19	0.00	0.73	0.67	0.61	10.85	7.80	0.61	0.20	0.14	0.00	0.00	0.08	
20	0.00	2.14	0.30	0.97	86.00	6.88	0.55	0.18	0.08	0.00	0.00	0.06	
21	0.00	0.67	0.27	1.58	54.00	6.65	0.52	0.18	0.04	0.00	0.00	0.04	
22	0.00	0.55	2.28	7.57	18.76	11.35	0.55	0.16	0.02	0.00	0.00	0.00	
23	0.00	0.37	19.04	7.80	9.64	10.10	8.95	0.16	0.02	0.00	0.00	0.00	
24	0.00	0.30	37.90	4.24	6.88	10.85	8.26	0.08	0.00	0.00	0.00	0.00	
25	0.00	0.18	21.90	2.28	5.08	7.57	7.57	0.02	0.00	0.00	0.00	0.00	
26	0.00	0.12	67.90	11.85	3.40	5.08	5.73	0.00	0.00	0.00	0.00	0.00	
27	0.00	0.20	51.00	10.10	22.80	3.26	3.61	0.00	0.00	0.00	0.00	0.00	
28	0.00	0.02	87.80	10.10	214.87	2.14	3.40	0.00	0.08	0.00	0.00	0.00	
29	0.00	0.16	65.15	52.50	251.65	1.58	3.26	0.00	0.04	0.00		0.00	
30	0.00	0.20	39.95	24.35	95.90	1.49	2.42	0.00	0.00	0.00		0.00	
31		0.20		9.64	26.10		1.75		0.00	0.00		0.00	
Total	0.41	6.45	436.31	346.19	1045.48	788.44	82.41	12.02	1.94	0.00	0.00	0.72	2720.37 CMSDAY
Mean	0.01	0.21	14.54	11.17	33.73	26.28	2.66	0.40	0.06	0.00	0.00	0.02	7.45 CMS
Max	0.41	2.14	87.80	52.50	251.65	180.25	8.95	1.49	0.20	0.00	0.00	0.08	251.65 CMS
Min	0.00	0.00	0.10	0.61	0.79	1.49	0.52	0.00	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.035	0.557	37.697	29.911	90.329	68.121	7.120	1.039	0.168	0.000	0.000	0.062	235.040 MCM

Momentary Peak 326.00 CMS, at 6.00 H (A.D), at 15.00 Hours, on Aug 28, 2001
Runoff Yield 33.72 Liters/Second/Square KM, Momentary Peak Yield 1475.113 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage 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 Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions Overbank flow starts at elevation +3.530 m.(A.D.) and is including overbank flow.

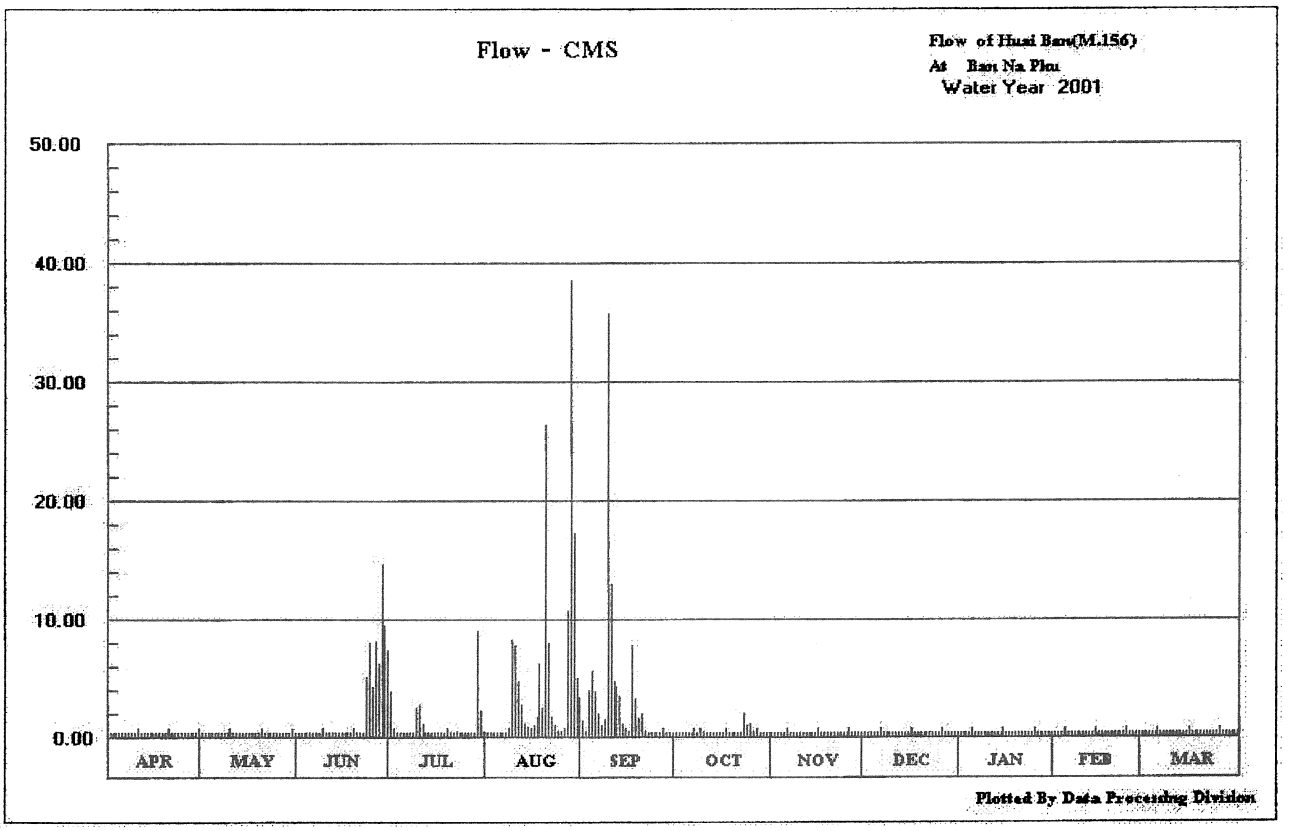
General Description Records poor. The concrete weir situated about 250 meters downstream from the gage site.

Stage-discharge relation defined by 33 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.65	1.29	1.67	2.16	1.80	1.96	1.77	1.75	1.68	1.56	1.73	1.64	
2	1.62	1.28	1.67	1.88	1.75	1.86	1.75	1.77	1.68	1.55	1.72	1.63	
3	1.60	1.26	1.71	1.81	1.76	2.17	1.74	1.76	1.68	1.54	1.71	1.62	
4	1.59	1.25	1.69	1.80	1.75	2.29	1.76	1.74	1.68	1.53	1.70	1.61	
5	1.57	1.24	1.69	1.77	1.73	2.16	1.74	1.72	1.68	1.51	1.69	1.61	
6	1.55	1.24	1.68	1.74	1.72	2.01	1.74	1.72	1.68	1.50	1.68	1.60	
7	1.54	1.24	1.69	1.75	1.72	1.92	1.73	1.71	1.68	1.68	1.68	1.59	
8	1.52	1.22	1.68	1.83	1.72	1.97	1.76	1.70	1.67	1.70	1.68	1.58	
9	1.51	1.21	1.69	2.05	2.49	3.95	1.89	1.70	1.67	1.69	1.68	1.57	
10	1.49	1.20	1.69	2.07	2.45	2.79	1.85	1.70	1.67	1.69	1.68	1.57	
11	1.48	1.24	1.77	1.93	2.22	2.22	1.80	1.69	1.67	1.69	1.68	1.56	
12	1.46	1.23	1.84	1.82	2.07	2.19	1.77	1.69	1.67	1.68	1.68	1.55	
13	1.45	1.22	1.80	1.77	1.93	2.13	1.75	1.72	1.67	1.68	1.68	1.54	
14	1.43	1.25	1.77	1.75	1.90	1.93	1.75	1.73	1.67	1.72	1.68	1.53	
15	1.41	1.26	1.76	1.77	1.88	1.88	1.74	1.72	1.66	1.77	1.68	1.52	
16	1.40	1.43	1.75	1.75	1.92	1.85	1.71	1.71	1.65	1.72	1.67	1.51	
17	1.38	1.63	1.72	1.73	1.99	2.45	1.72	1.70	1.65	1.70	1.67	1.50	
18	1.36	1.74	1.71	1.72	2.34	2.11	1.72	1.70	1.65	1.69	1.67	1.49	
19	1.35	1.73	1.70	1.71	2.05	1.98	1.72	1.70	1.64	1.68	1.67	1.48	
20	1.33	1.70	1.68	1.74	3.53	2.01	1.71	1.69	1.64	1.68	1.68	1.47	
21	1.32	1.70	1.68	1.82	2.47	1.86	1.71	1.69	1.63	1.67	1.68	1.45	
22	1.30	1.70	1.75	1.85	1.99	1.84	1.74	1.69	1.62	1.67	1.68	1.44	
23	1.29	1.70	2.25	1.83	1.92	1.83	2.01	1.68	1.61	1.70	1.68	1.43	
24	1.34	1.68	2.47	1.79	1.85	1.84	1.92	1.68	1.60	1.69	1.67	1.42	
25	1.33	1.68	2.19	1.75	1.85	1.81	1.93	1.68	1.59	1.69	1.66	1.41	
26	1.32	1.67	2.48	1.76	1.88	1.80	1.86	1.68	1.59	1.73	1.65	1.40	
27	1.30	1.66	2.34	1.77	2.66	1.78	1.83	1.68	1.58	1.74	1.65	1.39	
28	1.29	1.66	2.89	1.83	4.07	1.76	1.80	1.68	1.57	1.73	1.64	1.37	
29	1.28	1.68	2.58	2.54	3.04	1.76	1.77	1.68	1.57	1.73		1.36	
30	1.29	1.67	2.42	2.03	2.24	1.76	1.76	1.68	1.56	1.73		1.35	
31		1.68		1.86	2.12		1.75		1.56	1.73		1.34	
Mean	1.43	1.46	1.91	1.85	2.16	2.06	1.78	1.70	1.64	1.67	1.68	1.50	
Max	1.65	1.74	2.89	2.54	4.07	3.95	2.01	1.77	1.68	1.77	1.73	1.64	4.07
Min	1.28	1.20	1.67	1.71	1.72	1.76	1.71	1.68	1.56	1.50	1.64	1.34	1.20

Annual Max Momentary Gage Height 4.90 M (A.D), at 11.00 Hours, on Aug 28, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.43 M (A.D)
Left Bank Elevation 3.52 M (A.D)
Right Bank Elevation 3.52 M (A.D), Drainage Area 40 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	4.08	0.30	1.60	0.21	0.15	0.00	0.00	0.09	0.00	
2	0.00	0.00	0.00	0.86	0.15	0.72	0.15	0.21	0.00	0.00	0.06	0.00	
3	0.00	0.00	0.03	0.37	0.18	4.21	0.12	0.18	0.00	0.00	0.03	0.00	
4	0.00	0.00	0.00	0.30	0.15	5.77	0.18	0.12	0.00	0.00	0.00	0.00	
5	0.00	0.00	0.00	0.21	0.09	4.08	0.12	0.06	0.00	0.00	0.00	0.00	
6	0.00	0.00	0.00	0.12	0.06	2.13	0.12	0.06	0.00	0.00	0.00	0.00	
7	0.00	0.00	0.00	0.15	0.06	1.20	0.09	0.03	0.00	0.00	0.00	0.00	
8	0.00	0.00	0.00	0.51	0.06	1.70	0.18	0.00	0.00	0.00	0.00	0.00	
9	0.00	0.00	0.00	2.65	8.46	35.95	0.93	0.00	0.00	0.00	0.00	0.00	
10	0.00	0.00	0.00	2.91	7.90	13.13	0.65	0.00	0.00	0.00	0.00	0.00	
11	0.00	0.00	0.21	1.30	4.86	4.86	0.30	0.00	0.00	0.00	0.00	0.00	
12	0.00	0.00	0.58	0.44	2.91	4.47	0.21	0.00	0.00	0.00	0.00	0.00	
13	0.00	0.00	0.30	0.21	1.30	3.69	0.15	0.06	0.00	0.00	0.00	0.00	
14	0.00	0.00	0.21	0.15	1.00	1.30	0.15	0.09	0.00	0.06	0.00	0.00	
15	0.00	0.00	0.18	0.21	0.86	0.86	0.12	0.06	0.00	0.21	0.00	0.00	
16	0.00	0.00	0.15	0.15	1.20	0.65	0.03	0.03	0.00	0.06	0.00	0.00	
17	0.00	0.00	0.06	0.09	1.90	7.90	0.06	0.00	0.00	0.00	0.00	0.00	
18	0.00	0.12	0.03	0.06	6.42	3.43	0.06	0.00	0.00	0.00	0.00	0.00	
19	0.00	0.09	0.00	0.03	2.65	1.80	0.06	0.00	0.00	0.00	0.00	0.00	
20	0.00	0.00	0.00	0.12	26.60	2.13	0.03	0.00	0.00	0.00	0.00	0.00	
21	0.00	0.00	0.00	0.44	8.18	0.72	0.03	0.00	0.00	0.00	0.00	0.00	
22	0.00	0.00	0.15	0.65	1.90	0.58	0.12	0.00	0.00	0.00	0.00	0.00	
23	0.00	0.00	5.25	0.51	1.20	0.51	2.13	0.00	0.00	0.00	0.00	0.00	
24	0.00	0.00	8.18	0.27	0.65	0.58	1.20	0.00	0.00	0.00	0.00	0.00	
25	0.00	0.00	4.47	0.15	0.65	0.37	1.30	0.00	0.00	0.00	0.00	0.00	
26	0.00	0.00	8.32	0.18	0.86	0.30	0.72	0.00	0.00	0.09	0.00	0.00	
27	0.00	0.00	6.42	0.21	10.96	0.24	0.51	0.00	0.00	0.12	0.00	0.00	
28	0.00	0.00	14.83	0.51	38.71	0.18	0.30	0.00	0.00	0.09	0.00	0.00	
29	0.00	0.00	9.72	9.16	17.38	0.18	0.21	0.00	0.00	0.09		0.00	
30	0.00	0.00	7.48	2.39	5.12	0.18	0.18	0.00	0.00	0.09		0.00	
31		0.00		0.72	3.56		0.15		0.00	0.09		0.00	
Total	0.00	0.21	66.57	30.11	156.28	105.42	10.77	1.05	0.00	0.90	0.18	0.00	371.49 CMSDAY
Mean	0.00	0.01	2.22	0.97	5.04	3.51	0.35	0.04	0.00	0.03	0.01	0.00	1.02 CMS
Max	0.00	0.12	14.83	9.16	38.71	35.95	2.13	0.21	0.00	0.21	0.09	0.00	38.71 CMS
Min	0.00	0.00	0.00	0.03	0.06	0.18	0.03	0.00	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.000	0.018	5.752	2.602	13.503	9.108	0.931	0.091	0.000	0.078	0.016	0.000	32.097 MCM

Momentary Peak 58.90 CMS, at 4.90 M (A.D), at 11.00 Hours, on Aug 28, 2001
Runoff Yield 25.44 Liters/Second/Square KM, Momentary Peak Yield 1472.500 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 716 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 Float -

Rated by Current Meter 1997 - 1999, 2001 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

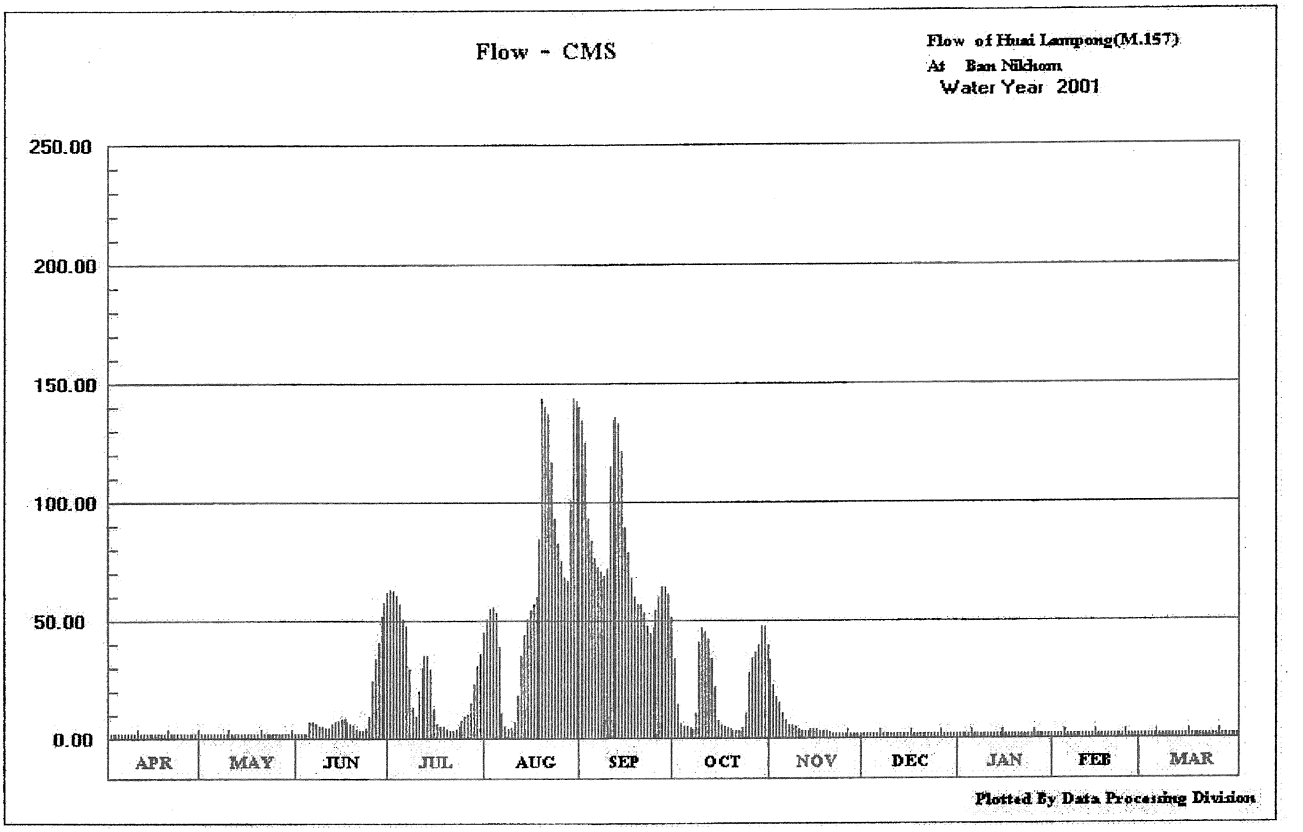
Overbank Flow Conditions Overbank flow starts at elevation +4.760 m.(A.D.) and is including overbank flow.

General Description Records fair. Stage-discharge relation defined by 33 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.28	3.15	3.22	5.46	5.18	6.42	4.71	4.70	3.69	3.64	3.33	2.91	
2	3.28	3.15	3.22	5.45	5.28	6.33	4.15	4.39	3.69	3.64	3.28	2.91	
3	3.27	3.15	3.25	5.41	5.30	5.94	3.86	4.24	3.69	3.64	3.25	2.90	
4	3.27	3.14	3.42	5.32	5.23	5.81	3.83	4.16	3.69	3.64	3.24	2.90	
5	3.26	3.17	3.88	5.18	4.86	5.69	3.82	4.01	3.69	3.63	3.24	2.89	
6	3.26	3.16	3.89	5.10	4.01	5.63	3.81	3.92	3.69	3.63	3.24	2.86	
7	3.26	3.15	3.87	4.58	3.82	5.60	3.79	3.85	3.69	3.62	3.23	2.84	
8	3.26	3.15	3.83	4.09	3.79	5.56	4.02	3.84	3.68	3.62	3.21	2.83	
9	3.25	3.14	3.82	3.98	3.81	5.62	4.91	3.82	3.68	3.59	3.19	2.82	
10	3.25	3.14	3.81	4.32	3.89	6.22	5.08	3.78	3.68	3.57	3.18	2.79	
11	3.24	3.14	3.81	4.61	4.26	6.42	5.04	3.77	3.67	3.56	3.17	2.78	
12	3.27	3.13	3.86	4.75	4.75	6.43	4.95	3.76	3.67	3.56	3.14	2.77	
13	3.27	3.13	3.90	4.76	5.00	6.41	4.72	3.76	3.67	3.56	3.13	2.76	
14	3.26	3.12	3.92	4.59	5.18	6.29	4.38	3.78	3.67	3.55	3.12	2.75	
15	3.25	3.12	3.94	4.08	5.26	5.89	3.92	3.78	3.67	3.54	3.11	2.74	
16	3.25	3.13	3.93	3.86	5.32	5.73	3.85	3.77	3.67	3.54	3.10	2.72	
17	3.24	3.18	3.89	3.83	5.40	5.55	3.82	3.77	3.67	3.50	3.09	2.69	
18	3.24	3.21	3.86	3.82	5.82	5.40	3.81	3.77	3.67	3.48	3.06	2.69	
19	3.23	3.21	3.85	3.78	6.50	5.33	3.78	3.75	3.67	3.44	3.04	2.69	
20	3.22	3.20	3.78	3.75	6.47	5.32	3.77	3.74	3.67	3.43	3.03	2.69	
21	3.22	3.20	3.75	3.75	6.44	5.24	3.77	3.72	3.66	3.42	3.01	2.69	
22	3.20	3.20	3.75	3.78	6.24	5.10	3.75	3.72	3.66	3.42	2.99	2.68	
23	3.20	3.20	3.81	3.82	5.94	5.01	3.81	3.71	3.65	3.40	2.97	2.68	
24	3.19	3.20	3.98	3.91	5.79	5.08	4.02	3.71	3.65	3.39	2.96	2.68	
25	3.18	3.20	4.44	3.97	5.67	5.26	4.53	3.70	3.65	3.37	2.94	2.68	
26	3.18	3.20	4.72	4.00	5.55	5.40	4.71	3.70	3.65	3.37	2.91	2.67	
27	3.17	3.20	4.92	4.16	5.53	5.48	4.78	3.69	3.65	3.37	2.91	2.65	
28	3.16	3.19	5.21	4.42	6.04	5.49	4.88	3.69	3.65	3.36	2.91	2.64	
29	3.16	3.20	5.34	4.62	6.50	5.42	5.10	3.69	3.65	3.35		2.64	
30	3.16	3.22	5.44	4.77	6.49	5.19	5.10	3.69	3.64	3.34		2.63	
31		3.22		5.03	6.47		4.88		3.64	3.34		2.63	
Mean	3.23	3.17	4.01	4.42	5.35	5.68	4.30	3.85	3.67	3.50	3.11	2.75	
Max	3.28	3.22	5.44	5.46	6.50	6.43	5.10	4.70	3.69	3.64	3.33	2.91	6.50
Min	3.16	3.12	3.22	3.75	3.79	5.01	3.75	3.69	3.64	3.34	2.91	2.63	2.63

Annual Max Momentary Gage Height 6.51 M (A.D), at 9.00 Hours, on Aug 19, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.52 M (A.D)
Left Bank Elevation 4.76 M (A.D)
Right Bank Elevation 4.75 M (A.D), Drainage Area 716 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	64.00	51.70	135.30	34.35	34.00	2.25	1.00	0.00	0.00	
2	0.00	0.00	0.00	63.50	55.70	126.00	15.50	23.15	2.25	1.00	0.00	0.00	
3	0.00	0.00	0.00	61.50	56.50	93.80	6.80	18.20	2.25	1.00	0.00	0.00	
4	0.00	0.00	0.00	57.40	53.70	84.70	5.90	15.80	2.25	1.00	0.00	0.00	
5	0.00	0.00	7.40	51.70	39.60	76.90	5.60	11.30	2.25	0.75	0.00	0.00	
6	0.00	0.00	7.70	48.50	11.30	73.30	5.30	8.60	2.25	0.75	0.00	0.00	
7	0.00	0.00	7.10	29.80	5.60	71.50	4.75	6.50	2.25	0.50	0.00	0.00	
8	0.00	0.00	5.90	13.70	4.75	69.30	11.60	6.20	2.00	0.50	0.00	0.00	
9	0.00	0.00	5.60	10.40	5.30	72.70	41.35	5.60	2.00	0.00	0.00	0.00	
10	0.00	0.00	5.30	20.70	7.70	115.80	47.70	4.50	2.00	0.00	0.00	0.00	
11	0.00	0.00	5.30	30.85	18.80	135.30	46.10	4.25	1.75	0.00	0.00	0.00	
12	0.00	0.00	6.80	35.75	35.75	136.45	42.75	4.00	1.75	0.00	0.00	0.00	
13	0.00	0.00	8.00	36.10	44.50	134.15	34.70	4.00	1.75	0.00	0.00	0.00	
14	0.00	0.00	8.60	30.15	51.70	122.10	22.80	4.50	1.75	0.00	0.00	0.00	
15	0.00	0.00	9.20	13.40	54.90	90.30	8.60	4.50	1.75	0.00	0.00	0.00	
16	0.00	0.00	8.90	6.80	57.40	79.45	6.50	4.25	1.75	0.00	0.00	0.00	
17	0.00	0.00	7.70	5.90	61.00	68.75	5.60	4.25	1.75	0.00	0.00	0.00	
18	0.00	0.00	6.80	5.60	85.40	61.00	5.30	4.25	1.75	0.00	0.00	0.00	
19	0.00	0.00	6.50	4.50	144.50	57.85	4.50	3.75	1.75	0.00	0.00	0.00	
20	0.00	0.00	4.50	3.75	141.05	57.40	4.25	3.50	1.75	0.00	0.00	0.00	
21	0.00	0.00	3.75	3.75	137.60	54.10	4.25	3.00	1.50	0.00	0.00	0.00	
22	0.00	0.00	3.75	4.50	117.60	48.50	3.75	3.00	1.50	0.00	0.00	0.00	
23	0.00	0.00	5.30	5.60	93.80	44.90	5.30	2.75	1.25	0.00	0.00	0.00	
24	0.00	0.00	10.40	8.30	83.35	47.70	11.60	2.75	1.25	0.00	0.00	0.00	
25	0.00	0.00	24.90	10.10	75.70	54.90	28.05	2.50	1.25	0.00	0.00	0.00	
26	0.00	0.00	34.70	11.00	68.75	61.00	34.35	2.50	1.25	0.00	0.00	0.00	
27	0.00	0.00	41.70	15.80	67.65	65.00	36.80	2.25	1.25	0.00	0.00	0.00	
28	0.00	0.00	52.90	24.20	101.20	65.50	40.30	2.25	1.25	0.00	0.00	0.00	
29	0.00	0.00	58.30	31.20	144.50	62.00	48.50	2.25	1.25	0.00		0.00	
30	0.00	0.00	63.00	36.45	143.35	52.10	48.50	2.25	1.00	0.00		0.00	
31		0.00		45.70	141.05		40.30		1.00	0.00		0.00	
Total	0.00	0.00	410.00	790.60	2161.40	2417.75	661.65	200.60	53.00	6.50	0.00	0.00	6701.50 CMSDAY
Mean	0.00	0.00	13.67	25.50	69.72	80.59	21.34	6.69	1.71	0.21	0.00	0.00	18.36 CMS
Max	0.00	0.00	63.00	64.00	144.50	136.45	48.50	34.00	2.25	1.00	0.00	0.00	144.50 CMS
Min	0.00	0.00	0.00	3.75	4.75	44.90	3.75	2.25	1.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.000	0.000	35.424	68.308	186.745	208.894	57.167	17.332	4.579	0.562	0.000	0.000	579.010 MCM

Momentary Peak 145.75 CMS, at 6.51 M (A.D), at 9.00 Hours, on Aug 19, 2001

Runoff Yield 25.64 Liters/Second/Square KM, Momentary Peak Yield 203.561 Liters/Second/Square KM

WATER YEAR : 2001

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 Lan Din.

Ban Lum Din **Amphoe** Chom Phra **Changwat** Surin

Drainage Area 4,644 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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

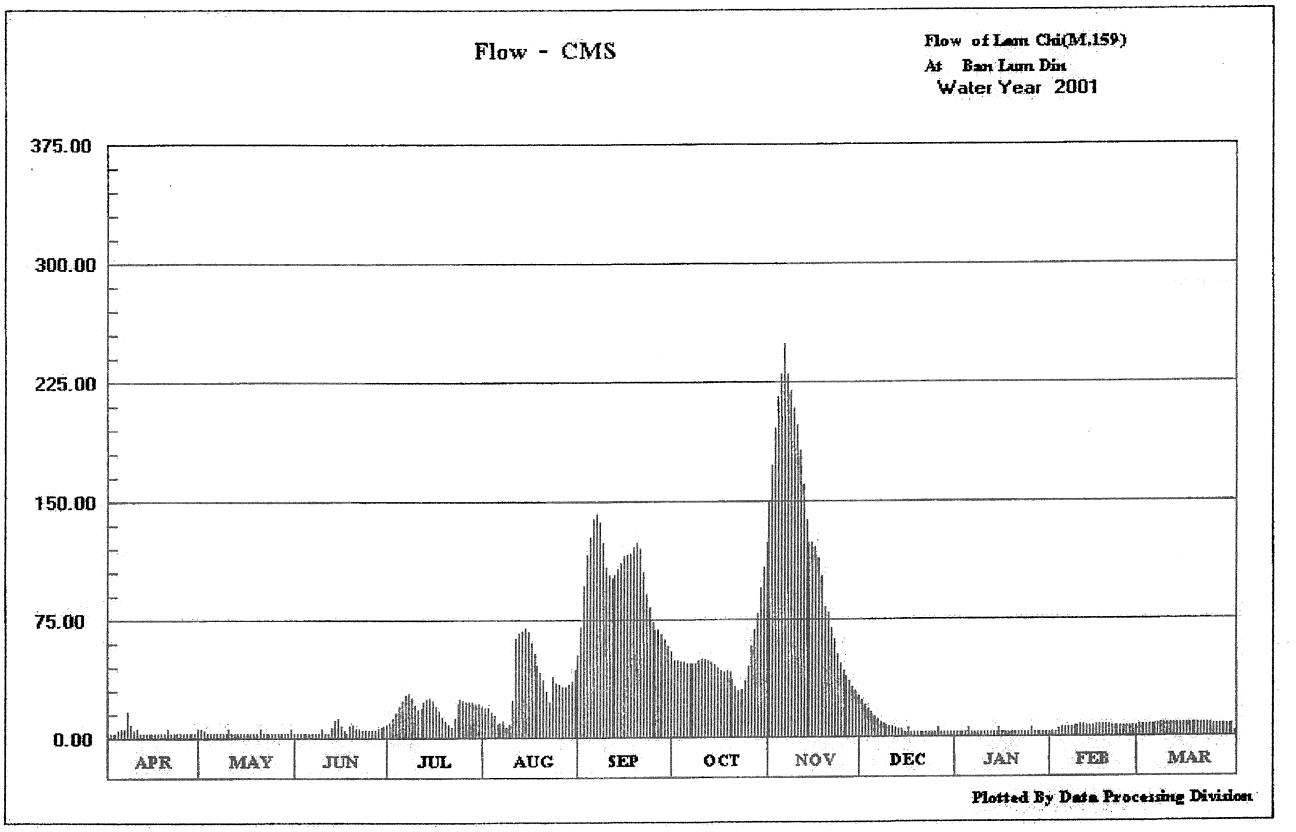
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 73 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.62	1.08	0.70	1.48	2.13	4.41	3.73	5.58	2.41	0.48	0.76	1.30	
2	0.60	1.00	0.69	1.66	2.13	4.88	3.76	5.83	2.27	0.48	0.85	1.30	
3	0.65	0.87	0.74	1.98	1.96	5.18	3.69	6.05	2.08	0.48	0.98	1.31	
4	1.00	0.83	0.72	2.20	1.83	5.33	3.71	6.23	1.96	0.48	1.02	1.30	
5	1.12	0.75	0.70	2.45	1.36	5.47	3.68	6.34	1.77	0.48	1.08	1.31	
6	1.15	0.69	0.70	2.66	1.47	5.50	3.68	6.48	1.61	0.47	1.12	1.32	
7	2.00	0.65	0.69	2.70	1.50	5.44	3.68	6.34	1.46	0.46	1.15	1.33	
8	1.35	0.61	0.66	2.52	1.16	5.28	3.68	6.26	1.37	0.45	1.20	1.35	
9	1.06	0.63	0.65	2.28	1.39	5.05	3.73	6.16	1.28	0.53	1.24	1.36	
10	0.87	0.60	0.62	2.08	2.43	4.97	3.78	6.06	1.20	0.60	1.26	1.36	
11	0.84	0.69	0.60	2.16	4.21	4.95	3.78	5.92	1.16	0.60	1.26	1.36	
12	0.77	0.68	1.18	2.38	4.31	4.98	3.76	5.71	1.08	0.60	1.24	1.37	
13	0.65	0.64	1.61	2.50	4.35	5.03	3.69	5.45	1.02	0.60	1.22	1.37	
14	0.61	0.61	1.69	2.55	4.38	5.09	3.62	5.29	1.01	0.60	1.22	1.38	
15	0.60	0.61	1.28	2.41	4.33	5.16	3.53	5.28	0.81	0.58	1.27	1.38	
16	0.59	0.78	0.98	2.19	4.14	5.18	3.43	5.24	0.68	0.58	1.26	1.38	
17	0.58	0.78	0.86	2.00	3.91	5.18	3.38	5.14	0.64	0.58	1.26	1.38	
18	0.53	0.77	1.27	1.80	3.63	5.24	3.44	4.96	0.60	0.58	1.26	1.38	
19	0.50	0.80	1.38	1.57	3.42	5.29	3.42	4.65	0.59	0.58	1.25	1.38	
20	0.49	0.75	1.09	1.35	3.15	5.23	3.15	4.59	0.58	0.58	1.21	1.38	
21	0.48	0.73	1.10	1.16	2.76	5.01	2.91	4.39	0.57	0.55	1.18	1.38	
22	0.47	0.71	1.05	1.72	2.37	4.79	2.76	4.20	0.60	0.54	1.20	1.38	
23	0.44	0.70	1.01	2.29	3.26	4.65	2.78	3.90	0.60	0.54	1.21	1.36	
24	0.43	0.68	1.01	2.48	3.07	4.48	3.08	3.65	0.60	0.53	1.21	1.33	
25	0.41	0.65	0.99	2.40	3.00	4.37	3.57	3.46	0.60	0.53	1.21	1.31	
26	0.39	0.64	1.02	2.36	2.89	4.37	4.09	3.25	0.57	0.53	1.21	1.31	
27	0.38	0.63	1.11	2.38	2.91	4.30	4.36	3.08	0.54	0.53	1.21	1.30	
28	0.37	0.63	1.20	2.38	3.01	4.20	4.60	2.92	0.50	0.52	1.21	1.28	
29	0.36	0.65	1.25	2.33	3.12	4.08	4.84	2.76	0.50	0.55		1.26	
30	0.35	0.66	1.36	2.30	3.47	3.97	5.04	2.60	0.50	0.62		1.30	
31		0.68		2.21	3.89		5.29		0.48	0.70		1.31	
Mean	0.69	0.72	1.00	2.16	2.93	4.90	3.73	4.93	1.02	0.55	1.17	1.34	
Max	2.00	1.08	1.69	2.70	4.38	5.50	5.29	6.48	2.41	0.70	1.27	1.38	6.48
Min	0.35	0.60	0.60	1.16	1.16	3.97	2.76	2.60	0.48	0.45	0.76	1.26	0.35

Annual Max Momentary Gage Height 6.48 M (A.D), at 18.00 Hours, on Nov 6, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.17 M (A.D)
Left Bank Elevation 7.28 M (A.D)
Right Bank Elevation 10.17 M (A.D), Drainage Area 4644 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.98	6.50	2.70	10.88	19.78	71.53	49.72	150.20	24.47	0.88	3.30	8.90	
2	1.80	5.70	2.61	13.02	19.78	98.20	50.44	174.00	22.09	0.88	4.20	8.90	
3	2.25	4.40	3.10	17.40	17.10	117.70	48.78	197.50	18.98	0.88	5.50	9.01	
4	5.70	4.00	2.90	20.90	15.22	128.55	49.24	217.30	17.10	0.88	5.90	8.90	
5	6.92	3.20	2.70	25.15	9.56	140.45	48.56	230.60	14.41	0.88	6.50	9.01	
6	7.25	2.61	2.70	28.88	10.77	143.00	48.56	251.00	12.42	0.82	6.92	9.12	
7	17.70	2.25	2.61	29.60	11.10	137.90	48.56	230.60	10.66	0.76	7.25	9.23	
8	9.45	1.89	2.34	26.36	7.36	124.60	48.56	220.60	9.67	0.70	7.80	9.45	
9	6.30	2.07	2.25	22.26	9.89	109.25	49.72	209.60	8.68	1.24	8.24	9.56	
10	4.40	1.80	1.98	18.98	24.81	104.05	50.92	198.60	7.80	1.80	8.46	9.56	
11	4.10	2.61	1.80	20.26	63.77	102.75	50.92	183.20	7.36	1.80	8.46	9.56	
12	3.40	2.52	7.58	23.96	67.50	104.70	50.44	162.00	6.50	1.80	8.24	9.67	
13	2.25	2.16	12.42	26.00	69.10	107.95	48.78	138.75	5.90	1.80	8.02	9.67	
14	1.89	1.89	13.38	26.90	70.30	111.85	47.24	125.30	5.80	1.80	8.02	9.78	
15	1.80	1.89	8.68	24.47	68.30	116.40	45.26	124.60	3.80	1.64	8.57	9.78	
16	1.72	3.50	5.50	20.74	61.36	117.70	43.13	121.80	2.52	1.64	8.46	9.78	
17	1.64	3.50	4.30	17.70	54.29	117.70	42.10	115.10	2.16	1.64	8.46	9.78	
18	1.24	3.40	8.57	14.80	47.46	121.80	43.34	103.40	1.80	1.64	8.46	9.78	
19	1.00	3.70	9.78	11.94	42.92	125.30	42.92	83.45	1.72	1.64	8.35	9.78	
20	0.94	3.20	6.60	9.45	37.70	121.10	37.70	79.90	1.64	1.64	7.91	9.78	
21	0.88	3.00	6.70	7.36	30.68	106.65	33.38	70.70	1.56	1.40	7.58	9.78	
22	0.82	2.80	6.20	13.76	23.79	92.35	30.68	63.40	1.80	1.32	7.80	9.78	
23	0.64	2.70	5.80	22.43	39.74	83.45	31.04	54.00	1.80	1.32	7.91	9.56	
24	0.58	2.52	5.80	25.66	36.26	74.54	36.44	47.90	1.80	1.24	7.91	9.23	
25	0.46	2.25	5.60	24.30	35.00	69.90	46.14	43.76	1.80	1.24	7.91	9.01	
26	0.36	2.16	5.90	23.62	33.02	69.90	59.69	39.55	1.56	1.24	7.91	9.01	
27	0.32	2.07	6.81	23.96	33.38	67.10	69.50	36.44	1.32	1.24	7.91	8.90	
28	0.28	2.07	7.80	23.96	35.18	63.40	80.40	33.56	1.00	1.16	7.91	8.68	
29	0.24	2.25	8.35	23.11	37.16	59.38	95.60	30.68	1.00	1.40		8.46	
30	0.20	2.34	9.56	22.60	43.97	56.03	108.60	27.80	1.00	1.98		8.90	
31		2.52		21.07	53.74		125.30		0.88	2.70		9.01	
Total	88.51	89.47	173.02	641.48	1129.99	3065.18	1661.66	3765.29	201.00	43.00	209.86	289.32	11357.78 CMSDAY
Mean	2.95	2.89	5.77	20.69	36.45	102.17	53.60	125.51	6.48	1.39	7.50	9.33	31.12 CMS
Max	17.70	6.50	13.38	29.60	70.30	143.00	125.30	251.00	24.47	2.70	8.57	9.78	251.00 CMS
Min	0.20	1.80	1.80	7.36	7.36	56.03	30.68	27.80	0.88	0.70	3.30	8.46	0.20 CMS
Runoff	7.647	7.730	14.949	55.424	97.631	264.832	143.567	325.321	17.366	3.715	18.132	24.997	981.312 MCM

Momentary Peak 251.00 CMS, at 6.48 M (A.D), at 18.00 Hours, on Nov 6, 2001
Runoff Yield 6.70 Liters/Second/Square KM, Momentary Peak Yield 54.048 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,745 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 at the footpath.

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 2001 to date.

Rating Operation

Period of Rating 2001 to date.

Rated by Float -

Rated by Current Meter 2001 to date.

Stability of Channel Regimes Fairly stable.

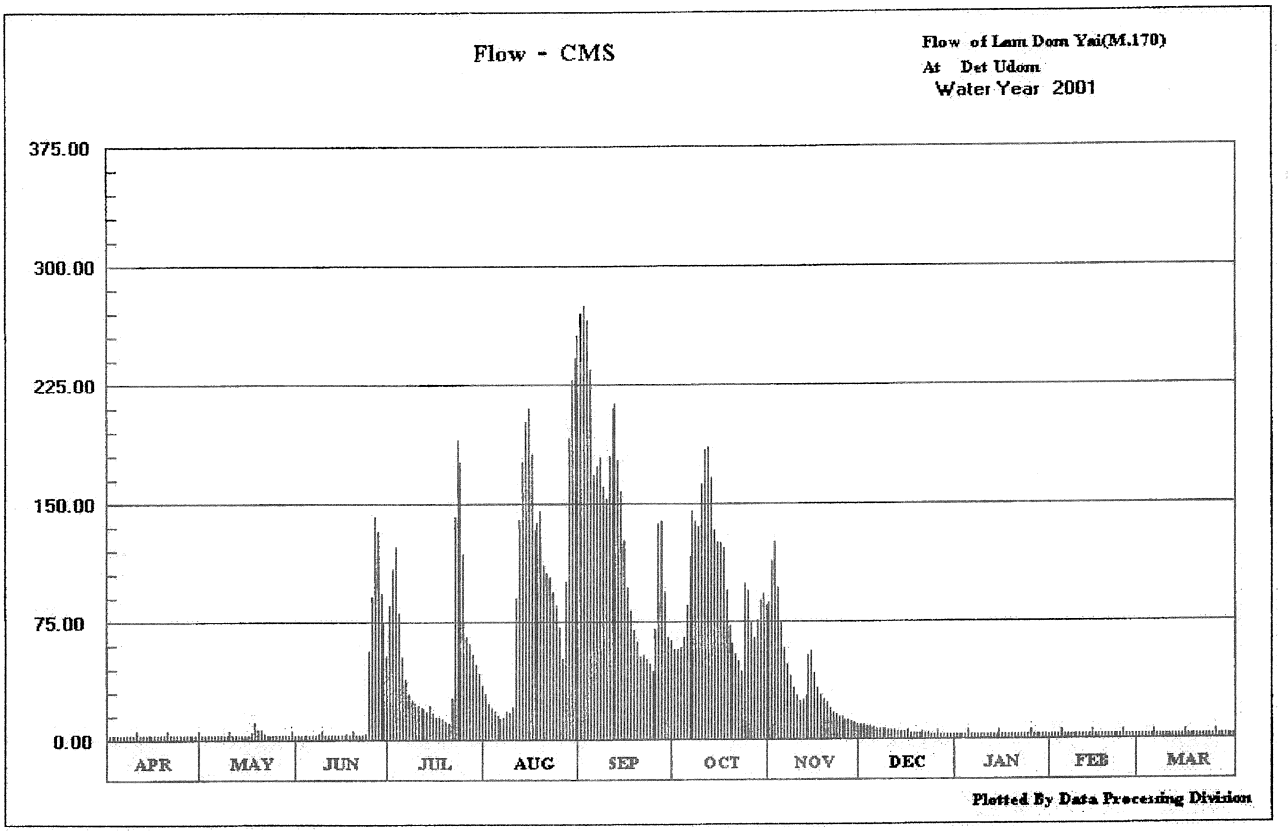
Overbank Flow Conditions Overbank flow starts at elevation +6.150 m.(A.D.), records are channel flow only.

General Description Records good. Stage-discharge relation defined by 55 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.53	0.54	0.74	3.80	2.41	6.63	3.18	3.83	1.55	1.00	0.78	0.62	
2	0.54	0.52	0.73	4.22	2.17	6.69	3.19	4.29	1.55	1.00	0.77	0.62	
3	0.52	0.50	0.66	4.45	2.04	6.57	3.21	4.50	1.54	0.98	0.75	0.60	
4	0.52	0.50	0.73	3.69	1.98	6.15	3.36	4.01	1.50	0.98	0.75	0.60	
5	0.51	0.51	0.68	3.08	1.85	5.20	3.80	3.57	1.46	0.95	0.73	0.60	
6	0.54	0.45	0.65	2.70	1.75	5.27	4.34	3.20	1.40	0.94	0.72	0.60	
7	0.54	0.47	0.76	2.42	1.82	5.35	4.82	2.96	1.38	0.93	0.70	0.59	
8	0.53	0.52	1.14	2.29	2.00	5.08	4.71	2.75	1.38	0.91	0.70	0.59	
9	0.53	0.50	0.90	2.19	1.93	4.95	4.66	2.55	1.37	0.90	0.69	0.59	
10	0.51	0.51	0.91	2.15	2.10	5.37	5.11	2.39	1.35	0.90	0.68	0.59	
11	0.50	0.53	1.05	2.11	3.89	5.80	5.42	2.25	1.35	0.90	0.66	0.56	
12	0.50	0.53	0.83	2.06	4.73	5.84	5.45	2.28	1.32	0.89	0.65	0.55	
13	0.54	0.54	0.80	2.00	5.32	5.33	5.17	2.38	1.28	0.89	0.65	0.55	
14	0.51	0.53	0.93	2.12	5.68	5.03	4.63	3.10	1.25	0.88	0.65	0.56	
15	0.53	0.58	0.86	1.96	5.79	4.52	4.50	3.17	1.23	0.87	0.65	0.55	
16	0.52	0.67	1.04	1.83	5.38	4.00	4.48	2.80	1.22	0.86	0.65	0.55	
17	0.50	1.24	1.14	1.80	4.62	3.71	4.44	2.55	1.19	0.86	0.65	0.55	
18	0.51	1.66	1.10	1.76	4.70	3.46	3.97	2.38	1.17	0.85	0.65	0.55	
19	0.51	1.40	1.04	1.67	4.82	3.30	3.52	2.30	1.16	0.84	0.64	0.55	
20	0.47	1.40	0.93	1.65	4.25	3.07	3.28	2.20	1.18	0.84	0.63	0.55	
21	0.52	1.13	0.92	2.32	4.17	3.11	3.13	2.06	1.26	0.84	0.63	0.55	
22	0.51	1.04	1.07	4.76	4.12	3.03	3.01	1.95	1.20	0.84	0.63	0.55	
23	0.50	0.95	1.13	5.51	3.95	2.97	2.85	1.92	1.19	0.83	0.62	0.55	
24	0.45	0.86	3.17	5.32	3.80	2.83	4.05	1.83	1.10	0.83	0.62	0.55	
25	0.47	0.79	3.90	4.37	3.49	3.47	3.98	1.80	1.09	0.82	0.62	0.54	
26	0.48	0.83	4.77	3.37	3.05	4.69	3.56	1.73	1.09	0.82	0.62	0.54	
27	0.53	0.75	4.61	3.28	4.08	4.72	3.36	1.70	1.06	0.81	0.62	0.54	
28	0.69	0.83	3.93	3.12	5.53	3.95	3.61	1.68	1.05	0.81	0.62	0.54	
29	0.63	0.84	3.56	2.97	6.05	3.36	3.85	1.63	1.04	0.80		0.54	
30	0.54	0.78	3.10	2.81	6.25	3.32	3.93	1.60	1.03	0.79		0.54	
31		0.70		2.61	6.44		3.79		1.02	0.78		0.54	
Mean	0.52	0.76	1.59	2.92	3.88	4.56	4.01	2.58	1.26	0.88	0.67	0.56	
Max	0.69	1.66	4.77	5.51	6.44	6.69	5.45	4.50	1.55	1.00	0.78	0.62	6.69
Min	0.45	0.45	0.65	1.65	1.75	2.83	2.85	1.60	1.02	0.78	0.62	0.54	0.45

Annual Max Momentary Gage Height 6.70 M (A.D), at 7.00 Hours, on Sep 2, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.30 M (A.D)
Left Bank Elevation 6.14 M (A.D)
Right Bank Elevation 6.35 M (A.D), Drainage Area 1745 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.70	1.70	87.00	30.30	271.25	58.10	88.50	10.25	3.50	1.90	1.10	
2	0.70	0.60	1.65	110.20	23.75	275.75	58.55	114.40	10.25	3.50	1.85	1.10	
3	0.60	0.50	1.30	124.00	20.50	266.75	59.45	127.00	10.10	3.34	1.75	1.00	
4	0.60	0.50	1.65	81.50	19.00	236.00	66.20	98.05	9.50	3.34	1.75	1.00	
5	0.55	0.55	1.40	53.70	16.00	169.50	87.00	75.65	8.90	3.10	1.65	1.00	
6	0.70	0.25	1.25	39.50	14.00	174.40	117.40	59.00	8.00	3.02	1.60	1.00	
7	0.70	0.35	1.80	30.60	15.40	180.00	146.20	48.90	7.70	2.94	1.50	0.95	
8	0.65	0.60	4.66	26.75	19.50	161.80	139.60	41.25	7.70	2.78	1.50	0.95	
9	0.65	0.50	2.70	24.25	17.75	154.00	136.60	34.50	7.55	2.70	1.45	0.95	
10	0.55	0.55	2.78	23.25	22.00	181.40	163.65	29.70	7.25	2.70	1.40	0.95	
11	0.50	0.65	3.90	22.25	91.50	211.50	184.90	25.75	7.25	2.70	1.30	0.80	
12	0.50	0.65	2.21	21.00	140.80	214.30	187.00	26.50	6.80	2.63	1.25	0.75	
13	0.70	0.70	2.00	19.50	177.90	178.60	167.55	29.40	6.24	2.63	1.25	0.75	
14	0.55	0.65	2.94	22.50	203.10	158.80	134.80	54.50	5.85	2.56	1.25	0.80	
15	0.65	0.90	2.42	18.50	210.80	128.20	127.00	57.65	5.59	2.49	1.25	0.75	
16	0.60	1.35	3.82	15.60	182.10	97.50	125.80	43.00	5.46	2.42	1.25	0.75	
17	0.50	5.72	4.66	15.00	134.20	82.50	123.40	34.50	5.11	2.42	1.25	0.75	
18	0.55	12.20	4.30	14.20	139.00	70.70	95.85	29.40	4.93	2.35	1.25	0.75	
19	0.55	8.00	3.82	12.40	146.20	63.50	73.40	27.00	4.84	2.28	1.20	0.75	
20	0.35	8.00	2.94	12.00	112.00	53.30	62.60	24.50	5.02	2.28	1.15	0.75	
21	0.60	4.57	2.86	27.60	107.20	54.95	55.85	21.00	5.98	2.28	1.15	0.75	
22	0.55	3.82	4.06	142.60	104.20	51.70	50.90	18.25	5.20	2.28	1.15	0.75	
23	0.50	3.10	4.57	191.20	94.75	49.30	44.75	17.50	5.11	2.21	1.10	0.75	
24	0.25	2.42	57.65	177.90	87.00	44.05	100.25	15.60	4.30	2.21	1.10	0.75	
25	0.35	1.95	92.00	119.20	72.05	71.15	96.40	15.00	4.22	2.14	1.10	0.70	
26	0.40	2.21	143.20	66.65	52.50	138.40	75.20	13.60	4.22	2.14	1.10	0.70	
27	0.65	1.75	133.60	62.60	101.90	140.20	66.20	13.00	3.98	2.07	1.10	0.70	
28	1.45	2.21	93.65	55.40	192.60	94.75	77.50	12.60	3.90	2.07	1.10	0.70	
29	1.15	2.28	75.20	49.30	229.00	66.20	89.50	11.60	3.82	2.00		0.70	
30	0.70	1.90	54.30	43.35	243.00	64.40	93.65	11.00	3.74	1.95		0.70	
31		1.50		36.35	257.00		86.50		3.66	1.90		0.70	
Total	18.40	71.63	715.19	1745.85	3277.00	4104.85	3151.75	1218.30	192.42	78.93	37.65	25.50	14637.47 CMSDAY
Mean	0.61	2.31	23.84	56.32	105.71	136.83	101.67	40.61	6.21	2.55	1.34	0.82	40.10 CMS
Max	1.45	12.20	143.20	191.20	257.00	275.75	187.00	127.00	10.25	3.50	1.90	1.10	275.75 CMS
Min	0.25	0.25	1.25	12.00	14.00	44.05	44.75	11.00	3.66	1.90	1.10	0.70	0.25 CMS
Runoff	1.590	6.189	61.792	150.841	283.133	354.659	272.311	105.261	16.625	6.820	3.253	2.203	1264.677 MCM

Momentary Peak 276.50 CMS, at 6.70 M (A.D), at 7.00 Hours, on Sep 2, 2001
Runoff Yield 22.98 Liters/Second/Square KM, Momentary Peak Yield 158.453 Liters/Second/Square KM

WATER YEAR : 2001

TONLE SAP BASIN

Khlong Phra Phut at Ban Pung Ngon, Chanthaburi (Ti.3)

Lat 12 - 58 - 12 N. **Long** 101 - 17 - 20 E.

Location on left bank downstream from the bridge of Pong Nam Ron - Wang Nam Yen Highway.

Ban Pung Ngon **Amphoe** Pong Nam Ron **Changwat** Chanthaburi

Drainage Area 79 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +190.675 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 6 meters from the top staff gage.

Elevation +195.793 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1983 to date.

Rating Operation

Period of Rating 1986 to date.

Rated by Float

Rated by Current Meter 1986 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the local weir during Jan.14-Mar. 31, 97 discharge estimated by recession equation. Stage-discharge relation defined by 42 discharge measurements made in 2001.

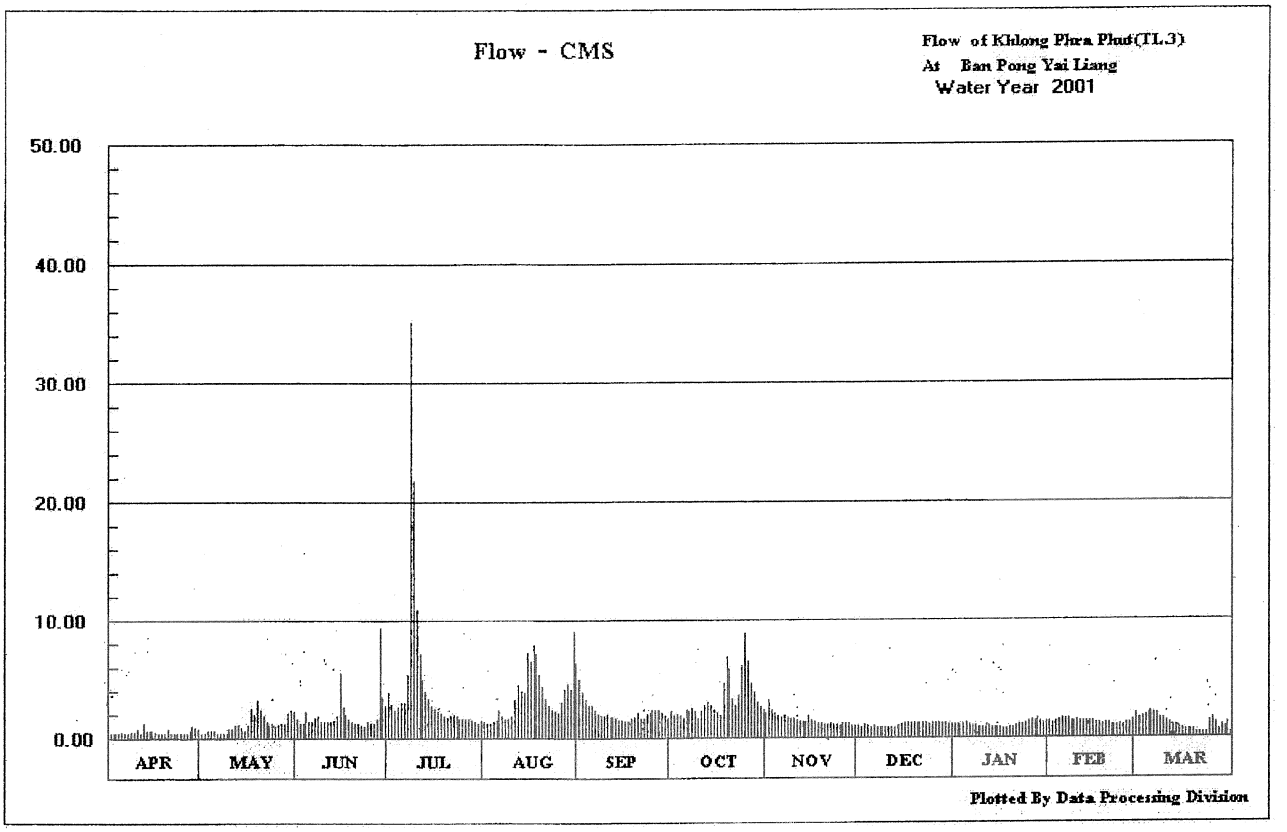
Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	191.00	191.00	191.17	191.35	191.15	191.42	191.23	191.22	191.10	191.11	191.14	191.21	
2	191.01	191.00	191.13	191.29	191.13	191.35	191.20	191.31	191.08	191.11	191.12	191.18	
3	191.01	191.04	191.12	191.25	191.13	191.31	191.21	191.25	191.11	191.10	191.14	191.19	
4	191.00	191.04	191.23	191.27	191.15	191.28	191.20	191.22	191.09	191.11	191.16	191.20	
5	191.03	191.04	191.15	191.30	191.16	191.28	191.18	191.20	191.08	191.12	191.18	191.21	
6	191.00	191.00	191.14	191.30	191.25	191.24	191.24	191.19	191.09	191.11	191.18	191.22	
7	191.01	190.99	191.19	191.44	191.20	191.21	191.23	191.20	191.08	191.10	191.18	191.21	
8	191.02	190.99	191.20	192.57	191.17	191.20	191.26	191.19	191.08	191.09	191.15	191.21	
9	191.02	190.98	191.14	192.16	191.18	191.20	191.23	191.17	191.07	191.08	191.14	191.18	
10	191.00	191.03	191.14	191.73	191.20	191.21	191.18	191.17	191.07	191.08	191.16	191.18	
11	191.01	191.06	191.15	191.54	191.31	191.19	191.23	191.16	191.08	191.08	191.15	191.14	
12	191.12	191.11	191.14	191.42	191.39	191.19	191.28	191.15	191.07	191.09	191.15	191.12	
13	191.04	191.11	191.16	191.36	191.36	191.17	191.30	191.14	191.08	191.08	191.14	191.09	
14	191.04	191.07	191.20	191.32	191.35	191.16	191.28	191.15	191.09	191.07	191.15	191.09	
15	191.04	191.04	191.45	191.28	191.55	191.16	191.24	191.20	191.11	191.08	191.15	191.08	
16	191.02	191.11	191.27	191.26	191.51	191.15	191.22	191.16	191.12	191.07	191.13	191.06	
17	191.00	191.26	191.21	191.23	191.58	191.15	191.20	191.15	191.13	191.06	191.13	191.04	
18	191.01	191.21	191.18	191.22	191.54	191.17	191.40	191.13	191.13	191.06	191.11	191.04	
19	190.99	191.31	191.15	191.20	191.44	191.19	191.53	191.12	191.13	191.07	191.12	191.04	
20	190.99	191.25	191.13	191.19	191.38	191.22	191.47	191.11	191.13	191.07	191.13	191.04	
21	191.00	191.20	191.12	191.20	191.32	191.17	191.32	191.11	191.13	191.10	191.10	191.01	
22	191.00	191.15	191.11	191.21	191.28	191.17	191.28	191.12	191.12	191.11	191.09	190.94	
23	191.00	191.11	191.09	191.20	191.24	191.21	191.34	191.10	191.12	191.11	191.10	190.95	
24	191.00	191.12	191.15	191.18	191.23	191.22	191.49	191.11	191.11	191.12	191.11	191.00	
25	190.99	191.09	191.12	191.18	191.22	191.25	191.63	191.10	191.12	191.14	191.10	191.14	
26	191.01	191.11	191.12	191.18	191.30	191.25	191.51	191.12	191.12	191.16	191.12	191.17	
27	191.04	191.12	191.17	191.18	191.37	191.25	191.40	191.13	191.12	191.15	191.12	191.12	
28	191.09	191.13	191.66	191.16	191.40	191.22	191.35	191.12	191.13	191.17	191.16	191.05	
29	191.07	191.22	191.33	191.14	191.37	191.20	191.30	191.10	191.12	191.15		191.09	
30	191.02	191.25	191.28	191.12	191.64	191.18	191.27	191.09	191.11	191.13		191.07	
31		191.23		191.16	191.50		191.25		191.11	191.14		191.12	
Mean	191.02	191.11	191.19	191.34	191.32	191.22	191.30	191.16	191.10	191.10	191.14	191.11	
Max	191.12	191.31	191.66	192.57	191.64	191.42	191.63	191.31	191.13	191.17	191.18	191.22	192.57
Min	190.99	190.98	191.09	191.12	191.13	191.15	191.18	191.09	191.07	191.06	191.09	190.94	190.94

Annual Max Momentary Gage Height 193.01 M (MSL), at 17.00 Hours, on Jul 8, 2001

Zero Gage at Bottom Elevation 190.67 M (MSL), River Bed 190.66 M (MSL)

Left Bank Elevation 196.58 M (MSL)



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.50	0.50	1.76	4.00	1.60	5.14	2.36	2.24	1.20	1.28	1.52	2.12	
2	0.57	0.50	1.44	3.08	1.44	4.00	2.00	3.36	1.06	1.28	1.36	1.84	
3	0.57	0.78	1.36	2.60	1.44	3.36	2.12	2.60	1.28	1.20	1.52	1.92	
4	0.50	0.78	2.36	2.84	1.60	2.96	2.00	2.24	1.13	1.28	1.68	2.00	
5	0.71	0.78	1.60	3.20	1.68	2.96	1.84	2.00	1.06	1.36	1.84	2.12	
6	0.50	0.50	1.52	3.20	2.60	2.48	2.48	1.92	1.13	1.28	1.84	2.24	
7	0.57	0.50	1.92	5.48	2.00	2.12	2.36	2.00	1.06	1.20	1.84	2.12	
8	0.64	0.50	2.00	35.25	1.76	2.00	2.72	1.92	1.06	1.13	1.60	2.12	
9	0.64	0.49	1.52	21.94	1.84	2.00	2.36	1.76	0.99	1.06	1.52	1.84	
10	0.50	0.71	1.52	11.03	2.00	2.12	1.84	1.76	0.99	1.06	1.68	1.84	
11	0.57	0.92	1.60	7.26	3.36	1.92	2.36	1.68	1.06	1.06	1.60	1.52	
12	1.36	1.28	1.52	5.14	4.64	1.92	2.96	1.60	0.99	1.13	1.60	1.36	
13	0.78	1.28	1.68	4.16	4.16	1.76	3.20	1.52	1.06	1.06	1.52	1.13	
14	0.78	0.99	2.00	3.52	4.00	1.68	2.96	1.60	1.13	0.99	1.60	1.13	
15	0.78	0.78	5.65	2.96	7.45	1.68	2.48	2.00	1.28	1.06	1.60	1.06	
16	0.64	1.28	2.84	2.72	6.69	1.60	2.24	1.68	1.36	0.99	1.44	0.92	
17	0.50	2.72	2.12	2.36	8.02	1.60	2.00	1.60	1.44	0.92	1.44	0.78	
18	0.57	2.12	1.84	2.24	7.26	1.76	4.80	1.44	1.44	0.92	1.28	0.78	
19	0.50	3.36	1.60	2.00	5.48	1.92	7.07	1.36	1.44	0.99	1.36	0.78	
20	0.50	2.60	1.44	1.92	4.48	2.24	5.99	1.28	1.44	0.99	1.44	0.78	
21	0.50	2.00	1.36	2.00	3.52	1.76	3.52	1.28	1.44	1.20	1.20	0.57	
22	0.50	1.60	1.28	2.12	2.96	1.76	2.96	1.36	1.36	1.28	1.13	0.47	
23	0.50	1.28	1.13	2.00	2.48	2.12	3.84	1.20	1.36	1.28	1.20	0.47	
24	0.50	1.36	1.60	1.84	2.36	2.24	6.33	1.28	1.28	1.36	1.28	0.50	
25	0.50	1.13	1.36	1.84	2.24	2.60	9.00	1.20	1.36	1.52	1.20	1.52	
26	0.57	1.28	1.36	1.84	3.20	2.60	6.69	1.36	1.36	1.68	1.36	1.76	
27	0.78	1.36	1.76	1.84	4.32	2.60	4.80	1.44	1.36	1.60	1.36	1.36	
28	1.13	1.44	9.60	1.68	4.80	2.24	4.00	1.36	1.44	1.76	1.68	0.85	
29	0.99	2.24	3.68	1.52	4.32	2.00	3.20	1.20	1.36	1.60		1.13	
30	0.64	2.60	2.96	1.36	9.20	1.84	2.84	1.13	1.28	1.44		0.99	
31		2.36		1.68	6.50		2.60		1.28	1.52		1.36	
Total	19.29	42.02	65.38	146.62	119.40	68.98	107.92	50.37	38.48	38.48	41.69	41.38	780.01 CMSDAY
Mean	0.64	1.36	2.18	4.73	3.85	2.30	3.48	1.68	1.24	1.24	1.49	1.33	2.14 CMS
Max	1.36	3.36	9.60	35.25	9.20	5.14	9.00	3.36	1.44	1.76	1.84	2.24	35.25 CMS
Min	0.50	0.49	1.13	1.36	1.44	1.60	1.84	1.13	0.99	0.92	1.13	0.47	0.47 CMS
Runoff	1.667	3.631	5.649	12.668	10.316	5.960	9.324	4.352	3.325	3.325	3.602	3.575	67.393 MCM

Momentary Peak 53.07 CMS, at 193.01 M (MSL), at 17.00 Hours, on Jul 8, 2001

Runoff Yield 27.05 Liters/Second/Square KM, Momentary Peak Yield 671.772 Liters/Second/Square KM

WATER YEAR : 2001

TONLE SAP BASIN

Khlong Ta Khlong at Ban Khlong Ta Khong, 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 Khong **Amphoe** Pong Nam Ron **Changwat** Chanthaburi

Drainage Area 96 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +176.800 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 30 meters from the top staff gage.

Elevation +186.762 m. (M.S.L.)

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 Float -

Rated by Current Meter 1986 to date.

Stability of Channel Regimes Stable.

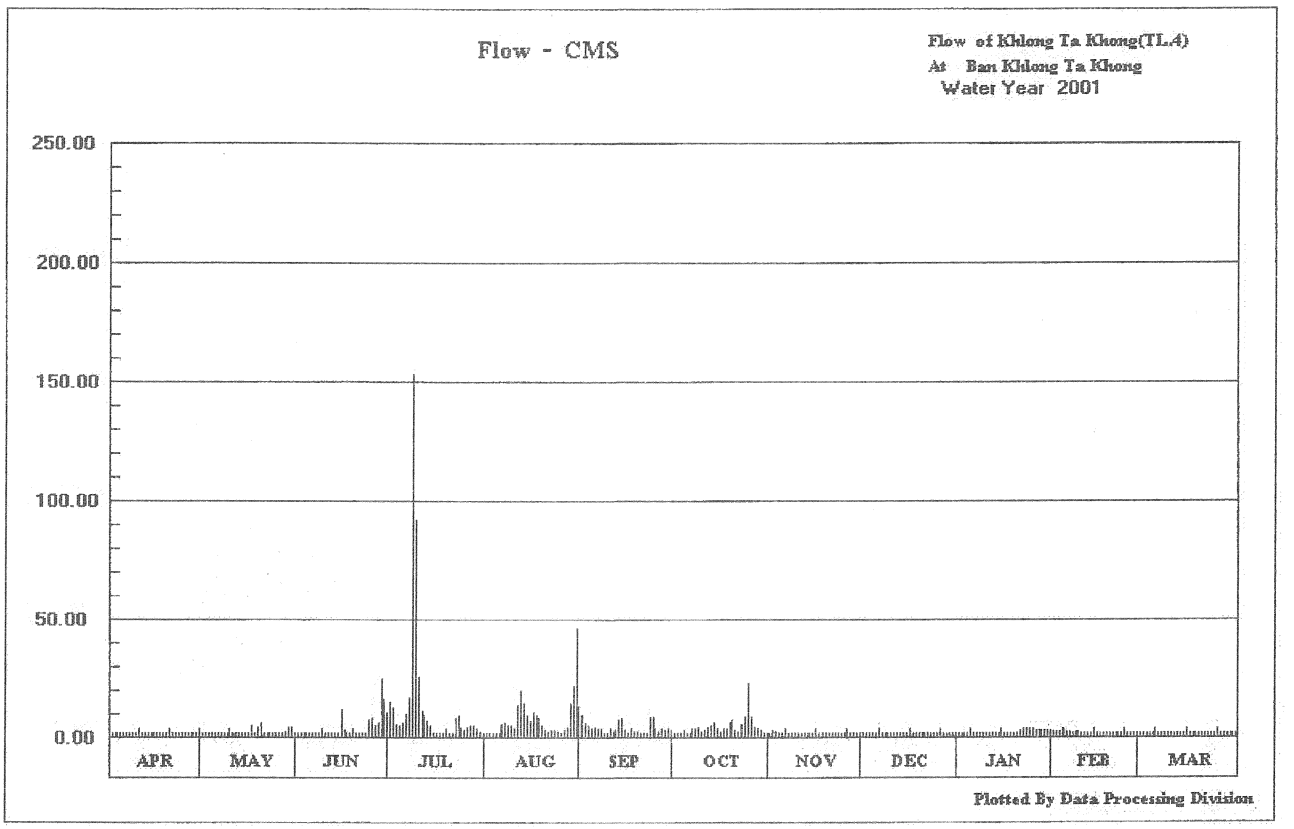
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the local weir during Dec.27, 96-Mar.31,97 discharge estimated by recession equation. Stage-discharge relation defined by 20 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	178.08	177.63	178.13	179.21	178.25	178.90	178.28	178.24	177.89	178.14	178.36	178.28	
2	178.15	177.63	178.05	179.10	178.23	178.72	178.24	178.41	177.87	178.14	178.35	178.27	
3	178.02	177.63	178.00	178.63	178.20	178.57	178.25	178.32	177.87	178.14	178.34	178.27	
4	177.92	177.63	178.02	178.59	178.18	178.48	178.38	178.23	177.86	178.11	178.33	178.27	
5	177.92	177.63	178.02	178.72	178.20	178.55	178.30	178.20	177.83	178.09	178.32	178.28	
6	178.08	177.63	177.97	178.97	178.67	178.47	178.25	178.17	177.83	178.09	178.31	178.29	
7	178.08	177.62	177.90	179.30	178.69	178.38	178.22	178.17	177.80	178.08	178.30	178.29	
8	178.06	177.61	178.25	182.33	178.58	178.30	178.48	178.17	177.88	178.08	178.34	178.29	
9	178.05	177.60	178.12	181.32	178.60	178.29	178.55	178.17	177.90	178.06	178.32	178.29	
10	178.05	177.60	178.03	179.63	178.46	178.45	178.34	178.14	177.89	178.04	178.29	178.28	
11	178.04	177.60	178.10	179.02	179.16	178.33	178.42	178.10	177.89	178.03	178.27	178.26	
12	178.03	177.60	178.10	178.93	179.41	178.37	178.55	178.08	177.91	178.03	178.26	178.23	
13	178.05	177.68	178.03	178.76	179.19	178.77	178.59	178.06	178.13	178.03	178.24	178.21	
14	178.07	178.17	178.13	178.60	178.91	178.85	178.70	178.05	178.19	178.03	178.24	178.18	
15	178.06	178.16	179.07	178.19	178.75	178.40	178.45	177.97	178.20	178.04	178.20	178.18	
16	178.04	178.13	178.37	178.00	178.98	178.29	178.31	177.84	178.19	178.05	178.20	178.18	
17	178.00	178.59	178.18	177.96	178.91	178.26	178.25	178.03	178.18	178.04	178.19	178.17	
18	177.89	178.29	178.09	177.95	178.81	178.35	178.43	178.02	178.17	178.04	178.19	178.17	
19	177.85	178.54	178.02	177.93	178.56	178.31	178.71	177.99	178.16	178.08	178.20	178.17	
20	177.82	178.70	177.99	177.88	178.39	178.24	178.80	177.99	178.17	178.22	178.21	178.17	
21	177.80	178.26	177.95	177.89	178.35	178.20	178.40	177.97	178.18	178.37	178.21	178.17	
22	177.78	178.21	177.97	178.81	178.39	178.27	178.32	177.95	178.18	178.44	178.21	178.17	
23	177.77	178.12	177.96	178.90	178.37	178.86	178.63	177.95	178.13	178.44	178.23	178.15	
24	177.74	178.03	178.78	178.52	178.32	178.87	178.88	177.94	178.09	178.43	178.23	178.15	
25	177.73	178.02	178.83	178.40	178.28	178.46	179.55	177.93	178.08	178.42	178.23	178.20	
26	177.71	178.13	178.57	178.50	178.42	178.33	178.89	177.92	178.13	178.42	178.23	178.20	
27	177.69	178.28	178.68	178.60	178.52	178.34	178.54	177.91	178.14	178.40	178.25	178.20	
28	177.67	178.33	179.62	178.61	179.18	178.37	178.43	177.91	178.13	178.40	178.25	178.21	
29	177.67	178.55	179.26	178.44	179.49	178.43	178.37	177.89	178.12	178.38		178.20	
30	177.66	178.52	178.99	178.35	180.26	178.37	178.29	177.89	178.12	178.37		178.18	
31		178.30		178.29	179.13		178.15		178.14	178.37		178.18	
Mean	177.92	178.01	178.31	178.78	178.70	178.46	178.48	178.05	178.04	178.19	178.26	178.22	
Max	178.15	178.70	179.62	182.33	180.26	178.90	179.55	178.41	178.20	178.44	178.36	178.29	182.33
Min	177.66	177.60	177.90	177.88	178.18	178.20	178.15	177.84	177.80	178.03	178.19	178.15	177.60

Annual Max Momentary Gage Height 183.38 M (MSL), at 19.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 176.80 M (MSL), River Bed 175.44 M (MSL)
Left Bank Elevation 186.17 M (MSL)



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.40	0.03	1.65	15.75	2.50	10.00	2.80	2.40	0.48	1.70	3.60	2.80	
2	1.75	0.03	1.25	13.50	2.30	7.30	2.40	4.10	0.44	1.70	3.50	2.70	
3	1.10	0.03	1.00	6.30	2.00	5.70	2.50	3.20	0.44	1.70	3.40	2.70	
4	0.60	0.03	1.10	5.90	1.90	4.80	3.80	2.30	0.42	1.55	3.30	2.70	
5	0.60	0.03	1.10	7.30	2.00	5.50	3.00	2.00	0.36	1.45	3.20	2.80	
6	1.40	0.03	0.85	11.05	6.70	4.70	2.50	1.85	0.36	1.45	3.10	2.90	
7	1.40	0.02	0.50	18.00	6.90	3.80	2.20	1.85	0.30	1.40	3.00	2.90	
8	1.30	0.01	2.50	153.95	5.80	3.00	4.80	1.85	0.46	1.40	3.40	2.90	
9	1.25	0.00	1.60	93.00	6.00	2.90	5.50	1.85	0.50	1.30	3.20	2.90	
10	1.25	0.00	1.15	26.40	4.60	4.50	3.40	1.70	0.48	1.20	2.90	2.80	
11	1.20	0.00	1.50	11.90	14.70	3.30	4.20	1.50	0.48	1.15	2.70	2.60	
12	1.15	0.00	1.50	10.45	20.75	3.70	5.50	1.40	0.55	1.15	2.60	2.30	
13	1.25	0.08	1.15	7.90	15.30	8.05	5.90	1.30	1.65	1.15	2.40	2.10	
14	1.35	1.85	1.65	6.00	10.15	9.25	7.00	1.25	1.95	1.15	2.40	1.90	
15	1.30	1.80	12.90	1.95	7.75	4.00	4.50	0.85	2.00	1.20	2.00	1.90	
16	1.20	1.65	3.70	1.00	11.20	2.90	3.10	0.38	1.95	1.25	2.00	1.90	
17	1.00	5.90	1.90	0.80	10.15	2.60	2.50	1.15	1.90	1.20	1.95	1.85	
18	0.48	2.90	1.45	0.75	8.65	3.50	4.30	1.10	1.85	1.20	1.95	1.85	
19	0.40	5.40	1.10	0.65	5.60	3.10	7.15	0.95	1.80	1.40	2.00	1.85	
20	0.34	7.00	0.95	0.46	3.90	2.40	8.50	0.95	1.85	2.20	2.10	1.85	
21	0.30	2.60	0.75	0.48	3.50	2.00	4.00	0.85	1.90	3.70	2.10	1.85	
22	0.26	2.10	0.85	8.65	3.90	2.70	3.20	0.75	1.90	4.40	2.10	1.85	
23	0.24	1.60	0.80	10.00	3.70	9.40	6.30	0.75	1.65	4.40	2.30	1.75	
24	0.18	1.15	8.20	5.20	3.20	9.55	9.70	0.70	1.45	4.30	2.30	1.75	
25	0.16	1.10	8.95	4.00	2.80	4.60	24.25	0.65	1.40	4.20	2.30	2.00	
26	0.12	1.65	5.70	5.00	4.20	3.30	9.85	0.60	1.65	4.20	2.30	2.00	
27	0.09	2.80	6.80	6.00	5.20	3.40	5.40	0.55	1.70	4.00	2.50	2.00	
28	0.07	3.30	26.10	6.10	15.10	3.70	4.30	0.55	1.65	4.00	2.50	2.10	
29	0.07	5.50	17.00	4.40	22.75	4.30	3.70	0.48	1.60	3.80		2.00	
30	0.06	5.20	11.35	3.50	47.10	3.70	2.90	0.48	1.60	3.70		1.90	
31		3.00		2.90	14.10		1.75		1.70	3.70		1.90	
Total	23.27	56.79	127.00	449.24	274.40	141.65	160.90	40.29	38.42	72.30	73.10	69.30	1526.66 CMSDAY
Mean	0.78	1.83	4.23	14.49	8.85	4.72	5.19	1.34	1.24	2.33	2.61	2.24	4.18 CMS
Max	1.75	7.00	26.10	153.95	47.10	10.00	24.25	4.10	2.00	4.40	3.60	2.90	153.95 CMS
Min	0.06	0.00	0.50	0.46	1.90	2.00	1.75	0.38	0.30	1.15	1.95	1.75	0.00 CMS
Runoff	2.011	4.907	10.973	38.814	23.708	12.239	13.902	3.481	3.319	6.247	6.316	5.988	131.903 MCM

Momentary Peak 228.50 CMS, at 183.38 M (MSL), at 19.00 Hours, on Jul 8, 2001

Runoff Yield 43.57 Liters/Second/Square KM, Momentary Peak Yield 2380.208 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 42 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +183.100 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 20 meters from the top staff gage.

Elevation +187.655 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1987 to date.

Rating Operation

Period of Rating 1987 t o date.

Rated by Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Fairly stable.

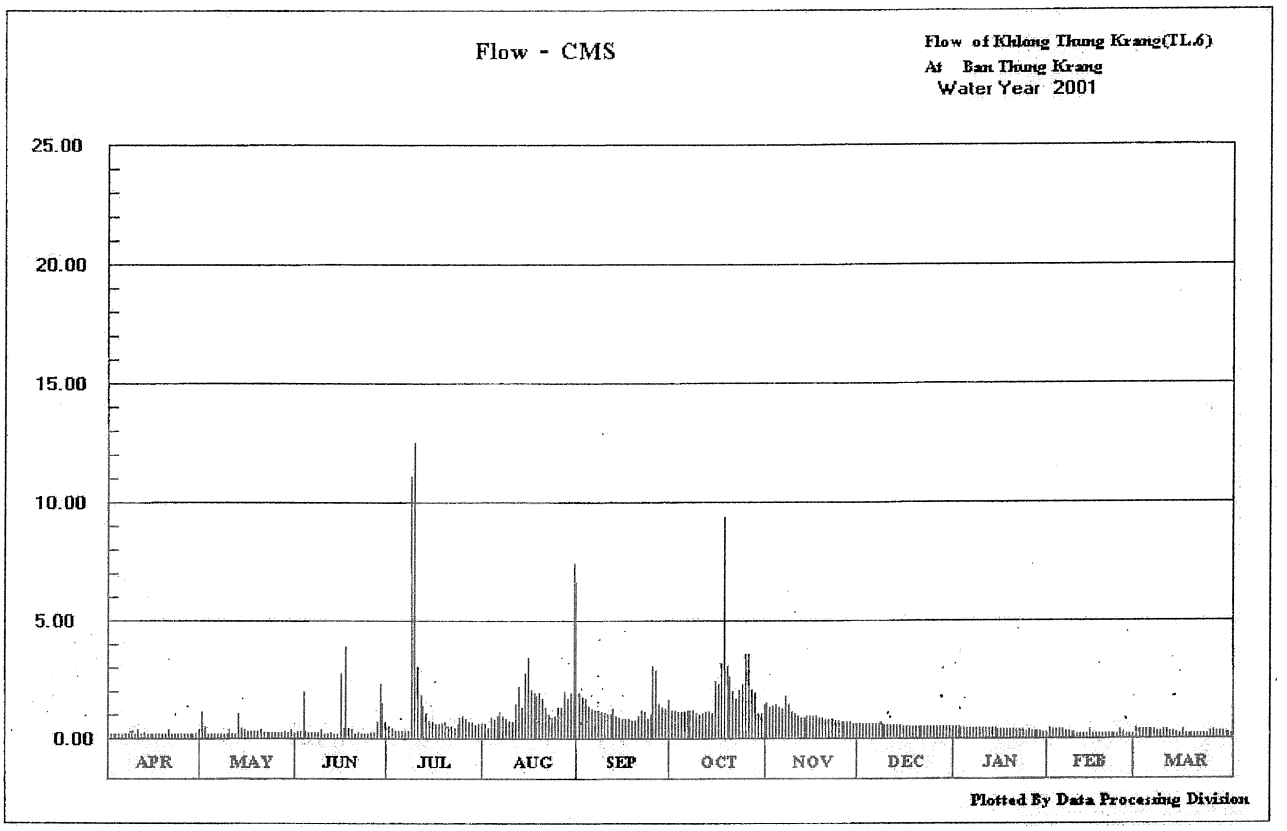
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	183.49	184.03	183.77	183.90	183.92	184.15	184.04	184.10	183.93	183.88	183.85	183.85	
2	183.49	183.90	183.80	183.86	183.87	184.13	184.04	184.07	183.93	183.88	183.84	183.84	
3	183.49	183.67	184.16	183.80	183.99	184.12	184.03	184.08	183.93	183.87	183.83	183.84	
4	183.48	183.62	183.79	183.80	183.97	184.08	184.03	184.09	183.93	183.87	183.83	183.83	
5	183.48	183.67	183.75	183.80	184.00	184.06	184.03	184.07	183.92	183.87	183.82	183.83	
6	183.47	183.62	183.73	183.78	184.03	184.04	184.04	184.06	183.92	183.87	183.81	183.82	
7	183.47	183.58	183.72	183.77	184.00	184.04	184.04	184.14	183.92	183.86	183.78	183.82	
8	183.46	183.57	183.71	184.69	183.98	184.03	184.04	184.09	183.92	183.86	183.76	183.81	
9	183.46	183.56	183.72	184.75	183.95	184.02	184.02	184.03	183.91	183.86	183.72	183.81	
10	183.45	183.56	183.69	184.27	183.94	184.01	184.01	184.02	183.91	183.86	183.70	183.82	
11	183.45	183.54	183.69	184.14	184.09	184.01	184.02	184.00	183.91	183.86	183.68	183.83	
12	183.72	183.54	183.71	184.08	184.18	184.06	184.03	183.99	183.91	183.85	183.66	183.81	
13	183.63	184.02	183.70	184.02	184.07	184.00	184.03	183.99	183.91	183.85	183.65	183.79	
14	183.54	183.86	183.70	183.96	184.24	183.99	184.02	184.00	183.91	183.85	183.64	183.74	
15	183.48	183.83	184.24	183.95	184.30	183.98	184.21	184.00	183.90	183.84	183.63	183.70	
16	183.45	183.80	183.87	183.93	184.17	183.98	184.20	184.00	183.90	183.84	183.62	183.69	
17	183.44	183.77	184.33	183.93	184.15	183.97	184.28	184.00	183.90	183.84	183.61	183.68	
18	183.43	183.78	183.86	183.92	184.14	183.96	184.62	183.99	183.90	183.84	183.62	183.68	
19	183.43	183.79	183.72	183.95	184.15	183.96	184.27	183.99	183.90	183.83	183.62	183.67	
20	183.43	183.80	183.70	183.89	184.12	184.00	184.23	183.98	183.90	183.83	183.60	183.67	
21	183.42	183.76	183.71	183.89	184.07	184.05	184.16	183.97	183.89	183.83	183.59	183.66	
22	183.41	183.75	183.70	183.87	184.01	184.03	184.12	183.97	183.89	183.82	183.58	183.65	
23	183.41	183.74	183.70	183.93	183.99	183.98	184.17	183.96	183.89	183.82	183.58	183.64	
24	183.40	183.74	183.69	183.99	184.00	184.01	184.20	183.96	183.89	183.81	183.62	183.64	
25	183.44	183.72	183.72	184.00	184.07	184.27	184.31	183.95	183.89	183.80	183.71	183.80	
26	183.47	183.72	183.72	183.98	184.07	184.25	184.31	183.95	183.89	183.80	183.69	183.79	
27	183.46	183.75	183.94	183.95	184.16	184.09	184.17	183.94	183.88	183.79	183.68	183.79	
28	183.46	183.77	184.20	183.94	184.12	184.07	184.15	183.94	183.88	183.79	183.67	183.78	
29	183.47	183.76	184.10	183.91	184.15	184.06	184.02	183.93	183.88	183.78		183.77	
30	183.49	183.75	183.95	183.93	184.53	184.11	184.02	183.93	183.88	183.76		183.76	
31		183.73		183.92	184.49		184.09		183.88	183.75		183.75	
Mean	183.47	183.73	183.83	183.98	184.09	184.05	184.13	184.01	183.90	183.83	183.69	183.76	
Max	183.72	184.03	184.33	184.75	184.53	184.27	184.62	184.14	183.93	183.88	183.85	183.85	184.75
Min	183.40	183.54	183.69	183.77	183.87	183.96	184.01	183.93	183.88	183.75	183.58	183.64	183.40

Annual Max Momentary Gage Height 185.06 M (MSL), at 12.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 183.10 M (MSL), River Bed 182.69 M (MSL)
Left Bank Elevation 187.42 M (MSL)
Right Bank Elevation 187.40 M (MSL), Drainage Area 42 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.09	1.18	0.37	0.60	0.68	2.00	1.24	1.60	0.72	0.56	0.50	0.50	
2	0.09	0.60	0.40	0.52	0.54	1.84	1.24	1.42	0.72	0.56	0.48	0.48	
3	0.09	0.27	2.08	0.40	0.96	1.76	1.18	1.48	0.72	0.54	0.46	0.48	
4	0.08	0.22	0.39	0.40	0.88	1.48	1.18	1.54	0.72	0.54	0.46	0.46	
5	0.08	0.27	0.35	0.40	1.00	1.36	1.18	1.42	0.68	0.54	0.44	0.46	
6	0.07	0.22	0.33	0.38	1.18	1.24	1.24	1.36	0.68	0.54	0.42	0.44	
7	0.07	0.18	0.32	0.37	1.00	1.24	1.24	1.92	0.68	0.52	0.38	0.44	
8	0.06	0.17	0.31	11.16	0.92	1.18	1.24	1.54	0.68	0.52	0.36	0.42	
9	0.06	0.16	0.32	12.60	0.80	1.12	1.12	1.18	0.64	0.52	0.32	0.42	
10	0.05	0.16	0.29	3.17	0.76	1.06	1.06	1.12	0.64	0.52	0.30	0.44	
11	0.05	0.14	0.29	1.92	1.54	1.06	1.12	1.00	0.64	0.52	0.28	0.46	
12	0.32	0.14	0.31	1.48	2.24	1.36	1.18	0.96	0.64	0.50	0.26	0.42	
13	0.23	1.12	0.30	1.12	1.42	1.00	1.18	0.96	0.64	0.50	0.25	0.39	
14	0.14	0.52	0.30	0.84	2.84	0.96	1.12	1.00	0.64	0.50	0.24	0.34	
15	0.08	0.46	2.84	0.80	3.50	0.92	2.51	1.00	0.60	0.48	0.23	0.30	
16	0.05	0.40	0.54	0.72	2.16	0.92	2.40	1.00	0.60	0.48	0.22	0.29	
17	0.04	0.37	3.95	0.72	2.00	0.88	3.28	1.00	0.60	0.48	0.21	0.28	
18	0.03	0.38	0.52	0.68	1.92	0.84	9.48	0.96	0.60	0.48	0.22	0.28	
19	0.03	0.39	0.32	0.80	2.00	0.84	3.17	0.96	0.60	0.46	0.22	0.27	
20	0.03	0.40	0.30	0.58	1.76	1.00	2.73	0.92	0.60	0.46	0.20	0.27	
21	0.02	0.36	0.31	0.58	1.42	1.30	2.08	0.88	0.58	0.46	0.19	0.26	
22	0.01	0.35	0.30	0.54	1.06	1.18	1.76	0.88	0.58	0.44	0.18	0.25	
23	0.01	0.34	0.30	0.72	0.96	0.92	2.16	0.84	0.58	0.44	0.18	0.24	
24	0.00	0.34	0.29	0.96	1.00	1.06	2.40	0.84	0.58	0.42	0.22	0.24	
25	0.04	0.32	0.32	1.00	1.42	3.17	3.65	0.80	0.58	0.40	0.31	0.40	
26	0.07	0.32	0.32	0.92	1.42	2.95	3.65	0.80	0.58	0.40	0.29	0.39	
27	0.06	0.35	0.76	0.80	2.08	1.54	2.16	0.76	0.56	0.39	0.28	0.39	
28	0.06	0.37	2.40	0.76	1.76	1.42	2.00	0.76	0.56	0.39	0.27	0.38	
29	0.07	0.36	1.60	0.64	2.00	1.36	1.12	0.72	0.56	0.38		0.37	
30	0.09	0.35	0.80	0.72	7.53	1.68	1.12	0.72	0.56	0.36		0.36	
31		0.33		0.68	6.71		1.54		0.56	0.35		0.35	
Total	2.17	11.54	22.23	47.98	57.46	40.64	63.73	32.34	19.32	14.65	8.37	11.47	331.90 CMSDAY
Mean	0.07	0.37	0.74	1.55	1.85	1.35	2.06	1.08	0.62	0.47	0.30	0.37	0.91 CMS
Max	0.32	1.18	3.95	12.60	7.53	3.17	9.48	1.92	0.72	0.56	0.50	0.50	12.60 CMS
Min	0.00	0.14	0.29	0.37	0.54	0.84	1.06	0.72	0.56	0.35	0.18	0.24	0.00 CMS
Runoff	0.187	0.997	1.921	4.145	4.965	3.511	5.506	2.794	1.669	1.266	0.723	0.991	28.676 MCM

Momentary Peak 22.08 CMS, at 185.06 M (MSL), at 12.00 Hours, on Jul 9, 2001

Runoff Yield 21.65 Liters/Second/Square KM, Momentary Peak Yield 525.714 Liters/Second/Square KM

WATER YEAR : 2001

THA CHIN BASIN

Upper Huai Kra Sieo at Ban Pha Tang, Uthai Thani (T.11)

Lat 15 - 06 - 14 N. **Long** 99 - 32 - 13 E.

Location on left bank at the bridge.

Ban Pha Tang **Amphoe** Ban Rai **Changwat** Uthai Thani

Drainage Area 355 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 bridge.

Elevation +8.220 m. (A.D.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.0, 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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable.

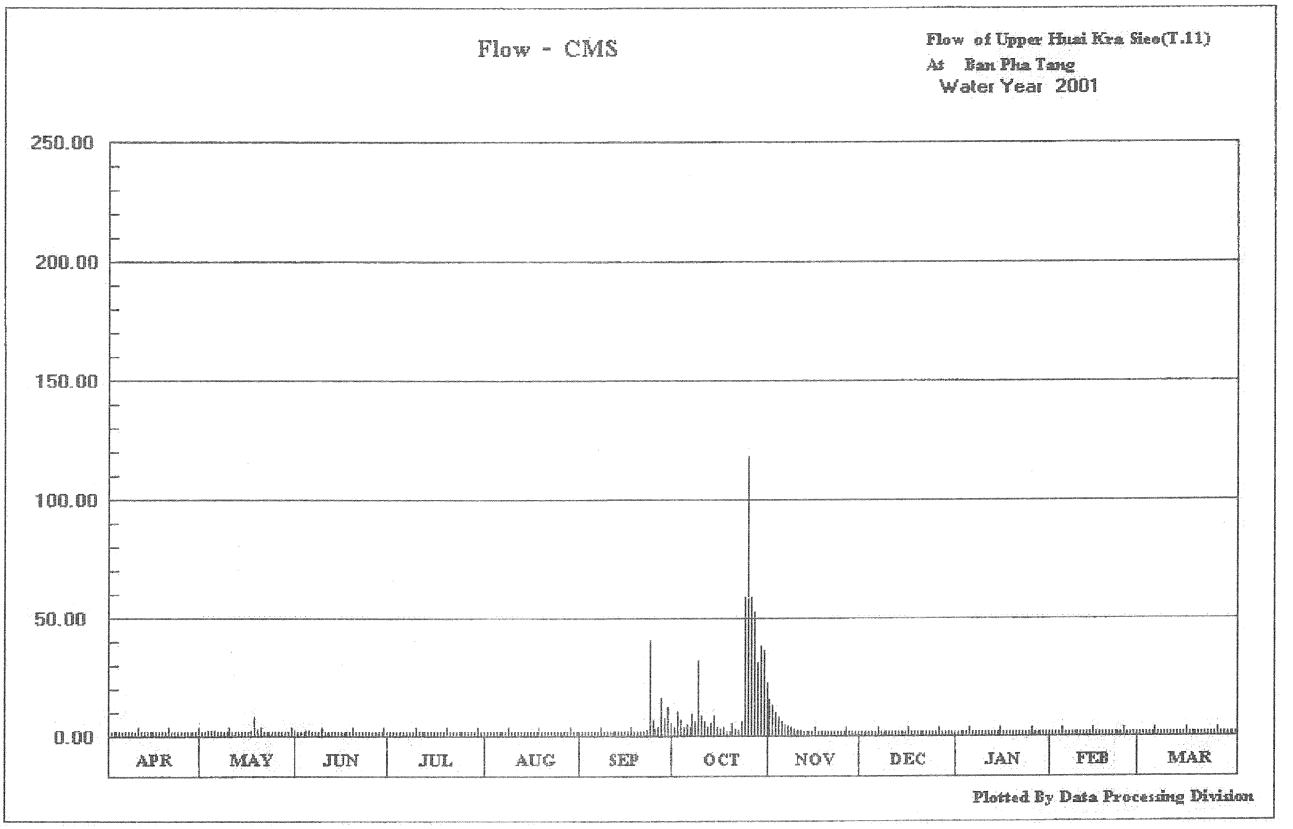
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 42 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.78	0.75	0.90	0.76	0.68	0.63	1.15	1.79	0.77	0.68	0.61	0.56	
2	0.78	0.83	0.84	0.76	0.68	0.62	1.56	1.68	0.75	0.65	0.61	0.56	
3	0.77	1.04	0.81	0.76	0.68	0.61	1.35	1.53	0.75	0.64	0.61	0.58	
4	0.76	1.05	1.05	0.76	0.69	0.61	1.16	1.43	0.75	0.64	0.61	0.58	
5	0.76	1.07	1.03	0.75	0.71	0.60	1.26	1.33	0.75	0.64	0.61	0.58	
6	0.75	0.98	0.90	0.74	0.80	0.60	1.14	1.26	0.75	0.63	0.60	0.58	
7	0.75	0.92	0.94	0.73	0.98	0.65	1.50	1.20	0.75	0.63	0.60	0.58	
8	0.75	0.87	0.92	0.72	1.11	0.68	1.34	1.14	0.74	0.63	0.60	0.58	
9	0.75	0.85	0.89	0.70	0.98	0.69	2.24	1.08	0.74	0.67	0.60	0.58	
10	0.74	0.83	0.89	0.76	0.87	0.69	1.46	1.05	0.74	0.67	0.60	0.58	
11	0.74	0.82	0.81	0.78	0.82	0.70	1.33	1.04	0.74	0.66	0.59	0.58	
12	0.74	0.82	0.83	0.66	0.79	0.92	1.18	1.01	0.74	0.65	0.64	0.58	
13	0.74	0.97	0.82	0.64	0.78	0.80	1.31	0.97	0.73	0.67	0.63	0.58	
14	0.77	0.99	0.81	0.63	0.78	0.79	1.48	0.96	0.73	0.69	0.62	0.57	
15	0.76	1.00	0.81	0.63	0.81	0.78	1.17	0.95	0.72	0.68	0.61	0.57	
16	0.76	0.95	0.81	0.73	0.76	0.78	1.11	0.94	0.72	0.68	0.60	0.56	
17	0.76	1.07	0.81	0.72	0.73	0.77	1.03	0.92	0.72	0.68	0.59	0.55	
18	0.76	1.44	0.81	0.72	0.72	0.73	0.97	0.89	0.71	0.67	0.58	0.55	
19	0.76	1.13	0.80	0.72	0.71	0.76	0.95	0.86	0.71	0.67	0.58	0.55	
20	0.76	1.05	0.79	0.71	0.70	0.79	1.30	0.84	0.72	0.66	0.57	0.55	
21	0.75	0.97	0.78	0.71	0.70	0.87	1.11	0.82	0.73	0.65	0.57	0.55	
22	0.75	0.96	0.75	0.71	0.69	1.07	1.05	0.81	0.72	0.65	0.57	0.55	
23	0.74	0.91	0.74	0.70	0.71	2.45	1.33	0.80	0.71	0.66	0.57	0.55	
24	0.72	0.88	0.76	0.69	0.70	1.37	2.80	0.79	0.71	0.67	0.57	0.57	
25	0.71	0.85	0.74	0.69	0.67	1.11	3.64	0.79	0.71	0.68	0.57	0.58	
26	0.71	0.85	0.74	0.68	0.65	1.14	2.80	0.78	0.71	0.66	0.57	0.58	
27	0.75	0.85	0.77	0.68	0.64	1.80	2.69	0.77	0.70	0.65	0.56	0.58	
28	0.75	0.85	0.77	0.67	0.64	1.39	2.23	0.76	0.70	0.64	0.56	0.59	
29	0.75	0.84	0.76	0.67	0.63	1.65	2.39	0.75	0.70	0.63		0.59	
30	0.75	0.87	0.76	0.68	0.65	1.31	2.35	0.74	0.70	0.63		0.59	
31		1.04		0.69	0.63		2.00		0.70	0.62		0.58	
Mean	0.75	0.95	0.83	0.71	0.74	0.95	1.63	1.02	0.73	0.66	0.59	0.57	
Max	0.78	1.44	1.05	0.78	1.11	2.45	3.64	1.79	0.77	0.69	0.64	0.59	3.64
Min	0.71	0.75	0.74	0.63	0.60	0.95	0.74	0.70	0.62	0.56	0.55	0.55	0.55

Annual Max Momentary Gage Height 4.25 M (A.D), at 6.00 Hours, on Oct 25, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.08 M (A.D)
Left Bank Elevation 8.17 M (A.D)
Right Bank Elevation 8.16 M (A.D), Drainage Area 355 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.3	1.1	2.1	1.2	0.7	0.4	4.4	16.7	1.2	0.7	0.4	0.2	
2	1.3	1.6	1.7	1.2	0.7	0.4	11.4	13.8	1.1	0.5	0.4	0.2	
3	1.2	3.3	1.5	1.2	0.7	0.4	7.4	10.8	1.1	0.5	0.4	0.2	
4	1.2	3.4	3.4	1.2	0.8	0.4	4.5	8.9	1.1	0.5	0.4	0.2	
5	1.2	3.6	3.2	1.1	0.9	0.3	5.9	7.0	1.1	0.5	0.4	0.2	
6	1.1	2.8	2.1	1.0	1.4	0.3	4.3	5.9	1.1	0.4	0.3	0.2	
7	1.1	2.3	2.5	1.0	2.8	0.5	10.2	4.9	1.1	0.4	0.3	0.2	
8	1.1	1.9	2.3	0.9	4.0	0.7	7.2	4.3	1.0	0.4	0.3	0.2	
9	1.1	1.8	2.1	0.8	2.8	0.8	32.6	3.7	1.0	0.7	0.3	0.2	
10	1.0	1.6	2.1	1.2	1.9	0.8	9.4	3.4	1.0	0.7	0.3	0.2	
11	1.0	1.5	1.5	1.3	1.5	0.8	7.0	3.3	1.0	0.6	0.3	0.2	
12	1.0	1.5	1.6	0.6	1.3	2.3	4.7	3.0	1.0	0.5	0.5	0.2	
13	1.0	2.7	1.5	0.5	1.3	1.4	6.7	2.7	1.0	0.7	0.4	0.2	
14	1.2	2.8	1.5	0.4	1.3	1.3	9.8	2.6	1.0	0.8	0.4	0.2	
15	1.2	2.9	1.5	0.4	1.5	1.3	4.6	2.5	0.9	0.7	0.4	0.2	
16	1.2	2.5	1.5	1.0	1.2	1.3	4.0	2.5	0.9	0.7	0.3	0.2	
17	1.2	3.6	1.5	0.9	1.0	1.2	3.2	2.3	0.9	0.7	0.3	0.2	
18	1.2	9.1	1.5	0.9	0.9	1.0	2.7	2.1	0.9	0.7	0.2	0.2	
19	1.2	4.2	1.4	0.9	0.9	1.2	2.5	1.9	0.9	0.7	0.2	0.2	
20	1.2	3.4	1.3	0.9	0.8	1.3	6.5	1.7	0.9	0.6	0.2	0.2	
21	1.1	2.7	1.3	0.9	0.8	1.9	4.0	1.5	1.0	0.5	0.2	0.2	
22	1.1	2.6	1.1	0.9	0.8	3.6	3.4	1.5	0.9	0.5	0.2	0.2	
23	1.0	2.2	1.0	0.8	0.9	41.7	7.0	1.4	0.9	0.6	0.2	0.2	
24	0.9	2.0	1.2	0.8	0.8	7.8	59.7	1.3	0.9	0.7	0.2	0.2	
25	0.9	1.8	1.0	0.8	0.7	4.0	118.7	1.3	0.9	0.7	0.2	0.2	
26	0.9	1.8	1.0	0.7	0.5	4.3	59.7	1.3	0.9	0.6	0.2	0.2	
27	1.1	1.8	1.2	0.7	0.5	17.0	53.5	1.2	0.8	0.5	0.2	0.2	
28	1.1	1.8	1.2	0.7	0.5	8.1	32.2	1.2	0.8	0.5	0.2	0.3	
29	1.1	1.7	1.2	0.7	0.4	13.2	39.0	1.1	0.8	0.4		0.3	
30	1.1	1.9	1.2	0.7	0.5	6.7	37.2	1.0	0.8	0.4		0.3	
31		3.3		0.8	0.4		23.5		0.8	0.4		0.2	
Total	33.3	81.2	49.2	27.1	35.2	126.4	586.9	116.8	29.7	17.8	8.3	6.5	1118.4 CMSDAY
Mean	1.1	2.6	1.6	0.9	1.1	4.2	18.9	3.9	1.0	0.6	0.3	0.2	3.1 CMS
Max	1.3	9.1	3.4	1.3	4.0	41.7	118.7	16.7	1.2	0.8	0.5	0.3	118.7 CMS
Min	0.9	1.1	1.0	0.4	0.4	0.3	2.5	1.0	0.8	0.4	0.2	0.2	0.2 CMS
Runoff	2.88	7.02	4.25	2.34	3.04	10.92	50.71	10.09	2.57	1.54	0.72	0.56	96.63 MCM

Momentary Peak 176.92 CMS, at 4.25 M (A.D), at 6.00 Hours, on Oct 25, 2001

Runoff Yield 8.63 Liters/Second/Square KM, Momentary Peak Yield 498.366 Liters/Second/Square KM

WATER YEAR : 2001

NAKHON NAYOK 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

Drainage Area 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 about 200 meters from the staff gage.

Elevation +8.758 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1973 to date.

Rating Operation

Period of Rating 1973 - 1980, 1991 to date.

Rated by Float -

Rated by Current Meter 1973 - 1980, 1991 to date.

Stability of Channel Regimes Fairly stable.

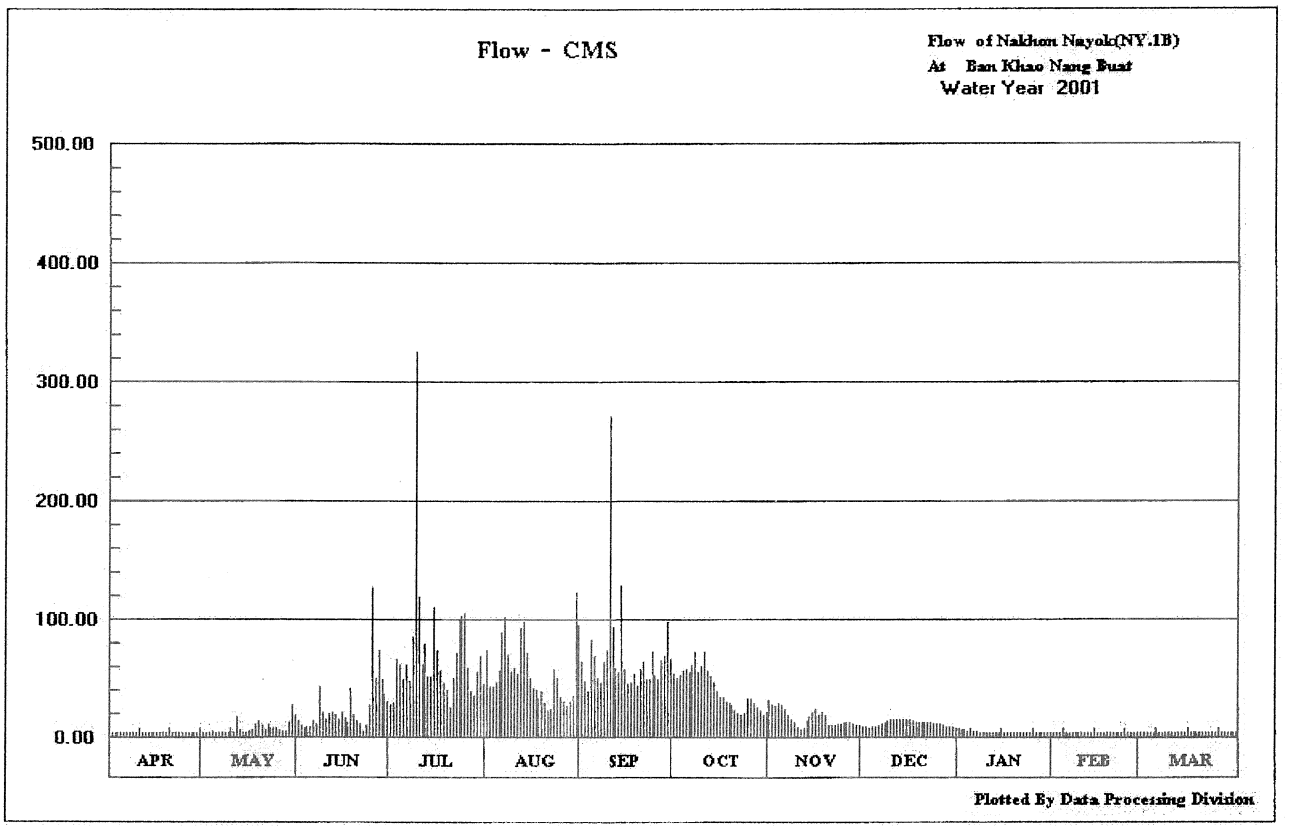
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 78 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.36	3.63	4.32	4.78	5.87	5.67	5.44	4.88	4.10	4.03	3.39	3.32	
2	3.40	3.54	4.17	4.79	5.17	5.30	5.36	4.76	4.07	3.99	3.39	3.30	
3	3.40	3.74	4.06	5.71	5.19	5.09	5.42	4.73	4.05	3.96	3.39	3.26	
4	3.41	3.89	4.11	5.62	5.28	6.04	5.50	4.82	4.09	3.93	3.39	3.37	
5	3.41	3.83	4.08	5.34	5.52	5.77	5.53	4.75	4.09	3.91	3.39	3.38	
6	3.39	3.79	4.31	5.61	6.16	5.35	5.48	4.65	4.13	3.88	3.38	3.34	
7	3.37	3.70	4.21	5.29	6.38	5.28	5.63	4.50	4.19	3.86	3.37	3.45	
8	3.35	3.61	5.18	6.08	5.78	5.68	5.84	4.35	4.28	3.83	3.37	3.40	
9	3.35	3.53	4.58	9.32	5.47	5.87	5.49	4.27	4.31	3.79	3.37	3.38	
10	3.35	3.50	4.34	6.70	5.57	8.74	5.60	4.09	4.34	3.75	3.37	3.34	
11	3.34	3.48	4.52	5.62	5.45	6.25	5.85	3.98	4.34	3.71	3.37	3.33	
12	3.34	4.45	4.58	5.97	6.22	5.57	5.52	4.05	4.35	3.67	3.36	3.33	
13	3.31	3.96	4.50	5.40	6.31	5.49	5.39	4.29	4.36	3.64	3.36	3.32	
14	3.33	3.81	4.36	5.38	5.81	6.87	5.28	4.44	4.37	3.62	3.36	3.32	
15	3.34	3.72	4.57	6.55	5.36	5.54	5.10	4.58	4.37	3.59	3.36	3.32	
16	3.36	3.87	4.41	5.86	5.16	5.24	4.96	4.63	4.35	3.54	3.35	3.31	
17	3.35	3.95	4.24	5.52	5.12	5.27	4.94	4.50	4.29	3.52	3.34	3.30	
18	3.35	4.23	5.14	5.28	4.90	5.46	4.84	4.57	4.27	3.50	3.34	3.29	
19	3.34	4.29	4.49	5.11	5.07	5.21	4.81	4.47	4.25	3.46	3.33	3.30	
20	3.32	4.17	4.32	4.69	4.80	5.53	4.76	4.16	4.24	3.45	3.32	3.32	
21	3.32	3.95	4.20	5.36	4.62	5.67	4.60	4.17	4.24	3.43	3.32	3.34	
22	3.32	4.20	3.90	5.82	4.63	5.34	4.54	4.17	4.24	3.43	3.32	3.35	
23	3.32	4.02	4.13	6.35	5.55	5.32	4.50	4.18	4.24	3.42	3.32	3.39	
24	3.31	4.02	4.75	6.40	5.37	5.85	4.51	4.20	4.23	3.41	3.32	3.35	
25	3.30	4.04	6.84	6.45	4.96	5.42	4.91	4.24	4.21	3.41	3.35	3.33	
26	3.29	3.96	5.36	5.57	4.85	5.34	4.93	4.27	4.18	3.41	3.34	3.34	
27	3.29	3.91	5.86	5.10	4.74	5.69	4.81	4.25	4.15	3.41	3.32	3.35	
28	3.30	3.92	5.32	5.00	4.85	5.76	4.67	4.22	4.12	3.40	3.32	3.34	
29	3.34	4.26	5.03	5.49	4.99	6.31	4.60	4.17	4.09	3.39		3.34	
30	3.36	4.78	4.84	5.77	6.76	5.71	4.49	4.13	4.07	3.40		3.34	
31		4.48		5.25	6.27		4.55		4.05	3.39		3.34	
Mean	3.34	3.94	4.62	5.72	5.43	5.72	5.09	4.38	4.21	3.62	3.35	3.34	
Max	3.41	4.78	6.84	9.32	6.76	8.74	5.85	4.88	4.37	4.03	3.39	3.45	9.32
Min	3.29	3.48	3.90	4.69	4.62	5.09	4.49	3.98	4.05	3.39	3.32	3.26	3.26

Annual Max Momentary Gage Height 9.88 M (MSL), at 11.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed 2.63 M (MSL)
Left Bank Elevation 11.49 M (MSL)
Right Bank Elevation 11.55 M (MSL), Drainage Area 519 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.44	3.87	15.76	29.76	75.74	65.50	54.84	32.96	10.50	8.89	1.71	1.08	
2	1.80	3.06	12.11	30.08	43.80	49.10	51.56	29.12	9.81	8.04	1.71	0.90	
3	1.80	4.86	9.58	67.51	44.60	40.62	54.02	28.16	9.35	7.56	1.71	0.54	
4	1.89	6.48	10.73	63.00	48.28	84.62	57.30	31.04	10.27	7.08	1.71	1.53	
5	1.89	5.76	10.04	50.74	58.24	70.57	58.71	28.80	10.27	6.76	1.71	1.62	
6	1.71	5.31	15.48	62.50	90.98	51.15	56.48	25.60	11.19	6.36	1.62	1.26	
7	1.53	4.50	13.04	48.69	102.64	48.28	63.50	20.80	12.57	6.12	1.53	2.25	
8	1.35	3.69	44.20	86.74	71.08	66.00	74.18	16.60	14.72	5.76	1.53	1.80	
9	1.35	2.97	23.36	326.52	56.07	75.74	56.89	14.48	15.48	5.31	1.53	1.62	
10	1.35	2.70	16.32	120.00	60.59	273.36	62.00	10.27	16.32	4.95	1.53	1.26	
11	1.26	2.52	21.44	63.00	55.25	95.75	74.70	7.88	16.32	4.59	1.53	1.17	
12	1.26	19.40	23.36	80.94	94.16	60.59	58.24	9.35	16.60	4.23	1.44	1.17	
13	0.99	7.56	20.80	53.20	98.93	56.89	52.79	14.96	16.88	3.96	1.44	1.08	
14	1.17	5.52	16.88	52.38	72.62	130.20	48.28	19.12	17.16	3.78	1.44	1.08	
15	1.26	4.68	23.04	111.65	51.56	59.18	41.00	23.36	17.16	3.51	1.44	1.08	
16	1.44	6.24	18.28	75.22	43.40	46.64	35.76	24.96	16.60	3.06	1.35	0.99	
17	1.35	7.40	13.76	58.24	41.80	47.87	35.04	20.80	14.96	2.88	1.26	0.90	
18	1.35	13.52	42.60	48.28	33.60	55.66	31.68	23.04	14.48	2.70	1.26	0.81	
19	1.26	14.96	20.52	41.40	39.86	45.41	30.72	19.96	14.00	2.34	1.17	0.90	
20	1.08	12.11	15.76	26.88	30.40	58.71	29.12	11.88	13.76	2.25	1.08	1.08	
21	1.08	7.40	12.80	51.56	24.64	65.50	24.00	12.11	13.76	2.07	1.08	1.26	
22	1.08	12.80	6.60	73.14	24.96	50.74	22.08	12.11	13.76	2.07	1.08	1.35	
23	1.08	8.66	11.19	101.05	59.65	49.92	20.80	12.34	13.76	1.98	1.08	1.71	
24	0.99	8.66	28.80	103.70	51.97	74.70	21.12	12.80	13.52	1.89	1.08	1.35	
25	0.90	9.12	128.40	106.35	35.76	54.02	33.96	13.76	13.04	1.89	1.35	1.17	
26	0.81	7.56	51.56	60.59	32.00	50.74	34.68	14.48	12.34	1.89	1.26	1.26	
27	0.81	6.76	75.22	41.00	28.48	66.50	30.72	14.00	11.65	1.89	1.08	1.35	
28	0.90	6.92	49.92	37.20	32.00	70.06	26.24	13.28	10.96	1.80	1.08	1.26	
29	1.26	14.24	38.34	56.89	36.84	98.93	24.00	12.11	10.27	1.71		1.26	
30	1.44	29.76	31.68	70.57	123.60	67.51	20.52	11.19	9.81	1.80		1.26	
31		20.24		47.05	96.81		22.40		9.35	1.71		1.26	
Total	38.88	269.23	821.57	2245.83	1760.31	2130.46	1307.33	541.32	410.62	120.83	38.79	38.61	9723.78 CMSDAY
Mean	1.30	8.68	27.39	72.45	56.78	71.02	42.17	18.04	13.25	3.90	1.39	1.25	26.64 CMS
Max	1.89	29.76	128.40	326.52	123.60	273.36	74.70	32.96	17.16	8.89	1.71	2.25	326.52 CMS
Min	0.81	2.52	6.60	26.88	24.64	40.62	20.52	7.88	9.35	1.71	1.08	0.54	0.54 CMS
Runoff	3.359	23.261	70.984	194.040	152.091	184.072	112.953	46.770	35.478	10.440	3.351	3.336	840.135 MCM

Momentary Peak 382.00 CMS, at 9.88 M (MSL), at 11.00 Hours, on Jul 9, 2001

Runoff Yield 51.33 Liters/Second/Square KM, Momentary Peak Yield 736.031 Liters/Second/Square KM

WATER YEAR : 2001

NAKHON NAYOK RIVER BASIN

Lower Khlong Ban at Ban Pa Kha, Nakhon Nayok (Ny.3)

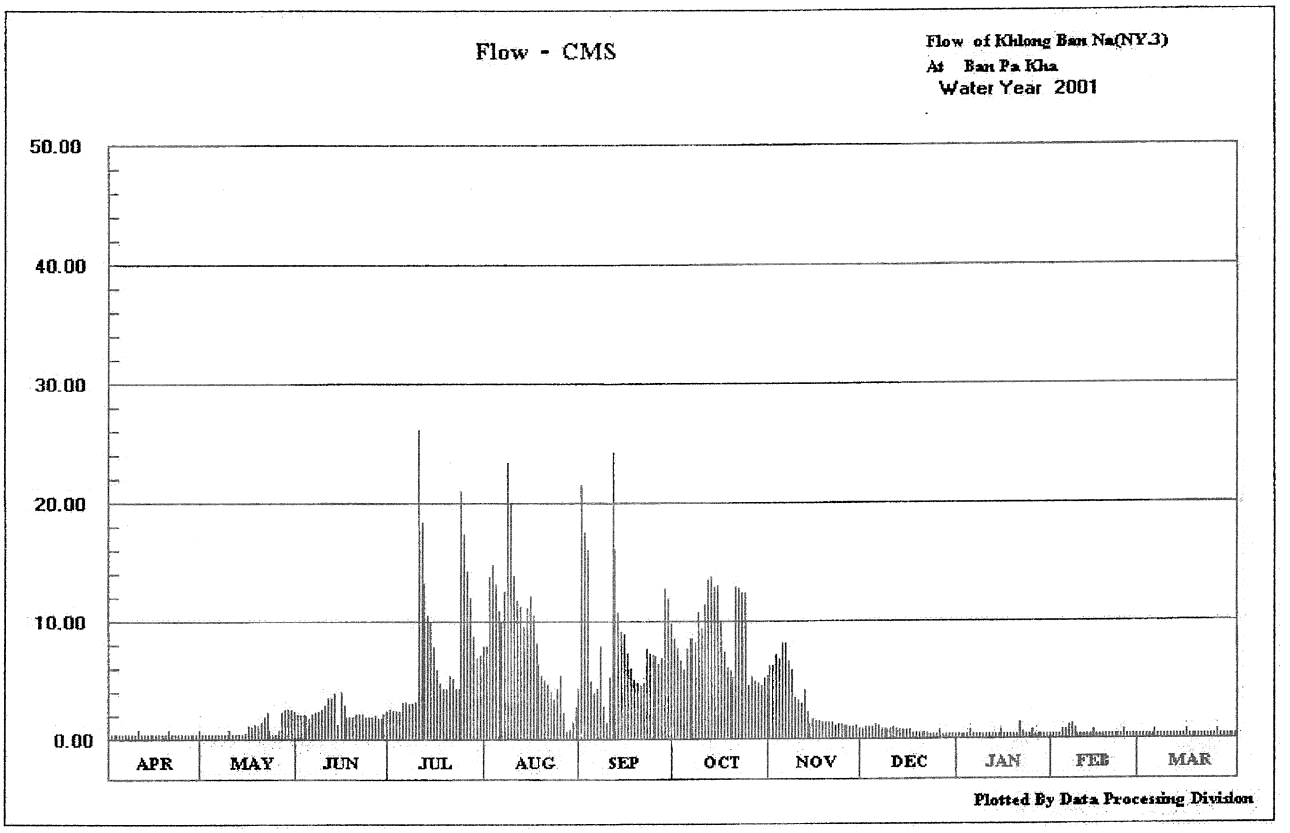
Lat 14 - 17 - 04 N. **Long** 101 - 04 - 28 E.

Location		on left bank near Wat Ban Pa Kha.			
	Ban Pa Kha	**Amphoe** Ban Na		**Changwat**	Nakhon Nayok
Drainage 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 Float	-			
	Rated by Current Meter	1977 - 1978, 1980, 1988 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records good. Flow effected by the local weir during Oct.31, 98 - Mar.31, 99 Discharge estimated by recession equation. Stage-discharge relation defined by 50 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.66	0.53	1.45	1.51	2.28	3.60	2.36	2.09	1.13	0.81	0.62	0.57	
2	0.63	0.53	1.45	1.49	2.93	3.26	2.26	2.08	1.16	0.82	0.60	0.57	
3	0.58	0.57	1.45	1.49	3.02	3.13	2.13	2.19	1.14	0.87	0.62	0.57	
4	0.57	0.59	1.42	1.48	2.87	1.90	2.03	2.15	1.15	0.84	1.01	0.56	
5	0.56	0.56	1.38	1.62	2.63	1.75	2.25	2.32	1.23	0.79	1.07	0.56	
6	0.59	0.58	1.44	1.61	2.51	1.81	2.36	2.32	1.20	0.75	1.19	0.56	
7	0.55	0.60	1.47	1.59	2.81	2.28	2.36	2.14	1.10	0.73	1.22	0.65	
8	0.55	0.65	1.49	1.60	3.75	1.56	2.31	2.04	1.11	0.73	1.13	0.65	
9	0.56	0.79	1.51	1.62	3.46	1.26	2.61	1.68	1.08	0.72	0.89	0.64	
10	0.59	0.77	1.57	3.96	2.94	1.95	2.46	1.64	1.12	0.69	0.71	0.64	
11	0.61	0.76	1.68	3.34	2.73	3.82	2.68	1.59	1.14	0.69	0.65	0.63	
12	0.61	0.76	1.67	2.88	2.67	3.14	2.91	1.78	1.11	0.71	0.63	0.61	
13	0.61	0.79	1.73	2.59	2.48	2.61	2.93	1.46	1.09	0.74	0.60	0.59	
14	0.61	0.79	1.25	2.52	2.65	2.43	2.84	1.22	1.08	0.73	0.57	0.56	
15	0.61	1.00	1.76	2.29	2.77	2.41	2.86	1.38	1.09	0.72	0.57	0.56	
16	0.60	1.19	1.58	2.03	2.58	2.21	2.52	1.32	1.07	0.71	0.57	0.56	
17	0.60	1.14	1.41	1.87	2.32	2.06	2.22	1.33	0.98	0.70	0.56	0.59	
18	0.62	1.23	1.41	1.80	2.11	1.91	2.06	1.28	0.99	0.69	0.55	0.83	
19	0.64	1.21	1.41	1.81	1.96	1.87	2.02	1.30	0.99	0.68	0.58	0.84	
20	0.65	1.29	1.45	1.97	1.91	1.84	1.94	1.26	0.98	0.66	0.58	0.83	
21	0.65	1.41	1.45	1.92	1.86	1.87	2.85	1.28	0.97	1.26	0.57	0.81	
22	0.65	1.46	1.45	1.81	1.76	2.26	2.83	1.20	0.97	1.04	0.57	0.80	
23	0.62	1.09	1.41	1.81	1.66	2.21	2.80	1.24	0.93	0.93	0.57	0.79	
24	0.60	0.93	1.40	3.56	1.80	2.19	2.79	1.23	0.91	0.81	0.57	0.79	
25	0.58	0.93	1.40	3.25	1.96	2.18	1.84	1.18	0.88	0.71	0.57	0.80	
26	0.56	1.09	1.42	2.97	1.47	2.11	1.94	1.19	0.87	0.66	0.57	0.80	
27	0.55	1.47	1.38	2.75	1.03	2.17	1.90	1.15	0.86	0.63	0.57	0.78	
28	0.54	1.52	1.38	2.39	0.84	2.83	1.87	1.15	0.86	0.62	0.57	0.75	
29	0.54	1.51	1.45	2.17	1.28	2.74	1.84	1.19	0.83	0.62		0.72	
30	0.53	1.51	1.48	2.19	1.55	2.50	1.93	1.11	0.81	0.62		0.59	
31		1.48		2.28	1.81		1.97		0.82	0.62		0.59	
Mean	0.59	0.99	1.47	2.20	2.27	2.33	2.34	1.55	1.02	0.75	0.70	0.67	
Max	0.66	1.52	1.76	3.96	3.75	3.82	2.93	2.32	1.23	1.26	1.22	0.84	3.96
Min	0.53	0.53	1.25	1.48	0.84	1.26	1.84	1.11	0.81	0.62	0.55	0.56	0.53

Annual Max Momentary Gage Height 4.06 M (A.D), at 12.00 Hours, on Jul 10, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.36 M (A.D)
Left Bank Elevation 7.28 M (A.D)



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.16	0.03	2.30	2.66	8.00	21.70	8.67	6.43	1.09	0.32	0.12	0.07	
2	0.13	0.03	2.30	2.54	13.93	17.62	7.83	6.36	1.18	0.34	0.10	0.07	
3	0.08	0.07	2.30	2.54	14.92	16.13	6.75	7.25	1.12	0.44	0.12	0.07	
4	0.07	0.09	2.12	2.48	13.30	5.10	6.01	6.92	1.15	0.38	0.73	0.06	
5	0.06	0.06	1.92	3.32	11.07	4.10	7.75	8.33	1.39	0.29	0.91	0.06	
6	0.09	0.08	2.24	3.26	9.99	4.47	8.67	8.33	1.30	0.25	1.27	0.06	
7	0.05	0.10	2.42	3.14	12.70	8.00	8.67	6.83	1.00	0.23	1.36	0.15	
8	0.05	0.15	2.54	3.20	23.55	2.96	8.25	6.08	1.03	0.23	1.09	0.15	
9	0.06	0.29	2.66	3.32	20.02	1.48	10.89	3.68	0.94	0.22	0.48	0.14	
10	0.09	0.27	3.02	26.28	14.04	5.45	9.54	3.44	1.06	0.19	0.21	0.14	
11	0.11	0.26	3.68	18.58	11.97	24.46	11.52	3.14	1.12	0.19	0.15	0.13	
12	0.11	0.26	3.62	13.40	11.43	16.24	13.71	4.28	1.03	0.21	0.13	0.11	
13	0.11	0.29	3.98	10.71	9.72	10.89	13.93	2.36	0.97	0.24	0.10	0.09	
14	0.11	0.29	1.45	10.08	11.25	9.27	13.00	1.36	0.94	0.23	0.07	0.06	
15	0.11	0.70	4.16	8.08	12.33	9.09	13.20	1.92	0.97	0.22	0.07	0.06	
16	0.10	1.27	3.08	6.01	10.62	7.42	10.08	1.68	0.91	0.21	0.07	0.06	
17	0.10	1.12	2.06	4.89	8.33	6.22	7.50	1.72	0.66	0.20	0.06	0.09	
18	0.12	1.39	2.06	4.40	6.58	5.17	6.22	1.54	0.68	0.19	0.05	0.36	
19	0.14	1.33	2.06	4.47	5.52	4.89	5.94	1.60	0.68	0.18	0.08	0.38	
20	0.15	1.57	2.30	5.59	5.17	4.68	5.38	1.48	0.66	0.16	0.08	0.36	
21	0.15	2.06	2.30	5.24	4.82	4.89	13.10	1.54	0.64	1.48	0.07	0.32	
22	0.15	2.36	2.30	4.47	4.16	7.83	12.90	1.30	0.64	0.82	0.07	0.30	
23	0.12	0.97	2.06	4.47	3.56	7.42	12.60	1.42	0.56	0.56	0.07	0.29	
24	0.10	0.56	2.00	21.22	4.40	7.25	12.51	1.39	0.52	0.32	0.07	0.29	
25	0.08	0.56	2.00	17.50	5.52	7.17	4.68	1.24	0.46	0.21	0.07	0.30	
26	0.06	0.97	2.12	14.37	2.42	6.58	5.38	1.27	0.44	0.16	0.07	0.30	
27	0.05	2.42	1.92	12.15	0.79	7.08	5.10	1.15	0.42	0.13	0.07	0.28	
28	0.04	2.72	1.92	8.92	0.38	12.90	4.89	1.15	0.42	0.12	0.07	0.25	
29	0.04	2.66	2.30	7.08	1.54	12.06	4.68	1.27	0.36	0.12		0.22	
30	0.03	2.66	2.48	7.25	2.90	9.90	5.31	1.03	0.32	0.12		0.09	
31		2.48		8.00	4.47		5.59		0.34	0.12		0.09	
Total	2.82	30.07	73.67	249.62	269.40	268.42	270.25	97.49	25.00	9.08	7.81	5.40	1309.03 CMSDAY
Mean	0.09	0.97	2.46	8.05	8.69	8.95	8.72	3.25	0.81	0.29	0.28	0.17	3.59 CMS
Max	0.16	2.72	4.16	26.28	23.55	24.46	13.93	8.33	1.39	1.48	1.36	0.38	26.28 CMS
Min	0.03	0.03	1.45	2.48	0.38	1.48	4.68	1.03	0.32	0.12	0.05	0.06	0.03 CMS
Runoff	0.244	2.598	6.365	21.567	23.276	23.191	23.350	8.423	2.160	0.785	0.675	0.467	113.100 MCM

Momentary Peak 27.58 CMS, at 4.06 M (A.D), at 12.00 Hours, on Jul 10, 2001

Runoff Yield 17.67 Liters/Second/Square KM, Momentary Peak Yield 135.862 Liters/Second/Square KM

WATER YEAR : 2001

NAKHON NAYOK RIVER BASIN

Khlong Samo Pun at Ban Noen Hom, Prachin Buri (Ny.4)

Lat 14 - 17 - 27 N. **Long** 101 - 24 - 20 E.

Location on left bank at the bridge of Prachin Buri - Khao Yai Highway.

Ban Noen Hom **Amphoe** Mueang **Changwat** Prachin Buri

Drainage Area 128 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +376.100 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank at the abutment of the bridge.

Elevation +382.580 m. (M.S.L.)

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 Float -

Rated by Current Meter 1986 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 36 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

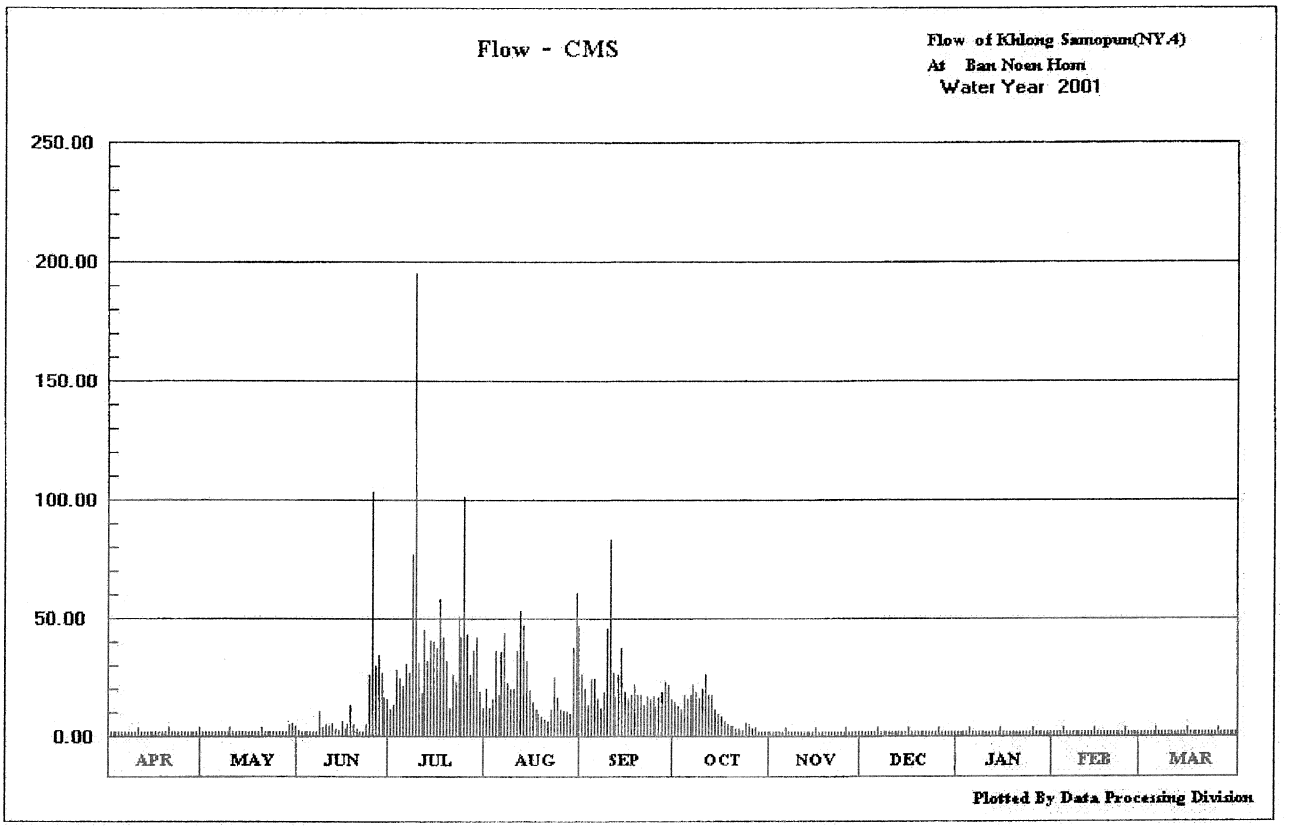
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	376.38	376.36	376.93	377.26	377.50	377.62	377.36	376.85	376.55	376.42	376.40	376.35	
2	376.38	376.40	376.84	377.32	377.28	377.49	377.31	376.87	376.55	376.42	376.40	376.35	
3	376.38	376.48	376.79	377.66	377.38	377.32	377.27	376.90	376.55	376.42	376.40	376.35	
4	376.38	376.48	376.79	377.59	377.80	377.59	377.43	376.87	376.54	376.42	376.40	376.35	
5	376.38	376.46	376.87	377.52	377.44	377.58	377.38	376.82	376.54	376.42	376.39	376.37	
6	376.37	376.44	376.80	377.71	377.79	377.38	377.44	376.77	376.54	376.42	376.39	376.38	
7	376.37	376.42	376.80	377.63	377.92	377.29	377.54	376.75	376.53	376.42	376.39	376.36	
8	376.37	376.40	377.24	378.33	377.55	377.46	377.47	376.73	376.53	376.42	376.39	376.35	
9	376.37	376.40	376.97	379.32	377.50	377.95	377.40	376.72	376.53	376.42	376.38	376.35	
10	376.36	376.42	377.05	377.72	377.49	378.40	377.50	376.70	376.52	376.42	376.38	376.35	
11	376.35	376.44	377.01	377.45	377.80	377.63	377.62	376.69	376.52	376.42	376.38	376.35	
12	376.34	376.59	377.07	377.94	378.05	377.41	377.43	376.67	376.51	376.42	376.38	376.35	
13	376.35	376.46	376.96	377.73	377.97	377.62	377.43	376.67	376.51	376.42	376.37	376.35	
14	376.35	376.44	376.91	377.87	377.73	377.82	377.26	376.66	376.50	376.42	376.37	376.35	
15	376.36	376.62	377.11	377.86	377.48	377.46	377.21	376.66	376.50	376.42	376.37	376.35	
16	376.36	376.59	376.94	377.82	377.35	377.38	377.16	376.65	376.49	376.41	376.37	376.35	
17	376.36	376.68	377.05	378.11	377.27	377.44	377.10	376.64	376.48	376.41	376.37	376.35	
18	376.37	376.78	377.32	377.90	377.20	377.53	377.05	376.63	376.47	376.41	376.36	376.34	
19	376.37	376.85	377.05	377.73	377.16	377.44	377.01	376.61	376.46	376.41	376.36	376.34	
20	376.37	376.85	376.95	377.28	377.13	377.44	377.00	376.60	376.45	376.41	376.36	376.34	
21	376.38	376.78	376.90	377.62	377.09	377.33	376.95	376.60	376.44	376.41	376.36	376.33	
22	376.38	376.90	376.85	377.56	377.26	377.41	376.94	376.60	376.44	376.41	376.36	376.33	
23	376.38	376.82	377.03	378.02	377.60	377.38	376.91	376.60	376.43	376.41	376.36	376.33	
24	376.38	376.82	377.62	377.90	377.40	377.41	377.07	376.59	376.42	376.41	376.35	376.33	
25	376.37	376.80	378.60	378.58	377.26	377.31	377.04	376.58	376.42	376.41	376.35	376.32	
26	376.37	376.74	377.70	377.91	377.24	377.40	376.95	376.58	376.42	376.40	376.35	376.32	
27	376.37	376.73	377.77	377.62	377.22	377.47	376.91	376.56	376.42	376.40	376.35	376.32	
28	376.36	376.90	377.63	377.80	377.21	377.56	376.89	376.55	376.42	376.40	376.35	376.32	
29	376.36	377.04	377.40	377.90	377.82	377.54	376.87	376.55	376.42	376.40		376.31	
30	376.36	377.07	377.38	377.46	378.14	377.38	376.85	376.55	376.42	376.40		376.31	
31		377.00		377.28	377.97		376.82		376.42	376.40		376.30	
Mean	376.37	376.65	377.14	377.79	377.52	377.51	377.18	376.67	376.48	376.41	376.37	376.34	
Max	376.38	377.07	378.60	379.32	378.14	378.40	377.62	376.90	376.55	376.42	376.40	376.38	379.32
Min	376.34	376.36	376.79	377.26	377.09	377.29	376.82	376.55	376.42	376.40	376.35	376.30	376.30

Annual Max Momentary Gage Height 379.60 M (MSL), at 1.00 Hours, on Aug 26, 2001

Zero Gage at Bottom Elevation 376.10 M (MSL), River Bed 375.60 M (MSL)

Left Bank Elevation 383.00 M (MSL)

Right Bank Elevation 384.01 M (MSL), Drainage Area 128 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.08	0.06	3.60	11.80	21.00	27.00	15.40	2.50	0.45	0.14	0.10	0.05	
2	0.08	0.10	2.40	13.80	12.40	20.60	13.40	2.70	0.45	0.14	0.10	0.05	
3	0.08	0.26	1.90	29.00	16.20	13.80	12.10	3.00	0.45	0.14	0.10	0.05	
4	0.08	0.26	1.90	25.50	37.00	25.50	18.20	2.70	0.42	0.14	0.10	0.05	
5	0.08	0.22	2.70	22.00	18.60	25.00	16.20	2.20	0.42	0.14	0.09	0.07	
6	0.07	0.18	2.00	31.60	36.40	16.20	18.60	1.70	0.42	0.14	0.09	0.08	
7	0.07	0.14	2.00	27.50	44.40	12.70	23.00	1.50	0.39	0.14	0.09	0.06	
8	0.07	0.10	11.20	77.70	23.50	19.40	19.80	1.30	0.39	0.14	0.09	0.05	
9	0.07	0.10	4.40	196.00	21.00	46.50	17.00	1.20	0.39	0.14	0.08	0.05	
10	0.06	0.14	6.00	32.20	20.60	84.00	21.00	1.00	0.36	0.14	0.08	0.05	
11	0.05	0.18	5.20	19.00	37.00	27.50	27.00	0.96	0.36	0.14	0.08	0.05	
12	0.04	0.57	6.40	45.80	54.00	17.40	18.20	0.88	0.33	0.14	0.08	0.05	
13	0.05	0.22	4.20	32.80	47.90	27.00	18.20	0.88	0.33	0.14	0.07	0.05	
14	0.05	0.18	3.20	41.20	32.80	38.20	11.80	0.84	0.30	0.14	0.07	0.05	
15	0.06	0.68	7.30	40.60	20.20	19.40	10.30	0.84	0.30	0.14	0.07	0.05	
16	0.06	0.57	3.80	38.20	15.00	16.20	8.80	0.80	0.28	0.12	0.07	0.05	
17	0.06	0.92	6.00	58.80	12.10	18.60	7.00	0.76	0.26	0.12	0.07	0.05	
18	0.07	1.80	13.80	43.00	10.00	22.50	6.00	0.72	0.24	0.12	0.06	0.04	
19	0.07	2.50	6.00	32.80	8.80	18.60	5.20	0.64	0.22	0.12	0.06	0.04	
20	0.07	2.50	4.00	12.40	7.90	18.60	5.00	0.60	0.20	0.12	0.06	0.04	
21	0.08	1.80	3.00	27.00	6.80	14.20	4.00	0.60	0.18	0.12	0.06	0.03	
22	0.08	3.00	2.50	24.00	11.80	17.40	3.80	0.60	0.18	0.12	0.06	0.03	
23	0.08	2.20	5.60	51.60	26.00	16.20	3.20	0.60	0.16	0.12	0.06	0.03	
24	0.08	2.20	27.00	43.00	17.00	17.40	6.40	0.57	0.14	0.12	0.05	0.03	
25	0.07	2.00	104.00	102.00	11.80	13.40	5.80	0.54	0.14	0.12	0.05	0.02	
26	0.07	1.40	31.00	43.70	11.20	17.00	4.00	0.54	0.14	0.10	0.05	0.02	
27	0.07	1.30	35.20	27.00	10.60	19.80	3.20	0.48	0.14	0.10	0.05	0.02	
28	0.06	3.00	27.50	37.00	10.30	24.00	2.90	0.45	0.14	0.10	0.05	0.02	
29	0.06	5.80	17.00	43.00	38.20	23.00	2.70	0.45	0.14	0.10		0.01	
30	0.06	6.40	16.20	19.40	61.20	16.20	2.50	0.45	0.14	0.10		0.01	
31		5.00		12.40	47.90		2.20		0.14	0.10		0.00	
Total	2.03	45.78	367.00	1261.80	749.60	693.30	332.90	33.00	8.60	3.90	2.04	1.25	3501.20 CMSDAY
Mean	0.07	1.48	12.23	40.70	24.18	23.11	10.74	1.10	0.28	0.13	0.07	0.04	9.59 CMS
Max	0.08	6.40	104.00	196.00	61.20	84.00	27.00	3.00	0.45	0.14	0.10	0.08	196.00 CMS
Min	0.04	0.06	1.90	11.80	6.80	12.70	2.20	0.45	0.14	0.10	0.05	0.00	0.00 CMS
Runoff	0.175	3.955	31.709	109.020	64.765	59.901	28.763	2.851	0.743	0.337	0.176	0.108	302.504 MCM

Momentary Peak 240.00 CMS, at 379.60 M (MSL), at 1.00 Hours, on Aug 26, 2001

Runoff Yield 74.94 Liters/Second/Square KM, Momentary Peak Yield 1875.000 Liters/Second/Square KM

WATER YEAR : 2001

NAKHON NAYOK 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

Drainage Area 116 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 Float -

Rated by Current Meter 1988 to date.

Stability of Channel Regimes Fairly stable.

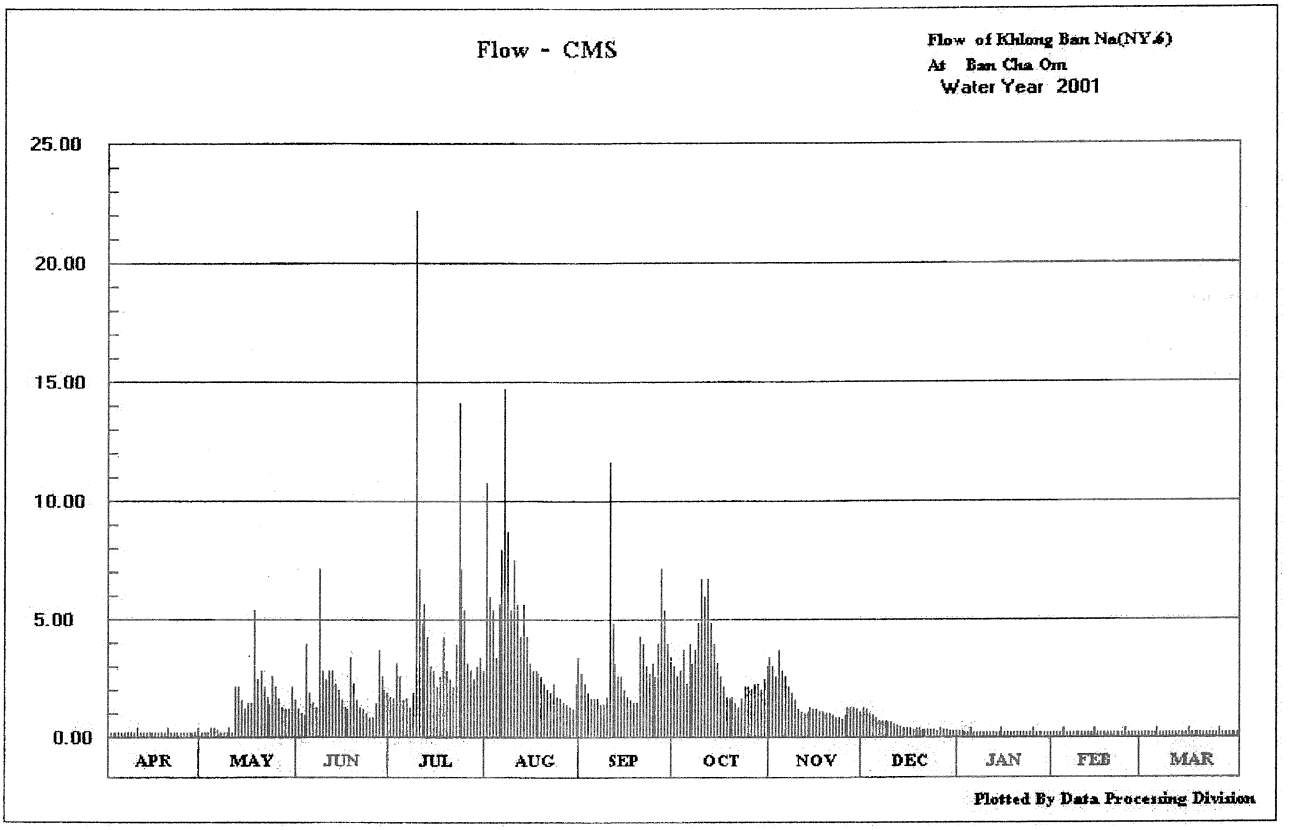
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 47 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.57	1.62	1.84	1.90	2.22	1.97	1.99	2.01	1.85	1.71	1.55	1.57	
2	1.58	1.65	1.82	1.89	2.10	1.94	1.96	1.99	1.84	1.71	1.55	1.57	
3	1.60	1.68	1.81	2.00	2.08	1.91	1.98	1.96	1.82	1.70	1.55	1.57	
4	1.60	1.73	2.03	1.96	2.01	1.89	2.02	2.02	1.81	1.69	1.55	1.57	
5	1.59	1.73	1.91	1.88	2.09	1.89	1.94	1.98	1.80	1.69	1.55	1.57	
6	1.60	1.72	1.87	1.89	2.15	1.89	2.03	1.96	1.78	1.68	1.56	1.57	
7	1.60	1.70	1.85	1.85	2.31	1.86	2.00	1.93	1.78	1.68	1.58	1.59	
8	1.60	1.66	2.13	1.91	2.17	1.86	2.02	1.91	1.78	1.68	1.58	1.59	
9	1.62	1.68	1.98	2.44	2.08	1.90	2.06	1.88	1.77	1.68	1.57	1.57	
10	1.64	1.69	1.95	2.13	2.14	2.24	2.12	1.84	1.77	1.67	1.57	1.56	
11	1.64	1.68	1.98	2.06	2.09	2.06	2.10	1.83	1.76	1.67	1.57	1.56	
12	1.64	1.93	1.98	2.09	2.04	2.00	2.12	1.82	1.75	1.66	1.57	1.55	
13	1.64	1.93	1.94	2.04	2.09	1.96	2.06	1.83	1.74	1.66	1.57	1.55	
14	1.64	1.88	1.92	1.99	2.04	1.96	2.03	1.85	1.73	1.64	1.57	1.55	
15	1.64	1.84	1.88	1.98	2.00	1.92	2.00	1.84	1.73	1.64	1.57	1.55	
16	1.64	1.87	1.85	1.93	1.98	1.90	1.96	1.84	1.73	1.62	1.57	1.54	
17	1.64	1.87	1.84	1.96	1.98	1.88	1.93	1.83	1.72	1.62	1.57	1.54	
18	1.64	2.08	2.01	2.04	1.97	1.87	1.90	1.83	1.73	1.66	1.57	1.53	
19	1.65	1.95	1.94	1.98	1.96	1.87	1.89	1.82	1.73	1.67	1.57	1.53	
20	1.65	1.98	1.88	1.95	1.94	2.04	1.90	1.82	1.72	1.67	1.57	1.53	
21	1.65	1.93	1.85	1.93	1.92	2.03	1.87	1.81	1.72	1.68	1.57	1.53	
22	1.65	1.90	1.84	2.03	1.91	1.99	1.85	1.80	1.72	1.69	1.57	1.53	
23	1.64	1.86	1.82	2.30	1.94	1.97	1.89	1.80	1.72	1.66	1.57	1.53	
24	1.64	1.96	1.80	2.13	1.90	2.00	1.93	1.79	1.72	1.63	1.57	1.53	
25	1.64	1.93	1.80	2.08	1.89	1.96	1.93	1.81	1.71	1.59	1.57	1.53	
26	1.62	1.89	1.87	2.00	1.87	2.03	1.92	1.85	1.71	1.57	1.57	1.52	
27	1.62	1.85	2.02	1.98	1.86	2.13	1.94	1.85	1.72	1.57	1.57	1.52	
28	1.62	1.84	1.96	1.95	1.85	2.08	1.94	1.85	1.72	1.56	1.57	1.52	
29	1.62	1.84	1.92	1.99	1.84	2.03	1.92	1.84	1.71	1.56		1.52	
30	1.62	1.93	1.91	2.01	1.94	2.01	1.95	1.83	1.71	1.56		1.52	
31		1.88		1.98	2.01		1.99		1.71	1.56		1.52	
Mean	1.62	1.83	1.91	2.01	2.01	1.97	1.97	1.87	1.75	1.65	1.57	1.55	
Max	1.65	2.08	2.13	2.44	2.31	2.24	2.12	2.02	1.85	1.71	1.58	1.59	2.44
Min	1.57	1.62	1.80	1.85	1.84	1.86	1.85	1.79	1.71	1.56	1.55	1.52	1.52

Annual Max Momentary Gage Height 2.58 M (A.D), at 18.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.32 M (A.D)
Left Bank Elevation 5.20 M (A.D)
Right Bank Elevation 5.18 M (A.D), Drainage Area 116 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.07	0.14	1.26	1.80	10.84	2.78	3.06	3.48	1.35	0.36	0.05	0.07	
2	0.08	0.20	1.08	1.71	6.00	2.36	2.64	3.06	1.26	0.36	0.05	0.07	
3	0.10	0.26	0.99	3.20	5.44	1.94	2.92	2.64	1.08	0.30	0.05	0.07	
4	0.10	0.48	4.04	2.64	3.48	1.71	3.76	3.76	0.99	0.28	0.05	0.07	
5	0.09	0.48	1.94	1.62	5.72	1.71	2.36	2.92	0.90	0.28	0.05	0.07	
6	0.10	0.42	1.53	1.71	8.00	1.71	4.04	2.64	0.78	0.26	0.06	0.07	
7	0.10	0.30	1.35	1.35	14.76	1.44	3.20	2.22	0.78	0.26	0.08	0.09	
8	0.10	0.22	7.20	1.94	8.80	1.44	3.76	1.94	0.78	0.26	0.08	0.09	
9	0.14	0.26	2.92	22.28	5.44	1.80	4.88	1.62	0.72	0.26	0.07	0.07	
10	0.18	0.28	2.50	7.20	7.60	11.68	6.80	1.26	0.72	0.24	0.07	0.06	
11	0.18	0.26	2.92	4.88	5.72	4.88	6.00	1.17	0.66	0.24	0.07	0.06	
12	0.18	2.22	2.92	5.72	4.32	3.20	6.80	1.08	0.60	0.22	0.07	0.05	
13	0.18	2.22	2.36	4.32	5.72	2.64	4.88	1.17	0.54	0.22	0.07	0.05	
14	0.18	1.62	2.08	3.06	4.32	2.64	4.04	1.35	0.48	0.18	0.07	0.05	
15	0.18	1.26	1.62	2.92	3.20	2.08	3.20	1.26	0.48	0.18	0.07	0.05	
16	0.18	1.53	1.35	2.22	2.92	1.80	2.64	1.26	0.48	0.14	0.07	0.04	
17	0.18	1.53	1.26	2.64	2.92	1.62	2.22	1.17	0.42	0.14	0.07	0.04	
18	0.18	5.44	3.48	4.32	2.78	1.53	1.80	1.17	0.48	0.22	0.07	0.03	
19	0.20	2.50	2.36	2.92	2.64	1.53	1.71	1.08	0.48	0.24	0.07	0.03	
20	0.20	2.92	1.62	2.50	2.36	4.32	1.80	1.08	0.42	0.24	0.07	0.03	
21	0.20	2.22	1.35	2.22	2.08	4.04	1.53	0.99	0.42	0.26	0.07	0.03	
22	0.20	1.80	1.26	4.04	1.94	3.06	1.35	0.90	0.42	0.28	0.07	0.03	
23	0.18	1.44	1.08	14.20	2.36	2.78	1.71	0.90	0.42	0.22	0.07	0.03	
24	0.18	2.64	0.90	7.20	1.80	3.20	2.22	0.84	0.42	0.16	0.07	0.03	
25	0.18	2.22	0.90	5.44	1.71	2.64	2.22	0.99	0.36	0.09	0.07	0.03	
26	0.14	1.71	1.53	3.20	1.53	4.04	2.08	1.35	0.36	0.07	0.07	0.02	
27	0.14	1.35	3.76	2.92	1.44	7.20	2.36	1.35	0.42	0.07	0.07	0.02	
28	0.14	1.26	2.64	2.50	1.35	5.44	2.36	1.35	0.42	0.06	0.07	0.02	
29	0.14	1.26	2.08	3.06	1.26	4.04	2.08	1.26	0.36	0.06		0.02	
30	0.14	2.22	1.94	3.48	2.36	3.48	2.50	1.17	0.36	0.06		0.02	
31		1.62		2.92	3.48		3.06		0.36	0.06		0.02	
Total	4.54	44.28	64.22	132.13	134.29	94.73	95.98	48.43	18.72	6.27	1.87	1.43	646.89 CMSDAY
Mean	0.15	1.43	2.14	4.26	4.33	3.16	3.10	1.61	0.60	0.20	0.07	0.05	1.77 CMS
Max	0.20	5.44	7.20	22.28	14.76	11.68	6.80	3.76	1.35	0.36	0.08	0.09	22.28 CMS
Min	0.07	0.14	0.90	1.35	1.26	1.44	1.35	0.84	0.36	0.06	0.05	0.02	0.02 CMS
Runoff	0.392	3.826	5.549	11.416	11.603	8.185	8.293	4.184	1.617	0.542	0.162	0.124	55.891 MCM

Momentary Peak 31.60 CMS, at 2.58 M (A.D), at 18.00 Hours, on Jul 9, 2001

Runoff Yield 15.28 Liters/Second/Square KM, Momentary Peak Yield 272.414 Liters/Second/Square KM

WATER YEAR : 2001

PRACHIN BURI RIVER BASIN

Prachin Buri 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 and Lam Hanuman.

Ban Kabin Buri **Amphoe** Kabin Buri **Changwat** Prachin Buri

Drainage Area 7,502 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 5 meters from the top staff gage.

Elevation +11.410 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic 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 Float -

Rated by Current Meter 1941 - 1943, 1945, 1964 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

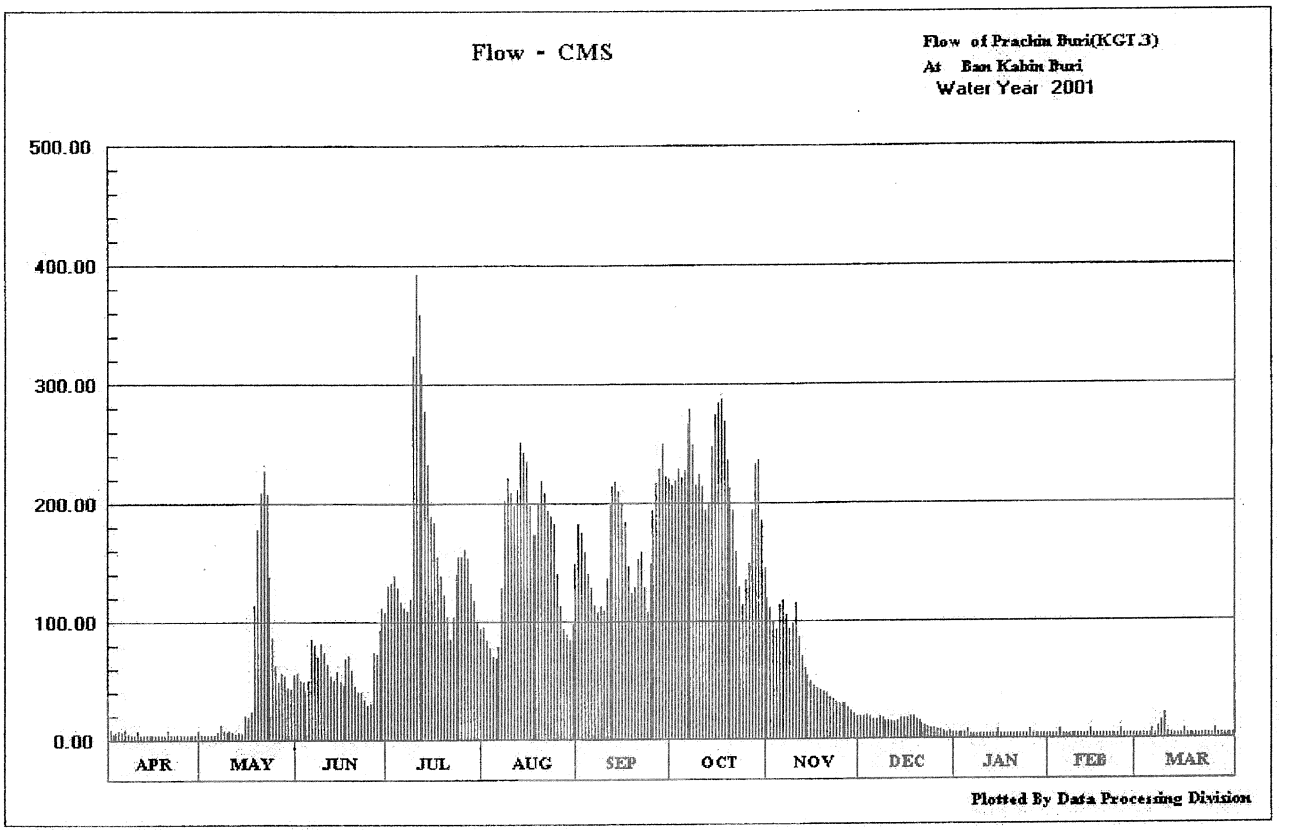
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 35 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.58	0.24	2.11	3.74	3.03	4.64	5.19	3.50	0.96	0.47	0.20	0.09	
2	0.47	0.27	1.94	3.78	2.77	4.52	5.24	3.35	1.01	0.45	0.13	0.07	
3	0.51	0.35	1.90	3.90	2.63	4.25	5.41	3.09	1.02	0.45	0.14	0.22	
4	0.55	0.33	1.69	3.70	2.46	3.94	5.28	2.98	0.96	0.43	0.12	0.22	
5	0.52	0.37	1.95	3.45	2.43	3.69	5.39	3.40	0.91	0.40	0.08	0.11	
6	0.58	0.48	2.82	3.35	2.65	3.39	6.02	3.47	0.90	0.37	0.09	0.08	
7	0.46	0.77	2.69	3.29	3.71	3.28	6.22	3.24	0.98	0.32	0.11	0.31	
8	0.39	0.57	2.46	3.51	4.96	3.37	5.74	2.99	0.92	0.36	0.10	0.67	
9	0.36	0.52	2.72	6.89	5.28	3.31	5.19	3.07	0.88	0.36	0.11	0.85	
10	0.31	0.45	2.53	7.87	5.08	3.85	5.31	3.43	0.87	0.36	0.08	1.07	
11	0.29	0.49	2.29	7.39	4.89	4.88	5.15	2.86	0.86	0.33	0.08	0.47	
12	0.24	0.45	2.04	6.66	5.12	5.16	4.82	2.44	0.84	0.32	0.05	0.35	
13	0.24	0.49	1.96	6.19	5.78	5.21	4.90	2.20	0.87	0.33	0.10	0.30	
14	0.23	0.47	2.12	5.47	5.64	5.10	5.72	2.03	0.92	0.33	0.10	0.24	
15	0.25	1.04	1.92	4.74	5.52	4.92	6.13	1.90	0.92	0.33	0.07	0.23	
16	0.26	1.00	1.85	4.65	4.89	4.66	6.29	1.81	0.93	0.33	0.08	0.17	
17	0.26	1.13	2.41	4.18	4.49	4.04	6.34	1.74	1.01	0.30	0.06	0.12	
18	0.24	3.39	2.48	3.90	4.48	3.60	6.04	1.71	0.96	0.29	0.07	0.14	
19	0.27	4.55	2.14	3.57	4.93	3.69	5.53	1.66	0.89	0.27	0.06	0.13	
20	0.32	5.09	1.81	3.19	5.24	4.14	5.14	1.60	0.87	0.26	0.05	0.11	
21	0.33	5.39	1.67	2.83	5.09	4.25	4.84	1.52	0.74	0.20	0.03	0.10	
22	0.26	5.05	1.66	3.22	4.82	3.69	4.24	1.45	0.72	0.26	0.08	0.08	
23	0.24	3.87	1.50	3.94	4.75	3.28	3.69	1.39	0.66	0.30	0.07	0.06	
24	0.23	2.86	1.32	4.19	4.63	4.09	3.42	1.35	0.61	0.25	0.06	0.04	
25	0.22	2.26	1.37	4.18	3.93	4.84	3.83	1.35	0.58	0.19	-0.01	0.05	
26	0.23	1.91	2.52	4.28	3.38	5.20	4.06	1.37	0.57	0.17	0.00	0.04	
27	0.28	2.10	2.49	4.15	3.02	5.41	4.84	1.23	0.55	0.16	-0.05	0.06	
28	0.34	2.05	2.98	3.77	2.90	5.76	5.46	1.16	0.52	0.09	-0.05	0.23	
29	0.29	1.77	3.35	3.48	2.77	5.30	5.54	1.08	0.47	0.20		0.33	
30	0.26	1.74	3.27	3.09	3.07	5.26	4.69	1.00	0.50	0.19		0.32	
31		2.08		3.02	4.09		4.02		0.46	0.25		0.29	
Mean	0.33	1.73	2.20	4.31	4.14	4.36	5.15	2.18	0.80	0.30	0.07	0.24	
Max	0.58	5.39	3.35	7.87	5.78	5.76	6.34	3.50	1.02	0.47	0.20	1.07	7.87
Min	0.22	0.24	1.32	2.83	2.43	3.28	3.42	1.00	0.46	0.09	-0.05	0.04	-0.05

Annual Max Momentary Gage Height 7.91 M (MSL), at 6.00 Hours, on Jul 10, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed -0.99 M (MSL)
Left Bank Elevation 9.73 M (MSL)



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.6	3.6	58.4	132.0	96.5	184.4	217.4	120.0	19.8	7.4	3.0	1.9	
2	7.4	4.1	51.6	134.0	84.8	177.2	220.4	112.5	21.3	7.0	2.3	1.7	
3	8.2	5.3	50.0	140.0	79.2	161.0	230.6	99.5	21.6	7.0	2.4	3.3	
4	9.0	5.0	42.7	130.0	72.4	142.4	222.8	94.0	19.8	6.6	2.2	3.3	
5	8.4	5.6	52.0	117.5	71.2	129.5	229.4	115.0	18.3	6.0	1.8	2.1	
6	9.6	7.6	86.8	112.5	80.0	114.5	268.3	118.5	18.0	5.6	1.9	1.8	
7	7.2	14.2	81.6	109.5	130.5	109.0	281.3	107.0	20.4	4.8	2.1	4.7	
8	5.9	9.4	72.4	120.5	203.6	113.5	250.4	94.5	18.6	5.4	2.0	11.8	
9	5.4	8.4	82.8	325.3	222.8	110.5	217.4	98.5	17.4	5.4	2.1	16.5	
10	4.7	7.0	75.2	393.9	210.8	137.5	224.6	116.5	17.1	5.4	1.8	23.1	
11	4.4	7.8	65.6	360.3	199.4	198.8	215.0	88.4	16.8	5.0	1.8	7.4	
12	3.6	7.0	55.6	309.9	213.2	215.6	195.2	71.6	16.2	4.8	1.5	5.3	
13	3.6	7.8	52.4	279.3	252.8	218.6	200.0	62.0	17.1	5.0	2.0	4.5	
14	3.5	7.4	58.8	234.2	244.4	212.0	249.2	55.2	18.6	5.0	2.0	3.6	
15	3.7	22.2	50.8	190.4	237.2	201.2	275.4	50.0	18.6	5.0	1.7	3.5	
16	3.9	21.0	48.3	185.0	199.4	185.6	285.8	46.8	18.9	5.0	1.8	2.7	
17	3.9	24.9	70.4	156.8	175.4	148.4	289.1	44.4	21.3	4.5	1.6	2.2	
18	3.6	114.5	73.2	140.0	174.8	125.0	269.6	43.4	19.8	4.4	1.7	2.4	
19	4.1	179.0	59.6	123.5	201.8	129.5	237.8	41.6	17.7	4.1	1.6	2.3	
20	4.8	211.4	46.8	104.5	220.4	154.4	214.4	39.5	17.1	3.9	1.5	2.1	
21	5.0	229.4	42.0	87.2	211.4	161.0	196.4	36.7	13.5	3.0	1.3	2.0	
22	3.9	209.0	41.6	106.0	195.2	129.5	160.4	34.5	13.0	3.9	1.8	1.8	
23	3.6	138.5	36.0	142.4	191.0	109.0	129.5	32.7	11.5	4.5	1.7	1.6	
24	3.5	88.4	30.6	157.4	183.8	151.4	116.0	31.5	10.3	3.7	1.6	1.4	
25	3.3	64.4	32.1	156.8	141.8	196.4	136.5	31.5	9.6	2.9	0.9	1.5	
26	3.5	50.4	74.8	162.8	114.0	218.0	149.6	32.1	9.4	2.7	1.0	1.4	
27	4.2	58.0	73.6	155.0	96.0	230.6	196.4	27.9	9.0	2.6	0.5	1.6	
28	5.1	56.0	94.0	133.5	90.0	251.6	233.6	25.8	8.4	1.9	0.5	3.5	
29	4.4	45.5	112.5	119.0	84.8	224.0	238.4	23.4	7.4	3.0		5.0	
30	3.9	44.4	108.5	99.5	98.5	221.6	187.4	21.0	8.0	2.9		4.8	
31		57.2		96.0	151.4		147.2		7.2	3.7		4.4	
Total	154.9	1714.4	1880.7	5214.7	4928.5	5061.7	6685.5	1916.0	481.7	142.1	48.1	135.2	28363.5 CMSDAY
Mean	5.2	55.3	62.7	168.2	159.0	168.7	215.7	63.9	15.5	4.6	1.7	4.4	77.7 CMS
Max	9.6	229.4	112.5	393.9	252.8	251.6	289.1	120.0	21.6	7.4	3.0	23.1	393.9 CMS
Min	3.3	3.6	30.6	87.2	71.2	109.0	116.0	21.0	7.2	1.9	0.5	1.4	0.5 CMS
Runoff	13.38	148.12	162.49	450.55	425.82	437.33	577.63	165.54	41.62	12.28	4.16	11.68	2450.61 MCM

Momentary Peak 396.70 CMS, at 7.91 M (MSL), at 6.00 Hours, on Jul 10, 2001

Runoff Yield 10.36 Liters/Second/Square KM, Momentary Peak Yield 52.879 Liters/Second/Square KM

WATER YEAR : 2001

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** Saa Kaeo

Drainage Area 2,279 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 +11.308 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 Float -

Rated by Current Meter 1972 - 1987, 1989 to date.

Stability of Channel Regimes Stable.

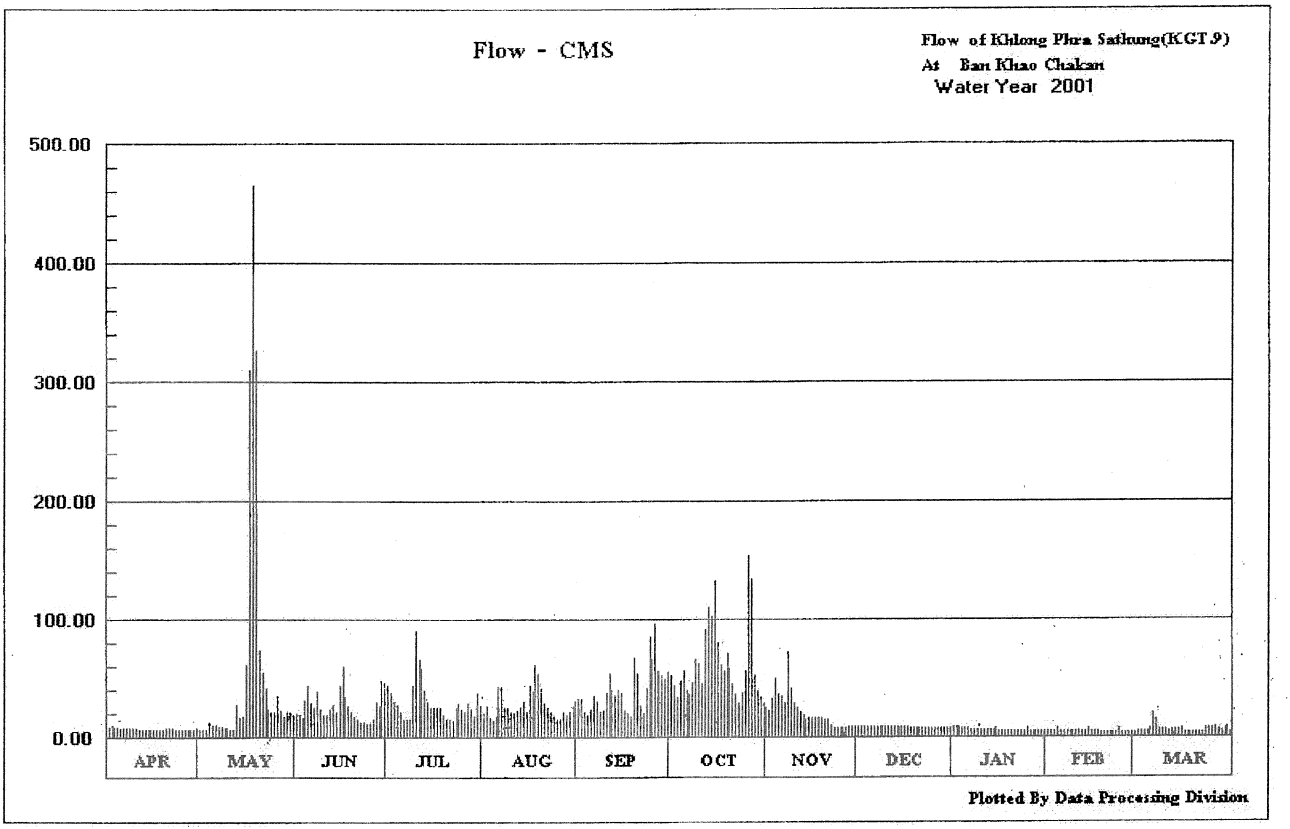
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.73	3.68	3.93	4.27	3.93	4.10	4.37	4.00	3.72	3.73	3.63	3.61	
2	3.76	3.67	3.90	4.18	4.02	4.11	4.27	3.96	3.72	3.72	3.63	3.65	
3	3.73	3.67	3.87	4.06	3.87	3.95	4.12	4.11	3.72	3.72	3.63	3.64	
4	3.72	3.80	4.09	4.03	3.82	3.91	4.31	4.35	3.72	3.71	3.63	3.63	
5	3.71	3.75	4.27	3.94	3.89	3.97	4.42	4.16	3.72	3.70	3.63	3.64	
6	3.70	3.75	4.05	3.85	4.25	4.14	4.21	4.14	3.72	3.69	3.63	3.63	
7	3.70	3.73	3.99	3.84	4.24	4.07	4.16	4.05	3.72	3.68	3.63	3.92	
8	3.69	3.73	4.19	3.84	4.00	3.95	4.30	4.63	3.72	3.68	3.63	3.85	
9	3.69	3.70	3.97	4.26	3.99	3.96	4.55	4.23	3.72	3.67	3.63	3.67	
10	3.68	3.69	3.91	4.83	3.95	4.17	4.50	4.05	3.72	3.66	3.63	3.67	
11	3.68	3.68	3.90	4.55	3.93	4.40	4.28	3.99	3.72	3.66	3.63	3.67	
12	3.68	3.68	3.97	4.45	3.96	4.21	4.85	3.95	3.72	3.66	3.63	3.65	
13	3.67	4.03	4.03	4.21	3.99	4.14	5.05	3.90	3.72	3.66	3.63	3.68	
14	3.67	3.86	3.95	4.07	4.07	4.21	4.97	3.85	3.72	3.66	3.63	3.68	
15	3.67	3.88	4.26	4.00	3.95	4.18	5.27	3.86	3.72	3.65	3.63	3.66	
16	3.67	4.48	4.47	4.00	4.27	3.96	4.72	3.86	3.72	3.65	3.63	3.64	
17	3.68	6.65	4.12	4.00	4.20	3.93	4.49	3.87	3.72	3.65	3.63	3.60	
18	3.68	7.63	4.01	3.99	4.48	3.89	4.43	3.87	3.71	3.64	3.62	3.60	
19	3.67	6.76	3.95	3.90	4.39	4.57	4.61	3.86	3.71	3.64	3.62	3.56	
20	3.67	4.65	3.89	3.85	4.22	4.39	4.45	3.85	3.71	3.64	3.62	3.57	
21	3.69	4.41	3.84	3.84	4.04	4.02	4.28	3.84	3.70	3.64	3.62	3.59	
22	3.69	4.22	3.80	3.82	3.99	3.93	4.16	3.75	3.70	3.64	3.61	3.59	
23	3.68	3.98	3.80	4.00	3.95	4.22	4.04	3.70	3.70	3.64	3.61	3.59	
24	3.68	3.95	3.79	4.04	3.89	4.78	4.18	3.70	3.70	3.64	3.61	3.70	
25	3.68	3.94	3.78	3.98	3.85	4.55	4.43	3.70	3.70	3.64	3.61	3.69	
26	3.68	4.14	3.84	3.94	3.84	4.90	5.45	3.71	3.70	3.64	3.61	3.70	
27	3.68	3.96	4.06	4.04	3.95	4.43	5.28	3.71	3.70	3.64	3.61	3.72	
28	3.67	3.89	4.01	3.97	3.90	4.37	4.37	3.72	3.69	3.63	3.61	3.67	
29	3.67	3.94	4.32	3.89	3.95	4.33	4.19	3.72	3.69	3.63		3.65	
30	3.67	3.94	4.30	4.17	4.02	4.41	4.12	3.74	3.69	3.63		3.69	
31		3.91		4.01	4.07		4.04		3.69	3.63		3.72	
Mean	3.69	4.22	4.01	4.06	4.03	4.21	4.48	3.93	3.71	3.66	3.62	3.66	
Max	3.76	7.63	4.47	4.83	4.48	4.90	5.45	4.63	3.72	3.73	3.63	3.92	7.63
Min	3.67	3.67	3.78	3.82	3.82	3.89	4.04	3.70	3.69	3.63	3.61	3.56	3.56

Annual Max Momentary Gage Height 7.64 M (A.D), at 9.00 Hours, on May 18, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.18 M (A.D)
Left Bank Elevation 9.63 M (A.D)
Right Bank Elevation 11.00 M (A.D), Drainage Area 2279 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.50	8.20	22.10	45.90	22.10	34.00	53.60	27.00	10.00	10.50	6.20	5.40	
2	12.00	7.80	20.00	39.60	28.40	34.70	45.90	24.20	10.00	10.00	6.20	7.00	
3	10.50	7.80	18.20	31.20	18.20	23.50	35.40	34.70	10.00	10.00	6.20	6.60	
4	10.00	14.00	33.30	29.10	15.20	20.70	48.80	52.00	10.00	9.50	6.20	6.20	
5	9.50	11.50	45.90	22.80	19.40	24.90	57.60	38.20	10.00	9.00	6.20	6.60	
6	9.00	11.50	30.50	17.00	44.50	36.80	41.70	36.80	10.00	8.60	6.20	6.20	
7	9.00	10.50	26.30	16.40	43.80	31.90	38.20	30.50	10.00	8.20	6.20	21.40	
8	8.60	10.50	40.30	16.40	27.00	23.50	48.00	74.40	10.00	8.20	6.20	17.00	
9	8.60	9.00	24.90	45.20	26.30	24.20	68.00	43.10	10.00	7.80	6.20	7.80	
10	8.20	8.60	20.70	91.70	23.50	38.90	64.00	30.50	10.00	7.40	6.20	7.80	
11	8.20	8.20	20.00	68.00	22.10	56.00	46.60	26.30	10.00	7.40	6.20	7.80	
12	8.20	8.20	24.90	60.00	24.20	41.70	93.50	23.50	10.00	7.40	6.20	7.00	
13	7.80	29.10	29.10	41.70	26.30	36.80	112.00	20.00	10.00	7.40	6.20	8.20	
14	7.80	17.60	23.50	31.90	31.90	41.70	104.30	17.00	10.00	7.40	6.20	8.20	
15	7.80	18.80	45.20	27.00	23.50	39.60	134.70	17.60	10.00	7.00	6.20	7.40	
16	7.80	62.40	61.60	27.00	45.90	24.20	81.80	17.60	10.00	7.00	6.20	6.60	
17	8.20	311.50	35.40	27.00	41.00	22.10	63.20	18.20	10.00	7.00	6.20	5.00	
18	8.20	466.80	27.70	26.30	62.40	19.40	58.40	18.20	9.50	6.60	5.80	5.00	
19	7.80	328.00	23.50	20.00	55.20	69.60	72.80	17.60	9.50	6.60	5.80	3.80	
20	7.80	76.00	19.40	17.00	42.40	55.20	60.00	17.00	9.50	6.60	5.80	4.10	
21	8.60	56.80	16.40	16.40	29.80	28.40	46.60	16.40	9.00	6.60	5.80	4.70	
22	8.60	42.40	14.00	15.20	26.30	22.10	38.20	11.50	9.00	6.60	5.40	4.70	
23	8.20	25.60	14.00	27.00	23.50	42.40	29.80	9.00	9.00	6.60	5.40	4.70	
24	8.20	23.50	13.50	29.80	19.40	87.20	39.60	9.00	9.00	6.60	5.40	9.00	
25	8.20	22.80	13.00	25.60	17.00	68.00	58.40	9.00	9.00	6.60	5.40	8.60	
26	8.20	36.80	16.40	22.80	16.40	98.00	155.00	9.50	9.00	6.60	5.40	9.00	
27	8.20	24.20	31.20	29.80	23.50	58.40	135.80	9.50	9.00	6.60	5.40	10.00	
28	7.80	19.40	27.70	24.90	20.00	53.60	53.60	10.00	8.60	6.20	5.40	7.80	
29	7.80	22.80	49.60	19.40	23.50	50.40	40.30	10.00	8.60	6.20		7.00	
30	7.80	22.80	48.00	38.90	28.40	56.80	35.40	11.00	8.60	6.20		8.60	
31		20.70		27.70	31.90		29.80		8.60	6.20		10.00	
Total	257.10	1743.80	836.30	978.70	903.00	1264.70	1991.00	689.30	295.90	230.60	166.40	239.20	9596.00 CMSDAY
Mean	8.57	56.25	27.88	31.57	29.13	42.16	64.23	22.98	9.55	7.44	5.94	7.72	26.29 CMS
Max	12.00	466.80	61.60	91.70	62.40	98.00	155.00	74.40	10.00	10.50	6.20	21.40	466.80 CMS
Min	7.80	7.80	13.00	15.20	15.20	19.40	29.80	9.00	8.60	6.20	5.40	3.80	3.80 CMS
Runoff	22.213	150.664	72.256	84.560	78.019	109.270	172.022	59.556	25.566	19.924	14.377	20.667	829.095 MCM

Momentary Peak 468.40 CMS, at 7.64 M (A.D), at 9.00 Hours, on May 18, 2001
Runoff Yield 11.54 Liters/Second/Square KM, Momentary Peak Yield 205.529 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 2,523 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +23.741 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 10 meters from the automatic gage building.

Elevation +34.652 m. (M.S.L.)

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 Float -

Rated by Current Meter 1966 - 1996, 1998 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

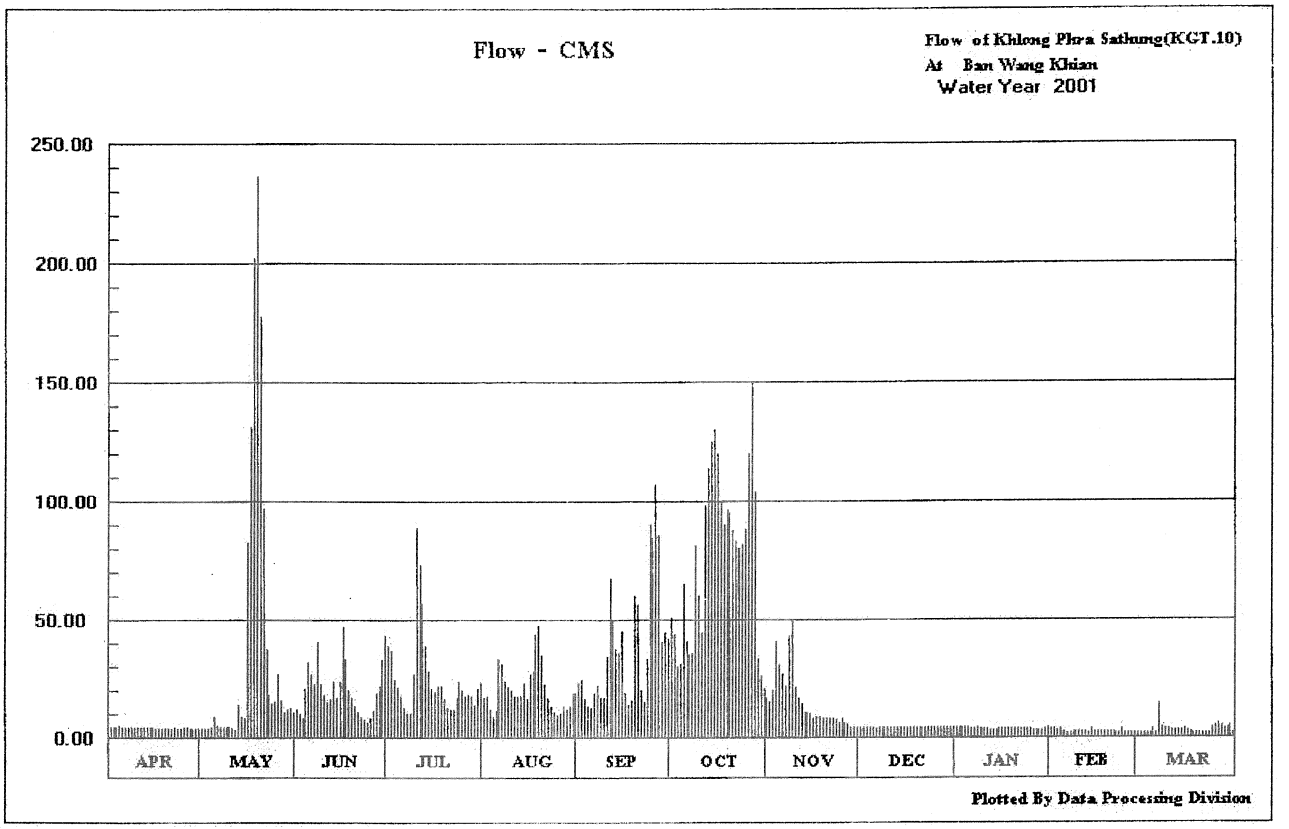
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the local weir during Mar. 9 - 31, 97 discharge estimeted by recession equation. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	29.63	29.62	29.80	30.19	29.88	29.98	30.33	29.88	29.64	29.64	29.62	29.46	
2	29.64	29.62	29.77	30.16	29.89	30.00	30.25	29.85	29.63	29.64	29.61	29.46	
3	29.64	29.61	29.74	30.00	29.80	29.87	30.07	29.93	29.63	29.64	29.59	29.46	
4	29.66	29.65	29.94	29.95	29.75	29.82	30.09	30.21	29.63	29.64	29.58	29.45	
5	29.64	29.75	30.10	29.89	29.79	29.81	30.48	30.08	29.63	29.64	29.57	29.45	
6	29.64	29.66	30.03	29.81	30.11	29.91	30.21	30.03	29.62	29.62	29.55	29.45	
7	29.64	29.64	29.97	29.77	30.09	29.96	30.14	29.96	29.65	29.62	29.55	29.50	
8	29.64	29.64	30.21	29.77	29.99	29.88	30.15	30.24	29.64	29.63	29.57	29.84	
9	29.64	29.64	29.97	30.03	29.95	29.88	30.65	30.32	29.64	29.62	29.58	29.63	
10	29.64	29.63	29.90	30.72	29.93	30.13	30.43	29.95	29.65	29.62	29.58	29.61	
11	29.63	29.61	29.85	30.57	29.89	30.51	30.26	29.88	29.65	29.62	29.58	29.61	
12	29.63	29.60	29.87	30.40	29.89	30.32	30.57	29.84	29.64	29.60	29.57	29.60	
13	29.63	29.83	29.99	30.19	29.89	30.17	31.05	29.78	29.64	29.60	29.56	29.59	
14	29.64	29.75	29.88	30.05	29.98	30.15	31.35	29.78	29.64	29.60	29.56	29.59	
15	29.64	29.73	29.99	29.94	29.87	30.27	31.49	29.77	29.64	29.61	29.57	29.59	
16	29.62	30.05	30.29	29.92	30.03	29.91	31.21	29.74	29.65	29.61	29.57	29.58	
17	29.62	31.52	30.11	29.96	30.05	29.83	30.62	29.75	29.65	29.61	29.58	29.60	
18	29.62	33.07	29.93	29.96	30.25	29.86	30.30	29.75	29.65	29.62	29.58	29.58	
19	29.62	33.73	29.88	29.87	30.30	30.43	30.51	29.74	29.64	29.61	29.58	29.56	
20	29.61	32.57	29.82	29.81	30.14	30.39	30.48	29.74	29.64	29.61	29.58	29.54	
21	29.61	30.53	29.78	29.80	29.97	29.93	30.21	29.74	29.64	29.62	29.57	29.51	
22	29.63	30.17	29.75	29.80	29.88	29.85	30.07	29.74	29.64	29.62	29.56	29.49	
23	29.62	29.90	29.72	29.88	29.82	30.11	29.95	29.72	29.64	29.62	29.54	29.48	
24	29.62	29.84	29.70	29.99	29.78	30.73	30.03	29.70	29.64	29.61	29.54	29.47	
25	29.64	29.85	29.73	29.93	29.76	30.68	30.25	29.73	29.64	29.60	29.53	29.64	
26	29.64	30.03	29.79	29.89	29.77	30.89	31.21	29.70	29.64	29.60	29.51	29.66	
27	29.62	29.86	29.91	29.90	29.82	30.69	31.96	29.69	29.64	29.60	29.49	29.69	
28	29.61	29.78	29.96	29.89	29.80	30.21	30.73	29.65	29.64	29.60	29.48	29.66	
29	29.62	29.80	30.11	29.83	29.82	30.26	30.11	29.64	29.64	29.60		29.62	
30	29.62	29.81	30.24	29.94	29.91	30.23	30.02	29.64	29.64	29.62		29.63	
31		29.78		29.98	29.91		29.94		29.64	29.63		29.67	
Mean	29.63	30.17	29.92	29.99	29.93	30.16	30.49	29.84	29.64	29.62	29.56	29.57	
Max	29.66	33.73	30.29	30.72	30.30	30.89	31.96	30.32	29.65	29.64	29.62	29.84	33.73
Min	29.61	29.60	29.70	29.77	29.75	29.81	29.94	29.64	29.62	29.60	29.48	29.45	29.45

Annual Max Momentary Gage Height 33.80 M (MSL), at 18.00 Hours, on May 19, 2001
Zero Gage at Bottom Elevation 23.74 M (MSL), River Bed 24.08 M (MSL)
Left Bank Elevation 35.79 M (MSL)
Right Bank Elevation 35.78 M (MSL), Drainage Area 2523 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.90	4.60	12.50	39.75	17.70	24.20	51.35	17.70	5.20	5.20	4.60	0.90	
2	5.20	4.60	10.85	37.50	18.35	25.50	44.50	15.75	4.90	5.20	4.30	0.90	
3	5.20	4.30	9.20	25.50	12.50	17.05	30.75	20.95	4.90	5.20	3.75	0.90	
4	5.80	5.50	21.60	22.25	9.75	13.80	32.25	41.30	4.90	5.20	3.50	0.75	
5	5.20	9.75	33.00	18.35	11.95	13.15	65.60	31.50	4.90	5.20	3.25	0.75	
6	5.20	5.80	27.75	13.15	33.75	19.65	41.30	27.75	4.60	4.60	2.75	0.75	
7	5.20	5.20	23.55	10.85	32.25	22.90	36.00	22.90	5.50	4.60	2.75	1.50	
8	5.20	5.20	41.30	10.85	24.85	17.70	36.75	43.70	5.20	4.90	3.25	15.10	
9	5.20	5.20	23.55	27.75	22.25	17.70	82.25	50.40	5.20	4.60	3.50	4.90	
10	5.20	4.90	19.00	89.60	20.95	35.25	60.85	22.25	5.50	4.60	3.50	4.30	
11	4.90	4.30	15.75	74.15	18.35	68.45	45.30	17.70	5.50	4.60	3.50	4.30	
12	4.90	4.00	17.05	58.00	18.35	50.40	99.01	15.10	5.20	4.00	3.25	4.00	
13	4.90	14.45	24.85	39.75	18.35	38.25	114.85	11.40	5.20	4.00	3.00	3.75	
14	5.20	9.75	17.70	29.25	24.20	36.75	125.80	11.40	5.20	4.00	3.00	3.75	
15	5.20	8.65	24.85	21.60	17.05	46.10	131.12	10.85	5.20	4.30	3.25	3.75	
16	4.60	83.45	47.70	20.30	27.75	19.65	120.57	9.20	5.50	4.30	3.25	3.50	
17	4.60	132.30	33.75	22.90	29.25	14.45	100.66	9.75	5.50	4.30	3.50	4.00	
18	4.60	202.80	20.95	22.90	44.50	16.40	90.70	9.75	5.50	4.60	3.50	3.50	
19	4.60	237.32	17.70	17.05	48.50	60.85	97.03	9.20	5.20	4.30	3.50	3.00	
20	4.30	178.22	13.80	13.15	36.00	57.05	96.08	9.20	5.20	4.30	3.50	2.50	
21	4.30	97.69	11.40	12.50	23.55	20.95	88.09	9.20	5.20	4.60	3.25	1.75	
22	4.90	38.25	9.75	12.50	17.70	15.75	84.03	9.20	5.20	4.60	3.00	1.35	
23	4.60	19.00	8.10	17.70	13.80	33.75	80.60	8.10	5.20	4.60	2.50	1.20	
24	4.60	15.10	7.00	24.85	11.40	90.65	82.87	7.00	5.20	4.30	2.50	1.05	
25	5.20	15.75	8.65	20.95	10.30	85.40	89.25	8.65	5.20	4.00	2.25	5.20	
26	5.20	27.75	11.95	18.35	10.85	107.45	120.57	7.00	5.20	4.00	1.75	5.80	
27	4.60	16.40	19.65	19.00	13.80	86.45	150.68	6.70	5.20	4.00	1.35	6.70	
28	4.30	11.40	22.90	18.35	12.50	41.30	104.29	5.50	5.20	4.00	1.20	5.80	
29	4.60	12.50	33.75	14.45	13.80	45.30	33.75	5.20	5.20	4.00		4.60	
30	4.60	13.15	43.70	21.60	19.65	42.90	27.00	5.20	5.20	4.60		4.90	
31		11.40		24.20	19.65		21.60		5.20	4.90		6.10	
Total	147.00	1208.68	633.25	819.05	653.60	1185.15	2385.45	479.50	161.20	139.60	86.20	111.25	8009.93 CMSDAY
Mean	4.90	38.99	21.11	26.42	21.08	39.51	76.95	15.98	5.20	4.50	3.08	3.59	21.95 CMS
Max	5.80	237.32	47.70	89.60	48.50	107.45	150.68	50.40	5.50	5.20	4.60	15.10	237.32 CMS
Min	4.30	4.00	7.00	10.85	9.75	13.15	21.60	5.20	4.60	4.00	1.20	0.75	0.75 CMS
Runoff	12.701	104.430	54.713	70.766	56.471	102.397	206.103	41.429	13.928	12.061	7.448	9.612	692.058 MCM

Momentary Peak 241.10 CMS, at 33.80 M (MSL), at 18.00 Hours, on May 19, 2001
Runoff Yield 8.70 Liters/Second/Square KM, Momentary Peak Yield 95.561 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,540 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 Float -

Rated by Current Meter 1966 to date.

Stability of Channel Regimes Fairly stable.

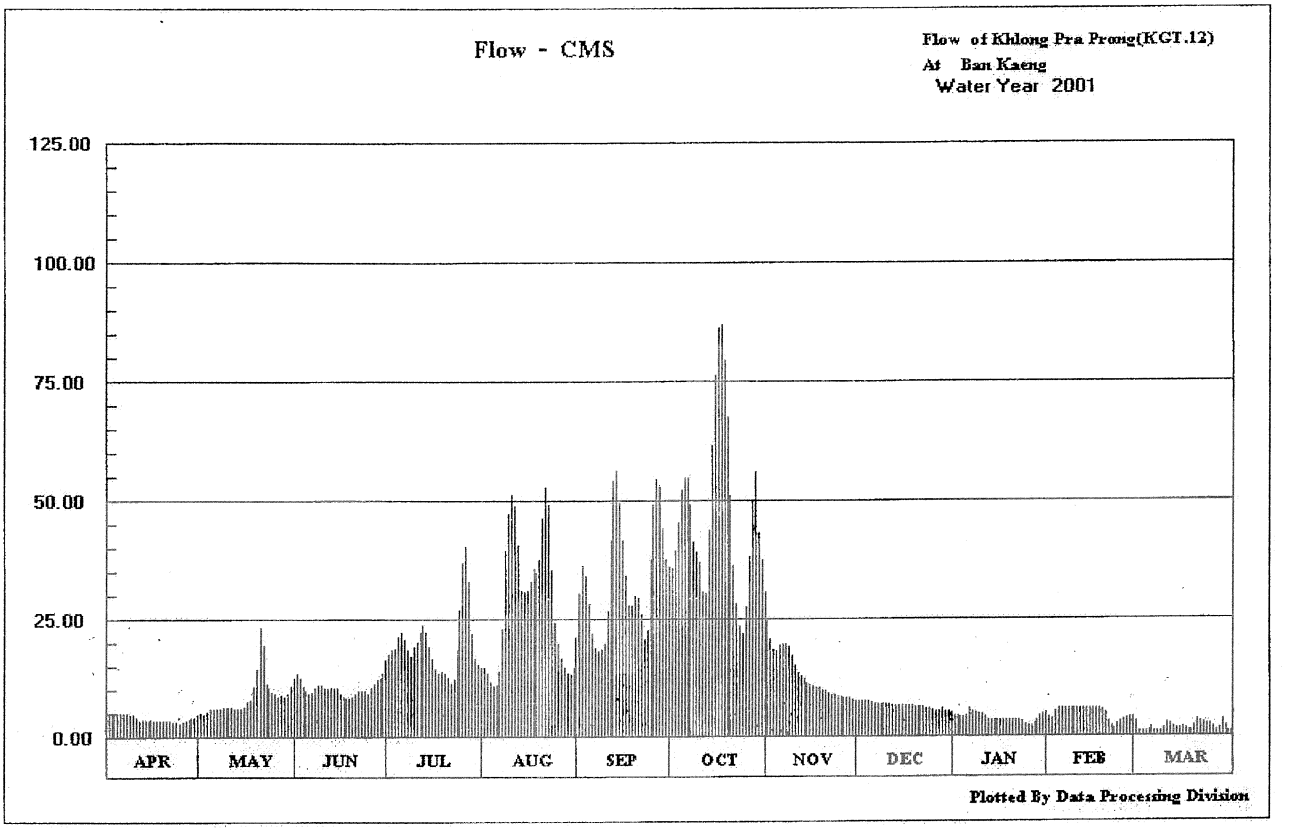
Overbank Flow Conditions No overbank flow.

General Description Records fair. The concrete weir situated about 7 kilometers downstream from the gage site. Stage-discharge relation defined by 30 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.20	2.18	2.70	2.86	2.74	3.32	3.50	3.13	2.40	2.14	2.09	2.00	
2	2.20	2.15	2.64	2.90	2.69	3.52	3.63	2.98	2.40	2.12	2.08	1.70	
3	2.20	2.21	2.55	2.91	2.60	3.45	3.82	2.89	2.39	2.10	2.22	1.62	
4	2.20	2.28	2.51	3.01	2.55	3.25	4.05	2.88	2.39	2.09	2.28	1.58	
5	2.20	2.30	2.48	3.04	2.56	3.03	4.14	2.93	2.38	2.13	2.29	1.56	
6	2.20	2.30	2.49	2.98	2.71	2.91	4.14	2.95	2.36	2.30	2.30	1.56	
7	2.19	2.30	2.53	2.89	3.07	2.88	3.95	2.95	2.36	2.21	2.30	1.57	
8	2.17	2.31	2.56	2.85	3.63	2.90	3.69	2.92	2.36	2.19	2.30	1.60	
9	2.16	2.31	2.56	2.92	3.89	2.94	3.62	2.84	2.36	2.17	2.30	1.63	
10	2.11	2.31	2.54	2.96	4.02	3.20	3.54	2.76	2.35	2.15	2.30	1.79	
11	2.05	2.32	2.54	3.04	3.94	3.70	3.33	2.70	2.35	2.09	2.30	1.98	
12	2.03	2.30	2.54	3.11	3.67	4.12	3.32	2.66	2.34	2.05	2.30	1.93	
13	2.03	2.30	2.53	3.05	3.35	4.19	3.77	2.63	2.34	2.04	2.30	1.85	
14	2.05	2.30	2.53	2.92	3.33	3.96	4.37	2.59	2.34	2.04	2.29	1.83	
15	2.06	2.31	2.48	2.82	3.35	3.70	4.79	2.56	2.34	2.04	2.27	1.82	
16	2.05	2.39	2.45	2.73	3.41	3.45	5.08	2.55	2.34	2.02	2.27	1.80	
17	2.03	2.41	2.42	2.70	3.50	3.24	5.09	2.54	2.34	2.02	2.27	1.80	
18	2.02	2.55	2.43	2.71	3.47	3.24	4.88	2.53	2.33	2.02	2.26	1.78	
19	2.03	2.73	2.45	2.70	3.56	3.30	4.54	2.51	2.32	2.02	2.18	1.78	
20	2.04	3.08	2.48	2.65	3.86	3.29	4.01	2.50	2.32	2.02	2.01	1.91	
21	2.03	2.93	2.50	2.59	4.07	3.18	3.52	2.48	2.31	2.02	1.92	2.03	
22	2.01	2.59	2.50	2.63	3.95	2.98	3.25	2.46	2.31	2.02	1.79	2.00	
23	1.99	2.54	2.50	2.89	3.49	3.06	3.10	2.46	2.30	1.99	1.94	1.96	
24	1.98	2.49	2.48	3.21	3.12	3.56	3.03	2.44	2.28	1.93	2.01	1.95	
25	1.99	2.47	2.53	3.54	2.94	3.95	3.23	2.44	2.24	1.90	2.02	1.93	
26	2.05	2.45	2.59	3.66	2.82	4.13	3.58	2.43	2.21	1.90	2.07	1.82	
27	2.08	2.46	2.63	3.41	2.74	4.07	3.98	2.43	2.22	1.97	2.10	1.75	
28	2.10	2.45	2.65	3.03	2.70	3.78	4.18	2.42	2.29	2.04	2.09	1.53	
29	2.11	2.47	2.70	2.82	2.68	3.56	3.75	2.41	2.23	2.12		1.38	
30	2.15	2.55	2.81	2.77	2.75	3.51	3.56	2.40	2.21	2.15		1.06	
31		2.65		2.75	2.99		3.33		2.19	2.19		0.95	
Mean	2.09	2.43	2.54	2.94	3.23	3.45	3.86	2.65	2.32	2.07	2.17	1.72	
Max	2.20	3.08	2.81	3.66	4.07	4.19	5.09	3.13	2.40	2.30	2.30	2.03	5.09
Min	1.98	2.15	2.42	2.59	2.55	2.88	3.03	2.40	2.19	1.90	1.79	0.95	0.95

Annual Max Momentary Gage Height 5.15 M (A.D), at 3.00 Hours, on Oct 7, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.53 M (A.D)
Left Bank Elevation 9.51 M (A.D)
Right Bank Elevation 8.23 M (A.D), Drainage Area 1540 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.50	5.30	14.00	18.00	15.00	30.60	36.00	24.90	8.00	4.90	4.40	3.50	
2	5.50	5.00	12.80	19.00	13.80	36.60	39.90	21.00	8.00	4.70	4.30	1.50	
3	5.50	5.60	11.00	19.25	12.00	34.50	45.60	18.75	7.85	4.50	5.70	1.18	
4	5.50	6.30	10.20	21.75	11.00	28.50	52.50	18.50	7.85	4.40	6.30	1.36	
5	5.50	6.50	9.60	22.50	11.20	22.25	55.20	19.75	7.70	4.80	6.40	1.62	
6	5.50	6.50	9.80	21.00	14.25	19.25	55.20	20.25	7.40	6.50	6.50	1.62	
7	5.40	6.50	10.60	18.75	23.25	18.50	49.50	20.25	7.40	5.60	6.50	1.49	
8	5.20	6.65	11.20	17.75	39.90	19.00	41.70	19.50	7.40	5.40	6.50	1.10	
9	5.10	6.65	11.20	19.50	47.70	20.00	39.60	17.50	7.40	5.20	6.50	1.22	
10	4.60	6.65	10.80	20.50	51.60	27.00	37.20	15.50	7.25	5.00	6.50	1.86	
11	4.00	6.80	10.80	22.50	49.20	42.00	30.90	14.00	7.25	4.40	6.50	3.30	
12	3.80	6.50	10.80	24.30	41.10	54.60	30.60	13.20	7.10	4.00	6.50	2.80	
13	3.80	6.50	10.60	22.75	31.50	56.70	44.10	12.60	7.10	3.90	6.50	2.20	
14	4.00	6.50	10.60	19.50	30.90	49.80	62.10	11.80	7.10	3.90	6.40	2.08	
15	4.10	6.65	9.60	17.00	31.50	42.00	76.65	11.20	7.10	3.90	6.20	2.02	
16	4.00	7.85	9.00	14.75	33.30	34.50	86.80	11.00	7.10	3.70	6.20	1.90	
17	3.80	8.20	8.40	14.00	36.00	28.20	87.15	10.80	7.10	3.70	6.20	1.90	
18	3.70	11.00	8.60	14.25	35.10	28.20	79.80	10.60	6.95	3.70	6.10	1.82	
19	3.80	14.75	9.00	14.00	37.80	30.00	67.90	10.20	6.80	3.70	5.30	1.82	
20	3.90	23.50	9.60	13.00	46.80	29.70	51.30	10.00	6.80	3.70	3.60	2.60	
21	3.80	19.75	10.00	11.80	53.10	26.40	36.60	9.60	6.65	3.70	2.70	3.80	
22	3.60	11.80	10.00	12.60	49.50	21.00	28.50	9.20	6.65	3.70	1.86	3.50	
23	3.40	10.80	10.00	18.75	35.70	23.00	24.00	9.20	6.50	3.40	2.90	3.10	
24	3.30	9.80	9.60	27.30	24.60	37.80	22.25	8.80	6.30	2.80	3.60	3.00	
25	3.40	9.40	10.60	37.20	20.00	49.50	27.90	8.80	5.90	2.50	3.70	2.80	
26	4.00	9.00	11.80	40.80	17.00	54.90	38.40	8.60	5.60	2.50	4.20	2.02	
27	4.30	9.20	12.60	33.30	15.00	53.10	50.40	8.60	5.70	3.20	4.50	1.70	
28	4.50	9.00	13.00	22.25	14.00	44.40	56.40	8.40	6.40	3.90	4.40	2.01	
29	4.60	9.40	14.00	17.00	13.60	37.80	43.50	8.20	5.80	4.70		3.96	
30	5.00	11.00	16.75	15.75	15.25	36.30	37.80	8.00	5.60	5.00		2.60	
31		13.00		15.25	21.25		30.90		5.40	5.40		1.50	
Total	132.10	282.05	326.55	626.05	891.90	1036.10	1466.35	398.70	213.15	130.40	146.96	68.88	5719.19 CMSDAY
Mean	4.40	9.10	10.89	20.20	28.77	34.54	47.30	13.29	6.88	4.21	5.25	2.22	15.67 CMS
Max	5.50	23.50	16.75	40.80	53.10	56.70	87.15	24.90	8.00	6.50	6.50	3.96	87.15 CMS
Min	3.30	5.00	8.40	11.80	11.00	18.50	22.25	8.00	5.40	2.50	1.86	1.10	1.10 CMS
Runoff	11.413	24.369	28.214	54.091	77.060	89.519	126.693	34.448	18.416	11.267	12.697	5.951	494.138 MCM

Momentary Peak 89.25 CMS, at 5.15 M (A.D), at 3.00 Hours, on Oct 7, 2001

Runoff Yield 10.17 Liters/Second/Square KM, Momentary Peak Yield 57.955 Liters/Second/Square KM

WATER YEAR : 2001

PRACHIN BURI RIVER BASIN

Khlong Phra Prong at Ban Non Suk Phum, Prachin Buri (Kgt.13A)

Lat 13 - 54 - 29 N. **Long** 101 - 51 - 32 E.

Location on right bank about 21 kilometers upstream from station Kgt.13.

Ban Non Suk Phum **Amphoe** Kabin Buri **Changwat** Prachin Buri

Drainage Area 5,347 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 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 mean of 5 readings.

Period of Available Gage Records 1997 to date.

Rating Operation

Period of Rating 1999 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable.

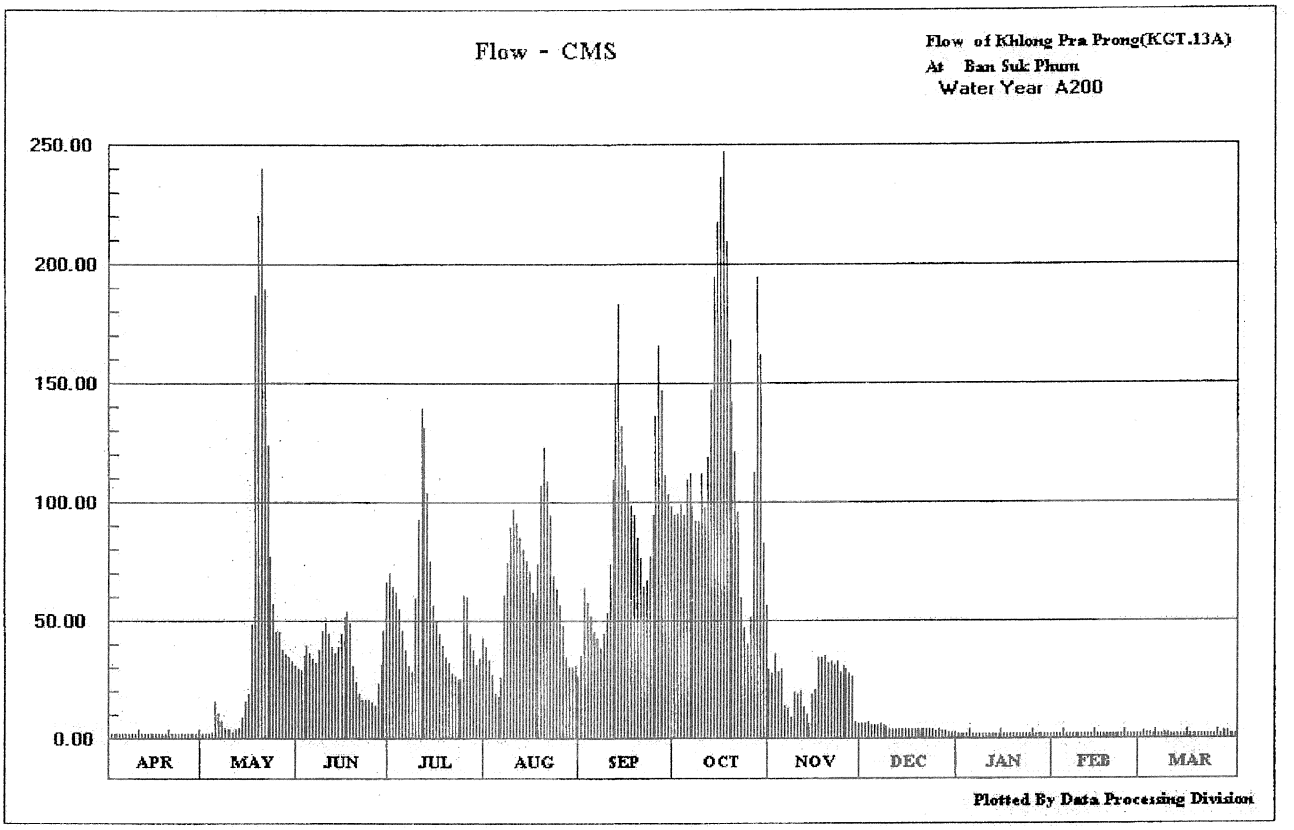
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 31 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.52	2.52	4.37	6.06	4.84	4.66	6.76	4.40	3.02	2.60	2.24	2.59	
2	2.50	2.52	4.36	5.87	4.56	5.86	6.79	4.29	3.04	2.58	2.26	2.72	
3	2.50	2.52	4.67	5.79	4.26	5.64	6.88	4.69	3.06	2.56	2.28	2.65	
4	2.52	2.62	4.88	5.57	3.86	5.44	6.77	4.32	3.01	2.50	2.27	2.62	
5	2.54	3.65	4.72	5.20	3.78	5.18	7.11	4.39	3.01	2.44	2.32	2.53	
6	2.55	3.31	4.60	4.80	4.20	5.04	7.16	3.55	3.01	2.42	2.30	2.41	
7	2.56	3.14	4.52	4.45	5.75	4.83	6.86	3.46	3.02	2.52	2.28	2.55	
8	2.57	2.88	4.80	4.33	6.21	5.12	6.71	3.22	3.01	2.37	2.28	2.53	
9	2.54	2.80	5.21	5.71	6.65	5.50	6.71	3.87	2.93	2.45	2.26	2.66	
10	2.50	2.74	5.32	6.72	6.83	6.18	7.17	3.85	2.80	2.37	2.23	2.64	
11	2.50	2.62	5.12	7.71	6.69	7.11	6.85	3.91	2.78	2.37	2.25	2.36	
12	2.49	2.75	4.86	7.55	6.52	7.93	7.30	3.51	2.79	2.35	2.28	2.34	
13	2.49	2.86	4.73	7.00	6.38	8.59	7.86	3.30	2.80	2.34	2.31	2.46	
14	2.48	3.20	4.84	6.23	6.22	7.57	8.81	3.05	2.80	2.36	2.34	2.38	
15	2.48	3.65	5.14	5.60	6.09	7.24	9.25	3.86	2.80	2.36	2.34	2.33	
16	2.47	3.85	5.42	5.37	5.78	7.03	9.57	3.96	2.79	2.34	2.35	2.35	
17	2.47	5.29	5.52	5.13	5.68	6.86	9.75	4.64	2.79	2.38	2.36	2.33	
18	2.46	8.66	5.33	4.87	6.18	6.77	9.10	4.64	2.79	2.38	2.34	2.21	
19	2.46	9.30	4.46	4.65	7.06	6.53	8.29	4.66	2.79	2.38	2.36	2.27	
20	2.46	9.63	4.10	4.52	7.39	6.26	7.77	4.51	2.79	2.39	2.42	2.18	
21	2.46	8.71	3.84	4.28	7.10	5.87	7.35	4.55	2.78	2.40	2.43	2.15	
22	2.46	7.40	3.72	4.24	6.77	5.95	6.80	4.49	2.78	2.42	2.37	2.33	
23	2.45	6.30	3.70	4.18	6.02	6.29	5.70	4.53	2.78	2.38	2.33	2.32	
24	2.45	5.62	3.70	4.17	5.84	6.76	5.24	4.32	2.76	2.38	2.33	2.32	
25	2.47	5.16	3.63	5.74	5.60	7.65	4.92	4.46	2.74	2.35	2.35	2.32	
26	2.49	5.18	3.52	5.73	5.28	8.24	5.42	4.39	2.72	2.30	2.38	2.42	
27	2.51	4.78	4.06	5.15	4.64	7.87	7.18	4.30	2.71	2.28	2.41	2.57	
28	2.54	4.70	4.48	4.79	4.41	7.15	8.81	4.24	2.68	2.46	2.42	2.68	
29	2.50	4.62	5.21	4.48	4.42	6.98	8.16	3.07	2.62	2.45		2.68	
30	2.49	4.54	5.94	4.60	4.44	6.86	6.46	3.02	2.65	2.33		2.41	
31		4.46		5.04	4.24		5.60		2.62	2.27		2.40	
Mean	2.50	4.58	4.63	5.34	5.60	6.50	7.26	4.05	2.83	2.40	2.32	2.44	
Max	2.57	9.63	5.94	7.71	7.39	8.59	9.75	4.69	3.06	2.60	2.43	2.72	9.75
Min	2.45	2.52	3.52	4.17	3.78	4.66	4.92	3.02	2.62	2.27	2.23	2.15	2.15

Annual Max Momentary Gage Height 9.76 M (A.D), at 12.00 Hours, on Oct 17, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.85 M (A.D)
Left Bank Elevation 14.47 M (A.D)
Right Bank Elevation 14.49 M (A.D), Drainage Area 5347 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.36	2.36	29.90	70.80	39.30	35.70	94.90	30.50	6.88	3.00	0.76	2.92	
2	2.20	2.36	29.70	65.10	33.70	64.80	96.10	28.30	7.16	2.84	0.84	4.08	
3	2.20	2.36	35.90	62.70	27.70	58.20	99.70	36.30	7.44	2.68	0.92	3.45	
4	2.36	3.18	40.10	56.10	19.70	52.50	95.30	28.90	6.74	2.20	0.88	3.18	
5	2.52	16.25	36.90	46.50	18.20	46.10	110.00	30.30	6.74	1.84	1.12	2.44	
6	2.60	11.15	34.50	38.50	26.50	43.30	112.50	14.75	6.74	1.72	1.00	1.66	
7	2.68	8.60	32.90	31.50	61.50	39.10	98.90	13.40	6.88	2.36	0.92	2.60	
8	2.76	5.52	38.50	29.10	75.30	44.90	92.90	9.80	6.74	1.42	0.92	2.44	
9	2.52	4.80	46.75	60.30	90.50	54.00	92.90	19.90	5.97	1.90	0.84	3.54	
10	2.20	4.26	49.50	93.30	97.70	74.40	113.00	19.50	4.80	1.42	0.72	3.36	
11	2.20	3.18	44.90	140.00	92.10	110.00	98.50	20.70	4.62	1.42	0.80	1.36	
12	2.14	4.35	39.70	132.00	85.70	151.00	119.50	14.15	4.71	1.30	0.92	1.24	
13	2.14	5.34	37.10	104.50	80.80	184.00	147.50	11.00	4.80	1.24	1.06	1.96	
14	2.08	9.50	39.30	75.90	75.60	133.00	195.00	7.30	4.80	1.36	1.24	1.48	
15	2.08	16.25	45.30	57.00	71.70	116.50	218.25	19.70	4.80	1.36	1.24	1.18	
16	2.02	19.50	52.00	50.75	62.40	106.00	237.20	21.70	4.71	1.24	1.30	1.30	
17	2.02	48.75	54.60	45.10	59.40	98.90	248.00	35.30	4.71	1.48	1.36	1.18	
18	1.96	187.50	49.75	39.90	74.40	95.30	210.00	35.30	4.71	1.48	1.24	0.64	
19	1.96	221.00	31.70	35.50	107.50	86.05	169.00	35.70	4.71	1.48	1.36	0.88	
20	1.96	240.80	24.50	32.90	124.00	76.80	143.00	32.70	4.71	1.54	1.72	0.52	
21	1.96	190.00	19.30	28.10	109.50	65.10	122.00	33.50	4.62	1.60	1.78	0.40	
22	1.96	124.50	17.30	27.30	95.30	67.50	96.50	32.30	4.62	1.72	1.42	1.18	
23	1.90	78.00	17.00	26.10	69.60	77.70	60.00	33.10	4.62	1.48	1.18	1.12	
24	1.90	57.60	17.00	25.90	64.20	94.90	47.50	28.90	4.44	1.48	1.18	1.12	
25	2.02	45.70	15.95	61.20	57.00	137.00	40.90	31.70	4.26	1.30	1.30	1.12	
26	2.14	46.10	14.30	60.90	48.50	166.50	52.00	30.30	4.08	1.00	1.48	1.72	
27	2.28	38.10	23.70	45.50	35.30	148.00	113.50	28.50	3.99	0.92	1.66	2.76	
28	2.52	36.50	32.10	38.30	30.70	112.00	195.00	27.30	3.72	1.96	1.72	3.72	
29	2.20	34.90	46.75	32.10	30.90	103.70	162.50	7.58	3.18	1.90		3.72	
30	2.14	33.30	67.20	34.50	31.30	98.90	83.60	6.88	3.45	1.18		1.66	
31		31.70		43.30	27.30		57.00		3.18	0.88		1.60	
Total	65.98	1533.41	1064.10	1690.65	1923.30	2741.85	3822.65	725.26	157.53	50.70	32.88	61.53	13869.84 CMSDAY
Mean	2.20	49.46	35.47	54.54	62.04	91.40	123.31	24.18	5.08	1.64	1.17	1.98	38.00 CMS
Max	2.76	240.80	67.20	140.00	124.00	184.00	248.00	36.30	7.44	3.00	1.78	4.08	248.00 CMS
Min	1.90	2.36	14.30	25.90	18.20	35.70	40.90	6.88	3.18	0.88	0.72	0.40	0.40 CMS
Runoff	5.701	132.487	91.938	146.072	166.173	236.896	330.277	62.662	13.611	4.380	2.841	5.316	1198.354 MCM

Momentary Peak 248.60 CMS, at 9.76 M (A.D), at 12.00 Hours, on Oct 17, 2001

Runoff Yield 7.11 Liters/Second/Square KM, Momentary Peak Yield 46.493 Liters/Second/Square KM

WATER YEAR : 2001

PRACHIN BURI RIVER BASIN

Huai Yang at Ban Thung Faek, Prachin Buri (Kgt.14)

Lat 14 - 09 - 39 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

Drainage Area 366 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +34.600 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the automatic gage building.

Elevation +42.429 m. (M.S.L.)

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 Float -

Rated by Current Meter 1966 - 1981, 1986 to date.

Stability of Channel Regimes Stable.

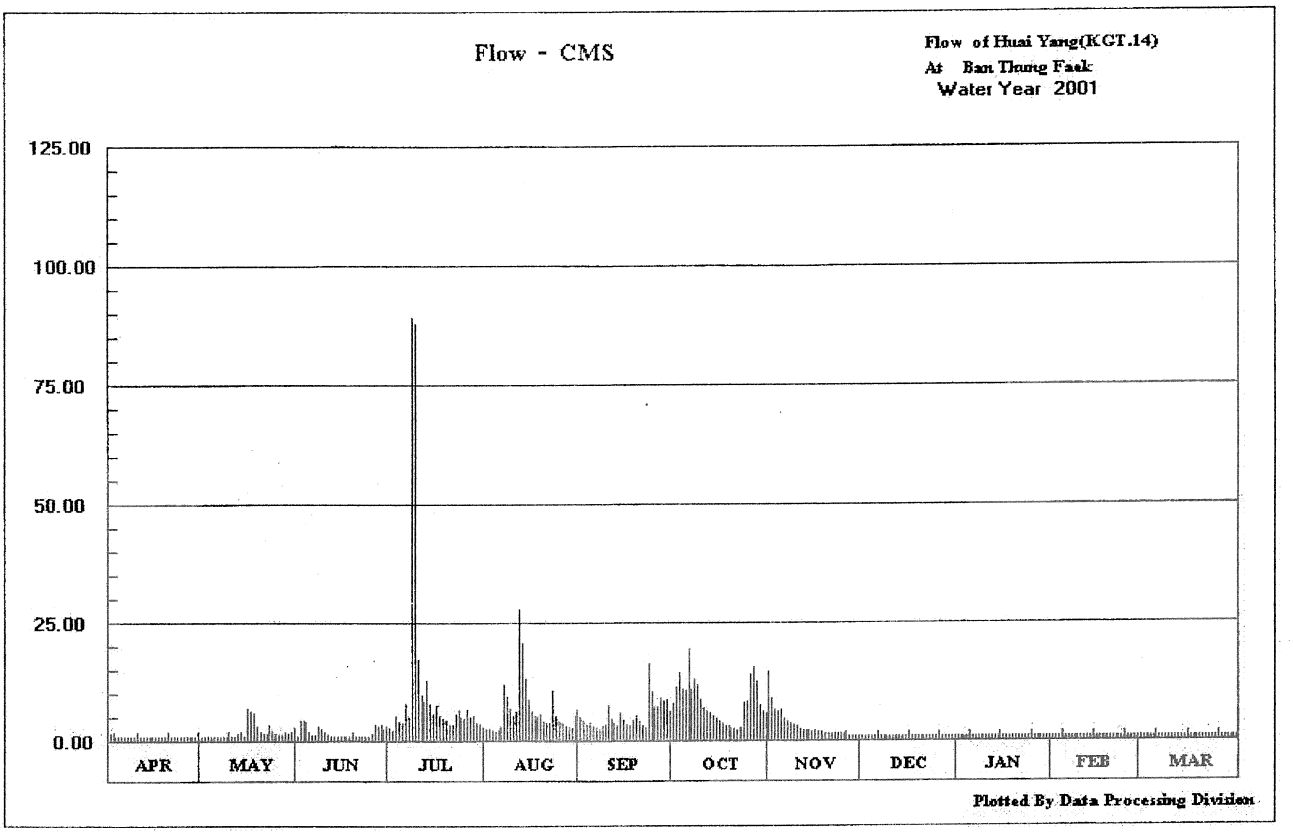
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 23 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.14	34.81	35.04	35.27	35.26	35.48	35.69	36.11	35.04	34.94	34.84	34.84	
2	35.20	34.81	35.42	35.21	35.25	35.41	35.91	35.77	35.03	34.94	34.84	34.84	
3	34.96	34.81	35.41	35.50	35.21	35.35	36.09	35.60	35.02	34.93	34.84	34.84	
4	34.94	34.81	35.40	35.39	35.17	35.36	35.89	35.58	35.05	34.93	34.84	34.84	
5	34.92	34.80	35.19	35.37	35.23	35.32	35.87	35.60	35.04	34.92	34.84	34.84	
6	34.89	34.81	35.09	35.68	35.29	35.29	36.33	35.44	35.04	34.90	34.84	34.84	
7	34.89	34.81	35.09	35.48	35.95	35.25	35.89	35.39	35.04	34.89	34.84	34.90	
8	34.88	34.81	35.30	38.47	35.79	35.31	36.02	35.37	35.00	34.88	34.84	35.00	
9	34.87	34.81	35.26	38.44	35.62	35.34	35.94	35.33	35.00	34.88	34.84	35.00	
10	34.86	34.81	35.17	36.23	35.49	35.67	35.75	35.30	35.00	34.88	34.84	35.00	
11	34.85	34.82	35.11	35.80	35.56	35.45	35.62	35.25	34.99	34.87	34.84	34.98	
12	34.85	34.82	35.04	35.73	36.68	35.37	35.57	35.23	34.99	34.87	34.84	34.89	
13	34.84	35.14	35.02	36.00	36.38	35.32	35.55	35.22	34.99	34.86	34.84	34.81	
14	34.84	35.19	35.01	35.68	36.02	35.54	35.49	35.21	34.98	34.85	34.84	34.80	
15	34.83	35.00	34.99	35.52	35.75	35.42	35.43	35.20	34.98	34.86	34.84	34.81	
16	34.83	35.62	34.98	35.66	35.58	35.35	35.40	35.23	34.98	34.86	34.84	34.80	
17	34.83	35.56	34.98	35.50	35.50	35.31	35.36	35.20	34.98	34.86	34.84	34.80	
18	34.83	35.55	34.96	35.44	35.47	35.42	35.32	35.17	34.96	34.86	34.84	34.80	
19	34.83	35.31	34.94	35.42	35.51	35.49	35.30	35.15	34.96	34.87	34.84	34.80	
20	34.82	35.18	34.93	35.33	35.40	35.38	35.28	35.16	34.96	34.87	34.84	34.80	
21	34.82	35.16	34.92	35.34	35.36	35.32	35.24	35.14	34.96	34.87	34.84	34.80	
22	34.82	35.12	34.90	35.51	35.36	35.28	35.22	35.14	34.96	34.87	34.84	34.77	
23	34.82	35.33	34.90	35.59	35.86	36.19	35.27	35.13	34.96	34.87	34.84	34.77	
24	34.82	35.21	34.91	35.48	35.49	35.84	35.70	35.12	34.96	34.87	34.84	34.78	
25	34.82	35.16	35.14	35.43	35.40	35.63	35.73	35.12	34.96	34.86	34.84	34.78	
26	34.82	35.10	35.34	35.60	35.37	35.64	36.07	35.04	34.96	34.86	34.84	34.79	
27	34.82	35.09	35.30	35.47	35.31	35.77	36.15	35.06	34.95	34.86	34.84	34.80	
28	34.81	35.18	35.33	35.50	35.29	35.73	35.99	35.05	34.95	34.86	34.84	34.80	
29	34.80	35.15	35.24	35.36	35.28	35.75	35.66	35.04	34.96	34.86		34.77	
30	34.80	35.14	35.32	35.34	35.50	35.58	35.58	35.04	34.95	34.87		34.76	
31		35.28		35.27	35.59		35.54		34.95	34.87		34.76	
Mean	34.87	35.07	35.12	35.71	35.55	35.49	35.67	35.28	34.99	34.88	34.84	34.83	
Max	35.20	35.62	35.42	38.47	36.68	36.19	36.33	36.11	35.05	34.94	34.84	35.00	38.47
Min	34.80	34.80	34.90	35.21	35.17	35.25	35.22	35.04	34.95	34.85	34.84	34.76	34.76

Annual Max Momentary Gage Height 41.19 M (MSL), at 17.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 34.60 M (MSL), River Bed 33.26 M (MSL)
Left Bank Elevation 41.66 M (MSL)
Right Bank Elevation 41.96 M (MSL), Drainage Area 366 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.98	0.05	1.28	3.10	3.00	5.56	8.35	15.20	1.28	0.70	0.20	0.20	
2	2.40	0.05	4.84	2.50	2.90	4.72	11.67	9.55	1.21	0.70	0.20	0.20	
3	0.80	0.05	4.72	5.80	2.50	4.00	14.82	7.00	1.14	0.65	0.20	0.20	
4	0.70	0.05	4.60	4.48	2.19	4.12	11.35	6.76	1.35	0.65	0.20	0.20	
5	0.60	0.00	2.33	4.24	2.70	3.64	11.05	7.00	1.28	0.60	0.20	0.20	
6	0.45	0.05	1.63	8.20	3.30	3.30	19.79	5.08	1.28	0.50	0.20	0.20	
7	0.45	0.05	1.63	5.56	12.35	2.90	11.35	4.48	1.28	0.45	0.20	0.50	
8	0.40	0.05	3.40	89.50	9.85	3.52	13.56	4.24	1.00	0.40	0.20	1.00	
9	0.35	0.05	3.00	88.30	7.30	3.88	12.18	3.76	1.00	0.40	0.20	1.00	
10	0.30	0.05	2.19	17.63	5.68	8.05	9.25	3.40	1.00	0.40	0.20	1.00	
11	0.25	0.10	1.77	10.00	6.52	5.20	7.30	2.90	0.95	0.35	0.20	0.90	
12	0.25	0.10	1.28	8.95	28.30	4.24	6.64	2.70	0.95	0.35	0.20	0.45	
13	0.20	1.98	1.14	13.20	20.94	3.64	6.40	2.60	0.95	0.30	0.20	0.05	
14	0.20	2.33	1.07	8.20	13.56	6.28	5.68	2.50	0.90	0.25	0.20	0.00	
15	0.15	1.00	0.95	6.04	9.25	4.84	4.96	2.40	0.90	0.30	0.20	0.05	
16	0.15	7.30	0.90	7.90	6.76	4.00	4.60	2.70	0.90	0.30	0.20	0.00	
17	0.15	6.52	0.90	5.80	5.80	3.52	4.12	2.40	0.90	0.30	0.20	0.00	
18	0.15	6.40	0.80	5.08	5.44	4.84	3.64	2.19	0.80	0.30	0.20	0.00	
19	0.15	3.52	0.70	4.84	5.92	5.68	3.40	2.05	0.80	0.35	0.20	0.00	
20	0.10	2.26	0.65	3.76	4.60	4.36	3.20	2.12	0.80	0.35	0.20	0.00	
21	0.10	2.12	0.60	3.88	4.12	3.64	2.80	1.98	0.80	0.35	0.20	0.00	
22	0.10	1.84	0.50	5.92	4.12	3.20	2.60	1.98	0.80	0.35	0.20	0.00	
23	0.10	3.76	0.50	6.88	10.90	16.80	3.10	1.91	0.80	0.35	0.20	0.00	
24	0.10	2.50	0.55	5.56	5.68	10.60	8.50	1.84	0.80	0.35	0.20	0.00	
25	0.10	2.12	1.98	4.96	4.60	7 45	8.95	1.84	0.80	0.30	0.20	0.00	
26	0.10	1.70	3.88	7.00	4.24	7.60	14.46	1.28	0.80	0.30	0.20	0.00	
27	0.10	1.63	3.40	5.44	3.52	9.55	16.00	1.42	0.75	0.30	0.20	0.00	
28	0.05	2.26	3.76	5.80	3.30	8.95	13.03	1.35	0.75	0.30	0.20	0.00	
29	0.00	2.05	2.80	4.12	3.20	9.25	7.90	1.28	0.80	0.30		0.00	
30	0.00	1.98	3.64	3.88	5.80	6.76	6.76	1.28	0.75	0.35		0.00	
31		3.20		3.10	6.88		6.28		0.75	0.35		0.00	
Total	10.93	57.12	61.39	359.62	215.22	174.09	263.69	107.19	29.27	12.20	5.60	6.15	1302.47 CMSDAY
Mean	0.36	1.84	2.05	11.60	6.94	5.80	8.51	3.57	0.94	0.39	0.20	0.20	3.57 CMS
Max	2.40	7.30	4.84	89.50	28.30	16.80	19.79	15.20	1.35	0.70	0.20	1.00	89.50 CMS
Min	0.00	0.00	0.50	2.50	2.19	2.90	2.60	1.28	0.75	0.25	0.20	0.00	0.00 CMS
Runoff	0.944	4.935	5.304	31.071	18.595	15.041	22.783	9.261	2.529	1.054	0.484	0.531	112.533 MCM

Momentary Peak 214.39 CMS, at 41.19 M (MSL), at 17.00 Hours, on Jul 8, 2001

Runoff Yield 9.75 Liters/Second/Square KM, Momentary Peak Yield 585.765 Liters/Second/Square KM

WATER YEAR : 2001

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 of at Ban Kaeng Din So about 1 kilometer upstream from the Kgt.15 station.

Ban Kaeng Din So **Amphoe** Na Di **Changwat** Prachin Buri

Drainage Area 530 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +12.800 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of the station office and near the rain gage.

Elevation +22.396 m. (M.S.L.)

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 Float -

Rated by Current Meter 1968 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

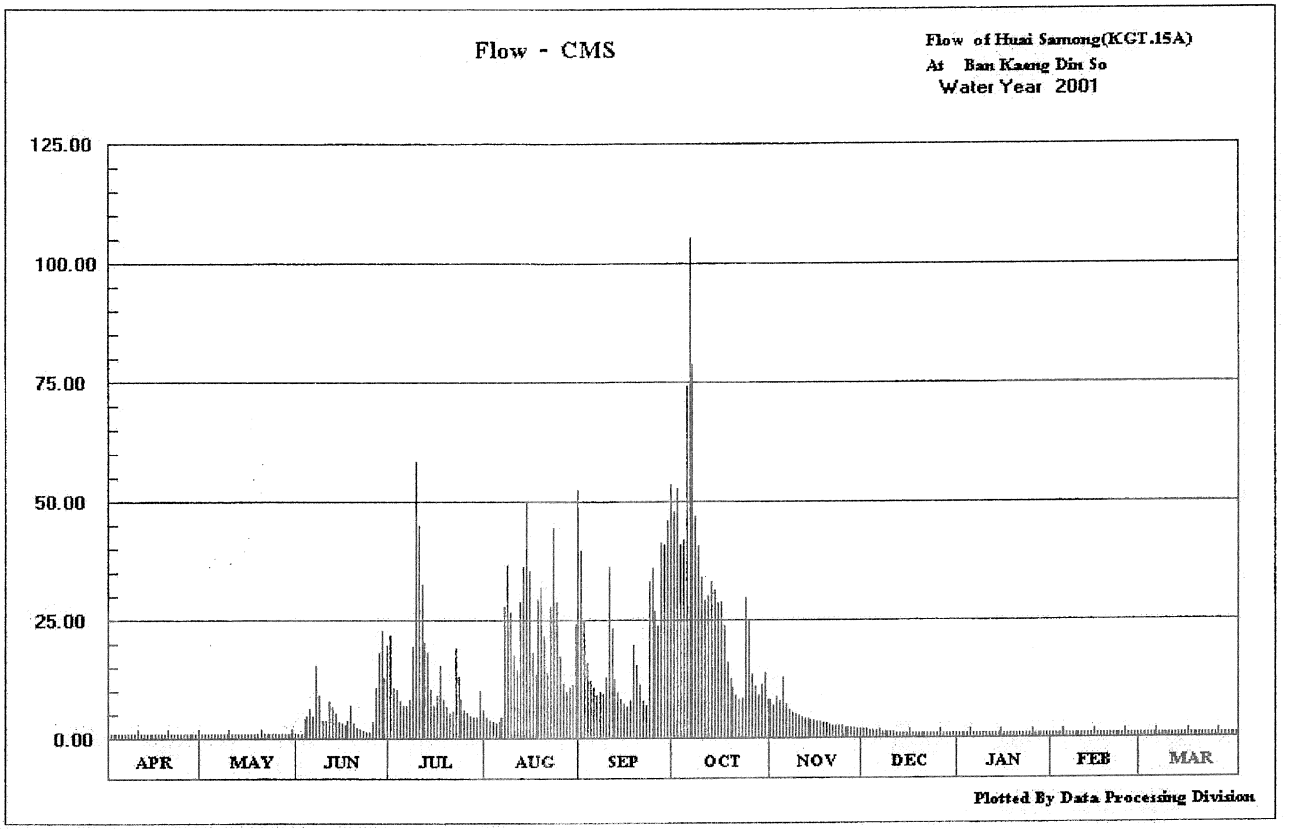
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the local weir during Feb.16 - Mar. 31, 97 discharge estimated by recession equation. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.12	14.68	14.45	15.37	14.05	16.05	16.24	14.40	14.36	14.77	14.71	14.25	
2	15.07	14.67	14.14	14.60	13.99	15.53	16.36	14.29	14.36	14.76	14.71	14.25	
3	14.97	14.73	14.00	14.59	13.94	15.00	16.08	14.45	14.36	14.75	14.71	14.22	
4	14.86	14.74	14.08	14.36	13.92	14.72	16.10	14.37	14.36	14.74	14.74	14.23	
5	14.71	14.75	14.23	14.29	13.95	14.61	16.76	14.78	14.34	14.73	14.76	14.25	
6	14.54	14.73	14.07	14.28	14.03	14.47	17.28	14.30	14.33	14.73	14.76	14.28	
7	14.34	14.71	14.94	14.39	15.66	14.54	16.85	14.18	14.32	14.73	14.73	15.22	
8	14.10	14.69	14.48	15.21	15.97	14.51	16.22	14.12	14.31	14.73	14.69	15.03	
9	13.78	14.68	13.98	16.47	15.61	14.77	16.07	14.10	14.28	14.73	14.67	14.87	
10	14.10	14.66	13.97	16.18	15.09	15.96	15.90	14.07	14.25	14.73	14.66	14.84	
11	14.35	14.68	14.36	15.85	14.89	15.44	15.71	14.04	14.25	14.73	14.65	14.79	
12	14.61	14.67	14.25	15.27	15.70	14.76	15.76	14.00	14.25	14.73	14.64	14.74	
13	14.73	14.66	14.14	15.14	15.96	14.54	15.87	14.00	14.24	14.73	14.63	14.72	
14	14.77	14.68	13.94	14.58	16.29	14.40	15.81	13.98	14.24	14.72	14.59	14.70	
15	14.76	14.73	13.90	14.28	15.93	14.30	15.69	13.97	14.23	14.71	14.55	14.68	
16	14.81	14.92	13.86	14.48	15.13	14.25	15.70	13.94	14.20	14.70	14.50	14.68	
17	14.84	15.68	13.98	14.95	14.83	14.36	15.47	13.94	14.20	14.68	14.47	14.66	
18	14.83	15.54	14.27	14.40	15.73	15.24	14.98	13.92	14.19	14.67	14.44	14.62	
19	14.80	15.49	13.89	14.25	15.83	14.95	14.76	13.89	14.19	14.66	14.42	14.61	
20	14.78	15.30	13.80	14.13	15.34	14.67	14.61	13.87	14.61	14.65	14.40	14.60	
21	14.75	15.14	13.75	14.15	14.85	14.37	14.49	13.85	14.87	14.65	14.38	14.58	
22	14.74	15.18	13.70	15.19	15.66	14.28	14.39	13.84	14.89	14.69	14.35	14.55	
23	14.72	15.13	13.68	14.81	16.16	15.87	14.43	13.83	14.85	14.71	14.33	14.52	
24	14.69	14.78	13.68	14.40	15.70	15.95	15.74	13.82	14.83	14.71	14.30	14.47	
25	14.68	14.30	13.94	14.20	15.08	15.63	15.53	13.81	14.83	14.69	14.26	14.45	
26	14.68	13.78	14.61	14.12	14.69	15.47	14.82	13.80	14.82	14.66	14.24	14.43	
27	14.70	14.09	15.13	14.07	14.53	16.09	14.64	13.80	14.81	14.65	14.23	14.41	
28	14.72	13.82	15.42	14.04	14.60	16.08	14.49	13.96	14.81	14.65	14.24	14.31	
29	14.71	13.79	14.77	14.04	14.66	16.20	14.67	14.38	14.81	14.66		14.25	
30	14.68	15.05	15.23	14.57	15.48	16.37	14.84	14.38	14.81	14.70		14.15	
31		15.29		14.19	16.35		14.40		14.78	14.71		14.10	
Mean	14.66	14.77	14.22	14.67	15.15	15.11	15.51	14.07	14.48	14.71	14.53	14.53	
Max	15.12	15.68	15.42	16.47	16.35	16.37	17.28	14.78	14.89	14.77	14.76	15.22	17.28
Min	13.78	13.78	13.68	14.04	13.92	14.25	14.39	13.80	14.19	14.65	14.23	14.10	13.68

Annual Max Momentary Gage Height 17.38 M (MSL), at 12.00 Hours, on Oct 6, 2001
Zero Gage at Bottom Elevation 12.80 M (MSL), River Bed 12.84 M (MSL)
Left Bank Elevation 24.20 M (MSL)



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	22.39	4.90	40.20	48.12	8.60	2.25	0.72	0.23	0.08	
2	0.00	0.00	0.00	10.90	4.31	25.30	53.28	7.39	2.16	0.69	0.22	0.08	
3	0.00	0.00	4.40	10.78	3.86	16.50	41.40	9.15	2.09	0.67	0.21	0.08	
4	0.00	0.00	5.20	8.16	3.68	12.46	42.20	8.27	2.01	0.65	0.21	0.07	
5	0.00	0.00	6.73	7.39	3.95	11.03	74.44	13.24	1.94	0.62	0.20	0.07	
6	0.00	0.00	5.10	7.28	4.70	9.37	105.70	7.50	1.87	0.60	0.19	0.07	
7	0.00	0.00	15.60	8.49	28.14	10.18	79.30	6.20	1.80	0.58	0.19	0.07	
8	0.00	0.00	9.48	19.67	37.12	9.82	47.26	5.60	1.74	0.56	0.18	0.06	
9	0.00	0.00	4.22	58.78	26.94	13.11	41.00	5.40	1.67	0.54	0.17	0.06	
10	0.00	0.00	4.13	45.56	17.85	36.76	34.60	5.10	1.61	0.52	0.17	0.06	
11	0.00	0.00	8.16	33.05	14.85	23.62	29.34	4.80	1.56	0.50	0.16	0.06	
12	0.00	0.00	6.95	20.69	29.10	12.98	30.54	4.40	1.50	0.48	0.15	0.06	
13	0.00	0.00	5.80	18.60	36.76	10.18	33.67	4.40	1.45	0.46	0.15	0.05	
14	0.00	0.00	3.86	10.66	50.27	8.60	31.81	4.22	1.39	0.45	0.14	0.05	
15	0.00	0.00	3.50	7.28	35.68	7.50	28.86	4.13	1.34	0.43	0.14	0.05	
16	0.00	0.00	3.14	9.48	18.45	6.95	29.10	3.86	1.30	0.42	0.13	0.05	
17	0.00	0.00	4.22	15.75	13.95	8.16	24.16	3.86	1.25	0.40	0.13	0.05	
18	0.00	0.00	7.17	8.60	29.82	20.18	16.20	3.68	1.20	0.39	0.12	0.04	
19	0.00	0.00	3.41	6.95	32.43	15.75	12.98	3.41	1.16	0.37	0.12	0.04	
20	0.00	0.00	2.60	5.70	21.88	11.81	11.03	3.23	1.12	0.36	0.12	0.04	
21	0.00	0.00	2.25	5.90	14.25	8.27	9.59	3.05	1.08	0.35	0.11	0.04	
22	0.00	0.00	1.90	19.35	28.14	7.28	8.49	2.96	1.04	0.33	0.11	0.04	
23	0.00	0.00	1.76	13.65	44.72	33.67	8.93	2.87	1.00	0.32	0.10	0.04	
24	0.00	0.00	1.76	8.60	29.10	36.40	30.06	2.78	0.97	0.31	0.10	0.04	
25	0.00	0.00	3.86	6.40	17.70	27.42	25.30	2.69	0.93	0.30	0.10	0.03	
26	0.00	0.00	11.03	5.60	12.07	24.16	13.80	2.60	0.90	0.29	0.09	0.03	
27	0.00	0.00	18.45	5.10	10.06	41.80	11.42	2.60	0.87	0.28	0.09	0.03	
28	0.00	0.00	23.26	4.80	10.90	41.40	9.59	2.51	0.83	0.27	0.09	0.03	
29	0.00	0.00	13.11	4.80	11.68	46.40	11.81	2.42	0.80	0.26		0.03	
30	0.00	0.00	20.01	10.54	24.34	53.71	14.10	2.33	0.78	0.25		0.03	
31		0.00		6.30	52.85		8.60		0.75	0.24		0.03	
Total	0.00	0.00	201.06	427.20	674.45	630.97	966.68	143.25	42.36	13.61	4.12	1.56	3105.26 CMSDAY
Mean	0.00	0.00	6.70	13.78	21.76	21.03	31.18	4.78	1.37	0.44	0.15	0.05	8.51 CMS
Max	0.00	0.00	23.26	58.78	52.85	53.71	105.70	13.24	2.25	0.72	0.23	0.08	105.70 CMS
Min	0.00	0.00	0.00	4.80	3.68	6.95	8.49	2.33	0.75	0.24	0.09	0.03	0.00 CMS
Runoff	0.000	0.000	17.372	36.910	58.272	54.516	83.521	12.377	3.660	1.176	0.356	0.135	268.295 MCM

Momentary Peak 112.20 CMS, at 17.38 M (MSL), at 12.00 Hours, on Oct 6, 2001

Runoff Yield 16.05 Liters/Second/Square KM, Momentary Peak Yield 211.698 Liters/Second/Square KM

WATER YEAR : 2001

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** K.A. Ko Chan **Changwat** Chon Buri

Drainage Area 535 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +20.124 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Beside the Meteorological station.

Elevation +25.658 m. (M.S.L.)

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 Float -

Rated by Current Meter 1965 - 1974, 1987 to date.

Stability of Channel Regimes Fairly stable.

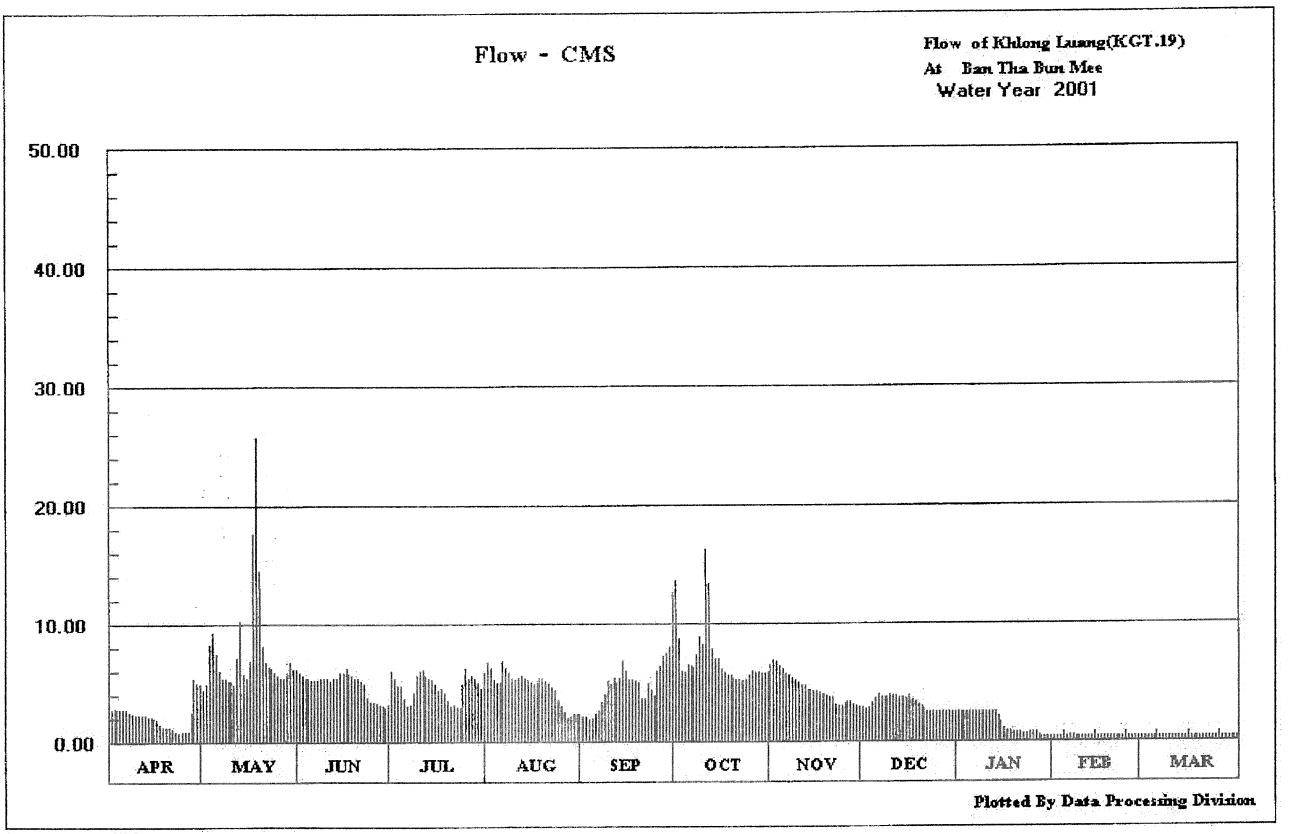
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the local weir during Apr. 1 - Jun. 13, Feb. 27 - Mar. 31,98, discharge estimated by recession equation. Stage-discharge relation defined by 13 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.09	22.30	22.43	22.44	22.49	21.98	22.89	22.48	22.10	22.04	20.88	20.76	
2	22.10	22.35	22.41	22.39	22.46	21.96	22.63	22.50	22.09	22.04	20.87	20.72	
3	22.09	22.60	22.40	22.33	22.38	21.92	22.44	22.49	22.10	22.04	20.89	20.73	
4	22.08	22.66	22.39	22.33	22.36	21.93	22.43	22.47	22.16	22.04	20.94	20.74	
5	22.09	22.55	22.38	22.21	22.36	22.03	22.48	22.45	22.21	22.04	20.97	20.74	
6	22.08	22.44	22.38	22.13	22.50	22.06	22.47	22.42	22.25	22.04	21.02	20.72	
7	22.04	22.40	22.38	22.15	22.46	22.18	22.46	22.41	22.22	22.04	21.02	20.70	
8	22.03	22.39	22.39	22.26	22.43	22.25	22.54	22.40	22.22	22.04	20.96	20.70	
9	22.01	22.37	22.39	22.41	22.40	22.37	22.64	22.38	22.23	22.04	20.97	20.68	
10	22.00	22.37	22.39	22.44	22.38	22.34	22.60	22.36	22.25	22.04	20.93	20.68	
11	22.01	22.35	22.37	22.45	22.39	22.39	23.00	22.33	22.24	22.04	20.87	20.68	
12	22.00	22.52	22.40	22.41	22.41	22.36	22.88	22.33	22.24	22.04	20.86	20.68	
13	21.98	22.72	22.40	22.39	22.39	22.39	22.57	22.29	22.23	22.04	20.86	20.68	
14	21.96	22.42	22.43	22.38	22.38	22.50	22.51	22.30	22.22	21.96	20.83	20.67	
15	21.93	22.39	22.43	22.35	22.36	22.44	22.51	22.28	22.21	21.84	20.76	20.65	
16	21.90	22.50	22.46	22.29	22.35	22.38	22.45	22.28	22.24	21.66	20.75	20.58	
17	21.77	23.06	22.42	22.31	22.37	22.38	22.43	22.27	22.19	21.46	20.74	20.54	
18	21.71	23.38	22.41	22.27	22.40	22.37	22.41	22.25	22.17	21.38	20.75	20.58	
19	21.70	22.93	22.39	22.20	22.39	22.36	22.41	22.24	22.15	21.35	20.86	20.58	
20	21.69	22.59	22.39	22.12	22.37	22.21	22.40	22.22	22.13	21.33	20.88	20.58	
21	21.65	22.49	22.37	22.14	22.34	22.21	22.38	22.23	22.08	21.26	20.86	20.57	
22	21.48	22.47	22.35	22.10	22.32	22.34	22.38	22.15	22.04	21.20	20.83	20.53	
23	21.37	22.46	22.22	22.10	22.30	22.29	22.37	22.13	22.04	21.23	20.82	20.52	
24	21.38	22.43	22.18	22.34	22.20	22.24	22.38	22.13	22.04	21.26	20.82	20.52	
25	21.40	22.41	22.17	22.46	22.13	22.44	22.41	22.16	22.04	21.28	20.81	20.52	
26	21.44	22.40	22.16	22.40	22.05	22.47	22.44	22.18	22.04	21.26	20.81	20.51	
27	22.04	22.40	22.14	22.41	21.93	22.53	22.43	22.18	22.04	21.02	20.83	20.50	
28	22.39	22.43	22.13	22.40	21.97	22.55	22.43	22.14	22.04	20.82	20.81	20.53	
29	22.36	22.49	22.11	22.36	22.03	22.58	22.42	22.12	22.04	20.74		20.55	
30	22.35	22.45	22.14	22.31	22.03	22.84	22.42	22.11	22.04	20.70		20.56	
31		22.45		22.43	22.03		22.43		22.04	20.71		20.56	
Mean	21.90	22.52	22.33	22.31	22.30	22.31	22.50	22.29	22.14	21.58	20.86	20.62	
Max	22.39	23.38	22.46	22.46	22.50	22.84	23.00	22.50	22.25	22.04	21.02	20.76	23.38
Min	21.37	22.30	22.11	22.10	21.93	21.92	22.37	22.11	22.04	20.70	20.74	20.50	20.50

Annual Max Momentary Gage Height 23.42 M (MSL), at 6.00 Hours, on May 18, 2001
Zero Gage at Bottom Elevation 20.12 M (MSL), River Bed 20.60 M (MSL)
Left Bank Elevation 26.95 M (MSL)
Right Bank Elevation 26.95 M (MSL), Drainage Area 535 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.94	4.60	6.02	6.16	6.86	2.32	13.80	6.72	3.00	2.64	0.48	0.36	
2	3.00	5.10	5.74	5.50	6.44	2.24	8.88	7.00	2.94	2.64	0.47	0.32	
3	2.94	8.40	5.60	4.90	5.40	2.08	6.16	6.86	3.00	2.64	0.49	0.33	
4	2.88	9.36	5.50	4.90	5.20	2.12	6.02	6.58	3.42	2.64	0.54	0.34	
5	2.94	7.70	5.40	3.79	5.20	2.58	6.72	6.30	3.79	2.64	0.57	0.34	
6	2.88	6.16	5.40	3.21	7.00	2.76	6.58	5.88	4.15	2.64	0.62	0.32	
7	2.64	5.60	5.40	3.35	6.44	3.56	6.44	5.74	3.88	2.64	0.62	0.30	
8	2.58	5.50	5.50	4.24	6.02	4.15	7.56	5.60	3.88	2.64	0.56	0.30	
9	2.46	5.30	5.50	5.74	5.60	5.30	9.04	5.40	3.97	2.64	0.57	0.28	
10	2.40	5.30	5.50	6.16	5.40	5.00	8.40	5.20	4.15	2.64	0.53	0.28	
11	2.46	5.10	5.30	6.30	5.50	5.50	16.40	4.90	4.06	2.64	0.47	0.28	
12	2.40	7.28	5.60	5.74	5.74	5.20	13.60	4.90	4.06	2.64	0.46	0.28	
13	2.32	10.40	5.60	5.50	5.50	5.50	7.98	4.51	3.97	2.64	0.46	0.28	
14	2.24	5.88	6.02	5.40	5.40	7.00	7.14	4.60	3.88	2.24	0.43	0.27	
15	2.12	5.50	6.02	5.10	5.20	6.16	7.14	4.42	3.79	1.82	0.36	0.25	
16	2.00	7.00	6.44	4.51	5.10	5.40	6.30	4.42	4.06	1.32	0.35	0.18	
17	1.61	17.84	5.88	4.70	5.30	5.40	6.02	4.33	3.63	1.06	0.34	0.14	
18	1.43	25.86	5.74	4.33	5.60	5.30	5.74	4.15	3.49	0.98	0.35	0.18	
19	1.40	14.72	5.50	3.70	5.50	5.20	5.74	4.06	3.35	0.95	0.46	0.18	
20	1.38	8.26	5.50	3.14	5.30	3.79	5.60	3.88	3.21	0.93	0.48	0.18	
21	1.30	6.86	5.30	3.28	5.00	3.79	5.40	3.97	2.88	0.86	0.46	0.17	
22	1.08	6.58	5.10	3.00	4.80	5.00	5.40	3.35	2.64	0.80	0.43	0.13	
23	0.97	6.44	3.88	3.00	4.60	4.51	5.30	3.21	2.64	0.83	0.42	0.12	
24	0.98	6.02	3.56	5.00	3.70	4.06	5.40	3.21	2.64	0.86	0.42	0.12	
25	1.00	5.74	3.49	6.44	3.21	6.16	5.74	3.42	2.64	0.88	0.41	0.12	
26	1.04	5.60	3.42	5.60	2.70	6.58	6.16	3.56	2.64	0.86	0.41	0.11	
27	2.64	5.60	3.28	5.74	2.12	7.42	6.02	3.56	2.64	0.62	0.43	0.10	
28	5.50	6.02	3.21	5.60	2.28	7.70	6.02	3.28	2.64	0.42	0.41	0.13	
29	5.20	6.86	3.07	5.20	2.58	8.12	5.88	3.14	2.64	0.34		0.15	
30	5.10	6.30	3.28	4.70	2.58	12.80	5.88	3.07	2.64	0.30		0.16	
31		6.30		6.02	2.58		6.02		2.64	0.31		0.16	
Total	71.83	239.18	150.75	149.95	149.85	152.70	224.48	139.22	102.96	50.70	13.00	6.86	1451.48 CMSDAY
Mean	2.39	7.72	5.03	4.84	4.83	5.09	7.24	4.64	3.32	1.64	0.46	0.22	3.98 CMS
Max	5.50	25.86	6.44	6.44	7.00	12.80	16.40	7.00	4.15	2.64	0.62	0.36	25.86 CMS
Min	0.97	4.60	3.07	3.00	2.12	2.08	5.30	3.07	2.64	0.30	0.34	0.10	0.10 CMS
Runoff	6.206	20.665	13.025	12.956	12.947	13.193	19.395	12.029	8.896	4.380	1.123	0.593	125.408 MCM

Momentary Peak 26.94 CMS, at 23.42 M (MSL), at 6.00 Hours, on May 18, 2001

Runoff Yield 7.43 Liters/Second/Square KM, Momentary Peak Yield 50.355 Liters/Second/Square KM

WATER YEAR : 2001

PRACHIN BURI RIVER BASIN

Khlong Pratong at Ban Pratong, Chanthaburi (Kgt.29)

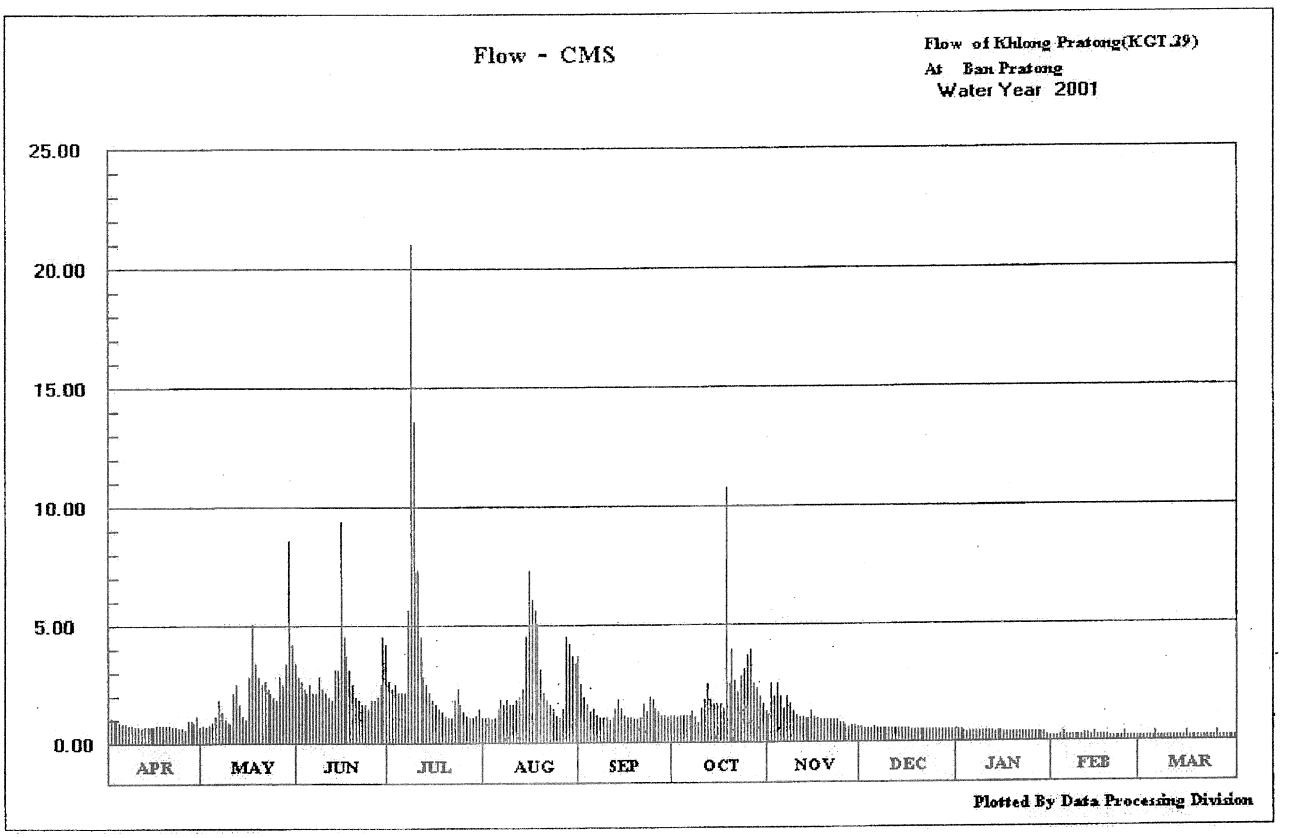
Lat 13 - 07 - 06 N. **Long** 102 - 13 - 15 E.

Location		on right bank at the bridge of Chanthaburi - Sa Kaeo Highway.			
	Ban Pratong	**Amphoe** Soi Dao		**Changwat** Chanthaburi	
Drainage Area		52 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 40 meters from the top staff gage.			
	Elevation	+6.072 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		1986 to date.			
Rating Operation					
	Period of Rating	1986 - 1990, 1992 to date.			
	Rated by Float	-			
	Rated by Current Meter	1986 - 1990, 1992 to date.			
Stability of Channel Regimes		Rather unstable by some scouring.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.61	-0.66	-0.50	-0.51	-0.61	-0.52	-0.60	-0.60	-0.68	-0.71	-0.80	-0.79	
2	-0.62	-0.67	-0.51	-0.53	-0.61	-0.55	-0.61	-0.52	-0.69	-0.71	-0.80	-0.78	
3	-0.63	-0.66	-0.53	-0.52	-0.62	-0.57	-0.60	-0.55	-0.69	-0.72	-0.79	-0.76	
4	-0.64	-0.64	-0.54	-0.54	-0.61	-0.59	-0.60	-0.52	-0.69	-0.74	-0.79	-0.75	
5	-0.65	-0.60	-0.52	-0.54	-0.58	-0.58	-0.60	-0.55	-0.68	-0.73	-0.79	-0.75	
6	-0.65	-0.56	-0.54	-0.54	-0.56	-0.60	-0.60	-0.58	-0.69	-0.72	-0.78	-0.75	
7	-0.66	-0.59	-0.54	-0.40	-0.57	-0.61	-0.59	-0.55	-0.69	-0.72	-0.78	-0.65	
8	-0.66	-0.62	-0.50	-0.08	-0.56	-0.61	-0.61	-0.57	-0.69	-0.72	-0.78	-0.05	
9	-0.67	-0.64	-0.53	-0.22	-0.57	-0.61	-0.65	-0.59	-0.69	-0.73	-0.78	-0.06	
10	-0.67	-0.65	-0.54	-0.36	-0.57	-0.63	-0.58	-0.60	-0.69	-0.73	-0.78	-0.10	
11	-0.68	-0.54	-0.55	-0.44	-0.56	-0.61	-0.56	-0.61	-0.69	-0.73	-0.77	-0.14	
12	-0.67	-0.52	-0.56	-0.50	-0.55	-0.58	-0.52	-0.61	-0.69	-0.73	-0.77	-0.09	
13	-0.67	-0.57	-0.49	-0.52	-0.53	-0.56	-0.56	-0.62	-0.69	-0.74	-0.78	-0.07	
14	-0.67	-0.60	-0.49	-0.54	-0.44	-0.58	-0.57	-0.62	-0.69	-0.73	-0.78	-0.05	
15	-0.67	-0.62	-0.31	-0.56	-0.36	-0.60	-0.57	-0.59	-0.69	-0.73	-0.79	-0.03	
16	-0.66	-0.50	-0.44	-0.57	-0.39	-0.61	-0.57	-0.61	-0.69	-0.74	-0.79	-0.04	
17	-0.66	-0.42	-0.47	-0.58	-0.40	-0.61	-0.58	-0.62	-0.70	-0.74	-0.79	-0.08	
18	-0.66	-0.48	-0.49	-0.59	-0.42	-0.62	-0.28	-0.63	-0.70	-0.74	-0.79	-0.06	
19	-0.66	-0.50	-0.52	-0.60	-0.49	-0.62	-0.52	-0.63	-0.70	-0.74	-0.80	-0.03	
20	-0.66	-0.52	-0.55	-0.61	-0.54	-0.61	-0.46	-0.63	-0.70	-0.74	-0.80	-0.02	
21	-0.67	-0.51	-0.56	-0.61	-0.56	-0.57	-0.51	-0.63	-0.70	-0.74	-0.81	0.04	
22	-0.67	-0.53	-0.57	-0.56	-0.57	-0.59	-0.54	-0.63	-0.70	-0.74	-0.82	0.07	
23	-0.68	-0.54	-0.57	-0.53	-0.58	-0.55	-0.50	-0.63	-0.71	-0.74	-0.81	0.10	
24	-0.68	-0.55	-0.58	-0.57	-0.60	-0.56	-0.49	-0.65	-0.71	-0.74	-0.78	0.11	
25	-0.69	-0.56	-0.56	-0.59	-0.61	-0.58	-0.47	-0.67	-0.71	-0.74	-0.76	0.14	
26	-0.63	-0.50	-0.56	-0.60	-0.58	-0.59	-0.46	-0.67	-0.71	-0.74	-0.77	0.17	
27	-0.63	-0.52	-0.55	-0.61	-0.44	-0.60	-0.52	-0.68	-0.71	-0.74	-0.78	0.17	
28	-0.64	-0.48	-0.52	-0.61	-0.45	-0.60	-0.53	-0.67	-0.71	-0.74	-0.78	0.18	
29	-0.60	-0.33	-0.44	-0.60	-0.47	-0.61	-0.55	-0.67	-0.71	-0.75		0.19	
30	-0.67	-0.45	-0.45	-0.58	-0.48	-0.60	-0.57	-0.68	-0.71	-0.78		0.15	
31		-0.48		-0.61	-0.47		-0.59		-0.71	-0.80		0.13	
Mean	-0.66	-0.55	-0.52	-0.52	-0.53	-0.59	-0.55	-0.61	-0.70	-0.74	-0.79	-0.15	
Max	-0.60	-0.33	-0.31	-0.08	-0.36	-0.52	-0.28	-0.52	-0.68	-0.71	-0.76	0.19	0.19
Min	-0.69	-0.67	-0.58	-0.61	-0.62	-0.63	-0.65	-0.68	-0.71	-0.80	-0.82	-0.79	-0.82

Annual Max Momentary Gage Height 0.00 M (A.D), at 6.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.80 M (A.D)
Left Bank Elevation 5.77 M (A.D)
Right Bank Elevation 5.78 M (A.D), Drainage Area 52 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.14	0.84	2.90	2.73	1.14	2.56	1.20	1.20	0.72	0.57	0.30	0.14	
2	1.08	0.78	2.73	2.39	1.14	2.05	1.14	2.56	0.66	0.57	0.30	0.13	
3	1.02	0.84	2.39	2.56	1.08	1.71	1.20	2.05	0.66	0.54	0.33	0.13	
4	0.96	0.96	2.22	2.22	1.14	1.37	1.20	2.56	0.66	0.48	0.33	0.12	
5	0.90	1.20	2.56	2.22	1.54	1.54	1.20	2.05	0.72	0.51	0.33	0.12	
6	0.90	1.88	2.22	2.22	1.88	1.20	1.20	1.54	0.66	0.54	0.36	0.11	
7	0.84	1.37	2.22	5.70	1.71	1.14	1.37	2.05	0.66	0.54	0.36	0.11	
8	0.84	1.08	2.90	21.08	1.88	1.14	1.14	1.71	0.66	0.54	0.36	0.10	
9	0.78	0.96	2.39	13.66	1.71	1.14	0.90	1.37	0.66	0.51	0.36	0.10	
10	0.78	0.90	2.22	7.38	1.71	1.02	1.54	1.20	0.66	0.51	0.36	0.10	
11	0.72	2.22	2.05	4.58	1.88	1.14	1.88	1.14	0.66	0.51	0.39	0.09	
12	0.78	2.56	1.88	2.90	2.05	1.54	2.56	1.14	0.66	0.51	0.39	0.09	
13	0.78	1.71	3.18	2.56	2.39	1.88	1.88	1.08	0.66	0.48	0.36	0.09	
14	0.78	1.20	3.18	2.22	4.58	1.54	1.71	1.08	0.66	0.51	0.36	0.08	
15	0.78	1.08	9.48	1.88	7.38	1.20	1.71	1.37	0.66	0.51	0.33	0.08	
16	0.84	2.90	4.58	1.71	6.12	1.14	1.71	1.14	0.66	0.48	0.33	0.08	
17	0.84	5.14	3.74	1.54	5.70	1.14	1.54	1.08	0.60	0.48	0.33	0.07	
18	0.84	3.46	3.18	1.37	5.14	1.08	10.84	1.02	0.60	0.48	0.33	0.07	
19	0.84	2.90	2.56	1.20	3.18	1.08	2.56	1.02	0.60	0.48	0.30	0.07	
20	0.84	2.56	2.05	1.14	2.22	1.14	4.02	1.02	0.60	0.48	0.30	0.07	
21	0.78	2.73	1.88	1.14	1.88	1.71	2.73	1.02	0.60	0.48	0.24	0.06	
22	0.78	2.39	1.71	1.88	1.71	1.37	2.22	1.02	0.60	0.48	0.18	0.06	
23	0.72	2.22	1.71	2.39	1.54	2.05	2.90	1.02	0.57	0.48	0.17	0.06	
24	0.72	2.05	1.54	1.71	1.20	1.88	3.18	0.90	0.57	0.48	0.17	0.06	
25	0.66	1.88	1.88	1.37	1.14	1.54	3.74	0.78	0.57	0.48	0.16	0.05	
26	1.02	2.90	1.88	1.20	1.54	1.37	4.02	0.78	0.57	0.48	0.15	0.05	
27	1.02	2.56	2.05	1.14	4.58	1.20	2.56	0.72	0.57	0.48	0.15	0.05	
28	0.96	3.46	2.56	1.14	4.30	1.20	2.39	0.78	0.57	0.48	0.14	0.05	
29	1.20	8.64	4.58	1.20	3.74	1.14	2.05	0.78	0.57	0.45		0.05	
30	0.78	4.30	4.30	1.54	3.46	1.20	1.71	0.72	0.57	0.36		0.04	
31		3.46		1.14	3.74		1.37		0.57	0.30		0.04	
Total	25.92	73.13	84.72	99.11	84.40	42.41	71.37	37.90	19.41	15.18	8.17	2.52	564.24 CMSDAY
Mean	0.86	2.36	2.82	3.20	2.72	1.41	2.30	1.26	0.63	0.49	0.29	0.08	1.55 CMS
Max	1.20	8.64	9.48	21.08	7.38	2.56	10.84	2.56	0.72	0.57	0.39	0.14	21.08 CMS
Min	0.66	0.78	1.54	1.14	1.08	1.02	0.90	0.72	0.57	0.30	0.14	0.04	0.04 CMS
Runoff	2.239	6.318	7.320	8.563	7.292	3.664	6.166	3.275	1.677	1.312	0.706	0.218	48.750 MCM

Momentary Peak 25.80 CMS, at 0.00 M (A.D), at 6.00 Hours, on Jul 8, 2001

Runoff Yield 29.73 Liters/Second/Square KM, Momentary Peak Yield 496.154 Liters/Second/Square KM

WATER YEAR : 2001

PRACHIN BURI RIVER BASIN

Khwae Nam Sai at Ban Nong Hean, Prachin Buri (Kgt.33)

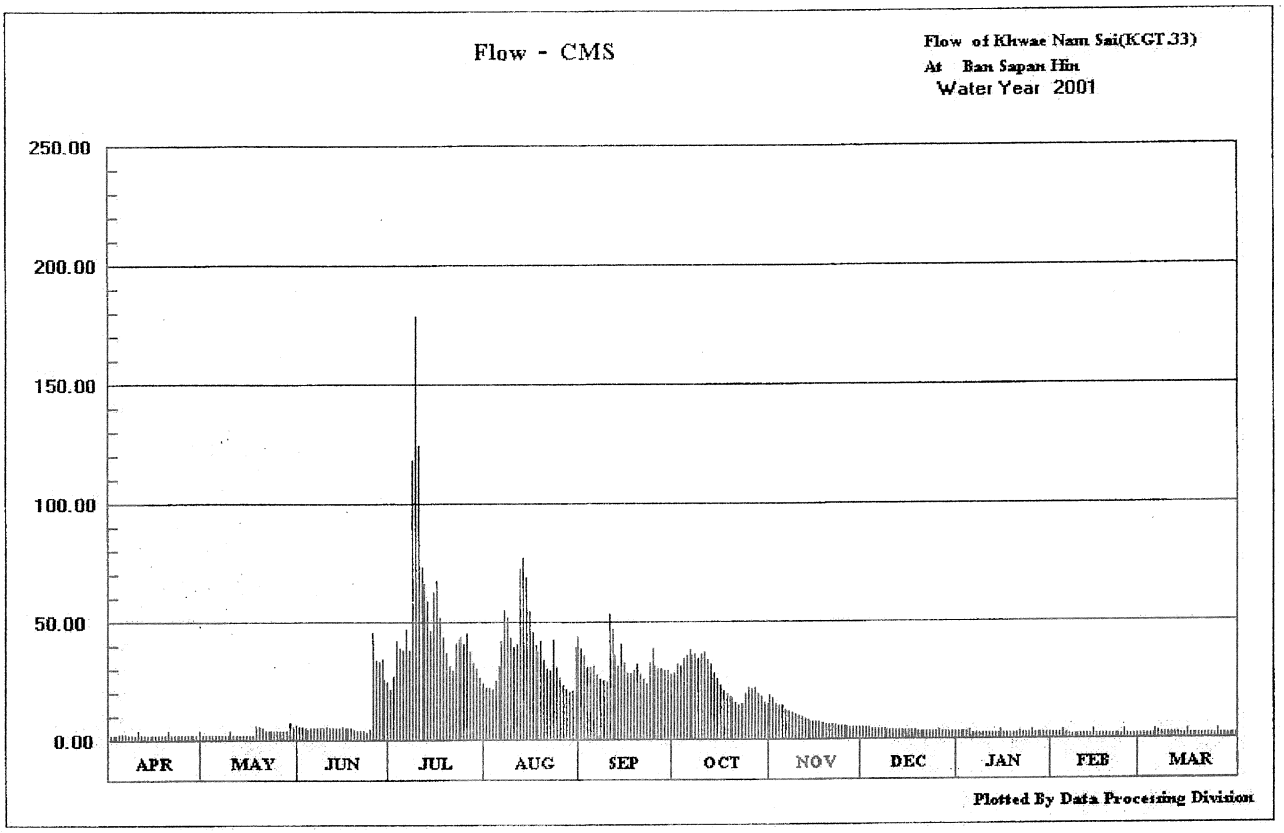
Lat 14 - 07 - 55 N. **Long** 101 - 43 - 52 E.

Location		on left bank at Ban Nong Hean.		
	Ban Nong Hean	**Amphoe** Na Di	**Changwat** Prachin Buri	
Drainage Area		1,015 sq.km.		
Type of Gage		Water - stage recorder.		
Zero Gage at Bottom		+0.000 m. (A.D.)		
Bench Mark		B.M.- H.D.		
	Location BM	On left bank near the top staff gage.		
	Elevation	+10.598 m. (A.D.)		
Gage Reading Frequency		Recording.		
Basis of Mean Daily Gage Height		Arithmetic mean of 24 readings.		
Period of Available Gage Records		1997 to date.		
Rating Operation				
	Period of Rating	2001 to date.		
	Rated by Float	-		
	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 32 discharge measurements made in 2001.		

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.87	0.81	1.20	2.12	2.14	2.87	2.43	1.99	1.15	0.96	0.89	0.79	
2	0.85	0.81	1.18	2.36	2.13	2.73	2.58	1.91	1.14	0.96	0.88	0.80	
3	0.85	0.81	1.13	2.98	2.10	2.54	2.57	1.80	1.13	0.96	0.89	0.80	
4	0.89	0.81	1.09	2.87	2.28	2.52	2.69	1.74	1.12	0.96	0.88	0.82	
5	0.89	0.83	1.14	2.83	2.56	2.57	2.75	1.77	1.12	0.95	0.88	0.83	
6	0.89	0.83	1.15	3.19	3.00	2.41	2.85	1.66	1.10	0.94	0.86	0.91	
7	0.87	0.83	1.16	2.83	3.51	2.31	2.73	1.60	1.09	0.94	0.86	0.98	
8	0.84	0.83	1.15	5.73	3.39	2.30	2.77	1.56	1.08	0.94	0.86	0.93	
9	0.82	0.84	1.16	7.60	3.05	2.27	2.68	1.52	1.07	0.94	0.86	0.89	
10	0.81	0.84	1.18	5.93	2.88	3.44	2.77	1.48	1.06	0.94	0.85	0.91	
11	0.81	0.84	1.16	4.18	2.94	3.18	2.79	1.45	1.05	0.94	0.85	0.91	
12	0.80	0.84	1.16	3.93	4.14	2.74	2.67	1.42	1.05	0.94	0.85	0.89	
13	0.80	0.83	1.16	3.65	4.31	2.57	2.58	1.39	1.05	0.93	0.85	0.88	
14	0.80	0.83	1.15	3.17	4.02	2.94	2.44	1.36	1.04	0.93	0.85	0.87	
15	0.84	0.85	1.21	3.79	3.48	2.62	2.31	1.36	1.04	0.93	0.84	0.86	
16	0.84	0.85	1.17	3.98	3.13	2.47	2.19	1.35	1.04	0.92	0.84	0.84	
17	0.83	0.85	1.14	3.38	2.91	2.44	2.09	1.33	1.03	0.92	0.83	0.84	
18	0.83	1.19	1.16	3.06	2.82	2.49	2.01	1.31	1.02	0.92	0.83	0.84	
19	0.82	1.19	1.10	2.79	2.98	2.59	1.94	1.27	1.01	0.92	0.83	0.83	
20	0.82	1.15	1.07	2.57	2.67	2.40	1.91	1.26	1.00	0.94	0.82	0.82	
21	0.82	1.05	1.04	2.47	2.50	2.31	1.83	1.25	1.00	0.96	0.82	0.81	
22	0.81	1.06	1.02	2.94	2.49	2.24	1.76	1.23	0.98	0.93	0.82	0.81	
23	0.81	1.06	1.00	3.01	3.02	2.61	1.78	1.22	0.98	0.92	0.79	0.81	
24	0.80	1.06	1.10	3.07	2.53	2.86	2.02	1.22	0.97	0.92	0.79	0.81	
25	0.80	1.04	3.15	2.93	2.34	2.57	2.13	1.20	0.97	0.92	0.79	0.80	
26	0.80	1.04	2.66	3.12	2.20	2.50	2.12	1.18	0.96	0.92	0.79	0.80	
27	0.84	1.03	2.64	2.81	2.10	2.51	2.15	1.17	0.96	0.91	0.79	0.80	
28	0.83	1.05	2.70	2.62	2.05	2.49	2.03	1.16	0.96	0.89	0.79	0.80	
29	0.83	1.34	2.33	2.50	2.07	2.48	1.94	1.16	0.96	0.89		0.80	
30	0.83	1.20	2.27	2.34	2.89	2.39	1.84	1.16	0.96	0.89		0.80	
31		1.24		2.23	3.06		1.79		0.96	0.89		0.80	
Mean	0.83	0.96	1.43	3.32	2.83	2.58	2.29	1.42	1.03	0.93	0.84	0.84	
Max	0.89	1.34	3.15	7.60	4.31	3.44	2.85	1.99	1.15	0.96	0.89	0.98	7.60
Min	0.80	0.81	1.00	2.12	2.05	2.24	1.76	1.16	0.96	0.89	0.79	0.79	0.79

Annual Max Momentary Gage Height 7.72 M (A.D), at 16.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.19 M (A.D)
Left Bank Elevation 10.79 M (A.D)
Right Bank Elevation 10.80 M (A.D), Drainage Area 1015 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.96	2.48	6.40	22.32	22.74	39.75	29.02	19.70	5.80	3.74	3.12	2.35	
2	2.80	2.48	6.16	27.42	22.53	36.25	32.62	18.10	5.68	3.74	3.04	2.40	
3	2.80	2.48	5.56	42.50	21.90	31.66	32.38	16.00	5.56	3.74	3.12	2.40	
4	3.12	2.48	5.09	39.75	25.68	31.18	35.26	14.98	5.44	3.74	3.04	2.56	
5	3.12	2.64	5.68	38.75	32.14	32.38	36.75	15.49	5.44	3.65	3.04	2.64	
6	3.12	2.64	5.80	47.75	43.00	28.54	39.25	13.62	5.20	3.56	2.88	3.29	
7	2.96	2.64	5.92	38.75	55.77	26.32	36.25	12.60	5.09	3.56	2.88	3.92	
8	2.72	2.64	5.80	119.13	52.75	26.10	37.25	11.92	4.98	3.56	2.88	3.47	
9	2.56	2.72	5.92	179.40	44.25	25.47	35.02	11.24	4.87	3.56	2.88	3.12	
10	2.48	2.72	6.16	125.33	40.00	54.00	37.25	10.56	4.76	3.56	2.80	3.29	
11	2.48	2.72	5.92	74.24	41.50	47.50	37.75	10.05	4.65	3.56	2.80	3.29	
12	2.40	2.72	5.92	67.24	73.12	36.50	34.78	9.54	4.65	3.56	2.80	3.12	
13	2.40	2.64	5.92	59.55	77.88	32.38	32.62	9.06	4.65	3.47	2.80	3.04	
14	2.40	2.64	5.80	47.25	69.76	41.50	29.26	8.64	4.54	3.47	2.80	2.96	
15	2.72	2.80	6.54	63.33	55.00	33.58	26.32	8.64	4.54	3.47	2.72	2.88	
16	2.72	2.80	6.04	68.64	46.25	29.26	23.79	8.50	4.54	3.38	2.72	2.72	
17	2.64	2.80	5.68	52.50	40.75	29.26	21.70	8.22	4.43	3.38	2.64	2.72	
18	2.64	6.28	5.92	44.50	38.50	30.46	20.10	7.94	4.32	3.38	2.64	2.72	
19	2.56	6.28	5.20	37.75	42.50	32.86	18.70	7.38	4.21	3.38	2.64	2.64	
20	2.56	5.80	4.87	32.38	34.78	28.30	18.10	7.24	4.10	3.56	2.56	2.56	
21	2.56	4.65	4.54	29.98	30.70	26.32	16.57	7.10	4.10	3.74	2.56	2.48	
22	2.48	4.76	4.32	41.50	30.46	24.84	15.32	6.82	3.92	3.47	2.56	2.48	
23	2.48	4.76	4.10	43.25	43.50	33.34	15.66	6.68	3.92	3.38	2.35	2.48	
24	2.40	4.76	5.20	44.75	31.42	39.50	20.30	6.68	3.83	3.38	2.35	2.48	
25	2.40	4.54	46.75	41.25	26.98	32.38	22.53	6.40	3.83	3.38	2.35	2.40	
26	2.40	4.54	34.54	46.00	24.00	30.70	22.32	6.16	3.74	3.38	2.35	2.40	
27	2.72	4.43	34.06	38.25	21.90	30.94	22.95	6.04	3.74	3.29	2.35	2.40	
28	2.64	4.65	35.50	33.58	20.90	30.46	20.50	5.92	3.74	3.12	2.35	2.40	
29	2.64	8.36	26.76	30.70	21.30	30.22	18.70	5.92	3.74	3.12		2.40	
30	2.64	6.40	25.47	26.98	40.25	28.08	16.76	5.92	3.74	3.12		2.40	
31		6.96		24.63	44.50		15.83		3.74	3.12		2.40	
Total	79.52	122.21	337.54	1629.35	1216.71	980.03	821.61	293.06	139.49	107.52	76.02	84.81	5887.87 CMSDAY
Mean	2.65	3.94	11.25	52.56	39.25	32.67	26.50	9.77	4.50	3.47	2.71	2.74	16.13 CMS
Max	3.12	8.36	46.75	179.40	77.88	54.00	39.25	19.70	5.80	3.74	3.12	3.92	179.40 CMS
Min	2.40	2.48	4.10	22.32	20.90	24.84	15.32	5.92	3.74	3.12	2.35	2.35	2.35 CMS
Runoff	6.871	10.559	29.163	140.776	105.124	84.675	70.987	25.320	12.052	9.290	6.568	7.328	508.712 MCM

Momentary Peak 183.36 CMS, at 7.72 M (A.D), at 16.00 Hours, on Jul 9, 2001
Runoff Yield 15.89 Liters/Second/Square KM, Momentary Peak Yield 180.650 Liters/Second/Square KM

WATER YEAR : 2001

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 right bank at Ban Pong School.

Ban Si Bua Thong **Amphoe** Khao Saming **Changwat** Trat

Drainage Area 920 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 Float -

Rated by Current Meter 1973 - 1978, 1999 to date.

Stability of Channel Regimes Stable.

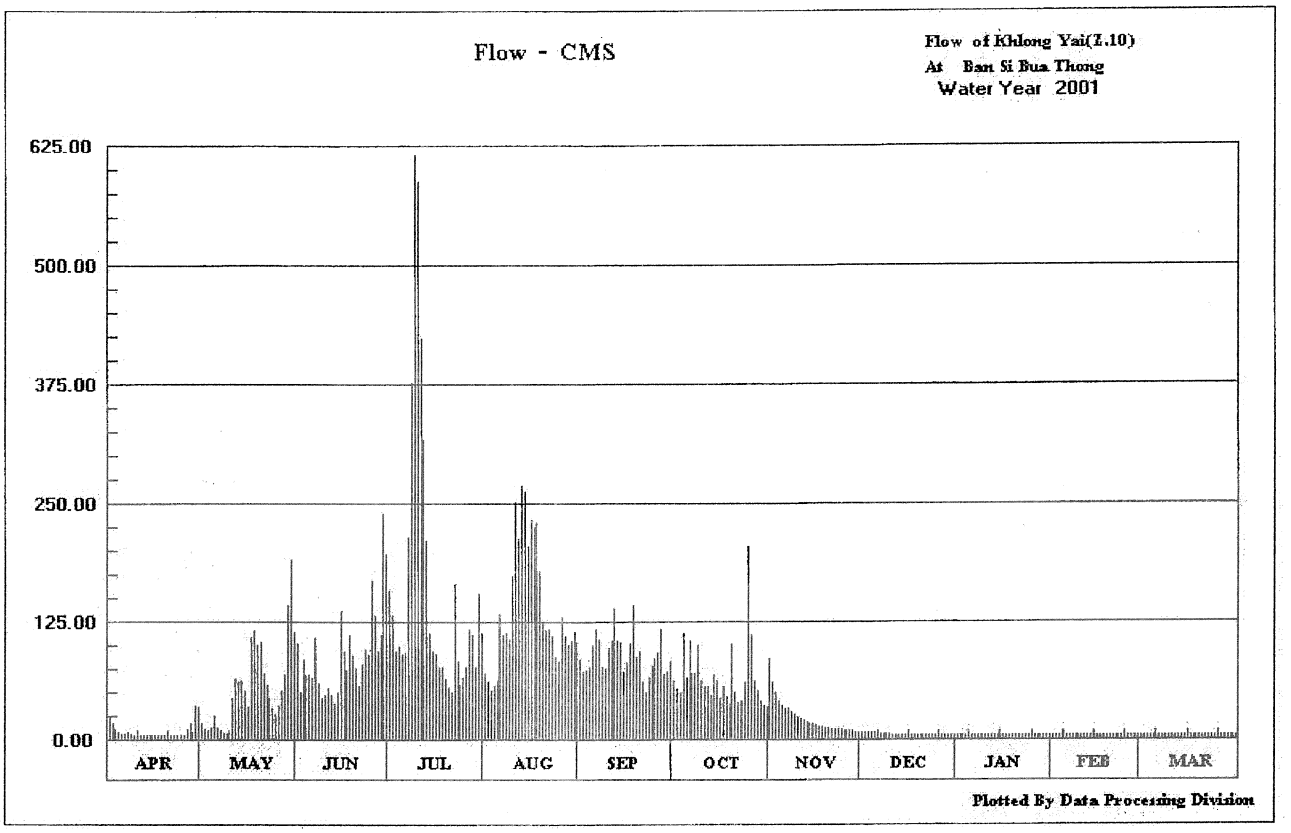
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 105 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.96	2.68	5.58	7.04	4.65	5.06	4.39	5.11	2.18	1.71	1.34	3.09	
2	2.67	2.39	3.98	6.36	4.36	4.69	4.06	4.33	2.19	1.73	1.37	3.11	
3	2.33	2.30	5.06	5.35	4.04	4.72	3.98	3.96	2.21	1.64	1.36	3.12	
4	2.18	2.44	4.57	5.47	4.19	4.84	5.88	3.63	2.19	1.63	1.38	3.16	
5	2.10	2.98	4.61	5.26	4.38	5.55	4.50	3.46	2.15	1.62	1.44	3.19	
6	2.06	2.43	4.47	5.31	6.38	6.00	5.67	3.29	2.11	1.61	1.40	3.23	
7	2.20	2.28	5.74	8.34	5.84	5.70	4.67	3.33	2.09	1.61	1.74	3.34	
8	2.05	2.08	4.29	11.49	5.88	4.83	4.65	3.15	2.08	1.60	2.11	3.47	
9	1.94	2.03	3.75	12.80	5.72	4.79	5.53	3.03	2.07	1.59	2.37	3.37	
10	1.88	2.08	3.85	12.73	7.39	5.45	4.38	2.94	2.04	1.58	2.60	3.27	
11	1.80	3.75	4.12	11.94	9.15	5.68	4.17	2.86	2.00	1.57	2.82	3.18	
12	1.77	4.44	3.84	10.53	8.31	6.53	4.20	2.79	1.99	1.56	3.03	3.12	
13	1.74	4.35	3.49	8.25	9.51	5.67	3.85	2.74	1.99	1.56	3.12	3.09	
14	1.73	4.38	3.96	5.85	9.40	5.64	4.57	2.70	1.99	1.54	3.11	3.08	
15	1.72	4.04	6.47	5.35	8.11	4.69	4.37	2.67	1.97	1.54	3.00	3.06	
16	1.69	3.37	5.37	5.28	8.74	4.97	3.71	2.63	1.92	1.54	2.96	3.05	
17	1.70	5.76	4.72	4.86	8.59	5.56	4.18	2.57	1.92	1.53	2.94	3.02	
18	1.83	5.94	5.82	4.86	8.67	6.61	3.81	2.52	1.90	1.53	2.99	3.01	
19	1.78	5.55	5.21	4.46	7.52	5.15	3.52	2.48	1.90	1.52	3.03	3.00	
20	1.74	5.64	4.77	4.10	6.15	5.35	5.59	2.45	1.88	1.53	3.04	3.01	
21	1.70	4.64	4.20	3.97	5.94	4.32	3.94	2.40	1.84	1.54	3.04	2.98	
22	1.66	4.24	4.92	7.19	6.00	3.97	3.57	2.38	1.81	1.41	3.04	2.97	
23	1.63	3.71	5.38	5.01	5.77	4.47	3.59	2.34	1.79	1.42	3.11	2.98	
24	1.69	3.32	5.21	4.24	5.19	4.88	4.34	2.32	1.78	1.44	3.29	3.02	
25	1.81	3.07	7.30	4.47	5.02	5.12	8.11	2.28	1.81	1.44	3.21	3.00	
26	2.36	3.45	6.35	4.83	6.32	5.31	5.82	2.26	1.76	1.37	3.15	2.96	
27	2.67	3.99	5.36	5.97	5.78	5.99	4.37	2.24	1.74	1.35	3.13	2.91	
28	2.20	4.59	5.81	5.83	5.52	4.60	4.03	2.22	1.78	1.36	3.09	3.00	
29	3.42	6.63	8.90	4.83	5.66	4.70	3.64	2.19	1.70	1.35		3.67	
30	3.39	7.79	7.93	6.95	5.92	5.05	3.45	2.19	1.72	1.35		3.53	
31		5.92		5.88	5.63		3.35		1.68	1.32		3.36	
Mean	2.08	3.94	5.17	6.61	6.44	5.20	4.45	2.85	1.94	1.52	2.58	3.14	
Max	3.42	7.79	8.90	12.80	9.51	6.61	8.11	5.11	2.21	1.73	3.29	3.67	12.80
Min	1.63	2.03	3.49	3.97	4.04	3.97	3.35	2.19	1.68	1.32	1.34	2.91	1.32

Annual Max Momentary Gage Height 12.94 M (A.D), at 6.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.16 M (A.D)
Left Bank Elevation 14.06 M (A.D)
Right Bank Elevation 14.03 M (A.D), Drainage Area 920 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	26.30	19.42	103.70	160.34	72.55	85.98	64.60	87.63	10.20	4.00	1.13	0.35	
2	19.18	13.35	52.62	133.74	63.70	73.79	54.94	62.80	10.35	4.20	1.09	0.34	
3	12.45	12.00	85.98	95.65	54.36	74.76	52.62	52.04	10.65	3.30	1.04	0.32	
4	10.20	14.30	70.07	99.85	58.71	78.72	115.02	43.05	10.35	3.20	1.00	0.31	
5	9.00	26.80	71.31	92.58	64.30	102.65	67.90	38.80	9.75	3.10	0.96	0.30	
6	8.40	14.10	67.00	94.25	134.52	119.70	106.92	34.55	9.15	3.00	0.92	0.28	
7	10.50	11.70	109.56	216.66	113.46	108.00	73.17	35.55	8.85	3.00	0.88	0.27	
8	8.25	8.70	61.61	378.20	115.02	78.39	72.55	31.05	8.70	2.90	0.84	0.26	
9	6.60	7.95	46.10	617.00	108.78	77.07	101.95	28.05	8.55	2.81	0.81	0.25	
10	5.78	8.70	48.85	589.70	175.27	99.15	64.30	25.80	8.10	2.72	0.78	0.24	
11	4.90	46.10	56.68	424.80	253.55	107.28	58.13	23.80	7.50	2.63	0.74	0.23	
12	4.60	66.10	48.56	318.50	215.34	140.37	59.00	22.06	7.35	2.54	0.71	0.22	
13	4.30	63.40	39.55	212.70	270.47	106.92	48.85	20.86	7.35	2.54	0.68	0.21	
14	4.20	64.30	52.04	113.85	265.30	105.84	70.07	19.90	7.35	2.36	0.66	0.20	
15	4.10	54.36	138.03	95.65	206.54	73.79	64.00	19.18	7.05	2.36	0.63	0.20	
16	3.80	36.55	96.35	93.24	234.54	83.01	45.06	18.22	6.30	2.36	0.60	0.19	
17	3.90	110.34	74.76	79.38	227.66	103.00	58.42	16.90	6.30	2.27	0.58	0.18	
18	5.23	117.36	112.68	79.38	231.32	143.49	47.69	15.90	6.00	2.27	0.56	0.17	
19	4.70	102.65	90.93	66.70	180.86	88.95	40.30	15.10	6.00	2.18	0.53	0.16	
20	4.30	105.84	76.41	56.10	125.55	95.65	104.05	14.50	5.78	2.27	0.51	0.16	
21	3.90	72.24	59.00	52.33	117.36	62.50	51.46	13.50	5.34	2.36	0.49	0.15	
22	3.50	60.16	81.36	166.67	119.70	52.33	41.55	13.20	5.01	1.55	0.47	0.15	
23	3.20	45.06	96.70	84.33	110.73	67.00	42.05	12.60	4.80	1.60	0.45	0.14	
24	3.80	35.30	90.93	60.16	90.27	80.04	63.10	12.30	4.70	1.70	0.43	0.13	
25	5.01	29.05	171.40	67.00	84.66	87.96	206.54	11.70	5.01	1.70	0.41	0.13	
26	12.90	38.55	133.35	78.39	132.18	94.25	112.68	11.40	4.50	1.38	0.40	0.12	
27	19.18	52.91	96.00	118.53	111.12	119.31	64.00	11.10	4.30	1.30	0.38	0.12	
28	10.50	70.69	112.29	113.07	101.60	71.00	54.07	10.80	4.70	1.34	0.37	0.11	
29	37.80	144.27	241.90	78.39	106.56	74.10	43.30	10.35	3.90	1.30		0.11	
30	37.05	192.47	198.62	156.75	116.58	85.65	38.55	10.35	4.10	1.30		0.10	
31		116.58		115.02	105.48		36.05		3.70	1.18		0.10	
Total	297.53	1761.30	2784.34	5108.91	4368.04	2740.65	2122.89	743.04	211.69	72.72	19.05	6.20	20236.36 CMSDAY
Mean	9.92	56.82	92.81	164.80	140.90	91.36	68.48	24.77	6.83	2.35	0.68	0.20	55.44 CMS
Max	37.80	192.47	241.90	617.00	270.47	143.49	206.54	87.63	10.65	4.20	1.13	0.35	617.00 CMS
Min	3.20	7.95	39.55	52.33	54.36	52.33	36.05	10.35	3.70	1.18	0.37	0.10	0.10 CMS
Runoff	25.707	152.176	240.567	441.410	377.399	236.792	183.418	64.199	18.290	6.283	1.646	0.536	1748.422 MCM

Momentary Peak 688.40 CMS, at 12.94 M (A.D), at 6.00 Hours, on Jul 9, 2001

Runoff Yield 60.26 Liters/Second/Square KM, Momentary Peak Yield 748.261 Liters/Second/Square KM

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Prasae at Ban Chak Khrok, Rayong (Z.11)

Lat 12 - 51 - 20 N. **Long** 101 - 37 - 09 E.

Location on right bank near the Meteorological Station.

Ban Chak Khrok **Amphoe** Klaeng **Changwat** Rayong

Drainage Area 1,280 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +2.630 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank near the Meteorological Station.

Elevation +13.420 m. (M.S.L.)

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 Float -

Rated by Current Meter 1989 to date.

Stability of Channel Regimes Stable.

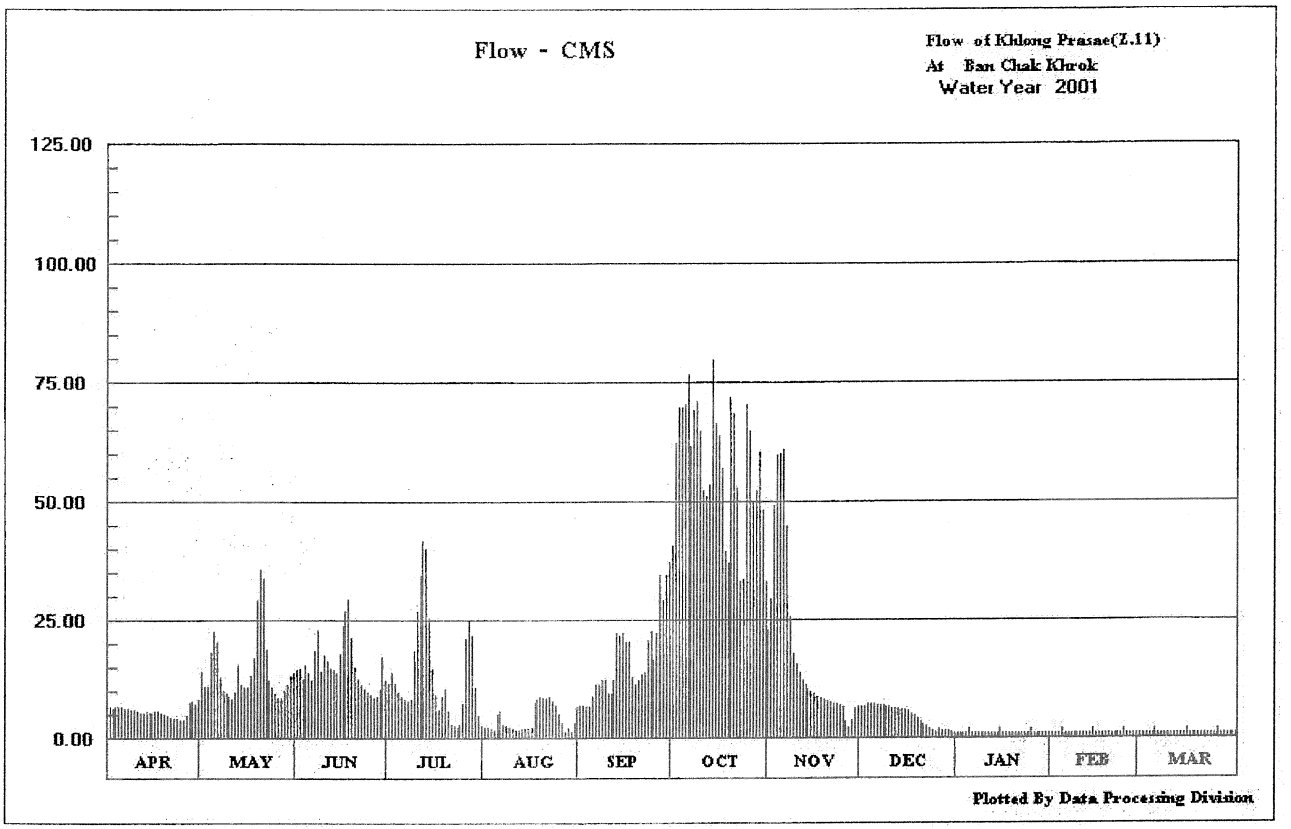
Overbank Flow Conditions No overbank flow.

