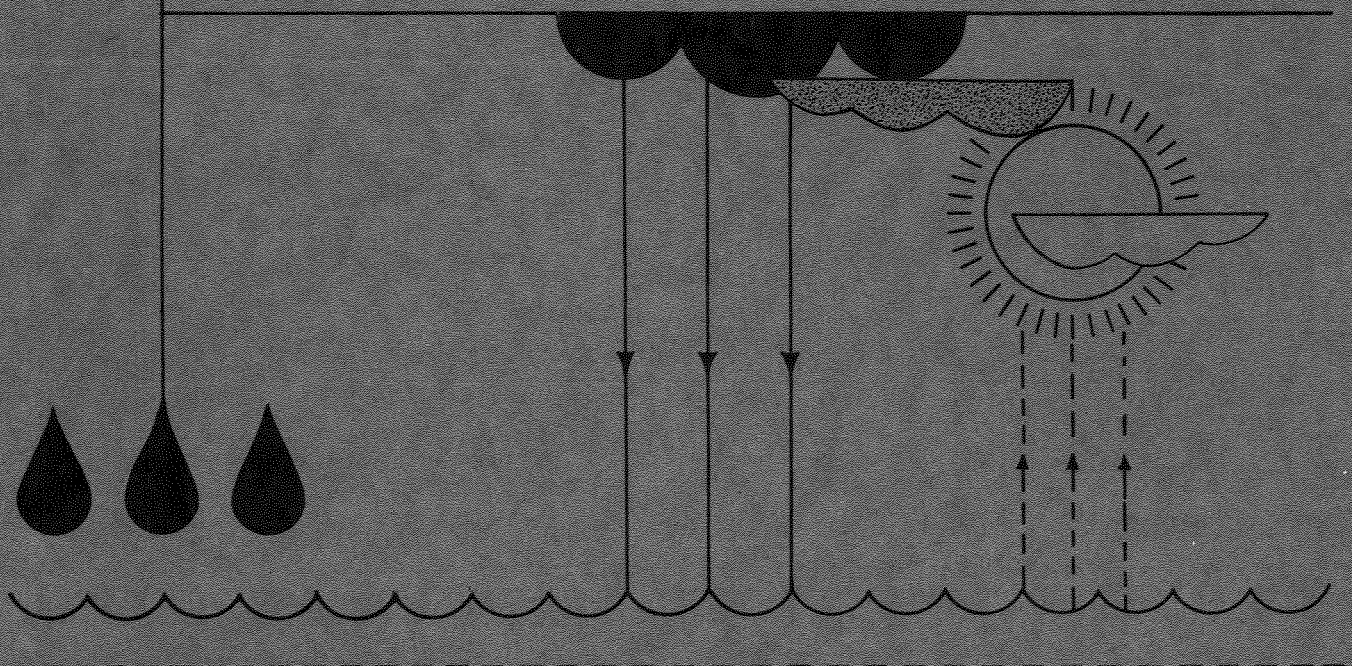
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THAILAND HYDROLOGICAL YEARBOOK

WATER YEAR 1957-1959

VOLUME 5



HYDROLOGY SECTION

ROYAL IRRIGATION DEPARTMENT

BANGKOK, THAILAND

230

Hydrology No. 328/74

THAILAND

HYDROLOGICAL YEARBOOK

VOLUME 5

WATER YEAR 1957-1959

HYDROLOGY SECTION
ROYAL IRRIGATION DEPARTMENT
BANGKOK, THAILAND

FOREWORD

The programme of yearbook publications was initiated in the year 1966. Great efforts have been made in the editing as well as the setting up of standard for yearbook publication. The previously processed data have been reviewed and arranged into serial order or volumes to be published. The first issue was Volume 8, published in 1968, contained the flow data as of water year 1965. The second issue was Volume 7, published in 1969, contained the flow data as of water year 1963 and 1964. The third issue was Volume 6, published in 1973, contained the flow data as of water years 1960, 1961 and 1962.

The Volume 5 of the series is the fourth issue which contains the flow data for water years 1957 to 1959. The number of flow data processed from actual calibrating sites is 39, 36 and 37 for the year 1957, 1958 and 1959 respectively, while the rest are of computed flows based on the application of mean daily gage height to the stage-discharge relationship of previously or subsequently calibrated at such sites. Remarks on such application are made under each station description. The total flow data contained in this issue are 203, of which the data for each year is 67, 68 and 68 for the year 1957, 1958 and 1959 respectively.

Damrong Jaraswathana
Chief of Hydrology Section
May 1974

ACKNOWLEDGEMENT

The editorial staff of this hydrological yearbook publication feels particularly indebted to Mr. Boonchob Kanchanalak, former Senior 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 to adopt engineering standard, methods and steps for implementation by which further publication of the series will be based upon.

We also wish to express our sincere appreciations to the Chief of Reproduction and Publication Section, Planning Division, and his efficient staff whose kind assistance and co-ordinated efforts have contributed to the success of this Volume 5 issue.

Hydrology Section
May 1974

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METHOD OF INVESTIGATION AND DATA PROCESSING

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

DEFINITION OF TERMS AND ABBREVIATIONS

Staff gaging station is a place on a stream bank where a staff gage is installed for manually observing water level; usually frequency of observation varies from 1 to 5 times of equal interval in the daytime. At some specific stations where streamflow measurement camps are situated, the observation of water level by night is also made usually 1 to 3 times of equal interval. The standard bench-mark of the Hydrology Section is also established hereby the gage site. The 1.00-m standard enamelled staff gage sections are used with zero reading specified in meters related to mean sea level datum. Wire-weight gages are also adopted on highway bridges.

Recording gaging station is a staff gaging station with additional installation of automatic water-level recorder. A continuous record of water level is obtained at such station. A. Ott type X has so far been adopted as our standard equipment. The pneumatic recording gage is going to be used in some mountainous headwater area. Weekly visit to the gage for inspection and changing chart paper by the crew is under practice.

Streamflow calibrating station or Rating station is a staff gaging station or recording station where flow measurement by a current meter is periodically performed, so that calibration of river section related to flow can be made through development of stage-flow relationship or simply called "rating curve".

The rating station operation covers also the sediment sampling, water temperature observation and water collection for quality analysis. Two types of the station are under operation: with and without crew camp. Those without the camp are under moving team and those with camps are subject to less accessibility. Fixed boat by cableway across the river is one of typical means of flow measurement by the current meter for medium river, 100 meter wide. For wider river, usually located in the deltaic plain with low velocity, the boat is fixed in position by anchors.

The A. Ott current meter has so far been adopted as standard equipment. The multiple-points method has been used as velocity measurement working practice. At present the two-point method is becoming more popular.

Cubic meter per second (cms) is a unit used for flow measurement. It is the rate of flow of a river or a stream discharging water in volume expressed in cubic meter per one second of time. One cms is the rate of discharge of a stream whose channel cross sectional area containing water is one square meter and whose average velocity is one meter per second.

Million cubic meter (mcm) is the volume of water expressed in millions of cubic meter. It is the quantity of water required to cover one square kilometer in area to the depth of one meter.

Water year is the year related to annual cycle of river flow beginning from April 1 to March 31 for this region, during which the river flow begins to rise, reaching its flood stage and subsiding toward its cyclic minimum.

The volume of river water in each water year, usually termed as annual runoff, is approximately the effective runoff from the rainfall accumulated during the water year.

Drainage area is an area above a specified location of a stream, measured in a horizontal plane, which is so enclosed by a topographic divide, in which direct surface runoff from rainfall would drain by gravity into the river above the specified site. The drainage area in square kilometers given herein is the total enclosed area including non-runoff contributing area, if any.

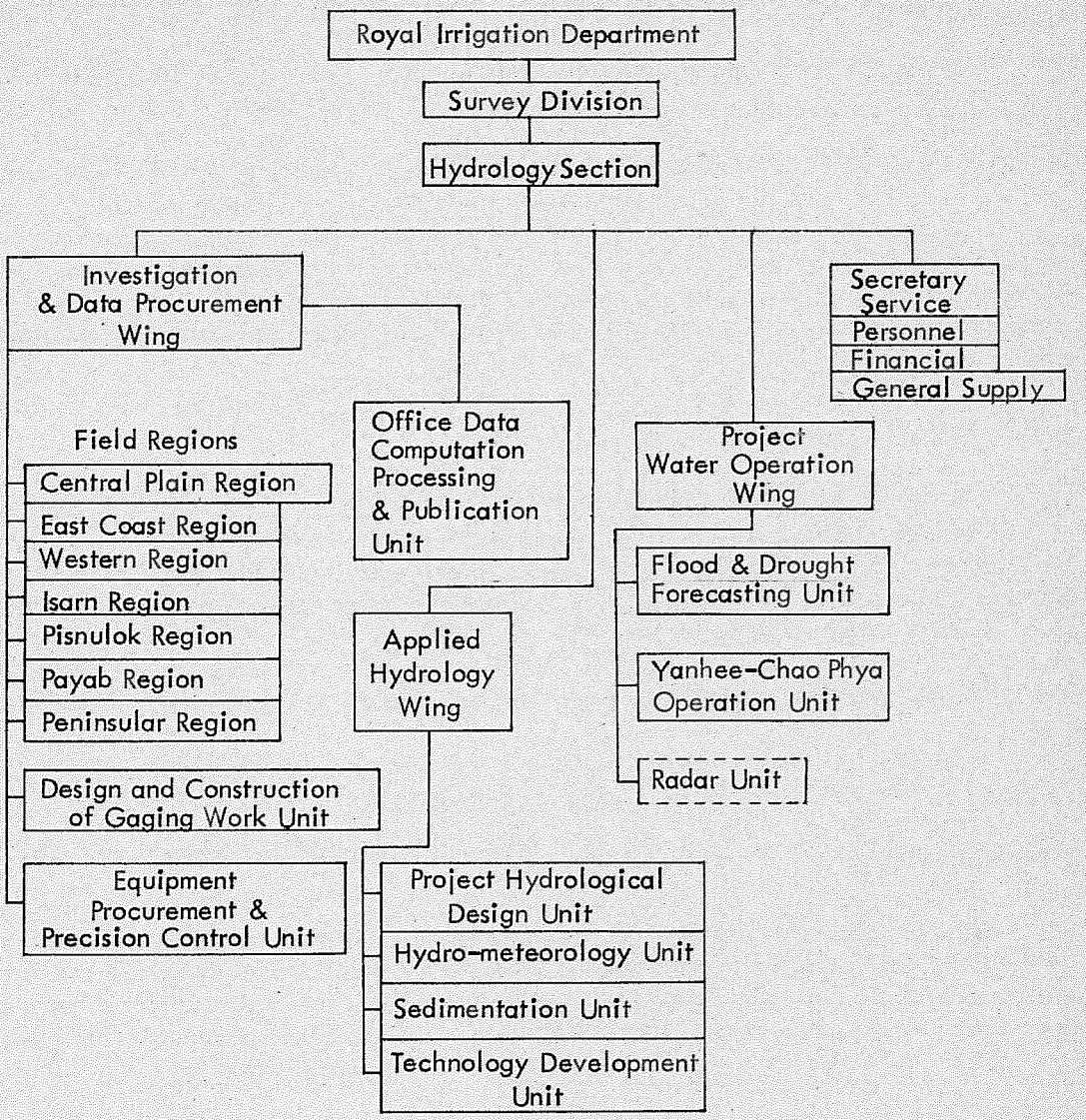
ORDER OF LISTING GAGING DATA

In this format, gaging 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. List of gaging station codes presented in the publication of Stream Gaging Stations are shown in the Map enclosed. The station code name contains the letter standing for river name and number in running order according to the age of the station installed in that river. C.1 is the station code for the Chao Phya River at Wat Tahard gaging station built in 1905, which is the first stream-flow rating station ever built in this river.

The river list follows the order of river basin beginning first with the main river and followed by first tributaries in the downstream order.

ORGANIZATION

Streamflow data presented herein are from the hydrologic network operated by Hydrology Section of Royal Irrigation Department. Field collection, Office processing and publication are its hydrologic activity under Investigation and Data Procurement Wing which is a part of the Section Works. The organization structure of the Section is diagramatically shown below:


Royal Irrigation Department
Survey Division
Hydrology Section
Investigation & Data Procurement Wing
Field Regions
Central Plain Region
East Coast Region
Western Region
Isarn Region
Pisnulok Region
Payab Region
Peninsular Region
Design and Construction of Gaging Work Unit
Equipment Procurement & Precision Control Unit
Office Data Computation Processing & Publication Unit
Applied Hydrology Wing
Project Hydrological Design Unit
Hydro-meteorology Unit
Sedimentation Unit
Technology Development Unit
Secretary Service
Personnel
Financial
General Supply
Project Water Operation Wing
Flood & Drought Forecasting Unit
Yanhee-Chao Phya Operation Unit
Radar Unit

STANDARD OF DATA COLLECTION WORK

Field work - The minimum standards of hydrologic basic data field observations and measurements are equal to those recommended in the United Nations ECAFE Flood Control Series No. 6.

Water level data are obtained by staff gage reading and recorders in such manner as previously explained.

Measurements of flow are made with current meter by accepted methods as previously mentioned. 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.

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 a fashion of using cross section made during dry season for discharge computation.

The standard methods of U. S. Geological Survey are basic methods adopted in the network field operation.

Office Record 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 shifting control could be eliminated or reduced. Zero flow elevation of the rating section is determined by trial 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 overbank flow stage. The overbank flow is assessed both by direct velocity measurement and slope-area method whenever applicable.

Determination of Daily Mean Flow - Application of the adjusted daily mean gage height to rating tables gives the corresponding daily mean discharge, from which the monthly and the yearly mean discharge are computed. Shifting adjustment for observed gage height is made when necessary. Shifting design is made base 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 gaging 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 mountain streams, less than 10% for larger valley streams and not more than 5% for lower deltaic streams. Most of mountain and valley streams are under recording operation, only deltaic streams that daytime reading are still used.

The daily mean water level tabulated herein are the actual arithmetic mean of the observed data available. Adjusted water level due to shifting, which are applicable to rating curve for daily mean flow determination are not shown but they will be found in the computation file of H. 25.

It is noted that the daily mean flow presented herein are mostly subject to upstream diversion utilization. Headwater utilization of water by people diversions and state-own diversions are expected in many of 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 tailwaters of existing reservoirs.

CLASSIFICATION OF DATA

Time basis used for daily mean flow is from midnight to midnight. The degrees of accuracy of the data are classified as follows:

Excellent indicates the error of data of less than 5% being believable;

Good being less than 10%
Fair being less than 15%; and
Poor being more than 15% probable.

Review of Procedure for Streamflow Record Processing

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

1. Checking of gage height data which are obtained either from staff gage reading of from 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 recorder charts, if any.

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

   d) Datums of gage observation and of the rating curve used.

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

2. Checking of availability and goodness of field measurement notes, H. 23.

3. Checking of differential magnitude of water level during rating as to which arithmetic average or weighed average is desirable.

4. Checking of stability of rating curve used, HS. 1004.

5. Review of shifting control sample and design shifting, H. 24-25, if any.

6. Adjustment of backwater, flood wave, etc., by rate of change of falls as index, H. 31-32, if any.

7. Overall review of daily mean flow data as an end-product, H. 26.

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

SERIES OF YEAR-BOOK PUBLICATIONS

It is contemplated that the hydrological data previous to the year 1965 will be published separately as well as the further data to the year 1965. The yearbook volumes in which those data will be published, are to be arranged as follows:

Volume	Years of Record	Approximate No. of Station-years
1	1912-1937	112
2	1938-1947	103
3	1948-1953	146
4	1954-1956	178
5	1957-1959	203
6	1960-1962	213
7	1963-1964	182
8	1965	113
9	1966	129
10	1967	140
11	1968	143

It is earnestly hopeful that the Volumes 4 back to 1 and the Volumes 9 to 11 and so on will be released in serial order.

UNIT OF MEASUREMENT USED

UNIT CONVERSION FACTORS

1 meter (m) = 39.37 inches	=	3.2808 feet
1 kilometer (km) = 0.6214 mile	=	3,280.8 feet
1 square meter (m^2 or sq.m.)	=	1.196 square yards
	=	10.764 square feet
1 square kilometer (km^2 or sq.km.)	=	0.3861 square mile
	=	247.1 acres
	=	625 rai (Thai)
1 cubic meter (m^3 or cu.m.)	=	1,000 litres
	=	1.308 cubic yards
	=	35.31 cubic feet
1 million cubic meter (mcm)	=	1,000,000 m^3
	=	810.7 acre-feet
1 acre-foot	=	1,233 m^3
1 hectare	=	6.25 rai (Thai)
1 acre	=	2.50 rai
1 rai (Thai)	=	1,600 m^2
1 day	=	86,400 seconds
1 month (average)	=	2.63 million seconds
1 year (average)	=	31.6 million seconds

STREAM GAGING DATA

WATER YEAR 1957 - 1959

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Ping River at Nawarath Bridge, Chiang Mai (P.1)

Location: Lat 18°- 47' - 09" N, Long 99°- 00' - 29" E, on left bank 100 meters downstream from Nawarath Bridge, Amphoe Muang, Chiang Mai.

Drainage Area: 6,355 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +300.80 m.(M.S.L.) Prior to Jul.19, 57 staff gage at same site at datum at 301.19 m.(M.S.L.)

Bench Mark: B.M. of the Survey Department.

Location: On left bank at the abutment of bridge.
Elevation: +306.876 m.(M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1921 to date.

Rating Operation:

Period of Rating: 1936 - 38, 1954 - 60
Rated by Float: 1936 - 38
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

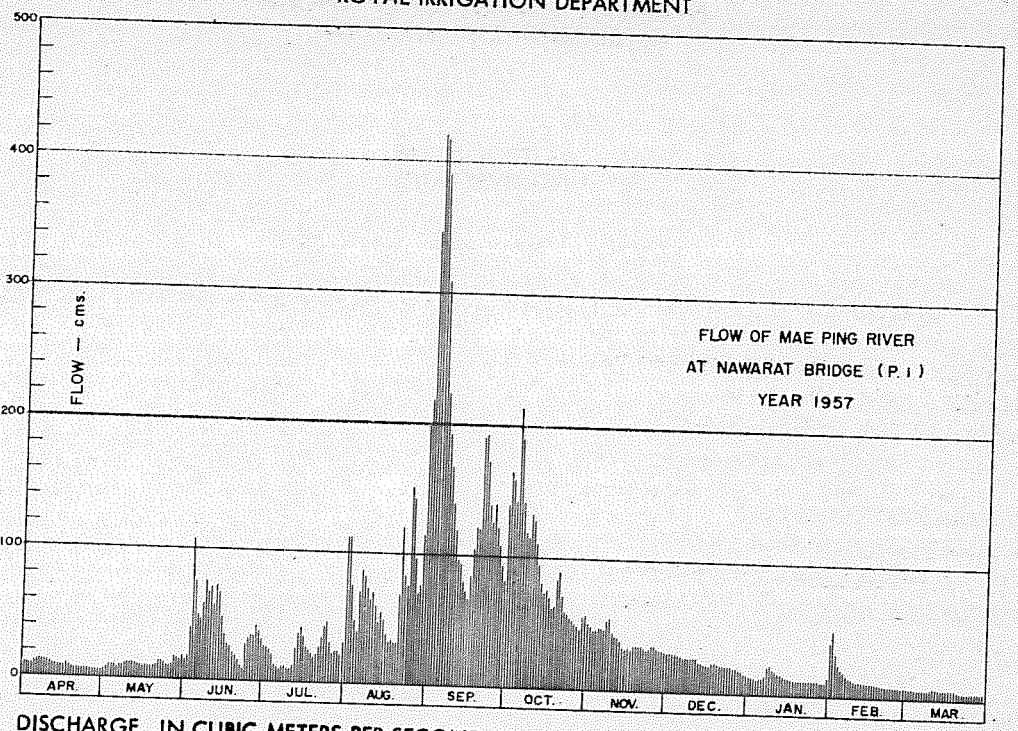
General Description: Records good. Flow regulated by Mae Faek weir for irrigation of about 11,200 hectares at above gage site. Stage - discharge relation used is defined by discharge measurements made during 1957. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	301.60	301.51	301.79	301.91	302.84	303.58	302.91	302.24	302.04	301.73	302.14	301.57
2	.60	.57	.83	.89	.84	304.27	303.20	.20	.03	.72	.24	.57
3	.59	.61	302.17	.86	.47	.61	.16	.17	.03	.71	.03	.57
4	.59	.63	.84	.82	.24	.59	.04	.18	.02	.70	301.91	.56
5	.64	.61	.56	.79	.13	.47	.52	.20	.02	.70	.83	.56
6	301.67	301.61	302.29	301.75	302.46	304.08	303.35	302.19	302.01	301.70	301.78	301.56
7	.69	.63	.25	.73	.63	303.61	.04	.17	301.99	.70	.75	.55
8	.68	.65	.38	.78	.58	.42	302.87	.24	.99	.73	.73	.55
9	.66	.67	.55	.78	.51	.25	.83	.27	.99	.86	.72	.55
10	.64	.70	.47	.73	.41	.09	.97	.17	.99	.87	.70	.57
11	301.61	301.70	302.51	301.72	302.46	302.86	302.94	302.13	301.99	301.81	301.68	301.58
12	.59	.70	.38	.80	.36	.68	.85	.11	.98	.79	.67	.57
13	.59	.67	.52	302.03	.22	.66	.67	.09	.94	.76	.66	.56
14	.58	.65	.47	.19	.30	.58	.54	.09	.93	.74	.65	.53
15	.58	.63	.26	.17	.24	.45	.47	.07	.91	.72	.65	.53
16	301.59	301.63	302.12	302.07	302.12	302.40	302.49	302.09	301.91	301.71	301.64	301.53
17	.61	.65	.00	301.95	.04	.58	.45	.07	.89	.70	.63	.53
18	.58	.64	.00	.93	.06	.75	.34	.11	.89	.69	.62	.53
19	.55	.62	301.93	.87	.03	.89	.36	.11	.88	.68	.61	.52
20	.53	.64	.88	.85	.03	.87	.57	.11	.87	.67	.61	.51
21	301.53	301.68	301.83	301.90	302.45	303.36	302.62	302.11	301.86	301.67	301.60	301.50
22	.52	.77	.76	302.00	.90	.39	.44	.09	.85	.67	.59	.50
23	.52	.75	.70	.09	.60	.26	.32	.07	.84	.67	.59	.50
24	.52	.72	302.04	.20	.51	.01	.30	.08	.84	.68	.58	.50
25	.52	.70	.11	.24	303.14	302.92	.26	.10	.83	.66	.58	.50
26	301.51	301.68	302.04	302.04	303.08	303.03	302.25	302.10	301.82	301.66	301.58	301.50
27	.50	.72	.03	301.91	302.71	302.88	.22	.08	.82	.66	.51	.51
28	.49	.82	.13	.95	.47	.79	.19	.07	.81	.65	.57	.50
29	.49	.80	.08	.95	.53	.65	.17	.06	.78	.65		.50
30	.48	.79	301.99	.90	.86	.55	.18	.05	.75	.65		.52
31		.84		302.03	303.36		.29		.75	.73		.57
Mean	301.59	301.68	302.16	301.93	302.50	303.18	302.64	302.13	301.91	301.71	301.71	301.53
Max.	301.69	301.84	302.84	302.24	303.36	304.61	303.52	302.27	302.04	301.87	302.24	301.57
Min.	301.48	301.51	301.70	301.72	302.03	302.40	302.17	302.05	301.75	301.65	301.57	301.50

WATER YEAR 1957 : Max. 304.61 m. Min. 301.48 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	9.20	6.20	15	27	112	218	125	52	30	15	42	8.00
2	9.20	8.00	18	25	112	345	164	48	30	14	50	8.00
3	8.80	10	40	24	71	420	158	46	30	14	33	8.00
4	8.80	10	107	21	49	415	142	47	29	13	25	7.70
5	11	10	76	13	40	389	213	48	29	13	21	7.70
6	12	8.40	50	11	70	308	187	48	28	13	18	7.70
7	13	9.20	47	10	87	223	142	46	27	13	16	7.40
8	12	10	58	12	82	193	120	52	27	15	15	7.40
9	12	11	75	12	75	167	115	55	27	22	14	7.40
10	11	12	67	10	65	144	133	46	27	23	13	8.00
11	10	12	71	10	70	118	129	42	27	19	12	8.40
12	8.80	12	58	13	60	97	117	41	27	18	12	8.00
13	8.80	11	72	27	48	94	95	39	24	16	12	7.70
14	8.40	10	67	38	55	85	81	34	24	15	11	6.80
15	8.40	9.20	48	42	49	72	74	32	22	14	11	6.80
16	8.80	9.20	36	35	39	67	76	34	22	14	11	6.80
17	10	10	28	27	33	85	72	32	21	13	10	6.80
18	8.40	10	26	25	35	105	61	35	24	12	10	6.80
19	7.40	8.80	22	22	32	122	63	35	24	12	10	6.50
20	6.80	10	19	19	32	120	84	35	23	12	10	4.80
21	6.80	10	16	22	69	188	90	35	22	12	9.20	4.60
22	6.50	14	12	28	120	193	71	34	22	12	8.80	4.60
23	6.50	13	10	35	84	173	59	32	21	12	8.80	4.60
24	6.50	12	28	43	75	138	57	33	21	12	8.40	4.60
25	6.50	11	33	47	151	126	54	35	21	12	8.40	4.60
26	6.20	10	35	31	143	140	53	35	20	12	8.40	4.60
27	5.90	12	35	23	97	121	50	33	20	12	8.00	4.80
28	5.60	17	42	25	71	110	48	32	19	11	8.00	4.60
29	5.60	16	38	25	77	93	46	32	18	11		4.60
30	5.30	15	32	22	115	82	56	31	16	11		5.00
31		18		32	184		57		16	15		7.10
Total	254.20	345	1,281	756	2,402	5,151	2,992	1,179	738	432	424	200.40
Mean	8.47	11.1	42.7	24.3	77.4	172	96.5	39.3	23.8	13.9	15.1	6.46
Max.	13	18	107	47	184	420	213	55	30	23	50	8.40
Min.	5.30	6.20	10	10	32	67	46	31	16	11	8.00	4.60
Runoff — mcm.	21.963	29.808	110.678	65.318	207.533	445.046	258.509	101.866	63.763	37.325	36.634	17.314

WATER YEAR 1957 : Max. 420 Min. 4.60 Mean 44.2 Annual Runoff 1,395.757 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.3	15.00	304.66	433				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Ping River at Nawarath Bridge, Chiang Mai (P.1)

Location: Lat 18°- 47' - 09" N, Long 99°- 00' - 29" E, on left bank 100 meters downstream from Nawarath Bridge, Amphoe Muang, Chiang Mai.

Drainage Area: 6,355 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +300.80 m.(M.S.L.)

Bench Mark: B.M. of The Survey Department.

Location: On left bank at the abutment of bridge.
Elevation: +306.876 m.(M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1921 to date.

Rating Operation:

Period of Rating: 1936 - 38, 1954 - 60
Rated by Float: 1936 - 38
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

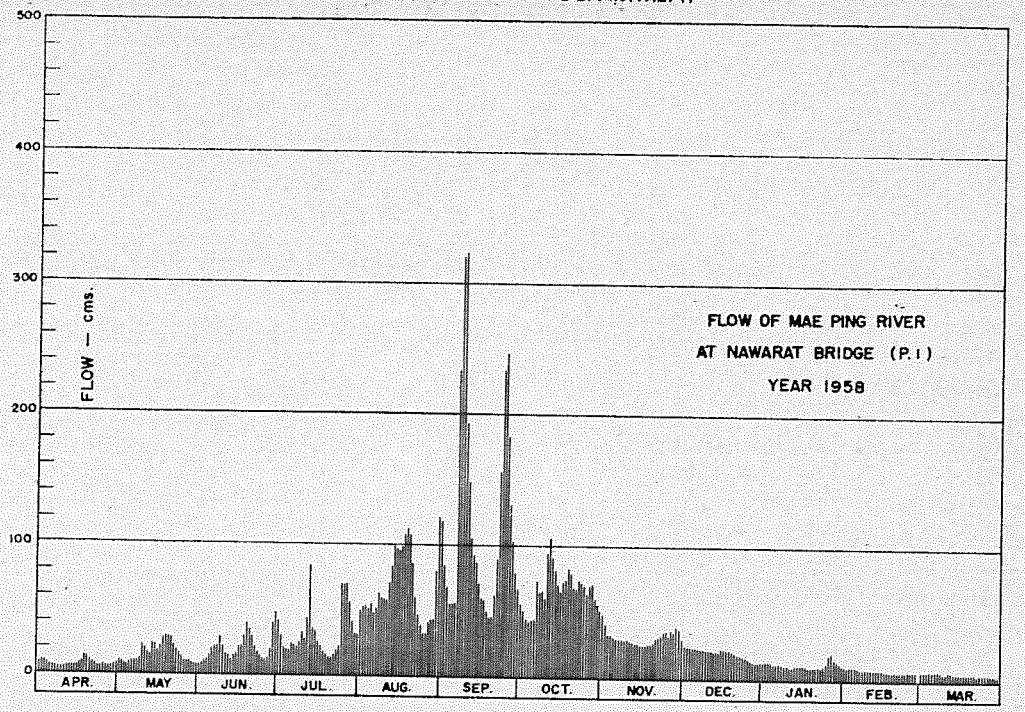
General Description: Records fair. Flow regulated by Mae Faek weir for irrigation of about 11,200 hectares at above gage site. Stage - discharge relation used is defined by discharge measurements during 1958. No adjustment made for virgin-flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	301.60	301.60	301.55	302.18	302.32	302.85	302.24	302.08	302.02	301.69	301.63	301.52
2	.62	.55	.59	.03	.35	.62	.18	.00	301.97	.69	.62	.51
3	.60	.53	.62	301.92	.35	.47	.13	301.97	.96	.69	.61	.51
4	.58	.53	.66	.86	.33	.35	.08	.97	.96	.67	.61	.53
5	.55	.58	.72	.87	.37	.34	.09	.95	.95	.66	.59	.53
6	301.54	301.60	301.81	301.96	302.30	302.36	302.12	301.93	301.94	301.66	301.57	301.54
7	.52	.60	.83	.94	.34	.72	.43	.92	.93	.67	.56	.54
8	.51	.60	.84	.90	.46	304.11	.32	.92	.93	.65	.55	.50
9	.51	.66	.97	.98	.43	.13	.34	.91	.93	.63	.55	.49
10	.51	.84	.87	302.08	.41	303.36	.28	.92	.91	.63	.55	.49
11	301.50	301.79	301.77	302.01	302.40	303.02	302.59	301.91	301.91	301.62	301.55	301.51
12	.50	.72	.74	.20	.54	302.68	.69	.89	.91	.62	.55	.51
13	.50	.71	.69	.60	.64	.58	.57	.88	.90	.63	.55	.49
14	.53	.88	.71	.07	.77	.53	.48	.88	.89	.64	.55	.48
15	.53	.85	.76	.05	.76	.38	.38	.87	.89	.64	.54	.48
16	301.55	301.78	301.84	301.94	302.75	302.28	302.34	301.87	301.89	301.64	301.53	301.47
17	.60	.87	.87	.88	.77	.27	.33	.87	.88	.63	.52	.47
18	.68	.98	.96	.81	.85	.17	.35	.88	.87	.60	.51	.47
19	.67	.99	302.21	.77	.89	.11	.42	.88	.87	.60	.50	.47
20	.61	.98	.14	.74	.85	.12	.38	.90	.87	.61	.51	.47
21	301.58	301.97	302.07	301.74	302.67	302.30	302.28	301.94	301.86	301.61	301.50	301.47
22	.55	.87	301.94	.77	.43	.54	.27	.95	.85	.61	.51	.44
23	.51	.73	.87	.85	.29	303.08	.34	.97	.85	.62	.51	.46
24	.51	.72	.81	302.16	.19	.60	.31	.90	.83	.65	.51	.46
25	.51	.69	.68	.53	.11	.68	.30	302.00	.82	.69	.51	.44
26	301.50	301.63	301.65	302.52	302.01	303.28	302.24	301.97	301.79	301.81	301.51	301.45
27	.49	.61	.70	.53	.11	302.90	.30	302.02	.77	.82	.53	.45
28	.50	.60	.82	.39	.13	.66	.31	301.99	.76	.74	.52	.45
29	.51	.59	302.11	.22	.14	.49	.20	302.05	.74	.69		.44
30	.53	.57	.19	.10	.30	.35	.14	.02	.73	.67		.44
31		.55		.10	.85		.10		.70	.63		.43
Mean	301.55	301.72	301.83	302.05	303.45	302.74	302.31	301.94	301.87	301.66	301.54	301.48
Max.	301.68	301.99	302.21	302.60	302.89	304.13	302.69	302.08	302.02	301.82	301.63	301.54
Min.	301.49	301.53	301.55	301.74	302.01	302.11	302.08	301.87	301.70	301.60	301.50	301.43

WATER YEAR 1958 : Max. 304.13 m. Min. 301.43 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	8.00	10	6.70	41	50	118	56	49	30	14	11	7.10
2	9.00	8.00	8.50	30	53	84	51	42	26	14	10	6.70
3	8.00	7.10	10	22	53	67	46	33	25	14	11	6.70
4	7.10	6.30	12	19	51	55	42	33	25	13	11	7.50
5	5.90	8.50	15	19	55	55	43	32	24	12	10	7.50
6	5.50	9.50	20	24	48	56	46	30	24	12	9.50	8.00
7	4.70	9.50	21	23	52	233	75	30	23	13	9.00	8.00
8	4.30	9.50	21	21	63	318	64	30	23	12	8.50	6.30
9	4.30	12	28	26	60	322	66	29	23	11	8.50	5.90
10	4.30	22	21	33	58	196	60	30	22	11	8.50	5.90
11	4.70	19	15	28	57	149	95	29	22	10	8.50	6.70
12	4.70	15	14	43	71	106	107	28	22	10	8.50	6.70
13	4.70	14	11	83	83	94	92	27	21	11	8.50	5.90
14	5.90	23	14	36	99	87	81	27	21	11	8.50	5.50
15	5.90	21	16	34	97	70	70	26	21	11	8.00	5.50
16	6.70	17	21	26	96	60	66	26	24	11	7.50	5.10
17	9.00	22	22	22	99	59	73	26	23	11	7.10	5.10
18	13	28	29	18	108	50	75	27	22	9.50	6.70	5.10
19	12	29	40	16	113	45	84	27	22	9.50	6.30	5.10
20	9.50	28	35	14	108	46	79	28	21	10	6.70	5.10
21	8.00	28	30	14	86	62	68	31	20	10	6.30	5.10
22	6.70	21	21	16	60	89	67	32	19	10	6.70	3.90
23	5.10	18	17	20	47	156	74	33	19	10	6.70	4.70
24	5.10	15	14	43	39	233	71	35	18	12	6.70	4.70
25	6.30	13	12	70	33	246	70	36	17	14	6.70	4.30
26	5.90	10	11	69	33	184	64	33	16	20	6.70	4.30
27	5.50	9.50	13	70	41	132	70	37	15	21	7.50	4.30
28	5.90	9.00	20	56	43	103	71	35	14	16	7.10	4.30
29	6.30	8.50	40	41	44	83	60	40	13	14		3.90
30	7.10	7.50	47	32	58	67	55	37	13	13		3.90
31		6.70		32	121		51		14	11		3.50
Total	199.10	464.60	605.20	1,041	2,079	3,625	2,092	958	642	381	227.70	172.30
Mean	6.64	15.0	20.2	33.5	67.0	121	67	31.9	20.7	12.3	8.13	5.56
Max.	13	29	47	83	121	322	107	49	30	21	11	8.00
Min.	4.30	6.30	6.70	14	33	45	42	26	13	9.50	6.30	3.50
Runoff - mcm.	17.202	40.141	52.289	89.942	179.626	313.200	180.749	82.771	55.469	32.918	19.67	14.887

WATER YEAR 1958 : Max. 322 Min. 3.50 Mean 34.1 Annual Runoff 1,078.868 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.9	01.00	304.49	392				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Ping River at Nawarath Bridge, Chiang Mai (P.1)

Location: Lat 18° – 47' – 09" N, Long 99° – 00' – 29" E, on left bank 100 meters downstream from Nawarath Bridge, Amphoe Muang, Chiang Mai.

Drainage Area: 6,355 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +300.80 m.(M.S.L.)

Bench Mark: B.M. of The Survey Department

Location: On left bank at the abutment of bridge.
Elevation: +306.876 m.(M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1921 to date.

Rating Operation:
Period of Rating: 1936 – 38, 1954 – 60
Rated by Float: 1936 – 38
Rated by Current Meter: 1954 – 60

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

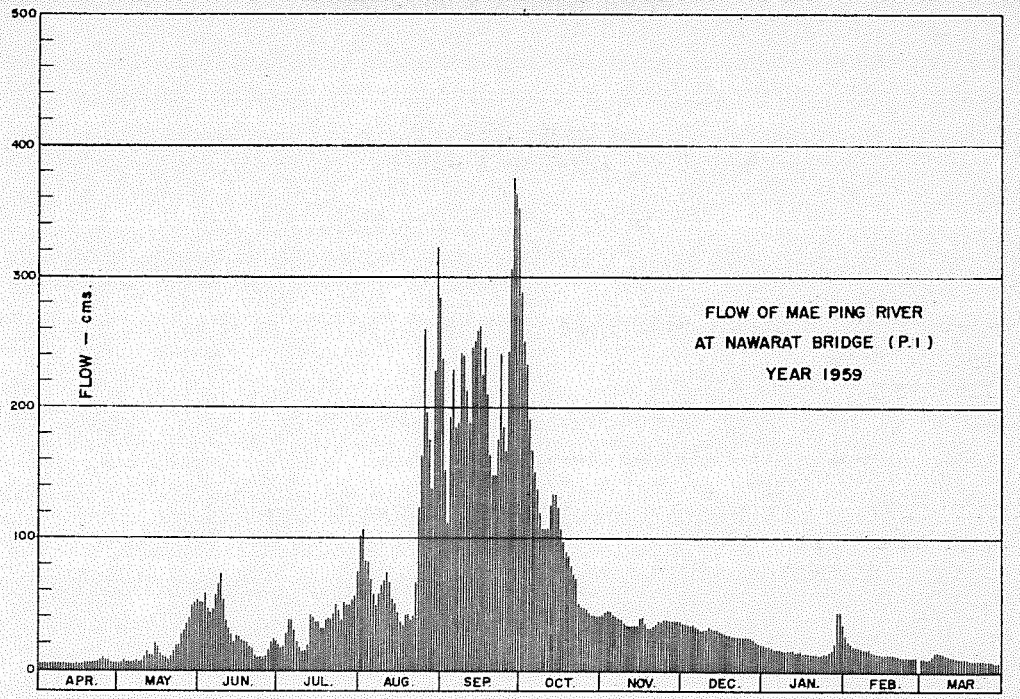
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Flow regulated by Mae Faek weir for irrigation of about 11,200 hectares at above gage site. Stage – discharge relation used is defined by discharge measurements during 1959. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	301.42	301.45	302.13	301.51	302.75	303.77	304.06	302.21	302.13	301.87	302.01	301.67
2	.42	.48	.13	.48	.78	.18	303.81	.23	.12	.86	301.92	.67
3	.42	.48	.20	.51	.56	302.86	.59	.24	.12	.84	.88	.66
4	.43	.45	.07	.68	.56	303.48	.33	.24	.11	.82	.85	.65
5	.44	.45	.04	.96	.43	.72	.15	.21	.11	.81	.84	.66
6	301.43	301.45	302.07	301.94	302.32	303.42	303.02	302.19	302.09	301.81	301.83	301.70
7	.43	.46	.19	.85	.23	.34	302.92	.16	.08	.80	.82	.71
8	.43	.49	.28	.69	.20	.68	.77	.15	.07	.79	.81	.70
9	.43	.47	.36	.60	.28	.67	.67	.13	.07	.79	.81	.69
10	.43	.52	.16	.58	.31	.49	.68	.12	.08	.79	.80	.67
11	301.41	301.58	301.95	301.57	302.37	303.35	302.68	302.11	302.09	301.79	301.78	301.66
12	.42	.64	.88	.64	.30	.70	.81	.11	.08	.79	.76	.65
13	.42	.59	.82	302.01	.16	.73	.89	.11	.07	.78	.75	.64
14	.42	.59	.72	301.98	.13	.78	.89	.11	.07	.78	.74	.63
15	.41	.76	.66	.93	.05	.80	.85	.18	.05	.77	.73	.62
16	301.43	301.71	301.64	301.93	301.96	303.59	302.68	302.19	302.03	301.76	301.73	301.61
17	.43	.59	.60	.87	.93	.71	.59	.13	.01	.76	.73	.61
18	.45	.55	.57	.87	302.03	.48	.54	.08	.00	.74	.72	.60
19	.45	.53	.55	.95	.03	.27	.50	.08	.00	.74	.72	.59
20	.44	.52	.50	.97	301.97	.15	.42	.11	301.99	.73	.70	.58
21	301.43	301.57	301.48	301.96	302.02	303.15	302.36	302.13	301.99	301.73	301.70	301.58
22	.45	.67	.38	302.00	.30	.35	.33	.14	.99	.73	.69	.57
23	.46	.73	.32	.10	.91	.79	.31	.14	.97	.73	.69	.57
24	.51	.74	.33	.04	303.24	.42	.28	.17	.97	.75	.69	.57
25	.52	.89	.33	301.95	.90	.30	.27	.17	.97	.76	.69	.56
26	301.48	301.94	301.35	302.25	303.50	303.80	302.25	302.16	301.97	301.77	301.69	301.55
27	.47	302.02	.46	.23	.35	304.16	.23	.15	.97	.79	.69	.55
28	.48	.07	.55	.24	.08	.49	.21	.15	.93	.89	.69	.54
29	.47	.11	.60	.28	.71	.45	.20	.15	.88	302.23	.68	.52
30	.46	.13	.57	.31	304.24	.36	.19	.15	.87	.23		.52
31		.15		.41	.04		.19		.87	.13		.52
Mean	301.44	301.67	301.76	301.91	302.70	303.61	302.70	302.15	302.02	301.82	301.76	301.61
Max.	301.52	302.15	302.36	302.41	304.24	304.49	304.06	302.24	302.13	302.23	302.01	301.71
Min.	301.41	301.45	301.32	301.48	301.93	302.86	302.19	302.08	301.87	301.73	301.68	301.52

WATER YEAR 1959 : Max. 304.49 m. Min. 301.32 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.60	4.20	51	18	102	237	287	42	36	19	28	9.33
2	3.60	5.40	51	16	106	152	244	44	35	19	22	9.33
3	3.60	6.37	58	18	82	112	232	45	35	18	20	8.96
4	3.90	5.40	46	28	82	193	193	45	34	17	18	8.59
5	4.20	5.40	43	38	68	229	168	42	34	16	18	11
6	3.90	5.40	46	37	58	185	151	41	33	16	17	13
7	3.90	5.70	57	30	49	189	138	38	32	16	17	13
8	3.90	6.74	65	21	58	241	119	38	31	15	16	13
9	3.90	6.00	73	16	65	239	107	36	31	15	16	12
10	3.90	7.11	54	14	68	211	108	34	32	15	16	11
11	3.30	10	36	14	74	190	108	34	33	15	14	11
12	3.60	13	31	18	67	244	124	34	32	15	13	10
13	3.60	11	27	42	54	249	134	34	31	14	13	10
14	3.60	11	21	40	51	258	134	34	31	14	13	9.33
15	3.30	19	26	36	44	261	129	40	30	14	12	8.96
16	3.90	17	25	36	37	226	108	41	29	13	12	8.59
17	3.90	11	23	31	34	246	98	36	28	13	12	8.59
18	4.50	8.96	21	31	42	209	92	32	27	13	12	8.22
19	4.50	8.22	20	38	42	164	88	32	27	13	12	7.85
20	4.20	7.85	17	39	38	148	80	34	26	12	11	7.48
21	5.10	10	16	38	42	148	73	36	26	12	11	7.48
22	5.70	14	11	42	67	175	70	37	26	12	10	7.11
23	6.00	18	8.59	50	124	241	51	37	25	12	10	7.11
24	7.85	18	8.96	45	160	185	48	39	25	13	10	7.11
25	8.22	27	8.96	38	259	168	47	39	25	13	10	6.74
26	6.44	30	10	51	196	242	46	38	25	14	10	6.37
27	6.37	36	15	49	175	305	44	38	25	15	10	6.37
28	5.10	40	20	50	139	374	42	38	23	21	10	6.00
29	4.80	49	23	54	228	364	42	38	21	44	10	5.40
30	4.50	51	21	57	321	345	41	38	20	44		5.40
31		53		66	283		41		19	36		6.74
Total	136.88	520.75	933.51	1,101	3,215	6,730	3,387	1,134	887	538	403	271.06
Mean	4.56	16.8	31.1	35.5	104	224	109	37.8	28.6	17.4	13.8	8.74
Max.	8.22	53	73	66	321	374	287	45	36	44	28	13
Min.	3.30	4.20	8.59	14	34	112	41	32	19	12	10	5.40
Runoff - MCM.	11.826	44.993	80.655	95.126	277.776	581.472	292.673	97.978	76.637	46.483	34.819	23.420

WATER YEAR 1959 : Max. 374 Min. 3.30 Mean 52.6 Annual Runoff 1,663.822 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 28	17.00	304.53	383				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Ping River at Tha Khae, Tak (P.2A)

Location: Lat 16°- 51' -14" N, Long 99°- 02' - 50" E, on right bank 200 meters downstream from Kittikhachon I Bridge at Ban Tha Khae, Amphoe Muang, Tak.

Drainage Area: 38,827 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +104.29 m.(M.S.L.)

Bench Mark: B.M. - R.I.D.

Location: At the south corner of Wat Chaichana Songkhram Temple.
Elevation: +110.290 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: 1934 - 39, 1942 - 45 and 1950 to date.

Rating Operation:

Period of Rating: 1952 - 60, 1963 to date
Rated by Float: -
Rated by Current Meter: 1952 - 60, 1963 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment but periodic rating curves are used for flow computation.

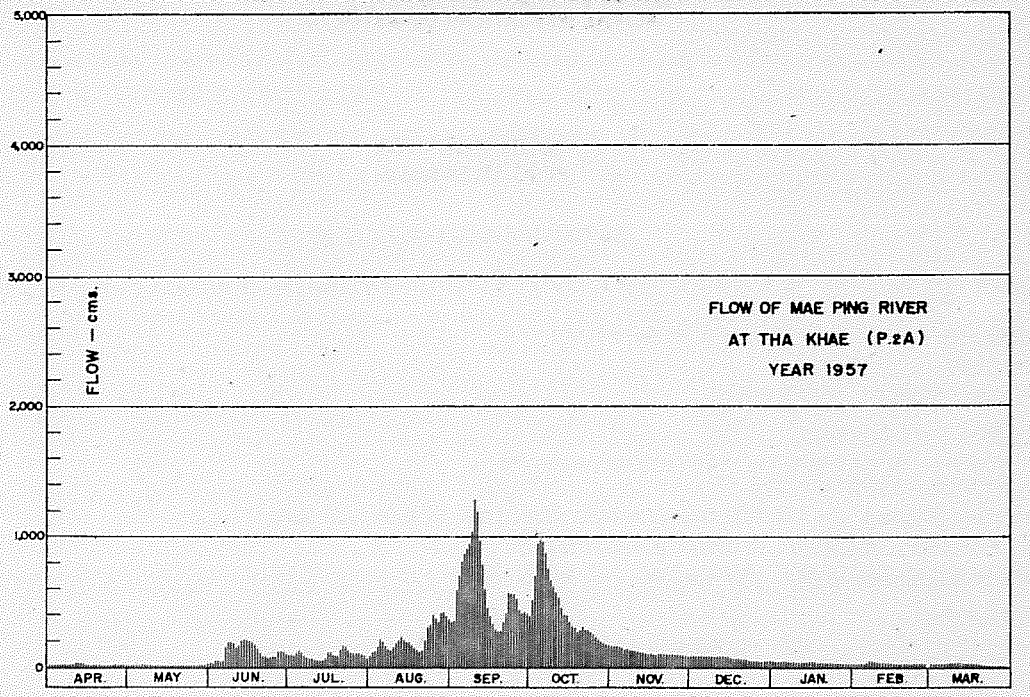
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1957. Up stream diversions for irrigation of about 40,300 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	104.88	104.79	105.08	105.45	105.44	106.15	106.23	105.77	105.48	105.17	105.10	105.09
2	.86	.85	.09	.47	.53	.18	.45	.76	.48	.17	.09	.09
3	.85	.88	.27	.48	.56	.58	.76	.75	.47	.17	.09	.09
4	.84	.86	.27	.53	.70	.71	107.09	.73	.47	.16	.11	.09
5	.91	.92	.22	.60	.88	.90	.15	.71	.46	.16	.11	.08
6	104.93	104.99	105.28	105.51	105.81	106.97	107.12	105.69	105.45	105.16	105.15	105.08
7	.93	.96	.70	.43	.70	107.01	106.99	.69	.44	.16	.22	.07
8	.93	.91	.81	.38	.62	.06	.83	.67	.44	.15	.22	.13
9	.93	.88	.79	.34	.61	.18	.69	.66	.43	.15	.18	.09
10	.98	.89	.72	.32	.68	.42	.61	.65	.42	.15	.15	.11
11	105.09	104.84	105.64	105.29	105.78	107.34	106.59	105.62	105.42	105.14	105.14	105.14
12	.08	.84	.72	.25	.86	.07	.53	.60	.41	.14	.14	.11
13	.04	.82	.82	.24	.92	106.81	.43	.59	.40	.13	.16	.12
14	.03	.80	.85	.29	.84	.54	.34	.57	.39	.14	.15	.13
15	104.99	.93	.84	.38	.81	.34	.28	.55	.37	.17	.14	.13
16	104.96	104.93	105.82	105.54	105.82	106.21	106.19	105.54	105.34	105.17	105.13	105.11
17	.95	.88	.79	.56	.74	.10	.11	.52	.31	.16	.11	.08
18	.92	.84	.70	.46	.66	.03	.09	.52	.30	.15	.10	.05
19	.91	.82	.58	.46	.60	105.99	.05	.51	.30	.14	.08	.00
20	.90	.82	.49	.46	.57	106.04	.05	.52	.29	.14	.08	104.76
21	104.87	104.82	105.40	105.63	105.58	106.18	106.10	105.53	105.27	105.13	105.09	104.94
22	.84	.81	.41	.72	.82	.31	.06	.53	.26	.12	.07	.93
23	.82	.81	.34	.66	106.09	.55	.06	.54	.23	.12	.06	.92
24	.81	.83	.38	.58	.14	.53	.05	.53	.22	.11	.08	.91
25	.80	.84	.40	.51	.27	.46	.01	.52	.22	.11	.07	.90
26	104.79	104.83	105.43	105.48	106.21	106.41	105.96	105.51	105.21	105.10	105.07	104.89
27	.78	.86	.54	.48	.14	.34	.91	.50	.20	.10	.10	.88
28	.77	.90	.55	.50	.26	.29	.86	.50	.19	.10	.09	.87
29	.76	.95	.52	.45	.27	.31	.83	.49	.19	.10		.87
30	.75	.94	.47	.40	.22	.29	.82	.48	.18	.10		.86
31		105.05		.36	.20		.79		.18	.12		.87
Mean	104.90	104.87	105.53	105.46	105.85	106.64	106.32	105.59	105.34	105.14	105.12	105.02
Max.	105.09	105.05	105.85	105.72	106.27	107.42	107.15	105.77	105.48	105.17	105.22	105.13
Min.	104.75	104.79	105.08	105.24	105.44	105.99	105.79	105.48	105.18	105.10	105.06	104.76

WATER YEAR 1957 : Max. 107.42 m. Min. 104.75 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	13	9.50	29	95	97	342	398	164	93	45	29	27
2	12	12	27	97	118	357	512	161	93	45	27	27
3	11	15	48	97	123	583	709	161	88	45	27	27
4	9.50	14	51	115	161	673	943	155	90	43	30	27
5	15	17	43	137	219	814	976	152	88	43	30	26
6	17	22	54	107	197	870	960	140	88	42	37	26
7	16	20	155	88	161	902	870	143	88	42	51	24
8	16	16	194	77	140	943	761	137	88	40	51	34
9	15	16	187	69	134	1,046	666	134	88	40	43	27
10	19	16	168	65	155	1,280	617	131	86	40	37	30
11	28	12	146	61	187	1,192	596	123	88	39	35	35
12	27	12	168	54	212	968	537	115	88	39	35	30
13	23	10	201	51	230	784	453	118	88	37	39	32
14	22	8.50	215	59	201	583	383	115	88	39	37	34
15	18	18	208	77	190	459	404	102	86	43	35	34
16	16	17	204	112	190	388	347	107	79	43	34	30
17	16	14	197	118	164	332	317	102	73	42	30	26
18	15	12	168	93	143	286	312	100	71	37	29	21
19	14	10	128	93	128	272	277	105	71	36	26	16
20	14	10	105	93	120	281	281	102	67	35	26	12
21	12	9.50	84	140	128	352	308	105	63	35	27	11
22	10	9.00	88	168	201	425	281	102	61	35	24	10
23	9.50	9.50	73	152	312	570	281	105	56	33	23	10
24	10	10	79	128	337	563	272	105	54	32	26	9.00
25	8.50	11	84	110	404	518	255	102	54	30	24	8.00
26	8.00	11	88	102	378	524	230	100	53	29	24	8.00
27	7.50	13	120	102	347	436	212	95	51	29	29	7.00
28	7.00	16	123	107	420	409	194	97	49	28	27	7.00
29	6.50	19	115	97	425	425	184	93	48	28		7.00
30	6.00	19	100	86	393	420	180	90	46	28		6.00
31		28		75	367		171		46	30		7.00
Total	421.50	436	3,650	3,025	6,982	17,997	13,887	3,561	2,270	1,152	892	635
Mean	14.0	14.1	122	97.6	225	600	448	119	73.2	37.2	31.8	20.5
Max.	28	28	215	168	425	1,280	976	164	93	45	51	34
Min.	6.00	8.50	27	51	97	272	171	90	46	28	23	6.00
Runoff - mcm.	36.418	37.670	315.360	261.360	603.245	1,554.941	1,199.837	307.670	196.128	99.533	77.069	54.846

WATER YEAR 1957 : Max. 1,280 Min. 6.00 Mean 150 Annual Runoff 4,744.094 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.10.	18.00	107.45	1,310				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Ping River at Tha Khae, Tak (P.2A)

Location: Lat 16°- 51' - 14" N, Long 99°- 02' - 50" E, on right bank 200 meters downstream from Kittikhachon I Bridge at Ban Tha Khae, Amphoe Muang, Tak.

Drainage Area: 38,827 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +104.29 m.(M.S.L.)

Bench Mark: B.M. - R.I.D.

Location: At the south corner of Wat Chaichana Songkhram Temple.
Elevation: +110.290 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: 1934 - 39, 1942 - 45, 1950 to date.

Rating Operation:

Period of Rating: 1952 - 60, 1963 to date.
Rated by Float: -
Rated by Current Meter: 1952 - 60, 1963 to date.

Stability of Channel Regimes: Rather unstable, no shifting adjustment but periodic rating curves are used for flow computation.

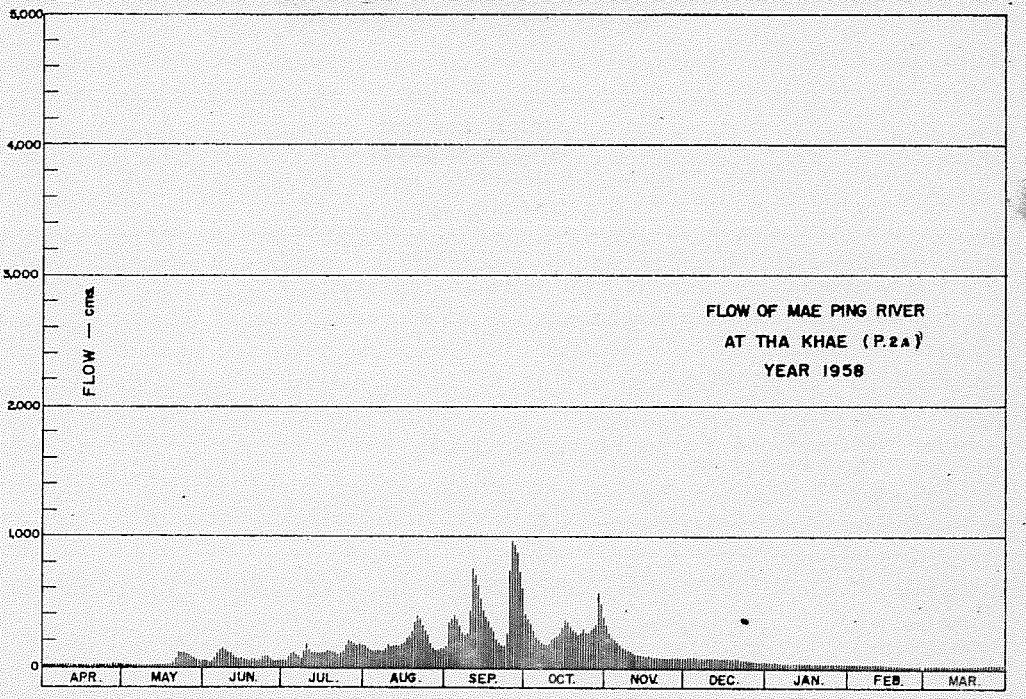
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1958. Upstream diversions for irrigation of about 40,300 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	104.86	104.89	105.23	105.28	105.73	105.91	106.31	106.17	105.56	105.31	105.17	105.01
2	.85	.95	.18	.26	.69	106.15	.29	.07	.57	.30	.17	.01
3	.84	.95	.16	.42	.65	.19	.19	105.99	.56	.29	.17	.01
4	.83	105.03	.25	.48	.65	.22	.09	.94	.57	.29	.17	.01
5	.91	.02	.34	.54	.62	.13	.02	.90	.56	.28	.17	.01
6	104.94	105.01	105.53	105.48	105.64	106.03	105.96	105.85	105.55	105.27	105.15	105.00
7	.94	104.99	.58	.43	.62	105.91	.91	.80	.54	.25	.15	.00
8	.92	.95	.66	.38	.62	.85	.89	.76	.54	.24	.15	.00
9	.89	.92	.59	.64	.68	.88	.85	.73	.53	.23	.14	.00
10	.87	.91	.53	.79	.76	106.28	.85	.70	.53	.22	.14	.00
11	104.85	104.93	105.51	105.67	105.74	106.76	105.95	105.68	105.52	105.21	105.13	105.00
12	.84	.88	.44	.60	.75	.70	.98	.65	.52	.20	.13	104.99
13	.85	.88	.37	.57	.76	.56	.98	.64	.50	.20	.12	.99
14	.84	.87	.33	.56	.75	.44	106.01	.63	.50	.19	.12	.99
15	.86	.86	.35	.56	.81	.29	.07	.61	.48	.19	.11	.99
16	104.93	104.86	105.30	105.56	105.83	106.19	106.21	105.60	105.47	105.19	105.10	104.99
17	.96	105.05	.29	.61	.92	.12	.21	.59	.46	.19	.08	.97
18	.84	.04	.27	.66	.98	.00	.13	.58	.45	.19	.07	.94
19	.95	.07	.31	.63	106.05	105.92	.07	.58	.44	.19	.05	.96
20	.93	.13	.33	.61	.19	.86	.05	.58	.44	.19	.04	.98
21	105.05	105.34	105.29	105.57	106.26	105.82	106.00	105.58	105.44	105.19	105.04	105.00
22	.07	.56	.33	.53	.21	.80	.01	.58	.43	.19	.04	.01
23	.04	.51	.44	.57	.10	.79	.07	.58	.42	.18	.04	.01
24	.00	.50	.45	.64	.02	106.04	.03	.58	.42	.18	.03	.01
25	104.97	.47	.46	.79	105.90	.83	.01	.58	.41	.18	.03	.02
26	104.95	105.42	105.38	105.88	105.78	107.06	106.08	105.58	105.40	105.18	105.03	105.02
27	105.16	.36	.31	.83	.70	.07	.14	.58	.38	.18	.02	.01
28	104.99	.31	.29	.80	.66	106.98	.19	.58	.37	.17	.02	.01
29	.92	.25	.29	.78	.66	.79	.60	.57	.35	.17		.00
30	.88	.23	.24	.79	.67	.60	.43	.57	.34	.17		104.99
31		.19		.76	.67		.29		.32	.17		.99
Mean	104.92	105.11	105.37	105.60	105.81	106.27	106.09	105.69	105.47	105.21	105.10	105.00
Max.	105.16	105.56	105.66	105.88	106.26	107.06	106.60	106.17	105.57	105.31	105.17	105.02
Min.	104.84	104.86	105.16	105.26	105.62	105.91	105.85	105.58	105.32	105.17	105.02	104.94

WATER YEAR 1958 : Max. 107.06 m. Min. 104.84 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.00	8.00	51	60	164	161	406	324	77	43	27	12
2	7.00	12	43	58	147	348	369	277	80	41	27	12
3	6.00	12	38	88	132	374	338	238	80	39	27	12
4	5.00	18	53	101	129	400	282	214	82	41	27	12
5	8.00	16	69	114	123	374	234	196	80	39	27	12
6	10	14	111	96	132	319	207	178	77	39	25	11
7	11	14	126	82	129	268	189	158	77	38	25	11
8	7.00	12	147	69	132	246	178	144	77	36	25	11
9	8.00	9.00	126	132	147	263	171	132	75	35	24	11
10	8.00	8.00	109	178	171	439	178	123	77	35	24	11
11	7.00	10	104	135	161	759	218	117	75	33	23	11
12	5.00	7.00	86	117	164	714	238	106	75	33	23	11
13	6.00	6.00	71	109	168	609	242	104	75	33	22	11
14	5.00	5.00	65	106	164	524	263	98	75	33	22	11
15	5.00	5.00	71	106	185	439	305	93	71	33	21	11
16	11	5.00	62	106	196	395	364	91	71	32	20	11
17	7.00	18	60	120	230	358	358	86	69	32	18	9.00
18	7.00	17	54	132	254	300	319	82	69	30	17	7.00
19	12	20	62	123	291	263	286	77	69	30	16	8.00
20	8.00	26	63	120	358	218	272	80	67	29	15	10
21	16	63	54	111	400	185	254	80	65	29	15	11
22	18	114	60	101	374	161	263	77	60	29	15	12
23	16	104	82	109	324	161	291	77	58	28	15	12
24	13	106	82	129	291	254	272	77	58	28	14	12
25	11	101	82	178	242	744	263	77	56	29	14	13
26	10	91	67	210	185	966	291	80	54	29	14	13
27	33	80	56	196	151	923	310	80	53	29	13	12
28	15	69	54	185	138	380	329	80	51	28	13	12
29	10	56	58	178	138	729	576	80	47	28		11
30	8.00	53	91	182	144	602	475	80	46	28		11
31		46		175	144		390		44	28		11
Total	300	1,127	2,217	3,906	6,108	13,376	9,131	3,706	2,090	1,017	568	345
Mean	10.0	36.3	73.9	126	197	446	294	123	67.4	32.8	20.3	11.1
Max.	33	114	147	210	400	966	576	324	82	43	27	13
Min.	5.00	5.00	38	58	123	161	171	77	44	28	13	7.00
Runoff — mcm.	25.920	97.373	191.549	337.478	527.731	1,155.686	788.918	320.198	180.576	87.869	49.075	29.808

WATER YEAR 1958 : Max. 996 Min. 5.00 Mean 120 Annual Runoff 3,792.182mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 26	21.00	107.16	1,038				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Ping River at Tha Khae, Tak (P.2A)

Location: Lat 16°- 51' - 14" N, Long 99°- 02' - 50" E, on right bank 200 meters downstream from Kittikhachon I Bridge at Ban Tha Khae, Amphoe Muang, Tak

Drainage Area: 38,827 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +104.29 m.(M.S.L.)

Bench Mark: B.M. - R.I.D.

Location: At the south corner of Wat Chaichana Songkhram Temple.
Elevation: +110.290 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: 1934 - 39, 1942 - 45, 1950 to date.

Rating Operation:

Period of Rating: 1952 - 60, 1963 to date.
Rated by Float: -
Rated by Current Meter: 1952 - 60, 1963 to date.

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

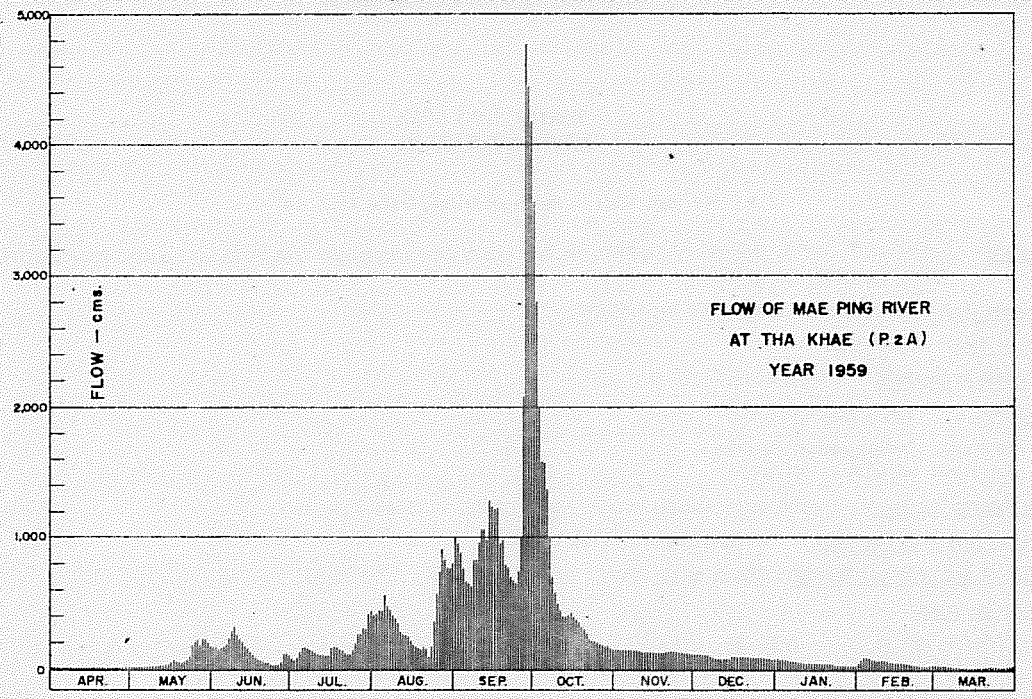
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1959. Upstream diversions for irrigation of about 40,300 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	104.99	105.03	105.70	105.41	106.28	107.02	108.99	105.62	105.48	105.33	105.19	105.81
2	.99	.03	.70	.37	.30	.00	.54	.61	.49	.30	.31	.80
3	.99	.03	.65	.46	.33	106.92	.01	.60	.49	.28	.37	.79
4	.99	.03	.68	.62	.29	.81	107.68	.59	.49	.26	.38	.78
5	.99	.03	.72	.78	.47	.66	.66	.59	.47	.23	.36	.77
6	104.99	105.03	105.80	105.76	106.35	106.64	107.48	105.59	105.47	105.22	105.35	104.76
7	.99	.05	.88	.72	.28	.60	.13	.60	.47	.20	.33	.75
8	105.00	.05	106.02	.71	.22	.78	106.86	.60	.45	.19	.31	.74
9	.00	.05	.08	.67	.19	.78	.65	.59	.45	.18	.29	.73
10	.00	.05	105.99	.62	.13	.94	.48	.58	.45	.17	.25	.72
11	105.00	105.09	105.89	105.59	106.07	107.07	106.38	105.58	105.43	105.16	105.20	104.71
12	.01	.11	.86	.58	.03	.16	.30	.56	.42	.15	.17	.70
13	.01	.17	.77	.57	.02	.03	.27	.55	.41	.14	.14	.69
14	.01	.21	.70	.56	.00	.41	.30	.54	.40	.13	.13	.68
15	.01	.30	.63	.55	105.93	.36	.31	.54	.39	.12	.11	.67
16	105.01	105.29	105.57	105.72	105.89	107.25	106.24	105.54	105.39	105.11	105.09	104.66
17	.02	.41	.47	.73	.84	.13	.24	.53	.38	.10	.08	.66
18	.02	.38	.37	.72	.83	.03	.16	.53	.38	.09	.07	.66
19	.02	.30	.37	.69	.81	.04	.10	.52	.38	.08	.02	.66
20	.02	.28	.31	.68	.86	106.84	.07	.52	.37	.07	104.99	.66
21	105.02	105.26	105.28	105.60	105.80	106.79	106.04	105.51	105.37	105.06	104.96	104.65
22	.02	.35	.23	.59	.74	.70	105.89	.51	.36	.04	.93	.65
23	.02	.46	.18	.60	.76	.67	.85	.51	.36	.03	.92	.65
24	.02	.78	.15	.69	106.17	.62	.83	.51	.36	.02	.90	.65
25	.02	.85	.19	.85	.47	.74	.79	.51	.36	.01	.88	.65
26	105.03	105.88	105.17	105.98	106.72	107.04	105.75	105.50	105.35	105.00	104.87	104.65
27	.03	.71	.29	106.02	.91	108.52	.72	.51	.35	.00	.86	.64
28	.03	.90	.55	.10	.85	109.61	.69	.50	.34	104.99	.85	.64
29	.03	.88	.55	.06	.78	.53	.68	.50	.35	.98	.84	.63
30	.03	.82	.54	.28	.78	.34	.65	.48	.34	.97		.63
31		.74		.30	.81		.63		.34	.96		.63
Mean	105.01	105.34	105.58	105.90	106.22	107.23	106.49	105.55	105.40	105.11	105.11	104.69
Max.	105.03	105.90	106.02	106.30	106.91	109.61	108.99	105.62	105.48	105.33	105.38	104.81
Min.	104.99	105.03	105.15	105.37	105.74	106.60	105.63	105.48	105.34	104.96	105.84	104.63

WATER YEAR 1959 : Max. 109.61 m. Min. 104.63 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	12	16	161	76	416	1,011	3,560	153	118	84	57	25
2	12	16	161	67	436	986	2,800	151	118	78	76	24
3	12	16	145	85	459	904	1,996	148	116	74	90	23
4	12	16	154	127	448	802	1,588	145	111	71	94	22
5	12	16	167	176	565	674	1,565	145	105	66	82	21
6	12	16	196	167	488	660	1,366	145	103	65	78	21
7	12	17	229	154	442	625	986	148	103	62	73	20
8	13	17	289	151	403	825	772	148	96	60	68	19
9	13	17	320	139	383	832	618	145	96	59	71	19
10	13	17	274	124	342	961	511	142	96	57	70	18
11	13	20	229	115	289	1,064	459	142	96	56	66	18
12	14	24	216	113	264	1,064	415	140	94	54	62	17
13	14	32	180	110	260	994	400	137	94	53	57	16
14	14	38	158	108	251	1,298	415	137	92	52	56	15
15	14	41	136	108	216	1,249	426	137	92	50	56	15
16	14	41	118	161	196	1,144	389	137	92	49	54	14
17	15	63	92	170	174	1,037	389	137	90	47	53	14
18	15	58	96	161	167	953	353	137	90	46	52	14
19	15	47	69	151	158	994	323	134	90	45	46	14
20	15	46	58	142	167	825	308	134	88	44	42	14
21	15	50	54	118	158	779	294	134	88	42	39	12
22	15	67	46	115	145	703	232	134	86	40	35	12
23	15	92	38	118	161	681	217	134	86	39	35	12
24	15	188	32	145	370	646	210	134	86	38	33	12
25	15	216	38	200	565	741	201	134	86	36	31	12
26	16	229	35	255	734	1,002	195	137	84	35	30	12
27	16	164	56	274	904	2,750	187	134	84	35	29	12
28	16	238	115	314	840	4,760	176	126	82	34	28	12
29	16	229	113	294	772	4,580	173	123	82	33	27	12
30	16	204	108	416	764	4,180	165	118	78	32		12
31	16	174		423	802		159		80	31		12
Total	421	2,425	4,056	5,277	12,739	39,724	21,848	4,150	2,902	1,567	1,590	495
Mean	14.0	78.2	135	170	411	1,324	705	138	93.6	50.5	54.8	16.0
Max.	16	238	320	423	904	4,760	3,560	153	118	84	94	25
Min.	12	16	32	67	145	625	159	118	78	31	27	12
Runoff - mcm.	36.374	209.520	350.438	455.933	1,100.650	3,432.154	1,887.667	358.560	250.733	135.389	137.376	42.768

WATER YEAR 1959 : Max. 4,760 Min. 12 Mean 265 Annual Runoff 8,397.562 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 28	12.00	109.67	4,900				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Taeng River at Mae Taeng Bridge, Chiang Mai (P.4A)

Location: Lat 19°- 07' - 20" N, Long 98°- 56' - 51" E, on left bank 5 meters downstream from bridge on highway, Chiang Mai - Fang, Amphoe Mae Taeng, Chiang Mai.

Drainage Area: 1,902 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +333.75 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.3

Location: On left bank at the bridge.
Elevation: +339.379 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: 1955 - 61
Rated by Float: -
Rated by Current Meter: 1955 - 61

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

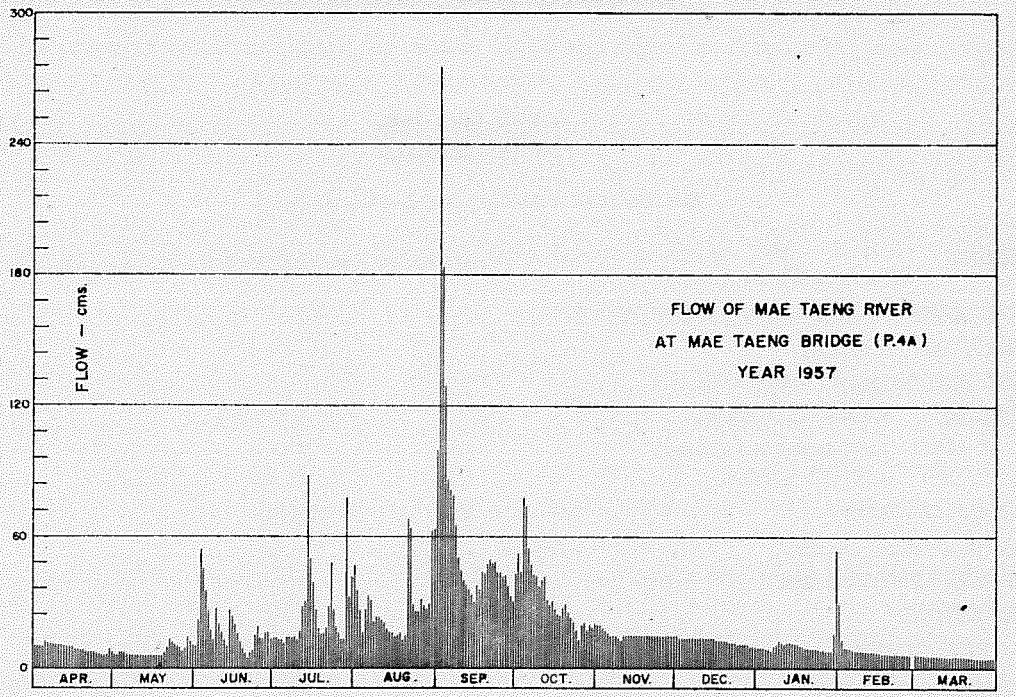
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1957. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958.

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	334.34	334.20	334.33	334.48	335.12	335.78	335.27	334.88	334.74	334.55	335.04	334.39
2	.34	.19	.66	.47	334.92	337.20	.37	.88	.73	.54	334.70	.38
3	.33	.26	335.23	.46	.76	336.51	.27	.84	.73	.54	.54	.38
4	.33	.22	.10	.44	.54	.07	.61	.81	.73	.52	.52	.38
5	.39	.21	334.92	.40	.78	335.80	.58	.77	.72	.50	.51	.37
6	334.38	334.21	334.74	334.48	334.88	335.63	335.40	334.76	334.72	334.49	334.50	334.37
7	.37	.20	.56	.47	.84	.57	.32	.75	.72	.56	.49	.37
8	.36	.19	.45	.47	.64	.50	.25	.74	.72	.61	.48	.36
9	.36	.19	.78	.47	.68	.41	.24	.71	.72	.67	.48	.36
10	.35	.18	.62	.45	.69	.28	.18	.68	.72	.65	.47	.36
11	334.34	334.19	334.52	334.56	334.66	335.20	335.21	334.76	334.71	334.62	334.46	334.35
12	.34	.19	.44	.79	.64	.18	.24	.75	.71	.65	.46	.35
13	.33	.19	.36	.84	.57	.14	.09	.75	.71	.65	.45	.35
14	.32	.18	.76	335.68	.54	.09	.05	.75	.70	.63	.45	.34
15	.31	.18	.72	.17	.54	.07	.07	.75	.70	.61	.44	.34
16	334.30	334.18	334.62	334.99	334.49	335.19	335.01	334.75	334.69	334.59	334.44	334.34
17	.29	.17	.52	.77	.51	.16	334.95	.76	.69	.57	.43	.33
18	.28	.17	.42	.58	.52	.26	.96	.76	.68	.55	.43	.33
19	.27	.18	.32	.50	.44	.27	335.02	.75	.68	.54	.42	.33
20	.26	.22	.22	.52	.51	.32	.05	.76	.67	.53	.42	.32
21	334.25	334.34	334.12	334.60	335.42	335.34	334.98	334.76	334.66	334.52	334.42	334.32
22	.24	.44	.26	.80	.37	.31	.94	.76	.66	.51	.41	.32
23	.23	.38	.30	335.14	334.83	.33	.90	.76	.64	.50	.41	.31
24	.22	.36	.50	334.77	.76	.27	.81	.75	.63	.50	.41	.31
25	.21	.34	.61	.61	.75	.26	.68	.75	.62	.49	.40	.31
26	334.20	334.32	334.46	334.54	334.87	335.24	334.88	334.75	334.61	334.49	334.40	334.30
27	.19	.25	.49	.46	.80	.25	.89	.74	.60	.48	.39	.30
28	.19	.32	.54	.45	.77	.19	.85	.74	.59	.48	.39	.30
29	.27	.48	.52	335.54	.82	.11	.87	.74	.58	.48		.29
30	.23	.43	.46	334.89	335.35	.08	.86	.74	.57	.78		.29
31		.37		335.04	.39		.87		.56	335.39		.32
Mean	334.29	334.25	334.55	334.70	334.79	335.43	335.09	334.76	334.67	334.59	334.48	334.34
Max.	334.39	334.48	335.23	335.68	335.43	337.35	335.61	334.88	334.74	335.39	335.04	334.39
Min.	334.19	334.17	334.12	334.40	334.44	335.07	334.68	334.68	334.56	334.48	334.39	334.29

WATER YEAR 1957 : Max. 337.35 m. Min. 334.12 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	9.40	5.60	9.10	14	47	100	44	20	15	9.50	29	6.20
2	9.40	5.38	22	14	35	272	52	20	14	9.30	14	6.00
3	9.10	7.16	54	13	26	182	44	18	14	9.30	9.30	6.00
4	9.10	6.12	45	13	16	128	78	17	14	8.90	8.90	6.00
5	11	5.86	35	11	27	99	74	16	14	8.50	8.70	5.80
6	11	5.86	26	14	33	85	55	15	14	8.20	8.50	5.80
7	10	5.60	17	14	31	79	48	15	14	9.80	8.20	5.80
8	10	5.38	13	14	21	65	43	15	14	11	8.00	5.60
9	10	5.38	27	14	23	56	42	14	14	13	8.00	5.60
10	9.70	5.16	20	13	23	46	38	13	14	12	7.80	5.60
11	9.40	5.38	16	17	22	39	40	15	14	11	7.60	5.40
12	9.40	5.38	13	28	21	38	42	15	14	12	7.60	5.40
13	9.10	5.38	10	31	18	35	32	15	14	12	7.40	5.40
14	8.80	5.16	26	88	16	32	29	15	14	11	7.40	5.20
15	8.50	5.16	24	50	16	31	31	15	14	11	7.20	5.20
16	8.20	5.16	20	39	14	38	27	15	13	11	7.20	5.20
17	7.94	4.94	16	27	15	36	24	15	13	10	7.00	5.00
18	7.68	4.94	12	18	16	44	24	15	13	10	7.00	5.00
19	7.42	5.16	8.80	15	13	44	28	15	13	9.30	6.80	5.00
20	7.16	6.12	6.12	16	15	48	29	15	13	9.10	6.80	4.80
21	6.90	9.40	3.84	19	68	50	25	15	12	8.90	6.80	4.80
22	6.64	13	7.16	28	64	48	23	15	12	8.70	6.60	4.80
23	6.38	11	8.20	48	30	49	21	15	12	8.50	6.60	4.60
24	6.12	10	15	27	26	44	17	15	11	8.50	6.60	4.60
25	5.86	9.40	19	19	26	44	13	15	11	8.20	6.40	4.60
26	5.60	8.80	13	16	32	42	20	15	11	8.20	6.40	4.40
27	5.38	6.90	14	13	28	43	21	15	11	8.00	6.20	4.40
28	5.38	8.80	16	13	27	38	19	15	11	8.00	6.20	4.40
29	7.42	14	16	77	29	33	20	15	10	8.00		4.20
30	6.38	12	13	33	64	31	19	15	10	16		4.20
31		10		42	65		20		10	54		4.80
Total	244.36	223.58	545.22	798	907	1,919	1,042	463	397	350.90	234.20	159.80
Mean	8.14	7.21	18.2	25.7	29.2	64.0	33.6	15.4	12.8	11.3	8.36	5.15
Max.	11	14	54	88	68	272	78	20	15	54	29	6.20
Min.	5.38	4.94	3.84	11	13	31	13	13	10	8.00	6.20	4.20
Runoff - MCM.	21.113	19.317	47.107	68.947	78.365	165.802	90.029	40.003	34.301	30.318	20.235	13.807

WATER YEAR 1957 : Max. 272 Min. 3.84 Mean 19.9 Annual Runoff 629.343 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 2	15.00	337.54	320				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Taeng River at Mae Taeng Bridge, Chiang Mai (P.4A)

Location: Lat 19°- 07' - 20" N, Long 98°- 56' - 51" E, on left bank 5 meters downstream from bridge on highway, Chiang Mai - Fang, Amphoe Mae Taeng, Chiang Mai.

Drainage Area: 1,902 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +333.75 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.3

Location: On left bank at the bridge.
Elevation: +339.379 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: 1955 - 61
Rated by Float: -
Rated by Current Meter: 1955 - 61

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

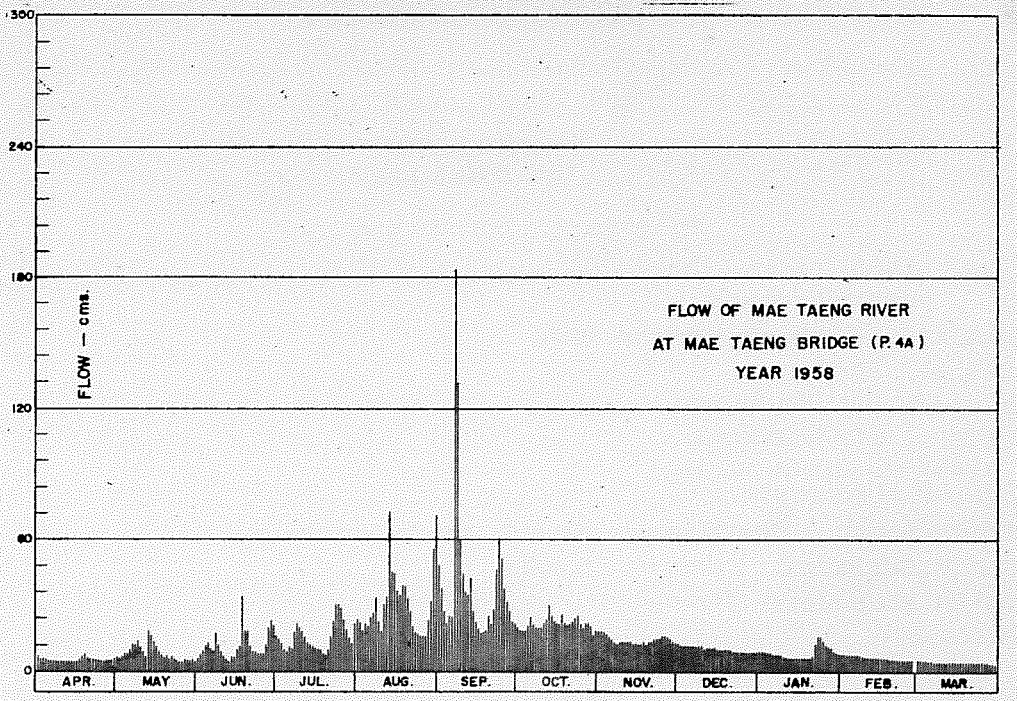
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1958. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	334.38	334.31	334.29	334.70	334.87	335.20	334.86	334.84	334.70	334.54	334.46	334.31
2	.32	.30	.36	.66	.84	.03	.83	.85	.69	.53	.46	.31
3	.31	.35	.43	.58	.76	334.88	.82	.83	.69	.53	.45	.30
4	.30	.38	.50	.50	.83	.78	.83	.79	.69	.52	.45	.30
5	.29	.40	.57	.46	.81	.91	.84	.76	.68	.51	.44	.29
6	334.28	334.49	334.48	334.52	334.91	334.91	334.97	334.73	334.68	334.50	334.44	334.29
7	.27	.58	.42	.51	.97	336.13	.90	.70	.68	.49	.43	.28
8	.27	.57	.69	.76	335.11	.09	.86	.69	.67	.48	.42	.28
9	.27	.62	.54	.83	334.89	335.48	.86	.71	.67	.46	.41	.27
10	.26	.54	.46	.80	.76	.31	.86	.70	.67	.44	.40	.27
11	334.26	334.46	334.37	334.75	335.06	335.18	334.85	334.69	334.62	334.44	334.39	334.26
12	.26	.38	.50	.68	.12	.11	.86	.68	.64	.43	.38	.26
13	.25	.78	.25	.61	.63	.25	335.00	.67	.64	.43	.38	.25
14	.25	.70	.34	.57	.29	.07	334.92	.66	.63	.43	.37	.25
15	.25	.62	.33	.54	.30	334.98	.87	.64	.61	.42	.37	.24
16	334.26	334.54	334.50	334.52	335.17	334.93	334.84	334.64	334.59	334.42	334.36	334.24
17	.29	.48	.56	.49	.13	.89	.85	.65	.59	.41	.36	.24
18	.36	.43	335.12	.47	.18	.86	.92	.67	.59	.40	.36	.25
19	.41	.35	334.82	.40	.17	.84	.85	.64	.58	.40	.35	.25
20	.32	.39	.78	.38	.08	.96	.82	.66	.57	.39	.35	.25
21	334.28	334.33	334.54	334.46	334.98	334.86	334.84	334.66	334.57	334.44	334.35	334.24
22	.27	.35	.47	.64	.82	.97	.86	.67	.56	.64	.34	.24
23	.26	.30	.47	.83	.76	335.27	.91	.69	.56	.74	.34	.24
24	.25	.27	.44	.98	.73	.46	.93	.69	.55	.73	.33	.23
25	.25	.25	.44	.98	.70	.32	.84	.70	.55	.67	.33	.23
26	334.24	334.23	334.43	334.96	334.68	335.16	334.80	334.70	334.54	334.61	334.33	334.22
27	.24	.29	.46	.86	.66	.08	.84	.70	.54	.58	.32	.22
28	.24	.25	.82	.76	.81	334.99	.86	.69	.54	.55	.32	.21
29	.25	.23	.89	.65	335.01	.92	.86	.69	.54	.49		.21
30	.29	.26	.85	.61	.35	.89	.79	.69	.53	.48		.21
31		.24		.84	.51		.85		.52	.46		.21
Mean	334.28	334.41	334.53	334.65	335.00	335.12	334.86	334.70	334.61	334.50	334.38	334.25
Max.	334.41	334.78	335.12	334.98	335.63	336.13	335.00	334.85	334.70	334.74	334.46	334.31
Min.	334.24	334.23	334.25	334.38	334.66	334.78	334.79	334.64	334.52	334.39	334.32	334.21

WATER YEAR 1958 : Max. 336.12 m. Min. 334.21 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.10	6.30	5.70	16	24	49	21	19	13	9.20	8.20	5.10
2	5.70	5.90	7.30	15	22	38	19	19	12	9.20	8.20	5.10
3	5.30	7.10	9.00	13	19	28	19	18	12	9.20	8.00	4.90
4	4.90	7.50	11	10	22	22	19	17	12	8.70	8.00	4.90
5	4.80	8.00	13	8.70	21	26	20	16	12	8.70	7.70	4.80
6	4.60	10	10	11	25	25	25	15	12	8.20	7.70	4.80
7	4.60	13	8.70	10	27	182	22	14	12	7.70	7.50	4.60
8	4.30	12	17	18	34	142	20	13	12	7.70	7.30	4.60
9	4.20	14	12	22	23	60	20	14	12	7.50	7.10	4.50
10	4.00	11	9.50	20	18	48	20	14	12	6.70	6.90	4.50
11	4.20	9.20	7.10	18	31	40	22	14	10	6.70	6.70	4.30
12	4.20	7.10	5.30	15	34	35	23	14	11	6.30	6.50	4.30
13	4.20	19	4.60	13	73	43	31	14	11	6.10	6.50	4.20
14	4.20	16	6.30	12	45	28	27	13	11	6.10	6.30	4.20
15	4.20	14	6.30	11	45	23	23	13	11	6.30	6.30	4.00
16	4.50	11	10	11	37	20	22	13	10	6.30	6.10	4.00
17	4.10	9.20	11	10	35	17	22	13	10	6.30	6.10	4.00
18	6.50	7.70	34	10	39	18	26	14	10	6.30	6.10	4.20
19	7.70	6.10	19	8.20	39	19	22	13	10	6.30	5.90	4.20
20	5.90	7.10	19	7.50	34	26	21	14	10	6.30	5.90	4.20
21	5.10	5.70	11	9.80	28	22	22	14	10	7.30	5.90	4.00
22	4.90	6.30	8.70	16	21	28	23	15	9.50	13	5.70	4.00
23	4.90	5.10	8.70	23	18	47	25	15	9.50	16	5.70	4.00
24	4.80	4.80	8.00	31	17	61	26	15	9.20	16	5.50	3.90
25	4.80	4.60	8.00	31	16	52	22	16	9.20	14	5.50	3.90
26	4.60	4.50	7.70	29	16	40	20	16	8.70	12	5.50	3.70
27	4.80	5.70	8.50	24	16	34	22	16	8.70	11	5.30	3.70
28	4.80	4.80	20	19	22	28	22	15	8.70	11	5.30	3.50
29	5.10	4.50	23	15	32	23	21	14	8.70	9.00		3.50
30	5.90	5.10	21	13	56	22	17	13	8.70	8.70		3.50
31		4.60		22	71		19		8.70	8.20		3.50
Total	149.90	256.90	350.40	492.20	960	1,246	683	443	324.60	272	183.40	130.60
Mean	5.00	8.29	11.7	15.9	31.0	41.5	22.0	14.8	10.5	8.77	6.55	4.21
Max.	7.10	19	34	31	73	182	31	19	13	16	8.20	5.10
Min.	4.00	4.50	4.60	7.50	16	17	17	13	8.70	6.10	5.30	3.50
Runoff - mcm.	12.951	22.196	30.274	42.526	82.944	107.654	59.011	38.275	28.045	23.501	15.846	11.284

WATER YEAR 1958 : Max. 182 Min. 3.50 Mean 15.0 Annual Runoff 474.509 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 7	18.00	336.84	305				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Taeng River at Mae Taeng Bridge, Chiang Mai (P.4A)

Location: Lat 19°– 07' – 20" N, Long 98°– 56' – 51" E, on left bank 5 meters downstream from bridge on highway, Chiang Mai – Fang, Amphoe Mae Taeng, Chiang Mai.

Drainage Area: 1,902 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +333.75 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D. No.3

Location: On left bank at the bridge.
Elevation: +339.379 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: 1955 – 61
Rated by Float: –
Rated by Current Meter: 1955 – 61

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

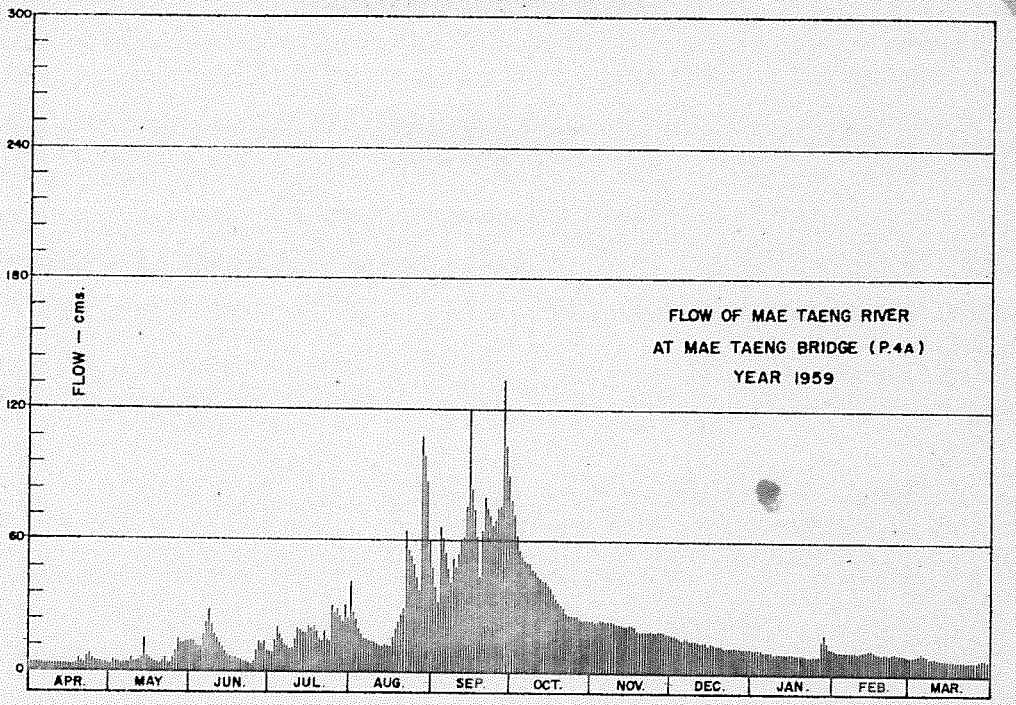
General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1959. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	334.20	334.18	334.64	334.44	335.21	335.30	335.74	334.87	334.75	334.55	334.54	334.41
2	.20	.24	.66	.42	334.96	.13	.67	.88	.74	.54	.53	.42
3	.20	.23	.58	.60	.92	.02	.58	.89	.73	.54	.52	.42
4	.20	.22	.52	.79	.84	.55	.48	.88	.72	.54	.51	.44
5	.19	.21	.60	.69	.73	.45	.43	.87	.71	.53	.50	.48
6	334.19	334.20	334.76	334.61	334.67	335.37	335.40	334.86	334.70	334.53	334.50	334.43
7	.19	.22	.92	.53	.65	.29	.38	.86	.70	.53	.49	.41
8	.19	.20	335.01	.49	.63	.20	.36	.85	.69	.53	.49	.40
9	.19	.33	334.90	.47	.60	.34	.34	.85	.68	.52	.48	.39
10	.18	.25	.74	.51	.58	.29	.32	.84	.68	.52	.47	.39
11	334.18	334.26	334.69	334.60	334.55	335.37	335.31	334.84	334.67	334.52	334.48	334.37
12	.18	.28	.62	.77	.53	.45	.29	.84	.67	.51	.49	.36
13	.18	.35	.55	.73	.51	.53	.27	.83	.66	.51	.50	.35
14	.18	.69	.46	.67	.54	.61	.25	.83	.66	.51	.50	.35
15	.18	.35	.40	.67	.52	336.10	.23	.82	.66	.50	.51	.34
16	334.17	334.27	334.37	334.76	334.50	335.79	335.20	334.81	334.65	334.50	334.49	334.34
17	.17	.25	.35	.74	.66	.74	.16	.81	.65	.50	.47	.34
18	.20	.23	.32	.76	.76	.57	.12	.80	.63	.49	.46	.33
19	.27	.22	.30	.72	.84	.30	.07	.80	.63	.49	.46	.33
20	.22	.20	.29	.67	.92	.59	.03	.79	.62	.49	.45	.33
21	334.21	334.26	334.26	334.62	335.00	335.78	335.01	334.79	334.60	334.48	334.45	334.33
22	.32	.32	.24	.76	.58	.74	334.99	.78	.60	.48	.44	.32
23	.39	.22	.22	.66	.48	.63	.97	.78	.59	.48	.45	.32
24	.30	.20	.20	.62	.45	.45	.96	.77	.58	.49	.46	.32
25	.24	.34	.27	335.00	.41	.58	.94	.77	.58	.48	.45	.33
26	334.23	334.50	334.45	334.94	335.28	335.66	334.93	334.77	334.57	334.47	334.44	334.33
27	.22	.68	.62	.97	.14	.82	.91	.76	.57	.72	.43	.35
28	.21	.64	.58	.92	336.02	336.18	.90	.76	.56	.81	.43	.36
29	.20	.68	.58	.86	335.95	335.98	.89	.75	.56	.69	.41	.35
30	.19	.66	.45	335.00	.80	.83	.88	.75	.55	.57		.35
31		.65		334.89	.45		.87		.55	.55		
Mean	334.21	334.34	334.52	334.70	334.99	335.55	335.19	334.82	334.64	334.53	334.48	334.37
Max.	334.39	334.69	335.01	335.00	336.02	336.18	335.74	334.89	334.75	334.81	334.54	334.48
Min.	334.17	334.18	334.20	334.42	334.50	335.02	334.87	334.75	334.55	334.47	334.41	334.32

WATER YEAR 1959 : Max. 336.18 m. Min. 334.17 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.60	3.10	14	9.20	41	48	81	24	17	11	11	8.00
2	3.60	4.90	14	9.00	27	39	74	23	17	11	10	8.20
3	3.60	4.50	12	14	24	32	65	23	17	11	10	8.20
4	3.60	4.20	11	21	20	67	58	24	16	11	10	8.70
5	3.60	3.80	12	17	17	62	54	24	15	10	10	9.70
6	3.30	3.60	17	14	15	55	51	23	16	10	10	8.50
7	3.30	4.00	23	12	15	48	50	23	16	10	9.70	8.00
8	3.30	3.80	28	11	14	41	50	23	15	9.70	9.70	7.70
9	3.30	6.20	22	10	14	52	47	23	15	9.20	9.70	7.30
10	3.00	4.70	17	11	14	48	46	22	15	9.20	9.50	7.30
11	3.00	4.70	15	14	13	54	44	22	15	9.20	9.70	6.80
12	3.00	4.90	13	20	12	61	43	22	14	9.00	10	6.60
13	3.00	6.20	11	19	12	68	42	21	14	9.00	10	6.40
14	3.00	15	9.00	18	13	76	42	21	14	9.00	11	6.40
15	3.00	6.80	7.50	18	12	121	40	21	13	9.00	11	6.20
16	2.70	5.70	7.10	21	11	84	39	21	14	9.00	10	6.20
17	2.70	4.90	6.80	20	16	75	37	21	14	9.00	9.50	6.20
18	3.60	4.20	6.20	21	20	62	34	19	13	8.50	9.20	5.70
19	5.50	4.00	5.70	19	23	44	32	19	13	8.50	9.20	5.70
20	4.20	3.40	5.50	15	26	65	31	19	13	8.50	9.00	5.70
21	3.80	4.90	4.70	14	29	80	30	19	12	8.00	9.00	5.70
22	6.40	6.40	4.20	19	65	75	27	19	12	8.00	8.70	5.50
23	8.00	4.00	3.80	15	56	72	26	19	12	7.70	9.00	5.50
24	6.00	4.20	3.40	14	54	67	26	19	12	8.20	9.20	5.50
25	4.50	6.80	4.50	31	50	70	26	19	12	8.20	9.00	5.70
26	4.40	10	9.20	27	45	75	26	19	12	8.20	8.70	5.70
27	4.20	15	14	29	38	88	25	19	12	15	8.50	6.40
28	4.00	13	13	26	108	134	24	19	11	18	8.50	6.60
29	3.60	13	14	23	99	108	24	18	11	14	8.00	6.60
30	3.30	14	9.50	31	87	90	24	18	11	11		6.00
31		14		25	62		24		11	11		5.70
Total	115.80	207.90	337.10	567.20	1,052	2,061	1,242	626	424	308.10	276.80	208.40
Mean	3.86	6.71	11.2	18.3	33.9	68.7	40.1	20.9	13.7	9.94	9.54	6.72
Max.	8.00	15	28	31	108	134	81	24	17	18	11	9.70
Min.	2.70	3.10	3.40	9.00	11	32	24	18	11	7.70	8.00	5.50
Runoff — MCM.	10.005	17.962	29.125	49.006	90.893	178.070	107.309	54.086	36.634	26.620	23.915	18.006

WATER YEAR 1959 : Max. 134 Min. 2.70 Mean 20.2 Annual Runoff 641.632 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 15	12.00	336.34	150				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Taeng River at Huai San, Chiang Mai (P.48)

Location: Lat 19°- 10' - 20" N, Long 98°- 55' - 05" E, on left bank at Ban Pa Fat 1 kilometer upstream from the district office of Amphoe Mae Taeng and 7.5 kilometers downstream from Kaeng Kut, Chiang Mai.

Drainage Area: 1,833 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +343.84 m.(M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 16 - time daily readings from 06.00 - 21.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 16 readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:

Period of Rating: 1957 to date.
Rated by Float: -
Rated by Current Meter: 1957 to date.

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1957. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

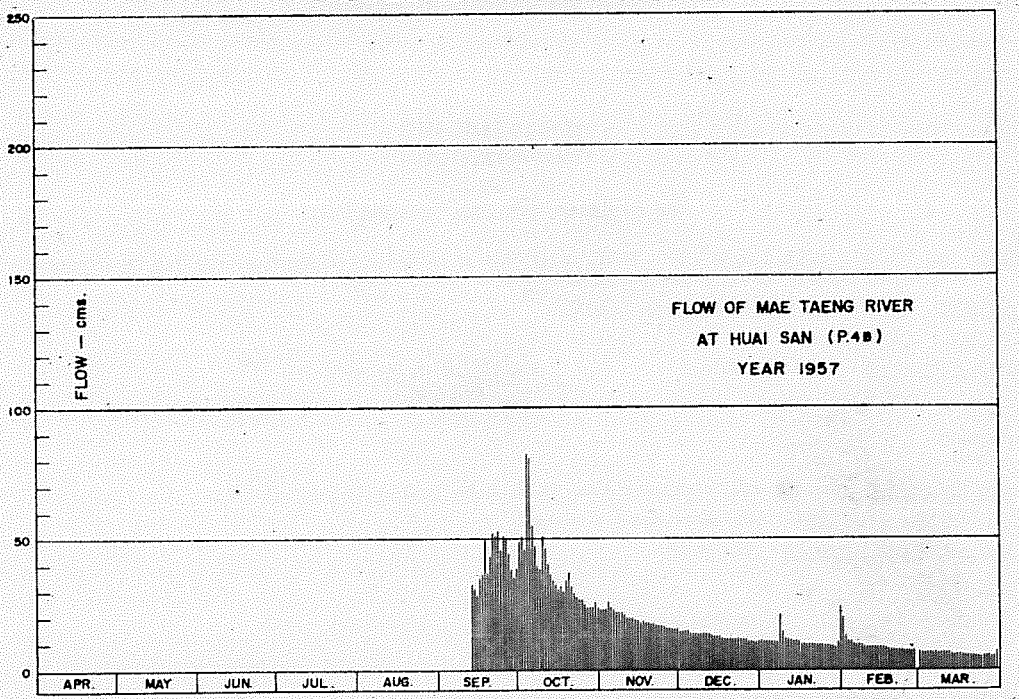
Remarks: Gage height record began on Sept.13.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1							345.27	344.86	344.69	344.59	344.79	344.45
2							.30	.85	.68	.58	.63	.44
3							.23	.85	.68	.58	.58	.44
4							.64	.90	.68	.58	.57	.44
5							.52	.88	.67	.58	.55	.44
6							345.35	344.85	344.67	344.58	344.54	344.44
7							.24	.84	.66	.58	.54	.44
8							.21	.83	.66	.81	.53	.43
9							.18	.83	.66	.68	.52	.44
10							.30	.81	.66	.61	.52	.45
11							345.22	344.80	344.65	344.60	344.52	344.44
12							.14	.79	.65	.59	.52	.43
13						345.02	.08	.79	.64	.58	.52	.42
14						344.99	.05	.78	.63	.57	.52	.41
15						.96	.01	.77	.63	.57	.52	.41
16						345.06	345.00	344.76	344.63	344.56	344.51	344.41
17						.10	344.99	.78	.62	.56	.50	.40
18						.28	.98	.76	.62	.55	.49	.40
19						.10	345.06	.76	.61	.55	.49	.39
20						.21	.09	.76	.61	.55	.48	.39
21						345.31	345.01	344.75	344.61	344.55	344.48	344.39
22						.29	344.96	.74	.60	.55	.48	.39
23						.32	.95	.74	.60	.54	.47	.38
24						.23	.92	.73	.60	.54	.47	.38
25						.30	.93	.73	.60	.54	.47	.39
26						345.28	344.89	344.72	344.60	344.53	344.46	344.39
27						.20	.88	.72	.59	.53	.46	.39
28						.11	.87	.71	.59	.53	.46	.38
29						.06	.88	.70	.59	.52		.39
30						.12	.91	.70	.58	.58		.45
31							.88		.58	.87		.47
Mean							345.09	344.78	344.63	344.58	344.52	344.42
Max.							345.64	344.90	344.69	344.87	344.79	344.47
Min.							344.88	344.70	344.58	344.52	344.46	344.38

WATER YEAR 1957 : Max. - m. Min. - m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1							49	23	15	11	20	6.80
2							51	23	15	11	13	6.50
3							46	23	15	11	11	6.50
4							82	26	15	11	11	6.50
5							80	24	14	11	9.90	6.50
6							55	23	14	11	9.60	6.50
7							47	22	14	11	9.60	6.50
8							45	22	14	21	9.20	6.20
9							43	22	14	15	8.90	6.50
10							51	21	14	12	8.90	6.80
11							46	20	14	12	8.90	6.50
12							40	20	14	11	8.90	6.20
13						32	36	20	13	11	8.90	6.00
14						31	34	19	13	11	8.90	5.60
15						29	32	19	13	11	8.90	5.60
16						35	31	18	13	10	8.50	5.60
17						37	32	19	12	10	8.20	5.40
18						50	30	18	12	9.90	7.90	5.40
19						37	35	18	12	9.90	7.90	5.20
20						45	37	18	12	9.90	7.60	5.20
21						52	32	18	12	9.90	7.60	5.20
22						51	29	17	12	9.90	7.60	5.20
23						53	28	17	12	9.60	7.40	4.90
24						46	27	17	12	9.60	7.40	4.90
25						51	27	17	12	9.60	7.40	5.20
26						50	25	16	12	9.20	7.10	5.20
27						44	24	16	11	9.20	7.10	5.20
28						38	24	16	11	9.20	7.10	4.90
29						35	24	16	11	8.90		5.20
30						39	26	16	11	11		6.80
31							24	16	11	24		7.40
Total							1,192	600	399	350.80	254.40	182.10
Mean							38.4	19.3	12.8	11.3	9.08	5.78
Max.							82	26	15	24	20	7.40
Min.							24	16	11	8.90	7.10	4.90
Runoff - MCM.							102.989	51.840	34.474	30.309	21.980	15.733

WATER YEAR 1957 : Max. – Min. – Mean – Annual Runoff – mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Taeng River at Huai San, Chiang Mai (P.4B)

Location: Lat 19°– 10' – 20" N, Long 98°– 55' – 05" E, on left bank at Ban Pa Fat 1 kilometer upstream from the district office of Amphoe Mae Taeng, and 7.5 kilometers downstream from Kaeng Kut, Chiang Mai.

Drainage Area: 1,833 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +343.84 m.(M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 6 – time daily readings at 06.00, 09.00, 12.00, 15.00, 18.00 and 21.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 6 readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:

Period of Rating: 1957 to date.
Rated by Float: –
Rated by Current Meter: 1957 to date.

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

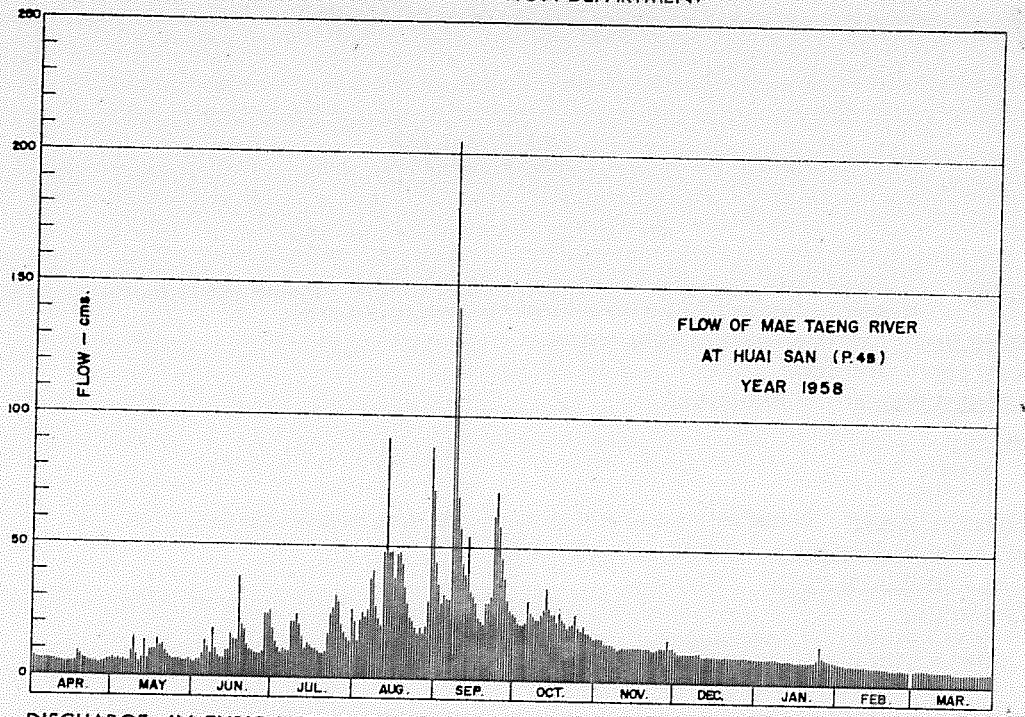
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1958.
No upstream state diversions except those built by the local residents.
No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	344.45	344.42	344.36	344.80	344.91	345.23	344.87	344.75	344.68	344.62	344.58	344.52
2	.42	.38	.41	.68	.71	.09	.84	.74	.67	.62	.58	.54
3	.39	.41	.43	.61	.91	345.00	.82	.74	.66	.62	.57	.54
4	.38	.37	.51	.57	.96	.06	.81	.73	.66	.62	.57	.54
5	.37	.40	.66	.63	.91	.03	.84	.73	.66	.62	.57	.54
6	344.36	344.37	344.63	344.60	344.97	345.02	344.98	344.73	344.66	344.61	344.57	344.53
7	.36	.37	.55	.60	345.14	346.43	.89	.73	.66	.61	.57	.52
8	.36	.52	.84	.89	.19	.12	.88	.72	.66	.61	.57	.51
9	.36	.66	.59	.89	344.99	345.53	.86	.72	.66	.61	.57	.51
10	.35	.48	.49	.95	.90	.40	.87	.72	.66	.60	.56	.51
11	344.35	344.40	344.46	344.86	344.86	345.23	344.91	344.72	344.65	344.60	344.56	344.51
12	.35	.44	.44	.73	345.30	.19	.94	.71	.65	.60	.56	.51
13	.34	.70	.58	.65	.77	.24	345.00	.71	.65	.60	.56	.50
14	.34	.48	.60	.69	.32	.03	344.92	.71	.65	.60	.55	.50
15	.34	.56	.71	.66	.31	344.96	.90	.70	.65	.59	.55	.50
16	344.36	344.55	344.68	344.62	345.18	344.91	344.87	344.70	344.64	344.59	344.55	344.50
17	.38	.58	.70	.61	.29	.88	.87	.70	.64	.59	.55	.50
18	.51	.58	345.14	.58	.30	.86	.93	.70	.64	.59	.54	.50
19	.46	.59	344.85	.54	.26	.85	.87	.69	.64	.59	.54	.50
20	.41	.62	.80	.54	.11	.96	.84	.69	.64	.59	.54	.50
21	344.38	344.51	344.64	344.58	345.00	344.97	344.82	344.69	344.64	344.59	344.54	344.50
22	.37	.45	.59	.80	344.92	345.00	.84	.69	.64	.59	.54	.50
23	.36	.41	.57	.99	.86	.34	.86	.69	.63	.59	.54	.49
24	.35	.39	.56	345.02	.81	.48	.91	.69	.63	.64	.54	.49
25	.34	.39	.55	.09	.78	.30	.82	.69	.63	.73	.54	.49
26	344.33	344.39	344.53	345.05	344.84	345.13	344.79	344.69	344.63	344.64	344.53	344.49
27	.33	.38	.60	344.88	.79	.07	.87	.70	.63	.61	.53	.49
28	.35	.37	.95	.77	.86	344.98	.81	.76	.63	.61	.53	.48
29	.37	.38	.98	.70	345.02	.92	.79	.70	.62	.60		.48
30	.40	.40	.98	.71	.73	.89	.77	.69	.62	.59		.48
31		.37		.99	.56		.76		.62	.58		.48
Mean	344.37	344.46	344.65	344.75	345.08	345.17	344.86	344.71	344.64	344.61	344.55	344.50
Max.	344.51	344.70	345.14	345.09	345.77	346.43	345.00	344.76	344.68	344.73	344.58	344.54
Min.	344.33	344.37	344.36	344.54	344.71	344.85	344.76	344.69	344.62	344.58	344.53	344.48

WATER YEAR 1958 : Max. 346.84 m. Min. 344.33 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep:	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	6.70	6.50	4.80	18	22	44	24	16	12	9.30	7.80	5.70
2	6.00	5.70	6.00	13	14	36	22	16	11	9.30	7.80	6.00
3	5.50	6.20	6.20	11	22	29	21	16	11	9.30	7.50	6.00
4	5.50	5.20	8.40	9.60	25	32	21	14	11	9.30	7.50	6.00
5	5.20	6.00	13	11	23	30	22	14	11	9.30	7.20	6.00
6	5.20	5.20	11	10	26	29	30	14	11	9.30	7.20	6.00
7	5.20	5.00	8.70	10	38	204	25	14	11	9.30	7.20	5.50
8	5.20	9.00	18	21	41	139	24	13	11	9.30	7.20	5.50
9	5.20	14	9.90	21	27	70	23	12	11	9.00	7.00	5.20
10	4.80	7.80	7.20	24	22	58	23	13	11	9.00	7.20	5.20
11	4.80	5.00	6.70	20	20	45	25	13	10	8.70	7.00	5.20
12	4.80	6.70	6.50	15	48	42	27	13	10	8.70	7.00	5.50
13	4.50	13	9.60	11	91	54	35	13	10	8.70	6.70	5.20
14	4.50	6.50	10	13	48	33	26	13	10	8.70	6.50	5.00
15	4.50	9.30	16	12	48	31	25	13	10	8.40	6.50	5.00
16	4.60	9.60	14	11	38	29	25	13	10	8.10	6.50	4.80
17	4.80	10	14	11	47	23	22	13	10	8.10	6.50	4.60
18	8.10	14	38	9.90	48	22	26	13	10	8.10	6.20	4.60
19	7.20	11	20	9.00	44	21	23	13	10	8.10	6.20	4.60
20	5.70	12	18	9.00	35	29	22	13	10	8.10	6.20	4.60
21	5.50	8.70	12	9.90	29	29	20	13	10	8.40	6.00	4.60
22	5.20	7.50	10	17	23	32	21	12	10	8.40	6.00	4.60
23	5.00	6.50	9.60	24	22	62	22	12	9.90	8.10	6.00	4.60
24	4.60	5.70	9.00	27	19	71	25	13	9.90	10	6.00	4.60
25	4.50	6.00	8.70	31	17	55	20	13	9.90	15	6.00	4.50
26	4.30	6.00	8.70	29	19	42	19	13	9.90	10	5.70	4.50
27	4.50	5.70	9.90	20	17	38	21	13	9.60	9.00	5.70	4.60
28	5.00	5.50	24	17	21	30	18	16	9.60	9.00	5.70	4.50
29	5.50	5.50	24	15	30	26	18	13	9.60	8.40		4.50
30	6.00	6.00	25	14	88	25	17	13	9.60	8.40		4.30
31		5.20		26	68		16		9.60	8.10		4.30
Total	158.10	236.00	386.90	499.40	1,080	1,410	708	403	318.60	278.90	186.00	155.80
Mean	5.27	7.61	13.0	16.1	34.8	47.0	22.8	13.4	10.3	9.00	6.64	5.02
Max.	8.10	14	38	31	91	204	35	16	12	15	7.80	6.00
Min.	4.30	5.00	4.80	9.00	14	21	16	12	9.60	8.10	5.70	4.30
Runoff - mcm.	13.660	20.390	33.428	43.148	93.312	121.824	61.171	34.819	27.527	24.097	16.074	13.461

WATER YEAR 1958 : Max. 204 Min. 4.30 Mean 16.0 Annual Runoff 502.908 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 7	18.00	347.37	355				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Taeng River at Huai San, Chiang Mai (P.4B)

Location: Lat 19°– 20' – 10" N, Long 98°– 55' – 05" E, on left bank at Ban Pa Fat 1 kilometer upstream from the district office of Amphoe Mae Taeng and 7.5 kilometers downstream from Kaeng Kut, Chiang Mai.

Drainage Area: 1,833 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 343.84 m.(M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 6 – time daily readings at 06.00, 09.00, 12.00, 15.00, 18.00 and 21.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 6 readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:

Period of Rating: 1957 to date.
Rated by Float: –
Rated by Current Meter: 1957 to date.

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

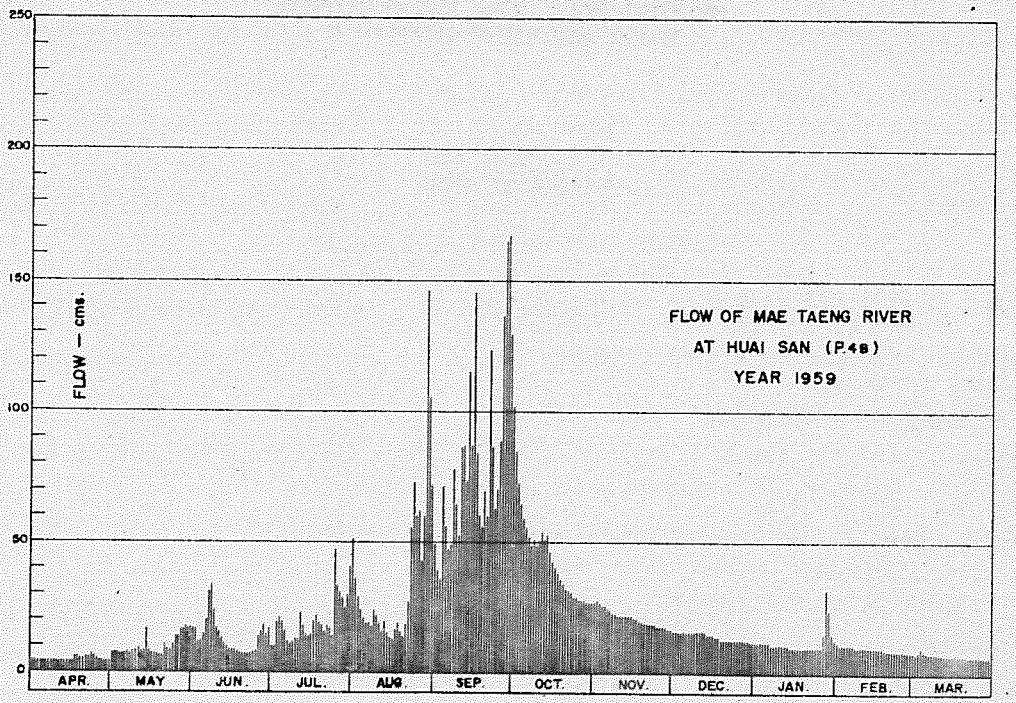
General Description: Records good for Jul.29 – Mar.31, and fair for Apr.1 – Jul.28. Stage – discharge relation used is defined by discharge measurements during 1959. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	344.48	344.44	344.71	344.55	345.31	345.30	345.84	344.82	344.60	344.50	344.49	344.39
2	.48	.45	.71	.56	.09	.15	.70	.85	.60	.50	.47	.38
3	.47	.45	.60	.76	344.96	.09	.53	.83	.59	.50	.47	.39
4	.47	.44	.59	.80	.87	.54	.42	.81	.59	.49	.47	.45
5	.47	.44	.64	.79	.81	.40	.34	.80	.58	.49	.46	.41
6	344.47	344.45	344.78	344.70	344.77	345.25	345.29	344.78	344.58	344.49	344.46	344.40
7	.47	.46	345.00	.61	.76	.28	.24	.77	.58	.48	.46	.38
8	.47	.42	.06	.57	.85	.62	.19	.75	.58	.48	.45	.38
9	.47	.49	344.86	.59	.87	.47	.22	.74	.58	.47	.45	.38
10	.47	.49	.72	.62	.83	.33	.20	.73	.59	.47	.49	.37
11	344.46	344.52	344.70	344.62	344.76	345.69	345.22	344.73	344.60	344.47	344.44	344.36
12	.46	.47	.63	.84	.70	.70	.27	.73	.58	.46	.44	.36
13	.46	.48	.56	.74	.79	.56	.23	.72	.59	.46	.43	.36
14	.46	.73	.52	.67	.67	.94	.25	.73	.57	.45	.43	.36
15	.46	.49	.49	.65	.63	.70	.14	.72	.56	.45	.43	.36
16	344.47	344.45	344.49	344.67	344.62	346.17	345.08	344.71	344.56	344.45	344.43	344.36
17	.50	.43	.49	.79	.72	345.67	.05	.70	.55	.45	.42	.36
18	.51	.41	.46	.83	.77	.43	.02	.69	.54	.44	.42	.35
19	.48	.40	.45	.77	.68	.39	344.98	.68	.53	.44	.42	.35
20	.47	.41	.44	.74	.65	.52	.95	.67	.53	.44	.41	.35
21	344.52	344.56	344.42	344.70	344.76	345.42	344.92	344.67	344.52	344.44	344.41	344.35
22	.51	.51	.41	.74	.97	346.00	.91	.66	.52	.44	.41	.35
23	.57	.49	.45	.71	345.22	345.69	.89	.66	.52	.44	.41	.35
24	.53	.57	.47	.65	.57	.46	.87	.65	.52	.44	.41	.34
25	.48	.64	.48	345.26	.42	.55	.87	.64	.52	.44	.41	.34
26	344.46	344.66	344.65	345.03	345.45	345.65	344.85	344.63	344.52	344.44	344.40	344.34
27	.44	.72	.70	.01	.20	346.11	.85	.63	.51	.56	.40	.34
28	.44	.72	.74	344.96	.42	.32	.84	.63	.51	.91	.39	.34
29	.44	.75	.67	.89	346.18	.33	.83	.62	.51	.77	.39	.34
30	.44	.71	.60	.99	345.86	.05	.83	.61	.50	.58		.34
31		.72		345.14	.54		.82		.50	.52		.33
Mean	344.48	344.53	344.62	344.77	345.02	345.63	345.12	344.71	344.55	344.49	344.43	344.36
Max.	344.57	344.75	345.06	345.26	346.18	345.33	345.84	344.85	344.60	344.91	344.49	344.45
Min.	344.44	344.40	344.41	344.55	344.62	345.09	344.82	344.61	344.50	344.44	344.39	344.33

WATER YEAR 1959 : Max. 346.18 m. Min. 344.33 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	4.40	7.40	17	10	51	50	103	27	16	12	12	8.10
2	4.40	7.60	17	11	36	40	87	28	16	12	11	7.70
3	4.20	7.60	12	19	29	36	73	27	16	12	11	8.10
4	4.20	7.40	12	21	24	71	65	26	16	12	11	10
5	4.20	7.40	14	20	21	58	59	26	16	12	11	8.80
6	4.20	7.60	20	16	19	47	56	25	16	12	11	8.40
7	4.20	7.90	31	12	19	49	52	24	16	11	11	7.70
8	4.20	7.00	34	11	23	78	49	23	16	11	10	7.70
9	4.20	8.50	24	12	24	64	51	23	16	11	10	7.70
10	4.20	8.50	17	13	22	52	49	22	16	11	9.90	7.40
11	4.00	9.40	16	13	19	86	51	22	16	11	9.90	7.00
12	4.00	8.10	13	23	16	87	54	22	16	11	9.90	7.00
13	4.00	8.30	11	18	20	73	51	22	16	11	9.50	7.00
14	4.00	17	9.40	15	15	115	53	22	15	10	9.50	7.00
15	4.00	8.50	8.50	14	13	87	46	22	15	10	9.50	7.00
16	4.20	7.60	8.50	15	13	145	42	21	15	10	9.50	7.00
17	5.60	7.20	8.50	20	17	84	40	21	14	10	9.20	7.00
18	5.80	6.80	7.90	22	19	61	38	20	14	9.90	9.20	6.70
19	5.20	6.60	7.60	19	15	57	36	20	13	9.90	9.20	6.70
20	5.00	6.80	7.40	18	14	69	34	19	13	9.90	8.80	6.70
21	6.00	11	7.00	16	19	60	32	19	13	9.90	8.80	6.70
22	5.80	9.00	6.80	18	29	123	32	19	13	9.90	8.80	6.70
23	7.00	8.50	7.60	17	44	86	31	19	13	9.90	8.80	6.70
24	6.20	11	8.10	14	73	63	29	19	13	9.90	8.80	6.40
25	5.20	14	8.30	47	60	72	29	18	13	9.90	8.80	6.40
26	4.80	14	14	33	62	82	28	18	13	9.90	8.40	6.40
27	4.40	17	16	31	43	137	28	18	13	15	8.40	6.40
28	4.40	17	18	29	60	165	28	18	13	32	8.10	6.40
29	4.40	18	15	25	146	167	27	17	12	24	8.10	6.40
30	4.40	17	12	30	105	129	27	17	12	16		6.40
31		17		39	71		27			13		6.00
Total	140.80	316.70	408.60	621	1,141	2,493	1,407	644	448	378.10	279.10	221.60
Mean	4.69	10.2	13.6	20.0	36.8	83.1	45.3	21.4	14.4	12.2	9.62	7.15
Max.	7.00	18	34	47	146	167	103	28	16	32	12	10
Min.	4.00	6.60	6.80	10	13	36	27	17	12	9.90	8.10	6.00
Runoff — MCM.	12.165	27.363	35.303	53.654	98.582	215.395	121.565	55.642	38.707	32.668	24.114	19.146

WATER YEAR 1959 : Max. 167 Min. 4.00 Mean 23.1 Annual Runoff 734.305 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 29	0.600	346.36	171				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Kuang River at Tha Sing Phitak, Lamphun (P.5)

Location: Lat 18° – 34' – 32" N, Long 99° – 00' – 44" E, on right bank 10 meters downstream from Tha Sing Phitak Bridge, infront of Phratat Hariphunchai Temple, Amphoe Muang, Lamphun.

Drainage Area: 1,569 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +289.30 m.(M.S.L.)

Bench Mark: B.M. – H.S./R.I.D.No.7

Location: On right bank near the abutment of bridge.
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: 1951 to date.

Rating Operation:

Period of Rating: 1954 – 60
Rated by Float: –
Rated by Current Meter: 1954 – 60

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

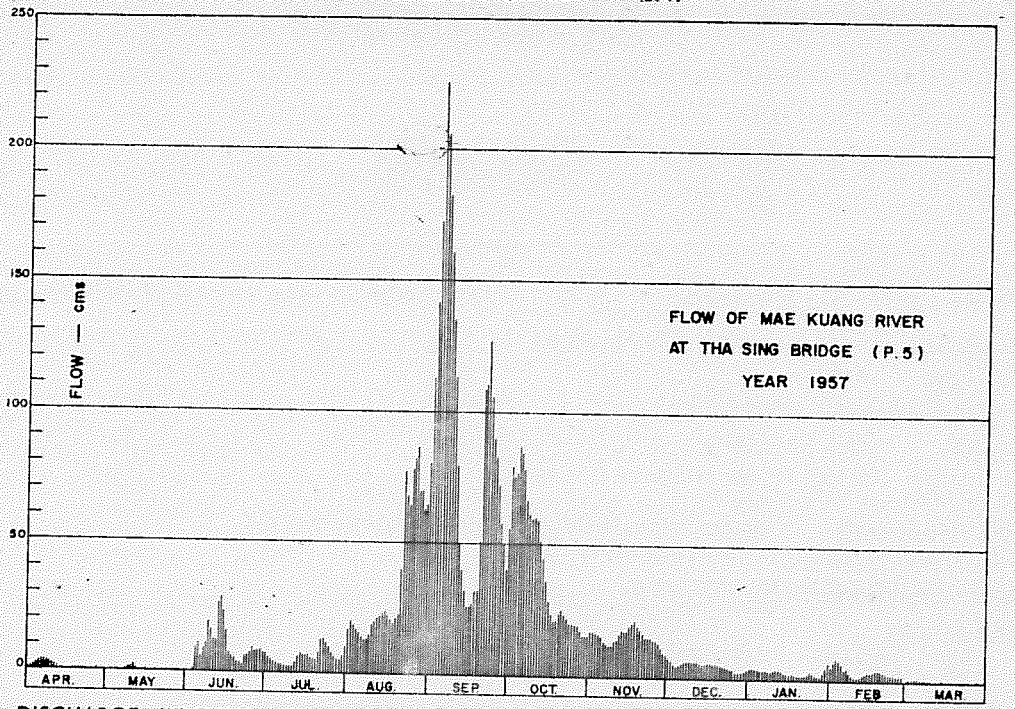
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1957. Upstream state diversions for irrigation of about 9,600 hectares. No adjustment made for virgin flow.

Remarks: No flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	289.68	289.47	289.54	290.01	290.36	292.00	291.66	290.33	290.08	289.93	289.99	289.69
2	.83	.47	.54	289.96	.44	.88	.95	.34	.05	.93	290.14	.67
3	.78	.47	.71	.90	.39	293.21	.82	.32	.02	.92	.14	.66
4	.84	.47	290.15	.87	.31	294.10	.84	.33	.01	.91	.11	.64
5	.88	.47	.19	.84	.27	.56	292.01	.32	.04	.88	.08	.62
6	289.90	289.46	289.99	289.81	290.19	294.27	291.90	290.29	290.04	289.86	289.93	289.60
7	.91	.56	290.03	.80	.18	.02	.67	.24	.07	.86	.98	.59
8	.88	.65	.16	.80	.26	293.71	.40	.22	.05	.85	.89	.57
9	.84	.72	.43	.80	.36	.37	.25	.21	.04	.84	.81	.56
10	.80	.79	.32	.78	.39	292.90	.19	.24	.03	.85	.79	.56
11	289.78	289.54	290.23	289.79	290.41	292.15	291.16	290.24	290.04	289.87	289.79	289.56
12	.73	.54	.27	.89	.47	291.50	.08	.32	.03	.87	.78	.54
13	.69	.54	.71	290.00	.50	.21	290.95	.34	.02	.85	.78	.53
14	.65	.52	.80	.04	.52	290.96	.83	.32	.01	.84	.83	.53
15	.60	.55	.59	.00	.55	.79	.72	.33	.00	.83	.82	.52
16	289.56	289.57	290.29	289.97	290.49	290.73	290.63	290.42	290.03	289.81	289.82	289.52
17	.53	.52	.11	290.01	.40	.75	.58	.43	.02	.80	.86	.52
18	.51	.51	.02	298.95	.40	.80	.53	.46	.00	.79	.89	.52
19	.51	.51	289.96	.93	.47	.80	.53	.40	289.99	.77	.87	.51
20	.51	.51	.88	.96	.51	291.53	.60	.37	.98	.77	.85	.51
21	289.50	289.52	289.85	290.16	291.11	292.58	290.62	290.31	289.96	289.76	289.81	289.51
22	.50	.52	.84	.32	.64	.86	.55	.29	.94	.75	.80	.51
23	.49	.52	290.03	.31	.51	.95	.51	.27	.93	.78	.79	.51
24	.49	.49	.04	.26	.48	.60	.51	.25	.91	.80	.78	.51
25	.49	.49	.07	.21	.87	.11	.52	.23	.90	.78	.75	.51
26	289.48	289.49	290.14	290.12	292.01	292.01	290.49	290.22	289.88	289.77	289.74	289.51
27	.48	.51	.09	.05	.12	291.76	.46	.18	.86	.75	.72	.51
28	.47	.66	.09	289.97	291.69	.41	.39	.13	.85	.74	.71	.51
29	.47	.61	.10	.96	.69	.31	.34	.11	.84	.90		.51
30	.47	.58	.06	290.05	.50	.03	.31	.10	.86	290.01		.52
31		.57		.25	.55		.30		.89	.09		.54
Mean	289.63	289.54	290.11	289.99	290.84	292.23	290.95	290.29	289.98	289.84	289.86	289.55
Max.	289.91	289.79	290.80	290.32	292.12	294.56	292.01	290.46	290.08	290.09	290.14	289.69
Min.	289.47	289.47	289.54	289.78	290.18	290.73	290.31	290.10	289.84	289.74	289.71	289.51

WATER YEAR 1957 : Max. 294.56 m. Min. 289.47 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.60		0.00	7.05	17	98	64	17	7.68	4.00	4.42	0.82
2	1.30		0.00	6.00	20	130	79	17	6.63	4.00	7.26	0.64
3	1.88		1.08	4.80	19	147	75	16	5.40	4.00	7.46	0.60
4	2.72		9.72	4.20	17	195	78	16	4.60	3.84	7.05	0.42
5	3.36		11	3.68	15	225	87	15	5.40	3.68	6.42	0.26
6	3.60		6.00	3.04	14	202	84	14	5.60	3.20	3.84	0.20
7	3.74		8.64	2.88	13	183	75	12	6.42	3.20	4.80	0.15
8	3.32	0.52	11	2.88	13	161	65	12	6.21	3.04	3.20	0.04
9	2.68	1.20	19	2.88	15	140	60	12	6.21	2.88	1.98	
10	2.12	2.00	15	2.56	19	112	59	14	6.00	3.04	1.70	
11	1.88		12	2.72	20	75	60	14	6.21	3.52	1.70	
12	1.30		12	4.60	21	49	58	16	6.00	3.52	1.70	
13	0.84		26	6.83	22	39	50	18	5.80	3.20	1.98	
14	0.52		29	7.89	23	31	42	17	5.60	2.88	2.88	
15	0.02		22	7.05	24	26	37	17	5.40	2.56	2.72	
16		0.04	13	6.63	22	26	29	20	6.00	1.98	2.72	
17			7.89	7.46	20	28	25	20	5.80	2.26	3.36	
18			6.00	5.80	19	32	21	21	5.40	1.98	3.36	
19			5.00	5.00	22	32	21	19	5.20	1.84	3.52	
20			3.52	5.20	23	62	24	18	5.20	1.98	3.20	
21			3.04	9.18	46	108	25	16	4.80	1.84	2.56	
22			2.88	13	77	112	23	15	4.40	1.70	2.40	
23			6.42	13	68	127	22	15	4.20	2.12	2.26	
24			6.83	12	64	110	21	15	3.68	2.40	2.12	
25			7.68	10	78	87	21	14	3.36	2.12	1.70	
26			9.45	7.89	81	83	19	14	2.88	1.98	1.70	
27			8.37	6.83	87	72	19	13	2.40	1.70	1.56	
28		0.62	8.37	5.00	69	57	17	11	2.26	1.28	1.56	
29		0.26	8.91	5.00	70	51	15	9.45	2.26	3.36		
30		0.10	7.89	6.83	63	39	15	8.64	2.72	5.00		
31		0.04		12	66		15		3.20	6.63		
Total	29.88	4.78	287.69	199.88	1,147	2,839	1,305	456.09	152.92	90.73	91.13	3.13
Mean	0.99	0.15	9.59	6.45	37.0	94.6	42.1	15.2	4.93	2.93	3.25	0.10
Max.	3.74	2.00	29	13	87	225	87	21	7.68	4.00	7.46	6.84
Min.	0.00	0.00	0.00	2.56	13	26	15	8.64	2.20	1.28	1.56	0.00
Runoff — MCM.	2.582	0.413	24.856	17.270	99.101	245.290	112.752	39.406	13.212	7.839	7.874	0.270

WATER YEAR 1957 : Max. 225 Min. 0.00 Mean 18.0 Annual Runoff 570.865 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 5	18.00	295.12	253				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Kuang River at Tha Sing Phitak, Lamphun (P.5)

Location: Lat 18°- 34' - 32" N, Long 99°- 00' - 44" E, on right bank 10 meters downstream from Tha Sing Phitak Bridge, infront of Phratat Hariphunchai Temple, Amphoe Muang, Lamphun.

Drainage Area: 1,569 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +289.30 m.(M.S.L.)

Bench Mark: B.M. - M.S./R.I.D. No.7

Location: On right bank near the abutment of bridge.
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: 1951 to date.

Rating Operation:

Period of Rating: 1954 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Rather unstable, no shifting adjustments for flow computation.

Overbank Flow Conditions: No overbank flow.

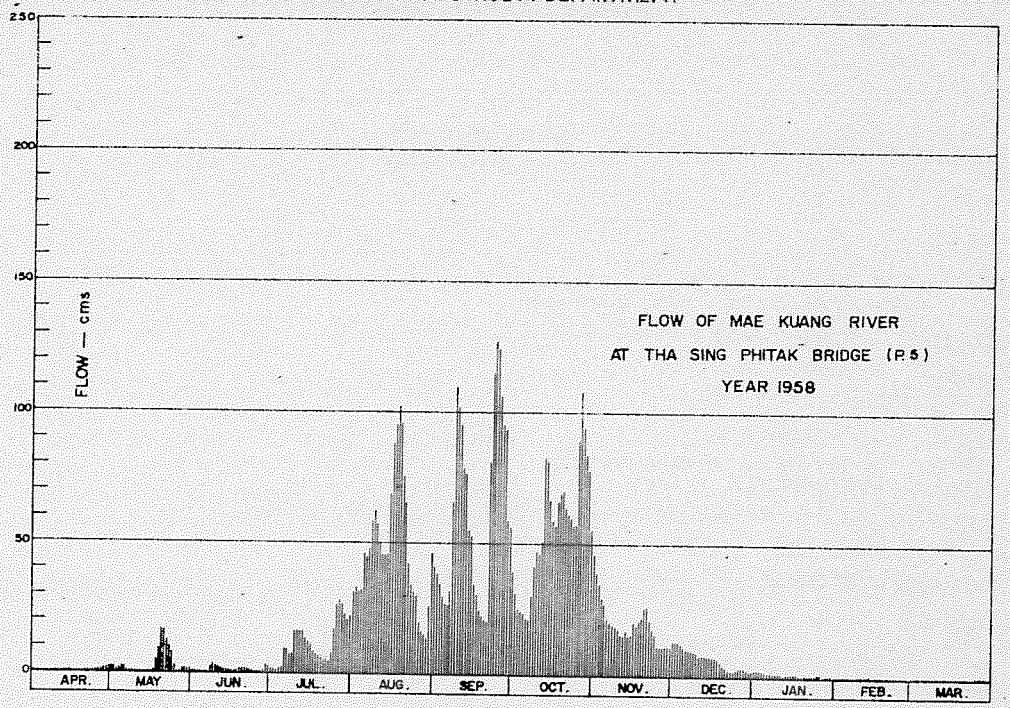
General Description: Gage height record good, discharge record poor. Stage - discharge relation used is defined by discharge measurements during 1954 - 60. Upstream state diversions for irrigation of about 9,600 hectares. No adjustment made for virgin flow.

Remarks: No flow for Apr. 15 - 19.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	289.54	289.80	289.71	289.79	290.60	290.95	290.88	291.12	290.08	289.83	289.61	289.54
2	.53	.79	.68	.74	.66	.89	.71	290.93	.07	.83	.60	.54
3	.53	.71	.66	.74	.63	.75	.57	.88	.08	.82	.59	.54
4	.52	.73	.65	.82	.64	.67	.52	.65	.06	.80	.53	.54
5	.52	.85	.70	.81	.92	.62	.48	.59	.02	.79	.58	.53
6	289.52	289.81	289.62	290.07	290.89	290.63	290.43	290.42	290.01	289.78	289.58	289.53
7	.52	.60	.69	.08	291.01	.88	.42	.37	.00	.78	.58	.53
8	.52	.61	.87	.05	.25	291.59	.64	.33	289.98	.76	.58	.53
9	.52	.70	.89	.03	.34	292.51	.99	.30	.98	.75	.58	.53
10	.52	.63	.84	.31	.20	.30	291.12	.28	.95	.74	.58	.53
11	289.51	289.63	289.81	290.34	291.10	292.19	291.12	290.20	289.93	289.73	289.58	289.53
12	.51	.62	.79	.31	.01	291.86	.16	.20	.94	.70	.58	.53
13	.51	.60	.74	.19	290.91	.78	292.03	.25	.91	.72	.58	.53
14	.51	.61	.72	.15	.94	.22	291.98	.20	.91	.72	.58	.53
15	.50	.65	.71	.12	291.59	.15	.65	.20	.91	.72	.57	.53
16	289.50	289.63	289.70	290.08	292.05	290.68	291.43	290.32	289.91	289.72	289.57	289.53
17	.50	.66	.71	.06	.28	.61	.37	.27	.91	.72	.56	.52
18	.50	.95	.76	.03	.47	.43	.58	.34	.90	.70	.56	.52
19	.50	290.03	.79	.00	.25	.38	.67	.36	.89	.71	.56	.52
20	.54	.24	.79	289.97	291.86	.31	.68	.46	.88	.71	.56	.52
21	289.57	290.24	289.79	289.94	291.48	290.32	291.52	290.46	289.86	289.71	289.56	289.52
22	.57	.12	.79	.93	290.91	291.91	.43	.32	.84	.68	.56	.52
23	.60	.03	.75	.92	.77	292.68	.40	.20	.84	.69	.55	.52
24	.63	289.98	.73	.97	.70	.98	.33	.17	.84	.71	.55	.52
25	.68	.81	.71	290.26	.66	.90	.32	.04	.85	.74	.55	.54
26	289.91	289.61	289.69	290.52	290.37	292.74	292.29	290.02	289.88	289.73	289.55	289.54
27	.75	.62	.64	.51	.30	.34	.47	.03	.86	.70	.54	.54
28	.77	.79	.70	.48	.26	.24	.22	.03	.85	.68	.54	.54
29	.78	.74	.86	.39	.22	291.43	291.92	.03	.84	.70		.54
30	.79	.72	.81	.32	.58	.35	.81	.08	.84	.70		.54
31		.73		.36	291.09		.32		.83	.67		.54
Mean	289.57	289.78	289.74	290.11	291.06	291.44	291.34	290.34	289.92	289.73	289.57	289.53
Max.	289.79	290.24	289.89	290.52	292.47	292.98	292.47	291.12	290.08	289.83	289.61	289.54
Min.	289.50	289.60	289.62	289.74	290.22	290.32	290.42	290.02	289.83	289.67	289.54	289.52

WATER YEAR 1958 : Max. 292.98 m. Min. 289.50 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.04	2.10	0.94	2.00	31	41	37	47	13	2.56	0.26	0.04
2	0.02	1.98	0.65	1.30	33	39	30	39	13	2.56	0.22	0.04
3	0.02	0.94	0.52	1.30	31	34	25	38	13	2.40	0.18	0.04
4	0.01	1.18	0.45	2.40	32	30	24	29	12	2.10	0.18	0.04
5	0.01	2.88	0.83	2.30	46	27	23	27	11	1.98	0.15	0.02
6	0.01	2.26	0.30	9.50	44	26	21	21	10	1.84	0.15	0.02
7	0.01	0.22	0.74	9.20	49	37	21	20	10	1.84	0.15	0.02
8	0.01	0.26	3.24	7.40	59	66	29	19	9.20	1.58	0.15	0.02
9	0.01	0.83	3.60	7.70	62	109	42	18	9.20	1.43	0.15	0.02
10	0.01	0.34	2.70	16	55	99	47	18	8.00	1.30	0.15	0.02
11	0.01	0.34	2.26	16	50	94	46	15	7.40	1.18	0.15	0.02
12	0.01	0.30	1.98	16	45	79	49	15	7.70	0.83	0.15	0.02
13	0.01	0.22	1.30	13	45	76	83	17	7.10	1.05	0.15	0.02
14	0.01	0.26	1.05	12	46	55	81	15	7.10	1.05	0.15	0.02
15		0.45	0.94	11	73	52	67	15	7.10	1.05	0.12	0.02
16		0.34	0.83	8.00	88	34	59	20	7.10	1.05	0.12	0.02
17		0.52	0.94	7.70	95	31	57	19	7.10	1.05	0.09	0.01
18		6.80	1.58	7.40	102	24	65	21	6.20	0.83	0.09	0.01
19		9.20	1.98	6.20	91	22	69	22	5.40	0.94	0.09	0.01
20	0.04	16	1.98	5.60	75	20	70	26	4.30	0.94	0.09	0.01
21	0.12	16	1.98	5.10	61	20	64	26	3.50	0.94	0.09	0.01
22	0.12	12	1.98	5.10	39	81	61	21	2.80	0.65	0.09	0.01
23	0.22	9.20	1.43	4.80	33	114	60	17	2.60	0.74	0.06	0.01
24	0.34	7.70	1.18	8.00	31	127	57	16	2.60	0.94	0.06	0.01
25	0.65	2.26	0.94	18	29	124	57	11	2.80	1.30	0.06	0.04
26	0.94	0.40	0.74	27	18	114	98	11	3.50	1.18	0.06	0.04
27	1.43	0.30	0.40	28	16	95	108	11	3.10	0.83	0.04	0.04
28	1.70	1.98	0.83	27	15	93	97	11	2.80	0.65	0.04	0.04
29	1.84	1.30	3.06	23	14	59	85	11	2.60	0.83		0.04
30	1.98	1.05	2.26	20	27	56	78	13	2.60	0.83		0.04
31		1.18		22	46		55		2.40	0.58		0.04
Total	9.57	100.79	43.61	350	1,471	1,878	1,765	609	206.20	39.03	3.44	0.76
Mean	0.32	3.25	1.45	11.3	47.5	63.6	56.9	20.3	6.65	1.26	0.12	0.02
Max.	1.98	16	3.60	28	102	127	108	47	13	2.56	0.26	0.04
Min.	0.00	0.22	0.30	1.30	14	26	21	11	2.40	0.58	0.04	0.01
Runoff — mcm.	0.827	8.708	3.762	30.240	127.094	162.259	152.496	52.618	17.8163	3.372	0.297	0.066

WATER YEAR 1958 : Max. 127 Min. 0.00 Mean 17.6 Annual Runoff 559.561 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 24	18.00	293.02	128				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Kaung River at Tha Sing Phitak, Lamphun (P.5)

Location: Lat 18°– 34' – 32" N, Long 99°– 00' – 44" E, on right bank 10 meters downstream from Tha Sing Phitak Bridge, infront of Phratat Hariphunchai Temple, Amphoe Mu ng, Lamphun.

Drainage Area: 1,569 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +289.30 m.(M.S.L.)

Bench Mark: B.M. – H.S./R.I.D. No.7

Location: On right bank near the abutment of bridge.
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: 1951 to date.

Rating Operation:

Period of Rating: 1954 – 60
Rated By Float: –
Rated by Current Meter: 1954 – 60

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1959. Upstream state diversions for irrigation of about 9,600 hectares. No adjustment made for virgin flow.

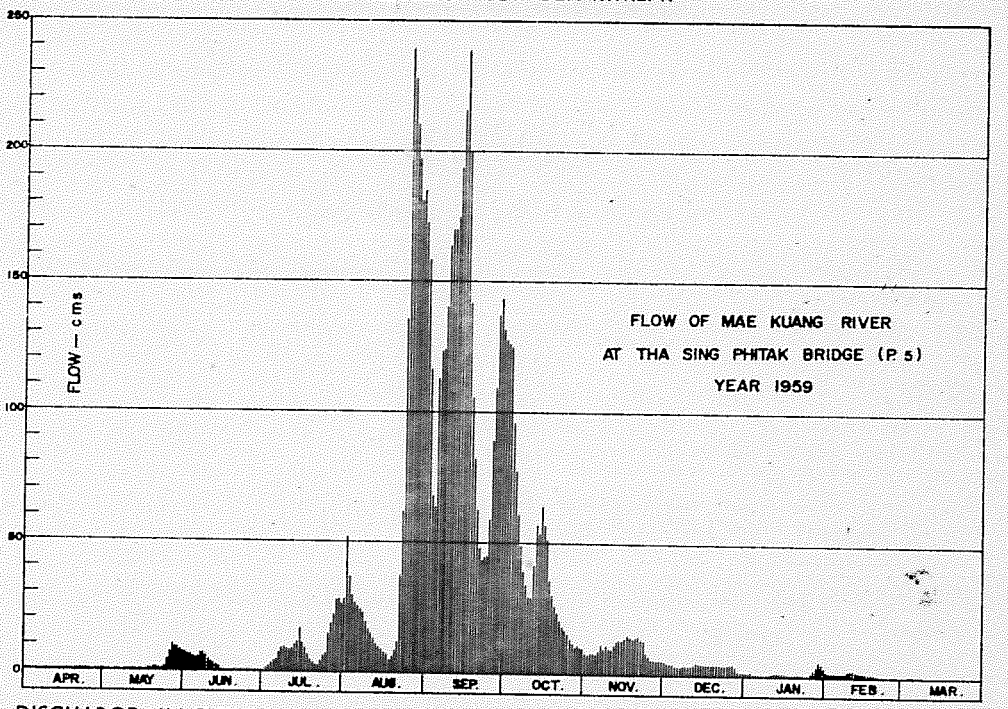
Remarks: No flow for Mar. 9 – 31.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	289.54	289.58	290.08	289.61	290.76	293.14	292.65	290.13	289.98	289.69	289.76	289.57
2	.54	.56	.07	.66	291.34	292.51	.64	.10	.96	.65	.75	.56
3	.54	.55	.04	.85	.01	291.66	.57	.14	.95	.68	.75	.55
4	.54	.56	.01	.91	290.79	.57	.10	.12	.94	.67	.75	.55
5	.54	.57	.01	.93	.71	292.41	291.83	.12	.91	.65	.73	.54
6	289.53	289.58	290.06	289.95	290.70	292.59	291.50	290.16	289.90	289.65	289.73	289.54
7	.53	.58	.08	290.16	.67	.60	.26	.23	.90	.65	.72	.52
8	.53	.55	.08	.18	.62	293.05	.05	.18	.90	.65	.76	.52
9	.53	.55	.00	.19	.50	.25	290.88	.25	.90	.65	.79	.49
10	.53	.55	289.97	.16	.44	.30	.81	.22	.90	.65	.81	.48
11	289.53	289.55	289.89	290.14	290.37	293.30	290.79	290.20	289.90	289.66	289.80	289.47
12	.53	.55	.86	.16	.31	.38	291.20	.26	.92	.69	.78	.46
13	.53	.54	.85	.23	.23	.66	.45	.32	.96	.68	.77	.45
14	.53	.55	.84	.30	.20	.95	.37	.31	.95	.68	.76	.44
15	.53	.55	.60	.44	.17	294.09	.59	.31	.93	.68	.74	.43
16	289.53	289.55	289.59	290.30	290.13	293.89	291.42	290.34	289.93	289.68	289.73	289.42
17	.53	.56	.59	.20	.10	.39	.31	.40	.93	.67	.70	.41
18	.53	.58	.59	.09	.00	292.71	290.95	.36	.93	.63	.70	.40
19	.53	.60	.59	289.94	.05	.01	.80	.35	.93	.61	.68	.40
20	.53	.70	.58	.91	.15	291.61	.71	.38	.92	.61	.67	.39
21	289.55	289.70	289.57	289.84	290.29	291.30	290.60	290.34	289.92	289.60	289.66	289.39
22	.58	.69	.57	.83	292.10	.15	.54	.33	.92	.59	.65	.38
23	.56	.65	.58	.94	.57	.18	.44	.32	.92	.59	.63	.38
24	.55	.70	.59	290.04	293.38	.20	.41	.16	.92	.59	.62	.38
25	.55	290.00	.59	.09	294.10	.66	.38	.06	.92	.58	.61	.38
26	289.54	290.10	289.60	290.38	293.98	292.34	290.31	290.02	289.94	289.62	289.60	289.37
27	.54	.26	.60	.55	.81	.39	.23	.02	.94	.82	.59	.37
28	.56	.20	.60	.63	.58	.80	.22	.01	.90	.97	.58	.37
29	.59	.18	.60	.78	.44	.90	.23	.01	.70	290.00	.57	.36
30	.59	.14	.61	.76	.50	.70	.21	.01	.70	289.97		.36
31		.10		.73	.39		.19		.69	.84		.36
Mean	289.54	289.71	289.77	290.16	291.39	292.59	291.05	290.21	289.90	289.69	289.70	289.44
Max.	289.59	290.26	290.08	290.78	294.10	294.09	292.65	290.40	289.98	290.00	289.81	289.57
Min.	289.53	289.54	289.57	289.61	290.00	291.15	290.19	290.01	289.69	289.58	289.57	289.36

WATER YEAR 1959 : Max. 294.10 m. Min. 289.36 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.16	0.32	7.00	0.48	27	159	127	8.12	5.04	1.12	1.80	0.28
2	0.16	0.64	6.80	0.88	52	118	126	7.40	4.68	0.80	1.70	0.24
3	0.16	0.20	6.20	2.90	37	68	122	8.36	4.50	1.04	1.70	0.20
4	0.16	0.24	5.60	3.78	29	63	92	7.88	4.32	0.96	1.70	0.20
5	0.16	0.28	5.60	4.14	26	111	77	7.88	3.78	0.80	1.50	0.16
6	0.12	0.32	6.60	4.50	25	123	60	8.84	3.60	0.80	1.50	0.16
7	0.12	0.32	7.00	8.84	24	124	48	10	3.60	0.80	1.40	0.08
8	0.12	0.20	7.00	9.32	22	153	39	9.32	3.60	0.80	1.80	0.08
9	0.12	0.20	5.40	9.56	18	167	32	11	3.60	0.80	2.10	
10	0.12	0.20	4.86	8.84	17	170	29	10	3.60	0.80	2.34	
11	0.12	0.20	3.46	8.36	14	170	29	9.80	3.60	0.88	2.20	
12	0.12	0.20	3.04	8.84	13	176	45	11	3.96	1.12	2.00	
13	0.12	0.16	2.90	10	10	204	57	13	4.68	1.04	1.90	
14	0.12	0.20	2.76	12	9.80	226	53	13	4.50	1.04	1.80	
15	0.12	0.20	0.40	17	9.08	239	64	13	4.14	1.04	1.60	
16	0.12	0.20	0.36	12	8.12	220	56	14	4.14	1.04	1.50	
17	0.12	0.24	0.36	9.80	7.40	176	50	15	4.14	0.96	1.20	
18	0.12	0.32	0.36	7.20	5.40	131	35	14	4.14	0.64	1.20	
19	0.12	0.40	0.36	4.32	6.40	87	29	14	4.14	0.48	1.04	
20	0.12	1.20	0.32	3.98	8.60	65	26	15	3.96	0.48	0.96	
21	0.20	1.20	0.28	2.76	12	50	22	14	3.96	0.40	0.88	
22	0.32	1.12	0.28	2.62	92	43	20	13	3.96	0.36	0.80	
23	0.24	0.80	0.32	4.32	122	44	17	13	3.96	0.36	0.64	
24	0.20	1.20	0.36	6.20	176	45	16	8.84	3.96	0.36	0.56	
25	0.20	5.40	0.36	7.20	239	68	15	6.60	3.96	0.32	0.48	
26	0.16	7.40	0.40	15	228	107	13	5.80	4.32	0.56	0.40	
27	0.16	11	0.40	20	217	110	10	5.80	4.32	2.48	0.36	
28	0.24	9.80	0.40	23	198	137	10	5.60	3.60	4.86	0.32	
29	0.36	9.32	0.40	28	180	143	10	5.60	1.20	5.40	0.28	
30	0.36	8.36	0.48	27	184	130	10	5.60	1.20	4.86		
31		7.40		26	176		9.56		1.12	2.76		
Total	5.04	68.84	80.06	308.84	2,192.80	3,827	1,348.56	304.44	117.28	40.16	37.66	1.40
Mean	0.17	2.22	2.67	9.96	70.7	127	43.5	10.1	3.78	1.29	1.30	0.04
Max.	0.36	11	7.00	28	239	239	127	15	5.04	5.40	2.34	0.98
Min.	0.12	0.16	0.28	0.48	5.40	43	9.56	5.60	1.12	0.32	0.28	0.00
Runoff - mcm.	0.435	5.947	6.917	26.684	189.457	330.653	116.516	26.304	10.133	3.470	3.254	0.121

WATER YEAR 1959 : Max. 239 Min. 0.00 Mean 22.7 Annual Runoff 719.892 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 25	06.00	294.13	243				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Ping River at Pha Wing Chu, Chiang Mai (P.6A)

Location: Lat 18° – 05' – 37" N, Long 98° – 36' – 53" E, on right bank about 4 kilometers upstream from the district office of Amphoe Hot, Chiang Mai.

Drainage Area: 19,233 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +250.16 m.(M.S.L.)

Bench Mark: B.M. – R.I.D. No.1

Location: On right bank near gage site.
Elevation: +255.498 m.(M.S.L.)

Gage Reading Frequency: 24 – time hourly readings at 06.00 – 24.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1953 – 57

Rating Operation:

Period of Rating: 1953 – 57
Rated by Float: –
Rated by Current Meter: 1953 – 57

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

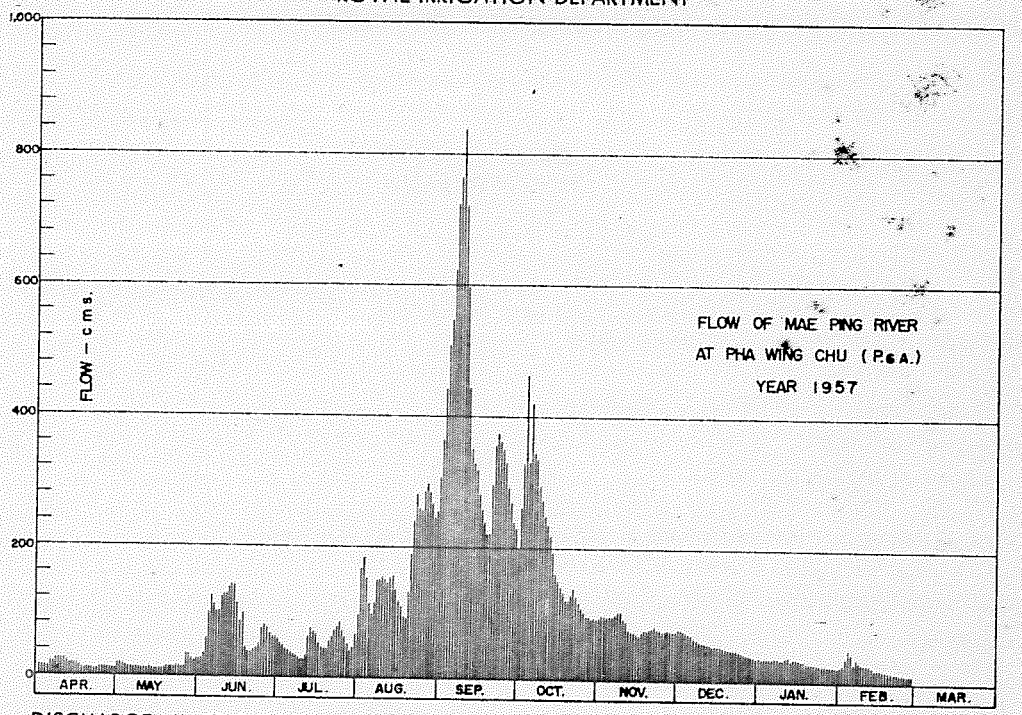
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1957. Upstream state diversions for irrigation of about 18,400 hectares. No adjustment made for virgin flow.

Remarks: Records ending on Mar.1

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	250.17	250.30	250.44	250.84	251.22	252.26	251.83	251.19	250.97	250.54	250.36	
2	.17	.30	.47	.77	.66	.52	252.18	.18	.96	.54	.43	
3	.15	.25	.56	.73	.74	.83	.44	.14	.94	.54	.59	
4	.14	.21	.81	.69	.52	253.08	253.02	.16	.93	.54	.71	
5	.26	.19	251.16	.64	.33	.23	252.92	.13	.91	.54	.64	
6	250.27	250.17	251.36	250.60	251.21	253.44	252.84	251.13	250.89	250.54	250.45	
7	.35	.15	.29	.58	.31	.66	.54	.15	.85	.54	.53	
8	.35	.14	.17	.55	.50	.71	.47	.17	.83	.54	.45	
9	.33	.13	.16	.50	.46	.92	.28	.18	.81	.53	.42	
10	.31	.13	.33	.46	.40	.65	.18	.14	.80	.53	.42	
11	250.28	250.12	251.37	250.45	251.38	253.33	252.09	251.08	250.78	250.56	250.40	
12	.24	.12	.39	.58	.35	252.79	.03	.02	.76	.59	.36	
13	.22	.14	.47	.89	.44	.41	251.94	250.99	.75	.48	.33	
14	.25	.13	.51	.99	.45	.31	.79	.98	.74	.53	.28	
15	.22	.12	.48	.94	.31	.26	.65	.97	.73	.52	.26	
16	250.19	250.11	251.28	250.90	251.23	252.09	251.56	250.97	250.73	250.50	250.26	
17	.17	.10	.08	.82	.13	.00	.50	.99	.73	.48	.24	
18	.15	.12	250.93	.75	.04	251.91	.46	251.02	.71	.46	.23	
19	.14	.16	.74	.70	.06	.81	.40	.02	.70	.45	.22	
20	.13	.18	.66	.72	.31	.82	.38	.04	.69	.44	.20	
21	250.12	250.18	250.66	250.83	251.65	252.11	251.44	251.05	250.68	250.43	250.19	
22	.11	.18	.70	.89	.92	.42	.50	.08	.67	.42	.15	
23	.10	.21	.71	.95	252.10	.49	.43	.03	.66	.41	.13	
24	.13	.18	.78	251.01	.00	.46	.36	.02	.64	.39	.13	
25	.15	.17	251.00	.08	251.99	.42	.31	.01	.62	.37	.13	
26	250.14	250.19	251.02	250.97	252.13	252.32	251.26	251.01	250.61	250.35	250.13	
27	.13	.51	250.99	.89	.18	.15	.23	.01	.60	.34	.12	
28	.13	.47	.93	.78	.11	.03	.20	250.99	.59	.33	.12	
29	.14	.36	.88	.68	.05	251.89	.17	.98	.58	.32		
30	.15	.32	.89	.75	251.95	.84	.18	.98	.56	.31		
31		.36		.94	.98		.18		.55	.33		
Mean	250.19	250.21	251.01	250.77	251.58	252.57	251.80	251.07	250.74	250.46	250.32	
Max.	250.35	250.51	251.51	251.08	252.18	253.92	253.02	251.20	250.97	250.59	250.71	
Min.	250.10	250.10	250.44	250.45	251.04	251.81	251.17	250.97	250.55	250.31	250.12	

WATER YEAR 1957 : Max. 253.92 m. Min. – m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	16	21	28	58	99	309	198	94	77	35	24	
2	16	21	31	51	168	364	260	97	76	35	28	
3	15	19	38	48	183	442	328	97	74	35	38	
4	14	16	60	44	152	507	462	96	73	35	49	
5	24	15	102	40	113	546	430	86	70	35	43	
6	24	15	124	37	99	624	418	86	68	35	29	
7	30	14	114	35	116	721	347	89	63	35	34	
8	30	14	102	33	150	762	335	92	61	35	29	
9	30	13	103	30	155	836	295	93	59	34	27	
10	27	13	124	28	150	721	271	88	58	34	27	
11	24	13	127	27	147	597	249	82	56	36	26	
12	21	13	129	35	142	442	235	75	54	38	24	
13	20	14	139	65	155	350	219	73	53	31	22	
14	21	13	144	76	156	328	191	71	52	34	19	
15	19	12	141	70	135	318	164	70	51	33	18	
16	17	12	113	67	117	278	150	69	51	32	18	
17	15	12	87	52	109	258	141	71	51	31	16	
18	15	13	98	47	94	239	133	75	49	30	16	
19	14	15	47	44	94	221	121	75	48	29	15	
20	13	16	39	45	133	221	120	77	47	28	14	
21	12	15	39	55	191	282	129	79	46	28	14	
22	12	15	43	63	241	354	138	82	45	27	12	
23	12	18	45	73	280	372	127	76	44	27	11	
24	14	16	52	79	258	362	116	75	43	25	11	
25	14	15	76	86	256	352	109	74	41	24	11	
26	14	16	79	73	286	330	102	75	40	23	11	
27	14	38	76	62	297	293	98	75	39	22	11	
28	13	35	69	50	282	269	94	73	38	22	11	
29	14	28	62	42	267	239	91	73	38	21		
30	14	25	63	48	245	229	92	73	36	21		
31		28		69	254		92		35	22		
Total	538	543	2,484	1,632	5,524	12,156	6,255	2,411	1,636	932	608	
Mean	17.9	17.5	82.8	52.6	178	405	202	80.4	52.8	30.1	21.7	
Max.	30	38	144	86	297	836	462	69	77	38	49	
Min.	12	12	28	27	94	221	91	67	35	21	11	
Runoff - MCM.	46.483	46.915	214.618	141.005	477.274	1,050.278	540.432	208.310	141.350	80.525	52.531	

WATER YEAR 1957 : Max. 836 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 9	14.00	253.93	840				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Ping River at Muang Kamphaeng Phet (P.7)

Location: Lat 16°- 28' - 15" N, Long 99°- 31' - 51" E, on left bank 1.5 kilometers downstream from the provincial office of Changwat Kamphaeng Phet near Thesa Road, Amphoe Muang, Kamphaeng Phet.

Drainage Area: 42,669 sq.km. Referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +71.15 m.(M.S.L.), Datum of 1954

Bench Mark: B.M. - H.S.

Location: On left bank near the mill.
Elevation: +77.007 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 - 59

Rating Operation:

Period of Rating: 1954 - 59
Rated by Float: -
Rated by Current Meter: 1954 - 59

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

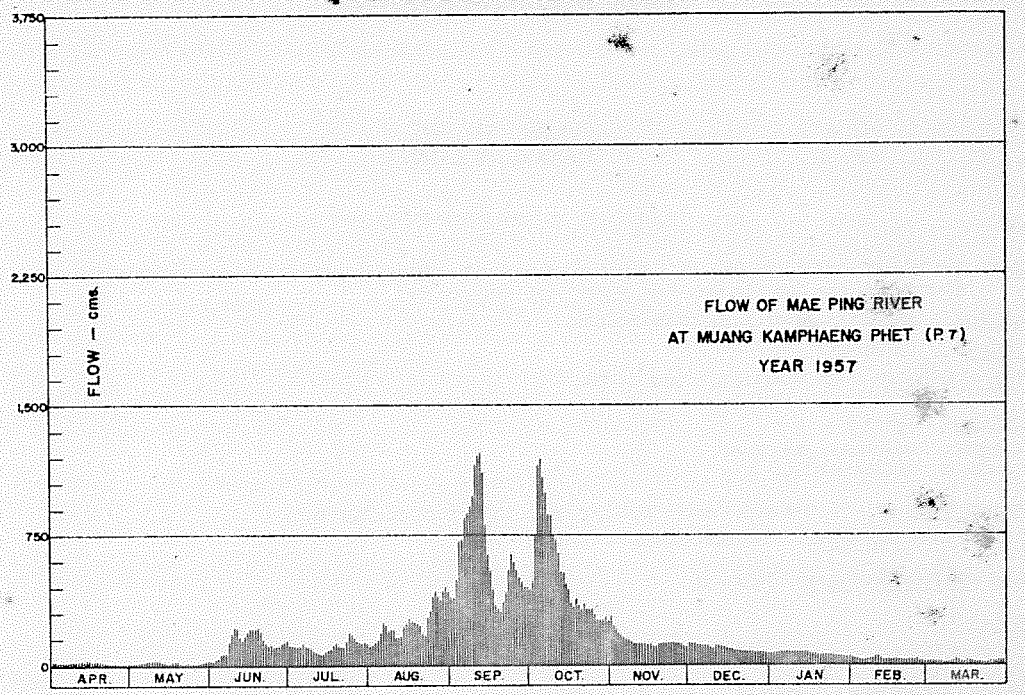
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1957. Natural flow of stream affected by diversions above station for irrigation of about 33,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	72.38	72.23	72.43	72.97	72.94	73.82	73.94	73.47	73.04	72.84	72.60	72.45
2	.37	.26	.53	.94	.98	.80	74.08	.40	.03	.84	.60	.43
3	.32	.27	.57	.96	73.07	.99	.60	.36	.02	.83	.60	.43
4	.31	.32	.71	.96	.10	74.43	75.27	.32	.02	.83	.59	.42
5	.34	.35	.78	73.01	.25	.62	.34	.27	.01	.82	.58	.42
6	72.34	72.34	72.76	73.08	73.45	74.84	75.29	73.26	72.99	72.82	72.57	72.42
7	.35	.41	.77	.00	.38	.89	.15	.23	.99	.81	.57	.41
8	.36	.45	73.21	72.90	.28	.94	74.95	.20	.98	.80	.57	.42
9	.38	.42	.37	.84	.20	75.02	.67	.17	.97	.79	.65	.45
10	.38	.39	.36	.78	.16	.31	.46	.15	.96	.79	.65	.44
11	72.38	72.39	73.27	72.76	73.26	75.41	74.38	73.14	72.95	72.78	72.64	72.46
12	.44	.36	.21	.73	.40	.17	.28	.11	.94	.78	.62	.56
13	.52	.33	.29	.69	.51	74.86	.20	.10	.94	.77	.60	.50
14	.51	.32	.39	.68	.52	.52	.05	.10	.93	.76	.57	.48
15	.47	.29	.42	.75	.44	.17	73.93	.08	.93	.75	.56	.47
16	72.45	72.28	73.41	72.83	73.41	74.01	73.82	73.09	72.93	72.74	72.56	72.50
17	.40	.36	.39	.99	.40	73.80	.60	.07	.92	.73	.55	.47
18	.39	.36	.33	73.03	.38	.68	.64	.07	.91	.72	.55	.46
19	.36	.33	.22	72.96	.23	.61	.75	.06	.90	.71	.56	.43
20	.34	.29	.10	.95	.16	.57	.63	.06	.90	.70	.54	.42
21	72.31	72.28	73.02	72.96	73.11	73.73	73.62	73.06	72.89	72.69	72.53	72.42
22	.30	.28	72.[illegible]	73.11	.13	.84	.68	.06	.89	.68	.53	.41
23	.28	.29	.95	.23	.42	74.13	.64	.07	.88	.67	.51	.39
24	.26	.26	.90	.18	.70	.28	.64	.07	.88	.66	.50	.39
25	.25	.28	.97	.10	.87	.27	.62	.08	.88	.65	.49	.38
26	72.25	72.29	72.95	73.03	73.93	74.28	73.55	73.07	72.87	72.64	72.49	72.38
27	.24	.35	.99	.00	.85	.21	.51	.07	.87	.63	.48	.36
28	.23	.35	73.00	72.99	.83	.13	.45	.06	.86	.63	.46	.35
29	.23	.36	.00	73.02	.94	.08	.42	.06	.86	.62		.35
30	.23	.39	.03	.03	.94	.03	.47	.05	.85	.62		.34
31		.41		.00	.86		.46		.85	.61		.34
Mean	72.34	72.33	73.04	72.97	73.42	74.45	73.07	73.14	72.93	72.73	72.56	72.42
Max.	72.52	72.45	73.42	73.23	73.94	75.41	75.34	73.47	73.04	72.84	72.65	72.56
Min.	72.23	72.23	72.43	72.68	72.94	73.57	73.42	73.05	72.85	72.61	72.46	72.34

WATER YEAR 1957 : Max. 75.41 m. Min. 72.23 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	19	9.80	19	118	108	402	407	254	128	86	44	25
2	18	12	28	112	112	393	475	230	125	86	44	23
3	15	12	33	116	132	485	750	218	123	84	44	23
4	15	15	54	116	140	716	1,153	182	123	84	43	22
5	16	17	65	116	188	733	1,192	167	120	82	41	22
6	15	16	62	132	250	856	1,075	164	116	82	40	22
7	17	21	64	114	227	885	988	156	116	80	40	21
8	18	22	148	106	197	914	868	148	114	78	40	22
9	19	19	194	94	164	964	868	148	112	76	52	25
10	19	18	191	82	153	1,146	750	142	110	76	52	24
11	19	18	161	78	173	1,212	705	140	108	74	50	26
12	21	18	148	73	215	1,119	649	132	106	74	47	38
13	23	16	179	65	250	1,001	606	130	106	73	44	30
14	31	15	209	64	282	822	530	130	104	71	40	28
15	27	13	218	76	254	627	470	114	104	69	38	27
16	25	13	215	88	244	545	416	116	104	67	38	30
17	20	18	209	120	240	440	362	112	102	65	37	27
18	19	18	215	130	233	349	336	112	100	64	37	26
19	18	16	182	114	188	320	380	132	98	62	38	23
20	16	13	148	112	167	304	332	132	98	60	36	22
21	15	13	128	114	153	371	328	132	96	58	34	22
22	14	13	110	150	159	421	353	132	96	57	34	21
23	13	13	112	185	247	565	328	135	94	55	31	19
24	12	12	104	170	324	643	328	135	94	54	30	19
25	11	13	118	153	398	570	320	137	94	52	29	19
26	11	10	114	135	425	575	293	135	92	50	29	19
27	10	14	123	128	389	540	278	135	92	49	28	18
28	9.80	14	140	125	380	500	257	132	90	49	26	17
29	9.80	15	140	132	460	475	247	132	90	47		17
30	9.80	16	132	128	466	450	264	130	88	47		16
31		18		120	421		250		88	46		16
Total	508.40	470.80	3,963	3,566	7,733	19,343	16,558	4,394	3,231	2,057	1,086	709
Mean	16.9	15.2	132	115	249	645	534	146	104	66.3	38.8	22.9
Max.	31	22	218	185	460	1,212	1,192	254	128	86	52	38
Min.	9.80	9.80	19	64	108	304	247	112	88	46	26	16
Runoff - mcm.	43.926	40.677	342.403	308.102	668.131	1,671.235	1,430.611	379.642	279.158	177.725	93.830	61.258

WATER YEAR 1957 : Max. 1,212 Min. 9.80 Mean 174 Annual Runoff 5,496.682 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 11	06.00	75.44	1,232				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Ping River at Muang Kamphaeng Phet (P.7)

Location: Lat 16°- 28' - 15" N, Long 99°- 31' - 51" E, on left bank 1.5 kilometers downstream from the provincial office of Changwat Kamphaeng Phet near Thesa Road, Amphoe Muang, Kamphaeng Phet.

Drainage Area: 42,669 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +71.15 m.(M.S.L.), datum of 1954.

Bench Mark: B.M. - H.S.

Location: On left bank near the mill.
Elevation: +77.007 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 - 59.

Rating Operation:

Period of Rating: 1950 - 59
Rated by Float: -
Rated by Current Meter: 1950 - 59

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

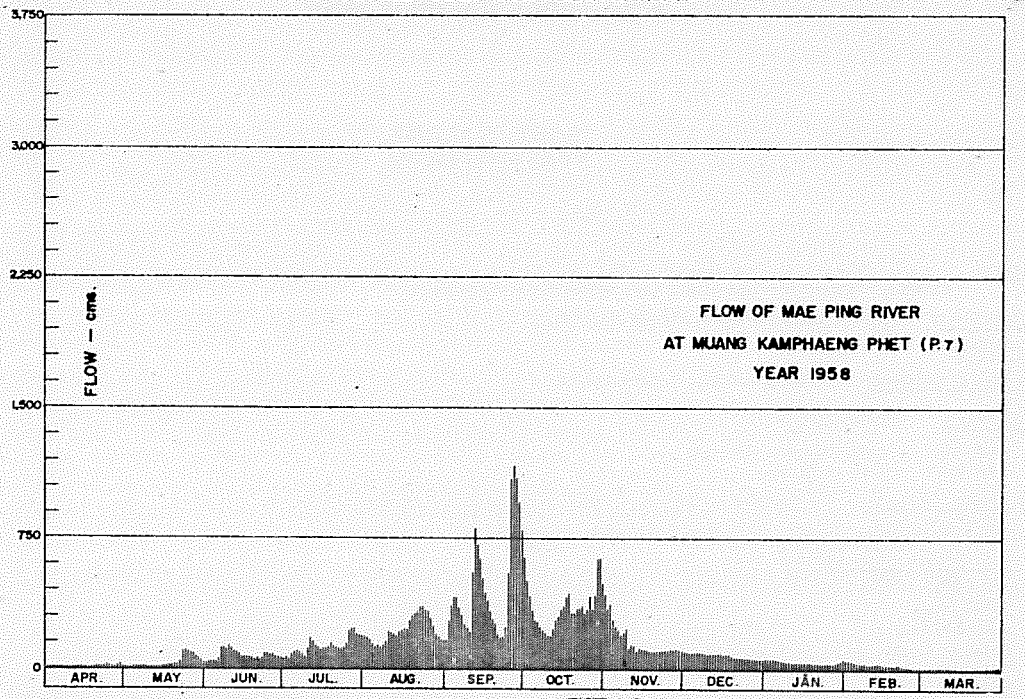
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1958. Natural flow of stream affected by diversions above station for irrigation of about 33,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	72.34	72.38	72.66	72.80	73.25	73.18	74.29	73.84	72.90	72.75	72.65	72.43
2	.33	.37	.62	.82	.23	.49	.05	.69	.90	.75	.65	.42
3	.33	.37	.63	.78	.18	.71	73.85	.57	.92	.75	.65	.42
4	.34	.45	.63	.89	.13	.82	.68	.48	.92	.74	.61	.42
5	.34	.41	.66	.85	.10	.81	.54	.40	.92	.73	.63	.41
6	72.35	72.45	72.76	73.01	73.08	73.69	73.45	73.33	72.92	72.72	72.61	72.40
7	.36	.45	.98	72.95	.10	.58	.40	.26	.91	.71	.60	.40
8	.37	.44	73.03	.91	.08	.45	.32	.31	.90	.70	.58	.40
9	.38	.41	.12	.86	.16	.40	.30	.15	.89	.70	.58	.43
10	.39	.38	.05	73.10	.34	.51	.27	.01	.88	.69	.56	.42
11	72.37	72.38	72.97	73.32	73.30	74.17	73.25	73.08	72.87	72.68	72.60	72.42
12	.34	.37	.90	.18	.29	.59	.46	.05	.87	.67	.56	.38
13	.33	.38	.85	.10	.28	.43	.51	.02	.87	.66	.55	.36
14	.32	.39	.81	.06	.31	.26	.50	72.99	.87	.65	.54	.36
15	.31	.37	.80	.03	.33	.07	.54	.98	.87	.64	.53	.38
16	72.32	72.37	72.81	73.05	73.40	73.89	73.66	72.96	72.86	72.64	72.53	72.36
17	.35	.42	.81	.02	.38	.76	.81	.94	.86	.64	.52	.36
18	.36	.47	.83	.09	.50	.63	.77	.92	.85	.63	.51	.35
19	.38	.51	.79	.12	.54	.50	.70	.91	.84	.63	.50	.34
20	.42	.53	.79	.09	.64	.39	.63	.90	.83	.63	.49	.34
21	72.40	72.54	72.80	73.07	73.82	73.30	73.57	72.91	72.82	72.62	72.48	72.34
22	.41	.62	.77	.03	.89	.24	.65	.93	.81	.62	.47	.34
23	.46	.97	.80	.01	.81	.28	.70	.93	.80	.62	.47	.33
24	.48	.98	.88	.03	.68	.44	.71	.93	.79	.62	.46	.33
25	.45	.97	.90	.12	.56	74.11	.60	.94	.78	.62	.45	.34
26	72.43	72.94	72.89	73.31	73.43	75.10	73.66	72.94	72.77	72.62	72.45	72.36
27	.40	.89	.87	.38	.30	.23	.78	.95	.76	.61	.44	.37
28	.47	.82	.86	.33	.23	.11	.65	.94	.75	.61	.43	.37
29	.52	.77	.82	.29	.16	74.88	74.05	.93	.74	.62		.35
30	.40	.75	.82	.26	.22	.57	.26	.91	.74	.62		.33
31		.69		.27	.17		.01		.75	.65		.33
Mean	72.38	72.56	72.83	73.07	73.35	73.92	73.66	73.10	72.84	72.66	72.54	72.37
Max.	72.52	72.98	73.12	73.38	73.89	75.23	74.29	73.84	72.92	72.75	72.65	72.43
Min.	72.31	72.37	72.62	72.78	73.08	73.18	73.25	72.91	72.74	72.61	72.43	72.33

WATER YEAR 1958 : Max. 75.23 m. Min. 72.31 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	5.0	7.0	41	59	180	158	633	414	84	55	38	11
2	4.5	6.5	36	64	174	266	513	348	84	55	38	10
3	4.5	6.5	38	59	158	356	418	298	89	55	38	10
4	5.0	13	36	80	143	405	344	262	89	53	36	10
5	5.0	9.0	40	94	134	400	286	232	89	51	35	9.0
6	5.5	13	57	108	129	348	251	207	89	50	32	8.0
7	6.0	13	106	91	134	302	232	183	86	48	30	8.0
8	6.5	12	113	82	129	251	203	200	84	46	28	8.0
9	7.0	9.0	134	70	152	232	196	149	82	46	28	11
10	7.5	7.0	116	129	210	274	186	137	80	44	25	10
11	6.5	7.0	101	186	196	573	180	129	78	43	30	10
12	5.0	6.5	91	155	193	793	255	121	78	41	25	7.0
13	4.5	7.0	78	134	190	706	274	113	78	40	24	6.0
14	4.0	8.0	72	124	200	618	270	106	78	38	23	6.0
15	3.5	7.5	70	113	207	523	286	103	78	36	22	7.0
16	4.0	7.0	70	121	232	436	335	98	76	36	22	6.0
17	5.5	10	68	116	225	378	400	94	76	36	20	6.0
18	6.0	15	70	131	270	323	383	89	74	35	19	5.5
19	7.0	18	64	140	286	270	352	86	72	35	18	5.0
20	10	22	64	129	327	228	323	84	70	35	17	5.0
21	8.0	22	60	121	405	196	302	86	68	33	16	5.0
22	9.0	32	57	113	436	177	331	91	66	33	15	5.0
23	14	91	66	108	400	190	352	91	64	33	15	4.5
24	16	94	82	124	344	247	356	91	62	33	14	4.5
25	13	91	86	149	294	543	310	94	60	33	13	5.0
26	11	84	82	200	243	1,086	335	94	59	33	13	6.0
27	8.0	84	78	225	196	1,172	387	96	57	32	12	6.5
28	15	64	74	210	174	1,093	331	94	55	32	11	6.5
29	19	55	64	196	152	952	513	91	53	33		5.5
30	7.5	53	64	183	170	782	618	86	53	33		4.5
31		46		183	155		493		55	38		4.5
Total	233	920	2,178	3,997	6,838	14,278	10,648	4,367	2,266	1,244	657	21.60
Mean	7.77	29.7	72.6	129	221	476	343	145	73.1	40.1	23.5	6.97
Max.	19	94	134	225	436	1,172	633	414	89	55	38	11
Min.	3.5	6.5	36	59	129	158	180	86	53	32	11	4.5
Runoff – mcm.	20.131	79.488	188.179	345.341	590.803	1,233.619	919.987	377.309	195.782	107.482	56.765	18.662

WATER YEAR 1958 : Max. 1,172 Min. 3.5 Mean 131 Annual Runoff 4,133.549 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 27	10.00	75.25	1,186				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Ping River at Muang Kamphaeng Phet (P.7)

Location: Lat 16°– 28' – 15" N, Long 99°– 31' – 51" E, on left bank 1.5 kilometers downstream from the provincial office of Changwat Kamphaeng Phet near Thesa Road, Amphoe Muang, Kamphaeng Phet.

Drainage Area: 42,699 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +71.15 m.(M.S.L.), datum of 1954

Bench Mark: B.M. – H.S.

Location: On left bank near the mill.
Elevation: +77.007 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 – 59

Rating Operation:

Period of Rating: 1950 – 59
Rated by Float: –
Rated by Current Meter: 1950 – 59

Stability of Channel Regimes: Unstable, no shifting adjustment but periodic rating curves are used for flow computation.

Overbank Flow Conditions: Overbank flow was observed but not included for flow computation.

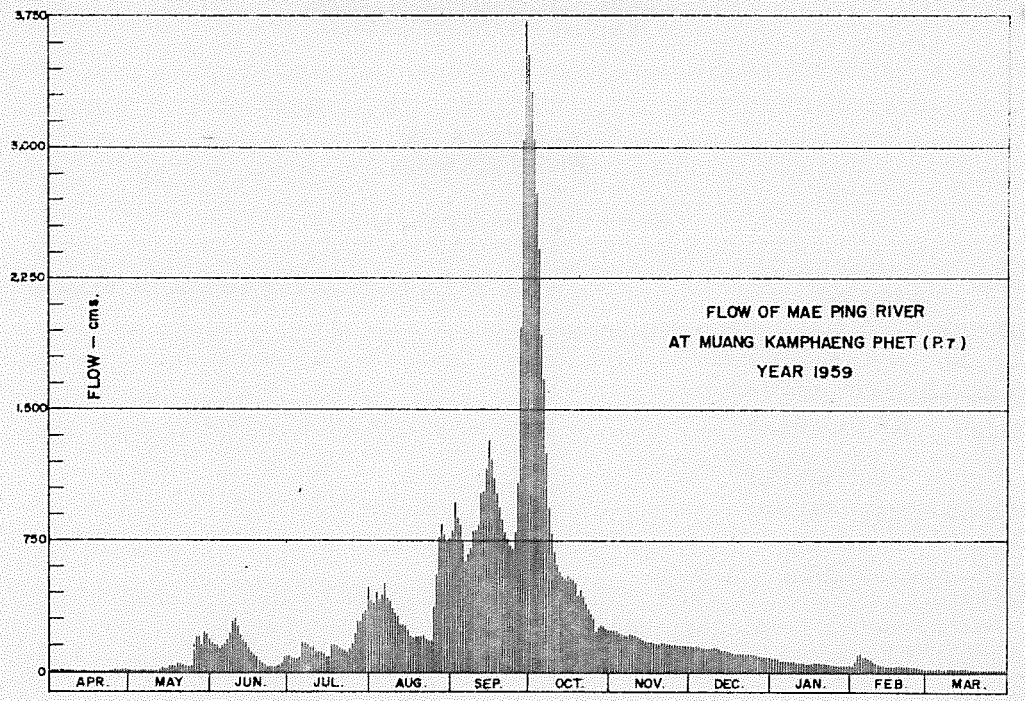
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1959. Natural flow of stream affected by diversions above station for irrigation. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	72.33	72.37	73.19	72.92	73.89	75.59	77.49	73.36	72.98	72.57	72.35	72.09
2	.36	.39	.16	.85	.88	.85	.25	.32	.97	.55	.47	.08
3	.34	.37	.15	.85	.93	.72	76.95	.31	.97	.54	.69	.07
4	.33	.36	.09	.86	.90	.63	.40	.29	.96	.52	.75	.06
5	.32	.42	.15	.90	.92	.48	76.03	.26	.95	.52	.69	.06
6	72.31	72.44	73.19	73.22	74.03	74.28	75.85	73.25	72.94	72.51	72.61	72.04
7	.30	.42	.27	.19	73.90	.28	.45	.25	.92	.50	.55	.04
8	.30	.41	.39	.16	.79	.35	.12	.27	.91	.49	.51	.03
9	.30	.42	.55	.12	.75	.41	74.85	.24	.90	.48	.47	.02
10	.30	.40	.60	.10	.69	.59	.65	.20	.89	.47	.43	.00
11	72.29	72.39	73.48	73.05	73.63	74.78	74.51	73.20	72.88	72.46	72.41	71.98
12	.29	.48	.36	.01	.56	.95	.43	.17	.86	.46	.39	.98
13	.30	.55	.27	72.99	.50	75.01	.34	.14	.84	.45	.37	.97
14	.30	.51	.20	.97	.51	.16	.31	.12	.84	.44	.35	.96
15	.31	.49	.11	.95	.47	.34	.34	.10	.82	.43	.33	.96
16	72.35	72.67	73.04	72.96	73.40	75.24	74.32	73.10	72.82	72.42	72.32	71.95
17	.34	.66	72.96	73.15	.33	.07	.28	.09	.80	.41	.30	.94
18	.31	.64	.88	.17	.29	74.92	.27	.08	.79	.41	.28	.94
19	.30	.74	.82	.14	.30	.81	.17	.07	.77	.39	.26	.93
20	.29	.69	.77	.11	.29	.67	.13	.09	.75	.37	.24	.92
21	72.31	72.65	72.73	73.08	73.30	74.58	74.00	73.07	72.74	72.35	72.22	71.91
22	.33	.63	.71	.06	.28	.49	73.88	.07	.74	.33	.20	.91
23	.36	.69	.69	.04	.23	.42	.79	.06	.73	.32	.18	.90
24	.39	.69	.67	.09	.25	.41	.71	.06	.72	.31	.16	.90
25	.44	73.16	.65	.21	.76	.59	.64	.05	.69	.31	.15	.90
26	72.44	73.31	72.68	73.40	74.15	75.05	73.59	73.05	72.67	72.31	72.13	71.89
27	.41	.32	.70	.56	.52	76.14	.51	.04	.65	.32	.12	.88
28	.41	.18	.77	.57	.65	77.24	.47	.02	.64	.32	.11	.87
29	.39	.40	.91	.66	.55	.82	.43	.01	.62	.33	.10	.87
30	.37	.37	.96	.70	.48	.67	.39	73.00	.60	.34		.86
31		.29		74.00	.50		.39		.58	.35		.85
Mean	72.34	72.69	73.04	73.16	73.76	75.05	74.67	73.14	72.80	72.42	72.35	71.96
Max.	72.44	73.40	73.60	74.00	74.65	77.82	77.49	73.36	72.98	72.57	72.75	72.09
Min.	72.29	72.36	72.65	72.85	73.23	74.28	73.39	73.00	72.58	72.31	72.10	71.85

WATER YEAR 1959 : Max. 77.82 m. Min. 71.85 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.2	4.8	165	91	433	812	3,308	240	152	79	49	24
2	4.4	5.6	156	75	429	972	3,040	229	150	76	65	24
3	3.6	4.8	153	75	452	890	2,740	227	150	75	98	23
4	3.2	4.4	135	77	438	836	2,420	222	148	72	109	22
5	2.8	8.0	153	86	448	748	1,902	214	146	72	98	22
6	2.4	10	165	174	502	635	1,665	212	144	70	86	21
7	2.0	8.0	190	165	438	635	1,250	212	140	69	77	21
8	2.0	7.0	231	156	388	674	944	217	138	68	70	20
9	2.0	8.0	289	144	371	708	771	210	136	66	65	19
10	2.0	6.0	308	138	346	812	676	200	134	65	60	18
11	1.6	5.6	263	124	321	928	616	200	132	64	57	17
12	1.6	14	220	114	293	1,037	584	193	129	64	55	17
13	2.0	22	190	108	270	1,077	549	187	125	62	52	16
14	2.0	17	168	103	274	1,178	538	182	125	61	49	16
15	2.4	15	141	99	259	1,301	549	178	122	60	47	16
16	4.0	39	122	101	234	1,232	542	178	122	59	46	15
17	3.6	38	101	153	210	1,117	527	176	118	57	43	14
18	2.4	34	82	159	197	1,017	523	174	116	57	41	14
19	2.0	52	68	150	200	946	488	171	113	55	39	14
20	1.6	42	58	141	197	860	474	176	109	52	37	13
21	2.4	36	50	133	200	806	430	171	107	49	35	13
22	3.2	33	46	127	194	754	389	171	107	47	33	13
23	4.4	42	42	122	178	714	360	169	105	46	31	12
24	5.6	42	39	135	184	708	335	169	104	44	30	12
25	10	156	36	171	375	812	314	167	98	44	29	12
26	10	203	41	234	564	1,103	299	167	95	44	27	12
27	7.0	207	44	293	772	1,964	279	165	92	46	27	11
28	7.0	162	58	297	848	3,030	268	160	90	46	26	11
29	5.6	234	88	333	789	3,704	258	158	87	47	25	11
30	4.8	224	101	350	748	3,524	247	156	84	48		11
31		197		486	760		247		81	49		10
Total	110.8	1,881.2	3,903	5,114	12,312	35,534	27,532	5,651	3,699	1,813	1,506	494
Mean	3.69	60.7	130	165	397	1,184	888	188	119	58.5	51.9	15.9
Max.	10	234	308	486	848	3,704	3,308	240	152	79	109	24
Min.	1.60	4.40	36	75	178	635	247	156	81	44	25	10
Runoff - MCM.	9.573	162.536	337.219	441.850	1,063.757	3,070.138	2,378.765	488.246	319.594	156.643	130.118	42.682

WATER YEAR 1959 : Max. 3,704 Min. 1.6 Mean 272 Annual Runoff 8,601.120 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 29	06.00	77.90	3,800				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

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

Location: Lat 17°- 14' - 30" N, Long 99°- 00' - 45" E, on right bank 4 kilometers downstream from Yanhee dam site, Amphoe Sam Ngao, Tak.

Drainage Area: 26,390 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +135.19 m.(M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: 25 meters north of the gage site.
Elevation: +143.825 m.(M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly 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: Rather unstable, shifting adjustment is included for flow computations.

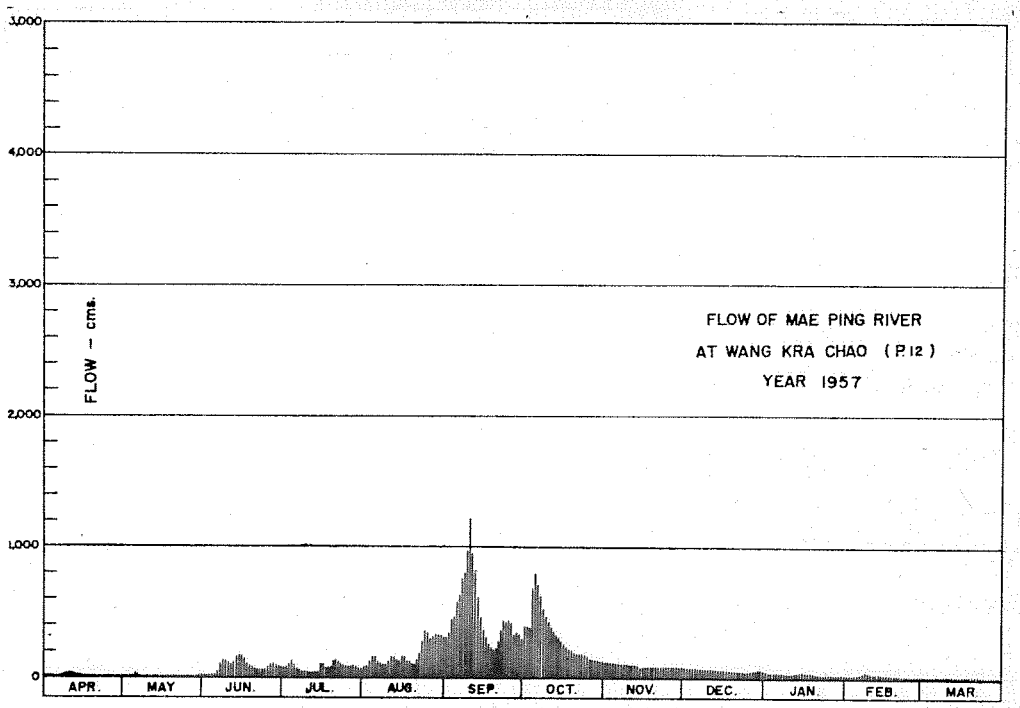
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1957. Natural flow of stream affected by state diversions above gage site for irrigation of about 28,000 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	136.10	136.18	136.29	136.71	136.81	137.69	137.70	137.11	136.83	136.49	136.32	136.17
2	.10	.13	.28	.71	.84	.78	.70	.10	.83	.48	.32	.16
3	.10	.13	.28	.77	137.05	138.04	.97	.09	.82	.47	.32	.15
4	.09	.23	.34	.91	.24	.15	138.51	.08	.80	.47	.32	.16
5	.11	.27	.41	.83	.22	.40	.73	.06	.79	.46	.38	.17
6	136.15	136.22	136.51	136.73	137.09	138.52	138.61	137.04	136.78	136.45	136.53	136.16
7	.20	.16	.93	.68	136.97	.78	.46	.05	.77	.45	.50	.16
8	.22	.12	137.11	.62	.92	.89	.31	.02	.76	.44	.46	.16
9	.25	.09	.07	.59	.99	139.22	.19	.01	.75	.43	.41	.24
10	.28	.08	136.97	.55	137.09	.37	.11	136.98	.74	.43	.39	.26
11	136.27	136.08	136.91	136.50	137.25	139.22	138.01	136.96	136.74	136.42	136.38	136.24
12	.25	.07	137.07	.47	.24	138.93	137.95	.95	.73	.44	.36	.23
13	.22	.06	.17	.54	.14	.57	.87	.94	.72	.45	.35	.29
14	.20	.05	.23	.66	.09	.26	.78	.92	.71	.48	.34	.26
15	.15	.04	.24	.83	.14	.04	.68	.89	.68	.47	.32	.24
16	136.13	136.03	137.22	136.89	137.13	137.87	137.58	136.88	136.67	136.46	136.30	136.22
17	.16	.03	.10	.78	136.98	.73	.51	.87	.67	.44	.28	.19
18	.15	.04	136.95	.76	.93	.64	.45	.86	.66	.43	.28	.17
19	.15	.03	.84	.77	.85	.55	.43	.87	.65	.43	.27	.16
20	.11	.01	.72	.98	.81	.60	.39	.87	.63	.42	.26	.16
21	136.08	136.01	136.62	137.09	137.01	137.78	137.36	136.88	136.62	136.41	136.25	136.15
22	.08	.07	.56	.04	.47	.99	.32	.89	.61	.39	.24	.14
23	.08	.06	.60	136.96	.59	138.10	.35	.89	.61	.38	.23	.13
24	.08	.07	.63	.88	.79	.13	.35	.88	.60	.37	.22	.12
25	.07	.07	.70	.82	.75	.13	.28	.87	.58	.36	.21	.12
26	136.06	136.06	136.84	136.82	137.66	138.08	137.23	136.87	136.57	136.35	136.20	136.11
27	.06	.23	.88	.84	.69	137.97	.21	.86	.56	.35	.18	.10
28	.08	.17	.84	.79	.74	.90	.18	.85	.54	.35	.17	.09
29	.08	.23	.78	.72	.74	.85	.16	.84	.52	.34		.09
30	.07	.38	.75	.66	.72	.75	.14	.84	.51	.33		.09
31		.32		.70	.71		.11		.50	.33		.11
Mean	136.14	136.12	136.79	136.76	137.25	138.20	137.70	136.94	136.67	136.42	136.31	136.68
Max.	136.28	136.38	137.24	137.09	137.79	139.37	138.73	137.11	136.83	136.49	136.53	136.29
Min.	136.06	136.01	136.28	136.47	136.81	137.55	137.11	136.84	136.50	136.33	136.17	136.09

WATER YEAR 1957 : Max. 139.37 m. Min. 136.01 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	11	14	22	80	96	310	291	129	84	42	25	12
2	11	12	23	81	100	344	297	127	84	41	25	12
3	10	12	24	108	138	452	384	123	83	41	24	11
4	10	18	29	134	176	473	686	121	80	41	27	11
5	11	22	31	100	164	585	795	119	80	40	37	11
6	14	18	42	78	134	636	712	117	80	39	62	9.00
7	19	15	106	72	117	756	621	121	78	39	50	10
8	22	12	140	64	102	806	539	117	76	38	43	10
9	21	11	134	59	111	976	477	111	76	37	37	15
10	22	11	113	55	134	1,204	435	106	75	38	34	18
11	22	11	100	49	169	946	386	102	76	37	31	18
12	20	10	127	45	164	795	355	102	75	39	32	16
13	18	9.00	166	56	140	612	331	96	73	40	32	21
14	18	8.00	176	76	134	469	303	86	70	43	28	18
15	15	7.00	169	108	171	376	276	89	64	45	27	17
16	13	7.00	153	113	166	310	246	89	63	42	25	15
17	15	7.00	117	88	131	255	230	89	62	40	23	13
18	15	7.00	99	86	123	235	214	89	59	38	21	11
19	14	7.00	89	91	110	214	211	91	57	38	21	11
20	12	7.00	75	131	102	230	201	89	55	36	21	10
21	10	7.00	66	136	144	288	186	88	55	36	19	10
22	9.00	10	66	126	258	373	185	91	53	33	18	10
23	9.00	10	70	117	294	431	193	91	55	31	18	9.00
24	9.00	10	75	100	358	431	193	89	55	30	16	9.00
25	9.00	10	84	92	341	435	174	88	53	30	15	9.00
26	8.00	9.00	110	94	303	419	162	88	52	29	14	9.00
27	9.00	18	113	92	320	373	157	88	52	30	13	9.00
28	9.00	15	100	86	334	341	151	88	49	29	12	8.00
29	9.00	18	84	76	330	331	144	84	46	27		7.00
30	14	29	83	64	327	300	140	84	45	26		7.00
31		25		73	317		129		43	26		8.00
Total	408	386	2,786	2,730	6,008	14,706	9,804	2,992	2,008	1,121	750	364
Mean	13.6	12.4	92.9	88.1	193	492	318	99.7	64.7	36.2	26.8	11.7
Max.	22	29	176	136	358	1,204	795	129	84	45	62	21
Min.	8.00	7.00	22	45	96	214	129	84	43	26	12	7.00
Runoff - mcm.	35.251	33.350	240.710	235.872	519.091	1,270.598	847.066	258.509	173.491	96.854	64.800	31.450

WATER YEAR 1957 : Max. 1204 Min. 7.0 Mean 121 Annual Runoff 3,807.042 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 10	12.00	139.39	1,236				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Ping River at Wang Kra Chao, Tak (p.12)

Location: Lat 17°- 14' - 30" N, Long 99°- 00' - 45" E, on right bank 4 kilometers downstream from Yanhee damsite, Amphoe Sam Ngao, Tak.

Drainage Area: 26,390 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +135.19 m.(M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: 25 meters north of the gage site.
Elevation: +143.825 m.(M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly 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: Rather unstable, shifting adjustment is included for flow computation.