General Description Records good. Flow effected by the concrete weir about 7 kilometers downstream and 5 kilometers above gage site. Stage-discharge relation defined by 83 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.64	5.20	5.22	5.04	4.14	4.67	6.68	5.78	4.65	3.79	3.79	3.66	
2	4.63	4.98	5.25	5.18	4.09	4.67	7.56	6.12	4.66	3.77	3.78	3.65	
3	4.65	4.99	5.09	5.03	4.03	4.65	7.87	7.04	4.70	3.74	3.77	3.66	
4	4.66	5.46	5.28	4.91	4.01	4.64	7.86	7.47	4.72	3.74	3.77	3.65	
5	4.64	5.77	5.18	4.84	4.50	4.85	7.89	7.48	4.70	3.73	3.76	3.65	
6	4.62	5.62	5.08	4.80	4.56	5.02	8.10	7.51	4.68	3.73	3.76	3.65	
7	4.61	5.11	5.50	4.77	4.22	5.02	7.54	6.86	4.68	3.72	3.76	3.66	
8	4.60	4.92	5.79	4.81	4.16	5.08	7.84	5.93	4.67	3.77	3.76	3.68	
9	4.58	4.89	5.20	5.48	4.11	5.07	7.91	5.44	4.66	3.82	3.75	3.67	
10	4.56	4.84	5.42	5.99	4.06	4.89	7.66	5.31	4.65	3.81	3.74	3.66	
11	4.53	4.81	5.34	6.36	4.02	4.88	7.17	5.18	4.63	3.82	3.73	3.65	
12	4.52	4.91	5.24	6.72	4.01	5.07	7.11	5.08	4.62	3.83	3.73	3.65	
13	4.54	5.29	5.21	6.65	4.07	5.74	7.21	5.01	4.61	3.83	3.73	3.65	
14	4.52	5.02	5.18	5.91	4.05	5.70	8.20	4.95	4.60	3.83	3.72	3.64	
15	4.52	4.96	5.44	5.24	4.04	5.75	7.73	4.90	4.59	3.83	3.71	3.63	
16	4.56	4.97	5.83	4.86	4.15	5.62	7.63	4.88	4.54	3.82	3.70	3.63	
17	4.55	5.13	5.99	4.60	4.74	5.61	7.35	4.85	4.49	3.82	3.69	3.63	
18	4.52	5.39	6.12	4.85	4.80	5.11	6.61	4.82	4.45	3.82	3.68	3.62	
19	4.48	6.10	5.67	4.95	4.85	5.01	6.49	4.80	4.39	3.82	3.68	3.63	
20	4.46	6.43	5.26	4.54	4.83	5.08	7.94	4.77	4.32	3.81	3.67	3.62	
21	4.43	6.33	5.10	4.26	4.82	5.15	7.82	4.74	4.25	3.81	3.67	3.62	
22	4.39	5.51	5.01	4.20	4.84	5.18	7.19	4.71	4.16	3.83	3.67	3.62	
23	4.39	5.08	4.95	4.14	4.78	5.63	6.30	4.71	4.07	3.85	3.66	3.62	
24	4.38	4.96	4.91	4.27	4.69	5.76	6.32	4.69	4.00	3.85	3.67	3.61	
25	4.38	4.88	4.87	4.72	4.49	5.36	7.89	4.64	3.95	3.87	3.66	3.61	
26	4.47	4.83	4.83	5.66	4.31	5.75	7.67	4.35	3.94	3.87	3.66	3.61	
27	4.75	4.82	4.84	5.89	3.92	6.37	7.06	4.15	3.98	3.86	3.65	3.60	
28	4.78	4.92	4.94	5.70	3.91	6.10	7.16	4.38	4.00	3.85	3.66	3.60	
29	4.71	5.01	5.41	4.96	3.91	6.36	7.49	4.62	3.98	3.84		3.59	
30	4.80	5.14	5.07	4.45	4.29	6.51	7.00	4.65	3.91	3.82		3.57	
31		5.17		4.19	4.66		6.30		3.82	3.81		3.56	
Mean	4.56	5.21	5.27	5.10	4.32	5.34	7.37	5.33	4.39	3.81	3.71	3.63	
Max	4.80	6.43	6.12	6.72	4.85	6.51	8.20	7.51	4.72	3.87	3.79	3.68	8.20
Min	4.38	4.81	4.83	4.14	3.91	4.64	6.30	4.15	3.82	3.72	3.65	3.56	3.56

Annual Max Momentary Gage Height 8.50 M (MSL), at 9.00 Hours, on Oct 14, 2001
Zero Gage at Bottom Elevation 2.63 M (MSL), River Bed 3.40 M (MSL)
Left Bank Elevation 10.81 M (MSL)
Right Bank Elevation 10.80 M (MSL), Drainage Area 1280 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.90	14.50	14.80	12.10	2.70	7.20	41.10	23.20	7.00	0.95	0.95	0.42	
2	6.80	11.20	15.25	14.20	2.45	7.20	62.50	29.90	7.10	0.85	0.90	0.40	
3	7.00	11.35	12.85	11.95	2.15	7.00	70.25	49.50	7.50	0.70	0.85	0.42	
4	7.10	18.40	15.70	10.15	2.05	6.90	70.00	60.25	7.70	0.70	0.85	0.40	
5	6.90	23.05	14.20	9.10	5.50	9.25	70.75	60.50	7.50	0.65	0.80	0.40	
6	6.70	20.80	12.70	8.50	6.10	11.80	77.00	61.25	7.30	0.65	0.80	0.40	
7	6.60	13.15	19.00	8.20	3.10	11.80	62.00	45.00	7.30	0.60	0.80	0.42	
8	6.50	10.30	23.35	8.65	2.80	12.70	69.50	26.10	7.20	0.85	0.80	0.46	
9	6.30	9.85	14.50	18.70	2.55	12.55	71.30	18.10	7.10	1.10	0.75	0.44	
10	6.10	9.10	17.80	27.30	2.30	9.85	65.00	16.15	7.00	1.05	0.70	0.42	
11	5.80	8.65	16.60	34.70	2.10	9.70	52.75	14.20	6.80	1.10	0.65	0.40	
12	5.70	10.15	15.10	41.90	2.05	12.55	51.25	12.70	6.70	1.15	0.65	0.40	
13	5.90	15.85	14.65	40.50	2.35	22.60	53.75	11.65	6.60	1.15	0.65	0.40	
14	5.70	11.80	14.20	25.70	2.25	22.00	80.00	10.75	6.50	1.15	0.60	0.38	
15	5.70	10.90	18.10	15.10	2.20	22.75	66.75	10.00	6.40	1.15	0.55	0.36	
16	6.10	11.05	24.10	9.40	2.75	20.80	64.25	9.70	5.90	1.10	0.50	0.36	
17	6.00	13.45	27.30	6.50	7.90	20.65	57.25	9.25	5.40	1.10	0.48	0.36	
18	5.70	17.35	29.90	9.25	8.50	13.15	39.70	8.80	5.00	1.10	0.46	0.34	
19	5.30	29.50	21.55	10.75	9.25	11.65	37.30	8.50	4.40	1.10	0.46	0.36	
20	5.10	36.10	15.40	5.90	8.95	12.70	72.20	8.20	3.70	1.05	0.44	0.34	
21	4.80	34.10	13.00	3.30	8.80	13.75	69.00	7.90	3.25	1.05	0.44	0.34	
22	4.40	19.15	11.65	3.00	9.10	14.20	53.25	7.60	2.80	1.15	0.44	0.34	
23	4.40	12.70	10.75	2.70	8.30	20.95	33.50	7.60	2.35	1.25	0.42	0.34	
24	4.30	10.90	10.15	3.35	7.40	22.90	33.90	7.40	2.00	1.25	0.44	0.32	
25	4.30	9.70	9.55	7.70	5.40	16.90	70.75	6.90	1.75	1.35	0.42	0.32	
26	5.20	8.95	8.95	21.40	3.60	22.75	65.25	4.00	1.70	1.35	0.42	0.32	
27	8.00	8.80	9.10	25.30	1.60	34.90	50.00	2.75	1.90	1.30	0.40	0.30	
28	8.30	10.30	10.60	22.00	1.55	29.50	52.50	4.30	2.00	1.25	0.42	0.30	
29	7.60	11.65	17.65	10.90	1.55	34.70	60.75	6.70	1.90	1.20		0.28	
30	8.50	13.60	12.55	5.00	3.45	37.70	48.50	7.00	1.55	1.10		0.24	
31		14.05		2.95	7.10		33.50		1.10	1.05		0.22	
Total	183.70	460.40	471.00	436.15	137.85	513.05	1805.50	555.85	152.40	32.55	17.04	11.20	4776.69 CMSDAY
Mean	6.12	14.85	15.70	14.07	4.45	17.10	58.24	18.53	4.92	1.05	0.61	0.36	13.09 CMS
Max	8.50	36.10	29.90	41.90	9.25	37.70	80.00	61.25	7.70	1.35	0.95	0.46	80.00 CMS
Min	4.30	8.65	8.95	2.70	1.55	6.90	33.50	2.75	1.10	0.60	0.40	0.22	0.22 CMS
Runoff	15.872	39.779	40.694	37.683	11.910	44.328	155.995	48.025	13.167	2.812	1.472	0.968	412.706 MCM

Momentary Peak 89.00 CMS, at 8.50 M (MSL), at 9.00 Hours, on Oct 14, 2001

Runoff Yield 10.22 Liters/Second/Square KM, Momentary Peak Yield 69.531 Liters/Second/Square KM

WATER YEAR : 2001

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 in front of Wat Ban Puk.

Ban Puk **Amphoe** Makham **Changwat** Chanthaburi

Drainage Area 671 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +6.300 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 20 meters from the top staff gage.

Elevation +14.374 m. (M.S.L.)

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 1973 to date.

Rated by Float -

Rated by Current Meter 1973 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

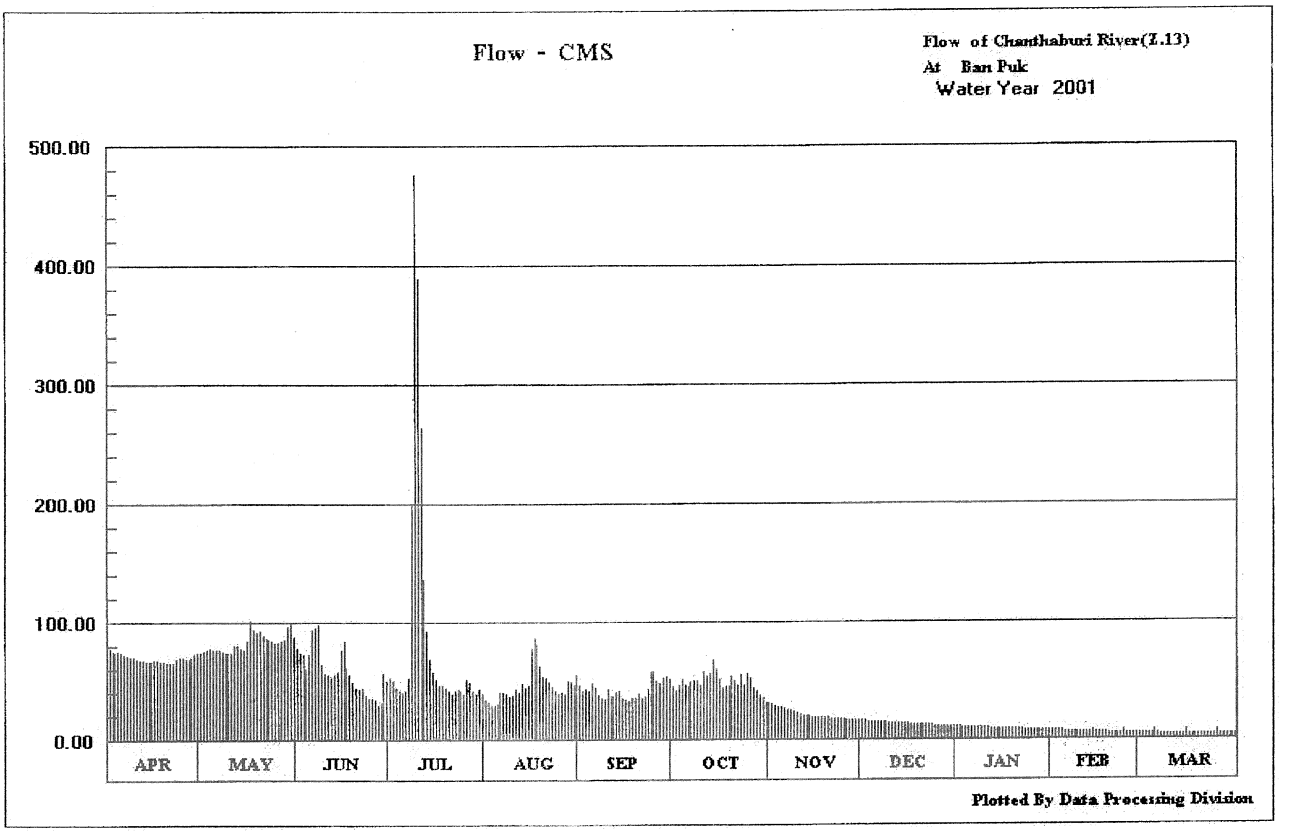
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 29 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.78	8.69	8.79	8.05	7.42	7.84	7.80	7.30	8.70	8.56	8.53	8.50	
2	8.72	8.71	8.70	7.96	7.32	7.67	7.65	7.26	8.70	8.57	8.52	8.50	
3	8.70	8.75	8.66	7.75	7.24	7.69	7.84	7.24	8.70	8.56	8.53	8.50	
4	8.71	8.79	8.28	7.65	7.21	7.65	8.01	7.18	8.72	8.55	8.52	8.51	
5	8.69	8.76	8.63	7.63	7.29	7.87	7.84	7.17	8.72	8.54	8.53	8.51	
6	8.65	8.75	9.23	7.68	7.64	7.75	7.77	7.12	8.72	8.53	8.52	8.54	
7	8.62	8.76	9.25	8.04	7.64	7.54	7.90	7.07	8.71	8.52	8.53	8.55	
8	8.59	8.73	9.33	11.58	7.60	7.45	7.97	7.05	8.71	8.52	8.53	8.54	
9	8.58	8.67	8.39	14.62	7.49	7.40	7.96	7.00	8.70	8.51	8.53	8.54	
10	8.54	8.67	8.18	13.88	7.53	7.69	7.85	6.96	8.69	8.50	8.53	8.54	
11	8.51	8.70	8.13	12.55	7.72	7.48	8.19	6.91	8.68	8.51	8.52	8.52	
12	8.49	8.86	8.03	10.27	7.63	7.51	8.06	6.87	8.68	8.51	8.52	8.52	
13	8.48	8.86	8.11	9.19	7.86	7.63	8.15	6.85	8.68	8.51	8.53	8.51	
14	8.48	8.81	8.19	8.52	7.75	7.66	8.49	7.96	8.67	8.52	8.52	8.50	
15	8.48	8.76	8.77	8.19	7.84	7.47	8.27	8.84	8.66	8.52	8.52	8.50	
16	8.49	8.96	8.97	7.99	8.78	7.39	8.01	8.84	8.66	8.52	8.52	8.48	
17	8.49	9.42	8.33	7.83	9.05	7.36	7.74	8.82	8.63	8.51	8.52	8.46	
18	8.48	9.22	8.11	7.82	8.89	7.43	7.79	8.82	8.61	8.51	8.52	8.46	
19	8.45	9.16	7.91	7.75	8.36	7.45	7.78	8.81	8.62	8.51	8.52	8.46	
20	8.44	9.21	7.75	7.65	8.06	7.60	8.10	8.80	8.62	8.51	8.52	8.45	
21	8.43	9.10	7.69	7.57	8.04	7.43	7.94	8.78	8.61	8.50	8.51	8.43	
22	8.42	9.03	7.74	7.66	7.90	7.51	7.83	8.76	8.61	8.50	8.51	8.43	
23	8.53	9.00	7.54	7.70	7.78	7.70	8.12	8.76	8.60	8.50	8.52	8.41	
24	8.57	8.96	7.43	7.66	7.68	8.19	7.82	8.76	8.60	8.50	8.52	8.40	
25	8.56	8.93	7.46	7.57	7.60	8.21	8.16	8.75	8.60	8.50	8.50	8.38	
26	8.52	8.92	7.40	7.99	7.62	7.95	8.02	8.70	8.60	8.51	8.51	8.36	
27	8.54	8.95	7.24	7.93	7.57	7.89	7.75	8.68	8.60	8.50	8.51	8.52	
28	8.59	9.01	7.30	7.68	7.97	8.05	7.67	8.68	8.59	8.50	8.51	8.71	
29	8.64	9.29	8.15	7.59	7.90	8.10	7.55	8.68	8.58	8.50		8.71	
30	8.67	9.35	7.96	7.71	7.85	7.98	7.43	8.69	8.58	8.50		8.71	
31		9.06		7.60	8.13		7.33		8.57	8.50		8.72	
Mean	8.56	8.93	8.19	8.62	7.82	7.68	7.90	8.00	8.65	8.52	8.52	8.51	
Max	8.78	9.42	9.33	14.62	9.05	8.21	8.49	8.84	8.72	8.57	8.53	8.72	14.62
Min	8.42	8.67	7.24	7.57	7.21	7.36	7.33	6.85	8.57	8.50	8.50	8.36	6.85

Annual Max Momentary Gage Height 14.82 M (MSL), at 10.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 6.30 M (MSL), River Bed 5.23 M (MSL)
Left Bank Elevation 14.81 M (MSL)
Right Bank Elevation 14.82 M (MSL), Drainage Area 671 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	78.72	75.66	79.06	54.50	35.86	48.20	47.00	32.50	17.54	12.45	8.83	6.48	
2	76.68	76.34	76.00	51.80	33.06	43.10	42.50	31.50	17.34	12.31	8.74	6.41	
3	76.00	77.70	74.64	45.50	31.00	43.70	48.20	31.00	17.15	12.17	8.64	6.34	
4	76.34	79.06	61.72	42.50	30.25	42.50	53.30	29.50	16.96	12.04	8.54	6.27	
5	75.66	78.04	73.62	41.90	32.25	49.10	48.20	29.25	16.78	11.91	8.45	6.20	
6	74.30	77.70	95.34	43.40	42.20	45.50	46.10	28.00	16.59	11.78	8.36	6.13	
7	73.28	78.04	96.10	54.20	42.20	39.26	50.00	26.75	16.41	11.65	8.27	6.06	
8	72.26	77.02	99.20	200.68	41.00	36.70	52.10	26.25	16.23	11.52	8.18	6.00	
9	71.92	74.98	65.46	477.60	37.82	35.30	51.80	25.00	16.05	11.39	8.09	5.93	
10	70.56	74.98	58.40	389.80	38.97	43.70	48.50	24.04	15.87	11.27	8.00	5.87	
11	69.54	76.00	56.90	265.30	44.60	37.54	58.70	22.84	15.70	11.14	7.91	5.80	
12	68.86	81.56	53.90	138.34	41.90	38.39	54.80	21.88	15.53	11.02	7.82	5.74	
13	68.52	81.56	56.30	93.82	48.80	41.90	57.50	21.40	15.36	10.90	7.74	5.68	
14	68.52	79.76	58.70	69.88	45.50	42.80	68.86	21.16	15.19	10.78	7.65	5.61	
15	68.52	78.04	78.38	58.70	48.20	37.26	61.38	20.93	15.02	10.66	7.57	5.55	
16	68.86	85.16	85.52	52.70	78.72	35.02	53.30	20.70	14.86	10.54	7.48	5.49	
17	68.86	102.80	63.42	47.90	88.50	34.18	45.20	20.47	14.69	10.43	7.40	5.43	
18	68.52	94.96	56.30	47.60	82.64	36.14	46.70	20.25	14.53	10.31	7.32	5.37	
19	67.50	92.68	50.30	45.50	64.44	36.70	46.40	20.03	14.37	10.20	7.24	5.31	
20	67.16	94.58	45.50	42.50	54.80	41.00	56.00	19.81	14.21	10.09	7.16	5.25	
21	66.82	90.40	43.70	40.13	54.20	36.14	51.20	19.59	14.06	9.98	7.08	5.19	
22	66.48	87.74	45.20	42.80	50.00	38.39	47.90	19.37	13.90	9.87	7.00	5.14	
23	70.22	86.60	39.26	44.00	46.40	44.00	56.60	19.16	13.75	9.76	6.93	5.08	
24	71.58	85.16	36.14	42.80	43.40	58.70	47.60	18.95	13.60	9.65	6.85	5.02	
25	71.24	84.08	36.98	40.13	41.00	59.34	57.80	18.74	13.45	9.54	6.77	4.97	
26	69.88	83.72	35.30	52.70	41.60	51.50	53.60	18.53	13.30	9.44	6.70	4.91	
27	70.56	84.80	31.00	50.90	40.13	49.70	45.50	18.33	13.15	9.34	6.63	4.86	
28	72.26	86.98	32.50	43.40	52.10	54.50	43.10	18.13	13.01	9.23	6.55	4.81	
29	73.96	97.62	57.50	40.71	50.00	56.00	39.55	17.93	12.87	9.13		4.75	
30	74.98	100.00	51.80	44.30	48.50	52.40	36.14	17.73	12.72	9.03		4.70	
31		88.88		41.00	56.90		33.34		12.58	8.93		4.65	
Total	2138.56	2612.60	1794.14	2746.99	1486.94	1308.66	1548.87	679.72	462.77	328.46	213.90	171.00	15492.61 CMSDAY
Mean	71.29	84.28	59.80	88.61	47.97	43.62	49.96	22.66	14.93	10.60	7.64	5.52	42.45 CMS
Max	78.72	102.80	99.20	477.60	88.50	59.34	68.86	32.50	17.54	12.45	8.83	6.48	477.60 CMS
Min	66.48	74.98	31.00	40.13	30.25	34.18	33.34	17.73	12.58	8.93	6.55	4.65	4.65 CMS
Runoff	184.772	225.729	155.014	237.340	128.472	113.068	133.822	58.728	39.983	28.379	18.481	14.774	1338.562 MCM

Momentary Peak 503.60 CMS, at 14.82 M (MSL), at 10.00 Hours, on Jul 9, 2001
Runoff Yield 63.26 Liters/Second/Square KM, Momentary Peak Yield 750.522 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 245 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +5.400 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 30 meters from the top staff gage.

Elevation +5.400 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1968 to date.

Rating Operation

Period of Rating 1986 to date.

Rated by Float -

Rated by Current Meter 1986 to date.

Stability of Channel Regimes Fairly stable.

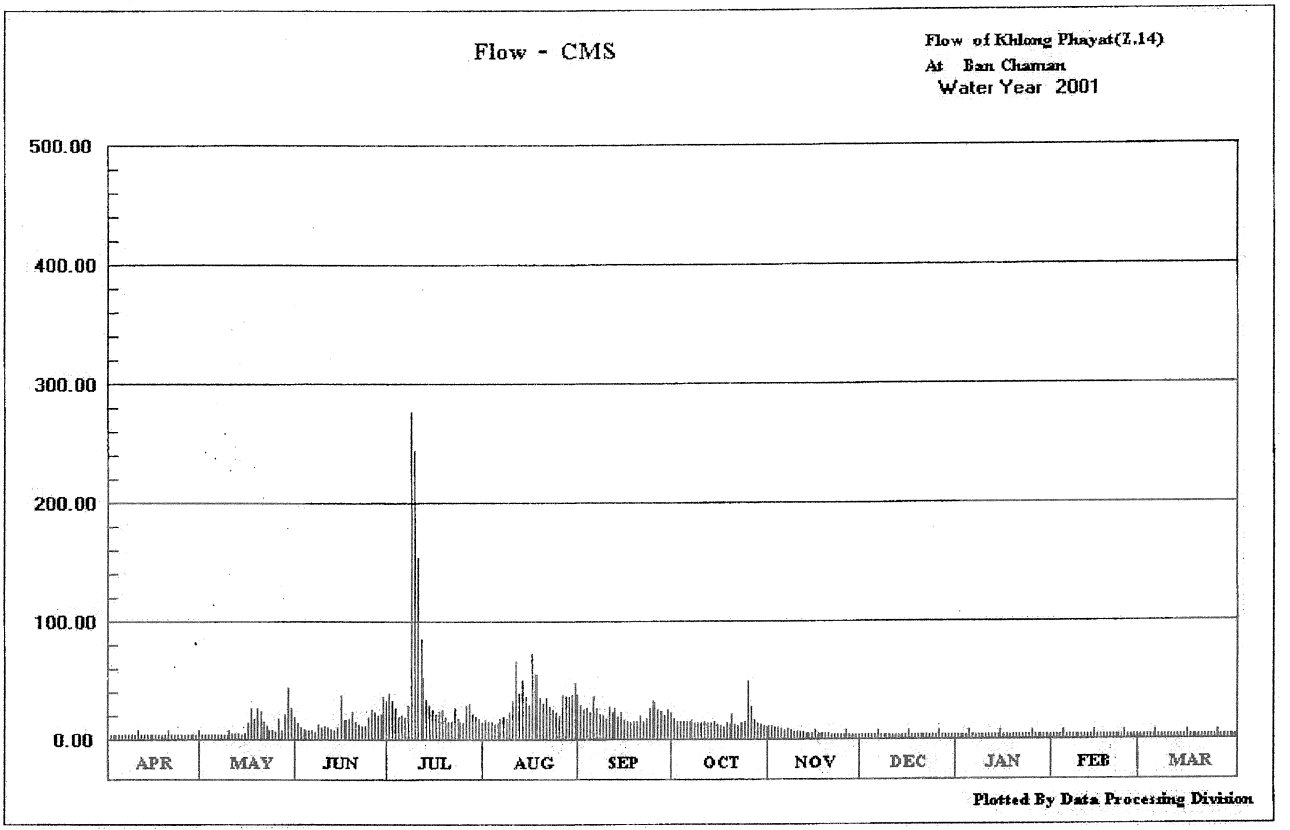
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 61 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.60	6.52	7.33	8.64	7.49	8.13	7.61	7.19	6.58	6.39	6.29	6.27	
2	6.58	6.55	7.12	8.36	7.43	7.97	7.47	7.18	6.54	6.33	6.29	6.26	
3	6.57	6.55	7.03	7.99	7.41	8.02	7.46	7.08	6.53	6.36	6.26	6.33	
4	6.53	6.51	6.98	7.66	7.28	7.85	7.46	7.10	6.57	6.34	6.27	6.30	
5	6.58	6.50	6.94	7.73	7.34	8.49	7.44	7.02	6.53	6.35	6.27	6.26	
6	6.53	6.48	6.94	7.65	7.59	8.04	7.46	6.97	6.55	6.35	6.29	6.30	
7	6.51	6.44	6.88	8.12	7.62	7.80	7.52	6.99	6.53	6.35	6.26	6.61	
8	6.50	6.41	7.28	14.10	7.57	7.68	7.39	6.92	6.52	6.34	6.27	6.38	
9	6.47	6.35	7.08	13.55	7.85	7.59	7.35	6.89	6.51	6.34	6.27	6.41	
10	6.42	6.35	7.19	11.96	8.34	8.10	7.33	6.87	6.49	6.31	6.27	6.30	
11	6.48	6.74	7.14	10.33	9.73	7.86	7.44	6.86	6.49	6.28	6.29	6.29	
12	6.56	6.75	7.06	9.19	8.64	8.05	7.36	6.84	6.50	6.29	6.28	6.26	
13	6.44	6.71	6.95	8.42	9.10	7.65	7.33	6.80	6.49	6.30	6.26	6.27	
14	6.40	6.62	7.13	8.13	8.51	7.82	7.42	6.79	6.50	6.35	6.30	6.26	
15	6.41	6.80	8.58	7.97	8.16	7.49	7.31	6.77	6.50	6.34	6.26	6.27	
16	6.41	7.32	7.53	7.80	9.93	7.47	7.19	6.76	6.48	6.34	6.26	6.26	
17	6.44	8.01	7.53	7.88	9.29	7.37	7.15	6.76	6.48	6.34	6.25	6.25	
18	6.46	7.57	7.58	7.95	9.33	7.48	7.40	6.73	6.47	6.32	6.25	6.28	
19	6.46	8.00	7.89	7.62	8.47	7.44	7.28	6.72	6.49	6.33	6.26	6.24	
20	6.44	7.92	7.46	7.45	8.18	7.68	7.78	6.70	6.45	6.32	6.26	6.26	
21	6.48	7.44	7.26	7.45	8.44	7.45	7.31	6.69	6.46	6.31	6.27	6.25	
22	6.47	7.21	7.20	8.00	8.06	7.60	7.20	6.67	6.44	6.32	6.25	6.25	
23	6.46	6.93	7.22	7.61	7.97	8.00	7.38	6.65	6.43	6.32	6.24	6.24	
24	6.43	6.94	7.64	7.44	7.81	8.31	7.48	6.56	6.42	6.30	6.25	6.24	
25	6.44	6.89	7.93	7.38	7.69	8.26	9.04	6.63	6.42	6.26	6.27	6.27	
26	6.46	7.61	7.85	8.14	8.57	7.97	8.10	6.59	6.42	6.26	6.28	6.26	
27	6.50	6.93	7.70	8.20	8.52	7.90	7.55	6.59	6.40	6.26	6.26	6.28	
28	6.52	7.77	7.76	7.77	8.50	7.69	7.36	6.61	6.40	6.25	6.28	6.25	
29	6.54	8.87	8.53	7.63	8.60	7.98	7.28	6.59	6.38	6.26		6.27	
30	6.57	8.04	8.32	7.61	9.03	7.85	7.19	6.58	6.37	6.26		6.27	
31		7.67		7.47	8.61		7.15		6.40	6.25		6.27	
Mean	6.49	7.08	7.43	8.49	8.29	7.83	7.46	6.80	6.48	6.31	6.27	6.29	
Max	6.60	8.87	8.58	14.10	9.93	8.49	9.04	7.19	6.58	6.39	6.30	6.61	14.10
Min	6.40	6.35	6.88	7.38	7.28	7.37	7.15	6.56	6.37	6.25	6.24	6.24	6.24

Annual Max Momentary Gage Height 14.87 M (MSL), at 18.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 5.40 M (MSL), River Bed 5.31 M (MSL)
Left Bank Elevation 13.83 M (MSL)
Right Bank Elevation 12.81 M (MSL), Drainage Area 245 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.00	4.20	14.95	40.30	17.35	30.10	19.70	12.85	4.80	2.90	1.92	1.76	
2	4.80	4.50	11.80	34.70	16.45	26.90	17.05	12.70	4.40	2.30	1.92	1.68	
3	4.70	4.50	10.45	27.30	16.15	27.90	16.90	11.20	4.30	2.60	1.68	2.30	
4	4.30	4.10	9.70	20.70	14.20	24.50	16.90	11.50	4.70	2.40	1.76	2.00	
5	4.80	4.00	9.10	22.10	15.10	37.30	16.60	10.30	4.30	2.50	1.76	1.68	
6	4.30	3.80	9.10	20.50	19.30	28.30	16.90	9.55	4.50	2.50	1.92	2.00	
7	4.10	3.40	8.24	29.90	19.90	23.50	17.90	9.85	4.30	2.50	1.68	5.11	
8	4.00	3.10	14.20	278.50	18.90	21.10	15.85	8.80	4.20	2.40	1.76	2.80	
9	3.70	2.50	11.20	245.00	24.50	19.30	15.25	8.37	4.10	2.40	1.76	3.10	
10	3.20	2.50	12.85	156.00	34.30	29.50	14.95	8.11	3.90	2.10	1.76	2.00	
11	3.80	6.54	12.10	87.05	67.90	24.70	16.60	7.98	3.90	1.84	1.92	1.92	
12	4.60	6.65	10.90	53.75	40.30	28.50	15.40	7.72	4.00	1.92	1.84	1.68	
13	3.40	6.21	9.25	35.90	51.50	20.50	14.95	7.20	3.90	2.00	1.68	1.76	
14	3.00	5.22	11.95	30.10	37.70	23.90	16.30	7.09	4.00	2.50	2.00	1.68	
15	3.10	7.20	39.10	26.90	30.70	17.35	14.65	6.87	4.00	2.40	1.68	1.76	
16	3.10	14.80	18.10	23.50	73.90	17.05	12.85	6.76	3.80	2.40	1.68	1.68	
17	3.40	27.70	18.10	25.10	56.25	15.55	12.25	6.76	3.80	2.40	1.60	1.60	
18	3.60	18.90	19.10	26.50	57.25	17.20	16.00	6.43	3.70	2.20	1.60	1.84	
19	3.60	27.50	25.30	19.90	36.90	16.60	14.20	6.32	3.90	2.30	1.68	1.52	
20	3.40	25.90	16.90	16.75	31.10	21.10	23.10	6.10	3.50	2.20	1.68	1.68	
21	3.80	16.60	13.90	16.75	36.30	16.75	14.65	5.99	3.60	2.10	1.76	1.60	
22	3.70	13.15	13.00	27.50	28.70	19.50	13.00	5.77	3.40	2.20	1.60	1.60	
23	3.60	8.95	13.30	19.70	26.90	27.50	15.70	5.55	3.30	2.20	1.52	1.52	
24	3.30	9.10	20.30	16.60	23.70	33.70	17.20	4.60	3.20	2.00	1.60	1.52	
25	3.40	8.37	26.10	15.70	21.30	32.70	50.00	5.33	3.20	1.68	1.76	1.76	
26	3.60	19.70	24.50	30.30	38.90	26.90	29.50	4.90	3.20	1.68	1.84	1.68	
27	4.00	8.95	21.50	31.50	37.90	25.50	18.50	4.90	3.00	1.68	1.68	1.84	
28	4.20	22.90	22.70	22.90	37.50	21.30	15.40	5.11	3.00	1.60	1.84	1.60	
29	4.40	45.75	38.10	20.10	39.50	27.10	14.20	4.90	2.80	1.68		1.76	
30	4.70	28.30	33.90	19.70	49.75	24.50	12.85	4.80	2.70	1.68		1.76	
31		20.90		17.05	39.70		12.25		3.00	1.60		1.76	
Total	116.60	385.89	519.69	1458.25	1059.80	726.30	537.55	224.31	116.40	66.86	48.88	59.95	5320.48 CMSDAY
Mean	3.89	12.45	17.32	47.04	34.19	24.21	17.34	7.48	3.75	2.16	1.75	1.93	14.58 CMS
Max	5.00	45.75	39.10	278.50	73.90	37.30	50.00	12.85	4.80	2.90	2.00	5.11	278.50 CMS
Min	3.00	2.50	8.24	15.70	14.20	15.55	12.25	4.60	2.70	1.60	1.52	1.52	1.52 CMS
Runoff	10.074	33.341	44.901	125.993	91.567	62.752	46.444	19.380	10.057	5.777	4.223	5.180	459.689 MCM

Momentary Peak 370.40 CMS, at 14.87 M (MSL), at 18.00 Hours, on Jul 8, 2001

Runoff Yield 59.50 Liters/Second/Square KM, Momentary Peak Yield 1511.837 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 244 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +29.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the Meteorological Station.

Elevation +33.743 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1977 to date.

Rating Operation

Period of Rating 1977 to date.

Rated by Float -

Rated by Current Meter 1977 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

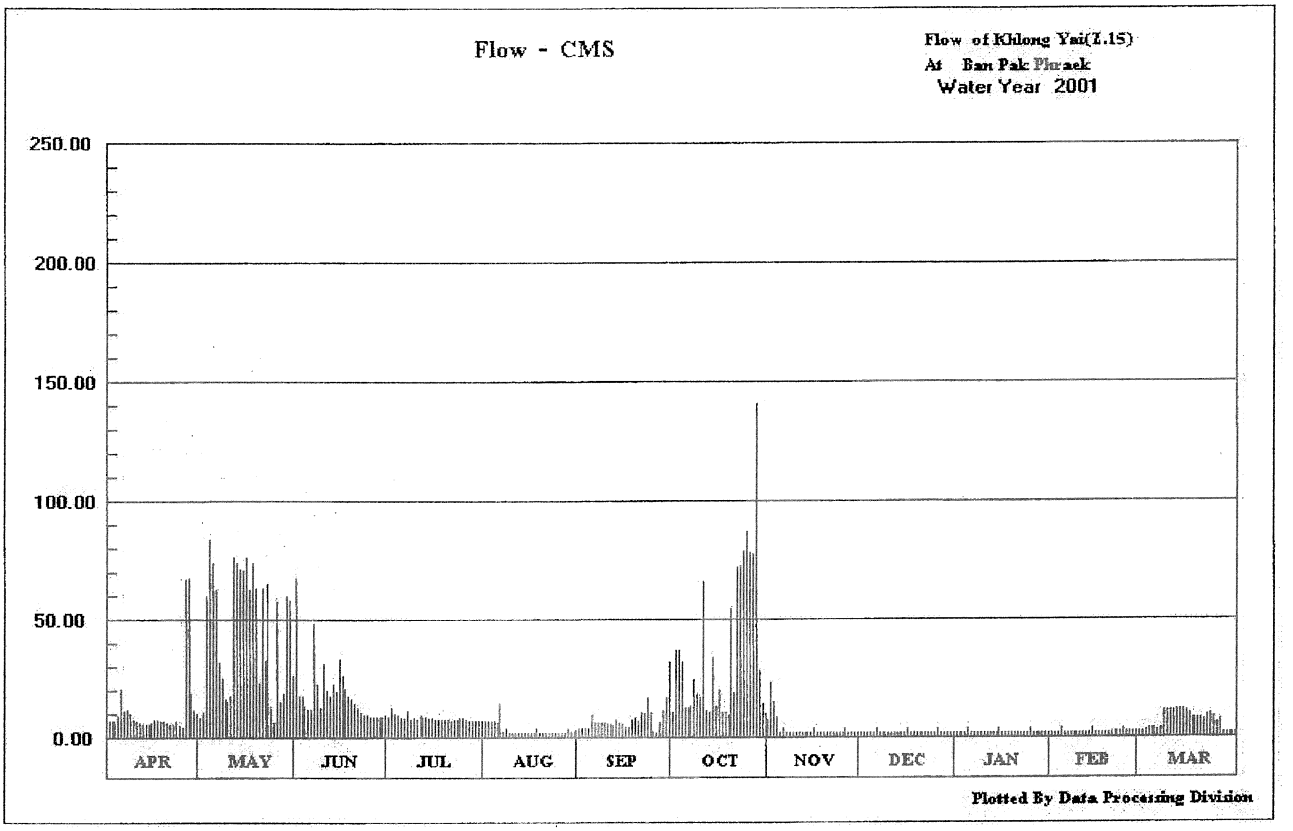
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow effected by the local weir during Dec.30, 98 - Mar. 31, 99. Discharge estimated by recession eqution. Stage-discharge relation defined by 14 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	29.25	29.31	30.92	29.35	29.25	30.54	30.98	29.30	28.75	29.60	29.20	30.33	
2	29.25	29.43	29.70	29.50	29.25	30.54	31.33	29.89	28.64	29.54	29.18	30.33	
3	29.25	30.78	29.70	29.41	29.25	30.51	31.33	29.60	28.65	29.54	29.20	30.38	
4	29.36	31.21	29.53	29.36	29.25	30.56	31.29	29.34	28.84	29.53	29.52	30.54	
5	29.81	31.03	29.49	29.32	30.77	30.93	31.03	29.35	28.84	29.53	29.54	30.51	
6	29.45	30.82	29.49	29.31	31.08	30.79	31.03	29.21	28.81	29.53	29.76	30.48	
7	29.48	30.14	30.53	29.44	30.25	30.78	31.05	29.12	28.78	29.52	29.85	30.45	
8	29.41	29.94	29.87	29.29	29.60	30.75	31.22	29.09	28.75	29.52	29.22	30.51	
9	29.30	29.65	29.51	29.32	29.54	30.75	31.14	29.03	28.75	29.52	29.20	31.00	
10	29.25	29.61	30.12	29.30	29.45	30.73	31.12	29.01	28.75	29.52	29.20	31.00	
11	29.22	29.69	29.79	29.37	29.40	30.71	31.51	28.99	28.74	29.52	29.20	31.00	
12	29.20	31.08	29.70	29.34	29.38	30.70	31.00	28.97	28.74	29.52	29.20	31.00	
13	29.21	31.04	29.87	29.33	29.37	30.86	30.99	28.96	28.75	29.52	29.20	31.02	
14	29.20	30.99	29.75	29.32	29.36	30.75	31.31	28.95	28.75	29.51	29.20	31.02	
15	29.24	30.98	30.17	29.31	29.35	30.74	31.05	28.94	28.75	29.51	29.83	31.02	
16	29.30	31.08	29.99	29.30	29.30	30.62	31.17	28.93	28.74	29.50	30.00	31.00	
17	29.30	30.82	29.80	29.30	29.30	30.59	30.99	28.92	28.74	29.50	30.00	30.97	
18	29.27	31.03	29.69	29.29	29.29	30.86	30.98	28.87	29.68	29.50	30.07	30.87	
19	29.25	30.84	29.65	29.29	29.28	30.89	30.93	28.79	29.67	29.50	30.10	30.87	
20	29.22	29.88	29.58	29.28	29.28	30.82	31.45	28.75	29.66	29.50	30.16	30.88	
21	29.19	30.84	29.51	29.27	29.29	30.99	31.15	28.80	29.65	29.52	30.19	30.87	
22	29.18	30.15	29.42	29.28	29.27	30.96	31.00	28.96	29.63	29.51	30.20	30.85	
23	29.27	30.87	29.38	29.28	29.25	31.12	31.01	28.91	29.62	29.50	30.20	30.94	
24	29.16	29.54	29.36	29.32	29.24	30.99	31.13	28.81	29.62	29.54	30.24	30.95	
25	29.11	29.24	29.34	29.32	29.22	30.20	31.26	28.84	29.60	29.56	30.28	30.91	
26	30.91	30.72	29.33	29.28	29.24	29.93	31.11	28.77	29.59	29.81	30.29	30.79	
27	30.92	29.60	29.33	29.27	29.60	30.79	31.10	28.78	29.58	29.83	30.27	30.86	
28	29.74	29.73	29.33	29.27	29.76	31.01	32.06	28.76	29.60	29.25	30.33	30.14	
29	29.45	30.78	29.34	29.26	30.24	31.12	30.04	28.74	29.58	29.21		30.12	
30	29.40	30.74	29.36	29.27	30.32	31.29	29.59	28.75	29.58	29.21		29.62	
31		29.99		29.27	30.45		29.40		29.59	29.21		29.35	
Mean	29.42	30.37	29.69	29.32	29.58	30.76	31.02	29.00	29.14	29.50	29.74	30.66	
Max	30.92	31.21	30.92	29.50	31.08	31.29	32.06	29.89	29.68	29.83	30.33	31.02	32.06
Min	29.11	29.24	29.33	29.26	29.22	29.93	29.40	28.74	28.64	29.21	29.18	29.35	28.64

Annual Max Momentary Gage Height 32.15 M (MSL), at 18.00 Hours, on Oct 28, 2001
Zero Gage at Bottom Elevation 29.00 M (MSL), River Bed 28.20 M (MSL)
Left Bank Elevation 33.15 M (MSL)
Right Bank Elevation 33.16 M (MSL), Drainage Area 244 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.55	8.83	68.46	9.75	7.55	4.68	11.38	8.60	0.15	1.50	0.70	3.59	
2	7.55	11.59	18.50	13.20	7.55	4.68	37.47	24.19	0.04	1.38	0.66	3.59	
3	7.55	61.10	18.50	11.13	7.55	4.47	37.47	15.70	0.05	1.38	0.70	3.74	
4	9.98	84.61	13.95	9.98	7.55	4.82	32.56	9.52	0.24	1.36	1.34	4.68	
5	21.71	74.32	12.97	9.06	7.08	10.08	13.13	1.00	0.24	1.36	1.38	4.47	
6	12.05	63.16	12.97	8.83	15.18	7.36	13.13	0.72	0.21	1.36	1.88	4.28	
7	12.74	32.78	48.95	11.82	3.35	7.22	13.95	0.54	0.18	1.34	2.15	4.10	
8	11.13	25.78	23.57	8.39	1.50	6.80	25.28	0.49	0.15	1.34	0.74	4.47	
9	8.60	17.10	13.45	9.06	1.38	6.80	18.88	0.43	0.15	1.34	0.70	11.90	
10	7.55	15.98	32.04	8.60	1.20	6.52	17.44	0.41	0.15	1.34	0.70	11.90	
11	6.92	18.22	21.11	10.21	1.10	6.24	66.40	0.39	0.14	1.34	0.70	11.90	
12	6.50	77.02	18.50	9.52	1.06	6.10	11.90	0.37	0.14	1.34	0.70	11.90	
13	6.71	74.86	23.57	9.29	1.04	8.58	11.64	0.36	0.15	1.34	0.70	12.72	
14	6.50	72.17	19.95	9.06	1.02	6.80	34.89	0.35	0.15	1.32	0.70	12.72	
15	7.34	71.64	33.89	8.83	1.00	6.66	13.95	0.34	0.15	1.32	2.09	12.72	
16	8.60	77.02	27.38	8.60	0.90	5.30	21.04	0.33	0.14	1.30	2.60	11.90	
17	8.60	63.16	21.40	8.60	0.90	5.03	11.64	0.32	0.14	1.30	2.60	11.12	
18	7.97	74.32	18.22	8.39	0.88	8.58	11.38	0.27	1.66	1.30	2.81	8.76	
19	7.55	64.22	17.10	8.39	0.86	9.12	10.08	0.19	1.64	1.30	2.90	8.76	
20	6.92	23.88	15.20	8.18	0.86	7.86	55.25	0.15	1.62	1.30	3.08	8.94	
21	6.33	64.22	13.45	7.97	0.88	11.64	19.60	0.20	1.60	1.34	3.17	8.76	
22	6.16	33.15	11.36	8.18	0.84	10.86	72.70	0.36	1.56	1.32	3.20	8.40	
23	7.97	65.81	10.44	8.18	0.80	17.44	73.24	0.31	1.54	1.30	3.20	10.34	
24	5.82	14.20	9.98	9.06	0.78	11.64	79.87	0.21	1.54	1.38	3.32	10.60	
25	4.97	7.34	9.52	9.06	0.74	3.20	87.66	0.24	1.50	1.42	3.44	9.56	
26	67.93	58.10	9.29	8.18	0.78	2.39	78.69	0.17	1.48	2.03	3.47	7.36	
27	68.46	15.70	9.29	7.97	1.50	7.36	78.10	0.18	1.46	2.09	3.41	8.58	
28	19.66	19.37	9.29	7.97	1.88	12.31	141.20	0.16	1.50	0.80	3.59	3.02	
29	12.05	61.10	9.52	7.76	3.32	17.44	29.14	0.14	1.46	0.72		2.96	
30	10.90	59.10	9.98	7.97	3.56	32.56	15.45	0.15	1.46	0.72		1.54	
31		27.38		7.97	4.10		10.90		1.48	0.72		1.00	
Total	390.27	1437.23	581.80	279.16	88.69	260.54	1155.41	66.79	24.07	40.70	56.63	240.28	4621.57 CMSDAY
Mean	13.01	46.36	19.39	9.01	2.86	8.68	37.27	2.23	0.78	1.31	2.02	7.75	12.66 CMS
Max	68.46	84.61	68.46	13.20	15.18	32.56	141.20	24.19	1.66	2.09	3.59	12.72	141.20 CMS
Min	4.97	7.34	9.29	7.76	0.74	2.39	10.08	0.14	0.04	0.72	0.66	1.00	0.04 CMS
Runoff	33.719	124.177	50.268	24.119	7.663	22.511	99.827	5.771	2.080	3.516	4.893	20.760	399.304 MCM

Momentary Peak 147.50 CMS, at 32.15 M (MSL), at 18.00 Hours, on Oct 28, 2001
Runoff Yield 51.89 Liters/Second/Square KM, Momentary Peak Yield 604.508 Liters/Second/Square KM

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Phlo at Ban Chamkho, Rayong (Z.18)

Lat 12 - 57 - 18 N. **Long** 101 - 40 - 32 E.

Location on left bank at the bridge on road.

Ban Chamkho **Amphoe** Klaeng **Changwat** Rayong

Drainage Area 167 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +28.146 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank the top staff gage.

Elevation +35.314 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1982 to date.

Rating Operation

Period of Rating 1983 to date.

Rated by Float -

Rated by Current Meter 1983 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

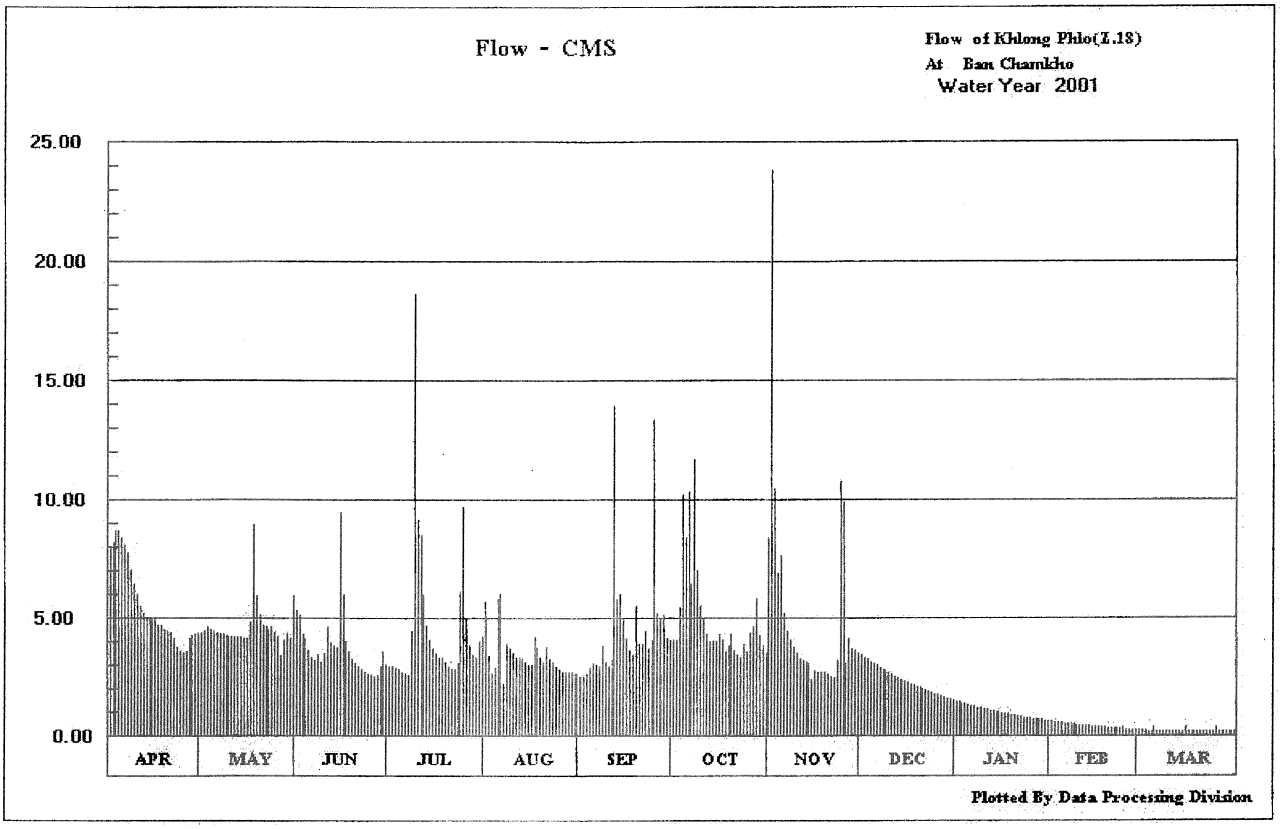
Overbank Flow Conditions Overbank flow starts at elevation +31.400 m.(M.S.L.) and is including overbank flow.

General Description Records fair. Flow regulated by the concrete weir about 1.5 kilometers downstream from the gage site. Stage-discharge relation defined by 50 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	30.80	30.49	30.59	30.24	30.63	30.16	30.44	30.83	31.24	31.04	30.39	29.54	
2	30.82	30.50	30.57	30.24	30.33	30.16	30.44	31.77	31.31	31.02	30.36	29.53	
3	30.85	30.52	30.48	30.23	30.18	30.18	30.60	30.97	31.33	31.00	30.34	29.53	
4	30.85	30.51	30.45	30.22	30.23	30.23	30.95	30.73	31.35	30.98	30.32	29.54	
5	30.83	30.50	30.37	30.20	30.64	30.27	30.83	30.78	31.35	30.96	30.29	29.55	
6	30.81	30.49	30.32	30.18	30.66	30.26	30.96	30.58	31.33	30.93	30.26	29.57	
7	30.79	30.48	30.29	30.17	30.09	30.24	30.70	30.50	31.29	30.92	30.25	29.59	
8	30.74	30.48	30.34	30.50	30.41	30.40	31.05	30.44	31.25	30.91	30.22	29.61	
9	30.70	30.47	30.28	31.51	30.38	30.28	30.74	30.39	31.21	30.88	30.19	29.61	
10	30.66	30.46	30.35	30.88	30.35	30.25	30.61	30.35	31.22	30.85	30.16	29.62	
11	30.61	30.46	30.52	30.84	30.32	30.29	30.55	30.31	31.25	30.84	30.14	29.60	
12	30.58	30.46	30.42	30.66	30.32	31.20	30.48	30.29	31.27	30.81	30.11	29.55	
13	30.55	30.46	30.40	30.53	30.31	30.64	30.43	30.28	31.28	30.79	30.08	29.50	
14	30.55	30.46	30.39	30.44	30.28	30.66	30.43	30.27	31.28	30.75	30.04	29.45	
15	30.55	30.45	30.90	30.38	30.26	30.55	30.43	30.13	31.29	30.74	30.02	29.41	
16	30.55	30.45	30.66	30.35	30.26	30.45	30.48	30.21	31.28	30.72	29.98	29.37	
17	30.53	30.54	30.43	30.32	30.46	30.37	30.44	30.19	31.28	30.71	29.95	29.31	
18	30.53	30.87	30.36	30.32	30.39	30.34	30.36	30.19	31.25	30.69	29.92	29.26	
19	30.51	30.65	30.31	30.28	30.32	30.61	30.40	30.19	31.22	30.67	29.88	29.23	
20	30.50	30.57	30.27	30.25	30.28	30.41	30.48	30.18	31.21	30.66	29.84	29.20	
21	30.49	30.53	30.24	30.22	30.39	30.41	30.37	30.16	31.20	30.65	29.82	29.16	
22	30.45	30.52	30.22	30.22	30.31	30.50	30.34	30.14	31.19	30.62	29.78	29.14	
23	30.39	30.51	30.20	30.27	30.28	30.38	30.32	30.30	31.18	30.60	29.74	29.10	
24	30.36	30.52	30.18	30.67	30.25	30.44	30.41	30.99	31.18	30.58	29.71	29.07	
25	30.35	30.49	30.17	30.92	30.22	31.16	30.36	30.93	31.17	30.55	29.68	29.03	
26	30.36	30.46	30.16	30.56	30.20	30.58	30.49	30.27	31.16	30.53	29.65	28.98	
27	30.45	30.33	30.17	30.40	30.20	30.56	30.52	30.45	31.14	30.52	29.63	28.91	
28	30.47	30.44	30.24	30.34	30.19	30.57	30.64	30.38	31.11	30.49	29.59	28.85	
29	30.48	30.48	30.36	30.32	30.20	30.45	30.47	30.99	31.08	30.47		28.85	
30	30.49	30.45	30.26	30.43	30.18	30.44	30.40	31.06	31.08	30.44		28.80	
31		30.65		30.46	30.18		30.35		31.06	30.42		28.75	
Mean	30.59	30.50	30.36	30.44	30.31	30.45	30.53	30.51	31.23	30.73	30.01	29.30	
Max	30.85	30.87	30.90	31.51	30.66	31.20	31.05	31.77	31.35	31.04	30.39	29.62	31.77
Min	30.35	30.33	30.16	30.17	30.09	30.16	30.32	30.13	31.06	30.42	29.59	28.75	28.75

Annual Max Momentary Gage Height 31.93 M (MSL), at 18.00 Hours, on Nov 2, 2001
Zero Gage at Bottom Elevation 28.15 M (MSL), River Bed 28.15 M (MSL)
Left Bank Elevation 34.43 M (MSL)
Right Bank Elevation 32.80 M (MSL), Drainage Area 167 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.00	4.44	5.40	3.00	5.80	2.60	4.14	8.45	3.49	1.54	0.68	0.33	
2	8.30	4.50	5.20	3.00	3.48	2.60	4.14	23.90	3.40	1.50	0.66	0.32	
3	8.75	4.70	4.38	2.95	2.70	2.70	5.50	10.55	3.31	1.46	0.65	0.31	
4	8.75	4.60	4.20	2.90	2.95	2.95	10.25	6.95	3.23	1.43	0.63	0.30	
5	8.45	4.50	3.72	2.80	5.90	3.15	8.45	7.70	3.14	1.39	0.61	0.29	
6	8.15	4.44	3.42	2.70	6.10	3.10	10.40	5.30	3.06	1.35	0.60	0.29	
7	7.85	4.38	3.25	2.65	2.25	3.00	6.50	4.50	2.98	1.32	0.58	0.28	
8	7.10	4.38	3.54	4.50	3.96	3.90	11.75	4.14	2.90	1.28	0.57	0.27	
9	6.50	4.32	3.20	18.70	3.78	3.20	7.10	3.84	2.83	1.25	0.55	0.26	
10	6.10	4.26	3.60	9.20	3.60	3.05	5.60	3.60	2.76	1.22	0.54	0.26	
11	5.60	4.26	4.70	8.60	3.42	3.25	5.00	3.36	2.68	1.19	0.52	0.25	
12	5.30	4.26	4.02	6.10	3.42	14.00	4.38	3.25	2.61	1.16	0.51	0.24	
13	5.00	4.26	3.90	4.80	3.36	5.90	4.08	3.20	2.55	1.13	0.50	0.24	
14	5.00	4.26	3.84	4.14	3.20	6.10	4.08	3.15	2.48	1.10	0.48	0.23	
15	5.00	4.20	9.50	3.78	3.10	5.00	4.08	2.45	2.42	1.07	0.47	0.23	
16	5.00	4.20	6.10	3.60	3.10	4.20	4.38	2.85	2.35	1.04	0.46	0.22	
17	4.80	4.90	4.08	3.42	4.26	3.72	4.14	2.75	2.29	1.01	0.45	0.21	
18	4.80	9.05	3.66	3.42	3.84	3.54	3.66	2.75	2.23	0.99	0.44	0.21	
19	4.60	6.00	3.36	3.20	3.42	5.60	3.90	2.75	2.17	0.96	0.42	0.20	
20	4.50	5.20	3.15	3.05	3.20	3.96	4.38	2.70	2.12	0.94	0.41	0.20	
21	4.44	4.80	3.00	2.90	3.84	3.96	3.72	2.60	2.06	0.91	0.40	0.19	
22	4.20	4.70	2.90	2.90	3.36	4.50	3.54	2.50	2.01	0.89	0.39	0.19	
23	3.84	4.60	2.80	3.15	3.20	3.78	3.42	3.30	1.96	0.86	0.38	0.18	
24	3.66	4.70	2.70	6.20	3.05	4.14	3.96	10.85	1.91	0.84	0.37	0.18	
25	3.60	4.44	2.65	9.80	2.90	13.40	3.66	9.95	1.86	0.82	0.36	0.17	
26	3.66	4.26	2.60	5.10	2.80	5.30	4.44	3.15	1.81	0.80	0.35	0.17	
27	4.20	3.48	2.65	3.90	2.80	5.10	4.70	4.20	1.76	0.78	0.34	0.16	
28	4.32	4.14	3.00	3.54	2.75	5.20	5.90	3.78	1.71	0.76	0.33	0.16	
29	4.38	4.38	3.66	3.42	2.80	4.20	4.32	3.68	1.67	0.74		0.16	
30	4.44	4.20	3.10	4.08	2.70	4.14	3.90	3.59	1.63	0.72		0.15	
31		6.00		4.26	2.70		3.60		1.58	0.70		0.15	
Total	168.29	144.81	115.28	145.76	107.74	139.24	161.07	155.74	74.96	33.15	13.65	7.00	1266.69 CMSDAY
Mean	5.61	4.67	3.84	4.70	3.48	4.64	5.20	5.19	2.42	1.07	0.49	0.23	3.47 CMS
Max	8.75	9.05	9.50	18.70	6.10	14.00	11.75	23.90	3.49	1.54	0.68	0.33	23.90 CMS
Min	3.60	3.48	2.60	2.65	2.25	2.60	3.42	2.45	1.58	0.70	0.33	0.15	0.15 CMS
Runoff	14.540	12.512	9.960	12.594	9.309	12.030	13.916	13.456	6.477	2.864	1.179	0.605	109.442 MCM

Momentary Peak 27.10 CMS, at 31.93 M (MSL), at 18.00 Hours, on Nov 2, 2001

Runoff Yield 20.78 Liters/Second/Square KM, Momentary Peak Yield 162.275 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 66 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +21.200 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 40 meters from the top staff gage.

Elevation +27.671 m. (M.S.L.)

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 Float -

Rated by Current Meter 1984 to date.

Stability of Channel Regimes Fairly stable.

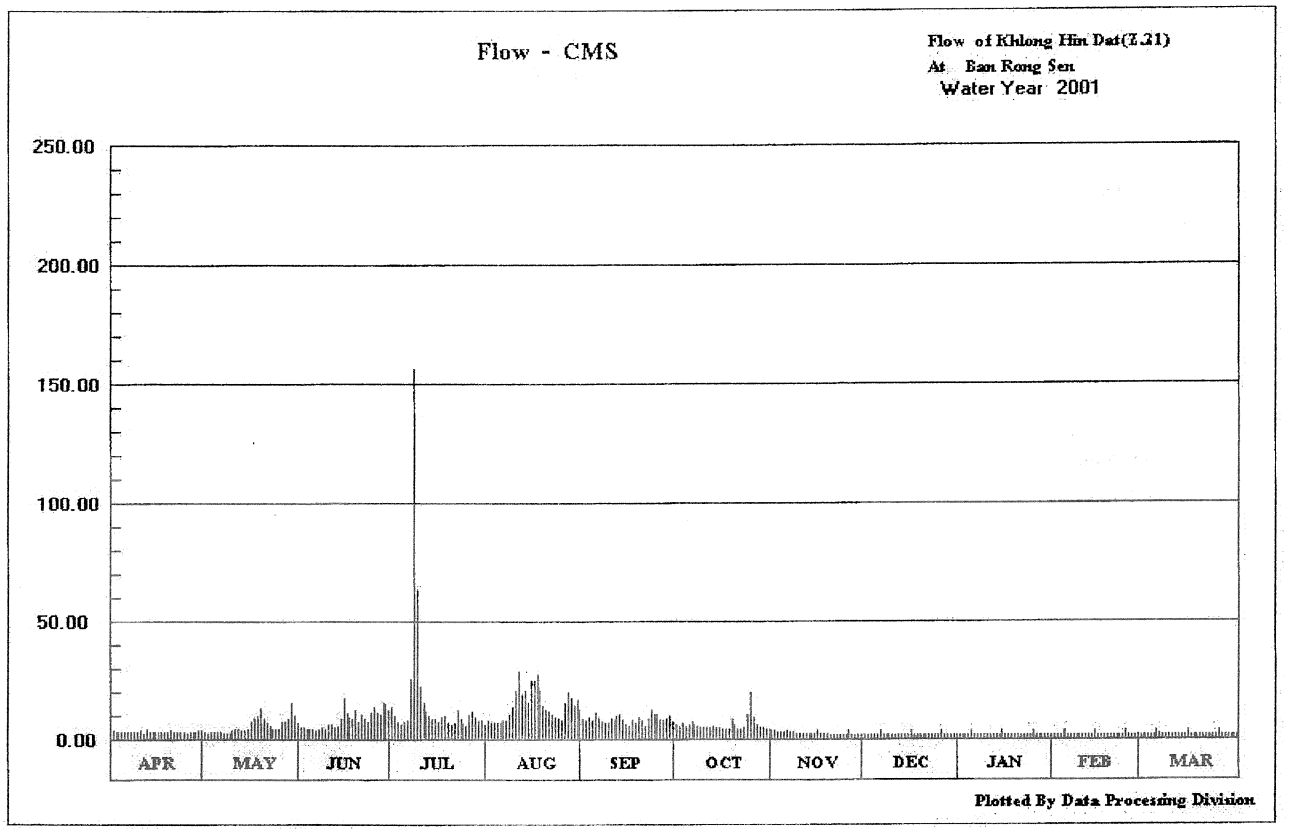
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 59 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.32	22.25	22.52	23.06	22.69	22.77	22.57	22.35	22.08	22.04	22.03	22.05	
2	22.30	22.23	22.47	22.85	22.67	22.70	22.55	22.35	22.07	22.02	22.02	22.08	
3	22.29	22.27	22.44	22.66	22.64	22.80	22.63	22.29	22.07	22.02	22.02	22.08	
4	22.28	22.29	22.42	22.59	22.61	22.70	22.56	22.28	22.06	22.01	22.02	22.04	
5	22.28	22.25	22.39	22.65	22.64	22.93	22.60	22.26	22.05	22.01	22.03	22.02	
6	22.28	22.25	22.38	22.71	22.72	22.77	22.65	22.24	22.05	22.00	22.02	22.09	
7	22.29	22.23	22.44	23.63	22.71	22.66	22.60	22.25	22.05	22.00	22.02	22.15	
8	22.27	22.21	22.48	26.97	22.86	22.64	22.54	22.24	22.05	22.00	22.03	22.06	
9	22.27	22.21	22.45	24.90	23.06	22.61	22.49	22.22	22.03	21.98	22.02	22.04	
10	22.11	22.25	22.57	23.51	23.40	22.76	22.48	22.21	22.02	21.99	22.02	22.03	
11	22.22	22.39	22.57	23.16	23.77	22.69	22.51	22.20	22.03	21.99	22.02	22.05	
12	22.39	22.41	22.50	22.95	23.33	22.85	22.47	22.19	22.02	21.98	22.01	22.04	
13	22.26	22.38	22.55	22.83	23.40	22.89	22.54	22.19	22.01	21.99	22.01	22.05	
14	22.27	22.34	22.75	22.76	23.18	22.69	22.51	22.18	22.04	21.99	22.01	22.05	
15	22.26	22.42	23.27	22.75	23.62	22.57	22.47	22.19	22.01	22.00	22.01	22.03	
16	22.25	22.66	22.91	22.66	23.62	22.54	22.44	22.17	21.99	21.99	22.03	22.03	
17	22.26	22.74	22.81	22.78	23.71	22.69	22.42	22.16	22.01	21.99	22.02	22.03	
18	22.27	22.83	22.76	22.82	23.41	22.64	22.40	22.16	22.00	21.99	22.00	22.03	
19	22.28	23.03	22.99	22.64	23.10	22.80	22.74	22.15	21.99	21.99	22.01	22.02	
20	22.26	22.75	22.66	22.57	22.99	22.69	22.57	22.14	21.97	22.00	22.01	22.02	
21	22.26	22.63	22.87	22.61	22.95	22.54	22.45	22.13	21.98	21.99	22.01	22.03	
22	22.24	22.54	22.77	23.01	22.87	22.76	22.42	22.13	21.95	21.98	22.02	22.03	
23	22.26	22.44	22.68	22.75	22.81	22.99	22.47	22.11	21.94	22.00	22.01	22.02	
24	22.26	22.44	22.90	22.63	22.77	22.87	22.86	22.13	21.95	21.99	22.03	22.02	
25	22.23	22.41	23.06	22.56	22.73	22.89	23.38	22.11	21.93	22.00	22.03	22.05	
26	22.27	22.67	22.93	22.89	23.18	22.72	22.79	22.09	21.91	22.00	22.00	22.05	
27	22.30	22.66	22.87	22.98	23.39	22.69	22.59	22.09	22.02	22.00	22.00	22.02	
28	22.28	22.74	23.16	22.78	23.26	22.77	22.52	22.09	21.90	22.00	22.00	22.03	
29	22.31	23.18	23.15	22.70	23.12	22.85	22.47	22.08	21.91	22.00		22.04	
30	22.33	22.83	23.02	22.71	23.23	22.67	22.45	22.08	21.91	21.99		22.04	
31		22.64		22.60	23.01		22.44		21.90	21.99		22.05	
Mean	22.27	22.50	22.72	23.02	23.08	22.74	22.57	22.18	22.00	22.00	22.02	22.04	
Max	22.39	23.18	23.27	26.97	23.77	22.99	23.38	22.35	22.08	22.04	22.03	22.15	26.97
Min	22.11	22.21	22.38	22.56	22.61	22.54	22.40	22.08	21.90	21.98	22.00	22.02	21.90

Annual Max Momentary Gage Height 27.66 M (MSL), at 8.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 21.20 M (MSL), River Bed 21.07 M (MSL)
Left Bank Elevation 29.69 M (MSL)
Right Bank Elevation 29.68 M (MSL), Drainage Area 66 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.36	3.80	6.10	14.32	8.65	9.85	6.85	4.60	2.56	2.28	2.21	2.35	
2	4.20	3.64	5.56	11.05	8.35	8.80	6.55	4.60	2.49	2.14	2.14	2.56	
3	4.12	3.96	5.32	8.20	7.90	10.30	7.75	4.12	2.49	2.14	2.14	2.56	
4	4.04	4.12	5.16	7.15	7.45	8.80	6.70	4.04	2.42	2.07	2.14	2.28	
5	4.04	3.80	4.92	8.05	7.90	12.25	7.30	3.88	2.35	2.07	2.21	2.14	
6	4.04	3.80	4.84	8.95	9.10	9.85	8.05	3.72	2.35	2.00	2.14	2.63	
7	4.12	3.64	5.32	26.26	8.95	8.20	7.30	3.80	2.35	2.00	2.14	3.05	
8	3.96	3.48	5.64	157.38	11.20	7.90	6.40	3.72	2.35	2.00	2.21	2.42	
9	3.96	3.48	5.40	64.00	14.32	7.45	5.72	3.56	2.21	1.86	2.14	2.28	
10	2.77	3.80	6.85	23.62	21.20	9.70	5.64	3.48	2.14	1.93	2.14	2.21	
11	3.56	4.92	6.85	16.20	29.69	8.65	5.95	3.40	2.21	1.93	2.14	2.35	
12	4.92	5.08	5.80	12.55	19.66	11.05	5.56	3.33	2.14	1.86	2.07	2.28	
13	3.88	4.84	6.55	10.75	21.20	11.65	6.40	3.33	2.07	1.93	2.07	2.35	
14	3.96	4.52	9.55	9.70	16.60	8.65	5.95	3.26	2.28	1.93	2.07	2.35	
15	3.88	5.16	18.40	9.55	26.04	6.85	5.56	3.33	2.07	2.00	2.07	2.21	
16	3.80	8.20	11.95	8.20	26.04	6.40	5.32	3.19	1.93	1.93	2.21	2.21	
17	3.88	9.40	10.45	10.00	28.07	8.65	5.16	3.12	2.07	1.93	2.14	2.21	
18	3.96	10.75	9.70	10.60	21.42	7.90	5.00	3.12	2.00	1.93	2.00	2.21	
19	4.04	13.81	13.15	7.90	15.00	10.30	9.40	3.05	1.93	1.93	2.07	2.14	
20	3.88	9.55	8.20	6.85	13.15	8.65	6.85	2.98	1.79	2.00	2.07	2.14	
21	3.88	7.75	11.35	7.45	12.55	6.40	5.40	2.91	1.86	1.93	2.07	2.21	
22	3.72	6.40	9.85	13.47	11.35	9.70	5.16	2.91	1.65	1.86	2.14	2.21	
23	3.88	5.32	8.50	9.55	10.45	13.15	5.56	2.77	1.58	2.00	2.07	2.14	
24	3.88	5.32	11.80	7.75	9.85	11.35	11.20	2.91	1.65	1.93	2.21	2.14	
25	3.64	5.08	14.32	6.70	9.25	11.65	20.76	2.77	1.51	2.00	2.21	2.35	
26	3.96	8.35	12.25	11.65	16.60	9.10	10.15	2.63	1.37	2.00	2.00	2.35	
27	4.20	8.20	11.35	13.00	20.98	8.65	7.15	2.63	2.14	2.00	2.00	2.14	
28	4.04	9.40	16.20	10.00	18.20	9.85	6.10	2.63	1.30	2.00	2.00	2.21	
29	4.28	16.60	16.00	8.80	15.40	11.05	5.56	2.56	1.37	2.00		2.28	
30	4.44	10.75	13.64	8.95	17.60	8.35	5.40	2.56	1.37	1.93		2.28	
31		7.90		7.30	13.47		5.32		1.30	1.93		2.35	
Total	119.29	204.82	280.97	535.90	477.59	281.10	217.17	98.91	61.30	61.44	59.22	71.59	2469.30 CMSDAY
Mean	3.98	6.61	9.37	17.29	15.41	9.37	7.01	3.30	1.98	1.98	2.11	2.31	6.77 CMS
Max	4.92	16.60	18.40	157.38	29.69	13.15	20.76	4.60	2.56	2.28	2.21	3.05	157.38 CMS
Min	2.77	3.48	4.84	6.70	7.45	6.40	5.00	2.56	1.30	1.86	2.00	2.14	1.30 CMS
Runoff	10.307	17.696	24.276	46.302	41.264	24.287	18.763	8.546	5.296	5.308	5.117	6.185	213.348 MCM

Momentary Peak 197.10 CMS, at 27.66 M (MSL), at 8.00 Hours, on Jul 8, 2001

Runoff Yield 102.50 Liters/Second/Square KM, Momentary Peak Yield 2986.364 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 267 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +32.600 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 10 meters from the top staff gage.

Elevation +40.318 m. (M.S.L.)

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 Float -

Rated by Current Meter 1986 to date.

Stability of Channel Regimes Fairly stable.

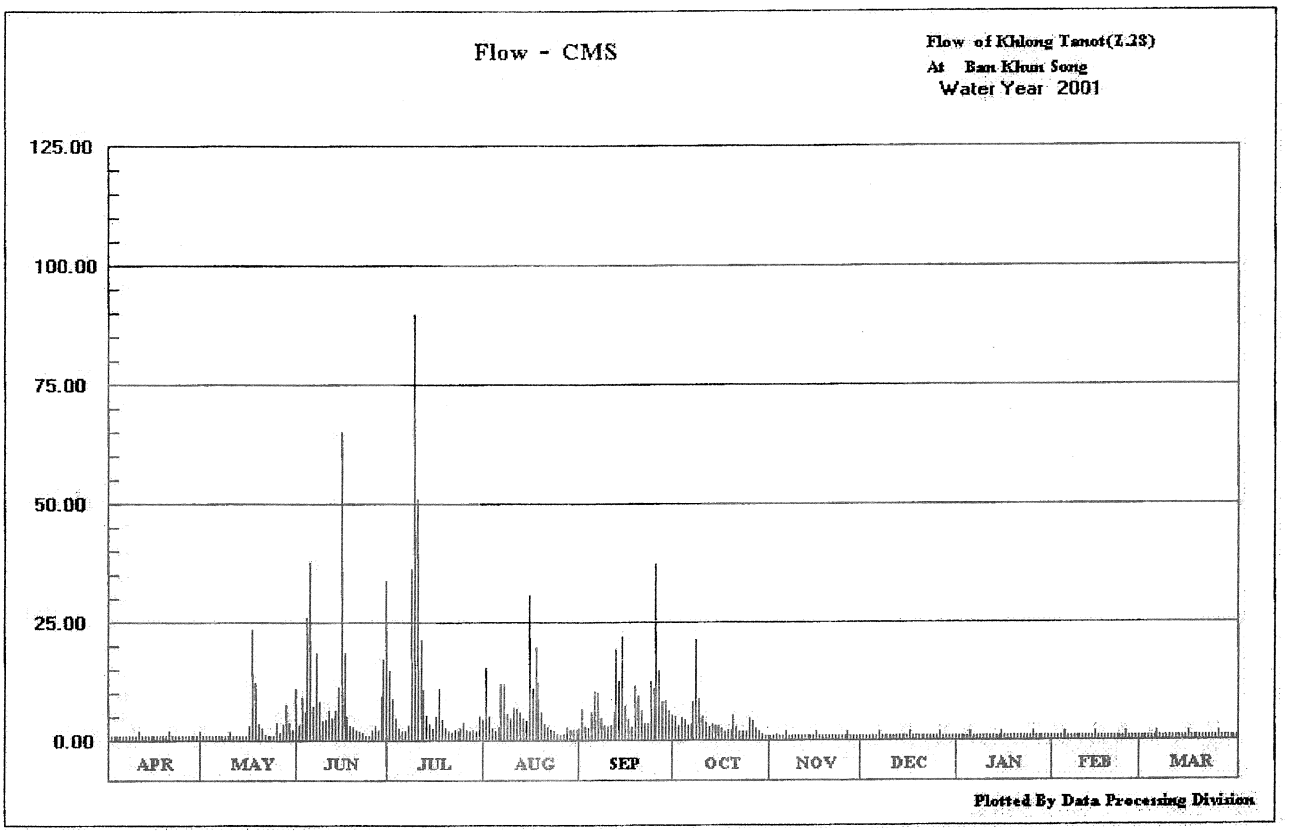
Overbank Flow Conditions Overbank flow starts at elevation +39.180 m.(M.S.L.) and is including overbank flow.

General Description Records fair. Stage-discharge relation defined by 17 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	33.49	33.19	33.95	35.20	35.27	34.38	34.20	33.44	33.22	33.14	33.27	32.88	
2	33.37	33.18	34.66	34.64	34.21	33.89	33.94	33.42	33.23	33.13	33.27	32.87	
3	33.31	33.25	34.30	34.13	33.85	33.81	34.16	33.57	33.24	33.12	33.27	32.86	
4	33.24	33.25	36.11	33.86	33.68	34.33	34.11	33.48	33.24	33.12	33.27	32.86	
5	33.21	33.23	36.91	33.69	33.91	34.81	33.95	33.54	33.24	33.12	33.26	33.00	
6	33.21	33.22	34.48	33.71	34.94	34.77	34.00	33.45	33.22	33.12	33.24	33.03	
7	33.16	33.36	35.52	33.95	34.95	34.15	34.57	33.45	33.21	33.13	33.24	33.04	
8	33.09	33.27	34.59	36.82	34.27	33.92	35.74	33.52	33.20	33.16	33.27	33.05	
9	33.11	33.19	34.07	39.79	34.14	33.87	34.64	33.42	33.20	33.18	33.18	33.05	
10	33.12	33.18	34.11	37.68	34.42	33.94	34.18	33.38	33.20	33.24	33.23	33.22	
11	33.12	33.18	34.34	35.73	34.38	34.32	34.01	33.32	33.20	33.24	33.23	33.30	
12	33.12	33.18	34.14	34.82	34.32	35.57	33.89	33.32	33.20	33.23	33.23	33.29	
13	33.12	33.27	34.35	34.22	34.16	35.02	34.00	33.30	33.22	33.21	33.22	33.28	
14	33.14	33.28	34.89	33.98	34.06	35.79	33.92	33.30	33.21	33.20	33.22	33.28	
15	33.29	33.42	38.48	33.85	36.46	34.48	33.92	33.29	33.20	33.18	33.22	33.26	
16	33.26	33.93	35.50	34.19	34.85	34.09	33.81	33.28	33.19	33.11	33.19	33.23	
17	33.22	35.90	34.17	34.87	35.61	33.90	33.71	33.28	33.19	33.10	33.18	33.23	
18	33.20	35.00	33.93	34.10	34.99	34.92	33.76	33.28	33.18	33.14	33.18	33.25	
19	33.17	33.98	33.91	33.84	34.30	34.70	33.80	33.26	33.18	33.14	33.14	33.27	
20	33.15	33.86	33.78	33.69	34.00	34.36	34.25	33.26	33.18	33.14	33.05	33.27	
21	33.14	33.57	33.69	33.62	33.91	33.99	33.87	33.25	33.18	33.14	33.02	33.26	
22	33.13	33.47	33.62	33.79	33.78	33.97	33.73	33.25	33.17	33.14	33.00	33.25	
23	33.10	33.48	33.49	33.73	33.68	35.02	33.68	33.25	33.16	33.13	32.98	33.23	
24	33.10	33.49	33.46	33.82	33.61	34.86	33.73	33.25	33.11	33.16	32.96	33.22	
25	33.19	34.03	33.79	34.03	33.54	36.90	34.15	33.24	33.16	33.26	32.96	33.22	
26	33.21	33.65	33.93	33.75	33.58	35.21	34.07	33.24	33.19	33.26	32.93	33.21	
27	33.17	33.96	33.75	33.72	33.87	34.59	33.84	33.24	33.20	33.26	32.91	33.20	
28	33.18	34.51	34.70	33.80	33.78	34.62	33.72	33.24	33.20	33.25	32.90	33.20	
29	33.21	34.02	35.41	33.61	33.75	34.36	33.59	33.24	33.17	33.25		33.19	
30	33.18	33.80	36.67	34.18	33.78	34.24	33.55	33.24	33.15	33.26		33.16	
31		34.86		34.10	33.85		33.50		33.14	33.26		33.13	
Mean	33.19	33.68	34.62	34.48	34.25	34.56	34.00	33.33	33.19	33.18	33.14	33.15	
Max	33.49	35.90	38.48	39.79	36.46	36.90	35.74	33.57	33.24	33.26	33.27	33.30	39.79
Min	33.09	33.18	33.46	33.61	33.54	33.81	33.50	33.24	33.11	33.10	32.90	32.86	32.86

Annual Max Momentary Gage Height 40.30 M (MSL), at 19.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 32.60 M (MSL), River Bed 32.36 M (MSL)
Left Bank Elevation 40.81 M (MSL)
Right Bank Elevation 39.17 M (MSL), Drainage Area 267 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.23	0.48	3.62	15.00	15.88	6.85	5.50	1.10	0.55	0.38	0.67	0.08	
2	0.92	0.46	9.35	9.15	5.57	3.20	3.55	1.05	0.57	0.36	0.67	0.07	
3	0.78	0.62	6.25	4.98	3.00	2.80	5.20	1.60	0.60	0.34	0.67	0.06	
4	0.60	0.62	26.38	3.05	2.15	6.48	4.82	1.20	0.60	0.34	0.67	0.06	
5	0.52	0.57	37.92	2.20	3.32	10.85	3.62	1.45	0.60	0.34	0.65	0.20	
6	0.52	0.55	7.60	2.30	12.15	10.45	4.00	1.13	0.55	0.34	0.60	0.23	
7	0.42	0.90	19.00	3.62	12.25	5.13	8.45	1.13	0.52	0.36	0.60	0.24	
8	0.29	0.67	8.65	36.55	6.02	3.40	21.75	1.35	0.50	0.42	0.67	0.25	
9	0.32	0.48	4.52	90.02	5.05	3.10	9.15	1.05	0.50	0.46	0.46	0.25	
10	0.34	0.46	4.82	51.40	7.15	3.55	5.35	0.95	0.50	0.60	0.57	0.55	
11	0.34	0.46	6.55	21.63	6.85	6.40	4.07	0.80	0.50	0.60	0.57	0.75	
12	0.34	0.46	5.05	10.95	6.40	19.63	3.20	0.80	0.50	0.57	0.57	0.73	
13	0.34	0.67	6.62	5.65	5.20	12.95	4.00	0.75	0.55	0.52	0.55	0.70	
14	0.38	0.70	11.65	3.85	4.45	22.38	3.40	0.75	0.52	0.50	0.55	0.70	
15	0.73	1.05	65.40	3.00	31.15	7.60	3.40	0.73	0.50	0.46	0.55	0.65	
16	0.65	3.47	18.75	5.42	11.25	4.67	2.80	0.70	0.48	0.32	0.48	0.57	
17	0.55	23.75	5.27	11.45	20.13	3.25	2.30	0.70	0.48	0.30	0.46	0.57	
18	0.50	12.75	3.47	4.75	12.65	11.95	2.55	0.70	0.46	0.38	0.46	0.62	
19	0.44	3.85	3.32	2.95	6.25	9.75	2.75	0.65	0.46	0.38	0.38	0.67	
20	0.40	3.05	2.65	2.20	4.00	6.70	5.87	0.65	0.46	0.38	0.25	0.67	
21	0.38	1.60	2.20	1.85	3.32	3.93	3.10	0.62	0.46	0.38	0.22	0.65	
22	0.36	1.18	1.85	2.70	2.65	3.77	2.40	0.62	0.44	0.38	0.20	0.62	
23	0.30	1.20	1.23	2.40	2.15	12.95	2.15	0.62	0.42	0.36	0.18	0.57	
24	0.30	1.23	1.15	2.85	1.80	11.35	2.40	0.62	0.32	0.42	0.16	0.55	
25	0.48	4.22	2.70	4.22	1.45	37.75	5.13	0.60	0.42	0.65	0.16	0.55	
26	0.52	2.00	3.47	2.50	1.65	15.13	4.52	0.60	0.48	0.65	0.13	0.52	
27	0.44	3.70	2.50	2.35	3.10	8.65	2.95	0.60	0.50	0.65	0.11	0.50	
28	0.46	7.85	9.75	2.75	2.65	8.95	2.35	0.60	0.50	0.62	0.10	0.50	
29	0.52	4.15	17.63	1.80	2.50	6.70	1.70	0.60	0.44	0.62		0.48	
30	0.46	2.75	34.30	5.35	2.65	5.80	1.50	0.60	0.40	0.65		0.42	
31		11.35		4.75	3.00		1.25		0.38	0.65		0.36	
Total	14.83	97.25	333.62	323.64	207.79	276.07	135.18	25.32	15.16	14.38	12.31	14.34	1469.89 CMSDAY
Mean	0.49	3.14	11.12	10.44	6.70	9.20	4.36	0.84	0.49	0.46	0.44	0.46	4.03 CMS
Max	1.23	23.75	65.40	90.02	31.15	37.75	21.75	1.60	0.60	0.65	0.67	0.75	90.02 CMS
Min	0.29	0.46	1.15	1.80	1.45	2.80	1.25	0.60	0.32	0.30	0.10	0.06	0.06 CMS
Runoff	1.281	8.402	28.825	27.963	17.953	23.852	11.680	2.188	1.310	1.242	1.064	1.239	126.999 MCM

Momentary Peak 101.55 CMS, at 40.30 M (MSL), at 19.00 Hours, on Jul 9, 2001

Runoff Yield 15.08 Liters/Second/Square KM, Momentary Peak Yield 380.337 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 312 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +9.200 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank next tall pole for electric cable near dwelling.

Elevation +18.683 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1987 to date.

Rating Operation

Period of Rating 1999 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable by some silting.

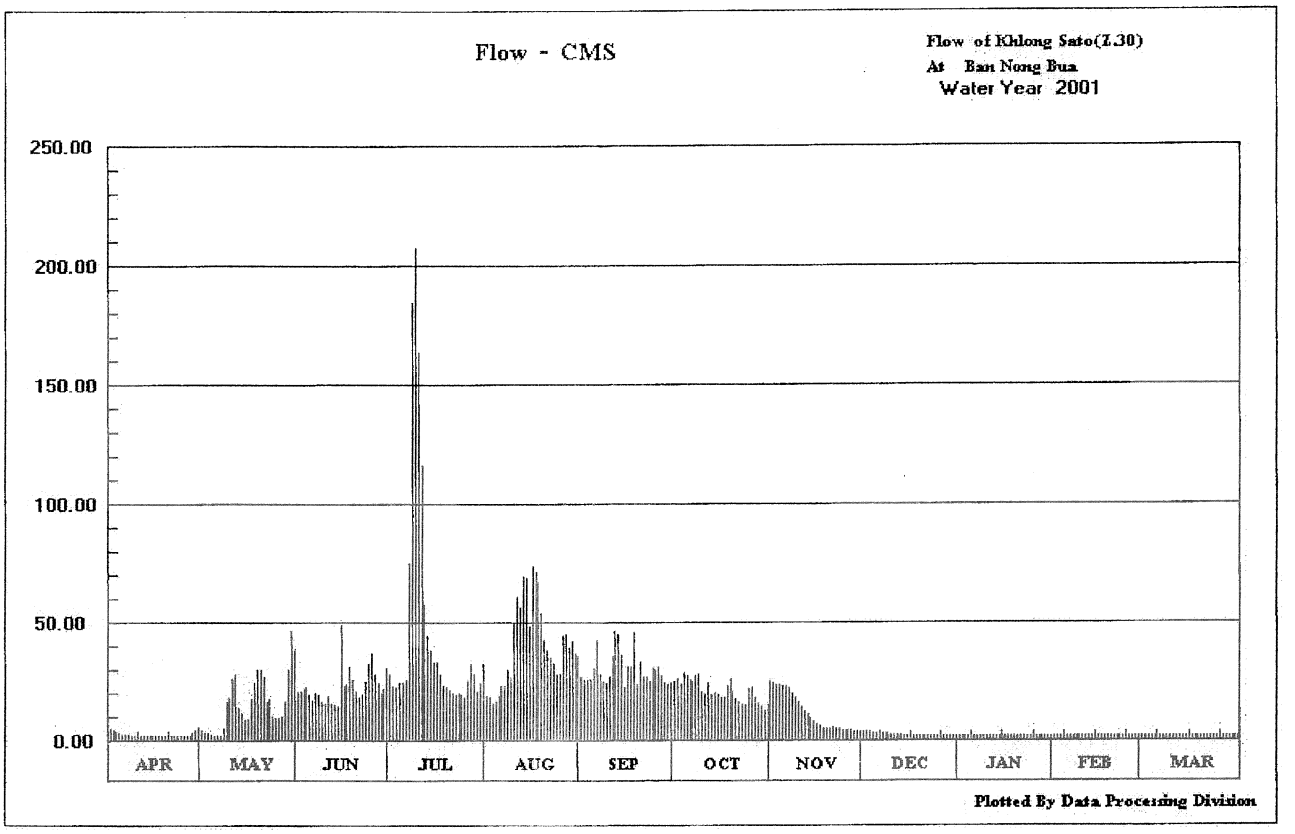
Overbank Flow Conditions No overbank flow .

General Description Records fair. Stage-discharge relation defined by 44 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.20	11.11	12.58	13.13	12.46	13.03	12.90	12.89	11.01	10.53	11.70	11.71	
2	11.10	10.97	12.57	12.75	12.38	12.95	13.00	12.86	11.01	10.52	11.70	11.71	
3	10.99	10.90	12.65	12.71	12.22	12.95	12.81	12.82	10.99	10.49	11.69	11.70	
4	10.91	10.82	12.70	12.85	12.24	12.93	13.15	12.80	10.96	10.49	11.71	11.70	
5	10.86	10.80	12.50	12.86	12.47	13.30	13.09	12.78	10.93	10.48	11.70	11.76	
6	10.83	10.75	12.28	12.96	12.77	14.08	12.93	12.77	10.94	10.47	11.70	11.87	
7	10.82	10.68	12.54	15.77	12.78	13.11	12.90	12.70	10.91	10.45	11.71	11.98	
8	10.66	11.19	12.50	18.85	13.25	12.89	13.07	12.55	10.92	10.45	11.70	11.96	
9	10.61	12.25	12.27	19.27	13.03	12.85	13.14	12.40	10.90	10.46	11.70	11.94	
10	10.57	12.40	12.21	18.45	14.50	13.03	12.59	12.25	10.88	10.45	11.70	11.88	
11	10.53	12.97	12.47	17.23	15.10	13.62	12.50	12.10	10.86	10.46	11.71	11.77	
12	10.50	13.10	12.19	14.93	14.88	14.28	12.87	11.95	10.86	10.43	11.69	11.74	
13	10.49	12.06	12.15	14.17	15.53	14.20	12.49	11.80	10.83	10.46	11.69	11.73	
14	10.45	11.82	12.07	13.78	15.49	13.67	12.52	11.65	10.79	10.38	11.69	11.71	
15	10.41	11.58	14.43	13.48	14.40	12.72	12.48	11.50	10.74	10.41	11.71	11.71	
16	10.36	11.58	12.78	13.49	15.74	13.36	12.41	11.36	10.76	10.40	11.70	11.71	
17	10.31	12.35	12.80	13.14	15.62	13.33	12.41	11.31	10.79	10.38	11.70	11.65	
18	10.34	12.85	13.33	12.76	15.40	14.26	12.75	11.20	10.75	10.38	11.76	11.77	
19	10.48	13.27	12.95	12.72	14.72	12.80	12.99	11.20	10.70	10.40	11.79	11.77	
20	10.45	13.27	12.60	12.61	14.05	13.47	12.60	11.21	10.68	10.42	11.79	11.73	
21	10.45	13.05	12.42	12.55	13.80	13.05	12.35	11.23	10.69	10.40	11.75	11.66	
22	10.37	12.25	12.48	12.51	13.58	13.04	12.25	11.19	10.70	10.33	11.78	11.68	
23	10.42	12.33	12.88	12.53	13.43	12.91	12.17	11.16	10.68	10.32	11.76	11.70	
24	10.41	11.72	13.43	12.50	13.13	13.30	12.15	11.12	10.70	10.30	11.74	11.60	
25	10.55	11.65	13.73	12.40	13.13	13.24	12.67	11.10	10.68	10.33	11.72	11.47	
26	10.77	11.65	13.10	12.91	14.17	13.32	12.71	11.08	10.64	10.35	11.71	11.42	
27	10.74	11.71	12.83	13.43	14.22	13.08	12.38	11.08	10.59	10.35	11.69	11.38	
28	10.95	12.23	12.52	13.12	13.85	12.83	12.22	11.06	10.52	10.90	11.70	11.40	
29	11.12	13.26	12.65	12.58	14.04	12.80	12.11	11.04	10.40	11.07		11.61	
30	11.25	14.28	13.30	12.87	13.71	12.87	11.94	11.00	10.55	11.08		11.89	
31		13.80		13.45	13.65		12.17		10.52	11.33		11.69	
Mean	10.66	12.09	12.73	13.83	13.86	13.24	12.60	11.77	10.77	10.51	11.72	11.71	
Max	11.25	14.28	14.43	19.27	15.74	14.28	13.15	12.89	11.01	11.33	11.79	11.98	19.27
Min	10.31	10.68	12.07	12.40	12.22	12.72	11.94	11.00	10.40	10.30	11.69	11.38	10.30

Annual Max Momentary Gage Height 19.35 M (MSL), at 6.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 9.20 M (MSL), River Bed 9.66 M (MSL)
Left Bank Elevation 20.52 M (MSL)
Right Bank Elevation 20.51 M (MSL), Drainage Area 312 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.90	5.18	21.42	29.12	19.74	27.72	25.90	25.76	4.47	1.45	0.18	0.02	
2	5.10	4.19	21.28	23.80	18.66	26.60	27.30	25.34	4.47	1.40	0.17	0.02	
3	4.33	3.70	22.40	23.24	16.74	26.60	24.64	24.78	4.33	1.25	0.16	0.01	
4	3.77	3.14	23.10	25.20	16.98	26.32	29.40	24.50	4.12	1.25	0.15	0.01	
5	3.42	3.00	20.30	25.34	19.88	31.50	28.56	24.22	3.91	1.20	0.14	0.01	
6	3.21	2.65	17.46	26.74	24.08	43.58	26.32	24.08	3.98	1.15	0.12	0.01	
7	3.14	2.20	20.86	75.55	24.22	28.84	25.90	23.10	3.77	1.05	0.11	0.01	
8	2.10	5.82	20.30	184.95	30.80	25.76	28.28	21.00	3.84	1.05	0.11	0.01	
9	1.85	17.10	17.34	208.22	27.72	25.20	29.26	18.90	3.70	1.10	0.10	0.01	
10	1.65	18.90	16.62	164.85	50.70	27.72	21.56	17.10	3.56	1.05	0.09	0.01	
11	1.45	26.88	19.88	116.92	61.50	36.22	20.30	15.30	3.42	1.10	0.08	0.01	
12	1.30	28.70	16.38	58.10	57.16	46.96	25.48	13.55	3.42	0.95	0.08	0.01	
13	1.25	14.82	15.90	45.09	70.23	45.60	20.16	11.90	3.21	1.10	0.07	0.01	
14	1.05	12.12	14.94	38.78	69.39	37.02	20.58	10.30	2.93	0.70	0.06	0.01	
15	0.85	9.60	49.51	34.02	49.00	23.38	20.02	8.80	2.58	0.85	0.06	0.01	
16	0.60	9.60	24.22	34.16	74.80	32.34	19.04	7.40	2.72	0.80	0.05	0.01	
17	0.35	18.30	24.50	29.26	72.12	31.92	19.04	6.90	2.93	0.70	0.05	0.00	
18	0.50	25.20	31.92	23.94	67.50	46.62	23.80	5.90	2.65	0.70	0.05	0.00	
19	1.20	31.08	26.60	23.38	54.44	24.50	27.16	5.90	2.30	0.80	0.04	0.00	
20	1.05	31.08	21.70	21.84	43.10	33.88	21.70	5.99	2.20	0.90	0.04	0.00	
21	1.05	28.00	19.18	21.00	39.10	28.00	18.30	6.17	2.25	0.80	0.04	0.00	
22	0.65	17.10	20.02	20.44	35.58	27.86	17.10	5.82	2.30	0.45	0.03	0.00	
23	0.90	18.06	25.62	20.72	33.32	26.04	16.14	5.58	2.20	0.40	0.03	0.00	
24	0.85	11.02	33.32	20.30	29.12	31.50	15.90	5.26	2.30	0.37	0.03	0.00	
25	1.55	10.30	37.98	18.90	29.12	30.66	22.68	5.10	2.20	0.34	0.03	0.00	
26	2.79	10.30	28.70	26.04	45.09	31.78	23.24	4.96	2.00	0.31	0.02	0.00	
27	2.58	10.91	24.92	33.32	45.94	28.42	18.66	4.96	1.75	0.29	0.02	0.00	
28	4.05	16.86	20.58	28.98	39.90	24.92	16.74	4.82	1.40	0.26	0.02	0.00	
29	5.26	30.94	22.40	21.42	42.94	24.50	15.42	4.68	0.80	0.24		0.00	
30	6.35	46.96	31.50	25.48	37.66	25.48	13.44	4.40	1.55	0.22		0.00	
31		39.10		33.60	36.70		16.14		1.40	0.21		0.00	
Total	70.10	512.81	710.85	1482.70	1283.23	927.44	678.16	372.47	88.66	24.44	2.13	0.18	6153.17 CMSDAY
Mean	2.34	16.54	23.70	47.83	41.39	30.91	21.88	12.42	2.86	0.79	0.08	0.01	16.86 CMS
Max	6.35	46.96	49.51	208.22	74.80	46.96	29.40	25.76	4.47	1.45	0.18	0.02	208.22 CMS
Min	0.35	2.20	14.94	18.90	16.74	23.38	13.44	4.40	0.80	0.21	0.02	0.00	0.00 CMS
Runoff	6.057	44.307	61.417	128.105	110.871	80.131	58.593	32.181	7.660	2.112	0.184	0.016	531.634 MCM

Momentary Peak 212.95 CMS, at 19.35 M (MSL), at 6.00 Hours, on Jul 9, 2001

Runoff Yield 54.03 Liters/Second/Square KM, Momentary Peak Yield 682.532 Liters/Second/Square KM

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Thap Ma at Ban Khao Bot, Rayong (Z.38)

Lat 12 - 44 - 09 N. **Long** 101 - 13 - 54 E.

Location on left bank at the bridge on road near Wat Khao Bot.

Ban Khao Bot **Amphoe** Mueang **Changwat** Rayong

Drainage 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 at the top staff gage.

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 mean of 5 readings.

Period of Available Gage Records 1993 to date.

Rating Operation

Period of Rating 1993 to date.

Rated by Float -

Rated by Current Meter 1993 to date.

Stability of Channel Regimes Fairly stable.

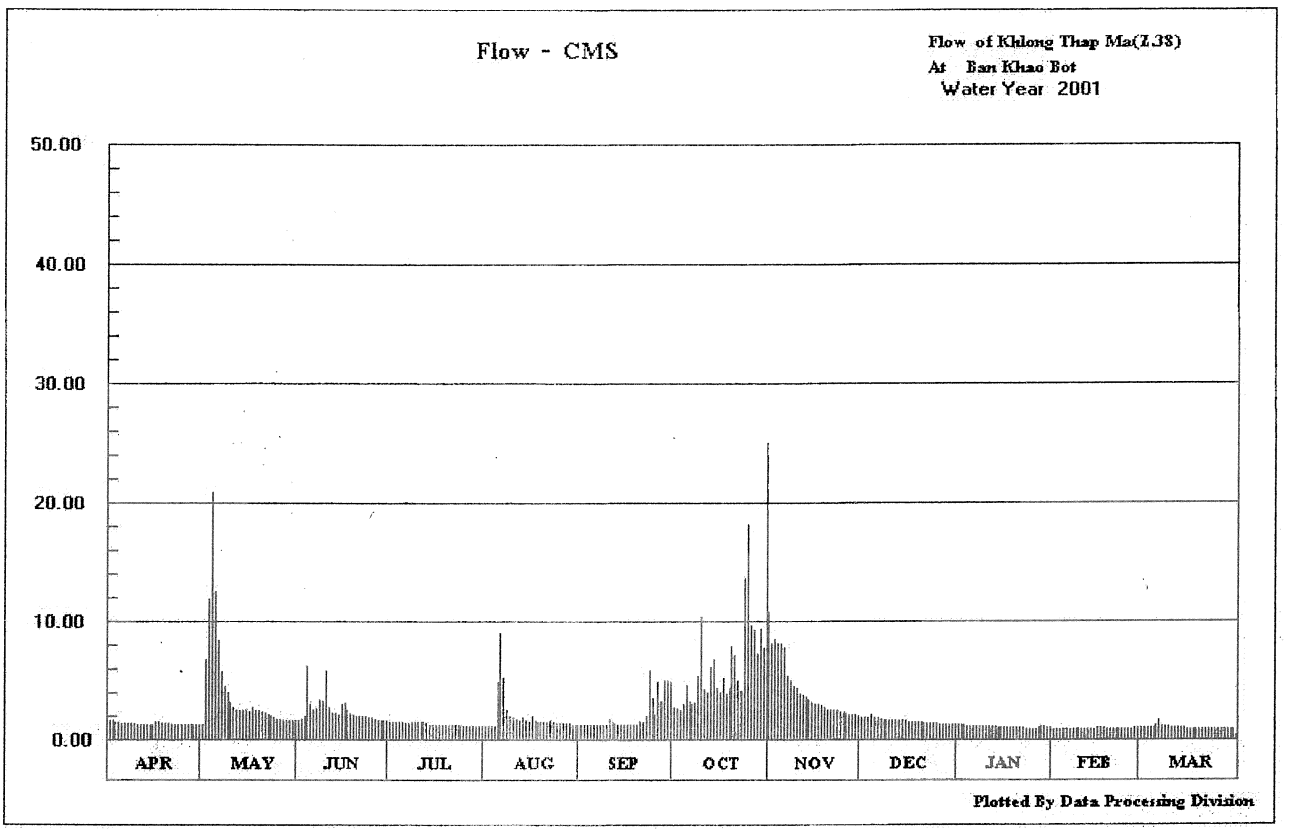
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.70	0.65	0.70	0.68	0.63	0.65	0.82	1.46	0.73	0.64	0.60	0.61	
2	0.70	1.19	0.71	0.68	0.62	0.65	0.81	1.29	0.73	0.64	0.60	0.61	
3	0.68	1.53	0.74	0.68	0.62	0.65	0.80	1.32	0.73	0.64	0.60	0.61	
4	0.68	1.99	1.15	0.68	0.62	0.64	0.85	1.29	0.75	0.63	0.60	0.61	
5	0.66	1.57	0.85	0.68	1.04	0.64	1.02	1.29	0.72	0.63	0.60	0.61	
6	0.66	1.31	0.79	0.67	1.35	0.64	0.88	1.26	0.72	0.63	0.60	0.64	
7	0.66	1.11	0.81	0.67	1.07	0.64	0.85	1.08	0.71	0.62	0.60	0.69	
8	0.66	1.01	0.89	0.68	0.80	0.64	0.86	1.05	0.70	0.62	0.60	0.62	
9	0.66	0.96	0.88	0.68	0.74	0.64	1.08	1.01	0.70	0.62	0.60	0.62	
10	0.65	0.86	1.12	0.68	0.72	0.71	1.44	0.99	0.70	0.62	0.60	0.62	
11	0.65	0.83	0.83	0.68	0.71	0.68	0.98	0.95	0.70	0.62	0.60	0.61	
12	0.65	0.80	0.77	0.68	0.70	0.66	0.96	0.93	0.70	0.62	0.60	0.61	
13	0.65	0.80	0.77	0.66	0.72	0.65	1.14	0.92	0.69	0.62	0.60	0.61	
14	0.65	0.79	0.76	0.65	0.70	0.65	1.19	0.90	0.69	0.61	0.60	0.61	
15	0.65	0.80	0.85	0.65	0.68	0.64	1.00	0.87	0.69	0.61	0.61	0.61	
16	0.68	0.78	0.87	0.65	0.74	0.64	0.96	0.85	0.68	0.61	0.61	0.60	
17	0.68	0.82	0.80	0.65	0.69	0.65	1.07	0.85	0.68	0.61	0.61	0.60	
18	0.67	0.79	0.77	0.65	0.68	0.65	0.95	0.84	0.68	0.61	0.60	0.60	
19	0.67	0.79	0.75	0.64	0.68	0.65	0.99	0.82	0.68	0.61	0.60	0.60	
20	0.66	0.78	0.74	0.64	0.68	0.68	1.27	0.80	0.68	0.61	0.60	0.60	
21	0.65	0.77	0.74	0.64	0.68	0.68	1.21	0.80	0.67	0.61	0.60	0.60	
22	0.65	0.75	0.74	0.64	0.69	0.74	1.05	0.79	0.67	0.61	0.60	0.60	
23	0.65	0.74	0.74	0.64	0.68	1.12	0.97	0.79	0.66	0.60	0.60	0.60	
24	0.65	0.72	0.73	0.63	0.67	0.91	1.63	0.78	0.66	0.60	0.60	0.60	
25	0.65	0.71	0.72	0.63	0.66	0.76	1.87	0.78	0.66	0.60	0.60	0.60	
26	0.65	0.71	0.71	0.63	0.66	1.04	1.39	0.77	0.65	0.60	0.60	0.60	
27	0.65	0.70	0.69	0.63	0.66	0.88	1.37	0.76	0.65	0.61	0.61	0.60	
28	0.65	0.70	0.69	0.63	0.66	1.05	1.22	0.76	0.65	0.63	0.61	0.59	
29	0.65	0.70	0.70	0.63	0.65	1.05	1.38	0.75	0.65	0.62		0.59	
30	0.65	0.70	0.69	0.63	0.65	1.04	1.26	0.74	0.64	0.61		0.59	
31		0.70		0.63	0.65		2.15		0.64	0.61		0.59	
Mean	0.66	0.91	0.79	0.65	0.73	0.74	1.14	0.95	0.69	0.62	0.60	0.61	
Max	0.70	1.99	1.15	0.68	1.35	1.12	2.15	1.46	0.75	0.64	0.61	0.69	2.15
Min	0.65	0.65	0.69	0.63	0.62	0.64	0.80	0.74	0.64	0.60	0.60	0.59	0.59

Annual Max Momentary Gage Height 2.28 M (A.D), at 15.00 Hours, on May 4, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.41 M (A.D)
Left Bank Elevation 4.69 M (A.D)
Right Bank Elevation 4.72 M (A.D), Drainage Area 151 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.80	1.45	1.80	1.66	1.31	1.45	2.88	10.86	2.07	1.38	1.10	1.17	
2	1.80	6.97	1.89	1.66	1.24	1.45	2.79	8.27	2.07	1.38	1.10	1.17	
3	1.66	12.01	2.16	1.66	1.24	1.45	2.70	8.70	2.07	1.38	1.10	1.17	
4	1.66	21.07	6.45	1.66	1.24	1.38	3.15	8.27	2.25	1.31	1.10	1.17	
5	1.52	12.69	3.15	1.66	5.08	1.38	4.84	8.27	1.98	1.31	1.10	1.17	
6	1.52	8.55	2.61	1.59	9.15	1.38	3.42	7.88	1.98	1.31	1.10	1.38	
7	1.52	5.93	2.79	1.59	5.44	1.38	3.15	5.56	1.89	1.24	1.10	1.73	
8	1.52	4.72	3.51	1.66	2.70	1.38	3.24	5.20	1.80	1.24	1.10	1.24	
9	1.52	4.20	3.42	1.66	2.16	1.38	5.56	4.72	1.80	1.24	1.10	1.24	
10	1.45	3.24	6.06	1.66	1.98	1.89	10.54	4.50	1.80	1.24	1.10	1.24	
11	1.45	2.97	2.97	1.66	1.89	1.66	4.40	4.10	1.80	1.24	1.10	1.17	
12	1.45	2.70	2.43	1.66	1.80	1.52	4.20	3.90	1.80	1.24	1.10	1.17	
13	1.45	2.70	2.43	1.52	1.98	1.45	6.32	3.80	1.73	1.24	1.10	1.17	
14	1.45	2.61	2.34	1.45	1.80	1.45	6.97	3.60	1.73	1.17	1.10	1.17	
15	1.45	2.70	3.15	1.45	1.66	1.38	4.60	3.33	1.73	1.17	1.17	1.17	
16	1.66	2.52	3.33	1.45	2.16	1.38	4.20	3.15	1.66	1.17	1.17	1.10	
17	1.66	2.88	2.70	1.45	1.73	1.45	5.44	3.15	1.66	1.17	1.17	1.10	
18	1.59	2.61	2.43	1.45	1.66	1.45	4.10	3.06	1.66	1.17	1.10	1.10	
19	1.59	2.61	2.25	1.38	1.66	1.45	4.50	2.88	1.66	1.17	1.10	1.10	
20	1.52	2.52	2.16	1.38	1.66	1.66	8.01	2.70	1.66	1.17	1.10	1.10	
21	1.45	2.43	2.16	1.38	1.66	1.66	7.23	2.70	1.59	1.17	1.10	1.10	
22	1.45	2.25	2.16	1.38	1.73	2.16	5.20	2.61	1.59	1.17	1.10	1.10	
23	1.45	2.16	2.16	1.38	1.66	6.06	4.30	2.61	1.52	1.10	1.10	1.10	
24	1.45	1.98	2.07	1.31	1.59	3.70	13.74	2.52	1.52	1.10	1.10	1.10	
25	1.45	1.89	1.98	1.31	1.52	2.34	18.34	2.52	1.52	1.10	1.10	1.10	
26	1.45	1.89	1.89	1.31	1.52	5.08	9.75	2.43	1.45	1.10	1.10	1.10	
27	1.45	1.80	1.73	1.31	1.52	3.42	9.45	2.34	1.45	1.17	1.17	1.10	
28	1.45	1.80	1.73	1.31	1.52	5.20	7.36	2.34	1.45	1.31	1.17	1.04	
29	1.45	1.80	1.80	1.31	1.45	5.20	9.60	2.25	1.45	1.24		1.04	
30	1.45	1.80	1.73	1.31	1.45	5.08	7.88	2.16	1.38	1.17		1.04	
31		1.80		1.31	1.45		25.15		1.38	1.17		1.04	
Total	45.74	129.25	79.44	45.93	66.61	69.27	213.01	130.38	53.10	37.74	31.15	35.89	937.51 CMSDAY
Mean	1.52	4.17	2.65	1.48	2.15	2.31	6.87	4.35	1.71	1.22	1.11	1.16	2.57 CMS
Max	1.80	21.07	6.45	1.66	9.15	6.06	25.15	10.86	2.25	1.38	1.17	1.73	25.15 CMS
Min	1.45	1.45	1.73	1.31	1.24	1.38	2.70	2.16	1.38	1.10	1.10	1.04	1.04 CMS
Runoff	3.952	11.167	6.864	3.968	5.755	5.985	18.404	11.265	4.588	3.261	2.691	3.101	81.001 MCM

Momentary Peak 28.66 CMS, at 2.28 M (A.D), at 15.00 Hours, on May 4, 2001

Runoff Yield 17.01 Liters/Second/Square KM, Momentary Peak Yield 189.801 Liters/Second/Square_KM

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Phrawa Yai at Ban Khao Khong, Chanthaburi (Z.39)

Lat 13 - 00 - 55 N. **Long** 101 - 47 - 26 E.

Location on left bank at Ban Khao Khong.

Ban Khao Khong **Amphoe** Kaeng Hang Maeo **Changwat** Chanthaburi

Drainage Area 80 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 next tall pole for electric cable dwelling.

Elevation +3.150 m. (A.D.)

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 1999 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable by some scouring.

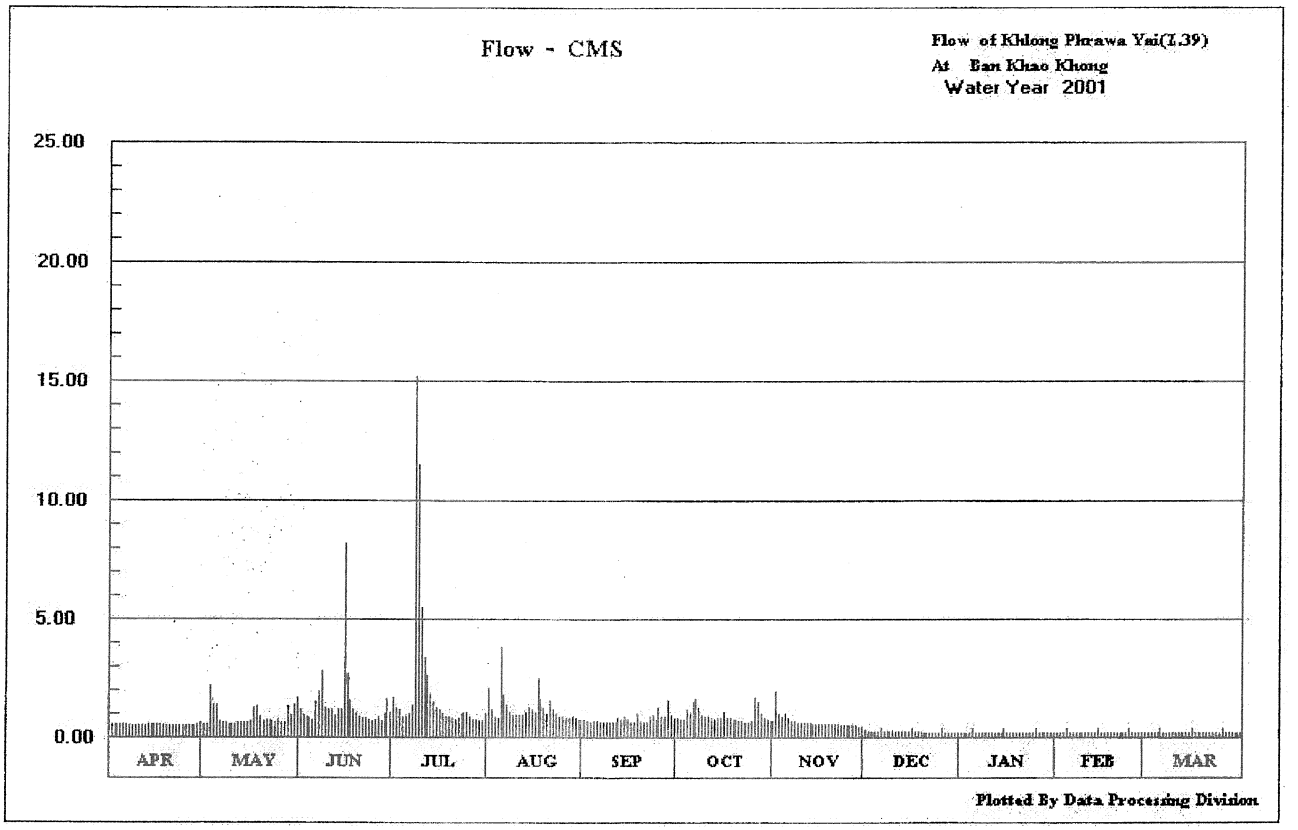
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 23 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.67	0.83	0.90	0.93	0.74	0.76	0.73	0.37	0.04	0.00	0.00	
2	0.67	0.65	0.80	0.84	0.83	0.73	0.75	0.92	0.34	0.00	0.00	0.00	
3	0.65	0.94	0.78	0.83	0.79	0.71	0.75	0.81	0.32	0.00	0.00	0.00	
4	0.64	0.86	0.76	0.79	0.77	0.72	0.83	0.78	0.35	0.00	0.00	0.00	
5	0.63	0.86	0.75	0.78	1.09	0.73	0.81	0.81	0.33	0.00	0.00	0.00	
6	0.62	0.72	0.87	0.81	0.91	0.71	0.87	0.76	0.32	0.00	0.00	0.00	
7	0.60	0.69	0.92	0.86	0.86	0.71	0.89	0.73	0.32	0.00	0.00	0.00	
8	0.59	0.68	1.00	1.90	0.82	0.70	0.84	0.72	0.32	0.00	0.00	0.00	
9	0.58	0.66	0.84	1.68	0.80	0.70	0.80	0.71	0.32	0.00	0.00	0.00	
10	0.57	0.66	0.83	1.24	0.80	0.69	0.79	0.70	0.32	0.00	0.00	0.00	
11	0.57	0.67	0.83	1.05	0.80	0.70	0.79	0.69	0.32	0.00	0.00	0.00	
12	0.58	0.70	0.80	0.98	0.80	0.77	0.76	0.68	0.32	0.00	0.00	0.00	
13	0.62	0.71	0.83	0.91	0.82	0.74	0.75	0.68	0.31	0.00	0.00	0.00	
14	0.64	0.71	0.83	0.87	0.84	0.79	0.77	0.67	0.31	0.00	0.00	0.00	
15	0.63	0.69	1.46	0.84	0.83	0.75	0.76	0.66	0.33	0.00	0.00	0.00	
16	0.63	0.72	0.99	0.83	0.82	0.70	0.82	0.65	0.32	0.00	0.00	0.00	
17	0.62	0.84	0.88	0.81	0.97	0.69	0.77	0.65	0.33	0.00	0.00	0.00	
18	0.61	0.85	0.83	0.79	0.89	0.81	0.76	0.64	0.34	0.00	0.00	0.00	
19	0.60	0.78	0.81	0.78	0.84	0.73	0.75	0.64	0.31	0.00	0.00	0.00	
20	0.60	0.73	0.78	0.77	0.81	0.71	0.74	0.63	0.26	0.00	0.00	0.00	
21	0.60	0.74	0.77	0.75	0.88	0.70	0.72	0.63	0.25	0.00	0.00	0.00	
22	0.59	0.75	0.76	0.76	0.83	0.79	0.72	0.62	0.30	0.00	0.00	0.00	
23	0.58	0.72	0.75	0.81	0.81	0.80	0.70	0.61	0.29	0.00	0.00	0.00	
24	0.58	0.71	0.73	0.82	0.79	0.75	0.71	0.61	0.25	0.00	0.00	0.00	
25	0.58	0.74	0.75	0.82	0.78	0.84	0.72	0.61	0.24	0.00	0.00	0.00	
26	0.59	0.71	0.78	0.78	0.77	0.79	0.90	0.61	0.19	0.00	0.00	0.00	
27	0.58	0.71	0.73	0.75	0.76	0.79	0.87	0.60	0.18	0.00	0.00	0.00	
28	0.59	0.85	0.81	0.74	0.78	0.88	0.81	0.59	0.16	0.00	0.00	0.00	
29	0.64	0.80	0.89	0.73	0.77	0.80	0.76	0.53	0.15	0.00		0.00	
30	0.68	0.86	0.82	0.73	0.75	0.77	0.74	0.52	0.15	0.00		0.00	
31		0.90		0.81	0.75		0.73		0.14	0.00		0.00	
Mean	0.61	0.75	0.84	0.90	0.83	0.75	0.78	0.67	0.28	0.00	0.00	0.00	
Max	0.68	0.94	1.46	1.90	1.09	0.88	0.90	0.92	0.37	0.04	0.00	0.00	1.90
Min	0.57	0.65	0.73	0.73	0.75	0.69	0.70	0.52	0.14	0.00	0.00	0.00	0.00

Annual Max Momentary Gage Height 2.35 M (A.D), at 18.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.14 M (A.D)
Left Bank Elevation 2.86 M (A.D)
Right Bank Elevation 2.91 M (A.D), Drainage Area 80 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.67	1.24	1.80	2.13	0.82	0.88	0.79	0.37	0.04	0.00	0.00	
2	0.67	0.65	1.00	1.32	1.24	0.79	0.85	2.02	0.34	0.00	0.00	0.00	
3	0.65	2.24	0.94	1.24	0.97	0.73	0.85	1.08	0.32	0.00	0.00	0.00	
4	0.64	1.48	0.88	0.97	0.91	0.76	1.24	0.94	0.35	0.00	0.00	0.00	
5	0.63	1.48	0.85	0.94	3.89	0.79	1.08	1.08	0.33	0.00	0.00	0.00	
6	0.62	0.76	1.56	1.08	1.91	0.73	1.56	0.88	0.32	0.00	0.00	0.00	
7	0.60	0.69	2.02	1.48	1.48	0.73	1.72	0.79	0.32	0.00	0.00	0.00	
8	0.59	0.68	2.90	15.30	1.16	0.70	1.32	0.76	0.32	0.00	0.00	0.00	
9	0.58	0.66	1.32	11.58	1.00	0.70	1.00	0.73	0.32	0.00	0.00	0.00	
10	0.57	0.66	1.24	5.58	1.00	0.69	0.97	0.70	0.32	0.00	0.00	0.00	
11	0.57	0.67	1.24	3.45	1.00	0.70	0.97	0.69	0.32	0.00	0.00	0.00	
12	0.58	0.70	1.00	2.68	1.00	0.91	0.88	0.68	0.32	0.00	0.00	0.00	
13	0.62	0.73	1.24	1.91	1.16	0.82	0.85	0.68	0.31	0.00	0.00	0.00	
14	0.64	0.73	1.24	1.56	1.32	0.97	0.91	0.67	0.31	0.00	0.00	0.00	
15	0.63	0.69	8.28	1.32	1.24	0.85	0.88	0.66	0.33	0.00	0.00	0.00	
16	0.63	0.76	2.79	1.24	1.16	0.70	1.16	0.65	0.32	0.00	0.00	0.00	
17	0.62	1.32	1.64	1.08	2.57	0.69	0.91	0.65	0.33	0.00	0.00	0.00	
18	0.61	1.40	1.24	0.97	1.72	1.08	0.88	0.64	0.34	0.00	0.00	0.00	
19	0.60	0.94	1.08	0.94	1.32	0.79	0.85	0.64	0.31	0.00	0.00	0.00	
20	0.60	0.79	0.94	0.91	1.08	0.73	0.82	0.63	0.26	0.00	0.00	0.00	
21	0.60	0.82	0.91	0.85	1.64	0.70	0.76	0.63	0.25	0.00	0.00	0.00	
22	0.59	0.85	0.88	0.88	1.24	0.97	0.76	0.62	0.30	0.00	0.00	0.00	
23	0.58	0.76	0.85	1.08	1.08	1.00	0.70	0.61	0.29	0.00	0.00	0.00	
24	0.58	0.73	0.79	1.16	0.97	0.85	0.73	0.61	0.25	0.00	0.00	0.00	
25	0.58	0.82	0.85	1.16	0.94	1.32	0.76	0.61	0.24	0.00	0.00	0.00	
26	0.59	0.73	0.94	0.94	0.91	0.97	1.80	0.61	0.19	0.00	0.00	0.00	
27	0.58	0.73	0.79	0.85	0.88	0.97	1.56	0.60	0.18	0.00	0.00	0.00	
28	0.59	1.40	1.08	0.82	0.94	1.64	1.08	0.59	0.16	0.00	0.00	0.00	
29	0.64	1.00	1.72	0.79	0.91	1.00	0.88	0.53	0.15	0.00		0.00	
30	0.68	1.48	1.16	0.79	0.85	0.91	0.82	0.52	0.15	0.00		0.00	
31		1.80		1.08	0.85		0.79		0.14	0.00		0.00	
Total	18.31	29.82	44.61	67.75	40.47	26.01	31.22	22.29	8.76	0.04	0.00	0.00	289.28 CMSDAY
Mean	0.61	0.96	1.49	2.19	1.31	0.87	1.01	0.74	0.28	0.00	0.00	0.00	0.79 CMS
Max	0.68	2.24	8.28	15.30	3.89	1.64	1.80	2.02	0.37	0.04	0.00	0.00	15.30 CMS
Min	0.57	0.65	0.79	0.79	0.85	0.69	0.70	0.52	0.14	0.00	0.00	0.00	0.00 CMS
Runoff	1.582	2.576	3.854	5.854	3.497	2.247	2.697	1.926	0.757	0.003	0.000	0.000	24.994 MCM

Momentary Peak 24.75 CMS, at 2.35 H (A.D), at 18.00 Hours, on Jul 8, 2001
Runoff Yield 9.91 Liters/Second/Square KM, Momentary Peak Yield 309.375 Liters/Second/Square KM

WATER YEAR : 2001

CHANTHABURI RIVER 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

Drainage Area 3 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 +6.693 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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

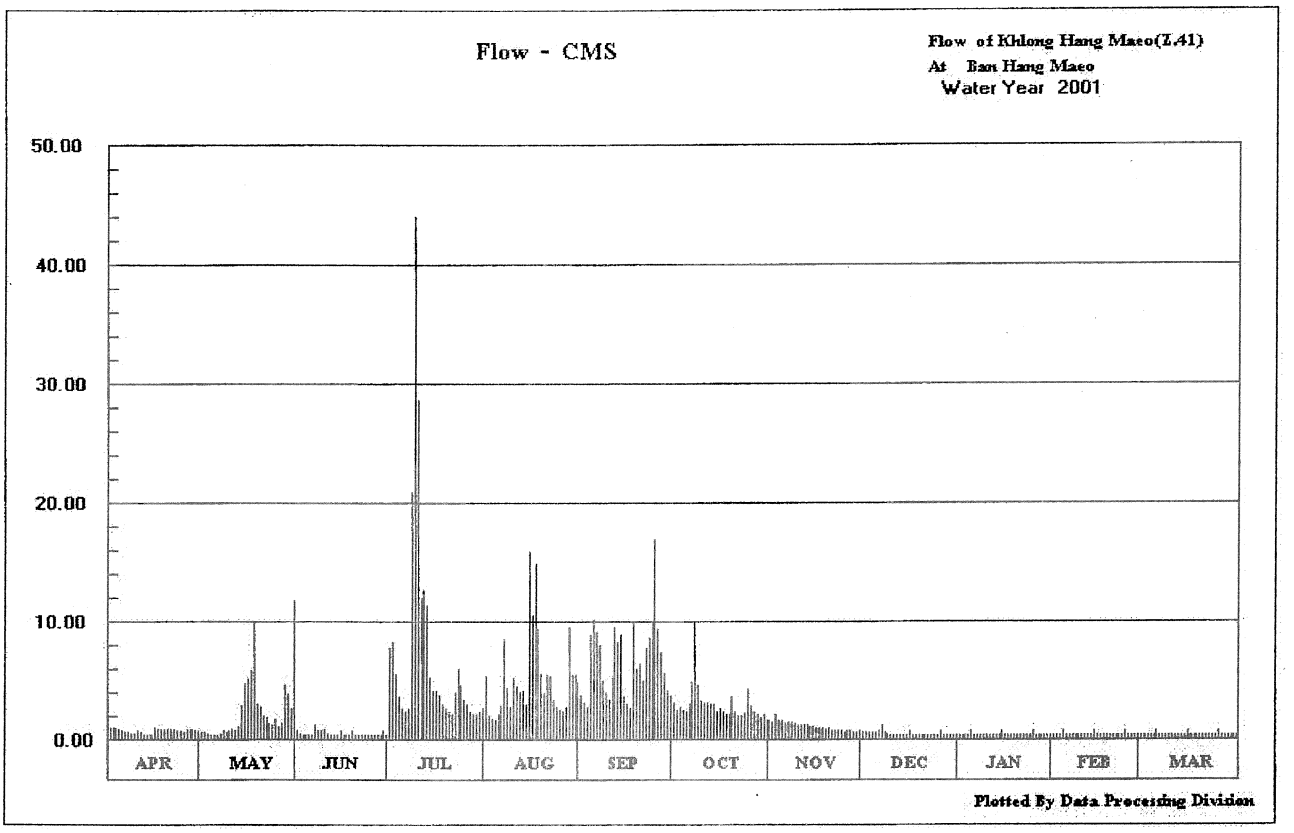
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.86	0.76	0.80	2.28	1.89	1.56	1.43	1.04	0.77	0.55	0.45	0.38	
2	0.89	0.75	0.72	2.36	1.15	1.41	1.28	1.03	0.78	0.55	0.45	0.37	
3	0.87	0.73	0.64	1.92	1.08	1.32	1.32	1.17	0.78	0.45	0.45	0.36	
4	0.83	0.70	0.59	1.55	1.06	2.48	1.27	1.05	0.78	0.44	0.45	0.35	
5	0.81	0.66	0.56	1.30	1.17	2.69	1.24	1.04	0.77	0.44	0.45	0.34	
6	0.77	0.68	0.55	1.24	1.36	2.52	1.38	1.00	0.76	0.44	0.45	0.33	
7	0.76	0.74	0.94	1.29	2.42	2.33	1.78	1.01	0.94	0.44	0.45	0.32	
8	0.73	0.80	0.82	4.10	1.68	1.81	2.63	1.01	0.76	0.44	0.45	0.31	
9	0.72	0.77	0.74	6.41	1.33	1.61	1.74	1.00	0.73	0.44	0.45	0.30	
10	0.78	0.82	0.84	4.95	1.87	1.47	1.44	0.96	0.65	0.43	0.45	0.29	
11	0.75	0.85	0.72	2.99	1.72	1.86	1.42	0.96	0.64	0.42	0.45	0.29	
12	0.66	0.82	0.66	3.09	1.61	2.58	1.42	0.96	0.62	0.40	0.45	0.28	
13	0.63	0.92	0.63	2.88	1.65	2.36	1.40	0.95	0.62	0.40	0.45	0.28	
14	0.65	1.36	0.62	1.87	1.38	2.48	1.40	0.91	0.62	0.45	0.45	0.28	
15	0.64	1.77	0.80	1.65	3.52	1.55	1.23	0.90	0.60	0.45	0.45	0.28	
16	0.86	1.83	0.68	1.64	2.74	1.38	1.30	0.89	0.60	0.45	0.45	0.28	
17	0.85	1.97	0.64	1.56	3.39	1.30	1.22	0.89	0.60	0.43	0.45	0.28	
18	0.84	2.64	0.63	1.40	2.55	2.63	1.18	0.87	0.60	0.43	0.45	0.28	
19	0.84	1.39	0.59	1.30	1.92	1.99	1.17	0.85	0.61	0.42	0.45	0.28	
20	0.84	1.33	0.56	1.23	1.60	2.06	1.54	0.86	0.61	0.41	0.45	0.28	
21	0.85	1.15	0.54	1.17	1.92	1.81	1.22	0.82	0.61	0.39	0.45	0.28	
22	0.83	1.10	0.52	1.61	1.89	2.28	1.14	0.80	0.61	0.40	0.45	0.28	
23	0.82	1.00	0.51	1.99	1.47	2.43	1.14	0.80	0.61	0.40	0.45	0.27	
24	0.79	0.96	0.51	1.73	1.33	2.66	1.20	0.79	0.61	0.40	0.45	0.27	
25	0.78	1.07	0.53	1.49	1.27	3.64	1.66	0.77	0.61	0.45	0.45	0.27	
26	0.84	0.90	0.61	1.38	1.22	2.56	1.37	0.80	0.59	0.45	0.45	0.27	
27	0.83	0.97	0.53	1.24	1.32	2.23	1.22	0.79	0.59	0.45	0.45	0.27	
28	0.83	1.75	0.61	1.18	2.58	1.94	1.16	0.78	0.55	0.45	0.45	0.27	
29	0.80	1.58	0.62	1.17	1.91	1.65	1.12	0.77	0.55	0.45		0.27	
30	0.76	1.30	0.62	1.25	1.91	1.56	1.18	0.79	0.54	0.45		0.27	
31		2.95		1.30	1.78		1.04		0.54	0.45		0.27	
Mean	0.79	1.19	0.64	2.02	1.80	2.07	1.36	0.91	0.65	0.44	0.45	0.30	
Max	0.89	2.95	0.94	6.41	3.52	3.64	2.63	1.17	0.94	0.55	0.45	0.38	6.41
Min	0.63	0.66	0.51	1.17	1.06	1.30	1.04	0.77	0.54	0.39	0.45	0.27	0.27

Annual Max Momentary Gage Height 6.82 M (A.D), at 18.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.48 M (A.D)
Left Bank Elevation 8.62 M (A.D)
Right Bank Elevation 8.64 M (A.D), Drainage Area 3 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.11	0.76	0.90	7.88	5.55	3.90	3.32	1.76	0.80	0.13	0.00	0.00	
2	1.22	0.73	0.62	8.36	2.20	3.24	2.72	1.72	0.83	0.13	0.00	0.00	
3	1.15	0.66	0.37	5.72	1.92	2.88	2.88	2.28	0.83	0.00	0.00	0.00	
4	1.00	0.55	0.22	3.85	1.84	9.08	2.68	1.80	0.83	0.00	0.00	0.00	
5	0.94	0.43	0.15	2.80	2.28	10.34	2.56	1.76	0.80	0.00	0.00	0.00	
6	0.80	0.49	0.13	2.56	3.04	9.32	3.12	1.60	0.76	0.00	0.00	0.00	
7	0.76	0.69	1.39	2.76	8.72	8.18	5.00	1.64	1.39	0.00	0.00	0.00	
8	0.66	0.90	0.97	21.10	4.50	5.15	9.98	1.64	0.76	0.00	0.00	0.00	
9	0.62	0.80	0.69	44.21	2.92	4.15	4.80	1.60	0.66	0.00	0.00	0.00	
10	0.83	0.97	1.04	28.75	5.45	3.48	3.36	1.46	0.40	0.00	0.00	0.00	
11	0.73	1.08	0.62	12.14	4.70	5.40	3.28	1.46	0.37	0.00	0.00	0.00	
12	0.43	0.97	0.43	12.83	4.15	9.68	3.28	1.46	0.31	0.00	0.00	0.00	
13	0.34	1.32	0.34	11.48	4.35	8.36	3.20	1.43	0.31	0.00	0.00	0.00	
14	0.40	3.04	0.31	5.45	3.12	9.08	3.20	1.29	0.31	0.00	0.00	0.00	
15	0.37	4.95	0.90	4.35	16.06	3.85	2.52	1.25	0.25	0.00	0.00	0.00	
16	1.11	5.25	0.49	4.30	10.64	3.12	2.80	1.22	0.25	0.00	0.00	0.00	
17	1.08	6.02	0.37	3.90	15.02	2.80	2.48	1.22	0.25	0.00	0.00	0.00	
18	1.04	10.04	0.34	3.20	9.50	9.98	2.32	1.15	0.25	0.00	0.00	0.00	
19	1.04	3.16	0.22	2.80	5.72	6.14	2.28	1.08	0.28	0.00	0.00	0.00	
20	1.04	2.92	0.15	2.52	4.10	6.56	3.80	1.11	0.28	0.00	0.00	0.00	
21	1.08	2.20	0.10	2.28	5.72	5.15	2.48	0.97	0.28	0.00	0.00	0.00	
22	1.00	2.00	0.05	4.15	5.55	7.88	2.16	0.90	0.28	0.00	0.00	0.00	
23	0.97	1.60	0.02	6.14	3.48	8.78	2.16	0.90	0.28	0.00	0.00	0.00	
24	0.87	1.46	0.02	4.75	2.92	10.16	2.40	0.87	0.28	0.00	0.00	0.00	
25	0.83	1.88	0.07	3.56	2.68	17.02	4.40	0.80	0.28	0.00	0.00	0.00	
26	1.04	1.25	0.28	3.12	2.48	9.56	3.08	0.90	0.22	0.00	0.00	0.00	
27	1.00	1.50	0.07	2.56	2.88	7.58	2.48	0.87	0.22	0.00	0.00	0.00	
28	1.00	4.85	0.28	2.32	9.68	5.84	2.24	0.83	0.13	0.00	0.00	0.00	
29	0.90	4.00	0.31	2.28	5.66	4.35	2.08	0.80	0.13	0.00		0.00	
30	0.76	2.80	0.31	2.60	5.66	3.90	2.32	0.87	0.10	0.00		0.00	
31		11.90		2.80	5.00		1.76		0.10	0.00		0.00	
Total	26.12	81.17	12.16	227.52	167.49	204.91	97.14	38.64	13.22	0.26	0.00	0.00	868.63 CMSDAY
Mean	0.87	2.62	0.41	7.34	5.40	6.83	3.13	1.29	0.43	0.01	0.00	0.00	2.38 CMS
Max	1.22	11.90	1.39	44.21	16.06	17.02	9.98	2.28	1.39	0.13	0.00	0.00	44.21 CMS
Min	0.34	0.43	0.02	2.28	1.84	2.80	1.76	0.80	0.10	0.00	0.00	0.00	0.00 CMS
Runoff	2.257	7.013	1.051	19.658	14.471	17.704	8.393	3.338	1.142	0.022	0.000	0.000	75.050 MCM

Momentary Peak 48.84 CMS, at 6.82 H (A.D), at 18.00 Hours, on Jul 9, 2001

Runoff Yield 793.27 Liters/Second/Square KM, Momentary Peak Yield 16280.000 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 445 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 200 meters from the gage observer's house.

Elevation +7.167 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 2000 to date.

Rated by Float -

Rated by Current Meter 2000 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

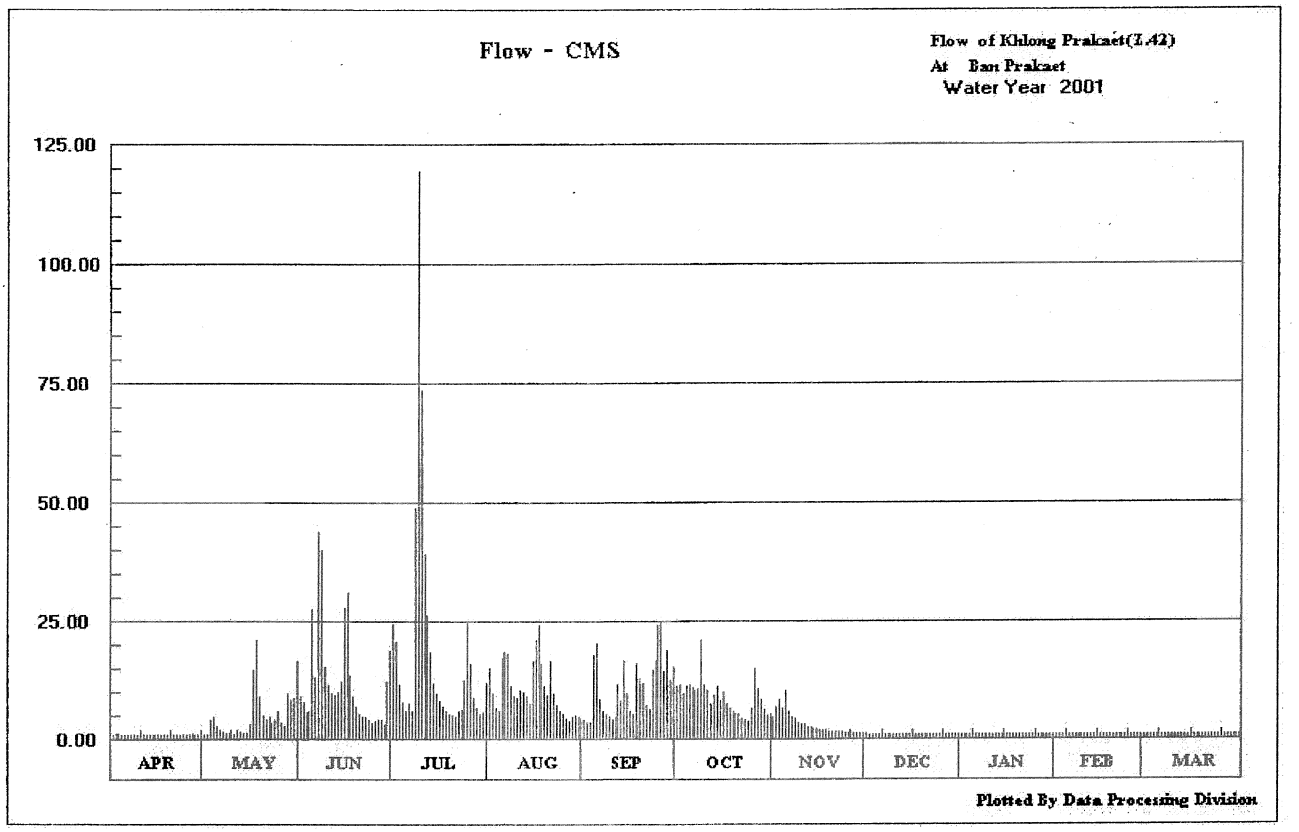
Overbank Flow Conditions Overbank flow starts at elevation +7.120 m.(A.D.) and is including overbank flow.

General Description Records fair. Stage-discharge relation defined by 60 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.29	0.14	1.09	2.12	1.50	0.69	1.25	0.76	0.31	0.94	0.35	0.00	
2	0.35	0.27	1.01	1.86	1.15	0.65	1.27	0.95	0.30	0.91	0.34	0.00	
3	0.34	0.70	0.84	1.26	0.93	0.63	1.14	1.06	0.30	0.89	0.32	0.00	
4	0.28	0.77	0.87	1.01	0.90	1.68	1.25	0.94	0.30	0.89	0.30	0.00	
5	0.24	0.57	2.32	0.88	1.64	1.84	1.27	1.18	0.29	0.87	0.28	0.00	
6	0.20	0.46	1.36	1.00	1.72	1.05	1.23	0.87	0.66	0.85	0.25	0.00	
7	0.18	0.39	3.19	0.89	1.71	0.90	1.19	0.77	1.00	0.82	0.23	0.00	
8	0.16	0.36	2.99	3.44	1.24	0.83	1.20	0.72	1.09	0.79	0.20	0.00	
9	0.15	0.32	1.51	6.41	1.10	0.75	1.88	0.65	1.09	0.76	0.18	0.00	
10	0.14	0.30	1.26	6.79	1.08	0.70	1.26	0.60	1.09	0.74	0.17	0.00	
11	0.13	0.30	1.13	4.91	1.19	0.77	1.18	0.59	1.09	0.72	0.16	0.00	
12	0.13	0.44	1.11	3.04	1.16	1.26	0.99	0.55	1.09	0.68	0.13	0.00	
13	0.13	0.39	1.16	1.72	1.10	1.04	1.12	0.53	1.09	0.68	0.12	0.00	
14	0.12	0.36	1.31	1.28	0.99	1.60	1.25	0.52	1.08	0.67	0.09	0.00	
15	0.12	0.33	3.28	1.13	1.60	1.14	1.03	0.50	1.08	0.66	0.06	0.00	
16	0.28	0.60	3.76	1.04	1.88	0.90	1.17	0.48	1.06	0.66	0.04	0.00	
17	0.28	1.47	1.38	0.95	2.09	0.82	0.99	0.46	1.04	0.64	0.03	0.00	
18	0.17	1.89	1.09	0.89	1.56	1.56	0.94	0.44	1.01	0.63	0.01	0.00	
19	0.13	1.09	0.95	0.81	1.25	1.34	0.87	0.42	1.00	0.60	0.01	0.00	
20	0.11	0.78	0.82	0.78	1.11	1.29	0.83	0.40	1.00	0.59	0.00	0.00	
21	0.11	0.71	0.77	0.75	1.59	0.98	0.81	0.39	1.00	0.59	0.00	0.00	
22	0.11	0.77	0.75	0.88	1.13	0.91	0.73	0.38	0.98	0.57	0.00	0.00	
23	0.10	0.65	0.71	0.92	0.98	1.47	0.70	0.37	0.97	0.56	0.00	0.00	
24	0.10	0.71	0.64	1.33	0.88	1.59	0.67	0.36	0.96	0.56	0.00	0.00	
25	0.10	0.88	0.67	2.15	0.81	2.09	0.93	0.35	0.96	0.54	0.00	0.00	
26	0.15	0.63	0.71	1.56	0.74	2.15	1.50	0.34	0.95	0.52	0.00	0.00	
27	0.32	0.58	0.69	1.08	0.66	1.46	1.20	0.33	0.95	0.50	0.00	0.00	
28	0.27	1.15	0.61	0.93	0.75	1.74	1.05	0.32	0.95	0.47	0.00	0.00	
29	0.27	1.06	1.31	0.82	0.79	1.33	0.91	0.31	0.95	0.44		0.00	
30	0.18	1.08	1.74	0.86	0.77	1.52	0.80	0.31	0.94	0.39		0.00	
31		1.60		1.29	0.73		0.81		0.94	0.35		0.00	
Mean	0.19	0.70	1.37	1.77	1.18	1.22	1.08	0.56	0.89	0.66	0.12	0.00	
Max	0.35	1.89	3.76	6.79	2.09	2.15	1.88	1.18	1.09	0.94	0.35	0.00	6.79
Min	0.10	0.14	0.61	0.75	0.66	0.63	0.67	0.31	0.29	0.35	0.00	0.00	0.00

Annual Max Momentary Gage Height 7.17 M (A.D), at 6.00 Hours, on Jul 10, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.18 M (A.D)
Left Bank Elevation 7.17 M (A.D)
Right Bank Elevation 7.12 M (A.D), Drainage Area 445 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.45	0.70	9.35	24.80	15.50	4.40	11.75	5.10	1.55	0.66	0.26	0.00	
2	1.75	1.35	8.15	20.90	10.25	4.00	12.05	7.25	1.50	0.64	0.26	0.00	
3	1.70	4.50	5.90	11.90	6.95	3.80	10.10	8.90	1.50	0.62	0.25	0.00	
4	1.40	5.20	6.20	8.15	6.50	18.20	11.75	7.10	1.50	0.60	0.24	0.00	
5	1.20	3.20	27.80	6.30	17.60	20.60	12.05	10.70	1.45	0.58	0.23	0.00	
6	1.00	2.30	13.40	8.00	18.80	8.75	11.45	6.20	1.41	0.57	0.23	0.00	
7	0.90	1.95	44.30	6.40	18.65	6.50	10.85	5.20	1.37	0.55	0.22	0.00	
8	0.80	1.80	40.30	29.08	11.60	5.80	11.00	4.70	1.33	0.53	0.21	0.00	
9	0.75	1.60	15.65	58.30	9.50	5.00	21.20	4.00	1.29	0.52	0.21	0.00	
10	0.70	1.50	11.90	74.00	9.20	4.50	11.90	3.50	1.25	0.50	0.20	0.00	
11	0.65	1.50	9.95	39.37	10.85	5.20	10.70	3.40	1.22	0.49	0.20	0.00	
12	0.65	2.20	9.65	26.64	10.40	11.90	7.85	3.00	1.18	0.47	0.19	0.00	
13	0.65	1.95	10.40	18.80	9.50	8.60	9.80	2.80	1.15	0.46	0.18	0.00	
14	0.60	1.80	12.65	12.20	7.85	17.00	11.75	2.70	1.11	0.45	0.18	0.00	
15	0.60	1.65	46.10	9.95	17.00	10.10	8.45	2.50	1.08	0.43	0.17	0.00	
16	1.40	3.50	55.70	8.60	21.20	6.50	10.55	2.40	1.05	0.42	0.17	0.00	
17	1.40	15.05	13.70	7.25	24.35	5.70	7.85	2.30	1.02	0.41	0.16	0.00	
18	0.85	21.35	9.35	6.40	16.40	16.40	7.10	2.20	0.99	0.40	0.16	0.00	
19	0.65	9.35	7.25	5.60	11.75	13.10	6.20	2.10	0.96	0.39	0.15	0.00	
20	0.55	5.30	5.70	5.30	9.65	12.35	5.80	2.00	0.93	0.37	0.00	0.00	
21	0.55	4.60	5.20	5.00	16.85	7.70	5.60	1.95	0.91	0.36	0.00	0.00	
22	0.55	5.20	5.00	6.30	9.95	6.65	4.80	1.90	0.88	0.35	0.00	0.00	
23	0.50	4.00	4.60	6.80	7.70	15.05	4.50	1.85	0.85	0.34	0.00	0.00	
24	0.50	4.60	3.90	12.95	6.30	16.85	4.20	1.80	0.83	0.33	0.00	0.00	
25	0.50	6.30	4.20	25.25	5.60	24.35	6.95	1.75	0.80	0.32	0.00	0.00	
26	0.75	3.80	4.60	16.40	4.90	25.25	15.50	1.70	0.78	0.31	0.00	0.00	
27	1.60	3.30	4.40	9.20	4.10	14.90	11.00	1.65	0.76	0.30	0.00	0.00	
28	1.35	10.25	3.60	6.95	5.00	19.10	8.75	1.60	0.74	0.30	0.00	0.00	
29	1.35	8.90	12.65	5.70	5.40	12.95	6.65	1.55	0.72	0.29		0.00	
30	0.90	9.20	19.10	6.10	5.20	15.80	5.50	1.55	0.69	0.28		0.00	
31		17.00		12.35	4.80		5.60		0.67	0.27		0.00	
Total	28.20	164.90	430.65	500.94	339.30	347.00	289.20	105.35	33.47	13.51	3.87	0.00	2256.39 CMSDAY
Mean	0.94	5.32	14.36	16.16	10.95	11.57	9.33	3.51	1.08	0.44	0.14	0.00	6.18 CMS
Max	1.75	21.35	55.70	74.00	24.35	25.25	21.20	10.70	1.55	0.66	0.26	0.00	74.00 CMS
Min	0.50	0.70	3.60	5.00	4.10	3.80	4.20	1.55	0.67	0.27	0.00	0.00	0.00 CMS
Runoff	2.436	14.247	37.208	43.281	29.316	29.981	24.987	9.102	2.892	1.167	0.334	0.000	194.952 MCM

Momentary Peak 111.10 CMS, at 7.17 M (A.D), at 6.00 Hours, on Jul 10, 2001
Runoff Yield 13.89 Liters/Second/Square KM, Momentary Peak Yield 249.663 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area - sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.000 m. (A.D.)

Bench Mark B.M.- H.D.

Location BM On right bank about 20 meters from the top staff gage.

Elevation +3.517 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 Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

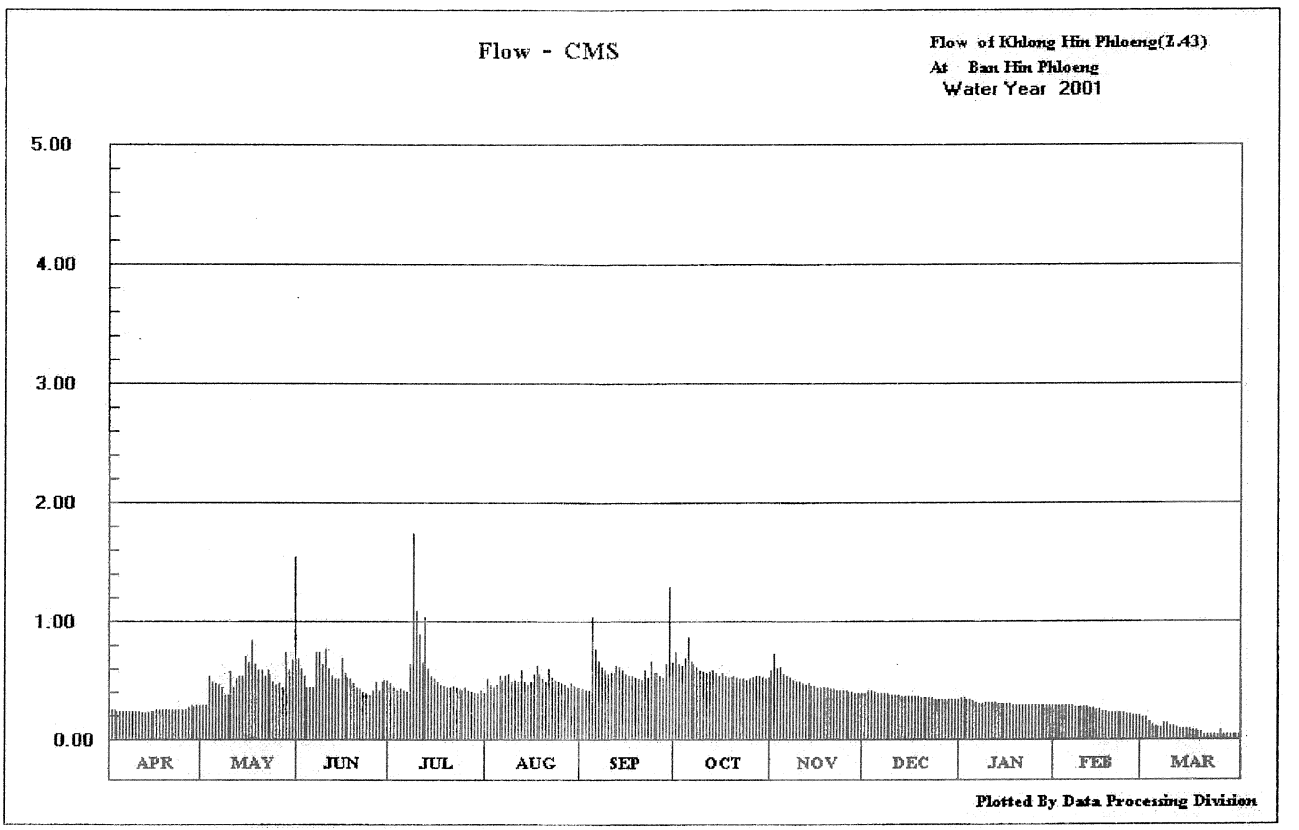
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.37	0.40	0.80	0.59	0.63	0.54	0.83	0.70	0.51	0.47	0.40	0.31	
2	0.37	0.40	0.72	0.56	0.58	0.53	0.75	0.82	0.53	0.47	0.40	0.30	
3	0.36	0.66	0.65	0.53	0.56	0.53	0.74	0.72	0.53	0.46	0.40	0.27	
4	0.36	0.61	0.56	0.54	0.58	0.93	0.80	0.73	0.52	0.45	0.40	0.24	
5	0.36	0.59	0.56	0.53	0.66	0.84	0.89	0.67	0.51	0.44	0.40	0.23	
6	0.35	0.58	0.55	0.52	0.62	0.78	0.78	0.65	0.51	0.43	0.40	0.22	
7	0.35	0.56	0.83	0.76	0.65	0.73	0.75	0.64	0.50	0.42	0.39	0.22	
8	0.35	0.49	0.83	1.07	0.67	0.70	0.73	0.62	0.50	0.42	0.39	0.26	
9	0.35	0.49	0.76	0.94	0.61	0.67	0.71	0.61	0.49	0.43	0.39	0.25	
10	0.35	0.69	0.84	0.90	0.62	0.68	0.69	0.60	0.49	0.43	0.39	0.23	
11	0.34	0.56	0.72	0.77	0.60	0.68	0.68	0.59	0.49	0.43	0.39	0.23	
12	0.34	0.63	0.66	0.93	0.71	0.74	0.69	0.58	0.49	0.43	0.38	0.22	
13	0.34	0.65	0.63	0.72	0.61	0.73	0.70	0.59	0.48	0.42	0.38	0.21	
14	0.36	0.65	0.63	0.65	0.58	0.70	0.68	0.57	0.48	0.42	0.37	0.21	
15	0.35	0.81	0.80	0.63	0.60	0.67	0.66	0.57	0.48	0.42	0.37	0.20	
16	0.37	0.77	0.68	0.61	0.67	0.66	0.68	0.56	0.48	0.42	0.36	0.20	
17	0.37	0.88	0.64	0.58	0.74	0.65	0.65	0.56	0.48	0.42	0.35	0.19	
18	0.37	0.75	0.63	0.57	0.67	0.64	0.64	0.55	0.48	0.41	0.34	0.19	
19	0.37	0.71	0.59	0.56	0.63	0.63	0.64	0.55	0.47	0.41	0.34	0.18	
20	0.37	0.70	0.56	0.55	0.60	0.62	0.66	0.54	0.47	0.41	0.34	0.18	
21	0.37	0.65	0.54	0.57	0.72	0.71	0.64	0.54	0.47	0.41	0.34	0.16	
22	0.37	0.71	0.52	0.55	0.64	0.64	0.63	0.53	0.47	0.40	0.34	0.14	
23	0.37	0.67	0.51	0.54	0.62	0.78	0.63	0.53	0.47	0.40	0.34	0.13	
24	0.37	0.61	0.49	0.53	0.60	0.68	0.62	0.53	0.46	0.40	0.33	0.13	
25	0.37	0.58	0.53	0.55	0.59	0.68	0.63	0.53	0.46	0.40	0.33	0.12	
26	0.39	0.59	0.61	0.53	0.58	0.66	0.64	0.52	0.46	0.40	0.32	0.12	
27	0.40	0.56	0.53	0.52	0.56	0.64	0.65	0.52	0.46	0.40	0.32	0.11	
28	0.39	0.83	0.61	0.51	0.59	0.75	0.66	0.51	0.46	0.40	0.32	0.11	
29	0.40	0.71	0.62	0.50	0.57	0.98	0.64	0.51	0.46	0.40		0.10	
30	0.40	0.79	0.62	0.53	0.56	0.77	0.63	0.51	0.45	0.40		0.10	
31		1.03		0.51	0.55		0.64		0.45	0.40		0.10	
Mean	0.37	0.66	0.64	0.62	0.62	0.70	0.69	0.59	0.48	0.42	0.37	0.19	
Max	0.40	1.03	0.84	1.07	0.74	0.98	0.89	0.82	0.53	0.47	0.40	0.31	1.07
Min	0.34	0.40	0.49	0.50	0.55	0.53	0.62	0.51	0.45	0.40	0.32	0.10	0.10

Annual Max Momentary Gage Height 1.55 M (A.D), at 15.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.05 M (A.D)
Left Bank Elevation 4.72 M (A.D)
Right Bank Elevation 4.71 M (A.D), Drainage Area 3 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.27	0.30	0.70	0.49	0.53	0.44	0.76	0.60	0.41	0.37	0.30	0.21	
2	0.27	0.30	0.62	0.46	0.48	0.43	0.65	0.74	0.43	0.37	0.30	0.20	
3	0.26	0.56	0.55	0.43	0.46	0.43	0.64	0.62	0.43	0.36	0.30	0.17	
4	0.26	0.51	0.46	0.44	0.48	1.05	0.70	0.63	0.42	0.35	0.30	0.14	
5	0.26	0.49	0.46	0.43	0.56	0.78	0.88	0.57	0.41	0.34	0.30	0.13	
6	0.25	0.48	0.45	0.42	0.52	0.68	0.68	0.55	0.41	0.33	0.30	0.12	
7	0.25	0.46	0.76	0.66	0.55	0.63	0.65	0.54	0.40	0.32	0.29	0.12	
8	0.25	0.39	0.76	1.75	0.57	0.60	0.63	0.52	0.40	0.32	0.29	0.16	
9	0.25	0.39	0.66	1.10	0.51	0.57	0.61	0.51	0.39	0.33	0.29	0.15	
10	0.25	0.59	0.78	0.90	0.52	0.58	0.59	0.50	0.39	0.33	0.29	0.13	
11	0.24	0.46	0.62	0.67	0.50	0.58	0.58	0.49	0.39	0.33	0.29	0.13	
12	0.24	0.53	0.56	1.05	0.61	0.64	0.59	0.48	0.39	0.33	0.28	0.12	
13	0.24	0.55	0.53	0.62	0.51	0.63	0.60	0.49	0.38	0.32	0.28	0.11	
14	0.26	0.55	0.53	0.55	0.48	0.60	0.58	0.47	0.38	0.32	0.27	0.11	
15	0.25	0.72	0.70	0.53	0.50	0.57	0.56	0.47	0.38	0.32	0.27	0.10	
16	0.27	0.67	0.58	0.51	0.57	0.56	0.58	0.46	0.38	0.32	0.26	0.10	
17	0.27	0.86	0.54	0.48	0.64	0.55	0.55	0.46	0.38	0.32	0.25	0.09	
18	0.27	0.65	0.53	0.47	0.57	0.54	0.54	0.45	0.38	0.31	0.24	0.09	
19	0.27	0.61	0.49	0.46	0.53	0.53	0.54	0.45	0.37	0.31	0.24	0.08	
20	0.27	0.60	0.46	0.45	0.50	0.52	0.56	0.44	0.37	0.31	0.24	0.08	
21	0.27	0.55	0.44	0.47	0.62	0.61	0.54	0.44	0.37	0.31	0.24	0.06	
22	0.27	0.61	0.42	0.45	0.54	0.54	0.53	0.43	0.37	0.30	0.24	0.04	
23	0.27	0.57	0.41	0.44	0.52	0.68	0.53	0.43	0.37	0.30	0.24	0.03	
24	0.27	0.51	0.39	0.43	0.50	0.58	0.52	0.43	0.36	0.30	0.23	0.03	
25	0.27	0.48	0.43	0.45	0.49	0.58	0.53	0.43	0.36	0.30	0.23	0.02	
26	0.29	0.49	0.51	0.43	0.48	0.56	0.54	0.42	0.36	0.30	0.22	0.02	
27	0.30	0.46	0.43	0.42	0.46	0.54	0.55	0.42	0.36	0.30	0.22	0.01	
28	0.29	0.76	0.51	0.41	0.49	0.65	0.56	0.41	0.36	0.30	0.22	0.01	
29	0.30	0.61	0.52	0.40	0.47	1.30	0.54	0.41	0.36	0.30		0.00	
30	0.30	0.69	0.52	0.43	0.46	0.67	0.53	0.41	0.35	0.30		0.00	
31		1.55		0.41	0.45		0.54		0.35	0.30		0.00	
Total	7.98	17.95	16.32	17.61	16.07	18.62	18.38	14.67	11.86	9.92	7.42	2.76	159.56 CMSDAY
Mean	0.27	0.58	0.54	0.57	0.52	0.62	0.59	0.49	0.38	0.32	0.26	0.09	0.44 CMS
Max	0.30	1.55	0.78	1.75	0.64	1.30	0.88	0.74	0.43	0.37	0.30	0.21	1.75 CMS
Min	0.24	0.30	0.39	0.40	0.45	0.43	0.52	0.41	0.35	0.30	0.22	0.00	0.00 CMS
Runoff	0.689	1.551	1.410	1.522	1.388	1.609	1.588	1.267	1.025	0.857	0.641	0.238	13.786 MCM

Momentary Peak 5.15 CMS, at 1.55 M (A.D), at 15.00 Hours, on Jul 8, 2001

Runoff Yield 145.72 Liters/Second/Square KM, Momentary Peak Yield 1716.667 Liters/Second/Square KM

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Ta Rong at Ban Chan Khrem, Chanthaburi (Z.44)

Lat 13 - 00 - 13 N. **Long** 102 - 03 - 06 E.

Location on left bank at Ban Chan Khrem.

Ban Chan Khrem **Amphoe** K.A. Khao Khitchakut **Changwat** Chanthaburi

Drainage Area 109 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +52.200 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank next tall pole for electric cable dwelling.

Elevation +58.585 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1997 to date.

Rating Operation

Period of Rating 2001 to date.

Rated by Float -

Rated by Current Meter 2001 to date.

Stability of Channel Regimes Fairly stable.

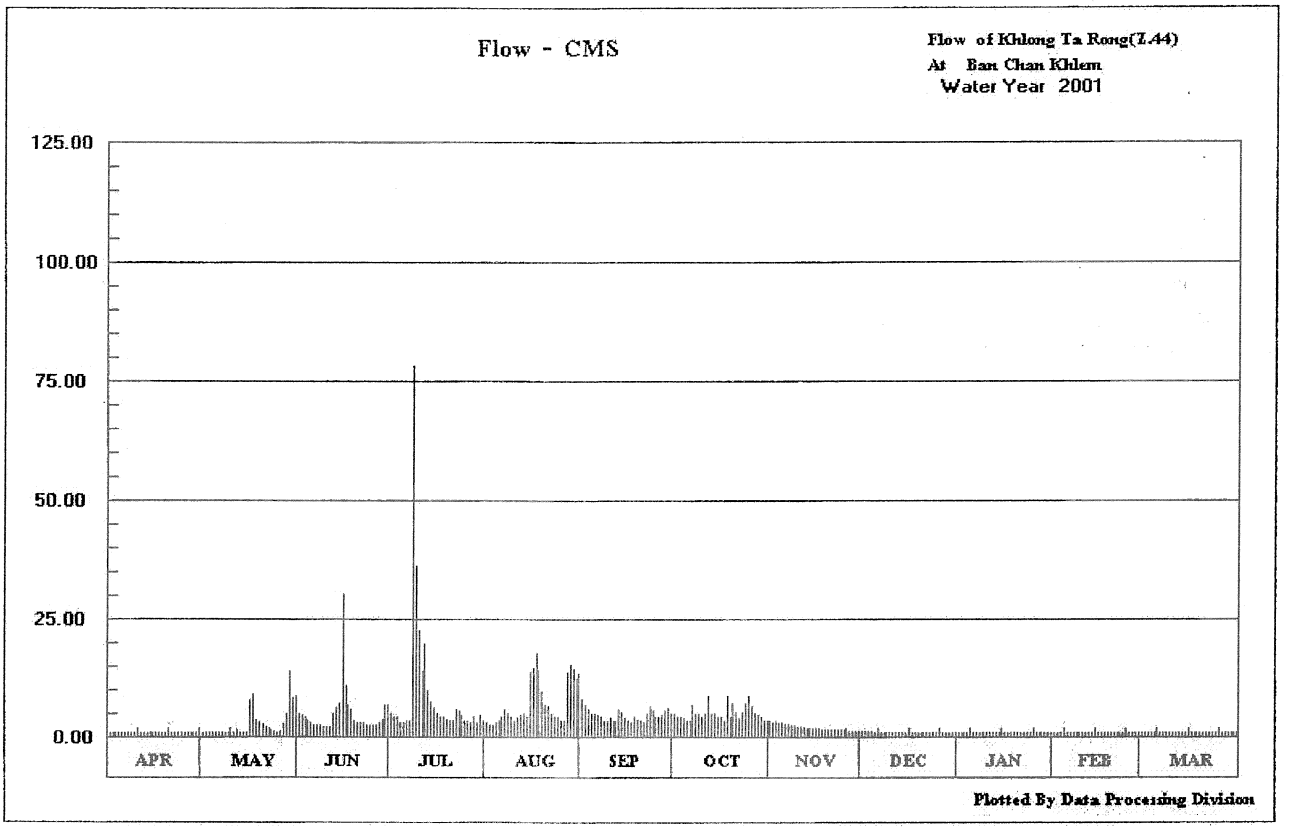
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	52.65	52.55	53.10	53.10	52.95	53.25	53.10	52.98	52.77	52.65	52.51	52.48	
2	52.65	52.57	53.07	53.05	52.90	53.20	53.05	52.95	52.77	52.65	52.49	52.50	
3	52.64	52.60	53.05	53.05	52.90	53.15	53.05	52.98	52.76	52.64	52.49	52.49	
4	52.63	52.58	53.00	52.96	52.95	53.10	53.03	52.95	52.76	52.64	52.48	52.53	
5	52.62	52.60	52.95	52.95	53.00	53.10	53.00	52.95	52.75	52.63	52.48	52.50	
6	52.61	52.58	52.90	52.99	53.05	53.07	53.00	52.92	52.75	52.63	52.48	52.57	
7	52.60	52.63	52.90	52.97	53.15	53.05	53.20	52.92	52.74	52.62	52.51	52.60	
8	52.59	52.59	52.90	55.23	53.10	53.00	53.10	52.90	52.74	52.62	52.52	52.58	
9	52.58	52.58	52.85	54.24	53.05	53.00	53.10	52.88	52.73	52.61	52.51	52.58	
10	52.57	52.63	52.85	53.80	53.00	53.03	53.05	52.85	52.73	52.61	52.50	52.65	
11	52.56	52.73	52.87	53.51	53.03	53.00	53.10	52.85	52.73	52.60	52.49	52.63	
12	52.55	52.80	53.09	53.71	53.08	53.00	53.29	52.85	52.73	52.60	52.51	52.62	
13	52.54	52.70	53.16	53.34	53.10	53.15	53.10	52.84	52.73	52.59	52.50	52.61	
14	52.53	52.66	53.22	53.23	53.05	53.11	53.10	52.83	52.73	52.59	52.50	52.60	
15	52.60	52.64	54.06	53.17	53.50	53.03	53.05	52.83	52.73	52.58	52.49	52.59	
16	52.60	53.24	53.38	53.10	53.53	53.00	53.05	52.83	52.72	52.57	52.48	52.56	
17	52.55	53.30	53.20	53.05	53.64	52.95	53.00	52.82	52.72	52.56	52.48	52.54	
18	52.55	53.01	53.15	53.05	53.51	53.05	53.29	52.81	52.72	52.55	52.48	52.53	
19	52.54	52.96	52.99	53.01	53.33	53.02	53.05	52.81	52.71	52.54	52.48	52.51	
20	52.51	52.92	52.95	53.00	53.20	53.00	53.22	52.80	52.71	52.53	52.48	52.44	
21	52.50	52.85	52.95	53.00	53.18	52.96	53.12	52.80	52.70	52.52	52.48	52.38	
22	52.50	52.82	52.95	53.14	53.10	53.09	53.04	52.80	52.70	52.51	52.48	52.33	
23	52.50	52.79	52.90	53.13	53.05	53.19	53.12	52.79	52.69	52.50	52.47	52.29	
24	52.49	52.78	52.90	53.07	53.05	53.13	53.22	52.79	52.69	52.52	52.48	52.23	
25	52.48	52.74	52.90	53.00	53.00	53.05	53.29	52.79	52.68	52.53	52.48	52.25	
26	52.44	52.78	52.90	53.00	53.00	53.05	53.19	52.78	52.68	52.53	52.47	52.26	
27	52.46	52.91	52.96	52.96	53.50	53.08	53.10	52.78	52.68	52.52	52.47	52.26	
28	52.55	53.10	53.01	53.05	53.55	53.13	53.08	52.77	52.67	52.51	52.47	52.26	
29	52.53	53.51	53.20	52.95	53.52	53.16	53.05	52.77	52.67	52.52		52.25	
30	52.55	53.27	53.20	53.08	53.44	53.10	53.00	52.77	52.67	52.52		52.25	
31		53.28		53.00	53.48		52.98		52.67	52.52		52.25	
Mean	52.56	52.83	53.05	53.22	53.19	53.07	53.10	52.85	52.72	52.57	52.49	52.46	
Max	52.65	53.51	54.06	55.23	53.64	53.25	53.29	52.98	52.77	52.65	52.52	52.65	55.23
Min	52.44	52.55	52.85	52.95	52.90	52.95	52.98	52.77	52.67	52.50	52.47	52.23	52.23

Annual Max Momentary Gage Height 56.20 M (MSL), at 18.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 52.20 M (MSL), River Bed 52.44 M (MSL)
Left Bank Elevation 58.80 M (MSL)
Right Bank Elevation 58.76 M (MSL), Drainage Area 109 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.75	0.25	5.50	5.50	3.50	8.40	5.50	3.80	1.70	0.75	0.05	0.00	
2	0.75	0.35	5.05	4.75	3.00	7.30	4.75	3.50	1.70	0.75	0.00	0.00	
3	0.70	0.50	4.75	4.75	3.00	6.40	4.75	3.80	1.60	0.70	0.00	0.00	
4	0.65	0.40	4.00	3.60	3.50	5.50	4.45	3.50	1.60	0.70	0.00	0.15	
5	0.60	0.50	3.50	3.50	4.00	5.50	4.00	3.50	1.50	0.65	0.00	0.00	
6	0.55	0.40	3.00	3.90	4.75	5.05	4.00	3.20	1.50	0.65	0.00	0.35	
7	0.50	0.65	3.00	3.70	6.40	4.75	7.30	3.20	1.40	0.60	0.05	0.50	
8	0.45	0.45	3.00	78.64	5.50	4.00	5.50	3.00	1.40	0.60	0.10	0.40	
9	0.40	0.40	2.50	36.72	4.75	4.00	5.50	2.80	1.30	0.55	0.05	0.40	
10	0.35	0.65	2.50	22.80	4.00	4.45	4.75	2.50	1.30	0.55	0.00	0.75	
11	0.30	1.30	2.70	14.57	4.45	4.00	5.50	2.50	1.30	0.50	0.00	0.65	
12	0.25	2.00	5.35	20.19	5.20	4.00	9.28	2.50	1.30	0.50	0.05	0.60	
13	0.20	1.00	6.58	10.46	5.50	6.40	5.50	2.40	1.30	0.45	0.00	0.55	
14	0.15	0.80	7.74	7.96	4.75	5.68	5.50	2.30	1.30	0.45	0.00	0.50	
15	0.50	0.70	30.72	6.76	14.30	4.45	4.75	2.30	1.30	0.40	0.00	0.45	
16	0.50	8.18	11.42	5.50	15.11	4.00	4.75	2.30	1.20	0.35	0.00	0.30	
17	0.25	9.50	7.30	4.75	18.16	3.50	4.00	2.20	1.20	0.30	0.00	0.20	
18	0.25	4.15	6.40	4.75	14.57	4.75	9.28	2.10	1.20	0.25	0.00	0.15	
19	0.20	3.60	3.90	4.15	10.22	4.30	4.75	2.10	1.10	0.20	0.00	0.05	
20	0.05	3.20	3.50	4.00	7.30	4.00	7.74	2.00	1.10	0.15	0.00	0.00	
21	0.00	2.50	3.50	4.00	6.94	3.60	5.86	2.00	1.00	0.10	0.00	0.00	
22	0.00	2.20	3.50	6.22	5.50	5.35	4.60	2.00	1.00	0.05	0.00	0.00	
23	0.00	1.90	3.00	6.04	4.75	7.12	5.86	1.90	0.95	0.00	0.00	0.00	
24	0.00	1.80	3.00	5.05	4.75	6.04	7.74	1.90	0.95	0.10	0.00	0.00	
25	0.00	1.40	3.00	4.00	4.00	4.75	9.28	1.90	0.90	0.15	0.00	0.00	
26	0.00	1.80	3.00	4.00	4.00	4.75	7.12	1.80	0.90	0.15	0.00	0.00	
27	0.00	3.10	3.60	3.60	14.30	5.20	5.50	1.80	0.90	0.10	0.00	0.00	
28	0.25	5.50	4.15	4.75	15.65	6.04	5.20	1.70	0.85	0.05	0.00	0.00	
29	0.15	14.57	7.30	3.50	14.84	6.58	4.75	1.70	0.85	0.10		0.00	
30	0.25	8.84	7.30	5.20	12.86	5.50	4.00	1.70	0.85	0.10		0.00	
31		9.06		4.00	13.82		3.80		0.85	0.10		0.00	
Total	9.00	91.65	163.76	301.31	243.37	155.36	175.26	73.90	37.30	11.05	0.30	6.00	1268.26 CMSDAY
Mean	0.30	2.96	5.46	9.72	7.85	5.18	5.65	2.46	1.20	0.36	0.01	0.19	3.47 CMS
Max	0.75	14.57	30.72	78.64	18.16	8.40	9.28	3.80	1.70	0.75	0.10	0.75	78.64 CMS
Min	0.00	0.25	2.50	3.50	3.00	3.50	3.80	1.70	0.85	0.00	0.00	0.00	0.00 CMS
Runoff	0.778	7.919	14.149	26.033	21.027	13.423	15.142	6.385	3.223	0.955	0.026	0.518	109.578 MCM

Momentary Peak 129.58 CMS, at 56.20 M (MSL), at 18.00 Hours, on Jul 8, 2001

Runoff Yield 31.88 Liters/Second/Square KM, Momentary Peak Yield 1188.807 Liters/Second/Square KM

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Ang at Ban Khlong Lae, Trat (Z.45)

Lat 12 - 36 - 58 N. **Long** 102 - 28 - 42 E.

Location on left bank near the highway bridge, Tambon Nong Bon.

Ban Khlong Lae **Amphoe** Bo Rai **Changwat** Trat

Drainage 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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

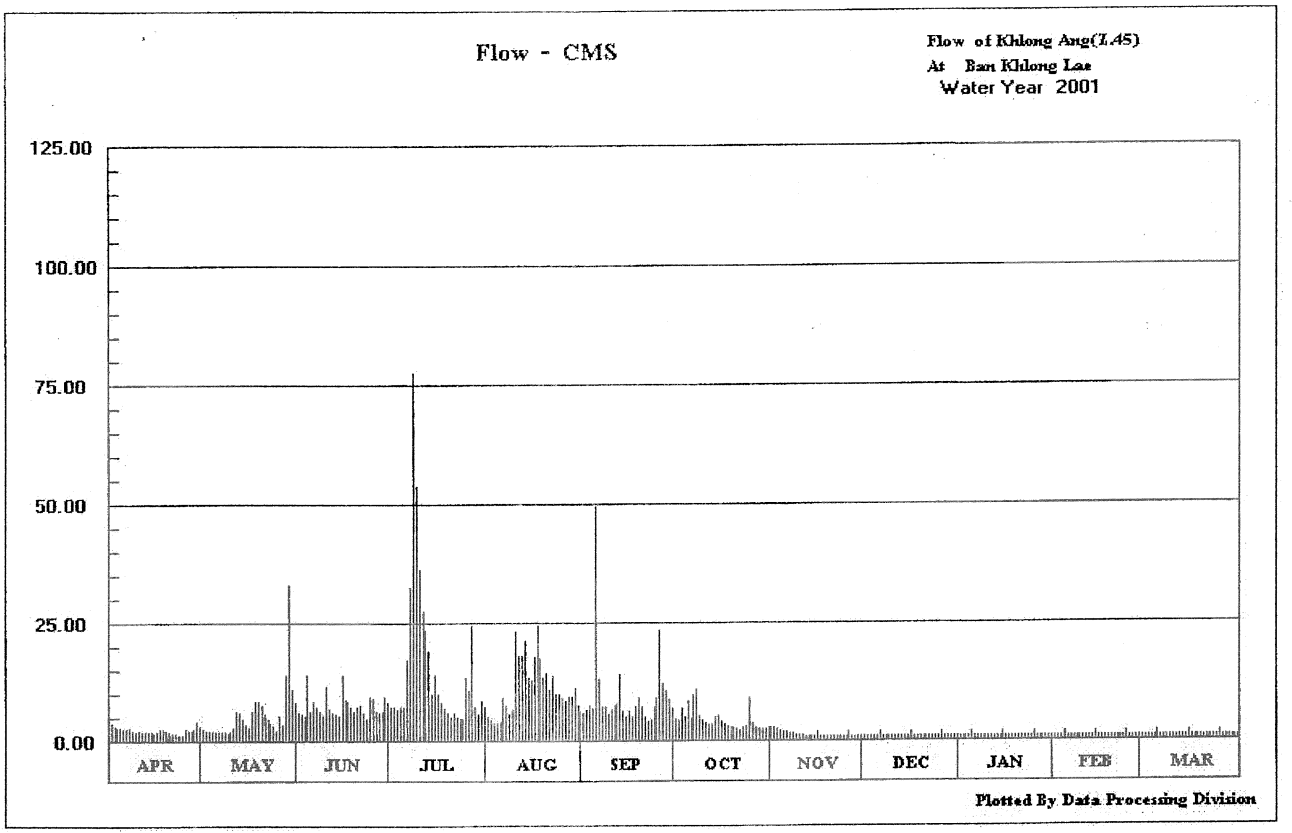
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 48 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.34	0.22	0.48	0.55	0.41	0.48	0.40	0.26	0.00	-0.11	-0.18	-0.16	
2	0.29	0.19	0.45	0.54	0.38	0.51	0.38	0.27	0.00	-0.12	-0.19	-0.17	
3	0.26	0.20	0.43	0.51	0.34	0.56	0.53	0.24	0.00	-0.13	-0.20	-0.18	
4	0.25	0.17	0.90	0.54	0.34	0.53	0.41	0.20	0.00	-0.14	-0.19	-0.16	
5	0.24	0.18	0.50	0.54	0.36	2.29	0.61	0.17	0.00	-0.15	-0.18	-0.15	
6	0.23	0.17	0.62	1.03	0.65	0.85	0.40	0.15	-0.02	-0.16	-0.19	-0.14	
7	0.25	0.18	0.54	1.67	0.57	0.55	0.68	0.13	-0.03	-0.13	-0.18	-0.16	
8	0.21	0.15	0.50	3.21	0.46	0.55	0.75	0.12	-0.02	-0.14	-0.17	-0.15	
9	0.18	0.13	0.44	2.44	0.51	0.45	0.43	0.10	-0.03	-0.15	-0.16	-0.16	
10	0.19	0.18	0.78	1.81	1.29	0.51	0.37	0.09	-0.04	-0.16	-0.18	-0.15	
11	0.16	0.25	0.53	1.47	1.08	0.57	0.34	0.08	-0.06	-0.15	-0.17	-0.17	
12	0.17	0.49	0.47	1.30	1.08	0.58	0.31	0.07	-0.07	-0.16	-0.18	-0.18	
13	0.16	0.48	0.45	1.12	1.21	0.90	0.30	0.07	-0.06	-0.17	-0.19	-0.19	
14	0.15	0.40	0.43	0.69	0.87	0.50	0.42	0.07	-0.05	-0.16	-0.20	-0.20	
15	0.13	0.30	0.89	0.89	0.83	0.42	0.43	0.07	-0.06	-0.16	-0.20	-0.19	
16	0.15	0.27	0.63	0.70	1.07	0.49	0.36	0.07	-0.06	-0.17	-0.21	-0.21	
17	0.22	0.50	0.62	0.60	1.35	0.41	0.32	0.07	-0.07	-0.16	-0.22	-0.22	
18	0.22	0.62	0.54	0.53	1.05	0.54	0.28	0.06	-0.06	-0.15	-0.21	-0.21	
19	0.19	0.62	0.49	0.48	0.86	0.64	0.25	0.05	-0.07	-0.16	-0.22	-0.19	
20	0.16	0.57	0.54	0.42	0.91	0.55	0.26	0.04	-0.08	-0.17	-0.20	-0.18	
21	0.13	0.45	0.56	0.47	0.75	0.42	0.23	0.03	-0.07	-0.15	-0.21	-0.20	
22	0.12	0.40	0.48	0.42	0.88	0.36	0.20	0.03	-0.08	-0.16	-0.20	-0.21	
23	0.11	0.33	0.40	0.39	0.70	0.38	0.26	0.03	-0.08	-0.17	-0.09	-0.13	
24	0.10	0.29	0.66	0.40	0.70	0.55	0.29	0.04	-0.09	-0.15	-0.14	-0.13	
25	0.22	0.20	0.64	0.87	0.64	0.65	0.65	0.03	-0.09	-0.16	-0.16	-0.20	
26	0.19	0.44	0.50	0.72	0.61	1.31	0.34	0.02	-0.10	-0.15	-0.18	-0.21	
27	0.20	0.32	0.47	1.34	0.66	0.80	0.27	0.02	-0.11	-0.16	-0.18	-0.22	
28	0.22	0.90	0.50	0.55	0.67	0.73	0.23	0.01	-0.12	-0.16	-0.15	-0.11	
29	0.36	1.69	0.67	0.46	0.76	0.63	0.22	0.01	-0.10	-0.15		-0.03	
30	0.28	0.75	0.60	0.62	0.57	0.52	0.22	0.01	-0.11	-0.16		-0.07	
31		0.59		0.55	0.49		0.26		-0.12	-0.17		-0.19	
Mean	0.20	0.41	0.56	0.90	0.74	0.64	0.37	0.09	-0.06	-0.15	-0.18	-0.17	
Max	0.36	1.69	0.90	3.21	1.35	2.29	0.75	0.27	0.00	-0.11	-0.09	-0.03	3.21
Min	0.10	0.13	0.40	0.39	0.34	0.36	0.20	0.01	-0.12	-0.17	-0.22	-0.22	-0.22

Annual Max Momentary Gage Height 3.58 M (A.D), at 6.00 Hours, on Jul 8, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -1.03 M (A.D)
Left Bank Elevation 4.07 M (A.D)
Right Bank Elevation 4.04 M (A.D), Drainage Area 58 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.26	2.82	6.46	7.70	5.27	6.46	5.10	3.26	1.00	0.47	0.26	0.32	
2	3.59	2.51	5.95	7.52	4.82	6.98	4.82	3.37	1.00	0.44	0.23	0.29	
3	3.26	2.60	5.61	6.98	4.26	7.88	7.34	3.04	1.00	0.41	0.20	0.26	
4	3.15	2.33	14.60	7.52	4.26	7.34	5.27	2.60	1.00	0.38	0.23	0.32	
5	3.04	2.42	6.80	7.52	4.54	49.91	8.79	2.33	1.00	0.35	0.26	0.35	
6	2.93	2.33	8.98	17.46	9.55	13.55	5.10	2.15	0.90	0.32	0.23	0.38	
7	3.15	2.42	7.52	32.92	8.06	7.70	10.12	1.97	0.85	0.41	0.26	0.32	
8	2.71	2.15	6.80	78.02	6.12	7.70	11.50	1.88	0.90	0.38	0.29	0.35	
9	2.42	1.97	5.78	54.30	6.98	5.95	5.61	1.70	0.85	0.35	0.32	0.32	
10	2.51	2.42	12.10	36.57	23.46	6.98	4.68	1.63	0.80	0.32	0.26	0.35	
11	2.24	3.15	7.34	27.85	18.56	8.06	4.26	1.56	0.70	0.35	0.29	0.29	
12	2.33	6.63	6.29	23.70	18.56	8.24	3.84	1.49	0.65	0.32	0.26	0.26	
13	2.24	6.46	5.95	19.46	21.54	14.60	3.70	1.49	0.70	0.29	0.23	0.23	
14	2.15	5.10	5.61	10.31	13.97	6.80	5.44	1.49	0.75	0.32	0.20	0.20	
15	1.97	3.70	14.39	14.39	13.13	5.44	5.61	1.49	0.70	0.32	0.20	0.23	
16	2.15	3.37	9.17	10.50	18.34	6.63	4.54	1.49	0.70	0.29	0.18	0.18	
17	2.82	6.80	8.98	8.60	24.90	5.27	3.98	1.49	0.65	0.32	0.16	0.16	
18	2.82	8.98	7.52	7.34	17.90	7.52	3.48	1.42	0.70	0.35	0.18	0.18	
19	2.51	8.98	6.63	6.46	13.76	9.36	3.15	1.35	0.65	0.32	0.16	0.23	
20	2.24	8.06	7.52	5.44	14.82	7.70	3.26	1.28	0.60	0.29	0.20	0.26	
21	1.97	5.95	7.88	6.29	11.50	5.44	2.93	1.21	0.65	0.35	0.18	0.20	
22	1.88	5.10	6.46	5.44	14.18	4.54	2.60	1.21	0.60	0.32	0.20	0.18	
23	1.79	4.12	5.10	4.96	10.50	4.82	3.26	1.21	0.60	0.29	0.55	0.41	
24	1.70	3.59	9.74	5.10	10.50	7.70	3.59	1.28	0.55	0.35	0.38	0.41	
25	2.82	2.60	9.36	13.97	9.36	9.55	9.55	1.21	0.55	0.32	0.32	0.20	
26	2.51	5.78	6.80	10.90	8.79	23.94	4.26	1.14	0.50	0.35	0.26	0.18	
27	2.60	3.98	6.29	24.66	9.74	12.50	3.37	1.14	0.47	0.32	0.26	0.16	
28	2.82	14.60	6.80	7.70	9.93	11.10	2.93	1.07	0.44	0.32	0.35	0.47	
29	4.54	33.44	9.93	6.12	11.70	9.17	2.82	1.07	0.50	0.35		0.85	
30	3.48	11.50	8.60	8.98	8.06	7.16	2.82	1.07	0.47	0.32		0.65	
31		8.42		7.70	6.63		3.26		0.44	0.29		0.23	
Total	80.60	184.28	236.96	492.38	363.69	295.99	150.98	50.09	21.87	10.58	7.10	9.42	1903.94 CMSDAY
Mean	2.69	5.94	7.90	15.88	11.73	9.87	4.87	1.67	0.71	0.34	0.25	0.30	5.22 CMS
Max	4.54	33.44	14.60	78.02	24.90	49.91	11.50	3.37	1.00	0.47	0.55	0.85	78.02 CMS
Min	1.70	1.97	5.10	4.96	4.26	4.54	2.60	1.07	0.44	0.29	0.16	0.16	0.16 CMS
Runoff	6.964	15.922	20.473	42.542	31.423	25.574	13.045	4.328	1.890	0.914	0.613	0.814	164.500 MCM

Momentary Peak 89.86 CMS, at 3.58 M (A.D), at 6.00 Hours, on Jul 8, 2001

Runoff Yield 89.94 Liters/Second/Square KM, Momentary Peak Yield 1549.310 Liters/Second/Square KM

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Sano at Ban Nonthee, Trat (Z.46)

Lat 12 - 31 - 05 N. **Long** 102 - 35 - 00 E.

Location on right bank at Ban Nonthee.

Ban Nonthee **Amphoe** Bo Rai **Changwat** Trat

Drainage Area 85 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 +7.800 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 Float -

Rated by Current Meter 2000 to date.

Stability of Channel Regimes Fairly stable.

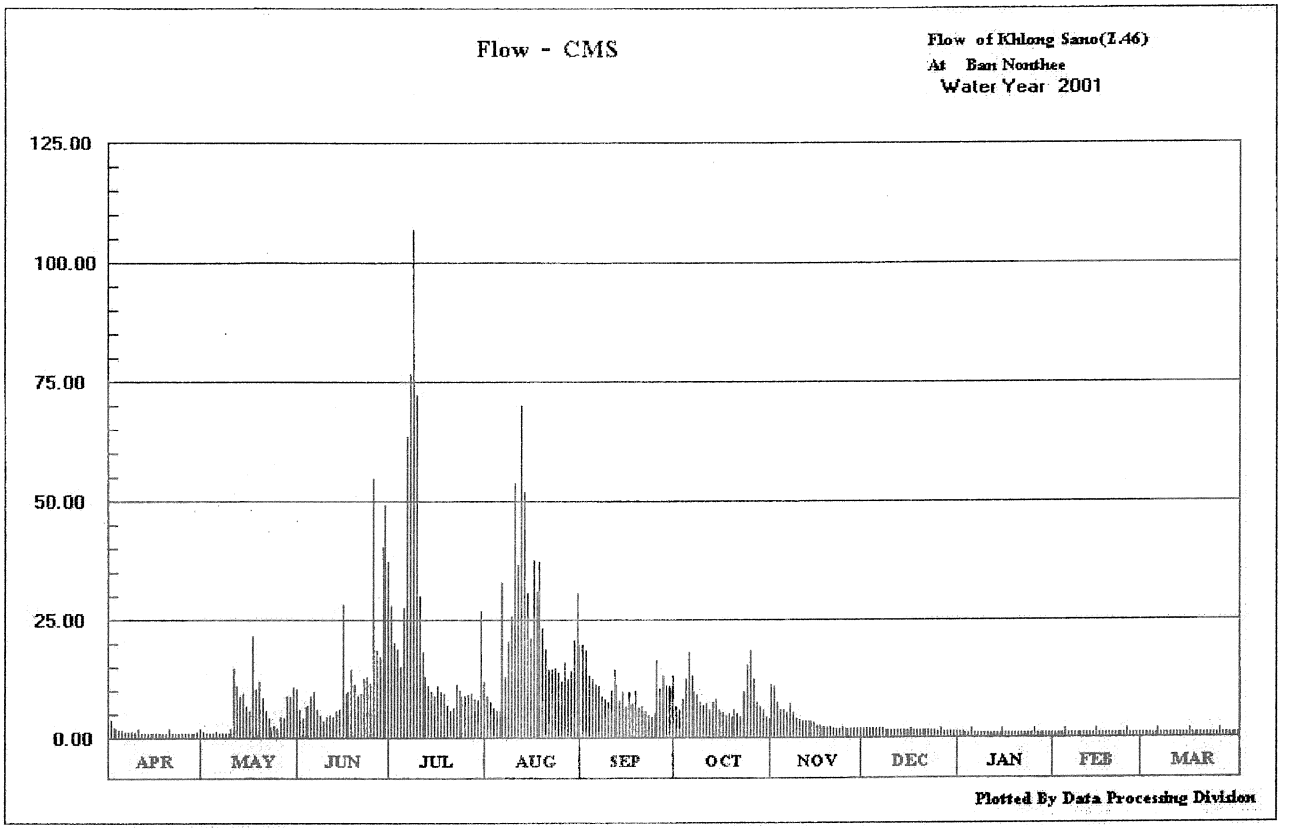
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 52 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.04	-0.22	0.18	1.01	0.33	0.74	0.22	0.44	-0.11	-0.21	-0.33	-0.46	
2	-0.08	-0.25	0.07	0.75	0.27	0.70	0.18	0.43	-0.11	-0.22	-0.33	-0.46	
3	-0.13	-0.26	0.23	0.71	0.21	0.51	0.30	0.28	-0.11	-0.24	-0.34	-0.47	
4	-0.17	-0.26	0.24	0.58	0.17	0.48	0.48	0.19	-0.12	-0.24	-0.35	-0.47	
5	-0.18	-0.23	0.34	1.00	0.17	0.44	0.69	0.19	-0.12	-0.25	-0.36	-0.47	
6	-0.21	-0.27	0.37	2.07	1.17	0.42	0.51	0.15	-0.13	-0.25	-0.36	-0.48	
7	-0.23	-0.30	0.18	2.42	0.50	0.34	0.37	0.26	-0.13	-0.26	-0.42	-0.48	
8	-0.22	-0.29	0.11	3.21	0.76	0.31	0.35	0.15	-0.14	-0.26	-0.43	-0.48	
9	-0.23	-0.31	0.02	2.30	0.94	0.27	0.28	0.06	-0.14	-0.26	-0.43	-0.48	
10	-0.25	-0.21	0.08	1.08	1.80	0.39	0.24	0.03	-0.14	-0.27	-0.44	-0.49	
11	-0.25	0.57	0.10	0.69	1.29	0.55	0.25	0.02	-0.15	-0.27	-0.44	-0.52	
12	-0.24	0.42	0.08	0.50	2.24	0.44	0.19	0.01	-0.15	-0.27	-0.45	-0.52	
13	-0.28	0.33	0.16	0.43	1.75	0.29	0.28	0.01	-0.15	-0.27	-0.45	-0.53	
14	-0.30	0.36	0.18	0.37	1.10	0.38	0.31	0.01	-0.15	-0.27	-0.46	-0.53	
15	-0.31	0.23	1.02	0.33	0.79	0.23	0.19	-0.01	-0.15	-0.28	-0.46	-0.54	
16	-0.32	0.17	0.36	0.43	1.32	0.37	0.15	-0.05	-0.15	-0.28	-0.47	-0.54	
17	-0.31	0.81	0.38	0.38	1.11	0.26	0.11	-0.06	-0.16	-0.28	-0.47	-0.54	
18	-0.30	0.40	0.55	0.36	1.31	0.39	0.12	-0.07	-0.16	-0.29	-0.47	-0.54	
19	-0.30	0.46	0.44	0.24	0.86	0.21	0.09	-0.08	-0.16	-0.29	-0.48	-0.54	
20	-0.32	0.32	0.34	0.16	0.71	0.22	0.18	-0.09	-0.16	-0.29	-0.48	-0.54	
21	-0.33	0.16	0.36	0.21	0.56	0.16	0.12	-0.10	-0.16	-0.29	-0.49	-0.55	
22	-0.33	0.07	0.48	0.44	0.56	0.11	0.08	-0.11	-0.16	-0.29	-0.46	-0.55	
23	-0.33	-0.07	0.50	0.39	0.57	0.09	0.38	-0.10	-0.17	-0.30	-0.41	-0.55	
24	-0.32	-0.06	0.45	0.34	0.53	0.13	0.59	-0.09	-0.18	-0.30	-0.42	-0.54	
25	-0.29	-0.11	1.83	0.34	0.46	0.62	0.70	-0.10	-0.19	-0.30	-0.42	-0.53	
26	-0.29	0.09	0.70	0.35	0.61	0.40	0.48	-0.10	-0.19	-0.31	-0.42	-0.53	
27	-0.26	0.06	0.66	0.36	0.48	0.51	0.27	-0.11	-0.20	-0.31	-0.43	-0.54	
28	-0.28	0.33	1.40	0.31	0.54	0.43	0.22	-0.11	-0.20	-0.31	-0.44	-0.54	
29	-0.21	0.34	1.67	0.29	0.77	0.43	0.19	-0.11	-0.20	-0.31		-0.54	
30	-0.17	0.41	1.31	0.98	1.10	0.51	0.09	-0.11	-0.20	-0.32		-0.54	
31		0.40		0.46	0.74		0.06		-0.20	-0.32		-0.44	
Mean	-0.25	0.10	0.49	0.76	0.83	0.38	0.28	0.03	-0.16	-0.28	-0.43	-0.51	
Max	0.04	0.81	1.83	3.21	2.24	0.74	0.70	0.44	-0.11	-0.21	-0.33	-0.44	3.21
Min	-0.33	-0.31	0.02	0.16	0.17	0.09	0.06	-0.11	-0.20	-0.32	-0.49	-0.55	-0.55

Annual Max Momentary Gage Height 3.60 M (A.D), at 18.00 Hours, on Aug 12, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.94 M (A.D)
Left Bank Elevation 7.86 M (A.D)
Right Bank Elevation 7.66 M (A.D), Drainage Area 85 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.16	1.58	6.20	28.31	9.09	20.00	6.88	11.74	2.33	1.64	0.98	0.46	
2	2.64	1.40	4.58	20.30	7.83	18.80	6.20	11.48	2.33	1.58	0.98	0.46	
3	2.19	1.34	7.07	19.10	6.69	13.57	8.40	8.02	2.33	1.46	0.94	0.42	
4	1.91	1.34	7.26	15.46	6.05	12.78	12.78	6.35	2.26	1.46	0.90	0.42	
5	1.84	1.52	9.32	28.00	6.05	11.74	18.52	6.35	2.26	1.40	0.86	0.42	
6	1.64	1.28	10.01	63.99	33.27	11.22	13.57	5.75	2.19	1.40	0.86	0.38	
7	1.52	1.10	6.20	76.94	13.30	9.32	10.01	7.64	2.19	1.34	0.62	0.38	
8	1.58	1.16	5.15	107.31	20.60	8.63	9.55	5.75	2.12	1.34	0.58	0.38	
9	1.52	1.06	3.88	72.50	26.14	7.83	8.02	4.44	2.12	1.34	0.58	0.38	
10	1.40	1.64	4.72	30.48	54.10	10.47	7.26	4.02	2.12	1.28	0.54	0.34	
11	1.40	15.19	5.00	18.52	37.08	14.65	7.45	3.88	2.05	1.28	0.54	0.24	
12	1.46	11.22	4.72	13.30	70.28	11.74	6.35	3.74	2.05	1.28	0.50	0.24	
13	1.22	9.09	5.90	11.48	52.35	8.21	8.02	3.74	2.05	1.28	0.50	0.21	
14	1.10	9.78	6.20	10.01	31.10	10.24	8.63	3.74	2.05	1.28	0.46	0.21	
15	1.06	7.07	28.62	9.09	21.50	7.07	6.35	3.48	2.05	1.22	0.46	0.18	
16	1.02	6.05	9.78	11.48	38.04	10.01	5.75	3.00	2.05	1.22	0.42	0.18	
17	1.06	22.11	10.24	10.24	31.41	7.64	5.15	2.88	1.98	1.22	0.42	0.18	
18	1.10	10.70	14.65	9.78	37.72	10.47	5.30	2.76	1.98	1.16	0.42	0.18	
19	1.10	12.26	11.74	7.26	23.66	6.69	4.86	2.64	1.98	1.16	0.38	0.18	
20	1.02	8.86	9.32	5.90	19.10	6.88	6.20	2.52	1.98	1.16	0.38	0.18	
21	0.98	5.90	9.78	6.69	14.92	5.90	5.30	2.40	1.98	1.16	0.34	0.15	
22	0.98	4.58	12.78	11.74	14.92	5.15	4.72	2.33	1.98	1.16	0.46	0.15	
23	0.98	2.76	13.30	10.47	15.19	4.86	10.24	2.40	1.91	1.10	0.66	0.15	
24	1.02	2.88	12.00	9.32	14.11	5.45	15.73	2.52	1.84	1.10	0.62	0.18	
25	1.16	2.33	55.18	9.32	12.26	16.56	18.80	2.40	1.77	1.10	0.62	0.21	
26	1.16	4.86	18.80	9.55	16.28	10.70	12.78	2.40	1.77	1.06	0.62	0.21	
27	1.34	4.44	17.68	9.78	12.78	13.57	7.83	2.33	1.70	1.06	0.58	0.18	
28	1.22	9.09	40.60	8.63	14.38	11.48	6.88	2.33	1.70	1.06	0.54	0.18	
29	1.64	9.32	49.58	8.21	20.90	11.48	6.35	2.33	1.70	1.06		0.18	
30	1.91	10.96	37.72	27.38	31.10	13.57	4.86	2.33	1.70	1.02		0.18	
31		10.70		12.26	20.00		4.44		1.70	1.02		0.54	
Total	44.33	193.57	437.98	692.80	732.20	316.68	263.18	127.69	62.22	38.40	16.76	8.33	2934.14 CMSDAY
Mean	1.48	6.24	14.60	22.35	23.62	10.56	8.49	4.26	2.01	1.24	0.60	0.27	8.04 CMS
Max	4.16	22.11	55.18	107.31	70.28	20.00	18.80	11.74	2.33	1.64	0.98	0.54	107.31 CMS
Min	0.98	1.06	3.88	5.90	6.05	4.86	4.44	2.33	1.70	1.02	0.34	0.15	0.15 CMS
Runoff	3.830	16.724	37.841	59.858	63.262	27.361	22.739	11.032	5.376	3.318	1.448	0.720	253.510 MCM

Momentary Peak 123.30 CMS, at 3.60 M (A.D), at 18.00 Hours, on Aug 12, 2001
Runoff Yield 94.57 Liters/Second/Square KM, Momentary Peak Yield 1450.588 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 25 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 Float -

Rated by Current Meter 2000 to date.

Stability of Channel Regimes Fairly stable.

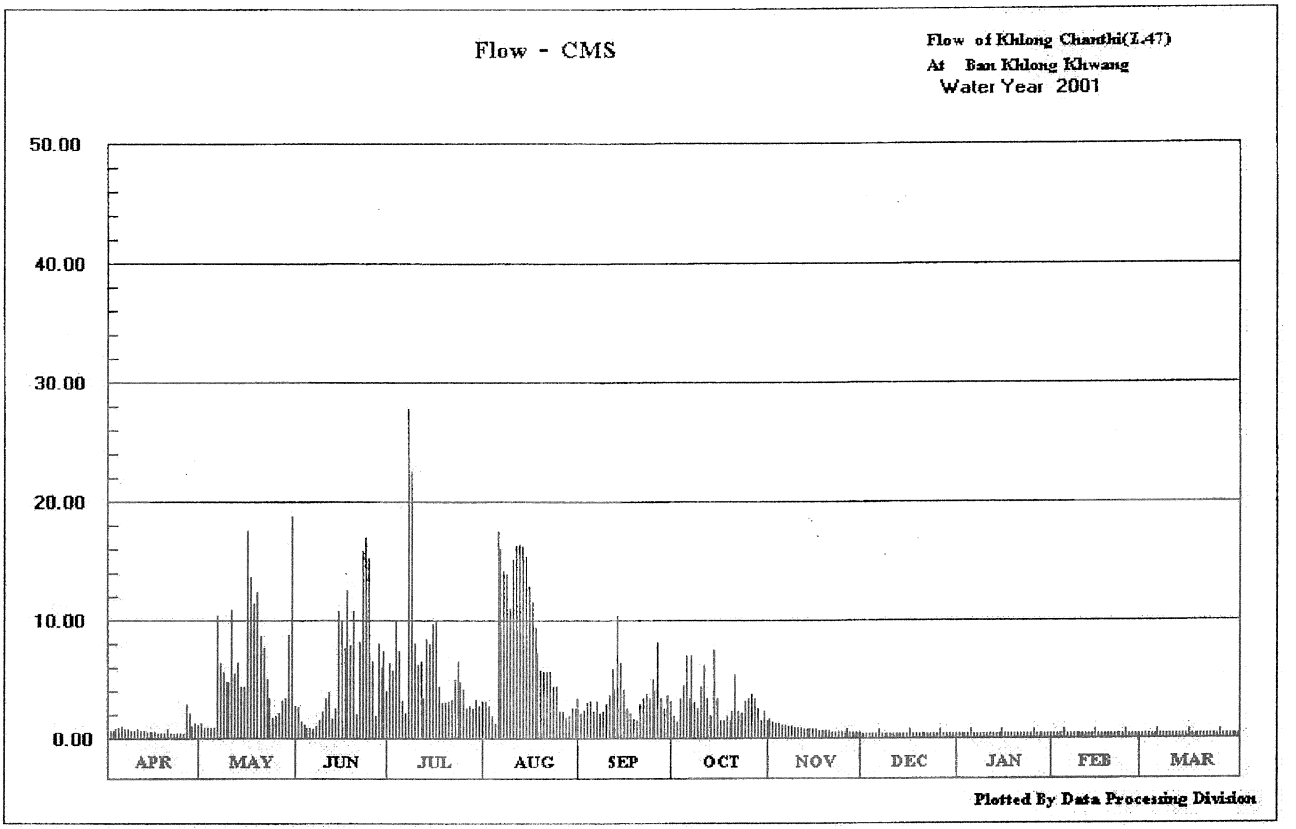
Overbank Flow Conditions Overbank flow starts at elevation +4.920 m.(A.D.) and is including overbank flow.

General Description Records good. Stage-discharge relation defined by 31 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.89	1.08	1.31	1.73	1.37	1.24	1.20	1.14	0.80	0.68	0.65	0.62	
2	0.90	1.00	1.10	1.66	1.32	1.27	1.10	1.11	0.80	0.66	0.64	0.61	
3	0.95	0.99	1.05	2.09	1.19	1.35	1.40	1.09	0.80	0.65	0.63	0.60	
4	0.99	0.98	1.00	1.84	1.09	1.36	1.52	1.07	0.80	0.64	0.62	0.59	
5	1.01	0.97	1.00	1.36	2.81	1.26	1.80	1.05	0.80	0.61	0.62	0.58	
6	0.95	2.13	0.95	1.24	2.68	1.36	1.40	1.04	0.80	0.60	0.61	0.57	
7	0.94	1.73	1.03	3.72	2.51	1.24	1.80	1.03	0.80	0.58	0.61	0.56	
8	0.91	1.64	1.12	3.27	2.49	1.25	1.35	1.01	0.80	0.57	0.63	0.56	
9	0.88	1.54	1.25	1.90	2.20	1.34	1.30	1.00	0.80	0.56	0.64	0.55	
10	0.94	1.54	1.39	1.71	2.60	1.42	1.50	0.98	0.80	0.55	0.64	0.54	
11	0.91	2.18	1.45	1.74	2.70	1.67	1.70	0.96	0.80	0.53	0.63	0.53	
12	0.88	1.63	1.14	1.40	2.71	1.47	1.40	0.95	0.79	0.52	0.63	0.52	
13	0.87	1.72	1.30	1.93	2.70	2.13	1.20	0.94	0.79	0.51	0.62	0.50	
14	0.87	1.50	2.17	1.90	2.62	1.73	1.85	0.93	0.79	0.49	0.61	0.52	
15	0.85	1.50	2.10	2.06	2.39	1.47	1.40	0.92	0.78	0.49	0.60	0.49	
16	0.85	2.82	1.86	2.08	2.25	1.30	1.13	0.91	0.78	0.48	0.60	0.49	
17	0.82	2.46	2.35	1.51	2.03	1.23	1.12	0.90	0.78	0.47	0.60	0.48	
18	0.82	2.24	1.89	1.35	1.82	1.14	1.20	0.90	0.78	0.46	0.59	0.47	
19	0.80	2.34	2.17	1.35	1.66	1.12	1.12	0.88	0.78	0.45	0.58	0.51	
20	0.80	1.96	1.22	1.37	1.65	1.34	1.25	0.88	0.77	0.45	0.58	0.70	
21	0.79	1.86	1.91	1.38	1.65	1.40	1.62	0.87	0.77	0.49	0.57	0.67	
22	0.79	1.58	2.67	1.57	1.65	1.44	1.26	0.87	0.78	0.70	0.57	0.65	
23	0.78	1.40	2.77	1.74	1.51	1.39	1.24	0.87	0.78	0.69	0.56	0.61	
24	0.78	1.16	2.61	1.55	1.51	1.57	1.36	0.87	0.78	0.69	0.56	0.60	
25	0.81	1.18	1.74	1.48	1.25	1.46	1.39	0.87	0.78	0.68	0.55	0.58	
26	1.34	1.23	1.20	1.30	1.25	1.91	1.44	0.86	0.78	0.68	0.55	0.57	
27	1.24	1.37	1.90	1.32	1.17	1.40	1.39	0.86	0.78	0.67	0.56	0.55	
28	1.01	1.39	1.69	1.29	1.18	1.30	1.30	0.85	0.78	0.67	0.57	0.54	
29	1.08	1.97	1.83	1.38	1.29	1.42	1.13	0.85	0.75	0.67		0.53	
30	1.04	2.93	1.46	1.33	1.29	1.36	1.25	0.84	0.70	0.66		0.52	
31		1.32		1.37	1.40		1.13		0.68	0.66		0.52	
Mean	0.92	1.66	1.62	1.71	1.87	1.41	1.36	0.94	0.78	0.59	0.60	0.56	
Max	1.34	2.93	2.77	3.72	2.81	2.13	1.85	1.14	0.80	0.70	0.65	0.70	3.72
Min	0.78	0.97	0.95	1.24	1.09	1.12	1.10	0.84	0.68	0.45	0.55	0.47	0.45

Annual Max Momentary Gage Height 5.10 M (A.D), at 18.00 Hours, on Jul 7, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.35 M (A.D)
Left Bank Elevation 4.95 M (A.D)
Right Bank Elevation 4.92 M (A.D), Drainage Area 25 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.77	1.42	2.79	6.57	3.33	2.34	2.10	1.74	0.50	0.28	0.25	0.22	
2	0.80	1.10	1.50	5.94	2.88	2.52	1.50	1.56	0.50	0.26	0.24	0.21	
3	0.95	1.07	1.30	10.10	2.04	3.15	3.60	1.46	0.50	0.25	0.23	0.20	
4	1.07	1.04	1.10	7.60	1.46	3.24	4.68	1.38	0.50	0.24	0.22	0.19	
5	1.14	1.01	1.10	3.24	17.61	2.46	7.20	1.30	0.50	0.21	0.22	0.18	
6	0.95	10.50	0.95	2.34	16.18	3.24	3.60	1.26	0.50	0.20	0.21	0.17	
7	0.92	6.57	1.22	27.94	14.31	2.34	7.20	1.22	0.50	0.18	0.21	0.16	
8	0.83	5.76	1.62	22.67	14.10	2.40	3.15	1.14	0.50	0.17	0.23	0.16	
9	0.74	4.86	2.40	8.20	11.20	3.06	2.70	1.10	0.50	0.16	0.24	0.15	
10	0.92	4.86	3.51	6.39	15.30	3.78	4.50	1.04	0.50	0.15	0.24	0.14	
11	0.83	11.00	4.05	6.66	16.40	6.03	6.30	0.98	0.50	0.13	0.23	0.13	
12	0.74	5.67	1.74	3.60	16.51	4.23	3.60	0.95	0.48	0.12	0.23	0.12	
13	0.71	6.48	2.70	8.50	16.40	10.50	2.10	0.92	0.48	0.11	0.22	0.10	
14	0.71	4.50	10.90	8.20	15.52	6.57	7.70	0.89	0.48	0.09	0.21	0.12	
15	0.65	4.50	10.20	9.80	13.10	4.23	3.60	0.86	0.46	0.09	0.20	0.09	
16	0.65	17.72	7.80	10.00	11.70	2.70	1.68	0.83	0.46	0.08	0.20	0.09	
17	0.56	13.80	12.70	4.59	9.50	2.28	1.62	0.80	0.46	0.07	0.20	0.08	
18	0.56	11.60	8.10	3.15	7.40	1.74	2.10	0.80	0.46	0.06	0.19	0.07	
19	0.50	12.60	10.90	3.15	5.94	1.62	1.62	0.74	0.46	0.05	0.18	0.11	
20	0.50	8.80	2.22	3.33	5.85	3.06	2.40	0.74	0.44	0.05	0.18	0.30	
21	0.48	7.80	8.30	3.42	5.85	3.60	5.58	0.71	0.44	0.09	0.17	0.27	
22	0.48	5.22	16.07	5.13	5.85	3.96	2.46	0.71	0.46	0.30	0.17	0.25	
23	0.46	3.60	17.17	6.66	4.59	3.51	2.34	0.71	0.46	0.29	0.16	0.21	
24	0.46	1.86	15.41	4.95	4.59	5.13	3.24	0.71	0.46	0.29	0.16	0.20	
25	0.53	1.98	6.66	4.32	2.40	4.14	3.51	0.71	0.46	0.28	0.15	0.18	
26	3.06	2.28	2.10	2.70	2.40	8.30	3.96	0.68	0.46	0.28	0.15	0.17	
27	2.34	3.33	8.20	2.88	1.92	3.60	3.51	0.68	0.46	0.27	0.16	0.15	
28	1.14	3.51	6.21	2.64	1.98	2.70	2.70	0.65	0.46	0.27	0.17	0.14	
29	1.42	8.90	7.50	3.42	2.64	3.78	1.68	0.65	0.40	0.27		0.13	
30	1.26	18.93	4.14	2.97	2.64	3.24	2.40	0.62	0.30	0.26		0.12	
31		2.88		3.33	3.60		1.68		0.28	0.26		0.12	
Total	27.13	195.15	180.56	204.39	255.19	113.45	106.01	28.54	14.32	5.81	5.62	4.93	1141.10 CMSDAY
Mean	0.90	6.30	6.02	6.59	8.23	3.78	3.42	0.95	0.46	0.19	0.20	0.16	3.13 CMS
Max	3.06	18.93	17.17	27.94	17.61	10.50	7.70	1.74	0.50	0.30	0.25	0.30	27.94 CMS
Min	0.46	1.01	0.95	2.34	1.46	1.62	1.50	0.62	0.28	0.05	0.15	0.07	0.05 CMS
Runoff	2.344	16.861	15.600	17.659	22.048	9.802	9.159	2.466	1.237	0.502	0.486	0.426	98.591 MCM

Momentary Peak 45.40 CMS, at 5.10 M (A.D), at 18.00 Hours, on Jul 7, 2001

Runoff Yield 125.05 Liters/Second/Square KM, Momentary Peak Yield 1816.000 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 93 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 +4.674 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 2001 to date.

Rating Operation

Period of Rating 2001 to date.

Rated by Float -

Rated by Current Meter 2001 to date.

Stability of Channel Regimes Stable.

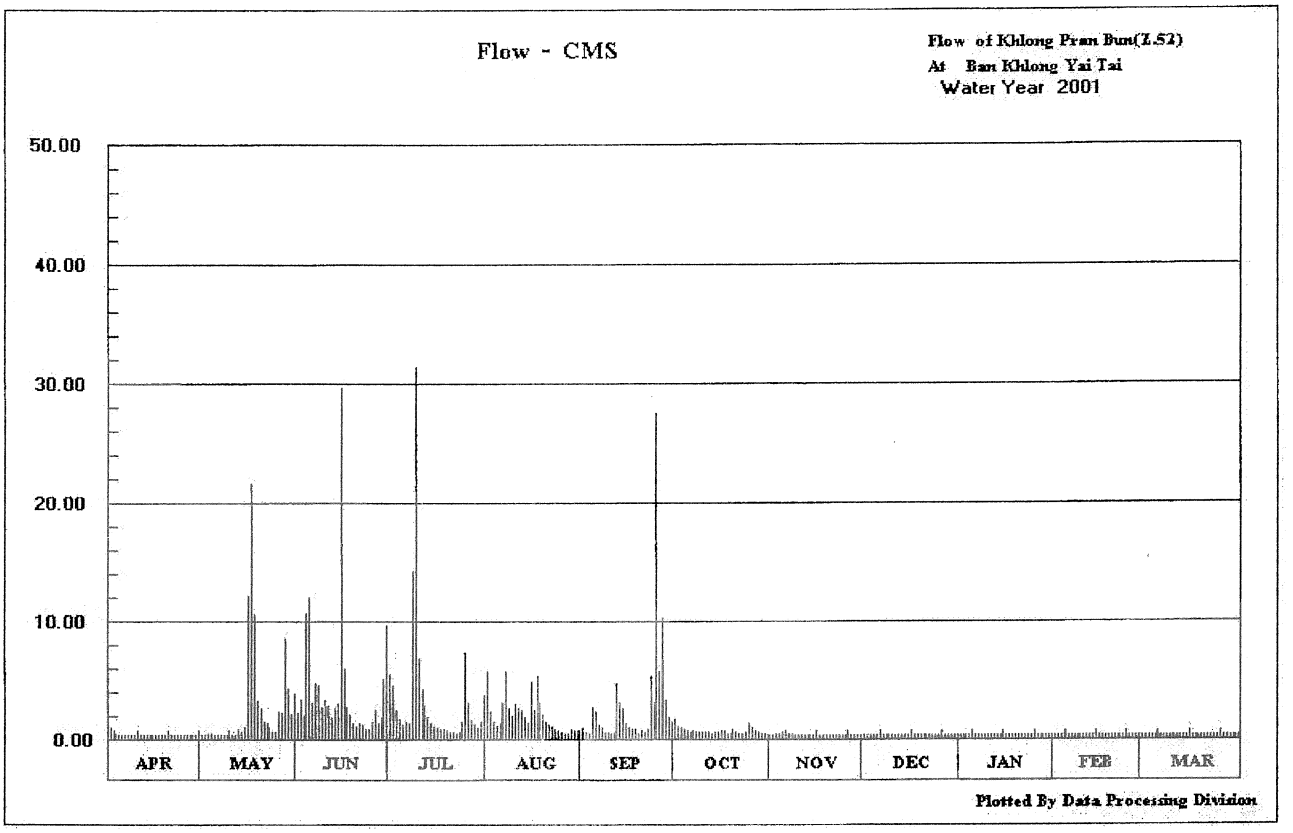
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.90	0.64	1.11	1.52	1.54	0.88	1.03	0.71	0.64	0.62	0.59	0.59	
2	0.84	0.64	1.27	1.42	1.12	0.80	0.92	0.70	0.64	0.62	0.59	0.59	
3	0.74	0.77	1.07	1.14	0.99	0.77	0.88	0.74	0.64	0.62	0.59	0.59	
4	0.73	0.77	2.04	1.03	0.93	1.17	0.85	0.75	0.64	0.62	0.59	0.59	
5	0.71	0.66	2.16	0.95	0.96	1.12	0.82	0.80	0.64	0.62	0.59	0.60	
6	0.69	0.62	1.22	1.00	1.22	0.94	0.80	0.74	0.64	0.62	0.59	0.60	
7	0.68	0.69	1.43	0.96	1.54	0.89	0.77	0.74	0.64	0.62	0.59	0.60	
8	0.67	0.67	1.42	2.34	1.16	0.81	0.81	0.74	0.64	0.62	0.59	0.60	
9	0.66	0.65	1.18	3.41	1.06	0.80	0.80	0.73	0.63	0.62	0.59	0.60	
10	0.66	0.65	1.26	1.67	1.21	0.77	0.81	0.70	0.63	0.62	0.59	0.60	
11	0.66	0.65	1.20	1.37	1.16	0.78	0.79	0.70	0.63	0.62	0.59	0.59	
12	0.65	0.72	1.04	1.20	1.14	1.44	0.78	0.70	0.62	0.62	0.59	0.59	
13	0.64	0.86	1.16	1.05	1.04	1.23	0.75	0.70	0.62	0.62	0.59	0.59	
14	0.64	0.80	1.21	0.97	0.97	1.16	0.80	0.68	0.62	0.62	0.59	0.58	
15	0.64	0.89	3.31	0.93	1.45	0.96	0.78	0.67	0.62	0.62	0.59	0.58	
16	0.64	2.17	1.57	0.89	1.13	0.88	0.82	0.66	0.62	0.62	0.59	0.58	
17	0.64	2.84	1.17	0.87	1.51	0.86	0.77	0.66	0.62	0.62	0.59	0.58	
18	0.64	2.02	1.08	0.85	1.22	0.85	0.77	0.66	0.62	0.62	0.59	0.57	
19	0.63	1.25	0.97	0.83	1.08	0.74	0.74	0.66	0.62	0.62	0.59	0.57	
20	0.63	1.15	0.92	0.80	0.99	0.83	0.86	0.65	0.62	0.62	0.59	0.56	
21	0.62	1.00	0.96	0.78	0.95	0.80	0.81	0.65	0.62	0.61	0.59	0.56	
22	0.62	0.97	0.95	0.77	0.91	0.87	0.77	0.64	0.62	0.61	0.59	0.55	
23	0.62	0.89	0.87	0.78	0.85	1.50	0.77	0.64	0.62	0.61	0.59	0.55	
24	0.61	0.79	0.85	0.99	0.82	1.23	0.78	0.64	0.62	0.61	0.59	0.55	
25	0.61	0.79	1.00	1.71	0.80	3.19	0.97	0.64	0.62	0.61	0.59	0.54	
26	0.71	1.12	1.14	1.22	0.77	1.54	0.89	0.64	0.62	0.61	0.59	0.54	
27	0.67	1.10	0.96	1.02	0.77	2.00	0.84	0.63	0.62	0.61	0.59	0.54	
28	0.65	1.83	1.05	0.94	0.85	1.26	0.80	0.63	0.62	0.61	0.59	0.54	
29	0.64	1.37	1.47	0.89	0.84	1.05	0.77	0.63	0.62	0.61		0.54	
30	0.63	1.09	1.94	0.99	0.82	0.99	0.75	0.63	0.62	0.61		0.54	
31		1.33		1.32	0.82		0.73		0.62	0.61		0.54	
Mean	0.67	1.04	1.30	1.18	1.05	1.10	0.81	0.68	0.63	0.62	0.59	0.57	
Max	0.90	2.84	3.31	3.41	1.54	3.19	1.03	0.80	0.64	0.62	0.59	0.60	3.41
Min	0.61	0.62	0.85	0.77	0.77	0.74	0.73	0.63	0.62	0.61	0.59	0.54	0.54

Annual Max Momentary Gage Height 4.26 M (A.D), at 6.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.40 M (A.D)
Left Bank Elevation 5.39 M (A.D)
Right Bank Elevation 5.42 M (A.D), Drainage Area 93 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.20	0.38	2.47	5.68	5.86	1.12	1.91	0.53	0.38	0.34	0.28	0.28	
2	0.96	0.38	3.59	4.78	2.54	0.80	1.30	0.50	0.38	0.34	0.28	0.28	
3	0.62	0.71	2.19	2.68	1.65	0.71	1.12	0.62	0.38	0.34	0.28	0.28	
4	0.59	0.71	10.84	1.91	1.35	2.89	1.00	0.65	0.38	0.34	0.28	0.28	
5	0.53	0.42	12.16	1.45	1.50	2.54	0.88	0.80	0.38	0.34	0.28	0.30	
6	0.48	0.34	3.24	1.70	3.24	1.40	0.80	0.62	0.38	0.34	0.28	0.30	
7	0.46	0.48	4.87	1.50	5.86	1.16	0.71	0.62	0.38	0.34	0.28	0.30	
8	0.44	0.44	4.78	14.42	2.82	0.84	0.84	0.62	0.38	0.34	0.28	0.30	
9	0.42	0.40	2.96	31.58	2.12	0.80	0.80	0.59	0.36	0.34	0.28	0.30	
10	0.42	0.40	3.52	7.10	3.17	0.71	0.84	0.50	0.36	0.34	0.28	0.30	
11	0.42	0.40	3.10	4.36	2.82	0.74	0.77	0.50	0.36	0.34	0.28	0.28	
12	0.40	0.56	1.98	3.10	2.68	4.96	0.74	0.50	0.34	0.34	0.28	0.28	
13	0.38	1.04	2.82	2.05	1.98	3.31	0.65	0.50	0.34	0.34	0.28	0.28	
14	0.38	0.80	3.17	1.55	1.55	2.82	0.80	0.46	0.34	0.34	0.28	0.26	
15	0.38	1.16	29.78	1.35	5.05	1.50	0.74	0.44	0.34	0.34	0.28	0.26	
16	0.38	12.27	6.13	1.16	2.61	1.12	0.88	0.42	0.34	0.34	0.28	0.26	
17	0.38	21.84	2.89	1.08	5.59	1.04	0.71	0.42	0.34	0.34	0.28	0.26	
18	0.38	10.62	2.26	1.00	3.24	1.00	0.71	0.42	0.34	0.34	0.28	0.24	
19	0.36	3.45	1.55	0.92	2.26	0.62	0.62	0.42	0.34	0.34	0.28	0.24	
20	0.36	2.75	1.30	0.80	1.65	0.92	1.04	0.40	0.34	0.34	0.28	0.22	
21	0.34	1.70	1.50	0.74	1.45	0.80	0.84	0.40	0.34	0.32	0.28	0.22	
22	0.34	1.55	1.45	0.71	1.25	1.08	0.71	0.38	0.34	0.32	0.28	0.20	
23	0.34	1.16	1.08	0.74	1.00	5.50	0.71	0.38	0.34	0.32	0.28	0.20	
24	0.32	0.77	1.00	1.65	0.88	3.31	0.74	0.38	0.34	0.32	0.28	0.20	
25	0.32	0.77	1.70	7.50	0.80	27.62	1.55	0.38	0.34	0.32	0.28	0.18	
26	0.53	2.54	2.68	3.24	0.71	5.86	1.16	0.38	0.34	0.32	0.28	0.18	
27	0.44	2.40	1.50	1.84	0.71	10.40	0.96	0.36	0.34	0.32	0.28	0.18	
28	0.40	8.70	2.05	1.40	1.00	3.52	0.80	0.36	0.34	0.32	0.28	0.18	
29	0.38	4.36	5.23	1.16	0.96	2.05	0.71	0.36	0.34	0.32		0.18	
30	0.36	2.33	9.80	1.65	0.88	1.65	0.65	0.36	0.34	0.32		0.18	
31		4.04		3.96	0.88		0.59		0.34	0.32		0.18	
Total	13.71	89.87	133.59	114.76	70.06	92.79	27.28	14.27	10.92	10.32	7.84	7.58	592.99 CMSDAY
Mean	0.46	2.90	4.45	3.70	2.26	3.09	0.88	0.48	0.35	0.33	0.28	0.24	1.62 CMS
Max	1.20	21.84	29.78	31.58	5.86	27.62	1.91	0.80	0.38	0.34	0.28	0.30	31.58 CMS
Min	0.32	0.34	1.00	0.71	0.71	0.62	0.59	0.36	0.34	0.32	0.28	0.18	0.18 CMS
Runoff	1.185	7.765	11.542	9.915	6.053	8.017	2.357	1.233	0.943	0.892	0.677	0.655	51.234 MCM

Momentary Peak 49.12 CMS, at 4.26 M (A.D), at 6.00 Hours, on Jul 9, 2001

Runoff Yield 17.47 Liters/Second/Square KM, Momentary Peak Yield 528.172 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Nam Khwae Noi at Ban Lum Sum, Kanchanaburi (K.10)

Lat 14 - 05 - 38 N. **Long** 99 - 10 - 40 E.

Location on left bank about 100 meters upstream from Ban Lum Sum railway station.

Ban Lum Sum **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainage Area 7,008 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +30.400 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the gage site.

Elevation +52.057 m. (M.S.L.)

Gage Reading Frequency Recording.

Basis of Mean Daily Gage Height Arithmetic means of 24 readings

Period of Available Gage Records 1965 to date.

Rating Operation

Period of Rating 1965 to date.

Rated by Float -

Rated by Current Meter 1965 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

General Description Records good. Flow regulated by Khao Laem Dam.

Stage-discharge relation defined by 86 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

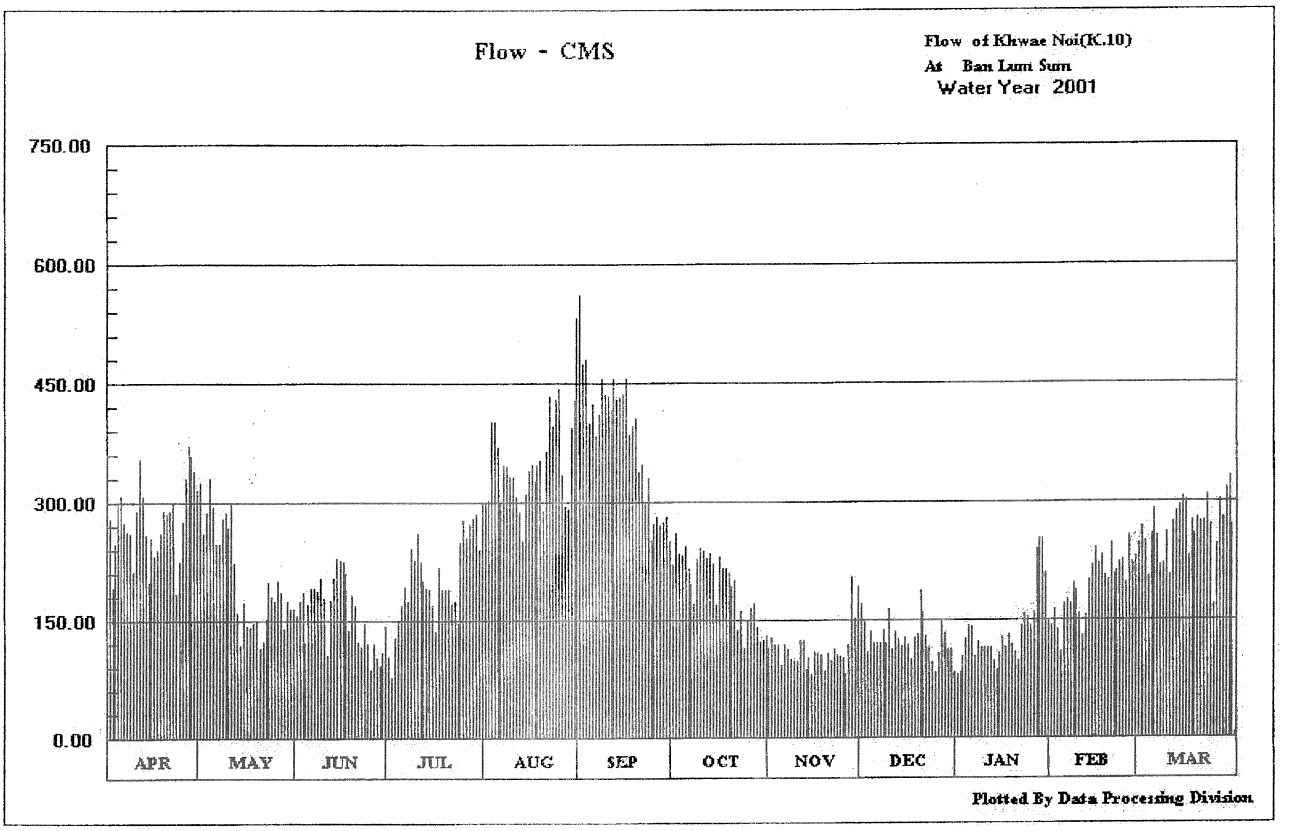
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	34.13	34.58	32.85	32.22	34.34	36.64	33.54	32.35	33.01	31.94	32.71	33.82	
2	33.25	33.95	33.05	31.90	34.36	35.94	33.96	32.53	32.78	31.96	32.92	34.02	
3	33.82	34.21	33.17	32.53	35.29	35.99	33.69	32.41	32.29	32.23	32.64	33.83	
4	34.31	34.65	32.45	32.76	35.29	35.28	33.67	32.41	32.62	32.49	32.30	33.39	
5	34.42	34.29	33.02	33.00	35.00	35.50	33.78	32.08	32.42	32.70	33.02	33.93	
6	34.08	33.82	33.24	33.27	34.32	35.12	33.51	32.41	32.44	32.68	33.08	34.26	
7	33.97	33.82	33.25	33.06	34.81	35.39	33.29	32.34	32.44	32.22	33.01	33.91	
8	33.95	34.13	33.21	33.76	34.78	35.79	33.01	32.17	32.64	32.46	33.30	33.54	
9	33.47	34.21	33.39	33.62	34.67	35.60	33.62	32.16	32.42	32.35	33.21	33.55	
10	34.23	34.02	33.09	33.96	34.67	35.59	33.77	32.15	32.93	32.36	32.86	33.96	
11	34.88	34.34	32.25	33.60	34.40	35.43	33.73	32.48	32.33	32.36	32.56	33.40	
12	34.42	33.57	33.08	33.34	34.21	35.78	33.63	32.48	32.62	32.37	32.85	34.08	
13	33.94	32.88	33.39	33.25	33.85	35.55	33.69	32.00	32.49	32.15	33.35	34.21	
14	33.33	32.41	33.64	33.22	34.44	35.57	33.56	32.20	32.39	32.00	33.53	34.29	
15	33.89	33.04	33.62	33.00	34.73	35.60	33.00	31.95	32.52	32.26	33.77	34.41	
16	33.67	32.70	33.60	32.61	34.81	35.79	33.65	32.28	32.40	32.53	33.56	34.37	
17	33.74	32.67	33.44	33.52	34.61	35.15	33.51	32.26	32.17	32.37	33.67	33.65	
18	33.95	32.74	32.64	33.22	34.81	35.25	33.51	32.24	32.52	32.57	33.41	34.10	
19	34.24	32.79	33.13	33.22	34.85	35.33	33.45	31.99	32.57	32.41	33.35	33.94	
20	34.20	32.37	33.00	33.22	34.24	34.71	33.27	32.27	33.20	32.30	33.82	34.14	
21	34.24	32.45	32.45	33.02	34.95	34.80	33.34	32.15	32.88	32.15	33.42	34.08	
22	34.32	32.81	32.38	33.06	35.59	34.34	32.64	32.34	32.54	32.69	33.46	34.11	
23	33.16	33.32	32.75	32.75	35.24	34.65	32.91	32.25	32.37	32.86	33.58	34.42	
24	33.59	33.12	32.43	33.84	35.55	33.85	32.37	32.23	32.13	32.82	33.61	34.05	
25	34.11	33.06	32.02	34.12	35.68	34.07	32.79	32.19	31.96	32.71	33.31	33.00	
26	34.64	33.34	32.44	33.90	34.68	34.16	32.94	31.93	32.27	32.88	33.92	33.81	
27	35.02	33.17	32.19	34.06	34.28	34.05	33.01	32.41	32.79	33.74	33.58	34.36	
28	34.91	32.66	32.09	34.13	34.26	34.08	32.68	33.38	32.60	33.87	33.65	34.13	
29	34.73	33.05	32.29	34.19	35.23	34.16	32.45	32.81	32.33	33.88		34.51	
30	34.50	32.94	32.71	33.75	35.53	33.84	32.48	33.27	32.33	33.44		34.66	
31		32.96		34.34	36.43		32.55		31.97	32.76		34.04	
Mean	34.10	33.36	32.88	33.34	34.84	35.10	33.26	32.34	32.50	32.60	33.27	34.00	
Max	35.02	34.65	33.64	34.34	36.43	36.64	33.96	33.38	33.20	33.88	33.92	34.66	36.64
Min	33.16	32.37	32.02	31.90	33.85	33.84	32.37	31.93	31.96	31.94	32.30	33.00	31.90

Annual Max Momentary Gage Height 36.95 M (MSL), at 21.00 Hours, on Aug 31, 2001

Zero Gage at Bottom Elevation 30.40 M (MSL), River Bed 30.19 M (MSL)

Left Bank Elevation 41.11 M (MSL)

Right Bank Elevation 46.80 M (MSL), Drainage Area 7008 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	281.0	326.0	158.5	105.6	302.0	563.2	222.0	116.0	172.9	83.2	145.9	250.0	
2	194.5	263.0	176.5	80.0	304.0	476.8	264.0	130.4	152.2	84.8	164.8	270.0	
3	250.0	289.0	187.3	130.4	402.9	482.8	237.0	120.8	111.2	106.4	139.6	251.0	
4	299.0	333.0	124.0	150.4	402.9	401.8	235.0	120.8	137.8	127.2	112.0	207.1	
5	310.0	297.0	173.8	172.0	371.0	426.0	246.0	94.4	121.6	145.0	173.8	261.0	
6	276.0	250.0	193.6	196.3	300.0	384.2	219.0	120.8	123.2	143.2	179.2	294.0	
7	265.0	250.0	194.5	177.4	350.1	413.9	198.1	115.2	123.2	105.6	172.9	259.0	
8	263.0	281.0	190.9	244.0	346.8	458.8	172.9	101.6	139.6	124.8	199.0	222.0	
9	215.0	289.0	207.1	230.0	335.0	437.0	230.0	100.8	121.6	116.0	190.9	223.0	
10	291.0	270.0	180.1	264.0	335.0	435.9	245.0	100.0	165.7	116.8	159.4	264.0	
11	357.8	302.0	108.0	228.0	308.0	418.3	241.0	126.4	114.4	116.8	132.8	208.0	
12	310.0	225.0	179.2	202.6	289.0	457.6	231.0	126.4	137.8	117.6	158.5	276.0	
13	262.0	161.2	207.1	194.5	253.0	431.5	237.0	88.0	127.2	100.0	203.5	289.0	
14	201.7	120.8	232.0	191.8	312.0	433.7	224.0	104.0	119.2	88.0	221.0	297.0	
15	257.0	175.6	230.0	172.0	341.3	437.0	172.0	84.0	129.6	108.8	245.0	309.0	
16	235.0	145.0	228.0	136.9	350.1	458.8	233.0	110.4	120.0	130.4	224.0	305.0	
17	242.0	142.3	212.0	220.0	329.0	387.5	219.0	108.8	101.6	117.6	235.0	233.0	
18	263.0	148.6	139.6	191.8	350.1	398.5	219.0	107.2	129.6	133.6	209.0	278.0	
19	292.0	153.1	183.7	191.8	354.5	407.3	213.0	87.2	133.6	120.8	203.5	262.0	
20	288.0	117.6	172.0	191.8	292.0	339.1	196.3	109.6	190.0	112.0	250.0	282.0	
21	292.0	124.0	124.0	173.8	365.5	349.0	202.6	100.0	161.2	100.0	210.0	276.0	
22	300.0	154.9	118.4	177.4	435.9	302.0	139.6	115.2	131.2	144.1	214.0	279.0	
23	186.4	200.8	149.5	149.5	397.4	333.0	163.9	108.0	117.6	159.4	226.0	310.0	
24	227.0	182.8	122.4	252.0	431.5	253.0	117.6	106.4	98.4	155.8	229.0	273.0	
25	279.0	177.4	89.6	280.0	445.8	275.0	153.1	103.2	84.8	145.9	199.9	172.0	
26	332.0	202.6	123.2	258.0	336.0	284.0	166.6	82.4	109.6	161.2	260.0	249.0	
27	373.2	187.3	103.2	274.0	296.0	273.0	172.9	120.8	153.1	242.0	226.0	304.0	
28	361.1	141.4	95.2	281.0	294.0	276.0	143.2	206.2	136.0	255.0	233.0	281.0	
29	341.3	176.5	111.2	287.0	396.3	284.0	124.0	154.9	114.4	256.0		319.0	
30	318.0	166.6	145.9	243.0	429.3	252.0	126.4	196.3	114.4	212.0		334.0	
31		168.4		302.0	535.9		132.0		85.6	150.4		272.0	
Total	8363.0	6421.9	4860.5	6349.0	10992.3	11530.7	6096.2	3466.2	3978.3	4280.4	5517.7	8309.1	80165.3 CMSDAY
Mean	278.8	207.2	162.0	204.8	354.6	384.4	196.7	115.5	128.3	138.1	197.1	268.0	219.6 CMS
Max	373.2	333.0	232.0	302.0	535.9	563.2	264.0	206.2	190.0	256.0	260.0	334.0	563.2 CMS
Min	186.4	117.6	89.6	80.0	253.0	252.0	117.6	82.4	84.8	83.2	112.0	172.0	80.0 CMS
Runoff	722.56	554.85	419.95	548.55	949.73	996.25	526.71	299.48	343.73	369.83	476.73	717.91	6926.28 MCM

Momentary Peak 603.50 CMS, at 36.95 M (MSL), at 21.00 Hours, on Aug 31, 2001

Runoff Yield 31.34 Liters/Second/Square KM, Momentary Peak Yield 86.116 Liters/Second/Square KM

WATER YEAR : 2001

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 Tung Na Nang Rok **Amphoe** Mueang **Changwat** Kanchanaburi

Drainage Area 2,340 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +40.437 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 6.00 meters from the top staff gage.

Elevation +49.887 m. (M.S.L.)

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 Float -

Rated by Current Meter 1965 - 1968, 1995 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 80 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

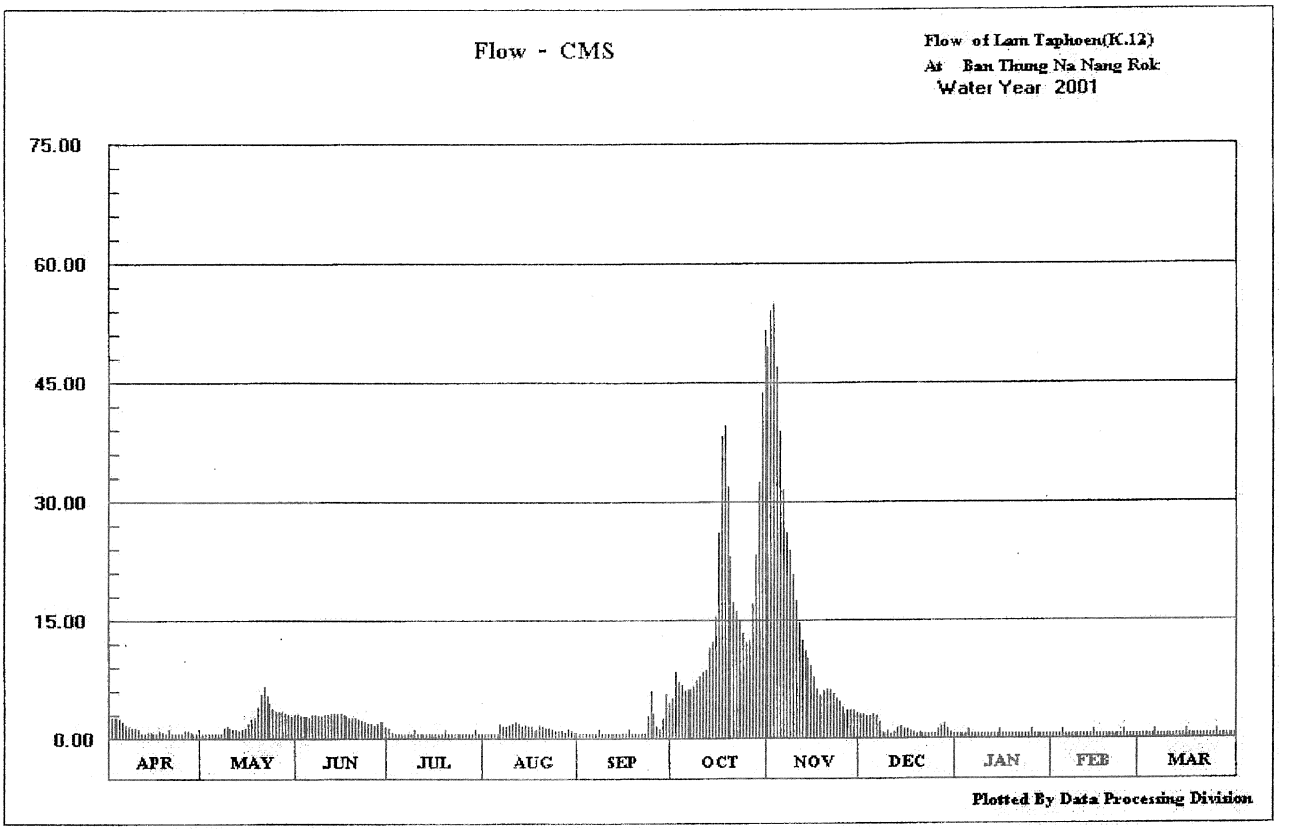
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.81	41.44	41.84	41.65	41.28	41.50	42.06	44.37	41.85	41.48	41.27	41.32	
2	41.81	41.47	41.83	41.55	41.28	41.44	42.34	44.50	41.84	41.43	41.27	41.31	
3	41.80	41.52	41.83	41.51	41.29	41.47	42.23	44.53	41.83	41.37	41.28	41.32	
4	41.79	41.52	41.83	41.49	41.29	41.38	42.20	44.29	41.82	41.40	41.28	41.30	
5	41.76	41.51	41.81	41.50	41.31	41.35	42.14	44.01	41.84	41.47	41.29	41.31	
6	41.71	41.47	41.85	41.49	41.74	41.34	42.15	43.72	41.83	41.47	41.28	41.30	
7	41.69	41.52	41.84	41.44	41.69	41.33	42.15	43.48	41.76	41.37	41.28	41.31	
8	41.67	41.65	41.82	41.39	41.70	41.28	42.19	43.37	41.57	41.40	41.27	41.32	
9	41.65	41.68	41.83	41.47	41.72	41.29	42.24	43.21	41.52	41.43	41.27	41.32	
10	41.61	41.65	41.84	41.45	41.74	41.28	42.30	43.01	41.61	41.38	41.26	41.30	
11	41.52	41.64	41.85	41.45	41.75	41.25	42.34	42.81	41.48	41.36	41.25	41.26	
12	41.48	41.62	41.86	41.47	41.73	41.27	42.35	42.65	41.56	41.36	41.27	41.27	
13	41.53	41.60	41.86	41.45	41.69	41.25	42.57	42.54	41.67	41.34	41.27	41.29	
14	41.53	41.62	41.86	41.42	41.72	41.25	42.63	42.47	41.68	41.37	41.27	41.26	
15	41.48	41.65	41.86	41.40	41.69	41.25	42.87	42.40	41.63	41.35	41.26	41.27	
16	41.47	41.73	41.85	41.39	41.69	41.25	43.48	42.28	41.62	41.34	41.25	41.26	
17	41.58	41.79	41.83	41.37	41.59	41.26	43.99	42.16	41.61	41.31	41.25	41.27	
18	41.54	41.80	41.81	41.37	41.58	41.28	44.04	42.09	41.57	41.28	41.25	41.27	
19	41.47	41.93	41.80	41.36	41.72	41.23	43.74	42.14	41.51	41.25	41.27	41.24	
20	41.42	42.11	41.80	41.34	41.68	41.25	43.33	42.15	41.53	41.26	41.28	41.27	
21	41.42	42.18	41.79	41.31	41.66	41.29	43.00	42.15	41.50	41.26	41.31	41.24	
22	41.42	42.08	41.77	41.33	41.65	41.29	42.92	42.10	41.49	41.27	41.30	41.26	
23	41.43	41.99	41.76	41.30	41.62	41.83	42.84	42.06	41.50	41.31	41.28	41.23	
24	41.49	41.92	41.74	41.29	41.60	42.14	42.72	42.02	41.45	41.32	41.25	41.23	
25	41.60	41.89	41.73	41.28	41.59	41.86	42.63	41.94	41.38	41.33	41.29	41.26	
26	41.59	41.89	41.72	41.28	41.59	41.70	42.65	41.85	41.39	41.33	41.29	41.27	
27	41.55	41.89	41.73	41.28	41.57	41.62	42.99	41.91	41.69	41.30	41.31	41.28	
28	41.44	41.87	41.75	41.28	41.61	41.78	43.34	41.91	41.73	41.26	41.31	41.28	
29	41.44	41.85	41.75	41.29	41.60	42.10	43.76	41.90	41.62	41.28		41.27	
30	41.43	41.83	41.70	41.29	41.57	41.99	44.19	41.87	41.55	41.29		41.27	
31		41.84		41.29	41.55		44.43		41.51	41.28		41.26	
Mean	41.57	41.75	41.80	41.39	41.60	41.46	42.86	42.73	41.62	41.34	41.28	41.28	
Max	41.81	42.18	41.86	41.65	41.75	42.14	44.43	44.53	41.85	41.48	41.31	41.32	44.53
Min	41.42	41.44	41.70	41.28	41.28	41.23	42.06	41.85	41.38	41.25	41.25	41.23	41.23

Annual Max Momentary Gage Height 44.57 M (MSL), at 2.00 Hours, on Nov 3, 2001

Zero Gage at Bottom Elevation 40.44 M (MSL), River Bed 41.07 M (MSL)

Left Bank Elevation 46.53 M (MSL)

Right Bank Elevation 46.55 M (MSL), Drainage Area 2340 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.90	0.56	3.20	1.50	0.11	0.80	5.40	49.74	3.30	0.72	0.09	0.20	
2	2.90	0.68	3.10	1.00	0.11	0.56	8.68	54.20	3.20	0.52	0.09	0.18	
3	2.80	0.88	3.10	0.84	0.13	0.68	7.36	55.25	3.10	0.32	0.11	0.20	
4	2.70	0.88	3.10	0.76	0.13	0.35	7.00	47.18	3.00	0.40	0.11	0.15	
5	2.40	0.84	2.90	0.80	0.18	0.27	6.28	38.98	3.20	0.68	0.13	0.18	
6	1.90	0.68	3.30	0.76	2.20	0.25	6.40	31.70	3.10	0.68	0.11	0.15	
7	1.74	0.88	3.20	0.56	1.74	0.23	6.40	26.30	2.40	0.32	0.11	0.18	
8	1.62	1.50	3.00	0.37	1.80	0.11	6.88	24.13	1.08	0.40	0.09	0.20	
9	1.50	1.68	3.10	0.68	2.00	0.13	7.48	21.09	0.88	0.52	0.09	0.20	
10	1.26	1.50	3.20	0.60	2.20	0.11	8.20	17.67	1.26	0.35	0.06	0.15	
11	0.88	1.44	3.30	0.60	2.30	0.04	8.68	14.84	0.72	0.30	0.04	0.06	
12	0.72	1.32	3.40	0.68	2.10	0.09	8.80	12.65	1.04	0.30	0.09	0.09	
13	0.92	1.20	3.40	0.60	1.74	0.04	11.61	11.22	1.62	0.25	0.09	0.13	
14	0.92	1.32	3.40	0.48	2.00	0.04	12.39	10.31	1.68	0.32	0.09	0.06	
15	0.72	1.50	3.40	0.40	1.74	0.04	15.68	9.40	1.38	0.27	0.06	0.09	
16	0.68	2.10	3.30	0.37	1.74	0.04	26.30	7.96	1.32	0.25	0.04	0.06	
17	1.12	2.70	3.10	0.32	1.16	0.06	38.45	6.52	1.26	0.18	0.04	0.09	
18	0.96	2.80	2.90	0.32	1.12	0.11	39.82	5.70	1.08	0.11	0.04	0.09	
19	0.68	4.10	2.80	0.30	2.00	0.00	32.20	6.28	0.84	0.04	0.09	0.02	
20	0.48	5.92	2.80	0.25	1.68	0.04	23.37	6.40	0.92	0.06	0.11	0.09	
21	0.48	6.76	2.70	0.18	1.56	0.13	17.50	6.40	0.80	0.06	0.18	0.02	
22	0.48	5.60	2.50	0.23	1.50	0.13	16.38	5.80	0.76	0.09	0.15	0.06	
23	0.52	4.70	2.40	0.15	1.32	3.10	15.26	5.40	0.80	0.18	0.11	0.00	
24	0.76	4.00	2.20	0.13	1.20	6.28	13.58	5.00	0.60	0.20	0.04	0.00	
25	1.20	3.70	2.10	0.11	1.16	3.40	12.39	4.20	0.35	0.23	0.13	0.06	
26	1.16	3.70	2.00	0.11	1.16	1.80	12.65	3.30	0.37	0.23	0.13	0.09	
27	1.00	3.70	2.10	0.11	1.08	1.32	17.36	3.90	1.74	0.15	0.18	0.11	
28	0.56	3.50	2.30	0.11	1.26	2.60	23.56	3.90	2.10	0.06	0.18	0.11	
29	0.56	3.30	2.30	0.13	1.20	5.80	32.70	3.80	1.32	0.11		0.09	
30	0.52	3.10	1.80	0.13	1.08	4.70	44.02	3.50	1.00	0.13		0.09	
31		3.20		0.13	1.00		51.75		0.84	0.11		0.06	
Total	37.04	79.74	85.40	13.71	41.70	33.25	544.53	502.72	47.06	8.54	2.78	3.26	1399.73 CMSDAY
Mean	1.23	2.57	2.85	0.44	1.35	1.11	17.57	16.76	1.52	0.28	0.10	0.11	3.83 CMS
Max	2.90	6.76	3.40	1.50	2.30	6.28	51.75	55.25	3.30	0.72	0.18	0.20	55.25 CMS
Min	0.48	0.56	1.80	0.11	0.11	0.00	5.40	3.30	0.35	0.04	0.04	0.00	0.00 CMS
Runoff	3.200	6.890	7.379	1.185	3.603	2.873	47.047	43.435	4.066	0.738	0.240	0.282	120.937 MCM

Momentary Peak 56.65 CMS, at 44.57 M (MSL), at 2.00 Hours, on Nov 3, 2001

Runoff Yield 1.64 Liters/Second/Square KM, Momentary Peak Yield 24.209 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,355 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +97.460 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Along the measuring line.

Elevation +109.256 m. (M.S.L.)

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 Float -

Rated by Current Meter 1966 - 1988, 1993 to date.

Stability of Channel Regimes Stable.

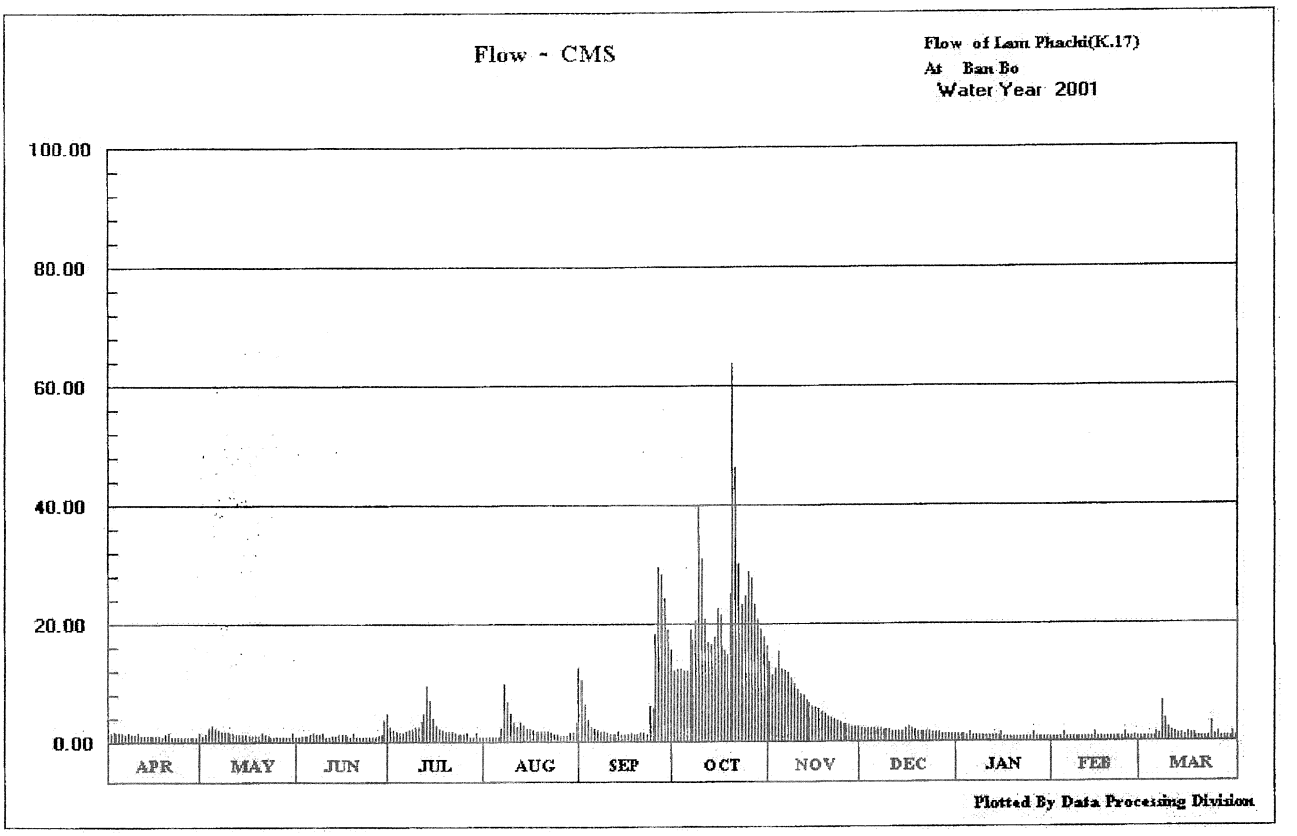
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 102 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	97.69	97.64	97.60	97.79	97.56	98.16	98.21	98.26	97.77	97.66	97.55	97.59	
2	97.70	97.65	97.63	97.73	97.59	97.98	98.22	98.19	97.76	97.66	97.59	97.58	
3	97.69	97.76	97.64	97.70	97.61	97.86	98.22	98.23	97.76	97.65	97.59	97.56	
4	97.68	97.81	97.63	97.69	97.62	97.79	98.21	98.32	97.76	97.64	97.57	97.54	
5	97.68	97.76	97.65	97.69	97.62	97.75	98.21	98.22	97.76	97.64	97.56	97.58	
6	97.67	97.74	97.69	97.70	97.75	97.73	98.44	98.21	97.76	97.64	97.54	97.58	
7	97.68	97.72	97.67	97.73	98.14	97.71	98.39	98.20	97.75	97.63	97.57	97.66	
8	97.66	97.70	97.65	97.76	98.00	97.70	98.48	98.17	97.74	97.64	97.57	98.00	
9	97.65	97.70	97.63	97.79	97.90	97.69	98.95	98.14	97.74	97.64	97.57	97.86	
10	97.64	97.69	97.61	97.78	97.83	97.66	98.75	98.10	97.73	97.63	97.54	97.75	
11	97.64	97.68	97.62	97.84	97.79	97.67	98.49	98.07	97.72	97.63	97.56	97.71	
12	97.64	97.67	97.63	97.90	97.83	97.66	98.37	98.05	97.72	97.63	97.55	97.68	
13	97.64	97.66	97.64	98.13	97.80	97.71	98.36	98.02	97.71	97.63	97.58	97.67	
14	97.63	97.65	97.65	98.02	97.77	97.67	98.40	97.99	97.72	97.63	97.58	97.66	
15	97.63	97.65	97.65	97.87	97.75	97.66	98.54	97.97	97.77	97.62	97.54	97.63	
16	97.63	97.64	97.65	97.80	97.73	97.66	98.51	97.96	97.78	97.62	97.50	97.64	
17	97.63	97.64	97.63	97.76	97.72	97.65	98.33	97.94	97.75	97.62	97.56	97.66	
18	97.61	97.64	97.62	97.74	97.71	97.65	98.30	97.92	97.73	97.62	97.57	97.66	
19	97.67	97.64	97.63	97.72	97.72	97.66	98.61	97.90	97.72	97.61	97.50	97.62	
20	97.64	97.65	97.62	97.71	97.72	97.69	99.41	97.88	97.71	97.61	97.54	97.56	
21	97.62	97.65	97.62	97.70	97.71	97.69	99.08	97.87	97.70	97.60	97.56	97.61	
22	97.60	97.64	97.61	97.69	97.69	97.67	98.73	97.85	97.70	97.61	97.56	97.61	
23	97.58	97.62	97.61	97.67	97.67	97.97	98.56	97.84	97.70	97.60	97.50	97.59	
24	97.59	97.61	97.61	97.67	97.66	97.95	98.60	97.83	97.68	97.59	97.50	97.83	
25	97.61	97.60	97.61	97.65	97.64	98.42	98.70	97.82	97.68	97.59	97.57	97.64	
26	97.61	97.60	97.62	97.68	97.64	98.72	98.68	97.82	97.68	97.60	97.60	97.58	
27	97.61	97.61	97.64	97.61	97.63	98.69	98.56	97.80	97.67	97.59	97.64	97.54	
28	97.61	97.61	97.67	97.60	97.65	98.59	98.49	97.79	97.67	97.59	97.61	97.59	
29	97.62	97.61	97.85	97.62	97.68	98.44	98.44	97.79	97.66	97.58		97.59	
30	97.64	97.60	97.90	97.62	97.83	98.33	98.40	97.78	97.66	97.59		97.59	
31		97.60		97.59	98.23		98.35		97.66	97.58		97.68	
Mean	97.64	97.66	97.65	97.74	97.75	97.91	98.52	98.00	97.72	97.62	97.56	97.65	
Max	97.70	97.81	97.90	98.13	98.23	98.72	99.41	98.32	97.78	97.66	97.64	98.00	99.41
Min	97.58	97.60	97.60	97.59	97.56	97.65	98.21	97.78	97.66	97.58	97.50	97.54	97.50

Annual Max Momentary Gage Height 99.74 M (MSL), at 12.00 Hours, on Oct 20, 2001
Zero Gage at Bottom Elevation 97.46 M (MSL), River Bed 97.30 M (MSL)
Left Bank Elevation 103.57 M (MSL)
Right Bank Elevation 103.57 M (MSL), Drainage Area 1355 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.90	1.40	1.00	2.90	0.60	10.80	12.30	13.80	2.70	1.60	0.50	0.90	
2	2.00	1.50	1.30	2.30	0.90	6.60	12.60	11.70	2.60	1.60	0.90	0.80	
3	1.90	2.60	1.40	2.00	1.10	4.20	12.60	12.90	2.60	1.50	0.90	0.60	
4	1.80	3.20	1.30	1.90	1.20	2.90	12.30	15.60	2.60	1.40	0.70	0.40	
5	1.80	2.60	1.50	1.90	1.20	2.50	12.30	12.60	2.60	1.40	0.60	0.80	
6	1.70	2.40	1.90	2.00	2.50	2.30	19.40	12.30	2.60	1.40	0.40	0.80	
7	1.80	2.20	1.70	2.30	10.20	2.10	17.70	12.00	2.50	1.30	0.70	1.60	
8	1.60	2.00	1.50	2.60	7.00	2.00	20.80	11.10	2.40	1.40	0.70	7.00	
9	1.50	2.00	1.30	2.90	5.00	1.90	40.25	10.20	2.40	1.40	0.70	4.20	
10	1.40	1.90	1.10	2.80	3.60	1.60	31.25	9.00	2.30	1.30	0.40	2.50	
11	1.40	1.80	1.20	3.80	2.90	1.70	21.15	8.40	2.20	1.30	0.60	2.10	
12	1.40	1.70	1.30	5.00	3.60	1.60	17.10	8.00	2.20	1.30	0.50	1.80	
13	1.40	1.60	1.40	9.90	3.00	2.10	16.80	7.40	2.10	1.30	0.80	1.70	
14	1.30	1.50	1.50	7.40	2.70	1.70	18.00	6.80	2.20	1.30	0.80	1.60	
15	1.30	1.50	1.50	4.40	2.50	1.60	22.90	6.40	2.70	1.20	0.40	1.30	
16	1.30	1.40	1.50	3.00	2.30	1.60	21.85	6.20	2.80	1.20	0.00	1.40	
17	1.30	1.40	1.30	2.60	2.20	1.50	15.90	5.80	2.50	1.20	0.60	1.60	
18	1.10	1.40	1.20	2.40	2.10	1.50	15.00	5.40	2.30	1.20	0.70	1.60	
19	1.70	1.40	1.30	2.20	2.20	1.60	25.40	5.00	2.20	1.10	0.00	1.20	
20	1.40	1.50	1.20	2.10	2.20	1.90	64.10	4.60	2.10	1.10	0.40	0.60	
21	1.20	1.50	1.20	2.00	2.10	1.90	46.50	4.40	2.00	1.00	0.60	1.10	
22	1.00	1.40	1.10	1.90	1.90	1.70	30.35	4.00	2.00	1.10	0.60	1.10	
23	0.80	1.20	1.10	1.70	1.70	6.40	23.60	3.80	2.00	1.00	0.00	0.90	
24	0.90	1.10	1.10	1.70	1.60	6.00	25.00	3.60	1.80	0.90	0.00	3.60	
25	1.10	1.00	1.10	1.50	1.40	18.70	29.00	3.40	1.80	0.90	0.70	1.40	
26	1.10	1.00	1.20	1.80	1.40	29.90	28.20	3.40	1.80	1.00	1.00	0.80	
27	1.10	1.10	1.40	1.10	1.30	28.60	23.60	3.00	1.70	0.90	1.40	0.40	
28	1.10	1.10	1.70	1.00	1.50	24.65	21.15	2.90	1.70	0.90	1.10	0.90	
29	1.20	1.10	4.00	1.20	1.80	19.40	19.40	2.90	1.60	0.80		0.90	
30	1.40	1.00	5.00	1.20	3.60	15.90	18.00	2.80	1.60	0.90		0.90	
31		1.00		0.90	12.90		16.50		1.60	0.80		1.80	
Total	41.90	49.50	46.30	82.40	90.20	206.85	711.00	219.40	68.20	36.70	16.70	48.30	1617.45 CMSDAY
Mean	1.40	1.60	1.54	2.66	2.91	6.89	22.94	7.31	2.20	1.18	0.60	1.56	4.43 CMS
Max	2.00	3.20	5.00	9.90	12.90	29.90	64.10	15.60	2.80	1.60	1.40	7.00	64.10 CMS
Min	0.80	1.00	1.00	0.90	0.60	1.50	12.30	2.80	1.60	0.80	0.00	0.40	0.00 CMS
Runoff	3.620	4.277	4.000	7.119	7.793	17.872	61.430	18.956	5.892	3.171	1.443	4.173	139.748 MCM

Momentary Peak 84.10 CMS, at 99.74 M (MSL), at 12.00 Hours, on Oct 20, 2001
Runoff Yield 3.27 Liters/Second/Square KM, Momentary Peak Yield 62.066 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Mae Nam Noi at Ban Mae Nam Noi, 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 Mae Nam Noi **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainage Area 320 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +67.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 10 meters from the top staff gage.

Elevation +73.578 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1989 to date.

Rating Operation

Period of Rating 1989 to date.

Rated by Float -

Rated by Current Meter 1989 to date.

Stability of Channel Regimes Stable.

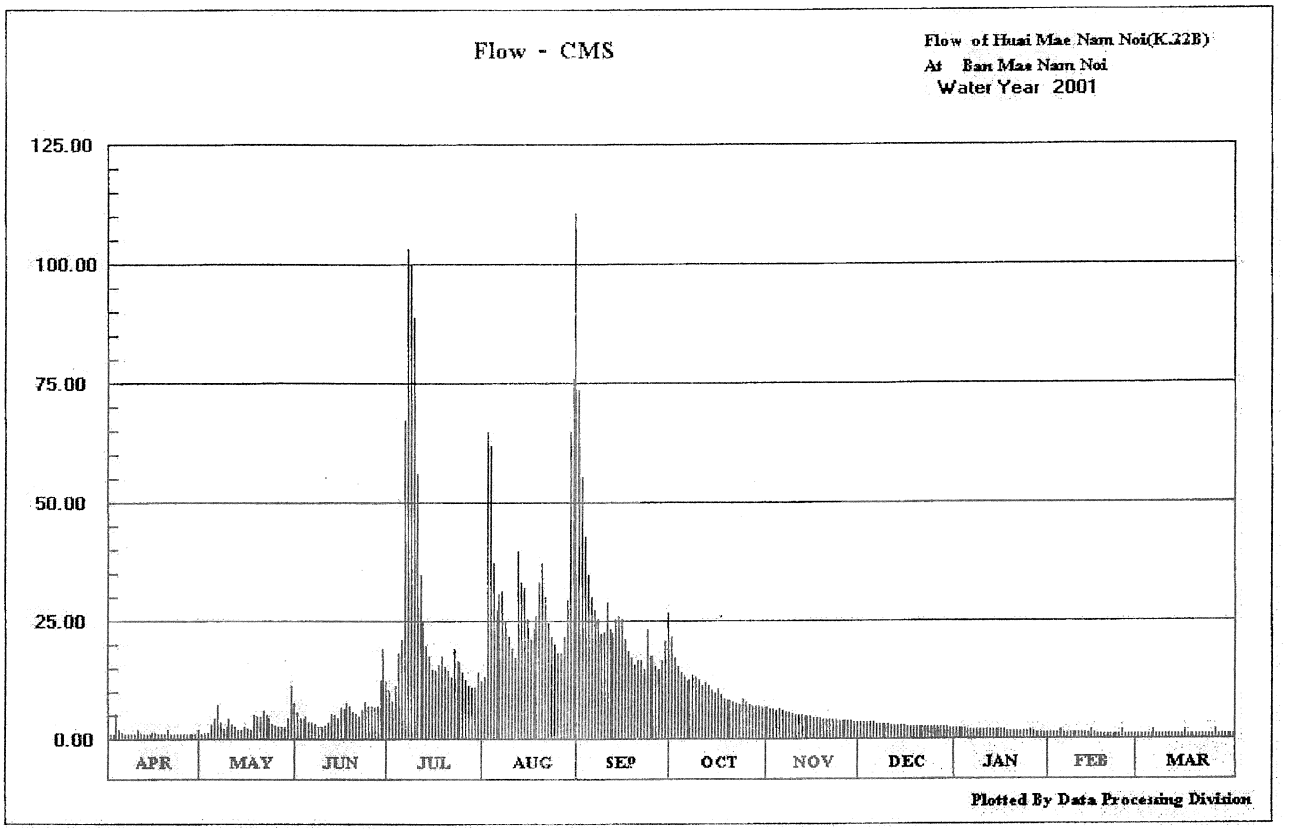
Overbank Flow Conditions No overbank flow

General Description Records good. Stage-discharge relation defined by 85 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	68.41	68.40	68.60	68.74	68.81	69.78	68.99	68.63	68.53	68.48	68.44	68.41	
2	68.40	68.44	68.56	68.67	69.67	69.54	68.90	68.62	68.53	68.48	68.44	68.41	
3	68.59	68.44	68.56	68.77	69.63	69.35	68.86	68.62	68.53	68.48	68.44	68.41	
4	68.47	68.52	68.57	68.92	69.26	69.22	68.83	68.61	68.53	68.48	68.44	68.41	
5	68.43	68.56	68.53	68.98	69.09	69.14	68.81	68.62	68.53	68.47	68.44	68.41	
6	68.42	68.65	68.53	69.70	69.15	69.09	68.79	68.61	68.52	68.47	68.44	68.40	
7	68.42	68.53	68.52	70.14	69.16	69.06	68.80	68.60	68.52	68.47	68.43	68.40	
8	68.42	68.48	68.50	70.10	69.05	69.00	68.82	68.60	68.52	68.47	68.43	68.40	
9	68.41	68.50	68.50	69.97	68.99	69.01	68.81	68.59	68.52	68.47	68.43	68.42	
10	68.41	68.56	68.51	69.55	68.94	69.12	68.80	68.58	68.52	68.47	68.43	68.41	
11	68.40	68.52	68.53	69.22	68.90	69.02	68.77	68.58	68.51	68.47	68.43	68.41	
12	68.40	68.49	68.59	69.05	69.30	69.01	68.78	68.58	68.51	68.46	68.43	68.40	
13	68.40	68.47	68.58	68.95	69.19	69.06	68.77	68.57	68.51	68.46	68.43	68.40	
14	68.40	68.47	68.56	68.91	69.17	69.07	68.74	68.57	68.51	68.46	68.43	68.40	
15	68.43	68.50	68.63	68.85	69.06	69.06	68.73	68.57	68.51	68.46	68.43	68.40	
16	68.44	68.48	68.62	68.84	68.98	68.98	68.75	68.56	68.50	68.46	68.42	68.40	
17	68.42	68.47	68.66	68.87	69.02	68.93	68.72	68.56	68.50	68.46	68.42	68.40	
18	68.41	68.58	68.64	68.91	69.07	68.90	68.70	68.56	68.50	68.45	68.42	68.40	
19	68.40	68.57	68.60	68.86	69.19	68.87	68.68	68.55	68.50	68.45	68.42	68.40	
20	68.40	68.57	68.59	68.84	69.26	68.89	68.68	68.55	68.50	68.45	68.42	68.40	
21	68.40	68.61	68.57	68.81	69.14	68.89	68.67	68.55	68.50	68.45	68.42	68.39	
22	68.40	68.58	68.62	68.94	69.04	68.85	68.66	68.55	68.50	68.45	68.42	68.39	
23	68.40	68.56	68.67	68.89	68.99	69.02	68.65	68.55	68.49	68.45	68.42	68.41	
24	68.40	68.52	68.64	68.88	68.96	68.91	68.69	68.54	68.49	68.45	68.42	68.40	
25	68.40	68.51	68.64	68.83	68.92	68.91	68.67	68.54	68.49	68.45	68.42	68.40	
26	68.42	68.49	68.63	68.80	68.92	68.86	68.65	68.54	68.49	68.45	68.41	68.40	
27	68.42	68.50	68.64	68.77	68.99	68.85	68.64	68.54	68.49	68.44	68.41	68.39	
28	68.40	68.50	68.80	68.76	69.13	68.89	68.64	68.54	68.49	68.44	68.41	68.39	
29	68.41	68.56	68.94	68.76	69.67	68.97	68.64	68.53	68.49	68.44		68.39	
30	68.41	68.77	68.79	68.83	69.81	69.08	68.63	68.53	68.48	68.44		68.39	
31		68.66		68.79	70.22		68.63		68.48	68.44		68.39	
Mean	68.42	68.53	68.61	69.03	69.18	69.04	68.74	68.57	68.51	68.46	68.43	68.40	
Max	68.59	68.77	68.94	70.14	70.22	69.78	68.99	68.63	68.53	68.48	68.44	68.42	70.22
Min	68.40	68.40	68.50	68.67	68.81	68.85	68.63	68.53	68.48	68.44	68.41	68.39	68.39

Annual Max Momentary Gage Height 70.54 M (MSL), at 12.00 Hours, on Jul 7, 2001
Zero Gage at Bottom Elevation 67.00 M (MSL), River Bed 68.01 M (MSL)
Left Bank Elevation 75.94 M (MSL)
Right Bank Elevation 72.19 M (MSL), Drainage Area 320 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.20	1.00	6.00	10.60	13.45	73.90	22.00	6.90	3.90	2.60	1.80	1.20	
2	1.00	1.80	4.80	8.10	65.25	55.80	17.50	6.60	3.90	2.60	1.80	1.20	
3	5.70	1.80	4.80	11.80	62.25	43.25	15.70	6.60	3.90	2.60	1.80	1.20	
4	2.40	3.60	5.10	18.50	37.60	35.20	14.35	6.30	3.90	2.60	1.80	1.20	
5	1.60	4.80	3.90	21.50	27.45	30.40	13.45	6.60	3.90	2.40	1.80	1.20	
6	1.40	7.50	3.90	67.50	31.00	27.45	12.60	6.30	3.60	2.40	1.80	1.00	
7	1.40	3.90	3.60	103.60	31.60	25.80	13.00	6.00	3.60	2.40	1.60	1.00	
8	1.40	2.60	3.00	100.00	25.25	22.50	13.90	6.00	3.60	2.40	1.60	1.00	
9	1.20	3.00	3.00	89.10	22.00	23.05	13.45	5.70	3.60	2.40	1.60	1.40	
10	1.20	4.80	3.30	56.50	19.50	29.20	13.00	5.40	3.60	2.40	1.60	1.20	
11	1.00	3.60	3.90	35.20	17.50	23.60	11.80	5.40	3.30	2.40	1.60	1.20	
12	1.00	2.80	5.70	25.25	40.00	23.05	12.20	5.40	3.30	2.20	1.60	1.00	
13	1.00	2.40	5.40	20.00	33.40	25.80	11.80	5.10	3.30	2.20	1.60	1.00	
14	1.00	2.40	4.80	18.00	32.20	26.35	10.60	5.10	3.30	2.20	1.60	1.00	
15	1.60	3.00	6.90	15.25	25.80	25.80	10.20	5.10	3.30	2.20	1.60	1.00	
16	1.80	2.60	6.60	14.80	21.50	21.50	11.00	4.80	3.00	2.20	1.40	1.00	
17	1.40	2.40	7.80	16.15	23.60	19.00	9.80	4.80	3.00	2.20	1.40	1.00	
18	1.20	5.40	7.20	18.00	26.35	17.50	9.00	4.80	3.00	2.00	1.40	1.00	
19	1.00	5.10	6.00	15.70	33.40	16.15	8.40	4.50	3.00	2.00	1.40	1.00	
20	1.00	5.10	5.70	14.80	37.60	17.05	8.40	4.50	3.00	2.00	1.40	1.00	
21	1.00	6.30	5.10	13.45	30.40	17.05	8.10	4.50	3.00	2.00	1.40	0.90	
22	1.00	5.40	6.60	19.50	24.70	15.25	7.80	4.50	3.00	2.00	1.40	0.90	
23	1.00	4.80	8.10	17.05	22.00	23.60	7.50	4.50	2.80	2.00	1.40	1.20	
24	1.00	3.60	7.20	16.60	20.50	18.00	8.70	4.20	2.80	2.00	1.40	1.00	
25	1.00	3.30	7.20	14.35	18.50	18.00	8.10	4.20	2.80	2.00	1.40	1.00	
26	1.40	2.80	6.90	13.00	18.50	15.70	7.50	4.20	2.80	2.00	1.20	1.00	
27	1.40	3.00	7.20	11.80	22.00	15.25	7.20	4.20	2.80	1.80	1.20	0.90	
28	1.00	3.00	13.00	11.40	29.80	17.05	7.20	4.20	2.80	1.80	1.20	0.90	
29	1.20	4.80	19.50	11.40	65.25	21.00	7.20	3.90	2.80	1.80		0.90	
30	1.20	11.80	12.60	14.35	76.30	26.90	6.90	3.90	2.60	1.80		0.90	
31		7.80		12.60	110.90		6.90		2.60	1.80		0.90	
Total	41.70	126.20	194.80	835.85	1065.55	770.15	335.25	154.20	99.80	67.40	42.80	32.30	3766.00 CMSDAY
Mean	1.39	4.07	6.49	26.96	34.37	25.67	10.81	5.14	3.22	2.17	1.53	1.04	10.32 CMS
Max	5.70	11.80	19.50	103.60	110.90	73.90	22.00	6.90	3.90	2.60	1.80	1.40	110.90 CMS
Min	1.00	1.00	3.00	8.10	13.45	15.25	6.90	3.90	2.60	1.80	1.20	0.90	0.90 CMS
Runoff	3.603	10.904	16.831	72.217	92.064	66.541	28.966	13.323	8.623	5.823	3.698	2.791	325.382 MCM

Momentary Peak 143.40 CMS, at 70.54 M (MSL), at 12.00 Hours, on Jul 7, 2001

Runoff Yield 32.24 Liters/Second/Square KM, Momentary Peak Yield 448.125 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage 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 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 Float -

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 77 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

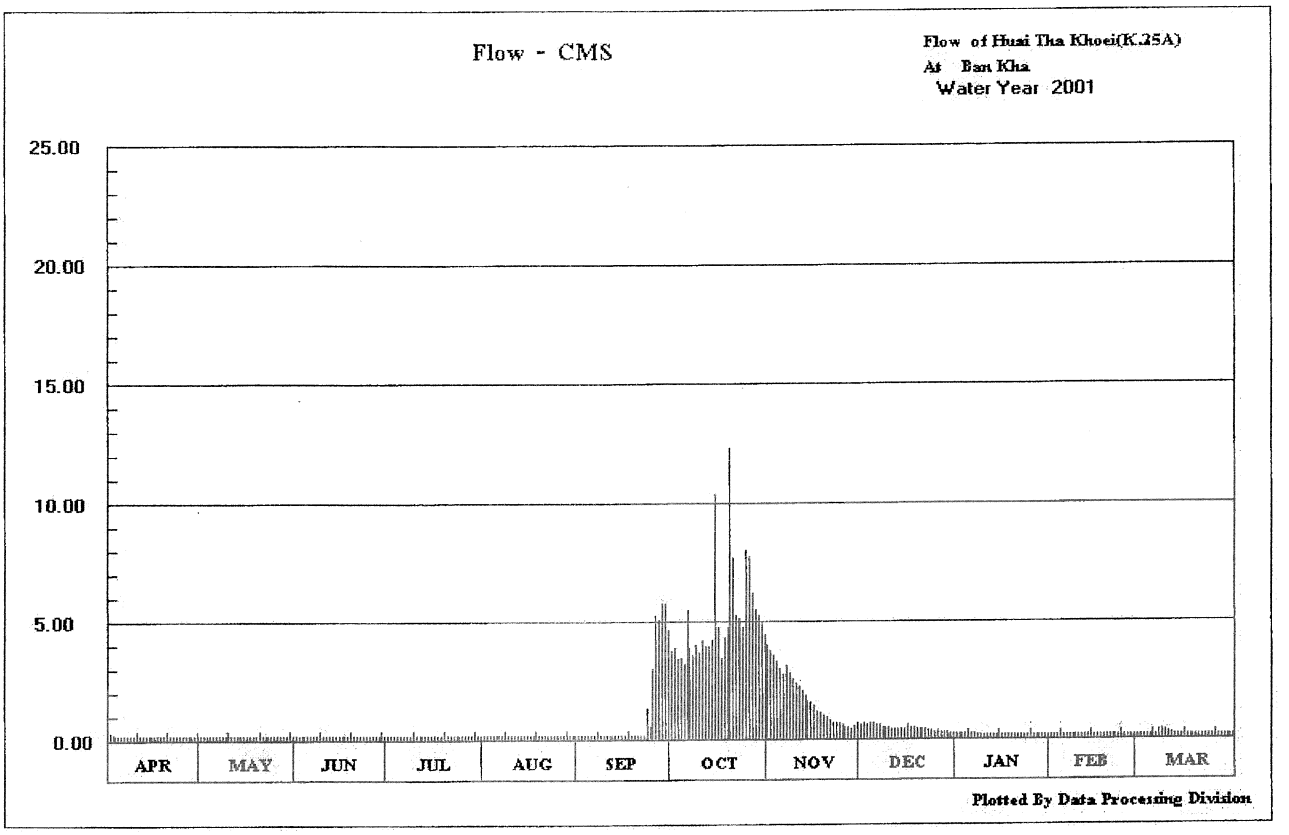
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.43	0.32	0.27	0.29	0.26	0.28	1.02	1.05	0.52	0.42	0.38	0.25	
2	0.41	0.32	0.32	0.28	0.26	0.28	1.03	1.02	0.53	0.42	0.38	0.25	
3	0.40	0.37	0.31	0.28	0.26	0.27	0.98	0.99	0.52	0.41	0.38	0.28	
4	0.39	0.35	0.32	0.28	0.26	0.27	0.98	0.96	0.54	0.41	0.38	0.31	
5	0.39	0.35	0.32	0.28	0.26	0.27	0.95	0.92	0.53	0.41	0.38	0.34	
6	0.38	0.34	0.33	0.27	0.30	0.27	1.22	0.89	0.52	0.41	0.38	0.34	
7	0.38	0.38	0.33	0.27	0.28	0.26	1.03	0.94	0.52	0.41	0.38	0.35	
8	0.37	0.37	0.33	0.27	0.28	0.27	0.99	0.90	0.50	0.40	0.38	0.46	
9	0.37	0.36	0.33	0.27	0.28	0.26	1.05	0.86	0.50	0.40	0.38	0.47	
10	0.36	0.34	0.32	0.28	0.33	0.26	1.01	0.84	0.49	0.40	0.37	0.46	
11	0.36	0.34	0.32	0.28	0.35	0.26	1.07	0.82	0.48	0.40	0.36	0.44	
12	0.36	0.34	0.32	0.34	0.35	0.26	1.04	0.79	0.48	0.40	0.34	0.41	
13	0.36	0.33	0.32	0.32	0.35	0.26	1.04	0.76	0.48	0.40	0.32	0.39	
14	0.35	0.32	0.31	0.31	0.34	0.26	1.07	0.72	0.48	0.40	0.30	0.38	
15	0.35	0.33	0.31	0.31	0.33	0.26	1.63	0.71	0.48	0.40	0.28	0.37	
16	0.35	0.33	0.30	0.32	0.33	0.26	1.14	0.69	0.52	0.40	0.27	0.37	
17	0.35	0.33	0.30	0.32	0.32	0.25	0.98	0.64	0.50	0.39	0.26	0.36	
18	0.35	0.32	0.30	0.32	0.32	0.26	1.09	0.62	0.49	0.39	0.26	0.36	
19	0.36	0.33	0.29	0.32	0.32	0.23	1.14	0.60	0.48	0.39	0.25	0.35	
20	0.35	0.33	0.28	0.31	0.31	0.25	1.76	0.58	0.48	0.39	0.25	0.34	
21	0.35	0.33	0.28	0.31	0.31	0.26	1.42	0.56	0.48	0.39	0.25	0.34	
22	0.34	0.32	0.28	0.30	0.30	0.26	1.19	0.54	0.47	0.39	0.25	0.34	
23	0.34	0.32	0.28	0.30	0.28	0.66	1.18	0.53	0.46	0.39	0.25	0.34	
24	0.33	0.31	0.27	0.30	0.30	0.51	1.14	0.53	0.45	0.39	0.25	0.34	
25	0.32	0.31	0.27	0.29	0.28	0.92	1.45	0.52	0.44	0.39	0.25	0.34	
26	0.32	0.31	0.26	0.29	0.28	1.19	1.43	0.50	0.44	0.39	0.25	0.34	
27	0.32	0.31	0.27	0.28	0.27	1.17	1.30	0.49	0.44	0.38	0.25	0.34	
28	0.32	0.31	0.28	0.28	0.27	1.25	1.22	0.48	0.43	0.38	0.25	0.33	
29	0.33	0.28	0.29	0.27	0.27	1.25	1.19	0.51	0.43	0.38		0.33	
30	0.32	0.27	0.29	0.26	0.28	1.12	1.16	0.53	0.42	0.38		0.33	
31		0.26		0.26	0.29		1.10		0.42	0.38		0.33	
Mean	0.36	0.33	0.30	0.29	0.30	0.46	1.16	0.72	0.48	0.40	0.31	0.35	
Max	0.43	0.38	0.33	0.34	0.35	1.25	1.76	1.05	0.54	0.42	0.38	0.47	1.76
Min	0.32	0.26	0.26	0.26	0.26	0.23	0.95	0.48	0.42	0.38	0.25	0.25	0.23

Annual Max Momentary Gage Height 1.96 M (A.D), at 6.00 Hours, on Oct 20, 2001

Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.19 M (A.D)

Left Bank Elevation 4.84 M (A.D)

Right Bank Elevation 8.02 M (A.D), Drainage Area 250 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.39	0.14	0.06	0.09	0.04	0.07	3.86	4.10	0.70	0.36	0.26	0.03	
2	0.33	0.14	0.14	0.07	0.04	0.07	3.94	3.86	0.75	0.36	0.26	0.03	
3	0.30	0.24	0.12	0.07	0.04	0.06	3.54	3.62	0.70	0.33	0.26	0.07	
4	0.28	0.20	0.14	0.07	0.04	0.06	3.54	3.38	0.80	0.33	0.26	0.12	
5	0.28	0.20	0.14	0.07	0.04	0.06	3.30	3.06	0.75	0.33	0.26	0.18	
6	0.26	0.18	0.16	0.06	0.10	0.06	5.58	2.83	0.70	0.33	0.26	0.18	
7	0.26	0.26	0.16	0.06	0.07	0.04	3.94	3.22	0.70	0.33	0.26	0.20	
8	0.24	0.24	0.16	0.06	0.07	0.06	3.62	2.90	0.60	0.30	0.26	0.48	
9	0.24	0.22	0.16	0.06	0.07	0.04	4.10	2.62	0.60	0.30	0.26	0.51	
10	0.22	0.18	0.14	0.07	0.16	0.04	3.78	2.48	0.57	0.30	0.24	0.48	
11	0.22	0.18	0.14	0.07	0.20	0.04	4.26	2.34	0.54	0.30	0.22	0.42	
12	0.22	0.18	0.14	0.18	0.20	0.04	4.02	2.14	0.54	0.30	0.18	0.33	
13	0.22	0.16	0.14	0.14	0.20	0.04	4.02	1.96	0.54	0.30	0.14	0.28	
14	0.20	0.14	0.12	0.12	0.18	0.04	4.26	1.72	0.54	0.30	0.10	0.26	
15	0.20	0.16	0.12	0.12	0.16	0.04	10.45	1.66	0.54	0.30	0.07	0.24	
16	0.20	0.16	0.10	0.14	0.16	0.04	4.86	1.55	0.70	0.30	0.06	0.24	
17	0.20	0.16	0.10	0.14	0.14	0.03	3.54	1.30	0.60	0.28	0.04	0.22	
18	0.20	0.14	0.10	0.14	0.14	0.04	4.42	1.20	0.57	0.28	0.04	0.22	
19	0.22	0.16	0.09	0.14	0.14	0.00	4.86	1.10	0.54	0.28	0.03	0.20	
20	0.20	0.16	0.07	0.12	0.12	0.03	12.40	1.00	0.54	0.28	0.03	0.18	
21	0.20	0.16	0.07	0.12	0.12	0.04	7.74	0.90	0.54	0.28	0.03	0.18	
22	0.18	0.14	0.07	0.10	0.10	0.04	5.31	0.80	0.51	0.28	0.03	0.18	
23	0.18	0.14	0.07	0.10	0.07	1.40	5.22	0.75	0.48	0.28	0.03	0.18	
24	0.16	0.12	0.06	0.10	0.10	0.65	4.86	0.75	0.45	0.28	0.03	0.18	
25	0.14	0.12	0.06	0.09	0.07	3.06	8.10	0.70	0.42	0.28	0.03	0.18	
26	0.14	0.12	0.04	0.09	0.07	5.31	7.86	0.60	0.42	0.28	0.03	0.18	
27	0.14	0.12	0.06	0.07	0.06	5.13	6.30	0.57	0.42	0.26	0.03	0.18	
28	0.14	0.12	0.07	0.07	0.06	5.85	5.58	0.54	0.39	0.26	0.03	0.16	
29	0.16	0.07	0.09	0.06	0.06	5.85	5.31	0.65	0.39	0.26		0.16	
30	0.14	0.06	0.09	0.04	0.07	4.68	5.04	0.75	0.36	0.26		0.16	
31		0.04		0.04	0.09		4.50		0.36	0.26		0.16	
Total	6.46	4.81	3.18	2.87	3.18	32.91	162.11	55.05	17.26	9.17	3.73	6.77	307.50 CMSDAY
Mean	0.22	0.16	0.11	0.09	0.10	1.10	5.23	1.83	0.56	0.30	0.13	0.22	0.84 CMS
Max	0.39	0.26	0.16	0.18	0.20	5.85	12.40	4.10	0.80	0.36	0.26	0.51	12.40 CMS
Min	0.14	0.04	0.04	0.04	0.04	0.00	3.30	0.54	0.36	0.26	0.03	0.03	0.00 CMS
Runoff	0.558	0.416	0.275	0.248	0.275	2.843	14.006	4.756	1.491	0.792	0.322	0.585	26.568 MCM

Momentary Peak 15.40 CMS, at 1.96 M (A.D), at 6.00 Hours, on Oct 20, 2001
Runoff Yield 3.37 Liters/Second/Square KM, Momentary Peak Yield 61.600 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Mae Nam Lo at Ban Mae Nam Lo, Kanchanaburi (K.30)

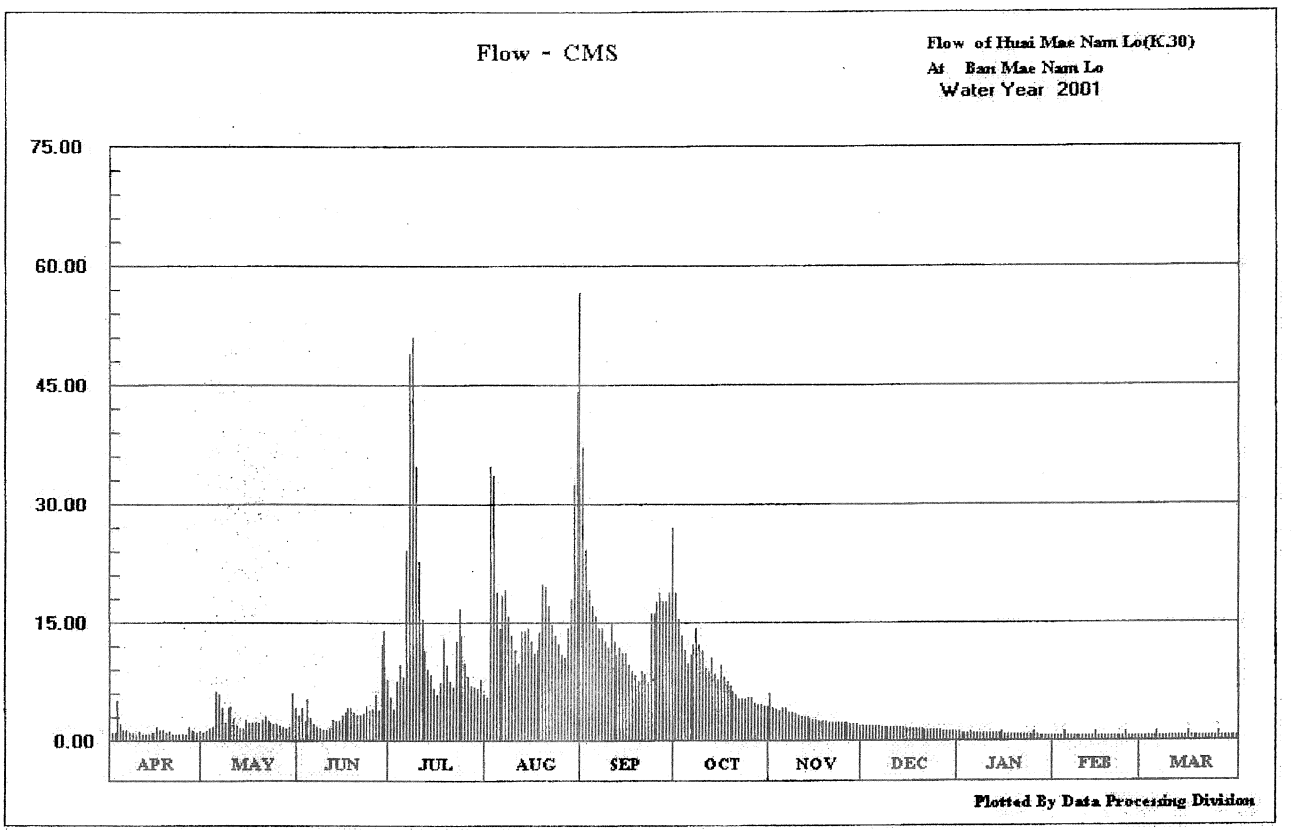
Lat 14 - 26 - 27 N. **Long** 98 - 47 - 48 E.

Location		on left bank about 1 kilometer downstream from station K.22A.		
	Ban Mae Nam Lo	**Amphoe** Sai Yok	**Changwat**	Kanchanaburi
Drainage Area		435 sq.km.		
Type of Gage		Staff gage.		
Zero Gage at Bottom		+68.000 m. (M.S.L.)		
Bench Mark		B.M.- H.D.		
	Location BM	On left bank about 30 meters from the top staff gage.		
	Elevation	+77.305 m. (M.S.L.)		
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.		
Period of Available Gage Records		1983 to date.		
Rating Operation				
	Period of Rating	1994 to date.		
	Rated by Float	-		
	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 85 discharge measurements made in 2001.		

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	68.67	68.66	68.82	68.93	68.93	69.69	69.35	68.95	68.74	68.68	68.63	68.59	
2	68.66	68.68	68.87	68.86	69.65	69.47	69.26	68.87	68.74	68.67	68.63	68.58	
3	68.91	68.71	68.78	69.01	69.63	69.36	69.20	68.86	68.74	68.67	68.63	68.58	
4	68.75	68.72	68.92	69.09	69.35	69.31	69.15	68.85	68.74	68.67	68.63	68.58	
5	68.70	68.96	68.80	69.03	69.23	69.27	69.10	68.87	68.74	68.67	68.63	68.58	
6	68.69	68.94	68.75	69.47	69.34	69.23	69.13	68.87	68.74	68.67	68.62	68.57	
7	68.67	68.87	68.73	69.86	69.36	69.23	69.17	68.84	68.73	68.66	68.62	68.57	
8	68.66	68.77	68.71	69.89	69.27	69.18	69.23	68.84	68.73	68.66	68.62	68.57	
9	68.65	68.87	68.70	69.65	69.20	69.16	69.17	68.83	68.73	68.66	68.62	68.60	
10	68.65	68.88	68.70	69.44	69.15	69.25	69.15	68.82	68.72	68.66	68.61	68.59	
11	68.65	68.80	68.71	69.26	69.10	69.18	69.08	68.81	68.72	68.66	68.61	68.59	
12	68.65	68.74	68.79	69.15	69.22	69.13	69.06	68.81	68.72	68.66	68.61	68.59	
13	68.65	68.71	68.78	69.07	69.22	69.16	69.12	68.81	68.72	68.66	68.61	68.60	
14	68.66	68.71	68.78	69.04	69.23	69.14	69.05	68.80	68.72	68.66	68.61	68.59	
15	68.67	68.79	68.82	68.97	69.18	69.14	69.02	68.79	68.71	68.66	68.61	68.58	
16	68.72	68.76	68.84	68.94	69.14	69.09	69.09	68.79	68.71	68.65	68.60	68.57	
17	68.70	68.76	68.87	69.00	69.15	69.06	69.03	68.78	68.71	68.65	68.60	68.57	
18	68.70	68.76	68.87	69.19	69.21	69.04	69.01	68.78	68.71	68.65	68.60	68.57	
19	68.67	68.76	68.84	69.09	69.38	69.01	68.99	68.78	68.71	68.65	68.60	68.57	
20	68.66	68.79	68.82	69.01	69.37	69.06	68.96	68.77	68.71	68.65	68.59	68.57	
21	68.65	68.81	68.82	68.98	69.31	69.05	68.94	68.77	68.70	68.65	68.59	68.56	
22	68.65	68.78	68.83	69.18	69.24	69.00	68.92	68.76	68.70	68.65	68.59	68.57	
23	68.65	68.76	68.88	69.30	69.20	69.28	68.92	68.76	68.70	68.65	68.59	68.59	
24	68.65	68.75	68.85	69.20	69.17	69.28	68.92	68.76	68.70	68.65	68.59	68.58	
25	68.65	68.75	68.86	69.10	69.13	69.32	68.93	68.76	68.69	68.65	68.58	68.59	
26	68.72	68.74	68.94	69.03	69.12	69.35	68.93	68.76	68.69	68.65	68.60	68.57	
27	68.70	68.73	68.85	68.99	69.23	69.32	68.90	68.75	68.68	68.64	68.60	68.57	
28	68.68	68.71	69.17	68.98	69.33	69.32	68.89	68.75	68.68	68.64	68.59	68.57	
29	68.67	68.73	69.22	68.97	69.61	69.35	68.89	68.75	68.68	68.64		68.57	
30	68.67	68.95	69.02	69.02	69.79	69.52	68.88	68.74	68.68	68.63		68.57	
31		68.87		68.94	69.97		68.88		68.68	68.63		68.57	
Mean	68.68	68.78	68.84	69.15	69.30	69.23	69.04	68.80	68.71	68.65	68.61	68.58	
Max	68.91	68.96	69.22	69.89	69.97	69.69	69.35	68.95	68.74	68.68	68.63	68.60	69.97
Min	68.65	68.66	68.70	68.86	68.93	69.00	68.88	68.74	68.68	68.63	68.58	68.56	68.56

Annual Max Momentary Gage Height 70.09 M (MSL), at 15.00 Hours, on Jul 7, 2001
Zero Gage at Bottom Elevation 68.00 M (MSL), River Bed 68.08 M (MSL)
Left Bank Elevation 73.13 M (MSL)
Right Bank Elevation 79.87 M (MSL), Drainage Area 435 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.24	1.12	3.40	5.75	5.75	37.40	19.00	6.25	2.16	1.36	0.76	0.32	
2	1.12	1.36	4.40	4.20	35.00	24.50	15.60	4.40	2.16	1.24	0.76	0.24	
3	5.25	1.74	2.72	7.75	33.80	19.40	13.50	4.20	2.16	1.24	0.76	0.24	
4	2.30	1.88	5.50	9.75	19.00	17.40	11.75	4.00	2.16	1.24	0.76	0.24	
5	1.60	6.50	3.00	8.25	14.55	15.95	10.00	4.40	2.16	1.24	0.76	0.24	
6	1.48	6.00	2.30	24.50	18.60	14.55	11.05	4.40	2.16	1.24	0.64	0.16	
7	1.24	4.40	2.02	49.20	19.40	14.55	12.45	3.80	2.02	1.12	0.64	0.16	
8	1.12	2.58	1.74	51.30	15.95	12.80	14.55	3.80	2.02	1.12	0.64	0.16	
9	1.00	4.40	1.60	35.00	13.50	12.10	12.45	3.60	2.02	1.12	0.64	0.40	
10	1.00	4.60	1.60	23.00	11.75	15.25	11.75	3.40	1.88	1.12	0.52	0.32	
11	1.00	3.00	1.74	15.60	10.00	12.80	9.50	3.20	1.88	1.12	0.52	0.32	
12	1.00	2.16	2.86	11.75	14.20	11.05	9.00	3.20	1.88	1.12	0.52	0.32	
13	1.00	1.74	2.72	9.25	14.20	12.10	10.70	3.20	1.88	1.12	0.52	0.40	
14	1.12	1.74	2.72	8.50	14.55	11.40	8.75	3.00	1.88	1.12	0.52	0.32	
15	1.24	2.86	3.40	6.75	12.80	11.40	8.00	2.86	1.74	1.12	0.52	0.24	
16	1.88	2.44	3.80	6.00	11.40	9.75	9.75	2.86	1.74	1.00	0.40	0.16	
17	1.60	2.44	4.40	7.50	11.75	9.00	8.25	2.72	1.74	1.00	0.40	0.16	
18	1.60	2.44	4.40	13.15	13.85	8.50	7.75	2.72	1.74	1.00	0.40	0.16	
19	1.24	2.44	3.80	9.75	20.20	7.75	7.25	2.72	1.74	1.00	0.40	0.16	
20	1.12	2.86	3.40	7.75	19.80	9.00	6.50	2.58	1.74	1.00	0.32	0.16	
21	1.00	3.20	3.40	7.00	17.40	8.75	6.00	2.58	1.60	1.00	0.32	0.08	
22	1.00	2.72	3.60	12.80	14.90	7.50	5.50	2.44	1.60	1.00	0.32	0.16	
23	1.00	2.44	4.60	17.00	13.50	16.30	5.50	2.44	1.60	1.00	0.32	0.32	
24	1.00	2.30	4.00	13.50	12.45	16.30	5.50	2.44	1.60	1.00	0.32	0.24	
25	1.00	2.30	4.20	10.00	11.05	17.80	5.75	2.44	1.48	1.00	0.24	0.32	
26	1.88	2.16	6.00	8.25	10.70	19.00	5.75	2.44	1.48	1.00	0.40	0.16	
27	1.60	2.02	4.00	7.25	14.55	17.80	5.00	2.30	1.36	0.88	0.40	0.16	
28	1.36	1.74	12.45	7.00	18.20	17.80	4.80	2.30	1.36	0.88	0.32	0.16	
29	1.24	2.02	14.20	6.75	32.60	19.00	4.80	2.30	1.36	0.88		0.16	
30	1.24	6.25	8.00	8.00	44.30	27.20	4.60	2.16	1.36	0.76		0.16	
31		4.40		6.00	56.90		4.60		1.36	0.76		0.16	
Total	42.47	90.25	125.97	418.25	576.60	454.10	275.35	95.15	55.02	32.80	14.04	6.96	2186.96 CMSDAY
Mean	1.42	2.91	4.20	13.49	18.60	15.14	8.88	3.17	1.77	1.06	0.50	0.22	5.99 CMS
Max	5.25	6.50	14.20	51.30	56.90	37.40	19.00	6.25	2.16	1.36	0.76	0.40	56.90 CMS
Min	1.00	1.12	1.60	4.20	5.75	7.50	4.60	2.16	1.36	0.76	0.24	0.08	0.08 CMS
Runoff	3.669	7.798	10.884	36.137	49.818	39.234	23.790	8.221	4.754	2.834	1.213	0.601	188.953 MCM

Momentary Peak 66.20 CMS, at 70.09 M (MSL), at 15.00 Hours, on Jul 7, 2001

Runoff Yield 13.77 Liters/Second/Square KM, Momentary Peak Yield 152.184 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 777 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +62.720 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 5 meters from the top staff gage.

Elevation +70.537 m. (M.S.L.)

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 Float -

Rated by Current Meter 1989 to date.

Stability of Channel Regimes Stable.

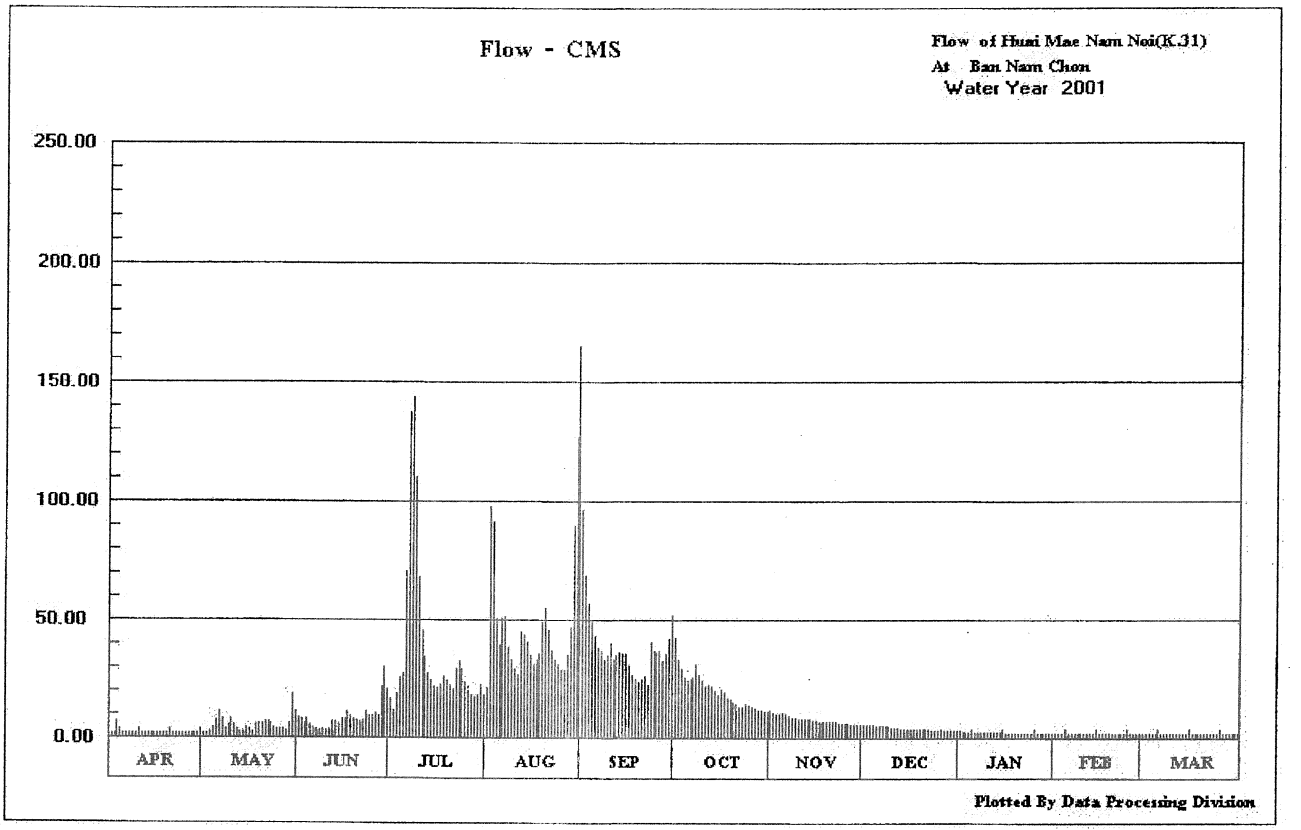
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 90 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.73	65.72	66.05	66.25	66.34	67.44	66.73	66.14	65.94	65.84	65.76	65.69	
2	65.73	65.76	66.03	66.15	67.46	67.11	66.58	66.11	65.94	65.83	65.76	65.69	
3	66.00	65.81	65.97	66.29	67.38	66.94	66.50	66.09	65.94	65.83	65.75	65.68	
4	65.88	65.90	66.03	66.43	66.85	66.84	66.43	66.10	65.94	65.82	65.75	65.68	
5	65.79	66.02	65.94	66.47	66.69	66.74	66.41	66.11	65.93	65.82	65.75	65.68	
6	65.76	66.13	65.91	67.13	66.85	66.67	66.42	66.09	65.93	65.82	65.75	65.68	
7	65.75	66.04	65.89	67.89	66.86	66.65	66.43	66.07	65.93	65.82	65.74	65.68	
8	65.74	65.89	65.85	67.95	66.67	66.58	66.54	66.06	65.92	65.82	65.74	65.68	
9	65.73	65.95	65.85	67.60	66.58	66.61	66.45	66.05	65.92	65.81	65.74	65.71	
10	65.72	66.04	65.85	67.10	66.51	66.70	66.40	66.04	65.91	65.81	65.74	65.70	
11	65.71	65.94	65.88	66.78	66.46	66.58	66.35	66.03	65.91	65.81	65.73	65.69	
12	65.71	65.87	65.99	66.60	66.77	66.61	66.37	66.03	65.90	65.81	65.73	65.68	
13	65.72	65.83	65.98	66.47	66.75	66.63	66.35	66.03	65.89	65.81	65.73	65.68	
14	65.72	65.82	65.96	66.41	66.71	66.62	66.32	66.03	65.89	65.81	65.73	65.68	
15	65.76	65.91	66.03	66.35	66.61	66.62	66.28	66.02	65.89	65.80	65.73	65.67	
16	65.80	65.87	66.04	66.34	66.54	66.53	66.33	66.01	65.89	65.80	65.73	65.67	
17	65.77	65.83	66.12	66.37	66.58	66.46	66.30	65.99	65.88	65.80	65.73	65.67	
18	65.76	65.94	66.08	66.44	66.62	66.42	66.25	65.99	65.88	65.80	65.72	65.66	
19	65.73	65.96	66.04	66.41	66.82	66.39	66.24	65.99	65.87	65.79	65.72	65.66	
20	65.72	65.97	66.02	66.37	66.91	66.42	66.22	65.99	65.87	65.79	65.72	65.65	
21	65.71	66.00	66.00	66.33	66.78	66.44	66.21	65.98	65.87	65.79	65.71	65.65	
22	65.70	65.99	66.02	66.51	66.65	66.37	66.18	65.98	65.87	65.79	65.71	65.66	
23	65.70	65.96	66.12	66.57	66.58	66.71	66.18	65.97	65.86	65.78	65.71	65.71	
24	65.70	65.90	66.08	66.50	66.54	66.64	66.20	65.97	65.86	65.78	65.70	65.69	
25	65.70	65.89	66.08	66.39	66.49	66.63	66.19	65.96	65.85	65.78	65.70	65.68	
26	65.77	65.88	66.11	66.32	66.49	66.64	66.18	65.96	65.85	65.78	65.70	65.67	
27	65.76	65.87	66.08	66.28	66.61	66.57	66.16	65.95	65.85	65.77	65.71	65.66	
28	65.73	65.85	66.36	66.27	66.80	66.62	66.15	65.95	65.84	65.77	65.70	65.65	
29	65.72	65.97	66.52	66.28	67.36	66.72	66.15	65.95	65.84	65.77		65.65	
30	65.72	66.29	66.33	66.37	67.78	66.87	66.12	65.95	65.84	65.77		65.65	
31		66.12		66.28	68.16		66.12		65.84	65.77		65.64	
Mean	65.75	65.93	66.04	66.58	66.81	66.66	66.31	66.02	65.89	65.80	65.73	65.67	
Max	66.00	66.29	66.52	67.95	68.16	67.44	66.73	66.14	65.94	65.84	65.76	65.71	68.16
Min	65.70	65.72	65.85	66.15	66.34	66.37	66.12	65.95	65.84	65.77	65.70	65.64	65.64

Annual Max Momentary Gage Height 68.58 M (MSL), at 14.00 Hours, on Jul 7, 2001
Zero Gage at Bottom Elevation 62.72 M (MSL), River Bed 64.86 M (MSL)
Left Bank Elevation 70.61 M (MSL)
Right Bank Elevation 81.25 M (MSL), Drainage Area 777 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.60	1.40	9.50	17.50	22.00	96.90	43.10	12.60	6.20	3.80	2.20	0.90	
2	1.60	2.20	8.90	13.00	98.60	69.75	34.00	11.40	6.20	3.60	2.20	0.90	
3	8.00	3.20	7.10	19.50	91.80	57.80	30.00	10.70	6.20	3.60	2.00	0.80	
4	4.60	5.00	8.90	26.50	51.50	50.80	26.50	11.00	6.20	3.40	2.00	0.80	
5	2.80	8.60	6.20	28.50	40.40	43.80	25.50	11.40	5.90	3.40	2.00	0.80	
6	2.20	12.20	5.30	71.25	51.50	39.20	26.00	10.70	5.90	3.40	2.00	0.80	
7	2.00	9.20	4.80	138.50	52.20	38.00	26.50	10.10	5.90	3.40	1.80	0.80	
8	1.80	4.80	4.00	144.50	39.20	34.00	32.00	9.80	5.60	3.40	1.80	0.80	
9	1.60	6.50	4.00	111.00	34.00	35.60	27.50	9.50	5.60	3.20	1.80	1.20	
10	1.40	9.20	4.00	69.00	30.50	41.00	25.00	9.20	5.30	3.20	1.80	1.00	
11	1.20	6.20	4.60	46.60	28.00	34.00	22.50	8.90	5.30	3.20	1.60	0.90	
12	1.20	4.40	7.70	35.00	45.90	35.60	23.50	8.90	5.00	3.20	1.60	0.80	
13	1.40	3.60	7.40	28.50	44.50	36.80	22.50	8.90	4.80	3.20	1.60	0.80	
14	1.40	3.40	6.80	25.50	41.70	36.20	21.00	8.90	4.80	3.20	1.60	0.80	
15	2.20	5.30	8.90	22.50	35.60	36.20	19.00	8.60	4.80	3.00	1.60	0.70	
16	3.00	4.40	9.20	22.00	32.00	31.50	21.50	8.30	4.80	3.00	1.60	0.70	
17	2.40	3.60	11.80	23.50	34.00	28.00	20.00	7.70	4.60	3.00	1.60	0.70	
18	2.20	6.20	10.40	27.00	36.20	26.00	17.50	7.70	4.60	3.00	1.40	0.60	
19	1.60	6.80	9.20	25.50	49.40	24.50	17.00	7.70	4.40	2.80	1.40	0.60	
20	1.40	7.10	8.60	23.50	55.70	26.00	16.00	7.70	4.40	2.80	1.40	0.50	
21	1.20	8.00	8.00	21.50	46.60	27.00	15.50	7.40	4.40	2.80	1.20	0.50	
22	1.00	7.70	8.60	30.50	38.00	23.50	14.20	7.40	4.40	2.80	1.20	0.60	
23	1.00	6.80	11.80	33.50	34.00	41.70	14.20	7.10	4.20	2.60	1.20	1.20	
24	1.00	5.00	10.40	30.00	32.00	37.40	15.00	7.10	4.20	2.60	1.00	0.90	
25	1.00	4.80	10.40	24.50	29.50	36.80	14.60	6.80	4.00	2.60	1.00	0.80	
26	2.40	4.60	11.40	21.00	29.50	37.40	14.20	6.80	4.00	2.60	1.00	0.70	
27	2.20	4.40	10.40	19.00	35.60	33.50	13.40	6.50	4.00	2.40	1.20	0.60	
28	1.60	4.00	23.00	18.50	48.00	36.20	13.00	6.50	3.80	2.40	1.00	0.50	
29	1.40	7.10	31.00	19.00	90.10	42.40	13.00	6.50	3.80	2.40		0.50	
30	1.40	19.50	21.50	23.50	127.60	52.90	11.80	6.50	3.80	2.40		0.50	
31		11.80		19.00	165.80		11.80		3.80	2.40		0.40	
Total	59.80	197.00	293.80	1178.85	1591.40	1190.45	647.30	258.30	150.90	92.80	43.80	23.10	5727.50 CMSDAY
Mean	1.99	6.35	9.79	38.03	51.34	39.68	20.88	8.61	4.87	2.99	1.56	0.75	15.69 CMS
Max	8.00	19.50	31.00	144.50	165.80	96.90	43.10	12.60	6.20	3.80	2.20	1.20	165.80 CMS
Min	1.00	1.40	4.00	13.00	22.00	23.50	11.80	6.50	3.80	2.40	1.00	0.40	0.40 CMS
Runoff	5.167	17.021	25.384	101.853	137.497	102.855	55.927	22.317	13.038	8.018	3.784	1.996	494.856 MCM

Momentary Peak 215.60 CMS, at 68.58 M (MSL), at 14.00 Hours, on Jul 7, 2001

Runoff Yield 20.20 Liters/Second/Square KM, Momentary Peak Yield 277.477 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 512 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 6.50 meters from the top staff gage.

Elevation +6.055 m. (A.D.)

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 Float -

Rated by Current Meter 1984 to date.

Stability of Channel Regimes Stable.

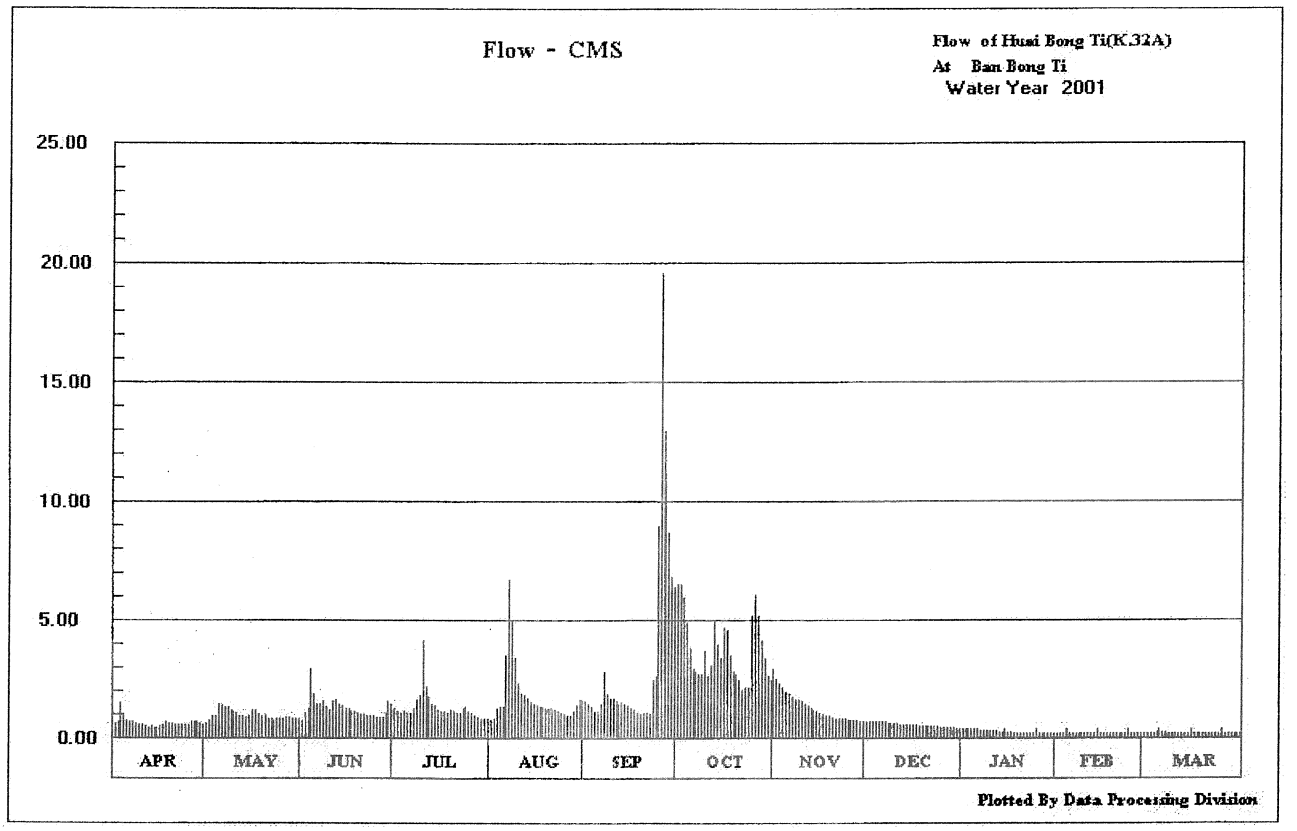
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 102 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.57	0.57	0.60	0.68	0.60	0.74	1.14	0.90	0.58	0.53	0.49	0.49	
2	0.58	0.60	0.65	0.66	0.61	0.71	1.14	0.86	0.58	0.53	0.49	0.49	
3	0.73	0.63	0.68	0.65	0.68	0.69	1.10	0.84	0.58	0.53	0.49	0.49	
4	0.64	0.63	0.90	0.66	0.69	0.66	1.03	0.82	0.58	0.53	0.49	0.50	
5	0.60	0.72	0.79	0.65	0.69	0.66	0.96	0.80	0.58	0.53	0.49	0.51	
6	0.59	0.70	0.72	0.65	0.94	0.72	0.90	0.79	0.58	0.53	0.49	0.51	
7	0.58	0.69	0.72	0.68	1.15	0.89	0.89	0.77	0.58	0.52	0.49	0.51	
8	0.57	0.69	0.74	0.75	1.04	0.79	0.88	0.75	0.57	0.52	0.49	0.51	
9	0.56	0.67	0.69	0.78	0.93	0.76	0.88	0.75	0.57	0.52	0.49	0.50	
10	0.56	0.66	0.67	0.98	0.84	0.76	0.95	0.74	0.57	0.52	0.49	0.49	
11	0.55	0.65	0.74	0.83	0.79	0.74	0.87	0.72	0.57	0.52	0.49	0.49	
12	0.54	0.63	0.75	0.77	0.78	0.72	0.91	0.70	0.56	0.52	0.49	0.49	
13	0.55	0.63	0.72	0.72	0.76	0.73	1.04	0.68	0.56	0.51	0.49	0.49	
14	0.54	0.62	0.70	0.70	0.73	0.71	0.97	0.67	0.56	0.51	0.49	0.49	
15	0.54	0.63	0.68	0.67	0.71	0.70	0.93	0.66	0.56	0.51	0.49	0.48	
16	0.55	0.67	0.68	0.66	0.70	0.68	1.02	0.65	0.56	0.51	0.49	0.48	
17	0.56	0.67	0.66	0.66	0.69	0.67	1.01	0.64	0.56	0.51	0.49	0.48	
18	0.58	0.64	0.66	0.65	0.69	0.65	0.94	0.63	0.55	0.50	0.49	0.48	
19	0.57	0.63	0.65	0.67	0.68	0.64	0.89	0.63	0.55	0.50	0.49	0.47	
20	0.57	0.63	0.64	0.66	0.68	0.65	0.88	0.62	0.55	0.50	0.49	0.47	
21	0.56	0.61	0.64	0.65	0.68	0.65	0.85	0.61	0.55	0.50	0.49	0.47	
22	0.56	0.61	0.63	0.65	0.67	0.64	0.81	0.61	0.55	0.50	0.49	0.47	
23	0.56	0.60	0.63	0.68	0.66	0.85	0.82	0.61	0.55	0.50	0.49	0.49	
24	0.56	0.61	0.63	0.69	0.65	0.87	0.82	0.61	0.55	0.50	0.49	0.47	
25	0.56	0.61	0.62	0.66	0.64	1.26	1.05	0.60	0.54	0.49	0.49	0.47	
26	0.58	0.61	0.62	0.65	0.63	1.59	1.11	0.60	0.54	0.49	0.49	0.47	
27	0.58	0.62	0.62	0.63	0.63	1.40	1.05	0.60	0.54	0.49	0.49	0.47	
28	0.58	0.62	0.65	0.62	0.66	1.25	0.98	0.60	0.54	0.49	0.49	0.47	
29	0.57	0.61	0.74	0.61	0.70	1.16	0.93	0.59	0.54	0.49		0.47	
30	0.56	0.61	0.71	0.61	0.75	1.13	0.87	0.59	0.53	0.49		0.47	
31		0.61		0.61	0.75		0.85		0.53	0.49		0.47	
Mean	0.57	0.63	0.68	0.68	0.74	0.84	0.95	0.69	0.56	0.51	0.49	0.48	
Max	0.73	0.72	0.90	0.98	1.15	1.59	1.14	0.90	0.58	0.53	0.49	0.51	1.59
Min	0.54	0.57	0.60	0.61	0.60	0.64	0.81	0.59	0.53	0.49	0.49	0.47	0.47

Annual Max Momentary Gage Height 1.76 M (A.D), at 3.00 Hours, on Sep 26, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.44 M (A.D)
Left Bank Elevation 6.21 M (A.D)
Right Bank Elevation 6.11 M (A.D), Drainage Area 512 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.69	0.69	0.86	1.31	0.86	1.66	6.60	3.00	0.74	0.46	0.23	0.23	
2	0.74	0.86	1.14	1.20	0.91	1.49	6.60	2.60	0.74	0.46	0.23	0.23	
3	1.60	1.03	1.31	1.14	1.31	1.37	6.00	2.40	0.74	0.46	0.23	0.23	
4	1.09	1.03	3.00	1.20	1.37	1.20	4.95	2.20	0.74	0.46	0.23	0.29	
5	0.86	1.54	1.94	1.14	1.37	1.20	3.90	2.00	0.74	0.46	0.23	0.34	
6	0.80	1.43	1.54	1.14	3.60	1.54	3.00	1.94	0.74	0.46	0.23	0.34	
7	0.74	1.37	1.54	1.31	6.75	2.90	2.90	1.83	0.74	0.40	0.23	0.34	
8	0.69	1.37	1.66	1.71	5.10	1.94	2.80	1.71	0.69	0.40	0.23	0.34	
9	0.63	1.26	1.37	1.89	3.45	1.77	2.80	1.71	0.69	0.40	0.23	0.29	
10	0.63	1.20	1.26	4.20	2.40	1.77	3.75	1.66	0.69	0.40	0.23	0.23	
11	0.57	1.14	1.66	2.30	1.94	1.66	2.70	1.54	0.69	0.40	0.23	0.23	
12	0.51	1.03	1.71	1.83	1.89	1.54	3.15	1.43	0.63	0.40	0.23	0.23	
13	0.57	1.03	1.54	1.54	1.77	1.60	5.10	1.31	0.63	0.34	0.23	0.23	
14	0.51	0.97	1.43	1.43	1.60	1.49	4.05	1.26	0.63	0.34	0.23	0.23	
15	0.51	1.03	1.31	1.26	1.49	1.43	3.45	1.20	0.63	0.34	0.23	0.17	
16	0.57	1.26	1.31	1.20	1.43	1.31	4.80	1.14	0.63	0.34	0.23	0.17	
17	0.63	1.26	1.20	1.20	1.37	1.26	4.65	1.09	0.63	0.34	0.23	0.17	
18	0.74	1.09	1.20	1.14	1.37	1.14	3.60	1.03	0.57	0.29	0.23	0.17	
19	0.69	1.03	1.14	1.26	1.31	1.09	2.90	1.03	0.57	0.29	0.23	0.11	
20	0.69	1.03	1.09	1.20	1.31	1.14	2.80	0.97	0.57	0.29	0.23	0.11	
21	0.63	0.91	1.09	1.14	1.31	1.14	2.50	0.91	0.57	0.29	0.23	0.11	
22	0.63	0.91	1.03	1.14	1.26	1.09	2.10	0.91	0.57	0.29	0.23	0.11	
23	0.63	0.86	1.03	1.31	1.20	2.50	2.20	0.91	0.57	0.29	0.23	0.23	
24	0.63	0.91	1.03	1.37	1.14	2.70	2.20	0.91	0.57	0.29	0.23	0.11	
25	0.63	0.91	0.97	1.20	1.09	9.00	5.25	0.86	0.51	0.23	0.23	0.11	
26	0.74	0.91	0.97	1.14	1.03	19.65	6.15	0.86	0.51	0.23	0.23	0.11	
27	0.74	0.97	0.97	1.03	1.03	13.00	5.25	0.86	0.51	0.23	0.23	0.11	
28	0.74	0.97	1.14	0.97	1.20	8.75	4.20	0.86	0.51	0.23	0.23	0.11	
29	0.69	0.91	1.66	0.91	1.43	6.90	3.45	0.80	0.51	0.23		0.11	
30	0.63	0.91	1.49	0.91	1.71	6.45	2.70	0.80	0.46	0.23		0.11	
31		0.91		0.91	1.71		2.50		0.46	0.23		0.11	
Total	21.15	32.73	40.59	42.63	56.71	101.68	119.00	41.73	19.18	10.50	6.44	6.01	498.35 CMSDAY
Mean	0.70	1.06	1.35	1.38	1.83	3.39	3.84	1.39	0.62	0.34	0.23	0.19	1.37 CMS
Max	1.60	1.54	3.00	4.20	6.75	19.65	6.60	3.00	0.74	0.46	0.23	0.34	19.65 CMS
Min	0.51	0.69	0.86	0.91	0.86	1.09	2.10	0.80	0.46	0.23	0.23	0.11	0.11 CMS
Runoff	1.827	2.828	3.507	3.683	4.900	8.785	10.282	3.605	1.657	0.907	0.556	0.519	43.057 MCM

Momentary Peak 26.40 CMS, at 1.76 M (A.D), at 3.00 Hours, on Sep 26, 2001

Runoff Yield 2.67 Liters/Second/Square KM, Momentary Peak Yield 51.563 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Khwae Yai 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

Drainage Area 14,528 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 about 3 meters from the third staff gage.

Elevation +7.667 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 1984 - 1985, 1987 to date.

Rated by Float -

Rated by Current Meter 1984 - 1985, 1987 to date.

Stability of Channel Regimes Fairly stable.

Overbank Flow Conditions No overbank flow.

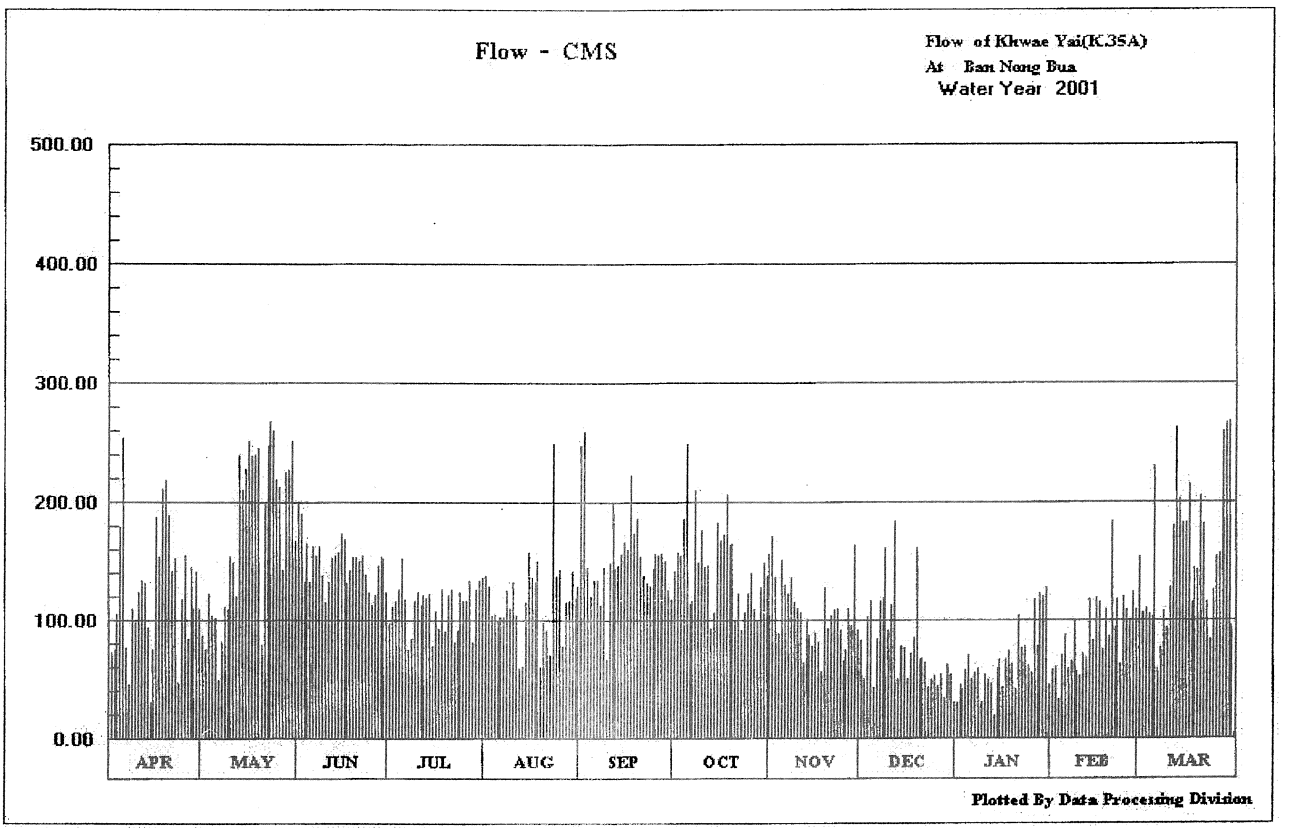
General Description Records good. Flow regulated by Sri Nakarindra Dam.

Stage-discharge relation defined by 69 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.87	3.02	4.01	3.13	3.51	4.38	3.54	3.67	2.98	2.22	2.68	3.65	
2	2.89	2.90	3.94	3.28	3.44	4.46	3.68	3.79	2.57	2.48	2.71	3.23	
3	3.22	3.38	3.47	3.33	3.21	3.57	3.66	3.50	3.19	2.41	2.27	3.27	
4	3.85	3.21	3.74	3.42	3.22	3.36	3.91	3.05	3.33	2.67	2.83	3.22	
5	4.42	3.18	3.47	3.63	3.17	3.48	4.39	3.62	2.44	2.84	3.04	3.19	
6	2.91	2.55	3.72	3.34	3.19	3.48	3.30	3.45	2.99	2.56	2.70	4.25	
7	2.47	2.97	3.66	2.89	3.19	3.29	3.33	3.38	3.33	2.64	2.77	2.69	
8	3.26	3.28	3.72	3.00	3.41	3.57	4.10	3.50	3.35	2.69	3.16	2.91	
9	3.15	3.26	3.51	3.33	3.27	2.79	3.60	3.32	3.71	2.23	2.66	3.24	
10	3.39	3.65	3.32	3.39	3.47	3.60	3.83	3.27	3.07	2.62	2.60	3.10	
11	3.48	3.60	3.47	3.29	3.21	4.01	3.57	3.23	3.29	2.55	2.85	3.43	
12	3.46	3.36	3.63	3.37	2.69	3.56	3.58	2.76	3.89	2.49	2.80	3.86	
13	3.10	4.32	3.66	3.35	2.71	3.58	3.09	3.16	2.57	2.02	3.34	4.49	
14	2.22	4.10	3.68	3.38	3.32	3.67	3.23	3.03	2.93	2.70	2.98	4.04	
15	2.89	4.23	3.81	2.92	3.68	3.75	3.88	2.92	2.91	2.78	3.35	3.88	
16	3.92	4.41	3.77	3.24	3.50	3.70	3.76	3.05	2.56	2.44	3.31	3.88	
17	3.64	4.32	3.46	3.09	3.47	4.19	3.80	2.97	2.85	2.78	2.89	4.14	
18	4.11	4.33	3.55	3.42	3.61	3.81	4.07	2.66	3.01	2.88	3.26	3.32	
19	4.16	4.36	3.64	3.06	2.71	3.91	3.73	3.43	3.71	2.74	3.02	3.56	
20	3.93	2.94	3.64	3.37	3.14	3.64	3.74	3.09	2.78	2.42	3.89	3.55	
21	3.54	4.01	3.61	3.42	3.07	3.51	3.17	3.20	2.80	3.21	3.11	4.06	
22	3.63	4.38	3.66	2.96	2.84	3.46	3.38	3.25	2.75	2.91	3.34	3.87	
23	2.50	4.52	3.52	3.07	4.39	3.44	3.08	3.27	2.44	2.93	2.74	3.31	
24	3.34	4.47	3.40	3.39	3.51	3.56	3.23	3.07	2.53	2.73	3.36	2.99	
25	3.66	4.16	3.29	3.33	3.55	3.67	3.38	2.77	2.61	2.64	3.26	3.41	
26	2.99	4.12	3.37	3.33	2.93	3.66	3.53	2.90	2.45	3.34	3.16	3.64	
27	3.57	3.55	3.58	3.48	3.31	3.67	3.26	3.27	2.62	2.93	3.39	3.67	
28	3.26	4.21	3.65	2.96	3.33	3.61	3.17	3.12	2.28	3.38	3.26	4.46	
29	3.54	4.22	3.63	3.42	3.54	3.41	3.43	3.73	2.74	3.36		4.51	
30	3.25	4.41	3.39	3.48	3.35	3.34	3.60	3.07	2.62	3.43		4.52	
31		3.76		3.50	3.44		3.51		2.23	2.47		3.12	
Mean	3.35	3.78	3.60	3.28	3.30	3.64	3.57	3.22	2.89	2.73	3.03	3.63	
Max	4.42	4.52	4.01	3.63	4.39	4.46	4.39	3.79	3.89	3.43	3.89	4.52	4.52
Min	2.22	2.55	3.29	2.89	2.69	2.79	3.08	2.66	2.23	2.02	2.27	2.69	2.02

Annual Max Momentary Gage Height 4.72 M (A.D), at 3.00 Hours, on Oct 18, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.16 M (A.D)
Left Bank Elevation 7.11 M (A.D)
Right Bank Elevation 10.65 M (A.D), Drainage Area 14528 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	74.60	87.80	200.30	98.00	139.20	249.20	142.80	158.40	84.20	31.20	59.60	156.00	
2	76.20	77.00	191.20	113.00	130.80	260.40	159.60	172.80	52.20	46.80	61.80	108.00	
3	107.00	123.80	134.40	118.30	106.00	146.40	157.20	138.00	104.00	42.60	34.20	112.00	
4	180.00	106.00	166.80	128.40	107.00	121.60	187.30	90.50	118.30	58.90	71.40	107.00	
5	254.80	103.00	134.40	153.60	102.00	135.60	250.60	152.40	44.40	72.20	89.60	104.00	
6	77.90	51.00	164.40	119.40	104.00	135.60	115.00	132.00	85.10	51.60	61.00	231.50	
7	46.20	83.30	157.20	76.20	104.00	114.00	118.30	123.80	118.30	56.80	66.60	60.30	
8	111.00	113.00	164.40	86.00	127.20	146.40	212.00	138.00	120.50	60.30	101.00	77.90	
9	100.00	111.00	139.20	118.30	112.00	68.20	150.00	117.20	163.20	31.80	58.20	109.00	
10	124.90	156.00	117.20	124.90	134.40	150.00	177.60	112.00	92.30	55.40	54.00	95.00	
11	135.60	150.00	134.40	114.00	106.00	200.30	146.40	108.00	114.00	51.00	73.00	129.60	
12	133.20	121.60	153.60	122.70	60.30	145.20	147.60	65.80	184.80	47.40	69.00	181.20	
13	95.00	240.80	157.20	120.50	61.80	147.60	94.10	101.00	52.20	21.00	119.40	264.60	
14	31.20	212.00	159.60	123.80	117.20	158.40	108.00	88.70	79.70	61.00	84.20	204.20	
15	76.20	228.90	175.20	78.80	159.60	168.00	183.60	78.80	77.90	67.40	120.50	183.60	
16	188.60	253.40	170.40	109.00	138.00	162.00	169.20	90.50	51.60	44.40	116.10	183.60	
17	154.80	240.80	133.20	94.10	134.40	223.70	174.00	83.30	73.00	67.40	76.20	217.20	
18	213.30	242.20	144.00	128.40	151.20	175.20	208.10	58.20	86.90	75.40	111.00	117.20	
19	219.80	246.40	154.80	91.40	61.80	187.30	165.60	129.60	163.20	64.20	87.80	145.20	
20	189.90	80.60	154.80	122.70	99.00	154.80	166.80	94.10	67.40	43.20	184.80	144.00	
21	142.80	200.30	151.20	128.40	92.30	139.20	102.00	105.00	69.00	106.00	96.00	206.80	
22	153.60	249.20	157.20	82.40	72.20	133.20	123.80	110.00	65.00	77.90	119.40	182.40	
23	48.00	269.00	140.40	92.30	250.60	130.80	93.20	112.00	44.40	79.70	64.20	116.10	
24	119.40	261.80	126.00	124.90	139.20	145.20	108.00	92.30	49.80	63.40	121.60	85.10	
25	157.20	219.80	114.00	118.30	144.00	158.40	123.80	66.60	54.70	56.80	111.00	127.20	
26	85.10	214.60	122.70	118.30	79.70	157.20	141.60	77.00	45.00	119.40	101.00	154.80	
27	146.40	144.00	147.60	135.60	116.10	158.40	111.00	112.00	55.40	79.70	124.90	158.40	
28	111.00	226.30	156.00	82.40	118.30	151.20	102.00	97.00	34.80	123.80	111.00	260.40	
29	142.80	227.60	153.60	128.40	142.80	127.20	129.60	165.60	64.20	121.60		267.50	
30	110.00	253.40	124.90	135.60	120.50	119.40	150.00	92.30	55.40	129.60		269.00	
31		169.20		138.00	130.80		139.20		31.80	46.20		97.00	
Total	3806.50	5463.80	4500.30	3526.10	3662.40	4670.10	4558.00	3262.90	2502.70	2054.10	2548.50	4855.80	45411.21 CMSDAY
Mean	126.88	176.25	150.01	113.75	118.14	155.67	147.03	108.76	80.73	66.26	91.02	156.64	124.41 CMS
Max	254.80	269.00	200.30	153.60	250.60	260.40	250.60	172.80	184.80	129.60	184.80	269.00	269.00 CMS
Min	31.20	51.00	114.00	76.20	60.30	68.20	93.20	58.20	31.80	21.00	34.20	60.30	21.00 CMS
Runoff	328.882	472.072	388.826	304.655	316.431	403.497	393.811	281.915	216.233	177.474	220.190	419.541	3923.528 MCM

Momentary Peak 299.20 CMS, at 4.72 M (A.D), at 3.00 Hours, on Oct 18, 2001

Runoff Yield 8.56 Liters/Second/Square KM, Momentary Peak Yield 20.595 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Khwae Yai 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

Drainage Area 11,787 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 +6.888 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 1984 to date.

Rating Operation

Period of Rating 1984 to date.

Rated by Float -

Rated by Current Meter 1984 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

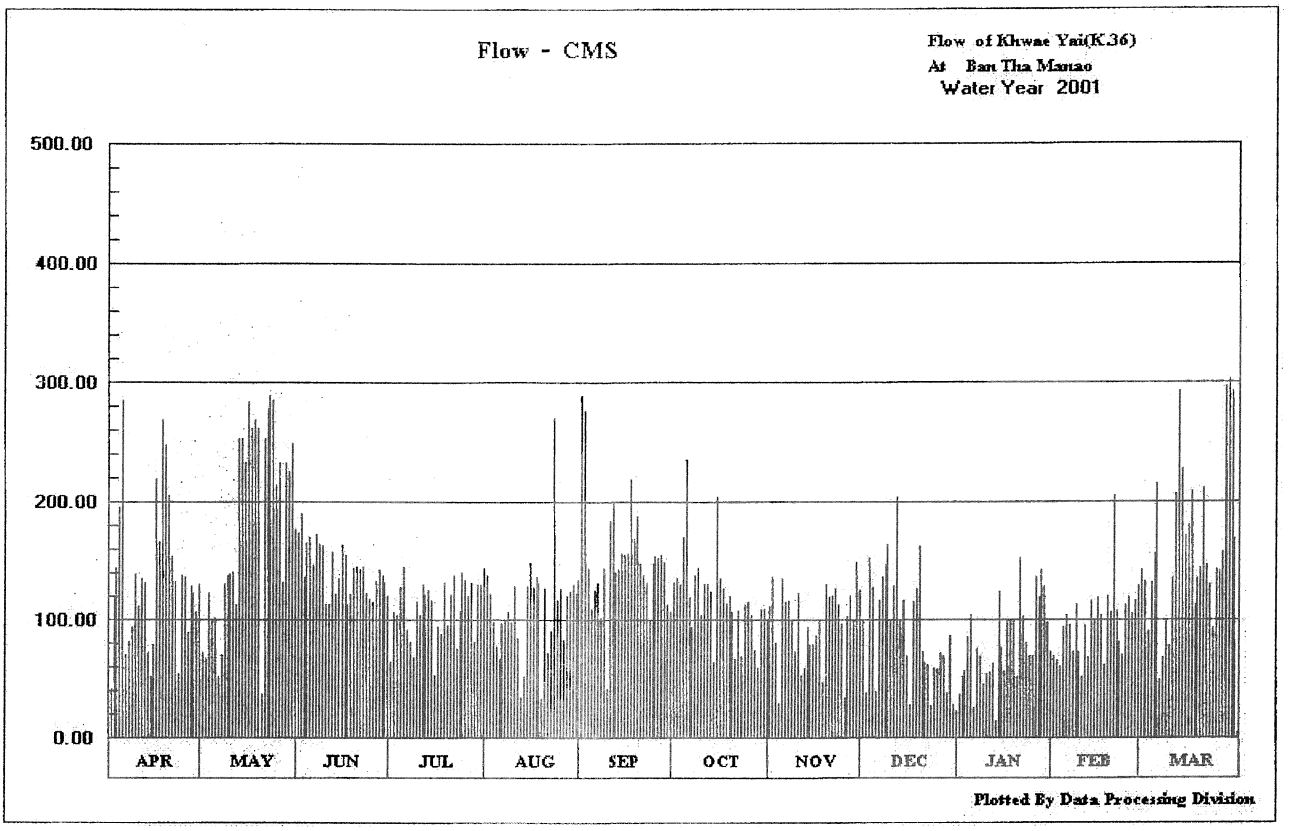
General Description Records good. Flow regulated by Sri Nakarindra Dam.

Stage-discharge relation defined by 67 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.40	2.76	3.69	2.67	3.39	4.54	3.34	3.15	3.04	2.32	2.72	3.43	
2	3.23	2.70	3.82	3.11	3.24	4.45	3.37	3.38	2.35	2.52	2.69	3.35	
3	3.44	3.26	3.38	3.09	3.02	3.45	3.32	2.85	3.52	2.59	2.63	2.95	
4	3.86	3.05	3.62	3.30	2.81	3.13	3.66	2.22	3.30	2.90	2.99	3.33	
5	4.51	3.06	3.66	3.46	2.70	3.28	4.16	3.37	2.36	3.09	3.09	3.55	
6	2.74	2.53	3.47	2.96	3.01	3.34	3.22	3.19	3.20	2.17	3.00	4.01	
7	2.86	2.74	3.68	2.86	3.05	3.06	2.99	3.20	3.38	2.79	2.77	2.50	
8	2.98	3.32	3.61	2.71	3.11	3.45	3.39	3.05	3.47	2.73	3.16	2.71	
9	3.40	3.39	3.60	3.19	3.02	2.39	3.45	2.77	3.61	2.45	2.77	3.02	
10	3.15	3.40	3.17	3.08	3.31	3.77	3.09	3.26	3.04	2.56	2.53	2.82	
11	3.37	3.41	3.17	3.32	2.89	3.89	3.32	2.54	3.31	2.57	3.00	3.37	
12	3.34	3.16	3.56	3.24	2.29	3.41	3.32	2.62	3.93	2.66	2.71	3.95	
13	2.76	4.29	3.25	3.28	2.53	3.43	3.27	2.99	3.03	1.98	3.20	4.56	
14	2.53	4.29	3.37	3.20	3.31	3.55	2.67	2.84	3.20	3.27	3.04	4.11	
15	2.84	4.14	3.61	2.54	3.49	3.54	3.93	2.83	2.73	2.81	3.22	3.67	
16	4.04	4.50	3.54	2.99	3.30	3.55	3.37	2.91	2.21	2.59	3.08	3.74	
17	3.63	4.35	3.17	2.92	3.38	4.04	3.29	3.04	3.19	3.03	2.64	3.96	
18	4.40	4.40	3.25	3.34	3.34	3.65	3.18	2.46	3.29	3.04	3.23	3.17	
19	4.25	4.35	3.44	3.00	2.27	3.80	3.23	3.32	3.60	3.04	3.11	3.37	
20	3.94	2.33	3.46	3.24	3.29	3.48	3.11	3.22	2.77	2.53	3.94	3.44	
21	3.53	4.29	3.43	3.39	2.75	3.39	2.70	3.23	2.67	3.52	3.12	3.98	
22	3.35	4.46	3.46	2.80	2.95	3.34	3.12	3.29	2.64	3.07	2.86	3.47	
23	2.56	4.54	3.26	3.12	4.41	3.05	2.72	3.17	2.19	2.85	2.74	3.32	
24	3.39	4.51	3.21	3.41	3.20	3.48	3.16	3.01	2.62	2.73	3.17	2.97	
25	3.38	4.00	3.19	3.36	3.29	3.53	3.19	2.30	2.60	2.73	3.22	3.43	
26	2.93	4.14	3.35	3.23	2.87	3.52	3.09	3.07	2.76	3.38	3.10	3.42	
27	3.31	3.34	3.43	3.34	3.23	3.54	2.78	3.23	2.73	3.22	3.20	3.56	
28	3.26	4.14	3.39	2.86	3.27	3.49	2.62	3.03	2.34	3.43	3.31	4.59	
29	3.11	4.09	3.34	3.32	3.32	3.17	3.13	3.49	2.91	3.31		4.63	
30	3.32	4.26	3.23	3.32	3.26	3.11	3.13	3.28	2.21	3.02		4.55	
31		3.71		3.44	3.36		3.04		2.13	2.77		3.65	
Mean	3.33	3.71	3.43	3.13	3.12	3.49	3.21	3.01	2.91	2.83	3.01	3.57	
Max	4.51	4.54	3.82	3.46	4.41	4.54	4.16	3.49	3.93	3.52	3.94	4.63	4.63
Min	2.40	2.33	3.17	2.54	2.27	2.39	2.62	2.22	2.13	1.98	2.53	2.50	1.98

Annual Max Momentary Gage Height 4.70 M (A.D), at 18.00 Hours, on Aug 23, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.55 M (A.D)
Left Bank Elevation 6.89 M (A.D)
Right Bank Elevation 7.12 M (A.D), Drainage Area 11787 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	43.00	73.40	174.80	65.30	138.90	291.00	133.40	112.50	101.00	37.40	69.80	143.60	
2	121.30	68.00	191.60	108.10	122.40	277.50	136.70	137.80	39.50	52.60	67.10	134.50	
3	144.80	124.60	137.80	106.00	99.00	146.00	131.20	82.00	154.40	58.20	61.70	92.00	
4	196.80	102.00	166.40	129.00	78.00	110.30	171.20	30.40	129.00	87.00	96.00	132.30	
5	286.50	103.00	171.20	147.20	68.00	126.80	236.40	136.70	40.20	106.00	106.00	158.00	
6	71.60	53.40	148.40	93.00	98.00	133.40	120.20	116.90	118.00	26.90	97.00	216.30	
7	83.00	71.60	173.60	83.00	102.00	103.00	96.00	118.00	137.80	76.10	74.30	51.00	
8	95.00	131.20	165.20	68.90	108.10	146.00	138.90	102.00	148.40	70.70	113.60	68.90	
9	140.00	138.90	164.00	116.90	99.00	42.30	146.00	74.30	165.20	47.00	74.30	99.00	
10	112.50	140.00	114.70	105.00	130.10	185.10	106.00	124.60	101.00	55.80	53.40	79.00	
11	136.70	141.20	114.70	131.20	86.00	200.70	131.20	54.20	130.10	56.60	97.00	136.70	
12	133.40	113.60	159.20	122.40	35.30	141.20	131.20	60.80	205.90	64.40	68.90	208.50	
13	73.40	254.60	123.50	126.80	53.40	143.60	125.70	96.00	100.00	14.80	118.00	294.00	
14	53.40	254.60	136.70	118.00	130.10	158.00	65.30	81.00	118.00	125.70	101.00	229.40	
15	81.00	233.60	165.20	54.20	150.80	156.80	205.90	80.00	70.70	78.00	120.20	172.40	
16	220.20	285.00	156.80	96.00	129.00	158.00	136.70	88.00	29.70	58.20	105.00	181.20	
17	167.60	263.00	114.70	89.00	137.80	220.20	127.90	101.00	116.90	100.00	62.60	209.80	
18	270.00	270.00	123.50	133.40	133.40	170.00	115.80	47.80	127.90	101.00	121.30	114.70	
19	249.00	263.00	144.80	97.00	33.90	189.00	121.30	131.20	164.00	101.00	108.10	136.70	
20	207.20	38.10	147.20	122.40	127.90	149.60	108.10	120.20	74.30	53.40	207.20	144.80	
21	155.60	254.60	143.60	138.90	72.50	138.90	68.00	121.30	65.30	154.40	109.20	212.40	
22	134.50	279.00	147.20	77.00	92.00	133.40	109.20	127.90	62.60	104.00	83.00	148.40	
23	55.80	291.00	124.60	109.20	271.50	102.00	69.80	114.70	28.30	82.00	71.60	131.20	
24	138.90	286.50	119.10	141.20	118.00	149.60	113.60	98.00	60.80	70.70	114.70	94.00	
25	137.80	215.00	116.90	135.60	127.90	155.60	116.90	36.00	59.00	70.70	120.20	143.60	
26	90.00	233.60	134.50	121.30	84.00	154.40	106.00	104.00	73.40	137.80	107.00	142.40	
27	130.10	133.40	143.60	133.40	121.30	156.80	75.20	121.30	70.70	120.20	118.00	159.20	
28	124.60	233.60	138.90	83.00	125.70	150.80	60.80	100.00	38.80	143.60	130.10	298.50	
29	108.10	226.70	133.40	131.20	131.20	114.70	110.30	150.80	88.00	130.10		304.50	
30	131.20	250.40	121.30	131.20	124.60	108.10	110.30	126.80	29.70	99.00		292.50	
31		177.30		144.80	135.60		101.00		24.10	74.30		170.00	
Total	4093.00	5703.90	4317.10	3459.60	3465.40	4612.80	3726.20	2996.20	2872.70	2557.60	2776.30	5099.50	45680.30 CMSDAY
Mean	136.43	184.00	143.90	111.60	111.79	153.76	120.20	99.87	92.67	82.50	99.15	164.50	125.15 CMS
Max	286.50	291.00	191.60	147.20	271.50	291.00	236.40	150.80	205.90	154.40	207.20	304.50	304.50 CMS
Min	43.00	38.10	114.70	54.20	33.90	42.30	60.80	30.40	24.10	14.80	53.40	51.00	14.80 CMS
Runoff	353.635	492.817	372.997	298.909	299.411	398.546	321.944	258.872	248.201	220.977	239.872	440.597	3946.778 MCM

Momentary Peak 315.00 CMS, at 4.70 M (A.D), at 18.00 Hours, on Aug 23, 2001

Runoff Yield 10.62 Liters/Second/Square KM, Momentary Peak Yield 26.724 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Khwae Noi 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

Drainage Area 10,603 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +19.840 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 5 meters from the automatic gage building.

Elevation +33.266 m. (M.S.L.)

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 Float -

Rated by Current Meter 1984 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

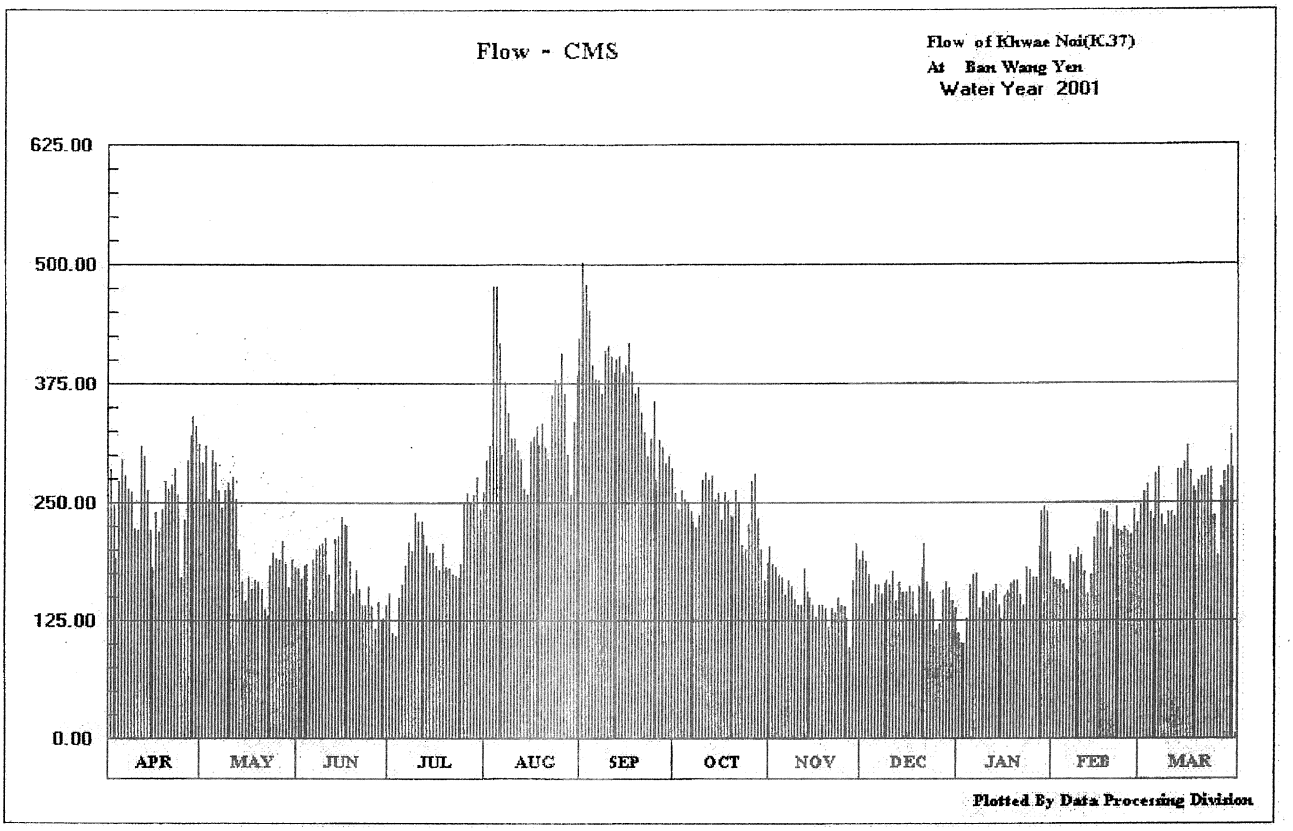
General Description Records good. Flow regulated by Khao Laem Dam.

Stage-discharge relation defined by 64 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.42	24.46	23.78	23.59	24.47	25.57	24.27	23.94	23.91	23.29	23.72	24.20	
2	24.20	24.56	23.71	23.29	24.56	25.45	24.17	23.82	23.84	23.22	23.69	24.28	
3	23.86	24.24	23.81	23.27	25.44	25.32	24.29	23.80	23.74	23.22	23.70	24.33	
4	24.35	24.53	23.82	23.56	25.44	25.02	24.24	23.73	23.52	23.41	23.66	24.15	
5	24.48	24.46	23.55	23.66	25.14	24.95	24.22	23.72	23.66	23.66	23.62	24.11	
6	24.38	24.29	23.85	23.81	24.51	24.94	24.16	23.58	23.66	23.74	23.88	24.39	
7	24.30	24.18	23.92	23.97	24.93	24.86	24.10	23.70	23.59	23.75	23.83	24.43	
8	24.28	24.29	23.95	23.91	24.75	25.10	24.06	23.65	23.67	23.48	23.86	24.14	
9	24.05	24.34	23.96	24.15	24.60	25.13	24.14	23.55	23.70	23.60	23.93	24.07	
10	24.04	24.29	24.00	24.10	24.60	25.07	24.36	23.51	23.66	23.56	23.88	24.15	
11	24.56	24.37	23.74	24.10	24.53	24.98	24.40	23.51	23.76	23.59	23.76	24.15	
12	24.50	24.24	23.46	24.02	24.48	25.05	24.36	23.78	23.54	23.62	23.59	24.13	
13	24.29	23.92	23.99	23.95	24.30	25.07	24.38	23.61	23.68	23.66	23.74	24.42	
14	24.04	23.68	24.01	23.90	24.26	24.98	24.24	23.56	23.60	23.51	24.00	24.42	
15	23.80	23.54	24.13	23.90	24.58	25.02	24.27	23.50	23.60	23.41	24.09	24.46	
16	24.15	23.72	24.08	23.81	24.61	25.14	24.11	23.42	23.65	23.57	24.17	24.56	
17	24.03	23.63	24.07	23.77	24.67	24.99	24.28	23.51	23.60	23.62	24.16	24.41	
18	24.17	23.69	23.84	23.96	24.57	24.86	24.23	23.51	23.44	23.67	24.15	24.31	
19	24.35	23.68	23.59	23.80	24.69	24.90	24.14	23.48	23.65	23.70	23.93	24.28	
20	24.30	23.63	23.77	23.78	24.55	24.75	24.13	23.34	23.80	23.69	24.07	24.35	
21	24.33	23.47	23.63	23.74	24.48	24.64	24.29	23.48	23.96	23.58	24.19	24.37	
22	24.43	23.43	23.51	23.73	24.85	24.50	24.22	23.45	23.68	23.51	24.04	24.37	
23	24.26	23.81	23.50	23.72	24.94	24.60	23.95	23.56	23.60	23.80	24.03	24.42	
24	23.72	23.90	23.65	23.82	24.91	24.82	23.92	23.51	23.55	23.77	24.06	24.43	
25	24.11	23.86	23.49	24.21	25.09	24.36	24.08	23.49	23.31	23.72	24.03	24.14	
26	24.47	23.85	23.33	24.27	24.86	24.59	24.35	23.41	23.36	23.72	24.02	23.88	
27	24.62	23.98	23.53	24.22	24.51	24.55	24.39	23.18	23.62	23.94	24.17	24.31	
28	24.73	23.82	23.39	24.26	24.26	24.45	24.12	23.70	23.68	24.16	24.09	24.40	
29	24.67	23.64	23.41	24.37	24.70	24.50	23.92	23.96	23.64	24.19		24.44	
30	24.57	23.85	23.51	24.17	24.96	24.43	23.70	23.85	23.54	24.16		24.62	
31		23.80		24.28	25.17		23.83		23.48	23.90		24.43	
Mean	24.28	23.97	23.73	23.91	24.72	24.89	24.17	23.59	23.64	23.66	23.93	24.31	
Max	24.73	24.56	24.13	24.37	25.44	25.57	24.40	23.96	23.96	24.19	24.19	24.62	25.57
Min	23.72	23.43	23.33	23.27	24.26	24.36	23.70	23.18	23.31	23.22	23.59	23.88	23.18

Annual Max Momentary Gage Height 25.64 M (MSL), at 14.00 Hours, on Sep 1, 2001
Zero Gage at Bottom Elevation 19.84 M (MSL), River Bed 19.73 M (MSL)
Left Bank Elevation 26.63 M (MSL)
Right Bank Elevation 27.73 M (MSL), Drainage Area 10603 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	286.6	293.8	181.2	154.6	295.6	504.0	260.9	205.4	200.6	112.6	172.8	249.0	
2	249.0	311.8	171.4	112.6	311.8	480.0	243.9	187.0	190.0	102.8	168.6	262.6	
3	193.0	255.8	185.5	109.8	478.0	454.0	264.3	184.0	175.6	102.8	170.0	271.1	
4	274.5	306.4	187.0	150.4	478.0	395.8	255.8	174.2	144.8	129.4	164.4	240.5	
5	297.4	293.8	149.0	164.4	418.6	382.5	252.4	172.8	164.4	164.4	158.8	233.7	
6	279.6	264.3	191.5	185.5	302.8	380.6	242.2	153.2	164.4	175.6	196.0	281.3	
7	266.0	245.6	202.2	210.2	378.7	365.8	232.0	170.0	154.6	177.0	188.5	288.4	
8	262.6	264.3	207.0	200.6	346.0	411.0	225.2	163.0	165.8	139.2	193.0	238.8	
9	223.5	272.8	208.6	240.5	319.0	416.7	238.8	149.0	170.0	156.0	203.8	226.9	
10	221.8	264.3	215.0	232.0	319.0	405.3	276.2	143.4	164.4	150.4	196.0	240.5	
11	311.8	277.9	175.6	232.0	306.4	388.2	283.0	143.4	178.4	154.6	178.4	240.5	
12	301.0	255.8	136.4	218.4	297.4	401.5	276.2	181.2	147.6	158.8	154.6	237.1	
13	264.3	202.2	213.4	207.0	266.0	405.3	279.6	157.4	167.2	164.4	175.6	286.6	
14	221.8	167.2	216.7	199.0	259.2	388.2	255.8	150.4	156.0	143.4	215.0	286.6	
15	184.0	147.6	237.1	199.0	315.4	395.8	260.9	142.0	156.0	129.4	230.3	293.8	
16	240.5	172.8	228.6	185.5	320.8	418.6	233.7	130.8	163.0	151.8	243.9	311.8	
17	220.1	160.2	226.9	179.8	331.6	390.1	262.6	143.4	156.0	158.8	242.2	284.8	
18	243.9	168.6	190.0	208.6	313.6	365.8	254.1	143.4	133.6	165.8	240.5	267.7	
19	274.5	167.2	154.6	184.0	335.2	373.0	238.8	139.2	163.0	170.0	203.8	262.6	
20	266.0	160.2	179.8	181.2	310.0	346.0	237.1	119.6	184.0	168.6	226.9	274.5	
21	271.1	137.8	160.2	175.6	297.4	326.2	264.3	139.2	208.6	153.2	247.3	277.9	
22	288.4	132.2	143.4	174.2	364.0	301.0	252.4	135.0	167.2	143.4	221.8	277.9	
23	259.2	185.5	142.0	172.8	380.6	319.0	207.0	150.4	156.0	184.0	220.1	286.6	
24	172.8	199.0	163.0	187.0	374.9	358.6	202.2	143.4	149.0	179.8	225.2	288.4	
25	233.7	193.0	140.6	250.7	409.1	276.2	228.6	140.6	115.4	172.8	220.1	238.8	
26	295.6	191.5	118.2	260.9	365.8	317.2	274.5	129.4	122.4	172.8	218.4	196.0	
27	322.6	211.8	146.2	252.4	302.8	310.0	281.3	97.2	158.8	205.4	243.9	267.7	
28	342.4	187.0	126.6	259.2	259.2	292.0	235.4	170.0	167.2	242.2	230.3	283.0	
29	331.6	161.6	129.4	277.9	337.0	301.0	202.2	208.6	161.6	247.3		290.2	
30	313.6	191.5	143.4	243.9	384.4	288.4	170.0	191.5	147.6	242.2		322.6	
31		184.0		262.6	424.3		188.5		139.2	199.0		288.4	
Total	7912.9	6627.5	5270.5	6272.3	10602.6	11157.8	7579.9	4658.1	4992.4	5117.9	5750.2	8296.3	84238.4 CMSDAY
Mean	263.8	213.8	175.7	202.3	342.0	371.9	244.5	155.3	161.0	165.1	205.4	267.6	230.8 CMS
Max	342.4	311.8	237.1	277.9	478.0	504.0	283.0	208.6	208.6	247.3	247.3	322.6	504.0 CMS
Min	172.8	132.2	118.2	109.8	259.2	276.2	170.0	97.2	115.4	102.8	154.6	196.0	97.2 CMS
Runoff	683.67	572.62	455.37	541.93	916.06	964.03	654.90	402.46	431.34	442.19	496.82	716.80	7278.20 MCM

Momentary Peak 518.00 CMS, at 25.64 M (MSL), at 14.00 Hours, on Sep 1, 2001

Runoff Yield 21.77 Liters/Second/Square KM, Momentary Peak Yield 48.854 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Lin Thin at Ban Lin Thin, Kanchanaburi (K.38A)

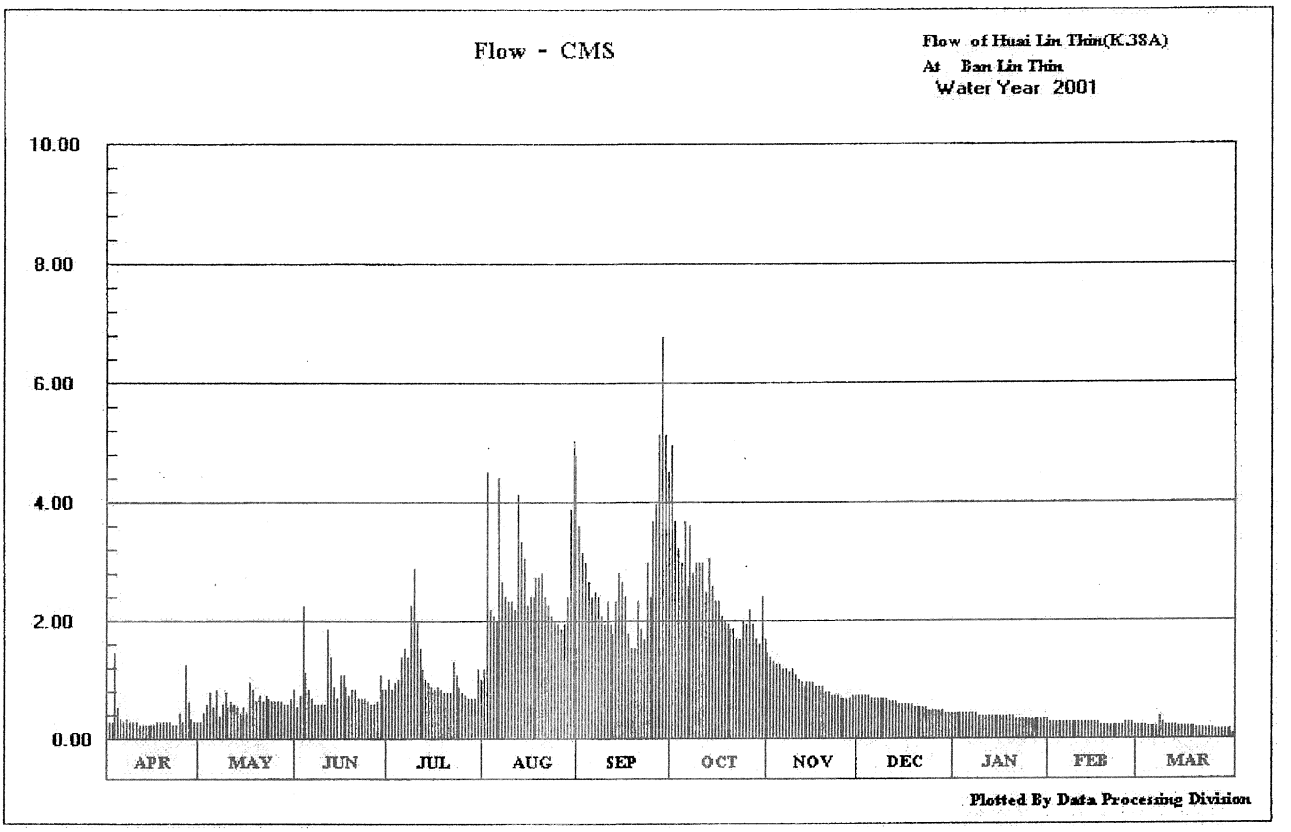
Lat 14 - 34 - 28 N. **Long** 98 - 49 - 07 E.

Location		on left bank at k.m. 95+700 on Kanchanaburi - Thong Pha Highway.
	Ban Lin Thin	**Amphoe** Thong Pha Phum **Changwat** Kanchanaburi
Drainage Area		114 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 abutment of the bridge.
	Elevation	28.446 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		2001 to date.
Rating Operation		
	Period of Rating	2001 to date.
	Rated by Float	-
	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 70 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.40	0.40	0.45	0.54	0.57	0.87	1.02	0.61	0.49	0.43	0.40	0.39	
2	0.40	0.43	0.49	0.51	0.97	0.82	0.88	0.60	0.49	0.43	0.40	0.39	
3	0.61	0.46	0.71	0.53	0.70	0.80	0.83	0.59	0.49	0.43	0.40	0.39	
4	0.45	0.50	0.56	0.54	0.69	0.76	0.80	0.58	0.49	0.43	0.40	0.38	
5	0.41	0.45	0.51	0.60	0.68	0.73	0.88	0.58	0.48	0.43	0.40	0.38	
6	0.40	0.51	0.48	0.62	0.96	0.74	0.75	0.57	0.48	0.43	0.40	0.38	
7	0.41	0.42	0.46	0.60	0.76	0.73	0.87	0.57	0.48	0.43	0.40	0.38	
8	0.40	0.46	0.46	0.71	0.73	0.69	0.78	0.56	0.48	0.43	0.40	0.42	
9	0.40	0.50	0.46	0.79	0.72	0.67	0.80	0.57	0.48	0.42	0.40	0.40	
10	0.40	0.45	0.46	0.68	0.72	0.72	0.80	0.55	0.48	0.42	0.40	0.39	
11	0.39	0.47	0.66	0.62	0.70	0.67	0.80	0.54	0.47	0.42	0.40	0.39	
12	0.39	0.46	0.60	0.57	0.93	0.65	0.74	0.53	0.47	0.42	0.40	0.39	
13	0.39	0.45	0.52	0.54	0.84	0.72	0.81	0.52	0.47	0.42	0.40	0.39	
14	0.39	0.43	0.48	0.53	0.81	0.78	0.75	0.53	0.46	0.42	0.40	0.38	
15	0.39	0.45	0.55	0.52	0.71	0.76	0.72	0.53	0.46	0.42	0.40	0.38	
16	0.39	0.43	0.55	0.51	0.73	0.73	0.72	0.53	0.46	0.42	0.40	0.38	
17	0.40	0.53	0.52	0.52	0.73	0.65	0.69	0.52	0.46	0.42	0.39	0.38	
18	0.40	0.51	0.49	0.51	0.77	0.62	0.68	0.52	0.46	0.42	0.39	0.38	
19	0.40	0.47	0.51	0.50	0.77	0.62	0.67	0.52	0.45	0.42	0.39	0.38	
20	0.40	0.49	0.51	0.50	0.78	0.72	0.66	0.50	0.45	0.42	0.39	0.37	
21	0.40	0.47	0.48	0.50	0.73	0.66	0.66	0.50	0.45	0.41	0.39	0.37	
22	0.39	0.49	0.48	0.59	0.71	0.64	0.64	0.49	0.45	0.41	0.39	0.37	
23	0.39	0.48	0.48	0.55	0.69	0.80	0.64	0.49	0.45	0.41	0.39	0.37	
24	0.43	0.47	0.47	0.52	0.68	0.73	0.68	0.49	0.44	0.41	0.39	0.37	
25	0.40	0.47	0.46	0.50	0.67	0.88	0.67	0.48	0.44	0.41	0.40	0.37	
26	0.58	0.47	0.46	0.49	0.66	0.91	0.70	0.48	0.44	0.41	0.40	0.36	
27	0.47	0.47	0.47	0.48	0.67	1.04	0.67	0.48	0.44	0.41	0.40	0.36	
28	0.41	0.46	0.55	0.48	0.73	1.22	0.64	0.48	0.44	0.41	0.39	0.36	
29	0.40	0.46	0.51	0.48	0.90	1.04	0.63	0.49	0.43	0.41		0.36	
30	0.40	0.48	0.51	0.57	1.03	0.97	0.73	0.49	0.43	0.41		0.36	
31		0.51		0.54	1.00		0.64		0.43	0.41		0.36	
Mean	0.42	0.47	0.51	0.55	0.77	0.78	0.74	0.53	0.46	0.42	0.40	0.38	
Max	0.61	0.53	0.71	0.79	1.03	1.22	1.02	0.61	0.49	0.43	0.40	0.42	1.22
Min	0.39	0.40	0.45	0.48	0.57	0.62	0.63	0.48	0.43	0.41	0.39	0.36	0.36

Annual Max Momentary Gage Height 2.08 M (A.D), at 18.00 Hours, on Sep 28, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.25 M (A.D)
Left Bank Elevation 4.00 M (A.D)
Right Bank Elevation 4.00 M (A.D), Drainage Area 114 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.30	0.30	0.55	1.04	1.22	3.63	4.98	1.48	0.75	0.45	0.30	0.27	
2	0.30	0.45	0.75	0.86	4.53	3.18	3.72	1.40	0.75	0.45	0.30	0.27	
3	1.48	0.60	2.28	0.98	2.20	3.00	3.27	1.34	0.75	0.45	0.30	0.27	
4	0.55	0.80	1.16	1.04	2.12	2.68	3.00	1.28	0.75	0.45	0.30	0.24	
5	0.35	0.55	0.86	1.40	2.04	2.44	3.72	1.28	0.70	0.45	0.30	0.24	
6	0.30	0.86	0.70	1.56	4.44	2.52	2.60	1.22	0.70	0.45	0.30	0.24	
7	0.35	0.40	0.60	1.40	2.68	2.44	3.63	1.22	0.70	0.45	0.30	0.24	
8	0.30	0.60	0.60	2.28	2.44	2.12	2.84	1.16	0.70	0.45	0.30	0.40	
9	0.30	0.80	0.60	2.92	2.36	1.96	3.00	1.22	0.70	0.40	0.30	0.30	
10	0.30	0.55	0.60	2.04	2.36	2.36	3.00	1.10	0.70	0.40	0.30	0.27	
11	0.27	0.65	1.88	1.56	2.20	1.96	3.00	1.04	0.65	0.40	0.30	0.27	
12	0.27	0.60	1.40	1.22	4.17	1.80	2.52	0.98	0.65	0.40	0.30	0.27	
13	0.27	0.55	0.92	1.04	3.36	2.36	3.09	0.92	0.65	0.40	0.30	0.27	
14	0.27	0.45	0.70	0.98	3.09	2.84	2.60	0.98	0.60	0.40	0.30	0.24	
15	0.27	0.55	1.10	0.92	2.28	2.68	2.36	0.98	0.60	0.40	0.30	0.24	
16	0.27	0.45	1.10	0.86	2.44	2.44	2.36	0.98	0.60	0.40	0.30	0.24	
17	0.30	0.98	0.92	0.92	2.44	1.80	2.12	0.92	0.60	0.40	0.27	0.24	
18	0.30	0.86	0.75	0.86	2.76	1.56	2.04	0.92	0.60	0.40	0.27	0.24	
19	0.30	0.65	0.86	0.80	2.76	1.56	1.96	0.92	0.55	0.40	0.27	0.24	
20	0.30	0.75	0.86	0.80	2.84	2.36	1.88	0.80	0.55	0.40	0.27	0.21	
21	0.30	0.65	0.70	0.80	2.44	1.88	1.88	0.80	0.55	0.35	0.27	0.21	
22	0.27	0.75	0.70	1.34	2.28	1.72	1.72	0.75	0.55	0.35	0.27	0.21	
23	0.27	0.70	0.70	1.10	2.12	3.00	1.72	0.75	0.55	0.35	0.27	0.21	
24	0.45	0.65	0.65	0.92	2.04	2.44	2.04	0.75	0.50	0.35	0.27	0.21	
25	0.30	0.65	0.60	0.80	1.96	3.72	1.96	0.70	0.50	0.35	0.30	0.21	
26	1.28	0.65	0.60	0.75	1.88	3.99	2.20	0.70	0.50	0.35	0.30	0.18	
27	0.65	0.65	0.65	0.70	1.96	5.16	1.96	0.70	0.50	0.35	0.30	0.18	
28	0.35	0.60	1.10	0.70	2.44	6.80	1.72	0.70	0.50	0.35	0.27	0.18	
29	0.30	0.60	0.86	0.70	3.90	5.16	1.64	0.75	0.45	0.35		0.18	
30	0.30	0.70	0.86	1.22	5.07	4.53	2.44	0.75	0.45	0.35		0.18	
31		0.86		1.04	4.80		1.72		0.45	0.35		0.18	
Total	11.82	19.86	26.61	35.55	85.62	86.09	78.69	29.49	18.75	12.25	8.13	7.33	420.19 CMSDAY
Mean	0.39	0.64	0.89	1.15	2.76	2.87	2.54	0.98	0.60	0.40	0.29	0.24	1.15 CMS
Max	1.48	0.98	2.28	2.92	5.07	6.80	4.98	1.48	0.75	0.45	0.30	0.40	6.80 CMS
Min	0.27	0.30	0.55	0.70	1.22	1.56	1.64	0.70	0.45	0.35	0.27	0.18	0.18 CMS
Runoff	1.021	1.716	2.299	3.072	7.398	7.438	6.799	2.548	1.620	1.058	0.702	0.633	36.304 MCM

Momentary Peak 17.12 CMS, at 2.08 M (A.D), at 18.00 Hours, on Sep 28, 2001
Runoff Yield 10.10 Liters/Second/Square KM, Momentary Peak Yield 150.175 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Ung Thi at Ban Ung Thi, Kanchanaburi (K.39)

Lat 14 - 42 - 21 N. **Long** 98 - 40 - 19 E.

Location on right bank at k.m. 121+600 on Kanchanaburi - Thong Pha Phum Highwey.

Ban Ung Thi **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainage Area 54 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 16.00 meters from the third staff gage.

Elevation +3.414 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 1984 to date.

Rating Operation

Period of Rating 1985 - 1990, 1996 to date.

Rated by Float -

Rated by Current Meter 1985 - 1990, 1996 to date.

Stability of Channel Regimes Stable.

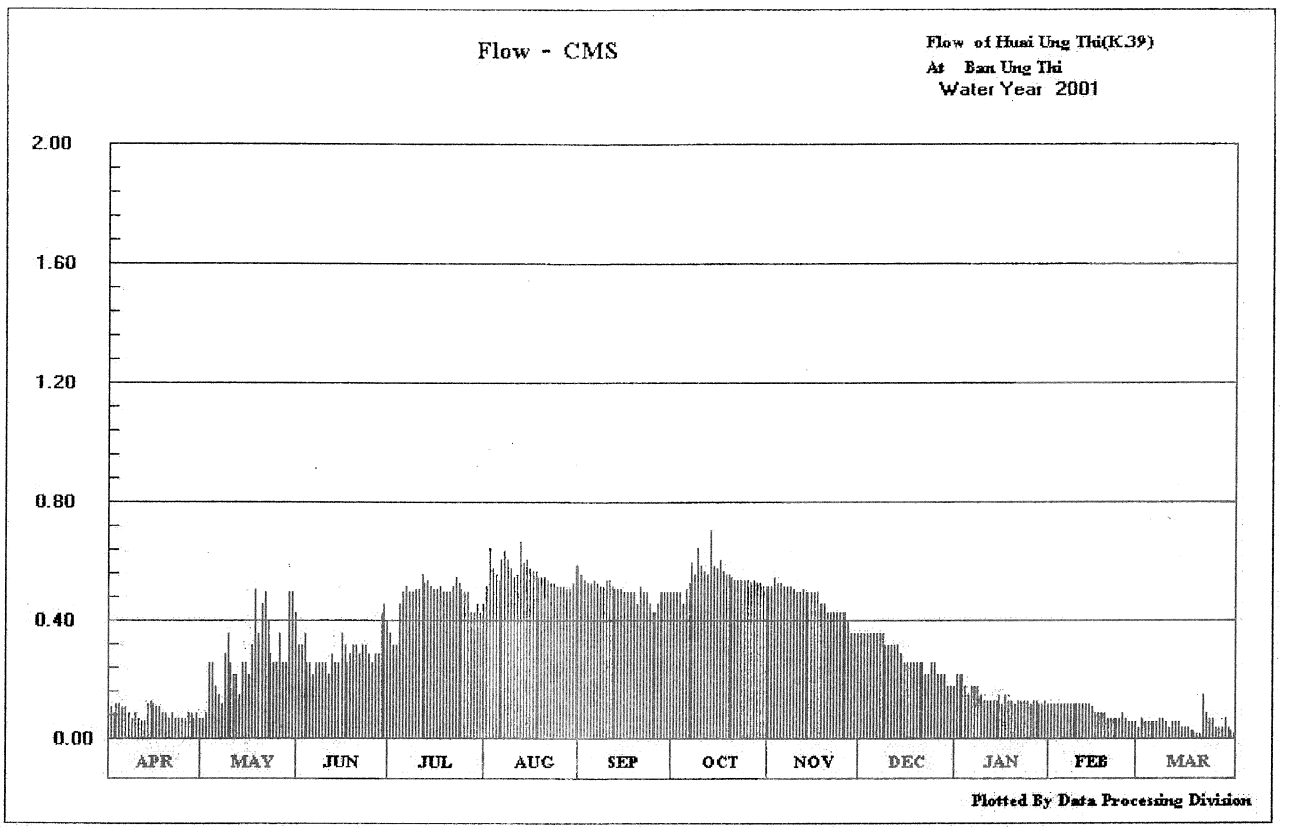
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 71 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.27	0.25	0.35	0.36	0.45	0.53	0.40	0.44	0.36	0.32	0.28	0.23	
2	0.26	0.26	0.35	0.35	0.73	0.48	0.41	0.44	0.36	0.32	0.28	0.25	
3	0.28	0.33	0.36	0.35	0.57	0.47	0.40	0.50	0.36	0.32	0.28	0.24	
4	0.28	0.33	0.33	0.39	0.54	0.47	0.39	0.47	0.36	0.31	0.28	0.24	
5	0.27	0.31	0.33	0.40	0.48	0.48	0.42	0.47	0.36	0.30	0.28	0.24	
6	0.27	0.30	0.32	0.44	0.65	0.46	0.46	0.45	0.36	0.31	0.28	0.24	
7	0.26	0.28	0.33	0.40	0.70	0.45	0.61	0.44	0.36	0.31	0.28	0.24	
8	0.25	0.34	0.33	0.40	0.64	0.45	0.53	0.44	0.36	0.31	0.28	0.25	
9	0.26	0.36	0.33	0.43	0.57	0.48	0.72	0.42	0.35	0.30	0.28	0.25	
10	0.25	0.33	0.33	0.43	0.52	0.48	0.59	0.41	0.35	0.29	0.28	0.24	
11	0.24	0.32	0.32	0.53	0.54	0.45	0.55	0.41	0.35	0.29	0.28	0.23	
12	0.24	0.32	0.34	0.47	0.78	0.43	0.54	0.42	0.35	0.29	0.28	0.24	
13	0.28	0.30	0.33	0.48	0.61	0.42	0.87	0.41	0.35	0.29	0.28	0.24	
14	0.29	0.33	0.33	0.45	0.64	0.42	0.60	0.41	0.34	0.29	0.27	0.24	
15	0.28	0.33	0.36	0.43	0.57	0.41	0.57	0.40	0.33	0.30	0.26	0.23	
16	0.27	0.32	0.35	0.42	0.56	0.40	0.64	0.40	0.33	0.28	0.26	0.23	
17	0.27	0.35	0.33	0.45	0.55	0.40	0.56	0.40	0.33	0.30	0.26	0.23	
18	0.26	0.42	0.34	0.41	0.52	0.40	0.54	0.39	0.33	0.29	0.26	0.22	
19	0.26	0.36	0.35	0.40	0.50	0.39	0.53	0.39	0.33	0.29	0.25	0.22	
20	0.25	0.39	0.35	0.40	0.50	0.45	0.50	0.38	0.33	0.28	0.25	0.21	
21	0.26	0.40	0.34	0.44	0.48	0.41	0.49	0.38	0.33	0.29	0.25	0.21	
22	0.25	0.37	0.35	0.52	0.47	0.40	0.48	0.38	0.32	0.29	0.25	0.30	
23	0.25	0.34	0.35	0.47	0.46	0.39	0.48	0.38	0.32	0.29	0.25	0.26	
24	0.25	0.33	0.34	0.43	0.45	0.38	0.49	0.38	0.33	0.29	0.26	0.25	
25	0.25	0.33	0.33	0.40	0.44	0.38	0.48	0.38	0.33	0.28	0.25	0.25	
26	0.26	0.36	0.34	0.40	0.44	0.39	0.47	0.38	0.32	0.29	0.24	0.23	
27	0.26	0.33	0.34	0.38	0.43	0.40	0.48	0.37	0.32	0.29	0.24	0.23	
28	0.25	0.33	0.38	0.38	0.43	0.41	0.47	0.36	0.32	0.28	0.24	0.23	
29	0.26	0.40	0.39	0.39	0.46	0.41	0.46	0.36	0.31	0.28		0.25	
30	0.25	0.40	0.37	0.38	0.60	0.41	0.45	0.36	0.31	0.29		0.23	
31		0.38		0.39	0.60		0.45		0.31	0.28		0.22	
Mean	0.26	0.34	0.34	0.42	0.54	0.43	0.52	0.41	0.34	0.29	0.27	0.24	
Max	0.29	0.42	0.39	0.53	0.78	0.53	0.87	0.50	0.36	0.32	0.28	0.30	0.87
Min	0.24	0.25	0.32	0.35	0.43	0.38	0.39	0.36	0.31	0.28	0.24	0.21	0.21

Annual Max Momentary Gage Height 1.09 M (A.D), at 6.00 Hours, on Oct 13, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.00 M (A.D)
Left Bank Elevation 3.68 M (A.D)
Right Bank Elevation 2.88 M (A.D), Drainage Area 54 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.11	0.07	0.32	0.36	0.52	0.56	0.50	0.52	0.36	0.22	0.12	0.04	
2	0.09	0.09	0.32	0.32	0.65	0.54	0.50	0.52	0.36	0.22	0.12	0.07	
3	0.12	0.26	0.36	0.32	0.58	0.53	0.50	0.55	0.36	0.22	0.12	0.06	
4	0.12	0.26	0.26	0.46	0.56	0.53	0.46	0.53	0.36	0.18	0.12	0.06	
5	0.11	0.18	0.26	0.50	0.54	0.54	0.51	0.53	0.36	0.15	0.12	0.06	
6	0.11	0.15	0.22	0.52	0.61	0.53	0.53	0.52	0.36	0.18	0.12	0.06	
7	0.09	0.12	0.26	0.50	0.64	0.52	0.60	0.52	0.36	0.18	0.12	0.06	
8	0.07	0.29	0.26	0.50	0.61	0.52	0.56	0.52	0.36	0.18	0.12	0.07	
9	0.09	0.36	0.26	0.51	0.58	0.54	0.65	0.51	0.32	0.15	0.12	0.07	
10	0.07	0.26	0.26	0.51	0.55	0.54	0.59	0.50	0.32	0.13	0.12	0.06	
11	0.06	0.22	0.22	0.56	0.56	0.52	0.57	0.50	0.32	0.13	0.12	0.04	
12	0.06	0.22	0.29	0.53	0.67	0.51	0.56	0.51	0.32	0.13	0.12	0.06	
13	0.12	0.15	0.26	0.54	0.60	0.51	0.71	0.50	0.32	0.13	0.12	0.06	
14	0.13	0.26	0.26	0.52	0.61	0.51	0.59	0.50	0.29	0.13	0.11	0.06	
15	0.12	0.26	0.36	0.51	0.58	0.50	0.58	0.50	0.26	0.15	0.09	0.04	
16	0.11	0.22	0.32	0.51	0.57	0.50	0.61	0.50	0.26	0.12	0.09	0.04	
17	0.11	0.32	0.26	0.52	0.57	0.50	0.57	0.50	0.26	0.15	0.09	0.04	
18	0.09	0.51	0.29	0.50	0.55	0.50	0.56	0.46	0.26	0.13	0.09	0.03	
19	0.09	0.36	0.32	0.50	0.55	0.46	0.56	0.46	0.26	0.13	0.07	0.03	
20	0.07	0.46	0.32	0.50	0.55	0.52	0.55	0.43	0.26	0.12	0.07	0.01	
21	0.09	0.50	0.29	0.52	0.54	0.50	0.54	0.43	0.26	0.13	0.07	0.01	
22	0.07	0.40	0.32	0.55	0.53	0.50	0.54	0.43	0.22	0.13	0.07	0.15	
23	0.07	0.29	0.32	0.53	0.53	0.46	0.54	0.43	0.22	0.13	0.07	0.09	
24	0.07	0.26	0.29	0.51	0.52	0.43	0.54	0.43	0.26	0.13	0.09	0.07	
25	0.07	0.26	0.26	0.50	0.52	0.43	0.54	0.43	0.26	0.12	0.07	0.07	
26	0.09	0.36	0.29	0.50	0.52	0.46	0.53	0.43	0.22	0.13	0.06	0.04	
27	0.09	0.26	0.29	0.43	0.51	0.50	0.54	0.40	0.22	0.13	0.06	0.04	
28	0.07	0.26	0.43	0.43	0.51	0.50	0.53	0.36	0.22	0.12	0.06	0.04	
29	0.09	0.50	0.46	0.46	0.53	0.50	0.53	0.36	0.18	0.12		0.07	
30	0.07	0.50	0.40	0.43	0.59	0.50	0.52	0.36	0.18	0.13		0.04	
31		0.43		0.46	0.59		0.52		0.18	0.12		0.03	
Total	2.72	9.04	9.03	15.01	17.54	15.16	17.13	14.14	8.75	4.52	2.72	1.67	117.43 CMSDAY
Mean	0.09	0.29	0.30	0.48	0.57	0.51	0.55	0.47	0.28	0.15	0.10	0.05	0.32 CMS
Max	0.13	0.51	0.46	0.56	0.67	0.56	0.71	0.55	0.36	0.22	0.12	0.15	0.71 CMS
Min	0.06	0.07	0.22	0.32	0.51	0.43	0.46	0.36	0.18	0.12	0.06	0.01	0.01 CMS
Runoff	0.235	0.781	0.780	1.297	1.515	1.310	1.480	1.222	0.756	0.391	0.235	0.144	10.146 MCM

Momentary Peak 0.81 CMS, at 1.09 M (A.D), at 6.00 Hours, on Oct 13, 2001
Runoff Yield 5.96 Liters/Second/Square KM, Momentary Peak Yield 15.000 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Lam Taphoen at Ban Yang Sung, Kanchanaburi (K.49)

Lat 14 - 29 - 15 N. **Long** 99 - 28 - 24 E.

Location on right bank at the bridge on road.

Ban Yang Sung **Amphoe** Bo Phloi **Changwat** Kanchanaburi

Drainage Area 1,372 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 +7.835 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 1994 to date.

Rated by Float -

Rated by Current Meter 1994 to date.

Stability of Channel Regimes Stable.

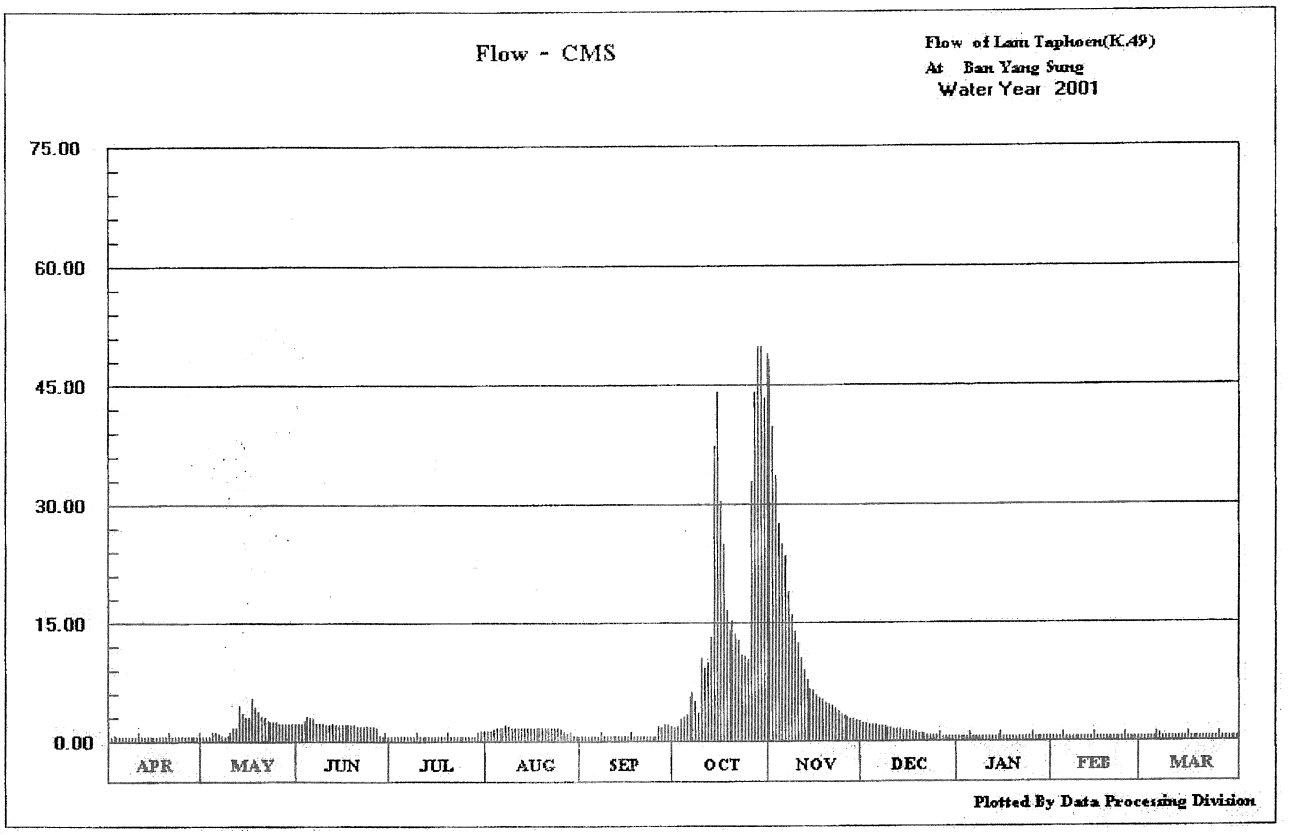
Overbank Flow Conditions Overbank flow starts at elevation +5.140 m.(A.D.), records are channel flow only.

General Description Records good. Stage-discharge relation defined by 43 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.16	1.90	2.63	2.07	2.37	1.94	2.47	5.09	2.64	2.10	1.97	1.85	
2	2.17	1.91	2.63	2.02	2.38	1.93	2.51	4.98	2.61	2.09	1.96	1.85	
3	2.15	2.03	2.73	2.01	2.42	1.92	2.78	4.88	2.59	2.07	1.95	1.85	
4	2.15	2.32	2.86	2.00	2.45	1.89	2.80	4.78	2.58	2.06	1.94	1.85	
5	2.14	2.28	2.82	2.00	2.49	1.87	2.92	4.73	2.55	2.06	1.94	1.85	
6	2.12	2.23	2.77	2.00	2.44	1.85	3.38	4.70	2.53	2.05	1.93	1.92	
7	2.12	2.18	2.63	1.99	2.55	1.85	3.49	4.60	2.52	2.04	1.93	2.26	
8	2.09	2.14	2.62	1.99	2.50	1.96	3.25	4.51	2.51	2.04	1.92	2.00	
9	2.05	2.17	2.61	1.98	2.48	1.93	2.96	4.42	2.47	2.03	1.91	1.96	
10	2.04	2.17	2.60	1.97	2.47	1.87	4.18	4.34	2.46	2.03	1.91	1.94	
11	2.02	2.49	2.59	2.00	2.48	1.86	4.02	4.17	2.42	2.01	1.90	1.93	
12	2.00	2.48	2.63	2.05	2.48	1.86	4.11	4.00	2.41	2.00	1.90	1.91	
13	2.00	3.14	2.60	2.03	2.48	1.85	4.39	3.80	2.39	1.99	1.90	1.90	
14	2.00	2.96	2.60	2.00	2.48	1.84	4.94	3.57	2.37	2.17	1.90	1.90	
15	2.06	2.80	2.60	2.00	2.48	1.82	5.04	3.51	2.36	2.18	1.89	1.89	
16	2.06	2.83	2.59	1.95	2.48	1.80	4.83	3.40	2.33	2.14	1.89	1.89	
17	2.04	3.34	2.59	1.85	2.47	1.78	4.73	3.35	2.31	2.10	1.88	1.89	
18	2.01	3.13	2.57	1.74	2.47	1.77	4.53	3.29	2.29	2.07	1.88	1.88	
19	2.00	2.98	2.55	1.64	2.47	1.76	4.43	3.21	2.27	2.06	1.88	1.87	
20	1.97	2.85	2.54	1.56	2.47	1.75	4.48	3.17	2.25	2.05	1.88	1.92	
21	1.96	2.80	2.54	1.56	2.46	1.75	4.41	3.14	2.23	2.04	1.88	1.96	
22	1.94	2.74	2.54	1.56	2.45	1.81	4.36	3.09	2.21	2.04	1.88	2.03	
23	1.92	2.69	2.53	1.56	2.45	1.87	4.22	2.98	2.20	2.04	1.87	2.04	
24	1.91	2.67	2.52	1.55	2.44	1.90	4.19	2.91	2.19	2.03	1.87	2.05	
25	1.89	2.65	2.51	1.54	2.43	2.03	4.15	2.88	2.19	2.02	1.87	2.07	
26	1.88	2.64	2.48	1.62	2.32	2.54	4.87	2.80	2.17	2.01	1.87	2.09	
27	1.86	2.63	2.19	1.76	2.25	2.47	5.04	2.75	2.16	2.00	1.87	2.09	
28	1.86	2.62	2.15	2.01	2.02	2.58	5.11	2.76	2.14	2.00	1.86	2.08	
29	1.87	2.63	2.11	2.32	2.00	2.55	5.11	2.73	2.13	1.99		2.08	
30	1.88	2.63	2.09	2.35	1.98	2.51	5.03	2.66	2.11	1.98		2.07	
31		2.63		2.35	1.97		5.10		2.10	1.97		2.07	
Mean	2.01	2.57	2.55	1.90	2.39	1.97	4.12	3.71	2.34	2.05	1.90	1.97	
Max	2.17	3.34	2.86	2.35	2.55	2.58	5.11	5.09	2.64	2.18	1.97	2.26	5.11
Min	1.86	1.90	2.09	1.54	1.97	1.75	2.47	2.66	2.10	1.97	1.86	1.85	1.54

Annual Max Momentary Gage Height 5.15 M (A.D), at 6.00 Hours, on Oct 29, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.29 M (A.D)
Left Bank Elevation 5.13 M (A.D)
Right Bank Elevation 5.19 M (A.D), Drainage Area 1372 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.90	0.20	2.52	0.61	1.62	0.28	1.96	48.40	2.56	0.70	0.34	0.10	
2	0.94	0.22	2.52	0.46	1.65	0.26	2.09	39.96	2.44	0.67	0.32	0.10	
3	0.87	0.49	2.92	0.43	1.79	0.24	3.12	33.76	2.37	0.61	0.30	0.10	
4	0.87	1.45	3.44	0.40	1.89	0.18	3.20	27.78	2.33	0.58	0.28	0.10	
5	0.84	1.31	3.28	0.40	2.03	0.14	3.69	25.23	2.23	0.58	0.28	0.10	
6	0.77	1.14	3.08	0.40	1.86	0.10	5.90	23.70	2.16	0.55	0.26	0.24	
7	0.77	0.97	2.52	0.38	2.23	0.10	6.45	19.20	2.13	0.52	0.26	1.24	
8	0.67	0.84	2.48	0.38	2.06	0.32	5.25	16.14	2.09	0.52	0.24	0.40	
9	0.55	0.94	2.44	0.36	1.99	0.26	3.87	14.04	1.96	0.49	0.22	0.32	
10	0.52	0.94	2.40	0.34	1.96	0.14	10.80	12.64	1.92	0.49	0.22	0.28	
11	0.46	2.03	2.37	0.40	1.99	0.12	9.47	10.70	1.79	0.43	0.20	0.26	
12	0.40	1.99	2.52	0.55	1.99	0.12	10.10	9.33	1.75	0.40	0.20	0.22	
13	0.40	4.70	2.40	0.49	1.99	0.10	13.44	8.00	1.69	0.38	0.20	0.20	
14	0.40	3.87	2.40	0.40	1.99	0.08	37.48	6.85	1.62	0.94	0.20	0.20	
15	0.58	3.20	2.40	0.40	1.99	0.04	44.40	6.55	1.58	0.97	0.18	0.18	
16	0.58	3.32	2.37	0.30	1.99	0.00	30.66	6.00	1.48	0.84	0.18	0.18	
17	0.52	5.70	2.37	0.10	1.96	0.00	25.23	5.75	1.41	0.70	0.16	0.18	
18	0.43	4.65	2.30	0.00	1.96	0.00	16.82	5.45	1.35	0.61	0.16	0.16	
19	0.40	3.96	2.23	0.00	1.96	0.00	14.26	5.05	1.28	0.58	0.16	0.14	
20	0.34	3.40	2.20	0.00	1.96	0.00	15.36	4.85	1.21	0.55	0.16	0.24	
21	0.32	3.20	2.20	0.00	1.92	0.00	13.82	4.70	1.14	0.52	0.16	0.32	
22	0.28	2.96	2.20	0.00	1.89	0.02	12.96	4.46	1.07	0.52	0.16	0.49	
23	0.24	2.76	2.16	0.00	1.89	0.14	11.20	3.96	1.04	0.52	0.14	0.52	
24	0.22	2.68	2.13	0.00	1.86	0.20	10.90	3.65	1.01	0.49	0.14	0.55	
25	0.18	2.60	2.09	0.00	1.82	0.49	10.50	3.52	1.01	0.46	0.14	0.61	
26	0.16	2.56	1.99	0.00	1.45	2.20	33.14	3.20	0.94	0.43	0.14	0.67	
27	0.12	2.52	1.01	0.00	1.21	1.96	44.40	3.00	0.90	0.40	0.14	0.67	
28	0.12	2.48	0.87	0.43	0.46	2.33	50.08	3.04	0.84	0.40	0.12	0.64	
29	0.14	2.52	0.73	1.45	0.40	2.23	50.08	2.92	0.80	0.38		0.64	
30	0.16	2.52	0.67	1.55	0.36	2.09	43.60	2.64	0.73	0.36		0.61	
31		2.52		1.55	0.34		49.20		0.70	0.34		0.61	
Total	14.15	74.64	67.21	11.78	52.46	14.14	593.43	364.47	47.53	16.93	5.66	11.27	1273.67 CMSDAY
Mean	0.47	2.41	2.24	0.38	1.69	0.47	19.14	12.15	1.53	0.55	0.20	0.36	3.49 CMS
Max	0.94	5.70	3.44	1.55	2.23	2.33	50.08	48.40	2.56	0.97	0.34	1.24	50.08 CMS
Min	0.12	0.20	0.67	0.00	0.34	0.00	1.96	2.64	0.70	0.34	0.12	0.10	0.00 CMS
Runoff	1.223	6.449	5.807	1.018	4.533	1.222	51.272	31.490	4.107	1.463	0.489	0.974	110.045 MCM

Momentary Peak 53.60 CMS, at 5.15 M (A.D), at 6.00 Hours, on Oct 29, 2001

Runoff Yield 2.54 Liters/Second/Square KM, Momentary Peak Yield 39.067 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 101 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 +4.837 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 1987, 1996 to date.

Rated by Float -

Rated by Current Meter 1987, 1996 to date.

Stability of Channel Regimes Fairly stable.

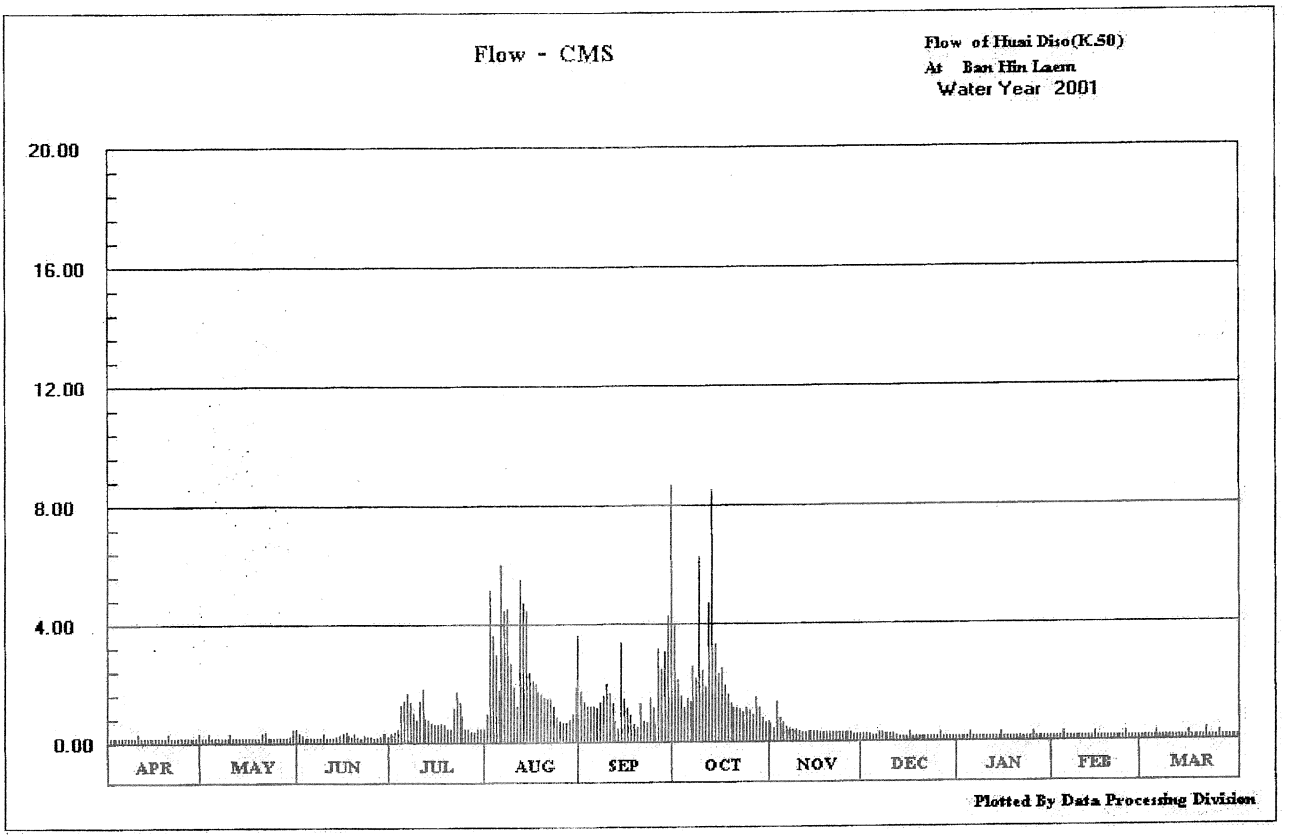
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 71 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.62	0.60	0.76	0.76	0.92	1.07	1.46	0.84	0.74	0.62	0.57	0.53	
2	0.61	0.59	0.74	0.78	1.63	1.00	1.15	0.81	0.74	0.58	0.57	0.52	
3	0.66	0.75	0.70	0.80	1.41	0.97	1.04	1.00	0.74	0.58	0.57	0.52	
4	0.66	0.68	0.69	0.98	1.30	0.97	0.96	0.89	0.73	0.58	0.57	0.51	
5	0.65	0.65	0.68	1.01	1.08	0.97	1.02	0.85	0.73	0.58	0.57	0.51	
6	0.64	0.64	0.68	1.06	1.75	0.96	1.00	0.82	0.73	0.58	0.57	0.51	
7	0.62	0.64	0.68	1.00	1.53	1.00	1.24	0.81	0.75	0.60	0.57	0.51	
8	0.60	0.64	0.68	0.93	1.54	1.04	1.16	0.79	0.74	0.60	0.57	0.51	
9	0.60	0.70	0.67	0.88	1.25	1.12	1.79	0.79	0.74	0.60	0.57	0.51	
10	0.59	0.70	0.67	1.01	1.10	1.06	1.21	0.77	0.74	0.60	0.56	0.51	
11	0.59	0.67	0.67	1.09	0.97	0.99	1.10	0.76	0.74	0.60	0.56	0.51	
12	0.58	0.66	0.70	0.89	1.68	0.87	1.57	0.75	0.72	0.59	0.56	0.52	
13	0.60	0.64	0.72	0.88	1.57	0.81	2.09	0.77	0.71	0.59	0.56	0.52	
14	0.58	0.60	0.74	0.85	1.53	1.37	1.36	0.77	0.71	0.58	0.56	0.52	
15	0.58	0.64	0.75	0.84	1.20	1.02	1.19	0.77	0.71	0.58	0.55	0.53	
16	0.61	0.64	0.77	0.84	1.14	0.96	1.23	0.77	0.71	0.58	0.55	0.53	
17	0.61	0.63	0.74	0.85	1.12	0.91	1.11	0.76	0.71	0.58	0.55	0.52	
18	0.61	0.67	0.72	0.84	1.07	0.84	1.05	0.75	0.71	0.58	0.55	0.52	
19	0.61	0.66	0.73	0.81	1.05	0.82	0.99	0.76	0.70	0.58	0.55	0.51	
20	0.60	0.72	0.72	0.80	1.03	0.99	0.96	0.76	0.68	0.58	0.55	0.51	
21	0.59	0.78	0.71	0.96	1.02	0.87	0.96	0.76	0.67	0.57	0.55	0.51	
22	0.58	0.70	0.74	1.07	1.02	0.85	0.95	0.76	0.67	0.57	0.55	0.79	
23	0.57	0.67	0.73	1.00	0.97	1.03	0.93	0.75	0.67	0.57	0.55	0.64	
24	0.57	0.67	0.72	0.91	0.90	0.96	0.96	0.75	0.67	0.57	0.55	0.59	
25	0.58	0.67	0.71	0.81	0.87	0.84	0.94	0.75	0.67	0.58	0.55	0.58	
26	0.60	0.67	0.71	0.80	0.85	1.34	0.91	0.75	0.66	0.57	0.55	0.56	
27	0.64	0.69	0.72	0.78	0.85	1.22	1.03	0.75	0.66	0.57	0.55	0.55	
28	0.61	0.67	0.75	0.78	0.88	1.32	0.96	0.74	0.64	0.57	0.53	0.55	
29	0.61	0.72	0.74	0.80	0.92	1.50	0.89	0.74	0.64	0.57		0.55	
30	0.60	0.81	0.73	0.81	1.10	2.11	0.86	0.74	0.63	0.57		0.55	
31		0.80		0.80	1.41		0.87		0.62	0.57		0.55	
Mean	0.61	0.68	0.72	0.88	1.18	1.06	1.13	0.78	0.70	0.58	0.56	0.54	
Max	0.66	0.81	0.77	1.09	1.75	2.11	2.09	1.00	0.75	0.62	0.57	0.79	2.11
Min	0.57	0.59	0.67	0.76	0.85	0.81	0.86	0.74	0.62	0.57	0.53	0.51	0.51

Annual Max Momentary Gage Height 2.38 M (A.D), at 6.00 Hours, on Oct 13, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.24 M (A.D)
Left Bank Elevation 3.16 M (A.D)
Right Bank Elevation 3.03 M (A.D), Drainage Area 101 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.12	0.10	0.38	0.38	1.00	1.75	4.02	0.66	0.32	0.12	0.07	0.03	
2	0.11	0.09	0.32	0.44	5.21	1.40	2.15	0.54	0.32	0.08	0.07	0.02	
3	0.16	0.35	0.20	0.50	3.67	1.25	1.60	1.40	0.32	0.08	0.07	0.02	
4	0.16	0.18	0.19	1.30	3.00	1.25	1.20	0.86	0.29	0.08	0.07	0.01	
5	0.15	0.15	0.18	1.45	1.80	1.25	1.50	0.70	0.29	0.08	0.07	0.01	
6	0.14	0.14	0.18	1.70	6.05	1.20	1.40	0.58	0.29	0.08	0.07	0.01	
7	0.12	0.14	0.18	1.40	4.51	1.40	2.64	0.54	0.35	0.10	0.07	0.01	
8	0.10	0.14	0.18	1.05	4.58	1.60	2.20	0.47	0.32	0.10	0.07	0.01	
9	0.10	0.20	0.17	0.82	2.70	2.00	6.33	0.47	0.32	0.10	0.07	0.01	
10	0.09	0.20	0.17	1.45	1.90	1.70	2.46	0.41	0.32	0.10	0.06	0.01	
11	0.09	0.17	0.17	1.85	1.25	1.35	1.90	0.38	0.32	0.10	0.06	0.01	
12	0.08	0.16	0.20	0.86	5.56	0.78	4.79	0.35	0.26	0.09	0.06	0.02	
13	0.10	0.14	0.26	0.82	4.79	0.54	8.56	0.41	0.23	0.09	0.06	0.02	
14	0.08	0.10	0.32	0.70	4.51	3.42	3.36	0.41	0.23	0.08	0.06	0.02	
15	0.08	0.14	0.35	0.66	2.40	1.50	2.35	0.41	0.23	0.08	0.05	0.03	
16	0.11	0.14	0.41	0.66	2.10	1.20	2.58	0.41	0.23	0.08	0.05	0.03	
17	0.11	0.13	0.32	0.70	2.00	0.95	1.95	0.38	0.23	0.08	0.05	0.02	
18	0.11	0.17	0.26	0.66	1.75	0.66	1.65	0.35	0.23	0.08	0.05	0.02	
19	0.11	0.16	0.29	0.54	1.65	0.58	1.35	0.38	0.20	0.08	0.05	0.01	
20	0.10	0.26	0.26	0.50	1.55	1.35	1.20	0.38	0.18	0.08	0.05	0.01	
21	0.09	0.44	0.23	1.20	1.50	0.78	1.20	0.38	0.17	0.07	0.05	0.01	
22	0.08	0.20	0.32	1.75	1.50	0.70	1.15	0.38	0.17	0.07	0.05	0.47	
23	0.07	0.17	0.29	1.40	1.25	1.55	1.05	0.35	0.17	0.07	0.05	0.14	
24	0.07	0.17	0.26	0.95	0.90	1.20	1.20	0.35	0.17	0.07	0.05	0.09	
25	0.08	0.17	0.23	0.54	0.78	0.66	1.10	0.35	0.17	0.08	0.05	0.08	
26	0.10	0.17	0.23	0.50	0.70	3.24	0.95	0.35	0.16	0.07	0.05	0.06	
27	0.14	0.19	0.26	0.44	0.70	2.52	1.55	0.35	0.16	0.07	0.05	0.05	
28	0.11	0.17	0.35	0.44	0.82	3.12	1.20	0.32	0.14	0.07	0.03	0.05	
29	0.11	0.26	0.32	0.50	1.00	4.30	0.86	0.32	0.14	0.07		0.05	
30	0.10	0.54	0.29	0.54	1.90	8.73	0.74	0.32	0.13	0.07		0.05	
31		0.50		0.50	3.67		0.78		0.12	0.07		0.05	
Total	3.17	6.24	7.77	27.20	76.70	53.93	66.97	13.96	7.18	2.54	1.61	1.43	268.70 CMSDAY
Mean	0.11	0.20	0.26	0.88	2.47	1.80	2.16	0.47	0.23	0.08	0.06	0.05	0.74 CMS
Max	0.16	0.54	0.41	1.85	6.05	8.73	8.56	1.40	0.35	0.12	0.07	0.47	8.73 CMS
Min	0.07	0.09	0.17	0.38	0.70	0.54	0.74	0.32	0.12	0.07	0.03	0.01	0.01 CMS
Runoff	0.274	0.539	0.671	2.350	6.627	4.660	5.786	1.206	0.620	0.219	0.139	0.124	23.216 MCM

Momentary Peak 11.30 CMS, at 2.38 M (A.D), at 6.00 Hours, on Oct 13, 2001

Runoff Yield 7.29 Liters/Second/Square KM, Momentary Peak Yield 111.881 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 299 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 20 meters from the top staff gage.

Elevation +6.300 m. (A.D.)

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 Float -

Rated by Current Meter 1992 to date.

Stability of Channel Regimes Stable.

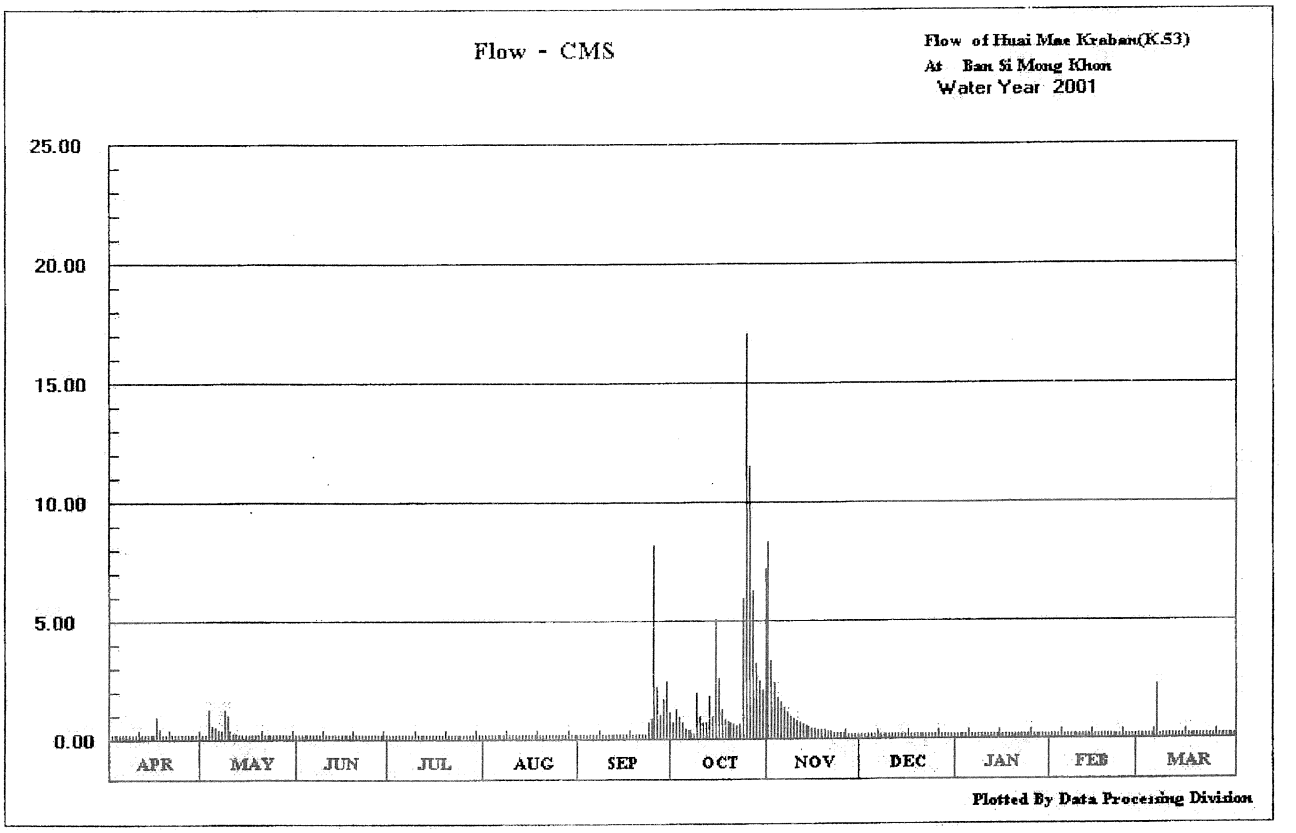
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 75 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.46	1.48	1.51	1.48	1.43	1.42	1.65	2.30	1.51	1.46	1.44	1.47	
2	1.46	1.49	1.46	1.46	1.42	1.42	1.73	1.95	1.51	1.46	1.44	1.47	
3	1.46	1.73	1.48	1.45	1.42	1.42	1.69	1.86	1.51	1.45	1.44	1.47	
4	1.46	1.62	1.52	1.45	1.43	1.42	1.64	1.79	1.51	1.45	1.44	1.47	
5	1.46	1.61	1.49	1.45	1.43	1.42	1.60	1.77	1.50	1.45	1.44	1.46	
6	1.46	1.59	1.49	1.44	1.49	1.42	1.58	1.74	1.50	1.45	1.45	1.46	
7	1.45	1.59	1.47	1.44	1.48	1.42	1.57	1.71	1.50	1.45	1.45	1.85	
8	1.45	1.73	1.50	1.44	1.52	1.42	1.55	1.69	1.50	1.45	1.45	1.50	
9	1.45	1.70	1.50	1.50	1.51	1.43	1.81	1.68	1.49	1.45	1.46	1.45	
10	1.45	1.57	1.49	1.52	1.50	1.42	1.69	1.66	1.49	1.45	1.46	1.43	
11	1.45	1.55	1.48	1.51	1.48	1.42	1.65	1.64	1.49	1.45	1.46	1.42	
12	1.45	1.54	1.48	1.50	1.48	1.42	1.64	1.63	1.49	1.45	1.46	1.41	
13	1.45	1.53	1.48	1.49	1.47	1.42	1.80	1.62	1.49	1.44	1.46	1.40	
14	1.47	1.52	1.48	1.48	1.46	1.43	1.69	1.61	1.49	1.44	1.46	1.40	
15	1.49	1.51	1.47	1.46	1.44	1.42	2.09	1.60	1.49	1.44	1.46	1.40	
16	1.69	1.49	1.47	1.46	1.44	1.42	1.88	1.60	1.49	1.44	1.46	1.40	
17	1.60	1.48	1.46	1.46	1.44	1.42	1.73	1.59	1.49	1.44	1.46	1.40	
18	1.51	1.49	1.46	1.46	1.43	1.42	1.67	1.59	1.48	1.44	1.46	1.40	
19	1.50	1.48	1.45	1.45	1.43	1.42	1.66	1.58	1.48	1.44	1.46	1.40	
20	1.48	1.48	1.45	1.45	1.42	1.42	1.65	1.57	1.48	1.44	1.46	1.40	
21	1.46	1.48	1.45	1.45	1.42	1.42	1.63	1.56	1.47	1.44	1.47	1.40	
22	1.45	1.48	1.45	1.44	1.42	1.42	1.62	1.55	1.47	1.44	1.47	1.40	
23	1.44	1.47	1.44	1.45	1.42	1.64	1.63	1.54	1.47	1.44	1.47	1.40	
24	1.44	1.46	1.44	1.45	1.42	1.68	2.15	1.54	1.47	1.44	1.47	1.40	
25	1.44	1.46	1.44	1.44	1.42	2.29	2.69	1.54	1.46	1.44	1.47	1.40	
26	1.44	1.46	1.44	1.44	1.42	1.84	2.46	1.53	1.46	1.43	1.47	1.40	
27	1.44	1.45	1.44	1.43	1.42	1.70	2.17	1.53	1.46	1.43	1.47	1.40	
28	1.44	1.46	1.48	1.43	1.42	1.78	1.94	1.52	1.46	1.43	1.47	1.40	
29	1.44	1.46	1.48	1.43	1.42	1.87	1.87	1.52	1.46	1.44		1.40	
30	1.44	1.46	1.49	1.43	1.42	1.71	1.83	1.51	1.46	1.44		1.40	
31		1.46		1.43	1.42		2.23		1.46	1.44		1.40	
Mean	1.47	1.53	1.47	1.46	1.44	1.53	1.81	1.65	1.48	1.44	1.46	1.43	
Max	1.69	1.73	1.52	1.52	1.52	2.29	2.69	2.30	1.51	1.46	1.47	1.85	2.69
Min	1.44	1.45	1.44	1.43	1.42	1.42	1.55	1.51	1.46	1.43	1.44	1.40	1.40

Annual Max Momentary Gage Height 3.88 M (A.D), at 3.00 Hours, on Oct 24, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.41 M (A.D)
Left Bank Elevation 5.09 M (A.D)
Right Bank Elevation 5.11 M (A.D), Drainage Area 299 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.12	0.16	0.23	0.16	0.06	0.04	0.80	8.40	0.23	0.12	0.08	0.14	
2	0.12	0.18	0.12	0.12	0.04	0.04	1.34	3.40	0.23	0.12	0.08	0.14	
3	0.12	1.34	0.16	0.10	0.04	0.04	1.04	2.44	0.23	0.10	0.08	0.14	
4	0.12	0.62	0.26	0.10	0.06	0.04	0.74	1.82	0.23	0.10	0.08	0.14	
5	0.12	0.56	0.18	0.10	0.06	0.04	0.50	1.66	0.20	0.10	0.08	0.12	
6	0.12	0.47	0.18	0.08	0.18	0.04	0.44	1.42	0.20	0.10	0.10	0.12	
7	0.10	0.47	0.14	0.08	0.16	0.04	0.41	1.18	0.20	0.10	0.10	2.35	
8	0.10	1.34	0.20	0.08	0.26	0.04	0.35	1.04	0.20	0.10	0.10	0.20	
9	0.10	1.10	0.20	0.20	0.23	0.06	1.99	0.98	0.18	0.10	0.12	0.10	
10	0.10	0.41	0.18	0.26	0.20	0.04	1.04	0.86	0.18	0.10	0.12	0.06	
11	0.10	0.35	0.16	0.23	0.16	0.04	0.80	0.74	0.18	0.10	0.12	0.04	
12	0.10	0.32	0.16	0.20	0.16	0.04	0.74	0.68	0.18	0.10	0.12	0.02	
13	0.10	0.29	0.16	0.18	0.14	0.04	1.90	0.62	0.18	0.08	0.12	0.00	
14	0.14	0.26	0.16	0.16	0.12	0.06	1.04	0.56	0.18	0.08	0.12	0.00	
15	0.18	0.23	0.14	0.12	0.08	0.04	5.17	0.50	0.18	0.08	0.12	0.00	
16	1.04	0.18	0.14	0.12	0.08	0.04	2.62	0.50	0.18	0.08	0.12	0.00	
17	0.50	0.16	0.12	0.12	0.08	0.04	1.34	0.47	0.18	0.08	0.12	0.00	
18	0.23	0.18	0.12	0.12	0.06	0.04	0.92	0.47	0.16	0.08	0.12	0.00	
19	0.20	0.16	0.10	0.10	0.06	0.04	0.86	0.44	0.16	0.08	0.12	0.00	
20	0.16	0.16	0.10	0.10	0.04	0.04	0.80	0.41	0.16	0.08	0.12	0.00	
21	0.12	0.16	0.10	0.10	0.04	0.04	0.68	0.38	0.14	0.08	0.14	0.00	
22	0.10	0.16	0.10	0.08	0.04	0.04	0.62	0.35	0.14	0.08	0.14	0.00	
23	0.08	0.14	0.08	0.10	0.04	0.74	0.68	0.32	0.14	0.08	0.14	0.00	
24	0.08	0.12	0.08	0.10	0.04	0.98	6.05	0.32	0.14	0.08	0.14	0.00	
25	0.08	0.12	0.08	0.08	0.04	8.24	17.15	0.32	0.12	0.08	0.14	0.00	
26	0.08	0.12	0.08	0.08	0.04	2.26	11.58	0.29	0.12	0.06	0.14	0.00	
27	0.08	0.10	0.08	0.06	0.04	1.10	6.35	0.29	0.12	0.06	0.14	0.00	
28	0.08	0.12	0.16	0.06	0.04	1.74	3.28	0.26	0.12	0.06	0.14	0.00	
29	0.08	0.12	0.16	0.06	0.04	2.53	2.53	0.26	0.12	0.08		0.00	
30	0.08	0.12	0.18	0.06	0.04	1.18	2.17	0.23	0.12	0.08		0.00	
31		0.12		0.06	0.04		7.28		0.12	0.08		0.00	
Total	4.73	10.34	4.31	3.57	2.71	19.69	83.21	31.61	5.22	2 70	3.26	3.57	174.92 CMSDAY
Mean	0.16	0.33	0.14	0.12	0.09	0.66	2.68	1.05	0.17	0.09	0.12	0.12	0.48 CMS
Max	1.04	1.34	0.26	0.26	0.26	8.24	17.15	8.40	0.23	0.12	0.14	2.35	17.15 CMS
Min	0.08	0.10	0.08	0.06	0.04	0.04	0.35	0.23	0.12	0.06	0.08	0.00	0.00 CMS
Runoff	0.409	0.893	0.372	0.308	0.234	1.701	7.189	2.731	0.451	0.233	0.282	0.308	15.113 MCM

Momentary Peak 55.84 CMS, at 3.88 M (A.D), at 3.00 Hours, on Oct 24, 2001
Runoff Yield 1.60 Liters/Second/Square KM, Momentary Peak Yield 186.756 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Khwae Noi at Ban Lin Thin, Kanchanaburi (K.54)

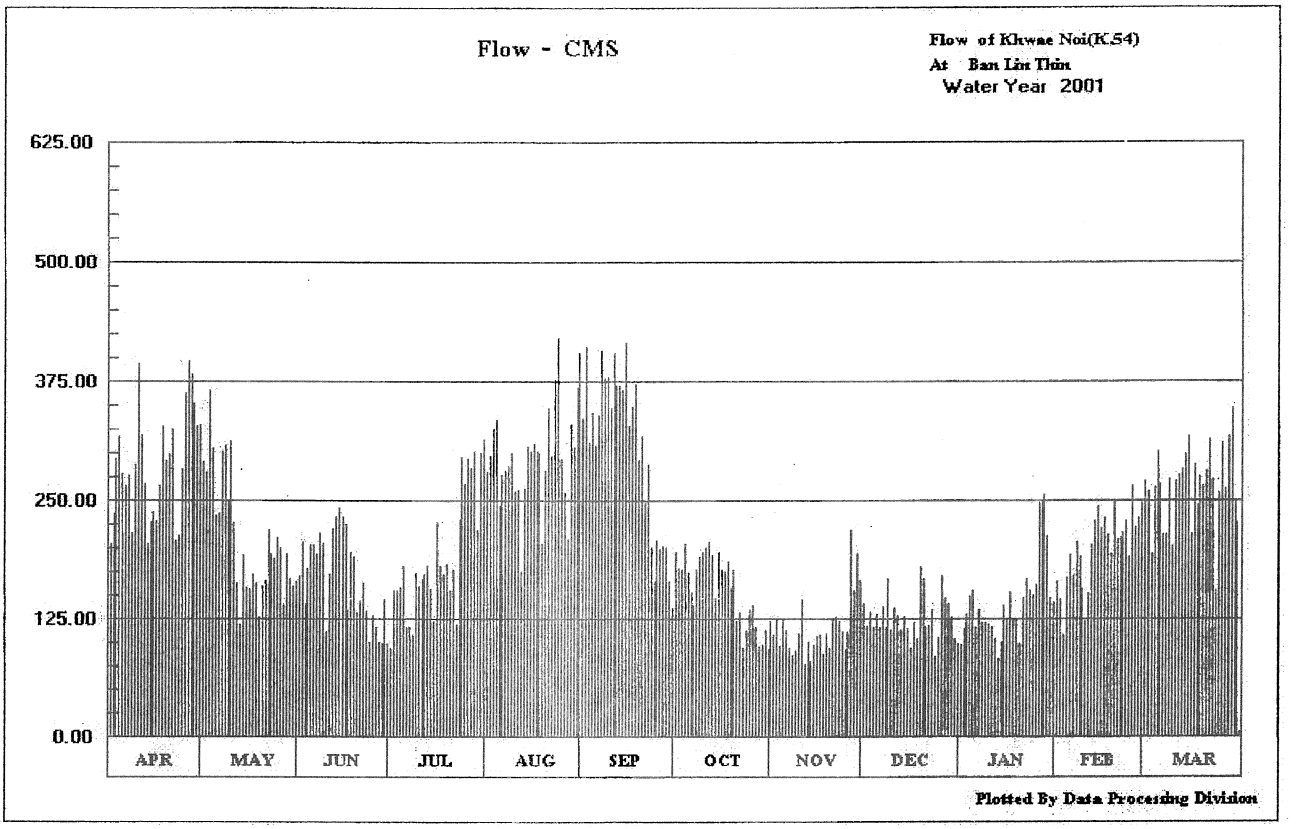
Lat 14 - 32 - 04 N. **Long** 98 - 47 - 30 E.

Location		on right bank at the bridge on road.
	Ban Lin Thin	**Amphoe** Thong Pha Phum **Changwat** Kanchanaburi
Drainage Area		5,300 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 40 meters from the gage observer's house.
	Elevation	+14.615 m. (A.D.)
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 Float	-
	Rated by Current Meter	1996 to date.
Stability of Channel Regimes		Stable.
Overbank Flow Conditions		No overbank flow.
General Description		Records good. Flow regulated by Khao Laem Dam.
		Stage-discharge relation defined by 70 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.76	3.34	2.52	1.94	3.27	3.63	2.70	2.15	2.30	1.96	2.47	3.20	
2	2.97	3.26	2.77	2.40	3.38	4.08	2.57	2.05	2.12	2.09	2.33	3.13	
3	3.36	3.82	2.30	2.40	3.56	3.47	2.56	2.17	2.22	2.21	2.04	2.68	
4	3.51	3.43	2.57	2.43	3.62	3.67	2.76	1.95	2.10	2.36	2.51	3.16	
5	3.25	2.96	2.75	2.60	3.03	3.45	2.54	2.16	2.21	2.41	2.67	3.41	
6	3.17	2.97	2.75	2.10	3.24	3.65	2.39	2.08	2.10	2.11	2.52	3.18	
7	3.24	3.41	2.69	2.10	3.28	4.06	2.28	1.94	2.27	2.25	2.77	2.83	
8	2.84	3.45	2.84	2.04	3.31	3.89	2.56	1.88	2.10	2.14	2.66	2.83	
9	3.32	3.06	2.76	2.54	3.40	3.90	2.66	1.91	2.49	2.14	2.42	3.21	
10	3.98	3.48	2.07	2.44	3.13	3.70	2.70	2.06	2.08	2.13	2.15	2.74	
11	3.52	2.91	2.53	2.49	3.14	4.05	2.73	2.33	2.26	2.10	2.38	3.20	
12	3.18	2.46	2.87	2.53	2.55	3.84	2.77	1.81	2.20	2.01	2.75	3.24	
13	2.76	2.13	2.95	2.60	3.15	3.84	2.67	1.99	2.08	1.85	2.92	3.29	
14	2.91	2.67	3.02	2.42	3.44	3.82	2.34	1.83	2.19	1.99	3.03	3.39	
15	2.98	2.43	2.95	2.15	3.41	4.11	2.70	1.96	2.09	2.29	2.87	3.51	
16	2.92	2.42	2.90	2.91	3.46	3.58	2.56	2.03	1.94	2.18	2.94	2.83	
17	3.17	2.53	2.25	2.60	3.41	3.71	2.55	2.05	2.14	2.39	2.83	3.32	
18	3.58	2.46	2.70	2.53	3.40	3.85	2.63	1.89	2.01	2.16	2.68	3.04	
19	3.35	2.19	2.66	2.61	2.76	3.35	2.43	2.06	2.58	2.16	3.06	3.23	
20	3.39	2.44	2.22	2.41	3.28	3.51	2.56	1.94	2.49	1.97	2.80	3.17	
21	3.56	2.48	2.32	2.56	3.70	3.05	2.15	2.16	2.10	2.35	2.81	3.28	
22	2.79	2.86	2.46	2.13	3.38	3.32	2.23	2.19	2.12	2.49	2.84	3.49	
23	2.82	2.69	2.24	2.93	3.88	2.73	1.94	2.15	2.25	2.41	2.92	3.21	
24	3.29	2.65	1.99	3.37	4.14	2.47	2.08	2.07	1.87	2.37	2.66	2.41	
25	3.80	2.81	2.20	3.18	3.36	2.79	2.25	1.92	2.02	2.45	3.17	3.12	
26	4.00	2.73	2.11	3.36	3.12	2.72	2.29	2.07	2.52	3.05	2.88	3.47	
27	3.92	2.29	1.99	3.30	2.80	2.74	2.10	2.86	2.35	3.07	2.94	3.15	
28	3.73	2.68	1.97	3.41	3.59	2.73	1.95	2.41	2.30	3.11	3.05	3.51	
29	3.58	2.49	2.33	2.86	3.44	2.47	1.96	2.68	2.19	2.82		3.70	
30	3.59	2.44	1.97	3.40	3.83	2.26	2.08	2.48	2.01	2.34		3.07	
31		2.47		3.49	4.05		1.93		1.97	2.31		2.91	
Mean	3.31	2.79	2.49	2.65	3.37	3.41	2.41	2.11	2.18	2.31	2.72	3.16	
Max	4.00	3.82	3.02	3.49	4.14	4.11	2.77	2.86	2.58	3.11	3.17	3.70	4.14
Min	2.76	2.13	1.97	1.94	2.55	2.26	1.93	1.81	1.87	1.85	2.04	2.41	1.81

Annual Max Momentary Gage Height 4.72 M (A.D), at 3.00 Hours, on Sep 8, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -1.07 M (A.D)
Left Bank Elevation 7.67 M (A.D)
Right Bank Elevation 7.67 M (A.D), Drainage Area 5300 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	206.40	293.00	172.80	96.20	282.50	337.80	198.00	123.50	143.00	98.80	165.80	272.00	
2	237.50	281.00	207.80	156.00	299.00	412.60	179.80	110.50	119.60	115.70	146.90	261.50	
3	296.00	368.40	143.00	156.00	326.60	312.50	178.40	126.10	132.60	131.30	109.20	195.20	
4	318.60	306.50	179.80	160.20	336.20	344.20	206.40	97.50	117.00	150.80	171.40	266.00	
5	279.50	236.00	205.00	184.00	246.50	309.50	175.60	124.80	131.30	157.40	193.80	303.50	
6	267.50	237.50	205.00	117.00	278.00	341.00	154.70	114.40	117.00	118.30	172.80	269.00	
7	278.00	303.50	196.60	117.00	284.00	409.20	140.40	96.20	139.10	136.50	207.80	216.50	
8	218.00	309.50	218.00	109.20	288.50	380.30	178.40	88.40	117.00	122.20	192.40	216.50	
9	290.00	251.00	206.40	175.60	302.00	382.00	192.40	92.30	168.60	122.20	158.80	273.50	
10	395.60	314.00	113.10	161.60	261.50	349.00	198.00	111.80	114.40	120.90	123.50	203.60	
11	320.20	228.50	174.20	168.60	263.00	407.50	202.20	146.90	137.80	117.00	153.40	272.00	
12	269.00	164.40	222.50	174.20	177.00	371.80	207.80	79.30	130.00	105.30	205.00	278.00	
13	206.40	120.90	234.50	184.00	264.50	371.80	193.80	102.70	114.40	84.50	230.00	285.50	
14	228.50	193.80	245.00	158.80	308.00	368.40	148.20	81.90	128.70	102.70	246.50	300.50	
15	239.00	160.20	234.50	123.50	303.50	417.70	198.00	98.80	115.70	141.70	222.50	318.60	
16	230.00	158.80	227.00	228.50	311.00	329.80	178.40	107.90	96.20	127.40	233.00	216.50	
17	267.50	174.20	136.50	184.00	303.50	350.60	177.00	110.50	122.20	154.70	216.50	290.00	
18	329.80	164.40	198.00	174.20	302.00	373.50	188.20	89.70	105.30	124.80	195.20	248.00	
19	294.50	128.70	192.40	185.40	206.40	294.50	160.20	111.80	181.20	124.80	251.00	276.50	
20	300.50	161.60	132.60	157.40	284.00	318.60	178.40	96.20	168.60	100.10	212.00	267.50	
21	326.60	167.20	145.60	178.40	349.00	249.50	123.50	124.80	117.00	149.50	213.50	284.00	
22	210.60	221.00	164.40	120.90	299.00	290.00	133.90	128.70	119.60	168.60	218.00	315.50	
23	215.00	196.60	135.20	231.50	378.60	202.20	96.20	123.50	136.50	157.40	230.00	273.50	
24	285.50	191.00	102.70	297.50	422.80	165.80	114.40	113.10	87.10	152.10	192.40	157.40	
25	365.00	213.50	130.00	269.00	296.00	210.60	136.50	93.60	106.60	163.00	267.50	260.00	
26	399.00	202.20	118.30	296.00	260.00	200.80	141.70	113.10	172.80	249.50	224.00	312.50	
27	385.40	141.70	102.70	287.00	212.00	203.60	117.00	221.00	149.50	252.50	233.00	264.50	
28	353.80	195.20	100.10	303.50	331.40	202.20	97.50	157.40	143.00	258.50	249.50	318.60	
29	329.80	168.60	146.90	221.00	308.00	165.80	98.80	195.20	128.70	215.00		349.00	
30	331.40	161.60	100.10	302.00	370.10	137.80	114.40	167.20	105.30	148.20		252.50	
31		165.80		315.50	407.50		94.90		100.10	144.30		228.50	
Total	8674.60	6580.30	5090.70	5993.70	9262.10	9210.60	4903.10	3548.80	3965.90	4515.70	5635.40	8246.40	75627.30 CMSDAY
Mean	289.15	212.27	169.69	193.35	298.78	307.02	158.16	118.29	127.93	145.67	201.26	266.01	207.20 CMS
Max	399.00	368.40	245.00	315.50	422.80	417.70	207.80	221.00	181.20	258.50	267.50	349.00	422.80 CMS
Min	206.40	120.90	100.10	96.20	177.00	137.80	94.90	79.30	87.10	84.50	109.20	157.40	79.30 CMS
Runoff	749.486	568.538	439.837	517.856	800.245	795.796	423.628	306.616	342.654	390.156	486.899	712.489	6534.199 MCM

Momentary Peak 526.60 CMS, at 4.72 M (A.D), at 3.00 Hours, on Sep 8, 2001

Runoff Yield 39.09 Liters/Second/Square KM, Momentary Peak Yield 99.358 Liters/Second/Square KM

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Lam Pha Chi at Ban Chorrakne Phuak, Kanchanaburi (K.59)

Lat 14 - 54 - 26 N. **Long** 99 - 23 - 05 E.

Location on left bank at the bridge on road.

Ban Chorrakne Phuak **Amphoe** Dan Makham Tia **Changwat** Kanchanaburi

Drainage Area 2,650 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +24.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +34.488 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 2000 to date.

Rating Operation

Period of Rating 2000 to date.

Rated by Float -

Rated by Current Meter 2000 to date.

Stability of Channel Regimes Stable.

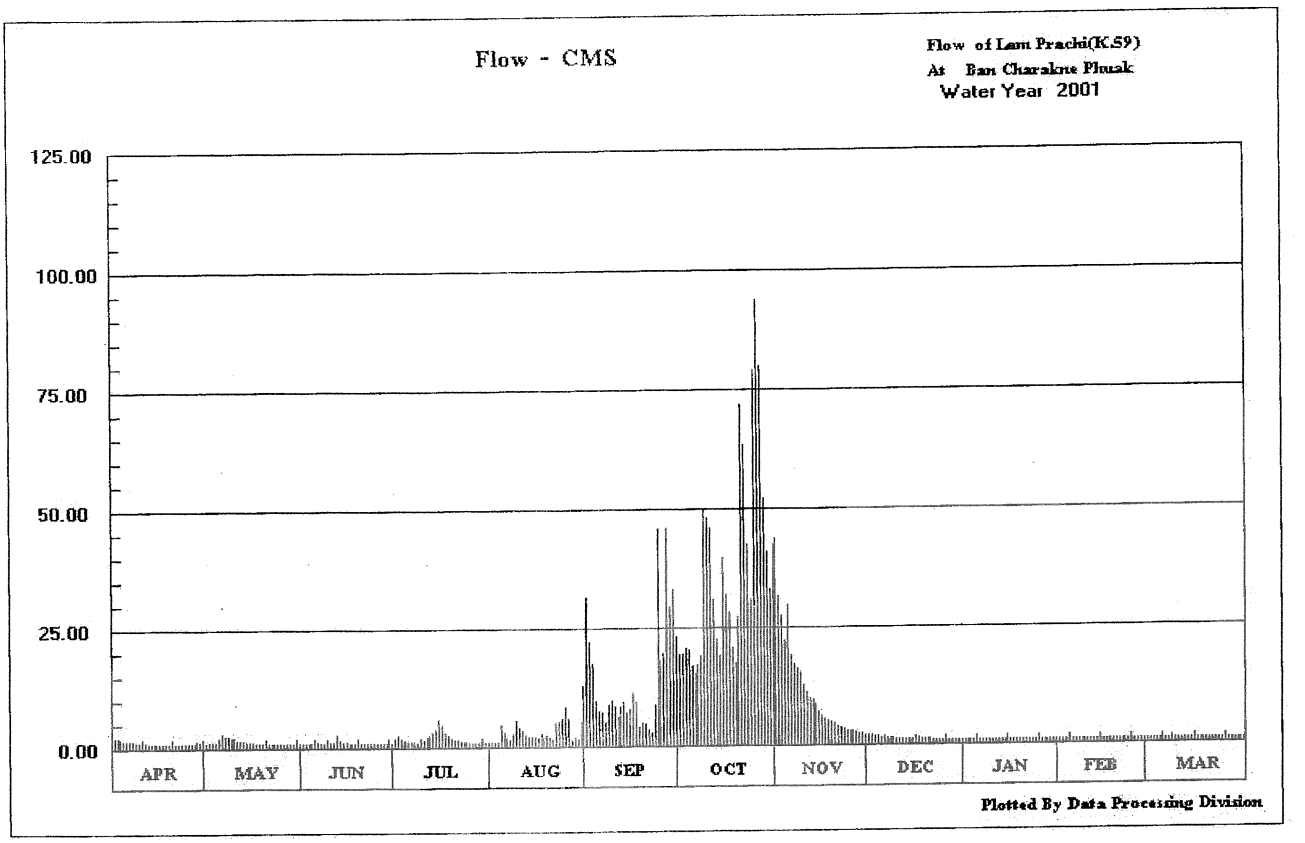
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 68 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	25.45	25.32	25.28	25.41	25.30	26.27	26.04	26.46	25.45	25.30	25.20	25.22	
2	25.43	25.37	25.29	25.46	25.30	26.10	26.04	26.27	25.43	25.30	25.21	25.21	
3	25.42	25.37	25.33	25.42	25.35	26.00	26.07	26.20	25.42	25.30	25.20	25.20	
4	25.40	25.37	25.34	25.39	25.58	25.78	26.06	26.10	25.41	25.30	25.19	25.15	
5	25.40	25.45	25.42	25.38	25.50	25.70	25.98	26.24	25.40	25.30	25.19	25.14	
6	25.40	25.50	25.36	25.37	25.42	25.68	25.94	26.03	25.40	25.30	25.19	25.12	
7	25.40	25.47	25.34	25.36	25.40	25.60	25.99	25.99	25.40	25.29	25.19	25.11	
8	25.38	25.46	25.35	25.35	25.49	25.75	26.03	25.97	25.40	25.29	25.18	25.22	
9	25.37	25.45	25.38	25.37	25.62	25.79	26.55	25.94	25.39	25.29	25.17	25.39	
10	25.37	25.43	25.38	25.40	25.55	25.74	26.52	25.88	25.38	25.28	25.17	25.35	
11	25.36	25.40	25.36	25.45	25.52	25.65	26.49	25.83	25.38	25.27	25.16	25.34	
12	25.35	25.40	25.48	25.46	25.47	25.74	26.26	25.80	25.37	25.27	25.15	25.30	
13	25.32	25.39	25.39	25.50	25.45	25.77	26.11	25.78	25.37	25.26	25.15	25.26	
14	25.31	25.38	25.37	25.54	25.44	25.68	26.03	25.75	25.36	25.26	25.15	25.25	
15	25.33	25.38	25.36	25.64	25.45	25.71	26.40	25.69	25.36	25.25	25.16	25.25	
16	25.35	25.37	25.35	25.58	25.42	25.83	26.28	25.65	25.36	25.25	25.17	25.26	
17	25.33	25.35	25.35	25.50	25.48	25.77	26.21	25.62	25.39	25.24	25.18	25.22	
18	25.32	25.34	25.34	25.47	25.41	25.55	26.07	25.61	25.38	25.23	25.14	25.15	
19	25.31	25.33	25.33	25.42	25.47	25.60	26.00	25.59	25.37	25.22	25.14	25.15	
20	25.31	25.33	25.33	25.40	25.41	25.58	26.19	25.58	25.37	25.22	25.16	25.15	
21	25.31	25.35	25.32	25.39	25.39	25.52	26.82	25.55	25.36	25.22	25.18	25.15	
22	25.34	25.33	25.29	25.38	25.59	25.49	26.72	25.53	25.35	25.21	25.14	25.11	
23	25.31	25.33	25.29	25.37	25.61	25.75	26.44	25.51	25.34	25.21	25.14	25.10	
24	25.31	25.33	25.29	25.36	25.63	26.49	26.26	25.50	25.33	25.20	25.15	25.10	
25	25.30	25.32	25.28	25.33	25.73	26.01	26.90	25.50	25.32	25.20	25.14	25.09	
26	25.31	25.31	25.27	25.32	25.64	26.05	27.05	25.50	25.31	25.19	25.18	25.19	
27	25.33	25.30	25.28	25.31	25.37	26.49	26.91	25.48	25.30	25.19	25.17	25.19	
28	25.39	25.30	25.29	25.31	25.35	26.23	26.58	25.47	25.30	25.19	25.19	25.16	
29	25.38	25.30	25.33	25.31	25.39	26.30	26.42	25.46	25.30	25.19		25.19	
30	25.32	25.29	25.33	25.28	25.61	26.12	26.30	25.45	25.30	25.18		25.27	
31		25.31		25.29	25.88		26.44		25.30	25.18		25.17	
Mean	25.35	25.37	25.34	25.40	25.49	25.86	26.33	25.76	25.36	25.24	25.17	25.20	
Max	25.45	25.50	25.48	25.64	25.88	26.49	27.05	26.46	25.45	25.30	25.21	25.39	27.05
Min	25.30	25.29	25.27	25.28	25.30	25.49	25.94	25.45	25.30	25.18	25.14	25.09	25.09

Annual Max Momentary Gage Height 27.19 M (MSL), at 18.00 Hours, on Oct 26, 2001
Zero Gage at Bottom Elevation 24.00 M (MSL), River Bed 24.75 M (MSL)
Left Bank Elevation 34.19 M (MSL)
Right Bank Elevation 34.16 M (MSL), Drainage Area 2650 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.75	1.20	0.90	2.15	1.00	31.85	19.80	44.20	2.75	1.00	0.50	0.60	
2	2.45	1.70	0.95	2.90	1.00	22.50	19.80	31.85	2.45	1.00	0.55	0.55	
3	2.30	1.70	1.30	2.30	1.50	18.00	21.15	28.00	2.30	1.00	0.50	0.50	
4	2.00	1.70	1.40	1.90	5.10	10.00	20.70	22.50	2.15	1.00	0.45	0.25	
5	2.00	2.75	2.30	1.80	3.50	8.00	17.20	30.20	2.00	1.00	0.45	0.20	
6	2.00	3.50	1.60	1.70	2.30	7.50	15.60	19.35	2.00	1.00	0.45	0.10	
7	2.00	3.05	1.40	1.60	2.00	5.50	17.60	17.60	2.00	0.95	0.45	0.05	
8	1.80	2.90	1.50	1.50	3.35	9.25	19.35	16.80	2.00	0.95	0.40	0.60	
9	1.70	2.75	1.80	1.70	6.00	10.25	50.50	15.60	1.90	0.95	0.35	1.90	
10	1.70	2.45	1.80	2.00	4.50	9.00	48.40	13.30	1.80	0.90	0.35	1.50	
11	1.60	2.00	1.60	2.75	3.90	6.75	46.30	11.55	1.80	0.85	0.30	1.40	
12	1.50	2.00	3.20	2.90	3.05	9.00	31.30	10.50	1.70	0.85	0.25	1.00	
13	1.20	1.90	1.90	3.50	2.75	9.75	23.05	10.00	1.70	0.80	0.25	0.80	
14	1.10	1.80	1.70	4.30	2.60	7.50	19.35	9.25	1.60	0.80	0.25	0.75	
15	1.30	1.80	1.60	6.50	2.75	8.25	40.00	7.75	1.60	0.75	0.30	0.75	
16	1.50	1.70	1.50	5.10	2.30	11.55	32.40	6.75	1.60	0.75	0.35	0.80	
17	1.30	1.50	1.50	3.50	3.20	9.75	28.55	6.00	1.90	0.70	0.40	0.60	
18	1.20	1.40	1.40	3.05	2.15	4.50	21.15	5.75	1.80	0.65	0.20	0.25	
19	1.10	1.30	1.30	2.30	3.05	5.50	18.00	5.30	1.70	0.60	0.20	0.25	
20	1.10	1.30	1.30	2.00	2.15	5.10	27.45	5.10	1.70	0.60	0.30	0.25	
21	1.10	1.50	1.20	1.90	1.90	3.90	72.30	4.50	1.60	0.60	0.40	0.25	
22	1.40	1.30	0.95	1.80	5.30	3.35	63.70	4.10	1.50	0.55	0.20	0.05	
23	1.10	1.30	0.95	1.70	5.75	9.25	42.80	3.70	1.40	0.55	0.20	0.00	
24	1.10	1.30	0.95	1.60	6.25	46.30	31.30	3.50	1.30	0.50	0.25	0.00	
25	1.00	1.20	0.90	1.30	8.75	18.45	79.50	3.50	1.20	0.50	0.20	0.00	
26	1.10	1.10	0.85	1.20	6.50	20.25	94.25	3.50	1.10	0.45	0.40	0.45	
27	1.30	1.00	0.90	1.10	1.70	46.30	80.45	3.20	1.00	0.45	0.35	0.45	
28	1.90	1.00	0.95	1.10	1.50	29.65	52.60	3.05	1.00	0.45	0.45	0.30	
29	1.80	1.00	1.30	1.10	1.90	33.50	41.40	2.90	1.00	0.45		0.45	
30	1.20	0.95	1.30	0.90	5.75	23.60	33.50	2.75	1.00	0.40		0.85	
31		1.10		0.95	13.30		42.80		1.00	0.40		0.35	
Total	46.60	53.15	42.20	70.10	116.75	444.05	1172.25	352.05	51.55	22.40	9.70	16.25	2397.05 CMSDAY
Mean	1.55	1.71	1.41	2.26	3.77	14.80	37.81	11.74	1.66	0.72	0.35	0.52	6.57 CMS
Max	2.75	3.50	3.20	6.50	13.30	46.30	94.25	44.20	2.75	1.00	0.55	1.90	94.25 CMS
Min	1.00	0.95	0.85	0.90	1.00	3.35	15.60	2.75	1.00	0.40	0.20	0.00	0.00 CMS
Runoff	4.026	4.592	3.646	6.057	10.087	38.366	101.282	30.417	4.454	1.935	0.838	1.404	207.105 MCM

Momentary Peak 108.95 CMS, at 27.19 M (MSL), at 18.00 Hours, on Oct 26, 2001

Runoff Yield 2.48 Liters/Second/Square KM, Momentary Peak Yield 41.113 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage 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 B.M.1 on right bank about 15 meters from the top staff gage ;
B.M.2 on right bank at the abutment of the bridge.

Elevation B.M.1=+5.262 m.(A.D.), B.M.2 = +8.348 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 2000 to date.

Rating Operation

Period of Rating 2000 to date.

Rated by Float -

Rated by Current Meter 2000 to date.

Stability of Channel Regimes Fairly stable.

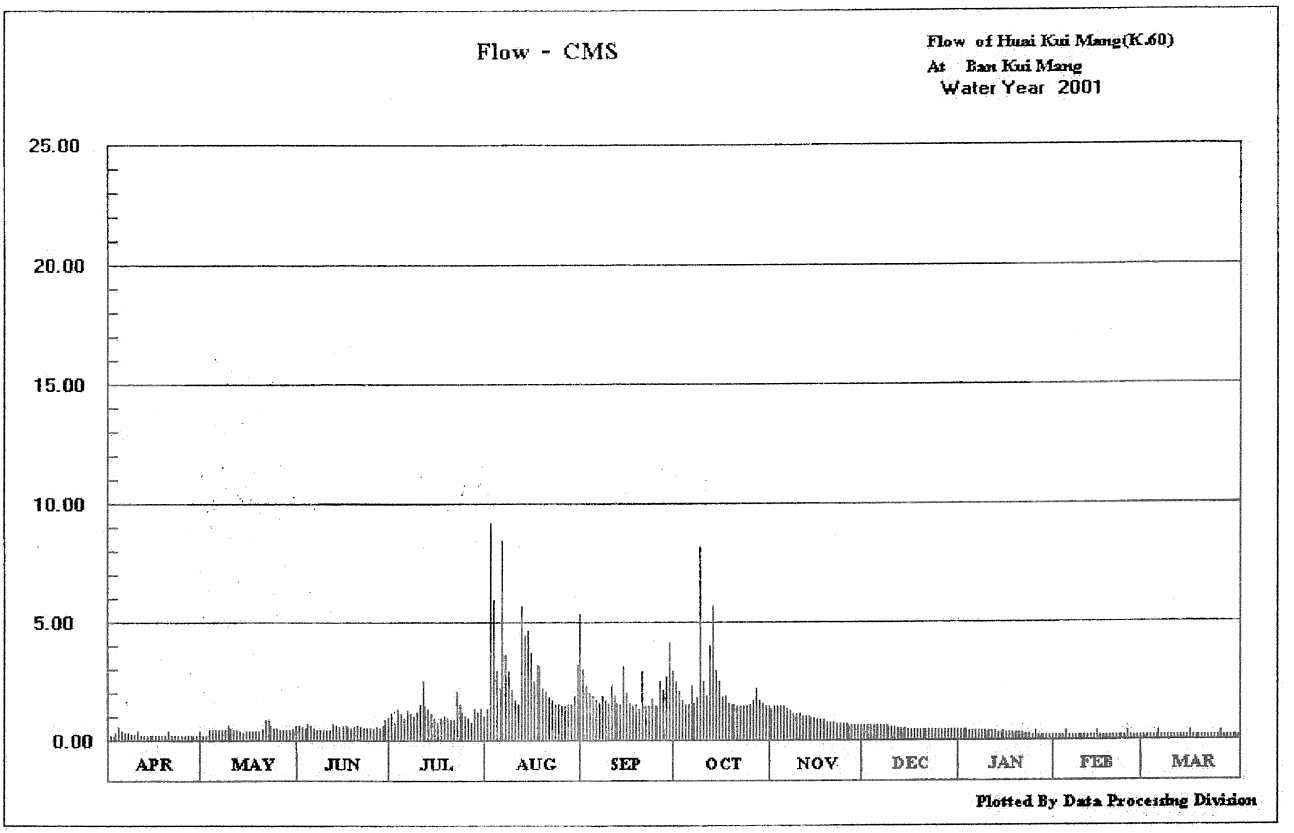
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 71 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.82	0.80	0.90	0.96	0.99	1.18	1.13	0.99	0.90	0.86	0.82	0.74	
2	0.82	0.80	0.89	0.92	1.74	1.11	1.08	1.00	0.90	0.86	0.81	0.74	
3	0.84	0.86	0.88	0.99	1.47	1.07	1.03	1.00	0.90	0.86	0.81	0.74	
4	0.89	0.86	0.91	0.96	1.17	1.06	1.01	1.00	0.90	0.85	0.81	0.74	
5	0.85	0.86	0.90	0.94	1.10	1.03	1.01	1.00	0.90	0.85	0.81	0.74	
6	0.84	0.86	0.88	0.98	1.68	1.02	1.11	0.99	0.90	0.85	0.80	0.74	
7	0.84	0.86	0.86	0.96	1.24	1.06	1.02	0.98	0.90	0.85	0.80	0.74	
8	0.83	0.86	0.86	0.95	1.17	1.03	1.05	0.96	0.90	0.85	0.80	0.73	
9	0.83	0.90	0.86	0.97	1.09	1.02	1.66	0.96	0.89	0.85	0.80	0.73	
10	0.82	0.88	0.86	1.01	1.03	1.11	1.13	0.96	0.89	0.85	0.80	0.73	
11	0.82	0.87	0.87	1.13	1.01	1.06	1.06	0.95	0.89	0.85	0.79	0.73	
12	0.81	0.86	0.91	1.00	1.45	1.02	1.28	0.95	0.88	0.85	0.78	0.74	
13	0.80	0.85	0.90	0.99	1.32	1.01	1.45	0.95	0.88	0.84	0.77	0.74	
14	0.80	0.84	0.89	0.96	1.34	1.19	1.17	0.94	0.88	0.84	0.76	0.74	
15	0.80	0.85	0.90	0.94	1.25	1.07	1.13	0.94	0.87	0.84	0.76	0.75	
16	0.79	0.85	0.90	0.92	1.13	1.02	1.05	0.93	0.87	0.84	0.76	0.75	
17	0.79	0.85	0.89	0.94	1.20	1.00	1.06	0.93	0.87	0.84	0.76	0.74	
18	0.82	0.85	0.88	0.95	1.19	1.01	1.02	0.93	0.87	0.84	0.76	0.74	
19	0.82	0.85	0.89	0.94	1.10	0.99	1.01	0.92	0.87	0.84	0.76	0.73	
20	0.82	0.88	0.90	0.93	1.08	1.17	1.01	0.92	0.87	0.84	0.75	0.73	
21	0.81	0.93	0.89	0.93	1.05	1.00	1.00	0.92	0.87	0.84	0.75	0.74	
22	0.81	0.93	0.88	1.08	1.03	1.00	1.00	0.91	0.86	0.83	0.75	0.73	
23	0.80	0.90	0.88	1.01	1.01	1.04	1.00	0.91	0.86	0.83	0.75	0.73	
24	0.80	0.88	0.88	0.97	1.01	1.00	1.00	0.91	0.86	0.82	0.75	0.73	
25	0.80	0.88	0.88	0.95	1.00	1.00	1.01	0.91	0.86	0.82	0.75	0.73	
26	0.80	0.87	0.89	0.94	1.00	1.13	1.03	0.90	0.86	0.82	0.74	0.73	
27	0.81	0.86	0.88	0.92	1.01	1.09	1.10	0.90	0.86	0.82	0.74	0.73	
28	0.81	0.86	0.90	0.99	1.01	1.15	1.03	0.90	0.86	0.82	0.74	0.73	
29	0.81	0.87	0.93	0.97	1.06	1.29	1.02	0.90	0.86	0.82		0.73	
30	0.81	0.88	0.94	0.99	1.20	1.17	1.00	0.90	0.86	0.82		0.73	
31		0.90		0.95	1.41		1.00		0.86	0.82		0.73	
Mean	0.82	0.87	0.89	0.97	1.18	1.07	1.09	0.94	0.88	0.84	0.77	0.74	
Max	0.89	0.93	0.94	1.13	1.74	1.29	1.66	1.00	0.90	0.86	0.82	0.75	1.74
Min	0.79	0.80	0.86	0.92	0.99	0.99	1.00	0.90	0.86	0.82	0.74	0.73	0.73

Annual Max Momentary Gage Height 2.25 M (A.D), at 6.00 Hours, on Oct 9, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.01 M (A.D)
Left Bank Elevation 8.34 M (A.D)
Right Bank Elevation 8.34 M (A.D), Drainage Area 128 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.30	0.20	0.70	1.18	1.42	3.10	2.60	1.42	0.70	0.50	0.30	0.05	
2	0.30	0.20	0.65	0.86	9.26	2.40	2.14	1.50	0.70	0.50	0.25	0.05	
3	0.40	0.50	0.60	1.42	6.00	2.06	1.74	1.50	0.70	0.50	0.25	0.05	
4	0.65	0.50	0.78	1.18	3.00	1.98	1.58	1.50	0.70	0.45	0.25	0.05	
5	0.45	0.50	0.70	1.02	2.30	1.74	1.58	1.50	0.70	0.45	0.25	0.05	
6	0.40	0.50	0.60	1.34	8.52	1.66	2.40	1.42	0.70	0.45	0.20	0.05	
7	0.40	0.50	0.50	1.18	3.70	1.98	1.66	1.34	0.70	0.45	0.20	0.05	
8	0.35	0.50	0.50	1.10	3.00	1.74	1.90	1.18	0.70	0.45	0.20	0.02	
9	0.35	0.70	0.50	1.26	2.22	1.66	8.27	1.18	0.65	0.45	0.20	0.02	
10	0.30	0.60	0.50	1.58	1.74	2.40	2.60	1.18	0.65	0.45	0.20	0.02	
11	0.30	0.55	0.55	2.60	1.58	1.98	1.98	1.10	0.65	0.45	0.18	0.02	
12	0.25	0.50	0.78	1.50	5.80	1.66	4.10	1.10	0.60	0.45	0.15	0.05	
13	0.20	0.45	0.70	1.42	4.50	1.58	5.80	1.10	0.60	0.40	0.12	0.05	
14	0.20	0.40	0.65	1.18	4.70	3.20	3.00	1.02	0.60	0.40	0.10	0.05	
15	0.20	0.45	0.70	1.02	3.80	2.06	2.60	1.02	0.55	0.40	0.10	0.07	
16	0.18	0.45	0.70	0.86	2.60	1.66	1.90	0.94	0.55	0.40	0.10	0.07	
17	0.18	0.45	0.65	1.02	3.30	1.50	1.98	0.94	0.55	0.40	0.10	0.05	
18	0.30	0.45	0.60	1.10	3.20	1.58	1.66	0.94	0.55	0.40	0.10	0.05	
19	0.30	0.45	0.65	1.02	2.30	1.42	1.58	0.86	0.55	0.40	0.10	0.02	
20	0.30	0.60	0.70	0.94	2.14	3.00	1.58	0.86	0.55	0.40	0.07	0.02	
21	0.25	0.94	0.65	0.94	1.90	1.50	1.50	0.86	0.55	0.40	0.07	0.05	
22	0.25	0.94	0.60	2.14	1.74	1.50	1.50	0.78	0.50	0.35	0.07	0.02	
23	0.20	0.70	0.60	1.58	1.58	1.82	1.50	0.78	0.50	0.35	0.07	0.02	
24	0.20	0.60	0.60	1.26	1.58	1.50	1.50	0.78	0.50	0.30	0.07	0.02	
25	0.20	0.60	0.60	1.10	1.50	1.50	1.58	0.78	0.50	0.30	0.07	0.02	
26	0.20	0.55	0.65	1.02	1.50	2.60	1.74	0.70	0.50	0.30	0.05	0.02	
27	0.25	0.50	0.60	0.86	1.58	2.22	2.30	0.70	0.50	0.30	0.05	0.02	
28	0.25	0.50	0.70	1.42	1.58	2.80	1.74	0.70	0.50	0.30	0.05	0.02	
29	0.25	0.55	0.94	1.26	1.98	4.20	1.66	0.70	0.50	0.30		0.02	
30	0.25	0.60	1.02	1.42	3.30	3.00	1.50	0.70	0.50	0.30		0.02	
31		0.70		1.10	5.40		1.50		0.50	0.30		0.02	
Total	8.61	16.63	19.67	38.88	98.72	63.00	70.67	31.08	18.20	12.25	3.92	1.11	382.74 CMSDAY
Mean	0.29	0.54	0.66	1.25	3.18	2.10	2.28	1.04	0.59	0.40	0.14	0.04	1.05 CMS
Max	0.65	0.94	1.02	2.60	9.26	4.20	8.27	1.50	0.70	0.50	0.30	0.07	9.26 CMS
Min	0.18	0.20	0.50	0.86	1.42	1.42	1.50	0.70	0.50	0.30	0.05	0.02	0.02 CMS
Runoff	0.744	1.437	1.699	3.359	8.529	5.443	6.106	2.685	1.572	1.058	0.339	0.096	33.069 MCM

Momentary Peak 16.75 CMS, at 2.25 M (A.D), at 6.00 Hours, on Oct 9, 2001

Runoff Yield 8.19 Liters/Second/Square KM, Momentary Peak Yield 130.859 Liters/Second/Square KM

WATER YEAR : 2001

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Song Phi Nong, Phetchaburi (B.3)

Lat 12 - 52 - 04 N. **Long** 99 - 40 - 37 E.

Location on left bank at Ban Song Phi Nong.

Ban Song Phi Nong **Amphoe** Kaeng Krachan **Changwat** Phetchaburi

Drainage Area 2,244 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +41.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 24 meters from the top staff gage.

Elevation +50.534 m. (M.S.L.)

Gage Reading Frequency Recording.

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 Float -

Rated by Current Meter 1954 - 1959, 1968 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

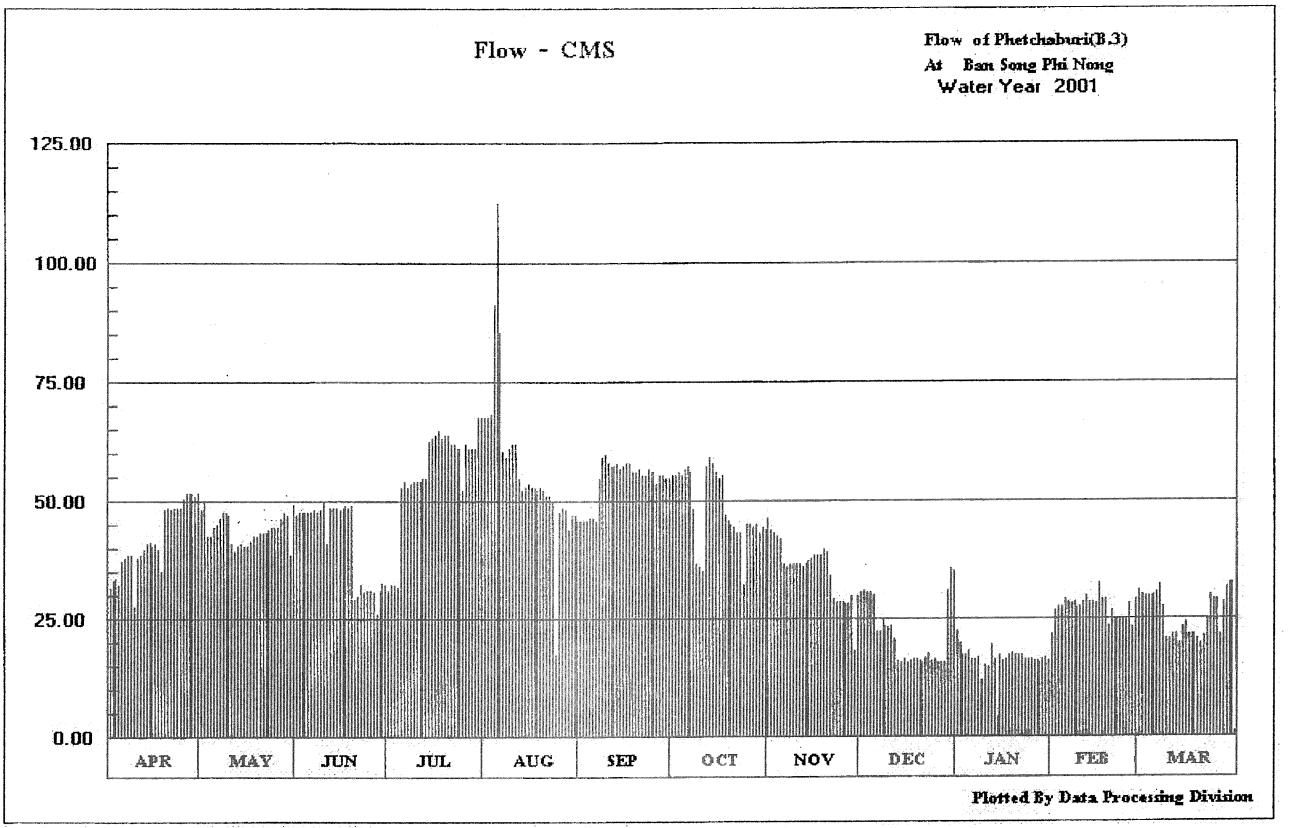
General Description Records good. Flow regulated by Kaeng Krachan Reservoir.

Stage-discharge relation defined by 78 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.70	42.99	42.97	42.69	43.29	42.95	43.11	42.96	42.68	42.51	42.50	42.69	
2	42.73	43.02	42.98	42.71	43.29	42.95	43.11	42.92	42.69	42.46	42.60	42.67	
3	42.74	42.90	42.98	42.71	43.30	42.95	43.12	42.91	42.68	42.40	42.62	42.66	
4	42.71	42.90	42.98	42.70	43.61	42.96	43.11	42.90	42.68	42.40	42.62	42.66	
5	42.81	42.93	42.98	43.07	43.87	42.96	43.13	42.89	42.67	42.42	42.65	42.66	
6	42.82	42.94	42.98	43.09	43.53	42.95	43.14	42.80	42.51	42.38	42.64	42.67	
7	42.83	42.96	42.99	43.07	43.19	43.10	43.12	42.79	42.51	42.38	42.63	42.68	
8	42.83	42.98	42.98	43.08	43.17	43.17	42.99	42.80	42.56	42.39	42.64	42.71	
9	42.62	42.98	42.99	43.09	43.20	43.18	42.80	42.80	42.54	42.27	42.61	42.62	
10	42.82	42.97	43.02	43.09	43.21	43.15	42.79	42.80	42.53	42.35	42.62	42.48	
11	42.83	42.87	42.87	43.09	43.21	43.14	42.77	42.80	42.54	42.34	42.64	42.48	
12	42.85	42.84	43.00	43.10	43.10	43.14	43.14	42.79	42.48	42.45	42.66	42.50	
13	42.87	42.86	43.00	43.10	43.06	43.15	43.17	42.80	42.37	42.38	42.64	42.50	
14	42.88	42.87	43.00	43.22	43.07	43.13	43.15	42.81	42.36	42.01	42.64	42.46	
15	42.86	42.86	42.99	43.23	43.08	43.14	43.12	42.82	42.38	42.40	42.63	42.53	
16	42.87	42.86	43.00	43.24	43.07	43.15	43.10	42.83	42.36	42.37	42.72	42.55	
17	42.85	42.88	43.01	43.25	43.07	43.15	43.11	42.83	42.37	42.38	42.65	42.50	
18	42.77	42.90	43.00	43.23	43.06	43.12	42.97	42.83	42.38	42.40	42.65	42.50	
19	42.99	42.90	43.01	43.24	43.07	43.12	42.95	42.85	42.38	42.41	42.54	42.50	
20	43.00	42.91	42.65	43.24	43.06	43.13	42.94	42.84	42.37	42.40	42.60	42.48	
21	42.99	42.91	42.66	43.21	43.04	43.11	42.93	42.75	42.36	42.40	42.57	42.46	
22	43.00	42.91	42.71	43.21	43.04	43.11	42.91	42.65	42.39	42.40	42.57	42.49	
23	43.00	42.92	42.68	43.20	43.02	43.13	42.91	42.64	42.41	42.38	42.56	42.57	
24	43.00	42.93	42.69	43.20	42.40	43.12	42.71	42.64	42.37	42.38	42.57	42.67	
25	43.03	42.93	42.69	43.06	42.98	43.12	42.94	42.64	42.38	42.38	42.56	42.65	
26	43.05	42.93	42.68	43.21	43.00	43.08	42.94	42.63	42.36	42.37	42.63	42.65	
27	43.05	42.96	42.59	43.20	42.99	43.11	42.93	42.63	42.36	42.37	42.53	42.50	
28	43.05	42.98	42.69	43.20	42.92	43.11	42.94	42.66	42.36	42.36	42.65	42.64	
29	43.04	42.97	42.72	43.20	42.97	43.10	42.91	42.42	42.69	42.38		42.70	
30	43.05	42.83	42.71	43.29	42.97	43.10	42.93	42.66	42.78	42.39		42.72	
31		43.01		43.29	42.95		42.92		42.77	42.37		42.72	
Mean	42.89	42.92	42.87	43.11	43.12	43.09	42.99	42.77	42.49	42.38	42.61	42.59	
Max	43.05	43.02	43.02	43.29	43.87	43.18	43.17	42.96	42.78	42.51	42.72	42.72	43.87
Min	42.62	42.83	42.59	42.69	42.40	42.95	42.71	42.42	42.36	42.01	42.50	42.46	42.01

Annual Max Momentary Gage Height 43.91 M (MSL), at 17.00 Hours, on Aug 17, 2001
Zero Gage at Bottom Elevation 41.00 M (MSL), River Bed 40.23 M (MSL)
Left Bank Elevation 45.42 M (MSL)
Right Bank Elevation 45.38 M (MSL), Drainage Area 2244 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.00	48.40	47.20	31.50	67.80	46.00	55.65	46.60	31.00	22.50	22.00	31.50	
2	33.50	50.20	47.80	32.50	67.80	46.00	55.65	44.20	31.50	20.20	27.00	30.50	
3	34.00	43.00	47.80	32.50	68.50	46.00	56.30	43.60	31.00	17.50	28.00	30.00	
4	32.50	43.00	47.80	32.00	91.80	46.60	55.65	43.00	31.00	17.50	28.00	30.00	
5	37.60	44.80	47.80	53.20	112.95	46.60	56.95	42.40	30.50	18.40	29.50	30.00	
6	38.20	45.40	47.80	54.40	85.75	46.00	57.60	37.00	22.50	16.70	29.00	30.50	
7	38.80	46.60	48.40	53.20	60.85	55.00	56.30	36.50	22.50	16.70	28.50	31.00	
8	38.80	47.80	47.80	53.80	59.55	59.55	48.40	37.00	25.00	17.10	29.00	32.50	
9	28.00	47.80	48.40	54.40	61.50	60.20	37.00	37.00	24.00	12.38	27.50	28.00	
10	38.20	47.20	50.20	54.40	62.20	58.25	36.50	37.00	23.50	15.50	28.00	21.10	
11	38.80	41.20	41.20	54.40	62.20	57.60	35.50	37.00	24.00	15.10	29.00	21.10	
12	40.00	39.40	49.00	55.00	55.00	57.60	57.60	36.50	21.10	19.75	30.00	22.00	
13	41.20	40.60	49.00	55.00	52.60	58.25	59.55	37.00	16.30	16.70	29.00	22.00	
14	41.80	41.20	49.00	62.90	53.20	56.95	58.25	37.60	15.90	4.45	29.00	20.20	
15	40.60	40.60	48.40	63.60	53.80	57.60	56.30	38.20	16.70	17.50	28.50	23.50	
16	41.20	40.60	49.00	64.30	53.20	58.25	55.00	38.80	15.90	16.30	33.00	24.50	
17	40.00	41.80	49.60	65.00	53.20	58.25	55.65	38.80	16.30	16.70	29.50	22.00	
18	35.50	43.00	49.00	63.60	52.60	56.30	47.20	38.80	16.70	17.50	29.50	22.00	
19	48.40	43.00	49.60	64.30	53.20	56.30	46.00	40.00	16.70	17.95	24.00	22.00	
20	49.00	43.60	29.50	64.30	52.60	56.95	45.40	39.40	16.30	17.50	27.00	21.10	
21	48.40	43.60	30.00	62.20	51.40	55.65	44.80	34.50	15.90	17.50	25.50	20.20	
22	49.00	43.60	32.50	62.20	51.40	55.65	43.60	29.50	17.10	17.50	25.50	21.55	
23	49.00	44.20	31.00	61.50	50.20	56.95	43.60	29.00	17.95	16.70	25.00	25.50	
24	49.00	44.80	31.50	61.50	17.50	56.30	32.50	29.00	16.30	16.70	25.50	30.50	
25	50.80	44.80	31.50	52.60	47.80	56.30	45.40	29.00	16.70	16.70	25.00	29.50	
26	52.00	44.80	31.00	62.20	49.00	53.80	45.40	28.50	15.90	16.30	28.50	29.50	
27	52.00	46.60	26.50	61.50	48.40	55.65	44.80	28.50	15.90	16.30	23.50	22.00	
28	52.00	47.80	31.50	61.50	44.20	55.65	45.40	30.00	15.90	15.90	29.50	29.00	
29	51.40	47.20	33.00	61.50	47.20	55.00	43.60	18.40	31.50	16.70		32.00	
30	52.00	38.80	32.50	67.80	47.20	55.00	44.80	30.00	36.00	17.10		33.00	
31		49.60		67.80	46.00		44.20		35.50	16.30		33.00	
Total	1273.70	1375.00	1255.30	1746.60	1780.60	1640.20	1510.55	1072.80	683.05	517.63	773.00	821.25	14449.68 CMSDAY
Mean	42.46	44.35	41.84	56.34	57.44	54.67	48.73	35.76	22.03	16.70	27.61	26.49	39.59 CMS
Max	52.00	50.20	50.20	67.80	112.95	60.20	59.55	46.60	36.00	22.50	33.00	33.00	112.95 CMS
Min	28.00	38.80	26.50	31.50	17.50	46.00	32.50	18.40	15.90	4.45	22.00	20.20	4.45 CMS
Runoff	110.048	118.800	108.458	150.906	153.844	141.713	130.512	92.690	59.016	44.723	66.787	70.956	1248.452 MCM

Momentary Peak 116.35 CMS, at 43.91 M (MSL), at 17.00 Hours, on Aug 17, 2001

Runoff Yield 17.64 Liters/Second/Square KM, Momentary Peak Yield 51.849 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,015 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +22.710 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the automatic gage building.

Elevation +30.274 m. (M.S.L.)

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 Float -

Rated by Current Meter 1961 - 1962, 1964 to date:

Stability of Channel Regimes Stable.

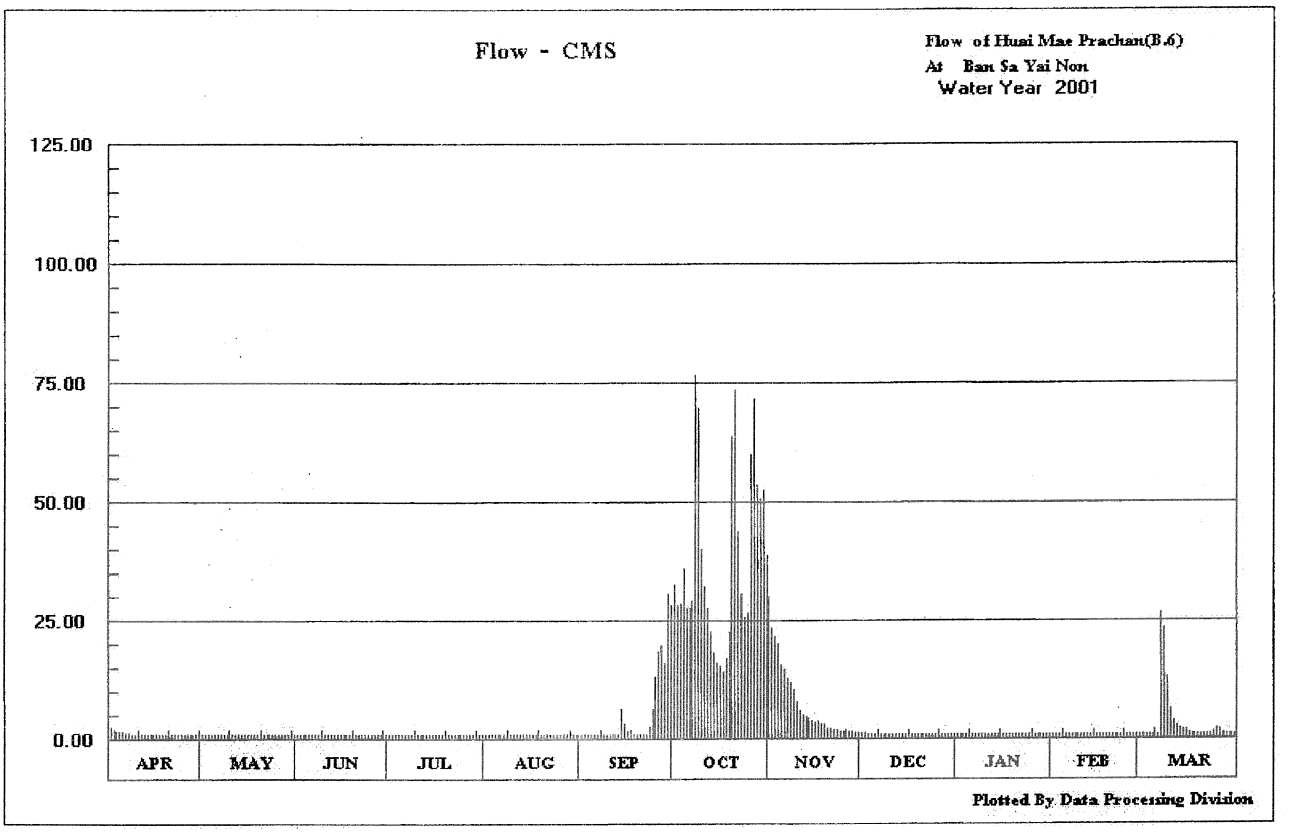
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 81 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.82	22.59	22.52	22.51	22.42	22.48	23.66	23.61	22.74	22.59	22.55	22.45	
2	22.79	22.59	22.51	22.48	22.43	22.47	23.57	23.48	22.73	22.61	22.54	22.45	
3	22.77	22.59	22.51	22.48	22.43	22.44	23.58	23.44	22.72	22.61	22.54	22.45	
4	22.76	22.58	22.51	22.47	22.43	22.44	23.72	23.41	22.71	22.60	22.53	22.44	
5	22.75	22.58	22.51	22.47	22.46	22.43	23.56	23.30	22.70	22.60	22.53	22.44	
6	22.74	22.57	22.51	22.47	22.50	22.44	23.56	23.27	22.70	22.60	22.52	22.44	
7	22.73	22.58	22.52	22.47	22.53	22.50	23.59	23.22	22.70	22.60	22.52	22.44	
8	22.70	22.59	22.52	22.47	22.52	22.57	24.19	23.19	22.70	22.59	22.51	23.54	
9	22.69	22.60	22.53	22.49	22.50	22.57	24.12	23.14	22.70	22.59	22.51	23.48	
10	22.67	22.61	22.53	22.51	22.52	22.55	23.79	23.06	22.69	22.59	22.51	23.23	
11	22.65	22.59	22.53	22.50	22.54	22.54	23.65	22.99	22.68	22.58	22.51	23.01	
12	22.63	22.57	22.54	22.50	22.54	22.60	23.56	22.95	22.66	22.58	22.50	22.89	
13	22.61	22.57	22.54	22.49	22.54	22.72	23.46	22.94	22.66	22.58	22.50	22.85	
14	22.59	22.57	22.54	22.48	22.53	23.01	23.36	22.93	22.69	22.58	22.50	22.81	
15	22.57	22.58	22.53	22.48	22.53	22.86	23.31	22.89	22.70	22.58	22.50	22.79	
16	22.57	22.58	22.52	22.47	22.53	22.75	23.29	22.87	22.70	22.58	22.49	22.76	
17	22.56	22.58	22.52	22.47	22.51	22.68	23.26	22.89	22.69	22.58	22.49	22.74	
18	22.55	22.57	22.51	22.46	22.50	22.64	23.33	22.86	22.68	22.58	22.49	22.71	
19	22.55	22.57	22.50	22.46	22.48	22.64	23.46	22.86	22.67	22.57	22.49	22.69	
20	22.54	22.56	22.49	22.45	22.46	22.61	24.06	22.81	22.66	22.57	22.48	22.67	
21	22.54	22.55	22.48	22.44	22.45	22.62	24.16	22.81	22.65	22.57	22.48	22.65	
22	22.53	22.55	22.48	22.43	22.44	22.65	23.84	22.79	22.63	22.57	22.47	22.66	
23	22.53	22.54	22.48	22.42	22.42	22.83	23.62	22.78	22.61	22.57	22.47	22.68	
24	22.52	22.54	22.48	22.42	22.42	23.01	23.52	22.77	22.58	22.56	22.46	22.71	
25	22.52	22.53	22.47	22.45	22.43	23.23	23.54	22.76	22.58	22.56	22.45	22.75	
26	22.52	22.53	22.47	22.45	22.41	23.37	24.02	22.75	22.57	22.56	22.44	22.81	
27	22.51	22.53	22.47	22.44	22.40	23.40	24.14	22.75	22.56	22.55	22.44	22.79	
28	22.51	22.52	22.47	22.44	22.40	23.31	23.95	22.75	22.55	22.55	22.44	22.74	
29	22.54	22.52	22.48	22.43	22.41	23.62	23.92	22.74	22.54	22.55		22.71	
30	22.56	22.52	22.48	22.43	22.41	23.57	23.94	22.74	22.52	22.55		22.69	
31		22.52		22.42	22.50		23.77		22.55	22.55		22.69	
Mean	22.62	22.56	22.50	22.46	22.47	22.79	23.69	22.99	22.65	22.58	22.49	22.75	
Max	22.82	22.61	22.54	22.51	22.54	23.62	24.19	23.61	22.74	22.61	22.55	23.54	24.19
Min	22.51	22.52	22.47	22.42	22.40	22.43	23.26	22.74	22.52	22.55	22.44	22.44	22.40

Annual Max Momentary Gage Height 24.45 M (MSL), at 17.00 Hours, on Oct 8, 2001
Zero Gage at Bottom Elevation 22.71 M (MSL), River Bed 21.73 M (MSL)
Left Bank Elevation 29.93 M (MSL)
Right Bank Elevation 29.07 M (MSL), Drainage Area 1015 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.81	0.51	0.23	0.19	0.05	0.12	33.00	30.50	1.73	0.51	0.35	0.09	
2	2.33	0.51	0.19	0.12	0.06	0.11	28.50	24.00	1.61	0.62	0.31	0.09	
3	2.09	0.51	0.19	0.12	0.06	0.08	29.00	22.00	1.49	0.62	0.31	0.09	
4	1.97	0.47	0.19	0.11	0.06	0.08	36.20	20.50	1.37	0.55	0.27	0.08	
5	1.85	0.47	0.19	0.11	0.10	0.06	28.00	16.00	1.25	0.55	0.27	0.08	
6	1.73	0.43	0.19	0.11	0.15	0.08	28.00	14.95	1.25	0.55	0.23	0.08	
7	1.61	0.47	0.23	0.11	0.27	0.15	29.50	13.20	1.25	0.55	0.23	0.08	
8	1.25	0.51	0.23	0.11	0.23	0.43	77.00	12.20	1.25	0.51	0.19	27.00	
9	1.18	0.55	0.27	0.14	0.15	0.43	70.00	10.70	1.25	0.51	0.19	24.00	
10	1.04	0.62	0.27	0.19	0.23	0.35	40.40	8.30	1.18	0.51	0.19	13.55	
11	0.90	0.51	0.27	0.15	0.31	0.31	32.50	6.27	1.11	0.47	0.19	6.80	
12	0.76	0.43	0.31	0.15	0.31	0.55	28.00	5.38	0.97	0.47	0.15	4.07	
13	0.62	0.43	0.31	0.14	0.31	1.49	23.00	5.15	0.97	0.47	0.15	3.35	
14	0.51	0.43	0.31	0.12	0.27	6.80	18.40	4.93	1.18	0.47	0.15	2.63	
15	0.43	0.47	0.27	0.12	0.27	3.53	16.40	4.07	1.25	0.47	0.15	2.33	
16	0.43	0.47	0.23	0.11	0.27	1.85	15.65	3.71	1.25	0.47	0.14	1.97	
17	0.39	0.47	0.23	0.11	0.19	1.11	14.60	4.07	1.18	0.47	0.14	1.73	
18	0.35	0.43	0.19	0.10	0.15	0.83	17.20	3.53	1.11	0.47	0.14	1.37	
19	0.35	0.43	0.15	0.10	0.12	0.83	23.00	3.53	1.04	0.43	0.14	1.18	
20	0.31	0.39	0.14	0.09	0.10	0.62	64.20	2.63	0.97	0.43	0.12	1.04	
21	0.31	0.35	0.12	0.08	0.09	0.69	74.00	2.63	0.90	0.43	0.12	0.90	
22	0.27	0.35	0.12	0.06	0.08	0.90	44.20	2.33	0.76	0.43	0.11	0.97	
23	0.27	0.31	0.12	0.05	0.05	2.99	31.00	2.21	0.62	0.43	0.11	1.11	
24	0.23	0.31	0.12	0.05	0.05	6.80	26.00	2.09	0.47	0.39	0.10	1.37	
25	0.23	0.27	0.11	0.09	0.06	13.55	27.00	1.97	0.47	0.39	0.09	1.85	
26	0.23	0.27	0.11	0.09	0.04	18.80	60.40	1.85	0.43	0.39	0.08	2.63	
27	0.19	0.27	0.11	0.08	0.03	20.00	72.00	1.85	0.39	0.35	0.08	2.33	
28	0.19	0.23	0.11	0.08	0.03	16.40	53.75	1.85	0.35	0.35	0.08	1.73	
29	0.31	0.23	0.12	0.06	0.04	31.00	50.90	1.73	0.31	0.35		1.37	
30	0.39	0.23	0.12	0.06	0.04	28.50	52.80	1.73	0.23	0.35		1.18	
31		0.23		0.05	0.15		39.20		0.35	0.35		1.18	
Total	25.53	12.56	5.75	3.25	4.32	159.44	1183.80	235.86	29.94	14.31	4.78	108.23	1787.77 CMSDAY
Mean	0.85	0.41	0.19	0.10	0.14	5.31	38.19	7.86	0.97	0.46	0.17	3.49	4.90 CMS
Max	2.81	0.62	0.31	0.19	0.31	31.00	77.00	30.50	1.73	0.62	0.35	27.00	77.00 CMS
Min	0.19	0.23	0.11	0.05	0.03	0.06	14.60	1.73	0.23	0.35	0.08	0.08	0.03 CMS
Runoff	2.206	1.085	0.497	0.281	0.373	13.776	102.280	20.378	2.587	1.236	0.413	9.351	154.463 MCM

Momentary Peak 103.00 CMS, at 24.45 M (MSL), at 17.00 Hours, on Oct 8, 2001

Runoff Yield 4.83 Liters/Second/Square KM, Momentary Peak Yield 101.478 Liters/Second/Square KM

WATER YEAR : 2001

PHETCHABURI RIVER BASIN

Huai Phak at Ban Kariang, Phetchaburi (B.8)

Lat 12 - 48 - 49 N. **Long** 99 - 41 - 32 E.

Location on left bank at Ban Kariang.

Ban Kariang **Amphoe** Tha Yang **Changwat** Phetchaburi

Drainage Area 264 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +42.315 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM In front of gage observer's house.

Elevation +51.185 m. (M.S.L.)

Gage Reading Frequency Recordings.

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 Float -

Rated by Current Meter 1973 to date.

Stability of Channel Regimes Stable.

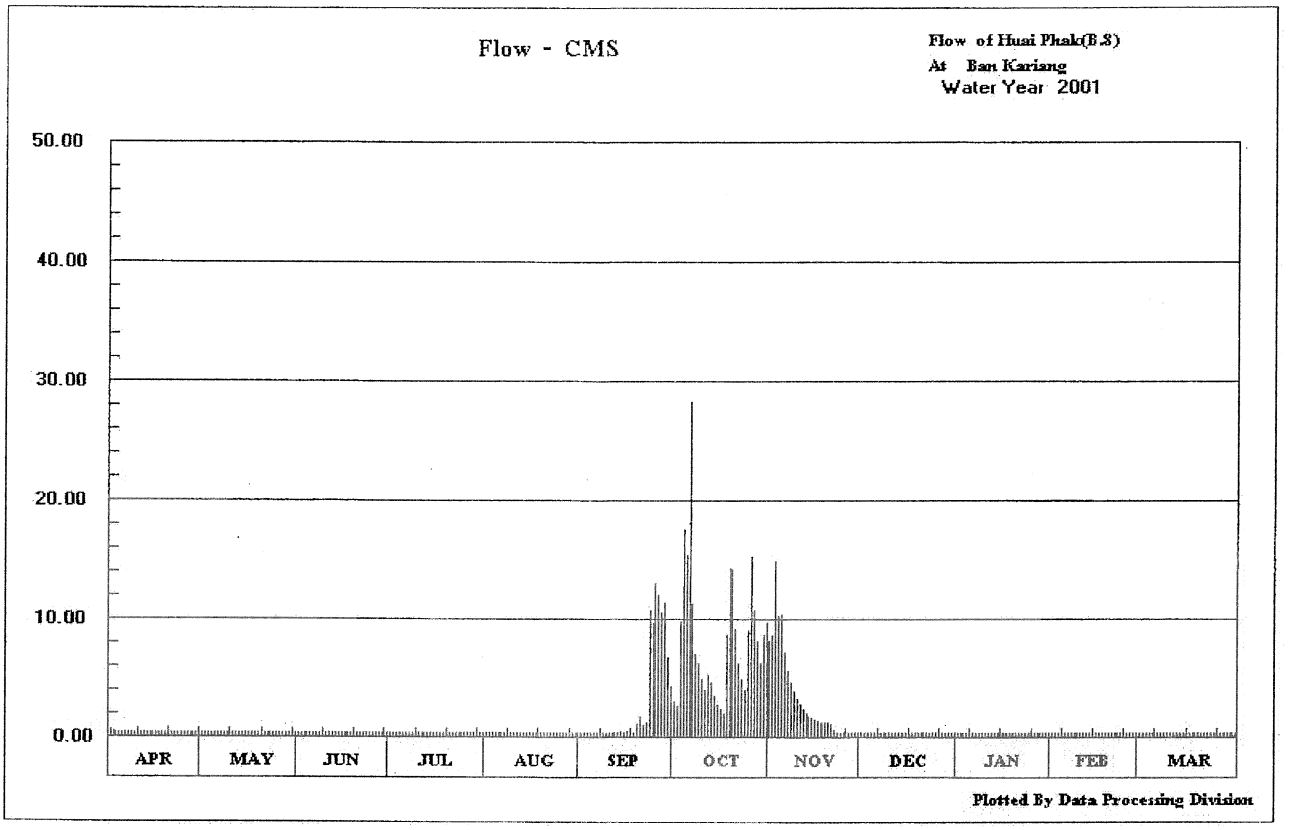
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 72 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	44.09	43.93	44.02	43.76	43.76	43.81	44.56	45.11	43.99	43.83	43.82	43.69	
2	44.06	43.97	44.02	43.77	43.76	43.80	44.50	45.15	43.99	43.82	43.81	43.68	
3	44.04	43.96	44.01	43.77	43.76	43.79	45.25	45.60	43.97	43.83	43.81	43.67	
4	44.01	43.95	44.00	43.77	43.76	43.78	45.76	45.29	43.97	43.85	43.80	43.67	
5	44.00	43.94	44.01	43.77	43.76	43.78	45.64	45.30	43.95	43.86	43.80	43.67	
6	43.98	43.94	44.00	43.77	43.77	43.84	46.22	45.02	43.94	43.87	43.75	43.67	
7	43.96	43.91	43.95	43.77	43.96	43.90	45.36	44.88	43.92	43.85	43.73	43.67	
8	43.95	43.91	43.92	43.74	43.91	43.90	45.01	44.78	43.90	43.83	43.73	43.71	
9	43.92	43.93	43.91	43.73	43.88	43.90	44.94	44.67	43.91	43.83	43.72	43.82	
10	43.92	43.95	43.98	43.85	43.86	43.88	44.80	44.58	43.92	43.83	43.72	43.94	
11	43.90	43.94	43.99	43.85	43.87	43.88	44.70	44.51	43.95	43.81	43.71	43.92	
12	43.88	43.89	43.92	43.84	43.85	43.86	44.84	44.45	43.96	43.80	43.72	43.90	
13	43.89	43.86	43.88	43.84	43.83	43.89	44.77	44.40	43.95	43.80	43.72	43.89	
14	43.91	43.87	43.85	43.83	43.81	44.06	44.62	44.36	43.93	43.79	43.72	43.88	
15	43.91	43.91	43.83	43.81	43.80	44.02	44.51	44.34	43.92	43.79	43.72	43.86	
16	43.90	43.91	43.81	43.79	43.80	44.08	44.45	44.31	43.92	43.82	43.71	43.84	
17	43.88	43.90	43.80	43.79	43.80	44.06	44.40	44.29	43.90	43.82	43.71	43.83	
18	43.87	43.88	43.79	43.79	43.82	44.04	45.15	44.27	43.89	43.86	43.71	43.82	
19	43.87	43.89	43.79	43.78	43.81	44.23	45.56	44.26	43.88	43.87	43.70	43.81	
20	43.87	43.88	43.79	43.76	43.81	44.36	45.55	44.26	43.85	43.85	43.70	43.74	
21	43.86	43.87	43.79	43.76	43.83	44.20	45.20	44.23	43.84	43.82	43.69	43.74	
22	43.87	43.88	43.78	43.75	43.83	44.26	44.94	44.12	43.86	43.81	43.69	43.76	
23	43.89	43.87	43.77	43.75	43.81	45.33	44.80	44.04	43.86	43.80	43.69	43.76	
24	43.91	43.86	43.76	43.75	43.79	45.24	44.69	44.03	43.88	43.79	43.69	43.76	
25	43.92	43.85	43.77	43.76	43.79	45.48	45.19	44.02	43.88	43.81	43.69	43.77	
26	43.93	43.85	43.76	43.76	43.78	45.41	45.63	43.99	43.87	43.79	43.69	43.76	
27	43.93	43.85	43.76	43.76	43.78	45.31	45.33	43.98	43.85	43.80	43.69	43.76	
28	43.90	43.86	43.76	43.76	43.78	45.37	45.11	43.99	43.84	43.93	43.69	43.76	
29	43.89	43.97	43.76	43.76	43.78	44.99	44.94	43.98	43.84	43.91		43.75	
30	43.89	44.05	43.76	43.75	43.80	44.72	45.16	43.98	43.84	43.88		43.73	
31		44.03		43.75	43.82		45.24		43.84	43.85		43.73	
Mean	43.93	43.91	43.86	43.78	43.81	44.31	45.06	44.47	43.90	43.83	43.73	43.77	
Max	44.09	44.05	44.02	43.85	43.96	45.48	46.22	45.60	43.99	43.93	43.82	43.94	46.22
Min	43.86	43.85	43.76	43.73	43.76	43.78	44.40	43.98	43.84	43.79	43.69	43.67	43.67

Annual Max Momentary Gage Height 47.18 M (MSL), at 24.00 Hours, on Oct 5, 2001
Zero Gage at Bottom Elevation 42.32 M (MSL), River Bed 42.75 M (MSL)
Left Bank Elevation 48.82 M (MSL)
Right Bank Elevation 51.02 M (MSL), Drainage Area 264 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.73	0.36	0.55	0.06	0.06	0.12	3.22	8.27	0.48	0.16	0.14	0.00	
2	0.65	0.44	0.55	0.07	0.06	0.10	2.80	8.73	0.48	0.14	0.12	0.00	
3	0.60	0.42	0.52	0.07	0.06	0.09	9.90	15.00	0.44	0.16	0.12	0.00	
4	0.52	0.40	0.50	0.07	0.06	0.08	17.70	10.38	0.44	0.20	0.10	0.00	
5	0.50	0.38	0.52	0.07	0.06	0.08	15.60	10.50	0.40	0.22	0.10	0.00	
6	0.46	0.38	0.50	0.07	0.07	0.18	28.44	7.23	0.38	0.24	0.05	0.00	
7	0.42	0.32	0.40	0.07	0.42	0.30	11.40	5.80	0.34	0.20	0.03	0.00	
8	0.40	0.32	0.34	0.04	0.32	0.30	7.11	4.84	0.30	0.16	0.03	0.01	
9	0.34	0.36	0.32	0.03	0.26	0.30	6.40	3.99	0.32	0.16	0.02	0.14	
10	0.34	0.40	0.46	0.20	0.22	0.26	5.00	3.36	0.34	0.16	0.02	0.38	
11	0.30	0.38	0.48	0.20	0.24	0.26	4.20	2.87	0.40	0.12	0.01	0.34	
12	0.26	0.28	0.34	0.18	0.20	0.22	5.40	2.48	0.42	0.10	0.02	0.30	
13	0.28	0.22	0.26	0.18	0.16	0.28	4.76	2.15	0.40	0.10	0.02	0.28	
14	0.32	0.24	0.20	0.16	0.12	0.65	3.64	1.93	0.36	0.09	0.02	0.26	
15	0.32	0.32	0.16	0.12	0.10	0.55	2.87	1.82	0.34	0.09	0.02	0.22	
16	0.30	0.32	0.12	0.09	0.10	0.70	2.48	1.66	0.34	0.14	0.01	0.18	
17	0.26	0.30	0.10	0.09	0.10	0.65	2.15	1.56	0.30	0.14	0.01	0.16	
18	0.24	0.26	0.09	0.09	0.14	0.60	8.73	1.47	0.28	0.22	0.01	0.14	
19	0.24	0.28	0.09	0.08	0.12	1.28	14.40	1.42	0.26	0.24	0.00	0.12	
20	0.24	0.26	0.09	0.06	0.12	1.93	14.25	1.42	0.20	0.20	0.00	0.04	
21	0.22	0.24	0.09	0.06	0.16	1.15	9.30	1.28	0.18	0.14	0.00	0.04	
22	0.24	0.26	0.08	0.05	0.16	1.42	6.40	0.83	0.22	0.12	0.00	0.06	
23	0.28	0.24	0.07	0.05	0.12	10.95	5.00	0.60	0.22	0.10	0.00	0.06	
24	0.32	0.22	0.06	0.05	0.09	9.78	4.13	0.57	0.26	0.09	0.00	0.06	
25	0.34	0.20	0.07	0.06	0.09	13.20	9.18	0.55	0.26	0.12	0.00	0.07	
26	0.36	0.20	0.06	0.06	0.08	12.15	15.45	0.48	0.24	0.09	0.00	0.06	
27	0.36	0.20	0.06	0.06	0.08	10.65	10.95	0.46	0.20	0.10	0.00	0.06	
28	0.30	0.22	0.06	0.06	0.08	11.55	8.27	0.48	0.18	0.36	0.00	0.06	
29	0.28	0.44	0.06	0.06	0.08	6.90	6.40	0.46	0.18	0.32		0.05	
30	0.28	0.63	0.06	0.05	0.10	4.36	8.84	0.46	0.18	0.26		0.03	
31		0.57		0.05	0.14		9.78		0.18	0.20		0.03	
Total	10.70	10.06	7.26	2.61	4.17	91.04	264.15	103.05	9.52	5.14	0.85	3.15	511.70 CMSDAY
Mean	0.36	0.32	0.24	0.08	0.13	3.03	8.52	3.44	0.31	0.17	0.03	0.10	1.40 CMS
Max	0.73	0.63	0.55	0.20	0.42	13.20	28.44	15.00	0.48	0.36	0.14	0.38	28.44 CMS
Min	0.22	0.20	0.06	0.03	0.06	0.08	2.15	0.46	0.18	0.09	0.00	0.00	0.00 CMS
Runoff	0.924	0.869	0.627	0.226	0.360	7.866	22.823	8.904	0.823	0.444	0.073	0.272	44.211 MCM

Momentary Peak 58.62 CMS, at 47.18 M (MSL), at 24.00 Hours, on Oct 5, 2001
Runoff Yield 5.31 Liters/Second/Square KM, Momentary Peak Yield 222.045 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 4,111 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +5.630 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 2.00 meters from the top staff gage.

Elevation +15.068 m. (M.S.L.)

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 Float -

Rated by Current Meter 1985 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

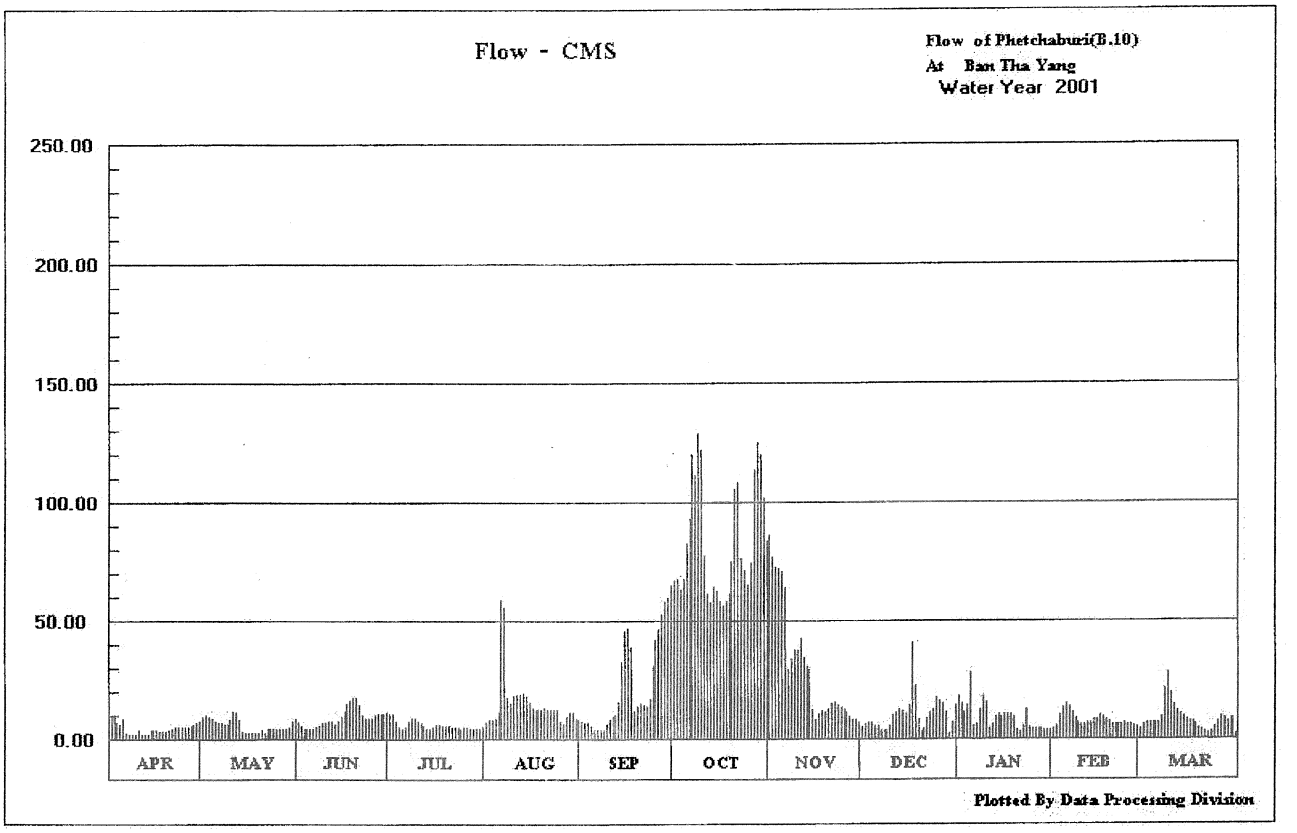
General Description Records good. Flow regulated by Phet Dam.

Stage-discharge relation defined by 77 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.03	7.04	6.88	7.14	6.89	6.93	9.90	10.63	6.77	7.61	6.69	6.72	
2	7.04	7.10	6.80	7.12	6.95	6.88	9.92	10.29	6.85	7.41	6.81	6.83	
3	6.90	7.05	6.73	6.93	6.98	6.87	9.75	10.12	6.90	7.16	7.09	6.86	
4	6.83	6.99	6.71	6.77	7.02	6.78	9.91	10.08	6.86	7.39	7.31	6.88	
5	7.02	6.91	6.71	6.73	7.19	6.67	10.51	10.03	6.80	8.16	7.43	6.88	
6	6.51	6.88	6.71	6.77	9.57	6.66	10.87	9.77	6.79	6.81	7.33	6.87	
7	6.45	6.86	6.74	6.91	9.43	6.64	11.76	8.21	6.65	6.84	7.16	6.89	
8	6.45	6.85	6.79	7.01	7.59	6.68	11.47	8.43	6.63	7.24	6.99	7.03	
9	6.50	6.84	6.86	7.02	7.44	6.84	12.05	8.62	6.66	7.64	6.87	7.79	
10	6.44	6.96	6.88	6.94	7.61	6.97	11.82	8.62	6.79	7.48	6.84	8.14	
11	6.43	7.22	6.91	6.86	7.66	7.04	10.31	8.88	7.08	6.73	6.83	7.70	
12	6.45	7.16	6.92	6.78	7.66	7.09	9.67	8.45	7.19	6.85	6.87	7.39	
13	6.50	6.95	6.84	6.73	7.70	7.48	9.52	8.27	7.26	7.06	6.87	7.23	
14	6.64	6.59	6.91	6.71	7.61	8.38	9.78	8.21	7.20	7.11	6.97	7.12	
15	6.64	6.56	7.04	6.74	7.47	9.03	9.71	7.24	7.15	7.05	6.96	7.03	
16	6.64	6.54	7.21	6.85	7.29	9.08	9.54	6.96	7.39	7.12	7.07	6.98	
17	6.62	6.53	7.41	6.85	7.24	8.68	9.47	7.14	8.77	7.13	7.06	6.94	
18	6.61	6.53	7.50	6.80	7.26	7.20	9.55	7.23	7.88	7.13	6.96	6.91	
19	6.62	6.52	7.57	6.79	7.26	7.34	9.66	7.19	6.95	7.06	6.92	6.84	
20	6.64	6.52	7.58	6.79	7.29	7.41	10.21	7.27	6.59	6.65	6.84	6.72	
21	6.70	6.54	7.38	6.77	7.27	7.39	11.28	7.42	6.69	6.61	6.84	6.65	
22	6.75	6.69	7.09	6.77	7.25	7.35	11.36	7.47	7.01	6.78	6.85	6.60	
23	6.77	6.71	7.01	6.74	7.25	7.54	10.27	7.40	7.17	7.27	6.85	6.53	
24	6.76	6.70	7.01	6.73	7.26	8.29	10.06	7.30	7.27	6.75	6.87	6.58	
25	6.76	6.70	7.01	6.75	6.93	8.84	9.81	7.25	7.58	6.70	6.83	6.75	
26	6.77	6.71	7.08	6.74	6.82	9.04	10.18	7.16	7.50	6.70	6.84	6.94	
27	6.81	6.71	7.11	6.71	7.05	9.31	11.55	7.04	7.41	6.71	6.81	7.06	
28	6.84	6.72	7.13	6.71	7.19	9.54	11.93	6.98	7.16	6.71	6.75	6.99	
29	6.86	6.76	7.15	6.71	7.19	9.60	11.76	6.97	6.55	6.68		6.93	
30	6.91	6.92	7.16	6.73	7.01	9.82	11.15	6.88	6.86	6.67		6.99	
31		6.99		6.76	6.97		10.55		7.39	6.67		6.99	
Mean	6.70	6.80	7.03	6.82	7.40	7.78	10.49	8.12	7.09	7.03	6.95	6.99	
Max	7.04	7.22	7.58	7.14	9.57	9.82	12.05	10.63	8.77	8.16	7.43	8.14	12.05
Min	6.43	6.52	6.71	6.71	6.82	6.64	9.47	6.88	6.55	6.61	6.69	6.53	6.43

Annual Max Momentary Gage Height 12.23 M (MSL), at 22.00 Hours, on Oct 9, 2001
Zero Gage at Bottom Elevation 5.63 M (MSL), River Bed 5.25 M (MSL)
Left Bank Elevation 13.00 M (MSL)
Right Bank Elevation 13.00 M (MSL), Drainage Area 4111 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.95	10.10	7.70	11.60	7.85	8.45	68.00	86.90	6.05	18.65	4.90	5.30	
2	10.10	11.00	6.50	11.30	8.75	7.70	68.50	77.75	7.25	15.65	6.65	6.95	
3	8.00	10.25	5.45	8.45	9.20	7.55	64.25	73.50	8.00	11.90	10.85	7.40	
4	6.95	9.35	5.15	6.05	9.80	6.20	68.25	72.50	7.40	15.35	14.15	7.70	
5	9.80	8.15	5.15	5.45	12.35	4.70	83.30	71.25	6.50	29.20	15.95	7.70	
6	3.10	7.70	5.15	6.05	59.75	4.60	94.10	64.75	6.35	6.65	14.45	7.55	
7	2.50	7.40	5.60	8.15	56.25	4.40	120.80	30.20	4.50	7.10	11.90	7.85	
8	2.50	7.25	6.35	9.65	18.35	4.80	112.10	34.60	4.30	13.10	9.35	9.95	
9	3.00	7.10	7.40	9.80	16.10	7.10	129.50	38.40	4.60	19.10	7.55	21.80	
10	2.40	8.90	7.70	8.60	18.65	9.05	122.60	38.40	6.35	16.70	7.10	28.80	
11	2.30	12.80	8.15	7.40	19.40	10.10	78.25	43.60	10.70	5.45	6.95	20.00	
12	2.50	11.90	8.30	6.20	19.40	10.85	62.25	35.00	12.35	7.25	7.55	15.35	
13	3.00	8.75	7.10	5.45	20.00	16.70	58.50	31.40	13.40	10.40	7.55	12.95	
14	4.40	3.90	8.15	5.15	18.65	33.60	65.00	30.20	12.50	11.15	9.05	11.30	
15	4.40	3.60	10.10	5.60	16.55	46.60	63.25	13.10	11.75	10.25	8.90	9.95	
16	4.40	3.40	12.65	7.25	13.85	47.60	59.00	8.90	15.35	11.30	10.55	9.20	
17	4.20	3.30	15.65	7.25	13.10	39.60	57.25	11.60	41.40	11.45	10.40	8.60	
18	4.10	3.30	17.00	6.50	13.40	12.50	59.25	12.95	23.60	11.45	8.90	8.15	
19	4.20	3.20	18.05	6.35	13.40	14.60	62.00	12.35	8.75	10.40	8.30	7.10	
20	4.40	3.20	18.20	6.35	13.85	15.65	75.75	13.55	3.90	4.50	7.10	5.30	
21	5.00	3.40	15.20	6.05	13.55	15.35	106.40	15.80	4.90	4.10	7.10	4.50	
22	5.75	4.90	10.85	6.05	13.25	14.75	108.80	16.55	9.65	6.20	7.25	4.00	
23	6.05	5.15	9.65	5.60	13.25	17.60	77.25	15.50	12.05	13.55	7.25	3.30	
24	5.90	5.00	9.65	5.45	13.40	31.80	72.00	14.00	13.55	5.75	7.55	3.80	
25	5.90	5.00	9.65	5.75	8.45	42.80	65.75	13.25	18.20	5.00	6.95	5.75	
26	6.05	5.15	10.70	5.60	6.80	46.80	75.00	11.90	17.00	5.00	7.10	8.60	
27	6.65	5.15	11.15	5.15	10.25	53.25	114.50	10.10	15.65	5.15	6.65	10.40	
28	7.10	5.30	11.45	5.15	12.35	59.00	125.90	9.20	11.90	5.15	5.75	9.35	
29	7.40	5.90	11.75	5.15	12.35	60.50	120.80	9.05	3.50	4.80		8.45	
30	8.15	8.30	11.90	5.45	9.65	66.00	102.50	7.70	7.40	4.70		9.35	
31		9.35		5.90	9.05		84.50		15.35	4.70		9.35	
Total	160.15	207.15	297.45	209.90	501.00	720.20	2625.30	923.95	344.15	311.10	243.70	295.75	6839.80 CMSDAY
Mean	5.34	6.68	9.91	6.77	16.16	24.01	84.69	30.80	11.10	10.04	8.70	9.54	18.74 CMS
Max	10.10	12.80	18.20	11.60	59.75	66.00	129.50	86.90	41.40	29.20	15.95	28.80	129.50 CMS
Min	2.30	3.20	5.15	5.15	6.80	4.40	57.25	7.70	3.50	4.10	4.90	3.30	2.30 CMS
Runoff	13.837	17.898	25.700	18.135	43.286	62.225	226.826	79.829	29.735	26.879	21.056	25.553	590.959 MCM

Momentary Peak 136.20 CMS, at 12.23 M (MSL), at 22.00 Hours, on Oct 9, 2001

Runoff Yield 4.56 Liters/Second/Square KM, Momentary Peak Yield 33.130 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 444 sq.km.

Type of Gage Water - Stage recorder.

Zero Gage at Bottom +72.272 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 45 meters from the top staff gage.

Elevation +78.722 m. (M.S.L.)

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 Float -

Rated by Current Meter 2000 to date.

Stability of Channel Regimes Stable.

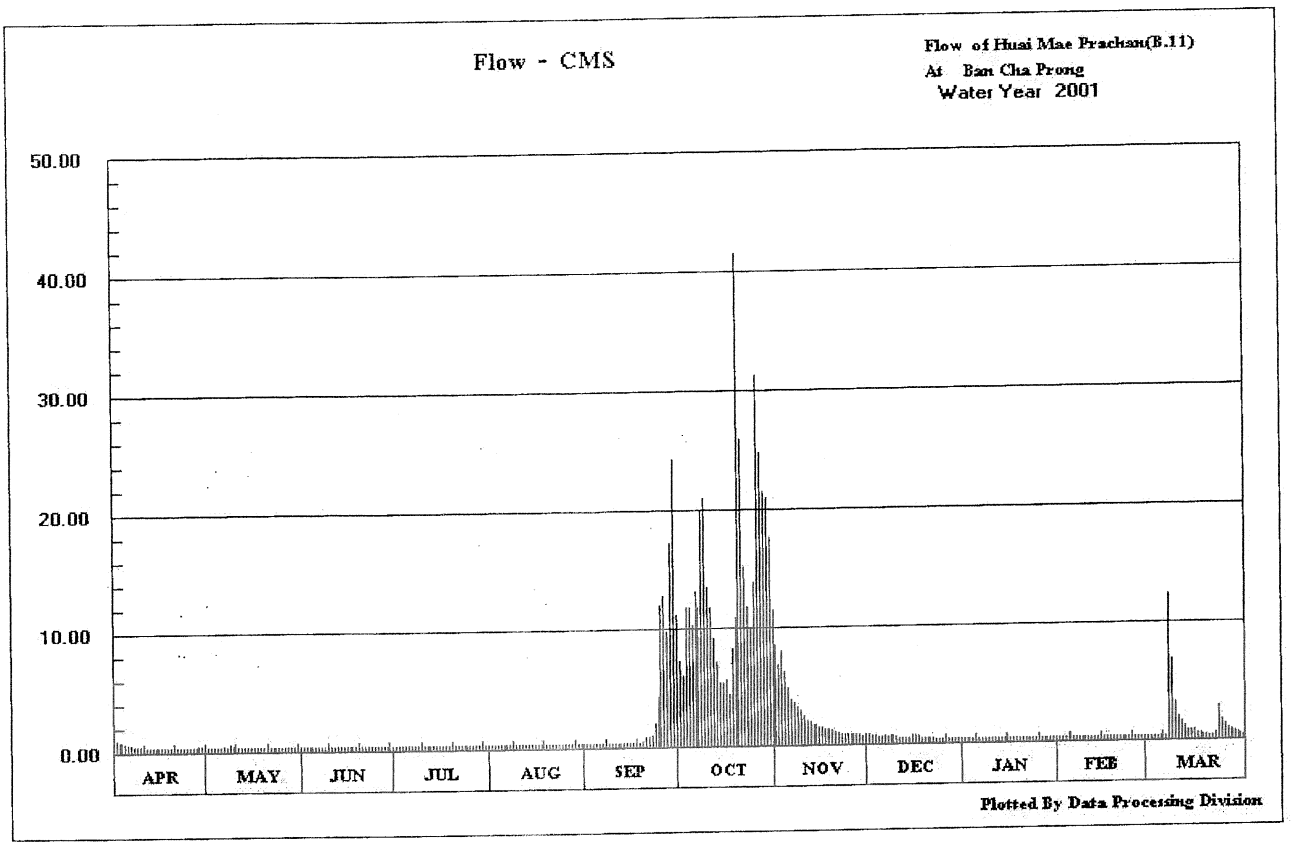
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 75 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.87	72.72	72.67	72.66	72.65	72.68	73.32	73.37	72.83	72.72	72.66	72.61	
2	72.85	72.69	72.67	72.65	72.65	72.67	73.26	73.30	72.81	72.72	72.66	72.61	
3	72.83	72.72	72.67	72.65	72.65	72.67	73.49	73.35	72.81	72.72	72.66	72.61	
4	72.82	72.74	72.66	72.65	72.66	72.67	73.49	73.27	72.80	72.72	72.65	72.60	
5	72.80	72.75	72.66	72.65	72.67	72.67	73.44	73.20	72.80	72.71	72.66	72.61	
6	72.79	72.76	72.68	72.66	72.69	72.69	73.53	73.14	72.81	72.71	72.67	72.61	
7	72.78	72.75	72.73	72.65	72.69	72.73	73.49	73.12	72.80	72.70	72.66	72.62	
8	72.77	72.80	72.73	72.65	72.69	72.72	73.69	73.09	72.81	72.69	72.65	73.51	
9	72.76	72.78	72.75	72.67	72.69	72.71	73.71	73.07	72.82	72.70	72.64	73.30	
10	72.75	72.76	72.74	72.68	72.70	72.70	73.54	73.04	72.80	72.69	72.64	73.09	
11	72.74	72.75	72.73	72.68	72.72	72.70	73.49	73.01	72.78	72.70	72.63	73.00	
12	72.73	72.74	72.73	72.69	72.73	72.71	73.40	72.99	72.77	72.70	72.63	72.95	
13	72.73	72.73	72.73	72.69	72.71	72.71	73.31	72.97	72.77	72.70	72.63	72.90	
14	72.73	72.73	72.72	72.69	72.71	72.72	73.23	72.96	72.78	72.69	72.63	72.85	
15	72.72	72.73	72.71	72.69	72.71	72.71	73.23	72.94	72.81	72.70	72.63	72.84	
16	72.72	72.73	72.69	72.70	72.71	72.71	73.24	72.93	72.80	72.69	72.63	72.83	
17	72.72	72.72	72.67	72.70	72.71	72.74	73.17	72.92	72.79	72.69	72.63	72.80	
18	72.71	72.71	72.67	72.69	72.71	72.75	73.36	72.91	72.78	72.69	72.62	72.79	
19	72.72	72.71	72.67	72.68	72.71	72.77	73.46	72.90	72.78	72.69	72.62	72.78	
20	72.71	72.71	72.67	72.68	72.72	72.84	74.05	72.88	72.77	72.68	72.62	72.77	
21	72.71	72.71	72.68	72.67	72.71	72.85	73.80	72.87	72.77	72.70	72.62	72.75	
22	72.70	72.71	72.73	72.65	72.71	72.87	73.58	72.85	72.76	72.71	72.61	72.73	
23	72.70	72.71	72.73	72.65	72.71	72.99	73.49	72.85	72.75	72.72	72.61	72.79	
24	72.70	72.70	72.70	72.65	72.72	73.16	73.43	72.84	72.73	72.72	72.61	73.06	
25	72.71	72.69	72.69	72.65	72.72	73.50	73.55	72.83	72.73	72.71	72.61	72.97	
26	72.74	72.68	72.67	72.65	72.73	73.52	73.89	72.83	72.74	72.70	72.61	72.91	
27	72.75	72.67	72.67	72.66	72.72	73.42	73.78	72.83	72.73	72.70	72.61	72.87	
28	72.77	72.67	72.67	72.65	72.70	73.63	73.72	72.83	72.73	72.69	72.61	72.84	
29	72.76	72.67	72.67	72.63	72.69	73.77	73.71	72.82	72.73	72.69		72.82	
30	72.74	72.67	72.67	72.64	72.68	73.47	73.64	72.83	72.73	72.69		72.80	
31		72.67		72.64	72.67		73.48		72.72	72.67		72.78	
Mean	72.75	72.72	72.69	72.66	72.70	72.92	73.52	72.99	72.78	72.70	72.63	72.84	
Max	72.87	72.80	72.75	72.70	72.73	73.77	74.05	73.37	72.83	72.72	72.67	73.51	74.05
Min	72.70	72.67	72.66	72.63	72.65	72.67	73.17	72.82	72.72	72.67	72.61	72.60	72.60

Annual Max Momentary Gage Height 74.19 M (MSL), at 6.00 Hours, on Oct 20, 2001
Zero Gage at Bottom Elevation 72.27 M (MSL), River Bed 70.22 M (MSL)
Left Bank Elevation 79.55 M (MSL)
Right Bank Elevation 79.53 M (MSL), Drainage Area 444 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.22	0.48	0.28	0.24	0.20	0.32	7.46	8.61	0.98	0.48	0.24	0.04	
2	1.10	0.36	0.28	0.20	0.20	0.28	6.20	7.00	0.86	0.48	0.24	0.04	
3	0.98	0.48	0.28	0.20	0.20	0.28	11.91	8.15	0.86	0.48	0.24	0.04	
4	0.92	0.56	0.24	0.20	0.24	0.28	11.91	6.40	0.80	0.48	0.20	0.00	
5	0.80	0.60	0.24	0.20	0.28	0.28	10.46	5.00	0.80	0.44	0.24	0.04	
6	0.76	0.64	0.32	0.24	0.36	0.36	13.34	4.10	0.86	0.44	0.28	0.04	
7	0.72	0.60	0.52	0.20	0.36	0.52	11.91	3.80	0.80	0.40	0.24	0.08	
8	0.68	0.80	0.52	0.20	0.36	0.48	20.14	3.37	0.86	0.36	0.20	12.58	
9	0.64	0.72	0.60	0.28	0.36	0.44	21.14	3.11	0.92	0.40	0.16	7.00	
10	0.60	0.64	0.56	0.32	0.40	0.40	13.72	2.72	0.80	0.36	0.16	3.37	
11	0.56	0.60	0.52	0.32	0.48	0.40	11.91	2.33	0.72	0.40	0.12	2.20	
12	0.52	0.56	0.52	0.36	0.52	0.44	9.30	2.12	0.68	0.40	0.12	1.80	
13	0.52	0.52	0.52	0.36	0.44	0.44	7.23	1.96	0.68	0.40	0.12	1.40	
14	0.52	0.52	0.48	0.36	0.44	0.48	5.60	1.88	0.72	0.36	0.12	1.10	
15	0.48	0.52	0.44	0.36	0.44	0.44	5.60	1.72	0.86	0.40	0.12	1.04	
16	0.48	0.52	0.36	0.40	0.44	0.44	5.80	1.64	0.80	0.36	0.12	0.98	
17	0.48	0.48	0.28	0.40	0.44	0.56	4.55	1.56	0.76	0.36	0.12	0.80	
18	0.44	0.44	0.28	0.36	0.44	0.60	8.38	1.48	0.72	0.36	0.08	0.76	
19	0.48	0.44	0.28	0.32	0.44	0.68	11.04	1.40	0.72	0.36	0.08	0.72	
20	0.44	0.44	0.28	0.32	0.48	1.04	41.70	1.28	0.68	0.32	0.08	0.68	
21	0.44	0.44	0.32	0.28	0.44	1.10	26.00	1.22	0.68	0.40	0.08	0.60	
22	0.40	0.44	0.52	0.20	0.44	1.22	15.24	1.10	0.64	0.44	0.04	0.52	
23	0.40	0.44	0.52	0.20	0.44	2.12	11.91	1.10	0.60	0.48	0.04	0.76	
24	0.40	0.40	0.40	0.20	0.48	4.40	10.17	1.04	0.52	0.48	0.04	2.98	
25	0.44	0.36	0.36	0.20	0.48	12.20	14.10	0.98	0.52	0.44	0.04	1.96	
26	0.56	0.32	0.28	0.20	0.52	12.96	31.40	0.98	0.56	0.40	0.04	1.48	
27	0.60	0.28	0.28	0.24	0.48	9.88	24.92	0.98	0.52	0.40	0.04	1.22	
28	0.68	0.28	0.28	0.20	0.40	17.38	21.68	0.98	0.52	0.36	0.04	1.04	
29	0.64	0.28	0.28	0.12	0.36	24.38	21.14	0.92	0.52	0.36		0.92	
30	0.56	0.28	0.28	0.16	0.32	11.33	17.84	0.98	0.52	0.36		0.80	
31		0.28		0.16	0.28		11.62		0.48	0.28		0.72	
Total	18.46	14.72	11.32	8.00	12.16	106.13	445.32	79.91	21.96	12.44	3.64	47.71	781.77 CMSDAY
Mean	0.62	0.47	0.38	0.26	0.39	3.54	14.37	2.66	0.71	0.40	0.13	1.54	2.14 CMS
Max	1.22	0.80	0.60	0.40	0.52	24.38	41.70	8.61	0.98	0.48	0.28	12.58	41.70 CMS
Min	0.40	0.28	0.24	0.12	0.20	0.28	4.55	0.92	0.48	0.28	0.04	0.00	0.00 CMS
Runoff	1.595	1.272	0.978	0.691	1.051	9.170	38.476	6.904	1.897	1.075	0.314	4.122	67.545 MCM

Momentary Peak 51.30 CMS, at 74.19 M (MSL), at 6.00 Hours, on Oct 20, 2001

Runoff Yield 4.82 Liters/Second/Square KM, Momentary Peak Yield 115.541 Liters/Second/Square KM

WATER YEAR : 2001

KHLONG KUI BASIN

Kui Buri River at Ban Pong Kasang, Prachuap Khiri Khan (Ky.2)

Lat 12 - 06 - 55 N. **Long** 99 - 44 - 20 E.

Location on right bank at the culvert of the left irrigation canal of Yang Chum Project.

Ban Pong Kasang **Amphoe** Kui Buri **Changwat** Prachuap Khiri Khan

Drainage Area 92 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 measuring line.

Elevation +8.405 m. (A.D.)

Gage Reading Frequency 16-time daily readings at 03.00 - 18.00, 21.00 and 24.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 16 readings.

Period of Available Gage Records 1979 to date.

Rating Operation

Period of Rating 1979 to date.

Rated by Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Stable.

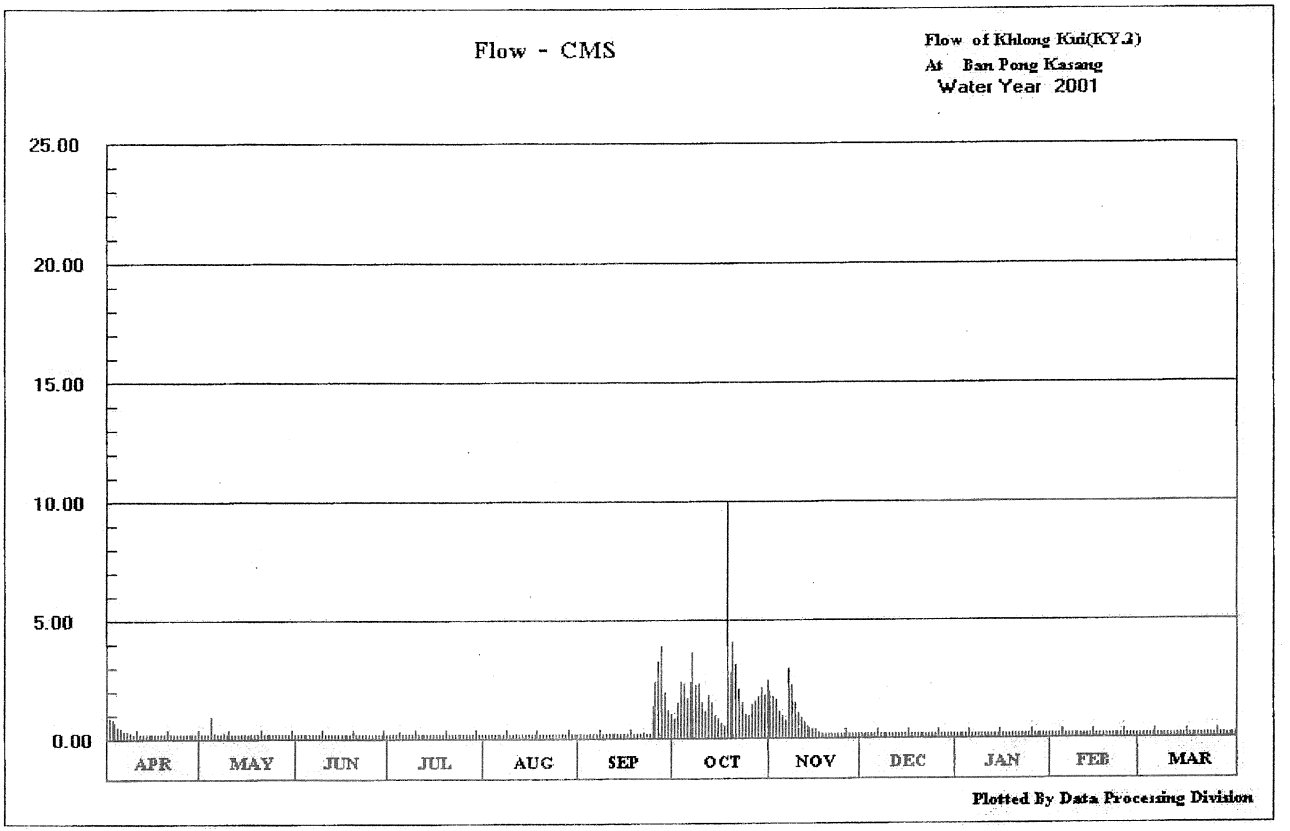
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 83 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.03	0.64	0.62	0.58	0.64	0.77	1.01	1.27	0.67	0.54	0.52	0.50	
2	1.01	0.64	0.61	0.66	0.75	0.77	1.18	1.22	0.67	0.54	0.52	0.51	
3	0.97	0.74	0.60	0.74	0.63	0.76	1.33	1.20	0.67	0.53	0.51	0.51	
4	0.93	1.04	0.61	0.85	0.55	0.74	1.32	1.10	0.66	0.52	0.51	0.50	
5	0.90	0.84	0.70	0.77	0.57	0.73	1.21	1.04	0.66	0.52	0.52	0.50	
6	0.87	0.78	0.68	0.74	0.69	0.73	1.33	0.99	0.65	0.52	0.51	0.50	
7	0.85	0.75	0.79	0.73	0.70	0.69	1.52	1.43	0.65	0.52	0.51	0.50	
8	0.84	0.83	0.68	0.76	0.66	0.68	1.31	1.31	0.64	0.50	0.51	0.50	
9	0.82	0.76	0.64	0.80	0.58	0.70	1.32	1.18	0.64	0.50	0.50	0.50	
10	0.81	0.76	0.62	0.76	0.57	0.65	1.18	1.09	0.64	0.50	0.50	0.50	
11	0.80	0.75	0.64	0.77	0.57	0.60	1.10	1.03	0.62	0.50	0.51	0.50	
12	0.78	0.72	0.69	0.80	0.58	0.59	1.24	0.97	0.63	0.49	0.51	0.50	
13	0.77	0.71	0.62	0.80	0.62	0.61	1.18	0.93	0.62	0.49	0.51	0.50	
14	0.76	0.70	0.63	0.76	0.63	0.71	1.04	0.91	0.62	0.49	0.50	0.50	
15	0.75	0.71	0.63	0.75	0.63	0.66	1.01	0.88	0.61	0.50	0.50	0.50	
16	0.74	0.73	0.64	0.74	0.61	0.65	0.96	0.86	0.60	0.50	0.50	0.50	
17	0.73	0.71	0.62	0.74	0.63	0.64	0.93	0.84	0.61	0.50	0.52	0.50	
18	0.71	0.70	0.63	0.74	0.70	0.63	2.05	0.82	0.60	0.50	0.51	0.50	
19	0.70	0.71	0.62	0.74	0.80	0.63	1.41	0.80	0.58	0.50	0.50	0.50	
20	0.70	0.71	0.63	0.75	0.78	0.71	1.57	0.78	0.58	0.50	0.50	0.50	
21	0.69	0.70	0.62	0.73	0.76	0.84	1.45	0.77	0.58	0.50	0.50	0.50	
22	0.68	0.69	0.62	0.71	0.75	0.76	1.28	0.76	0.58	0.50	0.50	0.50	
23	0.67	0.69	0.66	0.73	0.73	0.73	1.18	0.74	0.56	0.50	0.50	0.50	
24	0.67	0.68	0.73	0.74	0.71	1.15	1.06	0.73	0.56	0.50	0.50	0.50	
25	0.66	0.68	0.74	0.77	0.69	1.33	1.04	0.72	0.56	0.50	0.51	0.50	
26	0.64	0.68	0.73	0.73	0.70	1.47	1.16	0.71	0.56	0.50	0.52	0.50	
27	0.61	0.68	0.72	0.74	0.67	1.55	1.19	0.70	0.55	0.50	0.50	0.50	
28	0.60	0.69	0.71	0.72	0.65	1.26	1.22	0.69	0.55	0.51	0.50	0.50	
29	0.60	0.69	0.64	0.73	0.70	1.12	1.29	0.69	0.54	0.51		0.50	
30	0.62	0.67	0.60	0.77	0.75	1.07	1.23	0.67	0.54	0.51		0.50	
31		0.63		0.73	0.76		1.34		0.54	0.51		0.50	
Mean	0.76	0.72	0.66	0.74	0.67	0.83	1.25	0.93	0.60	0.51	0.51	0.50	
Max	1.03	1.04	0.79	0.85	0.80	1.55	2.05	1.43	0.67	0.54	0.52	0.51	2.05
Min	0.60	0.63	0.60	0.58	0.55	0.59	0.93	0.67	0.54	0.49	0.50	0.50	0.49

Annual Max Momentary Gage Height 2.56 M (A.D), at 6.00 Hours, on Oct 18, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.33 M (A.D)
Left Bank Elevation 5.19 M (A.D)
Right Bank Elevation 8.54 M (A.D), Drainage Area 92 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.95	0.11	0.10	0.07	0.11	0.21	0.89	2.09	0.14	0.04	0.03	0.01	
2	0.89	0.11	0.09	0.13	0.19	0.21	1.60	1.81	0.14	0.04	0.03	0.02	
3	0.75	0.19	0.09	0.19	0.11	0.20	2.43	1.70	0.14	0.04	0.02	0.02	
4	0.61	0.99	0.09	0.37	0.05	0.19	2.37	1.20	0.13	0.03	0.02	0.01	
5	0.50	0.34	0.16	0.21	0.06	0.18	1.76	0.99	0.13	0.03	0.03	0.01	
6	0.42	0.22	0.14	0.19	0.15	0.18	2.43	0.82	0.12	0.03	0.02	0.01	
7	0.37	0.19	0.22	0.18	0.16	0.15	3.68	3.04	0.12	0.03	0.02	0.01	
8	0.34	0.31	0.14	0.20	0.13	0.14	2.31	2.31	0.11	0.01	0.02	0.01	
9	0.28	0.20	0.11	0.23	0.07	0.16	2.37	1.60	0.11	0.01	0.01	0.01	
10	0.26	0.20	0.10	0.20	0.06	0.12	1.60	1.17	0.11	0.01	0.01	0.01	
11	0.23	0.19	0.11	0.21	0.06	0.09	1.20	0.95	0.10	0.01	0.02	0.01	
12	0.22	0.17	0.15	0.23	0.07	0.08	1.92	0.75	0.11	0.01	0.02	0.01	
13	0.21	0.17	0.10	0.23	0.10	0.09	1.60	0.61	0.10	0.01	0.02	0.01	
14	0.20	0.16	0.11	0.20	0.11	0.17	0.99	0.54	0.10	0.01	0.01	0.01	
15	0.19	0.17	0.11	0.19	0.11	0.13	0.89	0.45	0.09	0.01	0.01	0.01	
16	0.19	0.18	0.11	0.19	0.09	0.12	0.71	0.39	0.09	0.01	0.01	0.01	
17	0.18	0.17	0.10	0.19	0.11	0.11	0.61	0.34	0.09	0.01	0.03	0.01	
18	0.17	0.16	0.11	0.19	0.16	0.11	10.00	0.28	0.09	0.01	0.02	0.01	
19	0.16	0.17	0.10	0.19	0.23	0.11	2.91	0.23	0.07	0.01	0.01	0.01	
20	0.16	0.17	0.11	0.19	0.22	0.17	4.13	0.22	0.07	0.01	0.01	0.01	
21	0.15	0.16	0.10	0.18	0.20	0.34	3.18	0.21	0.07	0.01	0.01	0.01	
22	0.14	0.15	0.10	0.17	0.19	0.20	2.14	0.20	0.07	0.01	0.01	0.01	
23	0.14	0.15	0.13	0.18	0.18	0.18	1.60	0.19	0.06	0.01	0.01	0.01	
24	0.14	0.14	0.18	0.19	0.17	1.45	1.06	0.18	0.06	0.01	0.01	0.01	
25	0.13	0.14	0.19	0.21	0.15	2.43	0.99	0.17	0.06	0.01	0.02	0.01	
26	0.11	0.14	0.18	0.18	0.16	3.31	1.50	0.17	0.06	0.01	0.03	0.01	
27	0.09	0.14	0.17	0.19	0.14	3.95	1.65	0.16	0.05	0.01	0.01	0.01	
28	0.09	0.15	0.17	0.17	0.12	2.03	1.81	0.15	0.05	0.02	0.01	0.01	
29	0.09	0.15	0.11	0.18	0.16	1.30	2.20	0.15	0.04	0.02		0.01	
30	0.10	0.14	0.09	0.21	0.19	1.10	1.87	0.14	0.04	0.02		0.01	
31		0.11		0.18	0.20		2.49		0.04	0.02		0.01	
Total	8.46	6.14	3.77	6.02	4.21	19.21	66.89	23.21	2.76	0.52	0.48	0.33	142.00 CMSDAY
Mean	0.28	0.20	0.13	0.19	0.14	0.64	2.16	0.77	0.09	0.02	0.02	0.01	0.39 CMS
Max	0.95	0.99	0.22	0.37	0.23	3.95	10.00	3.04	0.14	0.04	0.03	0.02	10.00 CMS
Min	0.09	0.11	0.09	0.07	0.05	0.08	0.61	0.14	0.04	0.01	0.01	0.01	0.01 CMS
Runoff	0.731	0.530	0.326	0.520	0.364	1.660	5.779	2.005	0.238	0.045	0.041	0.029	12.269 MCM

Momentary Peak 19.84 CMS, at 2.56 M (A.D), at 6.00 Hours, on Oct 18, 2001

Runoff Yield 4.23 Liters/Second/Square KM, Momentary Peak Yield 215.652 Liters/Second/Square KM

WATER YEAR : 2001

KHLONG KUI 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

Drainage Area 538 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 1.00 meter from the top staff gage.

Elevation +6.136 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 Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 88 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

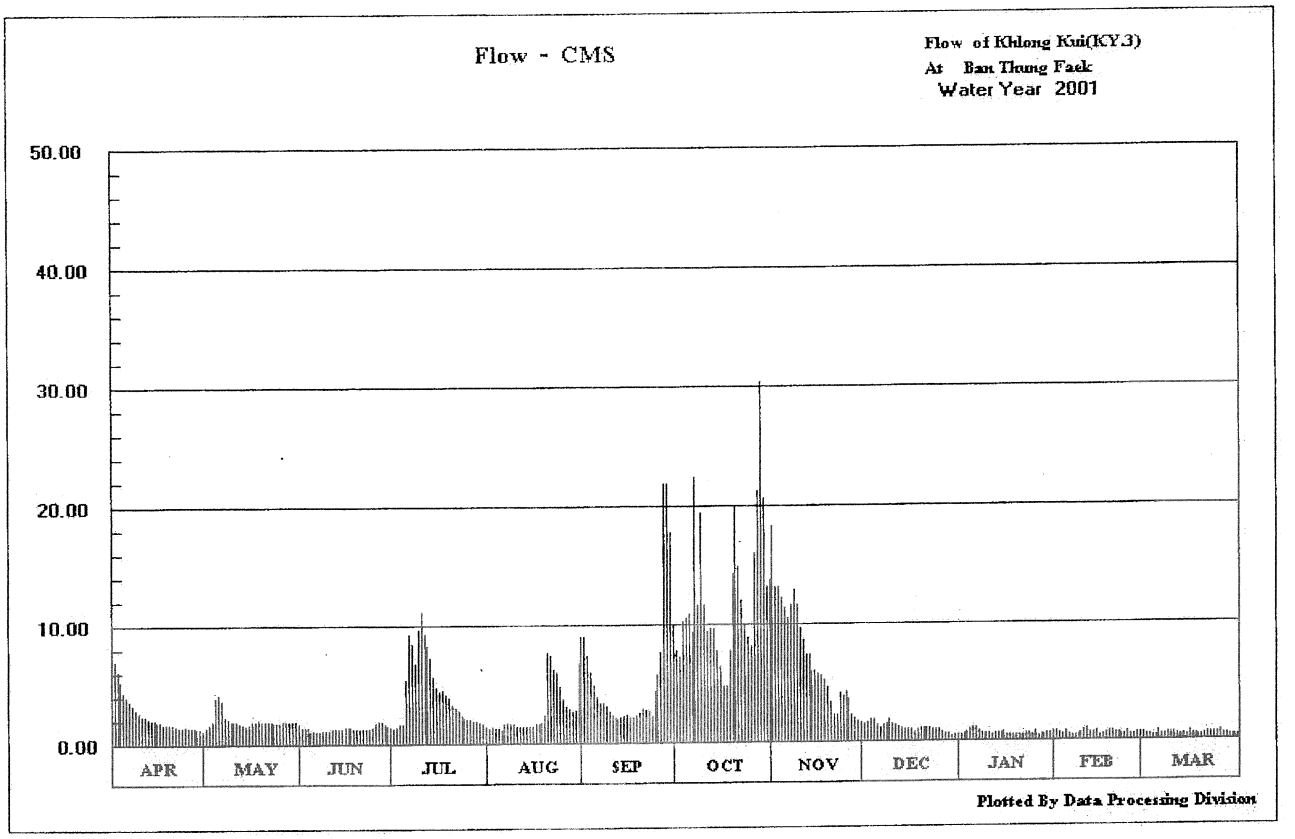
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.12	1.60	1.60	1.58	1.58	2.24	2.17	2.49	1.61	1.46	1.51	1.47	
2	2.06	1.62	1.59	1.60	1.59	2.15	2.14	2.40	1.62	1.47	1.48	1.45	
3	1.99	1.66	1.59	1.62	1.58	2.05	2.30	2.40	1.65	1.50	1.46	1.46	
4	1.92	1.88	1.54	1.62	1.57	1.96	2.31	2.37	1.65	1.53	1.45	1.44	
5	1.89	1.90	1.56	2.00	1.56	1.87	2.32	2.34	1.59	1.55	1.45	1.44	
6	1.85	1.85	1.54	2.25	1.63	1.83	2.26	2.31	1.55	1.55	1.44	1.44	
7	1.81	1.70	1.54	2.21	1.64	1.82	2.56	2.35	1.59	1.52	1.43	1.45	
8	1.77	1.68	1.55	2.11	1.62	1.80	2.35	2.39	1.61	1.48	1.46	1.46	
9	1.74	1.65	1.56	2.27	1.62	1.74	2.51	2.35	1.66	1.47	1.48	1.48	
10	1.72	1.65	1.55	2.33	1.60	1.71	2.35	2.27	1.61	1.47	1.52	1.49	
11	1.71	1.66	1.57	2.25	1.59	1.69	2.26	2.22	1.59	1.46	1.53	1.47	
12	1.69	1.64	1.58	2.20	1.59	1.67	2.27	2.15	1.57	1.47	1.48	1.46	
13	1.67	1.63	1.57	2.14	1.59	1.69	2.27	2.15	1.55	1.48	1.47	1.44	
14	1.67	1.61	1.58	2.02	1.59	1.70	2.17	2.05	1.53	1.48	1.45	1.45	
15	1.66	1.63	1.59	1.95	1.60	1.72	2.08	2.05	1.53	1.48	1.44	1.44	
16	1.65	1.65	1.60	1.92	1.62	1.69	1.95	2.03	1.53	1.46	1.46	1.44	
17	1.62	1.65	1.59	1.93	1.63	1.69	1.95	2.02	1.51	1.46	1.48	1.45	
18	1.62	1.67	1.57	1.90	1.64	1.70	2.17	1.99	1.54	1.45	1.50	1.45	
19	1.62	1.65	1.57	1.87	1.72	1.73	2.42	1.94	1.55	1.45	1.51	1.44	
20	1.62	1.65	1.58	1.81	2.16	1.77	2.52	1.82	1.55	1.46	1.48	1.44	
21	1.61	1.65	1.58	1.79	2.15	1.76	2.43	1.70	1.56	1.46	1.47	1.46	
22	1.60	1.65	1.57	1.76	2.07	1.74	2.36	1.70	1.56	1.48	1.46	1.47	
23	1.60	1.64	1.57	1.71	2.05	1.70	2.28	1.90	1.54	1.47	1.46	1.47	
24	1.61	1.64	1.59	1.69	1.95	1.92	2.23	1.88	1.53	1.45	1.45	1.47	
25	1.59	1.64	1.64	1.67	1.86	2.03	2.19	1.91	1.53	1.44	1.45	1.48	
26	1.59	1.65	1.65	1.67	1.80	2.16	2.45	1.85	1.49	1.44	1.46	1.47	
27	1.60	1.66	1.65	1.66	1.77	2.55	2.54	1.70	1.48	1.45	1.47	1.46	
28	1.58	1.66	1.63	1.65	1.75	2.55	2.68	1.67	1.47	1.46	1.48	1.45	
29	1.57	1.66	1.61	1.64	1.76	2.48	2.53	1.64	1.44	1.48		1.43	
30	1.56	1.66	1.60	1.62	2.11	2.28	2.40	1.63	1.46	1.49		1.43	
31		1.63		1.60	2.24		2.41		1.46	1.50		1.42	
Mean	1.71	1.67	1.58	1.87	1.75	1.91	2.32	2.06	1.55	1.48	1.47	1.45	
Max	2.12	1.90	1.65	2.33	2.24	2.55	2.68	2.49	1.66	1.55	1.53	1.49	2.68
Min	1.56	1.60	1.54	1.58	1.56	1.67	1.95	1.63	1.44	1.44	1.43	1.42	1.42

Annual Max Momentary Gage Height 2.70 M (A.D), at 6.00 Hours, on Oct 28, 2001

Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.56 M (A.D)

Left Bank Elevation 4.46 M (A.D)

Right Bank Elevation 4.77 M (A.D), Drainage Area 538 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.12	1.60	1.60	1.46	1.46	9.20	7.92	18.43	1.68	0.70	0.97	0.75	
2	6.28	1.76	1.53	1.60	1.53	7.60	7.44	13.30	1.76	0.75	0.80	0.65	
3	5.38	2.08	1.53	1.76	1.46	6.15	10.40	13.30	2.00	0.90	0.70	0.70	
4	4.54	4.10	1.18	1.76	1.39	5.02	10.69	12.43	2.00	1.11	0.65	0.60	
5	4.20	4.30	1.32	5.50	1.32	4.00	10.98	11.56	1.53	1.25	0.65	0.60	
6	3.80	3.80	1.18	9.40	1.84	3.60	9.60	10.69	1.25	1.25	0.60	0.60	
7	3.40	2.40	1.18	8.60	1.92	3.50	22.60	11.85	1.53	1.04	0.55	0.65	
8	3.03	2.24	1.25	6.96	1.76	3.30	11.85	13.01	1.68	0.80	0.70	0.70	
9	2.76	2.00	1.32	9.80	1.76	2.76	19.60	11.85	2.08	0.75	0.80	0.80	
10	2.58	2.00	1.25	11.27	1.60	2.49	11.85	9.80	1.68	0.75	1.04	0.85	
11	2.49	2.08	1.39	9.40	1.53	2.32	9.60	8.80	1.53	0.70	1.11	0.75	
12	2.32	1.92	1.46	8.40	1.53	2.16	9.80	7.60	1.39	0.75	0.80	0.70	
13	2.16	1.84	1.39	7.44	1.53	2.32	9.80	7.60	1.25	0.80	0.75	0.60	
14	2.16	1.68	1.46	5.76	1.53	2.40	7.92	6.15	1.11	0.80	0.65	0.65	
15	2.08	1.84	1.53	4.90	1.60	2.58	6.54	6.15	1.11	0.80	0.60	0.60	
16	2.00	2.00	1.60	4.54	1.76	2.32	4.90	5.89	1.11	0.70	0.70	0.60	
17	1.76	2.00	1.53	4.66	1.84	2.32	4.90	5.76	0.97	0.70	0.80	0.65	
18	1.76	2.16	1.39	4.30	1.92	2.40	7.92	5.38	1.18	0.65	0.90	0.65	
19	1.76	2.00	1.39	4.00	2.58	2.67	14.44	4.78	1.25	0.65	0.97	0.60	
20	1.76	2.00	1.46	3.40	7.76	3.03	20.20	3.50	1.25	0.70	0.80	0.60	
21	1.68	2.00	1.46	3.21	7.60	2.94	15.01	2.40	1.32	0.70	0.75	0.70	
22	1.60	2.00	1.39	2.94	6.41	2.76	12.14	2.40	1.32	0.80	0.70	0.75	
23	1.60	1.92	1.39	2.49	6.15	2.40	10.00	4.30	1.18	0.75	0.70	0.75	
24	1.68	1.92	1.53	2.32	4.90	4.54	9.00	4.10	1.11	0.65	0.65	0.75	
25	1.53	1.92	1.92	2.16	3.90	5.89	8.24	4.42	1.11	0.60	0.65	0.80	
26	1.53	2.00	2.00	2.16	3.30	7.76	16.15	3.80	0.85	0.60	0.70	0.75	
27	1.60	2.08	2.00	2.08	3.03	22.00	21.40	2.40	0.80	0.65	0.75	0.70	
28	1.46	2.08	1.84	2.00	2.85	22.00	30.60	2.16	0.75	0.70	0.80	0.65	
29	1.39	2.08	1.68	1.92	2.94	17.86	20.80	1.92	0.60	0.80		0.55	
30	1.32	2.08	1.60	1.76	6.96	10.00	13.30	1.84	0.70	0.85		0.55	
31		1.84		1.60	9.20		13.87		0.70	0.90		0.50	
Total	78.73	67.72	44.75	139.55	96.86	170.29	389.46	217.57	39.78	24.55	21.24	20.75	1311.25 CMSDAY
Mean	2.62	2.18	1.49	4.50	3.12	5.68	12.56	7.25	1.28	0.79	0.76	0.67	3.59 CMS
Max	7.12	4.30	2.00	11.27	9.20	22.00	30.60	18.43	2.08	1.25	1.11	0.85	30.60 CMS
Min	1.32	1.60	1.18	1.46	1.32	2.16	4.90	1.84	0.60	0.60	0.55	0.50	0.50 CMS
Runoff	6.802	5.851	3.866	12.057	8.369	14.713	33.649	18.798	3.437	2.121	1.835	1.793	113.292 MCM

Momentary Peak 32.00 CMS, at 2.70 M (A.D), at 6.00 Hours, on Oct 28, 2001

Runoff Yield 6.68 Liters/Second/Square KM, Momentary Peak Yield 59.480 Liters/Second/Square KM

WATER YEAR : 2001

WEST COAST - GULF BASIN

Khlong Bang Saphan at Ban Wang Yao, Prachuap Khiri Khan (Gt.7)

Lat 11 - 14 - 02 N. **Long** 99 - 26 - 35 E.

Location on left bank near the bridge of Phet Kasem Highway at Ban Wang Yao.

Ban Wang Yao **Amphoe** Bang Saphan **Changwat** Prachuap Khiri Khan

Drainage Area 346 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +11.824 m. (M.S.L)

Bench Mark B.M.- Highways Dept.

Location BM on left bank at the abutment of the bridge.

Elevation +19.908 m. (M.S.L.)

Gage Reading Frequency Recordings.

Basis of Mean Daily Gage Height Arithmetic mean of 24 readings.

Period of Available Gage Records 1978 to date.

Rating Operation

Period of Rating 1980 to date.

Rated by Float -

Rated by Current Meter 1980 to date.

Stability of Channel Regimes Rather unstable because of backwater effect.

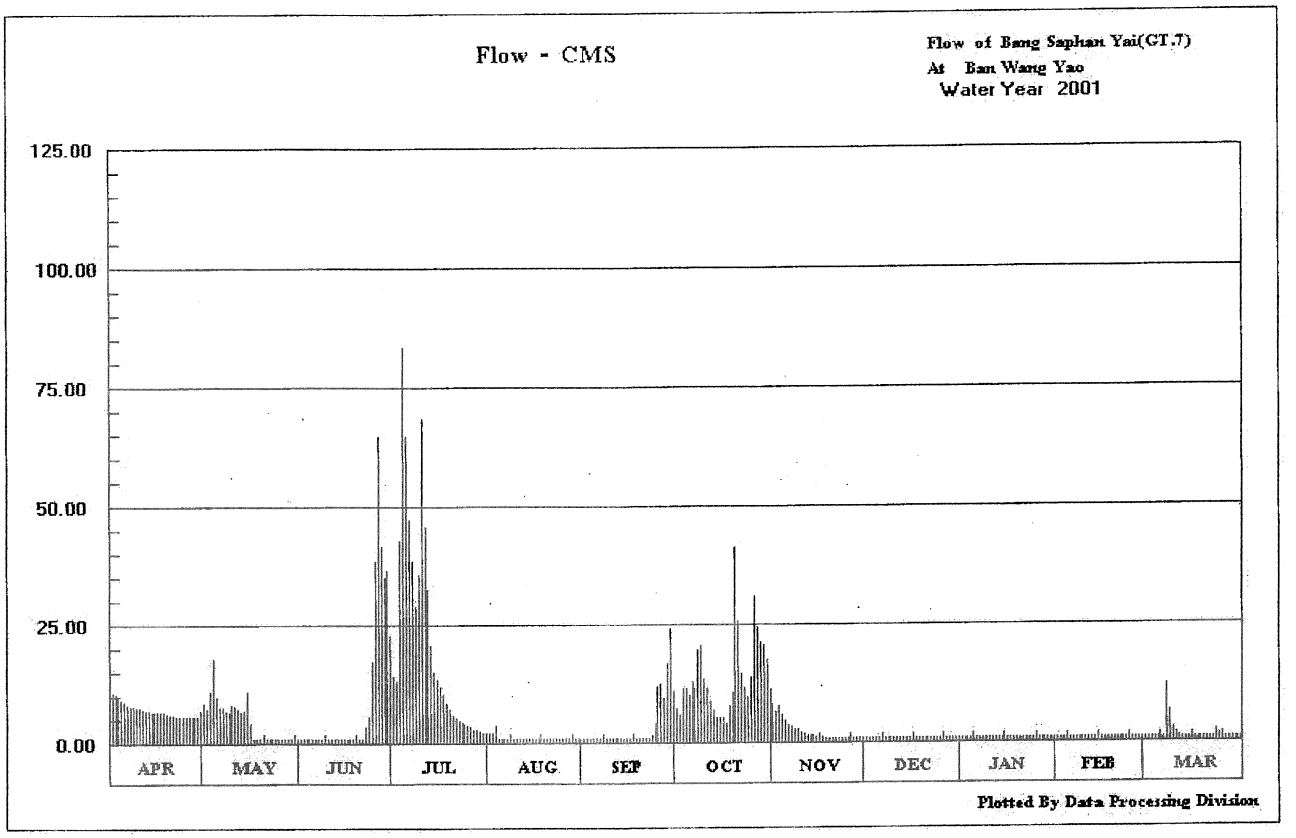
Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow regulated by the concrete weir about 2 kilometer downstream from the gage site. Stage-discharge relation defined by 88 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.70	13.64	12.62	12.91	12.46	14.00	13.53	14.47	12.82	12.54	12.61	12.30	
2	13.69	13.60	12.58	12.88	12.46	13.88	13.56	14.28	12.80	12.53	12.52	12.29	
3	13.68	13.71	12.56	13.53	12.53	13.81	14.19	14.11	12.79	12.52	12.48	12.29	
4	13.66	13.87	12.55	14.21	13.33	13.76	14.35	13.99	12.79	12.50	12.46	12.29	
5	13.65	13.67	12.53	13.92	13.53	13.76	14.21	13.91	12.77	12.50	12.45	12.28	
6	13.63	13.61	12.51	13.61	13.55	13.86	14.13	13.95	12.76	12.49	12.44	12.32	
7	13.62	13.61	12.50	13.45	13.54	13.97	13.97	14.10	12.74	12.49	12.43	12.35	
8	13.62	13.59	12.48	13.27	13.56	14.07	13.79	15.73	12.73	12.49	12.41	12.87	
9	13.61	13.58	12.46	13.40	13.56	13.83	13.73	15.74	12.71	12.48	12.41	13.03	
10	13.61	13.63	12.44	13.98	13.51	13.76	13.69	14.47	12.70	12.48	12.39	12.68	
11	13.60	13.62	12.43	13.58	13.48	13.72	13.64	14.08	12.69	12.48	12.38	12.49	
12	13.59	13.60	12.45	13.34	13.51	13.70	13.63	13.84	12.69	12.48	12.38	12.42	
13	13.59	13.58	12.43	13.09	13.67	13.65	13.60	13.67	12.67	12.48	12.37	12.39	
14	13.58	13.59	12.42	12.94	13.76	13.66	13.58	13.56	12.69	12.49	12.37	12.44	
15	13.58	13.71	12.43	12.89	13.65	13.69	13.60	13.47	12.72	12.57	12.36	12.73	
16	13.58	13.44	12.41	12.84	13.70	13.64	13.60	13.41	12.67	12.57	12.36	12.74	
17	13.58	13.13	12.45	12.79	13.95	13.59	13.56	13.36	12.65	12.54	12.36	12.71	
18	13.58	12.96	12.50	12.73	14.33	13.55	13.94	13.32	12.63	12.51	12.36	12.68	
19	13.57	12.98	12.47	12.68	14.59	13.54	14.01	13.27	12.70	12.50	12.35	12.67	
20	13.56	12.83	12.48	12.64	14.20	13.57	14.36	13.23	12.66	12.47	12.35	12.66	
21	13.55	12.80	12.46	12.61	14.17	13.49	14.09	13.20	12.63	12.47	12.34	12.64	
22	13.54	12.81	12.51	12.58	13.97	13.45	13.94	13.16	12.61	12.47	12.33	12.64	
23	13.54	12.81	12.62	12.56	13.87	13.43	13.94	13.11	12.59	12.47	12.33	12.66	
24	13.54	12.73	13.00	12.55	13.83	13.42	13.88	13.06	12.57	12.46	12.32	12.75	
25	13.54	12.70	13.45	12.53	13.79	13.52	13.90	13.02	12.56	12.45	12.32	12.87	
26	13.54	12.76	13.92	12.51	13.73	13.58	14.78	12.99	12.55	12.45	12.31	13.24	
27	13.54	12.78	13.51	12.49	13.71	13.55	14.50	12.95	12.53	12.44	12.31	13.64	
28	13.54	12.76	13.39	12.48	13.76	13.55	14.43	12.91	12.53	12.43	12.30	13.38	
29	13.54	12.75	13.42	12.47	14.03	13.46	14.69	12.88	12.53	12.44		13.10	
30	13.59	12.71	13.14	12.46	14.18	13.42	15.02	12.85	12.53	12.63		12.92	
31		12.68		12.46	14.18		14.79		12.53	12.64		12.74	
Mean	13.59	13.23	12.70	12.98	13.68	13.66	14.02	13.67	12.66	12.50	12.39	12.68	
Max	13.70	13.87	13.92	14.21	14.59	14.07	15.02	15.74	12.82	12.64	12.61	13.64	15.74
Min	13.54	12.68	12.41	12.46	12.46	13.42	13.53	12.85	12.53	12.43	12.30	12.28	12.28

Annual Max Momentary Gage Height 18.28 M (MSL), at 20.00 Hours, on Nov 8, 2001
Zero Gage at Bottom Elevation 11.82 M (MSL), River Bed 12.14 M (MSL)
Left Bank Elevation 19.91 M (MSL)
Right Bank Elevation 19.52 M (MSL), Drainage Area 346 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.00	8.90	0.00	14.35	2.70	0.32	7.46	8.61	0.98	0.48	0.24	0.04	
2	10.65	7.50	0.00	13.40	2.70	0.28	6.20	7.00	0.86	0.48	0.24	0.04	
3	10.30	11.40	0.00	43.15	4.10	0.28	11.91	8.15	0.86	0.48	0.24	0.04	
4	9.60	18.15	0.00	83.80	0.24	0.28	11.91	6.40	0.80	0.48	0.20	0.00	
5	9.25	9.95	0.00	65.20	0.28	0.28	10.46	5.00	0.80	0.44	0.24	0.04	
6	8.55	7.85	0.00	47.55	0.36	0.36	13.34	4.10	0.86	0.44	0.28	0.04	
7	8.20	7.85	0.00	38.75	0.36	0.52	11.91	3.80	0.80	0.40	0.24	0.08	
8	8.20	7.25	0.00	29.50	0.36	0.48	20.14	3.37	0.86	0.36	0.20	12.58	
9	7.85	7.00	0.00	36.00	0.36	0.44	21.14	3.11	0.92	0.40	0.16	7.00	
10	7.85	8.55	0.00	68.80	0.40	0.40	13.72	2.72	0.80	0.36	0.16	3.37	
11	7.50	8.20	0.00	45.90	0.48	0.40	11.91	2.33	0.72	0.40	0.12	2.20	
12	7.25	7.50	0.00	33.00	0.52	0.44	9.30	2.12	0.68	0.40	0.12	1.80	
13	7.25	7.00	0.00	21.10	0.44	0.44	7.23	1.96	0.68	0.40	0.12	1.40	
14	7.00	7.25	0.00	15.40	0.44	0.48	5.60	1.88	0.72	0.36	0.12	1.10	
15	7.00	11.40	0.00	13.70	0.44	0.44	5.60	1.72	0.86	0.40	0.12	1.04	
16	7.00	4.40	0.00	12.20	0.44	0.44	5.80	1.64	0.80	0.36	0.12	0.98	
17	7.00	1.30	0.00	10.70	0.44	0.56	4.55	1.56	0.76	0.36	0.12	0.80	
18	7.00	0.00	0.00	8.90	0.44	0.60	8.38	1.48	0.72	0.36	0.08	0.76	
19	6.75	0.00	0.00	7.50	0.44	0.68	11.04	1.40	0.72	0.36	0.08	0.72	
20	6.50	0.00	0.00	6.50	0.48	1.04	41.70	1.28	0.68	0.32	0.08	0.68	
21	6.25	0.00	0.00	5.75	0.44	1.10	26.00	1.22	0.68	0.40	0.08	0.60	
22	6.00	0.00	3.70	5.10	0.44	1.22	15.24	1.10	0.64	0.44	0.04	0.52	
23	6.00	0.00	6.00	4.70	0.44	2.12	11.91	1.10	0.60	0.48	0.04	0.76	
24	6.00	0.00	17.50	4.50	0.48	4.40	10.17	1.04	0.52	0.48	0.04	2.98	
25	6.00	0.00	38.75	4.10	0.48	12.20	14.10	0.98	0.52	0.44	0.04	1.96	
26	6.00	0.00	65.20	3.70	0.52	12.96	31.40	0.98	0.56	0.40	0.04	1.48	
27	6.00	0.00	42.05	3.30	0.48	9.88	24.92	0.98	0.52	0.40	0.04	1.22	
28	6.00	0.00	35.50	3.10	0.40	17.38	21.68	0.98	0.52	0.36	0.04	1.04	
29	6.00	0.00	37.10	2.90	0.36	24.38	21.14	0.92	0.52	0.36		0.92	
30	7.25	0.00	23.30	2.70	0.32	11.33	17.84	0.98	0.52	0.36		0.80	
31		0.00		2.70	0.28		11.62		0.48	0.28		0.72	
Total	223.20	141.45	269.10	657.95	21.06	106.13	445.32	79.91	21.96	12.44	3.64	47.71	2029.87 CMSDAY
Mean	7.44	4.56	8.97	21.22	0.68	3.54	14.37	2.66	0.71	0.40	0.13	1.54	5.56 CMS
Max	11.00	18.15	65.20	83.80	4.10	24.38	41.70	8.61	0.98	0.48	0.28	12.58	83.80 CMS
Min	6.00	0.00	0.00	2.70	0.24	0.28	4.55	0.92	0.48	0.28	0.04	0.00	0.00 CMS
Runoff	19.284	12.221	23.250	56.847	1.820	9.170	38.476	6.904	1.897	1.075	0.314	4.122	175.381 MCM

Momentary Peak 546.20 CMS, at 18.28 M (MSL), at 20.00 Hours, on Nov 8, 2001

Runoff Yield 16.07 Liters/Second/Square KM, Momentary Peak Yield 1578.613 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 44 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 +5.292 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 1997 to date.

Rated by Float -

Rated by Current Meter 1997 to date.

Stability of Channel Regimes Stable.

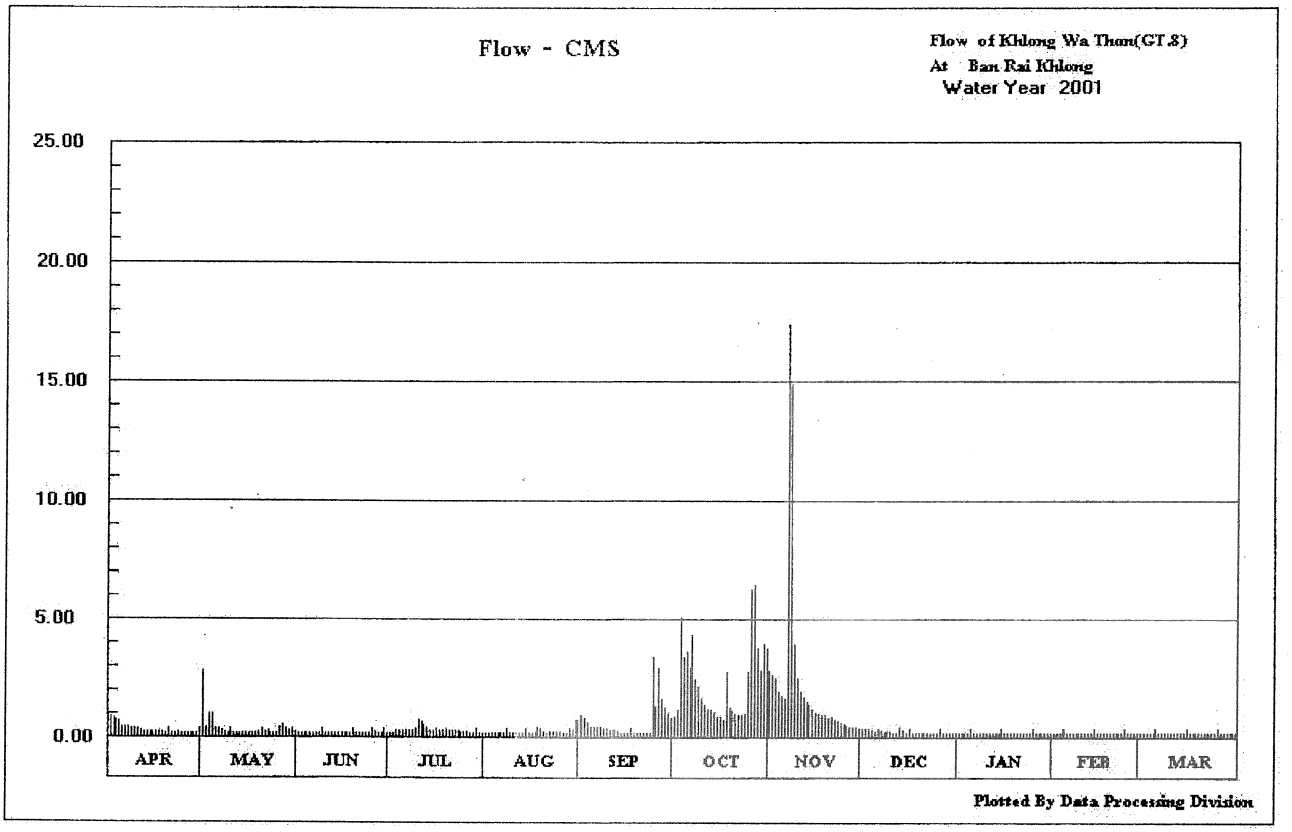
Overbank Flow Conditions No overbank flow.

General Description Records good. Discharge estimated by recession equation during Dec.30, 1999 - Mar.31, 2000. Stage-discharge relation defined by 99 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.57	0.84	0.41	0.37	0.40	0.59	0.57	0.84	0.48	0.37	0.33	0.28	
2	0.56	0.50	0.41	0.36	0.40	0.56	0.63	0.82	0.48	0.37	0.33	0.28	
3	0.55	0.60	0.40	0.45	0.40	0.53	1.01	0.81	0.47	0.37	0.33	0.28	
4	0.54	0.60	0.40	0.46	0.40	0.50	0.89	0.74	0.45	0.37	0.33	0.28	
5	0.50	0.48	0.39	0.46	0.40	0.50	0.91	0.72	0.43	0.37	0.34	0.28	
6	0.49	0.47	0.39	0.46	0.39	0.50	0.85	0.70	0.45	0.36	0.32	0.32	
7	0.49	0.45	0.39	0.46	0.39	0.49	0.96	1.61	0.46	0.36	0.32	0.40	
8	0.48	0.43	0.38	0.45	0.39	0.48	0.80	1.51	0.44	0.36	0.32	0.41	
9	0.47	0.41	0.37	0.48	0.38	0.47	0.76	0.93	0.44	0.36	0.32	0.35	
10	0.46	0.41	0.37	0.55	0.38	0.46	0.70	0.81	0.44	0.36	0.31	0.33	
11	0.45	0.42	0.37	0.54	0.38	0.46	0.66	0.74	0.42	0.36	0.31	0.31	
12	0.44	0.42	0.37	0.52	0.38	0.45	0.63	0.71	0.42	0.36	0.31	0.30	
13	0.44	0.40	0.37	0.50	0.38	0.43	0.63	0.68	0.49	0.36	0.31	0.31	
14	0.44	0.40	0.37	0.46	0.48	0.42	0.61	0.66	0.46	0.36	0.29	0.30	
15	0.44	0.41	0.37	0.46	0.40	0.42	0.57	0.63	0.40	0.36	0.29	0.31	
16	0.44	0.41	0.37	0.47	0.39	0.41	0.57	0.61	0.39	0.36	0.29	0.31	
17	0.44	0.41	0.37	0.45	0.44	0.40	0.55	0.60	0.37	0.35	0.29	0.30	
18	0.43	0.40	0.39	0.46	0.50	0.39	0.83	0.58	0.36	0.35	0.29	0.30	
19	0.42	0.43	0.38	0.45	0.47	0.38	0.64	0.58	0.37	0.32	0.29	0.30	
20	0.42	0.43	0.37	0.45	0.43	0.39	0.62	0.56	0.37	0.32	0.29	0.30	
21	0.41	0.44	0.36	0.45	0.42	0.38	0.60	0.57	0.39	0.31	0.29	0.29	
22	0.41	0.45	0.36	0.45	0.43	0.38	0.59	0.55	0.40	0.34	0.29	0.29	
23	0.43	0.40	0.36	0.45	0.43	0.37	0.59	0.54	0.39	0.31	0.29	0.29	
24	0.39	0.39	0.38	0.44	0.43	0.89	0.60	0.53	0.39	0.36	0.29	0.29	
25	0.38	0.39	0.48	0.44	0.43	0.65	0.83	0.52	0.39	0.36	0.29	0.29	
26	0.38	0.49	0.43	0.43	0.41	0.85	1.09	0.51	0.39	0.34	0.28	0.29	
27	0.38	0.52	0.41	0.42	0.41	0.70	1.10	0.50	0.38	0.33	0.28	0.29	
28	0.38	0.47	0.39	0.41	0.45	0.64	0.92	0.50	0.38	0.33	0.28	0.29	
29	0.38	0.45	0.38	0.40	0.46	0.60	0.84	0.49	0.37	0.34		0.29	
30	0.38	0.43	0.37	0.40	0.55	0.56	0.93	0.48	0.37	0.34		0.29	
31		0.44		0.40	0.55		0.92		0.37	0.35		0.29	
Mean	0.45	0.46	0.39	0.45	0.42	0.51	0.75	0.70	0.41	0.35	0.30	0.30	
Max	0.57	0.84	0.48	0.55	0.55	0.89	1.10	1.61	0.49	0.37	0.34	0.41	1.61
Min	0.38	0.39	0.36	0.36	0.38	0.37	0.55	0.48	0.36	0.31	0.28	0.28	0.28

Annual Max Momentary Gage Height 1.61 M (A.D), at 6.00 Hours. on Nov 7, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.21 M (A.D)
Left Bank Elevation 4.23 M (A.D)
Right Bank Elevation 4.00 M (A.D), Drainage Area 44 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.93	2.92	0.23	0.16	0.20	1.04	0.93	2.92	0.48	0.16	0.10	0.03	
2	0.88	0.55	0.23	0.14	0.20	0.88	1.28	2.71	0.48	0.16	0.10	0.03	
3	0.83	1.10	0.20	0.37	0.20	0.71	5.15	2.61	0.45	0.16	0.10	0.03	
4	0.77	1.10	0.20	0.41	0.20	0.55	3.45	2.02	0.37	0.16	0.10	0.03	
5	0.55	0.48	0.18	0.41	0.20	0.55	3.70	1.86	0.31	0.16	0.11	0.03	
6	0.52	0.45	0.18	0.41	0.18	0.55	3.03	1.70	0.37	0.14	0.08	0.08	
7	0.52	0.37	0.18	0.41	0.18	0.52	4.42	17.48	0.41	0.14	0.08	0.20	
8	0.48	0.31	0.17	0.37	0.18	0.48	2.50	14.95	0.34	0.14	0.08	0.23	
9	0.45	0.23	0.16	0.48	0.17	0.45	2.18	3.99	0.34	0.14	0.08	0.12	
10	0.41	0.23	0.16	0.83	0.17	0.41	1.70	2.61	0.34	0.14	0.06	0.10	
11	0.37	0.27	0.16	0.77	0.17	0.41	1.46	2.02	0.27	0.14	0.06	0.06	
12	0.34	0.27	0.16	0.66	0.17	0.37	1.28	1.78	0.27	0.14	0.06	0.05	
13	0.34	0.20	0.16	0.55	0.17	0.31	1.28	1.58	0.52	0.14	0.06	0.06	
14	0.34	0.20	0.16	0.41	0.48	0.27	1.16	1.46	0.41	0.14	0.04	0.05	
15	0.34	0.23	0.16	0.41	0.20	0.27	0.93	1.28	0.20	0.14	0.04	0.06	
16	0.34	0.23	0.16	0.45	0.18	0.23	0.93	1.16	0.18	0.14	0.04	0.06	
17	0.34	0.23	0.16	0.37	0.34	0.20	0.83	1.10	0.16	0.12	0.04	0.05	
18	0.31	0.20	0.18	0.41	0.55	0.18	2.81	0.99	0.14	0.12	0.04	0.05	
19	0.27	0.31	0.17	0.37	0.45	0.17	1.34	0.99	0.16	0.08	0.04	0.05	
20	0.27	0.31	0.16	0.37	0.31	0.18	1.22	0.88	0.16	0.08	0.04	0.05	
21	0.23	0.34	0.14	0.37	0.27	0.17	1.10	0.93	0.18	0.06	0.04	0.04	
22	0.23	0.37	0.14	0.37	0.31	0.17	1.04	0.83	0.20	0.11	0.04	0.04	
23	0.31	0.20	0.14	0.37	0.31	0.16	1.04	0.77	0.18	0.06	0.04	0.04	
24	0.18	0.18	0.17	0.34	0.31	3.45	1.10	0.71	0.18	0.14	0.04	0.04	
25	0.17	0.18	0.48	0.34	0.31	1.40	2.81	0.66	0.18	0.14	0.04	0.04	
26	0.17	0.52	0.31	0.31	0.23	3.03	6.35	0.60	0.18	0.11	0.03	0.04	
27	0.17	0.66	0.23	0.27	0.23	1.70	6.50	0.55	0.17	0.10	0.03	0.04	
28	0.17	0.45	0.18	0.23	0.37	1.34	3.84	0.55	0.17	0.10	0.03	0.04	
29	0.17	0.37	0.17	0.20	0.41	1.10	2.92	0.52	0.16	0.11		0.04	
30	0.17	0.31	0.16	0.20	0.83	0.88	3.99	0.48	0.16	0.11		0.04	
31		0.34		0.20	0.83		3.84		0.16	0.12		0.04	
Total	11.57	14.11	5.64	11.96	9.31	22.13	76.11	72.69	8.28	3.90	1.64	1.86	239.20 CMSDAY
Mean	0.39	0.46	0.19	0.39	0.30	0.74	2.46	2.42	0.27	0.13	0.06	0.06	0.66 CMS
Max	0.93	2.92	0.48	0.83	0.83	3.45	6.50	17.48	0.52	0.16	0.11	0.23	17.48 CMS
Min	0.17	0.18	0.14	0.14	0.17	0.16	0.83	0.48	0.14	0.06	0.03	0.03	0.03 CMS
Runoff	1.000	1.219	0.487	1.033	0.804	1.912	6.576	6.280	0.715	0.337	0.142	0.161	20.667 MCM

Momentary Peak 17.48 CMS, at 1.61 M (A.D), at 6.00 Hours, on Nov 7, 2001

Runoff Yield 14.89 Liters/Second/Square KM, Momentary Peak Yield 397.273 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 120 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +6.840 m. (M.S.L.)

Bench Mark B.M.- Highways Dept.

Location BM On right bank at the abutment of the bridge.

Elevation +12.200 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00,15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1979 to date.

Rating Operation

Period of Rating 1980 to date.

Rated by Float -

Rated by Current Meter 1980 to date.

Stability of Channel Regimes Stable.

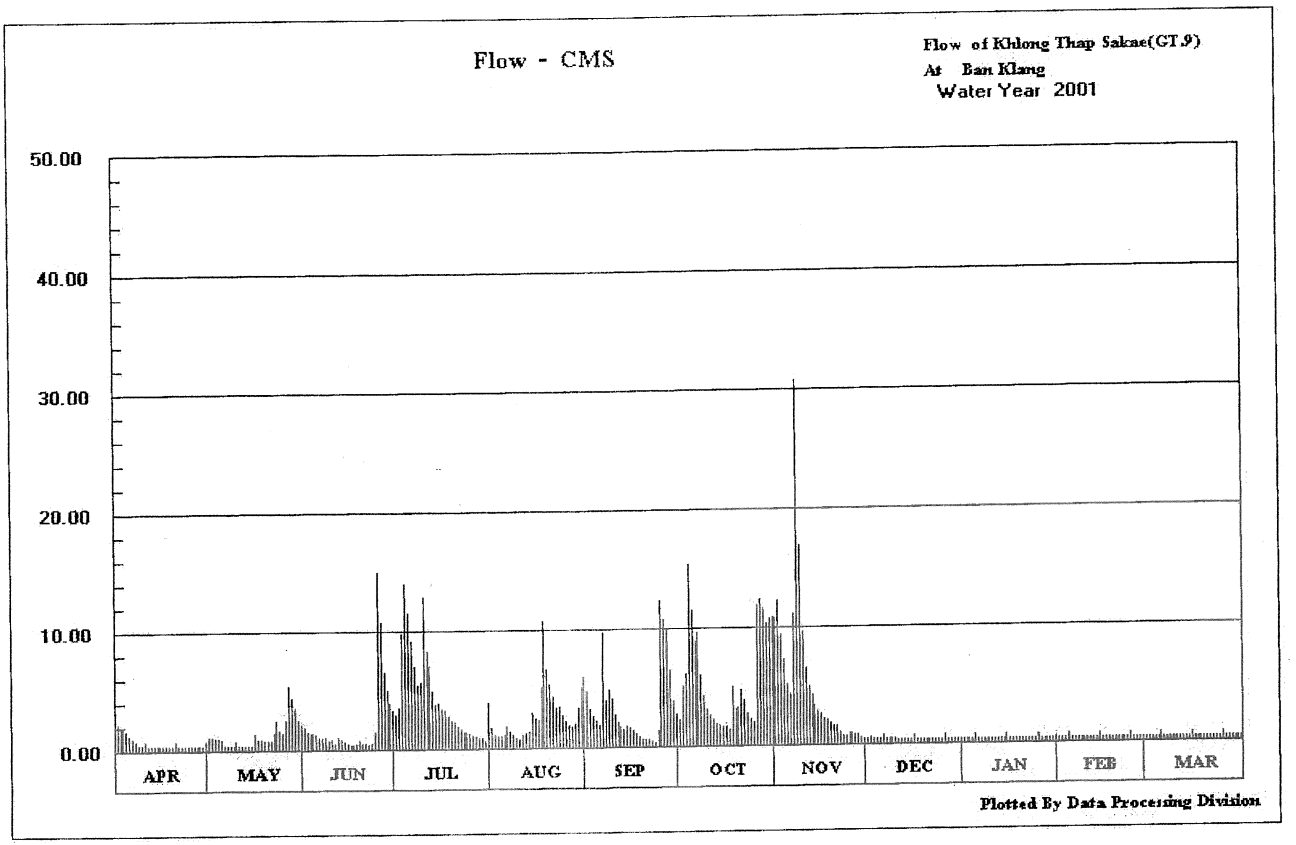
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 100 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.11	7.94	8.06	8.19	8.04	8.37	8.12	8.74	7.83	7.74	7.77	7.65	
2	8.08	7.94	8.01	8.26	7.95	8.23	8.40	8.82	7.85	7.73	7.75	7.72	
3	8.06	7.92	7.98	8.69	7.93	8.16	8.47	8.67	7.84	7.73	7.74	7.68	
4	8.02	7.93	7.98	8.91	7.93	8.11	8.98	8.54	7.83	7.70	7.74	7.67	
5	7.97	7.90	7.97	8.78	7.94	8.06	8.78	8.40	7.84	7.71	7.73	7.65	
6	7.93	7.82	7.92	8.65	8.06	8.69	8.64	8.34	7.86	7.70	7.73	7.62	
7	7.89	7.79	7.93	8.52	8.00	8.31	8.68	8.76	7.84	7.69	7.75	7.60	
8	7.84	7.75	7.92	8.42	7.95	8.38	8.46	9.73	7.83	7.67	7.75	7.71	
9	7.83	7.81	7.85	8.43	7.90	8.32	8.33	9.05	7.83	7.68	7.76	7.75	
10	7.82	7.79	7.91	8.85	7.88	8.18	8.22	8.68	7.83	7.66	7.70	7.72	
11	7.79	7.77	7.83	8.60	7.94	8.09	8.16	8.49	7.81	7.65	7.70	7.68	
12	7.77	7.75	7.93	8.52	7.96	8.05	8.11	8.39	7.81	7.67	7.65	7.66	
13	7.77	7.75	7.90	8.38	8.00	8.01	8.07	8.33	7.82	7.65	7.68	7.63	
14	7.76	7.76	7.85	8.28	8.21	8.05	8.04	8.25	7.80	7.64	7.67	7.60	
15	7.75	7.81	7.83	8.29	8.14	8.03	8.03	8.20	7.81	7.66	7.71	7.61	
16	7.76	7.98	7.82	8.24	8.13	7.99	8.03	8.16	7.79	7.67	7.71	7.66	
17	7.73	7.90	7.82	8.23	8.40	7.95	8.00	8.12	7.80	7.65	7.72	7.66	
18	7.72	7.90	7.83	8.17	8.74	7.91	8.39	8.09	7.79	7.63	7.72	7.66	
19	7.79	7.89	7.84	8.13	8.50	7.87	8.22	8.06	7.79	7.63	7.65	7.67	
20	7.77	7.87	7.83	8.11	8.42	7.85	8.23	8.03	7.79	7.62	7.64	7.67	
21	7.74	7.89	7.83	8.06	8.34	7.85	8.37	8.02	7.77	7.60	7.63	7.65	
22	7.72	7.98	7.81	8.03	8.25	7.83	8.30	7.95	7.75	7.61	7.62	7.66	
23	7.71	8.15	7.84	7.99	8.26	7.79	8.17	7.89	7.74	7.76	7.62	7.64	
24	7.72	8.03	8.01	7.98	8.18	7.98	8.11	7.89	7.77	7.77	7.61	7.67	
25	7.71	7.98	8.96	7.96	8.11	8.83	8.08	7.92	7.74	7.76	7.68	7.71	
26	7.74	8.14	8.74	7.94	8.07	8.74	8.80	7.93	7.73	7.72	7.67	7.70	
27	7.75	8.42	8.49	7.93	8.05	8.70	8.83	7.90	7.73	7.67	7.67	7.77	
28	7.76	8.34	8.39	7.90	8.08	8.49	8.79	7.90	7.75	7.64	7.66	7.74	
29	7.75	8.26	8.29	7.90	8.25	8.29	8.72	7.85	7.75	7.67		7.71	
30	7.83	8.14	8.23	7.87	8.40	8.18	8.74	7.84	7.73	7.73		7.71	
31		8.09		8.29	8.46		8.75		7.73	7.84		7.72	
Mean	7.82	7.95	8.02	8.27	8.14	8.18	8.39	8.30	7.79	7.69	7.69	7.68	
Max	8.11	8.42	8.96	8.91	8.74	8.83	8.98	9.73	7.86	7.84	7.77	7.77	9.73
Min	7.71	7.75	7.81	7.87	7.88	7.79	8.00	7.84	7.73	7.60	7.61	7.60	7.60

Annual Max Momentary Gage Height 10.44 M (MSL), at 15.00 Hours, on Nov 8, 2001
Zero Gage at Bottom Elevation 6.84 M (MSL), River Bed 7.07 M (MSL)
Left Bank Elevation 11.22 M (MSL)
Right Bank Elevation 11.64 M (MSL), Drainage Area 120 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.38	1.24	2.02	3.02	1.88	4.94	2.46	10.86	0.65	0.32	0.41	0.10	
2	2.16	1.24	1.67	3.70	1.30	3.40	5.30	12.40	0.75	0.29	0.35	0.26	
3	2.02	1.12	1.48	9.93	1.18	2.78	6.35	9.59	0.70	0.29	0.32	0.16	
4	1.74	1.18	1.48	14.20	1.18	2.38	15.60	7.44	0.65	0.20	0.32	0.14	
5	1.42	1.00	1.42	11.62	1.24	2.02	11.62	5.30	0.70	0.23	0.29	0.10	
6	1.18	0.60	1.12	9.25	2.02	9.93	9.08	4.58	0.80	0.20	0.29	0.04	
7	0.95	0.47	1.18	7.12	1.60	4.22	9.76	11.24	0.70	0.18	0.35	0.00	
8	0.70	0.35	1.12	5.60	1.30	5.06	6.20	30.92	0.65	0.14	0.35	0.23	
9	0.65	0.55	0.75	5.75	1.00	4.34	4.46	17.00	0.65	0.16	0.38	0.35	
10	0.60	0.47	1.06	13.00	0.90	2.94	3.30	9.76	0.65	0.12	0.20	0.26	
11	0.47	0.41	0.65	8.40	1.24	2.23	2.78	6.65	0.55	0.10	0.20	0.16	
12	0.41	0.35	1.18	7.12	1.36	1.95	2.38	5.18	0.55	0.14	0.10	0.12	
13	0.41	0.35	1.00	5.06	1.60	1.67	2.09	4.46	0.60	0.10	0.16	0.06	
14	0.38	0.38	0.75	3.90	3.20	1.95	1.88	3.60	0.50	0.08	0.14	0.00	
15	0.35	0.55	0.65	4.00	2.62	1.81	1.81	3.10	0.55	0.12	0.23	0.02	
16	0.38	1.48	0.60	3.50	2.54	1.54	1.81	2.78	0.47	0.14	0.23	0.12	
17	0.29	1.00	0.60	3.40	5.30	1.30	1.60	2.46	0.50	0.10	0.26	0.12	
18	0.26	1.00	0.65	2.86	10.86	1.06	5.18	2.23	0.47	0.06	0.26	0.12	
19	0.47	0.95	0.70	2.54	6.80	0.85	3.30	2.02	0.47	0.06	0.10	0.14	
20	0.41	0.85	0.65	2.38	5.60	0.75	3.40	1.81	0.47	0.04	0.08	0.14	
21	0.32	0.95	0.65	2.02	4.58	0.75	4.94	1.74	0.41	0.00	0.06	0.10	
22	0.26	1.48	0.55	1.81	3.60	0.65	4.10	1.30	0.35	0.02	0.04	0.12	
23	0.23	2.70	0.70	1.54	3.70	0.47	2.86	0.95	0.32	0.38	0.04	0.08	
24	0.26	1.81	1.67	1.48	2.94	1.48	2.38	0.95	0.41	0.41	0.02	0.14	
25	0.23	1.48	15.20	1.36	2.38	12.60	2.16	1.12	0.32	0.38	0.16	0.23	
26	0.32	2.62	10.86	1.24	2.09	10.86	12.00	1.18	0.29	0.26	0.14	0.20	
27	0.35	5.60	6.65	1.18	1.95	10.10	12.60	1.00	0.29	0.14	0.14	0.41	
28	0.38	4.58	5.18	1.00	2.16	6.65	11.81	1.00	0.35	0.08	0.12	0.32	
29	0.35	3.70	4.00	1.00	3.60	4.00	10.48	0.75	0.35	0.14		0.23	
30	0.65	2.62	3.40	0.85	5.30	2.94	10.86	0.70	0.29	0.29		0.23	
31		2.23		4.00	6.20		11.05		0.29	0.70		0.26	
Total	20.98	45.31	69.59	143.83	93.22	107.62	185.60	164.07	15.70	5.87	5.74	4.96	862.49 CMSDAY
Mean	0.70	1.46	2.32	4.64	3.01	3.59	5.99	5.47	0.51	0.19	0.20	0.16	2.36 CMS
Max	2.38	5.60	15.20	14.20	10.86	12.60	15.60	30.92	0.80	0.70	0.41	0.41	30.92 CMS
Min	0.23	0.35	0.55	0.85	0.90	0.47	1.60	0.70	0.29	0.00	0.02	0.00	0.00 CMS
Runoff	1.813	3.915	6.013	12.427	8.054	9.298	16.036	14.176	1.356	0.507	0.496	0.429	74.519 MCM

Momentary Peak 48.44 CMS, at 10.44 M (MSL), at 15.00 Hours, on Nov 8, 2001
Runoff Yield 19.69 Liters/Second/Square KM, Momentary Peak Yield 403.667 Liters/Second/Square KM

WATER YEAR : 2001

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 left bank at the bridge of Phet Kasem Highway near the guidepost 379.

Ban Nong Ya Plong **Amphoe** Bang Saphan **Changwat** Prachuap Khiri Khan

Drainage Area 112 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +25.360 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank at the abutment of the bridge.

Elevation +30.539 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1979 to date.

Rating Operation

Period of Rating 1980 to date.

Rated by Float -

Rated by Current Meter 1980 to date.

Stability of Channel Regimes Stable.

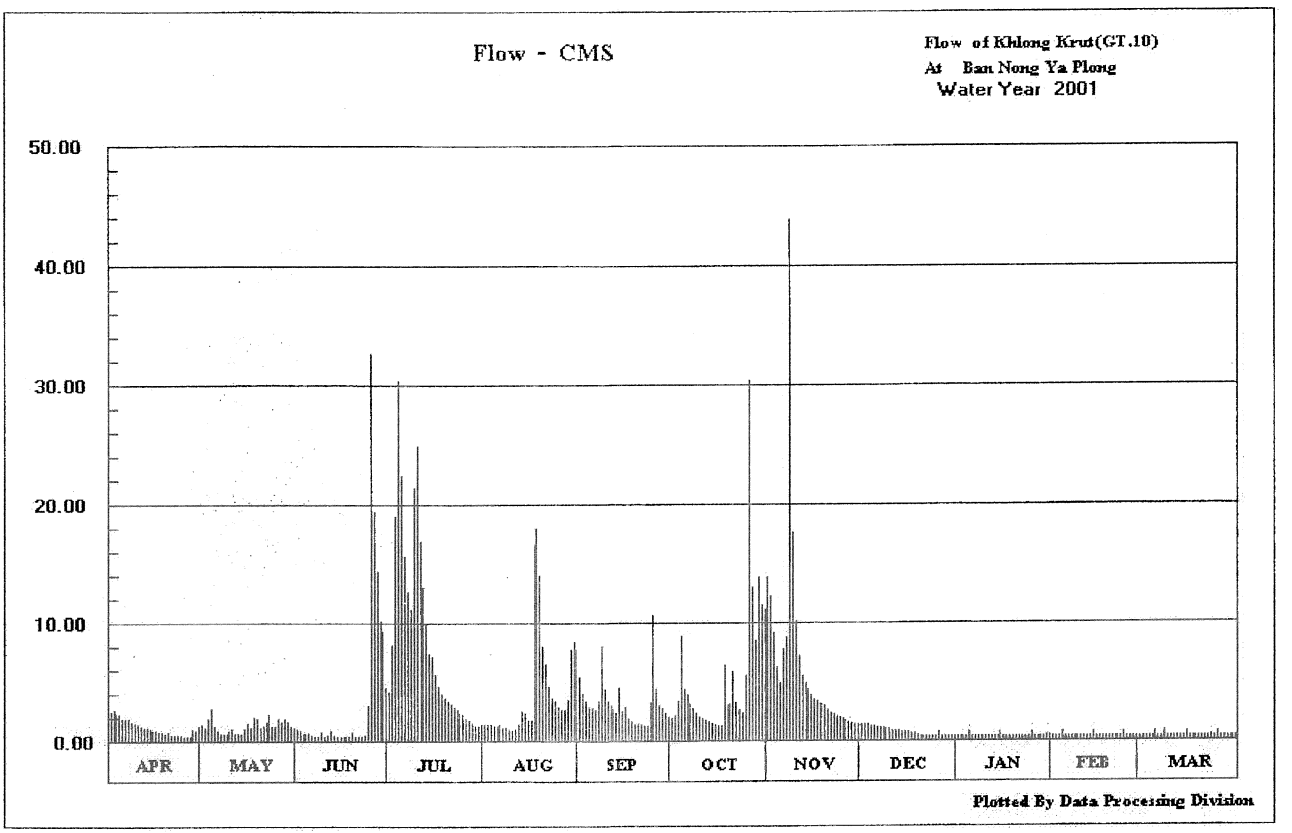
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 94 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.82	24.71	24.63	24.98	24.70	25.10	24.75	25.65	24.71	24.45	24.47	24.40	
2	24.83	24.66	24.60	25.29	24.70	24.97	24.78	25.56	24.70	24.45	24.45	24.40	
3	24.80	24.76	24.57	25.91	24.70	24.90	24.90	25.35	24.70	24.45	24.43	24.40	
4	24.79	24.84	24.57	26.46	24.69	24.86	25.34	25.16	24.69	24.45	24.42	24.40	
5	24.76	24.69	24.55	26.08	24.68	24.84	25.00	25.05	24.68	24.44	24.41	24.40	
6	24.75	24.61	24.53	25.74	24.71	24.83	24.96	25.26	24.67	24.44	24.41	24.40	
7	24.75	24.57	24.52	25.59	24.67	24.90	24.88	25.33	24.66	24.43	24.40	24.39	
8	24.73	24.56	24.52	25.49	24.66	25.28	24.84	27.00	24.65	24.43	24.40	24.50	
9	24.72	24.57	24.51	26.03	24.63	25.01	24.80	25.84	24.64	24.43	24.39	24.60	
10	24.70	24.62	24.51	26.20	24.61	24.91	24.77	25.42	24.63	24.43	24.39	24.48	
11	24.68	24.64	24.53	25.80	24.63	24.87	24.75	25.22	24.62	24.43	24.39	24.44	
12	24.67	24.57	24.60	25.61	24.70	24.84	24.74	25.11	24.61	24.43	24.39	24.43	
13	24.65	24.55	24.54	25.40	24.82	24.80	24.73	25.05	24.60	24.43	24.41	24.42	
14	24.64	24.55	24.52	25.24	24.80	25.02	24.72	25.00	24.59	24.42	24.42	24.42	
15	24.61	24.64	24.52	25.22	24.74	24.82	24.70	24.95	24.58	24.43	24.42	24.41	
16	24.60	24.72	24.51	25.12	24.74	24.85	24.69	24.92	24.57	24.47	24.42	24.41	
17	24.59	24.67	24.50	25.03	25.79	24.76	24.68	24.91	24.56	24.46	24.42	24.41	
18	24.58	24.77	24.50	24.97	25.86	24.73	25.17	24.88	24.56	24.43	24.42	24.41	
19	24.56	24.76	24.47	24.93	25.66	24.71	24.87	24.87	24.54	24.43	24.41	24.39	
20	24.54	24.67	24.47	24.91	25.28	24.70	24.88	24.83	24.50	24.42	24.41	24.39	
21	24.54	24.69	24.47	24.88	25.18	24.70	25.14	24.81	24.49	24.42	24.41	24.39	
22	24.53	24.73	24.47	24.86	25.03	24.69	24.89	24.79	24.48	24.41	24.41	24.39	
23	24.53	24.79	24.54	24.83	24.93	24.68	24.83	24.77	24.47	24.45	24.41	24.39	
24	24.53	24.69	24.87	24.81	24.90	24.89	24.80	24.77	24.46	24.44	24.41	24.54	
25	24.52	24.68	26.55	24.79	24.86	25.45	25.11	24.75	24.45	24.42	24.41	24.43	
26	24.51	24.75	25.93	24.76	24.83	25.00	26.46	24.74	24.45	24.42	24.41	24.57	
27	24.50	24.73	25.68	24.74	24.83	24.87	25.61	24.73	24.45	24.42	24.41	24.52	
28	24.64	24.76	25.42	24.72	24.92	24.84	25.31	24.72	24.47	24.40	24.40	24.48	
29	24.60	24.73	25.36	24.69	25.26	24.80	25.65	24.71	24.46	24.43		24.46	
30	24.69	24.69	25.02	24.68	25.30	24.77	25.51	24.71	24.46	24.53		24.46	
31		24.65		24.71	25.26		25.49		24.45	24.53		24.45	
Mean	24.65	24.68	24.77	25.24	24.94	24.88	25.02	25.10	24.57	24.44	24.41	24.44	
Max	24.83	24.84	26.55	26.46	25.86	25.45	26.46	27.00	24.71	24.53	24.47	24.60	27.00
Min	24.50	24.55	24.47	24.68	24.61	24.68	24.68	24.71	24.45	24.40	24.39	24.39	24.39

Annual Max Momentary Gage Height 28.39 M (MSL), at 18.00 Hours, on Jul 9, 2001
Zero Gage at Bottom Elevation 25.36 M (MSL), River Bed 23.82 M (MSL)
Left Bank Elevation 28.66 M (MSL)
Right Bank Elevation 28.66 M (MSL), Drainage Area 112 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.70	1.60	1.15	4.30	1.50	5.50	2.00	14.00	1.60	0.35	0.41	0.20	
2	2.80	1.30	1.00	8.35	1.50	4.20	2.30	12.40	1.50	0.35	0.35	0.20	
3	2.50	2.10	0.85	19.20	1.50	3.50	3.50	9.25	1.50	0.35	0.29	0.20	
4	2.40	2.90	0.85	30.58	1.45	3.10	9.10	6.40	1.45	0.35	0.26	0.20	
5	2.10	1.45	0.75	22.60	1.40	2.90	4.50	5.00	1.40	0.32	0.23	0.20	
6	2.00	1.05	0.65	15.80	1.60	2.80	4.10	7.90	1.35	0.32	0.23	0.20	
7	2.00	0.85	0.60	12.85	1.35	3.50	3.30	8.95	1.30	0.29	0.20	0.18	
8	1.80	0.80	0.60	11.35	1.30	8.20	2.90	44.00	1.25	0.29	0.20	0.50	
9	1.70	0.85	0.55	21.60	1.15	4.60	2.50	17.80	1.20	0.29	0.18	1.00	
10	1.50	1.10	0.55	25.00	1.05	3.60	2.20	10.30	1.15	0.29	0.18	0.44	
11	1.40	1.20	0.65	17.00	1.15	3.20	2.00	7.30	1.10	0.29	0.18	0.32	
12	1.35	0.85	1.00	13.20	1.50	2.90	1.90	5.65	1.05	0.29	0.18	0.29	
13	1.25	0.75	0.70	10.00	2.70	2.50	1.80	5.00	1.00	0.29	0.23	0.26	
14	1.20	0.75	0.60	7.60	2.50	4.70	1.70	4.50	0.95	0.26	0.26	0.26	
15	1.05	1.20	0.60	7.30	1.90	2.70	1.50	4.00	0.90	0.29	0.26	0.23	
16	1.00	1.70	0.55	5.80	1.90	3.00	1.45	3.70	0.85	0.41	0.26	0.23	
17	0.95	1.35	0.50	4.80	16.80	2.10	1.40	3.60	0.80	0.38	0.26	0.23	
18	0.90	2.20	0.50	4.20	18.20	1.80	6.55	3.30	0.80	0.29	0.26	0.23	
19	0.80	2.10	0.41	3.80	14.20	1.60	3.20	3.20	0.70	0.29	0.23	0.18	
20	0.70	1.35	0.41	3.60	8.20	1.50	3.30	2.80	0.50	0.26	0.23	0.18	
21	0.70	1.45	0.41	3.30	6.70	1.50	6.10	2.60	0.47	0.26	0.23	0.18	
22	0.65	1.80	0.41	3.10	4.80	1.45	3.40	2.40	0.44	0.23	0.23	0.18	
23	0.65	2.40	0.70	2.80	3.80	1.40	2.80	2.20	0.41	0.35	0.23	0.18	
24	0.65	1.45	3.20	2.60	3.50	3.40	2.50	2.20	0.38	0.32	0.23	0.70	
25	0.60	1.40	32.75	2.40	3.10	10.75	5.65	2.00	0.35	0.26	0.23	0.29	
26	0.55	2.00	19.60	2.10	2.80	4.50	30.58	1.90	0.35	0.26	0.23	0.85	
27	0.50	1.80	14.60	1.90	2.80	3.20	13.20	1.80	0.35	0.26	0.23	0.60	
28	1.20	2.10	10.30	1.70	3.70	2.90	8.65	1.70	0.41	0.20	0.20	0.44	
29	1.00	1.80	9.40	1.45	7.90	2.50	14.00	1.60	0.38	0.29		0.38	
30	1.45	1.45	4.70	1.40	8.50	2.20	11.65	1.60	0.38	0.65		0.38	
31		1.25		1.60	7.90		11.35		0.35	0.65		0.35	
Total	40.05	46.35	109.54	273.28	138.35	101.70	171.08	199.05	26.62	9.98	6.69	10.26	1132.95 CMSDAY
Mean	1.34	1.50	3.65	8.82	4.46	3.39	5.52	6.64	0.86	0.32	0.24	0.33	3.10 CMS
Max	2.80	2.90	32.75	30.58	18.20	10.75	30.58	44.00	1.60	0.65	0.41	1.00	44.00 CMS
Min	0.50	0.75	0.41	1.40	1.05	1.40	1.40	1.60	0.35	0.20	0.18	0.18	0.18 CMS
Runoff	3.460	4.005	9.464	23.611	11.953	8.787	14.781	17.198	2.300	0.862	0.578	0.886	97.887 MCM

Momentary Peak 85.15 CMS, at 28.39 M (MSL), at 18.00 Hours, on Jul 9, 2001

Runoff Yield 27.71 Liters/Second/Square KM, Momentary Peak Yield 760.268 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 58 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.000 m. (A.D.)

Bench Mark B.M.- Highways Dept.

Location BM On left bank at the abutment of the bridge.

Elevation +9.318 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 1980 to date.

Rated by Float -

Rated by Current Meter 1980 to date.

Stability of Channel Regimes Fairly stable.