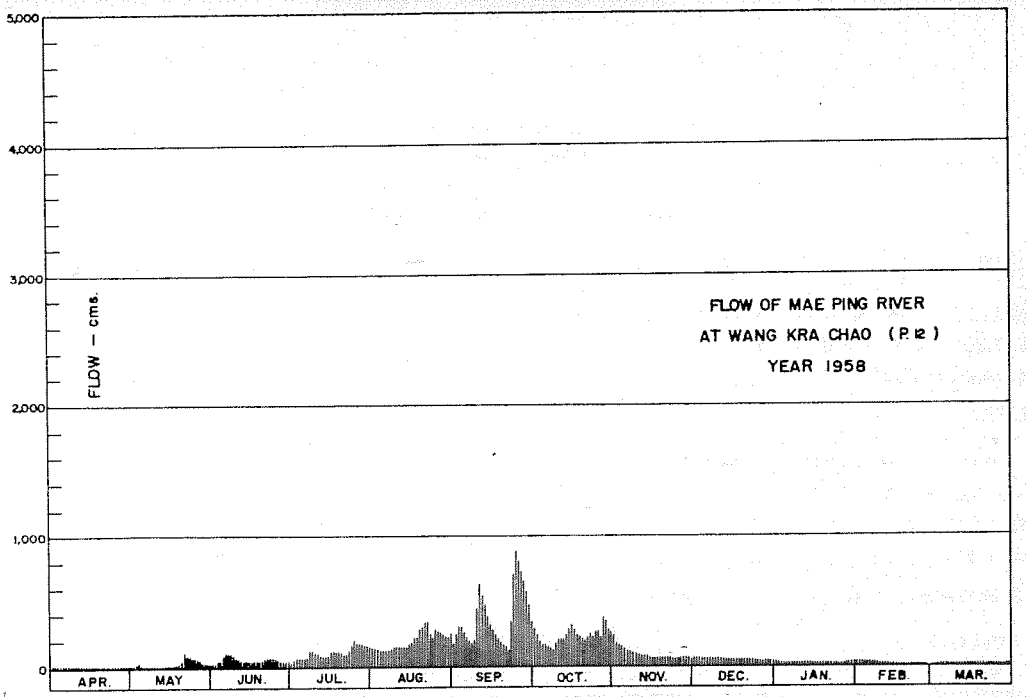
Overbank Flow Conditions:

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1958. Natural flow of stream affected by state diversions above gage site for irrigation of about 28,000 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	136.09	136.13	136.36	136.38	137.03	137.31	137.90	137.48	136.71	136.42	136.27	135.96
2	.08	.21	.34	.52	.00	.46	.71	.33	.71	.41	.24	.95
3	.09	.25	.45	.64	136.97	.64	.56	.23	.71	.40	.20	.95
4	.16	.22	.57	.62	.93	.61	.41	.16	.70	.40	.19	.94
5	.20	.22	.88	.63	.95	.49	.32	.09	.68	.40	.19	.94
6	136.17	136.17	136.89	136.58	136.93	137.38	137.24	137.03	136.68	136.40	136.18	135.93
7	.14	.12	.98	.54	.91	.26	.19	136.98	.67	.40	.17	.93
8	.12	.11	.90	.86	.96	.20	.16	.92	.66	.39	.15	.93
9	.10	.09	.79	137.00	.99	.30	.14	.89	.64	.38	.15	.93
10	.09	.06	.73	136.88	137.01	.97	.24	.85	.63	.38	.14	.92
11	136.08	136.07	136.64	136.81	137.03	138.40	137.36	136.82	136.62	136.38	136.13	135.92
12	.06	.06	.57	.78	.04	.28	.37	.79	.61	.38	.13	.92
13	.06	.04	.53	.75	.03	.16	.39	.78	.60	.38	.12	.92
14	.05	.06	.51	.75	.11	137.94	.51	.76	.58	.38	.10	.91
15	.04	.09	.47	.75	.13	.77	.67	.73	.57	.23	.08	.91
16	136.04	136.22	136.42	136.85	137.21	137.65	137.73	136.72	136.56	136.23	136.07	135.90
17	.03	.20	.42	.95	.32	.50	.63	.71	.55	.23	.07	.90
18	.02	.32	.46	.89	.36	.39	.50	.70	.53	.22	.05	.89
19	.02	.43	.49	.88	.48	.29	.46	.71	.52	.21	.04	.89
20	.21	.61	.49	.82	.57	.19	.39	.72	.52	.21	.03	.91
21	136.21	136.86	136.54	136.78	136.65	137.12	137.36	136.72	136.50	136.21	136.01	135.91
22	.10	.78	.56	.80	.61	.07	.44	.72	.49	.21	.01	.93
23	.13	.76	.60	.89	.49	.14	.45	.72	.47	.20	.01	.94
24	.12	.71	.62	137.08	.37	.83	.43	.72	.46	.19	.00	.94
25	.10	.66	.57	.27	.22	138.56	.55	.73	.45	.19	135.99	.93
26	136.09	136.58	136.48	137.24	137.12	138.87	137.57	136.73	136.44	136.19	135.98	135.92
27	.07	.51	.42	.19	.04	.73	.42	.72	.44	.19	.98	.92
28	.05	.44	.40	.16	136.98	.61	.84	.71	.44	.23	.97	.91
29	.05	.40	.39	.16	.93	.38	.83	.72	.43	.27		.90
30	.03	.36	.38	.13	.91	.12	.68	.71	.42	.27		.89
31		.37		.09	137.13		.56		.43	.27		.88
Mean	130.09	136.33	136.56	136.86	137.14	137.75	137.48	136.85	136.56	136.30	136.09	135.92
Max.	136.21	136.86	136.98	137.27	137.65	138.87	137.90	137.48	136.71	136.42	136.27	135.96
Min.	136.02	136.04	136.34	136.38	136.91	137.07	137.14	136.70	136.42	136.19	135.97	135.88

WATER YEAR 1958 : Max. 138.87 m. Min. 155.88 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	8.15	10	31	39	143	195	344	241	70	39	32	8.52
2	7.68	16	29	56	143	244	290	195	70	39	29	8.00
3	8.15	21	40	75	137	303	250	168	70	37	25	8.00
4	11	19	56	73	128	303	200	154	69	37	24	7.56
5	14	18	98	73	137	266	177	139	69	35	24	7.56
6	12	14	113	64	127	231	161	132	70	32	23	7.12
7	11	10	111	72	132	200	159	119	70	37	22	7.12
8	9.56	10	100	120	139	187	148	109	67	35	21	7.12
9	9.09	8.15	82	132	145	203	134	103	63	33	21	7.12
10	8.15	6.74	73	107	150	454	185	96	63	33	20	6.68
11	7.21	8.15	63	105	154	637	203	85	63	32	19	6.68
12	6.27	8.15	54	92	157	551	208	87	63	31	19	6.68
13	6.27	6.27	49	87	157	482	218	85	60	31	18	6.68
14	5.80	6.27	52	89	159	394	250	73	59	31	17	6.24
15	5.40	10	46	94	173	322	293	72	52	28	15	6.24
16	5.80	15	40	120	195	284	319	72	59	28	15	5.80
17	5.00	14	43	132	222	247	287	72	57	28	15	5.80
18	4.65	23	53	119	234	211	241	67	54	27	13	5.44
19	4.30	33	53	120	284	182	231	69	54	26	13	5.44
20	14	49	49	107	312	161	214	73	54	26	12	6.24
21	13	103	67	98	340	148	200	75	53	26	11	6.24
22	8.15	90	69	107	340	134	234	75	52	26	11	7.12
23	9.56	85	72	122	257	159	241	73	47	25	11	7.56
24	9.56	77	73	168	225	347	231	72	47	24	10	7.56
25	8.62	70	63	206	190	703	269	75	49	24	10	7.12
26	7.68	61	56	192	163	892	275	72	49	24	9.56	6.68
27	7.21	47	45	182	157	740	225	70	40	24	9.56	6.68
28	6.74	38	42	180	143	650	376	72	44	28	9.04	6.24
29	7.21	33	40	177	132	570	358	75	45	32		5.80
30	9.56	30	42	170	122	462	287	69	42	32		5.44
31		31		159	159		260		42	32		5.08
Total	250.77	970.73	1,804	3,637	5,656	10,862	7,370	2,939	1,766	942	478.16	207.56
Mean	8.36	31.3	60.1	117	182	362	238	98.0	57.0	30.4	17.1	6.69
Max.	14	103	113	206	340	892	376	241	70	39	32	8.52
Min.	4.30	6.27	29	39	122	134	134	67	42	24	9.04	5.08
Runoff — mcm.	21.666	83.871	155.866	314.237	488.678	938.477	636.768	253.929	152.582	81.389	41.313	17.933

WATER YEAR 1958 : Max. 892 Min. 4.30 Mean 101 Annual Runoff 3,186.710 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 26	10.00	139.02	985				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

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

Location: Lat 17°- 14' - 30" N, Long 99°- 00' - 45" E, on right bank 4 kilometers downstream from Yanhee Damsite, Amphoe Sam Ngao, Tak.

Drainage Area: 26,390 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +135.19 m.(M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: 25 meters north of the gage site.
Elevation: +143.825 m.(M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly 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: Rather unstable, shifting adjustment is included for flow computation.

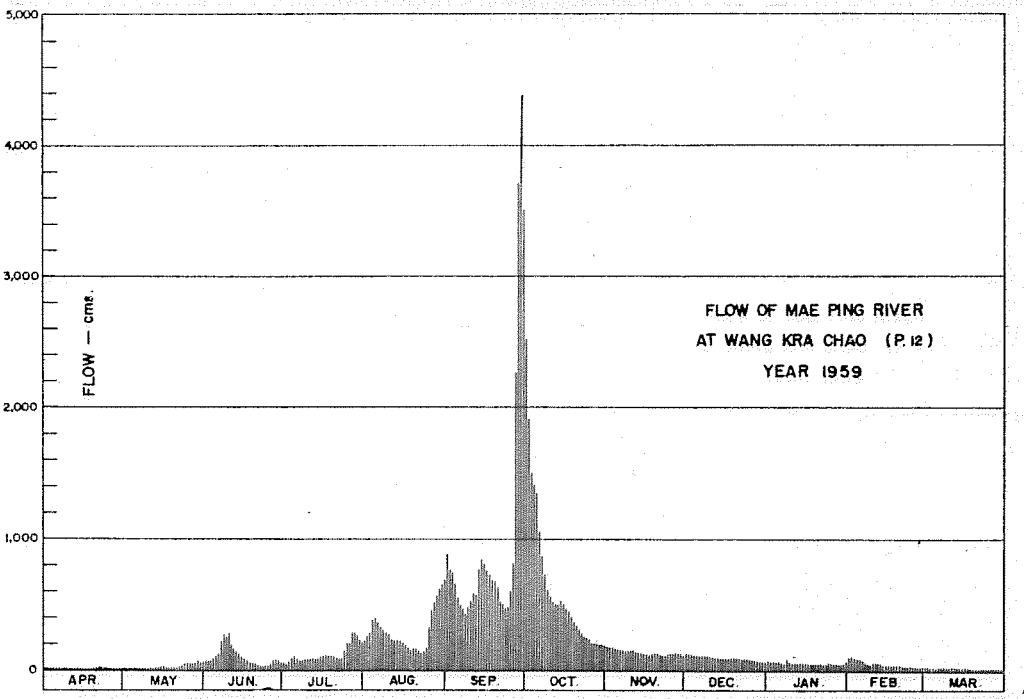
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage-discharge relation used is defined by discharge measurements during 1959. Natural flow of stream affected by state diversions above gage site for irrigation of about 28,000 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	135.88	136.01	136.60	136.42	137.35	138.76	140.62	137.17	136.90	136.54	136.79	136.30
2	.88	.14	.59	.40	.48	.68	.11	.16	.90	.52	.83	.29
3	.88	.03	.64	.48	.53	.61	139.71	.14	.88	.51	.76	.28
4	.87	.03	.77	.63	.81	.46	.61	.14	.86	.51	.69	.27
5	.87	.01	.82	.76	.86	.25	.54	.14	.85	.50	.63	.27
6	135.86	135.99	136.97	136.68	137.75	138.22	139.17	137.14	136.84	136.49	136.58	136.27
7	.86	.96	137.26	.60	.63	.21	138.90	.14	.83	.48	.55	.25
8	.86	.92	.43	.59	.62	.32	.65	.13	.82	.48	.51	.24
9	.86	.91	.38	.61	.55	.45	.46	.12	.82	.47	.50	.24
10	.86	.91	.23	.63	.48	.51	.35	.09	.81	.46	.49	.23
11	135.85	135.96	137.15	136.66	137.37	138.57	138.27	137.07	136.80	136.45	136.48	136.22
12	.86	136.00	.07	.67	.34	.58	.21	.04	.79	.45	.47	.21
13	.85	.10	136.95	.67	.32	.75	.22	.03	.79	.44	.45	.21
14	.84	.13	.87	.67	.27	.90	.27	.02	.79	.44	.44	.20
15	.84	.15	.74	.71	.21	.81	.24	.01	.77	.43	.43	.20
16	135.85	136.19	136.64	136.81	137.15	138.70	138.17	136.98	136.77	136.42	136.42	136.19
17	.95	.11	.57	.80	.13	.66	.10	.97	.76	.41	.40	.18
18	.99	.12	.49	.74	.10	.64	.01	.96	.75	.39	.39	.18
19	.99	.07	.42	.73	.17	.58	137.92	.97	.73	.37	.38	.18
20	136.01	.03	.37	.70	.13	.50	.82	.97	.70	.37	.37	.16
21	136.13	136.06	136.33	136.70	137.05	138.41	137.72	136.95	136.69	136.37	136.36	136.17
22	.07	.23	.31	.66	.01	.30	.63	.95	.67	.37	.34	.17
23	.01	.19	.30	.69	.03	.21	.54	.95	.65	.40	.34	.16
24	135.98	.45	.29	.94	.18	.22	.47	.94	.64	.39	.33	.15
25	.95	.47	.29	137.19	.59	.45	.41	.95	.62	.39	.32	.14
26	135.95	136.39	126.35	137.34	137.99	138.86	137.35	136.93	136.61	136.39	136.32	136.14
27	.95	.43	.55	.42	138.17	140.40	.32	.93	.60	.39	.32	.14
28	.94	.52	.56	.44	.24	141.41	.28	.92	.57	.39	.31	.13
29	.93	.56	.54	.38	.30	.79	.24	.90	.56	.40	.31	.13
30	.93	.50	.46	.33	.42	.21	.20	.89	.55	.49		.13
31		.54		.31	.53		.18		.54	.66		.12
												.12
Mean	135.92	136.16	136.70	136.82	137.54	138.80	138.25	137.02	136.74	136.44	136.46	136.20
Max.	136.13	136.56	137.43	137.44	138.53	141.79	140.62	137.17	136.90	136.66	136.83	136.30
Min.	135.84	135.91	136.30	136.40	137.01	138.21	137.18	136.89	136.54	136.37	136.31	136.12

WATER YEAR 1959 : Max. 141.79 m. Min. 135.84 m.



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DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	5.20	13	72	53	229	877	2,520	166	124	65	100	21
2	5.20	19	69	49	266	772	1,910	163	124	62	107	21
3	4.95	13	75	62	281	740	1,500	168	120	61	95	19
4	4.70	12	98	83	381	653	1,400	159	114	62	82	17
5	4.70	11	113	104	388	552	1,345	159	113	61	73	18
6	4.45	9.70	131	92	360	508	1,050	159	109	59	64	20
7	4.45	8.80	201	72	316	475	870	159	107	56	60	19
8	4.70	8.40	266	74	303	521	729	157	104	58	55	20
9	4.45	8.40	243	80	281	590	634	155	102	55	54	20
10	4.95	8.40	194	81	260	638	576	148	100	54	51	19
11	4.45	10	177	87	222	688	534	141	98	53	49	23
12	4.70	12	157	87	222	683	504	146	97	54	49	20
13	4.45	16	131	86	235	772	504	124	98	51	40	18
14	4.20	21	114	87	214	841	526	128	98	52	39	16
15	4.45	22	92	100	206	812	508	126	94	50	37	21
16	4.95	24	81	111	181	756	479	122	92	46	36	15
17	8.40	18	66	116	170	729	448	120	90	46	35	13
18	9.30	18	51	102	150	698	414	118	86	42	33	13
19	11	16	49	102	177	698	378	129	94	42	31	14
20	13	13	41	100	161	629	340	128	89	40	31	12
21	20	14	38	94	146	522	303	120	87	42	29	12
22	15	25	36	80	139	504	272	118	86	40	26	12
23	12	23	34	98	141	467	254	118	83	45	26	12
24	10	47	35	157	172	483	246	129	77	45	21	11
25	8.00	50	37	201	323	614	224	124	75	45	21	10
26	8.40	43	42	222	459	818	204	129	74	43	22	12
27	8.40	50	71	284	504	2,265	199	128	74	42	21	12
28	8.80	56	72	284	566	3,700	191	124	69	44	20	12
29	8.40	65	69	266	614	4,380	181	111	66	47	21	11
30	7.60	56	59	235	653	3,390	174	109	65	52		11
31		63		216	683		170		63	77		12
Total	223.25	773.70	2,914	3,865	9,403	38,775	19,587	4,085	2,872	1,591	1,328	486
Mean	7.44	24.9	97.1	125	303	1,026	632	136	92.6	51.3	45.8	15.7
Max.	20	65	266	284	683	4,380	2,520	168	124	77	107	23
Min.	4.20	8.40	34	49	139	467	170	109	63	40	20	10
Runoff - mcm.	19.289	66.848	251.770	333.936	812.419	2,658.960	1,692.317	352.944	248.141	137.462	114.739	41.990

WATER YEAR 1959 : Max. 4380 Min. 4.20 Mean 213 Annual Runoff 6,730.815 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 29	3.00	141.85	4,500				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Taeng River at Kaeng Kut, Chiang Mai (P.13)

Location: Lat 19°– 12' – 38" N, Long 98°– 52' – 20" E, on left bank 1 kilometer downstream from Ban Kut, Amphoe Mae Taeng, Chiang Mai.

Drainage Area: 1,765 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +441.31 m.(M.S.L.), datum of Aug.57.

Bench Mark: B.M. – R.I.D. No.6

Location: Near the gage site.
Elevation: +444.360 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: 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: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

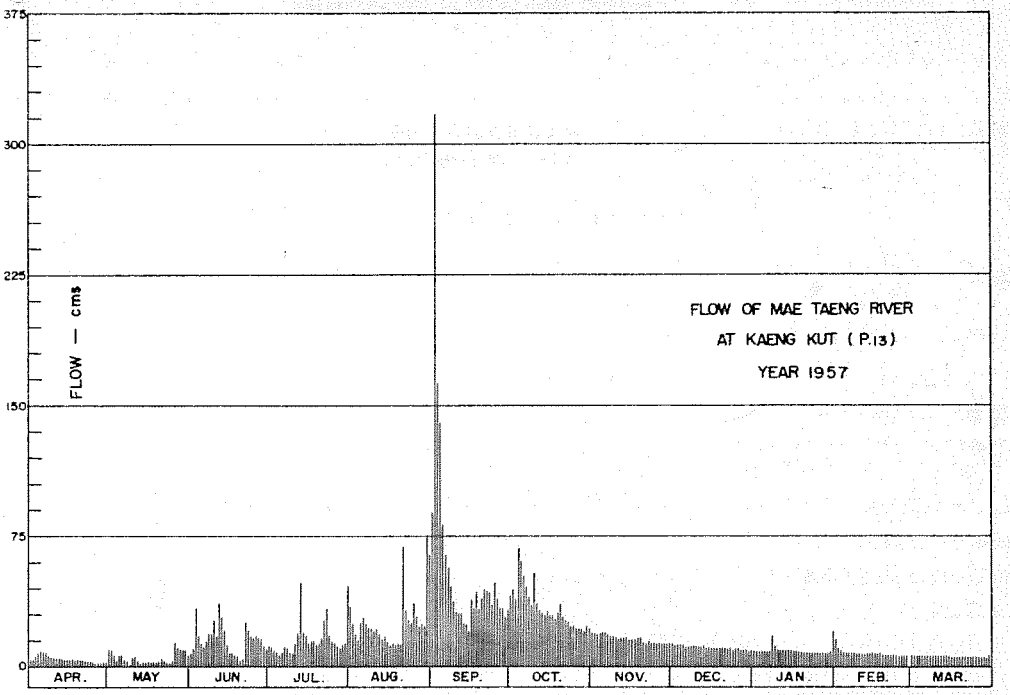
General Description: Records fair. Stage–discharge relation used is defined by discharge measurements during 1957. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	441.06	441.21	441.16	441.25	441.68	443.30	442.74	442.40	442.29	442.22	442.34	442.14
2	.07	.19	.21	.25	.48	445.40	.79	.40	.29	.22	.24	.14
3	.11	.13	.65	.23	.39	444.01	.70	.40	.29	.22	.21	.14
4	.15	.03	.37	.20	.33	443.53	443.12	.42	.29	.22	.20	.14
5	.17	.12	.27	.18	.52	.33	442.99	.41	.28	.21	.20	.14
6	441.16	441.09	441.32	441.21	441.57	443.11	442.83	442.40	442.40	442.21	442.20	442.14
7	.15	.04	.41	.25	.50	.07	.73	.39	.28	.21	.19	.14
8	.12	.02	.50	.25	.45	442.92	.69	.37	.28	.37	.19	.13
9	.10	440.94	.48	.21	.42	.83	.68	.37	.28	.27	.18	.14
10	.09	441.10	.64	.20	.41	.78	.80	.36	.28	.23	.18	.14
11	441.08	441.11	441.46	441.33	441.44	442.71	442.70	442.36	442.27	442.23	442.18	442.14
12	.08	.02	.80	.46	.38	.67	.64	.35	.27	.22	.18	.13
13	.07	440.99	.64	.80	.36	.54	.59	.35	.27	.22	.18	.13
14	.06	441.01	.47	.45	.36	.52	.55	.34	.26	.22	.18	.13
15	.06	.00	.28	.39	.32	.49	.53	.34	.26	.22	.18	.13
16	441.06	441.01	441.20	441.30	441.29	442.64	442.51	442.33	442.26	442.21	442.18	442.12
17	.06	.00	.16	.32	.31	.63	.51	.34	.26	.21	.17	.12
18	.06	.00	.11	.31	.27	.81	.50	.33	.25	.21	.17	.12
19	.05	.00	.08	.28	.28	.63	.54	.32	.25	.20	.16	.12
20	.05	.02	.10	.31	.31	.71	.60	.32	.25	.20	.16	.11
21	441.04	441.08	441.14	441.35	442.16	442.81	442.52	442.32	442.24	442.20	442.16	442.11
22	.03	.02	.47	.48	441.65	.80	.49	.32	.24	.20	.16	.11
23	.02	.00	.38	.69	.49	.83	.47	.31	.24	.19	.16	.11
24	.02	.00	.34	.40	.47	.74	.46	.31	.24	.19	.15	.11
25	.01	.02	.34	.33	.65	.80	.46	.31	.24	.19	.15	.11
26	441.00	441.30	441.36	441.30	441.54	442.78	442.44	442.30	442.24	442.19	442.15	442.11
27	.00	.24	.35	.26	.48	.69	.43	.30	.23	.19	.15	.10
28	.00	.21	.35	.25	.46	.61	.41	.30	.23	.19	.15	.10
29	.01	.21	.27	.27	.46	.55	.42	.30	.23	.19		.10
30	.04	.19	.23	.29	442.12	.56	.44	.29	.22	.22		.14
31		.12		.73	441.99		.42		.22	.43		.14
Mean	441.07	441.08	441.35	441.34	441.50	442.93	442.60	442.34	442.26	442.22	442.18	442.12
Max.	441.17	441.30	441.80	441.80	442.16	445.40	443.12	442.40	442.29	442.43	442.34	442.14
Min.	441.00	440.94	441.08	441.18	441.27	442.49	442.41	442.29	442.22	442.19	442.15	442.10

WATER YEAR 1957 : Max. 445.40 m. Min. 440.94 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	5.00	10	8.51	11	37	90	44	21	13	9.84	16	6.14
2	5.39	9.36	11	11	25	328	48	19	13	9.84	11	6.14
3	6.95	6.95	35	10	20	173	41	19	13	9.84	9.32	6.14
4	8.51	3.50	14	8.90	17	111	75	20	13	9.84	8.80	6.14
5	9.36	6.56	9.82	7.73	27	87	65	20	20	9.32	8.80	6.14
6	7.34	5.39	12	8.90	30	65	52	19	19	9.32	8.80	6.14
7	6.95	3.80	17	11	26	60	45	18	12	9.32	8.42	6.14
8	5.78	3.20	26	11	23	46	42	17	12	17	8.42	5.76
9	5.00	1.20	25	8.90	22	37	41	17	12	12	8.04	6.14
10	4.70	5.78	35	8.51	21	34	50	17	12	9.84	7.66	6.14
11	4.40	6.17	24	14	23	31	42	17	12	9.84	7.66	6.14
12	4.40	3.20	45	21	20	30	34	17	12	9.32	7.66	5.76
13	4.10	2.30	35	42	17	24	31	17	12	9.32	7.66	5.76
14	3.80	2.90	24	21	17	25	29	16	11	9.32	7.66	5.76
15	3.80	2.60	12	18	14	25	31	16	11	9.32	7.66	5.76
16	3.80	2.90	8.90	14	13	37	30	16	11	9.32	7.66	5.38
17	3.80	2.60	7.34	15	14	34	30	16	11	9.32	7.28	5.38
18	3.80	2.60	5.39	14	12	45	29	16	11	9.32	7.28	5.38
19	3.50	2.60	4.40	13	12	32	32	15	11	8.80	6.90	5.38
20	3.50	3.20	6.95	14	14	38	36	15	11	8.80	6.90	5.00
21	3.20	5.00	8.51	17	70	45	30	15	10	8.80	6.90	5.00
22	2.90	3.20	25	23	33	45	26	15	10	8.80	6.90	5.00
23	2.60	2.60	20	36	26	45	25	14	10	8.42	6.90	5.00
24	2.60	2.60	18	19	25	38	24	14	10	8.42	6.52	5.00
25	2.30	3.50	18	15	36	42	24	14	10	8.42	6.52	5.00
26	2.00	15	19	14	29	41	23	14	10	8.42	6.52	5.00
27	2.00	12	19	12	26	40	22	14	9.84	8.42	6.52	4.71
28	2.00	11	16	12	24	34	21	14	9.84	8.42	6.52	4.71
29	2.80	11	13	12	24	30	22	14	10	8.42		4.71
30	3.80	9.82	10	13	66	31	23	13	9.84	9.84		6.14
31		6.95		41	61		22		9.84	21		6.14
Total	130.18	169.48	531.82	496.94	824	1,743	1,089	489	346.36	306.22	222.88	173.13
Mean	4.34	5.47	17.7	16.0	26.6	58.1	35.1	16.3	11.2	9.88	7.96	5.58
Max.	9.36	15	45	42	70	328	75	21	13	21	16	6.14
Min.	2.00	1.20	4.40	7.73	12	24	21	13	9.84	8.40	6.52	4.71
Runoff - mcm.	11.247	14.643	45.949	42.936	71.193	150.595	94.090	42.250	29.925	26.457	19.257	14.958

WATER YEAR 1957 : Max. 328 Min. 1.20 Mean 17.7 Annual Runoff 563.502 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 2	13.00	445.81	429				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Taeng River at Kaeng Kut, Chiang Mai (P.13)

Location: Lat 19°- 12' - 38" N, Long 98°- 52' - 27" E, on left bank 1 kilometer downstream of Ban Kut, Amphoe Mae Taeng, Chiang Mai.

Drainage Area: 1,765 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +441.31 m.(M.S.L.), datum of Aug.57

Bench Mark: B.M. - R.I.D. No.6

Location: Near the gage site.
Elevation: +444.360 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: 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: Rather unstable, shifting adjustment is included for flow computation.

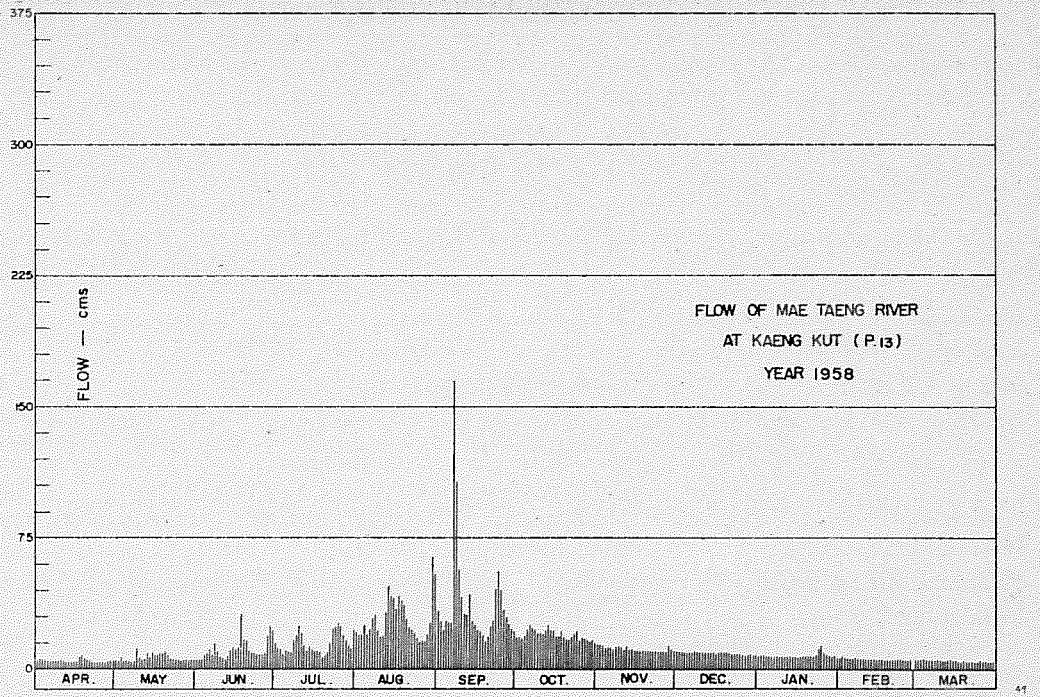
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1958. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	442.11	442.12	442.08	442.35	442.44	442.64	442.45	442.33	442.23	442.16	442.13	442.07
2	.13	.10	.11	.25	.38	.52	.44	.33	.23	.16	.15	.07
3	.12	.18	.12	.23	.43	.47	.43	.32	.23	.16	.13	.08
4	.11	.11	.18	.20	.48	.51	.43	.31	.22	.15	.12	.09
5	.11	.11	.20	.24	.44	.49	.46	.31	.22	.15	.11	.08
6	442.10	442.10	442.24	442.23	442.46	442.49	442.49	442.31	442.21	442.15	442.11	442.08
7	.10	.09	.19	.23	.59	444.12	.48	.30	.21	.15	.11	.07
8	.10	.08	.32	.39	.65	443.55	.46	.30	.20	.15	.11	.07
9	.10	.28	.22	.42	.50	442.97	.45	.30	.20	.14	.11	.07
10	.10	.15	.15	.47	.42	.79	.46	.30	.20	.14	.11	.06
11	442.09	442.11	442.12	442.41	442.41	442.69	442.47	442.30	442.19	442.14	442.11	442.05
12	.09	.13	.12	.31	.65	.67	.48	.29	.19	.14	.10	.04
13	.09	.22	.19	.27	443.04	.77	.46	.29	.19	.14	.10	.04
14	.09	.14	.23	.30	442.75	.61	.45	.28	.19	.14	.09	.04
15	.09	.18	.29	.26	.71	.56	.46	.28	.19	.14	.09	.04
16	442.09	442.20	442.27	442.24	442.62	442.53	442.44	442.28	442.18	442.14	442.09	442.04
17	.19	.20	.31	.23	.70	.51	.44	.27	.18	.14	.09	.03
18	.19	.21	.62	.20	.70	.47	.46	.27	.18	.14	.08	.03
19	.17	.21	.39	.18	.66	.46	.43	.26	.18	.14	.08	.03
20	.13	.24	.37	.18	.55	.56	.41	.26	.18	.14	.08	.03
21	442.11	442.19	442.24	442.21	442.47	442.58	442.40	442.26	442.18	442.13	442.08	442.03
22	.10	.13	.20	.33	.43	.59	.41	.25	.17	.13	.08	.03
23	.09	.11	.21	.48	.39	.82	.43	.25	.17	.13	.08	.03
24	.08	.10	.19	.52	.34	.94	.46	.25	.17	.22	.08	.02
25	.08	.10	.20	.56	.32	.80	.40	.25	.16	.30	.08	.02
26	442.08	442.09	442.18	442.53	442.32	442.65	442.40	442.24	442.16	442.21	442.08	442.02
27	.07	.10	.20	.41	.32	.60	.41	.26	.16	.18	.07	.02
28	.09	.10	.40	.34	.42	.54	.38	.32	.16	.16	.07	.02
29	.11	.09	.50	.29	.52	.49	.36	.26	.16	.15		.02
30	.11	.10	.48	.28	443.01	.48	.35	.25	.16	.14		.02
31		.09		.48	442.91		.34			.13		.02
Mean	442.11	442.14	442.25	442.32	442.55	442.69	442.43	442.28	442.19	442.16	442.09	442.04
Max.	442.19	442.28	442.62	442.56	443.04	444.12	442.46	442.33	442.23	442.30	442.15	442.09
Min.	442.07	442.08	442.08	442.18	442.32	442.46	442.34	442.25	442.16	442.13	442.07	442.02

WATER YEAR 1958 : Max. 444.12 m. Min. 442.02 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	4.88	5.44	4.88	16	21	35	20	15	11	8.88	7.44	5.44
2	5.44	4.88	5.72	12	18	28	20	15	11	8.88	8.16	5.44
3	5.16	7.44	6.00	11	21	25	19	14	11	8.88	7.44	5.72
4	4.88	5.16	8.16	9.98	23	27	19	14	11	8.52	7.08	6.00
5	4.88	5.16	8.88	12	21	26	21	13	11	8.52	6.72	5.72
6	4.60	4.88	10	11	22	26	24	13	11	8.52	6.72	5.72
7	4.60	4.32	8.52	11	30	165	23	13	11	8.52	6.72	5.44
8	4.60	4.32	13	19	34	104	22	13	10	8.52	6.72	5.44
9	4.60	12	9.60	21	24	55	22	13	10	8.16	6.72	5.44
10	4.60	6.72	7.08	23	20	41	22	13	10	8.16	6.72	5.16
11	4.32	5.16	6.00	20	20	34	23	13	9.98	8.16	6.72	4.88
12	4.32	6.00	6.00	15	34	33	24	12	9.98	8.16	6.36	4.60
13	4.32	9.24	8.52	13	62	40	25	12	9.98	8.16	6.36	4.60
14	4.32	6.72	10	14	40	29	23	12	9.98	8.16	6.00	4.60
15	4.32	6.36	13	12	38	26	22	12	9.98	8.16	6.00	4.60
16	4.32	8.88	12	12	34	23	21	12	9.60	8.16	6.00	4.60
17	7.44	8.88	13	11	40	22	21	12	9.60	8.16	6.00	4.32
18	7.44	9.24	30	9.24	40	20	22	12	9.60	8.16	5.72	4.32
19	6.72	9.24	17	8.52	36	19	21	11	9.60	8.16	5.72	4.32
20	5.44	10	16	8.52	30	24	20	11	9.60	8.16	5.72	4.32
21	4.88	8.52	11	9.60	25	26	19	11	9.60	7.80	5.72	4.32
22	4.60	6.36	9.24	16	23	26	20	11	9.24	7.80	5.72	4.32
23	4.32	5.72	9.60	23	21	46	20	12	9.24	7.80	5.72	4.60
24	4.04	6.00	8.88	26	18	55	21	12	9.24	11	5.72	4.32
25	4.04	6.00	9.24	28	17	45	18	12	8.88	14	5.72	4.32
26	4.04	5.16	8.52	26	17	34	18	11	8.88	10	5.72	4.32
27	3.76	5.44	9.98	20	17	31	19	12	8.88	9.24	5.44	4.32
28	4.32	5.44	19	16	22	27	17	14	8.88	8.52	5.44	4.32
29	4.88	5.16	24	14	28	22	16	12	8.88	8.16		4.04
30	4.88	5.44	23	14	63	22	16	12	8.88	7.80		4.04
31		5.16		23	55		15		8.88	7.44		4.04
Total	144.96	204.44	345.82	484.86	914	1,136	633	374	304.38	266.72	176.24	147.64
Mean	4.83	6.59	11.5	15.6	29.5	37.9	20.4	12.5	9.82	8.60	6.09	4.76
Max.	7.44	12	30	28	63	165	25	15	11	14	8.16	6.00
Min.	3.76	4.32	4.88	8.52	17	19	15	11	8.88	7.44	5.44	4.04
Runoff - mcm.	12.525	17.664	29.879	41.892	78.970	98.150	54.691	32.314	26.298	23.044	15.227	12.756

WATER YEAR 1958 : Max. 165 Min. 3.76 Mean 14.1 Annual Runoff 443.410 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 7	17.00	445.15	296				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Taeng River at Kaeng Kut, Chiang Mai (P.13)

Location: Lat 19°– 13' – 38" N, Long 98°– 52' – 27" E, on left bank 1 kilometer downstream of Ban Kut, Amphoe Mae Taeng, Chiang Mai.

Drainage Area: 1,765 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +441.31 m.(M.S.L.), datum of Aug.57

Bench Mark: B.M. – R.I.D. No.6

Location: Near the gage site.
Elevation: +444.360 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: 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: Rather unstable, shifting adjustment is included for flow computation.

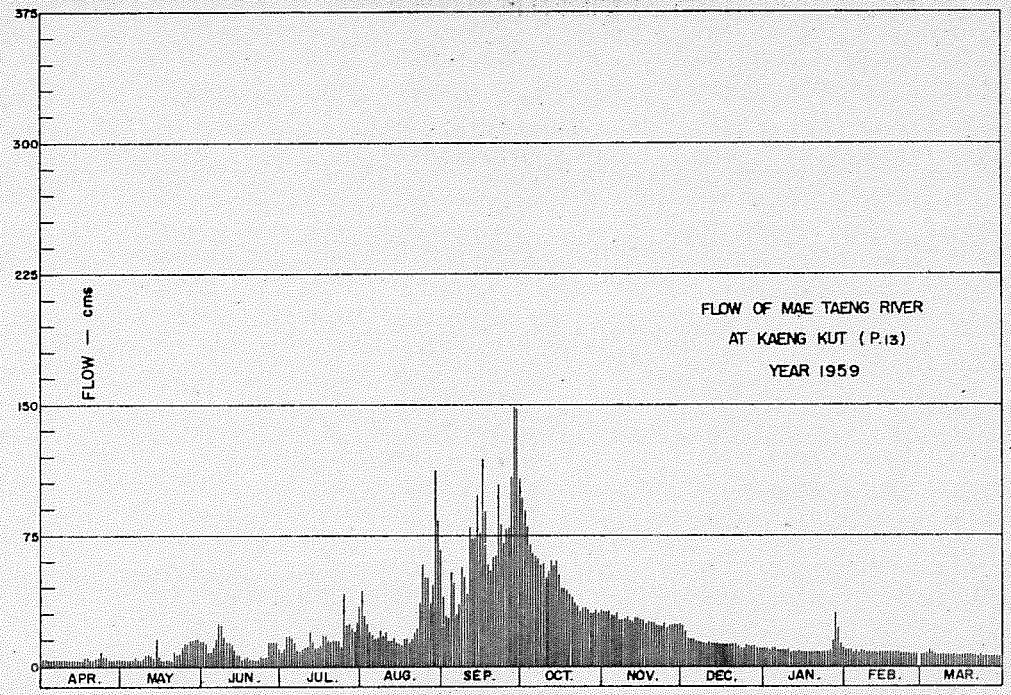
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1959. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	442.02	442.00	442.31	442.14	442.70	442.75	443.33	442.47	442.22	442.10	442.05	441.95
2	.02	.01	.29	.17	.52	.63	.24	.47	.21	.10	.04	.94
3	.02	.01	.19	.33	.43	.58	.11	.47	.20	.09	.03	.96
4	.02	.00	.18	.33	.36	.88	.00	.44	.20	.09	.02	442.03
5	.02	441.99	.25	.33	.33	.82	442.91	.43	.20	.09	.03	441.99
6	442.02	442.05	442.33	442.26	442.30	442.64	442.87	442.41	442.19	442.08	442.03	441.97
7	.02	.02	.49	.18	.29	.71	.81	.40	.19	.07	.03	.95
8	.02	441.99	.47	.15	.36	.99	.78	.38	.18	.07	.02	.95
9	.02	442.06	.36	.17	.37	.89	.82	.37	.18	.07	.01	.95
10	.01	.09	.28	.19	.35	.77	.78	.37	.18	.06	.00	.94
11	442.01	442.11	442.28	442.20	442.30	443.10	442.80	442.36	442.22	442.06	441.99	441.93
12	.01	.09	.20	.35	.27	.13	.86	.36	.20	.06	.98	.93
13	.02	.07	.15	.27	.33	.02	.81	.35	.20	.05	.98	.93
14	.02	.31	.11	.20	.25	.39	.83	.35	.17	.04	.98	.92
15	.02	.08	.10	.20	.22	.16	.71	.35	.17	.04	.98	.92
16	442.03	442.02	442.10	442.22	442.22	443.68	442.68	442.33	442.16	442.04	441.97	441.92
17	.07	.01	.09	.34	.29	.13	.66	.33	.15	.03	.97	.92
18	.05	.01	.07	.36	.33	442.94	.64	.31	.15	.03	.97	.92
19	.02	.00	.06	.32	.26	.91	.61	.31	.13	.02	.97	.91
20	.01	.00	.05	.30	.24	443.03	.58	.30	.13	.02	.97	.91
21	442.06	442.17	442.03	442.27	442.33	442.98	442.57	442.29	442.13	442.02	441.97	441.91
22	.06	.10	.03	.29	.45	443.47	.56	.28	.13	.02	.97	.90
23	.15	.10	.09	.27	.65	.19	.53	.28	.13	.02	.97	.90
24	.09	.18	.07	.22	.93	.00	.52	.27	.13	.02	.97	.89
25	.05	.26	.09	.73	.78	.09	.51	.25	.13	.02	.97	.89
26	442.03	442.27	442.26	442.49	442.81	443.19	442.50	442.24	442.13	442.03	441.97	441.88
27	.01	.32	.26	.49	.59	.63	.49	.24	.12	.18	.96	.88
28	.00	.31	.30	.45	.77	.78	.48	.24	.11	.48	.96	.88
29	.01	.33	.26	.40	443.54	.80	.47	.23	.11	.33	.96	.88
30	.00	.31	.19	.47	.22	.50	.47	.23	.11	.16		.88
31		.31		.57	442.94		.47			.10		.88
Mean	442.03	442.11	442.20	442.31	442.51	443.09	442.72	442.34	442.16	442.08	441.99	441.92
Max.	442.15	442.33	442.49	442.73	443.54	443.80	443.33	442.47	442.22	442.48	442.05	442.03
Min.	442.00	441.99	442.03	442.14	442.22	442.58	442.47	442.23	442.11	442.02	441.96	441.88

WATER YEAR 1959 : Max. 443.80 m. Min. 441.88 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	4.04	3.67	15	8.38	42	40	95	37	24	11	9.94	7.44
2	4.04	4.04	14	9.76	29	32	86	32	21	11	9.56	7.10
3	4.04	4.04	8.84	18	24	28	86	32	18	11	9.18	7.78
4	4.04	3.67	8.36	18	19	50	76	30	16	11	8.80	10
5	4.04	2.78	13	18	18	45	68	30	14	11	9.18	8.80
6	3.67	5.52	16	14	16	32	65	30	14	10	9.18	8.12
7	3.67	4.41	25	10	16	37	59	29	14	9.94	9.56	7.44
8	3.67	3.04	24	8.84	19	59	57	28	13	9.94	9.18	7.44
9	3.67	5.89	17	9.76	20	51	60	28	13	9.94	8.80	7.44
10	3.30	6.63	13	11	19	42	52	28	13	9.56	8.46	7.10
11	3.30	6.63	13	11	16	74	54	27	15	9.56	8.12	6.76
12	3.30	5.89	11	19	15	77	59	28	14	9.56	8.80	6.76
13	3.67	5.15	8.84	15	18	69	59	28	14	9.18	8.80	6.76
14	3.67	16	7.00	11	14	104	60	28	13	8.80	8.80	6.42
15	3.67	5.52	6.63	11	12	88	51	28	13	8.80	8.80	6.42
16	4.04	3.30	6.63	12	12	124	48	27	13	8.80	8.46	6.42
17	5.52	4.04	6.26	18	16	76	45	27	13	8.46	8.46	6.76
18	4.78	4.04	5.52	19	18	59	43	25	13	8.46	8.46	6.76
19	3.67	3.67	5.15	16	16	55	41	25	13	8.12	8.46	6.42
20	3.30	3.67	4.78	15	15	65	39	25	13	8.12	8.46	6.42
21	5.15	9.30	3.67	13	17	60	38	24	13	8.12	7.78	6.42
22	5.15	6.26	3.67	14	24	106	36	24	11	8.12	7.78	6.08
23	8.84	6.26	5.89	23	37	86	34	25	11	8.12	7.88	6.08
24	6.26	9.76	5.15	16	58	69	33	25	11	8.12	7.88	6.08
25	4.78	12	5.89	42	51	77	32	24	12	8.12	7.88	5.74
26	4.04	13	14	25	53	86	32	23	12	8.46	7.88	5.40
27	4.04	15	14	25	37	131	31	25	12	15	7.44	5.40
28	3.67	15	16	23	50	147	33	25	11	31	7.44	6.08
29	4.04	16	14	20	113	149	33	24	11	23	7.44	6.08
30	3.67	15	11	27	81	112	33	24	11	14		6.08
31		15		32	57		33		11	12		6.08
Total	126.74	234.18	322.30	532.74	952	2,230	1,571	815	420	336.30	246.46	210.08
Mean	4.22	7.55	10.7	17.2	30.7	77.4	50.7	27.2	13.5	10.8	8.50	6.78
Max.	8.84	16	25	42	113	149	95	37	24	31	9.94	10
Min.	3.30	2.78	3.67	8.38	12	28	31	24	11	8.12	7.44	5.40
Runoff - mcm.	10.950	20.233	27.847	46.029	82.253	192.672	135.734	70.416	36.288	29.056	21.294	18.151

WATER YEAR 1959 : Max. 149 Min. 2.78 Mean 21.8 Annual Runoff 690.923 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 16	12.00	444.13	175				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

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

Location: Lat 18°- 13' - 49" N, Long 98°- 38' - 35" E, on right bank near the bridge on highway, Hot - Mae Sariang, 7.5 kilometers from Amphoe Hot, Chiang Mai.

Drainage Area: 3,853 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +275.84 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.13

Location: Infront of the camp office of station P.14
Elevation: +282.079 m. (M.S.L.)

Gage Reading Frequency: 24 - hourly readings.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1953 to date.

Rating Operation:

Period of Rating: 1953 - 60
Rated by Float: -
Rated by Current Meter: 1953 - 60

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

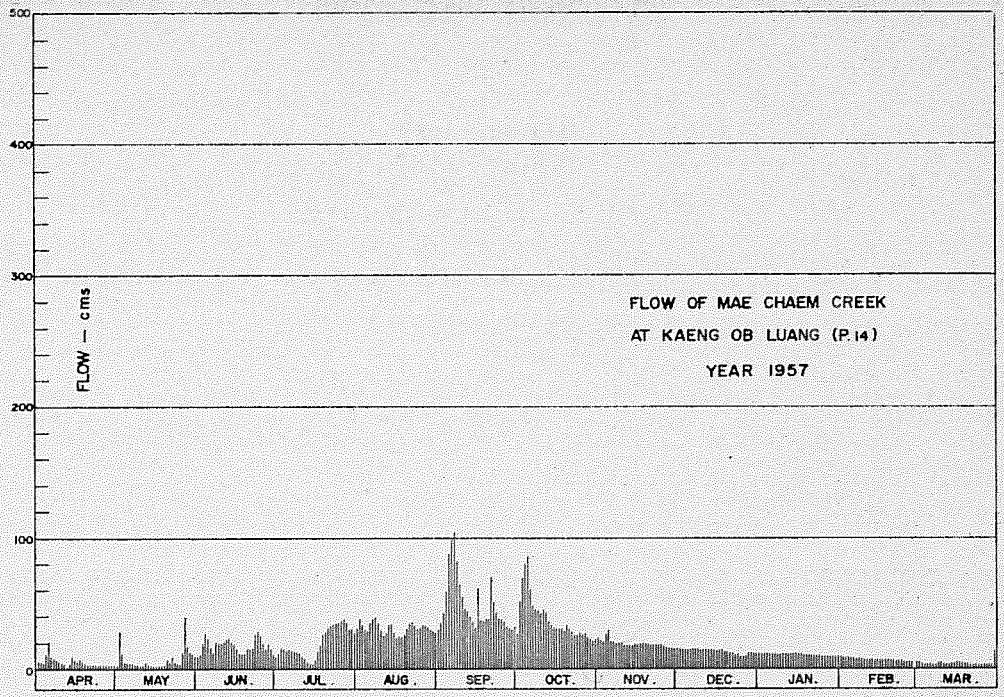
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1957. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	276.47	276.38	276.59	276.60	277.07	277.04	277.13	276.96	276.80	276.67	276.58	276.47
2	.47	277.03	.63	.68	.18	.13	.37	.93	.79	.67	.60	.48
3	.46	276.67	.80	.78	.09	.24	.60	.93	.78	.67	.61	.43
4	.66	.49	.94	.74	.03	.45	.70	277.01	.78	.67	.59	.42
5	.87	.46	.85	.71	.02	.76	.77	.00	.78	.66	.57	.44
6	276.60	276.44	276.68	276.74	277.13	277.87	277.49	276.85	276.78	276.66	276.57	276.44
7	.56	.43	.68	.72	.18	.94	.30	.87	.77	.66	.57	.41
8	.52	.42	.61	.70	.20	.70	.25	.86	.77	.65	.57	.42
9	.50	.40	.78	.69	.12	.51	.24	.86	.77	.65	.57	.45
10	.48	.38	.78	.66	.02	.39	.22	.85	.76	.65	.56	.45
11	276.42	276.39	276.84	276.61	276.95	277.27	277.31	276.84	276.76	276.64	276.56	276.43
12	.24	.48	.89	.59	277.01	.24	.23	.84	.75	.64	.56	.41
13	.25	.41	.89	.47	.13	.20	.13	.84	.74	.64	.55	.42
14	.61	.39	.84	.44	.10	.14	.10	.84	.74	.64	.54	.44
15	.53	.38	.80	.44	276.98	.05	.06	.86	.74	.64	.54	.46
16	276.52	276.37	276.74	276.55	276.93	277.48	277.05	276.86	276.74	276.63	276.54	276.46
17	.55	.36	.68	.71	.94	.14	.03	.86	.73	.63	.54	.45
18	.46	.36	.66	.82	.92	.14	.00	.86	.73	.63	.53	.44
19	.44	.41	.70	.99	.96	.17	.01	.85	.72	.63	.53	.44
20	.43	.55	.76	277.03	277.06	.18	.09	.85	.72	.62	.53	.43
21	276.42	276.48	276.76	277.07	277.13	277.58	277.02	276.84	276.71	276.61	276.51	276.42
22	.42	.61	.79	.09	.14	.45	.00	.84	.71	.61	.51	.41
23	.41	.50	277.02	.10	.09	.23	276.97	.84	.70	.61	.51	.40
24	.40	.45	.05	.12	.04	.17	.98	.84	.70	.60	.51	.38
25	.39	.43	276.96	.13	.08	.15	.99	.83	.69	.60	.50	.38
26	276.39	276.70	276.83	277.16	277.11	277.19	276.96	276.82	276.69	276.60	276.50	276.38
27	.39	277.18	.75	.17	.09	.13	.94	.82	.69	.59	.50	.38
28	.39	276.78	.85	.11	.05	.07	.95	.81	.69	.59	.49	.38
29	.38	.66	.75	.04	.04	.08	.93	.81	.68	.58		.38
30	.38	.65	.64	.05	.00	.04	.91	.80	.68	.58		.73
31		.59		276.99	276.99		.93		.68	.58		.74
Mean	276.47	276.52	276.78	276.83	277.06	277.30	277.15	276.86	276.73	276.63	276.54	276.44
Max.	276.87	277.18	277.05	277.17	277.20	277.94	277.77	277.01	276.80	276.67	276.61	276.74
Min.	276.24	276.36	276.59	276.44	276.92	277.04	276.91	276.80	276.68	276.58	276.49	276.38

WATER YEAR 1957 : Max. 277.94 m. Min. 276.24 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	4.96	2.80	10	9.36	32	30	34	24	16	12	8.64	4.96
2	4.96	29	12	12	39	35	52	22	16	12	9.36	5.28
3	4.64	12	20	17	33	43	71	21	15	12	9.72	3.80
4	12	8.28	27	15	30	59	81	28	15	12	9.00	3.60
5	21	7.20	23	14	29	87	86	30	15	12	8.28	4.00
6	9.36	6.56	14	15	35	97	60	20	15	12	8.28	4.00
7	7.92	6.24	14	14	39	105	46	21	16	12	8.28	3.40
8	6.56	5.92	12	13	40	81	44	20	15	11	8.28	3.60
9	5.92	5.28	19	13	35	64	44	20	16	11	8.28	4.32
10	5.28	4.64	19	12	29	54	42	20	15	12	7.92	4.32
11	3.60	4.96	21	9.72	25	45	46	18	15	11	7.92	3.80
12	0.80	7.92	23	10	28	43	42	18	15	11	7.92	3.40
13	0.92	5.92	23	4.96	35	40	35	18	15	12	7.56	3.60
14	9.72	4.96	20	4.00	34	36	33	19	14	12	7.56	4.00
15	6.88	4.64	18	4.00	27	31	31	20	14	11	7.20	4.64
16	6.56	4.32	15	7.56	24	61	31	20	14	12	7.20	4.64
17	7.56	4.00	12	14	25	36	31	20	14	12	7.20	4.32
18	4.64	4.00	11	19	24	36	31	20	14	11	6.88	4.00
19	4.00	5.92	12	27	26	38	28	20	13	11	6.88	4.00
20	3.80	11	15	29	31	39	35	20	13	11	6.88	3.80
21	3.60	8.28	14	32	35	70	30	19	12	11	6.24	3.60
22	3.60	13	16	33	36	59	28	19	12	11	6.24	3.40
23	3.40	9.00	27	34	33	42	26	19	11	10	6.24	3.20
24	3.20	7.56	28	35	30	38	26	19	12	10	6.24	3.00
25	3.00	6.56	24	35	32	37	27	18	9.72	10	5.92	2.80
26	3.00	16	19	37	34	36	25	18	10	10	5.92	2.80
27	3.00	41	15	38	33	31	28	16	10	10	5.92	2.80
28	3.00	17	20	34	31	31	23	16	13	10	5.60	2.80
29	2.80	12	15	30	30	30	23	16	12	9.72		2.80
30	2.80	11	11	31	28	33	22	16	12	9.72		14
31		9.00		27	27		23		12	9.72		15
Total	162.48	295.96	529	629.60	969	1,467	1,184	595	420.72	373.16	207.56	138.48
Mean	5.42	9.55	17.6	20.3	31.2	48.9	38.2	19.8	13.6	12.0	7.41	4.44
Max.	21	41	28	42	40	105	86	30	16	12	9.72	15
Min.	0.80	4.00	10	4.00	24	30	22	16	9.72	9.72	5.60	2.80
Runoff - mcm.	14.038	25.571	45.706	54.397	83.722	126.749	102.298	51.408	36.350	32.241	17.933	11.965

WATER YEAR 1957 : Max. 105 Min. 0.80 Mean 19.1 Annual Runoff 602.377 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 7	06.00	278.04	114				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

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

Location: Lat 18° – 13' – 49" N, Long 98° – 38' – 35" E, on right bank near the bridge on highway, Hot – Mae Sariang, 7.5 kilometers from Amphoe Hot, Chiang Mai.

Drainage Area: 3,853 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +275.84 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D. No.13

Location: Infront of the camp office of station P.14
Elevation: +282.079 m. (M.S.L.)

Gage Reading Frequency: 24 – hourly readings.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1953 to date.

Rating Operation:

Period of Rating: 1953 – 60
Rated by Float: –
Rated by Current Meter: 1953 – 60

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

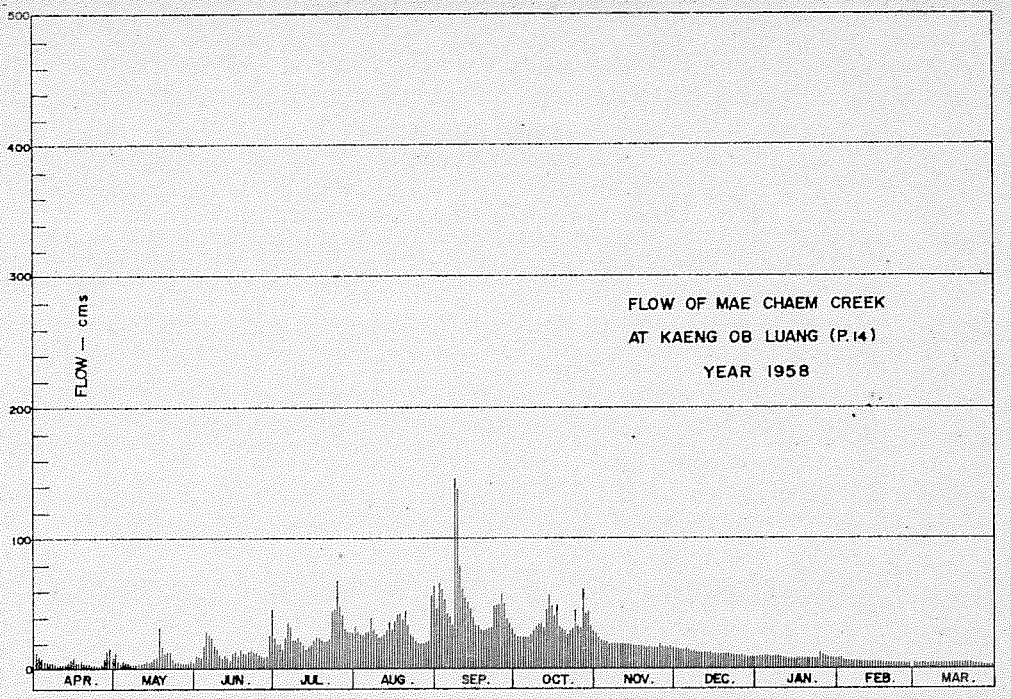
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1958. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	276.69	276.74	276.65	276.98	277.13	277.26	277.02	276.99	276.82	276.65	276.57	276.44
2	.59	.49	.64	.88	.07	.47	276.99	.96	.82	.65	.57	.44
3	.53	.44	.58	.99	.04	.47	277.01	.93	.80	.64	.56	.44
4	.49	.55	.89	.81	.02	.37	276.99	.93	.80	.64	.56	.44
5	.48	.43	277.11	277.04	.07	.26	.98	.91	.80	.64	.55	.44
6	276.48	276.45	277.02	277.20	277.14	277.19	276.97	276.90	276.79	276.63	276.54	276.44
7	.42	.42	276.98	.15	.23	.16	277.02	.90	.78	.63	.54	.43
8	.41	.39	.83	276.96	.14	.95	.06	.89	.77	.62	.53	.43
9	.41	.42	.78	.96	.07	.87	.11	.89	.76	.62	.52	.42
10	.41	.46	.67	277.02	.00	.57	.11	.89	.75	.62	.52	.41
11	276.41	276.43	276.58	276.94	277.03	277.40	277.13	276.89	276.75	276.62	276.51	276.41
12	.40	.43	.68	.87	.05	.36	.10	.89	.74	.60	.51	.40
13	.46	.53	.57	.84	.12	.32	.30	.88	.74	.59	.51	.40
14	.50	.45	.52	.84	.19	.25	.42	.87	.74	.59	.51	.39
15	.51	.55	.75	.94	.12	.15	.37	.87	.72	.59	.51	.39
16	276.48	276.62	276.79	277.00	277.20	277.11	277.19	276.86	276.72	276.58	276.49	276.39
17	.48	.57	.69	.06	.23	.06	.36	.85	.72	.59	.49	.39
18	.47	277.14	.80	.02	.27	.03	.12	.85	.72	.58	.48	.38
19	.46	276.83	.71	276.99	.26	.03	.10	.85	.71	.58	.47	.38
20	.45	.72	.69	.95	.31	.03	.04	.85	.71	.58	.47	.38
21	276.43	276.75	276.80	276.97	277.12	277.03	277.02	276.85	276.70	276.58	276.47	276.38
22	.42	.74	.77	277.03	.03	.08	.07	.85	.70	.58	.47	.37
23	.41	.59	.74	.32	276.98	.36	.14	.85	.69	.58	.47	.37
24	.35	.52	.71	.35	.94	.35	.35	.84	.68	.60	.47	.37
25	.34	.47	.65	.54	.92	.40	.12	.84	.67	.73	.46	.37
26	276.39	276.45	276.64	277.39	276.93	277.42	277.10	276.84	276.67	276.69	276.45	276.36
27	.62	.43	.61	.26	.93	.37	.50	.84	.67	.65	.44	.36
28	.79	.42	.65	.13	.94	.20	.25	.85	.66	.63	.44	.36
29	.77	.52	277.03	.09	.92	.14	.13	.86	.66	.62		.35
30	.62	.55	.32	.05	277.37	.07	.05	.84	.66	.59		.35
31		.45		.13	.47		.01		.66	.59		.35
Mean	276.49	276.55	276.76	277.05	277.10	277.29	277.13	276.88	276.73	276.61	276.50	276.39
Max.	276.79	277.14	277.32	277.54	277.47	277.95	277.50	276.99	276.82	276.73	276.57	276.44
Min.	276.34	276.39	276.52	276.81	276.92	277.03	276.97	276.84	276.66	276.58	276.44	276.35

WATER YEAR 1958 : Max. 277.95 m. Min. 276.34 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	12	13	10	24	33	46	26	28	16	10	8.10	4.60
2	9.00	5.60	9.60	19	29	66	25	23	16	11	8.30	4.60
3	7.40	4.00	8.10	22	27	62	25	22	15	11	6.90	4.60
4	5.80	6.50	20	15	26	53	25	18	15	11	6.90	5.00
5	5.40	4.20	30	25	29	42	25	21	16	11	6.70	4.60
6	5.60	4.40	26	36	29	41	24	19	15	10	6.20	4.60
7	4.80	3.90	24	33	40	34	27	20	14	11	6.50	4.60
8	3.60	3.90	17	22	31	145	30	20	14	11	6.20	4.60
9	3.40	3.60	15	22	27	137	34	19	13	11	6.00	4.40
10	3.40	5.00	11	25	24	79	35	20	13	10	6.00	4.60
11	3.90	4.40	8.30	22	26	60	35	20	13	10	6.00	4.40
12	2.80	4.40	12	18	27	55	32	19	13	9.30	6.00	4.40
13	4.80	6.20	8.60	16	31	52	46	20	13	9.00	6.00	4.40
14	6.80	4.80	6.70	17	36	47	57	19	14	9.00	6.00	4.20
15	9.60	7.40	13	20	31	39	49	18	12	9.00	6.00	4.40
16	6.00	8.60	14	23	38	34	39	18	12	8.60	5.60	4.60
17	5.40	9.30	10	26	42	33	50	18	12	9.00	5.60	4.40
18	6.50	32	15	24	43	30	32	18	12	9.00	4.60	4.40
19	4.80	17	12	23	39	30	31	17	12	9.00	4.60	4.20
20	4.60	12	12	21	45	31	29	17	12	9.00	4.60	4.20
21	4.00	14	14	21	33	32	26	17	12	8.30	4.60	4.20
22	3.60	13	14	24	26	32	30	16	11	8.60	4.80	4.00
23	3.10	6.50	13	45	24	50	32	17	11	8.60	4.80	4.00
24	2.70	5.20	13	46	21	49	45	17	11	8.60	4.80	3.90
25	2.50	4.80	11	68	20	52	33	20	11	13	4.60	3.90
26	3.70	4.80	10	49	20	57	32	17	11	11	4.60	3.90
27	8.60	4.20	9.30	42	20	50	61	17	11	10	4.40	3.70
28	14	4.00	10	30	21	38	43	17	10	9.30	4.40	3.60
29	16	5.60	26	29	21	35	35	18	10	8.30		3.40
30	9.30	6.90	47	27	57	30	29	17	10	8.30		3.40
31		4.80		29	65		29		10			3.40
Total	183.20	234	449.60	863	981	1,541	1,071	567	390	301.20	159.80	131.20
Mean	6.11	7.55	15.0	27.8	31.6	51.4	34.5	18.9	12.6	9.72	5.71	4.23
Max.	16	32	47	68	65	145	61	28	16	13	8.30	5.00
Min.	2.50	3.60	6.70	15	20	30	24	16	10	8.30	4.40	3.40
Runoff - mcm.	15.828	20.218	38.845	74.563	84.758	133.142	92.534	48.989	33.696	26.023	13.807	11.336

WATER YEAR 1958 : Max. 145 Min. 2.50 Mean 18.8 Annual Runoff 593.741 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 8	21.00	278.22	226				

WATER YEAR 1959
PING RIVER BASIN

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

Location: Lat 18°- 13' - 49" N, Long 98°- 38' - 35" E, on right bank near the bridge on highway Hot - Mae Sariang, 7.5 kilometers from Amphoe Hot, Chiang Mai.

Drainage Area: 3,853 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +275.84 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.13

Location: Infront of the camp office of station P.14
Elevation: +282.079 m. (M.S.L.)

Gage Reading Frequency: 24 - hourly readings.

Basis of Mean Daily Gage Height: Arithmetic mean of 24-hourly readings.

Period of Available Gage Records: 1953 to date.

Rating Operation:

Period of Rating: 1953 - 60
Rated by Float: -
Rated by Current Meter: 1953 - 60

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

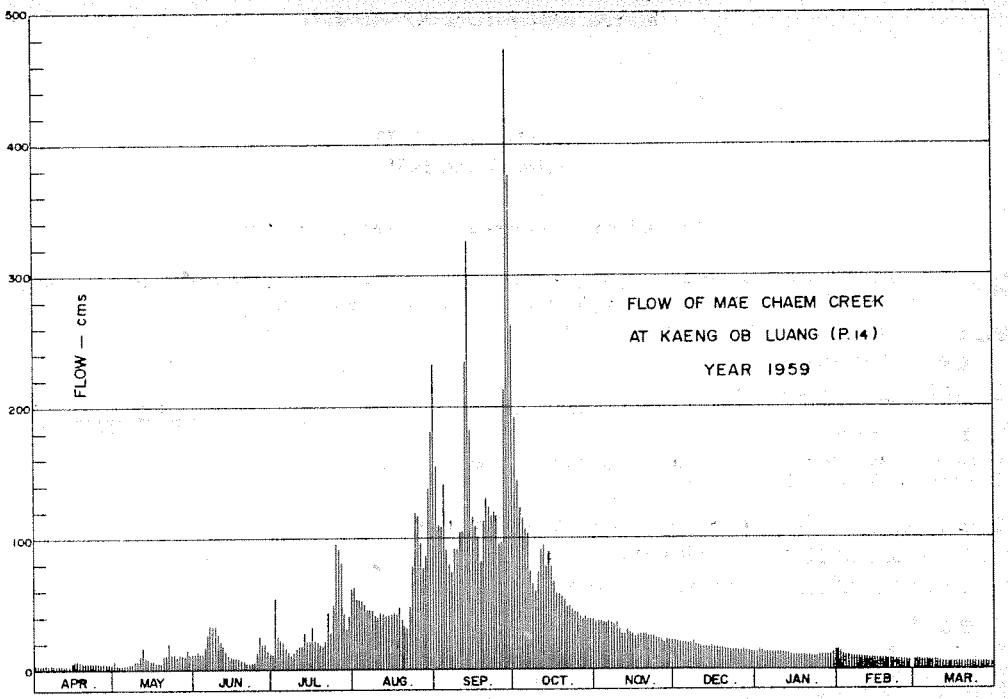
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1959. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	276.34	276.54	276.75	276.67	277.47	278.21	278.31	277.16	276.97	276.83	276.79	276.53
2	.34	.37	.74	277.38	.38	277.99	.08	.17	.96	.83	.74	.53
3	.33	.36	.73	.02	.38	.85	277.93	.17	.95	.82	.70	.53
4	.33	.35	.72	276.98	.40	278.09	.86	.16	.94	.81	.68	.52
5	.33	.33	.85	.94	.35	277.75	.76	.16	.94	.81	.67	.52
6	276.32	276.35	277.02	276.86	277.31	277.66	277.76	277.16	276.94	276.79	276.66	276.52
7	.32	.43	.10	.79	.32	.62	.57	.13	.93	.78	.66	.52
8	.32	.45	.10	.76	.32	.78	.52	.12	.93	.78	.65	.52
9	.31	.52	.11	.77	.28	.70	.51	.12	.92	.77	.65	.51
10	.31	.47	.01	.84	.28	.81	.59	.09	.92	.77	.64	.51
11	276.31	276.68	276.91	276.88	277.28	277.83	277.65	277.07	276.91	276.76	276.63	276.50
12	.30	.64	.87	.88	.28	278.71	.65	.07	.91	.75	.63	.49
13	.30	.57	.77	277.08	.28	279.03	.63	.07	.91	.74	.62	.49
14	.30	.53	.70	276.95	.27	278.29	.61	.07	.90	.73	.62	.48
15	.40	.46	.65	.98	.27	277.99	.53	.07	.89	.72	.61	.48
16	276.50	276.40	276.61	277.07	277.30	277.89	277.46	277.05	276.88	276.72	276.60	276.48
17	.74	.37	.67	276.98	.29	.80	.39	.06	.88	.71	.60	.47
18	.50	.36	.60	.96	.37	.71	.36	.04	.87	.71	.59	.47
19	.43	.41	.54	.92	.20	.82	.34	.04	.87	.70	.59	.46
20	.40	.64	.52	.90	.17	.93	.30	.04	.87	.70	.58	.46
21	276.43	276.69	276.48	276.96	277.17	277.88	277.27	277.02	276.86	276.69	276.58	276.46
22	.43	.88	.49	277.32	.36	.84	.26	.02	.86	.69	.58	.45
23	.41	.69	.49	.09	.62	.86	.25	.01	.85	.73	.57	.45
24	.42	.77	.51	.39	.89	.84	.23	.01	.85	.73	.56	.45
25	.40	.73	.76	.87	278.03	.75	.21	.01	.85	.74	.56	.44
26	276.38	276.72	277.02	277.89	277.71	277.77	277.21	277.00	276.85	276.74	276.55	276.44
27	.37	.68	276.89	.85	.61	278.53	.19	276.99	.84	.76	.54	.44
28	.36	.71	.90	.48	.75	279.44	.18	.99	.84	.79	.54	.43
29	.35	.80	.76	.32	278.07	.29	.17	.99	.83	.80		.43
30	.34	.72	.71	.45	.27	278.53	.19	.98	.83	.95		.43
31		.71		.67	.60		.17		.83	.94		.43
Mean	276.38	276.56	276.77	277.12	277.49	278.07	277.49	277.07	276.89	276.77	276.62	276.48
Max.	276.74	276.88	277.11	277.89	278.60	279.44	278.31	277.17	276.97	276.95	276.79	276.53
Min.	276.30	276.33	276.48	276.67	277.17	277.62	277.17	276.98	276.83	276.69	276.54	276.43

WATER YEAR 1959 : Max. 279.44 m. Min. 276.30 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.25	7.50	12	12	63	154	190	36	22	14	15	6.75
2	3.10	3.85	14	55	53	110	144	37	21	15	13	6.75
3	2.95	3.70	12	26	53	108	123	37	21	14	11	6.75
4	2.95	3.55	12	23	53	141	116	36	21	13	11	6.50
5	2.95	3.25	18	21	49	92	106	36	21	14	11	6.50
6	3.10	3.40	28	16	45	80	104	37	20	13	10	6.50
7	2.80	4.60	33	12	45	74	75	36	20	13	10	6.50
8	2.80	5.00	33	11	45	92	65	35	22	13	10	6.50
9	2.80	7.00	34	13	41	91	60	36	20	12	10	6.25
10	2.80	6.50	27	16	39	105	82	31	19	13	9.70	6.25
11	2.65	11	21	18	44	105	92	28	18	13	9.40	6.00
12	2.65	17	18	18	43	232	95	28	17	12	9.40	5.80
13	2.65	8.50	14	29	41	325	78	31	18	12	9.10	5.80
14	2.50	8.25	11	21	42	182	90	28	18	11	9.10	5.60
15	4.20	6.50	9.70	22	42	116	77	28	18	11	8.80	5.60
16	6.50	7.25	8.25	33	44	109	67	26	17	11	8.50	5.60
17	7.50	5.80	9.40	22	42	100	58	27	17	10	8.50	5.40
18	6.50	5.00	8.00	21	48	82	57	27	16	10	8.25	5.40
19	5.40	5.60	7.00	19	38	114	56	28	16	11	8.25	5.20
20	4.80	11	6.25	18	33	131	53	28	16	10	8.00	5.20
21	5.40	11	5.20	22	31	123	48	26	16	11	8.00	5.20
22	5.20	20	5.00	44	50	117	48	26	17	9.70	8.00	5.00
23	4.80	11	5.20	28	78	120	46	26	15	10	7.75	5.00
24	5.00	12	6.00	50	119	117	44	24	15	10	7.50	5.00
25	5.00	9.70	14	96	117	95	44	24	15	11	7.50	4.80
26	4.60	11	26	92	99	97	41	23	15	11	7.25	4.80
27	4.40	11	19	81	77	213	38	22	15	11	7.00	4.80
28	4.20	11	20	41	87	472	41	23	15	11	7.00	4.60
29	4.00	15	14	31	152	427	38	23	15	12	7.00	4.60
30	3.85	11	12	41	178	262	39	22	14	12	–	4.60
31		11		61	232		38		14	16		4.60
Total	121.30	267.95	462	1,013	2,123	4,586	2,253	875	544	369.70	265	173.85
Mean	4.04	8.64	15.4	32.7	68.5	153	72.7	29.1	17.5	11.92	9.14	5.61
Max.	7.50	20	34	96	232	472	190	37	22	16	15	6.75
Min.	2.50	3.25	5.00	11	31	74	38	22	14	9.70	7.00	4.60
Runoff - mcm.	10.480	23.151	39.917	87.523	183.427	396.230	194.659	75.600	47.002	31.942	22.896	15.021

WATER YEAR 1959 : Max. 472 Min. 2.50 Mean 35.7 Annual Runoff 1,127.848 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 28	12.00	279.59	511				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Ping River at Khanuworalak Buri, Kamphaeng Phet (P.16)

Location: Lat 16°- 03' - 42" N, Long 99°- 51' - 51" E, on right bank 70 meters infront of district office of Amphoe Khanuworalak Buri and about 12 kilometers from Phahon Yothin Highway at Ban Salokbat, Kamphaeng Phet.

Drainage Area: 45,642 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +41.91 m. (M.S.L.)

Bench Mark: B.M. - P.16

Location: Near the fence of the office of Amphoe Khanuwaralak Buri.
Elevation: +45.976 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: 1954 - 60, 1962 to date.

Rating Operation:

Period of Rating: 1960
Rated by Float: -
Rated by Current Meter: 1960

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for year without actual ratings.

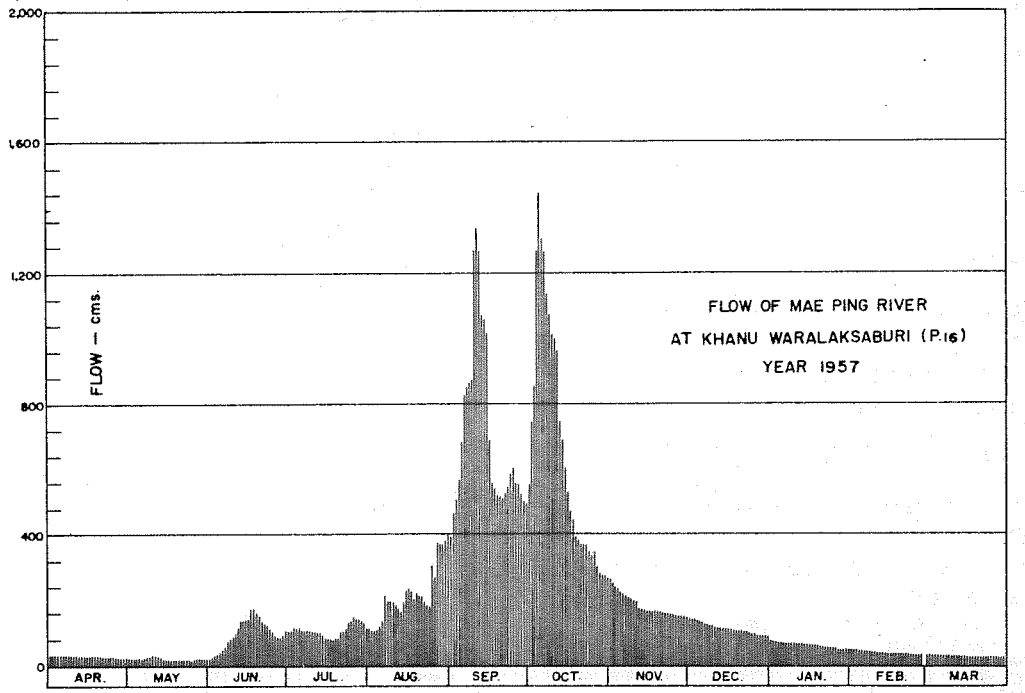
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1960. Natural flow of stream affected by state diversions for irrigation of about 33,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	42.46	42.35	42.35	43.04	43.10	44.19	44.60	43.76	43.26	42.85	42.64	42.49
2	.46	.35	.38	.06	.05	.38	45.00	.71	.25	.84	.64	.49
3	.45	.34	.47	.11	.05	.49	.21	.66	.25	.84	.64	.48
4	.45	.34	.51	.09	.07	.63	.91	.66	.21	.83	.63	.48
5	.45	.33	.57	.09	.13	.88	46.16	.61	.21	.83	.63	.47
6	42.45	42.33	42.64	43.06	43.23	45.16	45.96	43.59	43.20	42.81	42.61	42.47
7	.44	.38	.71	.06	.58	.21	.90	.55	.16	.81	.61	.46
8	.44	.42	.86	.05	.51	.24	.71	.55	.16	.81	.59	.46
9	.44	.45	.88	.04	.51	.26	.60	.53	.14	.80	.59	.44
10	.43	.46	.93	.04	.49	.91	.50	.51	.14	.80	.59	.44
11	42.43	42.45	43.01	43.03	43.45	46.01	45.48	43.50	43.11	42.80	42.56	42.44
12	.43	.41	.11	.01	.41	45.91	.41	.41	.11	.78	.56	.44
13	.43	.39	.21	.00	.36	.60	.01	.40	.10	.78	.56	.43
14	.42	.33	.23	42.96	.50	.58	44.90	.39	.09	.78	.56	.43
15	.43	.31	.23	.91	.64	.51	.71	.37	.09	.77	.54	.43
16	42.45	42.30	43.27	42.91	43.66	44.90	44.55	43.37	43.08	42.77	42.54	42.41
17	.45	.29	.39	.90	.64	.61	.40	.37	.08	.77	.54	.41
18	.44	.29	.41	.87	.61	.56	.32	.37	.06	.76	.54	.41
19	.43	.29	.35	.91	.59	.52	.18	.36	.06	.74	.53	.40
20	.41	.28	.29	.91	.57	.51	.14	.35	.04	.74	.53	.40
21	42.40	42.28	43.25	43.04	43.56	44.50	44.12	43.34	43.04	42.71	42.53	42.40
22	.40	.27	.23	.05	.50	.54	.11	.34	.03	.71	.53	.40
23	.40	.26	.14	.10	.45	.59	.11	.34	.03	.71	.51	.39
24	.39	.26	.09	.21	.43	.68	.05	.33	.02	.70	.51	.39
25	.38	.26	.01	.23	.90	.71	.01	.31	.01	.70	.50	.39
26	42.37	42.33	42.96	43.27	44.11	44.61	43.95	43.31	43.01	42.70	42.50	42.39
27	.36	.36	.93	.26	.13	.60	.90	.29	42.96	.68	.50	.38
28	.36	.36	.92	.25	.12	.53	.83	.29	.96	.67	.50	.38
29	.36	.35	.99	.21	.11	.48	.81	.28	.96	.67		.37
30	.35	.35	43.04	.13	.16	.46	.81	.28	.95	.67		.37
31		.35		.11	.21		.78		.95	.66		.37
Mean	42.42	42.34	42.98	43.06	43.57	44.89	44.72	43.44	43.09	42.76	42.56	42.42
Max.	42.46	42.46	43.41	43.27	44.21	46.01	46.16	43.76	43.26	42.85	42.64	42.49
Min.	42.35	42.26	42.35	42.87	43.05	44.19	43.78	43.28	42.95	42.66	42.50	42.37

WATER YEAR 1957 : Max. 46.16 m. Min. 42.26 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	32	23	23	107	117	399	556	265	146	77	50	35
2	32	23	26	110	108	468	742	251	144	76	50	35
3	31	23	33	119	108	510	851	238	144	76	50	34
4	31	23	37	115	112	569	1,271	238	137	74	49	34
5	31	22	43	115	122	683	1,442	225	137	74	49	33
6	31	22	50	110	141	825	1,305	220	135	71	47	33
7	31	26	58	110	217	851	1,264	210	128	71	47	32
8	31	29	78	108	200	867	1,140	210	128	71	45	32
9	31	31	81	107	200	878	1,072	205	124	70	45	31
10	30	32	89	107	196	1,271	1,012	200	124	70	45	31
11	30	31	102	105	186	1,339	1,001	198	119	70	42	31
12	30	28	119	102	176	1,271	961	176	119	67	42	31
13	30	26	137	100	166	1,072	747	174	117	67	42	30
14	29	22	141	94	198	1,060	692	172	115	67	42	30
15	30	21	141	86	232	1,018	605	168	115	66	40	30
16	31	20	148	86	238	692	535	168	114	66	40	28
17	31	19	172	84	232	560	475	168	114	66	40	28
18	31	19	176	80	225	539	445	168	110	65	40	28
19	30	19	164	86	220	522	395	166	110	62	39	27
20	28	19	152	86	215	518	382	164	107	62	39	27
21	27	19	144	107	212	514	375	162	107	58	39	27
22	27	18	141	108	198	531	371	162	105	58	39	27
23	27	18	124	117	186	552	371	162	105	58	37	26
24	26	18	115	137	181	591	352	160	103	57	37	26
25	26	18	102	141	305	605	339	156	102	57	36	26
26	25	22	94	148	371	560	320	156	102	57	36	26
27	24	24	89	146	378	556	305	152	94	55	36	26
28	24	24	87	144	375	527	285	152	94	54	36	26
29	24	23	93	137	371	506	279	150	94	54		25
30	23	23	107	122	388	498	279	150	92	54		25
31		23		119	406		270		92	53		25
Total	864	708	3,071	3,443	6,980	21,352	20,439	5,546	3,577	2,003	1,179	905
Mean	28.8	22.8	102	111	225	712	659	185	115	64.6	42.1	29.2
Max.	32	32	176	148	406	1,339	1,442	265	146	77	50	35
Min.	23	18	23	80	108	399	270	150	92	53	36	25
Runoff — mcm.	74.650	61.171	265.334	297.475	603.072	1,844.813	1,765.930	479.174	309.053	173.059	101.866	78.192

WATER YEAR 1957 : Max. 1,442 Min. 18 Mean 192 Annual Runoff 6,053.779 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 5	12.00	46.16	1,442				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Ping River at Khanuworalak Buri, Khamphaeng Phet (P.16)

Location: Lat 16°- 03' - 42" N, Long 99°- 51' - 51" E, on right bank 70 meters infront of district office of Amphoe Khanuworalak Buri and about 12 kilometers from Phahon Yothin Highway at Ban Salokbat, Kamphaeng Phet.

Drainage Area: 45,642 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +41.91 m.(M.S.L.)

Bench Mark: B.M. - P.16

Location: Near the fence of the office of Amphoe Khanuworalak Buri.
Elevation: +45.976 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: 1954 - 60, 1962 to date.

Rating Operation:

Period of Rating: 1960
Rated by Float: -
Rated by Current Meter: 1960

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage-discharge relation used is defined by discharge measurements during 1960. Natural flow of stream affected by state diversions for irrigation of about 33,500 hectares. No adjustment made for virgin flow.

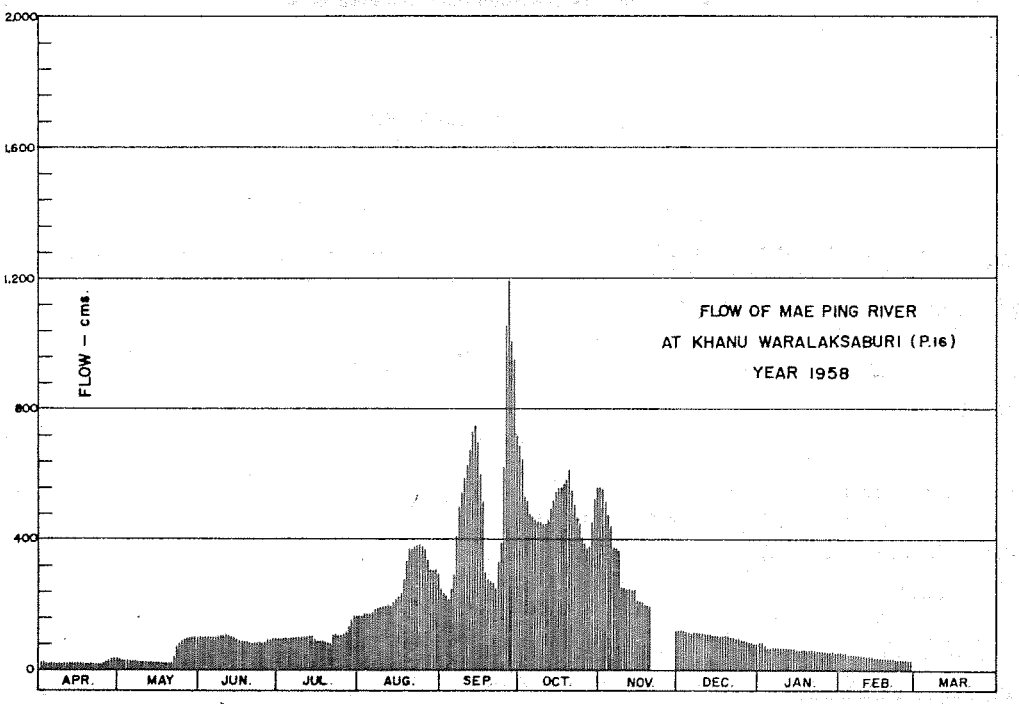
Remarks: No gage height record for Nov. 22 - 30 and Mar. 1 - 31.

GAGE HEIGHT IN METER (M.S.L), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	42.36	42.48	43.01	42.99	43.37	43.71	44.89	44.61	43.13	42.90	42.68	
2	.36	.46	.01	.99	.37	.66	.80	.60	.13	.89	.68	
3	.35	.46	.02	43.00	.40	.63	.54	.51	.13	.83	.66	
4	.35	.46	.02	.00	.40	.60	.51	.41	.11	.81	.61	
5	.33	.45	.02	.00	.40	.72	.41	.31	.11	.81	.61	
6	42.33	42.44	43.01	43.01	43.43	43.86	44.39	44.11	43.10	42.80	42.61	
7	.33	.44	.01	.01	.47	44.22	.36	.11	.10	.80	.59	
8	.31	.43	.03	.01	.47	.46	.34	.10	.10	.80	.59	
9	.30	.40	.05	.01	.49	.58	.34	43.71	.09	.79	.59	
10	.31	.40	.05	.01	.49	.68	.32	.71	.09	.79	.59	
11	42.32	42.39	43.06	43.02	43.51	44.76	44.32	43.70	43.07	42.77	42.57	
12	.33	.39	.03	.03	.51	.87	.36	.70	.07	.77	.56	
13	.33	.39	.01	.03	.51	.98	.45	.61	.07	.77	.55	
14	.32	.38	.00	.03	.56	45.01	.52	.61	.05	.77	.53	
15	.32	.37	42.96	42.96	.60	44.91	.58	.56	.05	.75	.53	
16	42.32	42.36	42.93	42.93	43.63	44.70	44.60	43.55	43.04	42.75	42.53	
17	.31	.36	.93	.93	.66	.50	.61	.54	.04	.75	.53	
18	.31	.35	.93	.93	.80	43.89	.64	.51	.04	.75	.51	
19	.30	.36	.91	.91	44.00	.81	.66	.50	.03	.73	.49	
20	.30	.36	.90	.90	.11	.78	.73	.50	.03	.73	.49	
21	42.30	42.38	42.89	42.90	44.12	43.78	44.59	43.41	43.01	42.73	42.49	
22	.30	.58	.89	43.07	.14	.71	.48		.01	.73	.46	
23	.29	.84	.90	.07	.14	.98	.40		42.99	.73	.46	
24	.29	.90	.91	.06	.15	44.17	.33		.99	.71	.46	
25	.36	.94	.91	.06	.13	.75	.21		.95	.71	.44	
26	42.43	42.50	42.92	43.06	44.10	45.57	44.16		42.95	42.71	42.44	
27	.46	43.00	.96	.12	.01	.79	.11		.93	.69	.44	
28	.50	.00	.96	.22	43.91	.49	.13		.91	.69	.44	
29	.51	.01	.98	.31	.90	.39	.34		.91	.69		
30	.51	.01	.98	.36	.86	44.91	.52		.90	.68		
31		.01		.36	.81		.61		.90	.68		
Mean	42.35	42.56	42.97	43.04	43.72	44.46	44.46		43.03	42.76	42.54	
Max.	42.51	43.01	43.06	43.36	44.15	45.79	44.89		43.13	42.90	42.68	
Min.	42.29	42.35	42.89	42.90	43.37	43.60	44.11		42.90	42.68	42.44	

WATER YEAR 1958 : Max. 45.79 m. Min. - m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	24	34	102	98	168	251	687	560	122	84	55	
2	24	32	102	98	168	238	646	556	122	83	55	
3	23	32	103	100	174	230	531	518	122	74	53	
4	23	32	103	100	174	222	518	479	119	71	47	
5	22	31	103	100	174	254	479	442	119	71	47	
6	22	31	102	102	181	293	471	371	117	70	47	
7	22	31	102	102	191	409	460	371	117	70	45	
8	21	30	105	102	191	498	453	368	117	70	45	
9	20	27	108	102	196	548	453	251	115	69	45	
10	21	27	108	102	196	591	445	251	115	69	45	
11	21	26	110	103	200	628	445	248	112	66	43	
12	22	26	105	105	200	678	460	248	112	66	42	
13	22	26	102	105	200	732	494	245	112	66	41	
14	21	26	100	105	212	747	522	245	108	66	39	
15	21	25	94	94	222	697	548	212	108	63	39	
16	22	24	89	89	230	600	556	210	107	63	39	
17	21	24	89	89	238	514	560	208	107	63	39	
18	21	23	89	89	276	302	574	200	107	63	37	
19	20	24	86	86	336	279	582	198	105	61	35	
20	20	24	84	84	371	270	614	198	105	61	35	
21	20	26	83	84	375	270	552	176	102	61	35	
22	20	44	83	112	382	251	506		102	61	32	
23	19	76	84	112	382	330	475		98	61	32	
24	19	84	86	110	385	392	449		98	58	32	
25	24	90	86	110	378	623	406		92	58	31	
26	30	100	87	110	368	1,054	388		92	58	31	
27	32	100	94	121	339	1,192	371		89	56	31	
28	36	100	94	139	308	1,006	378		86	56	31	
29	37	102	97	156	305	949	453		86	56		
30	37	102		166	293	697	522		84	55		
31		102		166	279		560		84	55		
Total	706	1,481	2,877	3,341	8,092	15,745	15,558		3,281	2,004	1,128	
Mean	23.5	47.8	95.9	108	261	525	502		106	64.6	40.3	
Max.	37	102	110	166	385	1,192	687		122	84	55	
Min.	19	23	83	84	168	222	371		84	55	31	
Runoff - MCM.	60.998	127.958	248.573	288.662	699.149	1,360.368	1,344.211		283.478	173.146	97.459	

WATER YEAR 1958 : Max. 1,192 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 27	12.00	45.79	1,192				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Ping River at Khanuworalak Buri, Kamphaeng Phet (P.16)

Location: Lat 16°- 03' - 42" N, Long 99°- 51' - 51" E, on right bank 70 meters infront of district office of Amphoe Khanuworalak Buri and 12 kilometers from Phahon Yothin Highway at Ban Salokbat, Khamphaeng Phet.

Drainage Area: 45,642 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +41.91 m. (M.S.L.)

Bench Mark: B.M. - P.16

Location: Near the fence of the office of Amphoe Khanuworak Buri.
Elevation: +45.976 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: 1954 - 60, 1962 to date.

Rating Operation:

Period of Rating: 1960
Rated by Float: -
Rated by Current Meter: 1960

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

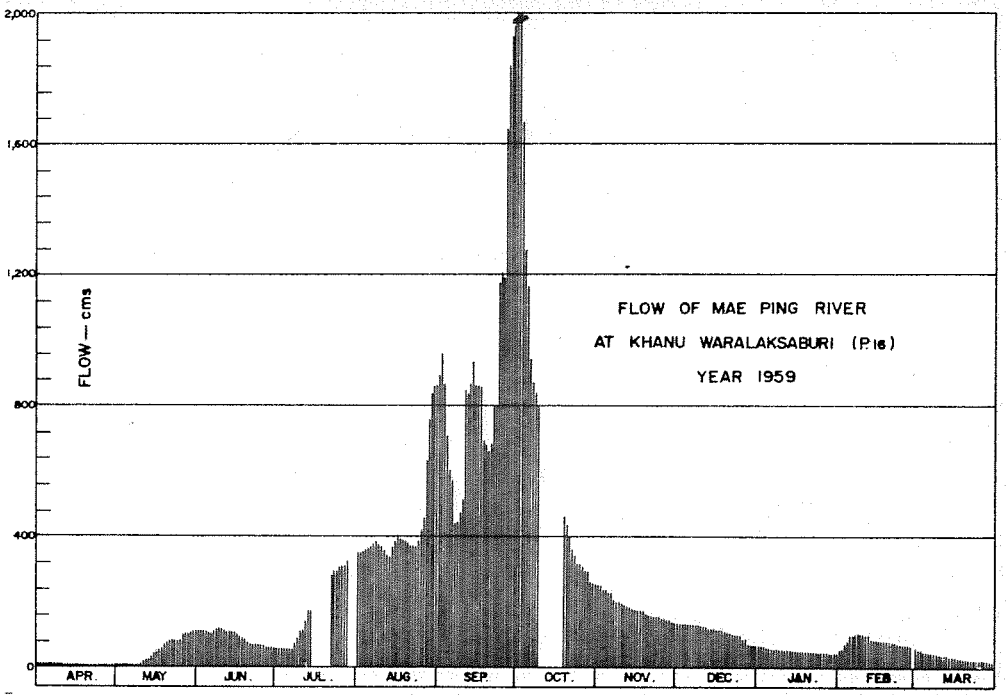
General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1960. Natural flow of stream affected by state diversions for irrigation of about 33,000 hectares. No adjustment made for virgin flow.

Remarks: No gage height record for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	42.08	42.06	43.06	42.70	44.04	45.30	47.01	43.71	43.20	42.76	42.70	42.71
2	.08	.05	.06	.69	.04	.35	.01	.68	.20	.76	.71	.66
3	.08	.05	.07	.69	.06	.23	46.88	.65	.20	.76	.86	.66
4	.07	.05	.05	.69	.08	44.80	45.91	.65	.18	.73	.91	.61
5	.07	.04	.03	.69	.10	.68	.75	.61	.18	.71	43.01	.61
6	42.07	42.04	43.02	42.68	44.11	44.63	45.37	43.61	43.18	42.71	43.01	42.59
7	.07	.04	.05	.68	.13	.31	.24	.53	.17	.70	.03	.59
8	.07	.06	.08	.86	.15	.32		.51	.17	.70	.03	.57
9	.07	.06	.09	.93	.12	.41		.51	.17	.68	.03	.54
10	.06	.12	.10	43.06	.10	.50		.48	.15	.68	.01	.54
11	42.06	42.26	43.06	43.07	44.06	45.02		43.47	43.15	42.68	43.01	42.51
12	.06	.27	.05	.23	.01	.18		.44	.14	.68	.01	.51
13	.06	.33	.05	.40	.01	.25		.44	.11	.68	42.91	.51
14	.04	.48	.04	.40	.11	.36		.41	.11	.65	.90	.46
15	.04	.58	.04		.16	.23		.41	.11	.65	.90	.46
16	42.04	42.63	43.02		44.21	45.23		43.40	43.08	42.65	42.89	42.46
17	.04	.66	42.99		.17	.22		.40	.08	.63	.89	.40
18	.03	.71	.99		.17	44.90		.40	.08	.63	.87	.40
19	.03	.81	.91		.15	.87		.33	.04	.63	.87	.36
20	.03	.83	.81		.14	45.03		.33	.04	.63	.85	.36
21	42.03	42.87	42.81		44.11	45.09		43.31	43.04	42.61	42.85	42.36
22	.03	.89	.80	43.81	.11	.11	44.06	.30	.02	.61	.85	.33
23	.03	.88	.80	.83	.11	.11	.01	.30	.02	.61	.81	.33
24	.03	.87	.80	.83	.16	.76	43.93	.30	.01	.60	.81	.30
25	.04	.87	.76	.91	.25	.81	.93	.27	.01	.60	.79	.30
26	42.05	43.01	42.76	43.91	44.35	45.79	43.90	43.27	42.91	42.60	42.79	42.30
27	.05	.01	.73	.92	.77	46.44	.86	.25	.91	.60	.79	.30
28	.06	.01	.73	.97	45.07	.68	.86	.25	.81	.59	.76	.26
29	.06	.03	.71		.18	.80	.73	.21	.81	.59	.76	.23
30	.06	.06	.71		.22	.89	.73	.21	.80	.59		.23
31		.06			.23		.71		.80	.59		.23
Mean	42.05	42.54	42.94		44.28	45.28		43.42	43.06	42.65	42.88	42.44
Max.	42.08	43.06	43.10		45.23	46.89		43.71	43.20	42.76	43.03	42.71
Min.	42.03	42.04	42.71		44.01	44.31		43.21	42.80	42.59	42.70	42.23

WATER YEAR 1959 : Max. 47.01 m. Min. 42.03 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	8.40	7.80	110	57	349	899	2,010	251	135	65	57	58
2	8.40	7.50	110	56	349	927	2,010	243	135	65	58	53
3	8.40	7.50	112	56	355	862	1,962	235	135	65	78	53
4	8.10	7.50	108	56	362	646	1,271	235	131	61	86	47
5	8.10	7.20	105	56	368	591	1,166	225	131	58	102	47
6	8.10	7.20	103	55	371	569	938	225	131	58	102	45
7	8.10	7.20	108	55	378	442	867	205	130	57	105	45
8	8.10	7.80	114	78	385	445		200	130	57	105	43
9	8.10	7.80	115	89	375	479		200	130	55	105	40
10	7.80	10	117	110	368	514		193	126	55	102	40
11	7.80	18	110	112	355	752		191	126	55	102	37
12	7.80	18	108	141	339	836		184	124	55	102	37
13	7.80	22	108	174	339	872		184	119	55	86	37
14	7.20	34	107	174	371	933		176	119	51	84	32
15	7.20	44	107		388	862		176	119	51	84	32
16	7.20	49	103		406	862		174	114	51	83	32
17	7.20	53	98		392	857		174	114	49	83	27
18	6.90	58	98		392	692		174	114	49	80	27
19	6.90	71	86		385	678		160	107	49	80	24
20	6.90	74	71		382	758		160	107	49	77	24
21	6.90	80	71		371	789		156	107	47	77	24
22	6.90	83	70	279	371	799	355	154	103	47	77	22
23	6.90	81	70	285	371	799	339	154	103	47	71	22
24	6.90	80	70	285	388	1,172	314	154	102	46	71	20
25	7.20	80	65	308	420	1,205	314	148	102	46	69	20
26	7.50	102	65	308	456	1,192	305	148	86	46	69	20
27	7.50	102	61	311	632	1,644	293	144	86	46	69	20
28	7.80	102	61	327	778	1,834	293	144	71	45	65	18
29	7.80	105	58		836	1,930	256	137	71	45	65	16
30	7.80	110	58		857	1,966	256	137	70	45		16
31		110			862		251		70	45		16
Total	227.80	1,553.50	2,747		13,751	27,806		5,441	3,448	1,615	2,394	994
Mean	7.59	50.1	91.6		443	927		181	111	52.1	82.5	32.1
Max.	8.40	110	117		862	1,966		251	135	65	105	58
Min.	6.90	7.20	58		339	442		137	70	45	57	16
Runoff - MCM.	19.673	134.222	237.341		1,188.086	2,402.438		470.102	297.907	139.536	206.842	85.882

WATER YEAR 1959 : Max. 2,010 Min. 6.90 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 1	6.00	47.01	2,110				

WATER YEAR 1958
PING RIVER BASIN

Mae Ping River at Ban Tha Sala, Chiang Mai (P.19A)

Location: Lat 18°- 25' - 29" N, Long 98°- 42' - 11" E, on left bank 300 meters downstream from the confluence with Li Creek, Amphoe Chom Thong, Chiang Mai.

Drainage Area: 14,023 sq.km. referred to AMS Map 1:50,000

Type of Gage: Staff gage.

Zero Gage at Bottom at: +271.35 m. (M.S.L.)

Bench Mark: B.M. - A.Z.1

Location: Infront of the camp of station P.19A
Elevation: +283.561 m.(M.S.L.)

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

Basis of Mean Daily Gage Height: Arithmetic means of 5 readings.

Period of Available Gage Records: 1958 to date.

Rating Operation:

Period of Rating: 1958 to date
Rated by Float: -
Rated by Current Meter: 1958 to date

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

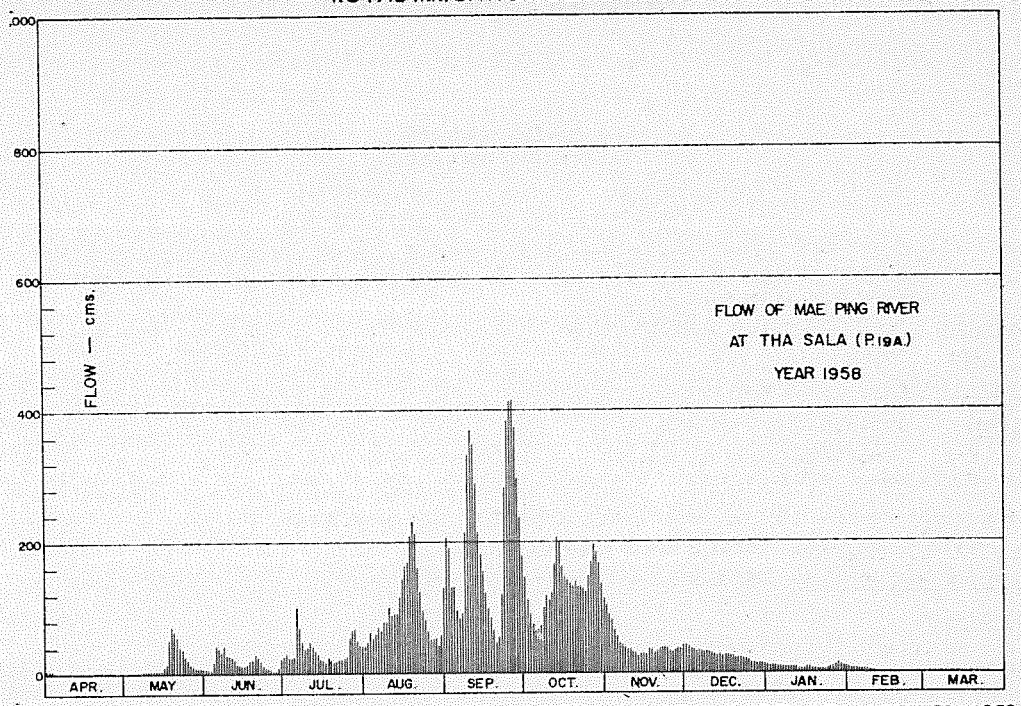
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1958. Natural flow of stream affected by the diversions for irrigation of about 28,000 hectares at above gage site. No adjustment made for virgin flow.

Remarks: Gage height for Apr.1 - Jul.17 and Mar.1 - 31, obtained based on correlation with station P.19, which is one kilometer downstream.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	272.18	272.07	272.23	272.58	272.65	273.88	273.53	273.28	272.75	272.39	272.23	271.90
2	.15	.06	.21	.62	.80	.67	.39	.20	.73	.30	.18	.90
3	.12	.06	.22	.55	.87	.44	.27	.12	.72	.34	.17	.90
4	.09	.07	.45	.52	.80	.29	.10	272.97	.70	.31	.19	.90
5	.97	.08	.77	.58	.83	.16	.09	.91	.68	.28	.15	.90
6	272.06	272.10	272.71	273.28	272.95	273.08	273.19	272.85	272.69	272.27	272.14	271.90
7	.05	.10	.67	.03	.90	.14	.19	.80	.67	.26	.14	.88
8	.04	.17	.76	272.82	273.01	.68	.32	.74	.66	.25	.12	.88
9	.03	.17	.60	.72	.17	274.50	.40	.72	.65	.24	.10	.88
10	.06	.16	.58	.74	.20	.65	.37	.69	.64	.23	.09	.88
11	272.05	272.15	272.55	272.82	273.11	274.56	273.35	272.66	272.63	272.22	272.07	271.88
12	.05	.14	.48	.76	.14	.27	.50	.65	.60	.22	271.99	.87
13	.05	.15	.40	.67	.16	273.97	.80	.63	.58	.20	.94	.87
14	.07	.17	.30	.62	.38	.77	.83	.63	.57	.20	.93	.87
15	.05	.21	.35	.51	.54	.61	.62	.63	.56	.19	.93	.87
16	272.02	272.31	272.33	272.48	273.59	273.40	273.51	272.63	272.56	272.21	271.92	271.87
17	.02	.46	.37	.44	.69	.24	.48	.70	.55	.22	.91	.86
18	.01	.92	.48	.40	.64	.10	.45	.66	.53	.21	.90	.86
19	.03	273.03	.51	.37	274.05	272.96	.43	.65	.52	.20	.89	.86
20	.10	272.89	.60	.33	273.95	.81	.47	.70	.51	.19	.94	.86
21	272.12	272.88	272.56	272.31	273.68	272.80	273.42	272.72	272.50	272.17	271.95	271.86
22	.11	.75	.40	.33	.48	273.37	.42	.75	.50	.16	.97	.86
23	.10	.71	.35	.37	.27	274.23	.41	.75	.49	.15	.96	.86
24	.09	.57	.30	.39	.06	.67	.40	.73	.48	.18	.96	.85
25	.08	.48	.27	.45	272.93	.76	.37	.71	.46	.22	.96	.82
26	272.08	272.38	272.19	272.67	272.82	274.83	273.67	272.69	272.42	272.27	271.95	271.82
27	.06	.34	.17	.91	.81	.70	.82	.72	.41	.33	.93	.82
28	.04	.29	.17	.96	.76	.39	.79	.75	.40	.37	.92	.82
29	.05	.24	.29	.86	.71	.09	.68	.73	.39	.34		.82
30	.05	.24	.52	.72	.87	273.75	.51	.76	.41	.28		.82
31		.24		.64	273.42		.38		.40	.26		.82
Mean	272.07	272.34	272.42	272.63	273.18	273.79	273.46	272.67	272.56	272.25	272.02	271.86
Max.	272.18	273.03	272.77	273.28	274.05	274.83	273.83	273.28	272.75	272.39	272.23	271.90
Min.	272.01	272.06	272.17	272.31	272.65	272.80	273.09	272.63	272.40	272.15	271.89	271.82

WATER YEAR 1958 : Max. 274.83 m. Min. 271.82 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	6.20	3.00	8.20	28	44	206	147	104	44	13	8.20	0.50
2	5.00	2.75	7.40	31	50	192	115	90	42	11	6.60	0.50
3	4.25	2.75	7.80	26	64	133	93	82	39	12	6.20	0.50
4	3.50	3.00	19	24	56	133	75	67	36	11	7.40	0.50
5	3.00	3.25	44	28	62	97	65	56	34	10	5.80	0.50
6	2.75	3.75	39	102	72	85	68	47	36	9.90	5.40	0.50
7	2.50	3.75	35	72	68	95	73	44	34	9.45	5.40	0.30
8	2.35	5.80	43	49	80	216	102	40	33	9.00	5.00	0.30
9	2.20	5.80	30	40	80	334	119	37	33	8.60	4.00	0.30
10	2.75	5.40	28	42	102	370	113	38	32	8.60	3.75	0.30
11	2.50	5.00	26	49	90	350	121	33	30	8.60	3.50	0.30
12	2.50	4.75	21	43	92	289	159	32	29	8.20	1.60	0.20
13	2.50	5.00	16	35	94	216	206	28	28	7.80	0.90	0.20
14	3.00	5.80	14	31	119	182	200	29	29	7.80	0.42	0.20
15	2.50	7.40	13	23	145	157	163	30	27	7.40	0.10	0.20
16	2.50	12	13	21	165	125	147	30	28	8.20	0.10	0.20
17	2.05	16	15	18	170	101	143	37	28	8.20	0.10	0.10
18	1.90	59	21	25	210	86	137	35	26	7.80	0.10	0.10
19	1.90	72	23	22	232	68	133	32	26	7.40	0.00	0.10
20	2.20	66	30	20	214	49	141	34	23	7.00	0.40	0.10
21	3.75	55	27	20	161	57	133	37	23	6.60	0.40	0.10
22	4.25	42	20	22	127	122	133	40	24	5.80	0.40	0.10
23	4.00	39	13	23	97	283	130	41	22	5.40	0.30	
24	3.75	27	11	25	85	384	124	40	21	6.60	0.30	
25	3.50	21	9.90	27	65	413	124	34	20	8.20	0.30	
26	3.25	15	6.60	55	53	416	170	33	16	9.90	0.20	
27	3.75	13	5.80	67	54	376	196	36	16	13	0.20	
28	2.35	11	5.80	68	55	298	186	40	15	15	0.20	
29	2.50	8.60	11	52	44	238	170	38	14	13		
30	2.50	8.60	24	44	60	178	137	43	15	10		
31		8.60		43	132		115		13	9.90		
Total	91.55	541	587.50	1,175	3,142	6,232	4,138	1,302	836	284.35	67.27	6.10
Mean	3.05	17.4	19.6	37.9	102	208	133	43.4	27.0	9.17	2.40	0.20
Max.	6.20	72	44	102	232	416	206	104	44	15	8.20	0.50
Min.	1.90	2.75	5.80	18	44	49	65	28	13	5.40	0.00	0.00
Runoff - mcm.	7.910	46.742	50.760	101.520	271.469	538.445	357.005	112.493	72.230	24.568	5.812	0.527

WATER YEAR 1958 : Max. 416 Min. 0.00 Mean 50.2 Annual Runoff 1,589.999 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 26	18.00	274.84	424				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Ping River at Ban Tha Sala, Chiang Mai (P.19A)

Location: Lat 18°- 25' - 29" N, Long 98°- 42' - 11" E, on left bank 300 meters downstream from the confluence with Li Creek, Amphoe Chom Thong, Chiang Mai.

Drainage Area: 14,032 sq.km. referred to AMS Map 1:50,000

Type of Gage: Staff gage.

Zero Gage at Bottom at: +271.35 m.(M.S.L.)

Bench Mark: B.M. - A.Z.1

Location: Infront of the camp of station P.19A
Elevation: +283.561 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: 1958 to date

Rating Operation:

Period of Rating: 1958 to date
Rated by Float: -
Rated by Current Meter: 1958 to date

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

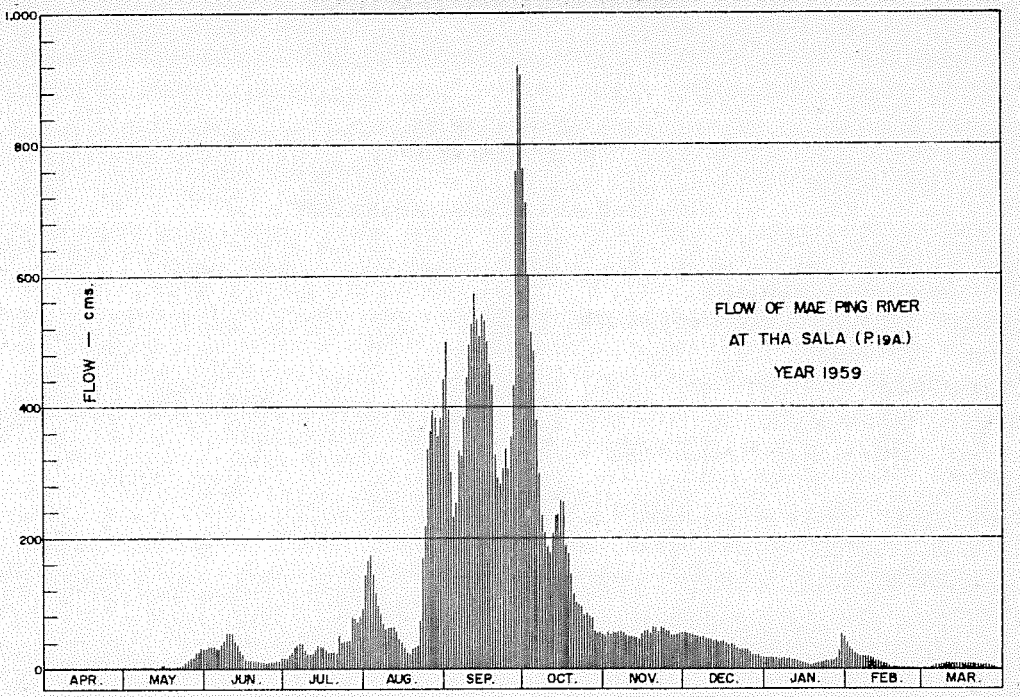
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1959. Natural flow of stream affected by the diversions for irrigation of about 28,000 hectares at above gage site. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	271.80	271.79	272.65	272.38	273.47	274.88	275.79	272.85	272.83	272.42	272.75	272.01
2	.80	.81	.65	.38	.65	.73	.50	.89	.80	.40	.64	271.98
3	.81	.79	.65	.46	.73	.42	.22	.87	.79	.39	.56	272.02
4	.80	.76	.69	.48	.49	.04	274.99	.89	.79	.39	.52	.02
5	.81	.77	.62	.63	.32	.20	.93	.87	.78	.38	.45	.09
6	271.80	271.80	272.62	272.67	273.23	274.46	274.61	272.88	272.76	272.35	272.42	272.17
7	.82	.82	.74	.73	.08	.45	.32	.92	.75	.33	.41	.17
8	.82	.92	.87	.66	272.96	.61	.06	.89	.76	.33	.38	.17
9	.82	.95	273.01	.56	.88	.78	273.87	.86	.75	.33	.37	.19
10	.82	.96	272.99	.50	.88	.95	.72	.85	.75	.35	.33	.23
11	271.81	271.96	272.90	272.47	272.85	274.98	273.65	272.84	272.75	272.35	272.32	272.21
12	.80	.96	.72	.48	.87	275.10	.77	.83	.74	.33	.27	.21
13	.81	.95	.61	.55	.78	.05	.88	.81	.74	.30	.23	.22
14	.80	272.13	.51	.67	.72	.05	.89	.80	.73	.25	.20	.20
15	.79	.32	.29	.63	.66	.05	.97	.86	.73	.21	.16	.20
16	271.77	272.21	272.29	272.64	272.57	275.08	273.89	272.88	272.70	272.19	272.12	272.19
17	.77	.18	.28	.57	.50	.05	.73	.88	.70	.16	.10	.19
18	.79	.17	.30	.49	.48	274.95	.70	.86	.68	.15	271.99	.19
19	.77	.18	.33	.48	.51	.76	.55	.82	.69	.18	272.03	.19
20	.79	.18	.31	.48	.54	.42	.39	.90	.65	.21	.05	.18
21	271.80	272.20	272.30	272.51	272.57	274.31	273.27	272.86	272.61	272.24	272.02	272.15
22	.81	.23	.29	273.01	.98	.24	.20	.92	.58	.23	.02	.13
23	.80	.22	.25	272.82	273.63	.34	.08	.89	.57	.24	.01	.10
24	.79	.31	.20	.78	274.07	.43	.05	.88	.56	.29	271.99	.10
25	.79	.39	.19	.90	.49	.33	.03	.87	.55	.28	272.00	.06
26	271.79	272.47	272.27	272.83	274.61	274.52	272.96	272.82	272.50	272.29	271.99	272.04
27	.77	.48	.26	273.25	.65	.81	.93	.82	.46	.32	.97	.02
28	.79	.57	.31	.22	.62	275.71	.91	.85	.46	.38	.96	.01
29	.80	.58	.32	.34	.53	276.22	.90	.85	.45	.55	272.03	.00
30	.80	.66	.40	.33	.60	.16	.90	.85	.43	.95		271.99
31		.67		.49	.76		.88		.42	.92		.99
Mean	271.80	271.79	272.49	272.72	273.38	274.80	273.79	272.86	272.66	272.34	272.37	272.08
Max.	271.82	272.67	273.01	273.49	274.76	276.22	275.79	272.92	272.83	272.95	272.75	272.23
Min.	271.77	271.76	272.19	272.38	272.48	274.04	272.88	272.80	272.42	272.15	271.96	271.98

WATER YEAR 1959 : Max. 276.22 m. Min. 271.76 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.15	0.05	31	17	145	499	763	52	58	19	41	2.30
2	0.10	0.15	35	17	168	396	712	57	55	18	34	1.85
3	0.10	0.05	34	22	175	303	601	55	54	19	29	2.30
4	0.15	0.00	35	26	146	234	513	58	54	19	25	3.80
5	0.12	0.05	32	34	119	254	485	56	53	19	23	5.00
6	0.05	0.30	32	37	98	335	380	57	51	16	21	7.40
7	0.10	0.15	38	40	85	327	300	59	50	18	21	7.10
8	0.10	0.95	44	39	70	385	236	56	50	19	20	8.00
9	0.05	0.65	56	29	63	445	210	52	48	16	20	8.00
10	0.05	0.50	56	24	64	495	186	51	47	17	18	10
11	0.05	0.40	53	24	64	527	179	51	47	16	18	8.80
12	0.00	0.25	43	26	65	572	208	50	44	16	14	8.80
13	0.05	0.25	38	31	56	534	236	48	45	14	13	8.80
14	0.05	0.30	31	37	46	509	239	48	43	12	12	8.80
15	0.05	5.60	24	35	41	541	258	55	43	10	10	9.20
16	0.05	5.90	16	35	33	534	256	59	43	9.60	8.60	8.80
17	0.05	3.80	15	29	27	502	188	60	41	8.40	6.80	8.80
18	0.00	2.00	15	26	26	467	177	56	39	7.70	3.40	8.80
19	0.00	1.40	13	26	33	435	146	65	40	8.80	4.40	8.80
20	0.00	1.70	13	27	34	330	115	64	37	9.60	4.40	8.80
21	0.05	4.40	13	26	37	293	102	59	33	10	3.80	8.00
22	0.10	5.90	12	52	75	284	99	65	31	12	3.80	7.40
23	0.05	6.20	11	42	172	307	95	63	31	12	3.80	5.30
24	0.05	10	10	42	220	337	84	60	31	14	2.90	7.40
25	0.05	14	11	44	338	307	86	59	31	13	3.20	6.50
26	0.05	18	12	45	364	356	83	53	27	14	3.20	5.90
27	0.05	19	11	81	396	435	78	53	23	15	2.60	4.10
28	0.05	26	13	78	385	759	59	54	22	18	2.60	2.30
29	0.05	27	18	74	356	919	56	56	22	30	3.50	2.00
30	0.05	32	17	82	385	906	57	57	20	55		2.00
31		31		94	441		54		19	52		1.85
Total	1.82	217.94	782	1,241	4,727	13,527	7,231	1,688	1,232	537.10	376	196.90
Mean	0.06	7.67	26.1	40.0	152	451	233	56.3	39.7	17.3	13.0	6.35
Max.	0.15	32	56	94	441	919	763	65	58	55	41	10
Min.	0.00	0.00	10	17	26	234	54	48	19	7.70	2.60	1.85
Runoff - MCM.	0.157	18.830	67.565	107.222	408.413	1,168.733	624.758	145.843	106.445	46.405	32.486	17.012

WATER YEAR 1959 : Max. 919 Min. 0.00 Mean 86.8 Annual Runoff 2,743.865 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 29	18.00	276.24	929				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Rim Creek at Mae Rim Bridge, Chiang Mai (P.21)

Location: Lat 18°- 55' - 29" N, Long 98°- 56' - 34" E, on right bank 100 meters downstream from the bridge, on highway Chiang Mai - Fang, Amphoe Mae Rim, Chiang Mai.

Drainage Area: 515 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +319.69 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No. 4

Location: Near the pond which belong to Mr.Bunsri Tongsuk Sakul.
Elevation: +321.928 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 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

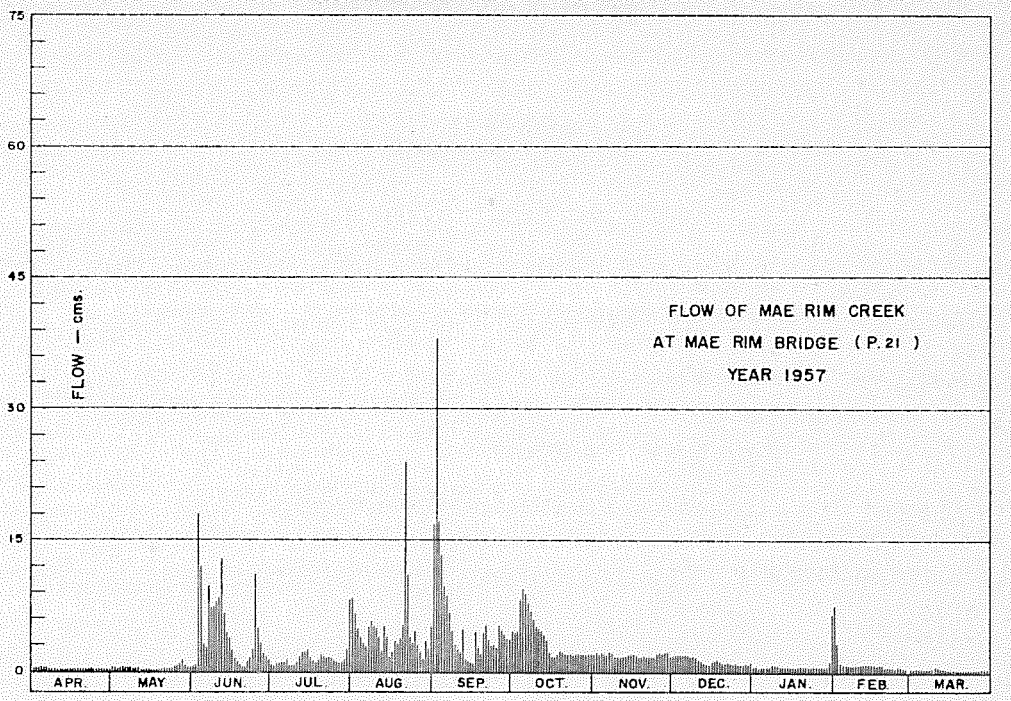
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1957. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	320.34	320.40	320.29	320.28	320.89	321.37	320.77	320.45	320.50	320.40	320.91	320.30
2	.35	.38	.54	.28	.77	322.07	.76	.46	.51	.41	.70	.30
3	.34	.33	321.45	.30	.65	321.41	.78	.45	.50	.37	.51	.31
4	.30	.35	.20	.30	.57	.21	321.04	.46	.50	.41	.50	.30
5	.35	.30	320.60	.30	.51	.09	.11	.45	.50	.40	.47	.28
6	320.35	320.35	320.54	320.29	320.60	321.03	321.04	320.44	320.50	320.41	320.46	320.26
7	.31	.36	321.08	.35	.66	320.92	320.96	.47	.50	.43	.45	.26
8	.29	.35	320.92	.24	.71	.75	.90	.46	.49	.49	.45	.31
9	.27	.33	.93	.24	.73	.61	.84	.42	.48	.46	.45	.34
10	.24	.34	.97	.24	.71	.54	.77	.42	.49	.44	.44	.38
11	320.22	320.42	321.01	320.30	320.68	320.51	320.75	320.41	320.45	320.41	320.47	320.37
12	.20	.32	.24	.39	.52	.46	.74	.42	.39	.41	.47	.34
13	.20	.31	320.89	.44	.78	.42	.70	.42	.34	.42	.40	.31
14	.20	.33	.72	.45	.75	.38	.65	.45	.31	.42	.48	.29
15	.20	.29	.67	.47	.51	.36	.50	.45	.32	.41	.49	.23
16	320.23	320.25	320.55	320.37	320.58	320.34	320.45	320.46	320.37	320.41	320.47	320.20
17	.25	.22	.41	.33	.71	.75	.44	.44	.38	.39	.46	.21
18	.30	.21	.37	.30	.68	.57	.45	.43	.36	.43	.46	.22
19	.30	.25	.34	.32	.67	.50	.48	.42	.35	.42	.44	.22
20	.29	.30	.27	.40	.78	.75	.46	.44	.33	.41	.42	.20
21	320.31	320.33	320.25	320.38	321.61	320.79	320.45	320.42	320.33	320.40	320.40	320.20
22	.29	.29	.40	.40	.12	.66	.45	.42	.32	.41	.40	.20
23	.30	.31	.41	.42	320.64	.63	.45	.43	.32	.40	.37	.20
24	.28	.36	.50	.40	.63	.63	.44	.45	.31	.41	.34	.20
25	.29	.40	321.09	.36	.73	.60	.45	.49	.32	.41	.36	.19
26	320.30	320.44	320.70	320.35	320.59	320.83	320.44	320.50	320.30	320.40	320.38	320.20
27	.34	.53	.57	.32	.50	.77	.45	.49	.30	.40	.35	.22
28	.31	.56	.45	.29	.42	.74	.45	.50	.30	.40	.31	.31
29	.27	.50	.40	.36	.63	.71	.44	.52	.32	.42		.31
30	.27	.40	.36	.46	.55	.69	.45	.49	.31	.53		.25
31		.40		.87	.76		.45		.34	.84		.21
Mean	320.28	320.35	320.67	320.36	320.70	320.77	320.63	320.45	320.37	320.43	320.46	320.26
Max.	320.35	320.56	321.45	320.87	321.61	322.07	321.11	320.52	320.51	320.84	320.91	320.38
Min.	320.20	320.21	320.25	320.24	320.42	320.34	320.44	320.42	320.30	320.37	320.31	320.19

WATER YEAR 1957 : Max. 322.07 m. Min. 320.20 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.30	0.45	0.60	0.80	8.45	16	4.60	2.04	1.86	0.45	7.55	0.20
2	0.32	0.40	2.51	0.80	6.65	38	4.48	2.13	1.95	0.49	3.20	0.20
3	0.30	0.27	18	0.94	4.99	17	4.73	2.04	1.86	0.37	0.92	0.22
4	0.35	0.32	12	0.94	4.00	12	8.45	2.13	1.86	0.49	0.85	0.20
5	0.32	0.42	3.10	1.08	3.30	9.75	9.58	2.04	1.86	0.45	0.73	0.17
6	0.32	0.32	2.70	1.01	4.36	8.75	9.07	1.95	1.86	0.49	0.69	0.15
7	0.22	0.35	9.75	1.43	5.12	7.10	7.85	2.22	1.86	0.57	0.65	0.15
8	0.19	0.32	7.25	0.70	5.77	4.73	6.95	2.13	1.77	0.81	0.65	0.22
9	0.16	0.27	7.40	0.70	5.38	3.10	6.05	1.77	1.68	0.69	0.65	0.30
10	0.12	0.30	8.00	0.70	5.12	2.40	5.12	1.77	1.77	0.61	0.61	0.40
11	0.10	0.53	8.60	1.08	4.00	2.13	4.86	1.68	1.43	0.49	0.73	0.37
12	0.07	0.23	13	1.77	2.31	4.86	4.73	1.68	1.20	0.49	0.73	0.30
13	0.07	0.22	6.50	2.22	5.25	1.36	4.24	1.68	0.94	0.53	0.81	0.22
14	0.07	0.27	4.48	2.31	4.00	1.08	3.64	1.95	0.75	0.53	0.77	0.19
15	0.07	0.19	3.88	2.50	1.59	0.94	2.13	1.95	0.80	0.49	0.81	0.11
16	0.11	0.13	2.60	1.59	2.22	0.80	1.68	2.04	1.15	0.49	0.73	0.07
17	0.13	0.10	1.36	1.29	3.52	4.73	1.59	1.86	1.22	0.42	0.69	0.08
18	0.20	0.08	1.08	1.08	3.20	2.70	2.04	1.77	1.22	0.57	0.69	0.10
19	0.20	0.13	0.87	1.22	3.88	2.04	2.31	1.68	1.15	0.53	0.61	0.10
20	0.19	0.20	0.50	1.86	5.25	4.73	2.13	1.86	1.01	0.49	0.53	0.07
21	0.22	0.27	0.55	1.68	24	5.12	2.04	1.68	1.01	0.45	0.45	0.07
22	0.19	0.19	1.29	1.59	11	3.64	2.04	1.68	0.94	0.49	0.45	0.07
23	0.20	0.22	1.59	1.77	4.00	3.00	2.04	1.77	0.94	0.45	0.37	0.07
24	0.17	0.35	2.50	1.59	3.40	3.00	1.95	1.68	0.87	0.49	0.30	0.07
25	0.19	0.45	11	1.22	4.60	2.70	2.04	2.04	0.94	0.49	0.35	0.06
26	0.10	0.61	4.86	1.15	3.00	5.38	1.95	2.13	0.80	0.45	0.40	0.07
27	0.30	1.05	3.30	0.94	2.13	4.60	2.04	2.04	0.80	0.45	0.32	0.10
28	0.22	1.25	2.13	1.01	1.43	4.24	2.04	2.13	0.80	0.45	0.22	0.22
29	0.16	0.85	1.68	1.50	3.40	3.88	1.95	2.31	0.94	0.53		0.22
30	0.16	0.45	1.36	2.60	2.60	3.64	2.04	1.77	0.87	1.05		0.13
31		0.45		8.30	4.99		2.04		1.08	6.50		0.08
Total	5.72	11.64	144.44	49.37	152.91	183.50	118.40	57.60	39.19	22.25	26.46	4.98
Mean	0.19	0.40	4.80	1.58	4.93	6.10	3.81	1.93	1.26	0.71	0.93	0.16
Max.	0.35	1.25	18	8.30	24	38	9.58	2.31	1.95	6.50	7.55	0.40
Min.	0.07	0.08	0.50	0.70	1.43	0.80	1.59	1.68	0.75	0.37	0.22	0.06
Runoff - mcm.	0.494	1.006	12.480	4.265	13.211	15.846	10.230	4.977	3.386	1.922	2.286	0.426

WATER YEAR 1957 : Max. 38 Min. 0.06 Mean 2.24 Annual Runoff 70.529 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 2	18.00	322.44	52				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Rim Creek at Mae Rim Bridge, Chiang Mai (P.21)

Location: Lat 18°- 55' - 29" N, Long 98°- 56' - 34" E, on right bank 100 meters downstream from the bridge, on highway Chiang Mai - Fang, Amphoe Mae Rim, Chiang Mai.

Drainage Area: 515 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +319.69 m.(M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.4

Location: Near the pond which belong to Mr.Bunsri Tongsuk Sakul.
Elevation: +321.928 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 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation due to its stability.

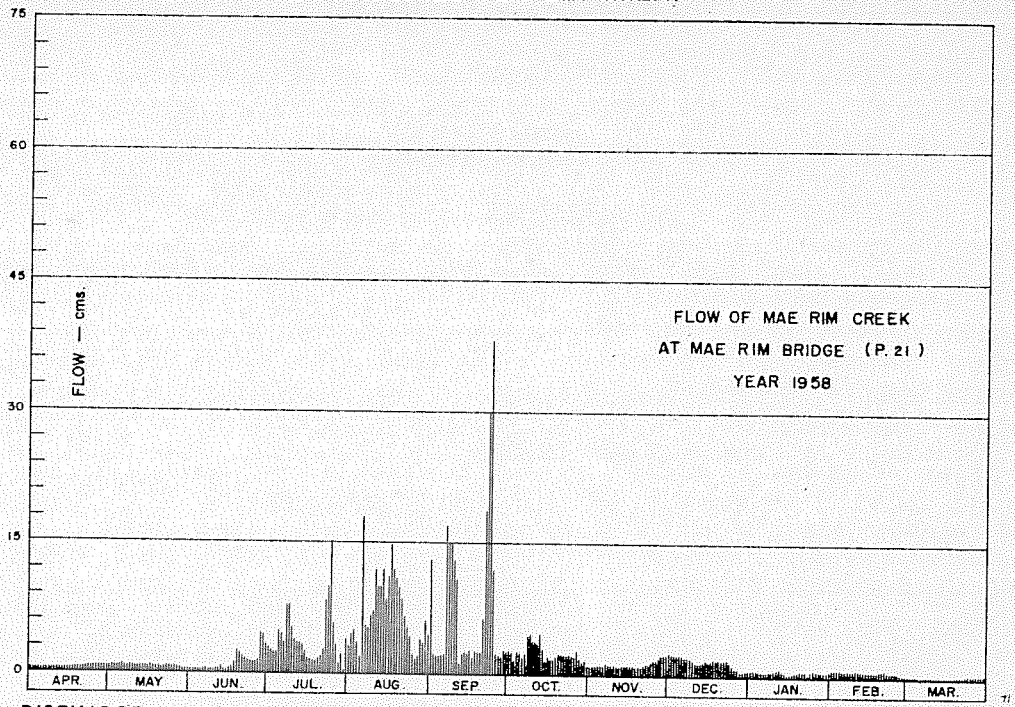
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1958. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	320.22	320.31	320.21	320.61	320.72	321.28	320.57	320.29	320.52	320.29	320.34	320.10
2	.22	.32	.21	.58	.85	320.52	.55	.31	.49	.32	.34	.10
3	.20	.33	.24	.57	.88	.50	.43	.30	.49	.30	.32	.09
4	.22	.31	.24	.58	.76	.50	.55	.30	.49	.30	.33	.06
5	.20	.34	.20	321.20	.58	.51	.55	.30	.51	.28	.31	.08
6	320.20	320.35	320.22	320.80	321.56	320.52	320.53	320.30	320.50	320.26	320.30	320.09
7	.20	.32	.25	.73	320.82	321.47	.60	.33	.49	.28	.31	.07
8	.20	.30	.21	321.04	.79	.34	.79	.31	.50	.31	.29	.06
9	.21	.33	.21	.08	.89	.35	.78	.31	.50	.32	.30	.05
10	.21	.31	.21	320.90	321.03	.27	.72	.31	.48	.33	.31	.03
11	320.24	320.30	320.24	320.72	321.27	321.19	320.65	320.30	320.44	320.37	320.32	320.06
12	.22	.30	.28	.70	.20	320.41	.60	.29	.42	.39	.31	.09
13	.22	.31	.34	.71	.19	.57	.64	.31	.44	.38	.29	.10
14	.24	.31	.24	.71	.31	.58	.53	.32	.47	.34	.27	.10
15	.24	.30	.20	.64	.11	.59	.51	.33	.45	.31	.27	.10
16	320.22	320.31	320.26	320.54	320.23	320.57	320.57	320.30	320.43	320.31	320.28	320.09
17	.26	.34	.32	.50	.41	.45	.47	.30	.44	.32	.27	.08
18	.26	.31	.39	.50	.25	.54	.47	.29	.44	.33	.27	.07
19	.27	.30	.56	.50	.20	.52	.47	.31	.44	.33	.29	.08
20	.26	.31	.54	.50	.13	.52	.47	.30	.45	.34	.30	.10
21	320.27	320.27	320.51	320.59	321.04	320.75	320.46	320.32	320.44	320.36	320.30	320.10
22	.30	.29	.50	.64	320.89	321.04	.46	.34	.43	.35	.28	.11
23	.30	.32	.45	321.08	.78	.88	.45	.36	.43	.34	.23	.13
24	.31	.31	.43	.22	.69	322.10	.46	.39	.41	.34	.24	.30
25	.30	.30	.41	.50	.48	321.12	.45	.41	.37	.39	.22	.26
26	320.32	320.29	320.41	320.92	320.43	320.56	320.43	320.45	320.33	320.35	320.21	320.25
27	.32	.29	.41	.71	.47	.52	.51	.49	.31	.34	.17	.28
28	.31	.26	.77	.44	.71	.50	.41	.52	.26	.33	.13	.26
29	.31	.24	.74	.50	.68	.57	.37	.51	.23	.33		.24
30	.30	.22	.63	.30	.88	.55	.38	.50	.29	.33		.21
31		.21		.78	.76		.30		.30			.20
Mean	320.25	321.30	320.34	320.74	320.77	320.83	320.52	320.35	320.42	320.33	320.28	320.13
Max.	320.32	320.35	320.77	321.50	321.56	322.10	320.79	320.52	320.52	320.39	320.34	320.28
Min.	320.20	320.21	320.20	320.30	320.43	320.41	320.30	320.29	320.23	320.26	320.13	320.03

WATER YEAR 1958 : Max. 322.10 m. Min. 320.03 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.37	0.70	0.33	3.00	3.30	13	2.70	0.92	2.44	0.54	0.37	0.01
2	0.37	0.76	0.33	2.61	4.66	3.70	2.53	1.03	2.27	0.61	0.87	0.01
3	0.30	0.81	0.44	2.53	5.03	2.02	1.65	0.98	2.27	0.51	0.76	0.00
4	0.37	0.70	0.44	2.53	3.50	2.02	2.53	1.03	2.19	0.51	0.81	0.00
5	0.30	0.87	0.30	11	1.85	2.19	2.53	1.03	2.36	0.40	0.70	0.00
6	0.30	0.92	0.37	4.54	18	2.27	1.85	1.03	2.19	0.30	0.65	0.00
7	0.30	0.76	0.47	3.60	5.54	17	2.53	1.26	2.02	0.44	0.70	0.00
8	0.30	0.65	0.33	7.86	5.29	15	4.42	1.09	2.02	0.58	0.61	0.00
9	0.33	0.81	0.33	7.86	6.65	15	4.54	1.09	1.93	0.58	0.65	0.00
10	0.33	0.70	0.33	5.29	8.82	13	3.70	1.09	1.72	0.58	0.70	0.00
11	0.44	0.65	0.44	3.94	12	11	3.60	0.92	1.39	0.70	0.76	0.00
12	0.37	0.65	0.58	3.60	10	1.20	3.40	0.87	1.26	0.76	0.70	0.00
13	0.37	0.70	0.87	3.60	10	2.36	4.54	0.98	1.33	0.58	0.61	0.00
14	0.44	0.70	0.44	3.40	12	2.44	2.90	1.03	1.52	0.33	0.54	0.00
15	0.44	0.65	0.30	2.61	8.66	2.36	1.52	1.14	1.72	0.24	0.54	0.00
16	0.37	0.70	0.54	1.78	11	2.70	2.02	0.98	1.59	0.22	0.58	0.00
17	0.51	0.87	0.81	1.52	15	1.85	1.59	0.92	1.65	0.22	0.54	0.00
18	0.51	0.70	1.26	1.46	12	2.61	1.78	0.87	1.72	0.44	0.54	0.00
19	0.54	0.65	2.58	1.46	11	2.53	2.02	0.92	1.72	0.44	0.61	0.00
20	0.51	0.70	2.19	1.52	10	2.61	2.36	0.87	1.72	0.54	0.65	0.00
21	0.54	0.54	1.85	2.19	8.66	5.16	2.27	0.98	1.65	0.58	0.65	0.00
22	0.65	0.61	1.78	2.80	6.65	9.66	2.19	1.20	1.65	0.54	0.58	0.00
23	0.65	0.76	1.46	8.50	5.29	30	2.10	1.20	1.65	0.51	0.40	0.01
24	0.70	0.70	1.33	10	4.30	38	2.19	1.39	1.46	0.51	0.44	0.26
25	0.65	0.65	1.26	15	2.25	12	2.10	1.52	1.14	0.70	0.37	0.18
26	0.76	0.61	1.33	5.94	1.78	2.36	1.93	1.52	0.87	0.54	0.33	0.20
27	0.76	0.61	1.39	3.40	2.02	2.10	2.61	1.85	0.70	0.51	0.24	0.26
28	0.70	0.51	4.78	1.14	3.94	1.93	1.72	2.19	0.47	0.47	0.16	0.22
29	0.70	0.44	4.54	2.19	3.60	2.70	1.46	2.19	0.37	0.47		0.18
30	0.65	0.37	3.30	0.44	6.07	2.53	1.52	2.19	0.58	0.47		0.12
31		0.30		3.94	4.54		0.98		0.58	0.53		0.10
Total	14.53	20.75	36.65	131.25	223.40	223.30	75.78	36.28	48.15	15.35	16.56	1.55
Mean	0.48	0.68	1.23	4.26	7.19	7.44	2.45	1.20	1.55	0.48	0.57	0.10
Max.	0.76	0.92	4.78	15	18	38	4.54	2.19	2.44	0.76	0.87	0.26
Min.	0.30	0.30	0.30	0.44	1.78	1.20	0.98	0.87	0.37	0.22	0.16	0.00
Runoff - mcm.	1.255	1.793	3.166	11.340	19.302	19.293	6.547	3.134	4.160	1.326	1.431	0.134

WATER YEAR 1958 : Max. 38 Min. 0.00 Mean 2.31 Annual Runoff 72.883 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 23	15.00	322.34	48				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Rim Creek at Mae Rim Bridge, Chiang Mai (P.21)

Location: Lat 18°- 55' - 29" N, Long 98°- 56' - 34" E, on right bank 100 meters downstream from the bridge, on highway Chiang Mai - Fang, Amphoe Mae Rim, Chiang Mai.

Drainage Area: 515 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +319.69 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.4

Location: Near the pond which belong to Mr.Bunsri Tongsuk Sakul.
Elevation: +321.928 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 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1959. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

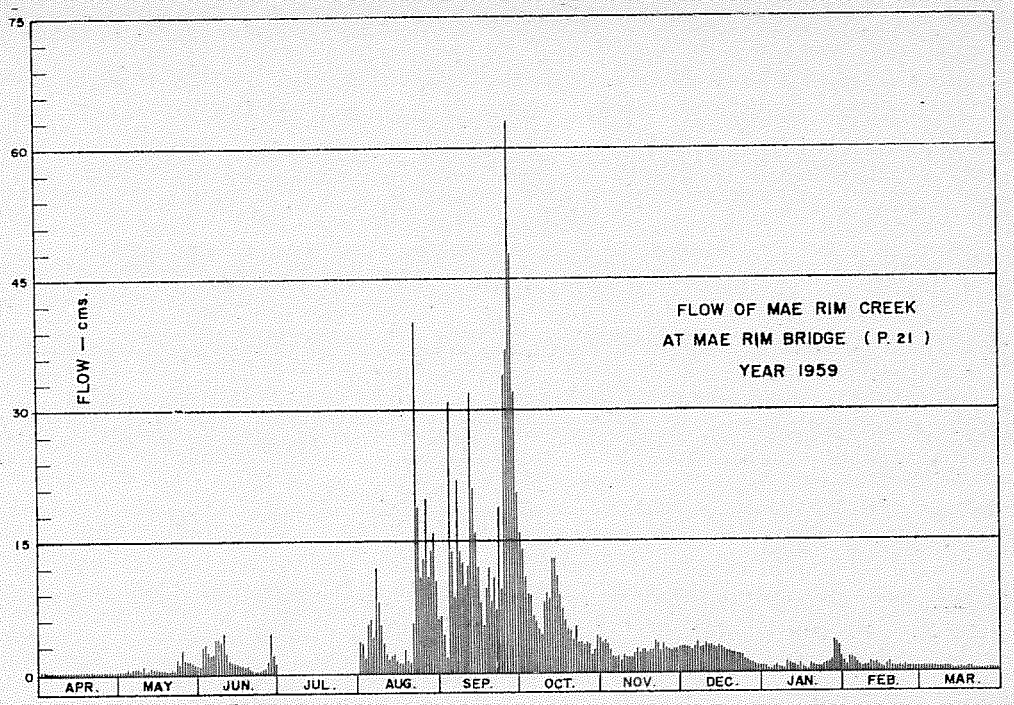
Remarks: No gage height record for Jul. 1 - 31.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	320.19	320.17	320.47		320.80	320.88	321.32	320.54	320.55	320.37	320.39	320.26
2	.19	.18	.65		.78	.74	.23	.55	.57	.35	.31	.25
3	.11	.12	.67		.62	.49	.07	.66	.55	.33	.47	.26
4	.19	.24	.56		.86	321.83	320.95	.57	.53	.29	.47	.25
5	.15	.18	.51		.91	.29	.93	.48	.51	.39	.45	.27
6	320.11	320.25	320.53		320.78	321.03	320.39	320.47	320.53	320.33	320.39	320.26
7	.15	.24	.68		321.27	.58	.83	.48	.55	.27	.33	.25
8	.15	.22	.71		.08	.31	.67	.40	.53	.25	.31	.25
9	.13	.15	.68		320.92	.27	.60	.47	.53	.23	.33	.26
10	.13	.24	.74		.76	.13	.80	.41	.57	.36	.33	.28
11	320.11	320.21	320.52		320.63	321.18	320.84	320.41	320.54	320.33	320.42	320.25
12	.11	.23	.42		.55	.85	.99	.39	.55	.27	.40	.27
13	.09	.30	.38		.59	.84	.99	.45	.53	.29	.43	.26
14	.12	.23	.36		.57	.38	321.02	.49	.51	.23	.37	.27
15	.11	.27	.33		.47	.17	320.91	.42	.53	.31	.35	.27
16	320.11	320.21	320.33		320.40	320.97	320.74	320.44	320.52	320.27	320.27	320.27
17	.11	.19	.32		.43	.77	.66	.44	.51	.25	.40	.26
18	.12	.17	.30		.65	321.02	.57	.40	.50	.21	.43	.25
19	.14	.13	.34		.51	.15	.53	.43	.51	.35	.36	.28
20	.13	.14	.26		.45	320.95	.50	.41	.49	.33	.33	.26
21	320.12	320.28	320.23		320.90	321.13	320.43	320.43	320.50	320.27	320.29	320.22
22	.12	.28	.18		322.11	321.90	.55	.52	.50	.25	.30	.16
23	.13	.51	.15		321.54	321.44	.42	.43	.51	.23	.28	.15
24	.12	.41	.23		.22	.03	.43	.52	.50	.30	.30	.12
25	.14	.62	.30		.34	.85	.41	.53	.45	.34	.25	.12
26	320.14	320.49	320.35		321.58	320.90	320.45	320.53	320.43	320.33	320.26	320.13
27	.15	.49	.51		.22	322.41	.43	.53	.41	.38	.27	.12
28	.19	.52	.87		.31	.14	.41	.55	.39	.66	.25	.13
29	.13	.52	.62		.39	321.77	.40	.55	.35	.64	.24	.13
30	.16	.48	.47		.10	.44	.56	.55	.32	.59		.12
31		.46			320.93		.54		.30	.46		.11
Mean	320.13	320.29	320.44		320.92	321.28	320.71	320.48	320.49	320.34	320.33	321.22
Max.	320.19	320.62	320.87		322.11	322.41	321.32	320.66	320.57	320.66	320.47	320.27
Min.	320.09	320.12	320.15		320.43	320.49	320.40	320.39	320.30	320.21	320.24	320.11

WATER YEAR 1959 : Max. 322.41 m. Min. 320.09 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.17	0.17	0.85		3.63	6.54	16	1.96	2.80	0.60	1.18	0.50
2	0.16	0.19	3.00		3.40	4.41	14	2.14	3.00	0.46	0.75	0.47
3	0.07	0.14	3.30		1.78	1.69	11	3.30	2.90	0.38	1.60	0.47
4	0.13	0.41	2.32		5.64	31	8.92	2.50	2.70	0.20	1.60	0.44
5	0.09	0.16	1.96		6.20	14	8.75	1.78	2.50	0.47	1.42	0.47
6	0.11	0.50	2.14		4.15	8.58	6.54	1.78	2.80	0.65	1.00	0.41
7	0.14	0.50	3.76		12	22	5.78	1.96	3.00	0.44	0.65	0.35
8	0.13	0.47	3.89		8.07	14	5.08	1.42	2.80	0.41	0.55	0.35
9	0.10	0.29	3.63		5.50	13	4.28	2.05	2.00	0.38	0.65	0.38
10	0.11	0.65	4.50		3.40	10	8.24	1.60	3.30	1.00	0.65	0.44
11	0.06	0.23	2.23		2.14	11	9.09	1.69	3.00	0.90	1.06	0.32
12	0.05	0.32	1.48		1.54	32	8.41	1.60	3.10	0.65	0.90	0.35
13	0.03	0.60	1.24		1.96	21	13	2.23	2.90	0.80	1.00	0.29
14	0.05	0.33	1.18		2.23	16	13	2.70	2.70	0.55	0.65	0.29
15	0.04	0.55	0.95		1.42	12	11	2.14	3.00	1.00	0.55	0.29
16	0.09	0.38	0.90		0.95	8.07	8.75	2.41	2.80	0.41	0.32	0.32
17	0.09	0.35	0.80		1.06	5.50	7.39	2.50	2.60	0.38	0.35	0.29
18	0.10	0.32	0.65		2.70	9.60	5.78	2.23	2.40	0.29	1.06	0.29
19	0.11	0.23	0.80		1.48	12	5.08	2.50	2.40	0.90	0.70	0.38
20	0.11	0.29	0.41		1.06	8.24	4.67	2.41	2.14	0.85	0.55	0.32
21	0.08	0.44	0.29		5.64	11	3.76	3.50	2.14	0.60	0.50	0.29
22	0.08	0.41	0.17		40	7.22	5.22	3.30	2.05	0.55	0.60	0.18
23	0.08	1.60	0.13		19	19	3.40	2.41	2.05	0.50	0.55	0.18
24	0.06	1.00	0.20		11	9.60	3.40	3.20	1.87	0.85	0.70	0.16
25	0.07	2.61	0.38		13	34	3.10	2.80	1.42	1.00	0.47	0.16
26	0.06	1.36	0.50		20	37	3.40	2.60	1.24	0.95	0.50	0.17
27	0.09	1.30	1.30		11	63	3.10	2.50	1.06	1.24	0.55	0.16
28	0.14	1.36	4.80		14	48	2.00	2.70	1.00	3.63	0.50	0.17
29	0.09	1.06	1.96		16	32	2.60	2.70	0.85	3.40	0.44	0.17
30	0.12	0.90	0.95		9.09	20	4.20	2.80	0.75	2.90		0.16
31		0.85			6.06		3.89		0.70	1.60		0.14
Total	2.81	20.27	50.67		235.10	541.45	212.83	71.41	70.87	28.94	22.50	9.36
Mean	0.09	0.65	1.69		7.58	18.0	6.36	2.38	2.29	0.93	0.76	0.30
Max.	0.17	2.61	4.80		40	63	16	3.50	3.30	3.63	1.60	0.50
Min.	0.03	0.14	0.13		1.06	1.69	2.00	1.42	0.70	0.20	0.32	0.14
Runoff - mcm.	0.243	1.734	4.378		19.302	46.781	18.388	6.170	6.123	2.500	1.944	0.809

WATER YEAR 1959 : Max. 63 Min. 0.03 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 27	06.00	322.49	69				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Sa Creek at Mae Sa Bridge, Chiang Mai (P.22)

Location: Lat 18° – 53' – 45" N, Long 98° – 57' – 12" E, on left bank 50 meters downstream of the bridge, on highway Chiang Mai – Fang, Amphoe Mae Rim, Chiang Mai.

Drainage Area: 135 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +317.09 m.(M.S.L.)

Bench Mark: B.M. – H.S./R.I.D.

Location: On left bank 9 meters from the bridge.
Elevation: +321.485 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 – 60
Rated by Float: –
Rated by Current Meter: 1954 – 60

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to the inadequate of measuring points.

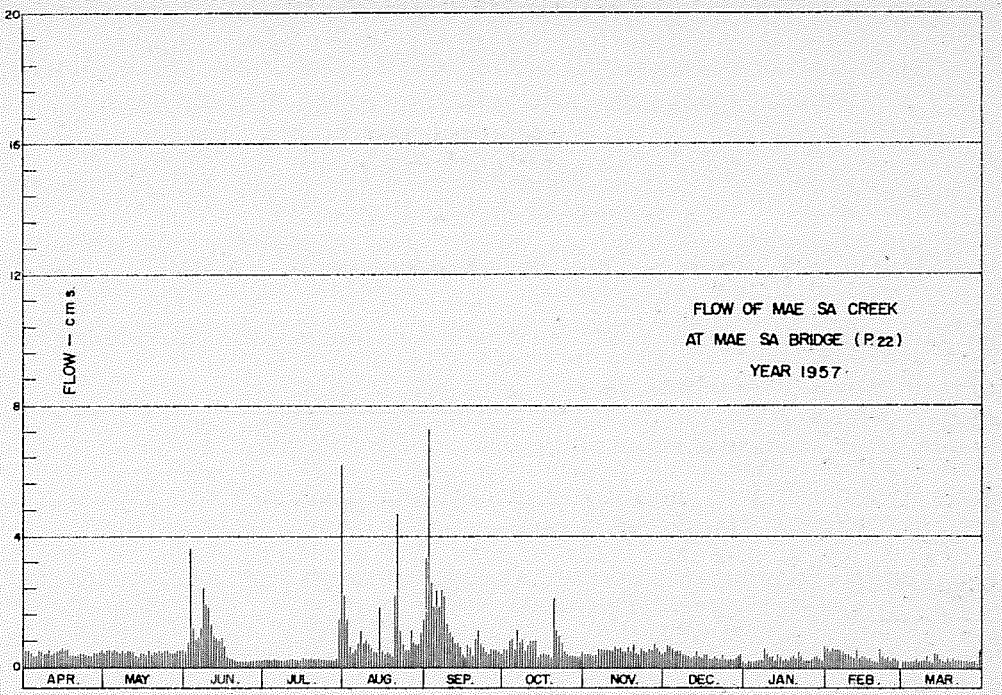
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage-discharge relation used is defined by discharge measurements during 1954-60. Natural flow of stream affected by the diversions for irrigation made by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	317.53	317.52	317.53	317.47	317.80	317.92	317.55	317.51	317.53	317.42	317.56	317.44
2	.53	.54	.59	.47	.66	318.21	.56	.51	.58	.46	.54	.45
3	.51	.54	.94	.47	.56	317.85	.60	.51	.57	.45	.56	.44
4	.49	.53	.67	.46	.52	.76	.96	.50	.56	.44	.55	.45
5	.49	.54	.61	.48	.53	.82	.84	.51	.53	.46	.55	.45
6	317.53	317.54	317.62	317.47	317.60	317.76	317.66	317.55	317.54	317.46	317.55	317.47
7	.53	.51	.67	.47	.66	.82	.59	.55	.54	.47	.54	.44
8	.51	.54	.83	.47	.59	.80	.61	.55	.49	.56	.51	.45
9	.51	.51	.77	.46	.61	.69	.54	.54	.50	.52	.51	.46
10	.54	.53	.76	.47	.59	.65	.58	.54	.50	.49	.49	.50
11	317.50	317.54	317.69	317.47	317.56	317.63	317.60	317.54	317.48	317.50	317.48	317.45
12	.52	.54	.63	.48	.54	.59	.60	.57	.49	.46	.56	.44
13	.54	.50	.62	.47	.53	.59	.60	.56	.52	.51	.48	.52
14	.54	.49	.60	.47	.76	.57	.49	.56	.50	.49	.50	.51
15	.55	.52	.62	.47	.54	.51	.51	.53	.47	.46	.49	.47
16	317.54	317.52	317.57	317.49	317.51	317.49	317.52	317.53	317.51	317.47	317.47	317.46
17	.55	.50	.49	.48	.53	.58	.51	.57	.51	.46	.48	.43
18	.49	.53	.48	.48	.52	.57	.51	.54	.47	.49	.46	.48
19	.50	.49	.48	.48	.50	.50	.49	.59	.47	.49	.45	.45
20	.49	.53	.46	.48	.80	.61	.79	.52	.49	.48	.44	.47
21	317.50	317.52	317.45	317.48	318.03	317.66	317.66	317.51	317.48	317.53	317.56	317.45
22	.52	.54	.45	.48	317.66	.59	.63	.56	.47	.50	.49	.46
23	.51	.52	.45	.47	.59	.57	.60	.54	.51	.46	.47	.45
24	.50	.53	.46	.47	.55	.53	.53	.53	.48	.46	.49	.45
25	.50	.54	.45	.47	.54	.51	.51	.55	.47	.46	.44	.45
26	317.49	317.52	317.46	317.46	317.66	317.56	317.50	317.55	317.47	317.47	317.48	317.43
27	.52	.52	.46	.46	.59	.53	.50	.59	.47	.49	.48	.44
28	.52	.52	.47	.46	.58	.54	.50	.54	.43	.49	.45	.44
29	.52	.54	.47	.48	.58	.53	.49	.53	.50	.47		.41
30	.53	.54	.46	.72	.65	.52	.49	.51	.51	.46		.54
31		.54		318.14	.71		.53		.46	.58		.53
Mean	317.52	317.51	317.59	317.51	317.61	317.65	317.60	317.54	317.50	317.50	317.50	317.49
Max.	317.55	317.54	317.94	318.14	318.03	318.21	317.96	317.59	317.58	317.58	317.56	317.54
Min.	317.49	317.49	317.45	317.46	317.51	317.49	317.49	317.50	317.43	317.42	317.44	317.41

WATER YEAR 1957 : Max. 318.21 m. Min. 317.41 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.49	0.45	0.49	0.26	2.21	3.41	0.56	0.41	0.49	0.12	0.60	0.17
2	0.49	0.52	0.76	0.26	1.15	7.30	0.56	0.41	0.71	0.22	0.52	0.20
3	0.41	0.52	3.63	0.26	0.60	2.66	0.82	0.41	0.65	0.20	0.62	0.17
4	0.33	0.49	1.22	0.22	0.45	1.85	0.85	0.37	0.60	0.17	0.56	0.20
5	0.33	0.52	0.87	0.30	0.49	2.39	0.57	0.41	0.49	0.22	0.56	0.20
6	0.49	0.52	0.93	0.26	0.82	1.85	1.15	0.56	0.52	0.22	0.56	0.26
7	0.49	0.41	1.22	0.26	1.15	2.39	0.76	0.56	0.52	0.26	0.52	0.17
8	0.41	0.52	2.48	0.26	0.76	2.21	0.87	0.56	0.33	0.60	0.41	0.20
9	0.41	0.41	1.94	0.22	0.87	1.36	0.52	0.52	0.37	0.45	0.41	0.22
10	0.52	0.49	1.85	0.26	0.76	1.09	0.71	0.52	0.37	0.33	0.33	0.37
11	0.37	0.52	1.36	0.26	0.60	0.98	0.82	0.52	0.30	0.37	0.30	0.20
12	0.45	0.52	0.98	0.30	0.52	0.76	0.82	0.65	0.33	0.22	0.60	0.17
13	0.52	0.37	0.93	0.26	0.49	0.76	0.82	0.60	0.49	0.41	0.30	0.45
14	0.52	0.33	0.82	0.26	1.85	0.65	0.33	0.60	0.37	0.33	0.37	0.41
15	0.56	0.45	0.93	0.26	0.52	0.41	0.41	0.49	0.26	0.22	0.33	0.26
16	0.52	0.45	0.65	0.33	0.41	0.33	0.45	0.49	0.41	0.26	0.26	0.22
17	0.56	0.37	0.33	0.30	0.49	0.71	0.41	0.65	0.41	0.22	0.30	0.17
18	0.33	0.49	0.30	0.30	0.45	0.65	0.41	0.52	0.26	0.33	0.22	0.30
19	0.37	0.33	0.30	0.30	0.37	0.37	0.33	0.76	0.26	0.33	0.20	0.20
20	0.33	0.49	0.22	0.30	2.21	0.87	2.12	0.45	0.33	0.30	0.17	0.26
21	0.37	0.45	0.20	0.30	4.72	1.15	1.15	0.41	0.30	0.49	0.60	0.20
22	0.45	0.52	0.20	0.30	1.15	0.76	0.98	0.60	0.26	0.37	0.33	0.22
23	0.41	0.45	0.20	0.26	0.76	0.65	0.82	0.52	0.41	0.22	0.26	0.20
24	0.37	0.49	0.22	0.26	0.56	0.49	0.49	0.49	0.30	0.22	0.33	0.20
25	0.37	0.52	0.20	0.26	0.52	0.41	0.41	0.56	0.26	0.22	0.17	0.20
26	0.33	0.45	0.22	0.22	1.15	0.60	0.37	0.56	0.26	0.26	0.30	0.15
27	0.45	0.45	0.22	0.22	0.76	0.56	0.37	0.76	0.26	0.33	0.30	0.17
28	0.45	0.45	0.26	0.22	0.71	0.52	0.37	0.52	0.15	0.33	0.20	0.17
29	0.45	0.52	0.26	0.30	0.71	0.49	0.33	0.49	0.37	0.26		0.10
30	0.49	0.52	0.22	1.57	1.09	0.45	0.33	0.41	0.41	0.22		0.52
31		0.52		6.22	1.50		0.49		0.22	0.71		0.49
Total	13.04	14.51	24.41	15.56	30.80	39.08	20.40	15.78	11.67	9.41	10.63	7.40
Mean	0.43	0.45	0.80	0.48	1.00	1.30	0.66	0.53	0.39	0.39	0.38	0.24
Max.	0.56	0.52	3.63	6.22	4.72	7.30	0.85	0.76	0.71	0.71	0.60	0.52
Min.	0.33	0.33	0.20	0.22	0.41	0.33	0.33	0.37	0.15	0.12	0.17	0.10
Runoff - mcm.	1.127	1.254	2.109	1.344	2.661	3.376	1.762	1.363	1.008	0.813	0.950	0.639

WATER YEAR 1957 : Max. 7.30 Min. 0.10 Mean 0.58 Annual Runoff 18.376 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 2	12.00	318.30	8.82				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Sa Creek at Mae Sa Bridge, Chiang Mai (P.22)

Location: Lat 18°- 53' - 45" N, Long 98°- 57' - 12" E, on left bank 50 meters downstream of the bridge, on highway Chiang Mai - Fang, Amphoe Mae Rim, Chiang Mai.

Drainage Area: 135 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +317.09 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: On left bank 9 meters downstream of the bridge.
Elevation: +321.485 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 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation due to the inadequate of measuring point.

Overbank Flow Conditions: No overbank flow.

General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1954 - 60. Natural flow of stream affected by the diversions for irrigation made by the local residents. No adjustment made for virgin flow.

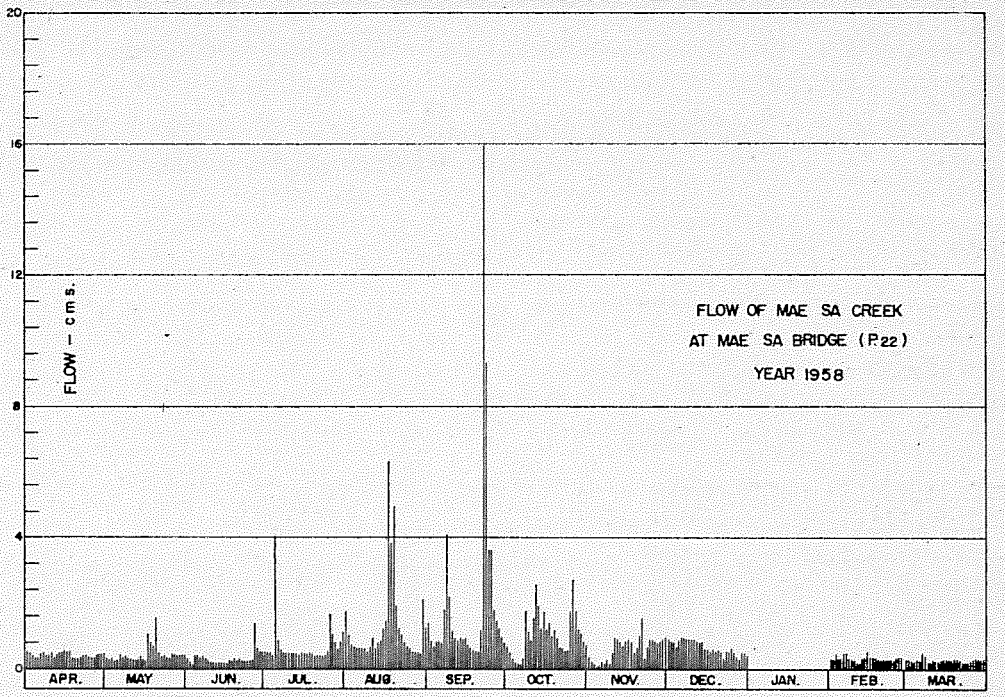
Remarks: No gage height record for Jan. 1 - 31.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	317.53	317.50	317.50	317.55	317.75	317.70	317.58	317.51	317.62		317.49	317.48
2	.53	.48	.46	.54	.65	.61	.55	.47	.61		.49	.48
3	.51	.49	.43	.54	.59	.58	.49	.45	.60		.53	.47
4	.49	.47	.51	.52	.58	.61	.46	.41	.58		.49	.46
5	.49	.48	.52	.98	.58	.61	.44	.43	.62		.50	.48
6	317.53	317.52	317.50	317.62	317.57	317.60	317.44	317.47	317.63		317.53	317.48
7	.53	.50	.51	.56	.57	.76	.79	.44	.63		.53	.53
8	.51	.50	.49	.54	.57	.98	.75	.48	.62		.49	.51
9	.51	.51	.48	.53	.55	.80	.66	.45	.62		.48	.46
10	.54	.48	.45	.54	.57	.66	.62	.54	.62		.48	.46
11	317.50	317.48	317.45	317.53	317.63	317.62	318.37	317.63	317.62		317.46	317.48
12	.52	.48	.45	.53	.57	.61	317.84	.62	.62		.45	.47
13	.53	.48	.45	.52	.60	.63	.74	.60	.60		.50	.46
14	.54	.51	.46	.52	.62	.62	.68	.59	.61		.51	.48
15	.55	.48	.45	.54	.68	.63	.75	.61	.56		.55	.48
16	317.54	317.47	317.45	317.53	317.71	317.59	317.67	317.62	317.57		317.50	317.48
17	.55	.65	.48	.54	318.15	.57	.70	.60	.55		.50	.48
18	.49	.60	.47	.54	317.96	.56	.64	.54	.56		.50	.47
19	.49	.58	.49	.53	318.05	.55	.67	.58	.55		.48	.49
20	.49	.72	.49	.51	317.77	.55	.63	.64	.56		.48	.48
21	317.50	317.54	317.49	317.52	317.68	317.68	317.57	317.56	317.55		317.48	317.47
22	.52	.50	.47	.52	.64	318.64	.57	.49	.49		.48	.45
23	.51	.52	.47	.51	.60	.33	.55	.58	.55		.48	.45
24	.50	.50	.47	.52	.58	317.94	.56	.62	.54		.48	.46
25	.50	.49	.47	.57	.57	.94	.76	.62	.54		.48	.46
26	317.49	317.52	317.48	317.74	317.55	317.75	317.86	317.61	317.54		317.50	317.48
27	.52	.52	.70	.65	.54	.71	.74	.60	.50		.50	.49
28	.52	.51	.57	.60	.54	.67	.67	.61	.49		.50	.48
29	.52	.51	.55	.57	.53	.64	.66	.62	.53			.48
30	.53	.52	.54	.61	.79	.60	.60	.63	.53			.48
31	.	.52		.67	.68		.59		.52			.48
Mean	317.50	317.53	317.50	317.57	317.66	317.72	317.66	317.55	317.57		317.49	317.48
Max.	317.55	317.72	317.70	317.98	318.15	318.64	318.37	317.64	317.63		317.55	317.53
Min.	317.49	317.47	317.43	317.51	317.53	317.55	317.44	317.41	317.49		317.45	317.45

WATER YEAR 1958 : Max. 318.64 m. Min. 317.41 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.49	0.37	0.37	0.56	1.78	1.43	0.71	0.41	0.93		0.33	0.30
2	0.49	0.30	0.22	0.52	1.09	0.87	0.56	0.26	0.87		0.33	0.30
3	0.41	0.33	0.15	0.52	0.76	0.71	0.33	0.20	0.82		0.49	0.26
4	0.33	0.26	0.41	0.45	0.71	0.87	0.22	0.10	0.71		0.33	0.22
5	0.33	0.30	0.45	4.10	0.71	0.87	0.17	0.15	0.93		0.37	0.30
6	0.49	0.45	0.37	0.93	0.65	0.82	0.17	0.26	0.98		0.49	0.30
7	0.49	0.37	0.41	0.60	0.65	1.85	0.33	0.17	0.98		0.49	0.49
8	0.41	0.37	0.33	0.52	0.65	4.10	1.78	0.30	0.93		0.33	0.41
9	0.41	0.41	0.30	0.49	0.56	2.21	1.15	0.20	0.93		0.30	0.22
10	0.51	0.30	0.20	0.52	0.71	1.15	0.93	0.52	0.91		0.30	0.22
11	0.37	0.30	0.20	0.49	0.98	0.93	10	0.98	0.93		0.22	0.30
12	0.45	0.30	0.20	0.49	0.65	0.87	2.57	0.93	0.87		0.20	0.26
13	0.49	0.30	0.20	0.45	0.82	0.98	1.71	0.82	0.82		0.37	0.22
14	0.52	0.41	0.22	0.45	0.93	0.93	1.29	0.76	0.87		0.41	0.30
15	0.56	0.30	0.20	0.52	1.29	0.98	1.78	0.87	0.60		0.56	0.30
16	0.52	0.26	0.20	0.49	1.50	0.76	1.22	0.93	0.65		0.37	0.30
17	0.56	1.09	0.30	0.52	6.36	0.65	1.43	0.82	0.56		0.37	0.30
18	0.33	0.82	0.26	0.52	3.85	0.60	1.04	0.52	0.60		0.37	0.26
19	0.33	0.71	0.33	0.49	4.97	0.56	1.22	0.71	0.56		0.30	0.33
20	0.33	1.57	0.26	0.41	1.94	0.56	0.98	1.04	0.60		0.30	0.30
21	0.37	0.52	0.33	0.45	1.29	1.29	0.65	1.60	0.56		0.30	0.26
22	0.45	0.37	0.26	0.45	1.04	16	0.65	0.33	0.33		0.30	0.20
23	0.41	0.45	0.26	0.41	0.82	9.36	0.56	0.71	0.56		0.30	0.20
24	0.37	0.37	0.26	0.45	0.71	3.63	0.56	0.93	0.52		0.30	0.22
25	0.37	0.33	0.26	0.65	0.65	3.63	1.85	0.93	0.65		0.30	0.22
26	0.33	0.45	0.30	1.71	0.56	1.78	2.75	0.87	0.52		0.37	0.30
27	0.45	0.45	1.43	1.09	0.52	1.50	1.71	0.82	0.37		0.37	0.33
28	0.45	0.41	0.65	0.82	0.52	1.22	1.22	0.87	0.33		0.37	0.30
29	0.45	0.41	0.56	0.65	0.49	1.04	1.15	0.93	0.29			0.30
30	0.49	0.45	0.52	0.87	2.12	0.82	0.82	0.98	0.49			0.30
31		0.45		1.22	1.29		0.76		0.45			0.30
Total	12.96	14.18	10.41	22.81	41.57	62.97	42.27	18.92	21.32		9.84	8.82
Mean	0.43	0.45	0.33	0.73	1.34	2.10	1.36	0.63	0.72		0.35	0.28
Max.	0.56	1.57	1.43	4.10	6.36	16	10	1.04	0.98		0.56	0.49
Min.	0.33	0.26	0.15	0.41	0.49	0.56	0.17	0.10	0.33		0.20	0.20
Runoff - mcm.	1.120	1.255	0.899	1.971	3.592	5.441	3.652	1.635	1.842		0.850	0.762

WATER YEAR 1958 : Max. 16 Min. 0.10 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 22	06.00	319.09	28				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Sa Creek at Mae Sa Bridge, Chiang Mai (P.22)

Location: Lat 18°- 53' - 45" N, Long 98°- 57' - 12" E, on left bank 50 meters downstream from the bridge on highway Chiang Mai - Fang, Amphoe Mae Rim, Chiang Mai.

Drainage Area: 135 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +317.09 m.(M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: On left bank 9 meters downstream from bridge.
Elevation: +321.485 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 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation due to the inadequate of measuring points.

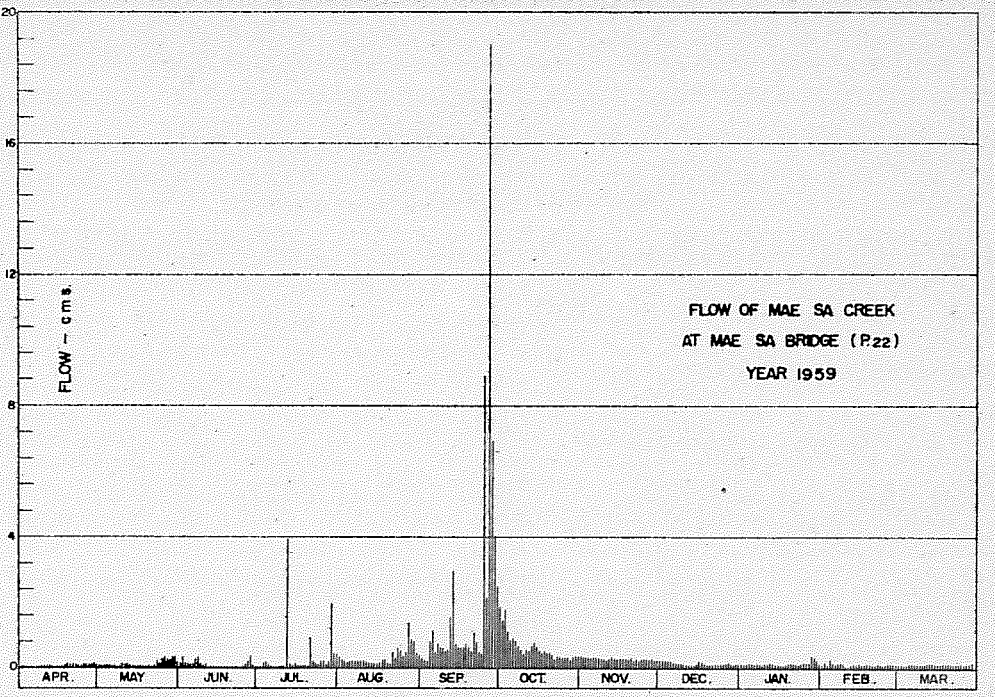
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1954 - 60. Natural flow of stream affected by the diversions for irrigation made by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	317.46	317.52	317.57	317.46	317.66	317.66	318.02	317.67	317.61	317.56	317.52	317.52
2	.47	.51	.68	.47	.63	.62	317.96	.67	.60	.55	.58	.54
3	.46	.51	.57	.57	.61	.60	318.01	.66	.60	.54	.54	.52
4	.45	.52	.56	.61	.59	318.54	317.89	.66	.60	.56	.63	.53
5	.46	.53	.56	.53	.61	317.90	.83	.65	.60	.56	.57	.54
6	317.46	317.51	317.56	317.50	317.60	317.74	317.85	317.66	317.57	317.54	317.54	317.57
7	.48	.48	.63	.48	.60	318.27	.83	.65	.57	.56	.57	.55
8	.48	.50	.67	.48	.61	317.77	.78	.65	.56	.57	.58	.54
9	.48	.53	.57	.49	.62	.77	.75	.63	.56	.53	.55	.54
10	.48	.56	.52	.51	.62	.74	.71	.62	.54	.56	.42	.55
11	317.49	317.54	317.55	317.50	317.59	317.76	317.75	317.62	317.55	317.55	317.48	317.55
12	.49	.56	.46	318.21	.58	.98	.74	.65	.53	.57	.54	.56
13	.49	.55	.46	317.57	.57	318.13	.79	.67	.54	.56	.55	.56
14	.49	.51	.51	.52	.58	317.82	.82	.66	.52	.54	.54	.56
15	.49	.48	.50	.58	.56	.72	.78	.65	.56	.54	.57	.55
16	317.49	317.52	317.51	317.54	317.59	317.77	317.74	317.64	317.60	317.53	317.54	317.56
17	.49	.52	.48	.51	.62	.78	.72	.64	.60	.54	.55	.55
18	.52	.49	.47	.53	.65	.82	.74	.64	.55	.53	.56	.56
19	.55	.46	.48	.53	.57	.77	.72	.60	.53	.57	.54	.56
20	.54	.48	.47	.51	.56	.73	.72	.65	.52	.57	.54	.55
21	317.56	317.48	317.46	317.86	317.73	317.87	317.70	317.62	317.55	317.57	317.52	317.55
22	.55	.49	.46	.60	.64	.81	.64	.63	.56	.55	.55	.53
23	.51	.62	.46	.57	.77	.73	.68	.61	.53	.54	.55	.55
24	.51	.57	.46	.55	.74	.71	.67	.63	.56	.57	.52	.55
25	.56	.64	.47	.61	.69	318.50	.65	.63	.54	.58	.53	.54
26	317.50	317.67	317.55	317.61	317.75	318.05	317.66	317.64	317.56	317.56	317.56	317.53
27	.53	.65	.59	.56	.95	.87	.66	.62	.58	.57	.56	.55
28	.56	.62	.70	.62	.83	.40	.62	.64	.54	.68	.54	.55
29	.55	.67	.50	318.03	.84	.22	.67	.61	.56	.66	.53	.57
30	.53	.69	.47	317.71	.72	.09	.68	.61	.56	.58		.56
31		.58		.71	.62		.66		.54	.57		.55
Mean	317.50	317.53	317.53	317.60	317.63	317.91	317.73	317.64	317.56	317.56	317.54	317.55
Max.	317.56	317.69	317.70	318.03	317.95	318.87	318.02	317.67	317.61	317.68	317.63	317.57
Min.	317.45	317.46	317.46	317.46	317.56	317.60	317.62	317.60	317.52	317.53	317.42	317.52

WATER YEAR 1959 : Max. 318.87 m. Min. 317.42 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.01	0.07	0.14	0.01	0.32	0.32	1.88	0.34	0.22	0.12	0.07	0.07
2	0.02	0.06	0.36	0.02	0.26	0.24	1.46	0.34	0.20	0.10	0.16	0.09
3	0.01	0.06	0.14	0.14	0.22	0.20	1.79	0.32	0.20	0.09	0.09	0.07
4	0.00	0.07	0.12	0.22	0.18	9.82	1.10	0.32	0.20	0.12	0.26	0.08
5	0.01	0.08	0.12	0.08	0.22	1.15	0.82	0.30	0.20	0.12	0.14	0.09
6	0.01	0.06	0.12	0.05	0.20	0.52	0.90	0.32	0.14	0.09	0.09	0.14
7	0.03	0.03	0.26	0.03	0.20	0.78	0.82	0.30	0.14	0.12	0.14	0.10
8	0.03	0.05	0.34	0.03	0.22	0.61	0.64	0.30	0.14	0.12	0.16	0.09
9	0.03	0.08	0.14	0.04	0.24	0.61	0.55	0.26	0.12	0.08	0.10	0.09
10	0.03	0.12	0.07	0.06	0.24	0.52	0.43	0.24	0.09	0.12	0.00	0.10
11	0.04	0.09	0.10	0.05	0.18	0.58	0.55	0.24	0.10	0.10	0.03	0.10
12	0.04	0.12	0.01	3.94	0.16	1.58	0.52	0.30	0.08	0.14	0.09	0.12
13	0.04	0.10	0.01	0.14	0.14	2.96	0.67	0.34	0.09	0.12	0.10	0.12
14	0.04	0.06	0.06	0.07	0.16	0.78	0.78	0.32	0.07	0.09	0.09	0.12
15	0.03	0.03	0.05	0.16	0.12	0.64	0.64	0.30	0.12	0.09	0.14	0.10
16	0.04	0.07	0.06	0.09	0.18	0.[illegible]	0.52	0.28	0.20	0.08	0.09	0.12
17	0.04	0.07	0.03	0.06	0.24	0.64	0.46	0.28	0.20	0.09	0.10	0.10
18	0.07	0.04	0.02	0.08	0.30	0.78	0.52	0.28	0.10	0.08	0.12	0.12
19	0.10	0.01	0.03	0.08	0.14	0.61	0.46	0.20	0.08	0.14	0.09	0.12
20	0.09	0.03	0.02	0.06	0.12	0.49	0.46	0.30	0.07	0.14	0.09	0.10
21	0.12	0.03	0.01	0.95	0.49	1.09	0.40	0.24	0.10	0.14	0.07	0.10
22	0.10	0.04	0.01	0.20	0.28	0.74	0.28	0.26	0.12	0.10	0.10	0.08
23	0.06	0.24	0.01	0.14	0.61	0.49	0.36	0.22	0.08	0.09	0.10	0.10
24	0.06	0.14	0.01	0.10	0.52	0.43	0.34	0.26	0.12	0.14	0.07	0.10
25	0.12	0.28	0.02	0.22	0.38	8.90	0.30	0.26	0.09	0.16	0.08	0.09
26	0.10	0.34	0.10	0.22	0.53	2.15	0.32	0.28	0.12	0.12	0.12	0.08
27	0.08	0.30	0.18	0.12	1.40	19	0.32	0.24	0.16	0.18	0.12	0.10
28	0.12	0.24	0.40	0.22	0.82	6.90	0.24	0.28	0.09	0.36	0.09	0.16
29	0.10	0.34	0.05	1.97	0.86	4.08	0.34	0.22	0.12	0.32	0.08	0.14
30	0.08	0.38	0.02	0.43	0.46	2.51	0.36	0.22	0.12	0.16		0.12
31		0.16		0.43	0.34		0.32		0.09	0.14		0.10
Total	1.65	3.79	3.01	10.41	10.75	74.64	19.55	8.36	3.97	4.06	2.98	3.15
Mean	0.05	0.12	0.10	0.33	0.35	2.49	0.63	0.28	0.13	0.13	0.10	0.10
Max.	0.12	0.38	0.40	1.97	1.40	19	1.88	0.34	0.22	0.36	0.26	0.14
Min.	0.00	0.01	0.01	0.01	0.12	0.20	0.24	0.20	0.07	0.08	0.00	0.07
Runoff - mcm.	0.142	0.327	0.260	0.899	0.929	6.449	1.689	0.722	0.343	0.357	0.257	0.272

WATER YEAR 1959 : Max. 19 Min. 0.00 Mean 0.40 Annual Runoff 12.642 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 27	09.00	318.89	19				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PING RIVER BASIN

Mae Khan Creek at Mae Khan Bridge, Chiang Mai (P.23)

Location: Lat 18°- 31' - 37" N, Long 98°- 51' - 42" E, on left bank at downstream side of the bridge, on highway Chiang Mai - Hot, Amphoe San Pa Tong, Chiang Mai.

Drainage Area: 1,777 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +285.62 m.(M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.8

Location: On left bank at Mae Khan Bridge.
Elevation: +291.767 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: 1955 - 60
Rated by Float: -
Rated by Current Meter: 1955 - 60

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to the inadequate of measuring points.

Overbank Flow Conditions: No overbank flow.

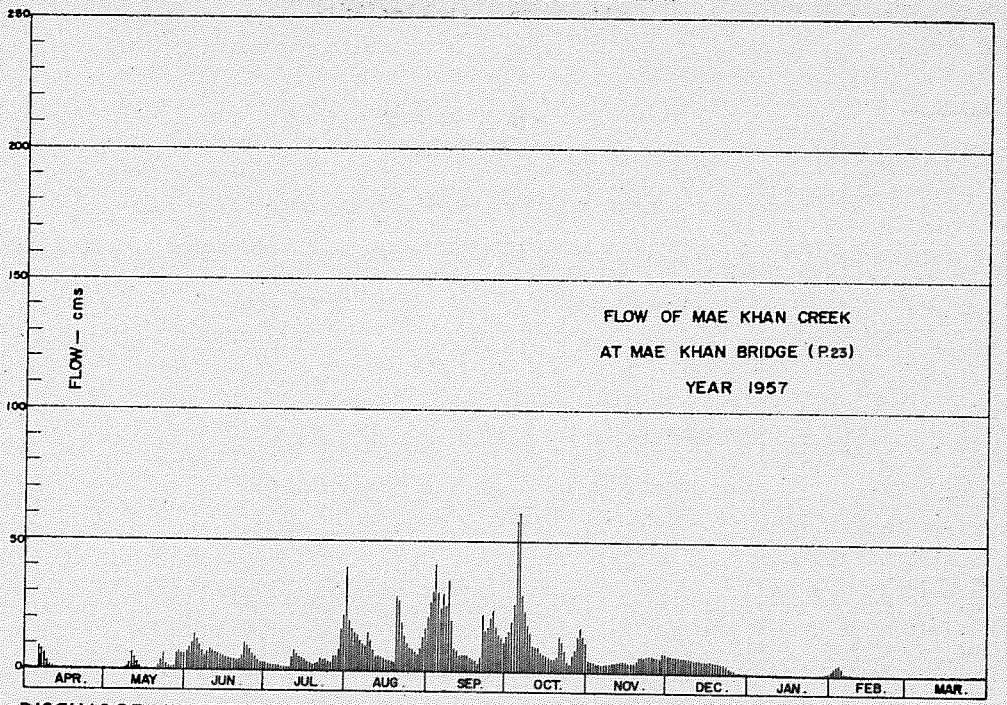
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1957 - 60. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: No flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	286.62	286.44	286.99	286.79	287.77	287.39	287.22	286.88	286.98	286.58	286.70	286.30
2	.61	.42	287.06	.76	.39	.54	.27	.87	.97	.56	.78	.29
3	.60	.41	.11	.76	.27	.61	.37	.85	.96	.52	.82	.29
4	.74	.41	.22	.75	.24	.79	.51	.83	.96	.49	.82	.29
5	.95	.40	.16	.74	.22	.58	288.04	.81	.95	.47	.75	.28
6	237.04	286.43	287.09	286.72	287.16	287.47	288.09	286.80	286.94	286.45	286.60	286.28
7	.01	.48	.00	.71	.12	.58	287.59	.81	.94	.44	.58	.28
8	286.91	.54	286.93	.70	.08	.46	.45	.82	.93	.43	.56	.29
9	.80	.65	.99	.68	.25	.67	.33	.83	.92	.42	.51	.29
10	.68	.76	287.04	.66	.16	.35	.23	.83	.92	.42	.48	.29
11	286.62	286.95	287.00	286.94	287.05	287.04	287.09	286.84	286.91	286.41	286.46	286.29
12	.61	.90	286.98	287.02	286.93	.02	.08	.85	.91	.41	.43	.29
13	.60	.79	.90	286.97	.93	286.96	.07	.86	.90	.40	.41	.28
14	.59	.68	.95	.93	.92	.96	286.99	.86	.90	.40	.40	.28
15	.58	.59	.92	.90	.91	.96	.97	.85	.89	.39	.40	.28
16	286.57	286.50	286.90	286.87	286.88	286.94	286.95	286.84	286.89	286.38	286.39	286.29
17	.56	.45	.89	.83	.87	.92	.93	.83	.88	.38	.39	.29
18	.55	.42	.88	.79	.85	.90	.91	.83	.87	.37	.38	.30
19	.53	.51	.87	.75	.82	.86	.90	.88	.87	.36	.38	.30
20	.49	.59	.85	.79	287.57	.77	.97	.95	.86	.35	.38	.30
21	286.48	286.71	286.88	286.84	287.53	286.92	287.20	286.96	286.84	286.35	286.37	286.30
22	.48	.89	.92	.91	.34	287.41	.15	.94	.83	.35	.36	.31
23	.47	.96	287.13	.88	.22	.28	.04	.96	.79	.38	.35	.31
24	.47	.74	.08	.85	.11	.29	286.88	.97	.73	.41	.34	.31
25	.47	.71	.03	.83	.06	.39	.82	.95	.71	.43	.33	.31
26	286.46	286.63	286.98	286.82	287.03	287.47	286.97	286.95	286.68	286.43	286.32	286.31
27	.46	.65	.91	.94	.00	.29	287.05	.94	.62	.45	.32	.32
28	.45	.96	.87	.94	286.97	.21	.21	.93	.60	.47	.31	.32
29	.45	287.00	.81	287.05	287.09	.17	.31	287.01	.60	.48		.33
30	.45	286.97	.80	.27	.21	.11	.05	286.99	.59	.54		.33
31		.95		.42	.30		286.96		.58	.58		.33
Mean	286.61	286.66	286.97	286.86	287.14	287.24	287.18	286.88	286.84	286.43	286.47	386.31
Max.	287.04	287.00	287.22	287.42	287.77	287.79	288.09	287.10	286.98	286.58	286.82	286.33
Min.	286.45	286.40	286.80	286.66	286.82	286.77	286.82	286.80	286.58	286.35	286.31	286.28

WATER YEAR 1957 : Max. 288.09 m. Min. 286.28 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.00	0.08	7.25	3.06	40	21	14	4.64	7.00	0.68	1.80	
2	0.90	0.04	9.24	2.64	20	28	16	4.46	6.75	0.56	2.92	
3	0.80	0.02	11	2.64	16	31	20	4.10	6.50	0.32	3.56	
4	2.36	0.02	14	2.50	15	41	26	3.74	6.50	0.18	3.56	
5	6.25	0.00	12	2.36	14	30	58	3.38	6.25	0.14	2.50	
6	8.66	0.06	10	2.08	12	24	61	3.20	6.00	0.10	0.80	
7	7.79	0.16	7.50	1.94	11	30	30	3.38	6.00	0.08	0.68	
8	5.25	0.44	5.75	1.80	9.82	24	23	3.56	5.75	0.06	0.56	
9	3.20	1.30	7.25	1.60	15	35	18	3.74	5.50	0.04	0.26	
10	1.60	2.64	8.66	1.40	12	19	15	3.74	5.50	0.04	0.16	
11	1.00	6.25	7.50	6.00	8.95	8.66	10	3.92	5.25	0.02	0.12	
12	0.90	5.00	7.00	8.08	5.75	8.08	9.82	4.10	5.25	0.02	0.06	
13	0.80	3.06	6.50	6.75	5.75	6.50	9.53	4.28	5.00		0.02	
14	0.74	1.60	6.25	5.75	5.50	6.50	7.25	4.28	5.00			
15	0.68	0.74	5.50	5.00	5.25	6.50	6.75	4.10	4.82			
16	0.62	0.20	5.00	4.46	4.64	6.00	6.25	3.92	4.82			
17	0.56	0.10	4.82	3.74	4.46	5.50	5.75	4.10	4.64			
18	0.50	0.04	4.64	3.06	4.10	5.00	5.25	4.28	4.46			
19	0.38	0.26	4.46	2.50	3.56	4.28	5.00	4.28	4.46			
20	0.18	0.74	4.10	3.06	29	2.78	6.75	4.10	4.28			
21	0.16	1.94	4.64	3.92	27	5.50	14	3.92	3.92			
22	0.16	4.82	5.50	5.25	19	22	12	3.74	3.74			
23	0.14	6.50	11	4.64	14	16	8.66	3.74	3.06			
24	0.14	2.36	9.82	4.10	11	17	4.64	4.64	2.22	0.02		
25	0.14	1.94	8.39	3.74	9.24	21	3.56	6.25	1.94	0.06		
26	0.12	1.10	7.00	3.56	8.39	24	6.75	6.25	1.60	0.06		
27	0.12	1.30	5.25	6.00	7.50	17	8.95	6.00	0.90	0.10		
28	0.10	6.50	4.46	6.00	6.75	14	14	5.75	0.80	0.14		
29	0.10	7.50	3.38	8.95	10	13	17	7.79	0.80	0.16		
30	0.10	6.75	3.20	16	14	11	8.95	7.25	0.74	0.44		
31		6.25		22	17		6.50		0.68	0.68		
Total	45.45	69.71	211.06	154.58	385.66	503.30	458.36	145.95	130.13	3.90	17.00	
Mean	1.51	2.26	7.03	4.97	12.4	16.8	14.8	4.87	4.19	0.12	0.59	
Max.	8.66	7.50	14	22	40	41	61	7.79	7.00	0.68	3.56	
Min.	0.10	0.00	3.20	1.40	3.56	2.78	3.56	3.20	0.68	0.00	0.00	
Runoff - mcm.	3.927	6.023	18.235	13.355	33.320	43.485	39.602	12.610	11.243	0.337	1.469	

WATER YEAR 1957 : Max. 61 Min. 0.00 Mean 5.82 Annual Runoff 183.609 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 5	15.00	288.30	77				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
PING RIVER BASIN

Mae Khan Creek at Mae Khan Bridge, Chiang Mai (P.23)

Location: Lat 18°- 37' - 31" N, Long 98°- 51' - 42" E, on left bank at downstream side of the bridge, on highway Chiang Mai - Hot, Amphoe San Pa Tong, Chiang Mai.

Drainage Area: 1,777 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +285.62 m.(M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.8

Location: On left bank at Mae Khan Bridge.
Elevation: +291.767 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: 1955 - 60
Rated by Float: -
Rated by Current Meter: 1955 - 60

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation due to the inadequate of measuring points.

Overbank Flow Conditions: No overbank flow.

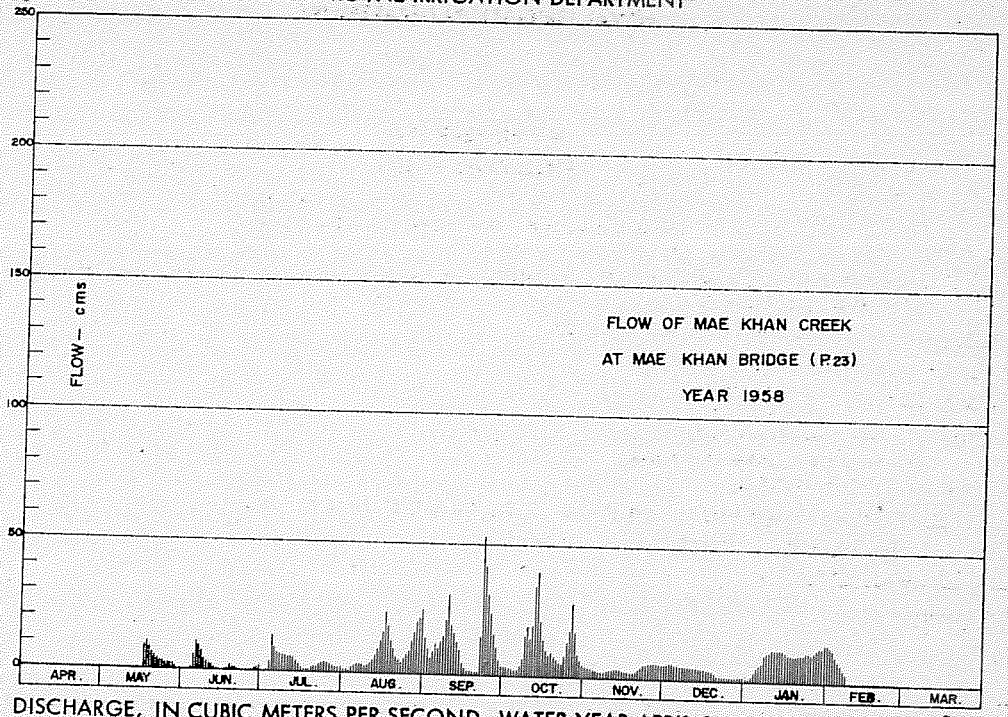
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1957 - 60.
No upstream state diversions for irrigation except those built by the local residents.
No adjustment made for virgin flow.

Remarks: No flow for many days and gage height record for Mar. which are no flow were not shown.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	286.34	286.28	286.35	286.61	286.66	287.21	286.81	286.87	286.92	286.61	287.20	
2	.34	.27	.36	.50	.71	.08	.79	.84	.93	.60	.19	
3	.34	.27	.36	.49	.62	286.98	.79	.82	.95	.70	.13	
4	.33	.27	.40	.58	.77	287.06	.75	.78	.93	.80	.06	
5	.33	.28	.94	287.22	.79	.15	.72	.76	.92	.91	.01	
6	286.33	286.28	287.12	287.06	286.82	287.10	286.75	286.74	286.91	286.95	286.96	
7	.32	.29	.06	.00	.82	.16	.84	.74	.91	.99	.89	
8	.31	.29	.00	286.98	.80	.25	.97	.73	.90	287.09	.79	
9	.31	.29	286.85	.97	.78	.40	287.26	.75	.90	.12	.60	
10	.30	.29	.82	.95	.82	.60	.36	.77	.89	.13	.44	
11	286.30	286.29	286.73	286.94	286.88	287.35	287.20	286.79	286.89	287.14	286.38	
12	.29	.29	.73	.94	.91	.28	.34	.80	.88	.14	.36	
13	.29	.30	.65	.91	.99	.20	.67	.80	.88	.14	.34	
14	.29	.30	.57	.87	287.11	.09	.77	.79	.87	.14	.32	
15	.29	.30	.55	.79	.19	286.87	.39	.78	.86	.14	.32	
16	286.29	286.31	286.54	286.71	287.31	286.76	287.21	286.77	286.85	287.13	286.32	
17	.30	287.07	.54	.64	.46	.70	.10	.76	.84	.10	.31	
18	.30	.11	.60	.65	.32	.70	.02	.74	.82	.09	.31	
19	.30	.03	.73	.60	.19	.68	.06	.73	.79	.08	.31	
20	.29	286.97	.66	.71	.09	.65	.01	.76	.75	.07	.31	
21	286.29	286.91	286.66	286.72	286.96	286.62	286.97	286.83	286.69	287.09	286.30	
22	.29	.87	.58	.72	.91	287.25	.92	.89	.66	.10	.30	
23	.29	.82	.52	.79	.87	.97	.89	.92	.64	.10	.30	
24	.29	.79	.51	.83	.94	.84	287.03	.91	.64	.11	.30	
25	.29	.76	.50	.85	287.01	.60	.20	.93	.64	.11	.29	
26	286.28	286.75	286.50	286.83	287.06	287.47	287.32	286.93	286.63	287.10	286.29	
27	.28	.75	.53	.80	.20	.27	.55	.93	.63	.12	.29	
28	.28	.75	.62	.76	.28	.11	.29	.92	.63	.14	.29	
29	.28	.64	.67	.73	.38	286.94	.04	.92	.62	.18		
30	.28	.47	.74	.72	.43	.82	286.95	.91	.62	.19		
31		.37		.72	.49		.89		.62	.21		
Mean	286.30	286.54	286.65	286.79	287.02	287.14	287.09	286.82	286.79	287.05	286.52	
Max.	286.34	287.11	287.12	287.22	287.49	287.97	286.77	286.93	286.95	287.21	287.20	
Min.	286.28	286.27	286.35	286.49	286.62	286.62	286.72	286.73	286.62	286.60	286.29	

WATER YEAR 1958 : Max. 287.97 m. Min. 286.27 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				0.90	1.40	14	3.38	4.46	5.50	0.90	14	
2				0.20	1.94	9.82	3.06	3.92	5.75	0.80	13	
3				0.18	1.00	6.50	3.06	3.56	6.25	1.80	12	
4				0.68	2.78	9.24	2.50	2.92	5.75	3.20	9.24	
5			6.00	14	3.06	12	2.08	2.64	5.25	5.25	7.79	
6			11	9.24	3.56	10	2.50	2.36	5.25	6.25	6.50	
7			9.24	7.50	3.56	13	3.92	2.36	5.25	7.00	4.82	
8			7.50	7.00	3.20	15	6.75	2.22	5.00	10	3.06	
9			4.10	6.75	2.92	21	16	2.50	5.00	11	0.80	
10			3.56	6.25	3.56	31	19	2.78	4.82	11	0.80	
11			2.22	6.00	4.64	19	14	3.06	4.82	12		
12			2.22	6.00	5.25	16	10	3.20	4.64	12		
13			1.30	5.25	7.25	13	35	3.20	4.64	12		
14			0.62	4.46	11	10	40	3.06	4.46	12		
15			0.50	3.06	13	4.46	21	2.92	4.28	12		
16			0.44	1.94	17	2.64	14	2.78	4.10	11		
17		9.53	0.44	1.20	24	1.80	10	2.64	3.92	10		
18		11	0.80	1.30	18	1.80	8.08	2.36	3.56	10		
19		8.39	2.22	0.80	13	1.60	9.24	2.22	3.06	9.82		
20		6.75	1.40	1.94	10	1.30	7.79	2.64	2.50	9.53		
21		5.25	1.40	2.08	6.50	1.00	6.75	3.74	1.70	10		
22		4.46	0.68	2.08	5.25	15	5.50	4.82	1.40	10		
23		3.56	0.32	3.06	4.46	53	4.82	5.50	1.20	10		
24		3.06	0.26	3.74	6.00	44	8.39	5.25	1.20	11		
25		2.64	0.20	4.10	7.79	31	14	5.75	1.20	11		
26		2.50	0.20	3.74	9.24	24	18	5.75	1.10	10		
27		2.50	0.38	3.20	14	16	28	5.75	1.10	11		
28		2.50	1.00	2.64	16	11	17	5.50	1.10	12		
29		1.20	1.50	2.22	20	6.00	8.66	5.50	1.00	13		
30		0.14	2.36	2.08	22	3.56	6.25	5.25	1.00	13		
31		0.00		2.08	25		4.82		1.00	14		
Total		63.48	61.86	115.67	286.36	417.72	362.55	110.61	106.80	292.55	71.29	
Mean		2.03	2.07	3.74	9.24	13.9	11.7	3.69	3.45	9.42	2.55	
Max.		11	11	14	25	53	40	5.75	6.25	14	14	
Min.		0.00	0.00	0.18	1.00	1.00	2.08	2.22	1.00	0.80	0.00	
Runoff — mcm.		5.485	5.345	9.994	24.741	36.091	31.324	9.557	9.227	25.276	6.159	

WATER YEAR 1958 : Max. 53 Min. Mean Annual Runoff mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 23	09.00	288.00	55				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Khan Creek at Mae Khan Bridge, Chiang Mai (P.23)

Location: Lat 18°- 37' - 31" N, Long 98°- 51' - 42" E, on left bank at downstream side of the bridge on highway Chiang Mai - Hot, Amphoe San Pa Tong, Chiang Mai.

Drainage Area: 1,777 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +285.62 m.(M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.8

Location: On left bank at Mae Khan Bridge.
Elevation: +291.767 m.(M.S.L.)

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

Basis of Mean Daily Gage Height: Arithmetic means of 5 readings.

Period of Available Gage Records: 1955 to date.

Rating Operation:

Period of Rating: 1955 - 60
Rated by Float: -
Rated by Current Meter: 1955 - 60

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation due to the inadequate of measuring points.

Overbank Flow Conditions: No overbank flow.

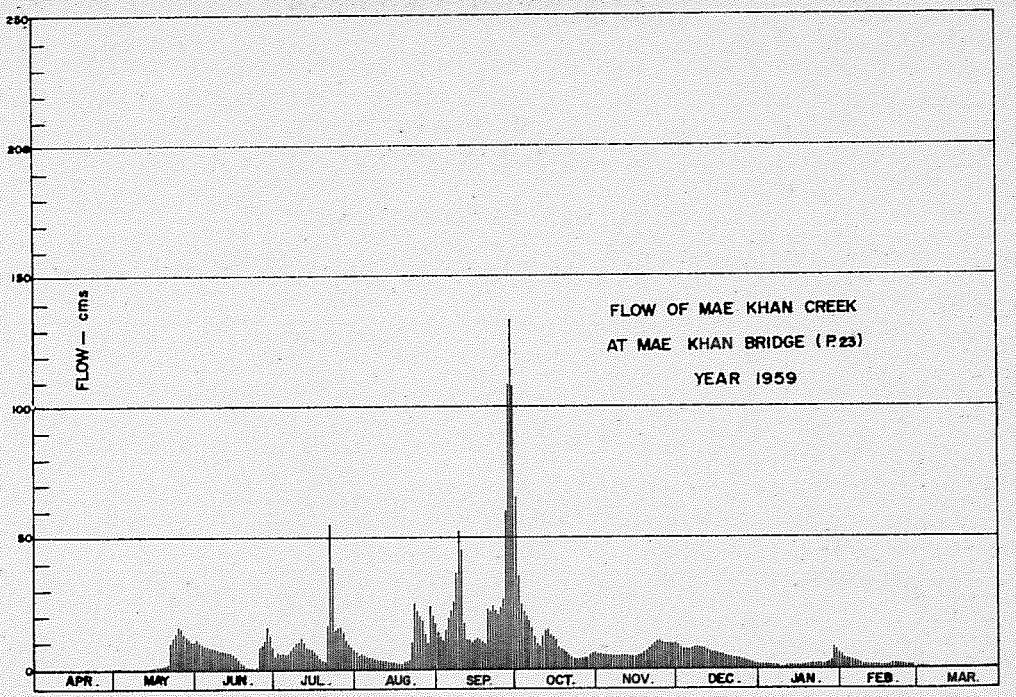
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1957 - 60. No upstream state diversions for irrigation except those built by the local residents. No adjustment made for virgin flow.