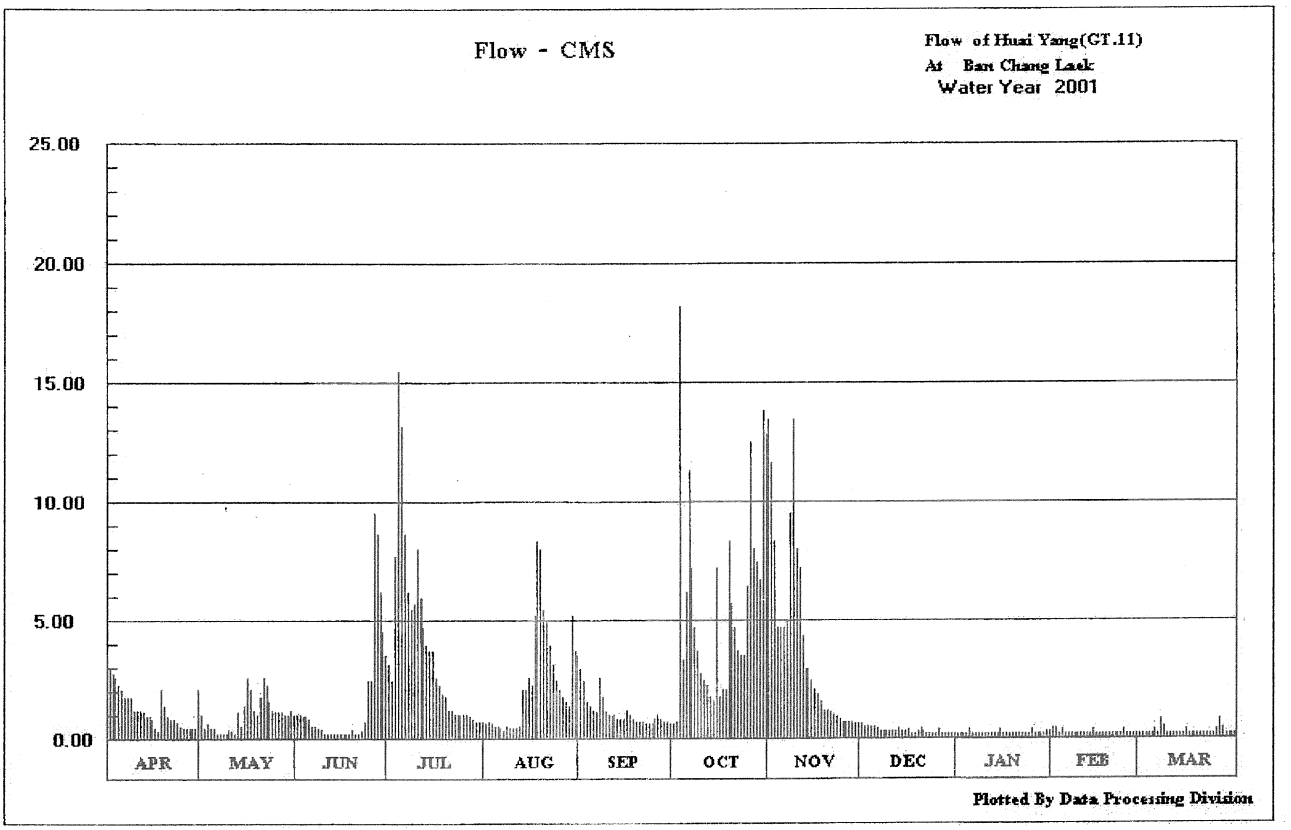
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 85 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.30	1.18	1.18	1.31	1.14	1.30	1.14	1.70	1.14	1.08	1.12	1.01	
2	1.29	1.12	1.18	1.27	1.15	1.27	1.15	1.64	1.13	1.08	1.12	1.01	
3	1.28	1.14	1.17	1.51	1.14	1.22	1.82	1.53	1.13	1.08	1.10	1.01	
4	1.26	1.12	1.17	1.75	1.13	1.21	1.32	1.39	1.13	1.07	1.09	1.00	
5	1.25	1.12	1.16	1.69	1.13	1.20	1.45	1.39	1.13	1.07	1.07	1.00	
6	1.23	1.09	1.13	1.54	1.12	1.19	1.63	1.39	1.12	1.06	1.05	1.10	
7	1.23	1.09	1.13	1.45	1.11	1.28	1.49	1.40	1.11	1.05	1.04	1.10	
8	1.23	1.07	1.12	1.42	1.13	1.23	1.39	1.57	1.11	1.05	1.04	1.16	
9	1.20	1.06	1.11	1.43	1.12	1.19	1.34	1.70	1.11	1.05	1.05	1.13	
10	1.20	1.09	1.10	1.52	1.12	1.18	1.29	1.52	1.11	1.05	1.05	1.09	
11	1.20	1.11	1.10	1.44	1.12	1.17	1.27	1.49	1.11	1.05	1.04	1.06	
12	1.19	1.10	1.10	1.39	1.13	1.18	1.26	1.37	1.11	1.04	1.04	1.03	
13	1.17	1.19	1.10	1.35	1.25	1.16	1.23	1.30	1.12	1.04	1.04	1.02	
14	1.17	1.13	1.10	1.34	1.25	1.16	1.22	1.30	1.11	1.04	1.03	1.00	
15	1.16	1.21	1.10	1.34	1.28	1.16	1.49	1.27	1.11	1.04	1.03	1.00	
16	1.12	1.28	1.10	1.28	1.26	1.20	1.23	1.25	1.10	1.04	1.03	1.00	
17	1.11	1.25	1.10	1.26	1.41	1.18	1.25	1.24	1.10	1.04	1.02	1.00	
18	1.25	1.20	1.10	1.24	1.53	1.16	1.25	1.22	1.10	1.04	1.02	1.00	
19	1.21	1.18	1.10	1.23	1.52	1.15	1.53	1.20	1.11	1.03	1.02	0.99	
20	1.17	1.23	1.10	1.20	1.42	1.15	1.43	1.20	1.12	1.03	1.02	1.00	
21	1.16	1.28	1.10	1.20	1.40	1.15	1.39	1.19	1.11	1.03	1.02	1.00	
22	1.16	1.26	1.11	1.18	1.35	1.14	1.34	1.18	1.10	1.04	1.02	1.00	
23	1.15	1.22	1.15	1.18	1.31	1.14	1.33	1.17	1.09	1.04	1.03	1.00	
24	1.13	1.20	1.27	1.18	1.27	1.14	1.33	1.16	1.09	1.04	1.03	1.02	
25	1.12	1.19	1.27	1.18	1.25	1.16	1.46	1.15	1.08	1.05	1.03	1.00	
26	1.12	1.19	1.57	1.18	1.23	1.18	1.67	1.15	1.08	1.05	1.02	1.00	
27	1.12	1.19	1.54	1.17	1.22	1.16	1.52	1.15	1.08	1.05	1.02	1.16	
28	1.12	1.18	1.45	1.16	1.21	1.15	1.50	1.15	1.08	1.06	1.00	1.12	
29	1.12	1.18	1.38	1.15	1.41	1.15	1.47	1.14	1.08	1.08		1.08	
30	1.25	1.20	1.33	1.15	1.34	1.14	1.71	1.14	1.08	1.11		1.07	
31		1.18		1.15	1.33		1.68		1.07	1.11		1.06	
Mean	1.19	1.17	1.19	1.32	1.25	1.18	1.41	1.32	1.10	1.05	1.04	1.04	
Max	1.30	1.28	1.57	1.75	1.53	1.30	1.82	1.70	1.14	1.11	1.12	1.16	1.82
Min	1.11	1.06	1.10	1.15	1.11	1.14	1.14	1.14	1.07	1.03	1.00	0.99	0.99

Annual Max Momentary Gage Height 2.30 M (A.D), at 9.00 Hours, on Oct 3, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.30 M (A.D)
Left Bank Elevation 7.87 M (A.D)
Right Bank Elevation 8.97 M (A.D), Drainage Area 58 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.00	1.10	1.10	3.20	0.70	3.00	0.70	13.50	0.70	0.26	0.50	0.12	
2	2.83	0.50	1.10	2.49	0.80	2.49	0.80	11.70	0.60	0.26	0.50	0.12	
3	2.66	0.70	1.00	7.80	0.70	1.64	18.30	8.40	0.60	0.26	0.30	0.12	
4	2.32	0.50	1.00	15.50	0.60	1.47	3.40	4.80	0.60	0.24	0.28	0.10	
5	2.15	0.50	0.90	13.20	0.60	1.30	6.25	4.80	0.60	0.24	0.24	0.10	
6	1.81	0.28	0.60	8.70	0.50	1.20	11.40	4.80	0.50	0.22	0.20	0.30	
7	1.81	0.28	0.60	6.25	0.40	2.66	7.25	5.00	0.40	0.20	0.18	0.30	
8	1.81	0.24	0.50	5.50	0.60	1.81	4.80	9.60	0.40	0.20	0.18	0.90	
9	1.30	0.22	0.40	5.75	0.50	1.20	3.80	13.50	0.40	0.20	0.20	0.60	
10	1.30	0.28	0.30	8.10	0.50	1.10	2.83	8.10	0.40	0.20	0.20	0.28	
11	1.30	0.40	0.30	6.00	0.50	1.00	2.49	7.25	0.40	0.20	0.18	0.22	
12	1.20	0.30	0.30	4.80	0.60	1.10	2.32	4.40	0.40	0.18	0.18	0.16	
13	1.00	1.20	0.30	4.00	2.15	0.90	1.81	3.00	0.50	0.18	0.18	0.14	
14	1.00	0.60	0.30	3.80	2.15	0.90	1.64	3.00	0.40	0.18	0.16	0.10	
15	0.90	1.47	0.30	3.80	2.66	0.90	7.25	2.49	0.40	0.18	0.16	0.10	
16	0.50	2.66	0.30	2.66	2.32	1.30	1.81	2.15	0.30	0.18	0.16	0.10	
17	0.40	2.15	0.30	2.32	5.25	1.10	2.15	1.98	0.30	0.18	0.14	0.10	
18	2.15	1.30	0.30	1.98	8.40	0.90	2.15	1.64	0.30	0.18	0.14	0.10	
19	1.47	1.10	0.30	1.81	8.10	0.80	8.40	1.30	0.40	0.16	0.14	0.08	
20	1.00	1.81	0.30	1.30	5.50	0.80	5.75	1.30	0.50	0.16	0.14	0.10	
21	0.90	2.66	0.30	1.30	5.00	0.80	4.80	1.20	0.40	0.16	0.14	0.10	
22	0.90	2.32	0.40	1.10	4.00	0.70	3.80	1.10	0.30	0.18	0.14	0.10	
23	0.80	1.64	0.80	1.10	3.20	0.70	3.60	1.00	0.28	0.18	0.16	0.10	
24	0.60	1.30	2.49	1.10	2.49	0.70	3.60	0.90	0.28	0.18	0.16	0.14	
25	0.50	1.20	2.49	1.10	2.15	0.90	6.50	0.80	0.26	0.20	0.16	0.10	
26	0.50	1.20	9.60	1.10	1.81	1.10	12.60	0.80	0.26	0.20	0.14	0.10	
27	0.50	1.20	8.70	1.00	1.64	0.90	8.10	0.80	0.26	0.20	0.14	0.90	
28	0.50	1.10	6.25	0.90	1.47	0.80	7.50	0.80	0.26	0.22	0.10	0.50	
29	0.50	1.10	4.60	0.80	5.25	0.80	6.75	0.70	0.26	0.26		0.26	
30	2.15	1.30	3.60	0.80	3.80	0.70	13.90	0.70	0.26	0.40		0.24	
31		1.10		0.80	3.60		12.90		0.24	0.40		0.22	
Total	39.76	33.71	49.73	120.06	77.94	35.67	179.35	121.51	12.16	6.64	5.50	6.90	688.93 CMSDAY
Mean	1.33	1.09	1.66	3.87	2.51	1.19	5.79	4.05	0.39	0.21	0.20	0.22	1.89 CMS
Max	3.00	2.66	9.60	15.50	8.40	3.00	18.30	13.50	0.70	0.40	0.50	0.90	18.30 CMS
Min	0.40	0.22	0.30	0.80	0.40	0.70	0.70	0.70	0.24	0.16	0.10	0.08	0.08 CMS
Runoff	3.435	2.913	4.297	10.373	6.734	3.082	15.496	10.498	1.051	0.574	0.475	0.596	59.524 MCM

Momentary Peak 39.00 CMS, at 2.30 M (A.D), at 9.00 Hours, on Oct 3, 2001

Runoff Yield 32.54 Liters/Second/Square KM, Momentary Peak Yield 672.414 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 26 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +15.860 m (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the footpath of the bridge.

Elevation +22.383 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 Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Fairly stable.

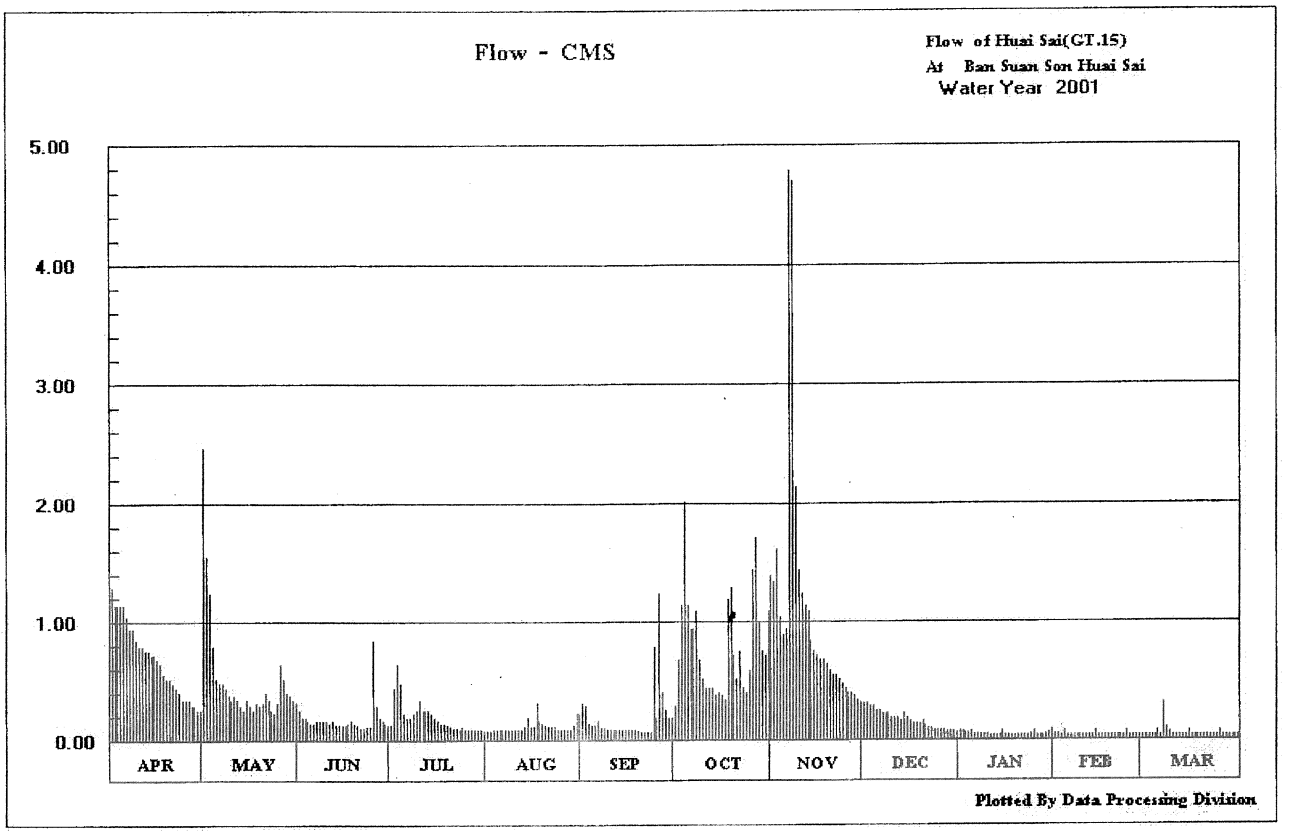
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 103 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.39	16.59	16.14	16.09	16.04	16.16	16.15	16.41	16.16	16.04	16.02	15.97	
2	16.36	16.44	16.12	16.20	16.04	16.15	16.26	16.40	16.16	16.04	16.02	15.97	
3	16.36	16.38	16.12	16.25	16.05	16.10	16.36	16.45	16.15	16.03	16.01	15.96	
4	16.36	16.29	16.11	16.21	16.05	16.09	16.52	16.34	16.15	16.03	16.01	15.96	
5	16.36	16.22	16.10	16.13	16.05	16.09	16.36	16.31	16.14	16.03	16.01	15.96	
6	16.34	16.21	16.10	16.12	16.05	16.11	16.32	16.32	16.14	16.02	16.00	15.96	
7	16.32	16.21	16.11	16.12	16.05	16.07	16.32	16.89	16.13	16.02	16.00	15.98	
8	16.32	16.20	16.11	16.13	16.06	16.07	16.35	16.88	16.13	16.02	16.00	16.16	
9	16.30	16.18	16.11	16.14	16.05	16.06	16.26	16.54	16.13	16.02	15.99	16.07	
10	16.29	16.17	16.11	16.17	16.05	16.06	16.22	16.42	16.12	16.02	15.99	16.03	
11	16.29	16.18	16.10	16.14	16.06	16.05	16.20	16.38	16.12	16.01	15.99	16.01	
12	16.28	16.17	16.11	16.14	16.06	16.06	16.20	16.36	16.12	16.01	15.99	16.00	
13	16.28	16.15	16.09	16.14	16.08	16.06	16.20	16.35	16.11	16.01	15.98	16.00	
14	16.27	16.14	16.09	16.13	16.12	16.06	16.18	16.30	16.13	16.01	15.98	15.99	
15	16.27	16.17	16.09	16.12	16.08	16.06	16.19	16.28	16.12	16.01	15.98	15.99	
16	16.26	16.15	16.09	16.11	16.08	16.06	16.18	16.27	16.11	16.01	15.98	15.99	
17	16.25	16.14	16.10	16.10	16.16	16.05	16.17	16.26	16.10	16.00	15.97	15.99	
18	16.23	16.16	16.11	16.10	16.11	16.05	16.37	16.26	16.10	16.00	15.97	15.98	
19	16.22	16.15	16.10	16.09	16.10	16.04	16.39	16.25	16.10	16.00	15.97	15.98	
20	16.22	16.16	16.09	16.08	16.09	16.03	16.27	16.24	16.11	16.00	15.97	15.98	
21	16.21	16.19	16.07	16.07	16.08	16.03	16.22	16.23	16.09	16.00	15.96	15.98	
22	16.20	16.17	16.07	16.07	16.08	16.03	16.28	16.23	16.07	16.00	15.96	15.97	
23	16.19	16.14	16.08	16.06	16.08	16.03	16.20	16.22	16.07	16.00	15.96	15.96	
24	16.17	16.13	16.08	16.08	16.06	16.29	16.19	16.21	16.06	16.02	15.96	15.96	
25	16.17	16.16	16.30	16.06	16.06	16.12	16.24	16.20	16.06	16.00	15.96	15.98	
26	16.17	16.25	16.15	16.06	16.05	16.38	16.42	16.19	16.06	16.01	15.97	15.99	
27	16.15	16.22	16.12	16.06	16.05	16.19	16.47	16.19	16.05	16.01	15.97	15.98	
28	16.15	16.19	16.11	16.06	16.05	16.14	16.33	16.18	16.04	16.01	15.96	15.97	
29	16.14	16.18	16.10	16.05	16.09	16.12	16.28	16.17	16.04	16.02		15.97	
30	16.14	16.17	16.09	16.05	16.13	16.12	16.27	16.16	16.04	16.03		15.97	
31		16.16		16.04	16.13		16.35		16.03	16.05		15.97	
Mean	16.26	16.21	16.11	16.11	16.07	16.10	16.28	16.33	16.10	16.02	15.98	15.99	
Max	16.39	16.59	16.30	16.25	16.16	16.38	16.52	16.89	16.16	16.05	16.02	16.16	16.89
Min	16.14	16.13	16.07	16.04	16.04	16.03	16.15	16.16	16.03	16.00	15.96	15.96	15.96

Annual Max Momentary Gage Height 17.19 M (MSL), at 6.00 Hours, on Nov 8, 2001
Zero Gage at Bottom Elevation 15.86 M (MSL), River Bed 15.97 M (MSL)
Left Bank Elevation 21.87 M (MSL)
Right Bank Elevation 19.15 M (MSL), Drainage Area 26 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.30	2.48	0.27	0.14	0.09	0.33	0.30	1.41	0.33	0.09	0.07	0.02	
2	1.15	1.57	0.21	0.45	0.09	0.30	0.69	1.35	0.33	0.09	0.07	0.02	
3	1.15	1.25	0.21	0.65	0.10	0.15	1.15	1.63	0.30	0.08	0.06	0.01	
4	1.15	0.81	0.18	0.49	0.10	0.14	2.03	1.05	0.30	0.08	0.06	0.01	
5	1.15	0.53	0.15	0.24	0.10	0.14	1.15	0.90	0.27	0.08	0.06	0.01	
6	1.05	0.49	0.15	0.21	0.10	0.18	0.95	0.95	0.27	0.07	0.05	0.01	
7	0.95	0.49	0.18	0.21	0.10	0.12	0.95	4.81	0.24	0.07	0.05	0.03	
8	0.95	0.45	0.18	0.24	0.11	0.12	1.10	4.72	0.24	0.07	0.05	0.33	
9	0.85	0.39	0.18	0.27	0.10	0.11	0.69	2.16	0.24	0.07	0.04	0.12	
10	0.81	0.36	0.18	0.36	0.10	0.11	0.53	1.46	0.21	0.07	0.04	0.08	
11	0.81	0.39	0.15	0.27	0.11	0.10	0.45	1.25	0.21	0.06	0.04	0.06	
12	0.77	0.36	0.18	0.27	0.11	0.11	0.45	1.15	0.21	0.06	0.04	0.05	
13	0.77	0.30	0.14	0.27	0.13	0.11	0.45	1.10	0.18	0.06	0.03	0.05	
14	0.73	0.27	0.14	0.24	0.21	0.11	0.39	0.85	0.24	0.06	0.03	0.04	
15	0.73	0.36	0.14	0.21	0.13	0.11	0.42	0.77	0.21	0.06	0.03	0.04	
16	0.69	0.30	0.14	0.18	0.13	0.11	0.39	0.73	0.18	0.06	0.03	0.04	
17	0.65	0.27	0.15	0.15	0.33	0.10	0.36	0.69	0.15	0.05	0.02	0.04	
18	0.57	0.33	0.18	0.15	0.18	0.10	1.20	0.69	0.15	0.05	0.02	0.03	
19	0.53	0.30	0.15	0.14	0.15	0.09	1.30	0.65	0.15	0.05	0.02	0.03	
20	0.53	0.33	0.14	0.13	0.14	0.08	0.73	0.61	0.18	0.05	0.02	0.03	
21	0.49	0.42	0.12	0.12	0.13	0.08	0.53	0.57	0.14	0.05	0.01	0.03	
22	0.45	0.36	0.12	0.12	0.13	0.08	0.77	0.57	0.12	0.05	0.01	0.02	
23	0.42	0.27	0.13	0.11	0.13	0.08	0.45	0.53	0.12	0.05	0.01	0.01	
24	0.36	0.24	0.13	0.13	0.11	0.81	0.42	0.49	0.11	0.07	0.01	0.01	
25	0.36	0.33	0.85	0.11	0.11	0.21	0.61	0.45	0.11	0.05	0.01	0.03	
26	0.36	0.65	0.30	0.11	0.10	1.25	1.46	0.42	0.11	0.06	0.02	0.04	
27	0.30	0.53	0.21	0.11	0.10	0.42	1.73	0.42	0.10	0.06	0.02	0.03	
28	0.30	0.42	0.18	0.11	0.10	0.27	1.00	0.39	0.09	0.06	0.01	0.02	
29	0.27	0.39	0.15	0.10	0.14	0.21	0.77	0.36	0.09	0.07		0.02	
30	0.27	0.36	0.14	0.10	0.24	0.21	0.73	0.33	0.09	0.08		0.02	
31		0.33		0.09	0.24		1.10		0.08	0.10		0.02	
Total	20.87	16.33	5.73	6.48	4.14	6.34	25.25	33.46	5.75	2.03	0.93	1.30	128.61 CMSDAY
Mean	0.70	0.53	0.19	0.21	0.13	0.21	0.81	1.12	0.19	0.07	0.03	0.04	0.35 CMS
Max	1.30	2.48	0.85	0.65	0.33	1.25	2.03	4.81	0.33	0.10	0.07	0.33	4.81 CMS
Min	0.27	0.24	0.12	0.09	0.09	0.08	0.30	0.33	0.08	0.05	0.01	0.01	0.01 CMS
Runoff	1.803	1.411	0.495	0.560	0.358	0.548	2.182	2.891	0.497	0.175	0.080	0.112	11.112 MCM

Momentary Peak 7.88 CMS, at 17.19 M (MSL), at 6.00 Hours, on Nov 8, 2001

Runoff Yield 13.55 Liters/Second/Square KM, Momentary Peak Yield 303.077 Liters/Second/Square KM

WATER YEAR : 2001

WEST COAST - GULF BASIN

Khlong Hin Chuang at Ban Khlong 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 Khlong Hin Chuang **Amphoe** Mueang **Changwat** Prachuap Khiri Khan

Drainage Area 47 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +10.870 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +17.808 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1987 to date.

Rating Operation

Period of Rating 1987 to date.

Rated by Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Stable.

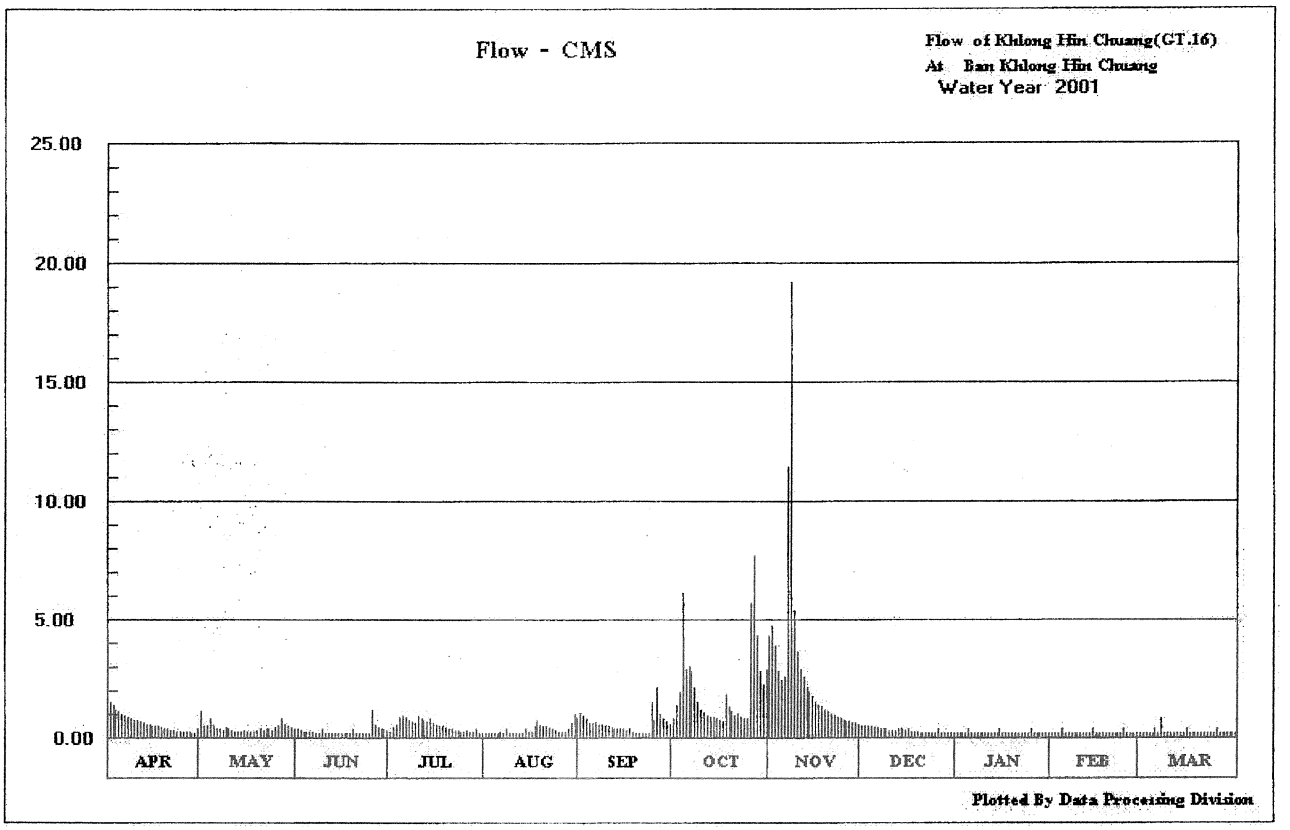
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 103 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.84	11.80	11.66	11.64	11.60	11.79	11.75	12.09	11.70	11.60	11.58	11.51	
2	11.83	11.70	11.65	11.68	11.60	11.77	11.83	12.12	11.70	11.60	11.58	11.51	
3	11.81	11.69	11.64	11.71	11.60	11.75	11.89	12.06	11.69	11.60	11.57	11.51	
4	11.80	11.75	11.63	11.76	11.60	11.72	12.21	11.97	11.69	11.59	11.56	11.52	
5	11.78	11.69	11.64	11.77	11.59	11.72	11.98	11.94	11.68	11.59	11.56	11.52	
6	11.77	11.67	11.63	11.76	11.63	11.73	11.99	11.95	11.68	11.59	11.55	11.52	
7	11.76	11.66	11.62	11.74	11.61	11.71	11.97	12.47	11.67	11.59	11.55	11.52	
8	11.75	11.65	11.62	11.73	11.60	11.71	11.91	12.76	11.67	11.59	11.55	11.75	
9	11.74	11.68	11.61	11.72	11.60	11.69	11.84	12.16	11.66	11.58	11.55	11.61	
10	11.74	11.67	11.62	11.77	11.59	11.69	11.81	12.04	11.65	11.58	11.55	11.56	
11	11.73	11.65	11.61	11.75	11.60	11.68	11.79	11.98	11.65	11.58	11.55	11.53	
12	11.72	11.64	11.62	11.74	11.60	11.67	11.77	11.95	11.65	11.58	11.55	11.54	
13	11.71	11.63	11.61	11.73	11.60	11.67	11.76	11.91	11.66	11.58	11.55	11.53	
14	11.71	11.63	11.60	11.75	11.67	11.67	11.76	11.89	11.66	11.58	11.54	11.52	
15	11.70	11.65	11.60	11.72	11.63	11.66	11.75	11.87	11.65	11.58	11.54	11.52	
16	11.70	11.63	11.60	11.71	11.63	11.65	11.74	11.84	11.64	11.58	11.55	11.52	
17	11.69	11.63	11.61	11.70	11.70	11.64	11.73	11.83	11.64	11.58	11.55	11.51	
18	11.68	11.63	11.62	11.69	11.74	11.63	11.88	11.82	11.63	11.58	11.54	11.51	
19	11.67	11.65	11.60	11.68	11.71	11.62	11.82	11.81	11.63	11.58	11.54	11.50	
20	11.66	11.65	11.59	11.67	11.70	11.61	11.80	11.80	11.62	11.58	11.54	11.50	
21	11.65	11.65	11.58	11.66	11.69	11.61	11.77	11.78	11.62	11.57	11.54	11.50	
22	11.65	11.67	11.57	11.65	11.68	11.60	11.78	11.77	11.62	11.57	11.53	11.51	
23	11.64	11.67	11.58	11.65	11.67	11.62	11.76	11.76	11.62	11.57	11.53	11.52	
24	11.64	11.65	11.60	11.64	11.65	11.84	11.75	11.75	11.61	11.58	11.53	11.51	
25	11.63	11.68	11.81	11.64	11.64	11.74	11.75	11.74	11.61	11.57	11.52	11.52	
26	11.63	11.70	11.71	11.65	11.63	11.91	12.18	11.73	11.61	11.57	11.51	11.52	
27	11.63	11.75	11.68	11.64	11.63	11.78	12.30	11.73	11.60	11.56	11.52	11.52	
28	11.62	11.71	11.67	11.63	11.66	11.75	12.09	11.72	11.60	11.56	11.51	11.53	
29	11.62	11.69	11.65	11.62	11.72	11.73	11.97	11.72	11.60	11.58		11.53	
30	11.65	11.68	11.65	11.61	11.78	11.71	11.92	11.71	11.60	11.57		11.49	
31		11.67		11.60	11.76		11.98		11.60	11.59		11.51	
Mean	11.71	11.67	11.63	11.69	11.65	11.70	11.88	11.92	11.64	11.58	11.54	11.53	
Max	11.84	11.80	11.81	11.77	11.78	11.91	12.30	12.76	11.70	11.60	11.58	11.75	12.76
Min	11.62	11.63	11.57	11.60	11.59	11.60	11.73	11.71	11.60	11.56	11.51	11.49	11.49

Annual Max Momentary Gage Height 12.87 M (MSL), at 6.00 Hours, on Nov 8, 2001
Zero Gage at Bottom Elevation 10.87 M (MSL), River Bed 11.44 M (MSL)
Left Bank Elevation 14.37 M (MSL)
Right Bank Elevation 14.37 M (MSL), Drainage Area 47 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.56	1.20	0.44	0.36	0.20	1.14	0.90	4.37	0.60	0.20	0.17	0.05	
2	1.47	0.60	0.40	0.52	0.20	1.02	1.47	4.81	0.60	0.20	0.17	0.05	
3	1.29	0.56	0.36	0.66	0.20	0.90	2.01	3.98	0.56	0.20	0.15	0.05	
4	1.20	0.90	0.32	0.96	0.20	0.72	6.23	2.87	0.56	0.18	0.13	0.07	
5	1.08	0.56	0.36	1.02	0.18	0.72	2.98	2.54	0.52	0.18	0.13	0.07	
6	1.02	0.48	0.32	0.96	0.32	0.78	3.09	2.65	0.52	0.18	0.12	0.07	
7	0.96	0.44	0.28	0.84	0.24	0.66	2.87	11.54	0.48	0.18	0.12	0.07	
8	0.90	0.40	0.28	0.78	0.20	0.66	2.21	19.26	0.48	0.18	0.12	0.90	
9	0.84	0.52	0.24	0.72	0.20	0.56	1.56	5.43	0.44	0.17	0.12	0.24	
10	0.84	0.48	0.28	1.02	0.18	0.56	1.29	3.72	0.40	0.17	0.12	0.13	
11	0.78	0.40	0.24	0.90	0.20	0.52	1.14	2.98	0.40	0.17	0.12	0.08	
12	0.72	0.36	0.28	0.84	0.20	0.48	1.02	2.65	0.40	0.17	0.12	0.10	
13	0.66	0.32	0.24	0.78	0.20	0.48	0.96	2.21	0.44	0.17	0.12	0.08	
14	0.66	0.32	0.20	0.90	0.48	0.48	0.96	2.01	0.44	0.17	0.10	0.07	
15	0.60	0.40	0.20	0.72	0.32	0.44	0.90	1.83	0.40	0.17	0.10	0.07	
16	0.60	0.32	0.20	0.66	0.32	0.40	0.84	1.56	0.36	0.17	0.12	0.07	
17	0.56	0.32	0.24	0.60	0.60	0.36	0.78	1.47	0.36	0.17	0.12	0.05	
18	0.52	0.32	0.28	0.56	0.84	0.32	1.92	1.38	0.32	0.17	0.10	0.05	
19	0.48	0.40	0.20	0.52	0.66	0.28	1.38	1.29	0.32	0.17	0.10	0.03	
20	0.44	0.40	0.18	0.48	0.60	0.24	1.20	1.20	0.28	0.17	0.10	0.03	
21	0.40	0.40	0.17	0.44	0.56	0.24	1.02	1.08	0.28	0.15	0.10	0.03	
22	0.40	0.48	0.15	0.40	0.52	0.20	1.08	1.02	0.28	0.15	0.08	0.05	
23	0.36	0.48	0.17	0.40	0.48	0.28	0.96	0.96	0.28	0.15	0.08	0.07	
24	0.36	0.40	0.20	0.36	0.40	1.56	0.90	0.90	0.24	0.17	0.08	0.05	
25	0.32	0.52	1.29	0.36	0.36	0.84	0.90	0.84	0.24	0.15	0.07	0.07	
26	0.32	0.60	0.66	0.40	0.32	2.21	5.74	0.78	0.24	0.15	0.05	0.07	
27	0.32	0.90	0.52	0.36	0.32	1.08	7.80	0.78	0.20	0.13	0.07	0.07	
28	0.28	0.66	0.48	0.32	0.44	0.90	4.37	0.72	0.20	0.13	0.05	0.08	
29	0.28	0.56	0.40	0.28	0.72	0.78	2.87	0.72	0.20	0.17		0.08	
30	0.40	0.52	0.40	0.24	1.08	0.66	2.32	0.66	0.20	0.15		0.02	
31		0.48		0.20	0.96		2.98		0.20	0.18		0.05	
Total	20.62	15.70	9.98	18.56	12.70	20.47	66.65	88.21	11.44	5.22	3.03	2.97	275.55 CMSDAY
Mean	0.69	0.51	0.33	0.60	0.41	0.68	2.15	2.94	0.37	0.17	0.11	0.10	0.75 CMS
Max	1.56	1.20	1.29	1.02	1.08	2.21	7.80	19.26	0.60	0.20	0.17	0.90	19.26 CMS
Min	0.28	0.32	0.15	0.20	0.18	0.20	0.78	0.66	0.20	0.13	0.05	0.02	0.02 CMS
Runoff	1.782	1.356	0.862	1.604	1.097	1.769	5.759	7.621	0.988	0.451	0.262	0.257	23.808 MCM

Momentary Peak 22.95 CMS, at 12.87 M (MSL), at 6.00 Hours, on Nov 8, 2001

Runoff Yield 16.06 Liters/Second/Square KM, Momentary Peak Yield 488.298 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 50 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.620 m.(M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +6.367 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1987 to date.

Rating Operation

Period of Rating 1987 to date

Rated by Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Fairly stable.

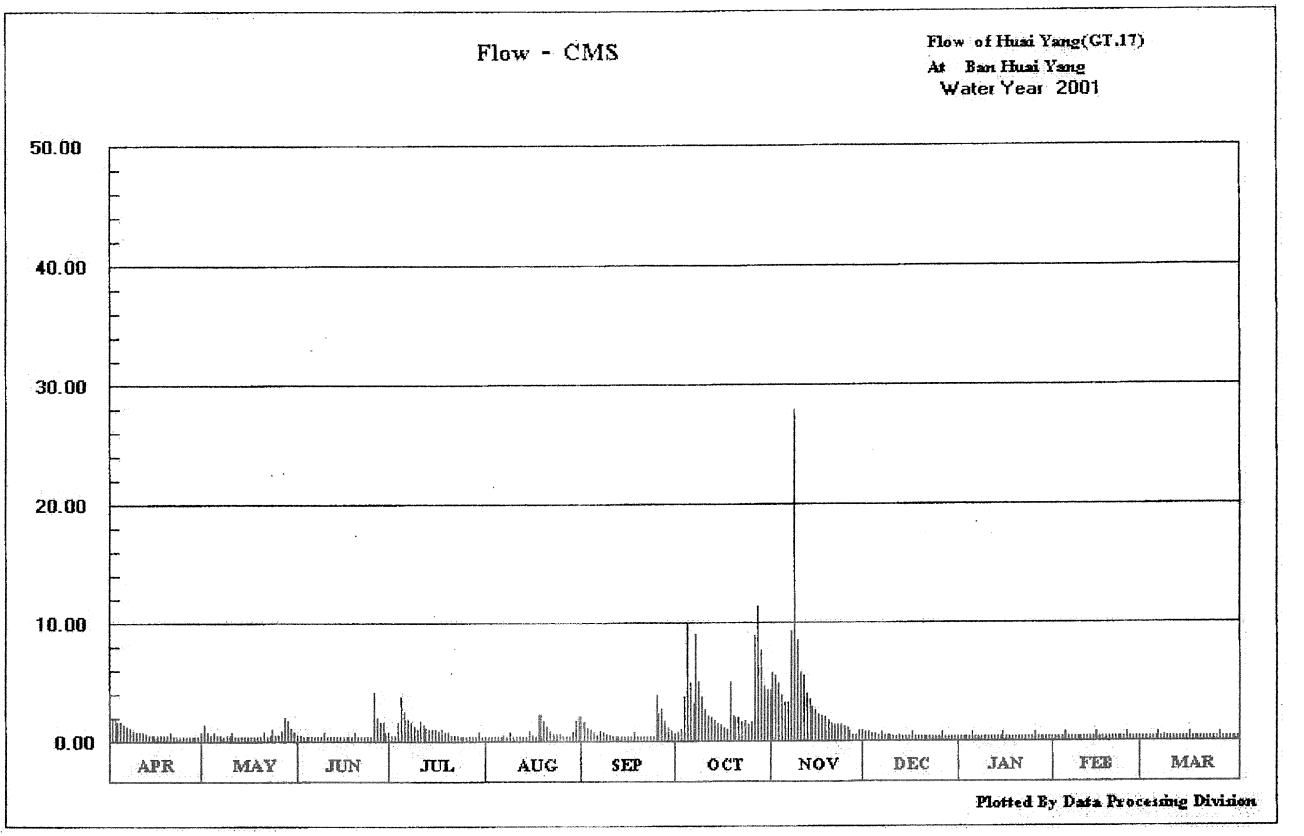
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 99 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.29	1.21	1.11	1.11	1.02	1.25	1.13	1.59	1.13	1.01	0.99	0.87	
2	1.27	1.14	1.08	1.11	1.02	1.19	1.17	1.57	1.13	1.01	0.98	0.87	
3	1.25	1.11	1.07	1.24	1.04	1.17	1.43	1.52	1.12	1.00	0.97	0.87	
4	1.24	1.14	1.06	1.43	1.04	1.13	1.83	1.45	1.12	1.00	0.96	0.87	
5	1.22	1.11	1.05	1.33	1.00	1.11	1.52	1.39	1.11	0.99	0.96	0.86	
6	1.20	1.09	1.04	1.27	1.09	1.15	1.39	1.39	1.11	0.99	0.94	0.90	
7	1.18	1.07	1.04	1.24	1.07	1.11	1.79	1.80	1.11	0.99	0.94	1.07	
8	1.16	1.10	1.03	1.20	1.04	1.12	1.53	2.54	1.10	0.98	0.93	1.09	
9	1.14	1.10	1.02	1.17	1.02	1.09	1.43	1.76	1.09	0.97	0.92	0.99	
10	1.14	1.09	1.02	1.26	1.02	1.07	1.34	1.59	1.08	0.97	0.92	0.96	
11	1.13	1.07	1.02	1.21	1.07	1.06	1.30	1.57	1.08	0.97	0.92	0.94	
12	1.12	1.06	1.01	1.19	1.05	1.05	1.28	1.46	1.09	0.97	0.91	0.91	
13	1.11	1.06	1.01	1.17	1.07	1.06	1.26	1.41	1.08	0.97	0.91	0.90	
14	1.11	1.06	1.01	1.17	1.15	1.02	1.23	1.36	1.08	0.97	0.91	0.89	
15	1.10	1.06	1.01	1.17	1.10	1.02	1.21	1.34	1.08	0.99	0.89	0.88	
16	1.10	1.06	1.01	1.16	1.08	1.01	1.19	1.31	1.07	0.99	0.92	0.88	
17	1.10	1.06	1.00	1.17	1.31	1.00	1.17	1.30	1.07	0.98	0.90	0.87	
18	1.10	1.06	1.00	1.14	1.31	1.00	1.53	1.28	1.07	0.97	0.90	0.87	
19	1.09	1.07	1.00	1.12	1.26	0.99	1.30	1.26	1.06	0.97	0.90	0.87	
20	1.09	1.06	0.99	1.11	1.20	0.98	1.29	1.23	1.06	0.97	0.90	0.87	
21	1.08	1.07	1.00	1.09	1.16	0.97	1.28	1.22	1.05	0.97	0.90	0.87	
22	1.07	1.11	1.01	1.09	1.12	0.97	1.25	1.21	1.05	0.97	0.89	0.87	
23	1.06	1.17	1.03	1.08	1.12	0.97	1.26	1.21	1.04	0.96	0.89	0.86	
24	1.05	1.11	1.08	1.07	1.12	1.45	1.21	1.20	1.04	0.97	0.89	0.86	
25	1.05	1.09	1.47	1.06	1.07	1.32	1.24	1.19	1.03	0.96	0.88	0.86	
26	1.05	1.16	1.29	1.06	1.05	1.35	1.78	1.16	1.03	0.96	0.88	0.88	
27	1.05	1.29	1.25	1.07	1.04	1.26	1.91	1.11	1.02	0.95	0.87	0.90	
28	1.05	1.26	1.25	1.06	1.09	1.19	1.71	1.10	1.02	0.96	0.87	0.88	
29	1.06	1.18	1.14	1.04	1.26	1.15	1.51	1.15	1.01	0.99		0.88	
30	1.07	1.12	1.14	1.03	1.30	1.12	1.48	1.16	1.01	0.99		0.88	
31		1.11		1.02	1.30		1.48		1.01	1.02		0.87	
Mean	1.12	1.11	1.07	1.15	1.12	1.11	1.40	1.39	1.07	0.98	0.92	0.90	
Max	1.29	1.29	1.47	1.43	1.31	1.45	1.91	2.54	1.13	1.02	0.99	1.09	2.54
Min	1.05	1.06	0.99	1.02	1.00	0.97	1.13	1.10	1.01	0.95	0.87	0.86	0.86

Annual Max Momentary Gage Height 2.87 M (MSL), at 12.00 Hours, on Nov 8, 2001
Zero Gage at Bottom Elevation 0.62 M (MSL), River Bed 0.66 M (MSL)
Left Bank Elevation 3.03 M (MSL)
Right Bank Elevation 3.78 M (MSL), Drainage Area 50 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.21	1.49	0.72	0.72	0.33	1.85	0.87	5.96	0.87	0.29	0.23	0.03	
2	2.03	0.95	0.57	0.72	0.33	1.33	1.17	5.68	0.87	0.29	0.22	0.03	
3	1.85	0.72	0.53	1.76	0.41	1.17	3.86	4.98	0.80	0.25	0.20	0.03	
4	1.76	0.95	0.49	3.86	0.41	0.87	10.00	4.10	0.80	0.25	0.18	0.03	
5	1.58	0.72	0.45	2.66	0.25	0.72	4.98	3.38	0.72	0.23	0.18	0.02	
6	1.40	0.61	0.41	2.03	0.61	1.02	3.38	3.38	0.72	0.23	0.15	0.08	
7	1.25	0.53	0.41	1.76	0.53	0.72	9.22	9.40	0.72	0.23	0.15	0.53	
8	1.10	0.65	0.37	1.40	0.41	0.80	5.12	28.00	0.65	0.22	0.13	0.61	
9	0.95	0.65	0.33	1.17	0.33	0.61	3.86	8.68	0.61	0.20	0.12	0.23	
10	0.95	0.61	0.33	1.94	0.33	0.53	2.78	5.96	0.57	0.20	0.12	0.18	
11	0.87	0.53	0.33	1.49	0.53	0.49	2.30	5.68	0.57	0.20	0.12	0.15	
12	0.80	0.49	0.29	1.33	0.45	0.45	2.12	4.22	0.61	0.20	0.10	0.10	
13	0.72	0.49	0.29	1.17	0.53	0.49	1.94	3.62	0.57	0.20	0.10	0.08	
14	0.72	0.49	0.29	1.17	1.02	0.33	1.67	3.02	0.57	0.20	0.10	0.07	
15	0.65	0.49	0.29	1.17	0.65	0.33	1.49	2.78	0.57	0.23	0.07	0.05	
16	0.65	0.49	0.29	1.10	0.57	0.29	1.33	2.42	0.53	0.23	0.12	0.05	
17	0.65	0.49	0.25	1.17	2.42	0.25	1.17	2.30	0.53	0.22	0.08	0.03	
18	0.65	0.49	0.25	0.95	2.42	0.25	5.12	2.12	0.53	0.20	0.08	0.03	
19	0.61	0.53	0.25	0.80	1.94	0.23	2.30	1.94	0.49	0.20	0.08	0.03	
20	0.61	0.49	0.23	0.72	1.40	0.22	2.21	1.67	0.49	0.20	0.08	0.03	
21	0.57	0.53	0.25	0.61	1.10	0.20	2.12	1.58	0.45	0.20	0.08	0.03	
22	0.53	0.72	0.29	0.61	0.80	0.20	1.85	1.49	0.45	0.20	0.07	0.03	
23	0.49	1.17	0.37	0.57	0.80	0.20	1.94	1.49	0.41	0.18	0.07	0.02	
24	0.45	0.72	0.57	0.53	0.80	4.10	1.49	1.40	0.41	0.20	0.07	0.02	
25	0.45	0.61	4.34	0.49	0.53	2.54	1.76	1.33	0.37	0.18	0.05	0.02	
26	0.45	1.10	2.21	0.49	0.45	2.90	9.04	1.10	0.37	0.18	0.05	0.05	
27	0.45	2.21	1.85	0.53	0.41	1.94	11.60	0.72	0.33	0.17	0.03	0.08	
28	0.45	1.94	1.85	0.49	0.61	1.33	7.78	0.65	0.33	0.18	0.03	0.05	
29	0.49	1.25	0.95	0.41	1.94	1.02	4.84	1.02	0.29	0.23		0.05	
30	0.53	0.80	0.95	0.37	2.30	0.80	4.46	1.10	0.29	0.23		0.05	
31		0.72		0.33	2.30		4.46		0.29	0.33		0.03	
Total	26.87	24.63	21.00	34.52	27.91	28.18	118.23	121.17	16.78	6.75	3.06	2.82	431.92 CMSDAY
Mean	0.90	0.79	0.70	1.11	0.90	0.94	3.81	4.04	0.54	0.22	0.11	0.09	1.18 CMS
Max	2.21	2.21	4.34	3.86	2.42	4.10	11.60	28.00	0.87	0.33	0.23	0.61	28.00 CMS
Min	0.45	0.49	0.23	0.33	0.25	0.20	0.87	0.65	0.29	0.17	0.03	0.02	0.02 CMS
Runoff	2.322	2.128	1.814	2.983	2.411	2.435	10.215	10.469	1.450	0.583	0.264	0.244	37.318 MCM

Momentary Peak 38.58 CMS, at 2.87 M (MSL), at 12.00 Hours, on Nov 8, 2001

Runoff Yield 23.67 Liters/Second/Square KM, Momentary Peak Yield 771.600 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 93 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +11.720 m.(M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank at the abutment of the bridge.

Elevation +17.588 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1987 to date.

Rating Operation

Period of Rating 1987 to date.

Rated by Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Fairly stable.

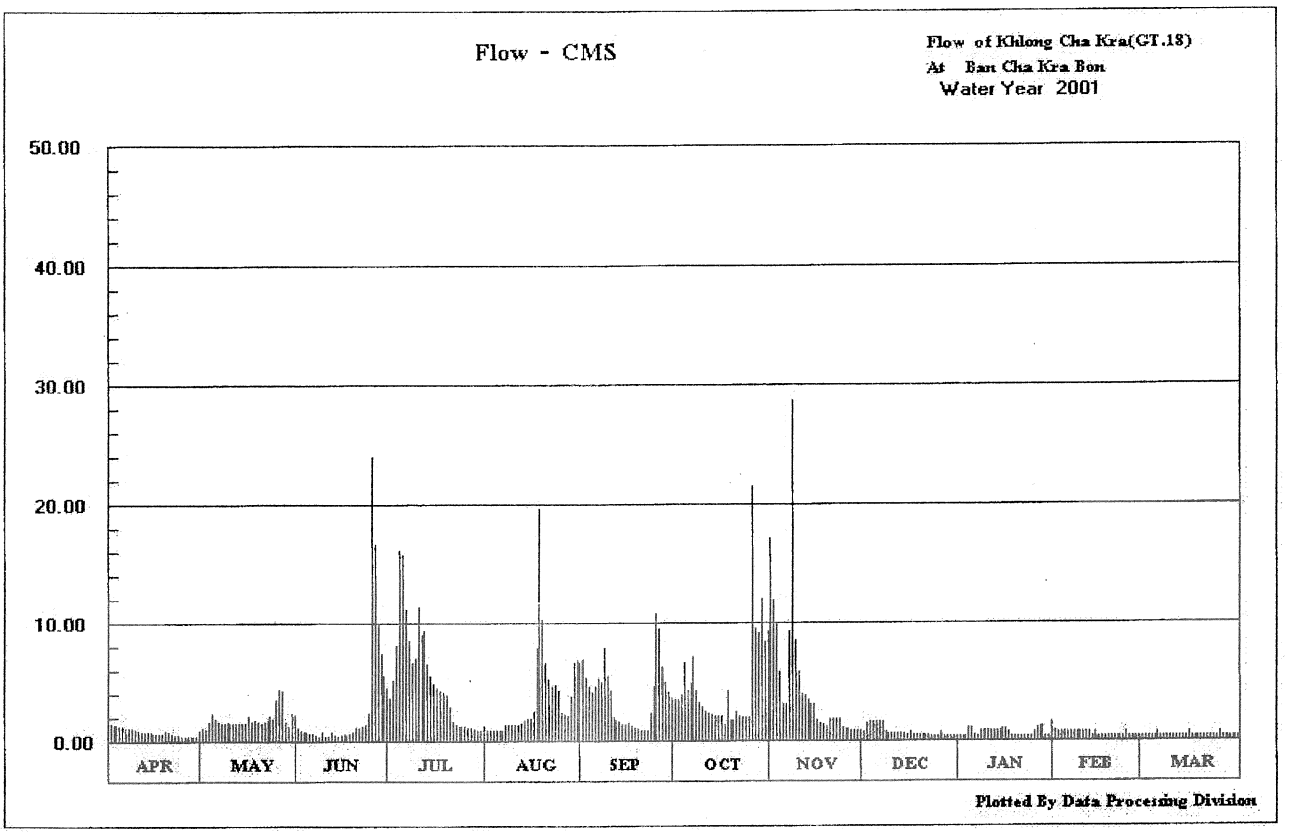
Overbank Flow Conditions Overbank flow starts at elevation +15.680 m.(M.S.L.), records are channel flow only.

General Description Records good. Stage-discharge relation defined by 96 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.21	13.14	13.13	13.58	13.07	14.01	13.56	14.88	13.06	12.98	13.07	12.87	
2	13.19	13.10	13.09	13.78	13.07	13.81	13.56	14.49	13.22	12.97	13.06	12.87	
3	13.18	13.24	13.05	14.13	13.07	13.72	13.62	14.30	13.23	12.97	13.05	12.87	
4	13.16	13.41	13.05	14.81	13.07	13.66	13.98	13.88	13.24	13.12	13.05	12.87	
5	13.15	13.30	13.03	14.78	13.07	13.72	13.68	13.52	13.24	13.12	13.05	12.87	
6	13.13	13.24	13.01	14.42	13.09	13.80	13.76	13.52	13.24	13.00	13.05	12.86	
7	13.13	13.22	13.00	14.17	13.18	13.77	14.03	14.24	13.24	12.97	13.05	12.86	
8	13.12	13.22	12.98	13.98	13.19	14.10	13.67	15.59	13.06	13.09	13.05	12.90	
9	13.11	13.23	12.98	14.02	13.18	13.83	13.53	14.17	13.03	13.08	13.05	12.92	
10	13.09	13.22	12.97	14.44	13.18	13.68	13.48	13.88	13.02	13.07	13.05	12.91	
11	13.06	13.22	12.98	14.22	13.20	13.32	13.43	13.64	13.02	13.07	13.05	12.90	
12	13.05	13.22	13.06	14.26	13.22	13.28	13.41	13.62	13.02	13.07	13.04	12.89	
13	13.05	13.21	12.99	13.96	13.27	13.23	13.37	13.56	13.02	13.07	12.95	12.89	
14	13.05	13.21	12.98	13.83	13.30	13.20	13.36	13.52	13.01	13.07	12.93	12.88	
15	13.03	13.22	13.00	13.76	13.30	13.19	13.35	13.52	13.00	13.10	12.92	12.88	
16	13.03	13.35	13.02	13.71	13.42	13.21	13.34	13.27	13.00	13.10	12.90	12.88	
17	13.03	13.24	12.99	13.68	14.11	13.16	13.18	13.22	13.00	13.05	12.89	12.88	
18	13.03	13.26	13.02	13.65	15.05	13.14	13.68	13.20	13.00	12.92	12.89	12.87	
19	13.08	13.24	12.99	13.62	14.34	13.11	13.28	13.17	13.00	12.91	12.88	12.87	
20	13.04	13.22	13.13	13.48	13.98	13.09	13.26	13.30	13.00	12.91	12.88	12.87	
21	13.01	13.24	13.14	13.25	13.80	13.08	13.42	13.30	12.99	12.91	12.87	12.92	
22	13.00	13.26	13.15	13.19	13.73	13.08	13.35	13.30	12.99	12.91	12.87	12.89	
23	13.00	13.35	13.18	13.17	13.74	13.41	13.32	13.29	12.98	12.92	12.87	12.87	
24	12.98	13.31	13.40	13.17	13.67	13.72	13.32	13.13	12.98	12.92	12.87	12.94	
25	12.98	13.56	15.33	13.15	13.41	14.38	13.32	13.11	12.98	12.92	12.87	12.94	
26	12.97	13.70	14.84	13.13	13.37	14.27	15.18	13.10	12.97	13.13	12.87	12.95	
27	12.97	13.67	14.30	13.12	13.36	13.93	14.27	13.09	12.97	13.15	12.87	12.96	
28	12.97	13.24	14.06	13.10	13.61	13.77	14.23	13.08	12.97	13.16	12.87	12.95	
29	12.97	13.16	13.83	13.07	13.98	13.66	14.50	13.07	12.97	12.95		12.95	
30	13.09	13.40	13.71	13.07	14.00	13.59	14.15	13.07	12.97	12.93		12.95	
31		13.37		13.15	13.98		14.24		12.98	13.24		12.94	
Mean	13.06	13.29	13.31	13.70	13.52	13.56	13.67	13.60	13.05	13.03	12.96	12.90	
Max	13.21	13.70	15.33	14.81	15.05	14.38	15.18	15.59	13.24	13.24	13.07	12.96	15.59
Min	12.97	13.10	12.97	13.07	13.07	13.08	13.18	13.07	12.97	12.91	12.87	12.86	12.86

Annual Max Momentary Gage Height 16.00 M (MSL), at 18.00 Hours, on Nov 1, 2001
Zero Gage at Bottom Elevation 11.72 M (MSL), River Bed 12.86 M (MSL)
Left Bank Elevation 15.79 M (MSL)
Right Bank Elevation 15.67 M (MSL), Drainage Area 93 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.64	1.32	1.27	3.76	1.00	7.10	3.62	17.32	0.95	0.59	1.00	0.09	
2	1.55	1.14	1.09	5.24	1.00	5.48	3.62	12.09	1.68	0.55	0.95	0.09	
3	1.50	1.77	0.91	8.30	1.00	4.76	4.04	10.00	1.73	0.55	0.91	0.09	
4	1.41	2.57	0.91	16.34	1.00	4.32	6.84	6.04	1.77	1.23	0.91	0.09	
5	1.36	2.05	0.82	15.92	1.00	4.76	4.46	3.34	1.77	1.23	0.91	0.09	
6	1.27	1.77	0.73	11.32	1.09	5.40	5.08	3.34	1.77	0.68	0.91	0.05	
7	1.27	1.68	0.68	8.70	1.50	5.16	7.30	9.40	1.77	0.55	0.91	0.05	
8	1.23	1.68	0.59	6.84	1.55	8.00	4.39	28.82	0.95	1.09	0.91	0.23	
9	1.18	1.73	0.59	7.20	1.50	5.64	3.41	8.70	0.82	1.05	0.91	0.32	
10	1.09	1.68	0.55	11.54	1.50	4.46	3.06	6.04	0.77	1.00	0.91	0.27	
11	0.95	1.68	0.59	9.20	1.59	2.14	2.71	4.18	0.77	1.00	0.91	0.23	
12	0.91	1.68	0.95	9.60	1.68	1.95	2.57	4.04	0.77	1.00	0.86	0.18	
13	0.91	1.64	0.64	6.68	1.91	1.73	2.36	3.62	0.77	1.00	0.45	0.18	
14	0.91	1.64	0.59	5.64	2.05	1.59	2.32	3.34	0.73	1.00	0.36	0.14	
15	0.82	1.68	0.68	5.08	2.05	1.55	2.27	3.34	0.68	1.14	0.32	0.14	
16	0.82	2.27	0.77	4.68	2.64	1.64	2.23	1.91	0.68	1.14	0.23	0.14	
17	0.82	1.77	0.64	4.46	8.10	1.41	1.50	1.68	0.68	0.91	0.18	0.14	
18	0.82	1.86	0.77	4.25	19.75	1.32	4.46	1.59	0.68	0.32	0.18	0.09	
19	1.05	1.77	0.64	4.04	10.44	1.18	1.95	1.45	0.68	0.27	0.14	0.09	
20	0.86	1.68	1.27	3.06	6.84	1.09	1.86	2.05	0.68	0.27	0.14	0.09	
21	0.73	1.77	1.32	1.82	5.40	1.05	2.64	2.05	0.64	0.27	0.09	0.32	
22	0.68	1.86	1.36	1.55	4.84	1.05	2.27	2.05	0.64	0.27	0.09	0.18	
23	0.68	2.27	1.50	1.45	4.92	2.57	2.14	2.00	0.59	0.32	0.09	0.09	
24	0.59	2.09	2.50	1.45	4.39	4.76	2.14	1.27	0.59	0.32	0.09	0.41	
25	0.59	3.62	24.21	1.36	2.57	10.88	2.14	1.18	0.59	0.32	0.09	0.41	
26	0.55	4.60	16.76	1.27	2.36	9.70	21.70	1.14	0.55	1.27	0.09	0.45	
27	0.55	4.39	10.00	1.23	2.32	6.44	9.70	1.09	0.55	1.36	0.09	0.50	
28	0.55	1.77	7.60	1.14	3.97	5.16	9.30	1.05	0.55	1.41	0.09	0.45	
29	0.55	1.41	5.64	1.00	6.84	4.32	12.20	1.00	0.55	0.45		0.45	
30	1.09	2.50	4.68	1.00	7.00	3.83	8.50	1.00	0.55	0.36		0.45	
31		2.36		1.36	6.84		9.40		0.59	1.77		0.41	
Total	28.93	63.70	91.25	166.48	120.64	120.44	152.18	146.12	27.49	24.69	13.72	6.91	962.55 CMSDAY
Mean	0.96	2.05	3.04	5.37	3.89	4.01	4.91	4.87	0.89	0.80	0.49	0.22	2.64 CMS
Max	1.64	4.60	24.21	16.34	19.75	10.88	21.70	28.82	1.77	1.77	1.00	0.50	28.82 CMS
Min	0.55	1.14	0.55	1.00	1.00	1.05	1.50	1.00	0.55	0.27	0.09	0.05	0.05 CMS
Runoff	2.500	5.504	7.884	14.384	10.423	10.406	13.148	12.625	2.375	2.133	1.185	0.597	83.164 MCM

Momentary Peak 37.00 CMS, at 16.00 M (MSL), at 18.00 Hours, on Nov 1, 2001
Runoff Yield 28.36 Liters/Second/Square KM, Momentary Peak Yield 397.849 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 56 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +12.450 m.(M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank at the abutment of the bridge.

Elevation +17.599 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1987 to date.

Rating Operation

Period of Rating 1987 - 1988, 1993 to date.

Rated by Float -

Rated by Current Meter 1987 - 1988, 1993 to date.

Stability of Channel Regimes Fairly stable.

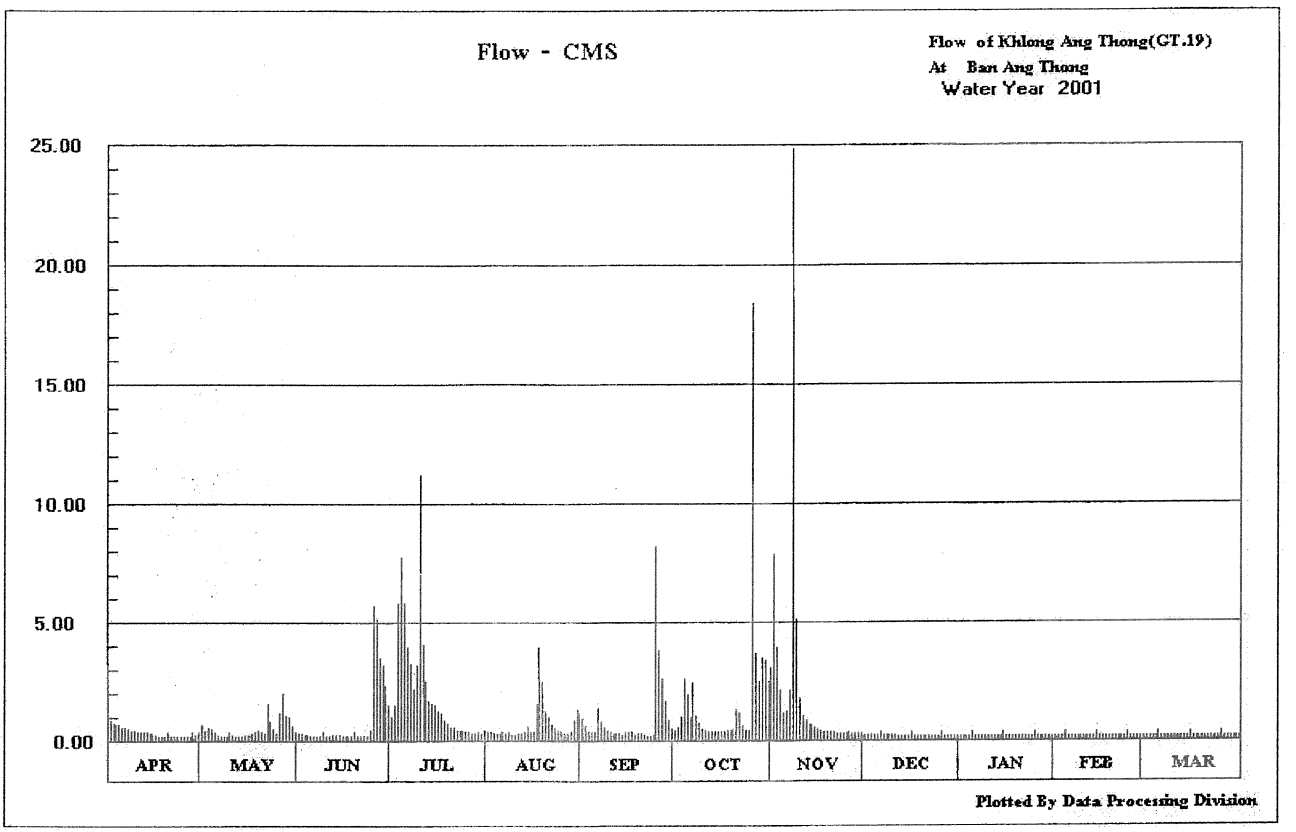
Overbank Flow Conditions Overbank flow starts at elevation +16.160 m.(M.S.L.), records are channel flow only.

General Description Records fair. Stage-discharge relation defined by 97 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.79	13.76	13.66	13.81	13.67	13.80	13.70	14.03	13.63	13.55	13.55	13.48	
2	13.77	13.70	13.64	13.87	13.67	13.74	13.73	14.42	13.63	13.54	13.55	13.48	
3	13.76	13.73	13.63	14.26	13.64	13.69	13.81	14.11	13.63	13.54	13.54	13.48	
4	13.75	13.72	13.62	14.41	13.65	13.67	13.99	13.94	13.62	13.53	13.53	13.48	
5	13.73	13.67	13.60	14.26	13.65	13.67	13.92	13.83	13.62	13.53	13.50	13.48	
6	13.73	13.63	13.59	14.11	13.67	13.86	13.81	13.84	13.62	13.53	13.49	13.48	
7	13.72	13.60	13.59	14.05	13.66	13.78	13.97	13.94	13.62	13.53	13.49	13.48	
8	13.71	13.59	13.59	13.95	13.67	13.73	13.82	15.41	13.62	13.53	13.49	13.49	
9	13.70	13.59	13.59	14.04	13.63	13.70	13.77	14.21	13.62	13.53	13.49	13.56	
10	13.69	13.62	13.60	14.65	13.61	13.67	13.72	13.91	13.62	13.53	13.49	13.53	
11	13.69	13.61	13.60	14.12	13.66	13.64	13.71	13.82	13.61	13.53	13.49	13.51	
12	13.69	13.60	13.62	13.98	13.66	13.64	13.69	13.79	13.60	13.52	13.48	13.50	
13	13.68	13.60	13.61	13.90	13.68	13.64	13.68	13.76	13.59	13.52	13.48	13.48	
14	13.65	13.59	13.61	13.88	13.74	13.63	13.69	13.75	13.59	13.52	13.48	13.48	
15	13.64	13.62	13.59	13.87	13.69	13.68	13.68	13.73	13.59	13.54	13.48	13.48	
16	13.61	13.62	13.60	13.84	13.69	13.67	13.69	13.72	13.59	13.54	13.48	13.48	
17	13.60	13.65	13.58	13.83	13.88	13.63	13.69	13.70	13.59	13.54	13.48	13.48	
18	13.59	13.68	13.59	13.79	14.11	13.61	13.70	13.69	13.58	13.54	13.49	13.48	
19	13.58	13.70	13.57	13.77	13.98	13.66	13.71	13.68	13.59	13.53	13.49	13.48	
20	13.54	13.65	13.52	13.73	13.84	13.65	13.72	13.67	13.58	13.53	13.48	13.48	
21	13.55	13.66	13.54	13.73	13.81	13.62	13.85	13.67	13.58	13.53	13.48	13.48	
22	13.56	13.88	13.56	13.71	13.75	13.60	13.83	13.65	13.57	13.53	13.48	13.48	
23	13.55	13.78	13.58	13.70	13.73	13.59	13.74	13.65	13.57	13.55	13.48	13.48	
24	13.52	13.72	13.70	13.70	13.71	13.63	13.71	13.64	13.56	13.54	13.48	13.49	
25	13.52	13.66	14.25	13.69	13.69	14.44	13.71	13.64	13.56	13.54	13.48	13.49	
26	13.54	13.83	14.21	13.68	13.66	14.10	15.07	13.64	13.55	13.54	13.48	13.49	
27	13.54	13.93	14.07	13.66	13.66	13.99	14.09	13.64	13.55	13.53	13.48	13.49	
28	13.67	13.82	14.04	13.66	13.68	13.90	13.98	13.64	13.55	13.53	13.48	13.49	
29	13.63	13.81	13.96	13.66	13.79	13.79	14.07	13.64	13.55	13.53		13.49	
30	13.67	13.74	13.87	13.65	13.85	13.72	14.06	13.64	13.55	13.55		13.48	
31		13.69		13.70	13.83		13.98		13.55	13.57		13.48	
Mean	13.65	13.69	13.69	13.89	13.73	13.74	13.85	13.85	13.59	13.54	13.49	13.49	
Max	13.79	13.93	14.25	14.65	14.11	14.44	15.07	15.41	13.63	13.57	13.55	13.56	15.41
Min	13.52	13.59	13.52	13.65	13.61	13.59	13.68	13.64	13.55	13.52	13.48	13.48	13.48

Annual Max Momentary Gage Height 16.17 M (MSL), at 15.00 Hours, on Nov 8, 2001
Zero Gage at Bottom Elevation 12.45 M (MSL), River Bed 13.07 M (MSL)
Left Bank Elevation 16.15 M (MSL)
Right Bank Elevation 16.48 M (MSL), Drainage Area 56 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.95	0.80	0.42	1.08	0.44	1.00	0.50	3.13	0.36	0.20	0.20	0.06	
2	0.85	0.50	0.38	1.56	0.44	0.70	0.65	7.98	0.36	0.18	0.20	0.06	
3	0.80	0.65	0.36	5.88	0.38	0.48	1.08	4.02	0.36	0.18	0.18	0.06	
4	0.75	0.60	0.34	7.84	0.40	0.44	2.70	2.20	0.34	0.16	0.16	0.06	
5	0.65	0.44	0.30	5.88	0.40	0.44	2.00	1.24	0.34	0.16	0.10	0.06	
6	0.65	0.36	0.28	4.02	0.44	1.48	1.08	1.32	0.34	0.16	0.08	0.06	
7	0.60	0.30	0.28	3.35	0.42	0.90	2.50	2.20	0.34	0.16	0.08	0.06	
8	0.55	0.28	0.28	2.30	0.44	0.65	1.16	24.91	0.34	0.16	0.08	0.08	
9	0.50	0.28	0.28	3.24	0.36	0.50	0.85	5.23	0.34	0.16	0.08	0.22	
10	0.48	0.34	0.30	11.30	0.32	0.44	0.60	1.90	0.34	0.16	0.08	0.16	
11	0.48	0.32	0.30	4.14	0.42	0.38	0.55	1.16	0.32	0.16	0.08	0.12	
12	0.48	0.30	0.34	2.60	0.42	0.38	0.48	0.95	0.30	0.14	0.06	0.10	
13	0.46	0.30	0.32	1.80	0.46	0.38	0.46	0.80	0.28	0.14	0.06	0.06	
14	0.40	0.28	0.32	1.64	0.70	0.36	0.48	0.75	0.28	0.14	0.06	0.06	
15	0.38	0.34	0.28	1.56	0.48	0.46	0.46	0.65	0.28	0.18	0.06	0.06	
16	0.32	0.34	0.30	1.32	0.48	0.44	0.48	0.60	0.28	0.18	0.06	0.06	
17	0.30	0.40	0.26	1.24	1.64	0.36	0.48	0.50	0.28	0.18	0.06	0.06	
18	0.28	0.46	0.28	0.95	4.02	0.32	0.50	0.48	0.26	0.18	0.08	0.06	
19	0.26	0.50	0.24	0.85	2.60	0.42	0.55	0.46	0.28	0.16	0.08	0.06	
20	0.18	0.40	0.14	0.65	1.32	0.40	0.60	0.44	0.26	0.16	0.06	0.06	
21	0.20	0.42	0.18	0.65	1.08	0.34	1.40	0.44	0.26	0.16	0.06	0.06	
22	0.22	1.64	0.22	0.55	0.75	0.30	1.24	0.40	0.24	0.16	0.06	0.06	
23	0.20	0.90	0.26	0.50	0.65	0.28	0.70	0.40	0.24	0.20	0.06	0.06	
24	0.14	0.60	0.50	0.50	0.55	0.36	0.55	0.38	0.22	0.18	0.06	0.08	
25	0.14	0.42	5.75	0.48	0.48	8.26	0.55	0.38	0.22	0.18	0.06	0.08	
26	0.18	1.24	5.23	0.46	0.42	3.90	18.43	0.38	0.20	0.18	0.06	0.08	
27	0.18	2.10	3.57	0.42	0.42	2.70	3.79	0.38	0.20	0.16	0.06	0.08	
28	0.44	1.16	3.24	0.42	0.46	1.80	2.60	0.38	0.20	0.16	0.06	0.08	
29	0.36	1.08	2.40	0.42	0.95	0.95	3.57	0.38	0.20	0.16		0.08	
30	0.44	0.70	1.56	0.40	1.40	0.60	3.46	0.38	0.20	0.20		0.06	
31		0.48		0.50	1.24		2.60		0.20	0.24		0.06	
Total	12.82	18.93	28.91	68.50	24.98	30.42	57.05	64.82	8.66	5.28	2.38	2.36	325.11 CMSDAY
Mean	0.43	0.61	0.96	2.21	0.81	1.01	1.84	2.16	0.28	0.17	0.08	0.08	0.89 CMS
Max	0.95	2.10	5.75	11.30	4.02	8.26	18.43	24.91	0.36	0.24	0.20	0.22	24.91 CMS
Min	0.14	0.28	0.14	0.40	0.32	0.28	0.46	0.38	0.20	0.14	0.06	0.06	0.06 CMS
Runoff	1.108	1.636	2.498	5.918	2.158	2.628	4.929	5.600	0.748	0.456	0.206	0.204	28.090 MCM

Momentary Peak 41.61 CMS, at 16.17 M (MSL), at 15.00 Hours, on Nov 8, 2001

Runoff Yield 15.91 Liters/Second/Square KM, Momentary Peak Yield 743.036 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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 Rat Nikhom **Changwat** Surat Thani

Drainage Area 3,012 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank near the sixth staff gage.

Elevation +10.502 m. (M.S.L.)

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 Float -

Rated by Current Meter 1989 to date.

Stability of Channel Regimes Fairly stable because of backwater effect.

Overbank Flow Conditions No overbank flow.

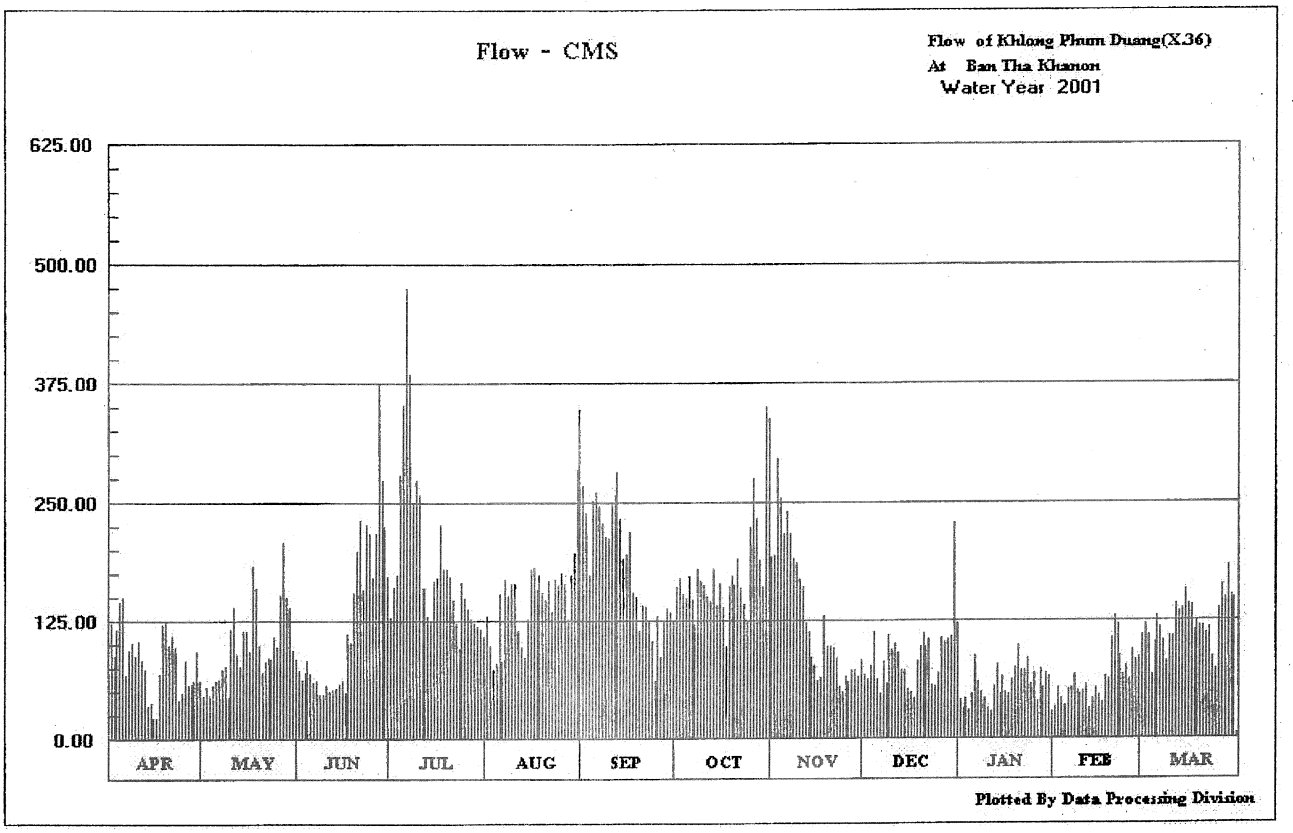
General Description Records fair. Flow regulated by Ratcha Prapha Dam.

Stage-discharge relation defined by 32 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.55	1.39	1.87	2.65	2.66	4.21	3.07	3.44	1.80	1.30	1.12	2.39	
2	2.11	1.58	1.72	3.07	2.24	3.94	3.20	3.46	1.72	1.09	1.54	2.53	
3	2.48	1.38	1.86	3.22	1.89	3.22	2.97	4.48	1.95	1.34	1.31	2.39	
4	2.87	1.60	2.04	4.31	1.99	4.06	2.91	4.10	2.44	1.06	1.17	1.80	
5	2.94	1.69	1.82	5.00	2.98	4.16	3.21	3.70	1.73	1.41	1.50	2.29	
6	1.80	1.72	1.66	5.95	2.02	4.00	2.90	3.95	1.43	2.11	1.53	2.67	
7	2.18	1.89	1.69	5.27	3.17	3.83	2.54	3.71	2.02	1.65	1.81	2.49	
8	2.29	1.94	1.41	4.04	2.96	3.67	3.30	3.42	1.64	1.44	1.49	2.30	
9	2.11	1.36	1.41	4.27	3.12	3.66	3.16	3.37	2.39	1.33	1.41	2.02	
10	2.30	2.48	1.62	4.12	3.11	4.05	3.09	3.18	2.19	1.08	1.48	2.38	
11	2.03	2.79	1.47	3.06	2.45	4.12	2.94	3.07	2.27	1.02	1.60	2.38	
12	1.91	2.13	1.51	3.05	2.23	4.34	2.87	2.56	2.15	1.59	1.10	2.83	
13	1.17	1.96	1.54	2.66	2.09	3.88	3.30	2.44	1.88	1.97	1.32	2.73	
14	1.24	2.45	1.63	2.57	2.63	3.42	2.81	2.09	1.87	1.42	1.53	2.77	
15	0.89	2.45	1.68	3.15	3.29	3.47	3.12	1.95	1.50	1.79	1.39	3.04	
16	0.89	2.16	1.44	3.19	3.32	3.73	2.79	1.69	1.44	1.46	1.23	2.83	
17	1.84	3.34	2.42	3.81	3.04	3.00	2.22	1.74	1.32	1.43	1.77	2.80	
18	2.53	3.05	2.29	3.29	3.23	2.94	3.07	2.67	2.02	1.72	1.72	2.45	
19	2.57	2.25	3.00	3.29	3.00	2.46	3.21	2.22	2.22	1.93	2.35	2.61	
20	2.25	1.86	3.51	3.21	2.89	2.81	3.09	2.23	2.41	2.25	2.66	2.52	
21	2.38	2.01	3.86	2.89	3.16	2.78	3.42	2.21	2.22	1.88	2.53	2.52	
22	2.22	2.09	3.03	2.55	2.72	2.58	3.06	2.06	2.32	1.87	2.11	2.42	
23	1.28	2.06	3.80	2.21	3.17	2.30	2.84	1.58	1.62	2.05	1.81	2.50	
24	1.45	2.37	3.71	3.14	3.09	1.68	2.57	1.45	1.59	1.64	1.94	2.09	
25	2.04	2.22	3.19	2.92	3.24	2.66	3.78	1.79	1.84	1.83	1.72	1.89	
26	1.60	2.95	3.71	2.77	3.11	2.08	4.28	1.67	2.35	1.27	2.19	2.76	
27	1.63	3.61	5.19	2.63	2.62	2.61	3.87	1.88	2.28	1.90	2.04	3.10	
28	1.68	2.93	4.27	2.55	3.22	2.76	3.41	1.87	2.32	1.55	2.07	2.91	
29	2.16	2.78	3.79	2.52	3.48	2.71	3.08	1.78	2.37	1.83		3.33	
30	1.68	2.19	3.21	2.48	4.38	2.61	4.99	2.03	3.83	1.77		2.95	
31		2.06		2.38	4.97		4.88		2.56	1.01		2.91	
Mean	1.97	2.22	2.51	3.30	2.95	3.26	3.22	2.59	2.05	1.58	1.69	2.57	
Max	2.94	3.61	5.19	5.95	4.97	4.34	4.99	4.48	3.83	2.25	2.66	3.33	5.95
Min	0.89	1.36	1.41	2.21	1.89	1.68	2.22	1.45	1.32	1.01	1.10	1.80	0.89

Annual Max Momentary Gage Height 6.17 M (MSL), at 6.00 Hours, on Jul 6, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed -0.61 M (MSL)
Left Bank Elevation 12.01 M (MSL)
Right Bank Elevation 12.12 M (MSL), Drainage Area 3012 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.25	47.50	73.55	130.75	131.50	269.05	162.60	194.60	69.00	43.00	34.40	111.25	
2	90.25	57.00	64.60	162.60	100.00	241.30	173.00	196.40	64.60	33.05	55.00	121.75	
3	118.00	47.00	72.90	174.80	74.85	174.80	154.75	297.40	78.75	45.00	43.50	111.25	
4	147.25	58.00	85.00	279.55	81.35	253.30	150.25	257.50	115.00	31.70	36.65	69.00	
5	152.50	62.95	70.30	353.00	155.50	263.80	173.90	218.50	65.15	48.50	53.00	103.75	
6	69.00	64.60	61.30	476.75	83.50	247.00	149.50	242.25	49.50	90.25	54.50	132.25	
7	95.50	74.85	62.95	386.75	170.60	230.85	122.50	219.45	83.50	60.75	69.65	118.75	
8	103.75	78.10	48.50	251.20	154.00	215.65	182.00	192.80	60.20	50.00	52.50	104.50	
9	90.25	46.00	48.50	275.35	166.60	214.70	169.80	188.30	111.25	44.50	48.50	83.50	
10	104.50	118.00	59.10	259.60	165.80	252.25	164.20	171.40	96.25	32.60	52.00	110.50	
11	84.25	141.25	51.50	161.80	115.75	259.60	152.50	162.60	102.25	29.90	58.00	110.50	
12	76.15	91.75	53.50	161.00	99.25	282.70	147.25	124.00	93.25	57.50	33.50	144.25	
13	36.65	79.40	55.00	131.50	88.75	235.60	182.00	115.00	74.20	80.05	44.00	136.75	
14	40.00	115.75	59.65	124.75	129.25	192.80	142.75	88.75	73.55	49.00	54.50	139.75	
15	24.60	115.75	62.40	169.00	181.10	197.30	166.60	78.75	53.00	68.45	47.50	160.20	
16	24.60	94.00	50.00	172.20	183.80	221.35	141.25	62.95	50.00	51.00	39.50	144.25	
17	71.60	185.60	113.50	228.95	160.20	157.00	98.50	65.70	44.00	49.50	67.35	142.00	
18	121.75	161.00	103.75	181.10	175.70	152.50	162.60	132.25	83.50	64.60	64.60	115.75	
19	124.75	100.75	157.00	181.10	157.00	116.50	173.90	98.50	98.50	77.45	108.25	127.75	
20	100.75	72.90	200.90	173.90	148.75	142.75	164.20	99.25	112.75	100.75	131.50	121.00	
21	110.50	82.75	233.70	148.75	169.80	140.50	192.80	97.75	98.50	74.20	121.75	121.00	
22	98.50	88.75	159.40	123.25	136.00	125.50	161.80	86.50	106.00	73.55	90.25	113.50	
23	42.00	86.50	228.00	97.75	170.60	104.50	145.00	57.00	59.10	85.75	69.65	119.50	
24	50.50	109.75	219.45	168.20	164.20	62.40	124.75	50.50	57.50	60.20	78.10	88.75	
25	85.00	98.50	172.20	151.00	176.60	131.50	226.10	68.45	71.60	70.95	64.60	74.85	
26	58.00	153.25	219.45	139.75	165.80	88.00	276.40	61.85	108.25	41.50	96.25	139.00	
27	59.65	209.95	376.75	129.25	128.50	127.75	234.65	74.20	103.00	75.50	85.00	165.00	
28	62.40	151.75	275.35	123.25	174.80	139.00	191.90	73.55	106.00	55.50	87.25	150.25	
29	94.00	140.50	227.05	121.00	198.20	135.25	163.40	67.90	109.75	70.95		184.70	
30	62.40	96.25	173.90	118.00	286.90	127.75	351.90	84.25	230.85	67.35		153.25	
31		86.50		110.50	349.70		339.80		124.00	29.45		150.25	
Total	2522.30	3116.60	3839.15	5866.35	4844.35	5502.95	5542.55	3928.30	2752.75	1812.45	1841.25	3868.75	45437.75 CMSDAY
Mean	84.08	100.54	127.97	189.24	156.27	183.43	178.79	130.94	88.80	58.47	65.76	124.80	124.49 CMS
Max	152.50	209.95	376.75	476.75	349.70	282.70	351.90	297.40	230.85	100.75	131.50	184.70	476.75 CMS
Min	24.60	46.00	48.50	97.75	74.85	62.40	98.50	50.50	44.00	29.45	33.50	69.00	24.60 CMS
Runoff	217.927	269.274	331.703	506.853	418.552	475.455	478.876	339.405	237.838	156.596	159.084	334.260	3925.822 MCM

Momentary Peak 508.65 CMS, at 6.17 M (MSL), at 6.00 Hours, on Jul 6, 2001

Runoff Yield 41.33 Liters/Second/Square KM, Momentary Peak Yield 168.874 Liters/Second/Square KM

WATER YEAR : 2001

TAPI RIVER BASIN

Tapi River at Ban Yan Din Daeng, Surat Thani (X.37A)

Lat 08 - 34 - 02 N. **Long** 99 - 15 - 15 E.

Location on left bank at Tambon Yan Din Daeng.

Ban Yan Din Daeng **Amphoe** Phrasaeng **Changwat** Surat Thani

Drainage Area 5,200 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +4.800 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM Near the automatic gage building.

Elevation +10.240 m. (M.S.L.)

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 Float -

Rated by Current Meter 1969 to date.

Stability of Channel Regimes Stable.

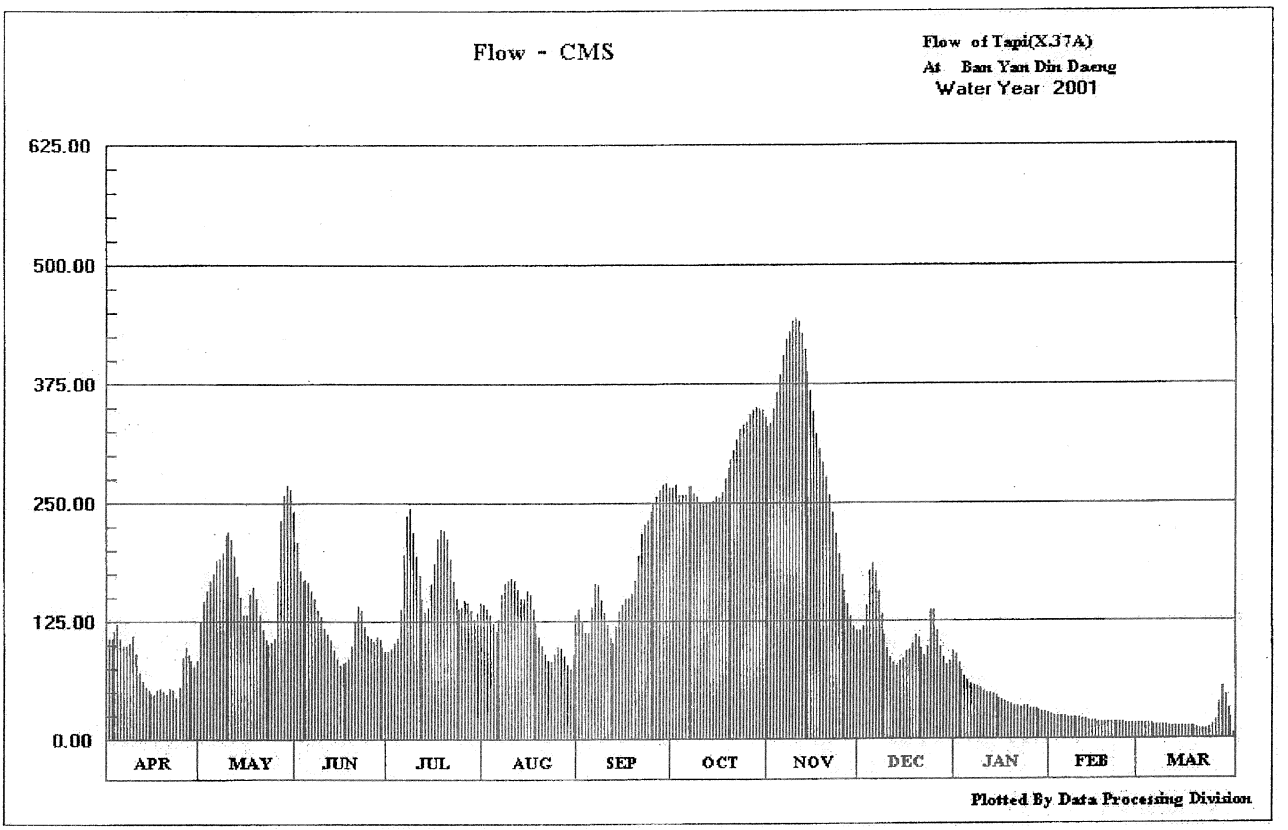
Overbank Flow Conditions Overbank flow starts at elevation +10.380 m.(M.S.L.) records are channel flow only.

General Description Records fair. Stage-discharge relation defined by 53 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.31	7.61	8.82	7.05	7.91	7.84	9.48	10.06	7.44	6.99	5.62	5.35	
2	7.31	7.95	8.45	7.12	7.85	7.64	9.51	10.08	7.52	6.80	5.60	5.34	
3	7.44	8.12	8.29	7.22	7.73	7.43	9.40	10.19	7.88	6.63	5.59	5.32	
4	7.58	8.29	8.32	7.31	7.57	7.43	9.40	10.30	8.45	6.50	5.58	5.32	
5	7.31	8.40	8.26	7.83	7.45	7.87	9.40	10.42	8.55	6.42	5.58	5.32	
6	7.18	8.59	8.13	8.66	7.67	8.25	9.50	10.53	8.42	6.36	5.56	5.31	
7	7.18	8.61	8.00	9.15	8.07	8.23	9.49	10.62	8.14	6.32	5.55	5.30	
8	7.24	8.68	7.82	9.24	8.24	7.99	9.41	10.66	7.74	6.30	5.54	5.30	
9	7.36	8.92	7.70	8.96	8.28	7.76	9.39	10.71	7.38	6.26	5.52	5.29	
10	7.02	8.96	7.51	8.64	8.33	7.56	9.32	10.73	7.11	6.21	5.52	5.26	
11	6.60	8.87	7.41	8.37	8.29	7.31	9.29	10.71	6.93	6.17	5.51	5.23	
12	6.42	8.64	7.28	8.02	8.15	7.23	9.29	10.65	6.80	6.15	5.49	5.23	
13	6.30	8.36	7.09	7.80	8.02	7.54	9.30	10.56	6.74	6.12	5.47	5.22	
14	6.22	8.03	6.89	7.87	8.00	7.80	9.33	10.44	6.82	6.09	5.46	5.21	
15	6.15	7.75	6.75	8.24	8.13	7.92	9.39	10.31	6.88	6.04	5.45	5.19	
16	6.13	7.75	6.81	8.55	8.09	8.02	9.37	10.17	7.03	6.00	5.43	5.19	
17	6.24	8.08	6.83	8.88	7.85	8.02	9.44	10.00	7.07	5.96	5.42	5.19	
18	6.26	8.20	6.88	8.99	7.58	8.09	9.58	9.87	7.20	5.93	5.42	5.19	
19	6.19	8.01	7.17	8.98	7.35	8.30	9.69	9.75	7.36	5.89	5.42	5.19	
20	6.14	7.73	7.63	8.89	7.16	8.65	9.77	9.59	7.32	5.86	5.40	5.17	
21	6.25	7.48	7.89	8.60	6.99	8.94	9.85	9.40	7.12	5.84	5.38	5.11	
22	6.22	7.29	7.81	8.28	6.87	9.06	9.95	9.19	6.94	5.83	5.38	5.08	
23	6.07	7.20	7.54	8.01	6.82	9.10	10.03	8.94	7.15	5.84	5.38	5.10	
24	6.28	7.22	7.36	7.85	6.99	9.21	10.07	8.67	7.82	5.84	5.38	5.15	
25	6.91	7.31	7.32	7.87	7.14	9.31	10.09	8.39	7.82	5.80	5.37	5.25	
26	7.13	8.28	7.26	7.98	7.10	9.38	10.14	8.13	7.46	5.78	5.36	5.45	
27	6.98	9.11	7.34	7.93	6.94	9.45	10.18	7.91	7.13	5.77	5.35	5.93	
28	6.87	9.40	7.29	7.81	6.77	9.51	10.20	7.70	6.91	5.76	5.34	6.30	
29	6.74	9.51	7.15	7.67	6.68	9.53	10.19	7.54	6.76	5.72		6.09	
30	6.86	9.47	7.04	7.77	6.99	9.48	10.18	7.44	6.84	5.69		5.77	
31		9.20		7.93	7.73		10.12		7.06	5.66		5.54	
Mean	6.73	8.29	7.53	8.18	7.57	8.33	9.67	9.66	7.35	6.08	5.47	5.35	
Max	7.58	9.51	8.82	9.24	8.33	9.53	10.20	10.73	8.55	6.99	5.62	6.30	10.73
Min	6.07	7.20	6.75	7.05	6.68	7.23	9.29	7.44	6.74	5.66	5.34	5.08	5.08

Annual Max Momentary Gage Height 10.73 M (MSL), at 4.00 Hours, on Nov 10, 2001
Zero Gage at Bottom Elevation 4.80 M (MSL), River Bed 2.80 M (MSL)
Left Bank Elevation 10.37 M (MSL)
Right Bank Elevation 10.41 M (MSL), Drainage Area 5200 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	108.05	125.60	209.60	94.50	144.15	139.60	267.60	332.40	115.40	91.50	26.80	17.81	
2	108.05	146.75	180.75	98.00	140.25	127.40	270.45	335.20	120.20	82.00	26.00	17.57	
3	115.40	157.80	169.30	103.10	132.80	114.80	260.00	350.60	142.20	73.50	25.65	17.10	
4	123.80	169.30	171.40	108.05	123.20	114.80	260.00	367.00	180.75	67.00	25.30	17.10	
5	108.05	177.00	167.20	138.95	116.00	141.55	260.00	385.80	188.25	63.00	25.30	17.10	
6	101.00	191.25	158.45	196.80	129.20	166.50	269.50	406.70	178.50	60.00	24.60	16.86	
7	101.00	192.80	150.00	237.50	154.55	165.10	268.55	424.00	159.10	58.00	24.25	16.63	
8	104.20	198.40	138.30	245.60	165.80	149.35	260.95	432.00	133.40	57.00	23.90	16.63	
9	110.80	217.60	131.00	220.80	168.60	134.60	259.10	442.00	111.90	55.00	23.20	16.39	
10	93.00	220.80	119.60	195.20	172.10	122.60	252.80	446.00	97.50	52.50	23.20	15.68	
11	72.00	213.60	113.60	174.90	169.30	108.05	250.10	442.00	88.50	50.65	22.85	14.96	
12	63.00	195.20	106.40	151.30	159.75	103.65	250.10	430.00	82.00	49.75	22.15	14.96	
13	57.00	174.20	96.50	137.00	151.30	121.40	251.00	412.40	79.00	48.40	21.45	14.72	
14	53.00	151.95	86.50	141.55	150.00	137.00	253.70	389.60	83.00	47.05	21.10	14.49	
15	49.75	134.00	79.50	165.80	158.45	144.80	259.10	368.50	86.00	44.80	20.75	14.01	
16	48.85	134.00	82.50	188.25	155.85	151.30	257.30	347.80	93.50	43.00	20.05	14.01	
17	54.00	155.20	83.50	214.40	140.25	151.30	263.80	324.00	95.50	41.20	19.70	14.01	
18	55.00	163.00	86.00	223.20	123.80	155.85	277.10	308.40	102.00	39.85	19.70	14.01	
19	51.55	150.65	100.50	222.40	110.25	170.00	288.45	294.75	110.80	38.05	19.70	14.01	
20	49.30	132.80	126.80	215.20	100.00	196.00	296.85	278.05	108.60	36.70	19.00	13.54	
21	54.50	117.80	142.85	192.00	91.50	219.20	306.00	260.00	98.00	35.80	18.52	12.11	
22	53.00	106.95	137.65	168.60	85.50	229.40	318.00	241.10	89.00	35.35	18.52	11.40	
23	46.15	102.00	121.40	150.65	83.00	233.00	328.20	219.20	99.50	35.80	18.52	11.87	
24	56.00	103.10	110.80	140.25	91.50	242.90	333.80	197.60	138.30	35.80	18.52	13.06	
25	87.50	108.05	108.60	141.55	99.00	251.90	336.60	176.30	138.30	34.00	18.29	15.44	
26	98.50	168.60	105.30	148.70	97.00	258.20	343.60	158.45	116.60	33.20	18.05	20.75	
27	91.00	233.90	109.70	145.45	89.00	264.75	349.20	144.15	98.50	32.80	17.81	39.85	
28	85.50	260.00	106.95	137.65	80.50	270.45	352.00	131.00	87.50	32.40	17.57	57.00	
29	79.00	270.45	99.50	129.20	76.00	272.35	350.60	121.40	80.00	30.80		47.05	
30	85.00	266.65	94.00	135.20	91.50	267.60	349.20	115.40	84.00	29.60		32.80	
31		242.00		145.45	132.80		340.80		95.00	28.40		23.90	
Total	2362.95	5381.40	3694.15	5107.20	3882.90	5325.40	8984.45	9281.80	3480.80	1462.90	600.45	596.82	50161.22 CMSDAY
Mean	78.77	173.59	123.14	164.75	125.25	177.51	289.82	309.39	112.28	47.19	21.44	19.25	137.43 CMS
Max	123.80	270.45	209.60	245.60	172.10	272.35	352.00	446.00	188.25	91.50	26.80	57.00	446.00 CMS
Min	46.15	102.00	79.50	94.50	76.00	103.65	250.10	115.40	79.00	28.40	17.57	11.40	11.40 CMS
Runoff	204.159	464.953	319.175	441.262	335.483	460.115	776.257	801.948	300.741	126.395	51.879	51.565	4333.930 MCM

Momentary Peak 446.00 CMS, at 10.73 M (MSL), at 4.00 Hours, on Nov 10, 2001

Runoff Yield 26.43 Liters/Second/Square KM, Momentary Peak Yield 85.769 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Pattani River at Ban Tha Sap, Yala (X.40A)

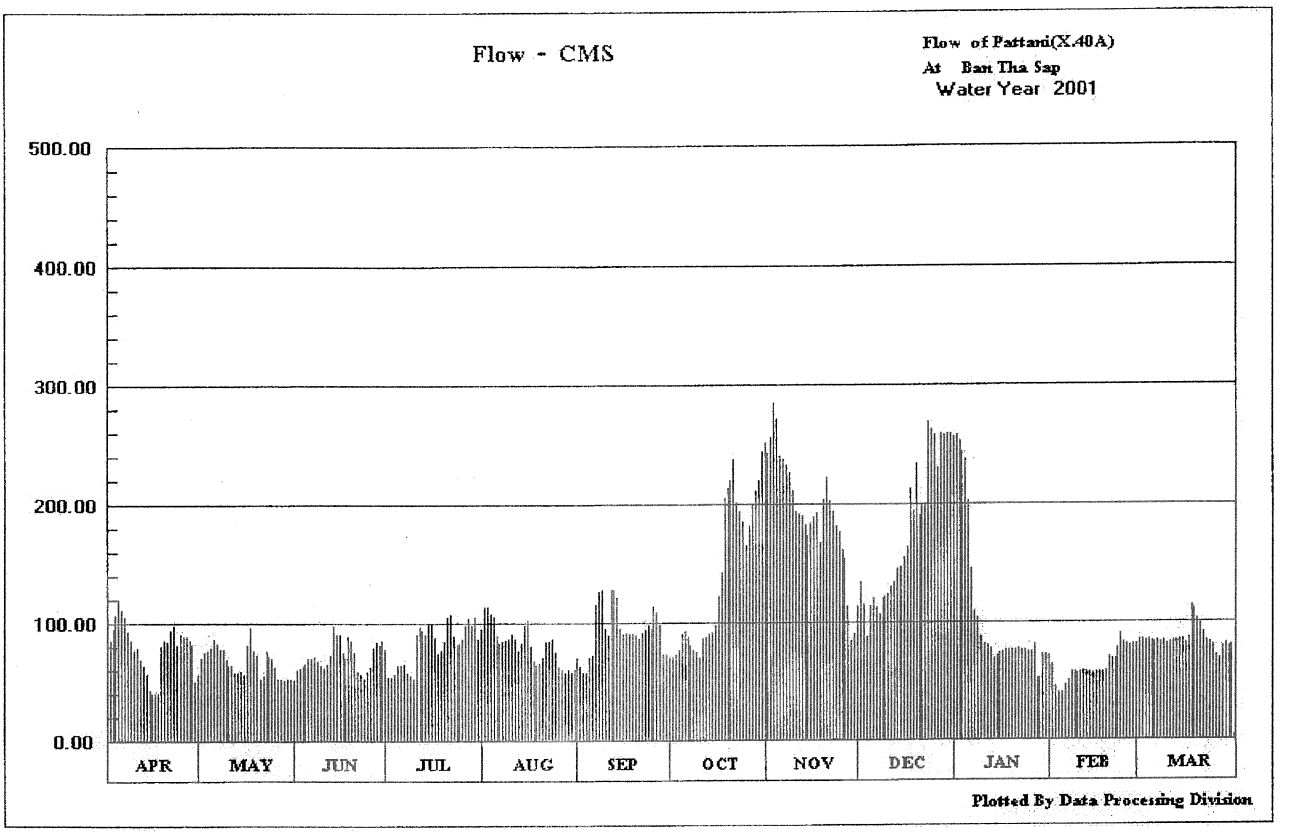
Lat 06 - 33 - 03 N. **Long** 101 - 16 - 10 E.

Location		on left bank at the bridge of Yala - Ban Niang Road.	
	Ban Tha Sap	Amphoe Mueang	**Changwat** Yala
Drainage Area		3,288 sq.km.	
Type of Gage		Staff gage.	
Zero Gage at Bottom		+10.154 m. (M.S.L.)	
Bench Mark		B.M.- H.D.	
	Location BM	On left bank between the fourth and the fifth staff gage.	
	Elevation	+18.160 m. (M.S.L)	
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.	
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.	
Period of Available Gage Records		1988 to date.	
Rating Operation			
	Period of Rating	1989 to date.	
	Rated by Float	-	
	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 49 discharge measurements made in 2001.	

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.89	12.66	12.50	12.40	13.26	12.54	12.66	14.63	13.51	14.76	12.56	12.89	
2	13.04	12.74	12.51	12.39	13.26	12.45	12.70	14.75	13.29	14.72	12.24	12.89	
3	13.17	12.76	12.56	12.44	13.19	12.45	12.77	14.99	12.93	14.64	12.16	12.88	
4	13.34	12.81	12.58	12.56	13.16	12.66	12.97	14.87	13.26	14.59	12.16	12.89	
5	13.24	12.91	12.66	12.56	12.95	12.71	13.00	14.61	13.34	14.24	12.27	12.87	
6	13.16	12.86	12.66	12.57	12.86	13.29	12.93	14.59	13.25	13.65	12.32	12.86	
7	13.00	12.79	12.69	12.45	12.87	13.42	12.83	14.54	13.17	13.20	12.46	12.87	
8	12.89	12.78	12.61	12.41	12.89	13.44	12.77	14.48	13.34	13.15	12.46	12.86	
9	12.76	12.63	12.55	12.36	12.91	13.04	12.74	14.33	13.36	12.93	12.44	12.87	
10	12.81	12.56	12.51	12.97	12.96	12.94	12.66	14.16	13.40	12.85	12.46	12.84	
11	12.65	12.56	12.58	13.05	12.92	13.43	12.91	14.13	13.46	12.82	12.47	12.86	
12	12.55	12.46	12.70	13.01	12.77	13.43	12.93	14.12	13.51	12.78	12.46	12.87	
13	12.43	12.46	13.07	12.97	12.86	13.36	12.96	14.04	13.64	12.65	12.46	12.88	
14	12.20	12.47	12.96	13.09	13.07	13.04	12.98	13.96	13.66	12.69	12.44	12.89	
15	12.15	12.43	12.96	13.08	13.12	12.96	13.07	14.06	13.76	12.72	12.46	12.89	
16	12.16	12.84	12.74	12.93	12.83	12.98	13.37	14.10	13.85	12.74	12.46	12.84	
17	12.16	13.05	12.67	12.73	12.61	12.96	13.62	14.14	14.34	12.76	12.45	12.92	
18	12.82	12.76	12.94	12.77	12.56	12.96	14.27	13.89	14.16	12.76	12.48	13.26	
19	12.89	12.71	12.89	12.87	12.57	12.94	14.35	14.25	14.55	12.76	12.66	13.24	
20	12.88	12.37	12.74	13.16	12.66	12.91	14.42	14.44	14.12	12.76	12.64	13.13	
21	13.02	12.41	12.48	13.19	12.88	12.99	14.59	14.24	14.20	12.79	12.64	13.08	
22	13.06	12.76	12.44	12.94	12.87	13.02	14.23	14.16	14.22	12.77	12.79	12.98	
23	12.84	12.69	12.37	12.84	12.92	13.06	14.15	14.03	14.85	12.76	12.97	12.88	
24	12.97	12.66	12.47	12.86	12.74	13.04	14.07	13.98	14.80	12.75	12.86	12.86	
25	12.94	12.54	12.53	12.92	12.54	13.27	13.87	13.83	14.76	12.75	12.85	12.83	
26	12.94	12.37	12.80	13.07	12.49	13.20	14.03	13.74	14.52	12.84	12.82	12.69	
27	12.89	12.36	12.88	13.15	12.45	13.06	14.22	13.27	14.77	12.37	12.85	12.65	
28	12.84	12.35	12.84	13.07	12.49	12.71	14.33	12.87	14.76	12.36	12.84	12.81	
29	12.33	12.36	12.90	13.16	12.45	12.70	14.42	12.97	14.77	12.70		12.84	
30	12.44	12.36	12.78	12.92	12.49	12.66	14.65	13.27	14.77	12.70		12.81	
31		12.35		13.03	12.67		14.71		14.75	12.69		12.83	
Mean	12.78	12.61	12.69	12.84	12.82	12.99	13.55	14.11	13.97	13.09	12.54	12.90	
Max	13.34	13.05	13.07	13.19	13.26	13.44	14.71	14.99	14.85	14.76	12.97	13.26	14.99
Min	12.15	12.35	12.37	12.36	12.45	12.45	12.66	12.87	12.93	12.36	12.16	12.65	12.15

Annual Max Momentary Gage Height 15.03 M (MSL), at 6.00 Hours, on Nov 3, 2001
Zero Gage at Bottom Elevation 10.15 M (MSL), River Bed 10.19 M (MSL)
Left Bank Elevation 21.05 M (MSL)
Right Bank Elevation 20.87 M (MSL), Drainage Area 3288 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	86.30	71.60	62.00	56.00	114.80	64.40	71.60	243.60	135.35	259.20	65.60	86.30	
2	97.20	76.40	62.60	55.40	114.80	59.00	74.00	258.00	117.20	254.40	46.40	86.30	
3	107.60	77.60	65.60	58.40	109.20	59.00	78.20	286.80	89.10	244.80	42.00	85.60	
4	121.20	80.70	66.80	65.60	106.80	71.60	91.90	272.40	114.80	239.00	42.00	86.30	
5	113.20	87.70	71.60	65.60	90.50	74.60	94.00	241.20	121.20	204.00	48.20	84.90	
6	106.80	84.20	71.60	66.20	84.20	117.20	89.10	239.00	114.00	147.25	51.20	84.20	
7	94.00	79.40	73.40	59.00	84.90	127.70	82.10	234.00	107.60	110.00	59.60	84.90	
8	86.30	78.80	68.60	56.60	86.30	129.40	78.20	228.00	121.20	106.00	59.60	84.20	
9	77.60	69.80	65.00	53.60	87.70	97.20	76.40	213.00	122.80	89.10	58.40	84.90	
10	80.70	65.60	62.60	91.90	91.20	89.80	71.60	196.00	126.00	83.50	59.60	82.80	
11	71.00	65.60	66.80	98.00	88.40	128.55	87.70	193.00	131.10	81.40	60.20	84.20	
12	65.00	59.60	74.00	94.80	78.20	128.55	89.10	192.00	135.35	78.80	59.60	84.90	
13	57.80	59.60	99.60	91.90	84.20	122.80	91.20	184.00	146.40	71.00	59.60	85.60	
14	44.00	60.20	91.20	101.20	99.60	97.20	92.60	176.00	148.10	73.40	58.40	86.30	
15	41.50	57.80	91.20	100.40	103.60	91.20	99.60	186.00	156.60	75.20	59.60	86.30	
16	42.00	82.80	76.40	89.10	82.10	92.60	123.60	190.00	165.00	76.40	59.60	82.80	
17	42.00	98.00	72.20	75.80	68.60	91.20	144.70	194.00	214.00	77.60	59.00	88.40	
18	81.40	77.60	89.80	78.20	65.60	91.20	207.00	169.00	196.00	77.60	60.80	114.80	
19	86.30	74.60	86.30	84.90	66.20	89.80	215.00	205.00	235.00	77.60	71.60	113.20	
20	85.60	54.20	76.40	106.80	71.60	87.70	222.00	224.00	192.00	77.60	70.40	104.40	
21	95.60	56.60	60.80	109.20	85.60	93.30	239.00	204.00	200.00	79.40	70.40	100.40	
22	98.80	77.60	58.40	89.80	84.90	95.60	203.00	196.00	202.00	78.20	79.40	92.60	
23	82.80	73.40	54.20	82.80	88.40	98.80	195.00	183.00	270.00	77.60	91.90	85.60	
24	91.90	71.60	60.20	84.20	76.40	97.20	187.00	178.00	264.00	77.00	84.20	84.20	
25	89.80	64.40	63.80	88.40	64.40	115.60	167.00	163.00	259.20	77.00	83.50	82.10	
26	89.80	54.20	80.00	99.60	61.40	110.00	183.00	154.90	232.00	82.80	81.40	73.40	
27	86.30	53.60	85.60	106.00	59.00	98.80	202.00	115.60	260.40	54.20	83.50	71.00	
28	82.80	53.00	82.80	99.60	61.40	74.60	213.00	84.90	259.20	53.60	82.80	80.70	
29	51.80	53.60	87.00	106.80	59.00	74.00	222.00	91.90	260.40	74.00		82.80	
30	58.40	53.60	78.80	88.40	61.40	71.60	246.00	115.60	260.40	74.00		80.70	
31		53.00		96.40	72.20		253.20		258.00	73.40		82.10	
Total	2415.50	2126.40	2205.30	2600.60	2552.60	2840.20	4489.80	5811.90	5614.40	3305.05	1808.50	2696.90	38467.15 CMSDAY
Mean	80.52	68.59	73.51	83.89	82.34	94.67	144.83	193.73	181.11	106.61	64.59	87.00	105.39 CMS
Max	121.20	98.00	99.60	109.20	114.80	129.40	253.20	286.80	270.00	259.20	91.90	114.80	286.80 CMS
Min	41.50	53.00	54.20	53.60	59.00	59.00	71.60	84.90	89.10	53.60	42.00	71.00	41.50 CMS
Runoff	208.699	183.721	190.538	224.692	220.545	245.393	387.919	502.148	485.084	285.556	156.254	233.012	3323.562 MCM

Momentary Peak 291.60 CMS, at 15.03 M (MSL), at 6.00 Hours, on Nov 3, 2001
Runoff Yield 32.05 Liters/Second/Square KM, Momentary Peak Yield 88.686 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Pattani River at Downstream Pattani Dam, Yala (X.40B)

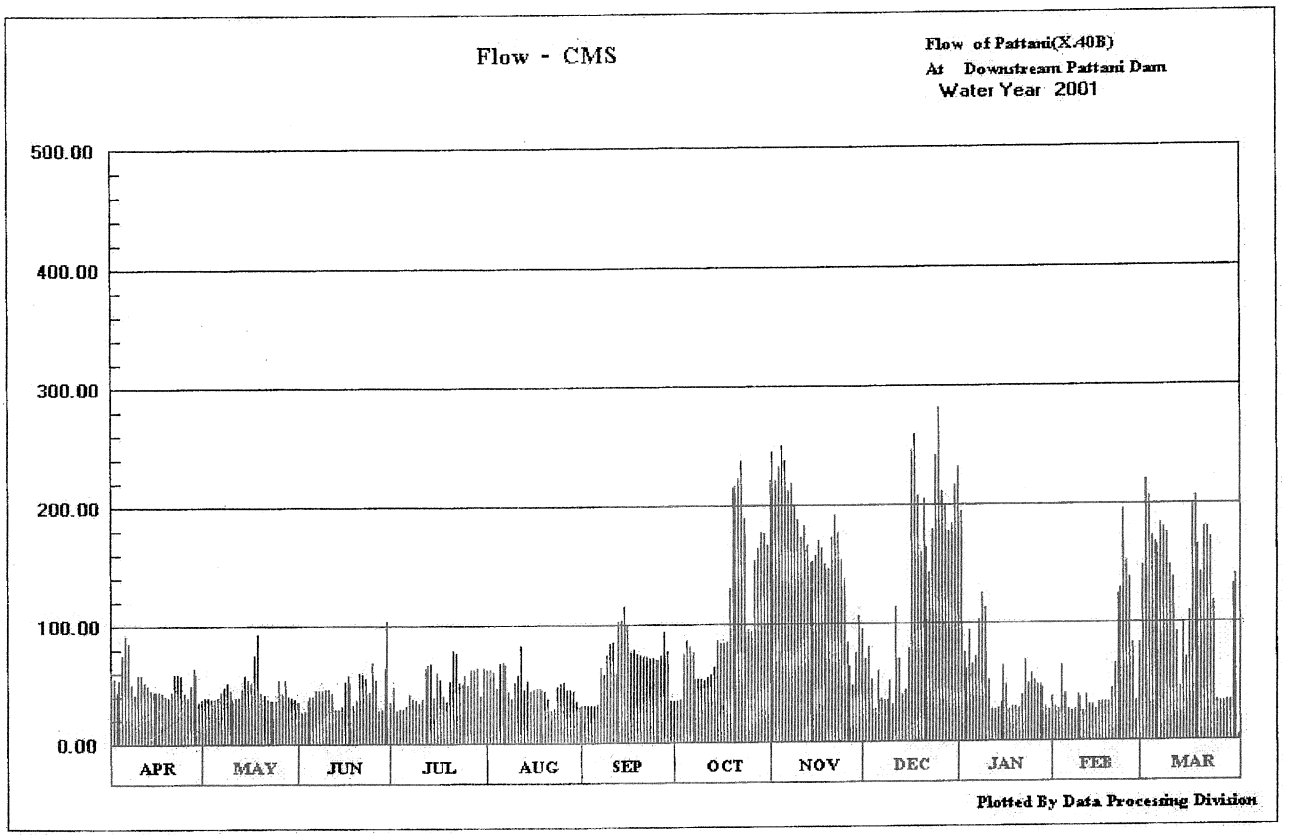
Lat 06 - 40 - 29 N. **Long** 101 - 17 - 14 E.

Location		-	
	Ban -	**Amphoe** Mueang	**Changwat** Yala
Drainage Area		3,430 sq.km.	
Type of Gage		Staff gage.	
Zero Gage at Bottom		+0.000 m. (M.S.L.)	
Bench Mark		B.M.- H.D.	
	Location BM	-	
	Elevation	12.222 m. (M.S.L.)	
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		2001 to date.	
Rating Operation			
	Period of Rating	2001 to date.	
	Rated by Float	-	
	Rated by Current Meter	2001 to date.	
Stability of Channel Regimes		Stable.	
Overbank Flow Conditions		No overbank flow.	
General Description		Records fair. Flow regulated by Pattani Dam. Stage-discharge relation defined by 38 discharge measurements made in 2001.	

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.91	4.51	4.19	4.74	5.08	4.33	4.43	8.33	5.23	7.51	4.27	6.73	
2	4.63	4.51	4.22	4.24	5.01	4.31	4.45	7.95	5.45	5.34	4.18	7.93	
3	4.88	4.49	4.44	4.25	4.71	4.32	5.36	8.13	4.84	5.04	5.09	7.72	
4	5.34	4.49	4.55	4.27	5.19	4.32	5.59	8.41	4.23	5.74	4.53	7.16	
5	5.69	4.51	4.55	4.31	5.20	4.35	5.47	8.21	5.02	5.12	4.18	7.07	
6	5.56	4.64	4.66	4.56	5.16	5.11	5.39	7.82	4.46	5.28	4.15	7.03	
7	4.78	4.74	4.67	4.47	4.63	4.95	4.89	7.91	4.42	5.91	4.20	7.35	
8	4.57	4.83	4.68	4.44	4.48	5.32	4.88	7.60	4.42	6.33	4.52	7.28	
9	4.95	4.67	4.70	4.39	4.82	5.53	4.88	7.40	4.83	6.09	4.45	7.21	
10	4.95	4.48	4.69	4.47	4.95	5.55	4.85	7.16	4.33	4.82	4.16	6.73	
11	4.81	4.52	4.61	5.11	5.50	4.99	4.90	7.32	6.12	4.21	4.51	6.54	
12	4.75	4.52	4.26	5.17	4.66	5.91	4.95	7.05	5.25	4.21	4.28	5.68	
13	4.68	4.71	4.27	5.18	4.85	5.92	5.11	6.80	4.53	4.22	4.28	4.66	
14	4.65	4.95	4.31	4.52	4.65	6.13	5.57	6.81	4.64	4.35	4.19	5.86	
15	4.64	4.87	4.85	5.02	4.68	5.84	5.53	6.89	5.43	5.10	4.34	5.23	
16	4.64	4.82	4.97	4.88	4.71	5.39	5.53	7.11	8.35	4.74	4.36	6.02	
17	4.60	5.34	4.83	4.54	4.71	5.42	5.56	7.01	8.55	4.21	4.36	7.60	
18	4.54	5.70	4.36	4.41	4.68	5.34	6.41	6.77	7.74	4.25	4.36	7.72	
19	4.50	4.60	4.44	4.84	4.65	5.31	7.85	6.70	6.95	4.26	4.62	7.02	
20	4.63	4.57	5.03	5.42	4.47	5.30	7.88	7.16	7.70	4.24	5.12	6.61	
21	4.98	4.47	4.98	5.38	4.22	5.30	7.97	7.48	7.01	4.52	6.29	7.28	
22	4.98	4.44	4.92	4.81	4.26	5.27	8.21	7.23	6.64	5.22	6.40	7.28	
23	4.96	4.44	4.65	4.80	4.74	5.26	7.44	6.84	7.26	4.77	7.53	7.13	
24	4.61	4.46	5.22	4.95	4.79	5.24	5.76	6.52	8.27	4.95	6.80	6.18	
25	4.51	4.89	4.88	4.77	4.82	5.25	5.74	5.52	8.89	4.82	6.55	4.38	
26	4.76	4.60	4.23	5.08	4.66	5.33	6.84	5.09	7.80	4.73	5.51	4.36	
27	5.09	4.88	4.27	5.08	4.66	5.74	7.01	4.74	7.61	4.73	4.38	4.36	
28	4.98	4.55	5.09	5.10	4.62	5.41	7.25	5.35	7.24	4.68	5.51	4.37	
29	4.41	4.52	5.92	4.55	4.42	4.42	7.23	5.98	7.35	4.27		4.39	
30	4.47	4.49	4.43	5.09	4.30	4.43	7.05	5.75	7.87	4.19		6.43	
31		4.42		5.07	4.31		7.95		8.11	4.47		6.59	
Mean	4.82	4.67	4.66	4.77	4.73	5.18	6.06	6.97	6.34	4.91	4.90	6.38	
Max	5.69	5.70	5.92	5.42	5.50	6.13	8.21	8.41	8.89	7.51	7.53	7.93	8.89
Min	4.41	4.42	4.19	4.24	4.22	4.31	4.43	4.74	4.23	4.19	4.15	4.36	4.15

Annual Max Momentary Gage Height 9.32 M (MSL), at 18.00 Hours, on Dec 16, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed 2.16 M (MSL)
Left Bank Elevation 12.16 M (MSL)
Right Bank Elevation 12.12 M (MSL), Drainage Area 3430 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	56.84	40.40	27.67	49.60	64.44	33.20	37.20	246.79	71.26	195.31	30.80	149.41	
2	45.20	40.40	28.80	29.60	61.26	32.40	38.00	222.85	81.50	76.27	27.34	221.59	
3	55.52	39.60	37.60	30.00	48.40	32.80	77.18	234.19	53.76	62.62	64.90	208.36	
4	76.27	39.60	42.00	30.80	69.44	32.80	88.50	251.84	29.20	96.00	41.20	174.28	
5	93.50	40.40	42.00	32.40	69.90	34.00	82.50	239.23	61.71	66.26	27.34	169.06	
6	87.00	45.60	46.40	42.40	68.08	65.81	78.54	214.66	38.40	73.54	26.35	166.74	
7	51.20	49.60	46.80	38.80	45.20	58.60	55.96	220.33	36.80	104.50	28.00	185.60	
8	42.80	53.32	47.20	37.60	39.20	75.36	55.52	200.80	36.80	127.15	40.80	181.40	
9	58.60	46.80	48.00	35.60	52.88	85.50	55.52	188.60	53.32	113.95	38.00	177.20	
10	58.60	39.20	47.60	38.80	58.60	86.50	54.20	174.28	33.20	52.88	26.68	149.41	
11	52.44	40.80	44.40	65.81	84.00	60.36	56.40	183.80	115.60	28.40	40.40	138.70	
12	50.00	40.80	30.40	68.54	46.40	104.50	58.60	167.90	72.17	28.40	31.20	93.00	
13	47.20	48.40	30.80	68.99	54.20	105.00	65.81	153.40	41.20	28.80	31.20	46.40	
14	46.00	58.60	32.40	40.80	46.00	116.15	87.50	153.98	45.60	34.00	27.67	102.00	
15	45.60	55.08	54.20	61.71	47.20	101.00	85.50	158.62	80.50	65.35	33.60	71.26	
16	45.60	52.88	59.48	55.52	48.40	78.54	85.50	171.38	248.05	49.60	34.40	110.10	
17	44.00	76.27	53.32	41.60	48.40	80.00	87.00	165.58	260.80	28.40	34.40	200.80	
18	41.60	94.00	34.40	36.40	47.20	76.27	131.55	151.69	209.62	30.00	34.40	208.36	
19	40.00	44.00	37.60	53.76	46.00	74.90	216.55	147.70	162.10	30.40	44.80	166.16	
20	45.20	42.80	62.17	80.00	38.80	74.45	218.44	174.28	207.10	29.60	66.26	142.57	
21	59.92	38.80	59.92	78.09	28.80	74.45	224.11	193.48	165.58	40.80	124.95	181.40	
22	59.92	37.60	57.28	52.44	30.40	73.08	239.23	178.40	144.28	70.81	131.00	181.40	
23	59.04	37.60	46.00	52.00	49.60	72.63	191.04	155.72	180.20	50.80	196.53	172.54	
24	44.40	38.40	70.81	58.60	51.60	71.72	97.00	137.60	243.01	58.60	153.40	118.90	
25	40.40	55.96	55.52	50.80	52.88	72.17	96.00	85.00	282.90	52.88	139.25	35.20	
26	50.40	44.00	29.20	64.44	46.40	75.81	155.72	64.90	213.40	49.20	84.50	34.40	
27	64.90	55.52	30.80	64.44	46.40	96.00	165.58	49.60	201.43	49.20	35.20	34.40	
28	59.92	42.00	64.90	65.35	44.80	79.50	179.60	76.72	179.00	47.20	84.50	34.80	
29	36.40	40.80	105.00	42.00	36.80	36.80	178.40	108.00	185.60	30.80		35.60	
30	38.80	39.60	37.20	64.90	32.00	37.20	167.90	96.50	217.81	27.67		132.65	
31		36.80		63.99	32.40		222.85		232.93	38.80		141.45	
Total	1597.27	1455.63	1409.87	1595.78	1536.08	2097.50	3633.40	4967.82	4184.83	1838.19	1679.07	4165.14	30160.58 CMSDAY
Mean	53.24	46.96	47.00	51.48	49.55	69.92	117.21	165.59	134.99	59.30	59.97	134.36	82.63 CMS
Max	93.50	94.00	105.00	80.00	84.00	116.15	239.23	251.84	282.90	195.31	196.53	221.59	282.90 CMS
Min	36.40	36.80	27.67	29.60	28.80	32.40	37.20	49.60	29.20	27.67	26.35	34.40	26.35 CMS
Runoff	138.004	125.766	121.813	137.875	132.717	181.224	313.926	429.220	361.569	158.820	145.072	359.868	2605.875 MCM

Momentary Peak 312.40 CMS, at 9.32 M (MSL), at 18.00 Hours, on Dec 16, 2001

Runoff Yield 24.09 Liters/Second/Square KM, Momentary Peak Yield 91.079 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong U Taphao at Ban Hat Yai Nai, Songkhla (X.44)

Lat 06 - 59 - 58 N. **Long** 100 - 27 - 33 E.

Location on left bank at the bridge of Hai Yai - Rattaphum Highway.

Ban Hat Yai Nai **Amphoe** Hat Yai **Changwat** Songkhla

Drainage Area 1,740 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom -0.730 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 200 meters from the top staff gage.

Elevation +7.294 m. (M.S.L.)

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 Float -

Rated by Current Meter 1967 - 1972, 1983 - 1988, 1999 to date.

Stability of Channel Regimes Fairly stable.

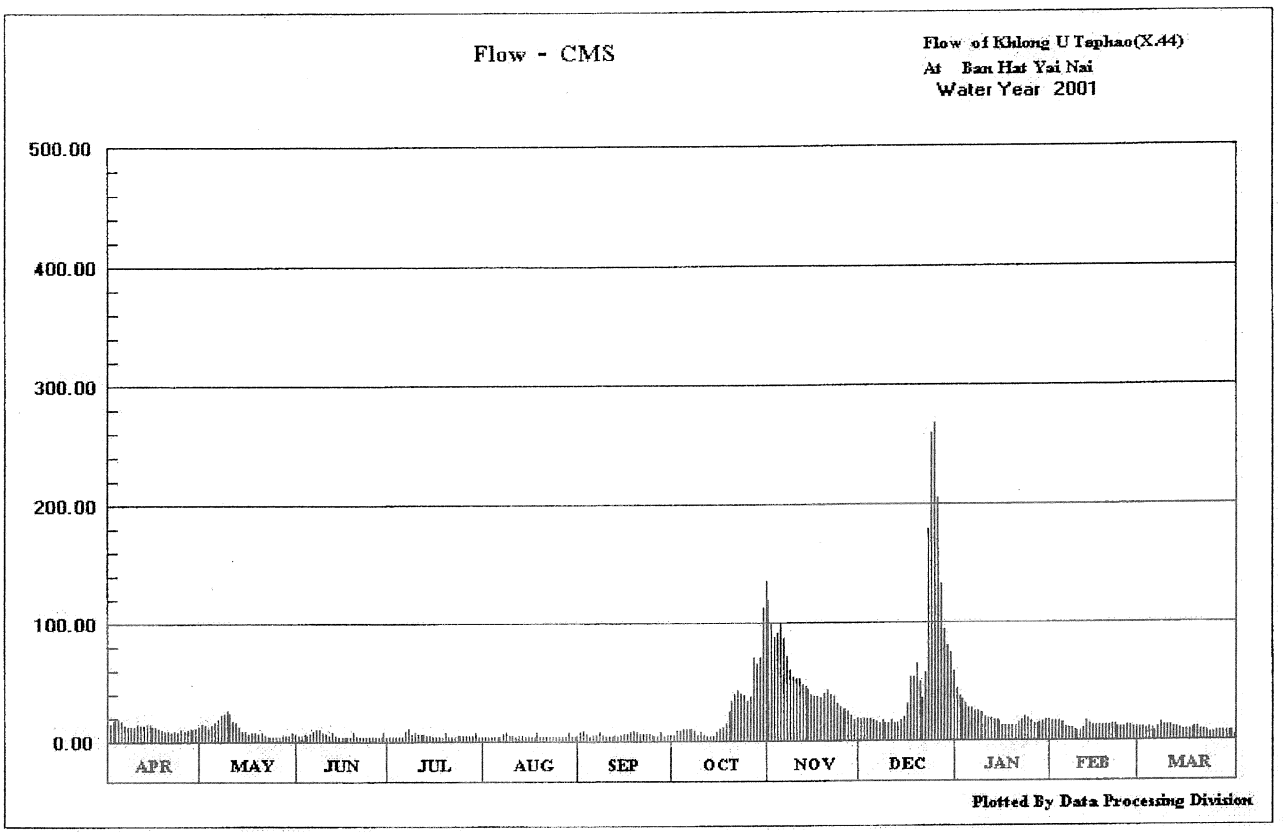
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.41	0.44	0.04	-0.09	-0.13	0.15	0.03	2.96	0.55	1.27	0.48	0.27	
2	0.49	0.37	0.05	-0.08	-0.10	0.18	0.18	2.57	0.53	1.10	0.46	0.26	
3	0.58	0.30	0.07	-0.10	-0.07	0.09	0.19	2.34	0.56	1.02	0.48	0.23	
4	0.56	0.40	0.05	-0.13	-0.03	0.00	0.24	2.41	0.53	0.92	0.44	0.27	
5	0.50	0.47	0.10	-0.04	-0.05	0.04	0.23	2.60	0.49	0.81	0.27	0.24	
6	0.40	0.54	0.18	0.19	-0.14	0.04	0.23	2.30	0.48	0.81	0.24	0.14	
7	0.34	0.65	0.23	0.27	0.09	0.05	0.22	1.98	0.43	0.75	0.23	0.29	
8	0.33	0.71	0.21	0.08	0.08	0.03	0.16	1.69	0.50	0.73	0.16	0.43	
9	0.31	0.77	0.10	0.04	0.05	-0.01	0.02	1.54	0.43	0.69	0.12	0.35	
10	0.42	0.71	0.10	0.06	0.01	-0.03	0.14	1.50	0.44	0.60	0.14	0.32	
11	0.39	0.52	0.05	0.08	-0.01	-0.03	0.05	1.49	0.49	0.53	0.21	0.32	
12	0.37	0.45	0.15	0.08	0.04	0.01	-0.02	1.39	0.41	0.53	0.45	0.30	
13	0.44	0.32	0.03	0.02	0.01	-0.01	-0.01	1.34	0.42	0.51	0.39	0.27	
14	0.42	0.19	-0.01	0.01	-0.03	0.03	0.00	1.26	0.52	0.49	0.31	0.22	
15	0.33	0.17	-0.08	-0.01	-0.07	0.09	0.14	1.13	0.57	0.45	0.33	0.18	
16	0.35	0.08	-0.13	-0.01	-0.19	0.10	0.21	1.08	0.92	0.34	0.31	0.18	
17	0.26	0.12	-0.15	0.00	-0.20	0.15	0.27	1.10	1.54	0.33	0.35	0.17	
18	0.23	0.11	-0.21	-0.01	-0.16	0.18	0.44	1.05	1.52	0.32	0.35	0.23	
19	0.19	0.07	-0.28	-0.08	-0.07	0.14	0.72	1.16	1.83	0.31	0.33	0.30	
20	0.17	0.01	-0.26	-0.05	-0.03	0.10	0.97	1.24	1.45	0.33	0.36	0.28	
21	0.14	0.02	-0.23	-0.09	-0.10	0.08	1.16	1.13	1.04	0.41	0.36	0.20	
22	0.18	-0.03	-0.17	-0.03	-0.10	0.07	1.24	1.10	1.64	0.50	0.28	0.16	
23	0.15	-0.07	-0.20	0.02	-0.05	0.08	1.17	0.92	4.00	0.57	0.30	0.13	
24	0.23	-0.09	-0.17	0.02	-0.10	0.04	1.12	0.83	5.05	0.56	0.30	0.09	
25	0.18	-0.08	-0.09	0.05	-0.08	-0.01	0.99	0.76	5.16	0.45	0.33	0.09	
26	0.23	0.00	-0.11	0.02	-0.10	-0.01	1.09	0.76	4.37	0.38	0.35	0.15	
27	0.26	0.01	-0.11	0.02	-0.20	-0.04	1.94	0.72	3.21	0.38	0.29	0.14	
28	0.25	0.01	-0.10	0.03	-0.16	0.00	1.81	0.62	2.47	0.43	0.27	0.15	
29	0.30	0.01	-0.04	0.03	-0.17	0.05	1.93	0.50	2.18	0.48		0.15	
30	0.33	0.02	-0.08	-0.04	-0.12	0.05	2.85	0.53	2.03	0.51		0.12	
31		0.07		-0.04	0.04		3.26		1.67	0.52		0.11	
Mean	0.32	0.23	-0.04	0.01	-0.07	0.05	0.74	1.40	1.53	0.58	0.32	0.22	
Max	0.58	0.77	0.23	0.27	0.09	0.18	3.26	2.96	5.16	1.27	0.48	0.43	5.16
Min	0.14	-0.09	-0.28	-0.13	-0.20	-0.04	-0.02	0.50	0.41	0.31	0.12	0.09	-0.28

Annual Max Momentary Gage Height 5.27 M (MSL), at 5.00 Hours, on Dec 25, 2001
Zero Gage at Bottom Elevation -0.73 M (MSL), River Bed -2.65 M (MSL)
Left Bank Elevation 7.19 M (MSL)
Right Bank Elevation 7.65 M (MSL), Drainage Area 1740 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.30	17.20	7.00	4.20	3.40	9.75	6.75	120.00	20.50	45.45	18.40	12.75	
2	18.70	15.25	7.25	4.40	4.00	10.50	10.50	100.50	19.90	39.50	17.80	12.50	
3	21.40	13.50	7.75	4.00	4.60	8.25	10.75	89.30	20.80	36.70	18.40	11.75	
4	20.80	16.00	7.25	3.40	5.40	6.00	12.00	92.50	19.90	33.20	17.20	12.75	
5	19.00	18.10	8.50	5.20	5.00	7.00	11.75	102.00	18.70	29.35	12.75	12.00	
6	16.00	20.20	10.50	10.75	3.20	7.00	11.75	87.50	18.40	29.35	12.00	9.50	
7	14.50	23.75	11.75	12.75	8.25	7.25	11.50	73.20	16.90	27.25	11.75	13.25	
8	14.25	25.85	11.25	8.00	8.00	6.75	10.00	61.60	19.00	26.55	10.00	16.90	
9	13.75	27.95	8.50	7.00	7.25	5.80	6.50	55.60	16.90	25.15	9.00	14.75	
10	16.60	25.85	8.50	7.50	6.25	5.40	9.50	54.00	17.20	22.00	9.50	14.00	
11	15.75	19.60	7.25	8.00	5.80	5.40	7.25	53.60	18.70	19.90	11.25	14.00	
12	15.25	17.50	9.75	8.00	7.00	6.25	5.60	49.65	16.30	19.90	17.50	13.50	
13	17.20	14.00	6.75	6.50	6.25	5.80	5.80	47.90	16.60	19.30	15.75	12.75	
14	16.60	10.75	5.80	6.25	5.40	6.75	6.00	45.10	19.60	18.70	13.75	11.50	
15	14.25	10.25	4.40	5.80	4.60	8.25	9.50	40.55	21.10	17.50	14.25	10.50	
16	14.75	8.00	3.40	5.80	2.20	8.50	11.25	38.80	33.20	14.50	13.75	10.50	
17	12.50	9.00	3.00	6.00	2.00	9.75	12.75	39.50	55.60	14.25	14.75	10.25	
18	11.75	8.75	1.90	5.80	2.80	10.50	17.20	37.75	54.80	14.00	14.75	11.75	
19	10.75	7.75	1.20	4.40	4.60	9.50	26.20	41.60	67.20	13.75	14.25	13.50	
20	10.25	6.25	1.40	5.00	5.40	8.50	34.95	44.40	52.00	14.25	15.00	13.00	
21	9.50	6.50	1.70	4.20	4.00	8.00	41.60	40.55	37.40	16.30	15.00	11.00	
22	10.50	5.40	2.60	5.40	4.00	7.75	44.40	39.50	59.60	19.00	13.00	10.00	
23	9.75	4.60	2.00	6.50	5.00	8.00	41.95	33.20	181.00	21.10	13.50	9.25	
24	11.75	4.20	2.60	6.50	4.00	7.00	40.20	30.05	260.25	20.80	13.50	8.25	
25	10.50	4.40	4.20	7.25	4.40	5.80	35.65	27.60	269.60	17.50	14.25	8.25	
26	11.75	6.00	3.80	6.50	4.00	5.80	39.15	27.60	206.90	15.50	14.75	9.75	
27	12.50	6.25	3.80	6.50	2.00	5.20	71.60	26.20	133.55	15.50	13.25	9.50	
28	12.25	6.25	4.00	6.75	2.80	6.00	66.40	22.70	95.50	16.90	12.75	9.75	
29	13.50	6.25	5.20	6.75	2.60	7.25	71.20	19.00	82.10	18.40		9.75	
30	14.25	6.50	4.40	5.20	3.60	7.25	114.50	19.90	75.35	19.30		9.00	
31		7.75		5.20	7.00		136.30		60.80	19.60		8.75	
Total	426.60	379.60	167.40	195.50	144.80	220.95	940.45	1561.35	2005.35	680.45	391.80	354.65	7468.90 CMSDAY
Mean	14.22	12.25	5.58	6.31	4.67	7.37	30.34	52.05	64.69	21.95	13.99	11.44	20.46 CMS
Max	21.40	27.95	11.75	12.75	8.25	10.50	136.30	120.00	269.60	45.45	18.40	16.90	269.60 CMS
Min	9.50	4.20	1.20	3.40	2.00	5.20	5.60	19.00	16.30	13.75	9.00	8.25	1.20 CMS
Runoff	36.858	32.797	14.463	16.891	12.511	19.090	81.255	134.901	173.262	58.791	33.852	30.642	645.313 MCM

Momentary Peak 278.95 CMS, at 5.27 M (MSL), at 5.00 Hours, on Dec 25, 2001

Runoff Yield 11.76 Liters/Second/Square KM, Momentary Peak Yield 160.316 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 751 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank near the automatic gage building.

Elevation +18.921 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1971 to date.

Rating Operation

Period of Rating 1976, 1985 to date.

Rated by Float -

Rated by Current Meter 1976, 1985 to date.

Stability of Channel Regimes Stable because of backwater effect.

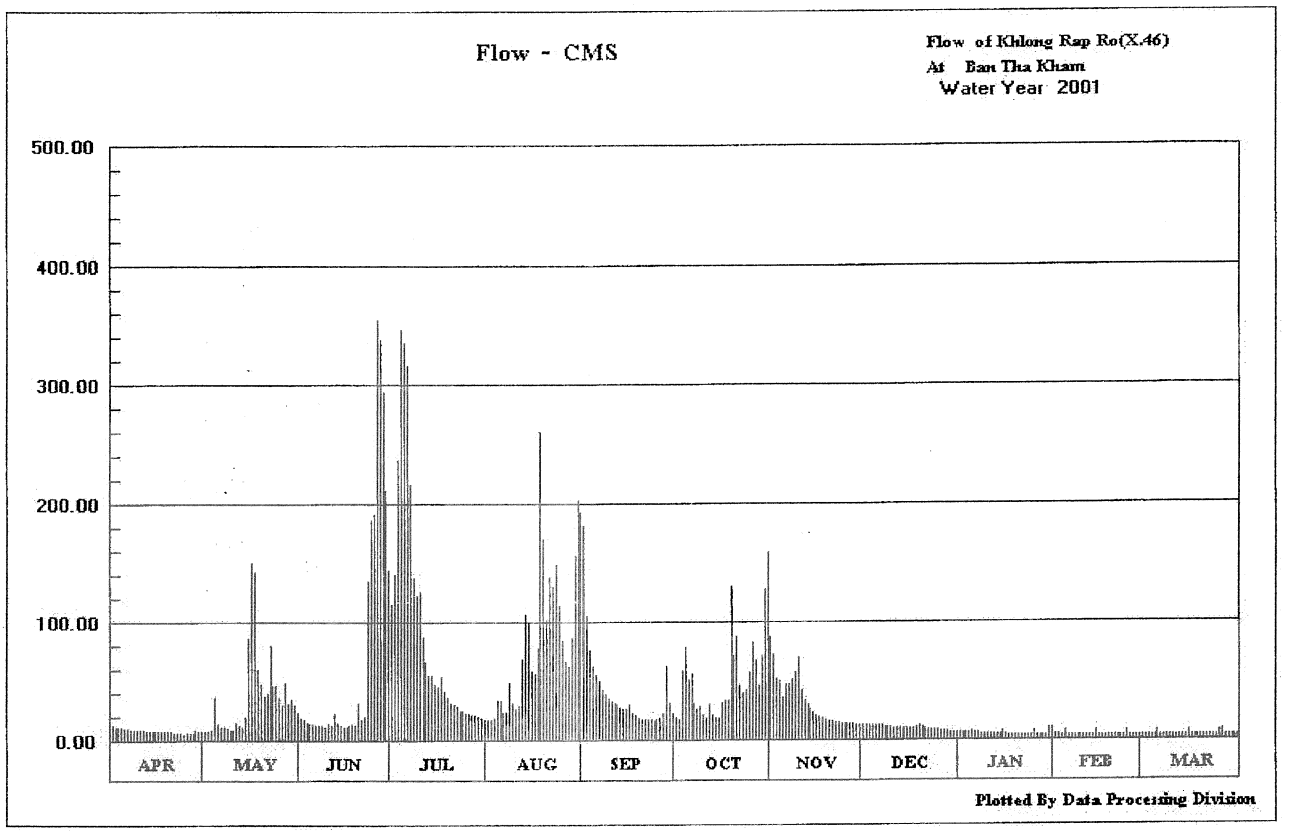
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.08	6.84	7.39	9.96	7.36	11.22	7.40	9.36	7.10	6.80	6.76	6.50	
2	7.05	6.86	7.34	10.43	7.35	9.75	7.37	8.98	7.08	6.80	6.73	6.50	
3	7.03	6.93	7.25	12.16	7.41	9.07	8.62	8.46	7.08	6.79	6.68	6.49	
4	7.03	7.98	7.20	13.60	7.93	8.73	9.13	8.38	7.08	6.78	6.66	6.49	
5	7.01	7.14	7.16	13.48	7.93	8.54	8.43	8.01	7.11	6.78	6.65	6.49	
6	6.97	7.06	7.10	13.26	7.57	8.38	8.58	8.33	7.11	6.77	6.64	6.48	
7	6.95	7.04	7.09	11.85	7.60	8.19	7.84	8.33	7.13	6.77	6.62	6.48	
8	6.94	7.00	7.08	10.39	8.37	8.06	7.66	8.42	7.05	6.76	6.62	6.51	
9	6.93	6.91	7.06	10.10	7.84	7.96	7.74	8.59	7.03	6.76	6.62	6.59	
10	6.90	6.90	7.14	10.17	7.65	7.89	7.49	8.91	7.03	6.75	6.61	6.66	
11	6.89	7.25	7.10	9.34	7.76	7.85	7.43	8.17	7.00	6.74	6.60	6.58	
12	6.88	7.10	7.52	8.82	8.89	7.78	7.77	7.92	7.00	6.73	6.60	6.55	
13	6.86	7.02	7.24	8.55	9.78	7.72	7.49	7.77	7.00	6.73	6.59	6.50	
14	6.86	7.45	7.11	8.53	9.64	7.66	7.39	7.67	7.00	6.72	6.59	6.49	
15	6.85	9.31	7.07	8.31	8.65	7.66	7.39	7.56	7.00	6.71	6.59	6.48	
16	6.85	10.63	7.03	8.25	8.57	7.78	7.84	7.50	7.00	6.71	6.58	6.47	
17	6.84	10.50	7.11	8.51	9.11	7.55	7.93	7.46	6.99	6.70	6.58	6.46	
18	6.88	8.68	7.15	8.14	12.53	7.50	7.91	7.40	7.05	6.70	6.57	6.47	
19	6.85	8.33	7.10	7.98	11.02	7.40	10.24	7.37	7.10	6.69	6.57	6.46	
20	6.82	8.02	7.84	7.84	9.66	7.38	8.94	7.30	7.02	6.69	6.56	6.45	
21	6.81	8.11	7.37	7.79	10.39	7.35	9.36	7.28	6.98	6.68	6.55	6.44	
22	6.78	9.18	7.44	7.75	10.24	7.36	8.27	7.25	6.95	6.68	6.54	6.45	
23	6.77	8.28	10.34	7.63	10.60	7.33	8.10	7.24	6.95	6.68	6.53	6.45	
24	6.76	8.28	11.31	7.64	9.93	7.30	8.19	7.20	6.90	6.67	6.53	6.46	
25	6.78	8.01	11.39	7.55	9.27	7.37	8.59	7.20	6.90	6.67	6.53	6.55	
26	6.78	7.80	13.67	7.55	8.82	7.41	9.22	7.19	6.85	6.66	6.53	6.75	
27	6.81	8.37	13.50	7.49	8.73	7.54	8.85	7.16	6.85	6.65	6.52	6.93	
28	6.89	7.85	13.00	7.49	9.33	8.74	8.29	7.15	6.83	6.65	6.52	6.66	
29	6.85	7.97	11.77	7.45	10.75	7.81	8.96	7.13	6.80	6.64		6.56	
30	6.87	7.77	10.51	7.39	11.61	7.52	10.21	7.10	6.80	6.98		6.50	
31		7.56		7.37	11.41		10.80		6.80	6.96		6.50	
Mean	6.89	7.88	8.48	9.12	9.15	7.99	8.37	7.79	6.99	6.74	6.60	6.53	
Max	7.08	10.63	13.67	13.60	12.53	11.22	10.80	9.36	7.13	6.98	6.76	6.93	13.67
Min	6.76	6.84	7.03	7.37	7.35	7.30	7.37	7.10	6.80	6.64	6.52	6.44	6.44

Annual Max Momentary Gage Height 14.54 M (MSL), at 18.00 Hours, on Jun 26, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed 3.99 M (MSL)
Left Bank Elevation 15.25 M (MSL)
Right Bank Elevation 15.33 M (MSL), Drainage Area 751 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.60	8.80	19.80	117.00	19.20	183.10	20.00	89.40	14.00	8.00	7.20	3.00	
2	13.00	9.20	18.80	141.08	19.00	106.75	19.40	74.20	13.60	8.00	6.60	3.00	
3	12.60	10.60	17.00	237.40	20.30	77.80	59.80	54.10	13.60	7.80	5.60	2.90	
4	12.60	37.40	16.00	348.00	35.90	64.20	80.20	51.30	13.60	7.60	5.20	2.90	
5	12.20	14.80	15.20	337.20	35.90	56.90	53.05	38.35	14.20	7.60	5.00	2.90	
6	11.40	13.20	14.00	317.40	25.10	51.30	58.30	49.55	14.20	7.40	4.80	2.80	
7	11.00	12.80	13.80	218.00	26.00	44.65	33.20	49.55	14.60	7.40	4.40	2.80	
8	10.80	12.00	13.60	138.98	50.95	40.10	27.80	52.70	13.00	7.20	4.40	3.10	
9	10.60	10.20	13.20	124.00	33.20	36.80	30.20	58.65	12.60	7.20	4.40	3.90	
10	10.00	10.00	14.80	127.50	27.50	34.70	22.70	71.40	12.60	7.00	4.20	5.20	
11	9.80	17.00	14.00	88.60	30.80	33.50	20.90	43.95	12.00	6.80	4.00	3.80	
12	9.60	14.00	23.60	67.80	70.60	31.40	31.10	35.60	12.00	6.60	4.00	3.50	
13	9.20	12.40	16.80	57.25	108.10	29.60	22.70	31.10	12.00	6.60	3.90	3.00	
14	9.20	21.50	14.20	56.55	101.80	27.80	19.80	28.10	12.00	6.40	3.90	2.90	
15	9.00	87.40	13.40	48.85	61.00	27.80	19.80	24.80	12.00	6.20	3.90	2.80	
16	9.00	151.58	12.60	46.75	57.95	31.40	33.20	23.00	12.00	6.20	3.80	2.70	
17	8.80	144.75	14.20	55.85	79.40	24.50	35.90	21.80	11.80	6.00	3.80	2.60	
18	9.60	62.20	15.00	42.90	261.45	23.00	35.30	20.00	13.00	6.00	3.70	2.70	
19	9.00	49.55	14.00	37.40	172.10	20.00	131.10	19.40	14.00	5.80	3.70	2.60	
20	8.40	38.70	33.20	33.20	102.70	19.60	72.60	18.00	12.40	5.80	3.60	2.50	
21	8.20	41.85	19.40	31.70	138.98	19.00	89.40	17.60	11.60	5.60	3.50	2.40	
22	7.60	82.20	21.20	30.50	131.10	19.20	47.45	17.00	11.00	5.60	3.40	2.50	
23	7.40	47.80	136.35	26.90	150.00	18.60	41.50	16.80	11.00	5.60	3.30	2.50	
24	7.20	47.80	188.05	27.20	115.50	18.00	44.65	16.00	10.00	5.40	3.30	2.60	
25	7.60	38.35	192.45	24.50	85.80	19.40	58.65	16.00	10.00	5.40	3.30	3.50	
26	7.60	32.00	356.40	24.50	67.80	20.30	83.80	15.80	9.00	5.20	3.30	7.00	
27	8.20	50.95	339.00	22.70	64.20	24.20	69.00	15.20	9.00	5.00	3.20	10.60	
28	9.80	33.50	296.00	22.70	88.20	64.60	48.15	15.00	8.60	5.00	3.20	5.20	
29	9.00	37.10	213.35	21.50	157.88	32.30	73.40	14.60	8.00	4.80		3.60	
30	9.40	31.10	145.28	19.80	204.55	23.60	129.53	14.00	8.00	11.60		3.00	
31		24.80		19.40	193.55		160.50		8.00	11.20		3.00	
Total	291.40	1205.53	2234.68	2913.11	2736.51	1224.10	1673.08	1012.95	363.40	208.00	116.60	107.50	14086.86 CMSDAY
Mean	9.71	38.89	74.49	93.97	88.27	40.80	53.97	33.76	11.72	6.71	4.16	3.47	38.59 CMS
Max	13.60	151.58	356.40	348.00	261.45	183.10	160.50	89.40	14.60	11.60	7.20	10.60	356.40 CMS
Min	7.20	8.80	12.60	19.40	19.00	18.00	19.40	14.00	8.00	4.80	3.20	2.40	2.40 CMS
Runoff	25.177	104.158	193.076	251.693	236.434	105.762	144.554	87.519	31.398	17.971	10.074	9.288	1217.105 MCM

Momentary Peak 497.60 CMS, at 14.54 M (MSL), at 18.00 Hours, on Jun 26, 2001

Runoff Yield 51.39 Liters/Second/Square KM, Momentary Peak Yield 662.583 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 305 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 3.30 meters from the top staff gage.

Elevation +10.538 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1991 to date.

Rating Operation

Period of Rating 1991 to date.

Rated by Float -

Rated by Current Meter 1991 to date.

Stability of Channel Regimes Stable.

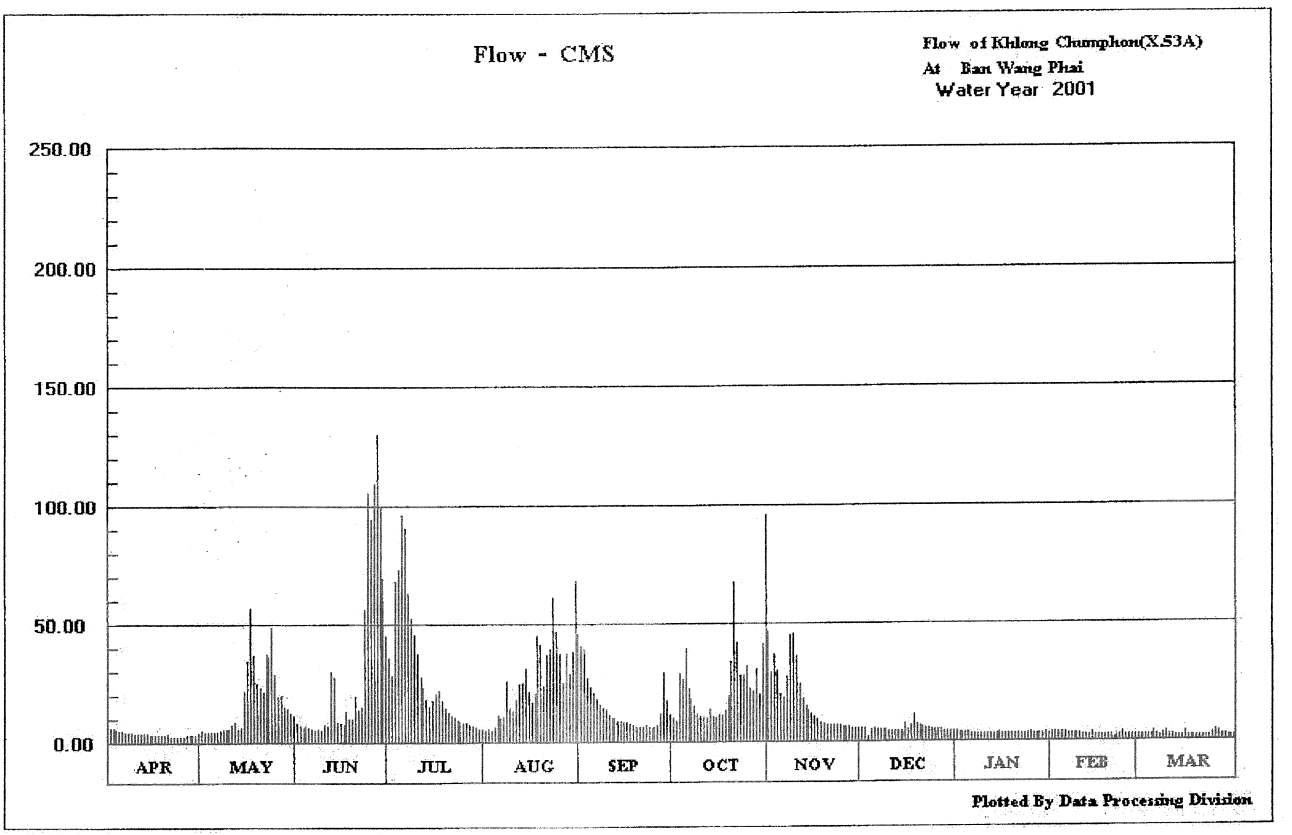
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 36 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.82	2.72	2.95	4.90	2.73	5.20	3.09	5.51	2.74	2.64	2.60	2.50	
2	2.79	2.65	2.88	4.42	2.75	5.12	3.02	4.52	2.74	2.63	2.59	2.50	
3	2.76	2.65	2.82	6.71	2.73	4.36	4.46	4.97	2.33	2.61	2.59	2.50	
4	2.73	2.67	2.84	6.94	2.81	4.10	4.32	4.54	2.73	2.60	2.59	2.49	
5	2.72	2.65	2.79	7.85	3.21	3.95	5.13	3.89	2.74	2.59	2.60	2.49	
6	2.68	2.66	2.74	7.63	3.13	3.74	4.05	3.81	2.73	2.58	2.58	2.49	
7	2.67	2.71	2.72	6.45	3.15	3.57	3.75	4.40	2.72	2.58	2.57	2.49	
8	2.65	2.74	2.74	5.86	4.27	3.48	3.52	5.45	2.71	2.57	2.56	2.48	
9	2.63	2.74	2.71	5.50	3.46	3.41	3.28	5.47	2.69	2.57	2.55	2.57	
10	2.62	2.74	2.93	5.02	3.37	3.23	3.14	4.96	2.68	2.57	2.54	2.60	
11	2.61	2.92	2.85	4.40	3.74	3.13	3.10	4.17	2.67	2.57	2.53	2.50	
12	2.60	3.03	4.56	4.08	4.20	3.09	3.12	3.77	2.66	2.57	2.52	2.49	
13	2.59	2.75	4.40	3.78	4.21	3.02	3.41	3.53	2.65	2.57	2.50	2.47	
14	2.58	2.83	3.03	3.52	4.64	3.00	3.14	3.37	2.64	2.57	2.49	2.45	
15	2.57	4.00	2.94	3.71	3.96	2.97	3.09	3.25	2.89	2.57	2.50	2.43	
16	2.56	4.84	2.90	3.93	3.68	2.95	3.21	3.16	2.70	2.57	2.50	2.41	
17	2.55	6.12	3.37	4.00	3.95	2.93	3.23	3.04	2.87	2.57	2.50	2.40	
18	2.55	4.98	3.11	3.69	5.46	2.88	3.34	2.95	3.19	2.57	2.52	2.39	
19	2.55	4.23	3.11	3.47	5.25	2.82	3.86	2.92	2.93	2.57	2.52	2.40	
20	2.54	4.09	3.85	3.30	4.12	2.83	4.79	2.88	2.88	2.57	2.52	2.41	
21	2.53	3.96	3.39	3.22	4.97	2.81	6.68	2.87	2.83	2.58	2.52	2.40	
22	2.53	5.01	3.52	3.15	5.12	2.85	5.27	2.86	2.78	2.58	2.52	2.40	
23	2.52	4.96	6.10	3.07	6.35	2.82	4.41	2.86	2.75	2.58	2.52	2.40	
24	2.52	5.65	8.15	3.00	5.54	2.77	4.41	2.84	2.72	2.58	2.51	2.46	
25	2.52	4.49	7.77	2.97	5.02	2.80	4.66	2.83	2.71	2.58	2.51	2.56	
26	2.54	3.86	8.26	2.95	4.23	2.85	4.04	2.82	2.70	2.58	2.51	2.64	
27	2.55	3.90	8.85	2.90	5.01	3.25	3.99	2.80	2.69	2.58	2.50	2.61	
28	2.57	3.53	7.95	2.86	4.48	4.53	4.61	2.78	2.68	2.57	2.50	2.53	
29	2.55	3.48	6.77	2.82	5.05	3.70	3.88	2.77	2.67	2.57		2.49	
30	2.54	3.33	5.45	2.78	6.69	3.22	5.24	2.76	2.67	2.61		2.46	
31		3.23		2.76	5.48		7.81		2.66	2.58		2.44	
Mean	2.60	3.62	4.28	4.25	4.28	3.38	4.10	3.63	2.73	2.58	2.53	2.48	
Max	2.82	6.12	8.85	7.85	6.69	5.20	7.81	5.51	3.19	2.64	2.60	2.64	8.85
Min	2.52	2.65	2.71	2.76	2.73	2.77	3.02	2.76	2.33	2.57	2.49	2.39	2.33

Annual Max Momentary Gage Height 9.15 M (MSL), at 6.00 Hours, on Jun 27, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed 1.99 M (MSL)
Left Bank Elevation 10.38 M (MSL)
Right Bank Elevation 10.38 M (MSL), Drainage Area 305 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.25	6.00	8.88	36.25	6.12	41.50	10.62	46.93	6.25	5.00	4.50	3.25	
2	6.87	5.13	8.00	28.80	6.37	40.10	9.75	30.30	6.25	4.88	4.37	3.25	
3	6.50	5.13	7.25	69.20	6.12	27.90	29.40	37.47	1.30	4.62	4.37	3.25	
4	6.12	5.38	7.50	74.15	7.12	24.00	27.30	30.60	6.12	4.50	4.37	3.12	
5	6.00	5.13	6.87	97.37	12.13	21.75	40.28	20.85	6.25	4.37	4.50	3.12	
6	5.50	5.25	6.25	91.33	11.13	18.75	23.25	19.65	6.12	4.25	4.25	3.12	
7	5.38	5.87	6.00	64.00	11.38	16.62	18.87	28.50	6.00	4.25	4.12	3.12	
8	5.13	6.25	6.25	53.05	26.55	15.50	16.00	45.87	5.87	4.12	4.00	3.00	
9	4.88	6.25	5.87	46.75	15.25	14.63	13.00	46.22	5.63	4.12	3.87	4.12	
10	4.75	6.25	8.63	38.35	14.12	12.38	11.25	37.30	5.50	4.12	3.75	4.50	
11	4.62	8.50	7.62	28.50	18.75	11.13	10.75	25.05	5.38	4.12	3.62	3.25	
12	4.50	9.87	30.90	23.70	25.50	10.62	11.00	19.12	5.25	4.12	3.50	3.12	
13	4.37	6.37	28.50	19.25	25.65	9.75	14.63	16.12	5.13	4.12	3.25	2.87	
14	4.25	7.37	9.87	16.00	32.10	9.50	11.25	14.12	5.00	4.12	3.12	2.62	
15	4.12	22.50	8.75	18.37	21.90	9.13	10.62	12.63	8.13	4.12	3.25	2.37	
16	4.00	35.20	8.25	21.45	18.00	8.88	12.13	11.50	5.75	4.12	3.25	2.13	
17	3.87	57.60	14.12	22.50	21.75	8.63	12.38	10.00	7.87	4.12	3.25	2.00	
18	3.87	37.65	10.87	18.12	46.05	8.00	13.75	8.88	11.88	4.12	3.50	1.90	
19	3.87	25.95	10.87	15.38	42.38	7.25	20.40	8.50	8.63	4.12	3.50	2.00	
20	3.75	23.85	20.25	13.25	24.30	7.37	34.35	8.00	8.00	4.12	3.50	2.13	
21	3.62	21.90	14.38	12.25	37.47	7.12	68.60	7.87	7.37	4.25	3.50	2.00	
22	3.62	38.18	16.00	11.38	40.10	7.62	42.72	7.75	6.75	4.25	3.50	2.00	
23	3.50	37.30	57.25	10.37	62.00	7.25	28.65	7.75	6.37	4.25	3.50	2.00	
24	3.50	49.38	106.37	9.50	47.45	6.62	28.65	7.50	6.00	4.25	3.37	2.75	
25	3.50	29.85	95.18	9.13	38.35	7.00	32.40	7.37	5.87	4.25	3.37	4.00	
26	3.75	20.40	109.95	8.88	25.95	7.62	23.10	7.25	5.75	4.25	3.37	5.00	
27	3.87	21.00	131.00	8.25	38.18	12.63	22.35	7.00	5.63	4.25	3.25	4.62	
28	4.12	16.12	100.12	7.75	29.70	30.45	31.65	6.75	5.50	4.12	3.25	3.62	
29	3.87	15.50	70.40	7.25	38.88	18.25	20.70	6.62	5.38	4.12		3.12	
30	3.75	13.62	45.87	6.75	68.80	12.25	42.20	6.50	5.38	4.62		2.75	
31		12.38		6.50	46.40		96.27		5.25	4.25		2.50	
Total	136.70	567.13	968.02	893.78	865.95	440.20	788.27	549.97	191.56	132.29	102.95	92.60	5729.42 CMSDAY
Mean	4.56	18.29	32.27	28.83	27.93	14.67	25.43	18.33	6.18	4.27	3.68	2.99	15.70 CMS
Max	7.25	57.60	131.00	97.37	68.80	41.50	96.27	46.93	11.88	5.00	4.50	5.00	131.00 CMS
Min	3.50	5.13	5.87	6.50	6.12	6.62	9.75	6.50	1.30	4.12	3.12	1.90	1.30 CMS
Runoff	11.811	49.000	83.637	77.223	74.818	38.033	68.107	47.517	16.551	11.430	8.895	8.001	495.022 MCM

Momentary Peak 143.75 CMS, at 9.15 M (MSL), at 6.00 Hours, on Jun 27, 2001

Runoff Yield 51.47 Liters/Second/Square KM, Momentary Peak Yield 471.311 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 105 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +17.343 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 63.60 meters from fourth staff gage.

Elevation +24.176 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1967 to date.

Rating Operation

Period of Rating 1967 - 1971, 1989 to date.

Rated by Float -

Rated by Current Meter 1967 - 1971, 1989 to date.

Stability of Channel Regimes Fairly stable.

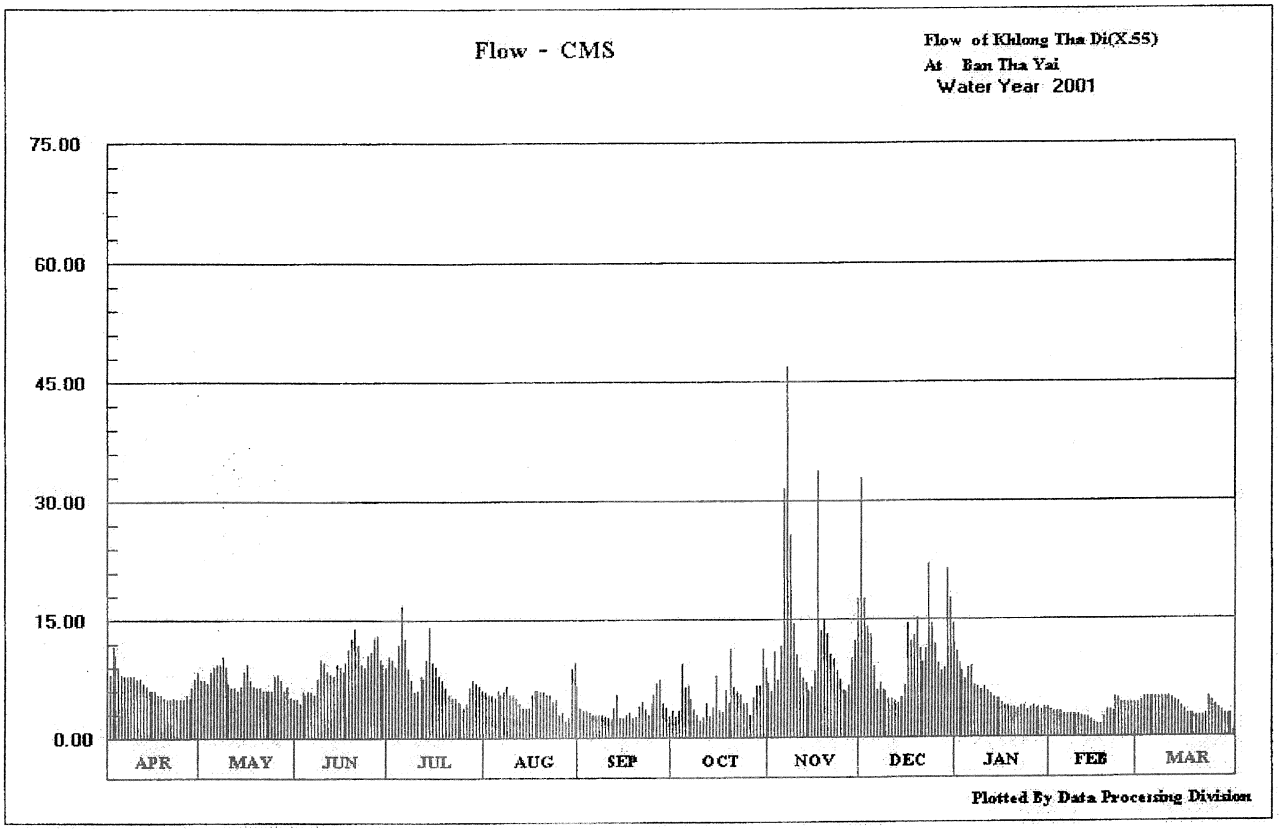
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.53	18.50	18.42	18.60	18.45	18.38	18.36	18.49	19.17	18.62	18.36	18.40	
2	18.64	18.50	18.40	18.59	18.44	18.36	18.33	18.45	18.82	18.57	18.35	18.41	
3	18.61	18.49	18.45	18.56	18.44	18.36	18.36	18.62	18.72	18.54	18.35	18.43	
4	18.56	18.54	18.44	18.65	18.43	18.35	18.57	18.50	18.69	18.50	18.35	18.43	
5	18.53	18.56	18.45	18.80	18.46	18.34	18.47	18.64	18.56	18.55	18.34	18.43	
6	18.52	18.57	18.45	18.67	18.44	18.34	18.48	19.14	18.46	18.56	18.34	18.43	
7	18.52	18.57	18.44	18.55	18.45	18.34	18.42	19.46	18.49	18.48	18.34	18.43	
8	18.52	18.60	18.51	18.50	18.48	18.34	18.37	19.01	18.46	18.47	18.34	18.43	
9	18.52	18.56	18.59	18.45	18.44	18.33	18.34	18.73	18.45	18.46	18.34	18.43	
10	18.51	18.49	18.58	18.46	18.44	18.32	18.30	18.61	18.42	18.47	18.34	18.43	
11	18.51	18.47	18.54	18.52	18.43	18.31	18.32	18.55	18.42	18.45	18.33	18.43	
12	18.49	18.47	18.53	18.51	18.40	18.38	18.40	18.51	18.41	18.44	18.32	18.42	
13	18.48	18.46	18.52	18.59	18.38	18.44	18.33	18.49	18.40	18.43	18.32	18.41	
14	18.46	18.48	18.57	18.72	18.38	18.32	18.38	18.46	18.43	18.42	18.30	18.40	
15	18.46	18.54	18.56	18.58	18.38	18.32	18.52	18.47	18.48	18.42	18.29	18.38	
16	18.46	18.57	18.54	18.56	18.44	18.34	18.36	18.54	18.73	18.40	18.28	18.36	
17	18.44	18.50	18.58	18.52	18.46	18.35	18.35	19.19	18.66	18.39	18.28	18.34	
18	18.44	18.48	18.63	18.50	18.46	18.32	18.46	18.70	18.68	18.39	18.32	18.34	
19	18.43	18.47	18.67	18.47	18.45	18.33	18.40	18.74	18.75	18.38	18.36	18.34	
20	18.42	18.47	18.71	18.44	18.45	18.39	18.63	18.69	18.63	18.38	18.36	18.33	
21	18.42	18.46	18.65	18.43	18.44	18.41	18.47	18.61	18.58	18.37	18.35	18.33	
22	18.43	18.46	18.57	18.43	18.44	18.37	18.45	18.59	18.63	18.39	18.43	18.33	
23	18.42	18.46	18.56	18.41	18.41	18.34	18.44	18.54	18.92	18.39	18.42	18.34	
24	18.42	18.46	18.61	18.40	18.42	18.40	18.40	18.50	18.73	18.36	18.40	18.43	
25	18.42	18.52	18.62	18.38	18.34	18.44	18.40	18.46	18.65	18.38	18.40	18.41	
26	18.44	18.53	18.67	18.40	18.35	18.49	18.34	18.45	18.57	18.39	18.40	18.39	
27	18.43	18.50	18.68	18.47	18.30	18.50	18.43	18.48	18.54	18.37	18.40	18.37	
28	18.47	18.46	18.59	18.50	18.32	18.40	18.48	18.59	18.55	18.38	18.40	18.35	
29	18.51	18.48	18.57	18.49	18.55	18.38	18.48	18.66	18.91	18.36		18.34	
30	18.54	18.43	18.56	18.48	18.58	18.33	18.63	18.82	18.82	18.38		18.34	
31		18.42		18.46	18.48		18.55		18.73	18.38		18.34	
Mean	18.48	18.50	18.56	18.52	18.43	18.37	18.43	18.66	18.63	18.43	18.35	18.39	
Max	18.64	18.60	18.71	18.80	18.58	18.50	18.63	19.46	19.17	18.62	18.43	18.43	19.46
Min	18.42	18.42	18.40	18.38	18.30	18.31	18.30	18.45	18.40	18.36	18.28	18.33	18.28

Annual Max Momentary Gage Height 20.07 M (MSL), at 18.00 Hours, on Nov 6, 2001
Zero Gage at Bottom Elevation 17.34 M (MSL), River Bed 17.28 M (MSL)
Left Bank Elevation 23.82 M (MSL)
Right Bank Elevation 23.85 M (MSL), Drainage Area 105 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.40	7.50	5.10	10.50	6.00	4.05	3.60	7.20	33.15	11.15	3.60	4.50	
2	11.80	7.50	4.50	10.20	5.70	3.60	2.92	6.00	17.85	9.60	3.38	4.80	
3	10.83	7.20	6.00	9.30	5.70	3.60	3.60	11.15	14.40	8.70	3.38	5.40	
4	9.30	8.70	5.70	12.12	5.40	3.38	9.60	7.50	13.43	7.50	3.38	5.40	
5	8.40	9.30	6.00	17.00	6.30	3.15	6.60	11.80	9.30	9.00	3.15	5.40	
6	8.10	9.60	6.00	12.78	5.70	3.15	6.90	31.80	6.30	9.30	3.15	5.40	
7	8.10	9.60	5.70	9.00	6.00	3.15	5.10	47.15	7.20	6.90	3.15	5.40	
8	8.10	10.50	7.80	7.50	6.90	3.15	3.83	25.95	6.30	6.60	3.15	5.40	
9	8.10	9.30	10.20	6.00	5.70	2.92	3.15	14.72	6.00	6.30	3.15	5.40	
10	7.80	7.20	9.90	6.30	5.70	2.70	2.25	10.83	5.10	6.60	3.15	5.40	
11	7.80	6.60	8.70	8.10	5.40	2.47	2.70	9.00	5.10	6.00	2.92	5.40	
12	7.20	6.60	8.40	7.80	4.50	4.05	4.50	7.80	4.80	5.70	2.70	5.10	
13	6.90	6.30	8.10	10.20	4.05	5.70	2.92	7.20	4.50	5.40	2.70	4.80	
14	6.30	6.90	9.60	14.40	4.05	2.70	4.05	6.30	5.40	5.10	2.25	4.50	
15	6.30	8.70	9.30	9.90	4.05	2.70	8.10	6.60	6.90	5.10	2.03	4.05	
16	6.30	9.60	8.70	9.30	5.70	3.15	3.60	8.70	14.72	4.50	1.80	3.60	
17	5.70	7.50	9.90	8.10	6.30	3.38	3.38	34.05	12.45	4.27	1.80	3.15	
18	5.70	6.90	11.47	7.50	6.30	2.70	6.30	13.75	13.10	4.27	2.70	3.15	
19	5.40	6.60	12.78	6.60	6.00	2.92	4.50	15.05	15.38	4.05	3.60	3.15	
20	5.10	6.60	14.07	5.70	6.00	4.27	11.47	13.43	11.47	4.05	3.60	2.92	
21	5.10	6.30	12.12	5.40	5.70	4.80	6.60	10.83	9.90	3.83	3.38	2.92	
22	5.40	6.30	9.60	5.40	5.70	3.83	6.00	10.20	11.47	4.27	5.40	2.92	
23	5.10	6.30	9.30	4.80	4.80	3.15	5.70	8.70	22.10	4.27	5.10	3.15	
24	5.10	6.30	10.83	4.50	5.10	4.50	4.50	7.50	14.72	3.60	4.50	5.40	
25	5.10	8.10	11.15	4.05	3.15	5.70	4.50	6.30	12.12	4.05	4.50	4.80	
26	5.70	8.40	12.78	4.50	3.38	7.20	3.15	6.00	9.60	4.27	4.50	4.27	
27	5.40	7.50	13.10	6.60	2.25	7.50	5.40	6.90	8.70	3.83	4.50	3.83	
28	6.60	6.30	10.20	7.50	2.70	4.50	6.90	10.20	9.00	4.05	4.50	3.38	
29	7.80	6.90	9.60	7.20	9.00	4.05	6.90	12.45	21.68	3.60		3.15	
30	8.70	5.40	9.30	6.90	9.90	2.92	11.47	17.85	17.85	4.05		3.15	
31		5.10		6.30	6.90		9.00		14.72	4.05		3.15	
Total	211.63	231.60	275.90	251.45	170.03	115.04	169.19	392.91	364.71	173.96	95.12	132.44	2583.98 CMSDAY
Mean	7.05	7.47	9.20	8.11	5.48	3.83	5.46	13.10	11.76	5.61	3.40	4.27	7.08 CMS
Max	11.80	10.50	14.07	17.00	9.90	7.50	11.47	47.15	33.15	11.15	5.40	5.40	47.15 CMS
Min	5.10	5.10	4.50	4.05	2.25	2.47	2.25	6.00	4.50	3.60	1.80	2.92	1.80 CMS
Runoff	18.285	20.010	23.838	21.725	14.691	9.939	14.618	33.947	31.511	15.030	8.218	11.443	223.256 MCM

Momentary Peak 80.02 CMS, at 20.07 M (MSL), at 18.00 Hours, on Nov 6, 2001

Runoff Yield 67.42 Liters/Second/Square KM, Momentary Peak Yield 762.095 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 957 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +0.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 6 meters from the top staff gage.

Elevation +19.207 m. (M.S.L.)

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 1974 - 1975, 1982 to date.

Rated by Float -

Rated by Current Meter 1974 - 1975, 1982 to date.

Stability of Channel Regimes Stable because of backwater effect.

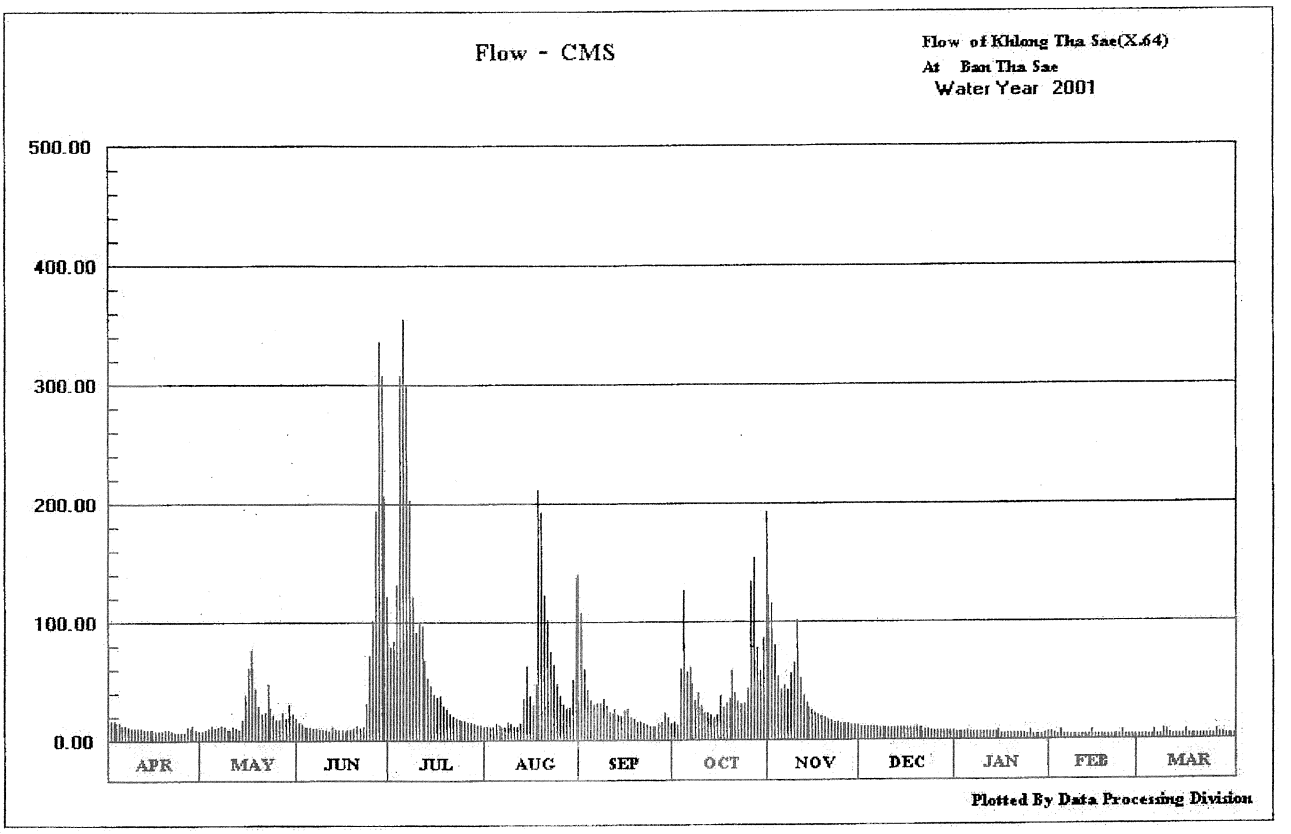
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.07	8.58	8.98	11.36	8.79	12.08	8.97	12.46	8.80	8.50	8.49	8.17	
2	9.03	8.62	8.90	11.47	8.78	10.77	8.87	12.28	8.79	8.49	8.37	8.16	
3	8.98	8.72	8.79	12.63	8.82	10.17	10.79	11.40	8.79	8.49	8.32	8.16	
4	8.96	8.88	8.81	15.49	8.93	9.82	12.54	10.60	8.79	8.48	8.30	8.16	
5	8.88	8.71	8.78	15.95	8.87	9.67	10.71	10.16	8.80	8.47	8.28	8.16	
6	8.86	8.81	8.72	15.40	8.82	9.73	10.85	10.34	8.76	8.47	8.27	8.15	
7	8.79	8.88	8.68	14.10	8.82	9.70	10.36	10.15	8.74	8.46	8.26	8.15	
8	8.75	8.82	8.63	12.41	9.01	9.88	9.83	10.67	8.71	8.45	8.25	8.26	
9	8.73	8.60	8.61	11.67	8.90	9.63	10.08	10.94	8.70	8.45	8.24	8.66	
10	8.71	8.60	8.59	11.89	8.81	9.41	9.62	11.91	8.68	8.44	8.23	8.58	
11	8.68	8.79	8.58	11.79	8.80	9.34	9.38	10.53	8.67	8.43	8.22	8.39	
12	8.65	8.73	8.81	11.03	8.93	9.51	9.36	9.97	8.69	8.43	8.22	8.30	
13	8.63	8.64	8.63	10.53	9.88	9.27	9.31	9.70	8.68	8.43	8.21	8.26	
14	8.61	9.11	8.59	10.31	10.89	9.23	9.18	9.58	8.68	8.42	8.21	8.22	
15	8.59	10.01	8.59	10.04	9.97	9.48	9.31	9.49	8.70	8.42	8.20	8.21	
16	8.58	10.82	8.55	9.92	9.68	9.53	9.95	9.38	8.69	8.41	8.19	8.18	
17	8.58	11.30	8.59	9.98	10.37	9.19	9.55	9.28	8.68	8.40	8.19	8.18	
18	8.58	10.22	8.66	9.63	14.25	9.08	9.72	9.24	8.71	8.39	8.19	8.17	
19	8.64	9.62	8.70	9.50	13.92	9.00	9.86	9.16	8.76	8.38	8.19	8.16	
20	8.60	9.35	8.88	9.33	12.46	8.98	10.76	9.10	8.72	8.37	8.19	8.16	
21	8.56	9.40	8.72	9.22	11.91	8.94	10.07	9.07	8.67	8.36	8.19	8.15	
22	8.50	10.37	8.76	9.16	11.25	8.88	9.75	9.01	8.62	8.35	8.18	8.15	
23	8.49	9.56	9.73	9.09	10.90	8.82	9.69	8.97	8.60	8.34	8.18	8.14	
24	8.49	9.31	11.14	9.07	10.39	8.80	9.70	8.95	8.58	8.32	8.18	8.14	
25	8.48	9.11	11.91	9.03	9.96	8.82	10.21	8.93	8.56	8.31	8.18	8.13	
26	8.80	9.12	13.96	9.00	9.66	8.90	12.69	8.90	8.55	8.30	8.18	8.26	
27	8.71	9.44	15.78	8.98	9.54	8.99	13.13	8.89	8.55	8.29	8.17	8.39	
28	8.84	9.20	15.49	8.93	9.57	9.37	11.31	8.87	8.54	8.28	8.17	8.36	
29	8.59	9.67	14.17	8.87	10.51	9.17	10.74	8.85	8.52	8.29		8.26	
30	8.57	9.33	12.41	8.83	12.79	8.92	11.56	8.83	8.51	8.34		8.19	
31		9.15		8.82	12.83		13.92		8.51	8.42		8.16	
Mean	8.70	9.27	9.87	10.76	10.23	9.44	10.38	9.85	8.67	8.40	8.23	8.23	
Max	9.07	11.30	15.78	15.95	14.25	12.08	13.92	12.46	8.80	8.50	8.49	8.66	15.95
Min	8.48	8.58	8.55	8.82	8.78	8.80	8.87	8.83	8.51	8.28	8.17	8.13	8.13

Annual Max Momentary Gage Height 16.02 M (MSL), at 6.00 Hours, on Jul 5, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed 7.27 M (MSL)
Left Bank Elevation 19.27 M (MSL)
Right Bank Elevation 18.89 M (MSL), Drainage Area 957 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.40	9.70	16.60	80.60	12.85	109.20	16.40	124.70	13.00	8.50	8.35	3.70	
2	17.60	10.30	15.00	84.80	12.70	61.10	14.40	117.20	12.85	8.35	6.55	3.60	
3	16.60	11.80	12.85	132.35	13.40	44.25	61.70	82.00	12.85	8.35	5.80	3.60	
4	16.20	14.60	13.20	309.00	15.60	35.50	128.30	56.00	12.85	8.20	5.50	3.60	
5	14.60	11.65	12.70	356.50	14.40	31.75	59.30	44.00	13.00	8.05	5.20	3.60	
6	14.20	13.20	11.80	300.00	13.40	33.25	63.50	48.50	12.40	8.05	5.05	3.50	
7	12.85	14.60	11.20	204.00	13.40	32.50	49.00	43.75	12.10	7.90	4.90	3.50	
8	12.25	13.40	10.45	122.45	17.20	37.00	35.75	58.10	11.65	7.75	4.75	4.90	
9	11.95	10.00	10.15	92.80	15.00	30.75	42.00	66.20	11.50	7.75	4.60	10.90	
10	11.65	10.00	9.85	101.60	13.20	25.25	30.50	102.40	11.20	7.60	4.45	9.70	
11	11.20	12.85	9.70	97.60	13.00	23.80	24.60	53.90	11.05	7.45	4.30	6.85	
12	10.75	11.95	13.20	69.05	15.60	27.75	24.20	39.25	11.35	7.45	4.30	5.50	
13	10.45	10.60	10.45	53.90	37.00	22.40	23.20	32.50	11.20	7.45	4.15	4.90	
14	10.15	19.20	9.85	47.75	64.70	21.60	20.60	29.50	11.20	7.30	4.15	4.30	
15	9.85	40.25	9.85	41.00	39.25	27.00	23.20	27.25	11.50	7.30	4.00	4.15	
16	9.70	62.60	9.25	38.00	32.00	28.25	38.75	24.60	11.35	7.15	3.90	3.80	
17	9.70	78.50	9.85	39.50	49.25	20.80	28.75	22.60	11.20	7.00	3.90	3.80	
18	9.70	45.50	10.90	30.75	213.25	18.60	33.00	21.80	11.65	6.85	3.90	3.70	
19	10.60	30.50	11.50	27.50	194.00	17.00	36.50	20.20	12.40	6.70	3.90	3.60	
20	10.00	24.00	14.60	23.60	124.70	16.60	60.80	19.00	11.80	6.55	3.90	3.60	
21	9.40	25.00	11.80	21.40	102.40	15.80	41.75	18.40	11.05	6.40	3.90	3.50	
22	8.50	49.25	12.40	20.20	76.75	14.60	33.75	17.20	10.30	6.25	3.80	3.50	
23	8.35	29.00	33.25	18.80	65.00	13.40	32.25	16.40	10.00	6.10	3.80	3.40	
24	8.35	23.20	72.90	18.40	49.75	13.00	32.50	16.00	9.70	5.80	3.80	3.40	
25	8.20	19.20	102.40	17.60	39.00	13.40	45.25	15.60	9.40	5.65	3.80	3.30	
26	13.00	19.40	196.00	17.00	31.50	15.00	135.05	15.00	9.25	5.50	3.80	4.90	
27	11.65	26.00	338.00	16.60	28.50	16.80	154.85	14.80	9.25	5.35	3.70	6.85	
28	13.80	21.00	309.00	15.60	29.25	24.40	78.85	14.40	9.10	5.20	3.70	6.40	
29	9.85	31.75	208.20	14.40	53.30	20.40	60.20	14.00	8.80	5.35		4.90	
30	9.55	23.60	122.45	13.60	139.55	15.40	88.40	13.60	8.65	6.10		3.90	
31		20.00		13.40	141.35		194.00		8.65	7.30		3.60	
Total	349.05	742.60	1639.35	2439.75	1680.25	826.55	1711.30	1188.85	342.25	216.70	125.85	142.45	11404.95 CMSDAY
Mean	11.63	23.95	54.65	78.70	54.20	27.55	55.20	39.63	11.04	6.99	4.49	4.60	31.25 CMS
Max	18.40	78.50	338.00	356.50	213.25	109.20	194.00	124.70	13.00	8.50	8.35	10.90	356.50 CMS
Min	8.20	9.70	9.25	13.40	12.70	13.00	14.40	13.60	8.65	5.20	3.70	3.30	3.30 CMS
Runoff	30.158	64.161	141.640	210.794	145.174	71.414	147.856	102.717	29.570	18.723	10.873	12.308	985.388 MCM

Momentary Peak 364.60 CMS, at 16.02 M (MSL), at 6.00 Hours, on Jul 5, 2001

Runoff Yield 32.65 Liters/Second/Square KM, Momentary Peak Yield 380.982 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Rattaphum at Ban Kamphaeng Phet, Songkhla (X.67)

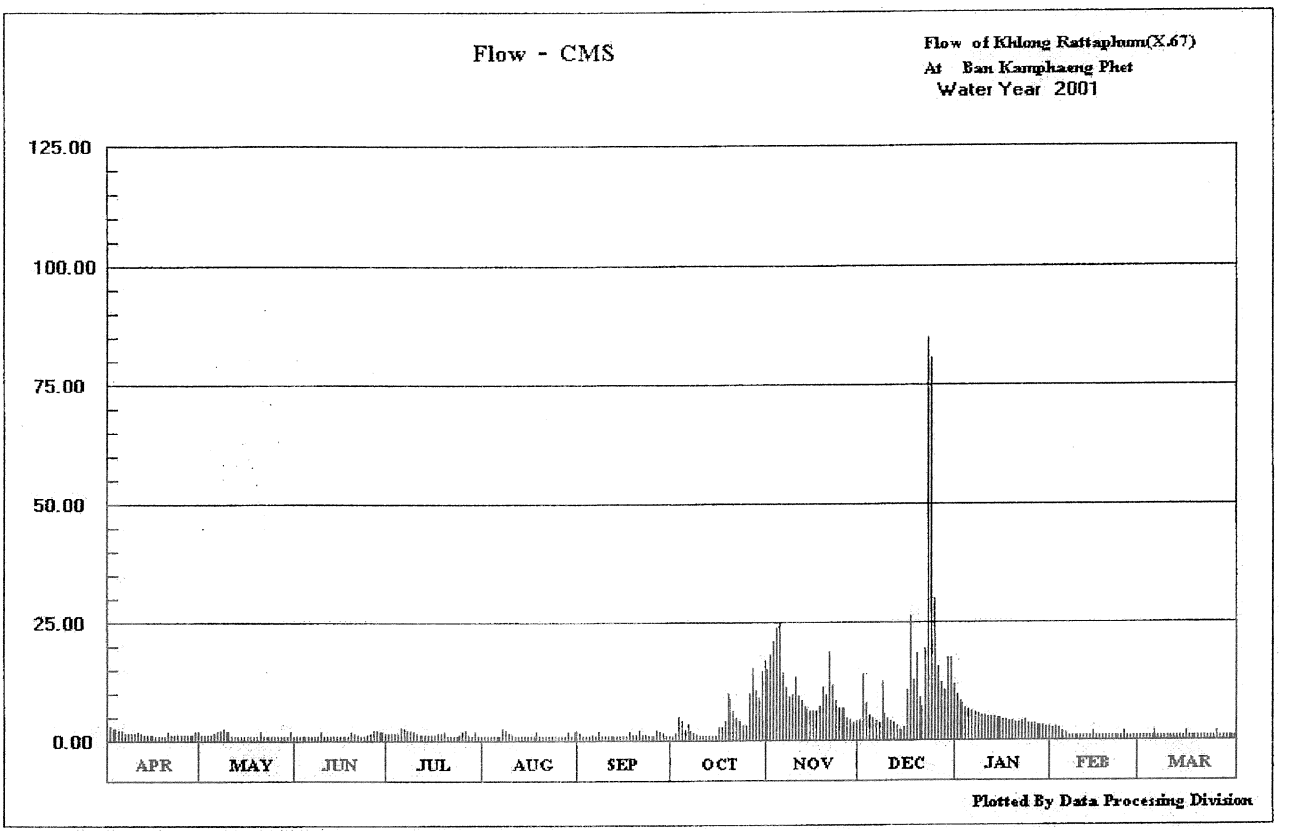
Lat 07 - 08 - 35 N. **Long** 100 - 17 - 20 E.

Location		on rigth bank about 3 meters upstream from the bridge of Phatthalung-Songkhla Highway.			
	Ban	Kamphaeng Phet	Amphoe	Rattaphum	**Changwat** Songkhla
Drainage Area		272 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+16.000 m. (M.S.L.)			
Bench Mark		B.M.- H. D.			
	Location BM	On left bank under the santal tree.			
	Elevation	+20.413 m. (M.S.L.)			
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.			
Period of Available Gage Records		1967 to date.			
Rating Operation					
	Period of Rating	1967 - 1970, 1972, 1983 to date.			
	Rated by Float	-			
	Rated by Current Meter	1967 - 1970, 1972, 1983 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records fair. Flow regulated by Rattaphum weir.			
		Stage-discharge relation defined by 23 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.14	17.75	17.29	17.87	17.59	17.83	17.47	19.17	18.32	18.88	18.06	17.60	
2	18.04	17.75	17.31	17.88	17.52	17.70	17.88	19.32	19.12	18.78	18.07	17.58	
3	18.02	17.75	17.55	17.84	17.41	17.63	18.41	19.44	18.72	18.71	18.03	17.57	
4	17.97	17.79	17.62	17.83	17.36	17.63	18.29	19.54	18.43	18.63	17.93	17.57	
5	17.95	17.87	17.68	18.09	17.33	17.78	17.97	19.59	18.35	18.59	17.82	17.56	
6	17.88	17.92	17.57	18.05	17.55	17.65	18.18	19.14	18.29	18.55	17.62	17.55	
7	17.88	17.99	17.55	17.98	18.05	17.62	17.94	18.97	18.21	18.53	17.56	17.54	
8	17.88	18.04	17.49	17.95	17.97	17.56	17.81	18.85	19.04	18.49	17.65	17.60	
9	17.88	17.90	17.49	17.89	17.82	17.56	17.73	18.88	18.48	18.45	17.66	17.60	
10	17.86	17.83	17.45	17.83	17.75	17.54	17.48	19.10	18.36	18.43	17.64	17.58	
11	17.82	17.67	17.39	17.76	17.71	17.41	17.35	18.85	18.27	18.42	17.66	17.51	
12	17.77	17.59	17.35	17.77	17.71	17.47	17.36	18.76	18.21	18.41	17.62	17.59	
13	17.74	17.58	17.35	17.74	17.65	17.51	17.40	18.66	18.12	18.39	17.60	17.56	
14	17.73	17.56	17.31	17.74	17.63	17.57	17.39	18.59	17.99	18.35	17.58	17.52	
15	17.73	17.54	17.29	17.73	17.58	17.71	17.35	18.55	18.08	18.34	17.56	17.51	
16	17.72	17.45	17.23	17.75	17.55	17.66	18.08	18.54	18.93	18.32	17.59	17.56	
17	17.72	17.55	17.22	17.84	17.49	17.72	18.10	18.54	19.63	18.30	17.62	17.55	
18	17.72	17.52	17.21	17.83	17.44	17.74	18.29	18.65	19.06	18.27	17.61	17.55	
19	17.72	17.24	17.64	17.70	17.40	17.78	18.90	18.97	19.33	18.25	17.59	17.54	
20	17.73	17.23	17.83	17.64	17.34	17.97	18.79	18.88	18.81	18.23	17.58	17.54	
21	17.73	17.24	17.75	17.60	17.31	17.75	18.56	19.35	18.67	18.23	17.58	17.57	
22	17.74	17.34	17.69	17.61	17.36	17.78	18.35	18.99	19.38	18.25	17.56	17.60	
23	17.75	17.47	17.67	17.66	17.52	17.62	18.28	18.77	21.07	18.33	17.56	17.62	
24	17.76	17.59	17.76	17.77	17.59	17.53	18.15	18.62	20.99	18.20	17.57	17.64	
25	17.77	17.65	17.85	17.92	17.50	17.37	18.13	18.62	19.76	18.16	17.61	17.69	
26	17.78	17.67	18.00	17.97	17.41	18.01	18.90	18.63	19.20	18.17	17.51	17.66	
27	17.77	17.69	17.98	17.79	17.46	17.81	19.18	18.38	19.03	18.15	17.56	17.65	
28	17.80	17.43	17.93	17.68	17.50	17.82	18.93	18.31	18.94	18.13	17.59	17.61	
29	17.90	17.34	17.87	17.64	17.69	17.66	18.83	18.24	19.29	18.13		17.60	
30	17.74	17.30	17.83	17.65	17.91	17.53	19.16	18.26	19.29	18.10		17.55	
31		17.30		17.68	17.98		19.27		19.01	18.07		17.53	
Mean	17.82	17.60	17.57	17.80	17.58	17.66	18.19	18.84	18.92	18.36	17.66	17.58	
Max	18.14	18.04	18.00	18.09	18.05	18.01	19.27	19.59	21.07	18.88	18.07	17.69	21.07
Min	17.72	17.23	17.21	17.60	17.31	17.37	17.35	18.24	17.99	18.07	17.51	17.51	17.21

Annual Max Momentary Gage Height 21.08 M (MSL), at 12.00 Hours, on Dec 23, 2001
Zero Gage at Bottom Elevation 16.00 M (MSL), River Bed 17.05 M (MSL)
Left Bank Elevation 22.67 M (MSL)
Right Bank Elevation 22.68 M (MSL), Drainage Area 272 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.58	1.60	0.28	2.08	0.97	1.92	0.64	15.40	4.84	10.24	3.06	1.00	
2	2.94	1.60	0.32	2.12	0.76	1.40	2.12	18.48	14.40	8.96	3.12	0.94	
3	2.82	1.60	0.85	1.96	0.52	1.12	5.48	21.44	8.24	8.12	2.88	0.91	
4	2.55	1.76	1.08	1.92	0.42	1.12	4.63	24.08	5.64	7.30	2.35	0.91	
5	2.45	2.08	1.32	3.24	0.36	1.72	2.55	25.43	5.05	6.92	1.88	0.88	
6	2.12	2.30	0.91	3.00	0.85	1.20	3.86	14.80	4.63	6.60	1.08	0.85	
7	2.12	2.65	0.85	2.60	3.00	1.08	2.40	11.62	4.07	6.44	0.88	0.82	
8	2.12	2.94	0.68	2.45	2.55	0.88	1.84	9.85	12.86	6.12	1.20	1.00	
9	2.12	2.20	0.68	2.16	1.88	0.88	1.52	10.24	6.04	5.80	1.24	1.00	
10	2.04	1.92	0.60	1.92	1.60	0.82	0.66	14.00	5.12	5.64	1.16	0.94	
11	1.88	1.28	0.48	1.64	1.44	0.52	0.40	9.85	4.49	5.56	1.24	0.73	
12	1.68	0.97	0.40	1.68	1.44	0.64	0.42	8.72	4.07	5.48	1.08	0.97	
13	1.56	0.94	0.40	1.56	1.20	0.73	0.50	7.60	3.44	5.33	1.00	0.88	
14	1.52	0.88	0.32	1.56	1.12	0.91	0.48	6.92	2.65	5.05	0.94	0.76	
15	1.52	0.82	0.28	1.52	0.94	1.44	0.40	6.60	3.18	4.98	0.88	0.73	
16	1.48	0.60	0.16	1.60	0.85	1.24	3.18	6.52	10.98	4.84	0.97	0.88	
17	1.48	0.85	0.14	1.96	0.68	1.48	3.30	6.52	26.54	4.70	1.08	0.85	
18	1.48	0.76	0.12	1.92	0.58	1.56	4.63	7.50	13.24	4.49	1.04	0.85	
19	1.48	0.18	1.16	1.40	0.50	1.72	10.50	11.62	18.72	4.35	0.97	0.82	
20	1.52	0.16	1.92	1.16	0.38	2.55	9.08	10.24	9.33	4.21	0.94	0.82	
21	1.52	0.18	1.60	1.00	0.32	1.60	6.68	19.20	7.70	4.21	0.94	0.91	
22	1.56	0.38	1.36	1.04	0.42	1.72	5.05	11.94	19.92	4.35	0.88	1.00	
23	1.60	0.64	1.28	1.24	0.76	1.08	4.56	8.84	85.35	4.91	0.88	1.08	
24	1.64	0.97	1.64	1.68	0.97	0.79	3.65	7.20	81.00	4.00	0.91	1.16	
25	1.68	1.20	2.00	2.30	0.70	0.44	3.51	7.20	30.30	3.72	1.04	1.36	
26	1.72	1.28	2.70	2.55	0.52	2.76	10.50	7.30	16.00	3.79	0.73	1.24	
27	1.68	1.36	2.60	1.76	0.62	1.84	15.60	5.26	12.67	3.65	0.88	1.20	
28	1.80	0.56	2.35	1.32	0.70	1.88	10.98	4.77	11.14	3.51	0.97	1.04	
29	2.20	0.38	2.08	1.16	1.36	1.24	9.59	4.28	17.80	3.51		1.00	
30	1.56	0.30	1.92	1.20	2.25	0.79	15.20	4.42	17.80	3.30		0.85	
31		0.30		1.32	2.60		17.40		12.29	3.12		0.79	
Total	57.42	35.64	32.48	56.02	33.26	39.07	161.31	327.84	479.50	163.20	36.22	29.17	1451.13 CMSDAY
Mean	1.91	1.15	1.08	1.81	1.07	1.30	5.20	10.93	15.47	5.26	1.29	0.94	3.98 CMS
Max	3.58	2.94	2.70	3.24	3.00	2.76	17.40	25.43	85.35	10.24	3.12	1.36	85.35 CMS
Min	1.48	0.16	0.12	1.00	0.32	0.44	0.40	4.28	2.65	3.12	0.73	0.73	0.12 CMS
Runoff	4.961	3.079	2.806	4.840	2.874	3.376	13.937	28.325	41.429	14.100	3.129	2.520	125.378 MCM

Momentary Peak 85.90 CMS, at 21.08 M (MSL), at 12.00 Hours, on Dec 23, 2001

Runoff Yield 14.62 Liters/Second/Square KM, Momentary Peak Yield 315.809 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Tha Khae at Ban Tha Khae, Phatthalung (X.68)

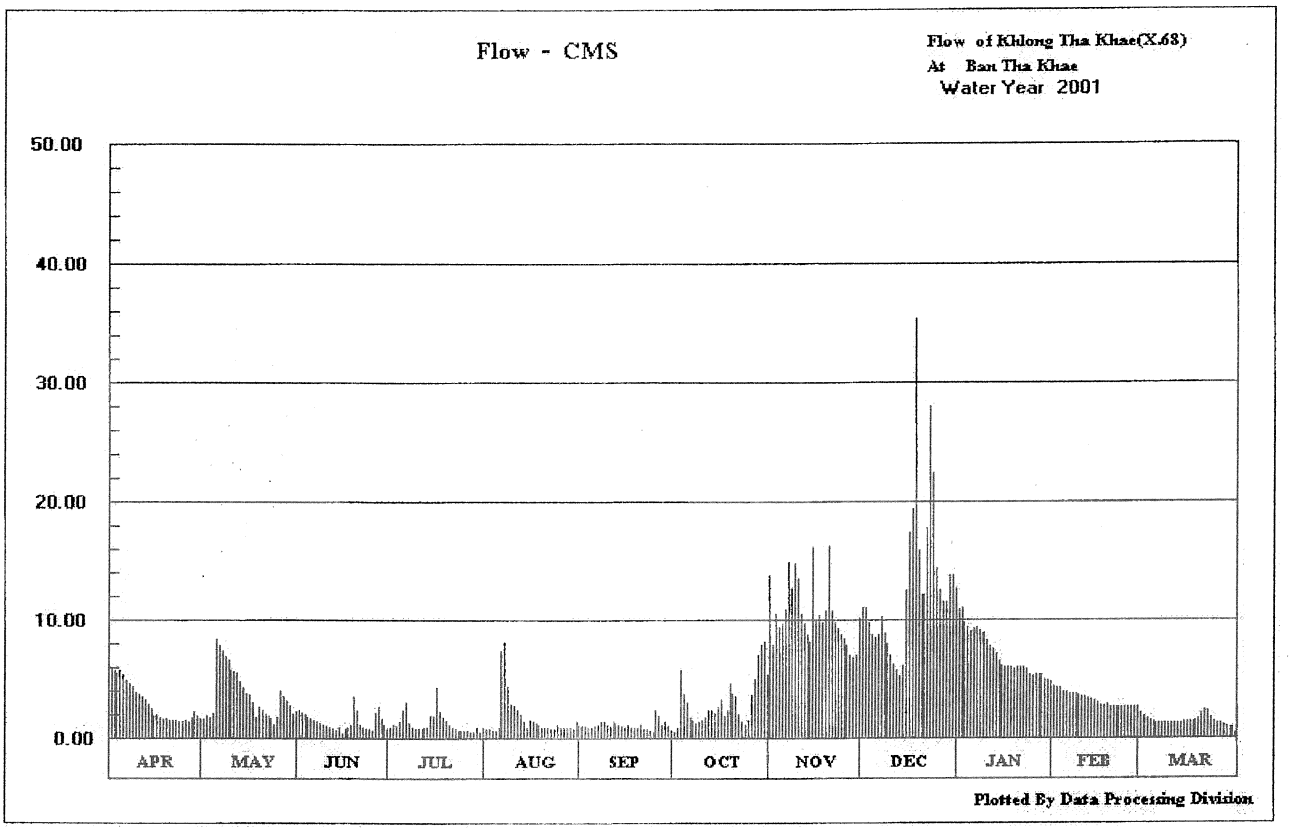
Lat 07 - 34 - 02 N. **Long** 100 - 03 - 04 E.

Location		on left bank downstream side of the bridge of phatthalung - Hat Yai Highway.
	Ban Tha Khae	**Amphoe** Mueang **Changwat** Phatthalung
Drainage Area		302 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+11.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank near the gage observer's house.
	Elevation	+15.966 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		1967 to date.
Rating Operation		
	Period of Rating	1967 - 1972, 1983 to date.
	Rated by Float	-
	Rated by Current Meter	1967 - 1972, 1983 to date.
Stability of Channel Regimes		Fairly stable because of backwater effect.
Overbank Flow Conditions		No overbank flow.
General Description		Records fair. Flow regulated by Tha Khae Weir.
		Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.20	12.70	12.80	12.55	12.53	12.58	12.48	13.86	13.65	13.64	13.05	12.77	
2	13.19	12.74	12.77	12.60	12.52	12.57	12.54	13.39	13.65	13.65	13.04	12.74	
3	13.17	12.72	12.75	12.57	12.50	12.55	13.19	13.61	13.55	13.55	13.03	12.70	
4	13.19	12.77	12.71	12.64	12.50	12.56	12.97	13.52	13.47	13.52	13.00	12.68	
5	13.15	13.43	12.70	12.81	12.54	12.58	12.88	13.54	13.44	13.49	13.00	12.64	
6	13.11	13.39	12.67	12.89	13.34	12.61	12.72	13.64	13.47	13.51	12.98	12.63	
7	13.07	13.34	12.65	12.63	13.41	12.64	12.67	13.94	13.59	13.52	12.97	12.63	
8	13.05	13.30	12.62	12.54	13.05	12.64	12.63	13.78	13.48	13.50	12.97	12.63	
9	13.00	13.27	12.60	12.53	12.87	12.60	12.66	13.93	13.40	13.48	12.96	12.63	
10	12.97	13.19	12.57	12.53	12.85	12.58	12.68	13.84	13.31	13.42	12.95	12.63	
11	12.95	13.18	12.55	12.53	12.81	12.64	12.71	13.61	13.24	13.37	12.94	12.63	
12	12.92	13.17	12.53	12.55	12.76	12.62	12.81	13.54	13.19	13.35	12.93	12.63	
13	12.87	13.09	12.50	12.54	12.65	12.60	12.80	13.46	13.14	13.32	12.92	12.63	
14	12.82	13.04	12.54	12.74	12.54	12.58	12.77	13.41	13.23	13.26	12.90	12.63	
15	12.74	12.97	12.45	12.73	12.68	12.56	12.83	14.02	13.77	13.23	12.88	12.64	
16	12.76	12.96	12.52	13.03	12.65	12.59	12.92	13.56	14.10	13.22	12.85	12.64	
17	12.72	12.88	12.55	12.78	12.63	12.55	12.74	13.60	14.23	13.21	12.85	12.65	
18	12.70	12.71	12.60	12.71	12.60	12.55	12.81	13.55	14.98	13.21	12.86	12.65	
19	12.69	12.83	12.94	12.67	12.56	12.55	13.08	13.63	14.00	13.20	12.83	12.67	
20	12.68	12.80	12.80	12.60	12.55	12.60	12.97	14.03	13.74	13.22	12.83	12.70	
21	12.68	12.75	12.61	12.56	12.55	12.53	12.94	13.63	13.74	13.22	12.83	12.77	
22	12.67	12.73	12.54	12.53	12.53	12.52	12.75	13.55	14.13	13.21	12.83	12.81	
23	12.65	12.70	12.53	12.50	12.52	12.49	12.66	13.51	14.67	13.20	12.83	12.78	
24	12.66	12.60	12.52	12.50	12.59	12.47	12.61	13.47	14.39	13.16	12.83	12.72	
25	12.67	12.71	12.50	12.50	12.56	12.80	12.67	13.43	13.90	13.14	12.83	12.64	
26	12.65	13.01	12.77	12.50	12.55	12.73	12.96	13.38	13.77	13.16	12.83	12.62	
27	12.71	12.95	12.83	12.47	12.55	12.60	13.12	13.31	13.69	13.16	12.83	12.62	
28	12.78	12.90	12.69	12.47	12.54	12.66	13.31	13.28	13.69	13.15	12.83	12.61	
29	12.74	12.85	12.61	12.55	12.53	12.57	13.38	13.31	13.86	13.12		12.58	
30	12.69	12.76	12.53	12.47	12.65	12.50	13.41	13.58	13.86	13.10		12.56	
31		12.79		12.55	12.60		13.16		13.78	13.09		12.56	
Mean	12.86	12.94	12.63	12.61	12.67	12.59	12.87	13.60	13.75	13.31	12.91	12.66	
Max	13.20	13.43	12.94	13.03	13.41	12.80	13.41	14.03	14.98	13.65	13.05	12.81	14.98
Min	12.65	12.60	12.45	12.47	12.50	12.47	12.48	13.28	13.14	13.09	12.83	12.56	12.45

Annual Max Momentary Gage Height 15.26 M (MSL), at 9.00 Hours, on Dec 18, 2001
Zero Gage at Bottom Elevation 11.00 M (MSL), River Bed 11.84 M (MSL)
Left Bank Elevation 18.34 M (MSL)
Right Bank Elevation 18.58 M (MSL), Drainage Area 302 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.00	1.80	2.50	1.05	0.95	1.20	0.72	13.94	11.15	11.02	4.55	2.29	
2	5.90	2.08	2.29	1.30	0.90	1.15	1.00	8.09	11.15	11.15	4.46	2.08	
3	5.70	1.94	2.15	1.15	0.80	1.05	5.90	10.63	9.90	9.90	4.37	1.80	
4	5.90	2.29	1.87	1.50	0.80	1.10	3.86	9.54	8.97	9.54	4.10	1.70	
5	5.50	8.53	1.80	2.58	1.00	1.20	3.14	9.78	8.64	9.19	4.10	1.50	
6	5.10	8.09	1.65	3.22	7.54	1.35	1.94	11.02	8.97	9.42	3.94	1.45	
7	4.73	7.54	1.55	1.45	8.31	1.50	1.65	15.10	10.38	9.54	3.86	1.45	
8	4.55	7.10	1.40	1.00	4.55	1.50	1.45	12.84	9.08	9.30	3.86	1.45	
9	4.10	6.77	1.30	0.95	3.06	1.30	1.60	14.95	8.20	9.08	3.78	1.45	
10	3.86	5.90	1.15	0.95	2.90	1.20	1.70	13.66	7.21	8.42	3.70	1.45	
11	3.70	5.80	1.05	0.95	2.58	1.50	1.87	10.63	6.44	7.87	3.62	1.45	
12	3.46	5.70	0.95	1.05	2.22	1.40	2.58	9.78	5.90	7.65	3.54	1.45	
13	3.06	4.91	0.80	1.00	1.55	1.30	2.50	8.86	5.40	7.32	3.46	1.45	
14	2.66	4.46	1.00	2.08	1.00	1.20	2.29	8.31	6.33	6.66	3.30	1.45	
15	2.08	3.86	0.60	2.01	1.70	1.10	2.74	16.30	12.71	6.33	3.14	1.50	
16	2.22	3.78	0.90	4.37	1.55	1.25	3.46	10.02	17.50	6.22	2.90	1.50	
17	1.94	3.14	1.05	2.36	1.45	1.05	2.08	10.50	19.54	6.11	2.90	1.55	
18	1.80	1.87	1.30	1.87	1.30	1.05	2.58	9.90	35.50	6.11	2.98	1.55	
19	1.75	2.74	3.62	1.65	1.10	1.05	4.82	10.89	16.00	6.00	2.74	1.65	
20	1.70	2.50	2.50	1.30	1.05	1.30	3.86	16.45	12.32	6.22	2.74	1.80	
21	1.70	2.15	1.35	1.10	1.05	0.95	3.62	10.89	12.32	6.22	2.74	2.29	
22	1.65	2.01	1.00	0.95	0.95	0.90	2.15	9.90	17.95	6.11	2.74	2.58	
23	1.55	1.80	0.95	0.80	0.90	0.76	1.60	9.42	28.17	6.00	2.74	2.36	
24	1.60	1.30	0.90	0.80	1.25	0.68	1.35	8.97	22.51	5.60	2.74	1.94	
25	1.65	1.87	0.80	0.80	1.10	2.50	1.65	8.53	14.50	5.40	2.74	1.50	
26	1.55	4.19	2.29	0.80	1.05	2.01	3.78	7.98	12.71	5.60	2.74	1.40	
27	1.87	3.70	2.74	0.68	1.05	1.30	5.20	7.21	11.67	5.60	2.74	1.40	
28	2.36	3.30	1.75	0.68	1.00	1.60	7.21	6.88	11.67	5.50	2.74	1.35	
29	2.08	2.90	1.35	1.05	0.95	1.15	7.98	7.21	13.94	5.20		1.20	
30	1.75	2.22	0.95	0.68	1.55	0.80	8.31	10.26	13.94	5.00		1.10	
31		2.43		1.05	1.30		5.60		12.84	4.91		1.10	
Total	93.47	118.67	45.51	43.18	58.46	37.40	100.19	318.44	403.51	224.19	93.96	50.19	1587.17 CMSDAY
Mean	3.12	3.83	1.52	1.39	1.89	1.25	3.23	10.61	13.02	7.23	3.36	1.62	4.35 CMS
Max	6.00	8.53	3.62	4.37	8.31	2.50	8.31	16.45	35.50	11.15	4.55	2.58	35.50 CMS
Min	1.55	1.30	0.60	0.68	0.80	0.68	0.72	6.88	5.40	4.91	2.74	1.10	0.60 CMS
Runoff	8.076	10.253	3.932	3.731	5.051	3.231	8.656	27.513	34.863	19.370	8.118	4.336	137.132 MCM

Momentary Peak 43.68 CMS, at 15.26 M (MSL), at 9.00 Hours, on Dec 18, 2001
Runoff Yield 14.40 Liters/Second/Square KM, Momentary Peak Yield 144.636 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Tan at Ban Wang Kong, Nakhon Si Thammarat (X.70)

Lat 08 - 25 - 34 N. **Long** 99 - 51 - 47 E.

Location on left bank upstream side of the bridge.

Ban Wang Kong **Amphoe** Mueang **Changwat** Nakhon Si Thammarat

Drainage Area 39 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 +7.274 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 1967 to date.

Rating Operation

Period of Rating 1967 - 1971, 1980, 1989 to date.

Rated by Float -

Rated by Current Meter 1967 - 1971, 1980, 1989 to date.

Stability of Channel Regimes Stable.

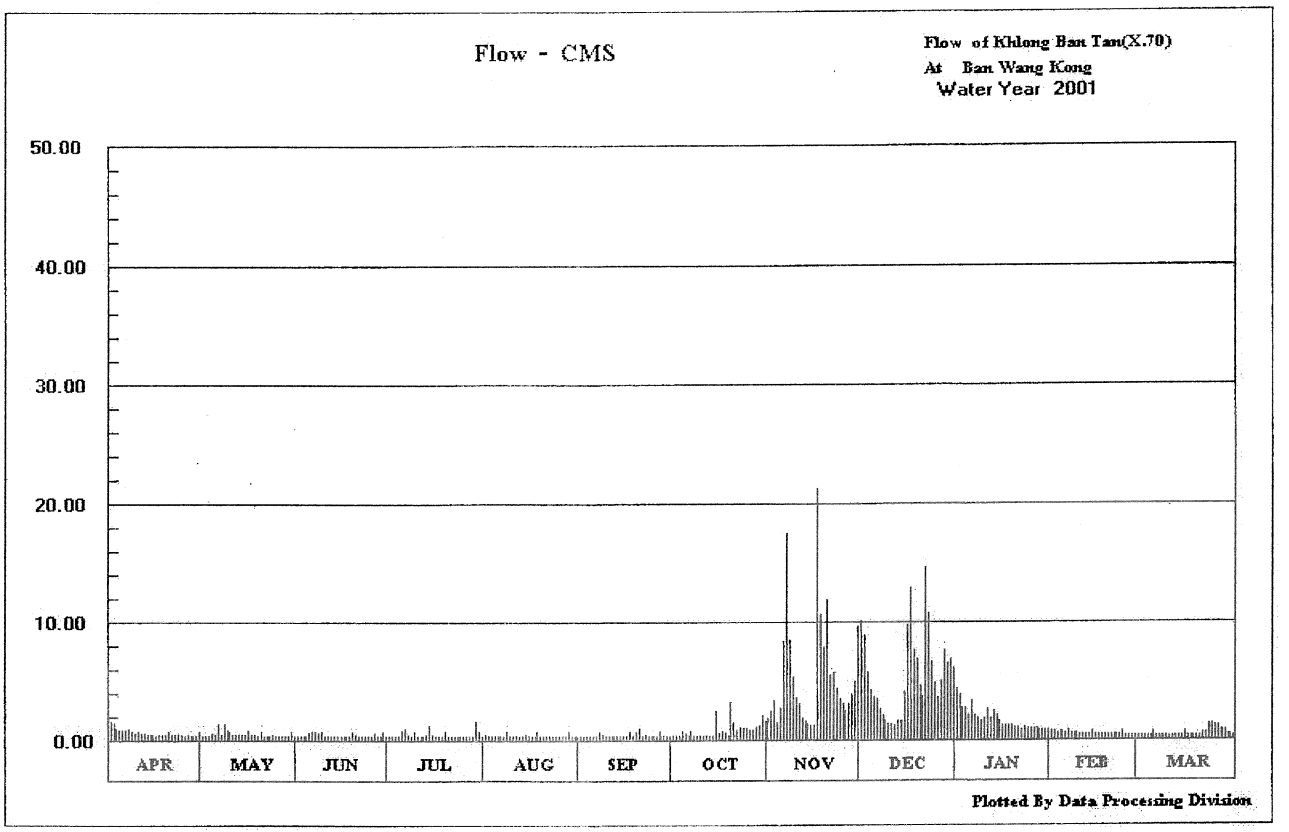
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.01	0.65	0.63	0.60	0.68	0.55	0.63	1.05	2.23	1.47	0.78	0.65	
2	0.96	0.64	0.63	0.60	0.62	0.56	0.60	1.15	2.08	1.40	0.77	0.65	
3	0.85	0.63	0.63	0.61	0.60	0.59	0.55	1.32	1.65	1.21	0.75	0.65	
4	0.81	0.73	0.65	0.63	0.62	0.56	0.79	0.97	1.46	1.20	0.75	0.64	
5	0.80	0.68	0.74	0.81	0.65	0.55	0.73	1.20	1.35	1.10	0.75	0.64	
6	0.81	0.92	0.76	0.85	0.63	0.57	0.65	2.00	1.34	1.32	0.80	0.64	
7	0.83	0.70	0.79	0.68	0.65	0.55	0.70	2.97	1.18	1.09	0.75	0.64	
8	0.76	0.95	0.74	0.65	0.63	0.70	0.65	2.02	1.08	1.05	0.75	0.64	
9	0.72	0.82	0.69	0.63	0.59	0.55	0.64	1.60	1.01	1.00	0.74	0.65	
10	0.71	0.77	0.65	0.62	0.60	0.55	0.60	1.37	0.95	1.05	0.70	0.65	
11	0.75	0.70	0.64	0.62	0.58	0.55	0.62	1.28	0.95	1.18	0.70	0.65	
12	0.74	0.69	0.64	0.64	0.58	0.55	0.62	1.05	0.91	1.05	0.70	0.65	
13	0.70	0.70	0.63	0.69	0.57	0.55	0.64	1.00	1.00	1.16	0.70	0.64	
14	0.69	0.70	0.63	0.90	0.67	0.56	0.60	0.95	1.00	1.10	0.70	0.64	
15	0.68	0.69	0.63	0.70	0.65	0.55	1.16	0.90	1.44	1.01	0.70	0.63	
16	0.65	0.80	0.62	0.66	0.65	0.54	0.75	0.90	2.19	0.90	0.69	0.63	
17	0.70	0.70	0.60	0.65	0.64	0.54	0.75	3.27	2.50	0.90	0.69	0.63	
18	0.69	0.68	0.60	0.64	0.64	0.65	0.74	2.28	1.90	0.90	0.69	0.61	
19	0.68	0.66	0.60	0.63	0.65	0.78	0.41	1.94	1.81	0.89	0.69	0.60	
20	0.67	0.65	0.67	0.63	0.54	0.85	1.30	2.40	1.50	0.88	0.69	0.60	
21	0.67	0.64	0.64	0.64	0.54	0.65	0.97	1.62	1.39	0.88	0.68	0.60	
22	0.69	0.64	0.60	0.63	0.54	0.67	0.81	1.65	2.68	0.80	0.67	0.75	
23	0.68	0.64	0.60	0.60	0.58	0.65	0.87	1.48	2.29	0.87	0.67	0.75	
24	0.67	0.67	0.64	0.62	0.55	0.65	0.85	1.33	1.77	0.85	0.66	0.93	
25	0.66	0.66	0.65	0.64	0.57	0.65	0.85	1.27	1.53	0.85	0.65	0.95	
26	0.67	0.65	0.73	0.64	0.55	0.64	0.82	1.16	1.37	0.85	0.65	0.90	
27	0.64	0.65	0.64	0.60	0.55	0.65	0.80	1.28	1.56	0.83	0.65	0.91	
28	0.64	0.65	0.62	0.59	0.54	0.63	0.88	1.40	1.90	0.80	0.65	0.82	
29	0.64	0.65	0.60	0.99	0.54	0.64	0.90	1.55	1.76	0.80		0.80	
30	0.74	0.64	0.60	0.78	0.60	0.64	1.10	2.17	1.80	0.82		0.70	
31		0.64		0.65	0.55		0.99		1.70	0.80		0.70	
Mean	0.73	0.70	0.65	0.67	0.60	0.61	0.77	1.55	1.59	1.00	0.71	0.69	
Max	1.01	0.95	0.79	0.99	0.68	0.85	1.30	3.27	2.68	1.47	0.80	0.95	3.27
Min	0.64	0.63	0.60	0.59	0.54	0.54	0.41	0.90	0.91	0.80	0.65	0.60	0.41

Annual Max Momentary Gage Height 4.80 M (A.D), at 18.00 Hours, on Dec 22, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.48 M (A.D)
Left Bank Elevation 7.39 M (A.D)
Right Bank Elevation 7.40 M (A.D), Drainage Area 39 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.85	0.55	0.49	0.40	0.64	0.30	0.49	2.07	10.30	4.53	0.94	0.55	
2	1.64	0.52	0.49	0.40	0.46	0.32	0.40	2.63	9.10	4.00	0.91	0.55	
3	1.20	0.49	0.49	0.43	0.40	0.38	0.30	3.56	5.88	2.96	0.85	0.55	
4	1.04	0.79	0.55	0.49	0.46	0.32	0.97	1.68	4.45	2.90	0.85	0.52	
5	1.00	0.64	0.82	1.04	0.55	0.30	0.79	2.90	3.73	2.35	0.85	0.52	
6	1.04	1.48	0.88	1.20	0.49	0.34	0.55	8.50	3.67	3.56	1.00	0.52	
7	1.12	0.70	0.97	0.64	0.55	0.30	0.70	17.70	2.79	2.30	0.85	0.52	
8	0.88	1.60	0.82	0.55	0.49	0.70	0.55	8.65	2.24	2.07	0.85	0.52	
9	0.76	1.08	0.67	0.49	0.38	0.30	0.52	5.50	1.85	1.80	0.82	0.55	
10	0.73	0.91	0.55	0.46	0.40	0.30	0.40	3.84	1.60	2.07	0.70	0.55	
11	0.85	0.70	0.52	0.46	0.36	0.30	0.46	3.34	1.60	2.79	0.70	0.55	
12	0.82	0.67	0.52	0.52	0.36	0.30	0.46	2.07	1.44	2.07	0.70	0.55	
13	0.70	0.70	0.49	0.67	0.34	0.30	0.52	1.80	1.80	2.68	0.70	0.52	
14	0.67	0.70	0.49	1.40	0.61	0.32	0.40	1.60	1.80	2.35	0.70	0.52	
15	0.64	0.67	0.49	0.70	0.55	0.30	2.68	1.40	4.30	1.85	0.70	0.49	
16	0.55	1.00	0.46	0.58	0.55	0.28	0.85	1.40	9.93	1.40	0.67	0.49	
17	0.70	0.70	0.40	0.55	0.52	0.28	0.85	21.37	13.00	1.40	0.67	0.49	
18	0.67	0.64	0.40	0.52	0.52	0.55	0.82	10.80	7.75	1.40	0.67	0.43	
19	0.64	0.58	0.40	0.49	0.55	0.94	0.02	8.05	7.07	1.36	0.67	0.40	
20	0.61	0.55	0.61	0.49	0.28	1.20	3.45	12.00	4.75	1.32	0.67	0.40	
21	0.61	0.52	0.52	0.52	0.28	0.55	1.68	5.65	3.95	1.32	0.64	0.40	
22	0.67	0.52	0.40	0.49	0.28	0.61	1.04	5.88	14.80	1.00	0.61	0.85	
23	0.64	0.52	0.40	0.40	0.36	0.55	1.28	4.60	10.90	1.28	0.61	0.85	
24	0.61	0.61	0.52	0.46	0.30	0.55	1.20	3.62	6.78	1.20	0.58	1.52	
25	0.58	0.58	0.55	0.52	0.34	0.55	1.20	3.29	4.98	1.20	0.55	1.60	
26	0.61	0.55	0.79	0.52	0.30	0.52	1.08	2.68	3.84	1.20	0.55	1.40	
27	0.52	0.55	0.52	0.40	0.30	0.55	1.00	3.34	5.20	1.12	0.55	1.44	
28	0.52	0.55	0.46	0.38	0.28	0.49	1.32	4.00	7.75	1.00	0.55	1.08	
29	0.52	0.55	0.40	1.76	0.28	0.52	1.40	5.13	6.70	1.00		1.00	
30	0.82	0.52	0.40	0.94	0.40	0.52	2.35	9.78	7.00	1.08		0.70	
31		0.52		0.55	0.30		1.76		6.25	1.00		0.70	
Total	24.21	21.66	16.47	19.42	12.88	13.74	31.49	168.83	177.20	59.56	20.11	21.73	587.30 CMSDAY
Mean	0.81	0.70	0.55	0.63	0.42	0.46	1.02	5.63	5.72	1.92	0.72	0.70	1.61 CMS
Max	1.85	1.60	0.97	1.76	0.64	1.20	3.45	21.37	14.80	4.53	1.00	1.60	21.37 CMS
Min	0.52	0.49	0.40	0.38	0.28	0.28	0.02	1.40	1.44	1.00	0.55	0.40	0.02 CMS
Runoff	2.092	1.871	1.423	1.678	1.113	1.187	2.721	14.587	15.310	5.146	1.738	1.877	50.743 MCM

Momentary Peak 46.00 CMS, at 4.80 M (A.D), at 18.00 Hours, on Dec 22, 2001

Runoff Yield 41.26 Liters/Second/Square KM, Momentary Peak Yield 1179.487 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Tan Yong Mus at Ban Tan Yong Mus, Narathiwat (X.73)

Lat 06 - 17 - 43 N. **Long** 101 - 44 - 04 E.

Location on right bank about 20 meters upstream from the bridge on Highway.

Ban Tan Yong Mus **Amphoe** Rangae **Changwat** Narathiwat

Drainage Area 336 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 top staff gage.

Elevation +4.249 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 1967 to date.

Rating Operation

Period of Rating 1985 to date.

Rated by Float -

Rated by Current Meter 1985 to date.

Stability of Channel Regimes Fairly stable.

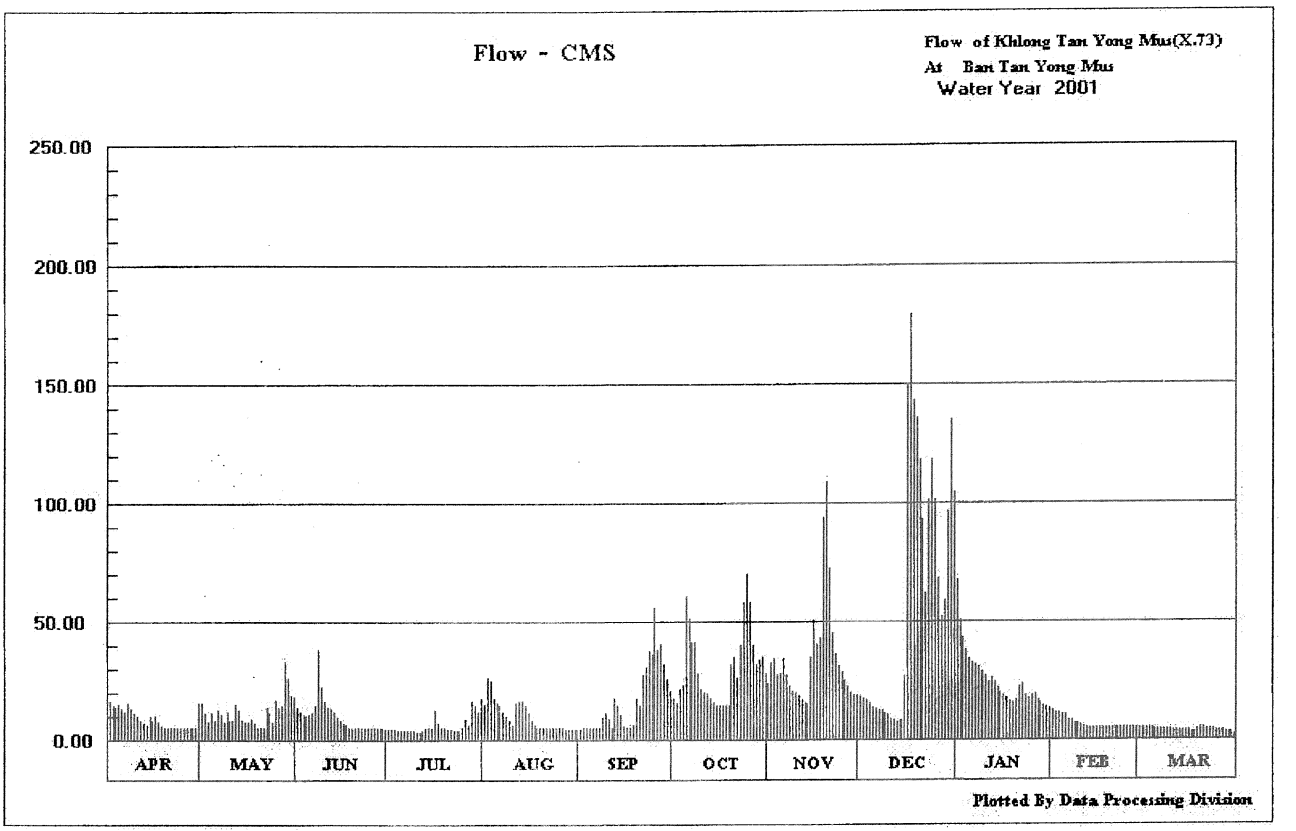
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 44 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.52	1.50	1.39	0.74	1.46	0.74	1.59	1.94	1.62	3.93	1.29	0.84	
2	1.43	1.22	1.27	0.72	2.04	0.87	1.50	2.38	1.60	3.21	1.25	0.80	
3	1.39	1.08	1.19	0.70	2.00	0.85	1.80	2.46	1.57	2.87	1.23	0.79	
4	1.45	1.24	1.17	0.69	1.59	0.82	1.91	2.13	1.47	2.64	1.20	0.77	
5	1.33	1.11	1.20	0.68	1.48	0.78	3.67	2.15	1.38	2.46	1.19	0.76	
6	1.26	1.32	1.22	0.66	1.41	0.82	3.25	2.46	1.33	2.37	1.12	0.74	
7	1.50	1.21	1.41	0.64	1.26	0.80	2.80	2.11	1.29	2.35	1.10	0.73	
8	1.33	1.09	2.64	0.64	1.17	1.15	2.79	1.86	1.30	2.27	1.07	0.71	
9	1.22	1.26	1.88	0.63	1.10	1.24	2.15	1.77	1.23	2.18	1.06	0.70	
10	1.17	1.12	1.52	0.62	1.05	1.13	1.81	1.72	1.19	2.10	1.04	0.70	
11	1.12	1.11	1.36	0.61	1.49	0.99	1.74	1.66	1.13	1.97	1.02	0.72	
12	1.06	1.44	1.35	0.67	1.52	1.60	1.70	1.54	1.10	2.06	0.99	0.69	
13	1.04	1.31	1.27	0.76	1.51	1.43	1.60	1.50	1.08	1.96	0.98	0.68	
14	1.18	1.11	1.16	0.90	1.43	1.21	1.47	1.44	1.11	1.85	0.95	0.69	
15	1.12	1.08	1.10	0.94	1.23	1.02	1.42	2.48	2.10	1.75	0.94	0.66	
16	1.18	1.08	1.07	1.29	1.11	0.96	1.42	3.23	6.06	1.67	0.93	0.65	
17	1.08	1.13	1.05	1.07	1.05	0.94	1.40	2.76	6.46	1.60	0.91	0.64	
18	1.02	1.06	0.99	0.86	0.99	1.04	1.41	2.88	5.95	1.53	0.90	0.63	
19	1.00	1.00	0.96	0.80	0.94	1.59	1.43	4.84	5.82	1.48	0.88	0.63	
20	0.97	0.95	0.93	0.75	0.90	1.43	2.34	5.24	5.46	1.56	0.87	0.71	
21	0.95	0.94	0.91	0.70	0.88	2.12	2.49	4.14	4.83	1.87	0.88	0.81	
22	0.94	1.38	0.87	0.69	0.86	2.26	2.06	2.96	3.72	1.93	0.94	0.78	
23	0.91	1.23	0.87	0.67	0.83	2.63	2.73	2.54	5.05	1.66	0.92	0.74	
24	0.93	1.08	0.85	0.65	0.82	2.55	3.55	2.29	5.46	1.58	0.91	0.71	
25	0.90	1.55	0.84	0.81	0.80	3.44	4.04	2.18	5.05	1.67	0.86	0.74	
26	0.86	1.36	0.81	1.13	0.77	2.65	3.55	2.00	3.96	1.69	0.85	0.67	
27	0.86	1.42	0.79	1.05	0.74	2.77	2.73	1.86	3.28	1.56	0.82	0.65	
28	0.86	2.40	0.78	1.53	0.73	2.34	2.34	1.74	3.57	1.48	0.82	0.64	
29	1.00	2.04	0.76	1.40	0.72	2.02	2.44	1.66	4.92	1.42		0.62	
30	1.48	1.65	0.74	1.26	0.71	1.77	2.49	1.67	5.81	1.37		0.60	
31		1.62		1.60	0.70		2.15		5.13	1.33		0.60	
Mean	1.14	1.29	1.15	0.87	1.14	1.53	2.25	2.39	3.26	1.98	1.00	0.70	
Max	1.52	2.40	2.64	1.60	2.04	3.44	4.04	5.24	6.46	3.93	1.29	0.84	6.46
Min	0.86	0.94	0.74	0.61	0.70	0.74	1.40	1.44	1.08	1.33	0.82	0.60	0.60

Annual Max Momentary Gage Height 6.54 M (A.D), at 6.00 Hours, on Dec 17, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.93 M (A.D)
Left Bank Elevation 8.90 M (A.D)
Right Bank Elevation 8.75 M (A.D), Drainage Area 336 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.10	16.75	14.82	5.37	16.05	5.37	18.32	24.80	18.85	68.05	13.07	5.96	
2	15.52	11.85	12.72	5.16	26.80	5.93	16.75	33.60	18.50	51.23	12.37	6.00	
3	14.82	8.08	11.22	4.95	26.00	5.95	22.00	35.20	17.97	43.70	12.02	5.90	
4	15.88	12.20	10.64	4.84	18.32	5.98	24.20	28.60	16.22	38.84	11.50	5.69	
5	13.78	8.93	11.50	4.74	16.40	5.79	61.68	29.00	14.65	35.20	11.22	5.58	
6	12.55	13.60	11.85	4.53	15.17	5.98	52.13	35.20	13.78	33.40	9.22	5.37	
7	16.75	11.68	15.17	4.32	12.55	6.00	42.20	28.20	13.07	33.00	8.65	5.27	
8	13.78	8.37	38.84	4.32	10.64	10.07	41.99	23.20	13.25	31.40	7.80	5.05	
9	11.85	12.55	23.60	4.21	8.65	12.20	29.00	21.47	12.02	29.60	7.51	4.95	
10	10.64	9.22	17.10	4.11	7.22	9.50	22.20	20.60	11.22	28.00	6.94	4.95	
11	9.22	8.93	14.30	4.01	16.57	5.81	20.95	19.55	9.50	25.40	6.37	5.16	
12	7.51	15.70	14.13	4.64	17.10	18.50	20.25	17.45	8.65	27.20	5.81	4.84	
13	6.94	13.42	12.72	5.58	16.92	15.52	18.50	16.75	8.08	25.20	5.82	4.74	
14	10.93	8.93	10.36	5.90	15.52	11.68	16.22	15.70	8.93	23.00	5.85	4.84	
15	9.22	8.08	8.65	5.86	12.02	6.37	15.35	35.60	28.00	21.12	5.86	4.53	
16	10.93	8.08	7.80	13.07	8.93	5.84	15.35	51.68	150.90	19.72	5.87	4.42	
17	8.08	9.50	7.22	7.80	7.22	5.86	15.00	41.36	180.10	18.50	5.89	4.32	
18	6.37	7.51	5.81	5.94	5.81	6.94	15.17	43.92	144.00	17.27	5.90	4.21	
19	5.80	5.80	5.84	6.00	5.86	18.32	15.52	94.40	136.20	16.40	5.92	4.21	
20	5.83	5.85	5.87	5.48	5.90	15.52	32.80	109.44	118.70	17.80	5.93	5.05	
21	5.85	5.86	5.89	4.95	5.92	28.40	35.80	73.44	94.05	23.40	5.92	5.99	
22	5.86	14.65	5.93	4.84	5.94	31.20	27.20	45.64	62.88	24.60	5.86	5.79	
23	5.89	12.02	5.93	4.64	5.97	38.63	40.73	36.80	101.95	19.55	5.88	5.37	
24	5.87	8.08	5.95	4.42	5.98	37.00	58.88	31.80	118.70	18.15	5.89	5.05	
25	5.90	17.62	5.96	5.99	6.00	56.40	70.84	29.60	101.95	19.72	5.94	5.37	
26	5.94	14.30	5.99	9.50	5.69	39.05	58.88	26.00	68.80	20.07	5.95	4.64	
27	5.94	15.35	5.90	7.22	5.37	41.57	40.73	23.20	52.80	17.80	5.98	4.42	
28	5.94	34.00	5.79	17.27	5.27	32.80	32.80	20.95	59.33	16.40	5.98	4.32	
29	5.80	26.80	5.58	15.00	5.16	26.40	34.80	19.55	97.20	15.35		4.11	
30	16.40	19.37	5.37	12.55	5.05	21.47	35.80	19.72	135.60	14.47		3.90	
31		18.85		18.50	4.95		29.00		105.07	13.78		3.90	
Total	292.89	391.93	318.45	215.71	330.95	536.05	981.04	1052.42	1940.92	807.32	206.92	153.90	7228.50 CMSDAY
Mean	9.76	12.64	10.61	6.96	10.68	17.87	31.65	35.08	62.61	26.04	7.39	4.96	19.80 CMS
Max	17.10	34.00	38.84	18.50	26.80	56.40	70.84	109.44	180.10	68.05	13.07	6.00	180.10 CMS
Min	5.80	5.80	5.37	4.01	4.95	5.37	15.00	15.70	8.08	13.78	5.81	3.90	3.90 CMS
Runoff	25.306	33.863	27.514	18.637	28.594	46.315	84.762	90.929	167.695	69.752	17.878	13.297	624.542 MCM

Momentary Peak 186.90 CMS, at 6.54 H (A.D), at 6.00 Hours, on Dec 17, 2001

Runoff Yield 58.94 Liters/Second/Square KM, Momentary Peak Yield 556.250 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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

Drainage Area 2,237 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 Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

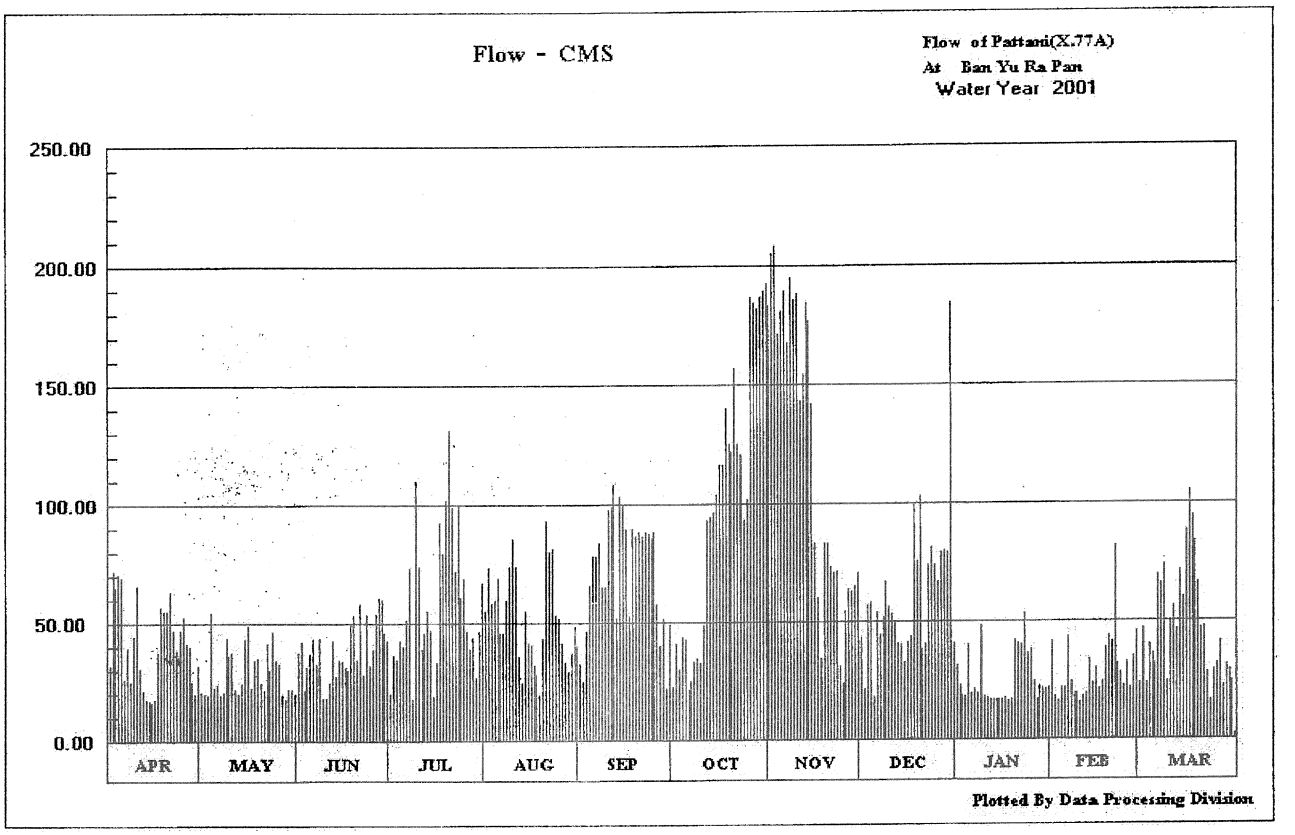
Overbank Flow Conditions No overbank flow.

General Description Records poor. Stage-discharge relation defined by 47 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.43	0.74	0.42	1.00	0.66	0.47	2.20	0.83	0.63	0.80	0.49	
2	1.21	0.42	0.81	0.72	1.22	0.52	0.79	2.37	0.44	0.48	0.37	0.88	
3	1.12	0.41	0.44	0.69	1.04	0.87	0.61	2.39	1.02	0.39	0.32	0.49	
4	1.19	0.99	0.63	0.82	1.05	1.13	0.84	2.11	1.04	0.38	0.46	0.78	
5	1.18	0.47	0.73	0.78	1.17	1.28	0.82	2.18	0.38	0.78	0.46	0.72	
6	0.54	0.49	0.83	0.94	0.86	1.28	0.44	2.25	0.98	0.41	0.83	0.64	
7	0.77	0.41	0.66	1.22	0.86	1.34	0.52	2.08	0.85	0.44	0.50	1.18	
8	0.52	0.43	0.84	0.36	1.05	1.12	0.67	2.29	0.95	0.40	0.41	1.13	
9	0.85	0.84	0.37	1.60	1.23	1.12	0.69	2.22	1.15	0.90	0.41	1.23	
10	1.13	0.72	0.38	1.23	1.36	1.48	0.66	2.24	1.01	0.38	0.31	0.50	
11	0.62	0.74	0.51	0.76	1.23	1.49	0.91	1.89	0.97	0.36	0.37	0.92	
12	0.44	0.45	0.82	0.86	0.71	1.58	1.44	1.98	0.92	0.35	0.41	1.01	
13	0.36	0.42	0.57	1.00	0.51	0.95	1.45	2.21	0.79	0.34	0.68	0.87	
14	0.34	0.50	0.69	0.88	1.00	1.53	1.47	2.15	0.78	0.34	0.49	1.20	
15	0.33	0.83	0.68	0.39	0.80	1.50	1.54	1.88	0.66	0.35	0.61	1.06	
16	0.36	0.91	0.63	0.67	0.79	1.40	1.66	1.33	0.80	0.34	0.44	1.39	
17	0.74	0.47	0.61	1.43	0.64	0.96	1.66	1.06	0.84	0.36	0.50	1.55	
18	1.02	0.69	0.93	1.29	0.58	1.40	1.87	0.69	1.50	0.33	0.76	1.45	
19	1.00	0.70	0.97	1.52	0.40	1.37	1.74	1.33	1.25	0.35	0.84	1.34	
20	1.00	0.50	0.69	1.80	0.83	1.39	1.71	1.33	1.53	0.81	0.80	1.14	
21	1.10	0.44	1.04	1.49	1.44	1.37	2.00	1.22	0.75	0.79	1.32	0.88	
22	0.88	0.80	0.58	1.21	1.30	1.39	1.74	1.19	0.79	0.78	0.65	0.89	
23	0.75	0.61	0.98	1.50	1.31	1.38	1.70	1.20	1.23	0.97	0.58	0.58	
24	0.88	0.87	0.64	1.07	0.97	1.36	1.44	0.63	1.31	0.72	0.47	0.33	
25	0.96	0.69	0.76	1.17	0.95	1.39	1.52	0.49	1.23	0.75	0.66	0.60	
26	0.80	0.66	0.98	0.87	0.80	1.03	2.23	0.99	1.15	0.50	0.46	0.65	
27	0.78	0.41	1.07	0.76	0.67	0.78	2.21	1.11	1.29	0.35	0.70	0.80	
28	0.52	0.36	1.06	0.84	0.60	0.94	2.19	1.09	1.30	0.47	0.86	0.47	
29	0.42	0.46	0.86	0.55	0.73	0.46	2.23	1.12	1.29	0.45		0.63	
30	0.65	0.45	0.82	0.87	0.90	0.91	2.25	1.19	2.21	0.44		0.60	
31		0.42		1.15	0.78		2.27		0.79	0.45		0.51	
Mean	0.77	0.58	0.74	1.00	0.93	1.18	1.41	1.61	1.03	0.51	0.59	0.87	
Max	1.21	0.99	1.07	1.80	1.44	1.58	2.27	2.39	2.21	0.97	1.32	1.55	2.39
Min	0.33	0.36	0.37	0.36	0.40	0.46	0.44	0.49	0.38	0.33	0.31	0.33	0.31

Annual Max Momentary Gage Height 2.55 M (A.D), at 18.00 Hours, on Nov 2, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -3.23 M (A.D)
Left Bank Elevation 10.34 M (A.D)
Right Bank Elevation 10.45 M (A.D), Drainage Area 2237 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	33.00	21.50	38.40	21.00	56.00	33.60	23.50	184.00	44.10	31.80	42.00	24.50	
2	72.90	21.00	42.70	37.20	73.80	26.00	41.40	206.10	22.00	24.00	18.80	47.60	
3	65.60	20.50	22.00	35.40	59.20	46.90	30.60	208.70	57.60	19.60	16.80	24.50	
4	71.20	55.30	31.80	43.40	60.00	66.40	44.80	172.30	59.20	19.20	23.00	40.80	
5	70.40	23.50	37.80	40.80	69.60	79.20	43.40	181.40	19.20	40.80	23.00	37.20	
6	27.00	24.50	44.10	51.80	46.20	79.20	22.00	190.50	54.60	20.50	44.10	32.40	
7	40.20	20.50	33.60	73.80	46.20	84.60	26.00	168.40	45.50	22.00	25.00	70.40	
8	26.00	21.50	44.80	18.40	60.00	65.60	34.20	195.70	52.50	20.00	20.50	66.40	
9	45.50	44.80	18.80	111.00	74.70	65.60	35.40	186.60	68.00	49.00	20.50	74.70	
10	66.40	37.20	19.20	74.70	86.40	98.40	33.60	189.20	56.80	19.20	16.40	25.00	
11	31.20	38.40	25.50	39.60	74.70	99.45	49.70	143.70	53.90	18.40	18.80	50.40	
12	22.00	22.50	43.40	46.20	36.60	108.90	94.20	155.40	50.40	18.00	20.50	56.80	
13	18.40	21.00	28.50	56.00	25.50	52.50	95.25	185.30	41.40	17.60	34.80	46.90	
14	17.60	25.00	35.40	47.60	56.00	103.65	97.35	177.50	40.80	17.60	24.50	72.00	
15	17.20	44.10	34.80	19.60	42.00	100.50	104.70	142.40	33.60	18.00	30.60	60.80	
16	18.40	49.70	31.80	34.20	41.40	90.00	117.30	83.70	42.00	17.60	22.00	89.10	
17	38.40	23.50	30.60	93.15	32.40	53.20	117.30	60.80	44.80	18.40	25.00	105.75	
18	57.60	35.40	51.10	80.10	29.00	90.00	141.10	35.40	100.50	17.20	39.60	95.25	
19	56.00	36.00	53.90	102.60	20.00	87.30	125.70	83.70	76.50	18.00	44.80	84.60	
20	56.00	25.00	35.40	132.00	44.10	89.10	122.55	83.70	103.65	42.70	42.00	67.20	
21	64.00	22.00	59.20	99.45	94.20	87.30	158.00	73.80	39.00	41.40	82.80	47.60	
22	47.60	42.00	29.00	72.90	81.00	89.10	125.70	71.20	41.40	40.80	33.00	48.30	
23	39.00	30.60	54.60	100.50	81.90	88.20	121.50	72.00	74.70	53.90	29.00	29.00	
24	47.60	46.90	32.40	61.60	53.90	86.40	94.20	31.80	81.90	37.20	23.50	17.20	
25	53.20	35.40	39.60	69.60	52.50	89.10	102.60	24.50	74.70	39.00	33.60	30.00	
26	42.00	33.60	54.60	46.90	42.00	58.40	187.90	55.30	68.00	25.00	23.00	33.00	
27	40.80	20.50	61.60	39.60	34.20	40.80	185.30	64.80	80.10	18.00	36.00	42.00	
28	26.00	18.40	60.80	44.80	30.00	51.80	182.70	63.20	81.00	23.50	46.20	23.50	
29	21.00	23.00	46.20	27.50	37.80	23.00	187.90	65.60	80.10	22.50		31.80	
30	33.00	22.50	43.40	46.90	49.00	49.70	190.50	71.20	185.30	22.00		30.00	
31		21.00		68.00	40.80		193.10		41.40	22.50		25.50	
Total	1265.20	926.80	1185.00	1836.30	1631.10	2183.90	3129.45	3627.90	1914.65	815.40	859.80	1530.20	20905.70 CMSDAY
Mean	42.17	29.90	39.50	59.24	52.62	72.80	100.95	120.93	61.76	26.30	30.71	49.36	57.28 CMS
Max	72.90	55.30	61.60	132.00	94.20	108.90	193.10	208.70	185.30	53.90	82.80	105.75	208.70 CMS
Min	17.20	18.40	18.80	18.40	20.00	23.00	22.00	24.50	19.20	17.20	16.40	17.20	16.40 CMS
Runoff	109.313	80.076	102.384	158.656	140.927	188.689	270.384	313.451	165.426	70.451	74.287	132.209	1806.253 MCM

Momentary Peak 232.50 CMS, at 2.55 M (A.D), at 18.00 Hours, on Nov 2, 2001

Runoff Yield 25.60 Liters/Second/Square KM, Momentary Peak Yield 103.934 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Chawang at Ban Na San, Surat Thani (X.81A)

Lat 08 - 48 - 23 N. **Long** 99 - 22 - 18 E.

Location on right bank at Wat Ban Na San.

Ban Na San **Amphoe** Ban Na San **Changwat** Surat Thani

Drainage Area 220 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 Wat Ban Na San's wall.

Elevation +5.539 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 1990 to date.

Rating Operation

Period of Rating 1990 to date.

Rated by Float -

Rated by Current Meter 1990 to date.

Stability of Channel Regimes Stable.

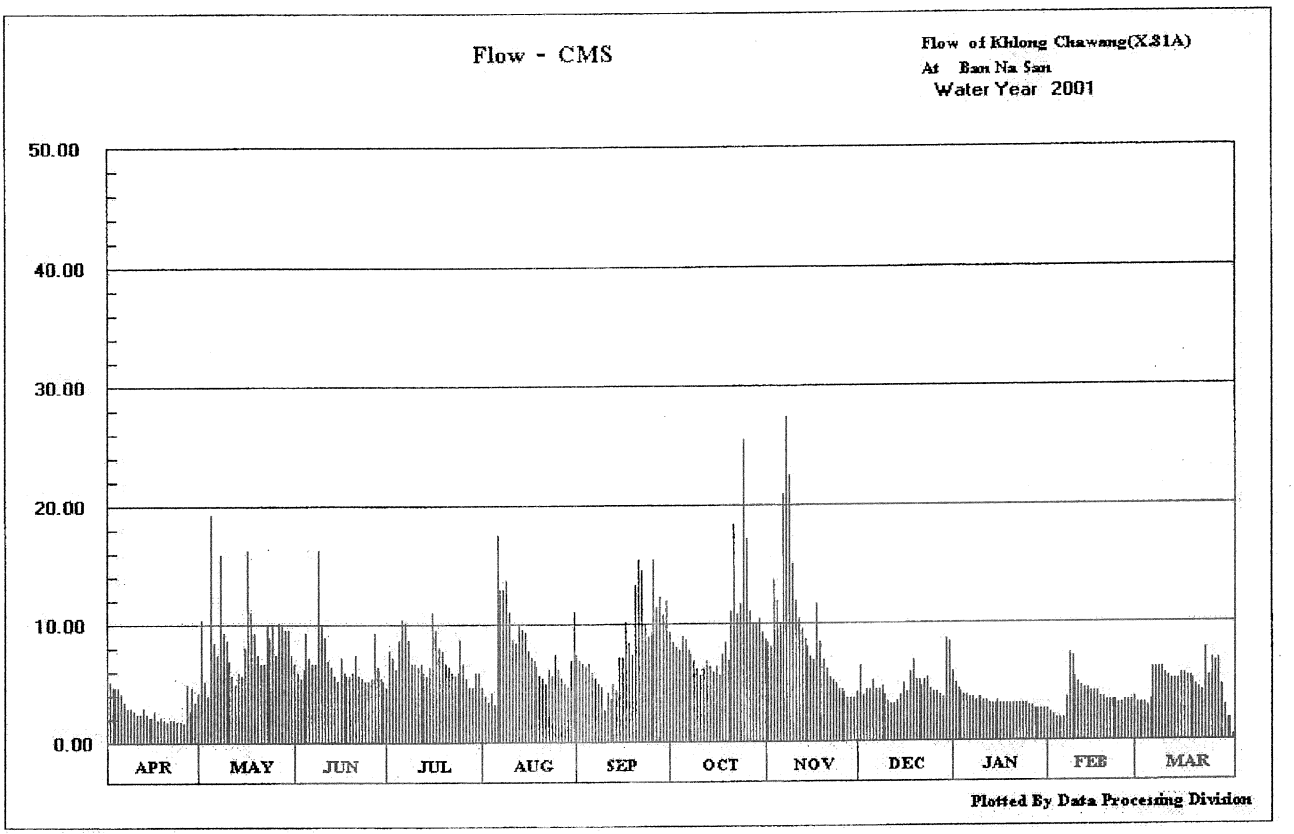
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 33 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.73	0.92	0.76	0.83	0.68	0.80	0.85	0.85	0.78	0.72	0.62	0.65	
2	0.71	0.73	0.74	0.81	0.66	0.79	0.84	0.84	0.68	0.70	0.61	0.65	
3	0.71	0.68	0.77	0.77	0.69	0.78	0.83	1.02	0.70	0.69	0.60	0.65	
4	0.71	1.15	0.88	0.86	0.65	0.79	0.87	0.97	0.70	0.68	0.60	0.64	
5	0.69	0.85	0.81	0.92	1.11	0.76	0.86	0.90	0.73	0.68	0.60	0.66	
6	0.66	0.82	0.79	0.91	1.00	0.74	0.83	1.19	0.70	0.67	0.67	0.77	
7	0.64	1.07	0.79	0.86	1.00	0.72	0.82	1.30	0.70	0.67	0.82	0.77	
8	0.64	0.88	1.08	0.79	1.02	0.71	0.80	1.22	0.71	0.66	0.81	0.77	
9	0.63	0.86	0.90	0.79	0.94	0.63	0.77	1.05	0.68	0.67	0.74	0.77	
10	0.62	0.80	0.87	0.78	0.86	0.69	0.75	0.97	0.66	0.66	0.72	0.75	
11	0.62	0.75	0.80	0.79	0.85	0.67	0.77	0.92	0.65	0.66	0.71	0.74	
12	0.64	0.72	0.78	0.76	0.90	0.72	0.80	0.89	0.65	0.65	0.70	0.73	
13	0.62	0.76	0.75	0.75	0.89	0.70	0.78	0.86	0.66	0.65	0.70	0.73	
14	0.61	0.75	0.73	0.78	0.88	0.81	0.76	0.84	0.68	0.65	0.69	0.73	
15	0.61	0.84	0.81	0.94	0.83	0.81	0.78	0.81	0.72	0.66	0.69	0.75	
16	0.63	1.08	0.76	0.89	0.81	0.91	0.75	0.80	0.69	0.65	0.69	0.75	
17	0.60	0.94	0.75	0.84	0.80	0.85	0.82	0.96	0.76	0.65	0.67	0.74	
18	0.61	0.88	0.75	0.83	0.78	0.82	0.85	0.85	0.80	0.65	0.67	0.74	
19	0.60	0.82	0.76	0.79	0.75	1.01	0.80	0.80	0.73	0.65	0.66	0.73	
20	0.59	0.79	0.82	0.78	0.74	1.06	0.94	0.77	0.73	0.65	0.66	0.71	
21	0.60	0.79	0.75	0.76	0.72	1.04	1.13	0.74	0.71	0.65	0.66	0.70	
22	0.60	0.90	0.74	0.75	0.77	0.90	0.93	0.73	0.73	0.65	0.66	0.69	
23	0.59	0.87	0.73	0.76	0.75	0.87	0.96	0.72	0.74	0.65	0.65	0.83	
24	0.59	0.90	0.73	0.86	0.82	0.88	1.27	0.70	0.70	0.65	0.65	0.74	
25	0.58	0.82	0.74	0.79	0.77	1.06	1.10	0.70	0.69	0.64	0.66	0.80	
26	0.72	0.91	0.88	0.74	0.74	0.95	0.94	0.69	0.69	0.64	0.66	0.79	
27	0.63	0.90	0.78	0.71	0.72	0.98	0.90	0.67	0.68	0.63	0.66	0.80	
28	0.71	0.89	0.74	0.71	0.71	0.93	0.90	0.67	0.67	0.63	0.67	0.71	
29	0.66	0.89	0.73	0.76	0.80	0.97	0.92	0.67	0.86	0.63		0.64	
30	0.69	0.82	0.71	0.76	0.94	0.88	0.88	0.69	0.85	0.63		0.59	
31		0.79		0.71	0.82		0.86		0.76	0.63		0.59	
Mean	0.64	0.86	0.79	0.80	0.82	0.84	0.87	0.86	0.72	0.66	0.67	0.72	
Max	0.73	1.15	1.08	0.94	1.11	1.06	1.27	1.30	0.86	0.72	0.82	0.83	1.30
Min	0.58	0.68	0.71	0.71	0.65	0.63	0.75	0.67	0.65	0.63	0.60	0.59	0.58

Annual Max Momentary Gage Height 1.80 M (A.D), at 18.00 Hours, on Oct 20, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.14 M (A.D)
Left Bank Elevation 7.84 M (A.D)
Right Bank Elevation 7.85 M (A.D), Drainage Area 220 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.25	10.60	6.00	7.90	4.00	7.00	8.50	8.50	6.50	5.00	2.50	3.25	
2	4.75	5.25	5.50	7.30	3.50	6.75	8.20	8.20	4.00	4.50	2.25	3.25	
3	4.75	4.00	6.25	6.25	4.25	6.50	7.90	13.85	4.50	4.25	2.00	3.25	
4	4.75	19.37	9.40	8.80	3.25	6.75	9.10	12.10	4.50	4.00	2.00	3.00	
5	4.25	8.50	7.30	10.60	17.67	6.00	8.80	10.00	5.25	4.00	2.00	3.50	
6	3.50	7.60	6.75	10.30	13.00	5.50	7.90	21.07	4.50	3.75	3.75	6.25	
7	3.00	15.98	6.75	8.80	13.00	5.00	7.60	27.50	4.50	3.75	7.60	6.25	
8	3.00	9.40	16.40	6.75	13.85	4.75	7.00	22.70	4.75	3.50	7.30	6.25	
9	2.75	8.80	10.00	6.75	11.20	2.75	6.25	15.12	4.00	3.75	5.50	6.25	
10	2.50	7.00	9.10	6.50	8.80	4.25	5.75	12.10	3.50	3.50	5.00	5.75	
11	2.50	5.75	7.00	6.75	8.50	3.75	6.25	10.60	3.25	3.50	4.75	5.50	
12	3.00	5.00	6.50	6.00	10.00	5.00	7.00	9.70	3.25	3.25	4.50	5.25	
13	2.50	6.00	5.75	5.75	9.70	4.50	6.50	8.80	3.50	3.25	4.50	5.25	
14	2.25	5.75	5.25	6.50	9.40	7.30	6.00	8.20	4.00	3.25	4.25	5.25	
15	2.25	8.20	7.30	11.20	7.90	7.30	6.50	7.30	5.00	3.50	4.25	5.75	
16	2.75	16.40	6.00	9.70	7.30	10.30	5.75	7.00	4.25	3.25	4.25	5.75	
17	2.00	11.20	5.75	8.20	7.00	8.50	7.60	11.80	6.00	3.25	3.75	5.50	
18	2.25	9.40	5.75	7.90	6.50	7.60	8.50	8.50	7.00	3.25	3.75	5.50	
19	2.00	7.60	6.00	6.75	5.75	13.42	7.00	7.00	5.25	3.25	3.50	5.25	
20	1.90	6.75	7.60	6.50	5.50	15.55	11.20	6.25	5.25	3.25	3.50	4.75	
21	2.00	6.75	5.75	6.00	5.00	14.70	18.52	5.50	4.75	3.25	3.50	4.50	
22	2.00	10.00	5.50	5.75	6.25	10.00	10.90	5.25	5.25	3.25	3.50	4.25	
23	1.90	9.10	5.25	6.00	5.75	9.10	11.80	5.00	5.50	3.25	3.25	7.90	
24	1.90	10.00	5.25	8.80	7.60	9.40	25.70	4.50	4.50	3.25	3.25	5.50	
25	1.80	7.60	5.50	6.75	6.25	15.55	17.25	4.50	4.25	3.00	3.50	7.00	
26	5.00	10.30	9.40	5.50	5.50	11.50	11.20	4.25	4.25	3.00	3.50	6.75	
27	2.75	10.00	6.50	4.75	5.00	12.40	10.00	3.75	4.00	2.75	3.50	7.00	
28	4.75	9.70	5.50	4.75	4.75	10.90	10.00	3.75	3.75	2.75	3.75	4.75	
29	3.50	9.70	5.25	6.00	7.00	12.10	10.60	3.75	8.80	2.75		3.00	
30	4.25	7.60	4.75	6.00	11.20	9.40	9.40	4.25	8.50	2.75		1.90	
31		6.75		4.75	7.60		8.80		6.00	2.75		1.90	
Total	91.75	276.05	205.00	220.25	241.97	253.52	293.47	280.79	152.30	105.75	108.65	155.20	2384.70 CMSDAY
Mean	3.06	8.90	6.83	7.10	7.81	8.45	9.47	9.36	4.91	3.41	3.88	5.01	6.53 CMS
Max	5.25	19.37	16.40	11.20	17.67	15.55	25.70	27.50	8.80	5.00	7.60	7.90	27.50 CMS
Min	1.80	4.00	4.75	4.75	3.25	2.75	5.75	3.75	3.25	2.75	2.00	1.90	1.80 CMS
Runoff	7.927	23.851	17.712	19.030	20.906	21.904	25.356	24.260	13.159	9.137	9.387	13.409	206.038 MCM

Momentary Peak 62.00 CMS, at 1.80 M (A.D), at 18.00 Hours, on Oct 20, 2001
Runoff Yield 29.70 Liters/Second/Square KM, Momentary Peak Yield 281.818 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong U - Taphao at Ban Bang Sala, Songkhla (X.90)

Lat 06 - 55 - 46 N. **Long** 100 - 26 - 33 E.

Location on left bank at the bridge near Wat Bang Sala, Tombon Thung Lan.

Ban Bang Sala Amphoe Khlong Hoi Khong **Changwat** Songkhla

Drainage Area 1,562 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.680 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 20 meters from the top staff gage.

Elevation +8.335 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1971 to date.

Rating Operation

Period of Rating 1971 - 1972, 1979 to date.

Rated by Float -

Rated by Current Meter 1971 - 1972, 1979 to date.

Stability of Channel Regimes Stable.

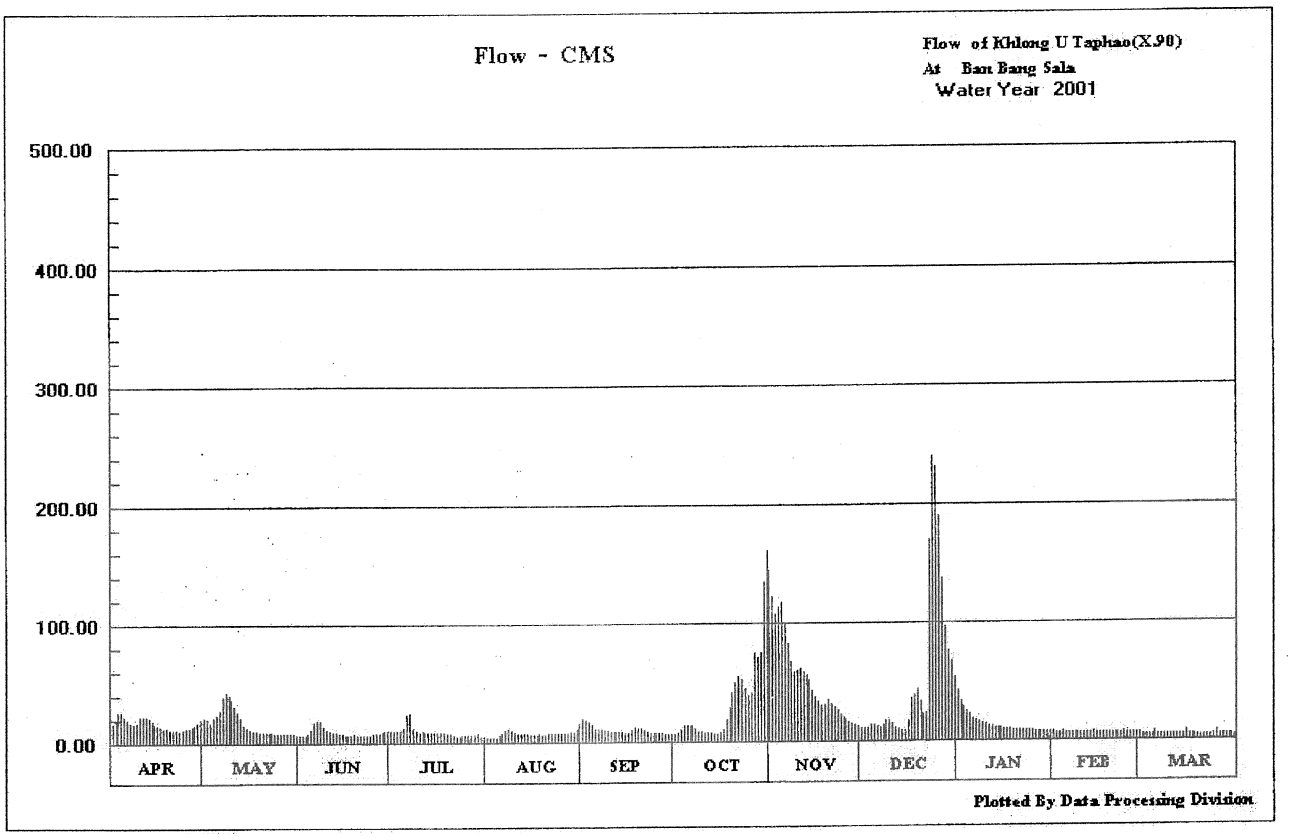
Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.39	2.67	1.71	2.04	1.48	2.59	1.69	6.19	2.13	3.54	1.76	1.64	
2	2.57	2.57	1.69	2.07	1.46	2.53	1.78	5.74	2.09	3.19	1.73	1.62	
3	2.86	2.46	1.70	2.04	1.44	2.44	2.01	5.41	2.16	2.97	1.73	1.60	
4	2.87	2.62	1.87	2.02	1.41	2.31	2.26	5.54	2.25	2.85	1.72	1.59	
5	2.73	2.77	2.09	2.23	1.64	2.15	2.26	5.62	2.28	2.68	1.71	1.58	
6	2.56	2.93	2.44	2.79	1.82	2.15	2.28	5.17	2.22	2.55	1.70	1.57	
7	2.45	3.38	2.55	2.82	2.06	2.13	2.26	4.78	2.11	2.44	1.69	1.57	
8	2.41	3.52	2.50	2.22	2.12	2.07	2.12	4.34	2.30	2.37	1.69	1.57	
9	2.45	3.43	2.26	2.01	2.01	2.03	1.98	4.09	2.46	2.31	1.68	1.56	
10	2.71	3.28	2.09	2.00	1.91	2.00	1.88	4.12	2.46	2.26	1.68	1.56	
11	2.70	3.06	2.02	2.06	1.85	1.98	1.83	4.16	2.34	2.22	1.68	1.55	
12	2.70	2.89	1.94	1.98	1.82	1.95	1.83	4.06	2.13	2.19	1.68	1.55	
13	2.63	2.65	1.88	1.94	1.79	1.93	1.81	4.00	2.01	2.16	1.71	1.55	
14	2.51	2.36	1.83	1.93	1.76	1.89	1.75	3.83	1.98	2.13	1.71	1.54	
15	2.40	2.23	1.77	2.00	1.75	1.84	1.73	3.54	1.95	2.10	1.70	1.54	
16	2.32	2.15	1.74	1.99	1.73	1.80	1.84	3.35	2.47	2.07	1.70	1.53	
17	2.26	2.08	1.72	1.96	1.71	2.03	2.07	3.19	3.29	2.05	1.70	1.53	
18	2.20	2.04	1.69	1.91	1.74	2.22	2.53	3.02	3.38	2.02	1.69	1.52	
19	2.17	1.99	1.68	1.86	1.75	2.15	2.97	3.09	3.57	2.00	1.69	1.51	
20	2.16	1.96	1.71	1.78	1.75	2.10	3.47	3.23	3.16	1.97	1.69	1.50	
21	2.15	1.94	1.75	1.63	1.76	2.01	3.80	3.08	2.71	1.95	1.69	1.48	
22	2.13	1.91	1.73	1.59	1.76	1.88	3.96	3.00	2.80	1.94	1.72	1.46	
23	2.08	1.88	1.71	1.59	1.77	1.83	3.89	2.86	6.63	1.94	1.72	1.47	
24	2.11	1.84	1.70	1.66	1.80	1.78	3.63	2.70	7.59	1.93	1.71	1.47	
25	2.20	1.84	1.77	1.66	1.82	1.77	3.40	2.59	7.50	1.92	1.69	1.56	
26	2.23	1.86	1.81	1.65	1.84	1.76	3.48	2.49	6.97	1.86	1.68	1.60	
27	2.28	1.85	1.85	1.64	1.81	1.76	4.55	2.41	6.05	1.83	1.69	1.59	
28	2.35	1.81	1.99	1.63	1.88	1.72	4.46	2.35	5.11	1.83	1.67	1.59	
29	2.44	1.76	2.08	1.61	1.93	1.70	4.56	2.30	4.61	1.81		1.58	
30	2.57	1.69	2.04	1.56	2.13	1.68	6.01	2.19	4.36	1.79		1.58	
31		1.72		1.51	2.37		6.48		3.93	1.78		1.57	
Mean	2.42	2.36	1.91	1.92	1.80	2.01	2.92	3.75	3.45	2.21	1.70	1.55	
Max	2.87	3.52	2.55	2.82	2.37	2.59	6.48	6.19	7.59	3.54	1.76	1.64	7.59
Min	2.08	1.69	1.68	1.51	1.41	1.68	1.69	2.19	1.95	1.78	1.67	1.46	1.41

Annual Max Momentary Gage Height 7.62 M (MSL), at 18.00 Hours, on Dec 24, 2001
Zero Gage at Bottom Elevation 0.68 M (MSL), River Bed -0.24 M (MSL)
Left Bank Elevation 10.00 M (MSL)
Right Bank Elevation 9.20 M (MSL), Drainage Area 1562 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.80	23.40	8.10	11.60	5.80	21.80	7.90	146.45	12.95	44.50	8.60	7.40	
2	21.40	21.40	7.90	12.05	5.60	20.60	8.80	124.30	12.35	35.75	8.30	7.20	
3	27.50	19.20	8.00	11.60	5.40	18.80	11.15	109.45	13.40	30.25	8.30	7.00	
4	27.75	22.40	9.70	11.30	5.10	16.20	15.20	115.30	15.00	27.25	8.20	6.90	
5	24.60	25.40	12.35	14.60	7.40	13.25	15.20	118.90	15.60	23.60	8.10	6.80	
6	21.20	29.25	18.80	25.80	9.20	13.25	15.60	99.80	14.40	21.00	8.00	6.70	
7	19.00	40.50	21.00	26.50	11.90	12.95	15.20	84.30	12.65	18.80	7.90	6.70	
8	18.20	44.00	20.00	14.40	12.80	12.05	12.80	68.90	16.00	17.40	7.90	6.70	
9	19.00	41.75	15.20	11.15	11.15	11.45	10.80	60.70	19.20	16.20	7.80	6.60	
10	24.20	38.00	12.35	11.00	10.10	11.00	9.80	61.60	19.20	15.20	7.80	6.60	
11	24.00	32.50	11.30	11.90	9.50	10.80	9.30	62.80	16.80	14.40	7.80	6.50	
12	24.00	28.25	10.40	10.80	9.20	10.50	9.30	59.80	12.95	13.85	7.80	6.50	
13	22.60	23.00	9.80	10.40	8.90	10.30	9.10	58.00	11.15	13.40	8.10	6.50	
14	20.20	17.20	9.30	10.30	8.60	9.90	8.50	52.90	10.80	12.95	8.10	6.40	
15	18.00	14.60	8.70	11.00	8.50	9.40	8.30	44.50	10.50	12.50	8.00	6.40	
16	16.40	13.25	8.40	10.90	8.30	9.00	9.40	39.75	19.40	12.05	8.00	6.30	
17	15.20	12.20	8.20	10.60	8.10	11.45	12.05	35.75	38.25	11.75	8.00	6.30	
18	14.00	11.60	7.90	10.10	8.40	14.40	20.60	31.50	40.50	11.30	7.90	6.20	
19	13.55	10.90	7.80	9.60	8.50	13.25	30.25	33.25	45.25	11.00	7.90	6.10	
20	13.40	10.60	8.10	8.80	8.50	12.50	42.75	36.75	35.00	10.70	7.90	6.00	
21	13.25	10.40	8.50	7.30	8.60	11.15	52.00	33.00	24.20	10.50	7.90	5.80	
22	12.95	10.10	8.30	6.90	8.60	9.80	56.80	31.00	26.00	10.40	8.20	5.60	
23	12.20	9.80	8.10	6.90	8.70	9.30	54.70	27.50	171.80	10.40	8.20	5.70	
24	12.65	9.40	8.00	7.60	9.00	8.80	46.90	24.00	241.15	10.30	8.10	5.70	
25	14.00	9.40	8.70	7.60	9.20	8.70	41.00	21.80	233.50	10.20	7.90	6.60	
26	14.60	9.60	9.10	7.50	9.40	8.60	43.00	19.80	192.20	9.60	7.80	7.00	
27	15.60	9.50	9.50	7.40	9.10	8.60	76.25	18.20	138.75	9.30	7.90	6.90	
28	17.00	9.10	10.90	7.30	9.80	8.20	73.10	17.00	97.40	9.30	7.70	6.90	
29	18.80	8.60	12.20	7.10	10.30	8.00	76.60	16.00	78.35	9.10		6.80	
30	21.40	7.90	11.60	6.60	12.95	7.80	136.55	13.85	69.60	8.90		6.80	
31		8.20		6.10	17.40		162.80		55.90	8.80		6.70	
Total	554.45	581.40	318.20	332.70	284.00	351.80	1101.70	1666.85	1720.20	480.65	224.10	202.30	7818.35 CMSDAY
Mean	18.48	18.75	10.61	10.73	9.16	11.73	35.54	55.56	55.49	15.50	8.00	6.53	21.42 CMS
Max	27.75	44.00	21.00	26.50	17.40	21.80	162.80	146.45	241.15	44.50	8.60	7.40	241.15 CMS
Min	12.20	7.90	7.80	6.10	5.10	7.80	7.90	13.85	10.50	8.80	7.70	5.60	5.10 CMS
Runoff	47.904	50.233	27.492	28.745	24.538	30.396	95.187	144.016	148.625	41.528	19.362	17.479	675.505 MCM

Momentary Peak 243.90 CMS, at 7.62 M (MSL), at 18.00 Hours, on Dec 24, 2001

Runoff Yield 13.71 Liters/Second/Square KM, Momentary Peak Yield 156.146 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Takhian at Ban Nai Thon, Surat Thani (X.103)

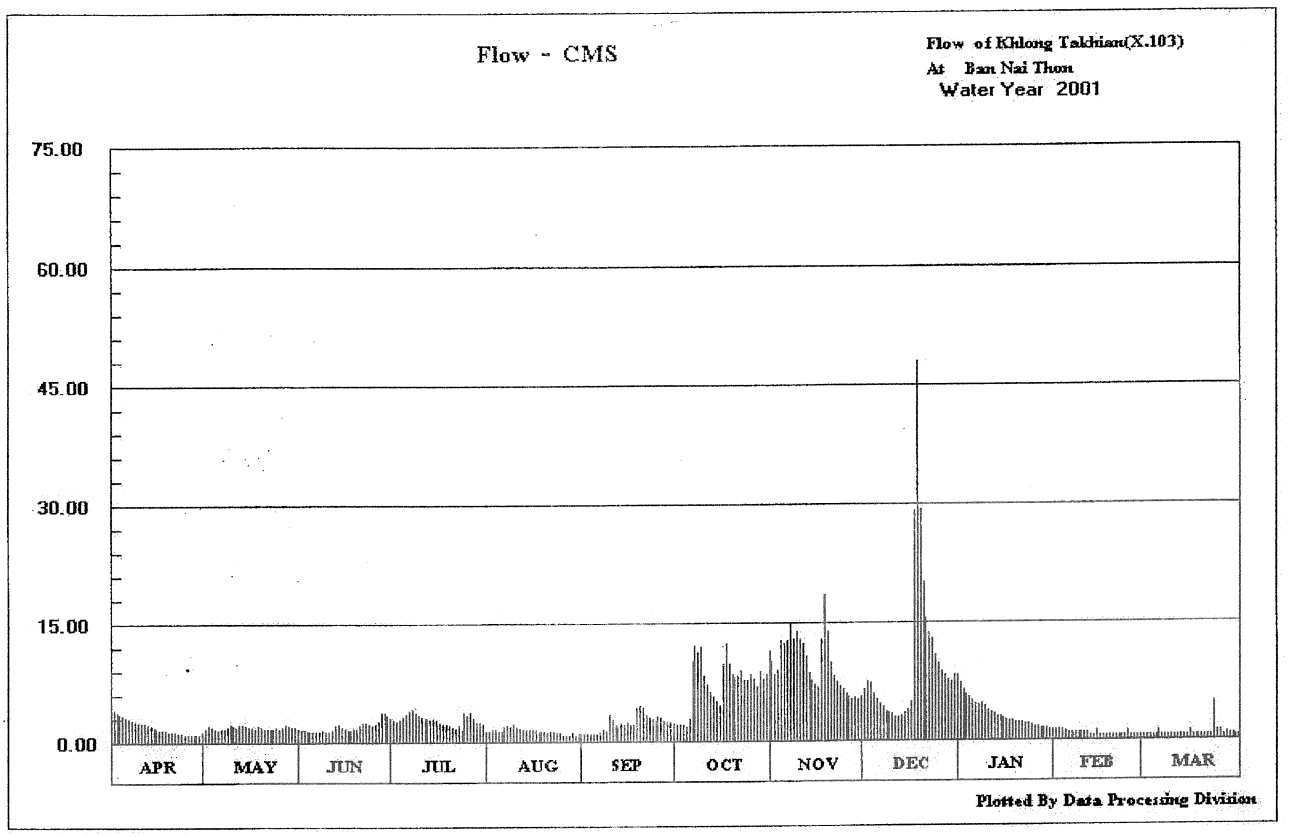
Lat 09 - 25 - 31 N. **Long** 99 - 09 - 42 E.

Location		on left bank Ban Rim Khlong.			
	Ban Nai Thon	**Amphoe** Chaiya		**Changwat** Surat Thani	
Drainage Area		180 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+7.000 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On left bank about 35 meters from the top staff gage.			
	Elevation	+14.745 m. (M.S.L.)			
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 Float	-			
	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 41 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.44	8.05	8.03	8.23	8.00	7.92	8.13	9.10	8.74	8.81	7.98	7.84	
2	8.41	8.11	8.02	8.22	8.03	7.91	8.13	8.94	8.84	8.72	8.00	7.81	
3	8.36	8.09	8.00	8.25	8.01	7.90	8.12	9.01	8.81	8.66	7.99	7.80	
4	8.34	8.05	7.99	8.32	8.00	7.92	8.08	9.34	8.68	8.60	7.95	7.79	
5	8.31	8.01	7.99	8.38	8.00	7.93	8.24	9.31	8.58	8.56	7.93	7.79	
6	8.28	8.05	7.99	8.42	8.09	7.97	9.10	9.35	8.51	8.52	7.93	7.79	
7	8.25	8.07	8.00	8.44	8.11	8.01	9.29	9.52	8.46	8.50	7.93	7.78	
8	8.21	8.08	8.01	8.40	8.08	7.99	9.21	9.37	8.41	8.52	7.93	7.78	
9	8.19	8.15	8.00	8.35	8.14	8.35	9.28	9.44	8.37	8.47	7.93	7.78	
10	8.18	8.11	8.00	8.31	8.10	8.23	8.92	9.36	8.33	8.41	7.92	7.77	
11	8.17	8.10	8.04	8.29	8.06	8.13	8.79	9.31	8.29	8.36	7.92	7.76	
12	8.15	8.16	8.12	8.26	8.03	8.09	8.70	9.15	8.28	8.33	7.82	7.77	
13	8.13	8.15	8.14	8.23	8.03	8.15	8.63	8.97	8.30	8.29	7.82	7.75	
14	8.09	8.13	8.10	8.28	8.02	8.13	8.56	8.86	8.36	8.27	7.79	7.75	
15	8.06	8.10	8.07	8.24	8.01	8.17	8.50	8.79	8.42	8.25	7.83	7.75	
16	8.03	8.08	8.04	8.18	8.01	8.13	9.07	8.76	8.55	8.22	7.86	7.75	
17	8.01	8.07	8.04	8.16	8.00	8.11	9.31	9.37	10.61	8.18	7.85	7.78	
18	8.01	8.12	8.05	8.15	7.98	8.47	9.07	9.83	11.57	8.17	7.85	7.78	
19	8.00	8.09	8.05	8.11	7.98	8.49	8.94	9.45	10.63	8.15	7.84	7.77	
20	7.98	8.07	8.11	8.08	7.97	8.46	8.91	9.09	9.95	8.14	7.85	7.71	
21	7.98	8.05	8.18	8.07	8.00	8.35	8.93	8.93	9.58	8.15	7.85	7.71	
22	7.95	8.06	8.18	8.11	7.98	8.28	9.01	8.84	9.43	8.13	7.84	7.71	
23	7.95	8.05	8.14	8.03	7.97	8.24	8.85	8.78	9.37	8.11	7.84	7.73	
24	7.93	8.08	8.11	8.39	7.97	8.22	8.85	8.73	9.17	8.09	7.83	8.53	
25	7.93	8.07	8.14	8.33	7.88	8.30	8.94	8.68	9.08	8.07	7.83	7.95	
26	7.92	8.08	8.21	8.39	7.87	8.26	8.89	8.64	8.99	8.06	7.83	7.86	
27	7.91	8.14	8.39	8.27	7.89	8.21	8.78	8.59	8.93	8.04	7.82	7.85	
28	7.93	8.11	8.39	8.19	7.89	8.19	8.99	8.60	8.87	8.03	7.81	7.91	
29	7.93	8.09	8.34	8.17	7.89	8.18	8.88	8.59	8.84	8.01		7.89	
30	7.98	8.08	8.28	8.15	7.92	8.15	8.95	8.63	8.93	7.99		7.87	
31		8.05		7.98	7.91		9.23		8.92	7.99		7.74	
Mean	8.10	8.09	8.11	8.24	7.99	8.16	8.82	9.04	8.99	8.28	7.88	7.81	
Max	8.44	8.16	8.39	8.44	8.14	8.49	9.31	9.83	11.57	8.81	8.00	8.53	11.57
Min	7.91	8.01	7.99	7.98	7.87	7.90	8.08	8.59	8.28	7.99	7.79	7.71	7.71

Annual Max Momentary Gage Height 11.96 M (MSL), at 23.00 Hours, on Dec 17, 2001
Zero Gage at Bottom Elevation 7.00 M (MSL), River Bed 6.74 M (MSL)
Left Bank Elevation 16.42 M (MSL)
Right Bank Elevation 16.40 M (MSL), Drainage Area 180 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.32	1.90	1.78	2.98	1.60	1.20	2.38	10.30	6.86	7.49	1.50	0.80	
2	4.08	2.26	1.72	2.92	1.78	1.15	2.38	8.66	7.76	6.68	1.60	0.65	
3	3.76	2.14	1.60	3.10	1.66	1.10	2.32	9.31	7.49	6.14	1.55	0.60	
4	3.64	1.90	1.55	3.52	1.60	1.20	2.08	12.94	6.32	5.60	1.35	0.57	
5	3.46	1.66	1.55	3.88	1.60	1.25	3.04	12.61	5.44	5.28	1.25	0.57	
6	3.28	1.90	1.55	4.16	2.14	1.45	10.30	13.05	4.88	4.96	1.25	0.57	
7	3.10	2.02	1.60	4.32	2.26	1.66	12.39	15.04	4.48	4.80	1.25	0.54	
8	2.86	2.08	1.66	4.00	2.08	1.55	11.51	13.27	4.08	4.96	1.25	0.54	
9	2.74	2.50	1.60	3.70	2.44	3.70	12.28	14.08	3.82	4.56	1.25	0.54	
10	2.68	2.26	1.60	3.46	2.20	2.98	8.48	13.16	3.58	4.08	1.20	0.51	
11	2.62	2.20	1.84	3.34	1.96	2.38	7.31	12.61	3.34	3.76	1.20	0.48	
12	2.50	2.56	2.32	3.16	1.78	2.14	6.50	10.85	3.28	3.58	0.70	0.51	
13	2.38	2.50	2.44	2.98	1.78	2.50	5.87	8.93	3.40	3.34	0.70	0.45	
14	2.14	2.38	2.20	3.28	1.72	2.38	5.28	7.94	3.76	3.22	0.57	0.45	
15	1.96	2.20	2.02	3.04	1.66	2.62	4.80	7.31	4.16	3.10	0.75	0.45	
16	1.78	2.08	1.84	2.68	1.66	2.38	9.97	7.04	5.20	2.92	0.90	0.45	
17	1.66	2.02	1.84	2.56	1.60	2.26	12.61	13.27	29.25	2.68	0.85	0.54	
18	1.66	2.32	1.90	2.50	1.50	4.56	9.97	18.79	48.26	2.62	0.85	0.54	
19	1.60	2.14	1.90	2.26	1.50	4.72	8.66	14.20	29.56	2.50	0.80	0.51	
20	1.50	2.02	2.26	2.08	1.45	4.48	8.39	10.19	20.35	2.44	0.85	0.33	
21	1.50	1.90	2.68	2.02	1.60	3.70	8.57	8.57	15.76	2.50	0.85	0.33	
22	1.35	1.96	2.68	2.26	1.50	3.28	9.31	7.76	13.96	2.38	0.80	0.33	
23	1.35	1.90	2.44	1.78	1.45	3.04	7.85	7.22	13.27	2.26	0.80	0.39	
24	1.25	2.08	2.26	3.94	1.45	2.92	7.85	6.77	11.07	2.14	0.75	5.04	
25	1.25	2.02	2.44	3.58	1.00	3.40	8.66	6.32	10.08	2.02	0.75	1.35	
26	1.20	2.08	2.86	3.94	0.95	3.16	8.21	5.96	9.11	1.96	0.75	0.90	
27	1.15	2.44	3.94	3.22	1.05	2.86	7.22	5.52	8.57	1.84	0.70	0.85	
28	1.25	2.26	3.94	2.74	1.05	2.74	9.11	5.60	8.03	1.78	0.65	1.15	
29	1.25	2.14	3.64	2.62	1.05	2.68	8.12	5.52	7.76	1.66		1.05	
30	1.50	2.08	3.28	2.50	1.20	2.50	8.75	5.87	8.57	1.55		0.95	
31		1.90		1.50	1.15		11.73		8.48	1.55		0.42	
Total	66.77	65.80	66.93	94.02	49.42	77.94	241.90	298.66	319.93	106.35	27.67	23.36	1438.75 CMSDAY
Mean	2.23	2.12	2.23	3.03	1.59	2.60	7.80	9.96	10.32	3.43	0.99	0.75	3.94 CMS
Max	4.32	2.56	3.94	4.32	2.44	4.72	12.61	18.79	48.26	7.49	1.60	5.04	48.26 CMS
Min	1.15	1.66	1.55	1.50	0.95	1.10	2.08	5.52	3.28	1.55	0.57	0.33	0.33 CMS
Runoff	5.769	5.685	5.783	8.123	4.270	6.734	20.900	25.804	27.642	9.189	2.391	2.018	124.308 MCM

Momentary Peak 59.72 CMS, at 11.96 M (MSL), at 23.00 Hours, on Dec 17, 2001

Runoff Yield 21.90 Liters/Second/Square KM, Momentary Peak Yield 331.778 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Tha Krachai at Ban Tha Kham, Surat Thani (X.104)

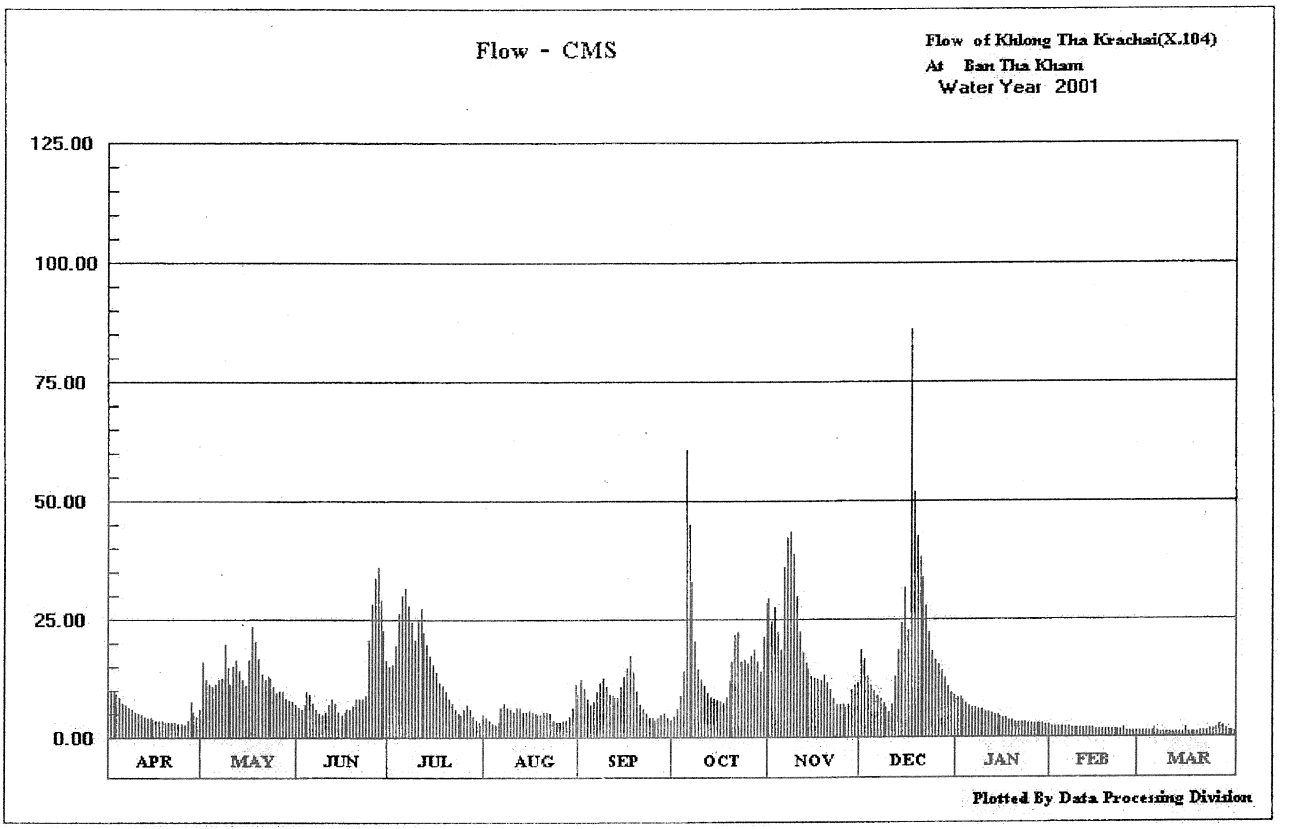
Lat 09 - 34 - 39 N. **Long** 99 - 08 - 14 E.

Location		on left bank at Ban Samo Thong.			
	Ban Tha Kham	**Amphoe** Tha Chana		**Changwat** Surat Thani	
Drainage Area		354 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+6.000 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On left bank about 10 meters downstream from the top staff gage.			
	Elevation	+15.446 m. (M.S.L.)			
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.			
Period of Available Gage Records		1978 to date.			
Rating Operation					
	Period of Rating	1978 to date.			
	Rated by Float	-			
	Rated by Current Meter	1978 to date.			
Stability of Channel Regimes		Stable.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records good. Stage-discharge relation defined by 39 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.12	7.40	6.94	7.35	6.82	7.23	6.84	7.82	7.48	7.05	6.67	6.59	
2	7.11	7.22	6.91	7.36	6.78	7.13	6.92	7.68	7.42	7.04	6.67	6.59	
3	7.08	7.19	6.97	7.52	6.73	7.03	7.06	7.77	7.26	7.01	6.67	6.58	
4	7.04	7.15	7.11	7.73	6.70	6.97	7.29	7.62	7.16	6.98	6.66	6.58	
5	6.98	7.19	7.08	7.84	6.77	7.00	8.55	7.49	7.10	6.95	6.66	6.57	
6	6.96	7.23	6.98	7.88	6.94	7.10	8.21	8.00	7.06	6.94	6.66	6.57	
7	6.93	7.24	6.92	7.78	6.98	7.20	7.91	8.14	7.03	6.93	6.65	6.57	
8	6.91	7.53	6.87	7.68	6.93	7.24	7.55	8.17	6.98	6.92	6.65	6.56	
9	6.89	7.34	6.85	7.56	6.91	7.15	7.32	8.06	6.93	6.91	6.65	6.56	
10	6.87	7.19	6.89	7.70	6.88	7.08	7.23	7.83	6.89	6.89	6.64	6.56	
11	6.86	7.35	6.96	7.76	6.93	7.06	7.16	7.62	6.97	6.88	6.64	6.55	
12	6.84	7.41	7.03	7.62	6.94	7.04	7.09	7.46	7.25	6.87	6.64	6.54	
13	6.83	7.31	6.98	7.53	6.89	7.04	7.05	7.38	7.48	6.86	6.64	6.53	
14	6.82	7.23	6.89	7.44	6.89	7.15	7.03	7.32	7.67	6.85	6.64	6.53	
15	6.81	7.17	6.85	7.36	6.90	7.26	7.01	7.26	7.88	6.84	6.63	6.53	
16	6.79	7.41	6.88	7.29	6.88	7.34	6.99	7.24	7.63	6.83	6.63	6.53	
17	6.79	7.65	6.92	7.20	6.87	7.44	6.98	7.22	9.06	6.82	6.63	6.52	
18	6.78	7.55	6.91	7.16	6.85	7.30	7.05	7.21	8.36	6.80	6.62	6.52	
19	6.77	7.42	6.95	7.11	6.85	7.10	7.21	7.27	8.15	6.79	6.62	6.55	
20	6.76	7.28	7.03	7.03	6.89	6.96	7.40	7.20	8.05	6.76	6.62	6.56	
21	6.75	7.22	7.02	6.98	6.88	6.92	7.60	7.12	7.94	6.75	6.61	6.57	
22	6.75	7.26	7.02	6.91	6.87	6.87	7.62	7.02	7.78	6.75	6.61	6.57	
23	6.74	7.24	7.06	6.87	6.79	6.82	7.39	6.96	7.62	6.75	6.61	6.59	
24	6.73	7.15	7.57	6.85	6.76	6.82	7.41	6.97	7.47	6.74	6.60	6.61	
25	6.71	7.09	7.79	6.91	6.75	6.80	7.38	6.96	7.41	6.73	6.60	6.62	
26	6.78	7.10	7.94	6.97	6.78	6.83	7.44	6.94	7.36	6.73	6.60	6.65	
27	6.99	7.11	8.00	6.91	6.78	6.85	7.48	6.97	7.31	6.73	6.60	6.69	
28	6.88	7.03	7.81	6.84	6.84	6.87	7.40	7.12	7.24	6.73	6.59	6.66	
29	6.84	7.01	7.63	6.78	6.94	6.83	7.30	7.17	7.15	6.72		6.63	
30	6.91	7.00	7.41	6.77	7.18	6.79	7.59	7.20	7.09	6.71		6.59	
31		6.97		6.85	7.08		7.80		7.06	6.69		6.58	
Mean	6.87	7.25	7.14	7.28	6.87	7.04	7.36	7.41	7.46	6.84	6.63	6.58	
Max	7.12	7.65	8.00	7.88	7.18	7.44	8.55	8.17	9.06	7.05	6.67	6.69	9.06
Min	6.71	6.97	6.85	6.77	6.70	6.79	6.84	6.94	6.89	6.69	6.59	6.52	6.52

Annual Max Momentary Gage Height 9.20 M (MSL), at 12.00 Hours, on Dec 17, 2001
Zero Gage at Bottom Elevation 6.00 M (MSL), River Bed 5.72 M (MSL)
Left Bank Elevation 17.60 M (MSL)
Right Bank Elevation 17.50 M (MSL), Drainage Area 354 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.40	16.50	6.80	15.37	4.40	12.68	4.80	29.75	18.70	9.00	2.57	1.71	
2	10.20	12.45	6.20	15.60	3.78	10.60	6.40	24.80	17.05	8.80	2.57	1.71	
3	9.60	11.80	7.40	19.80	3.23	8.60	9.20	27.95	13.35	8.20	2.57	1.62	
4	8.80	11.00	10.20	26.55	2.90	7.40	14.03	22.70	11.20	7.60	2.46	1.62	
5	7.60	11.80	9.60	30.50	3.67	8.00	61.13	18.97	10.00	7.00	2.46	1.53	
6	7.20	12.68	7.60	32.00	6.80	10.00	45.45	36.50	9.20	6.80	2.46	1.53	
7	6.60	12.90	6.40	28.30	7.60	12.00	33.12	42.45	8.60	6.60	2.35	1.53	
8	6.20	20.08	5.40	24.80	6.60	12.90	20.63	43.73	7.60	6.40	2.35	1.44	
9	5.80	15.15	5.00	20.90	6.20	11.00	14.70	39.05	6.60	6.20	2.35	1.44	
10	5.40	11.80	5.80	25.50	5.60	9.60	12.68	30.12	5.80	5.80	2.24	1.44	
11	5.20	15.37	7.20	27.60	6.60	9.20	11.20	22.70	7.40	5.60	2.24	1.35	
12	4.80	16.77	8.60	22.70	6.80	8.80	9.80	18.15	13.13	5.40	2.24	1.26	
13	4.60	14.47	7.60	20.08	5.80	8.80	9.00	16.05	18.70	5.20	2.24	1.17	
14	4.40	12.68	5.80	17.60	5.80	11.00	8.60	14.70	24.45	5.00	2.24	1.17	
15	4.20	11.40	5.00	15.60	6.00	13.35	8.20	13.35	32.00	4.80	2.13	1.17	
16	3.89	16.77	5.60	14.03	5.60	15.15	7.80	12.90	23.05	4.60	2.13	1.17	
17	3.89	23.75	6.40	12.00	5.40	17.60	7.60	12.45	86.50	4.40	2.13	1.08	
18	3.78	20.63	6.20	11.20	5.00	14.25	9.00	12.23	52.20	4.00	2.02	1.08	
19	3.67	17.05	7.00	10.20	5.00	10.00	12.23	13.58	42.87	3.89	2.02	1.35	
20	3.56	13.80	8.60	8.60	5.80	7.20	16.50	12.00	38.63	3.56	2.02	1.44	
21	3.45	12.45	8.40	7.60	5.60	6.40	22.00	10.40	34.25	3.45	1.91	1.53	
22	3.45	13.35	8.40	6.20	5.40	5.40	22.70	8.40	28.30	3.45	1.91	1.53	
23	3.34	12.90	9.20	5.40	3.89	4.40	16.27	7.20	22.70	3.45	1.91	1.71	
24	3.23	11.00	21.18	5.00	3.56	4.40	16.77	7.40	18.42	3.34	1.80	1.91	
25	3.01	9.80	28.65	6.20	3.45	4.00	16.05	7.20	16.77	3.23	1.80	2.02	
26	3.78	10.00	34.25	7.40	3.78	4.60	17.60	6.80	15.60	3.23	1.80	2.35	
27	7.80	10.20	36.50	6.20	3.78	5.00	18.70	7.40	14.47	3.23	1.80	2.79	
28	5.60	8.60	29.37	4.80	4.80	5.40	16.50	10.40	12.90	3.23	1.71	2.46	
29	4.80	8.20	23.05	3.78	6.80	4.60	14.25	11.40	11.00	3.12		2.13	
30	6.20	8.00	16.77	3.67	11.60	3.89	21.73	12.00	9.80	3.01		1.71	
31		7.40		5.00	9.60		29.00		9.20	2.79		1.62	
Total	164.45	410.75	354.17	460.18	170.84	266.22	533.64	552.73	640.44	154.38	60.43	49.57	3817.80 CMSDAY
Mean	5.48	13.25	11.81	14.84	5.51	8.87	17.21	18.42	20.66	4.98	2.16	1.60	10.46 CMS
Max	10.40	23.75	36.50	32.00	11.60	17.60	61.13	43.73	86.50	9.00	2.57	2.79	86.50 CMS
Min	3.01	7.40	5.00	3.67	2.90	3.89	4.80	6.80	5.80	2.79	1.71	1.08	1.08 CMS
Runoff	14.208	35.489	30.600	39.760	14.761	23.001	46.107	47.756	55.334	13.338	5.221	4.283	329.858 MCM

Momentary Peak 93.50 CMS, at 9.20 M (MSL), at 12.00 Hours, on Dec 17, 2001

Runoff Yield 29.55 Liters/Second/Square KM, Momentary Peak Yield 264.124 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Mai Siap at Ban Mai Siap, Nakhon Si Thammarat (X.105)

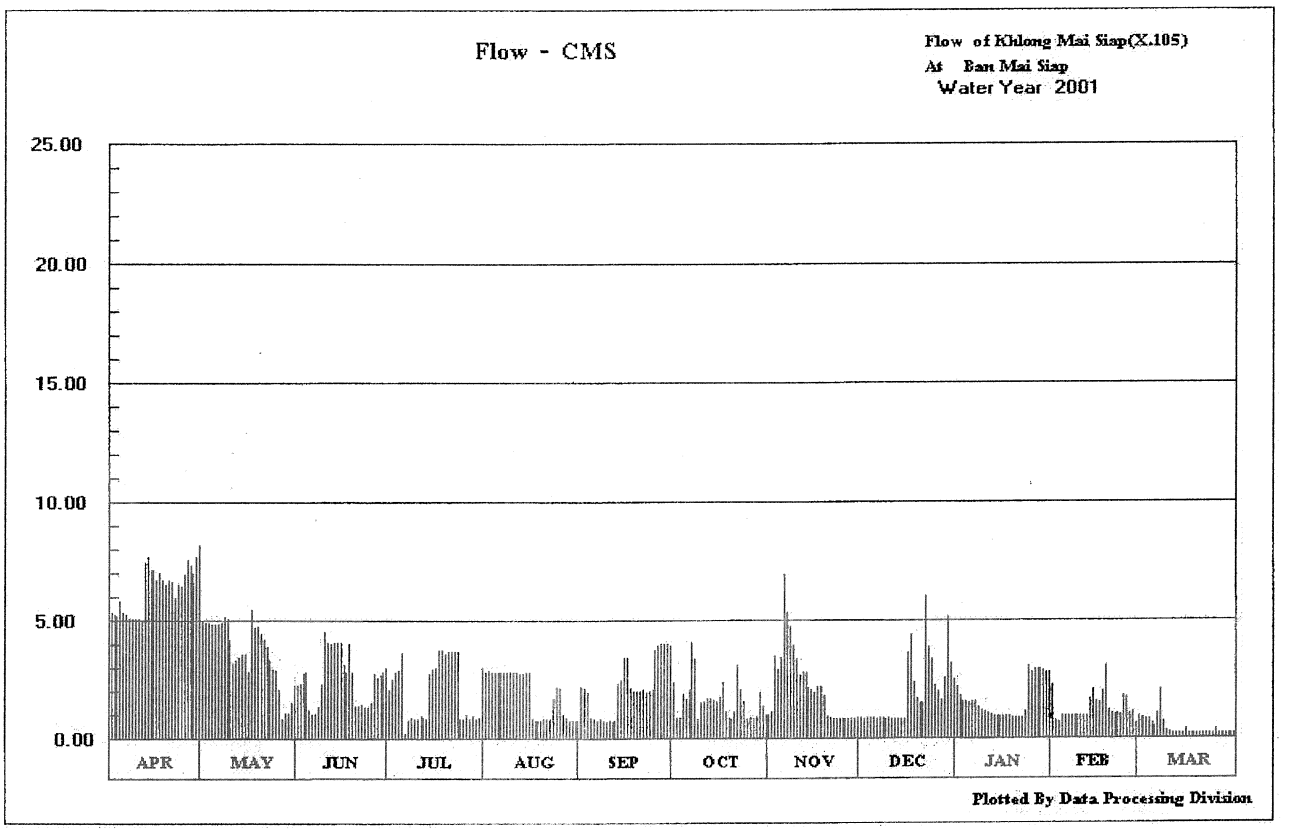
Lat 07 - 51 - 01 N. **Long** 99 - 55 - 53 E.

Location		on left bank at the bridge of Nakhon Si Thammarat - Phatthalung Highway.			
	Ban Mai Siap	**Amphoe** Cha - uat	**Changwat** Nakhon Si Thammarat		
Drainage Area		155 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+10.488 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	In front of the station office.			
	Elevation	+20.279 m. (M.S.L.)			
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.			
Period of Available Gage Records		1978 to date.			
Rating Operation					
	Period of Rating	1979 to date.			
	Rated by Float	-			
	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 14 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.79	11.74	11.36	11.33	11.44	11.35	11.38	11.17	11.15	11.35	11.36	11.16	
2	11.78	11.73	11.37	11.40	11.45	11.34	11.15	11.19	11.14	11.29	11.13	11.15	
3	11.77	11.73	11.43	11.44	11.44	11.31	11.15	11.54	11.15	11.25	11.12	11.14	
4	11.84	11.72	11.44	11.45	11.44	11.15	11.30	11.46	11.15	11.25	11.16	11.14	
5	11.79	11.72	11.20	11.56	11.44	11.14	11.27	11.53	11.15	11.24	11.16	11.11	
6	11.78	11.72	11.17	11.03	11.44	11.13	11.33	11.95	11.14	11.25	11.16	11.09	
7	11.75	11.73	11.17	11.13	11.44	11.14	11.62	11.79	11.15	11.25	11.16	11.18	
8	11.75	11.76	11.21	11.15	11.44	11.13	11.52	11.71	11.15	11.21	11.16	11.33	
9	11.75	11.75	11.37	11.14	11.44	11.12	11.14	11.60	11.14	11.20	11.16	11.12	
10	11.75	11.64	11.68	11.14	11.44	11.13	11.24	11.52	11.15	11.19	11.16	11.06	
11	11.74	11.50	11.62	11.16	11.44	11.12	11.25	11.42	11.14	11.18	11.16	11.05	
12	12.00	11.51	11.61	11.15	11.43	11.13	11.27	11.44	11.14	11.17	11.16	11.04	
13	12.02	11.53	11.62	11.14	11.43	11.37	11.27	11.44	11.14	11.16	11.27	11.04	
14	11.97	11.55	11.62	11.43	11.44	11.39	11.26	11.34	11.14	11.16	11.33	11.04	
15	11.97	11.55	11.62	11.46	11.44	11.53	11.25	11.33	11.14	11.16	11.25	11.04	
16	11.93	11.44	11.49	11.47	11.14	11.53	11.28	11.31	11.56	11.16	11.24	11.04	
17	11.96	11.80	11.44	11.58	11.13	11.34	11.38	11.35	11.66	11.16	11.32	11.03	
18	11.93	11.70	11.61	11.58	11.13	11.32	11.19	11.35	11.38	11.16	11.48	11.03	
19	11.91	11.71	11.44	11.55	11.13	11.32	11.15	11.29	11.27	11.15	11.20	11.03	
20	11.93	11.67	11.22	11.57	11.14	11.32	11.14	11.16	11.24	11.15	11.18	11.03	
21	11.92	11.64	11.22	11.57	11.14	11.33	11.19	11.15	11.24	11.15	11.17	11.03	
22	11.85	11.59	11.23	11.57	11.14	11.31	11.49	11.14	11.86	11.15	11.18	11.02	
23	11.91	11.51	11.21	11.57	11.27	11.32	11.33	11.14	11.59	11.19	11.17	11.03	
24	11.90	11.46	11.21	11.14	11.35	11.33	11.25	11.14	11.52	11.48	11.29	11.03	
25	11.95	11.45	11.24	11.14	11.34	11.58	11.14	11.14	11.36	11.44	11.28	11.04	
26	12.01	11.33	11.43	11.17	11.17	11.60	11.15	11.14	11.32	11.46	11.18	11.04	
27	11.99	11.14	11.41	11.14	11.15	11.61	11.14	11.14	11.26	11.46	11.19	11.04	
28	11.96	11.18	11.42	11.16	11.13	11.61	11.16	11.14	11.41	11.46	11.11	11.04	
29	12.02	11.18	11.44	11.14	11.13	11.61	11.31	11.14	11.76	11.45		11.04	
30	12.06	11.24	11.47	11.15	11.13	11.60	11.22	11.15	11.50	11.44		11.04	
31		11.36		11.47	11.13		11.17		11.40	11.44		11.03	
Mean	11.89	11.56	11.40	11.33	11.30	11.34	11.26	11.34	11.31	11.26	11.21	11.07	
Max	12.06	11.80	11.68	11.58	11.45	11.61	11.62	11.95	11.86	11.48	11.48	11.33	12.06
Min	11.74	11.14	11.17	11.03	11.13	11.12	11.14	11.14	11.14	11.15	11.11	11.02	11.02

Annual Max Momentary Gage Height 12.49 M (MSL), at 18.00 Hours, on Nov 6, 2001
Zero Gage at Bottom Elevation 10.49 M (MSL), River Bed 10.54 M (MSL)
Left Bank Elevation 22.01 M (MSL)
Right Bank Elevation 22.18 M (MSL), Drainage Area 155 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.42	5.05	2.34	2.15	2.88	2.28	2.47	1.11	0.97	2.28	2.34	1.04	
2	5.35	4.97	2.41	2.60	2.95	2.21	0.97	1.23	0.91	1.89	0.85	0.97	
3	5.28	4.97	2.81	2.88	2.88	2.02	0.97	3.58	0.97	1.63	0.78	0.91	
4	5.90	4.90	2.88	2.95	2.88	0.97	1.95	3.02	0.97	1.63	1.04	0.91	
5	5.42	4.90	1.30	3.72	2.88	0.91	1.76	3.51	0.97	1.56	1.04	0.71	
6	5.35	4.90	1.11	0.19	2.88	0.85	2.15	7.00	0.91	1.63	1.04	0.59	
7	5.12	4.97	1.11	0.85	2.88	0.91	4.15	5.42	0.97	1.63	1.04	1.17	
8	5.12	5.20	1.37	0.97	2.88	0.85	3.44	4.82	0.97	1.37	1.04	2.15	
9	5.12	5.12	2.41	0.91	2.88	0.78	0.91	4.00	0.91	1.30	1.04	0.78	
10	5.12	4.30	4.60	0.91	2.88	0.85	1.56	3.44	0.97	1.23	1.04	0.39	
11	5.05	3.30	4.15	1.04	2.88	0.78	1.63	2.74	0.91	1.17	1.04	0.33	
12	7.50	3.37	4.07	0.97	2.81	0.85	1.76	2.88	0.91	1.11	1.04	0.26	
13	7.75	3.51	4.15	0.91	2.81	2.41	1.76	2.88	0.91	1.04	1.76	0.26	
14	7.20	3.65	4.15	2.81	2.88	2.54	1.69	2.21	0.91	1.04	2.15	0.26	
15	7.20	3.65	4.15	3.02	2.88	3.51	1.63	2.15	0.91	1.04	1.63	0.26	
16	6.80	2.88	3.23	3.09	0.91	3.51	1.82	2.02	3.72	1.04	1.56	0.26	
17	7.10	5.50	2.88	3.86	0.85	2.21	2.47	2.28	4.45	1.04	2.08	0.19	
18	6.80	4.75	4.07	3.86	0.85	2.08	1.23	2.28	2.47	1.04	3.16	0.19	
19	6.60	4.82	2.88	3.65	0.85	2.08	0.97	1.89	1.76	0.97	1.30	0.19	
20	6.80	4.52	1.43	3.79	0.91	2.08	0.91	1.04	1.56	0.97	1.17	0.19	
21	6.70	4.30	1.43	3.79	0.91	2.15	1.23	0.97	1.56	0.97	1.11	0.19	
22	6.00	3.93	1.49	3.79	0.91	2.02	3.23	0.91	6.10	0.97	1.17	0.13	
23	6.60	3.37	1.37	3.79	1.76	2.08	2.15	0.91	3.93	1.23	1.11	0.19	
24	6.50	3.02	1.37	0.91	2.28	2.15	1.63	0.91	3.44	3.16	1.89	0.19	
25	7.00	2.95	1.56	0.91	2.21	3.86	0.91	0.91	2.34	2.88	1.82	0.26	
26	7.63	2.15	2.81	1.11	1.11	4.00	0.97	0.91	2.08	3.02	1.17	0.26	
27	7.40	0.91	2.67	0.91	0.97	4.07	0.91	0.91	1.69	3.02	1.23	0.26	
28	7.10	1.17	2.74	1.04	0.85	4.07	1.04	0.91	2.67	3.02	0.71	0.26	
29	7.75	1.17	2.88	0.91	0.85	4.07	2.02	0.91	5.20	2.95		0.26	
30	8.25	1.56	3.09	0.97	0.85	4.00	1.43	0.97	3.30	2.88		0.26	
31		2.34		3.09	0.85		1.11		2.60	2.88		0.19	
Total	192.93	116.10	78.91	66.35	61.05	67.15	52.83	68.72	62.94	53.59	38.35	14.46	873.38 CMSDAY
Mean	6.43	3.75	2.63	2.14	1.97	2.24	1.70	2.29	2.03	1.73	1.37	0.47	2.39 CMS
Max	8.25	5.50	4.60	3.86	2.95	4.07	4.15	7.00	6.10	3.16	3.16	2.15	8.25 CMS
Min	5.05	0.91	1.11	0.19	0.85	0.78	0.91	0.91	0.91	0.97	0.71	0.13	0.13 CMS
Runoff	16.669	10.031	6.818	5.733	5.275	5.802	4.565	5.937	5.438	4.630	3.313	1.249	75.460 MCM

Momentary Peak 14.35 CMS, at 12.49 M (MSL), at 18.00 Hours, on Nov 6, 2001

Runoff Yield 15.44 Liters/Second/Square KM, Momentary Peak Yield 92.581 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Chaiya at Ban Phanang, Surat Thani (X.106)

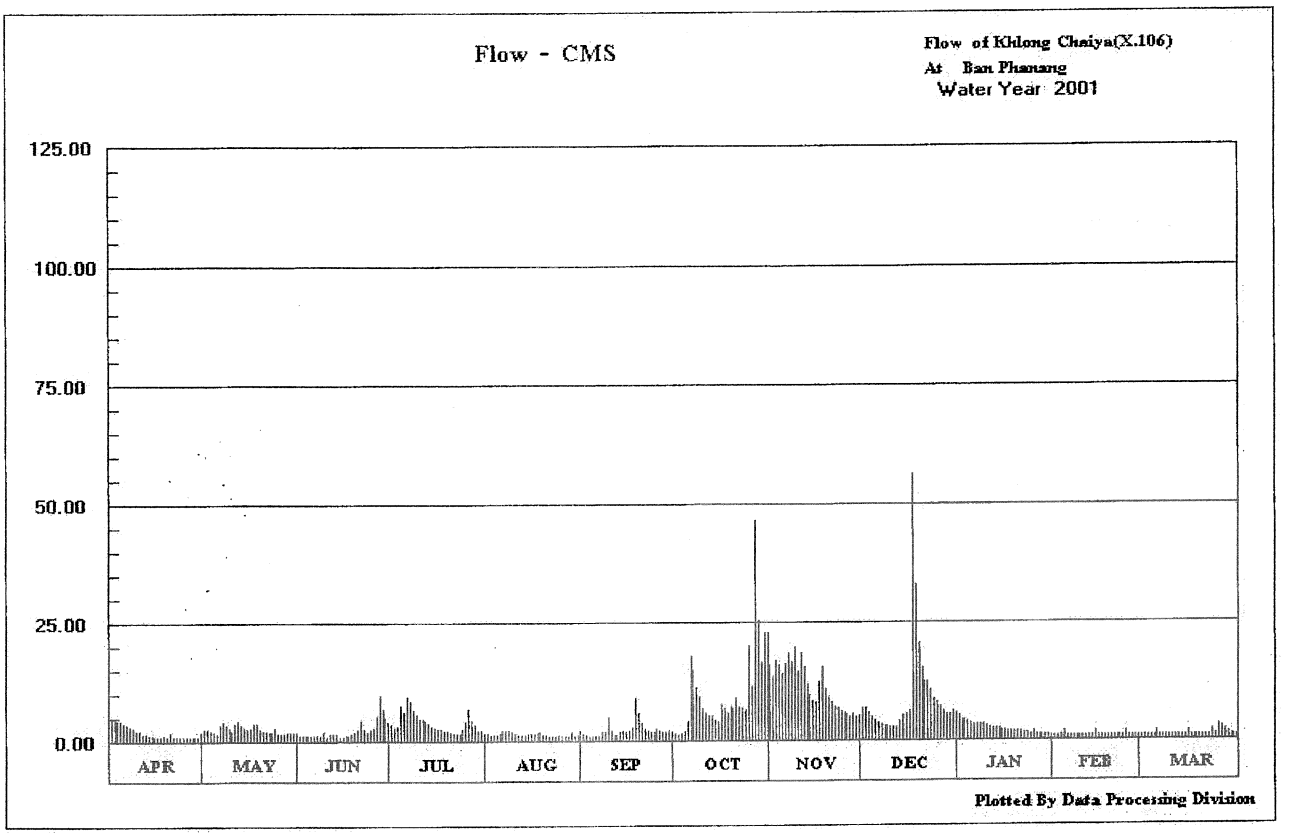
Lat 09 - 23 - 46 N. **Long** 99 - 10 - 32 E.

Location		on left bank at Ban Phanang.			
	Ban Phanang	**Amphoe** Chaiya		**Changwat** Surat Thani	
Drainage Area		309 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+7.000 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On left bank in front of the gage observer's house.			
	Elevation	+10.247 m. (M.S.L.)			
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.			
Period of Available Gage Records		1978 to date.			
Rating Operation					
	Period of Rating	1978 to date.			
	Rated by Float	-			
	Rated by Current Meter	1978 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records fair. Flow effected by Chaiya weir about 4 kilometers above gage site.			
		Stage-discharge relation defined by 40 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.80	7.54	7.36	7.64	7.38	7.38	7.38	8.73	7.97	7.82	7.30	7.16	
2	7.77	7.52	7.35	7.58	7.37	7.32	7.35	8.52	7.97	7.74	7.29	7.16	
3	7.73	7.47	7.34	7.60	7.36	7.27	7.38	8.79	7.89	7.72	7.32	7.17	
4	7.72	7.44	7.33	8.03	7.34	7.27	7.43	8.72	7.78	7.69	7.30	7.18	
5	7.68	7.41	7.32	7.92	7.38	7.27	7.70	8.59	7.74	7.68	7.30	7.20	
6	7.64	7.63	7.33	8.23	7.47	7.28	8.86	8.74	7.68	7.65	7.30	7.20	
7	7.59	7.70	7.34	8.14	7.48	7.34	8.64	8.92	7.63	7.63	7.29	7.19	
8	7.55	7.63	7.34	7.96	7.49	7.44	8.36	8.76	7.61	7.65	7.28	7.19	
9	7.50	7.55	7.30	7.84	7.44	7.78	8.23	9.00	7.59	7.63	7.25	7.18	
10	7.46	7.49	7.28	7.77	7.40	7.49	7.99	8.63	7.57	7.59	7.25	7.18	
11	7.40	7.67	7.38	7.77	7.35	7.37	7.89	8.92	7.56	7.58	7.24	7.17	
12	7.38	7.73	7.41	7.73	7.32	7.34	7.82	8.69	7.56	7.53	7.24	7.16	
13	7.35	7.62	7.39	7.66	7.36	7.43	7.81	8.41	7.70	7.53	7.23	7.15	
14	7.33	7.58	7.31	7.59	7.38	7.50	7.73	8.25	7.82	7.52	7.22	7.15	
15	7.31	7.52	7.31	7.55	7.41	7.45	7.69	8.15	7.85	7.50	7.22	7.15	
16	7.29	7.56	7.34	7.54	7.40	7.48	8.06	8.09	7.92	7.47	7.21	7.15	
17	7.31	7.66	7.34	7.52	7.42	7.55	7.99	8.47	10.57	7.45	7.21	7.15	
18	7.32	7.66	7.38	7.49	7.38	8.20	7.88	8.71	9.76	7.44	7.20	7.15	
19	7.31	7.54	7.36	7.46	7.37	7.87	8.02	8.35	9.06	7.43	7.20	7.16	
20	7.30	7.50	7.51	7.42	7.32	7.66	7.99	8.19	8.68	7.42	7.20	7.16	
21	7.29	7.46	7.73	7.40	7.30	7.54	8.20	8.09	8.46	7.44	7.23	7.16	
22	7.28	7.45	7.52	7.39	7.30	7.48	8.01	8.01	8.45	7.41	7.22	7.16	
23	7.26	7.44	7.44	7.41	7.30	7.43	7.99	7.97	8.31	7.40	7.21	7.29	
24	7.24	7.56	7.51	7.51	7.32	7.42	7.95	7.92	8.18	7.37	7.20	7.49	
25	7.22	7.40	7.58	7.70	7.29	7.54	9.03	7.89	8.09	7.35	7.19	7.37	
26	7.21	7.40	7.81	7.97	7.27	7.47	8.40	7.84	8.01	7.35	7.18	7.59	
27	7.20	7.41	8.25	7.72	7.26	7.44	10.32	7.79	7.93	7.34	7.18	7.57	
28	7.26	7.42	7.98	7.64	7.24	7.44	9.36	7.84	7.86	7.33	7.17	7.50	
29	7.23	7.43	7.79	7.50	7.25	7.46	8.77	7.78	7.85	7.36		7.39	
30	7.26	7.45	7.71	7.46	7.34	7.42	9.22	7.83	7.92	7.32		7.33	
31		7.43		7.41	7.46		9.22		7.90	7.31		7.27	
Mean	7.41	7.52	7.48	7.66	7.36	7.48	8.22	8.35	8.09	7.50	7.24	7.24	
Max	7.80	7.73	8.25	8.23	7.49	8.20	10.32	9.00	10.57	7.82	7.32	7.59	10.57
Min	7.20	7.40	7.28	7.39	7.24	7.27	7.35	7.78	7.56	7.31	7.17	7.15	7.15

Annual Max Momentary Gage Height 10.61 M (MSL), at 15.00 Hours, on Dec 17, 2001
Zero Gage at Bottom Elevation 7.00 M (MSL), River Bed 6.56 M (MSL)
Left Bank Elevation 12.16 M (MSL)
Right Bank Elevation 12.13 M (MSL), Drainage Area 309 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.50	3.05	1.76	3.90	1.88	1.88	1.88	16.46	7.20	5.70	1.40	0.64	
2	5.20	2.90	1.70	3.35	1.82	1.52	1.70	13.70	7.20	4.90	1.34	0.64	
3	4.80	2.52	1.64	3.50	1.76	1.22	1.88	17.24	6.40	4.70	1.52	0.68	
4	4.70	2.30	1.58	7.80	1.64	1.22	2.22	16.33	5.30	4.40	1.40	0.72	
5	4.30	2.07	1.52	6.70	1.88	1.22	4.50	14.62	4.90	4.30	1.40	0.80	
6	3.90	3.80	1.58	9.89	2.52	1.28	18.16	16.59	4.30	4.00	1.40	0.80	
7	3.43	4.50	1.64	8.90	2.60	1.64	15.28	18.95	3.80	3.80	1.34	0.76	
8	3.13	3.80	1.64	7.10	2.67	2.30	11.60	16.85	3.60	4.00	1.28	0.76	
9	2.75	3.13	1.40	5.90	2.30	5.30	9.89	20.00	3.43	3.80	1.10	0.72	
10	2.45	2.67	1.28	5.20	2.00	2.67	7.40	15.14	3.28	3.43	1.10	0.72	
11	2.00	4.20	1.88	5.20	1.70	1.82	6.40	18.95	3.20	3.35	1.04	0.68	
12	1.88	4.80	2.07	4.80	1.52	1.64	5.70	15.93	3.20	2.98	1.04	0.64	
13	1.70	3.70	1.94	4.10	1.76	2.22	5.60	12.26	4.50	2.98	0.98	0.60	
14	1.58	3.35	1.46	3.43	1.88	2.75	4.80	10.16	5.70	2.90	0.92	0.60	
15	1.46	2.90	1.46	3.13	2.07	2.37	4.40	9.00	6.00	2.75	0.92	0.60	
16	1.34	3.20	1.64	3.05	2.00	2.60	8.10	8.40	6.70	2.52	0.86	0.60	
17	1.46	4.10	1.64	2.90	2.15	3.13	7.40	13.04	56.72	2.37	0.86	0.60	
18	1.52	4.10	1.88	2.67	1.88	9.50	6.30	16.19	33.20	2.30	0.80	0.60	
19	1.46	3.05	1.76	2.45	1.82	6.20	7.70	11.47	20.90	2.22	0.80	0.64	
20	1.40	2.75	2.83	2.15	1.52	4.10	7.40	9.40	15.80	2.15	0.80	0.64	
21	1.34	2.45	4.80	2.00	1.40	3.05	9.50	8.40	12.91	2.30	0.98	0.64	
22	1.28	2.37	2.90	1.94	1.40	2.60	7.60	7.60	12.78	2.07	0.92	0.64	
23	1.16	2.30	2.30	2.07	1.40	2.22	7.40	7.20	10.94	2.00	0.86	1.34	
24	1.04	3.20	2.83	2.83	1.52	2.15	7.00	6.70	9.30	1.82	0.80	2.67	
25	0.92	2.00	3.35	4.50	1.34	3.05	20.45	6.40	8.40	1.70	0.76	1.82	
26	0.86	2.00	5.60	7.20	1.22	2.52	12.12	5.90	7.60	1.70	0.72	3.43	
27	0.80	2.07	10.16	4.70	1.16	2.30	46.90	5.40	6.80	1.64	0.72	3.28	
28	1.16	2.15	7.30	3.90	1.04	2.30	25.80	5.90	6.10	1.58	0.68	2.75	
29	0.98	2.22	5.40	2.75	1.10	2.45	16.98	5.30	6.00	1.76		1.94	
30	1.16	2.37	4.60	2.45	1.64	2.15	23.35	5.80	6.70	1.52		1.58	
31		2.22		2.07	2.45		23.35		6.50	1.46		1.22	
Total	66.66	92.24	83.54	132.53	55.04	81.37	338.76	355.28	299.36	89.10	28.74	34.75	1657.37 CMSDAY
Mean	2.22	2.98	2.78	4.28	1.78	2.71	10.93	11.84	9.66	2.87	1.03	1.12	4.54 CMS
Max	5.50	4.80	10.16	9.89	2.67	9.50	46.90	20.00	56.72	5.70	1.52	3.43	56.72 CMS
Min	0.80	2.00	1.28	1.94	1.04	1.22	1.70	5.30	3.20	1.46	0.68	0.60	0.60 CMS
Runoff	5.759	7.970	7.218	11.451	4.755	7.030	29.269	30.696	25.865	7.698	2.483	3.002	143.197 MCM

Momentary Peak 58.70 CMS, at 10.61 M (MSL), at 15.00 Hours, on Dec 17, 2001

Runoff Yield 14.69 Liters/Second/Square KM, Momentary Peak Yield 189.968 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Bang Kaeo at Ban Khuan In No Mo, Phatthalung (X.109)

Lat 07 - 20 - 29 N. **Long** 100 - 03 - 35 E.

Location on left bank at Ban Khuan In Nomo.

Ban Khuan In No Mo **Amphoe** Ta Mot **Changwat** Phatthalung

Drainage Area 133 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 Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Fairly stable.

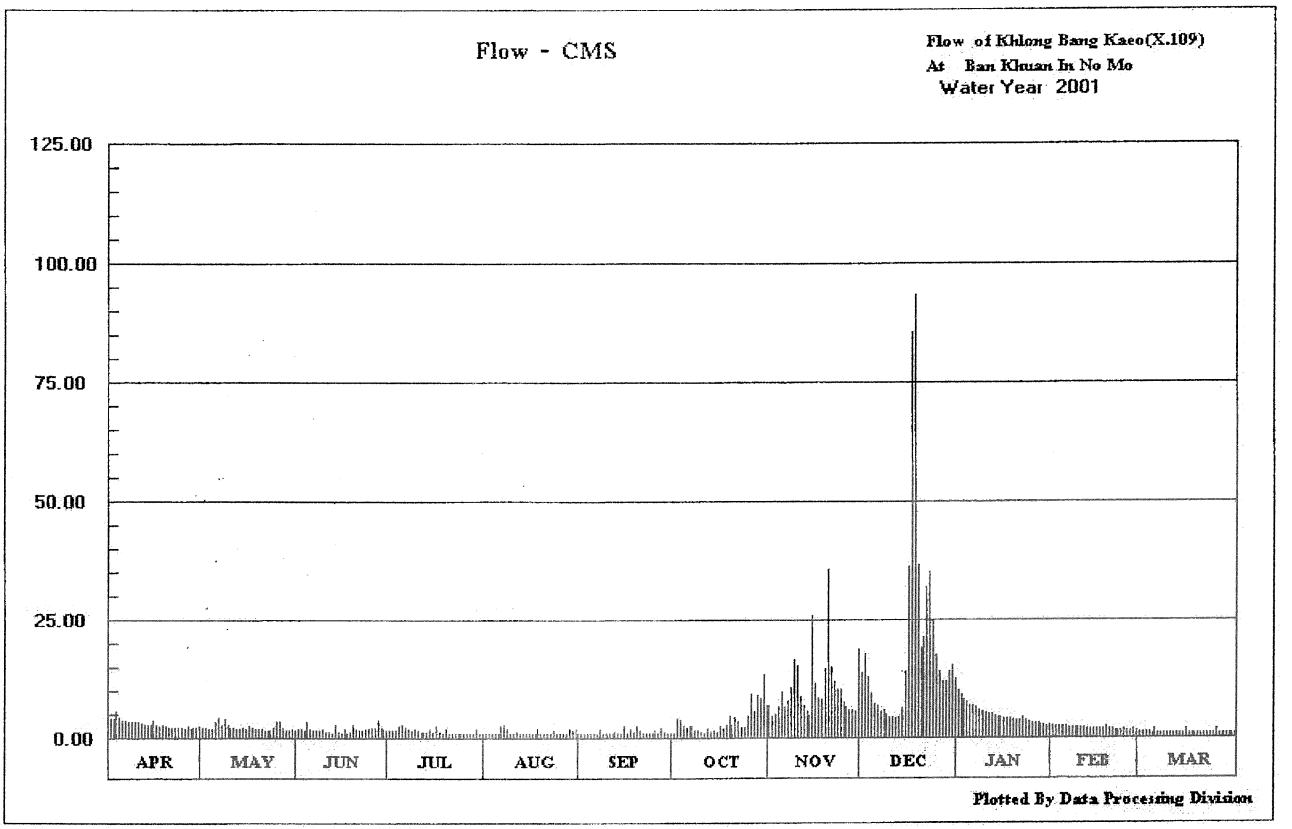
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 45 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.47	0.30	0.27	0.25	0.16	0.15	0.18	0.71	1.31	1.00	0.34	0.22	
2	0.46	0.29	0.26	0.24	0.16	0.14	0.46	0.54	1.63	0.91	0.33	0.22	
3	0.60	0.28	0.25	0.24	0.15	0.14	0.45	0.56	1.24	0.83	0.33	0.21	
4	0.51	0.28	0.42	0.33	0.15	0.14	0.32	0.69	0.94	0.77	0.33	0.21	
5	0.45	0.41	0.28	0.36	0.19	0.13	0.30	0.96	0.74	0.72	0.32	0.20	
6	0.43	0.49	0.25	0.30	0.32	0.19	0.32	0.70	0.72	0.71	0.31	0.19	
7	0.42	0.36	0.24	0.27	0.35	0.14	0.32	0.80	0.62	0.70	0.31	0.20	
8	0.41	0.48	0.23	0.25	0.23	0.14	0.23	1.05	0.63	0.65	0.30	0.19	
9	0.40	0.37	0.23	0.23	0.20	0.13	0.24	1.52	0.55	0.62	0.30	0.19	
10	0.42	0.31	0.22	0.23	0.17	0.14	0.22	1.44	0.51	0.59	0.29	0.19	
11	0.38	0.29	0.21	0.22	0.22	0.19	0.20	0.89	0.50	0.56	0.29	0.18	
12	0.36	0.28	0.20	0.22	0.18	0.21	0.27	0.72	0.48	0.55	0.28	0.18	
13	0.35	0.28	0.36	0.22	0.16	0.19	0.22	0.62	0.50	0.54	0.28	0.17	
14	0.37	0.29	0.22	0.27	0.16	0.17	0.23	0.54	0.68	0.50	0.27	0.17	
15	0.44	0.28	0.20	0.22	0.14	0.32	0.22	2.22	1.33	0.49	0.27	0.17	
16	0.36	0.32	0.26	0.33	0.14	0.19	0.32	1.13	2.91	0.48	0.27	0.17	
17	0.34	0.31	0.20	0.22	0.13	0.25	0.28	0.87	4.80	0.46	0.27	0.16	
18	0.35	0.27	0.21	0.20	0.13	0.22	0.36	0.83	4.91	0.46	0.32	0.16	
19	0.33	0.26	0.35	0.19	0.13	0.32	0.53	1.39	2.92	0.45	0.27	0.15	
20	0.31	0.25	0.28	0.19	0.13	0.24	0.36	2.87	1.72	0.44	0.27	0.15	
21	0.30	0.24	0.23	0.18	0.13	0.20	0.49	1.42	1.89	0.44	0.25	0.15	
22	0.30	0.24	0.23	0.18	0.13	0.18	0.40	1.15	2.62	0.51	0.25	0.15	
23	0.30	0.24	0.26	0.19	0.25	0.18	0.31	1.01	2.82	0.43	0.25	0.15	
24	0.29	0.31	0.27	0.19	0.16	0.16	0.29	1.03	2.16	0.41	0.24	0.19	
25	0.28	0.42	0.29	0.18	0.14	0.25	0.53	0.77	1.61	0.39	0.24	0.17	
26	0.32	0.40	0.30	0.18	0.13	0.19	0.95	0.70	1.34	0.39	0.23	0.17	
27	0.28	0.29	0.43	0.17	0.13	0.29	0.62	0.65	1.15	0.38	0.27	0.18	
28	0.29	0.25	0.29	0.19	0.24	0.22	0.92	0.63	1.16	0.37	0.23	0.15	
29	0.29	0.25	0.26	0.18	0.23	0.19	0.87	0.60	1.34	0.36		0.14	
30	0.33	0.24	0.25	0.16	0.27	0.19	1.28	1.69	1.44	0.34		0.13	
31		0.24		0.14	0.18		0.73		1.20	0.35		0.13	
Mean	0.37	0.31	0.27	0.22	0.18	0.19	0.43	1.02	1.56	0.54	0.28	0.17	
Max	0.60	0.49	0.43	0.36	0.35	0.32	1.28	2.87	4.91	1.00	0.34	0.22	4.91
Min	0.28	0.24	0.20	0.14	0.13	0.13	0.18	0.54	0.48	0.34	0.23	0.13	0.13

Annual Max Momentary Gage Height 5.94 M (A.D), at 17.00 Hours, on Dec 17, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.07 M (A.D)
Left Bank Elevation 9.45 M (A.D)
Right Bank Elevation 10.14 M (A.D), Drainage Area 133 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.47	2.60	2.27	2.05	1.20	1.13	1.35	7.16	14.22	10.50	3.04	1.72	
2	4.36	2.49	2.16	1.94	1.20	1.05	4.36	5.24	18.29	9.47	2.93	1.72	
3	5.90	2.38	2.05	1.94	1.13	1.05	4.25	5.46	13.38	8.55	2.93	1.61	
4	4.91	2.38	3.92	2.93	1.13	1.05	2.82	6.94	9.81	7.85	2.93	1.61	
5	4.25	3.81	2.38	3.26	1.42	0.97	2.60	10.04	7.51	7.28	2.82	1.50	
6	4.03	4.69	2.05	2.60	2.82	1.42	2.82	7.05	7.28	7.16	2.71	1.42	
7	3.92	3.26	1.94	2.27	3.15	1.05	2.82	8.20	6.13	7.05	2.71	1.50	
8	3.81	4.58	1.83	2.05	1.83	1.05	1.83	11.10	6.25	6.47	2.60	1.42	
9	3.70	3.37	1.83	1.83	1.50	0.97	1.94	16.86	5.35	6.13	2.60	1.42	
10	3.92	2.71	1.72	1.83	1.27	1.05	1.72	15.82	4.91	5.79	2.49	1.42	
11	3.48	2.49	1.61	1.72	1.72	1.42	1.50	9.23	4.80	5.46	2.49	1.35	
12	3.26	2.38	1.50	1.72	1.35	1.61	2.27	7.28	4.58	5.35	2.38	1.35	
13	3.15	2.38	3.26	1.72	1.20	1.42	1.72	6.13	4.80	5.24	2.38	1.27	
14	3.37	2.49	1.72	2.27	1.20	1.27	1.83	5.24	6.82	4.80	2.27	1.27	
15	4.14	2.38	1.50	1.72	1.05	2.82	1.72	26.30	14.46	4.69	2.27	1.27	
16	3.26	2.82	2.16	2.93	1.05	1.42	2.82	12.06	36.82	4.58	2.27	1.27	
17	3.04	2.71	1.50	1.72	0.97	2.05	2.38	9.01	86.00	4.36	2.27	1.20	
18	3.15	2.27	1.61	1.50	0.97	1.72	3.26	8.55	93.70	4.36	2.82	1.20	
19	2.93	2.16	3.15	1.42	0.97	2.82	5.13	15.18	36.98	4.25	2.27	1.13	
20	2.71	2.05	2.38	1.42	0.97	1.94	3.26	36.15	19.46	4.14	2.27	1.13	
21	2.60	1.94	1.83	1.35	0.97	1.50	4.69	15.56	21.71	4.14	2.05	1.13	
22	2.60	1.94	1.83	1.35	0.97	1.35	3.70	12.30	32.30	4.91	2.05	1.13	
23	2.60	1.94	2.16	1.42	2.05	1.35	2.71	10.62	35.33	4.03	2.05	1.13	
24	2.49	2.71	2.27	1.42	1.20	1.20	2.49	10.86	25.44	3.81	1.94	1.42	
25	2.38	3.92	2.49	1.35	1.05	2.05	5.13	7.85	18.03	3.59	1.94	1.27	
26	2.82	3.70	2.60	1.35	0.97	1.42	9.93	7.05	14.58	3.59	1.83	1.27	
27	2.38	2.49	4.03	1.27	0.97	2.49	6.13	6.47	12.30	3.48	2.27	1.35	
28	2.49	2.05	2.49	1.42	1.94	1.72	9.58	6.25	12.42	3.37	1.83	1.13	
29	2.49	2.05	2.16	1.35	1.83	1.42	9.01	5.90	14.58	3.26		1.05	
30	2.93	1.94	2.05	1.20	2.27	1.42	13.86	19.07	15.82	3.04		0.97	
31		1.94		1.05	1.35		7.40		12.90	3.15		0.97	
Total	101.54	83.02	66.45	55.37	43.67	45.20	127.03	330.93	616.96	163.85	67.41	40.60	1742.03 CMSDAY
Mean	3.38	2.68	2.22	1.79	1.41	1.51	4.10	11.03	19.90	5.29	2.41	1.31	4.77 CMS
Max	5.90	4.69	4.03	3.26	3.15	2.82	13.86	36.15	93.70	10.50	3.04	1.72	93.70 CMS
Min	2.38	1.94	1.50	1.05	0.97	0.97	1.35	5.24	4.58	3.04	1.83	0.97	0.97 CMS
Runoff	8.773	7.173	5.741	4.784	3.773	3.905	10.975	28.592	53.305	14.157	5.824	3.508	150.511 MCM

Momentary Peak 233.20 CMS, at 5.94 M (A.D), at 17.00 Hours, on Dec 17, 2001
Runoff Yield 35.88 Liters/Second/Square KM, Momentary Peak Yield 1753.383 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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

Drainage Area 256 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 +6.092 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 Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Stable.

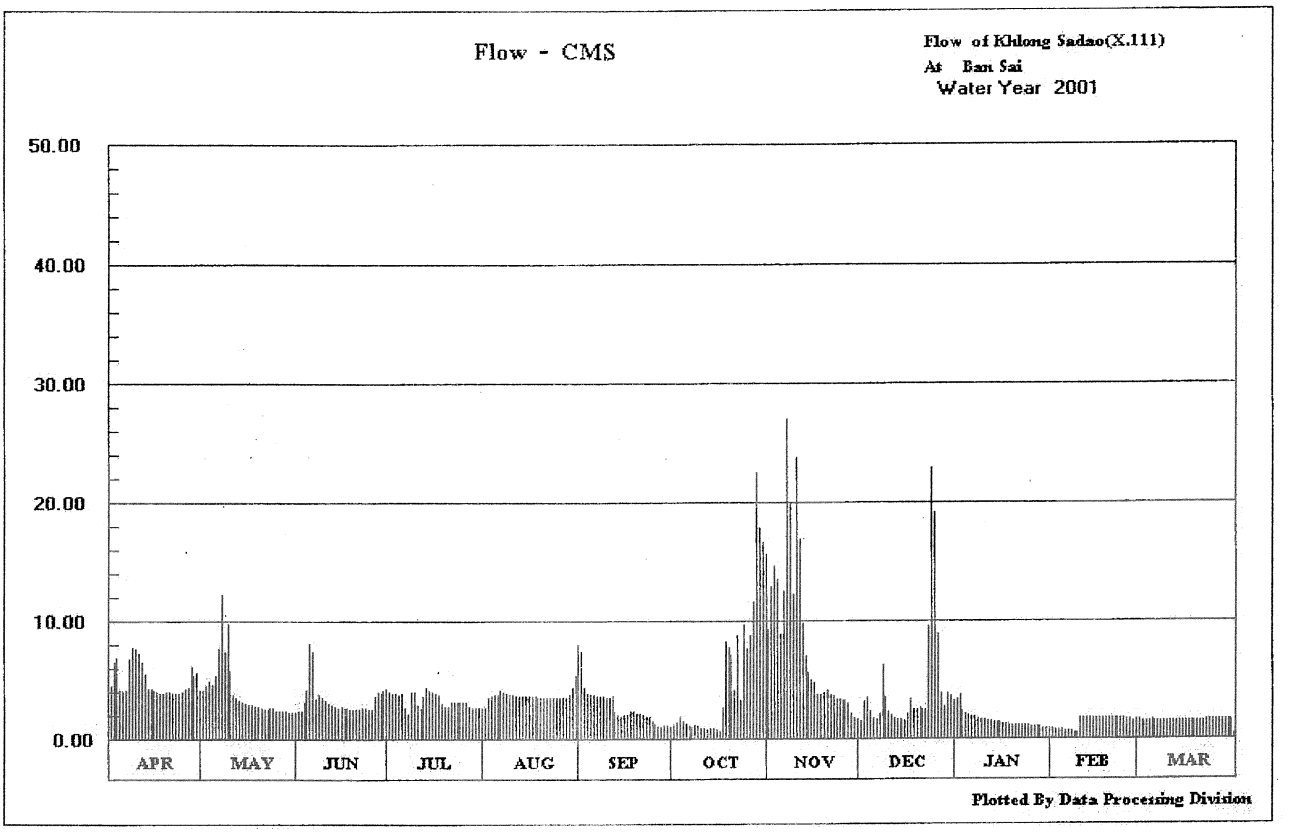
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.90	1.82	1.38	1.79	1.46	2.38	1.01	2.64	1.15	1.65	0.91	1.19	
2	2.25	1.90	1.40	1.76	1.66	1.88	1.12	2.99	1.57	1.73	0.90	1.17	
3	2.30	1.96	1.58	1.75	1.71	1.76	1.27	3.14	1.68	1.37	0.89	1.16	
4	1.83	1.93	1.82	1.73	1.73	1.73	1.15	3.05	1.37	1.31	0.88	1.15	
5	1.79	2.06	2.49	1.75	1.74	1.72	1.07	2.61	1.24	1.29	0.86	1.18	
6	1.83	2.42	2.39	1.45	1.81	1.71	1.01	2.96	1.19	1.27	0.84	1.17	
7	2.28	2.94	1.63	1.32	1.80	1.70	0.98	3.83	1.33	1.26	0.82	1.14	
8	2.45	2.39	1.73	1.80	1.77	1.69	1.01	3.46	2.21	1.24	0.76	1.16	
9	2.43	2.69	1.67	1.78	1.74	1.68	1.01	2.94	1.67	1.21	0.81	1.15	
10	2.36	2.11	1.61	1.50	1.72	1.68	0.95	3.67	1.36	1.18	1.23	1.16	
11	2.24	1.72	1.54	1.44	1.71	1.70	0.91	3.29	1.28	1.15	1.23	1.16	
12	2.08	1.67	1.51	1.71	1.70	1.35	0.87	2.69	1.23	1.14	1.23	1.15	
13	1.85	1.61	1.47	1.88	1.70	1.30	0.91	2.33	1.21	1.13	1.23	1.16	
14	1.84	1.58	1.44	1.83	1.70	1.27	0.93	2.10	1.19	1.12	1.23	1.15	
15	1.82	1.55	1.47	1.79	1.70	1.28	0.89	1.99	1.17	1.10	1.23	1.14	
16	1.79	1.52	1.46	1.77	1.69	1.30	0.86	1.94	1.33	1.08	1.23	1.14	
17	1.77	1.50	1.44	1.73	1.69	1.39	1.44	1.74	1.65	1.07	1.23	1.15	
18	1.75	1.49	1.43	1.54	1.68	1.37	2.52	1.74	1.41	1.04	1.23	1.15	
19	1.79	1.47	1.42	1.49	1.68	1.32	2.44	1.77	1.41	1.03	1.23	1.14	
20	1.78	1.45	1.41	1.48	1.68	1.31	2.35	1.82	1.45	1.03	1.23	1.15	
21	1.77	1.43	1.41	1.56	1.67	1.28	1.81	1.74	1.42	1.03	1.22	1.15	
22	1.77	1.42	1.46	1.56	1.68	1.26	2.59	1.69	1.42	1.03	1.23	1.16	
23	1.76	1.44	1.45	1.57	1.68	1.25	1.59	1.65	2.67	1.02	1.23	1.20	
24	1.79	1.45	1.42	1.57	1.67	1.17	2.68	1.63	3.63	1.01	1.23	1.20	
25	1.84	1.40	1.41	1.58	1.67	1.06	2.42	1.61	3.42	1.00	1.21	1.20	
26	1.87	1.39	1.71	1.57	1.66	1.00	2.59	1.59	2.61	0.99	1.18	1.20	
27	2.18	1.38	1.79	1.48	1.66	0.99	2.88	1.55	1.76	0.98	1.17	1.20	
28	2.05	1.37	1.76	1.46	1.73	1.01	3.61	1.31	1.47	0.97	1.19	1.19	
29	2.09	1.36	1.81	1.45	1.87	1.02	3.35	1.23	1.76	0.96		1.19	
30	1.82	1.35	1.85	1.46	2.06	1.00	3.27	1.21	1.70	0.93		1.19	
31		1.34		1.44	2.48		3.21		1.59	0.93		1.19	
Mean	1.97	1.71	1.61	1.61	1.74	1.42	1.76	2.26	1.66	1.14	1.10	1.17	
Max	2.45	2.94	2.49	1.88	2.48	2.38	3.61	3.83	3.63	1.73	1.23	1.20	3.83
Min	1.75	1.34	1.38	1.32	1.46	0.99	0.86	1.21	1.15	0.93	0.76	1.14	0.76

Annual Max Momentary Gage Height 3.90 M (A.D), at 12.00 Hours, on Nov 7, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.52 M (A.D)
Left Bank Elevation 7.18 M (A.D)
Right Bank Elevation 7.19 M (A.D), Drainage Area 256 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.70	4.30	2.52	4.16	2.84	7.48	1.23	9.40	1.65	3.60	0.98	1.77	
2	6.70	4.70	2.60	4.04	3.64	4.60	1.56	13.00	3.28	3.92	0.95	1.71	
3	7.00	5.00	3.32	4.00	3.84	4.04	2.08	14.85	3.72	2.48	0.92	1.68	
4	4.35	4.85	4.30	3.92	3.92	3.92	1.65	13.72	2.48	2.24	0.90	1.65	
5	4.16	5.56	8.23	4.00	3.96	3.88	1.41	9.10	1.96	2.16	0.85	1.74	
6	4.35	7.74	7.54	2.80	4.25	3.84	1.23	12.68	1.77	2.08	0.80	1.71	
7	6.88	12.47	3.52	2.28	4.20	3.80	1.15	27.17	2.32	2.04	0.75	1.62	
8	7.95	7.54	3.92	4.20	4.08	3.76	1.23	19.98	6.46	1.96	0.62	1.68	
9	7.81	9.90	3.68	4.12	3.96	3.72	1.23	12.47	3.68	1.84	0.72	1.65	
10	7.36	5.86	3.44	3.00	3.88	3.72	1.08	23.90	2.44	1.74	1.92	1.68	
11	6.64	3.88	3.16	2.76	3.84	3.80	0.98	17.08	2.12	1.65	1.92	1.68	
12	5.68	3.68	3.04	3.84	3.80	2.40	0.88	9.90	1.92	1.62	1.92	1.65	
13	4.45	3.44	2.88	4.60	3.80	2.20	0.98	7.18	1.84	1.59	1.92	1.68	
14	4.40	3.32	2.76	4.35	3.80	2.08	1.03	5.80	1.77	1.56	1.92	1.65	
15	4.30	3.20	2.88	4.16	3.80	2.12	0.92	5.15	1.71	1.50	1.92	1.62	
16	4.16	3.08	2.84	4.08	3.76	2.20	0.85	4.90	2.32	1.44	1.92	1.62	
17	4.08	3.00	2.76	3.92	3.76	2.56	2.76	3.96	3.60	1.41	1.92	1.65	
18	4.00	2.96	2.72	3.16	3.72	2.48	8.44	3.96	2.64	1.32	1.92	1.65	
19	4.16	2.88	2.68	2.96	3.72	2.28	7.88	4.08	2.64	1.29	1.92	1.62	
20	4.12	2.80	2.64	2.92	3.72	2.24	7.30	4.30	2.80	1.29	1.92	1.65	
21	4.08	2.72	2.64	3.24	3.68	2.12	4.25	3.96	2.68	1.29	1.88	1.65	
22	4.08	2.68	2.84	3.24	3.72	2.04	8.93	3.76	2.68	1.29	1.92	1.68	
23	4.04	2.76	2.80	3.28	3.72	2.00	3.36	3.60	9.70	1.26	1.92	1.80	
24	4.16	2.80	2.68	3.28	3.68	1.71	9.80	3.52	23.10	1.23	1.92	1.80	
25	4.40	2.60	2.64	3.32	3.68	1.38	7.74	3.44	19.26	1.20	1.84	1.80	
26	4.55	2.56	3.84	3.28	3.64	1.20	8.93	3.36	9.10	1.18	1.74	1.80	
27	6.28	2.52	4.16	2.92	3.64	1.18	11.84	3.20	4.04	1.15	1.71	1.80	
28	5.50	2.48	4.04	2.84	3.92	1.23	22.70	2.24	2.88	1.13	1.77	1.77	
29	5.74	2.44	4.25	2.80	4.55	1.26	18.07	1.92	4.04	1.10		1.77	
30	4.30	2.40	4.45	2.84	5.56	1.20	16.75	1.84	3.80	1.03		1.77	
31		2.36		2.76	8.16		15.77		3.36	1.03		1.77	
Total	154.38	128.48	105.77	107.07	124.24	82.44	174.01	253.42	137.76	51.62	43.31	52.77	1415.27 CMSDAY
Mean	5.15	4.14	3.53	3.45	4.01	2.75	5.61	8.45	4.44	1.67	1.55	1.70	3.88 CMS
Max	7.95	12.47	8.23	4.60	8.16	7.48	22.70	27.17	23.10	3.92	1.92	1.80	27.17 CMS
Min	4.00	2.36	2.52	2.28	2.84	1.18	0.85	1.84	1.65	1.03	0.62	1.62	0.62 CMS
Runoff	13.338	11.101	9.139	9.251	10.734	7.123	15.034	21.895	11.902	4.460	3.742	4.559	122.279 MCM

Momentary Peak 28.75 CMS, at 3.90 M (A.D), at 12.00 Hours, on Nov 7, 2001
Runoff Yield 15.15 Liters/Second/Square KM, Momentary Peak Yield 112.305 Liters/Second/Square_KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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

Drainage Area 129 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 15 meters from the gage observer's house.

Elevation +7.140 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 1979 to date.

Rating Operation

Period of Rating 1979 to date.

Rated by Float -

Rated by Current Meter 1979 to date.

Stability of Channel Regimes Stable.

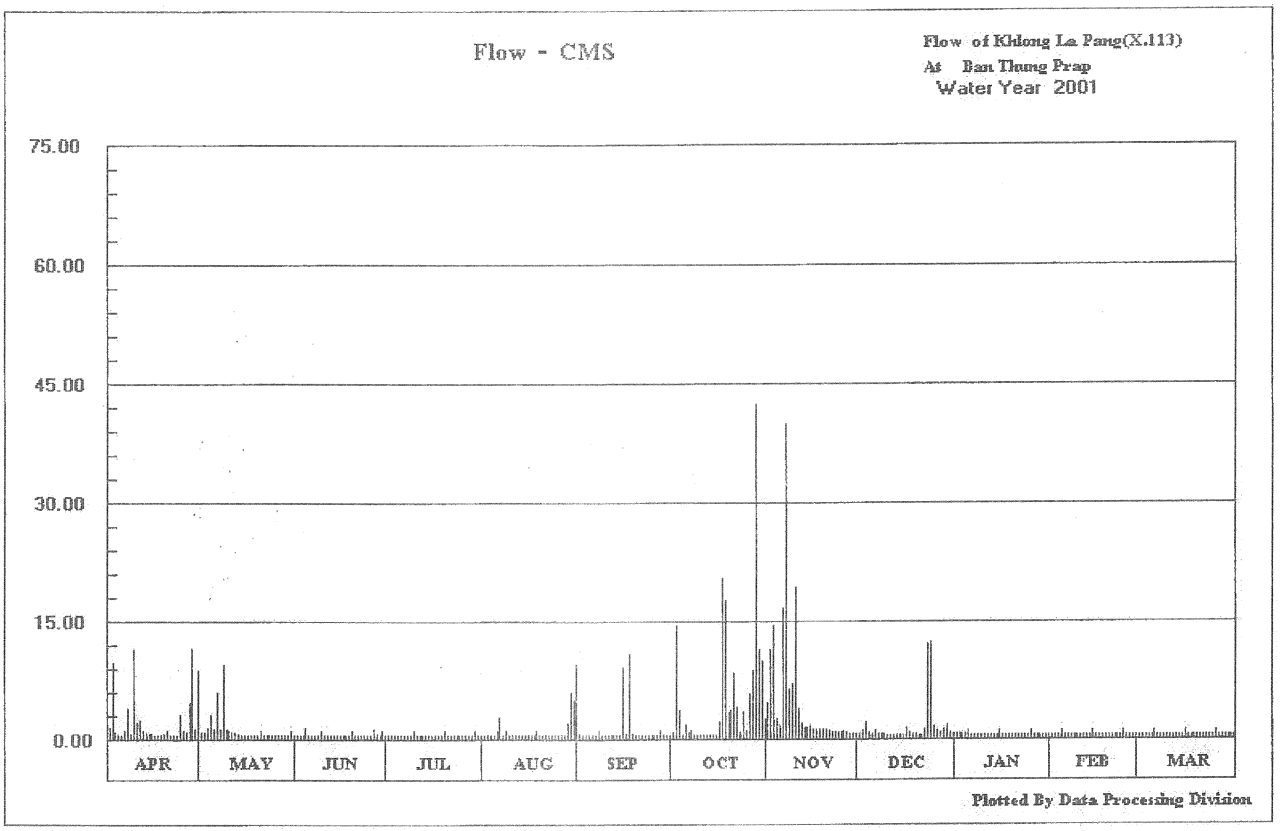
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.38	2.09	1.77	1.79	1.71	2.02	2.06	3.18	1.97	2.01	1.88	1.82	
2	3.86	2.09	1.75	1.76	1.71	1.86	4.25	4.02	2.17	1.99	1.88	1.82	
3	2.12	2.34	1.81	1.76	1.71	1.90	2.93	4.25	2.57	1.97	1.87	1.82	
4	2.00	2.81	2.38	1.75	1.77	1.78	1.94	2.65	2.06	1.97	1.87	1.82	
5	1.94	2.24	1.90	1.80	2.19	1.77	2.50	2.45	2.00	1.96	1.86	1.82	
6	2.15	3.43	1.79	1.79	2.72	1.74	2.05	4.39	1.98	1.95	1.86	1.82	
7	3.01	2.29	1.77	1.77	1.93	1.73	1.82	5.44	1.98	1.95	1.86	1.82	
8	2.02	3.84	1.78	1.73	1.77	1.72	1.81	3.49	1.97	1.94	1.86	1.81	
9	4.01	2.31	1.77	1.73	1.73	1.71	1.80	3.59	1.96	1.94	1.86	1.81	
10	2.56	2.15	1.76	1.72	1.72	1.71	1.77	4.56	1.95	1.93	1.86	1.81	
11	2.62	2.10	1.74	1.72	1.72	1.71	1.75	2.99	1.94	1.93	1.86	1.81	
12	2.16	2.05	1.74	1.73	1.73	1.70	1.75	2.53	1.94	1.93	1.85	1.81	
13	2.01	1.98	1.72	1.89	1.73	1.72	1.75	2.40	1.94	1.92	1.85	1.81	
14	2.01	1.94	1.70	1.77	1.73	1.73	1.73	2.33	1.93	1.92	1.85	1.81	
15	1.98	1.91	1.69	1.74	1.73	3.81	1.73	2.42	1.93	1.91	1.85	1.81	
16	1.95	1.95	1.67	1.73	1.73	1.99	2.56	2.28	2.36	1.91	1.85	1.80	
17	1.92	1.89	1.68	1.72	1.73	3.96	4.63	2.27	2.05	1.91	1.84	1.80	
18	1.90	1.86	1.68	1.71	1.72	2.03	4.46	2.31	1.97	1.91	1.83	1.80	
19	1.96	1.84	1.68	1.72	1.72	1.80	2.87	2.29	1.97	1.91	1.83	1.79	
20	1.87	1.83	1.68	1.71	1.72	1.77	2.97	2.25	1.94	1.91	1.83	1.79	
21	1.85	1.86	1.68	1.71	1.72	1.76	3.74	2.17	1.93	1.91	1.83	1.80	
22	1.93	1.83	1.94	1.71	1.72	1.75	3.04	2.14	2.27	1.91	1.83	1.80	
23	1.82	1.81	1.93	1.71	1.72	1.75	2.09	2.10	4.08	1.91	1.83	1.80	
24	2.80	1.84	1.81	1.71	1.72	1.74	2.89	2.08	4.09	1.90	1.83	1.81	
25	2.16	1.84	1.85	1.71	1.72	1.73	2.23	2.07	2.45	1.90	1.83	1.83	
26	2.08	1.81	2.30	1.72	1.72	1.73	3.42	2.06	2.12	1.90	1.83	1.83	
27	3.17	1.80	2.00	1.72	1.71	1.73	3.77	2.05	2.05	1.90	1.83	1.82	
28	4.03	1.78	1.84	1.71	2.54	1.73	5.52	2.01	2.27	1.89	1.82	1.81	
29	2.25	1.78	2.05	1.71	3.43	1.72	4.02	1.99	2.47	1.89		1.80	
30	3.78	1.77	1.86	1.71	3.24	1.72	3.88	1.98	2.14	1.88		1.79	
31		1.77		1.71	3.85		2.68		2.04	1.88		1.83	
Mean	2.41	2.09	1.82	1.74	1.98	1.92	2.79	2.76	2.21	1.92	1.85	1.81	
Max	4.03	3.84	2.38	1.89	3.85	3.96	5.52	5.44	4.09	2.01	1.88	1.83	5.52
Min	1.82	1.77	1.67	1.71	1.71	1.70	1.73	1.98	1.93	1.88	1.82	1.79	1.67

Annual Max Momentary Gage Height 6.27 M (A.D), at 1.00 Hours, on Nov 7, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.08 M (A.D)
Left Bank Elevation 8.22 M (A.D)
Right Bank Elevation 8.25 M (A.D), Drainage Area 129 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.76	1.18	0.54	0.58	0.42	1.04	1.12	5.01	0.94	1.02	0.76	0.64	
2	9.96	1.18	0.50	0.52	0.42	0.72	14.75	11.75	1.34	0.98	0.76	0.64	
3	1.24	1.68	0.62	0.52	0.42	0.80	3.92	14.75	2.48	0.94	0.74	0.64	
4	1.00	3.44	1.76	0.50	0.54	0.56	0.88	2.80	1.12	0.94	0.74	0.64	
5	0.88	1.48	0.80	0.60	1.38	0.54	2.20	2.00	1.00	0.92	0.72	0.64	
6	1.30	6.23	0.58	0.58	3.08	0.48	1.10	16.85	0.96	0.90	0.72	0.64	
7	4.25	1.58	0.54	0.54	0.86	0.46	0.64	40.20	0.96	0.90	0.72	0.64	
8	1.04	9.74	0.56	0.46	0.54	0.44	0.62	6.68	0.94	0.88	0.72	0.62	
9	11.63	1.62	0.54	0.46	0.46	0.42	0.60	7.43	0.92	0.88	0.72	0.62	
10	2.44	1.30	0.52	0.44	0.44	0.42	0.54	19.48	0.90	0.86	0.72	0.62	
11	2.68	1.20	0.48	0.44	0.44	0.42	0.50	4.16	0.88	0.86	0.72	0.62	
12	1.32	1.10	0.48	0.46	0.46	0.40	0.50	2.32	0.88	0.86	0.70	0.62	
13	1.02	0.96	0.44	0.78	0.46	0.44	0.50	1.80	0.88	0.84	0.70	0.62	
14	1.02	0.88	0.40	0.54	0.46	0.46	0.46	1.66	0.86	0.84	0.70	0.62	
15	0.96	0.82	0.38	0.48	0.46	9.41	0.46	1.88	0.86	0.82	0.70	0.62	
16	0.90	0.90	0.34	0.46	0.46	0.98	2.44	1.56	1 72	0.82	0.70	0.60	
17	0.84	0.78	0.36	0.44	0.46	11.06	20.69	1.54	1.10	0.82	0.68	0.60	
18	0.80	0.72	0.36	0.42	0.44	1.06	17.93	1.62	0.94	0.82	0.66	0.60	
19	0.92	0.68	0.36	0.44	0.44	0.60	3.68	1.58	0.94	0.82	0.66	0.58	
20	0.74	0.66	0.36	0.42	0.44	0.54	4.08	1.50	0.88	0.82	0.66	0.58	
21	0.70	0.72	0.36	0.42	0.44	0.52	8.76	1.34	0.86	0.82	0.66	0.60	
22	0.86	0.66	0.88	0.42	0.44	0.50	4.38	1.28	1.54	0.82	0.66	0.60	
23	0.64	0.62	0.86	0.42	0.44	0.50	1.18	1.20	12.50	0.82	0.66	0.60	
24	3.40	0.68	0.62	0.42	0.44	0.48	3.76	1.16	12.63	0.80	0.66	0.62	
25	1.32	0.68	0.70	0.42	0.44	0.46	1.46	1.14	2.00	0.80	0.66	0.66	
26	1.16	0.62	1.60	0.44	0.44	0.46	6.15	1.12	1.24	0.80	0.66	0.66	
27	4.97	0.60	1.00	0.44	0.42	0.46	9.03	1.10	1.10	0.80	0.66	0.64	
28	11.88	0.56	0.68	0.42	2.36	0.46	42.60	1.02	1.54	0.78	0.64	0.62	
29	1.50	0.56	1.10	0.42	6.23	0.44	11.75	0.98	2.08	0.78		0.60	
30	9.12	0.54	0.72	0.42	5.28	0.44	10.18	0.96	1.28	0.76		0.58	
31		0.54		0.42	9.85		2.92		1.08	0.76		0.66	
Total	82.25	44.91	19.44	14.74	39.86	35.97	179.78	157.87	59.35	26.28	19.46	19.24	699.15 CMSDAY
Mean	2.74	1.45	0.65	0.48	1.29	1.20	5.80	5.26	1.91	0.85	0.69	0.62	1.92 CMS
Max	11.88	9.74	1.76	0.78	9.85	11.06	42.60	40.20	12.63	1.02	0.76	0.66	42.60 CMS
Min	0.64	0.54	0.34	0.42	0.42	0.40	0.46	0.96	0.86	0.76	0.64	0.58	0.34 CMS
Runoff	7.106	3.880	1.680	1.274	3.444	3.108	15.533	13.640	5.128	2.271	1.681	1.662	60.407 MCM

Momentary Peak 74.83 CMS, at 6.27 M (A.D), at 1.00 Hours, on Nov 7, 2001
Runoff Yield 14.85 Liters/Second/Square KM, Momentary Peak Yield 580.078 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 43 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +15.853 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +20.347 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1978 to date.

Rating Operation

Period of Rating 1981 to date.

Rated by Float -

Rated by Current Meter 1981 to date.

Stability of Channel Regimes Stable.

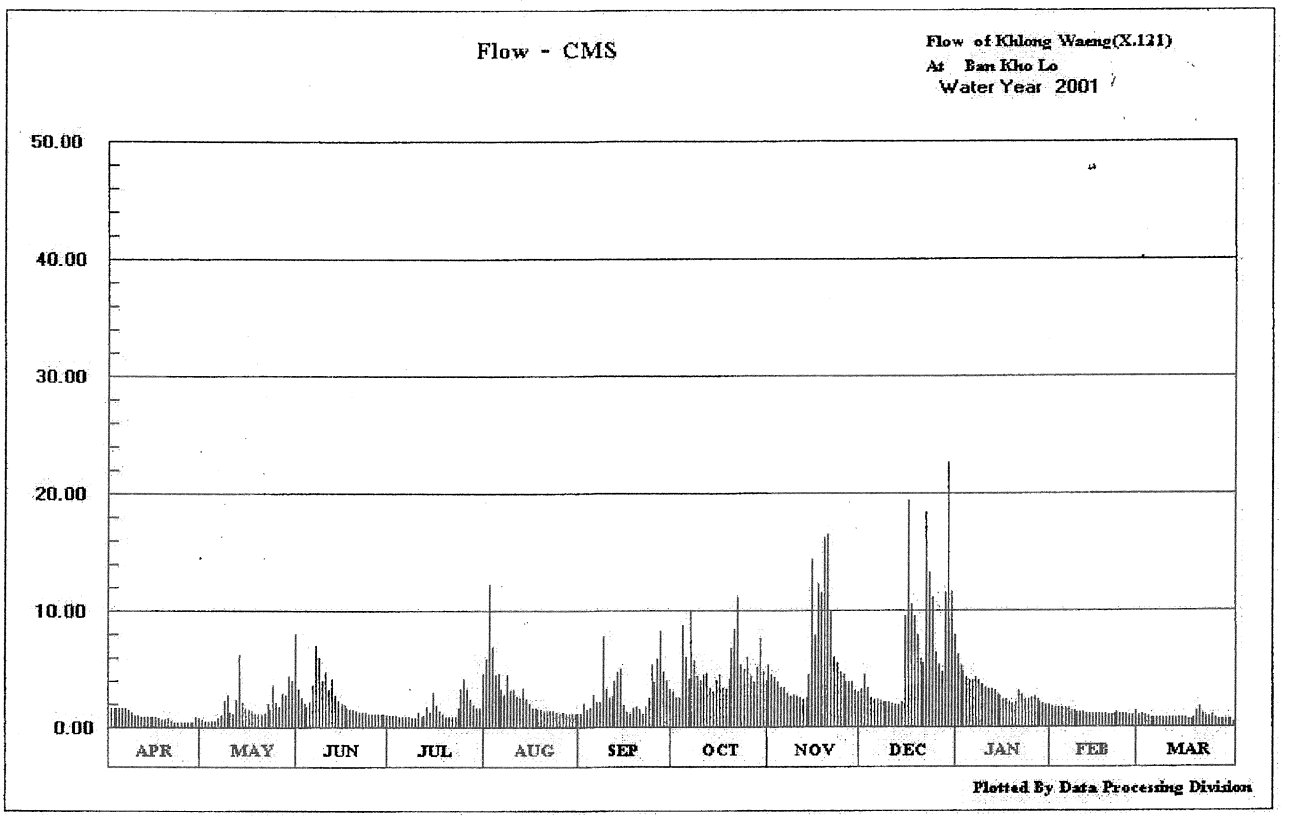
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.96	17.76	18.17	17.84	18.48	17.86	18.14	18.43	18.18	18.52	17.99	17.84	
2	17.96	17.74	18.08	17.84	19.06	18.02	18.08	18.32	18.32	18.41	17.97	17.85	
3	17.95	17.74	18.02	17.83	18.60	17.94	18.08	18.30	18.20	18.35	17.97	17.83	
4	17.96	17.74	17.99	17.82	18.32	17.97	18.78	18.25	18.08	18.29	17.97	17.81	
5	17.96	17.73	18.03	17.81	18.34	18.11	18.50	18.20	18.07	18.26	17.96	17.79	
6	17.97	17.79	18.23	17.81	18.18	18.04	18.28	18.19	18.06	18.26	17.95	17.79	
7	17.93	17.84	18.61	17.81	18.12	18.03	18.89	18.13	18.05	18.30	17.92	17.78	
8	17.88	18.05	18.50	17.79	18.33	18.68	18.47	18.10	18.04	18.26	17.91	17.78	
9	17.84	18.11	18.27	17.79	18.16	18.17	18.31	18.12	18.03	18.23	17.89	17.79	
10	17.84	17.89	18.35	17.89	18.18	18.08	18.26	18.10	18.03	18.19	17.88	17.79	
11	17.82	17.85	18.18	17.82	18.10	18.10	18.32	18.08	18.02	18.17	17.88	17.79	
12	17.81	18.06	18.28	17.84	18.08	18.26	18.34	18.07	18.01	18.18	17.86	17.79	
13	17.80	18.52	18.11	17.98	18.19	18.35	18.19	18.09	18.01	18.16	17.87	17.79	
14	17.82	18.03	18.05	17.88	18.06	18.38	18.14	18.33	18.04	18.12	17.86	17.79	
15	17.80	17.97	18.02	18.15	18.02	18.01	18.27	19.20	18.85	18.10	17.85	17.78	
16	17.80	17.93	18.01	18.01	17.97	17.89	18.32	18.70	19.49	18.07	17.85	17.77	
17	17.78	17.90	17.97	17.90	17.95	17.85	18.20	19.06	18.93	18.06	17.85	17.77	
18	17.77	17.86	17.94	17.85	17.93	17.97	18.18	19.01	18.85	18.04	17.85	17.76	
19	17.75	17.85	17.93	17.82	17.93	17.98	18.28	19.32	18.70	18.02	17.84	17.78	
20	17.73	17.84	17.90	17.81	17.92	17.94	18.58	19.34	18.48	18.04	17.84	17.92	
21	17.73	17.86	17.89	17.81	17.92	17.86	18.74	18.88	18.44	18.16	17.86	17.98	
22	17.72	18.02	17.89	17.80	17.91	17.98	18.98	18.50	19.44	18.11	17.89	17.86	
23	17.72	17.94	17.88	17.96	17.90	18.09	18.43	18.44	19.13	18.06	17.86	17.81	
24	17.71	18.23	17.87	18.17	17.89	18.43	18.39	18.35	18.98	18.06	17.85	17.80	
25	17.71	18.04	17.86	18.28	17.87	18.25	18.49	18.33	18.54	18.09	17.85	17.83	
26	17.70	17.98	17.85	18.18	17.88	18.48	18.31	18.25	18.42	18.10	17.83	17.79	
27	17.70	18.13	17.85	18.07	17.87	18.73	18.25	18.25	18.36	18.06	17.84	17.77	
28	17.70	18.11	17.85	18.01	17.85	18.36	18.40	18.25	19.01	18.03	17.90	17.76	
29	17.80	18.31	17.85	17.97	17.85	18.27	18.67	18.16	19.63	18.02		17.75	
30	17.78	18.26	17.84	17.96	17.85	18.18	18.36	18.15	19.02	18.01		17.75	
31		18.71		18.34	17.85		18.26		18.70	18.01		17.75	
Mean	17.81	17.99	18.04	17.93	18.08	18.14	18.38	18.43	18.52	18.15	17.89	17.80	
Max	17.97	18.71	18.61	18.34	19.06	18.73	18.98	19.34	19.63	18.52	17.99	17.98	19.63
Min	17.70	17.73	17.84	17.79	17.85	17.85	18.08	18.07	18.01	18.01	17.83	17.75	17.70

Annual Max Momentary Gage Height 19.87 M (MSL), at 12.00 Hours, on Dec 29, 2001
Zero Gage at Bottom Elevation 15.85 M (MSL), River Bed 17.70 M (MSL)
Left Bank Elevation 21.80 M (MSL)
Right Bank Elevation 21.85 M (MSL), Drainage Area 43 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.80	0.80	3.36	1.20	6.02	1.30	3.12	5.57	3.44	6.38	1.95	1.20	
2	1.80	0.70	2.64	1.20	12.40	2.16	2.64	4.62	4.62	5.39	1.85	1.25	
3	1.75	0.70	2.16	1.15	7.10	1.70	2.64	4.45	3.60	4.88	1.85	1.15	
4	1.80	0.70	1.95	1.10	4.62	1.85	8.90	4.02	2.64	4.37	1.85	1.05	
5	1.80	0.65	2.24	1.05	4.79	2.88	6.20	3.60	2.56	4.11	1.80	0.95	
6	1.85	0.95	3.85	1.05	3.44	2.32	4.28	3.52	2.48	4.11	1.75	0.95	
7	1.65	1.20	7.20	1.05	2.96	2.24	10.18	3.04	2.40	4.45	1.60	0.90	
8	1.40	2.40	6.20	0.95	4.70	7.90	5.93	2.80	2.32	4.11	1.55	0.90	
9	1.20	2.88	4.20	0.95	3.28	3.36	4.53	2.96	2.24	3.85	1.45	0.95	
10	1.20	1.45	4.88	1.45	3.44	2.64	4.11	2.80	2.24	3.52	1.40	0.95	
11	1.10	1.25	3.44	1.10	2.80	2.80	4.62	2.64	2.16	3.36	1.40	0.95	
12	1.05	2.48	4.28	1.20	2.64	4.11	4.79	2.56	2.08	3.44	1.30	0.95	
13	1.00	6.38	2.88	1.90	3.52	4.88	3.52	2.72	2.08	3.28	1.35	0.95	
14	1.10	2.24	2.40	1.40	2.48	5.13	3.12	4.70	2.32	2.96	1.30	0.95	
15	1.00	1.85	2.16	3.20	2.16	2.08	4.20	14.50	9.70	2.80	1.25	0.90	
16	1.00	1.65	2.08	2.08	1.85	1.45	4.62	8.10	19.58	2.56	1.25	0.85	
17	0.90	1.50	1.85	1.50	1.75	1.25	3.60	12.40	10.66	2.48	1.25	0.85	
18	0.85	1.30	1.70	1.25	1.65	1.85	3.44	11.65	9.70	2.32	1.25	0.80	
19	0.75	1.25	1.65	1.10	1.65	1.90	4.28	16.36	8.10	2.16	1.20	0.90	
20	0.65	1.20	1.50	1.05	1.60	1.70	6.92	16.67	6.02	2.32	1.20	1.60	
21	0.65	1.30	1.45	1.05	1.60	1.30	8.50	10.06	5.66	3.28	1.30	1.90	
22	0.60	2.16	1.45	1.00	1.55	1.90	11.26	6.20	18.48	2.88	1.45	1.30	
23	0.60	1.70	1.40	1.80	1.50	2.72	5.57	5.66	13.45	2.48	1.30	1.05	
24	0.55	3.85	1.35	3.36	1.45	5.57	5.21	4.88	11.26	2.48	1.25	1.00	
25	0.55	2.32	1.30	4.28	1.35	4.02	6.11	4.70	6.56	2.72	1.25	1.15	
26	0.50	1.90	1.25	3.44	1.40	6.02	4.53	4.02	5.48	2.80	1.15	0.95	
27	0.50	3.04	1.25	2.56	1.35	8.40	4.02	4.02	4.96	2.48	1.20	0.85	
28	0.50	2.88	1.25	2.08	1.25	4.96	5.30	4.02	11.65	2.24	1.50	0.80	
29	1.00	4.53	1.25	1.85	1.25	4.20	7.80	3.28	22.76	2.16		0.75	
30	0.90	4.11	1.20	1.80	1.25	3.44	4.96	3.20	11.80	2.08		0.75	
31		8.20		4.79	1.25		4.11		8.10	2.08		0.75	
Total	32.00	69.52	75.77	54.94	90.05	98.03	163.01	179.72	221.10	100.53	40.20	31.20	1156.07 CMSDAY
Mean	1.07	2.24	2.53	1.77	2.90	3.27	5.26	5.99	7.13	3.24	1.44	1.01	3.17 CMS
Max	1.85	8.20	7.20	4.79	12.40	8.40	11.26	16.67	22.76	6.38	1.95	1.90	22.76 CMS
Min	0.50	0.65	1.20	0.95	1.25	1.25	2.64	2.56	2.08	2.08	1.15	0.75	0.50 CMS
Runoff	2.765	6.007	6.547	4.747	7.780	8.470	14.084	15.528	19.103	8.686	3.473	2.696	99.884 MCM

Momentary Peak 29.20 CMS, at 19.87 M (MSL), at 12.00 Hours, on Dec 29, 2001

Runoff Yield 73.66 Liters/Second/Square KM, Momentary Peak Yield 679.070 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Ai To at Ban Ai To, Phatthalung (X.129)

Lat 07 - 23 - 19 N. **Long** 100 - 06 - 44 N.

Location on right bank near Wat Ban Ai To.

Ban Ai To **Amphoe** Bang Kaeo **Changwat** Phatthalung

Drainage Area 332 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +13.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 20 meters from the top staff gage.

Elevation +20.510 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1982 to date.

Rating Operation

Period of Rating 1983 to date.

Rated by Float -

Rated by Current Meter 1983 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

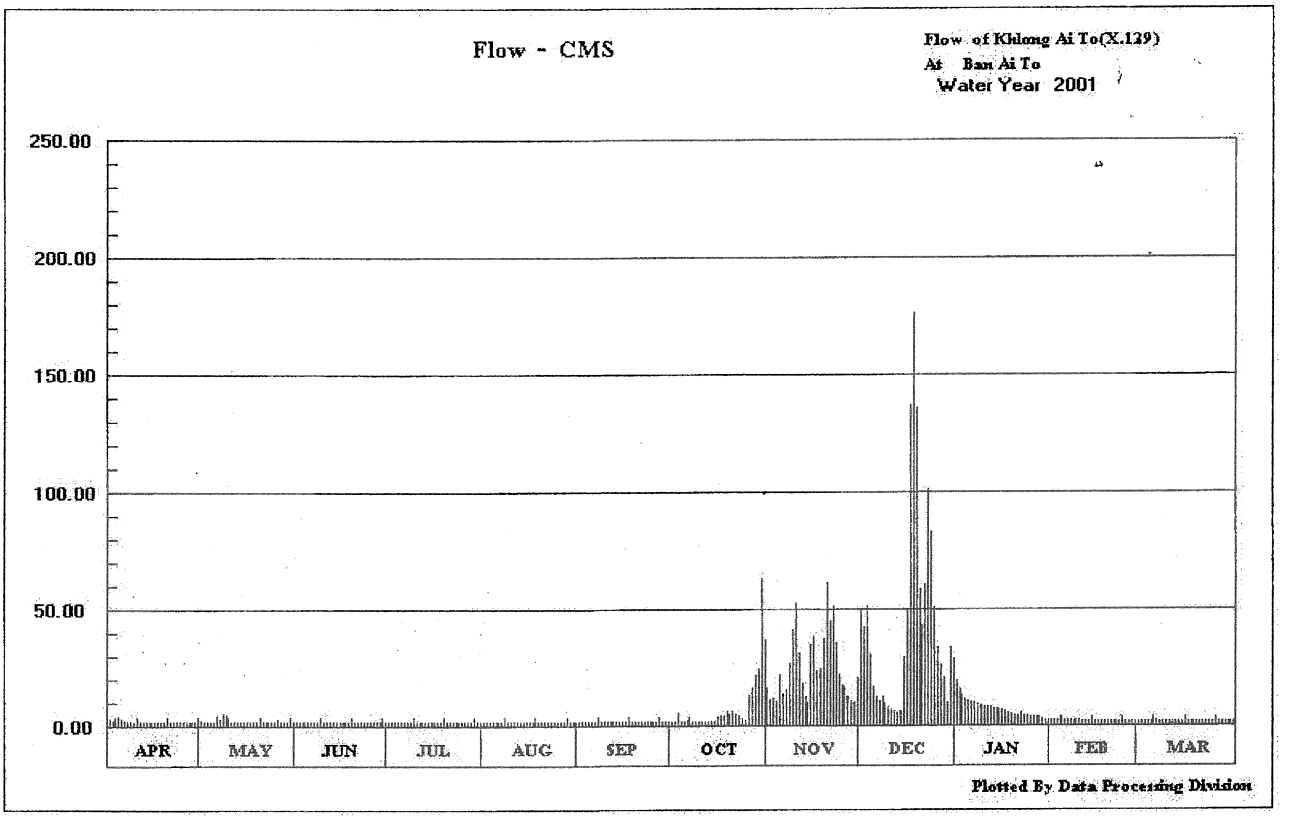
General Description Records fair. Flow regulated by Tha Chiat weir about 4 kilometers above gage site.

Stage-discharge relation defined by 37 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.87	13.85	13.55	13.53	13.52	13.53	13.50	14.67	16.07	14.83	13.86	13.68	
2	13.83	13.70	13.54	13.53	13.52	13.53	13.51	14.41	15.80	14.65	13.86	13.67	
3	13.92	13.63	13.54	13.53	13.52	13.53	14.08	14.44	16.13	14.53	13.85	13.67	
4	13.98	13.59	13.74	13.53	13.52	13.53	13.79	14.39	15.29	14.43	13.84	13.66	
5	13.87	13.61	13.73	13.55	13.52	13.53	13.81	14.92	14.70	14.38	13.85	13.64	
6	13.82	13.99	13.65	13.64	13.54	13.53	13.83	14.57	14.49	14.35	13.84	13.71	
7	13.80	13.89	13.58	13.61	13.79	13.53	13.78	14.66	14.37	14.36	13.82	13.83	
8	13.78	14.06	13.56	13.59	13.66	13.53	13.72	15.15	14.49	14.31	13.81	13.63	
9	13.74	14.01	13.55	13.55	13.57	13.53	13.71	15.75	14.32	14.25	13.84	13.63	
10	13.73	13.86	13.54	13.54	13.54	13.53	13.57	16.18	14.21	14.22	13.83	13.62	
11	13.71	13.77	13.53	13.56	13.52	13.53	13.54	15.33	14.13	14.21	13.81	13.62	
12	13.71	13.72	13.53	13.52	13.52	13.53	13.53	14.75	14.10	14.21	13.80	13.61	
13	13.66	13.68	13.54	13.52	13.52	13.53	13.53	14.50	14.08	14.19	13.79	13.61	
14	13.63	13.71	13.57	13.52	13.51	13.53	13.52	14.33	14.09	14.17	13.81	13.60	
15	13.63	13.66	13.53	13.52	13.51	13.52	13.52	15.48	15.25	14.16	13.80	13.60	
16	13.77	13.66	13.53	13.52	13.51	13.51	13.92	15.62	16.08	14.14	13.79	13.59	
17	13.70	13.68	13.53	13.52	13.51	13.51	13.99	15.02	19.18	14.11	13.78	13.58	
18	13.65	13.72	13.52	13.52	13.51	13.52	13.97	15.03	20.46	14.06	13.78	13.57	
19	13.63	13.64	13.70	13.52	13.51	13.54	14.10	15.60	19.14	14.03	13.78	13.56	
20	13.62	13.57	13.64	13.52	13.51	13.59	14.04	16.52	16.43	14.00	13.77	13.54	
21	13.59	13.55	13.59	13.52	13.51	13.54	14.12	15.89	15.82	13.98	13.75	13.52	
22	13.63	13.54	13.56	13.52	13.51	13.53	14.04	16.15	16.51	14.05	13.75	13.58	
23	13.63	13.53	13.53	13.52	13.52	13.51	13.98	15.52	17.97	14.00	13.75	13.58	
24	13.64	13.53	13.53	13.52	13.52	13.50	13.88	14.93	17.33	13.96	13.75	13.61	
25	13.58	13.62	13.53	13.51	13.52	13.50	13.85	14.74	16.12	13.94	13.74	13.63	
26	13.55	13.88	13.59	13.51	13.51	13.50	14.54	14.72	15.44	13.94	13.72	13.63	
27	13.54	13.74	13.60	13.52	13.51	13.50	14.69	14.48	15.11	13.93	13.70	13.63	
28	13.54	13.64	13.67	13.52	13.52	13.50	14.94	14.39	14.87	13.93	13.70	13.62	
29	13.54	13.60	13.58	13.52	13.52	13.50	15.03	14.34	14.33	13.87		13.57	
30	13.72	13.57	13.55	13.52	13.52	13.50	16.59	14.88	15.42	13.86		13.54	
31		13.55		13.52	13.53		15.57		15.22	13.86		13.52	
Mean	13.70	13.70	13.58	13.53	13.53	13.52	14.07	15.05	15.71	14.16	13.79	13.61	
Max	13.98	14.06	13.74	13.64	13.79	13.59	16.59	16.52	20.46	14.83	13.86	13.83	20.46
Min	13.54	13.53	13.52	13.51	13.51	13.50	13.50	14.33	14.08	13.86	13.70	13.52	13.50

Annual Max Momentary Gage Height 20.48 M (MSL), at 9.00 Hours, on Dec 18, 2001
Zero Gage at Bottom Elevation 13.00 M (MSL), River Bed 12.78 M (MSL)
Left Bank Elevation 22.42 M (MSL)
Right Bank Elevation 22.41 M (MSL), Drainage Area 332 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.74	3.48	0.40	0.24	0.16	0.24	0.00	16.87	50.28	20.47	3.61	1.60	
2	3.20	1.80	0.32	0.24	0.16	0.24	0.08	11.98	43.40	16.42	3.61	1.50	
3	4.42	1.10	0.32	0.24	0.16	0.24	6.70	12.50	51.81	14.07	3.48	1.50	
4	5.23	0.72	2.20	0.24	0.16	0.24	2.70	11.64	31.16	12.33	3.34	1.40	
5	3.74	0.90	2.10	0.40	0.16	0.24	2.94	22.50	17.55	11.47	3.48	1.20	
6	3.07	5.36	1.30	1.20	0.32	0.24	3.20	14.77	13.37	10.98	3.34	1.90	
7	2.80	4.02	0.64	0.90	2.70	0.24	2.60	16.65	11.31	11.14	3.07	3.20	
8	2.60	6.40	0.48	0.72	1.40	0.24	2.00	27.82	13.37	10.32	2.94	1.10	
9	2.20	5.65	0.40	0.40	0.56	0.24	1.90	42.20	10.48	9.33	3.34	1.10	
10	2.10	3.61	0.32	0.32	0.32	0.24	0.56	53.09	8.67	8.83	3.20	1.00	
11	1.90	2.50	0.24	0.48	0.16	0.24	0.32	32.12	7.45	8.67	2.94	1.00	
12	1.90	2.00	0.24	0.16	0.16	0.24	0.24	18.67	7.00	8.67	2.80	0.90	
13	1.40	1.60	0.32	0.16	0.16	0.24	0.24	13.55	6.70	8.35	2.70	0.90	
14	1.10	1.90	0.56	0.16	0.08	0.24	0.16	10.65	6.85	8.05	2.94	0.80	
15	1.10	1.40	0.24	0.16	0.08	0.16	0.16	35.72	30.20	7.90	2.80	0.80	
16	2.50	1.40	0.24	0.16	0.08	0.08	4.42	39.08	50.54	7.60	2.70	0.72	
17	1.80	1.60	0.24	0.16	0.08	0.08	5.36	24.77	137.40	7.15	2.60	0.64	
18	1.30	2.00	0.16	0.16	0.08	0.16	5.10	25.00	177.19	6.40	2.60	0.56	
19	1.10	1.20	1.80	0.16	0.08	0.32	7.00	38.60	136.20	5.95	2.60	0.48	
20	1.00	0.56	1.20	0.16	0.08	0.72	6.10	61.92	59.58	5.50	2.50	0.32	
21	0.72	0.40	0.72	0.16	0.08	0.32	7.30	45.70	43.91	5.23	2.30	0.16	
22	1.10	0.32	0.48	0.16	0.08	0.24	6.10	52.32	61.66	6.25	2.30	0.64	
23	1.10	0.24	0.24	0.16	0.16	0.08	5.23	36.68	102.04	5.50	2.30	0.64	
24	1.20	0.24	0.24	0.16	0.16	0.00	3.88	22.73	83.80	4.96	2.30	0.90	
25	0.64	1.00	0.24	0.08	0.16	0.00	3.48	18.45	51.56	4.69	2.20	1.10	
26	0.40	3.88	0.72	0.08	0.08	0.00	14.25	18.00	34.76	4.69	2.00	1.10	
27	0.32	2.20	0.80	0.16	0.08	0.00	17.32	13.20	26.88	4.56	1.80	1.10	
28	0.32	1.20	1.50	0.16	0.16	0.00	22.95	11.64	21.37	4.56	1.80	1.00	
29	0.32	0.80	0.64	0.16	0.16	0.00	25.00	10.81	10.65	3.74		0.56	
30	2.00	0.56	0.40	0.16	0.16	0.00	63.74	21.60	34.28	3.61		0.32	
31		0.40		0.16	0.24		37.88		29.48	3.61		0.16	
Total	56.32	60.44	19.70	8.42	8.66	5.52	258.91	781.23	1370.90	251.00	77.59	30.30	2928.99 CMSDAY
Mean	1.88	1.95	0.66	0.27	0.28	0.18	8.35	26.04	44.22	8.10	2.77	0.98	8.02 CMS
Max	5.23	6.40	2.20	1.20	2.70	0.72	63.74	61.92	177.19	20.47	3.61	3.20	177.19 CMS
Min	0.32	0.24	0.16	0.08	0.08	0.00	0.00	10.65	6.70	3.61	1.80	0.16	0.00 CMS
Runoff	4.866	5.222	1.702	0.727	0.748	0.477	22.370	67.498	118.446	21.686	6.704	2.618	253.065 MCM

Momentary Peak 177.82 CMS, at 20.48 M (MSL), at 9.00 Hours, on Dec 18, 2001
Runoff Yield 24.17 Liters/Second/Square KM, Momentary Peak Yield 535.602 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Palian at Ban Lam Khlaeng, Trang (X.139)

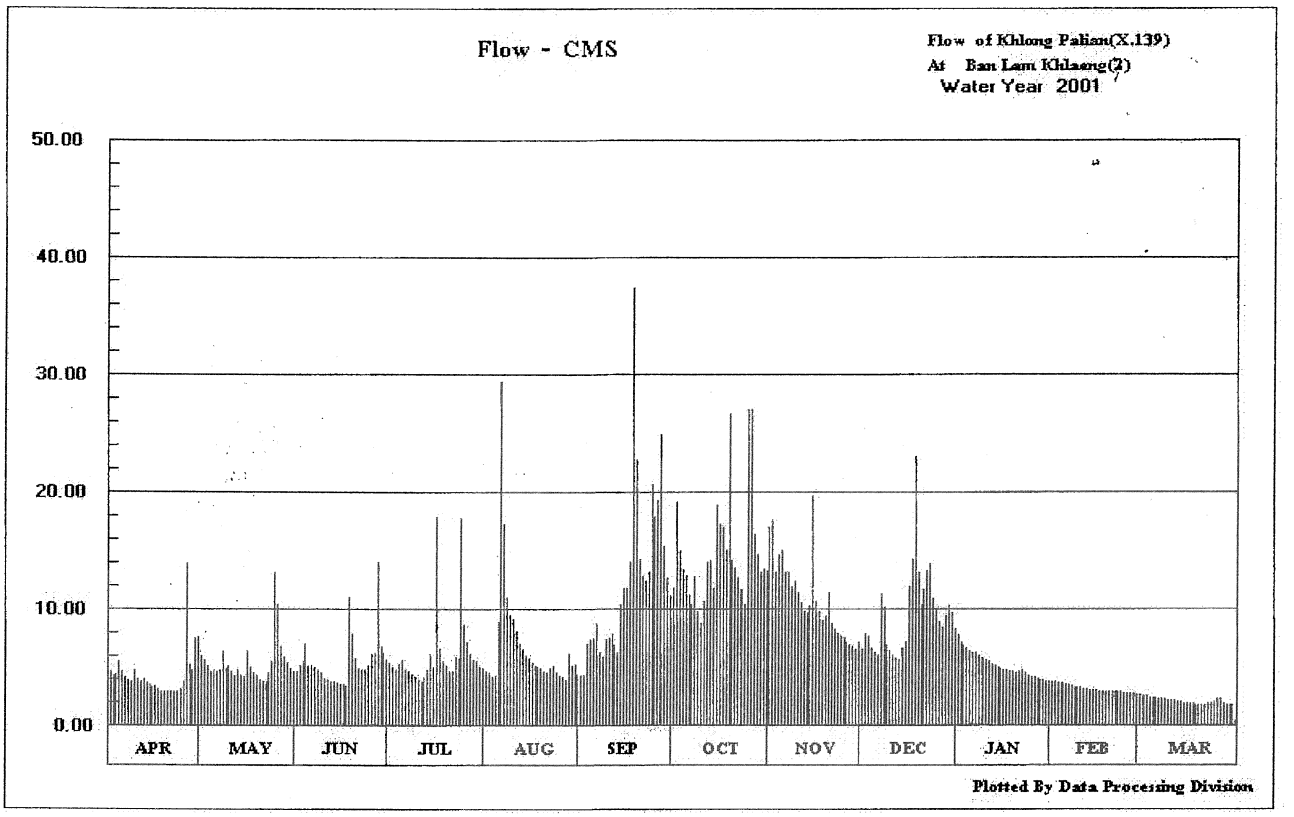
Lat 07 - 19 - 10 N. **Long** 99 - 49 - 06 E.

Location		on right bank at Ban Lam Khlaeng.	
	Ban Lam Khlaeng	**Amphoe** Palian	**Changwat** Trang
Drainage 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 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 Float	-	
	Rated by Current Meter	1983 to date.	
Stability of Channel Regimes		Stable.	
Overbank Flow Conditions		Overbank flow starts at elevation +4.310 m.(A.D.) and is including overbank flow.	
General Description		Records fair. Stage-discharge relation defined by 48 discharge measurements made in 2001.	

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.54	1.66	1.55	1.61	1.55	1.51	2.06	2.41	1.70	1.79	1.46	1.36	
2	1.51	1.63	1.59	1.58	1.53	1.51	2.55	2.45	1.80	1.75	1.46	1.35	
3	1.52	1.59	1.62	1.56	1.50	1.74	2.28	2.15	1.78	1.73	1.45	1.35	
4	1.62	1.55	1.74	1.60	1.51	1.76	2.17	2.25	1.71	1.71	1.45	1.34	
5	1.54	1.56	1.59	1.63	1.87	1.77	2.14	2.28	1.68	1.69	1.44	1.34	
6	1.50	1.55	1.59	1.56	3.13	1.86	2.02	2.15	1.66	1.68	1.44	1.34	
7	1.48	1.56	1.58	1.54	2.43	1.68	1.97	2.15	2.03	1.68	1.43	1.33	
8	1.46	1.69	1.56	1.52	2.01	1.65	2.13	2.07	1.95	1.66	1.42	1.33	
9	1.56	1.57	1.53	1.50	1.91	1.76	1.93	2.10	1.73	1.64	1.42	1.33	
10	1.49	1.59	1.49	1.48	1.89	1.77	1.86	2.04	1.69	1.63	1.42	1.32	
11	1.47	1.54	1.48	1.46	1.82	1.80	1.99	1.98	1.66	1.62	1.41	1.32	
12	1.49	1.51	1.47	1.50	1.74	1.73	2.21	1.93	1.64	1.60	1.41	1.32	
13	1.45	1.56	1.47	1.56	1.70	1.68	2.22	1.92	1.63	1.59	1.40	1.31	
14	1.44	1.51	1.45	1.67	1.66	1.97	2.06	1.96	1.71	1.58	1.40	1.31	
15	1.42	1.50	1.44	1.58	1.64	2.06	2.54	2.59	1.75	1.57	1.40	1.30	
16	1.43	1.69	1.44	2.47	1.61	2.06	2.43	1.99	2.07	1.56	1.39	1.30	
17	1.41	1.58	1.43	1.71	1.59	2.21	2.41	1.93	2.23	1.56	1.39	1.29	
18	1.39	1.53	2.01	1.62	1.58	3.50	2.28	1.88	2.80	1.55	1.39	1.29	
19	1.39	1.51	1.80	1.59	1.57	2.78	2.99	1.90	2.15	1.54	1.39	1.28	
20	1.39	1.48	1.64	1.55	1.55	2.23	2.22	2.04	1.97	1.53	1.38	1.28	
21	1.38	1.47	1.57	1.55	1.53	2.13	2.18	1.86	2.05	1.54	1.38	1.28	
22	1.38	1.47	1.56	1.65	1.57	2.10	2.12	1.83	2.16	1.56	1.38	1.28	
23	1.38	1.53	1.56	1.64	1.59	2.15	2.05	1.80	2.20	1.53	1.38	1.30	
24	1.41	1.62	1.59	2.46	1.53	2.65	1.97	1.78	2.00	1.51	1.37	1.30	
25	1.46	2.15	1.67	1.85	1.51	2.47	3.01	1.77	1.94	1.50	1.37	1.31	
26	2.20	1.97	1.68	1.75	1.50	2.56	3.01	1.75	1.87	1.50	1.37	1.33	
27	1.60	1.72	2.21	1.67	1.48	2.90	2.37	1.73	1.84	1.49	1.37	1.33	
28	1.56	1.65	1.72	1.63	1.67	2.30	2.25	1.72	1.90	1.48	1.36	1.30	
29	1.77	1.61	1.68	1.62	1.59	2.12	2.15	1.70	1.96	1.48		1.28	
30	1.78	1.57	1.63	1.58	1.60	2.02	2.17	1.75	1.92	1.47		1.28	
31		1.55		1.57	1.52		2.16		1.83	1.46		1.28	
Mean	1.51	1.60	1.61	1.65	1.71	2.08	2.25	2.00	1.90	1.59	1.40	1.31	
Max	2.20	2.15	2.21	2.47	3.13	3.50	3.01	2.59	2.80	1.79	1.46	1.36	3.50
Min	1.38	1.47	1.43	1.46	1.48	1.51	1.86	1.70	1.63	1.46	1.36	1.28	1.28

Annual Max Momentary Gage Height 4.44 M (A.D), at 18.00 Hours, on Sep 18, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 1.01 M (A.D)
Left Bank Elevation 4.30 M (A.D)
Right Bank Elevation 4.86 M (A.D), Drainage Area 153 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.74	6.18	4.85	5.53	4.85	4.41	11.90	17.15	6.70	7.87	3.86	2.76	
2	4.41	5.79	5.29	5.18	4.63	4.41	19.25	17.75	8.00	7.35	3.86	2.65	
3	4.52	5.29	5.66	4.96	4.30	7.22	15.20	13.25	7.74	7.09	3.75	2.65	
4	5.66	4.85	7.22	5.40	4.41	7.48	13.55	14.75	6.83	6.83	3.75	2.54	
5	4.74	4.96	5.29	5.79	9.05	7.61	13.10	15.20	6.44	6.57	3.64	2.54	
6	4.30	4.85	5.29	4.96	29.60	8.90	11.30	13.25	6.18	6.44	3.64	2.54	
7	4.08	4.96	5.18	4.74	17.45	6.44	10.55	13.25	11.45	6.44	3.53	2.43	
8	3.86	6.57	4.96	4.52	11.15	6.05	12.95	12.05	10.25	6.18	3.42	2.43	
9	4.96	5.07	4.63	4.30	9.65	7.48	9.95	12.50	7.09	5.92	3.42	2.43	
10	4.19	5.29	4.19	4.08	9.35	7.61	8.90	11.60	6.57	5.79	3.42	2.32	
11	3.97	4.74	4.08	3.86	8.30	8.00	10.85	10.70	6.18	5.66	3.31	2.32	
12	4.19	4.41	3.97	4.30	7.22	7.09	14.15	9.95	5.92	5.40	3.31	2.32	
13	3.75	4.96	3.97	4.96	6.70	6.44	14.30	9.80	5.79	5.29	3.20	2.21	
14	3.64	4.41	3.75	6.31	6.18	10.55	11.90	10.40	6.83	5.18	3.20	2.21	
15	3.42	4.30	3.64	5.18	5.92	11.90	19.10	19.85	7.35	5.07	3.20	2.10	
16	3.53	6.57	3.64	18.05	5.53	11.90	17.45	10.85	12.05	4.96	3.09	2.10	
17	3.31	5.18	3.53	6.83	5.29	14.15	17.15	9.95	14.45	4.96	3.09	1.99	
18	3.09	4.63	11.15	5.66	5.18	37.50	15.20	9.20	23.20	4.85	3.09	1.99	
19	3.09	4.41	8.00	5.29	5.07	22.88	26.81	9.50	13.25	4.74	3.09	1.88	
20	3.09	4.08	5.92	4.85	4.85	14.45	14.30	11.60	10.55	4.63	2.98	1.88	
21	2.98	3.97	5.07	4.85	4.63	12.95	13.70	8.90	11.75	4.74	2.98	1.88	
22	2.98	3.97	4.96	6.05	5.07	12.50	12.80	8.45	13.40	4.96	2.98	1.88	
23	2.98	4.63	4.96	5.92	5.29	13.25	11.75	8.00	14.00	4.63	2.98	2.10	
24	3.31	5.66	5.29	17.90	4.63	20.80	10.55	7.74	11.00	4.41	2.87	2.10	
25	3.86	13.25	6.31	8.75	4.41	18.05	27.20	7.61	10.10	4.30	2.87	2.21	
26	14.00	10.55	6.44	7.35	4.30	19.40	27.20	7.35	9.05	4.30	2.87	2.43	
27	5.40	6.96	14.15	6.31	4.08	25.10	16.55	7.09	8.60	4.19	2.87	2.43	
28	4.96	6.05	6.96	5.79	6.31	15.50	14.75	6.96	9.50	4.08	2.76	2.10	
29	7.61	5.53	6.44	5.66	5.29	12.80	13.25	6.70	10.40	4.08		1.88	
30	7.74	5.07	5.79	5.18	5.40	11.30	13.55	7.35	9.80	3.97		1.88	
31		4.85		5.07	4.52		13.40		8.45	3.86		1.88	
Total	136.36	171.99	170.58	193.58	218.61	374.12	462.56	328.70	298.87	164.74	91.03	69.06	2680.20 CMSDAY
Mean	4.55	5.55	5.69	6.24	7.05	12.47	14.92	10.96	9.64	5.31	3.25	2.23	7.34 CMS
Max	14.00	13.25	14.15	18.05	29.60	37.50	27.20	19.85	23.20	7.87	3.86	2.76	37.50 CMS
Min	2.98	3.97	3.53	3.86	4.08	4.41	8.90	6.70	5.79	3.86	2.76	1.88	1.88 CMS
Runoff	11.782	14.860	14.738	16.725	18.888	32.324	39.965	28.400	25.822	14.234	7.865	5.967	231.569 MCM

Momentary Peak 75.48 CMS, at 4.44 M (A.D), at 18.00 Hours, on Sep 18, 2001
Runoff Yield 47.99 Liters/Second/Square KM, Momentary Peak Yield 493.333 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Klai at Ban Hua Na, Nakhon Si Thammarat (X.149)

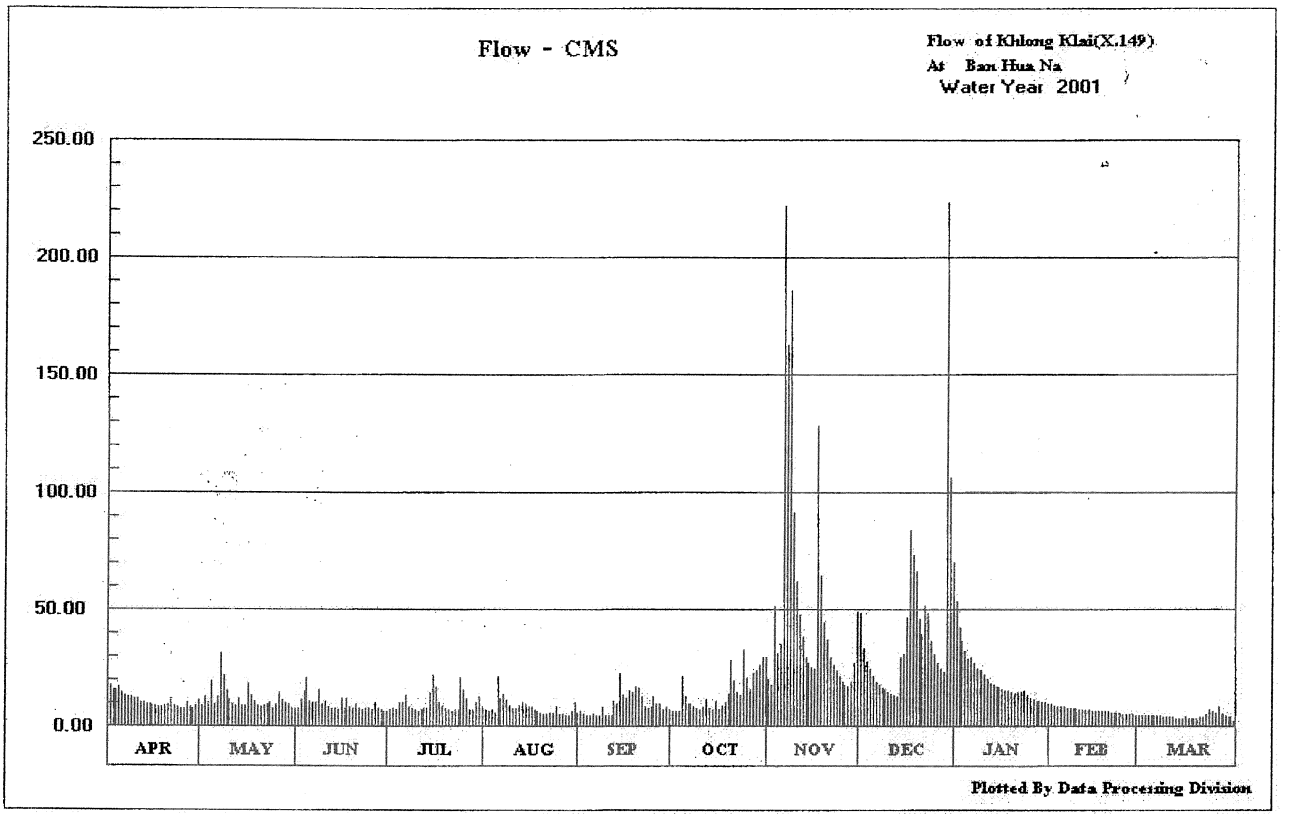
Lat 08 - 43 - 46 N. **Long** 99 - 44 - 53 E.

Location		on left bank at Ban Hua Na.			
	Ban Hua Na	**Amphoe** Nopphitam		**Changwat** Nakhon Si Thammarat	
Drainage Area		469 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+28.300 m. (M.S.L)			
Bench Mark		B.M.- H.D.			
	Location BM	On left bank near the station office.			
	Elevation	+34.588 m. (M.S.L.)			
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 Float	-			
	Rated by Current Meter	1984 to date.			
Stability of Channel Regimes		Fairly stable.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2001.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.93	28.76	28.72	28.71	28.70	28.69	28.69	28.97	29.34	29.40	28.77	28.64	
2	28.90	28.84	28.82	28.72	28.68	28.66	28.69	28.93	29.16	29.27	28.76	28.64	
3	28.89	28.79	28.88	28.71	28.70	28.64	28.68	29.38	29.08	29.20	28.75	28.64	
4	28.92	28.96	28.98	28.79	28.67	28.64	28.99	29.13	29.04	29.14	28.75	28.63	
5	28.87	28.78	28.81	28.79	28.99	28.65	28.84	29.18	28.99	29.10	28.74	28.63	
6	28.85	28.84	28.80	28.85	28.83	28.64	28.78	30.66	28.95	29.11	28.73	28.63	
7	28.84	29.13	28.80	28.75	28.86	28.63	28.78	30.29	28.93	29.07	28.73	28.63	
8	28.84	29.00	28.89	28.72	28.82	28.74	28.75	30.44	28.91	29.04	28.72	28.63	
9	28.83	28.88	28.77	28.70	28.76	28.64	28.72	29.77	28.89	29.03	28.72	28.62	
10	28.83	28.82	28.81	28.69	28.73	28.63	28.70	29.49	28.87	29.00	28.71	28.62	
11	28.80	28.78	28.75	28.70	28.72	28.64	28.75	29.33	28.86	28.97	28.71	28.61	
12	28.79	28.76	28.73	28.72	28.76	28.81	28.82	29.22	28.85	28.94	28.70	28.61	
13	28.78	28.83	28.72	28.72	28.80	28.77	28.73	29.11	28.84	28.93	28.70	28.60	
14	28.77	28.76	28.71	28.87	28.77	29.01	28.70	29.07	29.11	28.92	28.69	28.60	
15	28.76	28.76	28.83	29.00	28.74	28.85	28.81	29.05	29.12	28.91	28.69	28.59	
16	28.76	28.94	28.73	28.92	28.75	28.83	28.70	29.04	29.32	28.90	28.69	28.59	
17	28.75	28.85	28.83	28.79	28.70	28.88	28.76	30.05	29.70	28.88	28.69	28.59	
18	28.75	28.81	28.75	28.76	28.68	28.87	28.79	29.51	29.60	28.88	28.68	28.59	
19	28.76	28.76	28.73	28.72	28.67	28.92	28.86	29.30	29.53	28.87	28.68	28.59	
20	28.77	28.74	28.78	28.70	28.66	28.91	29.09	29.21	29.31	28.86	28.67	28.60	
21	28.83	28.76	28.73	28.69	28.65	28.84	28.96	29.11	29.24	28.87	28.67	28.62	
22	28.76	28.77	28.71	28.70	28.67	28.75	28.87	29.06	29.38	28.87	28.67	28.62	
23	28.74	28.80	28.72	28.70	28.67	28.73	28.85	29.03	29.34	28.88	28.67	28.66	
24	28.73	28.73	28.73	28.98	28.74	28.74	29.15	28.99	29.20	28.85	28.66	28.70	
25	28.73	28.77	28.70	28.89	28.66	28.84	28.98	28.95	29.12	28.83	28.66	28.69	
26	28.80	28.87	28.80	28.83	28.65	28.77	28.89	28.93	29.07	28.82	28.65	28.67	
27	28.74	28.82	28.72	28.71	28.64	28.77	29.01	28.92	29.04	28.81	28.65	28.75	
28	28.73	28.80	28.70	28.71	28.64	28.71	29.03	28.95	29.02	28.81	28.64	28.66	
29	28.76	28.77	28.68	28.79	28.69	28.74	29.06	29.07	30.67	28.80		28.63	
30	28.82	28.73	28.69	28.84	28.79	28.70	29.11	29.35	29.89	28.79		28.61	
31		28.72		28.74	28.67		29.11		29.57	28.78		28.61	
Mean	28.80	28.82	28.77	28.77	28.72	28.75	28.86	29.32	29.22	28.95	28.70	28.63	
Max	28.93	29.13	28.98	29.00	28.99	29.01	29.15	30.66	30.67	29.40	28.77	28.75	30.67
Min	28.73	28.72	28.68	28.69	28.64	28.63	28.68	28.92	28.84	28.78	28.64	28.59	28.59

Annual Max Momentary Gage Height 32.20 M (MSL), at 21.00 Hours, on Nov 6, 2001
Zero Gage at Bottom Elevation 28.30 M (MSL), River Bed 26.96 M (MSL)
Left Bank Elevation 35.96 M (MSL)
Right Bank Elevation 35.95 M (MSL), Drainage Area 469 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.48	9.60	8.20	7.85	7.50	7.15	7.15	20.77	48.90	54.00	9.95	5.40	
2	16.75	13.30	12.15	8.20	6.80	6.10	7.15	18.48	34.10	42.95	9.60	5.40	
3	16.17	10.65	15.60	7.85	7.50	5.40	6.80	52.30	28.30	37.00	9.25	5.40	
4	17.90	20.20	21.35	10.65	6.45	5.40	21.92	31.92	25.40	32.65	9.25	5.05	
5	15.03	10.30	11.58	10.65	21.92	5.75	13.30	35.55	21.92	29.75	8.90	5.05	
6	13.88	13.30	11.00	13.88	12.73	5.40	10.30	222.50	19.63	30.48	8.55	5.05	
7	13.30	31.92	11.00	9.25	14.45	5.05	10.30	163.50	18.48	27.57	8.55	5.05	
8	13.30	22.50	16.17	8.20	12.15	8.90	9.25	186.40	17.33	25.40	8.20	5.05	
9	12.73	15.60	9.95	7.50	9.60	5.40	8.20	91.85	16.17	24.68	8.20	4.70	
10	12.73	12.15	11.58	7.15	8.55	5.05	7.50	63.00	15.03	22.50	7.85	4.70	
11	11.00	10.30	9.25	7.50	8.20	5.40	9.25	48.05	14.45	20.77	7.85	4.35	
12	10.65	9.60	8.55	8.20	9.60	11.58	12.15	38.70	13.88	19.05	7.50	4.35	
13	10.30	12.73	8.20	8.20	11.00	9.95	8.55	30.48	13.30	18.48	7.50	4.00	
14	9.95	9.60	7.85	15.03	9.95	23.23	7.50	27.57	30.48	17.90	7.15	4.00	
15	9.60	9.60	12.73	22.50	8.90	13.88	11.58	26.12	31.20	17.33	7.15	3.80	
16	9.60	19.05	8.55	17.90	9.25	12.73	7.50	25.40	47.20	16.75	7.15	3.80	
17	9.25	13.88	12.73	10.65	7.50	15.60	9.60	129.00	84.50	15.60	7.15	3.80	
18	9.25	11.58	9.25	9.60	6.80	15.03	10.65	65.00	74.00	15.60	6.80	3.80	
19	9.60	9.60	8.55	8.20	6.45	17.90	14.45	45.50	67.00	15.03	6.80	3.80	
20	9.95	8.90	10.30	7.50	6.10	17.33	29.02	37.85	46.35	14.45	6.45	4.00	
21	12.73	9.60	8.55	7.15	5.75	13.30	20.20	30.48	40.40	15.03	6.45	4.70	
22	9.60	9.95	7.85	7.50	6.45	9.25	15.03	26.85	52.30	15.03	6.45	4.70	
23	8.90	11.00	8.20	7.50	6.45	8.55	13.88	24.68	48.90	15.60	6.45	6.10	
24	8.55	8.55	8.55	21.35	8.90	8.90	33.37	21.92	37.00	13.88	6.10	7.50	
25	8.55	9.95	7.50	16.17	6.10	13.30	21.35	19.63	31.20	12.73	6.10	7.15	
26	11.00	15.03	11.00	12.73	5.75	9.95	16.17	18.48	27.57	12.15	5.75	6.45	
27	8.90	12.15	8.20	7.85	5.40	9.95	23.23	17.90	25.40	11.58	5.75	9.25	
28	8.55	11.00	7.50	7.85	5.40	7.85	24.68	19.63	23.95	11.58	5.40	6.10	
29	9.60	9.95	6.80	10.65	7.15	8.90	26.85	27.57	224.25	11.00		5.05	
30	12.15	8.55	7.15	13.30	10.65	7.50	30.48	49.75	107.15	10.65		4.35	
31		8.20		8.90	6.45		30.48		71.00	10.30		4.35	
Total	347.95	388.29	305.84	327.41	265.85	299.68	477.84	1616.83	1356.74	637.47	208.25	156.25	6388.40 CMSDAY
Mean	11.60	12.53	10.19	10.56	8.58	9.99	15.41	53.89	43.77	20.56	7.44	5.04	17.50 CMS
Max	18.48	31.92	21.35	22.50	21.92	23.23	33.37	222.50	224.25	54.00	9.95	9.25	224.25 CMS
Min	8.55	8.20	6.80	7.15	5.40	5.05	6.80	17.90	13.30	10.30	5.40	3.80	3.80 CMS
Runoff	30.063	33.548	26.425	28.288	22.969	25.892	41.285	139.694	117.222	55.077	17.993	13.500	551.958 MCM

Momentary Peak 585.00 CMS, at 32.20 M (MSL), at 21.00 Hours, on Nov 6, 2001

Runoff Yield 37.32 Liters/Second/Square KM, Momentary Peak Yield 1247.335 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Langu at Ban Tha Khian, Satun (X.150)

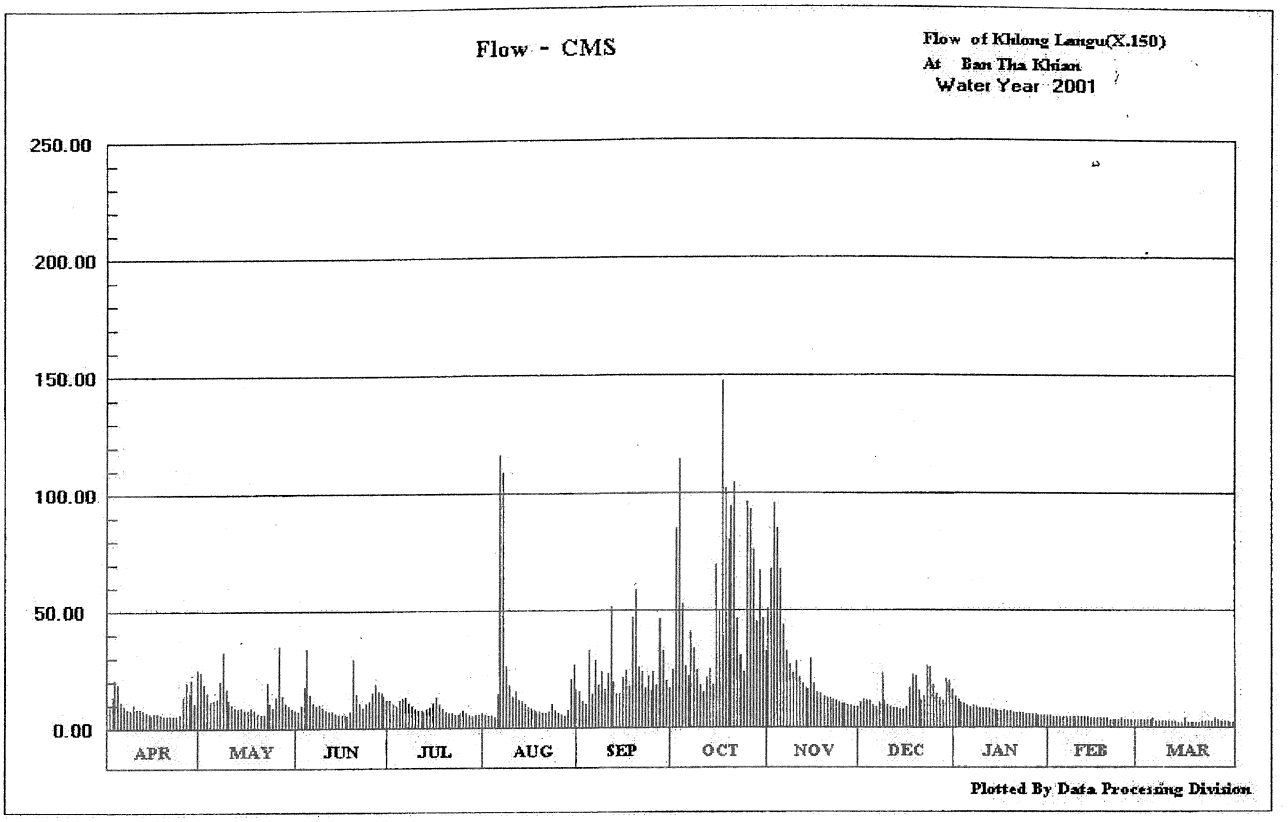
Lat 06 - 56 - 29 N. **Long** 99 - 52 - 33 E.

Location		on right bank at Ban Tha Khian.		
	Ban Tha Khian	**Amphoe** Langu	**Changwat** Satun	
Drainage Area		552 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 Float	-		
	Rated by Current Meter	1984 to date.		
Stability of Channel Regimes		Stable.		
Overbank Flow Conditions		No overbank flow.		
General Description		Records good. Stage-discharge relation defined by 49 discharge measurements made in 2001.		

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.17	2.01	1.05	1.36	0.96	1.58	2.04	3.09	1.28	1.45	0.90	0.78	
2	1.48	1.76	1.22	1.26	0.92	1.35	4.23	3.67	1.38	1.36	0.89	0.78	
3	1.87	1.55	1.70	1.20	0.90	1.25	5.06	4.53	1.34	1.31	0.88	0.77	
4	1.75	1.35	2.46	1.39	0.88	2.41	3.15	4.23	1.32	1.26	0.88	0.77	
5	1.32	1.39	1.52	1.42	1.52	1.53	2.12	3.67	1.20	1.21	0.88	0.76	
6	1.23	1.41	1.29	1.44	5.11	2.24	1.92	2.84	1.17	1.18	0.87	0.75	
7	1.15	1.83	1.20	1.30	4.90	1.72	2.71	2.39	1.31	1.21	0.87	0.74	
8	1.08	2.39	1.26	1.21	2.12	2.03	2.45	2.17	1.98	1.17	0.87	0.73	
9	1.26	1.66	1.16	1.14	1.71	1.63	2.06	2.00	1.33	1.14	0.87	0.73	
10	1.14	1.39	1.10	1.10	1.46	2.00	1.71	2.22	1.21	1.13	0.86	0.72	
11	1.11	1.27	1.06	1.08	1.59	3.12	1.55	1.89	1.16	1.11	0.86	0.72	
12	1.09	1.19	1.05	1.06	1.38	1.79	1.90	1.75	1.13	1.11	0.86	0.71	
13	1.05	1.15	1.00	1.12	1.32	1.52	2.08	1.66	1.11	1.10	0.86	0.70	
14	1.01	1.16	0.97	1.16	1.24	1.51	1.74	1.61	1.09	1.08	0.85	0.69	
15	0.98	1.10	0.95	1.29	1.17	1.90	3.74	2.27	1.09	1.06	0.85	0.69	
16	1.01	1.09	0.95	1.46	1.13	2.06	3.07	1.76	1.18	1.05	0.84	0.68	
17	0.99	1.19	0.94	1.24	1.08	1.70	5.90	1.57	1.67	1.07	0.83	0.67	
18	0.97	1.07	1.03	1.12	1.05	2.95	4.71	1.54	1.94	1.05	0.82	0.67	
19	0.94	1.02	2.27	1.06	1.03	3.38	4.08	1.47	1.92	1.04	0.82	0.67	
20	0.94	0.98	1.53	1.00	1.01	2.09	4.50	1.43	1.59	1.02	0.81	0.67	
21	0.92	0.96	1.30	0.99	1.00	2.03	4.77	1.41	1.35	1.01	0.80	0.67	
22	0.91	1.79	1.18	0.98	1.05	1.67	2.94	1.39	1.45	1.00	0.80	0.70	
23	0.90	1.28	1.29	0.98	1.25	1.91	2.31	1.34	2.13	0.99	0.80	0.71	
24	0.98	1.17	1.35	0.99	1.09	1.58	2.01	1.30	2.10	0.98	0.80	0.70	
25	1.45	1.47	1.55	1.10	1.00	2.02	4.55	1.27	1.74	0.98	0.80	0.73	
26	1.78	2.51	1.75	1.00	0.96	1.71	4.45	1.26	1.53	0.96	0.79	0.75	
27	1.55	1.50	1.58	0.97	0.94	2.93	3.94	1.23	1.42	0.95	0.79	0.76	
28	1.84	1.28	1.57	0.93	1.07	2.40	2.89	1.21	1.35	0.94	0.79	0.74	
29	1.28	1.20	1.48	0.96	1.87	1.82	3.65	1.19	1.85	0.93		0.71	
30	2.07	1.13	1.40	0.96	2.16	1.67	2.93	1.17	1.82	0.92		0.70	
31		1.08		1.00	1.62		2.39		1.61	0.91		0.69	
Mean	1.24	1.40	1.34	1.14	1.50	1.98	3.15	2.02	1.48	1.09	0.84	0.72	
Max	2.07	2.51	2.46	1.46	5.11	3.38	5.90	4.53	2.13	1.45	0.90	0.78	5.90
Min	0.90	0.96	0.94	0.93	0.88	1.25	1.55	1.17	1.09	0.91	0.79	0.67	0.67

Annual Max Momentary Gage Height 6.29 M (A.D), at 17.00 Hours, on Oct 17, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.02 M (A.D)
Left Bank Elevation 8.15 M (A.D)
Right Bank Elevation 8.28 M (A.D), Drainage Area 552 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.55	24.42	7.75	12.40	6.42	16.24	25.08	51.52	11.20	13.90	5.55	3.90	
2	14.44	19.64	10.30	10.90	5.84	12.25	86.05	68.10	12.70	12.40	5.40	3.90	
3	21.73	15.70	18.50	10.00	5.55	10.75	115.16	96.55	12.10	11.65	5.26	3.80	
4	19.45	12.25	34.87	12.85	5.26	33.65	53.20	86.05	11.80	10.90	5.26	3.80	
5	11.80	12.85	15.16	13.36	15.16	15.34	26.84	68.10	10.00	10.15	5.26	3.70	
6	10.45	13.18	11.35	13.72	116.96	29.56	22.68	44.68	9.55	9.70	5.11	3.60	
7	9.25	20.97	10.00	11.50	109.50	18.88	41.22	33.16	11.65	10.15	5.11	3.50	
8	8.20	33.16	10.90	10.15	26.84	24.86	34.63	27.94	23.82	9.55	5.11	3.40	
9	10.90	17.74	9.40	9.10	18.69	17.17	25.52	24.20	11.95	9.10	5.11	3.40	
10	9.10	12.85	8.50	8.50	14.08	24.20	18.69	29.08	10.15	8.95	4.97	3.30	
11	8.65	11.05	7.90	8.20	16.42	52.36	15.70	22.11	9.40	8.65	4.97	3.30	
12	8.35	9.85	7.75	7.90	12.70	20.21	22.30	19.45	8.95	8.65	4.97	3.20	
13	7.75	9.25	7.00	8.80	11.80	15.16	25.96	17.74	8.65	8.50	4.97	3.10	
14	7.15	9.40	6.57	9.40	10.60	14.98	19.26	16.79	8.35	8.20	4.83	3.00	
15	6.71	8.50	6.27	11.35	9.55	22.30	70.20	30.28	8.35	7.90	4.83	3.00	
16	7.15	8.35	6.27	14.08	8.95	25.52	50.96	19.64	9.70	7.75	4.68	2.90	
17	6.86	9.85	6.13	10.60	8.20	18.50	148.20	16.06	17.93	8.05	4.53	2.80	
18	6.57	8.05	7.45	8.80	7.75	47.65	102.85	15.52	23.06	7.75	4.39	2.80	
19	6.13	7.30	30.28	7.90	7.45	59.64	81.04	14.26	22.68	7.60	4.39	2.80	
20	6.13	6.71	15.34	7.00	7.15	26.18	95.50	13.54	16.42	7.30	4.25	2.80	
21	5.84	6.42	11.50	6.86	7.00	24.86	104.95	13.18	12.25	7.15	4.10	2.80	
22	5.70	20.21	9.70	6.71	7.75	17.93	47.38	12.85	13.90	7.00	4.10	3.10	
23	5.55	11.20	11.35	6.71	10.75	22.49	31.24	12.10	27.06	6.86	4.10	3.20	
24	6.71	9.55	12.25	6.86	8.35	16.24	24.42	11.50	26.40	6.71	4.10	3.10	
25	13.90	14.26	15.70	8.50	7.00	24.64	97.25	11.05	19.26	6.71	4.10	3.40	
26	20.02	36.10	19.45	7.00	6.42	18.69	93.75	10.90	15.34	6.42	4.00	3.60	
27	15.70	14.80	16.24	6.57	6.13	47.11	76.48	10.45	13.36	6.27	4.00	3.70	
28	21.16	11.20	16.06	5.99	8.05	33.40	46.03	10.15	12.25	6.13	4.00	3.50	
29	11.20	10.00	14.44	6.42	21.73	20.78	67.50	9.85	21.35	5.99		3.20	
30	25.74	8.95	13.00	6.42	27.72	17.93	47.11	9.55	20.78	5.84		3.10	
31		8.20		7.00	16.98		33.16		16.79	5.70		3.00	
Total	327.84	421.96	377.38	281.55	552.75	749.47	1750.31	826.35	457.15	257.58	131.45	101.70	6235.49 CMSDAY
Mean	10.93	13.61	12.58	9.08	17.83	24.98	56.46	27.55	14.75	8.31	4.69	3.28	17.08 CMS
Max	25.74	36.10	34.87	14.08	116.96	59.64	148.20	96.55	27.06	13.90	5.55	3.90	148.20 CMS
Min	5.55	6.42	6.13	5.99	5.26	10.75	15.70	9.55	8.35	5.70	4.00	2.80	2.80 CMS
Runoff	28.325	36.457	32.606	24.326	47.758	64.754	151.227	71.397	39.498	22.255	11.357	8.787	538.746 MCM

Momentary Peak 165.83 CMS, at 6.29 M (A.D), at 17.00 Hours, on Oct 17, 2001

Runoff Yield 30.95 Liters/Second/Square KM, Momentary Peak Yield 300.417 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,819 sq.km.

Type of Gage Water - stage recorder.

Zero Gage at Bottom +0.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 1.00 meters from the top staff gage.

Elevation +11.796 m. (M.S.L.)

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 Float -

Rated by Current Meter 1990 to date.

Stability of Channel Regimes Stable.

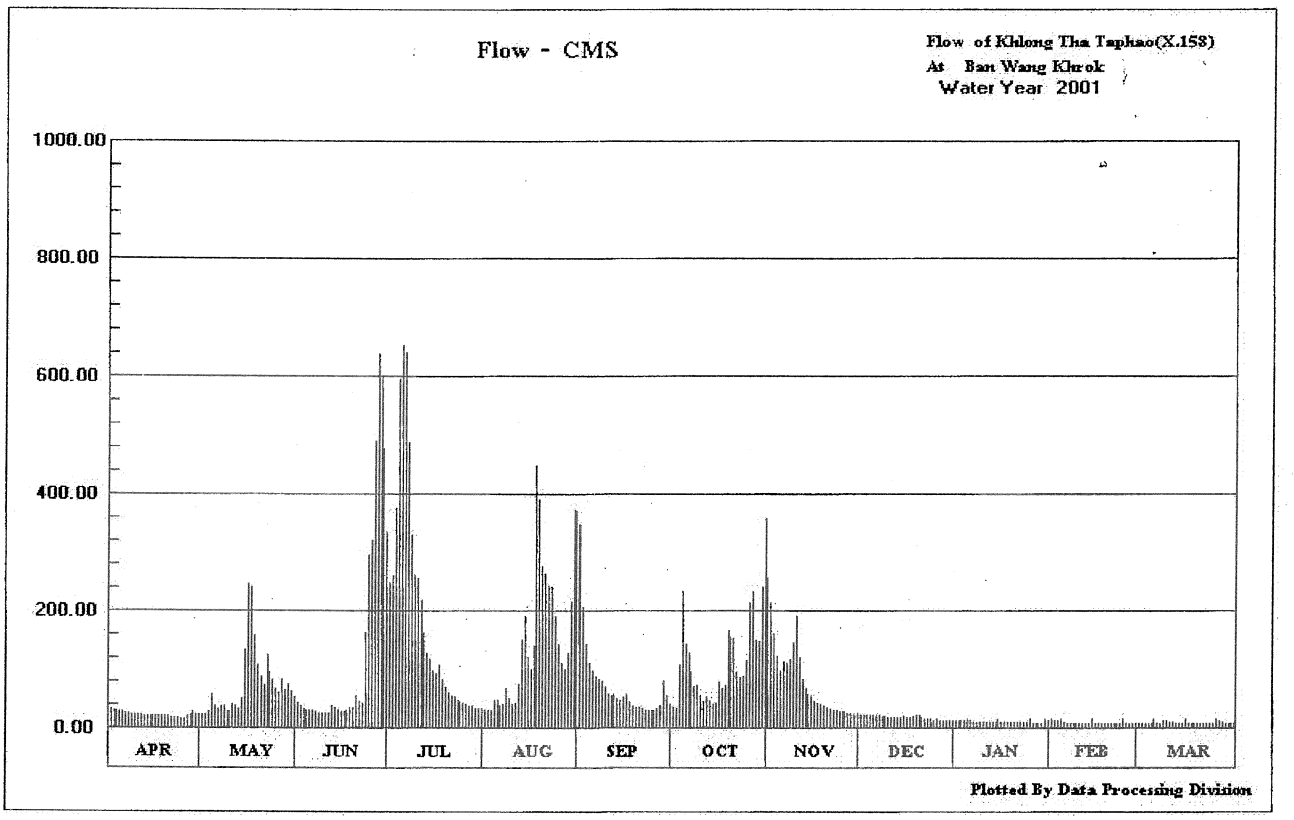
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.07	3.83	4.29	7.07	4.02	8.12	4.14	7.17	3.83	3.54	3.61	3.23	
2	4.03	3.85	4.16	7.21	3.98	6.62	4.08	6.71	3.82	3.54	3.55	3.18	
3	3.98	3.93	4.06	8.38	4.03	5.85	5.37	6.07	3.81	3.53	3.52	3.18	
4	3.97	4.55	4.02	10.39	4.37	5.40	6.93	5.57	3.83	3.53	3.45	3.19	
5	3.92	4.19	4.02	10.84	4.38	5.20	5.84	5.20	3.85	3.52	3.42	3.20	
6	3.89	4.08	3.98	10.75	4.19	5.07	5.64	5.44	3.82	3.51	3.40	3.20	
7	3.86	4.19	3.95	9.51	4.23	4.98	5.18	5.42	3.82	3.50	3.40	3.20	
8	3.83	4.15	3.90	7.93	4.71	4.94	4.76	5.49	3.77	3.48	3.39	3.33	
9	3.82	3.97	3.89	7.21	4.42	4.77	4.80	5.88	3.74	3.48	3.39	3.54	
10	3.81	3.95	3.88	7.17	4.23	4.58	4.51	6.45	3.72	3.48	3.38	3.58	
11	3.79	4.22	3.91	6.76	4.27	4.50	4.34	5.54	3.71	3.48	3.36	3.48	
12	3.77	4.16	4.20	6.09	4.85	4.54	4.46	5.00	3.71	3.47	3.35	3.42	
13	3.76	4.06	4.10	5.63	5.93	4.43	4.33	4.75	3.72	3.46	3.34	3.29	
14	3.76	4.42	3.98	5.49	6.44	4.36	4.23	4.58	3.71	3.46	3.34	3.24	
15	3.76	5.71	3.96	5.23	5.53	4.48	4.26	4.45	3.74	3.46	3.33	3.20	
16	3.75	7.05	3.96	5.14	5.25	4.56	4.88	4.34	3.72	3.46	3.29	3.19	
17	3.74	7.00	4.03	5.37	5.82	4.31	4.73	4.27	3.69	3.45	3.30	3.16	
18	3.73	6.04	4.11	4.97	9.12	4.20	4.83	4.22	3.77	3.45	3.30	3.15	
19	3.78	5.35	4.10	4.76	8.53	4.14	6.13	4.16	3.84	3.44	3.30	3.11	
20	3.75	5.05	4.52	4.62	7.36	4.11	6.00	4.10	3.79	3.43	3.29	3.11	
21	3.70	4.82	4.35	4.53	7.25	4.08	5.96	4.06	3.72	3.42	3.27	3.11	
22	3.69	5.60	4.30	4.46	7.03	4.03	5.16	4.03	3.66	3.42	3.26	3.10	
23	3.67	5.16	6.11	4.38	6.99	4.00	5.03	4.00	3.64	3.42	3.25	3.10	
24	3.65	5.00	7.59	4.33	6.44	3.98	5.05	3.97	3.61	3.44	3.24	3.10	
25	3.65	4.71	7.84	4.26	5.85	4.01	5.46	3.95	3.60	3.43	3.23	3.11	
26	3.76	4.59	9.52	4.25	5.42	4.08	6.71	3.93	3.59	3.40	3.22	3.44	
27	3.80	4.98	10.73	4.19	5.26	4.19	6.93	3.90	3.58	3.39	3.21	3.56	
28	3.97	4.70	10.41	4.16	5.64	4.92	5.93	3.89	3.57	3.38	3.21	3.47	
29	3.80	4.86	9.41	4.09	6.73	4.51	5.89	3.87	3.56	3.40		3.32	
30	3.82	4.64	7.99	4.05	8.35	4.22	7.00	3.86	3.55	3.62		3.22	
31		4.45		4.05	8.33		8.22		3.54	3.59		3.18	
Mean	3.81	4.75	5.31	6.04	5.77	4.71	5.38	4.81	3.71	3.47	3.34	3.25	
Max	4.07	7.05	10.73	10.84	9.12	8.12	8.22	7.17	3.85	3.62	3.61	3.58	10.84
Min	3.65	3.83	3.88	4.05	3.98	3.98	4.08	3.86	3.54	3.38	3.21	3.10	3.10

Annual Max Momentary Gage Height 11.02 M (MSL), at 4.00 Hours, on Jul 6, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed 0.75 M (MSL)
Left Bank Elevation 14.47 M (MSL)
Right Bank Elevation 14.45 M (MSL), Drainage Area 1819 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	36.15	26.20	46.50	249.65	33.90	352.00	39.30	259.15	26.20	15.50	17.40	7.75	
2	34.35	27.00	40.20	262.95	32.20	208.80	36.60	216.90	25.80	15.50	15.75	6.60	
3	32.20	30.20	35.70	378.00	34.35	146.75	111.05	163.60	25.40	15.25	15.00	6.60	
4	31.80	60.25	33.90	598.75	50.50	113.00	236.70	125.75	26.20	15.25	13.25	6.80	
5	29.80	41.55	33.90	655.00	51.00	100.00	146.00	100.00	27.00	15.00	12.50	7.00	
6	28.60	36.60	32.20	643.75	41.55	91.55	131.00	116.00	25.80	14.75	12.00	7.00	
7	27.40	41.55	31.00	491.55	43.50	85.80	98.70	114.50	25.80	14.50	12.00	7.00	
8	26.20	39.75	29.00	333.00	69.60	83.40	72.60	119.75	23.80	14.00	11.75	10.25	
9	25.80	31.80	28.60	262.95	53.10	73.20	75.00	149.00	22.60	14.00	11.75	15.50	
10	25.40	31.00	28.20	259.15	43.50	61.90	58.05	194.25	21.80	14.00	11.50	16.50	
11	24.60	43.00	29.40	221.40	45.50	57.50	49.00	123.50	21.40	14.00	11.00	14.00	
12	23.80	40.20	42.00	165.20	78.00	59.70	55.30	87.00	21.40	13.75	10.75	12.50	
13	23.40	35.70	37.50	130.25	152.75	53.65	48.50	72.00	21.80	13.50	10.50	9.25	
14	23.40	53.10	32.20	119.75	193.40	50.00	43.50	61.90	21.40	13.50	10.50	8.00	
15	23.40	136.25	31.40	101.95	122.75	56.40	45.00	54.75	22.60	13.50	10.25	7.00	
16	23.00	247.75	31.40	96.10	103.25	60.80	79.80	49.00	21.80	13.50	9.25	6.80	
17	22.60	243.00	34.35	111.05	144.50	47.50	70.80	45.50	20.60	13.25	9.50	6.20	
18	22.20	161.20	37.95	85.20	452.00	42.00	76.80	43.00	23.80	13.25	9.50	6.00	
19	24.20	109.75	37.50	72.60	393.00	39.30	168.40	40.20	26.60	13.00	9.50	5.20	
20	23.00	90.25	58.60	64.20	277.20	37.95	158.00	37.50	24.60	12.75	9.25	5.20	
21	21.00	76.20	49.50	59.15	266.75	36.60	155.00	35.70	21.80	12.50	8.75	5.20	
22	20.60	128.00	47.00	55.30	245.85	34.35	97.40	34.35	19.40	12.50	8.50	5.00	
23	19.80	97.40	166.80	51.00	242.10	33.00	88.95	33.00	18.60	12.50	8.25	5.00	
24	19.00	87.00	299.05	48.50	193.40	32.20	90.25	31.80	17.40	13.00	8.00	5.00	
25	19.00	69.60	324.00	45.00	146.75	33.45	117.50	31.00	17.00	12.75	7.75	5.20	
26	23.40	62.45	492.60	44.50	114.50	36.60	216.90	30.20	16.75	12.00	7.50	13.00	
27	25.00	85.80	641.25	41.55	103.90	41.55	236.70	29.00	16.50	11.75	7.25	16.00	
28	31.80	69.00	601.25	40.20	131.00	82.20	152.75	28.60	16.25	11.50	7.25	13.75	
29	25.00	78.60	481.05	37.05	218.70	58.05	149.75	27.80	16.00	12.00		10.00	
30	25.80	65.40	339.00	35.25	375.00	43.00	243.00	27.40	15.75	17.80		7.50	
31		54.75		35.25	373.00		362.00		15.50	16.75		6.60	
Total	761.70	2400.30	4153.00	5795.20	4826.50	2252.20	3710.30	2482.10	667.35	426.80	296.15	263.40	28035.00 CMSDAY
Mean	25.39	77.43	138.43	186.94	155.69	75.07	119.69	82.74	21.53	13.77	10.58	8.50	76.81 CMS
Max	36.15	247.75	641.25	655.00	452.00	352.00	362.00	259.15	27.00	17.80	17.40	16.50	655.00 CMS
Min	19.00	26.20	28.20	35.25	32.20	32.20	36.60	27.40	15.50	11.50	7.25	5.00	5.00 CMS
Runoff	65.811	207.386	358.819	500.705	417.010	194.590	320.570	214.453	57.659	36.876	25.587	22.758	2422.224 MCM

Momentary Peak 677.50 CMS, at 11.02 M (MSL), at 4.00 Hours, on Jul 6, 2001

Runoff Yield 42.23 Liters/Second/Square KM, Momentary Peak Yield 372.457 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong To Daeng at Ban Kwa Ro Krung, Narathiwat (X.159)

Lat 06 - 05 - 08 N. **Long** 102 - 01 - 20 E.

Location on right bank downstream from the bridge of Ban Lu Bo Lu Song - Ban Khlong Chang Road.

Ban Kwa Ro Krung **Amphoe** Sungai Kolok **Changwat** Narathiwat

Drainage Area Flood plain.

Type of Gage Staff gage.

Zero Gage at Bottom +2.100 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank at the abutment of the bridge.

Elevation +4.630 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1984 to date.

Rating Operation

Period of Rating 1987 to date.

Rated by Float -

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 45 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

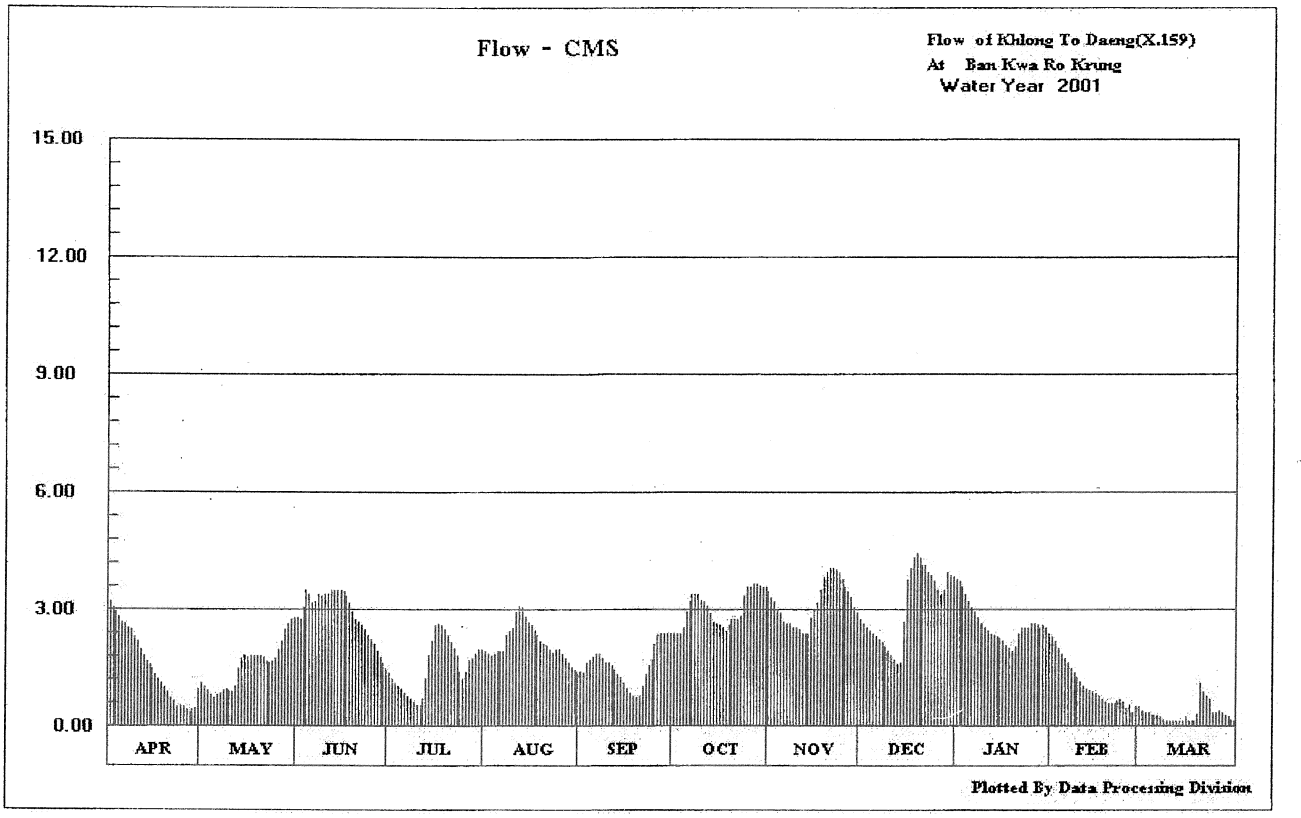
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.70	3.06	3.62	3.19	3.39	3.20	3.51	3.75	3.61	3.81	3.49	2.69	
2	3.67	3.04	3.61	3.12	3.36	3.19	3.51	3.72	3.59	3.80	3.46	2.61	
3	3.65	2.96	3.67	3.07	3.35	3.28	3.51	3.70	3.56	3.77	3.41	2.59	
4	3.63	2.89	3.76	3.03	3.37	3.31	3.56	3.66	3.53	3.74	3.37	2.56	
5	3.60	2.86	3.74	2.98	3.39	3.34	3.65	3.64	3.51	3.70	3.33	2.53	
6	3.58	2.89	3.69	2.92	3.39	3.36	3.70	3.60	3.49	3.67	3.28	2.51	
7	3.56	2.93	3.70	2.87	3.39	3.36	3.74	3.59	3.47	3.65	3.23	2.50	
8	3.54	2.97	3.74	2.82	3.50	3.32	3.74	3.59	3.45	3.62	3.19	2.47	
9	3.49	2.98	3.73	2.78	3.53	3.28	3.74	3.56	3.42	3.59	3.13	2.42	
10	3.46	2.96	3.74	2.73	3.55	3.28	3.71	3.55	3.39	3.55	3.08	2.37	
11	3.40	2.94	3.74	2.71	3.65	3.26	3.70	3.54	3.35	3.53	3.03	2.36	
12	3.35	3.03	3.76	2.82	3.68	3.22	3.68	3.52	3.31	3.51	2.99	2.35	
13	3.30	3.23	3.76	3.12	3.67	3.17	3.64	3.51	3.27	3.50	2.96	2.35	
14	3.27	3.32	3.76	3.35	3.63	3.13	3.60	3.52	3.28	3.49	2.94	2.31	
15	3.23	3.35	3.76	3.46	3.60	3.07	3.58	3.62	3.60	3.48	2.91	2.31	
16	3.18	3.34	3.75	3.57	3.57	2.99	3.57	3.66	3.81	3.46	2.87	2.31	
17	3.12	3.35	3.73	3.59	3.53	2.93	3.55	3.69	3.86	3.43	2.82	2.31	
18	3.07	3.35	3.69	3.57	3.50	2.88	3.53	3.76	3.90	3.41	2.78	2.31	
19	3.02	3.35	3.65	3.54	3.46	2.86	3.57	3.82	3.92	3.39	2.76	2.31	
20	2.95	3.35	3.61	3.50	3.44	2.87	3.61	3.84	3.90	3.42	2.75	2.55	
21	2.85	3.34	3.60	3.45	3.43	3.03	3.61	3.86	3.87	3.52	2.75	3.06	
22	2.79	3.30	3.57	3.41	3.40	3.18	3.61	3.86	3.87	3.55	2.79	2.95	
23	2.70	3.29	3.54	3.35	3.38	3.26	3.63	3.85	3.84	3.56	2.83	2.88	
24	2.72	3.30	3.50	3.20	3.40	3.31	3.73	3.84	3.83	3.56	2.78	2.81	
25	2.69	3.32	3.47	3.10	3.40	3.44	3.77	3.81	3.80	3.58	2.67	2.59	
26	2.63	3.40	3.44	3.21	3.36	3.50	3.77	3.77	3.76	3.58	2.71	2.59	
27	2.57	3.46	3.39	3.31	3.32	3.52	3.79	3.75	3.74	3.57	2.58	2.62	
28	2.64	3.54	3.34	3.33	3.29	3.51	3.79	3.72	3.76	3.56	2.69	2.57	
29	2.66	3.58	3.28	3.36	3.25	3.52	3.78	3.67	3.84	3.57		2.52	
30	2.99	3.61	3.24	3.40	3.22	3.52	3.77	3.64	3.83	3.55		2.47	
31		3.62		3.40	3.20		3.77		3.82	3.51		2.42	
Mean	3.17	3.22	3.62	3.20	3.44	3.24	3.66	3.69	3.65	3.57	2.99	2.52	
Max	3.70	3.62	3.76	3.59	3.68	3.52	3.79	3.86	3.92	3.81	3.49	3.06	3.92
Min	2.57	2.86	3.24	2.71	3.20	2.86	3.51	3.51	3.27	3.39	2.58	2.31	2.31

Annual Max Momentary Gage Height 3.92 M (MSL), at 17.00 Hours, on Dec 18, 2001

Zero Gage at Bottom Elevation 2.10 M (MSL), River Bed 2.13 M (MSL)

Left Bank Elevation 5.87 M (MSL)

Right Bank Elevation 5.85 M (MSL), Drainage Area Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.24	1.13	2.83	1.40	1.96	1.42	2.40	3.50	2.78	3.81	2.32	0.54	
2	3.09	1.08	2.78	1.25	1.88	1.40	2.40	3.34	2.69	3.75	2.21	0.42	
3	2.99	0.94	3.09	1.15	1.85	1.65	2.40	3.24	2.58	3.60	2.03	0.40	
4	2.88	0.83	3.55	1.06	1.90	1.73	2.58	3.04	2.47	3.44	1.90	0.37	
5	2.73	0.78	3.44	0.97	1.96	1.82	2.99	2.93	2.40	3.24	1.79	0.33	
6	2.66	0.83	3.19	0.88	1.96	1.88	3.24	2.73	2.32	3.09	1.65	0.31	
7	2.58	0.89	3.24	0.80	1.96	1.88	3.44	2.69	2.25	2.99	1.51	0.30	
8	2.51	0.95	3.44	0.72	2.36	1.76	3.44	2.69	2.18	2.83	1.40	0.27	
9	2.32	0.97	3.39	0.66	2.47	1.65	3.44	2.58	2.06	2.69	1.27	0.21	
10	2.21	0.94	3.44	0.59	2.55	1.65	3.29	2.55	1.96	2.55	1.17	0.16	
11	1.99	0.91	3.44	0.56	2.99	1.59	3.24	2.51	1.85	2.47	1.06	0.15	
12	1.85	1.06	3.55	0.72	3.14	1.48	3.14	2.43	1.73	2.40	0.98	0.14	
13	1.70	1.51	3.55	1.25	3.09	1.36	2.93	2.40	1.62	2.36	0.94	0.14	
14	1.62	1.76	3.55	1.85	2.88	1.27	2.73	2.43	1.65	2.32	0.91	0.10	
15	1.51	1.85	3.55	2.21	2.73	1.15	2.66	2.83	2.73	2.29	0.86	0.10	
16	1.38	1.82	3.50	2.62	2.62	0.98	2.62	3.04	3.81	2.21	0.80	0.10	
17	1.25	1.85	3.39	2.69	2.47	0.89	2.55	3.19	4.11	2.10	0.72	0.10	
18	1.15	1.85	3.19	2.62	2.36	0.81	2.47	3.55	4.35	2.03	0.66	0.10	
19	1.04	1.85	2.99	2.51	2.21	0.78	2.62	3.87	4.47	1.96	0.63	0.10	
20	0.92	1.85	2.78	2.36	2.14	0.80	2.78	3.99	4.35	2.06	0.62	0.36	
21	0.77	1.82	2.73	2.18	2.10	1.06	2.78	4.11	4.17	2.43	0.62	1.13	
22	0.68	1.70	2.62	2.03	1.99	1.38	2.78	4.11	4.17	2.55	0.68	0.92	
23	0.55	1.68	2.51	1.85	1.93	1.59	2.88	4.05	3.99	2.58	0.74	0.81	
24	0.58	1.70	2.36	1.42	1.99	1.73	3.39	3.99	3.93	2.58	0.66	0.71	
25	0.54	1.76	2.25	1.21	1.99	2.14	3.60	3.81	3.75	2.66	0.51	0.40	
26	0.45	1.99	2.14	1.45	1.88	2.36	3.60	3.60	3.55	2.66	0.56	0.40	
27	0.38	2.21	1.96	1.73	1.76	2.43	3.70	3.50	3.44	2.62	0.39	0.44	
28	0.47	2.51	1.82	1.79	1.68	2.40	3.70	3.34	3.55	2.58	0.54	0.38	
29	0.49	2.66	1.65	1.88	1.56	2.43	3.65	3.09	3.99	2.62		0.32	
30	0.98	2.78	1.53	1.99	1.48	2.43	3.60	2.93	3.93	2.55		0.27	
31		2.83		1.99	1.42		3.60		3.87	2.40		0.21	
Total	47.51	49.29	87.45	48.39	67.26	47.90	94.64	96.06	96.70	82.42	30.13	10.69	758.44 CMSDAY
Mean	1.58	1.59	2.92	1.56	2.17	1.60	3.05	3.20	3.12	2.66	1.08	0.34	2.08 CMS
Max	3.24	2.83	3.55	2.69	3.14	2.43	3.70	4.11	4.47	3.81	2.32	1.13	4.47 CMS
Min	0.38	0.78	1.53	0.56	1.42	0.78	2.40	2.40	1.62	1.96	0.39	0.10	0.10 CMS
Runoff	4.105	4.259	7.556	4.181	5.811	4.139	8.177	8.300	8.355	7.121	2.603	0.924	65.529 MCM

Momentary Peak 4.47 CMS, at 3.92 M (MSL), at 17.00 Hours, on Dec 18, 2001

Runoff Yield ********* Liters/Second/Square KM, Momentary Peak Yield ********* Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Chandi at Ban Manao Wan, Nakhon Si Thammarat (X.163)

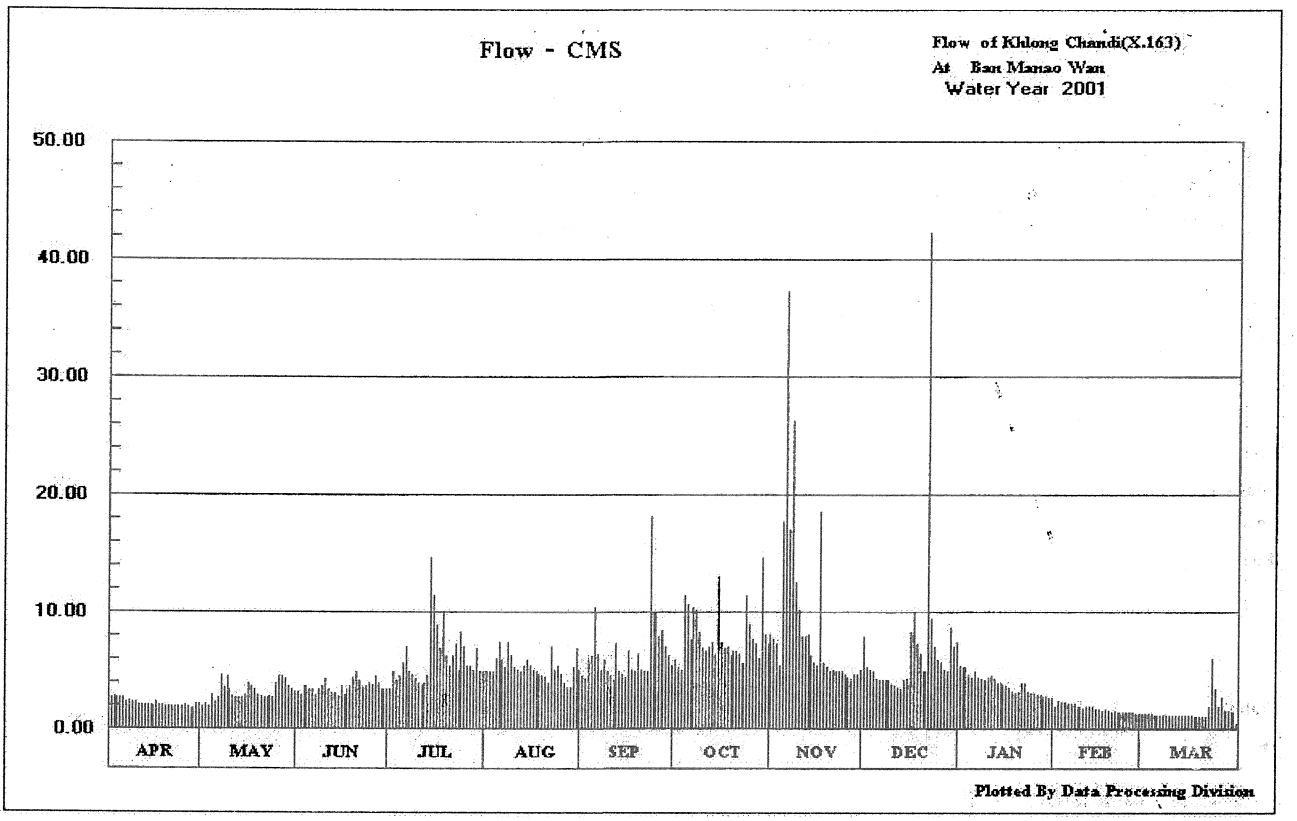
Lat 08 - 20 - 34 N. **Long** 99 - 37 - 12 E.

Location		on left bank at the bridge near Wat Manao Wan.			
	Ban Manao Wan	**Amphoe** Chawang		**Changwat** Nakhon Si Thammarat	
Drainage Area		97 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 5.80 meters from the top staff gage.			
	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		1986 to date.			
Rating Operation					
	Period of Rating	1987 to date.			
	Rated by Float	-			
	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 39 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.85	0.80	0.89	0.90	1.00	0.98	1.05	1.16	1.15	1.03	0.80	0.74	
2	0.86	0.82	0.87	1.00	1.00	0.96	1.02	1.14	1.02	1.02	0.84	0.74	
3	0.85	0.80	0.92	0.95	1.00	1.05	1.01	1.12	1.01	1.02	0.83	0.74	
4	0.85	0.87	0.92	0.98	1.06	1.07	1.30	1.03	1.00	0.99	0.83	0.74	
5	0.85	0.83	0.90	1.04	1.13	1.26	1.27	1.52	0.96	0.97	0.82	0.73	
6	0.83	0.85	0.90	1.11	1.05	1.08	1.14	2.10	0.95	1.00	0.82	0.73	
7	0.84	0.99	0.87	1.00	1.02	1.01	1.26	1.50	0.95	0.97	0.82	0.73	
8	0.83	0.91	0.90	0.99	1.13	1.05	1.25	1.79	0.95	0.96	0.80	0.73	
9	0.83	0.98	0.92	0.96	1.07	1.00	1.17	1.34	0.95	0.95	0.80	0.73	
10	0.81	0.90	0.96	0.94	1.02	0.98	1.10	1.25	0.93	0.97	0.79	0.73	
11	0.81	0.86	0.90	0.93	1.01	0.95	1.09	1.15	0.92	0.98	0.80	0.73	
12	0.81	0.85	0.88	0.94	1.00	1.12	1.11	1.15	0.91	0.96	0.80	0.73	
13	0.81	0.85	0.88	0.98	1.03	1.00	1.13	1.16	0.90	0.94	0.80	0.73	
14	0.81	0.85	0.86	1.42	1.05	0.99	1.08	1.07	0.95	0.94	0.78	0.73	
15	0.80	0.87	0.92	1.30	1.03	0.97	1.36	1.04	0.96	0.93	0.78	0.73	
16	0.83	0.94	0.87	1.20	1.01	1.09	1.13	1.03	1.17	0.92	0.77	0.73	
17	0.81	0.92	0.90	1.10	1.00	1.01	1.10	1.55	1.24	0.91	0.78	0.73	
18	0.81	0.90	0.92	1.24	0.99	1.00	1.11	1.04	1.12	0.89	0.77	0.72	
19	0.80	0.87	0.97	1.07	0.98	1.08	1.07	1.02	1.08	0.88	0.76	0.72	
20	0.80	0.86	1.00	1.03	0.97	1.01	1.09	1.00	1.00	0.89	0.77	0.72	
21	0.80	0.85	0.95	1.07	0.94	1.00	1.09	1.01	1.00	0.94	0.76	0.72	
22	0.80	0.85	0.91	1.12	1.11	1.00	1.08	1.00	2.23	0.94	0.75	0.72	
23	0.80	0.86	0.92	1.01	1.01	1.54	1.04	1.00	1.22	0.89	0.75	0.80	
24	0.80	0.85	0.94	1.17	1.03	1.24	1.30	1.00	1.11	0.88	0.75	1.06	
25	0.81	0.94	0.93	1.11	0.99	1.24	1.20	0.99	1.05	0.88	0.75	0.90	
26	0.80	0.98	0.98	1.03	0.94	1.15	1.14	0.97	1.04	0.87	0.75	0.80	
27	0.79	0.98	0.94	1.03	0.91	1.18	1.12	0.96	1.01	0.87	0.74	0.85	
28	0.79	0.96	0.90	1.01	0.91	1.11	1.06	0.99	1.00	0.86	0.74	0.77	
29	0.82	0.92	0.90	1.10	1.02	1.07	1.42	0.99	1.19	0.86		0.77	
30	0.82	0.90	0.90	1.00	1.10	1.03	1.16	1.01	1.11	0.85		0.76	
31		0.89		1.00	1.01		1.12		1.13	0.85		0.75	
Mean	0.82	0.89	0.91	1.06	1.02	1.07	1.15	1.17	1.07	0.93	0.78	0.76	
Max	0.86	0.99	1.00	1.42	1.13	1.54	1.42	2.10	2.23	1.03	0.84	1.06	2.23
Min	0.79	0.80	0.86	0.90	0.91	0.95	1.01	0.96	0.90	0.85	0.74	0.72	0.72

Annual Max Momentary Gage Height 3.60 M (A.D), at 14.00 Hours, on Dec 22, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.56 M (A.D)
Left Bank Elevation 7.06 M (A.D)
Right Bank Elevation 7.03 M (A.D), Drainage Area 97 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.75	2.00	3.35	3.50	5.00	4.70	6.00	8.20	8.00	5.60	2.00	1.40	
2	2.90	2.30	3.05	5.00	5.00	4.40	5.40	7.80	5.40	5.40	2.60	1.40	
3	2.75	2.00	3.80	4.25	5.00	6.00	5.20	7.40	5.20	5.40	2.45	1.40	
4	2.75	3.05	3.80	4.70	6.20	6.40	11.60	5.60	5.00	4.85	2.45	1.40	
5	2.75	2.45	3.50	5.80	7.60	10.56	10.82	17.74	4.40	4.55	2.30	1.30	
6	2.45	2.75	3.50	7.20	6.00	6.60	7.80	37.45	4.25	5.00	2.30	1.30	
7	2.60	4.85	3.05	5.00	5.40	5.20	10.56	17.15	4.25	4.55	2.30	1.30	
8	2.45	3.65	3.50	4.85	7.60	6.00	10.30	26.46	4.25	4.40	2.00	1.30	
9	2.45	4.70	3.80	4.40	6.40	5.00	8.40	12.64	4.25	4.25	2.00	1.30	
10	2.15	3.50	4.40	4.10	5.40	4.70	7.00	10.30	3.95	4.55	1.90	1.30	
11	2.15	2.90	3.50	3.95	5.20	4.25	6.80	8.00	3.80	4.70	2.00	1.30	
12	2.15	2.75	3.20	4.10	5.00	7.40	7.20	8.00	3.65	4.40	2.00	1.30	
13	2.15	2.75	3.20	4.70	5.60	5.00	7.60	8.20	3.50	4.10	2.00	1.30	
14	2.15	2.75	2.90	14.79	6.00	4.85	6.60	6.40	4.25	4.10	1.80	1.30	
15	2.00	3.05	3.80	11.60	5.60	4.55	13.16	5.80	4.40	3.95	1.80	1.30	
16	2.45	4.10	3.05	9.00	5.20	6.80	7.60	5.60	8.40	3.80	1.70	1.30	
17	2.15	3.80	3.50	7.00	5.00	5.20	7.00	18.62	10.04	3.65	1.80	1.30	
18	2.15	3.50	3.80	10.04	4.85	5.00	7.20	5.80	7.40	3.35	1.70	1.20	
19	2.00	3.05	4.55	6.40	4.70	6.60	6.40	5.40	6.60	3.20	1.60	1.20	
20	2.00	2.90	5.00	5.60	4.55	5.20	6.80	5.00	5.00	3.35	1.70	1.20	
21	2.00	2.75	4.25	6.40	4.10	5.00	6.80	5.20	5.00	4.10	1.60	1.20	
22	2.00	2.75	3.65	7.40	7.20	5.00	6.60	5.00	42.36	4.10	1.50	1.20	
23	2.00	2.90	3.80	5.20	5.20	18.33	5.80	5.00	9.52	3.35	1.50	2.00	
24	2.00	2.75	4.10	8.40	5.60	10.04	11.60	5.00	7.20	3.20	1.50	6.20	
25	2.15	4.10	3.95	7.20	4.85	10.04	9.00	4.85	6.00	3.20	1.50	3.50	
26	2.00	4.70	4.70	5.60	4.10	8.00	7.80	4.55	5.80	3.05	1.50	2.00	
27	1.90	4.70	4.10	5.60	3.65	8.60	7.40	4.40	5.20	3.05	1.40	2.75	
28	1.90	4.40	3.50	5.20	3.65	7.20	6.20	4.85	5.00	2.90	1.40	1.70	
29	2.30	3.80	3.50	7.00	5.40	6.40	14.79	4.85	8.80	2.90		1.70	
30	2.30	3.50	3.50	5.00	7.00	5.60	8.20	5.20	7.20	2.75		1.60	
31		3.35		5.00	5.20		7.40		7.60	2.75		1.50	
Total	67.90	102.50	111.30	193.98	167.25	198.62	251.03	276.46	215.67	122.50	52.30	51.45	1810.96 CMSDAY
Mean	2.26	3.31	3.71	6.26	5.40	6.62	8.10	9.22	6.96	3.95	1.87	1.66	4.96 CMS
Max	2.90	4.85	5.00	14.79	7.60	18.33	14.79	37.45	42.36	5.60	2.60	6.20	42.36 CMS
Min	1.90	2.00	2.90	3.50	3.65	4.25	5.20	4.40	3.50	2.75	1.40	1.20	1.20 CMS
Runoff	5.867	8.856	9.616	16.760	14.450	17.161	21.689	23.886	18.634	10.584	4.519	4.445	156.467 MCM

Momentary Peak 115.00 CMS, at 3.60 M (A.D), at 14.00 Hours, on Dec 22, 2001

Runoff Yield 51.15 Liters/Second/Square KM, Momentary Peak Yield 1185.567 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Nai Khieo at Ban Thon Hong, Nakhon Si Thammarat (X.165)

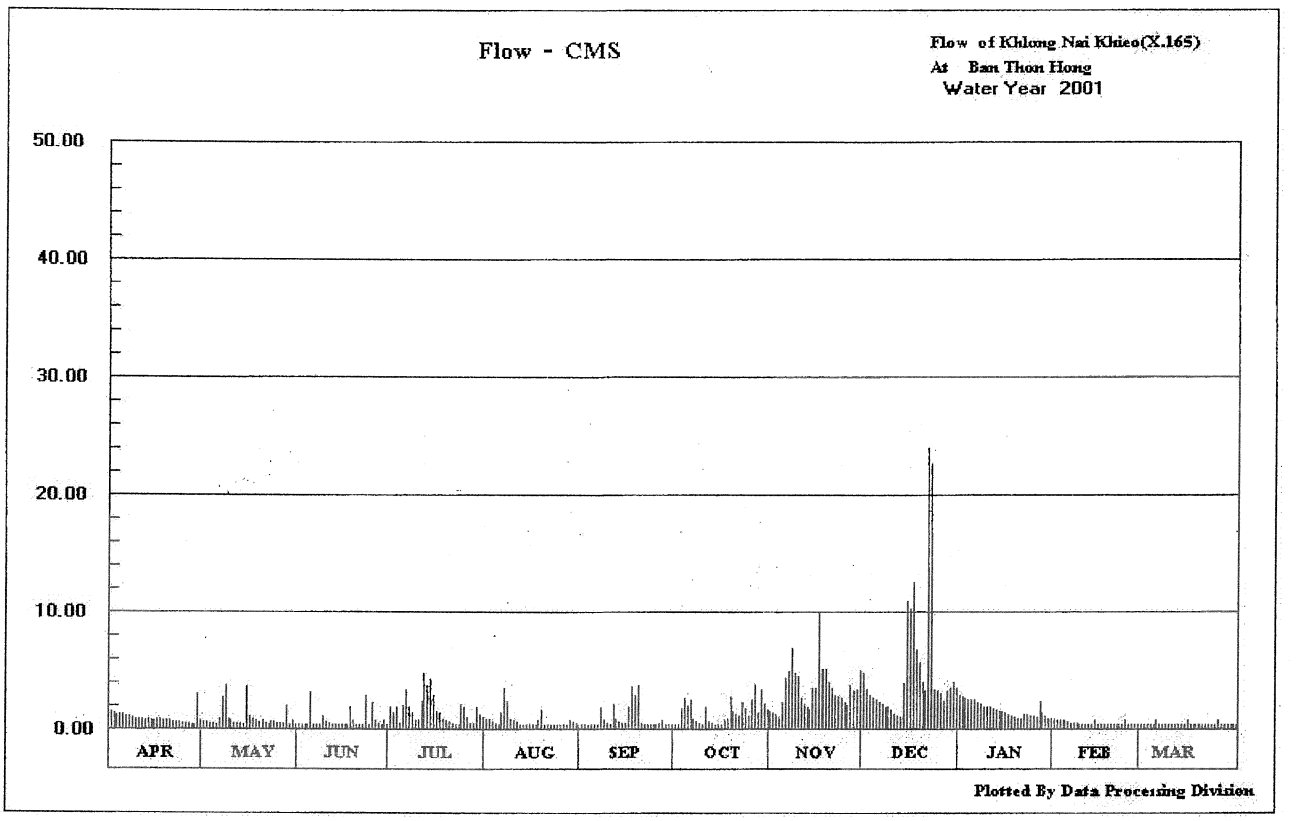
Lat 08 - 33 - 47 N. **Long** 99 - 48 - 59 E.

Location		on right bank at Ban Thon Hong.
	Ban Thon Hong	**Amphoe** Phrom Khiri **Changwat** Nakhon Si Thammarat
Drainage Area		25 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 9 meters from the top staff gage.
	Elevation	+9.738 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 Float	-
	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 36 discharge measurements made in 2001.
Remark		No record on 1 Mar. - 31 Mar.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.72	0.63	0.61	0.76	0.66	0.59	0.58	0.72	0.99	0.84	0.65	*******	
2	0.71	0.63	0.59	0.71	0.65	0.59	0.57	0.71	0.88	0.83	0.64	*******	
3	0.69	0.62	0.59	0.76	0.63	0.58	0.74	0.69	0.84	0.82	0.64	*******	
4	0.69	0.62	0.58	0.62	0.62	0.58	0.82	0.67	0.82	0.81	0.63	*******	
5	0.69	0.61	0.86	0.77	0.61	0.57	0.77	0.79	0.81	0.81	0.63	*******	
6	0.68	0.65	0.61	0.88	0.70	0.58	0.81	0.96	0.79	0.81	0.62	*******	
7	0.68	0.83	0.59	0.75	0.89	0.75	0.66	1.00	0.78	0.79	0.62	*******	
8	0.67	0.91	0.58	0.71	0.80	0.64	0.63	1.14	0.76	0.78	0.62	*******	
9	0.66	0.65	0.68	0.64	0.66	0.62	0.62	0.99	0.75	0.76	0.61	*******	
10	0.65	0.63	0.63	0.64	0.64	0.59	0.60	0.97	0.73	0.76	0.61	*******	
11	0.65	0.62	0.62	0.80	0.63	0.78	0.75	0.82	0.69	0.75	0.59	*******	
12	0.64	0.62	0.61	0.99	0.61	0.65	0.63	0.78	0.68	0.74	0.59	*******	
13	0.65	0.62	0.59	0.91	0.59	0.63	0.62	0.75	0.67	0.73	0.59	*******	
14	0.64	0.61	0.58	0.95	0.59	0.62	0.61	0.73	0.92	0.72	0.59	*******	
15	0.64	0.90	0.58	0.84	0.59	0.62	0.60	0.89	1.40	0.72	0.59	*******	
16	0.65	0.68	0.58	0.72	0.58	0.76	0.60	0.89	1.36	0.70	0.58	*******	
17	0.65	0.65	0.57	0.71	0.58	0.90	0.59	1.34	1.51	0.69	0.60	*******	
18	0.64	0.64	0.75	0.65	0.57	0.84	0.66	1.02	1.13	0.68	0.59	*******	
19	0.64	0.63	0.59	0.64	0.73	0.91	0.83	1.02	1.05	0.67	0.58	*******	
20	0.63	0.63	0.59	0.63	0.59	0.62	0.72	0.93	0.93	0.66	0.58	*******	
21	0.63	0.62	0.58	0.62	0.59	0.61	0.69	0.89	0.87	0.65	0.57	*******	
22	0.63	0.61	0.60	0.61	0.58	0.61	0.68	0.84	2.21	0.69	0.58	*******	
23	0.63	0.63	0.84	0.60	0.59	0.59	0.79	0.83	2.13	0.69	0.59	*******	
24	0.62	0.63	0.59	0.78	0.57	0.60	0.74	0.82	0.88	0.68	0.58	*******	
25	0.62	0.62	0.79	0.75	0.59	0.58	0.68	0.79	0.87	0.68	0.58	*******	
26	0.62	0.62	0.64	0.67	0.59	0.62	0.81	0.77	0.85	0.67	0.58	*******	
27	0.61	0.62	0.62	0.62	0.59	0.60	0.91	0.91	0.80	0.80	0.58	*******	
28	0.61	0.77	0.61	0.62	0.62	0.60	0.70	0.87	0.87	0.70	0.58	*******	
29	0.85	0.61	0.61	0.75	0.63	0.59	0.88	0.88	0.89	0.68		*******	
30	0.62	0.61	0.61	0.69	0.62	0.59	0.78	1.01	0.93	0.65		*******	
31		0.61		0.67	0.61		0.73		0.89	0.66		*******	
Mean	0.66	0.66	0.63	0.72	0.63	0.65	0.70	0.88	0.99	0.73	0.60	*******	
Max	0.85	0.91	0.86	0.99	0.89	0.91	0.91	1.34	2.21	0.84	0.65	*******	2.21
Min	0.61	0.61	0.57	0.60	0.57	0.57	0.57	0.67	0.67	0.65	0.57	*******	*******

Annual Max Momentary Gage Height 3.92 M (A.D), at 18.00 Hours, on Dec 23, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.43 M (A.D)
Left Bank Elevation 11.23 M (A.D)
Right Bank Elevation 11.24 M (A.D), Drainage Area 25 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.70	0.80	0.60	2.10	1.10	0.45	0.40	1.70	4.88	3.00	1.00	*******	
2	1.60	0.80	0.45	1.60	1.00	0.45	0.35	1.60	3.50	2.87	0.90	*******	
3	1.40	0.70	0.45	2.10	0.80	0.40	1.90	1.40	3.00	2.75	0.90	*******	
4	1.40	0.70	0.40	0.70	0.70	0.40	2.75	1.20	2.75	2.63	0.80	*******	
5	1.40	0.60	3.25	2.20	0.60	0.35	2.20	2.40	2.63	2.63	0.80	*******	
6	1.30	1.00	0.60	3.50	1.50	0.40	2.63	4.50	2.40	2.63	0.70	*******	
7	1.30	2.87	0.45	2.00	3.62	2.00	1.10	5.00	2.30	2.40	0.70	*******	
8	1.20	3.88	0.40	1.60	2.50	0.90	0.80	7.10	2.10	2.30	0.70	*******	
9	1.10	1.00	1.30	0.90	1.10	0.70	0.70	4.88	2.00	2.10	0.60	*******	
10	1.00	0.80	0.80	0.90	0.90	0.45	0.50	4.63	1.80	2.10	0.60	*******	
11	1.00	0.70	0.70	2.50	0.80	2.30	2.00	2.75	1.40	2.00	0.45	*******	
12	0.90	0.70	0.60	4.88	0.60	1.00	0.80	2.30	1.30	1.90	0.45	*******	
13	1.00	0.70	0.45	3.88	0.45	0.80	0.70	2.00	1.20	1.80	0.45	*******	
14	0.90	0.60	0.40	4.38	0.45	0.70	0.60	1.80	4.00	1.70	0.45	*******	
15	0.90	3.75	0.40	3.00	0.45	0.70	0.50	3.62	11.00	1.70	0.45	*******	
16	1.00	1.30	0.40	1.70	0.40	2.10	0.50	3.62	10.40	1.50	0.40	*******	
17	1.00	1.00	0.35	1.60	0.40	3.75	0.45	10.10	12.65	1.40	0.50	*******	
18	0.90	0.90	2.00	1.00	0.35	3.00	1.10	5.30	6.95	1.30	0.45	*******	
19	0.90	0.80	0.45	0.90	1.80	3.88	2.87	5.30	5.75	1.20	0.40	*******	
20	0.80	0.80	0.45	0.80	0.45	0.70	1.70	4.13	4.13	1.10	0.40	*******	
21	0.80	0.70	0.40	0.70	0.45	0.60	1.40	3.62	3.38	1.00	0.35	*******	
22	0.80	0.60	0.50	0.60	0.40	0.60	1.30	3.00	24.17	1.40	0.40	*******	
23	0.80	0.80	3.00	0.50	0.45	0.45	2.40	2.87	22.78	1.40	0.45	*******	
24	0.70	0.80	0.45	2.30	0.35	0.50	1.90	2.75	3.50	1.30	0.40	*******	
25	0.70	0.70	2.40	2.00	0.45	0.40	1.30	2.40	3.38	1.30	0.40	*******	
26	0.70	0.70	0.90	1.20	0.45	0.70	2.63	2.20	3.13	1.20	0.40	*******	
27	0.60	0.70	0.70	0.70	0.45	0.50	3.88	3.88	2.50	2.50	0.40	*******	
28	0.60	2.20	0.60	0.70	0.70	0.50	1.50	3.38	3.38	1.50	0.40	*******	
29	3.13	0.60	0.60	2.00	0.80	0.45	3.50	3.50	3.62	1.30		*******	
30	0.70	0.60	0.60	1.40	0.70	0.45	2.30	5.15	4.13	1.00		*******	
31		0.60		1.20	0.60		1.80		3.62	1.10		*******	
Total	32.23	33.40	25.05	55.54	25.77	30.58	48.46	108.08	163.73	56.01	15.30	*******	******** CMSDAY
Mean	1.07	1.08	0.84	1.79	0.83	1.02	1.56	3.60	5.28	1.81	0.55	*******	******** CMS
Max	3.13	3.88	3.25	4.88	3.62	3.88	3.88	10.10	24.17	3.00	1.00	*******	24.17 CMS
Min	0.60	0.60	0.35	0.50	0.35	0.35	0.35	1.20	1.20	1.00	0.35	*******	******** CMS
Runoff	2.785	2.886	2.164	4.799	2.227	2.642	4.187	9.338	14.146	4.839	1.322	*******	******** MCM

Momentary Peak 64.08 CMS, at 3.92 M (A.D), at 18.00 Hours, on Dec 23, 2001

Runoff Yield ******** Liters/Second/Square KM, Momentary Peak Yield 2563.200 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Sao Thong at Ban Sao Thong, Nakhon Si Thammarat (X.167)

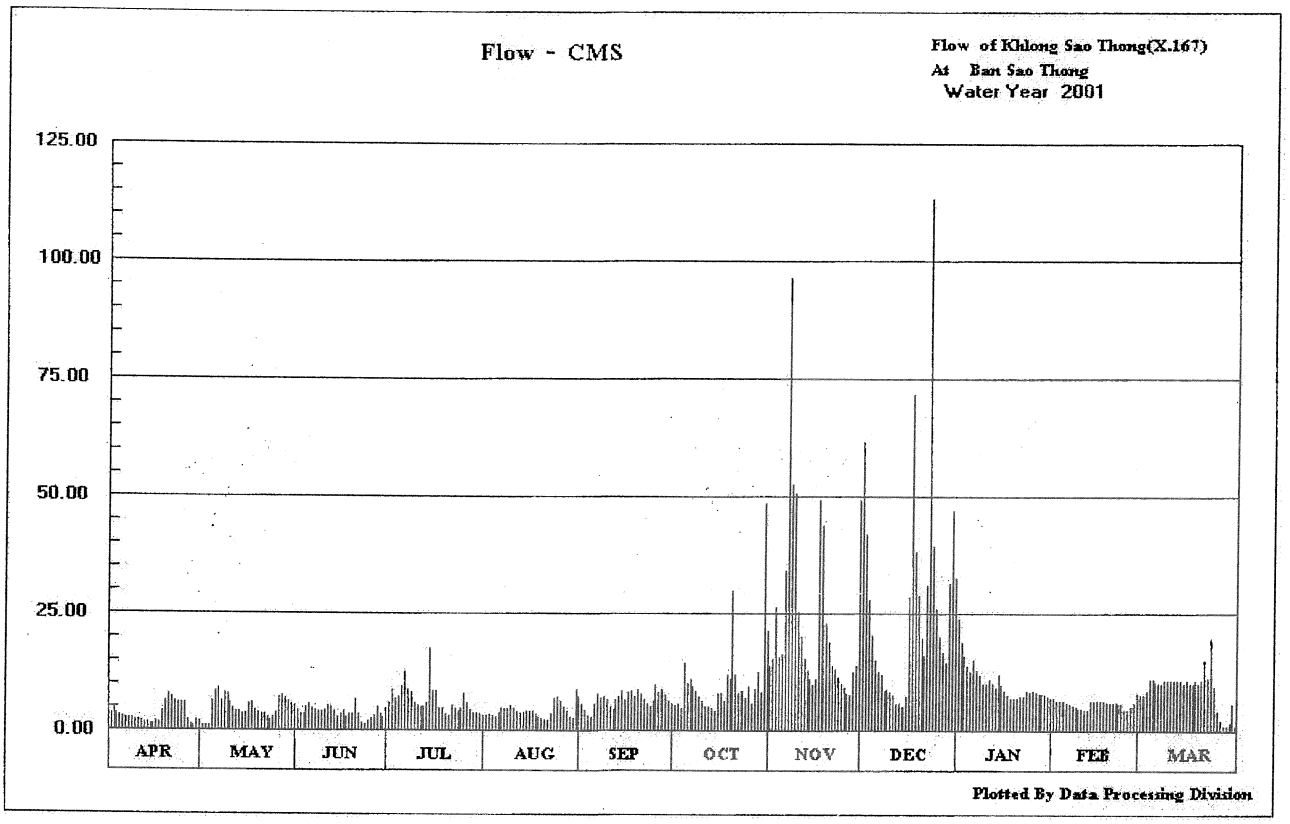
Lat 08 - 16 - 44 N. **Long** 99 - 54 - 30 E.

Location		on right bank at the bridge.			
	Ban Sao Thong	**Amphoe** Ron Phibun		**Changwat** Nakhon Si Thammarat	
Drainage Area		268 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 Float	-			
	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 4 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.80	0.50	0.85	0.93	0.77	0.92	0.90	1.32	2.91	1.72	0.98	1.02	
2	0.87	0.54	0.79	1.08	0.79	0.84	0.91	1.39	2.33	1.53	0.96	1.02	
3	0.80	0.55	0.78	0.98	0.76	0.77	0.87	1.81	1.86	1.41	0.95	1.07	
4	0.77	0.96	0.89	1.00	0.75	0.75	1.35	1.40	1.59	1.32	0.95	1.20	
5	0.74	1.07	0.91	1.11	0.81	0.92	1.15	1.43	1.38	1.26	0.93	1.20	
6	0.72	1.10	0.87	1.26	0.86	1.03	1.19	2.07	1.27	1.38	0.91	1.16	
7	0.72	0.96	0.84	1.08	0.86	0.99	1.12	3.61	1.23	1.28	0.90	1.15	
8	0.71	1.05	0.83	1.05	0.87	1.00	1.07	2.66	1.07	1.24	0.89	1.15	
9	0.70	1.03	0.83	0.93	0.90	0.97	1.01	2.60	1.08	1.15	0.87	1.18	
10	0.68	0.93	0.84	0.90	0.87	0.89	0.95	1.77	1.05	1.14	0.86	1.17	
11	0.66	0.86	0.90	0.89	0.82	0.84	0.89	1.58	1.02	1.20	0.85	1.17	
12	0.65	0.82	0.88	0.88	0.81	0.97	0.89	1.39	0.92	1.14	0.84	1.17	
13	0.63	0.82	0.83	0.93	0.81	1.00	0.86	1.28	0.91	1.10	0.96	1.17	
14	0.62	0.79	0.74	1.48	0.83	1.07	0.83	1.20	0.88	1.23	0.96	1.17	
15	0.62	0.81	0.80	1.06	0.82	0.97	1.03	1.13	1.00	1.13	0.96	1.15	
16	0.66	0.92	0.82	1.06	0.82	1.05	1.03	1.20	1.88	1.06	0.95	1.17	
17	0.64	0.94	0.74	0.87	0.79	1.06	0.95	2.55	3.16	1.02	0.95	1.15	
18	0.83	0.85	0.80	0.86	0.75	1.01	1.23	2.39	2.20	0.98	0.94	1.15	
19	0.95	0.81	0.80	0.78	0.72	1.09	1.20	1.68	1.89	0.98	0.94	1.17	
20	1.04	0.78	0.97	0.76	0.69	1.03	1.92	1.53	1.57	0.99	0.94	1.15	
21	1.01	0.79	0.79	0.90	0.68	0.97	1.23	1.32	1.42	1.00	0.93	1.17	
22	0.96	0.74	0.65	0.87	0.78	0.92	1.04	1.29	1.96	1.01	0.92	1.37	
23	0.93	0.70	0.62	0.83	0.98	0.89	1.07	1.21	3.81	1.07	0.92	1.21	
24	0.93	0.74	0.67	0.87	1.01	0.96	0.99	1.15	2.24	1.05	0.85	1.57	
25	0.94	0.81	0.71	1.03	0.95	1.13	1.12	1.10	1.80	1.06	0.85	1.11	
26	0.70	1.00	0.77	0.94	0.88	1.05	0.91	1.04	1.58	1.05	0.88	0.83	
27	0.62	1.02	0.88	0.85	0.83	1.08	1.08	1.02	1.44	1.04	0.94	0.70	
28	0.55	0.98	0.80	0.81	0.75	1.02	1.27	1.27	1.35	1.03	1.03	0.59	
29	0.70	0.96	0.74	0.81	0.71	0.96	1.05	1.32	1.97	1.02		0.60	
30	0.52	0.91	0.86	0.80	1.09	0.92	2.53	2.55	2.49	1.00		0.63	
31		0.90		0.77	1.01		1.62		2.01	0.98		0.92	
Mean	0.76	0.86	0.81	0.95	0.83	0.97	1.14	1.64	1.72	1.15	0.92	1.09	
Max	1.04	1.10	0.97	1.48	1.09	1.13	2.53	3.61	3.81	1.72	1.03	1.57	3.81
Min	0.52	0.50	0.62	0.76	0.68	0.75	0.83	1.02	0.88	0.98	0.84	0.59	0.50

Annual Max Momentary Gage Height 3.93 M (A.D), at 6.00 Hours, on Dec 23, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.43 M (A.D)
Left Bank Elevation 6.39 M (A.D)
Right Bank Elevation 6.38 M (A.D), Drainage Area 268 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.00	0.75	4.88	6.28	3.62	6.10	5.75	14.20	61.90	24.30	7.15	7.90	
2	5.23	1.05	3.88	9.10	3.88	4.70	5.93	15.78	42.40	19.25	6.80	7.90	
3	4.00	1.13	3.75	7.15	3.50	3.62	5.23	26.80	28.30	16.25	6.63	8.90	
4	3.62	6.80	5.57	7.50	3.38	3.38	14.88	16.00	20.75	14.20	6.63	11.50	
5	3.25	8.90	5.93	9.70	4.17	6.10	10.50	16.75	15.55	12.85	6.28	11.50	
6	3.00	9.50	5.23	12.85	5.05	8.10	11.30	34.60	13.07	15.55	5.93	10.70	
7	3.00	6.80	4.70	9.10	5.05	7.33	9.90	96.82	12.17	13.30	5.75	10.50	
8	2.87	8.50	4.52	8.50	5.23	7.50	8.90	52.95	8.90	12.40	5.57	10.50	
9	2.75	8.10	4.52	6.28	5.75	6.98	7.70	51.00	9.10	10.50	5.23	11.10	
10	2.50	6.28	4.70	5.75	5.23	5.57	6.63	25.68	8.50	10.30	5.05	10.90	
11	2.25	5.05	5.75	5.57	4.35	4.70	5.57	20.50	7.90	11.50	4.88	10.90	
12	2.12	4.35	5.40	5.40	4.17	6.98	5.57	15.78	6.10	10.30	4.70	10.90	
13	1.87	4.35	4.52	6.28	4.17	7.50	5.05	13.30	5.93	9.50	6.80	10.90	
14	1.75	3.88	3.25	18.00	4.52	8.90	4.52	11.50	5.40	12.17	6.80	10.90	
15	1.75	4.17	4.00	8.70	4.35	6.98	8.10	10.10	7.50	10.10	6.80	10.50	
16	2.25	6.10	4.35	8.70	4.35	8.50	8.10	11.50	28.90	8.70	6.63	10.90	
17	2.00	6.45	3.25	5.23	3.88	8.70	6.63	49.37	71.90	7.90	6.63	10.50	
18	4.52	4.88	4.00	5.05	3.38	7.70	12.17	44.20	38.50	7.15	6.45	10.50	
19	6.63	4.17	4.00	3.75	3.00	9.30	11.50	23.20	29.20	7.15	6.45	10.90	
20	8.30	3.75	6.98	3.50	2.62	8.10	30.10	19.25	20.25	7.33	6.45	10.50	
21	7.70	3.88	3.88	5.75	2.50	6.98	12.17	14.20	16.50	7.50	6.28	10.90	
22	6.80	3.25	2.12	5.23	3.75	6.10	8.30	13.52	31.30	7.70	6.10	15.33	
23	6.28	2.75	1.75	4.52	7.15	5.57	8.90	11.72	113.52	8.90	6.10	11.72	
24	6.28	3.25	2.38	5.23	7.70	6.80	7.33	10.50	39.70	8.50	4.88	20.25	
25	6.45	4.17	2.87	8.10	6.63	10.10	9.90	9.50	26.50	8.70	4.88	9.70	
26	2.75	7.50	3.62	6.45	5.40	8.50	5.93	8.30	20.50	8.50	5.40	4.52	
27	1.75	7.90	5.40	4.88	4.52	9.10	9.10	7.90	17.00	8.30	6.45	2.75	
28	1.13	7.15	4.00	4.17	3.38	7.90	13.07	13.07	14.88	8.10	8.10	1.42	
29	2.75	6.80	3.25	4.17	2.87	6.80	8.50	14.20	31.60	7.90		1.50	
30	0.90	5.93	5.05	4.00	9.30	6.10	48.72	49.37	47.43	7.50		1.87	
31		5.75		3.62	7.70		21.55		32.80	7.15		6.10	
Total	110.45	163.29	127.50	208.51	144.55	210.69	337.50	721.56	833.95	329.45	171.80	294.86	3654.11 CMSDAY
Mean	3.68	5.27	4.25	6.73	4.66	7.02	10.89	24.05	26.90	10.63	6.14	9.51	10.01 CMS
Max	8.30	9.50	6.98	18.00	9.30	10.10	48.72	96.82	113.52	24.30	8.10	20.25	113.52 CMS
Min	0.90	0.75	1.75	3.50	2.50	3.38	4.52	7.90	5.40	7.15	4.70	1.42	0.75 CMS
Runoff	9.543	14.108	11.016	18.015	12.489	18.204	29.160	62.343	72.053	28.464	14.844	25.476	315.715 MCM

Momentary Peak 125.83 CMS, at 3.93 M (A.D), at 6.00 Hours, on Dec 23, 2001
Runoff Yield 37.36 Liters/Second/Square KM, Momentary Peak Yield 469.515 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 315 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 Float -

Rated by Current Meter 1987 to date.

Stability of Channel Regimes Stable.

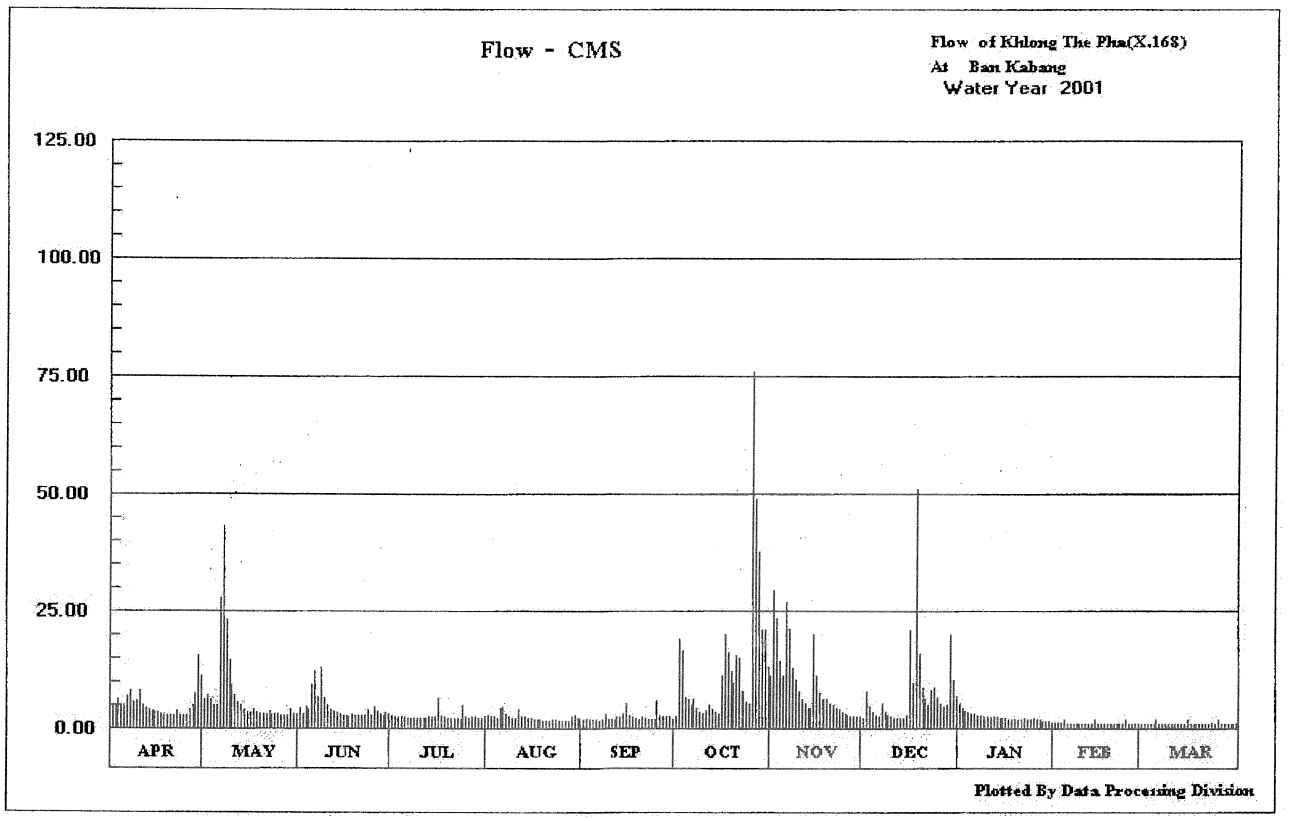
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 58 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.76	0.83	0.71	0.60	0.61	0.52	0.57	1.05	0.56	0.79	0.46	0.38	
2	0.74	0.88	0.64	0.59	0.58	0.52	1.30	1.57	0.91	0.72	0.45	0.38	
3	0.83	0.84	0.73	0.58	0.58	0.51	1.23	1.42	0.74	0.67	0.45	0.37	
4	0.77	0.76	0.69	0.58	0.56	0.53	0.85	1.16	0.65	0.66	0.45	0.36	
5	0.75	0.75	0.99	0.58	0.71	0.52	0.83	1.05	0.60	0.64	0.44	0.36	
6	0.86	1.53	1.09	0.56	0.73	0.50	0.77	1.51	0.59	0.62	0.44	0.35	
7	0.92	1.85	0.87	0.55	0.63	0.53	0.84	1.36	0.78	0.61	0.44	0.35	
8	0.80	1.41	1.12	0.55	0.59	0.62	0.72	1.11	0.65	0.60	0.43	0.34	
9	0.82	1.17	0.85	0.54	0.56	0.53	0.65	1.02	0.60	0.59	0.43	0.34	
10	0.92	0.98	0.76	0.54	0.55	0.52	0.62	0.91	0.57	0.58	0.43	0.34	
11	0.77	0.88	0.70	0.56	0.69	0.53	0.67	0.83	0.56	0.58	0.42	0.33	
12	0.72	0.80	0.68	0.54	0.59	0.58	0.77	0.78	0.55	0.58	0.42	0.32	
13	0.69	0.76	0.65	0.59	0.57	0.59	0.70	0.72	0.54	0.57	0.42	0.32	
14	0.67	0.69	0.63	0.59	0.55	0.62	0.65	0.72	0.54	0.56	0.41	0.32	
15	0.66	0.66	0.61	0.58	0.54	0.79	0.63	1.33	0.61	0.55	0.40	0.32	
16	0.65	0.66	0.61	0.85	0.53	0.60	1.05	1.05	1.35	0.54	0.40	0.32	
17	0.63	0.69	0.59	0.61	0.51	0.59	1.33	0.89	1.00	0.53	0.40	0.31	
18	0.64	0.66	0.63	0.57	0.51	0.54	1.22	0.84	1.99	0.52	0.40	0.31	
19	0.61	0.64	0.60	0.55	0.50	0.53	1.09	0.84	1.21	0.52	0.40	0.34	
20	0.61	0.63	0.60	0.54	0.49	0.58	1.00	0.78	0.96	0.52	0.39	0.35	
21	0.60	0.64	0.61	0.54	0.49	0.54	1.20	0.75	0.83	0.52	0.39	0.37	
22	0.68	0.67	0.60	0.54	0.51	0.52	1.18	0.72	0.77	0.55	0.38	0.35	
23	0.61	0.64	0.69	0.53	0.51	0.51	0.91	0.69	0.93	0.52	0.38	0.42	
24	0.61	0.64	0.60	0.76	0.50	0.51	0.80	0.66	0.95	0.52	0.38	0.46	
25	0.60	0.62	0.73	0.58	0.50	0.81	0.78	0.63	0.85	0.54	0.38	0.40	
26	0.70	0.60	0.67	0.55	0.49	0.60	2.36	0.61	0.78	0.52	0.38	0.38	
27	0.77	0.60	0.64	0.59	0.49	0.59	1.95	0.59	0.73	0.51	0.38	0.36	
28	0.89	0.61	0.61	0.57	0.59	0.59	1.74	0.58	0.75	0.49	0.38	0.34	
29	1.20	0.70	0.65	0.54	0.60	0.58	1.35	0.57	1.33	0.48		0.33	
30	1.05	0.62	0.62	0.54	0.56	0.52	1.35	0.57	1.02	0.48		0.33	
31		0.62		0.59	0.54		1.12		0.87	0.47		0.41	
Mean	0.75	0.81	0.71	0.58	0.56	0.57	1.04	0.91	0.83	0.57	0.41	0.35	
Max	1.20	1.85	1.12	0.85	0.73	0.81	2.36	1.57	1.99	0.79	0.46	0.46	2.36
Min	0.60	0.60	0.59	0.53	0.49	0.50	0.57	0.57	0.54	0.47	0.38	0.31	0.31

Annual Max Momentary Gage Height 3.29 M (A.D), at 6.00 Hours, on Oct 26, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.00 M (A.D)
Left Bank Elevation 9.60 M (A.D)
Right Bank Elevation 9.51 M (A.D), Drainage Area 315 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.42	6.61	4.69	3.10	3.25	2.26	2.79	11.57	2.68	5.86	1.63	0.80	
2	5.13	7.64	3.68	2.99	2.89	2.26	19.50	29.80	8.26	4.84	1.52	0.80	
3	6.61	6.82	4.99	2.89	2.89	2.15	17.05	23.80	5.13	4.11	1.52	0.70	
4	5.56	5.42	4.40	2.89	2.68	2.36	7.03	14.82	3.82	3.97	1.52	0.60	
5	5.27	5.27	9.90	2.89	4.69	2.26	6.61	11.57	3.10	3.68	1.42	0.60	
6	7.23	28.20	12.76	2.68	4.99	2.05	5.56	27.40	2.99	3.39	1.42	0.50	
7	8.46	43.60	7.44	2.58	3.53	2.36	6.82	21.60	5.71	3.25	1.42	0.50	
8	6.00	23.40	13.64	2.58	2.99	3.39	4.84	13.35	3.82	3.10	1.32	0.40	
9	6.41	15.11	7.03	2.47	2.68	2.36	3.82	10.69	3.10	2.99	1.32	0.40	
10	8.46	9.69	5.42	2.47	2.58	2.26	3.39	8.26	2.79	2.89	1.32	0.40	
11	5.56	7.64	4.55	2.68	4.40	2.36	4.11	6.61	2.68	2.89	1.21	0.30	
12	4.84	6.00	4.26	2.47	2.99	2.89	5.56	5.71	2.58	2.89	1.21	0.20	
13	4.40	5.42	3.82	2.99	2.79	2.99	4.55	4.84	2.47	2.79	1.21	0.20	
14	4.11	4.40	3.53	2.99	2.58	3.39	3.82	4.84	2.47	2.68	1.10	0.20	
15	3.97	3.97	3.25	2.89	2.47	5.86	3.53	20.55	3.25	2.58	1.00	0.20	
16	3.82	3.97	3.25	7.03	2.36	3.10	11.57	11.57	21.25	2.47	1.00	0.20	
17	3.53	4.40	2.99	3.25	2.15	2.99	20.55	7.84	10.10	2.36	1.00	0.10	
18	3.68	3.97	3.53	2.79	2.15	2.47	16.70	6.82	51.44	2.26	1.00	0.10	
19	3.25	3.68	3.10	2.58	2.05	2.36	12.76	6.82	16.35	2.26	1.00	0.40	
20	3.25	3.53	3.10	2.47	1.94	2.89	10.10	5.71	9.28	2.26	0.90	0.50	
21	3.10	3.68	3.25	2.47	1.94	2.47	16.00	5.27	6.61	2.26	0.90	0.70	
22	4.26	4.11	3.10	2.47	2.15	2.26	15.41	4.84	5.56	2.58	0.80	0.50	
23	3.25	3.68	4.40	2.36	2.15	2.15	8.26	4.40	8.67	2.26	0.80	1.21	
24	3.25	3.68	3.10	5.42	2.05	2.15	6.00	3.97	9.07	2.26	0.80	1.63	
25	3.10	3.39	4.99	2.89	2.05	6.21	5.71	3.53	7.03	2.47	0.80	1.00	
26	4.55	3.10	4.11	2.58	1.94	3.10	76.20	3.25	5.71	2.26	0.80	0.80	
27	5.56	3.10	3.68	2.99	1.94	2.99	49.20	2.99	4.99	2.15	0.80	0.60	
28	7.84	3.25	3.25	2.79	2.99	2.99	37.86	2.89	5.27	1.94	0.80	0.40	
29	16.00	4.55	3.82	2.47	3.10	2.89	21.25	2.79	20.55	1.84		0.30	
30	11.57	3.39	3.39	2.47	2.68	2.26	21.25	2.79	10.69	1.84		0.30	
31		3.39		2.99	2.47		13.64		7.44	1.73		1.10	
Total	167.44	238.06	146.42	91.58	84.51	84.48	441.44	290.89	254.86	87.11	31.54	16.64	1934.97 CMSDAY
Mean	5.58	7.68	4.88	2.95	2.73	2.82	14.24	9.70	8.22	2.81	1.13	0.54	5.30 CMS
Max	16.00	43.60	13.64	7.03	4.99	6.21	76.20	29.80	51.44	5.86	1.63	1.63	76.20 CMS
Min	3.10	3.10	2.99	2.36	1.94	2.05	2.79	2.79	2.47	1.73	0.80	0.10	0.10 CMS
Runoff	14.467	20.568	12.651	7.913	7.302	7.299	38.140	25.133	22.020	7.526	2.725	1.438	167.181 MCM

Momentary Peak 168.25 CMS, at 3.29 M (A.D), at 6.00 Hours, on Oct 26, 2001

Runoff Yield 16.83 Liters/Second/Square KM, Momentary Peak Yield 534.127 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Lam at Ban Khlong Lam, Phatthalung (X.170)

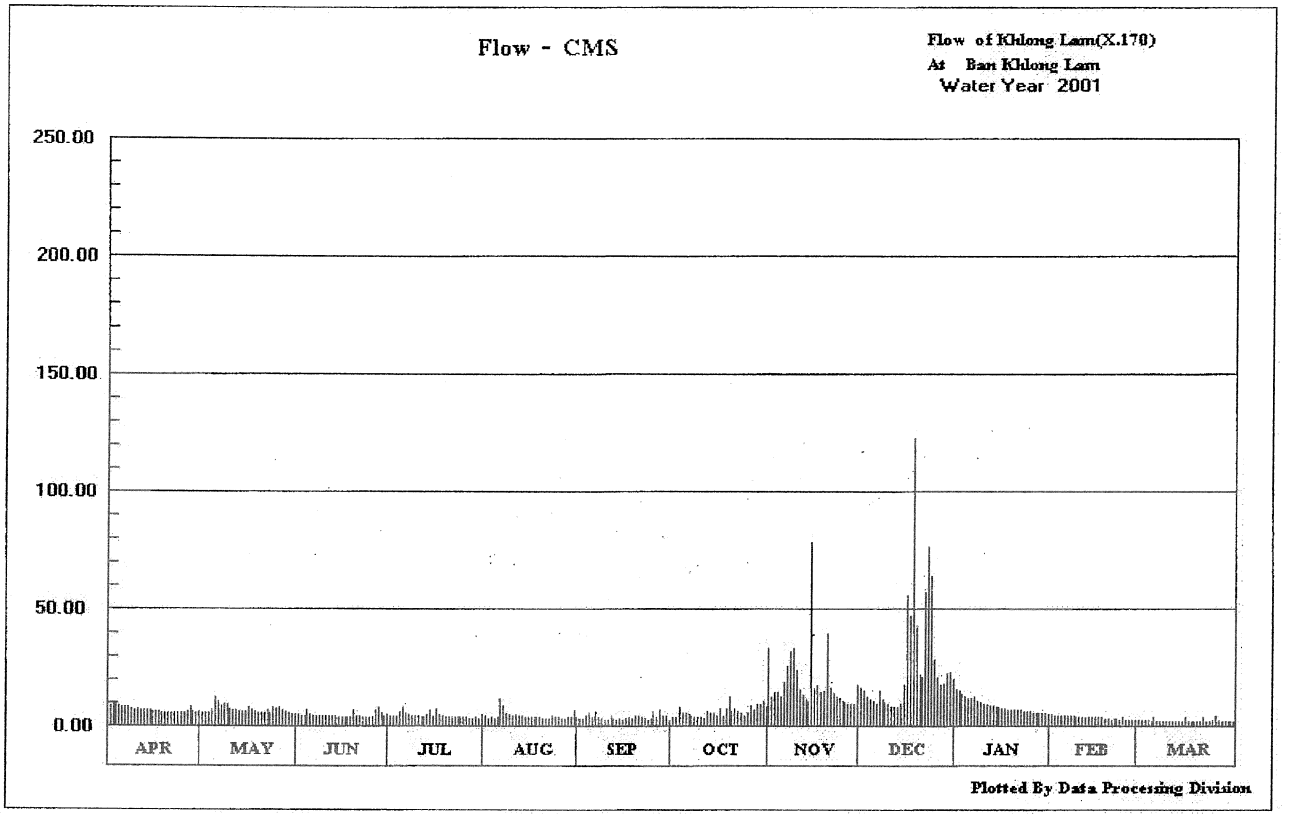
Lat 07 - 33 - 24 N. **Long** 99 - 59 - 24 E.

Location		on left bank at the bridge.
	Ban Khlong Lam	**Amphoe** K.A. Srinagarindra **Changwat** Phatthalung
Drainage Area		269 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 Float	-
	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 32 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.19	0.12	0.10	0.09	0.08	0.05	0.06	0.67	0.36	0.35	0.10	0.03	
2	0.21	0.11	0.09	0.09	0.05	0.05	0.06	0.27	0.33	0.33	0.09	0.03	
3	0.20	0.11	0.09	0.08	0.06	0.08	0.18	0.31	0.28	0.30	0.09	0.03	
4	0.19	0.14	0.15	0.13	0.05	0.11	0.11	0.31	0.25	0.27	0.09	0.03	
5	0.17	0.27	0.10	0.17	0.07	0.06	0.11	0.27	0.23	0.26	0.09	0.02	
6	0.17	0.23	0.09	0.11	0.26	0.13	0.10	0.41	0.21	0.26	0.08	0.02	
7	0.17	0.19	0.09	0.10	0.19	0.06	0.09	0.54	0.33	0.27	0.08	0.02	
8	0.16	0.21	0.09	0.09	0.12	0.05	0.07	0.64	0.25	0.23	0.08	0.02	
9	0.15	0.21	0.09	0.08	0.10	0.04	0.07	0.67	0.22	0.22	0.07	0.01	
10	0.16	0.16	0.08	0.08	0.09	0.04	0.06	0.50	0.20	0.21	0.07	0.01	
11	0.15	0.15	0.08	0.07	0.10	0.08	0.05	0.35	0.18	0.20	0.07	0.01	
12	0.15	0.14	0.08	0.07	0.09	0.05	0.13	0.29	0.17	0.19	0.07	0.01	
13	0.14	0.13	0.08	0.10	0.08	0.04	0.12	0.25	0.17	0.19	0.07	0.01	
14	0.14	0.13	0.07	0.14	0.07	0.05	0.11	0.23	0.20	0.18	0.06	0.00	
15	0.13	0.13	0.07	0.09	0.07	0.04	0.09	1.33	0.38	0.17	0.06	0.00	
16	0.13	0.18	0.07	0.16	0.06	0.05	0.16	0.35	1.01	0.16	0.06	0.00	
17	0.13	0.15	0.07	0.10	0.06	0.05	0.09	0.38	0.88	0.16	0.06	0.00	
18	0.12	0.13	0.07	0.08	0.06	0.05	0.16	0.32	1.86	0.15	0.05	0.00	
19	0.12	0.12	0.14	0.07	0.06	0.09	0.28	0.33	0.81	0.15	0.05	0.00	
20	0.12	0.11	0.09	0.07	0.05	0.09	0.13	0.77	0.47	0.14	0.04	-0.01	
21	0.11	0.11	0.08	0.06	0.05	0.07	0.16	0.36	0.45	0.14	0.05	0.00	
22	0.11	0.14	0.07	0.06	0.05	0.05	0.13	0.30	1.02	0.15	0.05	0.07	
23	0.11	0.11	0.07	0.06	0.09	0.04	0.11	0.27	1.30	0.13	0.04	0.02	
24	0.12	0.18	0.07	0.06	0.06	0.05	0.09	0.26	1.12	0.13	0.04	0.01	
25	0.12	0.16	0.07	0.06	0.06	0.13	0.12	0.24	0.58	0.13	0.04	0.03	
26	0.13	0.17	0.14	0.07	0.05	0.07	0.19	0.22	0.45	0.12	0.04	0.09	
27	0.18	0.14	0.17	0.05	0.05	0.14	0.15	0.21	0.38	0.12	0.03	0.04	
28	0.13	0.13	0.12	0.05	0.04	0.09	0.21	0.21	0.40	0.11	0.04	0.01	
29	0.12	0.12	0.09	0.05	0.07	0.08	0.20	0.20	0.48	0.11		0.01	
30	0.13	0.10	0.10	0.05	0.14	0.04	0.24	0.38	0.49	0.11		0.00	
31		0.10		0.10	0.06		0.17		0.43	0.10		0.00	
Mean	0.15	0.15	0.09	0.09	0.08	0.07	0.13	0.39	0.51	0.19	0.06	0.02	
Max	0.21	0.27	0.17	0.17	0.26	0.14	0.28	1.33	1.86	0.35	0.10	0.09	1.86
Min	0.11	0.10	0.07	0.05	0.04	0.04	0.05	0.20	0.17	0.10	0.03	-0.01	-0.01

Annual Max Momentary Gage Height 2.75 M (A.D), at 6.00 Hours, on Dec 18, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -1.79 M (A.D)
Left Bank Elevation 8.18 M (A.D)
Right Bank Elevation 8.40 M (A.D), Drainage Area 269 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.49	6.62	5.80	5.42	5.04	3.90	4.28	34.20	17.18	16.72	5.80	3.14	
2	10.35	6.21	5.42	5.42	3.90	3.90	4.28	13.09	15.82	15.82	5.42	3.14	
3	9.90	6.21	5.42	5.04	4.28	5.04	9.08	14.90	13.54	14.45	5.42	3.14	
4	9.49	7.44	7.85	7.03	3.90	6.21	6.21	14.90	12.17	13.09	5.42	3.14	
5	8.67	13.09	5.80	8.67	4.66	4.28	6.21	13.09	11.26	12.63	5.42	2.76	
6	8.67	11.26	5.42	6.21	12.63	7.03	5.80	19.55	10.35	12.63	5.04	2.76	
7	8.67	9.49	5.42	5.80	9.49	4.28	5.42	26.70	15.82	13.09	5.04	2.76	
8	8.26	10.35	5.42	5.42	6.62	3.90	4.66	32.40	12.17	11.26	5.04	2.76	
9	7.85	10.35	5.42	5.04	5.80	3.52	4.66	34.20	10.81	10.81	4.66	2.38	
10	8.26	8.26	5.04	5.04	5.42	3.52	4.28	24.50	9.90	10.35	4.66	2.38	
11	7.85	7.85	5.04	4.66	5.80	5.04	3.90	16.72	9.08	9.90	4.66	2.38	
12	7.85	7.44	5.04	4.66	5.42	3.90	7.03	13.99	8.67	9.49	4.66	2.38	
13	7.44	7.03	5.04	5.80	5.04	3.52	6.62	12.17	8.67	9.49	4.66	2.38	
14	7.44	7.03	4.66	7.44	4.66	3.90	6.21	11.26	9.90	9.08	4.28	2.00	
15	7.03	7.03	4.66	5.42	4.66	3.52	5.42	79.16	18.09	8.67	4.28	2.00	
16	7.03	9.08	4.66	8.26	4.28	3.90	8.26	16.72	56.70	8.26	4.28	2.00	
17	7.03	7.85	4.66	5.80	4.28	3.90	5.42	18.09	47.60	8.26	4.28	2.00	
18	6.62	7.03	4.66	5.04	4.28	3.90	8.26	15.36	123.40	7.85	3.90	2.00	
19	6.62	6.62	7.44	4.66	4.28	5.42	13.54	15.82	42.70	7.85	3.90	2.00	
20	6.62	6.21	5.42	4.66	3.90	5.42	7.03	40.20	22.85	7.44	3.52	1.80	
21	6.21	6.21	5.04	4.28	3.90	4.66	8.26	17.18	21.75	7.44	3.90	2.00	
22	6.21	7.44	4.66	4.28	3.90	3.90	7.03	14.45	57.40	7.85	3.90	4.66	
23	6.21	6.21	4.66	4.28	5.42	3.52	6.21	13.09	77.05	7.03	3.52	2.76	
24	6.62	9.08	4.66	4.28	4.28	3.90	5.42	12.63	64.40	7.03	3.52	2.38	
25	6.62	8.26	4.66	4.28	4.28	7.03	6.62	11.72	28.90	7.03	3.52	3.14	
26	7.03	8.67	7.44	4.66	3.90	4.66	9.49	10.81	21.75	6.62	3.52	5.42	
27	9.08	7.44	8.67	3.90	3.90	7.44	7.85	10.35	18.09	6.62	3.14	3.52	
28	7.03	7.03	6.62	3.90	3.52	5.42	10.35	10.35	19.00	6.21	3.52	2.38	
29	6.62	6.62	5.42	3.90	4.66	5.04	9.90	9.90	23.40	6.21		2.38	
30	7.03	5.80	5.80	3.90	7.44	3.52	11.72	18.09	23.95	6.21		2.00	
31		5.80		5.80	4.28		8.67		20.65	5.80		2.00	
Total	229.80	241.01	165.92	162.95	157.82	137.09	218.09	595.59	853.02	291.19	122.88	81.94	3257.30 CMSDAY
Mean	7.66	7.77	5.53	5.26	5.09	4.57	7.04	19.85	27.52	9.39	4.39	2.64	8.92 CMS
Max	10.35	13.09	8.67	8.67	12.63	7.44	13.54	79.16	123.40	16.72	5.80	5.42	123.40 CMS
Min	6.21	5.80	4.66	3.90	3.52	3.52	3.90	9.90	8.67	5.80	3.14	1.80	1.80 CMS
Runoff	19.855	20.823	14.335	14.079	13.636	11.845	18.843	51.459	73.701	25.159	10.617	7.080	281.431 MCM

Momentary Peak 209.00 CMS, at 2.75 M (A.D), at 6.00 Hours, on Dec 18, 2001

Runoff Yield 33.18 Liters/Second/Square KM, Momentary Peak Yield 776.952 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Wang Muang Yang at Ban Pa Ye, Narathiwat (X.171)

Lat 06 - 05 - 28 N. **Long** 101 - 57 - 24 E.

Location on left bank at the bridge.

Ban Pa Ye **Amphoe** Sungai Kolok **Changwat** Narathiwat

Drainage Area 839 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +6.030 m. (M.S.L)

Bench Mark B.M.- H.D.

Location BM On left bank about 12.00 meters from the top staff gage.

Elevation +8.492 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1993 to date.

Rating Operation

Period of Rating 1993 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Stable.

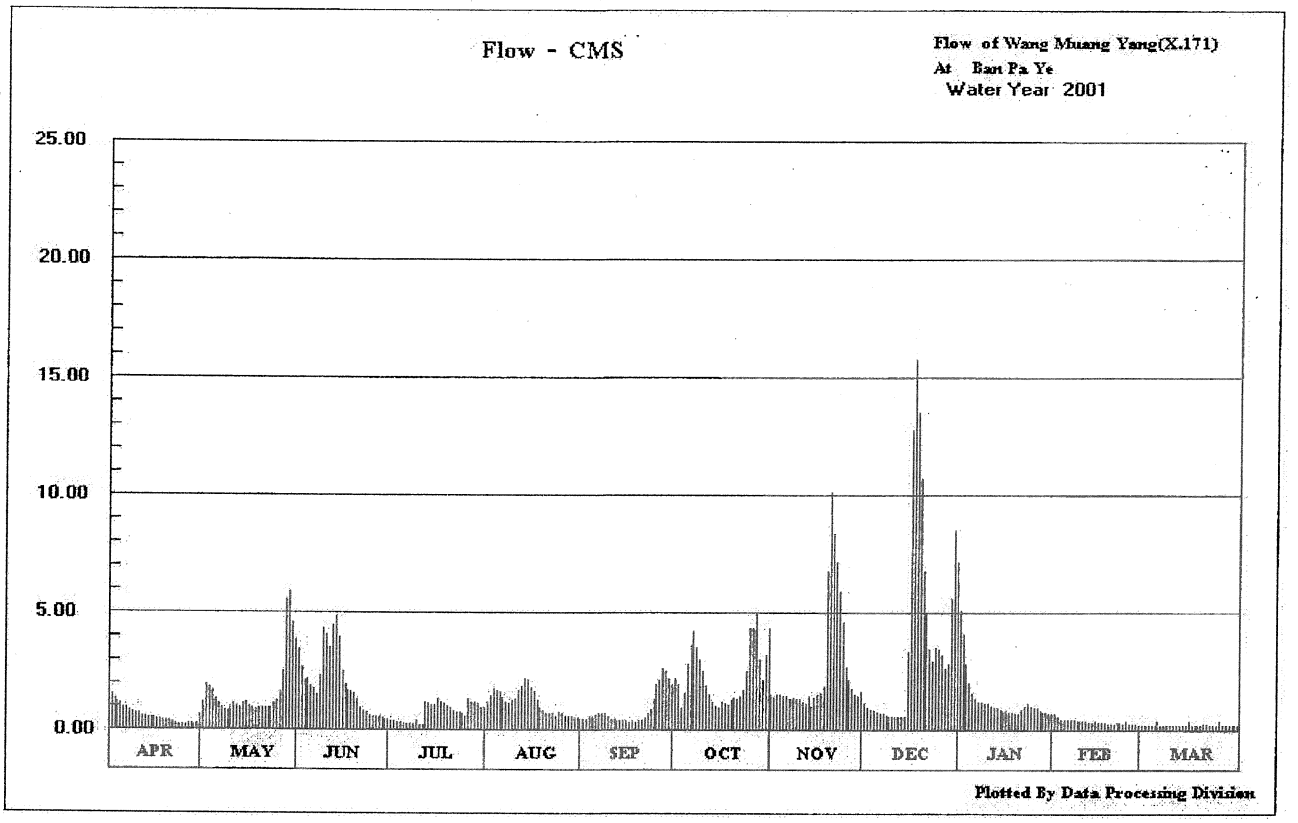
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.63	6.57	6.85	6.38	6.57	6.41	6.73	6.63	6.56	6.99	6.46	6.33	
2	6.60	6.70	6.78	6.38	6.62	6.41	6.70	6.61	6.53	6.91	6.44	6.32	
3	6.58	6.68	6.72	6.37	6.67	6.43	6.52	6.63	6.51	6.79	6.41	6.32	
4	6.56	6.66	6.73	6.36	6.66	6.43	6.64	6.63	6.50	6.71	6.41	6.32	
5	6.53	6.60	6.69	6.35	6.65	6.45	6.79	6.62	6.49	6.64	6.40	6.31	
6	6.52	6.56	6.67	6.35	6.61	6.47	6.87	6.62	6.47	6.60	6.40	6.31	
7	6.50	6.53	6.63	6.34	6.58	6.47	6.92	6.60	6.46	6.58	6.40	6.30	
8	6.48	6.50	6.74	6.34	6.56	6.46	6.86	6.61	6.45	6.57	6.39	6.30	
9	6.46	6.50	6.93	6.34	6.59	6.44	6.81	6.60	6.43	6.56	6.38	6.30	
10	6.46	6.54	6.91	6.33	6.60	6.41	6.76	6.60	6.43	6.56	6.38	6.30	
11	6.44	6.56	6.86	6.33	6.66	6.41	6.69	6.58	6.43	6.54	6.38	6.30	
12	6.43	6.54	6.94	6.57	6.69	6.39	6.63	6.56	6.43	6.53	6.37	6.30	
13	6.42	6.53	6.97	6.56	6.73	6.39	6.58	6.62	6.43	6.53	6.37	6.29	
14	6.42	6.56	6.90	6.55	6.72	6.38	6.54	6.54	6.43	6.51	6.37	6.28	
15	6.42	6.57	6.76	6.55	6.68	6.38	6.53	6.61	6.84	6.50	6.36	6.28	
16	6.41	6.54	6.70	6.60	6.65	6.37	6.57	6.63	7.38	6.50	6.36	6.28	
17	6.40	6.53	6.66	6.58	6.59	6.36	6.56	6.64	7.49	6.48	6.36	6.28	
18	6.38	6.51	6.65	6.56	6.53	6.37	6.55	6.69	7.41	6.48	6.34	6.28	
19	6.38	6.53	6.64	6.54	6.50	6.39	6.59	7.09	7.29	6.47	6.34	6.28	
20	6.37	6.53	6.60	6.52	6.47	6.39	6.61	7.26	7.09	6.46	6.34	6.32	
21	6.36	6.53	6.53	6.50	6.46	6.42	6.60	7.17	6.98	6.51	6.36	6.35	
22	6.34	6.53	6.50	6.49	6.46	6.47	6.62	7.11	6.85	6.54	6.36	6.34	
23	6.33	6.53	6.48	6.48	6.43	6.51	6.66	7.04	6.80	6.56	6.35	6.33	
24	6.33	6.56	6.45	6.46	6.48	6.60	6.76	6.95	6.86	6.54	6.34	6.33	
25	6.33	6.59	6.44	6.44	6.46	6.70	6.93	6.78	6.85	6.53	6.34	6.32	
26	6.34	6.65	6.43	6.60	6.44	6.72	6.93	6.72	6.83	6.52	6.34	6.32	
27	6.34	6.76	6.43	6.58	6.43	6.77	6.98	6.67	6.77	6.50	6.34	6.31	
28	6.33	7.02	6.42	6.57	6.43	6.76	6.81	6.63	6.79	6.48	6.33	6.30	
29	6.35	7.04	6.40	6.56	6.42	6.73	6.72	6.62	7.02	6.48		6.30	
30	6.45	6.95	6.40	6.53	6.42	6.70	6.83	6.65	7.18	6.47		6.29	
31		6.89		6.53	6.41		6.93		7.11	6.46		6.29	
Mean	6.43	6.62	6.66	6.47	6.55	6.49	6.72	6.72	6.78	6.56	6.37	6.31	
Max	6.63	7.04	6.97	6.60	6.73	6.77	6.98	7.26	7.49	6.99	6.46	6.35	7.49
Min	6.33	6.50	6.40	6.33	6.41	6.36	6.52	6.54	6.43	6.46	6.33	6.28	6.28

Annual Max Momentary Gage Height 7.50 M (MSL), at 12.00 Hours, on Dec 17, 2001
Zero Gage at Bottom Elevation 6.03 M (MSL), River Bed 5.27 M (MSL)
Left Bank Elevation 9.32 M (MSL)
Right Bank Elevation 9.31 M (MSL), Drainage Area 839 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.58	1.25	3.50	0.44	1.25	0.54	2.30	1.58	1.20	5.17	0.74	0.29	
2	1.40	2.00	2.80	0.44	1.52	0.54	2.00	1.46	1.05	4.13	0.66	0.26	
3	1.30	1.88	2.20	0.41	1.82	0.62	1.00	1.58	0.95	2.90	0.54	0.26	
4	1.20	1.76	2.30	0.38	1.76	0.62	1.64	1.58	0.90	2.10	0.54	0.26	
5	1.05	1.40	1.94	0.35	1.70	0.70	2.90	1.52	0.86	1.64	0.50	0.23	
6	1.00	1.20	1.82	0.35	1.46	0.78	3.70	1.52	0.78	1.40	0.50	0.23	
7	0.90	1.05	1.58	0.32	1.30	0.78	4.26	1.40	0.74	1.30	0.50	0.20	
8	0.82	0.90	2.40	0.32	1.20	0.74	3.60	1.46	0.70	1.25	0.47	0.20	
9	0.74	0.90	4.39	0.32	1.35	0.66	3.10	1.40	0.62	1.20	0.44	0.20	
10	0.74	1.10	4.13	0.29	1.40	0.54	2.60	1.40	0.62	1.20	0.44	0.20	
11	0.66	1.20	3.60	0.29	1.76	0.54	1.94	1.30	0.62	1.10	0.44	0.20	
12	0.62	1.10	4.52	1.25	1.94	0.47	1.58	1.20	0.62	1.05	0.41	0.20	
13	0.58	1.05	4.91	1.20	2.30	0.47	1.30	1.52	0.62	1.05	0.41	0.18	
14	0.58	1.20	4.00	1.15	2.20	0.44	1.10	1.10	0.62	0.95	0.41	0.16	
15	0.58	1.25	2.60	1.15	1.88	0.44	1.05	1.46	3.40	0.90	0.38	0.16	
16	0.54	1.10	2.00	1.40	1.70	0.41	1.25	1.58	12.84	0.90	0.38	0.16	
17	0.50	1.05	1.76	1.30	1.35	0.38	1.20	1.64	15.82	0.82	0.38	0.16	
18	0.44	0.95	1.70	1.20	1.05	0.41	1.15	1.94	13.58	0.82	0.32	0.16	
19	0.44	1.05	1.64	1.10	0.90	0.47	1.35	6.83	10.80	0.78	0.32	0.16	
20	0.41	1.05	1.40	1.00	0.78	0.47	1.46	10.20	6.83	0.74	0.32	0.26	
21	0.38	1.05	1.05	0.90	0.74	0.58	1.40	8.40	5.04	0.95	0.38	0.35	
22	0.32	1.05	0.90	0.86	0.74	0.78	1.52	7.20	3.50	1.10	0.38	0.32	
23	0.29	1.05	0.82	0.82	0.62	0.95	1.76	5.98	3.00	1.20	0.35	0.29	
24	0.29	1.20	0.70	0.74	0.82	1.40	2.60	4.65	3.60	1.10	0.32	0.29	
25	0.29	1.35	0.66	0.66	0.74	2.00	4.39	2.80	3.50	1.05	0.32	0.26	
26	0.32	1.70	0.62	1.40	0.66	2.20	4.39	2.20	3.30	1.00	0.32	0.26	
27	0.32	2.60	0.62	1.30	0.62	2.70	5.04	1.82	2.70	0.90	0.32	0.23	
28	0.29	5.64	0.58	1.25	0.62	2.60	3.10	1.58	2.90	0.82	0.29	0.20	
29	0.35	5.98	0.50	1.20	0.58	2.30	2.20	1.52	5.64	0.82		0.20	
30	0.70	4.65	0.50	1.05	0.58	2.00	3.30	1.70	8.60	0.78		0.18	
31		3.90		1.05	0.54		4.39		7.20	0.74		0.18	
Total	19.63	54.61	62.14	25.89	37.88	28.53	74.57	81.52	123.15	41.86	11.78	6.89	568.45 CMSDAY
Mean	0.65	1.76	2.07	0.84	1.22	0.95	2.41	2.72	3.97	1.35	0.42	0.22	1.56 CMS
Max	1.58	5.98	4.91	1.40	2.30	2.70	5.04	10.20	15.82	5.17	0.74	0.35	15.82 CMS
Min	0.29	0.90	0.50	0.29	0.54	0.38	1.00	1.10	0.62	0.74	0.29	0.16	0.16 CMS
Runoff	1.696	4.718	5.369	2.237	3.273	2.465	6.443	7.043	10.640	3.617	1.018	0.595	49.114 MCM

Momentary Peak 16.10 CMS, at 7.50 M (MSL), at 12.00 Hours, on Dec 17, 2001
Runoff Yield 1.86 Liters/Second/Square KM, Momentary Peak Yield 19.190 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Sadao at Ban Huai Khu, Songkhla (X.172)

Lat 06 - 35 - 38 N. **Long** 100 - 29 - 25 E.

Location on right at the bridge on road near Wat Huai Khu, Tambon Samnak Taeo.

Ban Huai Khu **Amphoe** Sadao **Changwat** Songkhla

Drainage Area 94 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 5.30 meters from the top staff gage.

Elevation + 5.990 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 - 1991, 2000 to date.

Rated by Float -

Rated by Current Meter 1988 - 1991, 2000 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

General Description Records fair. Flow regulated by Sadao Resservior.

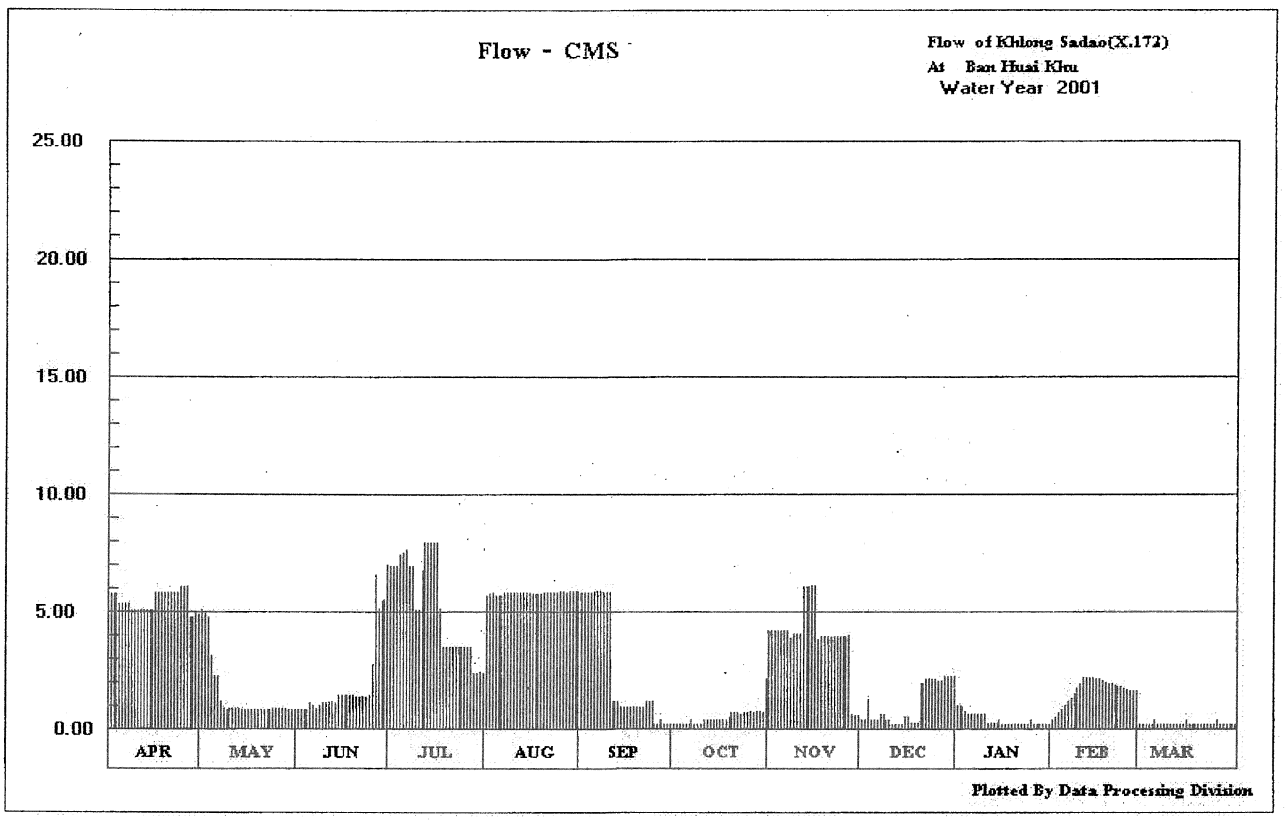
Stage-discharge relation defined by 38 discharge measurements made in 2001.

Remark No record on 1 Mar. - 31 Mar.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.51	1.42	0.60	1.66	1.50	1.52	0.38	1.30	0.45	0.66	0.45	*******	
2	1.51	1.40	0.60	1.66	1.51	1.52	0.38	1.30	0.45	0.66	0.50	*******	
3	1.51	1.38	0.60	1.66	1.52	1.52	0.40	1.30	0.72	0.64	0.55	*******	
4	1.45	1.13	0.60	1.72	1.50	1.52	0.40	1.30	0.46	0.58	0.60	*******	
5	1.45	0.96	0.68	1.73	1.50	1.53	0.40	1.30	0.45	0.54	0.65	*******	
6	1.45	0.96	0.66	1.74	1.50	1.53	0.40	1.30	0.45	0.54	0.70	*******	
7	1.45	0.70	0.62	1.66	1.52	1.53	0.40	1.30	0.54	0.54	0.75	*******	
8	1.42	0.62	0.66	1.66	1.52	1.52	0.40	1.25	0.54	0.54	0.80	*******	
9	1.42	0.60	0.68	1.42	1.52	1.52	0.40	1.28	0.45	0.54	0.85	*******	
10	1.42	0.62	0.68	1.42	1.52	1.52	0.40	1.28	0.45	0.54	0.90	*******	
11	1.42	0.62	0.68	1.64	1.52	0.70	0.46	1.28	0.40	0.42	0.95	*******	
12	1.42	0.62	0.70	1.78	1.52	0.70	0.46	1.55	0.40	0.42	0.95	*******	
13	1.42	0.61	0.68	1.78	1.52	0.70	0.46	1.55	0.39	0.42	0.95	*******	
14	1.42	0.60	0.78	1.78	1.52	0.63	0.46	1.55	0.40	0.42	0.95	*******	
15	1.42	0.60	0.78	1.78	1.52	0.63	0.46	1.56	0.50	0.40	0.94	*******	
16	1.52	0.60	0.78	1.78	1.51	0.63	0.46	1.56	0.50	0.40	0.93	*******	
17	1.52	0.60	0.78	1.43	1.51	0.63	0.46	1.24	0.42	0.40	0.92	*******	
18	1.52	0.60	0.78	1.20	1.51	0.63	0.46	1.26	0.42	0.38	0.91	*******	
19	1.52	0.60	0.78	1.20	1.51	0.63	0.50	1.26	0.42	0.38	0.90	*******	
20	1.52	0.60	0.76	1.20	1.52	0.63	0.56	1.26	0.90	0.39	0.89	*******	
21	1.52	0.60	0.76	1.20	1.52	0.64	0.56	1.26	0.90	0.40	0.88	*******	
22	1.52	0.60	0.76	1.20	1.52	0.71	0.56	1.26	0.94	0.40	0.87	*******	
23	1.52	0.60	0.76	1.20	1.52	0.71	0.54	1.26	0.94	0.40	0.86	*******	
24	1.55	0.62	0.78	1.20	1.52	0.70	0.56	1.26	0.93	0.40	0.85	*******	
25	1.55	0.62	1.06	1.20	1.53	0.40	0.56	1.26	0.93	0.40	0.84	*******	
26	1.55	0.62	1.62	1.20	1.53	0.40	0.57	1.26	0.92	0.40	0.83	*******	
27	1.38	0.62	1.43	1.20	1.52	0.40	0.56	1.27	0.92	0.40	0.83	*******	
28	1.38	0.62	1.47	0.99	1.53	0.39	0.58	0.54	0.96	0.39	0.82	*******	
29	1.40	0.60	1.48	0.99	1.53	0.38	0.58	0.52	0.96	0.40		*******	
30	1.39	0.60	1.67	1.00	1.53	0.38	0.56	0.52	0.96	0.40		*******	
31		0.60		0.99	1.53		0.94		0.96	0.40		*******	
Mean	1.47	0.73	0.86	1.43	1.52	0.89	0.49	1.25	0.65	0.46	0.81	*******	
Max	1.55	1.42	1.67	1.78	1.53	1.53	0.94	1.56	0.96	0.66	0.95	*******	1.78
Min	1.38	0.60	0.60	0.99	1.50	0.38	0.38	0.52	0.39	0.38	0.45	*******	*******

Annual Max Momentary Gage Height 1.82 M (A.D), at 15.00 Hours, on Jun 26, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.10 M (A.D)
Left Bank Elevation 5.71 M (A.D)
Right Bank Elevation 5.71 M (A.D), Drainage Area 94 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.82	5.15	0.90	7.01	5.75	5.90	0.27	4.30	0.45	1.11	0.45	*******	
2	5.82	5.00	0.90	7.01	5.82	5.90	0.27	4.30	0.45	1.11	0.60	*******	
3	5.82	4.86	0.90	7.01	5.90	5.90	0.30	4.30	1.32	1.04	0.75	*******	
4	5.38	3.21	0.90	7.52	5.75	5.90	0.30	4.30	0.48	0.84	0.90	*******	
5	5.38	2.32	1.18	7.61	5.75	5.98	0.30	4.30	0.45	0.72	1.07	*******	
6	5.38	2.32	1.11	7.69	5.75	5.98	0.30	4.30	0.45	0.72	1.25	*******	
7	5.38	1.25	0.97	7.01	5.90	5.98	0.30	4.30	0.72	0.72	1.42	*******	
8	5.15	0.97	1.11	7.01	5.90	5.90	0.30	3.95	0.72	0.72	1.60	*******	
9	5.15	0.90	1.18	5.15	5.90	5.90	0.30	4.16	0.45	0.72	1.83	*******	
10	5.15	0.97	1.18	5.15	5.90	5.90	0.30	4.16	0.45	0.72	2.05	*******	
11	5.15	0.97	1.18	6.84	5.90	1.25	0.48	4.16	0.30	0.36	2.27	*******	
12	5.15	0.97	1.25	8.03	5.90	1.25	0.48	6.12	0.30	0.36	2.27	*******	
13	5.15	0.93	1.18	8.03	5.90	1.25	0.48	6.12	0.28	0.36	2.27	*******	
14	5.15	0.90	1.53	8.03	5.90	1.00	0.48	6.12	0.30	0.36	2.27	*******	
15	5.15	0.90	1.53	8.03	5.90	1.00	0.48	6.20	0.60	0.30	2.23	*******	
16	5.90	0.90	1.53	8.03	5.82	1.00	0.48	6.20	0.60	0.30	2.19	*******	
17	5.90	0.90	1.53	5.23	5.82	1.00	0.48	3.88	0.36	0.30	2.14	*******	
18	5.90	0.90	1.53	3.60	5.82	1.00	0.48	4.02	0.36	0.27	2.10	*******	
19	5.90	0.90	1.53	3.60	5.82	1.00	0.60	4.02	0.36	0.27	2.05	*******	
20	5.90	0.90	1.46	3.60	5.90	1.00	0.78	4.02	2.05	0.28	2.00	*******	
21	5.90	0.90	1.46	3.60	5.90	1.04	0.78	4.02	2.05	0.30	1.96	*******	
22	5.90	0.90	1.46	3.60	5.90	1.28	0.78	4.02	2.23	0.30	1.91	*******	
23	5.90	0.90	1.46	3.60	5.90	1.28	0.72	4.02	2.23	0.30	1.87	*******	
24	6.12	0.97	1.53	3.60	5.90	1.25	0.78	4.02	2.19	0.30	1.83	*******	
25	6.12	0.97	2.83	3.60	5.98	0.30	0.78	4.02	2.19	0.30	1.78	*******	
26	6.12	0.97	6.67	3.60	5.98	0.30	0.81	4.02	2.14	0.30	1.73	*******	
27	4.86	0.97	5.23	3.60	5.90	0.30	0.78	4.09	2.14	0.30	1.73	*******	
28	4.86	0.97	5.53	2.46	5.98	0.28	0.84	0.72	2.32	0.28	1.69	*******	
29	5.00	0.90	5.60	2.46	5.98	0.27	0.84	0.66	2.32	0.30		*******	
30	4.93	0.90	7.09	2.50	5.98	0.27	0.78	0.66	2.32	0.30		*******	
31		0.90		2.46	5.98		2.23		2.32	0.30		*******	
Total	165.39	46.37	63.44	166.27	182.38	76.56	18.28	123.48	35.90	14.86	48.21	*******	******** CMSDAY
Mean	5.51	1.50	2.11	5.36	5.88	2.55	0.59	4.12	1.16	0.48	1.72	*******	******** CMS
Max	6.12	5.15	7.09	8.03	5.98	5.98	2.23	6.20	2.32	1.11	2.27	*******	8.03 CMS
Min	4.86	0.90	0.90	2.46	5.75	0.27	0.27	0.66	0.28	0.27	0.45	*******	******** CMS
Runoff	14.290	4.006	5.481	14.366	15.758	6.615	1.579	10.669	3.102	1.284	4.165	*******	******** MCM

Momentary Peak 8.38 CMS, at 1.82 M (A.D), at 15.00 Hours, on Jun 26, 2001

Runoff Yield ********* Liters/Second/Square KM, Momentary Peak Yield 89.149 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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** Hat Yai **Changwat** Songkhla

Drainage Area 982 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 1.13 meters from the top staff gage.

Elevation +5.932 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 1989 to date.

Rating Operation

Period of Rating 1989 to date.

Rated by Float -

Rated by Current Meter 1989 to date.

Stability of Channel Regimes Stable.

Overbank Flow Conditions No overbank flow.

General Description Records good. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

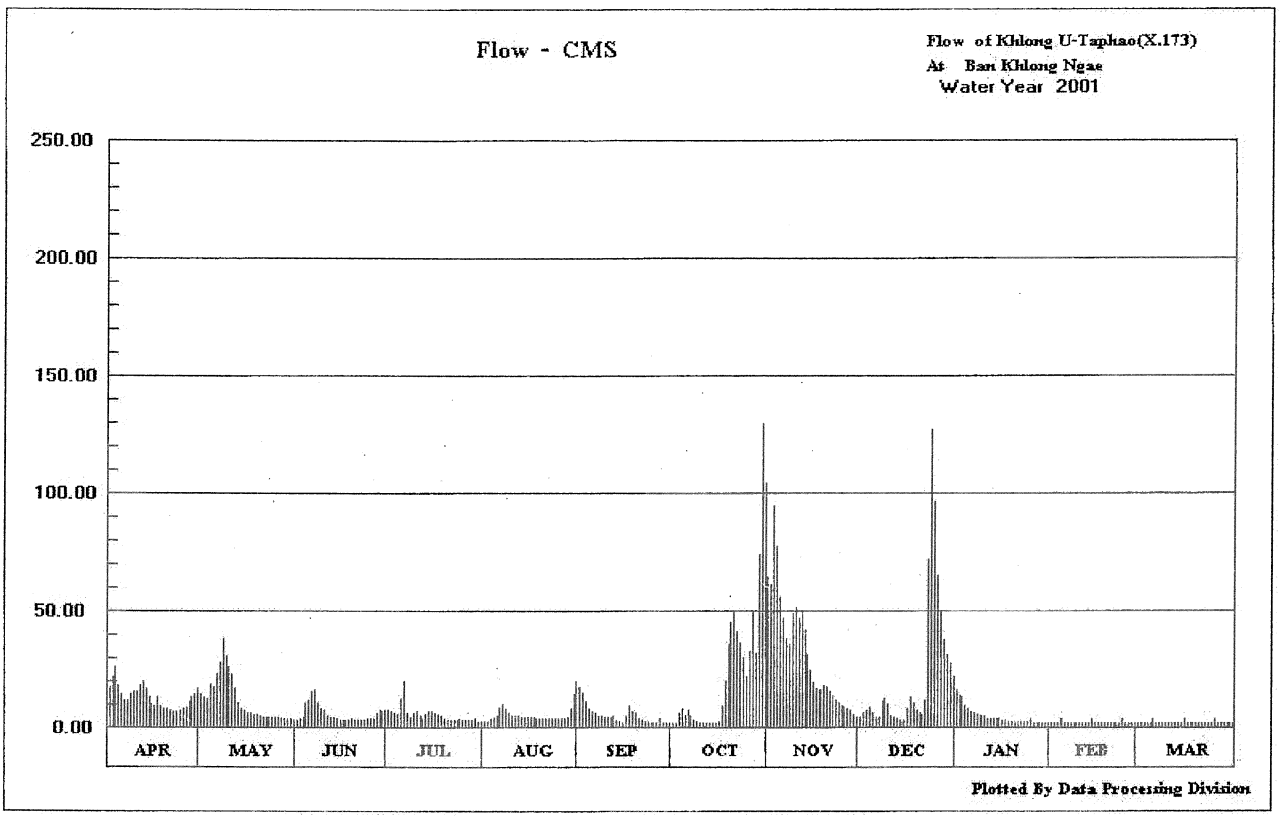
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.48	2.27	1.08	1.64	1.02	2.48	0.81	4.82	1.27	2.40	0.83	0.77	
2	2.82	2.14	1.18	1.56	1.02	2.33	0.92	4.74	1.49	2.21	0.81	0.77	
3	3.13	2.10	1.25	1.49	1.18	2.02	1.51	5.28	1.66	2.17	0.80	0.77	
4	2.56	2.62	1.95	1.45	1.26	1.69	1.69	5.05	1.73	1.85	0.78	0.75	
5	2.26	2.50	2.05	2.10	1.36	1.56	1.34	4.59	1.52	1.67	0.77	0.74	
6	2.08	2.90	2.35	2.71	1.76	1.48	1.64	4.27	1.29	1.57	0.76	0.74	
7	2.08	3.27	2.42	1.51	1.86	1.35	1.35	3.85	1.33	1.49	0.75	0.73	
8	2.25	3.85	1.93	1.30	1.70	1.41	1.15	3.72	1.98	1.44	0.73	0.73	
9	2.35	3.44	1.72	1.49	1.48	1.32	1.00	4.33	2.09	1.38	0.72	0.73	
10	2.34	3.12	1.61	1.55	1.39	1.33	0.94	4.42	1.86	1.34	0.78	0.73	
11	2.53	2.90	1.40	1.34	1.35	1.31	0.88	4.27	1.39	1.24	0.88	0.73	
12	2.67	2.46	1.32	1.24	1.34	1.34	0.84	4.38	1.26	1.21	0.90	0.72	
13	2.46	1.96	1.25	1.42	1.32	1.10	0.85	4.04	1.18	1.20	0.89	0.71	
14	2.14	1.72	1.18	1.60	1.30	1.01	0.84	3.49	1.13	1.18	0.89	0.71	
15	1.88	1.62	1.15	1.59	1.28	0.96	0.84	3.01	1.10	1.14	0.88	0.70	
16	1.84	1.53	1.14	1.49	1.27	1.35	1.00	2.65	1.67	1.12	0.87	0.70	
17	2.14	1.49	1.13	1.43	1.26	1.82	1.84	2.44	2.16	1.08	0.87	0.69	
18	1.79	1.42	1.11	1.39	1.23	1.59	2.67	2.39	1.93	1.05	0.87	0.69	
19	1.69	1.43	1.13	1.21	1.23	1.53	3.73	2.55	1.61	1.03	0.87	0.69	
20	1.68	1.34	1.14	1.13	1.23	1.21	4.20	2.48	1.50	1.01	0.86	0.69	
21	1.63	1.33	1.11	1.11	1.23	1.09	4.36	2.38	1.43	1.01	0.86	0.70	
22	1.57	1.30	1.10	1.15	1.23	1.02	4.00	2.23	2.05	1.03	0.86	0.70	
23	1.55	1.29	1.15	1.14	1.22	0.98	3.76	2.07	4.96	1.02	0.87	0.77	
24	1.66	1.28	1.22	1.21	1.24	0.95	3.39	1.94	5.58	0.98	0.86	0.77	
25	1.69	1.33	1.20	1.15	1.23	0.94	2.81	1.83	5.30	0.95	0.86	0.77	
26	1.78	1.33	1.24	1.15	1.23	0.89	3.55	1.75	4.83	0.94	0.85	0.77	
27	1.99	1.24	1.48	1.14	1.22	0.85	4.35	1.68	4.37	0.92	0.81	0.79	
28	2.18	1.20	1.65	1.08	1.25	0.87	3.52	1.64	3.84	0.90	0.79	0.77	
29	2.25	1.17	1.55	1.05	1.71	0.85	4.99	1.42	3.49	0.89		0.76	
30	2.45	1.15	1.61	1.04	2.27	0.82	5.60	1.32	3.21	0.87		0.74	
31		1.12		1.03	2.70		5.39		2.84	0.83		0.75	
Mean	2.13	1.93	1.43	1.38	1.40	1.31	2.44	3.17	2.36	1.26	0.83	0.73	
Max	3.13	3.85	2.42	2.71	2.70	2.48	5.60	5.28	5.58	2.40	0.90	0.79	5.60
Min	1.55	1.12	1.08	1.03	1.02	0.82	0.81	1.32	1.10	0.83	0.72	0.69	0.69

Annual Max Momentary Gage Height 5.65 M (A.D), at 18.00 Hours, on Oct 30, 2001

Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -4.05 M (A.D)

Left Bank Elevation 8.13 M (A.D)

Right Bank Elevation 8.14 M (A.D), Drainage Area 982 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.04	15.31	3.76	8.40	3.34	18.04	2.06	65.10	5.09	17.00	2.18	1.85	
2	22.57	13.68	4.46	7.60	3.34	16.09	2.72	61.90	6.90	14.53	2.06	1.85	
3	26.95	13.20	4.95	6.90	4.46	12.24	7.10	95.20	8.60	14.04	2.00	1.85	
4	19.08	19.87	11.50	6.50	5.02	8.90	8.90	78.25	9.30	10.50	1.90	1.75	
5	15.18	18.30	12.60	13.20	5.72	7.60	5.58	56.71	7.20	8.70	1.85	1.70	
6	12.96	23.65	16.35	21.09	9.60	6.80	8.40	47.82	5.23	7.70	1.80	1.70	
7	12.96	29.05	17.26	7.10	10.60	5.65	5.65	38.65	5.51	6.90	1.75	1.65	
8	15.05	38.65	11.30	5.30	9.00	6.10	4.25	36.16	11.80	6.40	1.65	1.65	
9	16.35	31.60	9.20	6.90	6.80	5.44	3.20	49.38	13.08	5.86	1.60	1.65	
10	16.22	26.80	8.10	7.50	5.93	5.51	2.84	51.78	10.60	5.58	1.90	1.65	
11	18.69	23.65	6.00	5.58	5.65	5.37	2.48	47.82	5.93	4.88	2.48	1.65	
12	20.55	17.78	5.44	4.88	5.58	5.58	2.24	50.68	5.02	4.67	2.60	1.60	
13	17.78	11.60	4.95	6.20	5.44	3.90	2.30	42.64	4.46	4.60	2.54	1.55	
14	13.68	9.20	4.46	8.00	5.30	3.27	2.24	32.35	4.11	4.46	2.54	1.55	
15	10.80	8.20	4.25	7.90	5.16	2.96	2.24	25.15	3.90	4.18	2.48	1.50	
16	10.40	7.30	4.18	6.90	5.09	5.65	3.20	20.28	8.70	4.04	2.42	1.50	
17	13.68	6.90	4.11	6.30	5.02	10.20	10.40	17.52	13.92	3.76	2.42	1.45	
18.	9.90	6.20	3.97	5.93	4.81	7.90	20.55	16.87	11.30	3.55	2.42	1.45	
19	8.90	6.30	4.11	4.67	4.81	7.30	36.34	18.95	8.10	3.41	2.42	1.45	
20	8.80	5.58	4.18	4.11	4.81	4.67	46.00	18.04	7.00	3.27	2.36	1.45	
21	8.30	5.51	3.97	3.97	4.81	3.83	50.16	16.74	6.30	3.27	2.36	1.50	
22	7.70	5.30	3.90	4.25	4.81	3.34	41.80	14.79	12.60	3.41	2.36	1.50	
23	7.50	5.23	4.25	4.18	4.74	3.08	36.88	12.84	72.80	3.34	2.42	1.85	
24	8.60	5.16	4.74	4.67	4.88	2.90	30.85	11.40	127.60	3.08	2.36	1.85	
25	8.90	5.51	4.60	4.25	4.81	2.84	22.43	10.30	97.00	2.90	2.36	1.85	
26	9.80	5.51	4.88	4.25	4.81	2.54	33.25	9.50	65.65	2.84	2.30	1.85	
27	11.90	4.88	6.80	4.18	4.74	2.30	49.90	8.80	50.42	2.72	2.06	1.95	
28	14.16	4.60	8.50	3.76	4.95	2.42	32.80	8.40	38.44	2.60	1.95	1.85	
29	15.05	4.39	7.50	3.55	9.10	2.30	74.45	6.20	32.35	2.54		1.80	
30	17.65	4.25	8.10	3.48	15.31	2.12	130.00	5.44	28.15	2.42		1.70	
31		4.04		3.41	20.95		105.10		22.84	2.18		1.75	
Total	418.10	387.20	202.37	194.91	199.39	176.84	786.31	975.66	709.90	169.33	61.54	51.90	4333.45 CMSDAY
Mean	13.94	12.49	6.75	6.29	6.43	5.89	25.36	32.52	22.90	5.46	2.20	1.67	11.87 CMS
Max	26.95	38.65	17.26	21.09	20.95	18.04	130.00	95.20	127.60	17.00	2.60	1.95	130.00 CMS
Min	7.50	4.04	3.76	3.41	3.34	2.12	2.06	5.44	3.90	2.18	1.60	1.45	1.45 CMS
Runoff	36.124	33.454	17.485	16.840	17.227	15.279	67.937	84.297	61.335	14.630	5.317	4.484	374.410 MCM

Momentary Peak 138.75 CMS, at 5.65 M (A.D), at 18.00 Hours, on Oct 30, 2001

Runoff Yield 12.09 Liters/Second/Square KM, Momentary Peak Yield 141.293 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Yaha at Yaha, Yala (X.175)

Lat 06 - 28 - 25 N. **Long** 101 - 08 - 32 E.

Location on left bank on the bridge on Yala - Yaha Road.

Ban - **Amphoe** Yaha **Changwat** Yala

Drainage Area 350 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 17.80 meters from the third staff gage.

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 1989 to date.

Rating Operation

Period of Rating 1990 to date.

Rated by Float -

Rated by Current Meter 1990 to date.

Stability of Channel Regimes Stable because of backwater effect.

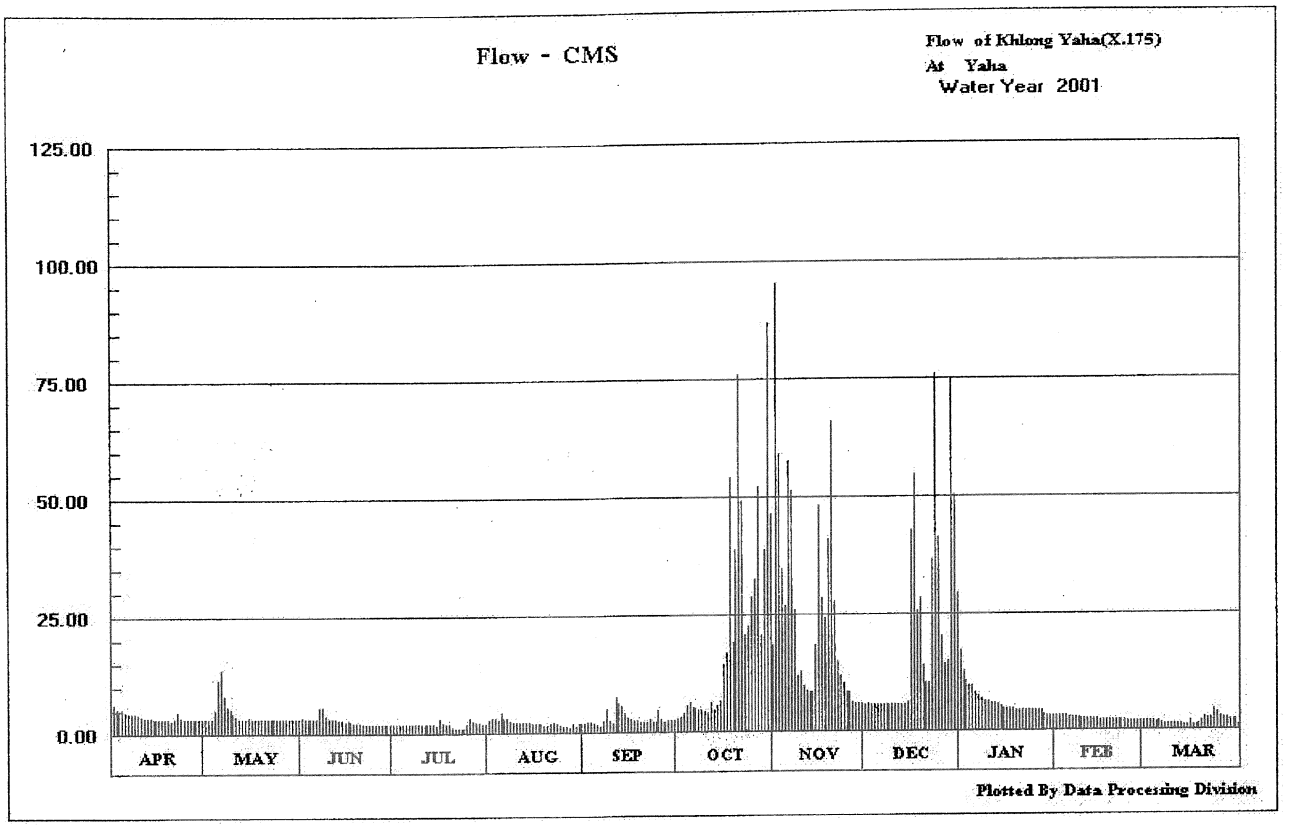
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 39 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.39	2.18	2.22	2.07	2.16	2.09	2.17	2.95	2.36	2.90	2.18	2.09	
2	2.33	2.18	2.19	2.07	2.20	2.10	2.20	5.23	2.37	2.71	2.18	2.08	
3	2.31	2.19	2.18	2.07	2.19	2.10	2.26	4.32	2.35	2.60	2.18	2.08	
4	2.34	2.31	2.18	2.07	2.17	2.08	2.36	3.56	2.35	2.55	2.18	2.07	
5	2.30	2.64	2.18	2.07	2.28	2.04	2.39	3.28	2.35	2.55	2.17	2.06	
6	2.28	2.75	2.20	2.07	2.20	2.02	2.33	4.28	2.35	2.49	2.17	2.05	
7	2.27	2.49	2.36	2.07	2.19	2.14	2.32	4.09	2.35	2.45	2.16	2.04	
8	2.27	2.38	2.36	2.07	2.13	2.32	2.30	3.25	2.35	2.42	2.15	2.03	
9	2.25	2.33	2.24	2.07	2.10	2.14	2.29	2.66	2.35	2.40	2.14	2.02	
10	2.23	2.27	2.19	2.07	2.10	2.08	2.28	2.70	2.35	2.39	2.14	2.02	
11	2.22	2.23	2.18	2.07	2.12	2.45	2.26	2.56	2.35	2.38	2.14	2.02	
12	2.21	2.20	2.18	2.09	2.12	2.39	2.39	2.52	2.35	2.37	2.13	2.02	
13	2.21	2.19	2.16	2.08	2.12	2.35	2.29	2.50	2.35	2.36	2.13	2.01	
14	2.20	2.19	2.16	2.07	2.12	2.25	2.35	2.50	2.35	2.33	2.13	2.00	
15	2.20	2.21	2.14	2.06	2.09	2.19	2.41	2.95	2.40	2.30	2.12	2.00	
16	2.20	2.19	2.15	2.18	2.08	2.17	2.78	4.00	3.83	2.30	2.12	2.00	
17	2.20	2.20	2.14	2.12	2.07	2.14	2.88	3.34	4.20	2.29	2.12	2.00	
18	2.19	2.18	2.12	2.08	2.06	2.13	4.18	3.17	3.23	2.29	2.12	2.00	
19	2.18	2.18	2.11	2.06	2.06	2.12	2.97	3.77	3.34	2.28	2.12	2.01	
20	2.16	2.18	2.10	2.02	2.06	2.11	3.70	4.51	2.77	2.28	2.12	2.08	
21	2.19	2.18	2.09	1.97	2.07	2.10	4.76	3.32	2.59	2.28	2.11	2.15	
22	2.30	2.18	2.09	1.97	2.10	2.16	4.03	2.81	2.58	2.28	2.11	2.14	
23	2.22	2.18	2.08	1.97	2.08	2.10	3.04	2.66	3.63	2.28	2.10	2.14	
24	2.19	2.18	2.08	2.00	2.05	2.12	3.11	2.58	4.76	2.28	2.09	2.27	
25	2.19	2.18	2.08	2.08	2.03	2.29	3.35	2.50	3.78	2.28	2.09	2.23	
26	2.19	2.18	2.08	2.20	2.01	2.17	3.49	2.50	3.03	2.28	2.09	2.17	
27	2.19	2.18	2.08	2.14	2.00	2.11	4.12	2.40	2.78	2.27	2.09	2.14	
28	2.19	2.18	2.08	2.10	2.00	2.14	3.04	2.37	2.81	2.22	2.08	2.14	
29	2.18	2.18	2.08	2.10	2.02	2.13	3.70	2.37	4.73	2.20		2.12	
30	2.18	2.18	2.08	2.09	2.07	2.14	5.03	2.37	4.07	2.20		2.12	
31		2.18		2.09	2.08		3.94		3.38	2.19		2.10	
Mean	2.23	2.25	2.15	2.07	2.10	2.16	2.99	3.13	2.93	2.37	2.13	2.08	
Max	2.39	2.75	2.36	2.20	2.28	2.45	5.03	5.23	4.76	2.90	2.18	2.27	5.23
Min	2.16	2.18	2.08	1.97	2.00	2.02	2.17	2.37	2.35	2.19	2.08	2.00	1.97

Annual Max Momentary Gage Height 5.40 M (A.D), at 6.00 Hours, on Nov 2, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.53 M (A.D)
Left Bank Elevation 10.39 M (A.D)
Right Bank Elevation 10.43 M (A.D), Drainage Area 350 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.64	3.39	3.92	2.23	3.18	2.44	3.29	18.88	6.16	17.65	3.39	2.44	
2	5.68	3.39	3.50	2.23	3.60	2.55	3.60	95.78	6.32	13.31	3.39	2.34	
3	5.36	3.50	3.39	2.23	3.50	2.55	4.56	59.36	6.00	11.00	3.39	2.34	
4	5.84	5.36	3.39	2.23	3.29	2.34	6.16	34.96	6.00	9.95	3.39	2.23	
5	5.20	11.84	3.39	2.23	4.88	1.92	6.64	27.22	6.00	9.95	3.29	2.13	
6	4.88	14.15	3.60	2.23	3.60	1.71	5.68	57.94	6.00	8.69	3.29	2.02	
7	4.72	8.69	6.16	2.23	3.50	2.97	5.52	51.53	6.00	7.85	3.18	1.92	
8	4.72	6.48	6.16	2.23	2.87	5.52	5.20	26.42	6.00	7.22	3.08	1.81	
9	4.40	5.68	4.24	2.23	2.55	2.97	5.04	12.26	6.00	6.80	2.97	1.71	
10	4.08	4.72	3.50	2.23	2.55	2.34	4.88	13.10	6.00	6.64	2.97	1.71	
11	3.92	4.08	3.39	2.23	2.76	7.85	4.56	10.16	6.00	6.48	2.97	1.71	
12	3.76	3.60	3.39	2.44	2.76	6.64	6.64	9.32	6.00	6.32	2.87	1.71	
13	3.76	3.50	3.18	2.34	2.76	6.00	5.04	8.90	6.00	6.16	2.87	1.60	
14	3.60	3.50	3.18	2.23	2.76	4.40	6.00	8.90	6.00	5.68	2.87	1.50	
15	3.60	3.76	2.97	2.13	2.44	3.50	7.01	18.88	6.80	5.20	2.76	1.50	
16	3.60	3.50	3.08	3.39	2.34	3.29	14.78	48.60	43.16	5.20	2.76	1.50	
17	3.60	3.60	2.97	2.76	2.23	2.97	17.16	28.81	55.10	5.04	2.76	1.50	
18	3.50	3.39	2.76	2.34	2.13	2.87	54.45	24.35	25.89	5.04	2.76	1.50	
19	3.39	3.39	2.65	2.13	2.13	2.76	19.37	41.29	28.81	4.88	2.76	1.60	
20	3.18	3.39	2.55	1.71	2.13	2.65	39.15	66.38	14.57	4.88	2.76	2.34	
21	3.50	3.39	2.44	1.28	2.23	2.55	76.20	28.28	10.79	4.88	2.65	3.08	
22	5.20	3.39	2.44	1.28	2.55	3.18	49.58	15.44	10.58	4.88	2.65	2.97	
23	3.92	3.39	2.34	1.28	2.34	2.55	21.10	12.26	37.02	4.88	2.55	2.97	
24	3.50	3.39	2.34	1.50	2.02	2.76	22.85	10.58	76.20	4.88	2.44	4.72	
25	3.50	3.39	2.34	2.34	1.81	5.04	29.07	8.90	41.59	4.88	2.44	4.08	
26	3.50	3.39	2.34	3.60	1.60	3.29	32.97	8.90	20.85	4.88	2.44	3.29	
27	3.50	3.39	2.34	2.97	1.50	2.65	52.50	6.80	14.78	4.72	2.44	2.97	
28	3.50	3.39	2.34	2.55	1.50	2.97	21.10	6.32	15.44	3.92	2.34	2.97	
29	3.39	3.39	2.34	2.55	1.71	2.87	39.15	6.32	75.00	3.60		2.76	
30	3.39	3.39	2.34	2.44	2.23	2.97	87.18	6.32	50.88	3.60		2.76	
31		3.39		2.44	2.34		46.68		29.87	3.50		2.55	
Total	124.33	140.20	94.97	70.23	79.79	101.07	703.11	773.16	641.81	202.56	80.43	72.23	3083.89 CMSDAY
Mean	4.14	4.52	3.17	2.27	2.57	3.37	22.68	25.77	20.70	6.53	2.87	2.33	8.45 CMS
Max	6.64	14.15	6.16	3.60	4.88	7.85	87.18	95.78	76.20	17.65	3.39	4.72	95.78 CMS
Min	3.18	3.39	2.34	1.28	1.50	1.71	3.29	6.32	6.00	3.50	2.34	1.50	1.28 CMS
Runoff	10.742	12.113	8.205	6.068	6.894	8.732	60.749	66.801	55.452	17.501	6.949	6.241	266.448 MCM

Momentary Peak 103.60 CMS, at 5.40 M (A.D), at 6.00 Hours, on Nov 2, 2001

Runoff Yield 24.14 Liters/Second/Square KM, Momentary Peak Yield 296.000 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Tha Taphao at Mueang, Chumphon (X.180)

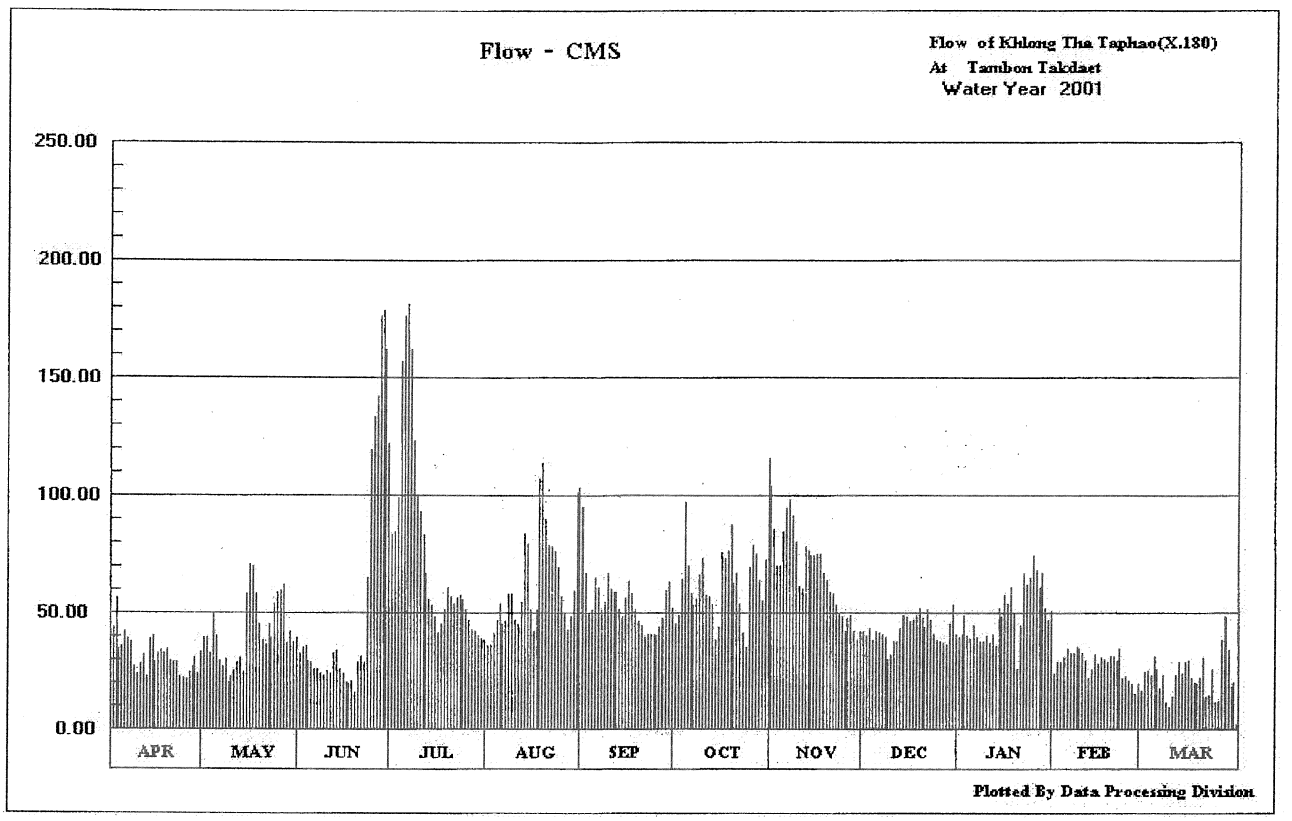
Lat 10 - 29 - 42 N. **Long** 99 - 10 - 23 E.

Location		on left bank at the highway bridge near the railway bridge.
	Ban -	**Amphoe** Mueang **Changwat** Chumphon
Drainage Area		2,045 sq.km.
Type of Gage		Water - stage recorder.
Zero Gage at Bottom		+0.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank about 3 meters from the top staff gage.
	Elevation	+5.896 m. (M.S.L.)
Gage Reading Frequency		Recording.
Basis of Mean Daily Gage Height		Arithmetic mean of 24 readings.
Period of Available Gage Records		1993 to date.
Rating Operation		
	Period of Rating	1998 to date.
	Rated by Float	-
	Rated by Current Meter	1998 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 22 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.66	0.54	0.36	1.45	0.45	1.66	0.68	1.81	0.61	0.54	0.11	-0.12	
2	0.93	0.55	0.43	1.48	0.44	1.15	0.77	1.50	0.56	0.59	0.24	0.12	
3	0.41	0.36	0.44	1.73	0.58	0.79	1.10	1.22	0.65	0.77	0.25	0.14	
4	0.45	0.79	0.26	2.58	0.72	0.83	1.70	1.21	0.52	0.56	0.30	0.09	
5	0.62	0.57	0.24	2.84	0.88	1.12	1.22	1.48	0.62	0.53	0.40	0.31	
6	0.53	0.27	0.15	2.90	0.68	1.03	0.98	1.65	0.60	0.67	0.35	0.16	
7	0.50	0.19	0.15	2.65	0.71	0.83	0.87	1.72	0.58	0.55	0.36	-0.08	
8	0.20	0.28	0.11	2.10	0.97	0.90	0.92	1.60	0.54	0.50	0.42	0.09	
9	0.10	-0.01	0.09	1.74	0.98	1.15	1.14	1.40	0.28	0.50	0.41	-0.28	
10	0.22	0.06	0.13	1.63	0.72	1.02	1.27	1.04	0.34	0.56	0.36	-0.34	
11	0.33	0.13	0.11	1.45	0.68	0.99	0.96	1.02	0.50	0.47	0.27	-0.19	
12	0.06	0.25	0.36	1.15	0.89	0.99	0.95	1.36	0.50	0.58	0.04	0.08	
13	0.53	0.30	0.38	0.92	1.46	0.83	0.87	1.33	0.64	0.44	0.15	0.25	
14	0.56	0.12	0.16	0.86	1.39	0.75	0.52	1.29	0.77	0.84	0.33	0.11	
15	0.24	0.98	0.10	0.76	0.82	0.94	0.66	1.30	0.76	0.75	0.23	0.24	
16	0.35	1.23	-0.01	0.60	0.61	1.08	1.32	1.31	0.71	0.96	0.29	0.26	
17	0.39	1.21	-0.03	0.69	0.82	0.98	1.27	1.31	0.72	0.88	0.28	0.04	
18	0.35	0.98	0.01	0.83	1.86	0.82	1.33	1.15	0.77	1.03	0.24	-0.01	
19	0.41	0.68	-0.13	1.03	1.96	0.71	1.53	1.09	0.84	0.80	0.31	-0.02	
20	0.26	0.51	0.25	0.95	1.58	0.67	1.07	0.99	0.74	0.15	0.31	0.05	
21	0.25	0.46	0.31	0.88	1.37	0.54	1.16	0.97	0.66	0.67	0.27	0.29	
22	0.25	0.69	0.24	0.93	1.36	0.59	0.88	0.87	0.82	1.15	0.40	-0.18	
23	0.06	0.54	1.12	0.96	1.33	0.59	0.60	0.80	0.72	1.05	0.05	-0.17	
24	0.04	0.88	2.05	0.92	1.20	0.58	0.43	0.76	0.59	1.12	0.07	0.15	
25	0.03	0.99	2.24	0.82	0.95	0.56	1.20	0.61	0.52	1.30	0.02	-0.27	
26	0.12	1.00	2.37	0.72	0.79	0.66	1.37	0.74	0.49	1.18	-0.02	-0.26	
27	0.19	1.06	2.84	0.63	0.63	0.74	1.31	0.77	0.48	1.03	-0.15	0.51	
28	0.29	0.47	2.87	0.61	0.76	1.01	1.09	0.61	0.46	1.16	-0.02	0.75	
29	0.10	0.62	2.65	0.56	1.01	1.08	0.91	0.52	0.69	0.84		0.39	
30	0.37	0.49	2.08	0.53	1.77	0.84	1.26	0.61	0.86	0.73		-0.05	
31		0.55		0.51	1.80		1.99		0.59	0.81		0.00	
Mean	0.33	0.57	0.74	1.24	1.04	0.88	1.08	1.13	0.62	0.76	0.22	0.07	
Max	0.93	1.23	2.87	2.90	1.96	1.66	1.99	1.81	0.86	1.30	0.42	0.75	2.90
Min	0.03	-0.01	-0.13	0.51	0.44	0.54	0.43	0.52	0.28	0.15	-0.15	-0.34	-0.34

Annual Max Momentary Gage Height 2.96 M (MSL), at 3.00 Hours, on Jul 6, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed -4.33 M (MSL)
Left Bank Elevation 7.05 M (MSL)
Right Bank Elevation 7.08 M (MSL), Drainage Area 2045 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	44.70	39.90	33.60	83.75	36.75	95.60	45.60	104.65	42.45	39.90	24.85	16.80	
2	56.85	40.25	36.05	85.40	36.40	67.50	49.65	86.50	40.60	41.65	29.40	25.20	
3	35.35	33.60	36.40	99.80	41.30	50.55	65.00	71.10	44.25	49.65	29.75	25.90	
4	36.75	50.55	30.10	157.60	47.40	52.35	98.00	70.55	39.20	40.60	31.50	24.15	
5	42.90	40.95	29.40	177.20	54.60	66.00	71.10	85.40	42.90	39.55	35.00	31.85	
6	39.55	30.45	26.25	182.00	45.60	61.50	59.10	95.00	42.00	45.15	33.25	26.60	
7	38.50	27.65	26.25	162.75	46.95	52.35	54.15	99.20	41.30	40.25	33.60	18.20	
8	28.00	30.80	24.85	124.00	58.65	55.50	56.40	92.00	39.90	38.50	35.70	24.15	
9	24.50	20.65	24.15	100.40	59.10	67.50	67.00	81.00	30.80	38.50	35.35	12.00	
10	28.70	23.10	25.55	93.80	47.40	61.00	73.85	62.00	32.90	40.60	33.60	10.50	
11	32.55	25.55	24.85	83.75	45.60	59.55	58.20	61.00	38.50	37.45	30.45	14.35	
12	23.10	29.75	33.60	67.50	55.05	59.55	57.75	78.80	38.50	41.30	22.40	23.80	
13	39.55	31.50	34.30	56.40	84.30	52.35	54.15	77.15	43.80	36.40	26.25	29.75	
14	40.60	25.20	26.60	53.70	80.45	48.75	39.20	74.95	49.65	52.80	32.55	24.85	
15	29.40	59.10	24.50	49.20	51.90	57.30	44.70	75.50	49.20	48.75	29.05	29.40	
16	33.25	71.65	20.65	42.00	42.45	64.00	76.60	76.05	46.95	58.20	31.15	30.10	
17	34.65	70.55	19.95	46.05	51.90	59.10	73.85	76.05	47.40	54.60	30.80	22.40	
18	33.25	59.10	21.35	52.35	107.90	51.90	77.15	67.50	49.65	61.50	29.40	20.65	
19	35.35	45.60	16.45	61.50	114.40	46.95	88.15	64.50	52.80	51.00	31.85	20.30	
20	30.10	38.85	29.75	57.75	90.90	45.15	63.50	59.55	48.30	26.25	31.85	22.75	
21	29.75	37.10	31.85	54.60	79.35	39.90	68.00	58.65	44.70	45.15	30.45	31.15	
22	29.75	46.05	29.40	56.85	78.80	41.65	54.60	54.15	51.90	67.50	35.00	14.70	
23	23.10	39.90	66.00	58.20	77.15	41.65	42.00	51.00	47.40	62.50	22.75	15.05	
24	22.40	54.60	120.50	56.40	70.00	41.30	36.05	49.20	41.65	66.00	23.45	26.25	
25	22.05	59.55	133.80	51.90	57.75	40.60	70.00	42.45	39.20	75.50	21.70	12.25	
26	25.20	60.00	142.90	47.40	50.55	44.70	79.35	48.30	38.15	69.00	20.30	12.50	
27	27.65	63.00	177.20	43.35	43.35	48.30	76.05	49.65	37.80	61.50	15.75	38.85	
28	31.15	37.45	179.60	42.45	49.20	60.50	64.50	42.45	37.10	68.00	20.30	48.75	
29	24.50	42.90	162.75	40.60	60.50	64.00	55.95	39.20	46.05	52.80		34.65	
30	33.95	38.15	122.60	39.55	102.20	52.80	73.30	42.45	53.70	47.85		19.25	
31		40.25		38.85	104.00		116.35		41.65	51.45		21.00	
Total	977.10	1313.70	1711.20	2367.05	1971.85	1649.85	2009.25	2035.95	1340.35	1549.85	807.45	728.10	18461.70 CMSDAY
Mean	32.57	42.38	57.04	76.36	63.61	55.00	64.81	67.86	43.24	50.00	28.84	23.49	50.58 CMS
Max	56.85	71.65	179.60	182.00	114.40	95.60	116.35	104.65	53.70	75.50	35.70	48.75	182.00 CMS
Min	22.05	20.65	16.45	38.85	36.40	39.90	36.05	39.20	30.80	26.25	15.75	10.50	10.50 CMS
Runoff	84.421	113.504	147.848	204.513	170.368	142.547	173.599	175.906	115.806	133.907	69.764	62.908	1595.091 MCM

Momentary Peak 186.80 CMS, at 2.96 M (MSL), at 3.00 Hours, on Jul 6, 2001

Runoff Yield 24.73 Liters/Second/Square KM, Momentary Peak Yield 91.345 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong To Daeng at Ban To Daeng, Narathiwat (X.182)

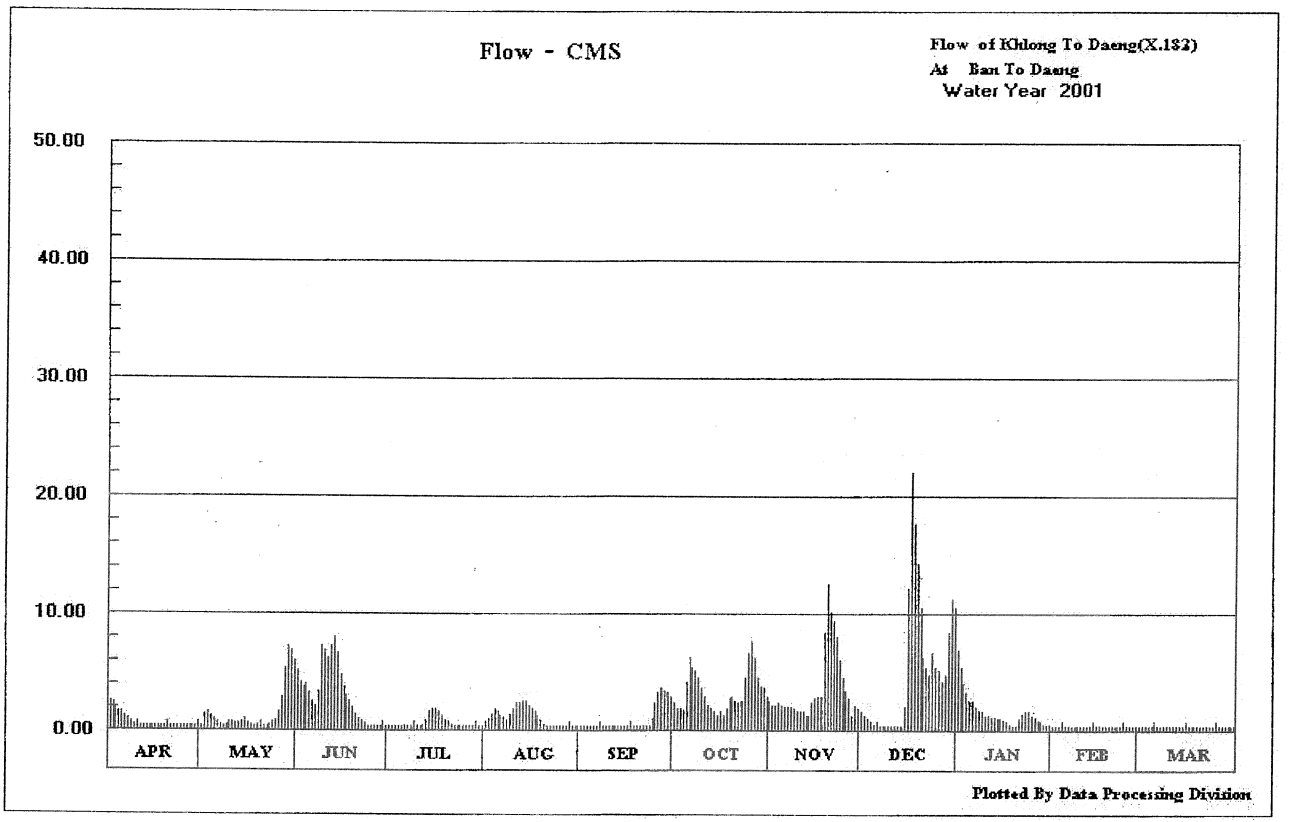
Lat 06 - 04 - 28 N. **Long** 101 - 58 - 08 E.

Location		on right bank at the bridge.
	Ban To Daeng	**Amphoe** Sungai Kolok **Changwat** Narathiwat
Drainage 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 at the abutment of the bridge.
	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		1993 to date.
Rating Operation		
	Period of Rating	1993 to date.
	Rated by Float	-
	Rated by Current Meter	1993 to date.
Stability of Channel Regimes		Fairly stable.
Overbank Flow Conditions		No overbank flow.
General Description		Records poor. Stage-discharge relation defined by 6 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.21	1.04	1.33	0.99	1.09	0.97	1.20	1.21	1.15	1.39	1.05	0.86	
2	1.20	1.14	1.30	0.97	1.11	0.97	1.17	1.19	1.13	1.34	1.04	0.85	
3	1.17	1.15	1.28	0.95	1.14	0.99	1.17	1.19	1.11	1.29	1.02	0.85	
4	1.15	1.13	1.29	0.94	1.17	0.99	1.16	1.20	1.09	1.25	1.00	0.85	
5	1.15	1.11	1.25	0.93	1.15	1.00	1.30	1.19	1.07	1.21	0.98	0.84	
6	1.13	1.09	1.21	0.92	1.13	1.02	1.37	1.18	1.06	1.21	0.97	0.83	
7	1.11	1.07	1.19	0.91	1.12	1.02	1.34	1.18	1.05	1.18	0.95	0.83	
8	1.09	1.05	1.26	0.91	1.10	1.00	1.33	1.18	1.05	1.16	0.95	0.83	
9	1.07	1.07	1.40	0.90	1.14	1.00	1.31	1.17	1.03	1.15	0.95	0.83	
10	1.05	1.09	1.39	0.90	1.17	0.98	1.27	1.15	1.03	1.13	0.93	0.83	
11	1.03	1.09	1.37	0.89	1.20	0.98	1.23	1.15	1.03	1.13	0.93	0.82	
12	1.01	1.08	1.40	1.07	1.20	0.96	1.19	1.15	1.02	1.12	0.92	0.81	
13	1.00	1.08	1.42	1.10	1.21	0.97	1.17	1.13	1.01	1.12	0.93	0.81	
14	1.00	1.09	1.38	1.15	1.21	0.96	1.15	1.13	1.01	1.11	0.93	0.81	
15	1.00	1.11	1.32	1.17	1.19	0.95	1.13	1.20	1.18	1.11	0.92	0.81	
16	1.00	1.08	1.28	1.17	1.17	0.94	1.15	1.22	1.53	1.10	0.91	0.81	
17	0.98	1.07	1.24	1.15	1.15	0.94	1.13	1.23	1.73	1.09	0.90	0.81	
18	0.97	1.05	1.21	1.13	1.13	0.94	1.17	1.23	1.65	1.07	0.89	0.81	
19	0.95	1.07	1.18	1.10	1.10	0.95	1.22	1.43	1.58	1.05	0.88	0.81	
20	0.95	1.07	1.14	1.09	1.07	0.96	1.23	1.54	1.49	1.05	0.88	0.87	
21	0.94	1.05	1.11	1.07	1.05	1.01	1.21	1.48	1.37	1.11	0.88	0.91	
22	0.93	1.05	1.10	1.01	1.03	1.03	1.20	1.46	1.34	1.14	0.89	0.90	
23	0.91	1.07	1.08	1.00	1.01	1.05	1.21	1.42	1.32	1.15	0.89	0.90	
24	0.91	1.09	1.05	0.97	1.03	1.11	1.31	1.36	1.38	1.15	0.88	0.89	
25	0.90	1.10	1.03	0.95	1.03	1.20	1.38	1.31	1.34	1.13	0.87	0.89	
26	0.90	1.15	1.03	1.03	1.03	1.25	1.41	1.26	1.33	1.12	0.87	0.88	
27	0.90	1.23	1.02	1.01	1.02	1.27	1.37	1.22	1.30	1.10	0.87	0.87	
28	0.89	1.34	1.01	1.04	1.01	1.26	1.31	1.13	1.32	1.09	0.86	0.87	
29	0.89	1.40	1.00	1.02	1.00	1.25	1.28	1.19	1.43	1.07		0.86	
30	0.95	1.39	1.00	1.06	1.00	1.23	1.27	1.17	1.51	1.07		0.85	
31		1.36		1.05	0.99		1.23		1.49	1.07		0.84	
Mean	1.01	1.13	1.21	1.02	1.10	1.04	1.24	1.24	1.26	1.14	0.93	0.85	
Max	1.21	1.40	1.42	1.17	1.21	1.27	1.41	1.54	1.73	1.39	1.05	0.91	1.73
Min	0.89	1.04	1.00	0.89	0.99	0.94	1.13	1.13	1.01	1.05	0.86	0.81	0.81

Annual Max Momentary Gage Height 1.75 M (A.D), at 15.00 Hours, on Dec 17, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -2.24 M (A.D)
Left Bank Elevation 3.96 M (A.D)
Right Bank Elevation 3.92 M (A.D), Drainage Area Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.68	0.40	5.23	0.00	0.90	0.00	2.50	2.68	1.75	7.09	0.50	0.00	
2	2.50	1.60	4.30	0.00	1.15	0.00	2.05	2.35	1.45	5.54	0.40	0.00	
3	2.05	1.75	3.94	0.00	1.60	0.00	2.05	2.35	1.15	4.12	0.20	0.00	
4	1.75	1.45	4.12	0.00	2.05	0.00	1.90	2.50	0.90	3.40	0.00	0.00	
5	1.75	1.15	3.40	0.00	1.75	0.00	4.30	2.35	0.70	2.68	0.00	0.00	
6	1.45	0.90	2.68	0.00	1.45	0.20	6.47	2.20	0.60	2.68	0.00	0.00	
7	1.15	0.70	2.35	0.00	1.30	0.20	5.54	2.20	0.50	2.20	0.00	0.00	
8	0.90	0.50	3.58	0.00	1.00	0.00	5.23	2.20	0.50	1.90	0.00	0.00	
9	0.70	0.70	7.40	0.00	1.60	0.00	4.61	2.05	0.30	1.75	0.00	0.00	
10	0.50	0.90	7.09	0.00	2.05	0.00	3.76	1.75	0.30	1.45	0.00	0.00	
11	0.30	0.90	6.47	0.00	2.50	0.00	3.04	1.75	0.30	1.45	0.00	0.00	
12	0.10	0.80	7.40	0.70	2.50	0.00	2.35	1.75	0.20	1.30	0.00	0.00	
13	0.00	0.80	8.12	1.00	2.68	0.00	2.05	1.45	0.10	1.30	0.00	0.00	
14	0.00	0.90	6.78	1.75	2.68	0.00	1.75	1.45	0.10	1.15	0.00	0.00	
15	0.00	1.15	4.92	2.05	2.35	0.00	1.45	2.50	2.20	1.15	0.00	0.00	
16	0.00	0.80	3.94	2.05	2.05	0.00	1.75	2.86	12.26	1.00	0.00	0.00	
17	0.00	0.70	3.22	1.75	1.75	0.00	1.45	3.04	22.21	0.90	0.00	0.00	
18	0.00	0.50	2.68	1.45	1.45	0.00	2.05	3.04	17.85	0.70	0.00	0.00	
19	0.00	0.70	2.20	1.00	1.00	0.00	2.86	8.48	14.36	0.50	0.00	0.00	
20	0.00	0.70	1.60	0.90	0.70	0.00	3.04	12.68	10.64	0.50	0.00	0.00	
21	0.00	0.50	1.15	0.70	0.50	0.10	2.68	10.28	6.47	1.15	0.00	0.00	
22	0.00	0.50	1.00	0.10	0.30	0.30	2.50	9.56	5.54	1.60	0.00	0.00	
23	0.00	0.70	0.80	0.00	0.10	0.50	2.68	8.12	4.92	1.75	0.00	0.00	
24	0.00	0.90	0.50	0.00	0.30	1.15	4.61	6.16	6.78	1.75	0.00	0.00	
25	0.00	1.00	0.30	0.00	0.30	2.50	6.78	4.61	5.54	1.45	0.00	0.00	
26	0.00	1.75	0.30	0.30	0.30	3.40	7.76	3.58	5.23	1.30	0.00	0.00	
27	0.00	3.04	0.20	0.10	0.20	3.76	6.47	2.86	4.30	1.00	0.00	0.00	
28	0.00	5.54	0.10	0.40	0.10	3.58	4.61	1.45	4.92	0.90	0.00	0.00	
29	0.00	7.40	0.00	0.20	0.00	3.40	3.94	2.35	8.48	0.70		0.00	
30	0.00	7.09	0.00	0.60	0.00	3.04	3.76	2.05	11.42	0.70		0.00	
31		6.16		0.50	0.00		3.04		10.64	0.70		0.00	
Total	15.83	52.58	95.77	15.55	36.61	22.13	109.03	112.65	162.61	55.76	1.10	0.00	679.62 CMSDAY
Mean	0.53	1.70	3.19	0.50	1.18	0.74	3.52	3.76	5.25	1.80	0.04	0.00	1.86 CMS
Max	2.68	7.40	8.12	2.05	2.68	3.76	7.76	12.68	22.21	7.09	0.50	0.00	22.21 CMS
Min	0.00	0.40	0.00	0.00	0.00	0.00	1.45	1.45	0.10	0.50	0.00	0.00	0.00 CMS
Runoff	1.368	4.543	8.275	1.344	3.163	1.912	9.420	9.733	14.050	4.818	0.095	0.000	58.719 MCM

Momentary Peak 23.35 CMS, at 1.75 M (A.D), at 15.00 Hours, on Dec 17, 2001

Runoff Yield ********* Liters/Second/Square KM, Momentary Peak Yield ********* Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Sai Buri River at Ban Sakor, Narathiwat (X.184)

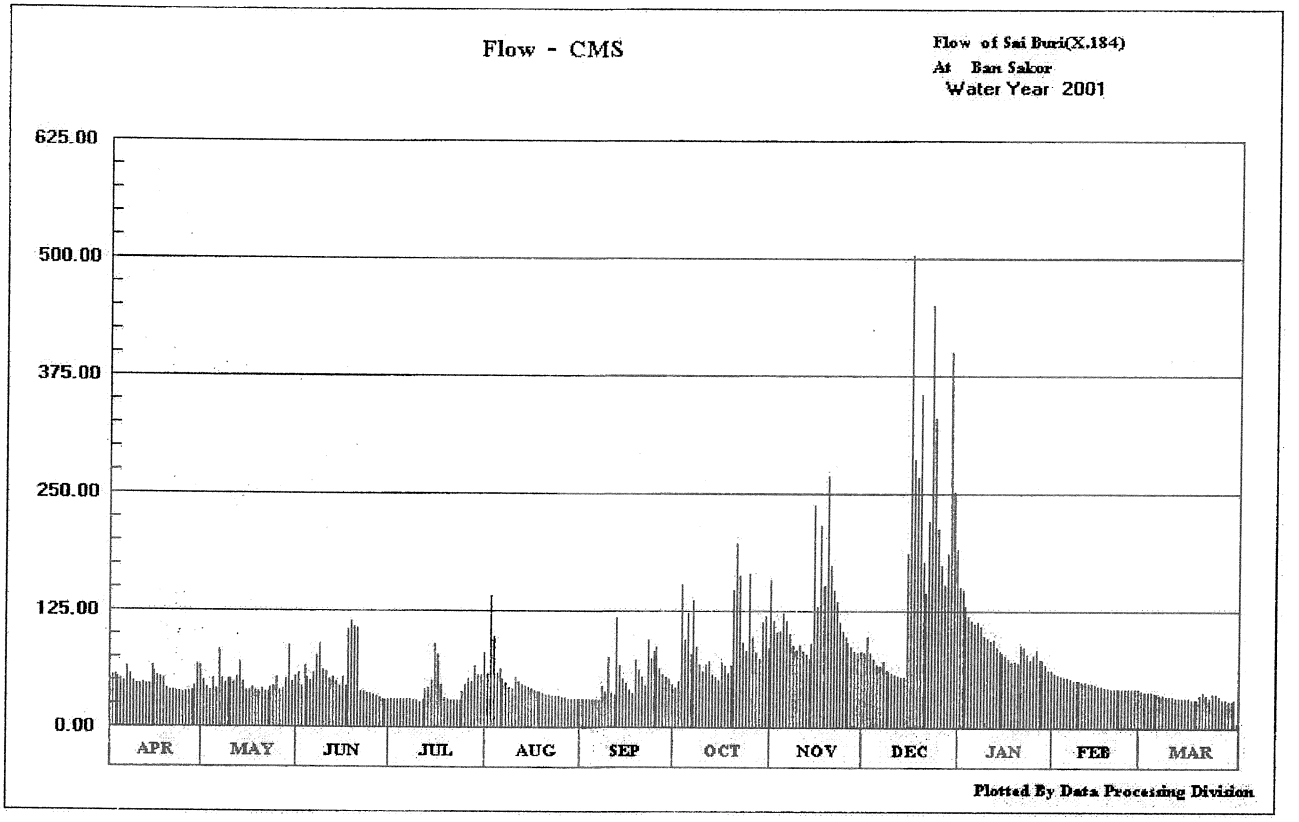
Lat 06 - 13 - 32 N. **Long** 101 - 30 - 00 E.

Location		on right bank at the bridge.
	Ban Sakor	**Amphoe** Si Sakhon **Changwat** Narathiwat
Drainage 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 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 Float	-
	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. Stage-discharge relation defined by 47 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.74	0.67	0.78	0.35	0.78	0.34	0.54	1.98	1.08	1.90	0.79	0.50	
2	0.75	0.55	0.56	0.35	1.79	0.34	0.64	1.49	1.30	1.87	0.76	0.48	
3	0.70	0.50	0.88	0.34	1.29	0.34	1.93	1.35	1.08	1.68	0.73	0.47	
4	0.69	0.68	0.72	0.33	0.78	0.33	1.25	1.36	0.99	1.55	0.71	0.46	
5	0.65	0.51	0.67	0.33	0.84	0.33	1.59	1.58	0.92	1.49	0.70	0.44	
6	0.86	1.11	0.79	0.33	0.68	0.35	1.05	1.49	0.88	1.45	0.68	0.44	
7	0.75	0.68	1.04	0.32	0.61	0.57	1.74	1.33	0.96	1.48	0.67	0.43	
8	0.64	0.61	1.20	0.30	0.55	0.46	1.17	1.18	0.83	1.42	0.67	0.42	
9	0.60	0.69	0.82	0.29	0.53	1.01	0.90	1.12	0.81	1.30	0.66	0.41	
10	0.59	0.68	0.80	0.28	0.70	0.45	0.81	1.18	0.78	1.27	0.65	0.40	
11	0.62	0.62	0.68	0.34	0.63	0.43	0.92	1.09	0.75	1.24	0.64	0.39	
12	0.58	0.70	0.72	0.53	0.59	1.53	0.96	1.06	0.74	1.25	0.62	0.38	
13	0.58	0.94	0.65	0.54	0.57	0.89	0.77	0.99	0.72	1.17	0.61	0.38	
14	0.89	0.65	0.57	0.66	0.55	0.69	0.70	1.20	0.70	1.10	0.59	0.37	
15	0.80	0.49	0.71	1.21	0.52	0.61	0.67	2.75	2.28	1.08	0.57	0.37	
16	0.73	0.50	0.57	1.05	0.50	0.49	0.93	1.68	4.45	1.03	0.56	0.36	
17	0.70	0.55	1.38	0.59	0.48	0.45	0.88	2.55	3.15	0.99	0.55	0.35	
18	0.68	0.50	1.49	0.38	0.46	0.97	0.78	1.91	2.99	0.95	0.54	0.34	
19	0.52	0.48	1.43	0.34	0.44	0.83	0.88	3.01	3.62	0.95	0.53	0.33	
20	0.50	0.52	1.40	0.30	0.42	0.72	1.87	2.16	2.19	0.93	0.52	0.42	
21	0.49	0.48	0.48	0.30	0.42	0.56	2.38	1.87	1.83	1.19	0.52	0.48	
22	0.48	0.48	0.46	0.30	0.41	1.26	2.03	1.73	2.60	1.16	0.52	0.43	
23	0.47	0.55	0.45	0.30	0.40	0.99	1.22	1.47	4.18	1.06	0.52	0.38	
24	0.45	0.57	0.44	0.46	0.40	1.09	1.10	1.36	3.45	0.97	0.52	0.44	
25	0.47	0.70	0.43	0.58	0.38	1.17	2.05	1.29	2.53	1.04	0.51	0.44	
26	0.48	0.50	0.40	0.69	0.36	0.85	1.27	1.22	2.15	1.11	0.51	0.39	
27	0.50	0.53	0.38	0.64	0.34	0.77	1.08	1.15	1.94	0.98	0.51	0.35	
28	0.57	0.69	0.35	0.89	0.33	0.71	1.00	1.09	2.28	0.97	0.51	0.32	
29	0.91	1.19	0.33	0.77	0.33	0.68	1.47	1.07	3.90	0.90		0.30	
30	0.88	0.63	0.32	0.76	0.33	0.59	1.54	1.09	2.87	0.83		0.31	
31		0.73		1.07	0.34		1.13		2.33	0.82		0.33	
Mean	0.64	0.63	0.73	0.51	0.57	0.69	1.20	1.53	1.98	1.20	0.60	0.40	
Max	0.91	1.19	1.49	1.21	1.79	1.53	2.38	3.01	4.45	1.90	0.79	0.50	4.45
Min	0.45	0.48	0.32	0.28	0.33	0.33	0.54	0.99	0.70	0.82	0.51	0.30	0.28

Annual Max Momentary Gage Height 5.18 M (A.D), at 24.00 Hours, on Dec 15, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.59 M (A.D)
Left Bank Elevation 11.89 M (A.D)
Right Bank Elevation 11.89 M (A.D), Drainage Area 1167 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	57.10	52.55	59.70	32.50	59.70	32.00	44.10	159.20	82.00	152.00	60.35	41.50	
2	57.75	44.75	45.40	32.50	142.12	32.00	50.60	115.83	99.50	149.30	58.40	40.20	
3	54.50	41.50	67.00	32.00	98.65	32.00	154.70	103.75	82.00	132.44	56.45	39.55	
4	53.85	53.20	55.80	31.50	59.70	31.50	95.25	104.60	75.25	121.05	55.15	38.90	
5	51.25	42.15	52.55	31.50	64.00	31.50	124.53	123.66	70.00	115.83	54.50	37.60	
6	65.50	84.25	60.35	31.50	53.20	32.50	79.75	115.83	67.00	112.35	53.20	37.60	
7	57.75	53.20	79.00	31.00	48.65	46.05	137.72	102.05	73.00	114.96	52.55	36.95	
8	50.60	48.65	91.00	30.00	44.75	38.90	88.75	89.50	63.25	109.74	52.55	36.30	
9	48.00	53.85	62.50	29.50	43.45	76.75	68.50	85.00	61.75	99.50	51.90	35.65	
10	47.35	53.20	61.00	29.00	54.50	38.25	61.75	89.50	59.70	96.95	51.25	35.00	
11	49.30	49.30	53.20	32.00	49.95	36.95	70.00	82.75	57.75	94.40	50.60	34.50	
12	46.70	54.50	55.80	43.45	47.35	119.31	73.00	80.50	57.10	95.25	49.30	34.00	
13	46.70	71.50	51.25	44.10	46.05	67.75	59.05	75.25	55.80	88.75	48.65	34.00	
14	67.75	51.25	46.05	51.90	44.75	53.85	54.50	91.00	54.50	83.50	47.35	33.50	
15	61.00	40.85	55.15	91.85	42.80	48.65	52.55	239.35	188.24	82.00	46.05	33.50	
16	56.45	41.50	46.05	79.75	41.50	40.85	70.75	132.44	505.50	78.25	45.40	33.00	
17	54.50	44.75	106.30	47.35	40.20	38.25	67.00	216.95	288.75	75.25	44.75	32.50	
18	53.20	41.50	115.83	34.00	38.90	73.75	59.70	152.90	268.75	72.25	44.10	32.00	
19	42.80	40.20	110.61	32.00	37.60	63.25	67.00	271.25	357.10	72.25	43.45	31.50	
20	41.50	42.80	108.00	30.00	36.30	55.80	149.30	176.20	179.05	70.75	42.80	36.30	
21	40.85	40.20	40.20	30.00	36.30	45.40	198.54	149.30	145.70	90.25	42.80	40.20	
22	40.20	40.20	38.90	30.00	35.65	96.10	163.85	136.84	222.40	88.00	42.80	36.95	
23	39.55	44.75	38.25	30.00	35.00	75.25	92.70	114.09	451.50	80.50	42.80	34.00	
24	38.25	46.05	37.60	38.90	35.00	82.75	83.50	104.60	331.50	73.75	42.80	37.60	
25	39.55	54.50	36.95	46.70	34.00	88.75	165.75	98.65	214.77	79.00	42.15	37.60	
26	40.20	41.50	35.00	53.85	33.00	64.75	96.95	92.70	175.25	84.25	42.15	34.50	
27	41.50	43.45	34.00	50.60	32.00	59.05	82.00	87.25	155.60	74.50	42.15	32.50	
28	46.05	53.85	32.50	67.75	31.50	55.15	76.00	82.75	188.24	73.75	42.15	31.00	
29	69.25	90.25	31.50	59.05	31.50	53.20	114.09	81.25	402.50	68.50		30.00	
30	67.00	49.95	31.00	58.40	31.50	47.35	120.18	82.75	253.75	63.25		30.50	
31		56.45		81.25	32.00		85.75		193.39	62.50		31.50	
Total	1525.95	1566.60	1738.44	1343.90	1461.57	1657.61	2907.81	3637.69	5480.59	2855.02	1348.55	1090.40	26614.13 CMSDAY
Mean	50.87	50.54	57.95	43.35	47.15	55.25	93.80	121.26	176.79	92.10	48.16	35.17	72.92 CMS
Max	69.25	90.25	115.83	91.85	142.12	119.31	198.54	271.25	505.50	152.00	60.35	41.50	505.50 CMS
Min	38.25	40.20	31.00	29.00	31.50	31.50	44.10	75.25	54.50	62.50	42.15	30.00	29.00 CMS
Runoff	131.842	135.354	150.201	116.113	126.280	143.218	251.235	314.296	473.523	246.674	116.515	94.211	2299.461 MCM

Momentary Peak 677.60 CMS, at 5.18 M (A.D), at 24.00 Hours, on Dec 15, 2001

Runoff Yield 62.48 Liters/Second/Square KM, Momentary Peak Yield 580.634 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Ta Kuaw Pa at Ban Hin Dan, Phang Nga (X.187)

Lat 08 - 46 - 25 N. **Long** 98 - 23 - 36 E.