Remarks: No flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	286.19	286.14	287.12	286.84	286.95	287.22	288.29	286.90	287.04	286.61	286.87	286.46
2	.18	.17	.09	.91	.91	.15	287.74	.90	.01	.60	.81	.45
3	.18	.19	.06	.90	.90	.13	.53	.89	286.99	.60	.80	.44
4	.17	.20	.04	.90	.87	.26	.47	.89	.98	.58	.78	.42
5	.16	.21	.02	.89	.85	.39	.41	.89	.99	.57	.74	.41
6	286.16	286.23	287.00	286.90	286.83	287.48	287.34	286.88	287.00	286.55	286.73	286.40
7	.15	.23	286.99	.96	.82	.54	.29	.88	.01	.53	.70	.40
8	.15	.23	.98	287.02	.79	.80	.21	.88	.02	.52	.66	.39
9	.14	.26	.97	.10	.78	288.09	.08	.87	.01	.47	.62	.38
10	.13	.27	.95	.13	.77	287.94	.02	.87	.00	.42	.61	.38
11	286.12	286.28	286.94	287.16	286.76	287.38	287.21	286.87	286.99	286.52	286.60	286.37
12	.12	.29	.92	.09	.75	.11	.26	.86	.97	.54	.60	.37
13	.11	.31	.91	.02	.72	.11	.27	.86	.95	.55	.58	.37
14	.10	.33	.90	.00	.70	.10	.21	.86	.92	.52	.57	.36
15	.09	.39	.87	286.97	.68	.13	.16	.86	.92	.52	.56	.35
16	286.08	286.41	286.82	286.92	286.65	287.15	287.11	286.87	286.91	286.56	286.55	286.34
17	.07	.45	.77	.90	.64	.12	.01	.89	.90	.58	.54	.33
18	.06	.49	.70	.83	.63	.09	286.98	.94	.89	.59	.57	.31
19	.06	.50	.59	.77	.70	.07	.96	.95	.87	.61	.59	.30
20	.05	.52	.51	.73	.75	.47	.91	287.01	.85	.63	.60	.29
21	286.05	286.54	286.42	287.31	286.78	287.44	286.87	287.05	286.84	286.66	286.61	286.29
22	.04	287.10	.37	288.13	287.14	.50	.83	.09	.83	.65	.62	.28
23	.03	.17	.40	287.78	.53	.44	.82	.13	.82	.64	.61	.28
24	.02	.22	.44	.26	.46	.40	.82	.13	.80	.62	.60	.28
25	.01	.29	287.00	.29	.40	.50	.82	.10	.79	.65	.59	.28
26	286.00	287.27	287.06	287.30	287.35	287.57	286.81	287.09	286.77	286.67	286.58	286.27
27	.00	.20	.14	.23	.20	288.02	.82	.08	.75	.70	.56	.27
28	285.99	.15	.29	.12	.06	.88	.82	.07	.73	.75	.54	.27
29	286.04	.12	.18	.06	.50	289.12	.90	.07	.68	287.03	.52	.27
30	.11	.10	.02	.01	.42	288.65	.91	.06	.63	286.98		.26
31		.09		286.97	.34		.91		.62	.91		.26
Mean	286.09	286.59	286.88	287.08	286.95	287.54	287.12	286.96	286.89	286.62	286.63	286.34
Max.	286.19	287.29	287.29	288.13	287.53	289.12	288.29	287.13	287.04	287.03	286.87	286.46
Min.	285.99	286.14	286.37	286.73	286.63	287.07	286.81	286.81	286.62	286.46	286.52	286.26

WATER YEAR 1959 : Max. 289.12 m. Min. 285.99 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			11	4.60	6.90	14	65	5.80	8.96	1.70	5.20	0.70
2			10	6.02	6.02	12	35	5.80	8.48	1.60	4.00	0.65
3			9.44	5.80	5.80	11	25	5.60	7.78	1.60	3.80	0.60
4			8.96	5.82	5.20	15	22	5.60	7.56	1.46	3.56	0.50
5			8.48	5.60	4.80	20	20	5.60	7.78	1.39	3.08	0.45
6			8.00	5.80	4.40	23	18	5.40	8.00	1.25	2.96	0.40
7			7.78	7.12	4.20	26	16	5.40	8.24	1.11	2.60	0.40
8			7.56	8.48	3.68	38	13	5.40	8.48	1.04	2.20	0.36
9			7.36	10	3.56	53	9.92	5.20	8.24	0.85	1.80	0.32
10			6.90	11	3.44	45	8.48	5.20	8.00	0.70	1.70	0.32
11			6.68	12	3.32	19	13	5.20	7.78	1.04	1.60	0.28
12			6.24	10	3.20	11	15	5.00	7.34	1.18	1.60	0.28
13		0.04	6.02	8.48	2.84	11	15	5.00	6.90	1.25	1.46	0.28
14		0.12	5.80	8.00	2.60	10	13	5.00	6.24	1.04	1.39	0.24
15		0.36	5.20	7.34	2.40	11	12	5.00	6.24	1.04	1.32	0.20
16		0.45	4.20	6.24	2.10	12	11	5.20	6.02	1.32	1.25	0.16
17		0.65	3.44	5.80	2.00	11	8.24	5.60	5.80	1.46	1.18	0.12
18		0.85	2.60	4.40	1.90	10	7.56	6.46	5.60	1.53	1.39	0.04
19		0.90	1.53	3.44	2.60	9.68	7.12	6.90	5.20	1.70	1.53	
20		1.04	0.97	2.96	3.20	23	6.02	8.24	4.80	1.90	1.60	
21		1.18	0.50	17	3.56	22	5.20	9.20	4.60	2.20	1.70	
22		10	0.28	55	11	24	4.40	10	4.40	2.10	1.80	
23		12	0.40	37	25	22	4.20	11	4.20	2.00	1.70	
24		13	0.60	15	22	20	4.20	11	3.80	1.80	1.60	
25		16	8.00	16	20	24	4.20	10	3.68	2.10	1.53	
26		15	9.44	16	18	27	4.00	10	3.44	2.30	1.46	
27		13	11	14	13	49	4.20	9.92	3.20	2.60	1.32	
28		12	16	11	9.44	109	4.20	9.68	2.96	3.20	1.18	
29		11	13	9.44	24	133	5.80	9.68	2.40	8.72	1.04	
30		10	8.48	8.24	20	90	6.02	9.44	1.96	7.56		
31		10		7.34	17		6.02		1.80	6.02		
Total		127.59	195.86	344.92	257.16	904.68	392.78	212.52	179.82	66.76	58.55	6.39
Mean		4.10	6.53	11.1	5.29	30.1	12.7	7.08	5.80	1.96	2.02	0.20
Max.		16	16	55	25	133	65	11	8.96	8.72	5.20	0.70
Min.		0.00	0.28	2.96	1.90	9.68	4.00	5.00	1.80	0.70	1.04	0.00
Runoff - mcm.		11.024	16.922	29.801	22.219	78.164	33.936	18.362	15.536	5.768	5.059	0.544

WATER YEAR 1959 : Max. 133 Min. 0.00 Mean 7.50 Annual Runoff 237.336 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 29	06.00	289.19	161				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

H.61

WATER YEAR 1957
PING RIVER BASIN

Mae Klang Creek at Mae Klang Bridge, Chiang Mai (P.24)

Location: Lat 18° – 23' – 15" N, Long 98° – 40' – 51" E, on left bank at upstream side of the bridge, on highway Chiang Mai – Hot, Amphoe Chom Thong, Chiang Mai.

Drainage Area: 616 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m.(A.D.)

Bench Mark:

Location: –
Elevation: –

Gage Reading Frequency: 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: 1955 to date.

Rating Operation:

Period of Rating: 1955 to date.
Rated by Float: –
Rated by Current Meter: 1955 to date.

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

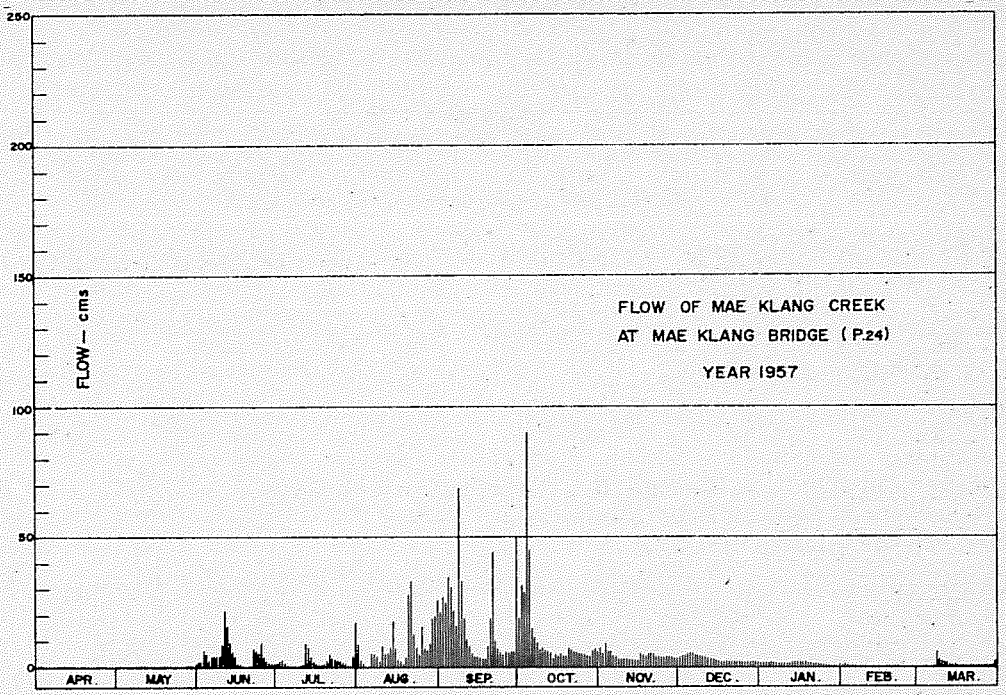
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1957.
No upstream state diversions for irrigation except those built by the local residents.
No adjustment made for virgin flow.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.10	0.14	0.38	0.34	0.73	0.93	0.92	0.65	0.50	0.38	0.35	0.20
2	.10	.13	.39	.37	.45	1.02	1.18	.57	.50	.38	.31	.20
3	.10	.13	.75	.40	.35	0.97	.19	.71	.50	.38	.28	.20
4	.20	.13	.49	.34	.29	1.13	2.06	.60	.50	.38	.27	.20
5	.17	.13	.39	.31	.60	1.06	1.52	.62	.50	.39	.26	.20
6	0.16	0.12	0.46	0.28	0.57	0.85	0.98	0.56	0.50	0.38	0.26	0.19
7	.15	.12	.49	.26	.55	0.78	.90	.53	.49	.37	.25	.19
8	.15	.11	.47	.25	.53	1.62	.82	.50	.48	.37	.25	.56
9	.15	.11	.46	.24	.43	1.16	.73	.50	.47	.37	.24	.41
10	.15	.10	.65	.22	.66	0.90	.76	.50	.46	.37	.24	.39
11	0.14	0.10	0.98	0.22	0.57	0.73	0.70	0.50	0.45	0.36	0.23	0.33
12	.13	.09	.83	.64	.58	.67	.67	.50	.44	.36	.23	.30
13	.12	.09	.68	.59	.64	.61	.65	.49	.43	.37	.23	.29
14	.12	.09	.54	.47	.86	.58	.63	.49	.42	.38	.22	.28
15	.12	.09	.46	.39	.51	.56	.60	.48	.42	.40	.22	.27
16	0.11	0.08	0.34	0.33	0.43	0.55	0.56	0.59	0.41	0.42	0.22	0.27
17	.11	.08	.29	.27	.34	.54	.59	.57	.40	.41	.22	.27
18	.11	.08	.25	.23	.32	.53	.54	.57	.40	.41	.22	.26
19	.11	.08	.24	.28	.47	.62	.52	.61	.40	.39	.22	.26
20	.10	.16	.25	.32	1.10	1.00	.64	.60	.40	.37	.22	.26
21	0.10	0.10	0.26	0.49	1.22	1.44	0.60	0.59	0.40	0.35	0.21	0.25
22	.10	.14	.59	.41	0.82	0.87	.57	.56	.39	.33	.21	.25
23	.09	.11	.54	.39	.65	.72	.56	.54	.39	.31	.21	.25
24	.09	.11	.54	.37	.59	.63	.55	.53	.39	.31	.21	.24
25	.09	.10	.67	.34	.90	.59	.54	.53	.39	.30	.20	.24
26	0.09	0.34	0.46	0.33	0.67	0.62	0.53	0.54	0.39	0.29	0.20	0.23
27	.08	.32	.39	.29	.64	.60	.52	.53	.39	.29	.20	.23
28	.08	.28	.36	.26	.75	.64	.52	.52	.39	.29	.20	.23
29	.08	.26	.35	.25	.94	.60	.60	.51	.39	.27		.22
30	.07	.27	.34	.50	.93	.58	.63	.50	.38	.25		.39
31		.24		.75	1.05		.59		.38	.34		.33
Mean	0.12	0.14	0.48	0.36	0.65	0.80	0.75	0.55	0.43	0.35	0.23	0.27
Max.	0.20	0.34	0.98	0.75	1.22	0.87	2.06	0.71	0.50	0.42	0.31	0.56
Min.	0.07	0.10	0.29	0.22	0.29	0.53	0.63	0.48	0.38	0.25	0.20	0.20

WATER YEAR 1957 : Max. 2.06 m. Min. 0.07 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.00	0.02	2.50	2.05	9.67	21	19	7.81	4.12	1.90	0.63	0.23
2	0.00	0.01	2.65	2.50	2.65	27	32	5.75	4.56	1.90	1.20	0.23
3	0.00	0.01	12	3.02	1.20	25	29	9.36	5.00	1.90	0.92	0.23
4	0.23	0.01	4.78	2.05	0.63	35	90	6.25	5.50	1.90	0.82	0.23
5	0.10	0.01	2.65	1.60	0.65	31	45	6.75	5.75	2.05	0.73	0.23
6	0.06	0.00	4.12	1.20	5.75	20	16	5.00	5.75	1.90	0.73	0.18
7	0.04	0.00	4.78	1.01	5.25	16	12	4.56	5.50	1.75	0.63	0.18
8	0.04	0.00	4.34	0.92	4.78	69	9.67	3.68	5.00	1.75	0.63	6.00
9	0.04	0.00	4.12	0.82	2.65	34	7.00	3.68	4.78	1.75	0.54	2.65
10	0.04	0.00	9.05	0.63	8.12	19	7.81	3.46	4.34	1.75	0.54	2.35
11	0.02	0.00	22	0.63	5.75	11	6.50	3.46	4.12	1.60	0.44	1.45
12	0.01	0.00	16	9.05	6.00	8.12	6.00	3.46	3.68	1.60	0.44	1.11
13	0.00	0.00	9.98	7.50	8.43	5.75	5.75	3.24	3.46	1.75	0.44	1.01
14	0.00	0.00	6.00	4.56	18	4.78	3.46	3.24	3.02	1.90	0.35	0.92
15	0.00	0.00	4.12	2.65	8.43	4.12	5.25	3.02	2.80	2.20	0.35	0.82
16	0.00	0.00	1.90	1.90	3.90	3.90	4.56	5.50	2.50	2.25	0.35	0.82
17	0.00	0.00	1.20	1.11	2.20	3.68	5.50	4.78	2.35	2.20	0.35	0.82
18	0.00	0.00	0.82	0.73	1.90	3.46	4.56	4.78	2.35	2.20	0.35	0.73
19	0.00	0.00	0.73	1.30	4.78	8.50	4.56	5.75	2.35	1.90	0.35	0.73
20	0.00	0.06	0.82	2.05	28	19	7.81	5.50	2.35	1.60	0.35	0.73
21	0.00	0.00	0.92	5.75	33	44	7.00	5.25	2.35	1.45	0.29	0.63
22	0.00	0.02	7.25	3.90	13	14	6.25	4.78	2.20	1.20	0.29	0.63
23	0.00	0.00	6.50	3.46	7.50	8.74	6.00	4.34	2.20	1.61	0.29	0.63
24	0.00	0.00	6.00	3.02	5.50	6.75	5.75	4.12	2.20	1.01	0.29	0.54
25	0.00	0.00	9.67	2.50	16	5.25	5.25	4.12	2.20	1.01	0.23	0.54
26	0.00	1.60	4.12	4.35	7.50	6.25	5.00	4.34	2.20	0.92	0.23	0.44
27	0.00	1.30	2.65	1.75	6.75	6.00	4.78	4.34	2.20	0.92	0.23	0.44
28	0.00	1.01	2.20	1.30	9.98	7.25	4.78	4.12	2.20	0.92	0.23	0.44
29	0.00	0.73	2.05	1.20	19	6.50	6.50	3.90	2.20	0.82		0.35
30	0.00	0.82	1.90	4.78	19	6.25	7.25	3.68	2.05	0.63		2.35
31		0.54		18	26		6.25		2.05	1.60		1.45
Total	0.58	6.14	157.82	95.29	291.97	386.70	386.24	142.02	103.33	49.84	13.22	30.09
Mean	0.02	0.20	5.33	3.07	9.42	12.9	12.4	4.73	3.32	1.61	0.47	0.97
Max.	0.23	1.60	23	18	33	69	90	9.36	5.75	2.25	1.20	6.00
Min.	0.00	0.00	1.20	0.63	0.63	3.46	3.46	3.02	2.05	0.63	0.23	0.23
Runoff - mcm.	0.050	0.530	13.636	8.233	8.226	33.411	33.371	12.270	8.928	4.306	1.142	2.600

WATER YEAR 1957 : Max. 90 Min. 0.00 Mean 4.56 Annual Runoff 143.704 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 4	06.00	2.23	108				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

H.61

WATER YEAR 1958
PING RIVER BASIN

Mae Klang Creek at Mae Klang Bridge, Chiang Mai (P.24)

Location: Lat 18°- 23' - 15" N, Long 98°- 40' - 51" E, on left bank at upstream side of the bridge, on highway Chiang Mai - Hot, Amphoe Chom Thong, Chiang Mai.

Drainage Area: 616 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m.(A.D.)

Bench Mark:

Location: -
Elevation: -

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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: 1955 to date.
Rated by Float: -
Rated by Current Meter: 1955 to date.

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

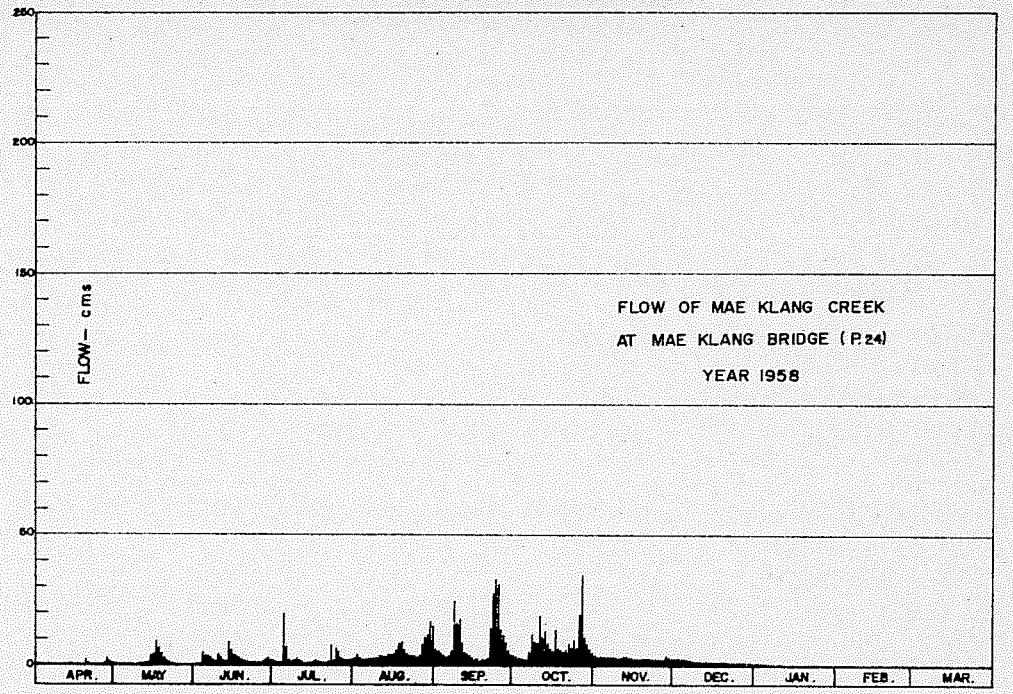
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1958. No upstream state diversions for irrigation except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.29	0.30	0.20	0.45	0.54	0.72	0.58	0.60	0.56	0.39	0.31	0.28
2	.26	.30	.20	.40	.64	.70	.56	.58	.54	.39	.31	.28
3	.24	.29	.20	.36	.53	.64	.53	.56	.54	.35	.31	.28
4	.23	.29	.67	.33	.50	.61	.51	.56	.53	.38	.31	.28
5	.23	.28	.58	1.36	.48	.55	.49	.56	.51	.37	.31	.28
6	0.23	0.28	0.58	0.79	0.51	0.61	0.47	0.57	0.50	0.36	0.30	0.28
7	.23	.27	.53	.51	.52	.71	.70	.58	.49	.36	.30	.28
8	.22	.27	.44	.44	.52	1.44	.99	.56	.49	.36	.30	.28
9	.22	.26	.39	.50	.52	1.16	.90	.56	.48	.35	.30	.28
10	.21	.26	.64	.52	.56	1.24	.85	.56	.47	.35	.29	.28
11	0.21	0.26	0.50	0.45	0.58	0.85	1.26	0.56	0.47	0.35	0.29	0.28
12	.21	.25	.43	.39	.56	0.67	0.94	.58	.46	.35	.29	.28
13	.20	.25	.39	.35	.55	0.62	1.06	.56	.46	.34	.28	.27
14	.20	.35	.93	.34	.62	0.57	0.83	.56	.45	.34	.28	.27
15	.20	.61	.71	.38	.63	0.54	.74	.55	.45	.34	.28	.27
16	0.20	0.54	0.59	0.42	0.64	0.47	0.71	0.56	0.45	0.34	0.28	0.27
17	.20	.90	.53	.47	.73	.49	1.09	.56	.44	.33	.28	.27
18	.19	.75	.55	.44	.84	.46	0.75	.56	.44	.33	.28	.27
19	.19	.63	.48	.40	.87	.50	.72	.55	.43	.32	.28	.27
20	.49	.54	.46	.38	.73	.45	.70	.55	.43	.32	.28	.27
21	0.32	0.43	0.44	0.35	0.65	0.52	0.75	0.54	0.42	0.31	0.28	0.27
22	.22	.35	.43	.43	.59	1.11	.84	.54	.42	.31	.28	.27
23	.20	.30	.42	.82	.58	1.53	.78	.53	.42	.30	.28	.27
24	.20	.28	.40	.43	.60	1.64	.93	.52	.42	.30	.28	.27
25	.20	.27	.38	.77	.54	1.60	.77	.51	.41	.30	.28	.27
26	0.20	0.26	0.36	0.69	0.59	1.08	1.40	0.50	0.41	0.29	0.28	0.27
27	.20	.25	.45	.54	.84	0.97	.76	.50	.40	.30	.28	.27
28	.55	.23	.51	.49	.97	0.85	0.97	.50	.40	.30	.28	.26
29	.42	.21	.55	.48	1.01	0.68	.85	.60	.39	.30		.26
30	.34	.20	.47	.49	1.17	0.62	.76	.56	.39	.30		.25
31		.20		.49	1.13		.67		.38	.31		.25
Mean	0.25	0.35	0.48	0.50	0.67	0.82	0.83	0.55	0.45	0.33	0.29	0.27
Max.	0.55	0.90	0.93	1.36	1.17	1.64	1.76	0.60	0.56	0.39	0.31	0.28
Min.	0.19	0.20	0.20	0.33	0.50	0.45	0.47	0.50	0.38	0.29	0.28	0.25

WATER YEAR 1958 : Max. 1.76 m. Min. 0.19 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.70	0.70	0.20	2.00	3.10	5.90	3.60	3.90	3.40	1.40	0.80	0.60
2	0.50	0.70	0.20	1.50	4.50	5.50	3.40	3.60	3.20	1.40	0.80	0.60
3	0.40	0.70	0.20	1.20	3.00	4.50	3.00	3.40	3.20	1.30	0.80	0.60
4	0.40	0.70	5.00	0.90	2.60	4.10	2.70	3.40	3.00	1.30	0.80	0.60
5	0.30	0.60	3.60	20	2.40	3.20	2.50	3.40	2.70	1.30	0.80	0.60
6	0.30	0.60	3.60	7.20	2.70	4.10	2.20	3.50	2.60	1.20	0.70	0.60
7	0.30	0.50	3.00	2.70	2.90	5.70	5.50	3.60	2.50	1.20	0.70	0.60
8	0.30	0.50	1.90	1.90	2.90	25	12	3.40	2.50	1.20	0.70	0.60
9	0.30	0.50	1.40	2.60	2.90	16	9.10	3.40	2.40	1.10	0.70	0.60
10	0.20	0.50	4.50	2.90	3.40	18	9.00	3.40	2.20	1.10	0.70	0.60
11	0.20	0.50	2.60	2.00	3.80	8.50	19	3.40	2.20	1.10	0.70	0.60
12	0.20	0.40	1.80	1.40	3.40	5.00	11	3.60	2.10	1.10	0.70	0.60
13	0.20	0.40	1.40	1.10	3.20	4.20	13	3.40	2.10	1.00	0.60	0.50
14	0.20	1.10	9.20	1.00	4.20	3.50	8.00	3.40	2.00	1.00	0.60	0.50
15	0.20	4.10	5.70	1.30	4.00	3.10	6.30	3.20	2.00	1.00	0.60	0.50
16	0.20	3.10	3.80	1.70	4.50	2.20	5.70	3.40	2.00	1.00	0.60	0.50
17	0.20	9.00	3.00	2.20	6.10	2.50	14	3.40	1.90	0.90	0.60	0.50
18	0.20	6.50	3.20	1.90	8.30	2.10	6.50	3.40	1.90	0.90	0.60	0.50
19	0.20	4.40	2.40	1.50	8.90	2.60	5.90	3.20	1.80	0.90	0.60	0.50
20	0.10	3.10	2.10	1.30	6.10	2.60	5.50	3.20	1.80	0.90	0.60	0.50
21	0.90	1.80	1.90	1.10	4.70	2.90	6.50	3.10	1.70	0.80	0.60	0.50
22	0.30	1.10	1.80	1.80	3.80	15	8.30	3.10	1.70	0.80	0.60	0.50
23	0.20	0.70	1.70	7.80	3.60	28	7.00	3.00	1.70	0.70	0.60	0.50
24	0.20	0.60	1.50	1.80	3.90	33	10	2.90	1.70	0.70	0.60	0.50
25	0.20	0.50	1.30	6.40	3.10	31	6.80	2.70	1.60	0.70	0.60	0.50
26	0.20	0.50	1.20	5.30	3.80	14	20	2.60	1.60	0.70	0.60	0.50
27	0.20	0.40	2.00	3.10	8.30	11	35	2.60	1.50	0.70	0.60	0.50
28	2.90	0.30	2.70	2.50	11	8.50	11	2.60	1.50	0.70	0.60	0.50
29	1.70	0.20	3.20	2.40	12	5.20	8.50	3.90	1.40	0.70		0.50
30	1.00	0.20	2.20	2.50	17	4.20	6.60	3.40	1.40	0.70		0.40
31		0.20		2.50	15		5.00		1.30	0.80		0.40
Total	15.40	45.10	78.30	95.50	169.50	280.50	272.60	98.50	64.60	30.30	18.50	16.50
Mean	0.51	1.45	2.61	3.08	5.47	9.35	8.79	3.28	2.08	0.98	0.66	0.53
Max.	2.90	9.00	9.20	20	17	33	35	3.90	3.40	1.40	0.80	0.60
Min.	0.20	0.20	0.20	0.90	2.60	2.00	2.20	2.80	1.30	0.70	0.60	0.40
Runoff – mcm.	1.330	3.897	6.765	8.251	14.645	24.235	23.533	8.570	5.581	2.618	1.598	1.426

WATER YEAR 1958 : Max. 35 Min. 0.20 Mean 3.25 Annual Runoff 102.410 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 27	06.00	2.60	90				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PING RIVER BASIN

Mae Klang Creek at Mae Klang Bridge, Chiang Mai (P.24)

Location: Lat 18°- 23' - 15" N, Long 98°- 40' - 51" E, on left bank at upstream side of the bridge, on highway Chiang Mai – Hot, Amphoe Chom Thong, Chiang Mai.

Drainage Area: 616 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m.(A.D.)

Bench Mark:

Location: –
Elevation: –

Gage Reading Frequency: 5 – time daily readings at 06.00, 09.00, 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: 1955 to date
Rated by Float: –
Rated by Current Meter: 1955 to date

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

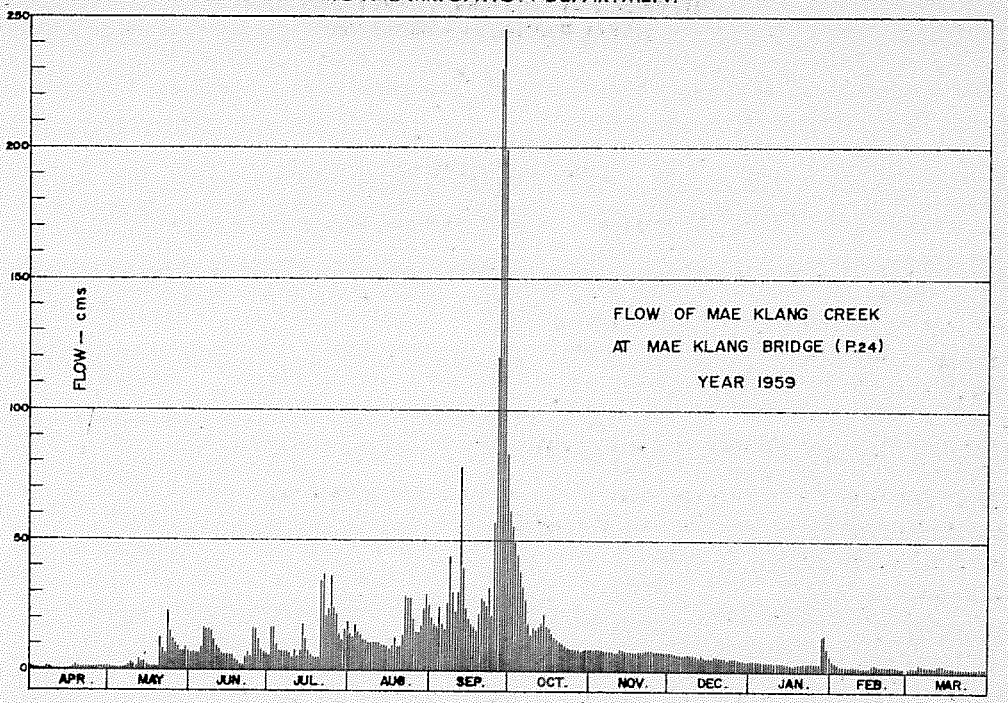
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1959. No upstream state diversions for irrigation except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.25	0.26	0.55	0.51	0.82	0.97	1.77	0.61	0.57	0.44	0.46	0.29
2	.24	.26	.56	.87	.74	.90	.66	.61	.56	.44	.42	.30
3	.22	.26	.55	.85	.90	.86	.55	.61	.55	.43	.38	.31
4	.22	.26	.55	.67	.80	1.05	.45	.61	.55	.43	.36	.31
5	.22	.24	.65	.58	.77	0.90	.33	.60	.54	.43	.34	.38
6	0.21	0.25	0.85	0.58	0.73	0.84	1.22	0.60	0.54	0.43	0.34	0.34
7	.26	.30	.84	.58	.73	1.15	.10	.59	.54	.42	.34	.33
8	.25	.40	.83	.58	.69	.45	0.89	.59	.54	.41	.33	.32
9	.23	.38	.80	.53	.69	.17	.79	.58	.54	.41	.33	.33
10	.22	.33	.73	.50	.69	.01	.86	.58	.53	.41	.32	.32
11	0.22	0.31	0.64	0.60	0.70	1.17	0.84	0.58	0.52	0.42	0.32	0.31
12	.22	.44	.61	.50	.68	2.02	.87	.62	.51	.41	.31	.35
13	.22	.40	.55	.60	.67	1.38	.95	.60	.54	.40	.31	.37
14	.22	.42	.52	.89	.65	.07	.98	.59	.50	.39	.30	.35
15	.22	.33	.54	.71	.63	0.94	.86	.58	.49	.38	.30	.33
16	0.22	0.30	0.53	0.59	0.61	0.89	0.87	0.58	0.49	0.37	0.36	0.32
17	.26	.30	.52	.53	.67	.87	.78	.58	.49	.37	.38	.30
18	.32	.31	.44	.49	.76	.82	.74	.57	.52	.38	.36	.30
19	.25	.30	.40	.48	.64	.98	.73	.59	.51	.39	.34	.29
20	.24	.74	.37	.48	.64	1.13	.69	.59	.50	.39	.36	.28
21	0.28	0.62	0.35	1.28	0.78	1.11	0.68	0.59	0.49	0.38	0.34	0.28
22	.28	.55	.50	.32	1.15	.06	.66	.60	.49	.38	.34	.27
23	.28	1.01	.56	0.97	1.12	.21	.64	.60	.47	.40	.34	.27
24	.28	0.80	.50	1.04	1.12	0.96	.61	.59	.48	.40	.34	.26
25	.28	0.75	.85	.32	0.96	1.69	.60	.58	.48	.39	.33	.26
26	0.28	0.66	0.84	1.04	0.81	1.70	0.60	0.58	0.48	0.39	0.31	0.28
27	.27	.63	.71	0.99	.82	3.37	.60	.58	.47	.39	.30	.30
28	.26	.58	.61	.79	.88	.45	.59	.57	.46	.78	.30	.31
29	.28	.58	.56	.72	1.05	.10	.60	.57	.45	.79	.30	.30
30	.27	.63	.54	.84	.17	2.25	.61	.58	.45	.64		.30
31		.56		.92	.05		.61		.44	.52		.31
Mean	0.25	0.46	0.60	0.75	0.81	1.38	0.89	0.59	0.51	0.44	0.34	0.31
Max.	0.32	1.01	0.85	1.32	1.17	3.45	1.77	0.62	0.57	0.79	0.46	0.38
Min.	0.21	0.25	0.35	0.48	0.63	0.82	0.59	0.57	0.44	0.38	0.30	0.26

WATER YEAR 1959 : Max. 3.45 m. Min. 0.21 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.15	1.26	6.85	5.77	15	21	62	8.52	7.39	4.24	4.66	1.59
2	1.04	1.26	7.12	17	13	18	55	8.52	7.12	4.24	3.82	1.70
3	0.82	1.26	6.85	17	18	17	49	8.52	6.85	4.03	3.06	1.87
4	0.82	1.26	6.85	10	15	25	44	8.52	6.85	4.03	2.72	1.87
5	0.82	1.04	9.80	7.66	14	18	38	8.20	6.58	4.03	2.38	3.06
6	0.71	1.15	17	7.66	12	16	32	8.20	6.58	4.03	2.38	2.38
7	1.26	1.70	16	7.66	12	29	27	7.93	6.58	3.82	2.38	2.21
8	1.15	3.40	16	7.66	11	44	18	7.93	6.58	3.61	2.21	2.04
9	0.93	3.06	15	6.31	11	30	14	7.66	6.58	3.61	2.21	2.21
10	0.82	2.21	12	5.50	11	23	17	7.66	6.31	3.61	2.04	2.04
11	0.82	1.87	9.48	8.20	11	30	16	7.66	6.04	3.82	2.04	1.87
12	0.82	4.24	8.52	5.50	11	78	17	8.84	5.77	3.61	1.87	2.85
13	0.82	3.40	6.85	8.20	10	40	20	8.20	6.58	3.40	1.87	2.89
14	0.82	3.82	6.04	18	9.80	25	22	7.93	5.50	3.23	1.70	2.55
15	0.82	2.21	6.58	12	9.16	20	17	7.66	5.29	3.06	1.70	2.21
16	0.82	1.70	6.31	7.93	8.52	18	17	7.66	5.29	2.89	2.72	2.04
17	1.26	1.70	6.04	6.31	10	17	14	7.66	5.29	2.89	3.06	1.70
18	2.04	1.87	4.24	5.29	13	15	13	7.39	6.04	3.06	2.72	1.70
19	1.15	1.70	3.40	5.08	9.48	22	12	7.93	5.77	3.23	2.38	1.59
20	1.04	13	2.89	5.08	9.48	28	11	7.93	5.50	3.23	2.72	1.48
21	1.48	8.84	2.55	35	14	27	11	7.93	5.29	3.06	2.38	1.48
22	1.48	6.85	5.50	37	29	25	10	8.20	5.29	3.06	2.38	1.37
23	1.48	23	7.12	21	28	32	9.48	8.20	4.87	3.40	2.38	1.37
24	1.48	15	5.50	24	28	21	8.52	7.93	5.08	3.40	2.38	1.26
25	1.48	13	17	37	21	57	8.20	7.66	5.08	3.23	2.21	1.26
26	1.48	10	16	24	15	60	8.20	7.66	5.08	3.23	1.87	1.48
27	1.37	9.16	12	22	15	230	8.20	7.66	4.87	3.23	1.70	1.70
28	1.26	7.66	8.52	14	18	245	7.93	7.39	4.66	14	1.70	1.87
29	1.48	7.66	7.12	12	25	199	8.20	7.39	4.45	14	1.70	1.70
30	1.37	9.16	6.58	16	30	103	8.52	7.66	4.45	9.48		1.70
31		7.12		19	25		8.52		4.24	6.04		1.87
Total	34.29	170.56	261.71	434.81	481.44	1,533	611.77	238.20	117.85	137.80	69.34	58.61
Mean	1.14	5.50	8.72	14.0	15.5	51.1	19.7	7.93	5.74	4.45	2.38	1.90
Max.	2.04	23	17	37	30	245	62	8.84	7.39	14	4.66	3.06
Min.	0.71	1.15	2.55	5.08	9.16	16	7.93	7.39	4.24	3.06	1.70	1.26
Runoff — mcm.	2.963	14.736	22.612	37.567	41.596	132.451	52.857	20.580	15.366	11.906	5.991	5.064

WATER YEAR 1959 : Max. 245 Min. 0.71 Mean 11.5 Annual Runoff 363.690 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 28	06.00	3.70	280				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
WANG RIVER BASIN

Mae Wang River at Ratsada Phisek Bridge, Lampang (W.1)

Location: Lat 18°- 17' - 28" N, Long 99°- 30' - 14" E, on left bank 100 meters downstream from Ratsada Phisek Bridge, Amphoe Muang, Lampang.

Drainage Area: 3,480 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +228.41 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. 20796

Location: On left bank 700 meters north of the slaughter house.
Elevation: +233.738 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: 1901 to date.

Rating Operation:

Period of Rating: 1955 - 61
Rated by Float: -
Rated by Current Meter: 1955 - 61

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

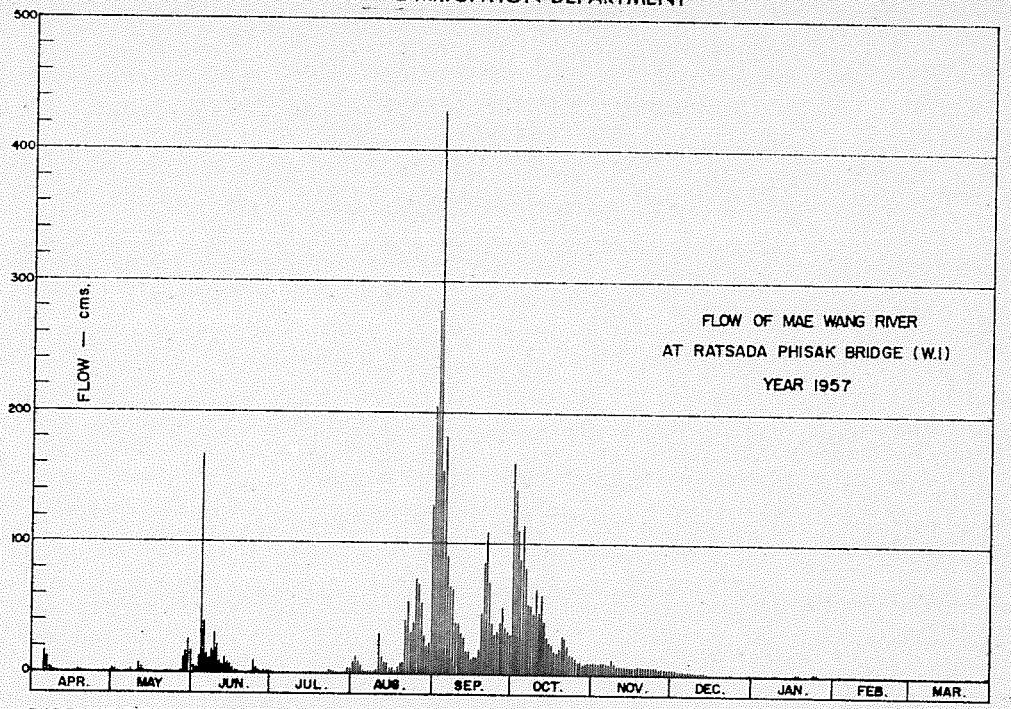
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation use is defined by discharge measurements during 1957. Upstream state diversions for irrigation of about 12,320 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	228.79	228.99	229.12	228.90	229.29	231.56	231.07	229.31	229.11	228.93	228.91	118.77
2	.79	.94	.06	.89	.39	232.04	230.82	.29	.11	.93	.91	.77
3	.79	.85	.38	.89	.29	233.03	.60	.26	.10	.91	.93	.79
4	.79	.81	231.10	.87	.16	231.16	.40	.30	.12	.91	.92	.79
5	229.41	.84	229.87	.81	.02	.41	.70	.30	.11	.91	.92	.79
6	229.38	228.81	229.48	228.81	228.91	230.45	230.36	229.26	229.07	228.91	228.91	228.80
7	.04	.91	.38	.80	.95	.16	.02	.26	.07	.93	.89	.86
8	228.93	.94	.53	.80	.96	.15	.02	.35	.06	.93	.89	.79
9	.85	.82	.78	.82	.95	229.80	229.98	.26	.06	.93	.89	.79
10	.83	.86	.57	.81	229.00	.75	230.11	.21	.04	.95	.89	.83
11	228.82	229.28	229.35	228.81	229.74	229.63	229.91	229.21	229.02	228.93	228.88	228.78
12	.81	.05	.25	.81	.40	.57	230.04	.20	.00	.91	.86	.78
13	.81	228.85	.33	.81	.26	.46	229.81	.20	.00	.91	.86	.80
14	.80	.85	.26	.80	.25	.39	.61	.20	228.99	.91	.86	.84
15	.80	.83	.13	.82	.12	.29	.55	.20	.98	.91	.86	.74
16	228.79	228.81	229.03	228.82	229.11	229.33	229.51	229.18	228.95	228.89	228.84	228.78
17	.78	.81	228.95	.82	.07	.33	.46	.18	.93	.96	.84	.78
18	.96	.80	.93	.83	.16	.53	.47	.19	.90	229.00	.84	.78
19	.84	.80	.91	.85	.24	.77	.51	.21	.91	228.97	.83	.77
20	.79	.79	.88	.84	.27	230.29	.67	.20	.90	.94	.83	.75
21	228.77	228.83	228.87	228.84	229.88	230.52	229.67	229.19	228.90	228.95	228.83	228.75
22	.78	.83	.88	.85	230.11	.20	.55	.19	.90	.95	.80	.76
23	.78	.80	.88	229.01	229.67	229.77	.43	.18	.90	.94	.80	.78
24	.78	.80	229.31	228.92	.90	.60	.38	.18	.89	229.02	.80	.78
25	.78	.79	.02	.92	230.30	.60	.38	.17	.89	228.91	.85	.78
26	228.78	228.87	228.92	228.89	230.23	229.79	229.31	229.15	228.90	228.91	228.82	228.78
27	.76	.82	.92	.87	.03	.92	.33	.15	.90	.89	.79	.77
28	.74	229.39	.92	.87	229.72	.66	.28	.15	.90	.95	.79	.77
29	.76	.55	.92	.90	.61	.59	.26	.14	.90	.96		.81
30	.77	.74	.92	229.09	.71	.56	.30	.14	.90	.91		.81
31		.34		.11	230.94		.32		.91	.91		.81
Mean	228.85	228.95	229.23	228.86	229.47	230.10	229.80	229.21	228.98	228.93	228.86	228.79
Max.	229.41	229.74	231.10	229.11	230.94	233.03	231.07	229.35	229.12	229.02	228.91	228.81
Min.	228.74	228.79	228.87	228.80	228.91	229.29	229.26	229.14	228.89	228.89	228.79	228.74

WATER YEAR 1957 : Max. 233.03 m. Min. 228.74 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.80	3.40	5.80	1.90	9.10	205	161	11	4.40	1.70	1.35	0.25
2	0.80	2.40	4.40	1.80	14	249	141	10	4.21	1.70	1.20	0.25
3	0.80	1.30	13	1.80	11	430	113	9.10	3.85	1.35	1.35	0.40
4	0.90	0.70	167	1.20	6.40	156	89	10	4.00	1.35	1.35	0.35
5	15	0.90	40	0.70	3.40	182	115	10	4.00	1.35	1.35	0.40
6	13	0.70	15	0.70	1.92	90	79	9.10	3.45	1.35	1.20	0.40
7	3.80	1.90	12	0.70	2.28	68	54	9.10	3.85	1.60	0.95	0.65
8	2.05	2.50	19	0.74	2.40	66	54	13	3.45	1.60	1.10	0.40
9	1.20	0.90	31	0.80	2.28	40	55	9.45	2.90	1.60	1.10	0.35
10	0.80	1.40	23	0.80	3.20	40	70	7.35	2.70	1.85	1.05	0.50
11	0.60	7.90	9.40	0.80	31	32	48	7.35	2.35	1.60	0.80	0.25
12	0.45	3.20	7.90	0.90	15	29	60	7.00	2.10	1.35	0.80	0.30
13	0.50	1.00	13	0.90	10	19	42	7.00	2.25	1.20	0.80	0.40
14	0.45	1.10	8.50	0.80	9.70	18	28	7.00	2.10	1.35	0.80	0.70
15	0.45	0.90	6.60	0.90	5.60	12	24	7.00	2.00	1.35	0.80	0.30
16	0.45	0.60	4.40	0.80	5.60	14	23	6.48	1.60	1.12	0.70	0.30
17	0.45	0.60	2.75	0.90	3.40	13	18	6.48	1.35	2.50	0.70	0.30
18	2.05	0.45	2.40	0.90	6.00	22	18	6.74	1.10	2.35	0.80	0.30
19	0.90	0.50	1.80	0.90	8.80	48	21	7.35	1.35	2.00	0.90	0.25
20	0.55	0.55	1.80	0.90	10	85	30	7.00	1.20	1.60	0.80	0.25
21	0.45	0.75	1.50	1.00	43	109	28	6.74	1.20	1.70	0.70	0.25
22	0.45	0.80	1.80	1.10	56	75	23	6.74	1.20	1.70	0.50	0.25
23	0.20	0.55	1.70	3.20	32	40	16	6.48	1.35	1.80	0.40	0.30
24	0.40	0.30	10	2.30	40	31	15	6.48	1.20	2.70	0.40	0.30
25	0.40	0.45	3.40	2.15	73	34	14	6.22	1.20	1.05	0.40	0.30
26	0.40	1.10	3.00	1.70	70	41	10	5.70	1.35	1.10	0.55	0.30
27	0.20	0.75	1.80	1.50	54	52	11	5.70	1.35	1.05	0.40	0.25
28	0.15	12	2.05	1.60	31	36	8.75	5.70	1.35	2.00	0.40	0.25
29	0.20	17	2.05	2.05	23	33	9.10	5.44	1.35	1.85		0.50
30	0.25	25	2.05	4.20	25	31	10	5.44	1.35	1.60		0.75
31		12		5.00	130		11		1.45	1.10		1.00
Total	48.90	103.60	458.10	45.65	738.08	2,300	1,398.85	227.79	68.55	49.52	23.65	11.75
Mean	1.63	3.34	15.2	1.47	23.8	76.7	45.1	7.59	2.21	1.60	0.84	0.38
Max.	15	25	167	5.00	130	430	161	13	4.40	2.70	1.35	1.00
Min.	0.15	0.30	1.50	0.70	1.92	12	8.75	5.44	1.10	1.05	0.40	0.25
Runoff - MCM.	4.225	8.951	39.579	3.944	63.770	198.720	120.861	19.681	5.923	4.278	2.043	1.015

WATER YEAR 1957 : Max. 430 Min. 0.15 Mean 15.0 Annual Runoff 473.009 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 3	09.00	233.21	465				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
WANG RIVER BASIN

Mae Wang River at Ratsada Phisek Bridge, Lampang (W.1)

Location: Lat 18°- 17' - 28" N, Long 99°- 30' - 14" E, on left bank 100 meters downstream from Ratsada Phisek Bridge, Amphoe Muang, Lampang.

Drainage Area: 3,480 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +228.41 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. 20796

Location: On left bank 700 meters north of the slaughter house.
Elevation: +233.738 m. (M.S.L.)

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

Basis of Mean Daily Gage Height: Arithmetic means of 5 readings.

Period of Available Gage Records: 1901 to date.

Rating Operation:

Period of Rating: 1955 - 61
Rated by Float: -
Rated by Current Meter: 1955 - 61

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

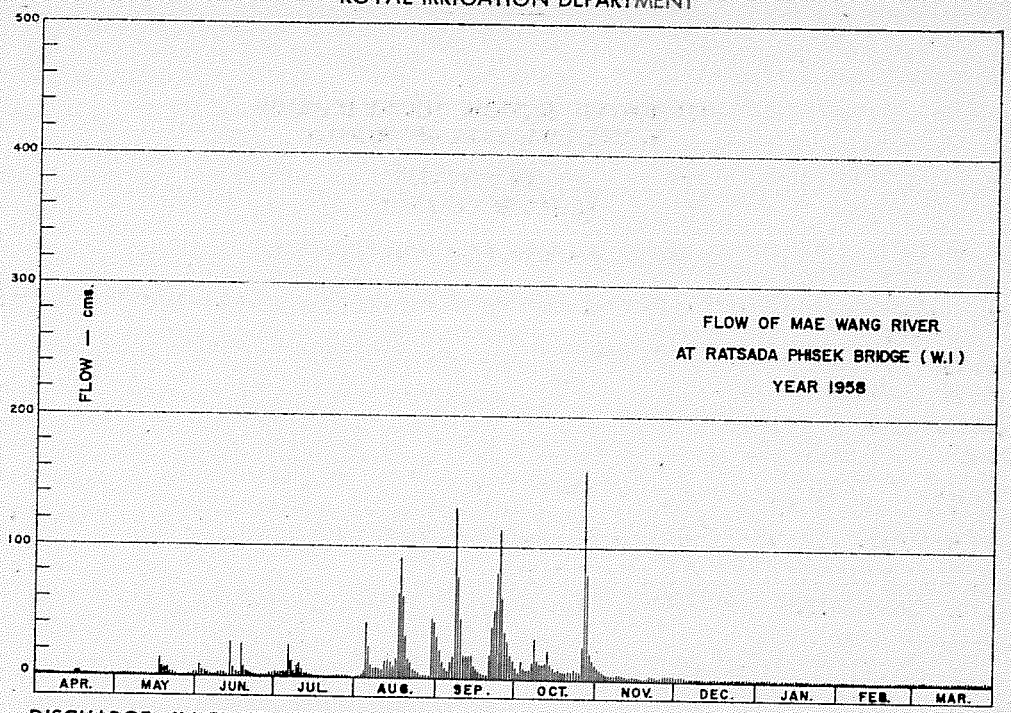
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1958. Upstream state diversions for irrigation of about 12,320 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	228.81	228.81	228.99	228.97	228.92	229.79	229.31	229.33	228.94	228.81	228.76	228.72
2	.81	.77	229.29	229.03	.91	.56	.24	.24	.94	.79	.76	.71
3	.84	.77	.12	.00	229.12	.45	.35	.16	.93	.79	.76	.72
4	.81	.76	.10	.06	.22	.31	.31	.13	.90	.79	.76	.72
5	.81	.75	.08	.10	230.07	.21	.28	.10	.90	.79	.76	.72
6	228.81	228.72	228.95	229.69	229.78	229.50	229.26	229.07	228.90	228.79	228.76	228.72
7	.81	.73	.93	.48	.51	.58	.39	.06	.90	.79	.75	.72
8	.80	.73	.91	.15	.42	230.98	.77	.04	.89	.79	.75	.72
9	.80	.75	229.06	.21	.41	.36	.49	.04	.88	.79	.75	.73
10	.78	.75	.08	.46	.34	229.95	.42	.03	.88	.82	.75	.72
11	228.77	228.74	228.99	229.32	229.30	229.60	229.36	229.00	228.86	228.84	228.75	228.72
12	.76	.83	.93	.16	.47	.56	.39	228.99	.86	.79	.75	.72
13	.76	.89	.86	.15	.52	.57	.63	.95	.88	.78	.75	.72
14	.76	.89	229.72	.04	.52	.56	.40	.98	.87	.78	.75	.75
15	.76	.83	.18	.03	.45	.40	.36	.96	.86	.77	.75	.73
16	229.02	228.91	228.99	229.01	229.72	229.26	229.26	229.00	228.86	228.77	228.75	228.71
17	.06	.84	.95	228.99	230.31	.17	.25	228.98	.86	.76	.76	.70
18	228.94	229.43	229.71	.95	.46	.11	.23	.98	.85	.78	.75	.72
19	.95	.25	.31	.93	.31	.07	.19	.99	.85	.79	.75	.70
20	.85	.20	.16	.91	229.86	.06	.18	229.02	.85	.77	.75	.69
21	228.80	229.22	229.02	228.93	229.61	229.46	229.20	229.06	228.84	228.77	228.72	228.68
22	.79	.08	228.96	.92	.43	.94	.18	.06	.84	.77	.72	.68
23	.77	228.97	.93	.91	.31	230.07	.25	228.98	.84	.76	.81	.68
24	.76	.88	.91	.90	.21	.31	.23	.99	.84	.76	.75	.68
25	.76	.86	.89	.90	.16	.74	.15	229.02	.84	.76	.75	.72
26	228.75	228.83	228.88	228.99	229.11	230.21	229.63	229.06	228.82	228.76	228.75	228.71
27	.73	.80	.91	229.01	.21	229.89	231.09	.06	.82	.76	.75	.73
28	.74	.80	.91	.00	.18	.76	230.11	228.98	.82	.76	.75	.69
29	.76	.97	.99	228.95	.15	.53	229.76	.95	.82	.76		.69
30	.80	.92	229.04	.94	.95	.43	.56	.95	.82	.76		.69
31		229.00		.91	.93		.44		.82	.76		.66
Mean	228.81	228.89	229.06	229.06	229.51	229.67	229.44	229.03	228.86	228.78	228.75	228.69
Max.	229.06	229.43	229.72	229.69	230.46	230.98	231.09	229.33	228.94	228.81	228.81	228.75
Min.	228.73	228.72	228.88	228.90	228.91	229.06	229.15	228.95	228.82	228.76	228.72	228.66

WATER YEAR 1958 : Max. 231.09 m. Min. 228.66 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.70	0.70	2.50	2.20	0.90	31	8.20	8.50	2.30	0.60	0.30	0.30
2	0.70	0.50	8.70	3.00	0.90	18	4.70	7.00	2.30	0.40	0.20	0.20
3	0.90	0.50	4.50	2.60	2.50	12	14	5.50	2.20	0.40	0.20	0.30
4	0.70	0.50	4.30	3.50	4.30	6.50	7.70	4.70	1.70	0.40	0.20	0.30
5	0.70	0.40	3.90	4.30	41	4.30	7.00	3.70	1.70	0.40	0.20	0.30
6	0.70	0.30	2.00	24	22	15	6.50	3.50	1.90	0.40	0.20	0.30
7	0.70	0.30	1.70	15	9.60	18	11	3.50	1.90	0.40	0.20	0.30
8	0.70	0.30	1.50	4.10	7.90	131	31	3.70	1.60	0.40	0.20	0.30
9	0.70	0.40	3.50	6.00	8.20	71	14	3.70	1.60	0.40	0.20	0.30
10	0.60	0.40	3.90	11	7.00	42	12	3.50	1.60	0.80	0.20	0.30
11	0.50	0.40	2.50	6.20	6.20	18	11	2.50	1.30	0.90	0.20	0.30
12	0.50	0.80	1.70	2.70	12	16	12	2.50	1.30	0.60	0.20	0.30
13	0.50	1.30	1.00	2.90	14	17	21	1.60	1.70	0.40	0.20	0.30
14	0.50	1.30	26	2.30	13	17	11	2.60	1.50	0.80	0.20	0.40
15	0.50	0.80	6.00	1.70	9.00	10	9.40	2.20	1.40	0.30	0.20	0.30
16	2.90	1.50	2.50	1.50	14	7.00	6.00	1.90	1.50	0.30	0.20	0.20
17	3.50	0.90	2.00	1.30	61	4.90	7.20	1.60	1.40	0.30	0.30	0.20
18	1.90	13	25	1.20	91	3.90	6.20	1.90	1.20	0.70	0.10	0.30
19	2.00	7.70	9.20	0.90	61	3.00	5.80	1.60	1.00	1.20	0.10	0.20
20	0.90	6.50	5.50	0.90	33	2.50	5.50	1.60	1.10	0.50	0.20	0.20
21	0.70	7.00	2.90	1.00	16	18	7.00	2.70	0.90	0.40	0.10	0.10
22	0.60	3.90	2.10	0.90	12	43	5.50	2.30	0.90	0.40	0.10	0.10
23	0.50	2.20	1.70	0.90	6.70	54	7.90	2.10	0.80	0.30	0.50	0.10
24	0.50	1.20	1.50	0.70	4.90	75	7.70	1.90	0.80	0.40	0.20	0.10
25	0.50	1.00	1.30	0.40	4.30	113	4.30	3.20	0.80	0.30	0.20	0.30
26	0.40	0.80	1.20	1.30	1.70	60	21	3.90	0.70	0.20	0.10	0.20
27	0.30	0.70	1.50	1.70	3.20	33	158	3.90	0.70	0.20	0.20	0.30
28	0.40	0.70	1.50	1.70	2.30	28	60	2.70	0.70	0.20	0.20	0.20
29	0.50	2.20	2.50	1.40	2.10	16	23	2.30	0.70	0.20		0.20
30	0.70	1.60	3.20	1.20	46	15	18	2.30	0.70	0.20		0.20
31		2.60		0.80	43		12		0.60	0.40		0.10
Total	25.90	62.40	137.30	109.30	560.70	903.10	535.60	94.60	40.50	13.80	5.60	7.50
Mean	0.86	2.01	4.58	3.52	18.1	30.1	17.3	3.15	1.31	0.44	0.20	0.24
Max.	3.50	13	26	24	91	131	158	8.50	2.30	1.20	0.50	0.40
Min.	0.30	0.30	1.00	0.40	0.90	2.50	4.30	1.60	0.60	0.20	0.10	0.10
Runoff - mcm.	2.238	5.391	11.863	9.443	48.444	78.028	46.276	8.173	3.499	1.192	0.484	0.648

WATER YEAR 1958 : Max. 158 Min. 0.10 Mean 6.84 Annual Runoff 215.680 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 27	09.00	321.24	181				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
WANG RIVER BASIN

Mae Wang River at Ratsada Phisek Bridge, Lampang (W.1)

Location: Lat 18°- 17' - 28" N, Long 99°- 30' - 14" E, on left bank 100 meters downstream from Ratsada Phisek Bridge, Amphoe Muang, Lampang.

Drainage Area: 3,480 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +228.41 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. 20796

Location: On left bank 700 meters north of the slaughter house.
Elevation: +233.738 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: 1901 to date

Rating Operation:

Period of Rating: 1955 - 61
Rated by Float: -
Rated by Current Meter: 1955 - 61

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

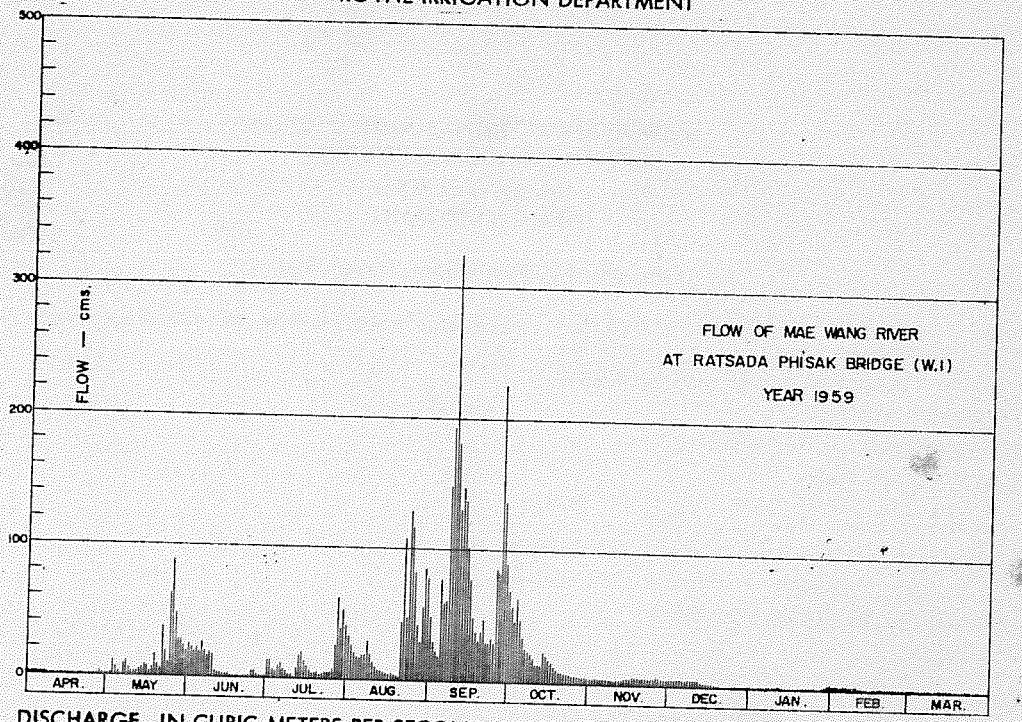
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1959. Upstream state diversions for irrigation of about 12,320 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	228.66	228.75	229.52	229.38	229.79	230.14	230.29	228.96	228.97	228.75	228.80	228.70
2	.67	229.07	.37	.40	.63	229.81	.17	.96	.97	.78	.82	.67
3	.65	.49	.30	.13	.44	.62	.05	.95	.91	.70	.84	.66
4	.65	.24	.35	.07	.46	.54	.27	.94	.96	.76	.93	.66
5	.75	.02	.26	.28	.46	230.57	.01	.94	.96	.74	.86	.65
6	228.86	228.94	229.72	229.29	229.52	230.32	229.82	228.94	228.94	228.73	228.85	228.64
7	.77	229.36	.56	.16	.51	.35	.70	.94	.94	.73	.81	.67
8	.73	.38	.44	.03	.75	231.29	.61	.94	.96	.72	.80	.66
9	.72	.16	.19	228.96	.52	.43	.55	.94	.90	.76	.80	.63
10	.73	.05	.19	.86	.37	232.19	.41	.94	.91	.73	.80	.63
11	228.71	229.04	229.09	228.86	229.27	231.37	229.29	228.93	228.94	228.78	228.79	228.64
12	.70	.13	.00	229.24	.17	.02	.28	.93	.93	.73	.75	.68
13	.70	.14	228.98	.60	.13	.16	.26	.93	.88	.72	.74	.71
14	.70	.22	.91	.60	.09	.06	.66	.95	.84	.71	.73	.66
15	.67	.30	.88	.40	.05	230.70	.56	229.00	.76	.67	.71	.64
16	228.67	229.26	228.86	229.27	229.03	230.40	229.48	228.98	228.75	228.67	228.71	228.64
17	.71	.11	.84	.12	.05	.11	.29	229.01	.76	.67	.71	.60
18	.70	.30	.81	.03	.01	.01	.25	.01	.73	.66	.71	.59
19	.71	.53	.81	.04	228.99	229.89	.18	.01	.72	.70	.70	.57
20	.71	.34	.80	.06	.95	.99	.15	228.98	.68	.72	.71	.54
21	228.70	229.25	228.76	228.97	230.02	230.11	229.11	228.96	228.70	228.70	228.69	228.59
22	.68	.98	.75	229.02	.89	229.84	.09	.98	.70	.70	.69	.58
23	.69	.57	.76	.05	.15	.74	.07	.96	.74	.67	.68	.57
24	.72	.35	.86	.06	231.06	.77	.06	.97	.72	.67	.70	.56
25	.71	230.34	229.02	.09	230.96	.75	.02	.96	.72	.67	.69	.58
26	228.70	230.64	229.08	229.23	230.61	230.44	229.00	228.99	228.74	228.71	228.69	228.63
27	.70	.11	228.92	.75	.05	.34	228.99	.96	.72	.74	.68	.57
28	.97	229.77	.86	230.28	229.88	231.71	.99	.97	.73	.77	.68	.56
29	.80	.77	.83	229.95	230.27	.16	.97	.98	.70	.80	.67	.56
30	.76	.74	.81	230.14	.65	230.57	.98	.97	.68	.79		.58
31		.61		229.98	.54		.96		.67	.92		.60
Mean	228.72	229.42	229.05	229.30	229.72	230.48	229.40	228.96	228.81	228.73	228.75	228.62
Max.	228.97	230.64	229.72	230.28	231.06	232.19	230.29	229.01	228.97	228.92	228.93	228.71
Min.	228.65	228.75	228.75	228.86	228.95	229.54	228.96	228.93	228.67	228.66	228.67	228.56

WATER YEAR 1959 : Max. 232.19 m. Min. 228.56 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.10	0.10	16	13	33	49	69	4.00	5.40	1.70	2.10	0.80
2	0.10	1.20	12	14	26	29	59	4.00	5.00	1.90	2.50	0.50
3	0.10	11	10	6.60	20	22	46	4.40	4.60	0.80	2.50	0.60
4	0.10	6.40	12	5.20	18	18	64	4.00	5.20	1.40	3.80	0.60
5	0.20	2.70	9.70	10	17	78	47	4.00	5.20	1.40	3.20	0.50
6	0.70	1.80	27	11	19	59	35	4.00	4.60	1.20	3.10	0.30
7	0.40	9.40	20	7.30	19	61	26	4.00	4.60	1.20	2.40	0.70
8	0.10	11	16	4.60	30	149	24	3.80	5.20	1.10	2.10	0.60
9		4.80	9.10	3.20	19	193	22	3.70	4.20	1.50	2.20	0.30
10	0.10	3.10	8.80	2.20	14	324	18	3.80	4.20	1.20	2.20	0.30
11		2.80	4.40	1.80	10	181	14	3.80	4.60	2.00	1.90	0.40
12		4.00	3.20	8.20	7.30	131	14	3.50	4.60	1.10	1.50	0.70
13		4.60	2.70	18	6.20	147	14	4.00	3.40	0.90	1.40	0.90
14		6.60	2.20	20	5.60	137	24	4.20	2.40	0.80	1.40	0.50
15		8.80	2.50	13	5.60	97	21	5.20	2.20	0.30	1.10	0.40
16		6.60	2.10	9.40	7.80	77	18	5.00	2.00	0.50	1.20	0.50
17		3.70	1.10	6.00	5.60	48	15	6.20	2.10	0.50	0.90	0.30
18		7.50	1.20	4.00	4.00	37	13	6.20	1.50	0.40	1.00	0.20
19		16	0.90	4.20	4.00	31	10	5.80	1.20	0.70	0.80	0.20
20		9.40	0.90	4.80	3.40	38	9.70	5.20	0.70	1.10	1.00	0.20
21		6.40	0.70	3.50	45	47	8.00	5.80	0.90	1.00	0.70	0.30
22		38	0.70	4.00	107	29	7.80	5.80	0.80	1.00	0.70	0.30
23		19	0.70	4.80	49	30	7.50	5.00	1.10	0.60	6.00	0.20
24	0.10	11	1.90	5.00	128	33	7.50	4.80	1.10	0.60	0.90	0.20
25		65	4.20	4.60	117	28	6.20	4.80	1.10	0.60	0.70	0.20
26		89	5.40	8.00	82	86	5.40	6.20	1.00	0.90	0.70	0.40
27		49	2.10	27	41	73	5.00	5.80	0.90	1.40	0.60	0.20
28	2.20	28	1.70	61	30	225	5.00	5.00	1.20	1.50	0.60	0.10
29	0.40	28	1.40	39	56	135	4.20	5.40	0.90	2.10	0.60	0.10
30	0.10	26	1.20	53	86	91	5.00	5.40	0.60	2.20		0.20
31		20		43	78		4.20		0.80	4.00		0.30
Total	4.70	500.90	181.80	419.40	1,093.50	2,683	628.50	142.80	83.30	37.60	44.40	12.00
Mean	0.16	16.1	6.06	13.5	35.3	89.4	20.3	4.76	2.69	1.21	1.53	0.39
Max.	2.20	89	27	61	128	324	69	6.20	5.40	4.00	3.80	0.90
Min.	0.00	0.10	0.70	1.80	3.40	18	4.20	3.50	0.60	0.30	0.60	0.10
Runoff — mcm.	0.406	43.278	15.707	36.236	94.478	231.811	54.302	12.338	7.197	3.249	3.836	1.037

WATER YEAR 1959 : Max. 324 Min. 0.00 Mean 15.9 Annual Runoff 503.876 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 10	09.00	232.41	366				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
WANG RIVER BASIN

Mae Wang River at Siriyong Bridge, Lampang (W.3)

Location: Lat 13°– 37' – 29" N, Long 99°– 14' – 04" E, on right bank about 20 meters upstream side of the bridge at Tambon Lom Raet, Amphoe Thoen, Lampang.

Drainage Area: 8,950 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +13.87 m.(A.D.)

Bench Mark: B.M. – H.S.

Location: On right bank 5 meters from the upper gage.
Elevation: +20.00 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: 1954 to date.

Rating Operation:

Period of Rating: 1954 – 60
Rated by Float: –
Rated by Current Meter: 1954 – 60

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

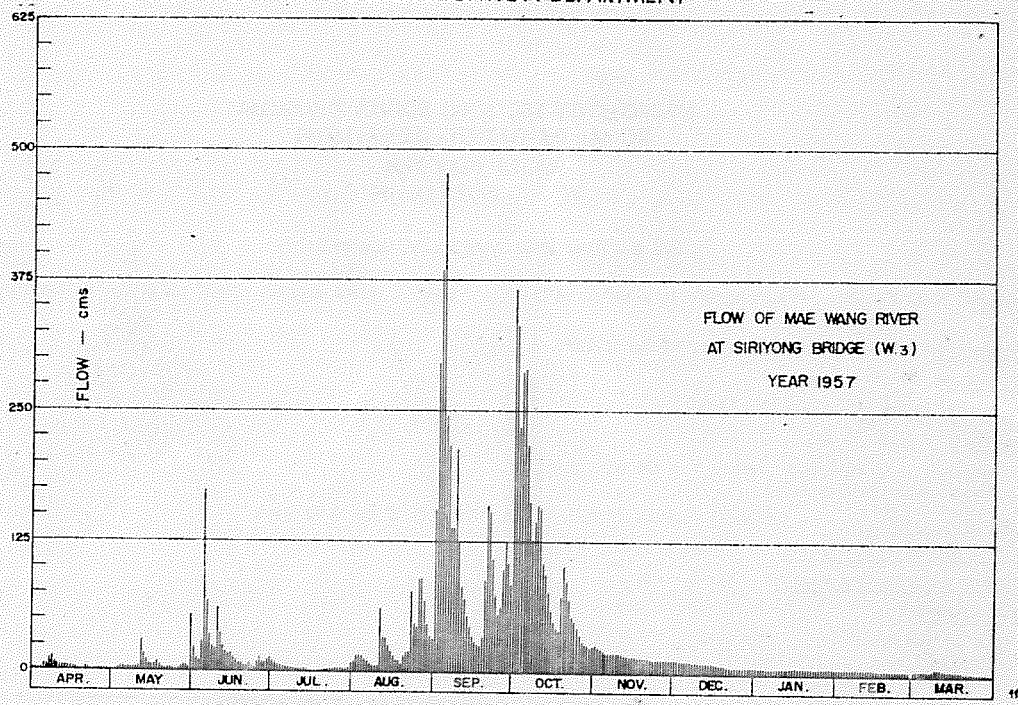
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1957. No upstream state diversions for irrigation except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	14.51	14.49	15.03	14.81	14.84	16.12	17.08	15.08	14.86	14.70	14.67	14.59
2	.50	.46	14.89	.77	.94	.80	16.95	.04	.86	.70	.66	.58
3	.50	.51	.83	.73	.94	17.16	.53	.03	.85	.70	.66	.57
4	.53	.62	15.11	.70	.93	.50	.76	.00	.85	.70	.65	.57
5	.67	.65	16.22	.66	.86	16.58	.77	14.98	.85	.70	.65	.57
6	14.66	14.59	15.52	14.64	14.78	16.55	16.50	14.98	14.84	14.69	14.65	14.59
7	.84	.64	.19	.63	.77	.02	.16	.98	.84	.69	.65	.56
8	.87	.61	.04	.61	.71	.03	15.95	.96	.84	.69	.69	.55
9	.75	.57	.00	.59	.68	.43	16.06	.96	.83	.69	.65	.68
10	.70	.55	.46	.57	.73	15.92	.15	.96	.82	.69	.65	.65
11	14.67	14.61	15.20	14.57	15.47	15.66	16.13	14.95	14.82	14.69	14.65	14.60
12	.65	15.11	.06	.56	.16	.53	15.82	.94	.81	.69	.65	.62
13	.63	14.92	14.96	.55	.16	.39	.72	.93	.81	.69	.65	.61
14	.60	.79	.92	.56	.08	.30	.58	.92	.80	.72	.65	.58
15	.63	.71	.94	.53	14.99	.19	.44	.92	.80	.68	.64	.57
16	14.59	14.70	14.88	14.51	14.94	15.12	15.33	14.91	14.79	14.68	14.64	14.57
17	.55	.71	.82	.51	.85	.08	.27	.91	.78	.68	.64	.57
18	.53	.81	.78	.51	.83	.06	.25	.90	.77	.67	.64	.56
19	.52	.65	.74	.51	.77	.20	.56	.90	.76	.67	.63	.54
20	.51	.59	.70	.53	.93	.66	.77	.90	.75	.67	.63	.53
21	14.57	14.55	14.68	14.58	14.97	16.17	15.68	14.89	14.74	14.67	14.62	14.53
22	.55	.58	.77	.59	.99	.11	.53	.89	.73	.67	.62	.51
23	.51	.57	.66	.59	15.59	15.82	.40	.89	.73	.67	.62	.49
24	.49	.56	.64	.59	.32	.57	.35	.89	.72	.67	.62	.50
25	.47	.53	.79	.62	.29	.42	.28	.88	.72	.67	.60	.49
26	14.47	14.53	14.88	14.64	15.64	15.48	15.21	14.88	14.71	14.70	14.58	14.49
27	.46	.60	.81	.62	.69	.75	.13	.87	.71	.69	.58	.49
28	.45	.67	.76	.59	.51	.95	.08	.87	.71	.67	.58	.47
29	.46	.66	.84	.58	.32	.79	.09	.87	.71	.69		.46
30	.45	.57	.87	.64	.19	.65	.05	.87	.71	.67		.45
31		15.40		.81	.17		.07		.71	.67		.45
Mean	14.57	14.66	14.96	14.60	15.07	15.57	15.76	15.93	14.77	14.68	14.64	14.55
Max.	14.87	15.40	16.22	14.81	15.69	17.50	17.08	15.08	14.86	14.70	14.69	14.68
Min.	14.45	14.46	14.64	14.51	14.68	15.06	15.05	14.87	14.71	14.67	14.58	14.45

WATER YEAR 1957 : Max. 17.50 m. Min. 14.45 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.34	0.94	23	10	12	155	365	27	13	6.08	5.46	3.70
2	1.05	0.63	14	8.88	17	296	332	24	13	6.08	5.25	3.41
3	1.05	1.34	11	7.28	17	385	235	23	12	6.08	5.25	3.11
4	1.93	4.62	29	6.08	17	476	286	21	12	6.08	5.04	3.11
5	5.46	5.04	173	5.25	13	246	289	19	12	6.08	5.04	3.11
6	5.25	3.70	68	4.83	9.28	239	228	19	12	5.87	5.04	3.70
7	12	4.83	35	4.62	8.88	138	162	19	12	5.87	5.04	2.82
8	13	4.21	24	4.21	6.48	140	127	19	11	5.87	5.87	2.52
9	8.08	3.11	21	3.70	5.66	213	145	19	11	5.87	5.04	5.66
10	6.08	2.52	61	3.11	7.28	123	160	19	11	5.87	5.04	5.04
11	5.46	4.21	36	3.11	62	86	156	18	11	5.87	5.04	4.00
12	5.04	29	25	2.82	33	70	108	17	10	5.87	5.04	4.42
13	4.62	16	19	2.52	33	53	94	17	10	5.87	5.04	4.21
14	4.00	10	16	2.82	27	45	76	16	10	6.88	5.04	3.41
15	4.62	6.48	17	1.93	20	35	59	16	10	5.66	4.83	3.11
16	3.70	6.08	14	1.34	17	30	48	16	*10	5.66	4.83	3.11
17	2.52	6.48	11	1.34	12	27	42	16	9.28	5.66	4.83	3.11
18	1.93	10	9.28	1.34	11	25	40	15	8.88	5.45	4.83	2.82
19	1.64	5.04	7.68	1.34	8.88	36	73	15	8.48	5.45	4.62	2.23
20	1.34	3.70	6.08	1.93	17	86	101	15	8.08	5.45	4.62	1.93
21	3.11	2.52	5.66	3.41	19	164	88	14	7.68	5.45	4.62	1.93
22	2.52	3.41	8.88	3.70	20	153	70	14	7.28	5.45	4.62	1.34
23	1.34	3.11	5.25	3.70	77	108	54	14	7.28	5.45	4.62	0.94
24	0.94	3.41	4.83	3.70	47	74	49	14	6.88	5.45	4.62	1.05
25	0.73	1.93	10	4.42	44	56	43	14	6.88	5.45	4.00	0.94
26	0.73	1.93	14	4.83	90	64	37	14	6.48	6.08	3.41	0.94
27	0.63	4.00	10	4.42	90	98	30	13	6.48	5.87	3.41	0.94
28	0.52	0.46	8.48	3.70	67	127	27	13	6.48	5.45	3.41	0.73
29	0.63	5.25	12	3.41	47	104	27	13	6.48	5.87		0.63
30	0.52	3.11	13	4.83	35	84	24	13	6.48	5.45		0.52
31		54		10	34		26		6.48	5.45		0.52
Total	101.78	216.06	712.14	128.57	924.46	3,936	3,601	506	283.60	178.99	133.50	79.01
Mean	3.39	6.97	23.7	4.15	29.8	131	116	16.8	9.34	5.77	4.77	2.55
Max.	13	54	173	10	90	476	365	27	13	6.08	5.87	5.66
Min.	0.52	0.63	4.83	1.34	5.66	25	24	13	6.48	5.45	3.41	0.52
Runoff — mcm.	8.794	18.667	61.529	11.108	79.873	340.070	311.126	43.718	25.021	15.465	11.534	6.826

WATER YEAR 1957 : Max. 476 Min. 0.52 Mean 29.6 Annual Runoff 933.734 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 4	06.00	17.75	547				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
WANG RIVER BASIN

Mae Wang River at Siriyong Bridge, Lampang (W.3)

Location: Lat 13°- 37' - 29" N, Long 99°- 14' - 04" E, on right bank about 20 meters upstream side of the bridge at Tambon Lom Raet, Amphoe Thoen, Lampang.

Drainage Area: 8,950 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +13.87 m.(A.D.)

Bench Mark: B.M. - H.S.

Location: On right bank 5 meters from the upper gage.
Elevation: +20.00 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: 1954 to date.

Rating Operation:

Period of Rating: 1954 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

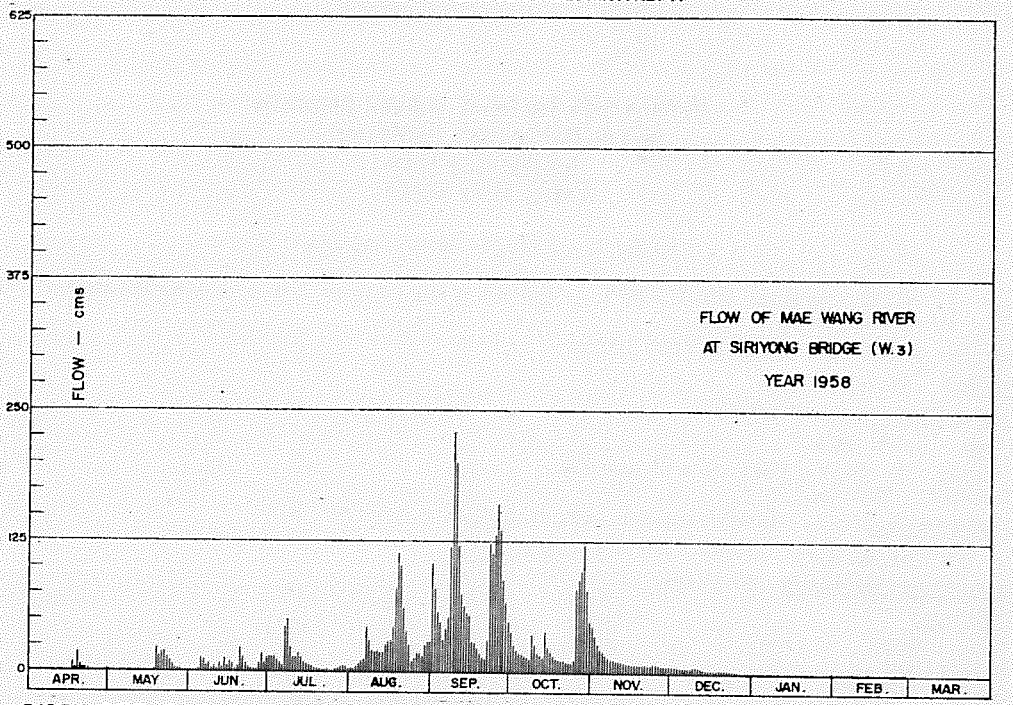
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1958. No upstream state diversions for irrigation except those built by the local residents. No adjustment made for virgin flow.

Remarks: No flow for many days.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	14.42	14.56	14.60	14.90	14.69	15.72	15.20	15.24	14.77	14.60	14.56	
2	.40	.56	.62	.91	.69	.56	.06	.15	.77	.60	.55	
3	.37	.52	.59	.90	.73	.38	.00	.06	.76	.60	.55	
4	.41	.53	.65	.85	.79	.30	14.95	.00	.75	.60	.55	
5	.42	.52	.88	.81	.84	.17	.95	14.97	.74	.60	.55	
6	14.49	14.48	14.85	14.77	14.89	15.24	14.92	14.93	14.74	14.60	14.55	
7	.50	.50	.75	15.25	15.25	.33	.90	.90	.74	.60	.54	
8	.49	.46	.89	.31	.11	.83	.88	.88	.74	.59	.53	
9	.51	.44	.70	.01	.00	16.39	15.18	.87	.73	.59	.52	
10	.50	.45	.72	14.88	14.96	.26	.03	.85	.73	.59	.52	
11	14.49	14.44	14.68	14.90	14.97	15.83	14.96	14.85	14.73	14.57	14.52	
12	.49	.49	.80	.95	.95	.52	.92	.84	.72	.57	.52	
13	.49	.47	.74	.88	.98	.42	.91	.83	.72	.57	.52	
14	.46	.56	.88	.82	15.06	.37	15.20	.83	.71	.57	.52	
15	.49	.60	.75	.78	.10	.35	.03	.82	.71	.57	.51	
16	14.49	14.60	14.85	14.75	15.11	15.10	14.97	14.81	14.70	14.57	14.51	
17	.82	.66	.77	.73	.25	.07	.92	.81	.69	.57	.51	
18	.71	.71	.70	.71	.57	.01	.89	.80	.68	.57	.51	
19	.95	15.02	.72	.69	.78	14.95	.87	.79	.68	.57	.51	
20	.74	14.94	15.04	.67	.71	.91	.86	.79	.68	.56	.51	
21	14.68	14.96	14.90	14.66	15.42	14.39	14.85	14.79	14.67	14.56	14.49	
22	.67	.98	.81	.65	.21	15.13	.84	.78	.66	.56	.48	
23	.66	.88	.75	.66	.05	.84	.83	.78	.65	.56	.47	
24	.61	.85	.70	.64	14.85	.81	.83	.79	.64	.56	.46	
25	.59	.76	.67	.63	.89	.89	.87	.78	.64	.56	.45	
26	14.57	14.68	14.66	14.65	14.96	16.06	15.56	14.78	14.63	14.56	14.44	
27	.55	.67	.78	.70	.96	15.91	.63	.77	.62	.56	.43	
28	.53	.66	.95	.67	.92	.63	.70	.77	.61	.56	.43	
29	.55	.63	.83	.72	15.06	.45	.83	.77	.61	.56		
30	.65	.61	.88	.73	.10	.29	.55	.77	.60	.56		
31		.60		.69	.10		.30		.60	.56		
Mean	14.56	14.64	14.76	14.80	15.13	15.49	15.08	14.86	14.69	14.57	14.51	
Max.	14.95	15.02	15.04	15.31	15.78	16.39	15.83	15.24	14.77	14.60	14.56	
Min.	14.37	14.44	14.59	14.63	14.69	14.38	14.83	14.77	14.60	14.56	14.43	

WATER YEAR 1958 : Max. 16.39 m. Min. 14.37 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		0.78	1.30	15	4.00	104	39	43	7.45	1.30	0.78	
2		0.78	1.90	15	4.00	80	27	35	7.45	1.30	0.65	
3		0.26	1.17	15	5.65	58	22	27	7.00	1.30	0.65	
4		0.39	2.80	12	8.35	49	18	22	6.55	1.30	0.65	
5		0.26	13	9.39	11	36	18	20	6.10	1.30	0.65	
6			12	7.45	14	43	16	17	6.10	1.30	0.65	
7			6.55	44	44	53	15	15	6.10	1.30	0.52	
8			8.80	50	31	121	13	13	6.10	1.17	0.39	
9	0.13		4.30	23	22	228	37	13	5.65	1.17	0.26	
10			5.20	13	19	200	24	12	5.65	1.17	0.26	
11			3.70	15	20	121	19	12	5.65	0.91	0.26	
12			8.80	18	18	75	16	11	5.20	0.91	0.26	
13			6.10	13	20	63	15	10	5.20	0.91	0.26	
14		0.78	13	9.98	27	57	39	10	4.75	0.91	0.26	
15		1.30	6.55	7.90	30	55	24	9.98	4.75	0.91	0.13	
16		1.30	12	6.55	31	30	20	9.39	4.30	0.91	0.13	
17	0.98	3.10	7.45	5.65	44	28	16	9.39	4.00	0.91	0.13	
18	4.75	4.75	4.30	4.75	81	23	14	8.80	3.70	0.91	0.13	
19	18	23	5.20	4.00	113	18	13	8.35	3.70	0.91	0.13	
20	6.10	17	25	3.40	102	15	12	8.35	3.70	0.78	0.13	
21	3.70	19	15	3.10	63	14	12	8.35	3.40	0.78		
22	3.40	20	9.39	2.80	40	33	11	7.90	3.10	0.78		
23	3.10	13	6.55	3.10	26	123	10	7.90	2.80	0.78		
24	1.60	12	4.30	2.50	12	118	10	8.35	2.50	0.78		
25	1.17	7.00	3.40	2.20	14	131	13	7.90	2.50	0.78		
26	0.91	3.70	3.10	2.80	19	161	80	7.90	2.20	0.78		
27	0.65	3.40	7.90	4.30	19	135	90	7.45	1.90	0.78		
28	0.39	3.10	18	3.40	16	90	101	7.45	1.60	0.78		
29	0.65	2.20	10	5.20	27	67	121	7.45	1.60	0.78		
30	2.80	1.60	13	5.65	30	48	79	7.45	1.30	0.78		
31		1.30		4.00	30		49		1.30	0.78		
Total	57.33	140.00	239.76	331.12	945.00	2,377	993	392.36	133.30	30.16	7.28	
Mean	1.91	4.52	7.99	10.7	30.5	79.2	32.0	13.1	4.30	0.97	0.26	
Max.	18	23	25	50	113	228	121	43	7.45	1.30	0.78	
Min.	0.00	0.00	1.17	2.20	4.00	14	10	7.45	1.30	0.78	0.00	
Runoff - mcm.	4.953	12.096	20.715	28.609	81.648	205.373	85.795	33.900	11.517	2.606	0.629	

WATER YEAR 1958 : Max. 228 Min. Mean Annual Runoff mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 9	12.00	16.47	246				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
WANG RIVER BASIN

Mae Wang River at Siriyong Bridge, Lampang (W.3)

Location: Lat 13°- 37' - 29" N, Long 99°- 14' - 04" E, on right bank 20 meters upstream side of the bridge at Tambon Lom Raet, Amphoe Thoen, Lampang.

Drainage Area: 8,950 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +13.87 m.(A.D.)

Bench Mark: B.M. - H.S.

Location: On right bank 5 meters from the upper gage.
Elevation: +20.00 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: 1954 to date.

Rating Operation:

Period of Rating: 1954 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

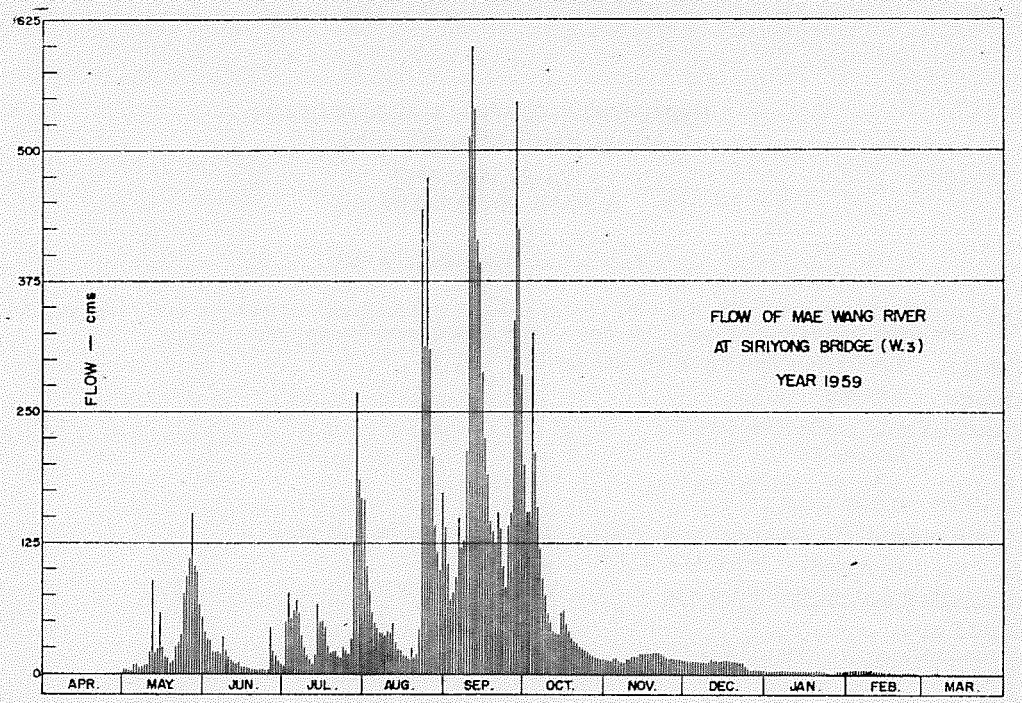
General Description: Records good except those for period of no gage height record. Stage - discharge relation used is defined by discharge measurements during 1959. No upstream state diversion for irrigation except those built by the local residents. No adjustment made for virgin flow.

Remarks: No gage height record for Apr. and no flow for Mar. 21 - 31.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		14.62	15.19	14.72	16.12	15.97	16.29	14.85	14.83	14.55	14.54	14.41
2		.57	.13	15.32	15.75	.72	.05	.83	.83	.55	.57	.41
3		.56	.11	.53	.57	.49	.05	.83	.83	.55	.60	.40
4		.54	14.97	.35	.39	.54	.84	.89	.83	.55	.59	.40
5		.78	.96	.41	.29	.66	.33	.88	.82	.55	.58	.43
6		14.75	14.97	15.49	15.25	16.01	16.09	14.84	14.81	14.55	14.58	14.44
7		.68	.94	.38	.20	15.85	15.84	.82	.80	.55	.61	.42
8		.71	15.16	.16	.19	.89	.65	.82	.80	.55	.59	.42
9		.73	14.99	.03	.17	16.79	.50	.86	.80	.55	.57	.41
10		.76	.90	14.91	.21	17.49	.39	.87	.82	.54	.55	.41
11		14.95	14.84	14.83	15.19	17.75	15.30	14.90	14.86	14.54	14.54	14.40
12		15.62	.82	.78	.29	.56	.23	.90	.84	.54	.54	.40
13		14.89	.77	.91	.08	.18	.19	.90	.84	.54	.54	.39
14		.99	.80	15.45	.00	.10	.18	.94	.84	.54	.53	.39
15		15.38	.70	.30	14.98	16.68	.38	.94	.83	.54	.52	.39
16		15.01	14.68	15.31	14.92	16.42	15.40	14.95	14.84	14.54	14.51	14.38
17		14.90	.67	.25	.90	.24	.29	.95	.84	.53	.49	.37
18		.85	.64	.06	.87	.00	.21	.95	.83	.53	.48	.36
19		.78	.63	14.95	15.02	15.95	.16	.96	.82	.53	.48	.36
20		.83	.61	.97	14.89	.86	.10	.95	.82	.53	.47	.36
21		15.03	14.59	14.97	14.94	16.04	15.07	14.94	14.81	14.53	14.46	14.35
22		.11	.59	.89	15.23	15.95	.03	.93	.80	.53	.46	.35
23		.18	.57	.88	17.27	.71	.00	.92	.79	.52	.46	.35
24		.54	.58	15.03	16.79	.58	14.98	.88	.72	.52	.45	.34
25		.66	.60	14.99	17.37	.97	.96	.86	.62	.52	.45	.32
26		15.79	15.25	14.93	16.78	16.04	14.94	14.86	14.59	14.51	14.44	14.31
27		16.05	14.97	15.12	.33	.99	.91	.87	.58	.51	.43	.31
28		15.72	.90	.88	15.97	17.58	.89	.87	.57	.53	.42	.31
29		.69	.81	16.61	.81	.21	.88	.85	.57	.53	.42	.30
30		.45	.76	.22	.87	16.68	.87	.84	.56	.51		.30
31		.35		.13	16.15		.86		.56	.53		.29
Mean		15.08	14.83	15.25	15.57	16.36	15.38	14.89	14.76	14.53	14.51	14.38
Max.		16.05	15.25	16.61	17.37	17.75	16.84	14.96	14.86	14.55	14.61	14.44
Min.		14.54	14.57	14.72	14.87	15.49	14.86	14.82	14.56	14.51	14.42	14.29

WATER YEAR 1959 : Max. 17.75 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		4.60	39	7.80	168	142	200	14	13	3.00	2.80	0.92
2		3.40	34	52	107	103	155	13	13	3.00	3.40	1.04
3		3.20	32	77	82	72	155	13	13	3.00	4.00	1.04
4		2.80	22	55	60	78	325	16	13	3.00	3.80	1.16
5		10	21	62	49	94	208	16	12	3.00	3.60	1.28
6		9.00	22	72	45	149	162	13	12	3.00	3.60	1.28
7		6.40	20	59	40	122	121	12	11	3.00	4.30	1.04
8		7.40	36	36	39	128	93	12	11	3.00	3.80	1.04
9		8.20	23	26	37	313	73	15	11	3.00	3.40	0.92
10		9.40	17	18	41	514	60	15	12	2.80	3.00	0.92
11		20	13	13	39	600	50	17	15	2.80	2.80	0.80
12		89	12	10	49	539	43	17	13	2.80	2.80	0.80
13		16	9.80	18	30	416	39	17	13	2.80	2.80	0.64
14		23	11	67	24	393	38	20	13	2.80	2.60	0.64
15		59	7.00	50	23	286	59	20	13	2.80	2.40	0.64
16		25	6.40	51	18	226	61	20	13	2.80	2.20	0.48
17		17	6.10	45	17	190	49	20	13	2.60	1.88	0.32
18		14	5.20	28	15	147	41	20	13	2.60	1.76	0.16
19		10	4.90	20	25	138	36	21	12	2.60	1.76	0.16
20		13	4.30	22	16	124	31	20	12	2.60	1.64	0.16
21		26	3.80	22	20	154	29	20	12	2.60	1.52	
22		32	3.80	16	43	138	26	19	11	2.60	1.52	
23		38	3.40	16	443	101	24	18	11	2.40	1.52	
24		78	3.60	26	313	83	23	16	7.80	2.40	1.40	
25		94	4.00	23	474	142	21	15	4.60	2.40	1.40	
26		113	45	19	310	154	20	15	3.80	2.20	1.28	
27		155	22	33	208	363	18	15	3.60	2.20	1.16	
28		103	17	127	142	546	16	15	3.40	2.60	1.04	
29		99	12	269	116	425	16	14	4.40	2.60	1.04	
30		67	9.40	186	125	286	15	13	3.20	2.20		
31		55		169	173.		15		3.20	2.60		
Total		1,210.40	469.70	1,695.80	3,291	7,166	2,222	491	319	83.80	70.22	15.44
Mean		39.0	15.6	54.7	106	239	71.6	16.4	10.3	2.70	2.42	0.50
Max.		155	45	269	474	600.	325	20	15	3.00	4.30	1.28
Min.		2.80	3.40	7.80	15	72	15	12	3.20	2.20	1.04	0.80
Runoff - RCM.		104.578	40.582	146.517	283.478	619.142	191.981	42.422	27.562	7.240	6.067	1.334

WATER YEAR 1959 : Max. 600 Min. 0.00 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 11	18.00	18.07	720				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
WANG RIVER BASIN

Mae Wang River at Wang Khrai, Tak (W.4)

Location: Lat 17°- 12' - 58" N, Long 99°- 04' - 42" E, on right bank 200 meters upstream from the bridge at Ban Wang Khrai, 8 kilometers from Amphoe Sam Ngao and 6 kilometers from Phahon Yothin highway, Amphoe Sam Ngao, Tak.

Drainage Area: 10,407 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +131.316 m.(M.S.L.)

Bench Mark: B.M. - R.I.D.

Location: At the fence near the gage site.
Elevation: +137.182 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: 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: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

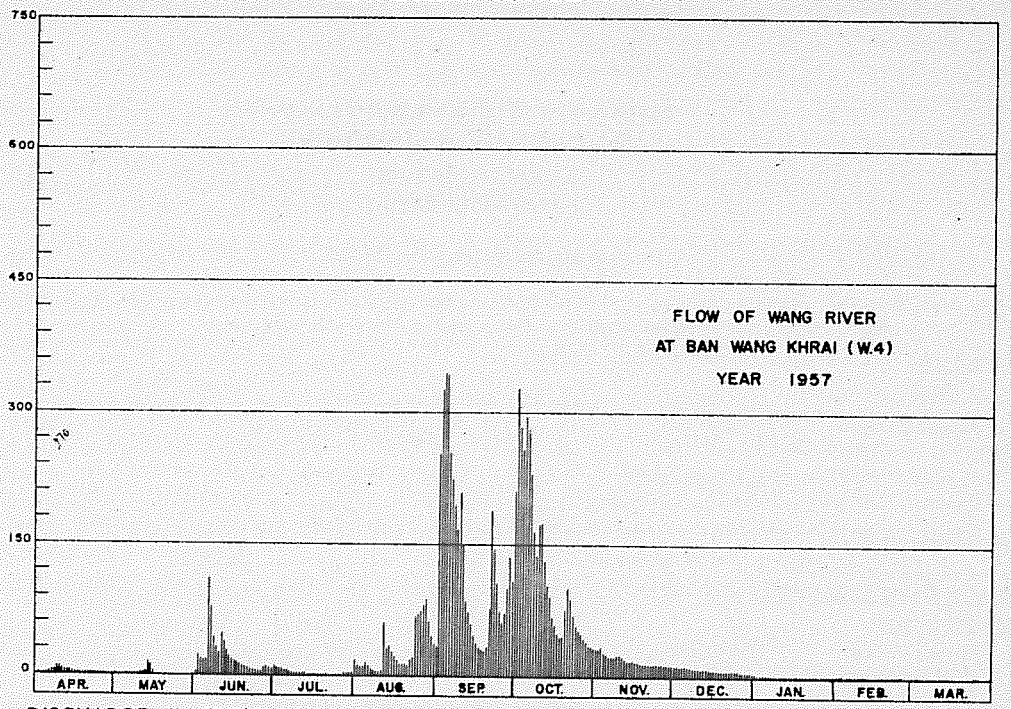
General Description: Records fair except those for period of no gage height record. Stage - discharge relation used is defined by discharge measurements during 1957. Upstream state diversions for irrigation of about 12,320 hectares. No adjustment made for virgin flow.

Remarks: No gage height record for May 16 - 31.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	131.99	131.99	132.25	132.59	132.74	133.19	135.16	133.12	132.68	132.28	132.30	132.08
2	.98	.98	.96	.52	.57	135.79	136.58	.16	.67	.27	.28	.07
3	.96	132.08	.82	.46	.54	136.58	.25	.20	.66	.25	.29	.07
4	.95	.05	.77	.40	.58	.76	.07	.02	.65	.24	.27	.09
5	132.00	.02	.80	.33	.72	.54	.40	.01	.64	.22	.25	.07
6	132.06	132.05	134.47	132.32	132.67	135.99	136.26	132.96	132.63	132.22	132.25	132.07
7	.29	.12	133.90	.25	.52	.78	135.84	.96	.62	.21	.22	.08
8	.30	.13	.35	.22	.43	.65	.17	.95	.61	.21	.22	.09
9	.48	.09	.16	.21	.39	.23	134.88	.92	.60	.20	.22	.10
10	.50	.10	132.94	.19	.35	.68	135.31	.99	.59	.19	.23	.12
11	132.34	132.09	133.47	132.17	132.46	135.22	135.32	132.94	132.58	132.21	132.27	132.14
12	.29	.06	.34	.15	133.79	134.19	.02	.85	.57	.27	.24	.16
13	.23	.27	.08	.16	.16	133.89	134.52	.81	.56	.28	.22	.26
14	.21	.72	132.89	.12	.25	.61	.37	.83	.55	.29	.22	.29
15	.17	.59	.73	.10	.05	.48	.03	.82	.54	.30	.22	.17
16	132.14		132.69	132.10	132.90	133.28	133.81	132.82	132.53	132.30	132.22	132.13
17	.13		.66	.07	.80	.18	.62	.81	.51	.30	.22	.14
18	.09		.57	.06	.65	.10	.51	.79	.49	.29	.20	.10
19	.07		.50	.07	.67	.07	.49	.77	.51	.29	.19	.09
20	.04		.44	.07	.71	.18	134.04	.77	.50	.28	.17	.09
21	132.02		132.40	132.07	132.65	134.01	134.43	132.74	132.49	132.28	132.16	132.08
22	.01		.39	.07	.85	135.36	.30	.76	.48	.27	.15	.06
23	131.99		.38	.08	.94	134.93	.03	.76	.47	.28	.14	.05
24	.99		.37	.12	133.92	.33	133.80	.76	.46	.28	.14	.04
25	.99		.30	.11	.96	133.91	.69	.74	.45	.30	.11	.03
26	131.98		132.25	132.11	134.00	133.67	133.58	132.73	132.44	132.31	132.10	132.02
27	.97		.47	.11	.06	.79	.43	.73	.43	.32	.10	.01
28	.96		.52	.15	.17	134.26	.29	.71	.32	.32	.09	.00
29	.95		.42	.14	133.88	.61	.18	.70	.31	.31		131.99
30	132.00		.38	.18	.42	.27	.19	.69	.30	.30		.98
31				.28	.27		.14		.29	.29		132.01
Mean	132.10		132.79	132.19	133.03	134.54	134.51	132.86	132.52	132.27	132.20	132.08
Max.	132.50		134.47	132.59	134.17	136.76	136.58	133.20	132.68	132.32	132.30	132.29
Min.	131.95		132.25	132.07	132.35	133.07	133.14	132.69	132.29	132.19	132.09	131.98

WATER YEAR 1957 : Max. 136.76 m. Min. 131.95 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.85	0.64	4.01	12	18	32	187	31	13	2.94	2.52	0.50
2	0.85	0.50	24	10	12	232	326	32	12	2.80	2.24	0.35
3	0.71	1.13	19	9.27	11	320	281	34	12	2.28	2.38	0.35
4	0.71	0.85	17	7.89	11	346	259	26	12	2.24	2.10	0.57
5	1.06	0.71	18	6.40	15	344	296	26	12	2.01	1.92	0.35
6	1.65	0.71	111	6.20	13	254	279	24	11	2.01	1.92	0.35
7	5.03	1.65	71	4.86	9.04	229	231	24	11	1.83	1.65	0.50
8	5.20	1.83	41	4.35	6.80	212	163	24	11	1.83	1.65	0.57
9	9.04	1.56	33	4.18	6.00	168	137	23	10	1.74	1.65	0.64
10	9.50	1.74	24	3.84	5.40	210	174	25	10	1.65	1.74	0.78
11	5.80	1.74	48	3.36	7.89	163	174	23	9.75	1.74	2.01	0.92
12	4.86	1.56	42	3.08	62	86	147	20	9.50	2.38	1.74	1.06
13	3.84	4.52	29	3.22	31	72	105	18	9.04	2.52	1.56	1.92
14	3.50	15	23	2.66	35	55	94	19	8.81	2.66	1.56	2.24
15	2.94	11	17	2.38	27	48	70	18	8.58	2.80	1.56	1.13
16	2.38		16	2.38	22	39	59	18	8.35	2.66	1.56	0.85
17	2.24		15	2.01	18	34	50	17	7.89	2.66	1.56	0.71
18	1.83		13	2.10	13	30	46	16	7.20	2.52	1.38	0.64
19	1.65		11	2.10	13	28	45	15	7.66	2.52	1.29	0.57
20	1.29		9.27	2.10	14	33	76	15	7.43	2.38	1.13	0.57
21	1.13		8.58	2.10	12	78	101	14	7.20	2.38	1.06	0.50
22	1.06		8.35	2.24	19	188	92	15	6.80	2.10	0.99	0.40
23	0.92		7.89	2.38	22	148	74	14	6.60	2.24	0.92	0.35
24	0.92		7.43	2.94	68	102	59	14	6.40	2.24	0.92	0.30
25	0.92		5.80	2.80	71	75	54	14	6.20	2.52	0.71	0.25
26	0.78		4.69	2.80	74	61	49	13	5.80	2.66	0.64	0.20
27	0.71		9.27	2.94	79	71	43	13	5.60	2.80	0.64	0.15
28	0.57		10	3.50	86	105	38	13	3.67	2.80	0.57	0.10
29	0.45		7.89	3.22	68	136	34	13	3.50	2.66		0.05
30	0.71		7.00	4.01	43	109	35	13	3.22	2.52		0.00
31				5.80	37		32		3.08	2.38		0.15
Total	73.10		662.18	129.11	929.13	4,008	3,810	584	2[illegible].28	73.57	41.57	18.02
Mean	2.44		22.1	4.16	30.1	134	123	19.5	8.27	2.37	1.48	0.58
Max.	9.50		111	12	86	346	326	34	13	2.94	2.52	2.24
Min.	0.71		4.69	2.01	5.40	28	32	13	3.08	1.65	0.57	0.00
Runoff - mcm.	6.316		57.212	11.155	80.277	346.291	329.184	50.458	22.142	6.356	3.592	1.557

WATER YEAR 1957 : Max. 346 Min. 0.00 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 4	18.00	136.80	351				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
WANG RIVER BASIN

Mae Wang River at Wang Khrai, Tak (W.4)

Location: Lat 17°- 12' - 58" N, Long 99°- 04' - 42" E, on right bank 200 meters upstream from the bridge at Ban Wang Khrai, 8 kilometers from Amphoe Sam Ngao and 6 kilometers from Phahon Yothin highway, Amphoe Sam Ngao, Tak.

Drainage Area: 10,407 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +131.316 m. (M.S.L.)

Bench Mark: B.M. - R.I.D.

Location: At the fence near the gage site.
Elevation: +137.182 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: 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: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1958. Upstream stage diversions for irrigation of about 12,320 hectares. No adjustment made for virgin flow.

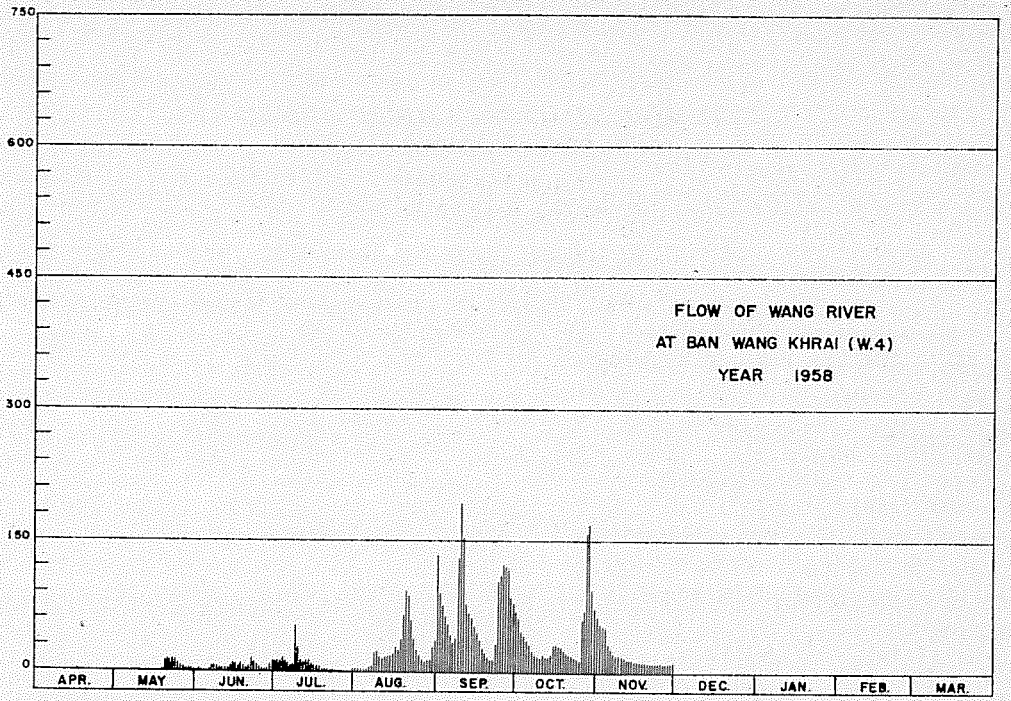
Remarks: No gage height record for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			132.22	132.73	132.39	134.80	133.95	133.80				
2			.29	.73	.37	.25	.79	.60				
3			.22	.69	.33	.00	.53	.52				
4			.21	.84	.32	133.79	.32	.46				
5			.15	.72	.49	.62	.19	.17				
6			132.29	132.60	132.52	133.47	133.11	132.94				
7			.53	.55	.62	.25	132.81	.81				
8			.52	.68	133.17	.39	.76	.81				
9			.44	133.64	.19	134.31	.75	.78				
10			.38	.10	132.96	135.52	.73	.76				
11			132.38	132.81	132.85	135.12	132.83	132.73				
12			.31	.68	.80	134.08	.77	.71				
13			.32	.77	.84	133.83	.74	.65				
14			.46	.79	.84	.64	.81	.64				
15			.58	.66	.92	.52	133.11	.63				
16			132.57	132.59	133.11	133.39	133.14	132.62				
17			.44	.53	.08	.27	.07	.61				
18			.56	.47	.22	.01	.00	.59				
19		132.19	.45	.44	134.07	132.93	132.91	.57				
20		.72	.40	.40	.36	.77	.81	.56				
21		132.77	132.62	132.38	134.25	132.72	132.74	132.55				
22		.68	.84	.36	133.67	.69	.74	.54				
23		.77	.65	.34	.40	133.19	.74	.54				
24		.75	.63	.31	.08	134.47	.74	.54				
25		.63	.45	.31	132.87	.56	.71	.54				
26		132.54	132.36	132.29	132.76	134.76	133.73	132.54				
27		.37	.34	.27	.62	.68	134.04	.53				
28		.36	.33	.27	.73	.62	135.23	.52				
29		.35	.64	.33	.69	.11	.39	.51				
30		.32	.70	.32	133.09	133.97	134.28	.51				
31		.25		.39	.23		133.92					
Mean			132.44	132.58	132.99	133.86	133.27	132.78				
Max.			132.84	133.64	134.36	135.52	134.28	133.80				
Min.			132.15	132.27	132.32	132.69	132.71	132.51				

WATER YEAR 1958 : Max. 135.52 m. Min. - m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			2.00	14	3.60	133	69	64				
2			3.40	14	3.20	92	62	54				
3			2.20	13	2.20	76	49	52				
4			2.00	18	1.80	64	40	51				
5			1.50	13	4.40	54	35	35				
6			3.80	9.50	4.50	45	32	25				
7			8.50	8.00	6.10	34	21	20				
8			8.30	11	23	41	18	20				
9			6.50	52	24	95	17	18				
10			5.00	26	17	193	16	18				
11			5.20	14	16	157	20	16				
12			4.40	11	16	79	18	15				
13			4.50	14	18	69	17	14				
14			7.50	14	18	62	20	13				
15			11	11	21	54	31	13				
16			10	8.80	28	46	31	12				
17			6.50	8.80	26	39	28	12				
18			9.30	6.70	30	27	29	11				
19		1.80	6.30	5.50	73	24	24	11				
20		13	5.00	4.80	94	18	21	11				
21		15	10	4.50	88	14	19	10				
22		12	17	4.20	56	13	18	10				
23		15	11	3.80	42	31	16	10				
24		14	9.80	3.00	27	102	15	10				
25		10	5.00	3.00	19	108	13	10				
26		7.50	4.10	2.20	15	122	58	10				
27		4.20	3.80	2.00	11	120	74	10				
28		4.20	3.80	1.80	14	117	158	10				
29		4.10	10	2.60	13	84	170	9.80				
30		3.80	12	2.40	28	75	90	9.50				
31		2.40		3.80	34		70					
Total			199.40	310.40	776.80	2,188	1,299	584.30				
Mean			6.65	10.0	25.0	72.9	41.9	19.5				
Max.			17	52	94	193	170	64				
Min.			1.50	1.80	1.80	13	13	9.50				
Runoff - MCM.			17.228	26.818	67.115	189.043	112.234	50.483				

WATER YEAR 1958 : Max. 193 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 10	06.00	135.65	202				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
WANG RIVER BASIN

Mae Wang River at Wang Khrai, Tak (W.4)

Location: Lat 17° – 12' – 58" N, Long 99° – 04' – 42" E, on right bank 200 meters upstream from the bridge at Ban Wang Khrai, 8 kilometers from Amphoe Sam Ngao and 6 kilometer from Phahon Yothin highway, Amphoe Sam Ngao, Tak.

Drainage Area: 10,407 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +131.316 m. (M.S.L.)

Bench Mark: B.M. – R.I.D.

Location: At the fence near the gage site.
Elevation: +137.182 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: 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, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

General Description: Records good except those for period of no gage height record. Stage – discharge relation used is defined by discharge measurements during 1959. Upstream state diversions for irrigation of about 12,300 hectares. No adjustment made for virgin flow.

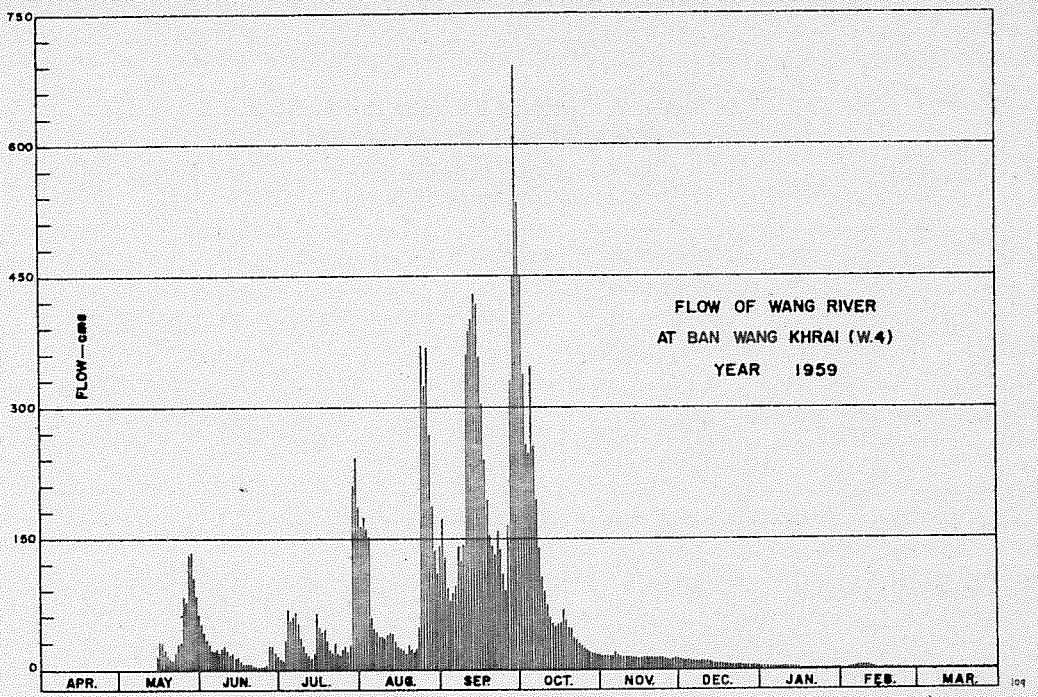
Remarks: No gage height record for Apr. 1 – May 14.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			133.56	132.58	135.06	135.16	137.22	132.71	132.56	132.25	132.16	132.07
2			.25	.51	.20	134.70	136.54	.69	.55	.24	.16	.07
3			.15	133.07	.04	.23	135.96	.70	.54	.24	.18	.06
4			.02	.95	134.93	133.99	.84	.67	.54	.23	.20	.06
5			132.89	.60	133.64	134.12	136.53	.68	.54	.22	.24	.05
6			132.83	133.68	133.45	134.27	135.88	132.82	132.53	132.23	132.27	132.04
7			.92	.79	.37	.79	.32	.71	.52	.24	.26	.04
8			.82	.64	.24	.61	134.78	.66	.51	.24	.25	.04
9			.93	.28	.25	.82	.38	.64	.50	.23	.27	.04
10			.99	.04	.20	136.62	.12	.67	.48	.22	.25	.04
11			132.83	132.83	133.29	136.76	133.89	132.65	132.47	132.21	132.24	132.04
12			.69	.69	.33	.90	.70	.66	.46	.21	.22	.03
13			.75	.60	.61	.98	.55	.64	.45	.21	.21	.03
14			.61	.83	.12	.94	.48	.63	.43	.21	.19	.02
15		132.70	.66	133.76	132.96	.70	.53	.62	.43	.20	.18	.01
16		133.11	132.51	133.44	132.93	136.30	133.64	132.61	132.42	132.20	132.17	132.00
17		.08	.45	.32	.88	135.77	.81	.63	.40	.19	.17	131.99
18		.77	.42	.40	.80	.30	.64	.64	.40	.19	.15	.98
19		.68	.39	.13	.96	134.96	.46	.64	.40	.18	.14	.98
20		.58	.36	132.91	.90	.86	.43	.64	.39	.17	.12	.97
21		132.48	132.33	132.83	132.82	134.66	133.23	132.65	132.37	132.17	132.12	131.96
22		.79	.32	133.07	.97	135.00	.13	.65	.37	.17	.11	.95
23		133.05	.30	132.82	133.28	134.71	.06	.63	.35	.17	.10	.95
24		.07	.30	.74	136.68	.43	.02	.62	.34	.16	.10	.95
25		134.06	.31	.94	.41	.15	132.94	.61	.33	.16	.10	.95
26		133.99	132.39	133.00	136.67	135.04	132.88	132.60	132.32	132.15	132.10	131.94
27		134.72	133.02	132.86	.06	136.34	.85	.58	.29	.16	.09	.94
28		.72	132.98	133.08	135.30	137.16	.80	.60	.27	.16	.09	.93
29		.32	.84	135.56	.76	138.00	.77	.60	.27	.15	.08	.93
30		.09	.68	.82	134.42	137.47	.76	.58	.26	.14		.92
31		133.72		.28	.86		.73		.25	.19		.92
Mean			132.72	133.36	134.08	135.52	134.03	132.65	132.42	132.20	132.17	131.99
Max.			133.56	135.82	136.68	138.00	137.22	132.82	132.56	132.25	132.27	132.07
Min.			132.30	132.51	132.80	133.99	132.73	132.58	132.25	132.14	132.08	131.92

WATER YEAR 1959 : Max. 138.00 m. Min. – m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			55	12	164	173	485	16	12	4.00	2.20	0.85
2			39	10	177	133	347	16	11	3.80	2.20	0.85
3			34	31	163	96	261	16	11	3.80	2.60	0.80
4			28	77	153	80	246	15	11	3.60	3.00	0.80
5			23	57	59	88	345	15	11	3.40	3.80	0.75
6			21	61	49	99	251	20	11	3.60	4.40	0.70
7			24	67	45	141	189	16	11	3.80	4.20	0.70
8			20	59	38	125	140	15	10	3.80	4.00	0.70
9			25	40	39	143	107	14	10	3.60	4.40	0.70
10			27	29	36	361	88	15	9.50	3.40	4.00	0.70
11			21	21	41	386	73	14	9.25	3.20	3.80	0.70
12			16	16	43	412	62	15	9.00	3.20	3.40	0.65
13			18	13	57	428	54	14	8.75	3.20	3.20	0.65
14			13	21	33	420	50	14	8.25	3.20	2.80	0.60
15		16	15	66	26	375	53	14	8.25	3.00	2.60	0.55
16		32	10	48	25	308	59	13	8.00	3.00	2.40	0.50
17		31	8.75	42	23	237	69	14	7.50	2.80	2.40	0.47
18		18	8.00	46	19	187	59	14	7.50	2.80	2.00	0.45
19		15	7.25	33	26	155	49	14	7.50	2.60	1.80	0.45
20		12	6.50	24	23	147	48	14	7.25	2.40	1.40	0.42
21		9.50	5.75	21	20	130	38	14	6.75	2.40	1.40	0.40
22		19	5.50	31	26	159	33	14	6.75	2.40	1.20	0.37
23		30	5.00	20	40	134	30	14	6.25	2.40	1.00	0.37
24		31	5.00	17	371	111	28	14	6.00	2.20	1.00	0.37
25		84	5.25	25	325	90	25	13	5.75	2.20	1.00	0.37
26		80	7.25	27	370	163	23	13	5.50	2.00	1.00	0.35
27		132	28	22	274	314	21	12	4.80	2.20	0.95	0.35
28		135	27	31	187	470	19	13	4.40	2.20	0.95	0.32
29		103	21	214	138	690	18	13	4.40	2.00	0.90	0.32
30		86	15	243	110	547	18	12	4.20	1.80		0.30
31		64		185	147		17		4.00	2.80		0.30
Total			544.25	1,609	3,247	7,302	3,305	430	247.55	90.80	70.00	16.81
Mean			18.1	51.9	105	235	107	14.3	7.98	2.97	2.41	0.54
Max.			55	243	371	690	485	20	12	4.00	4.40	0.85
Min.			5.00	10	19	80	17	12	4.00	1.80	0.90	0.30
Runoff - mcm.			47.023	139.018	280.541	630.893	285.552	37.152	21.388	7.845	6.048	1.452

WATER YEAR 1959 : Max. 690 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 29	06.00	138.01	692				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
WANG RIVER BASIN

Mae Mo Creek at Thanhin Lignite Office, Lampang (W.7)

Location: Lat 18°- 18' - 21" N, Long 99°- 43' - 40" E, on left bank at Thanhin Lignite Office, 11 kilometers upstream from Mae Mo Railway Station, Amphoe Muang, Lampang.

Drainage Area: 196 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +296.92 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 60

Rating Operation:

Period of Rating: 1954 - 56
Rated by Float: -
Rated by Current Meter: 1954 - 56

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

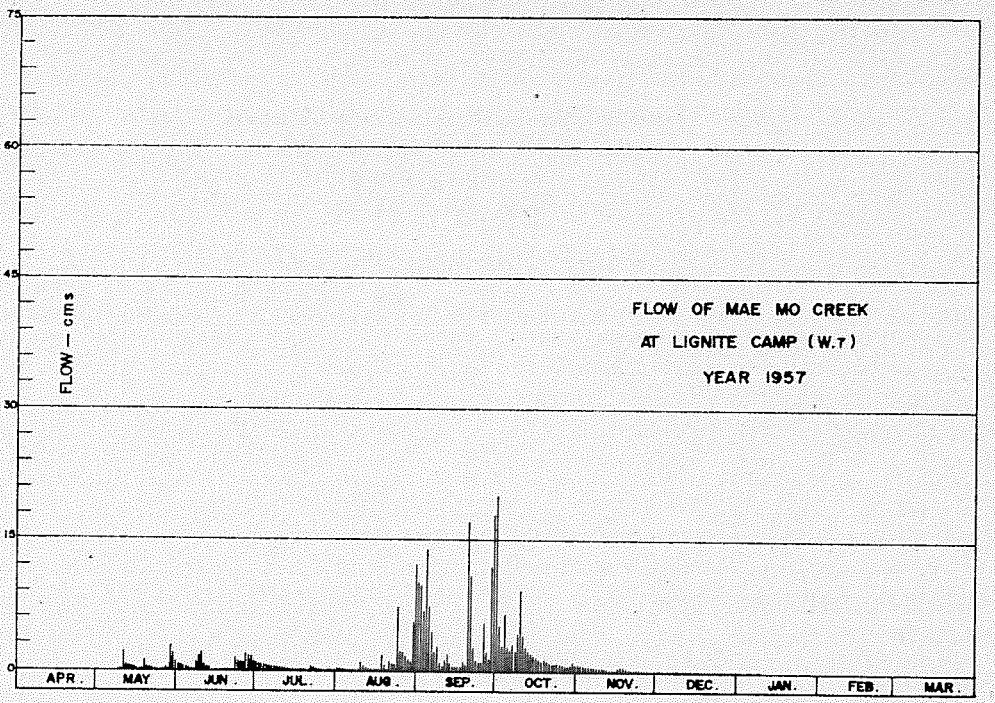
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1956. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: No gage height record and no flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			297.22	297.31	297.13	298.33	299.00	297.25	297.01	296.94		
2			.24	.28	.13	.30	297.90	.24	.01	.94		
3			.19	.25	.11	.04	.63	.22	.01	.94		
4	296.99		.15	.23	.09	.64	298.02	.20	.00	.94		
5	297.53		.13	.21	.07	.10	297.62	.19	.00	.93		
6	297.04		297.10	297.19	297.05	297.82	297.55	297.18	297.00	296.93		
7	296.99		.08	.18	.04	.50	.65	.17	.00	.93		
8	.96		.34	.16	.03	.62	.55	.15	296.99	.93		
9	.95	297.01	.45	.14	.04	.30	.81	.14	.99			
10	.95	299.02	.53	.13	.32	.18	298.26	.12	.99			
11	296.95	297.53	297.20	297.13	297.17	297.36	297.77	297.12	296.98			
12	.94	.22	.16	.11	.13	.49	.60	.10	.98			
13	.94	.17	.12	.11	.11	.31	.53	.10	.98			
14	.94	.15	.05	.10	.09	.20	.48	.08	.98			
15	.94	.13	.04	.09	.08	.17	.44	.07	.98			
16		297.11	397.03	297.08	297.08	297.21	297.40	297.12	296.98			
17		.04	.02	.08	.07	.21	.39	.18	.97			
18		.07	.01	.07	.46	.32	.33	.16	.97			
19		.20	.00	.07	.19	.24	.40	.13	.97			
20		.34	296.99	.06	.06	298.79	.33	.10	.96			
21		297.14	296.99	297.06	297.35	298.40	297.32	297.09	296.96			
22		.14	297.02	.18	.26	297.60	.28	.07	.96			
23		.11	.42	.13	.24	.34	.26	.06	.96			
24		.06	.33	.10	298.10	.30	.29	.05	.96			
25		.03	.31	.08	297.52	.31	.25	.04	.96			
26		297.04	297.30	297.06	297.51	297.93	297.22	297.03	296.95			
27		.13	.51	.05	.44	.47	.21	.03	.95			
28		.07	.46	.03	.39	.41	.20	.02	.95			
29		.62	.45	.03	.32	298.46	.23	.02	.95			
30		.49	.34	.02	.93	.88	.29	.02	.94			
31		.31		.08	298.49		.26		.94			
Mean			297.21	297.12	297.29	297.71	297.53	297.11	296.97			
Max.			297.53	297.31	298.49	298.88	299.00	297.25	297.01			
Min.			296.99	297.02	297.03	297.17	297.20	297.02	296.94			

WATER YEAR 1957 : Max. 299.00 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			0.64	0.99	0.35	10	20	0.75	0.09	0.01		
2			0.71	0.87	0.35	9.75	5.20	0.71	0.09	0.01		
3			0.53	0.75	0.29	6.69	2.87	0.64	0.09	0.01		
4	0.06		0.41	0.67	0.24	14	6.47	0.57	0.07	0.01		
5	2.19		0.35	0.60	0.20	7.35	2.82	0.53	0.07			
6	0.14		0.27	0.53	0.16	4.48	2.32	0.50	0.07			
7	0.06		0.22	0.53	0.14	2.20	3.02	0.47	0.07			
8	0.03		1.13	0.44	0.12	2.80	2.32	0.41	0.06			
9	0.02	0.09	1.69	0.38	0.14	0.95	4.39	0.38	0.06			
10	0.02	0.11	2.19	0.35	1.03	0.50	9.25	0.44	0.06			
11	0.02	2.19	0.57	0.35	0.47	1.28	4.03	0.32	0.05			
12	0.01	0.64	0.44	0.29	0.35	1.94	2.65	0.27	0.05			
13	0.01	0.47	0.32	0.29	0.29	0.99	2.19	0.27	0.05			
14	0.01	0.41	0.16	0.27	0.24	0.57	1.88	0.22	0.05			
15	0.01	0.35	0.14	0.24	0.22	0.47	1.65	0.20	0.05			
16		0.29	0.12	0.22	0.22	0.60	1.43	0.32	0.05			
17		0.14	0.11	0.22	0.20	0.60	1.38	0.50	0.04			
18		0.20	0.09	0.20	1.76	1.03	1.08	0.44	0.04			
19		0.57	0.07	0.20	0.53	0.71	1.43	0.35	0.04			
20		1.13	0.06	0.18	0.18	17	1.08	0.27	0.03			
21		0.38	0.06	0.18	1.18	11	1.03	0.24	0.03			
22		0.38	0.11	0.50	0.79	2.65	0.87	0.20	0.03			
23		0.29	1.54	0.35	0.71	1.13	0.79	0.18	0.03			
24		0.18	1.08	0.27	7.35	0.95	0.91	0.16	0.03			
25		0.12	0.99	0.22	2.13	0.99	0.75	0.14	0.03			
26		0.14	0.95	0.18	2.06	5.51	0.64	0.12	0.02			
27		0.35	2.06	0.16	1.65	1.82	0.60	0.12	0.02			
28		0.20	1.76	0.12	1.38	1.48	0.57	0.11	0.02			
29		1.94	1.69	0.12	1.03	12	0.67	0.11	0.02			
30		0.99	1.13	0.11	5.51	18	0.91	0.11	0.01			
31				0.22	12		0.79		0.01			
Total			21.59	11.00	43.37	139.39	85.99	10.05	1.43			
Mean			0.72	0.35	1.40	4.65	2.77	0.33	0.05			
Max.			2.19	0.99	12	18	20	0.75	0.09			
Min.			0.06	0.11	0.12	0.47	0.57	0.11	0.01			
Runoff - mcm.			1.865	0.950	3.747	12.042	7.429	0.868	0.123			

WATER YEAR 1957 : Max. 20 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 1	0.00	300.40	53				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
WANG RIVER BASIN

Mae Mo Creek at Thanhin Lignite Office, Lampang (W.7)

Location: Lat 18°- 18' - 21" N, Long 99°- 42'- 40" E, on left bank at Thanhin Lignite Office, 11 kilometers upstream from Mae Mo Railway Station, Amphoe Muang, Lampang.

Drainage Area: 196 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +296.92 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 60

Rating Operation:

Period of Rating: 1954 - 56
Rated by Float: -
Rated by Current Meter: 1954 - 56

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual rating.

Overbank Flow Conditions: No overbank flow.

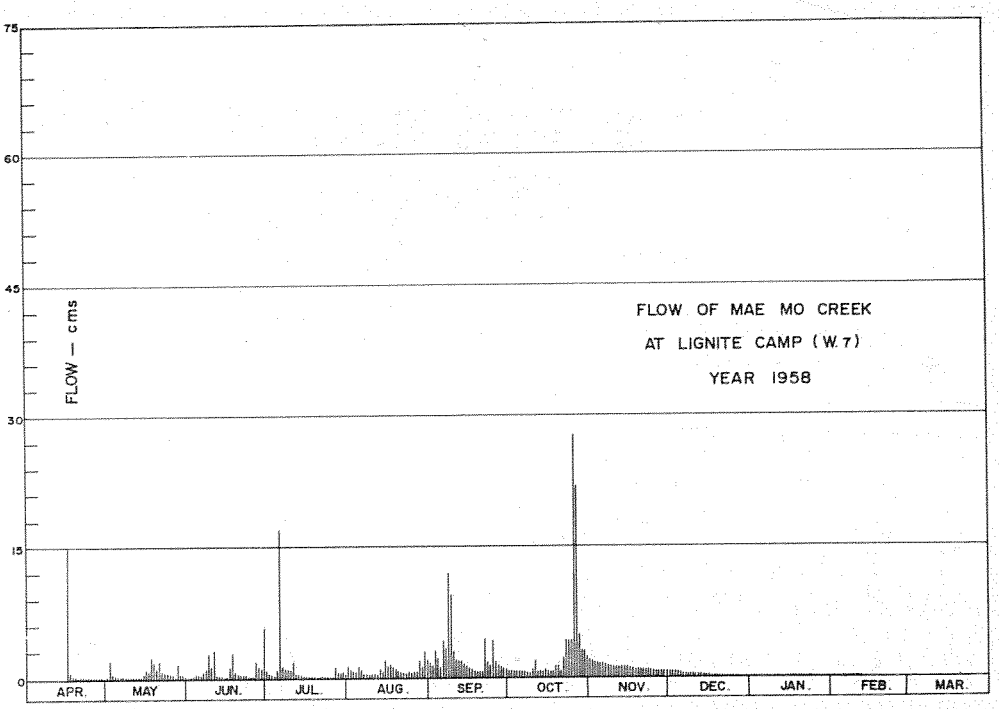
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1956. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: No gage height record and no flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		296.96	297.07	297.30	297.40	297.43	297.28	297.52	297.25	297.00	296.95	
2		297.49	.05	.16	.29	.38	.28	.49	.24	.00	.95	
3		.14	.10	.13	.28	.65	.27	.47	.24	.00	.95	
4		.11	.19	.11	.25	.54	.26	.46	.23	.00	.95	
5		.10	.15	.29	.40	.35	.25	.45	.22	296.99	.95	
6		297.08	297.13	298.83	297.28	297.79	297.23	297.44	297.20	296.99	296.94	
7		.08	.23	297.40	.20	.69	.22	.43	.20	.99	.94	
8		.07	.35	.35	.17	298.51	.21	.41	.19	.99	.94	
9		.06	.61	.32	.16	.28	.20	.40	.19	.99	.94	
10		.05	.37	.30	.16	297.66	.31	.38	.18	.98	.94	
11		297.04	297.68	297.48	297.18	297.51	297.51	297.37	297.16	296.98	296.94	
12		.04	.14	.17	.15	.50	.24	.36	.15	.98	.94	
13		.03	.12	.14	.33	.50	.28	.36	.14	.97	.94	
14		.02	.11	.12	.26	.45	.26	.37	.13	.97		
15		.60	.10	.11	.51	.40	.31	.36	.13	.97		
16	298.65	297.33	297.09	297.11	297.38	297.35	297.27	297.35	297.12	296.97		
17	297.22	.28	.36	.10	.42	.31	.25	.34	.11	.97		
18	.06	.56	.63	.10	.36	.27	.24	.33	.10	.97		
19	.05	.36	.23	.09	.29	.24	.40	.32	.10	.97		
20	.04	.32	.15	.08	.29	.25	.40	.31	.09	.97		
21	297.03	297.29	297.13	297.08	297.23	297.24	297.38	297.30	297.08	296.96		
22	.02	.26	.12	.08	.21	.82	.56	.30	.07	.96		
23	.01	.23	.12	.07	.21	.46	.80	.29	.06	.96		
24	.00	.21	.11	.07	.22	.41	.79	.28	.06	.96		
25	.00	.18	.10	.06	.21	.79	.79	.28	.05	.96		
26	296.99	297.16	297.10	297.06	297.23	297.48	299.39	297.27	297.04	296.96		
27	.98	.13	.48	.39	.24	.41	.07	.27	.03	.96		
28	.97	.45	.36	.23	.51	.36	297.88	.26	.03	.96		
29	.97	.19	.33	.21	.37	.32	.66	.26	.02	.96		
30	.96	.14	.95	.26	.65	.30	.61	.25	.01	.96		
31		.09		.20	.51		.56		.01	.95		
Mean		297.19	297.25	297.24	297.30	297.52	297.52	297.36	297.12	296.97		
Max.		297.56	297.68	298.83	297.65	298.51	299.39	297.52	297.25	297.00		
Min.		296.96	297.05	297.06	297.15	297.24	297.20	297.25	297.01	296.95		

WATER YEAR 1958 : Max. 299.39 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		0.03	0.20	0.95	1.43	1.59	0.87	2.13	0.75	0.07	0.02	
2		1.94	0.16	0.44	0.91	1.33	0.87	1.94	0.71	0.07	0.02	
3		0.38	0.27	0.35	0.87	3.02	0.83	1.82	0.71	0.07	0.02	
4		0.29	0.53	0.29	0.75	2.26	0.79	1.76	0.67	0.07	0.02	
5		0.27	0.41	0.91	1.43	1.18	0.75	1.69	0.64	0.06	0.02	
6		0.22	0.35	17	0.87	4.21	0.67	1.65	0.57	0.06	0.01	
7		0.22	0.67	1.43	0.57	3.32	0.64	1.59	0.57	0.06	0.01	
8		0.20	1.18	1.18	0.47	12	0.60	1.48	0.53	0.06	0.01	
9		0.18	2.72	1.03	0.44	9.50	0.57	1.40	0.53	0.06	0.01	
10		0.16	1.98	0.95	0.44	3.10	0.99	1.33	0.50	0.05	0.01	
11		0.14	3.25	1.88	0.50	2.06	2.06	1.28	0.44	0.05	0.01	
12		0.14	0.38	0.47	0.41	2.00	0.71	1.23	0.41	0.05	0.01	
13		0.12	0.32	0.38	1.08	2.00	0.87	1.23	0.38	0.04	0.01	
14		0.11	0.29	0.32	0.79	1.69	0.79	1.23	0.35	0.04		
15		2.65	0.27	0.29	2.06	1.43	0.99	1.23	0.35	0.04		
16	15	1.08	0.24	0.29	1.33	1.18	0.83	1.18	0.32	0.04		
17	0.64	0.87	1.23	0.27	1.54	0.99	0.75	1.13	0.29	0.04		
18	0.18	2.39	2.87	0.27	1.23	0.83	0.71	1.08	0.27	0.04		
19	0.16	1.23	0.67	0.24	0.91	0.71	1.43	1.03	0.27	0.04		
20	0.14	1.03	0.41	0.22	0.79	0.75	1.43	0.99	0.24	0.04		
21	0.12	0.91	0.35	0.22	0.67	0.71	0.87	0.95	0.22	0.03		
22	0.11	0.79	0.32	0.22	0.60	4.48	2.39	0.95	0.20	0.03		
23	0.09	0.67	0.32	0.20	0.60	1.76	4.30	0.91	0.18	0.03		
24	0.07	0.60	0.29	0.20	0.64	1.48	4.21	0.87	0.18	0.03		
25	0.07	0.50	0.27	0.18	0.60	4.21	4.21	0.87	0.16	0.03		
26	0.06	0.44	0.27	0.18	0.67	1.88	28	0.83	0.14	0.03		
27	0.05	0.12	1.88	1.23	0.71	1.48	22	0.83	0.12	0.03		
28	0.04	1.69	1.23	0.67	2.06	1.23	5.02	0.79	0.12	0.03		
29	0.04	0.53	1.08	0.60	1.28	1.03	3.10	0.79	0.11	0.03		
30	0.03	0.38	5.72	0.79	3.02	0.95	3.10	0.75	0.09	0.03		
31		0.24		0.57	2.06		2.39		0.09	0.02		
Total		20.52	29.43	34.22	31.73	74.36	97.74	36.99	11.11	1.37		
Mean		0.66	0.98	1.10	1.02	2.48	3.15	1.23	0.36	0.04		
Max.		2.65	5.72	17	3.02	12	28	2.13	0.75	0.07		
Min.		0.03	0.16	0.18	0.41	0.71	0.57	0.75	0.09	0.02		
Runoff — mcm.		1.773	2.543	2.957	2.743	6.425	8.445	3.196	0.960	0.118		

WATER YEAR 1958 : Max. 28 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 26	18.00	301.81	101				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
WANG RIVER BASIN

Mae Mo Creek at Thanhin Lignite Office, Lampang (W.7)

Location: Lat 18°– 18' – 21" N, Long 99°– 42' – 40" E, on left bank at Thanhin Lignite Office, 11 kilometers upstream from Mae Mo Railway Station, Amphoe Muang, Lampang.

Drainage Area: 196 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +296.92 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 – time daily readings at 06.00, 09.00, 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 – 60

Rating Operation:

Period of Rating: 1954 – 56
Rated by Float: –
Rated by Current Meter: 1954 – 56

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

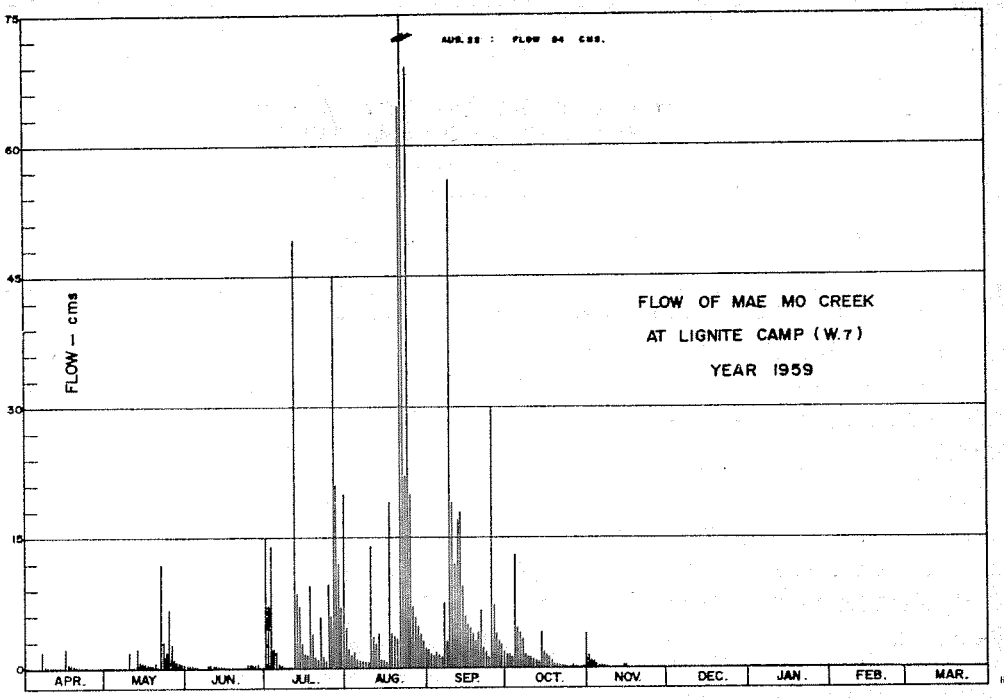
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1956. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: No gage height record and no flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		296.95	297.13	298.68	297.84	297.52	297.43	297.43	297.01	296.96	296.93	296.90
2		.95	.12	297.89	.55	.46	.45	.36	.01	.96	.93	.90
3		.95	.12	298.60	.42	.42	.38	.29	.00	.96	.93	.90
4		.95	.11	297.52	.48	.49	298.53	.19	.00	.96	.93	.90
5		.95	.10	.49	.32	.43	297.83	.14	.00	.96	.93	297.03
6	298.88	296.94	297.09	297.19	297.29	297.40	297.77	297.15	297.00	296.95	296.93	297.02
7	297.49	.94	.09	.14	.27	298.12	.72	.15	.00	.95	.92	.02
8	.11	.94	.08	.11	.26	297.65	.44	.12	296.99	.95	.92	.01
9	.05	.94	.15	.09	.25	300.51	.40	.10	.99	.95	.92	.01
10	.04	297.48	.14	.06	298.61	298.91	.36	.09	.99	.95	.92	.01
11	297.02	297.06	297.13	297.04	297.73	298.49	297.32	297.07	296.99	296.95	296.92	297.01
12	.01	.03	.12	300.28	.64	.83	.29	.07	.99	.95	.92	.00
13	.00	.55	.11	298.20	.76	.88	.28	.06	.99	.95	.92	.00
14	296.98	.25	.10	.07	.31	.28	.79	.16	.99	.95	.92	.00
15	.98	.22	.09	297.56	.29	297.97	.49	.15	.98	.95	.92	296.99
16	297.55	297.20	297.08	297.46	297.28	297.88	297.44	297.09	296.98	296.95	296.91	296.99
17	.20	.17	.07	.42	298.93	.83	.37	.06	.98	.95	.91	.99
18	.13	.14	.06	298.28	297.78	.76	.29	.06	.98	.94	.91	.99
19	.11	.12	.05	297.78	.74	.65	.18	.05	.98	.94	.91	.98
20	.08	.21	.04	.37	.71	.78	.17	.04	.98	.94	.91	.98
21	297.06	297.09	297.03	297.31	300.41	297.84	297.16	297.04	296.98	296.94	296.91	296.98
22	.05	298.38	.05	.97	301.36	.55	.14	.03	.97	.94	.91	.98
23	.03	297.65	.07	.39	299.12	.48	.12	.03	.97	.94	.91	.97
24	.02	.47	.19	.27	300.95	.41	.11	.03	.97	.94	.91	.97
25	296.99	298.07	.15	298.29	299.00	299.48	.10	.02	.97	.94	.90	.97
26	296.97	297.61	297.16	297.99	298.08	298.10	297.15	297.02	296.97	296.94	296.90	296.97
27	.96	.33	.13	300.13	297.96	297.77	.11	.02	.97	.94	.90	.96
28	.98	.26	.19	299.04	.86	.67	.10	.02	.96	.94	.90	.96
29	.96	.23	.05	298.47	.76	.61	.08	.01	.96	.93	.90	.96
30	.95	.18	.03	.06	.67	.47	.07	.01	.96	.93		.96
31		.16		.97	.56		.78		.96	.93		.96
Mean		297.24	297.10	297.94	298.07	297.99	297.38	297.10	296.98	296.95	296.91	296.98
Max.		298.38	297.19	300.28	301.36	300.51	298.53	297.43	297.01	296.96	296.93	297.03
Min.		296.94	297.03	297.04	297.25	297.41	297.07	297.01	296.96	296.93	296.90	296.90

WATER YEAR 1959 : Max. 301.36 m. Min. 296.90 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		0.02	0.35	15	4.66	2.13	1.59	1.59	0.09	0.03		
2		0.02	0.32	7.24	2.32	1.76	1.69	1.08	0.09	0.03		
3		0.02	0.32	14	1.54	1.54	1.33	0.91	0.07	0.03		
4		0.02	0.29	2.13	1.88	1.94	13	0.53	0.07	0.03		
5		0.02	0.27	1.94	1.03	1.59	4.57	0.38	0.07	0.03		0.12
6	18	0.01	0.24	0.53	0.91	1.43	4.03	0.41	0.07	0.02		0.11
7	1.94	0.01	0.24	0.38	0.83	7.58	3.58	0.41	0.07	0.02		0.11
8	0.29	0.01	0.22	0.29	0.79	3.02	1.65	0.32	0.06	0.02		0.09
9	0.16	0.01	0.41	0.14	0.75	56	1.43	0.27	0.06	0.02		0.09
10	0.14	1.88	0.38	0.18	14	19	1.23	0.24	0.06	0.02		0.09
11	0.11	0.18	0.35	0.14	3.67	12	1.03	0.20	0.06	0.02		0.09
12	0.09	0.12	0.32	49	2.95	17	0.91	0.20	0.06	0.02		0.07
13	0.07	2.32	0.29	8.50	3.94	18	0.87	0.18	0.06	0.02		0.07
14	0.05	0.75	0.27	7.02	0.99	9.50	4.21	0.44	0.06	0.02		0.07
15	0.05	0.64	0.24	2.39	0.91	5.99	1.94	0.41	0.05	0.02		0.06
16	2.32	0.57	0.22	1.76	0.87	5.02	1.65	0.24	0.05	0.02		0.06
17	0.57	0.47	0.20	1.54	19	4.57	1.28	0.18	0.05	0.02		0.06
18	0.35	0.38	0.18	9.50	4.12	3.94	0.91	0.18	0.05	0.01		0.06
19	0.29	0.32	0.16	4.12	3.76	3.02	0.50	0.16	0.05	0.01		0.05
20	0.22	0.60	0.14	1.28	3.49	4.12	0.47	0.14	0.05	0.01		0.05
21	0.18	0.24	0.12	0.99	53	6.69	0.44	0.14	0.05	0.01		0.05
22	0.16	11	0.16	5.93	84	2.32	0.38	0.12	0.04	0.01		0.05
23	0.12	3.02	0.20	1.38	23	1.88	0.32	0.12	0.02	0.01		0.04
24	0.11	1.82	0.53	0.83	69	1.48	0.29	0.12	0.04	0.01		0.04
25	0.06	6.80	0.41	9.62	20	30	0.27	0.11	0.04	0.01		0.04
26	0.04	2.72	0.44	6.14	7.13	7.35	0.41	0.11	0.04	0.01		0.04
27	0.03	1.08	0.35	45	5.83	4.03	0.29	0.11	0.04	0.01		0.03
28	0.05	0.79	0.53	21	4.84	3.17	0.27	0.11	0.03	0.01		0.03
29	0.03	0.67	0.16	12	3.94	2.72	0.22	0.09	0.03			0.03
30	0.02	0.50	0.12	6.91	3.17	1.82	0.20	0.09	0.03			0.03
31		0.44		20	2.39		4.12		0.03			0.03
Total	25.45	37.45	8.25	256.98	348.71	240.61	55.08	9.59	1.66	0.49	0.00	1.66
Mean	0.85	1.21	0.27	3.29	11.2	8.02	1.78	0.32	0.05	0.02	0.00	0.05
Max.	18	11	0.53	49	84	56	13	1.59	0.09	0.03	0.00	0.12
Min.	0.00	0.01	0.12	0.14	0.75	1.43	0.20	0.09	0.03	0.01	0.00	0.00
Runoff - mcm.	2.199	3.236	0.713	22.203	30.128	20.789	4.760	0.829	0.143	0.042	0.00	0.143

WATER YEAR 1959 : Max. 84 Min. 0.00 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 22	09.00	302.22	118				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
WANG RIVER BASIN

Mae Chang Creek at Ban Sop Mo, Lampang (W.8)

Location: Lat 18°- 14' - 52" N, Long 99°- 42' - 40" E, on right bank at Ban Sop Mo, 700 meters downstreams from the confluence with Mae Mo Creek or 2 kilometers downstream from Mae Mo Railway Station, Amphoe Mae Tha, Lampang.

Drainage Area: 754 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +280.68 m. (M.S.L.)

Bench Mark:
- Location:
- Elevation:

Gage Reading Frequency: 24 - time daily readings from 06.00 - 24.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 readings.

Period of Available Gage Records: 1954 - 60.

Rating Operation:
- Period of Rating: 1954 - 60
- Rated by Float: -
- Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Fairly stable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

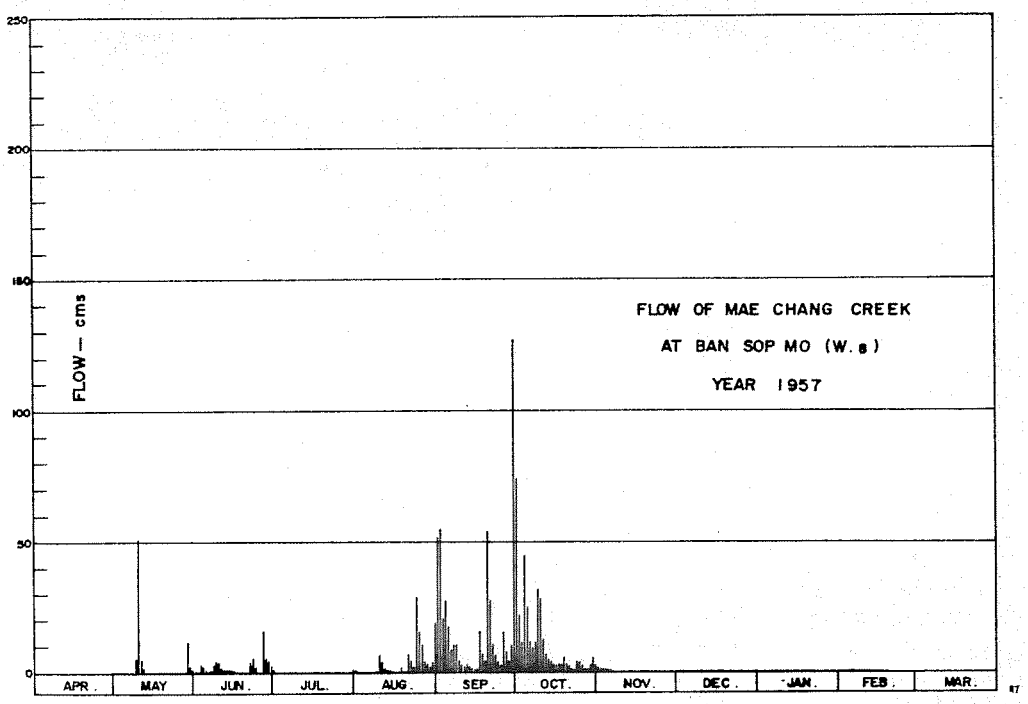
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1957. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: No flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			281.03	281.06	281.01	282.65	283.04	281.12	281.02	280.81	280.75	
2			.00	.01	280.92	.71	282.11	.09	.02	.80	.75	
3			.26	280.97	.88	.16	281.78	.06	.02	.80	.75	
4			.19	.94	.86	.27	282.52	.03	.02	.80	.74	
5			.04	.92	.85	.00	.17	.01	.02	.79	.74	
6			280.99	280.91	280.83	281.60	281.75	280.99	281.02	280.79	280.74	
7			281.04	.89	.82	.72	.67	.98	.02	.79	.73	
8			.22	.87	.82	.76	.78	.97	.02	.79	.73	
9		281.43	.32	.85	.80	.38	282.21	.96	.02	.78	.73	
10		282.65	.32	.84	281.28	.23	.21	.94	.02	.78	.73	
11		281.39	281.10	280.84	281.30	281.19	281.74	280.93	280.95	280.79	280.72	
12		.12	.04	.85	.05	.27	.53	.93	.88	.79	.72	
13		.01	.06	.87	.05	.20	.39	.92	.88	.78	.72	
14		280.90	.05	.86	.00	.12	.31	.91	.87	.78	.71	
15		.86	.01	.84	280.93	.10	.24	.91	.87	.78	.71	
16		280.83	280.99	280.84	280.89	281.06	281.23	280.91	280.86	280.78	280.71	
17		.82	.97	.84	.87	.65	.27	.92	.86	.78	.71	
18		.88	.94	.84	281.26	.51	.23	.93	.86	.78	.71	
19		281.26	.89	.87	280.94	.36	.44	.93	.85	.77	.71	
20		.01	.86	.87	.93	282.75	.27	.91	.85	.77		
21		280.92	280.90	280.89	281.59	282.26	281.22	280.90	280.85	280.78		
22		.87	281.29	.91	.28	281.74	.14	.90	.84	.80		
23		.89	.41	.90	.13	.45	.11	.89	.84	.79		
24		.91	.20	.88	282.21	.28	.41	.89	.83	.78		
25		.89	.04	.86	281.93	.25	.35	.88	.83	.78		
26		280.86	280.99	280.85	281.70	281.84	281.23	280.88	280.83	280.77		
27		281.12	281.93	.81	.32	.57	.12	.88	.82	.76		
28		280.89	.42	.80	.20	.38	.07	.88	.82	.76		
29		281.62	.36	.80	.13	.71	.31	.87	.82	.75		
30		.21	.20	.95	.27	283.00	.45	.95	.81	.74		
31		.07		281.12	282.05		.20		.81	.74		
Mean			281.10	280.89	281.16	281.71	281.56	280.94	280.90	280.78		
Max.			281.93	281.12	282.21	283.00	283.04	281.12	281.02	280.81		
Min.			280.86	280.80	280.80	281.06	281.07	280.87	280.81	280.74		

WATER YEAR 1957 : Max. 283.04 m. Min. 280.74 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			0.99	1.32	1.46	52	73	2.36	0.93	0.14	0.05	
2			0.83	0.99	0.78	54	22	1.97	0.93	0.12	0.05	
3			3.42	0.78	0.54	21	11	1.58	0.93	0.12	0.05	
4			2.49	0.63	0.38	28	44	1.32	0.93	0.12	0.04	
5			1.05	0.54	0.29	17	24	1.18	0.93	0.10	0.04	
6			0.83	0.50	0.19	8.13	11	1.05	0.93	0.10	0.04	
7			1.18	0.42	0.23	11	9.75	0.99	0.93	0.10	0.03	
8			3.30	0.35	0.12	11	11	0.93	0.93	0.10	0.03	
9		5.55	4.69	0.29	0.07	4.42	32	0.88	0.93	0.09	0.03	
10		56	4.24	0.26	7.18	3.08	27	0.78	0.93	0.09	0.03	
11		4.97	2.23	0.29	4.16	2.75	12	0.73	0.58	0.10	0.02	
12		1.71	1.46	0.32	1.97	3.54	7.18	0.73	0.32	0.10	0.02	
13		0.88	1.71	0.38	1.71	2.75	5.11	0.68	0.32	0.09	0.02	
14		0.38	1.58	0.35	1.46	1.71	4.03	0.63	0.29	0.09	0.01	
15		0.26	1.25	0.29	0.83	1.46	3.19	0.63	0.29	0.09	0.01	
16		0.19	1.11	0.29	0.50	1.18	3.08	0.63	0.26	0.09	0.01	
17		0.16	0.99	0.29	0.29	16	3.54	0.65	0.26	0.09	0.01	
18		0.32	0.83	0.29	2.97	6.80	3.08	0.73	0.26	0.09	0.01	
19		3.42	0.58	0.38	0.93	4.16	6.00	0.73	0.23	0.07	0.01	
20		0.88	0.46	0.38	0.78	53	3.42	0.63	0.23	0.07		
21		0.46	0.63	0.50	7.56	27	2.86	0.58	0.23	0.09		
22		0.68	4.55	0.58	4.46	11	1.84	0.53	0.21	0.12		
23		0.35	5.55	0.54	2.36	6.64	1.39	0.54	0.21	0.10		
24		0.42	2.49	0.46	29	4.16	4.97	0.54	0.19	0.09		
25		0.35	0.83	0.38	16	3.66	4.29	0.50	0.19	0.09		
26		0.26	0.50	0.38	11	16	3.08	0.50	0.19	0.07		
27		1.84	16	0.26	4.69	8.51	1.97	0.50	0.16	0.06		
28		0.35	5.55	0.23	3.08	4.97	1.58	0.50	0.16	0.06		
29		12	4.97	0.23	2.23	11	3.19	0.46	0.16	0.05		
30		2.62	2.97	0.83	3.78	127	6.00	0.83	0.14	0.04		
31		1.18		1.58	19		2.86		0.14	0.04		
Total		95.23	79.31	15.31	128.96	519.92	349.41	25.37	14.32	2.77	0.51	
Mean		3.07	2.64	0.49	4.16	17.3	11.3	0.85	0.46	0.09	0.02	
Max.		56	16	1.58	29	127	73	2.36	0.93	0.14	0.05	
Min.		0.00	0.46	0.23	0.07	1.18	1.39	0.46	0.14	0.04	0.00	
Runoff - MCM.		8.228	6.852	1.323	11.142	44.921	30.189	2.192	1.237	0.239	0.044	

WATER YEAR 1957 : Max. 127 Min. 0.00 Mean 3.37 Annual Runoff 106.411 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 30	20.00	286.23	475				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
WANG RIVER BASIN

Mae Chang Creek at Ban Sop Mo, Lampang (W.8)

Location: Lat 18°- 14' - 52" N, Long 99°- 42' - 40" E, on right bank at Ban Sop Mo, 700 meters downstream from the confluence with Mae Mo Creek or 2 kilometers downstream from Mae Mo Railway Station, Amphoe Mae Tha, Lampang.

Drainage Area: 754 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +280.68 sq.km.

Bench Mark:

Location:

Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 60

Rating Operation:

Period of Rating: 1954 - 60

Rated by Float: -

Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Fairly stable, no shifting adjustment but mean hourly discharge are used for flow computation.

Overbank Flow Conditions: No overbank flow.

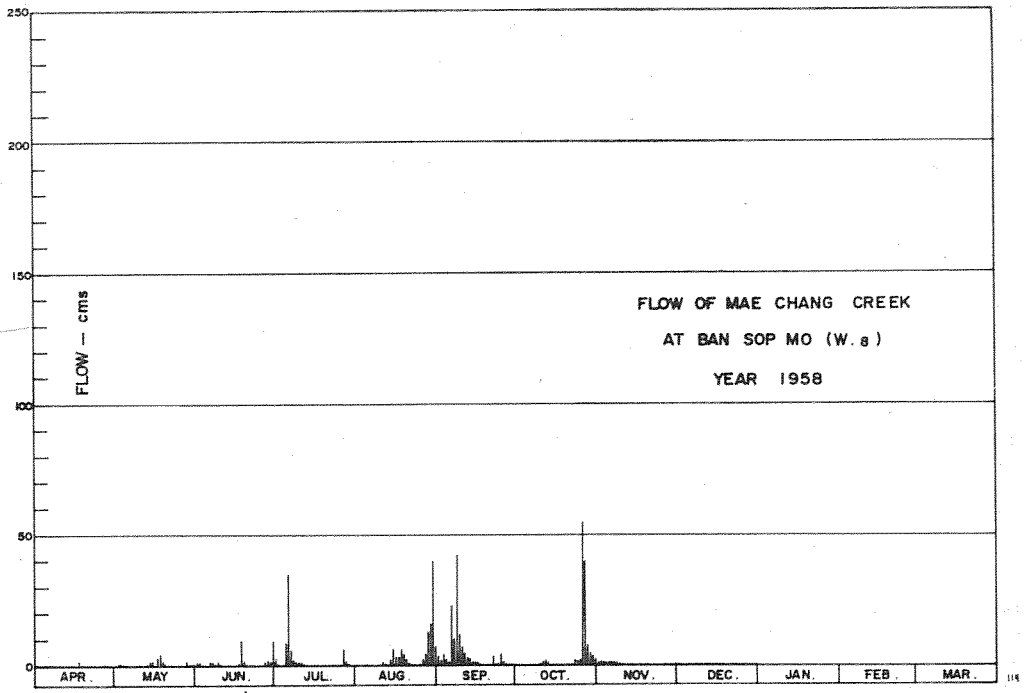
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1958. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: No flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		280.72	280.76	281.12	280.96	281.25	280.83	281.04	280.85	280.76	280.71	280.68
2		.95	.86	280.94	.86	.11	.82	.05	.84	.75	.71	.67
3		.85	.80	.89	.93	.37	.83	.05	.83	.75	.70	.67
4		.83	.84	.84	.91	.14	.81	.01	.82	.75	.70	.67
5		.83	.81	281.64	.94	.06	.81	.02	.82	.75	.70	.66
6		280.82	281.07	282.56	280.92	282.05	280.80	281.05	280.82	280.74	280.70	280.66
7		.81	.01	281.32	.92	281.65	.79	.02	.81	.74	.70	.66
8		.80	280.90	.10	.89	282.19	.80	.00	.81	.74	.70	.66
9		.80	281.06	.04	.85	281.69	.87	280.98	.81	.74	.70	.66
10		.79	280.86	.00	.92	.52	.85	.96	.84	.73	.70	.65
11		280.78	280.92	281.05	281.09	281.29	281.07	280.94	280.84	280.73	280.70	280.65
12		.78	.95	280.94	280.95	.24	.10	.92	.83	.73	.70	.65
13		.77	.81	.91	.93	.16	.01	.91	.83	.73	.69	.65
14		281.04	.78	.88	281.16	.09	280.91	.92	.84	.73	.69	.64
15		.05	.77	.86	.56	.03	.90	.90	.84	.72	.69	.64
16	282.22	280.89	280.75	280.85	281.25	280.99	280.84	280.90	280.83	280.72	280.69	280.64
17	281.05	281.21	281.01	.84	.27	.95	.80	.90	.83	.72	.69	.64
18	280.91	.30	.46	.83	.48	.91	.80	.88	.83	.72	.69	.64
19	.87	.07	.10	.82	.33	.89	.83	.88	.82	.72	.69	.63
20	.85	280.97	280.95	.81	.11	.87	.95	.88	.82	.72	.68	.63
21	280.83	280.88	280.88	280.80	280.99	280.87	280.85	280.87	280.81	280.72	280.68	280.63
22	.82	.84	.85	.82	.91	281.27	.89	.87	.81	.72	.68	.63
23	.80	.81	.83	.81	.87	280.97	281.12	.87	.80	.71	.68	.62
24	.79	.78	.81	.81	.86	281.00	.08	.86	.79	.71	.68	.62
25	.79	.76	.78	.81	.84	281.41	.13	.86	.78	.71	.68	.62
26	280.77	280.75	280.77	280.95	280.81	281.07	282.08	280.86	280.78	280.71	280.68	280.62
27	.77	.75	281.09	281.45	281.02	280.96	.12	.87	.77	.71	.68	.62
28	.75	.91	.10	.06	.43	.91	281.54	.87	.77	.71	.68	.62
29	.75	.81	.04	280.93	.45	.87	.36	.86	.77	.71		.62
30	.73	.78	.67	.89	282.37	.84	.27	.86	.76	.71		.62
31		.77		.86	281.54		.14		.76	.71		.61
Mean		280.87	280.94	281.01	281.11	281.19	281.03	280.93	280.81	280.73	280.69	280.64
Max.		281.30	281.67	282.56	282.37	282.19	282.12	281.05	280.85	280.76	280.71	280.68
Min.		280.72	280.75	280.80	280.81	280.84	280.79	280.86	280.76	280.71	280.68	280.61

WATER YEAR 1958 : Max. 282.56 m. Min. 280.61 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		0.00	1.04	2.20	0.81	3.55	0.19	1.46	0.27			
2		0.75	1.06	0.69	0.31	2.10	0.16	1.55	0.23			
3		0.27	0.10	0.45	0.66	4.87	0.19	1.55	0.19			
4		0.19	0.23	0.23	0.55	2.40	0.13	1.19	0.16			
5		0.19	0.13	8.67	0.69	1.64	0.13	1.28	0.16			
6		0.16	1.73	35	0.60	22	0.10	1.55	0.16			
7		0.13	1.19	5.10	0.60	10	0.07	1.28	0.13			
8		0.10	0.50	2.00	0.45	42	0.10	1.10	0.13			
9		0.10	1.64	1.46	0.27	11	0.35	0.95	0.13			
10		0.07	0.31	1.10	0.60	7.39	0.27	0.81	0.23			
11		0.05	0.60	1.55	1.91	3.99	1.73	0.69	0.23			
12		0.05	0.75	0.69	0.75	3.44	2.00	0.60	0.19			
13		0.03	0.13	0.55	0.66	2.60	1.19	0.55	0.19			
14		1.49	0.05	0.40	2.60	1.91	0.55	0.60	0.23			
15		1.79	0.03	0.31	6.37	1.37	0.50	0.50	0.23			
16	20	0.45	0.00	0.27	3.55	1.02	0.23	0.50	0.19			
17	1.96	3.11	1.19	0.23	3.77	0.75	0.10	0.50	0.19			
18	0.55	4.10	9.84	0.19	6.24	0.55	0.10	0.40	0.19			
19	0.35	1.73	2.00	0.16	4.43	0.45	0.19	0.40	0.16			
20	0.27	0.88	0.75	0.13	2.10	0.35	0.75	0.40	0.16			
21	0.19	0.40	0.40	0.10	1.02	0.35	0.27	0.35	0.13			
22	0.16	0.23	0.27	0.16	0.55	3.77	0.45	0.35	0.13			
23	0.10	0.13	0.19	0.13	0.55	0.88	2.20	0.35	0.10			
24	0.07	0.05	0.13	0.13	0.31	1.10	1.82	0.31	0.07			
25	0.07	0.01	0.05	0.13	0.23	4.16	2.30	0.31	0.05			
26	0.03	0.00	0.03	0.75	2.82	1.73	55	0.31	0.05			
27	0.03	0.00	1.91	6.28	4.29	0.81	40	0.35	0.03			
28	0.00	1.62	2.00	1.64	13	0.55	7.64	0.35	0.03			
29	0.00	0.13	1.46	0.66	16	0.35	4.76	0.31	0.03			
30	0.00	0.05	9.60	0.45	40	0.23	3.77	0.31	0.01			
31		0.03		0.31	7.18		2.40		0.01			
Total	23.78	19.31	39.31	71.43	123.87	137.31	129.64	21.16	4.39			
Mean	3.79	0.62	1.31	2.30	3.98	4.58	4.18	0.71	0.14			
Max.	20	4.10	9.84	35	40	42	55	1.55	0.27			
Min.	0.00	0.00	0.00	0.10	0.23	0.23	0.07	0.31	0.01			
Runoff - mcm.	2.054	1.668	3.396	6.145	10.702	11.863	11.201	1.828	0.379			

WATER YEAR 1958 : Max. 55 Min. 0.00 Mean 1.56 Annual Runoff 49.265 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 26	18.00	284.27	193				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
WANG RIVER BASIN

Mae Chang Creek at Ban Sop Mo, Lampang (W.8)

Location: Lat 18°- 14' - 52" N, Long 99°- 42' - 40" E, on right bank at Ban Sop Mo, 700 meters downstream from the confluence with Mae Mo Creek or 2 kilometers downstream from Mae Mo Railway Station, Amphoe Mae Tha, Lampang.

Drainage Area: 754 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +280.68 m. (M.S.L.)

Bench Mark:
Location:
Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 60

Rating Operation:

Period of Rating: 1954 - 60
Rated by Float: -
Rated by Current Meter: 1954 - 60

Stability of Channel Regimes: Rather unstable, no shifting adjustment but mean hourly discharge are used for flow computation.

Overbank Flow Conditions: No overbank flow.

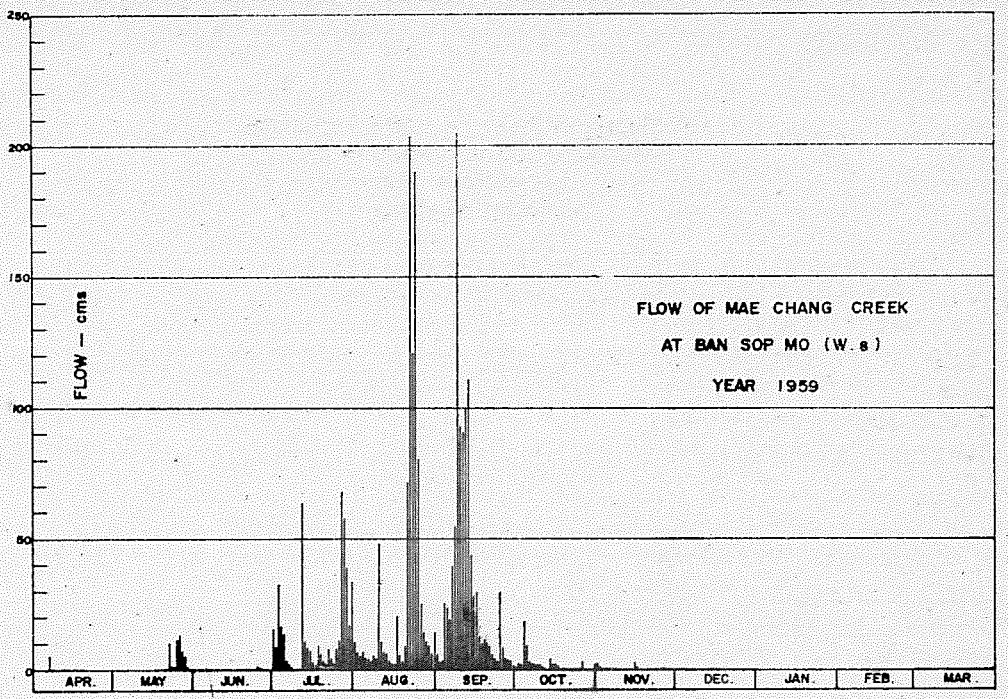
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1959. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: No flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	280.61	280.71	280.85	282.07	281.65	281.48	281.06	281.19	280.78	280.74	280.71	280.72
2	.62	.71	.82	281.62	.48	.26	.21	.00	.78	.74	.71	.72
3	.64	.70	.81	282.49	.43	.28	.16	280.84	.77	.74	.70	.72
4	.64	.70	.80	281.96	.54	.97	282.19	.83	.77	.74	.70	.72
5	.64	.70	.80	.74	.39	282.11	281.60	.83	.77	.73	.70	.77
6	281.45	280.70	280.79	281.29	281.35	281.95	281.30	280.83	280.78	280.73	280.70	280.77
7	280.81	.69	.78	.17	.26	282.48	.21	.93	.78	.73	.70	.77
8	.78	.69	.81	.00	.44	.70	.15	.85	.78	.73	.70	.77
9	.77	.69	.85	280.89	.30	284.30	.14	.85	.78	.73	.70	.76
10	.76	.69	.82	.86	282.75	283.26	.12	.85	.78	.73	.70	.76
11	280.76	280.68	280.81	280.85	281.68	283.18	281.09	280.84	280.77	280.73	280.70	280.76
12	.74	.68	.80	283.26	.49	.34	280.98	.84	.77	.73	.70	.76
13	.75	.68	.78	281.64	.50	.33	.91	.84	.77	.73	.69	.75
14	.75	.67	.76	.64	.30	282.50	281.32	.83	.77	.73	.69	.75
15	.75	.67	.75	.54	.18	.22	.16	281.24	.77	.72	.69	.75
16	280.98	280.67	280.74	281.25	281.13	282.22	281.18	281.03	280.77	280.72	280.69	280.75
17	.78	.66	.73	.12	282.25	281.77	280.96	280.82	.76	.72	.69	.75
18	.77	.66	.72	.66	281.43	.67	.94	.82	.76	.72	.69	.75
19	.75	.66	.72	.47	.24	.73	.94	.81	.76	.72	.69	.75
20	.75	.86	.71	.28	.61	.63	.94	.81	.76	.72	.69	.74
21	280.74	280.84	280.71	281.17	282.98	281.60	280.93	280.80	280.76	280.72	280.69	280.74
22	.74	281.77	.72	.59	284.77	.44	.93	.80	.76	.72	.69	.74
23	.73	.03	.81	.37	283.38	.35	.93	.80	.75	.72	.69	.74
24	.73	280.99	.94	.16	284.46	.32	.92	.79	.75	.72	.69	.74
25	.73	281.69	281.03	.56	283.00	282.27	.92	.79	.75	.71	.69	.74
26	280.72	281.76	281.00	281.61	282.15	281.59	281.26	280.79	280.75	280.71	280.70	280.73
27	.72	.47	280.89	283.21	281.84	.39	280.87	.78	.75	.71	.73	.73
28	.72	.45	.82	282.77	.72	.35	.85	.78	.75	.71	.73	.73
29	.72	.07	.82	.37	.63	.29	.85	.78	.74	.71	.73	.73
30	.71	280.95	.74	281.88	.50	.11	.85	.78	.74	.71		.72
31		.89		282.31	.78		281.22		.74	.71		.72
Mean	280.76	280.90	280.80	281.67	281.92	282.04	281.10	280.86	280.76	280.72	280.70	280.74
Max.	281.45	281.77	281.03	283.26	284.77	284.30	282.19	281.24	280.78	280.74	280.73	280.77
Min.	280.61	280.66	280.71	280.85	281.13	281.11	280.85	280.78	280.74	280.71	280.69	280.72

WATER YEAR 1959 : Max. 284.77 m. Min. 280.61 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			0.27	16	10	6.30	1.58	2.71	0.06			
2			0.16	8.64	6.30	3.34	2.89	1.10	0.06			
3			0.13	33	5.55	3.52	2.44	0.23	0.04			
4			0.10	17	7.40	25	19	0.19	0.04			
5			0.10	13	4.96	24	8.60	0.19	0.04			0.04
6	5.85		0.08	3.61	4.40	19	3.70	0.19	0.06			0.04
7	0.13		0.06	2.53	3.34	40	2.89	0.66	0.06			0.04
8	0.06		0.13	1.10	5.70	55	2.35	0.27	0.06			0.04
9	0.04		0.27	0.45	4.98	205	2.26	0.27	0.06			0.02
10	0.02		0.16	0.31	48	92	2.08	0.27	0.06			0.02
11	0.02		0.13	0.27	10	90	1.82	0.23	0.04			0.02
12			0.10	64	6.45	100	0.95	0.23	0.04			0.02
13			0.06	11	6.60	110	0.55	0.23	0.04			
14			0.02	8.20	3.70	44	3.98	0.19	0.04			
15				7.40	2.62	28	2.44	3.16	0.04			
16	0.95			3.25	2.17	29	2.62	1.34	0.04			
17	0.06			2.08	20	12	0.81	0.16	0.02			
18	0.04			9.57	5.55	10	0.69	0.16	0.02			
19				6.15	3.16	11	0.69	0.13	0.02			
20		0.31		3.52	9.64	9.32	0.69	0.13	0.02			
21		0.23		2.53	58	9.32	0.66	0.10	0.02			
22		11		8.23	203	5.70	0.66	0.10	0.02			
23		1.34	0.13	4.68	121	4.40	0.66	0.10				
24		1.02	0.69	2.44	190	3.98	0.60	0.08				
25		12	1.34	8.43	76	30	0.60	0.08				
26		13	1.10	12	26	8.40	3.34	0.08				
27		7.01	0.45	68	14	4.96	0.35	0.06				
28		5.85	0.16	58	11	4.40	0.27	0.06				
29		1.66	0.16	38	9.20	3.61	0.27	0.06				
30		0.75	0.00	16	6.60	1.99	0.27	0.06				
31		0.45		33	14		2.98					
Total	7.17	54.62	5.80	462.39	899.32	993.24	73.69	12.82	0.90			0.24
Mean	0.24	1.76	0.19	14.9	29.0	33.1	2.38	0.43	0.03			0.01
Max.	5.85	13	1.34	68	203	205	19	3.16	0.06			0.04
Min.	0.00	0.00	0.00	0.27	2.17	1.99	0.27	0.06	0.00			0.00
Runoff — mcm.	0.619	4.719	0.501	39.950	77.701	85.816	6.367	1.108	0.078			0.021

WATER YEAR 1959 : Max. 205 Min. 0.00 Mean 6.86 Annual Runoff 216.880 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 9	10.00	285.70	369				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
WANG RIVER BASIN

Mae Mo Creek at railway bridge, Lampang (W.9)

Location: Lat 18° – 14' – 52" N, Long 99° – 42' – 23" E, on left bank at the state railway bridge near Mae Mo Railway Station, Amphoe Mae Tha, Lampang.

Drainage Area: 347 sq.km. referred AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +284.53 m. (M.S.L.)

Bench Mark:

Location:

Elevation:

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

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

Period of Available Gage Records: 1957 – 60.

Rating Operation:

Period of Rating: 1957 – 60
Rated by Float: –
Rated by Current Meter: 1957 – 60

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

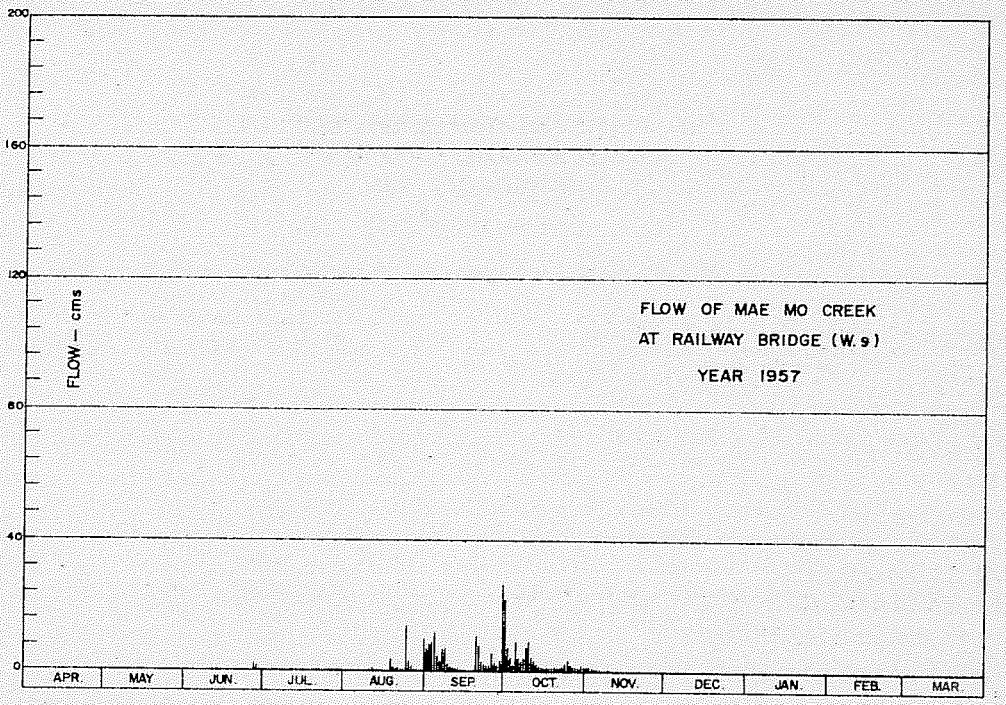
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1957. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: Record began on Jun. 27 and no flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				284.92	284.94	285.72	286.24	285.22	284.92	284.78	284.64	
2				.90	.93	.84	285.72	.17	.91	.77	.63	
3				.89	.89	.83	.48	.14	.91	.76	.63	
4				.89	.85	.94	.19	.13	.91	.76	.63	
5				.88	.79	.56	.81	.11	.90	.76	.62	
6				284.88	284.77	285.34	285.50	285.10	284.90	284.75	284.62	
7				.87	.76	.71	.42	.07	.90	.75	.62	
8				.87	.75	.70	.56	.08	.89	.75	.61	
9				.86	.75	.28	.76	.06	.89	.74	.61	
10				.85	.92	.17	.85	.07	.88	.74	.60	
11				284.85	285.10	285.14	285.54	285.05	284.88	284.74	284.60	
12				.85	284.93	.13	.40	.05	.88	.73	.60	
13				.84	.92	.07	.31	.05	.87	.73	.59	
14				.34	.94	.02	.25	.04	.87	.73	.59	
15				.84	.93	.00	.20	.03	.86	.72	.58	
16				284.83	284.91	284.98	285.17	285.04	284.86	284.72	284.58	
17				.83	.89	.96	.22	.06	.85	.72	.57	
18				.83	285.48	.97	.14	.03	.85	.72	.57	
19				.82	284.96	.96	.18	.01	.84	.71	.57	
20				.82	285.06	295.91	.18	.00	.84	.70	.56	
21				284.81	285.18	285.73	285.18	284.99	284.83	284.70	284.55	
22				.85	.11	.41	.15	.98	.83	.72	.55	
23				.85	.00	.27	.24	.97	.82	.71	.55	
24				.85	286.08	.16	.33	.96	.82	.70	.55	
25				.84	285.51	.16	.44	.96	.81	.69	.55	
26				284.84	285.21	285.62	285.25	284.95	284.81	284.68	284.55	
27			285.27	.83	.07	.35	.23	.94	.80	.67	.55	
28			.24	.83	.09	.25	.21	.94	.80	.67	.55	
29			.04	.83	284.93	.74	.21	.93	.79	.66		
30			284.95	.82	285.41	286.49	.28	.92	.79	.65		
31				.85	.93		.21		.79	.65		
Mean				284.85	285.06	285.47	285.38	284.97	284.35	284.75	284.59	
Max.				284.92	286.08	286.49	286.24	285.22	284.92	284.78	284.64	
Min.				284.82	284.75	284.96	285.18	284.92	284.79	284.65	284.55	

WATER YEAR 1957 : Max. 286.49 m. Min. – m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				0.22	0.24	6.52	22	1.36	0.22			
2				0.20	0.23	8.70	7.34	1.05	0.21			
3						8.90	4.14	0.90	0.21			
4						12	1.68	0.85	0.21			
5						4.42	9.10	0.75	0.20			
6						3.00	4.00	0.70	0.20			
7						5.68	3.00	0.58	0.20			
8						7.00	4.56	0.62				
9						2.10	7.85	0.54				
10					0.25	1.10	9.50	0.58				
11					0.95	0.85	4.56	0.50				
12					0.23	0.90	3.00	0.50				
13					0.23	0.66	2.10	0.50				
14					0.24	0.50	1.60	0.46				
15					0.22	0.46	1.20	0.42				
16					0.20	0.34	1.10	0.46				
17					0.00	0.29	1.44	0.54				
18					3.50	0.30	0.95	0.42				
19					0.30	0.29	1.20	0.34				
20					0.54	11	1.20	0.30				
21					1.20	7.51	1.20	0.29				
22					0.75	2.80	1.05	0.28				
23					0.38	1.84	1.68	0.27				
24					14	1.68	2.50	0.26				
25					3.70	1.68	3.50	0.26				
26					1.36	5.56	1.68	0.25				
27			2.00		0.70	2.40	1.52	0.24				
28			1.84		0.70	1.68	1.36	0.24				
29			0.58		0.25	7.34	1.84	0.23				
30			0.27		3.50	27	1.28	0.22				
31					9.90							
Total				0.42	43.57	134.50	110.49	14.91	1.05			
Mean				0.01	1.40	4.48	3.56	0.50	0.03			
Max.				0.22	14	27	22	1.36	0.22			
Min.				0.00	0.00	0.00	0.95	0.22	0.00			
Runoff - mcm.				0.036	3.764	11.621	9.546	1.288	0.091			

WATER YEAR 1957 : Max. 27 Min. 0.00 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 30	15.00	287.93	105				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
WANG RIVER BASIN

Mae Mo Creek at railway bridge, Lampang (W.9)

Location: Lat 18° – 14' – 52" N, Long 99° – 42' – 23" E, on left bank at the state railway bridge near Mae Mo Railway Station, Amphoe Mae Tha, Lampang.

Drainage Area: 347 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +284.53 m. (M.S.L.)

Bench Mark:

Location:

Elevation:

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

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

Period of Available Gage Records: 1957 – 60.

Rating Operation:

Period of Rating: 1957 – 60

Rated by Float: –

Rated by Current Meter: 1957 – 60

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1958. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

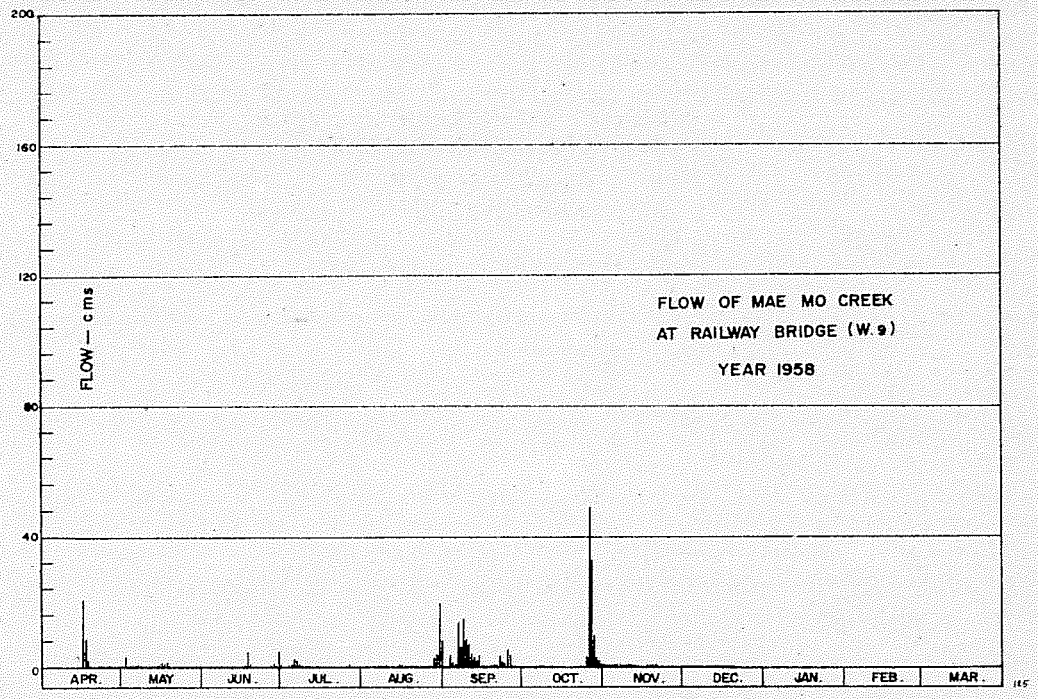
Remarks: No flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		284.79	284.83	285.05	285.01	285.05	284.96	285.19	285.08	284.73	284.64	
2		285.03	.83	284.96	284.95	284.96	.95	.18	.07	.72	.64	
3		284.86	.82	.91	285.00	.91	.99	.17	.06	.72	.64	
4		.82	.87	.89	284.99	.89	.97	.16	.05	.72	.64	
5		.81	.86	.97	285.06	.97	.94	.16	.01	.71	.63	
6		284.80	284.85	286.33	284.90	286.33	284.93	285.15	284.98	284.71	284.63	
7		.79	.94	285.32	.88	285.32	.91	.15	.97	.71	.63	
8		.78	.97	.17	.84	.17	.90	.14	.96	.70	.63	
9		.78	285.19	.14	.83	.14	.89	.14	.95	.70	.63	
10		.77	284.91	.10	.82	.10	.88	.14	.95	.70	.63	
11		284.76	285.04	285.10	284.83	285.10	285.10	285.13	284.92	284.69	284.63	
12		.76	284.94	284.96	.82	284.96	.07	.13	.90	.69	.63	
13		.75	.92	.93	.94	.93	284.98	.12	.87	.69	.62	
14		.75	.90	.92	.93	.92	.93	.11	.86	.68	.62	
15		285.08	.87	.91	285.32	.91	.97	.10	.86	.68	.62	
16	286.12	285.29	284.86	284.90	285.14	284.90	284.95	285.09	284.84	284.68	284.62	
17	285.01	.24	285.07	.90	.05	.90	.94	.11	.83	.68		
18	284.93	.32	.54	.89	.02	.89	.93	.12	.82	.68		
19	.91	.12	.13	.87	.03	.87	285.00	.12	.81	.67		
20	.89	284.98	.03	.87	.02	.87	284.99	.12	.80	.67		
21	284.87	284.90	284.98	284.86	285.00	284.86	284.93	285.11	284.79	284.67		
22	.87	.88	.96	.85	284.98	.85	285.00	.11	.78	.67		
23	.86	.87	.94	.85	.96	.85	.11	.11	.77	.66		
24	.85	.86	.93	.84	.97	.84	.08	.11	.76	.66		
25	.84	.86	.92	.84	.95	.84	.09	.10	.76	.66		
26	284.83	284.85	284.90	284.84	284.96	284.84	286.17	285.10	284.75	284.66		
27	.81	.85	285.17	285.21	285.08	285.21	285.90	.10	.75	.65		
28	.81	285.04	.22	.01	.41	.01	.45	.10	.74	.65		
29	.80	284.88	.06	.01	.50	.01	.31	.09	.74	.65		
30	.79	.85	.58	284.98	286.02	284.98	.25	.09	.73	.65		
31		.84		.86	285.41	.86	.21		.73	.64		
Mean		284.87	285.00	285.00	285.08	285.00	285.09	285.12	284.86	284.68		
Max.		285.32	285.58	286.33	286.02	286.33	286.17	285.19	285.08	284.73		
Min.		284.75	284.82	284.84	284.82	284.84	284.93	285.09	284.73	284.64		

WATER YEAR 1958 : Max. 286.33 m. Min. 284.62 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			0.02	0.44	0.30	0.50	0.17	1.41	0.64			
2		0.36	0.02	0.17	0.15	0.17	0.15	1.33	0.60			
3		0.03	0.01	0.08	0.27	4.15	0.26	1.25	0.55			
4		0.01	0.04	0.06	0.24	1.33	0.20	1.17	0.50			
5		0.01	0.03	0.19	0.48	0.95	0.13	1.17	0.33			
6			0.03	27	0.07	14	0.11	1.09	0.23			
7			0.13	2.23	0.05	6.32	0.08	1.09	0.20			
8			0.19	1.06	0.02	15	0.07	1.02	0.17			
9			1.20	0.88	0.02	8.47	0.06	1.02	0.15			
10			0.08	0.66	0.01	6.32	0.05	1.02	0.15			
11			0.40	0.66	0.02	3.29	0.76	0.95	0.09			
12			0.13	0.17	0.01	2.47	0.60	0.95	0.07			
13			0.09	0.11	0.13	1.58	0.23	0.88	0.04			
14			0.07	0.09	0.11	0.95	0.11	0.82	0.03			
15		0.57	0.04	0.08	2.23	0.64	0.20	0.76	0.03			
16	21	1.95	0.03	0.07	0.88	0.55	0.15	0.70	0.02			
17	0.30	1.55	0.52	0.07	0.44	0.33	0.13	0.82	0.02			
18	0.11	2.23	4.89	0.06	0.33	0.26	0.11	0.88	0.01			
19	0.08	0.76	0.82	0.04	0.36	0.29	0.29	0.88	0.01			
20	0.06	0.21	0.36	0.04	0.33	0.29	0.26	0.88				
21	0.04	0.07	0.21	0.03	0.27	0.33	0.11	0.82				
22	0.04	0.05	0.17	0.03	0.21	3.41	0.29	0.82				
23	0.03	0.04	0.13	0.03	0.17	0.82	0.82	0.82				
24	0.03	0.03	0.11	0.02	0.19	1.49	0.64	0.82				
25	0.02	0.03	0.09	0.02	0.15	5.74	0.70	0.76				
26	0.02	0.03	0.07	0.02	0.17	1.17	49	0.76				
27	0.01	0.03	1.06	1.33	0.57	0.70	16	0.76				
28	0.01	0.40	1.40	0.30	3.20	0.45	4.50	0.76				
29		0.05	0.48	0.30	4.30	0.33	2.58	0.70				
30		0.03	5.48	0.21	20	0.23	1.97	0.70				
31		0.02		0.03	3.81		1.58					
Total	21.75	8.46	18.30	36.48	39.49	82.53	82.31	27.81	3.84			
Mean	0.72	0.27	0.61	1.18	1.27	2.75	2.65	0.93	0.12			
Max.	21	2.23	5.48	27	20	15	49	1.41	0.64			
Min.	0.00	0.00	0.01	0.02	0.01	0.17	0.11	0.70	0.00			
Runoff - mcm.	1.879	0.731	1.581	3.152	3.412	7.130	7.111	2.403	0.332			

WATER YEAR 1958 : Max. 49 Min. 0.00 Mean 0.88 Annual Runoff 27.732 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 26	06.00	287.49	132				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
WANG RIVER BASIN

Mae Mo Creek at railway bridge, Lampang (W.9)

Location: Lat 18°– 14' – 52" N, Long 99°– 42' – 23" E, on left bank at the state railway bridge near Mae Mo Railway Station, Amphoe Mae Tha, Lampang.

Drainage Area: 347 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +284.53 m. (M.S.L.)

Bench Mark:

Location:

Elevation:

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

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

Period of Available Gage Records: 1957 – 60

Rating Operation:

Period of Rating: 1957 – 60
Rated by Float: –
Rated by Current Meter: 1957 – 60

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

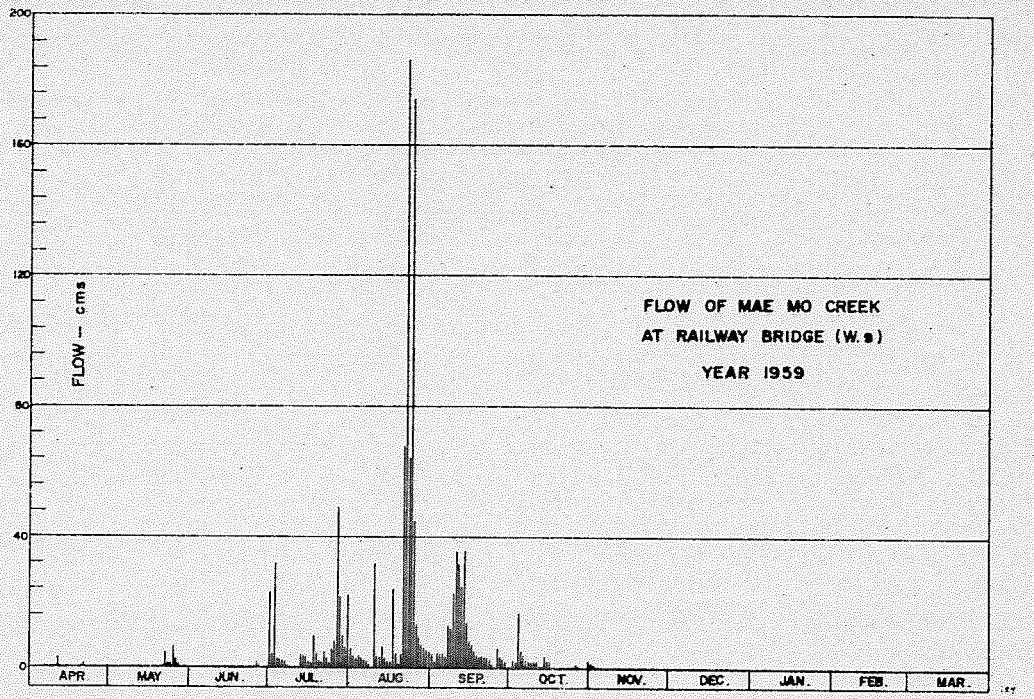
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1959. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: No flow for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		284.86	285.15	286.34	286.18	285.82	285.19	285.43	284.99	284.93	284.89	284.88
2		.86	.15	285.99	.12	.56	.69	.26	.99	.93	.89	.88
3		.86	.14	286.33	.08	.78	.41	.11	.98	.92	.89	.87
4		.86	.14	285.94	.14	.79	286.34	.10	.98	.92	.89	.87
5		.86	.14	.98	.09	.89	285.87	.09	.98	.92	.89	.87
6	285.29	284.86	285.14	285.93	286.07	285.88	285.68	285.07	284.98	284.92	284.88	284.87
7	284.96	.85	.14	.92	.06	286.22	.65	.16	.97	.92	.88	.89
8	.92	.85	.13	.81	285.86	.25	.59	.12	.97	.92	.88	.89
9	.90	.85	.13	.45	.75	287.92	.57	.10	.97	.92	.88	.89
10	.89	.85	.13	.43	286.71	286.79	.55	.10	.97	.92	.88	.89
11	284.88	248.85	285.18	285.42	286.19	286.67	285.53	285.09	284.97	284.91	284.88	284.89
12	.88	.85	.18	286.92	.12	.56	.21	.08	.96	.91	.88	.89
13	.87	.85	.17	.19	.21	.82	.18	.08	.96	.91	.88	.89
14	.86	.85	.17	.15	.10	.30	.66	.07	.96	.91	.88	.88
15	.86	.85	.17	.16	.06	.08	.58	.25	.96	.91	.87	.88
16	285.10	248.84	285.17	286.05	286.03	285.95	285.56	285.15	284.96	284.91	284.87	284.88
17	284.96	.84	.16	.02	.45	.87	.25	.08	.95	.91	.87	.88
18	.93	.84	.16	.31	.17	.79	.16	.07	.95	.91	.87	.88
19	.91	.84	.16	.16	.08	.74	.15	.06	.95	.90	.87	.88
20	.89	.84	.15	.08	.17	.74	.14	.05	.95	.90	.87	.88
21	284.89	284.84	285.15	286.03	287.13	285.80	285.13	285.04	284.95	284.90	284.87	284.87
22	.88	285.59	.15	.17	288.26	.73	.13	.03	.95	.90	.87	.87
23	.88	.48	.15	.10	286.95	.69	.12	.03	.94	.90	.87	.87
24	.89	.45	.21	.02	287.91	.39	.11	.03	.94	.90	.86	.87
25	.88	.72	.40	.24	286.83	.20	.11	.02	.94	.90	.86	.87
26	284.88	285.58	285.51	286.17	286.25	285.84	285.53	285.01	284.94	284.90	284.86	284.87
27	.88	.45	.36	.88	.07	.73	.17	.01	.94	.89	.88	.87
28	.87	.28	.30	.54	285.97	.69	.15	.01	.93	.89	.88	.86
29	.87	.16	.35	.31	.90	.67	.13	.00	.93	.89	.88	.86
30	.87	.15	.25	.16	.86	.30	.11	284.99	.93	.89		.86
31		.15		.56	.85		.48		.93	.99		.86
Mean	284.91	285.03	285.23	286.12	286.31	285.97	285.39	285.09	284.96	284.91	284.88	284.86
Max.	285.29	285.72	285.51	286.92	288.26	287.92	286.34	285.43	284.99	284.93	284.89	284.89
Min.	284.87	284.84	285.13	285.42	285.75	285.20	285.11	284.99	284.93	284.89	284.86	284.86

WATER YEAR 1959 : Max. 288.26 m. Min. 285.75 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			0.01	23	5.87	4.06	0.15	1.55	0.03	0.02	0.01	0.01
2			0.01	4.38	3.47	2.04	2.53	0.20	0.03	0.02	0.01	0.01
3			0.01	32	2.65	4.74	1.62	0.03	0.03	0.02	0.01	0.01
4			0.01	2.50	3.92	4.06	17	0.03	0.03	0.02	0.01	0.01
5			0.01	3.16	2.85	4.74	5.04	0.03	0.03	0.02	0.01	0.01
6	2.95		0.01	2.20	2.28	3.37	3.82	0.03	0.03	0.02	0.01	0.01
7	0.04		0.01	2.02	2.11	13	2.18	0.06	0.03	0.02	0.01	0.01
8	0.02		0.01	0.72	0.17	12	1.90	0.04	0.03	0.02	0.01	0.01
9			0.01	0.02	0.00	150	2.26	0.03	0.03	0.02	0.01	0.01
10			0.02	0.01	32	36	2.04	0.04	0.03	0.02	0.01	0.01
11			0.02	0.01	3.26	32	1.76	0.04	0.03	0.02	0.01	0.01
12			0.02	69	3.26	25	0.44	0.04	0.03	0.02	0.01	0.01
13			0.02	4.67	6.49	36	0.39	0.04	0.03	0.02	0.01	0.01
14			0.02	3.92	3.05	14	3.70	0.04	0.03	0.02	0.01	0.01
15			0.02	3.47	1.80	8.35	2.26	0.25	0.03	0.02	0.01	0.01
16	1.00		0.02	1.66	1.66	6.84	2.26	0.10	0.03	0.02	0.01	0.01
17	0.04		0.01	1.28	16	5.04	0.15	0.04	0.03	0.02	0.01	0.01
18	0.03		0.01	10	4.41	3.82	0.06	0.04	0.03	0.02	0.01	0.01
19	0.01		0.01	4.16	2.28	3.37	0.05	0.04	0.03	0.01	0.01	0.01
20			0.01	2.28	4.16	3.70	0.04	0.04	0.03	0.01	0.01	0.01
21			0.01	1.66	68	3.48	0.04	0.03	0.03	0.01	0.01	0.01
22		4.50	0.01	4.95	186	3.06	0.04	0.03	0.03	0.01	0.01	0.01
23		1.52	0.01	3.05	64	2.53	0.04	0.03	0.02	0.01	0.01	0.01
24		0.99	0.04	1.28	174	0.74	0.03	0.03	0.02	0.01	0.01	0.01
25		6.58	0.61	6.18	45	0.27	0.03	0.03	0.02	0.01	0.01	0.01
26		2.81	1.79	4.67	13	5.96	1.05	0.03	0.02	0.01	0.01	0.01
27		1.00	0.45	49	8.95	3.15	0.11	0.03	0.02	0.01	0.01	0.01
28		0.13	0.17	22	6.49	2.79	0.14	0.03	0.02	0.01	0.01	0.01
29		0.02	0.35	10	5.78	2.26	0.15	0.03	0.02	0.01	0.01	0.01
30		0.01	0.10	4.41	5.04	0.34	0.14	0.03	0.02	0.01		0.01
31		0.01		22	4.74		1.76		0.02	0.01		0.01
Total	4.09	17.57	3.81	299.66	682.69	396.71	53.18	3.01	0.84	0.49	0.29	0.31
Mean	0.14	0.57	0.13	9.67	22.0	13.2	1.71	0.10	0.03	0.02	0.01	0.01
Max.	2.95	6.58	1.79	69	186	150	17	1.55	0.03	0.02	0.01	0.01
Min.	0.00	0.00	0.01	0.01	0.00	0.27	0.03	0.03	0.02	0.01	0.01	0.01
Runoff – mcm.	0.353	1.518	0.329	25.891	58.984	34.276	4.595	0.260	0.073	0.042	0.025	0.027

WATER YEAR 1959 : Max. 186 Min. 0.00 Mean 4.00 Annual Runoff 126.373 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 22	18.00	288.64	250				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
YOM RIVER BASIN

Mae Yom River at Muang Phrae (Y.1)

Location: Lat 18°- 08' - 32" N, Long 100°- 08' - 07" E, on left bank infront of the dictrict liquor factory near Wat Chetawan, Amphoe Muang, Phrae.

Drainage Area: 7,590 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +144.90 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.1

Location: On left bank, 23 meters downstream from the gage site.
Elevation: +153.810 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: 1939 to date.

Rating Operation:

Period of Rating: 1954, 1956, 1957 - 60.
Rated by Float: -
Rated by Current Meter: 1954, 1956, 1957 - 60.

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

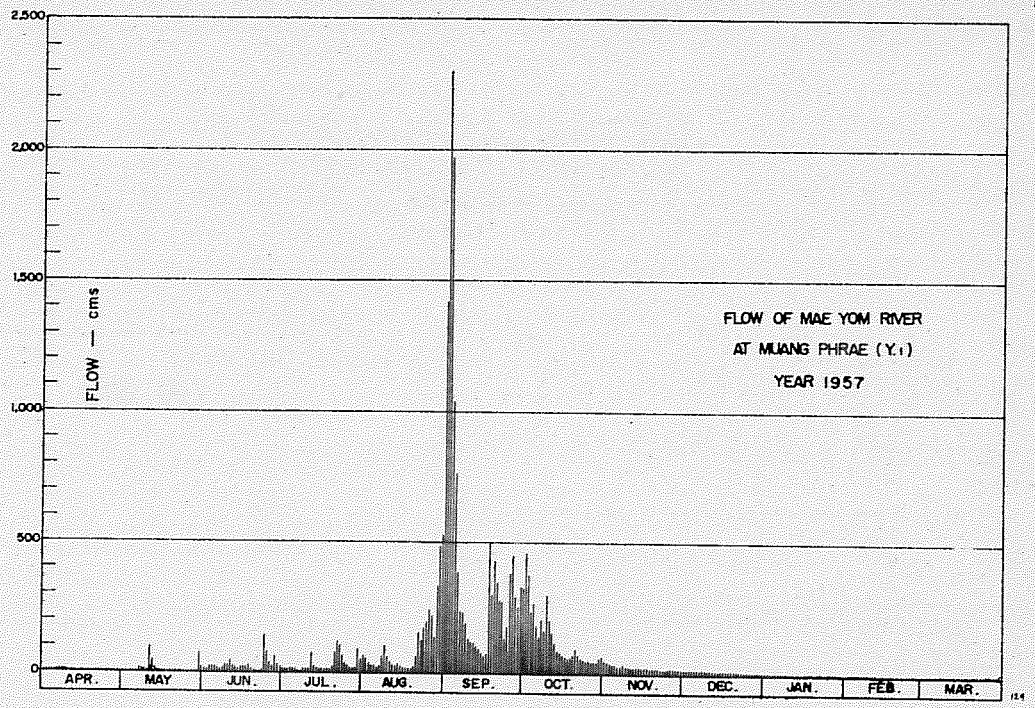
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1957. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	145.14	145.17	145.46	145.62	146.17	152.62	148.42	146.04	145.68	145.47	145.40	145.31
2	.13	.26	.46	.54	.03	154.44	149.29	145.97	.67	.47	.40	.31
3	.13	.21	.80	.48	145.87	153.84	148.71	.93	.67	.47	.40	.31
4	.16	.18	.69	.61	.74	151.76	147.72	.88	.66	.46	.40	.30
5	.19	.16	.66	.51	.68	150.57	.89	.86	.65	.46	.47	.30
6	145.17	145.15	145.59	145.43	145.62	148.70	147.35	145.85	145.64	145.45	145.46	145.30
7	.43	.55	.49	.40	.70	147.73	.04	.84	.63	.45	.46	.30
8	.35	.44	.68	.44	146.26	.72	.47	.90	.63	.45	.45	.29
9	.32	.39	.82	.63	.65	.32	.22	.85	.62	.44	.45	.29
10	.30	.35	.83	.62	.22	146.98	148.15	.82	.62	.44	.44	.29
11	145.25	146.62	145.99	145.65	145.96	146.83	147.40	145.78	145.61	145.44	145.43	145.29
12	.23	.00	.73	146.45	.77	.80	.04	.77	.60	.44	.40	.30
13	.20	145.45	.56	145.80	.75	.73	146.75	.76	.60	.43	145.38	.31
14	.18	.37	.52	.64	.79	.50	.55	.75	.59	.43	.37	.30
15	.17	.34	.70	.63	.69	.34	.42	.73	.59	.43	.37	.29
16	145.15	145.29	145.62	145.53	145.63	146.25	146.33	145.72	145.58	145.43	145.36	145.29
17	.14	.25	.65	.51	.57	.23	.27	.72	.57	.43	.36	.28
18	.21	.23	.73	.55	.56	149.51	.23	.71	.57	.42	.35	.28
19	.24	.35	.48	.56	.64	147.96	.26	.71	.56	.42	.34	.28
20	.27	.26	.39	.78	.67	149.03	.36	.71	.55	.42	.34	.28
21	145.24	145.32	145.35	146.18	146.22	148.37	146.59	145.71	145.54	145.41	145.34	145.27
22	.21	.29	.37	.77	147.01	147.99	.29	.71	.53	.41	.33	.26
23	.19	.24	.46	.38	146.81	.24	.15	.70	.52	.41	.33	.26
24	.17	.20	147.06	.18	147.09	146.92	.10	.70	.51	.42	.32	.26
25	.14	.19	146.39	145.94	.24	147.17	.07	.70	.51	.43	.32	.25
26	145.13	145.16	145.89	145.78	147.56	148.50	146.03	145.70	145.50	145.43	145.32	145.25
27	.11	.17	.73	.65	.50	149.04	.02	.70	.50	.46	.32	.25
28	.10	.17	146.27	.60	.04	148.04	145.97	.69	.49	.47	.31	.25
29	.08	.28	145.90	.72	148.37	147.77	.97	.69	.49	.44		.26
30	.07	146.36	.71	146.54	149.28	148.09	146.16	.69	.48	.42		.27
31		145.65		.11	.43		.23		.47	.41		.46
Mean	145.19	145.39	145.73	145.78	146.46	148.43	146.85	145.78	145.57	145.44	145.38	145.29
Max.	145.43	146.62	147.06	146.77	149.43	154.44	149.29	146.04	145.68	145.47	145.47	145.46
Min.	145.07	145.15	145.35	145.40	145.56	146.23	145.97	145.69	145.47	145.41	145.31	145.25

WATER YEAR 1957 : Max. 154.44 m. Min. 145.07 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.40	4.10	14	18	67	1,417	324	47	17	7.60	5.10	2.70
2	3.20	6.70	12	15	53	2,310	459	41	17	7.60	5.10	2.70
3	3.20	5.10	27	13	39	1,973	375	37	17	7.60	4.80	2.70
4	3.90	4.30	25	17	30	1,077	235	33	16	7.00	5.10	2.58
5	4.50	3.90	23	15	26	747	268	31	16	7.00	7.60	2.50
6	4.10	3.60	19	11	23	386	186	29	15	7.00	6.70	2.50
7	13	18	14	9.00	27	235	143	28	15	6.70	6.70	2.50
8	9.80	13	20	10	67	230	203	35	15	6.40	6.40	2.50
9	8.70	11	30	18	104	191	167	28	14	6.00	6.40	2.50
10	8.00	10	32	19	63	131	298	27	14	6.00	6.00	2.50
11	6.40	100	50	20	43	119	193	24	14	6.00	5.70	2.50
12	5.70	45	27	76	31	114	151	24	14	6.00	4.80	2.50
13	4.80	14	12	28	30	106	111	24	13	5.70	4.30	2.70
14	4.30	10	16	20	35	93	84	22	13	5.40	4.10	2.50
15	4.10	9.50	25	18	28	76	79	21	13	5.70	4.10	2.50
16	3.60	7.60	22	15	24	68	66	21	12	5.70	3.90	2.50
17	3.40	6.40	23	14	20	75	61	21	12	5.40	3.90	2.20
18	5.10	5.70	28	15	20	500	59	19	12	5.40	3.60	2.20
19	6.00	9.80	14	15	20	301	61	20	11	5.40	3.40	2.20
20	7.00	6.70	9.10	28	26	427	71	20	11	5.40	3.40	2.30
21	6.00	8.70	5.70	84	63	341	93	18	11	5.40	3.40	2.20
22	5.10	7.60	6.40	124	158	278	66	18	10	5.40	3.20	2.00
23	4.50	6.00	10	101	126	172	56	18	10	5.40	3.20	2.00
24	4.10	4.80	144	65	172	131	51	18	9.50	6.00	2.90	2.00
25	3.40	4.50	76	37	195	181	47	18	9.50	7.00	2.90	2.00
26	3.20	3.90	38	30	244	380	46	19	9.10	6.70	2.90	2.00
27	2.70	4.10	28	22	220	446	46	18	9.50	7.30	2.90	1.90
28	2.50	4.10	62	19	146	290	42	18	8.70	7.30	2.70	1.90
29	2.20	7.30	33	27	336	251	45	18	8.70	5.40		1.90
30	2.00	74	21	92	487	330	60	18	8.00	5.40		2.30
31		23		57	529		62		7.30	7.30		7.60
Total	147.90	442.40	866.20	1,052	3,452	13,378	4,208	733	382.30	193.60	125.20	77.50
Mean	4.93	14.3	28.9	33.9	111	445	136	24.4	12.3	6.24	4.47	2.50
Max.	13	100	144	124	529	2,310	459	47	17	7.60	7.60	7.60
Min.	2.00	3.60	5.70	9.00	20	68	42	18	7.30	5.40	2.70	1.90
Runoff - mcm.	12.778	38.223	74.840	90.893	298.253	1,155.859	363.571	63.331	33.031	16.727	10.817	6.696

WATER YEAR 1957 : Max. 2,310 Min. 1.90 Mean 68.6 Annual Runoff 2,164.760 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 2	06.00	154.43	2,417				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
YOM RIVER BASIN

Mae Yom River at Muang Phrae (Y.1)

Location: Lat 18° – 08' – 32" N, Long 100° – 08' – 07" E, on left bank infront of the district liquor factory near Wat Chetawan, Amphoe Muang, Phrae.

Drainage Area: 7,590 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +144.90 m. (M.S.L.)

Bench Mark: B.M. – R.I.D. 1

Location: On left bank 23 meters downstream from the gage site.
Elevation: +153.810 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: 1939 to date.

Rating Operation:

Period of Rating: 1954, 1956 – 60
Rated by Float: –
Rated by Current Meter: 1954, 1956 – 60

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

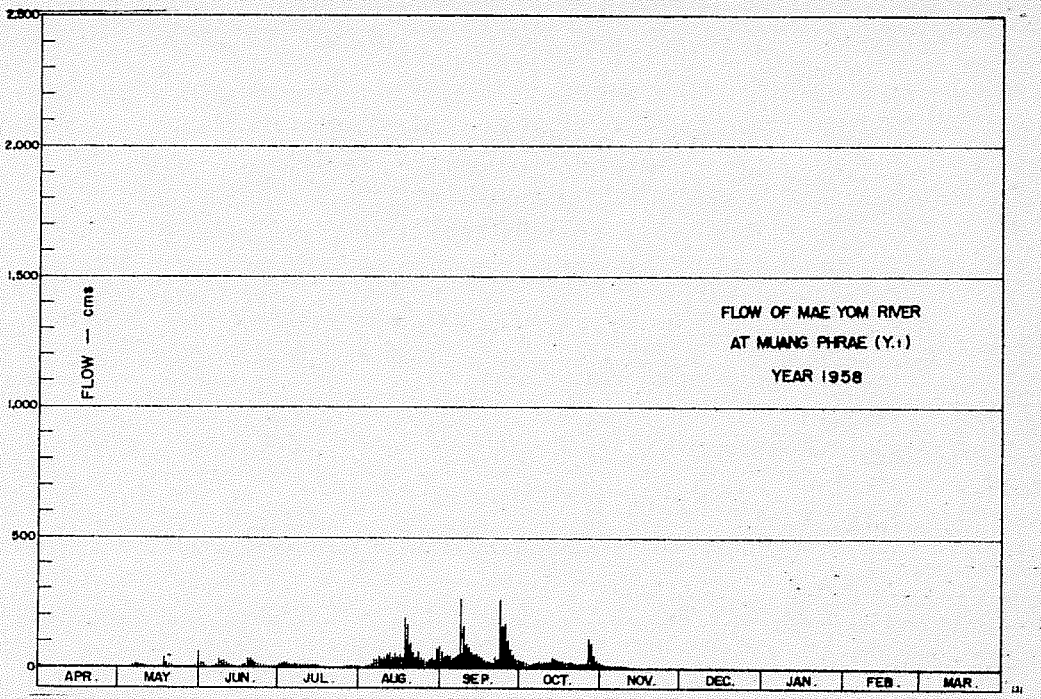
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1958. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	145.43	145.39	145.68	145.53	145.39	146.25	145.79	145.63	145.31	145.20	145.11	145.04
2	.37	.36	.68	.65	.38	.03	.73	.58	.31	.20	.11	.04
3	.33	.27	.48	.69	.43	145.99	.67	.53	.31	.19	.12	.03
4	.31	.34	.40	.67	.42	146.06	.63	.52	.31	.18	.11	.04
5	.29	.39	.39	.54	.57	145.91	.60	.49	.30	.18	.11	.03
6	145.28	145.52	145.37	145.51	145.85	145.97	145.63	145.47	145.30	145.18	145.11	145.03
7	.27	.65	.61	.53	.88	146.11	.71	.45	.29	.18	.10	.02
8	.27	.54	.95	.45	146.02	147.86	.67	.43	.29	.17	.10	.02
9	.26	.56	.81	.45	145.94	.13	.69	.42	.29	.17	.10	.02
10	.25	.52	.78	.47	.97	146.58	.69	.41	.29	.16	.10	.02
11	145.24	145.46	145.62	145.46	146.02	146.32	145.75	145.40	145.29	145.15	145.09	145.02
12	.23	.43	.51	.47	.25	.17	.76	.39	.29	.14	.08	.02
13	.22	.45	.45	.49	145.98	.11	146.07	.38	.29	.14	.10	.01
14	.21	.38	.40	.46	146.22	.11	145.89	.38	.29	.13	.08	.02
15	.20	.44	.41	.43	145.99	145.99	.85	.37	.28	.13	.07	.01
16	145.23	145.38	145.41	145.42	146.13	146.03	145.75	145.36	145.28	145.13	145.07	145.01
17	.23	.42	.45	.39	.03	145.84	.80	.35	.27	.12	.06	.00
18	.22	.99	.50	.37	147.41	.75	.71	.34	.27	.12	.07	.01
19	.30	.60	.95	.35	.10	.71	.68	.33	.26	.11	.06	.00
20	.30	.60	.92	.34	146.67	.66	.73	.32	.26	.11	.06	.00
21	145.29	145.48	145.81	145.33	146.22	145.95	145.65	145.32	145.25	145.11	145.06	144.99
22	.29	.42	.66	.34	145.99	.82	.59	.31	.25	.11	.06	.99
23	.27	.39	.56	.34	146.16	147.85	.57	.31	.24	.11	.05	.99
24	.25	.37	.49	.34	145.88	.11	.59	.31	.23	.11	.04	.98
25	.23	.34	.44	.35	.76	.21	.59	.32	.22	.11	.05	.98
26	145.22	145.32	145.40	145.37	145.70	146.82	145.64	145.31	145.23	145.11	145.05	144.97
27	.22	.31	.38	.44	.82	.34	146.84	.31	.22	.10	.05	.97
28	.21	.30	.39	.44	.86	.13	.63	.31	.22	.10	.04	.96
29	.26	.28	.36	.45	.87	145.96	.09	.32	.21	.10		.96
30	.32	.29	.48	.40	146.39	.85	145.85	.31	.20	.10		.95
31		146.23		.41	.48		.72		.19	.10		.95
Mean	145.27	145.46	145.56	145.45	146.02	146.29	145.79	145.39	145.26	145.14	145.08	145.00
Max.	145.43	146.23	145.95	145.69	147.41	147.86	146.84	145.63	145.31	145.20	145.12	145.04
Min.	145.20	145.27	145.36	145.33	145.38	145.66	145.57	145.31	145.19	145.10	145.04	144.95

WATER YEAR 1958 : Max. 247.86 m. Min. 144.95 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.00	5.20	22	15	9.00	64	30	20	5.70	3.00	1.50	0.20
2	4.20	4.20	22	21	9.00	47	30	18	5.70	2.80	1.60	0.30
3	3.50	2.80	10	24	12	45	20	16	5.20	2.30	1.80	0.20
4	3.20	4.70	7.00	23	14	50	19	14	5.50	2.10	1.60	0.40
5	2.80	6.30	6.30	16	20	41	19	13	5.20	2.10	1.60	0.30
6	2.60	12	6.30	15	36	44	21	13	5.00	2.10	1.60	0.40
7	2.50	17	16	16	38	55	25	12	4.70	1.80	1.50	0.30
8	2.50	12	35	12	50	268	24	12	5.00	1.80	1.50	0.40
9	2.30	12	28	12	36	164	23	11	5.00	2.60	1.50	0.40
10	2.10	12	28	13	43	95	24	11	5.00	2.60	1.20	0.40
11	2.10	8.30	20	14	52	81	27	9.40	4.70	2.30	1.00	0.50
12	2.00	6.70	15	14	60	61	27	9.40	5.20	1.80	0.90	0.50
13	1.80	9.40	11	15	42	56	47	9.80	4.50	1.60	1.20	0.50
14	1.60	6.00	8.30	13	61	56	39	8.30	4.50	1.60	0.80	0.60
15	1.50	8.70	8.30	12	47	47	32	8.00	4.50	1.60	0.80	0.50
16	2.10	5.50	8.30	11	56	48	28	7.70	4.20	1.60	0.80	0.50
17	2.10	7.70	11	9.80	48	33	32	7.30	5.00	1.50	0.60	0.40
18	1.80	44	12	9.00	196	28	25	7.00	4.70	1.60	1.00	0.60
19	4.00	17	38	8.70	167	25	24	7.00	4.50	1.60	0.30	0.40
20	3.50	16	38	8.30	107	21	27	6.70	4.70	1.30	0.90	0.50
21	2.80	11	31	7.70	67	42	24	6.70	4.50	1.30	0.40	0.40
22	2.80	6.30	23	7.30	48	33	20	6.30	4.20	1.30	0.40	0.40
23	3.00	6.00	17	7.00	64	263	19	6.30	4.00	1.30	0.30	0.40
24	2.10	5.50	13	7.70	41	162	20	6.30	4.00	1.30	0.20	0.40
25	2.30	4.50	11	8.00	33	172	20	6.00	3.00	1.30	0.20	0.40
26	1.80	3.70	8.70	8.70	28	115	22	5.70	3.70	1.50	0.20	0.20
27	1.80	4.00	8.00	12	35	74	119	5.70	3.20	1.30	0.20	0.30
28	1.80	3.70	9.00	12	40	52	100	6.00	3.50	1.30	0.20	0.20
29	3.20	3.00	8.00	11	35	38	52	6.30	3.50	1.30		0.20
30	3.20	3.20	8.30	10	75	35	34	6.00	3.20	1.30		0.20
31		65		11	82		28		3.00	1.30		0.20
Total	80.00	333.40	487.50	384.20	1,651	2,315	1,001	281.90	138.30	54.20	25.80	11.60
Mean	2.67	10.7	16.2	12.4	53.2	77.1	32.2	9.40	4.46	1.75	0.92	0.37
Max.	7.00	65	38	24	196	268	119	20	5.70	3.00	1.80	0.60
Min.	1.50	2.80	6.30	7.00	9.00	21	19	5.70	3.00	1.30	0.20	0.20
Runoff - mcm.	6.912	28.806	42.120	33.195	142.646	200.016	86.486	24.356	11.949	4.683	2.229	1.002

WATER YEAR 1958 : Max. 268 Min. 0 20 Mean 18.5 Annual Runoff 584.401 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 8	18.00	148.13	315				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
YOM RIVER BASIN

Mae Yom River at Muang Phrae (Y.1)

Location: Lat 18° – 08' – 32" N, Long 100° – 08' – 07" E, on left bank infront of the district liquor factory near Wat Chetawan, Amphoe Muang, Phrae.

Drainage Area: 7,590 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +144.90 m. (M.S.L.)

Bench Mark: B.M. – R.I.D. 1

Location: On left bank 23 meters downstream from the gage site.
Elevation: +153.810 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: 1939 to date.

Rating Operation:

Period of Rating: 1954, 1956 – 60.
Rated by Float: –
Rated by Current Meter: 1954, 1956 – 60.

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

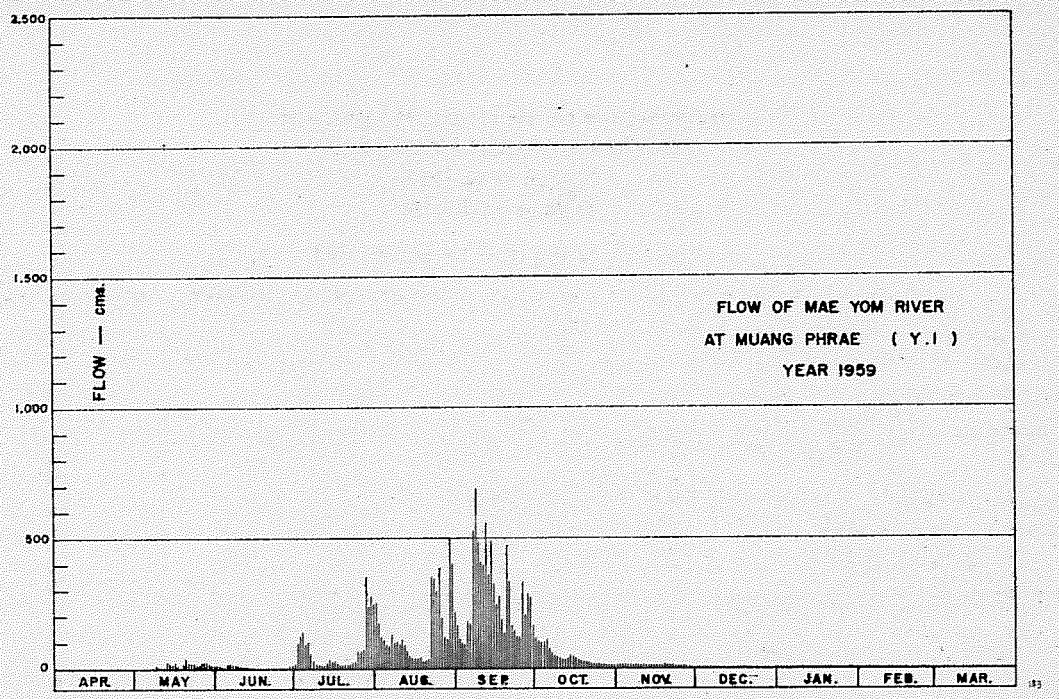
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1959. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	145.11	145.16	145.55	145.66	147.95	147.43	146.88	145.52	145.38	145.19	145.18	145.06
2	.10	.11	.51	146.59	.38	146.97	.79	.51	.38	.18	.17	.06
3	.07	.08	.43	.88	146.86	.75	.72	.52	.38	.18	.17	.05
4	.06	.05	.38	147.03	.81	.74	.67	.51	.37	.17	.18	.05
5	.05	.03	.55	146.62	.55	147.47	.77	.51	.37	.17	.17	.05
6	145.04	145.01	145.72	146.70	146.47	147.37	146.45	145.54	145.36	145.16	145.15	145.04
7	.04	.03	.64	.25	.93	149.43	.27	.51	.36	.16	.15	.04
8	.02	.38	.56	145.88	.68	150.15	.16	.58	.35	.15	.14	.08
9	.02	.55	.54	.69	.70	149.24	.08	.53	.35	.15	.13	.07
10	.00	.39	.45	.58	.58	148.94	146.00	.49	.34	.15	.12	.07
11	144.99	145.31	145.41	145.48	146.73	148.96	145.87	145.49	145.33	145.14	145.12	145.06
12	.98	.35	.38	.39	.46	149.68	.92	.47	.32	.14	.11	.06
13	.97	.91	.34	.63	.29	148.71	.96	.46	.31	.14	.10	.05
14	.96	.77	.32	.91	.10	149.46	146.13	.45	.31	.13	.10	.05
15	.95	.64	.27	.84	.03	148.43	.06	.45	.31	.13	.10	.04
16	144.99	145.85	145.25	145.79	145.92	147.81	146.00	145.44	145.29	145.13	145.09	145.04
17	.98	.53	.22	.79	.92	148.10	145.90	.44	.28	.13	.09	.03
18	.96	.41	.19	.56	.95	147.40	.85	.44	.27	.13	.08	.03
19	.95	.40	.19	.53	.85	147.07	.80	.44	.27	.13	.08	.03
20	.94	.98	.18	.49	.84	149.23	.77	.43	.27	.12	.08	.03
21	144.95	145.74	145.18	145.52	145.92	147.75	145.75	145.43	145.26	145.12	145.07	145.03
22	.95	.70	.15	.56	148.47	.22	.73	.42	.25	.12	.07	.02
23	.91	.72	.13	.72	.53	.08	.71	.42	.24	.12	.07	.02
24	.94	.66	.17	.73	.31	146.93	.65	.42	.23	.13	.07	.02
25	.94	.47	.19	146.30	.88	.81	.63	.42	.23	.23	.07	.02
26	144.92	145.74	145.19	146.34	147.59	148.46	145.60	145.41	145.22	145.19	145.07	145.02
27	.90	.85	.24	.35	.03	147.56	.58	.40	.22	.15	.07	.02
28	.93	.76	.34	148.37	146.89	148.19	.56	.40	.21	.15	.06	.01
29	.93	.63	.40	147.72	149.34	.13	.55	.39	.21	.15	.06	.01
30	145.22	.60	.39	148.07	148.95	147.24	.53	.39	.20	.16		.01
31		.51		147.83	147.80		.52		.19	.18		.01
Mean	144.99	145.49	145.35	146.22	147.02	148.02	146.00	145.46	145.29	145.15	145.11	145.04
Max.	145.22	145.98	145.72	148.37	149.34	150.15	146.88	145.58	145.38	145.19	145.18	145.08
Min.	144.90	145.01	145.13	145.39	145.84	146.74	145.52	145.39	145.19	145.12	145.06	145.01

WATER YEAR 1959 : Max. 150.15 m. Min. 144.91 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.58	2.60	17	21	254	178	117	14	9.55	4.80	4.40	1.58
2	1.58	1.44	15	88	177	123	112	14	9.55	4.60	4.20	1.58
3	1.23	1.09	12	124	122	99	103	14	9.20	4.60	4.20	1.51
4	1.16	0.74	9.90	144	120	98	100	14	9.20	4.40	4.60	1.51
5	1.02	0.60	18	100	93	185	111	14	9.20	4.40	4.20	1.44
6	0.88	0.42	26	107	85	173	80	15	8.85	4.20	4.00	1.51
7	0.81	0.48	22	61	134	532	63	14	8.85	4.20	4.00	1.51
8	0.48	4.60	19	36	107	692	53	16	8.50	3.80	3.80	2.20
9	0.48	14	17	26	109	471	48	15	8.50	3.80	3.40	1.93
10	0.36	8.15	13	19	98	410	42	13	8.50	3.60	3.20	1.79
11	0.30	5.35	12	15	113	392	41	13	8.50	3.60	3.20	1.65
12	0.30	6.40	11	11	83	558	38	12	7.45	3.60	2.90	1.65
13	0.24	28	9.20	21	65	362	40	12	7.45	3.60	2.90	1.51
14	0.18	21	8.50	38	52	490	53	12	7.45	3.20	2.90	1.44
15	0.12	19	7.10	34	49	326	49	12	7.45	3.40	2.90	1.37
16	0.36	27	6.40	33	41	239	42	11	7.10	3.20	2.50	1.30
17	0.24	12	5.00	32	42	278	35	11	7.10	3.40	2.50	1.23
18	0.18	8.85	4.60	19	45	183	32	11	6.75	3.40	2.00	1.23
19	0.12	8.85	4.60	18	31	137	30	11	6.40	3.20	2.50	1.16
20	0.16	38	4.60	17	34	473	28	11	6.75	3.00	2.10	1.16
21	0.12	25	4.20	18	40	288	25	11	6.05	3.00	1.93	1.23
22	0.12	22	3.20	19	355	159	24	11	6.05	2.90	1.96	1.16
23	0.00	23	2.90	29	349	143	21	11	5.70	2.90	2.00	1.02
24	0.06	21	4.00	29	296	127	20	11	5.70	3.00	2.00	1.02
25	0.12	13	4.80	65	390	115	19	11		5.35	1.93	0.95
26	0.06	25	4.40	66	199	331	18	9.90	5.35	4.20	1.86	0.95
27	0.00	30	6.05	67	130	203	18	9.90	5.35	3.80	1.86	1.02
28	0.06	25	9.55	354	115	288	17	10	5.35	3.80	1.72	0.95
29	0.12	21	11	233	500	278	16	9.90	5.35	3.80	1.72	0.88
30	3.60	19	11	281	410	162	15	9.90	5.00	4.00		0.88
31		15		244	227		14		4.80	4.40		0.81
Total	16.04	447.57	303.00	2,369	4,865	8,493	1,424	363.60	222.70	117.15	83.38	41.13
Mean	0.53	14.4	10.1	76	157	283	45.9	12.1	7.18	3.78	2.87	1.33
Max.	3.60	38	26	354	500	692	117	16	9.55	4.80	4.60	2.20
Min.	0.00	0.42	2.90	11	31	98	14	9.90	4.80	2.90	1.72	0.81
Runoff - mcm.	1.386	38.670	26.179	204.682	420.336	733.795	123.034	31.415	19.241	10.122	7.204	3.554

WATER YEAR 1959 : Max. 692 Min. 0.00 Mean 51.2 Annual Runoff 1,619.617 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 8	06.00	150.23	710				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
YOM RIVER BASIN

Mae Yom River at Talat Thani, Sukhothai (Y.4)

Location: Lat 17° – 00' – 18" N, Long 99° – 49' – 31" E, on left bank infornt of the house of the Governor, Amphoe Muang, Sukhothai.

Drainage Area: 17,731 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +45.00 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D.

Location: About 22 meters from the upper gage.
Elevation: +47.579 m. (M.S.L.)

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: 1950 – 60, 1962 to date.

Rating Operation:

Period of Rating: 1954 – 56
Rated by Float: –
Rated by Current Meter: 1954 – 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed at elevation +48.50 m. (M.S.L.) but not included for flow computation.

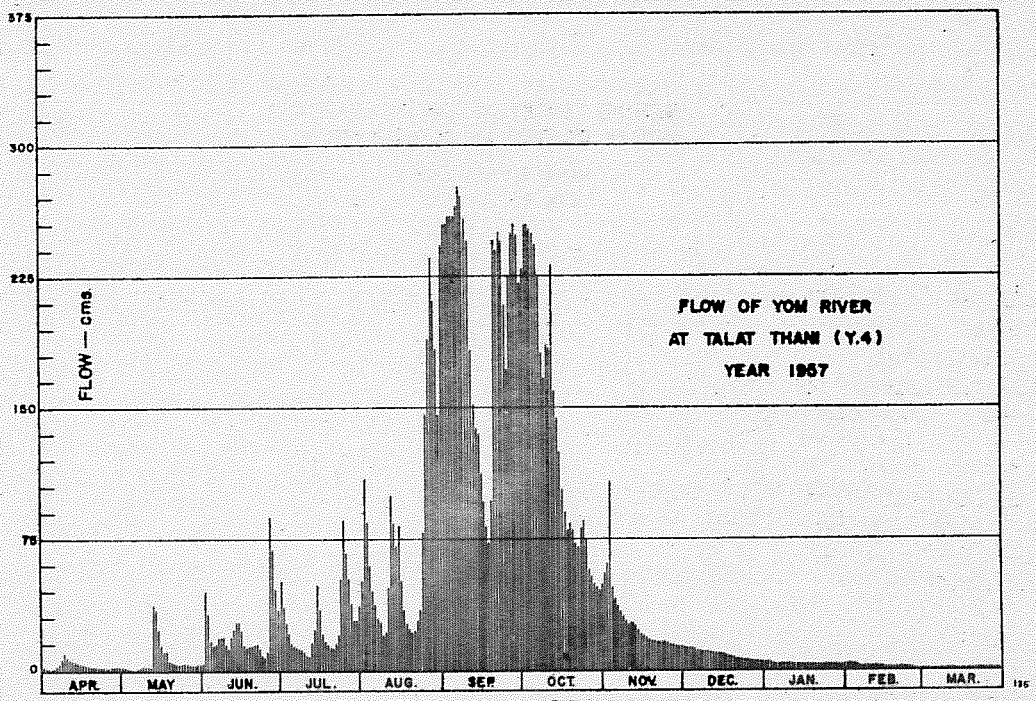
General Description: Records poor. Stage – discharge relation used is defined by discharge measurements during 1954 – 56. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

Remarks: No gage height record for Mar. 22 – 31, discharge estimated.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	45.16	45.18	45.46	47.23	47.20	49.01	48.96	47.33	46.06	45.53	45.36	45.11
2	.13	.16	47.07	46.94	48.20	.01	49.01	.45	.05	.52	.36	.10
3	.11	.14	46.62	.59	47.70	.02	.01	48.18	.04	.51	.42	.10
4	.10	.13	.24	.37	.41	.02	.00	47.15	.02	.50	.40	.09
5	.10	.11	.09	.23	.13	.02	.00	46.99	.00	.48	.38	.08
6	45.22	45.08	46.13	46.09	46.88	49.03	48.98	46.88	45.99	45.48	45.35	45.08
7	.41	.06	.31	.03	.62	.05	.94	.78	.96	.47	.34	.07
8	.67	.14	.31	.06	.58	.04	.82	.69	.96	.45	.33	.08
9	.86	.21	.28	.01	.32	.01	.72	.61	.95	.45	.32	.07
10	.71	.21	.10	45.86	.39	48.99	.83	.55	.93	.44	.31	.07
11	45.61	45.18	45.99	45.78	47.14	48.82	48.82	46.58	45.91	45.44	45.31	45.06
12	.59	.33	46.32	.79	48.08	.65	.96	.57	.90	.43	.30	.06
13	.56	46.91	.48	46.11	47.80	.52	.75	.51	.89	.42	.30	.05
14	.52	.83	.61	.42	.63	.47	.55	.41	.88	.42	.29	.05
15	.43	.39	.57	47.18	.84	.27	.36	.36	.85	.41	.28	.04
16	45.39	46.11	46.30	46.80	47.15	48.02	48.10	46.32	45.84	45.40	45.27	45.04
17	.36	45.92	.09	.41	46.86	47.85	47.95	.29	.83	.40	.26	.03
18	.31	.74	.03	.21	.65	.66	.80	.26	.82	.39	.25	.03
19	.26	.63	.10	.11	.47	48.08	.85	.21	.81	.39	.23	.02
20	.25	.53	.07	.03	.40	.99	.79	.20	.77	.38	.21	.02
21	45.22	45.47	46.11	46.06	46.45	48.98	47.66	46.18	45.74	45.38	45.19	45.01
22	.19	.41	.14	.16	.60	49.00	.60	.16	.71	.37	.18	.01
23	.19	.47	45.97	.34	.78	48.99	.81	.15	.69	.40	.16	
24	.14	.50	.79	47.29	47.74	.88	.88	.15	.67	.42	.15	
25	.09	.47	.70	.89	48.62	.75	.73	.13	.66	.42	.14	
26	45.14	45.41	45.99	47.57	48.87	48.95	47.36	46.11	45.65	45.41	45.13	
27	.20	.37	47.91	.32	.97	49.00	.26	.10	.63	.41	.12	
28	.21	.35	.62	46.87	.91	.01	.17	.10	.61	.38	.12	
29	.18	.32	46.98	.60	.83	.00	.14	.09	.58	.36	–	
30	.17	.38	.76	.65	.56	48.94	.10	.08	.55	.36	–	
31		.38		.76	.98		.25		.54	.36		
Mean	45.28	45.50	46.34	46.51	47.48	48.77	48.20	46.52	45.82	45.42	45.27	
Max.	45.86	46.91	47.91	47.89	48.98	49.05	49.01	48.18	46.06	45.53	45.42	
Min.	45.09	45.06	45.46	45.78	46.32	47.66	47.10	46.08	45.54	45.36	45.12	

WATER YEAR 1957 : Max. 49.01 m. Min. – m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.66	1.78	4.00	51	50	255	231	56	13	4.76	3.16	1.36
2	1.48	1.66	45	40	110	255	255	62	13	4.64	3.16	1.30
3	1.36	1.54	29	28	75	260	255	108	13	4.52	3.60	1.30
4	1.30	1.48	18	21	60	260	250	48	13	4.40	3.40	1.27
5	1.30	1.36	14	17	47	260	250	42	12	4.20	3.24	1.24
6	2.04	1.24	15	14	37	266	240	37	12	4.20	3.00	1.24
7	3.50	1.18	19	13	29	276	221	34	11	4.10	2.92	1.21
8	6.44	1.54	19	13	27	271	184	31	11	3.90	2.84	1.24
9	9.48	1.97	19	12	20	255	167	28	11	3.90	2.76	1.21
10	6.96	1.97	14	9.48	22	245	186	26	11	3.80	2.68	1.21
11	5.72	1.78	12	8.08	48	184	184	27	10	3.80	2.68	1.18
12	5.48	1.84	20	8.24	100	157	231	27	10	3.70	2.60	1.18
13	5.12	38	24	15	81	141	172	25	10	3.60	2.60	1.15
14	4.64	35	28	22	71	135	145	22	9.84	3.60	2.53	1.15
15	3.70	22	27	49	83	116	124	21	9.30	3.50	2.46	1.12
16	3.32	15	19	34	48	96	102	20	9.12	3.40	2.39	1.12
17	3.08	11	14	22	36	84	91	19	8.94	3.40	2.32	1.09
18	2.68	11	13	17	29	73	81	18	8.76	3.32	2.25	1.09
19	2.32	5.96	14	15	24	100	84	17	8.58	3.32	2.11	1.06
20	2.25	4.76	14	13	22	245	80	17	7.92	3.24	1.97	1.06
21	2.04	4.10	15	13	23	240	73	16	7.44	3.24	1.84	1.03
22	1.84	3.50	15	16	28	250	70	16	6.96	3.16	1.78	1.03
23	1.84	4.10	12	20	34	245	81	16	6.86	3.40	1.66	1.00
24	1.54	4.40	8.24	54	77	197	86	16	6.44	3.60	1.60	1.00
25	1.27	4.10	6.80	86	153	172	77	15	6.32	3.60	1.54	1.00
26	1.54	3.50	12	68	195	226	58	15	6.20	3.50	1.48	0.97
27	1.90	3.16	88	56	236	250	53	14	5.96	3.50	1.42	0.95
28	1.97	3.00	71	37	207	255	49	14	5.72	3.24	1.42	0.95
29	1.78	2.76	41	28	186	250	48	14	5.36	3.16		0.92
30	1.72	3.24	33	29	146	221	46	14	5.00	3.16		0.92
31		3.24		33	240		52		4.88	3.16		0.90
Total	91.27	202.16	683.04	861.80	2,544	6,240	4,226	835	279.42	114.02	67.41	34.45
Mean	3.04	6.52	22.8	27.8	82.1	208	136	27.8	9.01	3.68	2.41	1.11
Max.	9.48	38	88	86	240	276	255	108	13	4.76	3.60	1.36
Min.	1.27	1.18	4.00	8.08	20	73	46	14	4.88	3.16	1.42	0.90
Runoff - mcm.	7.886	17.467	59.015	74.459	219.802	539.136	365.640	72.144	24.142	9.851	5.824	2.98

WATER YEAR 1957 : Max. 276 Min. 0.90 Mean 44.3 Annual Runoff 1,397.828 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 7	15.00	49.06	282				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
YOM RIVER BASIN

Mae Yom River at Talat Thani, Sokhothai (Y.4)

Location: Lat 17° – 00' – 18" N, Long 99° – 49' – 31" E, on left bank infront of the house of the Governor, Amphoe Muang, Sokhothai.

Drainage Area: 17,731 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +45.00 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D.

Location: About 22 meters from the upper gage.

Elevation: +47.579 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 – 60, 1962 to date.

Rating Operation:

Period of Rating: 1954 – 56

Rated by Float: –

Rated by Current Meter: 1954 – 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed at elevation +48.50 m. (M.S.L.) but not included for flow computation.

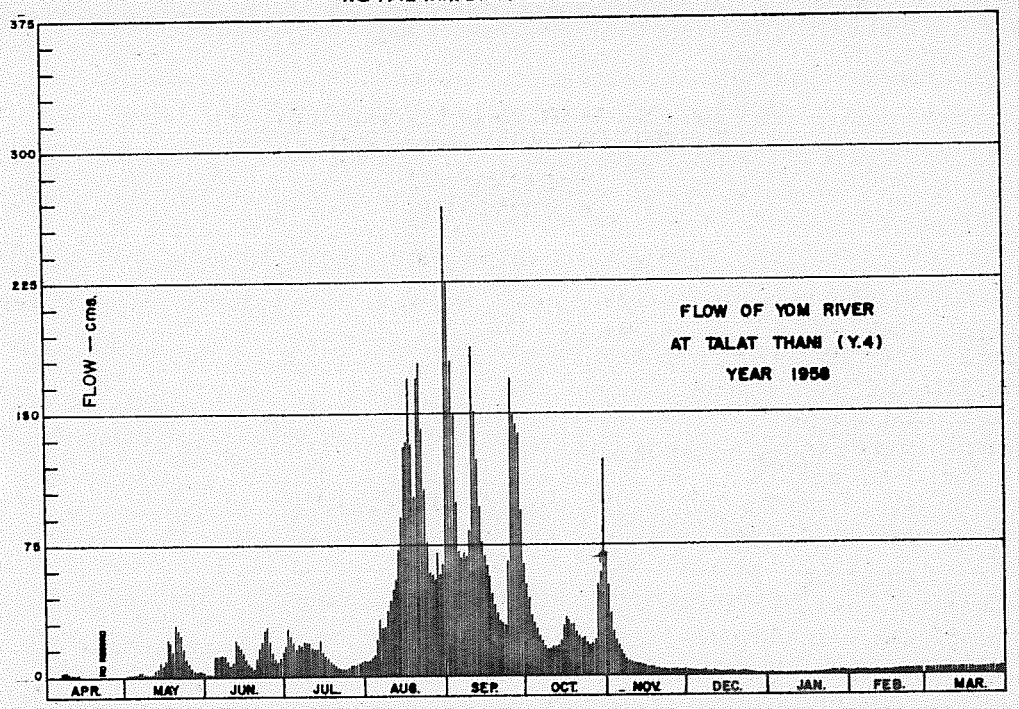
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1954 – 56. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

Remarks: No gage height record for Apr. 1 – 5, 14 – 30.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		45.00	45.18	46.35	45.85	48.96	47.31	47.33	45.35	45.05	45.27	45.36
2		.00	.14	.61	.85	.83	.10	46.90	.35	.04	.28	.36
3		.12	.11	.52	.92	.68	46.86	.61	.34	.03	.28	.36
4		.13	46.00	.32	46.05	.07	.70	.40	.33	.02	.29	.37
5		.14	.01	.23	.44	47.65	.57	.25	.32	.02	.29	.37
6	45.11	45.15	45.97	46.29	46.75	47.56	46.46	46.12	45.32	45.01	45.30	45.37
7	.26	.16	.98	.25	.61	.63	.32	.03	.31	.01	.31	.37
8	.26	.01	.99	.33	.64	.59	.23	45.93	.29	.01	.32	.37
9	.19	.03	.83	.32	.93	.84	.13	.82	.27	.01	.33	.37
10	.12	.06	.66	.32	47.05	48.84	.16	.78	.26	.01	.32	.38
11	45.07	45.13	45.78	46.23	47.14	48.70	46.22	45.74	45.26	45.01	45.31	45.38
12	.04	.49	46.36	.16	.31	.36	.20	.67	.25	.01	.31	.38
13	.01	.55	.28	.15	.60	47.99	.23	.64	.24	.01	.31	.38
14		.75	.23	.35	.99	.77	.34	.62	.24	.01	.30	.38
15		.66	.11	.11	48.43	.61	.61	.60	.23	.02	.31	.39
16		45.86	45.90	45.99	48.46	47.51	46.76	45.56	45.23	45.04	45.32	45.39
17		46.37	.74	.95	.74	.34	.73	.53	.22	.06	.32	.40
18		.28	.67	.87	.22	.12	.65	.51	.22	.08	.34	.40
19		.10	.50	.77	.09	.01	.62	.47	.21	.09	.35	.41
20		.66	.96	.68	.73	46.86	.50	.46	.19	.10	.36	.41
21		46.58	46.21	45.63	48.80	46.75	46.45	45.44	45.17	45.12	45.36	45.42
22		.47	.34	.59	.60	.66	.36	.41	.16	.14	.36	.43
23		.15	.55	.57	.20	.63	.39	.39	.15	.16	.36	.44
24		45.96	.59	.57	47.74	47.51	.33	.37	.15	.18	.36	.45
25		.77	.36	.60	.40	48.74	.23	.36	.13	.20	.36	.45
26		45.59	46.08	45.67	47.38	48.60	46.24	45.36	45.12	45.22	45.36	45.45
27		.47	45.91	.72	.33	.53	.37	.36	.11	.24	.36	.45
28		.39	.83	.73	.62	.48	47.25	.36	.10	.26	.36	.45
29		.43	.92	.75	.37	.12	.37	.36	.09	.29		.45
30		.38	46.07	.77	.48	47.63	48.36	.36	.07	.29		.45
31		.27		.86	49.03		47.72		.06	.29		.45
Mean		45.91	45.94	46.01	47.47	47.85	46.64	45.76	45.22	45.09	45.32	45.40
Max.		46.66	46.59	46.61	49.03	48.96	48.36	47.33	45.35	45.29	45.36	45.45
Min.		45.00	45.11	45.57	45.85	46.63	46.13	45.36	45.06	45.01	45.27	45.36

WATER YEAR 1958 : Max. 49.03 m. Min. 45.00 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		1.00	1.78	21	9.30	231	55	56	3.00	1.15	2.39	3.08
2		1.00	1.54	28	9.30	183	46	38	3.00	1.12	2.46	3.08
3		1.42	1.36	25	11	161	36	28	2.92	1.09	2.46	3.08
4		1.48	12	20	13	100	31	22	2.84	1.06	2.53	3.16
5		1.54	12	17	23	72	27	18	2.76	1.06	2.53	3.16
6	1.36	1.60	12	19	33	68	24	15	2.76	1.03	2.60	3.16
7	2.32	1.66	12	18	28	71	20	13	2.68	1.03	2.68	3.16
8	2.32	1.03	12	20	29	69	17	11	2.53	1.03	2.76	3.16
9	1.84	1.09	8.94	20	39	83	15	8.76	2.39	1.03	2.84	3.16
10	1.42	1.18	6.32	20	44	188	16	8.08	2.32	1.03	2.76	3.24
11	1.21	1.48	8.08	17	48	164	17	7.44	2.32	1.03	2.68	3.24
12	1.12	4.30	21	16	55	124	17	6.44	2.24	1.03	2.68	3.24
13	1.03	5.00	19	16	70	94	17	6.08	2.18	1.03	2.68	3.24
14		7.60	17	21	94	79	20	5.84	2.18	1.03	2.60	3.24
15		6.32	15	15	131	70	28	5.60	2.11	1.06	2.68	3.32
16		9.48	10	12	134	65	33	5.12	2.11	1.12	2.76	3.32
17		21	7.44	11	170	57	32	4.76	2.04	1.18	2.76	3.40
18		19	6.44	9.66	111	47	29	4.52	2.04	1.24	2.92	3.40
19		14	4.40	7.92	101	42	29	4.10	1.97	1.27	3.00	3.50
20		30	11	6.56	169	36	25	4.00	1.84	1.30	3.08	3.50
21		27	17	5.96	179	33	23	3.80	1.72	1.42	3.08	3.60
22		24	20	5.48	150	30	21	3.50	1.66	1.54	3.08	3.70
23		16	26	5.24	110	29	22	3.32	1.60	1.66	3.08	3.80
24		11	28	5.24	77	65	20	3.16	1.60	1.78	3.08	3.90
25		7.92	21	5.60	60	170	17	3.08	1.48	1.90	3.08	3.90
26		5.48	14	6.44	59	150	18	3.08	1.42	2.04	3.08	3.90
27		4.10	10	7.12	56	142	21	3.08	1.36	2.18	3.08	3.90
28		3.32	8.94	7.28	71	137	52	3.08	1.30	2.32	3.08	3.90
29		3.70	11	7.60	58	103	58	3.08	1.27	2.53		3.90
30		3.24	14	7.92	64	71	124	3.08	1.21	2.53		3.90
31		2.39		9.48	266		76		1.18	2.53		3.90
Total		239.33	370.24	413.50	2,471.60	2,934	986	304	64.04	44.35	78.49	107.14
Mean		7.72	12.3	13.3	79.7	97.8	31.8	10.1	2.06	1.43	2.80	3.46
Max.		30	28	28	266	231	124	56	3.00	2.53	3.08	3.90
Min.		1.00	1.36	5.24	9.30	29	15	3.08	1.18	1.03	2.39	3.08
Runoff - MCM.		20.678	31.989	35.726	213.546	253.498	85.190	26.266	5.533	3.832	6.781	9.257

WATER YEAR 1958 : Max. 266 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 31	15.00	49.04	271				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
YOM RIVER BASIN

Mae Yom River at Talat Thani, Sukhothai (Y.4)

Location: Lat 17°- 00' - 18" N, Long 99°- 49' - 31" E, on left bank infront of the house of the Governor, Amphoe Muang, Sukhothai.

Drainage Area: 17,731 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +45.00 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: About 22 meters from the upper gage.
Elevation: +47.579 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: 1950-60, 1962 to date.

Rating Operation:

Period of Rating: 1954 - 56
Rated by Float: -
Rated by Current Meter: 1954 - 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed at elevation +48.50 m.(M.S.L.) but not included for flow computation.

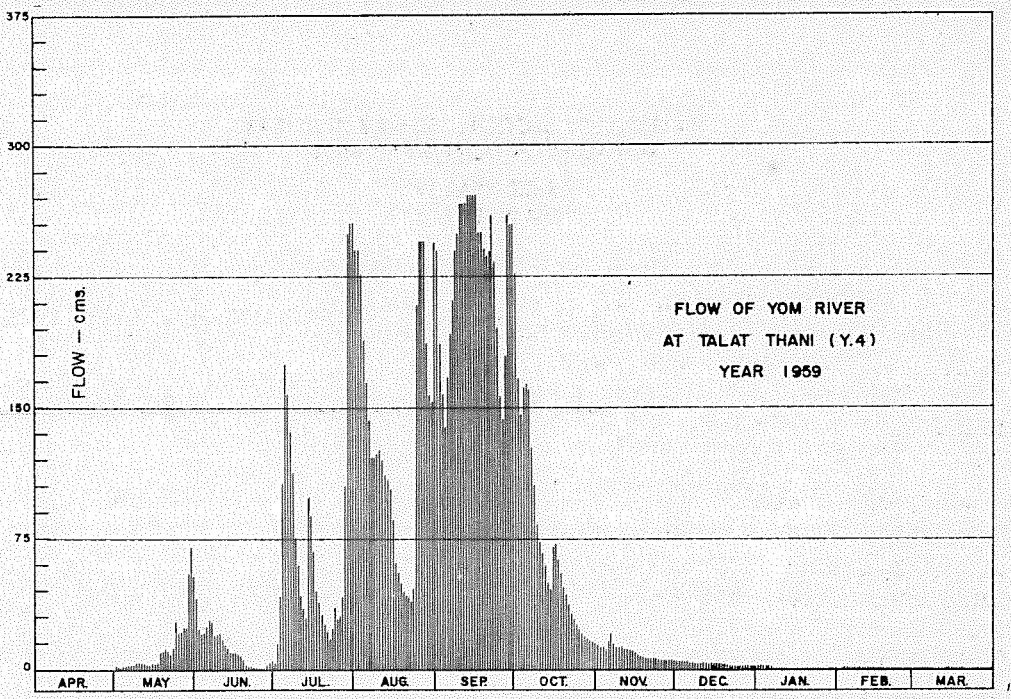
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1954 - 56. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

Remarks: No gage height record for Apr.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		45.22	46.85	45.49	48.98	48.98	48.94	46.07	45.55	45.21	44.81	44.75
2		.04	.47	46.21	.98	.87	.73	.04	.54	.20	45.02	.73
3		.01	.38	47.14	.95	.65	.56	.02	.54	.19	.09	.72
4		.08	.39	48.40	.82	.49	.68	44.99	.53	.18	44.98	.71
5		.20	.49	.77	.66	.79	.70	46.22	.52	.16	.97	.70
6		45.26	46.63	48.66	48.51	48.85	48.68	46.36	45.50	45.14	44.96	44.69
7		.31	.58	.46	.33	.92	.39	.10	.49	.12	.95	.69
8		.34	.32	.16	.34	.98	.10	.04	.49	.11	.93	.68
9		.36	.34	47.74	.38	49.01	47.88	.04	.48	.10	.92	.68
10		.38	.37	.31	.39	.03	.66	.03	.48	.08	.91	.67
11		45.39	46.20	47.03	48.32	49.03	47.55	46.00	45.48	45.07	44.90	44.67
12		.32	.08	46.81	.23	.03	.44	.00	.47	.06	.89	.66
13		.27	.05	.65	.21	.04	.25	45.98	.46	.05	.91	.66
14		.23	45.85	48.06	.17	.04	.10	.94	.44	.04	45.01	.66
15		.38	.84	47.79	47.92	.04	.61	.89	.43	.03	44.95	.65
16		45.40	45.85	47.25	47.49	49.04	47.65	45.84	45.42	45.02	44.92	44.65
17		.52	.83	.10	.34	.00	.53	.78	.40	.01	.90	.64
18		.89	.78	46.90	.19	.00	.34	.73	.38	44.99	.88	.64
19		.90	.52	.71	.12	48.98	.16	.69	.36	.98	.87	.64
20		.98	.37	.54	.02	.97	46.99	.68	.35	.97	.86	.64
21		45.92	45.27	46.39	46.99	48.98	46.86	45.68	45.34	44.96	44.85	44.64
22		.81	.22	.26	.95	49.02	.74	.68	.32	.95	.83	.63
23		45.01	.16	.57	47.28	48.96	.64	.65	.30	.94	.82	.63
24		.57	.13	.84	48.90	.85	.54	.65	.29	.93	.81	.63
25		.35	.11	.65	.99	.62	.45	.62	.28	.93	.80	.63
26		46.35	45.10	46.71	48.99	48.54	46.36	45.59	45.27	44.92	44.79	44.63
27		.48	.13	47.09	.99	.81	.30	.57	.26	.91	.78	.62
28		.47	.27	48.61	.84	49.02	.25	.56	.25	.91	.77	.62
29		47.33	.48	49.00	.64	.01	.20	.56	.24	.90	.76	.61
30		.61	.52	.01	.62	.01	.16	.55	.23	.89		.61
31		.20		.01	.99		.11		.22	.88		.60
Mean		45.79	45.85	47.40	48.24	48.92	47.37	45.85	45.40	45.03	44.89	44.66
Max.		47.61	46.85	49.01	48.99	49.04	48.94	46.36	45.55	45.21	45.09	44.75
Min.		45.01	45.10	45.49	46.95	48.49	46.11	45.55	45.22	44.88	44.76	44.60

WATER YEAR 1959 : Max. 49.04 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		2.04	36	4.30	240	240	221	14	5.00	1.97	0.52	0.38
2		1.12	24	17	240	195	169	13	4.88	1.90	1.06	0.34
3		1.03	21	48	226	157	146	13	4.88	1.84	1.27	0.32
4		1.24	22	128	184	138	161	12	4.76	1.78	0.95	0.29
5		1.90	25	175	159	178	164	17	4.64	1.66	0.92	0.27
6		2.32	29	159	140	191	161	21	4.40	1.54	0.90	0.25
7		2.68	27	134	121	212	127	14	4.30	1.42	0.87	0.25
8		2.92	20	106	122	240	102	13	4.30	1.36	0.82	0.24
9		3.08	20	77	126	255	86	13	4.20	1.30	0.79	0.24
10		3.24	21	55	127	266	73	13	4.20	1.24	0.77	0.22
11		3.32	17	43	120	266	67	12	4.20	1.21	0.74	0.22
12		2.76	14	35	112	266	62	12	4.10	1.18	0.72	0.20
13		2.39	13	29	110	271	52	12	4.00	1.15	0.77	0.20
14		2.11	9.30	99	107	271	46	11	3.80	1.12	1.03	0.20
15		3.24	9.12	80	89	271	70	10	3.70	1.09	0.87	0.18
16		3.40	9.30	52	64	271	72	9.12	3.60	1.06	0.79	0.18
17		4.64	8.94	46	57	250	66	8.08	3.40	1.03	0.74	0.17
18		10	8.08	38	50	250	57	7.28	3.24	0.97	0.69	0.17
19		10	4.64	31	47	240	48	6.68	3.08	0.95	0.67	0.17
20		12	2.92	26	43	236	42	6.56	3.00	0.92	0.64	0.17
21		11	2.39	22	42	240	36	6.56	2.92	0.90	0.62	0.17
22		8.58	2.04	18	40	260	32	6.56	2.76	0.87	0.57	0.15
23		12	1.66	27	54	231	29	6.20	2.60	0.84	0.55	0.15
24		27	1.48	36	202	191	26	6.20	2.53	0.82	0.52	0.15
25		21	1.36	29	245	153	23	5.84	2.46	0.82	0.50	0.15
26		21	1.30	31	245	143	21	5.48	2.39	0.79	0.48	0.15
27		24	1.48	46	245	181	19	5.24	2.32	0.77	0.45	0.13
28		24	2.39	152	188	260	18	5.12	2.25	0.77	0.43	0.13
29		56	4.20	250	156	255	17	5.12	2.18	0.74	0.41	0.12
30		70	4.64	255	153	255	16	5.00	2.11	0.72		0.12
31		50		255	245		15		2.04	0.69		0.10
Total		400.01	364.24	2,503.30	4,299	6,833	2,244	295.04	108.24	35.42	21.06	6.18
Mean		12.9	12.1	30.7	139	228	72.4	9.83	3.49	1.14	0.73	0.20
Max.		70	36	255	245	271	221	21	5.00	1.97	1.27	0.38
Min.		1.03	1.30	4.30	40	138	15	5.00	2.04	0.69	0.41	0.10
Runoff - MCM.		34.561	31.470	216.285	371.434	590.371	193.882	25.491	9.352	3.060	1.819	0.534

WATER YEAR 1959 : Max. 271 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 13	06.00	49.04	271				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
YOM RIVER BASIN

Mae Yom River at Kaeng Luang, Sukhothai (Y.6)

Location: Lat 17°- 26' - 03" N, Long 99°- 47' - 32" E, on left bank 150 meters upstream from Kaeng Luang, 300 meters from Km.8 on highway Si Satchanalai – Sawankhalok, Amphoe Si Satchanalai, Sukhothai.

Drainage Area: 12,658 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +58.80 m.(M.S.L.)

Bench Mark: B.M. – R.I.D. No.1

Location: On left bank near the camp of gage observer.
Elevation: +69.132 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: 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, no shifting adjustment for flow computation due to its stability.

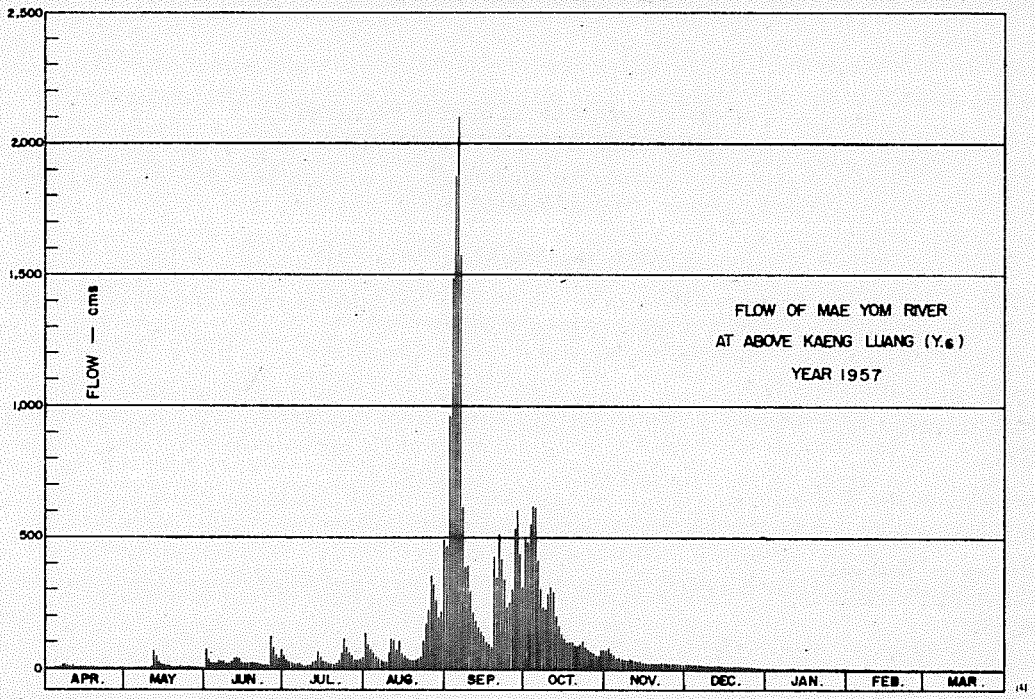
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation use is defined by discharge measurements during 1957. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	59.70	59.72	60.96	60.68	61.46	63.29	63.46	60.95	60.20	59.90	59.88	59.71
2	.69	.71	.48	.47	.12	65.14	.40	.99	.18	.89	.87	.70
3	.68	.70	.23	.35	60.94	66.65	.68	.80	.18	.89	.85	.70
4	.68	.69	.20	.28	.81	67.52	.94	.71	.17	.88	.83	.70
5	.89	.68	.22	.18	.58	.96	.91	.63	.18	.88	.83	.69
6	59.85	59.67	60.37	60.16	60.51	66.77	63.10	60.60	60.17	59.88	59.82	59.69
7	60.06	.79	.34	.21	.43	63.91	62.54	.54	.14	.87	.82	.69
8	.04	.76	.33	.13	.35	62.96	.16	.50	.13	.87	.83	.72
9	59.94	.73	.19	.06	.36	.97	.11	.47	.12	.86	.87	.70
10	.89	.72	.11	.02	.79	.50	.48	.51	.11	.86	.85	.69
11	59.95	59.93	60.41	60.05	61.31	62.03	62.57	60.49	60.10	59.86	59.83	59.69
12	.89	60.87	.50	.30	.24	61.81	.48	.44	.09	.85	.82	.68
13	.86	.63	.60	.42	60.94	.63	61.93	.42	.08	.85	.82	.67
14	.85	.33	.50	.84	61.21	.54	.69	.36	.07	.84	.78	.66
15	.84	.17	.31	.60	60.77	.39	.45	.34	.07	.84	.77	.66
16	59.81	60.05	60.19	60.38	60.65	61.23	61.30	60.33	60.05	59.84	59.77	59.65
17	.78	59.97	.18	.27	.52	.12	.19	.32	.04	.84	.76	.65
18	.77	.92	.25	.22	.42	.04	.22	.28	.03	.84	.76	.66
19	.75	.88	.21	.17	.36	63.13	.20	.27	.02	.83	.75	.67
20	.73	.85	.28	.16	.39	62.78	.12	.26	.01	.83	.75	.65
21	59.72	59.82	60.24	60.28	60.52	63.50	61.09	60.26	60.00	59.83	59.74	59.65
22	.73	.94	.08	.39	.64	.10	.15	.25	59.99	.85	.74	.65
23	.74	.88	.00	.77	61.24	62.73	.23	.25	.98	.85	.73	.64
24	.75	.83	59.98	61.29	.72	.15	.04	.23	.97	.84	.73	.64
25	.77	.81	60.05	.04	62.09	.26	60.94	.22	.97	.84	.73	.63
26	59.76	59.80	61.37	60.86	62.79	62.46	60.86	60.22	59.95	59.83	59.72	59.62
27	.74	.80	.04	.66	.64	63.57	.81	.23	.94	.83	.72	.62
28	.73	.78	60.67	.48	.31	.88	.75	.22	.93	.83	.71	.62
29	.71	.85	.54	.47	61.90	.19	.73	.21	.93	.83		.62
30	.71	.83	.90	.50	62.04	62.60	.89	.20	.92	.83		.63
31		.87		.63	63.41		.90		.91	.86		
Mean	59.80	59.90	60.39	60.43	61.18	63.23	61.85	60.42	60.05	59.85	59.79	59.66
Max.	60.06	60.87	61.37	61.29	63.41	67.96	63.94	60.99	60.20	59.90	59.88	59.71
Min.	59.68	59.67	59.98	60.02	60.35	61.04	60.73	60.20	59.91	59.83	59.71	59.62

WATER YEAR 1957 : Max. 67.96 m. Min. 59.62 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.40	3.92	79	53	138	464	504	78	22	9.00	8.40	3.66
2	3.22	3.66	39	38	96	961	490	82	21	8.70	8.10	3.40
3	3.04	3.40	23	30	77	1,489	557	64	21	8.70	7.50	3.40
4	3.04	3.22	22	26	65	1,878	622	56	20	8.40	6.90	3.40
5	8.70	3.04	23	21	46	2,100	615	49	21	8.40	6.90	3.22
6	7.50	2.86	31	20	41	1,572	421	47	20	8.40	6.60	3.22
7	15	5.74	29	22	35	615	307	43	19	8.10	6.60	3.22
8	15	4.96	29	18	30	392	241	40	18	8.10	6.90	3.92
9	11	4.18	21	15	31	394	233	38	18	7.80	8.10	3.40
10	8.70	3.92	17	14	63	300	296	41	17	7.80	7.50	3.22
11	11	10	34	15	119	220	313	39	17	7.80	6.90	3.22
12	8.70	70	40	27	111	186	296	36	17	7.50	6.60	3.04
13	7.80	49	47	34	77	160	204	34	16	7.50	6.00	2.86
14	7.50	29	40	68	107	148	169	31	16	7.20	5.48	2.68
15	7.20	20	28	47	61	129	136	29	16	7.20	5.22	2.68
16	6.30	15	21	32	51	110	118	29	15	7.20	5.22	2.50
17	5.48	12	21	25	41	96	105	28	15	7.20	4.96	2.50
18	5.22	9.80	24	23	34	87	108	26	14	7.20	4.96	2.68
19	4.70	8.40	22	20	31	428	106	25	14	6.90	4.70	2.86
20	4.18	7.50	26	20	32	354	96	25	13	6.90	4.70	2.50
21	3.92	6.60	24	26	41	514	93	25	13	6.90	4.44	2.50
22	4.18	11	16	32	50	421	100	24	13	7.50	4.44	2.50
23	4.44	8.40	13	61	111	344	110	24	12	7.50	4.18	2.32
24	4.70	6.90	12	117	173	239	87	23	12	7.20	4.18	2.32
25	5.22	6.30	15	87	229	258	77	23	12	7.20	4.18	2.14
26	4.96	6.00	126	69	356	293	69	23	11	6.90	3.92	1.96
27	4.44	6.00	87	52	326	531	65	23	11	6.90	3.92	1.96
28	4.18	5.48	53	39	267	607	59	23	10	6.90	3.66	1.96
29	3.66	7.50	43	38	200	441	58	22	10	6.90		1.96
30	3.66	6.90	73	40	221	318	72	22	9.80	6.90		1.96
31		8.10		49	492		73		9.40	7.80		2.14
Total	190.04	348.78	1,078	1,178	3,752	16,049	6,800	1,072	473.20	234.60	161.16	85.30
Mean	6.33	11.2	35.9	38.0	121	535	219	35.7	15.3	7.57	5.75	2.74
Max.	15	70	126	117	492	2,100	622	82	22	9.00	8.40	3.66
Min.	3.04	2.86	12	14	30	87	58	22	9.40	6.90	3.66	1.96
Runoff - mcm.	16.419	30.134	93.139	101.779	324.173	1,386.634	587.520	92.621	40.884	20.269	13.924	7.370

WATER YEAR 1957 : Max. 2,100 Min. 1.96 Mean 86.1 Annual Runoff 2,714.868 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 5	16.00	68.00	2,200				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
YOM RIVER BASIN

Mae Yom River at Kaeng Luang, Sukhothai (Y.6)

Location: Lat 17° – 26' – 03" N, Long 99° – 47' – 32" E, on left bank 150 meters upstream of Kaeng Luang, 300 meters from Km.8 on highway Si Satchanalai – Sawankhalok, Amphoe Si Satchanalai, Sukhothai.

Drainage Area: 12,658 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +58.80 m.(M.S.L.) Prior to Jun.1958 staft gage at same site and datum.

Bench Mark: B.M. – R.I.D. No.1

Location: On left bank near the camp of gage observer.
Elevation: +69.132 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly 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, no shifting adjustment for flow computation due to its stability.

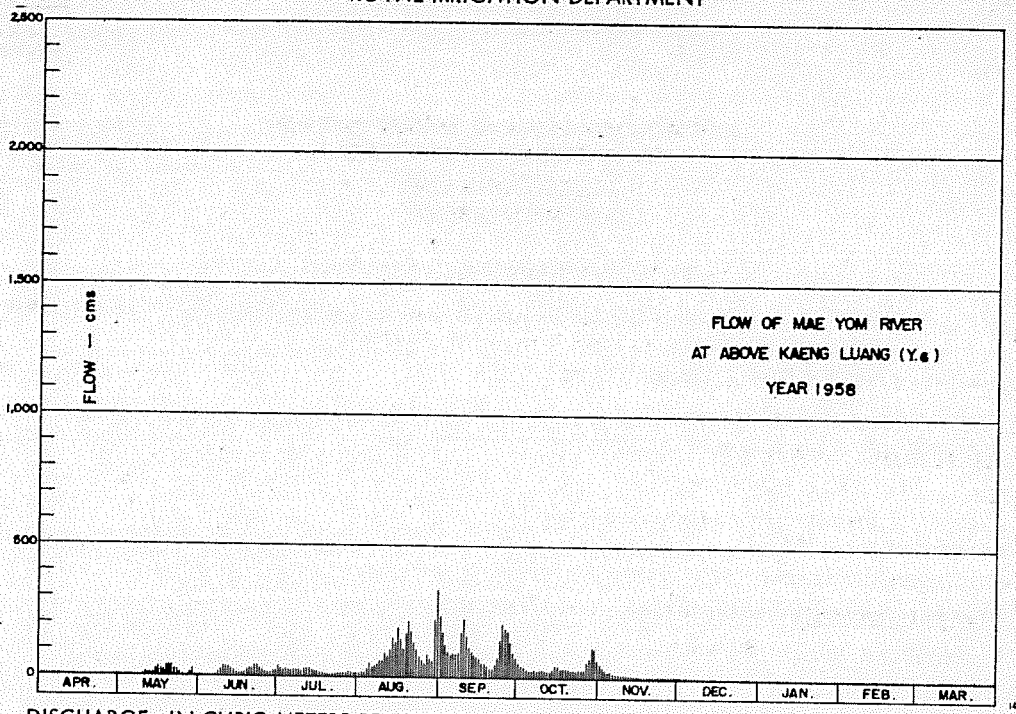
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1958. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	59.63	59.61	59.75	60.60	60.12	62.28	60.79	60.66	59.87	59.69	59.61	59.51
2	.64	.61	.75	.51	.16	61.87	.65	.55	.86	.69	.60	.51
3	.63	.60	60.25	.40	.23	.42	.55	.44	.86	.73	.60	.52
4	.69	.60	.24	.34	.41	.20	.48	.29	.86	.75	.59	.51
5	.80	.62	.16	.39	.66	.11	.49	.24	.85	.73	.59	.50
6	59.78	59.69	60.24	60.35	60.53	61.12	60.33	60.21	59.84	59.71	59.59	59.50
7	.74	.71	.19	.40	.56	.09	.30	.16	.84	.69	.59	.50
8	.71	.69	.05	.41	.73	.20	.30	.11	.83	.69	.58	.50
9	.70	.68	59.97	.37	.78	.87	.33	.09	.83	.69	.59	.49
10	.68	.85	60.12	.32	.81	62.11	.34	.06	.82	.69	.60	.49
11	59.66	59.96	60.45	60.29	60.97	61.69	60.30	60.05	59.82	59.68	59.59	59.48
12	.65	.95	.38	.41	61.07	.37	.35	.02	.81	.68	.59	.48
13	.64	60.03	.31	.41	.30	.23	.40	.01	.81	.68	.59	.48
14	.63	59.98	.21	.24	.59	.12	.48	59.99	.82	.67	.59	.47
15	.63	60.22	.13	.20	.62	.08	.64	.99	.82	.67	.58	.46
16	59.63	60.43	60.02	60.18	61.92	61.00	60.66	59.97	59.81	59.66	59.58	59.45
17	.62	.29	.02	.11	.62	60.85	.59	.96	.80	.65	.58	.45
18	.62	.18	.07	.05	.40	.79	.52	.96	.80	.65	.58	.45
19	.62	.43	.28	.02	.85	.70	.57	.94	.78	.64	.58	.45
20	.63	.46	.34	59.99	62.12	.59	.47	.92	.79	.64	.57	.45
21	59.64	60.48	60.41	59.97	61.90	60.50	60.39	59.91	59.78	59.63	59.56	59.45
22	.61	.24	.54	.96	.56	.76	.42	.91	.77	.63	.56	.46
23	.61	.13	.49	.99	.28	61.09	.39	.89	.75	.63	.55	.49
24	.61	.03	.36	60.02	.04	.67	.34	.89	.74	.63	.54	.49
25	.64	59.94	.21	.05	60.99	62.04	.30	.89	.73	.62	.54	.40
26	59.64	59.88	60.12	60.07	60.89	61.89	60.34	59.89	59.73	59.62	59.53	59.47
27	.65	.90	.06	.08	61.07	.82	.79	.88	.72	.62	.52	.45
28	.65	.88	.16	.09	.00	.50	.94	.88	.72	.61	.52	.42
29	.64	.82	.23	.09	60.90	.20	61.32	.87	.71	.61		.41
30	.62	.78	.42	.11	62.18	60.97	.32	.87	.71	.60		.41
31		.76		.10	.90		60.94		.70	.61		.40
Mean	59.65	59.95	60.20	60.21	61.17	61.30	60.55	60.05	59.79	59.66	59.57	59.47
Max.	59.80	60.48	60.54	60.60	62.90	62.28	61.32	60.66	59.87	59.75	59.61	59.52
Min.	59.61	59.60	59.75	59.96	60.12	60.50	60.30	59.87	59.70	59.60	59.52	59.40

WATER YEAR 1958 : Max. 62.90 m. Min. 59.40 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2.40	1.70	5.50	41	17	238	58	57	8.50	3.80	2.20	1.10
2	2.40	1.70	5.50	34	19	178	49	40	7.60	3.00	2.00	1.10
3	2.00	1.60	28	28	23	121	42	30	7.00	3.20	2.00	1.20
4	3.20	1.60	28	32	34	98	33	23	6.50	3.80	1.90	1.10
5	5.90	1.80	23	29	52	88	29	25	5.90	3.20	1.90	1.00
6	5.20	3.20	29	26	41	94	29	20	4.90	3.00	1.90	1.00
7	4.00	3.60	27	29	45	90	30	19	5.20	2.80	1.90	1.00
8	3.20	3.40	18	29	54	98	29	15	4.90	3.00	1.80	1.00
9	3.00	3.40	14	28	62	176	30	14	4.90	3.00	1.90	0.30
10	2.60	8.20	20	28	61	223	30	12	5.20	2.00	2.00	0.30
11	2.00	12	39	31	92	156	28	12	4.90	2.00	1.90	0.80
12	2.00	12	36	32	82	116	28	11	4.90	2.00	1.90	0.80
13	2.00	15	30	34	104	99	29	10	4.90	2.20	1.90	0.80
14	1.90	13	23	26	153	84	34	10	5.20	2.00	1.90	0.70
15	1.90	25	19	23	138	79	47	10	5.50	2.00	1.80	0.60
16	1.90	38	14	22	190	71	47	9.40	5.20	2.00	1.80	0.50
17	1.80	30	14	17	148	59	37	9.10	4.30	2.00	1.80	0.50
18	1.70	25	16	15	113	52	35	8.80	4.00	2.00	1.80	0.50
19	1.70	40	28	14	170	46	38	7.00	2.80	2.00	1.80	0.50
20	1.80	43	30	12	211	36	32	7.90	4.90	2.00	1.70	0.50
21	1.90	44	34	11	178	35	26	9.10	4.90	2.00	1.60	0.50
22	1.70	29	44	11	135	54	29	7.00	4.60	1.00	1.60	0.60
23	1.60	22	43	12	103	83	29	6.70	4.00	1.00	1.50	0.90
24	1.60	16	34	14	77	142	31	7.00	4.90	1.00	1.40	0.90
25	1.90	12	28	14	68	208	28	7.30	4.90	1.00	1.40	0.80
26	1.90	8.80	20	15	58	188	31	7.30	4.00	1.00	1.30	0.70
27	2.00	6.20	16	18	87	175	63	7.00	4.00	1.00	1.10	0.50
28	2.00	8.20	14	21	71	133	71	9.40	4.30	1.00	1.10	0.20
29	2.00	7.00	23	16	62	95	117	10	4.00	1.00		0.10
30	1.80	6.20	28	17	216	73	113	9.10	4.30	1.00		0.10
31		5.90		17	335		68		4.00	1.00		0.00
Total	71	448.50	741	696	3,199	3,388	1,320	430.10	155.10	63	48.80	20.60
Mean	2.37	14.5	24.7	22.4	103	113	42.6	14.3	5.00	2.03	1.74	0.66
Max.	5.90	44	44	41	335	238	117	57	8.50	3.80	2.20	1.20
Min.	1.60	1.60	5.50	11	17	35	26	6.70	2.80	1.00	1.10	0.00
Runoff - mcm.	6.134	38.750	64.022	60.134	276.394	292.723	114.048	37.152	13.332	5.443	4.234	1.814

WATER YEAR 1958 : Max. 335 Min. 0.00 Mean 29.0 Annual Runoff 914.207 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 31	06.00	63.20	392				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
YOM RIVER BASIN

Mae Yom River at Kaeng Luang, Sukhothai (Y.6)

Location: Lat 17°– 26' – 03" N, Long 99°– 47' – 32" E, on left bank 150 meters upstream from Kaeng Luang, 300 meters from Km.8 on highway Si Satchanalai – Sawankholok, Amphoe Si Satchanalai, Sukhothai.

Drainage Area: 12,658 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +58.80 m. (M.S.L.)

Bench Mark: B.M. – R.I.D. No.1

Location: On left bank near the camp of gage observer.
Elevation: +69.132 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly 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, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

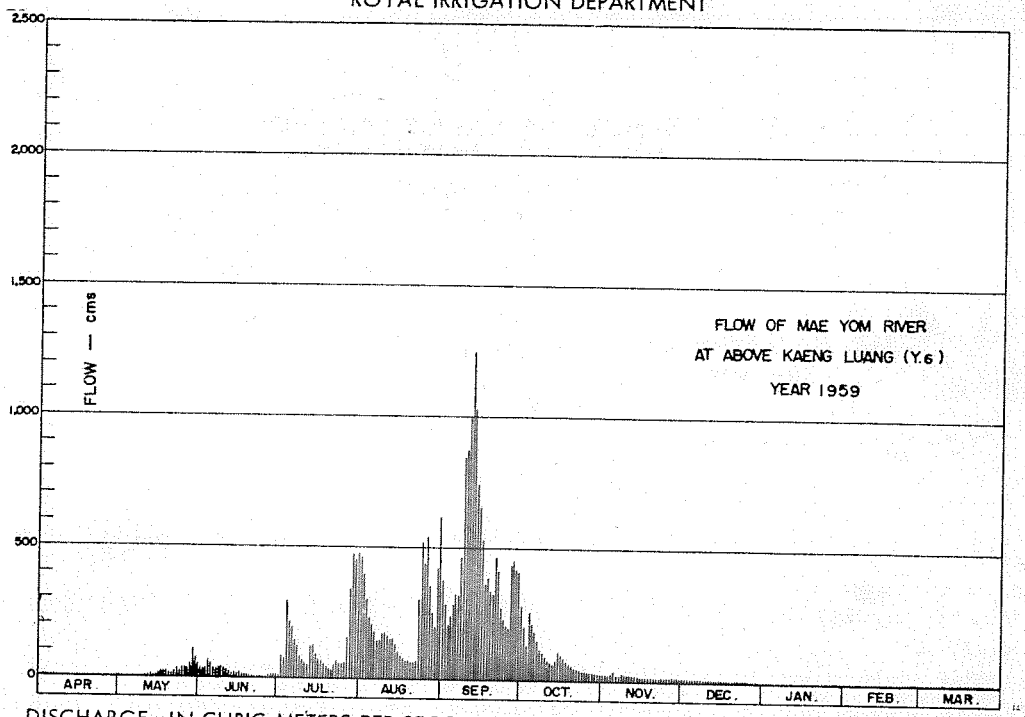
General Description: Records good. Stage – discharge relation used is defined by discharge measurements made during 1959. Upstream state diversions for irrigation of about 5,500 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	59.41	59.70	60.46	60.07	63.19	62.82	62.31	60.26	60.00	59.79	59.71	59.58
2	.44	.64	.36	61.00	62.90	.34	61.92	.25	.00	.78	.70	.58
3	.44	.58	.44	60.96	.45	61.91	.43	.20	59.99	.77	.69	.58
4	.44	.51	.79	62.32	.06	62.11	62.18	.30	.98	.76	.69	.57
5	.41	.51	.64	61.96	61.94	.32	61.94	.42	.97	.75	.69	.57
6	59.39	59.49	60.45	61.82	61.74	62.56	61.77	60.23	59.97	59.74	59.70	59.57
7	.40	.48	.40	.52	.53	.53	.57	.23	.97	.74	.71	.57
8	.41	.50	.48	.38	.55	63.16	.31	.26	.96	.73	.71	.56
9	.40	.57	.48	.05	.72	64.56	.16	.27	.96	.73	.72	.56
10	.38	.56	.35	60.84	.72	.65	.03	.22	.95	.73	.71	.55
11	59.36	59.53	60.30	60.72	61.64	64.96	60.94	60.23	59.94	59.73	59.70	59.55
12	.33	.85	.24	.61	.56	65.64	.86	.21	.93	.73	.69	.55
13	.32	.96	.15	61.33	.57	.07	.80	.20	.92	.72	.68	.55
14	.31	.84	.22	.38	.42	64.25	.97	.17	.92	.72	.67	.56
15	.31	.79	.15	.11	.21	63.96	61.27	.14	.92	.72	.66	.57
16	59.44	60.14	60.20	60.91	61.06	63.47	61.10	60.11	59.91	59.71	59.66	59.58
17	.53	.19	.05	.84	60.98	62.75	.00	.10	.91	.71	.65	.58
18	.52	.18	59.99	.72	.91	.83	60.87	.08	.90	.71	.64	.57
19	.50	.21	.98	.57	.90	.60	.77	.08	.89	.70	.64	.57
20	.45	.09	.85	.45	.81	.55	.70	.07	.88	.70	.63	.57
21	59.47	60.04	59.82	60.42	60.78	63.19	60.62	60.07	59.87	59.69	59.63	59.57
22	.44	.27	.79	.64	.88	62.94	.56	.07	.86	.69	.63	.56
23	.43	.44	.77	.82	62.45	.29	.51	.05	.85	.68	.62	.55
24	.41	.28	.75	.72	63.44	.03	.45	.05	.84	.68	.61	.54
25	.40	.47	.74	.69	.13	61.92	.43	.04	.83	.68	.61	.54
26	59.40	60.49	59.74	60.80	63.52	61.87	60.40	60.04	59.83	59.68	59.61	59.54
27	.40	.43	.94	61.62	62.69	63.12	.36	.04	.82	.67	.60	.54
28	.50	.66	.98	62.66	.16	.18	.35	.03	.81	.67	.60	.54
29	.50	61.20	60.02	63.23	61.88	62.98	.32	.02	.80	.67	.59	.53
30	.83	60.58	59.98	.15	63.03	.95	.30	.01	.79	.74		.53
31		.67		.27	.82		.28		.79	.73		.52
Mean	59.43	60.03	60.15	61.28	61.96	63.12	60.98	60.15	59.90	59.72	59.66	59.56
Max.	59.83	61.20	60.79	63.27	63.82	65.64	62.31	60.26	60.00	59.79	59.72	59.58
Min.	59.36	59.48	59.74	60.07	60.78	61.87	60.28	60.01	59.79	59.67	59.59	59.52

WATER YEAR 1959 : Max. 65.64 m. Min. 59.36 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.10	3.00	38	15	462	382	280	26	12	4.80	3.20	1.80
2	0.40	2.40	32	83	398	286	208	25	12	4.60	3.00	1.80
3	0.40	1.80	37	79	307	206	134	22	12	4.40	2.90	1.80
4	0.40	1.40	63	294	233	245	256	28	11	4.20	2.90	1.70
5	0.10	1.10	51	215	211	282	212	35	11	4.00	2.90	1.70
6	0.00	0.90	37	190	178	328	182	24	11	3.80	3.00	1.70
7	0.00	0.80	34	145	146	322	152	24	11	3.80	3.20	1.70
8	0.10	1.00	40	128	149	466	119	26	11	3.60	3.20	1.60
9	0.00	1.70	40	88	175	846	101	26	11	3.60	3.40	1.60
10	0.00	1.60	31	68	175	875	86	23	10	3.60	3.20	1.50
11	0.00	1.30	28	58	162	1,001	77	24	10	3.60	3.00	1.50
12	0.00	7.00	24	49	150	1,250	69	23	9.90	3.60	2.90	1.50
13	0.00	11	19	122	152	1,030	64	22	9.60	3.40	2.80	1.50
14	0.00	6.60	23	128	132	748	80	20	9.60	3.40	2.70	1.60
15	0.00	4.80	19	95	107	657	114	19	9.60	3.40	2.60	1.70
16	0.40	19	22	74	90	533	94	17	9.30	3.20	2.60	1.80
17	1.30	21	14	68	81	367	83	17	9.30	3.20	2.50	1.80
18	1.20	21	12	58	74	384	70	16	9.00	3.20	2.40	1.70
19	1.00	23	11	46	73	336	62	16	8.60	3.00	2.40	1.70
20	0.50	16	7.00	37	65	326	56	15	8.20	3.00	2.30	1.70
21	0.70	14	5.80	35	62	469	50	15	7.80	2.90	2.30	1.70
22	0.40	26	4.80	51	71	413	45	15	7.40	2.90	2.30	1.60
23	0.30	37	4.40	66	308	276	42	14	7.00	2.80	2.20	1.50
24	0.10	27	4.00	58	522	227	37	14	6.60	2.80	2.10	1.40
25	0.00	39	3.80	55	449	208	36	14	6.20	2.80	2.10	1.40
26	0.00	40	3.80	64	541	199	34	14	6.20	2.80	2.10	1.40
27	0.00	36	10	159	354	446	32	14	5.80	2.70	2.00	1.40
28	1.00	53	11	348	252	460	31	13	5.40	2.70	2.00	1.40
29	1.00	106	13	471	200	416	29	13	5.00	2.70	1.90	1.30
30	6.20	81	11	453	427	409	28	12	4.80	3.80		1.30
31		54		480	618		27		4.80	3.60		1.20
Total	15.60	659.40	653.60	4,280	7,324	14,393	2,890	586	272.10	105.90	76.10	49
Mean	0.53	21.8	21.8	138	236	480	93.2	19.5	8.77	3.42	2.62	1.58
Max.	6.20	106	63	480	618	1,250	280	26	12	4.80	3.40	1.80
Min.	0.00	0.80	3.80	15	62	199	27	12	4.80	2.70	1.90	1.20
Runoff - mcm.	1.348	56.972	56.471	369.792	632.794	1,243.555	249.696	50.630	23.509	9.150	6.575	4.234

WATER YEAR 1959 : Max. 1,250 Min. 0.00 Mean 85.8 Annual Runoff 2,704.726 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 12	09.00	65.83	1,367				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
YOM RIVER BASIN

Mae Yom River at Ban Nun, Phrae (Y.11)

Location: Lat 18°- 30' - 23" N, Long 100°- 00' - 32" E, on left bank at Ban Wang Din, Tambon Ban Nun, 4.5 kilometers west of the country road, Amphoe Ngao - Amphoe Song, Amphoe Song, Phrae.

Drainage Area: 5,542 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +174.00 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1949 - 60

Rating Operation:

Period of Rating: 1955 - 56
Rated by Float: -
Rated by Current Meter: 1955 - 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: No overbank flow.

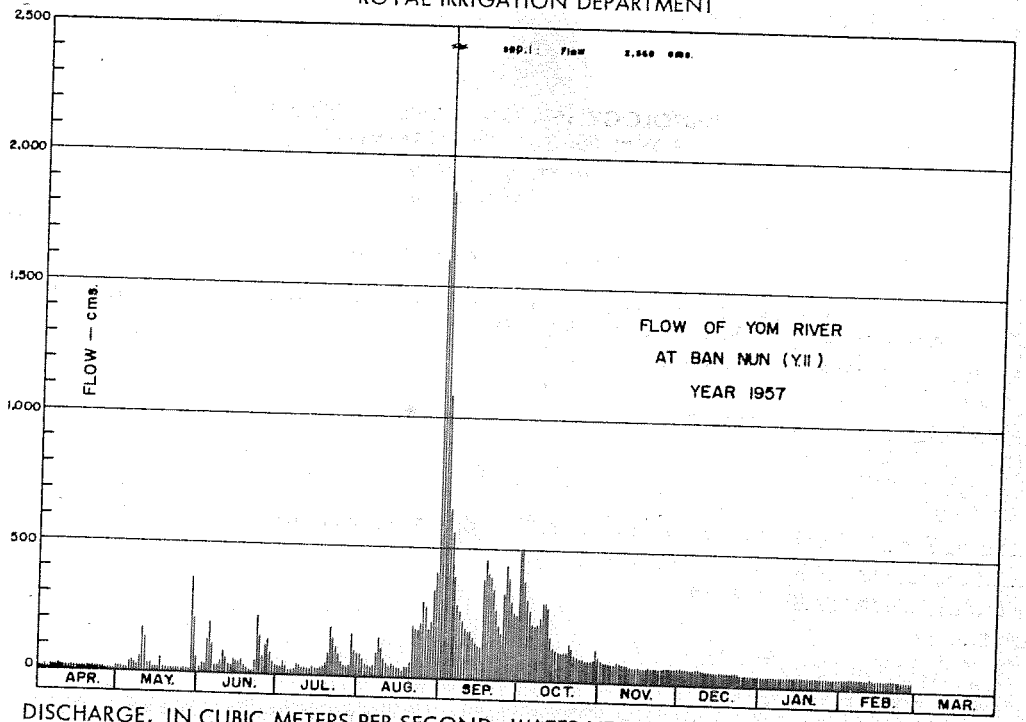
General Description: Records fair. Stage - discharge relation used is defined by discharge measurement during 1955 - 56.

Remarks: No gage height record for Mar.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	174.52	174.67	174.74	174.83	175.34	181.41	177.17	175.30	175.09	174.91	174.90	
2	.51	.57	.90	.85	.17	180.21	.21	.23	.09	.91	.90	
3	.51	.54	.84	175.04	.02	178.03	176.51	.23	.08	.91	.92	
4	.51	.56	175.72	174.83	174.94	177.60	.48	.22	.08	.91	.92	
5	.68	.90	.99	.68	.88	.37	.27	.20	.07	.91	.92	
6	174.64	174.99	174.88	174.68	174.99	176.51	176.03	175.20	175.07	174.91	174.91	
7	.65	.81	.80	.72	175.37	.35	.05	.29	.07	.91	.91	
8	.69	.75	.86	.99	.76	.27	.08	.28	.06	.91	.90	
9	.66	175.01	175.03	.93	.48	.09	.24	.19	.06	.91	.90	
10	.62	.85	.37	.77	.22	175.96	.43	.18	.03	.91	.89	
11	174.60	175.64	175.05	174.81	175.05	175.90	176.00	175.14	175.03	174.91	174.88	
12	.57	174.70	174.84	.75	174.98	.92	175.88	.13	.03	.91	.88	
13	.65	.75	.84	.76	175.07	.76	.71	.12	.03	.91	.87	
14	.56	.60	175.08	.87	174.97	.68	.61	.12	.02	.91	.86	
15	.54	.65	174.99	.78	.92	.63	.55	.12	.02	.91	.85	
16	174.57	174.64	174.99	174.76	174.84	175.57	175.52	175.12	175.02	174.90	174.84	
17	.54	175.10	175.08	.85	.80	176.76	.47	.11	.02	.90	.83	
18	.69	174.60	174.77	.87	.93	.88	.49	.11	.02	.90	.83	
19	.66	.62	.69	175.02	.93	.82	.51	.13	.02	.90	.83	
20	.55	.57	.64	.25	175.07	.81	.70	.11	.02	.90	.82	
21	174.67	174.65	174.60	175.94	176.01	176.61	175.54	175.11	175.02	174.90	174.82	
22	.56	.57	.80	.66	175.94	.20	.41	.11	.00	.90	.82	
23	.56	.55	176.13	.50	.93	175.97	.39	.10	.10	.90	.82	
24	.55	.53	175.67	.25	176.06	.85	.34	.10	174.92	.90	.81	
25	.54	.53	.16	.05	.43	176.67	.32	.10	.92	.90	.81	
26	174.49	174.61	175.57	174.94	176.35	175.99	175.30	175.10	174.92	174.90	174.80	
27	.53	.58	.67	.86	175.90	.68	.29	.10	.92	.90	.80	
28	.48	.60	.20	.84	176.12	.31	.29	.09	.92	.90	.80	
29	.50	176.72	174.96	175.84	.59	.27	.28	.09	.92	.90		
30	.71	175.83	.90	.42	.75	.24	.58	.09	.92	.90		
31		174.60		.38	180.38		.34		.91	.90		
Mean	174.58	174.85	175.09	175.02	175.61	176.71	175.81	175.15	175.01	174.90	174.86	
Max.	174.71	176.72	176.13	175.94	180.38	181.41	177.21	175.30	175.09	174.91	174.92	
Min.	174.48	174.53	174.60	174.68	174.80	175.57	175.29	175.09	174.91	174.90	174.80	

WATER YEAR 1957 : Max. 181.41 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	11	19	24	31	85	2,560	493	80	56	38	37	
2	10	13	37	33	65	1,823	505	72	56	38	37	
3	10	12	32	51	49	792	311	72	55	38	39	
4	10	13	144	31	41	635	304	70	55	38	39	
5	20	37	196	20	36	557	255	68	54	38	39	
6	18	46	36	20	46	311	204	68	54	38	38	
7	18	30	29	23	89	273	208	79	54	38	38	
8	21	25	34	46	151	255	214	78	53	38	37	
9	19	48	50	40	104	216	249	67	53	38	37	
10	16	168	89	27	70	190	292	66	50	38	37	
11	15	130	52	30	52	178	198	61	50	38	36	
12	13	21	32	25	45	182	174	60	50	38	36	
13	18	25	32	26	54	151	142	59	50	38	35	
14	13	15	55	35	44	137	125	59	49	38	34	
15	12	18	46	27	39	128	115	59	49	38	33	
16	13	18	46	26	32	118	110	59	49	37	32	
17	12	57	55	33	29	376	103	58	49	37	31	
18	12	15	27	35	40	409	106	58	49	37	31	
19	19	16	21	49	40	392	109	60	49	37	31	
20	12	13	18	74	54	390	140	58	49	37	31	
21	19	18	15	186	200	337	113	58	49	37	31	
22	13	13	29	133	186	240	94	58	47	37	31	
23	13	12	225	107	184	192	92	57	57	37	31	
24	12	11	135	74	210	168	85	57	39	37	30	
25	12	11	64	52	292	352	83	57	39	37	30	
26	9.60	16	118	41	273	439	80	57	39	37	29	
27	11	14	135	34	178	355	79	57	39	37	29	
28	9.20	15	68	32	223	264	79	56	39	37	29	
29	10	365	43	166	332	255	78	56	39	37		
30	22	164	37	96	373	249	120	56	39	37		
31		15		90	1,912		85		38	37		
Total	431.80	1,393	1,924	1,693	5,528	12,924	5,345	1,880	1,497	1,162	948	
Mean	14.4	44.9	64.1	54.6	178	431	172	62.7	48.3	37.5	33.8	
Max.	22	365	225	186	1,912	2,560	505	80	57	38	39	
Min.	9.20	11	15	20	29	118	78	56	38	37	29	
Runoff — mcm.	37.307	120.355	166.234	146.275	477.619	1,116.634	461.808	162.432	129.341	100.397	81.907	

WATER YEAR 1957 : Max. 2,560 Min Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 1	12.00	181.67	2,708				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
YOM RIVER BASIN

Mae Yom River at Ban Nun, Phrae (Y.11)

Location: Lat 18°- 30' - 23" N, Long 100°- 00' - 32" E, on left bank at Ban Wang Din, Tambon Ban Nun, 4.5 kilometers west of the country road Amphoe Ngao - Amphoe Song, Amphoe Song, Phrae.

Drainage Area: 5,542 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +174.00 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1949 - 60

Rating Operation:

Period of Rating: 1955 - 56
Rated by Float: -
Rated by Current Meter: 1955 - 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: No overbank flow.

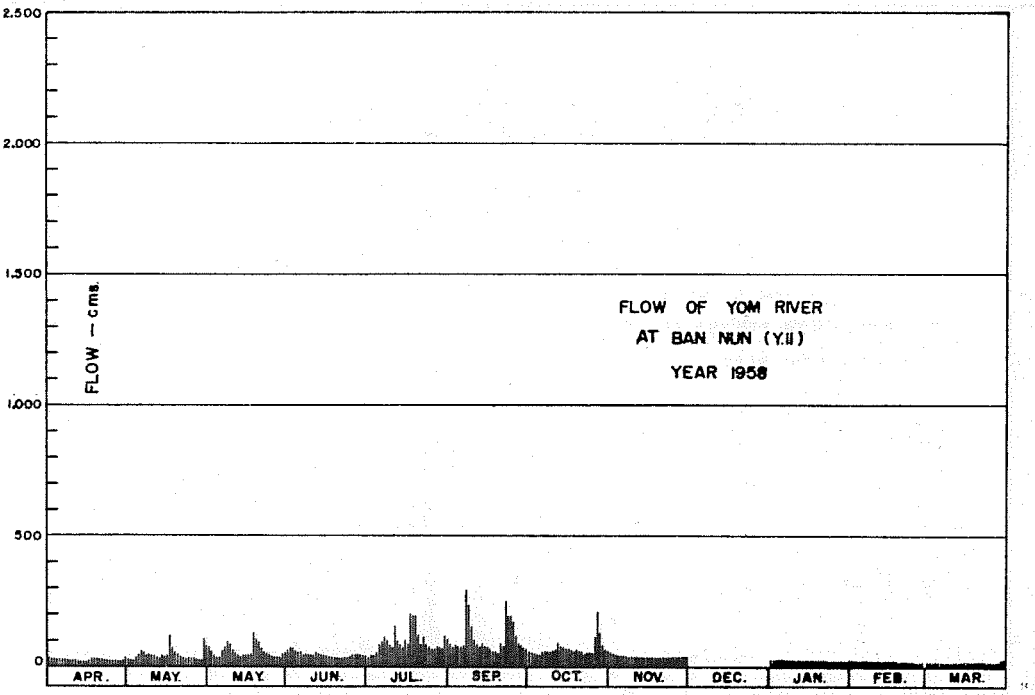
General Description: Records fair. Stage - discharge relation used is defined by discharge measurement during 1955 - 56.

Remarks: No gage height record for Dec.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	174.82	174.80	175.26	175.19	174.92	175.31	175.08	175.06		174.79	174.75	174.62
2	.80	.76	174.98	.23	.94	.24	.04	.02		.79	.74	.62
3	.77	.77	.88	.22	.96	.32	.01	.00		.79	.74	.62
4	.75	.87	.83	.05	175.09	.23	.00	174.97		.78	.73	.62
5	.75	175.01	.88	.05	.41	.23	.02	.96		.78	.73	.62
6	174.75	175.13	175.15	175.07	175.42	175.33	175.12	174.95		174.78	174.73	174.62
7	.73	.03	.24	174.97	.53	176.43	.09	.93		.78	.72	.62
8	.72	174.97	.42	.99	.45	.15	.09	.92		.78	.72	.62
9	.70	175.02	.35	.98	.32	175.66	.09	.91		.77	.71	.62
10	.69	174.96	.16	.97	.26	.46	.14	.90		.77	.71	.63
11	174.69	174.93	175.03	174.99	175.76	175.36	175.15	174.90		174.76	174.73	174.63
12	.68	.89	174.96	175.08	.43	.28	.38	.90		.76	.71	.63
13	.67	.86	.91	.00	.28	.36	.25	.89		.75	.70	.63
14	.67	.94	.96	174.99	.27	.27	.23	.88		.75	.69	.64
15	.67	.87	.94	.97	.45	.26	.16	.87		.75	.69	.64
16	174.74	174.99	174.99	174.93	175.26	175.19	175.18	174.86		175.75	174.69	174.65
17	.84	175.56	175.00	.90	176.02	.12	.13	.86		.75	.69	.65
18	.83	.06	.63	.88	175.98	.09	.11	.85		.75	.69	.64
19	.82	.10	.44	.87	.98	.05	.16	.85		.75	.68	.63
20	.80	174.96	.39	.86	.54	.35	.11	.85		.75	.68	.63
21	174.78	174.91	175.21	174.85	175.34	175.12	175.05	174.85		174.75	174.68	174.63
22	.75	.86	.09	.86	.54	176.23	.02	.85		.75	.67	.63
23	.73	.83	.02	.87	.31	175.93	.07	.85		.74	.66	.63
24	.72	.82	174.96	.91	.24	.97	.08	.85		.74	.65	.63
25	.70	.81	.92	.94	.18	.85	.05	.86		.74	.64	.63
26	174.69	174.83	174.90	175.00	175.20	175.50	175.44	174.87		174.74	174.63	174.63
27	.70	.79	.91	174.99	.27	.34	176.06	.88		.74	.63	.63
28	.68	.76	.87	175.00	.22	.24	175.49	.89		.74		.63
29	.72	.75	175.03	174.95	.22	.18	.28	.89		.74		.75
30	.84	175.47	.05	.95	.56	.15	.16	.89		.74		.81
31		.19		.94	.48		.11			.75		.75
Mean	174.74	174.95	175.08	174.98	175.38	175.44	175.17	174.90		174.76	174.69	174.69
Max.	174.84	175.56	175.63	175.23	175.98	176.43	176.06	175.06		174.79	174.75	174.81
Min.	174.67	174.75	174.83	174.85	174.92	175.05	175.00	174.85		174.74	174.63	174.62

WATER YEAR 1958 : Max. 176.43 m. Min. 174.62 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	31	29	75	67	39	81	55	53		28	25	16
2	29	26	45	72	41	73	51	49		28	24	16
3	27	27	36	70	43	83	48	47		28	24	16
4	25	35	31	52	56	72	47	44		27	24	16
5	25	48	36	52	94	72	49	43		27	24	16
6	25	60	62	54	96	84	59	42		27	24	16
7	24	50	73	44	112	292	56	40		27	23	16
8	23	44	96	46	100	229	56	39		27	23	16
9	21	49	86	45	83	133	56	38		27	22	16
10	21	43	64	44	75	101	61	37		27	22	17
11	21	40	50	46	151	88	62	37		26	24	17
12	20	37	43	55	97	78	90	37		26	22	17
13	19	34	38	47	78	88	74	37		25	21	17
14	19	41	43	46	76	76	72	36		25	21	18
15	19	35	41	44	100	75	64	35		25	21	18
16	24	46	46	40	75	67	66	34		25	21	18
17	32	117	47	37	202	59	60	34		25	21	18
18	31	53	128	36	194	56	58	33		25	21	18
19	31	57	99	35	194	52	64	33		25	20	17
20	29	43	92	34	113	86	58	33		25	20	17
21	27	38	69	33	85	59	52	33		25	20	17
22	25	34	56	34	113	247	49	33		25	19	17
23	24	31	49	35	81	184	54	33		24	19	17
24	23	31	43	38	73	192	55	33		24	18	17
25	21	30	39	41	66	168	52	34		24	18	17
26	21	31	37	47	68	107	99	35		24	17	17
27	21	28	38	46	76	85	210	36		24	17	17
28	20	26	35	47	70	73	106	37		24	17	17
29	23	25	50	42	70	66	78	37		24		25
30	32	103	52	42	117	62	64	37		24		30
31		67		41	104		58			25		25
Total	733	1,358	1,699	1,412	2,942	3,188	2,083	1,129		792	592	552
Mean	24.4	43.8	56.6	45.5	94.9	106	67.2	37.6		25.5	21.1	17.8
Max.	32	117	128	72	202	292	210	53		28	25	30
Min.	19	25	31	33	39	52	47	33		24	17	16
Runoff - MCM.	63.331	117.331	146.794	121.997	254.189	275.443	179.971	97.546		68.429	51.149	47.693

WATER YEAR 1958 : Max. 292 Min. 16 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 7	15.00	176.91	417				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
YOM RIVER BASIN

Mae Yom River at Ban Nun, Phrae (Y.11)

Location: Lat 18°- 30' - 23" N, Long 100°- 00' - 32" E, on left bank at Ban Wang Din, Tambon Ban Nun, 4.5 kilometers west of the country road Amphoe Ngao - Amphoe Song, Amphoe Song, Phrae.

Drainage Area: 5,542 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +174.00 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1949 - 60

Rating Operation:

Period of Rating: 1955 - 56
Rated by Float: -
Rated by Current Meter: 1955 - 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

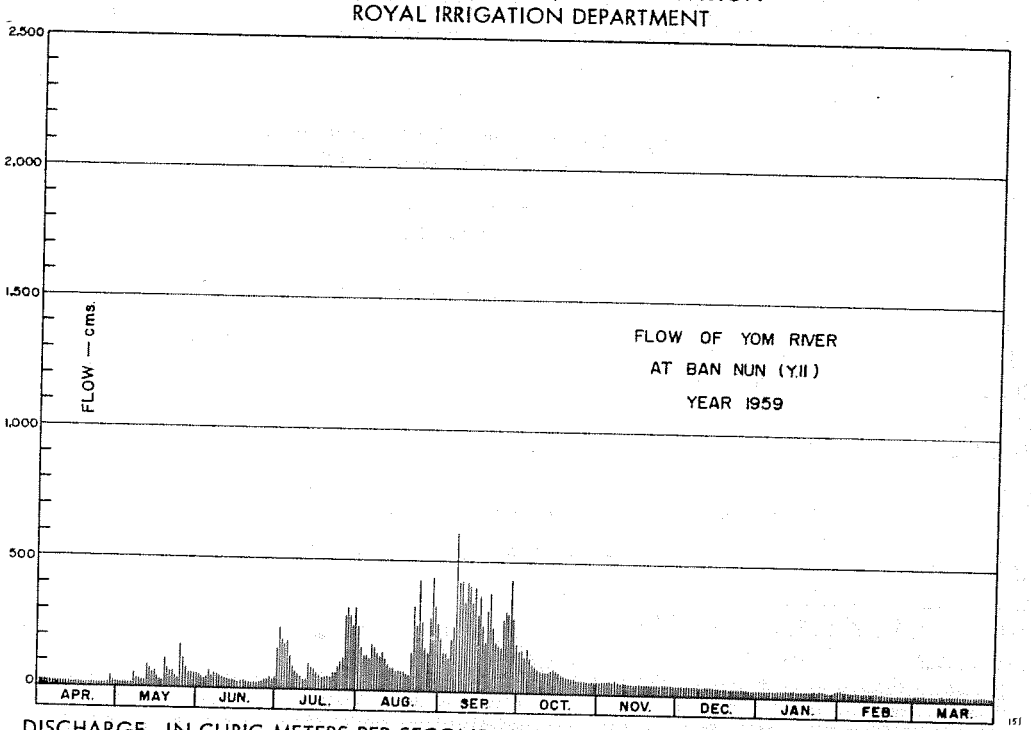
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1955 - 56.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	174.72	174.58	175.03	175.68	176.13	175.90	175.76	174.95	174.87	174.73	174.77	174.63
2	.70	.56	174.94	176.20	175.76	.72	.81	.95	.87	.72	.76	.63
3	.70	.57	.91	175.92	.65	.75	.64	.96	.86	.72	.75	.62
4	.69	.55	.98	.87	.65	.53	.83	.97	.86	.72	.75	.62
5	.68	.55	175.20	.95	.55	.99	.59	.99	.85	.71	.74	.66
6	174.65	174.60	175.00	175.58	175.90	176.03	175.49	174.95	174.85	174.71	174.74	174.65
7	.64	175.10	.11	.35	.82	177.51	.40	175.01	.84	.71	.73	.65
8	.63	174.82	.04	.17	.72	176.90	.34	174.96	.84	.72	.73	.65
9	.63	.83	.00	.06	.64	.93	.30	.94	.83	.72	.72	.64
10	.62	.78	174.95	174.98	.74	.58	.27	.94	.83	.72	.72	.64
11	174.62	174.73	174.91	174.92	175.56	176.91	175.23	174.93	174.83	174.72	174.71	174.63
12	.61	175.36	.88	.92	.41	.86	.23	.92	.82	.72	.71	.63
13	.60	.22	.84	175.45	.32	.59	.32	.91	.82	.71	.70	.62
14	.59	.04	.82	.32	.34	.85	.37	.91	.82	.71	.69	.62
15	.58	.19	.78	.29	.25	.36	.30	.91	.81	.71	.69	.61
16	174.59	174.93	174.76	175.14	175.29	176.73	175.23	174.90	174.81	174.71	174.68	174.61
17	.56	.85	.76	.04	.24	.19	.18	.90	.80	.71	.68	.61
18	.53	.80	.77	.01	.23	175.91	.15	.90	.80	.71	.67	.60
19	.56	175.53	.73	.02	.15	176.50	.12	.90	.79	.71	.67	.60
20	.55	.22	.71	.03	.12	.75	.09	.89	.79	.71	.67	.60
21	174.56	175.11	174.68	175.02	175.73	176.08	175.07	174.89	174.78	174.72	174.67	174.59
22	.54	.14	.69	.20	176.55	175.95	.04	.89	.78	.73	.66	.59
23	.54	174.92	.68	.18	.11	.89	.01	.89	.77	.74	.66	.59
24	.55	.88	.76	.31	.93	.77	.00	.88	.77	.75	.66	.59
25	.60	175.82	.77	.51	.19	176.35	174.99	.88	.76	.76	.65	.59
26	174.60	175.40	174.87	175.43	175.75	176.48	174.98	174.88	174.76	174.74	174.65	174.58
27	.62	.23	.92	176.39	.59	.44	.97	.88	.75	.73	.64	.58
28	.93	.08	.98	.54	176.38	.95	.96	.88	.75	.73	.64	.58
29	.74	.12	.91	.39	177.30	.20	.96	.87	.74	.73	.63	.58
30	.63	.05	.89	.21	176.55	175.89	.95	.87	.74	.75		.58
31		.08		.54	.24		.94		.73	.77		.58
Mean	174.62	174.99	174.87	175.50	175.80	176.35	175.24	174.92	174.80	174.72	174.69	174.61
Max.	174.93	175.82	175.20	176.54	177.30	177.51	175.83	175.01	174.87	174.77	174.77	174.66
Min.	174.53	174.55	174.68	174.92	175.12	175.53	174.94	174.87	174.73	174.71	174.63	174.58

WATER YEAR 1959 : Max. 177.51 m. Min. 174.53 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	23	14	50	137	225	178	151	42	35	24	27	17
2	21	13	41	240	151	144	160	42	35	23	26	17
3	21	13	38	182	131	149	130	43	34	23	25	16
4	21	12	45	172	131	112	164	44	34	23	25	16
5	20	12	68	188	115	196	121	46	33	22	24	19
6	18	15	47	120	178	204	106	42	33	22	24	18
7	18	57	58	86	162	603	93	48	32	22	24	18
8	17	31	51	65	144	414	85	43	32	23	24	18
9	17	31	47	53	130	422	80	41	31	23	23	18
10	16	27	42	45	147	329	76	41	31	23	23	18
11	16	24	38	39	117	417	72	40	31	23	22	17
12	16	88	36	39	94	403	72	39	31	23	22	17
13	15	70	32	100	83	331	83	38	31	22	21	16
14	14	51	31	83	85	400	89	38	31	22	21	16
15	14	67	27	79	74	276	80	38	30	22	21	16
16	14	40	26	61	79	368	72	37	30	22	20	16
17	13	33	26	51	73	238	66	37	29	22	20	16
18	11	29	27	48	72	180	62	37	29	22	19	15
19	13	112	24	49	62	309	59	37	28	22	19	15
20	12	70	22	50	59	373	56	37	28	22	19	15
21	13	58	20	49	145	214	54	37	27	23	19	14
22	12	61	21	68	321	188	51	37	27	24	19	14
23	12	39	20	66	221	176	48	37	27	24	19	14
24	12	36	26	81	422	153	47	36	27	25	19	14
25	15	162	27	109	238	273	46	36	26	26	18	14
26	15	93	35	97	149	304	45	36	26	24	18	14
27	16	72	39	283	121	295	44	36	25	24	18	14
28	40	55	45	319	280	428	43	36	25	24	18	14
29	24	59	38	283	534	240	43	35	24	24	17	14
30	17	52	37	242	321	176	42	35	24	25		14
31		55		319	249		41		24	27		14
Total	506	1,551	1,084	3,803	5,313	8,493	2,381	1,171	910	720	614	488
Mean	16.9	50.0	36.1	123	171	283	76.8	39.0	29.3	23.2	21.2	15.7
Max.	40	162	68	319	534	603	164	48	35	27	27	19
Min.	11	12	20	39	59	112	41	35	24	22	17	14
Runoff — mcm.	43.718	134.006	93.658	328.579	459.043	733.795	205.718	101.174	78.624	62.208	53.050	42.163

WATER YEAR 1959 : Max. 603 Min. 11 Mean 73.9 Annual Runoff 2,335.738 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 7	18.00	177.70	670				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
YOM RIVER BASIN

Ngao Creek at Ngao Bridge, Lampang (Y.13)

Location: Lat 18°- 45' - 06" N, Long 99°- 58' - 53" E, on left bank at downstream side of Ngao Bridge, Amphoe Ngao, Lampang.

Drainage Area: 382 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +266.79 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.14

Location: On left bank 100 meters upstream from gage site.
Elevation: +272.896 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: 1957 to date.

Rating Operation:

Period of Rating: 1957 - 58
Rated by Float: -
Rated by Current Meter: 1957 - 58

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

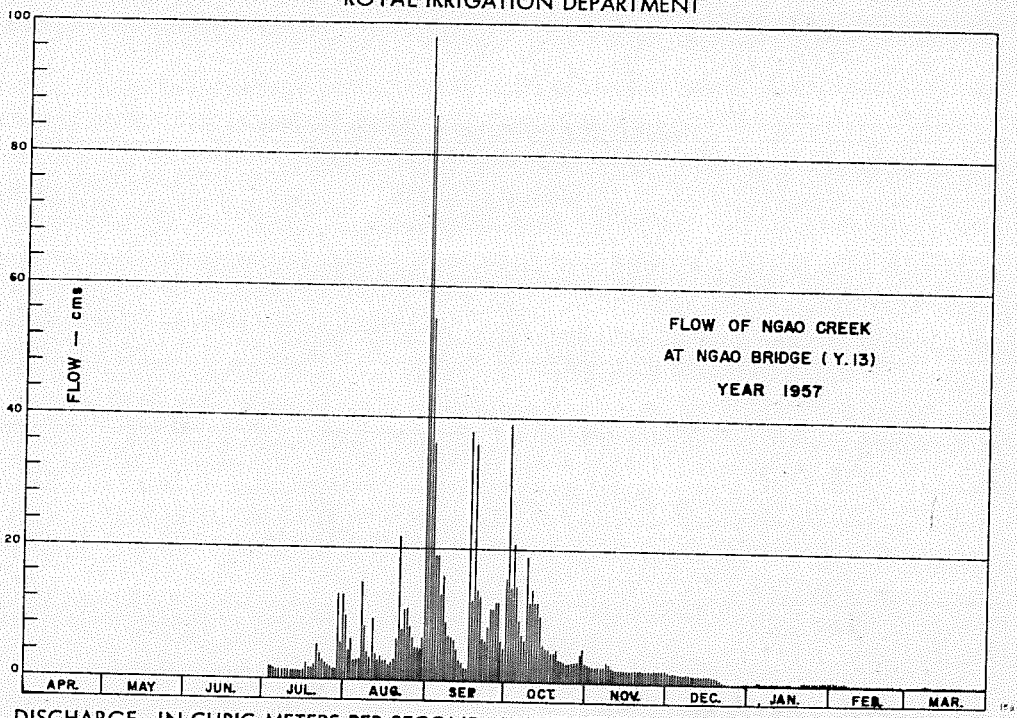
General Description: Gage height record good, discharge record fair. Stage - discharge relation used is defined by discharge measurements during 1957. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

Remarks: Gage height record began on July 3.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1					267.50	268.28	267.63	267.15	267.09	266.95	267.02	266.93
2					.32	.07	.83	.14	.09	.97	.01	.93
3				267.17	.27	267.78	.61	.13	.09	.97	266.99	.92
4				.16	.25	.69	.71	.12	.09	.97	.99	.92
5				.14	.24	.64	.59	.12	.07	.97	.99	.92
6				267.14	267.25	267.52	267.49	267.12	267.07	266.97	266.98	266.93
7				.13	.62	.61	.44	.12	.07	.97	.93	.93
8				.13	.44	.50	.42	.19	.06	.97	.97	.93
9				.13	.30	.48	.68	.14	.06	.97	.97	.93
10				.12	.26	.44	.55	.12	.06	.97	.97	.95
11				267.12	267.38	267.41	267.60	267.10	267.06	266.97	266.97	266.95
12				.12	.31	.39	.51	.10	.06	.97	.95	.94
13				.11	.34	.33	.43	.10	.06	.97	.95	.94
14				.10	.28	.27	.39	.10	.06	.97	.94	.93
15				.10	.24	.21	.34	.10	.06	.97	.93	.92
16				267.11	267.23	267.21	267.31	267.10	267.06	266.97	266.93	266.92
17				.21	.20	.86	.29	.10	.05	.97	.93	.92
18				.15	.22	.55	.26	.10	.05	.97	.93	.92
19				.14	.25	.89	.26	.10	.04	.97	.93	.92
20				.19	.33	.60	.28	.10	.02	.97	.93	.92
21				267.34	267.74	267.58	267.23	267.09	266.98	266.99	266.93	266.92
22				.29	.43	.40	.19	.09	.97	.99	.93	.92
23				.24	.53	.39	.17	.09	.96	.99	.93	.92
24				.20	.51	.38	.17	.09	.96	.99	.94	.91
25				.18	.47	.43	.17	.09	.95	.99	.94	.92
26				267.16	267.43	267.54	267.17	267.09	266.95	266.98	266.94	266.92
27				.14	.34	.43	.17	.09	.95	.98	.94	.93
28				.14	.33	.40	.20	.09	.95	.98	.93	.93
29				.58	.32	.39	.23	.09	.95	.98		.92
30				.33	.39	.34	.20	.09	.95	.98		.93
31				.57	268.42		.17		.95	.99		.92
Mean					267.39	267.53	267.37	267.10	267.02	266.97	266.95	266.92
Max.					268.42	268.28	267.83	267.15	267.09	266.99	267.02	266.95
Min.					267.20	267.21	267.17	267.09	266.95	266.95	266.93	266.91

WATER YEAR 1957 : Max. 268.42 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1					10	86	16	2.60	1.50	0.15	0.55	0.08
2					4.40	55	39	2.50	1.60	0.20	0.55	0.08
3				1.99	6.30	38	14	2.50	1.50	0.30	0.50	0.06
4				1.90	3.20	19	21	2.40	1.60	0.20	0.50	0.06
5				1.60	3.00	19	13	2.40	1.40	0.30	0.50	0.06
6				1.60	3.20	13	9.00	2.40	1.40	0.30	0.50	0.08
7				1.50	15	16	7.10	2.30	1.40	0.30	0.35	0.08
8				1.50	8.00	8.80	6.30	3.00	1.40	0.30	0.10	0.08
9				1.50	4.30	6.90	19	2.60	1.30	0.35	0.10	0.08
10				1.40	3.40	6.60	12	2.20	1.30	0.35	0.20	0.10
11				1.40	9.40	6.30	14	1.80	1.20	0.35	0.18	0.10
12				1.40	4.40	4.80	12	1.90	1.20	0.35	0.10	0.09
13				1.40	3.00	3.20	12	1.90	1.20	0.35	0.15	0.09
14				1.20	3.80	2.90	9.40	1.90	1.20	0.35	0.09	0.08
15				1.20	3.00	1.99	6.00	1.90	1.20	0.20	0.08	0.06
16				1.30	2.90	1.90	5.00	1.90	1.10	0.35	0.08	0.06
17				2.60	2.40	38	5.00	1.80	1.00	0.35	0.08	0.06
18				1.80	2.80	12	4.40	1.80	1.00	0.30	0.08	0.06
19				1.60	3.20	36	4.40	1.90	0.85	0.30	0.08	0.06
20				2.30	5.00	14	4.80	1.90	0.85	0.20	0.08	0.06
21				5.20	22	13	3.40	1.80	0.40	0.50	0.08	0.09
22				4.00	7.80	6.60	3.20	1.80	0.30	0.50	0.06	0.09
23				3.00	11	6.00	2.80	1.80	0.10	0.50	0.06	0.08
24				2.40	11	7.80	2.80	1.80	0.15	0.50	0.08	0.08
25				2.20	9.10	11	2.80	1.80	0.15	0.50	0.08	0.09
26				1.99	7.80	11	2.80	1.80	0.09	0.45	0.09	0.09
27				1.60	5.00	12	2.90	1.80	0.08	0.45	0.09	0.10
28				1.60	5.00	12	3.00	1.90	0.08	0.45	0.09	0.10
29				13	4.80	6.30	4.20	1.80	0.09	0.45		0.09
30				5.20	6.30	5.00	5.20	1.90	0.09	0.40		0.10
31				13	98		2.80		0.09	0.45		0.09
Total					288.50	480.09	269.30	61.70	26.82	11.00	5.48	2.48
Mean					9.31	16.0	8.69	2.06	0.86	0.35	0.19	0.08
Max.					98	86	39	3.00	1.60	0.50	0.55	0.10
Min.					2.40	1.90	2.80	1.80	0.08	0.15	0.06	0.06
Runoff - mcm.					24.926	41.472	23.242	5.331	2.333	0.950	0.473	0.214

WATER YEAR 1957 : Max. 98 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 31	06.00	268.89	200				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
YOM RIVER BASIN

Ngao Creek at Ngao Bridge, Lampang (Y.13)

Location: Lat 18°- 45' - 06" N, Long 99°- 58' - 53" E, on left bank at downstream side of Ngao Bridge, Amphoe Ngao, Lampang.

Drainage Area: 382 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +266.79 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No. 14

Location: On left bank 100 meters upstream from gage site.
Elevation: +272.896 m. (M.S.L.)

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: 1957 to date.

Rating Operation:

Period of Rating: 1957 - 58
Rated by Float: -
Rated by Current Meter: 1957 - 58

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

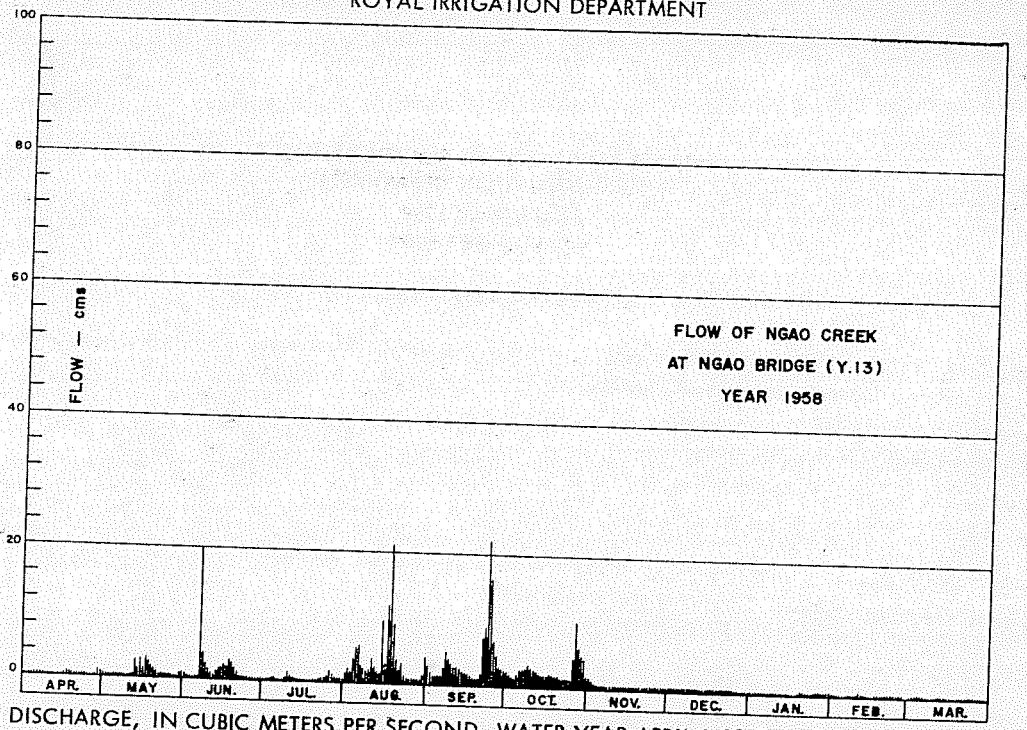
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1959. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	266.93	266.99	267.01	266.93	267.15	267.17	267.12	267.08	266.96	266.90	266.94	266.90
2	.96	.97	266.97	.93	.21	.12	.10	.02	.96	.90	.93	.94
3	.95	.96	.97	.94	.17	.09	.07	.00	.96	.90	.92	.94
4	.93	.97	.96	.94	.29	.09	.06	266.99	.96	.90	.91	.93
5	.94	.96	.97	.97	.36	.10	.12	.99	.96	.90	.92	.92
6	266.93	266.96	266.97	266.95	267.37	267.10	267.15	266.98	266.96	266.90	266.93	266.91
7	.94	.96	267.59	.93	.24	.19	.14	.97	.96	.90	.93	.90
8	.95	.96	.25	.93	.19	.31	.15	.96	.96	.90	.92	.90
9	.94	.96	.13	.94	.17	.24	.19	.96	.98	.90	.92	.90
10	.93	.95	.06	267.04	.19	.21	.16	.96	.98	.90	.93	.90
11	266.92	266.95	267.02	267.01	267.30	267.17	267.15	266.96	266.97	266.90	266.99	266.90
12	.92	.95	266.99	266.99	.24	.19	.15	.96	.97	.90	.95	.90
13	.92	267.17	267.04	.97	.17	.17	.12	.96	.97	.90	.93	.90
14	.92	.06	.09	.95	.15	.15	.10	.96	.97	.90	.91	.90
15	.92	.19	.09	.95	.40	.12	.09	.95	.97	.90	.88	.90
16	266.96	267.04	267.13	266.94	267.28	267.11	267.10	266.95	266.97	266.89	266.90	266.89
17	267.01	.21	.11	.95	.45	.11	.12	.95	.97	.89	.94	.89
18	266.97	.16	.20	.95	.61	.06	.10	.95	.97	.89	.93	.89
19	.96	.11	.18	.94	.37	.06	.09	.95	.96	.93	.92	.89
20	.96	.06	.10	.95	.23	.05	.09	.95	.96	.96	.92	.89
21	266.95	267.02	267.05	266.95	267.17	267.12	267.07	266.96	266.96	266.95	266.93	266.89
22	.94	266.99	.00	.96	.19	.38	.06	.96	.96	.94	.93	.89
23	.94	267.01	266.99	.97	.08	.45	.06	.96	.96	.93	.92	.89
24	.93	.01	.99	.98	.03	.63	.07	.99	.95	.93	.91	.89
25	.93	.00	.97	267.00	.02	.53	.06	.98	.95	.96	.91	.88
26	266.92	266.99	266.97	267.05	267.03	267.36	267.23	266.98	266.94	266.97	266.91	266.88
27	.92	.97	.96	.02	.03	.29	.42	.98	.93	.96	.90	.88
28	.92	.97	.95	.01	.02	.21	.26	.97	.92	.96	.90	.88
29	267.04	.97	.93	266.99	.01	.17	.18	.96	.91	.96		.88
30	.01	267.03	.93	.99	.07	.15	.15	.96	.90	.96		.88
31		.04		.95	.24		.10		.90	.96		.88
Mean	266.94	267.01	267.05	266.97	267.21	267.20	267.13	266.97	266.95	266.92	266.92	266.90
Max.	267.04	267.21	267.59	267.05	267.61	267.63	267.42	267.08	266.98	266.97	266.94	266.94
Min.	266.92	266.95	266.93	266.93	267.01	267.06	267.06	266.96	266.90	266.89	266.90	266.88

WATER YEAR 1958 : Max. 267.63 m. Min. 266.88 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.14	0.56	0.74	0.14	1.56	2.35	2.16	1.60	0.51	0.20	0.40	0.20
2	0.32	0.40	0.40	0.14	2.24	1.80	1.86	0.98	0.51	0.20	0.35	0.40
3	0.26	0.32	0.40	0.24	1.80	1.40	1.48	0.80	0.51	0.20	0.30	0.40
4	0.14	0.40	0.32	0.24	3.60	1.40	1.36	0.72	0.51	0.20	0.25	0.35
5	0.20	0.32	0.40	0.52	5.40	1.50	2.16	0.72	0.51	0.20	0.30	0.30
6	0.14	0.32	0.40	0.32	5.64	1.50	2.60	0.65	0.51	0.20	0.35	0.25
7	0.20	0.32	20	0.14	2.68	2.80	2.46	0.58	0.51	0.20	0.35	0.20
8	0.26	0.32	3.76	0.14	2.00	5.10	2.60	0.51	0.51	0.20	0.30	0.20
9	0.20	0.32	2.13	0.24	1.80	3.70	3.32	0.51	0.65	0.20	0.30	0.20
10	0.14	0.26	1.26	1.56	2.00	3.10	2.78	0.51	0.65	0.20	0.35	0.20
11	0.08	0.26	0.84	1.06	3.80	2.50	2.60	0.51	0.58	0.20	0.72	0.20
12	0.08	0.26	0.56	0.76	2.68	2.80	2.60	0.51	0.58	0.20	0.44	0.20
13	0.08	2.66	1.04	0.52	1.80	2.50	2.16	0.51	0.58	0.20	0.35	0.20
14	0.08	1.26	1.62	0.32	1.56	2.20	1.86	0.51	0.58	0.20	0.25	0.20
15	0.08	2.92	1.62	0.32	9.60	1.80	1.72	0.44	0.58	0.20	0.12	0.20
16	0.32	1.04	2.13	0.24	3.00	1.60	1.86	0.44	0.58	0.16	0.20	0.16
17	0.74	3.20	1.87	0.32	12	1.60	2.16	0.44	0.58	0.16	0.40	0.16
18	0.40	2.53	3.06	0.32	21	1.10	1.86	0.44	0.58	0.16	0.35	0.16
19	0.32	1.87	2.79	0.24	8.30	1.10	1.72	0.44	0.51	0.35	0.30	0.16
20	0.32	1.26	1.74	0.32	4.00	1.00	1.72	0.44	0.51	0.51	0.30	0.16
21	0.26	0.84	1.14	0.32	1.80	1.80	1.48	0.51	0.51	0.44	0.35	0.16
22	0.20	0.56	0.64	0.42	3.20	6.90	1.36	0.51	0.51	0.40	0.35	0.16
23	0.20	0.74	0.56	0.52	1.40	9.20	1.36	0.51	0.51	0.35	0.30	0.16
24	0.14	0.74	0.56	0.64	0.90	22	1.48	0.72	0.44	0.35	0.25	0.16
25	0.14	0.64	0.40	0.90	0.80	13	1.36	0.65	0.44	0.51	0.25	0.12
26	0.08	0.56	0.40	1.72	0.90	6.90	4.12	0.65	0.40	0.58	0.25	0.12
27	0.08	0.40	0.32	1.22	0.90	4.70	10	0.65	0.35	0.51	0.20	0.12
28	0.08	0.40	0.26	1.06	0.80	3.10	4.65	0.58	0.30	0.51	0.20	0.12
29	1.04	0.40	0.14	0.76	0.75	2.50	5.14	0.51	0.25	0.51		0.12
30	0.74	0.94	0.14	0.76	1.30	2.20	2.60	0.51	0.20	0.51		0.12
31		1.04		0.32	4.20		1.86		0.20	0.51		0.12
Total	7.46	28.06	51.64	16.74	113.41	115.15	78.45	18.06	15.15	9.52	8.83	5.98
Mean	0.25	0.90	1.72	0.54	3.66	3.84	2.53	0.60	0.49	0.31	0.31	0.19
Max.	1.04	3.20	20	1.72	21	22	10	1.60	0.65	0.58	0.72	0.40
Min.	0.08	0.26	0.14	0.14	0.75	1.00	1.36	0.44	0.20	0.16	0.12	0.12
Runoff — mcm.	0.644	2.424	4.462	1.446	9.799	9.949	6.778	1.560	1.309	0.822	0.763	0.517

WATER YEAR 1958 : Max. 22 Min. 0.08 Mean 1.28 Annual Runoff 40.474 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 24	06.00	267.69	27				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
YOM RIVER BASIN

Ngao Creek at Ngao Bridge, Lampang (Y.13)

Location: Lat 18°- 45' - 06" N, Long 99°- 58' - 53" E, on left bank at downstream side of Ngao Bridge, Amphoe Ngao, Lampang.

Drainage Area: 382 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +266.79 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.14

Location: On left bank 100 meters upstream from gage site.
Elevation: +272.896 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: 1957 to date.

Rating Operation:

Period of Rating: 1957 - 58
Rated by Float: -
Rated by Current Meter: 1957 - 50

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

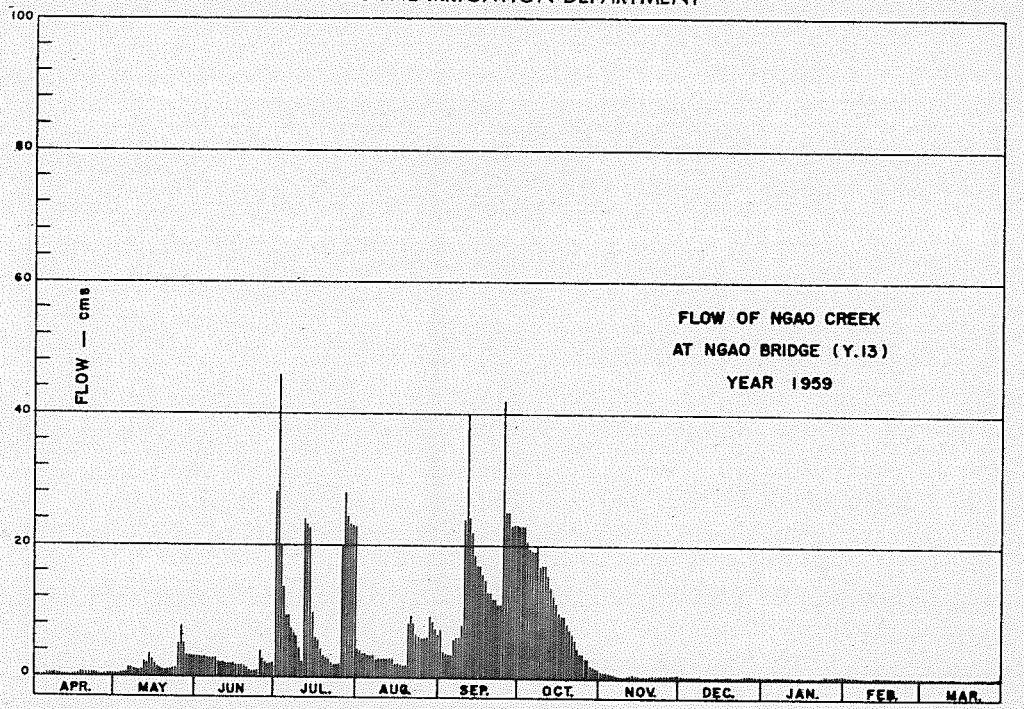
Overbank Flow Conditions: No overbank flow.

General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1957 - 58. No upstream state diversions except those built by the local residents. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	266.88	266.95	267.26	267.79	267.33	267.43	267.75	267.11	266.97	266.94	266.98	266.94
2	.87	.96	.25	268.02	.31	.29	.75	.08	.96	.94	.98	.94
3	.87	.97	.25	267.71	.29	.29	.75	.07	.95	.95	.98	.95
4	.85	.97	.25	.63	.29	.27	.73	.04	.95	.96	.97	.95
5	.99	.99	.24	.49	.27	.27	.72	.02	.94	.96	.97	.95
6	266.99	267.13	267.24	267.49	267.27	267.39	267.69	266.99	266.94	266.96	266.96	266.94
7	.97	.13	.24	.44	.27	.39	.69	.97	.93	.95	.95	.94
8	.97	.11	.24	.41	.24	.39	.72	.96	.93	.94	.95	.94
9	.96	.10	.21	.39	.24	.44	.67	.96	.93	.94	.95	.92
10	.96	.10	.21	.32	.24	.83	.66	.96	.93	.94	.94	.92
11	266.94	267.09	267.19	267.22	267.24	267.96	267.66	266.95	266.94	266.93	266.94	266.92
12	.94	.21	.19	.77	.24	.79	.64	.98	.94	.93	.94	.92
13	.94	.19	.19	.75	.24	.76	.61	.98	.94	.93	.94	.93
14	.93	.28	.19	.61	.24	.69	.59	.97	.94	.92	.94	.93
15	.96	.25	.19	.50	.19	.66	.56	.95	.94	.92	.93	.92
16	267.01	267.19	267.18	267.39	267.19	267.66	267.53	266.94	266.95	266.92	266.92	266.92
17	.01	.16	.18	.37	.18	.64	.49	.94	.95	.93	.92	.92
18	.04	.14	.17	.34	.18	.62	.49	.94	.96	.93	.94	.91
19	.04	.11	.17	.29	.18	.59	.46	.95	.96	.93	.95	.91
20	.02	.09	.14	.24	.45	.59	.43	.95	.96	.95	.95	.91
21	267.02	267.11	267.09	267.24	267.49	267.57	267.42	266.95	266.96	266.95	266.95	266.91
22	.01	.11	.09	.21	.46	.57	.38	.96	.94	.96	.95	.91
23	266.99	.12	.09	.19	.39	.54	.34	.96	.94	.96	.94	.91
24	.97	.12	.09	.19	.39	.54	.30	.96	.96	.97	.94	.90
25	.95	.35	.31	.19	.39	.98	.29	.98	.96	.97	.93	.90
26	266.94	267.44	267.24	267.66	267.39	267.79	267.26	266.98	266.97	266.97	266.93	266.90
27	.94	.34	.21	.82	.39	.79	.24	.97	.97	.98	.93	.90
28	.94	.27	.19	.79	.49	.76	.18	.97	.95	.99	.93	.90
29	.94	.27	.19	.77	.47	.76	.17	.97	.95	.99	.93	.90
30	.94	.26	.19	.76	.44	.76	.14	.98	.95	.99		.90
31		.26		.76	.39		.13		.95	.99		.90
Mean	266.95	267.15	267.19	267.50	267.31	267.61	267.49	266.97	266.94	266.95	266.94	266.91
Max.	267.04	267.44	267.31	268.02	267.49	267.98	267.75	267.11	266.97	266.99	266.98	266.95
Min.	266.85	266.95	267.09	267.19	267.18	267.27	267.13	266.94	266.93	266.92	266.92	266.90

WATER YEAR 1959 : Max. 268.02 m. Min. 266.85 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.16	0.35	3.16	25	4.58	7.36	23	1.12	0.41	0.32	0.44	0.32
2	0.14	0.38	3.00	46	4.06	3.64	23	0.90	0.38	0.32	0.44	0.32
3	0.14	0.41	3.00	20	3.64	3.64	23	0.85	0.35	0.35	0.44	0.35
4	0.10	0.41	3.00	15	3.64	3.32	21	0.70	0.35	0.38	0.41	0.35
5	0.47	0.47	2.84	9.28	3.32	3.32	20	0.60	0.32	0.38	0.41	0.35
6	0.47	1.36	2.84	9.28	3.32	6.14	19	0.47	0.32	0.38	0.38	0.32
7	0.41	1.36	2.84	7.68	3.32	6.14	19	0.41	0.29	0.35	0.35	0.32
8	0.41	1.12	2.84	6.72	2.84	6.14	20	0.38	0.29	0.32	0.35	0.32
9	0.38	1.00	2.36	6.14	2.84	7.68	17	0.38	0.29	0.32	0.35	0.26
10	0.38	1.00	2.36	4.32	2.84	28	17	0.38	0.29	0.32	0.32	0.26
11	0.32	0.95	2.08	2.52	2.84	40	17	0.35	0.32	0.29	0.32	0.26
12	0.32	2.36	2.08	24	2.84	25	16	0.44	0.32	0.29	0.32	0.26
13	0.32	2.08	2.08	23	2.84	23	14	0.44	0.32	0.29	0.32	0.29
14	0.29	3.48	2.08	14	2.84	19	13	0.41	0.32	0.26	0.32	0.29
15	0.38	3.00	2.08	9.60	2.08	17	12	0.35	0.32	0.26	0.29	0.26
16	0.55	2.08	1.96	6.14	2.08	17	11	0.32	0.35	0.26	0.26	0.26
17	0.55	1.72	1.96	5.62	1.96	16	9.28	0.32	0.35	0.29	0.26	0.26
18	0.70	1.48	1.84	4.84	1.96	15	9.28	0.32	0.38	0.29	0.32	0.23
19	0.70	1.12	1.84	3.64	1.96	13	8.32	0.35	0.38	0.29	0.35	0.23
20	0.60	0.95	1.48	2.84	8.00	13	7.36	0.35	0.38	0.35	0.35	0.23
21	0.60	1.12	0.95	2.84	9.28	12	7.04	0.35	0.38	0.35	0.35	0.23
22	0.55	1.12	0.95	2.36	8.32	12	5.88	0.38	0.32	0.38	0.35	0.23
23	0.47	1.24	0.95	2.08	6.14	11	4.84	0.38	0.32	0.38	0.32	0.28
24	0.41	1.24	0.95	2.08	6.14	11	3.80	0.38	0.38	0.41	0.32	0.20
25	0.35	5.10	4.06	2.08	6.14	42	3.64	0.44	0.38	0.41	0.29	0.20
26	0.32	7.68	2.84	17	6.14	25	3.16	0.44	0.41	0.41	0.29	0.20
27	0.32	4.84	2.36	28	6.14	25	2.84	0.41	0.41	0.44	0.29	0.20
28	0.32	3.32	2.08	25	9.28	23	1.96	0.41	0.35	0.47	0.29	0.20
29	0.32	3.32	2.08	24	8.64	23	1.84	0.41	0.35	0.47	0.29	0.20
30	0.32	3.16	2.08	23	7.68	23	1.48	0.44	0.35	0.47		0.20
31		3.16		23	6.14		1.36		0.35	0.47		0.20
Total	11.77	62.38	67.02	397.06	143.84	480.38	357.08	13.88	10.73	10.97	9.79	8.03
Mean	0.39	2.01	2.23	12.8	4.64	16.0	11.5	0.46	0.35	0.35	0.34	0.26
Max.	0.70	7.68	4.06	46	9.28	42	23	1.12	0.41	0.47	0.44	0.35
Min.	0.10	0.35	0.95	2.08	1.96	3.32	1.36	0.32	0.29	0.26	0.26	0.20
Runoff - MCM.	1.037	5.357	5.789	34.301	12.442	41.472	30.845	1.810	0.950	0.950	0.854	0.694

WATER YEAR 1959 : Max. 46 Min. 0.10 Mean 4.30 Annual Runoff 135.907 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
July 2	15.00	268.19	67				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

Nan River at Muang Nan (N.1 A)

Location: Lat 18° – 47' – 00" N, Long 100° – 47' – 37" E, on right bank at Ban Tha Chang, 3 kilometers upstream of the house of Governor, Amphoe Muang, Nan.

Drainage Area: 4,590 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 194.62 m. (M.S.L.)

Bench Mark: B.M. – H.S. Nan

Location: On right bank 3 kilometer downstream.
Elevation: +199.350 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 – 62

Rating Operation:

Period of Rating: 1954 – 56
Rated by Float: –
Rated by Current Meter: 1954 – 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

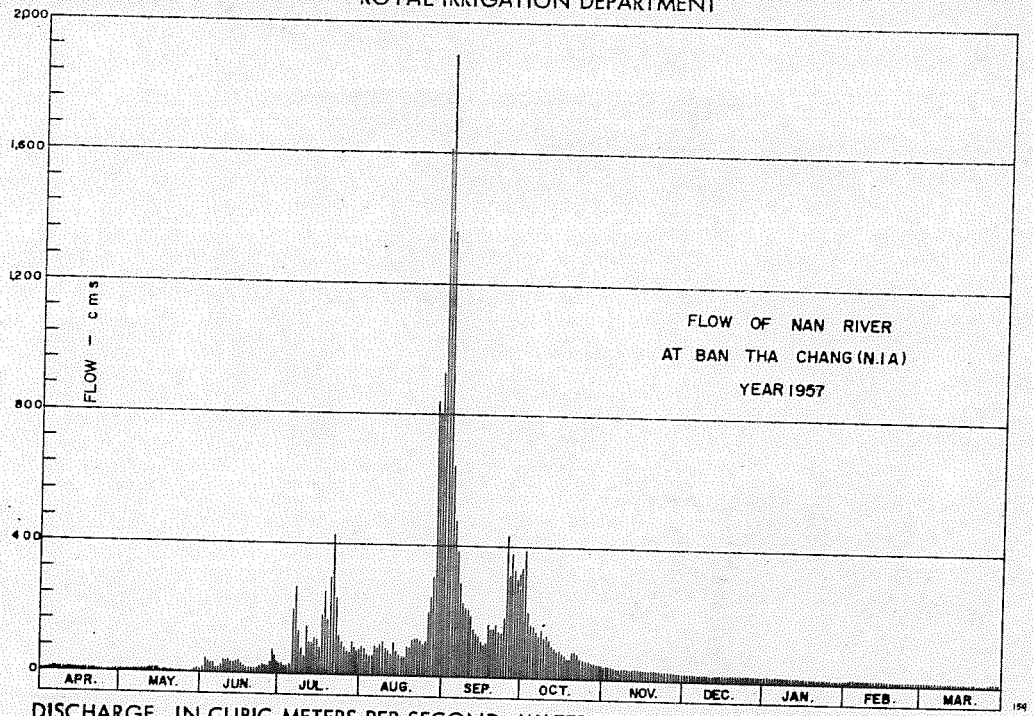
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1954 – 56. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	195.10	195.12	195.34	195.58	196.12	200.82	197.54	195.63	195.40	195.31	195.22	195.19
2	.10	.12	.68	.45	.04	201.30	.34	.62	.40	.30	.25	.18
3	.10	.13	.57	.49	195.92	200.37	196.87	.62	.39	.30	.28	.18
4	.22	.13	.52	.55	.85	198.71	.63	.60	.39	.30	.27	.17
5	.27	.14	.52	.51	.86	.14	.61	.58	.39	.29	.27	.17
6	195.25	195.14	195.37	196.85	196.15	197.77	196.51	195.56	195.39	195.29	195.27	195.16
7	.24	.15	.37	197.22	.04	.32	.42	.55	.38	.29	.26	.15
8	.22	.16	.45	196.46	.18	.02	.54	.55	.38	.27	.26	.14
9	.22	.17	.63	.06	.24	196.93	.35	.54	.38	.27	.25	.14
10	.20	.18	.64	195.86	.03	.90	.42	.54	.38	.27	.25	.13
11	195.20	195.21	195.63	196.55	195.98	196.80	196.33	195.53	195.37	195.26	195.24	195.13
12	.18	.26	.58	.21	.88	.54	.19	.53	.37	.26	.24	.12
13	.17	.25	.57	.20	196.24	.50	.11	.52	.37	.26	.24	.12
14	.16	.22	.60	.30	195.96	.39	.02	.52	.37	.26	.23	.11
15	.16	.21	.62	.28	.88	.28	.06	.51	.36	.25	.23	.11
16	195.15	195.18	195.49	196.10	195.84	196.21	195.96	195.51	195.36	195.25	195.22	195.11
17	.15	.17	.40	.77	.82	.25	.91	.48	.36	.25	.22	.11
18	.14	.14	.35	197.16	196.15	.64	.85	.47	.35	.25	.22	.10
19	.13	.08	.31	196.71	.12	.53	.86	.46	.35	.25	.22	.10
20	.12	.07	.29	197.37	.30	.55	196.06	.46	.35	.24	.21	.10
21	195.10	195.06	195.28	197.96	196.32	196.64	196.06	195.46	195.35	195.24	195.21	195.10
22	.08	.06	.34	.06	.33	.49	.00	.45	.34	.24	.21	.10
23	.06	.06	.39	196.43	.24	.47	195.86	.45	.34	.23	.21	.09
24	.06	.06	.49	.28	.20	.76	.82	.44	.34	.23	.21	.09
25	.06	.05	.47	.10	.24	197.98	.80	.43	.33	.22	.20	.09
26	195.06	195.05	195.45	195.99	196.83	197.44	195.76	195.42	195.33	195.22	195.20	195.12
27	.06	.05	.59	.94	197.09	.74	.74	.41	.33	.22	.20	.19
28	.07	.07	.98	196.23	.41	.52	.71	.40	.32	.21	.19	.18
29	.07	.18	.73	.12	199.24	.38	.68	.40	.32	.21		.17
30	.07	.29	.59	195.97	.15	.47	.67	.40	.32	.21		.16
31		.23		196.03	.49		.65		.31	.21		.15
Mean	195.14	195.14	195.49	196.32	196.49	197.39	196.17	195.50	195.36	195.25	195.23	195.13
Max.	195.27	195.29	195.98	197.96	199.49	201.30	197.54	195.63	195.40	195.31	195.28	195.19
Min.	195.06	195.05	195.28	195.45	195.82	196.21	195.65	195.40	195.31	195.21	195.19	195.09

WATER YEAR 1957 : Max. 201.30 m. Min. 195.05 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	8.00	9.00	20	37	91	1,610	332	42	24	19	14	12
2	8.00	9.00	46	27	82	1,899	292	41	24	18	15	12
3	8.00	9.50	37	30	69	1,354	203	41	23	18	17	12
4	14	9.50	33	35	62	646	162	39	23	18	16	11
5	16	10	33	32	63	475	159	37	23	17	16	11
6	15	10	22	199	94	384	143	36	23	17	16	11
7	15	10	22	268	82	288	130	35	23	17	16	10
8	14	11	27	135	98	230	147	35	23	16	16	10
9	14	11	42	85	105	213	120	34	23	16	15	10
10	13	12	43	63	81	208	130	34	23	16	15	9.50
11	13	13	42	149	76	190	117	33	22	16	15	9.50
12	12	16	37	101	65	147	99	33	22	16	15	9.00
13	11	15	37	100	105	141	90	33	22	16	15	9.00
14	11	14	39	113	74	126	80	33	22	16	14	8.50
15	11	13	41	110	65	110	85	32	22	15	14	8.50
16	10	12	30	89	61	101	74	32	22	15	14	8.50
17	10	11	24	185	59	106	68	30	22	15	14	8.50
18	10	10	21	256	94	163	62	29	21	15	14	8.00
19	9.50	7.50	19	175	91	146	63	28	21	15	14	8.00
20	9.00	7.25	17	298	113	149	85	28	21	15	13	8.00
21	8.00	7.00	17	430	116	163	85	28	21	15	13	8.00
22	7.50	7.00	20	237	117	140	78	27	20	15	13	8.00
23	7.00	7.00	23	131	105	137	63	27	20	14	13	7.75
24	7.00	7.00	30	110	100	183	59	27	20	14	13	7.75
25	7.00	6.75	29	89	105	435	57	26	20	14	13	7.75
26	7.00	6.75	27	77	194	312	53	25	20	14	13	9.00
27	7.00	6.75	38	71	242	377	52	25	20	14	13	12
28	7.25	7.25	76	104	306	328	49	24	19	13	12	12
29	7.25	12	51	91	842	300	46	24	19	13		11
30	7.25	17	38	75	807	318	45	24	19	13		11
31		14		81	941		43		19	13		10
Total	303.75	318.25	981	3,983	5,505	11,379	3,271	942	666	478	401	298.25
Mean	10.1	10.3	31.6	128	178	379	105	31.4	21.5	15.4	14.3	9.62
Max.	16	17	76	430	941	1,899	332	42	24	19	17	12
Min.	7.00	6.75	17	27	59	101	43	24	19	13	12	7.75
Runoff - mcm.	26.244	27.497	84.758	344.131	475.632	983.146	282.615	81.389	57.542	41.299	34.646	25.769

WATER YEAR 1957 : Max. 1,899 Min. 6.75 Mean 78.1 Annual Runoff 2,464.668 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.2	12.00	201.32	1,911				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
NAN RIVER BASIN

Nan River at Muang Nan (N.1 A)

Location: Lat 18° – 47' – 00" N, Long 100° – 47' – 37" E, on right bank at Ban Tha Chang, 3 kilometers upstream from the house of Governor, Amphoe Muang, Nan.

Drainage Area: 4,590 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +194.62 m. (M.S.L.)

Bench Mark: B.M. – H.S. Nan

Location: On right bank 3 kilometers downstream.
Elevation: +199.350 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 – 62

Rating Operation:

Period of Rating: 1954 – 56
Rated by Float: –
Rated by Current Meter: 1954 – 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

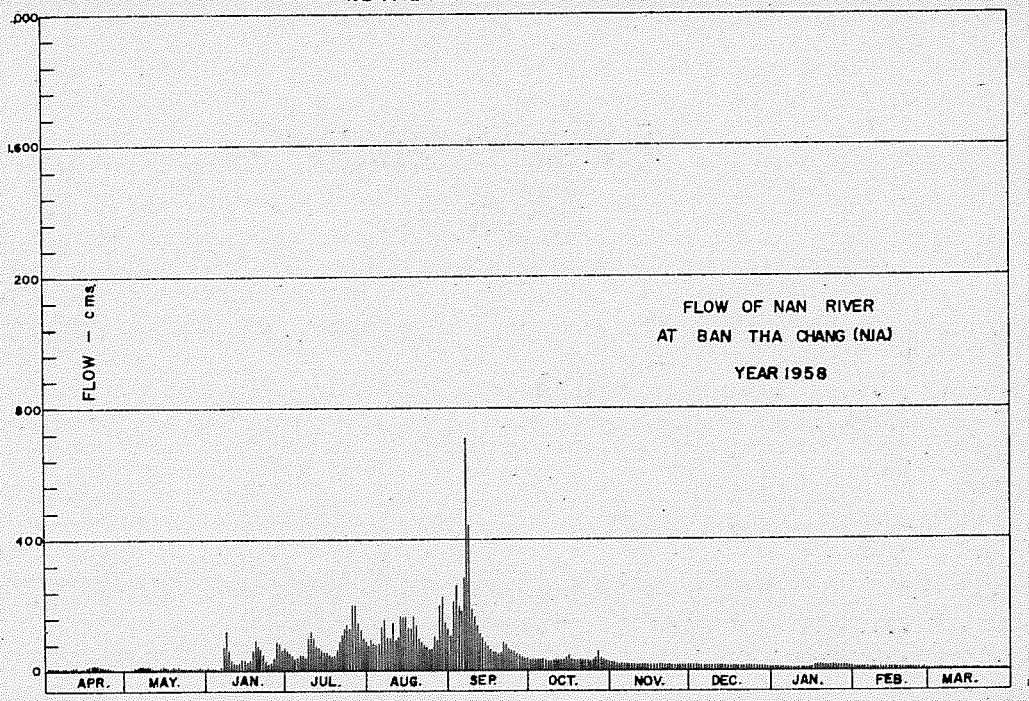
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1954 – 56. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	195.14	195.05	195.13	195.89	196.00	196.28	195.54	195.44	195.33	195.22	195.25	195.07
2	.14	.04	.12	.79	.17	.94	.52	.41	.33	.21	.24	.07
3	.14	.08	.13	.72	.09	197.19	.52	.39	.33	.19	.24	.07
4	.13	.14	.12	.60	.03	196.85	.54	.37	.33	.18	.22	.07
5	.13	.23	.11	.65	.06	.77	.55	.40	.32	.17	.22	.07
6	195.13	195.26	195.23	195.74	196.47	197.29	195.55	195.40	195.32	195.17	195.22	195.07
7	.12	.24	196.01	.72	.61	198.88	.54	.39	.32	.16	.21	.06
8	.12	.24	.36	.67	.24	.03	.50	.39	.32	.16	.21	.06
9	.12	.24	195.87	196.23	.19	196.80	.50	.39	.32	.16	.20	.06
10	.12	.22	.57	.37	.53	.64	.53	.38	.31	.16	.20	.06
11	195.11	195.18	195.45	196.26	196.21	196.47	195.57	195.38	195.31	195.15	195.19	195.05
12	.11	.15	.42	.07	.26	.30	.56	.38	.31	.15	.19	.05
13	.11	.12	.43	195.95	.68	.22	.56	.37	.30	.15	.18	.05
14	.11	.19	.58	.91	.67	.10	.59	.37	.30	.15	.17	.05
15	.10	.28	.52	.82	.67	.01	.62	.37	.30	.19	.17	.04
16	195.23	195.25	195.46	195.81	196.43	195.91	195.72	195.37	195.29	195.25	195.16	195.04
17	.24	.21	.61	.76	.42	.85	.58	.36	.29	.31	.15	.04
18	.29	.21	.91	.68	.67	.81	.53	.36	.29	.32	.14	.04
19	.30	.24	196.18	.72	.47	.76	.56	.36	.28	.32	.14	.04
20	.29	.23	.04	.89	.20	.81	.55	.36	.28	.31	.13	.03
21	195.25	195.18	195.91	196.10	196.10	196.10	195.54	195.35	195.28	195.31	195.13	105.03
22	.23	.15	.73	.30	.02	.07	.54	.35	.27	.30	.12	.03
23	.18	.13	.51	.45	195.96	195.92	.52	.35	.27	.30	.12	.03
24	.13	.12	.46	.50	.92	.87	.51	.35	.27	.30	.11	.03
25	.11	.11	.41	.43	.90	.86	.54	.35	.26	.29	.11	.02
26	195.09	195.10	195.64	196.88	196.23	195.79	195.65	195.35	195.26	195.29	195.10	195.02
27	.08	.09	196.12	.88	.15	.72	.81	.34	.25	.28	.09	.02
28	.07	.14	.07	.54	.89	.66	.61	.34	.25	.28	.08	.02
29	.06	.18	195.89	.38	197.06	.62	.54	.34	.24	.28		.05
30	.06	.15	.95	.21	196.55	.62	.51	.34	.24	.27		.04
31		.14		.10	.41		.47		.23	.27		.04
Mean	195.15	195.14	195.63	196.06	196.33	196.34	195.56	195.37	195.29	195.23	195.17	195.05
Max.	195.30	195.28	196.36	196.88	197.06	198.88	195.81	195.44	195.33	195.32	195.25	195.07
Min.	195.06	195.04	195.11	195.60	195.90	195.62	195.47	195.34	195.23	195.15	195.08	195.02

WATER YEAR 1958 : Max. 198.88 m. Min. 195.02 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	10	6.75	9.50	66	78	110	34	27	20	14	15	7.25
2	10	6.50	9.00	56	97	215	33	25	20	13	15	7.25
3	10	7.50	9.50	50	88	262	33	23	20	12	15	7.25
4	9.50	10	9.00	39	81	199	34	22	20	12	14	7.25
5	9.50	14	8.50	43	85	185	35	24	19	11	14	7.25
6	9.50	16	14	52	137	282	35	24	19	11	14	7.25
7	9.00	15	79	50	159	706	34	23	19	11	13	7.00
8	9.00	15	121	45	105	447	31	23	19	11	13	7.00
9	9.00	15	64	104	99	190	31	23	19	11	13	7.00
10	9.00	14	37	123	146	163	33	23	19	11	12	7.00
11	8.50	12	27	108	101	137	37	23	19	10	12	6.75
12	8.50	10	25	86	108	113	37	23	19	10	12	6.75
13	8.50	9.00	26	72	170	103	37	22	18	10	12	6.75
14	8.50	12	37	68	168	89	38	22	18	10	11	6.75
15	8.00	17	33	59	168	79	41	22	18	12	11	6.50
16	14	15	28	58	131	68	50	22	17	15	11	6.50
17	15	13	40	53	130	62	37	22	17	19	10	6.50
18	17	13	68	46	168	58	33	22	17	19	10	6.50
19	18	15	98	50	137	53	36	22	17	19	10	6.50
20	17	14	82	66	100	58	35	22	17	19	9.50	6.25
21	15	12	68	89	89	89	34	21	17	19	9.50	6.25
22	14	10	51	113	80	86	34	21	16	18	9.00	6.25
23	12	9.50	32	134	74	69	33	21	16	18	9.00	6.25
24	9.50	9.00	28	141	69	64	32	21	16	18	8.50	6.25
25	8.50	8.50	25	131	67	63	34	21	16	17	8.50	6.00
26	7.75	8.00	43	204	104	56	43	21	16	17	8.00	6.00
27	7.50	7.75	91	204	94	50	58	20	15	17	7.75	6.00
28	7.25	10	86	147	206	44	40	20	15	17	7.50	6.00
29	7.00	12	66	124	237	41	34	20	15	17		6.75
30	7.00	10	72	101	149	41	32	20	15	16		6.50
31		10		89	128		29		14	16		6.50
Total	313	356.50	1,386.50	2,771	3,753	4,182	1,117	665	542	450	314.25	206
Mean	10.4	11.5	46.2	89.4	121	139	36.0	22.2	17.5	14.5	11.2	6.64
Max.	18	17	121	204	237	706	58	27	20	19	15	7.25
Min.	7.00	6.50	8.50	39	67	41	29	20	14	10	7.50	6.00
Runoff - mcm.	27.043	30.802	119.794	239.414	324.259	361.325	96.509	57.456	46.829	38.880	27.151	17.798

WATER YEAR 1958 : Max. 706 Min. 6.00 Mean 44.0 Annual Runoff 1,387.260 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 7	15.00	199.17	815				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
NAN RIVER BASIN

Nan River at Muang Nan (N. 1 A)

Location: Lat 18°– 47' – 00" N, Long 100°– 47' – 37" E, on right bank at Ban Tha Chang, 3 kilometers upstream from the house of Governor, Amphoe Muang, Nan.

Drainage Area: 4,590 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +194.62 m. (M.S.L.)

Bench Mark: B.M. – H.S. Nan

Location: On right bank 3 kilometers downstream.
Elevation: +199.350 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 – 62

Rating Operation:

Period of Rating: 1954 – 56
Rated by Float: –
Rated by Current Meter: 1954 – 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

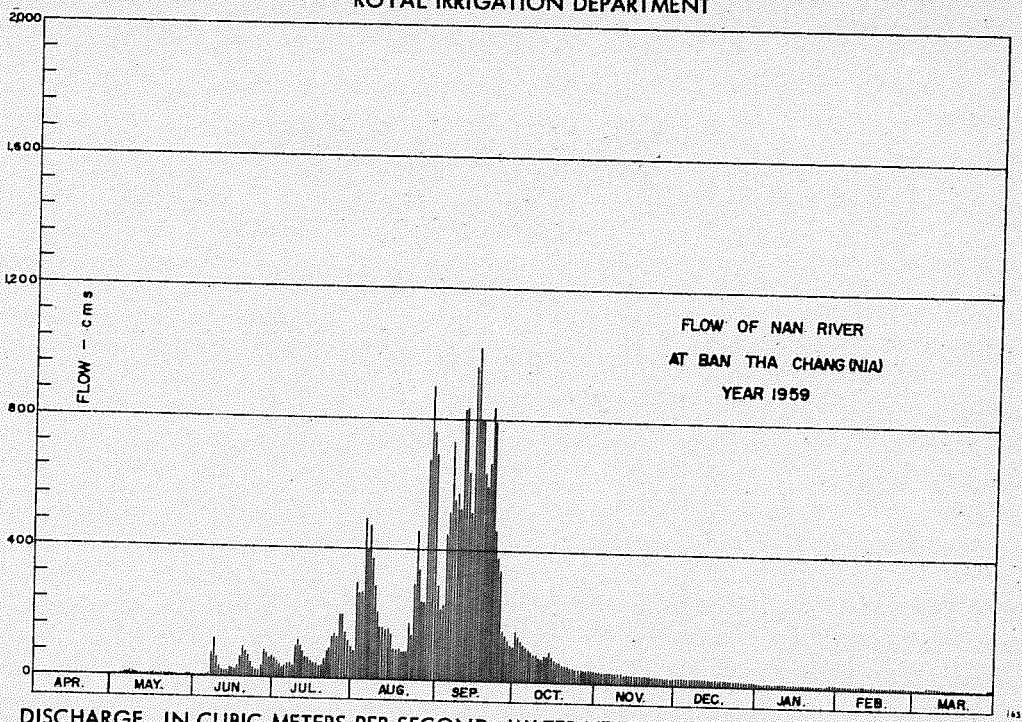
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1954 – 56. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	195.07	195.05	195.13	195.89	197.37	197.35	196.61	195.59	195.38	195.25	195.24	195.10
2	.06	.04	.12	.79	.21	196.98	.50	.58	.38	.25	.24	.10
3	.06	.08	.13	.72	.23	197.04	.41	.57	.38	.25	.23	.10
4	.06	.14	.12	.60	198.23	198.04	.31	.56	.38	.24	.23	.10
5	.05	.23	.11	.65	197.84	.29	.26	.55	.38	.24	.22	.09
6	195.05	195.24	195.23	195.74	198.15	198.95	196.18	195.54	195.38	195.24	195.21	195.22
7	.05	.26	196.01	.72	197.74	.44	.12	.53	.38	.23	.20	.24
8	.04	.24	.36	.67	.33	.49	.08	.52	.37	.23	.20	.23
9	.04	.24	195.87	196.23	196.95	.33	.04	.50	.37	.23	.20	.22
10	.04	.22	.57	.37	.63	199.21	195.99	.50	.37	.23	.20	.14
11	195.04	195.18	195.45	196.26	196.63	199.22	195.94	195.49	195.36	195.22	195.19	195.12
12	.03	.15	.42	.07	.62	198.67	196.04	.49	.36	.22	.19	.12
13	.03	.12	.43	195.95	.62	.30	.05	.48	.36	.22	.19	.12
14	.03	.19	.58	.91	.54	199.53	.16	.47	.35	.22	.19	.11
15	.03	.18	.52	.82	.30	.67	.00	.46	.35	.22	.18	.11
16	195.02	195.25	195.46	195.81	196.19	199.14	195.92	195.46	195.35	195.21	195.18	195.11
17	.03	.21	.61	.76	.21	.12	.87	.45	.34	.21	.18	.11
18	.03	.21	.91	.68	.15	198.68	.85	.45	.33	.21	.17	.10
19	.04	.24	196.18	.72	.11	.55	.77	.44	.32	.21	.17	.10
20	.05	.23	.04	.89	.14	.77	.74	.43	.32	.21	.16	.10
21	195.06	195.18	195.91	196.10	196.76	199.23	195.72	195.42	195.31	195.20	195.15	195.10
22	.06	.15	.73	.30	.52	.10	.69	.40	.31	.20	.14	.10
23	.07	.13	.51	.46	197.37	198.09	.67	.40	.30	.20	.13	.09
24	.07	.12	.46	.50	198.08	197.74	.65	.39	.29	.20	.12	.09
25	.06	.11	.41	.43	197.59	.57	.64	.39	.28	.19	.12	.08
26	195.06	195.10	195.64	196.88	197.10	197.46	195.63	195.38	195.28	195.19	195.12	195.08
27	.05	.09	196.12	.88	.09	.30	.62	.38	.27	.19	.11	.06
28	.05	.13	.07	.54	198.80	.07	.62	.38	.27	.19	.11	.06
29	.05	.18	195.89	.38	199.39	196.80	.62	.38	.26	.27	.11	.22
30	.04	.15	.95	.21	.03	.65	.61	.38	.26	.26		.20
31		.14		.10	197.84		.60		.26	.25		.19
Mean	195.05	195.17	195.63	196.06	197.21	198.26	195.93	195.46	195.33	195.22	195.17	195.13
Max.	195.07	195.26	196.36	196.88	199.39	199.67	196.61	195.59	195.38	195.27	195.24	195.24
Min.	195.02	195.04	195.11	195.60	196.11	196.65	195.60	195.38	195.26	195.19	195.11	195.06

WATER YEAR 1959 : Max. 199.67 m. Min. 195.02 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.25	6.75	9.50	66	298	294	159	38	23	15	15	8.00
2	7.00	6.50	9.00	56	266	222	141	37	23	15	15	8.00
3	7.00	7.50	9.50	50	270	233	128	37	23	15	14	8.00
4	7.00	10	9.00	39	499	450	114	36	23	15	14	8.00
5	6.75	14	8.50	43	401	516	108	35	23	15	14	7.75
6	6.75	15	14	52	478	731	98	34	23	15	13	14
7	6.75	16	79	50	377	559	91	33	23	14	13	15
8	6.50	15	121	45	290	575	87	33	22	14	13	14
9	6.50	15	64	104	212	527	82	31	22	14	13	14
10	6.50	14	37	123	162	830	77	31	22	14	13	10
11	6.50	12	27	108	162	834	71	30	22	14	12	9.00
12	6.25	10	25	86	160	633	82	30	22	14	12	9.00
13	6.25	9.00	26	72	160	519	83	30	22	14	12	9.00
14	6.25	12	37	68	147	958	96	29	21	14	12	8.50
15	6.25	12	33	59	113	1,017	78	28	21	14	12	8.50
16	6.00	15	28	58	99	803	69	28	21	13	12	8.50
17	6.25	13	40	53	101	796	64	27	20	13	12	8.50
18	6.25	13	68	46	94	636	62	27	20	13	11	8.00
19	6.50	15	98	50	90	594	54	27	19	13	11	8.00
20	6.75	14	82	66	93	667	52	26	19	13	11	8.00
21	7.00	12	68	89	183	838	50	25	19	13	10	8.00
22	7.00	10	51	113	144	788	47	24	19	13	10	8.00
23	7.25	9.50	32	135	298	462	45	24	18	13	9.50	7.75
24	7.25	9.00	28	141	460	377	43	23	17	13	9.00	7.75
25	7.00	8.50	25	131	343	339	43	23	17	12	9.00	7.50
26	7.00	8.00	43	204	244	316	42	23	17	12	9.00	7.50
27	6.75	7.75	91	204	242	284	41	23	16	12	8.50	7.00
28	6.75	9.50	86	147	678	239	41	23	16	12	8.50	7.00
29	6.75	12	66	124	901	190	41	23	16	16	8.50	14
30	6.50	10	72	101	761	165	40	23	16	16		13
31		10		89	692		39		16	15		12
Total	200.50	351	1,386.50	2,772	9,418	16,392	2,268	861	621	428	336.	291.25
Mean	6.68	11.3	46.2	89.4	304	546	73.2	28.7	20.0	13.8	11.6	9.39
Max.	7.25	16	121	204	901	1,017	159	38	23	16	15	15
Min.	6.00	6.50	8.50	39	90	165	39	23	16	12	8.50	7.00
Runoff - mcm.	17.323	30.327	119.794	239.501	813.715	1,416.269	195.955	74.391	53.654	36.979	29.030	25.164

WATER YEAR 1959 : Max. 1,017 Min. 6.00 Mean 96.5 Annual Runoff 3,052.102 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.15	8.00	199.84	1,092				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

Nan River at Tha-It, Uttaradit (N.2)

Location: Lat 17°- 37' - 16" N, Long 100°- 06' - 20" E, on right bank at Amphoe Muang Uttaradit, one kilometer upstream from the recorder site. (N.2A, which continued the record at N.2 in year 1962)

Drainage Area: 16,862 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +53.00 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1930 - 62

Rating Operation:

Period of Rating: 1954 - 59
Rated by Float: -
Rated by Current Meter: 1954 - 59

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation.

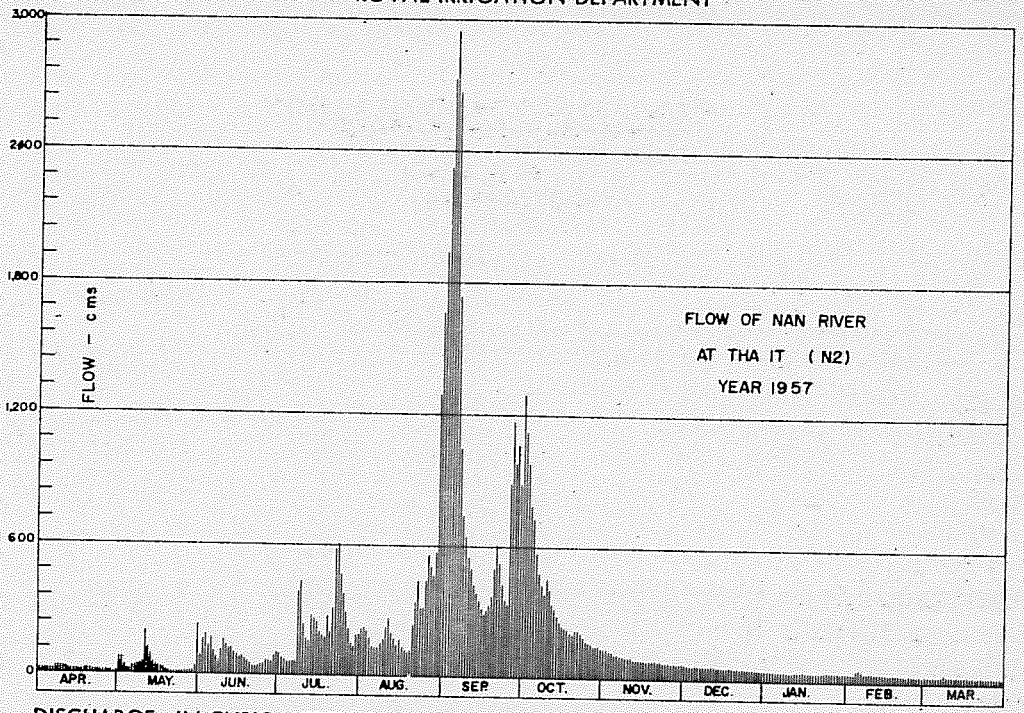
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by adjusted rating curve of discharge measurements during 1954 - 59. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	53.05	53.80	53.92	54.00	54.84	60.46	58.87	54.29	53.74	53.49	53.41	53.29
2	.07	.78	54.52	53.86	.86	61.32	.42	.30	.72	.48	.40	.29
3	.06	.41	.66	.74	.84	62.12	.00	.25	.71	.47	.40	.29
4	.08	.13	.29	.64	.61	.29	57.37	.18	.70	.47	.52	.29
5	.09	.12	.55	.62	.36	61.75	.17	.13	.69	.46	.63	.28
6	53.09	53.36	53.15	53.66	54.33	59.95	56.57	54.10	53.68	53.46	53.53	53.28
7	.25	.38	.89	.66	.33	58.21	.20	.07	.68	.45	.45	.27
8	.29	.44	.71	55.78	.45	57.23	55.97	.05	.57	.45	.43	.31
9	.26	.47	54.13	.98	.58	56.88	.76	.03	.66	.44	.42	.32
10	.24	.62	.47	54.94	.95	.75	56.09	.01	.65	.44	.42	.28
11	53.18	54.71	54.35	54.54	55.19	56.28	55.87	54.00	53.64	53.44	53.41	53.27
12	.12	.17	.22	.49	54.74	55.96	.56	53.96	.63	.45	.38	.27
13	.12	53.96	.19	55.14	.60	.77	.43	.95	.62	.45	.37	.27
14	.07	.54	.01	.10	.45	.60	.22	.94	.62	.45	.36	.26
15	.03	.37	53.94	55.00	.57	.41	.08	.93	.61	.42	.35	.26
16	53.02	53.36	53.83	54.74	54.36	55.27	54.98	53.92	53.60	53.44	53.35	53.24
17	.04	.33	.90	.67	.20	.39	.92	.90	.60	.43	.35	.25
18	.08	.29	.77	.54	.17	.51	.91	.89	.59	.43	.35	.24
19	.13	.03	.64	55.17	.31	.71	.81	.88	.59	.44	.34	.23
20	.11	52.94	.52	54.75	55.01	56.28	.76	.87	.58	.44	.34	.22
21	53.09	52.90	53.43	55.36	55.58	56.73	54.89	53.86	53.58	53.42	53.33	53.22
22	.01	.90	.36	56.62	56.07	.40	.86	.86	.57	.42	.33	.21
23	52.97	.90	.39	.72	55.43	55.99	.77	.85	.56	.43	.32	.20
24	.95	.93	.49	.14	.44	.64	.65	.84	.56	.44	.32	.20
25	.93	.92	.55	55.73	.77	.54	.57	.82	.54	.46	.31	.20
26	52.92	52.96	53.73	55.27	56.52	57.71	54.51	53.80	53.53	53.48	53.31	53.19
27	.90	.92	.70	54.89	.31	58.59	.47	.78	.53	.45	.30	.19
28	.89	.92	.63	.43	.15	57.99	.42	.77	.53	.43	.30	.19
29	.88	53.06	.93	.28	.60	58.26	.38	.76	.52	.43		.18
30	.89	.46	54.03	.67	58.85	57.70	.39	.75	.50	.42		.19
31		54.96		.69	59.78		.33		.50	.41		.21
Mean	53.06	53.39	53.90	54.83	55.30	57.50	55.55	53.93	53.61	53.44	53.38	53.24
Max.	53.29	54.96	54.66	56.72	59.78	62.29	58.87	54.30	53.74	53.49	53.63	53.32
Min.	52.88	52.90	53.15	53.62	54.17	55.27	54.33	53.75	53.50	53.41	53.30	53.18

WATER YEAR 1957 : Max. 62.29 m. Min. 52.88 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	19	78	90	100	216	1,941	1,293	135	72	49	43	33
2	20	76	167	84	220	2,318	1,122	136	70	48	42	33
3	20	43	188	72	216	2,824	976	130	69	48	42	33
4	21	24	135	62	180	2,943	785	122	68	48	52	33
5	21	23	171	62	144	2,671	728	116	67	47	61	33
6	21	39	118	64	140	1,731	569	112	66	47	52	33
7	31	40	87	64	140	1,046	480	108	66	46	46	32
8	33	45	69	388	157	744	427	106	65	46	44	45
9	32	48	116	430	175	647	384	104	64	45	44	36
10	30	60	160	232	234	547	454	101	63	45	44	33
11	27	196	143	170	276	499	406	100	62	45	43	32
12	23	120	126	163	200	425	344	95	61	46	40	32
13	23	95	123	267	178	386	319	94	60	46	40	32
14	20	53	101	260	154	352	282	94	60	46	39	32
15	18	40	93	242	174	316	256	92	59	45	38	32
16	17	39	81	200	144	291	239	90	58	45	38	31
17	18	36	88	189	124	312	229	88	58	44	38	31
18	21	33	75	170	120	334	228	87	57	44	38	30
19	24	18	62	273	137	374	212	86	57	45	37	30
20	23	14	52	202	244	499	204	85	56	45	37	29
21	21	12	44	307	348	608	224	84	56	44	36	29
22	17	12	39	581	449	528	220	84	56	44	36	29
23	15	12	41	605	319	432	205	83	55	44	36	28
24	14	13	49	466	321	360	186	82	55	45	36	28
25	13	13	55	378	386	340	174	80	53	47	35	28
26	13	14	71	291	557	887	165	78	52	48	35	27
27	12	13	68	224	506	1,186	160	76	52	46	34	27
28	12	13	61	154	468	973	153	75	52	44	34	27
29	11	20	92	134	576	1,064	147	74	52	44		27
30	12	47	104	189	1,286	884	149	73	50	44		27
31		236		192	1,660		140		50	43		29
Total	602	1,525	2,869	7,215	10,449	28,462	11,860	2,870	1,841	1,413	1,140	951
Mean	20.1	49.2	95.6	233	337	949	383	95.7	59.4	45.6	40.7	30.7
Max.	33	236	188	605	1,660	2,943	1,293	136	72	49	61	45
Min.	11	12	39	62	120	291	140	73	50	43	34	27
Runoff - mcm.	52.013	131.760	247.882	633.376	902.794	2,459.117	1,024.704	247.968	159.062	122.083	98.496	82.116

WATER YEAR 1957 : Max. 2,943 Min. 11 Mean 195 Annual Runoff 6,151.421 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 4	09.00	62.33	2,971				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
NAN RIVER BASIN

Nan River at Tha – It, Uttaradit (N.2)

Location: Lat 17°– 37' – 16" N, Long 100°– 06' – 20" E, on right bank at Amphoe Muang Uttaradit, one kilometer upstream from the recorder site. (N.2A, which continued the record at N.2 in year 1962)

Drainage Area: 16,862 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 53.00 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1930 – 62

Rating Operation:

Period of Rating: 1954 – 59
Rated by Float: –
Rated by Current Meter: 1954 – 59

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation.

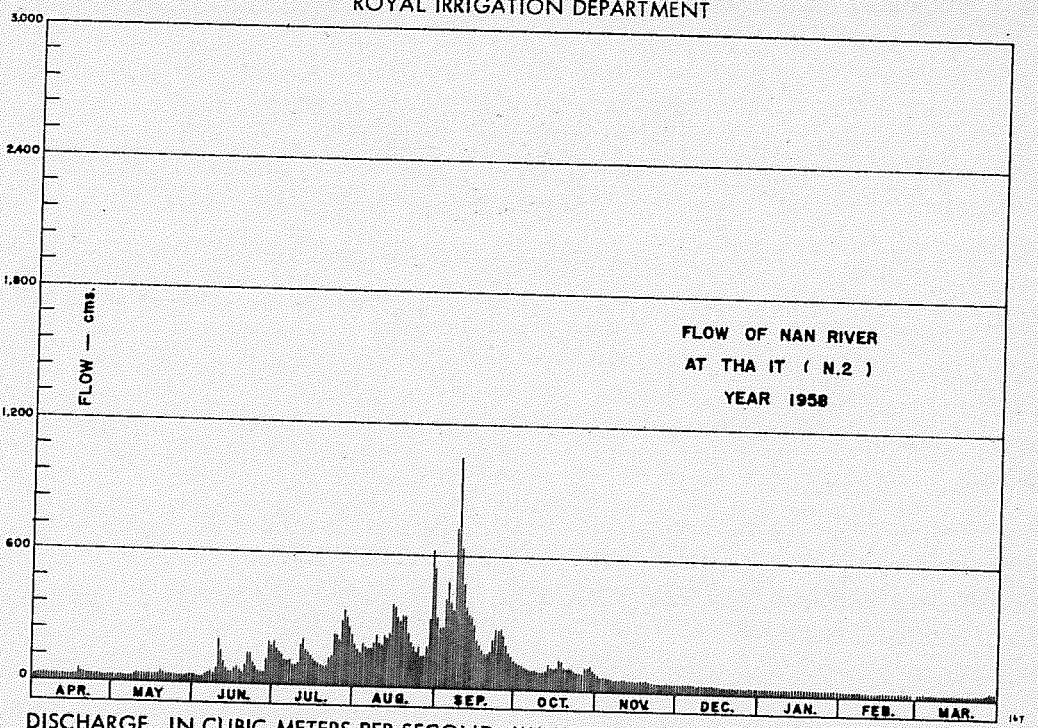
Overbank Flow Conditions: No overbank flow but flow in floodway for Sep. 9 – 12 was not included.

General Description: Records fair. Stage – discharge relation used is defined by adjusted rating curve of discharge measurements during 1954 – 59. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	53.20	53.15	53.32	54.71	54.71	55.55	54.19	53.18	53.40	53.24	53.17	53.05
2	.22	.15	.26	.65	.59	.19	.13	.70	.39	.24	.16	.05
3	.23	.16	.23	.45	.47	.20	.14	.67	.39	.23	.16	.06
4	.29	.21	.26	.32	.72	.67	.06	.64	.38	.23	.15	.05
5	.27	.18	.37	.10	.66	56.21	53.98	.63	.38	.22	.14	.04
6	53.25	53.17	53.49	54.03	54.54	55.85	53.93	53.62	53.38	53.22	53.15	53.05
7	.24	.15	.59	.14	.55	.64	.95	.61	.37	.22	.16	.06
8	.20	.16	.40	.06	.74	57.22	.89	.60	.37	.21	.14	.06
9	.19	.33	.69	53.90	.97	58.23	.87	.58	.36	.20	.13	.08
10	.18	.35	54.75	54.04	.75	57.00	.84	.57	.35	.20	.12	.08
11	53.16	53.36	54.32	54.61	54.68	56.24	53.88	53.56	53.35	53.20	53.11	53.07
12	.15	.33	53.95	.79	.94	55.81	.92	.55	.35	.19	.11	.06
13	.15	.31	.66	.61	.87	.54	54.13	.54	.34	.19	.11	.05
14	.15	.36	.50	.39	55.05	.48	.12	.53	.34	.18	.10	.04
15	.15	.43	.52	.29	.71	.24	.05	.51	.33	.18	.10	.04
16	53.15	53.33	53.74	54.18	55.67	54.95	54.05	53.50	53.33	53.18	53.09	53.03
17	.15	.32	.76	.07	.44	.77	.32	.50	.32	.18	.09	.03
18	.57	.35	.67	.00	.33	.63	.30	.50	.32	.17	.09	.03
19	.40	.52	.58	53.94	.49	.51	.11	.51	.31	.17	.09	.02
20	.34	.43	.98	.87	.49	.45	.04	.48	.31	.17	.08	.02
21	53.31	53.36	54.33	53.91	55.17	54.56	54.04	53.46	53.30	53.17	53.08	53.01
22	.31	.34	.33	54.20	54.89	.89	53.98	.45	.30	.16	.07	.01
23	.26	.30	.08	.37	.68	55.17	.91	.44	.29	.16	.07	53.00
24	.22	.27	53.84	.93	.52	.15	.87	.43	.28	.16	.06	.10
25	.20	.25	.66	.93	.63	.16	.81	.42	.28	.16	.06	.00
26	53.17	53.20	53.57	54.84	54.38	55.00	53.85	53.42	53.27	53.16	53.05	53.00
27	.16	.18	.53	55.08	.39	54.84	54.04	.41	.27	.16	.05	.13
28	.19	.17	54.23	.58	.67	.59	.06	.41	.26	.16	.05	.17
29	.21	.33	.70	.42	.75	.43	.16	.40	.25	.16		.15
30	.17	.37	.58	.19	56.83	.31	53.98	.40	.25	.16		.10
31		.35		54.94	.54		.86		.24	.17		.06
Mean	53.23	53.29	53.80	54.47	54.99	55.38	54.01	53.51	53.32	53.19	53.10	53.55
Max.	53.57	53.52	54.75	55.58	56.83	58.23	54.32	53.70	53.40	53.24	53.17	53.17
Min.	53.15	53.15	53.23	53.87	54.38	54.31	53.81	53.18	53.24	53.16	53.05	53.00

WATER YEAR 1958 : Max. 58.23 m. Min. 53.00 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	28	25	36	196	196	342	123	76	42	30	26	19
2	29	25	32	186	177	276	116	68	41	30	26	19
3	30	26	30	157	160	278	117	65	41	30	26	20
4	33	29	32	139	197	366	107	62	40	30	25	19
5	32	27	40	112	188	482	98	61	40	29	24	18
6	31	26	49	104	170	402	92	60	40	29	25	19
7	30	25	57	117	171	360	94	59	40	29	26	20
8	28	26	42	107	200	742	87	58	40	29	24	20
9	27	36	67	88	237	1,053	85	56	39	28	24	21
10	27	38	202	105	202	680	82	56	38	28	23	21
11	26	39	139	180	191	490	86	55	38	28	23	20
12	25	36	94	208	232	394	90	54	38	27	23	20
13	25	35	64	180	221	340	116	53	37	27	23	19
14	25	39	50	149	251	328	114	52	37	27	22	18
15	25	44	52	135	374	285	106	51	36	27	22	18
16	25	36	72	122	366	234	106	50	36	27	21	18
17	25	36	74	108	321	205	139	50	36	27	21	18
18	56	38	65	100	301	183	136	50	36	26	21	18
19	42	52	56	93	330	165	113	51	35	26	21	17
20	37	44	98	85	330	157	105	48	35	26	21	17
21	35	39	140	89	273	172	105	47	34	26	21	17
22	35	37	140	124	224	224	98	46	34	26	20	17
23	32	34	110	146	191	273	89	45	33	26	20	16
24	29	32	82	231	167	269	85	44	33	26	20	17
25	28	31	64	231	183	271	79	44	33	26	20	16
26	26	28	56	216	147	242	83	44	32	26	19	16
27	26	27	52	256	149	216	105	43	32	26	19	24
28	27	26	128	348	189	177	107	43	32	26	19	26
29	29	36	194	318	202	154	119	42	31	26		25
30	26	40	175	276	634	137	98	42	31	26		22
31		38		232	562		84		30	26		20
Total	899	1,050	2,492	5,138	7,736	9,897	3,164	1,575	1,120	846	625	595
Mean	30.0	33.9	83.1	166	249	330	102	52.5	36.1	27.3	22.3	19.2
Max.	56	52	202	348	634	1,053	139	76	42	30	26	26
Min.	25	25	30	85	147	137	79	42	30	26	19	16
Runoff - mcm.	77.674	90.720	215.309	443.923	668.390	855.101	273.370	136.080	96.768	73.094	54.00	51.408

WATER YEAR 1958 : Max. 1,053 Min. 16 Mean 96.3 Annual Runoff 3,035.837 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.9	06.00	58.40	1,115				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
NAN RIVER BASIN

Nan River at Tha – It, Uttaradit (N.2)

Location: Lat 17°– 37' – 16" N, Long 100°– 06' – 20" E, on right bank at Amphoe Muang Uttaradit, one kilometer upstream from the recorder site. (N.2A, which continued the record at N.2 in year 1962)

Drainage Area: 16,862 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 53.00 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1930 – 62

Rating Operation:

Period of Rating: 1954 – 59
Rated by Float: – –
Rated by Current Meter: 1954 – 59

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation.

Overbank Flow Conditions: No overbank flow.

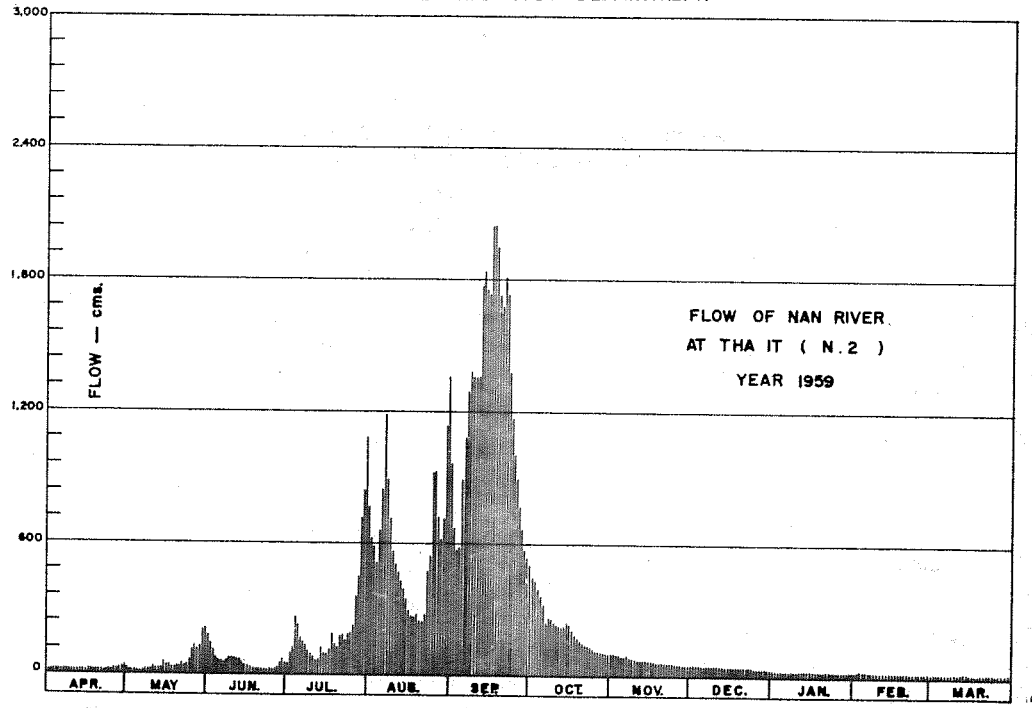
General Description: Records fair. Stage – discharge relation used is defined by adjusted rating curve of discharge measurements during 1954 – 59. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	53.04	53.15	54.62	53.56	57.28	58.16	56.33	54.05	53.56	53.30	53.20	53.07
2	.04	.08	.32	54.00	56.85	57.09	.08	.02	.56	.29	.27	.07
3	.09	.08	.03	.25	.57	56.58	.00	.00	.55	.28	.30	.07
4	.08	.04	53.75	55.12	.31	.64	55.78	53.98	.54	.28	.27	.07
5	.11	.01	.64	54.88	57.26	57.74	.60	.96	.54	.27	.22	.07
6	53.11	52.99	53.66	54.52	57.66	58.30	55.46	53.95	53.54	53.27	53.20	53.07
7	.07	53.00	.57	.40	58.60	.85	.29	.98	.52	.26	.19	.07
8	.05	.18	.74	.31	57.68	59.09	.17	.90	.52	.25	.17	.07
9	.02	.09	.89	.13	.12	.03	.06	.88	.51	.25	.17	.07
10	.01	.12	.82	53.91	56.64	.00	54.97	.85	.50	.25	.16	.08
11	53.00	53.33	53.82	53.86	56.30	59.02	54.93	53.83	53.50	53.24	53.16	53.08
12	.00	.19	.76	.72	.20	60.09	.89	.81	.50	.24	.15	.08
13	52.99	.25	.64	.85	.03	.20	.86	.79	.49	.24	.15	.08
14	.99	.29	.54	54.21	55.79	.01	.91	.78	.48	.23	.14	.06
15	.98	.59	.45	.01	.57	59.95	55.03	.77	.48	.23	.14	.05
16	53.00	53.38	53.40	53.97	55.39	60.69	54.93	53.75	53.47	53.23	53.13	53.03
17	.06	.44	.34	54.20	.17	.70	.74	.73	.46	.22	.13	.03
18	.04	.32	.31	.66	.17	.52	.62	.72	.44	.22	.12	.02
19	53.00	.25	.28	.40	.21	59.92	.55	.70	.43	.21	.12	.02
20	52.99	.42	.25	.26	.05	.80	.50	.69	.42	.21	.11	.01
21	53.03	53.34	53.23	54.59	55.02	60.14	54.43	53.68	53.41	53.21	53.10	52.99
22	.00	.51	.20	.66	.26	59.94	.36	.67	.40	.21	.10	.98
23	.02	.39	.20	.48	56.10	.32	.30	.65	.39	.21	.10	.97
24	.10	.42	.17	.68	.53	58.72	.24	.63	.38	.20	.09	.97
25	.06	.74	.18	.69	57.84	.24	.20	.62	.37	.20	.09	.96
26	53.21	54.22	53.21	54.95	57.87	57.88	54.16	53.61	53.36	53.20	53.09	52.96
27	.19	.27	.26	55.48	.31	.32	.12	.60	.35	.20	.09	.95
28	.15	.11	.49	56.06	56.81	56.81	.10	.58	.34	.19	.08	.94
29	.24	.43	.75	.89	57.12	.59	.07	.58	.34	.18	.08	.94
30	.37	.77	.58	57.87	58.59	.48	.05	.58	.32	.18		.93
31		.82		58.33	59.05		.03		.31	.18		.92
Mean	53.06	53.49	53.55	54.74	56.62	58.76	54.83	53.78	53.45	53.23	53.15	53.02
Max.	53.37	54.82	54.62	58.33	59.05	60.70	56.33	54.05	53.56	53.30	53.30	53.07
Min.	52.98	52.99	53.17	53.56	55.02	56.48	54.03	53.58	53.31	53.18	53.08	52.92

WATER YEAR 1959 : Max. 60.70 m. Min. 52.92 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	18	25	181	55	758	1,028	511	106	55	34	28	20
2	18	21	139	100	639	705	452	102	55	33	32	20
3	21	21	104	130	569	571	434	100	54	33	34	20
4	21	18	73	264	506	586	388	98	53	33	32	20
5	23	17	62	223	753	896	352	95	53	32	29	20
6	23	16	64	167	872	1,078	325	94	53	32	28	20
7	20	16	56	150	1,190	1,286	249	98	52	32	27	20
8	19	27	72	137	878	1,381	273	88	52	31	26	20
9	17	21	80	116	714	1,357	253	86	51	31	26	20
10	17	23	80	89	586	1,345	237	83	50	31	26	21
11	16	36	80	84	504	1,353	231	81	50	30	26	21
12	16	27	74	70	480	1,788	224	79	50	30	25	21
13	16	31	62	83	441	1,833	220	77	49	30	25	21
14	16	33	53	125	390	1,755	228	76	48	30	24	20
15	15	57	46	101	346	1,731	247	75	48	30	24	19
16	16	40	42	96	312	2,041	231	73	48	30	24	18
17	20	45	37	124	273	2,045	200	71	47	29	24	18
18	18	36	35	188	273	1,966	181	70	45	29	23	17
19	16	31	33	150	280	1,718	171	68	44	29	23	17
20	16	44	31	131	251	1,668	164	67	44	29	23	17
21	18	37	30	177	246	1,808	154	66	43	29	22	16
22	16	51	28	188	289	1,726	144	65	42	29	22	15
23	17	41	28	161	456	1,472	136	63	41	29	22	15
24	22	44	26	191	559	1,236	129	61	40	28	21	15
25	20	72	27	192	926	1,056	124	60	39	28	21	14
26	29	126	29	234	935	938	119	59	39	28	21	14
27	27	132	32	328	767	770	114	58	38	28	21	14
28	25	113	49	447	629	629	112	56	37	27	21	14
29	30	154	73	649	714	574	108	56	37	27	21	14
30	40	205	56	935	1,186	547	106	56	36	27		14
31		213		1,089	1,365		104		35	27		13
Total	606	1,773	1,782	7,174	19,087	38,887	6,966	2,287	1,428	925	721	548
Mean	20.2	57.2	59.4	231	616	1,296	225	76.2	46.1	29.8	24.9	17.7
Max.	40	213	181	1,089	1,365	2,045	511	106	55	34	34	21
Min.	15	16	26	55	246	547	104	56	35	27	21	13
Runoff - mcm.	52.358	153.187	153.965	619.834	1,649.117	3,359.837	601.862	197.597	123.466	79.920	62.294	47.347

WATER YEAR 1959 : Max. 2,045 Min. 13 Mean 208 Annual Runoff 6,582.299 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 16	18.00	60.77	2,077				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

Nan River at Phichai, Uttaradit (N.4)

Location: Lat 17°- 16' - 20" N, Long 100°- 04' - 52" E, on right bank near railway station, Amphoe Phichai, Uttaradit.

Drainage Area: 19,297 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +43.85 m. (M.S.L.)

Bench Mark: B.M. - H.S.

Location: A few meters north of Phichai railway station.
Elevation: +53.327 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: 1946 - 47, 1951 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, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

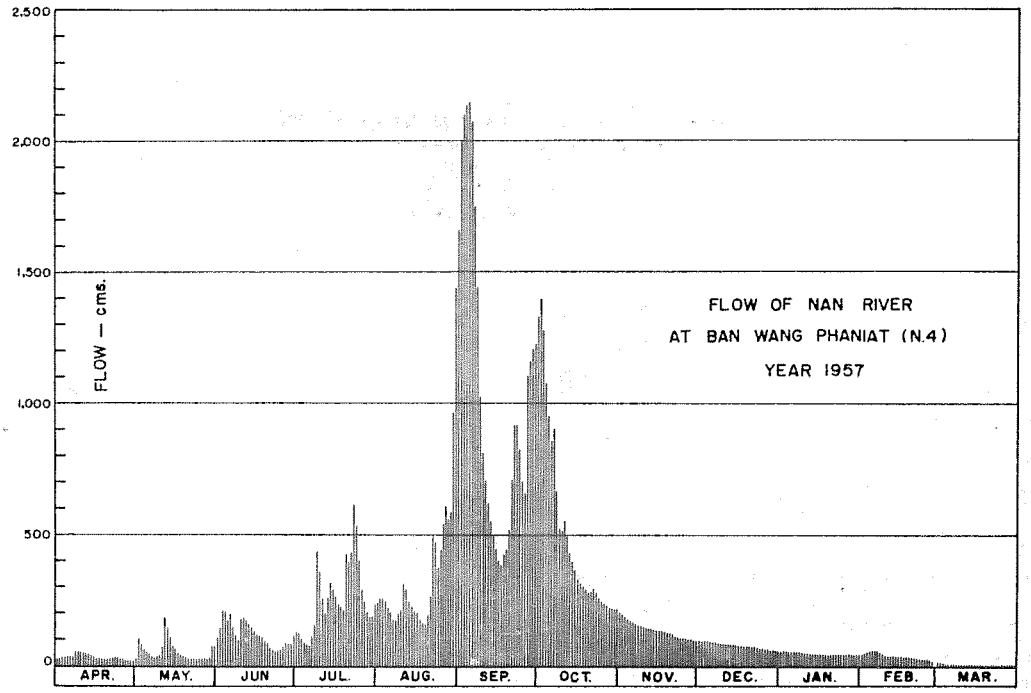
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1965 - 67. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	45.31	45.20	45.97	46.18	46.90	52.62	51.52	46.65	45.93	45.59	45.45	45.13
2	.32	.97	46.27	.16	47.00	53.40	.77	.60	.92	.59	.53	.11
3	.33	.80	.70	45.99	46.99	.65	.33	.57	.91	.58	.57	.09
4	.35	.64	.67	.87	.95	.75	50.63	.50	.90	.57	.60	.07
5	.35	.58	.45	.79	.82	.77	.23	.46	.89	.56	.62	.05
6	45.38	45.48	46.63	45.78	46.66	53.60	49.87	46.42	45.88	45.55	45.63	45.03
7	.38	.40	.24	46.06	.48	52.73	50.08	.38	.87	.55	.60	.02
8	.56	.34	.04	.06	.50	51.34	48.65	.35	.86	.54	.55	.01
9	.55	.40	45.93	47.96	.65	50.33	.39	.32	.85	.54	.49	44.99
10	.53	.43	46.48	.55	.75	49.69	.35	.31	.83	.53	.43	.98
11	45.52	45.64	46.55	46.97	47.31	49.19	48.55	46.30	45.82	45.52	45.41	44.98
12	.51	46.53	.47	.58	.18	48.86	.18	.26	.81	.52	.42	.97
13	.50	.24	.37	.97	46.89	.48	47.91	.25	.80	.51	.43	.97
14	.42	.02	.30	47.31	.78	.26	.73	.24	.79	.51	.42	.97
15	.37	45.75	.18	.20	.68	47.98	.53	.21	.78	.50	.41	.97
16	45.32	45.64	46.08	47.06	46.65	47.77	47.40	46.20	45.77	45.50	45.40	44.96
17	.31	.52	.07	46.85	.50	.68	.31	.20	.76	.49	.39	.96
18	.29	.44	.03	.80	.39	.89	.27	.18	.75	.48	.38	.96
19	.26	.38	45.90	.69	.36	48.02	.21	.16	.74	.48	.37	.95
20	.30	.34	.77	47.92	.58	.33	.12	.14	.73	.47	.36	.95
21	45.32	45.31	45.68	47.75	46.65	49.27	47.13	46.12	45.72	45.47	45.35	44.95
22	.35	.28	.60	.80	48.24	50.12	.23	.04	.71	.47	.33	.95
23	.36	.28	.55	48.83	.14	.09	.11	.03	.70	.47	.31	.94
24	.34	.28	.56	.47	47.63	49.75	.01	.02	.68	.47	.29	.94
25	.31	.29	.63	47.77	.86	.22	46.92	.01	.67	.47	.27	.94
26	45.28	45.28	45.72	47.24	48.42	48.98	46.86	46.00	45.64	45.47	45.25	44.94
27	.23	.30	.84	46.94	.82	50.79	.80	45.97	.63	.47	.23	.94
28	.21	.28	.82	.68	.57	51.00	.75	.96	.62	.47	.21	.94
29	.20	.31	.78	.53	.71	.16	.74	.95	.62	.47		.94
30	.19	.76	46.06	.57	50.27	.16	.74	.94	.61	.47		.94
31		.72		.86	51.90		.73		.61	.47		.94
Mean	45.35	45.54	46.08	46.94	47.43	50.30	48.16	46.22	45.77	45.51	45.42	44.98
Max.	45.56	46.53	46.70	48.83	51.90	53.77	51.77	46.65	45.93	45.59	45.63	45.13
Min.	45.19	45.20	45.55	45.78	46.36	47.68	46.73	45.94	45.61	45.47	45.21	44.94

WATER YEAR 1957 : Max. 53.77 m. Min. 44.94 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	28	18	102	131	242	1,691	1,314	202	98	57	42	13
2	29	102	144	128	258	1,989	1,395	194	96	57	50	12
3	30	82	210	105	256	2,090	1,255	189	95	56	55	10
4	32	63	205	90	250	2,132	1,049	178	94	55	58	9.20
5	32	56	170	81	229	2,140	940	172	93	54	60	8.00
6	35	45	199	80	204	2,070	851	165	92	52	62	6.80
7	35	37	140	114	175	1,731	901	159	90	52	58	6.20
8	54	31	112	114	178	1,258	572	155	89	51	52	5.60
9	52	37	98	434	202	966	520	151	88	51	46	4.50
10	50	40	175	355	218	808	512	149	86	50	40	4.00
11	49	63	186	253	312	691	552	148	84	49	38	4.00
12	48	183	173	191	289	617	478	142	83	49	39	3.50
13	47	140	158	253	240	538	424	141	82	48	40	3.50
14	39	109	148	312	223	494	389	140	81	48	39	3.50
15	34	76	131	292	207	438	351	135	80	47	38	3.50
16	29	63	117	268	202	396	328	134	78	47	37	3.00
17	28	49	116	234	178	379	312	134	77	46	36	3.00
18	26	41	110	226	161	420	305	131	76	45	35	3.00
19	23	35	94	208	156	446	294	128	75	45	34	2.50
20	27	31	78	426	191	508	278	126	74	44	33	2.50
21	29	28	68	392	202	709	280	123	72	44	32	2.50
22	32	25	58	402	490	911	297	112	71	44	30	2.50
23	33	25	52	611	470	904	277	110	70	44	28	2.00
24	31	25	54	536	370	822	260	109	68	44	26	2.00
25	28	26	62	396	414	698	245	107	66	44	24	2.00
26	25	25	72	299	526	639	236	106	63	44	22	2.00
27	21	27	87	248	608	1,095	226	102	62	44	21	2.00
28	19	25	84	207	556	1,156	218	101	60	44	19	2.00
29	18	28	80	183	584	1,204	216	100	60	44		2.00
30	17	77	114	189	950	1,204	216	99	59	44		2.00
31		72		236	1,439		215		59	44		2.00
Total	980	1,684	3,597	7,994	10,980	31,144	15,706	4,142	2,421	1,487	1,094	134.30
Mean	32.7	54.3	120	258	354	1,038	507	138	78.1	48.0	39.1	4.33
Max.	54	183	210	611	1,439	2,140	1,395	202	98	57	62	13
Min.	17	18	52	80	156	379	215	99	59	44	19	2.00
Runoff - MCM.	84.672	145.498	310.781	690.682	948.672	2,690.841	1,356.998	357.869	209.174	128.477	94.522	11.603

WATER YEAR 1957 : Max. 2,140 Min. 2.00 Mean 223 Annual Runoff 7,029.789 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.5	06.00	53.78	2,145				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
NAN RIVER BASIN

Nan River at Phichai, Uttaradit (N.4)

Location: Lat 17°- 16' - 20" N, Long 100°- 04' - 52" E, on right bank near railway station, Amphoe Phichai, Uttaradit.