Location on left bank at the bridge on Surat Thani - Phang Nga Highway.

Ban Hin Dan **Amphoe** Ta Kuaw Pa **Changwat** Phang Nga

Drainage Area 539 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +5.000 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On left bank about 4.00 meters from the top staff gage.

Elevation +11.405 m. (M.S.L.)

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 Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Fairly stable.

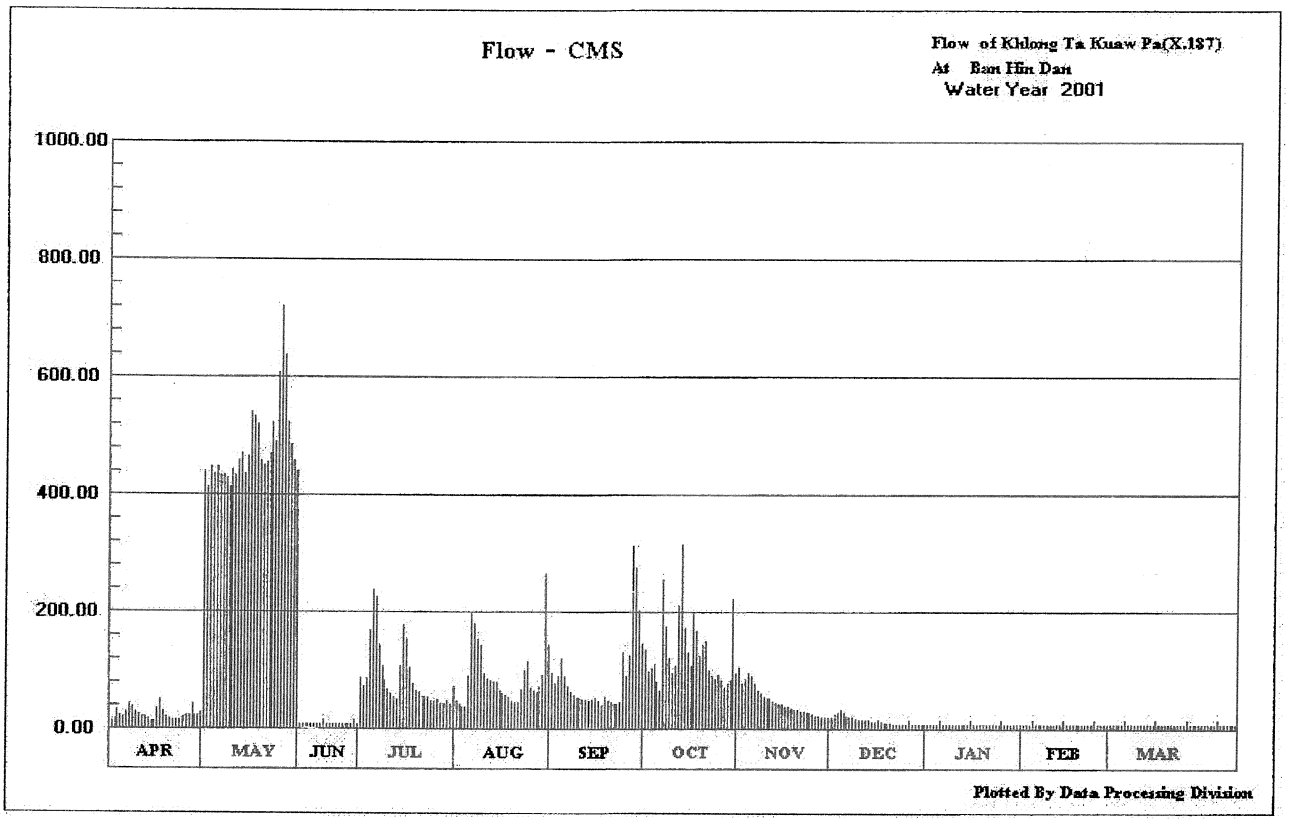
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 38 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.10	8.10	6.52	6.72	6.44	6.77	6.97	6.82	6.17	5.99	5.87	5.81	
2	6.14	8.03	6.47	6.64	6.40	6.66	6.78	6.67	6.24	5.98	5.87	5.81	
3	6.30	8.12	6.50	6.71	6.37	6.74	6.81	6.71	6.25	5.97	5.86	5.82	
4	6.20	8.09	6.51	7.14	6.36	6.90	6.85	6.77	6.32	5.97	5.86	5.82	
5	6.18	8.12	6.50	7.44	6.74	6.73	6.68	6.73	6.26	5.97	5.86	5.82	
6	6.25	8.08	6.45	7.39	7.28	6.64	6.59	6.66	6.20	5.97	5.86	5.82	
7	6.40	8.08	6.55	7.02	7.20	6.57	7.51	6.58	6.18	5.97	5.86	5.83	
8	6.37	8.07	6.55	6.83	7.06	6.53	7.18	6.54	6.18	5.95	5.85	5.83	
9	6.27	8.03	6.62	6.69	7.02	6.49	6.90	6.50	6.14	5.95	5.85	5.87	
10	6.24	8.11	6.52	6.61	6.77	6.49	6.76	6.48	6.13	5.94	5.85	5.84	
11	6.19	8.08	6.58	6.55	6.71	6.47	6.84	6.48	6.12	5.94	5.85	5.83	
12	6.17	8.15	6.47	6.51	6.69	6.47	7.33	6.45	6.12	5.94	5.85	5.83	
13	6.14	8.18	6.42	6.47	6.68	6.45	7.74	6.43	6.13	5.93	5.85	5.83	
14	6.10	8.09	6.39	6.83	6.68	6.47	7.16	6.41	6.10	5.92	5.84	5.83	
15	6.10	8.17	6.42	7.19	6.59	6.48	6.95	6.40	6.10	5.92	5.84	5.82	
16	6.33	8.35	6.40	7.07	6.55	6.44	6.83	6.37	6.09	5.92	5.84	5.81	
17	6.47	8.33	6.90	6.82	6.53	6.39	7.29	6.36	6.08	5.91	5.83	5.81	
18	6.29	8.30	7.41	6.66	6.51	6.51	7.14	6.34	6.07	5.90	5.83	5.80	
19	6.17	8.15	8.21	6.58	6.45	6.44	6.92	6.32	6.07	5.90	5.83	5.80	
20	6.14	8.13	7.28	6.57	6.43	6.42	7.02	6.31	6.05	5.90	5.82	5.80	
21	6.13	8.14	6.94	6.50	6.43	6.40	7.05	6.29	6.04	5.90	5.82	5.83	
22	6.12	8.18	6.83	6.51	6.60	6.41	6.79	6.28	6.03	5.90	5.84	5.99	
23	6.12	8.31	6.82	6.51	6.79	6.42	6.73	6.27	5.99	5.90	5.90	6.03	
24	6.17	8.23	6.80	6.45	6.87	6.95	6.71	6.25	5.99	5.90	5.89	5.91	
25	6.21	8.49	6.70	6.45	6.62	6.73	6.75	6.23	5.99	5.90	5.88	5.87	
26	6.21	8.71	6.98	6.47	6.58	6.92	6.70	6.22	5.98	5.90	5.87	5.98	
27	6.40	8.55	6.74	6.41	6.57	7.73	6.62	6.20	5.98	5.89	5.86	6.02	
28	6.21	8.31	6.66	6.41	6.63	7.59	6.67	6.19	5.97	5.88	5.85	5.97	
29	6.21	8.22	6.62	6.45	6.75	7.30	6.69	6.18	5.97	5.88		5.95	
30	6.26	8.15	6.70	6.41	7.55	7.03	7.38	6.18	5.99	5.87		5.90	
31		8.10		6.63	7.02		6.77		5.99	5.87		5.88	
Mean	6.22	8.20	6.72	6.70	6.71	6.68	6.94	6.42	6.09	5.92	5.85	5.86	
Max	6.47	8.71	8.21	7.44	7.55	7.73	7.74	6.82	6.32	5.99	5.90	6.03	8.71
Min	6.10	8.03	6.39	6.41	6.36	6.39	6.59	6.18	5.97	5.87	5.82	5.80	5.80

Annual Max Momentary Gage Height 8.27 M (MSL), at 6.00 Hours, on Jun 19, 2001
Zero Gage at Bottom Elevation 5.00 M (MSL), River Bed 5.14 M (MSL)
Left Bank Elevation 11.71 M (MSL)
Right Bank Elevation 11.67 M (MSL), Drainage Area 539 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.5	442.5	60.0	90.4	50.0	98.9	137.1	107.9	22.5	7.6	3.1	0.9	
2	19.9	416.2	53.7	76.8	45.0	80.2	100.6	81.9	29.0	7.2	3.1	0.9	
3	35.0	450.0	57.5	88.7	42.0	93.8	105.9	88.7	30.0	6.9	2.7	1.2	
4	25.0	438.8	58.8	171.0	41.0	123.5	113.7	98.9	37.0	6.9	2.7	1.2	
5	23.3	450.0	57.5	240.0	93.8	92.1	83.6	92.1	31.0	6.9	2.7	1.2	
6	30.0	435.0	51.2	227.6	201.8	76.8	68.8	80.2	25.0	6.9	2.7	1.2	
7	45.0	435.0	63.8	147.0	183.0	66.3	257.5	67.5	23.3	6.9	2.7	1.6	
8	42.0	431.2	63.8	109.8	155.0	61.3	179.0	62.5	23.3	6.1	2.4	1.6	
9	32.0	416.2	73.4	85.3	147.0	56.2	123.5	57.5	19.9	6.1	2.4	3.1	
10	29.0	446.2	60.0	71.7	98.9	56.2	97.2	55.0	19.1	5.8	2.4	2.0	
11	24.2	435.0	67.5	63.8	88.7	53.7	111.8	55.0	18.2	5.8	2.4	1.6	
12	22.5	461.2	53.7	58.8	85.3	53.7	213.5	51.2	18.2	5.8	2.4	1.6	
13	19.9	472.5	47.5	53.7	83.6	51.2	319.2	48.7	19.1	5.4	2.4	1.6	
14	16.5	438.8	44.0	109.8	83.6	53.7	175.0	46.2	16.5	5.0	2.0	1.6	
15	16.5	468.8	47.5	181.0	68.8	55.0	133.2	45.0	16.5	5.0	2.0	1.2	
16	38.0	543.8	45.0	157.0	63.8	50.0	109.8	42.0	15.7	5.0	2.0	0.9	
17	53.7	535.3	123.5	107.9	61.3	44.0	204.2	41.0	14.8	4.6	1.6	0.9	
18	34.0	522.5	232.5	80.2	58.8	58.8	171.0	39.0	14.0	4.3	1.6	0.5	
19	22.5	461.2	484.3	67.5	51.2	50.0	127.4	37.0	14.0	4.3	1.6	0.5	
20	19.9	453.8	201.8	66.3	48.7	47.5	147.0	36.0	12.3	4.3	1.2	0.5	
21	19.1	457.5	131.3	57.5	48.7	45.0	153.0	34.0	11.4	4.3	1.2	1.6	
22	18.2	472.5	109.8	58.8	70.0	46.2	102.3	33.0	10.6	4.3	2.0	7.6	
23	18.2	526.8	107.9	58.8	102.3	47.5	92.1	32.0	7.6	4.3	4.3	10.6	
24	22.5	492.7	104.0	51.2	117.6	133.2	88.7	30.0	7.6	4.3	3.9	4.6	
25	26.0	610.0	87.0	51.2	73.4	92.1	95.5	28.0	7.6	4.3	3.5	3.1	
26	26.0	722.7	139.1	53.7	67.5	127.4	87.0	27.0	7.2	4.3	3.1	7.2	
27	45.0	640.0	93.8	46.2	66.3	316.4	73.4	25.0	7.2	3.9	2.7	9.7	
28	26.0	526.8	80.2	46.2	75.1	277.5	81.9	24.2	6.9	3.5	2.4	6.9	
29	26.0	488.5	73.4	51.2	95.5	206.5	85.3	23.3	6.9	3.5		6.1	
30	31.0	461.2	87.0	46.2	267.5	149.0	225.3	23.3	7.6	3.1		4.3	
31		442.5		75.1	147.0		98.9		7.6	3.1		3.5	
Total	823.4	14995.2	2960.5	2850.4	2882.2	2763.7	4162.4	1513.1	507.6	159.7	69.2	91.0	33778.4 CMSDAY
Mean	27.4	483.7	98.7	91.9	93.0	92.1	134.3	50.4	16.4	5.2	2.5	2.9	92.5 CMS
Max	53.7	722.7	484.3	240.0	267.5	316.4	319.2	107.9	37.0	7.6	4.3	10.6	722.7 CMS
Min	16.5	416.2	44.0	46.2	41.0	44.0	68.8	23.3	6.9	3.1	1.2	0.5	0.5 CMS
Runoff	71.14	1295.59	255.79	246.27	249.02	238.78	359.63	130.73	43.86	13.80	5.98	7.86	2918.45 MCM

Momentary Peak 509.75 CMS, at 8.27 M (MSL), at 6.00 Hours, on Jun 19, 2001

Runoff Yield 171.69 Liters/Second/Square KM, Momentary Peak Yield 945.733 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 41 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +0.020 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 4.00 meters from the top staff gage.

Elevation +3.487 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1996 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

Rated by Current Meter 1996 to date.

Stability of Channel Regimes Stable.

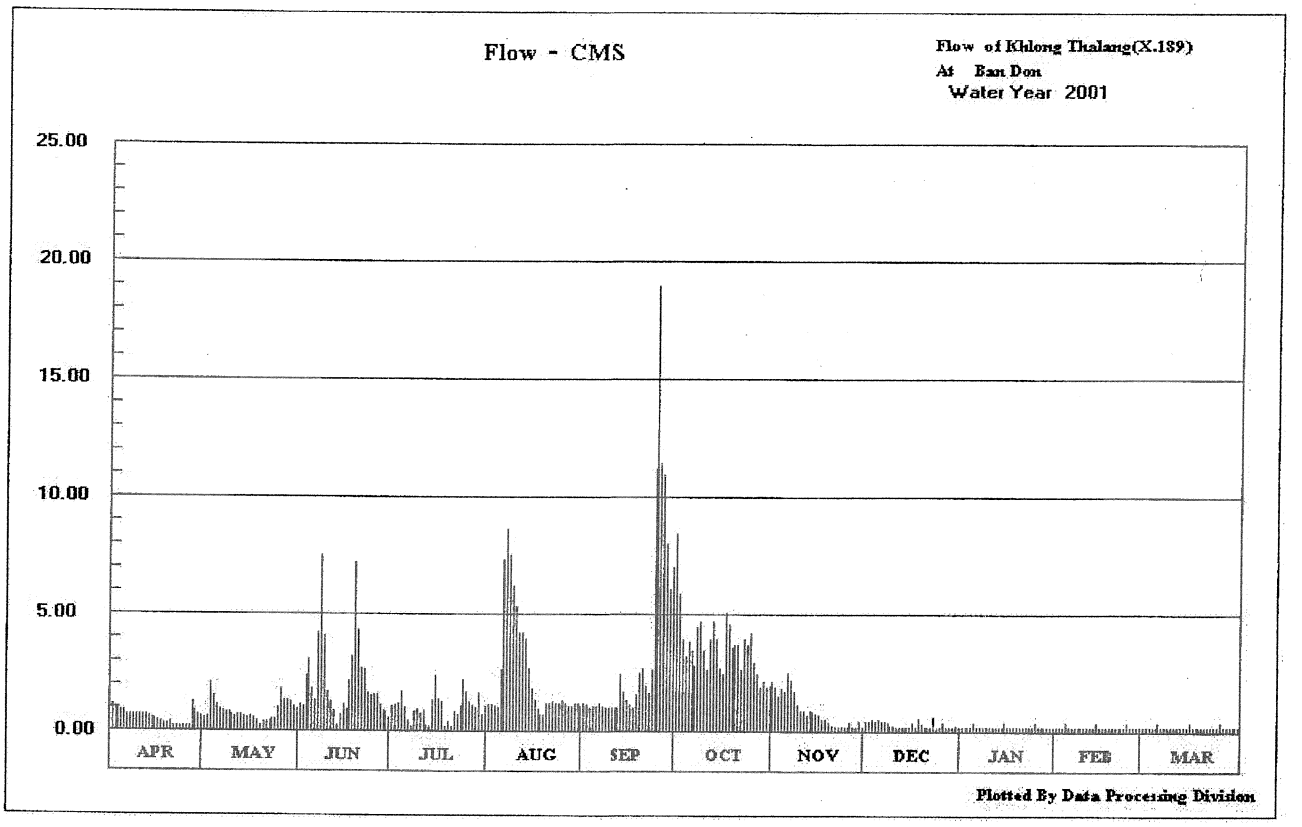
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 35 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.57	1.47	1.57	1.56	1.57	1.58	2.19	1.70	1.45	1.35	1.09	1.14	
2	1.54	1.48	1.56	1.57	1.57	1.57	2.03	1.67	1.45	1.33	1.09	1.12	
3	1.54	1.69	1.73	1.58	1.56	1.55	1.88	1.62	1.46	1.27	1.11	1.12	
4	1.53	1.62	1.81	1.65	1.55	1.56	1.82	1.66	1.45	1.26	1.13	1.11	
5	1.53	1.57	1.66	1.55	1.76	1.56	1.87	1.65	1.46	1.27	1.12	1.10	
6	1.50	1.54	1.60	1.45	2.12	1.58	1.84	1.75	1.45	1.24	1.12	1.10	
7	1.50	1.53	1.90	1.38	2.20	1.56	1.79	1.71	1.45	1.23	1.14	1.08	
8	1.50	1.52	2.13	1.52	2.13	1.55	1.92	1.65	1.44	1.27	1.15	1.08	
9	1.50	1.52	1.89	1.54	2.05	1.55	1.94	1.57	1.42	1.27	1.16	1.07	
10	1.49	1.50	1.65	1.51	1.99	1.55	1.84	1.53	1.42	1.27	1.17	1.06	
11	1.49	1.48	1.59	1.53	1.90	1.55	1.76	1.53	1.41	1.27	1.17	1.05	
12	1.49	1.50	1.53	1.42	1.90	1.55	1.88	1.49	1.40	1.27	1.17	1.04	
13	1.48	1.49	1.42	1.41	1.88	1.74	1.94	1.53	1.39	1.26	1.17	1.02	
14	1.47	1.48	1.49	1.60	1.77	1.65	1.88	1.52	1.41	1.26	1.16	1.01	
15	1.46	1.47	1.57	1.73	1.66	1.60	1.77	1.51	1.41	1.26	1.16	1.00	
16	1.45	1.48	1.54	1.61	1.60	1.57	1.74	1.49	1.39	1.24	1.16	1.00	
17	1.44	1.47	1.70	1.59	1.54	1.55	1.97	1.46	1.39	1.25	1.15	0.99	
18	1.43	1.45	1.82	1.34	1.50	1.63	1.93	1.46	1.47	1.22	1.14	0.99	
19	1.43	1.42	2.11	1.32	1.49	1.75	1.85	1.44	1.43	1.21	1.14	0.98	
20	1.41	1.43	1.91	1.30	1.58	1.77	1.86	1.42	1.40	1.20	1.14	0.98	
21	1.38	1.44	1.77	1.52	1.58	1.68	1.86	1.41	1.33	1.19	1.14	0.97	
22	1.36	1.45	1.76	1.49	1.59	1.64	1.76	1.40	1.31	1.19	1.14	1.02	
23	1.33	1.46	1.64	1.56	1.58	1.76	1.88	1.38	1.48	1.19	1.14	1.03	
24	1.33	1.46	1.62	1.71	1.58	2.30	1.86	1.36	1.38	1.18	1.14	1.05	
25	1.35	1.55	1.63	1.65	1.60	2.55	1.90	1.34	1.20	1.17	1.14	1.07	
26	1.37	1.66	1.63	1.59	1.58	2.31	1.80	1.31	1.29	1.16	1.15	1.09	
27	1.59	1.60	1.57	1.56	1.56	2.29	1.74	1.29	1.28	1.15	1.16	1.10	
28	1.53	1.60	1.53	1.55	1.56	2.16	1.67	1.27	1.26	1.14	1.16	1.12	
29	1.50	1.59	1.52	1.64	1.58	2.04	1.70	1.45	1.30	1.14		1.11	
30	1.48	1.56	1.47	1.49	1.58	2.10	1.67	1.36	1.42	1.10		1.10	
31		1.54		1.56	1.56		1.68		1.39	1.08		1.09	
Mean	1.47	1.52	1.68	1.53	1.70	1.76	1.85	1.50	1.39	1.22	1.14	1.06	
Max	1.59	1.69	2.13	1.73	2.20	2.55	2.19	1.75	1.48	1.35	1.17	1.14	2.55
Min	1.33	1.42	1.42	1.30	1.49	1.55	1.67	1.27	1.20	1.08	1.09	0.97	0.97

Annual Max Momentary Gage Height 2.62 M (MSL), at 18.00 Hours, on Sep 24, 2001
Zero Gage at Bottom Elevation 0.02 M (MSL), River Bed 0.36 M (MSL)
Left Bank Elevation 3.55 M (MSL)
Right Bank Elevation 3.54 M (MSL), Drainage Area 41 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.22	0.62	1.22	1.16	1.22	1.28	8.54	2.20	0.50	0.10	0.00	0.00	
2	1.04	0.68	1.16	1.22	1.22	1.22	5.98	1.96	0.50	0.06	0.00	0.00	
3	1.04	2.12	2.44	1.28	1.16	1.10	4.00	1.56	0.56	0.00	0.00	0.00	
4	0.98	1.56	3.12	1.80	1.10	1.16	3.25	1.88	0.50	0.00	0.00	0.00	
5	0.98	1.22	1.88	1.10	2.68	1.16	3.88	1.80	0.56	0.00	0.00	0.00	
6	0.80	1.04	1.40	0.50	7.42	1.28	3.50	2.60	0.50	0.00	0.00	0.00	
7	0.80	0.98	4.25	0.16	8.70	1.16	2.92	2.28	0.50	0.00	0.00	0.00	
8	0.80	0.92	7.58	0.92	7.58	1.10	4.50	1.80	0.44	0.00	0.00	0.00	
9	0.80	0.92	4.13	1.04	6.30	1.10	4.75	1.22	0.32	0.00	0.00	0.00	
10	0.74	0.80	1.80	0.86	5.38	1.10	3.50	0.98	0.32	0.00	0.00	0.00	
11	0.74	0.68	1.34	0.98	4.25	1.10	2.68	0.98	0.26	0.00	0.00	0.00	
12	0.74	0.80	0.98	0.32	4.25	1.10	4.00	0.74	0.20	0.00	0.00	0.00	
13	0.68	0.74	0.32	0.26	4.00	2.52	4.75	0.98	0.18	0.00	0.00	0.00	
14	0.62	0.68	0.74	1.40	2.76	1.80	4.00	0.92	0.26	0.00	0.00	0.00	
15	0.56	0.62	1.22	2.44	1.88	1.40	2.76	0.86	0.26	0.00	0.00	0.00	
16	0.50	0.68	1.04	1.48	1.40	1.22	2.52	0.74	0.18	0.00	0.00	0.00	
17	0.44	0.62	2.20	1.34	1.04	1.10	5.13	0.56	0.18	0.00	0.00	0.00	
18	0.38	0.50	3.25	0.08	0.80	1.64	4.62	0.56	0.62	0.00	0.00	0.00	
19	0.38	0.32	7.26	0.04	0.74	2.60	3.63	0.44	0.38	0.00	0.00	0.00	
20	0.26	0.38	4.38	0.00	1.28	2.76	3.75	0.32	0.20	0.00	0.00	0.00	
21	0.16	0.44	2.76	0.92	1.28	2.04	3.75	0.26	0.06	0.00	0.00	0.00	
22	0.12	0.50	2.68	0.74	1.34	1.72	2.68	0.20	0.02	0.00	0.00	0.00	
23	0.06	0.56	1.72	1.16	1.28	2.68	4.00	0.16	0.68	0.00	0.00	0.00	
24	0.06	0.56	1.56	2.28	1.28	11.25	3.75	0.12	0.16	0.00	0.00	0.00	
25	0.10	1.10	1.64	1.80	1.40	19.05	4.25	0.08	0.00	0.00	0.00	0.00	
26	0.14	1.88	1.64	1.34	1.28	11.50	3.00	0.02	0.00	0.00	0.00	0.00	
27	1.34	1.40	1.22	1.16	1.16	10.99	2.52	0.00	0.00	0.00	0.00	0.00	
28	0.98	1.40	0.98	1.10	1.16	8.06	1.96	0.00	0.00	0.00	0.00	0.00	
29	0.80	1.34	0.92	1.72	1.28	6.14	2.20	0.50	0.00	0.00		0.00	
30	0.68	1.16	0.62	0.74	1.28	7.10	1.96	0.12	0.32	0.00		0.00	
31		1.04		1.16	1.16		2.04		0.18	0.00		0.00	
Total	18.94	28.26	67.45	32.50	79.06	109.43	114.77	26.84	8.84	0.16	0.00	0.00	486.25 CMSDAY
Mean	0.63	0.91	2.25	1.05	2.55	3.65	3.70	0.89	0.29	0.01	0.00	0.00	1.33 CMS
Max	1.34	2.12	7.58	2.44	8.70	19.05	8.54	2.60	0.68	0.10	0.00	0.00	19.05 CMS
Min	0.06	0.32	0.32	0.00	0.74	1.10	1.96	0.00	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	1.636	2.442	5.828	2.808	6.831	9.455	9.916	2.319	0.764	0.014	0.000	0.000	42.012 MCM

Momentary Peak 21.60 CMS, at 2.62 M (MSL), at 18.00 Hours, on Sep 24, 2001
Runoff Yield 31.73 Liters/Second/Square KM, Momentary Peak Yield 514.531 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Bang Yai at Ban Sam Kong, Phuket (X.190)

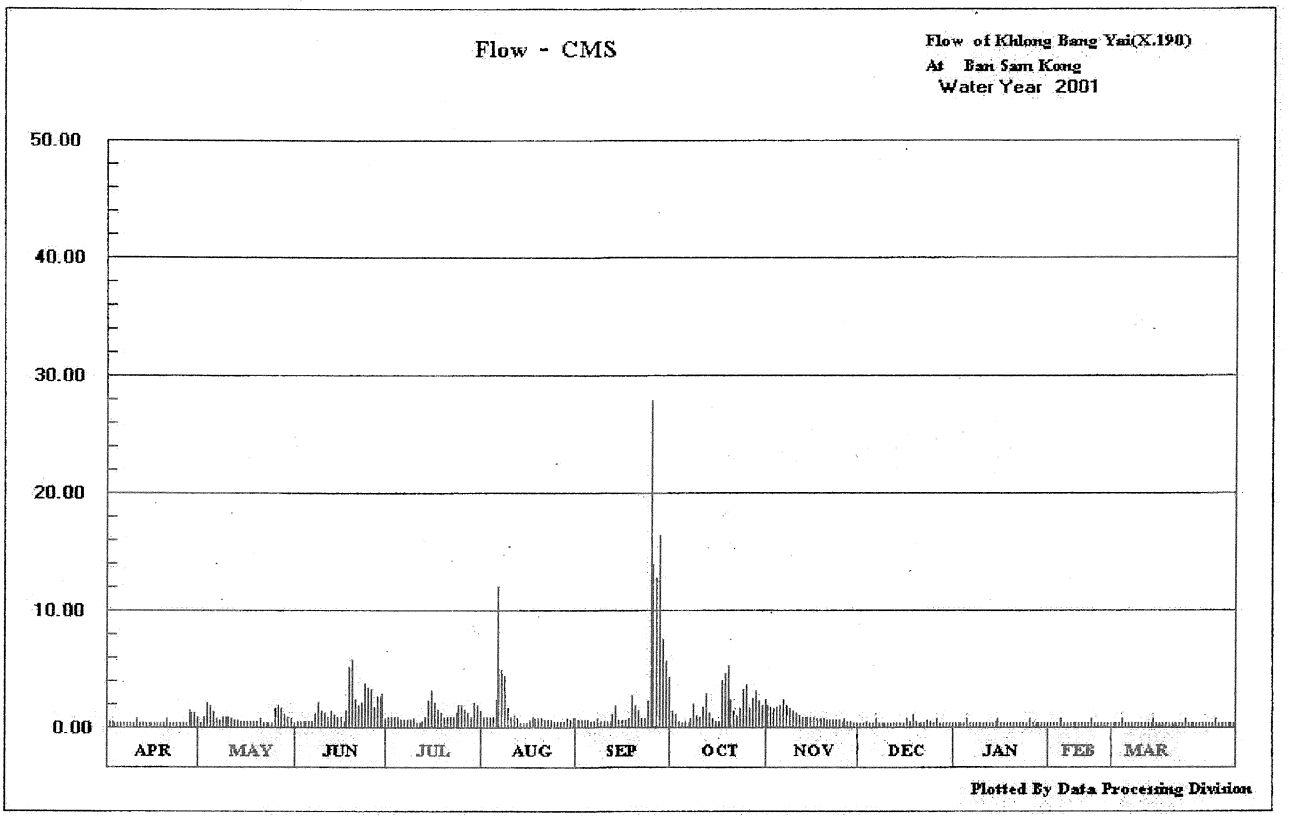
Lat 07 - 54 - 13 N. **Long** 98 - 20 - 44 E.

Location		on right bank at the bridge.			
	Ban Sam Kong	**Amphoe** Mueang		**Changwat** Phuket	
Drainage Area		41 sq.km.			
Type of Gage		Staff gage.			
Zero Gage at Bottom		+5.737 m. (M.S.L.)			
Bench Mark		B.M.- H.D.			
	Location BM	On right bank about 13.00 meters from the top staff gage.			
	Elevation	+10.044 m. (M.S.L.)			
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.			
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.			
Period of Available Gage Records		1996 to date.			
Rating Operation					
	Period of Rating	1996 to date.			
	Rated by Float	-			
	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 34 discharge measurements made in 2001.			
Remark		No record on 1 Feb. - 31 Mar.			

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.29	6.24	6.29	6.39	6.39	6.34	6.47	6.55	6.27	6.20	*******	*******	
2	6.29	6.39	6.29	6.39	6.40	6.34	6.42	6.52	6.27	6.19	*******	*******	
3	6.27	6.58	6.29	6.39	6.39	6.32	6.31	6.50	6.30	6.19	*******	*******	
4	6.24	6.54	6.29	6.39	6.39	6.32	6.26	6.52	6.27	6.18	*******	*******	
5	6.24	6.46	6.29	6.34	6.62	6.30	6.31	6.55	6.27	6.17	*******	*******	
6	6.24	6.36	6.29	6.34	7.48	6.30	6.26	6.62	6.25	6.17	*******	*******	
7	6.24	6.34	6.43	6.34	6.89	6.29	6.26	6.54	6.25	6.17	*******	*******	
8	6.24	6.38	6.58	6.34	6.84	6.29	6.56	6.50	6.25	6.17	*******	*******	
9	6.19	6.40	6.47	6.29	6.51	6.29	6.41	6.46	6.25	6.15	*******	*******	
10	6.19	6.39	6.44	6.24	6.40	6.29	6.39	6.45	6.24	6.15	*******	*******	
11	6.19	6.37	6.39	6.24	6.41	6.29	6.53	6.41	6.20	6.15	*******	*******	
12	6.19	6.34	6.46	6.30	6.36	6.43	6.67	6.40	6.20	6.15	*******	*******	
13	6.19	6.34	6.43	6.40	6.28	6.54	6.45	6.38	6.20	6.15	*******	*******	
14	6.19	6.31	6.39	6.60	6.26	6.34	6.36	6.40	6.20	6.31	*******	*******	
15	6.19	6.29	6.39	6.71	6.24	6.34	6.31	6.39	6.22	6.24	*******	*******	
16	6.19	6.30	6.29	6.59	6.34	6.34	6.31	6.38	6.26	6.20	*******	*******	
17	6.19	6.31	6.47	6.49	6.39	6.33	6.81	6.37	6.29	6.18	*******	*******	
18	6.16	6.29	6.91	6.44	6.37	6.66	6.86	6.37	6.43	6.18	*******	*******	
19	6.16	6.29	6.97	6.40	6.36	6.54	6.92	6.35	6.30	6.15	*******	*******	
20	6.16	6.24	6.61	6.39	6.35	6.49	6.61	6.34	6.25	6.15	*******	*******	
21	6.14	6.24	6.54	6.39	6.34	6.36	6.46	6.34	6.25	6.15	*******	*******	
22	6.14	6.21	6.59	6.39	6.34	6.36	6.41	6.34	6.28	6.15	*******	*******	
23	6.14	6.19	6.78	6.44	6.33	6.60	6.51	6.32	6.32	6.15	*******	*******	
24	6.14	6.25	6.74	6.54	6.29	8.45	6.72	6.32	6.29	6.12	*******	*******	
25	6.14	6.51	6.72	6.54	6.29	7.61	6.76	6.30	6.24	6.12	*******	*******	
26	6.14	6.54	6.52	6.49	6.29	7.53	6.50	6.30	6.23	6.12	*******	*******	
27	6.49	6.50	6.65	6.44	6.29	7.78	6.63	6.30	6.21	6.12	*******	*******	
28	6.44	6.42	6.65	6.39	6.29	7.13	6.71	6.30	6.20	6.12	*******	*******	
29	6.44	6.39	6.67	6.59	6.34	6.96	6.60	6.27	6.22	6.11		*******	
30	6.39	6.34	6.35	6.54	6.36	6.83	6.54	6.26	6.22	6.11		*******	
31		6.28		6.47	6.35		6.62		6.21	6.10		*******	
Mean	6.23	6.36	6.51	6.43	6.43	6.63	6.51	6.40	6.25	6.16	*******	*******	
Max	6.49	6.58	6.97	6.71	7.48	8.45	6.92	6.62	6.43	6.31	*******	*******	8.45
Min	6.14	6.19	6.29	6.24	6.24	6.29	6.26	6.26	6.20	6.10	*******	*******	*******

Annual Max Momentary Gage Height 8.72 M (MSL), at 18.00 Hours, on Sep 24, 2001
Zero Gage at Bottom Elevation 5.74 M (MSL), River Bed 5.76 M (MSL)
Left Bank Elevation 9.83 M (MSL)
Right Bank Elevation 9.81 M (MSL), Drainage Area 41 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.61	0.38	0.61	1.05	1.05	0.83	1.55	2.08	0.52	0.20	*******	*******	
2	0.61	1.05	0.61	1.05	1.10	0.83	1.23	1.88	0.52	0.18	*******	*******	
3	0.52	2.27	0.61	1.05	1.05	0.74	0.69	1.75	0.65	0.18	*******	*******	
4	0.38	2.01	0.61	1.05	1.05	0.74	0.47	1.88	0.52	0.16	*******	*******	
5	0.38	1.49	0.61	0.83	2.57	0.65	0.69	2.08	0.52	0.14	*******	*******	
6	0.38	0.92	0.61	0.83	12.22	0.65	0.47	2.57	0.43	0.14	*******	*******	
7	0.38	0.83	1.29	0.83	5.04	0.61	0.47	2.01	0.43	0.14	*******	*******	
8	0.38	1.01	2.27	0.83	4.52	0.61	2.14	1.75	0.43	0.14	*******	*******	
9	0.18	1.10	1.55	0.61	1.82	0.61	1.16	1.49	0.43	0.10	*******	*******	
10	0.18	1.05	1.36	0.38	1.10	0.61	1.05	1.42	0.38	0.10	*******	*******	
11	0.18	0.96	1.05	0.38	1.16	0.61	1.95	1.16	0.20	0.10	*******	*******	
12	0.18	0.83	1.49	0.65	0.92	1.29	3.00	1.10	0.20	0.10	*******	*******	
13	0.18	0.83	1.29	1.10	0.56	2.01	1.42	1.01	0.20	0.10	*******	*******	
14	0.18	0.69	1.05	2.40	0.47	0.83	0.92	1.10	0.20	0.69	*******	*******	
15	0.18	0.61	1.05	3.33	0.38	0.83	0.69	1.05	0.29	0.38	*******	*******	
16	0.18	0.65	0.61	2.34	0.83	0.83	0.69	1.01	0.47	0.20	*******	*******	
17	0.18	0.69	1.55	1.68	1.05	0.78	4.20	0.96	0.61	0.16	*******	*******	
18	0.12	0.61	5.25	1.36	0.96	2.91	4.73	0.96	1.29	0.16	*******	*******	
19	0.12	0.61	5.88	1.10	0.92	2.01	5.36	0.87	0.65	0.10	*******	*******	
20	0.12	0.38	2.49	1.05	0.87	1.68	2.49	0.83	0.43	0.10	*******	*******	
21	0.08	0.38	2.01	1.05	0.83	0.92	1.49	0.83	0.43	0.10	*******	*******	
22	0.08	0.25	2.34	1.05	0.83	0.92	1.16	0.83	0.56	0.10	*******	*******	
23	0.08	0.18	3.93	1.36	0.78	2.40	1.82	0.74	0.74	0.10	*******	*******	
24	0.08	0.43	3.59	2.01	0.61	28.02	3.42	0.74	0.61	0.04	*******	*******	
25	0.08	1.82	3.42	2.01	0.61	14.05	3.76	0.65	0.38	0.04	*******	*******	
26	0.08	2.01	1.88	1.68	0.61	12.92	1.75	0.65	0.34	0.04	*******	*******	
27	1.68	1.75	2.83	1.36	0.61	16.51	2.66	0.65	0.25	0.04	*******	*******	
28	1.36	1.23	2.83	1.05	0.61	7.70	3.33	0.65	0.20	0.04	*******	*******	
29	1.36	1.05	3.00	2.34	0.83	5.78	2.40	0.52	0.29	0.02		*******	
30	1.05	0.83	0.87	2.01	0.92	4.41	2.01	0.47	0.29	0.02		*******	
31		0.56		1.55	0.87		2.57		0.25	0.00		*******	
Total	11.55	29.46	58.54	41.37	47.75	114.29	61.74	35.69	13.71	4.11	*******	*******	******** CMSDAY
Mean	0.38	0.95	1.95	1.33	1.54	3.81	1.99	1.19	0.44	0.13	*******	*******	******** CMS
Max	1.68	2.27	5.88	3.33	12.22	28.02	5.36	2.57	1.29	0.69	*******	*******	28.02 CMS
Min	0.08	0.18	0.61	0.38	0.38	0.61	0.47	0.47	0.20	0.00	*******	*******	******** CMS
Runoff	0.998	2.545	5.058	3.574	4.126	9.875	5.334	3.084	1.185	0.355	*******	*******	******** MCM

Momentary Peak 33.02 CMS, at 8.72 M (MSL), at 18.00 Hours, on Sep 24, 2001

Runoff Yield ********* Liters/Second/Square KM, Momentary Peak Yield 791.657 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Bang Yai at Satree Phuket School, Phuket (X.191)

Lat 07 - 53 - 24 N. **Long** 98 - 23 - 36 E.

Location on right bank at Satree Phukat School.

Ban - **Amphoe** Mueang **Changwat** Phuket

Drainage Area 54 sq.km.

Type of Gage Staff gage.

Zero Gage at Bottom +1.417 m. (M.S.L.)

Bench Mark B.M.- H.D.

Location BM On right bank about 8.00 meters from the top staff gage.

Elevation +4.830 m. (M.S.L.)

Gage Reading Frequency 5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.

Basis of Mean Daily Gage Height Arithmetic mean of 5 readings.

Period of Available Gage Records 1996 to date.

Rating Operation

Period of Rating 1996 to date.

Rated by Float -

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 40 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

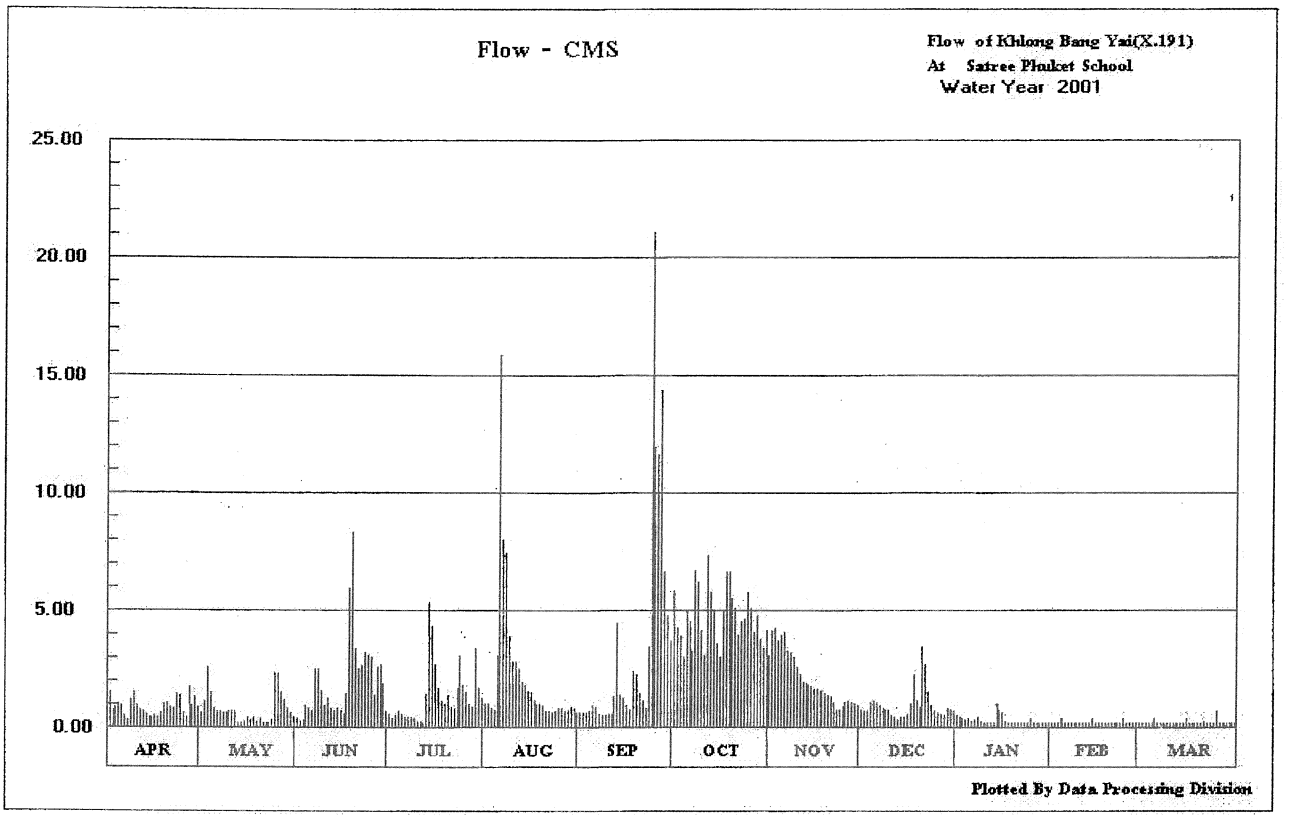
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.03	1.88	1.84	1.87	1.95	1.88	2.52	2.25	1.91	1.86	1.74	1.71	
2	1.91	1.97	1.82	1.84	1.95	1.88	2.37	2.36	1.90	1.85	1.74	1.71	
3	1.93	2.19	1.83	1.86	1.92	1.88	2.33	2.37	1.90	1.84	1.74	1.70	
4	1.95	2.03	1.94	1.90	1.91	1.90	2.24	2.31	1.96	1.83	1.73	1.71	
5	1.94	1.92	1.92	1.87	2.25	1.94	2.44	2.34	1.97	1.82	1.73	1.71	
6	1.86	1.89	1.89	1.85	3.29	1.93	2.40	2.35	1.96	1.82	1.73	1.71	
7	1.83	1.89	2.18	1.85	2.71	1.87	2.27	2.27	1.94	1.83	1.75	1.71	
8	1.98	1.88	2.18	1.85	2.66	1.86	2.60	2.26	1.92	1.85	1.74	1.71	
9	2.03	1.88	2.04	1.84	2.33	1.86	2.55	2.24	1.91	1.82	1.75	1.71	
10	1.94	1.90	1.94	1.82	2.22	1.87	2.36	2.19	1.91	1.81	1.74	1.71	
11	1.91	1.89	1.99	1.82	2.22	1.87	2.25	2.14	1.86	1.80	1.75	1.71	
12	1.90	1.90	1.92	1.81	2.18	2.00	2.65	2.10	1.85	1.78	1.75	1.71	
13	1.87	1.81	1.90	2.02	2.10	2.39	2.51	2.09	1.83	1.77	1.75	1.71	
14	1.85	1.77	1.92	2.47	2.08	2.01	2.44	2.08	1.85	1.95	1.74	1.71	
15	1.85	1.82	1.90	2.38	2.04	1.99	2.30	2.07	1.85	1.91	1.73	1.71	
16	1.86	1.85	1.87	2.21	2.03	1.94	2.24	2.05	1.87	1.88	1.74	1.71	
17	1.85	1.83	2.02	2.06	1.98	1.91	2.44	2.05	1.95	1.82	1.74	1.71	
18	1.88	1.85	2.53	1.97	1.95	2.16	2.59	2.04	2.14	1.78	1.74	1.70	
19	1.95	1.82	2.74	1.95	1.95	2.14	2.59	2.02	1.97	1.76	1.73	1.70	
20	1.96	1.82	2.28	2.01	1.94	2.02	2.49	2.01	1.93	1.76	1.72	1.70	
21	1.93	1.81	2.18	1.93	1.89	1.97	2.45	2.00	2.29	1.78	1.72	1.70	
22	1.92	1.77	2.20	1.92	1.89	1.92	2.34	1.96	2.21	1.80	1.72	1.82	
23	2.02	1.74	2.26	2.06	1.88	2.29	2.40	1.91	2.03	1.78	1.72	1.75	
24	2.01	1.83	2.25	2.25	1.89	3.62	2.41	1.91	1.94	1.76	1.72	1.75	
25	1.88	2.15	2.24	2.08	1.92	3.02	2.51	1.93	1.90	1.77	1.71	1.75	
26	1.85	2.15	2.01	2.03	1.92	3.00	2.45	1.96	1.88	1.77	1.71	1.89	
27	2.07	2.03	2.19	1.95	1.90	3.19	2.35	1.97	1.87	1.76	1.71	1.76	
28	1.94	1.98	2.21	1.93	1.90	2.59	2.42	1.96	1.86	1.76	1.71	1.76	
29	2.00	1.92	2.09	2.28	1.93	2.42	2.32	1.95	1.92	1.75		1.75	
30	1.93	1.88	1.89	2.06	1.92	2.31	2.28	1.94	1.91	1.75		1.74	
31		1.85		1.99	1.88		2.36		1.89	1.75		1.74	
Mean	1.93	1.90	2.07	1.99	2.08	2.19	2.42	2.10	1.94	1.81	1.73	1.73	
Max	2.07	2.19	2.74	2.47	3.29	3.62	2.65	2.37	2.29	1.95	1.75	1.89	3.62
Min	1.83	1.74	1.82	1.81	1.88	1.86	2.24	1.91	1.83	1.75	1.71	1.70	1.70

Annual Max Momentary Gage Height 4.13 M (MSL), at 17.00 Hours, on Sep 24, 2001

Zero Gage at Bottom Elevation 1.42 M (MSL), River Bed 1.46 M (MSL)

Left Bank Elevation 4.91 M (MSL)

Right Bank Elevation 4.92 M (MSL), Drainage Area 54 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.59	0.68	0.44	0.62	1.10	0.68	5.92	3.17	0.86	0.56	0.08	0.02	
2	0.86	1.22	0.32	0.44	1.10	0.68	4.31	4.22	0.80	0.50	0.08	0.02	
3	0.98	2.64	0.38	0.56	0.92	0.68	3.93	4.31	0.80	0.44	0.08	0.00	
4	1.10	1.59	1.04	0.80	0.86	0.80	3.08	3.74	1.16	0.38	0.06	0.02	
5	1.04	0.92	0.92	0.62	3.17	1.04	5.04	4.03	1.22	0.32	0.06	0.02	
6	0.56	0.74	0.74	0.50	15.95	0.98	4.60	4.12	1.16	0.32	0.06	0.02	
7	0.38	0.74	2.57	0.50	8.07	0.62	3.36	3.36	1.04	0.38	0.10	0.02	
8	1.28	0.68	2.57	0.50	7.49	0.56	6.80	3.27	0.92	0.50	0.08	0.02	
9	1.59	0.68	1.66	0.44	3.93	0.56	6.25	3.08	0.86	0.32	0.10	0.02	
10	1.04	0.80	1.04	0.32	2.89	0.62	4.22	2.64	0.86	0.26	0.08	0.02	
11	0.86	0.74	1.34	0.32	2.89	0.62	3.17	2.31	0.56	0.20	0.10	0.02	
12	0.80	0.80	0.92	0.26	2.57	1.40	7.38	2.05	0.50	0.16	0.10	0.02	
13	0.62	0.26	0.80	1.53	2.05	4.51	5.81	1.98	0.38	0.14	0.10	0.02	
14	0.50	0.14	0.92	5.37	1.92	1.46	5.04	1.92	0.50	1.10	0.08	0.02	
15	0.50	0.32	0.80	4.41	1.66	1.34	3.65	1.85	0.50	0.86	0.06	0.02	
16	0.56	0.50	0.62	2.79	1.59	1.04	3.08	1.72	0.62	0.68	0.08	0.02	
17	0.50	0.38	1.53	1.79	1.28	0.86	5.04	1.72	1.10	0.32	0.08	0.02	
18	0.68	0.50	6.03	1.22	1.10	2.44	6.69	1.66	2.31	0.16	0.08	0.00	
19	1.10	0.32	8.41	1.10	1.10	2.31	6.69	1.53	1.22	0.12	0.06	0.00	
20	1.16	0.32	3.46	1.46	1.04	1.53	5.59	1.46	0.98	0.12	0.04	0.00	
21	0.98	0.26	2.57	0.98	0.74	1.22	5.15	1.40	3.55	0.16	0.04	0.00	
22	0.92	0.14	2.70	0.92	0.74	0.92	4.03	1.16	2.79	0.20	0.04	0.32	
23	1.53	0.08	3.27	1.79	0.68	3.55	4.60	0.86	1.59	0.16	0.04	0.10	
24	1.46	0.38	3.17	3.17	0.74	21.12	4.71	0.86	1.04	0.12	0.04	0.10	
25	0.68	2.38	3.08	1.92	0.92	11.99	5.81	0.98	0.80	0.14	0.02	0.10	
26	0.50	2.38	1.46	1.59	0.92	11.70	5.15	1.16	0.68	0.14	0.02	0.74	
27	1.85	1.59	2.64	1.10	0.80	14.46	4.12	1.22	0.62	0.12	0.02	0.12	
28	1.04	1.28	2.79	0.98	0.80	6.69	4.82	1.16	0.56	0.12	0.02	0.12	
29	1.40	0.92	1.98	3.46	0.98	4.82	3.84	1.10	0.92	0.10		0.10	
30	0.98	0.68	0.74	1.79	0.92	3.74	3.46	1.04	0.86	0.10		0.08	
31		0.50		1.34	0.68		4.22		0.74	0.10		0.08	
Total	29.04	25.56	60.91	44.59	71.60	104.94	149.56	65.08	32.50	9.30	1.80	2.18	597.06 CMSDAY
Mean	0.97	0.82	2.03	1.44	2.31	3.50	4.82	2.17	1.05	0.30	0.06	0.07	1.64 CMS
Max	1.85	2.64	8.41	5.37	15.95	21.12	7.38	4.31	3.55	1.10	0.10	0.74	21.12 CMS
Min	0.38	0.08	0.32	0.26	0.68	0.56	3.08	0.86	0.38	0.10	0.02	0.00	0.00 CMS
Runoff	2.509	2.208	5.263	3.853	6.186	9.067	12.922	5.623	2.808	0.804	0.156	0.188	51.586 MCM

Momentary Peak 29.61 CMS, at 4.13 M (MSL), at 17.00 Hours, on Sep 24, 2001

Runoff Yield 29.80 Liters/Second/Square KM, Momentary Peak Yield 539.344 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Bang Tha at Mueang, Phuket (X.192)

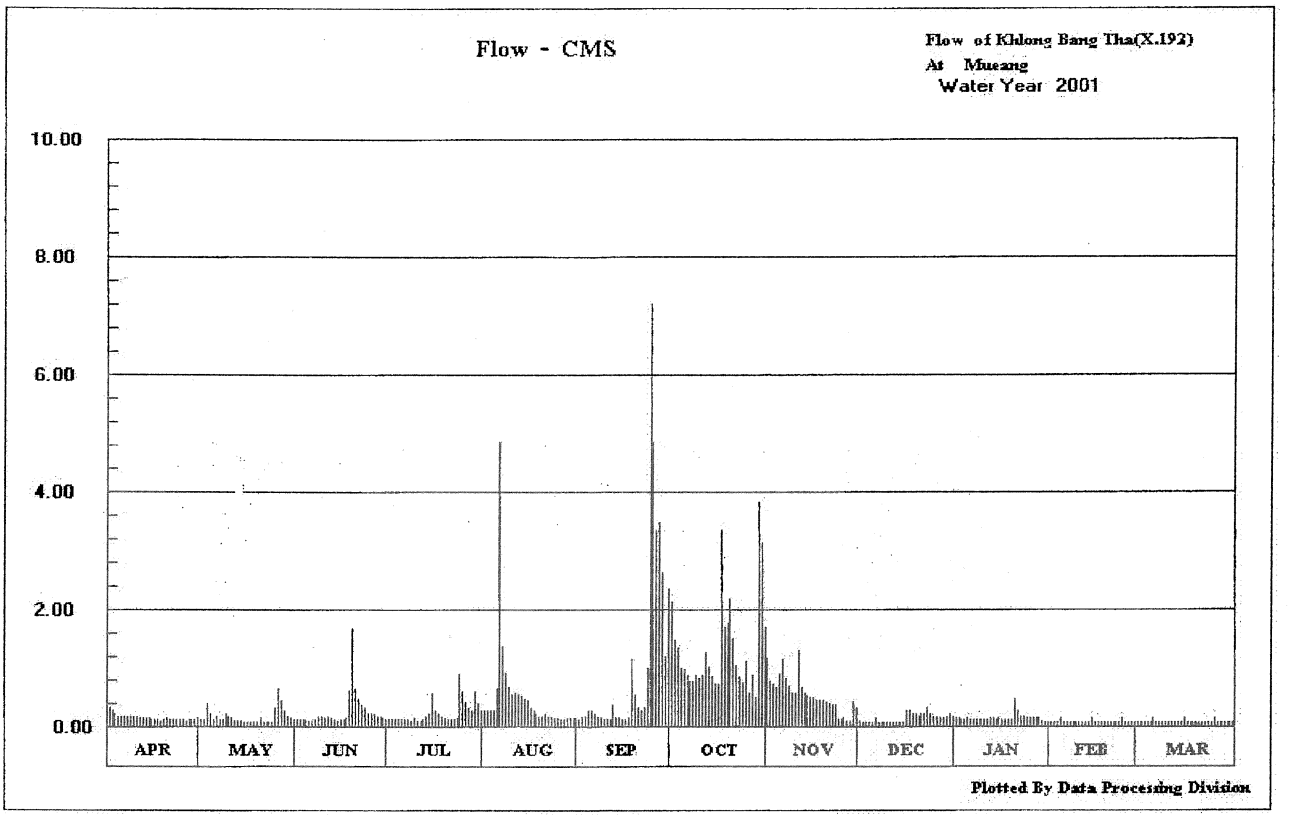
Lat 07 - 50 - 16 N. **Long** 98 - 21 - 05 E.

Location		on left bank at the bridge.
	Ban -	**Amphoe** Mueang **Changwat** Phuket
Drainage Area		5 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+2.658 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank about 8.00 meters from the top staff gage.
	Elevation	+4.221 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		1996 to date.
Rating Operation		
	Period of Rating	1996 to date.
	Rated by Float	-
	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 40 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.86	2.75	2.76	2.77	2.84	2.76	3.41	3.17	2.73	2.79	2.69	2.61	
2	2.84	2.77	2.76	2.76	2.85	2.81	3.25	3.04	2.72	2.78	2.69	2.61	
3	2.82	2.89	2.75	2.77	2.85	2.81	3.22	3.02	2.71	2.77	2.69	2.61	
4	2.81	2.82	2.75	2.76	2.85	2.84	3.11	3.00	2.71	2.76	2.68	2.61	
5	2.81	2.77	2.74	2.77	2.99	2.85	3.10	3.08	2.71	2.76	2.68	2.61	
6	2.81	2.81	2.73	2.76	3.86	2.83	3.07	3.16	2.71	2.75	2.68	2.61	
7	2.80	2.77	2.75	2.75	3.23	2.81	3.04	3.05	2.71	2.75	2.68	2.64	
8	2.80	2.77	2.81	2.74	3.09	2.78	3.04	3.01	2.71	2.75	2.67	2.66	
9	2.80	2.83	2.80	2.73	3.00	2.77	3.07	2.96	2.71	2.76	2.67	2.66	
10	2.80	2.80	2.79	2.73	2.95	2.76	3.05	2.96	2.71	2.77	2.67	2.66	
11	2.79	2.78	2.81	2.73	2.96	2.76	3.07	3.21	2.71	2.76	2.66	2.66	
12	2.79	2.74	2.79	2.76	2.95	2.88	3.20	3.00	2.71	2.78	2.66	2.66	
13	2.78	2.74	2.76	2.80	2.94	2.79	3.12	2.96	2.71	2.78	2.66	2.66	
14	2.78	2.73	2.74	2.82	2.92	2.78	3.06	2.94	2.71	2.76	2.66	2.66	
15	2.76	2.71	2.77	2.96	2.91	2.77	3.02	2.93	2.71	2.76	2.67	2.66	
16	2.77	2.71	2.76	2.85	2.87	2.76	3.02	2.93	2.84	2.76	2.66	2.66	
17	2.76	2.68	2.79	2.82	2.85	2.76	3.63	2.91	2.84	2.76	2.66	2.66	
18	2.74	2.71	2.98	2.80	2.82	3.16	3.31	2.91	2.83	2.75	2.66	2.66	
19	2.77	2.69	3.30	2.77	2.81	2.95	3.33	2.91	2.82	2.75	2.65	2.66	
20	2.76	2.69	2.99	2.75	2.80	2.87	3.42	2.90	2.81	2.92	2.66	2.66	
21	2.76	2.69	2.92	2.75	2.82	2.84	3.26	2.89	2.83	2.85	2.66	2.66	
22	2.75	2.69	2.88	2.76	2.81	2.86	3.13	2.88	2.82	2.81	2.66	2.63	
23	2.75	2.68	2.86	2.79	2.80	3.11	3.06	2.88	2.86	2.80	2.66	2.63	
24	2.75	2.68	2.83	3.08	2.79	4.13	3.03	2.76	2.83	2.79	2.66	2.63	
25	2.75	2.86	2.82	2.97	2.78	3.86	3.15	2.75	2.81	2.79	2.66	2.63	
26	2.74	2.99	2.82	2.90	2.77	3.63	2.96	2.74	2.80	2.78	2.66	2.63	
27	2.77	2.91	2.81	2.86	2.76	3.65	3.07	2.74	2.78	2.78	2.69	2.60	
28	2.76	2.84	2.80	2.85	2.76	3.50	2.93	2.74	2.79	2.78	2.71	2.59	
29	2.77	2.81	2.79	2.97	2.78	3.18	3.71	2.90	2.80	2.74		2.58	
30	2.76	2.78	2.77	2.89	2.78	3.45	3.59	2.86	2.82	2.70		2.58	
31		2.77		2.85	2.78		3.31		2.80	2.69		2.58	
Mean	2.78	2.77	2.82	2.82	2.90	3.02	3.19	2.94	2.77	2.77	2.67	2.63	
Max	2.86	2.99	3.30	3.08	3.86	4.13	3.71	3.21	2.86	2.92	2.71	2.66	4.13
Min	2.74	2.68	2.73	2.73	2.76	2.76	2.93	2.74	2.71	2.69	2.65	2.58	2.58

Annual Max Momentary Gage Height 4.61 M (MSL), at 18.00 Hours, on Sep 24, 2001
Zero Gage at Bottom Elevation 2.66 M (MSL), River Bed 2.38 M (MSL)
Left Bank Elevation 5.97 M (MSL)
Right Bank Elevation 5.95 M (MSL), Drainage Area 5 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.35	0.15	0.16	0.17	0.30	0.16	2.16	1.21	0.13	0.19	0.09	0.01	
2	0.30	0.17	0.16	0.16	0.32	0.22	1.50	0.82	0.12	0.18	0.09	0.01	
3	0.25	0.43	0.15	0.17	0.32	0.22	1.38	0.76	0.11	0.17	0.09	0.01	
4	0.22	0.25	0.15	0.16	0.32	0.30	1.03	0.70	0.11	0.16	0.08	0.01	
5	0.22	0.17	0.14	0.17	0.68	0.32	1.00	0.94	0.11	0.16	0.08	0.01	
6	0.22	0.22	0.13	0.16	4.88	0.27	0.91	1.18	0.11	0.15	0.08	0.01	
7	0.20	0.17	0.15	0.15	1.42	0.22	0.82	0.85	0.11	0.15	0.08	0.04	
8	0.20	0.17	0.22	0.14	0.97	0.18	0.82	0.73	0.11	0.15	0.07	0.06	
9	0.20	0.27	0.20	0.13	0.70	0.17	0.91	0.60	0.11	0.16	0.07	0.06	
10	0.20	0.20	0.19	0.13	0.58	0.16	0.85	0.60	0.11	0.17	0.07	0.06	
11	0.19	0.18	0.22	0.13	0.60	0.16	0.91	1.34	0.11	0.16	0.06	0.06	
12	0.19	0.14	0.19	0.16	0.58	0.40	1.30	0.70	0.11	0.18	0.06	0.06	
13	0.18	0.14	0.16	0.20	0.55	0.19	1.06	0.60	0.11	0.18	0.06	0.06	
14	0.18	0.13	0.14	0.25	0.50	0.18	0.88	0.55	0.11	0.16	0.06	0.06	
15	0.16	0.11	0.17	0.60	0.48	0.17	0.76	0.53	0.11	0.16	0.07	0.06	
16	0.17	0.11	0.16	0.32	0.37	0.16	0.76	0.53	0.30	0.16	0.06	0.06	
17	0.16	0.08	0.19	0.25	0.32	0.16	3.38	0.48	0.30	0.16	0.06	0.06	
18	0.14	0.11	0.65	0.20	0.25	1.18	1.74	0.48	0.27	0.15	0.06	0.06	
19	0.17	0.09	1.70	0.17	0.22	0.58	1.82	0.48	0.25	0.15	0.05	0.06	
20	0.16	0.09	0.68	0.15	0.20	0.37	2.21	0.45	0.22	0.50	0.06	0.06	
21	0.16	0.09	0.50	0.15	0.25	0.30	1.54	0.43	0.27	0.32	0.06	0.06	
22	0.15	0.09	0.40	0.16	0.22	0.35	1.09	0.40	0.25	0.22	0.06	0.03	
23	0.15	0.08	0.35	0.19	0.20	1.03	0.88	0.40	0.35	0.20	0.06	0.03	
24	0.15	0.08	0.27	0.94	0.19	7.24	0.79	0.16	0.27	0.19	0.06	0.03	
25	0.15	0.35	0.25	0.63	0.18	4.88	1.15	0.15	0.22	0.19	0.06	0.03	
26	0.14	0.68	0.25	0.45	0.17	3.38	0.60	0.14	0.20	0.18	0.06	0.03	
27	0.17	0.48	0.22	0.35	0.16	3.50	0.91	0.14	0.18	0.18	0.09	0.00	
28	0.16	0.30	0.20	0.32	0.16	2.65	0.53	0.14	0.19	0.18	0.11	0.00	
29	0.17	0.22	0.19	0.63	0.18	1.24	3.86	0.45	0.20	0.14		0.00	
30	0.16	0.18	0.17	0.43	0.18	2.38	3.15	0.35	0.25	0.10		0.00	
31		0.17		0.32	0.18		1.74		0.20	0.09		0.00	
Total	5.62	6.10	8.71	8.54	16.63	32.72	42.44	17.29	5.60	5.59	1.96	1.09	152.29 CMSDAY
Mean	0.19	0.20	0.29	0.28	0.54	1.09	1.37	0.58	0.18	0.18	0.07	0.04	0.42 CMS
Max	0.35	0.68	1.70	0.94	4.88	7.24	3.86	1.34	0.35	0.50	0.11	0.06	7.24 CMS
Min	0.14	0.08	0.13	0.13	0.16	0.16	0.53	0.14	0.11	0.09	0.05	0.00	0.00 CMS
Runoff	0.486	0.527	0.753	0.738	1.437	2.827	3.667	1.494	0.484	0.483	0.169	0.094	13.158 MCM

Momentary Peak 13.25 CMS, at 4.61 M (MSL), at 18.00 Hours, on Sep 24, 2001
Runoff Yield 69.77 Liters/Second/Square KM, Momentary Peak Yield 2215.719 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Tha Yang at Ban Don, Phuket (X.193)

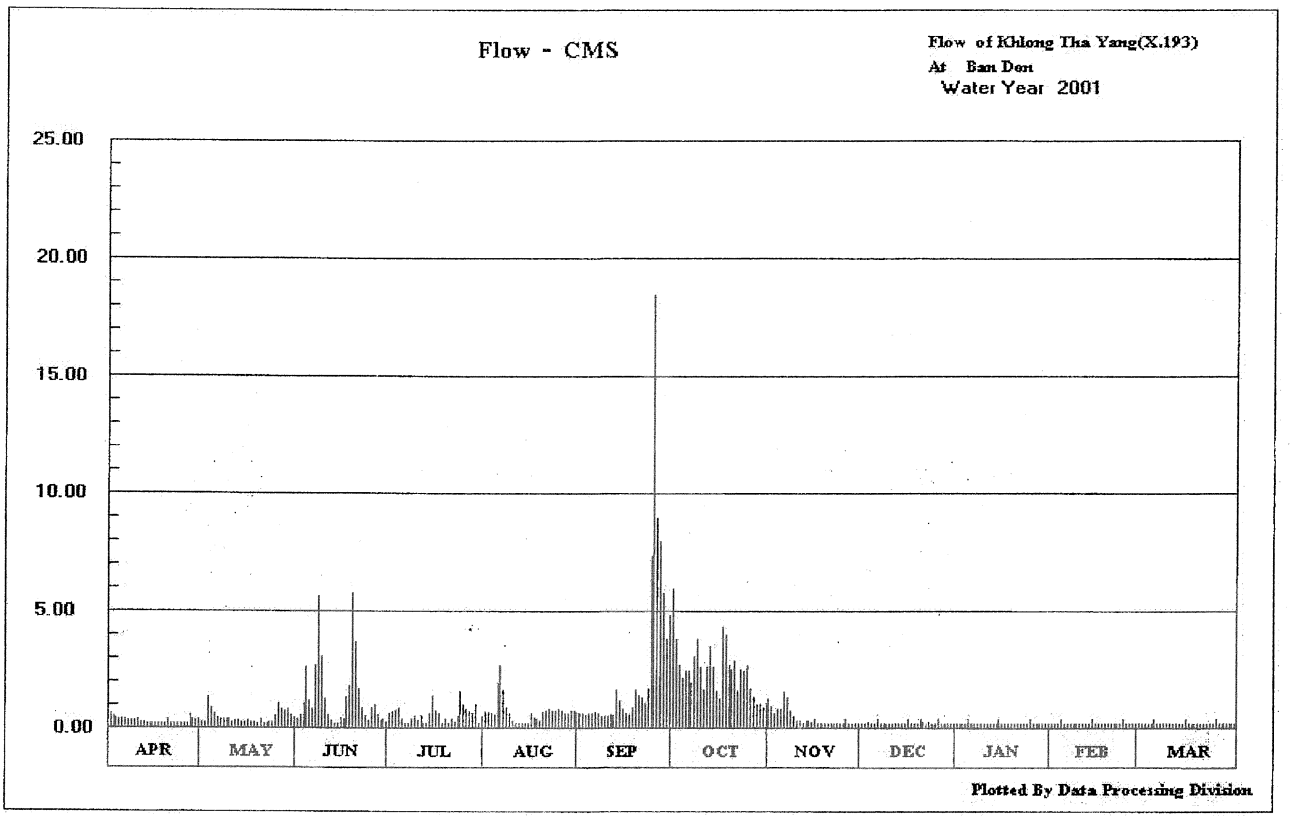
Lat 08 - 00 - 42 N **Long** 98 - 19 - 12 E.

Location		on right bank at the bridge.
	Ban Don	**Amphoe** Thalang **Changwat** Phuket
Drainage Area		15 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		-0.369 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On right bank about 6.00 meters from the top staff gage.
	Elevation	+3.524 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		1996 to date.
Rating Operation		
	Period of Rating	1996 to date.
	Rated by Float	-
	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 30 discharge measurements made in 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.45	1.37	1.41	1.45	1.46	1.45	1.90	1.54	1.34	1.24	1.02	1.03	
2	1.43	1.38	1.44	1.46	1.46	1.45	1.77	1.50	1.34	1.22	1.05	1.03	
3	1.42	1.55	1.52	1.47	1.45	1.44	1.70	1.45	1.36	1.18	1.06	1.03	
4	1.41	1.49	1.69	1.49	1.44	1.45	1.64	1.48	1.35	1.16	1.06	1.00	
5	1.41	1.45	1.53	1.41	1.62	1.45	1.67	1.48	1.35	1.18	1.05	1.00	
6	1.41	1.42	1.48	1.33	1.70	1.46	1.67	1.58	1.35	1.14	1.05	0.99	
7	1.40	1.41	1.70	1.26	1.59	1.45	1.62	1.55	1.33	1.13	1.07	0.99	
8	1.40	1.41	1.88	1.41	1.49	1.43	1.72	1.47	1.32	1.17	1.07	0.99	
9	1.39	1.41	1.72	1.43	1.45	1.43	1.77	1.43	1.31	1.17	1.07	0.98	
10	1.38	1.39	1.54	1.40	1.40	1.43	1.69	1.39	1.31	1.17	1.07	0.97	
11	1.38	1.38	1.44	1.43	1.30	1.44	1.59	1.40	1.31	1.17	1.07	0.96	
12	1.37	1.40	1.39	1.31	1.27	1.44	1.69	1.35	1.30	1.16	1.07	0.95	
13	1.35	1.39	1.28	1.30	1.26	1.59	1.75	1.39	1.30	1.16	1.07	0.92	
14	1.35	1.38	1.34	1.45	1.24	1.53	1.69	1.39	1.29	1.17	1.07	0.91	
15	1.35	1.37	1.42	1.56	1.21	1.48	1.58	1.38	1.30	1.17	1.07	0.87	
16	1.34	1.39	1.41	1.47	1.45	1.45	1.54	1.37	1.28	1.15	1.07	0.86	
17	1.33	1.38	1.55	1.45	1.42	1.44	1.80	1.34	1.29	1.15	1.06	0.86	
18	1.33	1.36	1.61	1.18	1.41	1.49	1.78	1.34	1.35	1.11	1.05	0.86	
19	1.32	1.33	1.89	1.18	1.39	1.59	1.70	1.32	1.34	1.10	1.05	0.86	
20	1.30	1.33	1.76	1.17	1.46	1.56	1.68	1.29	1.41	1.09	1.06	0.86	
21	1.29	1.34	1.60	1.41	1.47	1.55	1.71	1.27	1.37	1.09	1.05	0.86	
22	1.27	1.35	1.49	1.37	1.48	1.52	1.58	1.27	1.26	1.09	1.06	0.86	
23	1.25	1.36	1.43	1.43	1.47	1.60	1.68	1.25	1.38	1.08	1.05	0.87	
24	1.23	1.36	1.40	1.58	1.47	1.97	1.67	1.23	1.28	1.08	1.05	0.91	
25	1.26	1.43	1.49	1.51	1.48	2.34	1.70	1.21	1.09	1.05	1.05	0.98	
26	1.28	1.52	1.51	1.48	1.47	2.04	1.60	1.19	1.18	1.05	1.05	0.99	
27	1.44	1.48	1.44	1.46	1.45	2.00	1.55	1.18	1.18	1.05	1.05	1.00	
28	1.41	1.47	1.40	1.45	1.45	1.89	1.51	1.14	1.17	1.03	1.05	1.01	
29	1.40	1.48	1.39	1.51	1.47	1.77	1.51	1.35	1.20	1.03		1.01	
30	1.38	1.44	1.36	1.35	1.47	1.83	1.49	1.30	1.32	0.99		1.01	
31		1.42		1.43	1.46		1.52		1.28	0.98		1.00	
Mean	1.36	1.41	1.52	1.41	1.44	1.60	1.66	1.36	1.30	1.12	1.06	0.95	
Max	1.45	1.55	1.89	1.58	1.70	2.34	1.90	1.58	1.41	1.24	1.07	1.03	2.34
Min	1.23	1.33	1.28	1.17	1.21	1.43	1.49	1.14	1.09	0.98	1.02	0.86	0.86

Annual Max Momentary Gage Height 2.41 M (MSL), at 6.00 Hours, on Sep 25, 2001
Zero Gage at Bottom Elevation -0.37 M (MSL), River Bed 0.30 M (MSL)
Left Bank Elevation 3.66 M (MSL)
Right Bank Elevation 3.66 M (MSL), Drainage Area 15 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.70	0.34	0.46	0.70	0.76	0.70	6.00	1.32	0.28	0.08	0.00	0.00	
2	0.58	0.36	0.64	0.76	0.76	0.70	3.92	1.00	0.28	0.04	0.00	0.00	
3	0.52	1.40	1.16	0.82	0.70	0.64	2.80	0.70	0.32	0.00	0.00	0.00	
4	0.46	0.94	2.70	0.94	0.64	0.70	2.20	0.88	0.30	0.00	0.00	0.00	
5	0.46	0.70	1.24	0.46	2.00	0.70	2.50	0.88	0.30	0.00	0.00	0.00	
6	0.46	0.52	0.88	0.26	2.80	0.76	2.50	1.64	0.30	0.00	0.00	0.00	
7	0.40	0.46	2.80	0.12	1.72	0.70	2.00	1.40	0.26	0.00	0.00	0.00	
8	0.40	0.46	5.68	0.46	0.94	0.58	3.12	0.82	0.24	0.00	0.00	0.00	
9	0.38	0.46	3.12	0.58	0.70	0.58	3.92	0.58	0.22	0.00	0.00	0.00	
10	0.36	0.38	1.32	0.40	0.40	0.58	2.70	0.38	0.22	0.00	0.00	0.00	
11	0.36	0.36	0.64	0.58	0.20	0.64	1.72	0.40	0.22	0.00	0.00	0.00	
12	0.34	0.40	0.38	0.22	0.14	0.64	2.70	0.30	0.20	0.00	0.00	0.00	
13	0.30	0.38	0.16	0.20	0.12	1.72	3.60	0.38	0.20	0.00	0.00	0.00	
14	0.30	0.36	0.28	0.70	0.08	1.24	2.70	0.38	0.18	0.00	0.00	0.00	
15	0.30	0.34	0.52	1.48	0.02	0.88	1.64	0.36	0.20	0.00	0.00	0.00	
16	0.28	0.38	0.46	0.82	0.70	0.70	1.32	0.34	0.16	0.00	0.00	0.00	
17	0.26	0.36	1.40	0.70	0.52	0.64	4.40	0.28	0.18	0.00	0.00	0.00	
18	0.26	0.32	1.90	0.00	0.46	0.94	4.08	0.28	0.30	0.00	0.00	0.00	
19	0.24	0.26	5.84	0.00	0.38	1.72	2.80	0.24	0.28	0.00	0.00	0.00	
20	0.20	0.26	3.76	0.00	0.76	1.48	2.60	0.18	0.46	0.00	0.00	0.00	
21	0.18	0.28	1.80	0.46	0.82	1.40	2.96	0.14	0.34	0.00	0.00	0.00	
22	0.14	0.30	0.94	0.34	0.88	1.16	1.64	0.14	0.12	0.00	0.00	0.00	
23	0.10	0.32	0.58	0.58	0.82	1.80	2.60	0.10	0.36	0.00	0.00	0.00	
24	0.06	0.32	0.40	1.64	0.82	7.40	2.50	0.06	0.16	0.00	0.00	0.00	
25	0.12	0.58	0.94	1.08	0.88	18.52	2.80	0.02	0.00	0.00	0.00	0.00	
26	0.16	1.16	1.08	0.88	0.82	9.04	1.80	0.00	0.00	0.00	0.00	0.00	
27	0.64	0.88	0.64	0.76	0.70	8.00	1.40	0.00	0.00	0.00	0.00	0.00	
28	0.46	0.82	0.40	0.70	0.70	5.84	1.08	0.00	0.00	0.00	0.00	0.00	
29	0.40	0.88	0.38	1.08	0.82	3.92	1.08	0.30	0.00	0.00		0.00	
30	0.36	0.64	0.32	0.30	0.82	4.88	0.94	0.20	0.24	0.00		0.00	
31		0.52		0.58	0.76		1.16		0.16	0.00		0.00	
Total	10.18	16.14	42.82	18.60	23.64	79.20	79.18	13.70	6.48	0.12	0.00	0.00	290.06 CMSDAY
Mean	0.34	0.52	1.43	0.60	0.76	2.64	2.55	0.46	0.21	0.00	0.00	0.00	0.79 CMS
Max	0.70	1.40	5.84	1.64	2.80	18.52	6.00	1.64	0.46	0.08	0.00	0.00	18.52 CMS
Min	0.06	0.26	0.16	0.00	0.02	0.58	0.94	0.00	0.00	0.00	0.00	0.00	0.00 CMS
Runoff	0.880	1.394	3.700	1.607	2.042	6.843	6.841	1.184	0.560	0.010	0.000	0.000	25.061 MCM

Momentary Peak 21.22 CMS, at 2.41 M (MSL), at 6.00 Hours, on Sep 25, 2001

Runoff Yield 52.49 Liters/Second/Square KM, Momentary Peak Yield 1401.585 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Tapi River at Ban Tha Pho, Nakhon Si Thammarat (X.195)

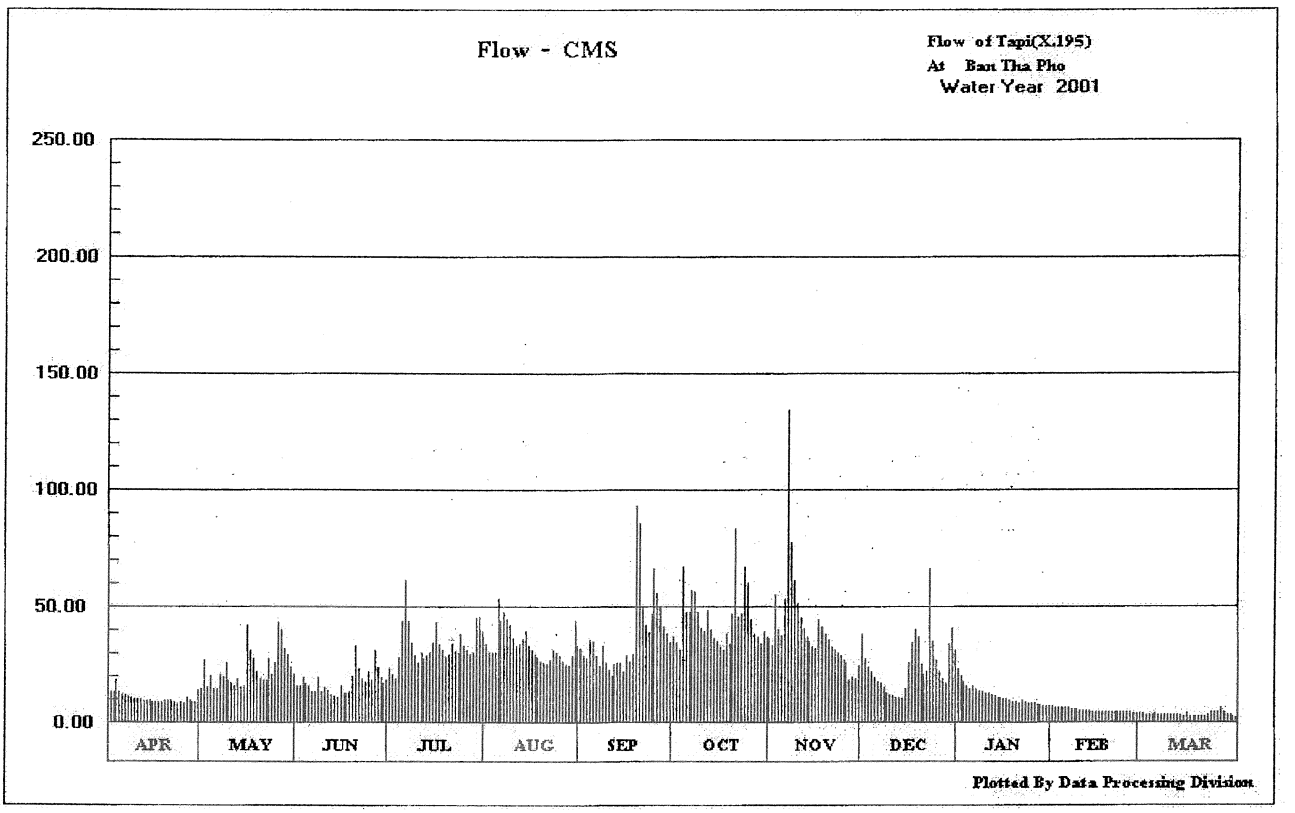
Lat 08 - 30 - 24 N. **Long** 99 - 30 - 39 E.

Location		on right bank at the bridge.			
	Ban Tha Pho	**Amphoe** Chawang		**Changwat** Nakhon Si thammarat	
Drainage 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 5.00 meters from the top staff gage.			
	Elevation	+8.277 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		1998 to date.			
Rating Operation					
	Period of Rating	1998 to date.			
	Rated by Float	-			
	Rated by Current Meter	1998 to date.			
Stability of Channel Regimes		Stable.			
Overbank Flow Conditions		No overbank flow.			
General Description		Records fair. Stage-discharge relation defined by 74 discharge measurements made in 2001.			

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.78	1.82	1.85	2.02	2.27	2.23	2.35	2.33	2.38	2.03	1.54	1.42	
2	1.77	2.11	1.84	1.97	2.19	2.15	2.28	2.26	2.12	1.95	1.53	1.42	
3	1.90	1.83	1.94	1.92	2.18	2.13	2.22	2.71	2.04	1.89	1.53	1.41	
4	1.78	1.95	1.87	2.14	2.19	2.31	2.94	2.42	2.00	1.85	1.52	1.41	
5	1.74	1.81	1.85	2.49	2.67	2.30	2.57	2.36	1.94	1.81	1.52	1.41	
6	1.73	1.82	1.79	2.83	2.49	2.15	2.57	2.67	1.89	1.84	1.52	1.41	
7	1.70	1.97	1.79	2.49	2.57	2.05	2.75	4.03	1.87	1.82	1.50	1.40	
8	1.69	1.94	1.93	2.28	2.50	2.26	2.73	3.13	1.83	1.77	1.50	1.40	
9	1.67	2.08	1.79	2.16	2.46	2.08	2.57	2.83	1.76	1.77	1.49	1.39	
10	1.66	1.90	1.83	2.08	2.33	2.01	2.43	2.64	1.73	1.75	1.48	1.38	
11	1.66	1.88	1.80	2.19	2.26	1.95	2.40	2.52	1.71	1.75	1.48	1.37	
12	1.65	1.84	1.74	2.13	2.27	2.07	2.58	2.43	1.70	1.73	1.48	1.37	
13	1.64	1.92	1.72	2.15	2.33	2.08	2.42	2.35	1.69	1.71	1.47	1.37	
14	1.64	1.83	1.68	2.18	2.40	2.08	2.33	2.30	1.67	1.70	1.46	1.37	
15	1.63	1.84	1.85	2.29	2.26	2.00	2.30	2.25	1.81	1.69	1.46	1.36	
16	1.63	2.46	1.76	2.48	2.22	2.16	2.24	2.23	2.08	1.67	1.45	1.36	
17	1.63	2.22	1.75	2.27	2.17	2.09	2.22	2.51	2.29	1.66	1.45	1.36	
18	1.62	2.12	1.78	2.22	2.14	2.17	2.37	2.44	2.42	1.65	1.45	1.36	
19	1.64	2.00	1.95	2.14	2.10	3.40	2.27	2.38	2.34	1.63	1.45	1.36	
20	1.65	1.92	2.26	2.17	2.08	3.27	2.56	2.32	2.07	1.63	1.45	1.36	
21	1.65	1.91	2.03	2.27	2.06	2.61	3.23	2.24	1.97	1.61	1.45	1.35	
22	1.63	1.91	1.92	2.20	2.11	2.46	2.53	2.21	2.00	1.65	1.45	1.36	
23	1.61	2.12	1.89	2.19	2.22	2.39	2.55	2.19	2.92	1.63	1.45	1.41	
24	1.62	1.96	2.00	2.37	2.18	2.56	2.94	2.15	2.30	1.60	1.44	1.45	
25	1.61	2.08	1.90	2.26	2.15	2.93	2.81	2.11	2.11	1.59	1.44	1.44	
26	1.69	2.48	2.21	2.21	2.10	2.72	2.50	2.08	2.00	1.60	1.44	1.44	
27	1.64	2.42	2.04	2.17	2.06	2.61	2.37	1.90	1.92	1.57	1.43	1.52	
28	1.63	2.23	1.94	2.18	2.05	2.44	2.34	1.93	1.87	1.57	1.43	1.44	
29	1.62	2.17	1.88	2.52	2.16	2.38	2.27	1.92	2.27	1.55		1.40	
30	1.80	2.04	1.91	2.53	2.49	2.29	2.41	2.05	2.43	1.55		1.38	
31		1.96		2.41	2.26		2.34		2.22	1.54		1.36	
Mean	1.68	2.02	1.88	2.26	2.26	2.34	2.50	2.40	2.04	1.70	1.47	1.39	
Max	1.90	2.48	2.26	2.83	2.67	3.40	3.23	4.03	2.92	2.03	1.54	1.52	4.03
Min	1.61	1.81	1.68	1.92	2.05	1.95	2.22	1.90	1.67	1.54	1.43	1.35	1.35

Annual Max Momentary Gage Height 4.27 M (A.D), at 9.00 Hours, on Nov 7, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed 0.50 M (A.D)
Left Bank Elevation 8.66 M (A.D)
Right Bank Elevation 8.66 M (A.D), Drainage Area 480 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.95	15.35	16.63	23.85	34.47	32.77	37.87	37.02	39.15	24.27	7.50	4.50	
2	13.68	27.67	16.20	21.73	31.07	29.38	34.90	34.05	28.10	20.88	7.25	4.50	
3	18.75	15.78	20.45	19.60	30.65	28.53	32.35	55.78	24.70	18.32	7.25	4.25	
4	13.95	20.88	17.48	28.95	31.07	36.17	67.85	41.00	23.00	16.63	7.00	4.25	
5	12.85	14.92	16.63	44.50	53.68	35.75	48.50	38.30	20.45	14.92	7.00	4.25	
6	12.58	15.35	14.23	62.07	44.50	29.38	48.50	53.68	18.32	16.20	7.00	4.25	
7	11.75	21.73	14.23	44.50	48.50	25.12	57.88	135.10	17.48	15.35	6.50	4.00	
8	11.48	20.45	20.02	34.90	45.00	34.05	56.83	78.15	15.78	13.68	6.50	4.00	
9	10.92	26.40	14.23	29.80	43.00	26.40	48.50	62.07	13.40	13.68	6.25	3.90	
10	10.65	18.75	15.78	26.40	37.02	23.42	41.50	52.10	12.58	13.13	6.00	3.80	
11	10.65	17.90	14.50	31.07	34.05	20.88	40.00	46.00	12.03	13.13	6.00	3.70	
12	10.37	16.20	12.85	28.53	34.47	25.97	49.00	41.50	11.75	12.58	6.00	3.70	
13	10.10	19.60	12.30	29.38	37.02	26.40	41.00	37.87	11.48	12.03	5.75	3.70	
14	10.10	15.78	11.20	30.65	40.00	26.40	37.02	35.75	10.92	11.75	5.50	3.70	
15	9.82	16.20	16.63	35.32	34.05	23.00	35.75	33.62	14.92	11.48	5.50	3.60	
16	9.82	43.00	13.40	44.00	32.35	29.80	33.20	32.77	26.40	10.92	5.25	3.60	
17	9.82	32.35	13.13	34.47	30.23	26.82	32.35	45.50	35.32	10.65	5.25	3.60	
18	9.55	28.10	13.95	32.35	28.95	30.23	38.72	42.00	41.00	10.37	5.25	3.60	
19	10.10	23.00	20.88	28.95	27.25	94.00	34.47	39.15	37.45	9.82	5.25	3.60	
20	10.37	19.60	34.05	30.23	26.40	86.20	48.00	36.60	25.97	9.82	5.25	3.60	
21	10.37	19.17	24.27	34.47	25.55	50.52	83.80	33.20	21.73	9.27	5.25	3.50	
22	9.82	19.17	19.60	31.50	27.67	43.00	46.50	31.92	23.00	10.37	5.25	3.60	
23	9.27	28.10	18.32	31.07	32.35	39.58	47.50	31.07	66.80	9.82	5.25	4.25	
24	9.55	21.30	23.00	38.72	30.65	48.00	67.85	29.38	35.75	9.00	5.00	5.25	
25	9.27	26.40	18.75	34.05	29.38	67.33	61.03	27.67	27.67	8.75	5.00	5.00	
26	11.48	44.00	31.92	31.92	27.25	56.30	45.00	26.40	23.00	9.00	5.00	5.00	
27	10.10	41.00	24.70	30.23	25.55	50.52	38.72	18.75	19.60	8.25	4.75	7.00	
28	9.82	32.77	20.45	30.65	25.12	42.00	37.45	20.02	17.48	8.25	4.75	5.00	
29	9.55	30.23	17.90	46.00	29.80	39.15	34.47	19.60	34.47	7.75		4.00	
30	14.50	24.70	19.17	46.50	44.50	35.32	40.50	25.12	41.50	7.75		3.80	
31		21.30		40.50	34.05		37.45		32.35	7.50		3.60	
Total	334.99	737.15	546.85	1056.86	1055.60	1162.39	1404.46	1241.14	783.55	375.32	163.50	128.10	8989.91 CMSDAY
Mean	11.17	23.78	18.23	34.09	34.05	38.75	45.31	41.37	25.28	12.11	5.84	4.13	24.63 CMS
Max	18.75	44.00	34.05	62.07	53.68	94.00	83.80	135.10	66.80	24.27	7.50	7.00	135.10 CMS
Min	9.27	14.92	11.20	19.60	25.12	20.88	32.35	18.75	10.92	7.50	4.75	3.50	3.50 CMS
Runoff	28.943	63.690	47.248	91.313	91.204	100.430	121.345	107.234	67.699	32.428	14.126	11.068	776.728 MCM

Momentary Peak 152.25 CMS, at 4.27 H (A.D), at 9.00 Hours, on Nov 7, 2001

Runoff Yield 51.31 Liters/Second/Square KM, Momentary Peak Yield 317.188 Liters/Second/Square KM

WATER YEAR : 2001

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

Drainage Area 1,572 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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Stable.

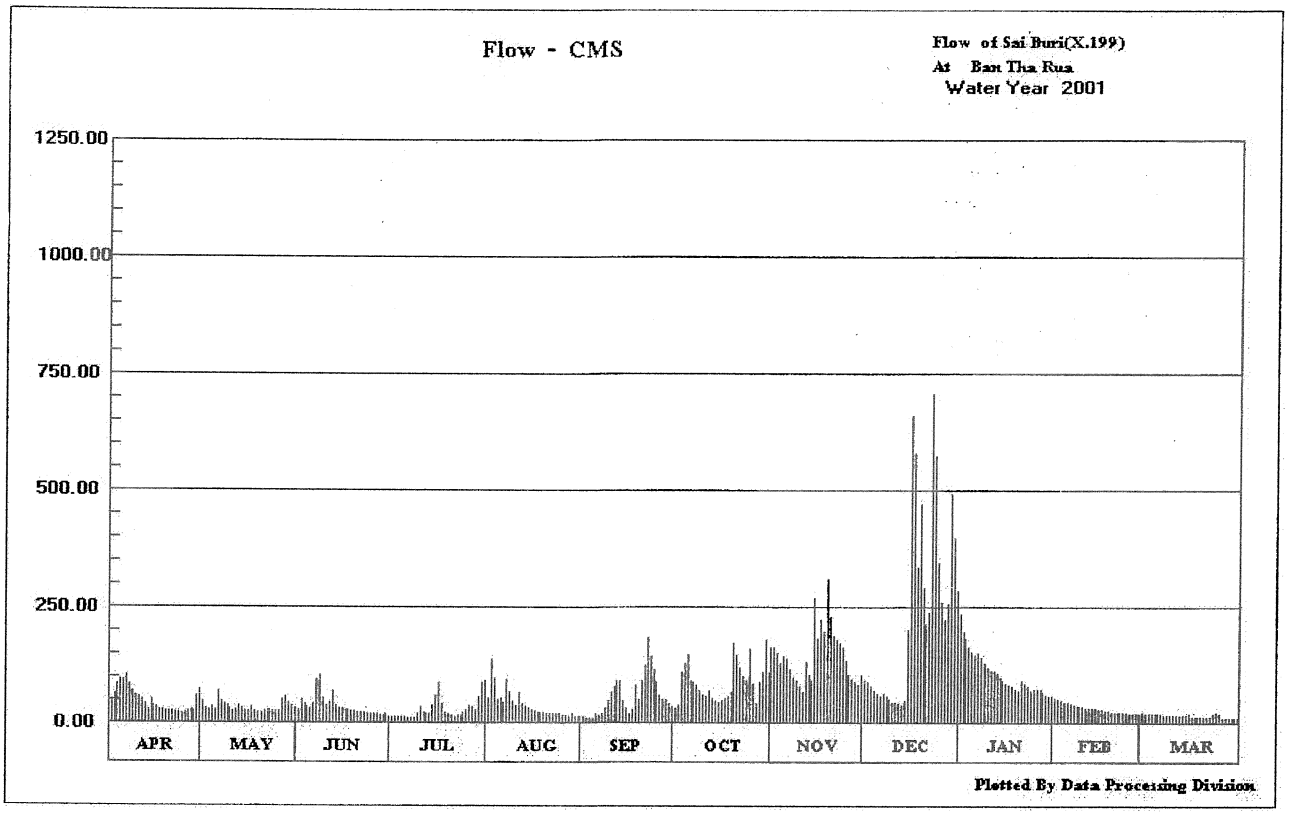
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.24	3.22	3.02	2.80	3.29	2.76	3.05	4.26	3.63	4.80	3.29	2.90	
2	3.37	3.04	3.25	2.78	4.04	2.74	3.13	4.25	3.60	4.53	3.25	2.86	
3	3.57	2.99	3.16	2.77	3.69	2.73	3.80	4.14	3.52	4.41	3.23	2.86	
4	3.67	3.10	3.10	2.76	3.26	2.71	3.98	3.98	3.44	4.26	3.21	2.85	
5	3.68	3.00	3.04	2.75	3.28	2.86	4.12	4.09	3.37	4.19	3.18	2.85	
6	3.75	3.44	3.17	2.74	3.20	2.83	3.63	4.06	3.33	4.12	3.15	2.85	
7	3.57	3.22	3.66	2.73	3.67	2.86	3.62	3.87	3.38	4.15	3.12	2.85	
8	3.43	3.16	3.77	2.72	3.41	3.03	3.54	3.70	3.31	4.08	3.09	2.84	
9	3.35	3.14	3.29	2.71	3.24	3.24	3.44	3.63	3.25	3.97	3.08	2.84	
10	3.31	3.04	3.14	3.10	3.14	3.40	3.34	3.53	3.21	3.88	3.07	2.84	
11	3.27	2.97	3.21	2.91	3.42	3.51	3.31	3.40	3.19	3.83	3.06	2.82	
12	3.17	3.02	3.45	2.85	3.16	3.63	3.43	3.99	3.15	3.84	3.06	2.82	
13	3.02	3.14	3.12	2.88	3.09	3.63	3.29	3.77	3.14	3.79	3.06	2.82	
14	3.27	3.05	3.04	3.11	3.05	3.22	3.22	3.63	3.23	3.71	3.05	2.81	
15	3.12	2.97	3.03	3.34	3.00	3.03	3.20	5.04	4.54	3.65	3.02	2.81	
16	3.08	2.94	3.00	3.61	2.94	2.89	3.23	4.41	7.04	3.59	3.00	2.80	
17	3.02	3.07	2.99	3.15	2.93	3.02	3.30	4.70	6.69	3.54	2.98	2.80	
18	2.99	2.95	2.97	2.93	2.92	3.56	3.33	4.51	5.45	3.51	2.94	2.80	
19	2.97	2.92	2.95	2.86	2.90	3.26	3.41	5.30	6.17	3.47	2.93	2.80	
20	2.95	2.91	2.93	2.83	2.87	3.63	4.34	4.75	5.17	3.43	2.91	2.80	
21	2.95	2.94	2.91	2.80	2.88	3.95	4.12	4.46	4.64	3.65	2.91	2.80	
22	2.93	3.00	2.90	2.81	2.87	4.43	3.88	4.38	4.82	3.57	2.92	2.79	
23	2.91	3.00	2.89	2.83	2.86	4.10	3.73	4.33	7.24	3.51	2.93	2.79	
24	2.89	2.98	2.87	2.93	2.85	3.87	3.63	4.25	6.67	3.45	2.90	2.86	
25	2.93	2.96	2.86	3.00	2.84	3.62	4.23	4.02	5.51	3.48	2.89	2.92	
26	2.95	2.96	2.87	3.13	2.81	3.36	3.57	3.77	4.96	3.46	2.88	2.80	
27	3.00	3.25	2.84	3.08	2.80	3.25	3.15	3.67	4.69	3.46	2.88	2.74	
28	2.98	3.32	2.83	3.02	2.78	3.27	3.62	3.61	4.94	3.40	2.87	2.72	
29	3.36	3.19	2.81	3.32	2.77	3.16	3.82	3.55	6.28	3.34		2.69	
30	3.47	3.13	2.79	3.62	2.77	3.09	4.37	3.77	5.80	3.33		2.67	
31		3.05		3.64	2.78		3.80		5.13	3.33		2.66	
Mean	3.21	3.07	3.06	2.98	3.08	3.29	3.60	4.09	4.60	3.77	3.03	2.81	
Max	3.75	3.44	3.77	3.64	4.04	4.43	4.37	5.30	7.24	4.80	3.29	2.92	7.24
Min	2.89	2.91	2.79	2.71	2.77	2.71	3.05	3.40	3.14	3.33	2.87	2.66	2.66

Annual Max Momentary Gage Height 7.90 M (A.D), at 18.00 Hours, on Dec 23, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.56 M (A.D)
Left Bank Elevation 14.21 M (A.D)
Right Bank Elevation 13.25 M (A.D), Drainage Area 1572 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	52.20	50.10	33.60	18.00	57.45	16.00	36.00	167.50	93.73	240.00	57.45	25.00	
2	65.85	35.20	53.25	17.00	140.80	15.00	42.40	166.25	90.50	202.55	53.25	22.20	
3	87.27	31.30	44.80	16.50	100.18	14.50	112.00	152.80	81.90	186.35	51.15	22.20	
4	98.03	40.00	40.00	16.00	54.30	13.50	133.60	133.60	73.30	167.50	49.05	21.50	
5	99.10	32.00	35.20	15.50	56.40	22.20	150.40	146.80	65.85	158.80	46.40	21.50	
6	106.63	73.30	45.60	15.00	48.00	20.10	93.73	143.20	61.65	150.40	44.00	21.50	
7	87.27	50.10	96.95	14.50	98.03	22.20	92.65	120.40	66.90	154.00	41.60	21.50	
8	72.22	44.80	108.77	14.00	70.07	34.40	84.05	101.25	59.55	145.60	39.20	20.80	
9	63.75	43.20	57.45	13.50	52.20	52.20	73.30	93.73	53.25	132.40	38.40	20.80	
10	59.55	35.20	43.20	40.00	43.20	69.00	62.70	82.97	49.05	121.60	37.60	20.80	
11	55.35	29.90	49.05	25.70	71.15	80.82	59.55	69.00	47.20	115.60	36.80	19.40	
12	45.60	33.60	74.37	21.50	44.80	93.73	72.22	134.80	44.00	116.80	36.80	19.40	
13	33.60	43.20	41.60	23.60	39.20	93.73	57.45	108.77	43.20	110.93	36.80	19.40	
14	55.35	36.00	35.20	40.80	36.00	50.10	50.10	93.73	51.15	102.33	36.00	18.70	
15	41.60	29.90	34.40	62.70	32.00	34.40	48.00	274.20	203.90	95.88	33.60	18.70	
16	38.40	27.80	32.00	91.57	27.80	24.30	51.15	186.35	662.40	89.42	32.00	18.00	
17	33.60	37.60	31.30	44.00	27.10	33.60	58.50	226.00	581.80	84.05	30.60	18.00	
18	31.30	28.50	29.90	27.10	26.40	86.20	61.65	199.85	339.25	80.82	27.80	18.00	
19	29.90	26.40	28.50	22.20	25.00	54.30	70.07	315.00	473.00	76.52	27.10	18.00	
20	28.50	25.70	27.10	20.10	22.90	93.73	177.50	233.00	294.35	72.22	25.70	18.00	
21	28.50	27.80	25.70	18.00	23.60	130.00	150.40	193.10	217.60	95.88	25.70	18.00	
22	27.10	32.00	25.00	18.70	22.90	189.05	121.60	182.50	242.80	87.27	26.40	17.50	
23	25.70	32.00	24.30	20.10	22.20	148.00	104.48	176.25	709.60	80.82	27.10	17.50	
24	24.30	30.60	22.90	27.10	21.50	120.40	93.73	166.25	577.40	74.37	25.00	22.20	
25	27.10	29.20	22.20	32.00	20.80	92.65	163.75	138.40	349.15	77.60	24.30	26.40	
26	28.50	29.20	22.90	42.40	18.70	64.80	87.27	108.77	262.40	75.45	23.60	18.00	
27	32.00	53.25	20.80	38.40	18.00	53.25	44.00	98.03	224.60	75.45	23.60	15.00	
28	30.60	60.60	20.10	33.60	17.00	55.35	92.65	91.57	259.60	69.00	22.90	14.00	
29	64.80	47.20	18.70	60.60	16.50	44.80	114.40	85.12	495.40	62.70		12.50	
30	76.52	42.40	17.50	92.65	16.50	39.20	181.25	108.77	400.00	61.65		11.50	
31		36.00		94.80	17.00		112.00		288.15	61.65		11.00	
Total	1550.19	1174.05	1162.34	1037.62	1287.68	1861.51	2852.55	4497.96	7462.63	3425.61	979.90	587.00	27879.04 CMSDAY
Mean	51.67	37.87	38.74	33.47	41.54	62.05	92.02	149.93	240.73	110.50	35.00	18.94	76.38 CMS
Max	106.63	73.30	108.77	94.80	140.80	189.05	181.25	315.00	709.60	240.00	57.45	26.40	709.60 CMS
Min	24.30	25.70	17.50	13.50	16.50	13.50	36.00	69.00	43.20	61.65	22.90	11.00	11.00 CMS
Runoff	133.936	101.438	100.426	89.650	111.256	160.834	246.460	388.624	644.771	295.973	84.663	50.717	2408.749 MCM

Momentary Peak 874.00 CMS, at 7.90 M (A.D), at 18.00 Hours, on Dec 23, 2001

Runoff Yield 48.59 Liters/Second/Square KM, Momentary Peak Yield 555.980 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Thadee at Ban Na Pa, Nakhon Si Thammarat (X.203)

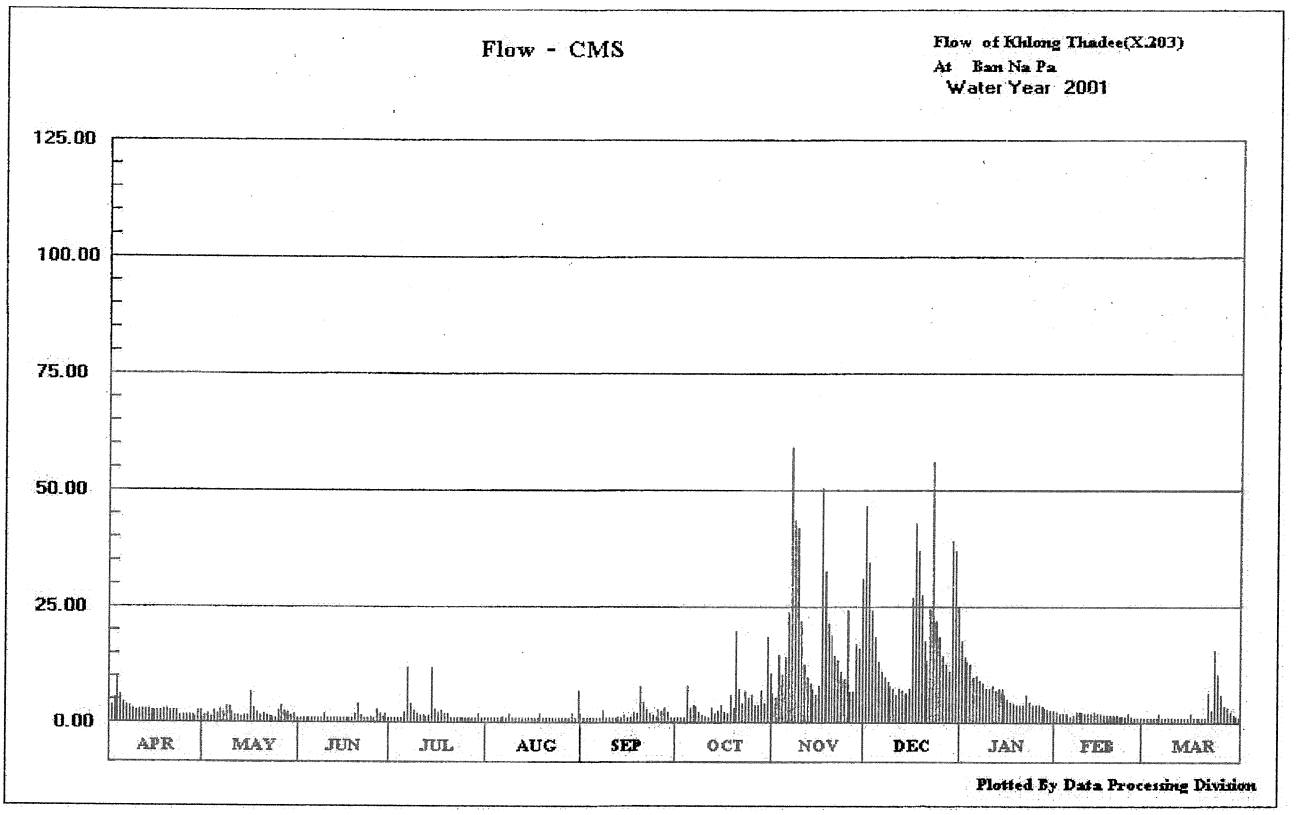
Lat 08 - 23 - 39 N. **Long** 99 - 54 - 55 E.

Location		on left bank at Ban Na Pa.
	Ban Na Pa	**Amphoe** Mueang **Changwat** Nakhon Si Thammarat
Drainage Area		120 sq.km.
Type of Gage		Staff gage.
Zero Gage at Bottom		+0.000 m. (M.S.L.)
Bench Mark		B.M.- H.D.
	Location BM	On left bank at Ban Na Pa.
	Elevation	+12.303 m. (M.S.L.)
Gage Reading Frequency		5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height		Arithmetic mean of 5 readings.
Period of Available Gage Records		2000 to date.
Rating Operation		
	Period of Rating	2000 to date.
	Rated by Float	-
	Rated by Current Meter	2000 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 2001.

Gage Height in Meter (MSL), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.56	8.26	8.10	8.10	8.10	8.17	8.11	8.78	10.57	9.60	8.34	8.19	
2	8.70	8.32	8.10	8.14	8.10	8.14	8.10	8.71	10.28	9.39	8.30	8.10	
3	9.04	8.24	8.10	8.11	8.10	8.10	8.12	9.44	9.92	9.33	8.29	8.10	
4	8.76	8.37	8.13	8.16	8.11	8.10	8.89	9.09	9.64	9.27	8.26	8.10	
5	8.62	8.29	8.10	8.35	8.10	8.10	8.48	9.40	9.32	9.06	8.22	8.10	
6	8.55	8.43	8.10	9.23	8.21	8.10	8.54	9.91	9.16	9.07	8.26	8.10	
7	8.52	8.36	8.10	8.60	8.11	8.41	8.51	10.74	9.06	9.01	8.35	8.10	
8	8.44	8.52	8.20	8.40	8.10	8.16	8.36	10.50	8.97	8.94	8.34	8.10	
9	8.38	8.52	8.22	8.30	8.10	8.13	8.28	10.47	8.89	8.86	8.35	8.10	
10	8.44	8.35	8.12	8.26	8.10	8.10	8.23	9.82	8.85	8.86	8.30	8.10	
11	8.42	8.27	8.11	8.25	8.10	8.10	8.20	9.27	8.75	8.90	8.29	8.10	
12	8.42	8.26	8.10	8.21	8.10	8.23	8.46	9.05	8.85	8.82	8.30	8.10	
13	8.42	8.24	8.10	8.26	8.10	8.18	8.30	8.95	8.82	8.84	8.34	8.10	
14	8.41	8.25	8.10	9.23	8.15	8.26	8.38	8.86	8.78	8.85	8.31	8.10	
15	8.40	8.28	8.10	8.44	8.11	8.15	8.56	8.74	8.86	8.74	8.30	8.10	
16	8.40	8.79	8.10	8.35	8.10	8.24	8.34	8.90	10.04	8.68	8.28	8.10	
17	8.40	8.49	8.12	8.37	8.10	8.34	8.32	10.63	10.49	8.62	8.28	8.10	
18	8.42	8.33	8.10	8.29	8.10	8.30	8.74	10.23	10.35	8.59	8.28	8.10	
19	8.42	8.27	8.10	8.24	8.10	8.89	8.47	9.78	10.06	8.55	8.25	8.10	
20	8.41	8.25	8.60	8.20	8.10	8.62	9.70	9.66	9.60	8.55	8.25	8.10	
21	8.40	8.25	8.28	8.19	8.10	8.43	8.86	9.41	9.35	8.55	8.24	8.10	
22	8.40	8.24	8.17	8.12	8.10	8.31	8.59	9.36	9.94	8.75	8.24	8.77	
23	8.27	8.22	8.10	8.10	8.10	8.26	8.80	9.16	10.70	8.62	8.24	8.38	
24	8.28	8.20	8.23	8.10	8.10	8.23	8.70	9.02	9.82	8.56	8.23	9.49	
25	8.25	8.39	8.20	8.10	8.10	8.44	8.74	9.93	9.65	8.55	8.22	9.09	
26	8.25	8.54	8.45	8.10	8.10	8.40	8.55	8.81	9.42	8.57	8.19	8.75	
27	8.25	8.38	8.30	8.10	8.10	8.46	8.56	8.79	9.27	8.52	8.19	8.53	
28	8.24	8.33	8.21	8.10	8.10	8.33	8.82	9.56	9.16	8.47	8.18	8.48	
29	8.37	8.28	8.17	8.10	8.11	8.20	8.59	9.50	10.41	8.44		8.36	
30	8.37	8.10	8.12	8.10	8.82	8.19	9.64	10.18	10.35	8.40		8.27	
31		8.10		8.10	8.32		9.12		9.96	8.37		8.24	
Mean	8.44	8.33	8.17	8.28	8.14	8.27	8.58	9.49	9.59	8.78	8.27	8.28	
Max	9.04	8.79	8.60	9.23	8.82	8.89	9.70	10.74	10.70	9.60	8.35	9.49	10.74
Min	8.24	8.10	8.10	8.10	8.10	8.10	8.10	8.71	8.75	8.37	8.18	8.10	8.10

Annual Max Momentary Gage Height 10.95 M (MSL), at 18.00 Hours, on Dec 9, 2001
Zero Gage at Bottom Elevation 0.00 M (MSL), River Bed 7.88 M (MSL)
Left Bank Elevation 12.48 M (MSL)
Right Bank Elevation 12.44 M (MSL), Drainage Area 120 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.20	1.95	1.00	1.00	1.00	1.35	1.05	6.75	47.07	18.00	2.55	1.45	
2	5.75	2.40	1.00	1.20	1.00	1.20	1.00	5.87	34.80	14.38	2.25	1.00	
3	10.00	1.80	1.00	1.05	1.00	1.00	1.10	15.20	24.40	13.63	2.18	1.00	
4	6.50	2.77	1.15	1.30	1.05	1.00	8.13	10.63	18.80	12.88	1.95	1.00	
5	4.75	2.18	1.00	2.63	1.00	1.00	3.60	14.50	13.50	10.25	1.65	1.00	
6	4.12	3.23	1.00	12.37	1.58	1.00	4.05	24.20	11.50	10.37	1.95	1.00	
7	3.90	2.70	1.00	4.50	1.05	3.07	3.82	59.35	10.25	9.63	2.63	1.00	
8	3.30	3.90	1.50	3.00	1.00	1.30	2.70	43.75	9.13	8.75	2.55	1.00	
9	2.85	3.90	1.65	2.25	1.00	1.15	2.10	42.33	8.13	7.75	2.63	1.00	
10	3.30	2.63	1.10	1.95	1.00	1.00	1.72	22.40	7.63	7.75	2.25	1.00	
11	3.15	2.03	1.05	1.88	1.00	1.00	1.50	12.88	6.37	8.25	2.18	1.00	
12	3.15	1.95	1.00	1.58	1.00	1.72	3.45	10.13	7.63	7.25	2.25	1.00	
13	3.15	1.80	1.00	1.95	1.00	1.40	2.25	8.87	7.25	7.50	2.55	1.00	
14	3.07	1.88	1.00	12.37	1.25	1.95	2.85	7.75	6.75	7.63	2.33	1.00	
15	3.00	2.10	1.00	3.30	1.05	1.25	4.20	6.25	7.75	6.25	2.25	1.00	
16	3.00	6.87	1.00	2.63	1.00	1.80	2.55	8.25	27.20	5.50	2.10	1.00	
17	3.00	3.67	1.10	2.77	1.00	2.55	2.40	50.82	43.27	4.75	2.10	1.00	
18	3.15	2.47	1.00	2.18	1.00	2.25	6.25	33.05	37.25	4.42	2.10	1.00	
19	3.15	2.03	1.00	1.80	1.00	8.13	3.53	21.60	27.80	4.12	1.88	1.00	
20	3.07	1.88	4.50	1.50	1.00	4.75	20.00	19.20	18.00	4.12	1.88	1.00	
21	3.00	1.88	2.10	1.45	1.00	3.23	7.75	14.68	13.88	4.12	1.80	1.00	
22	3.00	1.80	1.35	1.10	1.00	2.33	4.42	14.00	24.80	6.37	1.80	6.63	
23	2.03	1.65	1.00	1.00	1.00	1.95	7.00	11.50	56.25	4.75	1.80	2.85	
24	2.10	1.50	1.72	1.00	1.00	1.72	5.75	9.75	22.40	4.20	1.72	16.07	
25	1.88	2.93	1.50	1.00	1.00	3.30	6.25	24.60	19.00	4.12	1.65	10.63	
26	1.88	4.05	3.37	1.00	1.00	3.00	4.12	7.13	14.85	4.27	1.45	6.37	
27	1.88	2.85	2.25	1.00	1.00	3.45	4.20	6.87	12.88	3.90	1.45	3.97	
28	1.80	2.47	1.58	1.00	1.00	2.47	7.25	17.30	11.50	3.53	1.40	3.60	
29	2.77	2.10	1.35	1.00	1.05	1.50	4.42	16.25	39.48	3.30		2.70	
30	2.77	1.00	1.10	1.00	7.25	1.45	18.80	31.40	37.25	3.00		2.03	
31		1.00		1.00	2.40		11.00		25.20	2.77		1.80	
Total	102.67	77.37	42.37	74.76	39.68	64.27	159.21	577.26	651.97	217.51	57.28	78.10	2142.45 CMSDAY
Mean	3.42	2.50	1.41	2.41	1.28	2.14	5.14	19.24	21.03	7.02	2.05	2.52	5.87 CMS
Max	10.00	6.87	4.50	12.37	7.25	8.13	20.00	59.35	56.25	18.00	2.63	16.07	59.35 CMS
Min	1.80	1.00	1.00	1.00	1.00	1.00	1.00	5.87	6.37	2.77	1.40	1.00	1.00 CMS
Runoff	8.871	6.685	3.661	6.459	3.428	5.553	13.756	49.875	56.330	18.793	4.949	6.748	185.108 MCM

Momentary Peak 80.50 CMS, at 10.95 M (MSL), at 18.00 Hours, on Dec 9, 2001

Runoff Yield 48.91 Liters/Second/Square KM, Momentary Peak Yield 670.833 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Lower Khlong Lamae at Ban Thung Luang, Chumphon (X.214)

Lat 09 - 46 - 07 N. **Long** 99 - 05 - 00 E.

Location on left bank at the highway bridge, Tambon Thung Luang.

Ban Thung Luang **Amphoe** Lamae **Changwat** Chumphon

Drainage 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 2.00 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 mean of 5 readings.

Period of Available Gage Records 1999 to date.

Rating Operation

Period of Rating 1999 to date.

Rated by Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Stable.

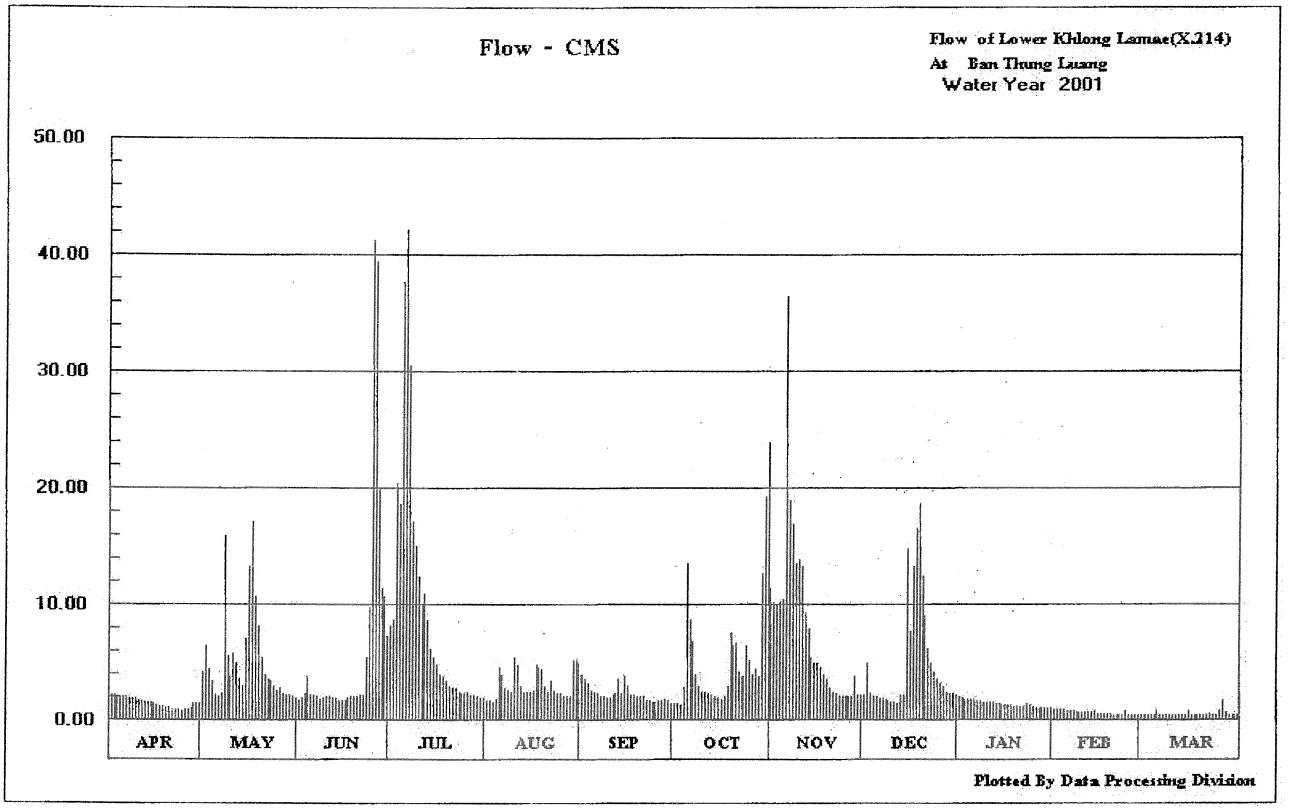
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.37	0.49	0.30	0.68	0.30	0.48	0.25	0.82	0.36	0.35	0.18	0.07	
2	0.36	0.60	0.33	0.70	0.29	0.46	0.25	0.77	0.53	0.33	0.18	0.07	
3	0.35	0.50	0.39	1.10	0.28	0.44	0.24	0.76	0.38	0.31	0.17	0.07	
4	0.34	0.45	0.47	1.05	0.31	0.41	0.42	0.77	0.35	0.31	0.17	0.06	
5	0.34	0.36	0.37	1.56	0.51	0.40	0.89	0.78	0.34	0.31	0.16	0.06	
6	0.34	0.35	0.36	1.66	0.48	0.39	0.70	1.53	0.33	0.30	0.16	0.06	
7	0.33	0.38	0.34	1.39	0.42	0.34	0.62	1.06	0.32	0.30	0.15	0.05	
8	0.32	0.97	0.31	1.01	0.41	0.34	0.48	1.00	0.31	0.29	0.14	0.05	
9	0.32	0.56	0.32	0.94	0.40	0.33	0.43	0.89	0.29	0.28	0.14	0.05	
10	0.30	0.47	0.34	0.85	0.55	0.33	0.40	0.90	0.28	0.27	0.13	0.04	
11	0.29	0.57	0.35	0.76	0.52	0.36	0.40	0.88	0.27	0.27	0.13	0.04	
12	0.28	0.53	0.33	0.80	0.43	0.38	0.38	0.73	0.26	0.27	0.13	0.04	
13	0.28	0.46	0.32	0.70	0.40	0.46	0.36	0.67	0.36	0.26	0.13	0.03	
14	0.27	0.43	0.30	0.59	0.40	0.39	0.35	0.55	0.37	0.25	0.12	0.03	
15	0.25	0.63	0.29	0.55	0.40	0.47	0.33	0.53	0.93	0.24	0.12	0.02	
16	0.23	0.88	0.29	0.52	0.41	0.43	0.31	0.53	0.66	0.24	0.12	0.02	
17	0.21	1.01	0.33	0.48	0.52	0.37	0.35	0.51	0.88	0.23	0.11	0.01	
18	0.21	0.79	0.35	0.47	0.51	0.36	0.43	0.48	0.99	0.23	0.11	0.00	
19	0.20	0.68	0.34	0.45	0.50	0.34	0.65	0.46	1.05	0.22	0.11	0.00	
20	0.19	0.55	0.34	0.43	0.43	0.35	0.60	0.42	0.85	0.22	0.10	-0.02	
21	0.18	0.48	0.36	0.42	0.40	0.34	0.61	0.40	0.72	0.21	0.10	0.00	
22	0.17	0.46	0.37	0.42	0.45	0.30	0.49	0.38	0.59	0.22	0.10	0.03	
23	0.17	0.45	0.55	0.40	0.41	0.29	0.47	0.35	0.53	0.25	0.09	0.11	
24	0.16	0.43	0.75	0.39	0.39	0.28	0.60	0.35	0.49	0.23	0.09	0.08	
25	0.17	0.41	1.64	0.39	0.38	0.28	0.54	0.35	0.46	0.21	0.09	0.06	
26	0.18	0.42	1.60	0.40	0.35	0.29	0.48	0.35	0.44	0.20	0.08	0.10	
27	0.20	0.38	1.09	0.37	0.34	0.29	0.50	0.35	0.43	0.20	0.08	0.30	
28	0.25	0.37	0.82	0.36	0.34	0.31	0.47	0.47	0.40	0.20	0.07	0.14	
29	0.25	0.37	0.79	0.34	0.54	0.30	0.86	0.37	0.39	0.19		0.10	
30	0.26	0.35	0.64	0.33	0.54	0.26	1.07	0.37	0.38	0.19		0.07	
31		0.32		0.32	0.53		1.20		0.37	0.19		0.06	
Mean	0.26	0.52	0.51	0.67	0.42	0.36	0.52	0.63	0.49	0.25	0.12	0.06	
Max	0.37	1.01	1.64	1.66	0.55	0.48	1.20	1.53	1.05	0.35	0.18	0.30	1.66
Min	0.16	0.32	0.29	0.32	0.28	0.26	0.24	0.35	0.26	0.19	0.07	-0.02	-0.02

Annual Max Momentary Gage Height 2.04 M (A.D), at 18.00 Hours, on Jul 5, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.22 M (A.D)
Left Bank Elevation 11.19 M (A.D)
Right Bank Elevation 11.21 M (A.D), Drainage Area 144 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.31	4.30	1.85	8.30	1.85	4.10	1.52	11.60	2.24	2.18	1.08	0.42	
2	2.24	6.50	2.05	8.75	1.79	3.70	1.52	10.32	5.10	2.05	1.08	0.42	
3	2.18	4.50	2.44	20.50	1.72	3.30	1.46	10.10	2.37	1.91	1.02	0.42	
4	2.11	3.50	3.90	18.75	1.91	2.70	2.90	10.32	2.18	1.91	1.02	0.36	
5	2.11	2.24	2.31	37.80	4.70	2.50	13.70	10.55	2.11	1.91	0.96	0.36	
6	2.11	2.18	2.24	42.35	4.10	2.44	8.75	36.52	2.05	1.85	0.96	0.36	
7	2.05	2.37	2.11	30.65	2.90	2.11	6.95	19.10	1.98	1.85	0.90	0.30	
8	1.98	16.10	1.91	17.35	2.70	2.11	4.10	17.00	1.91	1.79	0.84	0.30	
9	1.98	5.70	1.98	15.20	2.50	2.05	3.10	13.70	1.79	1.72	0.84	0.30	
10	1.85	3.90	2.11	12.50	5.50	2.05	2.50	14.00	1.72	1.66	0.78	0.24	
11	1.79	5.90	2.18	10.10	4.90	2.24	2.50	13.40	1.66	1.66	0.78	0.24	
12	1.72	5.10	2.05	11.00	3.10	2.37	2.37	9.43	1.59	1.66	0.78	0.24	
13	1.72	3.70	1.98	8.75	2.50	3.70	2.24	8.07	2.24	1.59	0.78	0.18	
14	1.66	3.10	1.85	6.30	2.50	2.44	2.18	5.50	2.31	1.52	0.72	0.18	
15	1.52	7.17	1.79	5.50	2.50	3.90	2.05	5.10	14.90	1.46	0.72	0.12	
16	1.40	13.40	1.79	4.90	2.70	3.10	1.91	5.10	7.85	1.46	0.72	0.12	
17	1.26	17.35	2.05	4.10	4.90	2.31	2.18	4.70	13.40	1.40	0.66	0.06	
18	1.26	10.78	2.18	3.90	4.70	2.24	3.10	4.10	16.70	1.40	0.66	0.00	
19	1.20	8.30	2.11	3.50	4.50	2.11	7.62	3.70	18.75	1.33	0.66	0.00	
20	1.14	5.50	2.11	3.10	3.10	2.18	6.50	2.90	12.50	1.33	0.60	0.00	
21	1.08	4.10	2.24	2.90	2.50	2.11	6.73	2.50	9.20	1.26	0.60	0.00	
22	1.02	3.70	2.31	2.90	3.50	1.85	4.30	2.37	6.30	1.33	0.60	0.18	
23	1.02	3.50	5.50	2.50	2.70	1.79	3.90	2.18	5.10	1.52	0.54	0.66	
24	0.96	3.10	9.88	2.44	2.44	1.72	6.50	2.18	4.30	1.40	0.54	0.48	
25	1.02	2.70	41.40	2.44	2.37	1.72	5.30	2.18	3.70	1.26	0.54	0.36	
26	1.08	2.90	39.50	2.50	2.18	1.79	4.10	2.18	3.30	1.20	0.48	0.60	
27	1.20	2.37	20.15	2.31	2.11	1.79	4.50	2.18	3.10	1.20	0.48	1.85	
28	1.52	2.31	11.60	2.24	2.11	1.91	3.90	3.90	2.50	1.20	0.42	0.84	
29	1.52	2.31	10.78	2.11	5.30	1.85	12.80	2.31	2.44	1.14		0.60	
30	1.59	2.18	7.40	2.05	5.30	1.59	19.45	2.31	2.37	1.14		0.42	
31		1.98		1.98	5.10		24.00		2.31	1.14		0.36	
Total	47.60	162.74	193.75	299.67	100.68	71.77	174.63	239.50	159.97	47.43	20.76	10.97	1529.47 CMSDAY
Mean	1.59	5.25	6.46	9.67	3.25	2.39	5.63	7.98	5.16	1.53	0.74	0.35	4.19 CMS
Max	2.31	17.35	41.40	42.35	5.50	4.10	24.00	36.52	18.75	2.18	1.08	1.85	42.35 CMS
Min	0.96	1.98	1.79	1.98	1.72	1.59	1.46	2.18	1.59	1.14	0.42	0.00	0.00 CMS
Runoff	4.113	14.061	16.740	25.891	8.699	6.201	15.088	20.693	13.821	4.098	1.794	0.948	132.146 MCM

Momentary Peak 61.40 CMS, at 2.04 M (A.D), at 18.00 Hours, on Jul 5, 2001

Runoff Yield 29.10 Liters/Second/Square KM, Momentary Peak Yield 426.389 Liters/Second/Square KM

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Upper Khlong Lamae at Ban Yan Sai, Chumphon (X.215)

Lat 09 - 44 - 06 N. **Long** 98 - 59 - 30 E.

Location on right bank at the highway bridge.

Ban Yan Sai **Amphoe** Lamae **Changwat** Chumphon

Drainage Area 96 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 1.00 meter from the top staff gage.

Elevation +4.818 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 Float -

Rated by Current Meter 1999 to date.

Stability of Channel Regimes Stable.

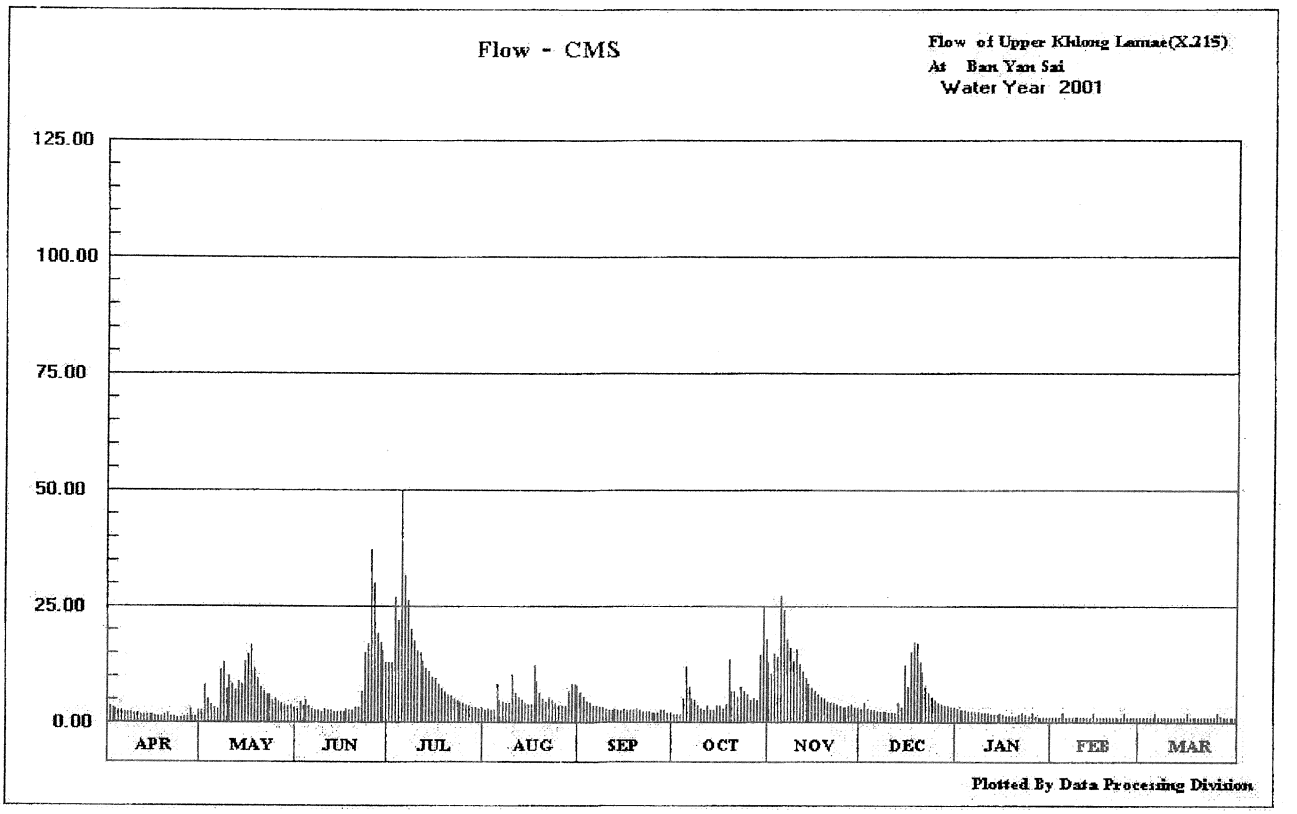
Overbank Flow Conditions No overbank flow.

General Description Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2001.

Gage Height in Meter (A.D), Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.46	0.37	0.38	1.11	0.36	0.69	0.26	1.11	0.39	0.39	0.15	0.02	
2	0.41	0.78	0.54	1.11	0.40	0.61	0.26	0.95	0.51	0.37	0.15	0.02	
3	0.38	0.58	0.46	1.94	0.36	0.53	0.26	1.23	0.39	0.35	0.14	0.01	
4	0.36	0.49	0.55	1.68	0.37	0.50	0.58	1.19	0.36	0.34	0.14	0.01	
5	0.34	0.41	0.44	3.04	0.80	0.46	1.06	1.96	0.35	0.33	0.13	0.01	
6	0.32	0.39	0.40	2.17	0.55	0.44	0.77	1.79	0.33	0.32	0.13	0.00	
7	0.31	1.01	0.36	1.90	0.53	0.43	0.60	1.43	0.32	0.31	0.12	0.00	
8	0.30	1.12	0.35	1.57	0.51	0.42	0.57	1.32	0.31	0.30	0.11	0.00	
9	0.29	0.75	0.33	1.41	0.52	0.39	0.44	1.14	0.30	0.29	0.11	0.00	
10	0.28	0.94	0.39	1.27	0.96	0.37	0.39	1.29	0.29	0.28	0.11	0.00	
11	0.26	0.80	0.35	1.25	0.68	0.36	0.37	1.10	0.28	0.27	0.10	0.00	
12	0.25	0.72	0.37	1.14	0.62	0.38	0.45	1.00	0.28	0.26	0.10	0.00	
13	0.24	0.86	0.32	1.04	0.55	0.36	0.37	0.90	0.52	0.25	0.10	-0.01	
14	0.24	0.81	0.30	0.99	0.50	0.36	0.34	0.81	0.41	0.25	0.09	-0.01	
15	0.23	1.13	0.30	0.92	0.49	0.38	0.45	0.75	1.08	0.24	0.08	-0.02	
16	0.22	1.24	0.30	0.90	0.49	0.35	0.46	0.71	0.76	0.23	0.08	-0.02	
17	0.21	1.36	0.39	0.81	1.07	0.36	0.39	0.66	1.26	0.22	0.08	-0.01	
18	0.21	1.04	0.35	0.75	0.85	0.37	0.49	0.62	1.40	0.22	0.07	-0.02	
19	0.26	0.89	0.37	0.70	0.69	0.38	1.15	0.59	1.38	0.21	0.07	-0.03	
20	0.21	0.76	0.43	0.66	0.59	0.34	0.70	0.54	1.12	0.21	0.07	-0.03	
21	0.19	0.70	0.41	0.63	0.54	0.33	0.70	0.52	0.98	0.23	0.06	-0.03	
22	0.19	0.65	0.70	0.60	0.61	0.32	0.61	0.50	0.78	0.28	0.05	-0.03	
23	0.18	0.65	1.25	0.55	0.57	0.30	0.76	0.48	0.69	0.25	0.05	0.14	
24	0.18	0.56	1.38	0.53	0.50	0.28	0.70	0.46	0.62	0.21	0.05	0.03	
25	0.19	0.59	2.46	0.51	0.46	0.29	0.66	0.43	0.57	0.20	0.04	0.12	
26	0.19	0.54	2.09	0.48	0.44	0.29	0.57	0.41	0.52	0.19	0.03	0.25	
27	0.38	0.51	1.50	0.44	0.45	0.37	0.58	0.44	0.49	0.18	0.03	0.21	
28	0.22	0.49	1.39	0.43	0.71	0.37	0.55	0.49	0.46	0.18	0.02	0.09	
29	0.19	0.46	1.28	0.41	0.81	0.29	1.22	0.41	0.44	0.17		0.05	
30	0.37	0.47	1.12	0.39	0.81	0.27	1.85	0.41	0.43	0.16		0.03	
31		0.41		0.42	0.79		1.43		0.41	0.16		0.01	
Mean	0.27	0.73	0.71	1.02	0.60	0.39	0.64	0.85	0.59	0.25	0.09	0.03	
Max	0.46	1.36	2.46	3.04	1.07	0.69	1.85	1.96	1.40	0.39	0.15	0.25	3.04
Min	0.18	0.37	0.30	0.39	0.36	0.27	0.26	0.41	0.28	0.16	0.02	-0.03	-0.03

Annual Max Momentary Gage Height 3.10 M (A.D), at 6.00 Hours, on Jul 5, 2001
Zero Gage at Bottom Elevation 0.00 M (A.D), River Bed -0.34 M (A.D)
Left Bank Elevation 4.41 M (A.D)
Right Bank Elevation 4.31 M (A.D), Drainage Area 96 Square Kilometers



Discharge, in Cubic Meter per Second, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.96	3.04	3.13	13.10	2.96	6.80	2.11	13.10	3.21	3.21	1.33	0.61	
2	3.41	8.11	4.84	13.10	3.30	5.65	2.11	10.65	4.51	3.04	1.33	0.61	
3	3.13	5.28	3.96	27.33	2.96	4.73	2.11	14.98	3.21	2.87	1.27	0.56	
4	2.96	4.29	4.95	22.44	3.04	4.40	5.28	14.35	2.96	2.79	1.27	0.56	
5	2.79	3.41	3.74	50.40	8.40	3.96	12.33	27.72	2.87	2.71	1.22	0.56	
6	2.62	3.21	3.30	31.90	4.95	3.74	7.96	24.42	2.71	2.62	1.22	0.50	
7	2.53	11.55	2.96	26.55	4.73	3.63	5.50	18.19	2.62	2.53	1.16	0.50	
8	2.45	13.26	2.87	20.51	4.51	3.52	5.17	16.42	2.53	2.45	1.11	0.50	
9	2.36	7.67	2.71	17.86	4.62	3.21	3.74	13.57	2.45	2.36	1.11	0.50	
10	2.28	10.50	3.21	15.62	10.80	3.04	3.21	15.94	2.36	2.28	1.11	0.50	
11	2.11	8.40	2.87	15.30	6.66	2.96	3.04	12.95	2.28	2.20	1.05	0.50	
12	2.02	7.24	3.04	13.57	5.79	3.13	3.85	11.40	2.28	2.11	1.05	0.50	
13	1.94	9.30	2.62	12.02	4.95	2.96	3.04	9.90	4.62	2.02	1.05	0.45	
14	1.94	8.55	2.45	11.25	4.40	2.96	2.79	8.55	3.41	2.02	1.00	0.45	
15	1.86	13.41	2.45	10.20	4.29	3.13	3.85	7.67	12.64	1.94	0.94	0.40	
16	1.77	15.14	2.45	9.90	4.29	2.87	3.96	7.09	7.82	1.86	0.94	0.40	
17	1.68	17.06	3.21	8.55	12.49	2.96	3.21	6.37	15.46	1.77	0.94	0.45	
18	1.68	12.02	2.87	7.67	9.15	3.04	4.29	5.79	17.70	1.77	0.89	0.40	
19	2.11	9.75	3.04	6.95	6.80	3.13	13.72	5.39	17.38	1.68	0.89	0.35	
20	1.68	7.82	3.63	6.37	5.39	2.79	6.95	4.84	13.26	1.68	0.89	0.35	
21	1.54	6.95	3.41	5.93	4.84	2.71	6.95	4.62	11.10	1.86	0.83	0.35	
22	1.54	6.22	6.95	5.50	5.65	2.62	5.65	4.40	8.11	2.28	0.78	0.35	
23	1.49	6.22	15.30	4.95	5.17	2.45	7.82	4.18	6.80	2.02	0.78	1.27	
24	1.49	5.06	17.38	4.73	4.40	2.28	6.95	3.96	5.79	1.68	0.78	0.67	
25	1.54	5.39	37.73	4.51	3.96	2.36	6.37	3.63	5.17	1.60	0.72	1.16	
26	1.54	4.84	30.30	4.18	3.74	2.36	5.17	3.41	4.62	1.54	0.67	2.02	
27	3.13	4.51	19.35	3.74	3.85	3.04	5.28	3.74	4.29	1.49	0.67	1.68	
28	1.77	4.29	17.54	3.63	7.09	3.04	4.95	4.29	3.96	1.49	0.61	1.00	
29	1.54	3.96	15.78	3.41	8.55	2.36	14.82	3.41	3.74	1.44		0.78	
30	3.04	4.07	13.26	3.21	8.55	2.20	25.57	3.41	3.63	1.38		0.67	
31		3.41		3.52	8.26		18.19		3.41	1.38		0.56	
Total	65.90	233.93	241.30	387.90	178.54	98.03	205.94	288.34	186.90	64.07	27.61	20.16	1998.62 CMSDAY
Mean	2.20	7.55	8.04	12.51	5.76	3.27	6.64	9.61	6.03	2.07	0.99	0.65	5.48 CMS
Max	3.96	17.06	37.73	50.40	12.49	6.80	25.57	27.72	17.70	3.21	1.33	2.02	50.40 CMS
Min	1.49	3.04	2.45	3.21	2.96	2.20	2.11	3.41	2.28	1.38	0.61	0.35	0.35 CMS
Runoff	5.694	20.212	20.848	33.515	15.426	8.470	17.793	24.913	16.148	5.536	2.386	1.742	172.681 MCM

Momentary Peak 51.75 CMS, at 3.10 M (A.D), at 6.00 Hours, on Jul 5, 2001
Runoff Yield 56.53 Liters/Second/Square KM, Momentary Peak Yield 534.221 Liters/Second/Square KM

Suspended Sediment Station

Water Year 2001

WATER YEAR : 2001

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 - **Amphoe** Mueang **Changwat** Chiang Mai

Drainage Area 6,355 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 2001

Number of observation 40

R - Square 0.8947

Remarks Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:15:09.97

LQS/LQS02D/12

Station - Nawarat Bridge, A. Mueang, Chiang Mai, (P.1)
Stream - Ping
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.80930
QS = 0.4851 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.81	83.42	795.09	179.75	481.07	2220.76	426.80	2107.82	277.17	101.98	62.63	22.66	
2	24.81	76.20	795.09	192.43	481.07	1583.09	375.45	1305.33	277.17	83.42	83.42	56.30	
3	29.26	56.30	693.54	144.03	1997.53	1095.79	567.88	1136.38	277.17	76.20	83.42	62.63	
4	50.27	83.42	538.23	101.98	6623.54	830.31	977.99	1095.79	259.12	92.49	76.20	56.30	
5	50.27	111.88	426.80	92.49	11011.11	940.06	940.06	977.99	277.17	92.49	69.26	50.27	
6	39.13	101.98	375.45	101.98	17953.95	977.99	1055.86	760.55	259.12	92.49	56.30	56.30	
7	39.13	101.98	354.73	101.98	10183.75	866.22	795.09	661.08	259.12	101.98	69.26	56.30	
8	34.04	122.19	295.76	132.91	6231.49	693.54	567.88	629.31	241.62	92.49	44.55	34.04	
9	44.55	92.49	208.27	277.17	7439.57	661.08	375.45	538.23	259.12	76.20	22.66	14.95	
10	44.55	83.42	179.75	481.07	6426.17	866.22	629.31	509.29	259.12	69.26	20.60	11.63	
11	39.13	101.98	155.54	453.57	3340.22	977.99	795.09	538.23	224.67	76.20	18.63	10.12	
12	39.13	192.43	132.91	567.88	10048.67	1349.19	693.54	538.23	208.27	76.20	18.63	8.70	
13	62.63	208.27	92.49	453.57	30738.61	1438.86	693.54	629.31	208.27	83.42	18.63	7.37	
14	83.42	192.43	101.98	314.88	30271.40	2052.34	567.88	598.24	192.43	92.49	14.95	6.40	
15	83.42	241.62	132.91	295.76	14132.10	3487.94	481.07	567.88	192.43	83.42	18.63	10.12	
16	83.42	259.12	122.19	241.62	7231.59	2514.58	400.76	567.88	192.43	76.20	56.30	34.04	
17	111.88	334.54	122.19	224.67	4517.08	1305.33	375.45	509.29	224.67	62.63	76.20	50.27	
18	155.54	453.57	92.49	241.62	2845.87	866.22	375.45	481.07	208.27	56.30	83.42	50.27	
19	167.45	375.45	83.42	224.67	2052.34	760.55	334.54	453.57	208.27	56.30	92.49	44.55	
20	144.03	334.54	69.26	241.62	1682.66	760.55	295.76	453.57	208.27	56.30	83.42	44.55	
21	144.03	509.29	56.30	400.76	1177.64	760.55	259.12	426.80	167.45	56.30	83.42	44.55	
22	101.98	1219.55	56.30	1438.86	977.99	726.70	241.62	453.57	224.67	50.27	83.42	24.81	
23	111.88	760.55	50.27	4107.21	1095.79	940.06	208.27	354.73	314.88	44.55	29.26	29.26	
24	76.20	375.45	101.98	4187.79	940.06	760.55	192.43	354.73	259.12	44.55	18.63	56.30	
25	44.55	259.12	92.49	3195.37	693.54	1016.59	208.27	314.88	208.27	39.13	16.74	62.63	
26	39.13	241.62	101.98	1393.70	629.31	1632.54	241.62	277.17	155.54	39.13	13.24	62.63	
27	44.55	1055.86	83.42	760.55	538.23	1016.59	295.76	241.62	92.49	39.13	8.70	62.63	
28	34.04	3124.02	62.63	598.24	726.70	629.31	598.24	241.62	92.49	44.55	10.12	62.63	
29	44.55	2107.82	69.26	509.29	1438.86	629.31	2107.82	241.62	92.49	44.55		76.20	
30	92.49	1095.79	101.98	453.57	2395.10	538.23	4027.33	241.62	92.49	39.13		101.98	
31		830.31		375.45	3053.40		3714.86		101.98	44.55		101.98	
Total	2084.27	15186.61	6544.70	22486.44	189356.44	34899.04	23820.19	18207.40	6515.75	2084.30	1333.13	1373.37	323891.66 Ton
Mean	69.48	489.89	218.16	725.37	6108.27	1163.30	768.39	606.91	210.19	67.24	47.61	44.30	
Max	167.45	3124.02	795.09	4187.79	30738.61	3487.94	4027.33	2107.82	314.88	101.98	92.49	101.98	30738.61
Min	24.81	56.30	50.27	92.49	481.07	538.23	192.43	241.62	92.49	39.13	8.70	6.40	6.40

WATER YEAR : 2001

PING RIVER BASIN

Mae Taeng at Ban Sanmahaphon, Chiang Mai (P.4A)

Lat 19 - 07 - 15 N. **Long** 98 - 56 - 53 E.

Location on right bank at the bridge of Chiang Mai from Fang Highway.

Ban Sammahaphon **Amphoe** Mae Taeng **Changwat** Chiang Mai

Drainage Area 1,902 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 2001

Number of observation 39

R - Square 0.9395

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:52:18.24

LQS/LQS02D/12

Station - Ban Sanmahaphon, Mae Taeng, Chiang Mai, (P.4A)
Stream - Mae Taeng
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.55600
QS = 3.4059 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.19	0.47	599.72	1.19	12.03	659.59	8.50	608.15	197.71	4.52	1.96	0.52	
2	1.19	0.30	513.64	1.19	4.52	331.82	8.50	479.07	210.75	4.52	1.96	0.52	
3	0.79	0.11	390.71	1.19	513.64	197.71	33.19	499.71	210.75	4.23	2.41	0.52	
4	0.16	0.11	287.50	1.19	2841.85	119.30	34.88	427.66	277.22	4.52	2.89	0.24	
5	0.16	0.05	206.37	1.19	6178.01	149.42	65.71	396.79	337.55	3.78	2.89	0.16	
6	0.24	25.65	164.41	1.19	3750.45	129.07	122.53	267.08	314.83	3.51	8.50	0.09	
7	0.24	25.65	122.53	1.34	1942.00	73.17	61.48	219.61	197.71	3.51	13.04	0.09	
8	0.24	19.41	78.31	2.18	1850.68	47.51	9.86	189.18	197.71	2.79	2.64	0.42	
9	0.24	18.24	23.08	3.04	1783.22	28.31	24.35	272.13	180.78	2.79	2.41	0.47	
10	0.16	20.61	9.86	3.51	1058.52	53.34	228.60	360.84	172.53	2.79	1.78	0.52	
11	0.24	45.63	11.29	28.31	712.51	86.25	172.53	354.96	172.53	2.41	1.02	0.52	
12	0.24	103.64	20.61	94.63	2210.78	139.11	149.42	349.13	172.53	0.00	0.76	0.52	
13	0.24	73.17	20.61	8.50	5707.96	202.02	116.11	343.32	164.41	0.00	0.76	0.52	
14	0.24	129.07	59.41	6.80	4681.08	712.51	91.69	337.55	160.40	0.00	0.76	0.52	
15	0.24	116.11	65.71	2.00	2807.91	459.36	26.97	366.74	149.42	0.00	0.76	2.41	
16	0.24	145.95	43.76	1.83	1738.75	233.14	8.06	326.12	142.52	0.00	0.76	1.96	
17	15.97	349.13	21.83	1.83	940.69	109.81	73.17	326.12	142.52	0.00	0.76	0.52	
18	15.97	309.24	2.18	1.83	499.71	55.34	45.63	303.69	132.39	0.08	0.64	0.52	
19	14.35	366.74	2.00	1.83	433.94	63.58	11.29	287.50	132.39	0.13	0.52	0.52	
20	12.79	176.64	2.18	1.83	360.84	106.71	7.64	326.12	129.07	0.32	0.52	0.52	
21	12.03	685.87	2.18	2.18	125.78	80.93	4.88	298.17	156.43	1.02	0.52	1.02	
22	12.03	465.80	2.18	6.01	142.52	257.07	3.51	282.34	172.53	1.46	0.52	0.52	
23	12.03	180.78	1.66	272.13	94.63	180.78	4.23	257.07	156.43	1.46	0.52	0.52	
24	12.79	61.48	1.66	608.15	45.63	68.16	4.52	224.09	135.73	1.62	0.52	0.52	
25	12.79	45.63	1.66	506.66	34.88	129.07	4.52	160.40	172.53	1.62	0.52	0.52	
26	9.86	142.52	1.34	142.52	31.53	237.71	15.15	164.41	103.64	1.62	0.24	0.52	
27	8.50	1465.18	1.34	47.51	29.91	68.16	45.63	156.43	25.65	1.78	0.24	0.52	
28	8.06	2268.40	1.34	34.88	135.73	21.83	309.24	156.43	5.25	1.62	0.16	0.52	
29	2.18	751.51	1.34	13.56	566.43	17.09	1086.67	172.53	4.52	1.31		0.52	
30	2.18	650.91	1.19	6.01	929.66	12.03	2073.00	189.18	4.52	1.96		0.42	
31		520.66		4.88	761.37		1204.45		4.52	1.96		0.42	
Total	157.58	9164.66	2661.60	1811.09	42927.16	5029.90	6055.91	9102.52	4737.47	57.33	50.98	18.10	81774.30 Ton
Mean	5.25	295.63	88.72	58.42	1384.75	167.66	195.35	303.42	152.82	1.85	1.82	0.58	
Max	15.97	2268.40	599.72	608.15	6178.01	712.51	2073.00	608.15	337.55	4.52	13.04	2.41	6178.01
Min	0.16	0.05	1.19	1.19	4.52	12.03	3.51	156.43	4.52	0.00	0.16	0.09	0.00

WATER YEAR : 2001

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

Drainage Area	3,853 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1970 - 1972, 1983, 1985 - 1993 and 2000 - Cont'd
Actual Measurement	1970 - 1972, 1983, 1985 - 1993 and 2000 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	42
R - Square	0.8938
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:18:03.98

LQS/LQS02D/12

Station - Kaeng Ob Luang, Hot, Chiang Mai, (P.14)
Stream - Nam Mae Chaem
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
2.14590
QS = 0.4141 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	39.86	9.47	211.93	103.43	722.08	1496.35	492.17	3634.01	435.56	199.70	78.21	36.87	
2	36.87	13.09	202.12	299.49	905.26	1005.18	428.29	3216.89	417.51	190.20	78.21	36.87	
3	34.00	16.06	146.35	234.93	1754.27	841.74	586.18	3216.89	396.38	174.15	82.65	36.87	
4	34.00	18.00	103.43	154.63	6132.68	810.91	1039.73	2426.82	379.23	174.15	82.65	36.87	
5	31.25	22.24	90.35	138.32	8674.82	3216.89	873.20	2426.82	359.17	174.15	72.49	34.00	
6	31.25	22.24	90.35	130.52	9754.81	2399.49	693.69	2160.97	314.64	174.15	72.49	31.25	
7	31.25	20.06	78.21	110.33	14711.09	1352.06	1221.87	1589.59	302.49	165.33	68.35	28.63	
8	28.63	20.06	59.19	103.43	19354.39	1005.18	810.91	1419.79	314.64	156.74	64.34	28.63	
9	26.13	20.06	59.19	146.35	10539.17	873.20	612.15	1305.69	314.64	148.40	64.34	26.13	
10	24.53	20.06	47.33	665.90	5435.69	905.26	1808.49	1196.68	302.49	148.40	56.71	26.13	
11	24.53	16.06	47.33	1005.18	4373.20	1039.73	1754.27	1128.84	290.60	140.30	56.71	26.13	
12	24.53	34.00	73.90	612.15	********	905.26	1352.06	1128.84	276.09	132.45	53.08	26.13	
13	22.24	31.25	78.21	359.17	********	873.20	873.20	1028.15	264.77	132.45	53.08	26.13	
14	20.06	26.13	59.19	259.20	35003.05	5548.74	665.90	932.46	264.77	132.45	53.08	26.13	
15	20.06	34.00	51.90	224.55	16767.81	4373.20	565.00	1057.24	264.77	132.45	60.46	23.76	
16	20.06	359.17	55.49	202.12	11148.74	2152.39	540.12	993.80	253.70	132.45	106.85	21.50	
17	18.00	2152.39	59.19	270.39	10142.94	1352.06	2757.87	899.88	242.88	124.84	132.45	19.36	
18	16.06	1399.28	59.19	359.17	5895.36	905.26	2336.37	816.01	242.88	100.07	93.53	19.36	
19	14.24	389.47	51.90	410.40	2680.21	780.69	1184.19	760.88	229.71	100.07	72.49	19.36	
20	14.24	163.16	39.86	638.73	3806.16	937.95	780.69	731.68	229.71	100.07	64.34	19.36	
21	14.24	359.17	39.86	1110.71	2987.77	1919.58	638.73	679.72	229.71	100.07	56.71	19.36	
22	14.24	311.58	39.86	6938.61	2399.49	1808.49	540.12	656.78	219.46	93.53	53.08	19.36	
23	14.24	183.23	36.87	13541.21	1919.58	1305.69	492.17	607.78	229.71	93.53	46.22	19.36	
24	13.09	78.21	59.19	13087.73	1648.47	1352.06	428.29	586.18	253.70	93.53	46.22	19.36	
25	13.09	44.04	103.43	3466.11	1447.38	2547.14	1221.87	540.12	229.71	100.07	42.98	23.76	
26	11.46	36.87	115.66	1546.18	1260.19	1648.47	2472.73	540.12	229.71	112.09	42.98	23.76	
27	10.44	110.33	84.16	1005.18	1184.19	1110.71	1596.89	519.85	219.46	106.85	36.87	21.50	
28	10.44	1147.13	59.19	1147.13	1399.28	841.74	4273.71	496.07	209.46	100.07	36.87	17.34	
29	9.47	586.18	51.90	780.69	1700.93	693.69	8513.29	476.71	209.46	93.53		15.44	
30	8.11	270.39	51.90	612.15	1919.58	565.00	12205.47	454.02	199.70	88.78		15.44	
31		234.93		780.69	1919.58		12205.47		190.20	78.21		13.66	
Total	630.61	8148.31	2306.63	50444.78	594312.38	46567.31	65965.09	37629.29	8516.91	3993.23	1828.44	757.81	821100.88 Ton
Mean	21.02	262.85	76.89	1627.25	19171.37	1552.24	2127.91	1254.31	274.74	128.81	65.30	24.45	
Max	39.86	2152.39	211.93	13541.21	290606.03	5548.74	12205.47	3634.01	435.56	199.70	132.45	36.87	290606.03
Min	8.11	9.47	36.87	103.43	722.08	565.00	428.29	454.02	190.20	78.21	36.87	13.66	8.11

WATER YEAR : 2001

PING RIVER BASIN

Ping River at Ban Tha Ngiu, Nakhon Sawan (P.17)

Lat 15 - 56 - 02 N. **Long** 99 - 58 - 49 E.

Location	on right bank at Som Sieo Market.
Ban Tha Ngiu	**Amphoe** Banphot Phisai **Changwat** Nakhon Sawan
Drainage Area	45,851 sq.km.
Method of sampling	Depth Integrating
Instrument Used	-
Period of Available Records	2001 - Cont'd
Actual Measurement	2001 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	27
R - Square	0.7489
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:52:49.93

LQS/LQS02D/12

Station - Ban Tha Ngiu, Banphot Phisai, Nakhon Sawan, (P.17)
Stream - Ping
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 060802
1.26210
QS = 1.3619 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1135.03	1867.99	3153.90	636.56	959.50	791.70	2031.21	10963.31	525.37	512.97	1495.78	1709.94	
2	1279.27	1393.53	3030.72	488.35	1454.70	727.79	1753.93	11013.40	451.90	488.35	1475.21	2149.51	
3	1063.95	2197.21	2765.71	380.85	1622.67	650.76	1579.39	10711.35	680.61	416.06	1495.78	2149.51	
4	874.44	2149.51	4551.53	290.30	1601.00	594.34	1644.40	10359.34	727.79	451.90	1601.00	2102.03	
5	1601.00	3410.26	4039.62	369.26	1960.91	580.41	1579.39	10066.61	727.79	594.34	1207.05	2054.76	
6	2102.03	3573.44	2485.43	759.61	1867.99	759.61	1622.67	9872.43	1170.58	874.44	874.44	1821.88	
7	2125.74	3938.60	2221.15	942.76	2078.37	925.41	1601.00	9486.45	1434.25	1334.35	1353.05	2911.94	
8	2078.37	4654.66	2054.76	1063.95	2054.76	1011.45	1557.84	8924.23	807.85	1579.39	1579.39	3122.15	
9	1891.13	3838.12	2078.37	743.67	3030.72	1011.45	1537.10	8197.12	1475.21	908.13	1537.10	2324.67	
10	1821.88	3217.60	2221.15	608.35	2596.30	1063.95	1622.67	7280.25	1297.81	1117.00	1579.39	2007.72	
11	1731.91	2708.99	2298.09	539.02	2404.77	1029.11	1891.13	6261.73	1153.13	1063.95	1434.25	1984.29	
12	2324.67	3122.15	2652.52	665.03	2245.13	1135.03	1960.91	5500.28	891.58	976.98	1261.49	2378.01	
13	2245.13	3000.93	3249.55	891.58	3217.60	1029.11	2245.13	4832.31	874.44	1063.95	1170.58	2031.21	
14	1937.59	2680.73	3971.91	1279.27	2911.94	874.44	2351.30	4174.82	1353.05	976.98	1353.05	2624.38	
15	1516.41	2298.09	3185.72	1334.35	2378.01	908.13	2737.32	3606.09	1516.41	942.76	1353.05	2652.52	
16	1224.67	2404.77	2540.33	1261.49	2458.48	874.44	2324.67	3153.90	1243.05	594.34	1709.94	2221.15	
17	1153.13	2596.30	2149.51	1063.95	2485.43	857.36	2221.15	2794.16	1063.95	1099.72	1666.19	2298.09	
18	1224.67	2680.73	1821.88	650.76	2378.01	841.01	2007.72	2404.77	976.98	1279.27	2054.76	2125.74	
19	1153.13	3217.60	1495.78	841.01	2540.33	1170.58	1844.90	1937.59	759.61	1316.41	1731.91	1937.59	
20	1579.39	3872.15	1188.79	824.07	2941.54	1984.29	1557.84	1537.10	1063.95	1243.05	1224.67	1688.04	
21	1731.91	4006.19	994.52	1011.45	3573.44	2173.33	1557.84	1316.41	824.07	1063.95	1753.93	1914.33	
22	1844.90	4174.82	976.98	824.07	3971.91	2298.09	1393.53	1063.95	994.52	959.50	2007.72	2054.76	
23	1844.90	3672.45	711.99	743.67	3508.33	2007.72	1243.05	775.62	976.98	824.07	1753.93	2149.51	
24	1709.94	3442.59	650.76	665.03	2624.38	2125.74	1153.13	594.34	841.01	1011.45	1867.99	2149.51	
25	1207.05	2941.54	539.02	539.02	1891.13	2221.15	1495.78	476.14	743.67	1224.67	1798.92	2149.51	
26	1776.01	2852.92	525.37	791.70	1434.25	2378.01	2941.54	312.45	580.41	1188.79	1644.40	1776.01	
27	1753.93	2765.71	539.02	650.76	1081.80	2882.40	11369.85	259.25	539.02	1224.67	1279.27	1644.40	
28	1937.59	3185.72	608.35	959.50	857.36	3000.93	11217.60	209.22	680.61	1224.67	1960.91	2149.51	
29	2031.21	3672.45	824.07	1063.95	824.07	2911.94	8285.21	189.85	743.67	1117.00		1960.91	
30	2007.72	3672.45	711.99	1297.81	727.79	2568.28	7366.20	139.65	665.03	841.01		1937.59	
31		3738.18		1224.67	775.62		9630.28		552.75	1334.35		1960.91	
Total	49908.70	96948.39	60238.50	25405.82	66458.24	43387.96	95325.69	138414.13	28337.05	30848.47	43225.15	66142.09	744640.19 Ton
Mean	1663.62	3127.37	2007.95	819.54	2143.81	1446.27	3075.02	4613.80	914.10	995.11	1543.76	2133.62	
Max	2324.67	4654.66	4551.53	1334.35	3971.91	3000.93	11369.85	11013.40	1516.41	1579.39	2054.76	3122.15	11369.85
Min	874.44	1393.53	525.37	290.30	727.79	580.41	1153.13	139.65	451.90	416.06	874.44	1644.40	139.65

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Rim at Mae Rim Tai, Chiang Mai (P.21)

Lat 18 - 55 - 45 N. **Long** 98 - 56 - 40 E.

Location on right bank about 100 meters downstream from the bridge of Chiang Mai - Fang Highway.

Ban Mae Rim Tai **Amphoe** Mae Rim **Changwat** Chiang Mai

Drainage Area 515 sq.km.

Method of sampling Depth Integrating

Instrument Used US.DH - 59, US.D - 49

Period of Available Records 2001 - Cont'd

Actual Measurement 2001 - Cont'd

Using Rating Curve Water Year 2001

Number of observation 36

R - Square 0.9457

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:53:06.92 LQS/LQS02D/12

Station - Ban Mae Rim Tai ,Mae Rim ,Chiang Mai, (P.21)
Stream - Nam Mae Rim
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.32550
QS = 5.6805 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.68	1.05	80.64	16.25	58.52	47.45	13.49	130.98	17.83	8.46	4.94	1.80	
2	3.68	0.86	48.85	17.04	50.13	28.32	14.71	82.38	18.63	7.72	3.95	2.09	
3	3.47	0.95	42.32	11.75	516.28	21.92	43.56	82.38	17.83	8.46	3.68	2.33	
4	3.47	3.47	36.63	4.72	623.40	23.72	109.95	69.02	17.04	8.13	3.01	1.80	
5	3.47	6.60	29.33	4.44	337.27	27.43	111.98	57.06	17.04	7.39	3.01	1.69	
6	3.95	6.60	24.58	9.38	294.86	35.44	78.91	51.55	16.25	6.29	3.95	1.91	
7	3.95	6.60	22.77	6.99	154.58	31.14	48.85	46.19	16.25	6.60	2.76	1.31	
8	3.68	9.38	17.04	6.29	154.58	23.72	22.77	46.19	17.04	7.39	2.76	1.05	
9	3.47	6.99	17.83	87.65	228.38	23.72	20.26	43.56	17.04	7.72	3.21	0.95	
10	3.21	5.61	16.25	157.12	213.58	48.85	54.29	42.32	15.48	8.46	2.76	0.86	
11	3.47	8.13	19.44	120.35	92.99	35.44	40.12	38.91	14.14	9.98	3.47	0.95	
12	4.44	8.87	15.48	149.85	690.11	100.39	35.44	38.91	13.49	8.87	3.68	1.15	
13	6.29	32.18	14.14	65.97	506.73	91.20	25.45	35.44	12.84	8.87	2.63	1.15	
14	6.60	15.48	11.75	47.45	301.63	149.85	21.92	34.38	13.49	9.38	2.33	1.31	
15	5.23	34.38	8.87	46.19	177.16	98.57	18.63	33.33	11.12	11.12	3.68	1.15	
16	5.23	27.43	8.87	44.81	118.13	50.13	14.71	30.23	10.59	8.87	5.61	0.95	
17	4.23	48.85	6.60	34.38	89.42	31.14	33.33	28.32	9.38	7.72	4.94	1.05	
18	3.68	48.85	6.60	32.18	62.97	25.45	24.58	26.43	9.98	6.99	4.23	1.05	
19	3.01	29.33	6.29	26.43	102.23	40.12	24.58	26.43	7.72	5.91	4.23	1.05	
20	2.76	29.33	5.23	40.12	67.49	34.38	17.83	24.58	3.95	4.72	4.44	0.95	
21	2.63	52.98	3.47	78.91	52.98	41.22	14.71	22.77	3.95	4.23	3.95	1.05	
22	2.45	33.33	2.63	525.87	61.47	29.33	14.71	23.72	16.25	4.94	4.72	0.86	
23	2.21	25.45	2.76	701.39	43.56	31.14	11.75	22.77	24.58	4.72	8.46	0.86	
24	1.41	28.32	3.95	281.83	34.38	21.92	14.71	22.77	12.29	8.13	2.76	0.95	
25	1.31	17.04	4.23	94.94	25.45	20.26	22.77	21.92	11.75	6.29	2.21	1.05	
26	0.86	46.19	6.29	51.55	23.72	26.43	40.12	21.92	14.14	5.61	1.91	0.95	
27	0.95	452.80	4.44	51.55	23.72	21.92	61.47	20.26	9.98	4.23	2.33	0.95	
28	0.76	448.39	5.61	46.19	52.98	23.72	124.52	19.44	9.98	3.95	2.33	0.95	
29	0.76	111.98	4.94	37.70	77.19	26.43	340.97	19.44	10.59	4.94		0.95	
30	1.05	172.10	8.13	35.44	85.88	19.44	570.50	17.83	9.38	4.72		0.95	
31		78.91		33.33	82.38		330.11		8.46	4.94		0.95	
Total	95.36	1798.43	485.96	2868.06	5404.15	1230.19	2321.70	1181.43	408.48	215.75	101.94	37.02	16148.47 Ton
Mean	3.18	58.01	16.20	92.52	174.33	41.01	74.89	39.38	13.18	6.96	3.64	1.19	
Max	6.60	452.80	80.64	701.39	690.11	149.85	570.50	130.98	24.58	11.12	8.46	2.33	701.39
Min	0.76	0.86	2.63	4.44	23.72	19.44	11.75	17.83	3.95	3.95	1.91	0.86	0.76

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Klang at Pracha Uthit Bridge, Chaing Mai (P.24A)

Lat 18 - 25 - 02 N. **Long** 98 - 40 - 29 E.

Location	on left bank at Pracha Uthit Bridge.
Ban -	**Amphoe** Chom Thong **Changwat** Chaing Mai
Drainage Area	460 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
Number of observation	36
R - Square	0.8902
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:18:47.93

LQS/LQS02D/12

Station - Pracha Uthit Bridge, Chom Thong, Chiang Mai, (P.24A)
Stream - Nam Mae Klang
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.49100
QS = 3.1705 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.82	0.75	15.91	8.26	7.49	18.21	19.40	237.67	29.17	12.65	4.16	1.00	
2	1.82	1.00	9.79	8.26	6.09	10.62	14.80	199.94	29.17	9.79	4.16	1.00	
3	1.82	1.23	4.74	4.16	40.93	10.62	154.98	182.62	27.61	9.04	3.56	1.00	
4	1.82	4.74	6.09	1.82	32.26	10.62	227.36	126.49	27.61	6.75	3.17	1.23	
5	1.82	3.17	12.65	3.56	38.97	33.80	109.99	100.70	24.68	8.26	4.74	1.23	
6	1.23	3.17	9.79	4.16	116.44	18.21	62.56	85.88	23.30	11.62	3.56	0.75	
7	1.23	5.40	4.74	3.56	204.40	12.65	49.08	82.96	24.68	10.62	4.74	1.23	
8	1.23	1.82	5.40	4.16	113.20	12.65	42.92	69.89	27.61	9.04	3.56	0.10	
9	1.23	1.52	4.74	10.62	126.49	11.62	24.68	64.97	29.17	9.04	4.16	0.27	
10	1.23	1.23	3.17	21.85	60.05	15.91	147.39	64.97	23.30	9.04	1.82	0.43	
11	1.23	1.00	11.62	47.00	30.65	13.71	64.97	60.05	21.85	9.04	2.80	0.50	
12	1.23	2.80	4.74	18.21	816.72	11.62	47.00	53.33	14.80	9.04	2.15	0.58	
13	1.23	13.71	2.80	8.26	213.41	26.08	33.80	49.08	14.80	10.62	2.80	0.58	
14	1.23	3.56	1.52	4.16	103.82	565.13	24.68	51.19	14.80	12.65	2.80	0.48	
15	1.23	4.16	1.52	3.56	72.52	106.97	20.61	213.41	15.91	14.80	2.49	0.48	
16	1.23	718.20	1.52	3.56	72.52	51.19	18.21	77.61	14.80	7.49	6.09	0.48	
17	1.23	133.39	1.23	4.16	64.97	29.17	133.39	75.05	14.80	6.75	4.74	0.50	
18	1.23	40.93	1.23	8.26	40.93	20.61	35.46	67.41	12.65	6.09	9.04	0.50	
19	1.00	15.91	1.23	14.80	32.26	30.65	29.17	53.33	14.80	5.40	4.74	0.55	
20	0.75	7.49	1.52	19.40	27.61	29.17	15.91	51.19	15.91	5.40	6.75	0.53	
21	0.53	18.21	1.23	20.61	26.08	35.46	14.80	47.00	13.71	5.40	8.26	0.53	
22	0.53	11.62	0.75	113.20	23.30	106.97	15.91	44.94	18.21	5.40	4.74	0.53	
23	0.53	6.75	1.23	103.82	19.40	38.97	20.61	42.92	30.65	6.09	3.56	0.33	
24	0.53	3.56	1.52	47.00	17.05	20.61	26.08	38.97	26.08	4.16	3.17	0.35	
25	0.53	3.17	3.56	30.65	14.80	166.69	283.48	37.04	23.30	4.16	2.15	0.40	
26	0.53	3.56	4.16	20.61	13.71	106.97	351.07	35.46	21.85	4.74	1.82	0.50	
27	0.75	204.40	2.49	19.40	12.65	53.33	151.25	33.80	20.61	7.49	1.82	0.35	
28	0.45	57.70	2.15	18.21	20.61	60.05	123.16	30.65	14.80	4.16	1.52	0.45	
29	0.45	26.08	2.15	14.80	27.61	32.26	938.05	30.65	14.80	3.56		0.48	
30	0.53	17.05	2.80	19.40	24.68	24.68	2824.46	29.17	12.65	4.74		0.38	
31		17.05		14.80	27.61		582.41		12.65	4.74		0.29	
Total	32.20	1334.33	127.99	624.28	2449.23	1685.20	6607.64	2338.34	630.73	237.77	109.07	18.01	16194.79 Ton
Mean	1.07	43.04	4.27	20.14	79.01	56.17	213.15	77.94	20.35	7.67	3.90	0.58	
Max	1.82	718.20	15.91	113.20	816.72	565.13	2824.46	237.67	30.65	14.80	9.04	1.23	2824.46
Min	0.45	0.75	0.75	1.82	6.09	10.62	14.80	29.17	12.65	3.56	1.52	0.10	0.10

WATER YEAR : 2001

PING RIVER BASIN

Khlong Khlung at Ban Pang Ta Wai, Kamphaeng Phet (P.35)

Lat 16 - 04 - 22 N. **Long** 99 - 24 - 18 E.

Location on right bank at Ban Pang Wai about 1.5 kilometers from Khao Song Phi Nong.

Ban Pang Ta Wai **Amphoe** Khlong Khlung **Changwat** Kamphaeng Phet

Drainage Area 730 sq.km.

Method of sampling Depth Integrating

Instrument Used US.DH - 48

Period of Available Records 1988 - 1996, 1998 - Cont'd

Actual Measurement 1988 - 1996, 1998 - Cont'd

Using Rating Curve Water Year 2001

Number of observation 45

R - Square 0.8847

Remarks Continued sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:14:10.41 LQS/LQS02D/12

Station - Ban Pang Ta Wai, Khlong Khlung, Kamphaeng Phet, (P.35)
Stream - Khlong Khlung
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 260602
1.38130
QS = 5.2853 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.92	3.88	197.43	31.85	7.59	8.83	93.27	1179.06	42.20	11.27	4.57	1.92	
2	2.61	6.80	149.45	28.31	5.29	9.25	61.93	857.01	41.17	11.90	4.57	1.92	
3	2.31	142.33	209.43	26.70	5.29	8.41	64.54	573.32	28.31	11.90	8.00	1.81	
4	2.31	475.96	147.07	27.50	8.83	6.80	87.04	373.15	43.37	15.51	5.65	1.81	
5	2.03	457.10	197.43	28.31	22.46	5.65	78.93	363.72	39.38	13.30	4.57	1.59	
6	2.03	392.19	237.12	22.46	45.74	11.90	72.98	286.84	29.24	8.83	4.92	1.70	
7	0.82	507.86	318.07	18.53	56.81	33.78	55.54	243.40	37.49	8.00	4.92	4.92	
8	0.82	760.44	182.71	17.71	191.50	24.11	46.94	221.62	42.20	8.00	4.92	4.22	
9	0.74	387.41	237.12	12.64	294.79	15.51	40.27	179.80	38.37	7.59	4.92	2.61	
10	0.65	179.80	1498.37	8.00	171.16	21.70	49.36	171.16	34.63	20.10	4.57	2.03	
11	0.57	108.26	1054.60	20.10	212.46	21.70	431.06	157.03	28.31	8.41	4.57	1.92	
12	0.57	185.63	904.36	22.46	126.11	35.62	533.78	139.98	31.85	8.41	4.57	1.81	
13	0.82	209.43	830.36	22.46	84.99	144.70	262.51	133.00	25.79	8.00	4.22	1.81	
14	0.82	149.45	488.65	32.81	51.81	64.54	149.45	119.33	22.46	8.41	4.22	1.70	
15	0.74	179.80	298.56	23.33	33.78	51.81	93.27	179.80	16.20	8.00	3.88	1.70	
16	0.65	110.45	191.50	18.53	25.79	28.31	78.93	194.46	16.20	8.00	3.88	1.59	
17	0.57	123.84	135.32	14.73	25.00	31.01	72.98	147.07	28.31	8.00	3.55	1.59	
18	0.57	188.56	106.08	9.25	16.20	22.46	64.54	126.11	22.46	8.00	3.23	1.59	
19	0.49	179.80	74.95	8.83	15.51	21.70	45.74	103.91	21.70	8.00	3.23	1.59	
20	0.49	149.45	63.23	9.25	15.51	19.26	37.49	87.04	19.26	7.59	2.61	6.80	
21	1.00	130.69	51.81	9.25	17.00	25.79	35.62	76.93	19.26	6.80	2.03	4.57	
22	3.23	168.31	49.36	8.83	72.98	215.50	35.62	64.54	19.26	6.80	2.03	3.55	
23	2.31	457.10	42.20	10.56	80.93	586.67	32.81	61.93	19.26	6.80	2.03	2.92	
24	1.70	224.69	44.55	12.64	78.93	283.11	318.07	58.08	18.53	6.80	2.03	2.61	
25	0.49	147.07	50.58	8.00	38.37	249.73	7778.42	54.29	16.20	6.41	1.92	2.03	
26	0.28	135.32	55.54	7.19	23.33	760.44	8793.64	50.58	12.64	5.29	1.92	1.92	
27	0.42	507.86	45.74	6.41	16.20	1219.19	5176.60	43.37	12.64	4.92	1.92	1.81	
28	0.42	1259.70	40.27	3.23	13.30	654.68	3260.03	45.74	12.64	4.92	1.92	1.70	
29	0.49	586.67	34.63	5.29	10.56	240.25	2112.20	41.17	11.27	4.92		1.59	
30	0.42	346.23	31.01	5.29	9.94	130.69	2277.22	32.81	11.90	4.57		1.49	
31		230.88		6.80	8.83		1584.06		11.90	4.57		1.49	
Total	34.29	9092.96	7967.50	487.25	1786.99	4953.10	33824.84	6366.25	774.40	260.02	105.37	72.31	65725.28 Ton
Mean	1.14	293.32	265.58	15.72	57.64	165.10	1091.12	212.21	24.98	8.39	3.76	2.33	
Max	3.23	1259.70	1498.37	32.81	294.79	1219.19	8793.64	1179.06	43.37	20.10	8.00	6.80	8793.64
Min	0.28	3.88	31.01	3.23	5.29	5.65	32.81	32.81	11.27	4.57	1.92	1.49	0.28

.670

WATER YEAR : 2001

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
Drainage Area	554 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	2001
Number of observation	36
R - Square	0.9550
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:19:12.58

LQS/LQS02D/12

Station - Ban Sahakhon Rom Klao, Phrao, Chiang Mai, (P.56A)
Stream - Nam Mae Ngat
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.30470
QS = 4.8754 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.43	0.60	135.43	3.41	41.06	144.62	61.17	84.47	16.54	5.78	3.41	1.15	
2	1.43	0.60	62.32	2.95	46.26	87.45	52.81	68.98	16.03	5.78	3.41	1.15	
3	1.43	0.68	42.11	2.45	226.26	71.59	52.81	91.97	14.95	5.78	3.41	1.29	
4	1.15	2.95	25.56	1.97	1152.00	142.66	61.17	61.17	13.96	5.13	3.41	1.29	
5	1.15	2.67	44.12	1.82	700.58	157.96	58.77	52.81	13.96	4.81	3.18	1.43	
6	1.01	2.95	32.70	1.97	238.81	123.12	62.32	45.18	13.96	3.94	3.18	1.43	
7	0.93	2.95	16.03	3.41	238.81	98.34	51.60	40.12	13.96	4.50	1.97	1.57	
8	1.15	2.45	10.57	4.50	148.42	98.34	46.26	40.12	14.45	3.94	1.97	1.57	
9	1.15	2.18	6.52	52.81	82.98	228.76	43.16	39.18	14.45	4.50	1.97	1.67	
10	1.15	1.82	5.46	93.62	63.59	350.69	55.16	36.41	12.92	3.41	2.18	1.82	
11	1.43	4.25	7.56	46.26	124.74	301.14	58.77	33.59	11.50	4.25	2.18	1.82	
12	1.43	6.87	5.78	38.26	458.60	285.24	46.26	34.49	10.12	4.50	1.97	1.82	
13	1.43	6.18	4.50	21.42	490.28	394.46	38.26	31.81	9.22	4.50	1.97	1.82	
14	1.15	10.12	4.50	11.50	295.82	760.83	31.81	29.46	8.78	4.50	1.97	1.67	
15	1.15	14.45	5.46	6.87	199.53	347.58	27.92	27.06	9.67	5.13	1.97	1.15	
16	1.15	7.92	16.03	7.56	301.14	192.74	26.31	25.56	8.78	5.78	4.50	0.93	
17	0.93	6.52	14.95	10.57	211.41	128.28	24.07	24.07	7.21	5.46	5.13	0.68	
18	0.93	6.18	9.22	17.64	114.67	121.36	22.06	24.07	6.87	4.50	6.18	0.93	
19	0.93	15.53	5.78	22.78	77.11	175.66	19.56	24.81	5.46	3.94	5.78	0.93	
20	0.93	6.52	4.81	50.50	57.52	167.77	17.64	24.07	5.13	3.94	5.13	1.01	
21	0.68	233.77	4.50	52.81	43.16	142.66	18.25	23.42	5.13	3.41	3.94	0.68	
22	0.68	109.77	3.70	159.97	55.16	113.08	17.64	23.42	7.21	3.18	4.25	0.56	
23	0.68	64.87	2.67	876.13	42.11	98.34	16.54	22.78	9.22	3.18	3.70	0.31	
24	0.68	29.46	2.18	545.88	31.81	90.46	17.13	20.18	7.92	3.18	2.45	0.37	
25	0.68	16.54	1.82	139.03	26.31	90.46	20.80	17.64	6.87	3.70	1.97	0.41	
26	0.93	10.57	1.67	52.81	26.31	90.46	45.18	17.64	6.52	3.70	1.67	0.31	
27	0.68	17.13	1.57	100.01	31.02	80.04	52.81	17.64	5.78	3.70	1.43	0.31	
28	0.68	30.24	2.18	68.98	96.80	81.51	228.76	17.64	5.13	2.18	1.43	0.18	
29	0.60	24.81	1.82	41.06	206.52	78.57	335.23	17.64	5.46	2.18		0.18	
30	0.60	16.03	3.41	56.28	213.87	71.59	218.81	17.13	5.78	1.97		0.18	
31		24.07		53.93	163.86		121.36		5.13	2.95		0.18	
Total	30.33	681.65	484.93	2549.16	6206.52	5315.76	1950.40	1034.53	298.07	127.40	85.71	30.80	18795.26 Ton
Mean	1.01	21.99	16.16	82.23	200.21	177.19	62.92	34.48	9.62	4.11	3.06	0.99	
Max	1.43	233.77	135.43	876.13	1152.00	760.83	335.23	91.97	16.54	5.78	6.18	1.82	1152.00
Min	0.60	0.60	1.57	1.82	26.31	71.59	16.54	17.13	5.13	1.97	1.43	0.18	0.18

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Tun at Ban Luang, Chiang Mai (P.64)

Lat 17 - 46 - 56 N. **Long** 98 - 22 - 29 E.

Location	on right bank at the bridge on Highway.
Ban Luang	**Amphoe** Omkoi **Changwat** Chiang Mai
Drainage Area	503 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
Number of observation	30
R - Square	0.8419
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:19:25.03

LQS/LQS02D/12

Station - Ban Luang, Omkoi, Chiang Mai, (P.64)
Stream -
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.49530
QS = 4.6590 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.45	1.96	4.11	14.53	133.71	58.48	31.63	74.60	17.25	8.46	3.53	1.96	
2	2.45	1.51	2.45	20.57	154.77	58.48	29.68	58.48	17.25	9.58	3.53	1.96	
3	4.11	1.96	1.10	13.23	236.17	55.77	29.68	184.08	17.25	9.58	3.53	1.51	
4	3.53	11.97	0.73	11.97	202.26	50.46	29.68	81.69	17.25	8.46	2.97	1.51	
5	2.45	3.53	1.10	20.57	208.85	45.34	29.68	64.54	15.87	7.38	2.97	1.51	
6	1.96	2.45	0.42	64.54	166.24	45.34	31.63	58.48	15.87	7.38	2.97	1.51	
7	1.51	2.45	0.42	55.77	215.76	40.40	40.40	47.88	14.53	7.38	2.97	1.51	
8	1.51	2.97	0.42	40.40	507.71	40.40	29.68	47.88	18.89	7.38	2.97	1.10	
9	1.51	2.45	0.42	45.34	302.88	40.40	25.91	45.34	17.25	7.38	2.97	1.10	
10	1.51	2.45	2.97	42.85	149.25	45.34	114.50	40.40	15.87	5.37	2.97	1.51	
11	1.10	4.11	5.37	33.62	119.16	47.88	133.71	40.40	15.87	6.35	2.97	1.51	
12	1.10	31.63	8.46	31.63	318.56	42.85	257.44	40.40	11.97	6.35	2.45	1.51	
13	1.10	7.38	3.53	31.63	264.85	42.85	81.69	38.00	11.97	5.37	2.45	1.51	
14	1.10	4.11	33.62	50.46	202.26	302.88	55.77	35.65	13.23	5.37	2.45	1.10	
15	1.10	8.46	14.53	35.65	160.59	257.44	40.40	47.88	13.23	5.37	5.37	0.42	
16	1.10	35.65	13.23	64.54	149.25	78.12	31.63	38.00	14.53	5.37	13.23	0.73	
17	0.42	71.14	25.91	133.71	138.61	53.09	640.74	33.62	14.53	4.73	8.46	0.36	
18	0.42	35.65	15.87	143.57	138.61	42.85	114.50	31.63	11.97	4.11	4.11	1.10	
19	0.42	10.76	11.97	250.37	128.66	40.40	64.54	29.68	11.97	4.11	2.97	0.73	
20	0.42	6.35	9.58	236.17	114.50	88.81	47.88	27.77	13.23	4.11	3.53	0.73	
21	0.73	45.34	11.97	236.17	96.31	92.53	42.85	24.08	11.97	4.11	2.97	1.10	
22	0.42	14.53	11.97	485.47	92.53	55.77	35.65	24.08	10.76	4.11	2.97	0.73	
23	0.42	5.37	9.58	368.63	85.32	67.90	33.62	29.68	9.58	4.11	2.97	0.42	
24	0.42	3.53	11.97	172.20	74.60	71.14	85.32	22.31	9.58	4.11	2.97	0.42	
25	0.36	3.53	13.23	123.88	71.14	55.77	395.62	27.77	9.58	4.11	2.45	0.42	
26	0.36	3.53	8.46	88.81	67.90	47.88	368.63	20.57	9.58	4.11	1.96	0.36	
27	0.36	5.37	9.58	81.69	74.60	42.85	138.61	20.57	9.58	4.11	1.51	0.73	
28	0.36	4.11	10.76	71.14	74.60	35.65	138.61	20.57	8.46	4.11	1.10	0.36	
29	0.30	3.53	14.53	71.14	74.60	31.63	133.71	20.57	9.58	4.11		0.42	
30	0.30	13.23	18.89	64.54	67.90	31.63	105.18	18.89	9.58	4.11		0.42	
31		4.11		109.91	64.54		81.69		10.76	4.11		0.36	
Total	35.30	355.12	277.15	3214.70	4856.69	2010.33	3420.26	1295.49	408.79	174.80	98.27	30.62	16177.52 Ton
Mean	1.18	11.46	9.24	103.70	156.67	67.01	110.33	43.18	13.19	5.64	3.51	0.99	
Max	4.11	71.14	33.62	485.47	507.71	302.88	640.74	184.08	18.89	9.58	13.23	1.96	640.74
Min	0.30	1.51	0.42	11.97	64.54	31.63	25.91	18.89	8.46	4.11	1.10	0.36	0.30

WATER YEAR : 2001

PING RIVER BASIN

Mae Taeng at Ban Muang Pok , Chiang Mai (P.65)

Lat 19 - 38 - 12 N. **Long** 98 - 38 - 20 E.

Location	on left bank in front of King Amphoe Wiang Haeng Office.
Ban Muang Pok	**Amphoe** Wiang Haeng **Changwat** Chiang Mai
Drainage Area	240 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	2001
Number of observation	36
R - Square	0.9046
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:53:22.30

LQS/LQS02D/12

Station - Ban Muang Pok, A. Wiang Haeng, Chiang Mai, (P.65)
Stream - Mae Taeng
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.55350
QS = 4.3210 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.96	0.18	60.37	5.74	28.79	149.31	78.39	42.87	9.50	6.19	2.48	1.66	
2	0.96	0.23	25.31	6.34	117.01	117.01	55.13	36.80	9.50	5.59	2.06	1.66	
3	0.81	0.23	25.31	5.22	835.01	101.53	56.80	34.10	8.79	5.59	2.06	1.66	
4	0.81	0.30	17.27	4.19	1538.70	106.32	67.73	31.34	8.79	5.59	2.06	1.47	
5	0.44	0.25	42.87	14.60	905.67	101.53	56.80	27.61	8.11	5.59	2.06	1.47	
6	0.44	0.25	18.27	6.89	555.32	87.23	58.66	24.06	8.11	5.59	1.85	1.47	
7	0.38	0.38	15.44	6.34	466.41	80.48	56.80	22.95	7.45	5.59	1.85	1.66	
8	0.38	0.38	19.18	33.40	295.29	76.14	87.23	21.87	7.45	5.59	1.66	1.85	
9	0.38	0.30	8.11	136.93	405.30	71.90	58.66	21.87	7.45	5.59	1.85	2.06	
10	0.38	0.23	12.19	73.92	215.88	96.61	55.13	20.80	7.45	5.59	1.85	2.06	
11	0.38	12.98	7.45	125.38	189.70	94.18	55.13	19.75	7.45	5.59	1.85	1.85	
12	0.38	12.98	9.41	45.63	1130.58	96.61	53.47	18.72	7.45	6.19	1.66	1.85	
13	0.38	9.41	5.74	28.79	967.25	119.63	51.84	18.72	8.11	6.81	1.85	1.85	
14	0.38	7.45	10.12	28.79	663.69	149.31	48.62	18.72	7.45	5.01	1.66	1.66	
15	0.38	73.92	12.19	26.45	398.88	111.41	45.63	18.72	7.45	5.01	1.66	1.47	
16	0.38	10.12	14.60	24.31	281.49	91.98	55.13	18.72	7.45	5.01	3.42	1.47	
17	0.38	10.77	8.11	21.15	204.63	80.48	63.84	18.72	6.81	5.01	2.27	1.66	
18	0.35	24.31	7.45	20.22	178.71	76.14	47.20	17.72	6.81	5.01	2.06	1.66	
19	0.23	20.22	8.11	15.44	149.31	82.77	44.24	17.72	6.81	5.01	2.06	1.66	
20	0.25	255.77	6.89	25.31	122.49	78.39	41.36	16.73	6.19	4.46	1.85	1.66	
21	0.23	133.95	5.74	20.22	128.29	114.20	41.36	16.73	6.19	4.46	1.85	1.66	
22	0.23	35.94	5.22	35.94	142.95	84.90	40.01	16.73	8.11	4.46	1.85	1.66	
23	0.18	18.27	5.74	398.88	101.53	73.92	38.69	12.49	8.11	4.46	1.66	1.66	
24	0.18	8.79	7.45	142.95	89.60	78.39	38.69	12.49	6.81	4.46	1.66	1.66	
25	0.18	6.89	8.11	63.84	82.77	71.90	40.01	10.22	6.19	5.01	1.66	1.66	
26	0.18	186.10	5.74	45.63	76.14	63.84	47.20	10.22	6.81	3.42	1.66	1.66	
27	0.18	104.02	5.22	51.84	239.58	62.10	45.63	10.22	6.19	2.06	1.66	1.66	
28	0.18	56.80	4.73	34.66	104.02	62.10	133.95	10.22	6.19	2.06	1.66	1.66	
29	0.18	82.77	4.73	27.61	193.33	60.37	264.15	9.50	6.19	2.06		1.66	
30	0.23	34.66	4.19	34.66	215.88	56.80	111.62	9.50	6.19	2.06		1.66	
31		53.47		25.31	295.29		63.14		6.19	2.27		1.47	
Total	11.38	1162.32	391.26	1536.58	11319.49	2697.48	2002.24	586.83	227.75	146.39	53.78	51.88	20187.38 Ton
Mean	0.38	37.49	13.04	49.57	365.14	89.92	64.59	19.56	7.35	4.72	1.92	1.67	
Max	0.96	255.77	60.37	398.88	1538.70	149.31	264.15	42.87	9.50	6.81	3.42	2.06	1538.70
Min	0.18	0.18	4.19	4.19	28.79	56.80	38.69	9.50	6.19	2.06	1.66	1.47	0.18

WATER YEAR : 2001

PING RIVER BASIN

Ping River 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
Drainage Area			1,771 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		
Number of observation			36		
R - Square			0.9338		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 25-FEB-2005 10:19:57.78

LQS/LQS02D/12

Station - Ban Klang, San Pa Tong, Chiang Mai, (P.71)
Stream - Nam Mae Khan
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.52420
QS = 2.7163 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.22	0.50	137.70	14.57	33.32	220.59	86.15	1755.42	72.42	23.33	9.73	0.83	
2	0.94	1.48	109.56	8.23	33.32	160.01	72.42	846.05	63.16	23.33	7.52	0.41	
3	0.83	1.72	109.56	5.51	514.48	93.32	234.44	745.91	65.87	29.86	6.15	0.41	
4	0.83	2.76	69.12	3.05	1251.36	206.10	298.72	455.39	60.49	28.18	3.63	0.33	
5	0.50	2.47	26.53	3.05	720.64	274.07	302.06	347.75	52.73	13.48	2.76	0.27	
6	0.50	4.29	23.33	1.97	1183.76	236.94	252.12	305.42	52.73	19.46	2.76	0.17	
7	0.41	4.29	23.33	1.34	1737.82	179.39	132.94	302.06	50.23	16.99	2.76	0.15	
8	0.33	3.96	15.76	3.36	484.63	100.68	114.02	254.68	45.34	15.76	2.76	0.27	
9	0.62	3.63	16.99	31.58	1063.77	93.32	109.56	244.49	42.97	13.48	1.06	0.33	
10	0.50	2.76	11.31	257.25	745.91	86.15	192.68	241.96	40.64	13.48	0.94	0.31	
11	0.83	1.48	18.17	323.02	298.72	93.32	199.35	228.14	45.34	15.76	0.83	0.25	
12	0.62	0.83	28.18	224.35	3745.01	222.47	128.08	222.47	40.64	14.57	0.62	0.22	
13	0.33	1.72	22.05	63.16	8350.78	241.96	89.71	192.68	33.32	13.48	0.83	0.17	
14	0.50	1.48	19.46	31.58	2647.60	274.07	52.73	153.82	26.53	15.76	0.83	0.12	
15	0.72	3.63	19.46	33.32	704.34	373.78	45.34	234.44	23.33	28.18	1.22	0.12	
16	0.72	285.48	23.33	26.53	410.63	241.96	40.64	220.59	23.33	23.33	28.18	0.09	
17	0.50	1393.21	15.76	15.76	343.59	192.68	185.91	179.39	23.33	18.17	22.05	0.09	
18	0.33	1157.09	10.51	7.52	257.25	123.43	123.43	142.52	16.99	12.41	12.41	0.08	
19	0.27	285.48	4.29	5.51	302.06	214.98	69.12	142.52	18.17	12.41	8.97	0.07	
20	0.33	93.32	1.48	6.15	218.71	128.08	40.64	132.94	23.33	11.31	4.89	0.08	
21	0.27	31.58	0.94	10.51	93.32	241.96	40.64	123.43	29.86	11.31	10.51	0.08	
22	0.25	60.49	0.94	308.79	241.96	239.45	23.33	105.16	36.92	9.73	7.52	0.09	
23	0.22	28.18	1.06	894.22	172.79	265.61	18.17	96.98	96.98	7.52	7.52	0.09	
24	0.25	18.17	1.34	484.63	72.42	153.82	57.87	241.96	69.12	7.52	1.48	0.12	
25	0.22	8.97	11.31	216.84	75.78	192.68	185.91	231.95	55.28	9.73	0.83	0.12	
26	0.25	7.52	13.48	69.12	60.49	247.02	360.35	228.14	42.97	6.15	0.50	0.12	
27	0.25	720.64	3.63	45.34	60.49	192.68	472.86	105.16	33.32	7.52	0.83	0.12	
28	0.25	1170.40	3.63	42.97	271.24	166.44	508.46	114.02	28.18	4.29	1.48	0.12	
29	0.18	292.08	3.63	23.33	430.33	137.70	1517.54	109.56	29.86	4.89		0.12	
30	0.18	118.70	5.51	16.99	688.16	123.43	8416.41	96.98	29.86	8.97		0.12	
31		123.43		40.64	323.02		7960.73		19.46	13.48		0.12	
Total	14.15	5831.74	751.35	3220.19	27537.70	5718.09	22332.33	8801.98	1292.70	453.84	151.57	5.99	76111.65 Ton
Mean	0.47	188.12	25.05	103.88	888.31	190.60	720.40	293.40	41.70	14.64	5.41	0.19	
Max	1.22	1393.21	137.70	894.22	8350.78	373.78	8416.41	1755.42	96.98	29.86	28.18	0.83	8416.41
Min	0.18	0.50	0.94	1.34	33.32	86.15	18.17	96.98	16.99	4.29	0.50	0.07	0.07

WATER YEAR : 2001

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
Drainage Area	13,353 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
Number of observation	38
R - Square	0.9086
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:53:38.09 LQS/LQS02D/12

Station - Ban Sop Soi, Chom Thong, Chiang Mai, P.73, (P.73)
Stream - Ping
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.34810
QS = 1.6024 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	31.92	8.67	1084.80	70.16	909.70	3722.90	1581.64	12991.22	581.36	178.60	47.73	4.08	
2	38.14	10.74	972.45	136.27	878.73	2855.28	1444.84	7755.51	619.27	185.93	54.60	5.51	
3	31.92	19.98	864.45	136.27	1052.38	2150.60	1708.49	5248.38	594.26	178.60	61.70	3.81	
4	21.24	54.60	748.19	104.66	3537.12	1708.49	2472.75	3948.39	557.73	164.16	54.60	7.05	
5	18.34	81.26	670.08	61.70	5787.96	1934.36	2630.77	3084.44	532.43	157.06	50.87	14.03	
6	22.94	164.16	607.23	54.60	7358.30	2199.29	3786.98	2547.82	532.43	164.16	44.65	11.45	
7	18.34	104.66	496.95	47.73	10928.80	1958.69	3537.12	2150.60	461.18	171.34	41.11	11.45	
8	21.24	92.77	404.35	47.73	11030.23	1562.45	2742.43	1888.61	438.04	164.16	38.14	10.74	
9	14.79	122.84	339.99	70.16	9977.39	1256.66	2054.07	1624.07	438.04	150.05	30.52	11.45	
10	11.45	87.27	289.34	427.03	9290.94	1312.52	2127.05	1483.78	404.35	157.06	25.55	8.34	
11	10.04	75.95	178.60	819.81	7402.17	1562.45	2714.40	1406.17	404.35	136.27	21.24	2.52	
12	9.35	81.26	164.16	864.45	7227.10	1934.36	2770.53	1349.29	392.68	136.27	18.34	2.52	
13	9.35	143.11	136.27	763.02	16830.02	2826.96	2883.67	1256.66	381.99	136.27	11.45	2.52	
14	8.67	171.34	116.91	594.26	19758.48	6200.04	2497.23	1274.81	392.68	136.27	5.51	2.28	
15	8.34	164.16	116.91	427.03	19031.51	8522.20	1958.69	1687.60	404.35	164.16	5.81	1.19	
16	8.67	334.84	143.11	366.09	16025.71	8760.59	1624.07	1562.45	392.68	185.93	12.91	0.18	
17	8.34	1237.38	157.06	345.17	12936.08	7227.10	1774.16	1330.87	371.37	171.34	38.14	0.32	
18	7.05	1052.38	136.27	329.70	10026.91	4595.75	1774.16	1151.58	381.99	157.06	70.16	0.32	
19	24.23	763.02	104.66	334.84	6665.73	3233.03	1602.18	1004.22	366.09	136.27	70.16	0.18	
20	19.98	569.51	61.70	339.99	4666.78	2742.43	1406.17	988.30	345.17	136.27	57.85	0.18	
21	22.94	438.04	57.85	355.59	3353.82	3055.54	1202.63	925.28	329.70	129.51	61.70	0.18	
22	25.55	581.36	44.65	956.66	2714.40	4046.07	1052.38	878.73	339.99	116.91	57.85	2.52	
23	38.14	850.23	41.11	3262.35	2371.19	4180.55	894.18	819.81	392.68	116.91	41.11	3.54	
24	24.23	632.38	34.76	5552.76	2054.07	3353.82	805.78	776.85	450.03	116.91	22.94	2.77	
25	27.33	404.35	41.11	5437.88	1708.49	2855.28	1135.08	695.87	450.03	116.91	14.79	2.05	
26	18.34	345.17	70.16	4282.98	1406.17	3142.44	1624.07	683.46	450.03	116.91	9.35	3.54	
27	18.34	415.20	65.05	2770.53	1202.63	3233.03	1983.11	644.55	371.37	110.42	7.37	4.64	
28	11.45	1795.32	54.60	2006.23	1219.38	2547.82	2077.41	632.38	339.99	110.42	5.51	3.54	
29	8.34	2371.19	47.73	1522.98	2422.55	2127.05	3384.97	607.23	329.70	110.42		4.08	
30	8.01	1624.07	54.60	1185.95	4080.40	1888.61	10475.34	581.36	314.41	70.16		3.81	
31		1202.63		1004.22	4454.55		15603.10		284.39	41.11		8.34	
Total	547.01	15999.84	8305.10	34678.80	208309.67	98696.36	85329.45	62980.30	13044.76	4323.82	981.66	139.13	533336.00 Ton
Mean	18.23	516.12	276.84	1118.67	6719.67	3289.88	2752.56	2099.34	420.80	139.48	35.06	4.49	
Max	38.14	2371.19	1084.80	5552.76	19758.48	8760.59	15603.10	12991.22	619.27	185.93	70.16	14.03	19758.48
Min	7.05	8.67	34.76	47.73	878.73	1256.66	805.78	581.36	284.39	41.11	5.51	0.18	0.18

WATER YEAR : 2001

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
Drainage Area			3,090 sq.km.		
Method of sampling			Depth Integrating		
Instrument Used			US.DH - 59, US.D - 49		
Period of Available Records			2001 - Cont'd		
Actual Measurement			2001 - Cont'd		
Using Rating Curve Water Year			2001		
Number of observation			38		
R - Square			0.938		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 25-FEB-2005 10:20:29.41 LQS/LQS02D/12

Station - Ban Cho Lae, Mae Taeng, Chiang Mai, P.75, (P.75)
Stream - Ping
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
2.21700
QS = 0.1314 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.89	37.44	208.95	18.53	104.75	1141.67	216.35	360.64	56.08	22.14	23.62	14.56	
2	7.03	16.48	187.59	18.53	96.28	669.32	223.90	280.71	61.39	8.94	22.14	14.56	
3	6.45	13.65	104.75	18.53	1219.26	442.57	255.50	289.41	53.52	25.16	18.53	14.56	
4	6.45	13.65	74.32	16.48	7436.86	405.72	208.95	247.38	43.95	28.40	15.50	12.77	
5	6.45	11.11	74.32	16.48	12140.36	507.93	180.75	239.41	39.54	26.75	14.56	13.65	
6	4.87	67.69	61.39	18.53	6250.36	455.25	187.59	201.69	39.54	26.75	13.65	14.56	
7	4.87	92.40	48.61	22.14	3007.16	339.41	154.77	180.75	41.71	18.53	14.56	13.65	
8	7.03	56.08	39.54	30.10	3158.28	329.06	118.20	137.53	46.24	20.71	15.50	14.56	
9	7.03	64.50	39.54	74.32	3860.54	329.06	132.54	127.66	46.24	20.71	16.48	15.50	
10	84.91	46.24	39.54	109.13	1861.28	563.80	263.76	113.62	43.95	22.14	20.71	14.56	
11	84.91	14.56	17.49	100.47	1193.09	895.68	223.90	109.13	33.66	23.62	11.11	12.77	
12	84.91	31.85	20.71	142.61	6829.47	1193.09	167.48	104.75	31.85	23.62	11.92	11.11	
13	84.91	26.75	18.53	96.28	16457.41	936.94	142.61	100.47	35.52	25.16	10.36	12.77	
14	84.91	26.75	25.16	64.50	7796.73	2200.64	122.88	96.28	39.54	25.16	12.77	14.56	
15	84.91	53.52	26.75	51.03	3691.60	2718.41	104.75	84.91	53.52	22.14	15.50	14.56	
16	84.91	23.62	26.75	70.96	2361.52	1219.26	84.91	70.96	48.61	20.71	18.53	13.65	
17	84.91	64.50	25.16	67.69	1755.06	686.81	81.29	67.69	41.71	23.62	19.60	12.77	
18	84.91	84.91	20.71	84.91	1091.50	468.13	81.29	67.69	37.44	22.14	15.50	10.36	
19	84.91	61.39	19.60	81.29	816.21	405.72	70.96	61.39	35.52	19.60	14.56	9.64	
20	61.39	104.75	17.49	74.32	563.80	430.09	61.39	61.39	37.44	20.71	13.65	9.64	
21	9.64	1468.94	15.50	70.96	417.81	405.72	56.08	56.08	37.44	17.49	15.50	12.77	
22	28.40	777.99	15.50	118.20	740.77	349.94	48.61	53.52	64.50	15.50	15.50	84.91	
23	37.44	154.77	16.48	578.27	740.77	455.25	48.61	61.39	64.50	14.56	14.56	92.40	
24	53.52	142.61	19.60	2084.05	430.09	722.53	48.61	61.39	46.24	16.48	14.56	92.40	
25	53.52	74.32	18.53	796.97	289.41	1327.08	53.52	58.71	39.54	18.53	12.77	88.61	
26	56.08	51.03	26.75	263.76	247.38	759.25	58.71	56.08	33.66	18.53	11.11	81.29	
27	22.14	349.94	28.40	180.75	280.71	371.52	96.28	53.52	31.85	22.14	11.11	64.50	
28	51.03	349.94	26.75	148.62	653.64	318.89	535.47	56.08	35.52	18.53	11.92	35.52	
29	53.52	187.59	20.71	113.62	875.43	329.06	653.64	56.08	35.52	12.77		33.66	
30	51.03	223.90	17.49	118.20	2240.27	263.76	704.55	53.52	33.66	11.92		30.10	
31		208.95		113.62	1686.15		535.47		33.66	17.49		26.75	
Total	1382.88	4901.82	1302.61	5763.85	90293.97	21641.56	5923.32	3569.83	1323.06	630.65	425.78	907.67	138067.02 Ton
Mean	46.10	158.12	43.42	185.93	2912.71	721.39	191.07	118.99	42.68	20.34	15.21	29.28	
Max	84.91	1468.94	208.95	2084.05	16457.41	2718.41	704.55	360.64	64.50	28.40	23.62	92.40	16457.41
Min	4.87	11.11	15.50	16.48	96.28	263.76	48.61	53.52	31.85	8.94	10.36	9.64	4.87

WATER YEAR : 2001

PING RIVER BASIN

Nam Mae Li at Ban Mae E - Hai, Lumphun (P.76)

Lat 18 - 08 - 23 N **Long** 98 - 53 - 58 E.

Location	on right bank near the bridge of Li - Ban Mae E - Hai road.
Ban Mae E - Hai	**Amphoe** Li **Changwat** Lamphun
Drainage Area	1,541 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
Number of observation	37
R - Square	0.8694
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:53:54.29

LQS/LQS02D/12

Station - Ban Mae E Hai, Li, Lamphun, (P.76)
Stream - Nam Li
River - Ping River
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.31510
QS = 4.3139 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.33	2.11	9.69	3.27	4.60	26.88	116.38	1237.31	29.19	4.60	2.60	1.42	
2	14.17	2.25	8.33	3.27	4.60	20.49	289.58	656.26	26.88	5.66	2.75	1.21	
3	14.17	2.40	7.03	3.59	5.66	16.79	351.83	428.42	25.75	4.95	2.25	0.92	
4	9.69	2.60	6.03	3.92	17.74	16.79	297.37	289.58	21.49	4.26	1.92	0.77	
5	5.66	2.60	5.66	3.92	32.74	15.00	229.06	211.74	20.49	4.60	1.60	0.36	
6	8.33	41.38	5.66	3.92	205.13	14.17	255.12	192.07	16.79	4.26	1.29	0.29	
7	5.66	17.74	6.03	3.92	792.51	16.79	173.14	137.55	7.68	3.59	1.13	0.33	
8	4.95	15.85	9.69	3.59	1051.14	15.00	143.30	94.91	11.09	3.59	1.00	0.29	
9	4.95	13.27	10.38	4.60	392.93	12.53	108.94	99.45	9.69	3.92	0.77	0.16	
10	4.26	9.01	15.00	3.92	792.51	9.69	94.91	94.91	7.68	3.92	0.36	0.16	
11	4.60	7.68	13.27	3.59	397.95	10.38	108.94	79.64	12.53	4.26	0.36	0.16	
12	3.92	9.01	11.80	3.59	444.54	7.68	173.14	64.06	13.27	3.59	0.45	0.16	
13	3.59	9.01	11.09	3.27	392.93	13.27	137.55	75.55	20.49	4.26	0.45	0.11	
14	3.27	9.69	7.68	2.96	558.29	77.59	129.03	77.59	16.79	4.60	0.77	0.08	
15	2.75	13.27	9.69	2.75	378.45	576.36	88.18	101.74	14.17	4.26	2.75	0.08	
16	2.60	20.49	9.01	2.60	347.44	397.95	81.58	94.91	13.27	1.92	2.60	0.16	
17	2.96	45.22	7.68	2.25	243.87	466.72	118.89	77.59	10.38	1.29	3.92	0.29	
18	3.27	154.97	5.66	2.11	79.64	123.93	163.99	67.88	7.03	1.21	2.75	0.36	
19	2.75	104.05	4.60	2.40	92.65	83.77	201.85	60.51	9.01	2.25	2.11	0.36	
20	2.96	69.75	4.26	2.25	73.64	65.91	101.74	54.19	7.03	2.40	1.60	0.36	
21	2.60	65.91	3.92	2.40	60.51	606.80	77.59	51.09	8.33	1.92	1.29	0.29	
22	2.11	62.12	3.92	2.96	45.22	477.90	60.51	46.52	6.40	1.60	1.00	0.24	
23	2.11	46.52	2.75	3.92	38.86	232.75	48.03	45.22	8.33	1.92	0.77	0.24	
24	2.11	37.62	2.60	3.27	36.38	182.55	45.22	42.65	7.68	2.11	0.59	0.29	
25	2.25	26.88	2.75	2.96	15.85	173.14	85.97	40.11	8.33	2.25	0.36	0.36	
26	2.60	29.19	2.75	3.27	21.49	285.70	143.30	37.62	9.01	2.60	0.45	0.36	
27	2.40	31.55	2.60	3.27	21.49	258.90	444.54	36.38	2.60	2.11	0.92	0.42	
28	2.25	15.00	2.60	3.59	28.03	176.31	309.63	33.94	4.95	1.73	1.42	0.42	
29	2.11	22.41	2.40	2.96	42.65	118.89	849.98	32.74	4.60	1.92		0.36	
30	2.11	19.59	3.27	3.59	37.62	60.51	2747.92	30.36	4.60	2.25		0.36	
31		20.49		4.60	35.16		3571.18		4.26	2.60		0.36	
Total	135.49	929.63	197.80	102.48	6692.22	4561.14	11748.39	4592.49	369.79	96.40	40.23	11.73	29477.79 Ton
Mean	4.52	29.99	6.59	3.31	215.88	152.04	378.98	153.08	11.93	3.11	1.44	0.38	
Max	14.17	154.97	15.00	4.60	1051.14	606.80	3571.18	1237.31	29.19	5.66	3.92	1.42	3571.18
Min	2.11	2.11	2.40	2.11	4.60	7.68	45.22	30.36	2.60	1.21	0.36	0.08	0.08

WATER YEAR : 2001

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
Drainage Area			547 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			2001		
Number of observation			36		
R - Square			0.9359		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 25-FEB-2005 10:20:59.95 LQS/LQS02D/12

Station - Ban Sop Mae Sapuad, Mae Ta, Lamphun, P.77, (P.77)
Stream - Nam Mae Tha
River - Ping
River System - Ping River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.28390
QS = 4.0519 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	0.86	4.05	20.98	9.87	56.63	3.04	1.25	0.86	0.51	
2	0.00	0.00	0.00	0.86	4.58	13.82	9.87	17.32	3.04	1.25	0.86	0.51	
3	0.00	0.00	0.00	0.86	25.58	8.62	13.82	13.82	2.56	1.25	0.86	0.51	
4	0.00	0.00	1.25	0.86	33.65	43.93	20.98	11.15	2.56	1.25	0.86	0.51	
5	0.00	0.00	28.75	0.86	84.97	53.85	131.11	10.50	2.10	1.25	0.86	0.51	
6	0.00	0.00	17.32	0.86	141.30	37.00	105.88	9.24	2.10	0.86	0.86	0.51	
7	0.00	0.00	24.80	0.86	194.58	20.98	42.17	8.62	2.10	0.86	0.86	0.51	
8	0.00	0.00	11.15	0.86	43.05	13.82	23.26	8.62	1.66	0.86	0.86	0.51	
9	0.00	0.00	7.41	0.86	74.92	11.15	24.80	8.62	1.66	1.25	0.86	0.51	
10	0.00	0.00	5.12	1.25	67.08	9.87	82.94	8.01	1.66	1.25	0.86	0.51	
11	0.00	0.00	3.04	5.12	83.96	8.62	63.23	7.41	1.25	1.25	0.86	0.51	
12	0.00	0.00	11.81	4.05	1449.91	11.81	99.51	7.41	1.25	1.25	0.86	0.21	
13	0.00	0.00	8.62	2.56	980.65	426.62	60.38	6.24	0.86	1.25	0.86	0.21	
14	0.00	0.00	5.12	2.10	339.89	580.60	26.36	5.67	0.86	1.25	0.86	0.21	
15	0.00	0.00	3.54	2.56	181.21	229.51	16.60	5.67	0.86	1.25	0.86	0.21	
16	0.00	0.00	2.56	2.10	99.51	122.20	77.90	5.67	0.86	1.25	0.86	0.21	
17	0.00	0.00	2.56	2.10	65.15	68.05	69.99	5.12	0.51	1.25	0.86	0.21	
18	0.00	0.00	2.10	2.10	40.43	46.59	50.19	4.58	0.51	1.25	0.86	0.21	
19	0.00	0.00	2.10	2.10	40.43	43.93	22.49	4.58	0.21	0.86	0.51	0.21	
20	0.00	0.00	2.10	2.10	31.17	84.97	13.82	4.58	0.51	0.86	0.51	0.21	
21	0.00	0.00	1.66	2.10	22.49	109.11	11.15	4.05	0.51	0.86	0.86	0.21	
22	0.00	0.00	1.66	24.02	102.68	68.05	9.24	4.05	0.86	1.25	0.86	0.21	
23	0.00	0.00	1.66	224.45	29.55	48.38	8.62	3.54	0.86	1.25	0.86	0.21	
24	0.00	0.00	2.10	108.03	16.60	31.17	8.62	3.54	0.86	1.25	0.86	0.21	
25	0.00	0.00	2.10	43.05	12.47	35.32	16.60	3.54	0.86	1.25	0.86	0.21	
26	0.00	0.00	1.25	19.50	6.82	24.80	13.82	3.04	0.86	0.86	0.51	0.21	
27	0.00	0.00	0.86	12.47	5.67	20.24	13.82	3.04	0.86	0.86	0.51	0.21	
28	0.00	0.00	0.86	9.24	11.15	19.50	11.81	3.04	0.86	0.86	0.51	0.21	
29	0.00	0.00	0.86	6.82	43.93	13.14	84.97	3.04	0.86	0.86		0.21	
30	0.00	0.00	0.86	3.54	82.94	9.87	260.43	3.04	0.86	0.86		0.00	
31		0.00		4.58	52.01		112.35		0.86	0.86		0.00	
Total	0.00	0.00	153.22	493.68	4372.38	2236.50	1516.60	243.38	39.27	34.07	22.33	9.39	9120.82 Ton
Mean	0.00	0.00	5.11	15.93	141.04	74.55	48.92	8.11	1.27	1.10	0.80	0.30	
Max	0.00	0.00	28.75	224.45	1449.91	580.60	260.43	56.63	3.04	1.25	0.86	0.51	1449.91
Min	0.00	0.00	0.00	0.86	4.05	8.62	8.62	3.04	0.21	0.86	0.51	0.00	0.00

WATER YEAR : 2001

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

Drainage Area 8,985 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

Number of observation 36

R - Square 0.8928

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:54:10.80

LQS/LQS02D/12

Station - Ban Don Chai, Thoen, Lampang, (W.3A)
Stream - Wang
River - Wang
River System - Wang River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.52450
QS = 0.9353 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	153.40	2.79	37.25	15.55	202.25	1007.37	580.93	11917.80	76.15	48.00	18.49	18.17	
2	67.77	3.40	38.72	15.55	336.57	1205.72	580.93	4601.90	70.52	57.12	17.73	14.95	
3	43.28	3.99	38.72	16.99	623.82	1164.91	458.75	2405.07	65.05	62.37	17.73	11.75	
4	23.21	3339.39	40.22	16.27	632.52	1115.60	397.75	1503.68	57.12	73.32	34.35	14.51	
5	16.99	801.17	44.83	13.46	937.35	1177.35	703.62	1031.09	54.56	57.12	48.00	17.23	
6	9.80	926.62	51.25	14.14	972.14	1055.00	1234.32	760.77	51.25	81.92	79.02	17.70	
7	8.98	572.48	67.77	14.84	1248.71	1292.21	1055.00	615.16	49.62	62.37	51.25	22.48	
8	8.19	232.82	90.85	19.25	1771.63	842.29	730.94	474.46	41.74	54.56	26.15	17.70	
9	6.32	130.77	93.90	22.40	2405.07	498.37	506.43	379.03	32.93	54.56	18.49	15.85	
10	3.99	81.92	59.72	41.74	2072.47	348.52	372.86	412.72	51.25	46.41	14.84	14.07	
11	4.62	54.56	31.53	103.24	2145.58	342.53	555.71	498.37	62.37	24.87	12.79	12.68	
12	3.99	54.56	30.16	76.15	3803.01	385.23	842.29	498.37	65.05	16.99	14.14	12.06	
13	3.40	103.24	21.59	38.72	10879.98	506.43	780.88	482.39	70.52	19.25	20.80	11.14	
14	3.99	79.02	20.80	26.15	17284.30	1019.21	712.69	450.96	57.12	21.59	18.49	12.37	
15	5.27	40.22	22.40	13.46	12015.60	1928.88	522.68	412.72	54.56	26.15	23.21	9.11	
16	5.27	73.32	19.25	10.22	10958.65	2877.70	385.23	246.37	51.25	22.40	31.53	8.55	
17	5.61	366.72	13.46	8.98	6794.15	2127.22	412.72	189.61	57.12	31.53	23.21	8.55	
18	7.42	161.22	10.22	6.32	4891.85	1858.42	547.38	145.72	59.72	30.16	34.35	8.28	
19	7.80	100.09	8.19	4.62	3250.59	1635.77	623.82	119.93	51.25	27.47	26.15	9.67	
20	9.39	73.32	6.32	8.98	2127.22	1602.39	498.37	134.46	54.56	22.40	32.93	10.25	
21	9.39	59.72	5.61	20.02	1292.21	1946.63	391.47	161.22	62.37	21.59	31.53	14.07	
22	8.58	41.74	6.68	49.62	972.14	1720.25	318.91	210.83	62.37	19.25	37.25	14.95	
23	6.68	27.47	7.42	153.40	712.69	1380.74	264.84	223.94	65.05	19.25	30.16	12.06	
24	4.30	24.87	7.42	905.28	589.42	1152.51	241.82	219.54	35.79	20.02	16.27	10.55	
25	2.33	16.99	6.68	2000.23	420.27	960.50	780.88	206.52	26.15	31.53	11.48	9.67	
26	2.20	24.03	5.96	915.93	301.58	811.39	1410.69	210.83	22.40	37.25	9.80	9.11	
27	2.33	20.02	6.32	360.62	223.94	632.52	1964.44	206.52	20.80	37.25	7.04	7.74	
28	2.49	16.99	8.19	223.94	198.00	606.54	2054.33	173.19	22.40	38.72	6.82	7.51	
29	2.33	52.89	9.39	198.00	202.25	547.38	3369.17	106.42	21.59	38.72		7.51	
30	1.65	35.79	10.84	202.25	264.84	589.42	10187.75	87.84	28.80	24.03		6.59	
31		27.47		210.83	342.53		20072.59		37.25	21.59		5.93	
Total	440.97	7549.60	821.66	5727.15	90873.34	34339.00	53560.19	29087.43	1538.68	1149.76	714.00	372.76	226174.56 Ton
Mean	14.70	243.54	27.39	184.75	2931.40	1144.63	1727.75	969.58	49.63	37.09	25.50	12.02	
Max	153.40	3339.39	93.90	2000.23	17284.30	2877.70	20072.59	11917.80	76.15	81.92	79.02	22.48	20072.59
Min	1.65	2.79	5.61	4.62	198.00	342.53	241.82	87.84	20.80	16.99	6.82	5.93	1.65

WATER YEAR : 2001

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 upsteam from the bridge on Highway.
Ban Wang Man	**Amphoe** Sam Ngao **Changwat** Tak
Drainage Area	10,507 sq. km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1989 - 1992, 1994 - Cont'd
Actual Measurement	1989 - 1992, 1994 - Cont'd
Using Rating Curve Water Year	1989 - 2001
Number of observation	222
R - Square	0.9052
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:24:35.94 LQS/LQS02D/12

Station - Ban Wang Man, Sam Ngao, Tak, (W.4A)
Stream - Wang
River - Wang
River System - Wang River

Royal Irrigation Department
Thailand
Hydrology Division 310702
1.48200
QS = 0.9584 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	30.16	19.17	36.93	12.80	165.80	384.49	604.06	5204.97	151.29	50.43	32.37	15.36	
2	74.69	14.32	41.68	11.83	160.89	574.82	628.84	5505.79	119.00	54.61	28.35	13.81	
3	69.48	13.81	50.43	14.83	181.05	893.03	663.93	5569.95	125.67	61.07	8.61	14.83	
4	42.90	930.69	57.81	15.96	318.15	949.65	550.76	5263.29	119.00	66.08	17.21	15.36	
5	33.49	4087.38	71.20	15.96	420.95	917.95	501.37	4295.72	110.19	69.48	20.50	11.83	
6	25.37	3471.76	53.03	14.83	584.51	930.69	633.76	2679.87	105.96	71.20	34.62	6.93	
7	18.54	1695.42	50.43	14.32	741.62	886.74	1000.97	1744.15	91.35	72.94	44.12	3.19	
8	14.83	1301.40	56.20	14.32	899.21	1000.97	1033.56	1331.18	81.82	71.20	47.87	1.53	
9	13.30	763.97	59.44	16.60	988.06	861.97	826.53	1066.35	76.45	57.81	42.90	19.82	
10	11.83	565.18	64.39	19.17	1484.11	623.81	643.77	855.88	69.48	47.87	29.08	18.54	
11	10.41	304.18	50.43	21.86	1589.81	400.56	1013.94	769.59	81.82	40.47	26.11	17.87	
12	8.61	220.61	42.90	40.47	1501.17	350.37	1126.40	769.59	80.02	40.47	6.93	15.96	
13	8.61	262.62	36.93	46.61	1818.08	361.27	1433.30	730.89	141.74	28.35	11.35	14.32	
14	7.76	232.37	33.49	45.36	3907.87	437.50	1235.64	684.29	83.64	26.86	6.93	13.81	
15	6.93	197.69	31.26	29.08	4348.33	886.74	949.65	653.82	81.82	27.58	17.21	13.30	
16	6.93	158.49	29.08	21.86	4243.32	1301.40	763.97	648.73	80.02	31.26	18.54	12.80	
17	6.53	175.76	26.86	17.21	5292.53	1882.96	608.92	488.37	74.69	30.16	21.86	10.88	
18	5.50	523.28	23.94	14.32	5602.12	1796.62	797.89	372.57	71.20	29.08	25.37	12.80	
19	6.14	368.63	19.17	10.88	5234.10	1492.63	747.19	297.27	74.69	34.62	25.37	13.30	
20	8.18	235.34	17.21	9.50	4401.15	1424.88	741.62	244.33	71.20	33.49	28.35	13.30	
21	9.05	178.32	14.83	9.50	2769.48	1257.14	653.82	226.46	69.48	32.37	29.08	11.35	
22	8.61	146.45	13.30	11.83	1861.25	1475.60	527.70	226.46	71.20	29.08	29.08	11.83	
23	8.61	105.96	13.30	23.25	1323.72	1526.88	454.25	238.32	71.20	25.37	29.08	17.87	
24	8.18	64.39	13.30	41.68	1000.97	1301.40	361.27	275.06	74.69	23.94	30.16	17.21	
25	4.88	54.61	13.30	123.46	780.87	1221.80	343.13	271.93	62.73	24.67	23.94	15.96	
26	4.60	45.36	11.83	730.89	623.81	1119.62	599.09	271.93	51.72	29.08	21.86	13.30	
27	4.29	41.68	10.41	949.65	492.69	1033.56	1308.82	256.48	42.90	32.37	20.50	12.31	
28	3.99	42.90	9.95	445.85	346.70	725.61	1796.62	247.34	38.10	38.10	17.21	11.83	
29	3.99	38.10	9.95	232.37	297.27	663.93	2787.52	235.34	38.10	56.20		11.35	
30	4.60	33.49	11.35	170.83	271.93	613.91	4401.15	183.79	56.20	42.90		11.35	
31		35.77		160.89	284.51		4803.82		51.72	39.28		12.31	
Total	470.99	16329.10	974.33	3307.97	53936.03	29298.50	34543.26	41609.71	2519.09	1318.39	694.56	406.21	185408.16 Ton
Mean	15.70	526.75	32.48	106.71	1739.87	976.62	1114.30	1386.99	81.26	42.53	24.81	13.10	
Max	74.69	4087.38	71.20	949.65	5602.12	1882.96	4803.82	5569.95	151.29	72.94	47.87	19.82	5602.12
Min	3.99	13.81	9.95	9.50	160.89	350.37	343.13	183.79	38.10	23.94	6.93	1.53	1.53

WATER YEAR : 2001

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
Drainage Area	1,379 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	2001
Number of observation	36
R - Square	0.9524
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:54:29.52

LQS/LQS02D/12

Station - Ban Hai, A. Chae Hom, Lampang, (W.16A)
Stream - Wang
River - Wang
River System - Wang River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.46900
QS = 3.3527 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.22	1.28	13.26	3.86	72.31	387.34	163.53	159.12	24.38	6.38	2.87	1.47	
2	2.73	1.74	14.74	3.45	148.10	368.64	148.10	127.77	20.94	5.96	2.87	1.66	
3	2.42	2.07	10.68	2.73	433.96	321.94	148.10	109.33	21.92	5.50	2.87	1.47	
4	2.42	6.38	11.84	2.42	4249.31	232.95	154.25	109.33	20.94	6.87	2.60	1.47	
5	1.90	5.96	27.41	2.42	7187.19	387.34	219.91	109.33	18.09	6.87	2.11	1.47	
6	1.90	3.86	20.32	1.74	1964.46	387.34	188.28	135.40	16.26	7.31	2.37	1.47	
7	2.07	2.73	17.00	2.24	3679.06	270.07	210.61	131.57	16.26	6.87	2.11	1.47	
8	1.90	2.24	25.32	2.07	2758.03	211.35	163.19	109.33	14.50	6.38	1.90	1.07	
9	1.74	2.07	23.28	22.28	1278.09	316.45	143.17	91.84	14.50	5.50	1.90	0.87	
10	1.90	2.07	20.32	28.48	826.13	483.69	171.43	81.82	12.96	5.50	1.47	1.47	
11	2.07	5.96	18.60	20.32	671.18	594.56	155.08	79.37	12.28	5.50	1.47	1.66	
12	1.90	21.29	13.26	14.74	3079.05	991.90	159.12	74.55	10.32	4.65	1.66	1.66	
13	1.74	101.92	12.50	11.25	10019.50	1468.94	127.77	69.82	10.32	7.31	1.90	1.66	
14	1.74	344.17	8.41	11.84	1706.10	2331.01	102.22	62.93	9.69	9.69	1.90	1.66	
15	1.74	101.92	16.18	9.56	837.87	1261.05	91.84	60.68	9.08	8.47	2.11	1.25	
16	1.58	35.87	17.00	13.96	756.80	640.12	85.11	56.38	8.47	7.31	2.60	0.81	
17	1.58	22.28	12.50	13.26	1082.22	399.97	201.44	54.33	8.47	7.31	3.11	0.72	
18	1.58	18.60	10.68	10.68	567.75	274.89	171.43	50.31	9.08	7.31	2.60	0.72	
19	1.58	16.18	7.37	8.94	381.07	374.84	127.77	46.38	8.47	6.87	2.11	0.87	
20	1.43	12.50	6.38	10.11	294.82	413.18	102.22	44.46	7.89	5.50	1.90	0.87	
21	1.43	15.45	5.50	17.75	232.95	374.84	76.95	42.56	7.89	4.28	1.90	0.81	
22	1.43	58.46	5.96	127.15	224.23	321.94	62.93	38.85	8.47	3.45	1.90	0.81	
23	1.43	86.08	6.38	991.90	219.91	332.99	54.33	37.14	8.47	3.86	2.11	0.87	
24	1.58	35.87	5.96	640.12	184.38	300.18	50.31	35.45	8.47	3.45	2.11	0.87	
25	1.74	21.29	4.65	251.10	154.25	270.07	58.46	35.45	9.69	2.60	1.90	0.72	
26	1.43	20.32	3.86	151.08	130.14	612.66	131.57	32.16	9.08	2.37	1.66	0.66	
27	1.28	20.32	3.11	101.92	115.68	374.84	143.17	30.55	7.89	2.60	1.47	0.72	
28	1.14	21.29	2.42	107.39	576.64	255.80	179.79	28.96	7.89	2.37	1.25	0.72	
29	1.00	17.00	2.24	78.42	2081.60	207.11	192.58	27.41	6.87	2.37		0.72	
30	1.14	13.96	3.45	55.18	952.17	195.10	210.61	25.88	5.96	2.37		0.72	
31		10.68		62.30	542.58		201.44		6.38	2.60		0.81	
Total	53.74	1031.81	350.58	2780.66	47407.54	15363.10	4396.71	2098.46	361.88	165.38	58.73	34.20	74102.79 Ton
Mean	1.79	33.28	11.69	89.70	1529.28	512.10	141.83	69.95	11.67	5.33	2.10	1.10	
Max	4.22	344.17	27.41	991.90	10019.50	2331.01	219.91	159.12	24.38	9.69	3.11	1.66	10019.50
Min	1.00	1.28	2.24	1.74	72.31	195.10	50.31	25.88	5.96	2.37	1.25	0.66	0.66

WATER YEAR : 2001

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 bank at the bridge of Lampang - Wang Nua Road.
Ban Nong Nao	**Amphoe** Chae Hom **Changwat** Lampang
Drainage Area	619 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	2001
Number of observation	36
R - Square	0.8980
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:21:39.87

LQS/LQS02D/12

Station - Ban Nong Nao, A. Chae Hom, Lampang, (W.17)
Stream - Nam Mae Soi
River - Wang
River System - Wang River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.54570
QS = 3.1038 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.50	1.16	48.24	6.42	42.55	81.75	38.86	94.25	31.85	11.63	6.42	5.05	
2	3.50	1.67	42.55	5.16	42.55	60.08	44.38	72.80	35.18	11.63	5.81	4.60	
3	3.50	19.65	22.48	3.50	139.36	37.00	111.58	72.80	28.53	10.65	5.16	4.60	
4	3.50	50.53	18.29	3.01	626.75	50.53	111.58	91.07	25.44	10.65	4.06	4.55	
5	4.06	42.55	14.57	3.50	290.74	72.80	75.75	115.34	26.97	9.77	5.16	4.44	
6	3.50	33.50	12.64	23.94	107.70	57.64	67.61	91.07	26.97	12.64	4.60	4.44	
7	3.50	26.97	10.65	15.67	70.19	40.63	50.53	81.75	26.97	8.85	2.55	4.33	
8	3.01	18.29	16.96	19.65	46.36	26.97	50.53	75.75	26.97	8.85	2.55	4.44	
9	2.55	15.67	38.86	127.24	44.38	97.47	37.00	65.06	25.44	8.85	1.30	4.44	
10	2.55	14.57	21.05	84.82	46.36	244.03	153.00	60.08	23.94	5.81	1.03	4.44	
11	2.11	107.70	21.05	31.85	52.86	143.61	75.75	57.64	21.05	7.18	1.16	4.60	
12	2.11	148.28	21.05	18.29	3430.04	143.61	57.64	50.53	22.48	8.03	1.67	4.94	
13	3.50	153.00	23.94	12.64	2001.26	658.27	52.86	52.86	19.65	15.67	13.59	4.11	
14	4.06	139.36	23.94	23.94	595.77	1251.83	42.55	40.63	16.96	21.05	2.55	4.11	
15	4.06	153.00	14.57	16.96	270.04	322.78	38.86	52.86	21.05	15.67	1.30	4.06	
16	3.50	57.64	8.85	26.97	187.49	139.36	31.85	46.36	21.05	15.67	8.85	3.70	
17	3.01	48.24	5.81	25.44	157.78	91.07	31.85	46.36	18.29	14.57	7.18	3.85	
18	4.06	40.63	4.60	21.05	78.73	62.55	65.06	38.86	15.67	14.57	8.03	3.75	
19	5.16	42.55	3.01	15.67	70.19	78.73	35.18	42.55	14.57	13.59	6.42	3.70	
20	8.03	40.63	2.11	22.48	94.25	70.19	44.38	35.18	13.59	8.03	5.16	3.70	
21	8.03	57.64	1.30	84.82	67.61	75.75	38.86	35.18	18.29	5.81	5.16	3.70	
22	8.03	46.36	1.30	611.19	70.19	70.19	31.85	38.86	15.67	6.42	4.60	3.70	
23	7.18	38.86	1.30	706.57	57.64	81.75	28.53	38.86	21.05	6.42	3.50	3.70	
24	6.42	46.36	1.16	249.88	31.85	52.86	25.44	38.86	18.29	12.64	2.11	3.85	
25	6.42	33.50	2.11	75.75	30.12	78.73	50.53	38.86	16.96	11.63	1.03	3.85	
26	5.81	35.18	1.67	31.85	26.97	127.24	107.70	37.00	16.96	8.03	1.30	3.85	
27	5.16	42.55	1.67	37.00	28.53	78.73	67.61	37.00	16.96	5.81	0.90	3.75	
28	3.50	50.53	1.30	52.86	1276.65	65.06	87.92	35.18	14.57	5.81	3.40	3.60	
29	2.55	42.55	1.30	31.85	232.26	52.86	177.39	31.85	14.57	5.81		3.60	
30	2.11	35.18	2.55	33.50	249.88	38.86	506.24	40.63	14.57	6.42		3.60	
31		40.63		52.86	131.36		157.78		13.59	6.42		3.60	
Total	127.98	1624.93	390.88	2476.33	10598.41	4452.93	2496.65	1656.08	644.10	314.58	116.55	126.65	25026.07 Ton
Mean	4.27	52.42	13.03	79.88	341.88	148.43	80.54	55.20	20.78	10.15	4.16	4.09	
Max	8.03	153.00	48.24	706.57	3430.04	1251.83	506.24	115.34	35.18	21.05	13.59	5.05	3430.04
Min	2.11	1.16	1.16	3.01	26.97	26.97	25.44	31.85	13.59	5.81	0.90	3.60	0.90

WATER YEAR : 2001

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

Drainage Area 1,065 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 2001

Number of observation 36

R - Square 0.9614

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:54:42.73

LQS/LQS02D/12

Station - Ban Tha Lo, Mueang, Lampang, (W.20)
Stream - Mae Tui
River - Wang
River System - Wang River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.32720
QS = 3.4923 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.10	0.28	0.28	2.43	74.97	16.28	35.18	171.46	5.41	23.01	10.79	7.40	
2	0.93	0.80	0.26	3.22	111.57	13.50	33.55	108.75	4.50	27.23	10.79	5.72	
3	1.04	0.80	0.14	5.15	74.97	10.79	35.18	79.55	4.20	26.16	10.12	5.72	
4	0.71	3.73	0.19	7.28	146.75	27.23	232.39	68.24	3.92	23.01	12.10	8.30	
5	0.44	4.60	0.28	5.15	77.25	31.94	269.61	57.93	3.63	19.97	12.10	9.65	
6	0.44	2.95	0.26	4.30	45.33	27.23	100.39	47.09	3.63	7.84	4.80	8.30	
7	0.50	2.26	0.26	4.90	105.94	26.16	72.71	33.55	3.35	7.40	2.09	9.65	
8	0.44	4.90	0.23	3.22	68.24	24.05	47.09	26.16	3.08	5.41	0.87	6.95	
9	0.44	2.09	0.23	20.40	50.64	24.05	28.78	21.99	2.64	2.64	0.58	7.40	
10	0.41	1.21	0.23	13.11	52.44	24.05	61.67	28.78	2.26	1.04	0.44	5.41	
11	0.50	0.93	0.23	2.09	50.64	27.23	56.09	35.18	1.93	0.58	0.28	2.64	
12	0.44	0.87	0.23	0.93	481.05	28.78	48.86	35.18	1.93	1.04	0.28	1.43	
13	0.44	0.80	0.23	0.50	700.37	128.87	48.86	27.23	1.77	1.62	0.44	1.04	
14	0.50	0.80	0.23	0.41	398.63	471.71	31.94	18.98	1.62	1.43	1.14	0.58	
15	0.50	0.80	0.19	0.28	239.72	430.23	27.23	14.15	1.62	1.28	1.28	0.28	
16	0.50	0.71	0.14	0.28	108.75	137.74	30.35	16.28	0.93	5.72	1.77	0.26	
17	0.44	0.71	0.14	1.04	57.93	52.44	30.35	14.15	0.68	6.57	1.28	0.23	
18	0.44	1.89	0.14	5.41	40.18	23.01	24.05	14.15	0.68	7.40	5.41	0.26	
19	0.44	1.58	0.14	9.65	26.16	17.03	21.99	14.15	0.68	7.40	5.41	0.23	
20	0.41	1.21	0.14	18.98	23.01	18.98	19.97	18.98	0.68	6.95	17.03	0.19	
21	0.41	0.71	0.12	25.10	20.97	23.01	18.98	8.30	0.58	8.30	12.10	0.19	
22	0.39	0.64	0.12	158.99	21.99	28.78	17.03	9.17	0.36	10.79	3.92	0.14	
23	0.39	0.50	0.12	727.90	21.99	33.55	17.03	9.17	4.50	12.10	1.43	0.03	
24	0.39	0.50	0.12	394.17	21.99	27.23	18.00	7.84	2.64	4.50	0.58	0.77	
25	0.39	0.50	0.14	120.14	19.97	28.78	36.83	7.84	2.64	2.47	0.26	1.28	
26	0.33	0.44	0.14	52.44	18.98	43.60	81.86	7.84	2.81	1.04	0.26	0.58	
27	0.33	0.44	0.12	33.55	23.01	56.09	74.97	7.40	3.08	0.68	2.81	0.68	
28	0.33	0.44	0.12	41.88	28.78	50.64	68.24	6.57	6.57	0.58	3.63	0.44	
29	0.33	0.39	0.12	33.55	25.10	47.09	152.84	6.14	11.41	2.81		0.26	
30	0.33	0.33	1.21	28.78	23.01	35.18	700.37	5.72	17.03	3.63		0.19	
31		0.28		28.78	20.97		416.62		18.98	6.57		0.14	
Total	14.68	39.09	6.50	1754.01	3181.30	1935.25	2859.01	927.92	119.74	237.17	123.99	86.34	11285.00 Ton
Mean	0.49	1.26	0.22	56.58	102.62	64.51	92.23	30.93	3.86	7.65	4.43	2.79	
Max	1.10	4.90	1.21	727.90	700.37	471.71	700.37	171.46	18.98	27.23	17.03	9.65	727.90
Min	0.33	0.28	0.12	0.28	18.98	10.79	17.03	5.72	0.36	0.58	0.26	0.03	0.03

WATER YEAR : 2001

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
Drainage Area			3,415 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			2001		
Number of observation			36		
R - Square			0.9189		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 25-FEB-2005 10:22:03.88 LQS/LQS02D/12

Station - Ban Tha Dua, Mueang, Lampang, (W.21)
Stream - Wang
River - Wang
River System - Wang River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.33490
QS = 3.7169 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	105.26	21.85	2.40	21.85	839.81	1820.56	212.26	148.75	26.94	21.47	11.17	12.56	
2	23.97	23.97	7.02	28.34	616.31	1729.61	140.79	121.39	26.94	21.47	25.08	14.69	
3	10.33	35.22	2.76	28.34	681.52	1744.69	212.26	100.81	26.94	21.47	26.94	19.72	
4	7.02	143.64	2.76	23.97	705.47	1379.09	217.07	84.69	16.33	61.26	30.76	21.47	
5	2.76	54.16	4.07	23.97	457.54	1744.69	100.81	91.05	13.93	75.68	18.00	50.88	
6	2.58	21.85	2.76	26.13	587.86	1126.01	100.81	55.72	14.69	75.68	9.13	26.94	
7	2.40	17.78	2.40	28.34	2686.71	738.97	78.66	39.29	16.33	78.66	6.56	21.47	
8	2.40	17.78	1.88	35.22	2436.17	292.20	53.28	97.53	72.74	69.82	13.93	19.72	
9	2.40	15.82	1.88	176.79	2489.34	246.45	58.47	307.88	64.08	13.24	6.10	19.72	
10	2.22	28.34	1.88	54.16	2959.15	276.73	713.81	329.09	53.28	11.17	32.71	14.69	
11	2.22	12.09	2.22	26.13	3018.95	470.87	389.20	329.09	75.68	7.85	32.71	11.17	
12	2.22	8.63	7.02	8.63	9211.90	810.94	231.64	329.09	81.66	6.10	19.72	7.43	
13	2.76	4.07	2.40	7.02	2979.05	1525.43	144.76	418.15	66.94	10.45	30.76	6.10	
14	12.09	4.07	2.05	12.09	7787.43	2005.89	117.60	69.82	46.15	6.10	34.87	7.85	
15	17.78	5.49	1.71	7.02	6595.29	2021.54	94.27	39.29	41.54	7.85	34.87	4.85	
16	13.93	4.07	1.71	7.02	4886.38	2209.17	100.81	23.26	55.72	30.76	28.83	6.96	
17	21.85	2.76	1.71	53.28	4107.83	2471.58	114.19	19.72	55.72	32.71	19.72	37.06	
18	30.59	35.22	8.63	87.85	2191.94	839.81	91.05	46.15	81.66	18.00	23.26	37.06	
19	4.07	26.13	10.33	87.85	1048.68	1277.18	81.66	58.47	81.66	13.93	25.08	37.06	
20	2.58	8.63	8.63	144.76	545.83	1805.32	81.66	241.48	81.66	16.33	28.83	53.28	
21	2.40	4.07	2.58	179.41	418.15	1241.87	78.66	193.32	117.60	14.69	19.72	50.88	
22	2.58	2.58	2.58	518.25	400.40	1048.68	78.66	276.73	23.26	23.26	11.17	53.28	
23	2.58	10.33	2.58	1595.42	350.66	580.80	69.82	276.73	14.69	25.08	11.17	48.50	
24	2.58	12.09	2.58	281.86	217.07	450.92	72.74	179.41	12.56	25.08	10.45	48.50	
25	2.40	5.49	2.76	140.79	125.22	251.43	226.75	226.75	18.00	32.71	12.56	46.15	
26	2.05	10.33	2.76	129.07	114.19	345.23	202.73	226.75	11.17	28.83	4.85	41.54	
27	2.76	2.76	13.93	170.28	129.07	246.45	121.39	32.71	9.13	26.94	4.12	32.71	
28	4.07	2.76	15.82	226.75	198.01	345.23	307.88	28.83	14.69	26.94	10.45	32.71	
29	5.49	4.07	13.93	271.62	140.79	367.05	738.97	32.71	16.33	46.15		32.71	
30	5.49	4.07	17.78	261.48	1265.38	212.26	302.63	28.83	16.33	21.47		32.71	
31		2.58		323.75	1866.47		251.43		21.47	11.17		32.71	
Total	303.83	552.70	153.52	4987.44	62058.57	31626.65	5786.72	4453.49	1275.82	882.32	543.52	883.08	113507.66 Ton
Mean	10.13	17.83	5.12	160.89	2001.89	1054.22	186.67	148.45	41.16	28.46	19.41	28.49	
Max	105.26	143.64	17.78	1595.42	9211.90	2471.58	738.97	418.15	117.60	78.66	34.87	53.28	9211.90
Min	2.05	2.58	1.71	7.02	114.19	212.26	53.28	19.72	9.13	6.10	4.12	4.85	1.71

WATER YEAR : 2001

WANG RIVER BASIN

Wang River at Sam Ngao, Tak (W.23)

Lat 17 - 22 - 01 N. **Long** 99 - 06 - 55 E.

Location on right bank about 200 meters upstream from the bridge on highway.

Ban - - **Amphoe** Sam Ngao **Changwat** Tak

Drainage Area 9,930 sq.km.

Method of sampling Depth Integrating

Instrument Used US.D - 49

Period of Available Records 1989 - 1992, 1994 - Cont'd

Actual Measurement 1989 - 1992, 1994 - Cont'd

Using Rating Curve Water Year 2001

Number of observation 21

R - Square 0.8517

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:55:08.75 LQS/LQS02D/12

Station - Sam Ngao, Sam Ngao, Tak, (W.23)
Stream - Wang River
River - Wang River
River System - Wang River

Royal Irrigation Department
Thailand
Hydrology Division 260602
1.28520
QS = 1.8251 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.32	2.31	46.89	15.38	161.99	311.10	469.74	6130.52	125.85	68.56	23.28	19.24	
2	15.38	0.00	52.99	24.32	164.53	658.28	505.40	6149.72	117.51	75.99	10.15	19.24	
3	14.44	0.23	51.76	27.49	255.79	755.53	444.97	4310.66	111.34	81.67	31.84	25.36	
4	14.44	3057.89	72.25	24.32	409.55	726.62	382.46	2113.32	107.27	85.50	32.95	20.23	
5	14.44	3314.82	59.52	26.42	448.94	697.96	409.55	1385.10	101.22	89.38	46.89	8.14	
6	14.44	1125.28	59.52	23.28	647.47	726.62	663.92	977.28	97.24	79.76	57.75	3.34	
7	14.44	796.41	64.91	22.25	669.57	703.67	831.83	738.15	55.99	93.29	79.76	22.25	
8	13.52	541.63	68.56	25.36	808.18	778.83	709.39	580.94	79.76	83.58	61.30	35.20	
9	13.52	258.96	83.58	27.49	1145.81	546.20	518.92	456.92	81.67	61.30	77.87	31.84	
10	12.61	182.58	70.40	35.20	1434.34	344.50	532.52	386.31	66.73	42.12	40.95	28.56	
11	11.72	141.97	63.10	57.75	1385.10	271.70	937.74	394.02	79.76	61.30	35.20	24.32	
12	11.72	139.51	51.76	87.43	1303.89	265.31	911.58	441.00	89.38	45.68	10.15	24.32	
13	10.84	93.29	46.89	70.40	2643.00	294.33	1084.46	421.28	83.58	40.95	5.62	22.25	
14	10.15	119.58	42.12	51.76	4737.18	460.92	738.15	397.89	95.26	42.12	29.65	18.25	
15	9.47	79.76	42.12	40.95	5553.25	924.64	616.57	397.89	85.50	44.49	30.74	23.28	
16	9.47	52.99	39.78	28.56	5553.25	1352.49	465.33	382.46	83.58	46.89	36.33	17.28	
17	9.47	300.87	34.07	22.25	5265.67	1645.10	441.00	274.91	77.87	44.49	44.49	15.38	
18	10.15	359.58	28.56	15.38	3783.13	1239.72	565.81	240.10	85.50	51.76	39.78	15.38	
19	10.15	179.97	24.32	10.15	2549.03	1152.68	550.78	212.42	81.67	50.53	46.89	25.36	
20	10.84	151.91	19.24	10.84	1798.99	990.54	532.52	182.58	79.76	50.53	40.95	16.32	
21	10.15	103.23	16.32	15.38	1247.70	1111.64	425.21	182.58	87.43	43.30	44.49	16.32	
22	10.15	125.85	15.38	34.07	861.60	1255.70	344.50	215.45	87.43	40.95	45.68	28.56	
23	8.80	31.84	16.32	63.10	680.90	1057.44	294.33	221.56	91.33	38.62	48.09	30.74	
24	7.49	54.24	18.25	146.92	518.92	931.19	258.96	227.70	81.67	38.62	39.78	26.42	
25	7.49	48.09	16.32	469.74	425.21	885.59	274.91	224.63	59.52	40.95	31.84	21.24	
26	8.14	40.95	12.61	1037.27	325.85	743.93	843.71	206.37	52.99	50.53	72.25	17.28	
27	8.80	46.89	12.61	555.78	255.79	596.15	1263.70	206.37	48.09	57.75	28.56	16.32	
28	8.80	37.47	11.72	252.64	203.36	509.90	1555.42	200.36	49.31	107.27	22.25	15.38	
29	9.47	36.33	11.72	172.22	182.58	474.17	2953.52	177.38	57.75	61.30		26.42	
30	10.15	36.33	10.84	169.65	191.42	441.00	4928.66	164.53	81.67	59.52		25.36	
31		36.33		172.22	212.42		5661.96		63.10	46.89		26.42	
Total	336.97	11497.09	1164.43	3735.97	45824.41	22853.45	31117.52	28600.40	2546.73	1825.59	1115.48	666.00	151284.06 Ton
Mean	11.23	370.87	38.81	120.52	1478.21	761.78	1003.79	953.35	82.15	58.89	39.84	21.48	
Max	16.32	3314.82	83.58	1037.27	5553.25	1645.10	5661.96	6149.72	125.85	107.27	79.76	35.20	6149.72
Min	7.49	0.00	10.84	10.15	161.99	265.31	258.96	164.53	48.09	38.62	5.62	3.34	0.00

WATER YEAR : 2001

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
Drainage Area	7,624 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
Number of observation	42
R - Square	0.9356
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:22:33.13

LQS/LQS02D/12

Station - Ban Nam Khong, Mueang, Phrae, (Y.1C)
Stream - Yom
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.47920
QS = 1.8967 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	63.19	22.98	224.36	63.19	6022.70	3873.87	2019.18	3873.87	310.64	42.63	42.63	14.74	
2	57.17	18.71	245.75	63.19	8029.36	3725.67	1680.29	2040.68	277.58	42.63	42.63	14.20	
3	50.54	20.51	405.52	53.82	11069.15	2790.17	1426.52	1738.77	245.75	44.96	42.63	14.20	
4	50.54	25.54	779.79	42.63	12166.42	2062.26	1369.35	1407.38	255.31	42.63	40.34	14.20	
5	53.82	255.31	1088.58	42.63	9687.71	5644.31	1680.29	1280.39	224.36	42.63	37.36	14.20	
6	42.63	334.34	1619.96	44.96	9585.30	16250.16	2198.78	1139.48	234.98	44.96	25.54	14.20	
7	40.34	206.17	1019.02	53.82	11453.13	11566.32	2335.29	1157.37	178.62	48.12	44.96	13.67	
8	37.36	145.46	690.82	78.59	14009.49	6292.27	1759.26	1121.69	161.76	50.54	53.82	13.14	
9	37.36	122.08	645.81	129.72	12528.27	4537.27	1465.05	1053.62	137.52	48.12	92.07	13.14	
10	34.45	107.25	469.26	255.31	9170.47	7832.90	1907.49	874.22	145.46	44.96	11.09	13.14	
11	34.45	129.72	334.34	234.98	12649.65	8121.87	4087.85	811.54	129.72	44.96	13.14	13.67	
12	34.45	482.70	145.46	277.58	59062.72	7646.28	3873.87	690.82	122.08	42.63	13.14	13.14	
13	34.45	392.83	53.82	234.98	69177.25	8367.37	2569.60	719.45	107.25	42.63	14.20	13.14	
14	34.45	287.51	44.96	206.17	55007.72	14985.19	1886.46	645.81	92.07	42.63	14.20	13.14	
15	42.63	266.37	40.34	178.62	27896.25	19243.98	1315.28	660.70	72.12	44.96	14.20	13.14	
16	42.63	299.00	37.36	188.49	16387.46	13016.04	1243.52	603.61	63.19	40.34	13.14	13.14	
17	42.63	310.64	37.36	287.51	16999.23	7192.24	1280.39	590.95	59.73	40.34	14.20	13.14	
18	44.96	603.61	40.34	255.31	14266.58	3781.43	1225.22	576.58	53.82	37.36	14.74	13.14	
19	40.34	603.61	40.34	255.31	7882.91	3903.73	1053.62	576.58	53.82	34.45	14.20	13.67	
20	37.36	455.94	42.63	344.88	5495.20	4274.69	905.08	442.75	53.82	34.45	14.20	13.67	
21	29.55	369.37	42.63	1503.91	4118.23	3781.43	764.06	494.57	53.82	40.34	14.20	14.20	
22	32.32	632.87	37.36	6898.58	3377.72	3644.14	719.45	442.75	59.73	44.96	14.20	14.20	
23	27.52	734.87	37.36	16318.76	3195.48	3090.18	675.71	431.31	53.82	40.34	14.20	13.14	
24	22.98	986.94	34.45	21185.07	2642.47	2837.98	734.87	418.35	53.82	29.55	14.74	13.14	
25	42.63	618.18	32.32	13694.00	1844.61	2451.54	857.90	405.52	53.82	34.45	14.74	12.10	
26	37.36	369.37	32.32	5347.39	1660.10	2595.76	1352.82	380.26	50.54	34.45	14.74	57.17	
27	29.55	322.42	32.32	4087.85	1540.65	2989.08	1680.29	369.37	48.12	34.45	14.20	42.63	
28	29.55	266.37	40.34	4709.24	3457.28	2692.40	1660.10	369.37	48.12	32.32	14.74	65.83	
29	29.55	206.17	42.63	2739.66	12952.29	2312.82	3873.87	334.34	44.96	34.45		48.12	
30	22.98	188.49	50.54	1503.91	11017.96	2040.68	8172.47	344.88	42.63	34.45		32.32	
31		206.17		2083.91	5569.60		8367.37		42.63	40.34		32.32	
Total	1159.74	9991.50	8388.09	83363.96	439923.34	183544.08	66141.30	25996.98	3531.61	1257.03	688.19	616.99	824602.81 Ton
Mean	38.66	322.31	279.60	2689.16	14191.08	6118.14	2133.59	866.57	113.92	40.55	24.58	19.90	
Max	63.19	986.94	1619.96	21185.07	69177.25	19243.98	8367.37	3873.87	310.64	50.54	92.07	65.83	69177.25
Min	22.98	18.71	32.32	42.63	1540.65	2040.68	675.71	334.34	42.63	29.55	11.09	12.10	11.09

WATER YEAR : 2001

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

Drainage Area 12,658 sq. km.

Method of sampling Depth Integrating

Instrument Used US.DH - 48

Period of Available Records 1963 - 1987, 1997 - Cont'd

Actual Measurement 1963 - 1987, 1997 - Cont'd

Using Rating Curve Water Year 2001

Number of observation 38

R - Square 0.9077

Remarks Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:45:26.70

LQS/LQS02D/12

Station - Ban Kaeng Luang, Si Satchanalai, Sukhothai, (Y.6)
Stream - Yom
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 310702
1.67510
QS = 0.4889 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	40.7	15.9	1207.3	80.2	1947.0	7168.5	4164.8	11448.9	320.2	67.8	27.1	12.7	
2	45.6	12.7	1655.8	93.4	2637.3	4387.1	5567.4	7563.9	298.2	61.9	23.1	9.8	
3	40.7	19.4	1855.4	93.4	7168.5	3294.3	4259.5	4614.1	287.4	61.9	19.4	9.8	
4	35.9	20508.8	2663.5	114.7	10292.7	3237.3	4039.9	3013.4	266.3	56.3	23.1	7.2	
5	31.4	13249.8	1947.0	100.3	11260.5	4912.6	3526.2	2406.3	245.9	56.3	23.1	7.2	
6	31.4	1207.3	1765.6	100.3	9403.7	6478.4	4355.1	1947.0	245.9	56.3	23.1	7.2	
7	27.1	465.4	1743.4	245.9	8380.2	13149.8	4516.2	1699.4	226.2	56.3	19.4	7.2	
8	27.1	559.9	2087.8	179.7	9755.4	14839.4	4419.3	1465.4	197.8	50.8	19.4	7.2	
9	27.1	378.1	1404.1	207.1	12263.2	8297.0	3526.2	1404.1	197.8	50.8	15.9	7.2	
10	19.4	236.0	987.2	661.3	12021.3	8971.5	2716.1	1265.1	188.7	45.6	15.9	7.2	
11	19.4	171.0	769.3	1245.7	9014.3	14422.3	3438.5	1188.3	171.0	45.6	12.7	7.2	
12	19.4	171.0	867.2	952.3	16610.4	10749.2	3978.0	1040.5	154.0	45.6	12.7	7.2	
13	15.9	505.0	969.7	883.9	93573.6	13350.2	5567.4	935.0	145.7	45.6	12.7	7.2	
14	15.9	1677.5	661.3	617.0	126796.7	21473.7	4071.0	834.0	129.8	50.8	12.7	7.2	
15	15.9	1150.6	439.7	532.1	137684.9	23079.5	2822.8	867.2	122.2	45.6	9.8	5.0	
16	15.9	753.5	320.2	478.4	130176.1	23393.7	2111.7	817.7	114.7	40.7	9.8	5.0	
17	12.7	1993.5	256.1	414.6	37242.3	17218.4	1832.8	753.5	100.3	40.7	9.8	9.8	
18	15.9	1743.4	256.1	309.1	16610.4	9491.2	2040.5	676.3	86.7	45.6	9.8	7.2	
19	15.9	1245.7	276.8	298.2	14422.3	7246.9	1721.3	631.6	86.7	40.7	12.7	7.2	
20	15.9	1113.4	188.7	309.1	8886.0	10292.7	1506.9	573.9	86.7	35.9	12.7	7.2	
21	15.9	1040.5	154.0	342.9	5961.4	8090.6	1226.4	559.9	86.7	35.9	12.7	9.8	
22	15.9	753.5	129.8	1113.4	7365.1	6478.4	1040.5	505.0	80.2	35.9	9.8	9.8	
23	12.7	588.1	129.8	4912.6	5461.8	6291.8	883.9	478.4	73.9	31.4	9.8	9.8	
24	12.7	900.8	114.7	13249.8	3644.5	5218.6	834.0	478.4	67.8	31.4	9.8	9.8	
25	12.7	883.9	114.7	15261.3	2931.1	4483.8	2232.5	427.1	73.9	31.4	9.8	9.8	
26	12.7	917.8	162.4	13249.8	2232.5	4614.1	7365.1	390.1	73.9	31.4	9.8	9.8	
27	15.9	769.3	145.7	7129.4	1699.4	4133.4	5709.4	378.1	61.9	27.1	9.8	9.8	
28	15.9	661.3	154.0	4164.8	1810.3	4419.3	4419.3	354.5	61.9	23.1	9.8	7.2	
29	15.9	676.3	107.4	3734.3	2208.1	5150.0	4912.6	320.2	61.9	27.1		9.8	
30	19.4	617.0	86.7	3824.9	6291.8	4419.3	13754.7	320.2	61.9	31.4		19.4	
31		617.0		2637.3	10887.7		16610.4		67.8	31.4		15.9	
Total	638.9	55603.4	23621.4	77537.2	726640.6	278753.0	129170.4	49357.5	4444.0	1338.3	406.2	273.8	1347784.6 Ton
Mean	21.3	1793.7	787.4	2501.2	23440.0	9291.8	4166.8	1645.3	143.4	43.2	14.5	8.8	
Max	45.6	20508.8	2663.5	15261.3	137684.9	23393.7	16610.4	11448.9	320.2	67.8	27.1	19.4	137684.9
Min	12.7	12.7	86.7	80.2	1699.4	3237.3	834.0	320.2	61.9	23.1	9.8	5.0	5.0

WATER YEAR : 2001

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
Drainage Area	12,131 sq. km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	1964 - Cont'd
Actual Measurement	1964 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	30
R - Square	0.9352
Remarks	Continued Sediment Station

RID Computer Center, Processing : 3-MAR-2005 14:54:56.86

LQS/LQS02D/12

Station - Ban Don Rabiang, Si Satchanalai, Sukhothai, (Y.14)
Stream - Yom
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 110802
1.80810
QS = 0.2099 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.1	13.0	820.9	41.4	1345.8	5377.4	3142.6	4556.9	134.0	34.1	21.1	12.1	
2	20.2	14.0	976.9	44.7	2561.2	3488.0	4115.9	3424.0	123.3	34.1	18.5	11.6	
3	20.2	20.2	1812.1	48.1	6905.7	2535.8	3329.0	2847.9	117.5	33.0	17.6	11.6	
4	19.3	34841.4	1768.7	46.4	9579.3	2689.9	2612.3	1628.9	114.9	33.0	18.5	11.6	
5	17.6	4672.8	1255.6	44.7	10137.0	4945.9	2410.6	1237.2	114.9	31.9	18.5	11.2	
6	16.0	451.6	1152.1	55.2	7852.6	5972.7	2901.5	1152.1	103.1	31.9	17.6	11.2	
7	15.0	187.0	1136.1	106.2	7311.2	13791.5	2961.0	1005.2	98.4	30.9	16.8	10.7	
8	14.5	291.4	1255.6	85.1	8920.0	12046.0	2901.5	881.6	92.5	29.8	15.5	10.7	
9	14.0	145.8	810.2	127.3	11146.6	8221.6	2288.2	798.1	87.9	29.8	15.0	10.7	
10	13.5	87.9	553.5	580.7	10207.7	10999.8	1873.6	753.3	82.4	29.8	14.0	10.3	
11	13.0	73.3	413.7	677.1	8221.6	10781.1	2535.8	667.3	73.3	29.8	14.0	10.3	
12	12.5	82.4	358.0	608.5	24251.9	8346.3	3021.0	589.9	70.7	29.8	13.5	9.8	
13	12.1	627.4	310.9	475.3	93696.5	13791.5	4006.5	518.1	70.7	29.8	13.5	9.8	
14	11.6	1152.1	273.3	316.9	115492.5	15227.3	2742.1	467.0	64.7	29.8	12.5	9.8	
15	11.6	657.6	165.5	249.5	127337.8	20288.4	1831.7	500.8	60.8	28.8	12.5	9.4	
16	11.6	500.8	123.3	182.3	98843.6	14540.1	1380.4	444.6	57.1	28.8	12.1	9.4	
17	11.6	1831.7	98.4	170.0	22744.6	10781.1	1136.1	421.6	49.8	28.8	12.1	9.4	
18	12.1	1076.7	114.9	138.1	15030.3	6905.7	1062.9	451.6	44.7	27.7	13.5	9.4	
19	13.0	731.4	103.1	149.4	12198.9	6379.9	1049.2	343.4	44.7	26.7	13.5	9.0	
20	12.5	753.3	77.5	142.3	6850.3	9242.5	921.4	298.2	44.7	25.8	13.0	8.2	
21	12.1	535.7	64.7	226.6	4672.8	5689.7	709.7	261.3	43.1	25.8	12.5	10.3	
22	12.1	305.0	58.9	907.0	6850.3	4827.0	589.9	226.6	39.8	25.8	12.5	12.1	
23	11.6	337.2	57.1	5924.4	3864.7	4556.9	483.7	231.8	38.3	25.8	12.5	11.6	
24	10.7	553.5	51.6	13277.5	2586.7	3656.3	553.5	209.7	36.7	24.8	12.5	11.6	
25	9.8	535.7	53.4	14540.1	2216.1	3173.3	1960.7	191.0	36.7	22.9	12.1	12.1	
26	11.6	544.5	70.7	11667.5	1589.7	3360.5	4636.2	178.4	35.2	21.1	11.6	12.1	
27	12.5	413.7	70.7	4945.9	1220.7	3142.6	3620.5	178.4	35.2	21.1	12.1	11.2	
28	13.5	413.7	66.7	2510.6	1456.6	3620.5	2990.9	165.5	35.2	20.2	12.5	13.0	
29	14.0	400.3	44.7	1895.7	1831.7	3901.5	3656.3	153.7	35.2	22.0		15.0	
30	13.0	331.0	38.3	2586.7	7311.2	3142.6	13619.2	142.3	34.1	22.9		16.0	
31		323.9		1768.7	9579.3		9926.2		34.1	22.9		16.8	
Total	413.9	52906.0	14157.1	64539.9	643815.0	225423.4	90970.1	24926.4	2053.7	859.4	401.6	348.0	1120814.5 Ton
Mean	13.8	1706.6	471.9	2081.9	20768.2	7514.1	2934.5	830.9	66.2	27.7	14.3	11.2	
Max	21.1	34841.4	1812.1	14540.1	127337.8	20288.4	13619.2	4556.9	134.0	34.1	21.1	16.8	127337.8
Min	9.8	13.0	38.3	41.4	1220.7	2535.8	483.7	142.3	34.1	20.2	11.6	8.2	8.2

WATER YEAR : 2001

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
Drainage Area	20,841 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, US.D - 49
Period of Available Records	1997 - Cont'd
Actual Measurement	1997 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	16
R - Square	0.1426
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:25:47.29 LQS/LQS02D/12

Station - Ban Bang Rakam ,Bang Rakam ,Phitsanulok, (Y.16)
Stream - Yom
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 310702
0.89930
QS = 12.2310 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	176.84	10.01	705.99	1135.55	1163.33	4478.76	4794.45	3596.06	2008.96	136.32	18.66	54.80	
2	154.66	11.13	774.08	1093.08	1246.22	4468.54	4733.53	3586.16	1896.78	136.32	18.66	54.80	
3	134.64	15.49	862.71	1049.08	1344.11	4437.85	4672.53	3596.06	1803.98	139.68	17.61	69.48	
4	131.27	35.79	923.26	990.77	1406.34	4386.65	4601.25	3635.61	1696.72	131.27	15.49	83.81	
5	131.27	310.00	980.67	923.26	1432.18	4335.39	4529.85	3655.37	1595.07	112.57	15.49	86.46	
6	124.51	438.30	1004.20	872.26	1468.26	4294.32	4499.20	3704.72	1519.64	100.48	15.49	87.35	
7	124.51	729.69	1010.92	814.75	1531.17	4242.93	4448.08	3766.74	1411.51	92.63	15.49	84.69	
8	117.70	829.17	1010.92	732.48	1559.96	4191.48	4386.65	3797.99	1312.88	87.35	15.49	65.84	
9	107.40	884.53	1027.67	716.46	1601.44	4129.63	4366.15	3797.99	1218.66	84.69	15.49	54.80	
10	103.08	899.50	1067.77	705.99	1677.71	4067.68	4355.90	3787.57	1093.08	84.69	17.61	52.01	
11	96.13	838.08	1139.52	682.20	1740.97	4047.01	4335.39	3745.88	967.20	83.81	21.78	52.01	
12	92.63	794.10	1191.03	682.20	1766.21	3995.28	4325.13	3704.72	846.98	83.81	22.81	50.13	
13	90.87	708.78	1242.29	687.10	1862.35	4005.63	4314.86	3655.37	751.92	83.81	22.81	49.19	
14	88.23	653.38	1281.56	698.30	2075.94	4119.31	4304.59	3596.06	685.00	86.46	22.81	48.25	
15	86.46	621.59	1312.88	713.67	2172.26	4181.18	4294.32	3516.80	610.95	64.93	22.81	48.25	
16	83.81	639.98	1318.09	719.25	2275.45	4222.36	4325.13	3442.02	548.83	52.01	19.71	48.25	
17	83.81	687.10	1297.23	735.26	2378.73	4263.50	4304.59	3348.29	492.46	47.30	19.71	49.19	
18	81.14	729.69	1302.45	776.85	2510.62	4284.05	4273.78	3282.50	425.01	43.50	19.71	50.13	
19	74.89	771.32	1302.45	823.68	2667.03	4396.90	4242.93	3197.70	369.14	41.59	17.61	51.07	
20	54.80	805.81	1302.45	826.42	2837.96	4488.99	4212.07	3087.79	337.44	38.70	16.55	52.01	
21	58.51	826.42	1307.66	820.25	3078.91	4560.46	4170.87	3007.74	312.30	35.79	16.55	54.80	
22	62.19	838.08	1318.09	812.00	3367.06	4652.18	4108.99	2900.64	293.10	33.83	16.55	92.63	
23	71.29	826.42	1307.66	835.34	3635.61	4753.85	4036.67	2802.07	246.42	30.87	23.84	103.08	
24	65.84	791.34	1307.66	874.99	3860.41	4804.59	3964.20	2694.09	221.92	27.88	30.87	110.85	
25	54.80	726.91	1292.01	940.18	4026.33	4875.53	3933.10	2586.84	220.33	24.85	43.50	110.85	
26	39.67	682.20	1271.10	963.83	4129.63	4905.90	3912.34	2485.15	194.69	24.85	65.84	109.13	
27	26.88	618.75	1238.35	970.57	4242.93	4905.90	3850.02	2386.65	159.62	22.81	87.35	103.08	
28	17.61	629.38	1222.60	1000.85	4325.13	4905.90	3787.57	2283.41	149.69	20.75	73.99	99.61	
29	14.41	647.74	1191.03	1049.08	4417.38	4875.53	3735.45	2194.41	157.97	21.78		97.87	
30	10.01	653.38	1179.17	1093.08	4478.76	4835.01	3694.86	2113.04	157.97	21.78		96.13	
31		671.67		1127.60	4488.99		3615.84		148.02	19.71		96.13	
Total	2559.86	19325.73	34693.47	26866.38	80769.38	133112.30	131130.31	96955.44	23854.24	2016.82	730.28	2266.68	554280.88 Ton
Mean	85.33	623.41	1156.45	866.66	2605.46	4437.08	4230.01	3231.85	769.49	65.06	26.08	73.12	
Max	176.84	899.50	1318.09	1135.55	4488.99	4905.90	4794.45	3797.99	2008.96	139.68	87.35	110.85	4905.90
Min	10.01	10.01	705.99	682.20	1163.33	3995.28	3615.84	2113.04	148.02	19.71	15.49	48.25	10.01

WATER YEAR : 2001

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 of Pong Sanuk - Chiang Muan road.
Ban Mang	**Amphoe** Chiang Muan **Changwat** Phayao
Drainage Area	597 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
Number of observation	43
R - Square	0.9535
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:23:10.72

LQS/LQS02D/12

Station - Ban Mang, Chiang Muan, Phayao, (Y.24)
Stream - Nam Pi
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.51020
QS = 3.6995 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.84	0.28	4.10	24.96	537.97	259.83	37.19	37.19	10.14	2.84	1.03	21.13	
2	1.50	0.28	3.70	27.67	288.54	187.60	30.59	30.59	10.14	2.84	0.69	21.13	
3	1.50	2.16	2.49	24.96	2098.72	143.08	47.89	22.24	9.22	2.84	0.69	18.95	
4	0.93	2.16	350.48	20.93	1802.63	4321.86	42.43	18.47	9.22	3.32	0.86	14.76	
5	0.93	2.16	50.03	17.23	1976.22	1499.15	46.04	17.23	8.39	3.32	0.33	14.76	
6	0.93	1.50	38.91	14.05	2566.91	725.45	42.43	40.66	8.39	2.84	0.28	14.76	
7	0.93	1.22	46.04	12.00	1745.98	583.06	38.91	35.50	7.52	2.35	0.33	14.76	
8	0.93	0.69	29.12	17.23	806.00	439.72	38.91	32.20	7.52	2.84	0.43	14.76	
9	0.93	0.63	20.93	71.40	385.35	303.27	439.72	27.67	7.52	2.84	0.33	14.76	
10	0.93	0.63	12.00	54.54	238.98	232.16	109.96	23.59	7.52	2.84	0.33	14.76	
11	0.93	1.84	8.39	32.20	187.60	700.99	66.45	24.96	5.63	2.35	0.17	14.76	
12	0.93	1.50	7.52	77.25	7304.57	560.36	61.62	24.96	5.63	1.54	0.15	14.76	
13	0.93	1.50	10.14	54.54	2067.86	1128.02	47.89	18.47	5.00	1.03	36.10	14.76	
14	0.93	5.63	9.22	37.19	806.00	820.16	38.91	18.47	3.87	2.84	33.48	14.76	
15	0.69	5.63	8.39	66.45	1164.88	496.47	38.91	19.73	3.87	1.75	36.10	14.76	
16	0.69	45.13	8.39	37.19	863.15	266.91	38.91	20.93	4.39	1.75	33.48	14.76	
17	0.69	27.56	7.52	95.71	617.66	172.24	38.91	19.73	4.39	2.84	36.10	14.76	
18	0.69	18.57	11.10	80.23	341.93	122.13	30.59	20.93	3.32	2.35	38.91	16.77	
19	0.63	13.27	6.89	54.54	167.36	341.93	27.67	17.23	3.32	2.35	38.91	14.76	
20	0.54	11.18	4.39	37.19	117.96	266.91	26.36	18.47	3.87	2.35	38.91	14.76	
21	0.48	6.48	3.32	737.78	117.96	192.67	23.59	17.23	4.39	1.93	38.91	14.76	
22	0.48	4.10	3.32	848.74	71.40	134.53	20.93	15.12	3.32	1.75	36.10	14.76	
23	0.40	4.10	11.10	1452.68	61.62	114.03	16.12	17.23	2.84	1.03	33.48	14.76	
24	0.35	4.10	16.12	266.91	59.32	102.15	15.12	20.93	2.84	1.03	28.33	14.76	
25	0.28	4.10	11.10	102.15	59.32	172.24	15.12	18.47	2.84	2.35	25.92	14.76	
26	0.28	9.22	8.39	54.54	61.62	157.34	14.05	8.39	2.84	1.93	25.92	14.76	
27	0.28	8.24	6.22	52.34	449.02	130.41	16.12	12.00	3.87	1.54	23.48	14.76	
28	0.21	6.48	5.00	44.22	6483.32	54.54	98.91	14.05	3.87	1.03	23.48	13.70	
29	0.28	9.22	5.00	38.91	1109.94	54.54	172.24	17.23	2.84	0.86		13.70	
30	0.28	7.31	12.00	47.89	496.47	46.04	92.54	12.00	2.84	0.57		12.59	
31		4.10		71.40	333.46		52.34		3.32	1.03		12.59	
Total	22.32	210.97	721.32	4575.02	35389.72	14729.79	1827.37	641.87	164.68	65.07	533.23	470.04	59351.41 Ton
Mean	0.74	6.81	24.04	147.58	1141.60	490.99	58.95	21.40	5.31	2.10	19.04	15.16	
Max	1.84	45.13	350.48	1452.68	7304.57	4321.86	439.72	40.66	10.14	3.32	38.91	21.13	7304.57
Min	0.21	0.28	2.49	12.00	59.32	46.04	14.05	8.39	2.84	0.57	0.15	12.59	0.15

WATER YEAR : 2001

YOM RIVER BASIN

Nam Mae Mok at Ban Mae Phu, Lampang (Y.26)

Lat 17 - 19 - 37 N. **Long** 99 - 27 - 42 E.

Location	on left bank downstream from Ban Mae Phu Tambon Wiang Mok.
Ban Mae Phu	**Amphoe** Thoen **Changwat** Lampang
Drainage Area	785 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 - 2001
Number of observation	25
R - Square	0.8528
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:26:23.63

LQS/LQS02D/12

Station - Ban Mae Phu, Thoen, Lampang, (Y.26)
Stream - Nam Mae Mok
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 310702
1.05320
QS = 3.1765 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.16	0.22	148.51	11.78	4.70	18.95	53.10	365.33	3.34	2.02	1.69	23.36	
2	15.59	0.22	214.98	11.78	9.29	18.40	88.70	205.68	3.34	2.02	1.53	13.89	
3	16.03	1.69	320.84	11.35	9.68	17.85	79.22	127.26	3.34	3.01	16.87	9.29	
4	14.76	44.65	277.82	10.96	10.10	18.40	68.36	87.51	3.18	14.76	22.26	9.29	
5	6.77	1.69	183.77	10.96	9.68	18.95	57.86	63.06	3.18	16.47	22.26	8.87	
6	6.49	1.21	102.08	10.96	11.35	19.50	64.85	48.48	3.01	16.87	22.26	8.87	
7	6.49	261.91	66.56	10.96	13.89	33.00	62.20	39.62	3.01	16.03	22.26	8.09	
8	6.49	271.83	52.33	10.96	13.89	22.81	58.71	32.32	2.84	16.03	22.26	2.18	
9	6.24	139.38	40.91	11.35	12.64	18.40	120.30	26.15	2.68	16.47	22.26	2.02	
10	4.70	65.71	35.64	14.76	11.35	16.87	139.38	21.70	2.68	16.47	22.26	1.85	
11	0.43	38.25	31.64	13.89	11.35	16.87	312.39	19.50	2.51	16.03	22.26	1.69	
12	0.40	24.48	34.96	11.78	13.07	18.40	254.27	17.30	2.18	16.03	22.26	1.69	
13	0.40	102.08	38.94	11.35	11.78	20.05	222.44	15.16	2.02	16.03	22.81	1.69	
14	0.40	115.12	33.00	11.78	10.53	20.60	137.85	14.33	2.02	18.95	22.81	1.69	
15	0.37	91.07	25.59	11.78	10.10	17.85	102.08	16.87	1.69	16.87	22.26	1.53	
16	0.34	116.40	18.40	10.10	10.10	20.05	69.22	13.89	1.69	16.03	22.26	1.53	
17	0.31	297.73	14.33	7.04	9.68	27.82	60.45	11.78	1.69	16.03	22.26	1.53	
18	0.31	281.76	10.96	6.77	9.68	27.26	127.26	10.10	1.69	16.03	22.26	1.53	
19	0.25	211.26	8.87	7.04	9.29	50.02	95.83	8.87	1.69	15.59	22.26	2.68	
20	0.28	131.78	7.53	7.04	9.29	91.07	70.98	7.04	1.69	15.59	22.26	18.95	
21	0.31	89.88	7.29	7.29	9.29	111.19	50.79	7.04	1.53	15.59	22.81	18.95	
22	0.31	58.71	10.10	8.34	12.21	122.91	32.32	6.77	1.37	15.59	22.26	19.50	
23	0.31	42.36	10.53	7.29	10.10	104.72	14.33	6.00	1.37	15.59	22.26	20.05	
24	0.28	33.64	10.96	6.00	9.68	137.85	17.85	5.45	1.37	18.40	22.26	20.05	
25	0.25	25.59	10.96	2.18	9.68	198.25	53.10	4.97	1.53	26.71	22.26	19.50	
26	0.22	22.26	11.35	1.21	9.29	172.98	109.91	4.46	1.53	26.71	22.26	19.50	
27	0.22	18.95	11.35	1.21	10.96	133.32	116.40	4.19	1.85	23.36	22.81	18.95	
28	0.25	23.36	10.96	1.05	18.40	134.85	116.40	3.95	2.02	12.64	22.81	18.95	
29	0.22	21.70	12.21	0.89	19.50	109.91	743.79	3.68	2.18	4.70		18.95	
30	0.22	20.60	11.35	0.89	19.50	71.88	1397.49	3.34	2.18	2.18		18.95	
31		44.65		0.89	18.95		634.13		2.02	1.85		18.95	
Total	104.80	2600.14	1774.72	251.63	359.00	1810.98	5531.96	1201.80	68.42	446.65	579.34	334.52	15063.96 Ton
Mean	3.49	83.88	59.16	8.12	11.58	60.37	178.45	40.06	2.21	14.41	20.69	10.79	
Max	16.03	297.73	320.84	14.76	19.50	198.25	1397.49	365.33	3.34	26.71	22.81	23.36	1397.49
Min	0.22	0.22	7.29	0.89	4.70	16.87	14.33	3.34	1.37	1.85	1.53	1.53	0.22

WATER YEAR : 2001

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	
Drainage Area			96 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		
Number of observation			36		
R - Square			0.8730		
Remarks			Continued Sediment Station		

RTD Computer Center, Processing : 25-FEB-2005 10:23:21.45

LQS/LQS02D/12

Station - Ban Pong, Ngao, Lampang, (Y.30)
Stream - Huai Pong
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.01260
QS = 5.0403 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.19	0.94	1.44	1.44	10.68	20.93	12.64	31.19	1.49	1.24	0.99	2.19	
2	0.94	0.94	0.94	1.44	15.85	20.26	9.29	28.17	2.45	0.99	0.99	1.69	
3	0.69	0.94	1.19	1.19	33.75	15.28	7.39	23.64	1.69	0.89	2.19	1.69	
4	0.69	1.44	0.94	1.69	23.64	15.28	14.25	22.96	0.99	1.69	1.94	1.69	
5	0.69	1.19	4.07	1.44	20.93	25.14	20.26	16.37	1.49	2.19	2.45	1.94	
6	0.69	0.94	4.07	1.69	11.61	18.91	21.61	16.37	2.45	1.94	3.16	1.94	
7	0.94	0.94	1.89	1.69	34.64	16.37	12.64	20.26	1.69	1.94	2.90	2.19	
8	0.69	0.69	1.69	1.69	25.87	14.25	14.25	16.89	2.90	1.94	1.94	2.45	
9	0.49	0.69	1.69	2.14	19.58	71.53	13.73	14.76	2.70	2.45	2.19	2.45	
10	0.69	0.69	1.19	1.89	75.64	47.84	38.98	14.25	2.19	2.19	2.19	2.45	
11	0.69	2.80	0.94	1.89	104.47	24.42	26.66	13.21	0.79	2.45	2.19	2.45	
12	0.69	1.69	1.44	1.89	201.80	21.61	23.64	13.73	2.45	2.70	2.45	2.45	
13	0.94	1.19	1.19	1.89	107.97	92.08	16.89	13.21	3.16	2.45	0.10	1.94	
14	0.69	18.23	1.44	1.89	67.41	92.08	15.85	13.21	1.69	1.69	0.99	1.24	
15	0.69	6.16	3.21	1.89	55.36	49.68	15.28	13.21	2.45	1.49	0.89	0.79	
16	1.44	4.48	4.89	2.14	34.64	33.75	14.25	13.21	1.69	0.89	1.24	0.79	
17	0.94	5.30	4.48	2.14	25.14	27.39	13.73	10.68	2.45	0.99	1.94	1.24	
18	1.19	3.66	3.21	2.40	20.26	18.91	13.21	9.76	2.19	1.24	0.89	0.69	
19	1.19	1.69	1.19	2.14	16.89	49.68	13.21	9.29	2.70	1.49	2.45	0.79	
20	1.19	1.69	1.69	2.14	17.56	32.92	12.64	8.32	1.69	1.94	2.19	0.89	
21	1.44	7.04	1.19	14.76	10.68	28.17	12.13	6.93	2.70	1.69	2.19	0.89	
22	1.44	4.48	1.19	90.97	11.15	25.14	11.61	6.57	2.45	1.69	1.24	1.94	
23	1.44	12.70	0.94	160.33	11.15	22.28	11.15	6.57	2.45	1.94	2.45	1.94	
24	1.69	6.57	1.19	44.28	10.22	18.91	14.25	6.22	2.45	4.48	2.19	1.49	
25	1.44	3.66	0.94	17.56	9.29	15.28	17.56	5.86	1.69	0.99	2.45	0.89	
26	1.69	1.69	0.94	12.64	8.78	14.25	23.64	5.86	1.49	0.79	2.19	0.69	
27	1.69	1.69	0.94	10.68	8.32	28.17	22.96	5.86	1.24	0.79	2.19	0.99	
28	1.44	0.94	1.19	10.22	78.76	18.91	68.41	4.12	1.49	0.69	2.45	0.69	
29	1.19	2.80	1.69	8.78	39.82	16.89	87.64	3.41	1.94	0.89		0.89	
30	1.19	1.69	1.44	8.32	23.64	10.68	65.36	2.70	1.24	0.89		1.49	
31		1.44		9.29	29.68		39.82		1.69	0.79		0.79	
Total	32.00	100.99	54.44	424.54	1165.18	906.99	704.93	376.79	62.13	50.42	53.62	46.64	3978.67 Ton
Mean	1.07	3.26	1.81	13.69	37.59	30.23	22.74	12.56	2.00	1.63	1.91	1.50	
Max	1.69	18.23	4.89	160.33	201.80	92.08	87.64	31.19	3.16	4.48	3.16	2.45	201.80
Min	0.49	0.69	0.94	1.19	8.32	10.68	7.39	2.70	0.79	0.69	0.10	0.69	0.10

WATER YEAR : 2001

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
Drainage Area	331 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
Number of observation	36
R - Square	0.8624
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:55:43.33

LQS/LQS02D/12

Station - Ban Mae Lai, Mueang, Phrae, (Y.34)
Stream - Nam Mae Lai
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.23580
QS = 4.1170 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.12	1.05	4.53	8.05	169.97	23.26	17.67	28.39	16.93	2.65	3.76	1.45	
2	1.12	1.97	3.37	6.96	50.07	20.46	16.93	24.18	16.14	2.65	0.60	1.45	
3	1.12	2.33	2.65	5.91	96.13	20.46	16.93	20.46	16.14	2.65	0.71	1.45	
4	1.16	1.97	1.33	5.37	57.04	19.50	15.41	19.50	16.14	2.98	0.97	1.45	
5	1.16	1.33	1.97	5.91	45.52	18.54	16.14	26.20	17.67	2.98	1.49	1.45	
6	0.97	1.33	6.96	8.57	101.73	38.39	34.53	24.18	17.67	4.12	1.49	1.45	
7	0.97	1.16	5.91	9.70	64.43	33.32	23.26	25.19	15.41	6.41	1.41	1.45	
8	1.05	1.05	4.53	11.03	44.07	30.76	21.36	20.46	4.53	6.41	1.37	1.45	
9	1.12	1.05	3.76	13.15	34.53	35.84	16.93	16.14	4.12	8.05	1.37	1.41	
10	1.12	2.98	2.98	13.86	96.13	41.13	14.63	15.41	3.37	8.57	1.37	1.41	
11	1.12	3.37	2.33	15.41	831.74	45.52	87.85	16.93	2.65	8.57	1.37	1.41	
12	1.20	2.33	1.33	16.14	2780.07	48.51	33.32	16.14	2.33	7.53	1.33	1.41	
13	1.20	1.16	1.33	13.15	723.74	93.36	29.57	15.41	2.33	4.53	1.33	1.41	
14	1.20	0.89	1.97	11.71	404.58	79.71	21.36	15.41	2.33	2.98	1.49	1.41	
15	1.29	0.89	1.97	10.30	615.69	141.49	21.36	15.41	1.97	2.98	1.49	1.45	
16	1.29	1.16	1.62	9.70	277.70	54.61	25.19	30.76	1.97	2.65	1.45	1.45	
17	1.20	1.16	1.62	9.16	138.00	30.76	21.36	28.39	1.97	2.65	1.45	1.45	
18	1.20	1.16	1.62	10.30	82.41	26.20	22.34	24.18	2.65	2.65	1.41	1.45	
19	1.41	1.05	1.33	12.40	61.95	24.18	14.63	21.36	4.12	1.97	1.37	1.41	
20	1.20	0.89	1.62	11.71	33.32	25.19	14.63	21.36	4.12	1.97	1.37	1.41	
21	1.25	0.89	1.33	293.12	29.57	50.07	15.41	23.26	5.91	2.33	1.37	1.41	
22	1.25	0.89	1.62	362.65	25.19	34.53	14.63	25.19	4.53	2.65	1.37	1.41	
23	1.25	0.78	1.97	104.55	21.36	24.18	13.86	24.18	1.97	1.97	1.37	1.45	
24	19.50	0.78	2.33	39.64	20.46	21.36	11.71	26.20	1.97	2.33	1.37	1.45	
25	8.57	0.89	1.33	21.36	16.14	26.20	11.71	28.39	1.97	2.33	1.53	1.45	
26	3.37	0.78	1.33	21.36	16.14	23.26	50.07	29.57	2.33	1.97	1.49	0.18	
27	2.98	0.78	1.33	24.18	30.76	25.19	64.43	27.14	2.65	1.97	1.49	0.18	
28	2.98	0.78	3.37	21.36	24.18	26.20	47.05	26.20	2.65	1.97	1.49	0.18	
29	1.33	0.78	3.76	20.46	38.39	22.34	32.03	26.20	2.65	1.62		0.74	
30	1.05	0.89	9.70	23.26	33.32	17.67	29.57	27.14	2.65	2.65		0.82	
31		1.05		93.36	28.39		26.20		2.65	3.37		0.93	
Total	66.75	39.57	82.80	1233.79	6992.72	1122.19	802.07	688.93	186.49	111.11	40.08	38.88	11405.38 Ton
Mean	2.23	1.28	2.76	39.80	225.57	37.41	25.87	22.96	6.02	3.58	1.43	1.25	
Max	19.50	3.37	9.70	362.65	2780.07	141.49	87.85	30.76	17.67	8.57	3.76	1.45	2780.07
Min	0.97	0.78	1.33	5.37	16.14	17.67	11.71	15.41	1.97	1.62	0.60	0.18	0.18

WATER YEAR : 2001

YOM RIVER BASIN

Nam Mae Khuan at Ban Pa Kha, Phayao (Y.36)

		Lat	19 - 09 - 24 N.	**Long**	100 - 19 - 36 E.
Location			on left bank at the bridge.		
	Ban Pa Kha		**Amphoe** Pong	**Changwat** Phayao	
Drainage Area			822 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			2001		
Number of observation			47		
R - Square			0.9401		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 25-FEB-2005 10:23:46.43

LQS/LQS02D/12

Station - Ban Pa Kha, Pong, Phayao, (Y.36)
Stream - Mae Nam Khuan
River - Yom
River System - Yom River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.65100
QS = 1.3760 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.81	2.43	6.71	14.88	1224.17	792.96	296.47	238.46	33.79	13.35	10.48	2.81	
2	2.81	6.71	9.15	14.88	624.24	600.10	252.49	212.18	30.02	13.35	10.48	4.57	
3	2.81	9.15	10.48	11.88	892.80	520.23	245.44	212.18	28.20	13.35	10.48	4.57	
4	3.63	10.48	13.35	10.48	3584.92	1168.81	345.18	193.31	32.75	16.48	9.15	4.57	
5	2.43	14.88	16.48	11.88	1894.42	1545.84	312.12	175.14	32.75	14.88	10.48	5.60	
6	2.07	3.63	7.89	22.07	1702.12	1151.01	274.13	164.23	30.48	14.88	9.15	4.57	
7	2.07	0.09	2.43	30.48	2292.33	922.17	281.50	164.23	28.28	14.88	9.15	5.60	
8	0.40	0.12	2.81	30.48	1186.71	1046.49	245.44	154.02	28.28	14.88	7.89	5.60	
9	0.44	0.09	1.73	28.28	907.44	765.30	245.44	154.02	28.28	14.88	7.89	5.60	
10	1.73	0.08	1.14	35.08	673.65	673.65	266.84	143.94	28.28	14.88	7.89	5.60	
11	2.81	1.73	1.42	30.48	863.80	1046.49	370.83	134.27	28.28	13.35	7.89	6.71	
12	2.81	1.42	0.64	35.08	3330.56	806.94	336.79	129.60	26.14	13.35	7.89	6.71	
13	3.63	0.35	0.44	30.48	2614.85	907.44	245.44	64.89	26.14	14.88	7.89	5.60	
14	3.63	0.44	0.87	20.14	1633.78	878.25	225.08	59.18	26.14	16.48	6.71	5.60	
15	3.21	6.71	0.35	42.80	3658.94	624.24	175.14	56.41	32.75	14.88	6.71	5.60	
16	2.81	24.07	0.87	37.47	2678.02	531.36	199.58	53.68	18.27	13.35	5.60	4.57	
17	2.43	16.48	0.64	48.40	1611.25	477.09	245.44	51.30	18.27	13.35	6.71	3.63	
18	2.43	14.88	0.44	70.06	1339.27	379.54	193.31	48.95	20.14	11.88	6.71	3.63	
19	1.73	13.35	0.05	57.29	1186.71	362.20	181.17	48.95	22.07	11.88	5.60	3.63	
20	0.87	13.35	0.09	60.39	922.17	362.20	175.14	48.95	20.14	10.48	7.89	3.63	
21	0.32	6.71	0.15	655.47	751.61	353.65	164.23	46.65	20.14	11.88	6.71	3.63	
22	0.32	14.88	3.63	1521.99	509.19	296.47	120.32	20.14	20.14	11.88	6.71	3.63	
23	0.35	5.60	87.76	1035.02	509.19	288.95	134.27	42.80	20.14	11.88	6.71	3.63	
24	0.35	2.43	45.56	863.80	565.32	456.74	134.27	42.80	16.48	11.88	6.71	3.63	
25	0.04	4.57	45.56	374.34	370.83	648.76	143.94	42.80	18.27	10.48	6.71	3.63	
26	0.03	2.07	26.14	236.38	328.49	553.91	164.23	42.80	18.27	10.48	6.71	3.63	
27	0.02	1.42	16.48	191.40	353.65	417.11	266.84	51.30	18.27	10.48	6.71	3.63	
28	0.09	2.43	13.35	141.81	1151.01	362.20	1319.80	35.82	18.27	10.48	6.71	3.63	
29	0.21	1.42	11.88	111.19	1339.27	328.49	698.91	33.79	16.48	10.48		3.63	
30	0.44	1.73	10.48	711.68	863.80	345.18	477.09	31.80	16.48	10.48		3.21	
31		0.87		1080.90	1063.64		296.47		16.48	10.48		3.21	
Total	49.73	184.57	338.97	7566.96	42628.15	19613.77	9033.34	2898.59	738.87	400.57	216.32	137.49	83807.34 Ton
Mean	1.66	5.95	11.30	244.10	1375.10	653.79	291.40	96.62	23.83	12.92	7.73	4.44	
Max	3.63	24.07	87.76	1521.99	3658.94	1545.84	1319.80	238.46	33.79	16.48	10.48	6.71	3658.94
Min	0.02	0.08	0.05	10.48	328.49	288.95	120.32	20.14	16.48	10.48	5.60	2.81	0.02

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Mueang, Phichit (N.7A)

Lat 16 - 28 - 03 N. **Long** 100 - 20 - 05 E.

Location	on right bank in front of Phichit Phitthaya Khom School.
Ban -	**Amphoe** Mueang **Changwat** Phichit
Drainage Area	29,153 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	2001
Number of observation	27
R - Square	0.6883
Remarks	Continued Sediment Station

RID Computer Center, Processing : 3-MAR-2005 15:09:01.38 LQS/LQS02D/12

Station - Mueang, Mueang, Phichit, (N.7A)
Stream - Nan River
River - Nan River
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 250602
0.96110
QS = 10.8490 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2181.3	3310.1	2005.2	1621.2	3535.6	10836.5	9849.1	6120.1	1763.1	1141.2	2322.4	2973.6	
2	2130.8	3003.5	2823.9	1995.9	3589.2	11020.9	9345.2	5756.5	1763.1	977.5	2382.8	3127.1	
3	1875.0	3621.4	3985.0	2181.3	3535.6	10980.0	8700.2	5401.8	1621.2	1047.8	2533.5	3363.9	
4	1902.9	3824.7	4091.6	2070.1	3803.3	10836.5	8467.8	4958.3	1578.6	1273.0	2352.6	3170.2	
5	3385.3	4810.1	3632.1	2332.5	4400.3	10693.0	8388.2	4718.8	2140.9	1791.1	1995.9	2513.4	
6	4027.6	5094.9	3137.9	2733.9	5163.2	10569.9	8058.9	4604.6	2833.8	2372.8	2080.2	2060.8	
7	3888.8	4878.5	3213.3	2833.8	5549.3	10569.9	7923.2	4453.5	2543.6	2993.5	2643.8	2042.3	
8	3610.7	4091.6	3256.3	2853.8	6023.2	10569.9	7705.1	4379.1	2513.4	2783.9	2763.9	2463.2	
9	2983.5	2473.3	2923.7	2090.3	6337.8	10426.2	7253.7	4166.2	2853.8	2372.8	2703.9	2863.8	
10	2433.1	1553.0	2473.3	1707.1	6832.5	10426.2	7025.2	3846.1	2933.7	2282.1	2693.9	2853.8	
11	2753.9	1504.4	2171.2	1753.8	7049.3	10487.8	7133.5	3653.5	2623.8	2231.7	2563.6	2593.7	
12	3717.8	1663.7	2100.5	2241.8	7337.9	10405.7	7590.0	3385.3	2231.7	2312.4	2302.3	2070.1	
13	3856.8	1553.0	2382.8	2433.1	8058.9	10569.9	7590.0	3202.5	2543.6	2413.0	1977.3	1930.8	
14	3299.4	2251.9	2953.6	2853.8	10918.5	10877.5	7265.8	3084.0	3033.3	2433.1	1995.9	2493.4	
15	2963.6	2100.5	2963.6	3503.4	12949.5	11102.9	6772.3	3073.2	2963.6	1968.0	2493.4	3213.3	
16	2262.0	2332.5	2823.9	3396.1	13212.4	11246.2	6144.3	2863.8	2673.8	1772.5	2933.7	3213.3	
17	2090.3	2683.9	2633.8	2413.0	12554.7	11328.0	5583.3	2713.9	2513.4	2723.9	2813.9	3148.6	
18	2151.0	2783.9	2402.9	1646.7	12005.6	11266.6	5469.9	2392.9	2292.2	3013.4	2903.7	3202.5	
19	2140.9	2893.8	2211.6	2171.2	11880.0	11164.3	5276.9	2171.2	1995.9	2943.6	2803.9	3116.3	
20	2753.9	2813.9	1921.5	2593.7	11716.5	11020.9	4958.3	2120.7	2191.4	2683.9	2423.0	3003.5	
21	3137.9	2603.7	1707.1	2743.9	10795.5	10775.0	4673.1	2140.9	2171.2	2433.1	2813.9	3428.3	
22	3524.9	2241.8	1496.7	2573.6	10467.3	10836.5	4432.2	2060.8	2231.7	2033.0	3094.8	3674.9	
23	3632.1	1912.2	1396.6	2883.8	10285.6	11061.9	4549.1	1912.2	2080.2	1930.8	3288.6	3739.2	
24	3202.5	2005.2	1218.8	4650.3	10304.6	11307.6	4421.6	2014.4	1958.7	2493.4	3310.1	3920.9	
25	2863.8	2023.7	1211.1	5914.2	10467.3	11184.8	4251.4	1809.8	1819.1	2533.5	3023.4	3610.7	
26	3353.1	1809.8	1496.7	6071.7	10549.4	10980.0	4453.5	1865.7	1288.5	2352.6	2903.7	2933.7	
27	3482.0	1902.9	1621.2	5853.6	10209.8	10713.5	5288.2	2023.7	1288.5	2201.5	2483.3	2793.9	
28	3363.9	1809.8	1612.7	5492.6	9925.1	10426.2	5877.8	2023.7	1697.7	2090.3	2743.9	3374.6	
29	3707.1	1716.4	1604.1	4821.5	9944.1	10247.7	6410.3	1856.4	1725.8	1847.1		3621.4	
30	3846.1	1621.2	1561.5	3814.0	10114.9	10152.8	6663.8	1744.5	1587.1	1735.1		3707.1	
31		1930.8		3621.4	10446.7		6603.4		1388.9	2251.9		3878.2	
Total	90522.0	80820.1	71034.2	95867.1	269963.6	324084.8	204125.3	96518.1	66845.3	67433.5	73345.3	94100.5	1534659.8 Ton
Mean	3017.4	2607.1	2367.8	3092.5	8708.5	10802.8	6584.7	3217.3	2156.3	2175.3	2619.5	3035.5	
Max	4027.6	5094.9	4091.6	6071.7	13212.4	11328.0	9849.1	6120.1	3033.3	3013.4	3310.1	3920.9	13212.4
Min	1875.0	1504.4	1211.1	1621.2	3535.6	10152.8	4251.4	1744.5	1288.5	977.5	1977.3	1930.8	977.5

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Ban Bang Mun Nak, Phichit (N.8A)

		Lat	16 - 04 - 45 N.	**Long**	100 - 24 - 00 E.
Location			on left bank opposite to Wat Bang Mun Nak.		
	Ban	Bang Mun Nak	**Amphoe**	Bang Mun Nak	**Changwat** Phichit
Drainage Area			32,878 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 - 2001		
Number of observation			114		
R - Square			0.7037		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 3-MAR-2005 15:12:28.66

LQS/LQS02D/12

Station - Ban Bang Mun Nak, Bang Mun Nak, Phichit, (N.8A)
Stream - Nan River
River - Nan River
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 310702
0.79150
QS = 43.9970 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2878.4	4074.6	2929.2	2808.7	4473.1	11766.7	12082.0	8383.1	3229.4	1883.9	2998.1	3416.7	
2	2842.4	3775.9	3274.3	2869.1	4519.4	11910.3	11824.2	8102.4	3566.3	1869.7	2972.9	3522.5	
3	2696.2	4102.0	4191.4	3148.3	4463.8	11910.3	11565.0	7847.4	3784.5	1726.8	3007.3	3821.1	
4	2479.5	4380.1	4758.3	3193.4	4565.6	11910.3	11352.6	7550.9	3139.2	1748.0	3139.2	3948.4	
5	3148.3	4593.3	4758.3	3093.9	4958.0	11824.2	11169.1	7279.3	3327.9	1777.0	2929.2	3575.1	
6	4155.7	4921.9	4426.7	3390.1	5580.0	11738.0	11037.7	7240.3	3592.6	2283.6	2671.5	3075.7	
7	4298.0	5333.5	4289.7	3601.3	6054.2	11622.7	10864.3	7061.7	4020.6	3211.4	2834.3	2851.7	
8	4218.6	5092.9	4298.0	3802.8	6456.2	11431.5	10497.1	6831.4	4074.6	3540.0	3016.4	2938.4	
9	3913.2	4271.9	4227.0	3575.1	6738.1	11169.1	9752.4	6559.8	4038.6	3247.4	3274.3	3327.9	
10	3399.0	3416.7	3939.8	3058.6	7125.6	11274.3	9499.7	6286.2	4002.6	3032.4	3327.9	3513.7	
11	3148.3	2720.9	3684.0	2764.3	7536.5	11431.5	9438.8	6045.6	3930.3	2929.2	3301.1	3460.9	
12	3767.3	2630.1	3496.1	2929.2	7802.1	11195.0	9730.6	5864.0	3647.0	2980.9	3148.3	3184.4	
13	4182.0	2712.7	3575.1	3256.3	8300.0	11274.3	9601.0	5653.8	3513.7	3041.5	2911.9	2816.8	
14	4092.5	2781.8	3939.8	3513.7	9730.6	11766.7	9479.4	5506.0	3647.0	3093.9	2799.3	2790.0	
15	3767.3	3157.3	4306.3	3939.8	11996.2	12082.0	9686.9	5588.7	3885.4	3016.4	3103.0	3460.9	
16	3363.5	3058.6	4315.7	4289.7	13214.7	12237.2	9214.6	5736.0	3702.4	2630.1	3292.2	3840.4	
17	2825.0	3390.1	4235.4	3903.6	13012.0	12300.4	8233.4	6045.6	3522.5	2808.7	3363.5	3794.2	
18	2737.4	3610.0	4110.5	3318.9	12646.6	12363.6	7959.2	5533.3	3301.1	3399.0	3407.8	3840.4	
19	2688.0	3674.2	3948.4	2825.0	12775.0	12363.6	7684.3	5404.2	3041.5	3540.0	3460.9	3812.5	
20	2869.1	3794.2	3739.2	3202.4	12910.0	12332.0	7442.0	5395.4	2894.5	3434.4	3283.2	3702.4	
21	3381.2	3739.2	3522.5	3504.9	12489.6	12237.2	7112.9	4794.8	2998.1	3247.4	3274.3	3821.1	
22	3693.7	3557.6	3220.4	3592.6	12142.2	12300.4	6927.1	4092.5	3058.6	3032.4	3504.9	4057.7	
23	3966.5	3354.6	2894.5	3557.6	11967.6	12395.1	6891.2	3821.1	2929.2	2781.8	3693.7	4191.4	
24	3867.2	3148.3	2663.2	4398.7	11852.9	12552.4	6843.3	3665.5	2790.0	2842.4	3903.6	4306.3	
25	3522.5	3103.0	2513.2	5644.1	11881.6	12583.8	6727.0	3540.0	2696.2	3148.3	3802.8	4333.4	
26	3592.6	3075.7	2654.9	6135.9	11939.0	12583.8	6715.9	3416.7	2479.5	3103.0	3618.7	3948.4	
27	3802.8	2955.6	2938.4	6182.3	11766.7	12521.0	7374.3	3354.6	2050.3	2963.7	3460.9	3496.1	
28	3840.4	2886.5	3041.5	6126.4	11565.0	12395.1	8149.9	3487.3	2050.3	2911.9	3318.9	3610.0	
29	3903.6	2816.8	3016.4	5790.9	11405.0	12237.2	8399.7	3478.5	2125.9	2720.9		3958.0	
30	4155.7	2688.0	2929.2	5182.4	11457.3	12142.2	8572.1	3310.0	2027.5	2394.9		4147.3	
31		2825.0		4676.0	11565.0		8660.6		1883.9	2454.2		4262.6	
Total	105195.9	109643.0	109837.4	121276.0	294889.6	359851.9	280488.3	166876.1	98951.2	86795.2	90820.1	112826.4	1937451.4 Ton
Mean	3506.5	3536.9	3661.2	3912.1	9512.6	11995.1	9048.0	5562.5	3192.0	2799.8	3243.6	3639.6	
Max	4298.0	5333.5	4758.3	6182.3	13214.7	12583.8	12082.0	8383.1	4074.6	3540.0	3903.6	4333.4	13214.7
Min	2479.5	2630.1	2513.2	2764.3	4463.8	11169.1	6715.9	3310.0	1883.9	1726.8	2671.5	2790.0	1726.8

WATER YEAR : 2001

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
Drainage Area	8,784 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	2001
Number of observation	27
R - Square	0.8990
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 3-MAR-2005 15:15:46.75

LQS/LQS02D/12

Station - Ban Bun Nak, Wiang Sa, Nan, (N.13A)
Stream - Nan
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.66750
QS = 0.2458 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.2	33.6	1918.4	4082.9	31846.3	32948.7	6601.2	3497.5	635.5	276.7	149.9	77.4	
2	57.3	33.6	1427.1	7730.6	27903.4	25094.0	6016.7	2924.3	635.5	276.7	149.9	72.6	
3	53.7	50.2	1156.7	2830.2	42529.3	19561.3	5219.8	2518.9	608.1	276.7	149.9	72.6	
4	57.3	97.2	2249.1	2249.1	89976.4	34352.5	4989.6	2352.6	608.1	276.7	149.9	72.6	
5	65.2	104.5	2645.7	2737.4	88680.3	68524.4	5065.9	2244.3	581.2	259.2	149.9	67.5	
6	57.3	135.7	2081.1	3484.3	63384.1	74701.1	4913.8	2033.9	581.2	259.2	149.9	67.5	
7	50.2	104.5	1124.2	2600.4	43791.6	91029.8	4913.8	1982.6	528.9	259.2	136.2	67.5	
8	46.5	81.2	1093.3	2600.4	31527.6	66056.4	4541.8	1831.8	528.9	242.1	123.1	62.9	
9	43.2	69.0	1031.3	13267.4	32971.8	46408.2	5142.6	1744.0	503.5	242.1	123.1	62.9	
10	40.0	61.0	716.5	13267.4	32326.7	53934.4	8608.9	1614.7	478.6	225.5	110.6	62.9	
11	40.0	61.0	594.2	7730.6	36779.4	39769.5	7658.2	1531.3	454.2	225.5	105.0	62.9	
12	40.0	144.0	547.6	5081.2	115930.3	34150.5	7119.4	1450.9	432.8	209.4	105.0	58.1	
13	53.7	119.7	419.0	3484.3	110533.2	45952.9	5853.7	1410.0	432.8	242.1	99.0	58.1	
14	207.6	144.0	379.5	2378.4	75666.3	51534.0	4615.3	1331.1	432.8	332.0	99.0	58.1	
15	152.6	119.7	439.4	3276.2	93600.4	35165.2	4324.3	1253.9	411.8	332.0	99.0	58.1	
16	85.8	207.6	594.2	5409.1	111172.1	26435.1	3902.1	1178.6	454.2	276.7	99.0	53.4	
17	65.2	482.0	1189.6	5275.2	89437.7	20165.5	4838.5	1105.2	454.2	242.1	93.6	53.4	
18	57.3	439.4	882.2	5409.1	68797.5	16994.4	4040.9	1068.6	432.8	225.5	93.6	49.2	
19	50.2	399.1	666.3	8442.0	63360.1	18400.6	3697.6	1033.6	411.8	209.4	93.6	49.2	
20	46.5	503.5	482.0	6895.4	47324.1	15647.1	3174.0	1000.3	391.2	193.8	88.0	45.2	
21	43.2	571.2	399.1	15981.5	35574.3	14218.9	3048.1	967.4	371.0	178.7	88.0	49.2	
22	36.6	525.4	322.5	61425.3	40199.3	13235.3	2632.3	903.0	351.3	193.8	88.0	49.2	
23	36.6	716.5	304.5	46175.0	27287.4	11593.3	2407.6	871.4	351.3	178.7	88.0	45.2	
24	33.6	304.5	1356.8	31527.6	20470.4	10803.7	2298.2	840.3	351.3	178.7	88.0	49.2	
25	33.6	743.6	1156.7	22120.6	15777.8	15118.7	2352.6	809.7	351.3	178.7	82.4	58.1	
26	30.7	1684.5	690.7	25148.0	13965.5	16448.1	2632.3	779.5	332.0	242.1	82.4	58.1	
27	57.3	1093.3	419.0	50514.7	26265.9	12637.3	2806.0	749.7	313.1	242.1	82.4	53.4	
28	40.0	690.7	525.4	33133.9	54663.1	10474.3	3431.8	720.5	294.7	193.8	82.4	49.2	
29	36.6	571.2	571.2	17236.4	44597.9	8706.5	4989.6	691.7	276.7	178.7		45.2	
30	30.7	439.4	525.4	16891.7	31241.8	7658.2	8511.9	663.3	276.7	178.7		41.0	
31		547.6		25962.6	29200.4		5297.4		276.7	164.0		41.0	
Total	1713.7	11278.4	27908.7	454348.9	1636782.1	937719.9	145645.9	43104.6	13544.2	7190.6	3048.8	1770.9	3284056.8 Ton
Mean	57.1	363.8	930.3	14656.4	52799.4	31257.3	4698.3	1436.8	436.9	232.0	108.9	57.1	
Max	207.6	1684.5	2645.7	61425.3	115930.3	91029.8	8608.9	3497.5	635.5	332.0	149.9	77.4	115930.3
Min	30.7	33.6	304.5	2249.1	13965.5	7658.2	2298.2	663.3	276.7	164.0	82.4	41.0	30.7

WATER YEAR : 2001

NAN RIVER BASIN

Khwae Noi 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
Drainage Area	4,841 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	1996 - 2001
Number of observation	24
R - Square	0.9047
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:08:04.49 LQS/LQS02D/12

Station - Ban Yang, Wat Bot, Phitsanulok, (N.22)
Stream - Khwae Noi
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 250602
1.83150
QS = 0.4602 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.45	15.61	7600.72	1589.80	2589.67	2852.57	2877.04	1001.95	96.33	32.37	13.79	5.83	
2	10.45	21.71	5139.25	2405.74	1539.09	2428.39	2951.02	778.56	98.73	32.37	13.79	5.83	
3	10.45	40.33	3126.96	634.95	1728.66	1693.45	3482.91	699.22	96.33	31.22	13.79	5.83	
4	10.45	98.73	2118.10	573.51	2901.60	1312.36	3994.80	626.00	96.33	30.09	13.20	5.57	
5	10.45	215.99	2383.18	626.00	4310.72	1223.26	2901.60	531.37	91.62	28.97	13.20	5.57	
6	9.93	151.63	2405.74	767.51	5139.25	1456.24	3126.96	490.69	87.01	27.88	13.20	5.57	
7	9.93	80.30	1891.17	590.78	7993.24	1800.07	2660.22	413.77	87.01	27.88	12.06	5.31	
8	9.93	59.73	1026.94	407.33	6889.01	1800.07	3000.82	363.49	84.75	25.74	12.06	5.31	
9	9.93	37.18	474.83	345.40	8701.67	1836.26	3630.16	321.94	80.30	25.74	12.06	5.31	
10	9.93	21.71	443.82	369.62	9372.43	1456.24	3902.15	304.83	82.51	23.69	12.06	5.05	
11	9.93	17.11	539.68	1026.94	10247.51	1265.92	4151.39	288.15	82.51	22.69	11.51	5.05	
12	9.93	19.81	2828.19	904.78	12137.60	1965.52	4246.66	230.66	75.97	21.71	11.51	5.05	
13	9.43	316.19	2683.93	653.03	18876.36	2496.93	3229.56	245.76	69.67	21.71	10.97	4.81	
14	9.43	363.49	1984.31	363.49	34079.39	3871.49	2360.72	230.66	67.62	23.69	10.45	4.81	
15	9.43	582.11	1039.55	304.83	44952.94	4342.91	1572.81	220.83	63.62	25.74	9.93	4.81	
16	9.43	727.62	746.84	230.66	59649.51	3749.94	1522.35	240.68	59.73	27.88	9.93	4.56	
17	9.43	727.62	531.37	288.15	72760.45	3570.93	1423.68	235.65	55.94	30.09	9.93	4.56	
18	9.43	653.03	466.99	699.22	66233.07	2755.63	1142.87	192.53	54.09	28.97	8.93	4.33	
19	9.43	582.11	357.42	1391.45	47596.01	1928.18	892.95	177.14	52.27	25.74	7.53	4.33	
20	9.43	573.51	277.27	1296.80	30760.40	2589.67	727.62	162.35	54.09	22.69	7.09	4.33	
21	9.43	548.05	180.94	756.54	14144.19	4088.43	653.03	155.17	59.73	20.75	7.09	4.33	
22	9.43	514.92	158.74	977.24	7844.99	9145.08	573.51	141.26	55.94	19.81	7.09	4.10	
23	9.43	363.49	137.87	12005.10	5696.45	22488.65	506.78	131.21	59.73	17.99	6.65	4.10	
24	9.43	299.22	339.47	15880.13	4057.11	19573.27	490.69	127.94	54.09	17.99	6.65	4.10	
25	9.43	240.68	421.19	14812.61	2975.87	13429.63	737.21	124.70	48.72	16.25	6.65	3.87	
26	9.43	188.63	708.63	14070.79	2316.09	8808.81	1589.80	121.50	43.60	16.25	6.65	3.87	
27	9.43	151.63	531.37	8808.81	1984.31	7894.27	2176.65	121.50	41.95	15.61	6.24	3.87	
28	9.43	127.94	482.73	7746.86	1782.10	6291.63	3810.50	111.12	38.74	15.61	6.24	3.65	
29	9.93	82.51	608.27	4959.70	2295.93	5066.97	3203.77	106.08	35.95	14.99		3.65	
30	9.93	93.96	1589.80	4183.04	2755.63	6842.69	2255.85	103.61	34.74	14.99		3.65	
31		106.08		3453.80	3152.47		1456.24		33.55	14.38		3.65	
Total	292.50	8022.63	43225.27	103124.61	497463.75	150025.47	71252.33	9000.32	2043.17	721.48	280.25	144.66	885596.50 Ton
Mean	9.75	258.79	1440.84	3326.60	16047.22	5000.85	2298.46	300.01	65.91	23.27	10.01	4.67	
Max	10.45	727.62	7600.72	15880.13	72760.45	22488.65	4246.66	1001.95	98.73	32.37	13.79	5.83	72760.45
Min	9.43	15.61	137.87	230.66	1539.09	1223.26	490.69	103.61	33.55	14.38	6.24	3.65	3.65

WATER YEAR : 2001

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

Drainage Area 1,861 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 2001

Number of observation 22

R - Square 0.9117

Remarks Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:08:55.36

LQS/LQS02D/12

Station - Ban Wang Nok Aen, Wang Thong, Phitsanulok, (N.24)
Stream - Nam Khek
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 250602
1.54680
QS = 1.3091 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.39	3.82	1253.80	239.08	295.72	497.14	689.97	170.61	34.24	12.72	3.82	1.02	
2	10.75	4.12	736.91	200.94	247.69	373.23	504.60	159.75	32.33	12.72	3.25	1.02	
3	8.89	7.16	373.23	157.76	333.68	304.99	497.14	142.61	30.47	12.72	2.97	1.02	
4	7.16	17.78	407.37	135.23	617.15	259.41	577.47	137.01	29.55	11.39	2.45	1.02	
5	7.16	12.72	471.43	259.41	919.48	330.38	467.70	129.85	28.64	10.75	1.74	1.02	
6	6.80	11.39	460.60	239.08	874.67	340.16	568.78	119.11	27.74	9.49	1.52	1.02	
7	6.80	10.75	359.87	182.07	1621.44	356.49	662.32	112.20	27.74	8.89	1.31	1.02	
8	7.16	10.11	208.19	144.42	1233.23	271.33	770.42	107.16	26.85	8.89	1.21	1.02	
9	9.49	10.11	227.57	198.54	1047.13	236.15	746.44	90.82	25.97	8.89	1.21	1.02	
10	8.89	11.39	330.38	182.07	7212.97	233.36	732.17	86.06	25.97	8.30	1.21	1.21	
11	8.30	36.19	708.61	186.72	7803.31	311.27	630.58	82.97	25.97	8.30	1.11	1.02	
12	7.72	126.27	902.48	277.36	7117.45	1138.83	551.53	78.45	25.97	7.72	1.11	1.02	
13	7.72	124.44	789.81	504.60	6628.08	852.37	383.28	74.02	25.10	6.80	1.02	0.84	
14	7.16	1034.68	653.20	330.38	4087.75	770.42	320.85	69.60	23.40	6.44	1.02	0.75	
15	7.16	268.26	573.12	241.90	4454.34	599.40	277.36	65.28	22.56	7.72	1.02	0.75	
16	6.80	239.08	504.60	189.07	3037.41	527.21	259.41	62.47	21.74	7.72	0.93	0.67	
17	6.44	896.98	523.50	193.78	1978.03	464.15	239.08	59.95	20.92	7.16	0.84	0.67	
18	6.08	221.95	376.52	330.38	2004.21	327.24	191.42	57.62	20.92	6.80	0.84	0.67	
19	5.74	203.34	256.40	289.55	1365.53	489.72	168.35	56.47	20.12	6.44	0.84	0.67	
20	5.74	336.99	208.19	205.76	1060.06	2200.95	152.07	55.32	20.12	6.44	0.84	0.67	
21	5.07	301.93	186.72	179.75	775.25	1583.94	142.61	51.94	19.33	6.44	1.21	0.67	
22	5.07	186.72	166.10	612.69	657.76	1118.95	133.36	46.46	18.55	6.44	1.11	0.67	
23	5.07	135.23	126.27	5146.78	560.13	1829.25	124.44	45.40	17.78	6.08	1.11	0.67	
24	4.75	144.42	283.43	2364.70	486.11	1651.66	122.72	41.21	17.78	6.08	1.02	0.52	
25	4.12	170.61	383.28	1158.84	431.81	1316.24	213.68	39.17	16.27	5.74	1.02	0.38	
26	3.25	205.76	393.59	671.49	397.09	1022.92	435.43	38.17	14.11	5.74	1.02	0.38	
27	0.52	124.44	184.39	508.42	343.49	891.28	431.81	37.17	13.41	5.74	1.02	0.38	
28	0.45	128.00	163.86	359.87	464.15	708.61	727.44	36.19	13.41	5.74	1.02	0.45	
29	0.32	366.53	182.07	349.89	449.71	577.47	621.62	35.21	13.41	5.40		0.59	
30	0.93	363.12	203.34	446.20	560.13	497.14	336.99	34.24	13.41	5.07		0.59	
31		512.26		407.37	662.32		221.95		13.41	4.75		0.52	
Total	182.90	6226.55	12598.83	16894.10	59727.28	22081.66	12902.99	2322.49	687.19	239.52	38.79	23.94	133926.25 Ton
Mean	6.10	200.86	419.96	544.97	1926.69	736.06	416.23	77.42	22.17	7.73	1.39	0.77	
Max	11.39	1034.68	1253.80	5146.78	7803.31	2200.95	770.42	170.61	34.24	12.72	3.82	1.21	7803.31
Min	0.32	3.82	126.27	135.23	247.69	233.36	122.72	34.24	13.41	4.75	0.84	0.38	0.32

WATER YEAR : 2001

NAN RIVER BASIN

Nam Khwae Noi at Ban Nong Krathao, Phitsanulok (N.36)

Lat 17 - 04 - 59 N. **Long** 100 - 49 - 55 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

Drainage Area 1,651 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 2001

Number of observation 28

R - Square 0.8547

Remarks Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:09:10.61 LQS/LQS02D/12

Station - Ban Nong Krathao, Nakhon Thai, Phitsanulok, (N.36)
Stream - Khwae Noi
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 250602
1.62100
QS = 1.8791 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.46	23.09	1098.89	2825.54	543.29	547.57	700.56	288.94	63.23	31.57	19.61	16.36	
2	14.79	21.91	474.31	1981.94	490.13	539.03	595.48	247.60	61.83	30.67	19.61	15.81	
3	12.89	259.16	622.26	817.66	1238.87	534.77	556.17	222.23	60.33	29.79	21.91	15.81	
4	11.46	177.50	932.37	478.38	1738.14	543.29	1252.08	203.40	58.84	28.92	21.36	16.36	
5	10.15	29.79	887.79	316.69	1623.73	812.36	849.75	192.88	57.48	28.05	21.36	20.75	
6	8.84	34.30	1032.19	307.40	1497.72	705.27	1135.85	185.04	56.13	28.05	21.36	17.99	
7	10.97	26.36	502.25	227.76	1858.51	782.36	1333.59	172.48	54.68	27.20	21.36	16.36	
8	8.03	23.09	253.35	172.48	2111.54	738.62	681.82	160.27	53.36	27.20	21.36	15.81	
9	7.66	20.22	259.16	1098.89	2540.06	498.11	560.49	150.51	51.94	27.20	20.75	15.33	
10	6.85	27.20	152.97	1519.44	3323.22	443.53	1167.18	141.47	50.64	26.36	20.75	14.79	
11	6.50	148.23	432.46	797.15	9648.72	677.16	1062.40	134.84	49.25	26.36	20.22	14.79	
12	6.11	190.19	1299.11	586.66	35247.44	1225.72	1232.29	128.32	47.88	26.36	20.22	14.32	
13	6.50	222.23	909.81	407.06	27353.00	1154.33	644.92	126.18	46.62	26.36	20.22	14.32	
14	6.85	150.51	582.26	276.88	16432.82	1368.80	447.24	119.83	45.37	26.36	19.61	13.34	
15	10.15	432.46	490.13	241.89	10610.92	1998.63	443.53	113.61	44.04	29.79	19.61	13.34	
16	9.69	534.77	323.23	236.24	7657.79	1571.25	443.53	111.56	43.03	28.92	19.02	12.89	
17	9.23	772.55	323.23	667.89	5091.58	871.41	368.82	107.51	42.02	27.20	19.02	12.38	
18	9.69	447.24	267.86	1512.32	3259.33	644.92	301.20	98.48	41.02	26.36	19.02	12.38	
19	15.33	190.19	175.07	865.98	2577.77	882.32	267.86	91.63	39.06	25.53	19.02	11.88	
20	8.84	83.28	124.05	478.38	2303.40	1923.96	241.89	88.28	37.13	24.95	18.50	11.88	
21	8.03	76.99	96.68	335.80	1661.26	2093.60	222.23	83.28	36.18	24.30	18.50	12.89	
22	7.25	190.19	76.99	2093.60	1319.68	2075.72	211.34	80.05	35.23	23.73	18.50	14.79	
23	8.84	78.51	91.63	12611.85	1219.16	5206.61	192.88	78.51	34.30	23.09	17.99	21.91	
24	15.81	63.23	454.70	11320.09	920.90	4863.87	222.23	76.99	33.38	23.73	17.99	22.46	
25	17.99	78.51	654.07	5091.58	753.09	2686.27	622.26	75.36	33.38	23.09	17.99	22.46	
26	17.99	66.19	187.70	2220.39	691.16	1948.73	649.49	73.86	32.47	23.09	17.42	34.30	
27	33.38	50.64	214.14	1691.69	635.82	1526.97	729.03	72.25	32.47	22.46	17.42	33.38	
28	27.20	41.02	187.70	1117.14	926.79	1111.16	876.86	69.19	31.57	21.36	17.42	32.47	
29	22.46	70.65	216.95	860.56	1404.36	893.28	631.29	67.74	31.57	20.75		31.57	
30	23.09	54.68	1135.85	828.31	1312.94	871.41	470.52	66.19	30.67	20.22		31.57	
31		219.59		719.49	1299.11		323.23		30.67	19.61		31.57	
Total	374.03	4804.47	14459.16	54707.13	149292.27	41741.03	19438.01	3828.48	1365.77	798.63	547.12	586.26	291942.34 Ton
Mean	12.47	154.98	481.97	1764.75	4815.88	1391.37	627.03	127.62	44.06	25.76	19.54	18.91	
Max	33.38	772.55	1299.11	12611.85	35247.44	5206.61	1333.59	288.94	63.23	31.57	21.91	34.30	35247.44
Min	6.11	20.22	76.99	172.48	490.13	443.53	192.88	66.19	30.67	19.61	17.42	11.88	6.11

WATER YEAR : 2001

NAN RIVER BASIN

Nam Khwae Noi 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
Drainage Area	4,340 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, US.D - 49
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	90
R - Square	0.9022
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:09:30.33

LQS/LQS02D/12

Station - Ban Nong Bon, Wat Bot, Phitsanulok, (N.40)
Stream - Khwae Noi
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 250602
1.78960
QS = 0.4553 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.16	16.36	5025.87	2236.12	1576.27	2015.93	2394.42	715.48	81.91	40.04	22.31	14.07	
2	17.16	24.16	3785.43	1966.56	1012.91	1405.40	1950.22	650.82	81.91	40.04	22.31	14.07	
3	17.98	110.36	2323.47	1885.46	1392.72	966.97	2936.70	602.40	78.71	38.87	22.31	14.07	
4	19.66	117.35	1532.01	1445.16	3155.07	844.93	2706.39	473.26	75.58	38.87	23.23	13.33	
5	17.98	190.87	1727.82	1003.16	3548.42	860.78	2236.12	419.67	75.58	37.72	23.23	13.33	
6	15.58	85.16	1727.82	582.16	4937.07	1102.54	2236.12	368.94	75.58	36.58	23.23	13.33	
7	13.33	67.98	1293.13	431.33	4996.19	1208.68	2082.61	315.98	72.50	35.46	22.31	16.36	
8	12.62	55.21	693.62	295.82	6145.51	1280.91	2725.27	271.44	72.50	35.46	22.31	14.81	
9	11.92	34.35	305.83	315.98	7469.14	1174.56	2133.24	243.42	74.03	33.26	21.41	13.33	
10	11.24	26.07	271.44	549.10	7971.88	860.78	2859.01	212.44	75.58	32.19	21.41	13.33	
11	10.58	24.16	413.89	1003.16	9020.43	1122.91	3134.93	180.47	70.98	32.19	20.53	12.62	
12	9.94	119.72	1950.22	722.83	13566.73	1606.09	3195.51	150.83	66.50	32.19	20.53	12.62	
13	8.70	248.00	1950.22	523.27	26262.35	2133.24	2270.88	180.47	63.59	32.19	19.66	12.62	
14	8.70	568.83	1354.99	336.73	48965.74	2725.27	1517.38	173.68	62.16	33.26	19.66	11.92	
15	9.94	555.64	722.83	216.75	71858.78	2763.19	1133.16	173.68	60.74	35.46	22.31	11.92	
16	11.24	643.80	510.56	173.68	74718.39	2557.48	1032.54	197.95	57.95	38.87	20.53	11.92	
17	11.92	609.21	347.32	358.06	56968.84	2305.88	1012.91	170.33	55.21	40.04	18.81	11.24	
18	14.07	708.16	290.87	941.98	34750.39	1532.01	829.21	141.98	53.86	37.72	17.16	10.58	
19	12.62	555.64	205.14	1256.63	20873.42	1082.33	657.87	129.41	57.95	35.46	17.16	9.94	
20	10.58	229.92	147.68	941.98	11693.58	1901.56	555.64	101.35	59.34	33.26	16.36	9.94	
21	9.31	115.00	108.08	582.16	6946.60	5449.48	497.99	105.81	56.57	31.13	16.36	11.24	
22	8.70	83.52	90.14	5604.42	5235.79	14383.24	443.14	105.81	53.86	30.09	16.36	14.07	
23	8.11	103.57	83.52	14604.53	3785.43	14604.53	408.15	101.35	51.22	29.06	16.36	14.07	
24	7.54	93.52	208.78	13890.81	2782.24	11693.58	402.44	99.15	48.63	28.05	15.58	12.62	
25	6.99	83.52	285.96	13139.89	1982.95	7826.77	672.07	96.97	46.10	27.05	14.81	11.24	
26	6.45	81.91	461.11	11543.05	1546.70	5856.31	1268.75	95.24	43.63	27.05	14.81	10.58	
27	5.94	105.81	336.73	8228.65	1317.72	5920.05	1885.46	91.82	43.63	26.07	14.07	10.58	
28	6.99	90.14	300.81	5542.22	1418.12	4335.12	2650.12	88.46	42.42	25.11	14.07	10.58	
29	9.94	69.47	413.89	4087.76	1743.31	3256.60	2184.41	83.52	42.42	24.16		10.58	
30	15.58	67.98	1072.29	3676.86	2323.47	2358.83	1430.90	81.91	41.22	23.23		9.94	
31		225.49		2358.83	2201.59		966.97		41.22	22.31		9.94	
Total	348.47	6110.88	29941.47	100445.09	442167.75	107135.95	52410.53	6824.04	1883.08	1012.44	539.19	380.79	749199.69 Ton
Mean	11.62	197.13	998.05	3240.16	14263.48	3571.20	1690.66	227.47	60.74	32.66	19.26	12.28	
Max	19.66	708.16	5025.87	14604.53	74718.39	14604.53	3195.51	715.48	81.91	40.04	23.23	16.36	74718.39
Min	5.94	16.36	83.52	173.68	1012.91	844.93	402.44	81.91	41.22	22.31	14.07	9.94	5.94

WATER YEAR : 2001

NAN RIVER BASIN

Nam Wa 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
Drainage Area	2,107 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
Number of observation	33
R - Square	0.6951
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:24:46.69

LQS/LQS02D/12

Station - Ban Hat Khao San, Wiang Sa, Nan, (N.42)
Stream - Nam Wa
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.59750
QS = 0.7133 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	55.70	35.79	990.11	8591.49	6261.71	4462.34	858.79	351.76	136.37	82.05	58.63	40.84	
2	52.25	30.52	442.59	3029.88	5407.46	3097.56	785.58	323.24	136.37	82.05	58.63	38.28	
3	52.25	55.70	411.45	1276.88	19664.26	2727.29	765.34	316.53	136.37	82.05	58.63	38.28	
4	64.67	61.62	474.57	1768.84	16529.94	5875.16	765.34	308.77	132.33	78.06	58.63	38.28	
5	55.70	96.62	442.59	1493.43	8541.78	10299.89	705.80	308.77	132.33	78.06	58.63	35.79	
6	46.69	71.57	295.64	1106.87	6159.98	13549.22	677.45	283.78	127.54	78.06	58.63	35.79	
7	43.99	49.44	253.42	990.11	5375.30	8591.49	667.12	264.78	127.54	78.06	55.70	35.79	
8	43.99	46.69	316.53	4750.38	7108.39	5875.16	610.64	253.42	122.81	78.06	55.70	32.88	
9	40.84	43.99	289.15	6839.28	6401.74	5346.42	924.40	241.23	122.81	78.06	55.70	32.88	
10	40.84	40.84	283.78	3932.43	7069.20	4405.54	1177.06	235.22	118.16	74.79	52.25	32.88	
11	38.28	55.70	283.78	2348.96	12595.27	3813.08	847.49	230.26	118.16	74.79	52.25	32.88	
12	38.28	78.06	224.35	1626.90	28780.91	3414.43	924.40	224.35	113.57	74.79	52.25	32.88	
13	71.57	109.80	196.64	1117.56	14889.44	7544.81	677.45	213.68	113.57	82.05	52.25	32.88	
14	118.16	67.77	241.23	1370.06	10791.75	5193.36	629.26	207.94	113.57	105.34	52.25	30.52	
15	64.67	67.77	186.48	1930.48	14655.00	3838.54	658.31	207.94	113.57	82.05	52.25	30.52	
16	52.25	88.88	912.79	1657.83	9929.58	3298.60	716.35	196.64	109.80	74.79	49.44	30.52	
17	46.69	122.81	610.64	1493.43	7544.81	2540.34	648.09	192.00	105.34	71.57	49.44	30.52	
18	40.84	196.64	351.76	2181.56	7424.83	2292.65	557.43	186.48	105.34	71.57	46.69	30.52	
19	38.28	181.03	330.00	1847.92	5436.47	2835.26	490.22	181.03	105.34	67.77	46.69	28.23	
20	35.79	336.82	235.22	1493.43	4381.71	2045.62	457.84	175.64	100.94	67.77	46.69	28.23	
21	35.79	181.03	202.26	18938.80	3932.43	2181.56	418.85	170.31	100.94	64.67	46.69	28.23	
22	32.88	165.91	196.64	11106.13	3861.22	1674.41	404.10	165.91	96.62	64.67	43.99	28.23	
23	32.88	136.37	202.26	7345.24	2898.74	1451.87	381.17	160.69	96.62	64.67	43.99	28.23	
24	30.52	141.28	968.02	4519.40	2311.36	1397.13	365.76	155.54	93.07	64.67	43.99	28.23	
25	30.52	302.18	344.83	6877.99	1912.99	1329.82	396.81	155.54	93.07	67.77	40.84	38.28	
26	30.52	725.45	264.78	21252.87	2181.56	1451.87	396.81	150.45	88.88	74.79	40.84	32.88	
27	78.06	336.82	207.94	11042.98	7384.99	1202.64	450.19	150.45	85.44	71.57	40.84	30.52	
28	43.99	241.23	330.00	5497.90	6159.98	1177.06	381.17	146.25	85.44	64.67	40.84	28.23	
29	35.79	213.68	253.42	5346.42	4254.43	1047.01	532.86	141.28	85.44	61.62		26.01	
30	32.88	175.64	374.03	4634.35	4280.96	1002.08	575.43	141.28	82.05	61.62		26.01	
31		1142.66		5193.36	5073.37		396.81		82.05	61.62		26.01	
Total	1425.56	5600.31	11116.90	152603.16	249201.56	114962.21	19244.32	6441.16	3381.45	2284.13	1413.35	990.25	568664.38 Ton
Mean	47.52	180.66	370.56	4922.68	8038.76	3832.07	620.78	214.71	109.08	73.68	50.48	31.94	
Max	118.16	1142.66	990.11	21252.87	28780.91	13549.22	1177.06	351.76	136.37	105.34	58.63	40.84	28780.91
Min	30.52	30.52	186.48	990.11	1912.99	1002.08	365.76	141.28	82.05	61.62	40.84	26.01	26.01

WATER YEAR : 2001

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 at Ban Nam Yao.

Ban Nam Yao **Amphoe** Pua **Changwat** Nan

Drainage Area	155 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	2001
Number of observation	27
R - Square	0.7433
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:56:49.05

LQS/LQS02D/12

Station - Ban Nam Yao, Pua, Nan, (N.49)
Stream - Nam Yao
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.19220
QS = 1.7507 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.65	1.32	6.51	23.65	153.60	124.87	19.77	9.96	5.77	2.75	1.48	1.14	
2	1.65	1.44	5.39	49.30	118.26	75.86	18.97	9.96	5.77	2.75	1.48	1.14	
3	1.44	1.86	6.51	53.40	957.85	88.47	16.61	9.96	5.77	2.75	1.48	1.14	
4	1.44	2.28	7.27	51.34	314.99	277.29	16.61	9.41	5.77	2.75	1.38	1.14	
5	1.44	2.73	9.41	36.61	128.41	161.36	16.61	9.41	5.77	2.75	1.34	1.14	
6	1.44	2.07	6.15	27.84	121.35	776.85	18.97	8.87	5.39	2.75	1.34	1.14	
7	1.44	1.65	24.67	24.67	112.11	258.97	14.29	8.87	5.39	2.75	1.34	1.09	
8	1.44	1.65	31.03	106.02	513.13	169.62	13.54	8.87	5.39	2.75	1.30	1.09	
9	1.44	1.44	11.64	194.77	522.53	194.77	31.03	8.87	5.39	2.75	1.30	1.09	
10	1.44	1.44	9.41	73.37	146.33	106.02	26.77	8.33	5.39	2.75	1.30	1.09	
11	1.32	2.28	7.27	47.26	153.60	80.86	19.77	7.80	5.05	2.75	1.24	1.09	
12	1.32	2.73	6.51	33.80	271.16	61.75	18.97	7.80	5.05	2.75	1.24	1.09	
13	2.95	2.07	6.51	26.77	475.81	131.97	16.61	7.27	5.05	2.75	1.24	1.09	
14	2.50	2.95	6.51	63.87	246.88	102.99	15.83	7.27	5.05	2.75	1.24	1.09	
15	1.86	4.68	6.51	61.75	585.89	73.37	15.06	6.90	5.05	2.75	1.24	1.09	
16	1.65	3.18	13.54	39.46	237.17	55.47	15.06	6.90	5.05	2.68	1.24	1.34	
17	1.44	2.50	8.87	36.61	232.35	49.30	16.61	6.90	2.82	2.68	1.24	1.54	
18	1.44	2.95	7.27	55.47	177.94	165.48	15.83	6.90	2.88	2.68	1.20	1.54	
19	1.44	2.73	6.51	38.05	142.72	59.65	13.54	6.51	2.88	2.68	1.20	1.54	
20	1.44	3.41	7.27	47.26	85.92	47.26	12.78	6.51	2.88	2.68	1.20	1.54	
21	1.44	2.95	13.54	1531.42	70.90	42.34	12.21	6.51	2.88	2.68	1.14	1.54	
22	1.44	3.18	9.41	277.29	57.55	36.61	11.64	6.51	2.88	2.50	1.14	2.15	
23	1.44	3.18	8.33	186.33	45.25	29.94	11.08	6.15	2.88	2.50	1.14	2.15	
24	1.32	9.41	7.80	135.53	38.05	27.84	11.08	6.15	2.88	2.50	1.14	2.15	
25	1.32	14.29	6.51	109.06	33.80	28.89	11.08	6.15	2.88	2.50	1.14	2.15	
26	1.44	7.27	5.77	142.72	161.36	31.03	11.08	6.15	2.88	2.50	1.14	2.15	
27	1.44	5.39	10.52	121.35	109.06	26.77	12.21	5.77	2.82	1.65	1.14	2.09	
28	1.44	5.05	9.96	94.00	80.86	24.67	11.64	5.77	2.75	1.65	1.14	2.09	
29	1.32	5.05	9.41	73.37	73.37	22.61	14.29	5.77	2.75	1.54		2.09	
30	1.32	3.98	40.91	91.03	55.47	21.57	12.21	5.77	2.75	1.54		2.09	
31		5.05		73.37	161.36		10.52		2.75	1.54		2.09	
Total	46.10	112.16	316.92	3926.74	6585.03	3354.45	482.27	223.97	128.66	77.75	35.14	46.89	15336.08 Ton
Mean	1.54	3.62	10.56	126.67	212.42	111.82	15.56	7.47	4.15	2.51	1.25	1.51	
Max	2.95	14.29	40.91	1531.42	957.85	776.85	31.03	9.96	5.77	2.75	1.48	2.15	1531.42
Min	1.32	1.32	5.39	23.65	33.80	21.57	10.52	5.77	2.75	1.54	1.14	1.09	1.09

WATER YEAR : 2001

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
Drainage Area	111 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 - 2001
Number of observation	63
R - Square	0.7119
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:09:52.48

LQS/LQS02D/12

Station - Ban Phutthabath, Chon Dan, Phetchabun, (N.53)
Stream - Khlong Butsabong
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 260602
1.51330
QS = 9.9560 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	16.03	6.57	18.39	8.63	33.97	5.43	1.01	0.00	0.00	0.00	
2	0.00	2.78	9.96	6.57	8.63	7.79	28.42	5.43	1.01	0.00	0.00	0.00	
3	0.00	11.82	8.20	6.18	161.33	7.37	31.04	5.07	1.01	0.00	0.00	0.00	
4	0.00	3.70	5.80	5.43	33.97	9.96	25.67	5.07	1.01	0.00	0.00	0.00	
5	0.00	3.38	5.07	8.63	31.04	72.10	20.85	4.71	1.01	0.00	0.00	0.00	
6	0.00	1.69	4.37	5.80	249.34	970.51	13.96	4.71	0.74	0.00	0.00	0.00	
7	0.00	1.01	3.70	5.43	117.18	78.08	16.03	4.37	0.74	0.00	0.00	0.00	
8	0.00	0.74	3.38	31.04	55.97	138.66	11.82	3.70	0.74	0.00	0.00	0.00	
9	0.00	0.45	28.42	16.03	46.02	669.26	11.82	3.70	0.45	0.00	0.00	0.00	
10	0.00	0.00	13.96	78.08	319.73	222.89	9.96	3.38	0.45	0.00	0.00	0.00	
11	0.00	0.08	110.30	25.67	103.55	411.69	49.09	3.38	0.45	0.00	0.00	0.00	
12	0.00	305.18	36.98	20.85	78.08	124.20	18.39	3.38	0.26	0.00	0.00	0.00	
13	0.00	9.51	9.07	9.96	55.97	124.20	11.82	3.38	0.26	0.00	0.00	0.00	
14	0.00	6.97	25.67	7.79	169.15	96.96	9.51	3.38	0.26	0.00	0.00	0.00	
15	0.00	4.71	52.49	7.37	72.10	96.96	9.96	3.07	0.08	0.00	0.00	0.00	
16	0.00	5.43	9.51	6.18	36.98	55.97	9.07	3.07	0.08	0.00	0.00	0.00	
17	0.00	4.03	28.42	18.39	33.97	39.84	8.20	3.07	0.00	0.00	0.00	0.00	
18	0.00	9.51	25.67	8.20	36.98	28.42	8.20	2.78	0.00	0.00	0.00	0.00	
19	0.00	7.37	8.63	6.97	153.65	39.84	7.79	2.49	0.00	0.00	0.00	0.00	
20	0.00	5.07	20.85	6.18	49.09	138.66	7.37	2.49	0.00	0.00	0.00	0.00	
21	0.00	9.07	16.03	5.43	36.98	33.97	6.97	2.12	0.00	0.00	0.00	0.00	
22	0.00	4.03	7.79	319.73	25.67	599.60	6.18	2.12	0.00	0.00	0.00	0.00	
23	0.00	3.07	7.37	131.36	18.39	334.50	6.18	2.12	0.00	0.00	0.00	0.00	
24	0.00	2.78	62.88	36.98	13.96	161.33	7.37	1.69	0.00	0.00	0.00	0.00	
25	0.00	2.49	13.96	20.85	9.96	944.27	8.63	1.69	0.00	0.00	0.00	0.00	
26	0.00	2.12	8.63	9.96	9.07	201.63	6.97	1.69	0.00	0.00	0.00	0.00	
27	0.00	8.20	8.20	8.63	8.63	90.51	6.57	1.69	0.00	0.00	0.00	0.00	
28	0.00	25.67	25.67	23.22	7.37	52.49	6.97	1.37	0.00	0.00	0.00	0.00	
29	0.00	9.96	9.07	9.96	7.37	42.77	6.18	1.37	0.00	0.00		0.00	
30	0.00	8.63	7.37	8.20	9.51	33.97	5.80	1.37	0.00	0.00		0.00	
31		364.72		7.37	9.51		5.07		0.00	0.00		0.00	
Total	0.00	824.17	593.45	869.01	1987.54	5837.03	415.83	93.29	9.56	0.00	0.00	0.00	10629.88 Ton
Mean	0.00	26.59	19.78	28.03	64.11	194.57	13.41	3.11	0.31	0.00	0.00	0.00	
Max	0.00	364.72	110.30	319.73	319.73	970.51	49.09	5.43	1.01	0.00	0.00	0.00	970.51
Min	0.00	0.00	3.38	5.43	7.37	7.37	5.07	1.37	0.00	0.00	0.00	0.00	0.00

WATER YEAR : 2001

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 Trakarn road from Tambon Pa Daeng.
Ban Tha Sakae	**Amphoe** Chat Trakan **Changwat** Phitsanulok
Drainage Area	967 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, 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	2001
Number of observation	27
R - Square	0.8033
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:57:01.10

LQS/LQS02D/12

Station - Ban Tha Sakae, Chat Trakan, Phitsanulok, (N.55)
Stream - Nam Phak
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 250602
1.63530
QS = 6.5340 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.80	23.55	1146.57	248.38	681.67	1133.07	1407.62	373.96	130.82	63.06	36.02	22.16	
2	23.55	29.43	329.74	162.27	550.56	932.36	1260.02	568.62	130.82	63.06	34.37	22.16	
3	26.42	63.06	393.20	118.07	691.44	795.60	2017.59	393.20	126.40	60.50	32.76	20.80	
4	24.97	84.96	293.78	106.14	2937.55	761.38	1561.49	386.92	122.37	60.50	32.76	20.80	
5	20.80	50.69	438.79	94.42	1423.16	1091.41	1203.58	342.08	118.07	57.98	32.76	20.80	
6	19.47	185.97	270.71	114.15	1333.45	907.53	1347.82	293.78	118.07	55.51	30.98	23.55	
7	19.47	143.72	162.27	79.25	2017.59	1333.45	1217.40	282.15	114.15	53.08	29.43	20.80	
8	18.03	53.08	106.14	63.06	5947.74	1260.02	1037.31	265.28	114.15	50.69	30.98	20.80	
9	16.78	32.76	60.50	73.69	6213.90	919.91	932.36	253.67	110.28	50.69	32.76	20.80	
10	15.56	26.42	94.42	90.82	6213.90	844.48	1304.05	253.67	106.14	48.34	32.76	20.80	
11	14.38	55.51	691.44	135.30	6445.63	2914.66	1561.49	259.45	102.07	48.34	32.76	20.80	
12	14.38	98.37	1561.49	98.37	21792.58	1904.90	1499.20	248.38	98.37	48.34	30.98	20.80	
13	14.38	70.97	568.62	84.96	31244.40	1561.49	1011.43	232.34	98.37	46.04	29.43	22.16	
14	24.97	73.69	299.42	70.97	26978.93	1997.81	881.53	243.13	94.42	46.04	27.91	22.16	
15	22.16	118.07	201.12	60.50	23004.08	1820.38	856.53	270.71	94.42	76.45	26.42	22.16	
16	19.47	157.46	165.76	84.96	19160.88	1484.22	761.38	232.34	90.82	70.97	24.97	22.16	
17	18.03	380.16	126.40	195.89	15728.10	1203.58	761.38	211.33	84.96	57.98	27.91	22.16	
18	15.56	265.28	98.37	232.34	11371.69	1037.31	633.60	195.89	84.96	55.51	24.97	22.16	
19	15.56	110.28	90.82	162.27	6799.36	1133.07	541.61	148.37	84.96	50.69	24.97	27.91	
20	14.38	76.45	79.25	114.15	4135.83	2623.41	472.13	130.82	82.08	48.34	23.55	39.39	
21	13.24	57.98	79.25	148.37	3053.07	2057.37	447.03	157.46	82.08	46.04	23.55	37.69	
22	12.13	55.51	70.97	12514.17	3241.47	5105.49	438.79	157.46	79.25	43.78	23.55	29.43	
23	12.13	55.51	60.50	18664.54	2689.56	8398.24	414.41	157.46	76.45	41.56	23.55	26.42	
24	12.13	50.69	57.98	14111.86	2057.37	6878.96	480.61	152.71	73.69	39.39	23.55	24.97	
25	11.06	76.45	65.65	5910.09	1624.76	3385.64	819.90	148.37	73.69	37.69	23.55	23.55	
26	11.06	60.50	53.08	2037.44	1423.16	2536.20	907.53	148.37	70.97	37.69	23.55	22.16	
27	10.03	53.08	110.28	1319.14	1333.45	2281.52	671.94	143.72	70.97	36.02	23.55	22.16	
28	27.91	53.08	84.96	907.53	1484.22	1721.49	671.94	143.72	68.29	36.02	23.55	20.80	
29	22.16	63.06	135.30	652.66	1656.76	1593.00	559.56	139.49	65.65	34.37		20.80	
30	19.47	135.30	323.88	2323.24	1561.49	1377.59	480.61	139.49	65.65	34.37		20.80	
31		1064.23		919.91	1377.59		414.41		63.06	32.76		19.47	
Total	530.44	3825.27	8221.66	61898.91	216175.33	62995.55	28576.25	7074.34	2896.45	1531.80	787.85	723.58	395237.47 Ton
Mean	17.68	123.40	274.06	1996.74	6973.40	2099.85	921.81	235.81	93.43	49.41	28.14	23.34	
Max	27.91	1064.23	1561.49	18664.54	31244.40	8398.24	2017.59	568.62	130.82	76.45	36.02	39.39	31244.40
Min	10.03	23.55	53.08	60.50	550.56	761.38	414.41	130.82	63.06	32.76	23.55	19.47	10.03

WATER YEAR : 2001

NAN RIVER BASIN

Nam Fua at Ban Kok Muang, 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 at the guidepost 11.5.
Ban Kok Muang	**Amphoe** Nakhon Thai **Changwat** Phitsanulok
Drainage Area	322 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	1984 - Cont'd, 1998 - Cont'd
Actual Measurement	2001
Using Rating Curve Water Year	2001
Number of observation	23
R - Square	0.8626
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:25:22.94

LQS/LQS02D/12

Station - Ban Kok Muang, Nakhon Thai, Phitsanulok. (N.58)
Stream - Nam Fua
River - Khwae Noi
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 021002
1.88720
QS = 5.8088 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.37	4.76	87.15	5844.45	35.26	112.13	116.58	17.25	4.37	1.82	1.57	1.34	
2	3.99	4.37	46.19	4875.95	23.56	79.49	83.28	17.25	4.37	1.82	1.57	1.34	
3	3.29	21.49	665.20	3831.15	573.69	55.29	72.15	17.25	3.99	1.82	1.57	1.34	
4	2.96	13.44	149.99	2607.69	322.39	83.28	58.49	16.17	3.99	1.82	1.82	1.13	
5	2.96	7.19	176.26	1948.25	103.48	273.57	46.19	15.29	3.99	1.57	1.82	1.13	
6	2.65	5.92	40.55	1714.00	439.59	112.13	40.55	14.27	3.99	1.57	1.82	1.13	
7	2.65	4.37	21.49	1272.86	234.74	322.39	46.19	13.44	3.63	1.57	1.82	1.13	
8	2.65	3.99	17.25	710.71	602.51	121.11	30.31	12.64	9.26	1.34	1.57	1.13	
9	3.29	3.63	17.25	359.56	3167.42	75.78	49.13	11.71	4.37	1.34	1.57	1.13	
10	3.29	83.28	37.86	160.26	500.08	65.15	112.13	10.81	3.99	1.34	1.34	0.94	
11	3.29	9.26	216.37	91.11	11227.55	160.26	170.85	10.09	3.63	1.13	1.34	0.94	
12	3.29	10.09	198.71	58.49	18104.28	130.42	149.99	9.26	3.63	1.13	1.34	0.94	
13	3.99	9.26	65.15	43.32	9116.41	149.99	43.32	8.59	3.29	1.13	1.34	0.94	
14	3.99	16.17	40.55	68.61	1696.57	121.11	35.26	10.81	3.29	2.36	1.34	0.94	
15	3.99	280.32	25.72	72.15	881.07	187.33	21.49	10.09	2.96	2.65	1.34	0.94	
16	3.99	491.22	103.48	46.19	818.25	79.49	27.97	10.09	2.96	2.65	1.34	0.76	
17	3.63	222.41	46.19	25.72	545.53	52.17	19.31	11.71	2.65	2.36	1.34	0.76	
18	2.96	95.15	35.26	15.29	422.98	52.17	15.29	10.81	2.65	2.36	1.34	0.60	
19	2.65	61.78	16.17	17.25	337.03	116.58	13.44	10.09	2.36	2.08	1.34	0.60	
20	2.65	72.15	12.64	68.61	241.02	192.98	11.71	9.26	2.36	2.08	1.34	0.60	
21	2.65	30.31	10.81	1272.86	187.33	187.33	10.09	8.59	2.08	2.08	1.34	0.60	
22	2.65	17.25	9.26	676.44	210.40	868.33	8.59	7.94	2.08	2.08	1.34	0.60	
23	2.65	10.09	9.26	431.25	176.26	431.25	7.94	7.19	1.82	2.08	1.34	0.60	
24	4.76	35.26	1139.57	315.19	116.58	390.67	72.15	5.92	1.82	1.82	1.57	0.60	
25	3.63	10.81	65.15	509.03	95.15	308.06	130.42	4.76	1.82	1.82	1.57	0.33	
26	3.29	7.94	21.49	500.08	87.15	181.76	52.17	4.37	1.82	1.82	1.57	0.46	
27	20.49	7.94	260.32	398.63	95.15	140.04	27.97	3.99	1.57	1.82	1.57	0.46	
28	9.26	6.48	35.26	315.19	367.23	99.27	25.72	5.27	1.57	1.57	1.57	0.46	
29	7.19	72.15	1040.70	322.39	241.02	91.11	130.42	4.76	1.57	1.57		0.33	
30	5.92	20.49	5844.45	204.52	868.33	68.61	27.97	4.76	1.34	1.34		0.33	
31		351.98		181.76	181.76		19.31		1.34	1.34		0.33	
Total	129.02	1990.95	10455.70	28958.96	52019.77	5309.25	1676.38	304.43	94.56	55.28	41.74	24.86	101060.91 Ton
Mean	4.30	64.22	348.52	934.16	1678.06	176.98	54.08	10.15	3.05	1.78	1.49	0.80	
Max	20.49	491.22	5844.45	5844.45	18104.28	868.33	170.85	17.25	9.26	2.65	1.82	1.34	18104.28
Min	2.65	3.63	9.26	15.29	23.56	52.17	7.94	3.99	1.34	1.13	1.34	0.33	0.33

WATER YEAR : 2001

NAN RIVER BASIN

Lam Nam Khan at Ban Na Chan, Phitsanulok (N.59)

Lat 17 - 01 - 49 N. **Long** 100 - 50 - 35 E.

Location	on left bank at Ban Na Chan.
Ban Na Chan	**Amphoe** Nakhon Thai **Changwat** Phitsanulok
Drainage Area	405 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.HD - 48
Period of Available Records	1997 - Cont'd
Actual Measurement	1997 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	27
R - Square	0.8258
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:57:18.18

LQS/LQS02D/12

Station - Ban Na Chan, Nakhon Thai, Phitsanulok, (N.59)
Stream - Lam Nam Khan
River - Khwae Noi
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 310702
1.54880
QS = 5.0410 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.67	1.04	183.92	485.94	88.28	98.15	89.36	51.43	12.21	5.04	3.23	1.46	
2	1.94	1.27	43.15	137.67	73.67	82.95	85.07	53.58	11.78	4.66	2.71	1.36	
3	1.46	360.47	62.86	59.09	190.67	69.67	91.53	46.54	11.47	4.51	2.46	1.36	
4	1.57	20.07	100.40	43.15	312.07	64.78	253.26	71.66	11.15	4.28	2.46	7.93	
5	1.13	5.68	229.28	48.61	162.60	100.40	140.70	45.85	10.85	4.14	2.71	3.43	
6	1.04	3.10	102.66	36.65	353.05	84.01	413.89	37.92	10.54	4.14	3.10	2.05	
7	0.95	1.94	43.82	31.13	236.57	75.70	288.81	34.78	10.24	4.14	2.71	1.78	
8	1.13	1.67	37.29	28.21	286.52	58.16	121.39	32.94	9.94	3.92	2.59	1.57	
9	0.95	1.36	69.67	178.92	232.91	50.01	93.72	31.13	9.64	3.71	2.46	1.57	
10	0.78	2.17	34.16	56.49	2582.43	49.31	266.20	29.37	9.35	3.71	2.29	1.46	
11	0.63	122.84	76.72	222.07	3897.00	97.04	216.72	27.07	9.06	3.57	2.17	1.36	
12	0.70	26.50	411.29	98.15	4273.99	291.11	400.93	26.50	8.77	3.57	5.68	1.36	
13	0.63	127.23	91.53	72.66	4235.74	142.23	120.19	25.39	8.49	3.57	5.28	1.27	
14	0.63	118.99	165.82	48.61	1281.34	214.95	100.40	24.29	8.21	4.14	2.90	1.27	
15	12.53	114.24	110.72	51.43	583.71	307.36	134.65	23.75	7.93	5.68	2.59	1.13	
16	2.05	72.66	82.95	36.02	500.99	116.61	118.99	22.14	7.66	4.51	2.29	1.04	
17	1.17	81.90	61.91	56.49	388.12	78.78	85.07	20.58	7.39	3.92	1.89	1.04	
18	0.95	51.43	41.82	56.49	293.41	80.86	68.68	19.56	7.12	3.57	1.78	0.95	
19	0.78	35.40	31.13	48.61	558.26	406.10	60.02	18.31	6.86	3.23	1.89	1.04	
20	0.70	16.14	24.29	36.02	286.52	1622.44	55.03	16.97	6.60	3.23	1.78	1.04	
21	0.55	39.86	20.07	31.13	194.07	388.12	51.43	16.14	6.34	3.10	1.89	0.95	
22	0.45	32.33	16.97	3055.28	182.25	604.87	50.01	15.79	6.09	2.90	1.78	0.86	
23	0.27	14.52	16.97	6291.73	145.30	681.44	51.43	15.32	5.84	2.90	1.67	0.78	
24	0.55	13.73	72.66	1000.68	116.61	370.44	71.66	15.32	5.68	2.71	1.57	0.86	
25	0.86	32.94	148.39	370.44	101.53	223.87	165.82	14.86	5.68	2.71	1.57	0.86	
26	16.14	31.13	24.29	234.74	94.82	164.21	159.41	14.52	5.44	2.59	1.46	0.70	
27	12.96	12.53	17.82	157.82	85.07	200.95	149.95	14.52	5.44	2.59	1.78	0.55	
28	3.10	9.06	17.82	110.72	218.50	124.30	234.74	14.07	5.28	2.46	1.78	0.63	
29	1.57	11.78	39.86	136.16	240.24	169.06	122.84	13.73	5.28	2.46		0.55	
30	1.13	9.94	137.67	118.99	195.78	178.92	76.72	12.96	5.04	2.29		0.55	
31		293.41		85.07	143.76		59.09		5.04	2.29		0.55	
Total	70.97	1667.33	2517.91	13425.17	22535.78	7196.80	4397.71	806.99	246.41	110.24	68.47	43.31	53087.09 Ton
Mean	2.37	53.78	83.93	433.07	726.96	239.89	141.86	26.90	7.95	3.56	2.45	1.40	
Max	16.14	360.47	411.29	6291.73	4273.99	1622.44	413.89	71.66	12.21	5.68	5.68	7.93	6291.73
Min	0.27	1.04	16.97	28.21	73.67	49.31	50.01	12.96	5.04	2.29	1.46	0.55	0.27

WATER YEAR : 2001

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
Drainage Area	788 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
Number of observation	27
R - Square	0.8743
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:25:47.41

LQS/LQS02D/12

Station - Ban Hua Mueang ,Na Noi ,Nan, (N.63)
Stream - Nam Haeng
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.60300
QS = 4.5027 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.40	1.04	116.26	14.57	49.12	54.73	54.73	44.59	12.39	3.40	3.40	2.04	
2	2.72	2.09	90.04	15.70	193.40	44.59	54.73	40.89	7.37	3.40	2.48	2.04	
3	2.72	4.15	51.26	15.70	250.55	39.08	50.54	37.15	5.95	3.40	2.84	1.88	
4	2.37	27.33	181.08	14.57	350.55	59.04	161.51	35.41	5.95	2.84	2.84	1.73	
5	2.09	5.40	101.43	14.57	197.27	90.04	75.17	27.04	5.95	3.94	3.40	1.73	
6	2.09	3.09	55.47	14.57	161.51	82.37	378.82	24.00	7.37	3.94	3.40	1.73	
7	1.83	2.72	49.12	14.57	241.45	106.13	126.47	18.44	7.37	3.40	5.95	2.20	
8	1.83	2.09	28.76	15.70	169.35	54.73	90.04	18.44	9.76	2.84	6.60	2.66	
9	1.53	2.09	21.87	27.33	139.36	213.98	63.47	18.44	5.95	2.66	2.48	2.66	
10	1.53	2.09	16.87	25.92	92.73	173.32	126.47	16.40	4.58	2.48	2.20	2.37	
11	1.53	1.83	21.87	21.87	9103.09	268.79	931.70	16.40	3.94	2.04	2.48	2.20	
12	1.30	2.37	18.08	16.87	34373.72	123.45	164.85	16.40	3.40	2.04	2.84	2.04	
13	1.30	3.40	16.87	16.87	6275.25	359.89	117.73	17.35	3.40	5.95	3.94	2.04	
14	1.83	3.40	13.46	16.87	3187.02	253.17	77.47	24.00	4.58	4.58	3.94	2.04	
15	1.83	3.09	11.35	19.31	1607.27	513.58	65.63	20.96	3.40	4.58	4.58	1.73	
16	1.83	6.69	19.31	19.31	1035.15	164.85	70.24	19.56	2.84	5.95	4.58	1.73	
17	2.09	27.33	19.31	19.31	529.10	120.45	54.73	18.44	2.84	5.95	5.25	2.04	
18	2.09	21.87	18.08	16.87	419.37	103.30	48.59	18.44	2.84	4.58	5.95	2.04	
19	1.53	16.87	14.57	16.87	296.18	106.13	44.59	16.40	2.84	2.84	5.95	1.73	
20	0.80	12.39	8.44	18.08	164.85	114.79	40.89	16.40	2.66	2.84	4.58	1.88	
21	0.80	10.34	6.69	122.45	164.85	164.85	40.89	14.34	2.66	2.48	2.84	2.04	
22	0.62	19.31	5.79	205.72	233.43	161.51	40.89	14.34	2.66	1.73	2.48	2.04	
23	0.62	14.57	5.79	227.72	138.84	161.51	39.08	14.34	2.66	1.34	2.37	2.04	
24	0.62	7.55	5.79	39.24	103.30	108.99	44.59	14.34	2.66	5.25	2.48	2.04	
25	1.83	6.69	5.40	30.23	77.47	77.47	56.77	14.34	2.84	5.95	2.48	1.73	
26	2.09	5.79	4.94	41.22	77.47	72.69	61.14	14.34	2.84	4.58	2.48	1.73	
27	2.37	4.15	4.50	150.28	129.52	61.14	65.63	16.40	2.84	3.40	2.37	1.73	
28	2.09	9.37	3.80	122.45	218.94	70.24	68.02	14.34	2.84	2.84	2.37	1.63	
29	1.30	9.37	3.40	49.12	161.51	65.63	56.77	14.34	2.66	2.20		1.34	
30	1.30	165.41	6.69	39.24	106.13	54.73	50.54	10.64	2.48	2.66		1.21	
31		181.08		33.70	75.17		44.59		2.84	3.94		1.21	
Total	51.88	584.96	926.29	1416.80	60322.92	4045.17	3367.28	606.91	135.36	110.02	99.55	59.25	71726.40 Ton
Mean	1.73	18.87	30.88	45.70	1945.90	134.84	108.62	20.23	4.37	3.55	3.56	1.91	
Max	3.40	181.08	181.08	227.72	34373.72	513.58	931.70	44.59	12.39	5.95	6.60	2.66	34373.72
Min	0.62	1.04	3.40	14.57	49.12	39.08	39.08	10.64	2.48	1.34	2.20	1.21	0.62

WATER YEAR : 2001

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

Drainage Area 637 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

Number of observation 27

R - Square 0.8094

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:57:36.04

LQS/LQS02D/12

Station - Ban Pang Sa, Tha Wang Pha, Nan, (N.65)
Stream - Huai Nam Yao
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.31820
QS = 2.1651 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.40	6.87	73.85	29.75	889.41	317.79	129.28	112.70	36.36	21.97	16.88	9.21	
2	4.70	6.87	86.13	29.75	647.12	327.53	129.28	112.70	36.36	21.97	16.88	9.21	
3	4.70	6.87	182.65	29.75	948.43	347.61	129.28	92.43	36.36	21.97	15.26	8.41	
4	4.70	6.12	372.33	112.70	1879.18	452.97	116.79	86.13	36.36	20.24	15.26	8.41	
5	4.70	5.40	125.08	150.74	970.80	875.78	112.70	83.02	36.36	20.24	15.26	7.63	
6	4.70	5.40	76.88	142.06	576.91	1131.56	108.64	76.88	36.36	20.24	15.26	7.63	
7	4.70	4.70	62.05	76.88	486.43	626.86	102.08	73.85	34.12	20.24	13.68	7.63	
8	4.70	16.88	73.85	53.54	436.45	513.50	102.08	70.86	34.12	20.24	13.68	7.63	
9	6.12	38.63	70.86	56.34	344.12	490.65	102.08	67.89	34.12	20.24	13.68	7.63	
10	4.02	25.53	64.96	56.34	263.61	383.84	98.84	67.89	31.92	20.24	13.68	7.63	
11	4.02	15.26	62.05	48.04	263.61	399.85	98.84	64.96	31.92	20.24	13.68	7.63	
12	3.37	10.66	56.34	45.64	327.53	321.03	95.62	64.96	31.92	18.54	13.68	7.63	
13	3.37	13.68	38.63	45.64	344.12	308.12	95.62	64.96	31.92	27.62	13.68	7.63	
14	2.75	21.97	36.36	150.74	825.57	274.58	95.62	62.05	31.92	18.54	13.68	7.63	
15	2.75	21.97	36.36	235.60	985.78	252.74	92.43	56.34	29.75	18.54	13.68	7.63	
16	2.75	48.04	36.36	196.77	690.86	218.75	129.28	56.34	29.75	16.88	13.68	6.87	
17	2.75	40.94	36.36	155.21	508.70	196.77	137.77	53.54	29.75	16.88	13.68	6.87	
18	2.75	45.64	34.12	150.74	490.65	182.65	102.08	50.77	27.62	16.88	13.68	6.87	
19	2.17	48.04	34.12	116.79	518.31	187.33	83.02	50.77	27.62	16.88	12.15	6.87	
20	2.17	36.36	25.53	125.08	499.12	178.01	76.88	48.04	27.62	16.88	12.15	6.87	
21	2.17	79.93	25.53	314.56	465.45	159.71	76.88	48.04	25.53	16.88	10.66	6.12	
22	2.17	67.89	25.53	567.04	494.88	173.39	73.85	48.04	25.53	16.88	10.66	6.12	
23	2.17	64.96	31.92	813.37	354.63	150.74	70.86	45.64	25.53	16.88	10.66	5.40	
24	2.17	50.77	31.92	542.54	311.33	420.09	67.89	45.64	25.53	16.88	9.21	5.40	
25	2.17	53.54	34.12	280.10	263.61	269.08	67.89	43.28	23.73	16.88	9.21	5.40	
26	2.17	53.54	31.92	1787.66	125.08	229.95	76.88	43.28	23.73	15.26	9.21	5.40	
27	1.88	59.18	31.92	696.37	280.10	196.77	83.02	43.28	23.73	15.26	9.21	5.40	
28	1.88	64.96	29.75	436.45	321.03	187.33	146.39	43.28	21.97	15.26	9.21	5.40	
29	1.61	62.05	29.75	2789.89	351.12	173.39	311.33	40.94	21.97	15.26		5.40	
30	1.61	92.43	29.75	1107.58	280.10	150.74	207.69	40.94	21.97	15.26		5.40	
31		168.80		1131.56	274.58		150.74		21.97	15.26		5.40	
Total	97.29	1243.88	1886.98	12475.22	16418.62	10099.11	3471.63	1859.44	913.42	571.43	361.29	214.36	49612.67 Ton
Mean	3.24	40.13	62.90	402.43	529.63	336.64	111.99	61.98	29.47	18.43	12.90	6.91	
Max	6.12	168.80	372.33	2789.89	1879.18	1131.56	311.33	112.70	36.36	27.62	16.88	9.21	2789.89
Min	1.61	4.70	25.53	29.75	125.08	150.74	67.89	40.94	21.97	15.26	9.21	5.40	1.61

WATER YEAR : 2001

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
Drainage Area	152 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
Number of observation	27
R - Square	0.7967
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:26:15.49

LQS/LQS02D/12

Station - Ban Noen Phoem, Nakhon Thai, Phitsanulok, (N.66)
Stream - Huai Om Sing
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 270802
1.63380
QS = 6.4856 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.72	0.39	28.98	334.88	28.98	48.36	44.71	11.24	2.52	0.81	0.43	0.32	
2	0.63	2.52	14.12	50.22	62.97	39.04	40.32	10.46	2.52	0.91	0.39	0.26	
3	0.81	42.94	367.78	31.09	288.73	33.86	46.52	10.08	2.37	0.81	0.39	0.20	
4	0.55	4.23	33.86	23.34	326.12	41.18	45.61	9.71	2.37	0.72	0.36	0.23	
5	0.43	2.52	199.80	20.29	163.18	94.38	45.61	8.27	2.37	0.72	0.39	0.26	
6	0.43	2.23	59.93	16.03	229.86	74.62	40.32	7.58	2.23	0.63	0.39	0.26	
7	0.36	1.22	28.98	14.12	218.55	54.02	32.47	7.02	2.23	0.63	0.43	0.29	
8	0.32	0.91	20.29	13.69	443.09	36.73	30.32	7.02	2.09	0.55	0.39	0.26	
9	0.32	0.55	16.94	734.45	446.92	31.68	95.89	6.49	2.09	0.55	0.36	0.26	
10	0.29	48.36	20.29	62.97	390.89	30.32	54.99	6.17	1.96	0.55	0.32	0.23	
11	0.29	14.55	124.46	41.18	1668.89	35.28	39.04	5.66	1.96	0.47	0.32	0.26	
12	0.29	38.19	130.51	27.11	4425.93	30.32	29.74	5.66	1.82	0.47	0.32	0.23	
13	0.32	6.17	36.73	22.14	3098.80	127.47	23.34	5.46	1.82	0.55	0.32	0.23	
14	0.26	21.46	25.11	17.56	1484.18	157.66	21.46	5.26	1.70	0.55	0.32	0.20	
15	0.26	121.14	18.67	19.80	523.15	407.66	19.80	4.97	1.70	0.81	0.29	0.20	
16	0.29	119.83	22.82	22.14	352.68	82.42	17.56	4.97	1.57	0.91	0.32	0.10	
17	0.26	41.18	15.43	136.68	237.10	59.93	15.43	4.50	1.45	0.63	0.32	0.18	
18	0.26	20.96	14.99	69.23	189.89	64.00	14.55	4.23	1.45	0.55	0.29	0.10	
19	0.20	11.63	11.24	27.85	138.07	70.29	12.44	4.05	1.33	0.47	0.26	0.07	
20	0.18	7.02	8.62	20.96	102.60	163.18	11.63	3.62	1.33	0.43	0.26	0.23	
21	0.18	16.48	7.58	39.04	82.42	216.07	11.24	3.37	1.22	0.43	0.32	0.26	
22	0.18	16.94	7.02	2027.45	70.29	462.35	10.85	3.37	1.22	0.43	0.32	0.23	
23	0.20	7.58	10.46	592.93	59.93	370.83	10.85	3.37	1.11	0.39	0.29	0.20	
24	0.43	10.08	41.18	185.97	50.22	125.79	19.80	3.21	1.11	0.36	0.29	0.23	
25	0.91	4.97	14.55	92.89	43.82	131.87	55.96	2.97	1.11	0.39	0.29	0.26	
26	0.43	4.05	9.34	102.60	40.32	89.05	38.19	2.82	1.11	0.43	0.29	0.20	
27	1.45	3.62	17.56	109.81	39.68	71.36	33.26	2.82	1.01	0.39	0.29	0.23	
28	0.43	2.97	10.85	77.92	329.03	60.94	24.04	2.66	1.01	0.47	0.29	0.23	
29	0.39	5.26	43.82	80.16	111.08	59.93	16.03	2.66	0.91	0.47		0.18	
30	0.32	2.82	323.22	133.58	201.81	56.95	13.69	2.52	0.91	0.47		0.18	
31		131.87		34.47	74.62		12.44		0.91	0.43		0.15	
Total	12.39	714.64	1685.13	5182.55	15923.80	3327.54	928.10	162.19	50.51	17.38	9.25	6.72	28020.20 Ton
Mean	0.41	23.05	56.17	167.18	513.67	110.92	29.94	5.41	1.63	0.56	0.33	0.22	
Max	1.45	131.87	367.78	2027.45	4425.93	462.35	95.89	11.24	2.52	0.91	0.43	0.32	4425.93
Min	0.18	0.39	7.02	13.69	28.98	30.32	10.85	2.52	0.91	0.36	0.26	0.07	0.07

WATER YEAR : 2001

NAN RIVER BASIN

Nan River at Ban Koei Chai, Nakhon Sawan (N.67)

Lat 15 - 52 - 09 N. **Long** 100 - 16 - 06 E.

Location	on right bank at the bridge near Wat Koei Chai Nua.
Ban Koei Chai	**Amphoe** Chum Saeng **Changwat** Nakhon Sawan
Drainage Area	54,923 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US. - 49 No.2701
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	36
R - Square	0.6976
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:28:22.81

LQS/LQS02D/12

Station - Ban Koei Chai, Chum Saeng, Nakhon Sawan, (N.67)
Stream - Nan
River - Nan
River System - Nan River

Royal Irrigation Department
Thailand
Hydrology Division 060802
1.27220
QS = 2.6073 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2799.3	4461.0	4347.1	4347.1	7040.5	22195.7	23981.2	20402.1	6244.9	1828.7	2332.8	3345.9	
2	2725.7	4167.8	4477.3	4280.7	6945.4	22398.3	23981.2	20165.2	6292.2	1481.9	2636.5	3546.5	
3	2607.3	4055.6	5608.7	4510.0	7017.2	22449.0	23775.6	19785.3	6106.7	1229.1	2725.7	3847.4	
4	2307.3	4715.3	7145.0	4659.3	7145.0	22499.7	23570.5	19264.0	5832.4	1172.5	2858.5	4087.6	
5	2204.4	5438.0	7900.2	4477.3	7955.5	22398.3	23468.0	18699.2	5651.6	1354.2	2799.3	3942.5	
6	3847.4	6477.2	7593.6	4715.3	9298.3	22347.6	23365.7	18429.2	6222.1	1840.9	2520.4	3422.8	
7	4642.8	7092.7	7017.2	5093.2	10843.6	22296.9	23212.4	18118.2	6945.4	2448.4	2361.3	3024.1	
8	4809.6	7593.6	6875.5	5310.7	11948.0	22195.7	23059.3	17630.8	6663.3	3298.4	2934.4	3084.3	
9	4493.6	7118.0	6827.2	5207.6	12843.2	21943.1	22499.7	16885.6	6571.0	3345.9	3176.5	3329.0	
10	3958.4	5565.9	6477.2	4526.3	13791.4	21943.1	22094.6	16061.5	6663.3	2934.4	3191.7	3594.8	
11	3407.4	4560.7	6061.4	3910.7	14833.8	22044.1	21894.9	15201.8	6617.1	2725.7	3191.7	3672.8	
12	3453.6	4087.6	5809.9	3879.0	15458.9	22044.1	22145.1	14390.2	6038.7	2621.9	3084.3	3453.6	
13	4232.2	4151.8	5854.9	4280.7	16321.6	22094.6	22449.0	13592.3	5502.7	2621.9	2843.7	3039.2	
14	4544.3	4103.6	6477.2	4609.9	18028.0	22499.7	22398.3	12959.9	5415.9	2755.1	2432.7	2799.3	
15	4183.9	4510.0	7302.4	5168.8	20641.8	22804.5	22094.6	12763.5	5651.6	2843.7	2375.5	3206.9	
16	3641.6	4412.1	7434.9	5991.8	22347.6	23008.3	21652.2	12315.8	5395.5	2477.2	2755.1	3863.2	
17	2934.4	4677.4	7355.0	5787.5	22804.5	23212.4	20594.2	11654.7	4866.1	2166.6	3237.4	4038.0	
18	2520.4	5054.6	7040.5	4827.9	22753.7	23314.6	19832.4	11116.5	4428.4	2814.1	3376.6	4103.6	
19	2432.7	5353.0	6663.3	4038.0	22906.4	23314.6	19264.0	9708.7	3942.5	3469.1	3500.0	4119.7	
20	2432.7	5651.6	6244.9	4232.2	23110.3	23416.9	18561.9	9265.9	3546.5	3515.5	3438.2	3974.3	
21	2964.2	5787.5	5696.3	4697.2	23059.3	23468.0	17674.6	9121.2	3453.6	3252.6	3054.2	3942.5	
22	3469.1	5696.3	5207.6	4979.4	22753.7	23570.5	17192.0	8378.8	3313.7	2949.3	3298.4	4167.8	
23	3942.5	5415.9	4789.7	4979.4	22499.7	23724.3	17061.5	7787.9	3267.8	2520.4	3688.5	4493.6	
24	4119.7	5054.6	4395.8	5720.3	22398.3	23827.0	16885.6	7513.3	3099.4	2269.1	3926.6	4827.9	
25	3751.2	4941.0	4103.6	8040.6	22347.6	23878.4	16580.4	7145.0	2681.7	2651.0	3990.2	5036.2	
26	3422.8	4697.2	4103.6	9739.6	22347.6	23929.8	16494.1	6734.4	2404.0	2873.3	3815.8	4626.4	
27	3767.0	4379.6	4412.1	10302.0	22246.3	23929.8	17720.6	6663.3	1878.8	2725.7	3767.0	4071.6	
28	3958.4	4264.5	4626.4	10235.7	22044.1	23878.4	19170.4	6827.2	1707.0	2563.8	3329.0	3751.2	
29	4055.6	4216.1	4659.3	9836.1	21894.9	23878.4	19926.8	6711.3	2027.8	2432.7		4135.7	
30	4280.7	4167.8	4560.7	8776.6	21846.8	23981.2	20402.1	6406.6	2166.6	2204.4		4477.3	
31		4200.0		7593.6	21943.1		20546.7		2077.5	1990.6		4659.3	
Total	105910.2	156068.0	177068.5	178754.5	539416.1	688486.9	643549.6	381699.4	142675.8	77378.1	86642.0	119685.0	3297334.3 Ton
Mean	3530.3	5034.5	5902.3	5766.3	17400.5	22949.6	20759.7	12723.3	4602.4	2496.1	3094.4	3860.8	
Max	4809.6	7593.6	7900.2	10302.0	23110.3	23981.2	23981.2	20402.1	6945.4	3515.5	3990.2	5036.2	23981.2
Min	2204.4	4055.6	4103.6	3879.0	6945.4	21943.1	16494.1	6406.6	1707.0	1172.5	2332.8	2799.3	1172.5

WATER YEAR : 2001

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 Payao Highway, Tambon Bua Sali.
Ban Ton Yang	**Amphoe** Mae Lao **Changwat** Chiang Rai
Drainage Area	2,934 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	2001
Number of observation	36
R - Square	0.9117
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:26:27.19

LQS/LQS02D/12

Station - Ban Ton Yang, Mae Lao, Chiang Rai, (G.8)
Stream - Nam Mae Lao
River - Nam Mae Kok
River System - Nam Mae Kok

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.31670
QS = 7.5695 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.79	0.23	2586.82	53.57	1340.99	3797.20	1022.24	1987.03	524.49	230.74	123.59	56.62	
2	13.48	0.23	2508.04	59.71	1375.72	2911.82	1153.91	1639.12	513.47	216.34	118.73	30.75	
3	13.48	0.19	1340.99	59.71	5252.27	2115.49	1170.63	1739.77	502.50	230.74	108.98	30.75	
4	11.79	13.48	1006.05	41.78	10283.42	2255.65	1087.59	1520.29	469.95	216.34	104.27	30.75	
5	11.79	28.68	832.25	41.78	11053.04	3297.29	1862.41	1481.16	459.76	172.42	87.21	28.68	
6	10.37	18.86	709.55	95.37	10080.46	3829.70	1966.12	1340.99	459.76	203.27	71.09	26.64	
7	7.67	11.79	591.77	216.34	9627.40	2882.65	1500.70	1255.11	439.53	190.83	53.57	26.64	
8	6.40	11.79	591.77	216.34	8556.13	2455.85	1104.08	1187.41	439.53	172.42	53.57	30.75	
9	2.96	6.40	502.50	203.27	7159.84	2208.69	1054.79	1087.59	449.61	172.42	83.11	30.75	
10	2.96	6.40	399.74	459.76	4678.89	3058.71	1071.16	989.93	419.52	154.68	44.66	28.68	
11	1.09	6.40	334.36	502.50	2639.66	3237.24	959.47	973.87	419.52	166.53	41.78	30.75	
12	1.09	154.68	389.93	409.60	2692.76	3029.19	945.12	916.58	419.52	178.36	41.78	28.68	
13	0.37	123.59	299.13	352.32	4819.67	2853.56	832.25	874.17	389.93	166.53	41.78	28.68	
14	38.95	230.74	237.80	245.13	5478.43	3448.56	749.93	832.25	352.32	166.53	53.57	26.64	
15	26.64	491.59	209.45	209.45	6262.46	3637.49	722.95	804.58	361.38	154.68	95.37	24.63	
16	26.64	299.13	209.45	184.57	8143.88	2613.21	672.65	763.50	343.31	148.74	148.74	22.66	
17	24.63	266.98	190.83	172.42	5214.80	1883.04	860.14	763.50	343.31	133.43	252.29	26.64	
18	20.74	237.80	154.68	196.91	3357.60	1500.70	1022.24	709.55	343.31	128.49	216.34	22.66	
19	13.48	223.51	123.59	209.45	2279.23	1520.29	973.87	709.55	334.36	123.59	178.36	22.66	
20	7.67	325.46	87.21	399.74	1841.83	1719.52	736.41	672.65	325.46	118.73	113.92	26.64	
21	6.40	945.12	59.71	902.39	1841.83	1780.42	591.77	637.69	252.29	108.98	104.27	26.64	
22	1.09	1760.07	47.59	902.39	1945.27	1739.77	535.56	626.13	290.47	108.98	104.27	47.59	
23	1.09	1520.29	53.57	1054.79	1639.12	1463.46	480.74	614.62	343.31	113.92	87.21	24.63	
24	0.37	1054.79	50.56	2403.92	1306.47	1659.14	429.49	591.77	352.32	99.61	83.11	18.86	
25	0.37	916.58	95.37	4059.02	1104.08	2050.06	546.70	580.42	343.31	108.98	91.18	13.48	
26	0.27	660.95	79.05	2941.06	945.12	2115.49	1137.24	569.13	316.62	95.37	83.11	7.67	
27	0.27	637.69	83.11	2378.06	1038.48	1780.42	1153.91	580.42	299.13	104.27	71.09	2.96	
28	0.27	1006.05	95.37	1238.11	2560.49	1520.29	1780.42	569.13	245.13	108.98	53.57	2.96	
29	0.27	1559.66	53.57	696.21	6142.36	1323.70	3448.56	546.70	230.74	113.92		2.96	
30	0.27	1170.63	44.66	989.93	5365.07	1087.59	2999.75	524.49	196.91	113.92		6.40	
31		2050.06		1579.44	5327.40		2326.54		223.51	108.98		26.64	
Total	264.66	15739.82	13968.47	23475.04	141354.16	70776.19	36899.34	28089.10	11404.28	4631.72	2710.52	762.44	350075.75 Ton
Mean	8.82	507.74	465.62	757.26	4559.81	2359.21	1190.30	936.30	367.88	149.41	96.80	24.59	
Max	38.95	2050.06	2586.82	4059.02	11053.04	3829.70	3448.56	1987.03	524.49	230.74	252.29	56.62	11053.04
Min	0.27	0.19	44.66	41.78	945.12	1087.59	429.49	524.49	196.91	95.37	41.78	2.96	0.19

WATER YEAR : 2001

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 the on road about 2 kilometers from Amphoe Khun Tan.

Ban Nam Ing **Amphoe** Khun Tan **Changwat** Chiang Rai

Drainage Area 6,155 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 2000

Number of observation 33

R - Square 0.9404

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:57:54.62

LQS/LQS02D/12

Station - Ban Nam Ing, Khun Tan, Chiang Rai, (I.14)
Stream - Nam Mae Ing
River - Nam Mae Ing
River System - Nam Mae Ing

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.13650
QS = 5.2051 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.77	5.21	581.44	126.79	3360.35	4143.79	2837.97	2733.55	327.89	101.93	62.43	35.38	
2	17.46	7.01	670.81	100.24	3733.32	3932.01	2574.70	2386.13	306.57	100.24	60.84	33.16	
3	15.42	8.25	630.67	94.36	3896.63	3678.63	2386.13	2145.60	293.10	96.03	58.46	32.42	
4	13.41	12.10	548.20	84.37	4272.02	3705.96	2234.83	1927.53	283.52	91.85	56.88	31.68	
5	12.10	20.22	470.25	78.61	4843.23	4290.57	2204.22	1835.12	267.32	90.18	56.09	28.76	
6	10.15	44.45	454.03	112.14	5324.64	4683.56	2339.26	1887.85	256.90	84.37	54.52	27.31	
7	8.88	48.29	454.03	134.63	5698.78	4934.76	2234.83	2884.67	253.13	81.89	48.29	25.87	
8	7.63	46.75	490.62	190.03	5763.27	4957.67	2094.47	2234.83	240.90	80.25	45.21	25.16	
9	8.25	44.45	498.80	273.98	5860.84	4820.38	1841.10	2282.67	234.35	81.89	40.64	27.31	
10	10.15	42.92	511.10	354.29	5892.49	4638.05	2386.13	2298.65	221.31	86.02	38.38	28.76	
11	10.80	42.16	494.71	347.42	5892.49	4592.60	2952.99	2330.64	213.90	100.24	36.88	30.22	
12	13.41	40.64	462.13	358.22	5860.84	4551.21	2419.50	2204.22	208.36	101.93	36.13	29.49	
13	18.14	45.21	413.78	351.34	5892.49	4476.56	2051.97	2130.98	199.17	96.03	35.38	28.04	
14	19.52	54.52	330.82	378.94	6022.05	4383.45	1678.00	2051.97	190.03	94.36	35.38	27.31	
15	20.22	74.52	234.35	392.83	6322.42	4290.57	1451.47	1914.29	181.85	90.18	34.64	24.44	
16	21.62	109.58	190.03	482.46	6642.67	4108.19	1334.56	1696.96	187.30	84.37	38.38	23.02	
17	22.32	141.65	154.91	539.93	6856.74	3984.50	1358.77	1651.99	181.85	74.52	52.18	22.32	
18	20.91	201.92	129.40	564.79	6785.29	3678.63	1370.32	1425.91	172.82	72.90	54.52	21.62	
19	20.22	217.60	116.43	573.11	6969.00	3569.56	1334.56	1364.54	166.52	72.90	53.74	20.22	
20	18.14	276.83	101.93	581.44	6642.67	3544.95	1280.57	1223.42	154.91	70.46	51.40	19.52	
21	18.14	395.82	97.72	577.27	6394.66	3520.35	1263.39	1053.96	146.94	68.85	49.07	18.14	
22	15.42	527.55	88.51	904.18	6086.96	3507.42	1246.24	904.18	139.01	67.24	46.75	17.46	
23	13.41	544.06	40.64	1618.94	5794.85	3520.35	1223.42	821.13	137.26	64.83	46.75	16.77	
24	12.75	644.37	54.52	2523.67	5570.08	3482.85	1200.66	757.34	132.01	64.83	45.21	16.09	
25	12.10	850.53	67.24	2837.97	5297.45	3507.42	1194.97	581.44	126.79	67.24	40.64	16.77	
26	10.80	821.13	72.90	2874.57	4980.60	3596.79	1217.73	519.32	119.01	68.85	38.38	17.46	
27	9.51	748.74	68.85	2893.52	4751.91	3692.95	1263.39	458.08	114.71	67.24	36.13	16.77	
28	7.63	772.42	58.46	3133.54	4569.90	3624.05	1353.00	410.78	112.14	64.83	34.64	16.09	
29	7.01	767.03	56.09	3090.19	4346.27	3532.00	1730.19	372.02	107.02	62.43		16.09	
30	6.40	564.79	101.93	2992.29	4216.44	3189.74	1867.46	337.64	104.47	49.07		15.42	
31		511.10		3031.66	4179.44		2865.73		101.93	48.29		16.09	
Total	418.69	8631.82	8645.30	32597.72	168720.80	120139.54	56792.53	46827.41	5882.99	2446.24	1287.94	725.16	453116.16 Ton
Mean	13.96	278.45	288.18	1051.54	5442.61	4004.65	1832.02	1560.91	189.77	78.91	46.00	23.39	
Max	22.32	850.53	670.81	3133.54	6969.00	4957.67	2952.99	2884.67	327.89	101.93	62.43	35.38	6969.00
Min	6.40	5.21	40.64	78.61	3360.35	3189.74	1194.97	337.64	101.93	48.29	34.64	15.42	5.21

WATER YEAR : 2001

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Phai Lom, Nakhon Sawan (C.2)

Lat 15 - 40 - 15 N. **Long** 100 - 06 - 45 E.

Location	on left bank at Khai Chira Prawat about 3 kilometers downstream from Dechatiwong Bridge.
Ban Phai Lom	**Amphoe** Mueang **Changwat** Nakhon Sawan
Drainage Area	110,569 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.P. - 61 No.161
Period of Available Records	1960 - 1964, 1965 - Cont'd
Actual Measurement	1965 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	33
R - Square	0.7248
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:58:08.75 LQS/LQS02D/12

Station - Ban Phai Lom , A. Mueang, Nakhon Sawan, (C.2)
Stream - Chao Phraya
River - Chao Phraya
River System - Chao Phraya

Royal Irrigation Department
Thailand
Hydrology Division 050802
1.32310
QS = 1.1542 QW

Water Year - 2001

Suspended Sediment, in Hundred Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.6	48.8	66.5	41.9	66.8	167.7	235.1	281.9	64.6	18.7	26.6	38.6	
2	27.9	45.7	65.9	39.2	63.9	167.7	235.9	281.1	63.3	16.1	29.2	40.3	
3	27.7	44.9	70.6	38.1	67.5	167.7	236.6	274.5	62.0	13.5	29.9	43.8	
4	24.6	53.7	85.5	39.2	69.2	167.7	238.9	269.7	61.7	12.0	31.7	46.9	
5	23.6	60.2	100.4	37.9	75.9	167.7	240.4	265.6	60.2	12.5	31.2	47.1	
6	36.6	73.0	94.7	40.3	86.3	167.7	241.9	260.8	62.0	16.1	27.0	42.7	
7	47.1	80.4	81.9	45.2	97.7	169.6	243.4	254.4	69.2	23.2	25.6	40.8	
8	51.4	88.8	77.0	48.8	106.2	170.9	244.2	245.0	69.9	32.1	30.6	46.3	
9	50.3	90.1	76.3	49.4	115.6	170.9	244.2	229.9	66.5	34.0	33.3	45.5	
10	45.7	76.6	74.5	43.5	126.1	172.8	243.4	212.7	69.2	30.3	34.5	44.6	
11	40.8	63.6	73.8	37.4	130.4	172.8	244.2	197.6	68.5	28.6	34.7	43.2	
12	39.4	58.4	73.8	34.7	133.6	174.1	244.2	183.2	64.2	26.6	33.5	44.6	
13	46.3	57.8	76.6	38.1	139.7	176.0	247.3	170.3	58.1	26.2	30.3	41.6	
14	49.4	57.8	83.9	44.4	151.8	177.3	251.2	159.0	56.6	27.5	27.9	38.6	
15	46.0	58.4	91.3	49.4	159.6	177.3	252.0	150.6	59.0	27.9	27.2	43.8	
16	40.3	56.9	89.2	54.0	169.0	178.6	250.5	143.0	58.7	25.6	29.9	46.3	
17	33.0	59.9	84.7	55.4	174.1	180.6	244.2	135.3	53.4	22.0	34.5	48.3	
18	28.3	63.6	79.2	49.4	176.0	180.6	238.9	127.7	48.3	27.0	38.4	48.8	
19	27.0	67.5	72.7	40.0	177.3	183.2	232.1	116.6	43.2	33.3	39.7	47.1	
20	27.2	74.8	66.8	38.6	181.2	189.1	223.3	107.6	38.4	35.2	36.9	45.7	
21	30.8	80.8	59.9	41.6	187.7	195.6	214.8	102.1	36.9	32.8	34.0	43.5	
22	35.9	82.3	54.3	45.2	193.0	201.0	207.2	95.5	34.5	30.1	37.9	46.9	
23	40.5	81.9	49.7	44.9	194.3	204.4	200.3	88.8	34.5	26.6	40.0	49.4	
24	43.8	75.9	43.8	45.5	190.4	206.5	193.0	84.3	32.8	24.0	41.9	52.3	
25	40.0	72.3	39.7	54.9	184.5	210.6	190.4	80.4	29.4	26.6	43.5	54.3	
26	36.4	67.8	38.1	65.2	179.3	214.1	198.3	74.8	24.8	29.2	42.4	52.0	
27	39.4	63.3	39.2	74.1	174.7	219.0	229.2	72.0	20.8	29.2	38.6	45.7	
28	43.5	62.0	41.1	77.0	171.5	224.7	261.6	70.9	18.0	28.1	37.1	43.0	
29	44.6	64.9	43.5	78.8	169.6	229.9	264.0	69.9	19.9	26.6		46.3	
30	45.7	66.2	44.9	77.7	168.3	232.9	261.6	67.5	21.6	24.0		48.5	
31		67.8		72.7	167.1		268.0		20.8	22.4		50.0	
Total	1141.8	2066.1	2039.5	1542.5	4448.3	5618.7	7320.3	4872.7	1491.0	788.0	948.0	1416.5	33693.4 100Ton
Mean	38.1	66.6	68.0	49.8	143.5	187.3	236.1	162.4	48.1	25.4	33.9	45.7	
Max	51.4	90.1	100.4	78.8	194.3	232.9	268.0	281.9	69.9	35.2	43.5	54.3	281.9
Min	23.6	44.9	38.1	34.7	63.9	167.7	190.4	67.5	18.0	12.0	25.6	38.6	12.0

WATER YEAR : 2001

CHAO PHRAYA RIVER BASIN

Huai Khun Kaeo at Ban Samo Thong, Uthai Thani (C.30)

Lat 15 - 21 - 04 N. **Long** 99 - 32 - 22 E.

Location	on right bank in front of Wat Samo Thong School.
Ban Samo Thong	**Amphoe** Huai Khot **Changwat** Uthai Thani
Drainage Area	219 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49 No.3917
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	1998 - 2001
Number of observation	64
R - Square	0.7045
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:27:12.89 LQS/LQS02D/12

Station - Ban Samo Thong, Ban Rai, Uthai Thani, (C.30)
Stream - Huai Khun Kaeo
River - Chao Phraya
River System - Chao Phraya

Royal Irrigation Department
Thailand
Hydrology Division 010802
1.33950
QS = 21.3190 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.99	13.99	16.08	13.22	6.25	12.47	6.67	19.90	6.67	5.22	0.98	0.72	
2	13.99	14.50	16.08	315.20	5.83	10.52	6.67	19.07	6.67	5.22	0.98	0.72	
3	13.99	17.42	16.08	402.75	5.83	8.42	6.67	15.28	6.67	5.22	0.98	0.72	
4	13.99	16.88	22.47	190.53	5.83	7.98	6.67	14.50	6.67	5.22	0.72	0.72	
5	13.22	16.08	21.32	14.50	5.83	7.32	7.32	14.50	6.67	5.22	0.72	0.72	
6	13.22	16.08	35.07	13.22	5.83	7.32	6.67	13.22	6.67	4.63	0.72	0.72	
7	13.22	16.08	48.25	11.73	6.25	7.32	6.67	10.52	6.67	4.63	0.72	2.81	
8	13.22	16.08	46.50	11.00	8.42	7.98	8.42	9.81	6.67	4.63	0.72	0.72	
9	13.22	16.08	27.83	11.00	6.67	7.98	16.88	10.52	6.67	4.63	0.72	0.72	
10	13.22	16.08	24.52	11.00	6.67	11.00	30.30	10.52	6.67	4.63	0.72	0.72	
11	13.22	16.08	33.78	11.00	6.25	9.11	13.22	9.11	6.25	526.09	0.72	0.72	
12	13.22	16.08	33.78	10.52	6.25	7.98	10.52	8.42	6.25	261.62	249.29	0.72	
13	13.22	16.08	29.05	10.52	6.25	7.98	9.81	7.98	6.25	261.62	268.11	0.72	
14	13.22	16.08	26.91	9.81	5.83	7.98	9.11	7.98	6.25	261.62	261.62	0.72	
15	13.99	16.08	22.47	9.81	5.83	7.98	8.42	7.98	6.25	261.62	255.70	0.72	
16	13.99	48.25	19.90	9.81	5.22	7.32	7.98	7.32	6.25	131.98	3.33	1.25	
17	13.99	26.91	19.07	9.81	5.22	7.32	7.98	7.32	6.25	9.11	2.14	0.98	
18	13.99	22.47	18.24	102.53	5.22	7.32	7.32	7.32	6.25	7.98	1.53	0.72	
19	13.99	19.90	105.94	387.19	5.22	7.32	7.32	7.32	322.00	6.67	1.25	0.72	
20	13.99	19.90	526.09	371.78	5.22	7.32	8.42	7.32	281.20	6.25	1.25	0.72	
21	13.99	19.90	179.67	307.87	5.22	7.32	7.98	7.32	196.02	5.22	1.25	0.72	
22	13.99	19.90	18.24	213.25	5.22	7.32	7.32	7.32	9.11	4.63	0.98	0.72	
23	13.99	19.90	17.42	65.06	5.22	7.32	15.28	7.32	7.32	4.25	0.98	0.72	
24	13.99	19.90	16.08	9.81	5.22	10.52	16.88	6.67	6.67	3.69	0.98	0.49	
25	13.99	19.90	14.50	8.42	5.22	8.42	61.30	6.67	6.25	3.69	0.98	0.49	
26	13.99	19.90	14.50	7.32	4.63	7.32	51.79	6.67	5.83	3.69	0.98	0.49	
27	13.99	19.90	13.99	6.67	9.81	7.32	27.83	6.67	5.83	2.81	0.72	0.49	
28	13.99	19.90	13.99	6.25	255.70	6.67	24.52	6.67	5.83	2.81	0.72	0.49	
29	13.99	19.90	13.99	6.25	174.30	6.67	45.11	6.67	5.22	1.83		0.49	
30	13.99	18.24	13.22	4.63	169.45	6.67	26.91	6.67	5.22	1.83		0.49	
31		18.24		6.25	116.80		19.07		5.22	1.25		0.49	
Total	412.00	592.68	1425.03	2568.71	876.71	241.49	497.03	284.56	978.42	1819.51	1060.51	23.36	10780.01 Ton
Mean	13.73	19.12	47.50	82.86	28.28	8.05	16.03	9.49	31.56	58.69	37.88	0.75	
Max	13.99	48.25	526.09	402.75	255.70	12.47	61.30	19.90	322.00	526.09	268.11	2.81	526.09
Min	13.22	13.99	13.22	4.63	4.63	6.67	6.67	6.67	5.22	1.25	0.72	0.49	0.49

WATER YEAR : 2001

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet (Ct.5A)

Lat 15 - 55 - 34 N. **Long** 99 - 30 - 22 E.

Location	on left bank behind wat Pang Makha.
Ban Pang Makha	**Amphoe** Khanu **Changwat** Kamphaeng Phet
Drainage Area	979 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49 No.3917
Period of Available Records	1983 - 1988, 1995 - Cont'd
Actual Measurement	1983 - 1988, 1995 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	30
R - Square	0.8516
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:27:36.94 LQS/LQS02D/12

Station - Ban Pang Makha, Khanu Woralaksaburi, Kamphaeng Phet, (CT.5A)
Stream - Nam Mae Wong
River - Sakae Krang
River System - Sakae Krang River

Royal Irrigation Department
Thailand
Hydrology Division 110702
1.72260
QS = 1.0827 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.99	2.98	117.58	26.50	12.31	15.00	51.38	1121.85	18.53	5.25	0.33	0.00	
2	5.25	85.12	121.61	20.41	9.84	14.45	21.71	660.62	17.32	4.55	0.22	0.00	
3	4.55	2430.93	200.17	19.15	8.91	12.31	39.76	421.64	16.14	4.55	0.14	0.00	
4	4.21	1251.85	149.89	19.15	24.40	10.31	23.03	300.38	15.00	4.55	0.02	0.00	
5	3.57	401.35	100.80	16.14	18.53	8.91	34.03	254.57	14.45	4.21	0.00	0.00	
6	3.57	164.94	73.81	19.15	43.20	8.91	29.42	175.84	13.36	4.21	0.00	0.00	
7	2.98	78.25	57.16	20.41	254.57	14.45	36.44	145.49	12.31	4.21	0.00	0.00	
8	2.70	160.36	68.42	21.71	78.25	39.76	64.23	121.61	39.76	3.57	0.00	0.00	
9	3.57	68.42	727.97	32.46	55.21	18.53	36.44	93.42	18.53	2.98	0.00	0.00	
10	2.70	41.47	4567.70	55.21	36.44	34.03	81.65	76.02	15.00	2.98	0.00	0.00	
11	1.48	32.46	920.75	41.47	36.44	18.53	261.98	64.23	13.36	2.70	0.00	0.00	
12	1.08	34.03	688.35	30.92	26.50	36.44	113.62	57.16	12.31	2.70	0.00	0.00	
13	0.74	89.82	343.05	24.40	32.46	19.15	64.23	51.38	11.29	2.70	0.00	0.00	
14	0.74	353.56	213.68	21.71	30.92	14.45	51.38	47.67	11.29	2.70	0.00	0.00	
15	1.08	421.64	149.89	19.15	21.71	12.31	36.44	85.12	11.29	2.70	0.00	0.00	
16	2.70	81.65	113.62	17.32	19.15	11.29	26.50	121.61	10.31	2.18	0.00	0.00	
17	2.18	334.74	85.12	17.32	18.53	10.31	23.03	70.56	9.84	1.93	0.00	0.00	
18	1.48	343.05	70.56	15.00	17.32	8.91	21.71	57.16	8.91	1.48	0.00	0.00	
19	1.48	171.14	62.17	13.36	16.14	12.31	15.00	47.67	14.45	1.28	0.00	0.00	
20	1.28	81.65	51.38	15.00	16.14	14.45	13.36	41.47	10.31	1.08	0.00	0.00	
21	1.08	64.23	43.20	11.29	18.53	13.36	12.31	36.44	9.84	1.08	0.00	0.00	
22	0.74	64.23	36.44	11.29	30.92	16.14	12.31	32.46	8.91	1.08	0.00	0.00	
23	0.59	70.56	34.03	18.53	36.44	334.74	14.45	30.92	8.03	0.74	0.00	0.74	
24	1.08	45.86	34.03	15.00	23.03	171.14	509.37	29.42	7.18	0.74	0.00	0.02	
25	1.08	34.03	38.09	12.31	17.32	213.68	25937.09	27.94	7.18	0.59	0.00	0.00	
26	0.74	247.24	30.92	9.84	14.45	326.51	8148.57	24.40	6.78	0.59	0.00	0.00	
27	1.08	104.58	29.42	8.91	13.36	175.84	3606.68	24.40	6.78	0.33	0.00	0.00	
28	1.28	815.97	26.50	8.03	12.31	78.25	2157.62	21.71	5.99	0.22	0.00	0.00	
29	1.93	195.20	32.46	8.03	24.40	47.67	2430.93	19.15	5.99	0.33		0.00	
30	1.48	254.57	27.94	10.31	18.53	43.20	9670.19	18.53	5.99	0.33		0.00	
31		121.61		11.29	30.92		1988.89		5.25	0.33		0.00	
Total	64.41	8647.49	9216.71	590.77	1017.18	1755.34	55533.75	4280.84	371.68	68.87	0.71	0.76	81548.50 Ton
Mean	2.15	278.95	307.22	19.06	32.81	58.51	1791.41	142.69	11.99	2.22	0.03	0.02	
Max	5.99	2430.93	4567.70	55.21	254.57	334.74	25937.09	1121.85	39.76	5.25	0.33	0.74	25937.09
Min	0.59	2.98	26.50	8.03	8.91	8.91	12.31	18.53	5.25	0.22	0.00	0.00	0.00

WATER YEAR : 2001

SAKAE KRANG RIVER BASIN

Khlong Pho at Ban Mai Khlong Charoen, Nakhon Sawan (Ct.7)

Lat 15 - 38 - 23 N. **Long** 99 - 32 - 20 E.

Location	on right bank near the gage of server's house.
Ban Mai Khlong Charoen	**Amphoe** K.A. Mae Poen **Changwat** Nakhon Sawan
Drainage Area	457 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48 No.3919
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	21
R - Square	0.8872
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:28:01.75 LQS/LQS02D/12

Station - Ban Mai Khlong Charoen, Lat Yao, Nakhon Sawan, (CT.7)
Stream - Khlong Pho
River - Sakae Krang
River System - Sakae Krang River

Royal Irrigation Department
Thailand
Hydrology Division 110702
1.63890
QS = 4.7808 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.06	0.11	30.53	3.32	4.02	1.06	8.30	265.49	1.06	0.11	0.00	0.00	
2	2.07	2.07	21.46	3.32	2.07	1.06	6.45	144.40	1.06	0.11	0.00	0.00	
3	2.66	627.16	116.02	2.66	1.06	1.06	5.59	58.30	1.06	0.00	0.00	0.00	
4	3.32	1872.17	64.66	2.66	2.07	0.66	4.78	33.83	1.06	0.00	0.00	0.00	
5	2.66	304.02	211.58	2.07	22.89	0.34	4.78	201.38	1.06	0.00	0.00	0.00	
6	2.07	95.09	85.25	2.07	7.35	0.66	5.59	69.05	1.06	0.00	0.00	0.00	
7	1.54	35.53	208.16	1.54	90.12	1.54	7.35	30.53	1.06	0.00	0.00	0.00	
8	1.54	58.30	239.74	1.54	258.03	2.66	11.41	20.07	1.06	0.00	0.00	0.00	
9	1.06	27.37	886.00	1.54	56.24	2.66	9.29	11.41	0.66	0.00	0.00	0.00	
10	1.06	13.69	4064.15	2.66	22.89	13.69	8.30	10.33	0.66	0.00	0.00	0.00	
11	1.06	7.35	2520.54	3.32	12.53	7.35	17.41	8.30	0.66	0.00	0.00	0.00	
12	0.66	127.08	3162.45	2.66	8.30	4.02	17.41	7.35	0.66	0.00	0.00	0.00	
13	0.66	153.38	642.97	2.66	7.35	3.32	11.41	6.45	0.66	0.00	0.00	0.00	
14	0.34	400.16	218.49	2.07	5.59	3.32	12.53	5.59	0.66	0.00	0.00	0.00	
15	0.34	409.00	113.32	1.54	3.32	2.66	9.29	7.35	0.66	0.00	0.00	0.00	
16	0.34	850.29	56.24	1.54	3.32	2.07	8.30	11.41	0.66	0.00	0.00	0.00	
17	0.34	520.85	32.17	1.54	2.07	1.54	7.35	9.29	0.34	0.00	0.00	0.00	
18	0.34	1246.22	24.35	1.06	1.54	1.54	7.35	7.35	0.34	0.00	0.00	0.00	
19	0.11	417.92	16.13	1.06	1.06	1.06	5.59	6.45	0.66	0.00	0.00	0.00	
20	0.11	153.38	10.33	1.06	1.06	1.06	4.78	5.59	0.66	0.00	0.00	0.00	
21	0.11	184.82	7.35	0.66	1.06	1.54	3.32	4.78	0.34	0.00	0.00	0.00	
22	0.00	73.54	7.35	0.66	1.54	1.54	2.66	3.32	0.34	0.00	0.00	0.00	
23	0.00	32.17	6.45	0.66	4.78	48.28	2.66	3.32	0.34	0.00	0.00	0.00	
24	0.00	16.13	5.59	0.34	8.30	85.25	7.35	2.66	0.34	0.00	0.00	0.00	
25	0.00	9.29	4.78	0.34	3.32	46.37	1225.72	2.66	0.34	0.00	0.00	0.00	
26	0.00	850.29	4.78	0.34	1.54	71.28	2369.03	2.66	0.34	0.00	0.00	0.00	
27	0.11	280.65	4.02	0.11	1.54	92.59	1443.82	2.07	0.11	0.00	0.00	0.00	
28	0.34	606.32	4.02	0.11	1.06	46.37	886.00	1.54	0.34	0.00	0.00	0.00	
29	0.34	168.82	3.32	0.11	1.06	18.72	2620.51	1.54	0.11	0.00		0.00	
30	0.11	113.32	3.32	0.11	1.54	11.41	4462.61	1.54	0.11	0.00		0.00	
31		56.24		3.32	1.54		792.04		0.11	0.00		0.00	
Total	24.35	9712.73	12775.52	48.65	540.16	476.68	13988.98	946.01	18.58	0.22	0.00	0.00	38531.88 Ton
Mean	0.81	313.31	425.85	1.57	17.42	15.89	451.26	31.53	0.60	0.01	0.00	0.00	
Max	3.32	1872.17	4064.15	3.32	258.03	92.59	4462.61	265.49	1.06	0.11	0.00	0.00	4462.61
Min	0.00	0.11	3.32	0.11	1.06	0.34	2.66	1.54	0.11	0.00	0.00	0.00	0.00

WATER YEAR : 2001

PASAK RIVER BASIN

Pasak River at Ban Pa, Saraburi (S.9)

Lat 14 - 37 - 33 N. **Long** 101 - 01 - 00 E.

Location	on left bank at Ban Mueang Nua railway bridge.
Ban Pa	**Amphoe** Kaeng Khoi **Changwat** Saraburi
Drainage Area	14,374 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48 No.3919
Period of Available Records	1999 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	1978 - 2001
Number of observation	306
R - Square	0.8191
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:27:04.96 LQS/LQS02D/12

Station - Ban Pa, Kaeng Khoi, Saraburi, (S.9)
Stream - Pasak
River - Pasak
River System - Pasak River

Royal Irrigation Department
Thailand
Hydrology Division 070802
1.31510
QS = 2.7085 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.64	370.53	255.14	860.53	73.46	1271.26	48.00	418.70	24.88	10.49	162.55	370.53	
2	10.49	335.07	255.14	840.76	62.67	1285.27	26.72	186.71	24.88	10.49	162.55	370.53	
3	10.49	317.11	249.86	819.70	39.00	1285.27	19.01	153.12	24.88	10.49	162.55	370.53	
4	7.64	311.55	249.86	789.04	29.84	1049.22	19.01	157.82	24.88	10.49	162.55	370.53	
5	7.64	311.55	255.14	543.03	28.58	966.84	19.01	501.56	24.88	10.49	162.55	370.53	
6	15.67	299.39	249.86	449.96	29.84	966.84	70.34	768.29	24.88	10.49	162.55	370.53	
7	108.10	293.91	255.14	443.90	116.80	966.84	124.76	510.29	24.88	10.49	162.55	370.53	
8	132.85	288.44	271.13	437.87	449.96	966.84	132.85	144.74	14.60	10.49	162.55	370.53	
9	136.48	191.63	293.91	457.25	449.96	966.84	283.00	288.44	14.60	10.49	162.55	311.55	
10	196.59	108.10	293.91	475.59	431.86	661.29	382.15	311.55	14.60	10.49	162.55	186.71	
11	277.59	89.56	288.44	227.98	457.25	617.77	698.78	311.55	13.02	10.49	162.55	181.81	
12	277.59	108.10	299.39	59.66	443.90	495.35	829.51	311.55	13.02	14.60	172.12	176.95	
13	283.00	144.74	346.42	35.00	798.76	364.75	525.34	311.55	13.02	136.48	265.77	167.32	
14	283.00	136.48	387.99	35.00	1517.62	357.85	418.70	311.55	13.02	136.48	322.70	78.21	
15	283.00	98.73	387.99	31.75	2319.10	352.12	412.75	186.71	13.02	136.48	335.07	78.21	
16	277.59	96.21	463.34	26.72	3043.73	260.44	277.59	113.30	13.02	136.48	370.53	78.21	
17	162.55	149.38	510.29	26.72	3428.86	260.44	108.10	62.67	11.49	196.59	376.33	78.21	
18	132.85	136.48	576.25	28.58	3515.92	243.56	39.00	44.49	11.49	265.77	376.33	75.83	
19	98.73	92.87	567.26	28.58	3494.10	136.48	33.69	36.99	11.49	265.77	376.33	75.83	
20	181.81	67.24	593.03	28.58	3515.92	136.48	108.10	33.69	11.49	265.77	376.33	73.46	
21	364.75	57.43	809.91	28.58	3515.92	136.48	104.67	33.69	11.49	265.77	376.33	67.24	
22	370.53	53.76	881.84	26.72	3494.10	136.48	108.10	33.69	11.49	260.44	370.53	67.24	
23	370.53	50.14	871.88	26.72	3450.58	153.12	108.10	33.69	10.49	255.14	370.53	67.24	
24	370.53	157.82	860.53	29.84	3450.58	149.38	128.34	29.84	10.49	153.12	370.53	64.95	
25	370.53	116.80	850.63	29.84	3407.18	149.38	201.58	26.72	10.49	162.55	370.53	64.95	
26	370.53	172.12	860.53	23.68	3363.91	176.95	412.75	26.72	10.49	162.55	370.53	62.67	
27	370.53	196.59	881.84	23.68	2010.01	162.55	617.77	26.72	10.49	162.55	370.53	62.67	
28	370.53	191.63	871.88	24.88	1134.69	78.21	1623.96	24.88	10.49	162.55	370.53	59.66	
29	370.53	181.81	850.63	23.68	913.32	64.95	2043.05	24.88	10.49	162.55		59.66	
30	370.53	181.81	945.06	26.72	708.22	48.00	1800.98	24.88	10.49	162.55		59.66	
31		227.98		23.68	809.91		860.53		10.49	162.55		59.66	
Total	6590.82	5534.96	15734.22	6934.22	50505.55	14867.25	12586.24	5450.98	459.43	3742.13	7729.60	5222.14	135357.56 Ton
Mean	219.69	178.55	524.47	223.68	1629.21	495.58	406.01	181.70	14.82	120.71	276.06	168.46	
Max	370.53	370.53	945.06	860.53	3515.92	1285.27	2043.05	768.29	24.88	265.77	376.33	370.53	3515.92
Min	7.64	50.14	249.86	23.68	28.58	48.00	19.01	24.88	10.49	10.49	162.55	59.66	7.64

WATER YEAR : 2001

PASAK RIVER BASIN

Lam Kong at Ban Wang Tha Di, Phetchabun (S.12)

Lat 15 - 59 - 50 N. **Long** 101 - 14 - 31 E.

Location	on left bank at Ban Wang Tha Di.
Ban Wang Tha Di	**Amphoe** Nong Phai **Changwat** Phetchabun
Drainage Area	471 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, US.D - 49
Period of Available Records	1996, 1998 - Cont'd
Actual Measurement	1996, 1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	60
R - Square	0.7001
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:23:25.45 LQS/LQS02D/12

Station - Ban Wang Tha Di, Nong Phai, Phetchabun, (S.12)
Stream - Lam Kong
River - Pasak
River System - Pasak River

Royal Irrigation Department
Thailand
Hydrology Division 310702
1.69280
QS = 3.7408 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.40	53.23	7.02	7.02	7.02	24.02	37.13	11.59	7.02	5.09	4.40	3.07	
2	4.06	13.45	7.86	7.02	11.59	17.64	37.13	11.09	7.02	5.09	4.40	3.07	
3	4.06	71.20	7.02	8.29	199.63	14.76	53.23	16.12	7.02	5.09	4.40	3.07	
4	4.06	16.12	6.61	58.98	45.41	151.39	41.27	12.09	7.02	5.09	4.40	3.49	
5	4.06	94.80	7.43	11.09	61.95	61.95	41.27	11.09	7.02	5.09	4.40	3.49	
6	4.40	10.12	5.83	9.65	113.31	64.98	50.45	10.12	7.02	5.09	4.40	3.49	
7	4.74	6.61	5.46	8.29	265.40	39.10	71.20	9.65	7.02	5.09	4.40	3.31	
8	5.09	9.18	10.12	20.73	141.45	22.42	58.98	10.12	7.02	4.74	4.06	3.07	
9	4.74	7.86	8.73	37.13	394.86	45.41	61.95	9.65	6.61	4.74	4.06	3.07	
10	4.74	5.83	11.09	16.12	2888.36	45.41	68.06	9.65	6.61	4.74	4.06	3.07	
11	3.74	9.18	11.09	10.60	559.77	141.45	35.05	9.18	6.22	4.74	4.06	3.07	
12	3.31	505.81	11.09	244.03	265.40	433.54	29.40	8.73	6.61	4.74	4.06	3.07	
13	3.31	156.32	8.73	37.13	117.69	105.74	24.02	8.73	6.22	4.74	4.06	3.07	
14	3.31	35.05	8.29	19.10	74.41	113.31	20.73	8.73	6.22	4.74	4.06	2.84	
15	5.09	13.45	8.73	24.02	84.35	74.41	19.10	8.73	5.83	5.09	4.06	2.84	
16	33.02	126.93	7.43	12.09	68.06	43.32	19.10	8.73	5.83	5.09	3.74	2.62	
17	8.29	105.74	7.02	10.12	47.72	31.19	16.12	8.29	5.83	5.09	3.74	2.46	
18	6.22	966.06	7.02	8.73	33.02	27.51	14.76	7.86	5.83	5.09	3.74	3.31	
19	4.06	673.78	6.61	7.43	35.05	37.13	13.45	7.86	5.83	5.09	3.74	3.07	
20	3.49	58.98	7.43	8.73	27.51	25.67	11.59	7.86	5.46	5.09	3.74	2.62	
21	3.31	16.12	8.29	8.29	20.73	216.69	11.59	7.86	5.46	4.74	3.74	2.62	
22	3.31	16.12	5.83	22.42	131.79	596.14	11.59	7.86	5.46	4.74	3.74	2.46	
23	3.31	12.09	5.09	74.41	68.06	265.40	13.45	7.86	5.09	4.74	3.49	3.31	
24	3.49	10.60	5.46	25.67	35.05	151.39	25.67	7.43	5.09	4.40	3.49	3.74	
25	13.45	9.65	6.22	12.09	27.51	349.93	25.67	7.43	5.09	4.74	3.49	3.74	
26	7.86	8.73	5.83	10.60	24.02	302.64	17.64	7.43	5.09	4.74	3.07	3.31	
27	5.09	7.43	7.02	9.18	22.42	122.41	17.64	7.43	5.09	4.40	3.07	3.07	
28	3.49	8.29	35.05	9.65	20.73	77.66	20.73	7.02	5.09	4.40	3.07	3.07	
29	3.07	8.73	10.60	11.59	19.10	58.98	14.76	7.02	5.09	4.40		2.84	
30	2.62	9.18	7.43	8.73	29.40	45.41	12.09	7.02	5.09	4.40		2.62	
31		7.86		9.18	47.72		11.09		5.09	4.40		2.62	
Total	167.19	3054.50	257.43	768.11	5888.49	3707.00	905.91	270.23	185.99	149.45	109.14	94.57	15558.01 Ton
Mean	5.57	98.53	8.58	24.78	189.95	123.57	29.22	9.01	6.00	4.82	3.90	3.05	
Max	33.02	966.06	35.05	244.03	2888.36	596.14	71.20	16.12	7.02	5.09	4.40	3.74	2888.36
Min	2.62	5.83	5.09	7.02	7.02	14.76	11.09	7.02	5.09	4.40	3.07	2.46	2.46

WATER YEAR : 2001

PASAK RIVER BASIN

Lam Sonthi at Ban Tha Yiam, Lop Buri (S.13)

		Lat	15 - 20 - 21 N.	**Long**	101 - 22 - 30 E.
Location			on left bank near Wat Tha Yiam.		
Ban	Tha Yiam	**Amphoe**	Chai Badan	**Changwat**	Lop Buri
Drainage Area			359 sq.km.		
Method of sampling			Depth Integrating		
Instrument Used			US.D - 49 No.3912		
Period of Available Records			1988 - Cont'd		
Actual Measurement			1988 - Cont'd		
Using Rating Curve Water Year			2001		
Number of observation			18		
R - Square			0.9171		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 21-JUL-2004 14:29:23.97

LQS/LQS02D/12

Station - Ban Tha Yiam, K.A. Lam Sonthi, Lop Buri, (S.13)
Stream - Lam Sonthi
River - Pasak
River System - Pasak River

Royal Irrigation Department
Thailand
Hydrology Division 060802
1.19780
QS = 14.5020 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.11	2.11	6.32	324.69	169.82	51.91	51.91	33.27	16.26	12.78	12.78	11.10	
2	2.11	3.43	6.32	51.91	35.27	51.91	47.66	31.28	16.26	12.78	12.78	11.10	
3	3.43	14.50	31.28	23.57	19.86	41.39	45.55	62.81	16.26	12.78	12.78	11.10	
4	2.11	7.86	7.86	16.26	14.50	45.55	45.55	47.66	16.26	11.10	12.78	11.10	
5	2.11	7.86	6.32	7.86	21.70	47.66	43.46	41.39	14.50	11.10	12.78	11.10	
6	2.11	4.84	4.84	7.86	74.03	47.66	56.23	31.28	14.50	11.10	12.78	11.10	
7	2.11	3.43	4.84	6.32	1149.46	41.39	56.23	29.32	14.50	11.10	12.78	11.10	
8	2.11	2.11	149.17	6.32	1253.92	37.29	85.54	27.38	14.50	11.10	12.78	11.10	
9	2.11	3.43	58.41	348.05	356.87	35.27	80.90	25.46	14.50	11.10	12.78	11.10	
10	2.11	2.11	18.04	193.55	1905.03	37.29	54.07	25.46	14.50	11.10	12.78	11.10	
11	2.11	2.11	11.10	97.31	8465.41	119.09	47.66	25.46	12.78	11.10	12.78	11.10	
12	2.11	2.11	7.86	483.99	734.84	374.63	39.33	25.46	12.78	11.10	12.78	9.46	
13	2.11	2.11	6.32	99.69	256.34	159.44	35.27	23.57	12.78	11.10	11.10	9.46	
14	2.11	12.78	12.78	74.03	172.43	151.73	35.27	23.57	12.78	9.46	11.10	9.46	
15	2.11	9.46	11.10	49.78	116.63	109.32	33.27	23.57	12.78	9.46	11.10	9.46	
16	2.11	14.50	18.04	37.29	92.57	67.26	31.28	23.57	12.78	9.46	11.10	9.46	
17	2.11	169.82	7.86	25.46	76.31	54.07	31.28	21.70	11.10	9.46	11.10	9.46	
18	2.11	19.86	6.32	16.26	62.81	47.66	31.28	21.70	12.78	9.46	11.10	9.46	
19	2.11	12.78	6.32	14.50	62.81	51.91	29.32	19.86	14.50	14.50	11.10	9.46	
20	2.11	11.10	3.43	12.78	58.41	45.55	29.32	19.86	16.26	14.50	11.10	9.46	
21	2.11	6.32	3.43	9.46	45.55	43.46	29.32	19.86	12.78	14.50	11.10	9.46	
22	2.11	4.84	3.43	65.03	45.55	225.94	29.32	19.86	12.78	14.50	11.10	9.46	
23	2.11	3.43	3.43	80.90	43.46	649.34	31.28	19.86	12.78	14.50	11.10	9.46	
24	2.11	128.99	7.86	41.39	43.46	465.45	41.39	19.86	14.50	14.50	11.10	9.46	
25	2.11	58.41	6.32	23.57	41.39	293.03	45.55	19.86	14.50	14.50	12.78	9.46	
26	2.11	9.46	9.46	16.26	39.33	383.57	39.33	16.26	12.78	12.78	12.78	7.86	
27	2.11	6.32	65.03	12.78	45.55	131.49	41.39	19.86	12.78	12.78	12.78	7.86	
28	2.11	4.84	51.91	9.46	41.39	80.90	45.55	19.86	12.78	12.78	12.78	7.86	
29	2.11	7.86	41.39	67.26	39.33	67.26	51.91	19.86	12.78	12.78		7.86	
30	2.11	85.54	35.27	167.21	45.55	54.07	37.29	18.04	12.78	12.78		7.86	
31		12.78		37.29	54.07		35.27		12.78	12.78		7.86	
Total	64.62	637.10	612.06	2428.09	15583.65	4012.49	1337.98	776.81	427.38	374.82	337.68	301.70	26894.38 Ton
Mean	2.15	20.55	20.40	78.33	502.70	133.75	43.16	25.89	13.79	12.09	12.06	9.73	
Max	3.43	169.82	149.17	483.99	8465.41	649.34	85.54	62.81	16.26	14.50	12.78	11.10	8465.41
Min	2.11	2.11	3.43	6.32	14.50	35.27	29.32	16.26	11.10	9.46	11.10	7.86	2.11

WATER YEAR : 2001

PASAK RIVER BASIN

Pasak River at Ban Tha Hai 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
Drainage Area	516 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, US.D - 49
Period of Available Records	1996, 1998 - Cont'd
Actual Measurement	1996, 1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	62
R - Square	0.8291
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:58:22.34

LQS/LQS02D/12

Station - Ban Tha Hai Yong,Lom Sak, Phetchabun, (S.33)
Stream - Pasak River
River - PasaK river
River System - Pasak River

Royal Irrigation Department
Thailand
Hydrology Division 060720
1.85670
QS = 1.7852 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.32	3.79	89.80	213.40	12.89	430.92	84.81	36.76	12.89	7.72	5.88	4.27	
2	5.88	36.76	26.78	54.43	14.59	275.18	75.23	34.13	12.89	7.72	5.88	3.79	
3	4.78	57.68	34.13	31.59	42.30	213.40	75.23	34.13	11.29	7.72	5.88	3.79	
4	4.27	11.29	29.14	26.78	26.78	1229.45	70.64	34.13	11.29	7.72	5.88	3.79	
5	4.27	7.72	39.49	22.34	18.28	502.19	70.64	31.59	11.29	7.72	5.88	3.79	
6	3.79	7.08	16.38	42.30	256.84	1343.31	66.19	29.14	11.29	7.72	5.88	3.79	
7	3.79	14.59	9.78	18.28	618.23	1363.09	61.87	26.78	11.29	7.72	5.88	5.88	
8	3.33	5.32	20.26	12.89	166.37	502.19	57.68	24.52	11.29	7.08	5.88	4.78	
9	3.33	3.79	9.07	128.35	79.96	265.77	61.87	24.52	11.29	7.08	5.32	4.27	
10	3.33	3.79	7.72	48.19	454.12	197.13	116.69	24.52	11.29	7.08	4.78	3.79	
11	2.91	5.88	34.13	24.52	8620.30	430.92	57.68	22.34	9.78	7.08	4.78	3.79	
12	2.91	6.47	39.49	18.28	17291.84	514.79	111.05	20.26	9.78	7.08	4.78	3.79	
13	2.91	5.88	20.26	14.59	26637.82	1050.70	54.43	20.26	9.78	6.47	4.78	3.79	
14	2.50	7.08	12.89	14.59	11654.32	514.79	48.19	20.26	9.78	9.78	4.78	3.33	
15	2.50	7.72	9.78	22.34	2220.40	313.26	45.20	18.28	9.78	9.78	4.78	3.33	
16	2.50	238.77	11.29	24.52	1084.90	230.27	45.20	18.28	9.78	7.72	4.78	3.33	
17	3.79	221.91	11.29	39.49	605.00	173.70	42.30	18.28	9.78	7.08	4.78	3.33	
18	3.33	12.89	12.89	26.78	1174.60	673.98	42.30	18.28	9.78	7.08	4.27	3.33	
19	4.27	9.78	7.72	18.28	419.73	687.87	39.49	16.38	9.07	7.08	4.27	3.33	
20	2.91	14.59	6.47	12.89	265.77	477.88	39.49	16.38	9.07	6.47	4.27	2.91	
21	2.50	9.78	5.88	12.89	205.34	490.19	36.76	16.38	8.38	6.47	4.27	2.91	
22	2.13	26.78	5.32	153.19	213.40	618.23	36.76	14.59	8.38	6.47	4.27	2.91	
23	2.13	20.26	4.78	173.70	465.71	275.18	36.76	14.59	8.38	6.47	4.27	2.91	
24	2.13	20.26	116.69	66.19	197.13	205.34	323.40	14.59	8.38	5.88	4.27	2.91	
25	3.33	9.07	26.78	42.30	146.79	343.76	116.69	14.59	8.38	5.88	4.27	2.91	
26	31.59	7.08	26.78	45.20	122.45	238.77	54.43	14.59	7.72	5.88	4.27	2.91	
27	5.88	6.47	981.98	26.78	1174.60	166.37	48.19	12.89	7.72	5.88	4.27	2.91	
28	3.79	5.88	140.52	57.68	3532.30	122.45	70.64	12.89	7.72	5.88	4.27	2.50	
29	2.91	213.40	54.43	36.76	1585.68	105.54	94.92	12.89	7.72	5.88		2.50	
30	2.50	26.78	333.70	36.76	2343.58	94.92	51.26	12.89	7.72	5.88		2.50	
31		430.92		20.26	821.59		51.26		7.72	5.88		2.50	
Total	131.51	1459.46	2145.62	1486.54	82473.62	14051.54	2187.25	630.11	300.70	217.35	137.57	106.57	105327.84 Ton
Mean	4.38	47.08	71.52	47.95	2660.44	468.38	70.56	21.00	9.70	7.01	4.91	3.44	
Max	31.59	430.92	981.98	213.40	26637.82	1363.09	323.40	36.76	12.89	9.78	5.88	5.88	26637.82
Min	2.13	3.79	4.78	12.89	12.89	94.92	36.76	12.89	7.72	5.88	4.27	2.50	2.13

WATER YEAR : 2001

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
Drainage Area	6,478 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
Number of observation	15
R - Square	0.9046
Remarks	Continued Sediment Station

RID Computer Center, Processing : 25-FEB-2005 10:27:31.08

LQS/LQS02D/12

Station - Ban Lam Takhro,Boung Sum Pan, Phetchabun, (S.34)
Stream - Pasak
River - Pasak
River System - Pasak River

Royal Irrigation Department
Thailand
Hydrology Division 250602
1.47810
QS = 2.5326 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.37	4.16	81.84	146.93	298.52	2460.86	4268.12	1216.76	44.95	0.00	0.00	0.00	
2	8.07	13.42	112.86	112.86	218.44	2016.02	3884.80	1113.42	45.90	0.00	0.00	0.00	
3	8.07	28.15	225.60	75.03	204.35	1757.03	3548.39	941.15	42.13	0.00	0.00	0.00	
4	8.07	28.97	336.01	168.29	400.64	1622.08	2815.04	759.51	40.28	0.00	0.00	0.00	
5	5.55	22.63	415.16	232.83	380.58	1567.89	2163.87	561.31	34.91	0.00	0.00	0.00	
6	3.90	32.32	352.52	110.95	490.26	1426.32	1726.06	394.87	34.04	0.00	0.00	0.00	
7	2.24	34.91	272.64	78.41	951.32	1340.07	1317.36	314.41	31.47	0.00	0.00	0.00	
8	1.66	14.26	228.00	50.76	1420.52	1467.16	1028.72	250.00	25.26	0.00	0.00	0.00	
9	1.19	10.99	280.32	37.57	1682.99	1543.99	788.10	213.71	24.63	0.00	0.00	0.00	
10	0.91	12.59	303.79	52.74	1935.35	1616.03	698.75	188.29	22.63	0.00	0.00	0.00	
11	0.58	13.42	259.98	47.82	2349.11	1726.06	689.55	170.48	18.79	0.00	0.00	0.00	
12	0.43	20.68	265.02	177.09	2995.96	1806.96	689.55	153.24	16.41	0.00	0.00	0.00	
13	0.31	153.24	325.16	634.05	3451.33	1871.59	698.75	151.13	14.66	0.00	0.00	0.00	
14	0.23	163.94	369.27	740.64	3470.67	1763.25	675.82	134.58	13.42	0.00	0.00	0.00	
15	0.22	71.69	392.00	474.92	3184.26	1744.62	583.79	118.66	9.52	0.00	0.00	0.00	
16	0.20	51.75	369.27	288.08	2896.82	1769.47	471.87	109.05	8.07	0.00	0.00	0.00	
17	0.17	110.95	293.28	195.12	2639.56	1763.25	338.75	97.87	6.44	0.00	0.00	0.00	
18	0.20	272.64	225.60	174.88	2471.26	1713.71	245.05	88.85	6.14	0.00	0.00	0.00	
19	0.43	721.92	146.93	149.03	2440.10	1628.14	172.67	83.58	4.43	0.00	0.00	0.00	
20	1.05	1385.85	96.04	101.55	2502.54	1496.56	153.24	75.03	2.24	0.00	0.00	0.00	
21	1.49	1597.92	80.12	94.23	2639.56	1432.13	128.53	66.78	1.28	0.00	0.00	0.00	
22	1.34	1238.89	66.78	83.58	2880.41	1579.88	97.87	58.85	0.54	0.00	0.00	0.00	
23	0.91	527.71	41.20	116.72	3432.03	1879.53	83.58	55.77	0.18	0.00	0.00	0.00	
24	0.41	228.00	28.97	355.29	4210.29	2230.66	97.87	53.75	0.04	0.00	0.00	0.00	
25	0.20	132.55	22.63	662.18	5086.35	2614.80	144.85	53.75	0.00	0.00	0.00	0.00	
26	0.11	88.85	23.93	866.00	5716.07	3336.02	213.71	51.75	0.00	0.00	0.00	0.00	
27	0.29	92.42	40.28	971.77	6284.45	4705.58	453.71	48.80	0.00	0.00	0.00	0.00	
28	1.34	64.10	59.89	1054.96	6711.23	5271.43	703.36	44.95	0.00	0.00	0.00	0.00	
29	3.40	54.76	120.62	1076.10	6567.96	5086.35	920.91	45.90	0.00	0.00		0.00	
30	3.90	80.12	110.95	895.82	5311.37	4637.38	1097.37	46.86	0.00	0.00		0.00	
31		132.55		447.71	3470.67		1216.76		0.00	0.00		0.00	
Total	64.24	7406.35	5946.66	10673.91	88694.97	66874.83	32116.77	7663.06	448.36	0.00	0.00	0.00	219889.16 Ton
Mean	2.14	238.91	198.22	344.32	2861.13	2229.16	1036.02	255.44	14.46	0.00	0.00	0.00	
Max	8.07	1597.92	415.16	1076.10	6711.23	5271.43	4268.12	1216.76	45.90	0.00	0.00	0.00	6711.23
Min	0.11	4.16	22.63	37.57	204.35	1340.07	83.58	44.95	0.00	0.00	0.00	0.00	0.00

WATER YEAR : 2001

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
Drainage Area	1,307 sq.km.
Method of sampling	Depth Integrating
Instrument Used	U.H.D - 49
Period of Available Records	1999 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	1999 - 2001
Number of observation	57
R - Square	0.7491
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:55:44.68

LQS/LQS02D/12

Station - Ban Na Ang, Ban Phu, Udonthani, (KH.18)
Stream - Huai Mong
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.03620
QS = 6.3725 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	46.8	383.8	159.7	28.9	881.9	250.8	352.7	14.6	14.6	10.0	2.1	
2	0.0	46.2	485.2	128.8	23.9	612.1	161.2	248.7	14.0	14.6	9.4	2.1	
3	0.0	47.4	485.2	102.5	18.1	446.9	91.6	158.3	14.0	14.0	9.4	2.1	
4	0.1	52.6	471.0	55.3	18.9	465.7	80.8	98.2	14.0	14.3	9.4	2.1	
5	0.1	54.3	418.6	58.5	37.3	745.1	75.7	72.1	13.7	11.6	9.2	1.8	
6	0.2	53.7	391.9	74.3	167.1	1177.7	77.9	54.8	13.2	12.9	9.2	1.8	
7	0.4	78.6	303.8	44.7	393.8	2002.1	72.1	45.2	12.4	11.6	8.9	2.1	
8	0.6	65.0	191.3	36.4	626.1	1661.7	65.0	41.5	10.8	11.6	8.1	1.8	
9	1.1	59.6	202.0	31.0	781.0	1272.9	80.1	36.0	9.4	13.2	7.6	1.7	
10	1.8	52.1	254.0	33.9	713.9	1094.6	113.5	32.2	9.4	14.0	10.2	1.7	
11	3.0	47.9	318.5	60.7	626.1	1082.7	155.3	28.5	7.8	12.1	10.2	1.7	
12	5.0	51.6	403.3	82.9	809.1	858.4	174.3	27.6	6.2	10.8	8.6	1.5	
13	8.4	61.2	540.7	114.9	1344.5	619.1	222.4	26.0	5.2	12.4	11.6	1.3	
14	10.5	58.5	452.2	116.4	1405.0	492.2	220.4	25.6	4.4	12.1	11.6	1.1	
15	8.9	50.0	273.2	146.5	1359.6	389.9	170.8	26.0	3.8	12.7	10.2	0.6	
16	8.4	48.4	147.9	187.6	1301.5	309.4	93.8	26.0	4.0	14.6	9.2	0.5	
17	9.4	64.4	79.3	193.3	1082.7	171.6	51.6	25.6	8.4	11.0	6.2	0.3	
18	10.8	67.7	59.6	162.7	790.3	156.8	36.0	22.6	9.7	12.9	5.2	0.7	
19	10.0	71.4	42.0	85.8	583.5	379.3	30.1	20.3	11.9	12.9	4.4	1.2	
20	8.9	63.9	26.4	43.6	465.7	519.9	28.1	18.9	9.2	12.9	4.0	1.1	
21	7.8	63.4	14.8	41.0	349.2	444.2	26.4	18.4	14.6	13.2	3.6	1.1	
22	7.6	61.2	12.9	104.7	277.7	328.8	21.0	17.6	12.1	12.1	2.9	1.1	
23	7.3	66.5	12.7	159.7	227.2	234.0	26.0	17.6	14.0	12.4	2.3	1.1	
24	7.3	61.2	23.5	171.6	167.1	213.6	84.4	17.3	14.3	11.3	2.1	1.1	
25	7.3	56.4	142.0	117.8	128.1	341.3	240.8	17.0	14.0	12.1	2.2	1.1	
26	7.3	57.5	200.0	68.2	95.3	661.0	347.0	16.5	14.0	10.8	2.2	1.8	
27	7.3	65.0	223.3	155.3	160.5	713.9	410.9	16.2	14.3	11.3	2.0	2.0	
28	7.3	61.2	203.9	196.2	457.6	588.9	438.8	15.9	15.7	9.4	2.0	2.0	
29	7.0	60.1	183.2	134.0	1770.1	454.9	588.9	15.4	14.3	11.3		2.0	
30	6.8	93.1	174.3	51.1	1551.2	344.7	640.0	15.4	13.7	12.1		1.6	
31		306.0		36.4	1201.4		495.6		12.9	10.8		1.2	
Total	160.6	2092.9	7120.5	3155.5	18962.4	19665.3	5571.3	1554.1	350.0	383.6	191.9	45.4	59253.5 Ton
Mean	5.4	67.5	237.4	101.8	611.7	655.5	179.7	51.8	11.3	12.4	6.9	1.5	
Max	10.8	306.0	540.7	196.2	1770.1	2002.1	640.0	352.7	15.7	14.6	11.6	2.1	2002.1
Min	0.0	46.2	12.7	31.0	18.1	156.8	21.0	15.4	3.8	9.4	2.0	0.3	0.0

WATER YEAR : 2001

KHONG RIVER BASIN

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

	Lat 17 - 18 - 32 N.	**Long** 101 - 46 - 25 E.	
Location	on left bank at the bridge of Wang Saphung - Loei Highway.		
Ban Na Lak	**Amphoe** Wang Saphung	**Changwat** Loei	
Drainage Area	1,262 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 - 2001		
Number of observation	72		
R - Square	0.8402		
Remarks	Continued Sediment Station		

RID Computer Center, Processing : 28-JUN-2004 09:56:03.65 LQS/LQS02D/12

Station - Ban Na Lak, A. Wang Saphung, Loei, (KH.28A)
Stream - Loei
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.43720
QS = 3.6852 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.0	3.5	251.8	219.0	60.4	1727.0	258.5	633.1	62.9	16.2	5.4	10.0	
2	6.0	4.2	279.0	199.9	53.1	1547.0	238.5	534.2	62.9	10.0	5.4	11.4	
3	6.0	499.7	467.0	111.1	41.6	1313.3	265.3	435.0	60.4	11.4	4.8	13.0	
4	6.0	396.0	524.6	77.2	139.0	1547.0	212.6	396.0	50.7	10.0	5.4	14.5	
5	6.6	279.0	251.8	81.2	111.1	2293.2	388.3	314.2	48.4	10.0	4.8	13.0	
6	6.6	206.2	206.2	89.5	726.3	583.0	300.0	258.5	43.8	10.0	5.4	14.5	
7	6.6	102.3	265.3	98.0	2797.1	516.2	307.1	231.9	37.2	9.3	4.8	14.5	
8	7.2	55.5	358.1	85.3	1727.0	442.9	238.5	199.9	29.0	9.3	5.4	14.5	
9	7.2	23.2	206.2	70.6	812.3	403.7	193.7	175.4	25.1	7.9	4.8	14.5	
10	7.2	6.0	120.2	193.7	1064.8	450.9	674.0	153.6	23.2	6.6	4.2	11.4	
11	7.9	7.9	93.7	231.9	1051.5	856.4	251.8	143.8	21.4	7.2	3.5	7.9	
12	7.9	14.5	358.1	169.5	20367.8	1802.1	212.6	134.2	27.0	8.6	4.8	6.0	
13	8.6	27.0	129.5	115.7	20106.0	2436.9	175.4	129.5	27.0	9.3	4.8	6.0	
14	8.6	39.4	98.0	81.2	11971.4	2033.6	129.5	111.1	27.0	9.3	4.8	6.6	
15	9.3	102.3	70.6	62.9	4577.3	1356.2	98.0	102.3	25.1	14.5	4.2	6.6	
16	9.3	592.9	62.9	62.9	1443.3	878.7	85.3	106.7	23.2	9.3	4.8	7.2	
17	10.0	543.9	81.2	81.2	901.2	653.4	115.7	106.7	23.2	9.3	5.4	6.6	
18	10.0	1132.2	129.5	251.8	2112.4	458.9	102.3	106.7	21.4	8.6	3.7	6.6	
19	11.4	923.9	89.5	169.5	4552.3	643.2	81.2	85.3	19.6	7.2	4.8	6.0	
20	11.4	768.9	57.9	129.5	1547.0	736.9	77.2	85.3	19.6	6.6	3.4	3.4	
21	13.0	612.9	43.8	102.3	889.9	543.9	73.2	81.2	17.9	6.0	3.3	5.4	
22	13.0	458.9	46.1	143.8	946.7	543.9	68.0	77.2	16.2	6.0	3.5	6.0	
23	14.5	358.1	48.4	823.2	1011.8	1399.6	65.4	70.6	16.2	6.6	3.7	6.6	
24	16.2	265.3	53.1	475.1	768.9	694.8	19069.4	70.6	14.5	6.6	4.2	6.6	
25	17.9	181.5	81.2	272.1	602.9	1502.3	26094.6	68.0	13.0	6.6	5.4	6.6	
26	65.4	89.5	169.5	206.2	516.2	4035.2	11773.5	65.4	14.5	6.6	3.7	5.4	
27	46.1	62.9	321.4	106.7	1916.8	1313.3	4956.6	65.4	13.0	7.2	4.8	7.2	
28	31.0	46.1	715.7	81.2	15697.4	643.2	3560.7	68.0	14.5	6.6	3.4	4.8	
29	21.4	35.1	279.0	70.6	7230.0	442.9	2499.4	68.0	16.2	6.6		4.8	
30	10.0	93.7	193.7	62.9	5093.2	314.2	2033.6	65.4	16.2	5.4		7.2	
31		134.2		65.4	3560.7		985.6		16.2	5.4		5.4	
Total	408.3	8066.7	6053.0	4991.1	114397.4	34113.8	75585.5	5143.2	846.5	260.2	126.6	260.2	250252.5 Ton
Mean	13.6	260.2	201.8	161.0	3690.2	1137.1	2438.2	171.4	27.3	8.4	4.5	8.4	
Max	65.4	1132.2	715.7	823.2	20367.8	4035.2	26094.6	633.1	62.9	16.2	5.4	14.5	26094.6
Min	6.0	3.5	43.8	62.9	41.6	314.2	65.4	65.4	13.0	5.4	3.3	3.4	3.3

WATER YEAR : 2001

KHONG RIVER BASIN

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

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

Location on left bank at the bridge on road.

Ban Fak Na **Amphoe** Mueang **Changwat** Loei

Drainage Area 3,101.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 - 2001

Number of observation 72

R - Square 0.8341

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:56:26.15 LQS/LQS02D/12

Station - Ban Fak Loei, Mueang, Loei, (KH.58A)
Stream - Loei
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.39310
QS = 2.9682 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.9	29.5	234.2	238.4	69.3	3318.3	570.8	1709.0	71.3	26.4	16.3	13.7	
2	23.4	26.4	592.8	268.9	59.5	1723.9	397.0	1237.8	67.3	27.9	16.3	16.3	
3	19.1	377.4	683.1	141.2	51.9	1071.0	308.0	1006.2	61.4	26.4	11.2	13.7	
4	16.3	301.9	1679.2	102.9	81.7	880.2	308.0	798.9	61.4	26.4	12.5	12.5	
5	17.7	114.4	1092.9	79.6	126.1	1320.2	615.0	657.3	61.4	24.9	12.5	12.5	
6	16.3	69.3	1049.3	71.3	332.8	1320.2	534.6	506.2	65.3	23.4	11.2	10.0	
7	16.3	50.1	808.9	90.2	3251.0	1418.3	520.4	430.3	57.6	23.4	11.2	5.5	
8	17.7	36.0	607.6	108.6	3869.8	1590.9	506.2	364.5	53.8	26.4	15.0	5.5	
9	16.3	26.4	578.1	77.5	1768.9	709.1	351.7	301.9	48.2	21.9	12.5	10.0	
10	17.7	31.1	358.1	88.1	1362.0	1130.3	585.4	277.8	46.4	20.5	11.2	13.7	
11	13.7	71.3	592.8	204.9	1753.9	1723.9	534.6	247.0	41.1	17.7	7.0	12.5	
12	8.9	123.1	1060.1	273.3	17593.7	2506.1	430.3	213.2	36.0	17.7	8.9	8.9	
13	8.9	67.3	911.2	135.1	25492.9	3251.0	345.4	192.7	36.0	19.1	11.2	5.5	
14	8.9	55.7	570.8	108.6	20334.9	2236.3	268.9	184.7	34.4	32.7	12.5	4.7	
15	8.9	85.9	242.7	75.4	10997.1	1844.6	247.0	192.7	34.4	63.4	11.2	4.7	
16	10.0	204.9	161.3	63.4	3776.2	1197.2	213.2	209.0	32.7	46.4	7.8	2.8	
17	11.2	1518.3	165.1	65.3	1709.0	890.5	204.9	192.7	32.7	36.0	7.8	2.2	
18	11.2	443.9	169.0	129.1	1814.2	849.4	169.0	176.8	29.5	32.7	7.8	2.8	
19	11.2	264.5	147.4	144.3	4281.0	1117.0	135.1	150.5	29.5	34.4	4.7	2.2	
20	12.5	196.8	117.3	108.6	2603.5	744.3	126.1	138.2	29.5	31.1	4.7	2.2	
21	11.2	141.2	92.4	88.1	1404.2	798.9	123.1	135.1	31.1	26.4	5.5	1.1	
22	7.8	111.5	73.4	81.7	2204.2	600.2	117.3	135.1	31.1	26.4	3.4	1.0	
23	37.7	92.4	184.7	437.1	1723.9	1038.5	648.8	123.1	29.5	26.4	4.1	2.8	
24	12.5	120.2	161.3	377.4	1210.7	963.7	5100.1	111.5	26.4	21.9	7.0	2.8	
25	12.5	192.7	92.4	238.4	717.9	1679.2	22765.7	92.4	50.1	21.9	11.2	2.2	
26	39.4	161.3	165.1	138.2	527.5	3869.8	26188.2	90.2	37.7	23.4	11.2	3.4	
27	61.4	108.6	358.1	97.4	1376.0	2662.5	18638.7	94.6	29.5	23.4	10.0	4.1	
28	67.3	90.2	819.0	79.6	19049.6	1679.2	9425.5	92.4	26.4	21.9	12.5	3.4	
29	50.1	114.4	506.2	73.4	20778.7	1081.9	5427.8	79.6	26.4	20.5		3.4	
30	34.4	111.5	213.2	73.4	14192.4	762.0	6861.9	77.5	26.4	17.7		4.1	
31		169.0		67.3	4436.3		2861.7		27.9	17.7		4.7	
Total	625.4	5507.2	14487.7	4326.7	168950.8	45978.6	105530.4	10218.9	1272.4	826.4	278.4	194.9	358197.8 Ton
Mean	20.8	177.7	482.9	139.6	5450.0	1532.6	3404.2	340.6	41.0	26.7	9.9	6.3	
Max	67.3	1518.3	1679.2	437.1	25492.9	3869.8	26188.2	1709.0	71.3	63.4	16.3	16.3	26188.2
Min	7.8	26.4	73.4	63.4	51.9	600.2	117.3	77.5	26.4	17.7	3.4	1.0	1.0

WATER YEAR : 2001

KHONG RIVER BASIN

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

Lat 17 - 07 - 44 N. **Long** 101 - 04 - 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
Drainage Area	562 q.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 - 2001
Number of observation	69
R - Square	0.8207
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:56:46.82 LQS/LQS02D/12

Station - Ban Keng Bong, Phu Luang, Loei, (KH.61)
Stream - Loei
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.66300
QS = 3.2956 QW

Water Year - 2001

Suspended Sediment, in Hundred Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	0.0	1.0	1.5	0.1	11.8	0.8	1.6	0.2	0.0	0.0	0.0	
2	0.0	0.0	2.3	0.5	0.1	5.8	0.7	1.0	0.2	0.0	0.0	0.0	
3	0.0	0.7	3.2	0.5	0.1	4.0	0.7	0.8	0.2	0.0	0.0	0.0	
4	0.0	0.7	1.0	0.4	0.1	2.7	0.6	0.8	0.1	0.0	0.0	0.0	
5	0.0	0.5	0.5	0.2	0.7	25.9	0.7	0.7	0.1	0.0	0.0	0.0	
6	0.0	0.0	0.3	0.2	3.5	5.8	0.6	0.7	0.1	0.0	0.0	0.0	
7	0.0	0.0	0.3	0.5	13.0	5.4	0.7	0.5	0.1	0.0	0.0	0.0	
8	0.0	0.0	0.7	0.3	4.0	4.0	0.7	0.5	0.1	0.0	0.0	0.0	
9	0.0	0.0	0.1	0.2	5.1	2.4	0.6	0.3	0.1	0.0	0.0	0.0	
10	0.0	0.0	0.1	2.3	20.2	2.0	0.8	0.3	0.1	0.0	0.0	0.0	
11	0.0	0.0	0.1	0.7	94.0	4.9	0.7	0.3	0.1	0.0	0.0	0.0	
12	0.0	0.0	0.4	0.5	370.9	41.8	0.6	0.3	0.1	0.0	0.0	0.0	
13	0.0	0.0	0.3	0.3	143.4	12.0	0.5	0.3	0.1	0.0	0.0	0.0	
14	0.0	0.0	0.2	0.3	86.3	20.2	0.3	0.2	0.1	0.0	0.0	0.0	
15	0.0	0.9	0.2	0.2	34.1	4.9	0.3	0.2	0.1	0.0	0.0	0.0	
16	0.0	6.4	0.1	0.1	10.0	2.9	0.3	0.2	0.1	0.0	0.0	0.0	
17	0.0	0.4	0.1	0.5	9.1	2.4	0.3	0.2	0.1	0.0	0.0	0.0	
18	0.0	0.1	0.1	0.8	52.2	1.8	0.4	0.2	0.1	0.0	0.0	0.0	
19	0.0	0.1	0.1	0.7	34.1	1.5	0.3	0.2	0.1	0.0	0.0	0.0	
20	0.0	0.1	0.2	0.5	20.2	5.1	0.3	0.2	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.2	0.3	28.0	2.5	0.3	0.2	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.1	5.8	17.4	8.7	0.3	0.2	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.1	5.0	12.2	4.8	1.4	0.2	0.0	0.0	0.0	0.0	
24	0.0	0.3	0.1	2.9	4.0	15.3	301.5	0.2	0.0	0.0	0.0	0.0	
25	0.4	0.1	0.5	0.6	2.4	31.0	138.4	0.2	0.0	0.0	0.0	0.0	
26	0.1	0.1	0.5	0.6	1.7	9.5	24.8	0.2	0.0	0.0	0.0	0.0	
27	0.2	0.1	11.2	0.5	61.8	3.7	10.4	0.2	0.0	0.0	0.0	0.0	
28	0.2	0.0	2.6	0.3	86.3	2.0	8.2	0.2	0.0	0.0	0.0	0.0	
29	0.0	0.1	0.7	0.1	81.1	1.7	5.1	0.2	0.0	0.0		0.0	
30	0.0	0.7	0.6	0.1	22.5	0.9	8.2	0.2	0.0	0.0		0.0	
31		0.3		0.1	16.2		2.1		0.0	0.0		0.2	
Total	0.9	11.6	27.9	27.5	1234.8	247.4	511.6	11.5	2.2	0.0	0.0	0.2	2075.6 100Ton
Mean	0.0	0.4	0.9	0.9	39.8	8.2	16.5	0.4	0.1	0.0	0.0	0.0	
Max	0.4	6.4	11.2	5.8	370.9	41.8	301.5	1.6	0.2	0.0	0.0	0.2	370.9
Min	0.0	0.0	0.1	0.1	0.1	0.9	0.3	0.2	0.0	0.0	0.0	0.0	0.0

WATER YEAR : 2001

KHONG RIVER BASIN

Huai Nam Kam at Ban Dan Muang Kham, Sakon Nakhon (Kh.63)

Lat 17 - 06 - 08 N. **Long** 104 - 21 - 28 E.

Location	on left bank at the bridge on road.
Ban Dan Muang Kham	**Amphoe** Khok Si Suphan **Changwat** Sakon Nakhon
Drainage Area	1,764 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	1983 - 2001
Number of observation	127
R - Square	0.8238
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:57:03.60 LQS/LQS02D/12

Station - Ban Dan Muang Kham, Khok Sisuphan, Sakon Nakhon, (KH.63)
Stream - Huai Nam Kam
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
0.78590
QS = 7.8640 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	0.0	7.2	253.9	241.9	317.9	127.4	149.8	29.6	118.6	118.1	109.7	
2	0.0	0.0	0.0	262.7	217.3	312.1	101.8	174.2	38.7	116.9	118.1	109.1	
3	0.0	0.0	0.0	260.7	206.6	316.0	132.9	148.4	48.8	115.7	117.5	110.3	
4	0.0	15.6	0.0	257.8	194.4	319.8	141.4	118.1	59.9	115.7	117.5	111.5	
5	0.0	14.6	0.0	250.9	209.1	327.5	140.7	123.9	71.9	114.5	117.5	111.5	
6	0.0	64.7	33.8	248.0	216.7	323.6	137.1	126.3	82.3	114.5	116.9	110.3	
7	0.0	66.8	66.8	247.0	216.7	321.7	134.3	126.8	88.1	114.5	116.9	108.5	
8	0.0	66.8	135.4	246.0	209.8	319.8	112.1	126.8	92.0	113.9	115.1	109.1	
9	0.0	66.8	54.0	245.0	219.8	332.8	175.5	126.8	95.6	113.9	112.1	109.7	
10	0.0	62.6	48.8	245.0	243.5	351.4	135.0	158.0	99.3	114.5	109.7	106.7	
11	0.0	54.0	45.8	244.2	296.4	338.1	153.2	162.1	102.4	114.5	109.1	102.4	
12	0.0	47.3	47.3	244.2	323.6	335.5	163.4	165.5	106.1	113.9	107.9	102.4	
13	0.0	35.1	50.3	244.2	332.8	327.5	173.5	129.3	107.9	113.9	107.3	103.0	
14	0.0	24.7	64.7	238.8	338.1	323.6	174.2	103.6	109.1	113.9	106.7	103.6	
15	0.0	18.6	113.2	230.3	335.5	316.0	154.6	89.1	110.3	114.5	104.8	103.6	
16	0.0	12.5	113.2	221.7	338.1	312.1	132.2	88.6	110.3	113.9	103.0	106.7	
17	0.0	9.7	120.7	204.7	367.1	305.3	121.6	49.2	110.3	113.9	102.4	106.7	
18	0.0	10.2	128.1	174.8	372.3	299.4	132.2	41.5	110.9	113.9	102.4	110.3	
19	0.0	11.9	105.5	149.1	361.9	297.9	126.8	45.0	112.1	114.5	103.0	109.1	
20	0.0	14.6	51.8	122.8	348.7	294.9	151.1	85.2	116.3	114.5	103.0	108.5	
21	0.0	17.7	155.3	87.7	367.1	294.9	142.1	191.2	112.7	114.5	104.8	107.9	
22	0.0	20.6	173.5	114.5	359.3	293.4	137.1	126.8	112.7	113.9	105.5	107.3	
23	0.0	21.5	188.6	113.9	335.5	291.5	134.3	40.3	113.3	113.9	106.7	106.7	
24	0.0	20.6	198.3	95.6	325.5	285.8	134.3	21.0	115.1	113.3	106.7	107.3	
25	0.0	20.6	211.0	63.1	325.5	280.1	172.2	37.5	115.7	114.5	107.9	107.9	
26	0.0	17.7	202.8	53.4	351.4	260.7	183.4	22.5	116.9	116.9	108.5	101.8	
27	0.0	12.5	214.8	168.2	359.3	233.4	190.6	37.5	118.1	118.6	109.1	87.2	
28	0.0	13.0	225.6	174.8	338.1	216.1	188.0	29.2	119.2	118.6	109.1	76.4	
29	0.0	12.5	231.9	176.2	330.1	199.6	183.4	29.6	119.8	119.2		73.9	
30	0.0	11.4	237.3	199.6	321.7	163.4	161.4	18.2	119.2	119.2		76.9	
31		10.2		237.3	321.7		145.6		118.6	118.6		81.8	
Total	0.0	774.8	3225.7	6076.1	9325.5	8911.8	4593.4	2892.0	3083.2	3575.3	3067.3	3187.8	48712.9 Ton
Mean	0.0	25.0	107.5	196.0	300.8	297.1	148.2	96.4	99.5	115.3	109.5	102.8	
Max	0.0	66.8	237.3	262.7	372.3	351.4	190.6	191.2	119.8	119.2	118.1	111.5	372.3
Min	0.0	0.0	0.0	53.4	194.4	163.4	101.8	18.2	29.6	113.3	102.4	73.9	0.0

WATER YEAR : 2001

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
Drainage Area	1,932 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 49
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	1998 - 2001
Number of observation	69
R - Square	0.8094
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:57:35.47 LQS/LQS02D/12

Station - Ban Nong Rua Thong, Na Kae, Nakhon Phanom, (KH.69A)
Stream - Nam Kam
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.12390
QS = 4.3941 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	103.0	245.1	713.5	495.7	1942.8	342.3	380.9	446.1	281.9	353.1	288.9	
2	0.0	149.7	56.5	805.5	541.6	1855.1	210.0	303.1	349.5	288.9	353.1	310.2	
3	0.0	217.5	380.1	770.9	685.0	1787.9	144.7	466.7	236.6	292.5	353.1	292.5	
4	0.0	249.7	469.6	751.7	628.4	1767.8	342.3	331.6	253.9	303.1	360.7	306.6	
5	0.0	372.8	347.1	689.8	596.5	1761.1	271.4	335.2	271.4	264.4	353.1	313.7	
6	0.0	431.3	461.7	680.3	550.0	1747.7	210.0	303.1	281.9	177.0	353.1	320.9	
7	0.0	453.9	548.8	661.4	504.0	1727.7	194.9	200.9	288.9	253.9	353.1	324.4	
8	0.2	469.6	394.6	633.1	600.7	1741.1	203.9	342.3	303.1	271.4	360.7	342.3	
9	0.0	509.0	387.3	670.8	633.1	1774.5	257.4	292.5	310.2	281.9	353.1	353.1	
10	0.0	532.8	146.1	656.7	680.3	1801.3	299.5	267.9	313.7	281.9	353.1	353.1	
11	0.0	431.3	446.1	656.7	911.5	1828.2	271.4	250.5	320.9	288.9	360.7	360.7	
12	0.1	222.1	48.7	651.9	1165.8	1861.8	114.9	376.8	360.7	288.9	360.7	364.8	
13	0.1	231.3	58.4	656.7	1331.5	1882.0	174.0	296.0	331.6	292.5	364.8	372.8	
14	0.1	231.3	222.1	642.5	1754.4	1909.0	100.2	345.9	328.0	299.5	376.8	397.1	
15	0.2	231.3	254.3	600.7	1855.1	1868.6	274.9	299.5	349.5	303.1	364.8	397.1	
16	0.3	235.9	217.5	566.9	1888.8	1808.0	274.9	306.6	360.7	306.6	368.8	397.1	
17	0.4	213.0	245.1	520.7	1956.4	1721.0	194.9	320.9	345.9	313.7	376.8	401.1	
18	0.4	168.1	226.7	487.4	2085.5	1626.4	274.9	288.9	247.0	306.6	389.0	409.3	
19	0.8	137.4	177.0	458.4	2147.0	1546.5	210.0	260.9	285.4	320.9	368.8	409.3	
20	1.1	124.5	254.3	278.4	2174.3	1454.9	310.2	236.6	281.9	320.9	353.1	413.3	
21	1.7	85.3	249.7	310.2	2167.5	1387.2	292.5	257.4	274.9	324.4	342.3	421.5	
22	2.5	56.5	359.9	504.0	2112.8	1342.6	264.4	292.5	271.4	324.4	324.4	425.6	
23	5.2	63.7	270.6	353.1	2078.7	1320.4	303.1	537.4	281.9	328.0	296.0	433.8	
24	7.5	116.7	564.8	260.9	2010.6	1270.4	264.4	389.0	288.9	331.6	260.9	433.8	
25	10.9	154.9	666.1	278.4	1936.1	1122.0	236.6	253.9	296.0	331.6	257.4	442.0	
26	15.9	213.0	596.9	188.9	2010.6	1062.1	401.1	243.5	299.5	324.4	253.9	442.0	
27	23.1	431.3	689.8	425.6	2106.0	932.8	182.9	210.0	267.9	342.3	253.9	458.4	
28	33.5	485.3	633.1	356.7	2071.9	727.8	356.7	236.6	250.5	401.1	257.4	466.7	
29	48.8	453.9	637.8	637.8	2051.4	550.0	372.8	364.8	257.4	413.3		433.8	
30	70.9	461.7	661.4	524.9	2092.3	483.2	442.0	437.9	260.9	338.7		409.3	
31		340.7		491.5	2031.0		446.1		267.9	338.7		393.0	
Total	223.7	8578.5	10917.2	16886.0	45854.5	45611.9	8239.3	9429.8	9284.1	9537.0	9476.7	11888.2	185926.9 Ton
Mean	7.5	276.7	363.9	544.7	1479.2	1520.4	265.8	314.3	299.5	307.6	338.5	383.5	
Max	70.9	532.8	689.8	805.5	2174.3	1942.8	446.1	537.4	446.1	413.3	389.0	466.7	2174.3
Min	0.0	56.5	48.7	188.9	495.7	483.2	100.2	200.9	236.6	177.0	253.9	288.9	0.0

WATER YEAR : 2001

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
Drainage Area	644 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
Number of observation	36
R - Square	0.8307
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:58:44.71

LQS/LQS02D/12

Station - Ban Mae Kham Lak Chet, Mae Chan, Chiang Rai, (KH.72)
Stream - Nam Mae Kham
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.39800
QS = 5.2824 QW

Water Year - 2001

Suspended Sediment, in Tons per Day. Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.40	5.06	473.91	35.79	510.42	443.38	373.88	354.42	157.46	106.10	40.59	20.20	
2	21.40	8.20	238.26	28.04	316.15	387.36	387.36	380.61	157.46	102.99	40.59	20.20	
3	18.91	6.04	200.30	23.97	1341.21	328.77	596.46	367.44	153.40	102.99	39.02	35.79	
4	16.51	29.59	153.40	25.34	3006.26	360.79	450.43	322.32	149.37	99.91	37.33	32.65	
5	15.40	74.83	149.37	37.33	1240.52	1183.60	785.52	297.37	149.37	96.85	31.05	23.97	
6	15.40	58.28	133.56	72.17	687.67	698.03	636.54	279.16	149.37	93.82	28.04	22.73	
7	15.40	69.69	115.59	291.34	718.88	457.52	429.11	267.12	149.37	90.82	28.04	21.40	
8	11.64	28.04	90.82	106.10	492.07	367.44	387.36	255.46	238.26	85.39	28.04	22.73	
9	7.38	22.73	96.85	215.85	387.36	464.90	606.41	255.46	180.63	80.06	32.65	23.97	
10	8.20	20.20	77.51	232.60	309.78	797.82	677.35	243.95	157.46	77.51	32.65	20.20	
11	10.73	62.57	88.18	210.35	316.15	899.72	414.97	249.69	149.37	77.51	28.04	10.73	
12	10.73	39.02	99.91	421.90	860.11	473.91	360.79	243.95	141.40	77.51	26.74	10.73	
13	29.59	35.79	85.39	328.77	822.58	1220.65	341.52	232.60	137.46	80.06	25.34	9.84	
14	40.59	285.12	74.83	255.46	1280.53	519.67	322.32	221.39	137.46	74.83	22.73	7.38	
15	99.91	596.46	54.08	243.95	1220.65	407.83	303.67	221.39	141.40	64.67	43.93	6.58	
16	39.02	145.37	69.69	457.52	586.56	360.79	309.78	210.35	141.40	64.67	42.32	6.58	
17	23.97	93.82	47.89	249.69	436.10	328.77	400.72	205.31	137.46	64.67	35.79	6.58	
18	18.91	69.69	42.32	443.38	2839.05	348.07	328.77	200.30	133.56	62.57	34.15	6.58	
19	14.41	102.99	37.33	185.50	1149.28	348.07	322.32	195.33	125.84	60.34	31.05	6.58	
20	11.64	667.08	34.15	421.90	687.67	510.42	297.37	190.40	125.84	56.10	35.79	6.58	
21	11.64	847.55	31.05	547.70	656.85	519.67	267.12	185.50	122.04	45.96	39.02	6.04	
22	9.84	215.85	25.34	335.01	566.89	492.07	267.12	185.50	122.04	45.96	32.65	6.58	
23	8.97	109.24	42.32	928.54	421.90	380.61	255.46	185.50	122.04	45.96	28.04	6.04	
24	7.38	96.85	51.95	606.41	335.01	360.79	255.46	180.63	115.59	47.89	25.34	22.73	
25	6.58	93.82	45.96	380.61	303.67	1048.04	285.12	175.81	115.59	45.96	22.73	21.40	
26	4.56	106.10	35.79	273.01	285.12	1149.28	309.78	166.27	112.40	51.95	21.40	17.75	
27	5.58	273.01	37.33	297.37	309.78	656.85	360.79	166.27	112.40	43.93	21.40	10.73	
28	6.04	309.78	39.02	255.46	380.61	606.41	538.31	166.27	109.24	43.93	20.20	10.73	
29	5.06	200.30	28.04	205.31	1031.43	501.22	1031.43	161.56	109.24	42.32		9.84	
30	4.14	161.56	29.59	443.38	1448.49	387.36	656.85	157.46	106.10	42.32		9.84	
31		457.52		367.44	708.43		429.11		106.10	42.32		6.58	
Total	520.93	5292.15	2729.73	8927.19	25657.18	17009.81	13389.20	6924.79	4266.12	2117.87	874.66	450.26	88159.88 Ton
Mean	17.36	170.71	90.99	287.97	827.65	566.99	431.91	230.83	137.62	68.32	31.24	14.52	
Max	99.91	847.55	473.91	928.54	3006.26	1220.65	1031.43	380.61	238.26	106.10	43.93	35.79	3006.26
Min	4.14	5.06	25.34	23.97	285.12	328.77	255.46	157.46	106.10	42.32	20.20	6.04	4.14

WATER YEAR : 2001

KHONG RIVER BASIN

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

	Lat 17 - 15 - 46 N.	**Long** 101 - 39 - 28 E.	
Location	on right bank at Ban Kok So.		
Ban Kok So	**Amphoe** Wang Saphung	**Changwat** Loei	
Drainage Area	142 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 - 2001		
Number of observation	69		
R - Square	0.8224		
Remarks	Continued Sediment Station		

RID Computer Center, Processing : 28-JUN-2004 09:57:52.29 LQS/LQS02D/12

Station - Ban Kok So, Wang Saphung, Loei_____, (KH.77A)
Stream - Nam Thop
River - Khong River
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.31310
QS = 2.4301 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.4	24.4	27.8	11.7	5.8	105.1	8.1	31.3	4.4	1.4	0.9	0.6	
2	24.4	87.2	52.9	9.8	5.5	36.7	8.1	22.8	4.2	1.2	0.9	0.6	
3	24.4	58.8	50.0	7.3	12.6	14.5	15.0	16.5	4.2	1.2	0.8	0.6	
4	24.4	54.3	29.5	5.8	11.7	44.2	61.8	13.5	4.2	1.1	0.8	0.6	
5	22.8	50.0	24.4	6.8	61.8	29.5	27.8	13.1	4.2	1.1	0.8	0.6	
6	22.8	48.0	34.9	6.8	349.7	16.5	19.6	12.1	4.2	1.1	0.8	0.6	
7	22.8	51.4	18.0	6.4	107.8	14.5	16.5	10.3	3.9	1.1	0.9	0.5	
8	21.2	27.8	24.4	6.8	34.9	12.6	11.7	8.5	3.9	1.0	1.0	0.5	
9	21.2	12.1	14.0	6.8	52.9	16.5	9.8	8.5	3.9	1.0	1.1	0.5	
10	21.2	4.7	14.5	13.1	27.8	31.3	42.2	8.1	3.9	0.9	1.1	0.5	
11	22.8	15.0	22.8	11.2	278.5	63.3	22.8	8.1	3.2	0.9	1.1	0.5	
12	24.4	42.2	18.0	10.7	593.1	69.5	18.0	7.7	2.7	1.0	1.1	0.5	
13	24.4	38.5	16.5	10.3	182.4	97.2	13.1	7.3	3.0	1.0	1.0	0.5	
14	24.4	38.5	14.0	10.3	90.5	107.8	11.2	7.7	3.2	1.0	1.0	0.5	
15	24.4	34.9	13.1	11.2	77.4	64.9	9.8	8.1	3.2	1.0	0.9	0.5	
16	26.1	31.3	13.1	11.2	64.9	46.1	14.0	8.5	3.2	0.9	0.9	0.5	
17	26.1	27.8	13.1	10.7	58.8	14.5	11.2	8.1	3.2	0.9	0.8	0.5	
18	26.1	19.6	14.0	11.7	264.7	22.8	9.4	7.7	3.0	0.9	0.8	0.5	
19	26.1	14.5	10.3	12.6	92.2	16.5	9.4	6.8	3.0	0.9	0.8	0.5	
20	26.1	9.8	9.8	12.6	50.0	15.0	9.0	6.0	3.0	0.9	0.8	0.5	
21	26.1	9.0	8.1	11.2	82.3	14.0	6.8	6.0	2.7	0.9	0.6	0.5	
22	26.1	7.7	6.0	99.8	102.5	15.0	6.8	5.5	2.5	0.9	0.6	0.5	
23	26.1	11.7	9.4	29.5	51.4	22.8	99.8	5.5	2.3	1.0	0.6	0.5	
24	26.1	40.4	9.0	15.0	33.1	18.0	1406.5	5.0	1.2	0.9	0.5	0.5	
25	24.4	11.7	8.1	10.7	21.2	93.8	464.2	5.0	2.3	0.9	0.5	0.5	
26	24.4	9.4	21.2	9.4	11.7	54.3	211.5	5.0	2.3	0.9	0.5	0.5	
27	24.4	9.0	22.8	7.7	196.8	31.3	83.9	5.0	2.3	0.9	0.5	0.5	
28	24.4	15.0	16.5	7.7	127.4	19.6	51.4	5.0	2.1	0.9	0.5	0.5	
29	24.4	31.3	10.3	6.0	95.5	13.5	247.3	5.0	2.1	0.9		0.5	
30	24.4	10.7	11.7	5.5	79.0	11.7	95.5	4.7	1.6	0.9		0.5	
31		33.1		7.3	52.9		40.4		1.6	0.9		0.5	
Total	731.3	879.8	558.2	403.6	3276.8	1133.0	3062.6	272.4	94.7	30.5	22.6	16.1	10481.6 Ton
Mean	24.4	28.4	18.6	13.0	105.7	37.8	98.8	9.1	3.1	1.0	0.8	0.5	
Max	26.1	87.2	52.9	99.8	593.1	107.8	1406.5	31.3	4.4	1.4	1.1	0.6	1406.5
Min	21.2	4.7	6.0	5.5	5.5	11.7	6.8	4.7	1.2	0.9	0.5	0.5	0.5

WATER YEAR : 2001

KHONG RIVER BASIN

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

Lat 20 - 09 - 25 N. **Long** 90 - 51 - 45 E.

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

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

Drainage Area 255 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

Number of observation 36

R - Square 0.8851

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:58:58.46

LQS/LQS02D/12

Station - Ban Hua Saphan , Mae Chan ,Chiang Rai, (KH.89)
Stream - Mae Chan
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division 020501
1.49770
QS = 5.9372 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.46	2.49	208.70	3.11	92.16	103.20	73.39	79.21	54.61	20.00	24.27	14.56	
2	0.84	4.82	52.21	2.83	64.95	118.25	82.17	59.51	54.61	21.35	27.31	16.77	
3	0.46	4.33	54.61	2.83	426.63	79.21	399.69	82.17	52.21	18.95	28.80	5.94	
4	0.35	8.49	25.70	3.78	1004.94	85.17	139.75	67.73	52.21	18.95	18.95	9.10	
5	0.35	13.61	43.50	7.22	285.62	391.07	515.59	62.21	52.21	18.95	17.78	3.48	
6	0.35	10.68	25.70	12.68	167.52	167.52	202.64	126.51	50.03	18.95	11.67	3.11	
7	0.57	9.10	14.56	67.73	153.43	110.64	106.90	106.90	50.03	12.68	9.10	14.56	
8	0.57	6.57	4.82	17.78	158.17	62.21	95.72	95.72	76.28	9.10	11.67	18.95	
9	0.57	5.41	4.82	139.75	76.28	158.17	106.90	95.72	56.86	9.83	5.41	16.77	
10	1.45	3.78	10.68	39.26	56.86	167.52	227.25	88.64	54.61	9.83	2.49	20.00	
11	1.45	14.56	30.31	35.17	227.25	227.25	153.43	92.16	52.21	12.68	2.49	15.65	
12	0.98	9.83	16.77	67.73	463.59	99.32	114.42	85.17	52.21	15.65	1.68	21.35	
13	5.41	6.57	6.57	39.26	227.25	445.17	85.17	85.17	50.03	21.35	3.78	9.83	
14	5.41	158.17	9.83	30.31	417.83	153.43	76.28	85.17	50.03	18.95	6.57	0.98	
15	144.35	92.16	8.49	20.00	285.62	85.17	64.95	82.17	56.86	21.35	18.95	1.45	
16	13.61	31.85	5.94	92.16	227.25	70.54	64.95	82.17	52.21	21.35	33.58	0.84	
17	4.82	47.70	4.33	126.51	95.72	64.95	62.21	70.54	50.03	21.35	31.85	3.78	
18	3.11	18.95	4.33	114.42	1668.37	167.52	64.95	64.95	50.03	20.00	18.95	3.48	
19	2.83	47.70	3.78	47.70	473.08	76.28	59.51	62.21	41.28	16.77	17.78	3.11	
20	2.83	382.17	3.78	130.71	190.69	148.74	56.86	59.51	41.28	12.68	20.00	3.78	
21	2.23	144.35	3.78	208.70	122.11	95.72	56.86	56.86	39.26	9.10	16.77	3.48	
22	1.68	64.95	3.78	106.90	130.71	227.25	54.61	56.86	39.26	16.77	16.77	9.83	
23	1.68	35.17	3.48	227.25	92.16	82.17	54.61	56.86	37.12	7.80	17.78	11.67	
24	1.18	82.17	3.48	227.25	85.17	64.95	54.61	56.86	35.17	7.80	27.31	0.98	
25	1.18	41.28	3.48	114.42	56.86	445.17	64.95	56.86	33.58	9.10	28.80	0.70	
26	1.18	28.80	3.48	56.86	54.61	285.62	79.21	56.86	31.85	17.78	25.70	0.98	
27	9.83	208.70	3.11	37.12	64.95	196.63	56.86	54.61	22.86	33.58	16.77	0.98	
28	0.84	263.06	2.83	31.85	64.95	184.80	70.54	54.61	20.00	35.17	16.77	0.57	
29	0.84	56.86	2.83	30.31	227.25	167.52	300.90	54.61	20.00	27.31		0.98	
30	0.98	39.26	2.83	103.20	167.52	118.25	227.25	54.61	21.35	27.31		0.98	
31		208.70		54.61	184.80		103.20		21.35	35.17		0.98	
Total	212.39	2052.24	572.51	2199.41	8014.30	4849.41	3876.33	2193.14	1371.63	567.61	479.75	219.62	26608.34 Ton
Mean	7.08	66.20	19.08	70.95	258.53	161.65	125.04	73.10	44.25	18.31	17.13	7.08	
Max	144.35	382.17	208.70	227.25	1668.37	445.17	515.59	126.51	76.28	35.17	33.58	21.35	1668.37
Min	0.35	2.49	2.83	2.83	54.61	62.21	54.61	54.61	20.00	7.80	1.68	0.57	0.35

WATER YEAR : 2001

KHONG RIVER BASIN

Lam Nam Phung at Ban Tong Khop, Sakhon 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** Sakhon Nakhon
Drainage Area	848 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 - 2001
Number of observation	69
R - Square	0.9010
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:58:07.89

LQS/LQS02D/12

Station - Ban Tong Khop, Khok Si Suphan, Sakhon Nakhon, (KH.90)
Stream - Phung
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.47370
QS = 2.8234 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	25.06	43.54	39.59	532.43	186.88	868.95	155.76	71.95	4.16	2.03	7.84	6.71	
2	12.88	43.54	39.59	174.22	1659.57	532.43	137.98	58.27	4.16	2.03	9.02	6.71	
3	9.02	47.60	53.92	104.58	1236.57	2457.23	137.98	51.79	4.16	2.03	9.02	6.71	
4	10.26	146.78	26.76	76.71	924.62	3160.47	126.52	39.59	3.25	2.42	7.84	9.02	
5	9.02	118.14	26.76	65.00	731.04	1708.26	109.94	49.68	2.42	2.03	7.84	9.02	
6	10.26	58.27	21.78	56.08	453.73	845.44	94.13	53.92	2.42	2.42	7.84	6.71	
7	11.54	51.79	12.88	56.08	206.41	679.51	86.53	43.54	2.42	2.42	9.02	6.71	
8	10.26	45.55	49.68	43.54	650.62	876.84	107.25	43.54	2.42	2.42	7.84	6.71	
9	12.88	39.59	47.60	74.32	723.61	3272.37	149.76	49.68	3.69	2.42	7.84	6.71	
10	10.26	39.59	33.89	60.49	1469.42	2650.17	196.57	49.68	4.16	2.42	7.84	6.71	
11	10.26	65.00	39.59	49.68	4215.50	1266.08	149.76	49.68	4.16	2.42	7.27	6.71	
12	18.65	65.00	35.76	58.27	3999.35	822.13	140.90	53.92	3.25	2.42	7.84	6.71	
13	23.40	58.27	30.26	62.73	956.92	601.03	120.91	71.95	2.82	2.42	7.84	6.71	
14	25.06	49.68	49.68	58.27	1447.72	486.03	109.94	74.32	2.42	2.42	7.84	6.17	
15	25.06	43.54	33.89	39.59	1055.94	391.32	109.94	69.61	2.82	4.64	6.71	6.17	
16	23.40	45.55	14.25	45.55	845.44	355.32	104.58	60.49	2.42	9.02	4.64	6.17	
17	25.06	45.55	7.84	30.26	3160.47	552.73	94.13	71.95	2.82	10.26	4.64	6.71	
18	30.26	51.79	7.84	43.54	1426.13	1557.23	86.53	60.49	2.42	6.71	6.71	7.84	
19	30.26	41.55	7.84	39.59	783.76	1352.89	81.57	51.79	2.82	7.84	6.17	7.84	
20	33.89	47.60	7.84	60.49	822.13	1227.77	69.61	49.68	2.82	7.27	6.71	9.02	
21	33.89	47.60	7.84	104.58	716.19	1123.67	79.13	49.68	2.42	11.54	6.71	9.02	
22	33.89	43.54	6.71	243.79	403.56	806.71	76.71	45.55	2.42	11.54	6.71	11.54	
23	33.89	39.59	18.65	216.41	326.19	657.80	94.13	49.68	2.42	11.54	6.71	7.27	
24	33.89	39.59	768.58	143.83	270.40	545.94	99.31	49.68	2.42	15.68	6.71	7.84	
25	41.55	39.59	731.04	118.14	206.41	385.24	112.65	49.68	2.42	14.25	6.71	7.84	
26	51.79	43.54	206.41	123.71	216.41	309.10	107.25	43.54	2.42	17.14	6.71	9.02	
27	43.54	43.54	161.84	512.38	1669.27	254.33	94.13	21.78	2.42	9.02	6.71	6.71	
28	47.60	41.55	109.94	806.71	876.84	209.73	84.04	4.16	2.42	9.02	6.71	6.71	
29	39.59	39.59	486.03	331.95	601.03	249.04	76.71	4.16	2.42	9.02		9.02	
30	43.54	39.59	532.43	183.69	1149.42	167.99	76.71	4.16	2.42	7.84		9.02	
31		39.59		174.22	908.60		79.13		2.42	12.88		9.02	
Total	769.91	1605.23	3616.71	4690.83	34300.15	30373.75	3350.19	1447.59	88.65	207.53	201.99	234.78	80887.32 Ton
Mean	25.66	51.78	120.56	151.32	1106.46	1012.46	108.07	48.25	2.86	6.69	7.21	7.57	
Max	51.79	146.78	768.58	806.71	4215.50	3272.37	196.57	74.32	4.16	17.14	9.02	11.54	4215.50
Min	9.02	39.59	6.71	30.26	186.88	167.99	69.61	4.16	2.42	2.03	4.64	6.17	2.03

WATER YEAR : 2001

KHONG RIVER BASIN

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

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

Location	on left bank at the bridge on highway.
Ban Khon Sawan	**Amphoe** That Phanom **Changwat** Nakhon Phanom
Drainage Area	167 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 49
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	1998 - 2001
Number of observation	66
R - Square	0.8121
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:58:23.16 LQS/LQS02D/12

Station - Ban Khon Sawan, That Phanom, Nakhon Phanom, (KH.91)
Stream - Huai Chanot
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.21480
QS = 3.8375 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.3	0.5	4.2	93.6	12.5	92.1	13.4	4.9	2.1	1.7	1.2	2.0	
2	1.3	0.5	3.1	42.5	18.8	127.0	11.4	4.8	2.1	1.7	0.9	1.3	
3	1.1	0.5	2.8	17.9	25.8	178.4	10.8	4.8	2.1	1.5	1.1	1.2	
4	1.0	0.5	2.9	9.5	18.8	222.7	8.9	4.8	2.2	1.5	1.0	1.1	
5	1.0	1.3	2.3	5.6	14.0	167.1	12.8	4.3	3.0	1.5	1.2	1.0	
6	1.1	1.1	3.0	4.6	14.0	123.1	14.6	4.5	3.0	1.8	1.1	0.8	
7	1.0	1.2	2.6	4.0	41.0	120.8	11.7	5.0	2.7	1.9	1.2	0.8	
8	1.0	0.7	2.4	8.6	125.4	172.0	18.2	5.2	2.1	2.4	1.3	1.0	
9	0.8	0.6	3.8	45.0	150.7	313.1	31.8	4.9	2.1	2.4	1.5	1.1	
10	0.8	0.5	3.4	50.1	122.3	337.9	31.8	3.9	1.9	2.1	1.2	1.1	
11	0.9	0.7	2.4	30.8	315.8	215.5	23.2	3.4	1.9	1.8	1.1	0.9	
12	0.9	0.6	2.2	22.9	277.3	144.3	16.1	3.2	2.1	1.7	1.3	1.3	
13	0.9	0.6	3.6	29.4	141.6	111.6	12.8	3.5	3.1	1.4	1.7	1.5	
14	0.7	0.4	5.0	18.2	183.6	125.4	10.0	3.7	2.7	1.7	1.7	1.9	
15	0.8	0.5	4.6	13.7	802.5	120.0	7.3	3.5	2.2	1.6	2.1	1.6	
16	0.6	0.5	3.5	12.5	515.7	89.9	6.3	3.3	1.9	1.3	1.5	0.7	
17	0.5	0.6	3.2	6.5	429.5	68.4	5.8	2.7	1.7	1.7	1.3	0.9	
18	0.6	0.9	4.9	5.1	352.5	76.2	5.8	3.0	1.7	1.8	1.2	0.7	
19	0.5	1.9	4.4	4.5	273.3	74.7	5.6	3.2	1.7	1.9	1.2	0.6	
20	0.5	1.8	3.1	3.8	183.6	76.2	5.3	3.3	1.7	1.6	0.9	0.7	
21	0.5	1.0	2.7	16.1	231.3	52.2	5.0	2.9	1.5	1.4	0.9	0.6	
22	0.4	0.8	6.8	251.7	188.8	44.5	5.0	2.4	1.5	2.0	0.8	0.7	
23	0.4	0.8	11.1	222.7	123.8	41.5	9.7	2.3	1.4	2.1	1.3	0.9	
24	0.5	0.6	41.0	111.6	87.0	39.5	16.7	2.4	1.5	2.0	1.3	1.0	
25	0.5	0.7	95.0	48.1	72.6	32.3	16.1	2.4	1.9	1.8	1.7	1.7	
26	0.7	0.7	55.8	16.1	188.8	24.8	12.5	2.1	2.7	1.5	1.8	1.1	
27	0.6	0.6	47.0	17.6	265.4	21.0	8.4	2.1	3.1	1.3	1.9	1.2	
28	0.5	0.7	56.3	35.1	186.2	18.5	6.2	2.3	3.0	1.4	2.0	0.8	
29	0.4	3.7	48.6	39.0	195.3	15.8	5.8	2.1	2.0	1.6		0.9	
30	0.4	13.4	58.4	25.5	259.5	14.0	5.4	2.3	1.7	1.5		1.8	
31		6.1		14.6	186.2		5.1		1.8	1.3		14.3	
Total	22.2	45.0	490.1	1226.9	6003.6	3260.5	359.5	103.2	66.1	52.9	37.4	47.2	11714.6 Ton
Mean	0.7	1.5	16.3	39.6	193.7	108.7	11.6	3.4	2.1	1.7	1.3	1.5	
Max	1.3	13.4	95.0	251.7	802.5	337.9	31.8	5.2	3.1	2.4	2.1	14.3	802.5
Min	0.4	0.4	2.2	3.8	12.5	14.0	5.0	2.1	1.4	1.3	0.8	0.6	0.4

WATER YEAR : 2001

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
Drainage Area	1,118 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 - 2001
Number of observation	66
R - Square	0.9133
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:58:38.60 LQS/LQS02D/12

Station - Ban Kan Luang Dong, Dong Luang, Muk Dahan, (KH.92)
Stream - Huai Bang Sai
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.45340
QS = 2.5542 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.1	5.1	60.3	2367.1	254.3	1933.4	99.2	3.3	0.9	0.0	2.6	0.0	
2	5.1	5.5	56.3	540.2	606.5	1028.8	94.6	3.3	0.4	0.0	0.2	0.0	
3	4.6	5.1	118.3	268.4	198.7	9347.2	85.5	2.9	0.2	0.0	0.0	0.0	
4	4.6	113.4	85.5	143.7	108.6	7992.6	81.1	2.9	0.4	0.0	0.0	0.0	
5	4.6	167.7	60.3	118.3	123.3	2598.8	72.6	2.9	0.4	0.0	0.0	0.0	
6	4.6	52.5	44.1	85.5	99.2	1457.7	68.4	2.9	0.2	0.0	0.0	0.0	
7	4.6	41.4	198.7	72.6	386.3	2246.1	49.6	2.6	0.2	0.0	0.0	0.0	
8	4.6	26.5	268.4	85.5	957.2	3751.3	56.3	2.2	0.2	0.0	0.0	0.0	
9	4.2	19.2	113.4	3867.4	1087.2	7267.3	160.9	2.2	0.2	0.0	0.0	0.0	
10	4.2	12.6	49.6	687.8	2385.9	4132.6	971.4	2.2	0.2	0.0	0.0	0.0	
11	4.2	17.1	12.6	192.9	19804.5	2735.1	113.4	1.8	0.2	0.0	0.0	0.0	
12	3.7	41.4	17.1	1791.2	22516.7	2246.1	49.6	1.8	0.2	0.0	0.0	0.0	
13	3.7	22.7	20.6	320.6	2689.4	7187.5	19.2	1.8	0.2	0.0	0.0	0.0	
14	3.3	17.1	94.6	103.9	5837.6	2404.7	9.7	2.2	0.1	0.0	0.0	0.0	
15	3.3	15.8	46.8	72.6	3430.8	2206.2	9.7	2.2	0.1	0.0	0.0	0.0	
16	3.7	12.6	81.1	76.8	4014.0	1191.7	9.7	2.2	0.1	0.0	0.0	0.0	
17	3.3	12.6	49.6	94.6	7864.9	1722.8	10.8	1.8	0.1	0.0	0.0	0.0	
18	3.7	10.8	2.9	90.0	6950.0	1299.2	9.7	1.8	0.1	0.0	0.0	0.0	
19	4.2	20.6	0.7	64.3	4192.3	805.6	9.1	1.5	0.0	0.0	0.0	0.0	
20	4.2	17.1	0.2	56.3	13037.0	778.9	10.8	1.2	0.0	0.0	0.0	0.0	
21	4.2	20.6	0.1	198.7	2896.9	1116.7	12.6	1.2	0.0	0.0	0.0	0.0	
22	4.2	19.2	0.7	3119.3	1688.9	1314.8	12.6	0.9	0.0	0.0	0.0	0.0	
23	4.2	15.8	138.5	1441.6	1473.9	675.1	10.8	0.9	0.0	0.0	0.0	0.0	
24	3.7	12.6	3222.1	426.0	1299.2	406.0	10.8	0.9	0.0	0.0	0.0	0.0	
25	9.7	26.5	1912.8	213.3	832.6	339.3	12.6	0.9	0.0	0.0	0.0	0.0	
26	4.6	26.5	1330.4	113.4	957.2	268.4	14.5	0.9	0.0	0.0	0.0	0.0	
27	4.6	26.5	957.2	3017.6	9539.8	219.2	17.1	0.9	0.0	0.0	0.0	0.0	
28	5.5	22.7	846.2	1490.1	3751.3	174.6	31.2	0.9	0.0	0.0	0.0	0.0	
29	6.0	113.4	1672.0	778.9	2124.1	148.9	64.3	0.9	0.0	0.0		0.0	
30	5.1	72.6	5912.3	406.0	3697.2	123.3	60.3	0.9	0.0	0.0		0.0	
31		44.1		213.3	1895.3		56.3		0.0	0.4		0.0	
Total	135.3	1037.3	17373.4	22517.9	126700.8	69119.9	2294.4	55.0	4.4	0.4	2.8	0.0	239241.6 Ton
Mean	4.5	33.5	579.1	726.4	4087.1	2304.0	74.0	1.8	0.1	0.0	0.1	0.0	
Max	9.7	167.7	5912.3	3867.4	22516.7	9347.2	971.4	3.3	0.9	0.4	2.6	0.0	22516.7
Min	3.3	5.1	0.1	56.3	99.2	123.3	9.1	0.9	0.0	0.0	0.0	0.0	0.0

WATER YEAR : 2001

KHONG RIVER BASIN

Nam Songkhram 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
Drainage Area	707 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 - 2001
Number of observation	39
R - Square	0.8600
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:58:53.02 LQS/LQS02D/12

Station - Ban Khok Kham Lai, A.Ban Duang, Udon Thani, (KH.93)
Stream - Nam Songkham
River - Nam Songkham
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
0.82580
QS = 12.5410 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.5	0.0	81.2	193.6	123.2	405.9	32.8	74.8	0.5	3.0	0.5	0.7	
2	0.5	5.8	111.5	206.6	85.4	423.7	20.9	59.6	0.5	3.0	0.3	0.7	
3	0.5	10.5	151.3	234.9	106.6	423.7	19.6	45.8	0.5	4.0	0.3	0.7	
4	0.3	14.9	173.9	239.1	191.3	399.9	16.9	35.3	0.9	4.0	0.3	0.5	
5	0.3	34.5	188.9	230.7	246.0	384.9	14.2	27.3	0.9	4.0	0.5	0.5	
6	0.3	41.8	190.1	185.4	262.5	378.9	14.2	22.9	0.9	3.0	0.5	0.5	
7	0.3	43.4	171.2	137.4	278.7	378.9	14.2	18.3	0.9	3.0	0.5	0.5	
8	0.0	44.2	139.2	82.2	313.5	376.8	12.7	15.6	2.0	3.0	0.5	0.5	
9	0.0	24.3	109.6	70.6	336.2	429.6	51.3	14.9	0.9	2.0	0.3	0.0	
10	0.0	16.3	92.5	66.2	360.6	481.1	106.6	13.5	0.9	2.0	0.3	0.0	
11	0.0	10.5	113.5	64.0	787.6	496.4	113.5	12.7	2.0	2.0	0.3	0.0	
12	0.0	9.8	166.8	56.6	1762.1	576.1	121.2	12.7	0.9	0.9	0.3	0.0	
13	0.0	8.2	199.4	45.8	1927.3	662.6	114.5	12.0	4.9	0.9	0.3	0.0	
14	0.0	7.4	252.9	32.8	1457.1	698.3	85.4	8.2	4.0	0.9	0.3	0.0	
15	0.0	5.8	302.5	27.3	1126.6	676.0	64.0	8.2	3.0	0.9	0.5	0.0	
16	0.0	4.0	327.1	31.1	851.1	612.9	48.9	8.2	12.7	0.9	0.5	0.0	
17	0.0	3.0	346.3	37.8	671.6	562.3	38.6	8.2	19.0	0.9	0.5	0.0	
18	0.0	3.0	360.6	40.2	553.0	500.2	23.5	5.8	14.2	0.9	0.3	0.0	
19	0.0	7.4	338.0	39.4	477.3	402.9	20.3	4.9	10.5	0.9	0.3	0.0	
20	0.0	16.9	313.5	36.9	432.6	362.6	17.6	4.9	8.2	0.9	0.3	0.0	
21	0.0	20.3	280.1	29.6	442.4	319.8	16.9	4.9	6.6	0.7	0.0	0.5	
22	0.0	14.2	236.3	31.1	461.8	278.7	16.9	3.0	5.8	0.7	0.0	0.7	
23	0.0	12.0	193.6	41.0	442.4	227.9	20.9	3.0	5.8	0.7	0.0	0.7	
24	0.0	11.3	164.0	47.4	399.9	172.1	22.2	0.9	5.8	0.7	0.0	0.7	
25	0.0	21.6	156.8	41.8	378.9	148.5	32.8	0.7	7.4	0.7	0.0	0.7	
26	0.0	26.6	149.5	31.9	352.4	143.9	40.2	0.5	7.4	0.7	0.0	0.7	
27	0.0	20.3	150.4	51.3	338.0	121.2	53.6	0.7	4.9	0.7	0.0	0.7	
28	0.0	18.3	173.0	64.8	334.4	95.6	91.5	0.9	4.9	0.7	0.0	0.7	
29	0.0	16.9	172.1	84.3	352.4	74.8	94.6	0.7	3.0	0.7		0.7	
30	0.0	20.3	173.0	126.0	364.7	58.8	96.6	0.7	4.0	0.7		0.7	
31		45.8		136.4	378.9		96.6		4.0	0.7		0.7	
Total	2.7	539.3	5978.8	2744.2	16596.5	11275.0	1533.7	429.8	147.9	48.8	7.6	12.1	39316.4 Ton
Mean	0.1	17.4	199.3	88.5	535.4	375.8	49.5	14.3	4.8	1.6	0.3	0.4	
Max	0.5	45.8	360.6	239.1	1927.3	698.3	121.2	74.8	19.0	4.0	0.5	0.7	1927.3
Min	0.0	0.0	81.2	27.3	85.4	58.8	12.7	0.5	0.5	0.7	0.0	0.0	0.0

WATER YEAR : 2001

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
Drainage Area	869 sq.km.
Method of sampling	Depth Integrating
Instrument Used	U.H.D - 49
Period of Available Records	1999 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	1999 - 2001
Number of observation	57
R - Square	0.8673
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:59:08.24 LQS/LQS02D/12

Station - Ban Wang Lao, A.Na Yung, Udon Thani_____. (KH.94)
Stream - Nam Som
River - Khong
River System - Khong River

Royal Irrigation Department
Thailand
Hydrology Division
1.13840
QS = 5.3946 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.6	7.6	533.8	21.0	47.0	321.3	89.7	228.8	13.4	8.2	3.4	3.6	
2	4.2	7.0	516.6	11.6	52.7	248.6	76.4	179.7	8.6	7.6	2.8	3.1	
3	3.9	7.3	518.8	8.2	58.4	130.1	77.5	199.6	4.2	7.3	3.1	3.4	
4	3.6	8.9	486.8	10.7	172.7	153.1	78.6	179.7	9.2	7.0	2.8	3.4	
5	4.2	8.6	227.1	19.6	759.2	465.6	85.3	90.9	15.2	7.3	3.6	3.6	
6	3.9	9.5	305.9	26.1	821.4	546.7	89.7	63.3	16.5	7.0	2.8	3.6	
7	4.4	11.6	227.1	22.5	902.5	535.9	92.0	55.1	15.6	6.1	3.4	3.4	
8	3.9	12.9	164.8	17.9	831.8	459.3	101.4	51.0	15.6	5.2	3.6	3.4	
9	4.2	11.1	139.0	43.1	774.7	333.4	105.1	45.4	5.2	6.4	3.6	2.8	
10	2.3	8.2	103.9	41.5	713.0	438.3	103.9	41.5	8.6	6.1	3.4	2.3	
11	2.3	6.1	150.6	44.6	491.1	566.1	90.9	39.1	6.6	6.1	2.8	2.6	
12	2.8	4.2	105.1	37.6	792.8	660.0	83.0	36.8	7.0	5.5	2.8	2.8	
13	3.1	5.0	319.6	34.5	1231.9	469.9	76.4	37.6	10.3	6.1	3.4	2.8	
14	2.6	8.2	343.7	16.1	1193.4	576.9	64.1	39.9	14.8	7.0	3.4	3.4	
15	3.1	10.3	340.3	15.2	1119.7	388.3	50.2	40.7	7.3	8.9	3.1	3.1	
16	2.3	12.0	371.8	17.0	865.8	175.5	43.1	36.8	8.2	9.2	2.8	2.8	
17	1.2	12.5	272.0	19.6	623.0	196.7	36.8	33.7	7.0	10.7	3.1	2.3	
18	0.5	12.5	263.7	16.1	486.8	186.8	26.1	35.2	7.6	8.2	3.1	2.3	
19	0.8	9.9	199.6	13.4	319.6	368.0	26.9	32.2	7.0	8.9	3.4	2.3	
20	0.9	10.3	52.7	17.9	270.4	402.8	24.7	28.4	7.0	8.6	2.6	2.3	
21	0.9	10.3	20.3	36.0	220.6	305.9	23.9	18.8	7.3	7.3	3.4	2.3	
22	0.6	22.5	16.1	89.7	162.2	250.3	22.5	15.2	7.6	7.3	3.6	3.1	
23	0.9	17.9	8.9	307.6	135.2	277.1	21.0	17.5	6.1	8.2	3.4	3.1	
24	2.6	20.3	8.2	270.4	95.4	240.3	32.9	18.3	5.5	7.9	3.4	3.1	
25	4.2	16.5	6.6	217.3	72.5	272.0	43.8	17.5	6.1	7.9	3.1	3.1	
26	5.2	19.6	18.8	189.6	67.5	338.5	62.5	17.0	7.0	9.9	3.4	2.8	
27	7.0	22.5	13.4	175.5	62.5	195.3	92.0	17.0	6.6	10.7	3.4	2.8	
28	8.2	33.7	10.3	155.7	126.3	168.7	145.4	16.1	7.3	10.3	3.1	2.6	
29	8.6	60.8	8.2	130.1	378.0	127.6	255.3	15.6	6.4	6.6		2.3	
30	7.9	209.1	13.4	94.3	359.3	111.3	323.0	16.5	7.3	3.6		2.3	
31		508.1		69.1	328.2		309.3		7.9	2.8		2.8	
Total	103.9	1125.0	5767.1	2189.5	14535.6	9910.3	2753.4	1664.9	270.0	229.9	89.8	89.6	38729.0 Ton
Mean	3.5	36.3	192.2	70.6	468.9	330.3	88.8	55.5	8.7	7.4	3.2	2.9	
Max	8.6	508.1	533.8	307.6	1231.9	660.0	323.0	228.8	16.5	10.7	3.6	3.6	1231.9
Min	0.5	4.2	6.6	8.2	47.0	111.3	21.0	15.2	4.2	2.8	2.6	2.3	0.5

WATER YEAR : 2001

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
Drainage Area	29,788 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 - 2001
Number of observation	75
R - Square	0.8472
Remarks	Continued Sediment Station

RID Computer Center, Processing : 26-OCT-2004 10:17:55.69 LQS/LQS02D/12

Station - Ban Kum Wat Tai Kosum, Kosum Phisai, Maha Sarakham, (E.1)
Stream - Chi
River - Chi
River System - Chi River

Royal Irrigation Department
Thailand
Hydrology Division
1.19600
QS = 3.2362 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	416.0	512.9	508.5	675.6	671.0	6458.7	8477.5	9307.8	1265.2	759.1	475.9	325.1	
2	443.6	503.2	480.2	607.5	583.8	6441.2	8191.5	9407.8	1211.8	680.3	503.2	349.2	
3	425.5	588.4	592.9	503.2	550.4	6105.4	7908.6	9528.1	1380.3	602.9	508.5	328.4	
4	503.2	774.3	641.4	388.7	480.2	5361.8	7778.1	9588.3	1346.9	579.3	508.5	331.7	
5	452.3	671.0	632.2	362.6	484.6	5092.9	7573.4	9548.1	1346.9	517.4	512.9	384.5	
6	517.4	573.9	690.5	299.0	531.6	4753.4	7333.9	9488.0	1293.0	447.9	503.2	380.2	
7	531.6	494.3	744.9	232.0	719.5	4650.0	7131.1	9367.8	1126.5	398.1	425.5	366.7	
8	512.9	452.3	714.8	228.9	953.1	4606.8	6857.3	9227.9	1094.2	328.4	349.2	362.6	
9	508.5	429.8	684.9	305.5	1003.4	4620.7	6694.7	9188.0	1081.2	282.8	335.9	393.8	
10	438.4	380.2	710.1	358.4	1048.2	4871.3	6405.0	9028.7	1042.2	266.7	308.7	398.1	
11	447.9	438.4	739.2	508.5	1192.4	5482.0	6166.7	8790.6	1003.4	263.6	305.5	371.0	
12	434.1	461.9	774.3	680.3	1517.1	6289.7	5891.5	8593.0	958.0	260.4	353.3	388.7	
13	531.6	484.6	780.0	710.1	2417.4	6911.7	5467.6	8342.8	901.2	292.5	335.9	411.7	
14	508.5	393.8	876.0	675.6	3816.0	7481.0	4694.7	8135.7	800.0	335.9	362.6	388.7	
15	517.4	402.3	1186.3	617.5	4900.8	7610.7	3890.1	7928.0	849.9	353.3	384.5	371.0	
16	573.9	470.6	1239.5	579.3	5287.5	7703.3	2903.3	7646.6	912.0	420.3	366.7	371.0	
17	569.3	531.6	1245.6	521.8	5755.3	7778.1	2091.5	7314.7	953.1	503.2	345.0	376.0	
18	554.9	626.7	1146.7	461.9	6120.0	7928.0	1791.3	7022.0	876.0	489.0	335.9	402.3	
19	434.1	626.7	1172.1	393.8	6531.4	8003.2	2055.8	6585.3	953.1	480.2	328.4	411.7	
20	416.0	554.9	1179.2	393.8	7039.7	8022.7	1914.0	5906.1	916.8	461.9	328.4	416.0	
21	429.8	517.4	901.2	358.4	7333.9	8040.8	1730.4	4460.8	964.9	457.5	328.4	425.5	
22	484.6	508.5	725.1	353.3	7481.0	8098.0	1468.4	3376.3	983.6	461.9	321.8	393.8	
23	475.9	508.5	665.4	420.3	7518.2	8342.8	1551.1	2818.5	958.0	438.4	315.3	371.0	
24	531.6	517.4	636.8	416.0	7351.7	8457.9	2136.3	2417.4	953.1	420.3	321.8	376.0	
25	521.8	521.8	480.2	470.6	7076.5	8632.4	4606.8	2029.1	953.1	407.4	321.8	429.8	
26	540.6	484.6	789.5	554.9	6621.7	8969.1	6423.8	1592.7	921.7	420.3	315.3	420.3	
27	527.2	508.5	1119.4	646.0	5678.9	9287.8	7002.9	1448.4	916.8	475.9	321.8	384.5	
28	656.2	470.6	1211.8	729.8	5005.1	9387.8	7573.4	1380.3	880.8	573.9	345.0	362.6	
29	540.6	461.9	1016.3	824.9	5092.9	9267.8	8211.1	1346.9	849.9	598.4		371.0	
30	438.4	508.5	880.8	829.7	5709.2	8889.7	8671.9	1359.4	849.9	564.8		398.1	
31		508.5		739.2	6166.7		9048.6		835.4	517.4		484.6	
Total	14883.8	15888.0	25165.8	15847.1	122639.2	213546.7	169642.3	192175.1	31378.9	14059.4	10468.9	11945.6	837640.8 Ton
Mean	496.1	512.5	838.9	511.2	3956.1	7118.2	5472.3	6405.8	1012.2	453.5	373.9	385.3	
Max	656.2	774.3	1245.6	829.7	7518.2	9387.8	9048.6	9588.3	1380.3	759.1	512.9	484.6	9588.3
Min	416.0	380.2	480.2	228.9	480.2	4606.8	1468.4	1346.9	800.0	260.4	305.5	325.1	228.9

WATER YEAR : 2001

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
Drainage Area	4,254 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 - 2001
Number of observation	60
R - Square	0.9197
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:53:20.56

LQS/LQS02D/12

Station - Ban Non Puai, Ban Khwao, Chaiyaphum, (E.5)
Stream - Chi
River - Chi
River System - Chi River

Royal Irrigation Department
Thailand
Hydrology Division
1.46800
QS = 1.9424 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.86	15.97	26.96	31.00	55.39	169.57	233.33	605.94	46.51	17.10	11.71	14.86	
2	13.79	14.86	33.10	31.00	37.40	155.54	198.77	464.19	44.18	17.10	10.71	14.86	
3	12.73	23.09	39.62	26.96	26.96	124.35	176.73	395.65	44.18	17.10	10.71	10.71	
4	11.71	33.10	62.16	31.00	48.88	108.58	191.33	371.06	41.88	14.86	10.71	10.71	
5	11.71	46.51	62.16	31.00	135.23	93.51	224.20	323.40	39.62	15.97	10.71	10.71	
6	10.71	37.40	58.74	33.10	103.48	103.48	270.98	270.98	37.40	14.86	10.71	10.71	
7	10.71	28.96	44.18	33.10	124.35	124.35	323.40	242.57	37.40	13.79	10.71	15.97	
8	10.71	26.96	35.23	28.96	358.95	141.90	371.06	215.19	37.40	13.79	10.71	12.73	
9	9.74	23.09	88.65	31.00	678.41	108.58	335.12	191.33	35.23	12.73	9.74	12.73	
10	9.74	21.85	98.45	33.10	570.69	93.51	261.40	183.99	35.23	12.73	9.74	9.74	
11	8.81	19.43	69.16	41.88	1098.83	93.51	270.98	162.51	28.96	12.73	9.74	8.81	
12	7.90	24.36	76.40	41.88	2980.46	129.75	270.98	141.90	28.96	11.71	9.74	7.02	
13	7.90	25.65	80.11	39.62	5975.16	395.65	206.30	124.35	28.96	10.71	9.74	7.02	
14	7.90	65.63	88.65	141.90	2936.22	420.75	162.51	124.35	26.96	10.71	7.02	7.02	
15	7.90	83.87	76.40	88.65	1257.10	280.67	135.23	124.35	26.96	10.71	7.02	7.02	
16	8.81	62.16	58.74	58.74	947.51	224.20	124.35	113.76	26.96	14.86	7.02	7.02	
17	12.73	93.51	46.51	48.88	605.94	162.51	98.45	113.76	26.96	14.86	7.02	7.02	
18	14.86	93.51	41.88	46.51	435.08	141.90	83.87	108.58	25.65	14.86	7.02	5.37	
19	14.86	113.76	44.18	39.62	358.95	148.67	76.40	98.45	24.36	14.86	5.37	3.18	
20	12.73	141.90	35.23	33.10	346.97	176.73	69.16	88.65	24.36	13.79	4.98	3.18	
21	10.71	119.02	28.96	28.96	280.67	251.93	62.16	76.40	23.09	13.79	4.60	3.18	
22	8.81	80.11	25.65	33.10	224.20	311.82	62.16	72.75	21.85	12.73	4.60	3.18	
23	7.02	52.11	25.65	33.10	242.57	753.44	62.16	65.63	21.85	12.73	4.60	2.86	
24	6.18	41.88	24.36	113.76	280.67	862.61	76.40	65.63	21.85	12.73	4.60	2.86	
25	6.18	35.23	24.36	198.77	224.20	588.23	753.44	62.16	19.43	12.73	4.60	24.36	
26	7.02	31.00	31.00	124.35	162.51	678.41	1155.20	62.16	19.43	12.73	4.60	19.43	
27	7.02	31.00	39.62	76.40	129.75	862.61	1103.13	58.74	19.43	12.73	7.02	12.73	
28	10.71	31.00	33.10	52.11	119.02	555.05	947.51	55.39	18.25	12.73	7.02	8.81	
29	14.86	28.96	28.96	46.51	124.35	408.14	834.88	52.11	17.10	12.73		9.74	
30	14.86	28.96	33.10	39.62	129.75	280.67	1077.39	48.88	17.10	12.73		8.81	
31		26.96		37.40	141.90		1005.50		17.10	12.73		7.02	
Total	314.18	1501.80	1461.27	1675.08	21141.55	8950.62	11224.48	5084.81	884.60	420.92	222.47	289.37	53171.15 Ton
Mean	10.47	48.45	48.71	54.03	681.99	298.35	362.08	169.49	28.54	13.58	7.95	9.33	
Max	14.86	141.90	98.45	198.77	5975.16	862.61	1155.20	605.94	46.51	17.10	11.71	24.36	5975.16
Min	6.18	14.86	24.36	26.96	26.96	93.51	62.16	48.88	17.10	10.71	4.60	2.86	2.86

WATER YEAR : 2001

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
Drainage Area	8,912 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 - 2001
Number of observation	54
R - Square	0.7196
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:53:54.64 LQS/LQS02D/12

Station - Ban Kaeng Ko, Mueang, Chaiyaphum, (E.21)
Stream - Chi
River - Chi
River System - Chi River

Royal Irrigation Department
Thailand
Hydrology Division
0.99530
QS = 7.8974 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	39.2	34.5	32.2	15.7	32.2	172.8	615.1	842.0	121.6	39.2	29.8	15.4	
2	39.2	32.2	36.8	15.7	27.5	168.1	339.8	924.5	103.0	39.2	29.8	15.4	
3	42.3	32.2	34.5	15.0	25.1	168.1	140.2	921.2	98.3	36.8	29.8	15.4	
4	42.3	34.5	36.8	15.0	18.1	163.5	70.3	851.3	98.3	36.8	32.2	15.4	
5	36.8	36.8	36.8	15.0	27.5	191.4	196.0	774.4	98.3	36.8	32.2	15.7	
6	36.8	48.5	39.2	14.6	34.5	200.7	390.8	694.4	93.7	45.4	32.2	15.7	
7	34.5	48.5	42.3	13.4	54.8	191.4	390.8	622.0	89.0	48.5	29.8	15.7	
8	34.5	48.5	45.4	13.4	57.9	200.7	396.9	461.7	84.3	45.4	29.8	15.7	
9	32.2	45.4	39.2	13.4	89.0	191.4	454.8	323.6	84.3	45.4	29.8	15.7	
10	32.2	42.3	45.4	11.8	231.6	345.2	427.8	177.4	79.7	42.3	29.8	15.7	
11	32.2	42.3	57.9	13.0	339.8	553.4	390.8	107.6	75.0	42.3	27.5	15.7	
12	32.2	42.3	54.8	13.4	390.8	638.9	312.8	61.0	67.2	42.3	25.1	15.7	
13	32.2	42.3	48.5	12.2	573.5	619.7	312.8	415.5	67.2	42.3	22.8	15.7	
14	32.2	42.3	45.4	12.2	624.3	605.8	302.0	421.6	57.9	42.3	25.1	15.0	
15	32.2	42.3	51.7	12.6	612.8	660.5	356.0	396.9	57.9	36.8	22.8	14.2	
16	34.5	61.0	51.7	51.7	624.3	672.8	323.6	366.8	57.9	34.5	18.1	13.0	
17	34.5	84.3	42.3	36.8	610.4	645.1	253.3	323.6	54.8	32.2	15.7	13.0	
18	32.2	79.7	39.2	32.2	612.8	608.1	158.8	280.3	54.8	34.5	15.0	11.8	
19	32.2	75.0	32.2	27.5	617.4	440.9	107.6	258.7	57.9	34.5	14.6	11.0	
20	32.2	79.7	27.5	20.4	605.8	440.9	107.6	247.9	64.1	34.5	14.2	10.3	
21	32.2	93.7	25.1	18.1	489.5	553.4	89.0	242.4	64.1	34.5	13.4	9.1	
22	32.2	98.3	20.4	45.4	403.1	638.9	93.7	215.4	61.0	34.5	13.4	8.7	
23	32.2	84.3	22.8	36.8	269.5	669.7	98.3	177.4	57.9	34.5	13.0	7.5	
24	32.2	75.0	20.4	18.1	140.2	638.9	112.3	158.8	54.8	34.5	12.2	7.1	
25	32.2	67.2	18.1	13.8	61.0	682.0	158.8	158.8	51.7	34.5	13.8	7.1	
26	29.8	54.8	15.7	42.3	168.1	842.0	258.7	154.2	51.7	34.5	15.0	6.7	
27	25.1	32.2	15.7	61.0	339.8	857.4	503.4	149.5	48.5	32.2	15.4	6.3	
28	27.5	32.2	15.7	51.7	258.7	817.4	685.1	144.9	45.4	34.5	15.4	5.9	
29	27.5	32.2	18.1	42.3	237.0	799.0	743.6	140.2	39.2	32.2		5.9	
30	34.5	34.5	20.4	34.5	200.7	734.4	743.6	130.9	39.2	32.2		5.5	
31		34.5		32.2	191.4		768.2		39.2	32.2		5.1	
Total	1002.0	1633.5	1032.2	771.2	8969.1	15112.5	10302.5	11144.9	2117.9	1162.3	617.7	366.1	54231.9 Ton
Mean	33.4	52.7	34.4	24.9	289.3	503.8	332.3	371.5	68.3	37.5	22.1	11.8	
Max	42.3	98.3	57.9	61.0	624.3	857.4	768.2	924.5	121.6	48.5	32.2	15.7	924.5
Min	25.1	32.2	15.7	11.8	18.1	163.5	70.3	61.0	39.2	32.2	12.2	5.1	5.1

WATER YEAR : 2001

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
Drainage Area			6,835 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 - 2001		
Number of observation			42		
R - Square			0.8924		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 28-JUN-2004 09:54:12.27

LQS/LQS02D/12

Station - Ban Khai, Muang, Chaiyaphum, (E.23)
Stream - Chi
River - Chi
River System - Chi River

Royal Irrigation Department
Thailand
Hydrology Division
1.42130
QS = 2.2622 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.1	9.3	14.5	14.5	17.4	84.3	132.2	1110.1	28.9	10.8	9.5	0.1	
2	15.1	9.5	14.0	15.1	23.6	91.4	91.4	729.5	28.9	10.5	9.3	0.3	
3	15.1	10.3	16.2	14.5	19.8	70.6	148.6	301.8	33.1	10.8	9.3	0.3	
4	12.9	11.3	18.6	14.5	17.4	58.0	119.0	241.6	33.1	11.3	9.3	0.2	
5	10.8	23.6	28.9	14.0	16.2	66.1	137.6	210.2	28.9	22.3	9.3	0.1	
6	9.8	27.5	28.9	14.5	38.9	51.4	180.1	174.2	31.6	22.3	9.3	0.0	
7	9.8	23.6	24.9	14.5	40.4	58.0	251.3	126.9	31.6	21.0	8.3	0.0	
8	10.5	18.6	19.8	15.1	68.3	58.0	306.2	103.7	31.6	18.6	8.1	0.0	
9	10.8	16.2	22.3	15.1	324.0	58.0	186.0	101.2	31.6	15.7	8.8	0.0	
10	10.8	16.2	45.0	14.5	451.9	56.3	143.1	180.1	31.6	14.0	6.1	0.0	
11	12.3	18.6	51.4	15.7	451.9	51.4	96.3	157.0	24.9	14.0	5.4	0.0	
12	10.5	15.7	45.0	16.2	967.7	54.7	216.4	140.3	22.3	13.4	5.4	0.0	
13	10.5	15.7	30.3	17.4	1736.1	64.0	186.0	162.7	19.8	13.4	5.4	0.1	
14	10.8	15.7	33.1	22.3	2018.0	201.0	159.8	148.6	22.3	13.4	3.5	0.2	
15	10.8	26.2	41.9	58.0	1631.1	244.9	89.0	145.8	22.3	13.4	2.8	0.2	
16	10.8	59.7	33.1	34.5	1258.1	134.9	79.6	124.2	22.3	12.9	2.3	0.3	
17	10.5	54.7	30.3	22.3	1233.0	96.3	66.1	77.3	22.3	12.9	1.9	0.6	
18	9.8	61.8	34.5	24.9	1266.5	82.0	45.0	72.8	22.3	12.9	1.4	0.2	
19	9.8	70.6	31.6	24.9	1183.4	106.2	38.9	72.8	23.6	12.3	1.0	0.0	
20	10.3	77.3	19.8	23.6	1038.1	119.0	35.9	82.0	23.6	11.8	0.6	0.0	
21	10.5	86.7	16.2	23.6	883.6	210.2	33.1	72.8	21.0	10.8	0.7	0.0	
22	10.0	70.6	15.7	40.4	624.8	342.1	28.9	23.6	22.3	9.0	0.6	0.0	
23	9.8	61.8	15.1	14.0	446.6	355.8	30.3	40.4	21.0	9.5	1.1	0.0	
24	9.8	51.4	15.1	14.5	293.1	816.5	56.3	41.9	19.8	9.5	0.4	0.0	
25	9.8	40.4	13.4	30.3	267.7	1054.0	77.3	43.5	21.0	9.5	0.2	0.0	
26	9.3	10.8	12.9	75.1	157.0	736.6	613.3	46.6	15.7	9.3	0.0	0.0	
27	9.5	14.5	13.4	46.6	119.0	654.3	1291.7	43.5	9.5	9.3	0.0	9.3	
28	9.8	15.7	15.7	35.9	103.7	772.6	1368.4	45.0	9.5	9.3	0.1	6.9	
29	9.5	15.7	15.7	26.2	93.8	495.0	1118.1	43.5	9.8	9.0		7.2	
30	9.5	15.7	14.0	26.2	86.7	225.8	883.6	40.4	10.5	9.0		6.7	
31		14.5		18.6	77.3		1208.1		10.3	9.0		6.3	
Total	324.3	979.9	731.3	757.5	16955.1	7469.4	9417.6	4904.0	707.0	390.9	120.1	39.0	42796.1 Ton
Mean	10.8	31.6	24.4	24.4	546.9	249.0	303.8	163.5	22.8	12.6	4.3	1.3	
Max	15.1	86.7	51.4	75.1	2018.0	1054.0	1368.4	1110.1	33.1	22.3	9.5	9.3	2018.0
Min	9.3	9.3	12.9	14.0	16.2	51.4	28.9	23.6	9.5	9.0	0.0	0.0	0.0

WATER YEAR : 2001

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 Wong **Changwat** Kalasin
Drainage Area	98 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 - 2001
Number of observation	45
R - Square	0.9120
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:54:31.59 LQS/LQS02D/12

Station - Ban Kut Chim Khum Mai, Khao Wong, Kalasin, (E.57)
Stream - Nam Yang
River - Chi
River System - Chi River

Royal Irrigation Department
Thailand
Hydrology Division
1.27610
QS = 6.3443 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	0.0	51.4	344.9	57.2	187.4	9.6	4.4	0.0	0.0	0.0	0.0	
2	0.0	0.6	27.8	135.3	44.5	126.0	26.9	5.5	0.0	0.0	0.0	0.0	
3	0.0	13.6	20.4	104.0	30.2	109.2	38.4	7.6	0.0	0.0	0.0	0.0	
4	0.0	1.7	18.2	48.2	18.9	122.9	38.4	5.9	0.0	0.0	0.0	0.0	
5	0.0	7.6	10.2	26.9	15.9	122.9	33.7	4.8	0.0	0.0	0.0	0.0	
6	0.0	2.2	5.2	26.0	10.9	88.7	33.7	1.8	0.0	0.0	0.0	0.0	
7	0.0	1.4	187.4	18.2	10.9	76.3	32.8	1.0	0.0	0.0	0.0	0.0	
8	0.0	0.8	114.5	11.6	13.6	88.7	35.4	0.7	0.0	0.0	0.0	0.0	
9	0.0	0.5	101.5	76.3	111.9	239.4	117.2	0.4	0.0	0.0	0.0	0.0	
10	0.0	0.5	73.9	91.1	167.5	225.2	111.9	0.3	0.0	0.0	0.0	0.0	
11	0.0	13.0	44.5	51.4	2650.3	190.8	57.2	0.0	0.0	0.0	0.0	0.0	
12	0.0	11.6	29.4	32.8	482.6	584.0	39.6	0.0	0.0	0.0	0.0	0.0	
13	0.0	5.5	40.8	20.4	154.4	488.9	22.0	1.1	0.0	0.0	0.0	0.0	
14	0.0	2.0	57.2	10.9	260.9	174.1	10.9	1.5	0.0	0.0	0.0	0.0	
15	0.0	1.0	45.7	5.9	180.7	109.2	6.3	1.2	0.0	0.0	0.0	0.0	
16	0.0	0.5	29.4	4.0	138.4	59.1	5.9	0.8	0.0	0.0	0.0	0.0	
17	0.0	0.5	21.3	3.3	268.1	132.2	4.4	0.5	0.0	0.0	0.0	0.0	
18	0.0	0.6	15.2	2.4	194.2	91.1	2.4	0.1	0.0	0.0	0.0	0.0	
19	0.0	0.7	7.6	1.7	649.4	49.5	2.6	0.0	0.0	0.0	0.0	0.0	
20	0.0	1.4	3.7	1.5	271.8	45.7	2.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	1.1	2.2	27.8	301.3	78.8	2.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	1.1	2.4	260.9	135.3	47.0	1.5	0.0	0.0	0.0	0.0	0.0	
23	0.0	1.1	28.5	184.1	81.3	29.4	3.7	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.8	122.9	119.8	48.2	20.4	5.9	0.0	0.0	0.0	0.0	0.0	
25	0.0	2.0	154.4	104.0	27.8	13.6	11.6	0.0	0.0	0.0	0.0	0.0	
26	0.0	2.6	662.6	63.1	19.6	10.9	9.6	0.0	0.0	0.0	0.0	0.0	
27	0.0	1.8	636.2	117.2	260.9	8.2	8.9	0.0	0.0	0.0	0.0	0.0	
28	0.0	1.5	702.7	151.2	271.8	5.2	8.2	0.0	0.0	0.0	0.0	0.0	
29	0.0	13.0	669.3	126.0	577.5	3.3	7.0	0.0	0.0	0.0		0.0	
30	0.0	11.6	1580.6	98.8	253.7	1.8	5.5	0.0	0.0	0.0		0.0	
31		10.2		71.5	141.6		4.8		0.0	0.0		0.0	
Total	0.0	112.5	5467.1	2341.2	7851.3	3529.9	700.0	37.6	0.0	0.0	0.0	0.0	20039.6 Ton
Mean	0.0	3.6	182.2	75.5	253.3	117.7	22.6	1.3	0.0	0.0	0.0	0.0	
Max	0.0	13.6	1580.6	344.9	2650.3	584.0	117.2	7.6	0.0	0.0	0.0	0.0	2650.3
Min	0.0	0.0	2.2	1.5	10.9	1.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0

WATER YEAR : 2001

CHI RIVER BASIN

Lam Phaniang at Ban Khong Po, Nong Bua Lumphu (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
Drainage Area	1,342 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 - 2001
Number of observation	57
R - Square	0.8561
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-JUN-2004 09:54:47.57

LQS/LQS02D/12

Station - Ban Khong Po, Mueang, Nong Bua Lamphu, (E.68A)
Stream - Lam Phaniang
River - Lam Nam Phong
River System - Chi River

Royal Irrigation Department
Thailand
Hydrology Division

QS = 3.8504 QW 1.22450

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	0.0	31.7	87.4	37.4	2260.1	405.0	1069.5	2.8	0.0	0.0	0.0	
2	0.0	0.0	56.4	74.2	33.1	1875.1	264.2	861.8	2.1	0.0	0.0	0.0	
3	0.0	0.0	97.5	56.4	33.8	1597.6	164.8	688.6	1.6	0.0	0.0	0.0	
4	0.0	0.0	109.6	48.4	27.6	1364.6	199.3	503.4	1.2	0.0	0.0	0.0	
5	0.0	0.0	120.1	36.7	27.6	1203.2	223.8	309.9	0.9	0.0	0.0	0.0	
6	0.0	0.1	127.2	31.7	33.1	1069.5	235.8	167.7	0.7	0.0	0.0	0.0	
7	0.0	0.1	132.6	29.0	104.3	1409.0	251.9	99.2	0.5	0.0	0.0	0.0	
8	0.0	0.1	129.0	29.0	202.2	1674.8	247.9	79.1	0.4	0.0	0.0	0.0	
9	0.0	0.1	87.4	31.1	276.5	1842.9	187.7	63.4	0.3	0.0	0.0	0.0	
10	0.0	0.1	64.6	36.7	378.6	1907.4	181.9	49.5	0.2	0.0	0.0	0.0	
11	0.0	0.2	85.7	80.7	1364.6	1907.4	276.5	39.5	0.2	0.0	0.0	0.0	
12	0.0	0.3	150.9	125.4	3819.9	1752.7	318.3	36.7	0.1	0.0	0.0	0.0	
13	0.0	0.3	239.8	181.9	3886.8	1476.0	352.6	33.1	0.1	0.0	0.0	0.0	
14	0.0	0.4	284.8	190.5	4021.3	1260.2	369.9	31.7	0.1	0.0	0.0	0.0	
15	0.0	0.6	272.4	184.8	4932.5	938.7	322.6	29.7	0.1	0.0	0.0	0.0	
16	0.0	0.8	184.8	139.9	3620.4	671.5	159.2	27.0	0.1	0.0	0.0	0.0	
17	0.0	1.0	107.8	120.1	2585.9	509.1	121.9	24.9	0.0	0.0	0.0	0.0	
18	0.0	1.3	69.3	121.9	2220.7	452.0	77.4	23.0	0.0	0.0	0.0	0.0	
19	0.0	1.8	48.4	80.7	1842.9	297.3	59.9	21.7	0.0	0.0	0.0	0.0	
20	0.0	2.3	45.0	52.9	1597.6	305.7	52.9	20.4	0.0	0.0	0.0	0.0	
21	0.0	3.0	32.4	38.1	1320.4	314.1	42.8	19.7	0.0	0.0	0.0	0.0	
22	0.0	4.0	29.0	41.0	1029.9	318.3	40.3	19.1	0.0	0.0	0.0	0.0	
23	0.0	5.2	27.6	41.0	748.8	318.3	41.7	19.1	0.0	0.0	0.0	0.0	
24	0.0	6.8	31.7	40.3	585.1	309.9	79.1	18.5	0.0	0.0	0.0	0.0	
25	0.0	14.2	59.9	40.3	474.7	318.3	280.6	14.1	0.0	0.0	0.0	0.0	
26	0.0	22.3	99.2	38.8	322.6	343.9	405.0	10.7	0.0	0.0	0.0	0.0	
27	0.0	19.7	107.8	41.0	288.9	369.9	714.3	8.2	0.0	0.0	0.0	0.0	
28	0.0	24.9	120.1	49.5	365.6	400.6	1165.5	6.2	0.0	0.0	0.0	0.0	
29	0.0	23.6	111.3	52.9	768.7	452.0	1453.6	4.8	0.0	0.0		0.0	
30	0.0	26.3	104.3	37.4	1146.7	457.7	1386.7	3.6	0.0	0.0		0.0	
31		27.0		37.4	1521.1		1260.2		0.0	0.0		0.0	
Total	0.0	186.5	3168.3	2197.1	39619.3	29377.8	11343.3	4303.8	11.4	0.0	0.0	0.0	90207.5 Ton
Mean	0.0	6.0	105.6	70.9	1278.0	979.3	365.9	143.5	0.4	0.0	0.0	0.0	
Max	0.0	27.0	284.8	190.5	4932.5	2260.1	1453.6	1069.5	2.8	0.0	0.0	0.0	4932.5
Min	0.0	0.0	27.6	29.0	27.6	297.3	40.3	3.6	0.0	0.0	0.0	0.0	0.0

WATER YEAR : 2001

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 bridge on highway.
Ban Kut Kwang	**Amphoe** Phon Thong **Changwat** Roi Et
Drainage Area	3,168 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 - 2001
Number of observation	71
R - Square	0.9378
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:59:11.40

LQS/LQS02D/12

Station - Ban Kut Kwang, Phon Thong, Roi Et, (E.70)
Stream - Lam Nam Yang
River - Chi
River System - Chi River

Royal Irrigation Department
Thailand
Hydrology Division

QS = 4.0274 QW 1.37150

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.9	12.6	53.6	15899.8	4414.3	24296.4	385.1	396.5	40.7	15.7	5.8	2.0	
2	9.7	8.3	53.6	16791.2	4007.6	19355.2	329.2	351.3	38.6	15.7	5.8	2.0	
3	7.0	30.7	92.1	13956.1	3207.2	11842.2	368.1	340.2	38.6	15.7	5.2	2.0	
4	5.2	67.4	431.4	7404.3	1972.9	11288.4	437.3	296.9	36.6	14.9	4.6	2.0	
5	4.0	89.6	437.3	3298.6	1281.5	12764.7	475.0	245.1	34.6	14.2	4.6	1.6	
6	4.0	58.1	368.1	1686.2	908.9	13456.2	431.4	185.2	32.7	14.2	4.0	1.1	
7	3.0	28.8	1573.9	1016.0	687.0	12034.9	385.1	153.2	30.7	13.4	4.0	1.1	
8	2.0	19.9	1943.4	713.8	1136.5	8438.3	351.3	143.0	30.7	13.4	3.5	0.4	
9	1.6	14.2	1507.5	3857.9	2786.7	8276.5	1146.7	121.7	30.7	14.9	3.5	0.8	
10	1.6	9.7	1529.5	6727.6	10239.7	8835.3	3964.7	105.3	27.0	14.2	3.5	1.6	
11	1.1	15.7	1398.6	4340.9	15433.3	11061.4	4484.3	92.1	23.3	11.9	3.5	2.0	
12	1.1	28.8	1025.9	2699.4	20350.0	12034.9	3023.2	84.5	23.3	11.1	3.5	2.0	
13	1.1	27.0	750.0	1663.6	21346.9	10092.1	1826.6	102.6	22.4	11.9	3.5	1.6	
14	0.4	21.6	731.8	1045.8	21346.9	8799.8	1116.1	425.5	22.4	11.9	4.6	1.6	
15	0.8	17.3	651.7	616.9	19619.2	8046.3	750.0	695.9	26.0	11.9	3.5	1.1	
16	1.1	19.9	499.3	557.3	15330.1	5382.2	548.9	499.3	23.3	11.9	3.5	0.8	
17	1.1	24.2	362.5	408.0	13655.5	3584.0	402.3	323.8	22.4	19.9	3.5	1.1	
18	0.8	24.2	225.2	291.6	16632.9	2751.1	313.0	215.4	21.6	19.0	3.5	0.8	
19	0.4	44.9	150.3	200.9	18374.0	2002.6	270.7	157.7	20.7	15.7	3.0	0.8	
20	0.2	42.8	87.0	165.2	17802.8	1841.1	240.1	116.1	19.0	11.9	2.5	1.1	
21	1.1	28.8	60.4	205.7	17268.3	1540.6	193.0	97.3	19.0	10.4	2.0	2.5	
22	0.2	24.2	47.0	1229.1	15381.7	1797.7	180.5	82.0	19.9	8.3	2.0	4.0	
23	0.2	19.9	67.4	2370.4	11099.1	2198.1	275.9	51.4	19.0	7.0	2.0	2.5	
24	0.2	14.9	625.6	3490.5	6383.7	2274.5	532.2	65.0	17.3	7.0	2.0	1.6	
25	1.6	14.9	3394.2	3377.1	3776.5	1812.1	1136.5	62.7	15.7	7.0	2.0	1.6	
26	0.4	17.3	5020.8	2664.1	2786.7	1518.5	1420.2	58.1	14.9	7.7	1.6	2.0	
27	2.0	14.9	10387.8	3006.6	5849.4	1126.3	1239.6	51.4	14.2	7.0	2.0	1.6	
28	1.6	12.6	11593.1	4948.6	15227.1	870.8	1035.8	47.0	14.2	6.4	2.0	0.8	
29	2.0	12.6	12666.7	6355.2	26961.3	660.5	1006.2	47.0	14.9	5.8		0.8	
30	2.0	19.9	13505.9	6044.7	30293.0	491.2	678.1	40.7	15.7	5.8		0.4	
31		49.2		6016.7	27938.8		491.2		16.5	5.8		3.0	
Total	69.4	834.9	71241.6	123049.8	373499.5	210473.9	29438.3	5653.9	746.6	361.6	94.7	48.3	815512.6 Ton
Mean	2.3	26.9	2374.7	3969.3	12048.4	7015.8	949.6	188.5	24.1	11.7	3.4	1.6	
Max	11.9	89.6	13505.9	16791.2	30293.0	24296.4	4484.3	695.9	40.7	19.9	5.8	4.0	30293.0
Min	0.2	8.3	47.0	165.2	687.0	491.2	180.5	40.7	14.2	5.8	1.6	0.4	0.2

WATER YEAR : 2001

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
Drainage Area			192 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 - 2001		
Number of observation			42		
R - Square			0.9237		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 28-JUN-2004 09:55:23.86 LQS/LQS02D/12

Station - Ban Phon, Khom Muang, Kalasin, (E.76A)
Stream - Huai Sang Ka
River - Lam Pao
River System - Chi River

Royal Irrigation Department
Thailand
Hydrology Division
1.19460
QS = 16.9770 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.3	0.3	1.3	249.9	200.8	1010.9	8.3	10.7	3.1	1.8	1.6	1.5	
2	1.2	5.0	1.9	158.0	278.5	234.3	11.1	8.7	2.8	1.8	1.6	1.5	
3	1.1	4.7	27.8	103.7	536.3	308.5	9.8	9.2	2.9	1.8	1.5	1.5	
4	1.0	3.1	253.1	36.1	272.1	1270.4	8.7	6.7	2.9	1.8	1.5	1.5	
5	1.0	1.3	18.8	33.4	97.5	885.2	7.4	6.4	2.5	1.8	1.5	1.5	
6	1.0	2.0	14.0	24.5	48.3	366.6	6.5	5.3	2.8	1.8	1.6	1.5	
7	1.0	1.9	45.9	19.4	33.4	169.7	6.4	5.0	2.9	1.8	1.6	1.5	
8	0.8	1.5	30.7	20.7	326.5	711.7	8.7	4.7	2.8	1.8	1.5	1.3	
9	0.8	1.3	59.3	85.2	281.7	1203.1	22.6	4.0	2.5	1.8	1.5	1.2	
10	0.7	1.2	37.9	99.7	432.7	1288.8	40.0	3.7	2.3	1.8	1.5	1.2	
11	0.5	1.6	32.5	60.6	1858.7	413.2	21.3	3.7	2.6	1.8	1.5	1.2	
12	0.4	1.5	29.1	40.0	2997.0	208.1	14.6	3.6	2.5	1.8	1.5	1.2	
13	0.3	1.2	23.2	34.3	1508.1	213.3	11.5	3.9	2.6	1.8	1.5	1.2	
14	0.3	1.0	23.9	18.8	1842.2	1710.7	9.2	12.6	2.9	2.0	1.5	1.2	
15	0.2	1.0	28.4	8.0	2742.5	284.9	8.0	6.7	2.3	1.8	1.5	1.2	
16	0.1	1.2	17.0	8.3	879.7	122.2	6.5	5.3	2.2	1.8	1.3	1.1	
17	0.0	1.2	10.7	23.9	2160.6	155.6	5.7	4.5	2.5	1.8	1.3	1.1	
18	0.0	1.1	10.1	20.1	1203.1	153.3	4.7	4.0	2.2	1.8	1.3	1.1	
19	0.0	1.0	6.9	14.6	726.2	92.1	4.7	3.6	2.2	2.2	1.3	1.1	
20	0.0	1.0	4.7	21.3	1245.8	53.2	5.5	3.4	2.0	1.8	1.3	1.1	
21	0.0	0.7	3.6	124.5	1344.9	103.7	4.5	3.2	1.9	1.6	1.6	1.1	
22	0.0	1.1	5.0	470.4	256.2	38.9	3.9	3.4	1.8	1.6	1.6	1.1	
23	0.0	1.2	75.3	348.2	116.1	253.1	4.4	3.4	1.8	1.8	1.6	1.0	
24	0.0	1.1	128.7	162.6	61.8	216.1	12.6	3.7	1.8	1.8	1.6	1.2	
25	0.0	1.8	385.7	126.4	37.0	95.6	28.4	3.6	1.8	1.8	1.6	1.2	
26	0.0	1.2	389.4	116.1	29.1	43.5	23.9	2.9	1.8	1.6	1.5	1.2	
27	0.0	1.1	304.9	1515.2	1221.4	22.0	18.8	2.8	1.8	1.8	1.5	1.2	
28	0.0	2.0	297.8	794.8	2818.8	15.0	16.0	2.8	1.8	1.8	1.5	1.2	
29	0.1	1.5	165.0	330.1	2452.1	12.0	16.6	2.9	1.8	1.8		1.2	
30	0.0	1.5	417.0	210.6	2160.6	11.1	12.6	2.9	1.8	1.8		1.1	
31		1.5		90.5	1613.1		11.1		1.8	1.8		1.1	
Total	11.8	48.8	2849.6	5369.9	31782.8	11666.8	374.0	147.3	71.4	55.8	41.9	38.3	52458.4 Ton
Mean	0.4	1.6	95.0	173.2	1025.3	388.9	12.1	4.9	2.3	1.8	1.5	1.2	
Max	1.3	5.0	417.0	1515.2	2997.0	1710.7	40.0	12.6	3.1	2.2	1.6	1.5	2997.0
Min	0.0	0.3	1.3	8.0	29.1	11.1	3.9	2.8	1.8	1.6	1.3	1.0	0.0

WATER YEAR : 2001

MUN RIVER BASIN

Mun River at Rasi Salai, 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 -		**Amphoe**	Rasi Salai	**Changwat**	Si Sa Ket
Drainage Area		44,275 sq.km.			
Method of sampling		Depth Integrating			
Instrument Used		US.DH - 48, 49			
Period of Available Records		2001 - Cont'd			
Actual Measurement		1997 - Cont'd			
Using Rating Curve Water Year		2001			
Number of observation		24			
R - Square		0.7248			
Remarks		Continued Sediment Station			

RID Computer Center, Processing : 2-APR-2004 09:03:52.05 LQS/LQS02D/12

Station - Rasi Salai, Rasi Salai, Si Sa Ket, (M.5)
Stream - Mun
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 171201
0.56870
QS = 66.5540 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	206.1	254.8	425.4	730.9	898.6	2131.2	3388.2	2809.7	2131.8	405.6	215.6	137.9	
2	206.1	258.9	463.1	675.2	873.1	2166.0	3348.8	2856.5	1986.8	388.0	201.3	142.2	
3	201.3	258.9	487.0	615.7	838.2	2193.9	3322.4	2898.3	1824.5	382.0	191.3	210.9	
4	201.3	258.9	510.0	587.2	792.9	2219.4	3293.4	2936.2	1646.8	363.6	180.9	180.9	
5	201.3	258.9	510.0	581.4	745.6	2248.2	3252.4	2973.7	1478.5	344.4	180.9	137.9	
6	191.3	254.8	492.8	621.3	711.0	2276.3	3223.7	2994.0	1342.9	327.8	180.9	124.3	
7	186.1	254.8	463.1	711.0	669.9	2297.3	3188.5	3000.7	1247.2	310.5	175.5	114.6	
8	180.9	254.8	450.8	755.2	659.4	2313.5	3162.6	3027.6	1205.7	298.5	164.3	114.6	
9	180.9	250.7	444.6	829.2	735.8	2341.1	3139.9	3041.0	1075.4	286.2	164.3	109.5	
10	206.1	246.5	431.9	778.9	1007.7	2390.3	3113.8	3044.3	987.8	278.6	164.3	109.5	
11	316.3	262.9	405.6	755.2	1662.6	2454.7	3094.0	3044.3	931.8	278.6	170.0	109.5	
12	369.8	266.9	393.9	716.0	1878.3	2533.3	3067.6	3041.0	881.6	270.9	180.9	104.2	
13	369.8	246.5	363.6	664.7	1889.1	2601.1	3047.7	3051.0	820.3	270.9	180.9	104.2	
14	327.8	242.3	322.1	626.8	1878.3	2682.1	3014.2	3051.0	745.6	270.9	180.9	119.5	
15	322.1	246.5	304.5	615.7	1869.3	2740.6	2997.4	3051.0	726.0	270.9	158.5	114.6	
16	316.3	250.7	286.2	615.7	1862.0	2819.6	2973.7	3044.3	700.9	270.9	164.3	104.2	
17	310.5	250.7	316.3	626.8	1862.0	2927.4	2943.0	3041.0	675.2	270.9	152.6	98.7	
18	286.2	262.9	344.4	610.1	1914.1	2990.2	2884.4	3027.6	626.8	274.8	146.4	180.9	
19	286.2	278.6	338.9	581.4	2012.9	3042.7	2826.2	3000.7	604.4	274.8	146.4	142.2	
20	278.6	274.8	310.5	545.4	2068.3	3098.6	2769.6	2977.1	587.2	274.8	146.4	124.3	
21	270.9	274.8	286.2	587.2	2095.5	3153.7	2708.6	2946.4	563.6	274.8	142.2	109.5	
22	262.9	274.8	286.2	815.8	2099.4	3190.1	2615.2	2919.0	539.2	270.9	142.2	98.7	
23	254.8	270.9	316.3	911.1	2083.9	3226.1	2565.7	2880.9	526.7	266.9	137.9	95.9	
24	254.8	270.9	475.1	802.1	2052.6	3265.8	2511.9	2839.4	515.6	258.9	137.9	93.0	
25	254.8	270.9	626.8	855.7	2000.9	3407.7	2479.2	2793.0	504.3	246.5	146.4	93.0	
26	266.9	270.9	721.0	923.6	1944.2	3436.9	2482.8	2732.4	487.0	246.5	146.4	86.9	
27	254.8	270.9	802.1	902.8	1923.0	3443.4	2508.3	2653.5	475.1	246.5	146.4	86.9	
28	254.8	286.2	838.2	881.6	1945.9	3443.4	2583.5	2555.0	469.1	246.5	142.2	86.9	
29	250.7	322.1	833.7	885.9	1988.9	3430.4	2650.1	2438.8	450.8	242.3		86.9	
30	246.5	357.3	792.9	881.6	2042.7	3414.2	2712.0	2298.9	425.4	233.7		86.9	
31		399.8		885.9	2091.6		2762.9		412.3	220.2		86.9	
Total	7716.9	8404.3	14043.2	22577.1	49097.7	83879.2	90631.7	86968.3	27596.3	8867.3	4588.2	3596.1	407966.3 Ton
Mean	257.2	271.1	468.1	728.3	1583.8	2796.0	2923.6	2898.9	890.2	286.0	163.9	116.0	
Max	369.8	399.8	838.2	923.6	2099.4	3443.4	3388.2	3051.0	2131.8	405.6	215.6	210.9	3443.4
Min	180.9	242.3	286.2	545.4	659.4	2131.2	2479.2	2298.9	412.3	220.2	137.9	86.9	86.9

WATER YEAR : 2001

MUN RIVER BASIN

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

	Lat	15 - 06 - 58 N.	**Long**	104 - 19 - 21 E.	
Location		on right bank at the bridge on Highway.			
Ban -		**Amphoe**	Mueang	**Changwat**	Si Sa Ket
Drainage Area		3,026 sq.km.			
Method of sampling		Depth Integrating			
Instrument Used		US.DH - 48, 49			
Period of Available Records		2001 - Cont'd			
Actual Measurement		1998 - Cont'd			
Using Rating Curve Water Year		2001			
Number of observation		27			
R - Square		0.9687			
Remarks		Continued Sediment Station			

RID Computer Center, Processing : 2-APR-2004 09:04:25.92 LQS/LQS02D/12

Station - Si Sa Ket, Mueang, Si Sa Ket, (M.9)
Stream - Huai Samran
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 061201
1.02230
QS = 5.7681 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.84	2.55	2.43	12.79	67.31	812.17	379.50	641.81	192.09	7.42	2.43	2.15	
2	2.43	2.61	2.43	10.28	63.83	438.71	389.19	671.56	184.90	6.36	2.38	2.26	
3	2.38	2.72	2.38	9.92	58.18	428.34	397.27	696.75	151.89	5.83	2.38	2.26	
4	2.38	2.78	2.38	10.64	50.37	389.19	415.39	730.81	123.71	5.30	2.38	2.15	
5	2.32	2.78	2.26	12.08	42.04	381.11	446.48	767.53	105.08	4.94	2.32	2.15	
6	2.32	2.78	2.26	11.36	28.06	393.39	399.86	788.53	80.84	5.65	2.38	2.15	
7	2.32	2.84	2.26	11.36	16.77	403.09	410.21	788.53	63.39	4.59	2.38	2.15	
8	2.32	2.72	2.43	12.44	14.60	403.09	412.80	759.66	59.04	4.12	2.32	2.38	
9	2.32	2.61	2.84	13.52	20.76	413.12	407.62	736.06	56.01	4.01	2.32	3.31	
10	2.32	2.55	2.90	13.52	315.66	421.21	412.80	738.68	52.54	3.89	2.32	3.66	
11	2.32	2.55	2.61	11.36	722.95	519.22	428.34	701.99	47.78	3.54	2.32	3.54	
12	2.32	2.49	2.55	8.49	901.61	610.46	442.59	662.40	39.83	3.42	2.38	3.42	
13	2.38	2.49	2.49	4.94	709.85	730.81	469.84	646.38	37.25	3.25	2.49	3.01	
14	2.43	2.49	2.32	3.54	468.41	904.25	481.52	634.95	37.62	3.07	2.38	2.72	
15	2.55	2.49	2.20	3.07	383.18	1033.49	746.55	653.25	39.83	3.07	2.38	2.55	
16	2.55	2.49	2.03	2.96	331.76	951.68	728.19	650.96	37.98	2.96	2.26	2.49	
17	2.67	2.49	1.91	2.78	293.35	789.85	688.90	632.66	35.04	2.84	2.26	2.43	
18	2.72	2.49	1.97	2.55	898.98	698.06	657.82	607.52	31.73	2.78	2.32	2.26	
19	2.67	2.61	2.03	2.43	1511.29	671.88	623.52	591.53	29.89	2.61	2.32	2.26	
20	2.67	2.55	1.97	2.32	1727.67	616.33	591.53	586.97	30.63	2.38	2.32	2.26	
21	2.61	2.49	1.91	14.96	1575.37	540.05	548.19	586.97	29.16	2.67	2.15	2.26	
22	2.55	2.49	2.67	5.30	1318.21	501.02	498.55	593.82	17.85	2.61	2.26	2.26	
23	2.43	2.49	2.38	11.00	1069.82	457.83	491.01	570.99	15.68	2.43	2.26	2.26	
24	2.43	2.49	12.44	17.49	822.68	439.35	504.27	531.59	16.04	2.38	2.20	2.15	
25	2.43	2.43	4.12	20.76	586.97	468.54	514.02	481.59	14.60	2.49	2.15	2.15	
26	2.43	2.43	4.01	22.58	466.53	501.02	487.24	428.60	13.88	2.49	2.15	1.97	
27	2.43	2.43	8.14	22.95	533.54	482.82	492.89	358.00	13.52	2.26	2.15	1.80	
28	2.49	2.49	11.72	42.78	580.12	454.27	510.12	312.44	13.16	2.09	2.15	1.80	
29	2.55	2.49	14.24	66.87	653.25	413.12	539.40	261.78	11.00	2.26		1.80	
30	2.55	2.43	14.24	72.54	767.53	391.45	577.84	217.39	9.92	2.43		1.97	
31		2.43		72.10	796.41		609.80		8.49	2.43		1.97	
Total	74.13	79.17	122.52	531.68	17797.06	16658.92	15703.25	18031.70	1600.37	108.57	64.51	73.95	70845.83 Ton
Mean	2.47	2.55	4.08	17.15	574.10	555.30	506.56	601.06	51.62	3.50	2.30	2.39	
Max	2.84	2.84	14.24	72.54	1727.67	1033.49	746.55	788.53	192.09	7.42	2.49	3.66	1727.67
Min	2.32	2.43	1.91	2.32	14.60	381.11	379.50	217.39	8.49	2.09	2.15	1.80	1.80

WATER YEAR : 2001

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
Drainage Area	1,654 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	1998 - 2001
Number of observation	26
R - Square	0.9061
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:04:49.59 LQS/LQS02D/12

Station - Ban Chiang Pheng, Pa Tiu, Yasothon, (M.32)
Stream - Lam Se Bai
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 091101
1.24860
QS = 2.4079 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.0	0.0	6.4	2233.7	1912.8	4986.6	27.3	62.1	5.0	29.8	2.1	0.0	
2	0.0	0.0	6.4	2008.7	1630.9	3726.7	22.6	62.1	5.0	32.3	2.1	0.0	
3	0.0	0.0	8.7	1677.3	842.5	2772.9	18.9	22.6	4.3	34.8	2.1	0.0	
4	0.0	0.0	13.6	1275.1	311.3	2304.3	18.0	18.9	4.3	40.0	2.1	0.0	
5	0.0	0.0	23.5	728.3	140.7	2024.8	21.6	17.1	4.3	42.7	2.1	0.0	
6	0.0	0.0	25.4	446.9	42.7	1739.5	22.6	14.4	4.3	48.1	1.8	0.0	
7	0.0	0.0	34.8	262.2	17.1	1455.6	26.4	13.6	4.3	50.8	1.8	0.0	
8	0.0	0.0	85.8	214.9	21.6	1441.7	45.4	12.8	3.7	50.8	1.5	0.0	
9	0.0	0.0	88.9	376.6	144.1	3312.4	82.8	11.1	4.3	29.8	1.8	0.0	
10	0.0	0.0	95.1	737.7	1004.6	4300.8	155.7	9.5	5.0	7.2	1.8	0.0	
11	0.0	0.0	98.3	910.6	1646.3	4685.9	181.0	8.7	5.0	6.4	2.1	0.0	
12	0.0	0.0	101.4	775.5	1817.9	4199.5	127.3	8.7	4.3	5.0	2.4	0.0	
13	0.0	0.0	124.0	509.0	1802.1	3843.8	70.8	10.3	4.3	4.3	1.8	0.0	
14	0.0	0.0	194.6	251.6	1739.5	3183.6	42.7	12.8	4.3	3.7	1.8	0.0	
15	0.0	0.0	164.1	111.0	1584.8	2410.9	25.4	11.9	4.3	3.0	1.8	0.0	
16	0.0	0.0	120.8	50.8	1229.1	1802.1	20.7	11.1	5.0	3.0	1.5	0.0	
17	0.0	0.0	82.8	24.4	1104.5	1015.6	18.0	9.5	7.2	2.4	0.8	0.0	
18	0.0	0.0	42.7	22.6	1881.1	1037.7	16.2	8.7	11.1	3.7	0.8	0.0	
19	0.0	0.0	17.1	18.0	2536.4	852.2	13.6	7.9	15.3	4.3	0.5	0.0	
20	0.0	0.0	12.8	16.2	2500.4	556.5	12.8	7.2	16.2	5.0	0.1	0.0	
21	0.0	0.0	11.1	18.9	3205.0	509.0	11.9	5.7	17.1	5.7	0.1	0.0	
22	0.0	0.0	17.1	37.4	3773.5	424.1	11.9	5.7	18.0	5.7	0.1	0.0	
23	0.0	0.8	111.0	111.0	3290.9	328.0	24.4	5.7	19.8	5.7	0.1	0.0	
24	0.0	1.5	509.0	267.6	2536.4	283.8	101.4	5.7	22.6	5.0	0.1	0.0	
25	0.0	1.8	910.6	516.8	1554.2	322.4	120.8	5.7	24.4	5.0	0.0	0.0	
26	0.0	1.8	1206.3	635.8	728.3	262.2	130.7	5.7	24.4	5.0	0.0	0.0	
27	0.0	1.8	1708.3	709.6	737.7	185.2	137.4	5.0	26.4	3.7	0.0	0.0	
28	0.0	1.8	1992.7	691.0	2772.9	114.2	147.5	5.0	26.4	3.0	0.0	0.0	
29	0.0	2.1	2163.6	1004.6	4865.9	85.8	134.0	5.0	26.4	3.0		0.0	
30	0.0	3.0	2286.6	1615.5	6490.1	56.4	107.8	5.0	29.8	2.1		0.0	
31		6.4		1865.2	6571.3		76.8		29.8	2.1		0.0	
Total	0.0	21.0	12263.5	20124.5	60436.6	54224.2	1974.4	395.2	386.6	453.1	33.2	0.0	150312.3 Ton
Mean	0.0	0.7	408.8	649.2	1949.6	1807.5	63.7	13.2	12.5	14.6	1.2	0.0	
Max	0.0	6.4	2286.6	2233.7	6571.3	4986.6	181.0	62.1	29.8	50.8	2.4	0.0	6571.3
Min	0.0	0.0	6.4	16.2	17.1	56.4	11.9	5.0	3.7	2.1	0.0	0.0	0.0

WATER YEAR : 2001

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 left bank at the bridge on highway.
Ban Huai Thap Than	**Amphoe** Huai Thap Thun **Changwat** Si Sa Ket
Drainage Area	1,794 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1997 - Cont'd
Using Rating Curve Water Year	1997 - 2001
Number of observation	99
R - Square	0.9010
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:06:27.63 LQS/LQS02D/12

Station - Ban Huai Thap Than, Uthumphon Phisai, Si Sa Ket, (M.42)
Stream - Huai Thap Than
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 121201
0.79760
QS = 8.2220 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	0.00	0.00	35.69	259.89	115.27	375.14	35.69	14.86	0.00	0.00	
2	0.00	0.00	0.00	0.00	32.95	308.92	81.72	410.55	34.33	13.14	0.00	0.00	
3	0.00	0.00	0.00	0.00	24.35	341.93	69.01	440.06	31.56	11.36	0.00	0.00	
4	0.00	0.00	0.00	0.00	19.75	364.16	60.85	453.27	30.15	9.51	0.00	0.00	
5	0.00	0.00	0.00	53.64	7.56	389.99	59.67	460.36	27.29	7.56	0.00	0.00	
6	0.00	0.00	0.00	58.47	0.00	406.65	64.38	453.27	27.29	5.47	0.00	0.00	
7	0.00	0.00	0.00	64.38	0.00	420.60	80.25	443.28	27.29	5.47	0.00	0.00	
8	0.00	0.00	0.00	66.70	0.00	434.68	119.28	430.36	27.29	3.15	0.00	0.00	
9	0.00	0.00	0.00	57.27	5.47	438.98	168.65	416.37	25.83	3.15	0.00	0.00	
10	0.00	0.00	0.00	46.17	72.80	435.76	175.92	402.75	25.83	3.15	0.00	0.00	
11	0.00	0.00	0.00	35.69	193.19	431.44	192.75	388.02	24.35	3.15	0.00	0.00	
12	0.00	0.00	0.00	35.69	221.10	421.69	205.89	360.14	22.84	3.15	0.00	0.00	
13	0.00	0.00	0.00	34.33	233.81	415.40	216.82	327.98	21.31	0.00	0.00	0.00	
14	0.00	0.00	0.00	31.56	246.34	409.57	236.61	281.16	21.31	0.00	0.00	0.00	
15	0.00	0.00	0.00	30.15	260.63	403.72	257.00	246.34	19.75	0.00	0.00	0.00	
16	0.00	0.00	0.00	28.73	270.05	397.85	269.32	228.89	19.75	0.00	0.00	0.00	
17	0.00	0.00	0.00	25.83	267.16	392.95	275.53	221.10	19.75	0.00	0.00	0.00	
18	0.00	0.00	0.00	19.75	288.63	393.93	273.64	225.36	18.16	0.00	0.00	0.00	
19	0.00	0.00	0.00	19.75	316.22	394.91	263.55	233.81	19.75	0.00	0.00	0.00	
20	0.00	0.00	0.00	19.75	321.66	389.99	244.96	244.27	19.75	0.00	0.00	0.00	
21	0.00	0.00	0.00	25.83	322.56	373.15	221.81	253.32	19.75	0.00	0.00	0.00	
22	0.00	0.00	0.00	48.69	314.40	350.05	200.66	258.45	19.75	0.00	0.00	0.00	
23	0.00	0.00	0.00	49.94	298.82	334.27	195.83	255.52	18.16	0.00	0.00	0.00	
24	0.00	0.00	0.00	47.43	270.05	321.66	196.71	236.61	16.53	0.00	0.00	0.00	
25	0.00	0.00	0.00	43.61	235.21	291.42	204.15	201.53	14.86	0.00	0.00	0.00	
26	0.00	0.00	0.00	38.37	200.22	241.49	216.25	176.07	14.86	0.00	0.00	0.00	
27	0.00	0.00	0.00	38.37	182.52	194.07	235.21	112.58	14.86	0.00	0.00	0.00	
28	0.00	0.00	0.00	38.37	176.52	172.44	259.18	49.94	14.86	0.00	0.00	0.00	
29	0.00	0.00	0.00	41.01	178.78	158.98	284.90	43.61	14.86	0.00		0.00	
30	0.00	0.00	0.00	39.70	193.63	141.40	311.66	38.37	14.86	0.00		0.00	
31		0.00		37.04	216.25		340.91		14.86	0.00		0.00	
Total	0.00	0.00	0.00	1076.22	5406.32	10431.94	6098.34	8668.48	677.48	83.12	0.00	0.00	32441.91 Ton
Mean	0.00	0.00	0.00	34.72	174.40	347.73	196.72	288.95	21.85	2.68	0.00	0.00	
Max	0.00	0.00	0.00	66.70	322.56	438.98	340.91	460.36	35.69	14.86	0.00	0.00	460.36
Min	0.00	0.00	0.00	0.00	0.00	141.40	59.67	38.37	14.86	0.00	0.00	0.00	0.00

WATER YEAR : 2001

MUN RIVER BASIN

Lam Takhong at Ban Mu Si, 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 Mu Si	**Amphoe** Pak Chong **Changwat** Nakhon Ratchasima
Drainage Area	237 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1996 - Cont'd
Using Rating Curve Water Year	1996 - 2001
Number of observation	91
R - Square	0.8424
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:06:45.22 LQS/LQS02D/12

Station - Ban Tha Mapang, Pak Chong, Nakhon Ratchasima, (M.43A)
Stream - Lam Takhong
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 010302
1.41730
QS = 1.5942 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.47	0.87	11.41	7.53	45.50	3.52	11.41	19.40	1.66	0.87	0.47	0.47	
2	0.47	0.67	5.22	5.22	19.40	5.78	10.73	13.52	1.66	0.87	0.47	0.47	
3	0.47	1.55	3.67	4.17	16.49	6.93	8.77	11.41	1.66	0.87	0.47	0.47	
4	0.61	2.75	6.93	65.44	26.68	8.14	12.81	10.73	1.66	0.87	0.47	0.47	
5	0.55	1.42	3.67	23.47	19.40	10.73	12.81	9.41	1.66	0.87	0.47	0.47	
6	0.47	0.87	3.52	15.74	78.90	10.73	12.81	8.14	1.66	0.87	0.44	0.50	
7	0.47	0.67	2.89	12.10	77.98	4.69	14.99	6.34	1.66	0.87	0.44	0.50	
8	0.47	0.55	2.46	9.41	43.93	24.53	53.58	5.22	1.55	0.83	0.44	0.74	
9	0.47	0.58	3.52	149.59	27.88	9.41	48.69	4.69	1.42	0.79	0.44	0.96	
10	0.47	0.61	4.17	29.09	29.09	59.26	40.85	4.69	1.42	0.79	0.44	0.96	
11	0.47	1.08	6.34	16.49	27.88	24.53	34.10	4.69	1.42	0.74	0.39	0.96	
12	0.47	5.22	6.34	16.49	38.00	17.45	47.09	4.69	0.96	0.70	0.36	0.96	
13	0.50	2.89	4.69	12.81	53.58	12.81	26.68	4.17	0.96	0.67	0.33	0.61	
14	0.79	1.92	3.21	78.90	29.09	14.25	20.39	3.52	0.96	0.67	0.26	0.61	
15	0.87	1.80	3.35	278.38	25.60	14.99	16.49	3.35	0.96	0.67	0.26	0.61	
16	0.83	3.21	2.75	78.90	22.43	11.41	14.25	3.21	0.96	0.61	0.26	0.58	
17	0.70	3.52	2.34	47.09	18.41	9.41	12.81	3.05	1.08	0.61	0.26	0.58	
18	0.70	3.35	2.19	34.10	10.07	15.74	10.73	3.05	1.18	0.61	0.26	0.50	
19	0.70	6.93	2.19	22.43	12.10	10.73	9.41	2.89	1.18	0.61	0.20	0.55	
20	0.70	3.35	1.92	15.74	10.07	9.41	8.14	2.59	0.96	0.61	0.20	0.50	
21	0.58	3.35	1.66	14.25	8.77	10.73	6.34	2.46	0.96	0.58	0.24	0.47	
22	0.55	3.67	1.42	26.68	8.14	12.81	5.78	2.46	0.96	0.58	0.24	0.44	
23	0.55	2.59	1.42	61.30	6.93	12.10	16.49	2.34	0.92	0.58	0.24	0.44	
24	0.29	2.46	1.31	30.32	6.34	10.73	19.40	2.34	0.92	0.55	0.36	0.44	
25	0.20	6.34	3.05	55.24	5.78	12.10	22.43	2.19	0.92	0.55	0.50	0.36	
26	0.20	2.89	2.75	20.39	3.67	14.25	15.74	2.19	0.92	0.55	0.50	0.33	
27	0.36	5.22	2.75	15.74	3.67	14.99	14.99	2.19	0.87	0.55	0.55	0.29	
28	0.74	6.34	7.53	14.99	3.67	14.99	12.81	2.06	0.87	0.55	0.55	0.26	
29	0.70	3.52	5.22	15.74	3.67	14.25	11.41	2.06	0.87	0.50		0.26	
30	0.58	1.18	3.21	12.81	3.21	12.81	8.14	2.06	0.87	0.50		0.26	
31		1.42		10.73	3.05		8.14		0.87	0.50		0.26	
Total	16.40	82.79	113.10	1201.28	689.38	414.21	569.21	151.11	36.58	20.99	10.51	16.28	3321.84 Ton
Mean	0.55	2.67	3.77	38.75	22.24	13.81	18.36	5.04	1.18	0.68	0.38	0.53	
Max	0.87	6.93	11.41	278.38	78.90	59.26	53.58	19.40	1.66	0.87	0.55	0.96	278.38
Min	0.20	0.55	1.31	4.17	3.05	3.52	5.78	2.06	0.87	0.50	0.20	0.26	0.20

WATER YEAR : 2001

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
Drainage Area	665 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1981 - 1988, 1991, 1997 - Cont'd
Using Rating Curve Water Year	1981 - 2001
Number of observation	258
R - Square	0.8161
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:07:23.86 LQS/LQS02D/12

Station - Vaccine Serum Office, Pak Chong, Nakhon Ratchasima, (M.89)
Stream - Lam Ta Khong
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 141201
1.54060
QS = 1.6033 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.7	9.8	64.5	28.0	28.0	32.4	28.0	54.0	11.5	8.2	6.2	6.7	
2	12.1	10.9	26.9	20.2	68.1	24.8	25.9	50.6	10.9	8.2	6.2	6.7	
3	16.2	12.1	23.8	16.2	36.2	20.2	23.8	37.5	10.9	8.2	6.2	6.7	
4	12.7	11.5	17.7	23.8	34.9	17.7	22.8	32.4	10.9	8.2	6.2	6.7	
5	12.1	15.4	20.2	106.1	59.1	17.7	28.0	25.9	10.9	8.2	6.7	6.7	
6	11.5	12.7	16.2	54.0	231.2	20.2	26.9	24.8	10.9	8.2	7.2	6.7	
7	10.9	11.5	16.9	37.5	241.5	18.5	29.1	21.1	10.4	8.2	6.7	6.7	
8	10.4	10.9	15.4	29.1	156.1	16.2	44.4	19.4	10.4	8.2	6.7	7.7	
9	10.4	10.4	13.4	50.6	85.4	31.3	128.7	18.5	10.4	7.7	6.7	9.3	
10	10.4	9.8	14.0	214.5	60.9	43.0	134.0	17.7	9.8	7.7	6.7	8.7	
11	9.8	9.8	15.4	73.7	79.5	87.4	108.3	16.2	9.8	7.7	6.7	7.2	
12	9.3	13.4	16.9	41.6	83.4	40.2	85.4	15.4	9.8	7.7	6.7	6.7	
13	9.3	17.7	19.4	30.2	83.4	28.0	95.5	15.4	9.8	7.7	6.7	6.7	
14	9.3	17.7	17.7	25.9	117.1	22.8	57.4	14.6	9.8	7.7	6.2	6.7	
15	9.3	12.7	16.2	164.7	70.0	24.8	44.4	14.6	9.3	7.7	6.2	6.7	
16	10.4	14.0	15.4	438.9	50.6	20.2	33.6	14.6	9.3	7.7	6.2	6.7	
17	10.4	24.8	14.6	179.4	40.2	18.5	29.1	14.6	9.3	7.7	6.2	6.2	
18	10.4	20.2	12.7	99.7	32.4	26.9	23.8	14.0	9.3	7.7	6.2	6.2	
19	10.4	25.9	12.1	66.3	25.9	33.6	21.9	13.4	9.3	7.7	6.2	6.2	
20	9.8	30.2	12.1	43.0	23.8	22.8	20.2	12.1	9.3	7.7	5.7	6.2	
21	9.3	19.4	10.9	31.3	21.1	21.9	20.2	12.1	8.7	7.2	5.7	5.7	
22	8.7	16.9	11.5	37.5	19.4	29.1	19.4	12.1	8.7	7.2	5.7	5.7	
23	8.7	18.5	10.9	89.4	16.9	32.4	21.1	12.1	8.7	7.2	5.7	5.7	
24	8.7	14.6	10.4	106.1	16.2	45.9	52.3	12.1	8.7	7.2	6.2	5.7	
25	8.7	16.9	10.4	66.3	16.2	89.4	57.4	12.1	8.7	7.2	7.2	5.7	
26	8.2	17.7	15.4	70.0	15.4	71.8	59.1	12.1	8.7	7.2	7.2	5.3	
27	8.7	14.6	19.4	38.9	14.6	54.0	49.0	11.5	8.7	7.2	6.7	5.3	
28	8.7	16.2	45.9	30.2	14.6	49.0	43.0	11.5	8.7	7.2	6.7	5.7	
29	8.7	16.9	22.8	25.9	14.0	52.3	36.2	11.5	8.7	7.2		6.2	
30	9.3	16.2	17.7	28.0	21.1	36.2	34.9	11.5	8.7	7.2		6.2	
31		55.7		25.9	36.2		40.2		8.7	6.7		6.2	
Total	305.5	525.0	556.8	2292.9	1813.4	1049.2	1444.0	565.4	297.7	236.7	179.6	201.5	9467.7 Ton
Mean	10.2	16.9	18.6	74.0	58.5	35.0	46.6	18.8	9.6	7.6	6.4	6.5	
Max	16.2	55.7	64.5	438.9	241.5	89.4	134.0	54.0	11.5	8.2	7.2	9.3	438.9
Min	8.2	9.8	10.4	16.2	14.0	16.2	19.4	11.5	8.7	6.7	5.7	5.3	5.3

WATER YEAR : 2001

MUN RIVER BASIN

Huai TaThieo at Ban Na Hai, Ubon Ratchathani (M.127)

Lat 15 - 38 - 37 N. **Long** 104 - 55 - 57 E.

Location	on left bank at the bridge on road.
Ban Na Hai	**Amphoe** Trakan Phutphon **Changwat** Ubon Ratchathani
Drainage Area	414 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1997 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	30
R - Square	0.9120
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:07:39.93 LQS/LQS02D/12

Station - Ban Na Hai, Trakan Phutphon, Ubon Ratchathani. (M.127)
Stream - Huai Ta Thieo
River - Lam Se Bok
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 241201
1.40030
QS = 2.9177 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.00	0.00	1.53	2816.29	94.67	498.50	35.03	63.87	0.81	0.17	0.08	0.00	
2	0.00	0.00	1.04	946.89	66.75	335.82	26.24	55.45	0.42	0.17	0.08	0.00	
3	0.00	0.00	69.67	382.39	55.45	233.86	24.72	50.40	0.31	0.17	0.08	0.00	
4	0.00	0.00	45.85	197.66	45.85	197.66	24.72	35.03	0.31	0.17	0.08	0.00	
5	0.00	0.00	24.72	125.79	43.62	1756.83	24.72	24.72	0.42	0.17	0.02	0.00	
6	0.00	0.00	13.46	98.00	39.26	1218.44	35.03	16.19	0.42	0.12	0.02	0.00	
7	0.00	0.00	13.46	75.61	29.35	460.91	58.22	12.58	0.42	0.12	0.02	0.00	
8	0.00	0.00	24.72	122.21	69.67	256.04	151.65	10.06	0.42	0.12	0.02	0.00	
9	0.00	0.00	24.72	207.83	202.73	3732.39	197.66	7.70	0.35	0.12	0.00	0.00	
10	0.00	0.00	41.42	156.09	558.09	8747.59	160.57	6.65	0.35	0.12	0.00	0.00	
11	0.00	0.00	84.88	108.19	838.65	5182.31	108.19	5.63	0.35	0.12	0.00	0.00	
12	0.00	0.00	188.19	69.67	548.02	1836.27	75.61	4.67	0.35	0.17	0.00	0.00	
13	0.00	0.00	136.70	52.72	274.72	2492.90	55.45	6.65	0.35	0.17	0.00	0.00	
14	0.00	0.00	98.00	41.42	218.13	1150.65	45.85	8.47	0.31	0.17	0.00	0.00	
15	0.00	0.00	78.63	27.78	228.58	434.05	26.24	10.06	0.31	0.20	0.00	0.00	
16	0.00	0.00	55.45	21.77	244.51	197.66	18.92	7.70	0.26	0.26	0.04	0.00	
17	0.00	0.00	30.95	16.19	1650.33	769.82	11.72	5.63	0.26	0.26	0.08	0.00	
18	0.00	0.00	20.33	16.19	2063.92	715.09	9.25	4.67	0.26	0.26	0.08	0.00	
19	0.00	0.12	11.72	11.72	862.24	228.58	10.06	2.92	0.31	0.26	0.08	0.00	
20	0.00	0.17	8.47	10.06	758.78	178.84	9.25	2.92	0.31	0.20	0.08	0.00	
21	0.00	0.08	6.65	133.03	693.52	174.22	7.70	2.92	0.26	0.20	0.04	0.00	
22	0.00	0.04	63.87	661.53	256.04	136.70	17.54	2.32	0.26	0.17	0.02	0.00	
23	0.00	0.26	650.96	548.02	151.65	197.66	374.51	1.77	0.20	0.17	0.02	0.00	
24	0.00	0.31	5328.58	256.04	125.79	300.22	335.82	1.53	0.17	0.12	0.02	0.00	
25	0.00	0.26	1487.66	147.87	101.37	262.22	256.04	1.04	0.12	0.12	0.00	0.00	
26	0.00	0.26	803.62	104.76	144.12	169.64	188.19	1.04	0.12	0.12	0.00	0.00	
27	0.00	0.20	548.02	136.70	1150.65	108.19	133.03	1.04	0.12	0.12	0.00	0.00	
28	0.00	0.20	1868.32	528.06	5604.71	72.62	244.51	0.59	0.12	0.12	0.00	0.00	
29	0.00	0.17	3194.08	619.55	11716.76	55.45	197.66	0.59	0.12	0.12		0.00	
30	0.00	10.88	2973.70	328.23	10373.42	43.62	125.79	1.04	0.26	0.12		0.00	
31		1.77		165.09	2264.97		84.88		0.20	0.08		0.00	
Total	0.00	14.72	17899.37	9133.35	41476.32	32144.75	3074.77	355.85	9.25	4.98	0.86	0.00	104114.23 Ton
Mean	0.00	0.47	596.65	294.62	1337.95	1071.49	99.19	11.86	0.30	0.16	0.03	0.00	
Max	0.00	10.88	5328.58	2816.29	11716.76	8747.59	374.51	63.87	0.81	0.26	0.08	0.00	11716.76
Min	0.00	0.00	1.04	10.06	29.35	43.62	7.70	0.59	0.12	0.08	0.00	0.00	0.00

WATER YEAR : 2001

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
Drainage Area	242 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, 49
Period of Available Records	2001 - Cont'd
Actual Measurement	2000 - Cont'd
Using Rating Curve Water Year	2000 - 2001
Number of observation	9
R - Square	0.7697
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:07:56.77 LQS/LQS02D/12

Station - Ban Hin Phoeng, Pak Chong, Nakhon Ratchasima, (M.134)
Stream - Huai Hin Lap
River - Lam Takhong
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 181202
1.84310
QS = 13.3670 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.6	1.3	3.7	1.5	1.3	1.3	10.8	12.9	1.3	0.3	0.2	0.5	
2	1.6	1.3	6.2	1.5	1.1	1.3	10.1	12.2	1.3	0.3	0.2	0.6	
3	1.5	1.5	22.0	1.5	1.1	1.1	8.9	11.5	1.3	0.3	0.2	0.6	
4	1.5	1.5	15.9	1.5	1.3	1.1	8.9	8.9	1.1	0.2	0.2	0.7	
5	1.6	1.6	3.5	1.3	1.5	0.8	8.9	8.1	1.1	0.2	0.2	0.8	
6	1.6	1.8	2.7	1.1	1.5	0.8	8.5	7.7	1.1	0.2	0.2	0.8	
7	1.6	1.8	2.7	1.1	2.7	1.0	8.5	7.7	1.1	0.2	0.2	0.8	
8	1.8	1.6	2.5	1.3	2.2	1.0	8.9	6.9	1.1	0.2	0.2	1.1	
9	1.8	1.8	1.8	1.5	2.2	1.1	9.5	6.6	1.1	0.2	0.2	1.1	
10	2.0	2.2	3.2	1.5	1.5	1.1	9.5	6.6	1.1	0.2	0.2	0.7	
11	2.0	5.5	4.0	2.2	1.3	1.3	8.5	5.2	1.3	0.2	0.2	0.7	
12	2.0	11.5	4.3	2.9	1.1	1.3	5.2	4.6	1.3	0.2	0.2	0.6	
13	2.5	22.0	3.7	2.9	1.1	1.3	5.2	4.0	1.3	0.2	0.2	0.6	
14	2.5	54.3	3.5	2.5	1.1	1.0	8.1	1.6	1.3	0.2	0.1	0.6	
15	2.5	13.6	3.2	1.8	1.3	1.0	2.5	1.5	1.1	0.2	0.1	0.7	
16	2.9	10.1	2.7	1.5	1.3	1.1	2.0	1.3	1.1	0.2	0.2	0.7	
17	2.9	354.4	2.0	1.3	1.0	1.1	1.8	1.3	0.8	0.2	0.2	0.6	
18	2.9	10.8	1.8	1.1	1.0	1.3	1.8	1.3	0.6	0.2	0.3	0.5	
19	3.5	8.5	1.5	1.1	1.0	1.3	1.8	1.3	0.5	0.1	0.4	0.5	
20	3.5	8.9	1.3	1.5	1.1	1.0	1.5	1.3	0.5	0.1	0.5	0.5	
21	3.2	7.7	1.3	1.3	1.1	1.0	1.5	1.3	0.4	0.1	0.5	0.5	
22	2.5	6.6	1.5	1.3	1.0	1.1	1.5	1.3	0.4	0.1	0.5	0.5	
23	2.2	5.2	1.5	1.3	1.0	1.6	1.8	1.1	0.4	0.2	0.5	0.5	
24	2.2	4.3	1.3	1.1	0.8	16.7	13.6	1.1	0.4	0.2	0.5	0.5	
25	1.8	4.0	1.3	1.1	0.8	22.0	14.4	1.1	0.4	0.2	0.5	0.5	
26	1.5	3.7	1.1	1.1	1.1	13.6	35.5	1.1	0.3	0.2	0.5	0.5	
27	1.1	3.5	1.5	1.3	1.1	12.9	22.0	1.1	0.3	0.2	0.5	0.4	
28	1.1	3.2	1.6	1.3	1.0	12.2	16.7	1.3	0.3	0.2	0.5	0.5	
29	0.8	3.5	1.6	1.1	1.1	11.5	16.7	1.3	0.3	0.2		0.5	
30	2.7	4.0	1.5	1.0	1.1	10.8	14.4	1.3	0.3	0.2		0.5	
31		3.7		1.1	1.1		12.9		0.3	0.2		0.5	
Total	62.9	565.4	106.4	45.6	38.9	125.7	281.9	124.5	25.2	6.1	8.4	19.1	1410.1 Ton
Mean	2.1	18.2	3.5	1.5	1.3	4.2	9.1	4.2	0.8	0.2	0.3	0.6	
Max	3.5	354.4	22.0	2.9	2.7	22.0	35.5	12.9	1.3	0.3	0.5	1.1	354.4
Min	0.8	1.3	1.1	1.0	0.8	0.8	1.5	1.1	0.3	0.1	0.1	0.4	0.1

WATER YEAR : 2001

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
Drainage Area	241 sq.km.
Method of sampling	Depth Integrating.
Instrument Used	US.DH - 48, 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1997 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	27
R - Square	0.8268
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:08:14.87 LQS/LQS02D/12

Station - Ban Don ao, Kantharalak, Si Sa Ket, (M.142)
Stream - Huai Khayung
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 270202
1.08610
QS = 3.3812 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.44	1.91	3.23	85.53	26.43	50.71	26.82	171.68	9.94	3.38	2.22	1.42	
2	3.23	1.91	3.09	63.85	26.82	40.33	20.09	141.86	9.54	3.23	2.12	1.42	
3	2.55	1.91	2.44	29.29	21.71	33.67	22.39	75.61	9.15	3.09	2.12	1.42	
4	2.33	1.91	2.22	21.37	19.50	33.23	42.57	53.90	8.55	2.94	2.12	1.42	
5	2.12	1.91	1.91	18.32	19.50	81.83	88.62	42.57	8.16	2.94	2.01	1.42	
6	1.91	2.65	2.22	14.83	22.39	55.73	54.82	33.23	7.57	2.94	2.01	1.42	
7	1.91	2.65	2.33	12.12	26.82	40.33	35.44	27.20	7.18	2.94	1.91	1.49	
8	1.80	2.55	1.91	9.94	21.37	32.79	27.59	23.41	6.79	2.80	1.91	1.49	
9	1.49	2.65	5.25	15.99	30.16	30.60	40.33	20.69	6.21	2.65	1.91	1.49	
10	1.42	2.65	8.95	16.57	71.67	48.44	58.03	18.32	6.21	2.65	1.91	1.49	
11	1.35	3.68	3.97	15.12	353.78	46.63	73.92	16.57	6.02	2.65	1.91	1.49	
12	1.91	5.25	3.82	14.08	127.85	52.08	53.45	18.03	6.02	2.65	1.80	1.42	
13	1.91	5.06	5.44	17.74	80.70	63.29	40.78	109.59	7.37	2.65	1.80	1.42	
14	2.01	4.87	3.53	13.59	66.08	42.12	45.72	95.54	8.75	2.65	1.80	1.42	
15	2.01	5.06	4.68	10.91	60.52	33.23	35.44	130.79	7.37	2.55	1.70	1.42	
16	2.01	8.95	5.63	9.94	46.63	27.99	32.79	68.87	6.40	2.55	1.70	1.70	
17	2.01	11.64	7.37	8.95	38.10	26.82	26.04	48.44	5.63	2.55	1.70	2.01	
18	1.91	8.55	4.68	9.94	36.77	23.07	36.32	37.21	5.06	2.44	1.59	2.01	
19	2.22	9.35	3.68	9.15	30.60	20.69	26.04	29.73	6.40	2.44	1.49	2.12	
20	2.12	10.18	3.09	10.18	26.82	23.41	45.27	25.26	5.82	2.44	1.49	2.44	
21	1.91	9.15	2.55	98.89	25.26	21.71	25.65	21.03	5.06	2.33	1.49	2.44	
22	1.91	7.18	5.06	290.60	24.49	25.26	21.71	19.80	4.68	2.22	1.49	2.44	
23	1.91	6.40	4.31	132.26	22.05	17.74	58.49	17.74	4.50	2.22	1.49	2.44	
24	1.91	6.02	30.16	68.31	26.04	16.28	49.34	16.86	3.97	2.22	1.49	2.44	
25	1.91	6.02	140.38	49.34	22.39	31.91	39.88	15.70	3.97	2.12	1.49	2.44	
26	1.91	5.44	112.49	88.00	19.50	41.23	36.32	14.08	3.82	2.12	1.42	2.33	
27	1.91	5.06	94.20	64.41	50.25	23.41	28.42	13.10	3.82	2.12	1.42	2.33	
28	1.91	3.82	79.00	47.53	76.74	19.21	75.05	12.37	3.68	2.12	1.35	2.33	
29	1.91	5.06	39.44	36.77	65.52	22.39	75.61	11.39	3.53	2.01		2.22	
30	1.91	3.23	26.04	32.35	62.18	17.44	43.92	11.15	3.53	2.22		2.22	
31		2.80		26.04	69.99		71.11		3.53	2.22		2.22	
Total	62.76	155.47	613.07	1341.91	1618.63	1043.57	1357.97	1341.72	188.23	79.05	48.86	57.78	7909.02 Ton
Mean	2.09	5.02	20.44	43.29	52.21	34.79	43.81	44.72	6.07	2.55	1.75	1.86	
Max	5.44	11.64	140.38	290.60	353.78	81.83	88.62	171.68	9.94	3.38	2.22	2.44	353.78
Min	1.35	1.91	1.91	8.95	19.50	16.28	20.09	11.15	3.53	2.01	1.35	1.42	1.35

WATER YEAR : 2001

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
Drainage Area	46 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1997 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	27
R - Square	0.8099
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:08:39.06 LQS/LQS02D/12

Station - Ban Nong Udom, Kantharalak, Si Sa Ket, (M.143)
Stream - Huai Sang Kot
River - Huai Khayung
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 270202
1.02450
QS = 2.7861 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.13	0.05	0.29	18.63	2.05	7.77	4.11	66.73	1.29	0.54	0.45	0.13	
2	0.13	0.05	0.32	15.68	1.76	6.28	4.39	16.87	1.20	0.51	0.45	0.13	
3	0.13	0.05	0.29	5.67	1.54	6.69	14.05	11.68	1.12	0.51	0.45	0.13	
4	0.13	0.05	0.26	4.19	1.29	6.28	28.06	8.47	1.03	0.51	0.45	0.13	
5	0.05	0.05	0.26	2.79	1.15	14.64	25.08	6.77	1.03	0.51	0.45	0.13	
6	0.05	0.18	0.26	2.05	3.42	7.30	14.05	5.67	1.01	0.51	0.43	0.13	
7	0.02	0.18	0.32	1.59	2.50	5.67	8.88	4.89	0.87	0.51	0.40	0.13	
8	0.02	0.18	0.51	1.29	15.68	4.89	7.09	4.19	0.84	0.48	0.40	0.13	
9	0.05	0.18	0.59	3.42	16.13	4.80	15.23	3.50	0.84	0.48	0.40	0.13	
10	0.05	0.18	0.73	2.13	51.50	7.21	7.65	3.24	0.84	0.45	0.37	0.13	
11	0.08	0.21	0.51	2.96	23.81	7.42	8.88	2.79	0.78	0.45	0.34	0.13	
12	0.08	0.21	0.45	2.87	20.43	5.58	7.42	1.71	0.84	0.45	0.29	0.13	
13	0.08	0.21	0.40	3.04	16.87	15.68	5.78	26.79	0.81	0.45	0.21	0.13	
14	0.08	0.18	0.43	2.13	10.79	8.73	5.46	19.29	0.81	0.45	0.21	0.13	
15	0.08	0.18	0.56	1.59	10.79	6.37	4.60	16.87	0.78	0.45	0.18	0.13	
16	0.08	0.34	0.62	1.29	7.88	5.17	3.82	9.32	0.78	0.45	0.18	0.10	
17	0.05	0.29	0.62	1.15	6.37	4.80	3.24	7.01	0.78	0.45	0.18	0.10	
18	0.05	0.54	0.51	1.03	5.67	3.99	10.94	5.87	0.70	0.45	0.18	0.10	
19	0.05	0.62	0.43	1.01	4.89	6.69	4.97	4.89	0.87	0.45	0.18	0.10	
20	0.05	1.99	0.37	1.03	4.19	8.23	6.37	4.11	0.73	0.43	0.16	0.10	
21	0.05	0.62	0.34	39.36	3.99	5.78	4.60	3.62	0.76	0.43	0.16	0.10	
22	0.05	0.51	0.40	19.29	4.31	7.30	4.11	3.24	0.67	0.43	0.13	0.10	
23	0.05	0.43	1.29	12.71	3.50	5.46	11.97	2.96	0.67	0.43	0.13	0.10	
24	0.05	0.40	22.73	8.00	4.48	9.47	6.89	2.50	0.67	0.45	0.13	0.10	
25	0.05	0.37	21.65	9.47	3.33	14.94	5.96	2.27	0.65	0.45	0.13	0.10	
26	0.05	0.37	9.17	9.61	4.31	10.35	5.09	2.05	0.65	0.45	0.13	0.10	
27	0.05	0.29	9.91	7.42	20.60	6.77	4.80	2.05	0.65	0.45	0.13	0.10	
28	0.05	0.62	7.65	4.97	22.91	5.38	23.45	1.59	0.56	0.45	0.13	0.10	
29	0.05	0.62	3.70	4.11	12.86	5.78	9.91	1.45	0.56	0.45		0.10	
30	0.05	0.51	18.45	3.13	12.12	4.89	6.37	1.40	0.54	0.45		0.10	
31		0.37		2.42	12.56		22.19		0.54	0.45		0.10	
Total	1.94	11.03	104.02	196.03	313.68	220.31	295.41	253.79	24.87	14.38	7.43	3.55	1446.44 Ton
Mean	0.06	0.36	3.47	6.32	10.12	7.34	9.53	8.46	0.80	0.46	0.27	0.11	
Max	0.13	1.99	22.73	39.36	51.50	15.68	28.06	66.73	1.29	0.54	0.45	0.13	66.73
Min	0.02	0.05	0.26	1.01	1.15	3.99	3.24	1.40	0.54	0.43	0.13	0.10	0.02

WATER YEAR : 2001

MUN RIVER BASIN

Huai Tha at Ban Tamnak Sai, Si Sa Ket (M.144A)

Lat 14 - 32 - 19 N. **Long** 104 - 29 - 29 E.

Location	on left bank at the bridge on road.
Ban Tamnak Sai	**Amphoe** Khun Han **Changwat** Si Sa Ket
Drainage Area	124 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1997 - Cont'd
Using Rating Curve Water Year	1997 - 2001
Number of observation	45
R - Square	0.8713
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:09:00.52 LQS/LQS02D/12

Station - Ban Tamnak Sai, Khun Han, Si Sa Ket, (M.144A)
Stream -
River -
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 270202
1.66890
QS = 0.7920 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.48	0.11	1.42	144.93	37.57	35.60	82.83	160.61	9.42	22.36	2.78	1.20	
2	2.48	0.02	3.09	59.47	22.36	26.97	29.97	61.88	8.69	19.13	2.48	1.20	
3	2.19	0.00	1.92	37.57	18.10	20.18	33.68	57.10	8.69	17.09	2.48	1.20	
4	1.92	0.00	1.20	26.97	15.23	19.13	59.47	39.58	8.69	16.15	2.48	1.42	
5	1.92	0.55	2.19	23.48	12.61	88.53	80.04	26.97	8.07	15.23	2.48	1.42	
6	1.66	0.99	2.19	20.18	14.33	33.68	50.23	26.97	7.48	13.46	2.48	1.42	
7	1.20	0.99	1.42	19.13	17.09	22.36	33.68	23.48	6.90	12.61	2.19	1.42	
8	0.99	0.99	1.92	18.10	14.33	19.13	26.97	21.26	6.90	11.78	2.19	1.42	
9	0.99	0.79	8.69	19.13	14.33	20.18	41.63	20.18	6.90	10.97	1.42	1.42	
10	0.79	0.55	31.80	25.78	80.04	35.60	33.68	18.10	6.90	10.97	0.99	1.42	
11	0.79	0.44	7.48	37.57	152.69	26.97	39.58	17.09	6.90	10.18	0.66	1.42	
12	0.79	1.20	4.79	25.78	69.33	25.78	43.72	15.23	6.90	9.42	0.55	1.42	
13	0.66	0.99	5.29	24.62	61.88	23.48	33.68	186.03	6.90	8.69	0.55	1.42	
14	0.55	0.79	6.35	20.18	61.88	19.13	41.63	52.48	8.07	7.48	0.55	1.42	
15	0.44	3.09	4.79	17.09	50.23	16.15	25.78	74.56	6.90	6.90	0.44	1.42	
16	0.25	4.79	9.42	15.23	28.17	14.33	22.36	43.72	5.81	6.35	0.44	1.42	
17	0.05	4.79	15.23	14.33	23.48	13.46	17.09	31.80	5.81	6.35	0.34	1.42	
18	1.66	4.31	9.42	12.61	22.36	11.78	26.97	26.97	5.81	5.81	0.34	1.42	
19	2.19	4.31	6.35	11.78	19.13	10.97	17.09	23.48	5.81	5.29	0.25	1.42	
20	1.20	7.48	5.81	12.61	15.23	14.33	31.80	22.36	5.29	5.29	0.25	1.42	
21	1.20	4.79	5.29	335.45	14.33	17.09	18.10	20.18	5.29	5.29	0.25	1.20	
22	0.99	3.09	6.90	177.16	13.46	16.15	15.23	18.10	5.29	5.29	1.20	1.20	
23	0.79	1.20	4.31	69.33	12.61	10.97	123.24	17.09	8.69	4.79	1.20	1.20	
24	0.99	0.79	11.78	43.72	12.61	8.69	94.38	16.15	8.69	4.79	1.42	1.20	
25	0.99	1.20	204.29	39.58	11.78	12.61	37.57	14.33	8.69	4.31	1.42	1.20	
26	0.79	1.20	77.28	168.69	10.97	17.09	26.97	13.46	8.69	3.41	1.20	1.20	
27	0.66	1.20	91.44	71.89	16.15	12.61	21.26	13.46	8.07	3.09	0.99	1.20	
28	0.55	0.25	80.04	37.57	116.51	10.97	172.79	12.61	8.07	2.78	0.99	1.20	
29	0.34	0.17	69.33	29.97	37.57	23.48	45.85	10.97	7.48	2.78		1.20	
30	0.17	0.11	74.56	26.97	31.80	25.78	29.97	10.18	6.90	2.78		1.20	
31		0.05		21.26	48.02		48.02		6.90	2.78		1.20	
Total	32.67	51.23	755.99	1608.13	1076.18	653.18	1405.26	1096.38	225.60	263.60	35.01	40.94	7244.17 Ton
Mean	1.09	1.65	25.20	51.88	34.72	21.77	45.33	36.55	7.28	8.50	1.25	1.32	
Max	2.48	7.48	204.29	335.45	152.69	88.53	172.79	186.03	9.42	22.36	2.78	1.42	335.45
Min	0.05	0.00	1.20	11.78	10.97	8.69	15.23	10.18	5.29	2.78	0.25	1.20	0.00

WATER YEAR : 2001

MUN RIVER BASIN

Lam Phra Phloeng at Ban Wang Takhian , Nakhon Ratchasima (M.145)

Lat 14 - 29 - 24 N. **Long** 101 - 41 - 14 E.

Location	on right bank at Ban Wang Takhian .
Ban Wang Takhian	**Amphoe** Pak Chong **Changwat** Nakhon Ratchasima
Drainage Area	333 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59 - 40 P
Period of Available Records	2001 - Cont'd
Actual Measurement	1996 - Cont'd
Using Rating Curve Water Year	1996 - 2001
Number of observation	96
R - Square	0.6849
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:09:22.11 LQS/LQS02D/12

Station - Ban Wang Takhian, Pak Chong, Nakhon Ratchasima, (M.145)
Stream - Lam Phra Phloeng
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 171201
1.14840
QS = 13.1290 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.1	7.3	9.6	11.9	9.6	17.4	22.5	44.6	10.2	8.4	3.0	6.7	
2	16.8	7.9	7.9	13.1	9.6	16.8	23.3	41.8	10.2	8.4	3.0	20.0	
3	14.3	7.3	9.0	13.1	10.2	16.8	56.1	36.2	10.2	8.4	3.0	7.3	
4	16.2	8.4	22.5	13.1	13.1	16.8	26.6	30.8	10.2	7.3	2.5	7.3	
5	13.1	10.2	25.8	12.5	89.3	18.1	21.9	36.2	9.6	7.3	2.5	6.7	
6	10.2	9.6	26.6	10.7	154.1	16.8	19.3	36.2	9.6	6.7	2.5	6.2	
7	9.0	9.0	34.9	9.0	180.5	16.2	87.6	29.1	9.6	6.7	2.5	5.7	
8	7.9	10.2	21.2	9.6	69.3	15.6	29.9	26.6	9.6	6.2	2.1	5.1	
9	13.1	10.2	18.7	9.6	34.9	15.6	27.4	25.8	9.0	5.7	2.1	4.6	
10	6.7	10.2	15.0	15.6	26.6	15.6	25.0	23.3	9.0	5.7	2.1	4.1	
11	7.3	69.3	12.5	13.7	25.8	16.8	21.2	21.9	8.4	5.7	1.6	3.5	
12	10.7	139.9	11.3	11.9	27.4	16.8	20.0	21.2	8.4	4.6	1.6	3.5	
13	15.0	95.3	10.2	10.7	73.9	16.2	19.3	20.0	7.9	4.1	1.6	3.0	
14	14.3	27.4	9.6	10.2	77.3	16.2	19.3	19.3	7.9	4.1	1.6	3.0	
15	13.1	19.3	9.0	195.8	48.9	16.2	47.4	19.3	7.9	4.1	2.1	3.0	
16	11.9	30.8	8.4	47.4	33.5	16.2	30.8	19.3	7.9	4.1	2.1	2.5	
17	10.2	23.3	7.9	33.5	25.8	16.2	24.1	20.0	7.9	4.1	2.1	4.1	
18	21.2	18.1	7.3	21.9	21.9	118.7	20.6	20.0	7.9	3.5	2.1	7.9	
19	12.5	15.6	6.7	18.1	19.3	48.9	18.1	19.3	7.3	3.5	2.5	6.7	
20	11.3	14.3	6.2	15.6	18.7	32.1	18.1	18.7	7.3	3.0	2.5	6.2	
21	10.7	12.5	5.7	13.7	16.8	51.7	18.7	18.1	7.3	3.0	2.5	5.7	
22	9.0	11.9	5.1	13.1	18.1	29.1	20.0	16.8	7.3	3.0	2.5	6.2	
23	8.4	10.7	4.6	18.1	20.0	57.5	29.1	14.3	7.3	3.0	6.2	7.9	
24	6.2	10.2	4.6	19.3	18.1	112.7	66.4	13.1	6.7	3.0	6.2	7.3	
25	6.7	9.6	4.6	15.6	17.4	260.8	66.4	11.9	6.7	3.0	6.7	7.3	
26	10.7	9.0	4.6	23.3	16.2	82.4	192.0	10.7	6.7	3.0	6.7	6.7	
27	9.6	10.2	10.2	16.2	15.6	39.0	106.1	10.7	6.7	3.0	7.3	6.7	
28	7.9	13.1	10.7	13.7	15.6	28.3	79.0	10.2	6.7	3.0	7.3	6.2	
29	7.9	13.1	10.2	12.5	16.2	24.1	77.3	10.2	6.2	3.0		6.2	
30	7.3	11.3	10.2	10.7	16.8	22.5	56.1	10.2	6.2	3.0		6.2	
31		10.2		10.2	18.7		59.0		6.2	3.0		6.2	
Total	337.3	665.4	350.8	663.4	1159.2	1188.1	1348.6	655.8	250.0	144.6	90.5	189.7	7043.4 Ton
Mean	11.2	21.5	11.7	21.4	37.4	39.6	43.5	21.9	8.1	4.7	3.2	6.1	
Max	21.2	139.9	34.9	195.8	180.5	260.8	192.0	44.6	10.2	8.4	7.3	20.0	260.8
Min	6.2	7.3	4.6	9.0	9.6	15.6	18.1	10.2	6.2	3.0	1.6	2.5	1.6

WATER YEAR : 2001

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
Drainage Area	212 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	2001 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	1999 - 2001
Number of observation	86
R - Square	0.9430
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:09:40.84 LQS/LQS02D/12

Station - Ban Phon Thong, Nam Yuen, Ubon Ratchathani, (M.152)
Stream - Huai Bon_
River - Lam Dom Yai
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 200202
0.92740
QS = 4.4571 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.56	2.04	2.56	90.17	15.75	70.15	22.39	35.26	8.24	2.99	2.13	1.86	
2	3.12	2.04	2.56	60.13	14.62	56.62	25.65	38.41	7.29	2.99	2.13	1.86	
3	2.43	2.04	2.43	43.97	12.35	46.55	25.29	35.61	7.29	2.99	2.13	1.77	
4	2.21	2.21	2.34	34.55	11.66	42.58	42.58	30.30	6.97	2.99	2.04	1.86	
5	2.21	2.21	2.34	32.79	10.27	57.50	43.27	27.81	6.65	2.99	2.04	1.77	
6	2.04	2.34	2.65	26.73	11.31	50.08	42.24	24.57	6.33	2.86	2.04	1.77	
7	1.95	2.34	3.46	23.48	17.98	45.79	39.46	21.29	6.33	2.86	2.04	1.77	
8	1.95	2.21	7.29	20.20	17.24	39.11	34.55	19.83	6.01	2.86	1.95	1.77	
9	1.86	2.13	12.00	23.84	13.87	38.41	37.71	18.35	5.44	2.78	1.95	1.77	
10	2.86	2.13	7.92	22.39	52.54	50.49	57.50	16.87	5.44	2.78	1.95	1.77	
11	1.95	2.13	4.46	18.72	201.73	46.93	60.13	15.75	5.20	2.78	1.95	1.77	
12	2.65	2.78	3.96	16.49	100.90	42.24	46.55	15.75	5.44	2.65	1.95	1.77	
13	2.04	2.99	3.20	15.75	67.99	47.31	40.85	36.66	6.33	2.65	1.95	1.77	
14	1.95	2.43	3.12	14.24	60.13	44.66	37.36	37.36	6.33	2.65	1.95	1.77	
15	3.71	3.20	11.31	13.49	50.90	39.11	38.76	34.20	5.44	2.56	1.95	1.86	
16	1.95	28.16	9.57	13.87	53.36	33.85	32.79	28.16	5.20	2.56	1.95	1.77	
17	1.95	16.49	7.29	12.73	55.81	31.73	31.37	23.48	4.95	2.56	1.95	1.77	
18	2.04	12.35	5.68	10.97	45.79	28.88	28.52	20.20	4.95	2.43	1.95	1.77	
19	1.95	6.97	4.70	8.87	42.58	26.73	25.29	18.35	4.70	2.43	1.95	1.77	
20	1.95	5.44	3.71	8.87	38.41	24.93	23.48	16.49	4.46	2.56	1.95	1.68	
21	2.04	4.95	3.12	21.66	37.71	22.75	22.03	16.12	4.21	2.43	1.95	1.68	
22	2.04	3.71	4.95	51.72	40.15	21.66	21.29	15.00	3.96	2.43	1.86	1.68	
23	2.13	3.20	20.20	55.81	35.96	22.03	39.11	14.24	3.71	2.43	1.86	1.68	
24	2.13	2.99	68.42	45.04	32.79	24.57	46.17	13.87	3.46	2.34	1.77	1.68	
25	2.21	2.65	51.72	34.90	27.81	43.62	47.31	12.73	3.20	2.34	1.86	1.77	
26	2.56	2.56	56.21	32.08	26.37	43.62	35.96	11.31	3.20	2.34	1.86	1.95	
27	2.13	2.56	30.66	29.24	66.68	34.55	32.08	10.62	3.20	2.34	1.86	1.86	
28	2.13	2.56	28.88	28.52	159.99	29.24	42.24	9.57	3.20	2.34	1.86	2.13	
29	2.13	2.43	26.37	24.21	162.37	26.37	43.62	9.22	3.12	2.34		2.04	
30	2.13	2.34	40.50	20.93	158.21	24.93	37.36	8.56	3.12	2.21		1.95	
31		2.34		17.24	114.94		36.31		2.99	2.21		1.95	
Total	66.96	136.92	433.58	873.60	1758.17	1156.99	1139.22	635.94	156.36	80.67	54.78	56.04	6549.23 Ton
Mean	2.23	4.42	14.45	28.18	56.72	38.57	36.75	21.20	5.04	2.60	1.96	1.81	
Max	3.71	28.16	68.42	90.17	201.73	70.15	60.13	38.41	8.24	2.99	2.13	2.13	201.73
Min	1.86	2.04	2.34	8.87	10.27	21.66	21.29	8.56	2.99	2.21	1.77	1.68	1.68

WATER YEAR : 2001

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
Drainage Area	369 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	24
R - Square	0.8054
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:10:06.11 LQS/LQS02D/12

Station - Ban Kut Chaing Mun, Nam Yuen, Ubon Ratchathani, (M.153)
Stream - Lam Dom Yai
River - Mun
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 061201
1.30740
QS = 0.8408 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.34	0.30	3.23	184.01	21.19	91.97	33.49	138.11	5.83	0.98	0.30	0.05	
2	0.78	0.30	4.82	102.86	20.84	66.37	29.81	50.64	5.49	0.98	0.30	0.05	
3	0.71	0.34	2.30	82.57	19.44	63.01	32.40	39.09	5.66	0.91	0.21	0.14	
4	0.53	0.34	0.48	53.84	15.61	58.38	86.80	32.40	5.49	0.84	0.21	0.08	
5	0.43	0.48	1.89	43.79	15.30	117.80	49.38	27.89	5.32	1.44	0.21	0.05	
6	0.53	0.38	3.11	32.95	23.11	65.02	102.86	23.52	5.15	0.84	0.17	0.06	
7	0.53	0.38	3.85	48.75	34.04	55.77	58.38	23.93	4.98	0.84	0.17	0.08	
8	0.59	0.43	5.32	26.00	20.84	44.40	75.31	23.52	4.49	0.78	0.17	0.05	
9	0.53	0.59	5.32	40.80	18.76	43.79	101.94	20.14	4.16	0.71	0.17	0.04	
10	0.53	0.38	5.32	31.32	484.71	63.01	67.72	15.61	3.85	0.65	0.17	0.09	
11	0.48	0.38	5.49	24.34	729.92	62.34	61.02	14.27	3.54	0.65	0.14	0.06	
12	0.65	0.91	3.69	21.89	330.03	51.28	55.13	13.25	3.38	1.18	0.14	0.05	
13	0.38	2.64	3.11	36.27	133.20	66.37	93.76	34.04	3.69	0.71	0.14	0.05	
14	0.65	2.30	3.11	23.93	168.37	47.50	53.19	23.52	4.16	0.59	0.10	0.59	
15	0.53	1.99	8.37	19.44	99.20	40.80	177.72	19.79	4.65	0.53	0.10	0.06	
16	0.59	20.14	9.64	21.54	149.04	39.66	71.07	17.47	3.23	0.48	0.14	0.06	
17	0.43	11.39	6.89	20.84	170.44	35.71	57.73	14.78	2.87	0.48	0.10	0.05	
18	0.48	17.47	5.15	17.47	132.23	34.04	50.64	13.50	2.76	0.43	0.09	0.04	
19	0.43	9.64	3.85	15.91	110.27	28.84	34.60	12.52	2.64	0.48	0.10	0.04	
20	0.38	9.42	3.54	15.30	101.02	48.75	36.83	11.84	2.53	0.48	0.14	0.02	
21	0.34	5.66	2.64	71.07	70.23	36.27	27.41	10.95	2.30	0.43	0.10	0.10	
22	0.30	6.01	16.53	328.42	77.44	27.41	27.89	10.29	1.89	0.43	0.09	0.06	
23	0.43	8.18	119.70	139.09	91.97	23.11	208.78	9.64	1.62	0.38	0.09	0.05	
24	0.43	2.41	462.10	72.76	57.73	22.30	130.28	9.00	1.35	0.38	0.08	0.05	
25	0.21	3.85	163.23	51.28	43.17	96.47	69.39	8.58	1.44	0.34	0.06	0.04	
26	0.98	3.54	83.41	71.92	35.71	48.12	76.17	8.00	1.35	0.38	0.05	0.05	
27	0.59	3.54	59.69	63.01	161.19	39.66	59.69	7.44	1.27	0.34	0.05	0.04	
28	0.38	2.99	114.02	44.40	451.08	30.78	42.57	7.08	1.18	0.38	0.05	0.04	
29	0.48	5.32	55.13	31.86	318.80	30.29	53.19	6.72	1.11	0.43		0.04	
30	0.34	2.99	109.33	27.41	211.19	26.94	34.60	6.18	1.11	0.34		0.05	
31		2.53		25.17	145.04		67.72		1.04	0.30		0.05	
Total	14.98	127.22	1274.26	1790.21	4461.11	1506.16	2127.47	653.71	99.53	19.11	3.84	2.28	12079.88 Ton
Mean	0.50	4.10	42.48	57.75	143.91	50.21	68.63	21.79	3.21	0.62	0.14	0.07	
Max	0.98	20.14	462.10	328.42	729.92	117.80	208.78	138.11	5.83	1.44	0.30	0.59	729.92
Min	0.21	0.30	0.48	15.30	15.30	22.30	27.41	6.18	1.04	0.30	0.05	0.02	0.02

WATER YEAR : 2001

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
Drainage Area	209 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48, 49
Period of Available Records	2001 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	24
R - Square	0.7089
Remarks	Continued Sediment Station

RID Computer Center, Processing : 2-APR-2004 09:20:05.53 LQS/LQS02D/12

Station - Ban Na Chaluai, Na Chaluai, Ubon Ratchathani, (M.154)
Stream - Huai Luang
River - Lam Dom Yai
River System - Mun

Royal Irrigation Department
Thailand
Hydrology Division 100402
0.90260
QS = 3.8719 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.86	0.74	0.95	33.47	5.58	37.02	38.66	46.68	6.58	2.99	1.85	1.66	
2	0.95	0.74	0.86	23.63	4.53	31.47	36.20	33.72	6.18	2.99	1.85	1.58	
3	0.86	0.74	1.15	17.44	4.84	27.68	29.20	30.97	6.05	2.88	1.85	1.58	
4	0.86	0.74	0.95	14.93	4.84	25.47	59.04	26.66	5.92	2.88	1.77	1.58	
5	0.86	0.70	0.95	11.50	4.74	42.84	51.06	23.40	5.82	2.88	1.77	1.58	
6	0.82	0.70	13.01	9.17	7.11	35.21	69.14	22.25	5.68	2.81	1.77	1.54	
7	0.82	0.70	3.91	5.82	7.11	31.97	47.26	19.92	5.68	2.81	1.77	1.54	
8	0.82	0.70	2.55	6.05	6.32	27.94	38.66	18.48	5.58	2.81	1.77	1.54	
9	0.82	0.74	1.88	6.71	6.45	33.47	74.21	17.24	5.45	2.73	1.73	1.54	
10	0.82	0.74	1.88	6.32	59.66	49.90	58.10	16.61	5.35	2.73	1.73	1.54	
11	0.74	0.70	1.88	5.35	107.35	34.22	49.90	15.56	5.21	2.73	1.73	1.50	
12	0.70	0.70	1.77	4.22	81.64	28.95	42.24	15.77	5.21	2.62	1.73	1.50	
13	0.66	0.74	1.66	3.91	52.80	32.72	38.66	22.71	4.84	2.62	1.73	1.50	
14	0.66	0.74	1.42	3.63	46.38	28.19	36.20	21.55	4.63	2.62	1.73	1.50	
15	0.66	0.74	3.91	3.34	53.09	25.47	52.80	18.07	4.63	2.55	1.73	1.50	
16	0.74	3.34	2.26	3.17	40.29	21.15	43.13	16.61	4.53	2.55	1.73	1.50	
17	0.74	3.17	1.96	2.99	34.96	20.13	37.30	14.93	4.53	2.55	1.73	1.50	
18	0.66	3.63	1.88	2.62	29.20	17.86	31.47	14.93	4.32	2.44	1.73	1.50	
19	0.66	2.33	1.66	2.81	25.47	17.65	29.20	12.15	4.32	2.44	1.66	1.42	
20	0.66	2.15	1.58	3.17	34.96	16.19	28.44	11.93	4.32	2.26	1.66	1.42	
21	0.66	1.66	1.58	11.06	31.72	15.98	25.01	10.69	4.01	2.15	1.66	1.42	
22	0.61	1.38	2.99	18.48	26.92	14.50	25.92	9.93	4.01	2.15	1.66	1.42	
23	0.66	1.23	12.37	20.74	22.02	13.01	40.02	9.93	4.01	2.07	1.66	1.42	
24	0.74	1.19	70.13	16.19	19.10	12.80	37.30	8.98	3.80	2.07	1.66	1.42	
25	0.70	1.19	46.97	16.82	16.40	41.11	32.47	8.79	3.63	2.07	1.66	1.42	
26	0.86	1.15	20.94	12.80	18.48	27.94	28.95	8.21	3.34	2.07	1.66	1.38	
27	0.86	1.31	16.82	10.50	45.50	24.32	27.43	8.21	3.06	2.07	1.66	1.38	
28	0.82	1.19	19.31	8.98	92.38	21.35	32.47	7.43	3.06	1.96	1.66	1.38	
29	0.82	1.15	15.14	8.60	73.86	38.12	30.72	6.98	3.06	1.96		1.38	
30	0.74	1.07	18.48	6.98	57.48	29.46	26.41	6.85	3.06	1.96		1.38	
31		1.03		5.68	46.68		31.47		2.99	1.96		1.38	
Total	22.84	39.03	272.80	307.08	1067.86	824.09	1229.04	506.14	142.86	76.38	48.30	45.90	4582.32 Ton
Mean	0.76	1.26	9.09	9.91	34.45	27.47	39.65	16.87	4.61	2.46	1.72	1.48	
Max	0.95	3.63	70.13	33.47	107.35	49.90	74.21	46.68	6.58	2.99	1.85	1.66	107.35
Min	0.61	0.70	0.86	2.62	4.53	12.80	25.01	6.85	2.99	1.96	1.66	1.38	0.61

WATER YEAR : 2001

THA CHIN BASIN

Upper Huai Kra Sieo at Ban Pha Tang, Uthai Thani (T.11)

	Lat	15 - 06 - 14 N.	**Long**	99 - 32 - 13 E.	
Location		on left bank at the bridge.			
Ban	Pha Tang	**Amphoe**	Ban Rai	**Changwat**	Uthai Thani
Drainage Area		355 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		2001			
Number of observation		21			
R - Square		0.9202			
Remarks		Continued Sediment Station			

RID Computer Center, Processing : 21-JUL-2004 14:31:07.85

LQS/LQS02D/12

Station - Ban Pha Tang, Ban Rai, Uthai Thani, (T.11)
Stream - Upper Huai Kra Sieo
River - Tha Chin
River System - Tha Chin River

Royal Irrigation Department
Thailand
Hydrology Division 020802
1.61540
QS = 5.3993 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.25	6.30	17.90	7.25	3.03	1.23	59.12	509.93	7.25	3.03	1.23	0.40	
2	8.25	11.54	12.72	7.25	3.03	1.23	275.21	374.71	6.30	1.76	1.23	0.40	
3	7.25	37.15	10.39	7.25	3.03	1.23	136.93	252.19	6.30	1.76	1.23	0.40	
4	7.25	38.98	38.98	7.25	3.77	1.23	61.31	184.49	6.30	1.76	1.23	0.40	
5	7.25	42.76	35.35	6.30	4.55	0.77	94.97	125.17	6.30	1.76	1.23	0.40	
6	6.30	28.49	17.90	5.40	9.30	0.77	56.97	94.97	6.30	1.23	0.77	0.40	
7	6.30	20.73	23.72	5.40	28.49	1.76	229.95	70.35	6.30	1.23	0.77	0.40	
8	6.30	15.23	20.73	4.55	50.69	3.03	131.00	56.97	5.40	1.23	0.77	0.40	
9	6.30	13.95	17.90	3.77	28.49	3.77	1502.41	44.69	5.40	3.03	0.77	0.40	
10	5.40	11.54	17.90	7.25	15.23	3.77	201.52	38.98	5.40	3.03	0.77	0.40	
11	5.40	10.39	10.39	8.25	10.39	3.77	125.17	37.15	5.40	2.37	0.77	0.40	
12	5.40	10.39	11.54	2.37	8.25	20.73	65.77	31.85	5.40	1.76	1.76	0.40	
13	5.40	26.86	10.39	1.76	8.25	9.30	116.62	26.86	5.40	3.03	1.23	0.40	
14	7.25	28.49	10.39	1.23	8.25	8.25	215.56	25.27	5.40	3.77	1.23	0.40	
15	7.25	30.15	10.39	1.23	10.39	8.25	63.53	23.72	4.55	3.03	1.23	0.40	
16	7.25	23.72	10.39	5.40	7.25	8.25	50.69	23.72	4.55	3.03	0.77	0.40	
17	7.25	42.76	10.39	4.55	5.40	7.25	35.35	20.73	4.55	3.03	0.77	0.40	
18	7.25	191.24	10.39	4.55	4.55	5.40	26.86	17.90	4.55	3.03	0.40	0.40	
19	7.25	54.84	9.30	4.55	4.55	7.25	23.72	15.23	4.55	3.03	0.40	0.40	
20	7.25	38.98	8.25	4.55	3.77	8.25	111.05	12.72	4.55	2.37	0.40	0.40	
21	6.30	26.86	8.25	4.55	3.77	15.23	50.69	10.39	5.40	1.76	0.40	0.40	
22	6.30	25.27	6.30	4.55	3.77	42.76	38.98	10.39	4.55	1.76	0.40	0.40	
23	5.40	19.30	5.40	3.77	4.55	2236.17	125.17	9.30	4.55	2.37	0.40	0.40	
24	4.55	16.54	7.25	3.77	3.77	149.08	3992.51	8.25	4.55	3.03	0.40	0.40	
25	4.55	13.95	5.40	3.77	3.03	50.69	12117.28	8.25	4.55	3.03	0.40	0.40	
26	4.55	13.95	5.40	3.03	1.76	56.97	3992.51	8.25	4.55	2.37	0.40	0.40	
27	6.30	13.95	7.25	3.03	1.76	524.81	3344.41	7.25	3.77	1.76	0.40	0.40	
28	6.30	13.95	7.25	3.03	1.76	158.45	1472.75	7.25	3.77	1.76	0.40	0.77	
29	6.30	12.72	7.25	3.03	1.23	348.75	2006.98	6.30	3.77	1.23		0.77	
30	6.30	15.23	7.25	3.03	1.76	116.62	1859.48	5.40	3.77	1.23		0.77	
31		37.15		3.77	1.23		885.44		3.77	1.23		0.40	
Total	192.65	893.36	382.31	139.44	249.05	3805.02	33469.91	2068.63	157.15	69.80	22.16	13.51	41463.00 Ton
Mean	6.42	28.82	12.74	4.50	8.03	126.83	1079.67	68.95	5.07	2.25	0.79	0.44	
Max	8.25	191.24	38.98	8.25	50.69	2236.17	12117.28	509.93	7.25	3.77	1.76	0.77	12117.28
Min	4.55	6.30	5.40	1.23	1.23	0.77	23.72	5.40	3.77	1.23	0.40	0.40	0.40

WATER YEAR : 2001

THA CHIN BASIN

Lower Huai Kra Sieo at Ban Wang Khan, Suphan Buri (T.12)

Lat 14 - 57 - 02 N. **Long** 99 - 38 - 12 E.