Drainage Area: 19,297 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +43.85 m. (M.S.L.)

Bench Mark: B.M. - H.S.

Location: A few meters north of Phichai railway station.
Elevation: +53.327 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: 1946 - 47, 1951 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, no shifting adjustment for flow computation for years without actual ratings.

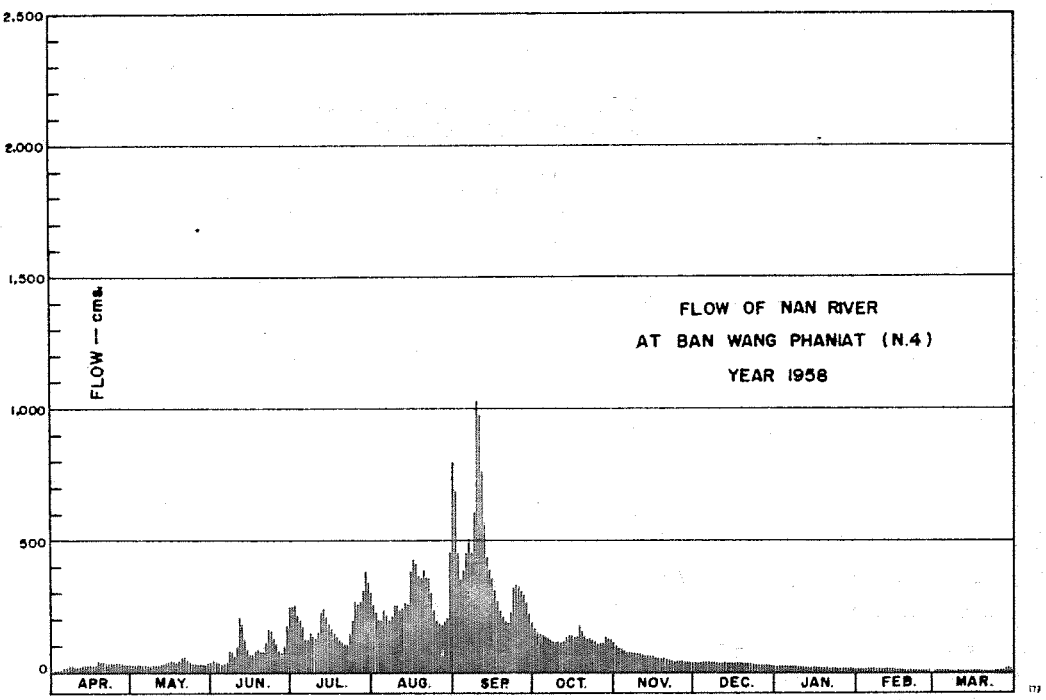
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1965 - 67. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	44.96	45.31	45.45	46.94	46.98	48.92	46.43	45.97	45.42	45.26	45.14	45.05
2	.99	.30	.41	.98	.79	47.90	.32	.89	.42	.26	.14	.05
3	45.01	.29	.36	.76	.62	.51	.26	.86	.42	.25	.14	.04
4	.07	.28	.33	.60	.64	.71	.24	.81	.42	.25	.14	.04
5	.13	.27	.34	.45	.85	48.05	.18	.77	.42	.25	.13	.04
6	45.18	45.26	45.38	46.10	46.73	48.33	46.14	45.76	45.42	45.24	45.13	45.04
7	.23	.25	.78	.14	.63	.02	.10	.74	.42	.24	.13	.03
8	.23	.25	.77	.30	.70	.92	.09	.71	.42	.23	.13	.03
9	.22	.26	.59	.19	.98	50.55	.07	.70	.41	.23	.12	.03
10	.20	.29	46.02	.18	.97	.37	.05	.68	.41	.22	.12	.03
11	45.22	45.31	46.66	46.36	46.84	49.18	46.03	45.66	45.40	45.22	45.12	45.02
12	.23	.33	.29	.81	.90	48.42	.13	.65	.40	.21	.11	.02
13	.26	.35	45.98	.89	47.03	47.87	.19	.64	.40	.21	.11	.02
14	.27	.38	.78	.67	46.97	.71	.27	.63	.39	.20	.11	.02
15	.27	.43	.65	.49	47.72	.55	.25	.62	.39	.20	.10	.02
16	45.25	45.47	45.66	46.39	47.92	47.28	46.19	45.60	45.38	45.20	45.10	45.01
17	.25	.42	.76	.30	.84	.00	.23	.57	.38	.19	.09	.01
18	.44	.40	.86	.20	.60	46.83	.49	.56	.37	.19	.09	.00
19	.41	.45	.74	.10	.57	.67	.37	.54	.37	.18	.09	44.99
20	.38	.60	.75	.03	.72	.60	.22	.53	.35	.17	.08	.98
21	45.34	45.59	46.14	45.98	47.56	46.55	46.16	45.52	45.35	45.17	45.08	44.97
22	.34	.46	.41	.97	.28	.86	.17	.50	.34	.16	.07	.97
23	.34	.41	.38	46.35	.03	47.36	.11	.47	.33	.16	.07	.98
24	.34	.36	.15	.56	46.80	.42	.04	.47	.32	.16	.06	.98
25	.35	.34	.02	47.07	.62	.40	.02	.46	.31	.15	.06	45.00
26	45.35	45.32	45.77	47.01	46.54	47.30	46.03	45.45	45.30	45.15	45.06	45.01
27	.34	.31	.70	.05	.52	.21	.04	.44	.30	.15	.05	.05
28	.33	.29	.98	.34	.60	.02	.20	.43	.29	.15	.05	.12
29	.32	.30	46.51	.70	.69	46.74	.15	.42	.28	.14		.13
30	.32	.35	.95	.45	48.10	.56	.10	.42	.27	.14		.13
31		.39		.20	49.62		.04		.27	.14		.10
Mean	45.21	45.35	45.98	46.60	47.14	47.73	46.17	45.61	45.37	45.19	45.10	45.00
Max.	45.44	45.60	46.95	47.70	49.62	50.55	46.49	45.97	45.42	45.26	45.14	45.13
Min.	44.96	45.25	45.33	45.97	46.52	46.55	46.02	45.42	45.27	45.14	45.05	44.97

WATER YEAR 1958 : Max. 50.55 m. Min. 44.96 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.00	28	42	248	255	630	167	102	39	23	14	8.00
2	4.50	27	38	255	224	422	151	93	39	23	14	8.00
3	5.60	26	33	220	197	348	142	89	39	22	14	7.40
4	9.20	25	30	194	200	385	140	83	39	22	14	7.40
5	13	24	31	170	234	452	131	78	39	22	13	7.40
6	17	23	35	120	215	508	126	77	39	22	13	7.40
7	21	22	80	126	199	446	120	75	39	22	13	6.80
8	21	22	78	148	210	630	119	71	39	21	13	6.80
9	20	23	57	133	255	1,026	116	70	38	21	12	6.80
10	18	26	109	131	253	977	113	68	38	20	12	6.80
11	20	28	204	156	232	688	110	65	37	20	12	6.20
12	21	30	147	228	242	526	124	64	37	19	12	6.20
13	23	32	104	240	263	416	133	63	37	19	12	6.20
14	24	35	80	205	253	385	144	62	36	18	12	6.20
15	24	40	64	176	387	355	141	60	36	18	11	6.20
16	22	44	65	161	426	306	133	58	35	18	11	5.60
17	22	39	77	148	410	252	138	55	35	17	10	5.60
18	41	37	89	134	364	231	176	54	34	17	10	5.00
19	38	42	75	120	359	205	158	51	34	17	10	4.50
20	35	58	76	110	387	194	137	50	32	16	9.80	4.00
21	31	57	126	104	357	186	128	49	32	16	9.80	3.50
22	31	43	164	102	306	236	130	47	31	15	9.20	3.50
23	31	38	159	155	263	321	121	44	30	15	9.20	4.00
24	31	33	127	188	226	332	112	44	29	15	8.60	4.00
25	32	31	109	270	197	328	109	43	28	14	8.60	5.00
26	32	29	78	260	184	310	110	42	27	14	8.60	5.60
27	31	28	70	266	181	294	112	41	27	14	8.00	8.00
28	30	26	104	317	194	261	134	40	26	14	8.00	12
29	29	27	180	383	208	216	127	39	25	14		13
30	29	32	250	337	462	188	120	39	24	14		13
31		36		292	791		112		24	14		11
Total	709.30	1,011	2,881	6,097	8,934	12,054	4,034	1,816	1,044	556	311.80	211.10
Mean	23.6	32.6	96.0	197	288	402	130	60.5	33.7	17.9	11.1	6.81
Max.	41	58	250	383	791	1,026	176	102	39	23	14	13
Min.	3.00	22	30	102	181	186	109	39	24	14	8.00	3.50
Runoff - MCM.	61.284	87.350	248.918	526.781	771.898	1,041.466	348.538	156.902	90.202	48.038	26.939	18.239

WATER YEAR 1958 : Max. 1,026 Min. 3.00 Mean 109 Annual Runoff 3,426.555 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.9	18.00	50.78	1,092				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
NAN RIVER BASIN

Nan River at Phichai, Uttaradit (N.4)

Location: Lat 17°– 16' – 20" N, Long 100°– 04' – 52" E, on right bank near railway station, Amphoe Phichai, Uttaradit.

Drainage Area: 19,297 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +43.85 m. (M.S.L.)

Bench Mark: B.M. – H.S.

Location: A few meters north of Phichai railway station.
Elevation: +53.327 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: 1946 – 47, 1951 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, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

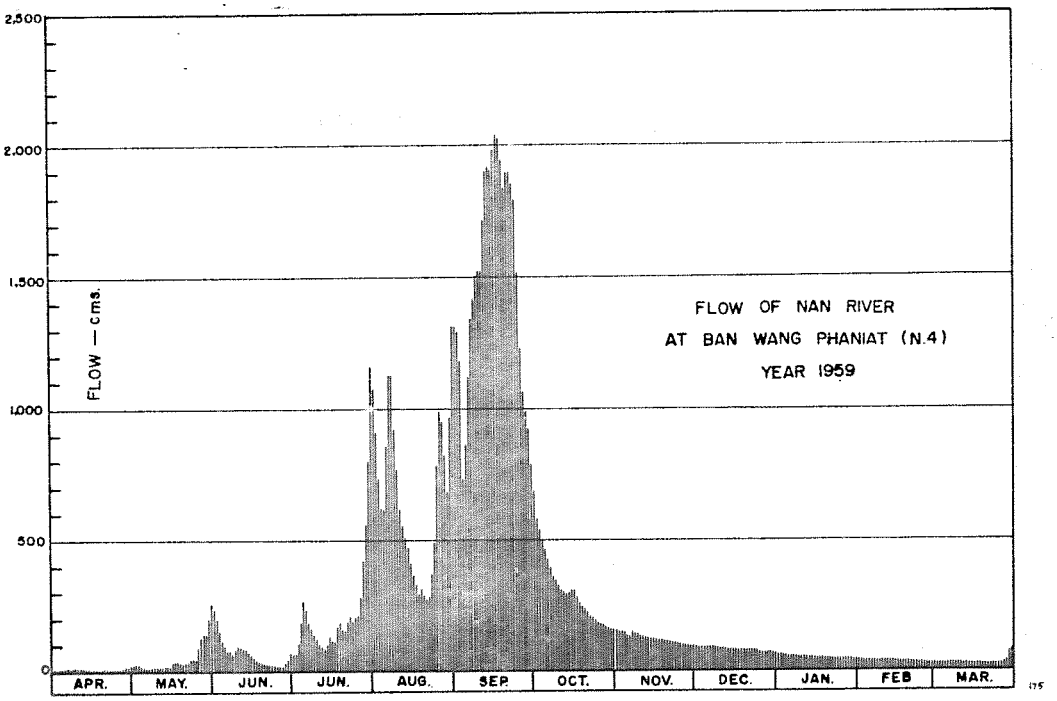
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1965 – 67. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	45.04	45.26	46.85	45.65	50.58	50.50	49.10	46.33	45.87	45.59	45.43	45.30
2	.03	.30	.62	.67	49.71	.44	48.68	.32	.86	.59	.42	.30
3	.05	.28	.34	46.00	.15	.00	.49	.31	.85	.58	.42	.30
4	.06	.20	.09	.52	48.80	49.30	.32	.28	.85	.57	.42	.30
5	.07	.14	45.89	47.03	.86	.54	.08	.21	.84	.56	.42	.30
6	45.09	45.09	45.77	46.78	49.85	50.85	47.86	46.17	45.83	45.55	45.42	45.30
7	.09	.08	.75	.47	50.89	51.26	.74	.30	.83	.54	.41	.30
8	.10	.10	.69	.38	.88	.82	.57	.26	.82	.54	.41	.29
9	.11	.12	.82	.23	.05	52.09	.47	.21	.81	.54	.41	.29
10	.10	.13	.88	.12	49.36	.12	.36	.20	.80	.53	.41	.29
11	45.10	45.16	45.87	45.95	48.81	52.07	47.27	46.17	45.79	45.53	45.40	45.29
12	.09	.19	.85	.86	.47	.68	.22	.14	.78	.52	.40	.28
13	.09	.20	.79	.80	.32	53.16	.19	.13	.77	.50	.39	.28
14	.09	.18	.70	46.01	.11	.22	.21	.10	.77	.50	.39	.28
15	.08	.21	.59	.18	47.80	.17	.27	.10	.77	.50	.38	.28
16	45.07	45.38	45.52	46.05	47.60	53.33	47.29	46.08	45.76	45.49	45.38	45.27
17	.06	.40	.46	.06	.37	.52	.13	.06	.74	.49	.37	.27
18	.05	.41	.41	.41	.19	.48	.00	.06	.74	.49	.36	.26
19	.06	.36	.37	.55	.30	.33	46.90	.04	.74	.48	.36	.26
20	.06	.30	.33	.37	.17	52.96	.83	.03	.73	.48	.35	.26
21	45.06	45.36	45.30	46.34	47.07	53.15	46.69	46.01	45.73	45.48	45.34	45.25
22	.05	.37	.27	.55	.14	.15	.69	.00	.72	.47	.34	.25
23	.05	.48	.26	.67	.65	.03	.63	45.99	.72	.47	.33	.25
24	.05	.49	.23	.55	48.26	52.88	.57	.96	.71	.47	.33	.23
25	.05	.48	.23	.68	49.62	51.86	.54	.94	.69	.47	.33	.23
26	45.06	46.06	45.21	46.80	50.40	50.92	46.50	45.93	45.68	45.46	45.32	45.25
27	.10	.22	.20	47.14	.20	.58	.47	.92	.67	.46	.32	.30
28	.17	.25	.33	.90	49.52	.36	.43	.89	.67	.45	.31	.34
29	.17	.22	.48	48.56	.04	.15	.41	.89	.67	.44	.31	.70
30	.23	.75	.70	49.70	50.30	49.64	.38	.88	.66	.43		.75
31		.99		51.81	51.50		.35		.66	.43		.56
Mean	45.08	45.49	45.66	46.71	48.93	51.92	47.21	46.10	45.76	45.47	45.37	45.32
Max.	45.23	46.99	46.85	51.01	51.50	53.52	49.10	46.33	45.87	45.59	45.43	45.75
Min.	45.03	45.08	45.20	45.65	47.07	49.30	46.35	45.88	45.66	45.43	45.31	45.23

WATER YEAR 1959 : Max. 53.52 m. Min. 45.03 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.40	23	234	64	1,034	1,308	670	152	90	57	40	27
2	6.80	27	197	66	812	1,289	578	151	89	57	39	27
3	8.00	25	154	106	681	1,156	540	149	88	56	39	27
4	8.60	18	119	181	604	716	506	145	88	55	39	27
5	9.20	14	93	263	617	772	458	135	87	54	39	27
6	10	10	78	223	846	1,112	414	130	86	52	39	27
7	10	10	76	173	1,124	1,234	391	148	86	51	38	27
8	11	11	69	159	1,121	1,412	359	142	84	51	38	26
9	12	12	84	138	894	1,505	341	135	83	51	38	26
10	11	13	92	123	730	1,516	321	134	82	50	38	26
11	11	15	90	100	606	1,498	305	130	81	50	37	26
12	10	17	88	89	536	1,713	296	126	80	49	37	25
13	10	18	81	82	506	1,895	290	124	78	47	36	25
14	10	17	70	107	464	1,919	294	120	78	47	36	25
15	9.80	19	57	131	402	1,899	305	120	78	47	35	25
16	9.20	35	49	113	364	1,962	308	117	77	46	35	24
17	8.60	37	43	114	323	2,037	280	114	75	46	34	24
18	8.00	38	38	164	290	2,021	258	114	75	46	33	23
19	8.60	33	34	186	310	1,962	242	112	75	45	33	23
20	8.60	27	30	158	287	1,819	231	110	74	45	32	23
21	8.60	33	27	154	270	1,891	208	107	74	45	31	22
22	8.00	34	24	186	282	1,891	208	106	72	44	31	22
23	8.00	45	23	205	373	1,845	199	105	72	44	30	22
24	8.00	46	21	186	494	1,788	189	101	71	44	30	21
25	8.00	45	21	207	791	1,425	184	99	69	44	30	21
26	8.60	114	19	226	985	1,133	178	98	68	43	29	22
27	11	137	18	282	932	1,034	173	96	66	43	29	27
28	16	141	30	422	767	974	167	93	66	42	28	31
29	14	137	45	554	657	919	164	93	66	41	28	70
30	21	218	70	810	958	796	159	92	65	40		76
31		256		1,159	1,308		155		65	40		54
Total	299	1,625	2,074	7,131	20,368	44,432	9,371	3,598	2,388	1,472	1,001	898
Mean	9.97	52.4	69.1	230	657	1,481	302	120	77.0	47.4	34.5	29.0
Max.	21	256	234	1,159	1,308	2,037	670	152	90	57	40	76
Min.	6.80	10	18	64	270	716	155	92	65	40	28	21
Runoff - MCM.	25.834	140.400	179.194	616.118	1,759.795	3,838.925	809.655	310.867	206.323	127.181	86.486	77.587

WATER YEAR 1959 : Max. 2,037 Min. 6.80 Mean 259 Annual Runoff 8,178.365 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.17	18.00	53.53	2,041				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

Nan River at Muang Phitsanulok (N.5)

Location: Lat 16° - 48' - 35" N, Long 100° - 15' - 37" E, on left bank at Ban Wat Chan, 50 meters downstream from ice factory, Amphoe Muang, Phitsanulok.

Drainage Area: 25,207 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +34.00 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No. 1506

Location: On left bank along the gage line.
Elevation: +44.739 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: 1922 - 28, 1950 to date.

Rating Operation:

Period of Rating: 1953 - 56
Rated by Float: -
Rated by Current Meter: 1953 - 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

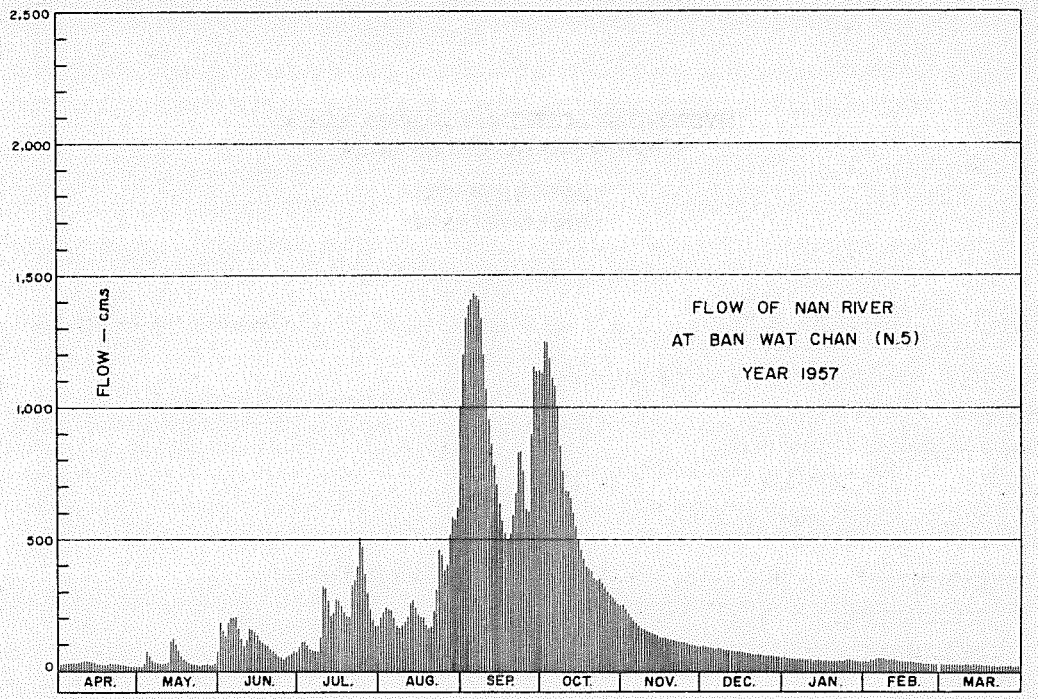
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1953 - 56. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	34.88	34.70	37.01	35.98	37.26	43.95	43.49	37.72	35.97	35.39	35.17	34.88
2	.89	.69	36.62	36.22	.45	44.45	44.12	.50	.96	.36	.19	.87
3	.90	35.07	.48	.25	.60	.66	.12	.32	.93	.32	.24	.86
4	.92	.72	.98	.05	.56	.74	43.80	.20	.92	.31	.27	.86
5	.95	.48	37.22	35.89	.50	.83	.47	.07	.90	.30	.32	.85
6	34.97	35.19	37.01	35.80	37.22	44.79	43.26	36.97	35.87	35.29	35.34	34.84
7	.99	.08	.05	.77	36.89	.73	42.77	.88	.85	.28	.36	.84
8	35.03	.02	36.68	.76	.80	.40	.12	.79	.84	.27	.31	.83
9	.07	34.96	.26	36.27	.92	43.71	41.51	.73	.81	.26	.35	.83
10	.17	.96	.03	38.33	37.08	.14	.08	.68	.79	.25	.26	.82
11	35.19	34.99	36.38	38.24	37.20	42.55	41.07	36.64	35.76	35.24	35.24	34.84
12	.13	35.12	.79	37.76	.76	.07	40.93	.60	.74	.23	.22	.81
13	.05	36.25	.75	.25	.87	41.57	.46	.55	.72	.22	.20	.88
14	.02	.37	.63	.45	.57	.10	.11	.49	.70	.21	.18	.89
15	34.98	.08	.52	.91	.30	40.71	39.74	.45	.68	.20	.16	.87
16	34.94	35.74	36.31	37.87	37.25	40.25	39.45	36.44	35.67	35.20	35.14	34.84
17	.94	.49	.18	.67	.21	39.97	.16	.42	.64	.20	.12	.81
18	.89	.28	.09	.39	36.94	.79	38.97	.36	.62	.19	.09	.79
19	.88	.15	.03	.23	.81	.94	.91	.31	.60	.19	.07	.78
20	.94	.03	35.89	.28	.83	40.33	.82	.27	.58	.19	.05	.76
21	34.95	34.96	35.72	38.35	37.33	41.01	38.60	36.26	35.56	35.19	35.02	34.74
22	.96	.90	.56	.53	38.24	.98	.53	.24	.54	.19	.00	.72
23	.93	.85	.43	.95	39.50	42.02	.57	.19	.53	.19	34.98	.71
24	.88	.79	35.36	39.85	.37	41.41	.43	.15	.51	.20	.96	.70
25	.83	.82	.31	.54	38.86	40.68	.30	.12	.49	.21	.94	.69
26	34.79	34.82	35.38	38.73	39.03	40.34	38.13	36.08	35.47	35.21	34.92	34.68
27	.79	.92	.51	.00	.93	42.30	.02	.05	.46	.19	.90	.69
28	.74	.86	.64	37.48	40.43	43.68	37.89	.03	.45	.18	.88	.68
29	.72	.83	.77	.15	.34	.61	.77	.01	.44	.17		.67
30	.70	.90	.76	36.88	.60	.66	.69	35.99	.41	.16		.66
31		35.76		.89	42.73		.68		.40	.15		.65
Mean	34.93	35.19	36.21	37.38	38.11	42.42	40.22	36.55	35.67	35.23	35.14	34.79
Max.	35.19	36.37	37.05	39.85	42.73	44.83	44.12	37.72	35.97	35.39	35.36	34.89
Min.	34.70	34.69	35.31	35.76	36.80	39.79	37.68	35.99	35.40	35.15	34.88	34.65

WATER YEAR 1957 : Max. 44.83 m. Min. 34.65 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	24	16	183	92	208	1,209	1,110	254	91	51	38	24
2	24	16	145	111	227	1,331	1,249	232	90	50	39	23
3	25	33	132	113	242	1,386	1,249	214	88	47	42	23
4	26	73	180	97	238	1,407	1,176	202	87	47	44	23
5	27	57	204	85	232	1,432	1,106	189	86	46	47	22
6	28	39	203	79	204	1,421	1,062	179	84	45	48	22
7	29	34	207	77	169	1,404	966	170	82	45	50	22
8	31	31	150	76	162	1,318	848	161	82	44	47	21
9	33	28	112	115	174	1,156	750	155	80	44	43	21
10	38	28	95	321	190	1,038	681	150	78	43	44	21
11	39	29	123	311	202	925	679	147	76	43	42	22
12	36	36	161	259	259	840	657	143	75	42	41	23
13	32	113	157	207	271	759	588	138	73	41	40	24
14	31	123	146	227	239	684	539	133	72	41	39	24
15	29	99	136	275	212	623	491	129	71	40	38	23
16	27	75	118	270	207	559	453	129	70	40	37	22
17	27	57	107	249	203	521	418	127	68	40	36	20
18	24	45	100	221	176	498	395	122	66	39	34	20
19	24	37	95	205	163	517	388	119	65	39	33	20
20	27	31	85	210	165	570	377	115	64	39	32	18
21	27	28	73	323	215	670	351	114	62	39	31	18
22	28	25	62	343	311	825	343	112	61	39	30	17
23	26	22	54	393	460	831	348	108	60	39	29	16
24	24	20	50	505	443	734	332	105	59	40	28	16
25	21	21	47	465	382	619	318	103	57	41	27	16
26	20	21	51	367	403	572	299	99	56	41	26	15
27	19	26	59	285	516	880	287	97	56	39	25	16
28	18	23	68	230	584	1,150	273	95	55	39	24	15
29	17	21	77	197	572	1,135	260	94	54	38		14
30	16	25	76	170	608	1,146	251	92	53	38		14
31		76		171	959		250		52	37		14
Total	797	1,308	3,456	7,049	9,596	28,160	18,494	4,226	2,173	1,296	1,034	610
Mean	26.6	42.2	115	227	309	939	596	141	70.1	41.8	36.9	19.7
Max.	39	123	207	505	959	1,432	1,249	254	91	51	50	24
Min.	16	16	47	76	162	498	250	92	52	37	24	14
Runoff - mcm.	68.861	113.011	298.598	609.034	829.094	2,433.024	1,597.882	365.126	187.747	111.974	89.338	52.704

WATER YEAR 1957 : Max. 1,432 Min. 14 Mean 213 Annual Runoff 6,717.427 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.5	18.00	44.84	1,437				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
NAN RIVER BASIN

Nan River at Muang Phitsanulok (N.5)

Location: Lat 16°- 48' - 35" N, Long 100°- 15' - 37" E, on left bank at Ban Wat Chan, 50 meters downstream from ice factory, Amphoe Muang, Phitsanulok.

Drainage Area: 25,207 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +34.00 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.1506

Location: On left bank along the gage line.
Elevation: +44.739 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: 1922 - 28, 1950 to date.

Rating Operation:

Period of Rating: 1953 - 56
Rated by Float: -
Rated by Current Meter: 1953 - 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

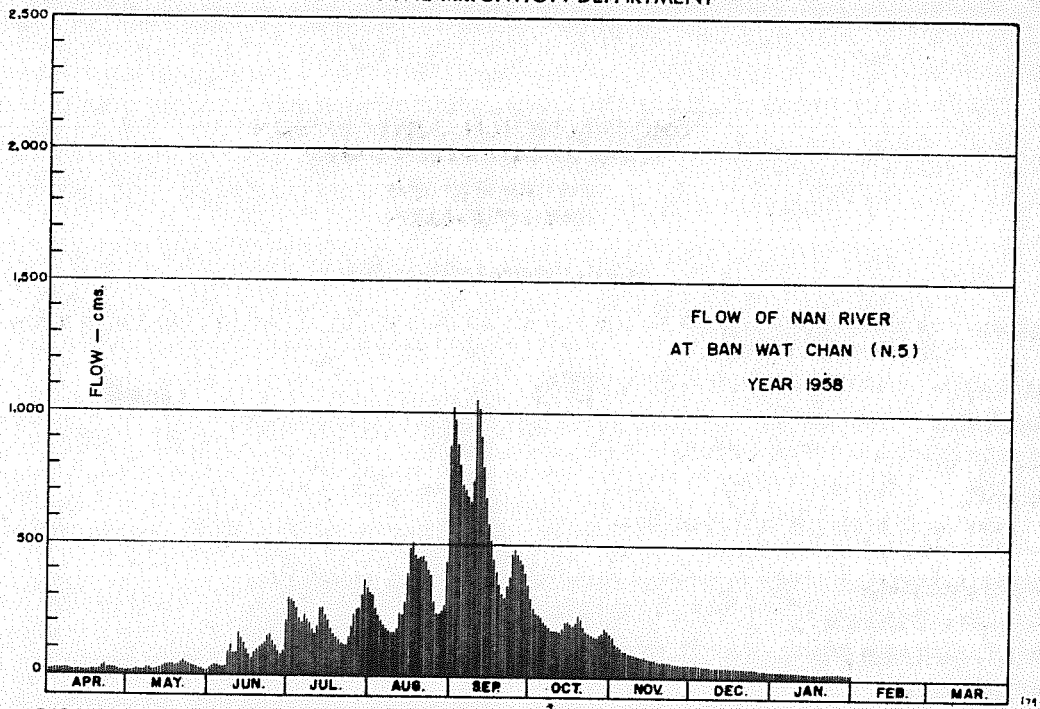
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1953 - 56. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	34.66	34.65	34.99	37.87	38.07	42.63	37.84	36.61	35.28	34.92	34.69	34.50
2	.68	.67	35.09	.83	37.97	.36	.57	.33	.26	.91	.69	.50
3	.70	.66	.13	.71	.61	41.70	.42	.21	.26	.90	.69	.50
4	.71	.72	.01	.42	.30	.17	.39	.10	.24	.89	.69	.49
5	.72	.66	34.99	.14	.13	40.89	.28	.03	.22	.87	.68	.49
6	34.74	34.66	34.98	37.12	36.98	40.77	37.12	35.97	35.21	34.86	34.68	34.49
7	.77	.75	35.17	.35	.86	.61	.04	.91	.20	.85	.68	.48
8	.75	.92	.91	.14	.80	.36	36.95	.85	.19	.84	.68	.48
9	.72	34.81	36.18	.06	.79	41.07	.85	.81	.16	.83	.68	.48
10	.68	.71	35.83	36.87	.79	42.79	.82	.77	.17	.82	.68	.49
11	34.67	34.69	35.88	36.66	36.89	42.55	36.80	35.73	35.16	34.81	34.67	34.49
12	.65	.79	36.67	.99	37.44	41.89	.80	.70	.15	.80	.66	.50
13	.63	.86	.38	37.56	.36	.11	.89	.67	.13	.80	.65	.50
14	.61	.95	36.22	.58	.88	40.37	37.12	.63	.12	.80	.64	.51
15	.59	35.03	35.92	.27	38.59	39.90	.14	.60	.11	.78	.63	.51
16	34.65	35.07	35.65	37.08	39.34	39.51	37.07	35.57	35.10	34.77	34.62	34.50
17	.65	.13	.55	36.83	.50	.04	.01	.53	.10	.76	.61	.49
18	.62	.11	.84	.67	.13	38.55	.11	.50	.09	.75	.60	.49
19	.59	.05	.99	.53	.05	.30	.36	.48	.08	.74	.59	.48
20	.73	.14	36.08	.42	.12	.05	.18	.46	.06	.73	.58	.48
21	35.00	35.31	36.18	36.29	39.13	37.93	36.89	35.46	35.05	34.73	34.57	34.47
22	.04	.40	.34	.24	.04	38.29	.78	.43	.03	.72	.56	.47
23	34.93	.25	.57	.26	38.71	.47	.75	.40	.02	.71	.55	.45
24	.90	.16	.64	.66	.24	39.15	.67	.38	.01	.71	.54	.45
25	.85	.10	.35	.95	37.75	.30	.60	.35	.00	.71	.53	.44
26	34.80	35.02	36.11	37.48	37.37	39.17	36.58	35.34	34.98	34.70	34.52	34.43
27	.76	34.95	35.84	.54	.41	.04	.64	.32	.97	.70	.51	.42
28	.70	.81	.78	.57	.46	38.95	.71	.30	.96	.70	.50	.41
29	.67	.82	.99	38.01	.64	.64	.93	.30	.95	.70		.41
30	.64	.77	37.09	.45	39.01	.24	.80	.29	.94	.70		.40
31		.78		.26	41.49		.73		.93	.69		.40
Mean	34.73	34.92	35.86	37.19	38.09	40.03	37.00	35.67	35.10	34.78	34.62	34.47
Max.	35.04	35.40	37.09	38.45	41.49	42.79	37.84	36.61	35.28	34.92	34.69	34.51
Min.	34.59	34.65	34.98	36.24	36.79	37.93	36.58	35.29	34.93	34.69	34.50	34.40

WATER YEAR 1958 : Max. 42.79 m. Min. 34.40 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	13	13	30	291	315	1,020	288	152	45	26	15	8.00
2	14	14	35	287	303	970	255	127	44	26	15	8.00
3	15	13	37	272	260	854	238	116	44	25	15	8.00
4	16	16	31	238	225	764	235	106	42	25	15	7.70
5	16	13	30	207	206	718	223	100	41	24	14	7.70
6	17	13	29	205	190	699	205	95	41	23	14	7.70
7	19	18	39	231	177	674	196	90	40	23	14	7.40
8	18	26	90	207	170	634	186	85	40	22	14	7.40
9	16	21	113	199	169	747	175	82	39	22	14	7.40
10	14	16	83	178	169	1,050	172	79	39	21	14	7.70
11	14	15	87	156	180	1,005	170	76	38	21	14	7.70
12	13	20	157	191	240	886	170	74	38	20	13	8.00
13	12	23	131	254	231	754	180	72	37	20	13	8.00
14	11	28	117	257	293	636	205	69	36	20	13	8.30
15	11	32	91	222	381	565	207	67	36	19	12	8.30
16	13	34	71	201	482	507	200	65	35	19	12	8.00
17	13	37	64	173	505	440	193	62	35	18	11	7.70
18	12	36	84	157	452	376	204	60	35	18	11	7.70
19	11	33	96	145	441	343	232	59	34	17	11	7.40
20	17	37	104	135	451	313	212	57	33	17	10	7.40
21	30	47	113	123	452	299	180	57	33	17	10	7.10
22	32	53	128	119	439	342	168	55	32	16	10	7.10
23	27	43	148	120	396	365	165	53	31	16	10	6.50
24	25	38	155	156	337	455	157	52	31	16	9.20	6.50
25	23	35	129	187	277	476	151	50	30	16	8.90	6.20
26	20	31	107	245	232	458	149	49	29	15	8.60	5.90
27	18	26	84	252	237	440	155	47	29	15	8.30	5.60
28	15	21	80	255	242	428	161	46	28	15	8.00	5.30
29	14	21	96	308	264	387	184	46	28	15		5.30
30	13	19	202	362	435	337	170	45	27	15		5.00
31		19		339	818		163		27	15		5.00
Total	502	813	2,761	6,672	9,969	17,942	5,949	2,193	1,097	597	347.00	221.00
Mean	16.7	26.2	92	215	332	598	192	73.0	35.4	19.3	12.4	7.13
Max.	32	53	202	362	818	1,050	288	152	45	26	15	8.00
Min.	11	13	29	119	169	299	149	45	27	15	8.00	5.00
Runoff - RCM.	43.373	70.243	238.550	576.461	861.322	1,550.189	513.994	189.475	94.781	51.581	29.981	19.094

WATER YEAR 1958 : Max. 1,050 Min. 5.00 Mean 134 Annual Runoff 4,239.043 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.10	18.00	42.83	1,058				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
NAN RIVER BASIN

Nan River at Muang Phitsanulok (N.5)

Location: Lat 16° – 48' – 35" N, Long 100° – 15' – 37" E, on left bank at Ban Wat Chan, 50 meters downstream from ice factory, Amphoe Muang, Phitsanulok.

Drainage Area: 25,207 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +34.00 m. (M.S.L.)

Bench Mark: B.M. – R.I.D. No.1506

Location: On left bank along the gage line.
Elevation: +44.739 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: 1922 – 28, 1950 to date.

Rating Operation:

Period of Rating: 1953 – 56
Rated by Float: –
Rated by Current Meter: 1953 – 56

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

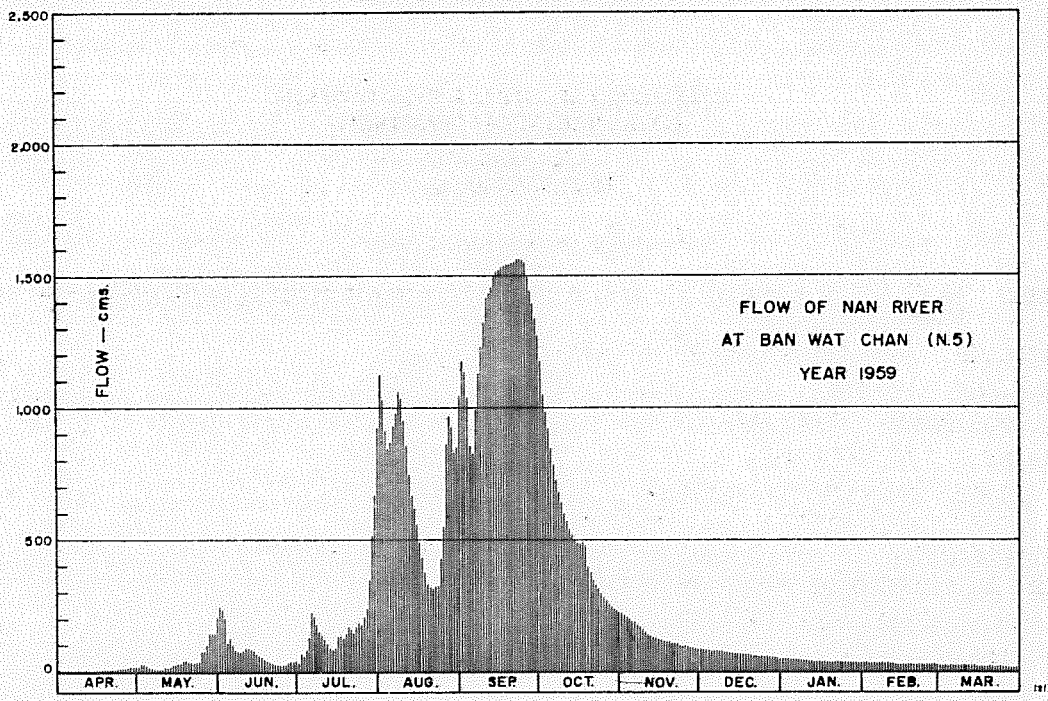
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1953 – 56. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	34.40	34.74	37.48	35.06	43.17	43.33	43.42	37.21	35.82	35.32	35.07	34.87
2	.39	35.01	.35	.56	42.62	.21	42.78	.16	.81	.31	.07	.86
3	.38	34.98	.06	.50	41.95	42.30	.40	.13	.79	.30	.06	.86
4	.37	.79	36.07	.89	.57	41.59	.04	.04	.77	.29	.05	.86
5	.36	.66	.30	36.42	.83	.43	41.65	36.97	.75	.27	.05	.86
6	34.35	34.61	35.98	37.27	42.13	42.43	41.27	36.91	35.73	35.73	35.04	34.85
7	.35	.54	.78	.11	.45	43.18	40.94	.82	.71	.25	.03	.85
8	.34	.47	.71	36.75	.84	.66	.64	.77	.70	.24	.02	.84
9	.34	.43	.69	.54	.65	44.11	.35	.67	.69	.23	.01	.83
10	.34	.47	.79	.42	.09	.49	.10	.54	.67	.22	.01	.83
11	34.33	34.59	35.85	36.21	41.50	44.57	39.89	36.46	35.65	35.20	35.00	34.82
12	.32	.63	.86	35.99	.00	.64	.72	.40	.63	.19	34.99	.81
13	.34	.76	.82	.91	40.54	.83	.56	.34	.61	.18	.98	.80
14	.35	.93	.74	.83	.17	.90	.45	.29	.59	.18	.97	.79
15	.36	.95	.61	.93	39.77	.93	.36	.26	.58	.17	.97	.78
16	34.36	34.94	35.46	36.41	39.23	44.96	39.36	36.22	35.57	35.16	34.96	34.76
17	.37	35.02	.40	.44	38.88	.98	.37	.20	.56	.15	.95	.75
18	.37	.21	.25	.33	.50	45.00	.29	.16	.54	.14	.94	.74
19	.39	.14	.14	36.58	.17	.01	38.67	.15	.53	.13	.94	.73
20	.42	.13	.07	.82	.09	.02	.49	.12	.50	.12	.93	.72
21	34.45	35.07	35.00	36.65	38.06	45.04	38.31	36.09	35.49	35.11	34.92	34.71
22	.47	.04	34.95	.57	.19	.08	.18	.04	.45	.10	.91	.70
23	.51	.07	.93	.86	.17	.09	.03	.02	.42	.09	.91	.70
24	.54	.14	.91	.91	.90	.09	37.91	.01	.41	.09	.90	.69
25	.57	.72	.86	.88	39.88	.05	.79	35.97	.41	.09	.90	.69
26	34.60	35.78	34.86	37.08	41.67	44.85	37.69	35.95	35.40	35.09	34.90	34.68
27	.65	36.11	35.03	.41	42.34	.57	.59	.91	.38	.09	.89	.68
28	.70	.49	.13	38.37	.01	.37	.51	.88	.36	.08	.89	.68
29	.71	.49	.12	39.60	41.56	.18	.41	.86	.35	.08	.88	.67
30	.71	.52	.21	40.76	.48	43.91	.35	.83	.34	.07		.67
31		37.15		42.11	42.67		.29		.32	.07		.66
Mean	34.44	35.18	35.61	36.91	40.78	44.19	39.48	36.36	35.56	35.17	34.97	34.77
Max.	34.71	37.15	37.48	42.11	43.17	45.09	43.42	37.21	35.82	35.32	35.07	34.87
Min.	34.32	34.43	34.86	35.06	38.06	41.43	37.29	35.83	35.32	35.07	34.88	34.66

WATER YEAR 1959 : Max. 45.09 m. Min. 34.66 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	5.00	17	245	33	1,123	1,173	1,173	215	83	47	34	24
2	4.80	31	231	64	1,018	1,131	1,043	210	82	47	34	23
3	4.60	29	199	60	897	959	977	206	80	46	33	23
4	4.40	20	103	88	832	835	912	196	79	45	33	23
5	4.20	13	124	135	876	808	846	189	76	44	33	23
6	4.00	11	95	222	928	982	781	182	76	44	32	23
7	4.00	9.20	80	204	986	1,125	726	172	75	43	32	23
8	3.80	7.10	75	165	1,060	1,224	678	167	74	42	31	22
9	3.80	5.90	73	146	1,024	1,322	633	157	73	42	31	22
10	3.80	7.10	80	135	921	1,411	595	146	72	41	31	22
11	3.60	11	85	116	834	1,430	564	138	71	40	30	21
12	3.40	12	86	96	736	1,447	538	133	69	40	30	21
13	3.80	18	83	90	662	1,493	514	128	68	39	29	20
14	4.00	27	77	83	606	1,510	498	123	67	39	29	20
15	4.20	28	68	91	546	1,518	484	120	66	39	29	19
16	4.20	27	57	134	466	1,526	484	117	65	38	28	18
17	4.40	31	53	137	418	1,531	486	115	64	38	28	18
18	4.40	41	43	128	369	1,536	475	111	63	37	27	17
19	4.80	38	37	149	327	1,537	391	111	62	37	27	17
20	5.60	37	34	172	318	1,541	368	108	60	36	27	16
21	6.50	34	30	156	314	1,546	344	105	59	36	26	16
22	7.10	32	28	149	320	1,556	329	101	57	35	26	15
23	8.30	34	27	177	327	1,558	311	99	54	35	26	15
24	9.20	37	26	182	421	1,558	296	98	54	35	25	15
25	10	75	23	179	562	1,549	282	95	54	35	25	15
26	26	80	23	201	849	1,498	270	93	53	35	25	14
27	13	107	32	237	966	1,430	258	90	52	35	25	14
28	15	141	37	352	923	1,382	248	87	50	34	25	14
29	16	141	36	520	830	1,338	237	86	50	34	24	14
30	16	144	41	698	817	1,278	231	83	49	34		14
31		209		925	1,027		224		47	34		13
Total	196.90	1,454.30	2,231	6,224	22,303	40,732	16,201	3,981	2,004	1,206	835	574
Mean	6.56	46.9	74.4	201	719	1,358	523	133	64.6	38.9	28.8	18.5
Max.	16	209	245	925	1,123	1,558	1,173	215	83	47	34	24
Min.	3.40	5.90	23	33	314	808	224	83	47	34	24	13
Runoff - mcm.	17.012	125.651	192.758	537.754	1,926.979	3,519.245	1,399.766	343.958	173.146	104.198	72.144	49.594

WATER YEAR 1959 : Max. 1,558 Min. 3.40 Mean 268 Annual Runoff 8,462.206 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.23	18.00	45.10	1,562				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

Nan River at Tha Pla, Uttaradit (N.6A)

Location: Lat 17° – 47' – 50" N, Long 100° – 31' – 56" E, on right bank 600 meters upstream from the district office of Amphoe Tha Pla, Uttaradit.

Drainage Area: 13,086 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +73.73 m. (M.S.L.)

Bench Mark: B.M. – R.I.D. No.1

Location: On right bank near gage site.
Elevation: +90.517 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: 1954 to date.

Rating Operation:

Period of Rating: 1954 to date.
Rated by Float: –
Rated by Current Meter: 1954 to date.

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

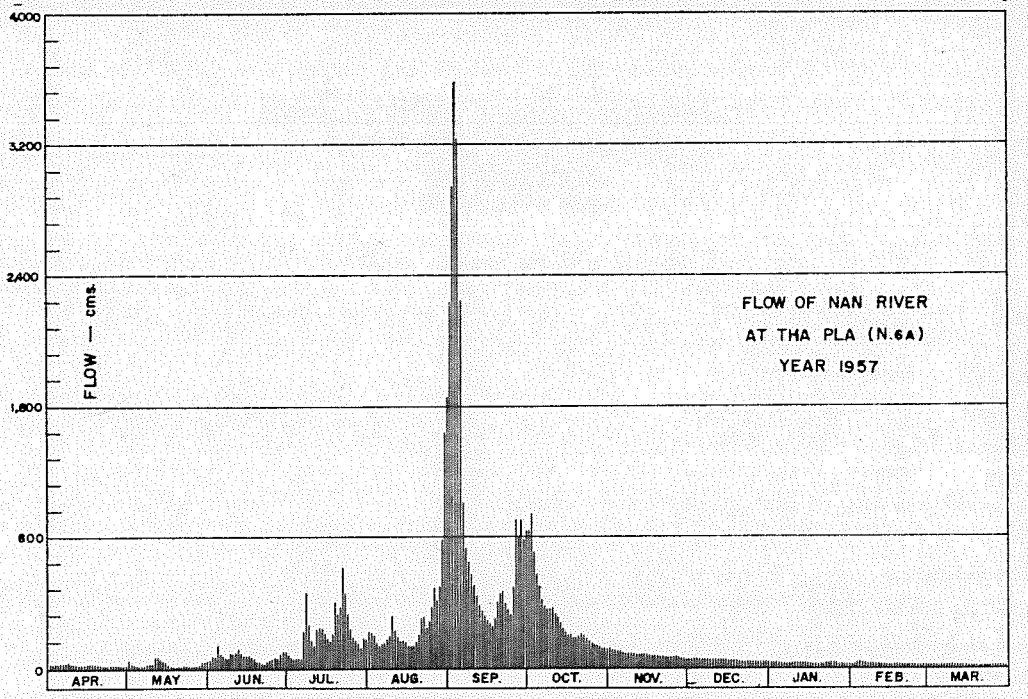
Overbank Flow Conditions: Overbank flow was observed at Ele. +85.00 m. (M.S.L.) and is included for flow computation.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1958. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	74.47	75.08	75.08	75.45	76.44	83.83	80.07	76.06	75.41	75.06	74.94	74.80
2	.46	74.63	.27	.26	.42	85.26	.33	75.98	.39	.04	.97	.80
3	.43	.52	.28	.06	.36	86.25	79.58	.92	.38	.04	75.11	.80
4	.45	.51	.78	.09	.06	85.40	78.92	.89	.37	.02	.22	.79
5	.50	.45	.42	.14	75.93	82.78	.58	.86	.36	.01	.11	.78
6	74.70	74.53	75.26	75.13	75.96	80.58	78.17	75.82	75.34	75.00	75.02	74.78
7	.72	.55	.13	76.40	76.03	79.50	77.88	.79	.33	.00	74.99	.77
8	.71	.63	.15	78.04	.25	.02	.75	.77	.31	74.99	.98	.80
9	.66	.61	.50	76.94	.36	78.69	.78	.76	.31	.99	.97	.80
10	.60	.70	.49	.26	77.13	.30	.83	.74	.30	.99	.95	.78
11	74.52	74.14	75.55	75.99	76.59	78.03	77.54	75.70	75.29	74.99	74.92	74.78
12	.47	.18	.68	76.68	.30	77.72	.40	.67	.27	.98	.90	.78
13	.44	74.99	.47	.73	.11	77.54	.16	.65	.26	.98	.89	.78
14	.42	.82	.41	.68	.15	.31	76.96	.62	.25	.98	.88	.78
15	.50	.69	.36	.45	.08	.09	.84	.60	.23	.97	.87	.76
16	74.61	74.59	75.42	76.36	75.91	76.96	76.74	75.58	75.22	74.96	74.87	74.75
17	.50	.52	.27	.22	.79	77.00	.69	.56	.21	.96	.86	.74
18	.55	.48	.09	.65	.85	.23	.62	.55	.20	.94	.86	.73
19	.52	.45	74.94	77.77	76.07	.77	.53	.58	.19	.95	.85	.72
20	.47	.43	.85	.34	.50	78.07	.66	.54	.16	.95	.85	.71
21	74.44	74.45	74.77	77.63	77.22	78.11	76.73	75.51	75.16	74.95	74.84	74.71
22	.41	.54	.76	78.87	.18	77.72	.64	.49	.15	.96	.84	.70
23	.39	.45	.90	.07	76.88	.49	.48	.48	.13	.98	.82	.70
24	.37	.45	.98	77.30	77.08	.22	.40	.47	.13	75.00	.82	.70
25	.35	.46	75.14	.88	.58	78.38	.34	.46	.12	.04	.82	.70
26	74.34	74.45	75.19	76.36	78.08	80.14	76.28	75.45	75.12	75.00	74.82	74.70
27	.33	.45	.11	.11	77.83	79.74	.21	.44	.11	74.97	.81	.69
28	.32	.49	.41	75.94	78.29	80.13	.15	.43	.10	.98	.81	.69
29	.36	.86	.60	76.14	79.61	79.66	.11	.42	.09	.96		.69
30	.47	.85	.66	.32	82.26	.84	.11	.41	.08	.94		.70
31		.93		.32	.56		.04		.06	.93		.73
Mean	74.48	74.64	75.26	76.50	77.22	79.41	77.27	75.64	75.23	74.98	74.91	74.75
Max.	74.72	75.18	75.78	78.87	82.56	86.25	80.33	76.06	75.41	75.06	75.22	74.80
Min.	74.32	74.43	74.76	75.06	75.79	76.96	76.04	75.41	75.06	74.93	74.81	74.69

WATER YEAR 1957 : Max. 86.25 m. Min. 74.32 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	22	42	55	86	224	2,240	837	122	62	34	22	18
2	21	20	69	67	210	2,940	943	114	60	34	28	18
3	22	16	69	50	198	3,588	719	108	60	35	39	18
4	19	15	123	54	158	3,019	578	105	60	34	47	17
5	21	12	83	58	141	1,750	504	102	59	33	39	16
6	30	16	72	56	145	1,010	430	98	58	32	33	17
7	32	12	62	225	154	753	380	95	58	32	31	17
8	30	22	62	458	183	624	360	93	57	32	31	18
9	22	28	89	267	201	576	367	91	58	32	31	18
10	20	30	87	172	320	497	378	91	57	33	30	17
11	16	65	95	136	232	442	335	87	57	33	28	17
12	15	67	113	238	192	387	321	85	54	33	26	17
13	14	51	92	248	167	355	280	86	53	33	24	17
14	14	37	79	244	172	323	243	85	52	33	23	17
15	17	26	79	211	166	292	222	85	50	32	22	16
16	22	20	80	191	138	273	206	81	49	31	22	15
17	21	15	68	165	134	260	209	76	50	31	22	15
18	20	13	55	221	137	312	188	76	50	30	21	14
19	17	12	43	407	161	405	185	79	49	31	21	13
20	16	11	37	328	209	461	204	78	46	31	21	13
21	11	12	31	383	315	468	213	78	46	30	20	14
22	8.00	17	30	620	310	400	202	66	46	32	19	13
23	7.00	12	42	461	249	364	182	66	44	34	19	13
24	9.00	12	49	329	289	323	172	66	44	36	19	13
25	9.00	12	62	244	382	495	159	68	43	36	19	13
26	9.00	12	66	182	491	904	146	70	42	34	19	13
27	9.00	10	59	167	419	807	138	66	41	31	19	13
28	9.00	14	82	148	503	900	131	62	39	31	19	13
29	10	39	99	125	785	786	127	62	40	29		13
30	16	34	105	178	1,441	834	127	61	40	28		14
31		47		180	1,653		120		37	27		16
Total	508	751	2,137	6,899	10,479	26,795	9,606	2,502	1,561	997	718	476
Mean	16.8	24.2	71.2	222	338	893	310	83.4	50.3	32.2	25.6	15.3
Max.	32	67	123	620	1,653	3,588	943	122	62	36	47	18
Min.	7.00	10	30	50	134	260	120	61	37	27	19	13
Runoff - MCM.	43.891	64.886	184.637	596.074	905.386	2,315.088	829.958	216.173	134.870	86.141	62.035	41.126

WATER YEAR 1957 : Max. 3,588 Min. 7.00 Mean 174 Annual Runoff 5,480.006 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 3	07.00	86.38	3,719				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
NAN RIVER BASIN

Nan River at Tha Pla, Uttaradit (N.6A)

Location: Lat 17°- 47' - 50" N, Long 100°- 31' - 56" E, on right bank 600 meters upstream from the district office of Amphoe Tha Pla, Uttaradit.

Drainage Area: 13,086 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +73.73 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.1

Location: On right bank near gage site.
Elevation: +90.517 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: 1954 to date.

Rating Operation:

Period of Rating: 1954 to date.
Rated by Float: -
Rated by Current Meter: 1954 to date.

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

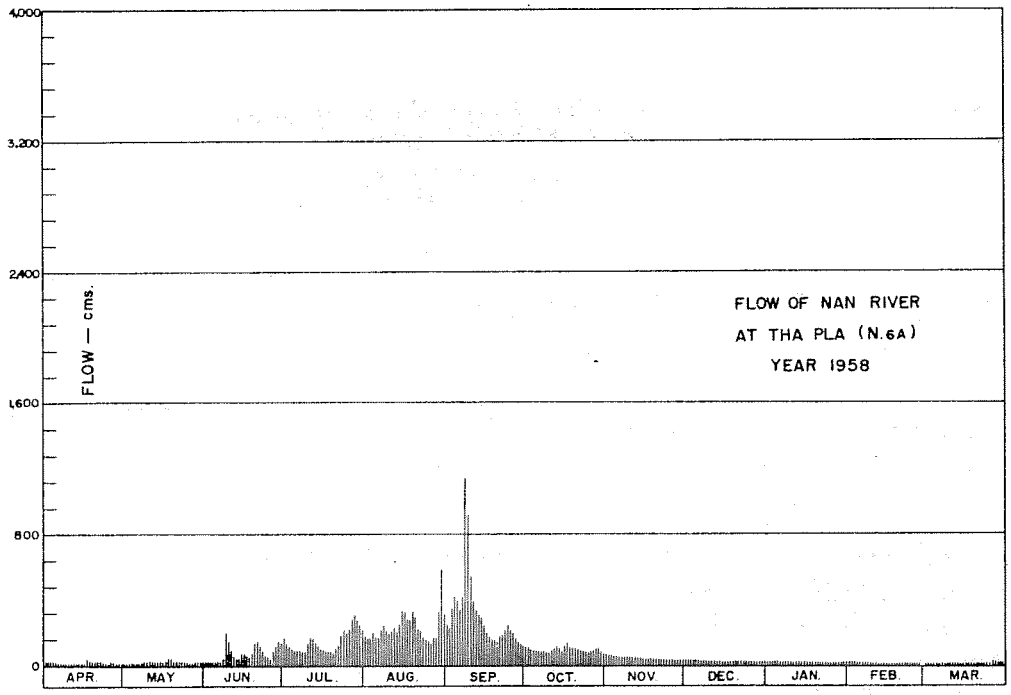
Overbank Flow Conditions: No overbank flow, included for flow computation.

General Description: Records good. Stage - discharge relation used is defined by discharge measurement during 1958. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	74.74	74.66	74.82	76.65	76.56	77.08	75.89	75.43	74.98	74.80	74.72	74.60
2	.74	.66	.77	.26	.40	76.95	.81	.39	.97	.69	.71	.61
3	.78	.68	.84	.10	.36	77.66	.77	.35	.97	.69	.71	.61
4	.77	.67	.82	75.94	.64	.95	.71	.31	.96	.68	.70	.61
5	.75	.66	.86	.82	.38	78.05	.70	.28	.96	.68	.72	.61
6	74.72	74.67	75.10	75.83	76.35	77.74	75.71	75.26	74.95	74.68	74.73	74.62
7	.70	.69	74.93	.80	.72	78.21	.69	.24	.95	.77	.71	.62
8	.69	.83	75.25	.72	.98	81.01	.69	.22	.94	.77	.69	.63
9	.68	.91	76.72	.72	.75	80.12	.62	.20	.93	.76	.68	.63
10	.67	.93	.32	76.24	.57	78.66	.61	.19	.93	.76	.67	.61
11	74.67	74.92	75.78	76.70	76.63	77.98	75.73	75.18	74.93	74.76	74.67	74.61
12	.68	.89	.45	.61	.79	.56	.89	.16	.93	.75	.65	.60
13	.67	.86	.25	.37	.69	.35	.92	.15	.92	.75	.67	.59
14	.67	.82	.19	.22	77.02	.34	.81	.13	.91	.74	.67	.59
15	.68	.82	.53	.13	.67	76.86	.74	.12	.91	.74	.65	.58
16	74.68	74.82	75.58	75.98	77.61	76.66	76.03	75.11	74.90	74.74	74.66	74.58
17	75.09	.94	.40	.85	.23	.51	.12	.11	.90	.74	.65	.57
18	74.93	75.20	.29	.79	.24	.56	75.88	.13	.89	.73	.64	.57
19	.88	.18	.60	.78	.51	.28	.79	.09	.88	.73	.63	.56
20	.86	74.96	76.22	.66	.26	.19	.81	.07	.87	.73	.63	.56
21	74.86	74.94	76.34	76.09	76.84	76.52	75.78	75.05	74.87	74.73	74.62	74.56
22	.78	.89	.00	.26	.74	.67	.69	.04	.86	.73	.63	.56
23	.75	.86	75.72	.80	.43	.68	.62	.03	.86	.72	.62	.51
24	.71	.81	.46	77.04	.33	77.04	.57	.02	.85	.72	.61	.56
25	.71	.76	.32	76.86	.22	76.24	.51	.01	.85	.72	.61	.56
26	74.82	74.72	75.22	77.02	76.15	76.70	75.70	75.01	74.84	74.71	74.61	74.80
27	.72	.72	76.03	.48	.53	.43	.82	.00	.84	.71	.61	.72
28	.65	.90	.28	.70	.51	.23	.91	74.99	.83	.71	.61	.68
29	.65	.87	.40	.29	77.56	.09	.81	.99	.82	.72		.65
30	.63	.91	.48	.07	78.98	75.98	.62	.99	.81	.73		.61
31		.87		76.72	77.68		.50		.81	.73		.60
Mean	74.74	74.84	75.56	76.37	76.88	77.24	75.74	75.14	74.90	74.73	74.66	74.61
Max.	75.09	75.20	76.72	77.70	78.98	81.01	76.12	75.43	74.98	74.80	74.73	74.80
Min.	74.63	74.66	74.77	75.72	76.15	75.98	75.50	74.99	74.81	74.68	74.61	74.56

WATER YEAR 1958 : Max. 81.01 m. Min. 74.56 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	17	13	20	172	189	249	117	70	35	24	18	12
2	17	13	18	129	175	236	107	66	35	24	18	12
3	18	14	20	114	170	350	98	63	35	23	18	12
4	18	13	20	99	204	426	91	61	33	23	17	12
5	17	13	21	91	170	401	91	60	33	22	19	12
6	15	13	29	95	164	343	88	58	33	22	18	12
7	14	14	25	95	218	419	87	53	32	22	17	12
8	13	20	47	84	245	1,142	88	53	32	21	17	13
9	12	24	195	82	218	926	82	51	31	21	17	13
10	11	25	149	132	199	551	82	50	31	21	15	12
11	12	25	94	175	209	404	95	49	31	20	15	12
12	12	23	62	165	227	337	112	49	31	20	14	12
13	12	22	47	138	208	306	115	48	30	20	15	11
14	12	20	43	121	246	292	105	47	30	20	15	11
15	13	20	68	110	330	241	92	46	30	19	14	11
16	13	20	72	95	330	204	128	45	29	19	15	10
17	36	25	57	89	277	173	135	45	29	19	14	9.60
18	26	43	49	86	280	159	108	47	28	18	14	9.20
19	23	42	76	87	327	152	102	44	28	18	13	9.60
20	22	27	139	76	297	144	108	42	28	18	13	9.60
21	22	25	148	110	225	178	99	40	28	18	12	9.20
22	18	22	113	125	211	191	96	39	27	18	13	8.90
23	17	21	84	188	170	209	89	39	27	18	12	9.20
24	15	19	61	220	157	248	85	38	26	18	12	9.20
25	15	17	49	198	146	216	81	37	26	18	12	9.20
26	20	16	36	220	131	204	91	37	26	17	12	24
27	16	16	99	284	137	165	94	37	26	17	12	18
28	12	23	121	310	170	144	110	36	25	17	12	16
29	12	23	145	273	325	130	108	36	25	18		15
30	12	23	143	256	586	119	90	36	24	18		11
31		21		214	317		76		24	18		11
Total	492	655	2,250	4,633	7,294	9,259	3,050	1,422	908	609	413	369.70
Mean	16.4	21.1	75.0	149	235	309	98.4	47.4	29.2	19.6	14.7	11.9
Max.	36	43	195	310	586	1,142	135	70	35	24	19	24
Min.	11	13	18	76	131	119	76	36	24	17	12	8.90
Runoff - mcm.	42.509	56.592	194.400	400.291	630.202	799.796	263.520	122.861	78.451	52.618	35.683	31.942

WATER YEAR 1958 : Max. 1,142 Min. 8.90 Mean 85.9 Annual Runoff 2,709.046 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 8	15.00	81.30	1,241				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
NAN RIVER BASIN

Nan River at Tha Pla, Uttaradit (N.6A)

Location: Lat 17°- 47' - 50" N, Long 100°- 31' - 56" E, on right bank 600 meters upstream from the district office of Amphoe Tha Pla, Uttaradit.

Drainage Area: 13,086 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +73.73 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.1

Location: On right bank near gage site.
Elevation: +90.517 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: 1954 to date.

Rating Operation:

Period of Rating: 1954 to date.
Rated by Float: -
Rated by Current Meter: 1954 to date.

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

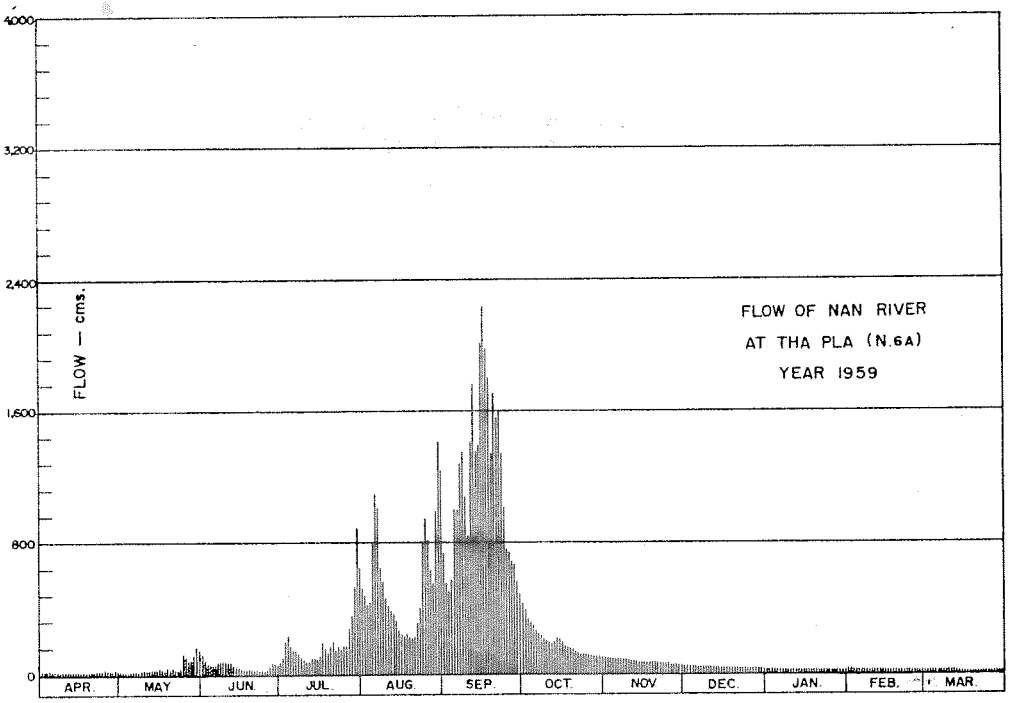
Overbank Flow Conditions: No overbank flow, included for flow computation.

General Description: Records good. Stage - discharge relation used is defined by discharge measurement during 1959. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	74.62	74.64	76.10	75.68	79.05	79.78	78.18	75.79	75.24	74.94	74.94	74.73
2	.68	.63	75.71	.89	78.78	78.88	.02	.76	.23	.93	.96	.73
3	.65	.59	.44	76.87	.46	.57	77.77	.74	.22	.92	.90	.74
4	.71	.57	.33	.95	.47	.63	.55	.71	.21	.91	.87	.72
5	.65	.57	.33	.51	79.94	80.33	.39	.70	.21	.91	.83	.72
6	74.63	74.68	75.23	76.26	81.13	80.35	77.20	75.68	75.20	74.89	74.82	74.72
7	.60	.69	.44	.23	80.68	81.24	.05	.65	.19	.89	.81	.73
8	.58	.66	.58	.03	79.70	.46	76.93	.63	.17	.88	.80	.73
9	.56	.77	.60	75.78	.14	.05	.82	.60	.17	.88	.79	.73
10	.56	.95	.60	.60	78.60	80.03	.75	.55	.16	.87	.79	.74
11	74.56	74.75	75.56	75.49	78.28	81.70	76.73	75.52	75.15	74.87	74.78	74.71
12	.55	.79	.42	.55	.18	82.46	.69	.51	.14	.86	.77	.71
13	.55	.77	.27	.76	77.95	81.66	.65	.50	.13	.86	.77	.73
14	.55	.94	.15	.78	.64	.74	.77	.48	.13	.85	.77	.66
15	.54	.83	.09	.76	.44	82.90	.76	.46	.12	.85	.76	.65
16	74.61	75.04	75.01	75.88	77.15	83.64	76.60	75.65	75.11	74.84	74.75	74.65
17	.59	74.90	74.98	76.67	.00	.25	.44	.63	.09	.84	.76	.65
18	.55	.84	.92	.34	.24	82.82	.36	.62	.07	.84	.75	.64
19	.63	75.00	.90	.13	.01	81.67	.33	.40	.06	.84	.75	.63
20	.59	74.87	.86	.36	76.84	82.56	.24	.38	.05	.83	.75	.64
21	74.57	74.99	74.82	76.65	76.87	82.03	76.16	75.36	75.04	74.82	74.75	74.63
22	.66	.93	.81	.31	79.71	.23	.09	.34	.03	.84	.74	.63
23	.68	.83	.80	.52	78.09	.63	.04	.33	.02	.86	.74	.63
24	.65	75.00	.78	.30	79.85	80.59	77.99	.31	.01	.85	.73	.63
25	.89	76.15	.82	.50	80.41	79.86	.96	.30	.00	.84	.73	.63
26	74.75	75.87	74.88	76.55	79.97	79.69	75.92	75.29	74.99	74.83	74.73	74.63
27	.69	.61	75.11	77.41	.21	.43	.89	.27	.97	.81	.73	.62
28	.68	.71	.40	78.08	78.77	.33	.87	.26	.97	.79	.73	.62
29	.84	76.06	.31	79.09	80.40	78.96	.83	.25	.96	.79	.72	.62
30	.64	.60	.25	80.89	81.72	.51	.80	.25	.95	.80		.62
31		.44		79.79	.27		.82		.95	.84		.61
Mean	74.63	75.10	75.22	76.63	78.73	80.93	76.73	75.48	75.09	74.86	74.81	74.65
Max.	74.89	76.60	76.10	80.89	81.72	83.64	78.18	75.79	75.24	74.94	74.96	74.74
Min.	74.54	74.57	74.80	75.49	76.84	78.51	75.80	75.25	74.95	74.79	74.72	74.61

WATER YEAR 1959 : Max. 83.64 m. Min. 74.54 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	13	14	116	79	525	738	436	103	51	32	34	18
2	16	12	83	99	480	560	401	100	50	32	34	19
3	15	10	67	206	426	505	341	96	48	32	31	19
4	18	9.25	58	235	443	570	315	95	49	32	29	18
5	15	8.75	57	123	797	1,007	300	96	49	32	27	18
6	13	16	53	141	1,182	1,002	268	93	48	31	26	18
7	11	16	69	144	1,017	1,279	242	92	47	29	25	18
8	10	14	80	120	652	1,352	240	91	48	29	24	19
9	9.00	23	80	96	564	1,162	216	88	47	29	24	18
10	9.50	31	79	81	467	845	206	85	47	29	24	19
11	8.75	19	69	76	426	1,420	195	82	46	29	23	18
12	8.50	19	69	80	391	1,760	185	82	45	28	23	19
13	8.50	19	55	98	370	1,359	201	80	45	29	23	18
14	8.25	27	44	98	331	1,397	218	75	45	28	22	14
15	8.00	24	41	93	276	2,013	210	73	44	27	22	14
16	12	36	34	113	244	2,228	194	72	44	27	22	14
17	11	28	32	197	235	1,973	169	75	42	27	21	15
18	9.75	26	29	153	252	1,800	162	72	41	27	20	14
19	12	36	31	135	228	1,332	160	75	41	27	20	14
20	11	26	26	162	220	1,709	147	72	40	26	20	14
21	11	35	23	194	228	1,558	136	70	39	27	20	14
22	16	29	22	147	318	1,607	132	68	38	27	19	13
23	18	24	22	167	413	1,344	122	66	39	28	19	13
24	17	34	23	151	797	1,020	119	68	37	27	18	14
25	28	124	24	177	956	755	116	65	37	27	18	13
26	21	98	26	173	828	748	113	62	37	26	18	13
27	17	80	46	282	638	684	110	62	36	25	18	12
28	15	88	70	362	560	662	110	62	35	24	18	13
29	23	116	64	533	991	574	105	59	34	24	18	13
30	12	165	58	891	1,415	495	103	58	34	25		13
31		149		659	1,240		106		33	27		13
Total	405.25	1,356	1,550	6,315	17,910	35,458	6,078	2,337	1,316	869	660	483
Mean	13.5	43.7	51.7	204	578	1,182	196	77.9	42.4	28.0	22.7	15.6
Max.	28	165	116	891	1,415	2,228	436	103	51	32	34	19
Min.	8.00	8.75	22	76	220	495	103	58	33	24	18	12
Runoff - MCM.	35.165	117.158	133.920	545.616	1,547.424	3,063.571	525.139	201.917	133.702	75.082	57.024	41.731

WATER YEAR 1959 : Max. 2,228 Min. 8.00 Mean 204 Annual Runoff 6,457.298 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 16	09.00	83.66	2,249				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

Nan River at Muang Phichit (N.7)

Location: Lat 16°- 26' - 31" N, Long 100°- 21' - 11" E, on right bank infront of Phichit Phittaya School, Amphoe Muang, Phichit.

Drainage Area: 28,191 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +26.20 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.4

Location: On right bank 78 meters downstream from gage site.
Elevation: +37.273 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: 1934 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: -
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

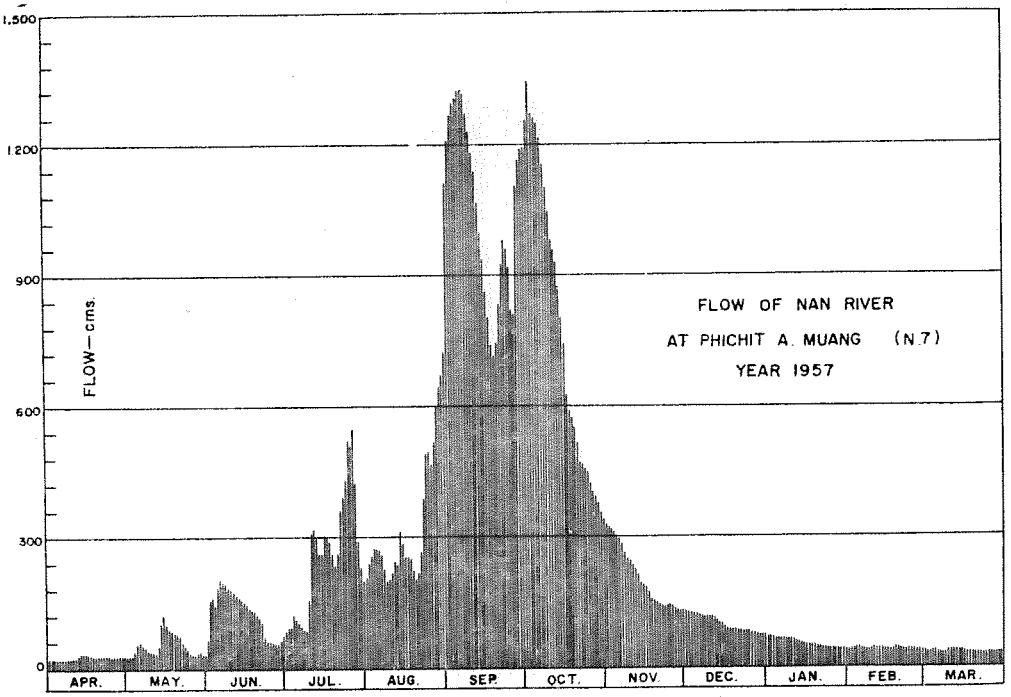
Overbank Flow Conditions: Overbank flow was observed at Ele. +36.15 m. (M.S.L.) but not included for flow computation.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1965 - 67. No state diversion above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	26.41	26.56	26.80	27.54	29.07	35.60	35.93	30.30	28.20	27.40	26.87	26.80
2	.40	.57	28.53	.72	.47	36.03	36.08	.25	.17	.35	.90	.75
3	.40	.55	.60	.70	.65	.19	.40	.20	.15	.35	.90	.75
4	.39	.63	.30	28.10	.80	.25	.19	.10	.13	.30	.95	.80
5	.38	27.10	.90	27.95	.80	.30	.15	.05	.12	.30	.95	.80
6	26.40	27.20	29.10	27.80	29.75	36.34	36.10	30.00	28.10	27.25	26.90	26.75
7	.40	.10	.00	.70	.60	.35	.00	29.80	.08	.30	.90	.70
8	.46	.00	28.95	.67	.20	.32	35.80	.60	.05	.25	.85	.70
9	.50	26.85	.85	.60	29.00	.20	.60	.55	.03	.30	.85	.75
10	.62	.80	.80	28.40	.09	.05	.40	.50	.00	.30	.90	.80
11	26.50	26.75	28.75	30.15	29.27	35.90	35.00	29.40	27.95	27.25	26.95	26.85
12	.56	.70	.70	.20	.53	.70	34.85	.30	.90	.20	.90	.80
13	.75	.82	.60	29.80	.96	.40	.65	.20	.85	.20	.90	.80
14	.72	27.48	.55	.70	30.15	.10	.30	.10	.80	.15	.95	.85
15	.73	28.10	.50	.70	29.90	34.70	33.85	28.95	.75	.10	.90	.80
16	26.72	28.00	28.40	30.10	29.60	34.30	33.50	28.90	27.70	27.10	26.90	26.75
17	.62	27.70	.30	.07	.60	33.85	32.60	.70	.65	.10	.85	.75
18	.60	.60	.25	29.90	.57	.50	.40	.55	.65	.05	.90	.70
19	.59	.55	.20	.65	.30	.35	.30	.50	.60	.05	.95	.70
20	.58	.50	.10	.40	.05	.49	.10	.45	.65	.00	.95	.75
21	26.57	27.40	28.00	29.70	29.11	33.80	31.80	28.40	27.65	27.00	26.90	26.70
22	.56	.20	27.55	30.58	.77	34.55	.50	.35	.60	26.95	.85	.70
23	.55	.10	.30	.84	30.71	.99	.45	.43	.60	.94	.85	.65
24	.58	26.95	.20	31.10	31.66	.90	.35	.45	.55	.93	.90	.70
25	.57	.70	.20	.92	.71	.55	.30	.40	.55	.92	.90	.70
26	26.56	26.65	27.17	31.74	31.40	34.05	31.10	28.35	27.50	26.91	26.85	26.65
27	.56	.60	.15	32.10	.81	.05	30.90	.30	.50	.90	.80	.65
28	.55	.75	.14	30.40	32.55	35.55	.85	.25	.45	.90	.80	.70
29	.54	.80	.25	29.80	.92	.83	.70	.20	.45	.88		.70
30	.55	.70	.40	.35	33.05	.90	.55	.20	.45	.88		.75
31		.60		.10	33.80		.40		.40	.87		.70
Mean	26.54	27.03	28.12	29.47	30.28	35.17	33.46	29.06	27.78	27.11	26.89	26.74
Max.	26.75	28.10	29.10	32.10	33.80	36.35	36.40	30.30	28.20	27.40	26.95	26.85
Min.	26.38	26.55	26.80	27.54	29.00	33.35	30.40	28.20	27.40	26.87	26.80	26.65

WATER YEAR 1957 : Max. 36.40 m. Min. 26.38 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	20	26	37	81	200	1,109	1,194	326	128	71	40	37
2	20	27	154	92	239	1,223	1,237	321	126	68	42	34
3	20	26	160	91	257	1,271	1,342	315	124	68	42	34
4	20	29	136	120	272	1,291	1,271	304	123	65	45	37
5	19	53	185	109	272	1,308	1,258	299	122	65	45	37
6	20	59	203	98	267	1,322	1,243	293	120	62	42	34
7	20	53	194	91	252	1,325	1,214	272	119	65	42	32
8	22	47	189	89	212	1,315	1,160	252	117	62	39	32
9	24	39	180	84	194	1,274	1,109	247	115	65	39	34
10	29	37	176	144	202	1,228	1,063	242	113	65	42	37
11	24	34	172	310	219	1,186	980	232	109	62	45	39
12	26	32	168	315	245	1,134	950	222	105	59	42	37
13	34	38	160	272	239	1,063	913	212	102	59	42	37
14	33	77	156	262	310	1,000	853	203	98	56	45	39
15	33	120	152	262	282	922	784	189	94	53	42	37
16	33	113	144	304	252	853	733	185	91	53	42	34
17	29	91	136	301	252	784	610	168	88	53	39	34
18	28	84	132	282	249	733	583	156	88	50	42	32
19	28	81	128	257	222	712	570	152	84	50	45	32
20	27	78	120	232	198	732	544	148	88	47	45	34
21	27	71	113	262	204	777	505	144	88	47	42	32
22	26	59	81	359	269	895	468	140	84	45	39	32
23	26	53	65	389	374	978	462	146	84	44	39	30
24	27	45	59	420	487	960	450	148	81	44	42	32
25	27	32	59	521	493	895	444	144	81	43	42	32
26	26	30	57	497	456	814	420	140	78	42	39	30
27	26	28	56	544	506	814	396	136	78	42	37	30
28	26	34	55	338	603	1,097	390	132	75	42	37	32
29	26	37	62	272	653	1,168	372	128	75	41		32
30	26	32	71	227	671	1,186	355	128	75	41		34
31		28		203	777		338		71	40		32
Total	772	1,593	3,760	7,828	10,328	31,369	24,211	6,124	3,024	1,669	1,164	1,051
Mean	25.7	51.4	125	252	333	1,046	781	204	97.5	53.8	41.6	33.9
Max.	34	120	203	544	777	1,325	1,342	326	128	71	45	39
Min.	19	26	37	51	194	712	338	128	71	40	37	30
Runoff - MCM.	66.701	137.635	324.864	676.339	892.339	2,710.282	2,091.830	529.114	261.274	144.202	100.570	90.806

WATER YEAR 1957 : Max. 1,342 Min. 19 Mean 254 Annual Runoff 8,025.955 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 3	18.00	36.40	1,342				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
NAN RIVER BASIN

Nan River at Muang Phichit (N.7)

Location: Lat 16°- 26' - 31" N, Long 100°- 21' - 11" E, on right bank infront of Phichit Phittaya School, Amphoe Muang, Phichit.

Drainage Area: 28,191 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +26.20 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.4

Location: On right bank 78 meters downstream from gage site.
Elevation: +37.273 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: 1934 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: -
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

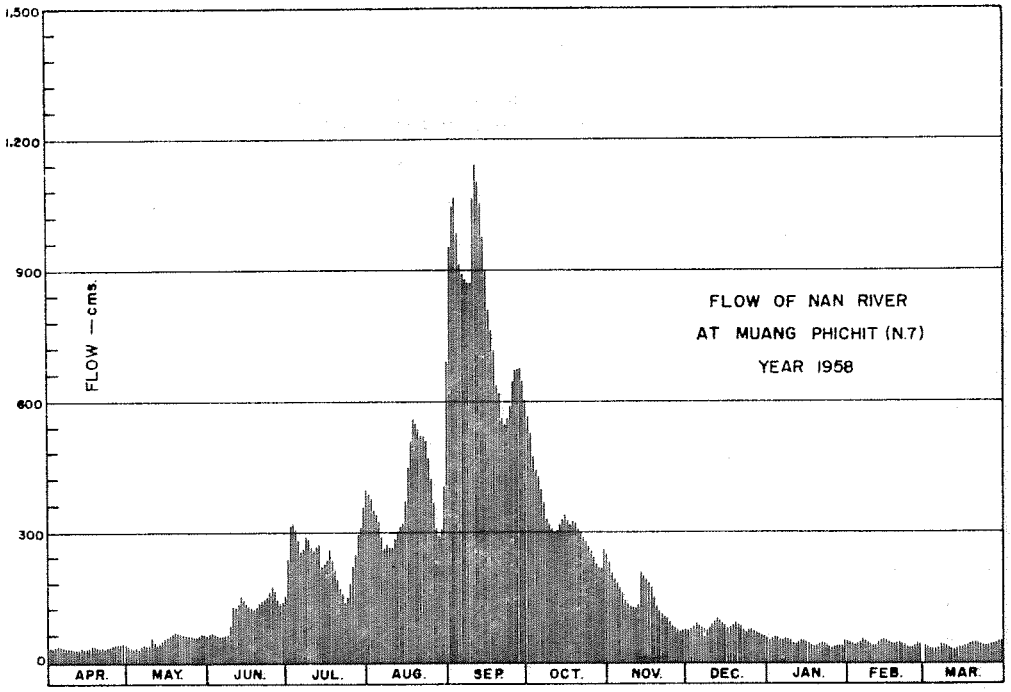
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1965 - 67. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	26.75	26.80	27.30	29.45	30.80	34.80	32.23	29.35	27.44	27.10	27.01	26.83
2	.70	.73	.35	30.18	.75	35.30	31.90	.15	.52	.17	26.93	.76
3	.75	.70	.30	.25	.54	.40	.47	28.98	.62	.20	.87	.70
4	.80	.75	.25	.10	.40	34.95	.26	.87	.70	.16	.92	.65
5	.80	.70	27.20	29.85	.30	.65	.17	.73	.63	.08	27.01	.70
6	26.75	26.80	27.22	29.60	29.90	34.50	30.90	28.62	27.52	27.09	27.07	26.77
7	.75	.87	.25	.70	.67	.45	.63	.40	.50	.20	.03	.87
8	.70	27.00	.30	.96	.80	.40	.33	.28	.46	.13	26.98	.85
9	.70	26.88	.50	.90	.70	.40	.23	.20	.53	.05	.91	.80
10	.65	27.14	28.22	.70	.75	35.40	.15	.19	.65	26.98	.86	.73
11	26.70	27.00	28.20	29.65	29.95	35.72	30.05	28.12	27.75	26.93	26.87	26.66
12	.70	26.90	.30	.75	30.09	.56	.09	.23	.85	27.02	.97	.60
13	.75	.94	.50	.80	.20	.30	.22	29.17	.77	.09	27.05	.67
14	.70	27.04	.40	30.20	.25	34.90	.32	.07	.68	.10	.10	.70
15	.70	.11	.30	.30	.65	.40	.40	28.98	.57	.03	.06	.74
16	26.75	27.20	28.20	30.00	31.30	33.95	30.33	28.88	27.50	26.93	26.98	26.82
17	.80	.24	.17	29.70	.80	.63	.20	.73	.58	.85	.92	.87
18	.80	.32	.10	.40	32.25	.20	.35	.37	.66	.82	.90	.94
19	.75	.40	.23	.25	.10	32.79	.23	.17	.70	.87	.97	27.00
20	.74	.35	.30	.00	.00	.70	.13	.07	.63	.94	27.00	.00
21	26.72	27.30	28.35	28.80	31.90	32.25	30.03	27.98	27.57	27.00	26.93	26.96
22	.71	.28	.42	.60	.90	.10	29.93	.90	.45	26.96	.86	.90
23	.75	.27	.47	.30	.80	.22	.83	.87	.40	.88	.78	.83
24	.80	.25	.63	.45	.45	.40	.76	.65	.47	.77	.72	.82
25	.85	.24	.80	.90	.10	.87	.64	.60	.50	.72	.77	.87
26	26.85	27.22	28.65	29.27	30.60	33.02	29.47	27.53	27.43	26.79	26.84	26.90
27	.90	.20	.40	.60	.10	.04	.32	.45	.33	.87	.92	.90
28	.90	.25	.30	30.02	.00	.06	.25	.40	.30	.94	.89	.96
29	.95	.28	.35	.15	.16	32.85	.29	.43	.23	27.02		27.02
30	.90	.30	.40	.50	.85	.55	.67	.45	.20	.05		.02
31		.25		.90	32.95		.55		.15	.04		.08
Mean	26.77	27.09	28.04	29.65	30.92	33.89	30.27	28.29	27.52	26.99	26.93	26.84
Max.	26.95	27.40	28.80	30.90	32.95	35.72	32.23	29.35	27.85	27.20	27.10	27.08
Min.	26.65	26.70	27.20	28.30	29.67	32.10	29.25	27.40	27.15	26.72	26.72	26.60

WATER YEAR 1958 : Max. 35.72 m. Min. 26.60 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	34	37	65	237	384	941	561	227	74	53	48	38
2	32	33	68	313	378	1,041	518	207	79	57	44	35
3	34	32	65	321	354	1,063	464	192	86	59	40	32
4	37	34	62	304	338	970	439	182	91	57	43	30
5	37	32	59	277	326	913	428	170	86	52	48	32
6	34	37	60	252	282	886	396	162	79	52	51	35
7	34	40	62	262	259	877	364	144	78	59	49	40
8	32	47	65	289	272	869	330	134	75	55	46	39
9	32	41	78	282	262	869	319	128	80	50	42	37
10	30	55	130	262	267	1,063	310	127	88	46	40	33
11	30	47	128	257	288	1,139	299	122	94	44	40	30
12	30	42	136	267	303	1,099	303	130	102	49	46	28
13	34	44	152	272	315	1,041	318	209	96	52	50	31
14	32	50	144	315	321	960	329	200	90	53	53	32
15	32	54	136	326	367	869	338	192	82	49	51	34
16	34	59	128	326	444	799	330	183	78	44	46	38
17	37	61	126	262	505	751	315	170	83	39	43	40
18	37	66	120	232	563	691	322	142	88	38	42	44
19	34	71	130	217	544	636	319	126	91	40	46	47
20	34	68	136	194	531	623	308	118	86	44	47	47
21	33	65	140	176	518	563	297	111	82	47	44	45
22	32	64	146	160	518	544	286	105	75	45	40	42
23	34	63	150	136	505	560	275	103	71	41	36	38
24	37	62	162	148	462	583	268	88	76	35	33	38
25	39	61	176	185	420	646	256	84	78	33	35	40
26	39	60	164	219	361	666	239	80	73	36	39	42
27	42	59	144	252	304	669	224	75	67	40	43	42
28	42	62	136	296	293	672	217	71	65	44	41	45
29	45	64	140	310	311	644	221	73	61	49		49
30	42	65	144	349	390	603	259	75	59	50		49
31		62		396	657		247		56	50		52
Total	1,055	1,637	3,552	8,094	12,042	24,250	10,099	4,130	2,469	1,462	1,226	1,204
Mean	35.2	52.8	118	261	388	808	326	138	79.6	47.2	43.8	38.8
Max.	45	71	176	396	657	1,139	561	227	102	59	53	52
Min.	30	32	59	136	259	544	217	71	56	33	33	28
Runoff — mcm.	91.152	141.437	306.893	699.322	1,040.429	2,095.200	872.554	356.832	213.322	126.317	105.926	104.026

WATER YEAR 1958 : Max. 1,139 Min. 28 Mean 195 Annual Runoff 6,153.408 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.11	18.00	35.72	1,139				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
NAN RIVER BASIN

Nan River at Muang Phichit (N.7)

Location: Lat 16°- 26' - 31" N, Long 100°- 21' - 11" E, on right bank infront of Phichit Phittaya School, Amphoe Muang, Phichit.

Drainage Area: 28,191 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +26.20 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.4

Location: On right bank 78 meters downstream from gage site.
Elevation: +37.273 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: 1934 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: -
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

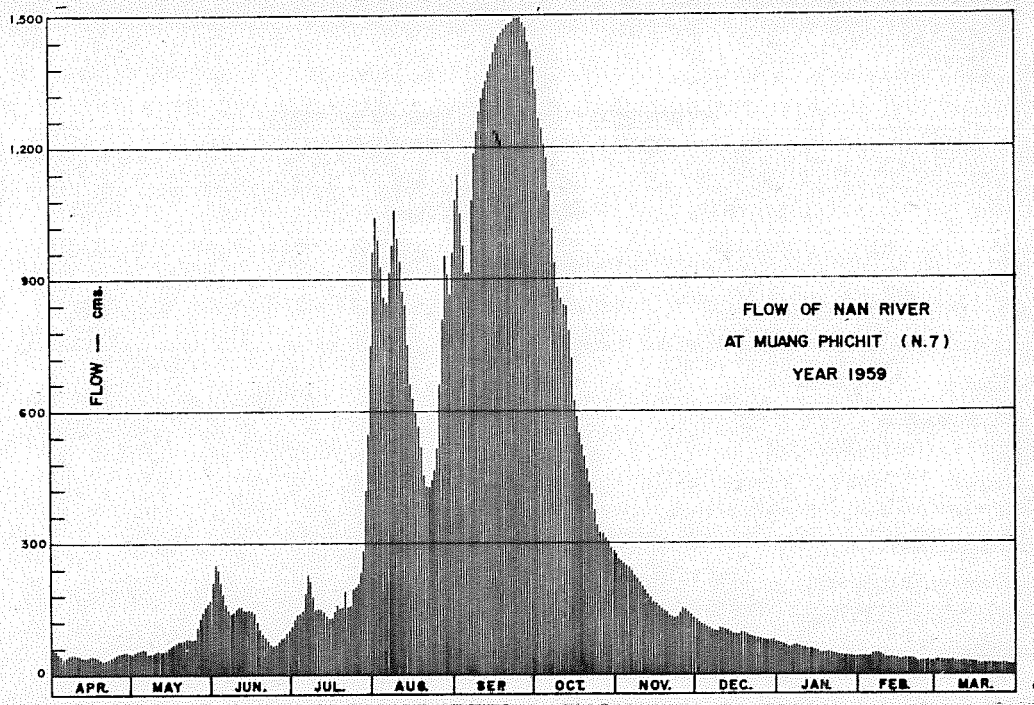
Overbank Flow Conditions: Overbank flow was observed at Ele. +36.15 m. (M.S.L.) but not included for flow computation.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1965 - 67. No state diversion above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	27.10	27.03	29.18	27.91	34.90	35.60	36.54	29.78	28.18	27.49	26.92	26.72
2	.05	.05	.57	28.23	35.28	.72	.37	.68	.13	.44	.92	.67
3	26.98	.13	.46	.30	.11	.40	.17	.62	.06	.40	.93	.65
4	.87	.19	.19	.33	34.77	34.95	.10	.60	27.99	.37	.90	.66
5	.80	.20	28.85	.42	.30	.63	.00	.58	.94	.30	.92	.69
6	26.85	27.16	28.57	28.78	34.25	34.65	35.85	29.49	27.90	27.26	26.97	26.72
7	.92	26.97	.47	29.37	.54	35.30	.56	.39	.88	.27	27.02	.70
8	.98	.93	.30	.25	35.09	.82	.14	.30	.82	.34	.02	.68
9	27.00	.99	.37	28.91	.37	36.03	34.82	.23	.83	.33	27.00	.65
10	26.96	27.06	.47	.48	.19	.20	.45	.18	.95	.27	26.98	.69
11	26.90	27.10	28.55	28.50	34.89	36.31	34.30	29.07	27.92	27.25	26.91	26.69
12	.85	.06	.53	.48	.42	.37	.24	28.90	.89	.23	.88	.65
13	.80	.08	.43	.40	.00	.46	.20	.87	.84	.22	.85	.66
14	.85	.15	.41	.33	33.53	.52	33.91	.70	.79	.23	.89	.68
15	.91	.23	.47	.23	.10	.57	.37	.65	.75	.17	.86	.65
16	26.89	27.29	28.42	28.25	32.61	36.62	32.80	28.59	27.74	27.13	20.80	26.62
17	.83	.38	.32	.45	.44	.67	.45	.53	.72	.10	.81	.62
18	.76	.44	.03	.60	.17	.70	.16	.48	.80	.09	.82	.63
19	.68	.50	27.86	.53	31.92	.72	.00	.40	.78	.07	.80	.58
20	.62	.46	.75	.55	.41	.74	31.85	.38	.74	.08	.81	.56
21	26.67	27.48	27.60	28.95	31.20	36.76	31.50	28.32	27.68	27.04	26.83	26.54
22	.75	.58	.48	.57	.17	.78	.20	.23	.65	.04	.76	.54
23	.82	.56	.37	.55	.35	.78	.03	.23	.62	.05	.71	.55
24	.89	.50	.33	29.02	.61	.79	30.55	.31	.60	.00	.70	.52
25	.97	.57	.37	.09	32.10	.80	.37	.47	.59	26.97	.72	.53
26	27.04	27.94	27.42	29.19	32.97	36.80	30.30	28.50	27.57	26.99	26.74	26.54
27	.05	28.25	.52	.43	34.45	.77	.23	.43	.57	.93	.72	.50
28	.09	.45	.60	.89	.87	.76	.18	.38	.56	.95	.70	.52
29	.07	.57	.72	31.05	.67	.69	.08	.33	.52	.95	.73	.50
30	.04	.62	.80	32.19	.40	.65	29.97	.26	.53	.90		.49
31		.75		33.65	.81		.88		.50	.93		.46
Mean	26.90	27.47	28.21	29.03	33.64	36.25	33.02	28.83	27.77	27.15	26.85	26.61
Max.	27.10	28.75	29.57	33.65	35.37	36.80	36.54	29.78	28.18	27.49	27.02	26.72
Min.	26.62	26.93	27.33	27.91	31.17	34.63	29.88	28.23	27.50	26.90	26.70	26.46

WATER YEAR 1959 : Max. 36.80 m. Min. 26.46 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	53	49	210	106	960	1,109	1,392	270	126	77	43	33
2	50	50	249	130	1,037	1,139	1,332	260	123	74	43	31
3	46	55	238	136	1,002	1,063	1,265	254	117	71	44	30
4	40	58	211	138	935	970	1,243	252	112	69	42	30
5	37	59	180	146	853	909	1,214	250	108	65	43	32
6	39	57	158	174	845	913	1,173	241	105	63	46	33
7	43	46	150	229	892	1,041	1,099	231	104	63	49	32
8	46	44	136	217	998	1,165	1,008	222	99	68	49	31
9	47	47	142	186	1,056	1,223	945	215	100	67	47	30
10	45	51	150	150	1,018	1,274	877	210	109	63	46	32
11	42	53	156	152	958	1,311	853	200	107	62	42	32
12	39	51	154	150	872	1,332	843	185	105	61	41	30
13	37	52	146	144	807	1,364	837	182	101	60	39	30
14	39	56	145	138	737	1,385	793	168	97	61	41	31
15	42	61	150	130	677	1,403	715	164	94	57	40	30
16	41	64	146	132	611	1,422	637	159	94	55	37	29
17	38	70	138	148	588	1,441	590	154	92	53	37	29
18	35	74	115	160	553	1,453	552	150	98	52	38	29
19	31	78	102	154	521	1,461	531	144	97	51	37	27
20	29	75	94	156	457	1,469	511	142	94	52	37	26
21	31	77	84	189	432	1,477	468	138	90	50	38	26
22	34	83	77	158	428	1,485	432	130	88	50	35	26
23	38	82	69	156	450	1,485	412	130	86	50	32	26
24	41	78	67	196	481	1,489	355	137	84	47	32	25
25	46	82	69	202	544	1,493	334	150	84	46	33	25
26	50	108	73	211	660	1,493	326	152	82	47	34	26
27	50	132	79	235	877	1,481	319	146	82	44	33	24
28	52	148	84	281	954	1,477	313	142	82	45	32	25
29	51	158	92	414	917	1,449	302	138	79	45	33	24
30	50	162	98	556	869	1,433	290	133	80	42		24
31		172		754	943		280		78	44		22
Total	1,262	2,432	3,962	6,428	23,932	39,609	22,241	5,449	2,997	1,754	1,143	880
Mean	42.1	78.4	132	207	772	1,320	717	182	96.7	56.6	39.4	28.4
Max.	53	172	249	754	1,056	1,493	1,392	270	126	77	49	33
Min.	29	44	67	106	428	909	280	130	78	42	32	22
Runoff – MCM.	109.037	210.125	342.317	555.379	2,067.725	3,422.218	1,921.622	470.794	258.941	151.546	98.755	76.032

WATER YEAR 1959 : Max. 1,493 Min. 22 Mean 305 Annual Runoff 9,684.490 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 26	18.00	36.80	1,493				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

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

Location: Lat 16°- 01' - 50" N, Long 100°- 22' - 53" E, on left bank near Bang Mun Nak Market, Amphoe Bang Mun Nak, Phichit.

Drainage Area: 32,791 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: 19.90 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: Near the camp of gage observer.
Elevation: +29.266 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: 1951 to date.

Rating Operation:

Period of Rating: 1965 to date.
Rated by Float: -
Rated by Current Meter: 1965 to date.

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

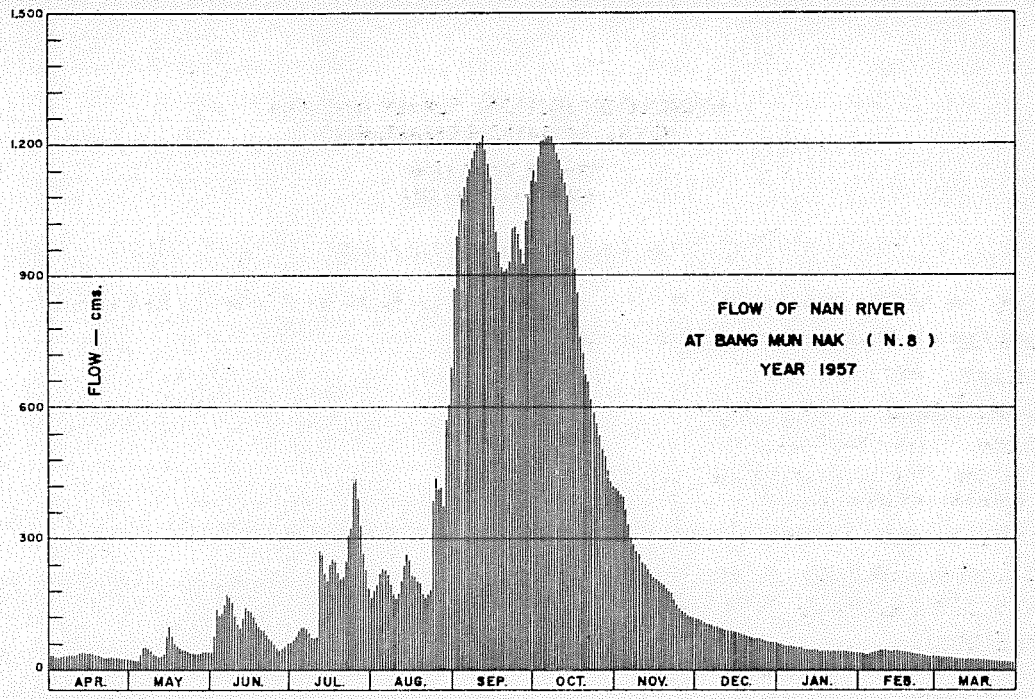
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1965 - 67. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	21.14	20.96	21.37	21.87	23.11	28.30	29.33	25.44	22.60	21.74	21.36	21.19
2	.13	.94	22.15	.92	.35	.85	.39	.41	.59	.72	.36	.17
3	.12	.92	.79	22.15	.44	29.05	.48	.36	.55	.70	.35	.15
4	.12	.89	.63	.33	.74	.15	.54	.28	.48	.68	.34	.15
5	.13	21.16	.69	.32	.81	.24	.57	.03	.43	.67	.33	.14
6	21.15	21.56	22.97	22.18	23.81	29.30	29.58	24.72	22.40	21.65	21.35	21.13
7	.18	.55	23.18	.05	.72	.38	.59	.50	.38	.62	.38	.13
8	.18	.42	.14	21.97	.52	.43	.59	.37	.35	.61	.42	.12
9	.18	.36	22.99	.94	.21	.51	.53	.24	.32	.59	.45	.11
10	.20	.24	.68	.98	.10	.54	.48	.12	.30	.58	.45	.10
11	21.23	21.15	22.38	23.15	23.38	29.55	29.40	24.01	22.26	21.55	21.43	21.10
12	.26	.13	.26	24.22	.51	.58	.32	23.90	.21	.54	.43	.10
13	.28	.17	.64	.15	.80	.46	.23	.81	.20	.52	.41	.09
14	.30	.29	.86	23.68	24.13	.37	.09	.72	.17	.51	.40	.08
15	.30	.97	.80	.55	.00	.25	28.95	.64	.14	.51	.39	.08
16	21.29	22.27	22.73	23.95	23.79	29.05	28.69	23.59	22.10	21.50	21.38	21.07
17	.22	.10	.59	24.07	.64	28.72	.48	.54	.09	.48	.36	.05
18	.18	21.83	.44	23.99	.54	.58	.05	.48	.07	.47	.36	.05
19	.15	.60	.34	.77	.48	.46	27.66	.44	.05	.47	.35	.03
20	.09	.53	.23	.59	.26	.40	.40	.37	.01	.47	.34	.00
21	21.04	21.46	22.15	23.61	23.14	28.47	27.18	23.32	21.99	21.46	21.33	20.99
22	.07	.42	.03	24.15	.20	.54	26.91	.23	.95	.45	.31	.97
23	.10	.38	21.88	.57	.28	.85	.70	.05	.95	.45	.30	.95
24	.11	.34	.77	.79	25.20	.91	.53	22.95	.92	.43	.30	.93
25	.07	.31	.64	25.56	.61	.81	.45	.88	.90	.43	.28	.89
26	21.05	21.28	21.51	25.62	25.40	28.62	26.31	22.80	21.86	21.42	21.27	20.88
27	.04	.26	.41	.26	.44	.50	.15	.74	.82	.41	.25	.88
28	.03	.26	.52	24.66	.10	.93	25.98	.69	.79	.41	.21	.87
29	.00	.31	.64	.13	26.55	29.18	.83	.64	.77	.39		.86
30	20.99	.36	.77	23.66	.71	.26	.64	.60	.76	.38		.86
31		.36		.36	27.24		.52		.75	.36		.85
Mean	21.14	21.38	22.30	23.36	24.13	29.00	28.08	23.79	22.13	21.52	21.35	21.03
Max.	21.30	22.27	23.18	25.62	27.24	29.58	29.59	25.44	22.60	21.74	21.45	21.19
Min.	20.99	20.89	21.37	21.87	23.10	28.30	25.52	22.60	21.75	21.36	21.21	20.85

WATER YEAR 1957 : Max. 29.59 m. Min. 20.85 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	30	22	42	70	163	883	1,138	416	121	62	42	32
2	30	22	90	73	185	1,008	1,115	412	120	61	42	31
3	29	21	136	90	194	1,059	1,182	405	117	60	41	31
4	29	20	124	100	224	1,086	1,201	396	112	59	40	31
5	30	31	129	100	231	1,112	1,210	366	107	58	40	30
6	31	52	152	91	231	1,130	1,214	328	104	57	41	30
7	32	51	170	83	222	1,152	1,217	304	103	56	43	30
8	32	45	166	76	202	1,167	1,217	288	101	55	45	29
9	32	42	153	74	173	1,191	1,198	274	100	54	46	29
10	33	35	128	77	162	1,201	1,182	262	99	54	46	28
11	34	31	103	167	188	1,204	1,158	251	96	51	45	28
12	36	30	96	272	201	1,214	1,136	240	93	51	45	28
13	37	31	125	265	230	1,176	1,109	231	92	49	44	28
14	38	37	142	218	263	1,150	1,069	222	91	49	44	27
15	38	76	136	205	250	1,115	1,033	214	90	49	43	27
16	37	97	132	245	229	1,059	971	209	88	48	43	27
17	34	88	120	256	214	978	923	204	87	47	42	26
18	32	68	108	248	204	945	834	198	85	47	42	26
19	31	55	101	227	198	919	762	194	83	47	41	25
20	28	50	94	209	177	907	714	187	79	47	40	24
21	26	46	90	211	169	921	677	182	77	46	40	24
22	27	45	81	265	172	936	630	174	75	45	39	23
23	28	43	71	310	179	1,008	596	158	75	45	38	22
24	29	40	64	337	386	1,023	577	150	73	45	38	21
25	27	39	57	431	438	998	556	144	72	45	37	20
26	26	37	49	439	411	955	541	136	70	45	36	19
27	26	36	44	393	416	927	508	133	67	44	35	19
28	25	36	49	321	374	1,028	487	129	65	44	33	19
29	24	39	57	263	572	1,094	468	125	64	43		18
30	24	42	61	216	597	1,118	442	121	64	43		18
31		42		186	687		426		63	42		18
Total	915	1,349	3,070	6,518	8,542	31,664	27,631	7,053	2,733	1,550	1,151	788
Mean	30.5	43.5	102	210	275	1,055	891	235	88.1	50.0	41.1	25.4
Max.	38	97	170	439	687	1,217	1,217	416	121	62	46	32
Min.	24	20	42	70	163	883	426	121	63	42	33	18
Runoff — MCM.	79.056	116.554	265.248	563.155	738.029	2,735.770	2,387.318	609.379	231.131	133.920	99.446	68.083

WATER YEAR 1957 : Max. 1,214 Min. 18 Mean 254 Annual Runoff 8,023.450 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 7	18.00	25.59	1,217				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
NAN RIVER BASIN

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

Location: Lat 16°- 01' - 50" N, Long 100°- 22' - 53" E, on left bank near Bang Mun Nak Market, Amphoe Bang Mun Nak, Phichit.

Drainage Area: 32,791 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: 19.90 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: Near the camp of gage observer.
Elevation: +29.266 m. (M.S.L.)

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 12.00, 13.00 and 18.00 hours.

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

Period of Available Gage Records: 1951 to date.

Rating Operation:

Period of Rating: 1965 to date.
Rated by Float: -
Rated by Current Meter: 1965 to date.

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

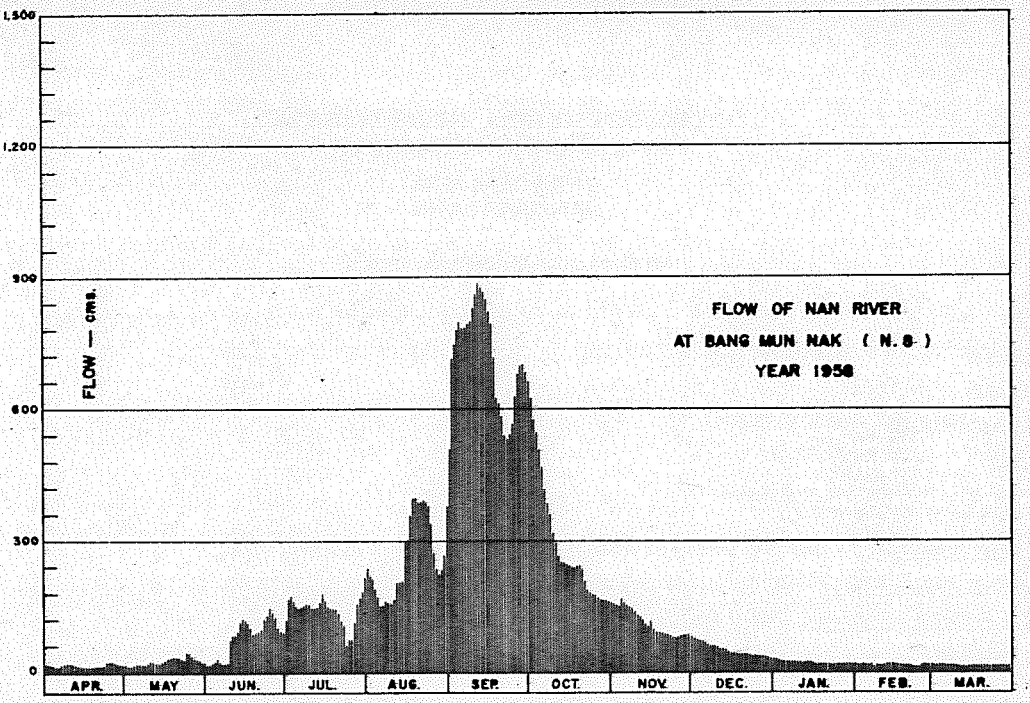
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1965 - 67. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	20.86	20.87	20.95	22.46	23.90	26.17	27.08	23.08	22.08	21.22	20.92	20.89
2	.84	.79	.92	23.17	.75	27.41	26.80	.04	.03	.18	.91	.90
3	.84	.77	.98	.26	.64	.73	.58	.00	21.99	.16	.91	.89
4	.83	.93	21.08	.18	.48	.79	.36	22.96	.96	.12	.91	.88
5	.82	.88	.15	.00	.25	.76	.16	23.17	.92	.09	.91	.87
6	20.81	20.87	21.08	22.94	22.98	27.74	25.79	23.09	21.87	21.08	20.91	20.86
7	.84	.84	20.97	.99	.99	.78	.41	.01	.83	.06	.88	.86
8	.85	.90	.91	23.02	23.13	.80	.19	22.95	.79	.03	.78	.85
9	.90	.96	.98	.07	.08	.89	.01	.91	.76	.02	.87	.85
10	.90	21.08	21.97	.04	.06	28.10	24.70	.55	.74	.02	.86	.84
11	20.89	21.08	22.11	22.96	23.20	28.27	24.48	22.76	21.68	21.05	20.85	20.83
12	.85	20.99	.08	.94	.56	.34	.25	.69	.64	.02	.85	.83
13	.82	.99	.25	.98	.58	.27	.04	.61	.61	.02	.87	.82
14	.77	.98	.52	.10	.56	.22	.00	.51	.58	.01	.87	.81
15	.76	21.01	.61	.31	24.45	.11	23.98	.43	.54	.10	.89	.79
16	20.78	21.07	22.55	23.18	24.51	27.99	23.94	22.56	21.47	20.99	20.89	20.78
17	.78	.13	.48	22.99	25.04	.75	.91	.28	.44	.99	.88	.78
18	.77	.20	.26	.95	.30	.37	.90	.23	.41	.98	.87	.77
19	.78	.27	.09	.93	.29	26.87	.93	.17	.40	.98	.86	.77
20	.78	.27	.14	.91	.24	.77	.95	.15	.39	.97	.85	.76
21	20.75	21.24	22.24	22.85	25.22	26.61	23.87	22.14	21.38	20.97	20.84	20.78
22	.74	.25	.36	.59	.26	.28	.65	.11	.37	.96	.84	.81
23	.85	.33	.60	.49	.25	.26	.39	.07	.36	.95	.83	.80
24	.99	.48	.70	21.77	.13	.41	.32	.04	.35	.94	.82	.79
25	21.02	.41	.92	.92	24.77	.66	.25	.02	.33	.93	.82	.78
26	21.00	21.32	22.78	21.99	24.28	27.12	23.23	22.05	21.32	20.93	20.88	20.77
27	.98	.25	.67	22.45	23.93	.28	.19	.07	.31	.92	.87	.77
28	20.96	.18	.40	23.01	.74	.31	.15	.09	.29	.92	.88	.76
29	.95	.14	.24	.14	.89	.32	.11	.10	.27	.92		.78
30	.92	.01	.18	.33	.97	.22	.12	.11	.24	.92		.78
31		.00		.70	25.00		.11			.92		.78
Mean	20.85	21.07	21.97	22.89	24.11	27.42	24.38	22.50	21.57	21.01	20.86	20.81
Max.	21.02	21.48	22.92	23.70	25.30	28.34	27.08	23.17	22.08	21.22	20.92	20.90
Min.	20.75	20.77	20.91	21.77	22.98	26.17	23.11	22.02	21.24	20.92	20.78	20.76

WATER YEAR 1958 : Max. 28.34 m. Min. 20.75 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	18	19	22	110	240	512	662	161	86	34	21	20
2	18	16	21	169	225	716	611	157	81	32	20	20
3	18	15	23	177	214	778	577	154	77	31	20	20
4	17	21	27	170	198	794	545	153	76	29	20	19
5	17	19	31	154	176	786	510	169	73	28	20	19
6	16	19	27	149	152	781	463	162	70	27	20	18
7	18	18	23	153	153	791	412	155	68	26	19	18
8	18	20	20	156	165	797	385	150	65	25	15	18
9	20	22	23	160	161	805	362	147	64	25	19	18
10	20	27	76	157	159	844	326	141	62	25	18	18
11	20	27	88	151	172	877	301	134	59	26	18	17
12	18	24	86	149	206	893	275	129	57	25	18	17
13	17	23	95	152	208	877	254	122	55	25	19	17
14	15	23	115	162	206	867	250	115	54	24	19	16
15	15	24	122	181	298	846	248	107	51	28	20	16
16	15	27	117	170	305	823	244	118	47	24	20	15
17	15	30	112	153	367	783	241	98	46	23	19	15
18	15	33	96	150	398	709	240	94	44	23	19	15
19	15	36	87	148	397	623	243	91	44	23	18	15
20	15	36	90	147	391	606	244	90	44	23	18	15
21	14	35	95	141	388	582	237	90	43	23	18	15
22	14	35	102	120	393	536	215	88	43	22	18	16
23	18	30	121	113	392	532	189	85	42	22	17	16
24	24	47	130	64	378	550	182	82	42	22	17	16
25	25	44	148	73	334	590	176	80	41	21	17	15
26	24	39	135	77	278	667	174	83	40	21	19	15
27	23	35	127	109	243	694	171	85	39	21	19	15
28	22	32	104	155	224	699	167	87	39	21	19	15
29	22	30	95	166	239	700	163	88	37	21		15
30	21	24	91	183	247	683	164	88	36	21		15
31		24		220	361		163		35	21		15
Total	547	854	2,449	4,539	8,268	21,741	9,394	3,503	1,660	762	524	514
Mean	18.2	27.5	81.6	146	267	725	303	117	53.5	24.6	18.7	16.6
Max.	25	47	148	220	398	893	662	169	86	34	21	20
Min.	14	15	20	64	152	512	163	80	35	21	15	15
Runoff - mcm.	47.260	73.786	211.594	392.170	714.355	1,878.422	811.642	302.657	143.424	65.837	45.274	44.410

WATER YEAR 1958 : Max. 893 Min. 14 Mean 150 Annual Runoff 4,730.882 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 12	18.00	28.34	893				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
NAN RIVER BASIN

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

Location: Lat 16°– 01' – 50" N, Long 100°– 22' – 53" E, on left bank near Bang Mun Nak Market, Amphoe Bang Mun Nak, Phichit.

Drainage Area: 32,791 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +20.90 m. (M.S.L.). Prior to June – staft gage at same site at datum at +19.90 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D.

Location: Near the camp of gage observer.
Elevation: +29.266 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: 1951 to date.

Rating Operation:

Period of Rating: 1965 to date.
Rated by Float: –
Rated by Current Meter: 1965 to date.

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed at Ele. +29.75 m. (M.S.L.) but not included for flow computation.

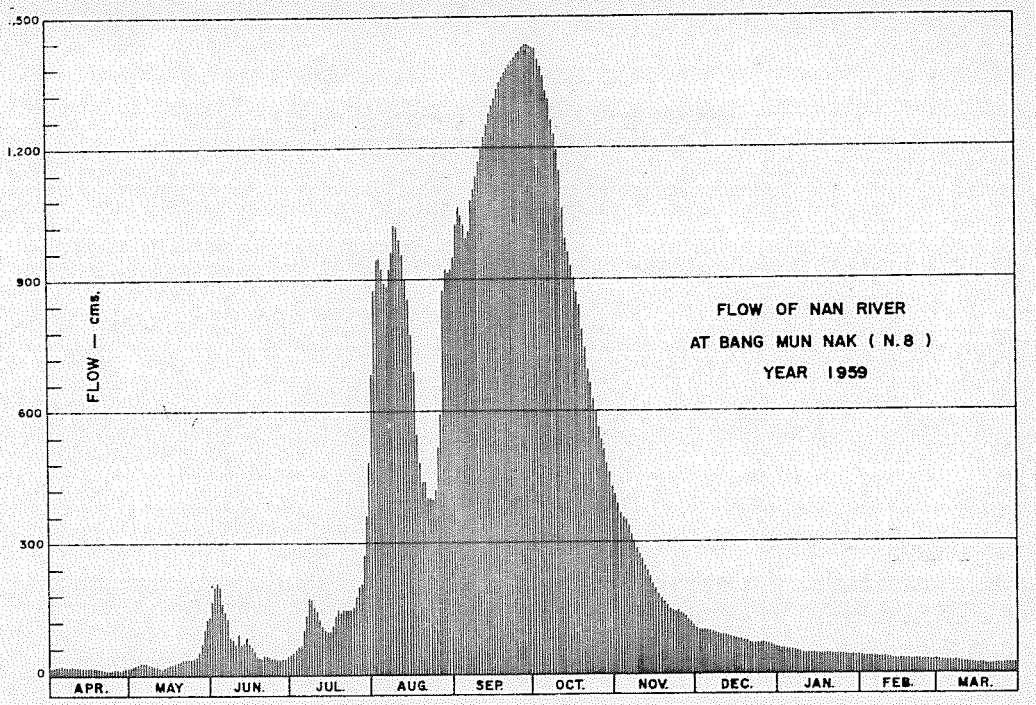
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1965 – 67. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	20.76	20.83	23.14	21.40	27.47	28.74	30.20	25.38	22.42	21.69	21.36	21.16
2	.80	.89	.49	.52	28.29	.99	.20	.21	.37	.68	.35	.15
3	.83	.94	.61	.63	.58	29.08	.18	.12	.35	.64	.33	.14
4	.85	.98	.53	.77	.60	.01	.15	24.98	.33	.61	.32	.13
5	.87	21.06	.12	.81	.48	28.86	.09	.94	.31	.60	.31	.12
6	20.86	21.08	22.96	22.15	28.34	28.78	30.02	24.77	22.29	21.60	21.31	21.11
7	.85	.03	.70	.72	.31	.90	29.94	.64	.26	.59	.30	.11
8	.85	20.97	.08	23.23	.53	29.12	.86	.51	.22	.57	.30	.10
9	.84	.93	.03	.23	.80	.26	.76	.39	.19	.53	.28	.09
10	.83	.88	21.89	.01	.92	.39	.61	.26	.16	.50	.28	.08
11	20.82	20.83	22.17	22.92	28.89	29.48	29.46	24.11	22.15	21.50	21.28	21.06
12	.80	.78	21.89	.78	.76	.56	.28	23.96	.12	.49	.26	.05
13	.80	.78	.89	.58	.58	.66	.02	.84	.10	.48	.25	.04
14	.80	.82	22.06	.38	.29	.73	28.81	.74	.07	.48	.25	.02
15	.80	.87	21.92	.27	27.94	.78	.66	.64	.05	.48	.24	.01
16	20.79	20.92	21.76	22.28	27.50	29.83	28.51	23.48	22.04	21.47	21.23	21.00
17	.78	.97	.60	.48	26.94	.88	.37	.34	.04	.46	.22	20.98
18	.77	21.02	.45	.78	.43	.93	.21	.24	.02	.45	.22	.96
19	.74	.07	.28	.90	.04	.98	.00	.14	.00	.45	.21	.92
20	.68	.13	.28	.87	25.63	30.00	27.75	.04	21.99	.44	.21	.91
21	20.60	21.22	21.43	22.91	25.42	30.03	27.53	22.94	21.94	21.43	21.21	20.91
22	.58	.22	.39	.92	.34	.06	.33	.90	.89	.42	.20	.91
23	.61	.22	.31	.90	.33	.09	.13	.87	.89	.41	.20	.92
24	.65	.23	.29	.90	.32	.11	26.93	.89	.88	.41	.20	.92
25	.67	.27	.25	.96	.60	.14	.73	.83	.88	.40	.19	.92
26	20.66	21.30	21.20	23.30	26.37	30.15	26.53	22.80	21.86	21.40	21.18	20.92
27	.65	.52	.24	.50	27.50	.18	.33	.74	.86	.39	.18	.92
28	.66	.75	.24	.59	28.27	.20	.13	.61	.85	.39	.18	.92
29	.80	22.29	.26	24.19	.48	.21	25.93	.52	.82	.38	.17	.92
30	.83	.63	.36	25.24	.44	.21	.73	.47	.77	.37		.92
31		.73		26.39	.46		.56		.71	.36		.92
Mean	20.76	21.16	21.96	22.88	27.54	29.64	28.32	23.71	22.06	21.48	21.24	21.00
Max.	20.87	22.73	23.61	26.39	28.92	30.21	30.20	25.38	22.42	21.69	21.36	21.16
Min.	20.58	20.78	21.20	21.40	25.32	28.74	25.56	22.47	21.71	21.36	21.17	20.91

WATER YEAR 1959 : Max. 30.21 m. Min. 20.58 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	15	17	166	44	725	982	1,431	408	106	59	42	31
2	16	20	199	49	881	1,043	1,431	387	102	59	41	31
3	17	22	211	56	945	1,067	1,424	376	101	57	40	30
4	18	23	203	64	950	1,049	1,412	359	100	55	39	30
5	19	26	164	67	923	1,010	1,390	354	99	55	39	29
6	18	27	151	90	893	991	1,364	334	98	55	39	29
7	18	25	130	131	885	1,020	1,335	318	96	54	38	29
8	18	23	86	174	934	1,078	1,306	305	93	53	38	28
9	18	21	81	174	996	1,118	1,272	290	92	50	37	28
10	17	19	71	155	1,025	1,155	1,223	276	90	48	37	27
11	17	17	91	148	1,018	1,182	1,176	261	90	48	37	26
12	16	15	71	135	987	1,207	1,124	246	89	48	36	26
13	16	15	71	120	945	1,242	1,051	234	88	47	35	26
14	16	17	84	103	881	1,262	998	224	85	47	35	25
15	16	19	73	97	814	1,278	964	214	83	47	35	24
16	16	21	64	98	730	1,295	929	198	82	47	34	24
17	16	23	55	112	637	1,313	900	184	82	46	34	23
18	15	25	46	135	553	1,331	865	175	80	46	34	22
19	14	27	37	146	495	1,350	825	166	78	46	33	21
20	12	30	37	143	441	1,357	783	157	77	46	33	20
21	10	34	45	147	414	1,368	736	149	74	45	33	20
22	9.44	34	45	148	403	1,379	702	146	71	45	33	20
23	10	34	39	146	402	1,390	669	143	71	44	33	21
24	11	34	37	146	400	1,398	635	145	71	44	33	21
25	12	36	35	151	436	1,409	600	139	71	44	32	21
26	12	38	33	180	546	1,412	569	136	70	44	32	21
27	11	49	35	200	730	1,414	543	133	70	43	32	21
28	12	63	35	209	877	1,431	504	122	69	43	32	21
29	16	98	36	269	923	1,435	480	115	67	43	31	21
30	17	124	42	391	915	1,435	455	111	64	42		21
31		132		548	919		431		61	42		21
Total	448.44	1,108	2,471	4,776	23,623	37,411	29,527	6,805	2,570	1,492	1,027	758
Mean	14.9	35.7	82.4	154	762	1,247	952	227	82.9	48.1	35.4	24.4
Max.	19	132	211	548	1,025	1,435	1,431	408	106	59	42	31
Min.	9.44	15	33	44	400	982	431	111	61	42	31	20
Runoff - MCM.	38.745	95.731	213.494	412.646	2,041.027	3,232.310	2,551.133	587.952	222.048	128.909	88.733	65.491

WATER YEAR 1959 : Max. 1,435 Min. 9.44 Mean 306 Annual Runoff 9,678.220 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 29	18.00	30.22	1,439				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
NAN RIVER BASIN

Nan River at Kaeng U – Luang, Uttaradit (N.9)

Location: Lat 18°– 02' – 03" N, Long 100°– 34' – 38" E, on left bank 3 kilometers upstream from Ban Pak Nam Li, Amphoe Tha Pla, Uttaradit.

Drainage Area: 11,608 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +87.00 m. (A.D.)

Bench Mark:

Location:

Elevation:

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

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

Period of Available Gage Records: 1952 – 54, 1956 – 57

Rating Operation:

Period of Rating: 1952 – 54, 1956 – 57

Rated by Float: –

Rated by Current Meter: 1952 – 54, 1956 – 57

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

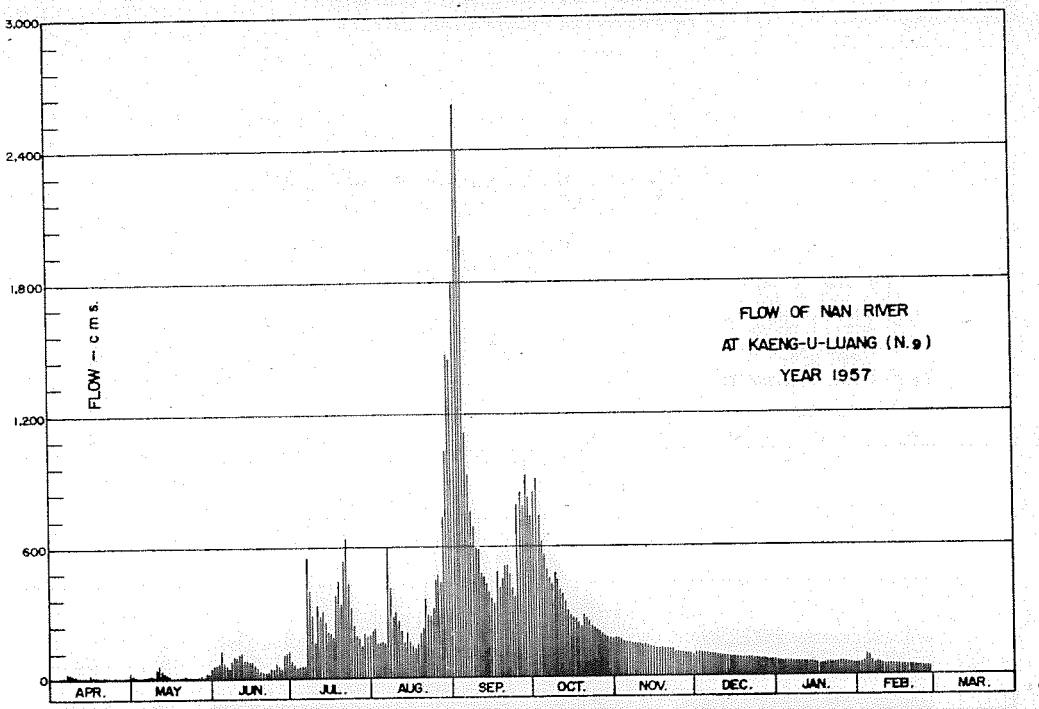
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1957. No state diversions above gage site.

Remarks: Record ending on Mar. 1

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	88.88	89.13	89.62	89.78	90.72	96.58	93.57	90.47	89.93	89.62	89.52	
2	.87	88.99	.62	.61	.83	98.61	.75	.46	.92	.61	.60	
3	.91	.99	.68	.53	.53	.33	92.89	.40	.91	.60	.82	
4	89.00	.87	90.18	.57	.37	97.05	.65	.37	.90	.60	.79	
5	.08	.90	89.73	.59	.44	94.47	.32	.34	.89	.58	.62	
6	89.28	89.01	89.59	89.59	90.33	93.81	92.09	90.31	89.88	89.57	89.59	
7	.20	.07	.47	92.38	.53	.15	91.91	.29	.87	.57	.52	
8	.16	.13	.81	91.77	.64	92.92	.82	.27	.86	.56	.55	
9	.12	.04	.97	90.93	91.15	.59	92.07	.25	.85	.56	.53	
10	.08	.44	.91	.39	.24	.40	91.86	.25	.84	.56	.50	
11	89.00	89.61	90.01	91.39	90.75	92.12	91.71	90.23	89.83	89.55	89.46	
12	88.98	.45	.06	.12	.57	91.98	.55	.22	.82	.55	.46	
13	.96	.28	89.77	.22	.38	.84	.32	.20	.81	.56	.44	
14	.92	.15	.81	90.97	.63	.64	.20	.16	.81	.54	.44	
15	89.16	.04	.77	.71	.35	.50	.10	.15	.80	.53	.43	
16	88.99	88.97	89.77	90.68	90.24	91.39	91.04	90.11	89.77	89.52	89.33	
17	89.04	.92	.61	.60	.20	.61	.01	.11	.76	.52	.42	
18	.02	.89	.46	91.60	.26	.73	90.89	.09	.75	.54	.41	
19	88.99	.86	.36	.92	.60	.98	.83	.07	.75	.57	.41	
20	.96	.86	.28	.39	.79	92.23	91.07	.08	.74	.56	.40	
21	88.88	89.01	89.24	92.35	91.50	92.21	91.04	90.08	89.73	89.55	89.39	
22	.86	88.88	.33	.75	.17	.00	91.93	.06	.72	.54	.38	
23	.84	.90	.44	91.88	.12	91.70	.82	.03	.71	.56	.37	
24	.82	.88	.43	.30	.08	.51	.74	.02	.70	.62	.37	
25	.81	.91	.69	90.88	.93	93.39	.70	.00	.69	.59	.37	
26	88.79	88.88	89.63	90.61	92.03	93.54	90.63	89.97	89.68	89.56	89.37	
27	.79	.88	.47	.51	91.89	.33	.58	.96	.67	.55	.36	
28	.78	.91	90.00	.31	92.68	.79	.53	.95	.66	.54	.35	
29	89.01	89.27	.06	.68	94.03	.16	.50	.95	.65	.51		
30	.30	.22	.12	.58	95.53	.35	.46	.93	.64	.50		
31		.53		.62	.47		.42		.63	.49		
Mean	88.98	89.08	89.70	90.88	91.29	93.20	91.42	90.16	89.78	89.56	89.47	
Max.	89.30	89.61	90.18	92.75	95.53	98.61	93.75	90.47	89.93	89.62	89.82	
Min.	88.78	88.86	89.24	89.53	90.20	91.39	90.42	89.93	89.63	89.49	89.35	

WATER YEAR 1957 : Max. 98.61 m. Min. 88.78 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	9.00	24	68	87	219	1,833	852	180	105	68	58	
2	8.50	15	68	67	237	2,614	903	178	104	67	66	
3	11	15	75	59	197	2,502	672	170	102	66	91	
4	16	8.50	139	63	166	2,006	614	166	101	66	88	
5	21	10	81	65	176	1,122	535	162	100	64	68	
6	36	17	65	65	160	921	484	157	99	63	65	
7	30	20	53	549	189	739	446	155	97	63	58	
8	27	24	90	418	206	679	428	152	96	62	61	
9	24	18	110	255	295	600	479	149	95	62	59	
10	21	50	102	169	312	554	436	149	94	62	56	
11	16	67	115	342	224	490	406	146	93	61	52	
12	15	51	122	290	195	460	374	145	91	61	52	
13	14	36	85	308	167	432	328	142	90	62	50	
14	11	26	90	263	205	392	304	136	90	60	50	
15	27	18	85	218	163	364	286	135	89	59	49	
16	15	14	85	213	148	342	275	129	85	58	49	
17	18	11	67	200	142	386	270	129	84	58	48	
18	17	9.50	52	384	150	410	248	127	83	60	47	
19	15	8.00	43	448	200	460	237	124	83	63	47	
20	14	8.00	36	342	230	515	281	125	82	62	46	
21	9.00	17	33	542	364	510	275	125	81	61	46	
22	8.00	9.00	40	638	299	464	255	122	79	60	45	
23	7.00	10	50	440	290	404	236	118	78	62	44	
24	6.00	9.00	49	324	282	368	222	117	77	68	44	
25	5.50	11	76	246	450	801	216	114	76	65	44	
26	4.70	9.00	69	202	471	843	205	110	75	62	44	
27	4.70	9.00	53	186	442	786	197	109	74	61	43	
28	4.40	11	114	157	621	915	189	107	73	60	43	
29	17	35	122	213	987	742	184	107	71	57		
30	38	31	131	197	1,476	791	178	105	70	56		
31		59		203	1,456		173		69	55		
Total	469.80	660	2,368	8,153	11,119	24,445	11,188	4,090	2,686	1,914	1,513	
Mean	15.7	21.3	78.9	263	359	815	361	136	86.6	61.7	54.0	
Max.	38	67	139	638	1,476	2,614	903	180	105	68	91	
Min.	4.40	8.00	33	59	142	342	173	105	69	55	43	
Runoff - mcm.	40.591	57.024	204.595	704.419	960.682	2,112.048	966.643	353.376	232.070	165.370	130.723	

WATER YEAR 1957 : Max. 2,614 Min. 4.40 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 2	18.00	98.83	2,702				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

Nan River at Taphan Hin, Phichit (N.10)

Location: Lat 16°– 13' – 03" N, Long 100°– 25' – 26" E, on right bank, one kilometer downstream from Wat Thao Praset, Tambon Huai Ket, Amphoe Taphan Hin, Phichit.

Drainage Area: 30,673 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +23.41 m. (M.S.L.)

Bench Mark: B.M. – R.I.D. No.1

Location: Near the gage site.
Elevation: +33.173 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 – 59, 1962 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: –
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

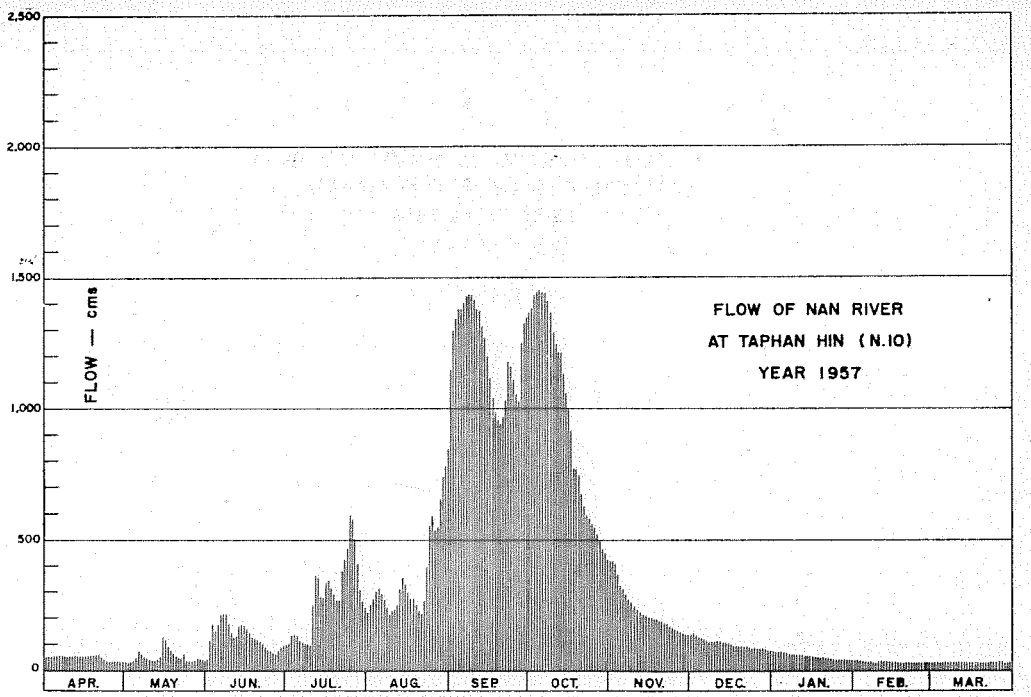
General Description: Records fair except those for period of no gage height record. Stage – discharge relation used is defined by discharge measurements during 1965.

Remarks: No state diversions above gage site.
No gage height record for May 26 – 31, discharge estimated.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	23.73	23.43	23.70	24.40	25.68	31.28	32.16	27.13	24.89	24.11	23.59	23.42
2	.73	.44	24.75	.44	.93	.87	.24	.15	.86	.09	.58	.42
3	.74	.49	25.21	.77	26.18	32.06	.38	26.95	.80	.07	.57	.41
4	.74	.52	.01	.87	.38	.21	.42	.75	.76	.05	.56	.41
5	.76	.71	.31	.79	.40	.21	.43	.49	.70	.03	.55	.41
6	23.77	24.04	25.65	24.64	26.36	32.30	32.42	26.37	24.65	24.01	23.54	23.41
7	.77	.01	.60	.55	.15	.37	.39	.21	.61	23.99	.53	.41
8	.77	23.75	.64	.49	25.84	.41	.31	.07	.61	.97	.52	.41
9	.75	.66	:55	.44	.65	.40	.19	25.95	.60	.95	.51	.41
10	.75	.60	24.99	.41	.71	.37	31.99	.86	.57	.93	.54	.41
11	23.77	23.56	24.71	25.97	25.85	32.23	31.72	25.77	24.55	23.92	23.56	23.41
12	.77	.55	.76	26.80	.98	.20	.57	.69	.51	.90	.53	.42
13	.78	.57	25.21	.71	26.44	.05	.57	.62	.50	.88	.50	.42
14	.79	.87	.24	.15	.70	31.83	.26	.56	.45	.87	.50	.42
15	.80	24.73	.21	.14	.49	.58	30.91	.51	.43	.85	.49	.41
16	23.81	24.67	25.14	26.56	26.24	31.24	30.56	25.47	24.41	23.83	23.48	23.41
17	.81	.43	24.99	.64	.11	30.87	.16	.46	.39	.81	.48	.42
18	.80	.18	.74	.47	.11	.50	29.32	.43	.38	.79	.47	.42
19	.80	23.97	.70	.24	25.91	.35	.32	.41	.36	.77	.47	.42
20	.79	.83	.65	.08	.71	.31	.17	.32	.33	.76	.46	.41
21	23.80	23.71	24.57	26.08	25.65	30.46	28.76	25.25	24.30	23.74	23.45	23.41
22	.80	.63	.43	.89	26.01	.92	.53	.20	.29	.72	.44	.41
23	.55	.56	.27	27.20	.97	31.40	.30	.19	.27	.71	.48	.41
24	.54	.51	.14	.46	28.01	.37	.19	.12	.26	.69	.43	.41
25	.53	.50	.03	28.26	.25	.16	.09	.05	.25	.67	.42	.41
26	23.49	23.48	23.96	28.17	27.89	30.86	27.95	25.00	24.24	23.66	23.42	23.41
27	.47		.94	27.61	.98	.72	.85	24.96	.22	.64	.42	.41
28	.45		24.06	26.91	28.71	31.66	.56	.91	.19	.63	.42	.41
29	.42		.19	.41	29.21	.95	.44	.88	.17	.62		.41
30	.42		.33	.14	28.85	32.08	.33	.85	.15	.61		.42
31				25.82	29.82		.18		.13	.60		.42
Mean	23.70		24.79	26.15	26.82	31.61	30.32	25.75	24.45	23.83	23.50	23.41
Max.	23.81		25.65	28.26	29.82	32.41	32.43	27.15	24.89	24.11	23.59	23.42
Min.	23.42		23.70	24.40	25.65	30.31	27.18	24.85	24.13	23.60	23.42	23.41

WATER YEAR 1957 : Max. 32.43 m. Min. 23.41 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	50	32	48	100	223	1,145	1,363	415	142	77	41	32
2	50	33	129	103	252	1,287	1,386	418	139	75	41	32
3	51	35	173	131	283	1,337	1,430	389	134	74	40	31
4	51	37	153	140	309	1,377	1,443	361	130	72	40	31
5	52	49	183	133	312	1,377	1,446	325	125	71	39	31
6	53	72	219	120	307	1,404	1,443	308	120	70	38	31
7	53	70	214	112	279	1,426	1,433	287	117	68	38	31
8	53	51	218	107	241	1,439	1,407	269	117	67	37	31
9	51	46	208	103	219	1,436	1,371	254	116	65	37	31
10	51	42	151	101	226	1,426	1,318	243	114	64	38	31
11	53	40	126	256	242	1,383	1,249	233	112	63	40	31
12	53	39	130	368	258	1,374	1,213	224	109	62	38	32
13	54	40	173	355	318	1,334	1,213	216	108	61	36	32
14	54	60	176	279	354	1,277	1,141	210	104	60	36	32
15	55	128	173	278	325	1,215	1,065	204	102	58	35	31
16	56	122	166	334	291	1,137	992	200	101	57	35	31
17	56	102	151	346	274	1,057	918	199	99	56	35	31
18	55	82	129	322	274	981	767	195	98	54	34	31
19	55	67	125	291	249	952	767	193	97	53	34	31
20	54	57	120	270	226	945	742	184	94	52	34	31
21	55	49	114	270	219	973	672	177	92	51	33	31
22	55	44	102	381	261	1,067	635	172	91	49	33	31
23	39	60	90	426	392	1,173	598	171	90	49	32	31
24	38	37	79	465	552	1,166	580	164	89	47	32	31
25	38	36	71	592	590	1,119	564	157	88	46	32	31
26	35	35	66	577	532	1,055	542	152	87	46	32	31
27	34	40	65	488	547	1,025	526	148	86	44	32	31
28	33	48	73	383	664	1,234	480	144	83	44	32	31
29	32	47	83	313	749	1,308	462	141	82	43		32
30	32	40	94	278	687	1,342	445	138	80	43		32
31		45		238	857		423		78	42		32
Total	1,451	1,685	4,002	8,660	11,512	36,774	30,034	6,891	3,224	1,783	1,004	968
Mean	48.4	54.3	133	279	371	1,226	969	230	104	57.5	36	31
Max.	56	128	219	592	857	1,439	1,446	418	142	77	41	32
Min.	32	32	48	100	219	945	423	138	78	42	32	31
Runoff - MCM.	125.366	145.584	345.773	748.224	994.637	3,177.274	2,594.938	595.382	278.554	154.051	86.746	83.635

WATER YEAR 1957 : Max. 1,446 Min. 31 Mean 296 Annual Runoff 9,330.163 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 5	18.00	32.44	1,449				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
NAN RIVER BASIN

Nan River at Taphan Hin, Phichit (N.10)

Location: Lat 16°- 13' - 03" N, Long 100°- 25' - 26" E, on right bank, one kilometer downstream from Wat Thao Praset, Tambon Huai Ket, Amphoe Taphan Hin, Phichit.

Drainage Area: 30,673 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +23.41 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.1

Location: Near the gage site.
Elevation: +33.173 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 - 59, 1962 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: -
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

General Description: Records fair except those for period of no gage height record. Stage - discharge relation used is defined by discharge measurements during 1965. No state diversions above gage site.

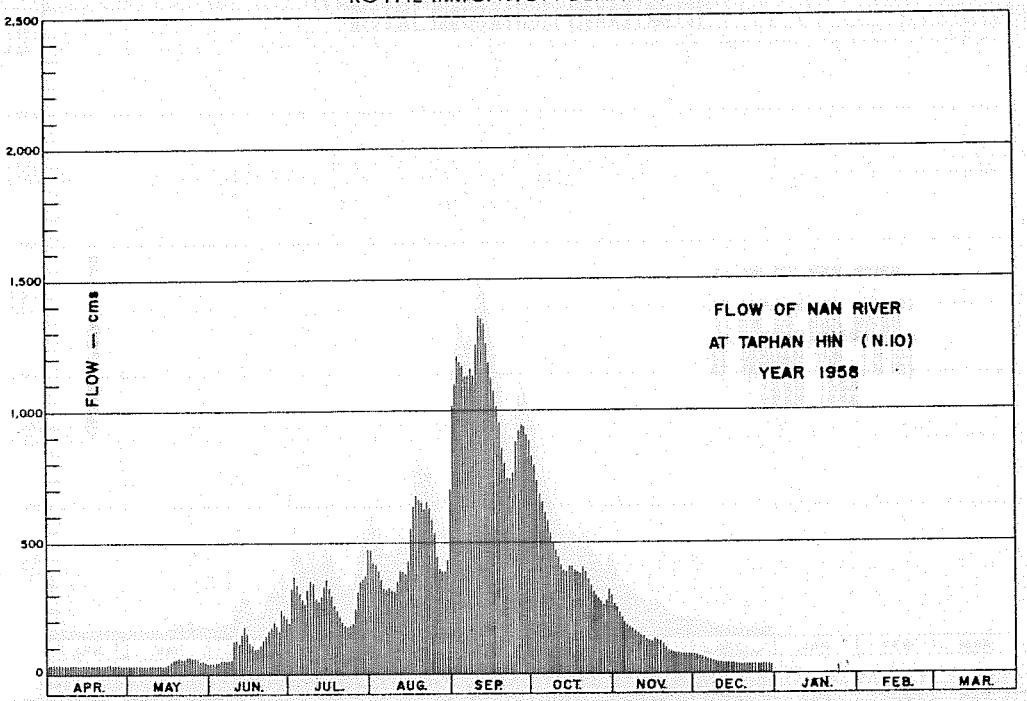
Remarks: No gage height record for Dec.30 - Mar 31.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	23.42	23.42	23.57	25.41	27.49	30.71	29.68	26.09	24.03			
2	.42	.42	.55	26.51	.19	31.50	.41	25.99	.00			
3	.41	.41	.63	.84	.13	.54	.13	.76	23.95			
4	.42	.41	.70	.66	26.97	.46	28.86	.56	.90			
5	.42	.41	.74	.41	.71	.35	.66	.39	.85			
6	23.43	23.42	23.78	26.19	26.46	31.21	28.46	25.29	23.80			
7	.43	.43	.75	.11	.46	.22	.18	.19	.75			
8	.44	.44	.70	.51	.35	.31	27.88	.15	.71			
9	.43	.45	.78	.71	.46	.22	.66	.09	.69			
10	.43	.45	24.67	.61	.43	.81	.46	24.99	.65			
11	23.42	23.45	24.74	26.30	26.81	32.18	27.21	24.90	23.61			
12	.42	.44	.58	.14	.98	.14	.11	.85	.59			
13	.42	.43	25.01	.22	.96	.06	26.94	.80	.57			
14	.41	.42	.30	.56	.91	31.75	.96	.75	.56			
15	.41	.44	.01	.81	27.23	.47	27.10	.69	.54			
16	23.41	23.51	24.79	26.66	27.91	31.29	27.09	24.83	23.51			
17	.42	.66	.54	.41	28.56	30.95	29.99	.76	.50			
18	.42	.78	.40	.08	.80	.69	.93	.69	.49			
19	.42	.85	.37	25.91	.70	.21	.93	.59	.49			
20	.43	.90	.56	.71	.61	29.76	27.09	.40	.48			
21	23.43	23.84	24.81	25.53	28.54	29.37	27.01	24.34	23.47			
22	.44	.82	25.02	.38	.63	.18	26.82	.25	.47			
23	.44	.88	.12	.28	.58	.19	.66	.20	.46			
24	.45	.98	.18	.36	.31	.36	.47	.15	.46			
25	.44	.94	.42	.45	27.89	.86	.34	.11	.45			
26	23.44	23.87	25.29	25.87	27.41	30.21	26.24	24.11	23.45			
27	.43	.81	.11	26.33	.06	.31	.14	.11	.44			
28	.43	.68	.88	.70	26.91	.26	.01	.09	.44			
29	.42	.67	.69	.76	.98	.11	.18	.06	.44			
30	.42	.64	.63	.88	27.26	.01	.46	.06				
31		.61		27.48	28.56		.36					
Mean	23.43	23.61	24.68	26.28	27.49	30.81	27.35	24.82				
Max.	23.45	23.98	25.88	27.48	28.80	32.18	29.68	26.09				
Min.	23.41	23.41	23.55	25.28	26.35	29.18	26.01	24.06				

WATER YEAR 1958 : Max. 32.18 m. Min. - m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	32	32	40	193	469	1,023	831	272	71			
2	32	32	39	327	424	1,196	783	259	69			
3	31	31	44	374	415	1,206	735	232	65			
4	32	31	48	348	392	1,187	689	210	62			
5	32	31	51	313	355	1,161	656	191	58			
6	32	32	54	285	320	1,130	624	181	55			
7	32	32	51	274	320	1,132	579	171	51			
8	32	33	48	327	330	1,152	531	167	49			
9	32	33	54	355	320	1,132	496	161	47			
10	32	33	122	341	316	1,272	465	151	45			
11	32	33	129	299	369	1,368	427	143	43			
12	32	33	114	278	393	1,357	412	138	41			
13	32	32	153	289	390	1,337	388	134	40			
14	31	32	182	334	383	1,256	390	129	40			
15	31	33	153	369	430	1,189	411	124	38			
16	31	37	133	348	536	1,148	409	137	37			
17	32	47	111	313	640	1,073	395	130	36			
18	32	54	100	270	679	1,019	386	124	35			
19	32	58	98	249	662	927	386	115	35			
20	32	62	113	226	648	847	409	100	35			
21	32	58	135	206	636	776	397	95	34			
22	33	56	154	190	651	744	371	88	34			
23	33	61	164	180	643	745	348	84	34			
24	33	68	170	188	600	774	322	80	34			
25	33	65	194	197	532	864	304	77	33			
26	33	60	181	244	457	927	291	77	33			
27	32	56	163	303	405	945	278	77	33			
28	32	47	246	354	383	936	261	75	33			
29	32	46	224	362	393	909	283	73	33			
30	32	44	217	379	435	891	320	73				
31		43		468	640		307					
Total	962	1,345	3,685	9,183	14,566	31,622	13,884	4,068				
Mean	32.1	43.4	123	296	470	1,054	448	136				
Max.	33	68	246	468	679	1,368	831	272				
Min.	31	31	39	180	316	744	261	73				
Runoff — mcm.	83.117	116.208	318.384	793.411	1,258.502	2,732.141	1,199.578	351.475				

WATER YEAR 1958 : Max. 1,368 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.11	18.00	32.24	1,386				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
NAN RIVER BASIN

Nan River at Taphan Hin, Phichit (N.10)

Location: Lat 16° – 13' – 03" N, Long 100° – 25' – 26" E, on right bank, one kilometer downstream from Wat Thao Praset, Tambon Huai Ket, Amphoe Taphan Hin, Phichit.

Drainage Area: 30,673 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +23.41 m. (M.S.L.)

Bench Mark: B.M. – R.I.D. No.1

Location: Near the gage site.
Elevation: +33.173 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 – 59, 1962 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: –
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow occurred for some day but not observed.

General Description: Records fair except those for period of no gage height record. Stage – discharge relation used is defined by discharge measurements during 1965. No state diversions above gage site.

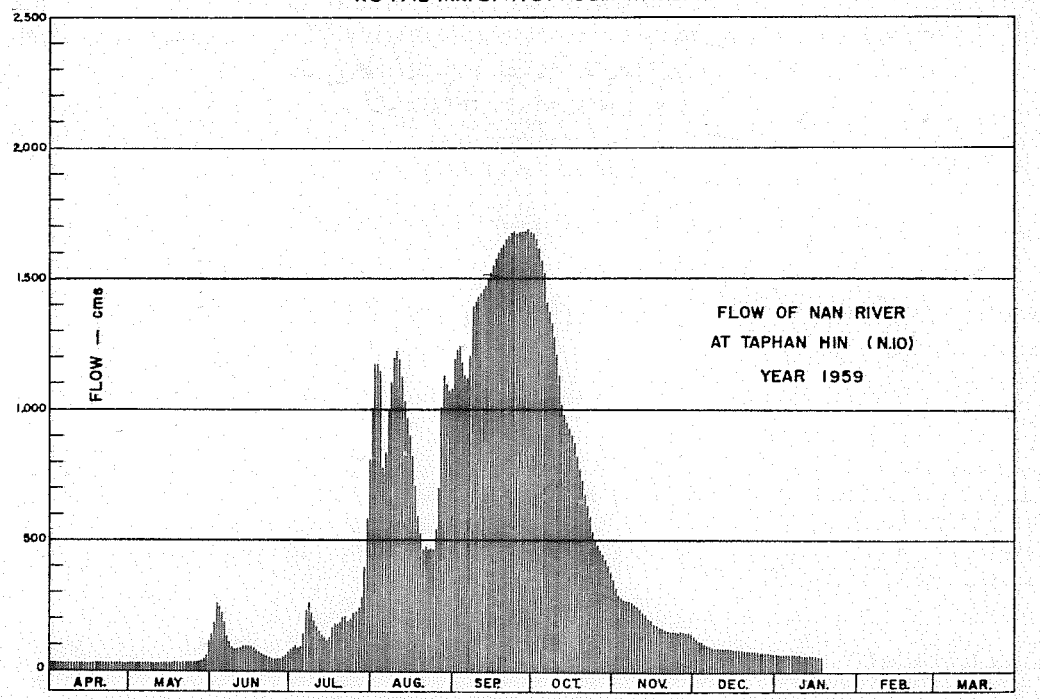
Remarks: No gage height record for Jan.19 – Mar.31.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	23.42	23.42	25.14	24.16	30.85	31.49	33.05	26.66	24.77	23.99		
2	.42	.43	.51	.28	31.42	.63	.00	.37	.69	.98		
3	.42	.43	26.01	.39	.41	.71	32.92	.20	.60	.97		
4	.42	.44	25.91	.31	.21	.48	.84	.15	.55	.96		
5	.42	.44	.54	.40	29.39	.21	.68	.11	.49	.95		
6	23.42	23.43	25.21	25.01	29.71	31.13	32.32	26.10	24.40	23.94		
7	.42	.43	24.76	.78	30.11	.65	.29	.05	.35	.93		
8	.42	.42	.47	26.03	30.01	32.18	.16	.00	.30	.92		
9	.42	.42	.34	25.66	.51	.33	31.94	25.95	.27	.91		
10	.42	.42	.25	.41	.64	.38	.62	.89	.26	.91		
11	23.42	23.42	24.26	25.26	31.49	32.42	31.36	25.79	24.25	23.90		
12	.42	.42	.32	.07	.25	.48	.02	.69	.24	.89		
13	.42	.43	.37	24.91	30.90	.53	30.71	.58	.24	.88		
14	.42	.43	.39	.74	.50	.64	.39	.48	.23	.88		
15	.42	.44	.37	.71	.06	.70	.26	.43	.22	.88		
16	23.42	23.45	24.33	24.79	29.71	32.77	30.07	25.33	24.21	23.88		
17	.42	.46	.27	25.16	28.81	.82	29.86	.27	.19	.87		
18	.42	.46	.10	.36	.31	.87	.64	.22	.18	.87		
19	.42	.46	.04	.29	27.86	.92	.34	.13	.17			
20	.42	.47	23.95	.37	.49	.96	.01	.05	.16			
21	23.42	23.48	23.90	25.56	27.54	33.00	28.71	25.03	.13			
22	.42	.48	.85	.56	.46	.02	.51	.01	.11			
23	.42	.47	.80	.42	.50	.03	.26	.01	.10			
24	.42	.47	.77	.58	.46	.04	27.83	24.99	.09			
25	.42	.48	.75	.76	28.01	.05	.64	.99	.07			
26	23.42	23.49	23.73	25.73	27.11	33.06	27.55	24.98	24.06			
27	.42	.51	.74	26.00	30.66	.06	.47	.98	.05			
28	.42	.56	.78	.26	31.21	.07	.29	.97	.04			
29	.42	.74	.98	27.08	.09	.09	.19	.94	.04			
30	.42	24.24	24.13	28.26	30.94	.07	.07	.90	.01			
31		.76		29.51	31.01		26.90		.00			
Mean	23.42	23.55	24.45	25.64	29.96	32.32	30.19	25.54	24.24			
Max.	23.42	24.76	26.01	29.51	31.64	33.09	33.05	26.66	24.77			
Min.	23.42	23.42	23.73	24.16	27.46	31.13	26.90	24.90	24.00			

WATER YEAR 1959 : Max. 33.09 m. Min. – m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	32	32	166	81	1,052	1,194	1,672	348	131	68		
2	32	32	204	90	1,178	1,227	1,653	308	124	68		
3	32	32	261	99	1,175	1,246	1,622	286	116	67		
4	32	33	249	93	1,130	1,191	1,592	279	112	66		
5	32	33	207	100	779	1,130	1,533	274	107	65		
6	32	32	173	153	837	1,113	1,410	273	100	65		
7	32	32	130	234	909	1,232	1,401	266	96	64		
8	32	32	106	264	1,086	1,396	1,364	260	92	63		
9	32	32	95	221	1,198	1,414	1,305	254	90	63		
10	32	32	88	193	1,230	1,430	1,225	247	89	63		
11	32	32	89	178	1,194	1,443	1,164	235	88	62		
12	32	32	94	159	1,139	1,462	1,088	224	87	61		
13	32	32	98	144	1,063	1,479	1,023	212	87	61		
14	32	32	99	129	981	1,518	960	201	86	61		
15	32	33	98	126	900	1,540	936	195	86	61		
16	32	33	94	133	837	1,566	902	185	85	61		
17	32	34	90	168	681	1,584	864	179	83	60		
18	32	34	76	188	600	1,603	824	174	82	60		
19	32	34	72	181	528	1,622	771	165	82			
20	32	34	65	189	469	1,637	715	157	81			
21	32	35	62	210	477	1,653	664	155	78			
22	32	35	58	210	465	1,661	632	153	77			
23	32	34	55	194	471	1,665	592	153	76			
24	32	34	53	212	465	1,669	523	151	75			
25	32	35	51	232	552	1,672	492	151	74			
26	32	35	50	228	732	1,676	478	150	73			
27	32	37	51	260	1,013	1,676	466	150	72			
28	32	40	54	294	1,130	1,680	439	149	72			
29	32	51	68	408	1,104	1,688	424	147	72			
30	32	87	78	595	1,071	1,680	406	143	70			
31		130		801	1,086		382		69			
Total	960	1,205	3,134	6,767	27,532	44,720	29,251	6,224	2,712			
Mean	32.0	38.9	104	218	888	1,491	952	207	87.5			
Max.	32	130	261	801	1,230	1,688	1,672	348	31			
Min.	32	32	50	81	465	1,113	382	143	69			
Runoff - mcm.	82.944	104.112	270.778	584.669	2,378.765	3,863.808	2,550.614	537.754	234.317			

WATER YEAR 1959 : Max. 1,688 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.29	06.00	33.09	1,688				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
NAN RIVER BASIN

Nan River at Ban San, Nan (N.13)

Location: Lat 18°– 32' – 06" N, Long 100°– 46' – 06" E, on right bank infront of Wat Phranet, Tambon Ban San, Amphoe Sa, Nan.

Drainage Area: 8,993 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +176.36 m. (M.S.L.)

Bench Mark: B.M. – R.I.D.

Location: Near the gage site.
Elevation: +186.63 m. (M.S.L.)

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: 1959 to date.

Rating Operation:

Period of Rating: 1959 to date
Rated by Float: –
Rated by Current Meter: 1959 to date

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

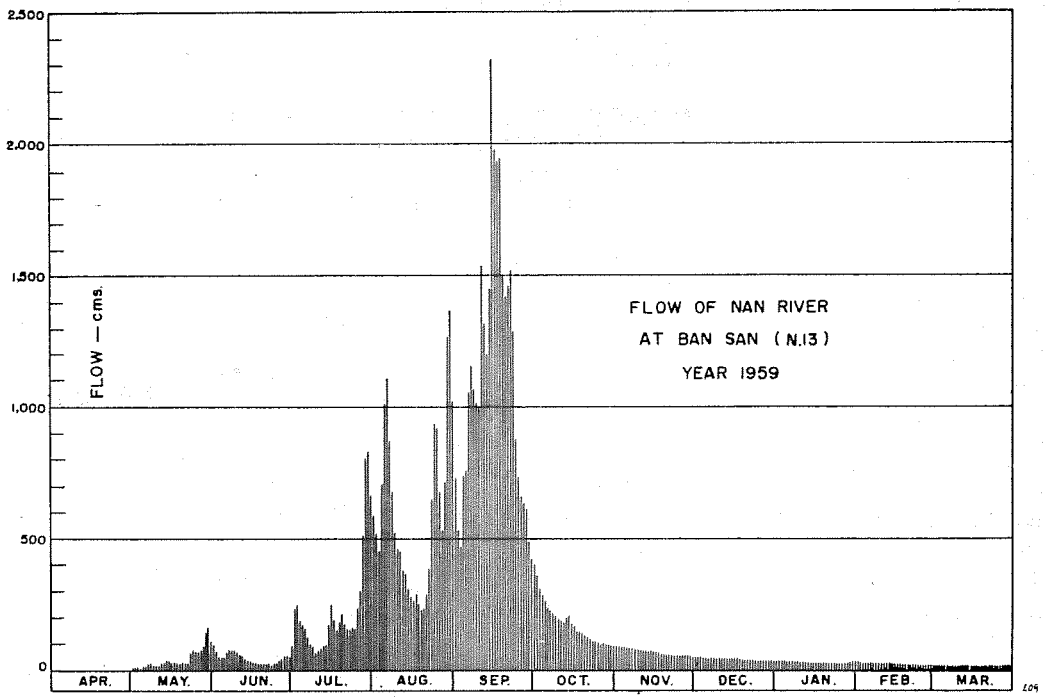
General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1959. No state diversions above gage site.

Remarks: Gage height record began on May 1.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		176.89	177.60	177.74	179.97	180.22	179.07	177.52	177.23	177.08	177.09	176.92
2		.88	.45	178.52	.72	179.74	178.92	.51	.22	.08	.06	.92
3		.88	.37	.57	.39	.53	.71	.49	.22	.08	.04	.92
4		.87	.33	.21	180.69	180.59	.59	.49	.21	.08	.03	.92
5		.91	.36	.11	181.66	.72	.45	.48	.21	.07	.02	.92
6		176.92	177.50	178.03	182.37	181.98	178.33	177.46	177.20	177.07	177.01	176.91
7		177.05	.57	177.89	180.88	182.19	.25	.44	.20	.06	.01	.91
8		.11	.59	.71	.46	.04	.19	.42	.19	.06	.00	.91
9		.04	.59	.64	179.84	181.69	.14	.41	.19	.06	.00	.91
10		.03	.56	.50	.51	.61	.08	.39	.18	.05	176.99	.91
11		177.03	177.49	177.52	179.41	183.24	178.05	177.38	177.18	177.05	176.98	176.91
12		.16	.41	.57	.11	182.61	.02	.37	.18	.05	.98	.90
13		.15	.33	.65	178.95	.14	.08	.36	.18	.04	.97	.90
14		.25	.27	.69	.76	.80	.16	.36	.17	.04	.97	.90
15		.25	.25	178.09	.56	184.82	.03	.35	.16	.04	.97	.90
16		177.16	177.22	178.60	178.51	184.47	177.92	177.34	177.14	177.03	176.96	176.90
17		.20	.19	.18	.62	.21	.86	.33	.13	.03	.96	.90
18		.19	.17	177.98	.46	183.03	.84	.32	.13	.03	.95	.89
19		.15	.15	178.15	.33	182.62	.80	.31	.13	.03	.95	.89
20		.21	.14	.33	.34	.87	.75	.30	.12	.04	.94	.89
21		177.19	177.13	178.07	178.73	182.97	177.71	177.29	177.11	177.03	176.94	176.89
22		.14	.11	177.97	179.07	183.05	.67	.28	.10	.03	.94	.88
23		.52	.10	.99	180.19	182.01	.65	.27	.10	.03	.93	.88
24		.62	.12	178.08	181.33	181.02	.63	.27	.09	.04	.93	.88
25		.60	.21	.01	181.31	180.65	.61	.26	.09	.02	.93	.88
26		177.56	177.29	178.48	180.49	180.42	177.60	177.25	177.09	177.01	176.93	176.88
27		.59	.36	.61	179.91	.24	.57	.24	.09	.01	.92	.88
28		.71	.46	179.82	180.69	.07	.55	.24	.08	.00	.92	.88
29		178.15	.45	180.98	182.48	179.57	.54	.24	.08	.02	.92	.87
30		.14	.41	181.05	.75	.25	.53	.23	.08	.08		.87
31		177.80		180.44	181.60		.53		.08	.13		.87
Mean		177.27	177.34	178.36	180.00	181.74	177.99	177.35	177.15	177.05	176.97	176.90
Max.		178.14	177.60	181.05	182.75	184.82	179.07	177.52	177.23	177.13	177.09	176.92
Min.		176.87	177.10	177.50	178.33	179.25	177.53	177.23	177.08	177.00	176.92	176.87

WATER YEAR 1959 : Max. 184.82 m. Min. – m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		10	93	88	563	628	408	90	49	34	33	18
2		10	64	233	517	498	369	88	49	34	30	18
3		10	50	248	449	467	306	86	50	34	28	18
4		9.00	46	186	703	738	286	87	50	34	27	18
5		11	49	170	1,011	743	262	84	47	33	27	18
6		12	65	156	1,106	1,053	233	80	46	33	27	17
7		21	74	126	788	1,150	229	81	46	32	26	17
8		26	74	97	644	1,059	216	77	47	32	26	17
9		17	73	90	520	1,008	205	74	46	32	26	17
10		17	69	65	458	994	191	73	43	30	26	17
11		18	60	76	449	1,532	184	73	43	30	25	17
12		26	50	81	379	1,311	177	72	43	30	23	16
13		29	41	91	369	1,150	197	69	43	29	23	16
14		38	35	97	300	1,445	205	70	42	29	22	16
15		36	33	172	272	2,318	177	67	42	29	22	16
16		28	29	250	262	1,976	166	64	42	27	22	16
17		30	26	186	286	1,911	147	64	45	27	22	16
18		28	25	151	246	1,441	145	60	40	27	22	16
19		26	23	182	225	1,325	140	58	38	27	21	16
20		30	22	214	233	1,418	128	58	37	29	19	16
21		29	21	161	288	1,456	124	54	37	27	19	16
22		24	25	154	356	1,516	116	54	37	27	19	16
23		64	18	152	644	1,150	109	54	37	27	20	16
24		76	22	163	936	873	108	54	36	29	18	16
25		70	27	154	915	708	101	54	36	26	18	16
26		69	37	233	676	659	97	54	36	25	18	16
27		74	40	258	527	628	102	53	36	26	18	16
28		91	53	513	713	604	96	51	35	25	18	16
29		145	53	801	1,267	482	96	50	35	26	18	16
30		163	48	830	1,364	416	91	49	35	32		15
31		108		666	997		90		35	37		14
Total		1,345	1,345	7,044	18,463	32,657	5,501	2,002	1,283	919	663	509
Mean		43.3	44.8	227	596	1,088	177	66.7	41.4	29.6	22.8	16.4
Max.		163	93	830	1,364	2,318	408	90	50	37	33	18
Min.		9.00	18	65	225	416	90	49	35	25	18	14
Runoff — MCM.		116.208	116.208	608.602	1,595.203	2,321.565	475.286	172.973	110.851	79.402	57.283	43.978

WATER YEAR 1959 : Max. 2,318 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 15	03.00	185.12	2,418				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
NAN RIVER BASIN

Nan River at Chumsaeng, Nakhon Sawan (N.14)

Location: Lat 15°- 53' - 41" N, Long 100°- 18' - 44" E, on right bank infront of the previous site of Amphoe Chumsaeng Office, Tambon Phikul, Nakhon Sawan.

Drainage Area: 33,110 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +19.00 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.2

Location: 45 meters from the fence of Amphoe Chumsaeng Office.
Elevation: +27.588 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: 1954 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: -
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: Overbank flow was observed but not included for flow computation.

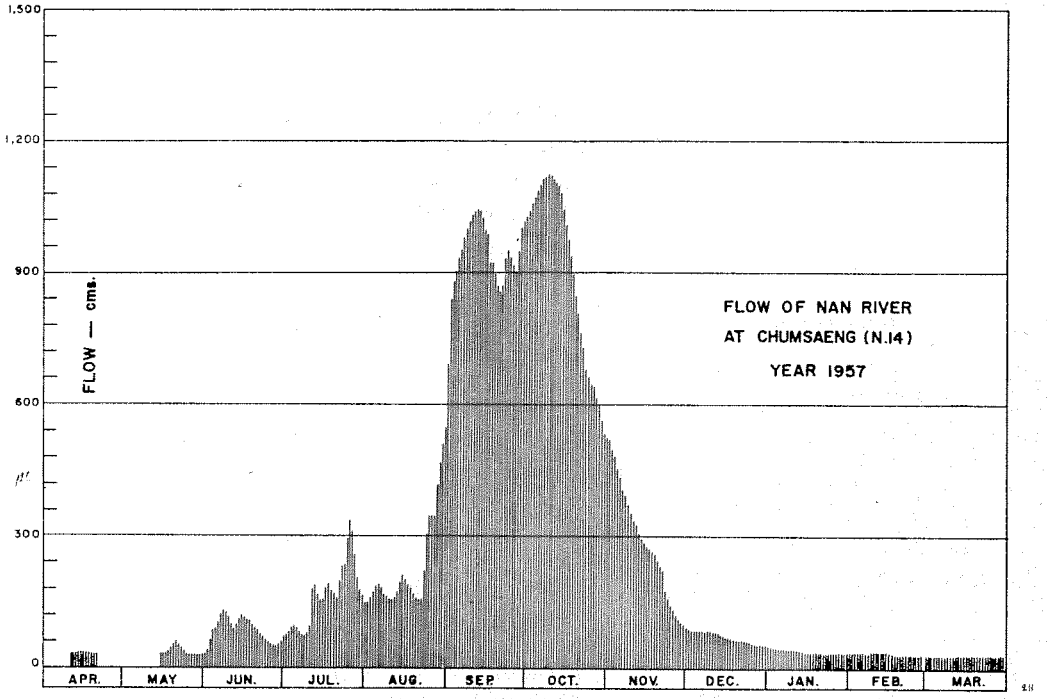
General Description: Records fair except those for periods of no gage height record. Stage - discharge relation used is defined by discharge measurements during 1965. No state diversions above gage site.

Remarks: No gage height record for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			19.00	19.99	21.16	25.20	26.59	24.14	20.35	19.56	19.18	19.00
2			.33	20.04	.14	.80	.64	.12	.29	.54	.17	.00
3			20.00	.19	.32	.96	.72	23.98	.25	.51	.16	.00
4			.22	.33	.46	26.09	.78	.90	.25	.48	.16	.00
5			.29	.38	.56	.21	.82	.69	.24	.46	.15	.00
6			20.65	20.31	21.62	26.31	26.87	23.51	20.24	19.43	19.14	19.00
7			.84	.20	.55	.40	.92	.38	.23	.40	.14	.00
8			.87	.12	.41	.49	.93	.23	.22	.38	.13	.00
9			.84	.08	.28	.54	.95	.09	.20	.36	.19	.00
10			.58	.21	.21	.61	.95	.00	.18	.33	.27	.00
11	19.01		20.37	20.50	21.23	26.63	26.92	22.91	20.17	19.32	19.26	19.00
12	.04		.21	21.52	.30	.65	.89	.79	.17	.31	.24	.00
13	.08		.37	.60	.43	.66	.86	.70	.15	.29	.23	.00
14	.09		.69	.41	.76	.61	.78	.59	.11	.28	.21	.00
15	.11	19.03	.78	.20	.85	.53	.71	.49	.00	.27	.20	.00
16	19.09	19.05	20.66	21.21	21.73	26.43	26.57	22.44	19.95	19.26	19.16	19.00
17	.07	.09	.60	.55	.57	.16	.40	.38	.90	.25	.13	.00
18	.05	.17	.49	.58	.56	.15	.20	.33	.87	.25	.10	.00
19	.01	.40	.41	.46	.46	25.98	25.96	.22	.86	.24	.09	.00
20	.00	.67	.30	.36	.33	.87	.82	.11	.83	.23	.07	.00
21	19.00	19.73	20.23	21.27	21.23	25.87	25.65	21.99	19.81	19.24	19.05	19.00
22		.59	.11	.49	.26	.99	.43	.75	.79	.24	.03	.00
23		.42	19.93	.99	.67	26.21	.21	.51	.76	.22	.02	.00
24		.23	.85	22.07	22.45	.27	.01	.26	.74	.20	.00	.00
25		.07	.73	.52	.99	.25	24.92	.03	.72	.19	.00	.00
26		19.00	19.62	22.89	22.97	26.13	24.82	20.87	19.70	19.17	19.00	19.00
27		.00	.57	.71	.97	.08	.80	.76	.67	.16	.00	.00
28		.00	.56	.31	23.37	.29	.69	.62	.65	.15	.00	.00
29		.00	.63	21.89	23.83	.49	.48	.52	.62	.16		.00
30		.00	.76	.52	24.03	.54	.32	.45	.60	.17		.00
31		.00		.28	.28		.21		.59	.17		.00
Mean			20.18	21.20	21.90	26.25	26.03	22.39	20.00	19.30	19.12	19.00
Max.			20.87	22.89	24.28	26.66	26.95	24.14	20.35	19.56	19.27	19.00
Min.			19.00	19.99	21.14	25.20	24.21	20.45	19.59	19.15	19.00	19.00

WATER YEAR 1957 : Max. 26.95 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			31	74	153	716	1,026	522	95	53	38	31
2			44	77	151	842	1,038	519	91	53	38	31
3			75	85	166	877	1,059	497	89	51	37	31
4			87	94	178	907	1,075	484	89	50	37	31
5			91	97	187	934	1,086	450	88	49	37	31
6			114	93	193	958	1,100	423	88	48	37	31
7			128	86	186	980	1,114	405	88	47	37	31
8			130	81	174	1,002	1,116	384	87	46	36	31
9			128	79	162	1,014	1,122	365	86	45	39	31
10			110	87	157	1,031	1,122	352	85	44	42	31
11	31		96	104	158	1,036	1,114	339	84	44	41	31
12	33		87	184	164	1,041	1,105	319	84	43	41	31
13	34		96	191	176	1,044	1,097	312	83	43	40	31
14	35		117	174	207	1,031	1,075	299	81	42	39	31
15	35	32	124	156	216	1,011	1,057	287	75	42	39	31
16	35	33	115	157	204	987	1,021	281	72	41	37	31
17	34	35	111	186	188	923	980	274	70	41	36	31
18	33	38	103	189	187	920	932	268	68	41	35	31
19	31	47	99	178	178	882	877	255	68	41	35	31
20	31	58	92	169	167	857	846	243	67	40	34	31
21	31	61	88	162	158	857	809	230	65	41	33	31
22		55	81	181	161	884	762	206	64	41	32	31
23		48	71	230	198	934	718	183	63	40	32	31
24		40	67	239	282	949	678	161	62	39	31	31
25		34	61	290	351	944	660	142	61	39	31	31
26		31	56	337	348	916	642	130	60	38	31	31
27		31	54	313	348	904	638	122	58	37	31	31
28		31	53	265	404	954	618	112	57	37	31	31
29		31	56	220	473	1,002	580	105	56	37		31
30		31	63	184	505	1,014	552	101	55	38		31
31		31		162	545		534		55	38		31
Total			2,628	5,124	7,193	28,351	28,153	8,770	2,294	1,329	1,007	961
Mean			87.6	165	232	945	908	292	74.0	42.9	35.9	31.0
Max.			130	337	545	1,044	1,122	522	95	53	42	31
Min.			31	74	151	716	534	101	55	37	31	31
Runoff - mcm.			227.069	442.475	621.475	2,449.526	2,432.419	757.728	198.202	114.826	87.005	83.030

WATER YEAR 1957 : Max. 1,122 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 9	06.00	26.95	1,122				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
NAN RIVER BASIN

Nan River at Chumsaeng, Nakhon Sawan (N.14)

Location: Lat 15^{0} – 53' – 41" N, Long 100^{0} – 18' – 44" E, on right bank infront of the previous site of Amphoe Chumsaeng Office, Tambon Phikul, Nakhon Sawan.

Drainage Area: 33,110 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +19.00 m. (M.S.L.)

Bench Mark: B.M. – R.I.D. No.2

Location: 45 meters from the fence of Amphoe Chumsaeng Office.

Elevation: +27.588 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: 1954 to date.

Rating Operation:

Period of Rating: 1965 to date

Rated by Float: –

Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: Overbank Flow was observed but not included for flow computation.

General Description: Records fair except those for periods of no gage height record. Stage – discharge relation used is defined by discharge measurements during 1965. No state diversions above gage site.

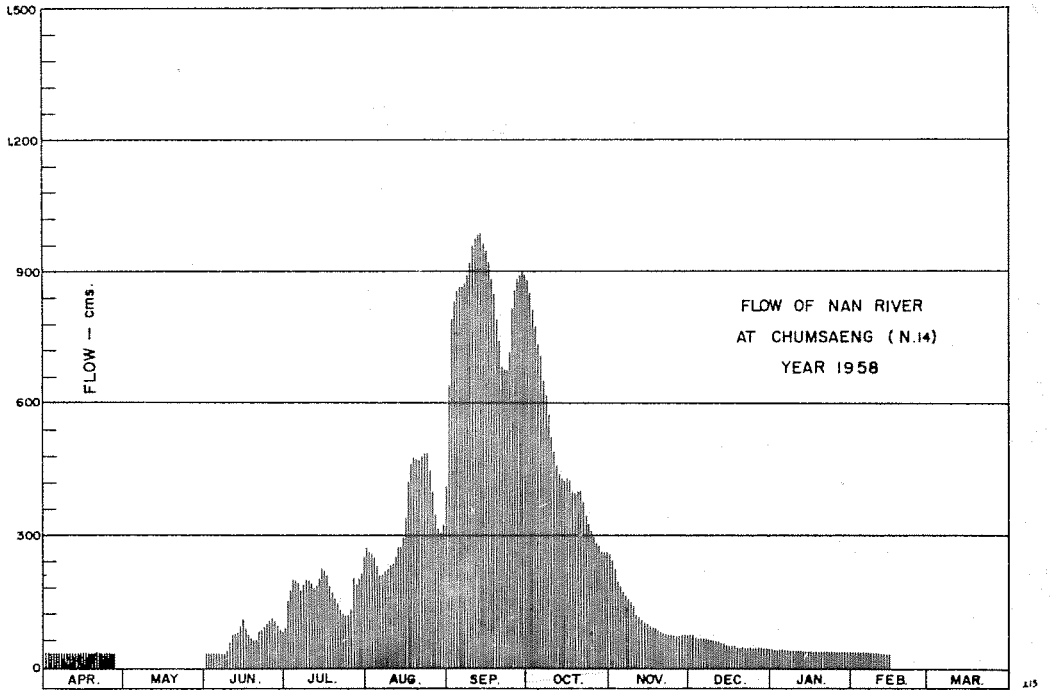
Remarks: No gage height record for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	19.00		19.00	20.27	22.36	24.82	25.97	22.25	19.98	19.30	19.11	
2	.00		.00	21.13	.31	25.56	.84	.14	20.00	.29	.11	
3	.00		.00	.45	.26	.76	.67	21.96	19.93	.28	.10	
4	.00		.00	.69	.17	.86	.49	.76	.87	.27	.10	
5	.00		.00	.68	.01	.89	.30	.57	.82	.26	.09	
6	19.00		19.00	21.62	21.80	25.91	25.16	21.43	19.80	19.25	19.08	
7	.00		.00	.45	21.78	.94	24.88	.30	.78	.24	.07	
8	.00		.00	.59	21.90	26.02	.69	.21	.77	.23	.06	
9	.00		19.17	.67	.94	.15	.45	.14	.75	.22	.06	
10	.00		.60	.67	.98	.31	.15	20.97	.74	.21	.05	
11	19.00		19.97	21.58	22.05	26.38	23.94	20.74	19.72	19.20	19.04	
12	.00		20.03	.50	.19	.41	.75	.66	.70	.20	.03	
13	.00		.12	.54	.38	.40	.61	.56	.65	.19	.02	
14	.00		.33	.71	.40	.35	.55	.48	.59	.19	.02	
15	.00		.43	.96	.56	.26	.52	.41	.51	.18	.00	
16	19.00		20.23	21.91	22.93	26.15	23.57	20.33	19.47	19.18		
17	.00		.05	.79	23.50	25.98	.52	.30	.42	.17		
18	.00		19.85	.57	.78	.82	.34	.24	.42	.17		
19	.00		.73	.39	.85	.57	.30	.18	.41	.17		
20	.00		.78	.21	.84	.33	.34	.11	.40	.17		
21	19.00		20.11	21.10	23.83	25.05	23.34	20.08	19.39	19.16		
22	.00		.20	20.90	.88	.01	.18	.07	.39	.16		
23	.00	19.06	.30	.77	.92	.00	22.97	.04	.38	.16		
24	.00	.12	.41	.69	.91	.20	.83	.01	.37	.15		
25	.00	.36	.51	.74	.67	.68	.69	.00	.36	.15		
26	19.00	19.37	20.60	20.92	23.34	25.86	22.58	20.00	19.36	19.15		
27	.00	.37	.49	21.73	22.97	.98	.47	.00	.35	.14		
28		.35	.36	.57	.73	26.03	.38	.00	.35	.14		
29		.27	.19	.73	.65	.04	.30	19.97	.34	.13		
30		.20	.13	.85	.81	.02	.29	.96	.33	.12		
31		.15		22.18	23.43		.29		.31	.12		
Mean			19.82	21.44	22.83	25.82	23.75	20.66	19.57	19.19		
Max.			20.60	22.18	23.92	26.41	25.97	22.25	20.00	19.30		
Min.			19.00	20.27	21.80	24.82	22.29	19.96	19.31	19.12		

WATER YEAR 1958 : Max. 26.41 m. Min. – m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	31		31	90	271	642	879	258	74	43	35	
2	31		31	150	265	789	851	246	75	43	35	
3	31		31	177	260	833	813	227	71	42	35	
4	31		31	200	250	855	774	207	68	42	35	
5	31		31	199	232	862	736	188	66	41	35	
6	31		31	193	211	866	708	176	65	41	34	
7	31		31	177	209	873	652	164	64	41	34	
8	31		31	190	221	891	618	157	63	40	33	
9	31		38	198	225	920	575	151	62	40	33	
10	31		55	198	229	958	524	138	62	39	33	
11	31		73	189	236	975	490	121	61	39	33	
12	31		76	182	252	982	460	115	60	39	32	
13	31		81	186	274	985	438	108	57	39	32	
14	31		94	202	276	968	429	103	55	39	32	
15	31		100	227	295	946	425	99	51	38	31	
16	31		88	222	342	920	432	94	50	38		
17	31		77	210	422	882	425	92	48	38		
18	31		67	188	465	846	400	88	48	38		
19	31		61	172	476	791	394	85	47	38		
20	31		64	157	474	742	400	81	47	38		
21	31		81	148	473	686	400	79	47	37		
22	31		86	132	481	678	377	78	47	37		
23	31	33	92	123	487	676	348	77	46	37		
24	31	36	99	117	486	716	328	75	46	37		
25	31	45	107	121	447	816	311	75	45	37		
26	31	46	111	134	400	855	298	75	45	37		
27	31	46	103	204	348	882	284	75	45	37		
28		45	96	188	316	893	274	75	45	37		
29		42	85	204	306	895	264	73	45	36		
30		39	82	216	325	891	263	73	44	36		
31		37		251	412		263		43	36		
Total			2,064	5,545	10,425	25,514	14,833	3,653	1,692	1,200		
Mean			68.8	179	336	850	478	122	54.6	38.7		
Max.			111	251	487	985	879	258	75	43		
Min.			31	90	211	642	263	73	43	36		
Runoff - mcm.			178.339	479.088	900.720	2,204.410	1,281.571	315.619	146.189	103.766		

WATER YEAR 1958 : Max. 985 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep.12	06.00	26.41	985				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
NAN RIVER BASIN

Nan River at Chumsaeng, Nakhon Sawan (N.14)

Location: Lat 15°- 53' - 41" N, Long 100°- 18' - 44" E, on right bank infront of the previous site of Amphoe Chumsaeng Office, Tambon Phikul, Nakhon Sawan.

Drainage Area: 33,110 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +19.00 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.2

Location: 45 meters from the fence of Amphoe Chumsaeng Office.
Elevation: +27.588 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: 1954 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: -
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: Overbank flow was observed but not included for flow computation.

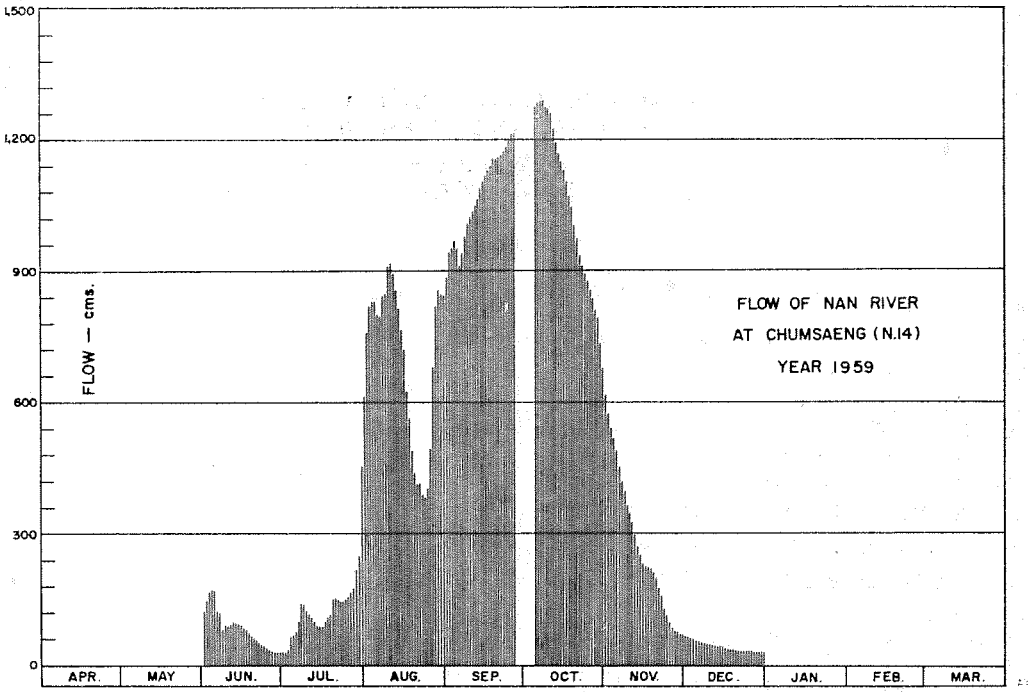
General Description: Records fair except those for periods of no gage height record. Stage - discharge relation used is defined by discharge measurements during 1965. No state diversions above gage site.

Remarks: No gage height record for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			20.80	19.00	24.66	26.00		24.68	19.87			
2			21.12	.00	25.41	.24		.42	.81			
3			.36	.20	.69	.29		.25	.77			
4			.40	.86	.75	.36		.12	.73			
5			.40	.94	.67	.28	27.48	23.91	.68			
6			20.77	20.15	25.61	26.12	27.51	23.70	19.63			
7			.74	.58	.59	.23	.52	.49	.58			
8			.13	21.02	.79	.38	.53	.32	.52			
9			.33	.02	.82	.51	.49	.10	.48			
10			.26	20.81	26.10	.57	.47	22.95	.44			
11			20.31	20.73	26.14	26.62	27.43	22.81	19.42			
12			.40	.63	.02	.68	.31	.58	.39			
13			.38	.48	25.85	.74	.20	.37	.35			
14			.36	.33	.66	.83	.11	.19	.34			
15			.32	.27	.44	.89	.04	.04	.29			
16			20.21	20.28	25.21	26.93	26.97	21.96	19.25			
17			.12	.48	24.73	.97	.87	.93	.20			
18			19.97	.63	.39	27.01	.75	.92	.16			
19			.87	.69	23.95	.06	.65	.83	.14			
20			.76	21.15	.62	.06	.50	.67	.11			
21			19.66	21.20	23.46	27.08	26.36	21.45	19.09			
22			.54	.16	.46	.10	.20	.25	.08			
23			.44	.10	.29	.13	.10	20.89	.07			
24			.35	.10	.25	.18	.03	.67	.06			
25			.23	.17	.39	.23	25.96	.44	.05			
26			19.12	21.24	23.96	27.26	25.85	20.18	19.04			
27			.08	.34	25.02	.28	.76	.10	.03			
28			.02	.45	.69		.65	.06	.02			
29			.00	.88	.86		.56	19.99	.01			
30			.00	22.21	.82		.29	.93	.00			
31				23.72	.80		24.99		.00			
Mean			20.08	20.77	25.03			22.14	19.31			
Max.			21.40	23.72	26.14			24.68	19.87			
Min.			19.00	19.00	23.25			19.93	19.00			

WATER YEAR 1959 : Max. - m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			125	31	613	886		616	68			
2			150	31	758	942		570	65			
3			169	39	818	954		540	63			
4			173	68	831	970		519	61			
5			173	72	831	951	1,272	486	59			
6			123	83	800	914	1,281	452	56			
7			121	105	796	939	1,284	421	54			
8			82	142	840	975	1,287	397	52			
9			94	142	846	1,006	1,275	366	50			
10			90	126	909	1,021	1,269	345	49			
11			93	120	918	1,033	1,257	325	48			
12			98	113	891	1,049	1,223	298	47			
13			97	103	853	1,064	1,192	272	45			
14			96	94	811	1,088	1,167	252	45			
15			93	90	764	1,105	1,147	235	43			
16			87	91	718	1,116	1,128	227	41			
17			81	103	625	1,128	1,100	224	39			
18			73	113	564	1,139	1,067	223	37			
19			68	117	492	1,153	1,041	214	37			
20			63	152	439	1,153	1,004	198	35			
21			58	156	416	1,158	970	177	35			
22			53	153	416	1,164	932	160	34			
23			49	148	393	1,172	909	131	34			
24			45	148	387	1,182	893	116	33			
25			40	154	407	1,200	877	100	33			
26			36	159	494	1,209	853	85	33			
27		33	34	168	680	1,214	833	80	32			
28		33	32	177	818		809	78	32			
29		92	31	219	855		789	74	31			
30		105	31	254	846		734	71	31			
31		84		455	842		674		31			
Total			2,558	4,126	21,653			8,252	1,353			
Mean			85.3	133	698			275	43.6			
Max.			173	455	918			616	68			
Min.			31	31	387			71	31			
Runoff - mcm.			221.011	356.486	1,870.819			712.973	252.199			

WATER YEAR 1959 : Max. - Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
-	-	-	-				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
NAN RIVER BASIN

Nam Pat Creek at Ban Fai, Uttaradit (N.16)

Location: Lat 17°- 44' - 24" N, Long 100°- 42' - 00" E, on left bank 3 kilometers upstream from Amphoe Nam Pat, Tambon Ban Fai, Uttaradit.

Drainage Area: 2,088 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m. (A.D.)

Bench Mark: B.M. - H.S.

Location: On left bank 12 meters from upper gage.
Elevation: +6.310 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: 1957 - 58, 1962 to date.

Rating Operation:

Period of Rating: 1963 to date
Rated by Float: - -
Rated by Current Meter: 1963 to date

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

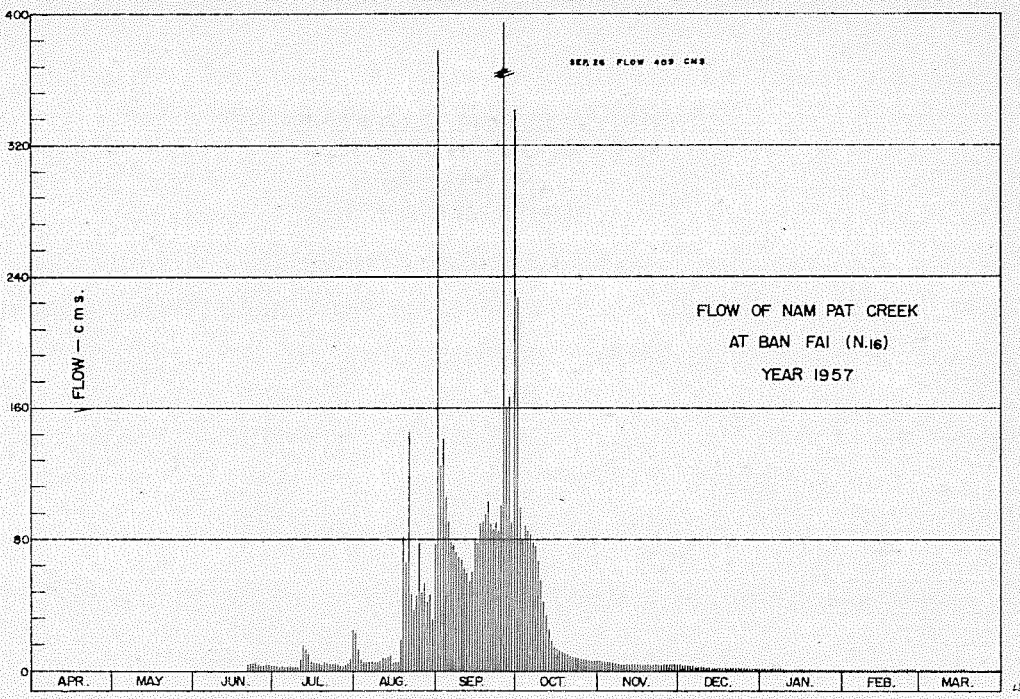
General Description: Records fair except those for period of no gage height record. Stage - discharge relation used is defined by discharge measurements during 1963 - 65. No state diversions above gage site.

Remarks: Gage height began to record on June 21.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				0.66	1.28	3.17	3.31	0.80	0.68	0.52	0.50	0.45
2				.65	.06	2.55	2.30	.79	.67	.52	.49	.45
3				.62	0.86	.68	.10	.77	.66	.52	.49	.45
4				.62	0.77	.38	.20	.77	.65	.52	.48	.45
5				.60	0.75	.22	.14	.76	.65	.52	.48	.45
6				0.60	0.78	2.07	2.12	0.75	0.65	0.52	0.48	0.45
7				.60	.80	.06	.08	.74	.65	.52	.48	.45
8				.60	.78	.01	.04	.72	.61	.51	.48	.45
9				.60	.76	1.98	1.94	.70	.60	.50	.48	.44
10				.60	.81	.95	.78	.70	.60	.50	.48	.44
11				0.83	0.88	1.90	1.62	0.70	0.60	0.50	0.48	0.44
12				1.11	.88	.86	.47	.69	.60	.50	.48	.44
13				.06	.90	.80	.31	.68	.58	.50	.48	.44
14				0.93	.92	.91	.17	.68	.58	.50	.48	.43
15				.78	.77	2.10	.06	.68	.58	.50	.48	.43
16				0.73	0.78	2.07	1.02	0.68	0.58	0.50	0.48	0.43
17				.77	.75	.21	.00	.68	.58	.50	.48	.42
18				.74	1.18	.22	.00	.70	.58	.50	.48	.42
19				.69	2.11	.27	0.96	.70	.58	.50	.48	.42
20				.76	1.93	.34	.95	.68	.58	.50	.48	.41
21			0.68	0.72	2.72	2.19	0.91	0.68	0.58	0.50	0.48	0.41
22			.71	.71	1.69	.17	.89	.68	.58	.50	.47	.40
23			.72	.70	1.55	.20	.87	.68	.58	.50	.47	.40
24			.74	.70	1.70	.15	.86	.68	.56	.50	.46	.40
25			.66	.68	2.07	.31	.85	.68	.55	.50	.46	.40
26			0.65	0.67	1.72	4.30	0.85	0.68	0.55	0.50	0.46	0.40
27			.65	.65	.79	2.84	.83	.68	.55	.50	.45	.39
28			.66	.71	.63	.88	.81	.68	.55	.50	.45	.39
29			.67	.75	.68	.21	.80	.68	.54	.50		.38
30			.70	.85	.43	3.98	.80	.68	.53	.50		.38
31				1.31	2.07		.80		.53	.50		.38
Mean				0.74	1.28	2.37	1.38	0.70	0.59	0.50	0.48	0.42
Max.				1.31	2.72	4.30	3.31	0.80	0.68	0.52	0.50	0.45
Min.				0.60	0.75	1.80	0.80	0.68	0.53	0.50	0.45	0.38

WATER YEAR 1957 : Max. 4.30 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				3.68	24	379	226	6.50	4.04	1.72	1.50	1.10
2				3.50	14	126	100	6.29	3.86	1.72	1.42	1.10
3				2.96	8.00	141	81	5.87	3.68	1.72	1.42	1.10
4				2.96	5.87	108	90	5.87	3.50	1.72	1.34	1.10
5				2.60	5.45	92	85	5.66	3.50	1.72	1.34	1.10
6				2.60	6.08	78	83	5.45	3.50	1.72	1.34	1.10
7				2.60	6.50	77	79	5.24	3.50	1.61	1.34	1.10
8				2.60	6.08	73	76	4.82	2.78	1.50	1.34	1.10
9				2.60	5.66	70	67	4.40	2.60	1.50	1.34	1.02
10				2.60	6.75	68	54	4.40	2.60	1.50	1.34	1.02
11				7.25	8.50	63	43	4.40	2.60	1.50	1.34	1.02
12				16	8.50	60	34	4.22	2.60	1.50	1.34	1.02
13				14	9.00	55	25	4.04	2.38	1.50	1.34	1.02
14				9.96	9.64	64	19	4.04	2.38	1.50	1.34	0.94
15				6.08	5.87	81	14	4.04	2.38	1.50	1.34	0.94
16				5.03	6.08	78	13	4.04	2.38	1.50	1.34	0.94
17				5.87	5.45	91	12	4.04	2.38	1.50	1.34	0.86
18				5.24	20	92	12	4.40	2.38	1.50	1.34	0.86
19				4.22	82	97	11	4.40	2.38	1.50	1.34	0.86
20				5.66	66	104	11	4.04	2.38	1.50	1.34	0.78
21			4.04	4.82	146	89	9.32	4.04	2.38	1.50	1.34	0.78
22			4.61	4.61	47	87	8.75	4.04	2.38	1.50	1.26	0.70
23			4.82	4.40	38	90	8.25	4.04	2.38	1.50	1.26	0.70
24			5.24	4.40	48	85	8.00	4.04	2.16	1.50	1.18	0.70
25			3.68	4.04	78	101	7.75	4.04	2.05	1.50	1.18	0.70
26			3.50	3.86	49	409	7.75	4.04	2.05	1.50	1.18	0.70
27			3.50	3.50	55	162	7.25	4.04	2.05	1.50	1.10	0.65
28			3.68	4.61	43	167	6.75	4.04	2.05	1.50	1.10	0.65
29			3.86	5.45	47	91	6.50	4.04	1.94	1.50		0.60
30			4.40	7.75	32	340	6.50	4.04	1.83	1.50		0.60
31				25	78		6.50		1.83	1.50		0.60
Total				180.45	970.43	3,618	1,218.32	136.56	80.90	47.93	36.72	27.46
Mean				5.82	31.3	121	39.3	4.55	2.61	1.55	1.31	0.88
Max.				25	146	409	226	6.50	4.04	1.72	1.50	1.10
Min.				2.60	5.45	55	6.50	4.04	1.83	1.50	1.10	0.60
Runoff — MCM.				15.591	83.345	312.595	105.263	11.799	6.990	4.141	3.173	2.372

WATER YEAR 1957 : Max. 409 Min. – Mean – Annual Runoff – mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 26	18.00	5.16	636				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
NAN RIVER BASIN

Nam Pat Creek at Ban Fai, Uttaradit (N.16)

Location: Lat 17°- 44' - 24" N, Long 100°- 42' - 00" E, on left bank 3 kilometers upstream from Amphoe Nam Pat, Tambon Ban Fai, Uttaradit.