Location	on left bank at Ban Wang Khan.
Ban Wang Khan	**Amphoe** Dan Chang **Changwat** Suphan Buri
Drainage Area	- 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	2001
Number of observation	21
R - Square	0.8247
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-FEB-2005 09:59:24.29

LQS/LQS02D/12

Station - Ban Wang Khan, Dan Chang, Suphan Buri, (T.12)
Stream - Lower Huai Kra Sieo
River - Tha Chin
River System - Tha Chin River

Royal Irrigation Department
Thailand
Hydrology Division 050802
1.16730
QS = 12.5520 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.53	5.59	104.81	19.21	7.46	9.39	135.17	1008.26	763.51	664.17	482.87	96.71	
2	15.53	5.59	93.97	19.21	5.59	7.46	219.85	965.80	763.51	664.17	482.87	118.43	
3	23.00	26.88	171.65	15.53	5.59	7.46	191.42	869.05	763.51	664.17	482.87	138.06	
4	15.53	30.84	104.81	15.53	5.59	9.39	167.39	700.02	763.51	688.04	482.87	154.72	
5	15.53	43.85	99.46	15.53	30.84	9.39	150.53	559.84	763.51	688.04	482.87	197.06	
6	13.44	53.09	93.97	13.44	138.06	8.42	146.36	445.51	763.51	688.04	482.87	258.06	
7	13.44	39.33	93.97	13.44	118.43	7.46	118.43	381.92	763.51	664.17	473.49	348.67	
8	11.39	83.50	93.97	13.44	96.71	23.00	828.58	265.08	763.51	664.17	473.49	293.42	
9	9.39	39.33	83.50	15.53	80.81	14.48	381.92	191.42	763.51	664.17	473.49	279.20	
10	9.39	30.84	83.50	26.88	53.09	30.84	1714.78	154.72	763.51	664.17	464.13	272.13	
11	9.39	30.84	60.37	34.88	39.33	17.36	776.47	142.20	763.51	664.17	464.13	504.69	
12	9.39	83.50	83.50	26.88	32.85	19.21	307.74	129.62	750.59	664.17	464.13	570.97	
13	9.39	83.50	57.81	19.21	26.88	83.50	473.49	118.43	750.59	664.17	464.13	652.28	
14	9.39	43.85	48.44	15.53	23.00	43.85	570.97	110.19	737.71	664.17	464.13	570.97	
15	9.39	219.85	43.85	13.44	21.09	37.09	381.92	104.81	737.71	664.17	464.13	515.66	
16	9.39	83.50	39.33	13.44	23.00	23.00	126.76	102.03	737.71	688.04	426.99	417.77	
17	9.39	132.49	39.33	11.39	37.09	19.21	93.97	99.46	737.71	688.04	426.99	365.24	
18	9.39	171.65	39.33	11.39	23.00	17.36	146.36	96.71	724.85	688.04	426.99	300.57	
19	9.39	171.65	34.88	9.39	24.93	39.33	272.13	93.97	724.85	676.09	426.99	231.38	
20	8.42	93.97	34.88	9.39	19.21	19.21	175.92	83.50	712.03	676.09	426.99	129.62	
21	7.46	83.50	30.84	9.39	17.36	15.53	107.59	83.50	712.03	676.09	426.99	88.71	
22	6.51	53.09	23.00	7.46	15.53	1008.26	96.71	80.81	712.03	664.17	426.99	83.50	
23	5.59	48.44	19.21	7.46	30.84	1918.03	102.03	78.14	712.03	664.17	426.99	75.67	
24	5.59	43.85	62.76	7.46	23.00	882.78	924.16	75.67	712.03	664.17	426.99	67.96	
25	5.59	46.14	19.21	8.42	21.09	202.72	3909.24	73.02	700.02	664.17	83.50	32.85	
26	5.59	48.44	15.53	7.46	19.21	126.76	2942.72	70.39	700.02	652.28	96.71	12.41	
27	5.59	48.44	15.53	5.59	15.53	993.98	1874.72	67.96	688.04	652.28	96.71	8.42	
28	5.59	43.85	15.53	5.59	13.44	504.69	1733.18	67.96	688.04	640.43	96.71	5.59	
29	5.59	39.33	15.53	5.59	11.39	272.13	1351.14	841.68	688.04	640.43		4.94	
30	5.59	39.33	15.53	19.21	11.39	208.41	1770.05	712.03	676.09	628.60		3.08	
31		124.11		19.21	11.39		1382.70		676.09	628.60		2.49	
Total	293.79	2092.16	1738.00	435.52	1002.72	6579.70	23574.40	8773.70	22676.81	20625.85	11319.01	6801.23	105912.91 Ton
Mean	9.79	67.49	57.93	14.05	32.35	219.32	760.46	292.46	731.51	665.35	404.25	219.39	
Max	23.00	219.85	171.65	34.88	138.06	1918.03	3909.24	1008.26	763.51	688.04	482.87	652.28	3909.24
Min	5.59	5.59	15.53	5.59	5.59	7.46	93.97	67.96	676.09	628.60	83.50	2.49	2.49

WATER YEAR : 2001

NAKHON NAYOK 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
Drainage Area	519 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	2001
Number of observation	27
R - Square	0.9381
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:38:44.16 LQS/LQS02D/12

Station - Ban Khao Nang Buat, Mueang, Nakhon Nayok, (NY.1B)
Stream - Nakhon Nayok
River - Nakhon Nayok
River System - Nakhon Nayok River

Royal Irrigation Department
Thailand
Hydrology Division 111102
1.44560
QS = 1.1285 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.91	7.98	60.77	152.33	587.83	476.50	368.59	176.56	33.79	26.56	2.45	1.26	
2	2.64	5.68	41.52	154.70	266.33	314.14	337.15	147.62	30.62	22.97	2.45	0.97	
3	2.64	11.09	29.59	497.78	273.39	238.83	360.65	140.63	28.57	21.01	2.45	0.46	
4	2.83	16.82	34.86	450.43	306.59	690.01	392.73	161.89	32.72	19.11	2.45	2.09	
5	2.83	14.18	31.67	329.42	402.07	530.72	406.77	145.28	32.72	17.88	2.45	2.27	
6	2.45	12.61	59.22	445.27	766.22	333.28	384.63	122.53	37.04	16.37	2.27	1.58	
7	2.09	9.93	46.21	310.36	912.14	306.59	455.61	90.76	43.82	15.48	2.09	3.64	
8	1.74	7.45	269.85	715.14	536.28	481.76	570.41	65.51	55.06	14.18	2.09	2.64	
9	1.74	5.44	107.34	4859.70	380.60	587.83	388.67	53.77	59.22	12.61	2.09	2.27	
10	1.74	4.74	63.92	1143.32	425.74	3758.77	440.13	32.72	63.92	11.39	2.09	1.58	
11	1.58	4.29	94.82	450.43	372.58	824.97	576.20	22.31	63.92	10.21	2.09	1.42	
12	1.58	82.06	107.34	647.06	805.24	425.74	402.07	28.57	65.51	9.08	1.91	1.42	
13	1.11	21.01	90.76	352.76	864.86	388.67	348.84	56.36	67.11	8.25	1.91	1.26	
14	1.42	13.34	67.11	344.93	553.15	1286.42	306.59	80.36	68.73	7.71	1.91	1.26	
15	1.58	10.51	105.22	1030.12	337.15	411.49	242.07	107.34	68.73	6.93	1.91	1.26	
16	1.91	15.92	75.30	582.01	262.82	291.65	198.65	118.13	65.51	5.68	1.74	1.11	
17	1.74	20.37	49.94	402.07	248.93	302.83	192.90	90.76	56.36	5.21	1.58	0.97	
18	1.74	48.69	255.84	306.59	181.54	376.58	166.74	105.22	53.77	4.74	1.58	0.83	
19	1.58	56.36	89.00	245.49	232.40	280.59	159.48	85.51	51.21	3.86	1.42	0.97	
20	1.26	41.52	60.77	131.49	157.09	406.77	147.62	40.39	49.94	3.64	1.26	1.26	
21	1.26	20.37	44.99	337.15	115.95	476.50	111.62	41.52	49.94	3.23	1.26	1.58	
22	1.26	44.99	17.27	558.89	118.13	329.42	98.94	41.52	49.94	3.23	1.26	1.74	
23	1.26	25.57	37.04	891.78	416.22	321.76	90.76	42.67	49.94	3.03	1.26	2.45	
24	1.11	25.57	145.28	925.79	341.03	576.20	92.79	44.99	48.69	2.83	1.26	1.74	
25	0.97	27.56	1260.79	960.18	198.65	360.65	184.36	49.94	46.21	2.83	1.74	1.42	
26	0.83	21.01	337.15	425.74	169.18	329.42	190.04	53.77	42.67	2.83	1.58	1.58	
27	0.83	17.88	582.01	242.07	142.95	487.05	159.48	51.21	39.26	2.83	1.26	1.74	
28	0.97	18.49	321.76	210.32	169.18	525.19	126.99	47.45	35.95	2.64	1.26	1.58	
29	1.58	52.48	219.70	388.67	207.38	864.86	111.62	41.52	32.72	2.45		1.58	
30	1.91	152.33	166.74	530.72	1193.23	497.78	89.00	37.04	30.62	2.64		1.58	
31		87.25		295.36	838.20		101.02		28.57	2.45		1.58	
Total	50.09	903.49	4873.78	19318.07	12783.05	17482.97	8203.12	2323.85	1482.78	273.86	51.07	49.09	67795.23 Ton
Mean	1.67	29.14	162.46	623.16	412.36	582.77	264.62	77.46	47.83	8.83	1.82	1.58	
Max	2.83	152.33	1260.79	4859.70	1193.23	3758.77	576.20	176.56	68.73	26.56	2.45	3.64	4859.70
Min	0.83	4.29	17.27	131.49	115.95	238.83	89.00	22.31	28.57	2.45	1.26	0.46	0.46

WATER YEAR : 2001

NAKHON NAYOK RIVER BASIN

Lower Khlong Ban 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
Drainage 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	2001
Number of observation	27
R - Square	0.8921
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:39:22.59

LQS/LQS02D/12

Station - Ban Pa Kha, Ban Na, Nakhon Nayok, (NY.3)
Stream - Khlong Ban Na
River - Nakhon Nayok
River System - Nakhon Nayok River

Royal Irrigation Department
Thailand
Hydrology Division 081099
1.07790
QS = 6.3831 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.89	0.15	15.67	18.32	60.04	176.04	65.48	47.45	7.00	1.87	0.65	0.36	
2	0.71	0.15	15.67	17.43	109.17	140.64	58.67	46.89	7.63	2.00	0.53	0.36	
3	0.42	0.36	15.67	17.43	117.55	127.86	50.00	54.00	7.21	2.63	0.65	0.36	
4	0.36	0.48	14.35	16.99	103.86	36.96	44.11	51.35	7.42	2.25	4.55	0.31	
5	0.31	0.31	12.89	23.27	85.22	29.21	58.02	62.72	9.10	1.68	5.77	0.31	
6	0.48	0.42	15.23	22.82	76.29	32.06	65.48	62.72	8.47	1.43	8.26	0.31	
7	0.25	0.53	16.55	21.91	98.81	60.04	65.48	50.64	6.38	1.31	8.89	0.83	
8	0.25	0.83	17.43	22.36	192.27	20.56	62.07	44.67	6.59	1.31	7.00	0.83	
9	0.31	1.68	18.32	23.27	161.39	9.74	83.72	26.00	5.97	1.25	2.89	0.77	
10	0.48	1.56	21.01	216.39	110.10	39.70	72.59	24.18	6.80	1.07	1.19	0.77	
11	0.59	1.49	26.00	148.91	92.71	200.29	88.96	21.91	7.21	1.07	0.83	0.71	
12	0.59	1.49	25.54	104.70	88.21	128.80	107.31	30.60	6.59	1.19	0.71	0.59	
13	0.59	1.68	28.29	82.23	74.07	83.72	109.17	16.11	6.18	1.37	0.53	0.48	
14	0.59	1.68	9.53	77.03	86.71	70.38	101.33	8.89	5.97	1.31	0.36	0.31	
15	0.59	4.35	29.67	60.69	95.72	68.91	103.01	12.89	6.18	1.25	0.36	0.31	
16	0.53	8.26	21.46	44.11	81.49	55.37	77.03	11.17	5.77	1.19	0.36	0.31	
17	0.53	7.21	13.91	35.32	62.72	45.78	56.01	11.45	4.08	1.13	0.31	0.48	
18	0.65	9.10	13.91	31.52	48.64	37.51	45.78	10.17	4.21	1.07	0.25	2.12	
19	0.77	8.68	13.91	32.06	40.25	35.32	43.56	10.59	4.21	1.01	0.42	2.25	
20	0.83	10.38	15.67	40.80	37.51	33.69	39.15	9.74	4.08	0.89	0.42	2.12	
21	0.83	13.91	15.67	38.05	34.78	35.32	102.17	10.17	3.95	9.74	0.36	1.87	
22	0.83	16.11	15.67	32.06	29.67	58.67	100.49	8.47	3.95	5.15	0.36	1.74	
23	0.65	6.18	13.91	32.06	25.09	55.37	97.98	9.32	3.42	3.42	0.36	1.68	
24	0.53	3.42	13.47	171.84	31.52	54.00	97.22	9.10	3.15	1.87	0.36	1.68	
25	0.42	3.42	13.47	139.61	40.25	53.36	33.69	8.05	2.76	1.19	0.36	1.74	
26	0.31	6.18	14.35	112.89	16.55	48.64	39.15	8.26	2.63	0.89	0.36	1.74	
27	0.25	16.55	12.89	94.21	4.95	52.64	36.96	7.42	2.51	0.71	0.36	1.62	
28	0.20	18.77	12.89	67.52	2.25	100.49	35.32	7.42	2.51	0.65	0.36	1.43	
29	0.20	18.32	15.67	52.64	10.17	93.46	33.69	8.26	2.12	0.65		1.25	
30	0.15	18.32	16.99	54.00	20.11	75.55	38.60	6.59	1.87	0.65		0.48	
31		16.99		60.04	32.06		40.80		2.00	0.65		0.48	
Total	15.09	198.96	505.66	1912.48	2070.13	2060.08	2053.00	697.20	157.92	53.85	47.81	30.60	9802.78 Ton
Mean	0.50	6.42	16.86	61.69	66.78	68.67	66.23	23.24	5.09	1.74	1.71	0.99	
Max	0.89	18.77	29.67	216.39	192.27	200.29	109.17	62.72	9.10	9.74	8.89	2.25	216.39
Min	0.15	0.15	9.53	16.99	2.25	9.74	33.69	6.59	1.87	0.65	0.25	0.31	0.15

WATER YEAR : 2001

NAKHON NAYOK RIVER BASIN

Khlong Samo Pun at Ban Noen Hom, Prachin Buri (Ny.4)

Lat 14 - 17 - 27 N. **Long** 101 - 24 - 20 E.

Location	on left bank at the bridge of Prachin Buri - Khao Yai Highway.
Ban Noen Hom	**Amphoe** Mueang **Changwat** Prachin Buri
Drainage 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	2001
Number of observation	21
R - Square	0.9098
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:39:51.82 LQS/LQS02D/12

Station - Ban Noen Hom, Mueang, Prachin Buri, (NY.4)
Stream - Khlong Samopun
River - Mae Nam Nakhon Nayok
River System - Nakhon Nayok River

Royal Irrigation Department
Thailand
Hydrology Division 081099
1.18380
QS = 1.9058 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.10	0.07	8.68	35.40	70.04	94.30	48.51	5.64	0.74	0.19	0.12	0.05	
2	0.10	0.12	5.37	42.61	37.54	68.46	41.15	6.18	0.74	0.19	0.12	0.05	
3	0.10	0.39	4.07	102.63	51.51	42.61	36.47	7.00	0.74	0.19	0.12	0.05	
4	0.10	0.39	4.07	88.13	136.94	88.13	59.12	6.18	0.68	0.19	0.12	0.05	
5	0.10	0.32	6.18	74.00	60.66	86.09	51.51	4.85	0.68	0.19	0.11	0.08	
6	0.08	0.25	4.33	113.61	134.31	51.51	60.66	3.57	0.68	0.19	0.11	0.10	
7	0.08	0.19	4.33	96.37	169.92	38.62	78.00	3.08	0.63	0.19	0.11	0.07	
8	0.08	0.12	33.28	329.58	80.01	63.76	65.32	2.60	0.63	0.19	0.11	0.05	
9	0.08	0.12	11.01	985.48	70.04	179.48	54.54	2.36	0.63	0.19	0.10	0.05	
10	0.07	0.19	15.89	116.17	68.46	361.44	70.04	1.91	0.57	0.19	0.10	0.05	
11	0.05	0.25	13.42	62.21	136.94	96.37	94.30	1.82	0.57	0.19	0.10	0.05	
12	0.04	0.98	17.16	176.28	214.23	56.06	59.12	1.64	0.51	0.19	0.10	0.05	
13	0.05	0.32	10.42	118.73	185.89	94.30	59.12	1.64	0.51	0.19	0.08	0.05	
14	0.05	0.25	7.55	155.52	118.73	142.21	35.40	1.55	0.46	0.19	0.08	0.05	
15	0.07	1.21	20.05	152.84	66.89	63.76	30.14	1.55	0.46	0.19	0.08	0.05	
16	0.07	0.98	9.26	142.21	47.03	51.51	25.01	1.46	0.42	0.15	0.08	0.05	
17	0.07	1.73	15.89	236.96	36.47	60.66	19.08	1.38	0.39	0.15	0.08	0.05	
18	0.08	3.82	42.61	163.60	29.10	76.00	15.89	1.29	0.35	0.15	0.07	0.04	
19	0.08	5.64	15.89	118.73	25.01	60.66	13.42	1.12	0.32	0.15	0.07	0.04	
20	0.08	5.64	9.84	37.54	22.01	60.66	12.81	1.04	0.28	0.15	0.07	0.04	
21	0.10	3.82	7.00	94.30	18.43	44.07	9.84	1.04	0.25	0.15	0.07	0.03	
22	0.10	7.00	5.64	82.03	35.40	56.06	9.26	1.04	0.25	0.15	0.07	0.03	
23	0.10	4.85	14.65	203.01	90.18	51.51	7.55	1.04	0.22	0.15	0.07	0.03	
24	0.10	4.85	94.30	163.60	54.54	56.06	17.16	0.98	0.19	0.15	0.05	0.03	
25	0.08	4.33	465.42	454.84	35.40	41.15	15.27	0.92	0.19	0.15	0.05	0.02	
26	0.08	2.84	111.06	166.76	33.28	54.54	9.84	0.92	0.19	0.12	0.05	0.02	
27	0.08	2.60	129.08	94.30	31.18	65.32	7.55	0.80	0.19	0.12	0.05	0.02	
28	0.07	7.00	96.37	136.94	30.14	82.03	6.72	0.74	0.19	0.12	0.05	0.02	
29	0.07	15.27	54.54	163.60	142.21	78.00	6.18	0.74	0.19	0.12		0.01	
30	0.07	17.16	51.51	63.76	248.45	51.51	5.64	0.74	0.19	0.12		0.01	
31		12.81		37.54	185.89		4.85		0.19	0.12		0.00	
Total	2.38	105.51	1288.87	5009.28	2666.83	2416.84	1029.47	66.82	13.23	5.07	2.39	1.29	12607.98 Ton
Mean	0.08	3.40	42.96	161.59	86.03	80.56	33.21	2.23	0.43	0.16	0.09	0.04	
Max	0.10	17.16	465.42	985.48	248.45	361.44	94.30	7.00	0.74	0.19	0.12	0.10	985.48
Min	0.04	0.07	4.07	35.40	18.43	38.62	4.85	0.74	0.19	0.12	0.05	0.00	0.00

WATER YEAR : 2001

NAKHON NAYOK 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
Drainage Area	116 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1999 - Con'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	27
R - Square	0.8366
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:40:11.35 LQS/LQS02D/12

Station - Ban Cha Om, Keang Khoi, Sara Buri, (NY.6)
Stream - Khlong Ban Na
River - Nakhon Nayok
River System - Nakhon Nayok River

Royal Irrigation Department
Thailand
Hydrology Division 081099
1.20880
QS = 1.6850 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.07	0.16	2.23	3.43	30.04	5.80	6.51	7.61	2.42	0.49	0.05	0.07	
2	0.08	0.24	1.85	3.22	14.70	4.76	5.45	6.51	2.23	0.49	0.05	0.07	
3	0.10	0.33	1.66	6.87	13.06	3.75	6.15	5.45	1.85	0.39	0.05	0.07	
4	0.10	0.69	9.11	5.45	7.61	3.22	8.35	8.35	1.66	0.36	0.05	0.07	
5	0.09	0.69	3.75	3.02	13.87	3.22	4.76	6.15	1.48	0.36	0.05	0.07	
6	0.10	0.59	2.82	3.22	20.81	3.22	9.11	5.45	1.25	0.33	0.06	0.07	
7	0.10	0.39	2.42	2.42	43.63	2.62	6.87	4.42	1.25	0.33	0.08	0.09	
8	0.10	0.27	18.32	3.75	23.35	2.62	8.35	3.75	1.25	0.33	0.08	0.09	
9	0.16	0.33	6.15	71.77	13.06	3.43	11.45	3.02	1.13	0.33	0.07	0.07	
10	0.21	0.36	5.10	18.32	19.56	32.88	17.10	2.23	1.13	0.30	0.07	0.06	
11	0.21	0.33	6.15	11.45	13.87	11.45	14.70	2.04	1.02	0.30	0.07	0.06	
12	0.21	4.42	6.15	13.87	9.88	6.87	17.10	1.85	0.91	0.27	0.07	0.05	
13	0.21	4.42	4.76	9.88	13.87	5.45	11.45	2.04	0.80	0.27	0.07	0.05	
14	0.21	3.02	4.08	6.51	9.88	5.45	9.11	2.42	0.69	0.21	0.07	0.05	
15	0.21	2.23	3.02	6.15	6.87	4.08	6.87	2.23	0.69	0.21	0.07	0.05	
16	0.21	2.82	2.42	4.42	6.15	3.43	5.45	2.23	0.69	0.16	0.07	0.03	
17	0.21	2.82	2.23	5.45	6.15	3.02	4.42	2.04	0.59	0.16	0.07	0.03	
18	0.21	13.06	7.61	9.88	5.80	2.82	3.43	2.04	0.69	0.27	0.07	0.02	
19	0.24	5.10	4.76	6.15	5.45	2.82	3.22	1.85	0.69	0.30	0.07	0.02	
20	0.24	6.15	3.02	5.10	4.76	9.88	3.43	1.85	0.59	0.30	0.07	0.02	
21	0.24	4.42	2.42	4.42	4.08	9.11	2.82	1.66	0.59	0.33	0.07	0.02	
22	0.24	3.43	2.23	9.11	3.75	6.51	2.42	1.48	0.59	0.36	0.07	0.02	
23	0.21	2.62	1.85	41.64	4.76	5.80	3.22	1.48	0.59	0.27	0.07	0.02	
24	0.21	5.45	1.48	18.32	3.43	6.87	4.42	1.36	0.59	0.18	0.07	0.02	
25	0.21	4.42	1.48	13.06	3.22	5.45	4.42	1.66	0.49	0.09	0.07	0.02	
26	0.16	3.22	2.82	6.87	2.82	9.11	4.08	2.42	0.49	0.07	0.07	0.01	
27	0.16	2.42	8.35	6.15	2.62	18.32	4.76	2.42	0.59	0.07	0.07	0.01	
28	0.16	2.23	5.45	5.10	2.42	13.06	4.76	2.42	0.59	0.06	0.07	0.01	
29	0.16	2.23	4.08	6.51	2.23	9.11	4.08	2.23	0.49	0.06		0.01	
30	0.16	4.42	3.75	7.61	4.76	7.61	5.10	2.04	0.49	0.06		0.01	
31		3.02		6.15	7.61		6.51		0.49	0.06		0.01	
Total	5.18	86.30	131.52	325.27	324.07	211.74	209.87	92.70	29.00	7.77	1.87	1.27	1426.56 Ton
Mean	0.17	2.78	4.38	10.49	10.45	7.06	6.77	3.09	0.94	0.25	0.07	0.04	
Max	0.24	13.06	18.32	71.77	43.63	32.88	17.10	8.35	2.42	0.49	0.08	0.09	71.77
Min	0.07	0.16	1.48	2.42	2.23	2.62	2.42	1.36	0.49	0.06	0.05	0.01	0.01

WATER YEAR : 2001

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
Drainage Area	2,279 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	2001
Number of observation	18
R - Square	0.8930
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:37:31.59 LQS/LQS02D/12

Station - Ban Khao Chakan, A.Muang, Sa Kaeo, (KGT.9)
Stream - Khlong Phra Sathung
River - Khlong Phra Prong
River System - Prachin Buri River

Royal Irrigation Department
Thailand
Hydrology Division 101102
1.57970
QS = 1.4057 QW

Water Year - 2001

Suspended Sediment, in Tons per Day. Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	57.7	39.0	186.9	593.0	186.9	369.1	757.6	256.5	53.4	57.7	25.1	20.2	
2	71.2	36.1	159.6	469.6	277.8	381.2	593.0	215.7	53.4	53.4	25.1	30.4	
3	57.7	36.1	137.5	322.3	137.5	206.0	393.4	381.2	53.4	53.4	25.1	27.7	
4	53.4	90.9	357.2	288.7	103.5	168.6	653.3	722.2	53.4	49.2	25.1	25.1	
5	49.2	66.6	593.0	196.3	152.1	225.7	848.9	443.7	53.4	45.2	25.1	27.7	
6	45.2	66.6	310.9	123.5	564.7	418.3	509.6	418.3	53.4	42.1	25.1	25.1	
7	45.2	57.7	246.0	116.7	550.7	333.8	443.7	310.9	53.4	39.0	25.1	177.6	
8	42.1	57.7	482.8	116.7	256.5	206.0	636.4	1271.8	53.4	39.0	25.1	123.5	
9	42.1	45.2	225.7	578.8	246.0	215.7	1103.3	536.9	53.4	36.1	25.1	36.1	
10	39.0	42.1	168.6	1769.5	206.0	456.6	1002.6	310.9	53.4	33.2	25.1	36.1	
11	39.0	39.0	159.6	1103.3	186.9	811.9	607.4	246.0	53.4	33.2	25.1	36.1	
12	39.0	39.0	225.7	905.4	215.7	509.6	1824.7	206.0	53.4	33.2	25.1	30.4	
13	36.1	288.7	288.7	509.6	246.0	418.3	2426.8	159.6	53.4	33.2	25.1	39.0	
14	36.1	130.4	206.0	333.8	333.8	509.6	2168.6	123.5	53.4	33.2	25.1	39.0	
15	36.1	144.8	578.8	256.5	206.0	469.6	3248.3	130.4	53.4	30.4	25.1	33.2	
16	36.1	963.3	943.8	256.5	593.0	215.7	1477.3	130.4	53.4	30.4	25.1	27.7	
17	39.0	12212.6	393.4	256.5	496.1	186.9	982.8	137.5	53.4	30.4	25.1	17.9	
18	39.0	23137.6	267.0	246.0	963.3	152.1	867.6	137.5	49.2	27.7	22.6	17.9	
19	36.1	13250.1	206.0	159.6	793.7	1144.6	1228.9	130.4	49.2	27.7	22.6	11.6	
20	36.1	1315.3	152.1	123.5	523.2	793.7	905.4	123.5	49.2	27.7	22.6	13.1	
21	42.1	830.3	116.7	116.7	299.7	277.8	607.4	116.7	45.2	27.7	22.6	16.2	
22	42.1	523.2	90.9	103.5	246.0	186.9	443.7	66.6	45.2	27.7	20.2	16.2	
23	39.0	235.8	90.9	256.5	206.0	523.2	299.7	45.2	45.2	27.7	20.2	16.2	
24	39.0	206.0	85.8	299.7	152.1	1634.3	469.6	45.2	45.2	27.7	20.2	45.2	
25	39.0	196.3	80.8	235.8	123.5	1103.3	867.6	45.2	45.2	27.7	20.2	42.1	
26	39.0	418.3	116.7	196.3	116.7	1965.3	4054.7	49.2	45.2	27.7	20.2	45.2	
27	39.0	215.7	322.3	299.7	206.0	867.6	3290.3	49.2	45.2	27.7	20.2	53.4	
28	36.1	152.1	267.0	225.7	159.6	757.6	757.6	53.4	42.1	25.1	20.2	36.1	
29	36.1	196.3	670.3	152.1	206.0	687.4	482.8	53.4	42.1	25.1		30.4	
30	36.1	196.3	636.4	456.6	277.8	830.3	393.4	62.1	42.1	25.1		42.1	
31		168.6		267.0	333.8		299.7		42.1	25.1		53.4	
Total	1262.9	55397.7	8767.1	11335.4	9566.6	17026.7	34646.1	6979.1	1540.2	1049.7	658.5	1191.9	149421.9 Ton
Mean	42.1	1787.0	292.2	365.7	308.6	567.6	1117.6	232.6	49.7	33.9	23.5	38.4	
Max	71.2	23137.6	943.8	1769.5	963.3	1965.3	4054.7	1271.8	53.4	57.7	25.1	177.6	23137.6
Min	36.1	36.1	80.8	103.5	103.5	152.1	299.7	45.2	42.1	25.1	20.2	11.6	11.6

WATER YEAR : 2001

PRACHIN BURI RIVER BASIN

Khlong Phra Prong at Ban Non Suk Phum, Prachin Buri (Kgt.13A)

Lat 13 - 54 - 29 N. **Long** 101 - 51 - 32 E.

Location	on right bank about 21 kilometers upstream from station Kgt.13.
Ban Non Suk Phum	**Amphoe** Kabin Buri **Changwat** Prachin Buri
Drainage Area	5,347 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	2001
Number of observation	27
R - Square	0.9360
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:37:51.77 LQS/LQS02D/12

Station - Ban Suk Phum, Kabin Buri,Prachin Buri, (KGT.13A)
Stream - Khlong Pra Prong
River - Prachin Buri River
River System - Prachin Buri River

Royal Irrigation Department
Thailand
Hydrology Division 201082
1.30920
QS = 3.1027 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.55	9.55	265.27	819.98	379.42	334.57	1203.31	272.26	38.75	13.07	2.17	12.62	
2	8.71	9.55	262.95	734.65	310.25	730.22	1223.27	246.84	40.83	12.17	2.47	19.55	
3	8.71	9.55	337.03	699.40	240.01	634.42	1283.61	341.96	42.93	11.28	2.78	15.70	
4	9.55	14.11	389.56	604.62	153.62	554.34	1209.95	253.72	37.72	8.71	2.62	14.11	
5	10.41	119.40	349.37	472.90	138.49	467.58	1459.93	269.93	37.72	6.89	3.60	9.97	
6	10.84	72.92	319.93	369.34	226.49	430.75	1503.52	105.18	37.72	6.31	3.10	6.02	
7	11.28	51.90	300.64	284.01	681.92	376.89	1270.14	92.76	38.75	9.55	2.78	10.84	
8	11.72	29.05	369.34	256.02	888.87	451.71	1170.22	61.58	37.72	4.91	2.78	9.97	
9	10.41	24.19	476.23	664.56	1130.80	575.16	1170.22	155.67	32.18	7.19	2.47	16.24	
10	8.71	20.69	513.24	1176.82	1250.00	874.99	1512.27	151.58	24.19	4.91	2.02	15.16	
11	8.71	14.11	451.71	2001.94	1157.04	1459.93	1263.42	163.91	23.01	4.91	2.32	4.64	
12	8.40	21.26	384.48	1853.51	1052.93	2210.33	1627.16	99.61	23.60	4.37	2.78	4.11	
13	8.40	27.81	351.86	1365.11	974.82	2863.12	2143.49	71.64	24.19	4.11	3.35	7.49	
14	8.09	59.13	379.42	898.16	893.51	1871.92	3089.25	41.88	24.19	4.64	4.11	5.18	
15	8.09	119.40	456.99	617.35	833.65	1573.89	3580.13	153.62	24.19	4.64	4.11	3.85	
16	7.79	151.58	547.43	530.27	695.02	1390.82	3992.45	174.35	23.60	4.11	4.37	4.37	
17	7.79	503.08	583.54	454.35	651.60	1270.14	4232.10	329.68	23.60	5.18	4.64	3.85	
18	7.49	2934.63	516.63	387.02	874.99	1209.95	3404.00	329.68	23.60	5.18	4.11	1.73	
19	7.49	3639.30	286.37	332.12	1416.64	1058.56	2561.47	334.57	23.60	5.18	4.64	2.62	
20	7.49	4071.97	204.38	300.64	1707.84	912.13	2058.29	298.25	23.60	5.46	6.31	1.32	
21	7.49	2985.96	149.55	244.56	1451.25	734.65	1671.87	307.84	23.01	5.74	6.60	0.93	
22	7.49	1716.86	129.60	235.49	1209.95	770.31	1229.94	293.49	23.01	6.31	4.91	3.85	
23	7.19	930.83	126.66	222.03	801.83	926.15	660.23	303.04	23.01	5.18	3.85	3.60	
24	7.19	625.87	126.66	219.80	721.38	1203.31	486.26	253.72	21.84	5.18	3.85	3.60	
25	7.79	462.28	116.52	677.57	617.35	1945.96	399.77	286.37	20.69	4.37	4.37	3.60	
26	8.40	467.58	101.00	673.23	499.70	2511.98	547.43	269.93	19.55	3.10	5.18	6.31	
27	9.13	364.32	195.69	459.63	329.68	2153.01	1521.04	249.13	18.99	2.78	6.02	11.72	
28	10.41	344.42	291.11	366.83	274.60	1494.78	3089.25	235.49	17.33	7.49	6.31	17.33	
29	8.71	324.79	476.23	291.11	276.94	1351.44	2433.26	43.99	14.11	7.19		17.33	
30	8.40	305.44	765.83	319.93	281.65	1270.14	1019.28	38.75	15.70	3.85		6.02	
31		286.37		430.75	235.49		617.35		14.11	2.62		5.74	
Total	261.83	20717.90	10225.22	18963.70	22357.73	35613.16	54633.89	6230.42	817.04	186.58	108.62	249.37	170365.47 Ton
Mean	8.73	668.32	340.84	611.73	721.22	1187.11	1762.38	207.68	26.36	6.02	3.88	8.04	
Max	11.72	4071.97	765.83	2001.94	1707.84	2863.12	4232.10	341.96	42.93	13.07	6.60	19.55	4232.10
Min	7.19	9.55	101.00	219.80	138.49	334.57	399.77	38.75	14.11	2.62	2.02	0.93	0.93

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Prasae at Ban Chak Khrok, Rayong (Z.11)

Lat 12 - 51 - 20 N. **Long** 101 - 37 - 09 E.

Location	on right bank near the Meteorological Station.
Ban Chak Khrok	**Amphoe** Klaeng **Changwat** Rayong
Drainage Area	1,280 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	2001
Number of observation	27
R - Square	0.9077
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:40:33.84 LQS/LQS02D/12

Station - Ban Chak Khrok, Klaeng, Rayong, (Z.11)
Stream - Khlong Prasae
River - Eastcoast-gulf
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division 101102

QS = 3.1342 QW 1.31820

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	39.99	106.42	109.34	83.84	11.61	42.29	420.24	197.75	40.75	2.93	2.93	1.00	
2	39.22	75.72	113.74	103.53	10.21	42.29	730.22	276.28	41.52	2.53	2.73	0.94	
3	40.75	77.06	90.76	82.47	8.60	40.75	851.88	536.98	44.63	1.96	2.53	1.00	
4	41.52	145.68	118.18	66.50	8.07	39.99	847.88	695.77	46.21	1.96	2.53	0.94	
5	39.99	196.06	103.53	57.59	29.65	58.84	859.88	699.58	44.63	1.78	2.34	0.94	
6	38.46	171.24	89.36	52.64	33.99	81.11	961.39	711.03	43.07	1.78	2.34	0.94	
7	37.71	93.56	151.98	50.20	13.93	81.11	722.53	473.58	43.07	1.60	2.34	1.00	
8	36.96	67.80	199.44	53.86	12.18	89.36	839.91	230.96	42.29	2.53	2.34	1.13	
9	35.47	63.93	106.42	148.82	10.77	87.97	868.70	142.56	41.52	3.55	2.15	1.06	
10	33.99	57.59	139.45	245.06	9.40	63.93	768.97	122.67	40.75	3.34	1.96	1.00	
11	31.80	53.86	127.20	336.19	8.33	62.65	583.93	103.53	39.22	3.55	1.78	0.94	
12	31.08	66.50	112.27	431.05	8.07	87.97	562.14	89.36	38.46	3.77	1.78	0.94	
13	32.53	119.68	107.88	412.17	9.67	191.03	598.57	79.75	37.71	3.77	1.78	0.94	
14	31.08	81.11	103.53	226.31	9.13	184.38	1011.07	71.73	36.96	3.77	1.60	0.88	
15	31.08	73.06	142.56	112.27	8.86	192.71	796.38	65.21	36.21	3.77	1.43	0.82	
16	33.99	74.39	207.92	60.10	11.89	171.24	757.29	62.65	32.53	3.55	1.26	0.82	
17	33.26	96.38	245.06	36.96	47.79	169.61	650.47	58.84	28.94	3.55	1.19	0.82	
18	31.08	134.83	276.28	58.84	52.64	93.56	401.47	55.10	26.15	3.55	1.13	0.76	
19	28.24	271.42	179.42	71.73	58.84	79.75	369.79	52.64	22.10	3.55	1.13	0.82	
20	26.84	354.19	115.22	32.53	56.34	89.36	883.18	50.20	17.58	3.34	1.06	0.76	
21	24.78	328.55	92.16	15.12	55.10	99.23	831.95	47.79	14.82	3.34	1.06	0.76	
22	22.10	153.56	79.75	13.34	57.59	103.53	591.24	45.42	12.18	3.77	1.06	0.76	
23	22.10	89.36	71.73	11.61	51.01	172.87	320.95	45.42	9.67	4.21	1.00	0.76	
24	21.44	73.06	66.50	15.43	43.85	194.38	326.01	43.85	7.82	4.21	1.06	0.70	
25	21.44	62.65	61.37	46.21	28.94	130.23	859.88	39.99	6.55	4.66	1.00	0.70	
26	27.54	56.34	56.34	177.78	16.96	192.71	772.87	19.49	6.31	4.66	1.00	0.70	
27	48.59	55.10	57.59	221.68	5.82	338.75	544.14	11.89	7.30	4.43	0.94	0.64	
28	51.01	67.80	70.42	184.38	5.58	271.42	580.28	21.44	7.82	4.21	1.00	0.64	
29	45.42	79.75	137.91	73.06	5.58	336.19	703.39	38.46	7.30	3.99		0.59	
30	52.64	97.80	87.97	26.15	16.04	375.02	522.72	40.75	5.58	3.55		0.48	
31		102.09		13.05	41.52		320.95		3.55	3.34		0.43	
Total	1032.10	3546.54	3621.28	3520.47	747.96	4164.23	20860.27	5130.67	833.20	104.50	46.45	25.61	43633.29 Ton
Mean	34.40	114.40	120.71	113.56	24.13	138.81	672.91	171.02	26.88	3.37	1.66	0.83	
Max	52.64	354.19	276.28	431.05	58.84	375.02	1011.07	711.03	46.21	4.66	2.93	1.13	1011.07
Min	21.44	53.86	56.34	11.61	5.58	39.99	320.95	11.89	3.55	1.60	0.94	0.43	0.43

WATER YEAR : 2001

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 in front of Wat Ban Puk.
Ban Puk	**Amphoe** Makham **Changwat** Chanthaburi
Drainage Area	671 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 - 2001
Number of observation	162
R - Square	0.7905
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:40:50.31 LQS/LQS02D/12

Station - Ban Puk, A. Makham, Chanthaburi, (Z.13)
Stream - Chanthaburi River
River - Chanthaburi
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division 111102
1.51190
QS = 0.6320 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	465.0	437.9	468.0	266.7	141.6	221.5	213.2	122.0	440.9	399.8	391.2	382.6	
2	446.9	443.9	440.9	247.0	125.2	187.0	183.1	116.4	440.9	402.7	388.3	382.6	
3	440.9	455.9	429.0	203.0	113.6	191.0	221.5	113.6	440.9	399.8	391.2	382.6	
4	443.9	468.0	321.9	183.1	109.5	183.1	257.8	105.4	446.9	396.9	388.3	385.5	
5	437.9	458.9	420.2	179.2	120.6	227.8	221.5	104.1	446.9	394.1	391.2	385.5	
6	426.1	455.9	621.1	189.0	181.1	203.0	207.0	97.4	446.9	391.2	388.3	394.1	
7	417.2	458.9	628.6	264.5	181.1	162.4	234.1	90.9	443.9	388.3	391.2	396.9	
8	408.5	449.9	659.5	1913.7	173.4	146.7	249.1	88.4	443.9	388.3	391.2	394.1	
9	405.6	432.0	351.8	7099.0	153.5	138.3	247.0	82.1	440.9	385.5	391.2	394.1	
10	394.1	432.0	296.0	5221.7	160.6	191.0	223.6	77.4	437.9	382.6	391.2	394.1	
11	385.5	440.9	284.6	2918.5	196.9	151.8	298.3	71.6	434.9	385.5	388.3	388.3	
12	379.8	490.5	262.2	1090.5	179.2	157.0	268.9	67.1	434.9	385.5	388.3	388.3	
13	377.0	490.5	280.1	606.2	225.7	179.2	289.2	64.9	434.9	385.5	391.2	385.5	
14	377.0	474.3	298.3	388.3	203.0	185.1	379.8	247.0	432.0	388.3	388.3	382.6	
15	377.0	458.9	461.9	298.3	221.5	150.1	319.2	484.0	429.0	388.3	388.3	382.6	
16	379.8	523.6	527.0	253.5	465.0	136.6	257.8	484.0	429.0	388.3	388.3	377.0	
17	379.8	696.1	335.4	219.4	555.0	131.7	201.0	477.5	420.2	385.5	388.3	371.3	
18	377.0	617.4	280.1	217.3	500.4	143.3	211.1	477.5	414.3	385.5	388.3	371.3	
19	368.5	595.1	236.2	203.0	343.5	146.7	209.1	474.3	417.2	385.5	388.3	371.3	
20	365.7	613.7	203.0	183.1	268.9	173.4	277.8	471.0	417.2	385.5	388.3	368.5	
21	362.9	573.1	191.0	167.9	264.5	143.3	242.6	465.0	414.3	382.6	385.5	362.9	
22	360.1	547.8	201.0	185.1	234.1	157.0	219.4	458.9	414.3	382.6	385.5	362.9	
23	391.2	537.1	162.4	193.0	209.1	193.0	282.4	458.9	411.4	382.6	388.3	357.3	
24	402.7	523.6	143.3	185.1	189.0	298.3	217.3	458.9	411.4	382.6	388.3	354.6	
25	399.8	513.6	148.4	167.9	173.4	303.3	291.5	455.9	411.4	382.6	382.6	349.0	
26	388.3	510.3	138.3	253.5	177.3	244.8	260.0	440.9	411.4	385.5	385.5	343.5	
27	394.1	520.3	113.6	240.5	167.9	232.0	203.0	434.9	411.4	382.6	385.5	388.3	
28	408.5	540.7	122.0	189.0	249.1	266.7	187.0	434.9	408.5	382.6	385.5	443.9	
29	423.1	643.7	289.2	171.6	234.1	277.8	164.2	434.9	405.6	382.6		443.9	
30	432.0	667.6	247.0	194.9	223.6	251.3	143.3	437.9	405.6	382.6		443.9	
31		558.6		173.4	284.6		126.8		402.7	382.6		446.9	
Total	12015.9	16030.7	9562.0	24266.9	7026.0	5774.2	7307.6	8797.7	13201.6	12004.1	10875.9	11975.9	138838.5 Ton
Mean	400.5	517.1	318.7	782.8	226.6	192.5	235.7	293.3	425.9	387.2	388.4	386.3	
Max	465.0	696.1	659.5	7099.0	555.0	303.3	379.8	484.0	446.9	402.7	391.2	446.9	7099.0
Min	360.1	432.0	113.6	167.9	109.5	131.7	126.8	64.9	402.7	382.6	382.6	343.5	64.9

WATER YEAR : 2001

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
Drainage Area	245 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	2001
Number of observation	30
R - Square	0.8348
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:41:08.73 LQS/LQS02D/12

Station - Ban Chaman, Makham, Chanthaburi, (Z.14)
Stream - Khlong Phayat
River - Chanthaburi
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division 111102
1.84060
QS = 0.2137 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.13	3.00	31.03	192.54	40.82	112.53	51.57	23.49	3.83	1.52	0.71	0.60	
2	3.83	3.40	20.08	146.20	37.01	91.50	39.53	22.99	3.27	0.99	0.71	0.56	
3	3.69	3.40	16.05	94.02	35.77	97.86	38.89	18.24	3.13	1.24	0.56	0.99	
4	3.13	2.87	14.00	56.49	28.23	77.04	38.89	19.15	3.69	1.07	0.60	0.77	
5	3.83	2.74	12.45	63.72	31.61	166.99	37.63	15.63	3.13	1.15	0.60	0.56	
6	3.13	2.49	12.45	55.49	49.66	100.45	38.89	13.60	3.40	1.15	0.71	0.77	
7	2.87	2.03	10.37	111.15	52.54	71.35	43.23	14.40	3.13	1.15	0.56	4.30	
8	2.74	1.71	28.23	6756.94	47.78	58.52	34.56	11.70	3.00	1.07	0.60	1.42	
9	2.37	1.15	18.24	5337.08	77.04	49.66	32.19	10.67	2.87	1.07	0.60	1.71	
10	1.82	1.15	23.49	2325.25	143.11	108.43	31.03	10.07	2.62	0.84	0.60	0.77	
11	2.49	6.78	21.03	794.59	502.97	78.20	37.63	9.77	2.62	0.66	0.71	0.71	
12	3.55	6.99	17.35	327.14	192.54	101.76	32.78	9.20	2.74	0.71	0.66	0.56	
13	2.03	6.16	12.83	155.64	302.38	55.49	31.03	8.09	2.62	0.77	0.56	0.60	
14	1.61	4.47	20.55	112.53	170.30	73.60	36.39	7.86	2.74	1.15	0.77	0.56	
15	1.71	8.09	182.12	91.50	116.69	40.82	29.90	7.42	2.74	1.07	0.56	0.60	
16	1.71	30.46	44.13	71.35	587.80	39.53	23.49	7.20	2.49	1.07	0.56	0.56	
17	2.03	96.57	44.13	80.55	355.70	33.37	21.51	7.20	2.49	1.07	0.51	0.51	
18	2.26	47.78	48.72	89.01	367.42	40.17	35.16	6.57	2.37	0.91	0.51	0.66	
19	2.26	95.29	81.73	52.54	163.71	37.63	28.23	6.36	2.62	0.99	0.56	0.46	
20	2.03	85.33	38.89	38.26	119.50	58.52	69.13	5.96	2.14	0.91	0.56	0.56	
21	2.49	37.63	27.14	38.26	158.84	38.26	29.90	5.76	2.26	0.84	0.60	0.51	
22	2.37	24.51	24.00	95.29	103.08	50.61	24.00	5.38	2.03	0.91	0.51	0.51	
23	2.26	12.07	25.02	51.57	91.50	95.29	33.96	5.01	1.92	0.91	0.46	0.46	
24	1.92	12.45	54.50	37.63	72.47	138.54	40.17	3.55	1.82	0.77	0.51	0.46	
25	2.03	10.67	86.55	33.96	59.54	131.06	286.37	4.65	1.82	0.56	0.60	0.60	
26	2.26	51.57	77.04	113.91	180.41	91.50	108.43	3.98	1.82	0.56	0.66	0.56	
27	2.74	12.07	60.57	122.35	171.97	82.92	45.94	3.98	1.61	0.56	0.56	0.66	
28	3.00	68.03	66.94	68.03	168.64	59.54	32.78	4.30	1.61	0.51	0.66	0.51	
29	3.27	243.18	173.64	53.51	185.57	92.75	28.23	3.98	1.42	0.56		0.60	
30	3.69	100.45	140.05	51.57	283.74	77.04	23.49	3.83	1.33	0.56		0.60	
31		57.50		39.53	187.30		21.51		1.61	0.51		0.60	
Total	79.25	1041.99	1433.32	17657.60	5085.64	2350.93	1406.44	279.99	76.89	27.81	16.77	24.30	29480.93 Ton
Mean	2.64	33.61	47.78	569.60	164.05	78.36	45.37	9.33	2.48	0.90	0.60	0.78	
Max	4.13	243.18	182.12	6756.94	587.80	166.99	286.37	23.49	3.83	1.52	0.77	4.30	6756.94
Min	1.61	1.15	10.37	33.96	28.23	33.37	21.51	3.55	1.33	0.51	0.46	0.46	0.46

WATER YEAR : 2001

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
Drainage Area	244 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 - 2001
Number of observation	122
R - Square	0.8731
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:41:26.13 LQS/LQS02D/12

Station - Ban Pak Phraek, A.Pluak Daeng, Rayong, (Z.15)
Stream - Khlong Yai
River - Khlong Yai
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division
1.40410
QS = 8.5461 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	146.0	182.0	3227.8	209.1	146.0	74.6	259.8	175.3	0.6	15.1	5.2	51.4	
2	146.0	266.6	514.0	320.0	146.0	74.6	1384.8	749.1	0.1	13.4	4.8	51.4	
3	146.0	2751.4	514.0	251.9	146.0	70.0	1384.8	408.3	0.1	13.4	5.2	54.5	
4	216.1	4345.7	345.8	216.1	146.0	77.8	1136.9	202.2	1.2	13.2	12.9	74.6	
5	643.5	3622.3	312.2	188.7	133.4	219.1	317.6	8.5	1.2	13.2	13.4	70.0	
6	281.6	2882.5	312.2	182.0	389.4	140.9	317.6	5.4	1.0	13.2	20.7	65.8	
7	304.5	1147.7	2015.3	274.1	46.7	137.2	345.8	3.6	0.8	12.9	25.0	62.0	
8	251.9	819.1	722.3	169.4	15.1	126.1	796.9	3.1	0.6	12.9	5.6	70.0	
9	175.3	460.3	328.6	188.7	13.4	126.1	528.9	2.6	0.6	12.9	5.2	276.7	
10	146.0	418.5	1111.5	175.3	11.0	118.9	473.2	2.4	0.6	12.9	5.2	276.7	
11	129.2	503.2	618.7	223.1	9.8	111.8	3092.2	2.3	0.5	12.9	5.2	276.7	
12	118.4	3808.4	514.0	202.2	9.3	108.3	276.7	2.1	0.5	12.9	5.2	276.7	
13	123.8	3659.3	722.3	195.4	9.0	174.8	268.2	2.0	0.6	12.9	5.2	303.8	
14	118.4	3476.1	571.5	188.7	8.8	126.1	1252.8	2.0	0.6	12.6	5.2	303.8	
15	140.4	3440.3	1202.7	182.0	8.5	122.5	345.8	1.9	0.6	12.6	24.1	303.8	
16	175.3	3808.4	891.4	175.3	7.4	88.9	615.8	1.8	0.5	12.4	32.7	276.7	
17	175.3	2882.5	630.7	175.3	7.4	82.6	268.2	1.7	0.5	12.4	32.7	251.5	
18	157.6	3622.3	503.2	169.4	7.1	174.8	259.8	1.4	17.4	12.4	36.5	179.9	
19	146.0	2950.7	460.3	169.4	6.9	190.4	219.1	0.8	17.1	12.4	38.1	179.9	
20	129.2	735.6	390.1	163.4	6.9	154.5	2388.8	0.6	16.8	12.4	41.5	185.2	
21	114.0	2950.7	328.6	157.6	7.1	268.2	557.5	0.9	16.5	12.9	43.2	179.9	
22	109.8	1165.9	259.2	163.4	6.7	243.3	3511.9	2.0	16.0	12.6	43.8	169.6	
23	157.6	3053.7	230.2	163.4	6.2	473.2	3548.6	1.7	15.7	12.4	43.8	227.1	
24	101.3	354.6	216.1	188.7	6.0	268.2	4007.8	1.0	15.7	13.4	46.1	235.2	
25	81.2	140.4	202.2	188.7	5.6	43.8	4567.3	1.2	15.1	14.0	48.4	203.4	
26	3192.8	2563.6	195.4	163.4	6.0	29.0	3924.9	0.7	14.8	23.1	49.0	140.9	
27	3227.8	408.3	195.4	157.6	15.1	140.9	3883.6	0.8	14.5	24.1	47.8	174.8	
28	559.9	548.3	195.4	157.6	20.7	290.1	8919.7	0.7	15.1	6.2	51.4	40.3	
29	281.6	2751.4	202.2	151.8	46.1	473.2	972.9	0.5	14.5	5.4		39.2	
30	244.6	2625.8	216.1	157.6	50.8	1136.9	399.2	0.6	14.5	5.4		15.7	
31		891.4		157.6	62.0		244.6		14.8	5.4		8.5	
Total	11941.1	63237.0	18149.4	5826.9	1506.4	5866.8	50471.7	1587.2	229.1	393.9	703.1	5025.7	164938.3 Ton
Mean	398.0	2039.9	605.0	188.0	48.6	195.6	1628.1	52.9	7.4	12.7	25.1	162.1	
Max	3227.8	4345.7	3227.8	320.0	389.4	1136.9	8919.7	749.1	17.4	24.1	51.4	303.8	8919.7
Min	81.2	140.4	195.4	151.8	5.6	29.0	219.1	0.5	0.1	5.4	4.8	8.5	0.1

WATER YEAR : 2001

EAST COAST - GULF BASIN

Khlong Phlo at Ban Chamkho, Rayong (Z.18)

		Lat	12 - 57 - 18 N.	**Long**	101 - 40 - 32 E.
Location			on left bank at the bridge on road.		
	Ban Chamkho		**Amphoe** K.A. Khao Chamao	**Changwat**	Rayong
Drainage Area			167 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			1999 - 2001		
Number of observation			107		
R - Square			0.8272		
Remarks			Continued Sediment Station		

RID Computer Center, Processing : 28-SEP-2004 13:42:11.29

LQS/LQS02D/12

Station - Ban Chamkho, Klaeng, Rayong, (Z.18)
Stream - Khlong Phlo
River - Prasae
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division 111102
1.48390
QS = 3.8933 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	85.19	35.56	47.55	19.88	52.87	16.07	32.05	92.40	208.02	147.87	28.67	3.55	
2	89.98	36.28	44.96	19.88	24.77	16.07	32.05	432.24	230.60	142.23	26.70	3.50	
3	97.31	38.69	34.85	19.39	17.00	17.00	48.86	128.45	237.19	136.66	25.41	3.50	
4	97.31	37.48	32.75	18.90	19.39	19.39	123.06	69.14	243.84	131.17	24.14	3.55	
5	92.40	36.28	27.35	17.94	54.22	21.37	92.40	80.50	243.84	125.75	22.38	3.61	
6	87.58	35.56	24.14	17.00	56.97	20.87	125.75	46.25	237.19	117.76	20.87	3.72	
7	82.84	34.85	22.38	16.53	12.97	19.88	62.60	36.28	224.07	115.13	20.37	3.84	
8	71.37	34.85	25.41	36.28	30.01	29.34	150.71	32.05	211.20	112.53	18.90	4.01	
9	62.60	34.14	21.87	300.33	28.01	21.87	71.37	28.67	198.58	104.83	17.47	4.01	
10	56.97	33.44	26.05	104.83	26.05	20.37	50.18	26.05	201.71	97.31	16.07	4.13	
11	50.18	33.44	38.69	94.85	24.14	22.38	42.41	23.52	211.20	94.85	15.16	3.89	
12	46.25	33.44	30.69	56.97	24.14	195.46	34.85	22.38	217.60	87.58	13.83	3.61	
13	42.41	33.44	29.34	39.92	23.52	54.22	31.37	21.87	220.83	82.84	12.54	3.33	
14	42.41	33.44	28.67	32.05	21.87	56.97	31.37	21.37	220.83	73.62	10.89	3.06	
15	42.41	32.75	109.94	28.01	20.87	42.41	31.37	14.72	224.07	71.37	10.09	2.85	
16	42.41	32.75	56.97	26.05	20.87	32.75	34.85	18.42	220.83	66.94	9.01	2.64	
17	39.92	41.16	31.37	24.14	33.44	27.35	32.05	17.47	220.83	64.76	8.56	2.34	
18	39.92	102.30	26.70	24.14	28.67	25.41	26.70	17.47	211.20	61.18	8.11	2.10	
19	37.48	55.59	23.52	21.87	24.14	50.18	29.34	17.47	201.71	58.36	7.53	1.96	
20	36.28	44.96	21.37	20.37	21.87	30.01	34.85	17.00	198.58	56.97	6.97	1.82	
21	35.56	39.92	19.88	18.90	28.67	30.01	27.35	16.07	195.46	55.59	6.69	1.65	
22	32.75	38.69	18.90	18.90	23.52	36.28	25.41	15.16	192.36	51.52	6.14	1.56	
23	28.67	37.48	17.94	21.37	21.87	28.01	24.14	22.89	189.28	48.86	5.62	1.39	
24	26.70	38.69	17.00	58.36	20.37	32.05	30.01	133.90	189.28	46.25	5.23	1.27	
25	26.05	35.56	16.53	115.13	18.90	183.16	26.70	117.76	186.21	42.41	4.85	1.11	
26	26.70	33.44	16.07	43.68	17.94	46.25	35.56	21.37	183.16	39.92	4.48	0.93	
27	32.75	24.77	16.53	29.34	17.94	43.68	38.69	32.75	177.11	38.69	4.24	0.68	
28	34.14	32.05	19.88	25.41	17.47	44.96	54.22	28.01	168.16	35.56	3.84	0.50	
29	34.85	34.85	26.70	24.14	17.94	32.75	34.14	133.90	159.36	34.14		0.50	
30	35.56	32.75	20.87	31.37	17.00	32.05	29.34	153.58	159.36	32.05		0.36	
31		55.59		33.44	17.00		26.05		153.58	30.69		0.23	
Total	1556.95	1204.19	894.87	1359.37	784.41	1248.57	1469.80	1839.11	6337.24	2405.39	364.76	75.20	19539.86 Ton
Mean	51.90	38.84	29.83	43.85	25.30	41.62	47.41	61.30	204.43	77.59	13.03	2.43	
Max	97.31	102.30	109.94	300.33	56.97	195.46	150.71	432.24	243.84	147.87	28.67	4.13	432.24
Min	26.05	24.77	16.07	16.53	12.97	16.07	24.14	14.72	153.58	30.69	3.84	0.23	0.23

WATER YEAR : 2001

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

Drainage Area 66 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 2001

Number of observation 30

R - Square 0.8714

Remarks Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:42:28.47 LQS/LQS02D/12

Station - Ban Rong Sen, A. Makham, Chanthaburi, (Z.21)
Stream - Khlong Hin Dat
River - Chanthaburi
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division 111102
2.12710
QS = 0.3075 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.05	5.26	14.40	88.44	30.27	39.90	18.43	7.90	2.27	1.78	1.66	1.89	
2	6.51	4.80	11.82	50.95	28.08	31.39	16.75	7.90	2.14	1.55	1.55	2.27	
3	6.25	5.74	10.76	27.02	24.96	43.88	23.96	6.25	2.14	1.55	1.55	2.27	
4	5.99	6.25	10.09	20.19	22.03	31.39	17.58	5.99	2.01	1.45	1.55	1.78	
5	5.99	5.26	9.11	25.98	24.96	63.45	21.10	5.50	1.89	1.45	1.66	1.55	
6	5.99	5.26	8.80	32.54	33.71	39.90	25.98	5.03	1.89	1.34	1.55	2.41	
7	6.25	4.80	10.76	321.24	32.54	27.02	21.10	5.26	1.89	1.34	1.55	3.30	
8	5.74	4.36	12.19	14486.93	52.44	24.96	15.95	5.03	1.89	1.34	1.66	2.01	
9	5.74	4.36	11.11	2136.83	88.44	22.03	12.56	4.58	1.66	1.15	1.55	1.78	
10	2.69	5.26	18.43	256.42	203.75	38.62	12.19	4.36	1.55	1.25	1.55	1.66	
11	4.58	9.11	18.43	114.98	417.09	30.27	13.66	4.15	1.66	1.25	1.55	1.89	
12	9.11	9.76	12.93	66.80	173.55	50.95	11.82	3.97	1.55	1.15	1.45	1.78	
13	5.50	8.80	16.75	48.06	203.75	57.02	15.95	3.97	1.45	1.25	1.45	1.89	
14	5.74	7.61	37.36	38.62	121.10	30.27	13.66	3.80	1.78	1.25	1.45	1.89	
15	5.50	10.09	150.74	37.36	315.54	18.43	11.82	3.97	1.45	1.34	1.45	1.66	
16	5.26	27.02	60.19	27.02	315.54	15.95	10.76	3.63	1.25	1.25	1.66	1.66	
17	5.50	36.12	45.25	41.20	370.17	30.27	10.09	3.46	1.45	1.25	1.55	1.66	
18	5.74	48.06	38.62	46.64	208.27	24.96	9.43	3.46	1.34	1.25	1.34	1.66	
19	5.99	81.87	73.78	24.96	97.61	43.88	36.12	3.30	1.25	1.25	1.45	1.55	
20	5.50	37.36	27.02	18.43	73.78	30.27	18.43	3.14	1.06	1.34	1.45	1.55	
21	5.50	23.96	53.94	22.03	66.80	15.95	11.11	2.98	1.15	1.25	1.45	1.66	
22	5.03	15.95	39.90	77.65	53.94	38.62	10.09	2.98	0.89	1.15	1.55	1.66	
23	5.50	10.76	29.16	37.36	45.25	73.78	11.82	2.69	0.81	1.34	1.45	1.55	
24	5.50	10.76	58.59	23.96	39.90	53.94	52.44	2.98	0.89	1.25	1.66	1.55	
25	4.80	9.76	88.44	17.58	34.91	57.02	194.86	2.69	0.74	1.34	1.66	1.89	
26	5.74	28.08	63.45	57.02	121.10	33.71	42.53	2.41	0.60	1.34	1.34	1.89	
27	6.51	27.02	53.94	72.00	199.28	30.27	20.19	2.41	1.55	1.34	1.34	1.55	
28	5.99	36.12	114.98	41.20	147.28	39.90	14.40	2.41	0.54	1.34	1.34	1.66	
29	6.78	121.10	111.98	31.39	103.23	50.95	11.82	2.27	0.60	1.34		1.78	
30	7.33	48.06	79.75	32.54	137.14	28.08	11.11	2.27	0.60	1.25		1.78	
31		24.96		21.10	77.65		10.76		0.54	1.25		1.89	
Total	175.30	683.68	1292.67	18344.44	3864.06	1117.03	728.47	120.74	42.48	40.97	42.42	56.97	26509.23 Ton
Mean	5.84	22.05	43.09	591.76	124.65	37.23	23.50	4.02	1.37	1.32	1.52	1.84	
Max	9.11	121.10	150.74	14486.93	417.09	73.78	194.86	7.90	2.27	1.78	1.66	3.30	14486.93
Min	2.69	4.36	8.80	17.58	22.03	15.95	9.43	2.27	0.54	1.15	1.34	1.55	0.54

WATER YEAR : 2001

CHANTHABURI RIVER 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
Drainage Area	3 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 - 2001
Number of observation	51
R - Square	0.8945
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:43:13.26

LQS/LQS02D/12

Station - Ban Hang Maeo, A. Kaeng Hang Maeo, Chanthaburi, (Z.41)
Stream - Khlong Hang Maeo
River - Khlong Hang Maeo
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division 111102
1.42810
QS = 2.6485 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.07	1.79	2.28	50.50	30.61	18.50	14.70	5.94	1.93	0.14	0.00	0.00	
2	3.52	1.69	1.34	54.95	8.17	14.19	11.06	5.75	2.03	0.14	0.00	0.00	
3	3.23	1.46	0.64	31.96	6.72	12.00	12.00	8.59	2.03	0.00	0.00	0.00	
4	2.65	1.13	0.30	18.16	6.33	61.84	10.82	6.13	2.03	0.00	0.00	0.00	
5	2.42	0.79	0.18	11.52	8.59	74.45	10.14	5.94	1.93	0.00	0.00	0.00	
6	1.93	0.96	0.14	10.14	12.96	64.18	13.45	5.18	1.79	0.00	0.00	0.00	
7	1.79	1.56	4.24	11.29	58.36	53.27	26.38	5.37	4.24	0.00	0.00	0.00	
8	1.46	2.28	2.54	206.16	22.69	27.51	70.77	5.37	1.79	0.00	0.00	0.00	
9	1.34	1.93	1.56	592.88	12.24	20.21	24.88	5.18	1.46	0.00	0.00	0.00	
10	2.03	2.54	2.80	320.69	29.83	15.72	14.95	4.55	0.72	0.00	0.00	0.00	
11	1.69	2.96	1.34	93.62	24.14	29.44	14.45	4.55	0.64	0.00	0.00	0.00	
12	0.79	2.54	0.79	101.31	20.21	67.75	14.45	4.55	0.50	0.00	0.00	0.00	
13	0.57	3.94	0.57	86.44	21.62	54.95	13.94	4.41	0.50	0.00	0.00	0.00	
14	0.72	12.96	0.50	29.83	13.45	61.84	13.94	3.81	0.50	0.00	0.00	0.00	
15	0.64	26.00	2.28	21.62	139.61	18.16	9.91	3.64	0.37	0.00	0.00	0.00	
16	3.07	28.28	0.96	21.26	77.55	13.45	11.52	3.52	0.37	0.00	0.00	0.00	
17	2.96	34.38	0.64	18.50	126.88	11.52	9.69	3.52	0.37	0.00	0.00	0.00	
18	2.80	71.38	0.57	13.94	65.96	70.77	8.81	3.23	0.37	0.00	0.00	0.00	
19	2.80	13.70	0.30	11.52	31.96	35.37	8.59	2.96	0.43	0.00	0.00	0.00	
20	2.80	12.24	0.18	9.91	19.87	38.87	17.82	3.07	0.43	0.00	0.00	0.00	
21	2.96	8.17	0.10	8.59	31.96	27.51	9.69	2.54	0.43	0.00	0.00	0.00	
22	2.65	7.13	0.04	20.21	30.61	50.50	7.95	2.28	0.43	0.00	0.00	0.00	
23	2.54	5.18	0.01	35.37	15.72	58.94	7.95	2.28	0.43	0.00	0.00	0.00	
24	2.17	4.55	0.01	24.51	12.24	72.60	9.25	2.17	0.43	0.00	0.00	0.00	
25	2.03	6.52	0.06	16.24	10.82	151.68	21.97	1.93	0.43	0.00	0.00	0.00	
26	2.80	3.64	0.43	13.45	9.69	66.56	13.20	2.28	0.30	0.00	0.00	0.00	
27	2.65	4.73	0.06	10.14	12.00	47.78	9.69	2.17	0.30	0.00	0.00	0.00	
28	2.65	25.25	0.43	8.81	67.75	32.92	8.38	2.03	0.14	0.00	0.00	0.00	
29	2.28	19.18	0.50	8.59	31.48	21.62	7.54	1.93	0.14	0.00		0.00	
30	1.79	11.52	0.50	10.37	31.48	18.50	8.81	2.17	0.10	0.00		0.00	
31		90.99		11.52	26.38		5.94		0.10	0.00		0.00	
Total	66.80	411.37	26.29	1884.00	1017.88	1312.60	442.64	117.04	27.66	0.28	0.00	0.00	5306.56 Ton
Mean	2.23	13.27	0.88	60.77	32.83	43.75	14.28	3.90	0.89	0.01	0.00	0.00	
Max	3.52	90.99	4.24	592.88	139.61	151.68	70.77	8.59	4.24	0.14	0.00	0.00	592.88
Min	0.57	0.79	0.01	8.59	6.33	11.52	5.94	1.93	0.10	0.00	0.00	0.00	0.00

WATER YEAR : 2001

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
Drainage Area	445 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 - 2001
Number of observation	54
R - Square	0.8947
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:43:30.15 LQS/LQS02D/12

Station - Ban Prakaet, A. Kaeng Hang Maeo, Chanthaburi, (Z.42)
Stream - Khlong Prakaet
River - Khlong Prakaet
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division
1.52650
QS = 1.9136 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.37	1.11	58.05	257.32	125.57	18.37	82.27	23.01	3.74	1.01	0.24	0.08	
2	4.50	3.03	47.07	198.18	66.79	15.88	85.50	39.37	3.55	0.97	0.24	0.07	
3	4.30	19.01	28.74	83.88	36.91	14.69	65.31	53.84	3.55	0.92	0.23	0.07	
4	3.20	23.70	31.01	47.07	33.32	160.45	82.27	38.13	3.55	0.88	0.22	0.07	
5	2.53	11.30	306.33	31.77	152.45	193.85	85.50	71.32	3.37	0.83	0.20	0.06	
6	1.91	6.82	100.55	45.75	168.60	52.46	79.09	31.01	3.23	0.81	0.20	0.06	
7	1.63	5.30	623.86	32.55	166.55	33.32	72.85	23.70	3.09	0.77	0.19	0.06	
8	1.36	4.69	539.94	734.48	80.68	28.00	74.39	20.31	2.96	0.73	0.18	0.05	
9	1.23	3.92	127.43	2846.68	59.48	22.33	202.54	15.88	2.82	0.71	0.18	0.05	
10	1.11	3.55	83.88	1365.32	56.63	19.01	83.88	12.95	0.23	0.66	0.16	0.05	
11	0.99	3.55	63.83	521.04	72.85	23.70	71.32	12.39	2.59	0.64	0.16	0.05	
12	0.99	6.38	60.92	287.03	68.29	83.88	44.45	10.24	2.46	0.60	0.15	0.04	
13	0.99	5.30	68.29	168.60	59.48	51.09	62.37	9.21	2.37	0.58	0.14	0.04	
14	0.88	4.69	92.09	87.13	44.45	144.59	82.27	8.72	2.24	0.57	0.14	0.04	
15	0.88	4.11	311.05	63.83	144.59	65.31	49.74	7.75	2.15	0.53	0.13	0.04	
16	3.20	12.95	367.47	51.09	202.54	33.32	69.80	7.28	2.06	0.51	0.13	0.03	
17	3.20	120.05	104.01	39.37	250.23	27.27	44.45	6.82	1.97	0.49	0.12	0.03	
18	1.49	204.73	58.05	32.55	136.87	136.87	38.13	6.38	1.88	0.47	0.12	0.03	
19	0.99	58.05	39.37	26.54	82.27	97.13	31.01	5.94	1.80	0.45	0.11	0.03	
20	0.77	24.40	27.27	24.40	60.92	88.77	28.00	5.51	1.71	0.42	0.11	0.03	
21	0.77	19.66	23.70	22.33	142.64	43.16	26.54	5.30	1.66	0.40	0.11	0.03	
22	0.77	23.70	22.33	31.77	63.83	34.51	20.98	5.10	1.57	0.39	0.10	0.03	
23	0.66	15.88	19.66	35.70	43.16	120.05	19.01	4.89	1.49	0.37	0.10	0.03	
24	0.66	19.66	15.28	95.44	31.77	142.64	17.11	4.69	1.44	0.35	0.08	0.03	
25	0.66	31.77	17.11	264.49	26.54	250.23	36.91	4.50	1.36	0.34	0.08	0.03	
26	1.23	14.69	19.66	136.87	21.65	264.49	125.57	4.30	1.31	0.32	0.08	0.03	
27	3.92	11.84	18.37	56.63	16.49	118.23	74.39	4.11	1.26	0.30	0.08	0.02	
28	3.03	66.79	13.52	36.91	22.33	172.72	52.46	3.92	1.21	0.30	0.08	0.02	
29	3.03	53.84	92.09	27.27	25.11	95.44	34.51	3.74	1.16	0.29		0.02	
30	1.63	56.63	172.72	30.25	23.70	129.30	25.82	3.74	1.09	0.27		0.02	
31		144.59		88.77	20.98		26.54		1.04	0.26		0.02	
Total	55.88	985.69	3553.65	7771.01	2507.67	2681.06	1894.98	454.05	65.91	17.14	4.06	1.26	19992.36 Ton
Mean	1.86	31.80	118.46	250.68	80.89	89.37	61.13	15.14	2.13	0.55	0.14	0.04	
Max	4.50	204.73	623.86	2846.68	250.23	264.49	202.54	71.32	3.74	1.01	0.24	0.08	2846.68
Min	0.66	1.11	13.52	22.33	16.49	14.69	17.11	3.74	0.23	0.26	0.08	0.02	0.02

WATER YEAR : 2001

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
Drainage Area	- 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	2000
Number of observation	18
R - Square	0.9054
Remarks	Continued Sediment Station

RID Computer Center, Processing : 28-SEP-2004 13:43:44.84

LQS/LQS02D/12

Station - Ban Nong Chek Soi, Kaeng Hang Maeo, Chanthaburi, (Z.43)
Stream - Khlong Hin Phloeng
River - Khlong Hin Phloeng
River System - East Coast-Gulf Basin

Royal Irrigation Department
Thailand
Hydrology Division 111102
1.55420
QS = 6.4998 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.85	1.00	3.73	2.14	2.42	1.81	4.24	2.94	1.63	1.39	1.00	0.57	
2	0.85	1.00	3.09	1.94	2.08	1.75	3.33	4.07	1.75	1.39	1.00	0.53	
3	0.80	2.64	2.57	1.75	1.94	1.75	3.25	3.09	1.75	1.33	1.00	0.41	
4	0.80	2.28	1.94	1.81	2.08	43.74	3.73	3.17	1.69	1.27	1.00	0.31	
5	0.80	2.14	1.94	1.75	2.64	4.42	5.33	2.71	1.63	1.22	1.00	0.27	
6	0.75	2.08	1.88	1.69	2.35	3.57	3.57	2.57	1.63	1.16	1.00	0.24	
7	0.75	1.94	4.24	3.41	2.57	3.17	3.33	2.49	1.56	1.11	0.95	0.24	
8	0.75	1.50	4.24	15.51	2.71	2.94	3.17	2.35	1.56	1.11	0.95	0.38	
9	0.75	1.50	3.41	7.54	2.28	2.71	3.01	2.28	1.50	1.16	0.95	0.34	
10	0.75	2.86	4.42	5.52	2.35	2.79	2.86	2.21	1.50	1.16	0.95	0.27	
11	0.71	1.94	3.09	3.49	2.21	2.79	2.79	2.14	1.50	1.16	0.95	0.27	
12	0.71	2.42	2.64	7.01	3.01	3.25	2.86	2.08	1.50	1.16	0.90	0.24	
13	0.71	2.57	2.42	3.09	2.28	3.17	2.94	2.14	1.44	1.11	0.90	0.21	
14	0.80	2.57	2.42	2.57	2.08	2.94	2.79	2.01	1.44	1.11	0.85	0.21	
15	0.75	3.90	3.73	2.42	2.21	2.71	2.64	2.01	1.44	1.11	0.85	0.18	
16	0.85	3.49	2.79	2.28	2.71	2.64	2.79	1.94	1.44	1.11	0.80	0.18	
17	0.85	5.14	2.49	2.08	3.25	2.57	2.57	1.94	1.44	1.11	0.75	0.15	
18	0.85	3.33	2.42	2.01	2.71	2.49	2.49	1.88	1.44	1.05	0.71	0.15	
19	0.85	3.01	2.14	1.94	2.42	2.42	2.49	1.88	1.39	1.05	0.71	0.13	
20	0.85	2.94	1.94	1.88	2.21	2.35	2.64	1.81	1.39	1.05	0.71	0.13	
21	0.85	2.57	1.81	2.01	3.09	3.01	2.49	1.81	1.39	1.05	0.71	0.08	
22	0.85	3.01	1.69	1.88	2.49	2.49	2.42	1.75	1.39	1.00	0.71	0.04	
23	0.85	2.71	1.63	1.81	2.35	3.57	2.42	1.75	1.39	1.00	0.71	0.03	
24	0.85	2.28	1.50	1.75	2.21	2.79	2.35	1.75	1.33	1.00	0.66	0.03	
25	0.85	2.08	1.75	1.88	2.14	2.79	2.42	1.75	1.33	1.00	0.66	0.01	
26	0.95	2.14	2.28	1.75	2.08	2.64	2.49	1.69	1.33	1.00	0.62	0.01	
27	1.00	1.94	1.75	1.69	1.94	2.49	2.57	1.69	1.33	1.00	0.62	0.01	
28	0.95	4.24	2.28	1.63	2.14	3.33	2.64	1.63	1.33	1.00	0.62	0.01	
29	1.00	3.01	2.35	1.56	2.01	9.77	2.49	1.63	1.33	1.00		0.00	
30	1.00	3.65	2.35	1.75	1.94	3.49	2.42	1.63	1.27	1.00		0.00	
31		12.84		1.63	1.88		2.49		1.27	1.00		0.00	
Total	24.93	90.72	76.93	91.17	72.78	132.35	90.02	64.79	45.31	34.37	23.24	5.63	752.24 Ton
Mean	0.83	2.93	2.56	2.94	2.35	4.41	2.90	2.16	1.46	1.11	0.83	0.18	
Max	1.00	12.84	4.42	15.51	3.25	43.74	5.33	4.07	1.75	1.39	1.00	0.57	43.74
Min	0.71	1.00	1.50	1.56	1.88	1.75	2.35	1.63	1.27	1.00	0.62	0.00	0.00

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Nam Khwae Noi at Ban Lum Sum, Kanchanaburi (K.10)

Lat 14 - 05 - 38 N. **Long** 99 - 10 - 40 E.

Location	on left bank about 100 meters upstream from Ban Lum Sum railway station.
Ban Lum Sum	**Amphoe** Sai Yok **Changwat** Kanchanaburi
Drainage Area	7,008 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1985 - 1991, 1997 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	36
R - Square	0.6738
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:34:00.83 LQS/LQS02D/12

Station - Ban Lum Sum, Sai Yok, Kanchanaburi, (K.10)
Stream - Khwae Noi
River - Mae Klong
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.76150
QS = 0.1294 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2662.75	3459.13	971.15	474.92	3023.20	9062.05	1758.07	560.37	1131.91	312.06	839.30	2167.23	
2	1392.73	2369.66	1173.75	291.22	3058.55	6758.08	2385.56	688.65	904.19	322.70	1040.17	2481.88	
3	2167.23	2797.73	1303.20	688.65	5023.30	6908.60	1972.67	601.86	520.17	481.27	776.52	2182.53	
4	2970.50	3591.04	630.23	885.43	5023.30	4999.17	1943.44	601.86	758.97	659.16	526.78	1555.56	
5	3165.69	2935.59	1142.30	1121.55	4343.97	5541.65	2106.52	389.81	608.90	830.20	1142.30	2338.01	
6	2579.86	2167.23	1381.40	1415.51	2988.02	4619.90	1716.43	601.86	623.08	812.13	1205.56	2883.55	
7	2401.50	2167.23	1392.73	1184.31	3922.19	5267.39	1438.46	553.58	623.08	474.92	1131.91	2306.54	
8	2369.66	2662.75	1347.64	2076.45	3857.30	6315.15	1131.91	443.69	776.52	637.41	1449.99	1758.07	
9	1661.59	2797.73	1555.56	1871.19	3629.12	5796.19	1871.19	437.55	608.90	560.37	1347.64	1772.04	
10	2831.93	2481.88	1216.25	2385.56	3629.12	5770.51	2091.46	431.45	1050.20	567.20	980.88	2385.56	
11	4075.41	3023.20	494.09	1842.62	3129.80	5366.43	2031.69	651.87	546.83	567.20	711.13	1567.48	
12	3165.69	1800.13	1205.56	1496.51	2797.73	6286.09	1885.54	651.87	758.97	574.06	971.15	2579.86	
13	2353.81	1000.48	1555.56	1392.73	2213.25	5668.30	1972.67	344.46	659.16	431.45	1508.24	2797.73	
14	1484.82	601.86	1899.95	1358.85	3201.75	5719.31	1786.06	462.32	587.89	344.46	1744.14	2935.59	
15	2275.26	1163.23	1871.19	1121.55	3750.19	5796.19	1121.55	317.36	681.22	500.56	2091.46	3147.72	
16	1943.44	830.20	1842.62	750.26	3922.19	6315.15	1914.40	513.60	594.86	688.65	1786.06	3076.30	
17	2046.56	803.16	1620.97	1730.26	3515.40	4690.02	1716.43	500.56	443.69	574.06	1943.44	1914.40	
18	2369.66	866.85	776.52	1358.85	3922.19	4927.07	1716.43	487.67	681.22	718.69	1580.78	2612.88	
19	2849.09	913.63	1259.40	1358.85	4009.44	5120.34	1634.46	338.96	718.69	601.86	1508.24	2353.81	
20	2780.70	574.06	1121.55	1358.85	2849.09	3707.72	1415.51	507.06	1336.47	526.78	2167.23	2679.47	
21	2849.09	630.23	630.23	1142.30	4231.17	3900.51	1496.51	431.45	1000.48	431.45	1594.13	2579.86	
22	2988.02	932.63	580.96	1184.31	5770.51	3023.20	776.52	553.58	696.11	821.15	1648.00	2629.46	
23	1292.19	1473.17	876.12	876.12	4903.14	3591.04	1030.18	494.09	574.06	980.88	1814.25	3165.69	
24	1828.41	1248.55	615.97	2197.87	5668.30	2213.25	574.06	481.27	419.37	942.20	1856.88	2530.67	
25	2629.46	1184.31	355.57	2646.08	6003.36	2563.41	913.63	456.07	322.70	839.30	1461.56	1121.55	
26	3572.06	1496.51	623.08	2290.88	3648.22	2713.03	1060.27	306.79	507.06	1000.48	2322.25	2151.99	
27	4389.44	1303.20	456.07	2547.02	2918.20	2530.67	1131.91	601.86	913.63	2046.56	1814.25	3058.55	
28	4141.86	794.24	395.64	2662.75	2883.55	2579.86	812.13	1543.67	741.59	2244.17	1914.40	2662.75	
29	3750.19	1173.75	520.17	2763.71	4879.26	2713.03	630.23	932.63	546.83	2259.69		3329.37	
30	3311.00	1060.27	839.30	2061.48	5617.49	2197.87	651.87	1415.51	546.83	1620.97		3610.05	
31		1080.53		3023.20	8302.62		703.60		328.09	885.43		2514.36	
Total	80299.60	51384.16	31654.73	49559.84	126634.92	142661.19	45391.36	17303.33	21211.67	25257.47	40878.64	76850.51	709087.44 Ton
Mean	2676.65	1657.55	1055.16	1598.70	4085.00	4755.37	1464.24	576.78	684.25	814.76	1459.95	2479.05	
Max	4389.44	3591.04	1899.95	3023.20	8302.62	9062.05	2385.56	1543.67	1336.47	2259.69	2322.25	3610.05	9062.05
Min	1292.19	574.06	355.57	291.22	2213.25	2197.87	574.06	306.79	322.70	312.06	526.78	1121.55	291.22

WATER YEAR : 2001

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 Tung Na Nang Rok	**Amphoe** Mueang **Changwat** Kanchanaburi
Drainage Area	2,340 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	2001
Number of observation	39
R - Square	0.9555
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:34:18.29

LQS/LQS02D/12

Station - Ban Thung Na Nang Rok, Mueang, Kanchanaburi, (K.12)
Stream - Lam Taphoen
River - Khwae Yai
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.42940
QS = 6.0875 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	27.89	2.66	32.10	10.87	0.26	4.43	67.81	1620.73	33.54	3.81	0.19	0.61	
2	27.89	3.51	30.68	6.09	0.26	2.66	133.65	1832.39	32.10	2.39	0.19	0.52	
3	26.52	5.07	30.68	4.74	0.33	3.51	105.57	1883.34	30.68	1.19	0.26	0.61	
4	25.18	5.07	30.68	4.11	0.33	1.36	98.27	1502.83	29.27	1.64	0.26	0.40	
5	21.28	4.74	27.89	4.43	0.52	0.94	84.15	1143.90	32.10	3.51	0.33	0.52	
6	15.24	3.51	33.54	4.11	18.79	0.84	86.46	851.24	30.68	3.51	0.26	0.40	
7	13.44	5.07	32.10	2.66	13.44	0.74	86.46	651.81	21.28	1.19	0.26	0.52	
8	12.13	10.87	29.27	1.47	14.10	0.26	95.87	576.32	6.80	1.64	0.19	0.61	
9	10.87	12.78	30.68	3.51	16.40	0.33	108.04	475.42	5.07	2.39	0.19	0.61	
10	8.47	10.87	32.10	2.93	18.79	0.26	123.21	369.18	8.47	1.36	0.11	0.40	
11	5.07	10.25	33.54	2.93	20.02	0.06	133.65	287.66	3.81	1.09	0.06	0.11	
12	3.81	9.05	35.01	3.51	17.58	0.19	136.30	228.96	6.44	1.09	0.19	0.19	
13	5.40	7.90	35.01	2.93	13.44	0.06	202.54	192.89	12.13	0.84	0.19	0.33	
14	5.40	9.05	35.01	2.13	16.40	0.06	222.27	170.92	12.78	1.19	0.19	0.11	
15	3.81	10.87	35.01	1.64	13.44	0.06	311.22	149.77	9.65	0.94	0.11	0.19	
16	3.51	17.58	33.54	1.47	13.44	0.06	651.81	118.09	9.05	0.84	0.06	0.11	
17	7.16	25.18	30.68	1.19	7.53	0.11	1121.73	88.78	8.47	0.52	0.06	0.19	
18	5.74	26.52	27.89	1.19	7.16	0.26	1179.30	73.26	6.80	0.26	0.06	0.19	
19	3.51	45.75	26.52	1.09	16.40	0.00	870.50	84.15	4.74	0.06	0.19	0.02	
20	2.13	77.34	26.52	0.84	12.78	0.06	550.55	86.46	5.40	0.11	0.26	0.19	
21	2.13	93.49	25.18	0.52	11.49	0.33	364.11	86.46	4.43	0.11	0.52	0.02	
22	2.13	71.43	22.56	0.74	10.87	0.33	331.27	75.11	4.11	0.19	0.40	0.11	
23	2.39	55.61	21.28	0.40	9.05	30.68	299.37	67.81	4.43	0.52	0.26	0.00	
24	4.11	44.16	18.79	0.33	7.90	84.15	253.40	60.75	2.93	0.61	0.06	0.00	
25	7.90	39.50	17.58	0.26	7.53	35.01	222.27	47.35	1.36	0.74	0.33	0.11	
26	7.53	39.50	16.40	0.26	7.53	14.10	228.96	33.54	1.47	0.74	0.33	0.19	
27	6.09	39.50	17.58	0.26	6.80	9.05	359.96	42.59	13.44	0.40	0.52	0.26	
28	2.66	36.49	20.02	0.26	8.47	23.86	556.96	42.59	17.58	0.11	0.52	0.26	
29	2.66	33.54	20.02	0.33	7.90	75.11	889.88	41.04	9.05	0.26		0.19	
30	2.39	30.68	14.10	0.33	6.80	55.61	1361.04	36.49	6.09	0.33		0.19	
31		32.10		0.33	6.09		1715.15		4.74	0.26		0.11	
Total	274.44	819.64	821.96	67.86	311.84	344.48	12951.73	12921.83	378.89	33.84	6.55	8.27	28941.33 Ton
Mean	9.15	26.44	27.40	2.19	10.06	11.48	417.80	430.73	12.22	1.09	0.23	0.27	
Max	27.89	93.49	35.01	10.87	20.02	84.15	1715.15	1883.34	33.54	3.81	0.52	0.61	1883.34
Min	2.13	2.66	14.10	0.26	0.26	0.00	67.81	33.54	1.36	0.06	0.06	0.00	0.00

WATER YEAR : 2001

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
Drainage Area	1,355 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1980 - 1986, 1997 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	33
R - Square	0.8965
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:34:50.48 LQS/LQS02D/12

Station - Ban Bo, Suan Phueng, Ratchaburi, (K.17)
Stream - Lam Phachi
River - Khwae Noi
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.63130
QS = 1.1840 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.37	2.05	1.18	6.72	0.51	57.43	71.01	85.67	5.98	2.55	0.38	1.00	
2	3.67	2.29	1.82	4.61	1.00	25.72	73.86	65.45	5.63	2.55	1.00	0.82	
3	3.37	5.63	2.05	3.67	1.38	12.30	73.86	76.75	5.63	2.29	1.00	0.51	
4	3.09	7.90	1.82	3.37	1.59	6.72	71.01	104.64	5.63	2.05	0.66	0.27	
5	3.09	5.63	2.29	3.37	1.59	5.28	71.01	73.86	5.63	2.05	0.51	0.82	
6	2.81	4.94	3.37	3.67	5.28	4.61	149.33	71.01	5.63	2.05	0.27	0.82	
7	3.09	4.28	2.81	4.61	52.32	3.97	128.58	68.21	5.28	1.82	0.66	2.55	
8	2.55	3.67	2.29	5.63	28.31	3.67	167.30	60.06	4.94	2.05	0.66	28.31	
9	2.29	3.67	1.82	6.72	16.35	3.37	491.14	52.32	4.94	2.05	0.66	12.30	
10	2.05	3.37	1.38	6.35	9.57	2.55	325.01	42.66	4.61	1.82	0.27	5.28	
11	2.05	3.09	1.59	10.45	6.72	2.81	171.92	38.12	4.28	1.82	0.51	3.97	
12	2.05	2.81	1.82	16.35	9.57	2.55	121.55	35.20	4.28	1.82	0.38	3.09	
13	2.05	2.55	2.05	49.83	7.11	3.97	118.09	31.00	3.97	1.82	0.82	2.81	
14	1.82	2.29	2.29	31.00	5.98	2.81	132.15	27.00	4.28	1.82	0.82	2.55	
15	1.82	2.29	2.29	13.27	5.28	2.55	195.73	24.46	5.98	1.59	0.27	1.82	
16	1.82	2.05	2.29	7.11	4.61	2.55	181.30	23.23	6.35	1.59	0.00	2.05	
17	1.82	2.05	1.82	5.63	4.28	2.29	107.94	20.83	5.28	1.59	0.51	2.55	
18	1.38	2.05	1.59	4.94	3.97	2.29	98.15	18.54	4.61	1.59	0.66	2.55	
19	2.81	2.05	1.82	4.28	4.28	2.55	231.77	16.35	4.28	1.38	0.00	1.59	
20	2.05	2.29	1.59	3.97	4.28	3.37	1049.25	14.27	3.97	1.38	0.27	0.51	
21	1.59	2.29	1.59	3.67	3.97	3.37	621.54	13.27	3.67	1.18	0.51	1.38	
22	1.18	2.05	1.38	3.37	3.37	2.81	309.88	11.36	3.67	1.38	0.51	1.38	
23	0.82	1.59	1.38	2.81	2.81	24.46	205.58	10.45	3.67	1.18	0.00	1.00	
24	1.00	1.38	1.38	2.81	2.55	22.02	225.85	9.57	3.09	1.00	0.00	9.57	
25	1.38	1.18	1.38	2.29	2.05	140.64	287.71	8.72	3.09	1.00	0.66	2.05	
26	1.38	1.18	1.59	3.09	2.05	302.42	274.88	8.72	3.09	1.18	1.18	0.82	
27	1.38	1.38	2.05	1.38	1.82	281.27	205.58	7.11	2.81	1.00	2.05	0.27	
28	1.38	1.38	2.81	1.18	2.29	220.71	171.92	6.72	2.81	1.00	1.38	1.00	
29	1.59	1.38	11.36	1.59	3.09	149.33	149.33	6.72	2.55	0.82		1.00	
30	2.05	1.18	16.35	1.59	9.57	107.94	132.15	6.35	2.55	1.00		1.00	
31		1.18		1.00	76.75		114.67		2.55	0.82		3.09	
Total	62.80	83.12	81.25	220.33	284.30	1408.33	6729.05	1038.62	134.73	49.24	16.60	98.73	10207.10 Ton
Mean	2.09	2.68	2.71	7.11	9.17	46.94	217.07	34.62	4.35	1.59	0.59	3.18	
Max	3.67	7.90	16.35	49.83	76.75	302.42	1049.25	104.64	6.35	2.55	2.05	28.31	1049.25
Min	0.82	1.18	1.18	1.00	0.51	2.29	71.01	6.35	2.55	0.82	0.00	0.27	0.00

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Mae Nam Noi at Ban Mae Nam Noi, Kanchanaburi (K.22B)

Location	**Lat**	14 - 26 - 59 N.	**Long**	98 - 48 - 08 E.	
	on right bank about 640 meters upstream from station K.22A.				
	Ban	Mae Nam Noi	**Amphoe**	Sai Yok	**Changwat** Kanchanaburi
Drainage Area	320 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	2001				
Number of observation	33				
R - Square	0.8982				
Remarks	Continued Sediment Station				

RID Computer Center, Processing : 21-JUL-2004 14:35:15.88

LQS/LQS02D/12

Station - Ban Mae Nam Noi, Sai Yok, Kanchanaburi, (K.22B)
Stream - Huai Mae Nam Noi
River - Khwae Noi
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.53000
QS = 0.7487 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.99	0.75	11.61	27.73	39.93	541.17	84.76	14.38	6.01	3.23	1.84	0.99	
2	0.75	1.84	8.25	18.38	447.32	352.09	59.72	13.43	6.01	3.23	1.84	0.99	
3	10.73	1.84	8.25	32.68	416.24	238.43	50.59	13.43	6.01	3.23	1.84	0.99	
4	2.86	5.31	9.06	65.03	192.46	173.99	44.09	12.51	6.01	3.23	1.84	0.99	
5	1.54	8.25	6.01	81.83	118.93	139.03	39.93	13.43	6.01	2.86	1.84	0.99	
6	1.25	16.34	6.01	471.13	143.25	118.93	36.13	12.51	5.31	2.86	1.84	0.75	
7	1.25	6.01	5.31	907.42	147.51	108.16	37.90	11.61	5.31	2.86	1.54	0.75	
8	1.25	3.23	4.02	859.62	104.66	87.73	41.99	11.61	5.31	2.86	1.54	0.75	
9	0.99	4.02	4.02	720.48	84.76	91.03	39.93	10.73	5.31	2.86	1.54	1.25	
10	0.99	8.25	4.65	358.87	70.48	130.72	37.90	9.88	5.31	2.86	1.54	0.99	
11	0.75	5.31	6.01	173.99	59.72	94.38	32.68	9.88	4.65	2.86	1.54	0.99	
12	0.75	3.62	10.73	104.66	211.57	91.03	34.39	9.88	4.65	2.50	1.54	0.75	
13	0.75	2.86	9.88	73.26	160.56	108.16	32.68	9.06	4.65	2.50	1.54	0.75	
14	0.75	2.86	8.25	62.36	151.82	111.71	27.73	9.06	4.65	2.50	1.54	0.75	
15	1.54	4.02	14.38	48.38	108.16	108.16	26.15	9.06	4.65	2.50	1.54	0.75	
16	1.84	3.23	13.43	46.22	81.83	81.83	29.35	8.25	4.02	2.50	1.25	0.75	
17	1.25	2.86	17.35	52.82	94.38	67.73	24.60	8.25	4.02	2.50	1.25	0.75	
18	0.99	9.88	15.35	62.36	111.71	59.72	21.59	8.25	4.02	2.16	1.25	0.75	
19	0.75	9.06	11.61	50.59	160.56	52.82	19.43	7.48	4.02	2.16	1.25	0.75	
20	0.75	9.06	10.73	46.22	192.46	57.39	19.43	7.48	4.02	2.16	1.25	0.75	
21	0.75	12.51	9.06	39.93	139.03	57.39	18.38	7.48	4.02	2.16	1.25	0.64	
22	0.75	9.88	13.43	70.48	101.19	48.38	17.35	7.48	4.02	2.16	1.25	0.64	
23	0.75	8.25	18.38	57.39	84.76	94.38	16.34	7.48	3.62	2.16	1.25	0.99	
24	0.75	5.31	15.35	55.09	76.08	62.36	20.50	6.73	3.62	2.16	1.25	0.75	
25	0.75	4.65	15.35	44.09	65.03	62.36	18.38	6.73	3.62	2.16	1.25	0.75	
26	1.25	3.62	14.38	37.90	65.03	50.59	16.34	6.73	3.62	2.16	0.99	0.75	
27	1.25	4.02	15.35	32.68	84.76	48.38	15.35	6.73	3.62	1.84	0.99	0.64	
28	0.75	4.02	37.90	31.00	134.85	57.39	15.35	6.73	3.62	1.84	0.99	0.64	
29	0.99	8.25	70.48	31.00	447.32	78.94	15.35	6.01	3.62	1.84		0.64	
30	0.99	32.68	36.13	44.09	568.29	115.30	14.38	6.01	3.23	1.84		0.64	
31		17.35		36.13	1007.05		14.38		3.23	1.84		0.64	
Total	41.70	219.14	430.72	4743.81	5871.70	3489.68	923.07	278.28	139.79	76.58	40.37	24.90	16279.74 Ton
Mean	1.39	7.07	14.36	153.03	189.41	116.32	29.78	9.28	4.51	2.47	1.44	0.80	
Max	10.73	32.68	70.48	907.42	1007.05	541.17	84.76	14.38	6.01	3.23	1.84	1.25	1007.05
Min	0.75	0.75	4.02	18.38	39.93	48.38	14.38	6.01	3.23	1.84	0.99	0.64	0.64

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Mae Nam Lo at Ban Mae Nam Lo, 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 Mae Nam Lo	**Amphoe** Sai Yok **Changwat** Kanchanaburi
Drainage Area	435 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
Number of observation	33
R - Square	0.9005
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:35:33.07

LQS/LQS02D/12

Station - Ban Mae Nam Lo, Sai Yok, Kanchanaburi, (K.30)
Stream - Huai Mae Nam Lo
River - Mae Klong
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.36620
QS = 1.6017 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.15	1.87	8.52	17.48	17.48	225.65	89.46	19.58	4.59	2.44	1.10	0.34	
2	1.87	2.44	12.12	11.38	206.10	126.61	68.33	12.12	4.59	2.15	1.10	0.23	
3	15.43	3.41	6.28	26.28	196.51	92.04	56.08	11.38	4.59	2.15	1.10	0.23	
4	5.00	3.79	16.45	35.95	89.46	79.33	46.39	10.64	4.59	2.15	1.10	0.23	
5	3.04	20.66	7.18	28.62	62.13	70.44	37.22	12.12	4.59	2.15	1.10	0.23	
6	2.74	18.52	5.00	126.61	86.89	62.13	42.66	12.12	4.59	2.15	0.87	0.13	
7	2.15	12.12	4.19	328.20	92.04	62.13	50.21	9.92	4.19	1.87	0.87	0.13	
8	1.87	5.85	3.41	347.49	70.44	52.15	62.13	9.92	4.19	1.87	0.87	0.13	
9	1.60	12.12	3.04	206.10	56.08	48.29	50.21	9.22	4.19	1.87	0.87	0.46	
10	1.60	12.88	3.04	116.14	46.39	66.25	46.39	8.52	3.79	1.87	0.66	0.34	
11	1.60	7.18	3.41	68.33	37.22	52.15	34.70	7.85	3.79	1.87	0.66	0.34	
12	1.60	4.59	6.73	46.39	60.09	42.66	32.23	7.85	3.79	1.87	0.66	0.34	
13	1.60	3.41	6.28	33.46	60.09	48.29	40.82	7.85	3.79	1.87	0.66	0.46	
14	1.87	3.41	6.28	29.81	62.13	44.52	31.01	7.18	3.79	1.87	0.66	0.34	
15	2.15	6.73	8.52	21.76	52.15	44.52	27.44	6.73	3.41	1.87	0.66	0.23	
16	3.79	5.42	9.92	18.52	44.52	35.95	35.95	6.73	3.41	1.60	0.46	0.13	
17	3.04	5.42	12.12	25.12	46.39	32.23	28.62	6.28	3.41	1.60	0.46	0.13	
18	3.04	5.42	12.12	54.11	58.08	29.81	26.28	6.28	3.41	1.60	0.46	0.13	
19	2.15	5.42	9.92	35.95	97.26	26.28	23.99	6.28	3.41	1.60	0.46	0.13	
20	1.87	6.73	8.52	26.28	94.64	32.23	20.66	5.85	3.41	1.60	0.34	0.13	
21	1.60	7.85	8.52	22.86	79.33	31.01	18.52	5.85	3.04	1.60	0.34	0.05	
22	1.60	6.28	9.22	52.15	64.18	25.12	16.45	5.42	3.04	1.60	0.34	0.13	
23	1.60	5.42	12.88	76.85	56.08	72.56	16.45	5.42	3.04	1.60	0.34	0.34	
24	1.60	5.00	10.64	56.08	50.21	72.56	16.45	5.42	3.04	1.60	0.34	0.23	
25	1.60	5.00	11.38	37.22	42.66	81.83	17.48	5.42	2.74	1.60	0.23	0.34	
26	3.79	4.59	18.52	28.62	40.82	89.46	17.48	5.42	2.74	1.60	0.46	0.13	
27	3.04	4.19	10.64	23.99	62.13	81.83	14.44	5.00	2.44	1.35	0.46	0.13	
28	2.44	3.41	50.21	22.86	84.35	81.83	13.66	5.00	2.44	1.35	0.34	0.13	
29	2.15	4.19	60.09	21.76	187.04	89.46	13.66	5.00	2.44	1.35		0.13	
30	2.15	19.58	27.44	27.44	284.38	146.05	12.88	4.59	2.44	1.10		0.13	
31		12.12		18.52	400.33		12.88		2.44	1.10		0.13	
Total	81.73	225.02	372.59	1992.33	2887.60	2045.37	1021.13	236.96	109.36	53.87	17.97	6.68	9050.61 Ton
Mean	2.72	7.26	12.42	64.27	93.15	68.18	32.94	7.90	3.53	1.74	0.64	0.22	
Max	15.43	20.66	60.09	347.49	400.33	225.65	89.46	19.58	4.59	2.44	1.10	0.46	400.33
Min	1.60	1.87	3.04	11.38	17.48	25.12	12.88	4.59	2.44	1.10	0.23	0.05	0.05

WATER YEAR : 2001

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

Drainage Area 777 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

Number of observation 32

R - Square 0.9295

Remarks Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:35:49.94 LQS/LQS02D/12

Station - Ban Nam Chon, Sai Yok, Kanchanaburi, (K.31)
Stream - Huai Mae Nam Noi
River - Khwae Noi
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.48600
QS = 0.9888 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.99	1.63	28.05	69.54	97.71	884.68	265.42	42.68	14.88	7.19	3.19	0.85	
2	1.99	3.19	25.46	44.71	907.84	542.77	186.59	36.78	14.88	6.63	3.19	0.85	
3	21.73	5.57	18.20	81.68	816.38	410.52	154.92	33.48	14.88	6.63	2.77	0.71	
4	9.55	10.81	25.46	128.84	345.82	338.86	128.84	34.88	14.88	6.09	2.77	0.71	
5	4.57	24.20	14.88	143.55	241.10	271.86	121.68	36.78	13.82	6.09	2.77	0.71	
6	3.19	40.69	11.79	560.20	345.82	230.53	125.24	33.48	13.82	6.09	2.77	0.71	
7	2.77	26.75	10.17	1504.19	352.83	220.12	128.84	30.73	13.82	6.09	2.37	0.71	
8	2.37	10.17	7.76	1602.03	230.53	186.59	170.51	29.38	12.79	6.09	2.37	0.71	
9	1.99	15.96	7.76	1082.58	186.59	199.79	136.13	28.05	12.79	5.57	2.37	1.30	
10	1.63	26.75	7.76	534.12	158.77	246.44	118.15	26.75	11.79	5.57	2.37	0.99	
11	1.30	14.88	9.55	298.08	139.83	186.59	101.03	25.46	11.79	5.57	1.99	0.85	
12	1.30	8.94	20.53	194.80	291.45	199.79	107.77	25.46	10.81	5.57	1.99	0.71	
13	1.63	6.63	19.35	143.55	278.34	209.87	101.03	25.46	10.17	5.57	1.99	0.71	
14	1.63	6.09	17.07	121.68	252.71	204.81	91.19	25.46	10.17	5.57	1.99	0.71	
15	3.19	11.79	25.46	101.03	199.79	204.81	78.58	24.20	10.17	5.06	1.99	0.58	
16	5.06	8.94	26.75	97.71	170.51	166.57	94.43	22.95	10.17	5.06	1.99	0.58	
17	3.63	6.63	38.72	107.77	186.59	139.83	84.81	20.53	9.55	5.06	1.99	0.58	
18	3.19	14.88	32.09	132.47	204.81	125.24	69.54	20.53	9.55	5.06	1.63	0.46	
19	1.99	17.07	26.75	121.68	325.08	114.66	66.61	20.53	8.94	4.57	1.63	0.46	
20	1.63	18.20	24.20	107.77	388.55	125.24	60.87	20.53	8.94	4.57	1.63	0.35	
21	1.30	21.73	21.73	94.43	298.08	132.47	58.07	19.35	8.94	4.57	1.30	0.35	
22	0.99	20.53	24.20	158.77	220.12	107.77	50.98	19.35	8.94	4.57	1.30	0.46	
23	0.99	17.07	38.72	182.53	186.59	252.71	50.98	18.20	8.34	4.09	1.30	1.30	
24	0.99	10.81	32.09	154.92	170.51	214.98	55.31	18.20	8.34	4.09	0.99	0.85	
25	0.99	10.17	32.09	114.66	151.10	209.87	53.13	17.07	7.76	4.09	0.99	0.71	
26	3.63	9.55	36.78	91.19	151.10	214.98	50.98	17.07	7.76	4.09	0.99	0.58	
27	3.19	8.94	32.09	78.58	199.79	182.53	46.77	15.96	7.76	3.63	1.30	0.46	
28	1.99	7.76	104.38	75.53	311.48	204.81	44.71	15.96	7.19	3.63	0.99	0.35	
29	1.63	18.20	162.66	78.58	794.02	259.04	44.71	15.96	7.19	3.63		0.35	
30	1.63	81.68	94.43	107.77	1331.69	359.88	38.72	15.96	7.19	3.63		0.35	
31		38.72		78.58	1965.22		38.72		7.19	3.63		0.25	
Total	93.66	524.93	976.93	8393.52	11900.75	7348.61	2925.26	737.18	325.21	157.35	54.92	20.25	33458.58 Ton
Mean	3.12	16.93	32.56	270.76	383.90	244.95	94.36	24.57	10.49	5.08	1.96	0.65	
Max	21.73	81.68	162.66	1602.03	1965.22	884.68	265.42	42.68	14.88	7.19	3.19	1.30	1965.22
Min	0.99	1.63	7.76	44.71	97.71	107.77	38.72	15.96	7.19	3.63	0.99	0.25	0.25

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Lin Thin at Ban Lin Thin, Kanchanaburi (K.38A)

Lat 14 - 34 - 28 N. **Long** 98 - 49 - 07 E.

Location	on left bank at k.m. 95+700 on Kanchanaburi - Thong Pha Highway.
Ban Lin Thin	**Amphoe** Thong Pha Phum **Changwat** Kanchanaburi
Drainage Area	114 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 - 2001
Number of observation	39
R - Square	0.7556
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:36:05.51 LQS/LQS02D/12

Station - Ban Lin Thin, Thong Pha Phum, Kanchanaburi, (K.38A)
Stream - Huai Lin Thin
River - Khwae Noi
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.74380
QS = 3.8415 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.47	0.47	1.35	4.11	5.43	36.38	63.14	7.61	2.33	0.95	0.47	0.39	
2	0.47	0.95	2.33	2.95	53.53	28.88	37.97	6.91	2.33	0.95	0.47	0.39	
3	7.61	1.58	16.17	3.71	15.19	26.09	30.32	6.40	2.33	0.95	0.47	0.39	
4	1.35	2.60	4.98	4.11	14.24	21.43	26.09	5.91	2.33	0.95	0.47	0.32	
5	0.62	1.35	2.95	6.91	13.32	18.20	37.97	5.91	2.06	0.95	0.47	0.32	
6	0.47	2.95	2.06	8.34	51.69	19.25	20.33	5.43	2.06	0.95	0.47	0.32	
7	0.62	0.78	1.58	6.91	21.43	18.20	36.38	5.43	2.06	0.95	0.47	0.32	
8	0.47	1.58	1.58	16.17	18.20	14.24	23.71	4.98	2.06	0.95	0.47	0.78	
9	0.47	2.60	1.58	24.89	17.17	12.42	26.09	5.43	2.06	0.78	0.47	0.47	
10	0.47	1.35	1.58	13.32	17.17	17.17	26.09	4.54	2.06	0.78	0.47	0.39	
11	0.39	1.81	11.55	8.34	15.19	12.42	26.09	4.11	1.81	0.78	0.47	0.39	
12	0.39	1.58	6.91	5.43	46.33	10.71	19.25	3.71	1.81	0.78	0.47	0.39	
13	0.39	1.35	3.32	4.11	31.79	17.17	27.47	3.32	1.81	0.78	0.47	0.39	
14	0.39	0.95	2.06	3.71	27.47	23.71	20.33	3.71	1.58	0.78	0.47	0.32	
15	0.39	1.35	4.54	3.32	16.17	21.43	17.17	3.71	1.58	0.78	0.47	0.32	
16	0.39	0.95	4.54	2.95	18.20	18.20	17.17	3.71	1.58	0.78	0.47	0.32	
17	0.47	3.71	3.32	3.32	18.20	10.71	14.24	3.32	1.58	0.78	0.39	0.32	
18	0.47	2.95	2.33	2.95	22.56	8.34	13.32	3.32	1.58	0.78	0.39	0.32	
19	0.47	1.81	2.95	2.60	22.56	8.34	12.42	3.32	1.35	0.78	0.39	0.32	
20	0.47	2.33	2.95	2.60	23.71	17.17	11.55	2.60	1.35	0.78	0.39	0.25	
21	0.47	1.81	2.06	2.60	18.20	11.55	11.55	2.60	1.35	0.62	0.39	0.25	
22	0.39	2.33	2.06	6.40	16.17	9.89	9.89	2.33	1.35	0.62	0.39	0.25	
23	0.39	2.06	2.06	4.54	14.24	26.09	9.89	2.33	1.35	0.62	0.39	0.25	
24	0.95	1.81	1.81	3.32	13.32	18.20	13.32	2.33	1.15	0.62	0.39	0.25	
25	0.47	1.81	1.58	2.60	12.42	37.97	12.42	2.06	1.15	0.62	0.47	0.25	
26	5.91	1.81	1.58	2.33	11.55	42.90	15.19	2.06	1.15	0.62	0.47	0.19	
27	1.81	1.81	1.81	2.06	12.42	67.18	12.42	2.06	1.15	0.62	0.47	0.19	
28	0.62	1.58	4.54	2.06	18.20	108.70	9.89	2.06	1.15	0.62	0.39	0.19	
29	0.47	1.58	2.95	2.06	41.23	67.18	9.10	2.33	0.95	0.62		0.19	
30	0.47	2.06	2.95	5.43	65.15	53.53	18.20	2.33	0.95	0.62		0.19	
31		2.95		4.11	59.22		9.89		0.95	0.62		0.19	
Total	29.19	56.61	104.03	168.26	751.67	803.65	638.86	115.87	50.36	23.78	12.44	9.82	2764.54 Ton
Mean	0.97	1.83	3.47	5.43	24.25	26.79	20.61	3.86	1.62	0.77	0.44	0.32	
Max	7.61	3.71	16.17	24.89	65.15	108.70	63.14	7.61	2.33	0.95	0.47	0.78	108.70
Min	0.39	0.47	1.35	2.06	5.43	8.34	9.10	2.06	0.95	0.62	0.39	0.19	0.19

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Ung Thi at Ban Ung Thi, Kanchanaburi (K.39)

Lat 14 - 42 - 21 N. **Long** 98 - 40 - 19 E.

Location on right bank at k.m. 121+600 on Kanchanaburi - Thong Pha Phum Highwey.

Ban Ung Thi **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainage Area 54 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 - 2001

Number of observation 86

R - Square 0.7456

Remarks Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:36:22.65

LQS/LQS02D/12

Station - Ban Ung Thi, Thong Pha Phum, Kanchanaburi, (K.39)
Stream - Huai Ung Thi
River - Khwae Noi
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.27530
QS = 3.9128 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.23	0.13	0.91	1.06	1.70	1.87	1.62	1.70	1.06	0.57	0.26	0.06	
2	0.18	0.18	0.91	0.91	2.26	1.78	1.62	1.70	1.06	0.57	0.26	0.13	
3	0.26	0.70	1.06	0.91	1.95	1.74	1.62	1.83	1.06	0.57	0.26	0.11	
4	0.26	0.70	0.70	1.45	1.87	1.74	1.45	1.74	1.06	0.44	0.26	0.11	
5	0.23	0.44	0.70	1.62	1.78	1.78	1.66	1.74	1.06	0.35	0.26	0.11	
6	0.23	0.35	0.57	1.70	2.08	1.74	1.74	1.70	1.06	0.44	0.26	0.11	
7	0.18	0.26	0.70	1.62	2.21	1.70	2.04	1.70	1.06	0.44	0.26	0.11	
8	0.13	0.81	0.70	1.62	2.08	1.70	1.87	1.70	1.06	0.44	0.26	0.13	
9	0.18	1.06	0.70	1.66	1.95	1.78	2.26	1.66	0.91	0.35	0.26	0.13	
10	0.13	0.70	0.70	1.66	1.83	1.78	2.00	1.62	0.91	0.29	0.26	0.11	
11	0.11	0.57	0.57	1.87	1.87	1.70	1.91	1.62	0.91	0.29	0.26	0.06	
12	0.11	0.57	0.81	1.74	2.35	1.66	1.87	1.66	0.91	0.29	0.26	0.11	
13	0.26	0.35	0.70	1.78	2.04	1.66	2.53	1.62	0.91	0.29	0.26	0.11	
14	0.29	0.70	0.70	1.70	2.08	1.66	2.00	1.62	0.81	0.29	0.23	0.11	
15	0.26	0.70	1.06	1.66	1.95	1.62	1.95	1.62	0.70	0.35	0.18	0.06	
16	0.23	0.57	0.91	1.66	1.91	1.62	2.08	1.62	0.70	0.26	0.18	0.06	
17	0.23	0.91	0.70	1.70	1.91	1.62	1.91	1.62	0.70	0.35	0.18	0.06	
18	0.18	1.66	0.81	1.62	1.83	1.62	1.87	1.45	0.70	0.29	0.18	0.04	
19	0.18	1.06	0.91	1.62	1.83	1.45	1.87	1.45	0.70	0.29	0.13	0.04	
20	0.13	1.45	0.91	1.62	1.83	1.70	1.83	1.33	0.70	0.26	0.13	0.01	
21	0.18	1.62	0.81	1.70	1.78	1.62	1.78	1.33	0.70	0.29	0.13	0.01	
22	0.13	1.22	0.91	1.83	1.74	1.62	1.78	1.33	0.57	0.29	0.13	0.35	
23	0.13	0.81	0.91	1.74	1.74	1.45	1.78	1.33	0.57	0.29	0.13	0.18	
24	0.13	0.70	0.81	1.66	1.70	1.33	1.78	1.33	0.70	0.29	0.18	0.13	
25	0.13	0.70	0.70	1.62	1.70	1.33	1.78	1.33	0.70	0.26	0.13	0.13	
26	0.18	1.06	0.81	1.62	1.70	1.45	1.74	1.33	0.57	0.29	0.11	0.06	
27	0.18	0.70	0.81	1.33	1.66	1.62	1.78	1.22	0.57	0.29	0.11	0.06	
28	0.13	0.70	1.33	1.33	1.66	1.62	1.74	1.06	0.57	0.26	0.11	0.06	
29	0.18	1.62	1.45	1.45	1.74	1.62	1.74	1.06	0.44	0.26		0.13	
30	0.13	1.62	1.22	1.33	2.00	1.62	1.70	1.06	0.44	0.29		0.06	
31		1.33		1.45	2.00		1.70		0.44	0.26		0.04	
Total	5.49	25.95	25.49	48.24	58.73	49.20	57.00	45.08	24.31	10.49	5.62	2.98	358.58 Ton
Mean	0.18	0.84	0.85	1.56	1.89	1.64	1.84	1.50	0.78	0.34	0.20	0.10	
Max	0.29	1.66	1.45	1.87	2.35	1.87	2.53	1.83	1.06	0.57	0.26	0.35	2.53
Min	0.11	0.13	0.57	0.91	1.66	1.33	1.45	1.06	0.44	0.26	0.11	0.01	0.01

WATER YEAR : 2001

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

Drainage Area 101 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 2001

Number of observation 24

R - Square 0.7114

Remarks Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:36:38.27 LQS/LQS02D/12

Station - Ban Hin Laem, Thong Pha Phum, Kanchanaburi, (K.50)
Stream - Huai Diso
River - Khwae Noi
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.12930
QS = 3.4298 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.31	0.25	1.15	1.15	3.43	6.45	16.51	2.15	0.95	0.31	0.17	0.07	
2	0.28	0.23	0.95	1.36	22.12	5.02	8.14	1.71	0.95	0.20	0.17	0.04	
3	0.43	1.05	0.56	1.57	14.89	4.41	5.83	5.02	0.95	0.20	0.17	0.04	
4	0.43	0.49	0.53	4.61	11.86	4.41	4.21	2.89	0.85	0.20	0.17	0.02	
5	0.40	0.40	0.49	5.22	6.66	4.41	5.42	2.29	0.85	0.20	0.17	0.02	
6	0.37	0.37	0.49	6.24	26.19	4.21	5.02	1.85	0.85	0.20	0.17	0.02	
7	0.31	0.37	0.49	5.02	18.79	5.02	10.27	1.71	1.05	0.25	0.17	0.02	
8	0.25	0.37	0.49	3.62	19.12	5.83	8.36	1.46	0.95	0.25	0.17	0.02	
9	0.25	0.56	0.46	2.74	10.53	7.50	27.56	1.46	0.95	0.25	0.17	0.02	
10	0.23	0.56	0.46	5.22	7.08	6.24	9.48	1.25	0.95	0.25	0.14	0.02	
11	0.23	0.46	0.46	6.87	4.41	4.81	7.08	1.15	0.95	0.25	0.14	0.02	
12	0.20	0.43	0.56	2.89	23.81	2.59	20.12	1.05	0.75	0.23	0.14	0.04	
13	0.25	0.37	0.75	2.74	20.12	1.71	38.75	1.25	0.65	0.23	0.14	0.04	
14	0.20	0.25	0.95	2.29	18.79	13.75	13.48	1.25	0.65	0.20	0.14	0.04	
15	0.20	0.37	1.05	2.15	9.22	5.42	9.00	1.25	0.65	0.20	0.12	0.07	
16	0.28	0.37	1.25	2.15	7.93	4.21	10.00	1.25	0.65	0.20	0.12	0.07	
17	0.28	0.34	0.95	2.29	7.50	3.24	7.29	1.15	0.65	0.20	0.12	0.04	
18	0.28	0.46	0.75	2.15	6.45	2.15	6.04	1.05	0.65	0.20	0.12	0.04	
19	0.28	0.43	0.85	1.71	6.04	1.85	4.81	1.15	0.56	0.20	0.12	0.02	
20	0.25	0.75	0.75	1.57	5.63	4.81	4.21	1.15	0.49	0.20	0.12	0.02	
21	0.23	1.36	0.65	4.21	5.42	2.59	4.21	1.15	0.46	0.17	0.12	0.02	
22	0.20	0.56	0.95	6.45	5.42	2.29	4.02	1.15	0.46	0.17	0.12	1.46	
23	0.17	0.46	0.85	5.02	4.41	5.63	3.62	1.05	0.46	0.17	0.12	0.37	
24	0.17	0.46	0.75	3.24	3.05	4.21	4.21	1.05	0.46	0.17	0.12	0.23	
25	0.20	0.46	0.65	1.71	2.59	2.15	3.82	1.05	0.46	0.20	0.12	0.20	
26	0.25	0.46	0.65	1.57	2.29	12.94	3.24	1.05	0.43	0.17	0.12	0.14	
27	0.37	0.53	0.75	1.36	2.29	9.74	5.63	1.05	0.43	0.17	0.12	0.12	
28	0.28	0.46	1.05	1.36	2.74	12.40	4.21	0.95	0.37	0.17	0.07	0.12	
29	0.28	0.75	0.95	1.57	3.43	17.81	2.89	0.95	0.37	0.17		0.12	
30	0.25	1.71	0.85	1.71	7.08	39.62	2.44	0.95	0.34	0.17		0.12	
31		1.57		1.57	14.89		2.59		0.31	0.17		0.12	
Total	8.11	17.66	22.49	93.33	304.18	207.42	262.46	43.89	20.50	6.32	3.86	3.71	993.93 Ton
Mean	0.27	0.57	0.75	3.01	9.81	6.91	8.47	1.46	0.66	0.20	0.14	0.12	
Max	0.43	1.71	1.25	6.87	26.19	39.62	38.75	5.02	1.05	0.31	0.17	1.46	39.62
Min	0.17	0.23	0.46	1.15	2.29	1.71	2.44	0.95	0.31	0.17	0.07	0.02	0.02

WATER YEAR : 2001

MAE KLONG RIVER BASIN

Huai Mae Kraban at Ban Si Mong Khon, Kanchanaburi (K.53)

Location	**Lat**	14 - 01 - 38 N.	**Long**	99 - 13 - 23 E.	
	on right bank at the bridge on road.				
Ban	Si Mong Khon	**Amphoe**	Sai Yok	**Changwat**	Kanchanaburi
Drainage Area	299 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 - Cont'd				
Number of observation	50				
R - Square	0.9536				
Remarks	Continued Sediment Station				

RID Computer Center, Processing : 21-JUL-2004 14:36:53.70

LQS/LQS02D/12

Station - Ban Si Mong Khon, A. Sai Yok , Kanchanaburi, (K.53)
Stream - Huai Mae Kraban
River - Khwae Noi
River System - Mae Klong

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.70650
QS = 10.3690 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.28	0.45	0.84	0.45	0.09	0.04	7.09	391.76	0.84	0.28	0.14	0.36	
2	0.28	0.56	0.28	0.28	0.04	0.04	17.09	83.70	0.84	0.28	0.14	0.36	
3	0.28	17.09	0.45	0.20	0.04	0.04	11.09	47.51	0.84	0.20	0.14	0.36	
4	0.28	4.59	1.04	0.20	0.09	0.04	6.20	28.81	0.84	0.20	0.14	0.36	
5	0.28	3.85	0.56	0.20	0.09	0.04	3.18	24.62	0.67	0.20	0.14	0.28	
6	0.28	2.86	0.56	0.14	0.56	0.04	2.55	18.86	0.67	0.20	0.20	0.28	
7	0.20	2.86	0.36	0.14	0.45	0.04	2.26	13.75	0.67	0.20	0.20	44.56	
8	0.20	17.09	0.67	0.14	1.04	0.04	1.73	11.09	0.67	0.20	0.20	0.67	
9	0.20	12.20	0.67	0.67	0.84	0.09	33.55	10.02	0.56	0.20	0.28	0.20	
10	0.20	2.26	0.56	1.04	0.67	0.04	11.09	8.02	0.56	0.20	0.28	0.09	
11	0.20	1.73	0.45	0.84	0.45	0.04	7.09	6.20	0.56	0.20	0.28	0.04	
12	0.20	1.48	0.45	0.67	0.45	0.04	6.20	5.37	0.56	0.20	0.28	0.01	
13	0.20	1.25	0.45	0.56	0.36	0.04	31.00	4.59	0.56	0.14	0.28	0.00	
14	0.36	1.04	0.45	0.45	0.28	0.09	11.09	3.85	0.56	0.14	0.28	0.00	
15	0.56	0.84	0.36	0.28	0.14	0.04	171.12	3.18	0.56	0.14	0.28	0.00	
16	11.09	0.56	0.36	0.28	0.14	0.04	53.65	3.18	0.56	0.14	0.28	0.00	
17	3.18	0.45	0.28	0.28	0.14	0.04	17.09	2.86	0.56	0.14	0.28	0.00	
18	0.84	0.56	0.28	0.28	0.09	0.04	8.99	2.86	0.45	0.14	0.28	0.00	
19	0.67	0.45	0.20	0.20	0.09	0.04	8.02	2.55	0.45	0.14	0.28	0.00	
20	0.45	0.45	0.20	0.20	0.04	0.04	7.09	2.26	0.45	0.14	0.28	0.00	
21	0.28	0.45	0.20	0.20	0.04	0.04	5.37	1.99	0.36	0.14	0.36	0.00	
22	0.20	0.45	0.20	0.14	0.04	0.04	4.59	1.73	0.36	0.14	0.36	0.00	
23	0.14	0.36	0.14	0.20	0.04	6.20	5.37	1.48	0.36	0.14	0.36	0.00	
24	0.14	0.28	0.14	0.20	0.04	10.02	223.77	1.48	0.36	0.14	0.36	0.00	
25	0.14	0.28	0.14	0.14	0.04	379.11	1324.37	1.48	0.28	0.14	0.36	0.00	
26	0.14	0.28	0.14	0.14	0.04	41.69	677.57	1.25	0.28	0.09	0.36	0.00	
27	0.14	0.20	0.14	0.09	0.04	12.20	243.04	1.25	0.28	0.09	0.36	0.00	
28	0.14	0.28	0.45	0.09	0.04	26.68	78.72	1.04	0.28	0.09	0.36	0.00	
29	0.14	0.28	0.45	0.09	0.04	50.54	50.54	1.04	0.28	0.14		0.00	
30	0.14	0.28	0.56	0.09	0.04	13.75	38.90	0.84	0.28	0.14		0.00	
31		0.28		0.09	0.04		306.88		0.28	0.14		0.00	
Total	21.83	76.04	12.03	8.97	6.53	541.17	3376.29	688.62	15.83	5.07	7.54	47.57	4807.49 Ton
Mean	0.73	2.45	0.40	0.29	0.21	18.04	108.91	22.95	0.51	0.16	0.27	1.53	
Max	11.09	17.09	1.04	1.04	1.04	379.11	1324.37	391.76	0.84	0.28	0.36	44.56	1324.37
Min	0.14	0.20	0.14	0.09	0.04	0.04	1.73	0.84	0.28	0.09	0.14	0.00	0.00

WATER YEAR : 2001

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Song Phi Nong, Phetchaburi (B.3)

Lat 12 - 52 - 04 N. **Long** 99 - 40 - 37 E.

Location	on left bank at Ban Song Phi Nong.
Ban Song Phi Nong	**Amphoe** Kaeng Krachan **Changwat** Phetchaburi
Drainage 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	2001
Number of observation	39
R - Square	0.7002
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:31:44.33 LQS/LQS02D/12

Station - Ban Song Phi Nong, A. Kaeng Krachan, Phetchaburi, (B.3)
Stream - Phetchaburi
River - Phetchaburi
River System - Phetchaburi River

Royal Irrigation Department
Thailand
Hydrology Division 221295
0.99170
QS = 1.7439 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	54.22	81.73	79.72	53.38	114.17	77.71	93.86	78.72	52.54	38.24	37.39	53.38	
2	56.74	84.74	80.73	55.06	114.17	77.71	93.86	74.69	53.38	34.36	45.81	51.70	
3	57.58	72.68	80.73	55.06	115.34	77.71	94.95	73.69	52.54	29.80	47.50	50.86	
4	55.06	72.68	80.73	54.22	154.20	78.72	93.86	72.68	52.54	29.80	47.50	50.86	
5	63.63	75.70	80.73	89.77	189.40	78.72	96.04	71.68	51.70	31.32	50.02	50.86	
6	64.63	76.71	80.73	91.77	144.12	77.71	97.13	62.62	38.24	28.45	49.18	51.70	
7	65.64	78.72	81.73	89.77	102.56	92.78	94.95	61.78	38.24	28.45	48.34	52.54	
8	65.64	80.73	80.73	90.77	100.39	100.39	81.73	62.62	42.45	29.13	49.18	55.06	
9	47.50	80.73	81.73	91.77	103.65	101.47	62.62	62.62	40.76	21.14	46.66	47.50	
10	64.63	79.72	84.74	91.77	104.82	98.21	61.78	62.62	39.92	26.42	47.50	35.88	
11	65.64	69.67	69.67	91.77	104.82	97.13	60.10	62.62	40.76	25.75	49.18	35.88	
12	67.65	66.65	82.73	92.78	92.78	97.13	97.13	61.78	35.88	33.60	50.86	37.39	
13	69.67	68.66	82.73	92.78	88.76	98.21	100.39	62.62	27.77	28.45	49.18	37.39	
14	70.67	69.67	82.73	105.98	89.77	96.04	98.21	63.63	27.10	7.66	49.18	34.36	
15	68.66	68.66	81.73	107.15	90.77	97.13	94.95	64.63	28.45	29.80	48.34	39.92	
16	69.67	68.66	82.73	108.32	89.77	98.21	92.78	65.64	27.10	27.77	55.90	41.61	
17	67.65	70.67	83.74	109.49	89.77	98.21	93.86	65.64	27.77	28.45	50.02	37.39	
18	60.10	72.68	82.73	107.15	88.76	94.95	79.72	65.64	28.45	29.80	50.02	37.39	
19	81.73	72.68	83.74	108.32	89.77	94.95	77.71	67.65	28.45	30.56	40.76	37.39	
20	82.73	73.69	50.02	108.32	88.76	96.04	76.71	66.65	27.77	29.80	45.81	35.88	
21	81.73	73.69	50.86	104.82	86.75	93.86	75.70	58.42	27.10	29.80	43.29	34.36	
22	82.73	73.69	55.06	104.82	86.75	93.86	73.69	50.02	29.13	29.80	43.29	36.64	
23	82.73	74.69	52.54	103.65	84.74	96.04	73.69	49.18	30.56	28.45	42.45	43.29	
24	82.73	75.70	53.38	103.65	29.80	94.95	55.06	49.18	27.77	28.45	43.29	51.70	
25	85.75	75.70	53.38	88.76	80.73	94.95	76.71	49.18	28.45	28.45	42.45	50.02	
26	87.76	75.70	52.54	104.82	82.73	90.77	76.71	48.34	27.10	27.77	48.34	50.02	
27	87.76	78.72	44.97	103.65	81.73	93.86	75.70	48.34	27.10	27.77	39.92	37.39	
28	87.76	80.73	53.38	103.65	74.69	93.86	76.71	50.86	27.10	27.10	50.02	49.18	
29	86.75	79.72	55.90	103.65	79.72	92.78	73.69	31.32	53.38	28.45		54.22	
30	87.76	65.64	55.06	114.17	79.72	92.78	75.70	50.86	60.94	29.13		55.90	
31		83.74		114.17	77.71		74.69		60.10	27.77		55.90	
Total	2152.90	2323.55	2121.92	2945.21	3001.62	2766.84	2550.39	1815.92	1160.54	881.69	1311.38	1393.56	24425.52 Ton
Mean	71.76	74.95	70.73	95.01	96.83	92.23	82.27	60.53	37.44	28.44	46.83	44.95	
Max	87.76	84.74	84.74	114.17	189.40	101.47	100.39	78.72	60.94	38.24	55.90	55.90	189.40
Min	47.50	65.64	44.97	53.38	29.80	77.71	55.06	31.32	27.10	7.66	37.39	34.36	7.66

WATER YEAR : 2001

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

Drainage Area 1,015 sq.km.

Method of sampling Depth Integrating

Instrument Used US.D 48H - 60

Period of Available Records 1966 - 1978, 1997, 1999 - Cont'd

Actual Measurement 1966 - 1978, 1997, 1999 - Cont'd

Using Rating Curve Water Year 2001

Number of observation 24

R - Square 0.8357

Remarks Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:32:00.1

LQS/LQS02D/12

Station - Ban Sa Yai Non, Tha Yang, Phetchaburi, (B 6)
Stream - Huai Mae Prachan
River - Phetchaburi
River System - Phetchaburi River

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.64110
QS = 5.9844 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.61	1.98	0.54	0.39	0.04	0.18	1858.04	1632.70	14.71	1.98	1.07	0.12	
2	23.98	1.98	0.39	0.18	0.06	0.16	1460.72	1101.76	13.08	2.73	0.88	0.12	
3	20.06	1.98	0.39	0.18	0.06	0.09	1503.01	955.15	11.51	2.73	0.88	0.12	
4	18.21	1.73	0.39	0.16	0.06	0.09	2162.80	850.63	10.03	2.24	0.70	0.09	
5	16.42	1.73	0.39	0.16	0.14	0.06	418.90	566.37	8.63	2.24	0.70	0.09	
6	14.71	1.50	0.39	0.16	0.27	0.09	418.90	506.67	8.63	2.24	0.54	0.09	
7	13.08	1.73	0.54	0.16	0.70	0.27	1545.77	413.04	8.63	2.24	0.54	0.09	
8	8.63	1.98	0.54	0.16	0.54	1.50	7463.47	362.95	8.63	1.98	0.39	1336.69	
9	7.85	2.24	0.70	0.24	0.27	1.50	6382.80	292.65	8.63	1.98	0.39	1101.76	
10	6.38	2.73	0.70	0.39	0.54	1.07	2589.72	192.89	7.85	1.98	0.39	431.17	
11	5.03	1.98	0.70	0.27	0.88	0.88	1812.06	121.74	7.10	1.73	0.39	139.08	
12	3.81	1.50	0.88	0.27	0.88	2.24	1418.90	94.69	5.69	1.73	0.27	59.90	
13	2.73	1.50	0.88	0.24	0.88	11.51	1027.43	88.14	5.69	1.73	0.27	43.52	
14	1.98	1.50	0.88	0.18	0.70	139.08	712.38	82.04	7.85	1.73	0.27	29.26	
15	1.50	1.73	0.70	0.18	0.70	47.42	589.79	59.90	8.63	1.73	0.27	23.98	
16	1.50	1.73	0.54	0.16	0.70	16.42	546.18	51.45	8.63	1.73	0.24	18.21	
17	1.28	1.73	0.54	0.16	0.39	7.10	487.35	59.90	7.85	1.73	0.24	14.71	
18	1.07	1.50	0.39	0.14	0.27	4.41	637.74	47.42	7.10	1.73	0.24	10.03	
19	1.07	1.50	0.27	0.14	0.18	4.41	1027.43	47.42	6.38	1.50	0.24	7.85	
20	0.88	1.28	0.24	0.12	0.14	2.73	5538.17	29.26	5.69	1.50	0.18	6.38	
21	0.88	1.07	0.18	0.09	0.12	3.26	6992.25	29.26	5.03	1.50	0.18	5.03	
22	0.70	1.07	0.18	0.06	0.09	5.03	3001.40	23.98	3.81	1.50	0.16	5.69	
23	0.70	0.88	0.18	0.04	0.04	36.11	1676.85	21.99	2.73	1.50	0.16	7.10	
24	0.54	0.88	0.18	0.04	0.04	139.08	1256.42	20.06	1.73	1.28	0.14	10.03	
25	0.54	0.70	0.16	0.12	0.06	431.17	1336.69	18.21	1.73	1.28	0.12	16.42	
26	0.54	0.70	0.16	0.12	0.03	737.97	5010.49	16.42	1.50	1.28	0.09	29.26	
27	0.39	0.70	0.16	0.09	0.02	816.85	6684.81	16.42	1.28	1.07	0.09	23.98	
28	0.39	0.54	0.16	0.09	0.02	589.79	4137.56	16.42	1.07	1.07	0.09	14.71	
29	0.88	0.54	0.18	0.06	0.03	1676.85	3783.69	14.71	0.88	1.07		10.03	
30	1.28	0.54	0.18	0.06	0.03	1460.72	4018.23	14.71	0.54	1.07		7.85	
31		0.54		0.04	0.27		2464.69		1.07	1.07		7.85	
Total	189.62	43.69	12.71	4.85	9.15	6138.04	81964.64	7748.95	192.31	52.87	10.12	3361.21	99728.16 Ton
Mean	6.32	1.41	0.42	0.16	0.30	204.60	2644.02	258.30	6.20	1.71	0.36	108.43	
Max	32.61	2.73	0.88	0.39	0.88	1676.85	7463.47	1632.70	14.71	2.73	1.07	1336.69	7463.47
Min	0.39	0.54	0.16	0.04	0.02	0.06	487.35	14.71	0.54	1.07	0.09	0.09	0.02

WATER YEAR : 2001

PHETCHABURI RIVER BASIN

Huai Phak at Ban Kariang, Phetchaburi (B.8)

Lat 12 - 48 - 49 N. **Long** 99 - 41 - 32 E.

Location on left bank at Ban Kariang.

Ban Kariang **Amphoe** Tha Yang **Changwat** Phetchaburi

Drainage Area 264 sq.km.

Method of sampling Depth Integrating

Instrument Used US.D - 49

Period of Available Records 1986 - 1997, 1999 - Cont'd

Actual Measurement 1986 - 1997, 1999 - Cont'd

Using Rating Curve Water Year 2001

Number of observation 24

R - Square 0.9125

Remarks Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:32:16.45 LQS/LQS02D/12

Station - Ban Kariang, Tha Yang, Phetchaburi, (B.8)
Stream - Huai Phak
River - Phetchaburi
River System - Phetchaburi River

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.13210
QS = 2.5258 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.77	0.79	1.28	0.10	0.10	0.23	9.49	27.61	1.10	0.32	0.27	0.00	
2	1.55	1.00	1.28	0.12	0.10	0.19	8.10	29.36	1.10	0.27	0.23	0.00	
3	1.42	0.95	1.20	0.12	0.10	0.17	33.85	54.18	1.00	0.32	0.23	0.00	
4	1.20	0.90	1.15	0.12	0.10	0.14	65.35	35.71	1.00	0.41	0.19	0.00	
5	1.15	0.84	1.20	0.12	0.10	0.14	56.64	36.18	0.90	0.45	0.19	0.00	
6	1.05	0.84	1.15	0.12	0.12	0.36	111.79	23.72	0.84	0.50	0.09	0.00	
7	0.95	0.70	0.90	0.12	0.95	0.65	39.71	18.48	0.74	0.41	0.05	0.00	
8	0.90	0.70	0.74	0.07	0.70	0.65	23.27	15.06	0.65	0.32	0.05	0.01	
9	0.74	0.79	0.70	0.05	0.55	0.65	20.66	12.10	0.70	0.32	0.03	0.27	
10	0.74	0.90	1.05	0.41	0.45	0.55	15.62	9.96	0.74	0.32	0.03	0.84	
11	0.65	0.84	1.10	0.41	0.50	0.55	12.82	8.33	0.90	0.23	0.01	0.74	
12	0.55	0.60	0.74	0.36	0.41	0.45	17.04	7.06	0.95	0.19	0.03	0.65	
13	0.60	0.45	0.55	0.36	0.32	0.60	14.77	6.01	0.90	0.19	0.03	0.60	
14	0.70	0.50	0.41	0.32	0.23	1.55	10.90	5.32	0.79	0.17	0.03	0.55	
15	0.70	0.70	0.32	0.23	0.19	1.28	8.33	4.98	0.74	0.17	0.03	0.45	
16	0.65	0.70	0.23	0.17	0.19	1.69	7.06	4.48	0.74	0.27	0.01	0.36	
17	0.55	0.65	0.19	0.17	0.19	1.55	6.01	4.18	0.65	0.27	0.01	0.32	
18	0.50	0.55	0.17	0.17	0.27	1.42	29.36	3.91	0.60	0.45	0.01	0.27	
19	0.50	0.60	0.17	0.14	0.23	3.34	51.73	3.76	0.55	0.50	0.00	0.23	
20	0.50	0.55	0.17	0.10	0.23	5.32	51.12	3.76	0.41	0.41	0.00	0.07	
21	0.45	0.50	0.17	0.10	0.32	2.96	31.54	3.34	0.36	0.27	0.00	0.07	
22	0.50	0.55	0.14	0.09	0.32	3.76	20.66	2.05	0.45	0.23	0.00	0.10	
23	0.60	0.50	0.12	0.09	0.23	37.94	15.62	1.42	0.45	0.19	0.00	0.10	
24	0.70	0.45	0.10	0.09	0.17	33.39	12.58	1.34	0.55	0.17	0.00	0.10	
25	0.74	0.41	0.12	0.10	0.17	46.88	31.08	1.28	0.55	0.23	0.00	0.12	
26	0.79	0.41	0.10	0.10	0.14	42.68	56.03	1.10	0.50	0.17	0.00	0.10	
27	0.79	0.41	0.10	0.10	0.14	36.77	37.94	1.05	0.41	0.19	0.00	0.10	
28	0.65	0.45	0.10	0.10	0.14	40.30	27.61	1.10	0.36	0.79	0.00	0.10	
29	0.60	1.00	0.10	0.10	0.14	22.49	20.66	1.05	0.36	0.70		0.09	
30	0.60	1.50	0.10	0.09	0.19	13.38	29.78	1.05	0.36	0.55		0.05	
31		1.34		0.09	0.27		33.39		0.36	0.41		0.05	
Total	23.79	22.07	15.85	4.83	8.26	302.03	910.51	328.93	20.71	10.39	1.52	6.34	1655.23 Ton
Mean	0.79	0.71	0.53	0.16	0.27	10.07	29.37	10.96	0.67	0.34	0.05	0.20	
Max	1.77	1.50	1.28	0.41	0.95	46.88	111.79	54.18	1.10	0.79	0.27	0.84	111.79
Min	0.45	0.41	0.10	0.05	0.10	0.14	6.01	1.05	0.36	0.17	0.00	0.00	0.00

WATER YEAR : 2001

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
Drainage Area	4,111 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
Number of observation	39
R - Square	0.8482
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:32:32.26 LQS/LQS02D/12

Station - Ban Tha Yang, Tha Yang, Phetchaburi, (B.10)
Stream - Phetchaburi
River - Phetchaburi
River System - Phetchaburi River

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.34890
QS = 0.9822 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.79	22.23	15.42	26.79	15.82	17.48	291.12	405.27	11.14	50.84	8.38	9.31	
2	22.23	24.94	12.27	25.86	18.32	15.42	294.01	348.79	14.21	40.13	12.65	13.43	
3	16.23	22.68	9.67	17.48	19.60	15.01	269.67	323.32	16.23	27.73	24.48	14.61	
4	13.43	20.03	8.96	11.14	21.34	11.51	292.56	317.40	14.61	39.10	35.03	15.42	
5	21.34	16.64	8.96	9.67	29.16	7.92	382.79	310.04	12.27	93.08	41.17	15.42	
6	4.52	15.42	8.96	11.14	244.51	7.69	451.21	272.51	11.89	12.65	36.04	15.01	
7	3.38	14.61	10.03	16.64	225.39	7.25	631.98	97.40	7.47	13.82	27.73	15.82	
8	3.38	14.21	11.89	20.90	49.74	8.15	571.36	117.02	7.03	31.57	20.03	21.79	
9	4.32	13.82	14.61	21.34	41.70	13.82	694.13	134.68	7.69	52.50	15.01	62.75	
10	3.20	18.74	15.42	17.90	50.84	19.17	644.71	134.68	11.89	43.80	13.82	91.36	
11	3.02	30.60	16.64	14.61	53.62	22.23	351.82	159.85	24.03	9.67	13.43	55.87	
12	3.38	27.73	17.06	11.51	53.62	24.48	258.41	118.85	29.16	14.21	15.01	39.10	
13	4.32	18.32	13.82	9.67	55.87	43.80	237.64	102.66	32.55	23.12	15.01	31.08	
14	7.25	6.16	16.64	8.96	50.84	112.48	273.93	97.40	29.64	25.40	19.17	25.86	
15	7.25	5.53	22.23	10.03	43.27	174.86	264.03	31.57	27.26	22.68	18.74	21.79	
16	7.25	5.12	30.12	14.21	34.03	179.94	240.38	18.74	39.10	25.86	23.58	19.60	
17	6.81	4.92	40.13	14.21	31.57	140.39	230.81	26.79	149.06	26.33	23.12	17.90	
18	6.59	4.92	44.87	12.27	32.55	29.64	241.76	31.08	69.84	26.33	18.74	16.64	
19	6.81	4.72	48.65	11.89	32.55	36.54	257.01	29.16	18.32	23.12	17.06	13.82	
20	7.25	4.72	49.19	11.89	34.03	40.13	336.74	33.04	6.16	7.47	13.82	9.31	
21	8.61	5.12	38.58	11.14	33.04	39.10	532.53	40.65	8.38	6.59	13.82	7.47	
22	10.40	8.38	24.48	11.14	32.06	37.05	548.79	43.27	20.90	11.51	14.21	6.37	
23	11.14	8.96	20.90	10.03	32.06	47.02	345.77	39.61	28.21	33.04	14.21	4.92	
24	10.76	8.61	20.90	9.67	32.55	104.43	314.45	34.53	33.04	10.40	15.01	5.95	
25	10.76	8.61	20.90	10.40	17.48	155.90	278.20	32.06	49.19	8.61	13.43	10.40	
26	11.14	8.96	24.03	10.03	13.04	175.87	332.25	27.73	44.87	8.61	13.82	17.90	
27	12.65	8.96	25.40	8.96	22.68	209.33	587.93	22.23	40.13	8.96	12.65	23.12	
28	13.82	9.31	26.33	8.96	29.16	240.38	668.23	19.60	27.73	8.96	10.40	20.03	
29	14.61	10.76	27.26	8.96	29.16	248.66	631.98	19.17	5.32	8.15		17.48	
30	16.64	17.06	27.73	9.67	20.90	279.63	506.37	15.42	14.61	7.92		20.03	
31		20.03		10.76	19.17		390.24		39.10	7.92		20.03	
Total	294.28	410.82	672.05	407.83	1419.67	2465.28	12352.81	3404.52	851.03	730.08	519.57	679.59	24207.53 Ton
Mean	9.81	13.25	22.40	13.16	45.80	82.18	398.48	113.48	27.45	23.55	18.56	21.92	
Max	22.23	30.60	49.19	26.79	244.51	279.63	694.13	405.27	149.06	93.08	41.17	91.36	694.13
Min	3.02	4.72	8.96	8.96	13.04	7.25	230.81	15.42	5.32	6.59	8.38	4.92	3.02

WATER YEAR : 2001

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
Drainage Area	460 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	2001
Number of observation	27
R - Square	0.8633
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:32:48.62 LQS/LQS02D/12

Station - Ban Cha Prong, Nong Ya Plong, Phetchaburi. (B.11)
Stream - Huai Mae Prachan
River - Phetchaburi
River System - Phetchaburi River

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.15900
QS = 2.8154 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.55	1.20	0.64	0.54	0.44	0.75	28.91	34.14	2.75	1.20	0.54	0.07	
2	3.14	0.86	0.64	0.44	0.44	0.64	23.33	26.85	2.36	1.20	0.54	0.07	
3	2.75	1.20	0.64	0.44	0.44	0.64	49.72	32.03	2.36	1.20	0.54	0.07	
4	2.56	1.44	0.54	0.44	0.54	0.64	49.72	24.20	2.17	1.20	0.44	0.00	
5	2.17	1.56	0.54	0.44	0.64	0.64	42.77	18.18	2.17	1.09	0.54	0.07	
6	2.05	1.68	0.75	0.54	0.86	0.86	56.70	14.45	2.36	1.09	0.64	0.07	
7	1.92	1.56	1.32	0.44	0.86	1.32	49.72	13.23	2.17	0.97	0.54	0.15	
8	1.80	2.17	1.32	0.44	0.86	1.20	91.40	11.51	2.36	0.86	0.44	52.97	
9	1.68	1.92	1.56	0.64	0.86	1.09	96.68	10.49	2.56	0.97	0.34	26.85	
10	1.56	1.68	1.44	0.75	0.97	0.97	58.58	8.98	2.17	0.86	0.34	11.51	
11	1.44	1.56	1.32	0.75	1.20	0.97	49.72	7.50	1.92	0.97	0.24	7.02	
12	1.32	1.44	1.32	0.86	1.32	1.09	37.33	6.73	1.80	0.97	0.24	5.56	
13	1.32	1.32	1.32	0.86	1.09	1.09	27.88	6.14	1.80	0.97	0.24	4.16	
14	1.32	1.32	1.20	0.86	1.09	1.20	20.73	5.85	1.92	0.86	0.24	3.14	
15	1.20	1.32	1.09	0.86	1.09	1.09	20.73	5.28	2.36	0.97	0.24	2.95	
16	1.20	1.32	0.86	0.97	1.09	1.09	21.59	5.00	2.17	0.86	0.24	2.75	
17	1.20	1.20	0.64	0.97	1.09	1.44	16.30	4.71	2.05	0.86	0.24	2.17	
18	1.09	1.09	0.64	0.86	1.09	1.56	33.08	4.43	1.92	0.86	0.15	2.05	
19	1.20	1.09	0.64	0.75	1.09	1.80	45.53	4.16	1.92	0.86	0.15	1.92	
20	1.09	1.09	0.64	0.75	1.20	2.95	212.46	3.75	1.80	0.75	0.15	1.80	
21	1.09	1.09	0.75	0.64	1.09	3.14	122.88	3.55	1.80	0.97	0.15	1.56	
22	0.97	1.09	1.32	0.44	1.09	3.55	66.16	3.14	1.68	1.09	0.07	1.32	
23	0.97	1.09	1.32	0.44	1.09	6.73	49.72	3.14	1.56	1.20	0.07	2.05	
24	0.97	0.97	0.97	0.44	1.20	15.68	41.40	2.95	1.32	1.20	0.07	9.98	
25	1.09	0.86	0.86	0.44	1.20	51.12	60.46	2.75	1.32	1.09	0.07	6.14	
26	1.44	0.75	0.64	0.44	1.32	54.83	152.93	2.75	1.44	0.97	0.07	4.43	
27	1.56	0.64	0.64	0.54	1.20	40.04	116.99	2.75	1.32	0.97	0.07	3.55	
28	1.80	0.64	0.64	0.44	0.97	77.05	99.55	2.75	1.32	0.86	0.07	2.95	
29	1.68	0.64	0.64	0.24	0.86	114.05	96.68	2.56	1.32	0.86		2.56	
30	1.44	0.64	0.64	0.34	0.75	46.92	79.42	2.75	1.32	0.86		2.17	
31		0.64		0.34	0.64		48.32		1.20	0.64		1.92	
Total	48.57	37.07	27.48	18.34	29.67	436.14	1967.39	276.70	58.69	30.28	7.67	163.98	3101.98 Ton
Mean	1.62	1.20	0.92	0.59	0.96	14.54	63.46	9.22	1.89	0.98	0.27	5.29	
Max	3.55	2.17	1.56	0.97	1.32	114.05	212.46	34.14	2.75	1.20	0.64	52.97	212.46
Min	0.97	0.64	0.54	0.24	0.44	0.64	16.30	2.56	1.20	0.64	0.07	0.00	0.00

WATER YEAR : 2001

KHLONG KUI 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
Drainage Area	538 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 - 2001
Number of observation	64
R - Square	0.6977
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:37:26.06

LQS/LQS02D/12

Station - Ban Thung Faek,Kui Buri,Prachuap Khiri Khan, (KY.3)
Stream - Khlong Kui
River - Khlong Kui
River System - Khlong Kui

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.15750
QS = 1.7132 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.62	2.95	2.95	2.65	2.65	22.36	18.80	49.96	3.12	1.13	1.65	1.23	
2	14.37	3.30	2.80	2.95	2.80	17.92	17.48	34.25	3.30	1.23	1.32	1.04	
3	12.01	4.00	2.80	3.30	2.65	14.03	25.76	34.25	3.82	1.52	1.13	1.13	
4	9.87	8.77	2.07	3.30	2.51	11.09	26.60	31.67	3.82	1.93	1.04	0.95	
5	9.02	9.27	2.36	12.32	2.36	8.52	27.44	29.12	2.80	2.22	1.04	0.95	
6	8.03	8.03	2.07	22.92	3.47	7.55	23.48	26.60	2.22	2.22	0.95	0.95	
7	7.06	4.72	2.07	20.68	3.65	7.30	63.27	29.97	2.80	1.79	0.86	1.04	
8	6.18	4.36	2.22	16.19	3.30	6.82	29.97	33.39	3.12	1.32	1.13	1.13	
9	5.55	3.82	2.36	24.05	3.30	5.55	53.65	29.97	4.00	1.23	1.32	1.32	
10	5.13	3.82	2.22	28.28	2.95	4.93	29.97	24.05	3.12	1.23	1.79	1.42	
11	4.93	4.00	2.51	22.92	2.80	4.54	23.48	21.23	2.80	1.13	1.93	1.23	
12	4.54	3.65	2.65	20.12	2.80	4.18	24.05	17.92	2.51	1.23	1.32	1.13	
13	4.18	3.47	2.51	17.48	2.80	4.54	24.05	17.92	2.22	1.32	1.23	0.95	
14	4.18	3.12	2.65	13.00	2.80	4.72	18.80	14.03	1.93	1.32	1.04	1.04	
15	4.00	3.47	2.80	10.78	2.95	5.13	15.06	14.03	1.93	1.32	0.95	0.95	
16	3.82	3.82	2.95	9.87	3.30	4.54	10.78	13.34	1.93	1.13	1.13	0.95	
17	3.30	3.82	2.80	10.17	3.47	4.54	10.78	13.00	1.65	1.13	1.32	1.04	
18	3.30	4.18	2.51	9.27	3.65	4.72	18.80	12.01	2.07	1.04	1.52	1.04	
19	3.30	3.82	2.51	8.52	5.13	5.34	37.67	10.48	2.22	1.04	1.65	0.95	
20	3.30	3.82	2.65	7.06	18.36	6.18	55.56	7.30	2.22	1.13	1.32	0.95	
21	3.12	3.82	2.65	6.61	17.92	5.97	39.40	4.72	2.36	1.13	1.23	1.13	
22	2.95	3.82	2.51	5.97	14.71	5.55	30.82	4.72	2.36	1.32	1.13	1.23	
23	2.95	3.65	2.51	4.93	14.03	4.72	24.62	9.27	2.07	1.23	1.13	1.23	
24	3.12	3.65	2.80	4.54	10.78	9.87	21.79	8.77	1.93	1.04	1.04	1.23	
25	2.80	3.65	3.65	4.18	8.28	13.34	19.68	9.57	1.93	0.95	1.04	1.32	
26	2.80	3.82	3.82	4.18	6.82	18.36	42.88	8.03	1.42	0.95	1.13	1.23	
27	2.95	4.00	3.82	4.00	6.18	61.33	59.40	4.72	1.32	1.04	1.23	1.13	
28	2.65	4.00	3.47	3.82	5.76	61.33	89.85	4.18	1.23	1.13	1.32	1.04	
29	2.51	4.00	3.12	3.65	5.97	48.18	57.47	3.65	0.95	1.32		0.86	
30	2.36	4.00	2.95	3.30	16.19	24.62	34.25	3.47	1.13	1.42		0.86	
31		3.47		2.95	22.36		35.96		1.13	1.52		0.77	
Total	160.90	132.09	81.76	313.96	206.70	407.77	1011.57	525.59	71.43	40.66	34.89	33.42	3020.74 Ton
Mean	5.36	4.26	2.73	10.13	6.67	13.59	32.63	17.52	2.30	1.31	1.25	1.08	
Max	16.62	9.27	3.82	28.28	22.36	61.33	89.85	49.96	4.00	2.22	1.93	1.42	89.85
Min	2.36	2.95	2.07	2.65	2.36	4.18	10.78	3.47	0.95	0.95	0.86	0.77	0.77

WATER YEAR : 2001

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 left bank at the bridge of Phet Kasem Highway near the guidepost 379.
Ban Nong Ya Plong	**Amphoe** Bang Saphan **Changwat** Prachuap Khiri Khan
Drainage Area	112 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	2001
Number of observation	30
R - Square	0.8756
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:33:08.53 LQS/LQS02D/12

Station - Ban Nong Ya Plong, Bang Saphan, Prachuap Khiri Khan, (GT.10)
Stream - Khlong Krut
River - Khlong Krut
River System - West Coast-Gulf

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.56110
QS = 3.3680 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.88	7.01	4.19	32.83	6.34	48.21	9.94	207.30	7.01	0.65	0.84	0.27	
2	16.80	5.07	3.37	92.52	6.34	31.65	12.36	171.52	6.34	0.65	0.65	0.27	
3	14.08	10.72	2.61	339.42	6.34	23.81	23.81	108.55	6.34	0.65	0.49	0.27	
4	13.21	17.75	2.61	701.92	6.02	19.70	105.81	61.08	6.02	0.65	0.41	0.27	
5	10.72	6.02	2.15	437.79	5.69	17.75	35.25	41.55	5.69	0.57	0.34	0.27	
6	9.94	3.63	1.72	250.38	7.01	16.80	30.48	84.85	5.38	0.57	0.34	0.27	
7	9.94	2.61	1.52	181.33	5.38	23.81	21.72	103.10	5.07	0.49	0.27	0.23	
8	8.43	2.38	1.52	149.39	5.07	89.93	17.75	1238.70	4.77	0.49	0.27	1.14	
9	7.71	2.61	1.32	407.93	4.19	36.48	14.08	301.58	4.48	0.49	0.23	3.37	
10	6.34	3.91	1.32	512.50	3.63	24.88	11.53	128.38	4.19	0.49	0.23	0.93	
11	5.69	4.48	1.72	280.69	4.19	20.70	9.94	75.01	3.91	0.49	0.23	0.57	
12	5.38	2.61	3.37	189.10	6.34	17.75	9.17	50.28	3.63	0.49	0.23	0.49	
13	4.77	2.15	1.93	122.59	15.88	14.08	8.43	41.55	3.37	0.49	0.34	0.41	
14	4.48	2.15	1.52	79.87	14.08	37.72	7.71	35.25	3.11	0.41	0.41	0.41	
15	3.63	4.48	1.52	75.01	9.17	15.88	6.34	29.33	2.86	0.49	0.41	0.34	
16	3.37	7.71	1.32	52.38	9.17	18.72	6.02	25.97	2.61	0.84	0.41	0.34	
17	3.11	5.38	1.14	38.98	275.55	10.72	5.69	24.88	2.38	0.74	0.41	0.34	
18	2.86	11.53	1.14	31.65	312.23	8.43	63.33	21.72	2.38	0.49	0.41	0.34	
19	2.38	10.72	0.84	27.07	211.94	7.01	20.70	20.70	1.93	0.49	0.34	0.23	
20	1.93	5.38	0.84	24.88	89.93	6.34	21.72	16.80	1.14	0.41	0.34	0.23	
21	1.93	6.02	0.84	21.72	65.61	6.34	56.67	14.97	1.04	0.41	0.34	0.23	
22	1.72	8.43	0.84	19.70	38.98	6.02	22.75	13.21	0.93	0.34	0.34	0.23	
23	1.72	13.21	1.93	16.80	27.07	5.69	16.80	11.53	0.84	0.65	0.34	0.23	
24	1.72	6.02	20.70	14.97	23.81	22.75	14.08	11.53	0.74	0.57	0.34	1.93	
25	1.52	5.69	781.21	13.21	19.70	137.25	50.28	9.94	0.65	0.41	0.34	0.49	
26	1.32	9.94	350.52	10.72	16.80	35.25	701.92	9.17	0.65	0.41	0.34	2.61	
27	1.14	8.43	221.33	9.17	16.80	20.70	189.10	8.43	0.65	0.41	0.34	1.52	
28	4.48	10.72	128.38	7.71	25.97	17.75	97.76	7.71	0.84	0.27	0.27	0.93	
29	3.37	8.43	111.31	6.02	84.85	14.08	207.30	7.01	0.74	0.49		0.74	
30	6.02	6.02	37.72	5.69	95.12	11.53	155.60	7.01	0.74	1.72		0.74	
31		4.77		7.01	84.85		149.39		0.65	1.72		0.65	
Total	175.59	205.98	1692.45	4160.95	1504.05	767.73	2103.43	2888.61	91.08	18.44	10.25	21.29	13639.85 Ton
Mean	5.85	6.64	56.41	134.22	48.52	25.59	67.85	96.29	2.94	0.59	0.37	0.69	
Max	16.80	17.75	781.21	701.92	312.23	137.25	701.92	1238.70	7.01	1.72	0.84	3.37	1238.70
Min	1.14	2.15	0.84	5.69	3.63	5.69	5.69	7.01	0.65	0.27	0.23	0.23	0.23

WATER YEAR : 2001

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
Drainage Area	58 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1998 - Cont'd
Actual Measurement	1999 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	30
R - Square	0.8955
Remarks	Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:33:22.37 LQS/LQS02D/12

Station - Ban Chang Laek, Bang Saphan Noi, Prachuap Khiri Khan, (GT.11)
Stream - Huai Yang
River - Khlong Bang Saphan Noi
River System - West Coast-Gulf

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.69220
QS = 3.6363 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	23.34	4.27	4.27	26.03	1.99	23.34	1.99	297.45	1.99	0.37	1.13	0.10	
2	21.14	1.13	4.27	17.03	2.49	17.03	2.49	233.48	1.53	0.37	1.13	0.10	
3	19.04	1.99	3.64	117.56	1.99	8.40	497.71	133.27	1.53	0.37	0.47	0.10	
4	15.11	1.13	3.64	375.78	1.53	6.98	28.84	51.70	1.53	0.32	0.42	0.07	
5	13.28	1.13	3.04	286.35	1.53	5.67	80.81	51.70	1.53	0.32	0.32	0.07	
6	9.92	0.42	1.53	141.42	1.13	4.95	223.44	51.70	1.13	0.28	0.24	0.47	
7	9.92	0.42	1.53	80.81	0.77	19.04	103.88	55.39	0.77	0.24	0.20	0.47	
8	9.92	0.32	1.13	65.09	1.53	9.92	51.70	167.05	0.77	0.24	0.20	3.04	
9	5.67	0.28	0.77	70.17	1.13	4.95	34.82	297.45	0.77	0.24	0.24	1.53	
10	5.67	0.42	0.47	125.31	1.13	4.27	21.14	125.31	0.77	0.24	0.24	0.42	
11	5.67	0.77	0.47	75.41	1.13	3.64	17.03	103.88	0.77	0.24	0.20	0.28	
12	4.95	0.47	0.47	51.70	1.53	4.27	15.11	44.62	0.77	0.20	0.20	0.16	
13	3.64	4.95	0.47	37.97	13.28	3.04	9.92	23.34	1.13	0.20	0.20	0.13	
14	3.64	1.53	0.47	34.82	13.28	3.04	8.40	23.34	0.77	0.20	0.16	0.07	
15	3.04	6.98	0.47	34.82	19.04	3.04	103.88	17.03	0.77	0.20	0.16	0.07	
16	1.13	19.04	0.47	19.04	15.11	5.67	9.92	13.28	0.47	0.20	0.16	0.07	
17	0.77	13.28	0.47	15.11	60.16	4.27	13.28	11.55	0.47	0.20	0.13	0.07	
18	13.28	5.67	0.47	11.55	133.27	3.04	13.28	8.40	0.47	0.20	0.13	0.07	
19	6.98	4.27	0.47	9.92	125.31	2.49	133.27	5.67	0.77	0.16	0.13	0.05	
20	3.64	9.92	0.47	5.67	65.09	2.49	70.17	5.67	1.13	0.16	0.13	0.07	
21	3.04	19.04	0.47	5.67	55.39	2.49	51.70	4.95	0.77	0.16	0.13	0.07	
22	3.04	15.11	0.77	4.27	37.97	1.99	34.82	4.27	0.47	0.20	0.13	0.07	
23	2.49	8.40	2.49	4.27	26.03	1.99	31.77	3.64	0.42	0.20	0.16	0.07	
24	1.53	5.67	17.03	4.27	17.03	1.99	31.77	3.04	0.42	0.20	0.16	0.13	
25	1.13	4.95	17.03	4.27	13.28	3.04	86.35	2.49	0.37	0.24	0.16	0.07	
26	1.13	4.95	167.05	4.27	9.92	4.27	264.67	2.49	0.37	0.24	0.13	0.07	
27	1.13	4.95	141.42	3.64	8.40	3.04	125.31	2.49	0.37	0.24	0.13	3.04	
28	1.13	4.27	80.81	3.04	6.98	2.49	110.01	2.49	0.37	0.28	0.07	1.13	
29	1.13	4.27	48.10	2.49	60.16	2.49	92.05	1.99	0.37	0.37		0.37	
30	13.28	5.67	31.77	2.49	34.82	1.99	312.51	1.99	0.37	0.77		0.32	
31		4.27		2.49	31.77		275.42		0.32	0.77		0.28	
Total	208.78	159.94	535.93	1642.73	764.17	165.32	2857.46	1751.12	24.46	8.62	7.26	13.03	8138.82 Ton
Mean	6.96	5.16	17.86	52.99	24.65	5.51	92.18	58.37	0.79	0.28	0.26	0.42	
Max	23.34	19.04	167.05	375.78	133.27	23.34	497.71	297.45	1.99	0.77	1.13	3.04	497.71
Min	0.77	0.28	0.47	2.49	0.77	1.99	1.99	1.99	0.32	0.16	0.07	0.05	0.05

WATER YEAR : 2001

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

Drainage Area 56 sq.km.

Method of sampling Depth Integrating

Instrument Used US.D - 49

Period of Available Records 1998 - Cont'd

Actual Measurement 1999 - Cont'd

Using Rating Curve Water Year 2001

Number of observation 27

R - Square 0.9408

Remarks Continued Sediment Station

RID Computer Center, Processing : 21-JUL-2004 14:33:48.00 LQS/LQS02D/12

Station - Ban Ang Thong, Thap Sakae, Prachuap Khiri Khan, (GT.19)
Stream - Khlong Ang Thong
River - Khlong Ang Thong
River System - West Coast-Gulf

Royal Irrigation Department
Thailand
Hydrology Division 221295
1.23550
QS = 7.4007 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.95	5.62	2.53	8.14	2.68	7.40	3.14	30.31	2.09	1.01	1.01	0.23	
2	6.05	3.14	2.24	12.82	2.68	4.76	4.35	96.32	2.09	0.89	1.01	0.23	
3	5.62	4.35	2.09	66.04	2.24	2.99	8.14	41.29	2.09	0.89	0.89	0.23	
4	5.19	3.94	1.95	94.23	2.39	2.68	25.25	19.60	1.95	0.77	0.77	0.23	
5	4.35	2.68	1.67	66.04	2.39	2.68	17.43	9.65	1.95	0.77	0.43	0.23	
6	4.35	2.09	1.54	41.29	2.68	12.01	8.14	10.43	1.95	0.77	0.33	0.23	
7	3.94	1.67	1.54	32.96	2.53	6.50	22.96	19.60	1.95	0.77	0.33	0.23	
8	3.54	1.54	1.54	20.71	2.68	4.35	8.89	393.09	1.95	0.77	0.33	0.33	
9	3.14	1.54	1.54	31.63	2.09	3.14	6.05	57.15	1.95	0.77	0.33	1.14	
10	2.99	1.95	1.67	148.03	1.81	2.68	3.94	16.36	1.95	0.77	0.33	0.77	
11	2.99	1.81	1.67	42.81	2.53	2.24	3.54	8.89	1.81	0.77	0.33	0.54	
12	2.99	1.67	1.95	24.10	2.53	2.24	2.99	6.95	1.67	0.65	0.23	0.43	
13	2.84	1.67	1.81	15.30	2.84	2.24	2.84	5.62	1.54	0.65	0.23	0.23	
14	2.39	1.54	1.81	13.64	4.76	2.09	2.99	5.19	1.54	0.65	0.23	0.23	
15	2.24	1.95	1.54	12.82	2.99	2.84	2.84	4.35	1.54	0.89	0.23	0.23	
16	1.81	1.95	1.67	10.43	2.99	2.68	2.99	3.94	1.54	0.89	0.23	0.23	
17	1.67	2.39	1.40	9.65	13.64	2.09	2.99	3.14	1.54	0.89	0.23	0.23	
18	1.54	2.84	1.54	6.95	41.29	1.81	3.14	2.99	1.40	0.89	0.33	0.23	
19	1.40	3.14	1.27	6.05	24.10	2.53	3.54	2.84	1.54	0.77	0.33	0.23	
20	0.89	2.39	0.65	4.35	10.43	2.39	3.94	2.68	1.40	0.77	0.23	0.23	
21	1.01	2.53	0.89	4.35	8.14	1.95	11.22	2.68	1.40	0.77	0.23	0.23	
22	1.14	13.64	1.14	3.54	5.19	1.67	9.65	2.39	1.27	0.77	0.23	0.23	
23	1.01	6.50	1.40	3.14	4.35	1.54	4.76	2.39	1.27	1.01	0.23	0.23	
24	0.65	3.94	3.14	3.14	3.54	2.09	3.54	2.24	1.14	0.89	0.23	0.33	
25	0.65	2.53	64.25	2.99	2.99	100.51	3.54	2.24	1.14	0.89	0.23	0.33	
26	0.89	9.65	57.15	2.84	2.53	39.77	270.91	2.24	1.01	0.89	0.23	0.33	
27	0.89	18.51	35.65	2.53	2.53	25.25	38.39	2.24	1.01	0.77	0.23	0.33	
28	2.68	8.89	31.63	2.53	2.84	15.30	24.10	2.24	1.01	0.77	0.23	0.33	
29	2.09	8.14	21.83	2.53	6.95	6.95	35.65	2.24	1.01	0.77		0.33	
30	2.68	4.76	12.82	2.39	11.22	3.94	34.30	2.24	1.01	1.01		0.23	
31		2.99		3.14	9.65		24.10		1.01	1.27		0.23	
Total	80.57	131.95	263.52	701.11	192.20	271.31	600.25	763.53	47.72	25.81	10.20	9.79	3097.96 Ton
Mean	2.69	4.26	8.78	22.62	6.20	9.04	19.36	25.45	1.54	0.83	0.36	0.32	
Max	6.95	18.51	64.25	148.03	41.29	100.51	270.91	393.09	2.09	1.27	1.01	1.14	393.09
Min	0.65	1.54	0.65	2.39	1.81	1.54	2.84	2.24	1.01	0.65	0.23	0.23	0.23

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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
Drainage Area	3,288 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	2001
Number of observation	29
R - Square	0.7631
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:37:44.55 LQS/LQS02D/12

Station - Ban Tha Sap, Mueang, Yala, (X.40A)
Stream - Pattani
River - Pattani
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 130502
1.54280
QS = 0.2081 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	201.9	151.4	121.2	103.6	313.6	128.5	151.4	1001.0	404.3	1101.6	132.2	201.9	
2	242.6	167.3	123.0	101.9	313.6	112.3	159.3	1093.8	323.8	1070.3	77.5	201.9	
3	283.8	171.4	132.2	110.5	290.3	112.3	173.4	1287.7	212.1	1008.6	66.5	199.4	
4	341.0	182.1	136.0	132.2	280.5	151.4	222.5	1189.3	313.6	972.0	66.5	201.9	
5	306.9	207.0	151.4	132.2	217.3	161.3	230.4	985.8	341.0	761.3	82.2	196.9	
6	280.5	194.4	151.4	134.1	194.4	323.8	212.1	972.0	310.2	460.4	90.2	194.4	
7	230.4	177.5	157.3	112.3	196.9	369.6	186.9	940.8	283.8	293.6	114.1	196.9	
8	201.9	175.5	141.7	105.3	201.9	377.2	173.4	903.8	341.0	277.3	114.1	194.4	
9	171.4	145.5	130.4	96.8	207.0	242.6	167.3	813.8	347.9	212.1	110.5	196.9	
10	182.1	132.2	123.0	222.5	219.9	214.7	151.4	715.8	362.0	191.9	114.1	189.4	
11	149.4	132.2	136.0	245.7	209.5	373.4	207.0	698.9	384.9	184.5	115.8	194.4	
12	130.4	114.1	159.3	233.4	173.4	373.4	212.1	693.3	404.3	175.5	114.1	196.9	
13	108.8	114.1	251.9	222.5	194.4	347.9	219.9	649.3	456.3	149.4	114.1	199.4	
14	71.4	115.8	219.9	258.1	251.9	242.6	225.1	606.2	464.5	157.3	110.5	201.9	
15	65.3	108.8	219.9	255.0	267.7	219.9	251.9	660.2	506.3	163.3	114.1	201.9	
16	66.5	189.4	167.3	212.1	186.9	225.1	351.4	682.2	548.8	167.3	114.1	189.4	
17	66.5	245.7	153.3	165.3	141.7	219.9	448.2	704.5	819.7	171.4	112.3	209.5	
18	184.5	171.4	214.7	173.4	132.2	219.9	778.7	569.4	715.8	171.4	117.6	313.6	
19	201.9	161.3	201.9	196.9	134.1	214.7	825.6	767.1	947.0	171.4	151.4	306.9	
20	199.4	98.5	167.3	280.5	151.4	207.0	867.4	879.5	693.3	171.4	147.5	270.8	
21	236.4	105.3	117.6	290.3	199.4	227.7	972.0	761.3	738.4	177.5	147.5	255.0	
22	248.8	171.4	110.5	214.7	196.9	236.4	755.6	715.8	749.8	173.4	177.5	225.1	
23	189.4	157.3	98.5	189.4	209.5	248.8	710.1	643.8	1173.2	171.4	222.5	199.4	
24	222.5	151.4	115.8	194.4	167.3	242.6	665.7	616.9	1133.2	169.3	194.4	194.4	
25	214.7	128.5	126.7	209.5	128.5	317.0	559.1	538.6	1101.6	169.3	191.9	186.9	
26	214.7	98.5	179.6	251.9	119.4	293.6	643.8	497.8	928.4	189.4	184.5	157.3	
27	201.9	96.8	199.4	277.3	112.3	248.8	749.8	317.0	1109.5	98.5	191.9	149.4	
28	189.4	95.2	189.4	251.9	119.4	161.3	813.8	196.9	1101.6	96.8	189.4	182.1	
29	91.9	96.8	204.4	280.5	112.3	159.3	867.4	222.5	1109.5	159.3		189.4	
30	110.5	96.8	175.5	209.5	119.4	151.4	1016.3	317.0	1109.5	159.3		182.1	
31		95.2		239.5	153.3		1062.5		1093.8	157.3		186.9	
Total	5606.8	4448.8	4776.5	6103.2	5916.3	7124.4	15031.5	21642.0	20529.1	9753.5	3679.0	6366.7	110977.8 Ton
Mean	186.9	143.5	159.2	196.9	190.8	237.5	484.9	721.4	662.2	314.6	131.4	205.4	
Max	341.0	245.7	251.9	290.3	313.6	377.2	1062.5	1287.7	1173.2	1101.6	222.5	313.6	1287.7
Min	65.3	95.2	98.5	96.8	112.3	112.3	151.4	196.9	212.1	96.8	66.5	149.4	65.3

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong U Taphao at Ban Hat Yai Nai, Songkhla (X.44)

Lat 06 - 59 - 58 N. **Long** 100 - 27 - 33 E.

Location	on left bank at the bridge of Hai Yai - Rattaphum Highway.
Ban Hat Yai Nai	**Amphoe** Hat Yai **Changwat** Songkhla
Drainage Area	1,740 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	2001
Number of observation	24
R - Square	0.9788
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:38:46.33 LQS/LQS02D/12

Station - Ban Hat Yai Nai, Hat Yai, Songkhla, (X.44)
Stream - Khlong U Taphao
River - Khlong U Taphao
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 130502
1.40530
QS = 2.4892 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	125.8	135.6	38.3	18.7	13.9	61.1	36.4	2079.4	173.6	531.4	149.1	89.0	
2	152.5	114.5	40.3	20.0	17.5	67.8	67.8	1620.7	166.5	436.3	142.3	86.6	
3	184.4	96.5	44.2	17.5	21.3	48.3	70.1	1372.7	177.1	393.4	149.1	79.4	
4	177.1	122.5	40.3	13.9	26.6	30.9	81.8	1442.4	166.5	341.8	135.6	89.0	
5	156.0	145.7	50.4	25.2	23.9	38.3	79.4	1654.8	152.5	287.4	89.0	81.8	
6	122.5	170.0	67.8	70.1	12.8	38.3	79.4	1334.0	149.1	287.4	81.8	58.9	
7	106.7	213.4	79.4	89.0	48.3	40.3	77.0	1038.1	132.3	258.9	79.4	94.0	
8	104.1	240.4	74.7	46.3	46.3	36.4	63.3	814.6	156.0	249.6	63.3	132.3	
9	99.0	268.3	50.4	38.3	40.3	29.4	34.5	705.4	132.3	231.3	54.6	109.3	
10	129.0	240.4	50.4	42.2	32.7	26.6	58.9	677.0	135.6	191.7	58.9	101.6	
11	119.8	163.0	40.3	46.3	29.4	26.6	40.3	670.0	152.5	166.5	74.7	101.6	
12	114.5	139.0	61.1	46.3	38.3	32.7	28.0	601.6	125.8	166.5	139.0	96.5	
13	135.6	101.6	36.4	34.5	32.7	29.4	29.4	572.1	129.0	159.5	119.8	89.0	
14	129.0	70.1	29.4	32.7	26.6	36.4	30.9	525.6	163.0	152.5	99.0	77.0	
15	104.1	65.5	20.0	29.4	21.3	48.3	58.9	452.7	180.7	139.0	104.1	67.8	
16	109.3	46.3	13.9	29.4	7.5	50.4	74.7	425.4	341.8	106.7	99.0	67.8	
17	86.6	54.6	11.7	30.9	6.6	61.1	89.0	436.3	705.4	104.1	109.3	65.5	
18	79.4	52.5	6.1	29.4	10.6	67.8	135.6	409.4	691.1	101.6	109.3	79.4	
19	70.1	44.2	3.2	20.0	21.3	58.9	245.0	469.2	920.6	99.0	104.1	96.5	
20	65.5	32.7	4.0	23.9	26.6	50.4	367.3	514.2	642.0	104.1	111.9	91.5	
21	58.9	34.5	5.2	18.7	17.5	46.3	469.2	452.7	404.0	125.8	111.9	72.4	
22	67.8	26.6	9.5	26.6	17.5	44.2	514.2	436.3	777.7	156.0	91.5	63.3	
23	61.1	21.3	6.6	34.5	23.9	46.3	474.8	341.8	3704.9	180.7	96.5	56.7	
24	79.4	18.7	9.5	34.5	17.5	38.3	447.2	297.1	6171.8	177.1	96.5	48.3	
25	67.8	20.0	18.7	40.3	20.0	29.4	377.7	263.6	6485.6	139.0	104.1	48.3	
26	79.4	30.9	16.2	34.5	17.5	29.4	430.8	263.6	4470.9	117.2	109.3	61.1	
27	86.6	32.7	16.2	34.5	6.6	25.2	1006.4	245.0	2416.7	117.2	94.0	58.9	
28	84.2	32.7	17.5	36.4	10.6	30.9	905.2	200.3	1508.5	132.3	89.0	61.1	
29	96.5	32.7	25.2	36.4	9.5	40.3	998.5	156.0	1219.8	149.1		61.1	
30	104.1	34.5	20.0	25.2	15.1	40.3	1946.7	166.5	1081.2	159.5		54.6	
31		44.2		25.2	38.3		2486.9		799.8	163.0		52.5	
Total	3156.8	2845.6	906.9	1050.8	698.5	1250.0	11805.3	20638.5	34634.3	6125.6	2866.1	2392.8	88371.2 Ton
Mean	105.2	91.8	30.2	33.9	22.5	41.7	380.8	687.9	1117.2	197.6	102.4	77.2	
Max	184.4	268.3	79.4	89.0	48.3	67.8	2486.9	2079.4	6485.6	531.4	149.1	132.3	6485.6
Min	58.9	18.7	3.2	13.9	6.6	25.2	28.0	156.0	125.8	99.0	54.6	48.3	3.2

WATER YEAR : 2001

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
Drainage Area	751 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	2001
Number of observation	24
R - Square	0.9350
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:39:02.92

LQS/LQS02D/12

Station - Ban Tha Kham, Tha Sae, Chumphon, (X.46)
Stream - Khlong Rap Ro
River - Khlong Tha Thaphao
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 220502
1.45430
QS = 1.5635 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	69.6	37.0	120.2	1591.7	114.9	3053.0	122.0	1076.3	72.6	32.2	27.6	7.7	
2	65.2	39.4	111.5	2089.6	113.2	1393.0	116.7	820.8	69.6	32.2	24.3	7.7	
3	62.3	48.4	96.3	4454.1	124.6	879.3	599.7	518.4	69.6	31.0	19.2	7.4	
4	62.3	303.1	88.2	7768.1	285.5	665.0	919.0	479.9	69.6	29.9	17.2	7.4	
5	59.4	78.7	81.8	7420.0	285.5	557.9	503.9	314.3	74.1	29.9	16.2	7.4	
6	53.8	66.6	72.6	6794.9	169.7	479.9	578.0	456.2	74.1	28.7	15.3	7.0	
7	51.1	63.7	71.1	3934.7	178.6	392.1	254.9	456.2	77.2	28.7	13.5	7.0	
8	49.8	58.0	69.6	2044.5	475.1	335.4	196.9	499.0	65.2	27.6	13.5	8.1	
9	48.4	45.8	66.6	1732.1	254.9	296.0	222.1	583.0	62.3	27.6	13.5	11.3	
10	44.5	44.5	78.7	1803.6	193.8	271.8	146.6	776.1	62.3	26.5	12.6	17.2	
11	43.2	96.3	72.6	1062.3	228.5	258.2	130.0	383.2	58.0	25.4	11.7	10.9	
12	41.9	72.6	155.1	719.9	763.5	235.0	231.7	282.1	58.0	24.3	11.7	9.7	
13	39.4	60.9	94.6	562.9	1418.7	215.7	146.6	231.7	58.0	24.3	11.3	7.7	
14	39.4	135.5	74.1	552.9	1300.1	196.9	120.2	200.0	58.0	23.3	11.3	7.4	
15	38.2	1041.4	68.1	446.9	617.3	196.9	120.2	166.7	58.0	22.2	11.3	7.0	
16	38.2	2319.6	62.3	419.2	572.9	235.0	254.9	149.4	58.0	22.2	10.9	6.6	
17	37.0	2169.1	74.1	543.0	905.7	163.8	285.5	138.2	56.6	21.2	10.9	6.3	
18	41.9	635.0	80.3	370.0	5125.1	149.4	278.6	122.0	65.2	21.2	10.5	6.6	
19	38.2	456.2	72.6	303.1	2789.9	122.0	1878.1	116.7	72.6	20.2	10.5	6.3	
20	34.5	318.5	254.9	254.9	1316.8	118.4	795.2	104.6	60.9	20.2	10.1	5.9	
21	33.3	356.9	116.7	238.3	2044.5	113.2	1076.3	101.3	55.2	19.2	9.7	5.6	
22	29.9	952.6	132.7	225.3	1878.1	114.9	428.4	96.3	51.1	19.2	9.3	5.9	
23	28.7	433.0	1988.5	187.7	2284.5	109.7	352.6	94.6	51.1	19.2	8.9	5.9	
24	27.6	433.0	3173.8	190.7	1562.1	104.6	392.1	88.2	44.5	18.2	8.9	6.3	
25	29.9	314.3	3282.3	163.8	1013.8	116.7	583.0	88.2	44.5	18.2	8.9	9.7	
26	29.9	241.6	8042.3	163.8	719.9	124.6	979.7	86.6	38.2	17.2	8.9	26.5	
27	33.3	475.1	7477.7	146.6	665.0	160.9	738.5	81.8	38.2	16.2	8.5	48.4	
28	43.2	258.2	6139.0	146.6	1055.3	671.0	437.6	80.3	35.7	16.2	8.5	17.2	
29	38.2	299.5	3813.3	135.5	2461.1	244.9	807.9	77.2	32.2	15.3		10.1	
30	40.7	231.7	2180.7	120.2	3586.7	155.1	1845.5	72.6	32.2	55.2		7.7	
31		166.7		116.7	3309.6		2520.7		32.2	52.5		7.7	
Total	1293.0	12252.9	38212.3	46703.6	37814.9	12130.3	18063.1	8741.9	1755.0	785.4	354.7	313.6	178420.7 Ton
Mean	43.1	395.3	1273.7	1506.6	1219.8	404.3	582.7	291.4	56.6	25.3	12.7	10.1	
Max	69.6	2319.6	8042.3	7768.1	5125.1	3053.0	2520.7	1076.3	77.2	55.2	27.6	48.4	8042.3
Min	27.6	37.0	62.3	116.7	113.2	104.6	116.7	72.6	32.2	15.3	8.5	5.6	5.6

WATER YEAR : 2001

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
Drainage Area	305 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	2001
Number of observation	21
R - Square	0.9126
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:39:41.59 LQS/LQS02D/12

Station - Ban Wang Phai, Mueang, Chumphon, (X.53A)
Stream - Khlong Chumphon
River - Khlong Chumphon
River System - Peninsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 220502
1.34100
QS = 1.5261 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.7	16.9	28.5	188.2	17.3	225.6	36.3	266.1	17.8	13.2	11.5	7.4	
2	20.2	13.7	24.8	138.2	18.3	215.5	32.3	148.0	17.8	12.8	11.0	7.4	
3	18.8	13.7	21.7	447.9	17.3	132.5	142.1	196.7	2.2	11.9	11.0	7.4	
4	17.3	14.6	22.8	491.4	21.2	108.3	128.7	149.9	17.3	11.5	11.0	7.0	
5	16.9	13.7	20.2	708.0	43.4	94.9	216.8	89.6	17.8	11.0	11.5	7.0	
6	15.0	14.1	17.8	649.8	38.6	77.7	103.7	82.8	17.3	10.6	10.6	7.0	
7	14.6	16.4	16.9	403.3	39.8	66.1	78.4	136.3	16.9	10.6	10.2	7.0	
8	13.7	17.8	17.8	313.6	124.0	60.2	62.9	258.0	16.4	10.2	9.8	6.7	
9	12.8	17.8	16.4	264.7	58.9	55.7	47.6	260.7	15.5	10.2	9.4	10.2	
10	12.3	17.8	27.5	203.0	53.2	44.6	39.2	195.5	15.0	10.2	9.0	11.5	
11	11.9	26.9	23.2	136.3	77.7	38.6	36.9	114.7	14.6	10.2	8.6	7.4	
12	11.5	32.9	151.9	106.4	117.4	36.3	38.0	79.8	14.1	10.2	8.2	7.0	
13	11.0	18.3	136.3	80.5	118.4	32.3	55.7	63.5	13.7	10.2	7.4	6.3	
14	10.6	22.2	32.9	62.9	159.9	31.2	39.2	53.2	13.2	10.2	7.0	5.6	
15	10.2	99.3	28.0	75.6	95.7	29.6	36.3	45.8	25.4	10.2	7.4	4.9	
16	9.8	180.9	25.9	93.1	73.6	28.5	43.4	40.4	15.9	10.2	7.4	4.2	
17	9.4	350.2	53.2	99.3	94.9	27.5	44.6	33.5	24.3	10.2	7.4	3.9	
18	9.4	198.0	37.4	74.3	259.4	24.8	51.3	28.5	42.2	10.2	8.2	3.6	
19	9.4	120.2	37.4	59.6	232.1	21.7	87.1	26.9	27.5	10.2	8.2	3.9	
20	9.0	107.3	86.2	48.8	110.1	22.2	175.1	24.8	24.8	10.2	8.2	4.2	
21	8.6	95.7	54.5	43.9	196.7	21.2	442.7	24.3	22.2	10.6	8.2	3.9	
22	8.6	201.8	62.9	39.8	215.5	23.2	234.6	23.8	19.8	10.6	8.2	3.9	
23	8.2	195.5	347.3	35.1	386.5	21.7	137.3	23.8	18.3	10.6	8.2	3.9	
24	8.2	284.9	797.2	31.2	270.0	19.2	137.3	22.8	16.9	10.6	7.8	5.9	
25	8.2	145.0	686.8	29.6	203.0	20.7	161.9	22.2	16.4	10.6	7.8	9.8	
26	9.0	87.1	833.3	28.5	120.2	23.2	102.8	21.7	15.9	10.6	7.8	13.2	
27	9.4	90.5	1054.0	25.9	201.8	45.8	98.4	20.7	15.5	10.6	7.4	11.9	
28	10.2	63.5	735.0	23.8	144.1	149.0	156.9	19.8	15.0	10.2	7.4	8.6	
29	9.4	60.2	458.3	21.7	206.7	75.0	88.8	19.2	14.6	10.2		7.0	
30	9.0	50.6	258.0	19.8	444.4	43.9	230.7	18.8	14.6	11.9		5.9	
31		44.6		18.8	262.0		697.3		14.1	10.6		5.2	
Total	354.3	2632.1	6114.1	4963.0	4422.1	1816.7	3984.3	2511.8	553.0	331.3	245.8	208.8	28137.3 Ton
Mean	11.8	84.9	203.8	160.1	142.6	60.6	128.5	83.7	17.8	10.7	8.8	6.7	
Max	21.7	350.2	1054.0	708.0	444.4	225.6	697.3	266.1	42.2	13.2	11.5	13.2	1054.0
Min	8.2	13.7	16.4	18.8	17.3	19.2	32.3	18.8	2.2	10.2	7.0	3.6	2.2

WATER YEAR : 2001

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
Drainage Area	105 sq.km.
Method of sampling	Depth Integrating.
Instrument Used	US.DH - 59
Period of Available Records	1990 - Cont'd
Actual Measurement	1989 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	23
R - Square	0.7524
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:40:14.98 LQS/LQS02D/12

Station - Ban Pak Prik, Lan Saka, Nakhon Si Thammarat, (X.55)
Stream - Khlong Tha Di
River - Khlong Hua Trut
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 130502
1.40320
QS = 1.0632 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.1	18.0	10.5	28.8	13.1	7.6	6.4	17.0	144.6	31.3	6.4	8.8	
2	33.9	18.0	8.8	27.7	12.2	6.4	4.8	13.1	60.7	25.4	5.9	9.6	
3	30.1	17.0	13.1	24.3	12.2	6.4	6.4	31.3	44.9	22.1	5.9	11.3	
4	24.3	22.1	12.2	35.2	11.3	5.9	25.4	18.0	40.7	18.0	5.9	11.3	
5	21.1	24.3	13.1	56.6	14.1	5.3	15.0	33.9	24.3	23.2	5.3	11.3	
6	20.0	25.4	13.1	38.0	12.2	5.3	16.0	136.4	14.1	24.3	5.3	11.3	
7	20.0	25.4	12.2	23.2	13.1	5.3	10.5	237.1	17.0	16.0	5.3	11.3	
8	20.0	28.8	19.0	18.0	16.0	5.3	7.0	102.5	14.1	15.0	5.3	11.3	
9	20.0	24.3	27.7	13.1	12.2	4.8	5.3	46.3	13.1	14.1	5.3	11.3	
10	19.0	17.0	26.5	14.1	12.2	4.3	3.3	30.1	10.5	15.0	5.3	11.3	
11	19.0	15.0	22.1	20.0	11.3	3.8	4.3	23.2	10.5	13.1	4.8	11.3	
12	17.0	15.0	21.1	19.0	8.8	7.6	8.8	19.0	9.6	12.2	4.3	10.5	
13	16.0	14.1	20.0	27.7	7.6	12.2	4.8	17.0	8.8	11.3	4.3	9.6	
14	14.1	16.0	25.4	44.9	7.6	4.3	7.6	14.1	11.3	10.5	3.3	8.8	
15	14.1	22.1	24.3	26.5	7.6	4.3	20.0	15.0	16.0	10.5	2.9	7.6	
16	14.1	25.4	22.1	24.3	12.2	5.3	6.4	22.1	46.3	8.8	2.4	6.4	
17	12.2	18.0	26.5	20.0	14.1	5.9	5.9	150.1	36.6	8.2	2.4	5.3	
18	12.2	16.0	32.6	18.0	14.1	4.3	14.1	42.1	39.3	8.2	4.3	5.3	
19	11.3	15.0	38.0	15.0	13.1	4.8	8.8	47.7	49.2	7.6	6.4	5.3	
20	10.5	15.0	43.4	12.2	13.1	8.2	32.6	40.7	32.6	7.6	6.4	4.8	
21	10.5	14.1	35.2	11.3	12.2	9.6	15.0	30.1	26.5	7.0	5.9	4.8	
22	11.3	14.1	25.4	11.3	12.2	7.0	13.1	27.7	32.6	8.2	11.3	4.8	
23	10.5	14.1	24.3	9.6	9.6	5.3	12.2	22.1	81.9	8.2	10.5	5.3	
24	10.5	14.1	30.1	8.8	10.5	8.8	8.8	18.0	46.3	6.4	8.8	11.3	
25	10.5	20.0	31.3	7.6	5.3	12.2	8.8	14.1	35.2	7.6	8.8	9.6	
26	12.2	21.1	38.0	8.8	5.9	17.0	5.3	13.1	25.4	8.2	8.8	8.2	
27	11.3	18.0	39.3	15.0	3.3	18.0	11.3	16.0	22.1	7.0	8.8	7.0	
28	15.0	14.1	27.7	18.0	4.3	8.8	16.0	27.7	23.2	7.6	8.8	5.9	
29	19.0	16.0	25.4	17.0	23.2	7.6	16.0	36.6	79.7	6.4		5.3	
30	22.1	11.3	24.3	16.0	26.5	4.8	32.6	60.7	60.7	7.6		5.3	
31		10.5		14.1	16.0		23.2		46.3	7.6		5.3	
Total	502.9	559.3	732.7	644.1	367.1	216.4	375.7	1322.8	1124.1	384.2	169.1	256.5	6654.9 Ton
Mean	16.8	18.0	24.4	20.8	11.8	7.2	12.1	44.1	36.3	12.4	6.0	8.3	
Max	33.9	28.8	43.4	56.6	26.5	18.0	32.6	237.1	144.6	31.3	11.3	11.3	237.1
Min	10.5	10.5	8.8	7.6	3.3	3.8	3.3	13.1	8.8	6.4	2.4	4.8	2.4

WATER YEAR : 2001

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
Drainage Area	957 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	2001
Number of observation	24
R - Square	0.9523
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:40:37.25 LQS/LQS02D/12

Station - Tha Sae, A. Tha Sae, Chumphon, (X.64)
Stream - Khlong Tha Sae
River - Khlong Tha Taphao
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 220502
1.63320
QS = 0.7258 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	84.4	29.7	71.4	942.4	47.0	1547.5	70.0	1922.1	47.9	23.9	23.2	6.1	
2	78.5	32.7	60.5	1023.9	46.1	599.5	56.6	1737.0	47.0	23.2	15.6	5.9	
3	71.4	40.9	47.0	2118.4	50.3	353.9	609.1	969.3	47.0	23.2	12.8	5.9	
4	68.6	57.9	49.1	8460.9	64.5	247.0	2013.6	519.9	47.0	22.6	11.7	5.9	
5	57.9	40.0	46.1	10686.6	56.6	205.8	570.9	350.7	47.9	21.9	10.7	5.9	
6	55.3	49.1	40.9	8062.2	50.3	221.9	638.4	411.1	44.3	21.9	10.2	5.6	
7	47.0	57.9	37.5	4294.4	50.3	213.8	418.1	347.4	42.6	21.2	9.7	5.6	
8	43.4	50.3	33.5	1865.8	75.6	264.2	249.8	552.2	40.0	20.6	9.2	9.7	
9	41.7	31.2	32.0	1186.4	60.5	195.3	325.0	683.3	39.2	20.6	8.8	35.9	
10	40.0	31.2	30.4	1375.5	49.1	141.6	192.7	1393.3	37.5	19.9	8.3	29.7	
11	37.5	47.0	29.7	1288.2	47.9	128.5	135.7	488.5	36.7	19.3	7.9	16.8	
12	35.1	41.7	49.1	732.0	64.5	165.2	132.1	291.0	38.4	19.3	7.9	11.7	
13	33.5	34.3	33.5	488.5	264.2	116.4	123.3	213.8	37.5	19.3	7.4	9.7	
14	32.0	90.5	30.4	400.8	658.2	109.7	101.5	182.5	37.5	18.7	7.4	7.9	
15	30.4	303.2	30.4	312.5	291.0	158.0	123.3	160.3	39.2	18.7	7.0	7.4	
16	29.7	623.7	27.5	276.0	208.5	170.1	285.0	135.7	38.4	18.0	6.7	6.4	
17	29.7	902.6	30.4	294.0	421.6	103.2	175.0	118.1	37.5	17.4	6.7	6.4	
18	29.7	370.4	35.9	195.3	4617.0	85.9	219.2	111.4	40.0	16.8	6.7	6.1	
19	34.3	192.7	39.2	162.8	3956.0	74.2	258.4	98.3	44.3	16.2	6.7	5.9	
20	31.2	130.3	57.9	126.8	1922.1	71.4	594.7	89.0	40.9	15.6	6.7	5.9	
21	28.2	139.3	40.9	108.1	1393.3	65.8	321.9	84.4	36.7	15.0	6.7	5.6	
22	23.9	421.6	44.3	98.3	870.0	57.9	227.4	75.6	32.7	14.5	6.4	5.6	
23	23.2	177.5	221.9	87.5	663.2	50.3	211.1	70.0	31.2	13.9	6.4	5.4	
24	23.2	123.3	799.9	84.4	428.6	47.9	213.8	67.2	29.7	12.8	6.4	5.4	
25	22.6	90.5	1393.3	78.5	288.0	50.3	367.1	64.5	28.2	12.3	6.4	5.1	
26	47.9	92.1	4022.8	74.2	203.2	60.5	2189.5	60.5	27.5	11.7	6.4	9.7	
27	40.0	148.5	9795.9	71.4	172.5	72.8	2737.7	59.2	27.5	11.2	6.1	16.8	
28	52.8	104.8	8460.9	64.5	180.0	133.9	909.2	56.6	26.7	10.7	6.1	15.0	
29	30.4	205.8	4439.8	56.6	479.6	99.9	585.1	54.0	25.3	11.2		9.7	
30	28.9	126.8	1865.8	51.5	2309.9	63.1	1095.9	51.5	24.6	13.9		6.7	
31		96.8		50.3	2358.7		3956.0		24.6	18.7		5.9	
Total	1232.4	4884.3	31897.9	45118.7	22348.3	5875.5	20107.1	11418.4	1145.5	544.2	242.2	291.3	145105.8 Ton
Mean	41.1	157.6	1063.3	1455.4	720.9	195.8	648.6	380.6	37.0	17.6	8.6	9.4	
Max	84.4	902.6	9795.9	10686.6	4617.0	1547.5	3956.0	1922.1	47.9	23.9	23.2	35.9	10686.6
Min	22.6	29.7	27.5	50.3	46.1	47.9	56.6	51.5	24.6	10.7	6.1	5.1	5.1

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Tan at Ban Wang Kong, Nakhon Si Thammarat (X.70)

Lat 08 - 25 - 34 N. **Long** 99 - 51 - 47 E.

Location	on left bank upstream side of the bridge.
Ban Wang Kong	**Amphoe** Mueang **Changwat** Nakhon Si Thammarat
Drainage Area	39 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1990 - Cont'd
Actual Measurement	1989 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	27
R - Square	0.8266
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:40:55.89 LQS/LQS02D/12

Station - Ban Wang Kong, Mueang, Nakhon Si Thammarat, (X.70)
Stream - Khlong Ban Tan
River - Khlong Ban Tan
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 220502
1.27120
QS = 2.6391 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.8	1.2	1.1	0.8	1.5	0.6	1.1	6.7	51.2	18.0	2.4	1.2	
2	4.9	1.1	1.1	0.8	1.0	0.6	0.8	9.0	43.7	15.4	2.3	1.2	
3	3.3	1.1	1.1	0.9	0.8	0.8	0.6	13.3	25.1	10.5	2.1	1.2	
4	2.8	2.0	1.2	1.1	1.0	0.6	2.5	5.1	17.6	10.2	2.1	1.1	
5	2.6	1.5	2.1	2.8	1.2	0.6	2.0	10.2	14.1	7.8	2.1	1.1	
6	2.8	4.3	2.2	3.3	1.1	0.7	1.2	40.1	13.8	13.3	2.6	1.1	
7	3.0	1.7	2.5	1.5	1.2	0.6	1.7	101.8	9.7	7.6	2.1	1.1	
8	2.2	4.8	2.1	1.2	1.1	1.7	1.2	41.0	7.4	6.7	2.1	1.1	
9	1.9	2.9	1.6	1.1	0.8	0.6	1.1	23.0	5.8	5.6	2.1	1.2	
10	1.8	2.3	1.2	1.0	0.8	0.6	0.8	14.6	4.8	6.7	1.7	1.2	
11	2.1	1.7	1.1	1.0	0.7	0.6	1.0	12.2	4.8	9.7	1.7	1.2	
12	2.1	1.6	1.1	1.1	0.7	0.6	1.0	6.7	4.2	6.7	1.7	1.2	
13	1.7	1.7	1.1	1.6	0.7	0.6	1.1	5.6	5.6	9.2	1.7	1.1	
14	1.6	1.7	1.1	4.0	1.4	0.6	0.8	4.8	5.6	7.8	1.7	1.1	
15	1.5	1.6	1.1	1.7	1.2	0.6	9.2	4.0	16.9	5.8	1.7	1.1	
16	1.2	2.6	1.0	1.3	1.2	0.5	2.1	4.0	48.8	4.0	1.6	1.1	
17	1.7	1.7	0.8	1.2	1.1	0.5	2.1	129.4	68.8	4.0	1.6	1.1	
18	1.6	1.5	0.8	1.1	1.1	1.2	2.1	54.3	35.6	4.0	1.6	0.9	
19	1.5	1.3	0.8	1.1	1.2	2.4	0.0	37.4	31.7	3.9	1.6	0.8	
20	1.4	1.2	1.4	1.1	0.5	3.3	12.7	62.1	19.1	3.8	1.6	0.8	
21	1.4	1.1	1.1	1.1	0.5	1.2	5.1	23.8	15.1	3.8	1.5	0.8	
22	1.6	1.1	0.8	1.1	0.5	1.4	2.8	25.1	81.1	2.6	1.4	2.1	
23	1.5	1.1	0.8	0.8	0.7	1.2	3.6	18.4	55.0	3.6	1.4	2.1	
24	1.4	1.4	1.1	1.0	0.6	1.2	3.3	13.5	30.1	3.3	1.3	4.5	
25	1.3	1.3	1.2	1.1	0.7	1.2	3.3	12.0	20.3	3.3	1.2	4.8	
26	1.4	1.2	2.0	1.1	0.6	1.1	2.9	9.2	14.6	3.3	1.2	4.0	
27	1.1	1.2	1.1	0.8	0.6	1.2	2.6	12.2	21.5	3.0	1.2	4.2	
28	1.1	1.2	1.0	0.8	0.5	1.1	3.8	15.4	35.6	2.6	1.2	2.9	
29	1.1	1.2	0.8	5.4	0.5	1.1	4.0	21.1	29.6	2.6		2.6	
30	2.1	1.1	0.8	2.4	0.8	1.1	7.8	47.9	31.3	2.9		1.7	
31		1.1		1.2	0.6		5.4		27.1	2.6		1.7	
Total	61.5	52.5	37.2	46.5	26.9	30.1	89.7	783.9	795.6	194.3	48.5	53.3	2220.0 Ton
Mean	2.0	1.7	1.2	1.5	0.9	1.0	2.9	26.1	25.7	6.3	1.7	1.7	
Max	5.8	4.8	2.5	5.4	1.5	3.3	12.7	129.4	81.1	18.0	2.6	4.8	129.4
Min	1.1	1.1	0.8	0.8	0.5	0.5	0.0	4.0	4.2	2.6	1.2	0.8	0.0

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Tan Yong at Ban Tan Yong Mus, Narathiwat (X.73)

Lat 06 - 17 - 43 N. **Long** 101 - 44 - 04 E.

Location	on right bank about 20 meters upstream from the bridge on Highway.
Ban Tan Yong Mus	**Amphoe** Rangae **Changwat** Narathiwat
Drainage Area	336 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1990 - Cont'd
Actual Measurement	1989 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	22
R - Square	0.8619
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:41:16.46

LQS/LQS02D/12

Station - Rangae, Rangae, Narathiwat, (X.73)
Stream - Khlong Tan Yong Mus
River - Bang Nara
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 220502
1.23800
QS = 1.5310 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	51.5	50.2	43.1	12.3	47.6	12.3	56.0	81.5	58.1	284.5	36.9	14.0	
2	45.6	32.7	35.7	11.7	89.7	13.9	50.2	118.7	56.7	200.2	34.5	14.1	
3	43.1	20.3	30.5	11.1	86.4	13.9	70.3	125.8	54.7	164.4	33.3	13.8	
4	46.9	33.9	28.6	10.8	56.0	14.0	79.1	97.3	48.2	142.1	31.5	13.2	
5	39.4	23.0	31.5	10.5	48.9	13.5	251.9	99.0	42.5	125.8	30.5	12.9	
6	35.1	38.8	32.7	9.9	44.4	14.0	204.5	125.8	39.4	117.9	24.0	12.3	
7	50.2	32.1	44.4	9.4	35.1	14.1	157.4	95.6	36.9	116.1	22.1	12.0	
8	39.4	21.2	142.1	9.4	28.6	26.7	156.5	75.1	37.5	109.2	19.5	11.4	
9	32.7	35.1	76.7	9.1	22.1	33.9	99.0	68.2	33.3	101.5	18.6	11.1	
10	28.6	24.0	51.5	8.8	17.7	24.9	71.1	64.8	30.5	94.7	16.8	11.1	
11	24.0	23.0	41.2	8.5	49.5	13.5	66.2	60.7	24.9	84.0	15.2	11.7	
12	18.6	46.3	40.6	10.2	51.5	56.7	63.4	52.8	22.1	91.4	13.5	10.8	
13	16.8	38.1	35.7	12.9	50.8	45.6	56.7	50.2	20.3	83.2	13.6	10.5	
14	29.6	23.0	27.7	13.8	45.6	32.1	48.2	46.3	23.0	74.3	13.6	10.8	
15	24.0	20.3	22.1	13.7	33.3	15.2	45.0	127.5	94.7	66.8	13.7	9.9	
16	29.6	20.3	19.5	36.9	23.0	13.6	45.0	202.3	762.4	61.4	13.7	9.6	
17	20.3	24.9	17.7	19.5	17.7	13.7	43.7	153.6	949.1	56.7	13.8	9.4	
18	15.2	18.6	13.5	13.9	13.5	16.8	44.4	165.4	719.5	52.1	13.8	9.1	
19	13.5	13.5	13.6	14.1	13.7	56.0	45.6	426.6	671.6	48.9	13.8	9.1	
20	13.6	13.6	13.7	12.6	13.8	45.6	115.2	512.2	566.4	54.1	13.9	11.4	
21	13.6	13.7	13.8	11.1	13.8	96.4	128.4	312.6	424.6	75.9	13.8	14.0	
22	13.7	42.5	13.9	10.8	13.9	108.3	91.4	173.5	257.9	80.7	13.7	13.5	
23	13.8	33.3	13.9	10.2	14.0	141.1	150.7	132.9	469.2	60.7	13.7	12.3	
24	13.7	20.3	13.9	9.6	14.0	133.8	237.8	110.9	566.4	55.4	13.8	11.4	
25	13.8	53.4	14.0	14.0	14.1	225.5	299.0	101.5	469.2	61.4	13.9	12.3	
26	13.9	41.2	14.0	24.9	13.2	143.0	237.8	86.4	288.3	62.7	13.9	10.2	
27	13.9	45.0	13.8	17.7	12.3	154.5	150.7	75.1	207.8	54.1	14.0	9.6	
28	13.9	120.5	13.5	52.1	12.0	115.2	115.2	66.2	240.0	48.9	14.0	9.4	
29	13.5	89.7	12.9	43.7	11.7	88.1	124.0	60.7	442.3	45.0		8.8	
30	48.9	60.0	12.3	35.1	11.4	68.2	128.4	61.4	667.9	41.8		8.3	
31		58.1		56.7	11.1		99.0		487.0	39.4		8.3	
Total	790.4	1130.6	898.1	545.0	930.4	1764.1	3531.8	3930.6	8812.4	2755.3	517.1	346.3	25952.1 Ton
Mean	26.3	36.5	29.9	17.6	30.0	58.8	113.9	131.0	284.3	88.9	18.5	11.2	
Max	51.5	120.5	142.1	56.7	89.7	225.5	299.0	512.2	949.1	284.5	36.9	14.1	949.1
Min	13.5	13.5	12.3	8.5	11.1	12.3	43.7	46.3	20.3	39.4	13.5	8.3	8.3

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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
Drainage Area	2,237 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	2001
Number of observation	30
R - Square	0.7967
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:41:36.27

LQS/LQS02D/12

Station - Ban Yu Ra Pan,Bannang Sata, Yala, (X.77A)
Stream - Pattani
River - Pattani
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 220502
1.35250
QS = 0.7795 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	88.2	49.4	108.3	47.9	180.4	90.4	55.7	901.5	130.6	83.9	122.3	59.0	
2	257.7	47.9	125.0	103.7	262.0	63.9	119.9	1051.0	51.0	57.4	41.2	144.8	
3	223.4	46.3	51.0	97.0	194.5	141.9	79.7	1069.0	187.4	43.6	35.4	59.0	
4	249.6	177.4	83.9	127.8	198.0	227.1	133.4	824.9	194.5	42.4	54.1	117.6	
5	245.8	55.7	106.0	117.6	242.1	288.3	127.8	884.3	42.4	117.6	54.1	103.7	
6	67.3	59.0	130.6	162.3	139.1	288.3	51.0	944.9	174.3	46.3	130.6	86.1	
7	115.2	46.3	90.4	262.0	139.1	315.2	63.9	799.7	136.2	51.0	60.6	245.8	
8	63.9	49.4	133.4	40.0	198.0	223.4	92.6	979.9	165.3	44.8	46.3	227.1	
9	136.2	133.4	41.2	455.1	266.4	223.4	97.0	918.8	234.6	150.6	46.3	266.4	
10	227.1	103.7	42.4	266.4	324.3	386.7	90.4	936.2	183.9	42.4	34.3	60.6	
11	81.8	108.3	62.3	112.9	266.4	392.3	153.5	645.3	171.3	40.0	41.2	156.4	
12	51.0	52.6	127.8	139.1	101.5	443.5	364.5	717.4	156.4	38.9	46.3	183.9	
13	40.0	47.9	72.4	180.4	62.3	165.3	370.0	910.2	119.9	37.7	94.8	141.9	
14	37.7	60.6	97.0	144.8	180.4	414.8	381.1	858.7	117.6	37.7	59.0	253.4	
15	36.5	130.6	94.8	43.6	122.3	397.9	420.5	637.4	90.4	38.9	79.7	201.6	
16	40.0	153.5	83.9	92.6	119.9	342.7	490.4	310.7	122.3	37.7	51.0	338.1	
17	108.3	55.7	79.7	359.0	86.1	168.3	490.4	201.6	133.4	40.0	60.6	426.2	
18	187.4	97.0	159.4	292.7	74.1	342.7	629.6	97.0	397.9	36.5	112.9	370.0	
19	180.4	99.2	171.3	409.2	44.8	328.9	538.5	310.7	275.1	38.9	133.4	315.2	
20	180.4	60.6	97.0	575.3	130.6	338.1	520.3	310.7	414.8	125.0	122.3	230.9	
21	216.1	51.0	194.5	392.3	364.5	328.9	733.7	262.0	110.6	119.9	306.2	144.8	
22	144.8	122.3	74.1	257.7	297.2	338.1	538.5	249.6	119.9	117.6	88.2	147.7	
23	110.6	79.7	174.3	397.9	301.7	333.5	514.3	253.4	266.4	171.3	74.1	74.1	
24	144.8	141.9	86.1	205.2	171.3	324.3	364.5	83.9	301.7	103.7	55.7	36.5	
25	168.3	97.0	112.9	242.1	165.3	338.1	409.2	59.0	266.4	110.6	90.4	77.6	
26	122.3	90.4	174.3	141.9	122.3	190.9	927.5	177.4	234.6	60.6	54.1	88.2	
27	117.6	46.3	205.2	112.9	92.6	117.6	910.2	219.8	292.7	38.9	99.2	122.3	
28	63.9	40.0	201.6	133.4	77.6	162.3	892.9	212.5	297.2	55.7	139.1	55.7	
29	47.9	54.1	139.1	68.9	106.0	54.1	927.5	223.4	292.7	52.6		83.9	
30	88.2	52.6	127.8	141.9	150.6	153.5	944.9	249.6	910.2	51.0		77.6	
31		47.9		234.6	117.6		962.4		119.9	52.6		62.3	
Total	3842.4	2457.7	3447.7	6358.2	5299.0	7924.4	13395.8	16300.5	6711.6	2085.8	2333.4	4958.4	75114.9 Ton
Mean	128.1	79.3	114.9	205.1	170.9	264.1	432.1	543.4	216.5	67.3	83.3	159.9	
Max	257.7	177.4	205.2	575.3	364.5	443.5	962.4	1069.0	910.2	171.3	306.2	426.2	1069.0
Min	36.5	40.0	41.2	40.0	44.8	54.1	51.0	59.0	42.4	36.5	34.3	36.5	34.3

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong U - Taphao at Ban Bang Sala, Songkhla (X.90)

Lat 06 - 55 - 46 N. **Long** 100 - 26 - 33 E.

Location	on left bank at the bridge near Wat Bang Sala, Tombon Thung Lan.
Ban Bang Sala	**Amphoe** Khlong Hoi Khong **Changwat** Songkhla
Drainage Area	1,562 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1982 - Cont'd
Actual Measurement	1982 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	24
R - Square	0.9546
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:41:53.35 LQS/LQS02D/12

Station - Ban Bang Sala, Hat Yai, Songkhla, (X.90)
Stream - Khlong U Taphao
River - Khlong U Taphao
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 220502
1.48290
QS = 2.0200 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	144.4	216.7	44.9	76.5	27.4	195.1	43.3	3287.4	90.1	562.0	49.1	39.3	
2	189.8	189.8	43.3	81.0	26.0	179.3	50.8	2577.8	84.0	406.2	46.6	37.7	
3	275.3	161.6	44.1	76.5	24.6	156.6	72.2	2134.5	94.8	317.0	46.6	36.2	
4	279.0	203.1	58.7	73.6	22.6	125.6	114.3	2305.9	112.0	271.6	45.8	35.4	
5	233.3	244.7	84.0	107.6	39.3	93.2	114.3	2413.5	118.8	219.4	44.9	34.7	
6	187.1	301.6	156.6	250.4	54.3	93.2	118.8	1861.5	105.5	184.5	44.1	33.9	
7	159.1	488.7	184.5	260.5	79.5	90.1	114.3	1449.3	87.0	156.6	43.3	33.9	
8	149.2	552.6	171.7	105.5	88.6	81.0	88.6	1074.6	123.3	139.6	43.3	33.9	
9	159.1	511.2	114.3	72.2	72.2	75.1	68.8	890.5	161.6	125.6	42.5	33.2	
10	227.7	444.6	84.0	70.7	62.3	70.7	59.6	910.2	161.6	114.3	42.5	33.2	
11	224.9	352.6	73.6	79.5	56.9	68.8	55.1	936.6	132.5	105.5	42.5	32.4	
12	224.9	286.5	65.1	68.8	54.3	66.0	55.1	871.0	90.1	99.5	42.5	32.4	
13	205.8	211.2	59.6	65.1	51.7	64.2	53.4	832.4	72.2	94.8	44.9	32.4	
14	174.2	137.3	55.1	64.2	49.1	60.5	48.3	726.2	68.8	90.1	44.9	31.7	
15	146.8	107.6	50.0	70.7	48.3	56.0	46.6	562.0	66.0	85.5	44.1	31.7	
16	127.9	93.2	47.4	69.8	46.6	52.5	56.0	475.3	164.1	81.0	44.1	31.0	
17	114.3	82.5	45.8	67.0	44.9	75.1	81.0	406.2	449.0	78.0	44.1	31.0	
18	101.1	76.5	43.3	62.3	47.4	105.5	179.3	336.7	488.7	73.6	43.3	30.2	
19	96.4	69.8	42.5	57.8	48.3	93.2	317.0	364.8	576.1	70.7	43.3	29.5	
20	94.8	67.0	44.9	50.8	48.3	85.5	529.5	423.1	393.6	67.9	43.3	28.8	
21	93.2	65.1	48.3	38.5	49.1	72.2	708.0	360.7	227.7	66.0	43.3	27.4	
22	90.1	62.3	46.6	35.4	49.1	59.6	807.0	328.8	253.3	65.1	45.8	26.0	
23	82.5	59.6	44.9	35.4	50.0	55.1	763.2	275.3	4165.5	65.1	45.8	26.7	
24	87.0	56.0	44.1	40.9	52.5	50.8	607.5	224.9	6887.2	64.2	44.9	26.7	
25	101.1	56.0	50.0	40.9	54.3	50.0	497.7	195.1	6565.7	63.2	43.3	33.2	
26	107.6	57.8	53.4	40.1	56.0	49.1	534.1	169.1	4919.6	57.8	42.5	36.2	
27	118.8	56.9	56.9	39.3	53.4	49.1	1248.9	149.2	3034.4	55.1	43.3	35.4	
28	134.9	53.4	69.8	38.5	59.6	45.8	1173.2	134.9	1795.5	55.1	41.7	35.4	
29	156.6	49.1	82.5	37.0	64.2	44.1	1257.4	123.3	1300.2	53.4		34.7	
30	189.8	43.3	76.5	33.2	90.1	42.5	2963.3	99.5	1090.8	51.7		34.7	
31		45.8		29.5	139.6		3846.0		788.1	50.8		33.9	
Total	4676.7	5404.1	2086.4	2239.2	1710.5	2405.5	16672.6	26900.3	34667.8	3990.9	1236.3	1012.8	103003.1 Ton
Mean	155.9	174.3	69.5	72.2	55.2	80.2	537.8	896.7	1118.3	128.7	44.2	32.7	
Max	279.0	552.6	184.5	260.5	139.6	195.1	3846.0	3287.4	6887.2	562.0	49.1	39.3	6887.2
Min	82.5	43.3	42.5	29.5	22.6	42.5	43.3	99.5	66.0	50.8	41.7	26.0	22.6

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Bang Kaeo at Ban Khuan In No Mo, Phatthalung (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
Drainage Area	133 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 48
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	20
R - Square	0.7019
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:42:15.68 LQS/LQS02D/12

Station - Ban Khuan In No Mo, Ta Mot, Phatthalung, (X.109)
Stream - Khlong Bang Kaeo
River - Khlong Bang Kaeo
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.49170
QS = 2.1784 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.3	9.1	7.4	6.4	2.9	2.6	3.4	41.1	114.3	72.7	11.4	4.9	
2	19.6	8.5	6.9	5.9	2.9	2.3	19.6	25.8	166.3	62.3	10.8	4.9	
3	30.8	7.9	6.4	5.9	2.6	2.3	18.9	27.4	104.3	53.5	10.8	4.4	
4	23.4	7.9	16.7	10.8	2.6	2.3	10.2	39.2	65.7	47.1	10.8	4.4	
5	18.9	16.0	7.9	12.7	3.7	2.1	9.1	68.0	44.1	42.1	10.2	4.0	
6	17.4	21.8	6.4	9.1	10.2	3.7	10.2	40.1	42.1	41.1	9.6	3.7	
7	16.7	12.7	5.9	7.4	12.1	2.3	10.2	50.3	32.6	40.1	9.6	4.0	
8	16.0	21.1	5.4	6.4	5.4	2.3	5.4	79.0	33.5	35.3	9.1	3.7	
9	15.3	13.3	5.4	5.4	4.0	2.1	5.9	147.3	26.6	32.6	9.1	3.7	
10	16.7	9.6	4.9	5.4	3.1	2.3	4.9	134.0	23.4	29.9	8.5	3.7	
11	14.0	8.5	4.4	4.9	4.9	3.7	4.0	60.0	22.6	27.4	8.5	3.4	
12	12.7	7.9	4.0	4.9	3.4	4.4	7.4	42.1	21.1	26.6	7.9	3.4	
13	12.1	7.9	12.7	4.9	2.9	3.7	4.9	32.6	22.6	25.8	7.9	3.1	
14	13.3	8.5	4.9	7.4	2.9	3.1	5.4	25.8	38.2	22.6	7.4	3.1	
15	18.1	7.9	4.0	4.9	2.3	10.2	4.9	285.9	117.2	21.8	7.4	3.1	
16	12.7	10.2	6.9	10.8	2.3	3.7	10.2	89.4	472.4	21.1	7.4	3.1	
17	11.4	9.6	4.0	4.9	2.1	6.4	7.9	57.8	1674.3	19.6	7.4	2.9	
18	12.1	7.4	4.4	4.0	2.1	4.9	12.7	53.5	1902.7	19.6	10.2	2.9	
19	10.8	6.9	12.1	3.7	2.1	10.2	25.0	126.0	475.4	18.9	7.4	2.6	
20	9.6	6.4	7.9	3.7	2.1	5.9	12.7	459.6	182.5	18.1	7.4	2.6	
21	9.1	5.9	5.4	3.4	2.1	4.0	21.8	130.7	214.8	18.1	6.4	2.6	
22	9.1	5.9	5.4	3.4	2.1	3.4	15.3	92.0	388.5	23.4	6.4	2.6	
23	9.1	5.9	6.9	3.7	6.4	3.4	9.6	73.9	444.1	17.4	6.4	2.6	
24	8.5	9.6	7.4	3.7	2.9	2.9	8.5	76.4	272.1	16.0	5.9	3.7	
25	7.9	16.7	8.5	3.4	2.3	6.4	25.0	47.1	162.8	14.7	5.9	3.1	
26	10.2	15.3	9.1	3.4	2.1	3.7	66.9	40.1	118.6	14.7	5.4	3.1	
27	7.9	8.5	17.4	3.1	2.1	8.5	32.6	35.3	92.0	14.0	7.4	3.4	
28	8.5	6.4	8.5	3.7	5.9	4.9	63.4	33.5	93.4	13.3	5.4	2.6	
29	8.5	6.4	6.9	3.4	5.4	3.7	57.8	30.8	118.6	12.7		2.3	
30	10.8	5.9	6.4	2.9	7.4	3.7	110.0	177.0	134.0	11.4		2.1	
31		5.9		2.3	3.4		43.1		98.8	12.1		2.1	
Total	411.5	301.5	220.5	165.9	118.7	125.1	646.9	2621.7	7719.6	846.0	228.0	101.8	13507.2 Ton
Mean	13.7	9.7	7.3	5.4	3.8	4.2	20.9	87.4	249.0	27.3	8.1	3.3	
Max	30.8	21.8	17.4	12.7	12.1	10.2	110.0	459.6	1902.7	72.7	11.4	4.9	1902.7
Min	7.9	5.9	4.0	2.3	2.1	2.1	3.4	25.8	21.1	11.4	5.4	2.1	2.1

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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
Drainage Area	256 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1980 - Cont'd
Actual Measurement	1980 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	22
R - Square	0.8886
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:42:35.53 LQS/LQS02D/12

Station - Ban Phrai, Sadao, Songkhla, (X.111)
Stream - Khlong Sadao
River - Khlong Lam
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.56900
QS = 1.4373 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.3	14.2	6.1	13.5	7.4	33.8	2.0	48.3	3.2	10.7	1.4	3.5	
2	28.4	16.3	6.4	12.9	10.9	15.8	2.9	80.4	9.3	12.3	1.3	3.3	
3	30.4	18.0	9.4	12.7	11.9	12.9	4.5	99.1	11.3	6.0	1.3	3.2	
4	14.4	17.1	14.2	12.3	12.3	12.3	3.2	87.5	6.0	5.1	1.2	3.2	
5	13.5	21.2	39.2	12.7	12.5	12.1	2.5	45.9	4.1	4.8	1.1	3.4	
6	14.4	35.6	34.2	7.2	13.9	11.9	2.0	77.3	3.5	4.5	1.0	3.3	
7	29.6	75.3	10.4	5.2	13.7	11.7	1.8	255.6	5.4	4.4	0.9	3.1	
8	37.2	34.2	12.3	13.7	13.1	11.5	2.0	157.8	26.8	4.1	0.7	3.2	
9	36.2	52.4	11.1	13.3	12.5	11.3	2.0	75.3	11.1	3.7	0.9	3.2	
10	32.9	23.0	10.0	8.1	12.1	11.3	1.6	209.1	5.8	3.4	4.0	3.2	
11	28.0	12.1	8.7	7.1	11.9	11.7	1.4	123.4	4.7	3.2	4.0	3.2	
12	21.9	11.1	8.2	11.9	11.7	5.7	1.2	52.4	4.0	3.1	4.0	3.2	
13	15.0	10.0	7.6	15.8	11.7	5.0	1.4	31.7	3.7	3.0	4.0	3.2	
14	14.7	9.4	7.1	14.4	11.7	4.5	1.5	22.7	3.5	2.9	4.0	3.2	
15	14.2	8.9	7.6	13.5	11.7	4.7	1.3	18.8	3.3	2.7	4.0	3.1	
16	13.5	8.4	7.4	13.1	11.5	5.0	1.1	17.4	5.4	2.5	4.0	3.1	
17	13.1	8.1	7.1	12.3	11.5	6.3	7.1	12.5	10.7	2.5	4.0	3.2	
18	12.7	7.9	6.9	8.7	11.3	6.0	40.8	12.5	6.6	2.2	4.0	3.2	
19	13.5	7.6	6.7	7.9	11.3	5.2	36.7	13.1	6.6	2.1	4.0	3.1	
20	13.3	7.2	6.6	7.7	11.3	5.1	32.5	14.2	7.2	2.1	4.0	3.2	
21	13.1	6.9	6.6	9.1	11.1	4.7	13.9	12.5	6.7	2.1	3.9	3.2	
22	13.1	6.7	7.4	9.1	11.3	4.4	44.6	11.5	6.7	2.1	4.0	3.2	
23	12.9	7.1	7.2	9.3	11.3	4.3	9.6	10.7	50.8	2.1	4.0	3.6	
24	13.5	7.2	6.7	9.3	11.1	3.3	51.6	10.4	198.2	2.0	4.0	3.6	
25	14.7	6.4	6.6	9.4	11.1	2.4	35.6	10.0	149.0	1.9	3.7	3.6	
26	15.5	6.3	11.9	9.3	10.9	1.9	44.6	9.6	45.9	1.9	3.4	3.6	
27	25.7	6.1	13.5	7.7	10.9	1.9	69.4	8.9	12.9	1.8	3.3	3.6	
28	20.9	6.0	12.9	7.4	12.3	2.0	192.8	5.1	7.6	1.7	3.5	3.5	
29	22.3	5.8	13.9	7.2	15.5	2.1	134.8	4.0	12.9	1.7		3.5	
30	14.2	5.7	15.0	7.4	21.2	1.9	119.7	3.7	11.7	1.5		3.5	
31		5.5		7.1	38.7		108.9		9.6	1.5		3.5	
Total	579.1	467.7	328.9	316.3	401.3	232.7	975.0	1541.4	654.2	105.6	83.6	102.7	5788.5 Ton
Mean	19.3	15.1	11.0	10.2	12.9	7.8	31.5	51.4	21.1	3.4	3.0	3.3	
Max	37.2	75.3	39.2	15.8	38.7	33.8	192.8	255.6	198.2	12.3	4.0	3.6	255.6
Min	12.7	5.5	6.1	5.2	7.4	1.9	1.1	3.7	3.2	1.5	0.7	3.1	0.7

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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
Drainage Area	129 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1979 - Cont'd
Actual Measurement	1981 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	24
R - Square	0.9659
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:42:53.97 LQS/LQS02D/12

Station - Ban Thung Prap 1, Sadao, Songkhla, (X.113)
Stream - Khlong Lam
River - Khlong U Taphao
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.52340
QS = 5.7836 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.7	7.4	2.3	2.5	1.5	6.1	6.9	67.3	5.3	6.0	3.8	2.9	
2	191.8	7.4	2.0	2.1	1.5	3.5	348.9	246.8	9.0	5.6	3.8	2.9	
3	8.0	12.7	2.8	2.1	1.5	4.1	46.3	348.9	23.1	5.3	3.7	2.9	
4	5.8	38.0	13.7	2.0	2.3	2.4	4.8	27.8	6.9	5.3	3.7	2.9	
5	4.8	10.5	4.1	2.7	9.4	2.3	19.2	16.6	5.8	5.1	3.5	2.9	
6	8.6	93.9	2.5	2.5	32.1	1.9	6.7	427.4	5.4	4.9	3.5	2.9	
7	52.4	11.6	2.3	2.3	4.6	1.8	2.9	1607.2	5.4	4.9	3.5	2.9	
8	6.1	185.4	2.4	1.8	2.3	1.7	2.8	104.4	5.3	4.8	3.5	2.8	
9	242.9	12.1	2.3	1.8	1.8	1.5	2.7	122.8	5.1	4.8	3.5	2.8	
10	22.5	8.6	2.1	1.7	1.7	1.5	2.3	533.0	4.9	4.6	3.5	2.8	
11	26.0	7.6	1.9	1.7	1.7	1.5	2.0	50.7	4.8	4.6	3.5	2.8	
12	8.8	6.7	1.9	1.8	1.8	1.4	2.0	20.8	4.8	4.6	3.4	2.8	
13	6.0	5.4	1.7	4.0	1.8	1.7	2.0	14.2	4.8	4.4	3.4	2.8	
14	6.0	4.8	1.4	2.3	1.8	1.8	1.8	12.5	4.6	4.4	3.4	2.8	
15	5.4	4.3	1.3	1.9	1.8	175.9	1.8	15.1	4.6	4.3	3.4	2.8	
16	4.9	4.9	1.1	1.8	1.8	5.6	22.5	11.4	13.2	4.3	3.4	2.7	
17	4.4	4.0	1.2	1.7	1.8	225.0	584.3	11.2	6.7	4.3	3.2	2.7	
18	4.1	3.5	1.2	1.5	1.7	6.3	469.8	12.1	5.3	4.3	3.1	2.7	
19	5.1	3.2	1.2	1.7	1.7	2.7	42.1	11.6	5.3	4.3	3.1	2.5	
20	3.7	3.1	1.2	1.5	1.7	2.3	49.3	10.7	4.8	4.3	3.1	2.5	
21	3.4	3.5	1.2	1.5	1.7	2.1	157.8	9.0	4.6	4.3	3.1	2.7	
22	4.6	3.1	4.8	1.5	1.7	2.0	54.9	8.4	11.2	4.3	3.1	2.7	
23	2.9	2.8	4.6	1.5	1.7	2.0	7.4	7.6	271.2	4.3	3.1	2.7	
24	37.3	3.2	2.8	1.5	1.7	1.9	43.5	7.3	275.5	4.1	3.1	2.8	
25	8.8	3.2	3.4	1.5	1.7	1.8	10.3	7.1	16.6	4.1	3.1	3.1	
26	7.3	2.8	11.8	1.7	1.7	1.8	92.0	6.9	8.0	4.1	3.1	3.1	
27	66.5	2.7	5.8	1.7	1.5	1.8	165.2	6.7	6.7	4.1	3.1	2.9	
28	250.9	2.4	3.2	1.5	21.4	1.8	1755.7	6.0	11.2	4.0	2.9	2.8	
29	10.7	2.4	6.7	1.5	93.9	1.7	246.8	5.6	17.6	4.0		2.7	
30	167.7	2.3	3.5	1.5	73.0	1.7	198.3	5.4	8.4	3.8		2.5	
31		2.3		1.5	188.6		29.6		6.5	3.8		3.1	
Total	1191.1	465.8	98.4	58.3	464.9	469.6	4382.6	3742.5	772.6	140.0	93.6	86.9	11966.3 Ton
Mean	39.7	15.0	3.3	1.9	15.0	15.7	141.4	124.8	24.9	4.5	3.3	2.8	
Max	250.9	185.4	13.7	4.0	188.6	225.0	1755.7	1607.2	275.5	6.0	3.8	3.1	1755.7
Min	2.9	2.3	1.1	1.5	1.5	1.4	1.8	5.4	4.6	3.8	2.9	2.5	1.1

WATER YEAR : 2001

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
Drainage Area	153 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	1986 - Cont'd
Actual Measurement	1986 - Cont'd
Using Rating Curve Water Year	1986 - 2001
Number of observation	286
R - Square	0.7951
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:43:13.99 LQS/LQS02D/12

Station - Ban Lam Khlaeng(2), Palian, Trang, (X.139)
Stream - Khlong Palian
River - Khlong Palian
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.73390
QS = 0.5810 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.6	13.7	9.0	11.3	9.0	7.6	42.6	80.2	15.7	20.8	6.0	3.4	
2	7.6	12.2	10.4	10.1	8.3	7.6	98.0	85.1	21.4	18.5	6.0	3.1	
3	7.9	10.4	11.7	9.3	7.3	17.9	65.1	51.3	20.2	17.3	5.7	3.1	
4	11.7	9.0	17.9	10.8	7.6	19.0	53.3	61.8	16.3	16.3	5.7	2.9	
5	8.6	9.3	10.4	12.2	26.5	19.6	50.3	65.1	14.7	15.2	5.5	2.9	
6	7.3	9.0	10.4	9.3	206.7	25.7	38.9	51.3	13.7	14.7	5.5	2.9	
7	6.7	9.3	10.1	8.6	82.7	14.7	34.5	51.3	39.8	14.7	5.2	2.7	
8	6.0	15.2	9.3	7.9	38.0	13.2	49.3	43.5	32.9	13.7	4.9	2.7	
9	9.3	9.7	8.3	7.3	29.6	19.0	31.2	46.4	17.3	12.7	4.9	2.7	
10	7.0	10.4	7.0	6.7	28.0	19.6	25.7	40.7	15.2	12.2	4.9	2.5	
11	6.3	8.6	6.7	6.0	22.8	21.4	36.3	35.4	13.7	11.7	4.6	2.5	
12	7.0	7.6	6.3	7.3	17.9	17.3	57.5	31.2	12.7	10.8	4.6	2.5	
13	5.7	9.3	6.3	9.3	15.7	14.7	58.5	30.4	12.2	10.4	4.4	2.3	
14	5.5	7.6	5.7	14.2	13.7	34.5	42.6	33.7	16.3	10.1	4.4	2.3	
15	4.9	7.3	5.5	10.1	12.7	42.6	96.7	103.4	18.5	9.7	4.4	2.1	
16	5.2	15.2	5.5	87.7	11.3	42.6	82.7	36.3	43.5	9.3	4.1	2.1	
17	4.6	10.1	5.2	16.3	10.4	57.5	80.2	31.2	59.6	9.3	4.1	1.9	
18	4.1	8.3	38.0	11.7	10.1	311.5	65.1	27.2	135.5	9.0	4.1	1.9	
19	4.1	7.6	21.4	10.4	9.7	132.2	174.1	28.8	51.3	8.6	4.1	1.7	
20	4.1	6.7	12.7	9.0	9.0	59.6	58.5	40.7	34.5	8.3	3.9	1.7	
21	3.9	6.3	9.7	9.0	8.3	49.3	54.3	25.7	41.6	8.6	3.9	1.7	
22	3.9	6.3	9.3	13.2	9.7	46.4	48.3	23.5	52.3	9.3	3.9	1.7	
23	3.9	8.3	9.3	12.7	10.4	51.3	41.6	21.4	56.4	8.3	3.9	2.1	
24	4.6	11.7	10.4	86.4	8.3	112.1	34.5	20.2	37.1	7.6	3.6	2.1	
25	6.0	51.3	14.2	25.0	7.6	87.7	178.5	19.6	32.0	7.3	3.6	2.3	
26	56.4	34.5	14.7	18.5	7.3	99.3	178.5	18.5	26.5	7.3	3.6	2.7	
27	10.8	16.8	57.5	14.2	6.7	155.3	75.4	17.3	24.2	7.0	3.6	2.7	
28	9.3	13.2	16.8	12.2	14.2	67.3	61.8	16.8	28.8	6.7	3.4	2.1	
29	19.6	11.3	14.7	11.7	10.4	48.3	51.3	15.7	33.7	6.7		1.7	
30	20.2	9.7	12.2	10.1	10.8	38.9	53.3	18.5	30.4	6.3		1.7	
31		9.0		9.7	7.9		52.3		23.5	6.0		1.7	
Total	270.8	374.9	386.6	498.2	678.6	1653.7	2070.9	1172.2	991.5	334.4	126.5	72.4	8630.7 Ton
Mean	9.0	12.1	12.9	16.1	21.9	55.1	66.8	39.1	32.0	10.8	4.5	2.3	
Max	56.4	51.3	57.5	87.7	206.7	311.5	178.5	103.4	135.5	20.8	6.0	3.4	311.5
Min	3.9	6.3	5.2	6.0	6.7	7.6	25.7	15.7	12.2	6.0	3.4	1.7	1.7

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Klai at Ban Hua Na, Nakhon Si Thammarat (X.149)

Lat 08 - 43 - 46 N. **Long** 99 - 44 - 53 E.

Location	on left bank at Ban Hua Na.
Ban Hua Na	**Amphoe** Nopphitam **Changwat** Nakhon Si Thammarat
Drainage Area	469 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	1998 - 2001
Number of observation	96
R - Square	0.7183
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:43:32.05 LQS/LQS02D/12

Station - Ban Thai Na, Tha Sala, Nakhon Si Thummarat_, (X.149)
Stream - Khlong Klai
River - Khlong Klai
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.39360
QS = 1.2412 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.3	29.0	23.3	21.9	20.6	19.2	19.2	85.1	280.6	322.2	30.5	13.0	
2	63.0	45.7	40.3	23.3	17.9	15.4	19.2	72.3	169.8	234.2	29.0	13.0	
3	60.0	33.5	57.1	21.9	20.6	13.0	17.9	308.1	130.9	190.2	27.6	13.0	
4	69.2	81.8	88.4	33.5	16.7	13.0	91.7	154.8	112.6	159.8	27.6	11.9	
5	54.2	32.0	37.7	33.5	91.7	14.2	45.7	179.9	91.7	140.4	26.1	11.9	
6	48.5	45.7	35.1	48.5	43.0	13.0	32.0	2317.8	78.6	145.2	24.7	11.9	
7	45.7	154.8	35.1	27.6	51.3	11.9	32.0	1508.7	72.3	126.3	24.7	11.9	
8	45.7	95.1	60.0	23.3	40.3	26.1	27.6	1811.1	66.1	112.6	23.3	11.9	
9	43.0	57.1	30.5	20.6	29.0	13.0	23.3	675.4	60.0	108.2	23.3	10.7	
10	43.0	40.3	37.7	19.2	24.7	11.9	20.6	399.4	54.2	95.1	21.9	10.7	
11	35.1	32.0	27.6	20.6	23.3	13.0	27.6	273.8	51.3	85.1	21.9	9.6	
12	33.5	29.0	24.7	23.3	29.0	37.7	40.3	202.5	48.5	75.4	20.6	9.6	
13	32.0	43.0	23.3	23.3	35.1	30.5	24.7	145.2	45.7	72.3	20.6	8.6	
14	30.5	29.0	21.9	54.2	30.5	99.4	20.6	126.3	145.2	69.2	19.2	8.6	
15	29.0	29.0	43.0	95.1	26.1	48.5	37.7	117.1	150.0	66.1	19.2	8.0	
16	29.0	75.4	24.7	69.2	27.6	43.0	20.6	112.6	267.1	63.0	19.2	8.0	
17	27.6	48.5	43.0	33.5	20.6	57.1	29.0	1084.3	601.3	57.1	19.2	8.0	
18	27.6	37.7	27.6	29.0	17.9	54.2	33.5	417.2	499.8	57.1	17.9	8.0	
19	29.0	29.0	24.7	23.3	16.7	69.2	51.3	253.8	435.2	54.2	17.9	8.0	
20	30.5	26.1	32.0	20.6	15.4	66.1	135.6	196.4	260.4	51.3	16.7	8.6	
21	43.0	29.0	24.7	19.2	14.2	45.7	81.8	145.2	215.0	54.2	16.7	10.7	
22	29.0	30.5	21.9	20.6	16.7	27.6	54.2	121.7	308.1	54.2	16.7	10.7	
23	26.1	35.1	23.3	20.6	16.7	24.7	48.5	108.2	280.6	57.1	16.7	15.4	
24	24.7	24.7	24.7	88.4	26.1	26.1	164.7	91.7	190.2	48.5	15.4	20.6	
25	24.7	30.5	20.6	60.0	15.4	45.7	88.4	78.6	150.0	43.0	15.4	19.2	
26	35.1	54.2	35.1	43.0	14.2	30.5	60.0	72.3	126.3	40.3	14.2	16.7	
27	26.1	40.3	23.3	21.9	13.0	30.5	99.4	69.2	112.6	37.7	14.2	27.6	
28	24.7	35.1	20.6	21.9	13.0	21.9	108.2	78.6	103.8	37.7	13.0	15.4	
29	29.0	30.5	17.9	33.5	19.2	26.1	121.7	126.3	2343.3	35.1		11.9	
30	40.3	24.7	19.2	45.7	33.5	20.6	145.2	287.4	837.2	33.5		9.6	
31		23.3		26.1	16.7		145.2		471.8	32.0		9.6	
Total	1151.1	1351.6	969.0	1066.3	796.7	968.8	1867.4	11621.0	8760.2	2758.3	573.4	372.3	32256.1 Ton
Mean	38.4	43.6	32.3	34.4	25.7	32.3	60.2	387.4	282.6	89.0	20.5	12.0	
Max	72.3	154.8	88.4	95.1	91.7	99.4	164.7	2317.8	2343.3	322.2	30.5	27.6	2343.3
Min	24.7	23.3	17.9	19.2	13.0	11.9	17.9	69.2	45.7	32.0	13.0	8.0	8.0

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Langu at Ban Tha Khian, Satun (X.150)

Lat 06 - 56 - 29 N. **Long** 99 - 52 - 33 E.

Location	on right bank at Ban Tha Khian.
Ban Tha Khian	**Amphoe** Langu **Changwat** Satun
Drainage Area	552 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	2001
Number of observation	25
R - Square	0.8319
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:43:50.39

LQS/LQS02D/12

Station - Ban Wang Pa Khian, Langu, Satun, (X.150)
Stream - Khlong Langu
River - Khlong Langu
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.58790
QS = 0.5272 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	19.0	84.3	13.6	28.7	10.1	44.1	87.9	275.7	24.4	34.4	8.0	4.6	
2	36.6	59.6	21.4	23.4	8.7	28.2	622.5	429.4	29.8	28.7	7.7	4.6	
3	70.0	41.8	54.2	20.4	8.0	22.9	988.8	747.4	27.6	26.0	7.4	4.4	
4	58.7	28.2	148.3	30.4	7.4	140.2	290.1	622.5	26.5	23.4	7.4	4.4	
5	26.5	30.4	39.5	32.3	39.5	40.3	97.9	429.4	20.4	20.9	7.4	4.2	
6	21.9	31.6	25.0	33.7	1013.5	114.1	74.9	219.9	19.0	19.4	7.0	4.0	
7	18.0	66.2	20.4	25.5	912.8	56.0	193.5	136.9	26.0	20.9	7.0	3.9	
8	14.9	136.9	23.4	20.9	97.9	86.7	146.7	104.3	81.0	19.0	7.0	3.7	
9	23.4	50.7	18.5	17.6	55.1	48.2	90.4	83.0	27.1	17.6	7.0	3.7	
10	17.6	30.4	15.8	15.8	35.1	83.0	55.1	111.2	20.9	17.1	6.7	3.5	
11	16.2	23.9	14.0	14.9	44.9	282.9	41.8	72.0	18.5	16.2	6.7	3.5	
12	15.3	19.9	13.6	14.0	29.8	62.4	72.9	58.7	17.1	16.2	6.7	3.3	
13	13.6	18.0	11.6	16.7	26.5	39.5	92.8	50.7	16.2	15.8	6.7	3.2	
14	12.0	18.5	10.5	18.5	22.4	38.8	57.8	46.5	15.3	14.9	6.4	3.0	
15	10.8	15.8	9.7	25.0	19.0	72.9	450.6	118.6	15.3	14.0	6.4	3.0	
16	12.0	15.3	9.7	35.1	17.1	90.4	270.9	59.6	19.4	13.6	6.1	2.9	
17	11.2	19.9	9.4	22.4	14.9	54.2	1475.9	43.3	51.6	14.5	5.8	2.7	
18	10.5	14.5	12.8	16.7	13.6	243.5	826.3	41.0	76.9	13.6	5.5	2.7	
19	9.4	12.4	118.6	14.0	12.8	347.8	566.0	35.9	74.9	13.2	5.5	2.7	
20	9.4	10.8	40.3	11.6	12.0	94.1	734.6	33.0	44.9	12.4	5.2	2.7	
21	8.7	10.1	25.5	11.2	11.6	86.7	853.3	31.6	28.2	12.0	5.0	2.7	
22	8.4	62.4	19.4	10.8	13.6	51.6	241.4	30.4	34.4	11.6	5.0	3.2	
23	8.0	24.4	25.0	10.8	22.9	73.9	124.6	27.6	99.2	11.2	5.0	3.3	
24	10.8	19.0	28.2	11.2	15.3	44.1	84.3	25.5	95.4	10.8	5.0	3.2	
25	34.4	35.9	41.8	15.8	11.6	85.5	756.0	23.9	57.8	10.8	5.0	3.7	
26	61.5	156.7	58.7	11.6	10.1	55.1	713.3	23.4	40.3	10.1	4.8	4.0	
27	41.8	38.0	44.1	10.5	9.4	239.2	516.3	21.9	32.3	9.7	4.8	4.2	
28	67.1	24.4	43.3	9.0	14.5	138.5	230.5	20.9	28.2	9.4	4.8	3.9	
29	24.4	20.4	36.6	10.1	70.0	65.2	423.4	19.9	68.1	9.0		3.3	
30	91.6	17.1	31.0	10.1	103.0	51.6	239.2	19.0	65.2	8.7		3.2	
31		14.9		11.6	47.3		136.9		46.5	8.4		3.0	
Total	783.7	1152.4	983.9	560.3	2730.4	2881.6	11556.6	3963.1	1248.4	483.5	173.0	108.4	26625.3 Ton
Mean	26.1	37.2	32.8	18.1	88.1	96.1	372.8	132.1	40.3	15.6	6.2	3.5	
Max	91.6	156.7	148.3	35.1	1013.5	347.8	1475.9	747.4	99.2	34.4	8.0	4.6	1475.9
Min	8.0	10.1	9.4	9.0	7.4	22.9	41.8	19.0	15.3	8.4	4.8	2.7	2.7

WATER YEAR : 2001

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
Drainage Area	1,819 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	2001
Number of observation	23
R - Square	0.8083
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:44:06.26 LQS/LQS02D/12

Station - Ban Wang Khrok, Tha Sae, Chumphon, (X.158)
Stream - Khlong Tha Taphao
River - Khlong Tha Taphao
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 130502
1.39850
QS = 1.4919 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	225.3	143.6	320.4	3360.5	205.9	5433.5	253.2	3540.7	143.6	68.9	81.0	26.1	
2	209.8	149.8	261.4	3613.5	191.6	2617.5	229.2	2760.6	140.6	68.9	70.5	20.9	
3	191.6	175.2	221.4	6002.9	209.8	1598.5	1082.4	1860.9	137.5	67.4	65.8	20.9	
4	188.3	460.3	205.9	11421.4	359.6	1109.1	3119.3	1288.0	143.6	67.4	55.4	21.8	
5	172.0	273.7	205.9	12949.5	364.6	934.8	1587.0	934.8	149.8	65.8	51.0	22.7	
6	162.4	229.2	191.6	12639.5	273.7	826.3	1363.8	1150.5	140.6	64.3	48.2	22.7	
7	152.9	273.7	181.7	8667.6	291.9	754.6	917.9	1129.7	140.6	62.8	48.2	22.7	
8	143.6	257.3	165.5	5027.8	563.2	725.3	597.4	1202.8	125.6	59.8	46.8	38.7	
9	140.6	188.3	162.4	3613.5	385.7	604.3	625.2	1632.8	116.8	59.8	46.8	68.9	
10	137.5	181.7	159.2	3540.7	291.9	478.0	436.9	2366.0	111.1	59.8	45.4	75.2	
11	131.5	287.2	168.7	2841.0	310.8	431.2	344.7	1255.8	108.2	59.8	42.7	59.8	
12	125.6	261.4	277.9	1886.4	660.4	454.4	408.3	769.4	108.2	58.3	41.3	51.0	
13	122.6	221.4	237.1	1352.9	1690.6	391.3	339.8	590.5	111.1	56.8	40.0	33.5	
14	122.6	385.7	191.6	1202.8	2351.5	354.6	291.9	478.0	108.2	56.8	40.0	27.3	
15	122.6	1440.8	185.0	960.4	1245.2	419.7	306.0	402.6	116.8	56.8	38.7	22.7	
16	119.7	3324.8	185.0	884.3	977.6	466.2	681.9	344.7	111.1	56.8	33.5	21.8	
17	116.8	3236.0	209.8	1082.4	1564.3	330.1	576.8	310.8	102.6	55.4	34.8	19.1	
18	113.9	1822.8	241.1	747.2	7708.2	277.9	646.3	287.2	125.6	55.4	34.8	18.3	
19	128.5	1064.7	237.1	597.4	6338.7	253.2	1937.7	261.4	146.7	53.9	34.8	15.0	
20	119.7	809.9	442.7	503.0	3890.3	241.1	1772.4	237.1	131.5	52.5	33.5	15.0	
21	105.4	639.2	349.7	448.6	3686.8	229.2	1725.5	221.4	111.1	51.0	31.0	15.0	
22	102.6	1320.3	325.2	408.3	3289.2	209.8	901.0	209.8	94.3	51.0	29.8	14.2	
23	97.1	901.0	1912.0	364.6	3219.3	198.3	793.6	198.3	89.0	51.0	28.5	14.2	
24	91.6	769.4	4325.8	339.8	2351.5	191.6	809.9	188.3	81.0	53.9	27.3	14.2	
25	91.6	563.2	4838.8	306.0	1598.5	202.1	1171.4	181.7	78.4	52.5	26.1	15.0	
26	122.6	483.9	8693.5	301.3	1129.7	229.2	2760.6	175.2	76.8	48.2	25.0	53.9	
27	134.5	754.6	12570.9	273.7	986.2	273.7	3119.3	165.5	75.2	46.8	23.8	72.1	
28	188.3	556.4	11488.1	261.4	1363.8	710.7	1690.6	162.4	73.6	45.4	23.8	58.3	
29	134.5	667.6	8409.7	233.2	2792.7	436.9	1644.3	156.0	72.1	48.2		37.3	
30	140.6	516.2	5154.9	217.5	5936.4	287.2	3236.0	152.9	70.5	83.6		25.0	
31		402.6		217.5	5892.2		5650.6		68.9	76.8		20.9	
Total	4156.3	22761.9	62520.0	86266.6	62121.8	21670.3	41020.9	24615.8	3410.7	1815.8	1148.5	964.2	332472.8 Ton
Mean	138.5	734.3	2084.0	2782.8	2003.9	722.3	1323.3	820.5	110.0	58.6	41.0	31.1	
Max	225.3	3324.8	12570.9	12949.5	7708.2	5433.5	5650.6	3540.7	149.8	83.6	81.0	75.2	12949.5
Min	91.6	143.6	159.2	217.5	191.6	191.6	229.2	152.9	68.9	45.4	23.8	14.2	14.2

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Chandi at Ban Manao Wan, Nakhon Si Thammarat (X.163)

Lat 08 - 20 - 34 N. **Long** 99 - 37 - 12 E.

Location	on left bank at the bridge near Wat Manao Wan.
Ban Manao Wan	**Amphoe** Chawang **Changwat** Nakhon Si Thammarat
Drainage Area	97 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1991 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	1991 - 2001
Number of observation	175
R - Square	0.7975
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:44:25.49 LQS/LQS02D/12

Station - Ban Chandi Nua, Chawang, Nakhon Si Thammarat. (X.163)
Stream - Khlong Chandi
River - Tapi
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.54960
QS = 1.4596 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.0	4.3	9.5	10.2	17.7	16.1	23.4	38.0	36.6	21.1	4.3	2.5	
2	7.6	5.3	8.2	17.7	17.7	14.5	19.9	35.2	19.9	19.9	6.4	2.5	
3	7.0	4.3	11.6	13.7	17.7	23.4	18.8	32.4	18.8	19.9	5.9	2.5	
4	7.0	8.2	11.6	16.1	24.7	25.9	65.1	21.1	17.7	16.9	5.9	2.5	
5	7.0	5.9	10.2	22.2	33.8	56.3	58.5	125.8	14.5	15.3	5.3	2.2	
6	5.9	7.0	10.2	31.1	23.4	27.2	35.2	400.4	13.7	17.7	5.3	2.2	
7	6.4	16.9	8.2	17.7	19.9	18.8	56.3	119.4	13.7	15.3	5.3	2.2	
8	5.9	10.9	10.2	16.9	33.8	23.4	54.2	233.7	13.7	14.5	4.3	2.2	
9	5.9	16.1	11.6	14.5	25.9	17.7	39.5	74.4	13.7	13.7	4.3	2.2	
10	4.8	10.2	14.5	13.0	19.9	16.1	29.8	54.2	12.3	15.3	3.9	2.2	
11	4.8	7.6	10.2	12.3	18.8	13.7	28.5	36.6	11.6	16.1	4.3	2.2	
12	4.8	7.0	8.9	13.0	17.7	32.4	31.1	36.6	10.9	14.5	4.3	2.2	
13	4.8	7.0	8.9	16.1	21.1	17.7	33.8	38.0	10.2	13.0	4.3	2.2	
14	4.8	7.0	7.6	94.9	23.4	16.9	27.2	25.9	13.7	13.0	3.6	2.2	
15	4.3	8.2	11.6	65.1	21.1	15.3	79.2	22.2	14.5	12.3	3.6	2.2	
16	5.9	13.0	8.2	43.9	18.8	28.5	33.8	21.1	39.5	11.6	3.3	2.2	
17	4.8	11.6	10.2	29.8	17.7	18.8	29.8	135.6	52.1	10.9	3.6	2.2	
18	4.8	10.2	11.6	52.1	16.9	17.7	31.1	22.2	32.4	9.5	3.3	1.9	
19	4.3	8.2	15.3	25.9	16.1	27.2	25.9	19.9	27.2	8.9	3.0	1.9	
20	4.3	7.6	17.7	21.1	15.3	18.8	28.5	17.7	17.7	9.5	3.3	1.9	
21	4.3	7.0	13.7	25.9	13.0	17.7	28.5	18.8	17.7	13.0	3.0	1.9	
22	4.3	7.0	10.9	32.4	31.1	17.7	27.2	17.7	484.6	13.0	2.7	1.9	
23	4.3	7.6	11.6	18.8	18.8	132.3	22.2	17.7	47.9	9.5	2.7	4.3	
24	4.3	7.0	13.0	39.5	21.1	52.1	65.1	17.7	31.1	8.9	2.7	24.7	
25	4.8	13.0	12.3	31.1	16.9	52.1	43.9	16.9	23.4	8.9	2.7	10.2	
26	4.3	16.1	16.1	21.1	13.0	36.6	35.2	15.3	22.2	8.2	2.7	4.3	
27	3.9	16.1	13.0	21.1	10.9	41.0	32.4	14.5	18.8	8.2	2.5	7.0	
28	3.9	14.5	10.2	18.8	10.9	31.1	24.7	16.9	17.7	7.6	2.5	3.3	
29	5.3	11.6	10.2	29.8	19.9	25.9	94.9	16.9	42.4	7.6		3.3	
30	5.3	10.2	10.2	17.7	29.8	21.1	38.0	18.8	31.1	7.0		3.0	
31		9.5		17.7	18.8		32.4		33.8	7.0		2.7	
Total	156.8	296.1	337.2	821.2	625.6	874.0	1194.1	1681.6	1175.1	387.8	109.0	110.9	7769.4 Ton
Mean	5.2	9.6	11.2	26.5	20.2	29.1	38.5	56.1	37.9	12.5	3.9	3.6	
Max	7.6	16.9	17.7	94.9	33.8	132.3	94.9	400.4	484.6	21.1	6.4	24.7	484.6
Min	3.9	4.3	7.6	10.2	10.9	13.7	18.8	14.5	10.2	7.0	2.5	1.9	1.9

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Nai Khieo at Ban Thon Hong, Nakhon Si Thammarat (X.165)

Lat 08 - 33 - 47 N. **Long** 99 - 48 - 59 E.

Location	on right bank at Ban Thon Hong.
Ban Thon Hong	**Amphoe** Phrom Khiri **Changwat** Nakhon Si Thammarat
Drainage Area	25 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH. - 59
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	25
R - Square	0.7208
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:44:44.18 LQS/LQS02D/12

Station - Ban Ai Khieo, Phrom Khiri, Nakhon Si Thammarat, (X.165)
Stream - Khlong Ai Khieo
River - Khlong Maying
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.07670
QS = 2.0407 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.6	1.6	1.2	4.5	2.3	0.9	0.8	3.6	11.2	6.7	2.0	********	
2	3.4	1.6	0.9	3.4	2.0	0.9	0.7	3.4	7.9	6.4	1.8	********	
3	2.9	1.4	0.9	4.5	1.6	0.8	4.1	2.9	6.7	6.1	1.8	********	
4	2.9	1.4	0.8	1.4	1.4	0.8	6.1	2.5	6.1	5.8	1.6	********	
5	2.9	1.2	7.3	4.8	1.2	0.7	4.8	5.2	5.8	5.8	1.6	********	
6	2.7	2.0	1.2	7.9	3.2	0.8	5.8	10.3	5.2	5.8	1.4	********	
7	2.7	6.4	0.9	4.3	8.2	4.3	2.3	11.5	5.0	5.2	1.4	********	
8	2.5	8.8	0.8	3.4	5.5	1.8	1.6	16.8	4.5	5.0	1.4	********	
9	2.3	2.0	2.7	1.8	2.3	1.4	1.4	11.2	4.3	4.5	1.2	********	
10	2.0	1.6	1.6	1.8	1.8	0.9	1.0	10.6	3.8	4.5	1.2	********	
11	2.0	1.4	1.4	5.5	1.6	5.0	4.3	6.1	2.9	4.3	0.9	********	
12	1.8	1.4	1.2	11.2	1.2	2.0	1.6	5.0	2.7	4.1	0.9	********	
13	2.0	1.4	0.9	8.8	0.9	1.6	1.4	4.3	2.5	3.8	0.9	********	
14	1.8	1.2	0.8	10.0	0.9	1.4	1.2	3.8	9.1	3.6	0.9	********	
15	1.8	8.5	0.8	6.7	0.9	1.4	1.0	8.2	27.0	3.6	0.9	********	
16	2.0	2.7	0.8	3.6	0.8	4.5	1.0	8.2	25.4	3.2	0.8	********	
17	2.0	2.0	0.7	3.4	0.8	8.5	0.9	24.6	31.4	2.9	1.0	********	
18	1.8	1.8	4.3	2.0	0.7	6.7	2.3	12.3	16.5	2.7	0.9	********	
19	1.8	1.6	0.9	1.8	3.8	8.8	6.4	12.3	13.4	2.5	0.8	********	
20	1.6	1.6	0.9	1.6	0.9	1.4	3.6	9.4	9.4	2.3	0.8	********	
21	1.6	1.4	0.8	1.4	0.9	1.2	2.9	8.2	7.6	2.0	0.7	********	
22	1.6	1.2	1.0	1.2	0.8	1.2	2.7	6.7	63.0	2.9	0.8	********	
23	1.6	1.6	6.7	1.0	0.9	0.9	5.2	6.4	59.1	2.9	0.9	********	
24	1.4	1.6	0.9	5.0	0.7	1.0	4.1	6.1	7.9	2.7	0.8	********	
25	1.4	1.4	5.2	4.3	0.9	0.8	2.7	5.2	7.6	2.7	0.8	********	
26	1.4	1.4	1.8	2.5	0.9	1.4	5.8	4.8	7.0	2.5	0.8	********	
27	1.2	1.4	1.4	1.4	0.9	1.0	8.8	8.8	5.5	5.5	0.8	********	
28	1.2	4.8	1.2	1.4	1.4	1.0	3.2	7.6	7.6	3.2	0.8	********	
29	7.0	1.2	1.2	4.3	1.6	0.9	7.9	7.9	8.2	2.7		********	
30	1.4	1.2	1.2	2.9	1.4	0.9	5.0	11.9	9.4	2.0		********	
31		1.2		2.5	1.2		3.8		8.2	2.3		********	
Total	66.3	70.0	52.4	120.3	53.6	64.9	104.4	245.8	391.9	120.2	30.6	*********	********* Ton
Mean	2.2	2.3	1.7	3.9	1.7	2.2	3.4	8.2	12.6	3.9	1.1	*********	
Max	7.0	8.8	7.3	11.2	8.2	8.8	8.8	24.6	63.0	6.7	2.0	*********	63.0
Min	1.2	1.2	0.7	1.0	0.7	0.7	0.7	2.5	2.5	2.0	0.7	*********	*********

WATER YEAR : 2001

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
Drainage Area	268 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH. - 59
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	27
R - Square	0.8918
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:45:04.10 LQS/LQS02D/12

Station - Ban Sao Thong, Ron Phibun, Nakhon Si Thammarat, (X.167)
Stream - Khlong Sao Thong
River - Khlong Cha Mao
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.59590
QS = 1.1234 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.3	0.7	14.1	21.1	8.8	20.1	18.3	77.5	812.6	182.7	25.9	30.4	
2	15.7	1.2	9.8	38.1	9.8	13.3	19.2	91.7	444.3	126.0	23.9	30.4	
3	10.3	1.4	9.3	25.9	8.3	8.8	15.7	213.6	233.0	96.1	23.0	36.8	
4	8.8	23.9	17.4	28.0	7.8	7.8	83.5	93.8	142.0	77.5	23.0	55.4	
5	7.4	36.8	19.2	42.2	11.0	20.1	47.9	100.9	89.6	66.1	21.1	55.4	
6	6.5	40.8	15.7	66.1	14.9	31.7	53.8	321.2	67.9	89.6	19.2	49.4	
7	6.5	23.9	13.3	38.1	14.9	27.0	43.6	1659.3	60.6	69.8	18.3	47.9	
8	6.0	34.2	12.5	34.2	15.7	28.0	36.8	633.4	36.8	62.4	17.4	47.9	
9	5.6	31.7	12.5	21.1	18.3	25.0	29.2	596.5	38.1	47.9	15.7	52.3	
10	4.8	21.1	13.3	18.3	15.7	17.4	23.0	199.6	34.2	46.4	14.9	50.8	
11	4.1	14.9	18.3	17.4	11.7	13.3	17.4	139.3	30.4	55.4	14.1	50.8	
12	3.7	11.7	16.6	16.6	11.0	25.0	17.4	91.7	20.1	46.4	13.3	50.8	
13	3.1	11.7	12.5	21.1	11.0	28.0	14.9	69.8	19.2	40.8	23.9	50.8	
14	2.7	9.8	7.4	113.2	12.5	36.8	12.5	55.4	16.6	60.6	23.9	50.8	
15	2.7	11.0	10.3	35.5	11.7	25.0	31.7	45.0	28.0	45.0	23.9	47.9	
16	4.1	20.1	11.7	35.5	11.7	34.2	31.7	55.4	241.0	35.5	23.0	50.8	
17	3.4	22.0	7.4	15.7	9.8	35.5	23.0	566.4	1032.0	30.4	23.0	47.9	
18	12.5	14.1	10.3	14.9	7.8	29.2	60.6	474.7	380.9	25.9	22.0	47.9	
19	23.0	11.0	10.3	9.3	6.5	39.5	55.4	169.7	245.0	25.9	22.0	50.8	
20	32.9	9.3	25.0	8.3	5.2	31.7	257.1	126.0	136.6	27.0	22.0	47.9	
21	29.2	9.8	9.8	18.3	4.8	25.0	60.6	77.5	98.5	28.0	21.1	50.8	
22	23.9	7.4	3.7	15.7	9.3	20.1	32.9	71.7	273.7	29.2	20.1	87.6	
23	21.1	5.6	2.7	12.5	25.9	17.4	36.8	57.1	2139.1	36.8	20.1	57.1	
24	21.1	7.4	4.5	15.7	29.2	23.9	27.0	47.9	400.0	34.2	14.1	136.6	
25	22.0	11.0	6.0	31.7	23.0	45.0	43.6	40.8	209.8	35.5	14.1	42.2	
26	5.6	28.0	8.8	22.0	16.6	34.2	19.2	32.9	139.3	34.2	16.6	12.5	
27	2.7	30.4	16.6	14.1	12.5	38.1	38.1	30.4	103.3	32.9	22.0	5.6	
28	1.4	25.9	10.3	11.0	7.8	30.4	67.9	67.9	83.5	31.7	31.7	2.0	
29	5.6	23.9	7.4	11.0	6.0	23.9	34.2	77.5	277.9	30.4		2.1	
30	0.9	19.2	14.9	10.3	39.5	20.1	554.6	566.4	531.3	28.0		3.1	
31		18.3		8.8	29.2		150.9		294.9	25.9		20.1	
Total	307.6	538.2	351.6	791.7	427.9	775.5	1958.5	6851.0	8660.2	1604.2	573.3	1372.8	24212.5 Ton
Mean	10.3	17.4	11.7	25.5	13.8	25.9	63.2	228.4	279.4	51.7	20.5	44.3	
Max	32.9	40.8	25.0	113.2	39.5	45.0	554.6	1659.3	2139.1	182.7	31.7	136.6	2139.1
Min	0.9	0.7	2.7	8.3	4.8	7.8	12.5	30.4	16.6	25.9	13.3	2.0	0.7

WATER YEAR : 2001

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
Drainage Area	315 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	2001
Number of observation	24
R - Square	0.8738
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:45:21.12 LQS/LQS02D/12

Station - Ban Ba Hoi, Ka Bang, Yala, (X.168)
Stream - Khlong The Pha
River - Khlong The Pha
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
2.07900
QS = 0.7497 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	25.2	38.0	18.6	7.9	8.7	4.1	6.3	121.8	5.8	29.6	2.1	0.5	
2	22.5	51.4	11.3	7.3	6.8	4.1	360.5	870.5	60.4	19.9	1.8	0.5	
3	38.0	40.6	21.2	6.8	6.8	3.7	272.7	545.5	22.5	14.2	1.8	0.4	
4	26.5	25.2	16.3	6.8	5.8	4.5	43.2	203.7	12.2	13.2	1.8	0.3	
5	23.7	23.7	88.1	6.8	18.6	4.1	38.0	121.8	7.9	11.3	1.6	0.3	
6	45.8	776.2	149.3	5.8	21.2	3.3	26.5	731.1	7.3	9.5	1.6	0.2	
7	63.5	1920.3	48.6	5.4	10.3	4.5	40.6	445.9	28.1	8.7	1.6	0.2	
8	31.1	526.6	171.5	5.4	7.3	9.5	19.9	164.0	12.2	7.9	1.3	0.1	
9	35.7	212.1	43.2	4.9	5.8	4.5	12.2	103.3	7.9	7.3	1.3	0.1	
10	63.5	84.2	25.2	4.9	5.4	4.1	9.5	60.4	6.3	6.8	1.3	0.1	
11	26.5	51.4	17.5	5.8	16.3	4.5	14.2	38.0	5.8	6.8	1.1	0.1	
12	19.9	31.1	15.3	4.9	7.3	6.8	26.5	28.1	5.4	6.8	1.1	0.0	
13	16.3	25.2	12.2	7.3	6.3	7.3	17.5	19.9	4.9	6.3	1.1	0.0	
14	14.2	16.3	10.3	7.3	5.4	9.5	12.2	19.9	4.9	5.8	0.9	0.0	
15	13.2	13.2	8.7	6.8	4.9	29.6	10.3	402.0	8.7	5.4	0.7	0.0	
16	12.2	13.2	8.7	43.2	4.5	7.9	121.8	121.8	431.0	4.9	0.7	0.0	
17	10.3	16.3	7.3	8.7	3.7	7.3	402.0	54.2	91.8	4.5	0.7	0.0	
18	11.3	13.2	10.3	6.3	3.7	4.9	261.2	40.6	2708.2	4.1	0.7	0.0	
19	8.7	11.3	7.9	5.4	3.3	4.5	149.3	40.6	249.9	4.1	0.7	0.1	
20	8.7	10.3	7.9	4.9	3.0	6.8	91.8	28.1	77.0	4.1	0.6	0.2	
21	7.9	11.3	8.7	4.9	3.0	4.9	238.9	23.7	38.0	4.1	0.6	0.4	
22	15.3	14.2	7.9	4.9	3.7	4.1	221.0	19.9	26.5	5.4	0.5	0.2	
23	8.7	11.3	16.3	4.5	3.7	3.7	60.4	16.3	66.8	4.1	0.5	1.1	
24	8.7	11.3	7.9	25.2	3.3	3.7	31.1	13.2	73.4	4.1	0.5	2.1	
25	7.9	9.5	21.2	6.8	3.3	33.4	28.1	10.3	43.2	4.9	0.5	0.7	
26	17.5	7.9	14.2	5.4	3.0	7.9	6130.2	8.7	28.1	4.1	0.5	0.5	
27	26.5	7.9	11.3	7.3	3.0	7.3	2468.8	7.3	21.2	3.7	0.5	0.3	
28	54.2	8.7	8.7	6.3	7.3	7.3	1431.9	6.8	23.7	3.0	0.5	0.1	
29	238.9	17.5	12.2	4.9	7.9	6.8	431.0	6.3	402.0	2.7		0.1	
30	121.8	9.5	9.5	4.9	5.8	4.1	431.0	6.3	103.3	2.7		0.1	
31		9.5		7.3	4.9		171.5		48.6	2.3		0.9	
Total	1024.2	4018.4	817.3	245.0	204.0	218.7	13580.1	4280.0	4633.0	222.3	28.6	9.6	29281.2 Ton
Mean	34.1	129.6	27.2	7.9	6.6	7.3	438.1	142.7	149.5	7.2	1.0	0.3	
Max	238.9	1920.3	171.5	43.2	21.2	33.4	6130.2	870.5	2708.2	29.6	2.1	2.1	6130.2
Min	7.9	7.9	7.3	4.5	3.0	3.3	6.3	6.3	4.9	2.3	0.5	0.0	0.0

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Wang Muang at Ban Pa Ye, Narathiwat (X.171)

Lat 06 - 05 - 28 N. **Long** 101 - 57 - 24 E.

Location	on left bank at the bridge.
Ban Pa Ye	**Amphoe** Sungai Kolok **Changwat** Narathiwat
Drainage Area	839 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	20
R - Square	0.8139
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:45:39.02 LQS/LQS02D/12

Station - Sungai Kolok, Sungai Kolok, Narathiwat_____, (X.171)
Stream - Wang Muang Yang
River - Kolok
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
0.99160
QS = 1.8563 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.9	2.3	6.4	0.8	2.3	1.0	4.2	2.9	2.2	9.5	1.4	0.5	
2	2.6	3.7	5.2	0.8	2.8	1.0	3.7	2.7	1.9	7.6	1.2	0.5	
3	2.4	3.5	4.1	0.8	3.4	1.2	1.9	2.9	1.8	5.3	1.0	0.5	
4	2.2	3.3	4.2	0.7	3.3	1.2	3.0	2.9	1.7	3.9	1.0	0.5	
5	1.9	2.6	3.6	0.7	3.1	1.3	5.3	2.8	1.6	3.0	0.9	0.4	
6	1.9	2.2	3.4	0.7	2.7	1.5	6.8	2.8	1.5	2.6	0.9	0.4	
7	1.7	1.9	2.9	0.6	2.4	1.5	7.8	2.6	1.4	2.4	0.9	0.4	
8	1.5	1.7	4.4	0.6	2.2	1.4	6.6	2.7	1.3	2.3	0.9	0.4	
9	1.4	1.7	8.0	0.6	2.5	1.2	5.7	2.6	1.2	2.2	0.8	0.4	
10	1.4	2.0	7.6	0.5	2.6	1.0	4.8	2.6	1.2	2.2	0.8	0.4	
11	1.2	2.2	6.6	0.5	3.3	1.0	3.6	2.4	1.2	2.0	0.8	0.4	
12	1.2	2.0	8.3	2.3	3.6	0.9	2.9	2.2	1.2	1.9	0.8	0.4	
13	1.1	1.9	9.0	2.2	4.2	0.9	2.4	2.8	1.2	1.9	0.8	0.3	
14	1.1	2.2	7.3	2.1	4.1	0.8	2.0	2.0	1.2	1.8	0.8	0.3	
15	1.1	2.3	4.8	2.1	3.5	0.8	1.9	2.7	6.2	1.7	0.7	0.3	
16	1.0	2.0	3.7	2.6	3.1	0.8	2.3	2.9	23.3	1.7	0.7	0.3	
17	0.9	1.9	3.3	2.4	2.5	0.7	2.2	3.0	28.7	1.5	0.7	0.3	
18	0.8	1.8	3.1	2.2	1.9	0.8	2.1	3.6	24.7	1.5	0.6	0.3	
19	0.8	1.9	3.0	2.0	1.7	0.9	2.5	12.5	19.7	1.5	0.6	0.3	
20	0.8	1.9	2.6	1.9	1.5	0.9	2.7	18.6	12.5	1.4	0.6	0.5	
21	0.7	1.9	1.9	1.7	1.4	1.1	2.6	15.3	9.2	1.8	0.7	0.7	
22	0.6	1.9	1.7	1.6	1.4	1.5	2.8	13.1	6.4	2.0	0.7	0.6	
23	0.5	1.9	1.5	1.5	1.2	1.8	3.3	10.9	5.5	2.2	0.7	0.5	
24	0.5	2.2	1.3	1.4	1.5	2.6	4.8	8.5	6.6	2.0	0.6	0.5	
25	0.5	2.5	1.2	1.2	1.4	3.7	8.0	5.2	6.4	1.9	0.6	0.5	
26	0.6	3.1	1.2	2.6	1.2	4.1	8.0	4.1	6.1	1.9	0.6	0.5	
27	0.6	4.8	1.2	2.4	1.2	5.0	9.2	3.4	5.0	1.7	0.6	0.4	
28	0.5	10.3	1.1	2.3	1.2	4.8	5.7	2.9	5.3	1.5	0.5	0.4	
29	0.7	10.9	0.9	2.2	1.1	4.2	4.1	2.8	10.3	1.5		0.4	
30	1.3	8.5	0.9	1.9	1.1	3.7	6.1	3.1	15.7	1.5		0.3	
31		7.2		1.9	1.0		8.0		13.1	1.4		0.3	
Total	36.4	100.2	114.4	47.8	70.4	53.3	137.0	149.5	225.3	77.3	21.9	12.9	1046.4 Ton
Mean	1.2	3.2	3.8	1.5	2.3	1.8	4.4	5.0	7.3	2.5	0.8	0.4	
Max	2.9	10.9	9.0	2.6	4.2	5.0	9.2	18.6	28.7	9.5	1.4	0.7	28.7
Min	0.5	1.7	0.9	0.5	1.0	0.7	1.9	2.0	1.2	1.4	0.5	0.3	0.3

WATER YEAR : 2001

SOUTHERN PENINSULA WEST COAST

Khlong Sadao at Ban Huai Khu, Songkhla (X.172)

Lat 06 - 35 - 38 N. **Long** 100 - 29 - 25 E.

Location	on right at the bridge on road near Wat Huai Khu, Tambon Samnak Taeo.
Ban Huai Khu	**Amphoe** Sadao **Changwat** Songkhla
Drainage Area	94 sq.km.
Method of sampling	Depth Integrating
Intsrument Used	US.D - 49
Period of Available Records	2000 - Cont'd
Actual Measurement	2000 - Cont'd
Using Rating Curve Water Year	2001
Number of observation	24
R - Square	0.9229
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:46:03.60 LQS/LQS02D/12

Station - Ban Huai Khu, Sadao, Songkhla, (X.172)
Stream - Khlong Sadao
River - Khlong U_taphao
River System - Peninsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 210502
1.83950
QS = 0.2334 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.0	4.8	0.2	8.4	5.8	6.1	0.0	3.4	0.1	0.3	0.1	********	
2	6.0	4.5	0.2	8.4	6.0	6.1	0.0	3.4	0.1	0.3	0.1	********	
3	6.0	4.3	0.2	8.4	6.1	6.1	0.0	3.4	0.4	0.3	0.1	********	
4	5.2	2.0	0.2	9.5	5.8	6.1	0.0	3.4	0.1	0.2	0.2	********	
5	5.2	1.1	0.3	9.8	5.8	6.3	0.0	3.4	0.1	0.1	0.3	********	
6	5.2	1.1	0.3	9.9	5.8	6.3	0.0	3.4	0.1	0.1	0.4	********	
7	5.2	0.4	0.2	8.4	6.1	6.3	0.0	3.4	0.1	0.1	0.4	********	
8	4.8	0.2	0.3	8.4	6.1	6.1	0.0	2.9	0.1	0.1	0.6	********	
9	4.8	0.2	0.3	4.8	6.1	6.1	0.0	3.2	0.1	0.1	0.7	********	
10	4.8	0.2	0.3	4.8	6.1	6.1	0.0	3.2	0.1	0.1	0.9	********	
11	4.8	0.2	0.3	8.0	6.1	0.4	0.1	3.2	0.0	0.0	1.1	********	
12	4.8	0.2	0.4	10.8	6.1	0.4	0.1	6.5	0.0	0.0	1.1	********	
13	4.8	0.2	0.3	10.8	6.1	0.4	0.1	6.5	0.0	0.0	1.1	********	
14	4.8	0.2	0.5	10.8	6.1	0.2	0.1	6.5	0.0	0.0	1.1	********	
15	4.8	0.2	0.5	10.8	6.1	0.2	0.1	6.7	0.1	0.0	1.0	********	
16	6.1	0.2	0.5	10.8	6.0	0.2	0.1	6.7	0.1	0.0	1.0	********	
17	6.1	0.2	0.5	4.9	6.0	0.2	0.1	2.8	0.0	0.0	0.9	********	
18	6.1	0.2	0.5	2.5	6.0	0.2	0.1	3.0	0.0	0.0	0.9	********	
19	6.1	0.2	0.5	2.5	6.0	0.2	0.1	3.0	0.0	0.0	0.9	********	
20	6.1	0.2	0.5	2.5	6.1	0.2	0.1	3.0	0.9	0.0	0.8	********	
21	6.1	0.2	0.5	2.5	6.1	0.3	0.1	3.0	0.9	0.0	0.8	********	
22	6.1	0.2	0.5	2.5	6.1	0.4	0.1	3.0	1.0	0.0	0.8	********	
23	6.1	0.2	0.5	2.5	6.1	0.4	0.1	3.0	1.0	0.0	0.7	********	
24	6.5	0.2	0.5	2.5	6.1	0.4	0.1	3.0	1.0	0.0	0.7	********	
25	6.5	0.2	1.6	2.5	6.3	0.0	0.1	3.0	1.0	0.0	0.7	********	
26	6.5	0.2	7.7	2.5	6.3	0.0	0.2	3.0	0.9	0.0	0.6	********	
27	4.3	0.2	4.9	2.5	6.1	0.0	0.1	3.1	0.9	0.0	0.6	********	
28	4.3	0.2	5.4	1.2	6.3	0.0	0.2	0.1	1.1	0.0	0.6	********	
29	4.5	0.2	5.6	1.2	6.3	0.0	0.2	0.1	1.1	0.0		********	
30	4.4	0.2	8.6	1.3	6.3	0.0	0.1	0.1	1.1	0.0		********	
31		0.2		1.2	6.3		1.0		1.1	0.0		********	
Total	163.0	23.0	42.8	177.6	188.6	65.7	3.3	102.4	13.5	1.7	19.2*********	*********	Ton
Mean	5.4	0.7	1.4	5.7	6.1	2.2	0.1	3.4	0.4	0.1	0.7*********		
Max	6.5	4.8	8.6	10.8	6.3	6.3	1.0	6.7	1.1	0.3	1.1*********	10.8	
Min	4.3	0.2	0.2	1.2	5.8	0.0	0.0	0.1	0.0	0.0	0.1*********	*********	

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

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
Drainage Area	982 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	2001
Number of observation	22
R - Square	0.9480
Remarks	Continued Sediment Station.

RID Computer Center, Processing : 7-JUN-2004 13:46:23.02 LQS/LQS02D/12

Station - Ban Khlong Ngae, Sadao, Songkhla _____, (X.173)
Stream - Khlong U-Taphao
River - Khlong U-Taphao
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 230502
1.59130
QS = 1.5623 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	155.9	120.1	12.9	46.2	10.6	155.9	4.9	1201.5	20.8	141.8	5.4	4.2	
2	222.7	100.4	16.9	39.4	10.6	129.9	7.7	1108.9	33.8	110.5	4.9	4.2	
3	295.3	94.8	19.9	33.8	16.9	84.1	35.3	2199.7	48.0	104.6	4.7	4.2	
4	170.4	181.8	76.1	30.7	20.4	50.6	50.6	1610.1	54.3	65.9	4.3	3.8	
5	118.4	159.5	88.1	94.8	25.1	39.4	24.1	964.6	36.1	48.8	4.2	3.6	
6	92.1	239.9	133.3	199.9	57.1	33.0	46.2	735.4	21.7	40.2	4.0	3.6	
7	92.1	332.7	145.3	35.3	66.9	24.6	24.6	524.1	23.6	33.8	3.8	3.5	
8	116.8	524.1	74.1	22.2	51.6	27.8	15.6	471.4	79.3	30.0	3.5	3.5	
9	133.3	380.4	53.4	33.8	33.0	23.1	9.9	773.9	93.5	26.0	3.3	3.5	
10	131.6	292.7	43.6	38.6	26.5	23.6	8.2	834.7	66.9	24.1	4.3	3.5	
11	164.9	239.9	27.0	24.1	24.6	22.7	6.6	735.4	26.5	19.5	6.6	3.5	
12	191.8	152.3	23.1	19.5	24.1	24.1	5.6	806.6	20.4	18.1	7.1	3.3	
13	152.3	77.2	19.9	28.5	23.1	13.6	5.9	612.8	16.9	17.7	6.9	3.1	
14	100.4	53.4	16.9	42.7	22.2	10.3	5.6	394.8	14.8	16.9	6.9	3.1	
15	68.9	44.5	15.6	41.9	21.3	8.8	5.6	264.5	13.6	15.2	6.6	3.0	
16	64.9	36.9	15.2	33.8	20.8	24.6	9.9	187.8	48.8	14.4	6.4	3.0	
17	100.4	33.8	14.8	29.2	20.4	62.9	64.9	148.8	103.2	12.9	6.4	2.8	
18	60.0	28.5	14.0	26.5	19.0	41.9	191.8	140.1	74.1	11.7	6.4	2.8	
19	50.6	29.2	14.8	18.1	19.0	36.9	475.1	168.6	43.6	11.0	6.4	2.8	
20	49.7	24.1	15.2	14.8	19.0	18.1	691.4	155.9	34.6	10.3	6.1	2.8	
21	45.3	23.6	14.0	14.0	19.0	13.2	793.5	138.4	29.2	10.3	6.1	3.0	
22	40.2	22.2	13.6	15.6	19.0	10.6	593.7	113.6	88.1	11.0	6.1	3.0	
23	38.6	21.7	15.6	15.2	18.6	9.4	486.4	90.7	1435.4	10.6	6.4	4.2	
24	48.0	21.3	18.6	18.1	19.5	8.5	366.1	75.1	3505.9	9.4	6.1	4.2	
25	50.6	23.6	17.7	15.6	19.0	8.2	220.5	63.9	2266.3	8.5	6.1	4.2	
26	59.0	23.6	19.5	15.6	19.0	6.9	412.5	56.2	1217.7	8.2	5.9	4.2	
27	80.4	19.5	33.0	15.2	18.6	5.9	787.0	49.7	800.0	7.7	4.9	4.5	
28	106.0	17.7	47.1	12.9	19.9	6.4	403.6	46.2	519.6	7.1	4.5	4.2	
29	116.8	16.4	38.6	11.7	52.5	5.9	1487.5	28.5	394.8	6.9		4.0	
30	150.6	15.6	43.6	11.4	120.1	5.2	3611.5	23.1	316.5	6.4		3.6	
31		14.4		11.0	197.8		2574.8		226.9	5.4		3.8	
Total	3268.0	3365.8	1101.4	1010.1	1055.2	936.1	13426.6	14725.0	11674.9	864.9	154.3	110.7	51693.0 Ton
Mean	108.9	108.6	36.7	32.6	34.0	31.2	433.1	490.8	376.6	27.9	5.5	3.6	
Max	295.3	524.1	145.3	199.9	197.8	155.9	3611.5	2199.7	3505.9	141.8	7.1	4.5	3611.5
Min	38.6	14.4	12.9	11.0	10.6	5.2	4.9	23.1	13.6	5.4	3.3	2.8	2.8

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Khlong Yaha at Yaha, Yala (X.175)

Lat 06 - 28 - 25 N. **Long** 101 - 08 - 32 E.

Location	on left bank on the bridge on Yala - Yaha Road.
Ban -	**Amphoe** Yaha **Changwat** Yala
Drainage Area	350 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	2001
Number of observation	27
R - Square	0.9421
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:50:31.66 LQS/LQS02D/12

Station - Yaha, Yaha, Yala, (X.175)
Stream - Khlong Yaha
River - Pattani
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 230502
1.39780
QS = 1.2307 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.4	6.8	8.3	3.8	6.2	4.3	6.5	74.8	15.6	68.1	6.8	4.3	
2	14.0	6.8	7.1	3.8	7.4	4.6	7.4	723.7	16.2	45.9	6.8	4.0	
3	12.9	7.1	6.8	3.8	7.1	4.6	10.3	370.8	15.1	35.1	6.8	4.0	
4	14.5	12.9	6.8	3.8	6.5	4.0	15.6	176.9	15.1	30.5	6.8	3.8	
5	12.3	38.9	6.8	3.8	11.3	3.1	17.4	124.7	15.1	30.5	6.5	3.5	
6	11.3	50.0	7.4	3.8	7.4	2.6	14.0	358.5	15.1	25.3	6.5	3.3	
7	10.8	25.3	15.6	3.8	7.1	5.6	13.4	304.3	15.1	21.9	6.2	3.1	
8	10.8	16.8	15.6	3.8	5.4	13.4	12.3	119.6	15.1	19.5	5.9	2.8	
9	9.8	14.0	9.3	3.8	4.6	5.6	11.8	40.9	15.1	17.9	5.6	2.6	
10	8.8	10.8	7.1	3.8	4.6	4.0	11.3	44.9	15.1	17.4	5.6	2.6	
11	8.3	8.8	6.8	3.8	5.1	21.9	10.3	31.4	15.1	16.8	5.6	2.6	
12	7.8	7.4	6.8	4.3	5.1	17.4	17.4	27.9	15.1	16.2	5.4	2.6	
13	7.8	7.1	6.2	4.0	5.1	15.1	11.8	26.1	15.1	15.6	5.4	2.4	
14	7.4	7.1	6.2	3.8	5.1	9.8	15.1	26.1	15.1	14.0	5.4	2.2	
15	7.4	7.8	5.6	3.5	4.3	7.1	18.7	74.8	17.9	12.3	5.1	2.2	
16	7.4	7.1	5.9	6.8	4.0	6.5	53.1	280.4	237.5	12.3	5.1	2.2	
17	7.4	7.4	5.6	5.1	3.8	5.6	65.4	135.0	334.1	11.8	5.1	2.2	
18	7.1	6.8	5.1	4.0	3.5	5.4	328.6	106.7	116.3	11.8	5.1	2.2	
19	6.8	6.8	4.8	3.5	3.5	5.1	77.5	223.2	135.0	11.3	5.1	2.4	
20	6.2	6.8	4.6	2.6	3.5	4.8	207.2	433.5	52.1	11.3	5.1	4.0	
21	7.1	6.8	4.3	1.7	3.8	4.6	525.7	131.5	34.2	11.3	4.8	5.9	
22	12.3	6.8	4.3	1.7	4.6	6.2	288.3	56.4	33.3	11.3	4.8	5.6	
23	8.3	6.8	4.0	1.7	4.0	4.6	87.3	40.9	191.7	11.3	4.6	5.6	
24	7.1	6.8	4.0	2.2	3.3	5.1	97.6	33.3	525.7	11.3	4.3	10.8	
25	7.1	6.8	4.0	4.0	2.8	11.8	136.7	26.1	225.5	11.3	4.3	8.8	
26	7.1	6.8	4.0	7.4	2.4	6.5	163.0	26.1	85.9	11.3	4.3	6.5	
27	7.1	6.8	4.0	5.6	2.2	4.8	312.3	17.9	53.1	10.8	4.3	5.6	
28	7.1	6.8	4.0	4.6	2.2	5.6	87.3	16.2	56.4	8.3	4.0	5.6	
29	6.8	6.8	4.0	4.6	2.6	5.4	207.2	16.2	514.2	7.4		5.1	
30	6.8	6.8	4.0	4.3	3.8	5.6	634.6	16.2	298.9	7.4		5.1	
31		6.8		4.3	4.0		265.0		142.0	7.1		4.6	
Total	273.0	337.3	189.0	121.5	146.3	210.7	3730.1	4085.0	3266.8	554.3	151.3	128.2	13193.5 Ton
Mean	9.1	10.9	6.3	3.9	4.7	7.0	120.3	136.2	105.4	17.9	5.4	4.1	
Max	17.4	50.0	15.6	7.4	11.3	21.9	634.6	723.7	525.7	68.1	6.8	10.8	723.7
Min	6.2	6.8	4.0	1.7	2.2	2.6	6.5	16.2	15.1	7.1	4.0	2.2	1.7

WATER YEAR : 2001

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
Drainage Area	1,167 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	2001
Number of observation	24
R - Square	0.7908
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:47:03.14 LQS/LQS02D/12

Station - Ban Talat Phatthana, Sri Sakhon, Narathiwat, (X.184)
Stream - Sai Buri
River - Sai Buri
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 220502
1.66950
QS = 0.2872 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	246.0	214.1	265.0	96.0	265.0	93.5	159.8	1362.5	450.1	1261.2	269.8	144.4	
2	250.7	163.8	167.7	96.0	1127.3	93.5	201.0	801.2	621.7	1224.0	255.4	136.9	
3	227.6	144.4	321.2	93.5	612.8	93.5	1298.8	666.6	450.1	1002.1	241.3	133.2	
4	223.0	218.6	236.7	91.1	265.0	91.1	578.0	675.8	390.0	862.4	232.1	129.6	
5	205.4	148.2	214.1	91.1	297.6	91.1	904.2	893.6	345.6	801.2	227.6	122.5	
6	309.3	470.9	269.8	91.1	218.6	96.0	429.7	801.2	321.2	761.4	218.6	122.5	
7	250.7	218.6	422.9	88.7	188.3	171.8	1069.6	648.5	370.7	791.2	214.1	118.9	
8	201.0	188.3	535.6	84.0	163.8	129.6	513.6	520.9	291.8	732.1	214.1	115.5	
9	184.1	223.0	286.0	81.7	155.9	403.0	333.3	477.9	280.3	621.7	209.7	112.0	
10	179.9	218.6	274.7	79.4	227.6	126.0	280.3	520.9	265.0	595.3	205.4	108.6	
11	192.5	192.5	218.6	93.5	196.7	118.9	345.6	457.0	250.7	569.4	201.0	106.1	
12	175.8	227.6	236.7	155.9	179.9	841.8	370.7	436.4	246.0	578.0	192.5	103.5	
13	175.8	358.1	205.4	159.8	171.8	327.3	260.2	390.0	236.7	513.6	188.3	103.5	
14	327.3	205.4	171.8	209.7	163.8	223.0	227.6	535.6	227.6	463.9	179.9	101.0	
15	274.7	140.6	232.1	543.9	152.0	188.3	214.1	2691.4	1802.3	450.1	171.8	101.0	
16	241.3	144.4	171.8	429.7	144.4	140.6	351.8	1002.1	9376.6	416.3	167.7	98.5	
17	227.6	163.8	694.2	179.9	136.9	126.0	321.2	2284.2	3681.5	390.0	163.8	96.0	
18	218.6	144.4	801.2	103.5	129.6	377.1	265.0	1273.7	3265.7	364.3	159.8	93.5	
19	152.0	136.9	741.8	93.5	122.5	291.8	321.2	3316.6	5248.9	364.3	155.9	91.1	
20	144.4	152.0	712.8	84.0	115.5	236.7	1224.0	1614.0	1657.8	351.8	152.0	115.5	
21	140.6	136.9	136.9	84.0	115.5	167.7	1969.9	1224.0	1175.1	528.2	152.0	136.9	
22	136.9	136.9	129.6	84.0	112.0	586.6	1429.6	1058.3	2380.8	506.4	152.0	118.9	
23	133.2	163.8	126.0	84.0	108.6	390.0	552.4	781.2	7764.9	436.4	152.0	103.5	
24	126.0	171.8	122.5	129.6	108.6	457.0	463.9	675.8	4635.9	377.1	152.0	122.5	
25	133.2	227.6	118.9	175.8	103.5	513.6	1457.3	612.8	2246.0	422.9	148.2	122.5	
26	136.9	144.4	108.6	223.0	98.5	303.4	595.3	552.4	1599.5	470.9	148.2	106.1	
27	144.4	155.9	103.5	201.0	93.5	260.2	450.1	499.2	1311.4	383.5	148.2	96.0	
28	171.8	223.0	96.0	327.3	91.1	232.1	396.5	457.0	1802.3	377.1	148.2	88.7	
29	339.4	528.2	91.1	260.2	91.1	218.6	781.2	443.2	6409.7	333.3		84.0	
30	321.2	196.7	88.7	255.4	91.1	179.9	852.0	457.0	2967.2	291.8		86.3	
31		241.3		443.2	93.5		485.0		1885.3	286.0		91.1	
Total	6191.3	6400.7	8301.9	5213.5	6142.0	7569.7	19102.9	28131.0	63958.4	17527.9	5221.6	3410.3	177171.2 Ton
Mean	206.4	206.5	276.7	168.2	198.1	252.3	616.2	937.7	2063.2	565.4	186.5	110.0	
Max	339.4	528.2	801.2	543.9	1127.3	841.8	1969.9	3316.6	9376.6	1261.2	269.8	144.4	9376.6
Min	126.0	136.9	88.7	79.4	91.1	91.1	159.8	390.0	227.6	286.0	148.2	84.0	79.4

WATER YEAR : 2001

SOUTHERN PENINSULA EAST COAST

Tapi River at Ban Tha Pho, Nakhon Si Thammarat (X.195)

Lat 08 - 30 - 24 N. **Long** 99 - 30 - 39 E.

Location	on right bank at the bridge.
Ban Tha Pho	**Amphoe** Chawang **Changwat** Nakhon Si thammarat
Drainage Area	480 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1998 - Cont'd
Actual Measurement	1998 - Cont'd
Using Rating Curve Water Year	1998 - 2001
Number of observation	101
R - Square	0.7491
Remarks	Continued Sediment Station

RID Computer Center, Processing : 7-JUN-2004 13:47:22.49 LQS/LQS02D/12

Station - Ban Ton Pho, Chawang, Nakhon Si Thammarat, (X.195)
Stream - Tapi
River - Tapi
River System - Pininsula West Coast

Royal Irrigation Department
Thailand
Hydrology Division 230502
1.22090
QS = 3.7674 QW

Water Year - 2001

Suspended Sediment, in Tons per Day, Water Year April 1, 2001 to March 31, 2002

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	94.1	105.7	116.6	181.1	283.9	266.9	318.4	309.7	331.6	185.0	44.1	23.6	
2	91.9	217.1	112.9	161.6	250.1	233.6	288.2	279.6	221.2	153.9	42.3	23.6	
3	135.0	109.3	150.1	142.5	245.9	225.3	262.7	510.9	189.0	131.2	42.3	22.0	
4	94.1	153.9	123.9	229.4	250.1	301.0	648.9	350.8	173.2	116.6	40.5	22.0	
5	85.1	102.1	116.6	387.7	487.5	296.8	430.7	322.8	150.1	102.1	40.5	22.0	
6	82.9	105.7	96.4	582.1	387.7	233.6	430.7	487.5	131.2	112.9	40.5	22.0	
7	76.3	161.6	96.4	387.7	430.7	192.9	534.5	1504.4	123.9	105.7	37.0	20.5	
8	74.2	150.1	146.2	288.2	393.1	279.6	522.6	771.1	109.3	91.9	37.0	20.5	
9	69.8	205.0	96.4	237.6	371.8	205.0	430.7	582.1	89.6	91.9	35.3	19.8	
10	67.7	135.0	109.3	205.0	309.7	177.1	356.1	470.0	82.9	87.4	33.6	19.2	
11	67.7	127.5	98.6	250.1	279.6	153.9	340.4	403.7	78.5	87.4	33.6	18.6	
12	65.5	112.9	85.1	225.3	283.9	200.9	436.1	356.1	76.3	82.9	33.6	18.6	
13	63.4	142.5	80.7	233.6	309.7	205.0	350.8	318.4	74.2	78.5	31.9	18.6	
14	63.4	109.3	72.0	245.9	340.4	205.0	309.7	296.8	69.8	76.3	30.2	18.6	
15	61.3	112.9	116.6	292.4	279.6	173.2	296.8	275.3	102.1	74.2	30.2	18.0	
16	61.3	371.8	89.6	382.4	262.7	237.6	271.1	266.9	205.0	69.8	28.5	18.0	
17	61.3	262.7	87.4	283.9	241.8	209.0	262.7	398.4	292.4	67.7	28.5	18.0	
18	59.2	221.2	94.1	262.7	229.4	241.8	327.2	361.3	350.8	65.5	28.5	18.0	
19	63.4	173.2	153.9	229.4	213.0	966.1	283.9	331.6	314.1	61.3	28.5	18.0	
20	65.5	142.5	279.6	241.8	205.0	869.2	425.3	305.4	200.9	61.3	28.5	18.0	
21	65.5	138.7	185.0	283.9	196.9	452.7	839.7	271.1	161.6	57.1	28.5	17.4	
22	61.3	138.7	142.5	254.3	217.1	371.8	409.1	258.4	173.2	65.5	28.5	18.0	
23	57.1	221.2	131.2	250.1	262.7	336.0	419.9	250.1	636.7	61.3	28.5	22.0	
24	59.2	157.7	173.2	327.2	245.9	425.3	648.9	233.6	296.8	55.1	26.9	28.5	
25	57.1	205.0	135.0	279.6	233.6	642.8	570.2	217.1	217.1	53.2	26.9	26.9	
26	74.2	382.4	258.4	258.4	213.0	516.7	393.1	205.0	173.2	55.1	26.9	26.9	
27	63.4	350.8	189.0	241.8	196.9	452.7	327.2	135.0	142.5	49.5	25.2	40.5	
28	61.3	266.9	150.1	245.9	192.9	361.3	314.1	146.2	123.9	49.5	25.2	26.9	
29	59.2	241.8	127.5	403.7	237.6	331.6	283.9	142.5	283.9	45.9		20.5	
30	98.6	189.0	138.7	409.1	387.7	292.4	345.6	192.9	356.1	45.9		19.2	
31		157.7		345.6	279.6		314.1		262.7	44.1		18.0	
Total	2160.0	5671.9	3953.0	8750.0	8719.5	10056.8	12393.3	10954.7	6193.8	2485.7	911.7	662.4	72912.8 Ton
Mean	72.0	183.0	131.8	282.3	281.3	335.2	399.8	365.2	199.8	80.2	32.6	21.4	
Max	135.0	382.4	279.6	582.1	487.5	966.1	839.7	1504.4	636.7	185.0	44.1	40.5	1504.4
Min	57.1	102.1	72.0	142.5	192.9	153.9	262.7	135.0	69.8	44.1	25.2	17.4	17.4