Drainage Area: 2,088 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m. (A.D.)

Bench Mark: B.M. - H.S.

Location: On left bank 12 meters from upper gage.
Elevation: +6.310 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: 1957 - 58, 1962 to date.

Rating Operation:

Period of Rating: 1963 to date
Rated by Float: -
Rated by Current Meter: 1963 to date

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

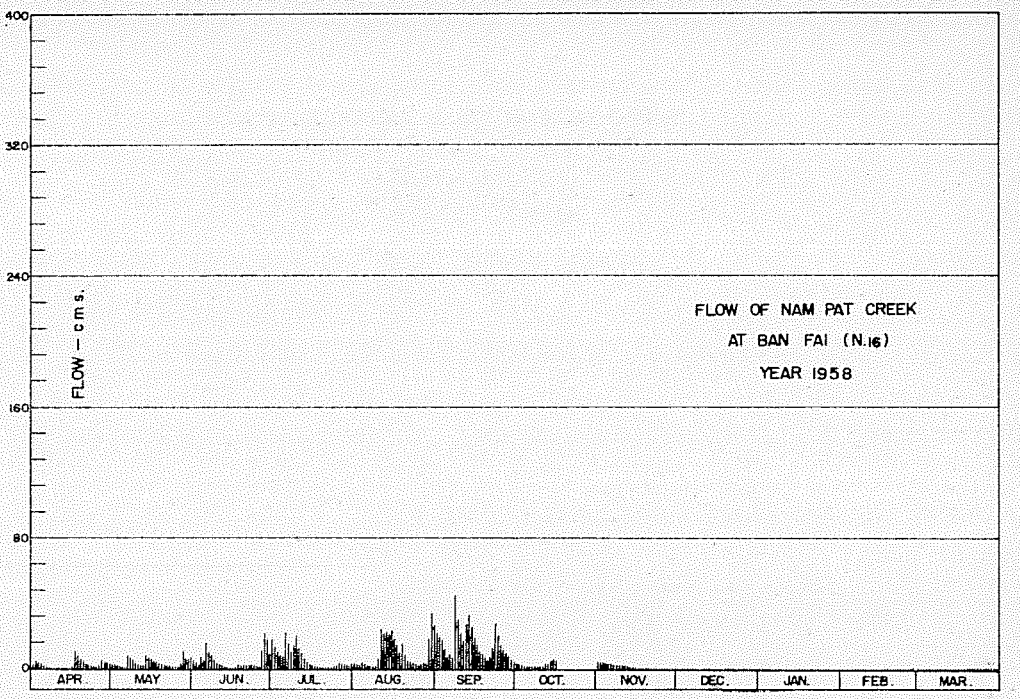
General Description: Records fair except those for period of no gage height record. Stage - discharge relation used is defined by discharge measurements during 1963 - 65. No state diversions above gage site.

Remarks: No gage height record for Oct. 17 - 31.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.52	0.63	0.75	1.17	0.69	1.25	0.67	0.71	0.46	0.36	0.30	0.28
2	.70	.59	.68	1.04	.65	.18	.65	.69	.45	.36	.30	.28
3	.64	.56	.62	0.95	.62	.14	.61	.68	.45	.35	.30	.28
4	.59	.52	.84	.90	.72	0.99	.59	.65	.45	.35	.30	.28
5	.52	.49	.75	.85	.66	.84	.58	.65	.44	.35	.30	.28
6	0.47	0.46	1.09	1.26	0.61	0.91	0.58	0.64	0.44	0.35	0.30	0.28
7	.44	.87	0.96	.11	.58	.84	.57	.62	.43	.34	.30	.28
8	.41	.80	.87	0.97	.55	1.67	.56	.61	.43	.34	.30	.28
9	.40	.75	.77	1.07	.52	.43	.56	.59	.43	.34	.30	.28
10	.40	.69	.70	.21	.82	.23	.55	.58	.42	.34	.30	.28
11	0.39	0.62	0.63	1.03	1.31	1.12	0.56	0.55	0.42	0.34	0.29	0.28
12	.39	.57	.56	0.93	.23	.35	.66	.52	.42	.34	.29	.28
13	.38	.54	.51	.82	.28	.47	.63	.50	.42	.34	.29	.28
14	.38	.89	.49	.73	.24	.32	.75	.49	.42	.34	.29	.28
15	.38	.83	.47	.65	.31	.24	.82	.47	.41	.33	.29	.28
16	0.38	0.77	0.44	0.59	1.20	1.11	0.76	0.46	0.41	0.33	0.29	0.28
17	.96	.73	.41	.55	.05	0.98		.46	.41	.33	.29	.28
18	.84	.68	.64	.51	0.95	.92		.45	.41	.33	.29	.28
19	.76	.64	.55	.49	1.09	.85		.45	.40	.33	.29	.28
20	.64	.59	.61	.48	0.92	.74		.43	.40	.32	.29	.27
21	0.59	0.57	0.57	0.46	0.77	0.86		0.43	0.40	0.32	0.29	0.27
22	.57	.54	.63	.44	.72	1.11		.43	.40	.32	.28	.27
23	.52	.51	.63	.41	.68	.40		.42	.40	.32	.28	.27
24	.49	.47	.58	.60	.64	.21		.42	.39	.31	.28	.27
25	.47	.45	.53	.54	.61	.07		.42	.38	.31	.28	.27
26	0.45	0.42	0.48	0.71	0.59	1.00		0.44	0.38	0.31	0.28	0.27
27	.77	.60	.99	.67	.72	0.94		.50	.38	.31	.28	.27
28	.71	.95	1.25	.61	.64	.87		.48	.37	.31	.28	.27
29	.68	.85	1.15	.58	1.04	.78		.47	.37	.31		.27
30	.65	.76	0.97	.55	.49	.73		.46	.37	.30		.27
31		.82		.74	.38				.36	.30		.27
Mean	0.54	0.65	0.70	0.76	0.88	1.08		0.52	0.41	0.33	0.29	0.28
Max.	0.96	0.95	1.25	1.26	1.49	1.67		0.71	0.46	0.36	0.30	0.28
Min.	0.38	0.42	0.41	0.41	0.52	0.73		0.42	0.36	0.30	0.28	0.27

WATER YEAR 1958 : Max. 1.67 m. Min. 0.27 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.72	3.14	5.45	19	4.22	23	3.86	4.61	1.18	0.50	0.20	0.16
2	4.40	2.49	4.04	14	3.50	20	3.50	4.22	1.10	0.50	0.20	0.16
3	3.32	2.16	2.96	11	2.96	18	2.78	4.04	1.10	0.45	0.20	0.16
4	2.49	1.72	7.50	9.00	4.82	12	2.49	3.50	1.10	0.45	0.20	0.16
5	1.72	1.42	5.45	7.75	3.68	7.50	2.38	3.50	1.02	0.45	0.20	0.16
6	1.26	1.18	16	23	2.78	9.32	2.38	3.32	1.02	0.45	0.20	0.16
7	1.02	8.25	11	16	2.38	7.50	2.27	2.96	0.94	0.40	0.20	0.16
8	0.78	6.50	8.25	11	2.05	46	2.16	2.78	0.94	0.40	0.20	0.16
9	0.70	5.45	5.87	15	1.72	32	2.16	2.49	0.94	0.40	0.20	0.16
10	0.70	4.22	4.40	21	7.00	22	2.05	2.38	0.86	0.40	0.20	0.16
11	0.65	2.92	3.14	13	25	17	2.16	2.05	0.86	0.40	0.18	0.16
12	0.65	2.27	2.16	9.96	22	27	3.68	1.72	0.86	0.40	0.18	0.16
13	0.60	1.94	1.61	7.00	24	34	3.14	1.50	0.86	0.40	0.18	0.16
14	0.60	8.75	1.42	5.03	22	26	5.45	1.42	0.86	0.40	0.18	0.16
15	0.60	7.25	1.26	3.50	25	22	7.00	1.26	0.78	0.35	0.18	0.16
16	0.60	5.87	1.02	2.49	20	16	5.66	1.18	0.78	0.35	0.18	0.16
17	11	5.03	0.78	2.05	14	11		1.18	0.78	0.35	0.18	0.16
18	7.50	4.04	3.32	2.61	11	9.64		1.10	0.78	0.35	0.18	0.16
19	5.66	3.32	2.05	1.42	16	7.75		1.10	0.70	0.30	0.18	0.16
20	3.32	2.49	2.78	1.34	9.64	5.24		0.94	0.70	0.30	0.18	0.14
21	2.49	2.27	2.27	1.18	5.87	8.00		0.94	0.70	0.30	0.18	0.14
22	2.27	1.94	3.14	1.02	4.82	16		0.94	0.70	0.30	0.16	0.14
23	1.72	1.61	3.14	0.78	4.04	30		0.86	0.70	0.30	0.16	0.14
24	1.42	1.26	2.38	2.60	3.32	21		0.86	0.65	0.25	0.16	0.14
25	1.26	1.10	1.83	1.94	2.78	15		0.86	0.60	0.25	0.16	0.14
26	1.10	0.86	1.34	4.61	2.49	12		1.02	0.60	0.25	0.16	0.14
27	5.87	2.60	12	3.86	4.82	10		1.50	0.60	0.25	0.16	0.14
28	4.61	11	23	2.78	3.32	8.25		1.34	0.55	0.25	0.16	0.14
29	4.04	7.75	18	2.38	14	6.08		1.26	0.55	0.25		0.14
30	3.50	5.66	11	2.05	35	5.03		1.18	0.55	0.20		0.14
31		7.00		5.24	29				0.50	0.20		0.14
Total	77.57	123.50	168.56	222.59	333.21	504.31		58.01	24.86	10.80	5.10	4.72
Mean	2.58	3.98	5.62	7.18	10.7	16.8		1.93	0.80	0.35	0.18	0.15
Max.	11	11	23	23	35	46		4.61	1.18	0.50	0.20	0.16
Min.	0.60	0.86	0.78	0.78	1.72	5.03		0.86	0.50	0.20	0.16	0.14
Runoff - mcm.	6.702	10.670	14.563	19.232	28.789	43.572		5.012	2.148	0.933	0.441	0.408

WATER YEAR 1958 : Max. 46 Min. 0.14 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 8	12.00	1.75	52				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHAO PHYA RIVER BASIN

Chao Phya River at Muang Nakhon Sawan (C.2)

Location: Lat 15° – 40' – 15" N, Long 100° – 06' – 45" E, on left bank 2 kilometers downstream from Dechatiwong Bridge, Amphoe Muang, Nakhon Sawan.

Drainage Area: 111,435 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +17.00 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D.

Location: On left bank 20 meters west of gage site.
Elevation: B.M.1 +26.258 m. (M.S.L.) and B.M.2 +26.091 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: 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: Rather unstable, periodic rating curves and shifting adjustment are included for flow computation.

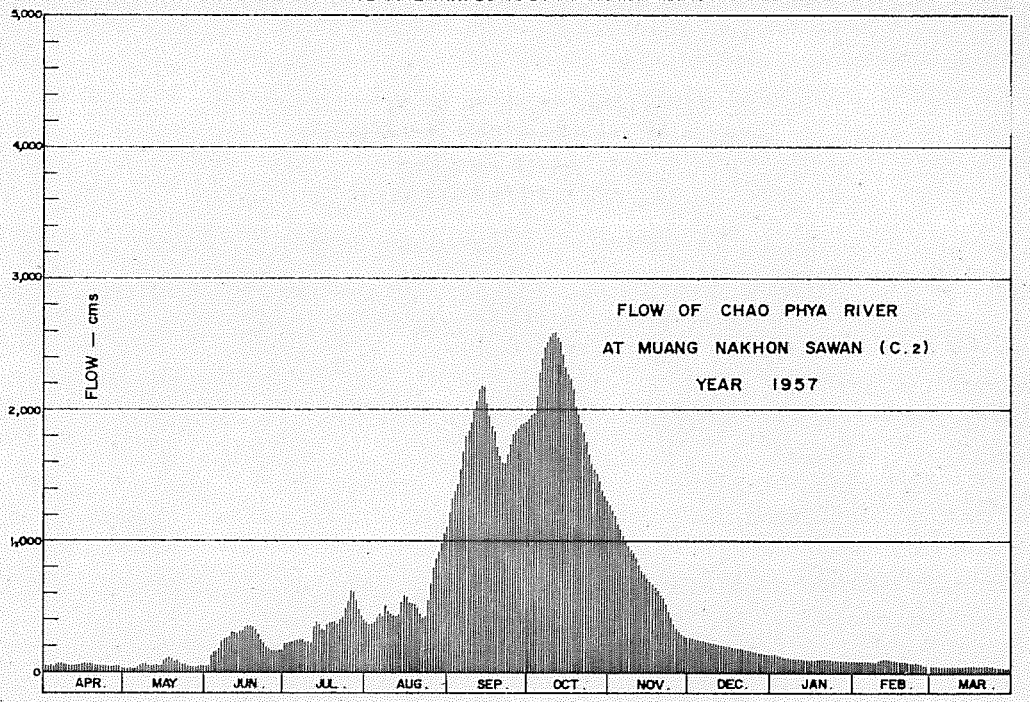
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1957. Upstream state diversions for irrigation of about 70,000 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	17.49	17.38	17.45	18.34	18.99	21.18	22.68	21.60	18.70	18.02	17.74	17.50
2	.48	.37	.51	.39	.92	.43	.75	.55	.67	.01	.76	.47
3	.48	.36	.94	.42	.93	.55	.78	.49	.64	17.98	.75	.47
4	.47	.36	18.14	.46	.98	.65	23.00	.30	.62	.96	.74	.47
5	.59	.35	.14	.51	19.08	.90	.27	.19	.60	.94	.74	.46
6	17.61	17.38	18.25	18.52	19.14	22.16	23.45	21.06	18.59	17.93	17.73	17.46
7	.63	.53	.47	.50	.08	.39	.58	20.94	.58	.91	.72	.44
8	.54	.60	.54	.50	.33	.52	.66	.82	.52	.89	.69	.44
9	.51	.57	.59	.45	.25	.64	.72	.74	.50	.88	.68	.43
10	.50	.53	.62	.46	.17	.77	.75	.66	.50	.87	.76	.43
11	17.50	17.50	18.75	18.38	19.12	22.93	23.75	20.57	18.47	17.86	17.80	17.43
12	.50	.50	.77	.84	.09	23.06	.75	.48	.45	.84	.82	.43
13	.53	.48	.73	.97	.17	.11	.74	.40	.42	.82	.79	.43
14	.57	.46	.78	.93	.43	.08	.70	.31	.39	.81	.76	.43
15	.61	.53	.85	.78	.55	22.98	.65	.22	.37	.80	.73	.45
16	17.63	17.78	18.96	18.77	19.56	22.82	23.59	20.15	18.34	17.80	17.71	17.47
17	.64	.89	.96	.88	.44	.68	.51	.09	.32	.79	.71	.46
18	.61	.89	.94	.95	.41	.61	.40	.04	.31	.83	.69	.43
19	.59	.84	.89	.98	.39	.37	.25	19.96	.28	.84	.67	.42
20	.56	.77	.82	19.00	.29	.25	.15	.87	.26	.83	.65	.42
21	17.54	17.77	18.71	18.95	19.41	22.15	23.03	19.77	18.23	17.81	17.64	17.40
22	.51	.66	.58	.94	.10	.15	22.90	.60	.21	.80	.63	.39
23	.51	.60	.45	19.04	.16	.23	.75	.40	.19	.79	.62	.38
24	.50	.55	.33	.24	.50	.36	.65	.23	.17	.78	.61	.38
25	.47	.50	.27	.54	.89	.50	.47	.08	.15	.78	.59	.35
26	17.47	17.48	18.19	19.74	20.18	22.54	22.35	18.99	18.13	17.77	17.57	17.34
27	.46	.45	.15	.71	.34	.56	.23	.89	.11	.76	.52	.32
28	.44	.43	.14	.52	.46	.60	.05	.83	.10	.75	.51	.31
29	.41	.44	.17	.33	.60	.61	21.88	.77	.07	.75		.33
30	.39	.45	.24	.16	.78	.62	.76	.73	.05	.74		.31
31		.47		.05	.92		.67		.04	.74		.30
Mean	17.52	17.54	18.44	18.88	19.50	22.41	23.03	20.16	18.35	17.84	17.69	17.41
Max.	17.64	17.89	18.96	19.74	20.92	23.11	23.75	21.60	18.70	18.02	17.82	17.50
Min.	17.39	17.35	17.45	18.34	18.92	21.18	21.67	18.73	18.04	17.74	17.51	17.30

WATER YEAR 1957 : Max. 23.75 m. Min. 17.30 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	48	37	51	221	385	1,227	1,940	1,272	272	141	92	54
2	46	36	59	233	367	1,337	1,962	1,223	268	145	95	51
3	46	35	133	240	376	1,391	1,979	1,199	259	139	94	53
4	45	35	162	240	394	1,437	2,105	1,122	254	130	92	53
5	61	37	162	253	431	1,555	2,273	1,091	250	126	89	52
6	63	41	186	260	453	1,683	2,391	1,041	248	124	87	52
7	66	59	245	255	434	1,803	2,478	1,007	246	121	86	49
8	54	66	255	255	515	1,846	2,523	962	232	117	81	49
9	50	62	268	238	475	1,912	2,561	933	228	115	84	48
10	51	57	276	240	450	1,984	2,584	903	228	114	97	48
11	51	53	311	228	434	2,076	2,584	862	222	112	104	48
12	51	53	303	352	431	2,153	2,584	818	217	109	107	48
13	55	50	292	391	456	2,184	2,516	782	211	105	102	48
14	61	48	306	370	541	2,166	2,419	750	205	104	102	48
15	66	57	325	325	581	2,041	2,318	718	209	102	97	51
16	69	96	358	322	578	1,951	2,261	694	203	102	94	53
17	71	116	358	361	538	1,874	2,235	673	199	100	94	52
18	66	116	352	382	528	1,835	2,155	655	197	107	90	48
19	63	107	343	385	528	1,708	2,020	628	191	109	87	47
20	59	94	322	391	495	1,647	1,960	598	187	107	84	47
21	57	94	292	376	447	1,598	1,892	566	181	104	82	44
22	53	75	258	403	416	1,598	1,824	526	177	102	78	43
23	53	66	225	434	434	1,677	1,748	466	173	100	77	42
24	51	62	198	498	548	1,745	1,660	417	169	98	75	42
25	48	55	184	558	689	1,819	1,588	374	165	98	72	38
26	50	53	166	625	806	1,841	1,541	342	161	97	69	37
27	49	49	168	615	874	1,874	1,504	312	158	95	57	35
28	46	46	166	551	927	1,896	1,442	298	156	94	56	34
29	43	48	173	489	990	1,901	1,377	284	150	94		36
30	38	49	198	434	1,062	1,907	1,339	279	146	92		34
31		54		400	1,118		1,301		145	92		33
Total	1,630	1,906	7,095	11,325	17,701	53,666	63,064	21,795	6,307	3,395	2,424	1,417
Mean	54.3	61.4	236	365	571	1,789	2,034	726	203	109	865	45.7
Max.	71	116	358	625	1,118	2,184	2,584	1,272	272	145	107	54
Min.	38	35	51	221	367	1,227	1,301	279	145	92	56	33
Runoff – mcm.	140.832	164.678	613.008	978.480	1,529.366	4,636.742	5,448.730	1,883.088	544.925	293.328	209.434	122.429

WATER YEAR 1957 : Max. 2,584 Min. 33 Mean 525 Annual Runoff 16,565.040 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 10	06.00	23.76	2,592				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
CHAO PHYA RIVER BASIN

Chao Phya River at Muang Nakhon Sawan (C.2)

Location: Lat 15°- 40' - 15" N, Long 100°- 06' - 45" E, on left bank 2 kilometers downstream from Dechatiwong Bridge, Amphoe Muang, Nakhon Sawan.

Drainage Area: 111,435 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +17.00 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: On left bank 20 meters west of gage site.
Elevation: B.M.1 +26.258 m. (M.S.L.) and B.M.2 +26.091 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: 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: Rather unstable, shifting adjustment is included for flow computation.

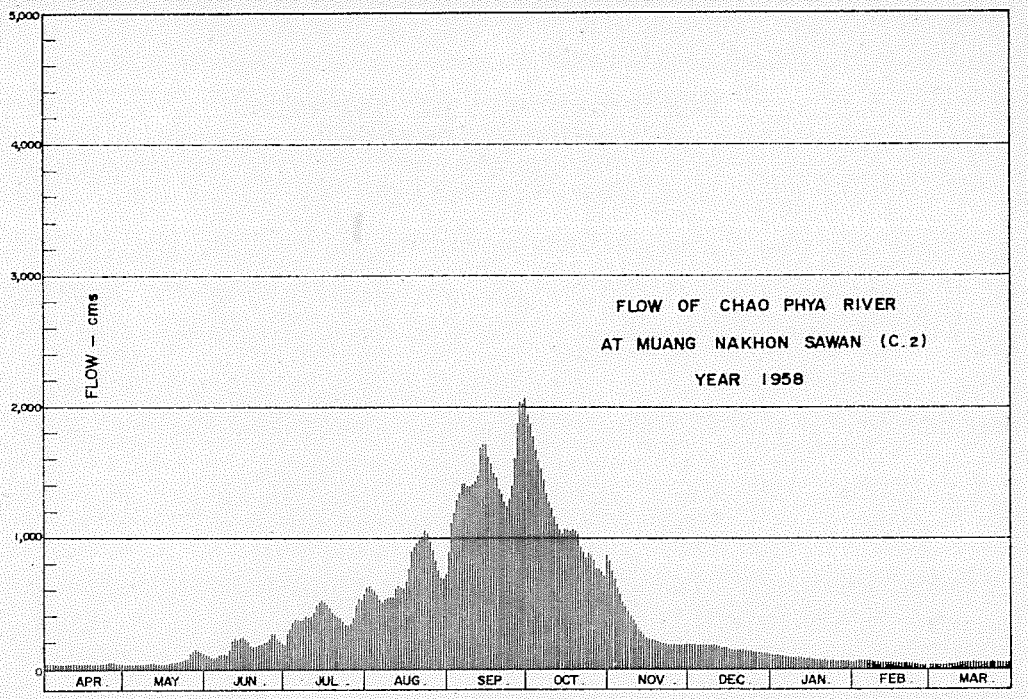
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1958. Upstream state diversions for irrigation of about 70,000 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	17.30	17.31	17.78	18.32	19.71	20.46	23.26	20.65	18.29	17.76	17.42	17.22
2	.29	.32	.71	.57	.73	21.03	.19	.45	.29	.75	.43	.23
3	.28	.33	.66	.88	.70	.22	.07	.26	.28	.74	.44	.24
4	.27	.30	.65	19.02	.68	.46	22.91	.03	.27	.72	.45	.24
5	.26	.33	.70	.05	.58	.57	.75	19.85	.24	.70	.45	.24
6	17.26	17.31	17.75	19.02	19.46	21.71	22.59	19.68	18.22	17.68	17.44	17.24
7	.26	.28	.77	.01	.40	.72	.40	.55	.20	.67	.43	.25
8	.26	.28	.79	.04	.42	.72	.18	.41	.18	.66	.42	.25
9	.26	.30	.81	.12	.46	.73	.01	.31	.17	.65	.41	.25
10	.27	.33	18.02	.11	.49	.75	21.83	.17	.15	.63	.39	.25
11	17.26	17.36	18.32	19.10	19.52	21.80	21.64	19.06	18.13	17.62	17.38	17.25
12	.28	.36	.41	.14	.73	.92	.48	18.95	.12	.60	.37	.28
13	.29	.34	.36	.30	.80	22.38	.36	.86	.09	.58	.37	.33
14	.27	.31	.41	.32	.80	.43	.29	.77	.07	.57	.38	.36
15	.25	.31	.45	.37	.80	.43	.25	.67	.04	.56	.36	.39
16	17.31	17.33	18.40	19.39	19.94	22.40	21.20	18.63	18.02	17.55	17.35	17.39
17	.29	.35	.30	.32	20.21	.29	.18	.59	.01	.54	.34	.38
18	.34	.39	.20	.23	.43	.14	.20	.54	17.99	.52	.33	.38
19	.34	.42	.13	.14	.49	.07	.18	.49	.97	.52	.33	.38
20	.33	.45	.15	.08	.57	21.88	.11	.44	.95	.50	.32	.37
21	17.32	17.48	18.20	19.03	20.62	21.78	21.06	18.41	17.94	17.50	17.30	17.35
22	.31	.52	.25	18.93	.70	.64	20.93	.38	.93	.49	.29	.35
23	.31	.56	.30	.86	.86	.55	.83	.35	.91	.48	.28	.36
24	.35	.62	.33	.78	.91	.59	.81	.32	.90	.47	.27	.37
25	.42	.67	.40	.75	.79	.73	.79	.30	.88	.46	.26	.36
26	17.43	17.89	18.57	18.82	20.61	22.18	20.66	18.29	17.87	17.45	17.24	17.33
27	.37	.98	.53	.96	.39	.75	.49	.28	.85	.45	.24	.32
28	.36	18.01	.48	19.26	.18	23.05	.48	.27	.83	.44	.25	.30
29	.35	17.99	.40	.43	.01	.19	.41	.27	.82	.43		.29
30	.33	.92	.34	.47	19.99	.28	.32	.29	.80	.43		.29
31		.83		.62	20.07		.77		.78	.42		.29
Mean	17.31	17.49	18.15	19.08	20.22	21.96	21.50	18.95	18.04	17.56	17.35	17.31
Max.	17.43	18.01	18.57	19.62	20.91	23.28	23.26	20.65	18.29	17.76	17.45	17.39
Min.	17.25	17.28	17.65	18.32	19.40	20.46	20.32	18.27	17.78	17.42	17.24	17.22

WATER YEAR 1958 : Max. 23.28 m. Min. 17.22 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	32	34	108	188	621	898	1,942	825	195	113	59	34
2	31	35	94	279	628	1,117	1,875	756	195	111	61	35
3	30	38	84	319	605	1,196	1,777	694	193	110	62	37
4	30	35	82	359	598	1,298	1,677	622	192	106	64	37
5	29	38	92	380	565	1,346	1,591	566	189	103	64	37
6	28	36	102	371	527	1,408	1,535	517	191	100	62	37
7	28	33	106	368	509	1,412	1,445	481	189	98	61	38
8	30	33	110	377	531	1,390	1,347	443	186	97	59	40
9	30	35	102	401	543	1,894	1,274	416	185	95	58	40
10	30	38	143	398	553	1,403	1,237	380	183	92	55	40
11	30	41	208	404	543	1,425	1,166	352	181	90	55	40
12	31	41	230	431	611	1,479	1,105	301	179	87	54	43
13	32	39	217	491	634	1,691	1,061	281	176	84	54	51
14	30	36	230	506	615	1,715	1,035	263	174	83	55	55
15	29	36	240	521	615	1,715	1,079	244	169	81	52	59
16	34	38	227	509	661	1,611	1,061	237	158	80	51	59
17	32	40	203	488	774	1,561	1,053	230	156	75	49	58
18	37	44	179	461	894	1,493	1,061	222	152	72	48	58
19	37	47	169	434	935	1,461	1,053	216	149	72	48	58
20	36	50	173	416	966	1,377	1,028	210	145	70	46	56
21	35	53	184	401	985	1,333	936	206	143	70	43	54
22	37	58	188	383	1,015	1,272	889	203	142	68	42	54
23	37	63	200	362	1,058	1,234	853	199	143	68	41	55
24	41	74	208	339	1,039	1,290	882	193	142	67	40	56
25	48	76	232	330	977	1,390	875	191	138	65	39	55
26	49	120	276	350	909	1,593	828	195	136	64	37	51
27	43	137	266	398	829	1,871	769	193	133	64	37	49
28	39	143	227	488	757	2,029	766	192	129	62	38	46
29	38	139	208	540	699	2,018	742	192	127	61		45
30	36	126	193	521	692	2,066	713	195	124	61		45
31		108		578	733		867		120	59		45
Total	1,029	1,864	5,281	12,791	22,621	44,486	35,522	10,215	5,014	2,528	1,434	1,467
Mean	34.3	60.1	176	413	730	1,483	1,146	340	162	81.5	51.2	47.3
Max.	49	143	276	578	1,058	2,066	1,942	825	195	113	64	59
Min.	28	33	82	188	509	898	713	191	120	59	37	34
Runoff - MCM.	88.906	161.050	456.278	1,105.142	1,954.454	3,843.590	3,069.101	882.576	433.210	218.419	123.898	126.749

WATER YEAR 1958 : Max. 2,066 Min. 28 Mean 395 Annual Runoff 12,463.373mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 30	06.00	23.28	2,066				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHAO PHYA RIVER BASIN

Chao Phya River at Muang Nakhon Sawan (C.2)

Location: Lat 15°– 40' – 15" N, Long 100°– 06' – 45" E, on left bank 2 kilometers downstream from Dechatiwong Bridge, Amphoe Muang, Nakhon Sawan.

Drainage Area: 111,435 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +17.00 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D.

Location: On left bank 20 meters west of gage site.
Elevation: B.M.1 +26.258 m. (M.S.L.) and B.M.2 +26.091 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: 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: Rather unstable, shifting adjustment is included for flow computation.

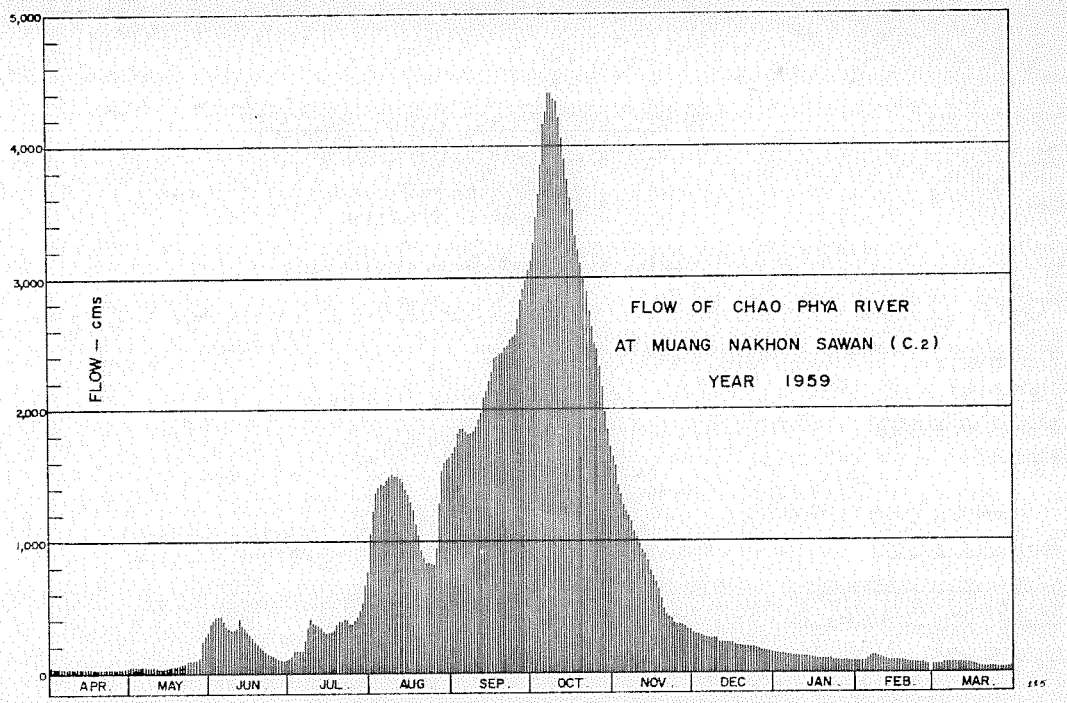
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1959. Upstream state diversions for irrigation of about 70,000 hectares. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	17.27	17.26	18.91	17.79	21.01	22.30	24.41	22.36	18.95	18.21	17.81	17.57
2	.25	.26	19.03	.93	.41	.40	.65	.17	.91	.19	.81	.56
3	.25	.26	.11	18.02	.55	.59	.84	21.94	.91	.17	.80	.55
4	.26	.26	.11	.06	.60	.64	.01	.81	.89	.15	.82	.55
5	.25	.28	.06	.05	.65	.64	.21	.65	.87	.13	.93	.63
6	17.24	17.31	18.92	18.10	21.62	22.60	25.41	21.51	18.86	18.10	18.03	17.67
7	.23	.30	.84	.35	.72	.56	.49	.38	.82	.09	.07	.65
8	.23	.29	.75	.81	.75	.58	.52	.26	.80	.08	.04	.64
9	.20	.27	.73	.97	.79	.62	.52	.06	.77	.07	.01	.66
10	.19	.26	.78	.95	.81	.69	.50	20.97	.76	.05	17.95	.65
11	17.19	17.25	18.95	18.90	21.83	22.78	25.45	20.85	18.73	18.03	17.90	17.64
12	.20	.24	19.03	.87	.79	.90	.39	.74	.68	.02	.87	.62
13	.19	.21	18.94	.83	.74	23.05	.31	.64	.66	.01	.83	.61
14	.18	.21	.84	.74	.65	.15	.23	.62	.62	.00	.81	.60
15	.17	.22	.76	.68	.57	.25	.13	.44	.60	17.99	.78	.59
16	17.15	17.25	18.64	18.64	21.45	23.39	25.03	20.33	18.57	17.98	17.78	17.57
17	.14	.30	.55	.65	.30	.44	24.95	.19	.55	.96	.75	.47
18	.13	.35	.43	.75	.08	.45	.83	19.99	.53	.95	.74	.45
19	.12	.38	.30	.88	20.87	.49	.73	.77	.52	.94	.73	.44
20	.12	.46	.22	.95	.70	.50	.62	.59	.51	.92	.72	.42
21	17.11	17.52	18.11	18.97	20.52	23.50	24.49	19.45	18.49	17.90	17.70	17.41
22	.10	.58	.00	19.04	.43	.51	.35	.37	.46	.89	.69	.40
23	.11	.64	17.92	.04	.39	.58	.19	.29	.43	.87	.68	.39
24	.12	.67	.86	18.98	.35	.66	.03	.24	.41	.86	.65	.38
25	.13	.68	.79	.98	.33	.76	23.86	.21	.39	.85	.64	.37
26	17.13	17.71	17.73	19.03	20.54	23.93	23.67	19.18	18.36	17.82	17.62	17.36
27	.13	.74	.69	.17	21.35	24.09	.47	.15	.33	.82	.61	.36
28	.16	18.32	.67	.34	21.87	.24	.24	.09	.31	.81	.59	.35
29	.19	.52	.66	.66	22.16	.32	.01	.03	.28	.81	.59	.34
30	.22	.65	.72	20.00	.20	.31	22.80	.00	.25	.81		.34
31		.83		.47	.40		.57		.24	.81		.34
Mean	17.18	17.53	18.47	18.82	21.37	23.23	24.58	20.38	18.59	17.98	17.79	17.50
Max.	17.27	18.83	19.11	20.47	22.40	24.32	25.52	22.36	18.95	18.21	18.07	17.67
Min.	17.10	17.21	17.66	17.79	20.33	22.30	22.57	19.00	18.24	17.81	17.59	17.34

WATER YEAR 1959 : Max. 25.52 m. Min. 17.10 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	41	46	381	117	1,060	1,670	3,136	1,638	298	152	89	51
2	39	46	414	142	1,236	1,720	3,265	1,565	301	148	89	56
3	39	46	438	167	1,370	1,819	3,450	1,405	301	144	87	55
4	40	46	438	174	1,416	1,847	3,623	1,343	283	141	90	55
5	39	48	423	165	1,439	1,847	3,850	1,269	279	137	108	65
6	38	50	381	174	1,425	1,825	4,143	1,205	277	132	124	70
7	37	47	352	247	1,472	1,803	4,279	1,196	268	130	130	67
8	37	46	329	360	1,486	1,814	4,390	1,145	263	128	125	66
9	35	43	324	408	1,505	1,836	4,390	1,061	268	127	120	69
10	35	42	337	378	1,481	1,875	4,352	1,023	266	124	111	67
11	35	41	357	363	1,491	1,925	4,333	972	232	120	103	66
12	36	40	408	355	1,472	1,993	4,219	926	230	122	98	64
13	35	39	360	344	1,448	2,082	4,046	897	234	120	95	62
14	36	39	334	316	1,388	2,140	3,895	848	234	119	92	61
15	35	40	314	302	1,352	2,202	3,740	775	230	117	87	60
16	32	43	284	302	1,298	2,286	3,605	737	223	116	87	57
17	32	49	262	304	1,232	2,385	3,504	688	216	106	83	46
18	31	52	236	339	1,135	2,392	3,304	639	212	104	82	35
19	30	55	223	375	1,042	2,419	3,201	562	210	108	80	34
20	30	66	182	396	938	2,426	3,103	483	208	106	79	32
21	26	74	165	387	868	2,468	2,997	440	204	103	76	31
22	25	84	151	408	833	2,475	2,892	428	201	101	71	31
23	26	93	140	408	837	2,524	2,745	406	195	98	70	34
24	27	98	133	378	822	2,545	2,633	378	192	96	66	33
25	28	98	126	378	814	2,566	2,514	368	188	95	65	32
26	28	101	116	393	942	2,685	2,458	375	179	90	62	31
27	28	104	101	435	1,293	2,827	2,318	366	173	90	55	31
28	35	231	98	486	1,535	2,923	2,166	350	170	90	53	31
29	38	256	96	558	1,600	2,991	1,968	330	164	89	53	30
30	41	287	106	671	1,620	3,051	1,842	322	159	89		30
31		331		841	1,640		1,705		157	89		30
Total	1,014	2,681	8,009	11,071	39,480	67,361	102,066	24,140	7,015	3,531	2,530	1,482
Mean	33.8	86.5	267	357	1,274	2,245	3,292	805	226	114	87.2	47.8
Max.	41	331	438	841	1,640	3,051	4,390	1,638	301	152	130	70
Min.	25	39	96	117	814	1,670	1,705	322	157	89	53	30
Runoff - mcm.	87.610	231.638	691.978	956.534	3,411.936	5,819.990	8,818.502	2,085.696	606.096	305.078	218.592	128.045

WATER YEAR 1959 : Max. 4,390 Min. 25 Mean 739 Annual Runoff 23,361.696 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 8	18.00	25.57	4,509				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
CHAO PHYA RIVER BASIN

Chao Phya River at Ban Bang Kaeo, Ang Thong (C.7)

Location: Lat 14°- 35' - 05" N, Long 100°- 27' - 12" E, on left bank infront of the police station, Amphoe Muang, Ang Thong.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.94 m. (M.S.L.)

Bench Mark: B.M. - C.7

Location: On left bank infront of Muang Ang Thong police station.
Elevation: +6.569 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: 1930 to date.

Rating Operation:

Period of Rating: 1955
Rated by Float: -
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed but not included for flow computation.

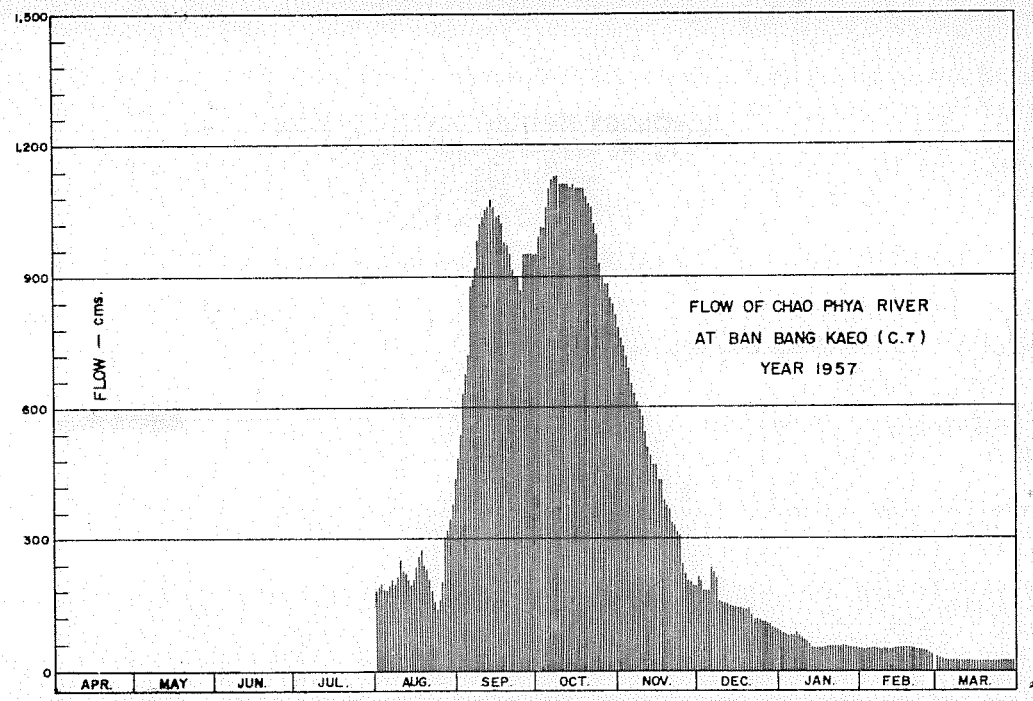
General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

Remarks: No gage height record for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1					2.75	4.44	6.04	5.61	2.98	1.94	1.44	1.17
2					.81	.69	.12	.53	.91	.87	.44	.12
3					.84	5.09	.13	.47	.75	.85	.44	.06
4					.76	.26	.13	.40	.76	.84	.44	.02
5					.75	.41	.19	.31	.78	.84	.44	.01
6					2.84	5.90	6.24	5.17	3.12	1.85	1.44	1.01
7					.92	.94	.26	.10	.05	.92	.44	.00
8					.86	.99	.27	.01	2.97	.84	.43	.03
9					.99	6.09	.27	4.94	.57	.79	.43	.00
10					3.22	.14	.25	.83	.54	.73	.43	0.99
11					3.05	6.16	6.25	4.72	2.54	1.67	1.43	0.99
12					.02	.18	.25	.58	.52	.58	.43	.99
13					2.93	.19	.25	.49	.49	.49	.44	.97
14					.84	.21	.24	.40	.45	.49	.46	.96
15					.92	.19	.25	.40	.46	.49	.48	.96
16					3.14	6.16	6.24	4.23	2.44	1.49	1.49	0.96
17					.28	.17	.24	.23	.44	.49	.49	.95
18					.26	.14	.24	.01	.42	.51	.48	.95
19					.14	.08	.24	3.95	.41	.52	.47	.95
20					.09	.07	.22	.91	.40	.52	.46	.95
21					2.92	6.04	6.20	3.74	2.32	1.52	1.45	0.95
22					.74	5.98	.19	.70	.22	.52	.43	.95
23					.57	.94	.14	.62	.24	.52	.41	.95
24					.41	.94	.11	.58	.20	.52	.40	.95
25					.59	.88	.02	.18	.15	.52	.39	.95
26					2.91	6.04	5.94	3.03	2.15	1.52	1.37	0.94
27					3.55	.04	.91	2.92	.12	.48	.31	.94
28					.65	.04	.91	.90	.08	.48	.26	.94
29					.76	.04	.82	.84	.04	.47		1.00
30					.94	.04	.78	.84	.01	.46		.04
31					4.23		.71		1.98	.44		1.00
Mean					3.02	5.71	6.13	4.39	2.46	1.62	1.41	0.96
Max.					4.23	6.21	6.27	5.61	3.12	1.94	1.49	1.17
Min.					2.41	4.44	5.71	2.84	1.98	1.44	1.26	0.94

WATER YEAR 1957 : Max. 6.27 m. Min. 0.94 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1					183	479	950	781	215	91	50	32
2					190	536	1,005	757	205	84	50	29
3					195	633	1,013	739	183	83	50	26
4					184	677	1,013	718	184	82	50	24
5					183	721	1,058	691	186	82	50	24
6					195	875	1,101	653	236	83	50	24
7					206	895	1,119	635	226	89	50	23
8					197	919	1,128	613	214	82	49	25
9					217	983	1,128	596	159	77	49	23
10					251	1,020	1,110	569	156	72	49	23
11					226	1,025	1,110	543	156	68	49	23
12					221	1,050	1,110	510	153	60	49	23
13					208	1,058	1,110	490	150	53	50	22
14					195	1,074	1,101	471	145	53	51	21
15					206	1,058	1,110	471	146	53	53	21
16					239	1,035	1,110	435	144	53	53	21
17					261	1,043	1,101	435	144	53	53	21
18					258	1,020	1,101	390	141	55	53	21
19					239	977	1,101	379	140	56	52	21
20					232	970	1,083	371	139	56	51	21
21					206	950	1,065	339	129	56	51	21
22					181	914	1,058	332	118	56	49	21
23					159	895	1,020	318	120	56	48	21
24					140	895	998	311	116	56	47	21
25					162	868	937	245	111	56	46	21
26					205	950	895	223	111	56	45	21
27					306	950	880	206	108	53	41	21
28					323	950	880	203	104	53	38	21
29					343	950	849	195	100	52		23
30					377	950	836	195	97	51		25
31					435		813		94	50		23
Total					7,123	26,435	31,884	13,814	4,630	1,980	1,376	707
Mean					229	881	1,028	460	149	63	49	22
Max.					435	1,074	1,128	781	236	91	53	32
Min.					140	479	813	195	94	50	38	21
Runoff – mcm.					615.427	2,283.984	2,754.778	1,193.530	400.032	171.072	118.886	61.085

WATER YEAR 1957 : Max. 1,128 Min. 21 Mean – Annual Runoff – mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 8	06.00	6.27	1,128				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHAO PHYA RIVER BASIN

Chao Phya River at Ban Bang Kaeo, Ang Thong (C.7)

Location: Lat 14°- 35' - 05" N, Long 100°- 27' - 12" E, on left bank infront of the police station, Amphoe Muang, Ang Thong.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.94 m. (M.S.L.)

Bench Mark: B.M. - C.7

Location: On left bank infront of Muang Ang Thong police station.
Elevation: +6.569 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: 1930 to date.

Rating Operation:

Period of Rating: 1955
Rated by Float: -
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed but not included for flow computation.

General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

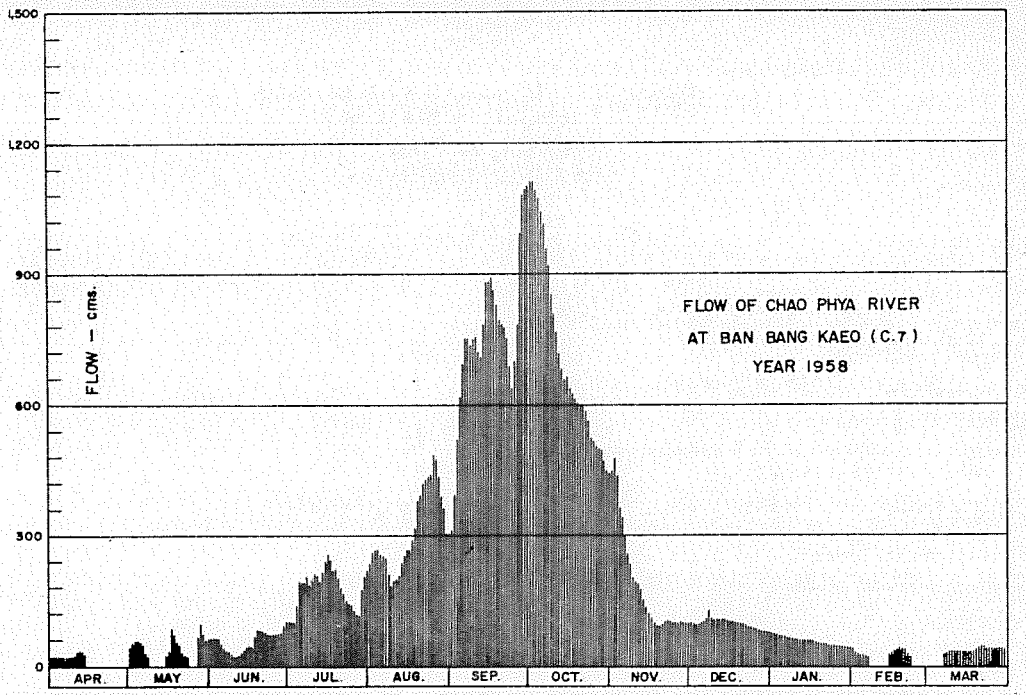
Remarks: No gage height record for many days.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.95	1.34	1.63	2.08	3.13	3.59	6.25	4.29	2.04	1.78	1.32	
2	.95	.50	.64	.06	.28	4.02	.25	.42	.02	.75	.15	
3	.95	.53	.63	.06	.31	.61	.23	.24	1.99	.73	.11	
4	.95	.56	.59	.42	.33	5.02	.21	3.89	2.00	.70	.07	
5	.95	.55	.43	.84	.23	.31	.18	.76	.05	.69	.04	
6	0.95	1.50	1.31	2.82	3.23	5.51	6.13	3.51	2.10	1.67	1.02	
7	.95	.41	.19	.82	.20	.51	.05	.26	.17	.64	1.00	1.09
8	.95	.11	.17	.91	2.95	.46	5.99	.11	.31	.62		.17
9	1.00	0.99	.08	.78	.77	.50	.83	2.91	.14	.61		.19
10	.08		0.98	.86	.84	.52	.69	.84	.12	.59		.21
11	1.17			2.96	2.88	5.41	5.56	2.79	2.12	1.59		1.21
12	.24			.92	.94	.37	.39	.69	.12	.58		.21
13	.16			.84	3.14	.61	.28	.51	.12	.58		.21
14	.06		1.27	.99	.23	.91	.18	.38	.12	.58		.19
15		1.04	.36	3.16	.33	.91	.20	.25	.08	.57	1.04	.18
16		1.22	1.38	3.25	3.33	5.93	5.11	2.14	2.07	1.57	1.22	1.18
17		.90	.36	.17	.46	.86	.06	.04	.07	.53	.25	.18
18		.69	.68	.02	.61	.76	.01	1.98	.06	.51	.30	.20
19		.51	.84	2.97	.96	.65	4.98	.94	.05	.49	.33	.27
20		.41	.84	.90	4.02	.62	.95	2.03	.04	.48	.29	.36
21		1.13	1.81	2.72	4.15	5.59	4.94	2.08	2.01	1.48	1.27	1.39
22		.03	.77	.62	.20	.51	.86	.11	1.98	.47	.08	.34
23		0.96	.74	.48	.22	.29	.79	.08	.96	.46	0.98	.32
24			.74	.44	.26	.11	.64	.06	.93	.42		.32
25			.74	.42	.46	.33	.61	.06	.92	.41		.32
26			1.75	2.31	4.42	5.61	4.57	2.04	1.89	1.41		1.32
27		1.66	.75	.24	.23	.99	.54	.06	.86	.40		.32
28		2.00	.80	.20	.01	6.21	.52	.04	.84	.40		.32
29	1.05	1.78	.95	.69	3.86	.23	.41	.04	.83	.39		.32
30	.17	.58	2.06	.92	.54	.24	.32	.04	.81	.37		.32
31		.62		3.03	.55		.26		.80	.34		.32
Mean				2.71	3.55	5.25	5.26	2.65	2.02	1.51		
Max.				3.25	4.46	6.24	6.25	4.42	2.31	1.78		
Min.				2.06	2.77	3.59	4.26	1.94	1.80	1.34		

WATER YEAR 1958 : Max. 6.25 m. Min. 0.95 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	21	43	64	104	238	312	1,110	448	100	76	41	
2	21	54	65	102	261	392	1,110	475	98	74	31	
3	21	56	64	102	266	517	1,092	437	95	72	29	
4	21	59	61	141	269	615	1,074	367	96	70	27	
5	21	58	49	195	253	691	1,050	343	101	69	25	
6	21	54	41	192	253	751	1,013	299	106	68	24	
7	21	48	33	192	248	751	957	258	113	65	23	28
8	21	29	32	205	211	736	919	235	128	64		32
9	23	23	27	186	185	748	852	205	110	63		33
10	27		22	197	195	754	807	195	108	61		35
11	32			212	202	721	766	188	108	61		35
12	36			206	209	709	715	175	108	60		35
13	32			195	239	781	683	152	108	60		35
14	26		38	217	253	880	656	137	108	60		33
15		25	44	242	269	880	661	122	104	60	25	33
16		35	46	256	269	890	638	110	103	60	35	33
17		87	44	244	290	862	625	100	103	56	37	33
18		69	68	221	316	829	613	94	102	55	40	34
19		55	82	214	380	794	605	91	101	53	42	38
20		48	82	203	392	784	598	99	100	53	39	44
21		30	79	179	419	775	596	104	97	53	38	46
22		25	76	166	429	751	576	107	94	52	27	43
23		21	73	149	433	685	557	104	92	51	22	41
24			73	144	442	638	524	102	90	48		41
25			73	141	484	697	517	102	89	48		41
26			74	128	475	781	508	100	86	48		41
27		67	74	120	435	919	501	102	83	47		41
28		96	78	116	390	1,074	497	100	82	47		41
29	26	76	92	175	361	1,092	473	100	81	46		41
30	32	60	102	206	304	1,101	454	100	79	45		41
31		64		223	306		442		78	43		41
Total				5,573	9,676	22,910	22,189	5,551	3,051	1,788		
Mean				179	312	763	715	185	98	57		
Max.				256	484	1,101	1,110	475	128	76		
Min.				102	185	312	442	91	78	43		
Runoff - mcm.				481.507	836.006	1,979.424	1,917.130	479.606	263.606	154.483		

WATER YEAR 1958 : Max. 1,110 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 1	06.00	6.25	1,110				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHAO PHYA RIVER BASIN

Chao Phya River at Ban Bang Kaeo, Ang Thong (C.7)

Location: Lat 14°- 35' - 05" N, Long 100°- 27' - 12" E, on left bank infront of the police station, Amphoe Muang, Ang Thong.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.94 m. (M.S.L.)

Bench Mark: B.M. - C.7

Location: On left bank infront of Muang Ang Thong police station.
Elevation: +6.596 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: 1930 to date.

Rating Operation:

Period of Rating: 1955
Rated by Float: -
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No over bank flow.

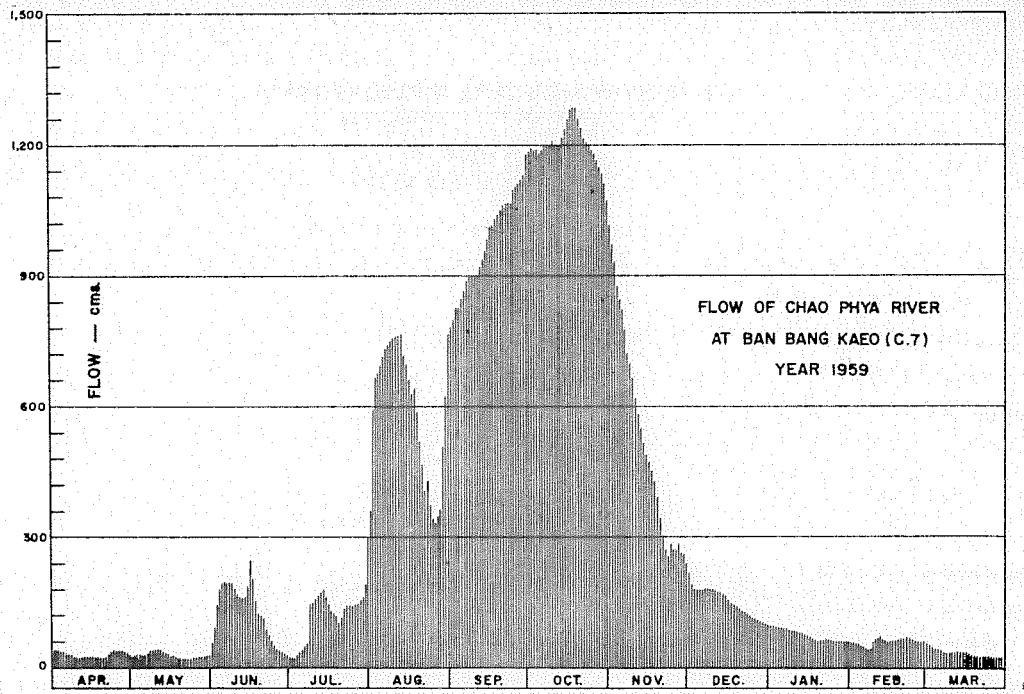
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.32	1.07	1.59	1.03	3.79	5.64	6.33	6.14	3.07	1.98	1.54	1.48
2	.32	.10	.73	0.99	4.64	.67	.33	.09	2.79	.96	.52	.42
3	.29	.14	2.41	.99	5.22	.74	.33	5.99	.70	.94	.50	.38
4	.27	.14	.72	1.12	.25	.78	.33	.90	.69	.94	.47	.35
5	.24	.12	.84	.22	.33	.83	.32	.82	.69	.93	.42	.33
6	1.20	1.12	2.84	1.33	5.39	5.89	6.33	5.71	2.70	1.90	1.37	1.30
7	.16	.16	.84	.43	.44	.93	.34	.56	.73	.89	.35	.22
8	.10	.29	.86	.50	.47	.94	.34	.40	.74	.87	.35	.21
9	.05	.31	.83	2.44	.51	.94	.34	.29	.73	.85	.53	.21
10	.01	.31	.75	.48	.54	.94	.35	.19	.72	.84	.60	.22
11	1.01	1.33	2.63	2.56	5.54	5.95	6.34	5.02	2.70	1.83	1.65	1.22
12	.04	.33	.59	.62	.54	.98	.34	4.86	.67	.82	.70	.23
13	.08	.24	.57	.66	.55	6.01	.34	.71	.64	.79	.65	.23
14	.08	.19	.59	.73	.41	.05	.36	.62	.62	.75	.59	.24
15	.08	.13	.79	.62	.32	.10	.38	.48	.60	.72	.56	.25
16	1.06	1.09	3.21	2.48	5.20	6.13	6.40	4.42	2.52	1.67	1.56	1.20
17	.04	.07	2.91	.34	.07	.13	.42	.28	.44	.63	.58	.14
18	.04	.02	.52	.28	.11	.15	.42	.19	.42	.61	.60	.07
19	.04	0.99	.28	.15	4.95	.16	.42	3.98	.40	.59	.61	.05
20	.01	.98	.22	.04	.56	.18	.41	.79	.37	.57	.63	.05
21	1.06	0.97	2.14	2.18	4.27	6.19	6.39	3.59	2.32	1.57	1.64	1.04
22	.20	.97	1.90	.36	.05	.20	.36	.35	.28	.63	.72	.03
23	.24	.99	.75	.41	.19	.20	.35	.23	.26	.61	.67	.03
24	.29	.99	.58	.41	3.89	.20	.34	.35	.21	.59	.64	.02
25	.29	1.01	.41	.42	.78	.23	.33	.33	.17	.57	.59	.02
26	1.29	1.04	1.40	2.42	3.69	6.24	6.32	3.33	2.14	1.56	1.56	1.01
27	.27	.03	.33	.44	.83	.25	.31	.35	.10	.56	.55	.01
28	.25	.02	.25	.48	4.53	.26	.30	.31	.07	.56	.55	.00
29	.21	.03	.22	.56	.87	.27	.28	.28	.06	.55	.54	.00
30	.14	.09	.10	.81	5.31	.32	.26	.21	.03	.55		.03
31		.27		3.31	.55		.21		1.99	.54		.07
Mean	1.16	1.11	2.18	2.15	4.83	6.05	6.34	4.49	2.52	1.72	1.56	1.16
Max.	1.32	1.33	3.21	3.31	5.55	6.32	6.42	6.14	3.07	1.98	1.72	1.48
Min.	1.01	0.97	1.10	0.99	3.69	5.64	6.21	3.21	1.99	1.54	1.35	1.00

WATER YEAR 1959 : Max. 6.42 m. Min. 0.97 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	41	27	61	25	348	791	1,185	1,020	229	94	57	53
2	41	28	72	23	524	800	1,185	983	188	92	56	48
3	39	30	140	23	666	823	1,185	919	176	91	56	46
4	38	30	179	29	675	836	1,185	875	175	91	52	44
5	36	29	195	35	697	852	1,175	849	175	90	48	42
6	34	29	195	42	715	872	1,185	813	176	87	45	40
7	32	32	195	49	730	890	1,195	766	180	86	44	35
8	28	39	197	54	739	895	1,195	718	181	84	44	35
9	26	41	193	144	751	895	1,195	685	180	83	56	35
10	24	41	183	149	760	895	1,205	658	179	82	62	35
11	24	42	167	158	760	899	1,195	615	176	81	66	35
12	25	42	162	166	760	914	1,195	576	172	80	70	36
13	27	36	159	171	763	913	1,195	540	168	77	66	36
14	27	33	162	180	721	957	1,215	520	166	74	61	36
15	27	30	188	166	694	990	1,235	488	163	72	59	37
16	26	28	250	149	661	1,013	1,255	475	151	68	59	34
17	25	27	205	132	628	1,013	1,282	446	144	64	60	30
18	25	24	153	125	638	1,028	1,282	427	141	63	62	27
19	25	23	125	111	598	1,035	1,282	384	139	61	63	26
20	24	22	118	100	509	1,050	1,269	348	135	60	64	26
21	26	22	110	114	444	1,058	1,245	312	129	60	65	25
22	34	22	87	134	398	1,065	1,215	272	125	64	72	25
23	36	23	74	140	427	1,065	1,205	253	123	63	68	25
24	39	23	60	140	367	1,065	1,195	272	117	61	65	24
25	39	24	48	141	346	1,092	1,185	269	113	60	61	24
26	39	25	47	141	330	1,101	1,175	269	110	59	59	24
27	38	25	42	144	356	1,110	1,165	272	106	59	58	24
28	37	24	37	149	499	1,119	1,155	266	103	59	58	23
29	35	25	35	158	579	1,128	1,137	261	102	58	57	23
30	30	28	28	190	691	1,175	1,119	250	99	58		25
31		38		266	763		1,074		95	57		27
Total	947	912	3,867	3,748	18,477	29,358	37,165	15,801	4,616	2,238	1,711	1,005
Mean	32	29	129	121	596	979	1,199	527	149	72	59	32
Max.	41	42	250	266	763	1,175	1,282	1,020	229	94	72	53
Min.	24	22	28	23	330	791	1,074	250	95	57	44	23
Runoff - mcm.	81.820	78.797	334.108	323.827	1,596.412	2,536.531	3,211.056	1,365.206	398.822	193.363	147.830	86.832

WATER YEAR 1959 : Max. 1,282 Min. 22 Mean 327 Annual Runoff 10,354.603 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 17	12.00	6.42	1,282				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
CHAO PHYA RIVER BASIN

Chao Phya River at Wat Pho Ngam, Chai Nat (C.13)

Location: Lat 19°- 09' - 57" N, Long 100°- 11' - 32" E, on left bank 1,500 meters downstream from Chao Phya Diversion Dam, Amphoe Samphaya, Chai Nat.

Drainage Area: 120,693 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 7.00 m. (M.S.L.)

Bench Mark: B.M. - C.13

Location: On left bank 5 meters from B.M. - H.S./R.I.D. No.1
Elevation: + 15.634 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: 1947 to date.

Rating Operation:

Period of Rating: 1947 - 49, 1951 - 59 and 1961 - 62
Rated by Float: -
Rated by Current Meter: 1947 - 49, 1951 - 59 and 1961 - 62

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

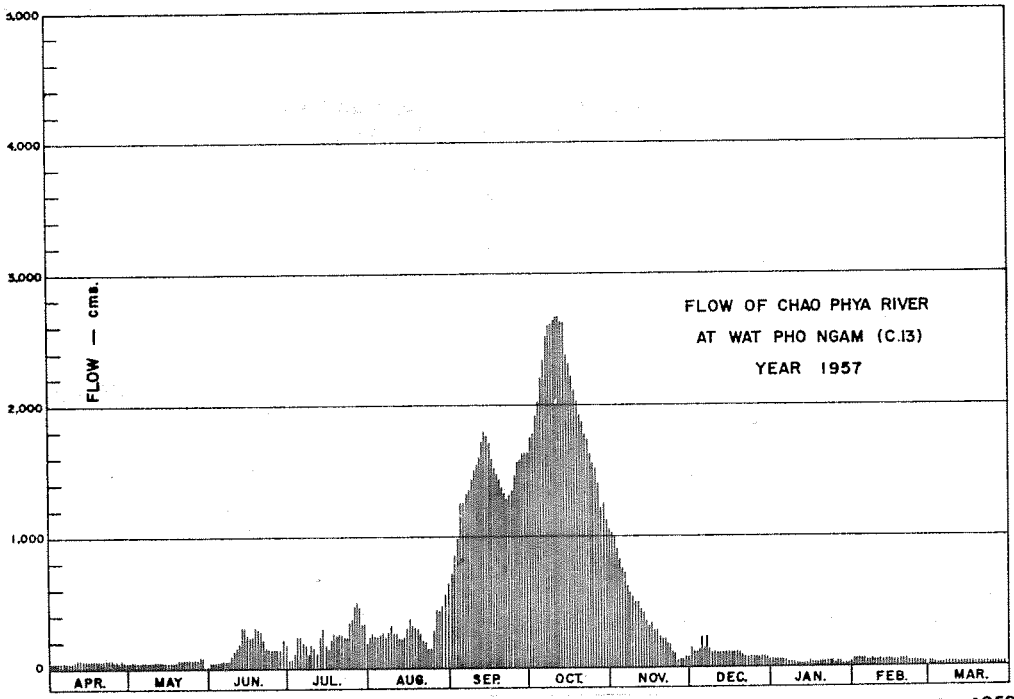
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1957. Flow regulated by Chao Phya Diversion. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.11	7.23	7.26	7.34	8.60	10.48	13.37	11.53	8.19	7.53	7.35	7.11
2	.13	.24	.23	.40	.65	.91	.49	.42	.06	.52	.37	.08
3	.14	.23	.23	.85	.51	11.32	.72	.25	.05	.53	.40	.02
4	.16	.21	.23	8.70	.51	.83	.98	.06	.20	.53	.35	.00
5	.18	.19	.25	.73	.59	12.45	14.33	10.90	.61	.52	.35	6.90
6	7.16	7.18	7.28	8.52	8.73	12.30	14.55	10.62	8.51	7.51	7.35	6.90
7	.21	.23	.32	7.69	.55	.52	.76	.43	.65	.43	.33	.98
8	.23	.23	.33	.77	.66	.62	.89	.20	.14	.43	.34	.98
9	.23	.24	.62	8.23	9.07	.91	.91	.08	.00	.43	.33	.97
10	.21	.24	.94	.26	8.67	13.13	.98	9.95	.01	.31	.34	.97
11	7.48	7.24	8.05	8.08	8.66	13.28	14.97	9.85	8.00	7.21	7.34	6.97
12	.48	.18	.22	7.80	.49	.45	.96	.55	7.99	.27	.34	.97
13	.48	.17	.90	8.73	.44	.56	.93	.53	8.00	.28	.34	.97
14	.34	.17	.87	9.06	.47	.65	.94	.31	.00	.28	.39	.90
15	.33	.17	.59	8.64	.84	.58	.71	.23	.00	.33	.39	.94
16	7.33	7.17	8.50	8.06	9.09	13.47	14.61	9.23	8.00	7.35	7.39	6.95
17	.37	.18	.60	.33	.07	.35	.49	8.95	.00	.35	.35	.95
18	.45	.24	.79	.58	8.89	.17	.39	.93	.00	.35	.31	.95
19	.46	.31	.84	.57	.88	12.94	.24	.84	.00	.35	.31	.95
20	.46	.41	.76	.55	.73	.83	.05	.67	7.90	.40	.31	.91
21	7.47	7.41	8.54	8.65	8.44	12.63	13.97	8.64	7.75	7.40	7.31	6.90
22	.46	.43	.15	.61	.33	.47	.76	.46	.75	.40	.30	.90
23	.45	.43	.04	.51	.05	.53	.57	.23	.75	.40	.30	.90
24	.44	.43	.04	.93	.06	.60	.43	7.90	.76	.39	.30	.90
25	.43	.42	.04	9.18	.75	.93	.15	.66	.75	.39	.23	.89
26	7.37	7.40	8.02	9.38	9.41	12.94	12.98	7.53	7.74	7.39	7.15	6.89
27	.17	.39	.02	.73	.39	13.08	.70	.62	.75	.39	.14	.88
28	.31	.45	7.95	.56	.43	.14	.45	.64	.74	.32	.06	7.05
29	.28	.62	.60	.08	.66	.15	.27	8.28	.75	.34		.06
30	.17	.80	.35	8.57	.93	.15	.00	.33	.75	.33		.06
31		.48		.32	10.18		11.71		.53	.33		6.91
Mean	7.32	7.31	7.98	8.50	8.83	12.74	13.91	9.33	7.98	7.39	7.31	6.96
Max.	7.48	7.80	8.90	9.73	10.18	13.65	14.98	11.53	8.65	7.53	7.40	7.11
Min.	7.11	7.17	7.23	7.34	8.05	10.48	11.71	7.53	7.53	7.21	7.06	6.88

WATER YEAR 1957 : Max. 14.98 m. Min. 6.88 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	46	55	59	65	250	711	1,735	1,031	157	70	65	42
2	47	56	57	70	267	813	1,793	1,006	132	69	66	44
3	48	55	57	116	249	955	1,912	918	127	68	69	33
4	50	54	57	245	249	1,119	2,015	826	148	68	65	32
5	51	52	59	250	265	1,262	2,216	769	238	66	65	28
6	50	51	61	213	284	1,266	2,357	747	168	60	65	32
7	54	55	65	99	245	1,337	2,506	641	243	50	55	37
8	55	56	66	107	297	1,361	2,607	594	150	50	62	32
9	55	58	97	184	332	1,476	2,614	540	120	50	60	32
10	54	59	138	184	272	1,533	2,656	507	121	38	59	33
11	78	57	159	156	272	1,574	2,663	507	121	35	66	37
12	78	52	196	116	243	1,669	2,670	457	120	35	66	32
13	78	51	318	250	236	1,807	2,635	433	121	35	60	33
14	65	52	312	316	241	1,798	2,621	360	120	35	66	27
15	64	52	259	243	312	1,762	2,387	328	122	50	67	31
16	64	51	240	145	380	1,708	2,333	342	125	52	66	31
17	67	52	256	199	342	1,558	2,239	291	127	46	55	32
18	75	57	318	265	312	1,501	2,155	288	128	45	64	34
19	76	64	305	259	314	1,425	2,052	254	130	45	62	34
20	76	74	291	263	290	1,397	1,932	224	117	53	65	32
21	77	74	245	272	231	1,341	1,867	232	91	49	59	34
22	76	76	169	258	207	1,282	1,807	198	93	51	54	33
23	75	77	153	240	153	1,305	1,735	184	94	47	56	34
24	74	78	154	354	154	1,357	1,639	123	89	61	59	36
25	73	78	156	393	288	1,469	1,574	104	97	39	55	35
26	67	76	148	471	452	1,570	1,529	56	96	58	51	37
27	51	75	151	502	440	1,587	1,369	68	94	53	46	37
28	62	92	141	462	454	1,639	1,224	75	98	30	40	37
29	59	99	234	348	512	1,639	1,255	189	96	39		33
30	51	131	190	249	569	1,639	1,156	184	93	32		35
31		81		196	639		1,073		69	31		26
Total	1,896	2,050	5,111	7,490	9,751	42,860	62,326	12,476	3,845	1,510	1,688	1,045
Mean	63.2	66.1	170	242	314	1,429	2,010	416	124	48.7	60.3	33.7
Max.	78	131	318	502	639	1,807	2,670	1,031	243	70	69	44
Min.	46	51	57	65	153	711	1,073	56	69	30	40	26
Runoff - mcm.	163.814	177.120	441.590	647.136	842.486	3,703.104	5,384.966	1,077.926	332.208	130.464	145.843	90.288

WATER YEAR 1957 : Max. 2,670 Min. 26 Mean 416 Annual Runoff 13,136.947mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 12	06.00	14.98	2,670				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
CHAO PHYA RIVER BASIN

Chao Phya River at Wat Pho Ngam, Chai Nat (C.13)

Location: Lat 19°- 09' - 57" N, Long 100°- 11' - 32" E, on left bank 1,500 meters downstream from Chao Phya Diversion Dam, Amphoe Sanphaya, Chai Nat.

Drainage Area: 120,693 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +7.00 m. (M.S.L.)

Bench Mark: B.M. - C.13

Location: On left bank 5 meters from B.M. - H.S./R.I.D. No.1
Elevation: +15.634 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: 1947 to date.

Rating Operation:

Period of Rating: 1947 - 49, 1951 - 59 and 1961 - 62
Rated by Float: -
Rated by Current Meter: 1947 - 49, 1951 - 59 and 1961 - 62

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

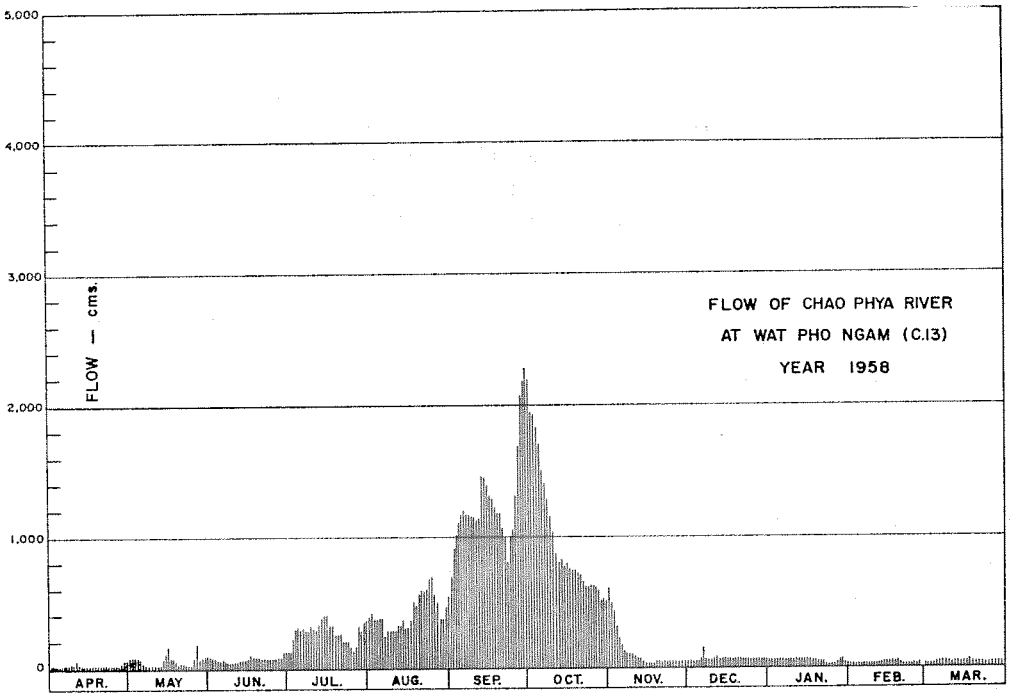
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1958. Flow regulated by Chao Phya Diversion. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	6.91	7.50	7.62	7.76	9.20	9.86	14.42	10.13	7.33	7.41	7.03	7.01
2	.91	.58	.61	.76	.23	10.48	.10	9.65	.33	.41	.03	.01
3	.91	.55	.57	8.42	.20	11.22	.01	.48	.34	.40	.03	.01
4	.91	.52	.35	.75	.08	.55	13.83	.02	.43	.41	.03	.00
5	.91	.49	.34	.75	.07	.92	.60	8.61	.43	.40	.03	.16
6	7.04	7.45	7.20	8.62	9.06	12.02	13.28	8.26	7.44	7.39	7.04	7.24
7	.05	6.85	.21	.81	8.57	11.97	12.87	.02	8.06	.39	.03	.24
8	.07	.91	.13	.62	.60	.94	.55	7.77	7.53	.38	.03	.24
9	.17	.91	.05	.70	.64	.93	.19	.77	.51	.38	.03	.23
10	.10	.91	.07	.87	.64	.95	11.83	.76	.50	.38	.03	.23
11	7.32	6.91	7.10	8.73	8.64	11.75	11.50	7.71	7.50	7.38	7.03	7.23
12	.09	.91	.13	.65	.80	.83	.15	.47	.50	.38	.04	.23
13	6.90	.91	.34	.89	.95	12.73	10.92	.37	.44	.38	.15	.22
14	.86	7.25	.37	9.13	9.05	.70	.82	.20	.43	.38	.26	.21
15	.88	.55	.40	.17	8.77	.68	.76	.16	.43	.38	.26	.21
16	6.89	8.12	7.41	9.18	8.81	12.65	10.75	7.16	7.43	7.37	7.27	7.20
17	.89	7.54	.68	8.91	9.20	.43	.64	.15	.43	.37	.33	.20
18	.89	.47	.53	.90	.74	.18	.63	.14	.42	.36	.33	.23
19	.89	.34	.53	.72	.68	11.99	.65	.35	.42	.34	.28	.25
20	.89	6.99	.54	.62	.92	.96	.58	.36	.41	.28	.22	.25
21	6.89	7.04	7.53	8.58	9.97	11.83	10.48	7.37	7.41	7.27	7.05	7.16
22	.89	.07	.53	.30	.97	.66	.35	.36	.41	.27	.04	.15
23	.89	.02	.54	.30	10.17	10.90	.15	.35	.41	.01	.04	.15
24	.89	6.98	.56	.30	.31	11.33	.07	.35	.41	.07	.03	.15
25	.89	.99	.56	.09	.28	.62	.07	.33	.40	.07	.03	.15
26	6.89	7.42	7.54	8.02	10.01	12.23	10.07	7.34	7.43	7.06	7.03	7.15
27	.89	8.25	.55	.02	9.70	13.24	9.98	.34	.43	.13	.03	.15
28	7.18	7.39	.55	.67	.45	14.05	.96	.34	.42	.30	.01	.15
29	.32	.63	.86	.76	.03	.29	.76	.33	.42	.30		.14
30	.40	.62	.87	.90	.36	.63	.69	.35	.42	.27		.14
31		.64		.99	.50		.64		.41	.05		.13
Mean	6.99	7.16	7.44	8.61	9.31	12.12	11.33	7.77	7.45	7.30	7.10	7.17
Max.	7.40	8.25	7.87	9.18	10.31	14.63	14.42	10.13	8.06	7.41	7.33	7.25
Min.	6.86	6.85	7.05	7.76	8.57	9.86	9.64	7.14	7.33	7.01	7.01	7.00

WATER YEAR 1958 : Max. 14.63 m. Min. 6.85 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	27	90	99	123	395	610	2,196	615	56	69	33	39
2	29	101	96	127	424	778	1,962	503	53	69	40	39
3	26	93	89	244	395	972	1,921	470	55	67	32	34
4	28	89	72	301	379	1,065	1,831	358	58	68	31	36
5	29	84	71	315	381	1,174	1,724	254	55	67	32	55
6	39	78	58	285	383	1,207	1,575	189	48	65	34	52
7	36	25	62	317	242	1,185	1,412	140	156	65	37	55
8	36	27	55	291	279	1,167	1,334	109	75	67	34	56
9	47	28	48	289	291	1,153	1,225	107	61	64	32	56
10	37	32	47	338	285	1,150	1,098	104	65	65	35	50
11	66	32	50	301	283	1,037	985	99	71	62	34	53
12	41	32	57	295	313	1,132	879	77	81	61	37	52
13	29	32	73	345	338	1,466	810	66	74	62	47	48
14	29	65	78	398	368	1,460	837	43	74	61	58	46
15	29	109	80	407	313	1,400	780	37	75	67	52	52
16	32	169	80	413	319	1,326	800	38	82	67	52	58
17	32	81	113	338	395	1,309	772	33	73	67	61	47
18	32	83	90	330	510	1,243	751	34	74	67	56	64
19	32	70	92	262	490	1,181	754	58	78	66	62	52
20	32	40	90	261	575	1,178	727	58	73	55	48	50
21	32	45	91	273	600	1,089	733	56	72	54	34	47
22	32	50	92	204	590	1,003	685	53	72	55	34	43
23	30	40	92	210	620	800	638	49	70	38	36	42
24	32	39	94	212	693	1,016	620	48	72	37	38	43
25	32	38	94	165	700	1,042	623	44	67	37	41	44
26	33	90	92	148	570	1,292	625	49	75	36	38	42
27	29	192	94	178	518	1,683	605	48	72	46	40	45
28	52	75	94	338	478	2,070	588	50	71	64	39	46
29	66	96	137	299	360	2,201	510	47	71	65		44
30	78	95	136	345	455	2,295	530	52	71	53		42
31		104		375	503		515		69	32		42
Total	1,104	2,224	2,516	8,727	13,445	37,684	31,045	3,893	2,219	1,818	1,147	1,474
Mean	36.8	71.7	83.9	281	434	1,256	1,001	130	71.6	58.6	41.0	47.5
Max.	78	192	137	413	700	2,295	2,196	615	156	69	62	64
Min.	26	25	47	123	242	610	510	33	48	32	31	34
Runoff - mcm.	95.386	192.154	217.382	754.013	1,161.648	3,255.898	2,682.288	336.355	191.722	157.075	99.101	127.354

WATER YEAR 1958 : Max. 2,295 Min. 25 Mean 294 Annual Runoff 9,270.374 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 30	18.00	14.63	2,295				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
CHAO PHYA RIVER BASIN

Chao Phya River at Wat Pho Ngam, Chai Nat (C.13)

Location: Lat 19°- 09' - 57" N, Long 100°- 11' - 32" E, on left bank 1,500 meters downstream from Chao Phya Diversion Dam, Amphoe Sanphaya, Chai Nat.

Drainage Area: 120,693 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +7.00 m. (M.S.L.)

Bench Mark: B.M. - C.13

Location: On left bank 5 meters from B.M. - H.S./R.I.D. No.1
Elevation: +15.634 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: 1947 to date.

Rating Operation:

Period of Rating: 1947 - 49, 1951 - 59 and 1961 - 62
Rated by Float: -
Rated by Current Meter: 1947 - 49, 1951 - 59 and 1961 - 62

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

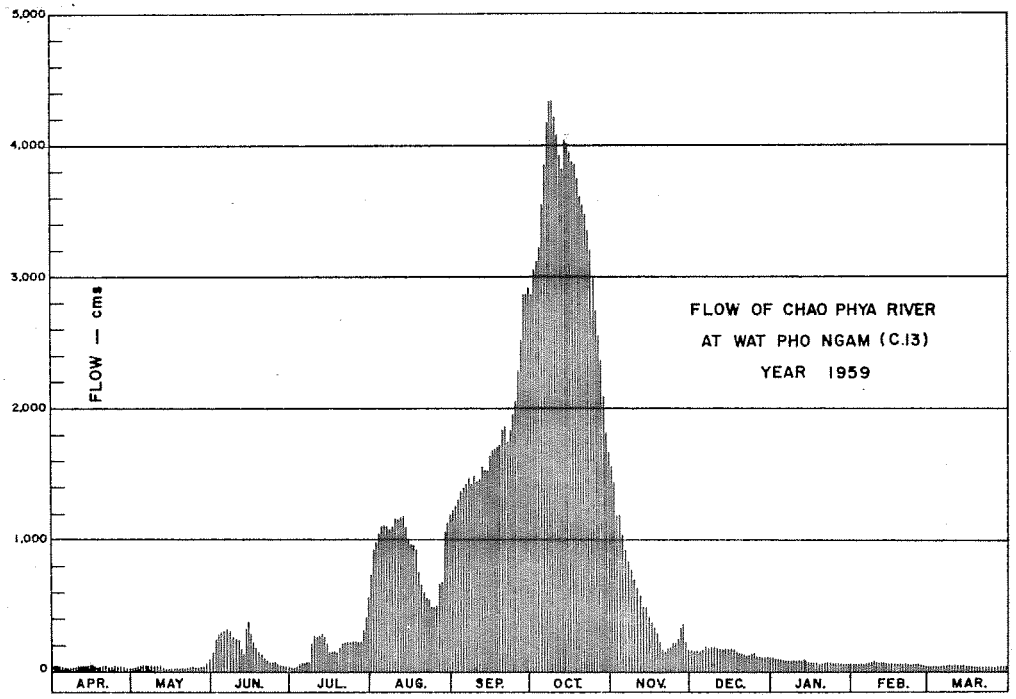
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1959. Flow regulated by Chao Phya Diversion. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.13	6.92	7.97	7.08	10.48	12.08	15.22	12.92	8.11	7.75	7.35	7.13
2	.13	.93	8.29	.07	11.19	.22	.39	.59	.04	.72	.36	.12
3	.12	.90	.62	.07	.63	.32	.45	.14	.04	.72	.35	.12
4	.07	7.01	.67	.21	.56	.54	.57	11.92	.04	.70	.35	.11
5	6.97	.08	.74	.33	.68	.54	.75	.61	.04	.63	.35	.11
6	6.99	7.12	8.76	7.33	11.77	12.61	15.94	11.22	8.21	7.60	7.38	7.11
7	.97	.17	.76	.34	.79	.67	16.03	10.93	.25	.61	.45	.11
8	.97	.18	.73	.44	.80	.65	.12	.95	.24	.61	.47	.11
9	.96	.16	.58	8.19	.82	.69	.13	.51	.24	.61	.56	.28
10	7.04	.12	.46	.51	.98	.70	.04	.26	.24	.59	.54	.29
11	7.09	7.11	8.44	8.53	11.93	12.76	16.01	10.05	8.21	7.53	7.42	7.29
12	.09	.11	.16	.55	.93	.89	15.97	9.87	.14	.53	.42	.28
13	.08	6.90	7.78	.65	.91	.94	.94	.57	.13	.51	.37	.28
14	.07	.84	8.80	.55	.58	13.07	.95	.49	.12	.47	.34	.28
15	.06	.87	9.07	.37	.37	.23	.94	.35	.13	.46	.34	.24
16	7.05	6.89	8.82	8.07	11.33	13.35	15.91	9.21	8.12	7.46	7.34	7.15
17	.04	.91	.30	.00	.37	.39	.90	.00	.12	.43	.34	.11
18	.04	.93	.03	7.96	.24	.45	.90	8.87	.11	.40	.33	.10
19	.03	.94	7.85	.94	10.81	.49	.85	.52	.03	.40	.33	.08
20	.06	.96	.79	8.10	.43	.59	.79	.24	7.97	.41	.33	.07
21	7.18	6.97	7.73	8.28	10.09	13.51	15.73	8.13	7.84	7.45	7.32	7.07
22	.17	.98	.52	.31	9.88	.52	.68	.24	.85	.48	.32	.07
23	.10	7.01	.35	.32	.80	.64	.59	.25	.83	.48	.32	.06
24	.12	.04	.35	.33	.62	.89	.46	.39	.83	.45	.32	.06
25	.14	.06	.37	.33	.58	14.05	.30	.38	.91	.40	.32	.06
26	7.14	7.07	7.28	8.33	9.65	14.37	15.08	8.60	7.81	7.36	7.31	7.06
27	.11	.08	.21	.33	10.32	.79	14.83	.87	.78	.36	.31	.06
28	.03	.10	.14	.33	11.18	15.19	.47	9.00	.77	.36	.30	.06
29	6.98	.15	.08	.62	.71	.15	.08	8.60	.79	.35	.25	.16
30	.93	.49	.10	9.11	.97	.16	13.69	.19	.78	.36		.16
31		.57		.88	12.08		.23		.78	.36		.17
Mean	7.06	7.05	8.06	8.12	11.14	13.35	15.48	9.73	8.02	7.50	7.36	7.14
Max.	7.18	7.57	9.07	9.88	12.08	15.19	16.13	12.92	8.25	7.75	7.56	7.29
Min.	6.93	6.84	7.08	7.07	9.58	12.08	13.23	8.13	7.77	7.35	7.25	7.06

WATER YEAR 1959 : Max. 16.13 m. Min. 6.84 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	42	33	157	33	790	1,230	2,872	1,552	169	110	65	46
2	50	33	229	36	947	1,260	3,050	1,425	159	105	66	46
3	48	33	292	34	1,022	1,317	3,115	1,190	159	103	65	46
4	43	45	302	53	1,072	1,395	3,258	1,198	152	100	65	45
5	34	50	312	65	1,112	1,407	3,526	1,057	154	93	65	45
6	35	55	320	72	1,118	1,435	3,806	945	183	90	68	45
7	35	53	324	74	1,105	1,467	4,094	876	192	91	77	45
8	33	52	320	77	1,080	1,435	4,325	798	189	90	80	45
9	32	49	272	210	1,100	1,493	4,325	710	196	97	91	58
10	45	48	259	280	1,170	1,457	4,225	663	192	92	89	59
11	48	49	250	268	1,160	1,471	4,094	620	185	85	74	59
12	47	51	192	272	1,178	1,572	3,929	582	172	89	74	58
13	46	33	132	292	1,198	1,540	3,806	492	172	80	67	58
14	45	28	324	274	1,075	1,536	4,038	495	169	80	64	58
15	49	22	387	225	1,006	1,625	4,010	442	169	78	64	54
16	44	26	318	158	976	1,684	3,929	394	167	80	64	47
17	43	30	222	159	964	1,696	3,875	342	172	77	64	45
18	32	35	185	159	930	1,712	3,852	290	165	75	63	45
19	38	33	147	157	765	1,712	3,738	218	149	75	63	43
20	48	35	130	187	680	1,825	3,614	157	142	68	63	42
21	58	36	118	218	630	1,865	3,543	157	127	78	62	42
22	45	36	89	222	578	1,748	3,475	180	124	80	62	42
23	40	40	72	230	548	1,850	3,271	185	124	80	62	41
24	53	41	74	227	490	1,943	3,141	220	130	75	62	41
25	51	41	77	225	498	2,030	2,930	214	143	66	62	41
26	50	35	63	225	510	2,212	2,705	274	120	67	61	41
27	48	36	55	222	678	2,495	2,523	346	117	74	61	41
28	43	40	49	230	687	2,854	2,236	364	115	74	60	41
29	38	44	46	302	1,080	2,854	2,035	260	117	75	55	48
30	34	87	47	396	1,165	2,910	1,825	169	115	70		48
31		97		620	1,198		1,664		115	68		48
Total	1,297	1,326	5,761	6,202	28,483	53,057	104,829	16,815	4,754	2,565	1,938	1,463
Mean	43.2	42.7	192	200	919	1,767	3,381	560	153	82.7	66.8	47.1
Max.	58	97	387	620	1,198	2,910	4,325	1,552	196	110	91	59
Min.	32	22	46	33	490	1,230	1,664	157	115	66	55	41
Runoff - mcm.	112.061	114.566	497.750	765.853	2,460.931	4,584.125	9,057.226	1,452.816	410.746	221.616	167.443	126.403

WATER YEAR 1959 : Max. 4,325 Min. 22 Mean 624 Annual Runoff 19,741.536mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 9	06.00	16.13	4,325				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHAO PHYA RIVER BASIN

Chao Phya River at In Buri, Sing Buri (C.14)

Location: Lat 15°- 00' - 30" N, Long 100°- 19' - 50" E, on right bank 200 meters north of the district office of Amphoe In Buri, Sing Buri.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +5.00 m. (M.S.L.). Prior to Mar. 14, 1966.

Bench Mark: B.M. - C.14

Location: On right bank infront of the Thai Government Saving Bank.
Elevation: +12.694 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: 1955
Rated by Float: -
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

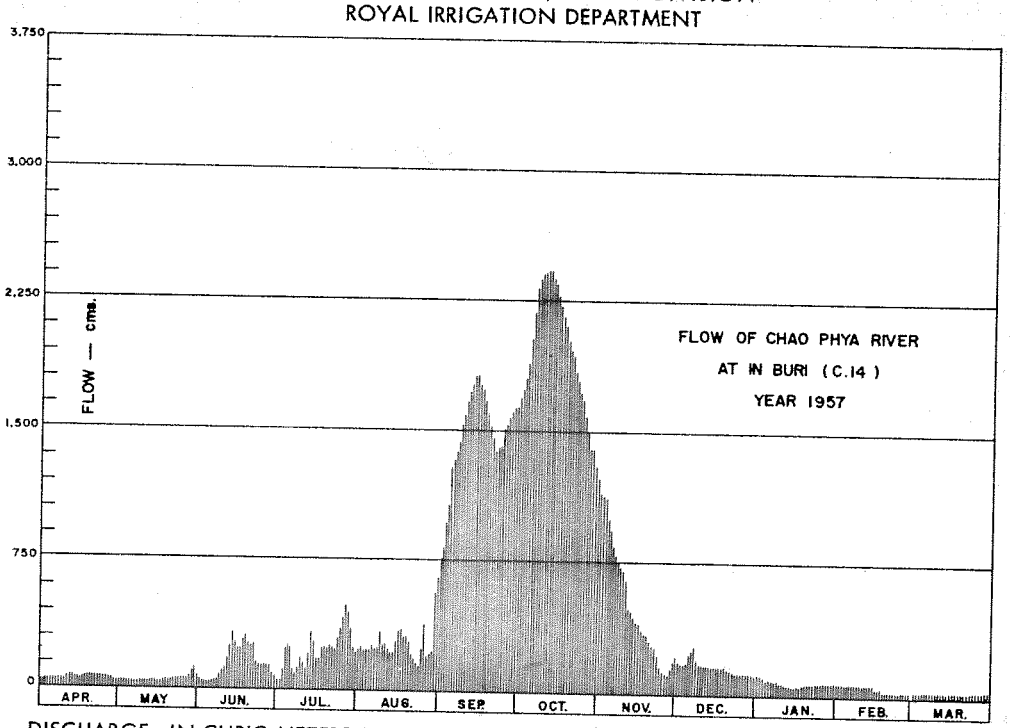
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	5.38	5.39	5.48	5.50	6.60	8.60	11.09	9.86	6.44	5.90	5.65	5.18
2	.38	.40	.42	.52	.70	.81	.20	.78	.28	.87	.62	.18
3	.38	.40	.42	.76	.61	9.25	.37	.70	.26	.82	.62	.17
4	.38	.38	.42	6.68	.60	.78	.55	.52	.31	.75	.62	.18
5	.40	.38	.42	.80	.64	10.22	.79	.22	.56	.75	.63	.18
6	5.43	5.37	5.44	6.71	6.74	10.30	11.96	9.07	6.67	5.70	5.63	5.17
7	.44	.34	.47	5.99	.70	.46	12.10	8.82	.75	.70	.63	.17
8	.45	.41	.50	.82	.68	.56	.16	.68	.44	.70	.61	.17
9	.45	.42	.70	6.16	7.13	.77	.18	.60	.20	.65	.59	.17
10	.42	.42	.89	.37	6.73	11.00	.19	.48	.20	.65	.57	.17
11	5.59	5.40	6.16	6.24	6.76	11.09	12.20	8.26	6.20	5.60	5.57	5.17
12	.65	.40	.31	5.98	.66	.24	.20	7.72	.20	.60	.57	.17
13	.65	.38	.75	6.60	.55	.32	.17	.65	.19	.52	.57	.17
14	.54	.38	7.04	7.11	.56	.36	.13	.54	.19	.50	.57	.17
15	.52	.38	6.80	6.85	.88	.33	.06	.38	.19	.48	.40	.17
16	5.51	5.37	6.59	6.24	7.12	11.24	12.01	7.36	6.18	5.52	5.40	5.19
17	.51	.36	.63	.34	.18	.17	11.95	.16	.18	.55	.20	.19
18	.58	.42	.84	.63	6.99	.03	.86	.10	.18	.60	.20	.19
19	.60	.45	.97	.66	.97	10.85	.75	.10	.19	.62	.20	.19
20	.61	.44	.83	.65	.84	.74	.62	6.88	.10	.62	.20	.19
21	5.62	5.49	6.71	6.75	6.56	10.58	11.56	6.80	5.99	5.62	5.20	5.19
22	.62	.49	.38	.72	.40	.43	.39	.73	.98	.62	.22	.19
23	.61	.49	.17	.60	.18	.46	.32	.55	.98	.62	.20	.19
24	.61	.49	.16	.90	.15	.52	.18	.19	.97	.62	.20	.19
25	.60	.57	.14	7.12	.57	.75	.00	.01	.96	.63	.20	.20
26	5.60	5.57	6.12	7.42	7.30	10.81	10.84	5.92	5.96	5.63	5.20	5.25
27	.44	.55	.10	.70	6.42	.89	.64	.87	.95	.63	.20	.25
28	.43	.59	.10	.62	.50	.97	.46	.93	.95	.65	.18	.28
29	.49	.71	5.87	.38	.62	.97	.44	6.23	.95	.65		.28
30	.39	.91	.58	6.76	7.96	.97	.30	.50	.94	.65		.28
31		.70		.56	8.18		.16		.93	.65		.17
Mean	5.51	5.47	6.11	6.57	6.79	10.61	11.51	7.62	6.18	5.65	5.30	5.19
Max.	5.65	5.91	7.04	7.70	8.18	11.36	12.20	9.86	6.75	5.90	5.65	5.28
Min.	5.38	5.34	5.42	5.50	6.15	8.60	10.16	5.87	5.93	5.48	5.18	5.17

WATER YEAR 1957 : Max. 12.20 m. Min. 5.18 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	38	39	50	52	230	740	1,685	1,157	198	107	71	21
2	38	40	42	54	250	803	1,740	1,128	169	103	67	21
3	38	40	42	86	232	943	1,834	1,100	165	95	67	20
4	38	38	42	246	230	1,128	1,935	1,037	174	85	67	21
5	40	38	42	270	238	1,298	2,084	932	222	85	68	21
6	44	37	45	252	258	1,330	2,205	882	244	77	68	20
7	45	34	48	121	250	1,395	2,330	806	260	77	68	20
8	46	41	52	95	246	1,438	2,387	764	198	77	65	20
9	46	42	77	148	344	1,533	2,406	740	155	71	63	20
10	42	42	106	185	256	1,642	2,416	704	155	71	60	20
11	63	40	148	162	262	1,685	2,425	639	155	64	60	20
12	71	40	174	119	242	1,762	2,425	490	155	64	60	20
13	71	38	260	230	220	1,806	2,397	473	153	54	60	20
14	57	38	324	340	222	1,828	2,359	445	153	52	60	20
15	54	38	270	281	288	1,812	2,292	405	153	50	40	20
16	53	37	228	162	343	1,762	2,245	400	152	54	40	21
17	53	36	236	179	356	1,725	2,198	352	152	58	40	21
18	62	42	279	236	313	1,656	2,132	338	152	64	22	21
19	64	46	308	242	308	1,571	2,058	338	153	67	22	21
20	65	45	277	240	279	1,519	1,977	288	138	67	22	21
21	67	51	252	260	222	1,446	1,941	270	121	67	22	21
22	67	51	186	254	190	1,383	1,845	256	119	67	24	21
23	65	51	150	230	152	1,395	1,806	220	119	67	22	21
24	65	51	148	292	147	1,421	1,730	153	118	67	22	21
25	64	60	145	343	224	1,524	1,690	124	116	68	22	22
26	64	60	141	415	385	1,552	1,566	110	116	68	22	26
27	45	58	138	485	194	1,589	1,473	103	115	68	22	26
28	44	63	138	465	210	1,628	1,395	113	115	71	21	28
29	51	79	103	405	234	1,628	1,387	160	115	71		28
30	39	109	62	262	555	1,628	1,330	210	113	71		28
31		77		222	616		1,274		112	71		20
Total	1,599	1,501	4,513	7,333	8,496	44,570	60,967	15,137	4,735	2,198	1,267	671
Mean	53.3	48.4	150	237	274	1,486	1,967	504	153	70.9	45.2	21.6
Max.	71	109	308	485	616	1,828	2,425	1,157	260	107	71	28
Min.	38	34	42	52	147	740	1,274	103	112	50	21	20
Runoff - MCM.	138.154	129.686	389.923	633.571	734.054	3,850.848	5,267.549	1,307.837	409.104	189.907	109.469	57.974

WATER YEAR 1957 : Max. 2,425 Min. 20 Mean 419 Annual Runoff 13,218.077mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 12	06.00	12.20	2,425				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHAO PHYA RIVER BASIN

Chao Phya River at In Buri, Sing Buri (C.14)

Location: Lat 15°– 00' – 30" N, Long 100°– 19' – 50" E, on right bank 200 meters north of the district office of Amphoe In Buri, Sing Buri.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +5.00 m. (M.S.L.). Prior to Mar. 14, 1966

Bench Mark: B.M. – C.14

Location: On right bank infront of the Thai Government Saving Bank.
Elevation: +12.694 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: 1955
Rated by Float: –
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

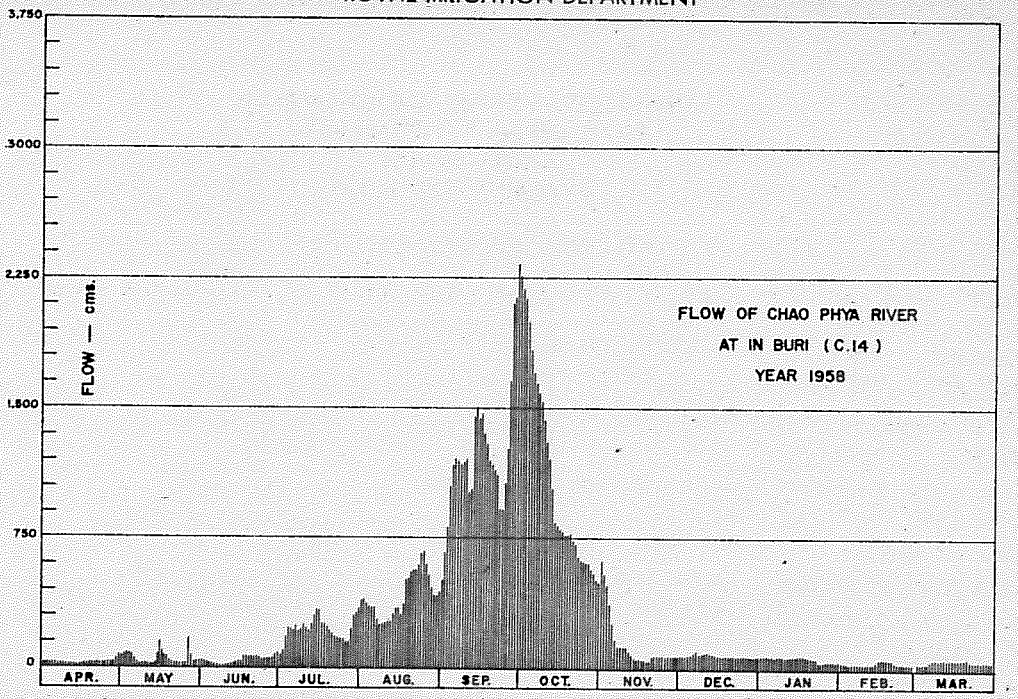
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	5.17	5.68	5.42	5.68	7.32	7.81	12.00	8.20	5.63	5.67	5.30	5.25
2	.17	.73	.40	.67	.33	8.42	11.78	7.94	.63	.67	.30	.25
3	.16	.75	.36	6.04	.30	9.00	.71	.67	.63	.66	.30	.25
4	.15	.72	.32	.58	.19	.56	.56	.28	.67	.66	.29	.25
5	.14	.68	.25	.61	.17	.92	.36	6.85	.71	.65	.29	.26
6	5.14	5.68	5.18	6.47	7.17	10.03	11.15	6.54	5.72	5.65	5.28	5.45
7	.14	.15	.16	.67	6.90	9.98	.03	.23	.88	.64	.28	.47
8	.10	.13	.17	.51	.67	.93	10.90	.04	.77	.64	.28	.47
9	.10	.14	.04	.52	.75	.95	.74	.02	.77	.63	.28	.47
10	.10	.13	.03	.70	.76	.97	.48	5.99	.76	.62	.28	.47
11	5.09	5.13	5.06	6.65	6.78	9.97	10.20	5.96	5.76	5.61	5.28	5.47
12	.09	.14	.10	.53	.91	.81	.00	.81	.76	.60	.28	.46
13	.09	.14	.24	.74	7.02	10.57	9.52	.67	.72	.60	.28	.46
14	.08	.29	.29	.92	.13	.72	8.95	.53	.69	.60	.47	.46
15	.08	.55	.32	7.12	.15	.58	.86	.47	.68	.59	.49	.46
16	5.09	6.11	5.32	7.12	6.98	10.63	8.80	5.45	5.68	5.59	5.49	5.45
17	.11	5.83	.61	6.78	7.18	.47	.74	.45	.68	.58	.54	.44
18	.11	.66	.60	.75	.80	.24	.70	.43	.68	.58	.55	.47
19	.14	.58	.58	.69	.82	.03	.71	.50	.68	.57	.52	.47
20	.14	.35	.60	.51	.97	9.95	.72	.63	.68	.57	.49	.47
21	5.17	5.25	5.59	6.46	8.02	9.86	8.62	5.63	5.67	5.55	5.33	5.43
22	.17	.29	.58	.36	.03	.74	.50	.63	.67	.51	.30	.39
23	.20	.27	.58	.32	.16	.17	.30	.64	.67	.30	.30	.39
24	.20	.23	.48	.32	.37	.17	.18	.61	.67	.31	.29	.38
25	.20	.20	.48	.29	.36	.59	.17	.61	.67	.32	.28	.38
26	5.23	5.25	5.48	6.17	8.13	10.15	8.16	5.62	5.67	5.32	5.28	5.39
27	.23	6.29	.49	.15	7.88	11.07	.13	.61	.67	.32	.28	.39
28	.30	5.78	.52	.52	.66	.82	.05	.60	.67	.33	.28	.39
29	.45	.40	.72	.90	.46	.90	7.93	.61	.67	.34		.39
30	.65	.40	.77	.97	.41	12.10	.78	.60	.67	.34		.38
31		.42		7.08	.49		.70		.67	.32		.38
Mean	5.17	5.46	5.39	6.54	7.43	10.07	9.46	6.03	5.69	5.53	5.34	5.40
Max.	5.65	6.29	5.77	7.12	8.37	12.10	12.00	8.20	5.88	5.67	5.55	5.47
Min.	5.08	5.13	5.03	5.67	6.67	7.81	7.70	5.43	5.63	5.30	5.28	5.25

WATER YEAR 1958 : Max. 12.10 m. Min. 5.03 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	20	74	42	74	390	515	2,235	622	68	73	30	26
2	20	82	40	73	393	686	2,077	550	68	73	30	26
3	19	85	36	128	385	930	2,032	478	62	72	30	26
4	19	80	32	226	359	1,051	1,941	380	73	72	29	26
5	18	74	26	232	354	1,180	1,828	281	79	71	29	27
6	18	74	21	204	354	1,222	1,715	218	80	71	28	46
7	18	19	19	244	292	1,202	1,656	160	104	69	28	48
8	15	17	20	212	244	1,183	1,594	128	88	69	28	48
9	15	18	11	214	260	1,191	1,519	125	88	68	28	48
10	15	17	10	250	262	1,199	1,404	121	86	67	28	48
11	14	17	12	240	266	1,125	1,290	116	86	65	28	48
12	14	18	15	216	294	1,239	1,210	94	86	64	28	47
13	14	18	25	258	320	1,442	1,037	73	80	64	28	47
14	14	29	29	296	345	1,509	845	56	76	64	48	47
15	14	58	32	343	350	1,446	818	48	74	63	51	47
16	14	140	32	343	306	1,469	800	46	74	63	51	46
17	16	97	65	266	356	1,399	782	46	74	62	57	45
18	16	72	64	260	512	1,306	770	44	74	62	58	48
19	18	62	62	248	517	1,222	773	52	74	60	54	48
20	18	35	64	212	558	1,191	776	68	74	60	51	48
21	20	26	63	202	572	1,157	746	68	73	58	33	44
22	20	29	62	133	574	1,114	710	68	73	53	30	39
23	22	28	62	176	611	915	650	69	73	30	30	39
24	22	24	50	176	671	915	616	65	73	31	29	38
25	22	22	50	170	668	1,062	614	65	73	32	28	38
26	24	26	50	150	602	1,270	611	67	73	32	28	39
27	24	170	51	147	534	1,676	602	65	73	32	28	39
28	30	89	54	214	475	2,104	580	64	73	33	28	39
29	46	40	80	292	425	2,160	547	65	73	34		39
30	71	40	88	308	413	2,330	507	64	73	34		38
31		42		333	433		485		73	32		38
Total	630	1,622	1,267	6,890	13,095	38,310	33,770	4,366	2,377	1,733	976	1,270
Mean	21.0	52.3	42.2	222	422	1,277	1,089	146	76.7	55.9	34.8	40.9
Max.	71	170	88	343	671	2,330	2,235	622	104	73	58	48
Min.	14	17	10	73	244	515	485	44	73	30	28	26
Runoff - mcm.	54.432	140.141	109.469	595.296	1,131.408	3,309.984	2,917.728	377.222	205.373	149.731	84.326	109.728

WATER YEAR 1958 : Max. 2,330 Min. 10 Mean 291 Annual Runoff 9,184.838 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sep. 30	18.00	12.10	2,330				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHAO PHYA RIVER BASIN

Chao Phya River at In Buri, Sing Buri (C.14)

Location: Lat 15° 00' – 30" N, Long 100° 19' – 50" E, on right bank 200 meters north of the district office of Amphoe In Buri, Sing Buri.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +5.00 m. (M.S.L.). Prior to Mar. 14, 1966.

Bench Mark: B.M. – C.14

Location: On right bank infront of the Thai Government Saving Bank.
Elevation: +12.694 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: 1955
Rated by Float: –
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

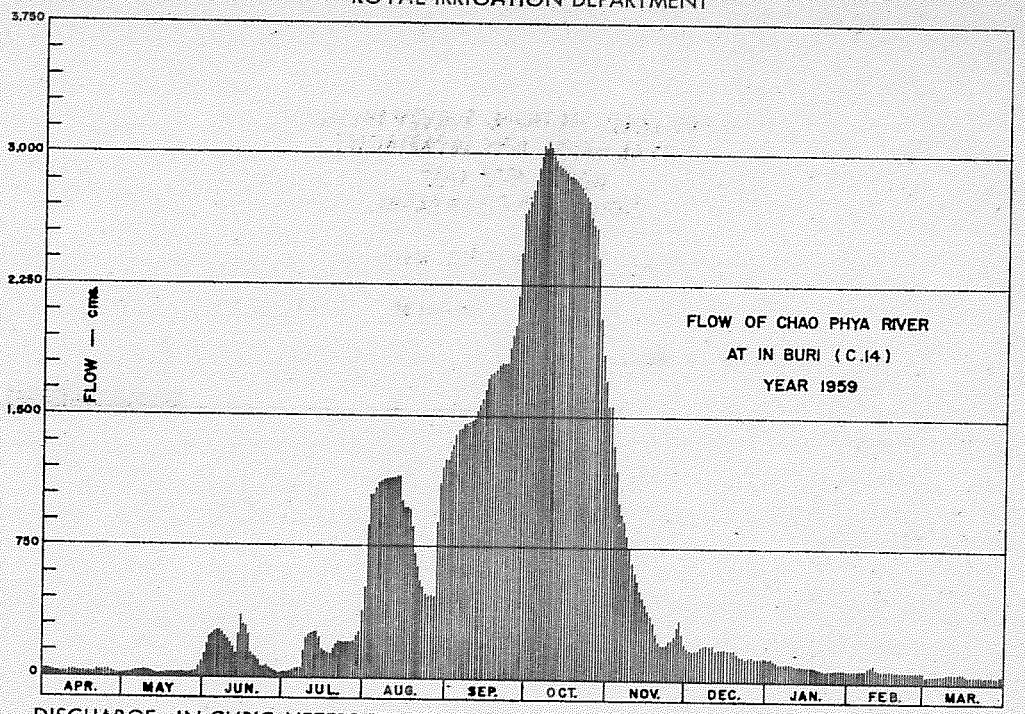
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	5.38	5.14	5.97	5.32	7.89	10.10	12.50	10.87	6.37	6.02	5.63	5.43
2	.37	.16	6.32	.32	9.09	.20	.57	.58	.30	.02	.63	.40
3	.35	.14	.62	.31	.58	.32	.61	.27	.28	.00	.62	.40
4	.34	.16	.71	.38	.59	.51	.65	.02	.28	5.96	.62	.40
5	.24	.26	.72	.52	.68	.52	.72	9.76	.28	.88	.62	.40
6	5.22	5.32	6.79	5.55	9.78	10.55	12.80	9.38	6.39	5.87	5.62	5.40
7	.19	.42	.80	.55	.80	.62	.82	.10	.45	.87	.65	.40
8	.19	.40	.79	.56	.81	.62	.83	8.88	.45	.86	.70	.40
9	.19	.38	.66	6.16	.84	.62	.82	.74	.45	.86	.76	.50
10	.18	.37	.54	.60	.84	.65	.76	.37	.45	.84	.80	.55
11	5.30	5.33	6.50	6.71	9.85	10.68	12.72	8.24	6.44	5.81	5.68	5.55
12	.32	.21	.40	.69	.85	.70	.70	.05	.33	.80	.66	.55
13	.32	.21	.00	.80	.89	.85	.70	7.80	.32	.80	.64	.55
14	.30	.11	.73	.73	.68	.95	.68	.65	.33	.77	.61	.54
15	.29	.08	7.18	.56	.45	11.06	.67	.52	.35	.77	.60	.52
16	5.29	5.11	6.99	6.30	9.35	11.15	12.65	7.37	6.34	5.75	5.59	5.45
17	.28	.12	.53	.19	.38	.20	.65	.25	.32	.73	.59	.41
18	.27	.14	.27	.14	.32	.23	.63	.15	.32	.72	.58	.40
19	.26	.16	.08	.12	8.95	.25	.62	6.87	.28	.70	.57	.36
20	.25	.18	.02	.22	.50	.27	.60	.63	.22	.70	.56	.35
21	5.39	5.20	5.96	6.36	8.19	11.36	12.58	6.44	6.11	5.69	5.55	5.35
22	.39	.20	.75	.50	7.96	.31	.55	.47	.11	.68	.55	.35
23	.37	.23	.62	.48	.87	.31	.53	.49	.08	.67	.55	.35
24	.39	.28	.57	.49	.72	.40	.51	.59	.07	.66	.55	.34
25	.37	.28	.60	.50	.65	.60	.44	.59	.14	.65	.55	.34
26	5.35	5.28	5.50	6.49	7.68	11.70	12.37	6.68	6.08	5.64	5.56	5.34
27	.33	.30	.46	.50	8.18	.94	.24	.97	.02	.64	.55	.33
28	.28	.31	.39	.51	9.11	12.22	.03	7.11	.02	.64	.55	.33
29	.23	.36	.31	.75	.69	.43	11.79	6.85	.02	.63	.55	.39
30	.18	.57	.30	7.14	.96	.45	.41	.48	.02	.63		.43
31		.74		.73	10.10		.12		.02	.63		.45
Mean	5.29	5.26	6.20	6.26	9.14	11.09	12.49	7.90	6.25	5.77	5.61	5.42
Max.	5.39	5.74	7.18	7.73	10.10	12.45	12.83	10.87	6.45	6.02	5.80	5.55
Min.	5.18	5.08	5.30	5.31	7.65	10.10	11.12	6.44	6.02	5.63	5.55	5.33

WATER YEAR 1959 : Max. 12.83 m. Min. 5.08 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	39	18	117	32	536	1,250	2,730	1,580	185	125	68	44
2	38	19	176	32	889	1,290	2,803	1,446	172	125	68	40
3	35	18	234	31	1,058	1,338	2,845	1,318	169	122	67	40
4	34	19	252	39	1,061	1,416	2,887	1,218	169	116	67	40
5	25	27	254	54	1,093	1,421	2,973	1,121	169	104	67	40
6	24	32	268	58	1,128	1,433	3,050	988	188	102	67	40
7	21	42	270	58	1,135	1,464	3,072	892	200	102	70	40
8	21	40	268	59	1,139	1,464	3,083	824	200	101	77	40
9	21	39	242	148	1,150	1,464	3,072	782	200	101	86	52
10	21	38	218	230	1,150	1,477	3,006	671	200	98	92	58
11	30	33	210	252	1,153	1,491	2,962	633	198	93	74	58
12	32	23	190	248	1,153	1,542	2,940	580	177	92	72	58
13	32	23	122	270	1,168	1,570	2,940	512	176	92	69	58
14	30	16	256	256	1,165	1,618	2,919	472	177	87	65	57
15	29	14	356	222	1,012	1,671	2,908	440	181	87	64	54
16	29	16	313	172	977	1,715	2,887	402	179	84	63	46
17	28	16	216	153	988	1,740	2,887	373	176	81	63	41
18	28	18	167	145	967	1,756	2,866	349	176	80	62	40
19	27	19	135	141	845	1,767	2,856	285	169	77	60	37
20	26	21	125	158	710	1,778	2,835	236	158	77	59	35
21	40	22	116	183	619	1,828	2,814	198	140	75	58	35
22	40	22	84	210	555	1,800	2,782	204	140	74	58	35
23	38	24	67	206	531	1,800	2,761	208	135	73	58	35
24	40	28	60	208	490	1,850	2,740	228	133	72	58	34
25	38	28	64	210	472	1,965	2,667	228	145	70	58	34
26	35	28	52	208	480	2,025	2,595	246	135	69	59	34
27	33	30	47	210	616	2,190	2,565	308	125	69	59	33
28	28	31	40	212	895	2,445	2,263	340	125	69	59	33
29	24	37	31	260	1,096	2,656	2,083	281	125	68	59	40
30	21	60	30	347	1,195	2,677	1,855	206	125	68		44
31		83		413	1,250		1,700		125	68		46
Total	907	884	4,980	5,505	28,676	51,901	87,346	17,569	5,072	2,721	1,906	1,321
Mean	30.2	28.5	166	177	925	1,730	2,818	586	164	87.8	65.7	42.6
Max.	40	83	356	413	1,250	2,677	3,083	1,580	200	125	92	58
Min.	21	14	30	31	472	1,250	1,700	198	125	68	58	33
Runoff — mcm.	78.365	76.378	430.272	475.632	2,477.606	4,484.246	7,546.694	1,517.962	438.221	235.094	164.678	114.134

WATER YEAR 1959 : Max. 3,083 Min. 14 Mean 570 Annual Runoff 18,039.283mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 8	06.00	12.84	3,094				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHAO PHYA RIVER BASIN

Chao Phya River at Wat Chula Mani, Ayuthaya (C.15)

Location: Lat 14°– 25' – 35" N, Long 100°– 29' – 11" E, on left bank infront of Wat Chula Mani, 100 meters downstream from the confluence with Khlong Bang Ban, Amphoe Bang Ban, Ayuthaya.

Drainage Area: Flood plain referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: –0.25 m. (M.S.L.)

Bench Mark: B.M. – C.15

Location: On left bank north of Wat Chula Mani.
Elevation: +4.301 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: 1955
Rated by Float: –
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed but not included for flow computation.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

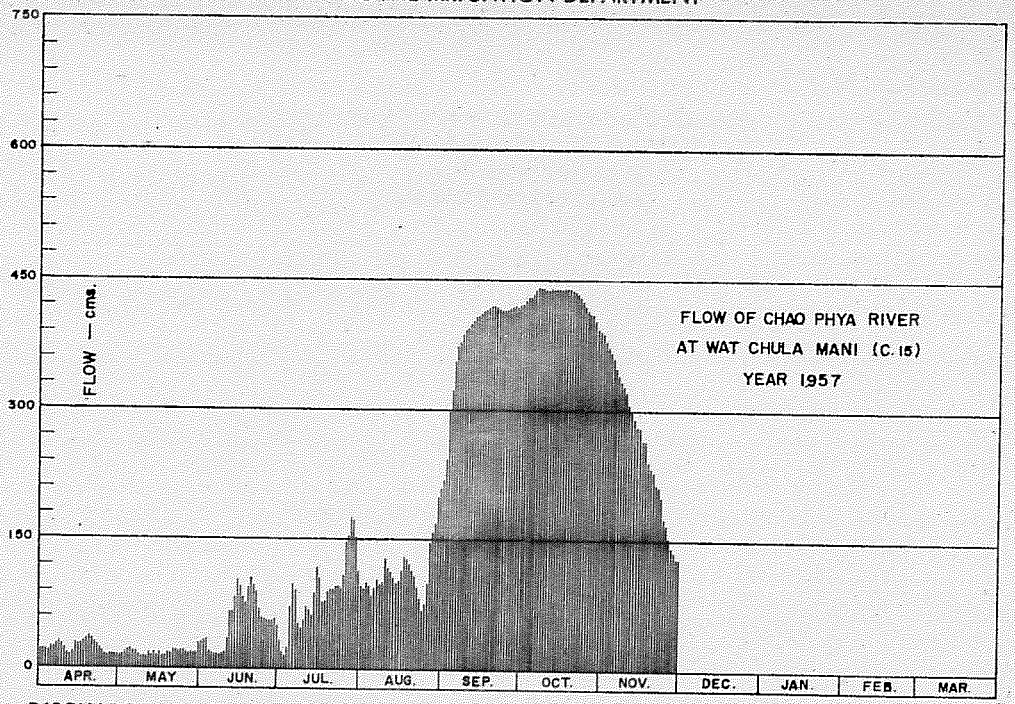
Remarks: No gage height record for Dec. 1 – Mar.31.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.28	0.13	0.47	0146	1.33	2.68	4.08	3.85				
2	.29	.14	.47	.21	.30	.86	.11	.80				
3	.27	.21	.48	.15	.38	3.19	.13	.75				
4	.25	.29	.24	.35	.33	.39	.13	.71				
5	.34	.30	.22	1.03	.20	.63	.16	.66				
6	0.34	0.23	0.16	1.36	1.31	3.74	4.19	3.57				
7	.40	.23	.17	.27	.41	.78	.20	.52				
8	.44	.14	.14	0.79	.35	.84	.20	.46				
9	.39	.11	.18	.66	.40	.88	.20	.42				
10	.32	.12	.24	.83	.67	.91	.19	.37				
11	0.20	0.11	0.51	1.01	1.56	3.94	4.19	3.26				
12	.14	.18	.96	0.97	.51	.96	.19	.18				
13	.24	.14	.96	.90	.45	.99	.19	.14				
14	.40	.21	1.25	1.23	.36	.99	.19	.06				
15	.39	.13	.42	.58	.40	4.02	.19	.06				
16	0.41	0.18	1.31	1.42	1.55	4.03	4.19	2.93				
17	.46	.13	.16	.10	.71	.04	.19	.93				
18	.49	.13	.09	.06	.69	.05	.19	.73				
19	.53	.20	.30	.24	.60	.06	.19	.69				
20	.49	.20	.42	.27	.55	.07	.18	.65				
21	0.44	0.29	1.33	1.27	1.47	4.06	4.17	2.50				
22	.36	.27	.25	.31	.33	.05	.16	.48				
23	.32	.24	.00	.33	.15	.04	.14	.39				
24	.23	.28	0.86	.28	0.97	.03	.12	.15				
25	.17	.29	.84	.48	1.05	.04	.07	.07				
26	0.10	0.22	0.81	1.88	1.36	4.05	4.03	1.93				
27	.16	.18	.81	.96	.88	.06	.01	.81				
28	.16	.22	.81	2.15	2.00	.07	.01	.77				
29	.16	.16	.85	.12	.09	.07	3.96	.69				
30	.11	.21	.75	1.97	.37	.08	.90	.69				
31		.41		.51	.47		.88					
Mean	0.31	0.20	0.78	1.17	1.52	3.85	4.13	2.87				
Max.	0.53	0.41	1.42	2.15	2.47	4.08	4.20	3.85				
Min.	0.10	0.11	0.14	0.15	0.97	2.68	3.88	1.69				

WATER YEAR 1957 : Max. 4.20 m. Min. – m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	21	14	32	32	95	232	419	385				
2	21	15	32	18	93	253	424	378				
3	21	18	33	15	99	295	427	371				
4	20	21	19	25	95	321	427	365				
5	24	22	18	71	85	354	432	358				
6	24	19	16	98	94	370	436	346				
7	28	19	16	91	102	375	438	339				
8	30	15	15	53	97	384	438	330				
9	27	13	17	44	101	389	438	325				
10	23	14	19	56	126	393	436	318				
11	17	13	35	70	115	398	436	304				
12	15	17	66	67	111	400	435	293				
13	19	14	66	61	105	405	436	288				
14	28	18	89	87	98	405	436	278				
15	27	14	103	117	101	409	436	278				
16	29	17	94	103	114	411	436	262				
17	32	14	82	77	129	412	436	262				
18	33	14	76	74	127	414	436	238				
19	36	17	93	88	119	416	436	233				
20	33	17	103	91	114	417	435	228				
21	30	21	95	91	107	416	433	211				
22	26	21	89	94	95	414	432	209				
23	23	19	69	95	81	412	428	199				
24	19	21	58	91	67	411	425	174				
25	16	21	57	108	73	412	417	165				
26	13	18	55	146	98	414	411	151				
27	16	17	55	154	146	416	408	139				
28	16	18	55	174	158	417	408	135				
29	16	16	57	171	167	417	400	127				
30	13	18	50	155	197	419	392	127				
31		29		111	208		389					
Total	696	544	1,664	2,728	3,517	11,601	13,216	7,816				
Mean	23.2	17.5	55.4	88.0	113	386	426	260				
Max.	36	29	103	174	208	419	438	385				
Min.	13	13	15	15	67	232	389	127				
Runoff - mcm.	60.134	47.002	143.770	235.699	303.869	1,002.326	1,141.862	675.302				

WATER YEAR 1957 : Max. 438 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 7	06.00	4.20	438				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHAO PHYA RIVER BASIN

Chao Phya River at Wat Chula Mani, Ayuthaya (C.15)

Location: Lat 14°– 25' – 35" N, Long 100°– 29' – 11" E, on left bank infront of Wat Chula Mani, 100 meters downstream from the confluence with Khlong Bang Ban, Amphoe Bang Ban, Ayuthaya.

Drainage Area: Flood plain referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: –0.25 m. (M.S.L.)

Bench Mark: B.M. – C.15

Location: On left bank north of Wat Chula Mani.
Elevation: +4.301 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: 1955
Rated by Float: –
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed but not included for flow computation.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

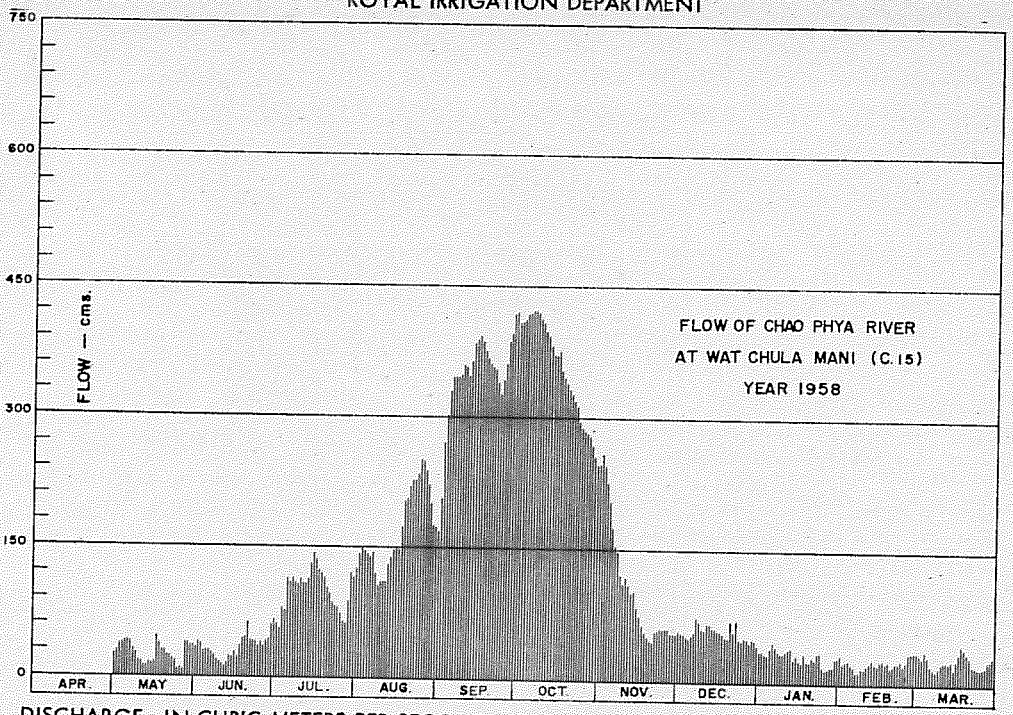
Remarks: No gage height record for Apr. 1 – 30.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		0.35	0.49	0.97	1.69	2.11	4.01	2.81	0.84	0.52	0.47	0.54
2		.44	.61	.91	.85	.48	.02	.92	.82	.53	.32	.48
3		.54	.56	.83	.91	.94	.03	.80	.80	.50	.35	.45
4		.57	.41	1.14	.89	3.24	.07	.63	.76	.47	.38	.56
5		.60	.45	.10	.84	.45	.08	.44	.73	.56	.29	.46
6		0.61	0.44	1.55	1.81	3.57	4.10	2.17	0.78	0.69	0.23	0.29
7		.60	.38	.49	.88	.57	.10	1.96	.85	.62	.11	.18
8		.44	.34	.55	.60	.57	.08	.89	1.04	.54	.13	.16
9		.36	.24	.49	.46	.60	.04	.61	0.99	.49	.21	.22
10		.19	.18	.47	.50	.67	.01	.51	.89	.48	.20	.30
11		0.17	0.12	1.55	1.50	3.66	3.93	1.60	0.89	0.52	0.29	0.35
12		.07	.06	.48	.56	.58	.91	.49	.97	.58	.34	.36
13		.06	.18	.48	.73	.71	.83	.37	.96	.60	.39	.34
14		.16	.32	.55	.81	.84	.75	.23	.90	.40	.30	.36
15		.12	.32	.74	.90	.88	.74	.17	.90	.46	.29	.41
16		0.18	0.41	1.81	1.93	3.90	3.68	1.09	0.85	0.35	0.35	0.39
17		.68	.32	.78	.90	.87	.63	0.95	.85	.34	.40	.51
18		.59	.53	.65	2.15	.78	.57	.83	.80	.49	.32	.64
19		.44	.66	.61	.44	.72	.52	.76	.74	.36	.37	.60
20		.43	.70	.55	.47	.67	.48	.68	.76	.33	.23	.51
21		0.32	0.91	1.42	2.58	3.65	3.44	0.67	1.01	0.43	0.28	0.44
22		.32	.63	.35	.64	.62	.39	.83	0.85	.38	.13	.28
23		.26	.61	.20	.65	.53	.32	.84	1.01	.50	.12	.26
24		.22	.62	.15	.72	.43	.19	.88	0.73	.51	.20	.23
25		.01	.54	.15	.84	.55	.15	.88	.71	.23	.28	.22
26		0.04	0.61	1.08	2.84	3.67	3.11	0.89	0.73	0.16	0.35	0.23
27		.01	.69	0.95	.74	.87	.09	.88	.78	.22	.52	.25
28		.60	.64	.91	.60	.94	.07	.81	.69	.23	.53	.39
29		.58	.69	1.23	.40	.97	2.99	.81	.73	.24		.39
30		.53	.89	.62	.16	.99	.88	.78	.71	.42		.47
31		.52		.56	.15		.80		.64	.42		.39
Mean		0.35	0.48	1.36	2.10	3.57	3.61	1.41	0.83	0.44	0.30	0.38
Max.		0.68	0.91	1.81	2.84	3.99	4.10	2.92	1.04	0.69	0.53	0.64
Min.		0.01	0.06	0.83	1.46	2.11	2.80	0.67	0.64	0.16	0.11	0.16

WATER YEAR 1958 : Max. 4.10 m. Min. 0.01 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		25	33	67	127	169	408	247	57	35	32	36
2		30	41	62	143	209	409	260	55	36	23	33
3		36	38	56	149	263	411	246	54	34	25	31
4		38	29	80	147	301	417	226	51	32	27	38
5		40	31	77	142	329	419	204	49	38	21	32
6		41	30	114	139	346	422	176	53	46	19	21
7		40	27	109	146	346	422	154	57	41	13	17
8		30	24	114	119	346	419	147	72	36	14	16
9		26	19	109	106	350	412	120	68	33	18	18
10		17	17	107	110	360	408	111	60	33	17	22
11		16	14	114	110	358	396	119	60	35	21	25
12		12	11	108	115	347	393	109	67	39	24	26
13		11	17	108	131	365	382	99	66	40	27	24
14		16	23	114	139	384	371	87	61	28	22	26
15		14	23	132	148	389	370	83	61	32	21	18
16		17	29	139	151	392	361	76	57	25	25	27
17		46	23	136	148	388	354	65	57	24	28	35
18		39	36	124	174	375	346	56	54	33	23	43
19		30	44	120	204	367	339	51	50	26	26	40
20		30	47	114	208	360	333	46	51	24	19	35
21		23	62	103	220	357	328	45	70	30	21	30
22		23	42	97	227	353	320	56	57	27	14	21
23		20	41	85	228	340	312	57	70	34	14	20
24		18	41	81	236	326	295	60	49	35	17	19
25		8.95	36	81	251	343	289	60	47	19	21	18
26		10	41	75	251	360	284	60	49	16	25	19
27		8.15	46	65	239	388	282	60	49	18	35	20
28		40	43	62	222	398	279	55	46	19	36	27
29		39	46	87	200	402	269	55	49	19		27
30		36	60	121	175	405	256	53	48	29		32
31		35		115	174		246		43	29		27
Total		815.10	1,014	3,076.	5,279	10,416	10,952	3,243	1,737	945	628	823
Mean		26.3	33.8	99.2	170	347	353	108	56.0	30.5	22.4	26.5
Max.		46	62	139	251	405	422	260	72	46	36	43
Min.		8.15	11	56	106	169	246	45	43	16	13	16
Runoff - mcm.		70.425	87.610	256.766	456.106	899.942	946.253	280.195	150.077	81.648	54.259	71.107

WATER YEAR 1958 : Max. 422 Min. 8.15 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 6	06.00	410	422				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHAO PHYA RIVER BASIN

Chao Phya River at Wat Chula Mani, Ayuthaya (C.15)

Location: Lat 14° – 25' – 35" N, Long 100° – 29' – 11" E, on left bank infront of Wat Chula Mani, 100 meters downstream from the confluence with Khlong Bang Ban, Amphoe Bang Ban, Ayuthaya.

Drainage Area: Flood plain referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: -0.25 m. (M.S.L.)

Bench Mark: B.M. – C.15

Location: On left bank north of Wat Chula Mani.
Elevation: +4.301 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: 1955
Rated by Float: –
Rated by Current Meter: 1955

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

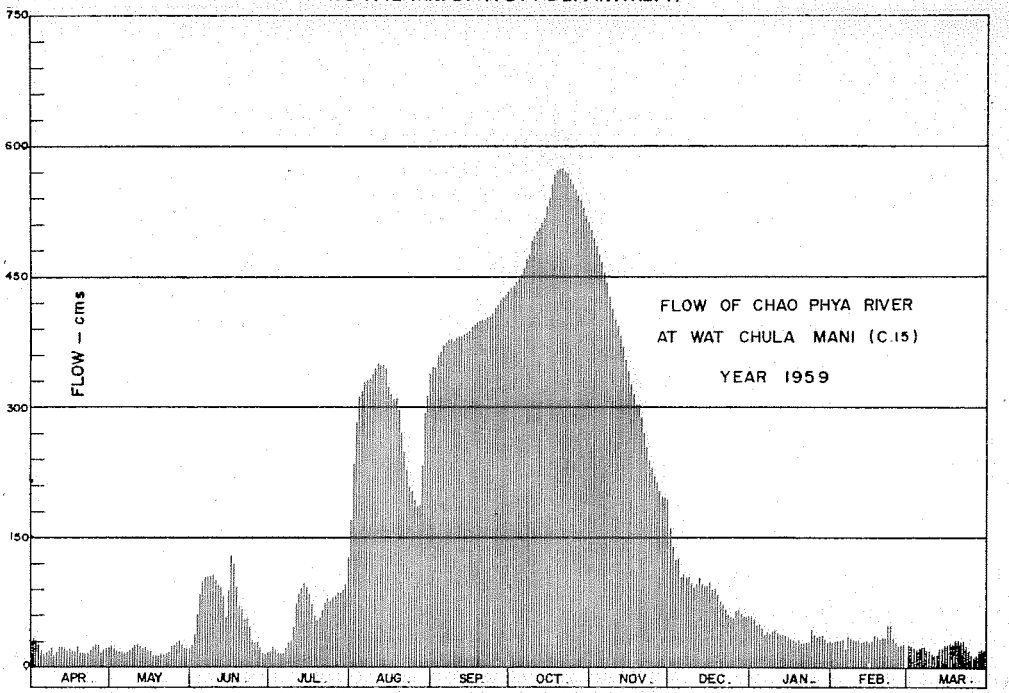
Overbank Flow Conditions: Overbank flow was observed but not included for flow computation.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1955. Flow regulated by Chao Phya Diversion at Chai Nat. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.50	0.37	0.37	0.23	2.24	3.57	4.18	4.57	2.02	0.90	0.44	0.40
2	.46	.30	.59	.33	.71	.57	.20	.52	1.80	.84	.46	.37
3	.38	.26	.93	.28	3.10	.62	.23	.47	.65	.75	.48	.34
4	.25	.24	1.20	.22	.32	.69	.25	.42	.67	.76	.49	.30
5	.15	.24	.39	.18	.37	.74	.28	.36	.44	.70	.49	.31
6	0.21	0.20	1.44	0.22	3.44	3.77	4.33	4.29	1.48	0.58	0.32	0.35
7	.25	.24	.45	.33	.46	.79	.39	.21	.43	.63	.56	.35
8	.31	.29	.46	.44	.47	.79	.42	.12	.44	.60	.51	.29
9	.12	.31	.46	.45	.51	.78	.51	.03	.37	.64	.46	.27
10	.24	.38	.39	.74	.56	.80	.54	3.95	.29	.67	.47	.17
11	0.34	0.39	1.32	1.12	3.59	3.81	4.57	3.89	1.37	0.62	0.48	0.14
12	.34	.37	.28	.21	.58	.81	.59	.82	.43	.59	.44	.20
13	.32	.32	.18	.31	.58	.83	.62	.73	.34	.59	.46	.31
14	.26	.33	0.34	.36	.54	.84	.66	.62	.31	.58	.46	.33
15	.29	.27	1.27	.29	.41	.86	.73	.53	.31	.54	.44	.37
16	0.24	0.21	1.71	1.20	3.33	3.89	4.79	3.43	1.38	0.50	0.49	0.38
17	.25	.15	.60	.04	.29	.91	.86	.34	.26	.48	.59	.41
18	.34	.14	.30	0.87	.30	.93	.92	.25	.27	.44	.55	.38
19	.21	.13	.03	.82	.20	.94	.94	.25	.20	.49	.51	.48
20	.20	.19	0.98	.88	.00	.95	.95	.13	.09	.40	.55	.49
21	0.19	0.15	0.83	0.97	2.82	3.95	4.95	3.00	1.06	0.42	0.54	0.41
22	.20	.20	.83	1.09	.61	.97	.93	2.87	0.98	.43	.74	.47
23	.29	.23	.72	.14	.47	.98	.92	.74	.93	.45	.74	.36
24	.33	.36	.47	.11	.43	4.00	.89	.67	.87	.67	.54	.27
25	.39	.38	.41	.16	.32	.05	.86	.60	.86	.59	.44	.12
26	0.39	0.44	0.43	1.17	2.25	4.07	4.83	2.52	0.97	0.53	0.38	0.11
27	.21	.46	.32	.23	.28	.10	.80	.44	.99	.57	.40	.17
28	.28	.40	.20	.21	.69	.12	.76	.37	.93	.59	.41	.26
29	.31	.32	.16	.25	3.18	.14	.71	.36	.89	.49	.42	.30
30	.33	.31	.24	.34	.33	.16	.66	.33	.90	.41		.25
31		.32		.69	.52		.62		.90	.47		.38
Mean	0.29	0.29	0.94	0.90	3.09	3.88	4.64	3.46	1.25	0.59	0.49	0.31
Max.	0.50	0.46	1.71	1.69	3.59	4.16	4.95	4.57	2.02	0.90	0.74	0.49
Min.	0.12	0.13	0.16	0.18	2.24	3.57	4.18	2.33	0.86	0.40	0.32	0.11

WATER YEAR 1959 : Max. 4.95 m. Min. 0.11 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	34	26	27	19	183	346	435	501	160	61	30	28
2	32	22	39	24	235	346	438	492	139	57	32	26
3	27	20	63	21	283	353	443	483	124	50	33	24
4	20	19	85	18	312	363	446	474	126	51	33	22
5	15	19	100	17	318	370	451	464	105	47	33	23
6	17	17	105	18	328	374	459	452	108	39	23	25
7	20	19	105	24	330	377	469	440	104	42	38	25
8	23	21	106	30	332	377	474	425	105	40	35	21
9	14	23	106	31	337	375	490	411	97	43	32	21
10	19	27	100	50	344	378	495	399	92	45	32	16
11	24	27	95	79	349	379	501	391	97	41	33	15
12	24	26	91	86	347	379	504	381	104	39	30	17
13	23	23	83	94	347	382	510	368	96	39	32	23
14	20	24	57	98	342	384	517	353	94	39	32	24
15	21	21	91	92	323	386	529	340	94	36	30	26
16	19	20	129	85	313	391	540	326	99	34	33	27
17	20	15	119	72	308	393	554	314	90	33	39	29
18	24	15	93	59	309	396	566	302	91	30	37	27
19	17	14	71	55	296	398	570	302	85	33	35	33
20	17	17	67	60	270	399	572	287	76	28	37	33
21	17	15	56	67	248	399	572	270	74	29	36	29
22	17	17	56	76	223	402	568	254	67	30	50	32
23	21	19	48	80	208	403	566	239	63	31	50	26
24	24	26	32	78	203	406	560	230	59	45	36	21
25	27	27	29	82	192	414	554	222	58	39	30	14
26	27	30	30	83	184	417	548	213	67	36	27	13
27	17	32	23	87	187	422	542	204	68	38	28	16
28	21	28	17	86	233	425	535	197	63	39	29	20
29	23	23	16	89	293	428	526	196	60	33	29	22
30	24	23	19	96	313	432	517	193	61	29		20
31		23		127	339		510		61	32		27
Total	648	678	2,058	1,983	8,829	11,694	15,961	10,123	2,787	1,208	974	725
Mean	21.6	21.9	68.6	64.0	285	390	515	337	89.9	38.9	33.6	23.3
Max.	34	32	129	127	349	432	572	501	160	61	50	33
Min.	14	14	16	17	183	346	435	193	58	28	23	13
Runoff - RCIL	55.987	58.579	177.811	171.331	762.826	1,033.690	1,379.030	874.627	240.797	104.371	84.154	62.640

WATER YEAR 1959 : Max. 572 Min. 13 Mean 158 Annual Runoff 4,982.515 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 19	18.00	4.95	572				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
LOP BURI RIVER BASIN

Lop Buri River at Wat Pho Ngam, Lop Buri (L.2)

Location: Lat 14°- 47' - 46" N, Long 100°- 36' - 39" E, on left bank infront of Wat Pho Ngam, one kilometer west of railway station, Amphoe Muang, Lop Buri.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +1.64 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 61

Rating Operation:

Period of Rating: 1950
Rated by Float: -
Rated by Current Meter: 1950

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

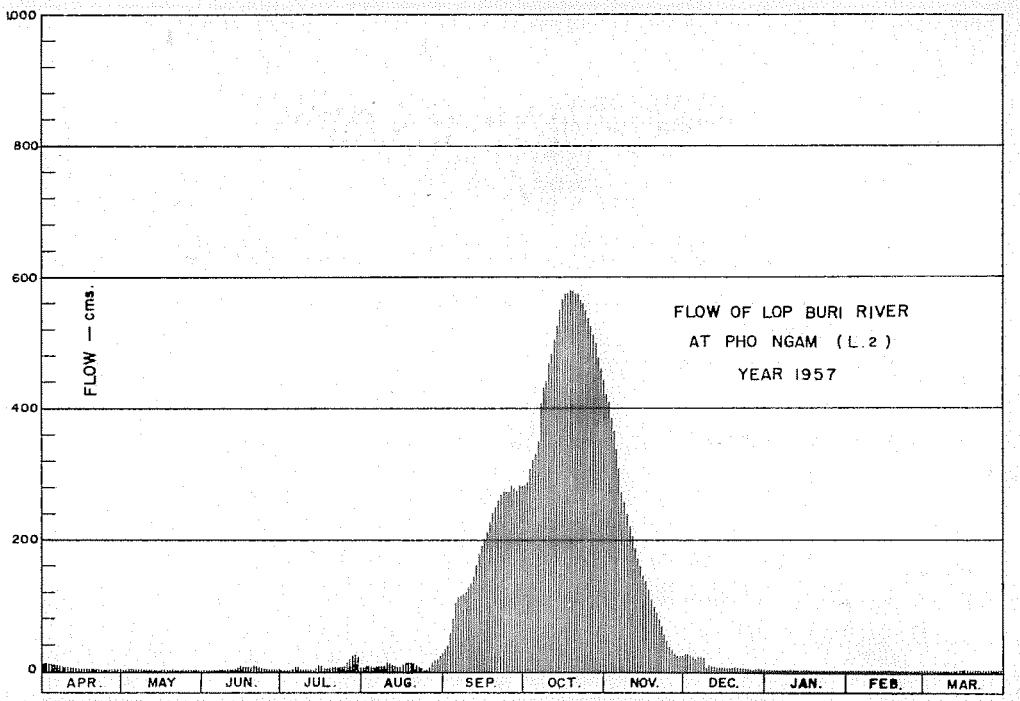
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1950. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.48	2.49	2.31	2.54	3.27	4.50	7.24	7.71	4.14	2.64	2.44	2.29
2	.51	.48	.30	.49	.33	.68	.26	.68	.17	.69	.44	.28
3	.45	.47	.29	.45	.38	5.12	.34	.60	.13	.67	.43	.27
4	.42	.47	.36	.43	.31	.52	.39	.53	.02	.65	.43	.29
5	.37	.46	.36	.89	.29	.90	.42	.44	3.92	.64	.42	.29
6	3.32	2.45	2.37	3.24	3.33	6.00	7.48	7.34	4.07	2.62	2.44	2.29
7	.26	.43	.41	.16	.39	.03	.67	.19	.06	.60	.46	.28
8	.18	.42	.41	2.81	.35	.07	.74	.13	3.94	.60	.56	.27
9	.06	.41	.42	.60	.39	.12	.77	.04	.24	.60	.54	.27
10	.02	.40	.43	.67	.67	.20	.84	6.93	.47	.58	.56	.27
11	2.97	2.39	2.44	2.85	3.53	6.27	7.87	6.84	3.37	2.58	2.51	2.26
12	.94	.38	.46	.81	.46	.36	.92	.72	.32	.60	.49	.26
13	.91	.37	.62	.69	.37	.56	.97	.61	.26	.58	.43	.26
14	.89	.36	3.08	3.09	.28	.68	8.02	.51	.24	.56	.38	.41
15	.86	.36	.34	.47	.30	.76	.05	.36	.27	.54	.36	.45
16	2.83	2.34	3.22	3.34	3.50	6.82	8.07	6.31	3.12	2.53	2.39	2.42
17	.79	.33	.12	.08	.70	.90	.07	.17	.08	.53	.49	.39
18	.75	.32	.12	2.96	.72	.98	.08	.00	.06	.51	.47	.37
19	.75	.31	.25	3.13	.64	7.05	.08	5.84	.16	.50	.44	.34
20	.71	.30	.38	.20	.58	.10	.07	.69	.20	.49	.39	.36
21	2.69	2.29	3.33	3.22	3.48	7.14	8.07	5.51	3.12	2.49	2.36	2.37
22	.67	.28	.21	.28	.29	.18	.05	.28	.01	.48	.35	.34
23	.64	.27	2.97	.28	.08	.20	.04	.04	2.94	.48	.34	.33
24	.61	.26	.78	.24	2.84	.20	.02	4.78	.92	.47	.32	.28
25	.58	.41	.80	.42	.82	.21	.00	.58	.90	.47	.31	.24
26	2.56	2.39	2.72	3.70	3.16	7.24	7.97	4.37	2.85	2.45	2.30	2.23
27	.54	.37	.69	.91	.69	.22	.94	.22	.32	.44	.30	.22
28	.53	.36	.67	4.12	.85	.21	.91	.12	.80	.43	.30	.21
29	.52	.34	.65	.18	.92	.24	.86	.06	.78	.43		.32
30	.51	.33	.62	3.99	4.10	.24	.82	.10	.77	.42		.31
31		.32		.09	.28		.77		.75	.43		.30
Mean	2.91	2.37	2.74	3.14	3.46	6.52	7.80	6.09	3.32	2.54	2.42	2.31
Max.	3.51	2.49	3.38	4.18	4.28	7.24	8.08	7.71	4.17	2.69	2.56	2.45
Min.	2.51	2.26	2.29	2.43	2.82	4.50	7.24	4.06	2.32	2.42	2.30	2.21

WATER YEAR 1957 : Max. 8.08 m. Min. 2.21 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	11	1.45	0.82	1.70	7.70	36	284	422	26	2.20	1.20	0.78
2	11	1.40	0.80	1.45	8.30	41	288	411	26	2.45	1.20	0.76
3	10	1.35	0.78	1.25	8.80	61	309	385	25	2.35	1.15	0.74
4	9.40	1.35	0.92	1.15	8.10	81	322	364	23	2.25	1.15	0.78
5	8.70	1.30	0.92	3.90	7.90	106	331	337	20	2.20	1.10	0.78
6	8.20	1.25	0.94	7.40	8.30	113	349	309	24	2.10	1.20	0.78
7	7.60	1.15	1.05	6.60	8.90	115	408	272	24	2.00	1.30	0.76
8	6.80	1.10	1.05	3.10	8.50	119	432	259	21	2.00	1.80	0.74
9	5.60	1.05	1.10	2.00	8.90	123	443	241	7.40	2.00	1.70	0.74
10	5.20	1.00	1.15	2.35	14	130	470	220	10	1.90	1.80	0.74
11	4.70	0.98	1.20	3.50	12	136	483	206	8.70	1.90	1.55	0.72
12	4.40	0.96	1.30	3.10	10	145	504	188	8.20	2.00	1.45	0.72
13	4.10	0.94	2.10	2.45	8.70	167	527	173	7.60	1.90	1.15	0.72
14	3.90	0.92	5.80	5.90	7.80	182	550	161	7.40	1.80	0.96	1.05
15	3.60	0.92	8.40	10	8.00	194	565	145	7.60	1.70	0.92	1.25
16	3.30	0.88	7.20	8.40	11	203	575	140	6.20	1.65	0.98	1.10
17	2.95	0.86	6.20	5.80	15	215	575	127	5.80	1.65	1.45	0.98
18	2.75	0.84	6.20	4.60	15	229	580	113	5.60	1.55	1.35	0.94
19	2.75	0.82	7.50	6.30	14	243	580	101	6.60	1.50	1.20	0.88
20	2.55	0.80	8.80	7.00	13	252	575	91	7.00	1.45	0.98	0.92
21	2.45	0.78	8.30	7.20	11	261	575	81	6.20	1.45	0.92	0.94
22	2.35	0.76	7.10	7.80	7.90	270	565	69	5.10	1.40	0.90	0.88
23	2.20	0.74	4.70	7.80	5.80	274	560	57	4.40	1.40	0.88	0.86
24	2.05	0.72	2.90	7.40	3.40	274	550	46	4.20	1.35	0.84	0.76
25	1.90	1.05	3.00	9.40	3.20	276	540	38	4.00	1.35	0.82	0.68
26	1.80	0.98	2.60	15	6.60	284	527	32	3.50	1.25	0.80	0.66
27	1.70	0.94	2.45	20	15	279	513	28	0.84	1.20	0.80	0.64
28	1.65	0.92	2.35	25	18	276	500	25	3.00	1.15	0.80	0.62
29	1.60	0.88	2.25	27	20	284	479	24	2.90	1.15		0.84
30	1.55	0.86	2.10	22	25	284	462	25	2.85	1.10		0.82
31		0.84		5.90	29		443		2.75	1.15		0.80
Total	137.75	30.79	101.98	242.85	348.80	5,653	14,864	5,090	319.20	52.50	32.35	25.38
Mean	4.59	0.99	3.40	7.83	11.2	188	479	170	10.3	1.69	1.15	0.82
Max.	11	1.45	8.80	27	29	284	580	422	26	2.45	1.80	1.25
Min.	1.55	0.72	0.78	1.15	3.20	36	284	24	2.75	1.10	0.80	0.62
Runoff - mcm.	11.901	2.660	8.811	20.982	30.136	488.419	1,284.249	439.776	27.579	4.536	2.795	2.192

WATER YEAR 1957: Max. 580 Min. 0.62 Mean 73.7 Annual Runoff 2,324.039 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 18	18.00	8.08	580				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
LOP BURI RIVER BASIN

Lop Buri River at Wat Pho Ngam, Lop Buri (L.2)

Location: Lat 14°- 47' - 46" N, Long 100°- 36' - 39" E, on left bank infront of Wat Pho Ngam, one kilometer west of railway station, Amphoe Muang, Lop Buri.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +1.64 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 61

Rating Operation:

Period of Rating: 1950
Rated by Float: -
Rated by Current Meter: 1950

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

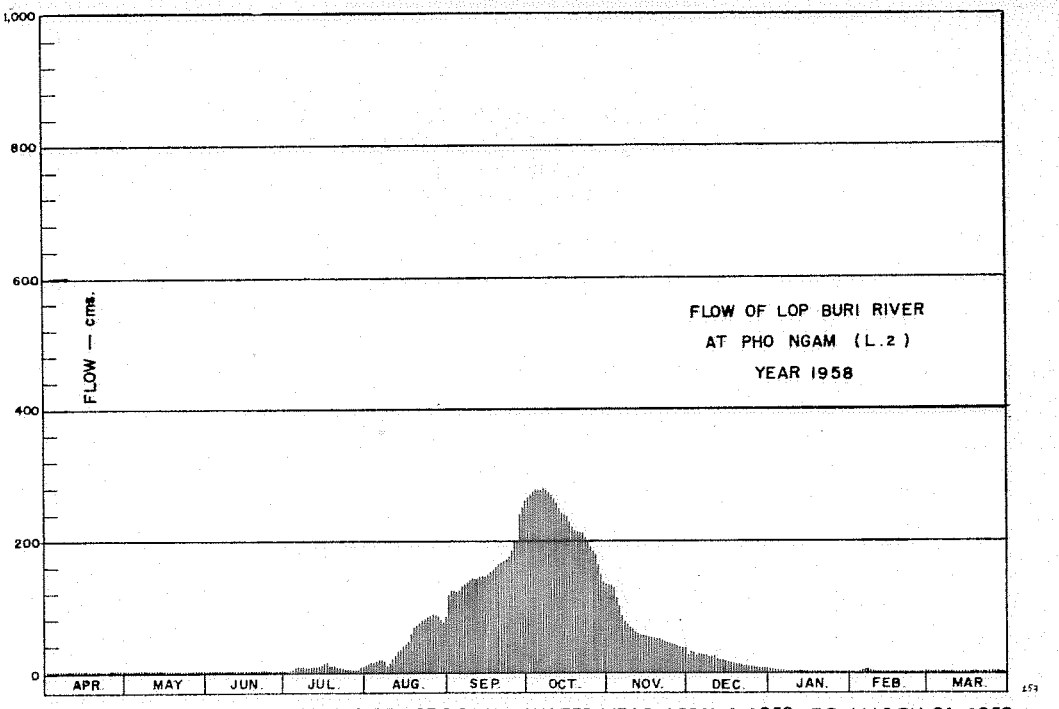
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1950. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2.28	2.23	2.36	2.79	3.59	6.09	7.17	6.26	4.26	3.14	2.34	2.30
2	.27	.22	.34	.81	.71	.14	.19	.26	.42	.07	.36	.29
3	.26	.22	.35	.80	.76	.14	.21	.21	.37	2.98	.37	.28
4	.26	.24	.36	.94	.76	.15	.22	.04	.20	.92	.52	.26
5	.36	.23	.33	3.33	.83	.17	.22	5.87	.26	.84	.82	.25
6	2.36	2.24	2.32	3.47	3.87	6.24	7.22	5.65	4.24	2.29	3.04	2.25
7	.35	.24	.31	.42	.91	.27	.23	.52	.22	.74	.00	.24
8	.42	.23	.29	.45	.83	.29	.22	.40	.21	.70	2.82	.23
9	.46	.21	.27	.36	.49	.32	.20	.31	.18	.69	.67	.23
10	.45	.24	.26	.38	.76	.35	.18	.23	.13	.66	.55	.22
11	2.46	2.23	2.24	3.46	4.01	6.34	7.16	5.14	4.19	2.62	2.47	2.20
12	.48	.22	.24	.45	.19	.35	.13	.10	.00	.57	.43	.19
13	.50	.23	.32	.39	.43	.37	.09	.07	3.94	.55	.41	.18
14	.51	.24	.37	.48	.58	.38	.05	.04	.90	.59	.45	.18
15	.54	.23	.42	.61	.68	.39	.04	.04	.86	.65	.46	.17
16	2.54	2.22	2.46	3.73	4.75	6.42	7.03	5.02	3.81	2.62	2.44	2.24
17	.54	.21	.46	.71	.86	.46	6.98	.00	.75	.52	.41	.23
18	.54	.25	.48	.52	5.11	.49	.95	.00	.69	.46	.38	.22
19	.53	.28	.48	.55	.32	.52	.91	4.98	.63	.41	.35	.21
20	.52	.29	.58	.44	.37	.56	.90	.92	.62	.37	.33	.20
21	2.47	2.27	2.59	3.26	5.43	6.57	6.89	4.88	3.58	2.36	2.31	2.18
22	.43	.26	.57	.31	.49	.59	.89	.83	.51	.32	.31	.17
23	.40	.25	.56	.12	.52	.62	.85	.80	.49	.30	.29	.16
24	.36	.24	.55	.03	.60	.65	.80	.76	.47	.28	.28	.16
25	.30	.23	.54	.00	.64	.71	.75	.73	.43	.26	.27	.19
26	2.28	2.31	2.52	2.91	5.66	6.82	6.70	4.71	3.39	2.24	2.26	2.18
27	.24	.28	.56	.81	.63	.80	.66	.67	.33	.24	.26	.17
28	.24	.42	.70	.77	.60	7.04	.54	.63	.29	.26	.30	.16
29	.24	.44	.68	3.01	.51	.10	.42	.58	.26	.29		.15
30	.23	.41	.73	.31	.46	.14	.34	.53	.23	.32		.15
31		.40		.50	.60		.26		.20	.33		.14
Mean	2.39	2.26	2.44	3.26	4.71	6.49	6.95	5.15	3.81	2.53	2.49	2.20
Max.	2.54	2.44	2.73	3.73	5.66	7.14	7.23	6.26	4.42	3.14	3.04	2.30
Min.	2.23	2.21	2.24	2.77	3.49	6.09	6.26	4.53	3.20	2.24	2.26	2.14

WATER YEAR 1958 : Max. 7.23 m. Min. 2.14 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.76	0.66	0.92	2.95	13	120	267	135	29	6.40	0.88	0.80
2	0.74	0.64	0.88	3.10	15	125	272	135	34	5.70	0.92	0.78
3	0.72	0.64	0.90	3.00	16	125	276	131	32	4.80	0.94	0.76
4	0.72	0.68	0.92	4.40	16	125	279	116	27	4.20	1.60	0.72
5	0.92	0.66	0.86	8.30	18	127	279	104	29	3.40	3.20	0.70
6	0.92	0.68	0.84	10	19	134	279	89	28	2.95	5.40	0.70
7	0.90	0.68	0.82	9.40	20	136	281	81	28	2.70	5.00	0.68
8	1.10	0.66	0.78	10	18	138	279	75	27	2.50	3.20	0.66
9	1.30	0.62	0.74	8.60	11	141	274	70	26	2.45	2.35	0.66
10	1.25	0.68	0.72	8.80	16	144	270	66	25	2.30	1.75	0.64
11	1.30	0.66	0.68	10	22	143	265	62	27	2.10	1.35	0.60
12	1.40	0.64	0.68	10	27	144	259	60	22	1.85	1.15	0.58
13	1.50	0.66	0.84	8.90	34	146	250	58	20	1.75	1.05	0.56
14	1.55	0.68	0.94	11	38	147	242	57	19	1.95	1.25	0.56
15	1.70	0.66	1.10	13	42	148	241	57	18	2.25	1.30	0.54
16	1.70	0.64	1.30	16	45	151	239	56	17	2.10	1.20	0.68
17	1.70	0.62	1.30	15	49	156	229	55	16	1.60	1.05	0.66
18	1.70	0.70	1.40	11	61	159	224	55	15	1.30	0.96	0.64
19	1.65	0.76	1.40	12	71	162	217	54	14	1.05	0.90	0.62
20	1.60	0.78	1.90	10	74	167	215	52	13	0.97	0.86	0.60
21	1.35	0.74	1.95	7.60	77	168	213	50	13	0.92	0.82	0.56
22	1.15	0.72	1.85	8.10	80	171	213	48	11	0.84	0.82	0.54
23	1.00	0.70	1.80	6.20	81	175	207	47	11	0.80	0.78	0.52
24	0.92	0.68	1.75	5.30	86	179	200	45	10	0.76	0.76	0.52
25	0.80	0.66	1.70	5.00	88	187	192	44	10	0.72	0.74	0.58
26	0.76	0.82	1.60	4.10	90	203	185	43	8.90	0.68	0.72	0.56
27	0.68	0.76	1.80	3.10	88	200	180	42	8.30	0.68	0.72	0.54
28	0.68	1.10	2.50	2.85	86	241	165	40	7.90	0.72	0.80	0.52
29	0.68	1.20	2.40	5.10	81	252	151	38	7.60	0.78		0.50
30	0.66	1.05	2.65	8.10	78	261	143	37	7.30	0.84		0.50
31		1.00		11	86		135		7.00	0.86		0.48
Total	33.81	22.83	39.92	251.90	1,546	4,875	7,121	2,002	568.00	62.92	42.47	18.96
Mean	1.13	0.74	1.33	8.12	49.9	162	230	66.7	18.3	2.03	1.52	0.61
Max.	1.70	1.20	2.65	16	90	261	281	135	34	6.40	5.40	0.80
Min.	0.66	0.62	0.68	2.85	11	120	135	37	7.00	0.68	0.72	0.48
Runoff - mcm.	2.921	1.972	3.449	21.764	133.574	421.200	615.254	172.973	49.075	5.436	3.669	1.638

WATER YEAR 1958 : Max. 281 Min. 0.48 Mean 45.4 Annual Runoff 1,432.927 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 7	06.00	7.23	281				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
LOP BURI RIVER BASIN

Lop Buri River at Wat Pho Ngam, Lop Buri (L.2)

Location: Lat 14°- 47' - 46" N, Long 100°- 36' - 39" E, on left bank infront of Wat Pho Ngam, one kilometer west of railway station, Amphoe Muang, Lop Buri.

Drainage Area: Flood plain, referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +1.64 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 61

Rating Operation:

Period of Rating: 1950
Rated by Float: -
Rated by Current Meter: 1950

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

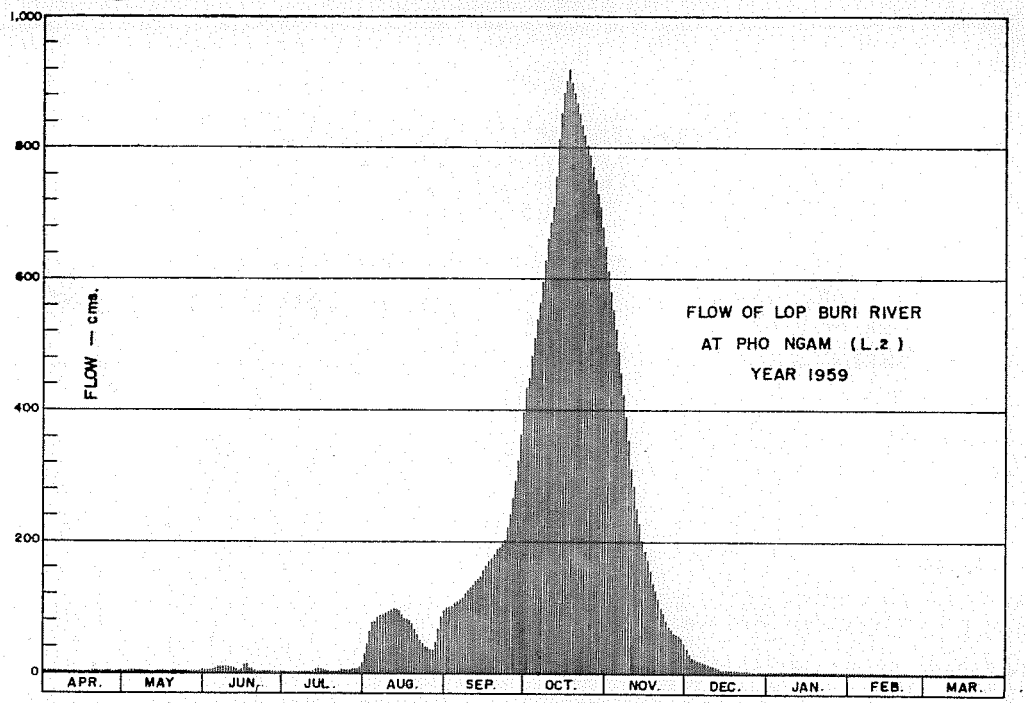
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1950. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2.14	2.14	2.68	2.46	4.34	5.83	7.75	8.13	4.59	2.58	2.48	2.22
2	.14	.14	.71	.48	.79	.85	.79	.08	.37	.55	.44	.21
3	.13	.14	.76	.49	5.18	.89	.87	.03	.16	.52	.48	.20
4	.13	.13	.98	.57	.48	.94	.93	7.97	.02	.50	.48	.21
5	.13	.13	3.27	.55	.55	.97	8.00	.90	3.96	.48	.56	.21
6	2.12	2.13	3.38	2.50	5.62	6.00	8.05	7.81	3.92	2.45	2.67	2.20
7	.12	.14	.43	.46	.66	.04	.11	.72	.83	.42	.57	.20
8	.12	.14	.43	.42	.69	.12	.15	.62	.78	.40	.47	.20
9	.12	.13	.40	.39	.71	.16	.19	.50	.70	.38	.41	.19
10	.12	.13	.33	.37	.75	.21	.23	.36	.63	.36	.48	.19
11	2.12	2.13	3.32	2.34	5.77	6.26	8.26	7.25	3.53	2.34	2.63	2.18
12	.11	.13	.15	.72	.78	.33	.32	.10	.46	.34	.72	.17
13	.11	.14	.04	3.13	.79	.38	.39	6.98	.37	.34	.75	.17
14	.11	.16	2.80	.22	.76	.42	.44	.84	.20	.34	.79	.17
15	.10	.16	3.04	.20	.67	.48	.48	.73	.27	.33	.72	.16
16	2.10	2.17	3.54	3.07	5.57	6.55	8.50	6.62	3.25	2.32	2.60	2.16
17	.10	.17	.59	2.90	.53	.60	.52	.49	.21	.32	.48	.15
18	.09	.18	.29	.80	.51	.64	.50	.34	.18	.32	.40	.15
19	.09	.20	.01	.76	.44	.68	.48	.19	.14	.31	.34	.15
20	.09	.20	2.81	.72	.29	.73	.46	.04	.11	.30	.37	.14
21	2.09	2.24	2.69	2.76	5.11	6.76	8.44	5.86	3.08	2.30	2.38	2.14
22	.08	.31	.67	.87	4.93	.80	.42	.71	.03	.30	.32	.14
23	.09	.35	.64	.98	.79	.83	.40	.56	2.98	.30	.29	.13
24	.10	.37	.56	3.04	.67	.95	.38	.37	.95	.29	.26	.13
25	.15	.36	.50	.06	.56	7.06	.36	.27	.92	.28	.26	.12
26	2.14	2.39	2.49	3.07	4.47	7.18	8.34	5.16	2.86	2.33	2.25	2.12
27	.14	.42	.48	.10	.51	.29	.32	.12	.81	.47	.25	.12
28	.14	.42	.46	.14	.87	.40	.29	.09	.78	.66	.23	.11
29	.14	.48	.43	.15	5.29	.53	.26	.01	.74	.67	.22	.11
30	.14	.56	.46	.13	.60	.64	.22	4.82	.70	.62		.11
31		.64		.74	.76		.18		.66	.54		.11
Mean	2.11	2.24	2.94	2.82	5.26	6.55	8.26	6.59	3.36	2.41	2.46	2.16
Max.	2.15	2.64	3.59	3.74	5.79	7.64	8.52	8.13	4.59	2.67	2.79	2.22
Min.	2.08	2.13	2.43	2.34	4.34	5.83	7.75	4.82	2.66	2.28	2.22	2.11

WATER YEAR 1959 : Max. 8.52 m. Min. 2.08 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.48	0.48	2.40	1.30	31	101	436	613	39	1.90	1.40	0.64
2	0.48	0.48	2.55	1.40	47	103	450	580	32	1.75	1.20	0.62
3	0.46	0.48	2.80	1.45	64	105	483	555	26	1.60	1.40	0.60
4	0.46	0.46	4.80	1.85	79	109	509	527	23	1.50	1.40	0.62
5	0.46	0.46	7.70	1.75	83	111	540	495	21	1.40	1.80	0.62
6	0.44	0.46	8.80	1.50	87	113	565	458	20	1.25	2.35	0.60
7	0.44	0.48	9.60	1.30	90	116	598	425	18	1.10	1.85	0.60
8	0.44	0.48	9.60	1.10	91	123	628	392	17	1.00	1.35	0.60
9	0.44	0.46	9.00	0.98	93	126	658	355	15	0.96	1.05	0.58
10	0.44	0.46	8.30	0.94	96	131	688	314	14	0.92	1.40	0.58
11	0.44	0.46	8.20	0.88	97	135	710	286	12	0.88	2.15	0.56
12	0.42	0.46	6.50	2.60	98	142	756	252	10	0.88	2.60	0.54
13	0.42	0.48	5.40	6.30	98	147	812	229	8.70	0.88	2.75	0.54
14	0.42	0.52	3.00	7.20	96	151	852	206	7.00	0.88	2.95	0.54
15	0.40	0.52	5.40	7.00	90	158	884	190	7.70	0.86	2.60	0.52
16	0.40	0.54	12	5.70	84	166	900	175	7.50	0.84	2.00	0.52
17	0.40	0.54	13	4.00	82	172	920	159	7.10	0.84	1.40	0.50
18	0.38	0.56	7.90	3.00	81	177	900	143	6.80	0.84	1.00	0.50
19	0.38	0.60	5.10	2.80	77	182	884	129	6.40	0.82	0.88	0.50
20	0.38	0.60	3.10	2.60	70	190	868	116	6.10	0.80	0.94	0.48
21	0.38	0.68	2.45	2.80	61	194	852	103	5.80	0.80	0.96	0.48
22	0.36	0.82	2.35	3.70	52	200	836	93	5.30	0.80	0.84	0.48
23	0.38	0.90	2.20	4.80	47	205	820	84	4.80	0.80	0.86	0.46
24	0.40	0.94	1.80	5.40	42	224	804	74	4.50	0.78	0.72	0.46
25	0.50	0.92	1.50	5.60	38	244	788	69	4.20	0.76	0.72	0.44
26	0.48	0.98	1.45	5.70	35	270	772	63	3.60	0.86	0.70	0.44
27	0.48	1.10	1.40	6.00	36	296	752	61	3.10	1.35	0.70	0.44
28	0.48	1.10	1.30	6.40	50	325	733	60	2.90	2.30	0.66	0.42
29	0.48	1.40	1.15	6.50	70	364	710	56	2.70	2.35	0.64	0.42
30	0.48	1.80	1.30	8.10	86	398	680	48	2.50	2.10		0.42
31		2.20		16	96		650		2.30	1.70		0.42
Total	13.00	22.82	152.05	126.65	2,247	5,478	22,442	7,310	346.00	36.50	41.27	16.14
Mean	0.43	0.74	5.07	4.08	72.5	183	724	244	11.2	1.18	1.47	0.52
Max.	0.48	2.20	13	16	98	398	920	613	39	2.35	2.95	0.64
Min.	0.36	0.46	1.15	0.88	31	101	436	48	2.30	0.76	0.64	0.42
Runoff - MCM.	1.123	1.972	13.137	10.942	194.140	473.299	1,938.989	631.584	29.894	3.154	3.565	1.394

WATER YEAR 1959 : Max. 920 Min. 0.36 Mean 104.45 Annual Runoff 3,303.195 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 17	06.00	8.52	920				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
PASAK RIVER BASIN

Pasak River at Kaeng Khoi, Saraburi (S.2)

Location: Lat 14°- 35' - 32" N, Long 101°- 00' - 23' E, on right bank 100 meters downstream from Kaeng Khoi Water Supply, Amphoe Kaeng Khoi, Saraburi.

Drainage Area: 14,396 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 5.84 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1914 to date.

Rating Operation:

Period of Rating: 1945, 1947 - 48, 1959 - 61, 1965 to date.
Rated by Float: 1945, 1947 - 48
Rated by Current Meter: 1959 - 61, 1965 to date.

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

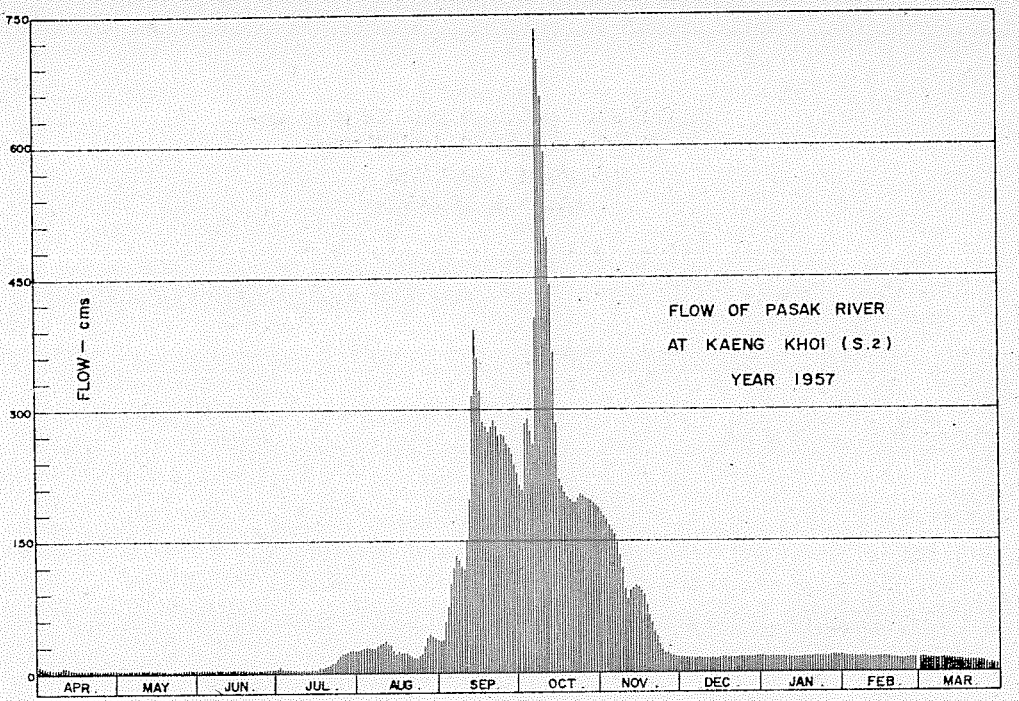
Overbank Flow Conditions: No overbank flow.

General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1959. Natural flow of stream affected by the diversions upstream which undefined.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.31	6.94	6.93	7.16	7.79	7.96	10.13	9.78	7.59	7.63	7.64	7.55
2	.26	.94	.92	.28	.81	.97	.06	.73	.59	.62	.64	.55
3	.21	.94	.92	.12	.82	8.29	.83	.69	.58	.62	.63	.55
4	.16	.93	.92	.06	.83	.50	.89	.62	.58	.62	.63	.54
5	.13	.93	.92	.05	.84	.85	.74	.56	.58	.62	.62	.54
6	7.12	6.93	6.93	7.02	7.81	9.08	10.60	9.51	7.57	7.62	7.62	7.54
7	.09	.93	.93	6.98	.82	.24	12.00	.39	.57	.61	.62	.54
8	.08	.93	.93	.97	.87	.18	14.83	.24	.57	.61	.61	.53
9	.11	.93	.94	.96	.92	.08	.56	.05	.57	.61	.61	.53
10	.26	.93	.95	.96	.94	.05	.21	8.75	.56	.61	.60	.53
11	7.25	6.92	6.96	6.97	7.96	9.44	13.68	8.61	7.56	7.60	7.60	7.52
12	.20	.92	.96	.97	.93	.96	12.83	.74	.56	.60	.59	.52
13	.15	.92	.97	.88	.87	11.16	.34	.78	.56	.60	.59	.51
14	.10	.92	.98	7.05	.76	.86	11.63	.80	.57	.60	.59	.51
15	.07	.92	.98	.12	.70	.58	10.85	.78	.57	.60	.58	.50
16	7.06	6.92	6.99	7.19	7.76	11.21	10.19	8.73	7.58	7.61	7.58	7.49
17	.05	.92	.99	.23	.72	10.86	.12	.66	.58	.61	.58	.49
18	.05	.92	7.00	.25	.75	.81	.03	.52	.58	.62	.58	.48
19	.04	.92	.00	.29	.70	.74	9.98	.35	.59	.62	.57	.47
20	.04	.91	.00	.36	.66	.81	.95	.24	.59	.62	.57	.47
21	7.03	6.91	7.01	7.38	7.60	10.88	9.92	8.12	7.59	7.63	7.57	7.46
22	.02	.91	.01	.42	.62	.81	.91	.03	.59	.63	.57	.44
23	.01	.91	.01	.49	.61	.70	.98	7.89	.60	.63	.56	.43
24	6.99	.91	.01	.62	.66	.72	10.02	.76	.60	.63	.56	.42
25	.99	.91	.01	.68	.72	.70	.00	.70	.60	.64	.56	.39
26	6.98	6.92	7.02	7.73	7.89	10.61	9.97	7.69	7.61	7.64	7.56	7.38
27	.97	.92	.02	.73	8.04	.57	.96	.66	.61	.64	.55	.31
28	.96	.92	.03	.75	.08	.49	.93	.64	.61	.64	.55	.34
29	.95	.92	.04	.78	.04	.37	.91	.61	.62	.65		.32
30	.94	.93	.05	.78	.00	.26	.87	.60	.63	.65		.30
31		.93		.79	7.97		.83		.63	.65		.29
Mean	7.09	6.92	6.98	7.29	7.82	10.06	10.96	8.61	7.59	7.62	7.59	7.46
Max.	7.31	6.94	7.05	7.79	8.08	11.86	14.83	9.78	7.63	7.65	7.64	7.55
Min.	6.94	6.91	6.92	6.88	7.61	7.96	9.83	7.60	7.56	7.60	7.55	7.29

WATER YEAR 1957 : Max. 14.83 m. Min. 6.88 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	8.30	3.26	3.17	5.52	26	37	214	182	17	19	19	16
2	7.20	3.26	3.08	7.60	28	38	208	178	17	18	19	16
3	6.20	3.26	3.08	5.04	28	60	283	174	17	18	19	16
4	5.52	3.17	3.08	4.40	29	76	289	168	17	18	19	15
5	5.16	3.17	3.08	4.30	29	103	274	162	17	18	18	15
6	5.04	3.17	3.17	4.00	28	121	260	158	16	18	18	15
7	4.70	3.17	3.17	3.62	28	134	405	147	16	18	18	15
8	4.60	3.17	3.17	3.53	31	129	733	134	16	18	18	15
9	4.92	3.17	3.26	3.44	34	121	699	119	16	18	18	15
10	7.20	3.17	3.35	3.44	36	119	657	95	16	18	17	15
11	7.00	3.08	3.44	3.53	37	152	594	84	16	17	17	15
12	6.00	3.08	3.44	3.53	35	198	496	94	16	17	17	15
13	5.40	3.08	3.53	2.72	31	316	442	97	16	17	17	14
14	4.80	3.08	3.62	4.30	25	390	365	99	16	17	17	14
15	4.50	3.08	3.62	5.04	22	359	285	97	16	17	17	14
16	4.40	3.08	3.71	5.88	25	321	220	93	17	18	17	14
17	4.30	3.08	3.71	6.60	23	286	213	88	17	18	17	14
18	4.30	3.08	3.80	7.00	24	281	205	77	17	18	17	13
19	4.20	3.08	3.80	7.80	22	274	200	64	17	18	16	13
20	4.20	2.99	3.80	9.80	20	281	198	56	17	18	16	13
21	4.10	2.99	3.90	10	19	288	195	47	17	19	16	13
22	4.00	2.99	3.90	12	18	281	194	41	17	19	16	12
23	3.90	2.99	3.90	14	18	270	200	32	18	19	16	12
24	3.71	2.99	3.90	18	20	272	204	25	18	19	16	12
25	3.71	2.99	3.90	21	23	270	202	22	18	19	16	11
26	3.62	3.08	4.00	23	32	261	199	22	18	19	16	10
27	3.53	3.08	4.00	23	42	257	198	20	18	19	16	8.30
28	3.44	3.08	4.10	24	45	249	196	19	18	19	16	9.20
29	3.35	3.08	4.20	26	42	237	194	18	18	20		8.60
30	3.26	3.17	4.30	26	40	227	190	18	19	20		8.00
31		3.17		26	38		187		19	20		7.80
Total	144.56	96.29	108.18	324.09	898	6,408	9,399	2,630	528	568	479	403.90
Mean	4.82	3.11	3.61	10.4	29.0	214	303	87.7	17.0	18.3	17.1	13.0
Max.	8.30	3.26	4.30	26	45	390	733	182	19	20	19	16
Min.	3.26	2.99	3.08	2.72	18	37	187	18	16	17	16	7.80
Runoff - mcm.	12.490	8.319	9.347	28.001	77.587	553.651	812.074	227.232	45.619	49.075	41.386	34.897

WATER YEAR 1957 : Max. 733 Min. 2.72 Mean 60.2 Annual Runoff 1,899.678 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 8	12.00	14.87	738				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
PASAK RIVER BASIN

Pasak River at Kaeng Khoi, Saraburi (S.2)

Location: Lat 14°- 35' - 32" N, Long 101°- 00' - 23' E, on right bank 100 meters downstream from Kaeng Khoi Water Supply, Amphoe Kaeng Khoi, Saraburi.

Drainage Area: 14,396 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 5.84 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1914 to date.

Rating Operation:

Period of Rating: 1945, 1947 - 48, 1959 - 61, 1965 to date.
Rated by Float: 1945, 1947 - 48
Rated by Current Meter: 1959 - 61, 1965 to date.

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

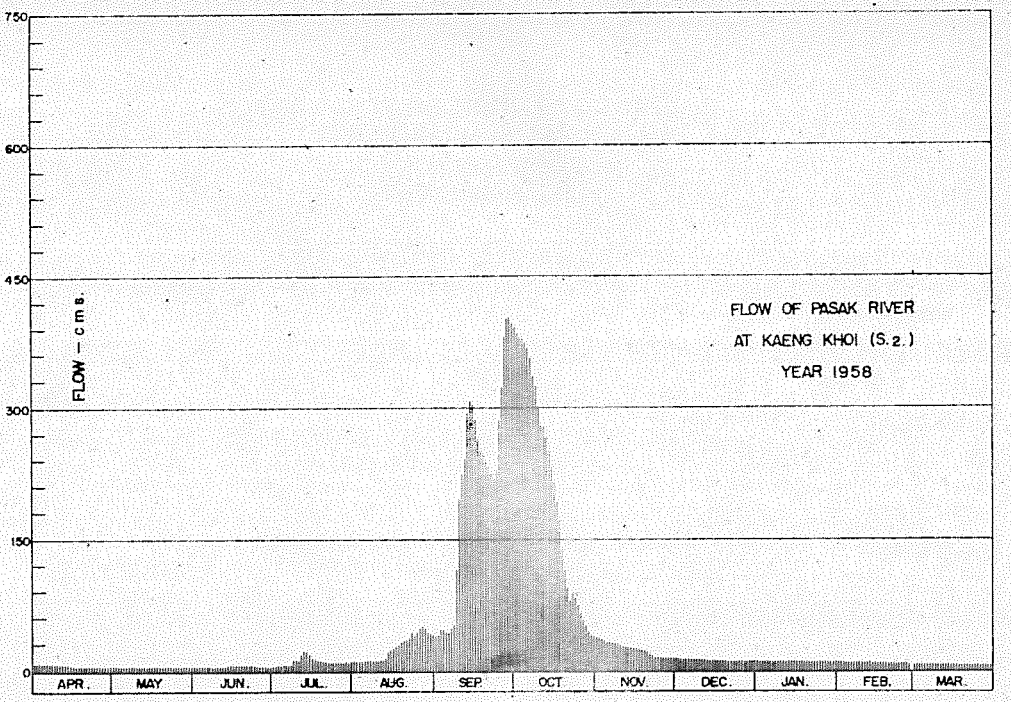
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage discharge relation used is defined by discharge measurements during 1959. Natural flow of stream affected by the diversions upstream which undefined.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.28	7.12	7.09	7.19	7.43	8.01	11.88	8.02	7.55	7.46	7.42	7.33
2	.27	.11	.10	.18	.42	.03	.83	.01	.55	.45	.42	.33
3	.27	.11	.10	.21	.39	.13	.79	7.98	.54	.45	.41	.32
4	.26	.11	.12	.23	.40	.13	.77	.95	.54	.45	.41	.32
5	.25	.11	.13	.25	.43	.08	.74	.92	.54	.45	.41	.32
6	7.25	7.10	7.14	7.24	7.45	8.09	11.68	7.92	7.53	7.45	7.41	7.31
7	.24	.10	.14	.26	.45	.14	.57	.91	.53	.44	.41	.31
8	.24	.10	.15	.33	.45	.22	.37	.90	.52	.44	.40	.31
9	.23	.10	.17	.49	.44	9.03	.27	.89	.51	.44	.40	.30
10	.22	.11	.15	.49	.42	.96	.05	.86	.51	.44	.40	.30
11	7.21	7.11	7.14	7.45	7.48	10.24	10.81	7.84	7.50	7.44	7.39	7.30
12	.21	.11	.14	.61	.51	.45	.81	.82	.49	.44	.39	.30
13	.20	.10	.17	.74	.55	.93	.65	.81	.48	.44	.39	.29
14	.19	.10	.20	.72	.73	11.08	.53	.81	.48	.44	.38	.29
15	.19	.10	.22	.64	.77	.04	.32	.80	.47	.43	.38	.28
16	7.18	7.09	7.23	7.52	7.80	10.87	10.13	7.80	7.47	7.43	7.38	7.28
17	.16	.09	.26	.50	.83	.65	9.91	.79	.47	.43	.37	.27
18	.14	.09	.29	.47	.88	.54	.68	.78	.46	.43	.37	.27
19	.14	.10	.28	.44	.91	.48	.30	.76	.46	.42	.37	.27
20	.14	.10	.27	.41	.93	.40	.01	.72	.46	.42	.36	.27
21	7.13	7.10	7.25	7.40	7.96	10.33	8.71	7.68	7.46	7.42	7.36	7.26
22	.13	.10	.24	.38	8.00	.25	.59	.63	.45	.42	.35	.26
23	.13	.09	.23	.37	.08	.19	.69	.59	.45	.42	.35	.26
24	.12	.09	.22	.36	.06	.31	.61	.58	.45	.43	.35	.27
25	.12	.09	.19	.36	.09	.88	.49	.57	.46	.43	.35	.28
26	7.13	7.09	7.19	7.38	8.14	11.40	8.39	7.57	7.46	7.43	7.34	7.27
27	.12	.08	.18	.38	.19	.79	.28	.56	.46	.43	.34	.27
28	.12	.08	.19	.36	.16	.97	.19	.56	.47	.42	.33	.26
29	.12	.08	.18	.36	.08	.99	.10	.55	.46	.42		.26
30	.12	.08	.18	.37	.05	.94	.07	.55	.46	.42		.25
31		.09		.41	.04		.03		.46	.42		.25
Mean	7.18	7.10	7.18	7.40	7.76	10.05	10.33	7.79	7.49	7.43	7.38	7.29
Max.	7.28	7.12	7.29	7.74	8.19	11.99	11.88	8.02	7.55	7.46	7.42	7.33
Min.	7.12	7.08	7.09	7.18	7.39	8.01	8.03	7.55	7.45	7.42	7.33	7.25

WATER YEAR 1958 : Max. 11.99 m. Min. 7.08 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.60	5.04	4.70	5.88	12	40	392	41	16	13	12	8.90
2	7.40	4.92	4.80	5.76	12	42	386	40	16	12	12	8.90
3	7.40	4.92	4.80	6.20	11	48	382	38	15	12	11	8.60
4	7.20	4.92	5.04	6.60	11	48	380	36	15	12	11	8.60
5	7.00	4.92	5.16	7.00	12	45	376	34	15	12	11	8.60
6	7.00	4.80	5.28	6.80	13	45	370	34	15	12	11	8.30
7	6.80	4.80	5.28	7.20	13	49	358	34	15	12	11	8.30
8	6.80	4.80	5.40	8.90	13	54	337	33	15	12	11	8.30
9	6.60	4.80	5.64	14	12	117	327	32	14	12	11	8.00
10	6.40	4.92	5.40	14	12	198	305	31	14	12	11	8.00
11	6.20	4.92	5.28	12	13	225	281	29	14	12	11	8.00
12	6.20	4.92	5.28	18	14	245	281	28	14	12	11	8.00
13	6.00	4.80	5.64	24	16	293	265	28	13	12	11	7.80
14	5.66	4.80	6.00	23	23	308	253	28	13	12	10	7.80
15	5.88	4.80	6.40	19	25	304	232	27	13	12	10	7.60
16	5.76	4.70	6.60	15	27	287	214	27	13	12	10	7.60
17	5.52	4.70	7.20	14	29	265	194	26	13	12	10	7.40
18	5.28	4.70	7.80	13	32	254	173	26	13	12	10	7.40
19	5.28	4.80	7.60	12	34	248	139	25	13	12	10	7.40
20	5.28	4.80	7.40	11	35	240	116	23	13	12	9.80	7.40
21	5.16	4.80	7.00	11	37	233	92	21	13	12	9.80	7.20
22	5.16	4.80	6.80	10	39	226	82	19	12	12	9.50	7.20
23	5.16	4.70	6.60	10	45	220	90	17	12	12	9.50	7.20
24	5.04	4.70	6.40	9.80	43	231	84	17	12	12	9.50	7.40
25	5.04	4.70	5.88	9.80	45	288	75	16	13	12	9.50	7.60
26	5.16	4.70	5.88	10	49	340	67	16	13	12	9.20	7.40
27	5.04	4.60	5.76	10	52	382	59	16	13	12	9.20	7.40
28	5.04	4.60	5.88	9.80	50	402	52	16	13	12	8.90	7.20
29	5.04	4.60	5.76	9.80	45	404	46	16	13	12		7.20
30	5.04	4.60	5.76	10	43	398	44	16	13	12		7.00
31		4.70		11	42		41		13	12		7.00
Total	178.36	148.28	178.42	354.54	859	6,479	6,493	790	422	373	289.90	240.70
Mean	5.94	4.78	5.95	11.4	27.7	216	209	26.3	13.6	12.0	10.3	7.76
Max.	7.60	5.04	7.80	24	52	404	392	41	16	13	12	8.90
Min.	5.04	4.60	4.70	5.76	11	40	41	16	12	12	8.90	7.00
Runoff - mcm.	15.410	12.811	15.415	30.632	74.218	559.786	560.995	68.256	36.461	32.227	25.047	20.796

WATER YEAR 1958 : Max. 404 Min. 4.60 Mean 46.0 Annual Runoff 1,452.056 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 29	06.00	12.00	405				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
PASAK RIVER BASIN

Pasak River at Kaeng Khoi, Saraburi (S.2)

Location: Lat 14° – 35' – 32" N, Long 101° – 00' – 23" E, on right bank 100 meters downstream from Kaeng Khoi Water Supply, Amphoe Kaeng Khoi, Saraburi.

Drainage Area: 14,396 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 5.84 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1914 to date.

Rating Operation:

Period of Rating: 1945, 1947 – 48, 1959 – 61, 1965 to date.
Rated by Float: 1945, 1947 – 48.
Rated by Current Meter: 1959 – 61, 1965 to date.

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

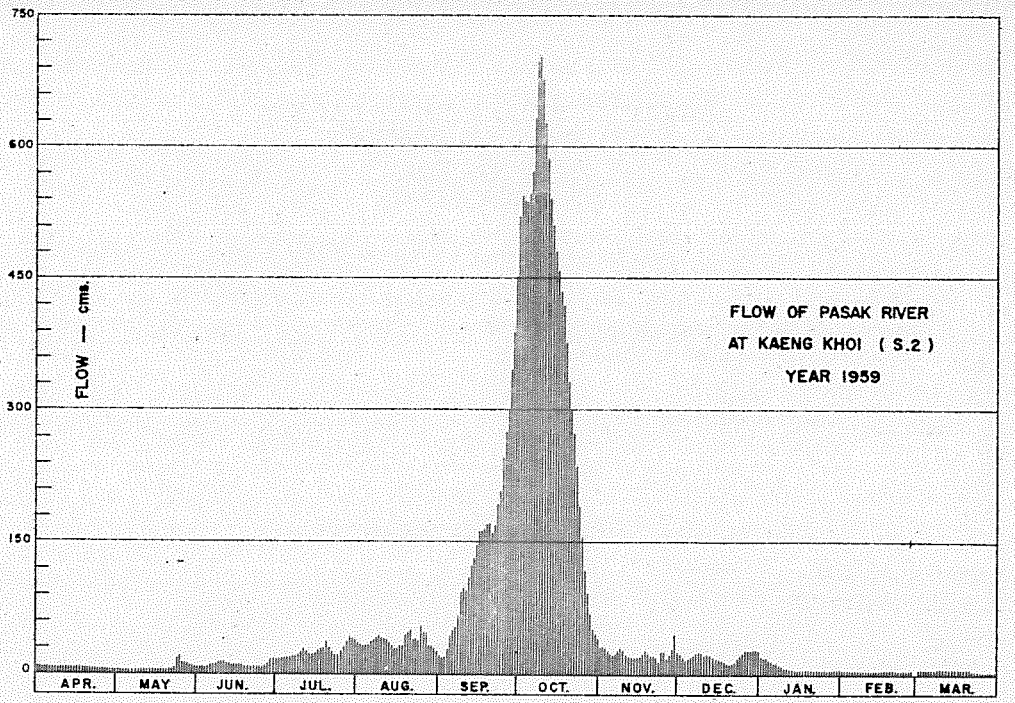
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1959. Natural flow of stream affected by the diversions upstream which undefined.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	7.24	7.06	7.31	7.57	7.94	7.72	13.01	7.90	7.68	7.74	7.04	7.13
2	.24	.05	.30	.57	.91	.67	.23	.95	.61	.59	.03	.14
3	.24	.03	.29	.58	.90	.65	.20	.95	.54	.60	.01	.11
4	.24	.02	.29	.59	.88	.91	.15	.88	.57	.53	6.99	.11
5	.23	.01	.31	.60	.90	8.03	.25	.85	.56	.46	.98	.13
6	7.23	7.01	7.34	7.60	7.95	8.11	13.44	7.80	7.64	7.43	6.97	7.17
7	.23	.00	.38	.61	8.01	.14	14.17	.82	.72	.36	.97	.16
8	.22	.00	.40	.62	.03	.27	.65	.82	.74	.34	.96	.17
9	.22	6.99	.42	.67	.06	.67	.69	.81	.72	.27	.97	.18
10	.21	.98	.44	.71	.03	.72	.52	.77	.67	.22	.97	.20
11	7.21	6.98	7.44	7.82	8.02	8.74	14.09	7.72	7.69	7.17	6.96	7.12
12	.21	.97	.42	.78	.01	.92	13.66	.68	.67	.15	.95	.20
13	.21	.97	.41	.73	7.94	9.08	.21	.65	.65	.14	.95	.16
14	.21	.96	.40	.70	.88	.23	.02	.67	.61	.14	.94	.14
15	.20	.96	.37	.68	.84	.35	12.85	.69	.58	.13	.94	.13
16	7.20	6.97	7.35	7.74	7.82	9.55	12.59	7.72	7.55	7.13	6.94	7.12
17	.20	.96	.34	.79	.87	.56	.40	.77	.52	.12	.93	.10
18	.20	.96	.34	.83	.90	.61	.28	.80	.47	.17	.93	.07
19	.19	.96	.33	.84	8.08	.60	11.94	.71	.41	.19	.93	.04
20	.18	.96	.33	.94	.12	.56	.52	.68	.40	.18	.92	.00
21	7.18	6.97	7.33	7.86	8.15	9.46	11.14	7.65	7.45	7.18	6.92	6.93
22	.17	7.13	.32	.76	.01	.55	10.80	.66	.51	.17	.92	.90
23	.15	.32	.32	.72	.00	.84	.47	.42	.59	.16	.92	.87
24	.14	.62	.32	.68	.00	10.04	.06	.73	.68	.16	.92	.87
25	.14	.63	.31	.74	.16	.41	9.61	.74	.72	.14	.91	.87
26	7.12	7.51	7.31	7.80	8.14	10.68	9.04	7.55	7.78	7.12	7.01	6.86
27	.10	.44	.34	.88	.05	.91	8.65	.63	.75	.09	.02	.86
28	.09	.40	.46	.94	7.81	11.27	.36	.76	.78	.07	.02	.85
29	.08	.36	.56	8.04	.96	.65	.22	.81	.80	.06	.10	.85
30	.07	.34	.56	.03	.78	12.25	.19	.69	.79	.06		.86
31		.32		7.99	.71		.08		.76	.05		.86
Mean	7.18	7.12	7.37	7.75	7.96	9.25	11.85	7.74	7.63	7.24	7.00	7.04
Max.	7.24	7.63	7.56	8.04	8.16	12.25	14.69	7.95	7.80	7.74	7.10	7.20
Min.	7.07	6.96	7.29	7.57	7.71	7.65	8.08	7.42	7.40	7.05	6.91	6.85

WATER YEAR 1959 : Max. 14.69 m. Min. 6.85 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	6.80	4.40	8.30	16	36	21	518	29	21	24	4.20	5.16
2	6.80	4.30	8.00	16	34	19	544	32	18	17	4.10	5.28
3	6.80	4.10	7.80	17	33	18	540	30	15	18	3.90	4.92
4	6.80	4.00	7.80	17	32	31	537	24	16	15	3.71	4.92
5	6.60	3.90	8.30	18	33	45	548	21	16	13	3.62	5.16
6	6.60	3.90	9.20	18	36	51	570	21	19	12	3.53	5.64
7	6.60	3.80	10	18	40	53	648	24	23	9.80	3.53	5.52
8	6.40	3.80	11	18	41	63	697	26	24	9.20	3.44	5.64
9	6.40	3.71	12	21	43	93	702	28	23	7.40	3.53	5.76
10	6.20	3.62	12	23	41	97	681	25	21	6.40	3.53	6.00
11	6.20	3.62	12	28	41	96	637	19	22	5.64	3.44	5.04
12	6.20	3.53	12	26	40	110	594	18	21	5.40	3.35	6.00
13	6.20	3.53	11	24	36	123	542	17	20	5.28	3.35	5.52
14	6.20	3.44	11	22	32	135	521	18	18	5.28	3.26	5.26
15	6.00	3.44	10	21	29	145	493	19	17	5.16	3.26	5.16
16	6.00	3.53	9.50	24	28	160	457	21	16	5.16	3.26	5.04
17	6.00	3.44	9.20	27	31	161	436	24	15	5.04	3.17	4.80
18	6.00	3.44	9.20	29	33	165	423	26	13	5.64	3.17	4.50
19	5.88	3.44	8.90	29	45	172	385	22	11	5.88	3.17	4.20
20	5.76	3.44	8.90	36	47	169	340	21	11	5.76	3.08	3.80
21	5.76	3.53	8.90	31	50	160	315	20	13	5.76	3.08	3.17
22	5.64	5.16	8.60	25	40	168	281	20	14	5.64	3.08	2.90
23	5.40	8.60	8.60	23	40	192	243	12	17	5.52	3.08	2.63
24	5.28	18	8.60	21	38	210	204	24	21	5.52	3.08	2.63
25	5.28	19	8.30	24	49	246	163	24	23	5.28	2.99	2.63
26	5.04	14	8.30	27	47	273	123	16	26	5.04	3.90	2.54
27	4.80	12	9.20	32	47	296	92	19	25	4.70	4.00	2.54
28	4.70	11	13	36	32	332	69	25	26	4.50	4.00	2.45
29	4.60	9.80	16	42	31	374	53	28	27	4.40	4.80	2.54
30	4.50	9.20	16	41	30	440	48	22	27	4.40		2.54
31		8.60		39	26		41		25	4.30		2.54
Total	117.44	193.27	301.60	789	1,161	4,618	12,445	675	604	241.10	101.61	132.36
Mean	5.91	6.23	10.0	25.4	37.4	153	401	22.5	19.5	7.78	3.63	4.27
Max.	6.80	19	16	42	50	440	702	32	27	24	4.80	6.00
Min.	4.50	3.44	7.80	16	26	18	41	12	11	4.30	2.99	2.45
Runoff - MCM.	15.331	16.698	26.058	68.170	100.310	398.995	1,075.248	58.320	52.186	20.831	8.779	11.436

WATER YEAR 1959 : Max. 702 Min. 2.45 Mean 58.4 Annual Runoff 1,847.178 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 9	21.00	14.20	703				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
PASAK RIVER BASIN

Pasak River at Ban Huai Rai, Phetchabun (S.6)

Location: Lat 16°– 49' – 54" N, Long 101°– 18' – 04" E, at Ban Huai Rai 50 meters upstream side of Lom Sak proposed weir site, 16 kilometers upstream from the district office of Amphoe Lom Sak, Phetchabun.

Drainage Area: 1,006 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +146.50 m. (M.S.L.)

Bench Mark:

Location:

Elevation:

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

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

Period of Available Gage Records: 1956 – 60.

Rating Operation:

Period of Rating: 1956 – 59
Rated by Float: –
Rated by Current Meter: 1956 – 59

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

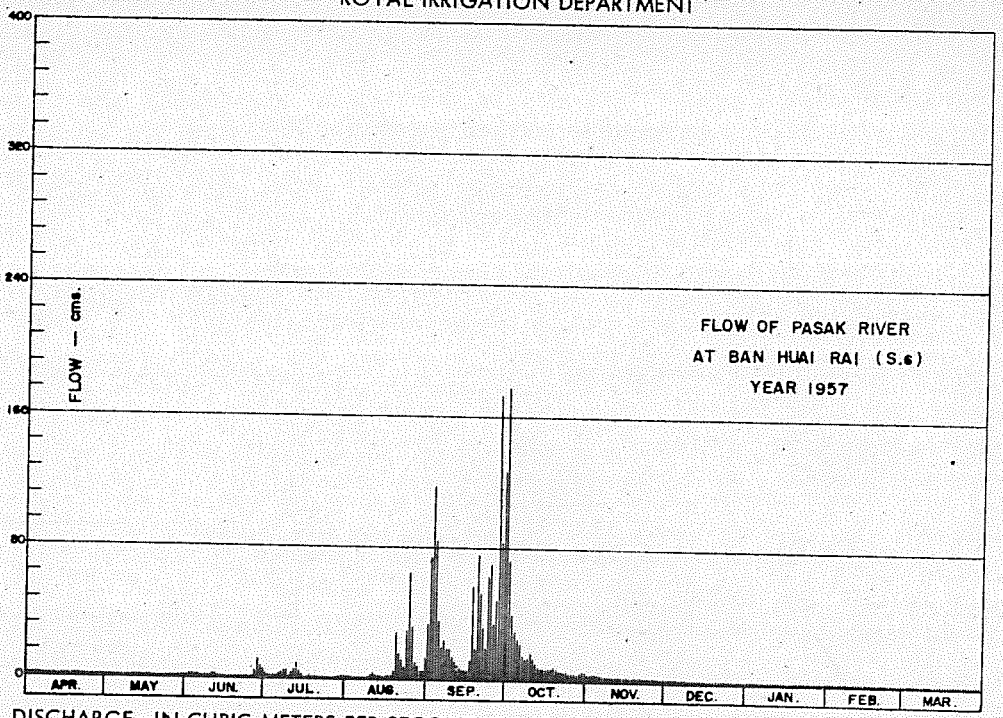
General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1957.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	146.77	146.68	146.83	147.00	146.95	148.14	150.99	147.12	146.91	146.84	146.78	146.68
2	.77	.68	.92	146.91	.91	.89	148.86	.10	.91	.84	.78	.68
3	.77	.72	.93	.90	.87	149.76	.31	.09	.91	.84	.78	.68
4	.77	.70	.91	.91	.82	.35	.06	.09	.91	.84	.78	.68
5	.79	.70	.91	.87	.80	148.03	147.91	.07	.91	.84	.78	.67
6	146.80	146.70	146.88	146.99	146.80	147.76	147.83	147.05	146.90	146.83	146.77	146.66
7	.81	.70	.84	147.12	.79	.90	.57	.04	.90	.83	.77	.66
8	.79	.70	.80	.21	.80	.72	.50	.03	.90	.83	.77	.67
9	.77	.70	.83	.18	.88	.72	.55	.03	.90	.83	.76	.76
10	.77	.69	.80	146.89	.95	.55	.66	.00	.90	.83	.75	.79
11	146.76	146.69	146.99	147.08	147.08	147.43	147.49	147.00	146.89	146.82	146.74	146.76
12	.76	.69	.91	.17	146.97	.35	.44	.00	.89	.82	.74	.75
13	.76	.68	.87	.33	.92	.25	.32	.00	.89	.82	.74	.74
14	.76	.68	.84	.15	.97	.22	.30	.00	.89	.82	.74	.72
15	.76	.68	.87	146.98	.91	.22	.30	.00	.89	.82	.74	.71
16	146.76	146.68	146.85	146.90	146.94	147.20	147.28	147.00	146.88	146.81	146.73	146.70
17	.76	.67	.79	.90	.94	.46	.28	146.99	.88	.81	.73	.68
18	.76	.67	.77	.91	.94	148.34	.31	.98	.88	.81	.71	.68
19	.76	.67	.77	.90	147.21	147.78	.34	.98	.88	.81	.71	.69
20	.76	.67	.75	.86	.99	148.64	.26	.96	.88	.81	.71	.67
21	146.76	146.67	146.75	146.86	147.59	148.22	147.21	146.95	146.87	146.80	146.71	146.66
22	.76	.66	.73	.86	.45	147.88	.18	.94	.87	.80	.71	.66
23	.76	.66	.71	.84	.26	.77	.16	.94	.87	.80	.71	.65
24	.76	.66	.71	.84	.91	148.82	.17	.93	.87	.80	.71	.64
25	.75	.68	.73	.84	148.80	.97	.15	.92	.87	.80	.71	.64
26	146.73	146.74	146.75	146.83	147.81	148.14	147.15	146.92	146.86	146.79	146.70	146.64
27	.70	.79	.86	.82	.48	.57	.15	.92	.86	.79	.69	.64
28	.68	.78	147.45	.82	.34	150.67	.15	.92	.86	.79	.68	.65
29	.68	.76	.27	.82	.22	149.17	.15	.92	.85	.79		.66
30	.68	.89	.16	.84	.18	.81	.19	.92	.85	.79		.66
31		.84		.93	.54		.19		.85	.79		.66
Mean	146.75	146.70	146.87	146.95	147.19	148.22	147.56	146.99	146.88	146.81	146.74	146.68
Max.	146.81	146.89	147.45	147.33	148.80	150.67	150.99	147.12	146.91	146.84	146.78	146.79
Min.	146.68	146.66	146.71	146.82	146.79	147.20	147.15	146.92	146.85	146.79	146.68	146.64

WATER YEAR 1957 : Max. 150.99 m. Min. 146.64 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.70	0.32	1.04	2.62	2.08	34	178	4.28	1.68	1.11	0.74	0.32
2	0.70	0.32	1.78	1.68	1.68	75	73	3.95	1.68	1.11	0.74	0.32
3	0.70	0.48	1.88	1.58	1.34	117	40	3.82	1.68	1.11	0.74	0.32
4	0.70	0.40	1.68	1.68	0.98	85	30	3.82	1.68	1.11	0.74	0.32
5	0.79	0.40	1.68	1.34	0.84	36	25	3.55	1.68	1.11	0.74	0.29
6	0.84	0.40	1.42	2.51	0.84	20	22	3.29	1.58	1.04	0.70	0.25
7	0.91	0.40	1.11	4.28	0.79	24	15	3.15	1.58	1.04	0.70	0.25
8	0.79	0.40	0.84	5.81	0.84	19	13	3.02	1.58	1.04	0.70	0.29
9	0.70	0.40	1.04	5.27	1.42	19	14	3.02	1.58	1.04	0.65	0.65
10	0.70	0.36	0.84	1.50	2.08	14	17	2.62	1.58	1.04	0.60	0.79
11	0.65	0.36	2.51	3.68	3.68	11	13	2.62	1.50	0.98	0.56	0.65
12	0.65	0.36	1.68	5.11	2.30	8.95	11	2.62	1.50	0.98	0.56	0.60
13	0.65	0.32	1.34	8.47	1.78	6.65	8.23	2.62	1.50	0.98	0.56	0.56
14	0.65	0.32	1.11	4.78	2.30	6.02	7.75	2.62	1.50	0.98	0.56	0.48
15	0.65	0.32	1.34	2.40	1.68	6.02	7.75	2.62	1.50	0.98	0.56	0.44
16	0.65	0.32	1.18	1.58	1.98	5.60	7.31	2.62	1.42	0.91	0.52	0.40
17	0.65	0.29	0.79	1.58	1.98	12	7.31	2.51	1.42	0.91	0.52	0.32
18	0.65	0.29	0.70	1.68	1.98	57	7.99	2.40	1.42	0.91	0.44	0.32
19	0.65	0.29	0.70	1.58	5.81	19	8.71	2.40	1.42	0.91	0.44	0.36
20	0.65	0.29	0.60	1.26	28	76	6.87	2.19	1.42	0.91	0.44	0.29
21	0.65	0.29	0.60	1.26	16	53	5.81	2.08	1.34	0.84	0.44	0.25
22	0.65	0.25	0.52	1.26	12	31	5.27	1.98	1.34	0.84	0.44	0.25
23	0.65	0.25	0.44	1.11	6.87	20	4.94	1.98	1.34	0.84	0.44	0.21
24	0.65	0.25	0.44	1.11	30	63	5.11	1.88	1.34	0.84	0.44	0.19
25	0.60	0.32	0.52	1.11	65	70	4.78	1.78	1.34	0.84	0.44	0.19
26	0.52	0.56	0.60	1.04	32	34	4.78	1.78	1.26	0.79	0.40	0.19
27	0.40	0.79	1.26	0.94	11	51	4.78	1.78	1.26	0.79	0.36	0.19
28	0.32	0.74	12	0.98	8.71	173	4.78	1.78	1.26	0.79	0.32	0.21
29	0.32	0.65	7.09	0.98	6.02	83	4.78	1.78	1.18	0.79		0.25
30	0.32	1.50	4.94	1.11	5.27	127	5.44	1.78	1.18	0.79		0.25
31		1.11		1.88	14		5.44		1.18	0.79		0.25
Total	19.11	13.75	53.27	73.21	270.17	1,355.56	569.57	78.34	44.92	29.14	15.49	10.65
Mean	0.64	0.44	1.78	2.36	8.72	45.18	18.37	2.61	1.45	0.94	0.55	0.34
Max.	0.91	1.50	12	8.47	65	173	178	4.28	1.68	1.11	0.74	0.79
Min.	0.32	0.25	0.44	0.94	0.79	5.60	4.78	1.78	1.18	0.79	0.32	0.19
Runoff - mcm.	1.651	1.188	4.602	6.325	23.343	117.120	49.211	6.768	3.881	2.517	1.338	0.920

WATER YEAR 1957: Max. 178 Min. 0.19 Mean 6.94 Annual Runoff 218.867 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 3	20.00	152.86	304				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
PASAK RIVER BASIN

Pasak River at Ban Huai Rai, Phetchabun (S.6)

Location: Lat 16°– 49' – 54" N, Long 101°– 18' – 04" E, at Ban Huai Rai 50 meters upstream side of Lom Sak proposed weir site, 16 kilometers upstream from the district office of Amphoe Lom Sak, Phetchabun.

Drainage Area: 1,006 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +146.50 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1956 – 60

Rating Operation:

Period of Rating: 1956 – 59
Rated by Float: –
Rated by Current Meter: 1956 – 59

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

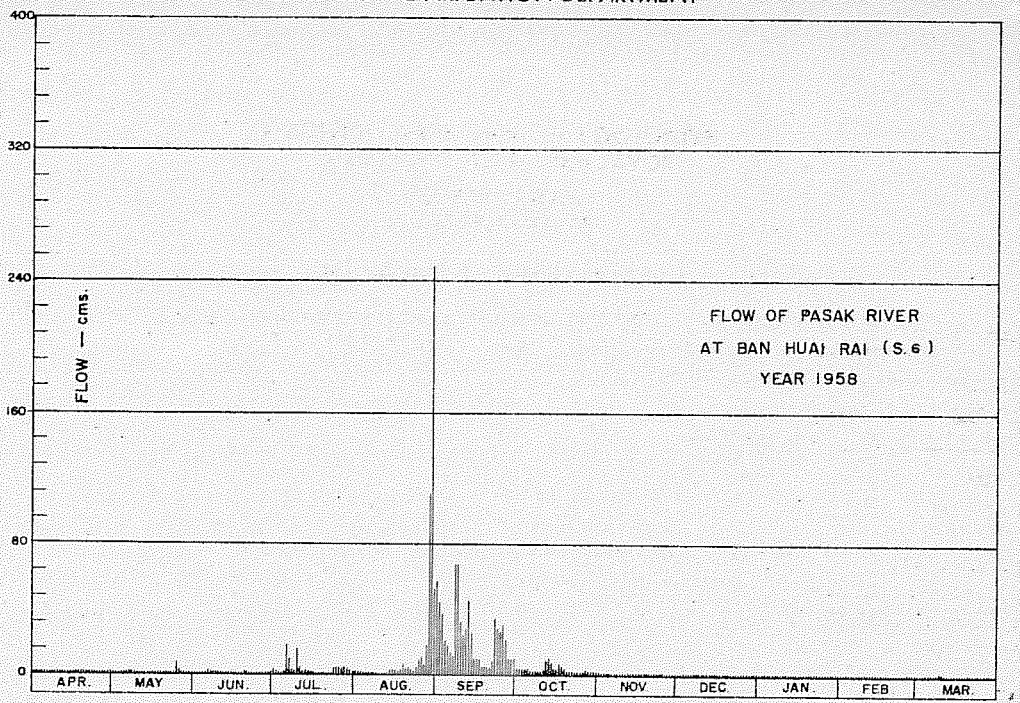
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1958.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	146.73	146.62	146.81	147.05	146.97	148.66	147.16	146.88	146.77	146.70	146.66	146.66
2	.69	.62	.81	146.95	.95	.31	.16	.87	.77	.70	.66	.66
3	.68	.67	.81	.91	.94	147.91	.16	.84	.77	.69	.66	.66
4	.68	.71	.80	.90	.93	.60	.14	.84	.77	.69	.73	.66
5	.68	.75	.89	147.00	.91	.62	.09	.84	.77	.68	.81	.76
6	146.67	146.75	147.06	147.80	146.90	147.54	147.07	146.84	146.76	146.68	146.72	146.81
7	.66	.75	146.95	.52	.89	.51	.05	.84	.79	.68	.70	.74
8	.64	.75	.92	.09	.89	148.75	.02	.84	.83	.68	.70	.84
9	.64	.65	.87	.09	.89	149.00	.01	.84	.77	.67	.70	.92
10	.64	.60	.86	.62	.89	148.01	.03	.84	.75	.67	.70	.88
11	146.62	146.60	146.86	147.28	146.89	147.76	147.12	146.84	146.73	146.67	146.70	146.77
12	.61	.60	.86	.08	.89	.92	.22	.82	.73	.67	.71	.73
13	.61	.59	.86	.05	.90	148.56	.42	.81	.72	.67	.77	.70
14	.61	.59	.85	.00	147.02	147.81	.23	.81	.72	.67	.79	.70
15	.61	.58	.84	146.96	.10	.40	.13	.81	.71	.67	.72	.76
16	146.61	146.58	146.84	146.93	147.04	147.24	147.06	146.82	146.71	146.67	146.73	146.71
17	.61	.58	.84	.91	.04	.19	.31	.83	.71	.67	.69	.71
18	.61	.58	.84	.90	.17	.14	.16	.81	.75	.66	.67	.71
19	.61	.58	.84	.91	.30	.12	.09	.80	.74	.66	.68	.71
20	.61	.58	.93	.91	.20	.11	.02	.80	.71	.66	.68	.71
21	146.61	146.58	146.90	146.91	147.27	147.10	147.00	146.81	146.72	146.66	146.68	146.70
22	.61	.58	.86	.92	.12	.20	146.99	.84	.75	.66	.68	.70
23	.61	.58	.84	.93	.05	.97	.99	.84	.74	.75	.75	.70
24	.61	.88	.84	147.15	.16	.84	.99	.83	.72	.74	.71	.70
25	.61	147.27	.84	.20	.21	.92	.98	.82	.71	.71	.74	.68
26	146.61	147.06	146.84	147.23	147.46	148.00	147.08	146.80	146.71	146.71	146.76	146.68
27	.61	.12	.84	.15	.31	147.65	.07	.78	.70	.71	.66	.68
28	.61	.19	.84	.17	.86	.38	.00	.77	.70	.71	.66	.68
29	.61	146.93	.84	.12	150.16	.32	146.95	.77	.70	.75		.68
30	.61	.81	.94	.06	151.84	.22	.92	.77	.70	.71		.67
31		.81		146.99	148.64		.91		.70	.68		.67
Mean	146.63	146.73	146.86	147.09	147.38	147.72	147.08	146.82	146.74	146.69	146.71	146.72
Max.	146.73	147.27	147.06	147.80	151.84	149.00	147.42	146.88	146.83	146.75	146.81	146.92
Min.	146.61	146.58	146.80	146.90	146.89	147.10	146.91	146.77	146.70	146.66	146.66	146.66

WATER YEAR 1958 : Max. 151.84 m. Min. 146.58 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.45	0.20	0.80	3.40	2.60	58	3.80	1.60	0.70	0.40	0.30	0.30
2	0.35	0.15	0.80	2.20	1.90	45	4.60	1.70	0.70	0.40	0.30	0.30
3	0.35	0.40	0.80	1.60	1.70	38	4.40	1.20	0.70	0.40	0.30	0.30
4	0.40	0.53	0.80	1.60	1.50	21	4.00	1.40	0.70	0.40	0.50	0.30
5	0.40	0.71	1.60	2.40	1.50	19	3.80	1.50	0.70	0.40	1.00	0.60
6	0.35	0.80	2.80	18	1.50	13	3.00	1.50	0.60	0.40	0.50	1.10
7	0.30	0.71	1.80	10	1.50	12	3.00	1.50	0.70	0.40	0.40	0.59
8	0.25	0.59	1.70	3.80	1.50	68	2.90	1.30	1.00	0.50	0.40	0.80
9	0.30	0.15	1.40	2.60	1.50	68	2.90	1.00	0.70	0.40	0.40	2.00
10	0.30		1.30	16	1.50	33	2.90	1.10	0.60	0.40	0.40	1.40
11	0.20		1.30	5.20	1.40	25	3.80	1.20	0.60	0.40	0.40	0.90
12	0.15		1.40	2.60	1.40	29	9.70	1.10	0.50	0.40	0.40	0.40
13	0.20		1.30	2.50	1.50	46	11	0.80	0.50	0.40	0.70	0.50
14	0.20		1.30	2.40	3.20	26	7.90	0.90	0.50	0.40	0.90	0.50
15	0.20		1.30	2.10	3.60	10	4.60	0.90	0.50	0.40	0.50	0.80
16	0.20		1.30	2.00	3.20	10	3.80	1.10	0.50	0.40	0.50	0.50
17	0.20		1.10	1.50	2.60	10	7.90	1.30	0.50	0.40	0.40	0.50
18	0.20		1.10	1.40	3.80	5.40	5.20	0.90	0.60	0.30	0.30	0.50
19	0.20		1.20	1.50	6.60	5.40	3.60	0.90	0.60	0.30	0.40	0.50
20	0.20		1.90	1.40	4.40	5.40	2.90	0.90	0.50	0.40	0.40	0.50
21	0.20		1.60	1.30	5.20	5.00	2.90	0.90	0.50	0.40	0.40	0.40
22	0.20		1.40	1.30	4.20	8.80	2.90	1.20	0.60	0.30	0.40	0.40
23	0.20		1.20	1.40	2.70	35	2.90	1.20	0.60	0.60	0.60	0.40
24	0.20	0.88	1.10	4.80	5.20	28	2.80	1.00	0.50	0.70	0.50	0.40
25	0.20	5.80	1.10	5.00	9.40	27	2.80	1.00	0.50	0.50	0.60	0.30
26	0.20	2.50	1.10	4.80	11	31	2.80	0.90	0.50	0.50	0.60	0.40
27	0.20	1.30	1.20	4.60	7.00	21	4.00	0.70	0.50	0.50	0.30	0.40
28	0.20	1.60	1.10	5.00	18	10	3.00	0.70	0.50	0.40	0.30	0.40
29	0.20	1.40	1.20	4.00	101	10	2.70	0.70	0.60	0.60		0.40
30	0.15	0.80	2.00	3.20	249	10	2.10	0.70	0.40	0.50		0.30
31		0.80		2.70	51		1.80		0.40	0.40		0.30
Total	7.35	19.32	40	122.30	512.10	733	126.40	32.80	18	13.30	13.10	17.39
Mean	0.24	0.62	1.33	3.95	16.5	24.4	4.21	1.09	0.58	0.43	0.47	0.56
Max.	0.45	5.80	2.80	18	249	68	11	1.70	1.00	0.70	1.00	2.00
Min.	0.15	0.00	0.80	1.30	1.40	5.00	1.80	0.70	0.40	0.30	0.30	0.30
Runoff — mcm.	0.635	1.669	3.456	10.567	44.245	63.331	10.921	2.834	1.555	1.149	1.132	1.502

WATER YEAR 1958 : Max. 249 Min. 0.00 Mean 4.53 Annual Runoff 142.997 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 30	05.00	154.02	359				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
PASAK RIVER BASIN

Pasak River at Ban Huai Rai, Phetchabun (S.6)

Location: Lat 16°- 49' - 54" N, Long 101°- 18' - 04" E, at Ban Huai Rai 50 meters upstream side of Lom Sak proposed weir site, 16 kilometers upstream from the district office of Amphoe Lom Sak, Phetchabun.

Drainage Area: 1,006 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: + 146.50 m. (M.S.L.)

Bench Mark:

Location:

Elevation:

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

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

Period of Available Gage Records: 1956 - 60.

Rating Operation:

Period of Rating: 1956 - 59.
Rated by Float: -
Rated by Current Meter: 1956 - 59.

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

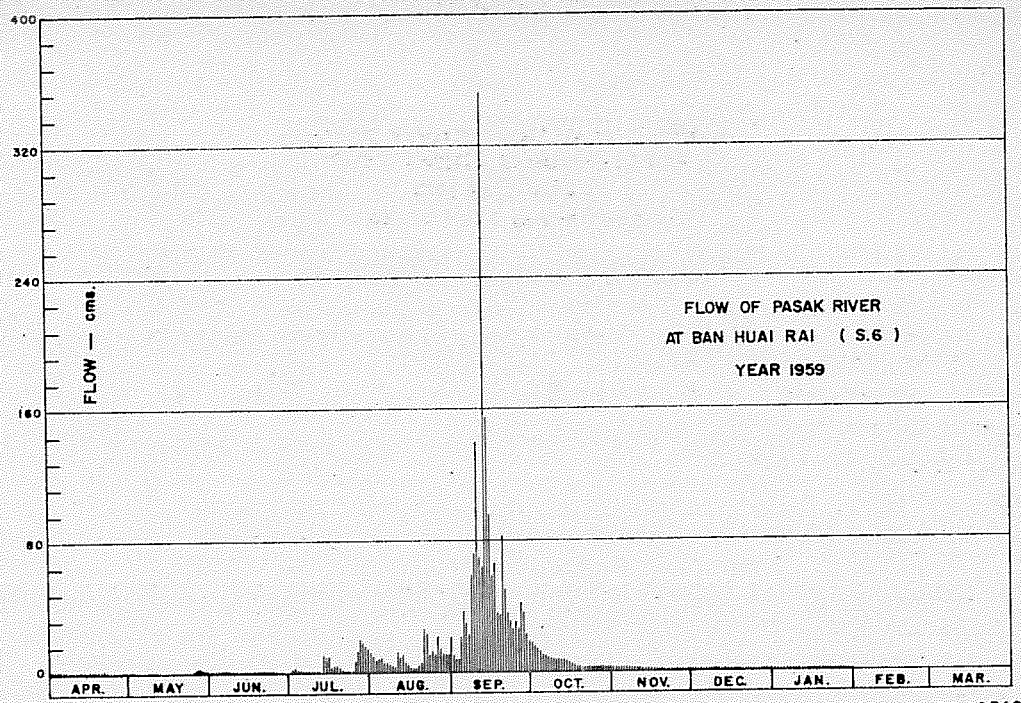
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1959.

Remarks: No gage height record for Feb. - Mar.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	146.66	146.59	146.70	146.62	147.59	147.51	147.66	146.92	146.76	146.66		
2	.66	.59	.78	.70	.49	.32	.59	.92	.76	.65		
3	.62	.57	.73	.95	.33	.30	.47	.92	.75	.65		
4	.69	.57	.70	.95	.40	.80	.41	.91	.74	.65		
5	.59	.57	.69	.83	.39	148.15	.33	.91	.74	.65		
6	146.59	146.56	146.69	146.78	147.20	148.20	147.30	146.91	146.74	146.64		
7	.59	.56	.69	.74	.14	147.70	.24	.91	.73	.63		
8	.57	.55	.68	.72	.11	148.78	.21	.90	.73	.64		
9	.57	.55	.69	.70	.06	149.36	.19	.89	.73	.63		
10	.59	.54	.69	.68	.04	150.33	.17	.89	.73	.63		
11	146.60	146.53	146.69	146.68	147.69	148.62	147.15	146.88	146.72	146.63		
12	.65	.53	.69	.68	.28	.53	.18	.87	.72	.63		
13	.68	.55	.68	.88	.43	152.34	.20	.86	.72	.63		
14	.70	.52	.68	147.60	.21	150.21	.20	.86	.72	.63		
15	.75	.51	.68	.58	.15	149.40	.14	.85	.71	.63		
16	146.71	146.50	146.67	147.14	147.05	148.93	147.09	146.84	146.70	146.63		
17	.68	.56	.67	.03	.02	.46	.07	.84	.70	.62		
18	.69	.62	.67	.15	.01	.25	.06	.82	.70	.62		
19	.70	.63	.66	.15	.01	.19	.02	.82	.70	.63		
20	.79	.61	.66	.12	.23	149.15	146.97	.81	.69	.63		
21	146.79	146.61	146.65	146.94	148.20	148.41	146.98	146.80	146.68	146.63		
22	.71	.63	.64	.84	147.75	.12	.98	.79	.68	.65		
23	.68	.70	.64	.80	.51	.03	.99	.78	.68	.65		
24	.66	.77	.64	.80	.58	147.82	.90	.78	.68	.63		
25	.65	.85	.64	.80	.42	148.04	.94	.77	.68	.63		
26	146.65	146.98	146.63	147.33	147.93	147.94	146.92	146.76	146.67	146.61		
27	.64	.94	.63	.76	.71	148.47	.92	.76	.67	.61		
28	.62	.87	.63	148.05	.57	.23	.93	.75	.67	.61		
29	.61	.79	.63	147.88	.41	147.89	.93	.75	.67	.61		
30	.59	.76	.63	.64	.46	.75	.94	.76	.67	.60		
31		.72		.66	.86		.93		.66	.60		
Mean	146.68	146.63	146.67	147.07	147.39	148.51	147.13	146.84	146.71	146.63		
Max.	146.79	146.98	146.78	148.05	148.20	152.34	147.66	146.92	146.76	146.66		
Min.	146.57	146.50	146.63	146.62	147.01	147.30	146.90	146.75	146.66	146.60		

WATER YEAR 1959 : Max. 152.34 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.34	0.06	0.70	0.24	12	11	18	2.40	1.10	0.70		
2	0.36	0.06	0.90	0.70	10	7.80	16	2.40	1.10	0.65		
3	0.30		0.65	2.00	7.20	7.20	14	2.40	1.10	0.65		
4	0.46		0.55	1.90	7.60	22	13	2.10	1.10	0.65		
5	0.30		0.50	1.20	9.00	37	9.60	2.10	1.10	0.65		
6	0.30		0.55	0.95	5.80	30	9.60	2.00	1.10	0.55		
7	0.24		0.55	0.75	5.40	19	8.60	2.00	1.10	0.50		
8	0.12		0.55	0.70	5.00	56	8.00	1.90	1.10	0.65		
9	0.06		0.55	0.70	3.70	80	8.00	1.80	1.10	0.48		
10	0.18		0.50	0.55	3.00	140	7.40	1.70	1.00	0.48		
11	0.30		0.55	0.55	12	69	6.60	1.70	0.95	0.50		
12	0.42		0.55	0.55	6.80	64	7.00	1.60	0.95	0.50		
13	0.50		0.50	1.20	10	352	7.80	1.60	0.95	0.55		
14	0.55		0.50	10	6.00	155	6.80	1.50	0.95	0.46		
15	0.77		0.50	9.60	4.80	97	6.00	1.50	0.90	0.46		
16	0.65		0.48	9.80	3.30	60	4.80	1.40	0.90	0.48		
17	0.50		0.32	3.10	2.90	67	4.40	1.40	0.85	0.44		
18	0.60	0.30	0.34	4.60	2.80	36	4.00	1.30	0.85	0.44		
19	0.65	0.24	0.34	4.60	2.80	34	3.30	1.30	0.85	0.50		
20	0.95	0.18	0.30	3.90	5.80	83	3.00	1.20	0.85	0.48		
21	0.85	0.18	0.30	2.00	27	51	3.10	1.10	0.80	0.48		
22	0.65	0.24	0.32	1.40	24	36	3.10	1.00	0.80	0.60		
23	0.50	0.60	0.32	1.10	11	32	3.30	0.85	0.80	0.65		
24	0.34	0.75	0.32	1.00	13	27	2.30	1.30	0.80	0.50		
25	0.24	1.14	0.32	1.00	10	30	2.90	1.30	0.75	0.50		
26	0.30	2.70	0.30	6.20	22	26	2.50	1.10	0.75	0.38		
27	0.30	2.30	0.30	16	15	42	2.40	1.20	0.75	0.38		
28	0.24	1.40	0.30	20	12	36	2.60	1.10	0.70	0.38		
29	0.18	1.00	0.30	17	10	23	2.80	1.10	0.70	0.38		
30	0.06	0.90	0.30	13	11	19	2.70	1.20	0.75	0.38		
31		0.75		14	21		2.60		0.70	0.38		
Total	12.21	12.80	13.46	150.29	301.90	1,749	190.20	46.55	28.20	15.78		
Mean	0.41	0.41	0.45	4.85	9.74	58.3	6.14	1.55	0.91	0.51		
Max.	0.95	2.70	0.90	20	27	352	18	2.40	1.10	0.70		
Min.	0.06	0.00	0.30	0.55	2.80	7.20	2.30	0.85	0.70	0.38		
Runoff - mcm.	1.055	1.106	1.163	12.985	26.084	151.114	16.433	4.022	2.436	1.363		

WATER YEAR 1959 : Max. 352 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 13	16.00	154.89	650				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MAE KHONG RIVER BASIN

Mae Kok River at Mae Kok Bridge, Chiang Rai (G.2A)

Location: Lat 19°- 55' - 16" N, Long 99°- 50' - 57" E, on left bank about 200 meters downstream from the bridge on highway Chiang Rai - Mae Chan, Amphoe Muang, Chiang Rai.

Drainage Area: 2,088 sq.km. (only in Thailand) referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +389.00 m. (M.S.L.)

Bench Mark: H.S. No.1

Location: Infront of Muang Chiang Rai police station.
Elevation: +393.900 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: 1958 to date.

Rating Operation:

Period of Rating: 1958 - 60
Rated by Float: -
Rated by Current Meter: 1958 - 60

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1958. No state diversions for irrigation above gage site.

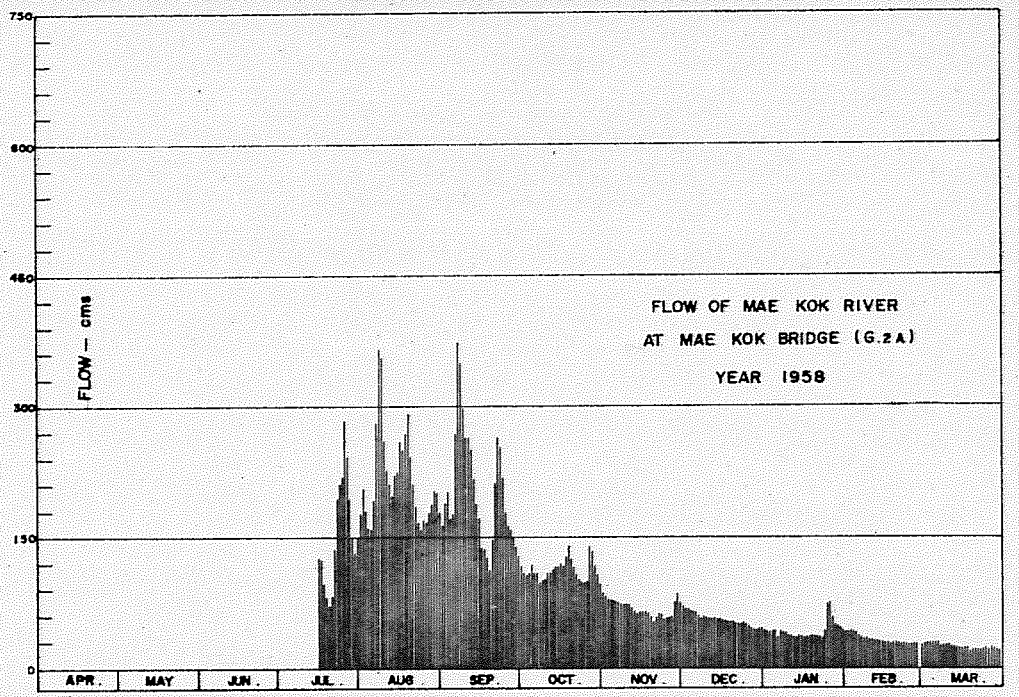
Remarks: Gage height record began on July 16.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1					391.25	391.17	390.97	390.80	390.68	390.50	390.46	390.32
2					.38	.25	.93	.78	.65	.50	.46	.34
3					.27	.32	.90	.76	.63	.49	.46	.35
4					.18	.20	.91	.75	.63	.49	.46	.36
5					.15	.23	.96	.75	.62	.49	.45	.36
6					391.32	391.61	390.90	390.73	390.61	390.49	390.43	390.36
7					.70	.97	.89	.73	.59	.48	.43	.35
8					.94	.88	.85	.72	.58	.48	.42	.33
9					.91	.68	.84	.72	.58	.48	.41	.33
10					.60	.59	.85	.72	.57	.48	.41	.32
11					391.51	391.57	390.89	390.71	390.57	390.48	390.40	390.31
12					.43	.49	.91	.70	.57	.48	.40	.30
13					.36	.39	.96	.69	.57	.47	.39	.29
14					.44	.28	.96	.66	.57	.47	.39	.28
15					.58	.19	.96	.67	.57	.47	.38	.27
16				391.05	391.57	391.11	390.97	390.67	390.56	390.47	390.37	390.27
17				.03	.55	.09	.96	.67	.55	.46	.37	.26
18				390.87	.62	.00	391.00	.66	.55	.46	.35	.26
19				.76	.67	390.97	.07	.65	.55	.45	.35	.25
20				.70	.51	391.13	.00	.65	.55	.45	.34	.25
21				390.83	391.39	391.36	390.95	390.64	390.54	390.45	390.34	390.25
22				391.07	.30	.56	.90	.64	.54	.45	.33	.25
23				.36	.23	.54	.86	.64	.54	.44	.33	.25
24				.46	.17	.37	.84	.64	.53	.52	.33	.26
25				.50	.21	.23	.82	.64	.52	.74	.33	.26
26				391.77	391.16	391.16	390.93	390.64	390.52	390.77	390.33	390.26
27				.58	.20	.13	391.04	.64	.51	.65	.33	.26
28				.36	.21	.11	.02	.75	.50	.56	.33	.26
29				.18	.33	.07	390.91	.77	.50	.52		.26
30				.06	.32	.02	.87	.72	.50	.49		.26
31				.13	.23		.84		.50	.47		.25
Mean					391.41	390.32	390.92	390.70	390.56	390.50	390.38	390.29
Max.					391.94	391.97	391.07	390.80	390.68	390.77	390.46	390.36
Min.					391.15	390.97	390.82	390.64	390.50	390.44	390.33	390.25

WATER YEAR 1958 : Max. 191.97 m. Min. - m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1					176	163	116	85	71	43	41	26
2					206	189	109	82	68	42	41	27
3					180	201	107	79	68	41	43	29
4					161	172	109	79	66	42	41	29
5					159	176	118	79	65	43	41	29
6					192	269	109	76	65	36	36	29
7					282	374	109	76	60	42	35	29
8					365	350	98	73	57	41	34	24
9					353	297	100	73	60	41	34	25
10					259	264	101	73	57	37	31	26
11					226	264	110	74	57	37	33	25
12					211	250	110	68	57	36	32	23
13					197	216	113	65	57	35	31	23
14					221	189	116	63	56	37	31	22
15					242	172	116	65	56	36	30	21
16				126	259	138	120	65	55	35	28	21
17				124	250	136	116	65	55	36	29	22
18				96	269	126	128	63	53	37	27	22
19				81	291	113	140	59	53	37	30	18
20				71	242	140	124	52	53	37	29	20
21				82	211	201	116	59	51	36	28	20
22				136	185	264	107	63	51	36	27	20
23				194	167	253	100	62	51	35	28	20
24				211	159	219	98	56	53	43	28	21
25				219	169	178	98	57	51	73	26	22
26				283	165	163	100	59	48	76	27	20
27				242	180	159	140	59	46	59	27	22
28				194	189	150	134	77	44	49	27	21
29				148	204	138	118	85	44	47		20
30				132	201	128	107	77	46	46		19
31				148	178		98		46	43		20
Total					6,749	6,052	3,485	2,065	1,720	1,314	885	715
Mean					217	202	113	68.8	55.4	42.4	31.6	23.1
Max.					365	374	140	85	71	76	43	29
Min.					159	113	98	52	44	35	26	19
Runoff — mcm.					383.114	522.893	301.104	178.416	148.608	113.530	76.464	61.776

WATER YEAR 1958 : Max. 374 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 7	15.00	392.01	386				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
MAE KHONG RIVER BASIN

Mae Kok River at Mae Kok Bridge, Chiang Rai (G.2A)

Location: Lat 19°– 55' – 16" N, Long 99°– 50' – 57" E, on left bank about 200 meters downstream from the bridge on highway Chiang Rai – Mae Chan, Amphoe Muang, Chiang Rai.

Drainage Area: 2,088 sq.km. (only in Thailand) referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +389.00 m. (M.S.L.)

Bench Mark: H.S. No.1

Location: Infront of Muang Chiang Rai police station.
Elevation: +393.900 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: 1958 to date.

Rating Operation:

Period of Rating: 1958 – 60
Rated by Float: - –
Rated by Current Meter: 1958 – 60

Stability of Channel Regimes: Unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

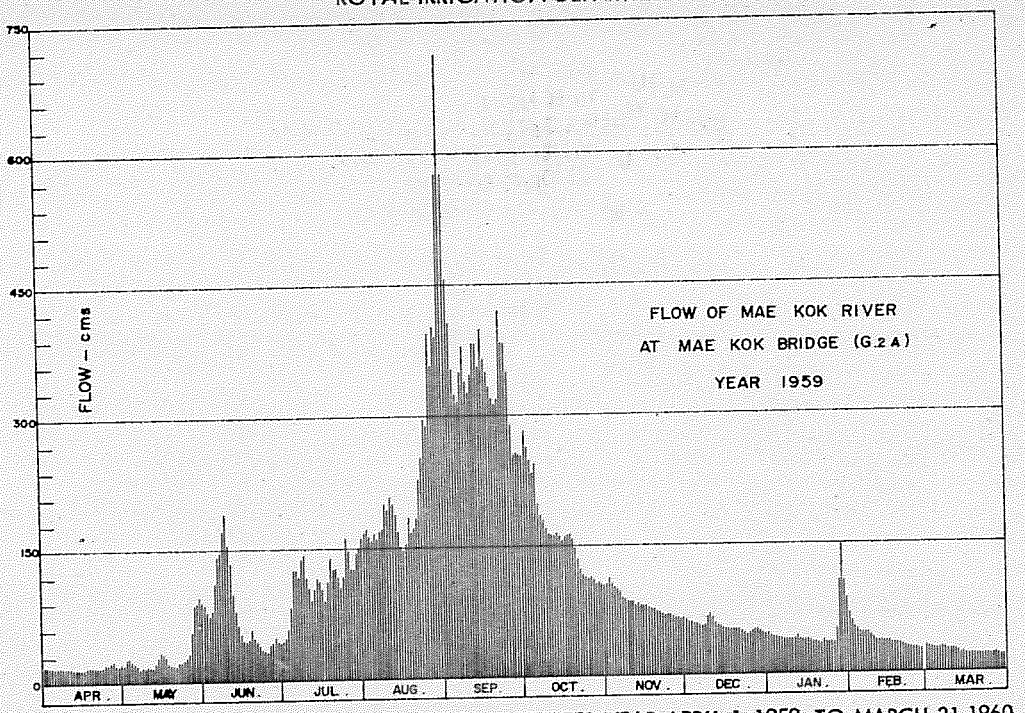
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1959. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	390.25	390.28	390.84	390.54	391.15	392.48	391.72	390.92	390.66	390.52	390.67	390.35
2	.25	.37	.79	.56	.18	.13	.69	.95	.65	.51	.62	.34
3	.24	.39	.74	.65	.16	.00	.63	.91	.65	.50	.57	.33
4	.24	.34	.78	.83	.14	391.85	.57	.89	.65	.50	.54	.34
5	.23	.30	.97	391.04	.18	.76	.49	.87	.64	.49	.53	.34
6	390.23	390.27	391.13	391.03	391.15	391.71	391.43	390.85	390.63	390.49	390.53	390.35
7	.23	.24	.14	390.98	.18	.79	.36	.84	.63	.48	.54	.35
8	.23	.24	.24	391.04	.21	.86	.31	.83	.62	.47	.54	.34
9	.23	.23	.28	.08	.33	.78	.27	.80	.67	.47	.52	.33
10	.23	.26	.17	390.97	.29	.76	.26	.80	.70	.47	.50	.32
11	390.22	390.25	391.05	390.91	391.35	391.82	391.24	390.79	390.67	390.47	390.49	390.32
12	.21	.24	390.89	.83	.31	.89	.22	.78	.65	.47	.47	.31
13	.21	.29	.75	.89	.29	.89	.23	.78	.63	.47	.46	.30
14	.20	.37	.66	.96	.22	.82	.22	.77	.62	.47	.45	.29
15	.20	.43	.59	.94	.13	.93	.22	.77	.61	.47	.44	.29
16	390.21	390.41	390.55	390.90	391.09	391.84	391.22	390.77	391.59	390.46	390.43	390.28
17	.24	.37	.52	.84	.10	.79	.22	.76	.58	.45	.42	.28
18	.26	.30	.55	.93	.25	.75	.21	.75	.57	.45	.41	.27
19	.25	.27	.63	391.07	.18	.74	.17	.74	.56	.44	.40	.27
20	.24	.27	.57	.02	.18	.74	.12	.72	.55	.43	.40	.27
21	390.23	390.26	390.52	391.03	391.26	391.78	391.08	390.71	390.54	390.42	390.39	390.26
22	.23	.32	.48	390.99	.40	392.08	.04	.71	.54	.44	.39	.26
23	.25	.32	.46	.93	.50	.03	.01	.71	.53	.42	.39	.26
24	.27	.33	.46	.94	.63	391.93	390.98	.71	.53	.43	.38	.26
25	.29	.40	.45	391.13	.64	.91	.96	.70	.53	.43	.38	.25
26	390.32	390.45	390.50	391.09	391.96	391.80	390.97	390.69	390.54	390.45	390.37	390.24
27	.34	.67	.54	.00	.83	.71	.93	.68	.56	.56	.36	.24
28	.28	.89	.58	390.98	.95	.74	.92	.68	.56	.90	.35	.24
29	.28	.89	.53	391.08	.91	.64	.92	.66	.54	391.10		.24
30	.30	.92	.50	.11	392.31	.67	.91	.66	.53	390.89		.25
31		.86		.14	.62		.90		.53	.78		.25
Mean	390.25	390.40	390.73	390.95	391.42	391.85	391.21	290.77	390.59	390.53	390.46	390.29
Max.	390.34	390.92	391.28	391.14	392.62	392.48	391.72	390.95	390.70	391.10	390.67	390.35
Min.	390.20	390.23	390.45	390.54	391.09	391.64	390.90	390.66	390.53	390.42	390.35	390.24

WATER YEAR 1959 : Max. 392.62 m. Min. 390.20 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	20	21	89	46	168	616	283	107	65	47	68	32
2	19	28	79	50	173	456	264	113	62	45	61	30
3	18	29	76	60	165	406	249	107	61	44	54	29
4	18	24	81	84	159	354	234	103	61	44	51	28
5	17	22	113	127	168	326	245	101	60	42	48	27
6	18	20	144	127	161	316	199	98	58	42	48	29
7	18	16	148	119	170	350	185	92	57	42	48	30
8	17	18	173	140	173	380	182	91	58	42	48	29
9	17	16	192	144	202	340	170	86	68	41	44	27
10	18	19	157	119	194	326	165	86	71	41	40	26
11	17	18	136	107	209	347	163	86	67	42	39	27
12	16	18	101	92	202	383	161	82	60	46	38	26
13	16	22	81	105	189	383	165	84	58	41	39	24
14	16	29	65	117	170	358	161	81	57	40	38	22
15	15	35	55	113	152	399	157	81	55	41	38	24
16	16	33	47	105	148	365	161	81	54	41	38	21
17	18	29	46	91	157	350	163	79	53	39	36	21
18	19	23	49	113	185	333	163	78	53	38	36	21
19	18	20	60	140	168	319	157	78	53	37	36	21
20	18	20	50	127	173	313	146	74	53	36	35	21
21	18	19	45	129	185	319	136	73	53	35	33	20
22	18	24	42	119	229	418	123	71	50	39	32	21
23	19	23	36	107	255	383	117	70	49	37	32	21
24	22	26	36	119	296	383	115	71	47	37	31	21
25	21	29	34	161	290	350	113	70	49	37	29	21
26	24	34	42	148	395	290	115	68	51	37	30	21
27	26	57	45	127	358	255	111	67	53	53	30	21
28	21	89	51	127	402	258	107	67	53	107	28	21
29	19	91	46	146	391	255	109	65	50	148	28	19
30	23	98	44	152	577	255	107	67	49	105		20
31		91		163	713		105		47	86		20
Total	560	1,041	2,363	3,624	7,577	10,586	5,031	2,477	1,735	1,552	1,156	741
Mean	18.6	33.5	78.7	117	244	353	162	82.5	55.9	50.0	39.9	23.9
Max.	26	98	192	163	713	616	283	113	71	148	68	32
Min.	15	16	34	46	148	255	105	65	47	35	28	19
Runoff - MCM.	48.384	89.942	204.163	313.114	654.653	914.630	434.678	214.013	149.904	134.093	99.878	64.022

WATER YEAR 1959 : Max. 713 Min. 15 Mean 105 Annual Runoff 3,321.475 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 31	18.00	392.65	728				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
MAE KHONG RIVER BASIN

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

Location: Lat 17°– 34' – 39" N, Long 102°– 20' – 19" E, on right bank about 300 meters downstream from Huai Mong Damsite and 500 meters downstream from the confluence of Huai Nam Ban and Huai Pak Kong, Amphoe Ban Phu, Udon Thani.

Drainage Area: 1,307 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +0.70 m. (A.D.)

Bench Mark: B.M. – H.S.

Location: At the camp of station Kh.18
Elevation: +7.590 m. (A.D.)

Gage Reading Frequency: Recording

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:

Period of Rating: 1957 to date
Rated by Float: –
Rated by Current Meter: 1957 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation due to the inadequate of measuring points.

Overbank Flow Conditions: No overbank flow.

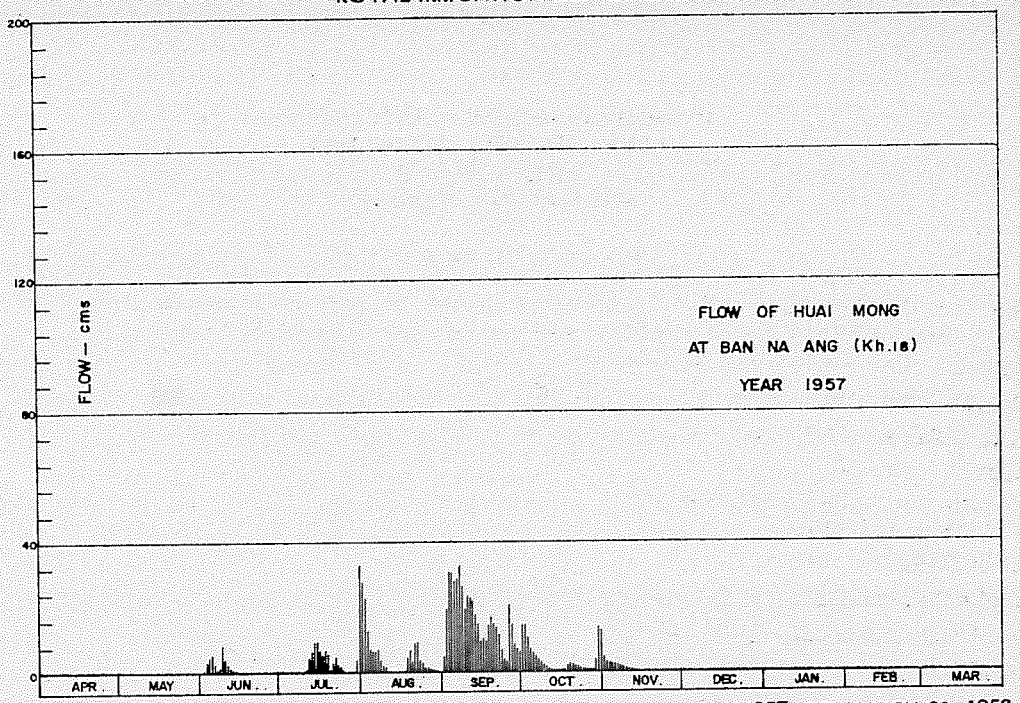
General Description: Records poor. Stage – discharge relationship used is defined by discharge measurements during 1957. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.90	0.88	1.10	0.99	5.27	2.45	3.58	2.91	1.07	0.88	0.83	0.74
2	.89	.98	.64	.97	4.80	4.23	.81	.67	.12	.89	.85	.74
3	.87	.89	2.72	.95	3.88	5.29	.28	.59	.14	.90	.85	.72
4	1.00	.86	3.10	.95	.00	.24	2.84	.52	.14	.86	.84	.72
5	0.99	.86	.26	1.00	2.97	.10	.57	.44	.12	.85	.83	.72
6	0.98	0.89	2.63	1.09	3.02	5.17	2.42	2.36	1.12	0.82	0.82	0.72
7	.96	.92	.09	.12	.00	.45	.24	.26	.09	.83	.85	.72
8	.94	.91	.41	.16	2.44	4.99	.05	.16	.07	.84	.84	.71
9	.95	.88	3.63	.04	.02	.48	1.87	.05	.02	.84	.86	.71
10	.96	.89	.03	.03	1.77	.82	.65	1.95	.01	.85	.83	.72
11	1.12	0.89	2.58	1.58	1.50	4.66	1.50	1.89	0.99	0.85	0.81	0.72
12	.43	.92	.18	2.50	.35	.50	.39	.78	.97	.84	.77	.76
13	.13	.92	1.98	.87	.31	.34	.31	.62	.97	.83	.77	.90
14	.02	.92	.79	3.27	.32	.03	.27	.55	.97	.83	.77	.82
15	0.98	.90	.53	.48	.31	3.38	.27	.49	.96	.82	.76	.77
16	0.96	0.88	1.34	3.07	1.29	3.43	1.27	1.41	0.95	0.81	0.75	0.75
17	.96	.87	.19	2.82	.22	.30	.30	.40	.94	.81	.74	.73
18	.95	.87	.11	.18	2.00	.75	.38	.39	.93	.81	.73	.72
19	.91	.88	.10	1.83	.92	4.09	.99	.37	.92	.79	.74	.72
20	.93	.87	.19	.62	.34	.16	.83	.32	.91	.78	.74	.71
21	0.93	0.87	1.15	2.37	3.08	3.86	1.72	1.27	0.90	0.81	0.73	0.70
22	.91	.93	.46	.78	.34	.48	.72	.23	.89	.81	.73	.70
23	.88	.89	.12	.35	2.38	2.80	.62	.18	.89	.81	.73	.70
24	.89	.88	.04	.07	.10	.32	.53	.18	.89	.81	.73	.69
25	.88	.90	0.98	1.82	1.77	.19	.48	.15	.89	.82	.73	.68
26	0.94	0.88	0.95	1.54	1.86	4.31	1.43	1.13	0.89	0.81	0.72	0.67
27	.91	.85	.96	.53	.75	3.86	.45	.12	.89	.81	.72	.71
28	.89	.97	.95	.20	.56	.05	.36	.09	.89	.81	.73	.71
29	.87	1.11	.94	.15	.41	2.19	2.23	.07	.90	.81		.72
30	.86	0.96	.98	.96	.34	.63	3.78	.07	.90	.81		.71
31		.97		5.23	.37		.56		.89	.81		.71
Mean	0.96	0.91	1.74	1.91	2.28	3.94	2.02	1.69	0.97	0.83	0.78	0.73
Max.	1.43	1.11	3.63	5.23	5.27	5.45	3.81	2.91	1.14	0.90	0.86	0.90
Min.	0.86	0.85	0.94	0.95	1.22	2.19	1.27	1.07	0.89	0.78	0.72	0.67

WATER YEAR 1957 : Max. 5.45 m. Min. 0.67 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.060	0.048	0.22	0.12	28	5.44	15	4.97	0.10	0.014	0.009	0.003
2	0.054	0.12	0.85	0.098	23	20	15	3.82	0.14	0.015	0.011	0.003
3	0.042	0.054	3.35	0.066	13	31	11	3.46	0.16	0.016	0.011	0.002
4	0.13	0.036	5.00	0.098	7.33	31	7.67	3.16	0.16	0.012	0.010	0.002
5	0.12	0.036	5.96	0.21	7.18	28	6.11	2.84	0.14	0.011	0.009	0.002
6	0.12	0.054	3.03	0.31	7.18	29	5.21	2.54	0.14	0.008	0.008	0.002
7	0.10	0.074	1.58	0.39	7.42	33	4.27	2.18	0.12	0.009	0.011	0.002
8	0.088	0.067	2.35	0.52	4.05	27	3.38	1.83	0.10	0.010	0.010	0.001
9	0.095	0.048	8.59	0.25	2.46	20	2.67	1.53	0.064	0.010	0.012	0.001
10	0.10	0.054	4.65	0.19	1.50	24	1.92	1.31	0.056	0.011	0.009	0.002
11	0.24	0.054	2.86	1.61	0.88	23	1.48	1.18	0.046	0.011	0.007	0.002
12	0.56	0.074	1.78	4.95	0.63	22	1.17	1.01	0.039	0.010	0.004	0.004
13	0.25	0.074	1.39	6.87	0.58	18	0.95	0.79	0.039	0.009	0.004	0.016
14	0.15	0.074	1.08	9.81	0.61	15	0.86	0.70	0.039	0.009	0.004	0.008
15	0.12	0.060	0.68	10	0.61	10	0.86	0.63	0.036	0.008	0.004	0.004
16	0.10	0.048	0.46	6.71	0.61	11	0.86	0.53	0.032	0.007	0.003	0.003
17	0.10	0.042	0.31	5.68	0.54	10	0.92	0.52	0.029	0.007	0.003	0.002
18	0.095	0.042	0.23	7.26	4.96	15	1.14	0.51	0.026	0.007	0.002	0.002
19	0.067	0.048	0.22	5.94	7.28	17	3.12	0.49	0.023	0.005	0.003	0.002
20	0.081	0.042	0.31	1.03	3.70	15	2.53	0.44	0.019	0.005	0.003	0.001
21	0.081	0.042	0.27	3.43	9.23	14	2.15	0.30	0.016	0.007	0.002	0.001
22	0.067	0.081	0.59	5.37	10	12	2.15	0.25	0.015	0.007	0.002	0.001
23	0.048	0.054	0.24	2.90	4.30	7.48	1.82	0.20	0.015	0.007	0.002	0.001
24	0.054	0.048	0.17	2.30	3.44	4.15	1.56	0.20	0.015	0.007	0.002	0.001
25	0.048	0.060	0.12	1.34	1.64	3.50	1.42	0.17	0.015	0.008	0.002	0.001
26	0.088	0.048	0.095	0.71	1.91	21	1.28	0.15	0.015	0.007	0.002	0.000
27	0.067	0.030	0.10	0.41	1.58	15	1.34	0.14	0.015	0.007	0.002	0.001
28	0.054	0.11	0.095	0.28	1.11	8.98	1.09	0.12	0.015	0.007	0.002	0.001
29	0.042	0.23	0.088	0.25	0.81	7.42	4.22	0.10	0.016	0.007		0.002
30	0.036	0.10	0.12	4.21	0.68	6.46	14	0.10	0.016	0.007		0.001
31		0.11		33	0.73		13		0.015	0.007		0.001
Total	3.257	2.062	46.788	116.312	156.95	504.43	130.15	36.17	1.676	0.272	0.153	0.075
Mean	0.108	0.066	1.56	3.75	5.06	16.81	4.20	1.20	0.054	0.008	0.005	0.002
Max.	0.56	0.23	8.59	33	28	33	15	4.97	0.16	0.016	0.012	0.016
Min.	0.036	0.030	0.088	0.066	0.54	3.50	0.86	0.10	0.015	0.005	0.002	0.000
Runoff – mcm.	0.281	0.178	4.042	10.049	13.560	43.583	11.245	3.125	0.145	0.023	0.013	0.006

WATER YEAR 1957 : Max. 33 Min. 0.00 Mean 2.73 Annual Runoff 86.253 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 7	03.00	5.50	34				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MAE KHONG RIVER BASIN

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

Location: Lat 17°- 34' - 39" N, Long 102°- 20' - 19" E, on right bank about 300 meters downstream from Huai Mong Damsite and 500 meters downstream from the confluence of Huai Nan Ban and Huai Pak Kong, Amphoe Ban Phu, Udon Thani.

Drainage Area: 1,307 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +0.70 m. (A.D.)

Bench Mark: B.M. - H.S.

Location: At the camp of station Kh.18
Elevation: +7.590 m. (A.D.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:

Period of Rating: 1957 to date
Rated by Float: -
Rated by Current Meter: 1957 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation due to the unadequate of measuring points.

Overbank Flow Conditions: No overbank flow.

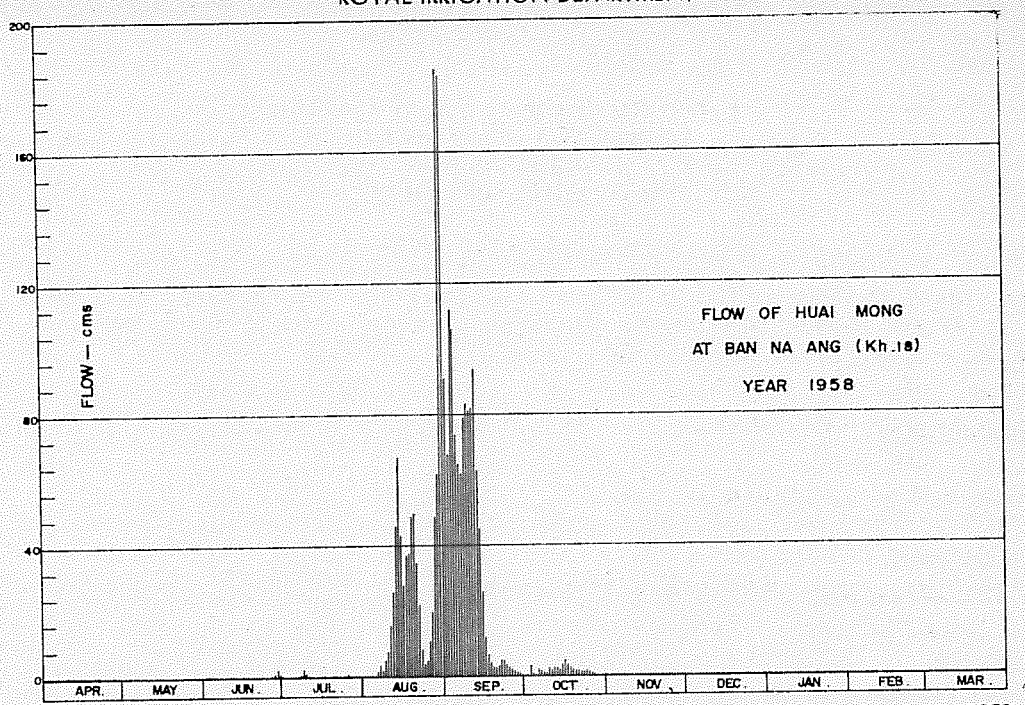
General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1958. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.71	0.65	0.84	1.15	0.96	6.98	1.14	1.05	0.77	0.71	0.73	0.61
2	.71	.65	.80	0.98	1.14	.64	.16	.04	.77	.70	.77	.64
3	.71	.65	.78	.88	0.97	7.23	2.03	.02	.75	.70	.79	.65
4	.71	.67	.77	.85	.86	.14	1.30	.00	.75	.69	.79	.65
5	.71	.72	.76	.84	.82	6.77	.01	0.97	.74	.69	.79	.65
6	0.70	0.77	0.76	0.81	1.69	6.58	1.75	0.95	0.73	0.69	0.77	0.64
7	.70	.78	.80	.82	2.09	.48	.59	.92	.71	.69	.72	.63
8	.70	.78	.80	1.31	1.72	.85	.49	.91	.71	.68	.69	.63
9	.69	.75	.79	.89	2.43	.91	.31	.88	.68	.68	.68	.61
10	.68	.72	.78	.49	.80	.89	.83	.89	.67	.68	.66	.60
11	0.68	0.71	0.76	1.19	3.84	6.87	1.78	0.89	0.67	0.67	0.65	0.59
12	.68	.70	.74	.04	4.77	7.06	.93	.89	.67	.65	.65	.60
13	.67	.71	.72	0.97	5.92	6.49	.92	.87	.67	.67	.64	.61
14	.68	.72	.74	.91	6.64	5.68	.78	.86	.67	.69	.68	.64
15	.70	.76	.75	.86	5.74	4.74	2.12	.84	.68	.66	.67	.64
16	0.71	0.79	0.75	0.84	4.94	3.35	2.38	0.83	0.68	0.64	0.68	0.63
17	.75	.77	.75	.82	5.55	2.64	.08	.81	.68	.63	.69	.62
18	.74	.76	.78	.80	.61	.25	1.93	.80	.68	.66	.66	.61
19	.73	.75	.77	.80	6.10	2.00	.80	.84	.68	.66	.65	.61
20	.71	.77	.76	.79	.13	1.94	.64	.83	.68	.66	.63	.61
21	0.70	0.77	0.75	0.80	5.38	2.07	1.60	0.83	0.68	0.65	0.60	0.63
22	.70	.76	.74	.84	4.25	.41	.51	.84	.68	.65	.59	.66
23	.69	.75	.74	.86	2.92	.38	.54	.83	.68	.65	.60	.67
24	.69	.74	.75	.95	.21	.14	.69	.81	.67	.65	.60	.64
25	.67	.73	.77	1.13	.42	1.95	.46	.80	.67	.64	.64	.63
26	0.67	0.72	0.72	1.30	3.68	1.77	1.33	0.78	0.69	0.63	0.64	0.62
27	.67	.72	.79	.23	4.19	.63	.28	.77	.70	.64	.63	.62
28	.66	.76	1.61	.10	6.09	.49	.16	.76	.71	.65	.62	.65
29	.66	.81	.88	.00	.48	.36	.13	.73	.71	.63		.70
30	.65	.90	.34	0.96	7.73	.20	.10	.76	.71	.64		.71
31		.86		.95	.73		.07		.71	.64		.69
Mean	0.69	0.74	0.85	1.00	3.99	4.33	1.57	0.87	0.70	0.66	0.67	0.63
Max.	0.75	0.90	1.88	1.89	7.73	7.23	2.38	1.05	0.77	0.71	0.79	0.71
Min.	0.65	0.65	0.72	0.79	0.82	1.20	1.01	0.73	0.67	0.63	0.59	0.59

WATER YEAR 1958 : Max. 7.73 m. Min. 0.59 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.046	0.020	0.14	0.58	0.26	91	0.56	0.39	0.082	0.046	0.058	0.004
2	0.046	0.020	0.10	0.28	0.56	68	0.60	0.37	0.082	0.040	0.082	0.016
3	0.046	0.020	0.088	0.18	0.27	112	3.25	0.34	0.070	0.040	0.094	0.020
4	0.046	0.028	0.082	0.15	0.16	106	0.90	0.30	0.070	0.036	0.094	0.020
5	0.046	0.052	0.076	0.14	0.12	74	0.32	0.27	0.064	0.036	0.094	0.020
6	0.040	0.082	0.076	0.11	1.99	65	2.19	0.25	0.058	0.036	0.082	0.016
7	0.040	0.088	0.10	0.12	3.52	62	1.67	0.22	0.046	0.036	0.052	0.012
8	0.040	0.088	0.10	0.92	2.09	79	1.39	0.21	0.046	0.032	0.036	0.012
9	0.036	0.070	0.094	2.70	5.25	83	0.92	0.18	0.032	0.032	0.032	0.004
10	0.032	0.052	0.088	1.39	7.62	81	2.47	0.19	0.028	0.032	0.024	0.000
11	0.032	0.046	0.076	0.66	16	82	2.29	0.19	0.028	0.028	0.020	0.000
12	0.032	0.040	0.064	0.37	26	94	2.85	0.19	0.028	0.020	0.020	0.000
13	0.028	0.046	0.052	0.27	46	63	2.82	0.17	0.028	0.028	0.016	0.004
14	0.032	0.052	0.064	0.21	67	45	2.29	0.16	0.028	0.036	0.032	0.016
15	0.040	0.076	0.070	0.16	43	26	3.65	0.14	0.032	0.024	0.028	0.016
16	0.046	0.094	0.070	0.14	28	12	4.97	0.13	0.032	0.016	0.032	0.012
17	0.070	0.082	0.070	0.12	37	6.52	3.47	0.11	0.032	0.012	0.036	0.008
18	0.064	0.076	0.088	0.10	38	4.28	2.85	0.10	0.032	0.024	0.024	0.004
19	0.058	0.070	0.082	0.10	49	3.12	2.36	0.14	0.032	0.024	0.020	0.004
20	0.046	0.082	0.076	0.094	50	2.89	1.83	0.13	0.032	0.024	0.012	0.004
21	0.040	0.082	0.070	0.10	35	3.43	1.70	0.13	0.032	0.020	0.000	0.012
22	0.040	0.076	0.064	0.14	22	5.14	1.45	0.14	0.032	0.020	0.000	0.024
23	0.036	0.070	0.064	0.16	8.56	4.98	1.53	0.13	0.032	0.020	0.000	0.028
24	0.036	0.064	0.070	0.25	4.07	3.74	1.99	0.11	0.028	0.020	0.000	0.016
25	0.028	0.058	0.082	0.54	5.20	2.93	1.31	0.10	0.028	0.016	0.016	0.012
26	0.028	0.052	0.052	0.90	11	2.26	0.97	0.088	0.036	0.012	0.016	0.008
27	0.028	0.052	0.094	0.75	20	1.80	0.86	0.082	0.040	0.016	0.012	0.008
28	0.024	0.076	1.73	0.48	49	1.39	0.60	0.076	0.046	0.020	0.008	0.020
29	0.024	0.11	2.66	0.30	62	1.04	0.54	0.058	0.046	0.012		0.040
30	0.020	0.20	1.00	0.26	185	0.68	0.48	0.076	0.046	0.016		0.046
31		0.16		0.25	183		0.43		0.046	0.016		0.036
Total	1.170	2.184	7.542	12.924	1,006.67	1,187.20	55.51	5.170	1.294	0.790	0.940	0.442
Mean	0.039	0.070	0.25	0.42	32.5	39.6	1.79	0.17	0.042	0.025	0.033	0.014
Max.	0.070	0.20	2.66	2.70	185	112	4.97	0.39	0.082	0.046	0.094	0.046
Min.	0.020	0.020	0.052	0.094	0.12	0.68	0.32	0.058	0.028	0.012	0.000	0.000
Runoff – MCM.	0.101	0.189	0.652	1.117	86.976	102.574	4.796	0.447	0.112	0.068	0.081	0.038

WATER YEAR 1958 : Max. 185 Min. 0.00 Mean 6.25 Annual Runoff 197.151 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 30	20.00	8.08	248				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
MAE KHONG RIVER BASIN

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

Location: Lat 17°– 34' – 39" N, Long 102°– 20' – 19" E, on right bank about 300 meters downstream from Huai Mong Damsite and 500 meters donwstream from the confluence of Huai Nam Ban and Huai Pak Kong, Amphoe Ban Phu, Udon Thani.

Drainage Area: 1,307 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +0.70 m. (A.D.)

Bench Mark: B.M. – H.S.

Location: At the camp of station Kh.18
Elevation: +7.590 m. (A.D.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:

Period of Rating: 1957 to date
Rated by Float: –
Rated by Current Meter: 1957 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation due to the inadequate of measuring points.

Overbank Flow Conditions: No overbank flow.

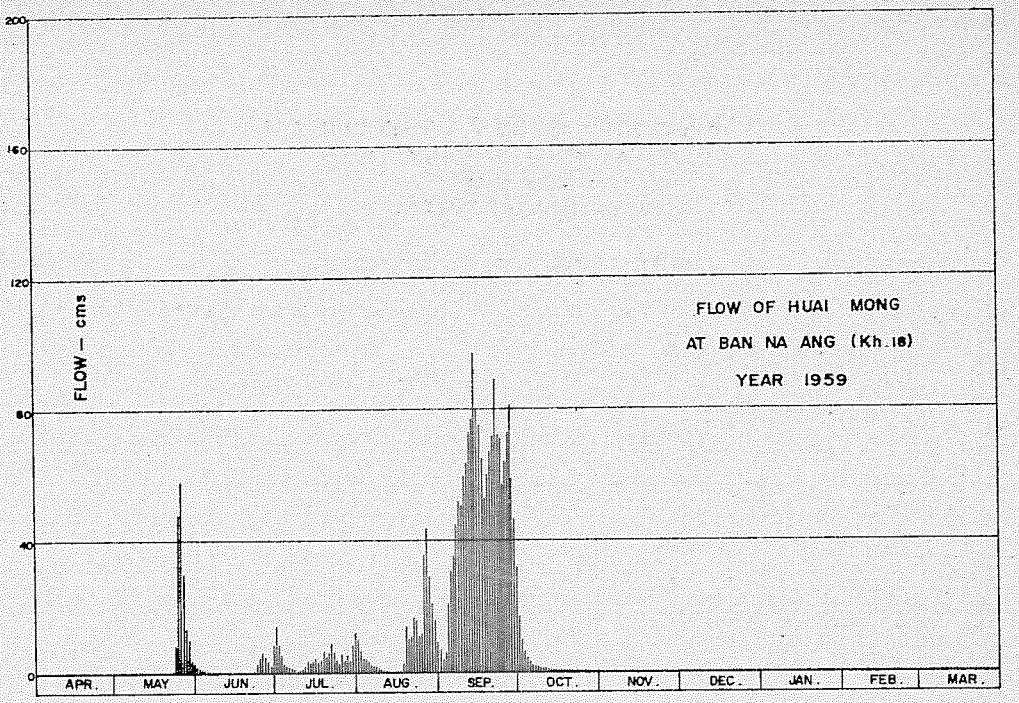
General Description: Records fair. Stage – discharge relationship used is defined by discharge measurements during 1959. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.67	0.65	1.76	3.74	2.98	2.59	4.12	1.57	1.09	0.83	0.74	0.70
2	.66	.60	.65	.17	.48	.17	3.26	.58	.07	.75	.75	.71
3	.63	.59	.69	2.48	.19	.42	2.71	.59	.06	.79	.74	.70
4	.63	.60	.50	.01	.19	4.24	.35	.54	.06	.86	.73	.69
5	.60	.60	.31	1.81	.11	5.05	.11	.50	.07	.82	.74	.68
6	0.60	0.62	1.16	1.71	1.93	5.44	1.92	1.46	1.04	0.79	0.73	0.67
7	.60	.65	.09	.63	.84	.92	.79	.46	.01	.79	.73	.65
8	.60	.65	.03	.54	.79	6.24	.58	.47	0.95	.78	.73	.65
9	.61	.65	0.98	.39	.64	.20	.52	.48	.97	.77	.72	.64
10	.62	.65	.94	.31	.47	.48	.52	.44	.93	.79	.72	.63
11	0.61	0.65	0.90	1.48	1.38	6.59	1.55	1.37	0.97	0.83	0.71	0.62
12	.61	.64	.88	.91	.38	.77	.51	.37	.97	.85	.70	.62
13	.62	.62	.85	2.15	.35	.83	.43	.37	.95	.82	.69	.62
14	.66	.61	.83	.01	.32	7.08	.46	.36	.93	.80	.67	.63
15	.64	.60	.82	.13	.25	6.88	.50	.33	.89	.77	.65	.65
16	0.65	0.60	0.81	2.21	1.18	6.80	1.51	1.30	0.93	0.80	0.66	0.65
17	.64	.61	.78	.06	.28	.60	.44	.28	.94	.80	.66	.64
18	.66	.60	.80	.14	.98	.31	.49	.27	.90	.80	.67	.64
19	.67	.60	.78	.47	3.47	.25	.57	.26	.94	.80	.69	.62
20	.66	.60	.76	.23	.03	.64	.60	.26	.92	.79	.69	.61
21	0.65	0.60	0.83	2.43	3.07	6.74	1.60	1.23	0.89	0.76	0.71	0.61
22	.63	.60	1.27	.85	.76	.99	.55	.18	.88	.75	.69	.61
23	.62	1.57	.42	.38	.73	.74	.58	.17	.86	.75	.67	.61
24	.61	2.77	.93	.12	.14	.73	.59	.22	.85	.74	.67	.63
25	.61	6.07	2.21	1.96	.29	.38	.68	.20	.84	.74	.66	.65
26	0.61	6.42	2.69	2.31	5.45	6.58	1.62	1.18	0.82	0.74	0.66	0.63
27	.87	5.22	.45	.13	.86	.76	.57	.16	.86	.75	.66	.64
28	.81	3.63	.14	.32	.14	.89	.58	.12	.86	.75	.66	.64
29	.74	2.63	1.83	.11	4.51	.46	.63	.10	.83	.74	.67	.64
30	.69	.25	2.75	.74	.02	5.35	.65	.08	.90	.73		.65
31		1.19		3.24	3.17		.59		.86	.73		.65
Mean	0.65	1.49	1.36	2.20	2.69	5.97	1.79	1.33	0.94	0.76	0.69	0.64
Max.	0.87	6.42	2.75	3.74	5.86	7.08	4.12	1.59	1.09	0.86	0.75	0.71
Min.	0.60	0.60	0.76	1.31	1.18	2.17	1.43	1.08	0.82	0.73	0.65	0.61

WATER YEAR 1959 : Max. 7.08 m. Min. 0.60 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.008	0.008	1.78	14	9.91	7.19	17	0.17	0.030	0.011	0.012	0.023
2	0.007	0.004	1.20	9.40	6.48	3.93	10	0.18	0.026	0.008	0.010	0.015
3	0.006	0.005	1.13	4.90	4.11	6.12	6.20	0.15	0.026	0.015	0.005	0.016
4	0.006	0.005	0.79	2.76	4.11	21	4.20	0.14	0.026	0.025	0.011	0.014
5	0.005	0.004	0.56	1.94	3.39	31	3.20	0.14	0.042	0.015	0.011	0.011
6	0.005	0.007	0.42	1.63	2.42	36	2.35	0.15	0.036	0.016	0.011	0.011
7	0.005	0.015	0.19	1.39	2.06	45	1.87	0.15	0.025	0.012	0.010	0.008
8	0.005	0.011	0.17	1.12	1.87	52	1.59	0.16	0.019	0.007	0.010	0.005
9	0.005	0.017	0.13	0.78	1.42	51	1.07	0.15	0.013	0.005	0.012	0.005
10	0.005	0.008	0.12	0.62	0.94	60	1.02	0.12	0.015	0.012	0.005	0.005
11	0.005	0.006	0.10	0.92	0.76	64	0.95	0.11	0.025	0.015	0.007	0.005
12	0.005	0.005	0.086	2.34	0.76	73	0.62	0.12	0.019	0.026	0.006	0.005
13	0.005	0.005	0.067	3.75	0.70	77	0.67	0.11	0.019	0.016	0.005	0.004
14	0.004	0.005	0.064	2.76	0.64	97	0.61	0.10	0.019	0.012	0.006	0.003
15	0.006	0.005	0.061	3.57	0.55	80	0.78	0.10	0.009	0.006	0.009	0.006
16	0.007	0.005	0.049	4.40	0.50	75	0.67	0.10	0.021	0.009	0.007	0.008
17	0.008	0.005	0.040	3.06	0.59	65	0.51	0.10	0.015	0.012	0.007	0.007
18	0.012	0.005	0.038	3.66	2.62	54	0.40	0.075	0.027	0.010	0.009	0.007
19	0.006	0.005	0.046	6.42	14	53	0.28	0.075	0.019	0.015	0.010	0.005
20	0.005	0.005	0.031	4.80	10	67	0.29	0.075	0.016	0.015	0.015	0.004
21	0.004	0.005	0.11	6.18	11	72	0.26	0.082	0.016	0.023	0.022	0.003
22	0.004	0.005	0.090	8.98	17	89	0.25	0.074	0.017	0.016	0.013	0.012
23	0.003	1.21	0.13	5.89	16	72	0.16	0.076	0.015	0.016	0.008	0.002
24	0.003	8.39	2.42	3.48	11	71	0.17	0.064	0.017	0.011	0.008	0.005
25	0.003	48	4.40	2.54	12	57	0.22	0.064	0.019	0.011	0.008	0.012
26	0.003	58	6.10	5.51	36	64	0.21	0.064	0.011	0.008	0.009	0.007
27	0.14	30	4.70	3.57	44	73	0.18	0.051	0.029	0.007	0.008	0.010
28	0.035	13	3.30	5.56	29	81	0.17	0.047	0.017	0.007	0.010	0.000
29	0.022	5.75	2.02	3.39	21	59	0.19	0.041	0.010	0.009	0.012	0.000
30	0.013	3.80	8.25	8.18	16	32	0.19	0.039	0.022	0.009		0.000
31		2.66		12	9.40		0.17		0.017	0.012		0.000
Total	0.350	170.955	38.592	139.54	290.23	1,688.24	56.45	3.077	0.647	0.391	0.276	0.218
Mean	0.012	5.51	1.29	4.50	9.36	56.3	1.82	0.10	0.021	0.013	0.009	0.007
Max.	0.14	58	8.25	14	44	97	17	0.18	0.042	0.026	0.022	0.023
Min.	0.003	0.004	0.031	0.62	0.50	3.93	0.16	0.039	0.009	0.005	0.005	0.000
Runoff - mcm.	0.030	14.770	3.334	12.056	25.076	145.864	4.877	0.266	0.056	0.034	0.024	0.019

WATER YEAR 1959 : Max. 97 Min. 0.00 Mean 6.53 Annual Runoff 206.407 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 14	17.00	7.12	99				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
MAE KHONG RIVER BASIN

Nam Oon at Phanna Nikhom, Sakon Nakhon (Kh.20)

Location: Lat 17° – 20' – 49" N, Long 103° – 51' – 06" E, on right bank near Phanna Nikhom Market, Amphoe Phanna Nikhom, Sakon Nakhon.

Drainage Area: 1,199 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +156.27 m. (M.S.L.)

Bench Mark: B.M. of the Survey Department

Location: Near the district office of Amphoe Phanna Nikhom.
Elevation: +164.083 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: 1955 to date.

Rating Operation:

Period of Rating: 1956 – 62
Rated by Float: –
Rated by Current Meter: 1956 – 67

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

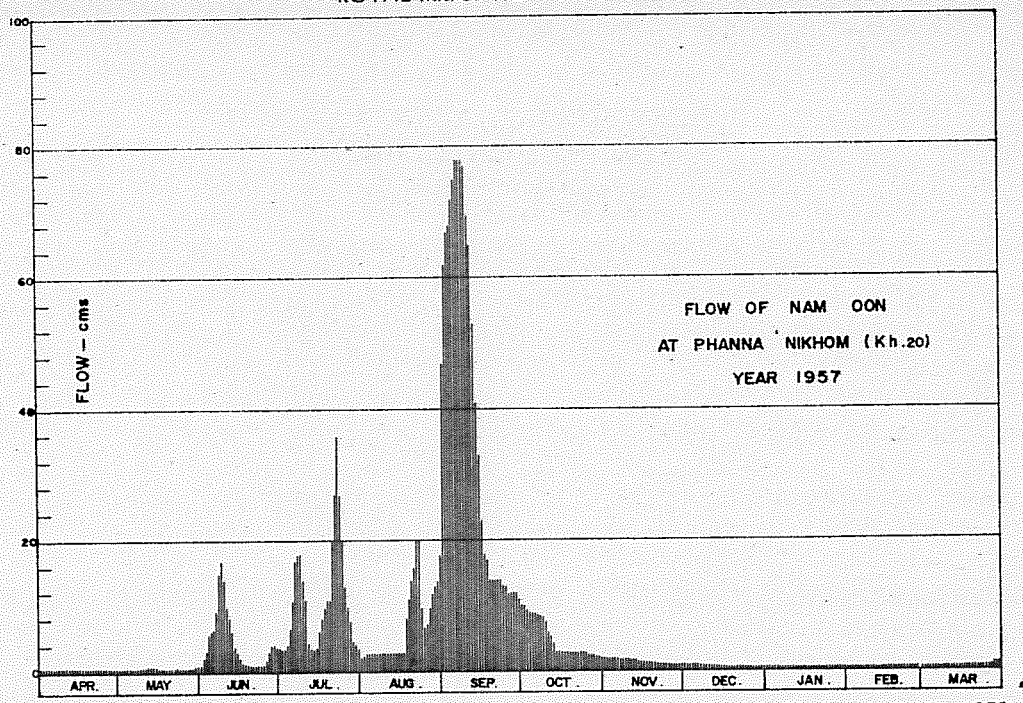
General Description: Records poor. Stage – discharge relationship used is defined by discharge measurements during 1962. No stage diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	156.50	156.50	156.63	157.11	156.86	160.04	158.01	156.82	156.57	156.45	156.45	156.45
2	.50	.50	.86	.05	.90	.54	.01	.82	.57	.45	.45	.45
3	.50	.50	157.05	.07	.97	.67	157.92	.82	.57	.45	.45	.45
4	.50	.50	.42	.21	.97	.72	.87	.82	.57	.45	.45	.45
5	.50	.50	.52	.57	.97	.81	.84	.82	.57	.45	.45	.45
6	156.50	156.49	157.54	158.11	156.97	160.89	157.84	156.82	156.57	156.45	156.45	156.45
7	.50	.49	.90	.57	.97	.97	.79	.79	.55	.45	.45	.45
8	.50	.51	158.44	.67	.97	.98	.79	.79	.55	.45	.45	.45
9	.50	.52	.55	.67	.97	.97	.77	.79	.55	.45	.45	.45
10	.50	.53	.34	.32	.97	.96	.67	.79	.55	.45	.45	.45
11	156.50	156.55	158.02	158.06	156.97	160.77	157.47	156.77	156.52	156.45	156.45	156.44
12	.50	.56	157.75	157.23	.97	.64	.37	.77	.52	.45	.45	.44
13	.50	.57	.44	.07	.97	.27	.17	.77	.52	.45	.45	.44
14	.50	.57	.14	.07	.97	159.80	156.97	.71	.52	.45	.45	.44
15	.50	.55	156.99	.13	.97	.47	.97	.71	.52	.45	.45	.44
16	156.50	156.52	156.86	157.50	156.97	158.97	156.97	156.71	156.52	156.45	156.45	156.44
17	.50	.51	.70	.76	.97	.64	.97	.67	.47	.45	.45	.44
18	.50	.49	.67	.99	157.77	.57	.97	.67	.47	.45	.45	.44
19	.50	.48	.66	158.12	158.07	.37	.97	.67	.47	.45	.45	.44
20	.50	.49	.61	.12	.37	.37	.97	.67	.47	.45	.45	.44
21	156.50	156.50	156.61	158.76	158.50	158.37	156.97	156.63	156.47	156.45	156.45	156.44
22	.50	.50	.61	159.17	.77	.32	.97	.63	.47	.45	.45	.44
23	.50	.50	.61	.57	.77	.32	.97	.63	.47	.45	.45	.44
24	.50	.50	.61	.17	157.97	.27	.97	.63	.47	.45	.45	.44
25	.50	.50	.61	158.77	.57	.27	.97	.60	.47	.45	.45	.44
26	156.50	156.50	156.84	158.27	157.67	158.21	156.91	156.60	156.47	156.45	156.45	156.44
27	.50	.50	157.03	157.97	.97	.21	.91	.60	.45	.45	.45	.44
28	.50	.50	.17	.67	158.17	.14	.91	.60	.45	.45	.45	.57
29	.50	.54	.17	.27	.27	.14	.87	.60	.45	.45		.57
30	.50	.57	.14	.17	.37	.07	.87	.57	.45	.45		.57
31		.58		156.97	.67		.82		.45	.45		.57
Mean	156.50	156.52	157.18	157.91	157.52	159.45	157.27	156.70	156.51	156.45	156.45	156.46
Max.	156.50	156.58	158.55	159.57	158.77	160.98	158.01	156.82	156.57	156.45	156.45	156.57
Min.	156.50	156.48	156.61	156.97	156.86	158.07	156.82	156.57	156.45	156.45	156.45	156.44

WATER YEAR 1957 : Max. 160.98 m. Min. 156.44 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.60	0.60	1.12	3.66	2.20	47	10	2.00	0.88	0.45	0.45	0.45
2	0.60	0.60	2.20	3.30	2.40	62	10	2.00	0.88	0.45	0.45	0.45
3	0.60	0.60	3.30	3.42	2.82	67	9.48	2.00	0.88	0.45	0.45	0.45
4	0.60	0.60	5.64	4.26	2.82	68	9.06	2.00	0.88	0.45	0.45	0.45
5	0.60	0.60	6.34	6.69	2.82	72	8.82	2.00	0.88	0.45	0.45	0.45
6	0.60	0.57	6.48	11	2.82	75	8.82	2.00	0.88	0.45	0.45	0.45
7	0.60	0.57	9.30	17	2.82	78	8.42	1.85	0.80	0.45	0.45	0.45
8	0.60	0.64	15	18	2.82	78	8.42	1.85	0.80	0.45	0.45	0.45
9	0.60	0.68	17	18	2.82	78	8.26	1.85	0.80	0.45	0.45	0.45
10	0.60	0.72	14	14	2.82	77	7.46	1.85	0.80	0.45	0.45	0.45
11	0.60	0.80	10	11	2.82	70	5.99	1.75	0.68	0.45	0.45	0.42
12	0.60	0.84	8.10	4.38	2.82	65	5.29	1.75	0.68	0.45	0.45	0.42
13	0.60	0.88	5.78	3.42	2.82	53	4.02	1.75	0.68	0.45	0.45	0.42
14	0.60	0.88	3.84	3.42	2.82	41	2.82	1.45	0.68	0.45	0.45	0.42
15	0.60	0.80	2.94	3.78	2.82	33	2.82	1.45	0.68	0.45	0.45	0.42
16	0.60	0.68	2.20	6.20	2.82	23	2.82	1.45	0.68	0.45	0.45	0.42
17	0.60	0.64	1.40	8.18	2.82	18	2.82	1.28	0.51	0.45	0.45	0.42
18	0.60	0.57	1.28	10	8.26	17	2.82	1.28	0.51	0.45	0.45	0.42
19	0.60	0.54	1.24	11	11	14	2.82	1.28	0.51	0.45	0.45	0.42
20	0.60	0.57	1.04	11	14	14	2.82	1.28	0.51	0.45	0.45	0.42
21	0.60	0.60	1.04	20	16	14	2.82	1.12	0.51	0.45	0.45	0.42
22	0.60	0.60	1.04	27	20	14	2.82	1.12	0.51	0.45	0.45	0.42
23	0.60	0.60	1.04	36	20	14	2.82	1.12	0.51	0.45	0.45	0.42
24	0.60	0.60	1.04	27	9.93	13	2.82	1.12	0.51	0.45	0.45	0.42
25	0.60	0.60	1.04	20	6.69	13	2.82	1.00	0.51	0.45	0.45	0.42
26	0.60	0.60	2.10	13	7.46	12	2.46	1.00	0.51	0.45	0.45	0.42
27	0.60	0.60	3.18	9.93	9.93	12	2.46	1.00	0.45	0.45	0.45	0.42
28	0.60	0.60	4.02	7.46	12	12	2.46	1.00	0.45	0.45	0.45	0.88
29	0.60	0.76	4.02	4.62	13	12	2.25	1.00	0.45	0.45		0.88
30	0.60	0.88	3.84	4.02	14	11	2.25	0.88	0.45	0.45		0.88
31		0.92		2.82	18		2.00		0.45	0.45		0.88
Total	18.00	20.74	140.56	343.56	227.17	1,177	151.76	44.48	19.91	13.95	12.60	15.16
Mean	0.60	0.67	4.68	11.1	7.33	39.2	4.89	1.48	0.64	0.45	0.45	0.49
Max.	0.60	0.92	17	36	20	78	10	2.00	0.88	0.45	0.45	0.88
Min.	0.60	0.54	1.04	2.82	2.20	11	2.00	0.88	0.45	0.45	0.45	0.42
Runoff – mcm.	1.555	1.792	12.144	29.683	19.627	101.693	13.112	3.843	1.720	1.205	1.089	1.310

WATER YEAR 1957 : Max. 78 Min. 0.42 Mean 5.99 Annual Runoff 188.774 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 8	06.00	160.98	78				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MAE KHONG RIVER BASIN

Nam Oon at Phanna Nikhom, Sakon Nakhon (Kh.20)

Location: Lat 17°- 20' - 49" N, Long 103°- 51' - 06" E, on right bank near Phanna Nikhom Market, Amphoe Phanna Nikhom, Sakon Nakhon.

Drainage Area: 1,199 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +156.27 m. (M.S.L.)

Bench Mark: B.M. of the Survey Department

Location: Near the district office of Amphoe Phanna Nikhom
Elevation: +164.083 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: 1955 to date

Rating Operation:

Period of Rating: 1956 - 62
Rated by Float: -
Rated by Current Meter: 1956 - 62

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

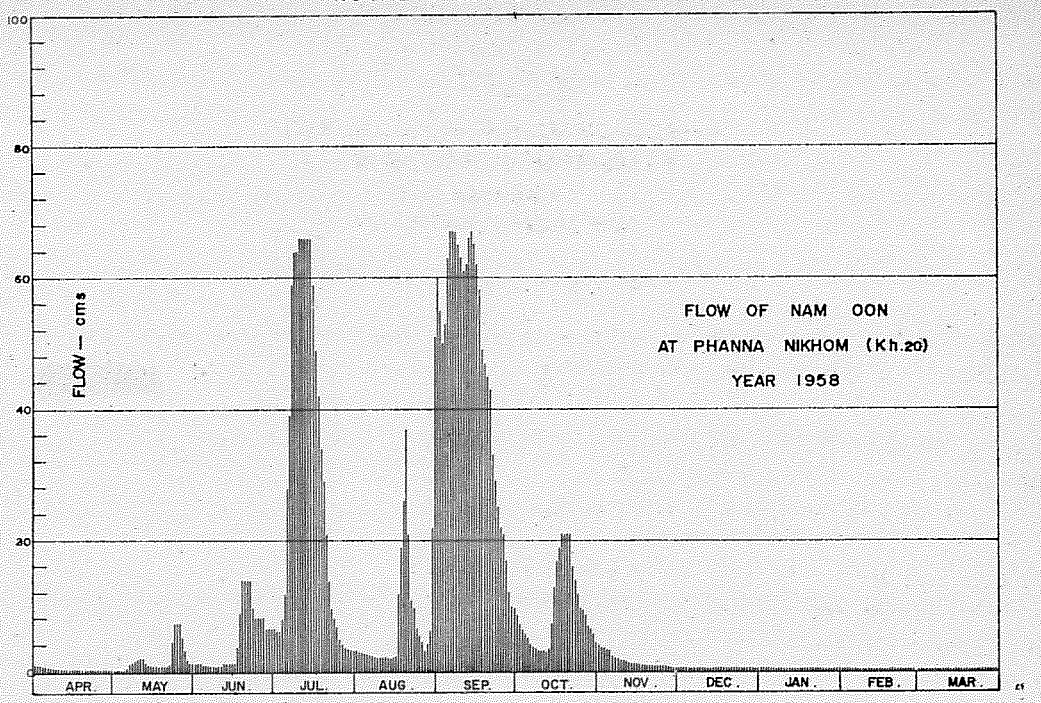
Overbank Flow Conditions: No overbank flow.

General Description: Records poor. Stage - discharge relationship used is defined by discharge measurements during 1962. No stage diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	156.57	156.42	156.67	157.56	157.06	160.48	157.72	157.19	156.53	156.51	156.47	156.44
2	.57	.42	.67	.52	.03	.34	.64	.14	.53	.51	.47	.44
3	.57	.42	.67	.52	156.99	.16	.56	.12	.52	.51	.47	.44
4	.54	.42	.62	.74	.97	.26	.46	.08	.52	.50	.47	.44
5	.54	.42	.62	158.22	.96	.57	.37	.06	.52	.50	.47	.44
6	156.49	156.47	156.57	159.19	156.94	160.67	157.18	156.91	156.52	156.50	156.47	156.44
7	.49	.65	.57	.72	.93	.67	.12	.86	.52	.50	.46	.44
8	.45	.72	.57	160.44	.90	.67	.09	.84	.52	.50	.46	.44
9	.45	.76	.57	.60	.86	.64	.06	.81	.52	.50	.46	.44
10	.45	.82	.57	.60	.88	.57	.03	.79	.51	.50	.46	.44
11	156.45	156.85	156.57	160.66	156.87	160.51	157.04	156.74	156.51	156.49	156.46	156.44
12	.45	.85	.67	.66	.87	.55	.02	.70	.51	.49	.46	.44
13	.42	.69	.67	.66	.87	.65	.10	.68	.51	.49	.46	.44
14	.42	.64	.67	.66	.83	.67	.67	.68	.51	.49	.46	.44
15	.42	.64	.67	.66	.87	.63	158.26	.67	.51	.49	.46	.44
16	156.42	156.57	156.67	160.46	156.93	160.54	158.55	156.66	156.51	156.49	156.45	156.44
17	.42	.57	157.13	.11	158.14	.42	.73	.64	.51	.49	.45	.44
18	.42	.57	.87	159.83	.68	.14	.81	.63	.51	.49	.45	.44
19	.42	.57	158.37	.51	159.09	.03	.81	.63	.51	.48	.45	.44
20	.42	.57	.37	.24	.63	159.97	.81	.61	.51	.48	.45	.44
21	156.42	156.57	158.37	158.81	158.82	159.89	158.82	156.60	156.51	156.48	156.45	156.44
22	.42	.63	.37	.37	.10	.46	.52	.59	.51	.48	.45	.44
23	.42	157.27	157.97	.03	157.96	.24	.37	.58	.51	.48	.45	.44
24	.42	.67	.77	157.74	.55	.06	.14	.57	.51	.48	.44	.44
25	.42	.67	.77	.59	.42	158.91	157.97	.57	.51	.47	.44	.44
26	156.42	157.67	157.77	157.33	157.27	158.82	157.91	156.57	156.51	156.47	156.44	156.44
27	.42	.37	.77	.22	.04	.60	.82	.55	.51	.47	.44	.44
28	.42	.07	.57	.12	.24	.16	.59	.53	.51	.47	.44	.44
29	.42	156.77	.57	.10	.54	157.98	.52	.53	.51	.47		.44
30	.42	.67	.57	.08	158.87	.94	.44	.53	.51	.47		.44
31		.67		.07	160.18		.26		.51	.47		.44
Mean	156.45	156.78	157.21	158.93	157.56	156.73	157.78	156.74	156.51	156.49	156.46	156.44
Max.	156.57	157.67	158.37	160.66	160.18	160.67	158.81	157.19	156.53	156.51	156.47	156.44
Min.	156.42	156.42	156.57	157.07	156.83	157.94	157.02	156.53	156.51	156.47	156.44	156.44

WATER YEAR 1958 : Max. 160.67 m. Min. 156.42 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.88	0.36	1.28	6.62	3.36	60	7.86	4.14	0.72	0.64	0.51	0.42
2	0.88	0.36	1.28	6.34	3.18	55	7.22	3.84	0.72	0.64	0.51	0.42
3	0.88	0.36	1.28	6.34	2.94	50	6.62	3.72	0.68	0.64	0.51	0.42
4	0.76	0.36	1.08	8.02	2.82	53	5.92	3.48	0.68	0.60	0.51	0.42
5	0.76	0.36	1.08	12	2.76	63	5.29	3.36	0.68	0.60	0.51	0.42
6	0.57	0.51	0.88	28	2.64	67	4.08	2.46	0.68	0.60	0.51	0.42
7	0.57	1.20	0.88	39	2.58	67	3.72	2.20	0.68	0.60	0.48	0.42
8	0.45	1.50	0.88	59	2.40	67	3.54	2.10	0.68	0.60	0.48	0.42
9	0.45	1.70	0.88	64	2.20	65	3.36	1.95	0.68	0.60	0.48	0.42
10	0.45	2.00	0.88	64	2.30	63	3.18	1.86	0.64	0.60	0.48	0.42
11	0.45	2.15	0.88	66	2.25	61	3.24	1.60	0.64	0.57	0.48	0.42
12	0.45	2.15	1.28	66	2.25	62	3.12	1.40	0.64	0.57	0.48	0.42
13	0.36	1.36	1.28	66	2.25	66	3.60	1.32	0.64	0.57	0.48	0.42
14	0.36	1.16	1.28	66	2.05	67	7.46	1.32	0.64	0.57	0.48	0.42
15	0.36	1.16	1.28	66	2.25	65	13	1.28	0.64	0.57	0.48	0.42
16	0.36	0.88	1.28	59	2.58	62	17	1.24	0.64	0.57	0.45	0.42
17	0.36	0.88	3.78	49	12	58	19	1.16	0.64	0.57	0.45	0.42
18	0.36	0.88	9.06	42	19	49	21	1.12	0.64	0.57	0.45	0.42
19	0.36	0.88	14	34	26	47	21	1.12	0.64	0.54	0.45	0.42
20	0.36	0.88	14	29	37	45	21	1.04	0.64	0.54	0.45	0.42
21	0.36	0.88	14	21	21	43	21	1.00	0.64	0.54	0.45	0.42
22	0.36	1.12	14	14	11	33	16	0.96	0.64	0.54	0.45	0.42
23	0.36	4.62	9.93	10	9.84	29	14	0.92	0.64	0.54	0.45	0.42
24	0.36	7.46	8.26	8.02	6.55	25	12	0.88	0.64	0.54	0.42	0.42
25	0.36	7.46	8.26	6.83	5.64	22	9.93	0.88	0.64	0.51	0.42	0.42
26	0.36	7.46	8.26	5.01	4.62	21	9.39	0.88	0.64	0.51	0.42	0.42
27	0.36	5.29	8.26	4.32	3.24	17	8.66	0.80	0.64	0.51	0.42	0.42
28	0.36	3.42	6.69	3.72	4.44	12	6.83	0.72	0.64	0.51	0.42	0.42
29	0.36	1.75	6.69	3.60	6.48	10	6.34	0.72	0.64	0.51		0.42
30	0.36	1.28	6.69	3.48	22	9.66	5.78	0.72	0.64	0.51		0.42
31		1.28		3.42	51		4.56		0.64	0.51		0.42
Total	14.03	63.11	149.56	919.72	280.62	1,413.66	294.70	50.19	20.28	17.49	13.08	13.02
Mean	0.468	2.03	4.98	29.7	9.05	47.1	9.51	1.67	0.654	0.564	0.467	0.420
Max.	0.88	7.46	14	66	51	67	21	4.14	0.72	0.64	0.51	0.42
Min.	0.36	0.36	0.88	3.42	2.05	9.66	3.12	0.72	0.64	0.51	0.42	0.42
Runoff — mcm.	1.212	5.453	12.922	79.464	24.245	122.140	25.462	4.336	1.752	1.511	1.130	1.125

WATER YEAR 1958 : Max. 67 Min. 0.36 Mean 8.90 Annual Runoff 280.753 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 6	06.00	160.67	67				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
MAE KHONG RIVER BASIN

Nam Oon at Phanna Nikhom, Sakon Nakhon (Kh.20)

Location: Lat 17°– 20' – 49" N, Long 103°– 51' – 06" E, on right bank near Phanna Nikhom Market, Amphoe Phanna Nikhom, Sakon Nakhon.

Drainage Area: 1,199 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +156.27 m. (M.S.L.)

Bench Mark: B.M. of the Survey Department

Location: Near the district office of Amphoe Phanna Nikhom.
Elevation: +164.083 m. (M.S.L.)

Gage Reading Frequency: 3 – time daily reading at 06.00, 12.00 and 18.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 3 readings.

Period of Available Gage Records: 1955 to date.

Rating Operation:

Period of Rating: 1956 – 62
Rated by Float: –
Rated by Current Meter: 1956 – 62

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

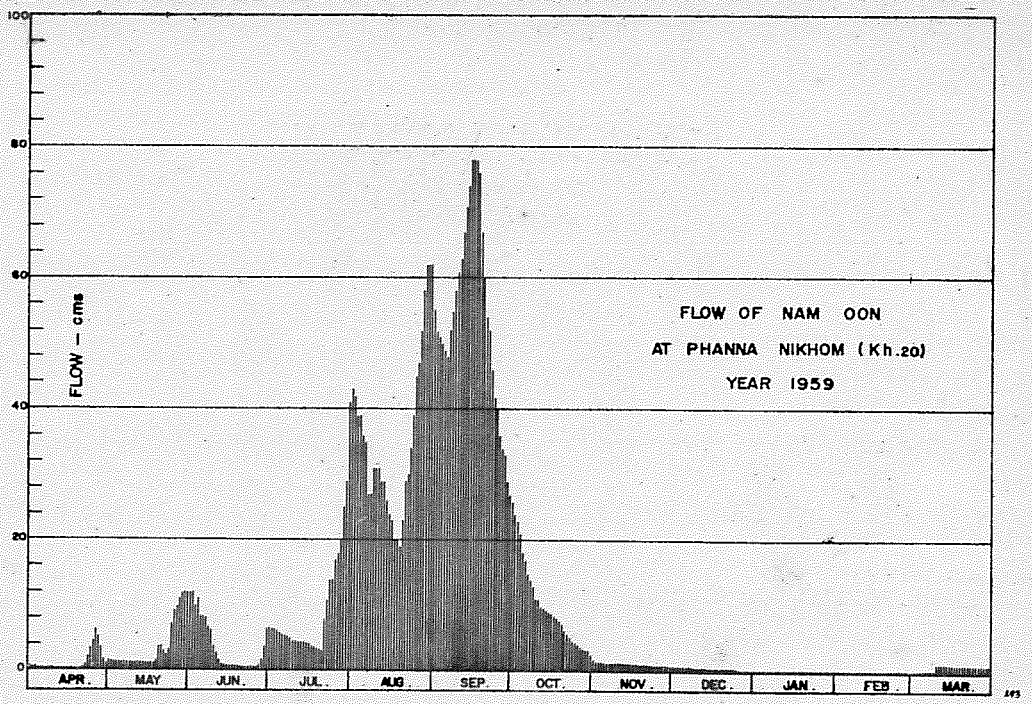
Overbank Flow Conditions: No overbank flow.

General Description: Records poor. Stage – discharge relationship used is defined by discharge measurements during 1962. No stage diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	156.44	156.74	158.14	157.54	159.86	160.32	159.08	156.80	156.57	156.42	156.41	156.41
2	.44	.71	.15	.53	.84	.24	.02	.74	.57	.42	.41	.41
3	.44	.69	157.99	.52	.70	.19	158.93	.74	.57	.42	.41	.41
4	.43	.69	158.06	.49	.69	.16	.82	.74	.57	.42	.41	.41
5	.43	.69	157.78	.46	.57	.11	.66	.73	.57	.42	.41	.41
6	156.43	156.69	157.78	157.41	159.53	160.08	158.54	156.73	156.57	156.42	156.41	156.41
7	.43	.69	.74	.40	.17	.24	.43	.72	.56	.42	.41	.41
8	.43	.67	.58	.39	.17	.33	.37	.72	.55	.42	.41	.41
9	.43	.67	.50	.33	.37	.42	.24	.72	.54	.42	.41	.42
10	.43	.67	.11	.29	.37	.51	.13	.71	.54	.42	.41	.67
11	156.43	156.67	156.91	157.27	159.37	160.57	158.06	156.70	156.53	156.42	156.41	156.67
12	.43	.66	.74	.25	.24	.69	.01	.70	.52	.42	.41	.67
13	.42	.66	.59	.25	.23	.80	157.94	.69	.51	.42	.41	.66
14	.42	.66	.56	.25	.10	.88	.90	.68	.50	.42	.41	.66
15	.42	.65	.55	.22	158.98	.97	.88	.68	.49	.42	.41	.66
16	156.42	156.65	156.55	157.22	158.92	160.97	157.84	156.68	156.49	156.42	156.41	156.65
17	.42	.65	.55	.16	.79	.97	.80	.66	.48	.42	.41	.65
18	.42	.65	.55	.11	.74	.92	.75	.65	.48	.42	.41	.65
19	.41	.76	.55	.09	.68	.69	.69	.65	.47	.42	.41	.64
20	.41	157.14	.54	.04	.94	.48	.64	.65	.47	.42	.41	.64
21	156.41	157.14	156.53	157.02	159.24	160.30	157.50	156.65	156.46	156.42	156.41	156.63
22	.57	.01	.53	.74	.32	.24	.46	.65	.46	.42	.41	.63
23	.83	156.93	.52	158.13	.52	159.99	.38	.64	.45	.42	.41	.63
24	157.09	157.08	.52	.37	.69	.84	.29	.64	.44	.42	.41	.69
25	.25	.66	.51	.37	.95	.73	.24	.63	.44	.42	.41	.62
26	157.52	157.91	156.51	158.59	160.06	159.58	157.19	156.62	156.43	156.42	156.41	156.62
27	.34	158.01	.57	.64	.24	.49	.12	.61	.42	.42	.41	.61
28	.07	.07	.78	.78	.42	.44	.08	.60	.42	.42	.41	.61
29	156.77	.22	157.11	159.07	.54	.26	.04	.59	.42	.42	.41	.61
30	.62	.21	.54	.26	.54	.14	.04	.58	.42	.42		.61
31		.18		.80	.54		156.94		.42	.42		.60
Mean	156.60	157.05	157.03	157.74	159.53	160.25	157.87	156.68	156.49	156.42	156.41	156.57
Max.	157.52	158.22	158.15	159.80	160.54	160.97	159.08	156.80	156.57	156.42	156.41	156.67
Min.	156.41	156.65	156.51	157.02	158.68	159.14	156.94	156.58	156.42	156.42	156.41	156.41

WATER YEAR 1959 : Max. 160.97 m. Min. 156.41 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.42	1.60	12	6.48	43	55	26	1.90	0.88	0.36	0.33	0.33
2	0.42	1.45	12	6.41	42	52	24	1.60	0.88	0.36	0.33	0.33
3	0.42	1.36	10	6.34	39	51	23	1.60	0.88	0.36	0.33	0.33
4	0.39	1.36	11	6.13	39	50	21	1.60	0.88	0.36	0.33	0.33
5	0.39	1.36	8.34	5.92	36	49	18	1.55	0.88	0.36	0.33	0.33
6	0.39	1.36	8.34	5.57	35	48	17	1.55	0.88	0.36	0.33	0.33
7	0.39	1.36	8.02	5.50	27	52	15	1.50	0.84	0.36	0.33	0.33
8	0.39	1.28	6.76	5.43	27	55	14	1.50	0.80	0.36	0.33	0.33
9	0.39	1.28	6.20	5.01	37	58	13	1.50	0.76	0.36	0.33	0.36
10	0.39	1.28	3.66	4.74	31	61	11	1.45	0.76	0.36	0.33	1.28
11	0.39	1.28	2.46	4.62	31	63	11	1.40	0.72	0.36	0.33	1.28
12	0.39	1.24	1.60	4.50	29	67	10	1.40	0.68	0.36	0.33	1.28
13	0.36	1.24	0.96	4.50	29	71	9.66	1.36	0.68	0.36	0.33	1.24
14	0.36	1.24	0.84	4.50	26	74	9.30	1.32	0.60	0.36	0.33	1.24
15	0.36	1.20	0.80	4.32	24	78	9.14	1.32	0.57	0.36	0.33	1.24
16	0.36	1.20	0.80	4.32	23	78	8.82	1.32	0.57	0.36	0.33	1.20
17	0.36	1.20	0.80	3.96	20	78	8.50	1.24	0.54	0.36	0.33	1.20
18	0.36	1.20	0.80	3.66	20	76	8.10	1.20	0.54	0.36	0.33	1.20
19	0.33	1.70	0.80	3.54	19	67	7.62	1.20	0.51	0.36	0.33	1.16
20	0.33	3.84	0.76	3.24	23	60	7.22	1.20	0.51	0.36	0.33	1.16
21	0.33	3.84	0.72	3.12	29	54	6.20	1.20	0.48	0.36	0.33	1.12
22	0.88	3.06	0.72	8.02	30	52	5.92	1.20	0.48	0.36	0.33	1.12
23	2.05	2.58	0.68	11	34	46	5.36	1.16	0.45	0.36	0.33	1.12
24	3.54	3.48	0.68	14	39	42	4.74	1.16	0.42	0.36	0.33	1.08
25	4.50	7.38	0.64	14	45	40	4.44	1.12	0.42	0.36	0.33	1.08
26	6.34	9.39	0.64	17	47	36	4.14	1.08	0.39	0.36	0.33	1.08
27	5.08	10	0.88	18	52	34	3.72	1.04	0.36	0.36	0.33	1.04
28	3.42	11	1.80	20	58	33	3.48	1.00	0.36	0.36	0.33	1.04
29	1.75	12	3.66	25	62	29	3.24	0.96	0.36	0.36	0.33	1.04
30	1.08	12	6.48	29	62	27	3.24	0.92	0.36	0.36		1.04
31		12		41	62		2.64		0.36	0.36		1.00
Total	35.76	115.76	113.84	298.83	1,114	1,636	318.48	39.05	18.80	11.16	9.57	28.24
Mean	1.19	3.73	3.79	9.64	35.9	54.5	10.3	1.30	0.606	0.360	0.330	0.910
Max.	6.34	12	12	41	62	78	26	1.90	0.88	0.36	0.33	1.28
Min.	0.33	1.20	0.64	3.12	19	27	2.64	0.92	0.36	0.36	0.33	0.33
Runoff - mcm.	3.090	10.002	9.836	25.819	96.250	141.350	27.517	3.374	1.624	0.964	0.827	2.439

WATER YEAR 1959 : Max. 78 Min. 0.33 Mean 10.2 Annual Runoff 323.092 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 15	06.00	160.97	78				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHEE RIVER BASIN

Chee River at Wat Thai Kosum, Maha Sarakham (E.1)

Location: Lat 16° – 15' – 02" N, Long 103° – 04' – 25" E, on right bank, 800 meters north – east of the district office of Amphoe Kosum Phisai, Maha Sarakham.

Drainage Area: 29,803 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +136.51 m. (M.S.L.)

Bench Mark: B.M. – E.1

Location: On right bank near the gage site.
Elevation: +149.116 m. (M.S.L.)

Gage Reading Frequency: 2 – time daily readings at 06.00 and 18.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 2 readings.

Period of Available Gage Records: 1936 – 43, 1951 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: –
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

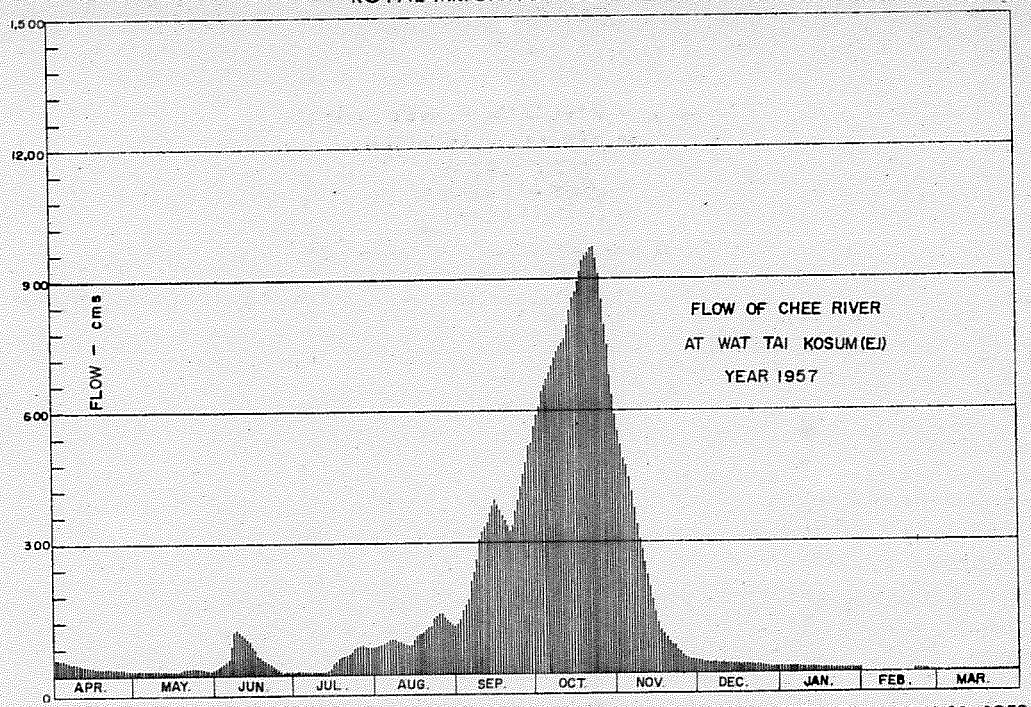
General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1965 – 66. No stage diversions for irrigation above gage site.

Remarks: No gage height record for Feb. 1 – 20.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	137.97	137.14	137.33	136.96	138.60	139.58	144.74	144.52	137.80	137.32		136.80
2	.94	.14	.42	.97	.63	.78	.88	.30	.77	.32		.79
3	.91	.13	.51	.97	.66	140.02	145.02	.07	.74	.31		.78
4	.86	.12	.65	.98	.73	.20	.11	143.92	.70	.30		.77
5	.81	.11	.82	.97	.81	.42	.19	.67	.67	.29		.76
6	137.77	137.10	137.94	136.95	138.88	140.98	145.27	143.36	137.65	137.28		136.75
7	.72	.09	138.62	.96	.94	141.26	.35	142.99	.64	.27		.74
8	.68	.08	139.26	.96	.90	.65	.43	.60	.63	.26		.74
9	.62	.07	.33	.95	.86	142.21	.50	.19	.62	.25		.73
10	.60	.06	.20	.92	.81	.40	.55	141.92	.61	.25		.72
11	137.56	137.04	139.09	136.97	138.76	142.54	145.59	141.56	137.60	137.23		136.72
12	.52	.03	.02	137.01	.71	.65	.64	.18	.59	.22		.71
13	.47	.02	138.93	.10	.64	.89	.76	140.79	.58	.22		.71
14	.43	.01	.80	.24	.69	143.05	.89	.38	.57	.21		.70
15	.40	.00	.61	.38	.88	.20	.98	139.96	.56	.20		.70
16	137.38	136.99	138.38	137.58	139.02	143.08	146.04	139.54	137.55	137.20		136.69
17	.36	.98	.16	.83	.09	142.95	.12	.32	.54	.19		.69
18	.33	.98	.01	138.04	.16	.82	.20	.15	.52	.18		.68
19	.31	137.17	137.90	.07	.27	.69	.28	138.98	.50	.17		.68
20	.30	.22	.81	.10	.37	.56	.32	.82	.48	.17		.67
21	137.29	137.26	137.72	138.17	139.41	142.43	146.34	138.66	137.46	137.17	137.03	136.67
22	.28	.29	.63	.27	.47	.58	.37	.53	.45	.16	.01	.67
23	.26	.35	.48	.39	.75	.95	.38	.41	.43	.16	136.98	.66
24	.24	.33	.30	.52	.87	143.21	.30	.28	.42	.16	.94	.66
25	.22	.30	.07	.58	.90	.51	.19	.14	.40	.16	.92	.65
26	137.21	137.26	137.00	138.63	139.90	143.76	145.99	138.03	137.38	137.16	136.89	136.65
27	.19	.23	136.97	.63	.74	144.00	.77	137.95	.37	.15	.86	.64
28	.17	.20	.96	.61	.64	.29	.57	.90	.35	.15	.83	.65
29	.16	.18	.95	.59	.53	.40	.25	.87	.35	.13		.66
30	.15	.13	.95	.56	.48	.58	.01	.83	.34	.13		.65
31		.17		.57	.42		144.76		.34	.13		.64
Mean	137.47	137.13	137.96	137.69	139.14	142.42	145.67	140.49	137.54	137.21		136.70
Max.	137.97	137.35	139.33	138.63	139.90	144.58	146.38	144.52	137.80	137.32		136.80
Min.	137.15	136.98	136.95	136.92	138.60	139.58	144.74	137.83	137.34	137.13		136.64

WATER YEAR 1957 : Max. 146.38 m. Min. 136.64 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	38	11	16	7.20	66	119	588	553	31	16		4.30
2	36	11	19	7.40	67	131	612	522	30	16		4.14
3	35	11	21	7.40	69	147	638	491	29	15		3.98
4	33	10	26	7.60	72	158	655	474	28	15		3.82
5	32	10	32	7.40	76	173	670	446	27	15		3.66
6	30	10	36	7.00	80	212	686	414	26	15		3.50
7	28	9.89	67	7.20	83	233	702	378	26	14		3.34
8	27	9.68	100	7.20	81	262	720	342	25	14		3.34
9	25	9.47	104	7.00	79	308	735	307	25	14		3.18
10	24	9.26	97	6.40	76	324	746	284	25	14		3.02
11	23	8.84	91	7.40	74	337	755	255	24	13		3.02
12	22	8.63	87	8.21	71	347	766	227	24	13		2.86
13	20	8.42	82	10	68	369	795	199	24	13		2.86
14	19	8.21	76	13	70	384	829	170	23	13		2.70
15	18	8.00	66	17	80	398	854	143	23	12		2.70
16	17	7.80	55	24	87	387	870	117	23	12		2.58
17	17	7.60	45	32	91	375	893	104	22	12		2.58
18	16	7.60	39	40	95	362	917	94	22	12		2.46
19	15	12	35	42	101	351	941	85	21	12		2.46
20	15	13	32	43	107	339	954	77	20	12		2.34
21	15	14	28	46	109	327	960	69	20	12	8.63	2.34
22	15	15	25	50	113	341	970	62	19	11	8.21	2.34
23	14	17	20	56	130	375	973	56	19	11	7.60	2.22
24	13	16	15	62	137	399	947	51	19	11	6.80	2.22
25	13	15	9.47	65	139	429	914	45	18	11	6.40	2.10
26	13	14	8.00	67	139	456	856	40	17	11	5.83	2.10
27	12	13	7.40	67	129	483	797	37	17	11	5.32	1.98
28	12	12	7.20	66	123	521	750	35	17	11	4.81	1.98
29	11	12	7.00	65	116	536	682	34	17	11		2.22
30	11	11	7.00	64	113	562	636	32	16	11		2.10
31		12		64	110		591		16	11		1.98
Total	619	342.41	1,260.07	980.41	2,951	10,145	24,402	6,143	693	394		86.42
Mean	20.6	11.0	42.0	31.6	95.2	338	787	205	22.3	12.7		2.79
Max.	38	17	104	67	139	562	973	553	31	16		4.30
Min.	11	7.60	7.00	6.40	66	119	588	32	16	11		1.98
Runoff - mcm.	53.482	29.584	108.870	84.707	254.966	876.528	2,108.333	530.755	59.875	34.042		7.467

WATER YEAR 1957 : Max. 973 Min. 1.98 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 22	15.00	146.39	977				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHEE RIVER BASIN

Chee River at Wat Thai Kosum, Maha Sarakham (E.1)

Location: Lat 16° – 15' – 02" N, Long 103° – 04' – 25" E, on right bank, 800 meters north – east of the district office of Amphoe Kosum Phisai, Maha Sarakham.

Drainage Area: 29,803 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +136.51 m. (M.S.L.)

Bench Mark: B.M. – E.1

- Location: On right bank near the gage site.
- Elevation: +149.116 m. (M.S.L.)

Gage Reading Frequency: 2 – time daily readings at 06.00 and 18.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 2 readings.

Period of Available Gage Records: 1936 – 43, 1951 to date.

Rating Operation:

- Period of Rating: 1965 to date
- Rated by Float: –
- Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1965 – 66. No stage diversions for irrigation above gage site.

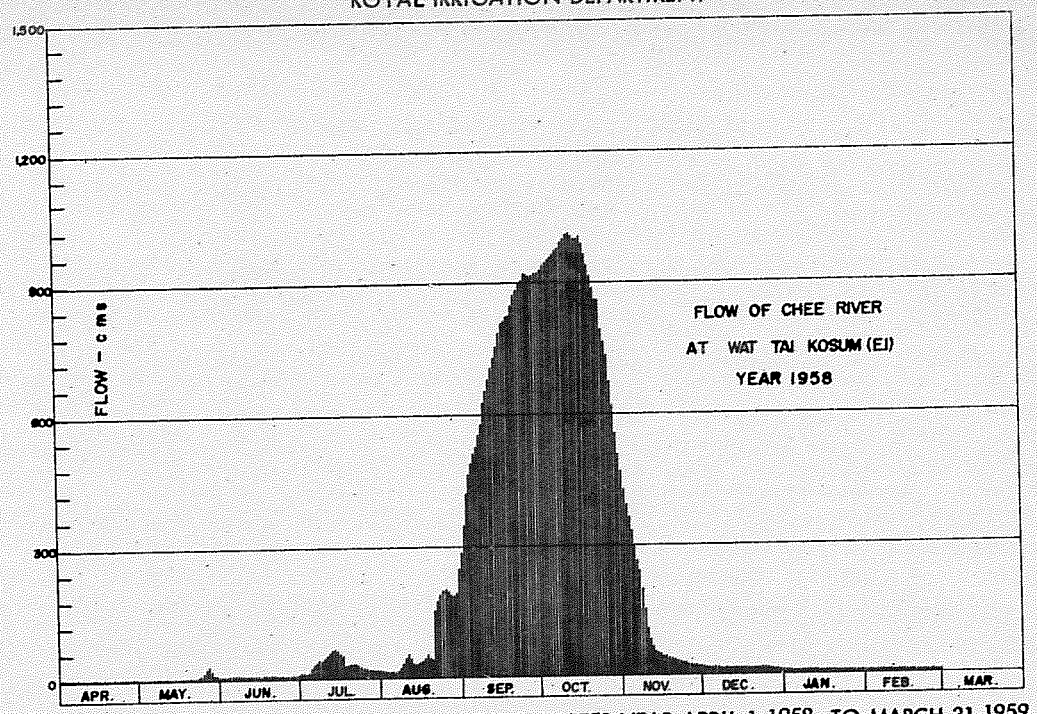
Remarks: No gage height record for Mar.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	136.64	136.60	136.92	137.38	137.44	142.67	146.24	143.52	137.49	137.19	137.04	
2	.64	.60	.94	.34	.43	143.44	.27	.16	.47	.17	.04	
3	.63	.60	.97	.26	.40	.85	.30	142.83	.46	.16	.04	
4	.63	.61	137.00	.38	.38	144.07	.32	.52	.45	.14	.04	
5	.63	.61	.02	.66	.37	.23	.34	.09	.44	.13	.04	
6	136.63	136.62	137.04	137.84	137.35	144.34	146.35	141.68	137.42	137.12	137.04	
7	.63	.63	.06	.99	.47	.53	.38	.42	.40	.11	.03	
8	.62	.64	.05	138.13	.67	.70	.40	140.81	.39	.11	.03	
9	.62	.64	.05	.10	.99	.97	.43	.17	.39	.10	.03	
10	.62	.65	.04	.22	138.28	145.13	.46	139.43	.37	.10	.02	
11	136.62	136.65	137.03	138.38	138.45	145.25	146.49	138.99	137.36	137.09	137.02	
12	.61	.66	.00	.52	.21	.37	.51	.71	.36	.09	.02	
13	.61	.66	.00	.63	137.91	.48	.49	.42	.35	.08	.02	
14	.61	.67	136.99	.70	.94	.60	.47	.36	.33	.08	.01	
15	.61	.68	.97	.62	138.01	.72	.45	.29	.33	.07	.01	
16	136.61	136.69	136.95	138.49	138.09	145.80	146.48	138.20	137.33	137.06	137.01	
17	.61	.73	.96	.38	.15	.83	.44	.14	.32	.06	.01	
18	.61	.76	.99	137.86	.40	.87	.36	.08	.32	.05	.00	
19	.62	.79	137.02	.91	139.21	.91	.28	.01	.31	.04	.00	
20	.62	.83	.05	.93	.76	.96	.19	137.95	.30	.04	.00	
21	136.62	136.88	137.04	137.92	140.19	146.04	146.10	137.88	137.30	137.04	137.00	
22	.63	.88	.01	.86	.50	.09	.01	.81	.29	.04	136.99	
23	.63	.94	136.98	.79	.70	.12	145.89	.78	.28	.04	.99	
24	.63	137.15	.95	.70	.85	.16	.75	.76	.27	.04	.99	
25	.62	.35	137.00	.64	.89	.22	.63	.71	.26	.04	.99	
26	136.62	137.59	137.04	137.59	140.78	146.21	145.49	137.68	137.25	137.04	136.99	
27	.61	.78	.07	.56	.70	.20	.21	.65	.24	.04	.98	
28	.61	.47	.10	.52	.67	.19	144.92	.61	.23	.04	.98	
29	.61	.13	.12	.48	.77	.21	.55	.57	.22	.04		
30	.60	.01	.15	.46	141.50	.22	.21	.53	.21	.04		
31		136.95		.45	.97		143.88		.20	.04		
Mean	136.62	136.85	137.02	137.89	139.01	145.35	145.98	139.12	137.33	137.08	137.01	
Max.	136.64	137.78	137.15	138.70	141.97	146.22	146.51	143.52	137.49	137.19	137.04	
Min.	136.60	136.60	136.92	137.26	137.35	142.67	143.88	137.53	137.20	137.04	136.98	

WATER YEAR 1958 : Max. 146.51 m. Min. – m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.98	1.50	6.40	17	19	349	929	430	21	12	8.84	
2	1.98	1.50	6.80	16	19	422	938	395	20	12	8.84	
3	1.86	1.50	7.40	14	18	466	947	363	20	11	8.84	
4	1.86	1.62	8.00	17	17	491	954	335	19	11	8.84	
5	1.86	1.62	8.42	26	17	512	960	298	19	11	8.84	
6	1.86	1.74	8.84	33	17	528	963	265	19	10	8.84	
7	1.86	1.86	9.26	38	20	554	973	245	18	10	8.63	
8	1.74	1.98	9.05	44	27	581	980	200	18	10	8.63	
9	1.74	1.98	9.05	43	38	629	990	156	18	10	8.63	
10	1.74	2.10	8.84	48	51	659	1,000	110	17	10	8.42	
11	1.74	2.10	8.63	55	58	682	1,011	85	17	9.89	8.42	
12	1.62	2.22	8.00	62	48	707	1,017	71	17	9.89	8.42	
13	1.62	2.22	8.00	67	35	731	1,011	57	17	9.68	8.42	
14	1.62	2.34	7.80	71	36	757	1,004	54	16	9.68	8.21	
15	1.62	2.46	7.40	67	39	785	997	51	16	9.47	8.21	
16	1.62	2.58	7.00	60	42	805	1,007	47	16	9.26	8.21	
17	1.62	3.18	7.20	55	45	813	994	45	16	9.26	8.21	
18	1.62	3.66	7.80	33	56	824	967	42	16	9.05	8.00	
19	1.74	4.14	8.42	35	48	835	941	39	15	8.84	8.00	
20	1.74	4.81	9.05	36	74	848	914	37	15	8.84	8.00	
21	1.74	5.66	8.84	36	158	870	887	34	15	8.84	8.00	
22	1.86	5.66	8.21	33	178	884	862	32	15	8.84	7.80	
23	1.86	6.80	7.60	31	192	893	829	31	15	8.84	7.80	
24	1.86	11	7.00	28	203	905	792	30	14	8.84	7.80	
25	1.74	17	8.00	26	206	923	764	28	14	8.84	7.80	
26	1.74	24	8.84	24	198	920	733	27	14	8.84	7.80	
27	1.62	31	9.47	23	192	917	674	26	13	8.84	7.60	
28	1.62	20	10	22	190	914	620	25	13	8.84	7.60	
29	1.62	11	10	20	197	920	557	23	13	8.84		
30	1.50	8.21	11	20	251	923	509	22	13	8.84		
31		7.00		19	288		469		12	8.84		
Total	52.20	194.44	250.32	1,119	2,977	22,047	27,193	3,603	501	298.10	231.65	
Mean	1.74	6.27	8.34	36.1	96.0	735	877	120	16.2	9.62	8.27	
Max.	1.98	31	11	71	288	923	1,017	430	21	12	8.84	
Min.	1.50	1.50	6.40	14	17	349	469	22	12	8.84	7.60	
Runoff - mcm.	4.510	16.800	21.628	96.682	257.213	1,904.861	2,349.475	311.299	43.286	25.756	20.014	

WATER YEAR 1958 : Max. 1,017 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 12	15.00	146.51	1,017				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHEE RIVER BASIN

Chee River at Wat Thai Kosum, Maha Sarakham (E.1)

Location: Lat 16° – 15' – 02" N, Long 103° – 04' – 25" E, on right bank, 800 meters north-east of the district office of Amphoe Kosum Phisai, Maha Sarakham.

Drainage Area: 29,803 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +136.51 m. (M.S.L.)

Bench Mark: B.M. – E.1

Location: On right bank near the gage site.
Elevation: +149.116 m. (M.S.L.)

Gage Reading Frequency: 2 – time daily readings at 06.00 and 18.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 2 readings.

Period of Available Gage Records: 1936 – 43, 1951 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: –
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

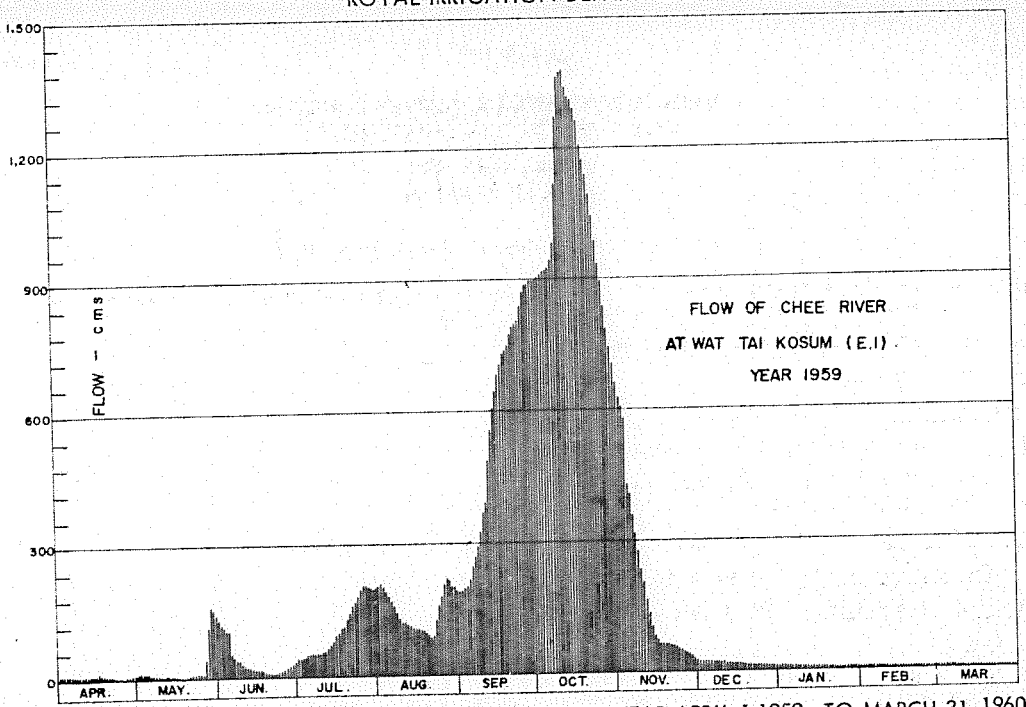
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relation used is defined by discharge measurements during 1965 – 66. No stage diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	136.93	137.24	139.88	138.18	140.94	140.70	146.15	144.97	137.70	137.23	137.04	136.91
2	.93	.29	.68	.14	141.05	.74	.17	.85	.69	.21	.03	.90
3	.93	.26	.57	.17	140.88	.79	.19	.70	.68	.20	.03	.91
4	.92	.24	.44	.20	.75	.94	.21	143.52	.67	.19	.02	.92
5	.92	.21	.40	.33	.60	141.12	.22	.30	.66	.19	.02	.92
6	136.92	137.15	138.36	138.36	140.44	141.48	146.24	142.80	137.64	137.18	137.02	136.91
7	.92	.11	.24	.37	.25	.76	.30	.32	.63	.17	.01	.90
8	.92	.08	.13	.38	.03	142.09	.42	141.84	.62	.16	.01	.89
9	.91	.05	.04	.41	139.80	.46	.79	.32	.60	.15	.01	.89
10	.91	.02	137.90	.45	.70	.92	147.21	140.87	.58	.15	.00	.89
11	136.91	136.99	137.77	138.48	139.65	143.18	147.46	140.39	137.57	137.14	137.00	136.89
12	.91	.96	.65	.54	.58	144.07	.48	139.91	.56	.13	.00	.89
13	.96	.93	.61	.71	.56	.57	.49	.43	.54	.13	136.99	.89
14	137.03	.90	.56	.84	.48	.86	.40	.02	.52	.12	.99	.89
15	.16	.87	.51	139.02	.45	145.08	.33	138.85	.50	.12	.98	.89
16	137.28	136.85	137.46	139.23	139.42	145.27	147.30	138.71	137.48	137.11	136.98	136.89
17	.21	.85	.40	.38	.40	.38	.26	.68	.43	.10	.98	.89
18	.13	.84	.33	.49	.37	.49	.19	.65	.42	.10	.97	.88
19	.04	.88	.27	.55	.23	.52	.05	.61	.39	.09	.97	.88
20	136.99	.98	.23	.87	.14	.58	146.97	.58	.36	.09	.96	.88
21	136.91	137.06	137.18	140.06	139.07	145.69	146.86	138.55	137.33	137.08	136.96	136.88
22	.91	.12	.20	.27	.19	.76	.74	.51	.31	.07	.96	.88
23	.88	.15	.25	.43	.74	.79	.59	.46	.30	.07	.95	.88
24	.85	.18	.30	.59	140.32	.82	.43	.39	.29	.06	.95	.88
25	.83	.21	.40	.84	.59	.93	.28	.30	.28	.06	.94	.88
26	136.89	137.24	137.51	140.97	141.00	146.05	146.13	138.21	137.27	137.05	136.93	136.88
27	.94	138.15	.62	.99	.14	.11	145.93	.16	.26	.05	.93	.88
28	137.02	139.55	.75	.93	.06	.12	.73	.03	.25	.05	.92	.87
29	.10	140.31	.86	.85	140.90	.13	.55	137.88	.24	.04	.92	.87
30	.18	.22	.99	.82	.87	.14	.36	.74	.23	.04		.87
31		.00		.89	.72		.15		.22	.04		.87
Mean	136.98	138.35	137.94	139.41	140.11	144.12	146.57	140.12	137.45	137.11	136.98	136.89
Max.	137.28	140.31	139.88	140.99	141.14	146.14	147.49	144.97	137.70	137.23	137.04	136.92
Min.	136.83	136.84	137.18	138.14	139.07	140.70	145.15	137.74	137.22	137.04	136.92	136.87

WATER YEAR 1959 : Max. 147.49 m. Min. 136.83 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	6.60	13	138	46	209	192	902	629	28	13	8.84	6.20
2	6.60	15	125	45	216	195	908	607	27	13	8.63	6.00
3	6.60	14	119	46	205	199	914	581	27	12	8.63	6.20
4	6.40	13	111	47	196	209	920	430	27	12	8.42	6.40
5	6.40	13	108	53	185	222	923	408	26	12	8.42	6.40
6	6.40	11	54	54	174	249	929	360	26	12	8.42	6.20
7	6.40	10	49	55	162	271	947	318	25	12	8.21	6.00
8	6.40	9.68	44	55	147	298	987	278	25	11	8.21	5.83
9	6.20	9.05	40	56	133	330	1,117	237	24	11	8.21	5.83
10	6.20	8.42	35	58	126	372	1,272	204	24	11	8.00	5.83
11	6.20	7.80	30	60	123	397	1,370	171	23	11	8.00	5.83
12	6.20	7.20	26	63	119	491	1,378	140	23	11	8.00	5.83
13	7.20	6.60	25	71	118	560	1,382	110	22	11	7.80	5.83
14	8.63	6.00	23	78	113	609	1,346	87	22	10	7.80	5.83
15	11	5.49	21	87	111	649	1,318	78	21	10	7.60	5.83
16	15	5.15	20	99	110	686	1,306	71	20	10	7.60	5.83
17	13	5.15	18	107	108	709	1,291	70	19	10	7.60	5.83
18	11	4.98	16	114	107	733	1,264	68	19	10	7.40	5.66
19	8.84	5.66	14	117	99	739	1,211	66	18	9.89	7.40	5.66
20	7.80	7.60	13	137	94	753	1,181	65	17	9.89	7.20	5.66
21	6.20	9.26	12	149	90	778	1,140	63	16	9.68	7.20	5.66
22	6.20	10	12	163	96	795	1,096	61	15	9.47	7.20	5.66
23	5.66	11	14	174	129	802	1,045	59	15	9.47	7.00	5.66
24	5.15	12	15	185	166	810	990	56	15	9.26	7.00	5.66
25	4.81	13	18	202	185	840	941	51	15	9.26	6.80	5.66
26	5.83	13	21	211	213	873	896	48	14	9.05	6.60	5.66
27	6.80	45	25	213	224	890	840	45	14	9.05	6.60	5.66
28	8.42	117	29	209	218	893	787	40	14	9.05	6.40	5.49
29	10	166	33	203	206	896	746	34	13	8.84	6.40	5.49
30	12	160	38	201	204	899	705	29	13	8.84		5.49
31		145		206	194		662		13	8.84		5.49
Total	230.14	879.04	1,246	3,564	4,780	17,339	32,714	5,464	620	322.59	221.59	180.26
Mean	7.67	28.3	41.5	115	154	578	1,055	182	20.0	10.4	7.64	5.81
Max.	15	166	138	213	224	899	1,382	629	28	13	8.84	6.40
Min.	4.81	4.98	12	45	90	192	662	29	13	8.84	6.40	5.49
Runoff - MCM.	19.884	75.949	107.654	307.930	412.992	1,498.090	2,826.490	472.090	53.568	27.872	19.145	15.574

WATER YEAR 1959 : Max. 1,382 Min. 4.81 Mean 185 Annual Runoff 5,837.497 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 13	15.00	147.49	1,382				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHEE RIVER BASIN

Chee River at Wat Si Thammaram, Ubon Ratchathani (E.2)

Location: Lat 16°- 15' - 02" N, Long 103°- 04' - 25" E, on left bank, 1.5 kilometers south of the office of Amphoe Yasothon and 500 meters downstream from Wat Si Thammaram, Ubon Ratchathani.

Drainage Area: 47,406 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +117.00 m. (M.S.L.)

Bench Mark: B.M. of the Survey Department No.97

Location: 15 meters east of the district post office.
Elevation: +126.972 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 of 5 readings.

Period of Available Gage Records: 1951 to date.

Rating Operation:

Period of Rating: 1951
Rated by Float: -
Rated by Current Meter: 1951

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

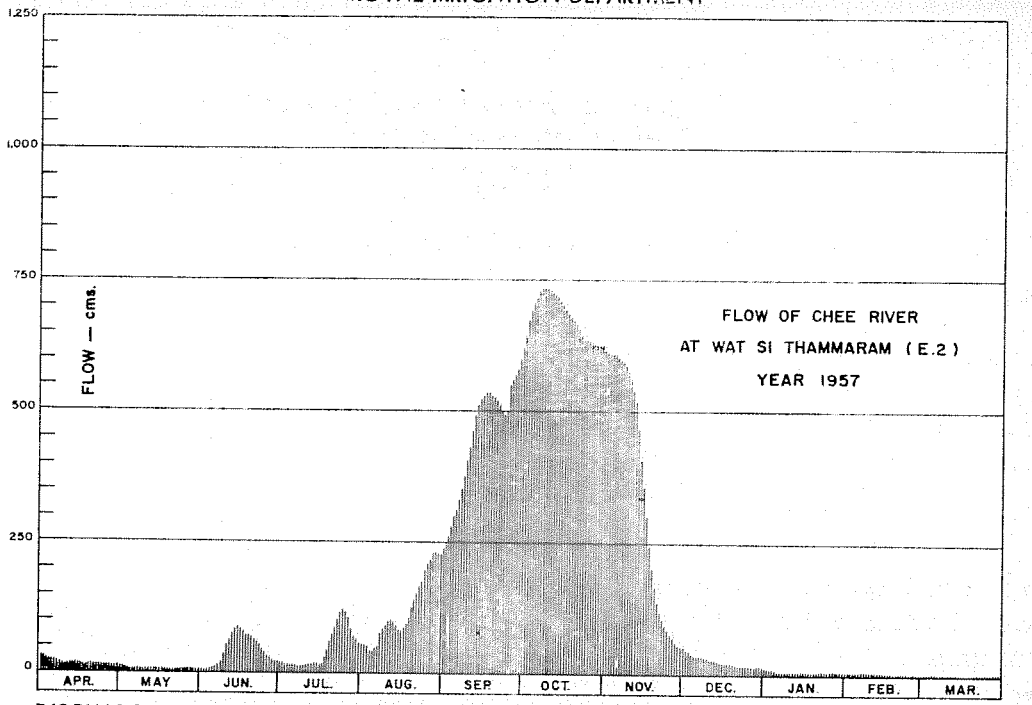
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1951. No state diversion for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	119.11	118.63	118.34	118.86	119.62	121.76	124.81	124.72	119.54	118.64	118.34	118.27
2	.07	.59	.34	.83	.60	.95	.93	.70	.49	.61	.34	.27
3	118.99	.55	.35	.80	.53	122.12	125.07	.70	.42	.58	.34	.27
4	.96	.50	.40	.76	.44	.28	.15	.69	.34	.56	.33	.27
5	.93	.44	.48	.72	.41	.42	.22	.68	.28	.53	.33	.27
6	118.90	118.40	118.60	118.69	119.48	122.59	125.24	124.65	119.24	118.51	118.33	118.26
7	.87	.38	.68	.66	.60	.78	.31	.62	.22	.50	.32	.26
8	.82	.38	.79	.65	.93	.96	.32	.60	.19	.50	.32	.26
9	.79	.38	119.07	.66	120.08	123.20	.32	.56	.15	.49	.32	.25
10	.71	.38	.48	.67	.18	.46	.31	.49	.12	.49	.31	.25
11	118.78	118.37	119.71	118.71	120.26	123.70	125.30	124.35	119.07	118.48	118.31	118.25
12	.78	.37	.82	.77	.29	.86	.27	.14	.06	.47	.31	.24
13	.78	.37	.94	.79	.26	124.01	.25	123.97	.03	.46	.31	.24
14	.78	.37	120.04	.79	.16	.11	.23	.64	.00	.45	.31	.24
15	.74	.37	.09	.75	.09	.15	.20	.23	118.98	.45	.30	.23
16	118.72	118.37	120.06	118.72	120.02	124.17	125.16	122.82	118.96	118.44	118.30	118.23
17	.70	.36	119.97	.77	.07	.23	.12	.35	.92	.42	.30	.22
18	.68	.35	.89	119.07	.20	.23	.09	121.93	.90	.41	.29	.22
19	.70	.33	.84	.35	.40	.18	.05	.41	.88	.40	.29	.21
20	.72	.32	.80	.67	.67	.16	.02	.12	.86	.39	.29	.21
21	118.71	118.32	119.77	119.94	120.85	124.13	124.99	120.71	118.84	118.39	118.29	118.20
22	.70	.31	.71	120.11	.93	.06	.96	.49	.81	.37	.29	.19
23	.70	.31	.66	.26	121.07	123.98	.88	.30	.78	.37	.28	.19
24	.70	.31	.46	.47	.25	.92	.85	.14	.76	.37	.28	.18
25	.69	.36	.30	.55	.46	124.00	.84	.00	.75	.36	.28	.17
26	118.69	118.40	119.26	120.48	121.53	124.32	124.83	119.89	118.72	118.36	118.28	118.16
27	.68	.38	.17	.39	.65	.40	.80	.79	.70	.36	.28	.15
28	.68	.35	.04	.10	.71	.47	.80	.71	.67	.35	.28	.14
29	.67	.34	118.98	119.88	.74	.55	.79	.63	.66	.35		.13
30	.66	.33	.91	.76	.73	.67	.79	.57	.65	.35		.12
31		.34		.67	.68		.79		.64	.35		.12
Mean	118.78	118.38	119.30	119.30	120.48	123.63	125.05	122.52	118.99	118.44	118.30	118.21
Max.	119.11	118.63	120.09	120.55	121.74	124.67	125.32	124.72	119.54	118.64	118.34	118.27
Min.	118.66	118.31	118.34	118.65	119.41	121.76	124.79	119.57	118.64	118.35	118.28	118.12

WATER YEAR 1957 : Max. 125.32 m. Min. 118.12 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	30	13	5.80	20	56	235	631	615	51	13	5.80	4.40
2	28	12	5.80	19	55	254	653	612	48	12	5.80	4.40
3	25	11	6.00	18	51	271	680	612	44	12	5.80	4.40
4	24	9.42	7.00	17	45	289	697	610	40	11	5.60	4.40
5	23	7.86	8.90	16	43	304	712	609	37	10	5.60	4.40
6	21	7.00	12	15	48	323	717	604	35	9.68	5.60	4.20
7	20	6.60	14	14	55	345	733	598	34	9.42	5.40	4.20
8	19	6.60	18	14	77	366	735	595	33	9.42	5.40	4.20
9	18	6.60	28	14	88	395	735	588	31	9.16	5.40	4.00
10	15	6.60	48	14	95	429	733	576	30	9.16	5.20	4.00
11	18	6.40	62	15	101	460	730	555	28	8.90	5.20	4.00
12	18	6.40	69	17	103	482	723	523	28	8.64	5.20	3.80
13	18	6.40	78	18	101	504	719	498	26	8.38	5.20	3.80
14	18	6.40	85	18	93	519	715	452	25	8.12	5.20	3.80
15	16	6.40	88	17	88	525	708	399	24	8.12	5.00	3.60
16	16	6.40	86	16	83	528	699	349	24	7.86	3.00	3.60
17	15	6.20	80	17	87	537	690	297	22	7.40	5.00	3.44
18	14	6.00	74	28	96	537	684	252	21	7.20	4.80	3.44
19	15	5.60	71	41	112	529	676	200	21	7.00	4.80	3.28
20	16	5.40	68	59	134	526	670	174	20	6.80	4.80	3.28
21	15	5.40	66	78	150	522	664	137	19	6.80	4.80	3.12
22	15	5.20	62	90	157	511	658	119	18	6.40	4.80	2.96
23	15	5.20	59	101	169	499	643	104	18	6.40	4.60	2.96
24	15	5.20	47	118	186	491	638	92	17	6.40	4.60	2.80
25	15	6.20	38	124	205	502	638	82	17	6.20	4.60	2.64
26	15	7.00	36	118	212	550	634	74	16	6.20	4.60	2.48
27	14	6.60	32	111	224	562	629	67	15	6.20	4.60	2.32
28	14	6.00	27	89	230	573	629	62	14	6.00	4.60	2.16
29	14	5.80	24	74	233	587	627	57	14	6.00		2.00
30	14	5.60	22	66	232	607	627	53	14	6.00		1.80
31		5.80		59	227		627		13	6.00		1.80
Total	533	212.28	1,327.50	1,435	3,836	13,762	21,052	10,665	797	251.86	143.00	105.68
Mean	17.8	6.85	44.2	46.3	124	459	679	355	25.7	7.48	5.11	3.41
Max.	30	13	88	124	233	607	735	615	51	13	5.80	4.40
Min.	14	5.20	5.80	14	43	235	627	53	13	6.00	4.60	1.80
Runoff — MCM.	46.051	18.341	114.696	123.984	331.430	1,189.037	1,818.893	921.456	68.861	21.761	12.355	9.131

WATER YEAR 1957 : Max. 735 Min. 1.80 Mean 148 Annual Runoff 4,675.996 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 7	18.00	125.32	735				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHEE RIVER BASIN

Chee River at Wat Si Thammaram, Ubon Ratchathani (E.2)

Location: Lat 16°– 15' – 02" N, Long 105°– 04' – 25" E, on left bank, 1.5 kilometers south of the office of Amphoe Yasothon and 500 meters downstream from Wat Si Thammaram, Ubon Ratchathani.

Drainage Area: 47,406 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +117.00 m. (M.S.L.)

Bench Mark: B.M. of the Survey Department No.97

Location: 15 meters east of the district post office.
Elevation: +126.972 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 of 5 readings.

Period of Available Gage Records: 1951 to date.

Rating Operation:

Period of Rating: 1951
Rated by Float: –
Rated by Current Meter: 1951

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

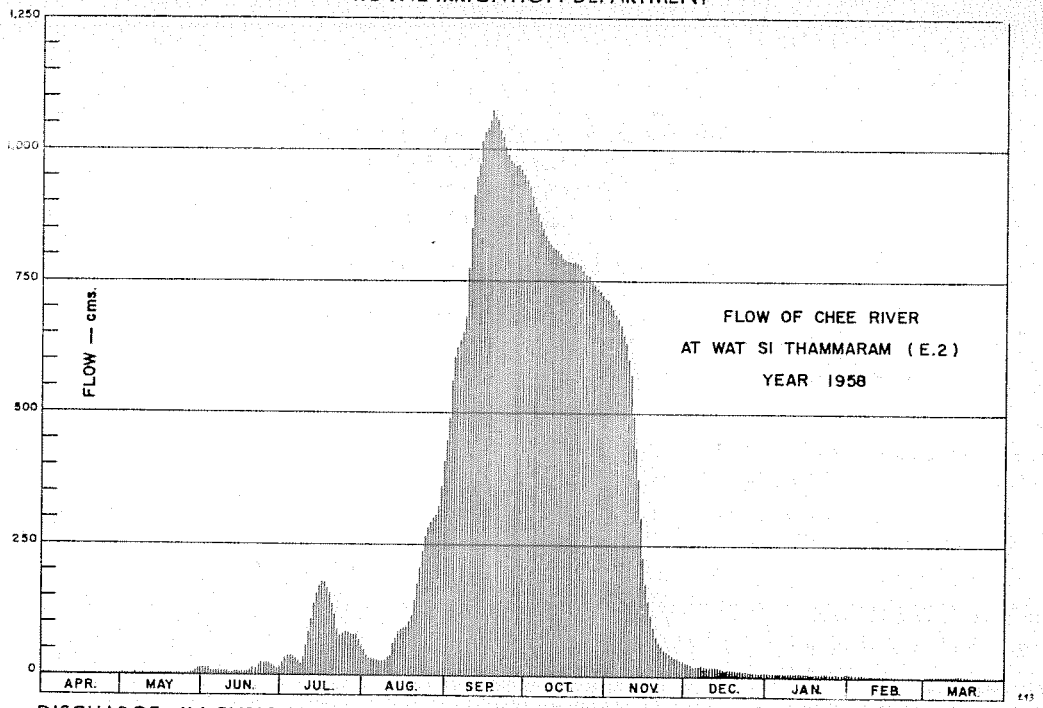
Overbank Flow Conditions: Overbank flow was observed for Sept. 11 – Oct. 3 but not included for flow computation.

General Description: Records fair. Stage – discharge relationship used is defined by discharge measurements during 1951. No state diversion for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	118.12	118.05	118.66	118.96	119.49	123.69	125.96	125.23	119.06	118.49	118.32	118.20
2	.12	.05	.61	119.19	.33	124.19	.93	.20	118.96	.48	.31	.20
3	.12	.05	.55	.28	.22	.55	.89	.16	.89	.48	.31	.20
4	.12	.05	.50	.30	.18	.68	.84	.11	.84	.48	.30	.20
5	.12	.05	.47	.24	.15	.78	.81	.06	.79	.47	.30	.20
6	118.12	118.05	118.43	119.16	119.10	124.88	125.76	125.00	118.78	118.47	118.30	118.20
7	.12	.06	.41	.05	.07	125.02	.72	124.92	.77	.47	.29	.20
8	.13	.07	.36	118.95	.09	.33	.69	.83	.76	.46	.29	.20
9	.11	.07	.33	119.23	.16	.60	.65	.60	.75	.46	.28	.19
10	.11	.07	.32	.64	.29	.79	.62	.43	.75	.46	.28	.19
11	118.10	118.08	118.29	120.09	119.28	125.91	125.61	124.02	118.74	118.46	118.27	118.19
12	.09	.08	.30	.45	.72	126.01	.60	123.45	.73	.45	.27	.19
13	.10	.09	.31	.75	.84	.08	.57	122.88	.72	.44	.26	.18
14	.09	.10	.34	.92	120.04	.12	.54	.27	.71	.45	.25	.18
15	.09	.11	.31	121.13	.11	.14	.52	121.72	.69	.43	.25	.18
16	118.08	118.12	118.30	121.17	120.14	126.15	125.51	121.12	118.67	118.43	118.24	118.17
17	.08	.16	.30	.15	.19	.19	.51	120.67	.66	.42	.23	.17
18	.08	.19	.36	.07	.31	.20	.51	.28	.64	.41	.23	.17
19	.07	.20	.45	120.93	.45	.18	.50	.04	.62	.41	.22	.17
20	.07	.19	.57	.72	.75	.16	.50	119.87	.59	.41	.22	.16
21	118.07	118.17	118.68	120.42	121.19	126.13	125.49	119.73	118.58	118.40	118.22	118.16
22	.07	.19	.79	.09	.59	.11	.48	.62	.56	.39	.22	.16
23	.06	.20	.94	119.92	.88	.06	.44	.52	.56	.39	.21	.15
24	.06	.19	.99	.95	122.11	.04	.41	.46	.55	.38	.21	.15
25	.06	.27	.93	120.00	.22	.03	.39	.40	.54	.37	.21	.15
26	118.06	118.27	118.97	119.99	122.34	126.02	125.37	119.32	118.53	118.37	118.20	118.14
27	.06	.26	.86	.95	.41	.02	.34	.28	.52	.36	.20	.14
28	.05	.35	.75	.93	.45	.02	.33	.24	.51	.34	.20	.14
29	.05	.51	.67	.94	.67	.00	.30	.19	.51	.34		.14
30	.05	.63	.77	.86	.95	125.97	.27	.12	.50	.33		.13
31		.66		.68	123.26		.25		.50	.32		.13
Mean	118.09	118.18	118.55	120.00	120.48	125.67	125.56	121.99	118.68	118.42	118.25	118.17
Max.	118.13	118.66	118.99	121.17	123.26	126.20	125.96	125.23	119.06	118.49	118.32	118.20
Min.	118.05	118.05	118.29	118.95	119.07	123.69	125.25	119.12	118.50	118.32	118.20	118.13

WATER YEAR 1958 : Max. 126.20 m. Min. 118.05 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.80	0.85	14	24	48	459	942	715	28	9.16	5.40	3.12
2	1.80	0.85	12	33	40	531	929	708	24	8.90	5.20	3.12
3	1.80	0.85	11	37	34	587	912	699	21	8.90	5.20	3.12
4	1.80	0.85	9.42	38	33	609	892	688	19	8.90	5.00	3.12
5	1.80	0.85	8.64	35	31	626	880	678	18	8.64	5.00	3.12
6	1.80	0.85	7.60	32	29	643	862	666	18	8.64	5.00	3.12
7	1.80	0.98	7.20	27	28	670	849	651	17	8.64	4.80	3.12
8	2.00	1.11	6.20	23	29	738	839	634	17	8.33	4.80	3.12
9	1.60	1.11	5.60	35	32	812	827	595	17	8.38	4.60	2.96
10	1.60	1.11	5.40	57	38	873	818	567	17	8.38	4.60	2.96
11	1.50	1.24	4.80	88	37	920	815	505	16	8.38	4.40	2.96
12	1.37	1.24	5.00	116	63	965	812	428	16	8.12	4.40	2.96
13	1.50	1.37	5.20	141	71	1,003	804	357	16	7.86	4.20	2.80
14	1.37	1.50	5.80	156	85	1,026	795	288	15	8.12	4.00	2.80
15	1.37	1.60	5.20	175	90	1,038	790	231	15	7.60	4.00	2.80
16	1.24	1.80	5.00	178	92	1,044	787	174	14	7.60	3.80	2.64
17	1.24	2.48	5.00	177	95	1,068	787	134	14	7.40	3.60	2.64
18	1.24	2.96	6.20	169	105	1,074	787	102	13	7.20	3.60	2.64
19	1.11	3.12	8.12	157	116	1,062	784	85	13	7.20	3.44	2.64
20	1.11	2.96	17	138	141	1,050	784	73	12	7.20	3.44	2.48
21	1.11	2.64	14	114	180	1,032	781	64	12	7.00	3.44	2.48
22	1.11	2.96	18	88	218	1,020	778	56	11	6.80	3.44	2.48
23	0.98	3.12	23	76	247	992	767	50	11	6.80	3.28	2.32
24	0.98	2.96	25	78	270	982	759	47	11	6.60	3.28	2.32
25	0.98	4.40	23	82	282	976	753	43	10	6.40	3.28	2.32
26	0.98	4.40	24	81	295	971	748	39	10	6.40	3.12	2.16
27	0.98	4.20	20	78	303	971	740	37	9.94	6.20	3.12	2.16
28	0.85	6.00	17	77	308	971	738	35	9.68	5.80	3.12	2.16
29	0.85	9.68	14	78	332	960	730	33	9.68	5.80		2.16
30	0.85	13	17	72	365	947	728	30	9.42	5.60		2.00
31		14		60	403		719		9.42	5.40		2.00
Total	40.52	97.04	349.38	2,720	4,440	26,620	24,931	9,412	453.14	232.40	114.56	82.80
Mean	1.35	3.13	11.6	87.7	143	887	804	314	14.6	7.50	4.09	2.67
Max.	2.00	14	25	178	403	1,074	942	715	28	9.16	5.40	3.12
Min.	0.85	0.85	4.80	23	28	459	719	30	9.42	5.40	3.12	2.00
Runoff - MCM.	3.501	8.384	30.186	235.008	383.616	2,299.968	2,154.038	813.197	39.151	20.079	9.898	7.154

WATER YEAR 1958 : Max. 1,074 Min. 0.85 Mean 190 Annual Runoff 6,004.181 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 18	06.00	126.20	1,074				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHEE RIVER BASIN

Chee River at Wat Si Thammaram, Ubon Ratchathani (E.2)

Location: Lat 16°- 15' - 02" N, Long 103°- 04" - 25' E, on left bank, 1.5 kilometers south of the office of Amphoe Yasothon and 500 meters downstream from Wat Si Thammaram, Ubon Ratchathani.

Drainage Area: 47,406 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +117.00 m. (M.S.L.)

Bench Mark: B.M. of the Survey Department No.97

Location: 15 meters east of the district post office.
Elevation: +126.972 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 of 5 readings.

Period of Available Gage Records: 1951 to date.

Rating Operation:

Period of Rating: 1951
Rated by Float: -
Rated by Current Meter: 1951

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

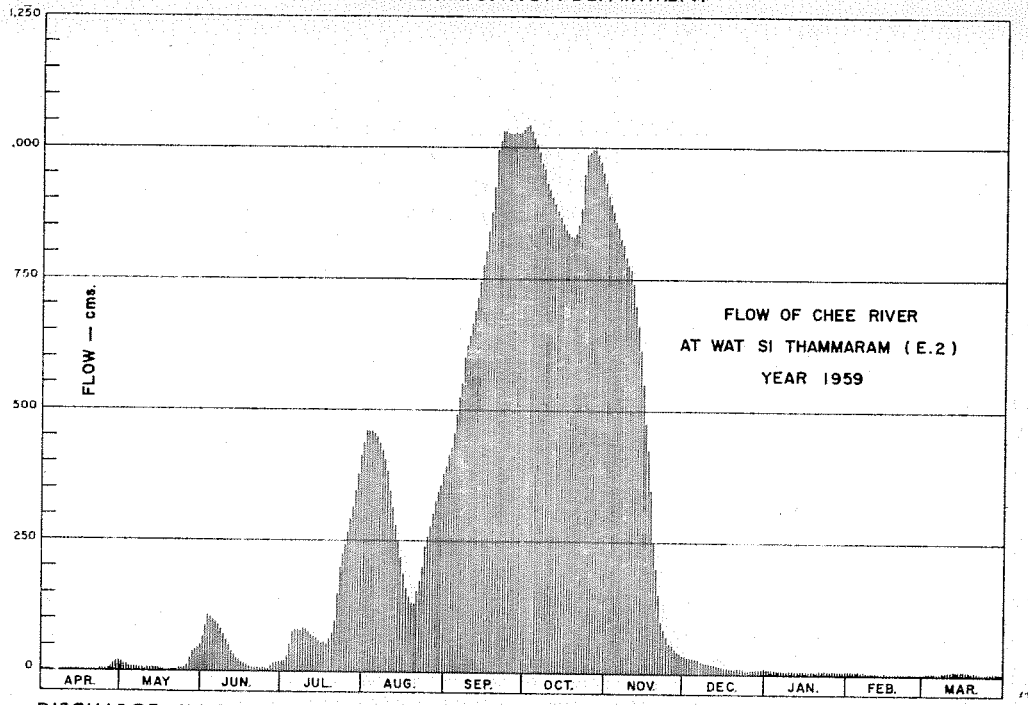
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1951. No state diversion for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	118.13	118.78	119.91	118.86	123.56	123.21	126.14	125.91	119.22	118.46	118.35	118.23
2	.13	.65	120.19	.88	.70	.33	.15	.86	.20	.45	.34	.25
3	.13	.59	.34	119.08	.70	.45	.12	.81	.16	.44	.34	.26
4	.12	.52	.32	.54	.70	.68	.11	.76	.11	.44	.33	.27
5	.18	.47	.26	.89	.68	124.00	.08	.70	.07	.43	.33	.28
6	118.12	118.42	120.20	120.00	123.62	124.22	126.05	125.65	119.02	118.43	118.32	118.29
7	.11	.37	.13	.01	.53	.44	.01	.60	118.97	.42	.32	.29
8	.11	.35	.03	119.99	.43	.64	125.97	.53	.93	.42	.31	.30
9	.11	.34	119.88	120.03	.26	.80	.92	.49	.90	.42	.30	.32
10	.11	.33	.71	.01	.08	.92	.90	.42	.86	.41	.30	.35
11	118.10	118.33	119.55	119.92	122.89	125.04	125.87	125.33	118.82	118.41	118.29	118.40
12	.10	.33	.35	.84	.54	.15	.84	.22	.78	.40	.29	.44
13	.10	.32	.13	.81	.18	.28	.81	.04	.74	.40	.28	.48
14	.10	.32	.04	.75	121.81	.39	.77	124.71	.71	.40	.28	.50
15	.10	.32	118.92	.70	.57	.51	.75	.33	.68	.39	.28	.48
16	118.10	118.32	118.82	119.63	121.30	125.64	125.72	123.90	118.66	118.39	118.27	118.43
17	.10	.31	.74	.61	.06	.74	.68	.25	.64	.39	.26	.39
18	.10	.28	.67	.60	120.84	.86	.67	122.69	.60	.39	.26	.37
19	.10	.25	.60	.76	.69	.95	.66	121.69	.59	.39	.25	.34
20	.10	.25	.54	.87	.66	126.06	.70	.09	.56	.39	.25	.33
21	118.11	118.24	118.50	120.23	120.88	126.10	125.76	120.61	118.55	118.38	118.24	118.30
22	.15	.29	.47	.88	121.05	.13	.87	.20	.54	.38	.24	.28
23	.24	.34	.45	121.35	.49	.13	.99	119.96	.53	.38	.24	.26
24	.25	.45	.42	.68	.83	.12	126.05	.81	.52	.38	.24	.25
25	.27	.52	.41	.88	122.04	.13	.06	.67	.51	.37	.24	.23
26	118.32	118.61	118.47	122.10	122.25	126.12	126.07	119.61	118.50	118.37	118.24	118.23
27	.50	.92	.59	.37	.42	.12	.07	.52	.50	.37	.24	.22
28	.63	119.27	.72	.60	.54	.12	.06	.38	.49	.36	.23	.22
29	.74	.41	.79	.86	.72	.12	.03	.30	.48	.36	.23	.20
30	.80	.40	.83	123.11	.93	.13	125.99	.25	.47	.35		.19
31		.52		.37	123.06		.95		.47	.35		.19
Mean	118.21	118.54	119.20	120.52	122.39	125.25	125.93	123.04	118.73	118.40	118.28	118.31
Max.	118.80	119.52	120.34	123.37	123.70	126.13	126.15	125.91	119.22	118.46	118.35	118.50
Min.	118.10	118.24	118.41	118.86	120.66	123.21	125.66	119.25	118.47	118.35	118.23	118.19

WATER YEAR 1959 : Max. 126.15 m. Min. 118.10 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2.00	18	76	20	442	396	1,038	920	34	8.38	6.00	3.60
2	2.00	14	95	21	460	412	1,044	900	33	8.12	5.80	4.00
3	2.00	12	107	28	460	428	1,026	880	32	7.86	5.80	4.20
4	1.80	9.94	106	51	460	457	1,020	862	30	7.86	5.60	4.40
5	1.80	8.64	101	74	457	502	1,003	842	28	7.60	5.60	4.60
6	1.80	7.40	96	82	450	535	987	827	26	7.60	5.40	4.80
7	1.60	6.40	91	83	438	568	965	812	24	7.40	5.40	4.80
8	1.60	6.00	84	81	425	602	947	792	23	7.40	5.20	5.00
9	1.60	5.80	74	84	403	629	925	781	21	7.40	5.00	5.40
10	1.60	5.60	62	83	381	651	916	762	20	7.20	5.00	6.00
11	1.50	5.60	52	76	358	674	904	738	19	7.20	4.80	7.00
12	1.50	5.60	41	71	317	697	892	712	18	7.00	4.80	7.86
13	1.50	5.40	30	69	278	726	880	674	16	7.00	4.60	8.90
14	1.50	5.40	27	65	240	753	866	614	15	7.00	4.60	9.42
15	1.50	5.40	22	62	216	787	859	552	14	6.80	4.60	8.90
16	1.50	5.40	19	57	190	824	849	488	14	6.80	4.40	7.60
17	1.50	5.20	16	56	168	856	836	402	13	6.80	4.20	6.80
18	1.50	4.00	14	55	149	900	833	334	12	5.80	4.20	6.40
19	1.50	4.00	12	66	135	938	830	228	12	6.80	4.00	5.80
20	1.50	4.00	10	73	133	992	842	171	11	6.80	4.00	5.60
21	1.60	3.80	9.42	98	152	1,014	862	129	11	6.60	3.80	5.00
22	2.32	4.80	8.64	152	168	1,032	904	96	10	6.60	3.80	4.60
23	3.80	5.80	8.12	195	208	1,032	956	79	10	6.60	3.80	4.20
24	4.00	8.12	7.40	227	242	1,026	987	69	9.94	6.60	3.80	4.00
25	4.40	9.94	7.20	247	263	1,026	992	59	9.68	6.40	3.80	3.60
26	5.40	12	8.64	269	286	1,026	998	56	9.42	6.40	3.80	3.60
27	9.42	22	12	299	304	1,026	998	50	9.42	6.40	3.80	3.44
28	13	37	16	324	317	1,026	992	42	9.16	6.20	3.60	3.44
29	16	43	18	354	337	1,026	976	38	8.90	6.20	3.60	3.12
30	18	43	19	384	363	1,032	956	36	8.64	6.00		2.29
31		50		417	378		938		8.64	6.00		2.29
Total	110.74	383.84	1,249.42	4,223	9,578	23,593	29,021	13,945	519.80	215.82	132.80	162.00
Mean	3.69	12.4	41.6	136	309	786	936	465	16.8	6.96	4.58	5.22
Max.	18	50	107	417	460	1,032	1,044	920	34	8.38	6.00	9.42
Min.	1.50	3.80	7.20	20	133	396	830	36	8.64	6.00	3.60	2.29
Runoff - mcm.	9.568	33.164	107.950	364.867	827.539	2,038.435	2,507.414	1,204.848	44.911	18.647	11.474	13.997

WATER YEAR 1959 : Max. 1,044 Min. 1.50 Mean 227 Annual Runoff 7,182.814 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 1	15.00	126.15	1,044				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHEE RIVER BASIN

Chee River at Tha Khon Yang, Maha Sarakham (E.8A)

Location: Lat 16°- 13' - 51" N, Long 103°- 16' - 29" E, on right bank at the bridge on highway Maha Sarakham – Kalasin, Tambon Tha Khon Yang, Amphoe Kantharawichai, Maha Sarakham.

Drainage Area: 29,817 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +133.21 m. (M.S.L.)

Bench Mark: B.M. – H.S. No.6

Location: On the right abutment of bridge.
Elevation: +147.910 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: 1955 to date.

Rating Operation:

Period of Rating: 1955 – 57, 1964 to date.
Rated by Float: –
Rated by Current Meter: 1955 – 57, 1964 to date.

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

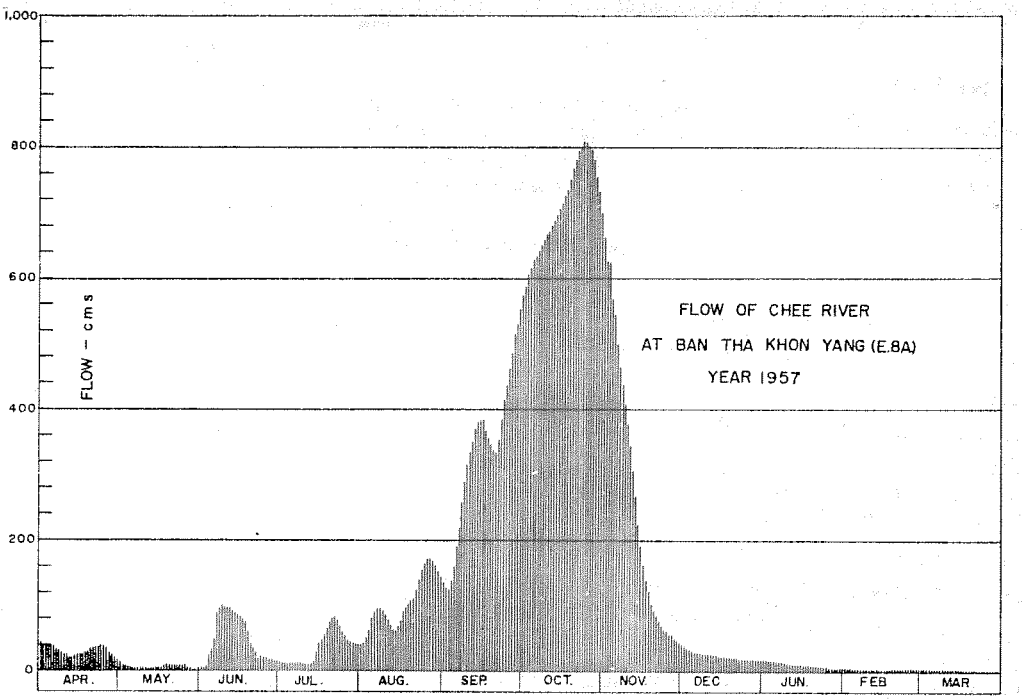
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relationship used is defined by discharge measurements during 1955 – 57. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	134.66	134.03	133.74	134.06	134.60	136.41	141.41	142.07	134.63	134.11	133.76	133.70
2	.62	133.94	.77	.02	.69	.29	.52	141.81	.57	.11	.76	.70
3	.60	.87	.87	.02	.87	.19	.67	.65	.52	.10	.76	.70
4	.58	.85	134.28	.01	135.12	.36	.74	.38	.48	.08	.75	.69
5	.56	.80	.47	.01	.47	.74	.82	.17	.44	.08	.75	.69
6	134.53	133.77	134.80	134.01	135.63	137.24	141.87	140.80	134.40	134.07	133.75	133.69
7	.45	.75	135.56	.00	.71	.71	.93	.48	.37	.05	.74	.68
8	.39	.73	.73	.00	.71	138.18	.98	.21	.35	.04	.74	.68
9	.35	.73	.78	133.99	.64	.61	142.04	139.93	.33	.02	.74	.68
10	.30	.73	.75	.99	.54	.92	.09	.62	.30	.01	.74	.68
11	134.25	133.73	135.72	133.98	135.40	139.18	142.13	139.23	134.29	133.99	133.73	133.68
12	.19	.73	.69	.97	.26	.37	.19	138.80	.28	.97	.73	.67
13	.19	.73	.63	.96	.12	.55	.25	.31	.28	.96	.73	.67
14	.23	.73	.58	134.04	.05	.65	.31	137.72	.26	.94	.73	.67
15	.25	.72	.53	.41	.19	.68	.37	.20	.24	.92	.73	.66
16	134.28	133.73	135.48	134.71	135.47	139.62	142.42	136.78	134.22	133.91	133.73	133.66
17	.30	.75	.43	.81	.71	.51	.50	.43	.21	.90	.72	.66
18	.34	.84	.33	.94	.80	.39	.55	.13	.20	.88	.72	.65
19	.37	.95	.05	135.15	.87	.28	.66	135.81	.20	.87	.72	.65
20	.48	.95	134.72	.36	.95	.18	.76	.63	.19	.86	.72	.65
21	134.50	133.91	134.51	135.44	136.07	139.15	142.85	135.48	134.18	133.84	133.72	133.65
22	.52	.86	.38	.46	.23	.35	.93	.33	.17	.82	.72	.64
23	.56	.85	.30	.36	.47	.68	.97	.19	.16	.81	.71	.64
24	.56	.84	.25	.19	.70	.99	143.02	.09	.16	.80	.71	.64
25	.55	.81	.19	.02	.86	140.22	.03	.03	.15	.80	.71	.63
26	134.52	133.85	134.18	134.90	136.94	140.47	142.98	134.97	134.15	133.77	133.71	133.63
27	.33	.69	.16	.81	.94	.67	.95	.91	.14	.77	.71	.62
28	.28	.68	.14	.75	.87	.92	.85	.83	.14	.77	.70	.62
29	.22	.65	.10	.71	.79	141.05	.69	.76	.13	.76		.61
30	.12	.65	.09	.68	.69	.23	.53	.69	.13	.77		.61
31		.71		.66	.54		.32		.13	.77		.61
Mean	134.40	133.79	134.81	134.53	135.83	138.99	142.30	137.72	134.27	133.92	133.73	133.66
Max.	134.66	134.03	135.78	135.46	136.94	141.23	143.03	142.07	134.63	134.11	133.76	133.70
Min.	134.12	133.65	133.74	133.96	134.60	136.19	141.41	134.69	134.13	133.76	133.70	133.61

WATER YEAR 1957 : Max. 143.03 m. Min. 133.61 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	44	15	6.20	16	41	140	573	663	42	18	6.80	5.00
2	42	12	7.10	15	45	132	588	626	39	18	6.80	5.00
3	41	10	10	15	54	126	607	605	37	18	6.80	5.00
4	40	9.50	26	14	67	137	617	569	35	17	6.50	4.70
5	39	8.00	35	14	85	161	628	544	33	17	6.50	4.70
6	37	7.10	51	14	94	193	635	500	31	17	6.50	4.70
7	34	6.50	90	14	98	224	643	464	30	16	6.20	4.40
8	31	5.90	99	14	98	257	650	437	29	16	6.20	4.40
9	29	5.90	102	14	94	291	659	409	28	15	6.20	4.40
10	27	5.90	100	14	89	317	666	378	27	14	6.20	4.40
11	25	5.90	99	13	81	339	671	343	27	14	5.90	4.40
12	22	5.90	97	13	74	355	679	306	26	13	5.90	4.10
13	22	5.90	94	13	67	372	689	267	26	13	5.90	4.10
14	24	5.90	91	16	63	381	698	224	25	12	5.90	4.10
15	25	5.60	88	32	70	384	707	190	24	12	5.90	3.80
16	26	5.90	85	46	85	385	714	163	23	11	5.90	3.80
17	27	6.50	83	51	98	368	726	140	23	11	5.60	3.80
18	29	9.20	77	58	103	357	734	123	22	10	5.60	3.50
19	30	12	63	68	107	347	750	104	22	10	5.60	3.50
20	35	12	47	79	112	339	766	94	22	9.80	5.60	3.50
21	36	11	36	83	119	336	780	85	22	9.20	5.60	3.50
22	37	9.80	31	84	129	353	793	77	21	8.60	5.60	3.20
23	39	9.50	21	79	143	384	799	70	21	8.30	5.30	3.20
24	39	9.20	25	70	158	415	807	65	21	8.00	5.30	3.20
25	38	8.30	22	62	168	438	808	62	20	8.00	5.30	2.90
26	37	9.50	22	56	174	463	801	59	20	7.10	5.30	2.90
27	28	4.70	21	51	174	485	796	56	20	7.10	5.30	2.60
28	26	4.40	20	48	169	514	780	52	20	7.10	5.00	2.60
29	23	3.50	18	46	164	530	754	49	19	6.80		2.30
30	19	3.50	18	45	157	552	731	45	19	7.10		2.30
31		5.30		44	148		699		19	7.10		2.30
Total	951	239.30	1,590.30	1,201	3,328	10,075	21,948	7,769	793	366.20	165.20	116.30
Mean	31.7	7.72	53.0	38.7	107	335	708	259	25.6	11.8	5.90	3.75
Max.	44	15	102	84	174	552	808	663	42	18	6.80	5.00
Min.	19	3.50	6.20	13	41	126	573	45	19	6.80	5.00	2.30
Runoff - mcm.	82.166	20.675	137.402	103.766	287.539	870.480	1,896.307	671.242	68.515	31.640	14.273	10.043

WATER YEAR 1957 : Max. 808 Min. 2.30 Mean 133 Annual Runoff 4,194.053 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 25	12.00	143.03	808				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHEE RIVER BASIN

Chee River at Tha Khon Yang, Maha Sarakham (E.8A)

Location: Lat 16°– 13' – 51" N, Long 103°– 16' – 29" E, on right bank at the bridge on highway Maha Sarakham – Kalasin, Tambon Tha Khon Yang, Amphoe Kantharawichai, Maha Sarakham.

Drainage Area: 29,817 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +133.21 m. (M.S.L.)

Bench Mark: B.M. – H.S. No.6

Location: On the right abutment of bridge.
Elevation: +147.910 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: 1955 to date.

Rating Operation:

Period of Rating: 1955 – 57, 1964 to date.
Rated by Float: –
Rated by Current Meter: 1955 – 57, 1964 to date.

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

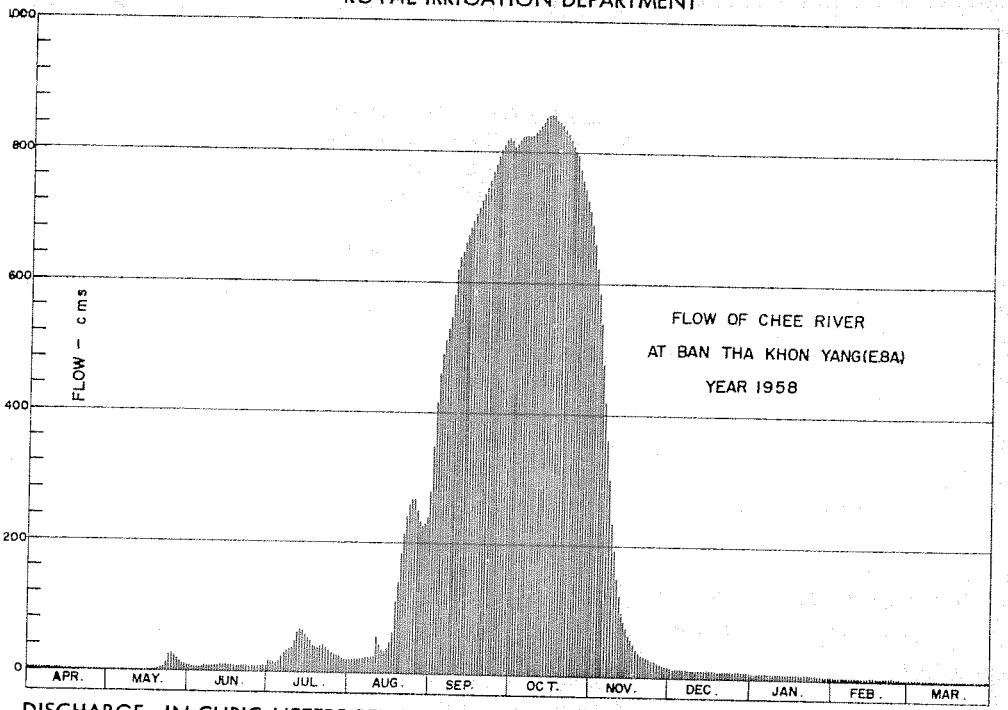
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relationship used is defined by discharge measurements during 1955 – 57. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	133.60	133.54	133.83	134.13	134.18	139.30	143.05	141.79	134.04	133.88	133.73	133.66
2	.60	.54	.79	.08	.18	140.01	.10	.50	.01	.88	.73	.66
3	.60	.53	.77	.07	.21	.45	.12	.12	.00	.88	.73	.65
4	.59	.53	.76	.06	.22	.71	.13	140.60	133.99	.87	.72	.65
5	.59	.53	.75	.11	.24	.91	.13	.03	.99	.87	.72	.65
6	133.59	133.52	133.78	134.23	134.24	141.05	143.13	139.47	133.98	133.87	133.72	133.64
7	.59	.51	.83	.39	.25	.19	.14	138.75	.98	.86	.72	.64
8	.59	.51	.83	.49	.26	.47	.18	137.86	.98	.86	.71	.64
9	.58	.51	.83	.52	.27	.71	.20	.25	.97	.86	.71	.63
10	.58	.52	.83	.57	.33	.86	.23	136.61	.97	.85	.71	.63
11	133.58	133.54	133.83	134.78	134.95	141.95	143.27	136.13	133.97	133.85	133.70	133.63
12	.58	.54	.83	135.04	.69	142.05	.31	135.72	.96	.85	.70	.63
13	.58	.54	.90	.15	.52	.14	.33	.47	.96	.85	.70	.62
14	.57	.55	.91	.09	.50	.22	.33	.28	.96	.84	.70	.62
15	.57	.56	.91	134.98	.58	.30	.33	.09	.96	.84	.70	.61
16	133.57	133.56	133.90	134.89	134.76	142.37	143.29	134.94	133.95	133.84	133.69	133.61
17	.57	.57	.90	.78	135.10	.43	.26	.80	.95	.83	.69	.61
18	.57	.58	.89	.63	.99	.50	.23	.67	.94	.83	.68	.61
19	.57	.58	.88	.58	136.44	.57	.20	.57	.94	.83	.68	.60
20	.56	.64	.88	.59	137.11	.62	.16	.49	.94	.82	.68	.60
21	133.56	133.69	133.88	134.64	137.60	142.70	143.12	134.43	133.93	133.82	133.68	133.60
22	.56	.74	.87	.64	138.00	.78	.06	.39	.93	.81	.68	.59
23	.56	.97	.86	.59	.24	.85	142.98	.34	.93	.81	.67	.59
24	.56	134.28	.86	.50	.34	.93	.89	.30	.92	.80	.67	.59
25	.56	.30	.86	.42	.33	143.00	.82	.26	.92	.80	.67	.58
26	133.55	134.24	133.85	134.37	138.09	143.04	142.72	134.22	133.92	133.79	133.67	133.58
27	.55	.16	.85	.34	137.88	.09	.62	.18	.91	.77	.66	.58
28	.55	.01	.85	.30	.78	.10	.51	.14	.91	.76	.66	.57
29	.55	133.97	.87	.24	.84	.08	.40	.10	.90	.75		.57
30	.54	.90	.95	.22	.96	.04	.26	.07	.89	.74		.56
31		.87		.20	138.49		.06		.88	.73		.56
Mean	133.57	133.71	133.85	134.50	135.92	142.05	143.02	136.28	133.95	133.83	133.69	133.59
Max.	133.60	134.30	133.95	135.15	138.49	143.10	143.33	141.79	134.04	133.88	133.73	133.66
Min.	133.54	133.51	133.75	134.06	134.18	139.30	142.06	134.07	133.88	133.73	133.66	133.56

WATER YEAR 1958 : Max. 143.33 m. Min. 133.51 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2.00	0.80	8.90	19	22	349	812	624	16	10	5.90	3.80
2	2.00	0.80	7.70	17	22	417	820	585	14	10	5.90	3.80
3	2.00	0.60	7.10	17	23	461	823	538	14	10	5.90	3.50
4	1.80	0.60	6.80	16	23	489	825	477	14	10	5.60	3.50
5	1.80	0.60	6.50	18	24	513	825	419	14	10	5.60	3.50
6	1.80	0.40	7.40	24	24	530	825	364	13	10	5.60	3.20
7	1.80	0.20	8.90	31	25	547	826	302	13	9.80	5.60	3.20
8	1.80	0.20	8.90	35	25	581	833	234	13	9.80	5.30	3.20
9	1.60	0.20	8.90	37	26	621	836	194	13	9.80	5.30	2.90
10	1.60	0.40	8.90	39	28	638	841	152	13	9.80	5.30	2.90
11	1.60	0.80	8.90	50	58	646	847	123	13	9.50	5.00	2.90
12	1.60	0.80	8.90	63	45	660	854	99	13	9.50	5.00	2.90
13	1.60	0.80	11	68	37	673	857	85	13	9.50	5.00	2.60
14	1.40	1.00	11	65	36	684	857	75	13	9.20	5.00	2.60
15	1.40	1.20	11	60	40	696	857	65	13	9.20	5.00	2.30
16	1.40	1.20	11	55	50	707	850	58	12	9.20	4.70	2.30
17	1.40	1.40	11	50	66	716	846	51	12	8.90	4.70	2.30
18	1.40	1.60	11	42	114	726	841	44	12	8.90	4.40	2.30
19	1.40	1.60	10	40	141	737	836	39	12	8.90	4.40	2.00
20	1.20	3.20	10	40	185	744	829	35	12	8.60	4.40	2.00
21	1.20	4.70	10	43	216	756	823	33	12	8.60	4.40	2.00
22	1.20	6.20	10	43	243	769	814	31	12	8.30	4.40	1.80
23	1.20	13	9.80	40	261	780	801	29	12	8.30	4.10	1.80
24	1.20	26	9.80	36	269	793	786	27	12	8.00	4.10	1.80
25	1.20	27	9.80	32	268	804	775	25	12	8.00	4.10	1.60
26	1.00	24	9.50	30	250	810	759	23	12	7.70	4.10	1.60
27	1.00	21	9.50	29	235	818	744	22	11	7.10	3.80	1.60
28	1.00	16	9.50	27	228	820	728	20	11	6.80	3.80	1.40
29	1.00	13	10	24	232	817	711	18	11	6.50		1.40
30	0.80	11	12	23	241	810	690	17	11	6.20		1.20
31		10		22	281		661		10	5.90		1.20
Total	43.40	190.30	283.70	1,135	3,738	20,103	25,032	4,808	388	271.70	136.40	75.10
Mean	1.45	6.14	9.46	36.6	120	670	807	160	12.52	8.76	4.87	2.42
Max.	2.00	27	12	68	281	820	857	624	16	10	5.90	3.80
Min.	0.80	0.20	6.50	16	22	349	661	17	10	5.90	3.80	1.20
Runoff - mcm.	3.750	16.442	24.512	98.064	322.963	1,736.899	2,162.765	415.411	33.523	23.475	11.785	6.489

WATER YEAR 1958 : Max. 857 Min. 0.80 Mean 154 Annual Runoff 4,856.077mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 15	12.00	143.33	857				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHEE RIVER BASIN

Chee River at Tha Khon Yang, Maha Sarakham (E.8A)

Location: Lat 16°– 13' – 51" N, Long 103°– 16' – 29" E, on right bank at the bridge on highway Maha Sarakham – Kalasin, Tambon Tha Khon Yang, Amphoe Kantharawichai, Maha Sarakham.

Drainage Area: 29,817 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +133.21 m. (M.S.L.)

Bench Mark: B.M. – H.S. No.6

Location: On the right abutment of bridge.
Elevation: +147.910 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: 1955 to date.

Rating Operation:

Period of Rating: 1955 – 57, 1964 to date.
Rated by Float: –
Rated by Current Meter: 1955 – 57, 1964 to date.

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

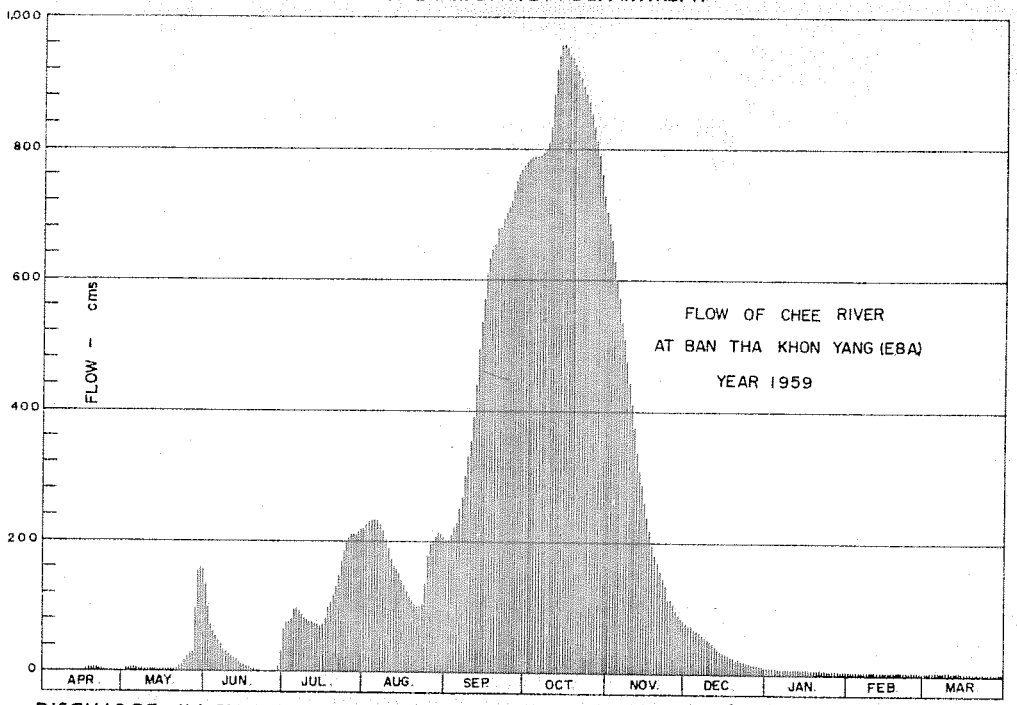
General Description: Records fair. Stage – discharge relationship used is defined by discharge measurements during 1955 – 57. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	133.56	133.66	136.37	135.15	137.70	137.41	142.85	142.23	135.37	133.93	133.74	133.67
2	.55	.75	135.75	.35	.78	.39	.87	.04	.30	.92	.74	.68
3	.55	.80	.24	.39	.83	.51	.89	141.83	.25	.91	.73	.69
4	.54	.80	.07	.47	.87	.70	.90	.62	.19	.90	.73	.70
5	.54	.80	134.87	.69	.88	.80	.90	.39	.12	.89	.73	.71
6	133.54	.77	134.74	135.73	137.85	138.09	142.91	141.13	135.06	133.88	133.73	133.70
7	.54	.75	.66	.65	.76	.31	.93	140.89	.00	.88	.73	.70
8	.54	.75	.44	.54	.62	.72	.96	.58	134.93	.87	.72	.69
9	.53	.74	.38	.46	.43	139.08	143.03	.28	.86	.86	.72	.68
10	.53	.73	.33	.39	.21	.36	.19	139.93	.80	.86	.72	.68
11	133.53	133.72	134.28	135.34	136.96	139.76	143.49	139.57	134.73	133.85	133.72	133.68
12	.53	.71	.21	.31	.80	140.22	.74	.16	.65	.85	.72	.67
13	.52	.70	.16	.27	.72	.76	.87	138.82	.58	.84	.72	.67
14	.52	.69	.09	.24	.64	141.12	.95	.56	.50	.84	.71	.67
15	.52	.68	.02	.23	.46	.40	.95	.24	.46	.84	.71	.66
16	133.57	133.69	133.98	135.29	136.30	141.70	143.91	137.92	134.40	133.83	133.71	133.66
17	.69	.71	.91	.45	.15	.87	.85	.62	.36	.83	.71	.66
18	.77	.73	.84	.66	.02	.96	.82	.29	.32	.82	.70	.66
19	.77	.76	.76	.88	135.92	142.01	.77	.06	.28	.81	.70	.65
20	.77	.78	.71	136.09	.84	.18	.72	136.88	.24		.70	.65
21	133.77	133.79	133.66	136.35	135.79	142.18	143.65	136.69	134.23	133.81	133.70	133.65
22	.73	.86	.60	.58	.78	.27	.58	.52	.20	.80	.69	.65
23	.67	.96	.58	.88	.87	.33	.50	.34	.17	.80	.69	.64
24	.60	134.10	.56	137.15	136.37	.39	.41	135.97	.13	.79	.69	.64
25	.60	.26	.55	.34	137.04	.45	.30	.99	.09	.79	.68	.64
26	133.60	134.34	133.55	137.44	137.30	142.57	143.18	135.86	134.06	133.78	133.68	133.64
27	.59	.36	.54	.53	.39	.67	.07	.71	.05	.77	.67	.64
28	.59	135.80	.54	.53	.48	.74	142.90	.59	.02	.76	.67	.64
29	.59	136.69	.88	.51	.56	.79	.72	.48	133.99	.76	.66	.63
30	.59	.76	134.49	.59	.54	.82	.53	.42	.96	.75		.63
31		.71		.64	.47		.36		.95	.75		.63
Mean	133.60	134.17	134.22	136.10	136.98	140.65	143.28	138.42	134.52	133.83	133.71	133.66
Max.	133.77	136.76	136.37	137.64	137.88	142.82	143.95	142.23	135.37	133.93	133.74	133.71
Min.	133.52	133.66	133.54	135.15	135.78	137.39	142.36	135.42	133.95	133.75	133.66	133.63

WATER YEAR 1959 : Max. 143.95 m. Min. 133.52 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.20	3.80	137	68	223	204	780	686	79	12	6.20	4.10
2	1.00	6.50	100	78	228	203	783	659	76	12	6.20	4.40
3	1.00	8.00	73	80	232	211	786	629	73	11	5.90	4.70
4	0.80	8.00	64	85	234	223	788	601	70	11	5.90	5.00
5	0.80	8.00	54	97	235	229	788	571	67	11	5.90	5.30
6	0.80	7.10	48	99	233	250	789	539	64	10	5.90	5.00
7	0.80	6.50	44	95	227	267	793	511	61	10	5.90	5.00
8	0.80	6.50	33	89	218	300	798	475	57	10	5.60	4.70
9	0.60	6.20	31	84	205	330	808	444	54	9.80	5.60	4.40
10	0.60	5.90	28	80	191	354	834	409	51	9.80	5.60	4.40
11	0.60	5.60	26	78	175	392	882	374	47	9.50	5.60	4.40
12	0.60	5.30	23	76	164	438	923	337	43	9.50	5.60	4.10
13	0.40	5.00	21	74	159	495	945	308	40	9.20	5.60	4.10
14	0.40	4.70	18	73	154	538	959	287	36	9.20	5.30	4.10
15	0.40	4.40	15	72	143	572	959	261	34	9.20	5.30	3.80
16	1.40	4.70	13	75	133	611	952	238	31	8.90	5.30	3.80
17	4.70	5.30	11	84	124	635	942	218	30	8.90	5.30	3.80
18	7.10	5.90	9.20	95	116	647	936	196	28	8.60	5.00	3.80
19	7.10	6.80	6.80	108	110	654	928	181	26	8.60	5.00	3.50
20	7.10	7.40	5.30	120	105	678	919	170	24	8.30	5.00	3.50
21	7.10	7.70	3.80	136	102	678	908	157	24	8.30	5.00	3.50
22	5.90	9.80	2.00	150	102	692	897	146	22	8.00	4.70	3.50
23	4.70	13	1.60	170	107	701	884	135	21	8.00	4.70	3.20
24	2.00	18	1.20	187	137	709	869	113	19	7.70	4.70	3.20
25	2.00	25	1.00	200	180	719	852	114	18	7.70	4.40	3.20
26	2.00	29	1.00	206	197	737	833	107	16	7.40	4.40	3.20
27	1.80	30	0.80	212	203	752	815	98	16	7.10	4.10	3.20
28	1.80	103	0.80	212	209	762	788	91	15	6.80	4.10	3.20
29	1.80	157	10	211	214	770	759	85	14	6.80	3.80	2.90
30	1.80	161	35	216	213	775	731	82	13	6.50		2.90
31		159		219	208		705		12	6.50		2.90
Total	69.10	834.10	817.50	3,829	5,481	15,526	26,333	9,222	1,181	277.30	151.60	120.80
Mean	2.30	26.91	27.25	123	177	517	849	307.40	38.10	8.94	5.23	3.90
Max.	7.10	161	137	219	235	775	959	686	79	12	6.20	5.30
Min.	0.40	3.80	0.80	68	102	203	705	82	12	6.50	3.80	2.90
Runoff - MCM.	5.970	72.066	70.632	330.826	473.558	1,341.446	2,275.171	796.781	102.038	23.959	13.098	10.437

WATER YEAR 1959 : Max. 959 Min. 0.40 Mean 175 Annual Runoff 5,515.983 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 15	12.00	143.95	959				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHEE RIVER BASIN

Chee River at Tha Phra, Khon Kaen (E.16A)

Location: Lat 16°- 21' - 14" N, Long 102°- 48' - 09" E, on left bank 400 meters upstream from the bridge on highway Khon Kaen - Maha Sarakham, Tambon Don Han, Amphoe Muang, Khon Kaen.

Drainage Area: 13,171 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +142.936 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: On left bank near the gage site.
Elevation: +154.989 m. (M.S.L.)

Gage Reading Frequency: 2 - time daily readings at 06.00 and 09.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 2 readings.

Period of Available Gage Records: 1954 to date.

Rating Operation:

Period of Rating: 1963 to date.
Rated by Float: -
Rated by Current Meter: 1963 to date.

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

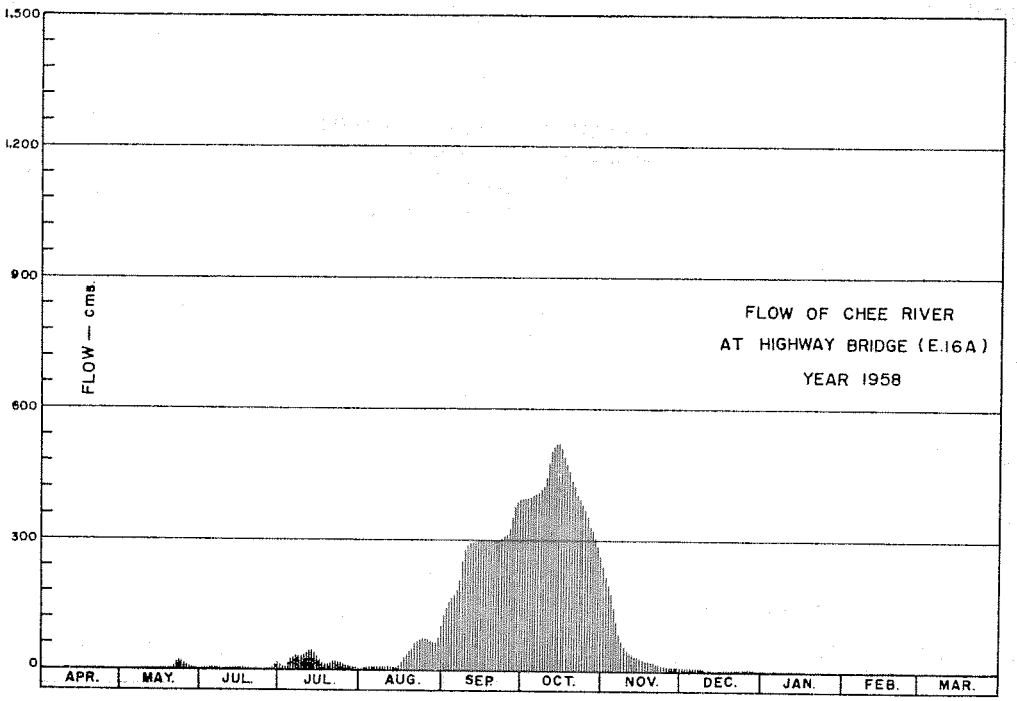
Overbank Flow Conditions: No overbank flow.

General Description: Records poor. Stage - discharge relationship used is defined by discharge measurements during 1963. For wet season natural flow of stream affected by backwater from the farm nearby the gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	142.89	142.83	143.16	143.72	143.48	147.32	151.47	149.76	143.63	143.26	143.12	143.06
2	.89	.83	.10	.50	.58	.76	.47	.38	.61	.24	.12	.07
3	.89	.85	.10	.44	.60	148.04	.48	148.89	.59	.24	.12	.06
4	.89	.93	.43	.86	.63	.27	.49	.34	.56	.23	.12	.04
5	.89	.93	.41	144.31	.61	.44	.51	147.61	.55	.23	.11	.03
6	142.89	142.95	143.31	144.55	143.59	148.55	151.53	146.65	143.53	143.22	143.11	143.03
7	.89	.95	.27	.65	.58	.89	.54	.07	.52	.22	.10	.03
8	.89	.98	.18	.60	.57	150.02	.58	145.65	.52	.22	.10	.02
9	.88	143.04	.21	.60	.58	.38	.63	.33	.50	.21	.10	.02
10	.88	.04	.33	.66	.60	.52	.71	.11	.45	.20	.09	.01
11	142.88	143.00	143.38	144.89	143.58	150.58	151.88	144.95	143.41	143.21	143.07	143.00
12	.87	142.99	.32	145.05	.52	.58	152.01	.81	.41	.21	.05	.00
13	.88	.96	.30	.09	.50	.60	.05	.69	.41	.20	.06	.00
14	.89	.99	.28	144.96	.53	.62	.08	.63	.41	.19	.06	142.97
15	.93	143.02	.30	.62	.70	.63	.08	.48	.40	.19	.06	.99
16	142.94	143.02	143.29	144.31	144.13	150.64	152.04	144.39	143.37	143.18	143.05	143.00
17	.94	.04	.29	.02	.54	.64	151.97	.31	.36	.18	.04	.00
18	.93	.10	.28	143.88	.76	.65	.90	.21	.34	.19	.07	142.98
19	.91	.16	.27	.87	145.01	.66	.82	.19	.33	.19	.09	.97
20	.90	.20	.22	144.04	.29	.65	.74	.12	.31	.18	.10	.96
21	142.88	143.50	143.17	144.15	145.57	150.65	151.64	144.05	143.31	143.17	143.09	142.96
22	.88	144.13	.16	.14	.74	.65	.54	143.97	.32	.17	.08	.96
23	.86	.20	.15	.08	.80	.68	.46	.83	.31	.17	.07	.95
24	.85	.11	.11	.00	.86	.75	.37	.80	.29	.17	.05	.95
25	.85	143.90	.08	143.89	.89	.75	.27	.77	.30	.16	.04	.96
26	142.86	143.73	143.07	143.80	145.83	150.90	151.16	143.74	143.29	143.16	143.04	142.95
27	.85	.56	.03	.70	.74	151.11	.03	.73	.29	.17	.03	.95
28	.84	.43	.48	.58	.63	.32	150.88	.72	.28	.16	.04	.95
29	.84	.32	.90	.54	.65	.43	.70	.69	.28	.14		.96
30		.26	144.03	.50	.92	.47	.48	.66	.27	.13		.96
31		.20		.47	146.68		.18		.26	.13		.97
Mean	142.88	143.23	143.29	144.14	144.57	150.14	151.51	145.18	143.40	143.19	143.08	142.99
Max.	142.94	144.20	144.03	145.09	146.68	151.47	152.08	149.76	143.63	143.26	143.12	143.07
Min.	142.84	142.83	143.03	143.44	143.48	147.32	150.18	143.66	143.26	143.13	143.03	142.95

WATER YEAR 1958 : Max. 152.08 m. Min. 142.83 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.66	0.42	2.28	9.90	5.82	128	394	235	8.24	3.20	1.96	1.56
2	0.66	0.42	1.80	6.10	7.38	145	394	216	7.88	3.00	1.96	1.62
3	0.66	0.50	1.80	5.26	7.70	157	396	194	7.54	3.00	1.96	1.56
4	0.66	0.85	5.12	13	8.24	166	397	169	7.06	2.90	1.96	1.44
5	0.66	0.85	4.84	24	7.88	173	401	139	6.90	2.90	1.88	1.38
6	0.66	0.95	3.71	30	7.54	178	404	101	6.58	2.80	1.88	1.38
7	0.66	0.95	3.30	33	7.38	194	405	80	6.42	2.80	1.80	1.38
8	0.66	1.10	2.44	32	7.22	250	412	65	6.42	2.80	1.80	1.32
9	0.62	1.44	2.70	32	7.38	275	420	55	6.10	2.70	1.80	1.32
10	0.62	1.44	3.93	35	7.70	287	434	47	5.40	2.60	1.74	1.26
11	0.62	1.20	4.48	40	7.38	292	470	42	4.84	2.70	1.62	1.20
12	0.58	1.15	3.82	45	6.42	292	501	38	4.84	2.70	1.50	1.20
13	0.62	1.00	3.60	47	6.10	294	512	34	4.84	2.60	1.56	1.20
14	0.66	1.15	3.40	42	6.58	296	520	32	4.84	2.52	1.56	1.05
15	0.85	1.32	3.60	32	9.50	297	520	28	4.70	2.52	1.56	1.15
16	0.90	1.32	3.50	24	19	298	509	26	4.37	2.44	1.50	1.20
17	0.90	1.44	3.50	16	30	298	491	24	4.26	2.44	1.44	1.20
18	0.85	1.80	3.40	13	36	298	474	21	4.04	2.52	1.62	1.10
19	0.75	2.28	3.30	13	44	299	456	21	3.93	2.54	1.74	1.05
20	0.70	2.60	2.80	17	53	298	440	19	3.71	2.44	1.80	1.00
21	0.62	6.10	2.36	20	62	298	422	17	3.71	2.36	1.74	1.00
22	0.62	19	2.28	19	68	298	405	15	3.82	2.36	1.68	1.00
23	0.54	21	2.20	18	70	301	393	12	3.71	2.36	1.62	0.95
24	0.50	19	1.88	16	73	308	380	11	3.50	2.36	1.50	0.95
25	0.50	14	1.68	13	74	308	367	11	3.60	2.28	1.44	1.00
26	0.54	10	1.62	11	72	324	353	10	3.50	2.28	1.44	0.95
27	0.50	7.06	1.38	9.50	68	347	338	10	3.50	2.36	1.38	0.95
28	0.46	5.12	5.82	7.38	65	374	322	9.90	3.40	2.28	1.44	0.95
29	0.46	3.82	14	6.74	65	388	303	9.32	3.40	2.12		1.00
30	0.46	3.20	17	6.10	75	394	283	8.78	3.30	2.04		1.00
31		2.60		5.68	102		261		3.20	2.04		1.05
Total	19.15	135.08	117.54	639.66	1,086.22	8,255	12,777	1,700	151.55	78.94	46.88	36.37
Mean	0.64	4.36	3.92	20.6	35.0	275	412	56.6	4.89	2.55	1.67	1.17
Max.	0.90	21	17	47	102	394	520	235	8.24	3.20	1.96	1.62
Min.	0.46	0.42	1.38	5.26	5.82	128	261	8.78	3.20	2.04	1.38	0.95
Runoff - mcm.	1.654	11.671	10.155	55.267	93.849	713.232	1,103.933	146.880	13.094	6.820	4.050	3.142

WATER YEAR 1958 : Max. 520 Min. 0.42 Mean 68.6 Annual Runoff 2,163.749 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 14	06.00	152.10	526				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHEE RIVER BASIN

Chee River at Tha Phra, Khon Kaen (E.16A)

Location: Lat 16°- 21' - 14" N, Long 102°- 48' - 09" E, on left bank 400 meters upstream from the bridge on highway Khon Kaen - Maha Sarakham, Tambon Don Han, Amphoe Muang, Khon Kaen.

Drainage Area: 13,171 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +142.936 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: On left bank near the gage site.
Elevation: +154.989 m. (M.S.L.)

Gage Reading Frequency: 2 - time daily readings at 06.00 and 09.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 2 readings.

Period of Available Gage Records: 1954 to date.

Rating Operation:

Period of Rating: 1963 to date.
Rated by Float: -
Rated by Current Meter: 1963 to date.

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

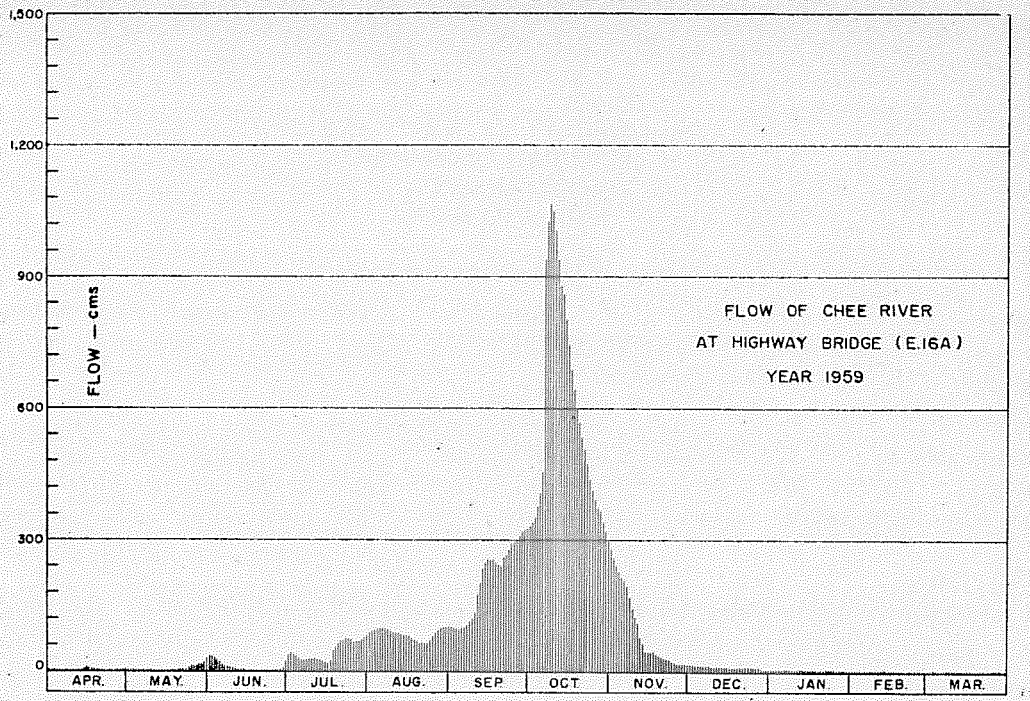
Overbank Flow Conditions: No overbank flow.

General Description: Records poor. Stage - discharge relationship used is defined by discharge measurements during 1963. For wet season natural flow of stream affected by backwater from the farm nearby the gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	143.00	143.45	144.72	144.77	146.31	146.64	150.96	150.40	143.94	143.40	143.17	143.03
2	.00	.41	.67	.94	.41	.62	151.04	.16	.93	.39	.15	.08
3	.00	.34	.59	.86	.47	.54	.14	149.88	.92	.38	.16	.09
4	142.98	.26	.38	.71	.55	.51	.36	.61	.89	.38	.16	.11
5	.96	.22	.16	.56	.55	.55	.53	.34	.87	.37	.16	.10
6	142.96	143.22	143.90	144.40	146.55	146.60	152.21	149.19	143.84	143.36	143.16	143.06
7	.96	.21	.75	.36	.50	.71	153.06	148.70	.83	.35	.16	.05
8	.97	.16	.66	.43	.45	.87	.31	.21	.81	.35	.18	.07
9	.95	.12	.60	.47	.41	147.13	.38	147.59	.77	.34	.17	.09
10	.94	.08	.54	.51	.34	.21	.34	146.85	.74	.33	.17	.08
11	142.94	143.05	143.47	144.50	146.29	148.43	153.26	146.78	143.72	143.32	143.15	143.06
12	.95	.04	.42	.45	.24	.99	.11	145.71	.71	.32	.14	.05
13	.96	.03	.36	.35	.20	149.67	.01	.61	.70	.31	.12	.03
14	143.47	.00	.28	.29	.15	.99	152.99	.36	.69	.30	.11	.01
15	.65	142.98	.23	.17	.09	150.11	.82	.01	.67	.29	.10	.04
16	143.57	143.01	143.21	144.07	146.04	150.09	152.69	145.01	143.66	143.29	143.09	143.06
17	.45	.11	.19	.16	145.98	.06	.57	.01	.65	.28	.09	.06
18	.35	.14	.17	145.12	.84	149.99	.44	144.85	.64	.27	.08	.04
19	.22	.15	.15	.32	.74	.90	.31	.71	.64	.26	.08	.03
20	.12	.30	.12	.57	.62	.77	.21	.57	.64	.26	.06	.01
21	143.07	143.42	143.13	145.76	145.61	150.13	152.11	144.53	143.64	143.26	143.05	143.01
22	.05	.48	.12	.79	.59	.26	.00	.50	.64	.25	.05	.01
23	.03	.48	.24	.99	.56	.40	151.85	.46	.61	.25	.06	.00
24	.02	.65	.14	.92	.81	.45	.69	.24	.58	.25	.05	.00
25	.00	.81	.07	.91	146.07	.50	.57	.12	.56	.25	.06	142.99
26	143.00	143.77	143.11	145.71	146.34	150.66	151.44	144.06	143.54	143.24	143.05	142.98
27	.08	.78	.23	.71	.48	.75	.30	.03	.53	.22	.04	.96
28	.21	.90	.30	.72	.62	.85	.27	.00	.48	.22	.04	.95
29	.29	144.01	.50	.91	.64	.90	.04	143.97	.45	.20	.03	.94
30	.40	.19	144.35	146.05	.66	.91	150.88	.94	.44	.18		.93
31		.58		.18	.67		.64		.41	.18		.92
Mean	143.11	143.40	143.56	145.05	146.22	149.01	152.08	146.13	143.68	143.29	143.11	143.03
Max.	143.65	144.58	144.72	146.18	146.67	150.91	153.38	150.40	143.94	143.40	143.17	143.11
Min.	142.94	142.98	143.07	144.07	145.56	146.51	150.64	143.94	143.41	143.18	143.03	142.92

WATER YEAR 1959 : Max. 153.38 m. Min. 142.92 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.20	5.40	35	37	88	101	331	277	15	4.70	2.36	1.38
2	1.20	4.84	34	42	92	100	339	259	14	4.59	2.20	1.68
3	1.20	4.04	31	39	94	97	351	242	14	4.48	2.28	1.74
4	1.10	3.20	25	35	97	95	379	226	13	4.48	2.28	1.88
5	1.00	2.80	20	30	97	97	404	214	13	4.37	2.28	1.80
6	1.00	2.80	14	26	97	99	560	207	12	4.26	2.28	1.56
7	1.00	2.70	10	25	95	103	891	185	12	4.15	2.28	1.50
8	1.05	2.28	8.78	27	93	110	1,022	163	12	4.15	2.44	1.62
9	0.95	1.96	7.70	28	92	120	1,067	139	11	4.04	2.36	1.74
10	0.90	1.68	6.74	29	89	123	1,041	109	10	3.93	2.36	1.68
11	0.90	1.50	5.68	29	88	173	994	106	9.90	3.82	2.20	1.56
12	0.95	1.44	4.98	27	86	198	915	67	9.70	3.82	2.12	1.50
13	1.00	1.38	4.26	25	84	229	867	64	9.50	3.71	1.96	1.38
14	5.68	1.20	3.40	23	83	248	858	56	9.32	3.60	1.88	1.26
15	8.60	1.10	2.90	20	81	256	786	44	8.96	3.50	1.80	1.44
16	7.22	1.26	2.70	18	79	254	735	44	8.78	3.50	1.74	1.56
17	5.40	1.88	2.52	20	77	253	688	44	8.60	3.40	1.74	1.56
18	4.15	2.12	2.36	48	72	248	638	39	8.42	3.30	1.68	1.44
19	2.80	2.20	2.20	54	68	243	593	35	8.42	3.20	1.68	1.38
20	1.96	3.60	1.96	62	64	235	560	31	8.42	3.20	1.56	1.26
21	1.62	4.98	2.04	69	64	257	529	30	8.42	3.20	1.50	1.26
22	1.50	5.82	1.96	70	63	266	498	29	8.42	3.10	1.50	1.26
23	1.38	5.82	3.00	77	62	277	463	28	7.88	3.10	1.56	1.00
24	1.32	8.60	2.12	75	71	281	430	22	7.38	3.10	1.50	1.00
25	1.20	12	1.62	74	80	285	410	19	7.06	3.10	1.56	1.15
26	1.20	11	1.88	67	89	299	390	17	6.74	3.00	1.50	1.10
27	1.68	11	2.90	67	94	308	371	17	6.58	2.80	1.44	1.00
28	2.70	14	3.60	68	100	318	367	16	5.82	2.80	1.44	1.95
29	3.50	16	6.10	74	101	324	339	15	5.40	2.60	1.38	0.90
30	4.70	21	25	79	101	325	322	15	5.26	2.44		0.85
31		31		84	102		298		4.84	2.44		0.80
Total	70.06	190.60	275.40	1,448	2,643	6,322	18,436	2,759	289.82	109.88	54.86	42.19
Mean	2.34	6.15	9.18	46.7	85.2	211	595	91.9	9.35	3.54	1.89	1.36
Max.	8.60	31	35	84	102	325	1,067	277	15	4.70	2.36	1.88
Min.	0.90	1.10	1.62	18	62	95	298	15	4.84	2.44	1.38	0.80
Runoff - mcm.	6.053	16.467	23.794	125.107	228.355	546.221	1,592.870	238.378	25.040	9.494	4.740	3.645

WATER YEAR 1959 : Max. 1,067 Min. 0.80 Mean 89.1 Annual Runoff 2,820.165 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 8	06.00	153.38	1,067				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHEE RIVER BASIN

Nam Phong at Ban Tha Hin, Khon Kaen (E.17)

Location: Lat 16°- 26' - 20" N, Long 102°- 56' - 52" E, on left bank 20 meters downstream from the bridge on the road Khon Kaen - Yang Talat, opposite to Wat Tha Hin, Amphoe Muang, Khon Kaen.

Drainage Area: 14,426 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m. (A.D.)

Bench Mark: B.M. - H.S.

Location: Near the gage site.
Elevation: +10.990 m. (A.D.)

Gage Reading Frequency: 3 - time daily readings at 09.00, 12.00 and 15.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 3 readings.

Period of Available Gage Records: 1954, 1956 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: -
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for year without actual ratings.

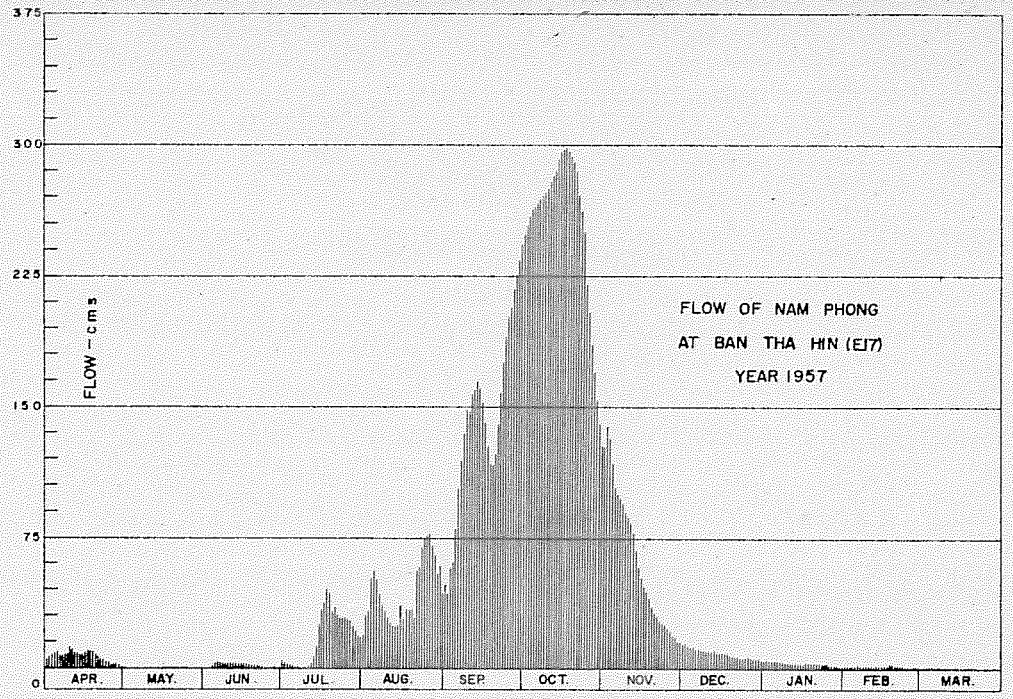
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relation used is defined by discharge measurements during 1965 - 67.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.29	0.99	1.00	1.28	2.07	3.22	9.03	5.83	1.80	1.28	1.08	0.97
2	.33	.98	.24	.21	.55	.01	.15	6.14	.77	.28	.06	.98
3	.40	.97	.48	.16	.94	.58	.26	5.95	.72	.25	.04	.98
4	.46	.95	2.05	.12	3.45	.67	.36	.53	.68	.25	.04	.96
5	.53	.92	3.43	.07	.52	4.44	.41	.08	.67	.25	.08	.95
6	1.36	0.89	4.20	1.05	3.33	5.08	9.46	4.98	1.66	1.23	1.08	0.94
7	.35	.87	.43	.03	.01	.60	.49	.88	.65	.22	.07	.94
8	.40	.84	.14	.01	2.77	6.15	.54	.78	.60	.21	.07	.94
9	.47	.83	3.84	.01	.62	.46	.59	.63	.60	.20	.06	.93
10	.61	.83	.62	.00	.48	.41	.64	.52	.59	.19	.04	.92
11	1.56	0.81	3.42	0.99	2.34	6.71	9.71	4.45	1.58	1.17	1.02	0.91
12	.50	.78	.23	1.17	.24	.77	.78	.30	.57	.17	.01	.90
13	.44	.78	.09	.46	.26	.88	.86	3.91	.56	.16	.08	.88
14	.41	.77	.09	.73	.26	.78	10.01	.58	.55	.15	.08	.87
15	.44	.77	.16	2.34	.74	.56	.07	.36	.54	.14	.06	.86
16	1.49	0.77	3.06	2.67	2.40	6.21	10.11	3.16	1.53	1.13	1.04	0.85
17	.54	.76	2.84	.84	.65	5.83	.12	.04	.51	.17	.10	.85
18	.53	.76	.60	3.14	.61	.52	.08	2.89	.48	.18	.14	.86
19	.49	.75	.32	.01	.65	.50	.03	.69	.46	.18	.11	.84
20	.43	.75	.03	2.90	.45	.72	9.95	.60	.44	.18	.07	.84
21	1.37	0.75	1.77	2.71	3.51	6.20	9.85	2.49	1.42	1.18	1.04	0.84
22	.30	.76	.63	.56	.58	.72	.55	.39	.40	.17	.02	.84
23	.25	.77	.57	.47	.95	7.18	.35	.35	.39	.15	.01	.88
24	.18	.70	.49	.46	.13	.57	.05	.30	.38	.15	.01	.91
25	.12	.71	.49	.46	.21	.88	8.33	.20	.37	.13	.00	.92
26	1.09	0.75	1.54	2.44	4.22	8.00	7.91	2.14	1.39	1.10	1.00	0.92
27	.08	.78	.54	.37	3.99	.25	.45	.05	.34	.09	0.99	.88
28	.05	.85	.51	.25	.84	.48	.02	1.97	.33	.09	.99	.85
29	.04	1.02	.42	.17	.42	.63	6.60	.88	.32	.09		.83
30	.03	.08	.34	.05	.60	.88	.18	.85	.31	.08		.83
31		.02		1.97	.01		5.87		.29	.08		.84
Mean	1.35	0.84	2.45	1.91	2.99	6.26	9.03	3.60	1.51	1.17	1.05	0.89
Max.	1.61	1.08	4.43	3.14	4.22	8.88	10.12	6.14	1.80	1.28	1.14	0.98
Min.	1.03	0.70	1.00	0.99	2.07	3.01	5.87	1.85	1.29	1.08	0.99	0.83

WATER YEAR 1957 : Max. 10.12 m. Min. 0.70 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	5.84	0.99	1.00	5.68	21	49	249	128	15	5.68	2.68	1.47
2	6.48	0.98	1.24	4.56	32	44	254	139	15	5.68	2.46	1.58
3	7.60	0.97	1.48	3.80	42	59	259	132	14	5.20	2.24	1.58
4	8.74	0.95	2.05	3.20	55	62	263	118	13	5.20	2.24	1.36
5	10	0.92	3.43	2.57	57	84	265	104	13	5.20	2.68	1.25
6	6.96	0.89	4.20	2.35	52	104	267	101	12	4.88	2.68	1.14
7	6.80	0.87	4.43	2.13	44	120	269	98	12	4.72	2.57	1.14
8	7.60	0.84	4.14	1.91	38	139	271	95	11	4.56	2.57	1.14
9	8.93	0.83	3.87	1.91	34	149	273	90	11	4.40	2.46	1.03
10	12	0.83	3.62	1.80	30	148	275	87	11	4.25	2.24	0.92
11	11	0.81	3.42	1.69	27	158	279	84	11	3.95	2.02	0.81
12	9.50	0.78	3.23	3.95	25	160	282	80	11	3.95	1.91	0.70
13	8.36	0.78	3.09	8.74	25	165	285	68	11	3.80	2.68	0.56
14	7.79	0.77	3.09	14	25	161	292	59	10	3.65	2.68	0.49
15	8.36	0.77	3.16	27	37	153	295	53	10	3.50	2.46	0.42
16	9.31	0.77	3.06	35	29	141	297	48	10	3.35	2.24	0.35
17	10	0.76	2.84	39	35	128	298	45	9.69	3.95	2.90	0.35
18	10	0.76	2.60	47	34	118	296	41	9.12	4.10	3.50	0.42
19	9.31	0.75	2.32	44	35	117	293	36	8.74	4.10	3.05	0.28
20	8.17	0.75	2.03	41	30	124	290	33	8.36	4.10	2.57	0.28
21	7.12	0.75	1.77	36	57	141	285	31	7.98	4.10	2.24	0.28
22	6.00	0.76	1.63	32	59	159	271	28	7.60	3.95	2.02	0.28
23	5.20	0.77	1.57	30	70	176	262	27	7.44	3.65	1.91	0.56
24	4.10	0.70	1.49	30	75	191	250	26	7.28	3.65	1.91	0.81
25	3.20	0.71	1.49	30	77	202	220	24	7.12	3.35	1.80	0.92
26	2.79	0.75	1.54	29	78	207	204	23	7.44	2.90	1.80	0.92
27	2.68	0.78	1.54	28	71	217	186	20	6.64	2.79	1.69	0.56
28	2.35	0.85	1.51	25	66	226	170	19	6.48	2.79	1.69	0.35
29	2.24	1.02	1.42	23	55	234	154	17	6.32	2.79		0.21
30	2.13	1.08	1.34	20	60	243	140	16	6.16	2.68		0.21
31		1.02		19	44		129		5.84	2.68		0.28
Total	210.56	25.96	73.60	593.29	1,419	4,379	7,823	1,870	302.21	123.55	65.89	22.65
Mean	7.02	0.84	2.45	19.1	45.8	146	252	62.3	9.75	3.98	2.35	0.73
Max.	12	1.08	4.43	47	78	243	298	139	15	5.68	3.50	1.58
Min.	2.13	0.70	1.00	1.69	21	44	129	16	5.84	2.68	1.69	0.21
Runoff - mcm.	18.192	2.243	6.359	51.260	122.602	378.346	675.907	161.568	26.111	10.675	5.693	1.957

WATER YEAR 1957 : Max. 298 Min. 0.21 Mean 463 Annual Runoff 1,460.912 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 16	15.00	10.12	298				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHEE RIVER BASIN

Nam Phong at Ban Tha Hin, Khon Kaen (E.17)

Location: Lat 16°- 26' - 20" N, Long 102°- 56' - 52" E, on left bank 20 meters downstream from the bridge on the road Khon Kaen - Yang Talat, opposite to Wat Tha Hin, Amphoe Muang, Khon Kaen.

Drainage Area: 14,426 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m. (A.D.)

Bench Mark: B.M. - H.S.

Location: Near the gage site.
Elevation: +10.990 m. (M.S.L.)

Gage Reading Frequency: 3 - time daily readings at 09.00, 12.00 and 15.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 3 readings.

Period of Available Gage Records: 1954, 1956 to date.

Rating Operation:

Period of Rating: 1965 to date.
Rated by Float: -
Rated by Current Meter: 1965 to date.

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was not observed.

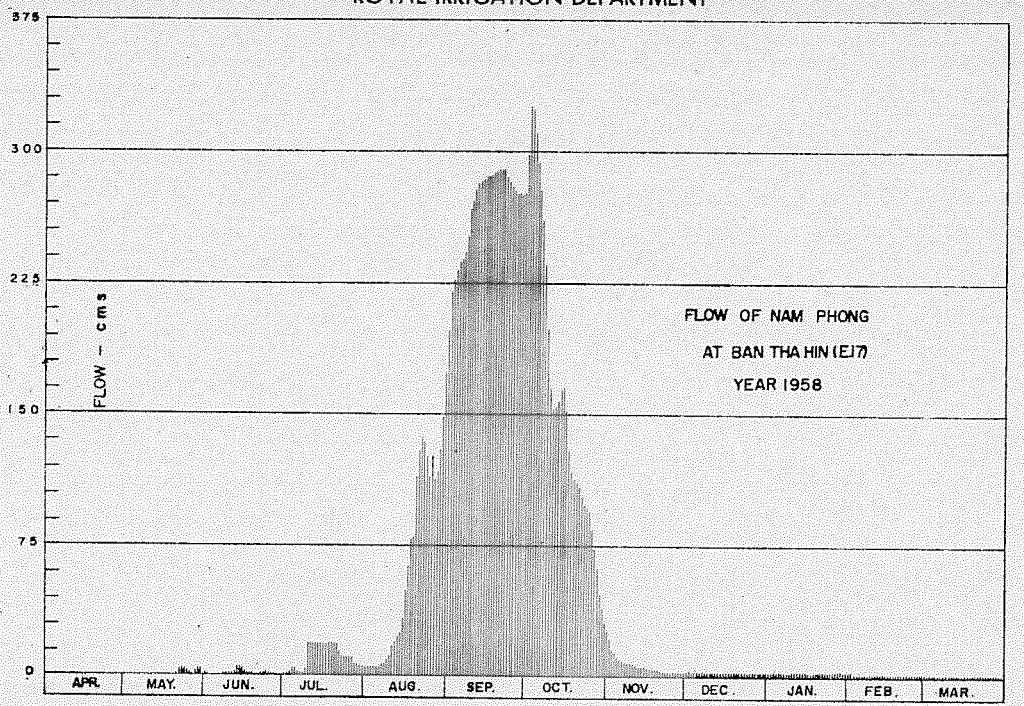
General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1965 - 67.

Remarks: Gage height record for Nov.1 - Mar.31 obtained from correlation and no flow for Apr.5 - May 18.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.84	0.70	0.98	1.03	1.34	7.73	10.13	2.29	1.17	1.16	1.11	1.02
2	.83	.70	.93	.07	.33	8.32	.71	.12	.18	.16	.11	.02
3	.81	.68	.92	.15	.33	.46	.65	1.82	.17	.16	.10	.02
4	.81	.68	.91	.28	.32	.60	.38	.72	.17	.16	.10	.02
5	.80	.69	.90	.25	.32	.70	.02	.61	.17	.16	.10	.02
6	0.80	0.70	0.91	1.15	1.31	8.78	9.70	1.56	1.16	1.16	1.09	1.02
7	.80	.70	.93	.13	.39	.87	.30	.50	.16	.15	.09	.02
8	.80	.69	.96	.10	.43	9.07	8.67	.47	.16	.15	.08	.02
9	.78	.69	.99	.23	.55	.40	7.79	.43	.16	.15	.08	.02
10	.78	.68	1.00	2.03	.66	.57	6.89	.41	.16	.15	.07	.02
11	0.76	0.68	1.04	2.06	1.95	9.69	6.55	1.37	1.16	1.15	1.07	1.02
12	.76	.68	.17	.07	2.03	.79	.58	.35	.16	.15	.07	.02
13	.76	.68	.34	1.98	.17	.83	.66	.34	.16	.14	.06	.02
14	.79	.68	.30	.94	.30	.84	.87	.32	.16	.14	.06	.02
15	.77	.68	.20	.94	2.63	.86	.88	.31	.16	.14	.06	.02
16	0.77	0.69	1.11	1.92	3.22	9.87	6.52	1.28	1.16	1.14	1.06	1.02
17	.77	.73	.07	.90	.77	.87	5.88	.26	.16	.13	.05	.02
18	.76	.80	.04	2.04	4.28	.89	.48	.26	.16	.13	.05	.02
19	.75	.88	.00	.03	.29	.92	.37	.25	.16	.13	.05	.02
20	.74	.94	0.96	1.97	5.39	.95	.32	.24	.16	.13	.04	.02
21	0.73	1.05	0.94	1.96	5.90	9.96	5.24	1.23	1.16	1.13	1.04	1.02
22	.72	.25	1.03	.79	6.09	.96	.04	.22	.16	.13	.04	.02
23	.71	.26	.11	.63	.03	.87	4.88	.21	.16	.12	.04	.02
24	.70	.19	.13	.60	5.78	.81	.83	.20	.16	.12	.04	.02
25	.70	.15	.10	.57	.42	.77	.79	.20	.16	.12	.04	.02
26	0.70	1.09	1.04	1.55	5.78	9.69	4.44	1.19	1.16	1.12	1.03	1.02
27	.71	.03	.01	.53	.37	.65	.10	.18	.16	.12	.03	.02
28	.71	.12	.07	.40	.51	.65	3.69	.17	.16	.11	.03	.02
29	.71	.19	.03	.37	.90	.64	.15	.16	.16	.11		.02
30	.71	.18	0.99	.36	6.44	.65	2.84	.16	.16	.11		.02
31		.05		.35	7.11		.52		.16	.11		.02
Mean	0.76	0.87	1.04	1.59	3.59	9.45	6.51	1.39	1.16	1.14	1.06	1.02
Max.	0.84	1.26	1.34	2.07	7.11	9.96	10.71	2.29	1.18	1.16	1.11	1.02
Min.	0.70	0.68	0.90	1.03	1.31	7.73	2.52	1.16	1.16	1.11	1.03	1.02

WATER YEAR 1958 : Max. 10.71 m. Min. 0.68 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar,
1	0.28		1.58	2.13	6.64	197	298	26	3.95	3.80	3.05	2.02
2	0.21		1.03	2.57	6.48	220	326	22	4.10	3.80	3.05	2.02
3	0.07		0.92	3.65	6.48	226	323	16	3.95	3.80	2.90	2.02
4	0.07		0.81	5.68	6.32	231	310	14	3.95	3.80	2.90	2.02
5			0.70	5.20	6.32	235	293	12	3.95	3.80	2.90	2.02
6			0.81	3.65	6.16	238	278	11	3.80	3.80	2.79	2.02
7			1.03	3.35	7.44	242	260	9.50	3.80	3.65	2.79	2.02
8			1.36	2.90	8.17	251	234	8.93	3.80	3.65	2.68	2.02
9			1.69	4.88	10	265	199	8.17	3.80	3.65	2.68	2.02
10			1.80	20	12	272	165	7.79	3.80	3.65	2.57	2.02
11			2.24	21	18	278	153	7.12	3.80	3.65	2.57	2.02
12			3.95	21	20	282	154	6.80	3.80	3.65	2.57	2.02
13			6.64	19	23	284	156	6.64	3.80	3.50	2.46	2.02
14			6.00	18	26	284	164	6.32	3.80	3.50	2.46	2.02
15			4.40	18	34	285	165	6.16	3.80	3.50	2.46	2.02
16			3.05	18	49	286	152	5.68	3.80	3.50	2.46	2.02
17			2.57	17	64	286	130	5.36	3.80	3.35	2.35	2.02
18			2.24	20	79	287	117	5.36	3.80	3.35	2.35	2.02
19		0.56	1.80	20	80	288	113	5.20	3.80	3.35	2.35	2.02
20		1.14	1.36	19	114	290	111	5.04	3.80	3.35	2.24	2.02
21		2.35	1.14	19	130	290	109	4.88	3.80	3.35	2.24	2.02
22		5.20	2.13	15	137	290	103	4.72	3.80	3.35	2.24	2.02
23		5.36	3.05	12	135	286	98	4.56	3.80	3.20	2.24	2.02
24		4.25	3.35	11	126	283	96	4.40	3.80	3.20	2.24	2.02
25		3.65	2.90	11	115	281	95	4.40	3.80	3.20	2.24	2.02
26		2.79	2.24	10	126	278	84	4.25	3.80	3.20	2.13	2.02
27		2.13	1.91	10	113	276	74	4.10	3.80	3.20	2.13	2.02
28		3.20	2.57	7.60	117	276	62	3.95	3.80	3.05	2.13	2.02
29		4.25	2.13	7.12	130	275	47	3.80	3.80	3.05		2.02
30		4.10	1.69	6.96	149	276	39	3.80	3.80	3.05		2.02
31		2.35		6.80	173		31		3.80	3.05		2.02
Total	0.63	41.33	69.09	361.49	2,034.01	8,038	4,939	237.93	118.70	106.55	70.17	62.62
Mean	0.02	1.33	2.30	11.7	65.6	268	159	7.93	3.83	3.44	2.51	2.02
Max.	0.28	5.36	6.64	21	173	290	326	26	4.10	3.80	3.05	2.02
Min.	0.00	0.00	0.70	2.13	6.16	197	31	3.80	3.80	3.05	2.13	2.02
Runoff - RCM.	0.054	3.571	5.969	31.233	175.738	694.483	426.730	20.557	10.256	9.206	6.063	5.410

WATER YEAR 1958 : Max. 326 Min. 0.00 Mean 44.0 Annual Runoff 1,389.270 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 2	06.00	10.71	326				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHEE RIVER BASIN

Nam Phong at Ban Tha Hin, Khon Kaen (E.17)

Location: Lat 16°- 26' - 20" N, Long 102°- 56' - 52" E, on left bank 20 meters downstream from the bridge on the road Khon Kaen - Yang Talat, opposite to Wat Tha Hin, Amphoe Muang, Khon Kaen.

Drainage Area: 14,426 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m. (A.D.)

Bench Mark: B.M. - H.S.

Location: Near the gage site.
Elevation: +10.990 m. (M.S.L.)

Gage Reading Frequency: 3 - time daily readings at 09.00, 12.00 and 15.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 3 readings.

Period of Available Gage Records: 1954, 1956 to date.

Rating Operation:

Period of Rating: 1965 to date
Rated by Float: -
Rated by Current Meter: 1965 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was not observed.

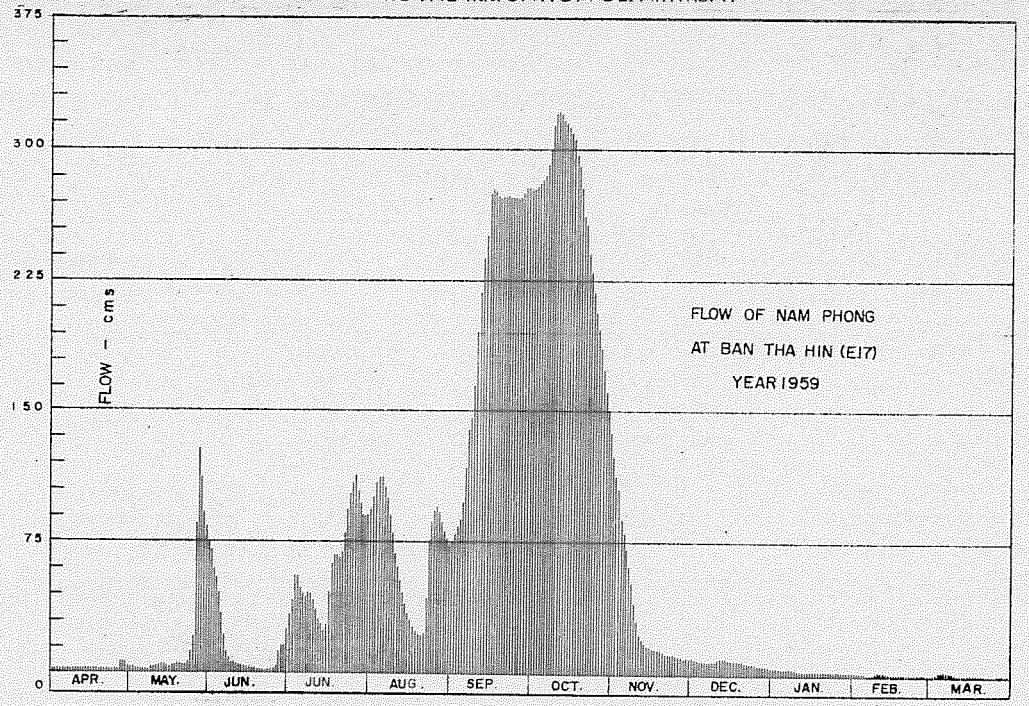
General Description: Records poor. Stage - discharge relation used is defined by discharge measurements during 1965 - 67.

Remarks: Gage height record for Apr. - Jul. 7 obtained from correlation.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.01	1.14	4.00	2.67	4.79	4.21	9.67	5.72	1.51	1.20	1.00	0.89
2	.01	.12	3.66	.99	5.01	.34	.70	.36	.50	.20	0.98	.97
3	.01	.10	.44	3.49	.27	.48	.75	4.97	.46	.18	.97	1.00
4	.01	.05	.14	.51	.37	.59	.78	.64	.45	.17	.95	.06
5	.01	.03	2.64	.24	.37	.92	.83	.32	.44	.16	.95	.03
6	1.01	1.01	2.13	3.11	5.22	5.54	9.94	4.03	1.44	1.16	0.96	1.03
7	.01	.01	1.66	.05	4.98	6.19	10.15	3.70	.43	.15	.96	.02
8	.01	.03	.44	.14	.67	.41	.44	.34	.43	.14	.97	.01
9	.01	.11	.34	.10	.34	.95	.58	2.90	.43	.12	.98	0.99
10	.01	.13	.31	2.97	3.98	7.70	.60	.49	.44	.10	.99	.96
11	1.01	1.15	1.28	2.76	3.67	8.27	10.58	2.18	1.48	1.10	0.98	0.93
12	.01	.24	.25	.54	.40	.75	.53	.03	.49	.09	.98	.91
13	.01	.26	.23	.41	.15	9.17	.48	1.92	.50	.09	.98	.91
14	.01	.25	.20	.27	2.90	.62	.43	.87	.49	.09	.97	.91
15	.00	.20	.17	.44	.66	.67	.36	.82	.47	.10	.96	.90
16	1.00	1.20	1.15	3.17	2.50	9.65	10.28	1.80	1.45	1.09	0.95	0.87
17	.00	.24	.13	.76	.34	.61	.14	.78	.43	.09	.94	.90
18	.00	.27	.11	.93	.24	.57	9.94	.74	.42	.09	.93	.90
19	.00	.30	.07	.93	.17	.56	.67	.71	.40	.08	.92	.89
20	.00	.28	.05	.86	.13	.57	.31	.68	.40	.07	.91	.87
21	1.00	1.24	1.05	3.96	2.22	9.58	9.09	1.65	1.39	1.07	0.91	0.87
22	.00	.24	.06	4.35	3.00	.57	8.81	.65	.37	.07	.91	.86
23	.00	.33	.06	.80	4.22	.56	.55	.62	.35	.08	.91	.84
24	.00	.67	.07	5.07	.57	.56	.26	.61	.33	.08	.91	.83
25	.00	.07	.12	.26	.78	.55	7.97	.60	.30	.07	.92	.82
26	1.00	4.50	1.26	5.31	4.84	9.56	7.75	1.58	1.28	1.06	0.91	0.82
27	.32	5.87	.70	.11	.74	.63	.44	.56	.26	.05	.89	.82
28	.33	.48	.89	4.88	.52	.68	.13	.52	.24	.04	.89	.80
29	.31	4.94	.89	.66	.37	.68	6.81	.52	.23	.02	.89	.80
30	.20	.45	2.37	.65	.22	.67	.47	.52	.22	.01		.80
31		.16		.71	.10		.13		.20	.01		.81
Mean	1.43	1.90	1.69	3.71	3.93	8.16	7.32	2.53	1.39	1.10	0.98	0.93
Max.	1.33	5.87	4.00	5.31	5.37	9.68	10.60	5.72	1.51	1.20	1.00	1.06
Min.	1.00	1.01	1.05	2.27	2.13	4.21	6.13	1.52	1.20	1.01	0.89	0.80

WATER YEAR 1959 : Max. 10.60 m. Min. 0.80 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.91	3.50	71	35	95	77	277	124	10	4.40	1.80	0.63
2	1.91	3.20	61	43	102	81	278	113	9.50	4.40	1.58	1.47
3	1.91	2.90	55	57	110	85	280	106	8.74	4.10	1.47	1.80
4	1.91	2.35	47	57	113	89	282	90	8.55	3.95	1.25	2.46
5	1.91	2.13	34	50	113	99	284	81	8.36	3.80	1.25	2.13
6	1.91	1.91	22	46	108	118	289	72	8.36	3.80	1.36	2.13
7	1.91	1.91	12	45	101	140	299	62	8.17	3.65	1.36	2.02
8	1.91	2.13	8.36	47	91	148	313	53	8.17	3.50	1.47	1.91
9	1.91	3.05	6.64	46	81	167	320	41	8.17	3.20	1.58	1.69
10	1.91	3.35	6.16	43	70	195	321	31	8.36	2.90	1.69	1.36
11	1.91	3.65	5.68	37	62	218	320	23	9.12	2.90	1.58	1.03
12	1.91	5.04	5.20	32	54	237	317	20	9.31	2.79	1.58	0.81
13	1.91	5.36	4.88	29	47	255	315	18	9.50	2.79	1.58	0.81
14	1.91	5.20	4.40	26	41	274	312	17	9.31	2.79	1.47	0.81
15	1.80	4.40	3.95	29	35	277	309	16	8.93	2.90	1.36	0.70
16	1.80	4.40	3.65	48	31	276	305	15	8.55	2.79	1.25	0.49
17	1.80	5.04	3.35	64	27	274	299	15	8.17	2.79	1.14	0.70
18	1.80	5.52	3.05	69	25	272	289	14	7.98	2.79	1.03	0.70
19	1.80	6.00	2.57	69	23	272	277	13	7.60	2.68	0.92	0.63
20	1.80	5.68	2.35	67	22	272	261	13	7.60	2.57	0.81	0.49
21	1.80	5.04	2.35	70	24	273	251	12	7.44	2.57	0.81	0.49
22	1.80	5.04	2.46	81	44	272	240	12	7.12	2.57	0.81	0.42
23	1.80	6.48	2.46	95	78	272	229	12	6.80	2.65	0.81	0.28
24	1.80	13	2.57	104	88	272	218	12	6.48	2.65	0.81	0.21
25	1.80	21	3.20	110	95	271	206	11	6.00	2.57	0.92	0.14
26	1.80	86	5.36	111	96	272	197	11	5.68	2.46	0.81	0.14
27	6.32	129	13	105	93	275	186	11	5.36	2.35	0.63	0.14
28	6.48	117	17	98	87	277	174	10	5.04	2.24	0.63	0.00
29	6.16	100	17	91	82	277	162	10	4.88	2.02	0.63	0.00
30	4.40	84	28	91	78	277	150	10	4.72	1.91		0.00
31		76		92	74		138		4.40	1.91		0.07
Total	71.70	719.28	455.64	1,987	2,190	6,564	8,098	1,048	236.37	91.39	34.39	26.66
Mean	2.39	23.2	15.2	64.1	70.6	219	261	34.9	7.62	2.95	1.18	0.86
Max.	6.48	129	71	111	113	277	321	124	10	4.40	1.80	2.46
Min.	1.80	1.91	2.35	26	22	77	138	10	4.40	1.91	0.63	0.00
Runoff - mcm.	6.195	62.146	39.367	171.677	189.216	567.130	699.667	90.547	20.422	7.896	2.971	2.303

WATER YEAR 1959 : Max. 321 Min. 0.00 Mean 58.9 Annual Runoff 1,859.452 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 10	06.00	10.60	321				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHEE RIVER BASIN

Nam Phong at Ban Nam Phong, Khon Kaen (E.22)

Location: Lat 16°- 42' - 41" N, Long 102°- 48' - 30" E, on right bank at the bridge on highway Udon - Khon Kaen, south of Ban Nam Phong marget, Amphoe Nam Phong, Khon Kaen.

Drainage Area: 13,183 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +151.22 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.1

Location: On right bank on the abutment of bridge.
Elevation: +167.463 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: 1954 - 57, 1964 - 65
Rated by Float: -
Rated by Current Meter: 1954 - 57, 1964 - 65

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

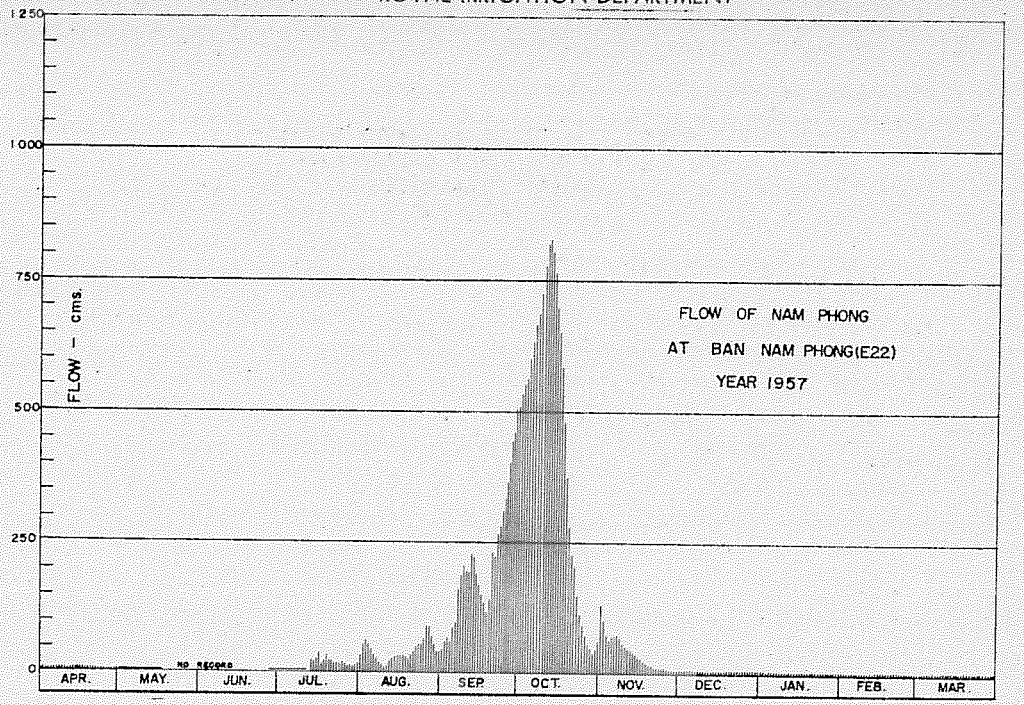
General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1956. No state diversions for irrigation above gage site.

Remarks: No gage height record for May 1 - July 18.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	152.42				153.98	154.30	161.12	156.59	152.43	152.20	152.13	152.10
2	.49				154.69	.81	.32	155.98	.41	.20	.12	.10
3	.24				.90	155.18	.42	.14	.40	.20	.12	.10
4	.24				.70	.38	.57	154.88	.39	.20	.12	.10
5	.42				.37	.59	.77	155.03	.38	.20	.12	.10
6	152.45				153.89	155.81	161.97	155.09	152.37	152.19	152.12	152.10
7	.52				.60	157.22	162.17	.19	.35	.19	.12	.10
8	.52				.37	.67	.31	.04	.34	.19	.12	.10
9	.51				.14	.92	.52	154.66	.33	.19	.12	.10
10	.44				152.91	.77	.84	.44	.32	.18	.11	.10
11	152.41				153.01	157.77	163.07	154.33	152.31	152.18	152.11	152.10
12	.32				.37	158.27	.12	.24	.30	.18	.11	.10
13	.30			153.43	.69	.17	162.98	.09	.30	.18	.10	.10
14	.35			.35	.75	157.72	.75	153.90	.30	.17	.28	.09
15	.46			.58	.82	.37	.37	.68	.29	.17	.44	.09
16	152.44			153.99	153.76	156.97	162.09	153.55	152.29	152.17	152.21	152.09
17	.43			.15	.82	.67	161.63	.37	.28	.17	.13	.09
18	.42			154.03	.82	.32	160.87	.22	.28	.17	.12	.09
19	.32			153.91	.66	.82	159.93	.08	.27	.16	.12	.09
20	.31			.53	.87	158.32	158.93	152.93	.27	.16	.12	.09
21	152.28			153.40	154.08	158.22	158.25	152.84	152.26	152.16	152.12	152.09
22	.24			.32	.39	.77	157.90	.79	.26	.16	.12	.09
23	.22			.27	.67	.97	156.97	.73	.25	.16	.11	.09
24	.22			.24	.71	159.29	.12	.68	.25	.15	.11	.09
25	.21			.32	155.02	.53	155.63	.65	.24	.15	.11	.09
26	152.21			153.18	155.69	159.83	155.09	152.61	152.24	152.15	152.10	152.09
27	.21			.08	.53	160.23	154.65	.56	.23	.14	.10	.09
28	.21			152.96	.24	.57	.32	.52	.22	.14	.10	.09
29	.22			.92	154.71	.72	153.90	.46	.22	.14		.09
30	.22			153.08	.16	161.05	154.24	.45	.21	.13		.09
31				.28	.08		.98		.21	.13		.09
Mean	152.34				154.14	157.50	159.64	153.82	152.30	152.17	152.14	152.09
Max.	152.52				155.69	161.05	163.12	156.59	152.43	152.20	152.44	152.10
Min.	152.21				152.91	154.30	153.90	152.45	152.21	152.13	152.10	152.09

WATER YEAR 1957 : Max. 163.12 m. Min. 152 09 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	8.20				40	48	509	132	8.30	6.00	5.30	6.00
2	8.90				60	63	534	104	8.10	6.00	5.20	6.00
3	6.40				66	74	551	73	8.00	6.00	5.20	6.00
4	6.40				60	61	563	65	7.90	6.00	5.20	6.00
5	8.20				50	90	602	70	7.80	6.00	5.20	6.00
6	8.50				38	98	632	72	7.70	5.90	5.20	6.00
7	9.20				31	164	662	75	7.50	5.90	5.20	6.00
8	9.20				25	189	685	70	7.40	5.90	5.20	6.00
9	9.10				20	205	721	59	7.30	5.90	5.20	6.00
10	8.40				15	195	777	52	7.20	5.80	5.10	6.00
11	8.10				17	195	818	49	7.10	5.80	5.10	6.00
12	7.20				25	228	827	47	7.00	5.80	5.10	6.00
13	7.00			27	33	221	801	43	7.00	5.80	5.00	6.00
14	7.50			25	35	192	761	38	7.00	5.70	6.80	5.90
15	8.60			30	36	172	695	33	6.90	5.70	8.40	5.90
16	8.40			41	35	150	650	30	6.90	5.70	6.10	5.90
17	8.30			20	36	135	581	25	6.80	5.70	6.30	5.90
18	8.20			42	36	119	478	21	6.80	5.70	6.20	5.90
19	7.20			39	32	143	373	19	6.70	5.60	6.20	5.90
20	7.10			29	38	231	279	16	6.70	5.60	6.20	5.90
21	6.80			26	43	224	226	14	6.60	5.60	6.20	5.90
22	6.40			24	51	266	203	13	6.60	5.60	6.20	5.90
23	6.20			23	59	282	150	12	6.50	5.60	6.10	5.90
24	6.20			22	60	310	111	11	6.50	5.60	6.10	5.90
25	6.10			24	70	333	91	11	6.40	5.60	6.10	5.90
26	6.10			21	94	363	72	10	6.40	5.50	6.00	5.90
27	6.10			19	91	403	58	9.60	6.30	5.40	6.00	5.90
28	6.10			16	76	442	49	9.20	6.20	5.40	6.00	5.90
29	6.20			15	60	460	38	8.60	6.20	5.40		5.90
30	6.20			19	45	501	47	8.50	6.10	5.30		5.90
31				23	43		68		6.10	5.30		5.90
Total	222.50				1,420	6,557	13,612	1,109.90	216	176.80	162.10	184.20
Mean	7.42				45.8	218	439	37.0	6.97	5.70	5.79	5.94
Max.	9.20				94	501	827	132	8.30	6.00	8.40	6.00
Min.	6.10				15	48	38	8.50	6.10	5.30	5.10	5.90
Runoff - mcm.	19.224				122.688	566.525	1,176.077	95.895	18.662	15.275	14.005	15.915

WATER YEAR 1957 : Max. 827 Min. 5.10 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 12	06.00	163.14	829				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHEE RIVER BASIN

Nam Phong at Ban Nam Phong, Khon Kaen (E.22)

Location: Lat 16°- 42' - 41" N, Long 102°- 48' - 30" E, on right bank at the bridge on highway Udon - Khon Kaen, south of Ban Nam Phong marget, Amphoe Nam Phong, Khon Kaen.

Drainage Area: 13,183 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +151.22 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.1

Location: On right bank on the abutment of bridge.
Elevation: +167.463 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: 1954 - 57, 1964 - 65
Rated by Float: -
Rated by Current Meter: 1954 - 57, 1964 - 65

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

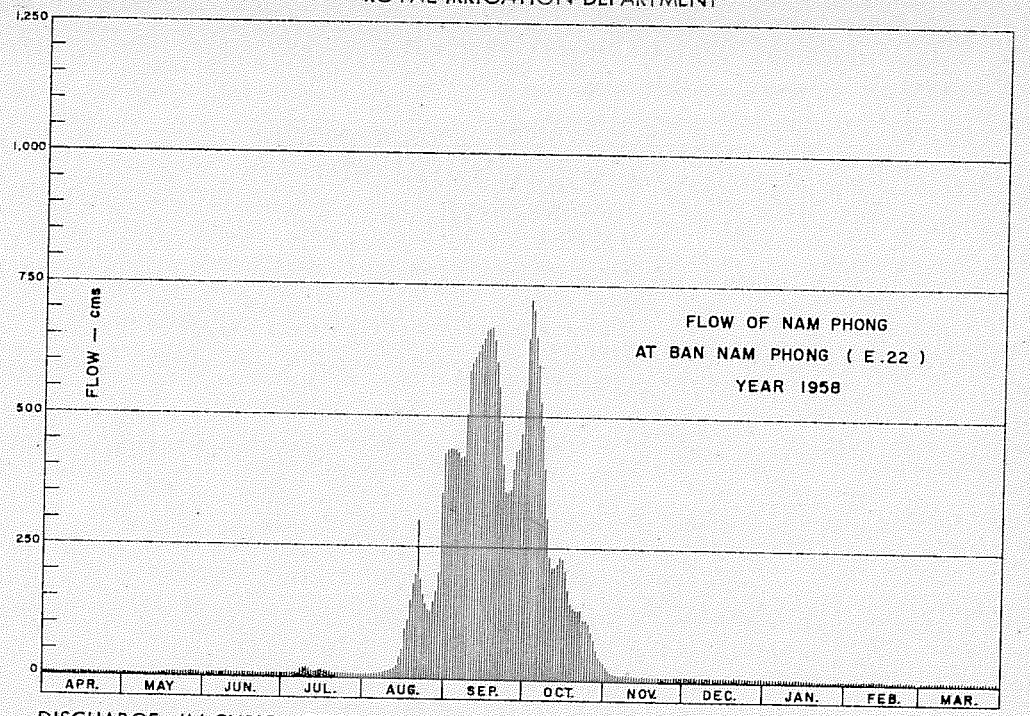
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1956. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	152.08	152.07	152.07	152.12	152.22	160.51	161.91	153.37	152.13	152.12	152.07	151.97
2	.07	.07	.09	.13	.22	.53	162.53	.17	.14	.12	.07	.97
3	.07	.05	.09	.12	.22	.55	.47	152.84	.13	.12	.06	.97
4	.06	.06	.14	.13	.31	.52	.18	.74	.13	.12	.06	.97
5	.06	.06	.19	.12	.36	.48	161.78	.62	.13	.12	.06	.97
6	152.06	152.07	152.18	152.18	152.39	160.41	161.43	152.57	152.12	152.11	152.05	151.97
7	.06	.07	.20	.32	.49	.40	.01	.51	.12	.11	.05	.97
8	.07	.06	.27	.97	.62	.91	160.31	.48	.12	.11	.04	.97
9	.07	.06	.37	153.08	.74	161.66	159.37	.43	.12	.11	.04	.97
10	.07	.05	.47	.14	.82	.79	158.39	.41	.12	.11	.03	.97
11	152.06	152.05	152.32	153.02	152.96	161.83	158.01	152.37	152.12	152.11	152.03	151.97
12	.06	.05	.20	152.63	153.15	.90	.04	.35	.12	.11	.03	.97
13	.07	.05	.27	.63	.39	.99	.13	.34	.12	.10	.02	.97
14	.08	.07	.21	.62	.96	162.08	.36	.32	.12	.10	.02	.97
15	.08	.06	.14	.65	154.55	.18	.38	.30	.12	.10	.02	.97
16	152.08	152.07	152.12	152.74	155.68	162.21	157.97	152.27	152.12	152.09	152.02	151.97
17	.08	.14	.14	.72	156.07	.21	.29	.23	.12	.09	.01	.97
18	.08	.27	.17	.69	.64	.15	156.82	.23	.12	.09	.01	.97
19	.07	.32	.19	.63	157.32	161.96	.72	.22	.12	.09	.01	.97
20	.07	.22	.21	.56	.71	.64	.66	.21	.12	.09	.00	.97
21	152.06	152.16	152.20	152.45	157.91	161.17	156.58	152.20	152.12	152.08	152.00	151.97
22	.07	.16	.18	.41	.71	160.59	.37	.19	.12	.08	.00	.97
23	.07	.16	.15	.39	.37	159.81	.19	.18	.12	.08	151.99	.97
24	.07	.19	.13	.39	156.98	.75	.14	.17	.12	.08	.99	.97
25	.08	.20	.14	.37	.56	.80	.10	.16	.12	.08	.99	.97
26	152.08	152.22	152.11	152.33	156.52	160.10	155.72	152.15	152.12	152.08	151.98	151.97
27	.07	.25	.15	.29	.82	.48	.32	.14	.12	.08	.98	.97
28	.07	.27	.19	.27	157.31	.51	154.90	.13	.12	.07	.98	.97
29	.07	.23	.16	.25	.86	.67	.30	.12	.12	.07		.97
30	.07	.13	.13	.23	159.70	161.07	153.96	.12	.12	.07		.97
31		.08		.22	160.46		.63		.12	.07		.97
Mean	152.07	152.13	152.19	152.80	155.16	161.06	157.97	152.38	152.12	152.09	152.02	151.97
Max.	152.08	152.32	152.47	153.14	160.46	162.21	162.53	153.37	152.14	152.12	152.07	151.97
Min.	152.06	152.05	152.07	152.12	152.22	159.75	153.63	152.12	152.12	152.07	151.98	151.97

WATER YEAR 1958 : Max. 162.53 m. Min. 151.97 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	4.80	4.70	4.70	5.20	6.20	435	623	25	5.30	5.20	4.70	3.85
2	4.70	4.70	4.90	5.30	6.20	438	723	20	5.40	5.20	4.70	3.85
3	4.70	4.50	4.90	5.20	6.20	440	712	14	5.30	5.20	4.60	3.85
4	4.60	4.60	5.40	5.30	7.10	436	664	12	5.30	5.20	4.60	3.85
5	4.60	4.60	5.90	5.20	7.60	432	604	10	5.30	5.20	4.60	3.85
6	4.60	4.70	5.80	5.80	7.90	423	552	9.70	5.20	5.10	4.50	3.85
7	4.60	4.70	6.00	7.20	8.90	422	495	9.10	5.20	5.10	4.50	3.85
8	4.70	4.60	6.70	16	10	483	412	8.80	5.20	5.10	4.40	3.85
9	4.70	4.60	7.70	19	12	586	318	8.30	5.20	5.10	4.40	3.85
10	4.70	4.50	8.70	20	13	605	236	8.10	5.20	5.10	4.30	3.85
11	4.60	4.50	7.20	17	16	611	211	7.70	5.20	5.10	4.30	3.85
12	4.60	4.50	6.00	11	20	622	213	7.50	5.20	5.10	4.30	3.85
13	4.70	4.50	6.70	10	26	635	218	7.40	5.20	5.00	4.20	3.85
14	4.80	4.70	6.10	10	40	649	234	7.20	5.20	5.00	4.20	3.85
15	4.80	4.60	5.40	11	55	664	230	7.00	5.20	5.00	4.20	3.85
16	4.80	4.70	5.20	12	93	669	208	6.70	5.20	4.90	4.20	3.85
17	4.80	5.40	5.40	12	109	669	168	6.30	5.20	4.90	4.10	3.85
18	4.80	6.70	5.70	11	134	659	143	6.30	5.20	4.90	4.10	3.85
19	4.70	7.20	5.90	10	170	631	138	6.20	5.20	4.90	4.10	3.85
20	4.70	6.20	6.10	10	192	583	135	6.10	5.20	4.90	4.00	3.85
21	4.60	5.60	6.00	8.50	304	515	131	6.00	5.20	4.80	4.00	3.85
22	4.70	5.60	5.80	8.10	192	446	132	5.90	5.20	4.80	4.00	3.85
23	4.70	5.60	5.50	7.90	172	361	113	5.80	5.20	4.80	3.95	3.85
24	4.70	5.90	5.30	7.90	151	355	112	5.70	5.20	4.80	3.95	3.85
25	4.80	6.00	5.40	7.70	130	360	110	5.60	5.20	4.80	3.95	3.85
26	4.80	6.20	5.10	7.30	128	390	95	5.50	5.20	4.80	3.90	3.85
27	4.70	6.00	5.50	6.90	143	432	79	5.40	5.20	4.80	3.90	3.85
28	4.70	6.70	5.90	6.70	169	435	66	5.30	5.20	4.70	3.90	3.85
29	4.70	6.30	5.60	6.50	201	454	48	5.20	5.20	4.70		3.85
30	4.70	5.30	5.30	6.30	350	503	40	5.20	5.20	4.70		3.85
31		4.80		6.20	429		32		5.20	4.70		3.85
Total	141.10	163.20	175.80	288.20	3,209	15,342	8,191	249	161.80	153.60	118.55	119.35
Mean	4.70	5.26	5.86	9.30	103	511	264	8.30	5.22	4.95	4.22	3.85
Max.	4.80	7.20	8.70	20	429	669	723	25.00	5.40	5.20	4.70	3.85
Min.	4.60	4.50	4.70	5.20	6.20	422	32	5.20	5.20	4.70	3.90	3.85
Runoff - mcm.	12.182	14.100	15.189	24.900	277.258	1,325.549	707.702	21.514	13.979	13.271	10.243	10.312

WATER YEAR 1958 : Max. 723 Min. 3.85 Mean 77.5 Annual Runoff 2,446.209 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 2	06.00	162.59	723				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHEE RIVER BASIN

Nam Phong at Ban Nam Phong, Khon Kaen (E.22)

Location: Lat 16°- 42' - 41" N, Long 102°- 48' - 30" E, on right bank at the bridge on highway, Udon - Khon Kaen, south of Ban Nam Phong marget, Amphoe Nam Phong, Khon Kaen.

Drainage Area: 13,183 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +151.22 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.1

Location: On right bank on the abutment of bridge.
Elevation: +167.463 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: 1954 - 57, 1964 - 65
Rated by Float: -
Rated by Current Meter: 1954 - 57, 1964 - 65

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

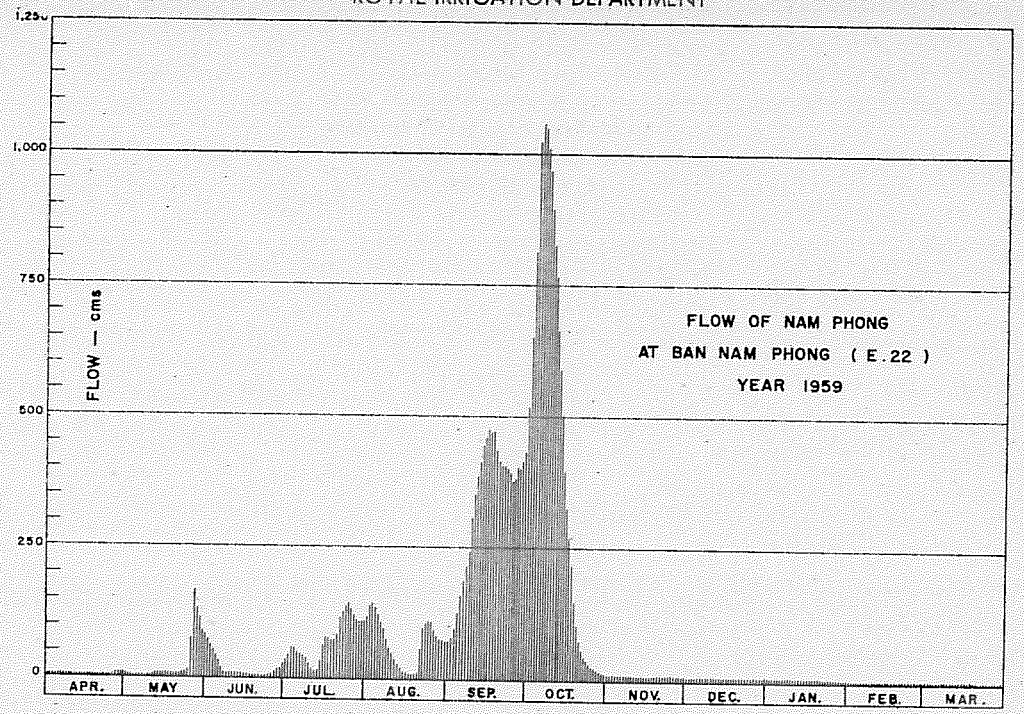
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1956. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	151.96	152.10	155.22	153.78	156.27	155.08	161.22	152.59	152.21	152.20	152.02	152.02
2	.96	.08	154.86	154.12	.71	.32	162.06	.54	.22	.20	.02	.02
3	.96	.06	.62	.68	.83	.62	.79	.49	.22	.19	.02	.02
4	.96	.01	.28	.71	.72	156.00	163.64	.45	.23	.19	.04	.01
5	.96	151.98	153.75	.40	.62	.92	164.15	.41	.24	.18	.04	.01
6	151.96	151.96	153.18	154.24	156.29	157.52	164.33	152.36	152.23	152.18	152.03	152.01
7	.96	.96	152.68	.18	155.86	.70	.30	.31	.23	.17	.03	.01
8	.96	.98	.44	.09	.46	158.04	.10	.29	.22	.17	.03	.00
9	.96	152.07	.34	153.88	154.90	.61	163.78	.27	.22	.16	.03	.00
10	.96	.09	.30	.45	.49	159.33	.43	.27	.22	.16	.02	.00
11	151.96	152.09	152.26	153.06	154.19	159.85	163.03	152.26	152.22	152.15	152.02	151.99
12	.96	.21	.22	152.81	153.91	160.12	162.51	.25	.22	.15	.02	.99
13	.96	.23	.20	.92	.39	.35	161.95	.24	.22	.14	.02	.99
14	.96	.22	.17	153.50	.21	.58	.21	.23	.22	.14	.02	.98
15	.95	.17	.13	154.61	152.85	.78	160.33	.22	.22	.13	.02	.98
16	151.95	152.17	152.11	155.29	152.68	160.86	159.35	152.22	152.22	152.13	152.02	151.98
17	.95	.21	.09	.26	.56	.81	158.62	.22	.22	.12	.02	.97
18	.95	.23	.07	.21	.47	.81	157.94	.22	.21	.12	.02	.97
19	.95	.29	.03	.08	.60	.62	.01	.22	.21	.11	.02	.97
20	.95	.26	.01	.23	.63	.38	155.94	.22	.21	.11	.02	.96
21	151.95	152.21	152.01	155.59	154.14	160.27	155.19	152.22	152.21	152.10	152.02	151.96
22	.95	.21	.02	156.30	155.74	.26	154.42	.22	.21	.09	.02	.96
23	.95	.33	.02	.51	.91	.25	.05	.22	.21	.09	.02	.95
24	.95	.69	.03	.74	156.09	.18	153.77	.22	.21	.08	.02	.95
25	.95	153.12	.08	.83	.09	159.97	.52	.22	.21	.08	.02	.95
26	151.95	155.80	152.24	156.67	155.92	160.00	153.34	152.22	152.21	152.07	152.02	151.94
27	152.32	157.28	.72	.40	.54	.21	.17	.22	.21	.07	.02	.94
28	.33	156.83	.93	.17	.33	.20	152.96	.21	.21	.06	.02	.94
29	.31	.25	.93	.07	.13	.32	.83	.21	.21	.06	.02	.94
30	.16	155.73	153.47	.05	.09	.45	.79	.21	.21	.06		.93
31		.39		.04	.08		.69		.21	.06		.93
Mean	152.00	152.97	152.71	154.96	154.86	159.25	158.72	152.28	152.22	152.13	152.03	151.98
Max.	152.33	157.28	155.22	156.83	156.83	160.86	164.33	152.59	152.24	152.20	152.04	152.02
Min.	151.95	151.96	152.01	152.81	152.47	155.08	152.69	152.21	152.21	152.06	152.02	151.93

WATER YEAR 1959 : Max. 164.33 m. Min. 151.93 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.80	5.10	76	35	117	71	522	9.90	6.10	6.00	4.20	4.20
2	3.80	4.80	65	44	137	79	646	9.40	6.20	6.00	4.20	4.20
3	3.80	4.60	58	59	143	91	768	8.90	6.20	5.90	4.20	4.20
4	3.80	4.10	48	60	138	106	922	8.50	6.30	5.90	4.40	4.10
5	3.80	3.90	35	51	133	148	1,020	8.10	6.40	5.80	4.40	4.10
6	3.80	3.80	21	47	118	181	1,056	7.60	6.30	5.80	4.30	4.10
7	3.80	3.80	11	45	100	191	1,050	6.10	6.30	5.70	4.30	4.10
8	3.80	3.90	8.40	43	84	213	1,010	6.90	6.20	5.70	4.30	4.00
9	3.80	4.70	7.40	38	66	253	946	6.70	6.20	5.60	4.30	4.00
10	3.80	4.90	7.00	27	54	314	882	6.70	6.20	5.60	4.20	4.00
11	3.80	4.90	6.60	18	46	365	810	6.60	6.20	5.50	4.20	3.95
12	3.80	6.10	6.20	13	39	392	719	6.50	6.20	5.50	4.20	3.95
13	3.80	6.30	6.00	15	26	416	629	6.40	6.20	5.40	4.20	3.95
14	3.80	6.20	5.70	28	21	444	520	6.30	6.20	5.40	4.20	3.90
15	3.75	5.70	5.30	57	14	468	414	6.20	6.20	5.30	4.20	3.90
16	3.75	5.70	5.10	78	11	477	316	6.20	6.20	5.30	4.20	3.90
17	3.75	6.10	4.90	77	9.60	471	254	6.20	6.20	5.20	4.20	3.85
18	3.75	6.30	4.70	75	8.70	471	206	6.20	6.10	5.20	4.20	3.85
19	3.75	6.90	4.30	71	10	448	152	6.20	6.10	5.10	4.20	3.85
20	3.75	6.60	4.10	76	10	420	103	6.20	6.10	5.10	4.20	3.80
21	3.75	6.10	4.10	90	44	408	75	6.20	6.10	5.00	4.20	3.80
22	3.75	6.10	4.20	118	96	407	52	6.20	6.10	4.90	4.20	3.80
23	3.75	7.30	4.20	128	101	405	42	6.20	6.10	4.90	4.20	3.75
24	3.75	11	4.30	139	110	398	35	6.20	6.10	4.80	4.20	3.75
25	3.75	19	4.80	143	110	377	29	6.20	6.10	4.80	4.20	3.75
26	3.75	98	6.40	135	102	380	24	6.20	6.10	4.70	4.20	3.70
27	7.20	167	12	123	88	401	20	6.20	6.10	4.70	4.20	3.70
28	7.30	143	16	113	79	400	16	6.10	6.10	4.60	4.20	3.70
29	7.10	116	16	109	73	413	14	6.10	6.10	4.60	4.20	3.70
30	5.60	95	28	108	72	428	13	6.10	6.10	4.60		3.65
31		82		108	71		11		6.10	4.60		3.65
Total	125.40	854.90	489.70	2,271	2,232.30	10,036	13,276	203.50	191.20	163.20	122.60	121.65
Mean	4.18	27.6	16.3	73.2	72.1	334	428	6.78	6.17	5.26	4.23	3.92
Max.	7.30	167	76	143	143	477	1,056	9.90	6.40	6.00	4.40	4.20
Min.	3.75	3.80	4.10	13	8.70	71	11	6.10	6.10	4.60	4.20	3.65
Runoff - mcm.	10.834	73.863	42.310	196.214	192.871	867.110	1,147.046	17.582	16.520	14.083	10.593	10.510

WATER YEAR 1959 : Max. 1,056 Min. 3.65 Mean 82.2 Annual Runoff 2,599.512 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 6	06.00	164.33	1,056				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
CHEE RIVER BASIN

Nam Phong at Ubolratana Damsite, Khon Kaen (E.31)

Location: Lat 16°- 46' - 23" N, Long 102°- 37' - 58" E, on left bank 100 meters downstream from Ubolratana Damsite, Amphoe Nam Phong, Khon Kaen.

Drainage Area: 12,104 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +155.00 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.123

Location: On left bank near the gage site.
Elevation: +168.189 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 - 64

Rating Operation:

Period of Rating: 1957 - 64
Rated by Float: -
Rated by Current Meter: 1957 - 64

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation due to its stability.

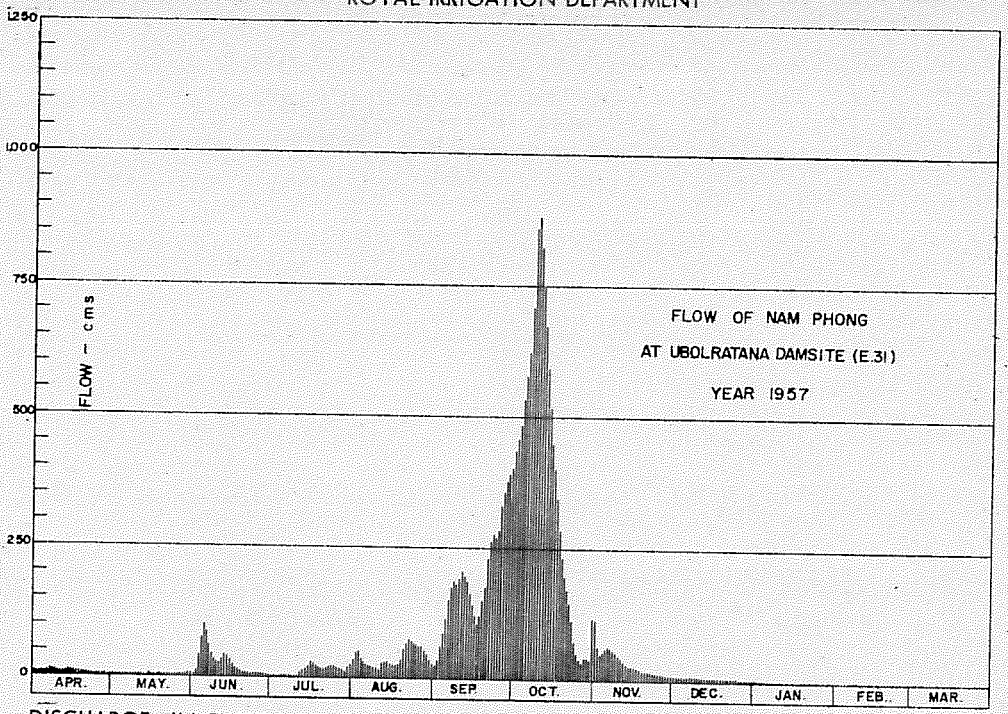
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1957. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	156.40	155.74	156.08	155.81	158.48	157.78	166.46	160.90	156.72	156.13	155.87	155.83
2	.33	.70	157.03	.78	.96	158.31	.74	159.38	.66	.12	.86	.85
3	.31	.69	158.68	.78	.95	159.43	167.05	158.91	.64	.10	.86	.83
4	.30	.69	159.86	.74	.45	160.17	.47	159.02	.60	.08	.87	.71
5	.43	.65	160.56	.71	157.99	.92	.82	.35	.55	.06	.91	.78
6	156.54	155.61	160.18	155.71	157.89	161.79	168.17	159.47	156.55	156.03	155.91	155.74
7	.92	.58	159.37	.69	.62	162.33	.78	.40	.66	.03	.93	.66
8	.71	.56	158.68	.65	.60	.54	169.71	.25	.65	.02	.99	.62
9	.62	.54	.23	.62	.56	.45	.83	.05	.60	.00	.96	.73
10	.47	.52	.03	.78	.38	.64	.53	158.84	.54	.01	.92	.73
11	156.44	155.53	157.94	155.66	157.31	162.87	169.07	158.64	156.51	156.00	155.89	155.78
12	.50	.51	158.39	156.98	158.10	.68	168.53	.41	.49	.01	.89	.71
13	.60	.46	.68	157.07	.20	.51	167.92	.21	.47	155.99	156.18	.66
14	.67	.46	.54	.32	.06	.11	.33	.03	.44	.95	.09	.65
15	.66	.53	.18	.70	157.93	161.54	166.70	157.89	.40	.94	155.97	.71
16	156.59	155.56	157.74	157.98	157.77	161.03	166.01	157.73	156.37	155.95	155.95	155.71
17	.44	.53	.34	.96	.87	160.63	165.21	.62	.35	.93	.90	.82
18	.31	.53	156.98	.69	.92	.91	164.28	.49	.32	.93	.87	.86
19	.24	.62	.72	.49	158.40	161.81	163.38	.37	.31	.94	.87	.77
20	.18	.61	.57	.32	159.16	162.35	162.71	.27	.30	.89	.86	.77
21	156.07	155.56	156.43	157.36	159.52	163.44	162.23	157.26	156.28	155.86	155.82	155.72
22	.00	.55	.30	.49	.83	.99	161.67	.23	.26	.84	.83	.67
23	155.95	.80	.28	.63	.74	164.16	160.85	.18	.25	.87	.84	.64
24	.94	.84	.51	.62	.63	.06	159.67	.11	.24	.84	.86	.64
25	.96	.89	.49	.58	.48	.31	158.89	.04	.20	.89	.86	.63
26	155.96	156.05	156.37	157.45	159.40	165.01	158.47	156.98	156.19	155.92	155.87	155.63
27	.87	155.88	.19	.42	.39	.40	.21	.89	.18	.91	.86	.62
28	.82	.80	.14	.20	.14	.68	.67	.83	.18	.87	.85	.61
29	.82	156.00	.03	.01	158.75	.87	.58	.80	.18	.85		.62
30	.78	.38	155.91	.69	.34	166.17	.20	.76	.15	.84		.61
31		.02		.83	157.99		161.14		.15	.84		.59
Mean	156.29	155.69	157.55	156.86	158.87	162.50	164.77	158.08	156.40	155.96	155.90	155.70
Max.	156.92	156.38	160.56	157.98	159.83	166.17	169.83	160.90	156.72	156.13	156.18	155.86
Min.	155.78	155.46	155.91	155.62	157.31	157.78	158.20	156.76	156.15	155.84	155.82	155.59

WATER YEAR 1957 : Max. 169.83 m. Min. 155.46 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	8.00	3.70	5.80	4.05	39	26	435	115	9.80	3.50	1.70	1.50
2	7.65	3.50	15	3.90	51	36	456	64	8.90	3.50	1.60	1.60
3	7.55	3.45	44	3.90	51	63	485	50	8.70	3.30	1.60	1.30
4	7.50	3.45	77	3.70	39	87	533	52	8.20	3.20	1.70	0.80
5	8.30	3.25	101	3.55	30	116	578	61	7.70	3.00	1.90	1.20
6	9.40	3.05	88	3.55	28	151	621	65	7.70	2.80	1.90	1.00
7	14	2.90	62	3.45	23	177	707	63	8.90	2.80	2.10	0.70
8	12	2.80	44	3.25	23	187	857	58	8.80	2.70	2.50	0.50
9	10	2.70	34	3.10	22	183	880	53	8.20	2.50	2.30	0.90
10	8.70	2.60	30	3.90	20	192	822	48	7.50	2.60	2.00	0.90
11	8.40	2.65	29	3.30	19	204	749	43	7.20	2.50	1.80	1.20
12	9.00	2.55	37	15	31	194	671	37	7.00	2.60	1.80	0.80
13	10	2.30	44	16	33	186	591	33	6.80	2.50	3.90	0.70
14	11	2.30	40	19	31	166	517	30	6.40	2.20	3.20	0.60
15	11	2.65	33	24	29	141	449	28	6.00	2.20	2.40	0.80
16	9.90	2.80	25	30	26	121	402	26	5.70	2.20	2.20	0.80
17	8.40	2.65	19	29	27	104	345	24	5.50	2.10	1.90	1.40
18	7.55	2.65	15	24	28	116	285	23	5.20	2.10	1.70	1.60
19	7.20	3.10	12	21	37	152	231	20	5.10	2.20	1.70	1.10
20	6.80	3.05	9.70	19	56	179	196	18	5.00	1.80	1.60	1.10
21	5.70	2.80	8.30	19	66	232	172	18	4.80	1.60	1.40	0.90
22	5.00	2.75	7.50	21	76	265	146	17	4.60	1.50	1.50	0.70
23	4.75	4.00	7.40	23	73	276	113	16	4.50	1.70	1.50	0.60
24	4.70	3.70	9.10	23	69	270	72	15	4.50	1.50	1.60	0.60
25	4.80	4.45	8.90	23	65	285	50	14	4.10	1.80	1.60	0.60
26	4.80	5.50	7.85	21	63	331	39	13	4.00	2.00	1.70	0.60
27	4.40	4.40	6.90	20	63	357	33	12	3.90	1.90	1.60	0.50
28	4.10	4.00	6.40	17	55	377	44	11	3.90	1.70	1.60	0.50
29	4.10	5.00	5.30	15	46	390	41	10	3.90	1.60		0.50
30	3.90	7.90	4.55	24	36	412	38	10	3.70	1.50		0.50
31		5.20		27	30		117		3.70	1.50		0.50
Total	228.60	107.80	837.70	469.65	1,285	5,976	11,675	1,047	189.90	70.60	54	27
Mean	7.62	3.46	27.9	15.1	41.4	199	377	34.9	6.12	2.28	1.93	0.87
Max.	14	7.90	101	30	76	412	880	115	9.80	3.50	3.90	1.60
Min.	3.90	2.30	4.55	3.10	19	26	33	10	3.70	1.50	1.40	0.50
Runoff - mcm.	19.751	9.314	72.377	40.578	111.024	516.326	1,008.720	90.461	16.407	6.100	4.666	2.333

WATER YEAR 1957 : Max. 880 Min. 0.50 Mean 60.2 Annual Runoff 1,898.057 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 9	24.00	169.87	888				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
CHEE RIVER BASIN

Nam Phong at Ubolratana Damsite, Khon Kaen (E.31)

Location: Lat 16°– 46' – 23" N, Long 102°– 37' – 58" E, on left bank 100 meters downstream from Ubolratana Damsite, Amphoe Nam Phong, Khon Kaen.

Drainage Area: 12,104 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +155.00 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D. No. 123

Location: On left bank near the gage site.
Elevation: +168.189 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 – 64

Rating Operation:

Period of Rating: 1957 – 64
Rated by Float: –
Rated by Current Meter: 1957 – 64

Stability of Channel Regimes: Unstable, no shifting adjustment but periodic rating curves are used for flow computation.

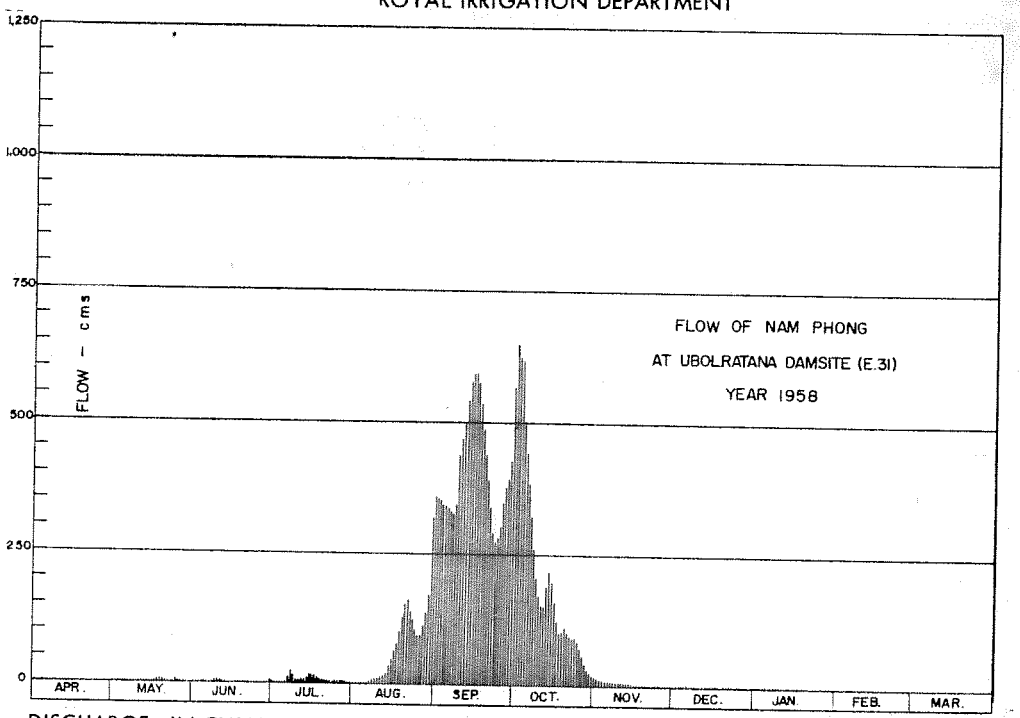
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relation used is defined by discharge measurements during 1958. No state diversions above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	155.59	155.44	155.75	156.29	156.25	165.53	168.76	157.46	156.12	156.00	155.81	155.69
2	.57	.45	.92	.11	.19	.48	.59	.33	.12	155.99	.83	.64
3	.56	.49	156.04	.09	.20	.38	.08	.19	.10	.97	.84	.63
4	.53	.49	.11	155.99	.19	.34	167.42	.10	.09	.97	.83	.63
5	.53	.46	.06	.94	.10	.28	166.71	.00	.03	.97	.84	.61
6	155.55	155.45	156.16	156.03	156.30	165.16	165.92	156.89	156.09	155.97	155.81	155.66
7	.56	.46	.15	157.27	.67	.09	.00	.75	.14	.98	.75	.67
8	.55	.45	.09	158.05	157.06	.37	164.01	.68	.10	.98	.71	.63
9	.60	.45	.47	157.47	.10	166.65	163.11	.64	.07	.96	.70	.63
10	.61	.46	.59	156.75	.12	167.03	162.38	.59	.09	.94	.71	.66
11	155.55	155.48	156.36	156.74	157.33	167.36	161.95	156.50	159.16	155.95	155.72	155.68
12	.53	.48	.13	.87	.38	.78	.92	.42	.20	.94	.68	.67
13	.55	.56	.03	.80	.74	168.06	162.76	.35	.18	.95	.67	.72
14	.52	.69	155.94	.94	158.42	.21	163.22	.34	.18	.92	.69	.70
15	.50	.76	.87	157.52	.93	.33	162.96	.31	.17	.92	.71	.67
16	155.52	155.77	155.87	157.58	159.65	168.14	162.14	156.28	156.17	155.90	155.68	155.67
17	.52	156.01	.79	.42	160.04	167.75	161.25	.26	.21	.92	.72	.66
18	.52	.35	.93	.14	.70	.22	160.75	.28	.22	.91	.74	.62
19	.53	.57	156.19	156.86	161.45	166.67	.82	.26	.23	.91	.73	.60
20	.59	.37	.12	.63	162.02	.03	161.02	.25	.23	.89	.76	.62
21	155.57	156.17	156.10	156.50	162.17	165.31	160.79	156.32	156.20	155.88	155.74	155.58
22	.55	.04	155.97	.40	161.81	164.55	.55	.20	.19	.87	.71	.55
23	.52	.02	.87	.33	.31	.22	.43	.18	.15	.85	.67	.55
24	.53	.16	.82	.32	160.84	.36	.42	.15	.13	.87	.64	.54
25	.51	.36	.79	.34	.53	.72	.21	.13	.10	.82	.60	.63
26	155.49	156.20	155.76	156.40	160.56	165.43	159.81	156.13	156.09	155.78	155.63	155.62
27	.48	155.96	.84	.41	161.02	.84	.24	.11	.07	.76	.68	.66
28	.48	.86	.93	.33	.59	166.02	158.70	.10	.07	.76	.71	.65
29	.47	.81	.90	.28	162.36	.50	.24	.09	.06	.81		.59
30	.45	.76	156.50	.20	165.05	168.07	157.91	.10	.05	.81		.58
31		.75		.13	.56		.65		.02	.79		.60
Mean	155.53	155.80	156.03	156.65	159.41	166.20	162.34	156.48	156.13	155.90	155.72	155.63
Max.	155.61	156.57	156.59	158.05	165.56	168.33	168.76	157.46	156.23	156.00	155.84	155.72
Min.	155.45	155.44	155.75	155.94	156.10	164.22	157.65	156.09	156.02	155.76	155.60	155.54

WATER YEAR 1958 : Max. 168.76 m. Min. 155.44 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.37	0.07	1.50	4.70	4.40	355	648	17	3.50	2.80	1.20	0.64
2	0.32	0.10	2.30	3.40	4.00	352	624	15	3.50	2.75	1.30	0.47
3	0.30	0.18	3.00	3.35	4.00	345	568	13	3.30	2.60	1.35	0.43
4	0.24	0.18	3.40	2.75	4.00	342	504	11	3.30	2.60	1.30	0.43
5	0.24	0.12	3.20	2.40	3.40	338	443	10	3.00	2.60	1.35	0.37
6	0.28	0.10	3.80	3.00	4.80	330	384	10	3.30	2.60	1.20	0.53
7	0.30	0.12	3.70	15	8.00	326	321	9.00	3.70	2.70	0.87	0.57
8	0.28	0.10	3.45	27	11	344	260	8.20	3.30	2.70	0.75	0.43
9	0.40	0.10	6.10	17	11	438	208	7.80	3.20	2.50	0.70	0.43
10	0.42	0.12	7.20	8.80	12	469	171	7.20	3.30	2.40	0.75	0.53
11	0.28	0.16	5.30	7.00	15	498	152	6.40	3.80	2.45	0.80	0.60
12	0.24	0.16	3.60	10	16	539	151	5.80	4.00	2.40	0.60	0.57
13	0.28	0.30	2.95	9.40	21	566	190	5.20	3.90	2.45	0.57	0.80
14	0.22	0.67	2.40	11	35	581	214	5.20	3.90	1.80	0.65	0.70
15	0.20	1.00	2.05	17	47	593	199	4.90	3.90	1.80	0.75	0.57
16	0.22	1.05	2.05	18	66	574	160	4.60	3.90	1.70	0.60	0.57
17	0.22	2.80	1.70	16	79	536	122	4.50	4.10	1.80	0.80	0.53
18	0.22	5.20	2.35	12	101	487	102	4.60	4.20	1.75	0.85	0.40
19	0.24	7.00	4.00	10	130	440	104	4.50	4.30	1.75	0.82	0.35
20	0.37	5.30	3.50	7.80	155	392	113	4.50	4.30	1.65	0.90	0.40
21	0.32	3.80	3.40	6.40	161	340	103	5.00	4.00	1.60	0.85	0.30
22	0.26	3.00	2.60	5.30	146	292	95	4.00	4.00	1.55	0.75	0.23
23	0.22	2.90	2.05	5.10	125	271	91	3.90	3.80	1.40	0.57	0.23
24	0.24	3.75	1.80	5.00	105	280	91	3.80	3.60	1.55	0.45	0.20
25	0.21	5.20	1.70	5.20	94	303	84	3.60	3.30	1.25	0.35	0.43
26	0.18	4.10	1.55	5.30	95	349	71	3.60	3.30	1.00	0.43	0.40
27	0.16	2.50	1.90	5.35	113	377	55	3.40	3.20	0.90	0.60	0.53
28	0.16	2.00	2.35	5.10	136	392	41	3.30	3.20	0.90	0.75	0.50
29	0.14	1.75	2.20	4.60	172	427	31	3.30	3.10	1.20		0.32
30	0.10	1.55	6.40	4.00	319	569	24	3.30	3.10	1.20		0.30
31		1.50		3.60	357		20		2.90	1.05		0.35
Total	7.65	56.88	93.50	260.55	2,554.60	12,445	6,344	195.60	111.20	59.40	22.88	14.12
Mean	0.25	1.83	3.12	8.40	82.4	415	205	6.52	3.59	1.92	0.82	0.45
Max.	0.42	7.00	7.20	27	357	593	648	17	4.30	2.80	1.35	0.80
Min.	0.10	0.07	1.50	2.40	3.40	271	20	3.30	2.90	0.90	0.35	0.20
Runoff - MCM.	0.661	4.914	8.078	22.511	220.717	1,075.248	548.122	16.900	9.608	5.132	1.977	1.220

WATER YEAR 1958 : Max. 648 Min. 0.07 Mean 64.7 Annual Runoff 1,915.089 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 1	12.00	168.84	659				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
CHEE RIVER BASIN

Nam Phong at Ubolratana Damsite, Khon Kaen (E.31)

Location: Lat 16°- 46' - 23" N, Long 102°- 37' - 58" E, on left bank 100 meters downstream from Ubolratana Damsite, Amphoe Nam Phong, Khon Kaen.

Drainage Area: 12,104 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +155.00 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No. 125

Location: On left bank near the gage site.
Elevation: +168.189 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 - 64

Rating Operation:

Period of Rating: 1957 - 64
Rated by Float: -
Rated by Current Meter: 1957 - 64

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation due to its stability.

Overbank Flow Conditions: No overbank flow.

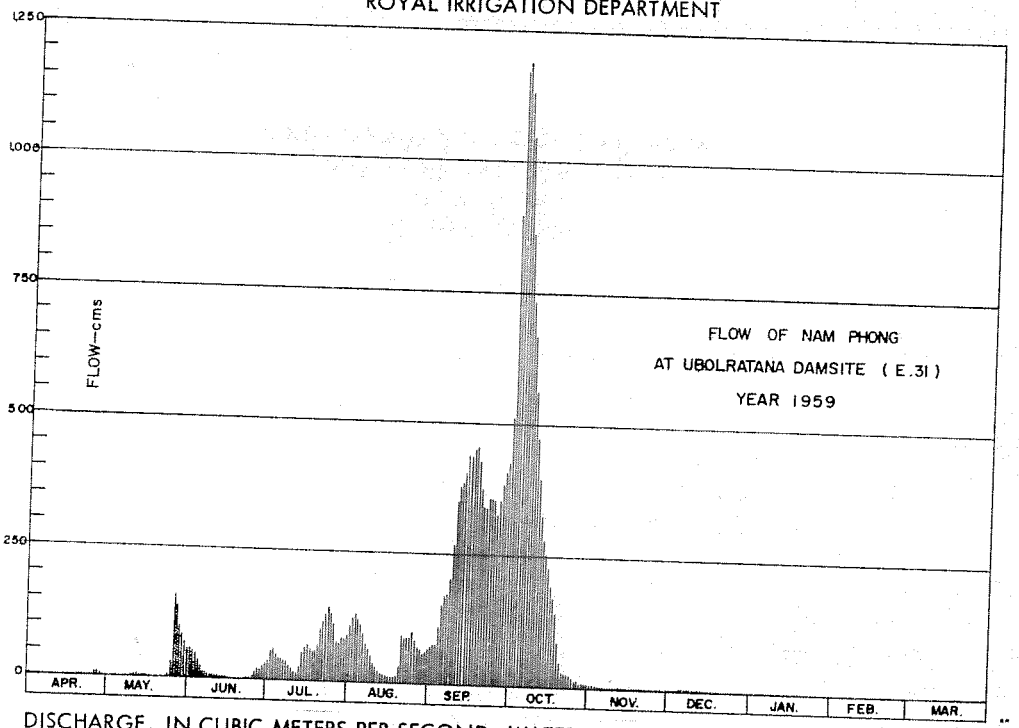
General Description: Records good. Stage - discharge relation used is defined by discharge measurements during 1959. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	155.58	155.84	159.57	158.38	160.86	159.36	169.57	156.89	156.37	156.21	156.12	156.23
2	.60	.77	.22	159.11	161.28	.47	170.67	.84	.39	.22	.15	.24
3	.57	.72	158.79	.29	.32	.48	.75	.77	.41	.19	.16	.22
4	.53	.67	.25	158.93	.14	160.30	.53	.69	.42	.17	.22	.21
5	.55	.63	157.69	.70	160.78	161.52	.18	.63	.44	.15	.21	.14
6	155.60	155.61	157.14	158.67	160.34	161.92	169.78	156.65	156.48	156.16	156.16	156.08
7	.59	.63	156.81	.61	159.89	.99	.33	.52	.52	.16	.15	.08
8	.58	.92	.62	.43	.38	162.55	168.83	.46	.57	.16	.12	.12
9	.69	.95	.53	.00	158.98	163.68	.28	.54	.58	.17	.13	.08
10	.74	156.05	.46	157.73	.58	164.91	167.66	.51	.54	.16	.11	.05
11	155.72	156.33	156.35	157.33	158.21	165.26	167.01	156.57	156.51	156.14	156.10	156.02
12	.68	.32	.27	.24	157.85	.46	166.35	.50	.49	.15	.02	.02
13	.65	.21	.22	.82	.56	.58	165.70	.47	.46	.13	.09	.05
14	.64	.14	.13	158.80	.33	.77	164.80	.47	.44	.12	.19	.02
15	.60	.10	.05	159.73	.17	166.01	163.78	.46	.43	.12	.09	.01
16	155.59	155.96	155.97	159.70	157.03	166.13	162.90	156.42	156.43	156.14	156.11	155.99
17	.58	.87	.92	.51	156.88	.16	.16	.44	.39	.14	.10	.96
18	.59	.82	.86	.37	.78	165.97	161.41	.47	.34	.17	.07	.94
19	.55	.79	.82	.39	157.02	.42	160.16	.46	.30	.17	.07	.94
20	.52	.82	.78	.81	.69	.10	159.13	.43	.27	.15	.06	.97
21	155.54	155.81	155.77	160.54	159.81	164.98	158.61	156.40	156.24	156.13	156.07	155.93
22	.52	.80	.79	.95	.89	165.18	.38	.37	.22	.12	.08	.99
23	.57	.86	.81	161.13	.89	.14	.12	.35	.20	.10	.14	156.08
24	.56	156.42	.91	.38	160.24	164.93	157.92	.38	.19	.09	.15	.05
25	.56	158.01	156.26	.15	.08	.80	.73	.37	.16	.06	.32	.02
26	156.43	161.92	157.20	160.69	159.74	164.90	157.55	156.43	156.16	156.03	156.29	156.01
27	.55	.94	.58	.31	.47	165.17	.40	.39	.16	.01	.22	155.99
28	.19	160.94	.47	.02	.31	.51	.26	.34	.19	155.99	.22	.95
29	155.97	.19	.91	.02	158.99	.83	.13	.32	.20	.97	.19	.96
30	.87	159.74	158.27	.16	159.03	166.53	.10	.34	.23	.97		.95
31		.64		.47	.23		156.93		.23	.96		.94
Mean	155.70	156.92	156.85	159.40	159.09	164.17	163.33	156.50	156.35	156.12	156.14	156.04
Max.	156.55	161.94	159.57	161.38	161.32	166.53	170.75	156.89	156.58	156.22	156.32	156.24
Min.	155.52	155.61	155.77	157.24	156.78	159.36	156.93	156.32	156.16	155.96	158.02	155.93

WATER YEAR 1959 : Max. 170.75 m. Min. 155.52 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.35	1.74	59	39	109	71	897	6.33	2.07	1.20	0.66	1.20
2	0.30	1.02	54	56	124	76	1,167	5.77	2.21	1.25	0.60	1.25
3	0.33	0.85	46	62	133	75	1,188	4.91	2.35	1.10	0.66	1.30
4	0.15	0.62	37	50	124	110	1,132	4.00	2.42	1.00	1.00	1.25
5	0.35	0.48	24	43	112	151	1,045	3.40	2.56	0.90	1.05	0.85
6	0.53	0.35	14	40	94	169	860	3.40	2.84	0.95	1.00	0.85
7	0.39	0.44	12	39	76	173	732	3.00	3.16	0.95	0.85	1.15
8	0.39	1.81	9.17	36	65	203	666	2.14	3.56	0.95	0.75	1.10
9	0.66	2.07	7.75	28	53	268	562	3.08	3.64	1.00	0.80	0.66
10	1.02	2.28	7.17	23	37	350	474	2.49	3.32	0.95	0.75	0.50
11	0.85	5.83	5.94	17	33	377	396	3.16	3.08	0.85	0.66	0.42
12	0.66	5.61	5.30	16	24	395	326	3.08	2.92	0.90	0.42	0.53
13	0.62	4.39	4.13	28	20	405	279	2.77	2.70	0.80	0.85	0.63
14	0.53	3.95	3.51	55	18	437	251	2.77	2.56	0.75	0.95	0.33
15	0.35	3.33	2.88	66	17	441	227	2.70	2.49	0.75	0.90	0.25
16	0.27	2.00	2.35	71	14	451	192	2.42	2.49	0.85	0.90	0.22
17	0.35	1.61	1.87	64	14	455	169	2.56	2.21	0.85	0.85	0.16
18	0.39	1.41	1.54	57	13	427	140	2.77	1.88	1.00	0.53	0.14
19	0.21	1.29	1.24	58	19	374	85	2.70	1.65	1.00	0.53	0.14
20	0.15	1.41	1.13	75	33	342	47	2.49	1.50	.90	0.53	0.22
21	0.21	1.35	1.02	102	92	336	29	2.28	1.35	0.80	0.66	0.14
22	0.18	1.24	1.13	118	86	356	28	2.07	1.25	0.75	0.63	0.30
23	0.24	1.02	1.35	130	90	358	26	1.94	1.15	0.66	0.53	0.60
24	0.18	6.83	2.42	142	87	354	23	2.14	1.10	0.63	0.46	0.50
25	0.27	30	4.80	131	98	325	19	2.07	0.95	0.53	1.50	0.39
26	7.06	160	15	112	83	355	13	2.49	0.95	0.42	1.40	0.36
27	8.32	138	22	78	71	384	14	2.21	0.95	0.86	1.05	0.30
28	4.48	96	20	75	66	406	9.48	1.88	1.10	0.30	1.10	0.20
29	2.56	83	28	84	58	427	9.00	1.76	1.15	0.25	0.95	0.22
30	1.81	70	33	83	61	514	7.88	1.88	1.30	0.25		0.20
31		57		95	67		6.90		1.30	0.22		0.18
Total	34.16	686.93	428.70	2,073	1,991	9,565	11,020.26	86.66	64.16	24.07	23.52	16.54
Mean	1.14	22.21	14.3	66.8	64.2	319	355	2.89	2.07	0.77	0.81	0.53
Max.	8.32	160	59	142	133	514	1,188	6.33	3.64	1.25	1.50	1.30
Min.	0.15	0.35	1.02	16	13	71	6.90	1.76	0.95	0.22	0.42	0.14
Runoff - mcm.	2.951	59.351	37.040	179.107	172.028	826.416	952.150	7.487	5.543	2.080	2.032	1.429

WATER YEAR 1959 : Max. 1,188 Min. 0.15 Mean 71.1 Annual Runoff 2,247.610 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 3	01.00	170.79	1,200				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
MUNE RIVER BASIN

Mune River at Railway Bridge, Nakhon Ratchasima (M.2)

Location: Lat 15°- 00' - 03" N, Long 102°- 15' - 57" E, on right bank 100 meters west of Ban Tha Chang School and 30 meters south of railway pumping station, Amphoe Chakkarat, Nakhon Ratchasima.

Drainage Area: 4,800 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +158.50 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No. 1004

Location: 10 meters from right bank along the gage line.
Elevation: +165.140 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: 1950 to date.

Rating Operation:

Period of Rating: 1960
Rated by Float: -
Rated by Current Meter: 1960

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: -

General Description: Records good. The data presented is made by discharge measurements during 1960. No upstream diversions for irrigation except some of tank irrigation.

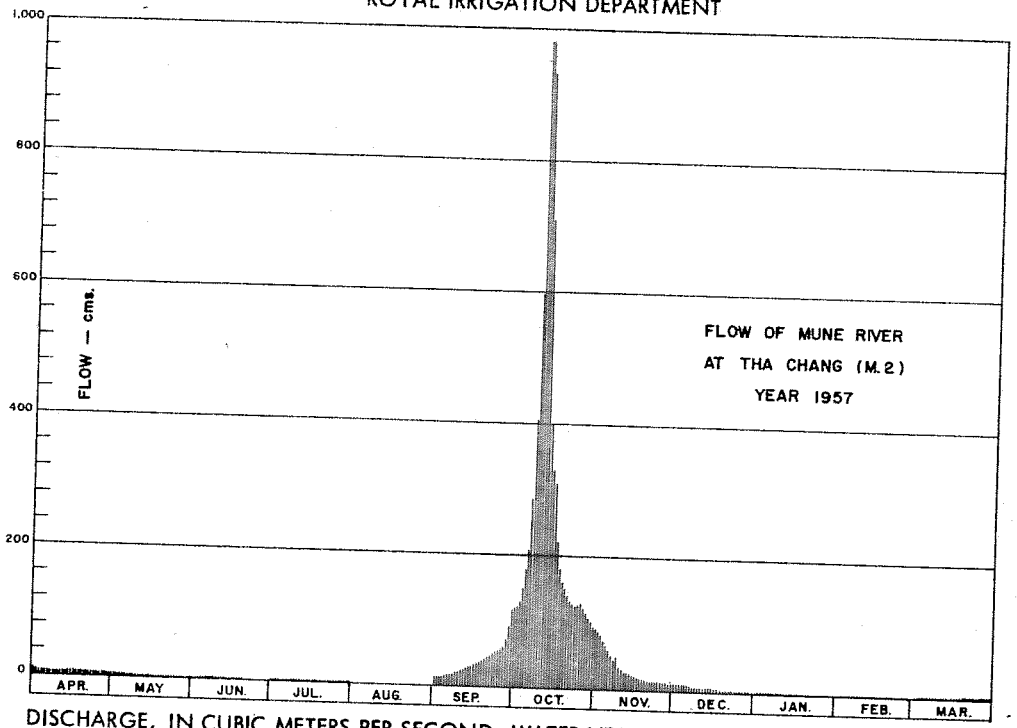
Remarks: No gage height record for periods Jun. 22 - 30 and Aug. 1 - 31.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	160.92	159.96	159.02	159.17		161.68	165.30	164.91	161.49	160.12	159.66	159.39
2	.43	.90	.04	.45		.72	.34	.84	.45	.09	.65	.39
3	.30	.85	.07	.56		.76	.41	.67	.40	.08	.63	.38
4	.23	.81	.11	.50		.89	.55	.49	.35	.09	.62	.38
5	.17	.74	.16	.44		162.07	.68	.37	.29	.06	.60	.37
6	160.09	159.68	159.20	159.43		162.13	165.87	164.15	161.23	160.05	159.59	159.37
7	.03	.61	.22	.46		.18	166.02	163.83	.20	.04	.57	.37
8	.00	.53	.23	.47		.27	.29	.65	.16	.04	.55	.36
9	159.98	.45	.21	.48		.35	.50	.46	.11	.02	.53	.36
10	.96	.39	.20	.51		.48	.95	.27	.07	.01	.53	.36
11	159.95	159.35	159.20	159.55		162.65	166.95	162.94	161.01	160.00	159.51	159.36
12	.96	.30	.24	.59		.72	.90	.79	160.95	159.99	.51	.35
13	.97	.28	.25	.60		.85	.48	.72	.89	.98	.50	.35
14	160.04	.26	.19	.56		.97	.27	.69	.83	.97	.49	.35
15	.06	.24	.16	.53		163.10	.14	.53	.78	.96	.49	.36
16	160.15	159.22	159.14	159.52		163.22	166.04	162.46	160.73	159.94	159.47	159.36
17	.32	.20	.12	.55		.30	165.87	.28	.68	.92	.46	.37
18	.37	.18	.11	.60		.41	.68	.16	.62	.90	.44	.37
19	.33	.17	.10	.63		.52	.61	.06	.58	.89	.43	.37
20	.26	.17	.09	.65		.61	.54	161.99	.53	.87	.43	.38
21	160.21	159.15	159.06	159.66		163.65	165.49	161.90	160.49	159.85	159.42	159.38
22	.17	.13		.66		.74	.41	.84	.44	.84	.42	.39
23	.13	.10		.67		.86	.37	.79	.42	.82	.42	.39
24	.11	.09		.72		.96	.35	.72	.38	.81	.41	.39
25	.11	.08		.80		164.01	.38	161.69	.34	.79	.41	.40
26	160.09	159.08		159.84		164.08	165.39	161.65	160.29	159.77	159.40	159.40
27	.06	.07		.91		.15	.34	.62	.25	.74	.40	.41
28	.03	.06		.98		.46	.26	.59	.22	.73	.40	.41
29	.02	.05		160.01		165.00	.16	.57	.20	.71		.41
30	.00	.04		.04		.30	.07	.54	.18	.69		.48
31		.03		.06			164.99		.15	.68		.48
Mean	160.15	159.33		159.63		163.14	165.76	162.77	160.71	159.92	159.50	159.38
Max.	160.92	159.96		160.06		165.30	166.95	164.91	161.49	160.12	159.66	159.48
Min.	159.95	159.03		159.17		161.68	164.99	161.54	160.15	159.68	159.40	159.35

WATER YEAR 1957 : Max. 166.95 m. Min. 159.03 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	6.16	1.46	0.04	0.11		13	119	92	11	2.07	0.77	0.35
2	3.34	1.37	0.04	0.42		13	123	88	10	1.97	0.75	0.35
3	2.77	1.23	0.06	0.57		14	131	80	10	1.94	0.70	0.33
4	2.48	1.11	0.07	0.47		15	151	73	9.50	1.97	0.68	0.33
5	2.25	0.94	0.11	0.40		17	178	68	8.92	1.87	0.64	0.32
6	1.97	0.81	0.13	0.37		17	233	60	8.44	1.84	0.62	0.32
7	1.78	0.66	0.15	0.43		18	287	50	8.20	1.81	0.59	0.32
8	1.68	0.52	0.16	0.44		19	402	45	7.96	1.81	0.55	0.30
9	1.52	0.42	0.14	0.45		20	540	49	7.66	1.74	0.52	0.30
10	1.46	0.35	0.13	0.49		22	980	35	7.36	1.71	0.52	0.30
11	1.43	0.29	0.13	0.55		25	980	29	6.88	1.68	0.49	0.30
12	1.46	0.22	0.17	0.62		26	920	27	6.40	1.55	0.49	0.29
13	1.49	0.20	0.18	0.64		28	526	26	5.93	1.52	0.47	0.29
14	1.81	0.18	0.12	0.57		30	392	25	5.52	1.49	0.46	0.29
15	1.87	0.17	0.11	0.52		32	332	23	5.19	1.46	0.46	0.30
16	2.18	0.15	0.09	0.50		34	294	21	4.90	1.39	0.44	0.30
17	2.86	0.13	0.08	0.55		36	233	19	4.62	1.43	0.43	0.32
18	3.07	0.18	0.07	0.64		38	178	18	4.31	1.37	0.40	0.32
19	2.90	0.11	0.07	0.70		41	162	17	3.80	1.34	0.39	0.32
20	2.60	0.11	0.06	0.75		43	150	16	3.84	1.28	0.39	0.33
21	2.39	0.09	0.05	0.07		45	142	15	3.63	1.23	0.38	0.33
22	2.25	0.09		0.77		47	131	14	3.39	1.20	0.38	0.35
23	2.11	0.07		0.79		50	127	14	3.30	1.14	0.38	0.35
24	2.04	0.06		0.90		53	124	13	3.11	1.11	0.37	0.35
25	2.04	0.06		1.08		55	128	13	2.94	1.05	0.37	0.36
26	1.97	0.06		1.20		57	129	12	2.73	1.00	0.36	0.36
27	1.87	0.06		1.40		60	123	12	2.56	0.94	0.36	0.37
28	1.78	0.05		1.52		71	115	12	2.43	0.92	0.36	0.37
29	1.74	0.05		1.71		97	107	12	2.35	0.87		0.37
30	1.68	0.04		1.81		119	101	11	2.28	0.83		0.45
31		0.04		1.87			96		2.18	0.81		0.45
Total	66.95	11.28		24.01		1,155	8,634	975	171.33	44.34	13.72	10.39
Mean	2.23	0.36		0.77		38.5	278	32.5	5.53	1.40	0.49	0.33
Max.	6.16	1.46		1.87		119	980	92	11	2.07	0.77	0.45
Min.	1.43	0.04		0.11		13	96	11	2.18	0.81	0.36	0.29
Runoff - MCM.	5.784	0.974		2.074		99.792	745.978	84.240	14.803	3.831	1.185	0.898

WATER YEAR 1957 : Max. 980 Min. 0.04 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 10	18.00	166.95	980				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MUNE RIVER BASIN

Mune River at Railway Bridge, Nakhon Ratchasima (M.2)

Location: Lat 15°- 00' - 03" N, Long 102°- 15' - 57" E, on right bank 100 meters west of Ban Tha Chang School and 30 meters south of railway pumping station, Amphoe Chakkarat, Nakhon Ratchasima.

Drainage Area: 4,800 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +158.50 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.1004

Location: 10 meters from right bank along the gage line.
Elevation: +165.140 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: 1950 to date.

Rating Operation:

Period of Rating: 1960
Rated by Float: -
Rated by Current Meter: 1960

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for year without actual ratings.

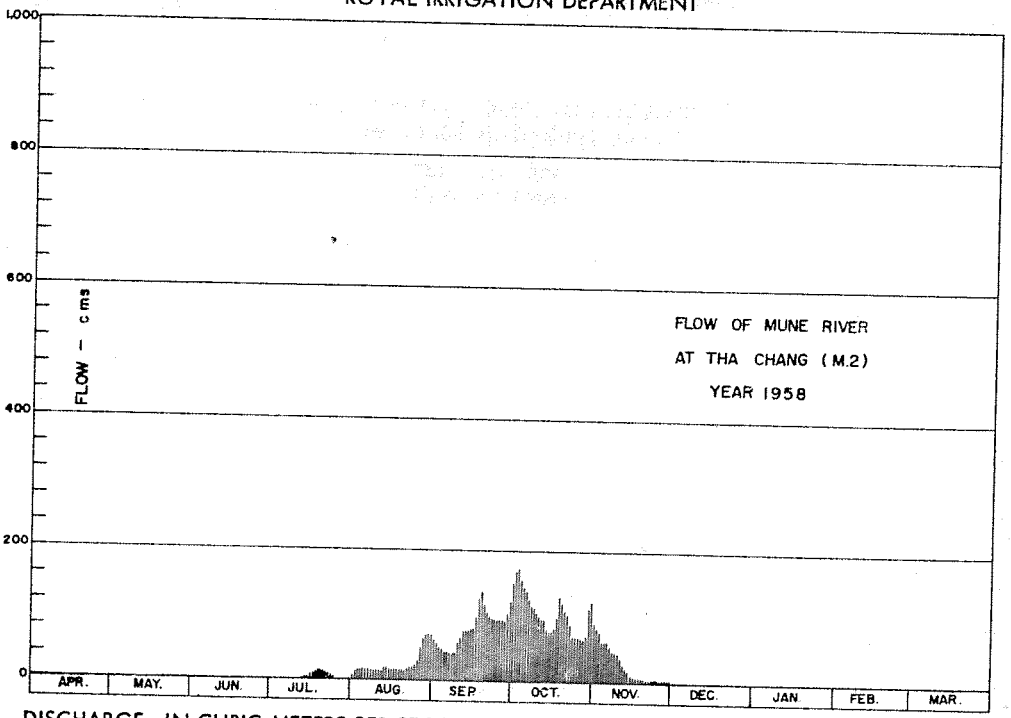
Overbank Flow Conditions: -

General Description: Records good. The data presented is made by discharge measurements during 1960. No upstream diversions for irrigation except some of tank irrigation.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	159.46	159.30	159.05	158.93	161.54	164.27	165.54	164.92	160.59	159.83	159.56	159.45
2	.45	.30	.04	.92	162.00	.13	.65	.78	.56	.82	.56	.44
3	.45	.30	.04	.92	.16	163.95	.67	.66	.53	.82	.55	.44
4	.45	.29	.03	.92	.22	.81	.59	.30	.49	.81	.55	.43
5	.44	.29	.02	.91	.28	.75	.51	.28	.46	.79	.54	.43
6	159.43	159.29	159.01	158.91	162.33	163.71	165.47	164.25	160.41	159.79	159.54	159.43
7	.43	.28	.00	.91	.23	.64	.39	.06	.39	.77	.53	.42
8	.43	.28	.00	.90	.14	.59	.28	163.81	.38	.77	.53	.42
9	.42	.27	158.99	.90	.10	.67	.23	.72	.36	.76	.52	.42
10	.42	.27	.99	.90	.16	164.19	.14	.65	.33	.75	.52	.41
11	159.42	159.26	158.99	159.50	162.15	164.41	165.07	163.42	160.31	159.74	159.50	159.41
12	.41	.26	159.00	160.07	.12	.59	.01	162.93	.27	.73	.51	.41
13	.41	.26	.01	.79	.35	.64	164.97	.62	.25	.72	.51	.40
14	.41	.25	.01	.92	.44	.66	.68	.27	.22	.71	.50	.40
15	.40	.25	.00	.96	.38	.69	.59	161.64	.19	.70	.50	.40
16	159.40	159.25	159.00	161.64	162.30	164.77	164.66	161.49	160.18	159.69	159.49	159.39
17	.39	.25	.01	.95	.23	165.00	.76	.39	.15	.68	.49	.39
18	.38	.23	.00	162.07	.25	.41	165.02	.29	.13	.68	.49	.39
19	.39	.23	.00	.10	.22	.47	.40	.17	.10	.67	.48	.38
20	.39	.22	158.99	161.98	.19	.29	.33	.07	.07	.65	.48	.38
21	159.38	159.22	158.99	161.84	162.22	165.18	165.19	161.02	160.04	159.64	159.48	159.37
22	.37	.21	.99	.70	.41	.07	.13	160.98	.02	.64	.48	.37
23	.36	.20	.98	.62	.49	.02	164.85	.93	160.00	.63	.48	.36
24	.35	.19	.97	.32	.55	.00	.44	.91	159.98	.62	.47	.36
25	.34	.18	.97	160.54	.79	164.98	.41	.83	.97	.61	.47	.35
26	159.34	159.16	158.96	160.27	163.17	164.97	164.39	160.77	159.93	159.60	159.46	159.35
27	.33	.14	.96	159.56	164.13	.97	.37	.73	.90	.60	.46	.34
28	.33	.11	.95	.50	.38	.91	.36	.70	.89	.59	.45	.34
29	.32	.09	.95	.48	.47	165.16	.47	.67	.88	.59		.33
30	.31	.07	.94	160.20	.49	.33	165.26	.64	.86	.58		.33
31		.05		161.10	.50		.34		.84	.58		.32
Mean	159.39	159.22	158.99	160.26	162.62	164.61	165.04	162.33	160.18	159.69	159.52	159.39
Max.	159.46	159.30	159.05	162.10	164.50	165.47	165.67	164.92	160.59	159.83	159.56	159.45
Min.	159.31	159.05	158.94	158.90	161.54	163.59	164.36	160.64	159.84	159.58	159.45	159.32

WATER YEAR 1958 : Max. 165.67 m. Min. 158.90 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.43	0.22	0.05		11	64	150	92	3.85	1.17	0.57	0.42
2	0.42	0.22	0.04		16	59	171	85	3.69	1.14	0.57	0.40
3	0.42	0.22	0.04		18	53	175	79	3.84	1.14	0.56	0.40
4	0.42	0.21	0.04		18	49	158	65	3.63	1.11	0.56	0.39
5	0.40	0.21	0.03		19	47	145	64	3.49	1.05	0.54	0.39
6	0.39	0.21	0.03		19	46	139	63	3.25	1.05	0.54	0.39
7	0.39	0.20	0.03		18	44	129	57	3.16	1.00	0.52	0.38
8	0.39	0.20	0.03		17	43	117	49	3.11	1.00	0.52	0.38
9	0.38	0.19	0.02		17	45	113	46	3.03	0.99	0.50	0.38
10	0.38	0.19	0.02		18	61	106	45	2.90	0.97	0.50	0.37
11	0.38	0.18	0.02	0.47	17	69	101	38	2.81	0.94	0.50	0.37
12	0.37	0.18	0.03	1.90	17	77	98	29	2.64	0.92	0.49	0.37
13	0.37	0.18	0.03	5.25	20	79	95	24	2.56	0.90	0.49	0.36
14	0.37	0.18	0.03	6.16	21	79	80	19	0.43	0.87	0.47	0.36
15	0.36	0.18	0.03	6.48	20	81	77	12	2.32	0.85	0.47	0.36
16	0.36	0.18	0.03	12	19	84	79	11	2.28	0.83	0.46	0.35
17	0.35	0.18	0.03	15	18	97	84	9.90	2.18	0.81	0.46	0.35
18	0.33	0.16	0.03	17	18	131	98	8.92	2.11	0.81	0.46	0.35
19	0.35	0.16	0.03	17	18	139	130	8.02	2.00	0.79	0.45	0.33
20	0.35	0.15	0.02	16	18	118	122	7.36	1.90	0.75	0.45	0.33
21	0.33	0.15	0.02	14	18	108	109	6.96	1.81	0.72	0.45	0.32
22	0.32	0.14	0.02	13	21	101	105	6.64	1.74	0.72	0.45	0.32
23	0.30	0.13	0.02	12	22	98	88	6.24	1.68	0.70	0.45	0.30
24	0.29	0.12	0.01	9.20	23	97	71	6.08	1.52	0.68	0.44	0.30
25	0.28	0.11	0.01	3.59	27	96	69	5.52	1.49	0.66	0.44	0.29
26	0.28	0.11	0.01	2.64	33	95	69	5.13	1.48	0.64	0.43	0.29
27	0.26	0.09	0.01	0.57	59	95	68	4.91	1.37	0.64	0.43	0.28
28	0.26	0.07	0.01	0.47	68	92	67	4.73	1.34	0.62	0.42	0.28
29	0.25	0.06	0.01	0.45	72	107	72	4.57	1.31	0.62		0.26
30	0.23	0.05	0.00	2.35	73	122	115	4.41	1.25	0.61		0.26
31		0.05		2.00	73		123		1.20	0.61		0.25
Total	10.41	4.88	0.75	157.53	846	2,476	3,323	867.39	73.35	26.31	13.59	10.58
Mean	0.35	0.16	0.02	5.08	27.3	82.5	107	28.9	2.37	0.85	0.48	0.34
Max.	0.43	0.22	0.05	17	73	139	175	92	3.85	1.17	0.57	0.42
Min.	0.23	0.05	0.00	0.00	11	43	67	4.41	1.20	0.61	0.42	0.25
Runoff - MCM.	0.899	0.422	0.065	13.610	73.094	213.926	287.107	74.942	6.337	2.273	1.174	0.914

WATER YEAR 1958 : Max. 175 Min. 0.00 Mean 21.4 Annual Runoff 674.766 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 2	18.00	165.70	182				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
MUNE RIVER BASIN

Mune River at Railway Bridge, Nakhon Ratchasima (M.2)

Location: Lat 15°- 00' - 03" N, Long 102°- 15' - 57" E, on right bank 100 meters west of Ban Tha Chang School and 30 meters south of railway pumping station, Amphoe Chakkarat, Nakhon Ratchasima.

Drainage Area: 4,800 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +158.50 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D. No.1004

Location: 10 meters from right bank along the gage line.
Elevation: +165.140 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: 1950 to date.

Rating Operation:

Period of Rating: 1960
Rated by Float: -
Rated by Current Meter: 1960

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: -

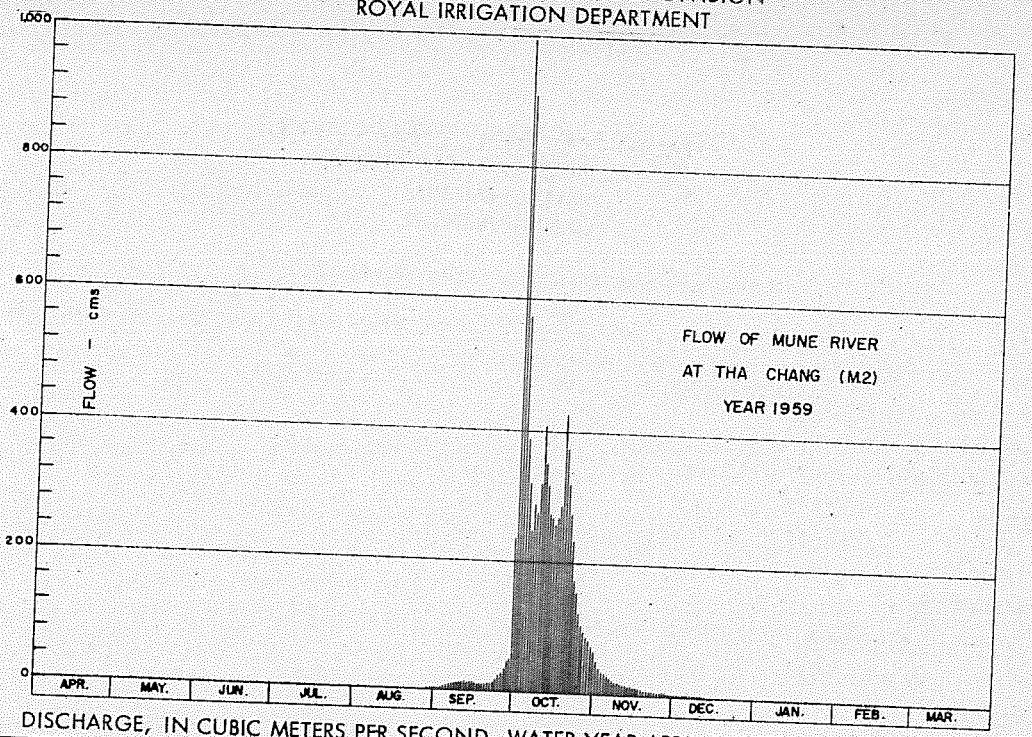
General Description: Records good. The data presented is made by discharge measurements during 1960. No upstream diversions for irrigation except some of tank irrigation.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	159.31	159.51	159.26	159.41	159.25	160.78	166.96	163.93	160.77	160.10	159.67	159.50
2	.31	.50	.25	.40	.25	.87	.89	.61	.76	.09	.65	.50
3	.30	.49	.24	.39	.24	161.01	.54	.32	.75	.08	.64	.49
4	.30	.47	.23	.38	.24	.13	.26	.14	.73	.07	.62	.49
5	.30	.46	.23	.36	.23	.19	.11	.07	.72	.06	.61	.48
6	159.31	159.45	159.22	159.34	159.23	161.53	165.91	162.85	160.71	160.05	159.59	159.48
7	.32	.45	.22	.31	.22	.64	166.02	.63	.70	.04	.58	.48
8	.32	.44	.21	.29	.22	.72	165.99	.49	.69	.03	.57	.47
9	.33	.42	.21	.27	.21	.80	166.11	.40	.66	.03	.57	.47
10	.33	.41	.20	.26	.21	.86	.30	.19	.64	.01	.57	.47
11	159.33	159.40	159.20	159.26	159.20	161.90	166.18	162.08	160.59	159.99	159.56	159.46
12	.34	.37	.19	.25	.20	.89	.10	.01	.54	.98	.56	.46
13	.36	.34	.19	.25	.27	.85	165.99	161.94	.50	.96	.56	.45
14	.39	.33	.19	.26	.54	.81	.97	.86	.48	.95	.55	.45
15	.44	.32	.18	.28	.92	.77	.94	.80	.44	.94	.55	.45
16	159.47	159.32	159.18	159.28	160.03	161.72	165.97	161.70	160.40	159.92	159.54	159.44
17	.50	.31	.18	.28	.08	.70	166.02	.58	.38	.91	.54	.44
18	.53	.31	.17	.29	.13	.68	.33	.48	.35	.89	.53	.43
19	.55	.30	.17	.29	.23	.66	.23	.39	.31	.87	.53	.43
20	.57	.30	.16	.30	.28	.64	.11	.33	.29	.86	.53	.43
21	159.58	159.29	159.16	159.31	160.30	161.76	165.99	161.29	160.27	159.85	159.52	159.42
22	.59	.29	.16	.31	.31	.90	.87	.18	.25	.84	.52	.42
23	.59	.29	.15	.32	.32	162.20	.67	.09	.23	.83	.52	.41
24	.60	.28	.15	.32	.33	.46	.55	.04	.22	.81	.52	.41
25	.61	.28	.15	.31	.34	.78	.35	161.00	.20	.79	.51	.40
26	159.62	159.28	159.15	159.31	160.34	163.02	165.16	160.95	160.18	159.77	159.51	159.40
27	.62	.27	.19	.30	.35	.37	164.98	.90	.17	.75	.51	.40
28	.61	.27	.23	.30	.36	.82	.88	.87	.15	.73	.51	.37
29	.59	.26	.26	.29	.42	164.48	.77	.84	.14	.71	.51	.39
30	.56	.26	.37	.28	.53	165.88	.53	.80	.12	.69		.39
31		.26		.26	.68		.30		.11	.68		.38
Mean	159.45	159.35	159.20	159.30	159.82	162.09	165.84	161.89	160.43	159.91	156.56	159.44
Max.	159.62	159.51	159.37	159.41	160.68	165.88	166.96	163.93	160.77	160.10	159.67	159.50
Min.	159.30	159.26	159.15	159.26	159.20	160.78	164.30	160.80	160.11	159.68	159.51	159.37

WATER YEAR 1959 : Max. 166.96 m. Min. 159.15 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.23	0.49	0.18	0.37	0.18	5.19	992	52	5.13	2.00	0.79	0.47
2	0.23	0.47	0.18	0.36	0.18	5.80	908	43	5.07	1.97	0.75	0.47
3	0.22	0.46	0.17	0.35	0.17	6.88	572	36	5.03	1.94	0.72	0.46
4	0.22	0.44	0.16	0.33	0.17	7.78	387	33	4.91	1.94	0.68	0.46
5	0.22	0.43	0.16	0.30	0.16	8.14	320	31	4.85	1.87	0.66	0.45
6	0.23	0.42	0.15	0.28	0.16	11	246	28	4.80	1.84	0.62	0.45
7	0.25	0.42	0.15	0.23	0.15	12	287	24	4.73	1.81	0.61	0.45
8	0.25	0.40	0.14	0.21	0.15	13	275	22	4.67	1.78	0.59	0.44
9	0.26	0.38	0.14	0.19	0.14	14	320	21	4.52	1.78	0.59	0.44
10	0.26	0.37	0.13	0.18	0.14	15	407	18	4.41	1.71	0.59	0.44
11	0.26	0.36	0.13	0.18	0.13	15	349	17	3.85	1.55	0.57	0.43
12	0.28	0.32	0.12	0.18	0.13	15	316	16	3.88	1.52	0.57	0.43
13	0.30	0.28	0.12	0.18	0.19	14	275	15	3.68	1.56	0.57	0.42
14	0.35	0.26	0.12	0.18	0.54	14	268	15	3.58	1.53	0.56	0.42
15	0.40	0.25	0.12	0.20	1.43	14	257	14	3.39	1.49	0.56	0.42
16	0.44	0.25	0.12	0.20	1.78	13	268	13	3.20	1.43	0.54	0.40
17	0.47	0.23	0.12	0.20	1.94	13	287	12	3.11	1.40	0.54	0.40
18	0.52	0.23	0.11	0.21	2.11	13	426	11	2.99	1.34	0.52	0.39
19	0.55	0.22	0.11	0.21	2.48	13	372	9.90	2.81	1.28	0.52	0.39
20	0.59	0.22	0.11	0.22	2.69	12	320	9.30	2.73	1.25	0.52	0.39
21	0.61	0.21	0.11	0.23	2.77	14	275	8.92	2.64	1.23	0.50	0.38
22	0.62	0.21	0.11	0.23	2.81	15	233	8.08	2.56	1.20	0.50	0.38
23	0.62	0.21	0.10	0.25	2.86	18	175	7.52	2.48	1.17	0.50	0.37
24	0.64	0.20	0.10	0.25	2.90	21	151	7.12	2.43	1.11	0.50	0.37
25	0.66	0.20	0.10	0.23	2.94	27	124	6.80	2.35	1.05	0.49	0.36
26	0.68	0.28	0.10	0.23	2.94	30	107	8.40	2.28	1.00	0.49	0.36
27	0.68	0.19	0.12	0.22	2.99	37	96	6.00	2.25	0.97	0.49	0.36
28	0.66	0.19	0.16	0.22	3.03	49	90	5.80	2.18	0.92	0.49	0.32
29	0.62	0.18	0.18	0.21	3.30	72	84	5.59	2.14	0.87	0.49	0.35
30	0.57	0.18	0.32	0.20	3.84	236	74	5.32	2.07	0.83		0.35
31		0.18		0.18	4.62		65		2.03	0.81		0.35
Total	12.89	9.13	4.14	7.21	60.02	753.79	9,326	507.75	106.75	44.15	16.52	12.58
Mean	0.43	0.29	0.14	0.23	1.61	25.1	301	16.9	3.44	1.42	0.57	0.40
Max.	0.68	0.49	0.32	0.37	4.62	236	992	52	5.13	2.00	0.79	0.47
Min.	0.22	0.18	0.10	0.18	0.13	5.19	65	5.32	2.03	0.81	0.49	0.32
Runoff - mcm.	1.114	0.789	0.358	0.623	4.322	65.127	805.766	43.870	9.240	3.814	1.427	1.087

WATER YEAR 1959 : Max. 992 Min. 0.10 Mean 29.6 Annual Runoff 937.538 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 1	18.00	166.99	1,028				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
MUNE RIVER BASIN

Mune River at Seri Prachatipathai Bridge, Ubon Ratchathani (M.7)

Location: Lat 15°– 13' – 17" N, Long 104°– 15' – 39" E, on left bank at the abutment of Seri Prachathipathai Bridge, Amphoe Muang, Ubon Ratchathani.

Drainage Area: 106,673 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero gage at Bottom at: +105.00 m. (M.S.L.)

Bench Mark: B.M. – H.S. M.7

Location: On left bank near the bridge.
Elevation: +113.317 m. (M.S.L.)

Gage Reading Frequency: 2 – time daily readings at 09.00 and 15.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 2 readings.

Period of Available Gage Records: 1944 to date.

Rating Operation:

Period of Rating:
Rated by Float: –
Rated by Current Meter: 1956 – 58, 1964 to date

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

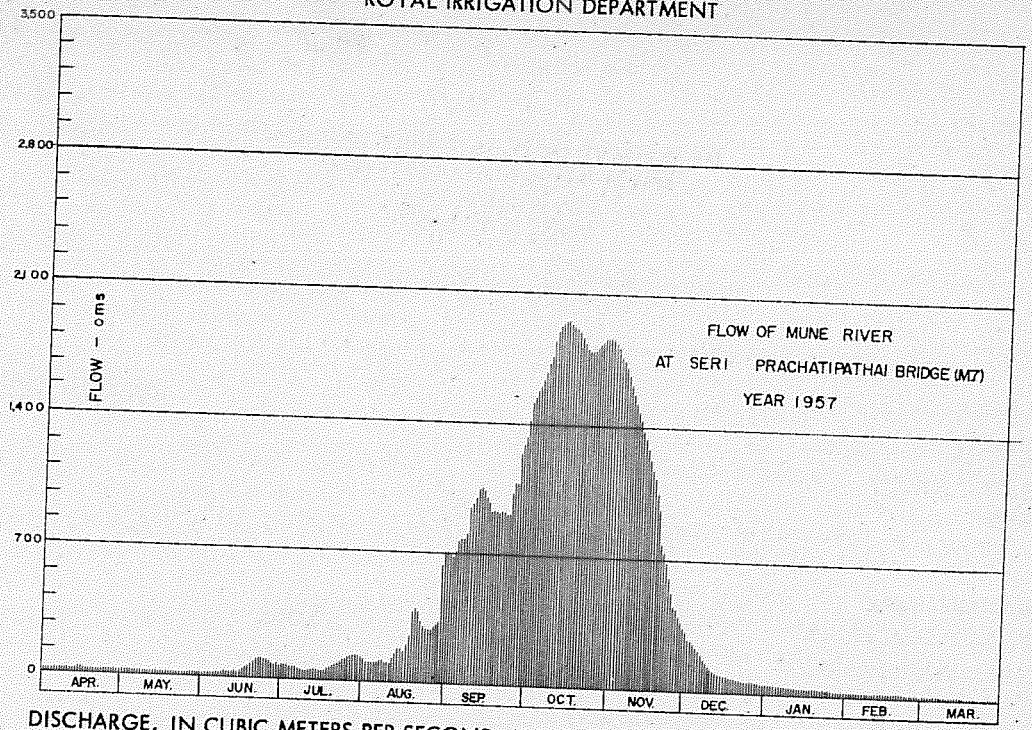
Overbank Flow Conditions: Overbank flow was observed at Elev. +111.50 m. (M.S.L.) and is included for flow computation.

General Description: Gage height record good, discharge record fair. Stage – discharge relationship used is defined by discharge measurements made for period 1958. No upstream diversions for irrigation except those for series of tank irrigation the total of 140 tanks with capacity of 420 MCM. and irrigated area of 64,200 hectares.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	106.46	106.54	106.48	106.86	107.07	108.77	110.40	111.40	107.73	106.72	106.52	106.46
2	.45	.54	.48	.84	106.97	.74	.62	.36	.68	.71	.52	.46
3	.44	.53	.50	.83	.98	.70	.71	.30	.61	.71	.52	.46
4	.44	.52	.49	.80	.97	.77	.79	.21	.56	.70	.52	.45
5	.45	.52	.50	.79	.96	.92	.87	.16	.49	.69	.52	.45
6	106.46	106.52	106.55	106.79	107.00	108.92	110.95	111.07	107.43	106.68	106.52	106.45
7	.47	.52	.53	.75	.03	.92	111.05	110.97	.36	.67	.52	.45
8	.49	.52	.54	.70	.03	109.01	.13	.87	.28	.66	.52	.44
9	.49	.50	.60	.66	.01	.32	.23	.75	.21	.65	.52	.44
10	.49	.50	.58	.67	106.96	.45	.37	.65	.14	.65	.52	.44
11	106.48	106.50	106.58	106.71	106.96	109.54	111.49	110.55	107.09	106.64	106.52	106.43
12	.50	.50	.58	.73	.14	.58	.53	.44	.04	.63	.52	.43
13	.53	.49	.63	.75	.25	.54	.56	.33	106.98	.62	.52	.43
14	.56	.49	.57	.74	.35	.45	.60	.22	.59	.62	.52	.43
15	.56	.48	.62	.73	.35	.40	.59	.10	.92	.62	.51	.42
16	106.55	106.48	106.69	106.70	107.28	109.34	111.56	109.97	106.90	106.62	106.51	106.42
17	.53	.47	.75	.73	.40	.29	.53	.85	.89	.61	.51	.42
18	.51	.47	.81	.77	.54	.29	.52	.75	.87	.61	.51	.42
19	.49	.46	.86	.81	.93	.29	.48	.57	.86	.60	.50	.42
20	.48	.46	.92	.85	.99	.27	.42	.38	.84	.59	.50	.41
21	106.48	106.45	106.97	106.89	107.95	109.29	111.35	108.94	106.83	106.59	106.49	106.41
22	.48	.45	107.00	.94	.78	.28	.28	.83	.81	.58	.49	.41
23	.49	.45	.00	.98	.70	.26	.25	.69	.80	.57	.48	.41
24	.51	.45	106.98	107.05	.67	.25	.26	.50	.78	.56	.48	.41
25	.50	.45	.97	.08	.67	.52	.28	.31	.77	.56	.47	.40
26	106.49	106.45	106.93	107.12	107.66	109.66	111.32	108.17	106.78	106.55	106.47	106.40
27	.49	.46	.88	.15	.68	.88	.36	.06	.77	.54	.46	.39
28	.50	.47	.84	.17	.94	110.01	.39	107.96	.76	.54	.46	.39
29	.51	.48	.84	.17	.99	.14	.42	.88	.75	.53		.38
30	.51	.48	.78	.16	108.59	.23	.42	.80	.73	.53		.38
31		.48		.13	.75		.41		.73	.52		.37
Mean	106.49	106.49	106.71	106.87	107.47	109.33	111.26	109.80	107.04	106.61	106.50	106.42
Max.	106.56	106.54	107.00	107.17	108.75	110.23	111.60	111.40	107.73	106.72	106.52	106.46
Min.	106.44	106.45	106.48	106.66	106.96	108.70	110.40	107.80	106.73	106.52	106.46	106.37

WATER YEAR 1957 : Max. 111.60 m. Min. 106.37 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	18	27	20	80	122	709	1,415	1,862	314	54	25	18
2	17	27	20	76	102	697	1,512	1,844	279	52	25	18
3	16	26	22	74	104	680	1,551	1,817	273	52	25	18
4	16	25	21	68	102	709	1,587	1,776	257	50	25	17
5	17	25	22	66	100	772	1,623	1,754	235	48	25	17
6	18	25	28	66	108	772	1,660	1,713	217	47	25	17
7	19	25	26	59	114	772	1,704	1,668	196	45	25	17
8	21	25	27	50	114	810	1,740	1,623	173	44	25	16
9	21	22	35	44	110	943	1,785	1,570	155	42	25	16
10	21	22	32	45	110	998	1,848	1,525	138	42	25	16
11	20	22	32	52	100	1,037	1,902	1,481	126	41	25	14
12	22	22	32	55	138	1,054	1,921	1,433	116	39	25	14
13	26	21	39	59	165	1,037	1,935	1,384	104	38	25	14
14	30	21	31	57	193	998	1,954	1,336	98	38	25	14
15	30	20	38	55	193	977	1,949	1,283	92	38	23	13
16	28	20	48	50	173	951	1,935	1,225	88	38	23	13
17	26	19	59	55	208	930	1,921	1,173	86	36	23	13
18	23	19	70	63	251	930	1,916	1,129	82	36	23	13
19	21	18	80	70	382	930	1,898	1,050	80	35	22	13
20	20	18	92	78	403	921	1,871	968	76	34	22	12
21	20	17	102	86	389	930	1,839	781	74	34	21	12
22	20	17	108	96	331	925	1,808	735	70	32	21	12
23	21	17	108	104	304	917	1,794	676	68	31	20	12
24	23	17	104	118	294	912	1,799	598	64	30	20	12
25	22	17	102	124	294	1,029	1,808	522	63	30	19	11
26	21	17	94	133	290	1,089	1,826	467	64	28	19	11
27	21	18	84	140	297	1,186	1,844	428	63	27	19	10
28	22	19	76	145	386	1,243	1,857	393	61	27	18	10
29	23	20	76	145	403	1,300	1,871	365	59	26		10
30	23	20	64	142	634	1,340	1,871	338	55	26		10
31		20		135	701		1,866		55	25		9.00
Total	646	648	1,692	2,590	7,605	28,498	55,810	34,917	3,899	1,165	642	422
Mean	21.5	20.9	56.4	83.5	245	950	1,800	1,164	126	37.5	22.9	13.6
Max.	30	27	108	145	701	1,340	1,954	1,862	314	54	25	18
Min.	16	17	20	44	100	680	1,415	338	55	25	18	9.00
Runoff - mcm.	55.814	55.987	146.189	223.776	637.072	2,462.227	4,821.984	3,016.825	336.874	100.656	55.469	36.461

WATER YEAR 1957 : Max. 1,954 Min. 9.00 Mean 379 Annual Runoff 11,969.338mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 14	06.00	111.60	1,954				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MUNE RIVER BASIN

Mune River at Seri Prachatipathai Bridge, Ubon Ratchathani (M.7)

Location: Lat 15°– 13' – 17" N, Long 104°– 15' – 39" E, on left bank at the abutment of Seri Prachathipathai Bridge, Amphoe Muang, Ubon Ratchathani.

Drainage Area: 106,673 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +105.00 m. (M.S.L.)

Bench Mark: B.M. – H.S. M.7

Location: On left bank near the bridge.

Elevation: +113.317 m. (M.S.L.)

Gage Reading Frequency: 2 – time daily readings at 09.00 and 15.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 2 readings.

Period of Available Gage Records: 1944 to date.

Rating Operation:

Period of Rating: 1956 – 58, 1964 to date.

Rated by Float: –

Rated by Current Meter: 1956 – 58, 1964 to date.

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: Overbank flow was observed at Elev. +111.50 m. (M.S.L.) and is included for flow computation.

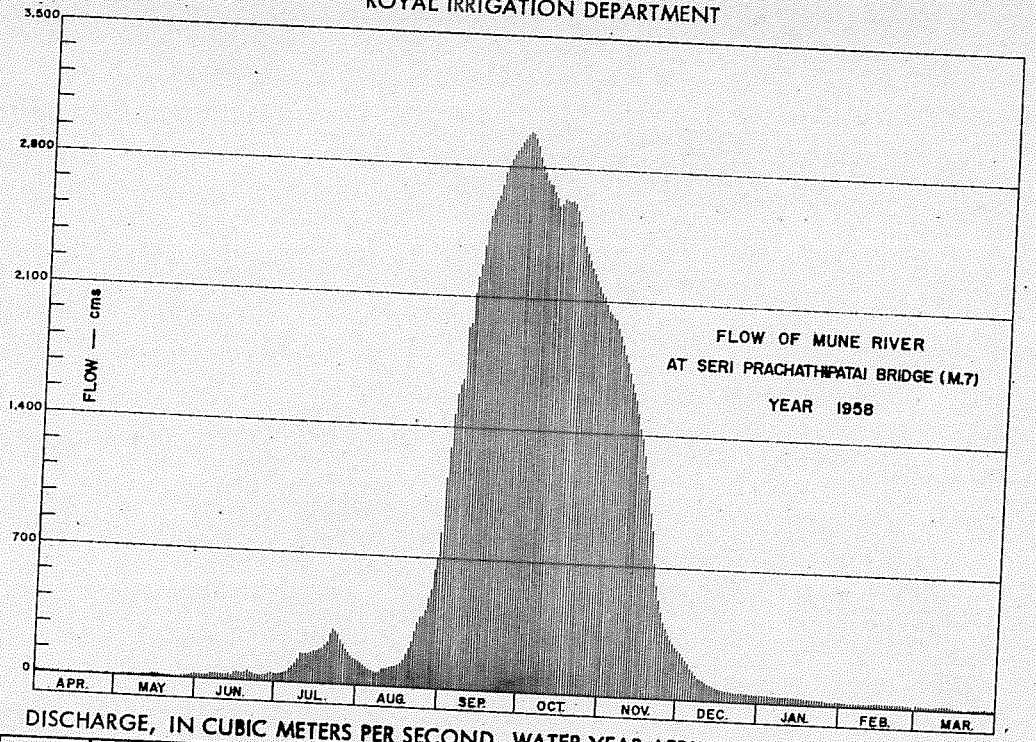
General Description: Gage height record good, discharge record fair. Stage – discharge relationship used is defined by discharge measurements made for period 1958. No upstream diversions for irrigation except those for series of tank irrigation, the total of 140 tanks with capacity of 420 MCM. and irrigated area of 64,200 hectares.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	106.37	106.32	106.46	106.68	107.13	109.61	113.15	111.72	107.54	106.65	106.52	106.46
2	.36	.31	.47	.67	.07	110.13	.11	.67	.49	.64	.52	.46
3	.35	.31	.48	.70	.02	.55	.05	.59	.43	.64	.51	.45
4	.35	.33	.50	.73	106.97	.77	.01	.51	.36	.64	.51	.44
5	.35	.34	.52	.75	.92	.87	112.95	.42	.29	.64	.51	.44
6	106.34	106.34	106.55	106.86	106.88	110.96	112.92	111.32	107.19	106.63	106.50	106.45
7	.34	.35	.57	.93	.86	111.24	.90	.22	.13	.63	.50	.45
8	.34	.36	.57	.98	.84	.60	.84	.11	.07	.62	.49	.45
9	.33	.36	.56	107.16	.85	.89	.81	110.97	.01	.62	.50	.44
10	.33	.36	.56	.22	.94	112.10	.77	.87	106.96	.61	.51	.44
11	106.32	106.35	106.54	107.22	106.94	112.29	112.81	110.72	106.92	106.61	106.51	106.45
12	.33	.36	.57	.21	.95	.43	.82	.60	.89	.60	.52	.45
13	.35	.36	.61	.21	.99	.55	.81	.46	.85	.60	.53	.44
14	.33	.38	.54	.22	107.01	.66	.81	.31	.83	.59	.54	.44
15	.33	.42	.68	.27	.02	.73	.80	.15	.82	.59	.54	.53
16	106.34	106.44	106.69	107.28	107.05	112.77	112.76	109.94	106.79	106.59	106.54	106.42
17	.34	.44	.66	.30	.10	.83	.72	.75	.77	.59	.53	.42
18	.34	.43	.65	.36	.18	.92	.65	.47	.75	.58	.52	.41
19	.33	.42	.67	.39	.29	.99	.57	.18	.75	.58	.50	.41
20	.33	.42	.72	.45	.43	113.03	.51	108.82	.74	.57	.50	.40
21	106.33	106.41	106.69	107.61	107.52	113.06	112.42	108.54	106.73	106.57	106.49	106.40
22	.33	.41	.69	.67	.72	.09	.35	.36	.72	.56	.49	.39
23	.32	.40	.60	.64	.87	.12	.28	.16	.71	.56	.49	.39
24	.32	.40	.59	.58	.92	.14	.20	.02	.70	.55	.49	.39
25	.32	.41	.58	.53	.94	.16	.13	107.91	.69	.55	.48	.39
26	106.33	106.43	106.61	107.45	108.02	113.19	112.07	107.83	106.67	106.54	106.48	106.39
27	.32	.44	.63	.36	.19	.20	.00	.76	.66	.54	.47	.39
28	.33	.43	.66	.29	.29	.22	111.94	.70	.66	.53	.47	.39
29	.32	.43	.67	.23	.48	.21	.89	.64	.65	.53		.39
30	.32	.43	.69	.18	.79	.20	.84	.59	.65	.53		.39
31		.44		.15	109.18		.78		.65	.52		.39
Mean	106.33	106.39	106.60	107.20	107.43	112.28	112.57	109.74	105.90	106.59	106.50	106.42
Max.	106.37	106.44	106.72	107.67	109.18	113.22	113.15	111.72	107.54	106.65	106.54	106.46
Min.	106.32	106.31	106.46	106.67	106.84	109.61	111.78	107.59	106.65	106.52	106.47	106.39

WATER YEAR 1958 : Max. 113.22 m. Min. 106.31 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	9.05	5.30	18	47	135	1,067	2,918	2,011	251	43	25	18
2	8.30	4.55	19	46	122	1,296	2,880	1,987	235	41	25	18
3	7.55	4.55	20	50	112	1,481	2,825	1,954	217	41	23	17
4	7.55	4.55	22	55	102	1,579	2,789	1,912	196	41	23	16
5	7.55	6.80	25	59	92	1,624	2,735	1,871	175		23	16
6	6.80	6.80	29	80	84	1,664	2,712	1,826	150	40	22	17
7	6.80	7.55	31	94	80	1,790	2,696	1,781	135	40	22	17
8	6.80	8.30	31	104	76	1,954	2,653	1,732	122	38	21	17
9	6.05	8.30	30	142	78	2,093	2,631	1,669	110	38	22	16
10	6.05	8.30	30	157	96	2,200	2,603	1,624	100	37	23	16
11	5.30	7.55	28	157	96	2,302	2,631	1,556	92	37	23	17
12	6.05	8.30	31	155	98	2,382	2,639	1,503	86	35	25	17
13	7.55	8.30	37	155	106	2,455	2,631	1,441	78	35	26	16
14	6.05	10	28	157	110	2,527	2,631	1,375	74	34	27	16
15	6.05	13	47	170	112	2,574	2,629	1,305	72	34	27	15
16	6.80	16	49	173	118	2,603	2,596	1,213	66	34	27	13
17	6.80	16	44	178	128	2,645	2,568	1,129	63	34	26	13
18	6.80	15	43	196	147	2,712	2,520	1,007	59	32	25	12
19	6.05	13	46	205	175	2,767	2,468	882	59	32	22	12
20	6.05	13	54	223	217	2,807	2,429	730	57	31	22	11
21	6.05	12	49	273	244	2,834	2,377	614	55	31	21	11
22	6.05	12	40	294	311	2,860	2,336	542	54	30	21	11
23	5.30	11	35	284	362	2,889	2,297	464	52	30	21	11
24	5.30	11	34	264	379	2,908	2,253	414	50	29	21	11
25	5.30	12	32	248	386	2,928	2,216	376	49	29	20	11
26	5.30	15	37	223	414	2,956	2,184	348	46	27	20	11
27	5.30	16	40	192	474	2,966	2,149	324	44	27	19	11
28	6.05	15	44	175	514	2,986	2,119	304	44	26	19	11
29	5.30	15	46	160	590	2,977	2,094	284	43	26		11
30	5.30	16	49	147	718	2,966	2,069	267	43	25		11
31		16		140	882		2,039		43			11
Total	191.25	336.15	1,068	5,007	7,558	71,792	77,319	34,445	2,920	1,044	641	431
Mean	6.37	10.8	35.6	161	244	2,393	2,494	1,148	94.1	33.6	22.8	13.9
Max.	9.05	16	54	294	882	2,986	2,918	2,011	251	43	27	18
Min.	5.30	4.55	18	46	76	1,067	2,039	267	43	25	19	11
Runoff - MCM.	16.524	29.043	92.275	432.605	653.011	6,202.829	6,680.189	2,976.048	252.288	90.202	55.382	37.238

WATER YEAR 1958 : Max. 2,986 Min. 4.55 Mean 555 Annual Runoff 17,518.326 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 28	06.00	113.22	2,986				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
MUNE RIVER BASIN

Mune River at Seri Prachatipathai Bridge, Ubon Ratchathani (M.7)

Location: Lat 15° – 13' – 17" N, Long 104° – 15' – 39" E, on left bank at the abutment of Seri Prachathipathai Bridge, Amphoe Muang, Ubon Ratchathani.

Drainage Area: 106,673 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +105.00 m. (M.S.L.)

Bench Mark: B.M. – H.S. M.7
- Location: On left bank near the bridge.
- Elevation: +113.317 m. (M.S.L.)

Gage Reading Frequency: 2 – time daily readings at 09.00 and 15.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 2 readings.

Period of Available Gage Records: 1944 to date.

Rating Operation:
- Period of Rating: Rated by Float: 1956 – 58, 1964 to date.
- Rated by Current Meter: 1956 – 58, 1964 to date.

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

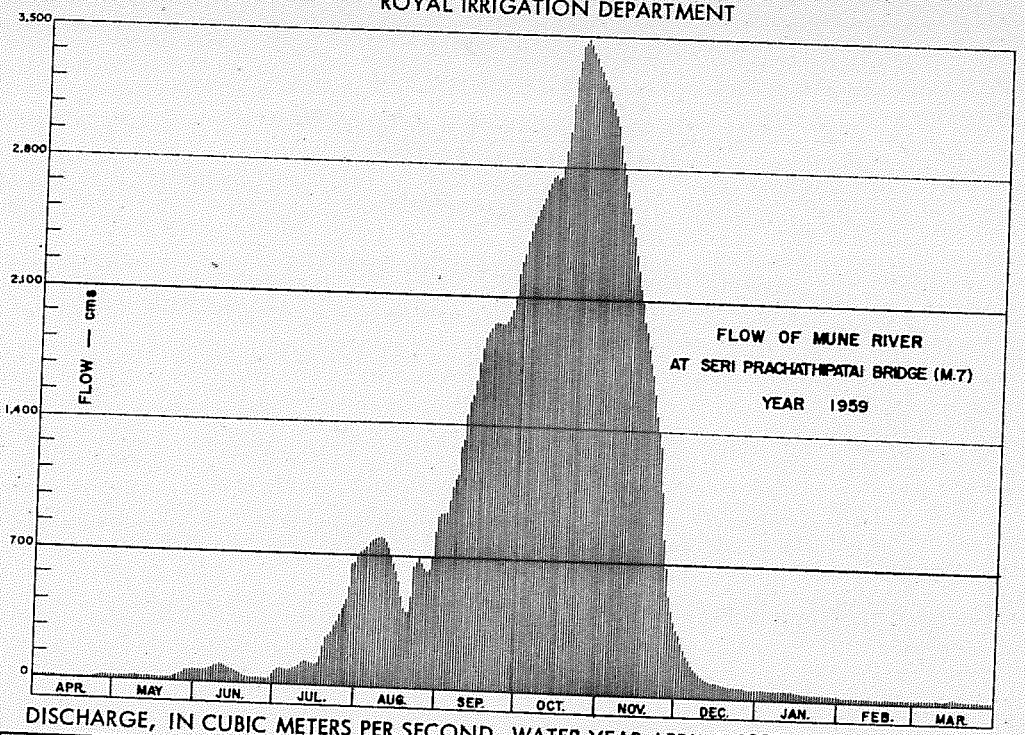
Overbank Flow Conditions: Overbank flow was observed at Elev. +111.50 m. (M.S.L.) and is included for flow computation.

General Description: Gage height record good, discharge record fair. Stage – discharge relationship used is defined by discharge measurements made for period 1958. No upstream diversions for irrigation except those for series of tank irrigation, the total of 140 tanks with capacity of 420 MCM. and irrigated area of 64,200 hectares.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	106.39	106.45	106.79	106.82	108.78	109.31	112.49	113.36	107.78	106.71	106.54	106.45
2	.38	.43	.79	.88	.80	.31	.57	.32	.67	.71	.54	.45
3	.38	.45	.80	.91	.84	.34	.63	.27	.57	.70	.54	.45
4	.38	.47	.80	.90	.89	.46	.68	.19	.46	.70	.54	.46
5	.38	.49	.82	.88	.93	.64	.74	.12	.37	.69	.54	.45
6	106.38	106.51	106.84	106.86	108.94	109.73	112.77	113.01	107.27	106.68	106.54	106.46
7	.41	.52	.86	.88	.98	.82	.83	112.92	.20	.67	.54	.48
8	.40	.54	.88	.92	.99	.96	.90	.81	.12	.66	.54	.48
9	.40	.55	.92	.92	.99	110.29	.94	.70	.06	.66	.53	.48
10	.39	.53	.97	107.00	.98	.53	.97	.57	106.99	.66	.53	.47
11	106.38	106.52	106.97	107.04	108.96	110.67	112.97	112.44	106.96	106.66	106.53	106.47
12	.38	.51	.93	.09	.88	.77	.95	.29	.92	.66	.52	.47
13	.38	.51	.90	.12	.78	.95	.96	.12	.90	.65	.52	.48
14	.38	.50	.85	.09	.69	111.16	113.03	111.96	.87	.65	.52	.52
15	.37	.49	.83	.05	.57	.32	.14	.77	.86	.65	.52	.55
16	106.37	106.48	106.78	107.07	108.41	111.44	113.27	111.60	106.84	106.64	106.51	106.56
17	.37	.48	.77	.07	.25	.52	.38	.42	.83	.63	.51	.54
18	.36	.48	.75	.18	.12	.55	.49	.23	.82	.62	.50	.53
19	.36	.47	.70	.44	.01	.60	.58	.02	.80	.61	.50	.53
20	.36	.47	.66	.57	107.98	.61	.63	110.82	.80	.60	.49	.53
21	106.37	106.47	106.63	107.62	108.32	111.61	113.66	110.58	106.79	106.59	106.48	106.52
22	.40	.48	.62	.66	.64	.60	.67	.37	.78	.59	.48	.51
23	.42	.51	.63	.72	.71	.61	.65	110.04	.77	.58	.47	.50
24	.44	.57	.61	.82	.76	.64	.63	109.50	.76	.58	.47	.49
25	.44	.63	.60	.90	.67	.71	.60	.07	.75	.58	.47	.48
26	106.47	106.68	106.62	107.99	108.59	111.76	113.57	108.70	106.74	106.57	106.46	106.48
27	.53	.71	.60	108.10	.57	.94	.54	.39	.73	.56	.46	.47
28	.50	.78	.59	.22	.59	112.14	.50	.20	.72	.56	.46	.47
29	.49	.78	.59	.46	.76	.28	.48	107.99	.71	.55	.45	.47
30	.48	.78	.77	.68	109.08	.37	.45	.89	.71	.55		.46
31		.78		.71	.23		.40		.71	.55		.47
Mean	106.40	106.55	106.76	107.40	108.70	110.95	113.19	111.25	106.98	106.63	106.51	106.49
Max.	106.53	106.78	106.97	108.71	109.23	112.37	113.67	113.36	107.78	106.71	106.54	106.56
Min.	106.36	106.43	106.59	106.82	107.98	109.31	112.49	107.89	106.71	106.55	106.45	106.45

WATER YEAR 1959 : Max. 113.67 m. Min. 106.36 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	11	17	66	72	714	938	2,418	3,133	331	52	27	17
2	10	15	66	84	722	938	2,468	3,090	294	52	27	17
3	10	17	68	90	739	951	2,506	3,037	260	50	27	17
4	10	19	68	88	760	1,003	2,539	2,946	226	50	27	18
5	10	21	72	84	777	1,081	2,581	2,889	199	49	27	17
6	10	23	76	80	781	1,120	2,603	2,789	170	47	27	18
7	12	25	80	84	798	1,160	2,645	2,712	152	46	27	20
8	11	27	84	92	802	1,221	2,696	2,631	133	44	27	20
9	11	29	92	92	802	1,367	2,727	2,553	120	44	26	20
10	11	26	102	108	798	1,472	2,752	2,467	106	44	26	19
11	10	25	102	116	789	1,534	2,752	2,388	100	44	26	19
12	10	23	94	126	756	1,579	2,735	2,302	92	44	25	19
13	10	23	88	133	714	1,660	2,744	2,210	88	43	25	20
14	10	22	78	126	676	1,754	2,807	2,129	82	43	25	25
15	9.05	21	74	118	626	1,826	2,908	2,035	80	43	25	29
16	9.05	20	64	122	562	1,880	3,037	1,954	76	41	23	30
17	9.05	20	63	122	498	1,916	3,154	1,871	74	40	23	27
18	8.30	20	55	147	449	1,931	3,276	1,785	72	38	22	26
19	8.30	19	50	220	411	1,954	3,377	1,691	68	37	22	26
20	8.30	19	44	260	400	1,959	3,435	1,601	68	35	21	26
21	9.05	19	40	277	526	1,959	3,470	1,494	66	34	20	25
22	11	20	38	290	655	1,954	3,482	1,402	64	34	20	23
23	13	23	40	311	684	1,959	3,458	1,257	63	32	19	22
24	16	31	37	345	705	1,973	3,435	1,050	61	32	19	21
25	16	40	35	372	667	2,007	3,400	835	59	32	19	20
26	19	47	38	404	634	2,030	3,366	680	57	31	18	20
27	26	52	35	442	626	2,119	3,332	554	55	30	18	19
28	22	64	34	486	634	2,221	3,287	478	54	30	18	19
29	21	64	34	582	705	2,297	3,265	404	52	29	17	19
30	20	64	63	672	840	2,348	3,231	369	52	29		18
31		64		684	904		3,176		52	29		19
Total	371.10	919	1,880	7,229	21,154	50,111	93,062	56,736	3,426	1,228	673	655
Mean	12.3	29.6	62.6	233	682	1,670	3,002	1,891	110	39.6	23.2	21.1
Max.	26	64	102	684	904	2,348	3,482	3,133	331	52	27	30
Min.	8.30	15	34	72	400	938	2,418	369	52	29	17	17
Runoff — MCM.	32.063	79.402	162.432	624.586	1,827.706	4,329.590	8,040.557	4,901.990	296.006	106.099	58.147	56.592

WATER YEAR 1959 : Max. 3,482 Min. 8.30 Mean 649 Annual Runoff 20,515.075mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 22	06.00	113.67	3,482				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
MUNE RIVER BASIN

Huai Samran at Highway Bridge, Si Sa Ket (M.9)

Location: Lat 15° – 07' – 00" N, Long 104° – 19' – 20" E, on left bank downstream side of the bridge, 200 meters north of the city jail, Amphoe Muang, Si Sa Ket.

Drainage Area: 3,026 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +109.00 m. (M.S.L.)

Bench Mark: B.M. – No.0339

Location: At the bridge on right bank.

Elevation: +123.034 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: 1951

Rated by Float: –

Rated by Current Meter: 1951

Stability of Channel Regimes: Stable no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

General Description: Stage record good, discharge record fair stage discharge relationship used is defined by discharge measurements during 1951. No diversions for irrigation above gage site.

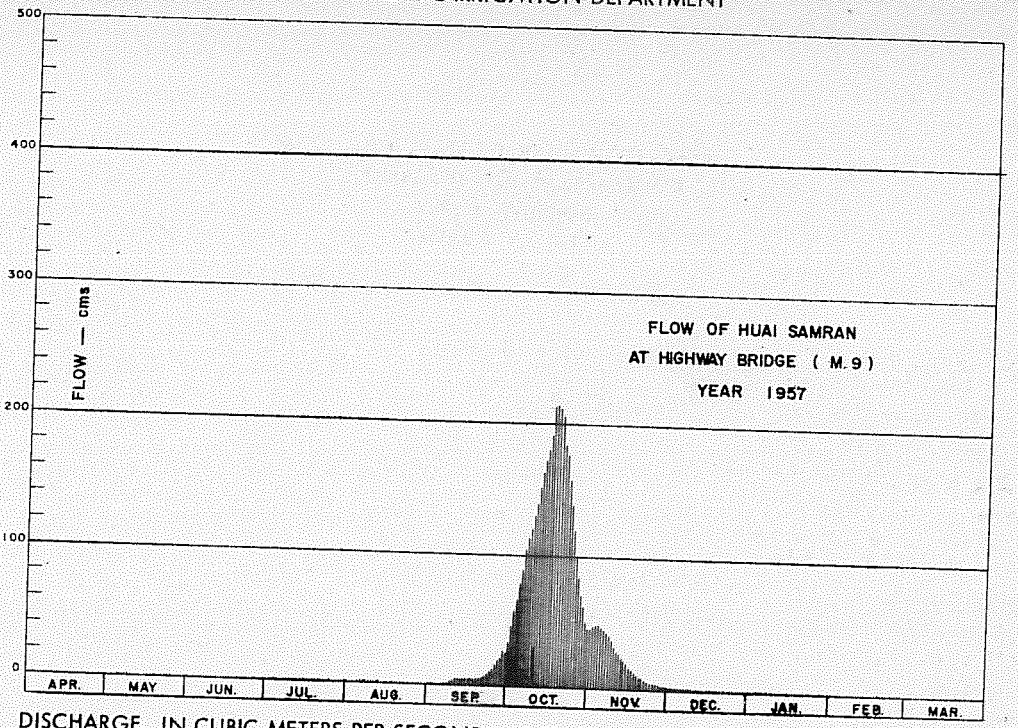
Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	109.35	109.35	109.59	109.51	109.56	110.22	113.72	114.15	111.00	110.62	109.56	109.35
2	.35	.33	.56	.48	.56	.45	114.29	.25	110.96	.59	.56	.35
3	.34	.34	.53	.48	.55	.55	.70	.28	.93	.55	.55	.35
4	.39	.46	.53	.48	.55	.54	.99	.27	.90	.50	.54	.35
5	.39	.49	.53	.93	.55	.52	115.36	.23	.87	.45	.53	.34
6	109.36	109.47	109.51	109.85	109.60	110.51	115.73	114.18	110.84	110.44	109.53	109.34
7	.35	.62	.51	.75	.60	.50	.90	.12	.83	.39	.51	.34
8	.35	.63	.50	.82	.59	.71	116.15	113.96	.82	.34	.51	.33
9	.34	.62	.50	.82	.58	111.01	.32	.81	.81	.32	.51	.33
10	.34	.52	.50	.81	.57	.29	.49	.60	.80	.29	.50	.33
11	109.34	109.50	109.49	109.80	109.57	111.43	116.66	113.43	110.79	110.26	109.49	109.33
12	.33	.47	.48	.78	.57	.42	.84	.28	.79	.25	.49	.32
13	.33	.43	.48	.80	.56	.40	.96	.14	.77	.24	.49	.32
14	.32	.42	.48	.80	.80	.42	117.13	.01	.75	.19	.54	.32
15	.32	.42	.48	.76	.84	.47	.27	112.86	.75	.16	.52	.31
16	109.40	109.41	109.48	109.72	109.80	111.54	117.45	112.71	110.74	110.13	109.50	109.31
17	.40	.40	.47	.70	.98	.49	.57	.48	.73	.09	.48	.31
18	.41	.40	.65	110.01	110.13	.44	.58	.36	.72	109.99	.47	.31
19	.40	.39	.67	.08	.14	.40	.56	.21	.71	.95	.47	.31
20	.39	.46	.65	.11	.12	.39	.50	.11	.70	.94	.46	.31
21	109.39	109.45	109.64	110.18	110.07	111.64	117.28	112.00	110.69	109.85	109.46	109.31
22	.38	.42	.61	.09	.09	.89	.14	111.91	.69	.74	.45	.30
23	.38	.66	.60	109.89	.05	112.15	116.93	.81	.68	.69	.45	.30
24	.37	.60	.59	.83	.04	.25	.57	.72	.67	.65	.44	.30
25	.37	.54	.58	.79	.15	.49	.27	.62	.67	.65	.44	.30
26	109.36	109.51	109.72	109.77	110.23	112.81	115.86	111.52	110.66	109.63	109.44	109.29
27	.36	.49	.62	.76	.16	.87	.45	.42	.65	.58	.43	.29
28	.36	.46	.54	.72	.16	113.00	.13	.30	.65	.58	.43	.29
29	.35	.72	.53	.62	.20	.17	114.80	.20	.65	.57		.29
30	.35	.64	.51	.59	.23	.29	.45	.12	.65	.57		.29
31		.60		.59	.20		.18		.64	.56		.28
Mean	109.36	109.49	109.55	109.78	109.86	111.54	116.14	112.80	110.76	110.06	109.49	109.32
Max.	109.41	109.72	109.72	110.18	110.23	113.29	117.58	114.28	111.00	110.62	109.56	109.35
Min.	109.32	109.33	109.47	109.48	109.55	110.22	113.72	111.12	110.64	109.56	109.43	109.28

WATER YEAR 1957 : Max. 117.58 m. Min. 109.28 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.010	0.010	0.067	0.043	0.058	0.42	35	45	2.35	1.15	0.058	0.010
2	0.010	0.006	0.058	0.036	0.058	0.78	48	47	2.21	1.08	0.058	0.010
3	0.008	0.008	0.049	0.036	0.055	0.99	59	48	2.10	0.99	0.055	0.010
4	0.018	0.032	0.049	0.036	0.055	0.97	67	48	2.00	0.88	0.052	0.010
5	0.018	0.038	0.049	0.17	0.055	0.92	80	47	1.89	0.78	0.049	0.008
6	0.012	0.034	0.043	0.14	0.070	0.90	94	45	1.79	0.77	0.049	0.008
7	0.010	0.076	0.043	0.11	0.070	0.88	102	44	1.75	0.67	0.043	0.008
8	0.010	0.079	0.040	0.14	0.067	1.38	114	40	1.72	0.59	0.043	0.006
9	0.008	0.076	0.040	0.14	0.064	2.38	122	37	1.68	0.55	0.043	0.006
10	0.008	0.046	0.040	0.13	0.061	3.55	131	32	1.65	0.51	0.040	0.006
11	0.008	0.040	0.038	0.13	0.061	4.26	141	29	1.62	0.47	0.038	0.006
12	0.006	0.034	0.036	0.12	0.061	4.20	153	26	1.62	0.45	0.038	0.004
13	0.006	0.026	0.036	0.13	0.058	4.10	161	24	1.56	0.44	0.038	0.004
14	0.004	0.024	0.036	0.13	0.13	4.20	174	22	1.50	0.38	0.052	0.004
15	0.004	0.024	0.036	0.12	0.14	4.47	186	19	1.50	0.35	0.046	0.002
16	0.020	0.022	0.036	0.11	0.13	4.83	202	17	1.47	0.31	0.040	0.002
17	0.020	0.020	0.034	0.10	0.18	4.57	213	14	1.44	0.27	0.036	0.002
18	0.022	0.020	0.085	0.21	0.31	4.31	214	12	1.41	0.19	0.034	0.002
19	0.020	0.018	0.091	0.26	0.32	4.10	212	11	1.38	0.17	0.034	0.002
20	0.018	0.032	0.085	0.29	0.30	4.05	206	9.50	1.35	0.17	0.032	0.002
21	0.018	0.030	0.082	0.37	0.26	5.42	186	8.30	1.32	0.14	0.032	0.002
22	0.016	0.024	0.073	0.27	0.27	7.31	175	7.49	1.32	0.11	0.030	
23	0.016	0.088	0.070	0.16	0.24	9.95	159	6.59	1.30	0.097	0.030	
24	0.014	0.070	0.067	0.14	0.23	10	136	5.96	1.27	0.085	0.028	
25	0.014	0.052	0.064	0.13	0.33	14	119	5.28	1.27	0.085	0.028	
26	0.012	0.043	0.110	0.12	0.43	18	100	4.73	1.25	0.079	0.028	
27	0.012	0.038	0.076	0.12	0.35	19	83	4.20	1.22	0.064	0.026	
28	0.012	0.032	0.052	0.11	0.35	21	72	3.60	1.22	0.064	0.026	
29	0.010	0.110	0.049	0.076	0.39	27	61	3.15	1.22	0.061		
30	0.010	0.082	0.043	0.067	0.43	26	52	2.79	1.22	0.061		
31		0.070		0.067	0.39		45		1.20	0.058		
Total	0.374	1.304	1.677	4.211	5.973	213.94	3,902	668.59	47.80	12.074	1.106	0.114
Mean	0.012	0.042	0.056	0.136	0.193	7.13	126	22.3	1.54	0.389	0.039	0.003
Max.	0.022	0.110	0.110	0.37	0.43	27	214	48	2.35	1.15	0.058	0.010
Min.	0.004	0.006	0.034	0.036	0.055	0.42	35	2.79	1.20	0.058	0.026	0.000
Runoff - MCM.	0.032	0.113	0.144	0.364	0.516	18.484	337.133	57.766	4.130	1.043	0.095	0.012

WATER YEAR 1957 : Max. 214 Min. 0.00 Mean 13.3 Annual Runoff 419.832 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 18	12.00	117.59	215				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MUNE RIVER BASIN

Huai Samran at Highway Bridge, Si Sa Ket (M.9)

Location: Lat 15° – 07' – 00" N, Long 104° – 19' – 20" E, on left bank downstream side of the bridge, 200 meters north of the city jail, Amphoe Muang, Si Sa Ket.

Drainage Area: 3,026 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +109.00 m. (M.S.L.)

Bench Mark: B.M. – No. 0339

Location: At the bridge on right bank.
Elevation: +123.034 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: 1951
Rated by Float: –
Rated by Current Meter: 1951

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

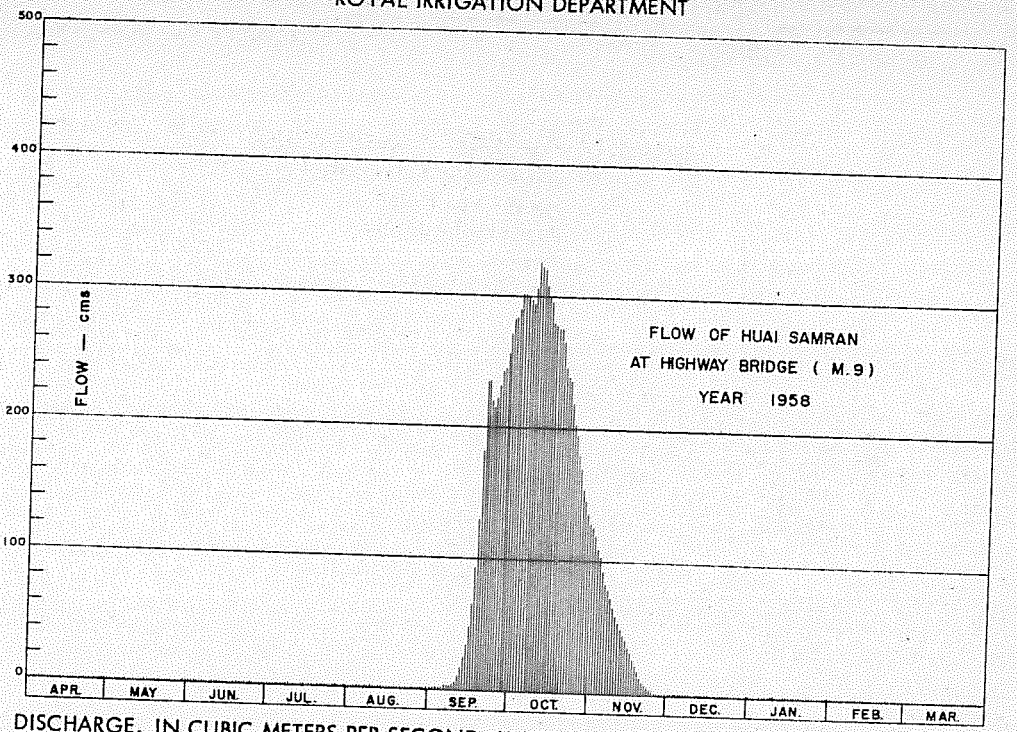
General Description: Stage record good, discharge record fair. Stage – discharge relationship used is defined by discharge measurements during 1951. No diversions for irrigation above gage site.

Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	109.28	109.26	109.40	109.47	109.69	110.22	118.22	116.39	110.04	109.75	109.53	109.28
2	.28	.26	.40	.46	.66	.22	.29	.26	.03	.75	.52	.27
3	.28	.26	.40	.46	.65	.55	.36	.10	.03	.74	.51	.27
4	.28	.26	.44	.45	.62	.75	.37	115.90	.02	.74	.50	.26
5	.28	.26	.44	.45	.60	.85	.35	.70	.01	.73	.47	.26
6	109.28	109.26	109.41	109.45	109.66	110.94	118.32	115.52	110.00	109.73	109.45	109.26
7	.27	.26	.40	.43	.70	.95	.30	.35	.00	.72	.44	.25
8	.27	.28	.40	.43	.70	.94	.44	.16	109.99	.71	.44	.25
9	.27	.27	.41	.43	.68	111.19	.54	114.94	.98	.71	.43	.25
10	.27	.26	.41	.42	.66	.63	.53	.77	.97	.71	.43	.24
11	109.27	109.32	109.41	109.42	109.63	112.11	118.51	114.55	109.97	109.70	109.42	109.24
12	.27	.32	.40	.42	.62	.50	.41	.42	.96	.69	.42	.24
13	.27	.31	.40	.42	.62	113.13	.35	.25	.95	.68	.41	.23
14	.26	.31	.40	.41	.89	.61	.26	.04	.94	.66	.41	.23
15	.26	.30	.39	.47	.90	114.23	.18	113.81	.93	.65	.40	.22
16	109.26	109.30	109.53	109.48	109.88	114.92	118.16	113.60	109.92	109.63	109.40	109.22
17	.26	.35	.60	.46	.85	115.80	.15	.35	.91	.63	.39	.22
18	.26	.34	.57	.46	.80	116.62	.15	.04	.90	.61	.38	.22
19	.26	.33	.52	.45	.79	117.32	.10	112.75	.89	.61	.38	.29
20	.26	.33	.50	.45	.79	.78	117.96	.38	.88	.58	.36	.28
21	109.26	109.32	109.49	109.48	109.78	117.79	117.84	112.15	109.86	109.57	109.35	109.27
22	.26	.32	.49	.48	.78	.66	.80	111.85	.85	.57	.35	.27
23	.26	.31	.48	.47	.77	.60	.67	.55	.84	.60	.33	.27
24	.26	.32	.48	.45	.99	.67	.51	.17	.84	.57	.30	.26
25	.25	.36	.47	.45	.99	.76	.35	110.86	.83	.57	.29	.26
26	109.25	109.35	109.46	109.44	109.95	117.88	117.17	110.65	109.81	109.55	109.29	109.26
27	.25	.35	.55	.44	110.08	.89	116.99	.37	.79	.55	.28	.25
28	.25	.35	.55	.52	.16	118.01	.87	.18	.78	.55	.28	.25
29	.25	.39	.51	.53	.23	.13	.70	.09	.77	.54		.25
30	.25	.45	.49	.50	.24	.22	.58	.05	.76	.54		.25
31		.42		.50	.23		.44		.75	.54		.20
Mean	109.26	109.31	109.46	109.46	109.82	114.49	117.90	113.37	109.91	109.64	109.40	109.26
Max.	109.28	109.45	109.60	109.53	110.24	118.22	118.54	116.39	110.04	109.75	109.53	109.29
Min.	109.25	109.26	109.39	109.41	109.60	110.22	116.44	110.05	109.75	109.54	109.28	109.20

WATER YEAR 1958 : Max. 118.54 m. Min. 109.20 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			0.020	0.034	0.097	0.42	283	125	0.23	0.11	0.049	
2			0.020	0.032	0.088	0.42	292	119	0.22	0.11	0.046	
3			0.020	0.032	0.085	0.99	301	111	0.22	0.11	0.043	
4			0.028	0.030	0.076	1.50	302	102	0.22	0.11	0.040	
5			0.028	0.030	0.070	1.82	300	93	0.21	0.11	0.034	
6			0.022	0.030	0.088	2.14	296	86	0.20	0.11	0.030	
7			0.020	0.026	0.10	2.17	293	80	0.20	0.11	0.028	
8			0.020	0.026	0.10	2.14	311	73	0.19	0.10	0.028	
9			0.022	0.026	0.094	3.10	325	66	0.18	0.10	0.026	
10			0.022	0.024	0.088	5.35	323	61	0.18	0.10	0.026	
11		0.004	0.022	0.024	0.079	9.51	321	55	0.18	0.10	0.024	
12		0.004	0.020	0.024	0.076	14	307	51	0.18	0.097	0.024	
13		0.002	0.020	0.024	0.076	24	300	47	0.17	0.094	0.022	
14		0.002	0.020	0.022	0.16	33	288	42	0.17	0.088	0.022	
15			0.018	0.034	0.16	47	279	37	0.17	0.085	0.020	
16			0.049	0.036	0.15	65	276	32	0.17	0.079	0.020	
17		0.010	0.070	0.032	0.14	97	275	28	0.16	0.079	0.018	
18		0.008	0.061	0.032	0.13	139	275	22	0.16	0.073	0.016	
19		0.006	0.046	0.030	0.13	190	269	18	0.16	0.073	0.016	
20		0.006	0.040	0.030	0.13	234	253	12	0.15	0.064	0.012	
21		0.004	0.038	0.036	0.12	235	240	9.95	0.15	0.061	0.010	
22		0.004	0.038	0.036	0.12	222	236	6.95	0.14	0.061	0.010	
23		0.002	0.036	0.034	0.12	216	223	4.89	0.14	0.070	0.006	
24		0.004	0.036	0.030	0.19	223	207	3.01	0.14	0.061		
25		0.012	0.034	0.030	0.19	232	193	1.86	0.14	0.061		
26		0.010	0.032	0.028	0.17	244	177	1.22	0.13	0.055		
27		0.010	0.055	0.028	0.26	245	163	0.64	0.13	0.055		
28		0.010	0.055	0.046	0.35	258	155	0.37	0.12	0.055		
29		0.018	0.043	0.049	0.43	273	144	0.27	0.12	0.052		
30		0.030	0.038	0.040	0.44	283	136	0.24	0.12	0.052		
31		0.024		0.040	0.43		128		0.11	0.052		
Total		0.170	0.993	0.975	4.937	3,303.56	7,871	1,289.40	5.16	2.537	0.570	
Mean		0.005	0.033	0.031	0.159	110	254	43.0	0.17	0.082	0.020	
Max.		0.030	0.070	0.049	0.44	283	325	125	0.23	0.11	0.049	
Min.		0.000	0.018	0.022	0.070	0.42	128	0.24	0.11	0.052	0.000	
Runoff — mcm.		0.015	0.086	0.084	0.426	285.427	680.054	111.404	0.446	0.219	0.049	

WATER YEAR 1958 : Max. 325 Min. 0.00 Mean 34.2 Annual Runoff 1,078.212 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 9	18.00	118.56	328				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
MUNE RIVER BASIN

Huai Samran at Highway Bridge, Si Sa Ket (M.9)

Location: Lat 15° – 07' – 00" N, Long 104° – 19' – 20" E, on left bank downstream side of the bridge, 200 meters north of the city jail, Amphoe Muang, Si Sa Ket.

Drainage Area: 3,026 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +109.00 m. (M.S.L.)

Bench Mark: B.M. – No.0339

Location: At the bridge on right bank.

Elevation: +123.034 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: 1951
Rated by Float: –
Rated by Current Meter: 1951

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

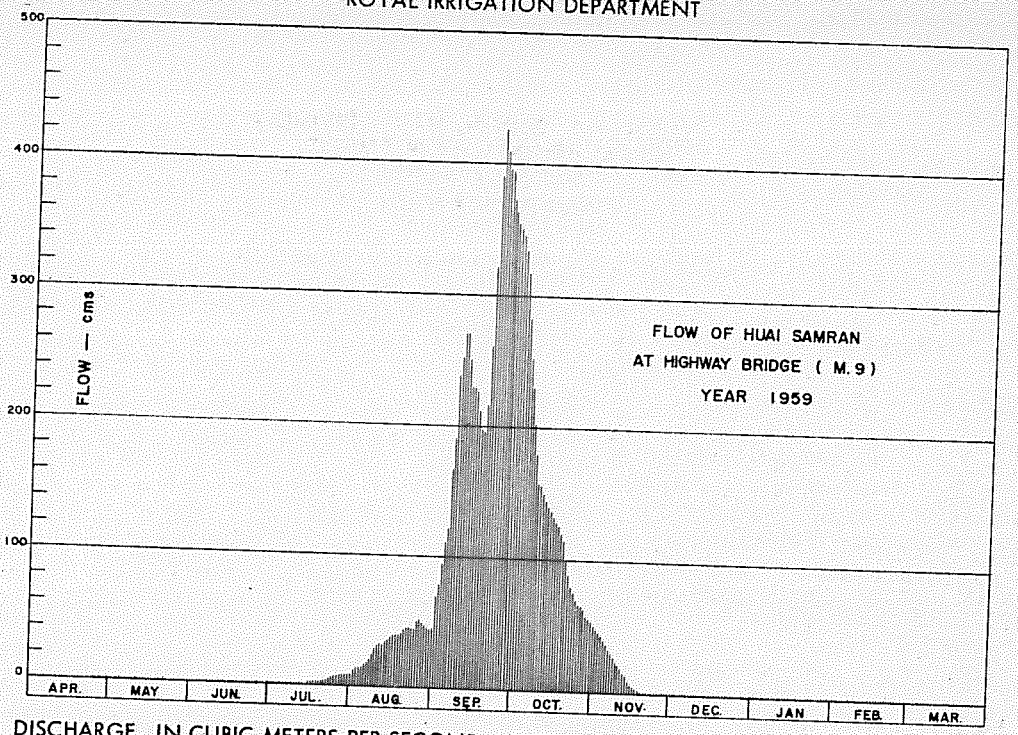
General Description: Stage record good, discharge record fair. Stage – discharge relationship used is defined by discharge measurements during 1951. No diversions for irrigation above gage site.

Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	109.20	109.25	109.43	110.10	112.05	114.18	118.73	114.44	110.45	109.94	109.53	109.35
2	.20	.25	.42	.06	.34	115.10	.70	.34	.43	.92	.53	.34
3	.20	.24	.40	.05	.52	.33	.59	.21	.42	.90	.52	.33
4	.27	.24	.39	.18	.49	.73	.46	.11	.40	.89	.52	.32
5	.22	.23	.37	.21	.49	116.07	.27	113.97	.38	.86	.52	.31
6	109.22	109.23	109.35	110.24	112.66	116.32	118.06	113.82	110.36	109.84	109.52	109.30
7	.21	.35	.33	.23	.75	.93	117.74	.66	.35	.82	.51	.30
8	.21	.35	.32	.20	.87	117.32	.48	.46	.34	.80	.51	.30
9	.20	.30	.31	.35	113.23	.83	.16	.30	.32	.78	.51	.30
10	.20	.27	.43	.55	.45	.95	116.90	.17	.31	.76	.50	.29
11	109.20	109.29	109.56	110.64	113.55	118.11	116.88	113.04	110.30	109.74	109.49	109.29
12	.28	.38	.56	.60	.62	.10	.79	112.85	.29	.71	.49	.29
13	.25	.33	.50	.57	.60	117.93	.72	.64	.27	.69	.49	.32
14	.22	.34	.52	.56	.68	.75	.64	.47	.26	.67	.49	.31
15	.21	.35	.63	.60	.84	.72	.60	.18	.24	.65	.48	.29
16	109.21	109.43	109.64	111.16	113.93	117.71	116.55	111.81	110.23	109.63	109.48	109.29
17	.20	.44	.62	.36	.93	.59	.49	.52	.22	.62	.47	.29
18	.25	.49	.83	.29	.90	.40	.41	.24	.21	.61	.44	.29
19	.37	.56	.87	.27	.94	.38	.32	110.96	.20	.59	.43	.32
20	.39	.48	.79	.23	.95	.66	.16	.74	.18	.58	.44	.32
21	109.33	109.46	109.72	111.21	114.08	118.12	115.93	110.70	110.17	109.58	109.43	109.31
22	.36	.66	.71	.20	.15	.60	.68	.66	.16	.57	.43	.30
23	.33	.57	.76	.41	.21	119.04	.50	.62	.14	.56	.41	.30
24	.27	.52	.85	.57	.15	.28	.30	.60	.12	.56	.41	.30
25	.45	.86	.94	.85	.13	.19	.11	.56	.10	.55	.40	.29
26	109.58	109.97	109.89	111.95	114.42	119.07	114.99	110.55	110.08	109.55	109.40	109.29
27	.59	.86	.85	.96	.43	.05	.94	.59	.06	.54	.39	.30
28	.45	.68	.79	112.03	.29	118.91	.93	.50	.04	.54	.39	.30
29	.33	.60	.86	.02	.25	.82	.73	.47	.01	.54	.37	.30
30	.29	.53	110.11	.01	.16	.74	.63	.46	109.98	.53		.29
31		.44		.01	.14		.54		.96	.53		.29
Mean	109.28	109.45	109.62	111.05	113.59	117.63	116.51	112.11	110.22	109.68	109.48	109.30
Max.	109.59	109.97	110.11	112.03	114.42	119.28	118.73	114.44	110.45	109.94	109.53	109.35
Min.	109.20	109.23	109.31	110.05	112.05	114.18	114.54	110.46	109.96	109.53	109.37	109.29

WATER YEAR 1959 : Max. 119.28 m. Min. 109.20 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1			0.026	0.28	8.85	45	350	52	0.78	0.17	0.049	0.010
2			0.024	0.25	12	71	346	49	0.75	0.17	0.049	0.008
3			0.020	0.24	14	79	332	46	0.73	0.16	0.046	0.006
4			0.018	0.37	14	94	314	44	0.69	0.16	0.046	0.004
5			0.014	0.40	14	110	290	40	0.66	0.15	0.046	0.002
6			0.010	0.44	16	122	264	37	0.62	0.14	0.046	
7		0.010	0.006	0.43	18	159	230	34	0.60	0.14	0.043	
8		0.010	0.004	0.39	19	190	205	30	0.59	0.13	0.043	
9			0.002	0.60	25	239	176	27	0.55	0.12	0.043	
10			0.026	0.99	29	252	157	24	0.54	0.12	0.040	
11			0.058	1.20	31	270	156	22	0.52	0.11	0.038	
12		0.016	0.058	1.10	33	269	149	19	0.51	0.10	0.038	
13		0.006	0.040	1.03	32	250	145	16	0.48	0.097	0.038	0.004
14		0.008	0.046	1.01	34	231	140	14	0.47	0.090	0.038	0.002
15		0.010	0.079	1.10	37	228	137	10	0.44	0.085	0.036	
16		0.026	0.082	2.97	39	227	135	6.59	0.43	0.079	0.036	
17		0.028	0.076	3.90	39	215	131	4.73	0.42	0.076	0.034	
18		0.038	0.14	3.55	39	197	126	3.33	0.40	0.073	0.028	
19	0.014	0.056	0.15	3.46	40	195	122	2.21	0.39	0.067	0.026	0.004
20	0.018	0.036	0.13	3.28	40	222	114	1.47	0.37	0.064	0.028	0.004
21	0.006	0.032	0.11	3.19	43	271	103	1.35	0.36	0.064	0.026	0.002
22	0.012	0.088	0.10	3.15	45	333	92	1.25	0.35	0.061	0.026	
23	0.006	0.061	0.12	4.15	46	392	85	1.15	0.32	0.058	0.022	
24		0.046	0.14	4.99	45	426	78	1.10	0.30	0.058	0.022	
25	0.030	0.15	0.17	6.95	44	413	71	1.01	0.28	0.055	0.020	
26	0.064	0.18	0.16	7.85	51	396	67	0.99	0.26	0.055	0.020	
27	0.067	0.15	0.14	7.94	52	394	66	0.92	0.25	0.052	0.018	
28	0.030	0.094	0.13	8.63	48	375	65	0.88	0.23	0.052	0.018	
29	0.006	0.070	0.15	8.52	47	363	59	0.82	0.21	0.052	0.014	
30		0.049	0.29	8.41	45	352	57	0.80	0.18	0.052		
31		0.028		8.41	44		54		0.18	0.049		
Total	0.253	1.194	2.519	99.18	1,043.85	7,380	4,816	492.60	13.86	2.909	0.997	0.046
Mean	0.008	0.038	0.084	3.20	33.7	246	155	16.4	0.45	0.094	0.034	0.001
Max.	0.067	0.18	0.29	8.63	52	426	350	52	0.78	0.17	0.049	0.010
Min.	0.00	0.00	0.002	0.24	8.85	45	54	0.80	0.18	0.049	0.014	0.00
Runoff - mcm.	0.022	0.103	0.218	8.569	90.189	637.632	416.102	42.561	1.198	0.251	0.084	0.004

WATER YEAR 1959 : Max. 426 Min. 0.00 Mean 37.8 Annual Runoff 1,196.933 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 24	18.00	119.28	426				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
MUNE RIVER BASIN

Lam Phra Phloeng at Ban Bu Hua Chang, Nakhon Ratchasima (M.33)

Location: Lat 14°– 35' – 20" N, Long 101°– 50' – 30" E, on right bank 50 meters upstream of Lam Phra Phloeng Damsite Ban Bu Hua Chang, Amphoe Pak Thong Chai, Nakhon Ratchasima.

Drainage Area: 822 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +226.76 m. (M.S.L.)

Bench Mark: B.M. of Survey Division No.3

Location: Near the gage site.

Elevation: +264.086 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1955 – 1964

Rating Operation:

Period of Rating: 1955 – 1964

Rated by Float: –

Rated by Current Meter: 1955 – 1964

Stability of Channel Regimes: Rather unstable, shifting adjustment and mean hourly discharge are made for flow computation.

Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relationship defined by discharge measurements made during 1957. No diversions for irrigation above gage site.

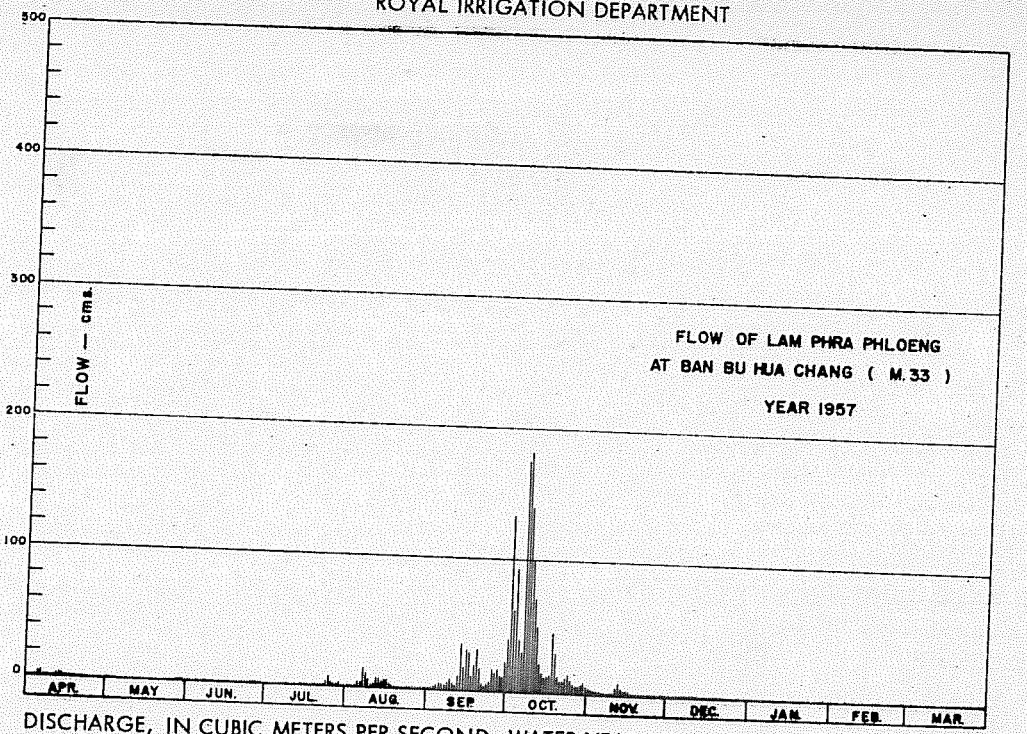
Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	226.94	226.93	226.94	226.93	227.45	227.09	232.36	228.19	227.29	227.16	227.12	227.08
2	.94	.93	.96	.92	.37	.37	235.04	.03	.28	.15	.11	.08
3	.94	.93	.96	.92	.58	.49	233.45	227.91	.27	.15	.11	.08
4	227.27	.93	.94	.92	.42	228.08	234.24	.81	.27	.15	.11	.11
5	228.37	.92	.94	.92	228.31	.40	232.36	.74	.26	.15	.11	.09
6	228.46	226.92	226.93	226.91	228.26	228.30	231.37	227.67	227.26	227.14	227.11	227.08
7	227.54	.92	.93	.91	230.35	227.93	235.13	.61	.25	.14	.11	.08
8	.32	.92	.93	.93	229.31	228.90	.42	.56	.25	.14	.11	.08
9	.20	.91	.99	.95	228.34	229.36	.08	.52	.25	.13	.11	.08
10	.15	.87	227.01	.92	.19	228.16	234.28	.58	.24	.13	.11	.08
11	227.10	226.88	226.99	226.92	228.22	228.09	233.74	228.61	227.24	227.13	227.11	227.08
12	.21	.88	227.32	.91	.62	229.18	232.74	229.19	.23	.13	.11	.08
13	.76	.88	.51	227.07	.63	232.21	230.76	228.20	.23	.13	.11	.08
14	228.18	.88	.13	.16	.29	230.06	229.79	227.73	.22	.13	.11	.07
15	227.42	.88	.14	.43	.73	231.48	.32	.74	.22	.13	.10	.07
16	227.22	226.88	227.03	227.22	228.79	231.56	229.67	227.61	227.21	227.13	227.10	227.07
17	.12	.90	.00	.16	227.77	229.42	.60	.51	.20	.13	.09	.07
18	.07	.89	.00	.29	.50	230.30	231.99	.46	.20	.13	.09	.07
19	.05	.89	.00	.17	.35	231.64	.66	.43	.19	.12	.10	.07
20	.04	.89	226.99	.10	.31	230.65	229.79	.41	.19	.12	.09	.07
21	227.01	226.88	227.00	227.09	227.29	228.96	229.12	227.39	227.19	227.12	227.09	227.07
22	226.99	.93	.27	.09	.30	.41	228.94	.37	.19	.12	.09	.06
23	.97	.93	.01	.52	.33	.63	229.38	.36	.18	.12	.09	.06
24	.96	.92	.00	228.00	.27	.74	.69	.34	.18	.12	.09	.06
25	.96	.91	.08	229.05	.20	230.27	228.98	.33	.17	.12	.09	.06
26	226.95	226.91	227.00	228.23	227.15	229.88	228.48	227.32	227.17	227.11	227.08	227.06
27	.94	.91	226.97	227.58	.12	230.06	.31	.31	.17	.11	.08	.06
28	.94	227.08	.95	.50	.11	229.52	.36	.31	.17	.11	.08	.06
29	.94	.18	.94	.85	.10	.39	.59	.29	.17	.11		.06
30	.94	.00	.94	.52	.08	231.06	.96	.29	.16	.11		.06
31		226.95		.29	.07		.42		.16	.11		.06
Mean	227.23	226.92	227.03	227.27	227.83	229.35	231.13	227.66	227.21	227.13	227.10	227.07
Max.	228.46	227.18	227.51	229.05	230.35	232.21	235.42	229.19	227.29	227.16	227.12	227.11
Min.	226.94	226.87	226.93	226.91	227.07	227.09	228.31	227.29	227.16	227.11	227.08	227.06

WATER YEAR 1957 : Max. 235.42 m. Min. 226.87 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.05	0.03	0.05	0.03	0.98	0.30	39	4.20	0.57	0.14	0.06	0.02
2	0.05	0.03	0.08	0.02	0.82	1.03	133	3.54	0.54	0.12	0.05	0.02
3	0.05	0.03	0.08	0.02	1.38	1.38	61	3.05	0.50	0.12	0.05	0.02
4	0.75	0.03	0.05	0.02	0.92	3.34	93	2.52	0.50	0.12	0.05	0.05
5	4.30	0.02	0.05	0.02	4.00	4.55	39	2.25	0.46	0.12	0.05	0.02
6	4.70	0.02	0.03	0.01	3.75	4.10	29	1.98	0.46	0.10	0.05	0.02
7	1.50	0.02	0.03	0.01	14	2.95	176	1.90	0.43	0.10	0.05	0.02
8	0.88	0.02	0.03	0.03	11	7.40	184	1.74	0.43	0.10	0.05	0.02
9	0.58	0.01	0.12	0.06	5.50	9.76	165	1.50	0.43	0.08	0.05	0.02
10	0.45		0.16	0.02	3.58	4.10	102	1.70	0.40	0.08	0.05	0.02
11	0.34		0.12	0.02	3.95	3.70	80	6.18	0.40	0.08	0.05	0.02
12	0.60		0.88	0.01	6.12	13	47	9.02	0.37	0.08	0.05	0.02
13	2.19		1.41	0.27	6.30	35	21	4.35	0.37	0.08	0.05	0.02
14	3.60		0.40	0.48	4.30	17	14	2.56	0.34	0.08	0.05	0.01
15	1.14		0.43	1.17	6.42	30	11	2.37	0.34	0.08	0.03	0.01
16	0.63		0.19	0.63	6.94	27	13	1.82	0.31	0.08	0.03	0.01
17	0.38		0.14	0.48	2.37	11	13	1.39	0.28	0.08	0.02	0.01
18	0.27		0.14	0.80	1.34	18	55	1.18	0.28	0.08	0.02	0.01
19	0.23		0.14	0.50	0.98	31	32	1.07	0.25	0.06	0.03	0.01
20	0.21		0.12	0.34	0.96	20	14	1.00	0.25	0.06	0.02	0.01
21	0.16		0.14	0.32	0.86	6.24	9.02	0.92	0.25	0.06	0.02	0.01
22	0.12	0.03	0.75	0.32	0.90	3.97	8.72	0.85	0.25	0.06	0.02	
23	0.09	0.03	0.16	1.00	0.96	5.26	12	0.81	0.22	0.06	0.02	
24	0.08	0.02	0.14	2.56	0.77	7.17	14	0.74	0.22	0.06	0.02	
25	0.08	0.01	0.30	7.10	0.62	17	9.14	0.70	0.20	0.06	0.02	
26	0.06	0.01	0.14	3.34	0.48	13	6.00	0.67	0.20	0.05	0.02	
27	0.05	0.01	0.09	1.70	0.40	16	4.80	0.64	0.20	0.05	0.02	
28	0.05	0.30	0.06	1.30	0.36	11	5.45	0.64	0.20	0.05	0.02	
29	0.05	0.53	0.05	2.52	0.34	11	6.94	0.57	0.20	0.05		
30	0.05	0.14	0.05	1.34	0.26	25	8.48	0.57	0.18	0.05		
31		0.06		0.82	0.27		5.18		0.18	0.05		
Total	23.69	1.35	6.53	27.26	91.83	360.25	1,410.73	62.43	10.21	2.44	1.02	0.37
Mean	0.79	0.04	0.22	0.88	2.96	12.0	45.5	2.08	0.33	0.08	0.04	0.01
Max.	4.70	0.53	1.41	7.10	14	35	184	9.02	0.57	0.14	0.06	0.05
Min.	0.05	0.00	0.03	0.01	0.26	0.30	4.80	0.57	0.18	0.05	0.02	0.00
Runoff - mcm.	2.047	0.117	0.564	2.355	7.934	31.126	121.887	5.394	0.882	0.211	0.088	0.032

WATER YEAR 1957 : Max. 184 Min. 0.00 Mean 5.47 Annual Runoff 172.637 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 2	08.00	235.95	191				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MUNE RIVER BASIN

Lam Phra Phloeng at Ban Bu Hau Chang, Nakhon Ratchasima (M.33)

Location: Lat 14°- 35' - 20" N, Long 101°- 50' - 30" E, on right bank 50 meters upstream of Lam Phra Phloeng Damsite, Ban Bu Hua Chang, Amphoe Pak Thong Chai, Nakhon Ratchasima.

Drainage Area: 822 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +226.76 m. (M.S.L.)

Bench Mark: B.M. of Survey Division No.3

Location: Near the gage site.
Elevation: +264.086 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1955 - 1964

Rating Operation:

Period of Rating: 1955 - 1964
Rated by Float: -
Rated by Current Meter: 1955 - 1964

Stability of Channel Regimes: Rather unstable, shifting adjustment and mean hourly discharge are made for flow computation.

Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relationship defined by discharge measurements made during 1958. No diversions for irrigation above gage site.

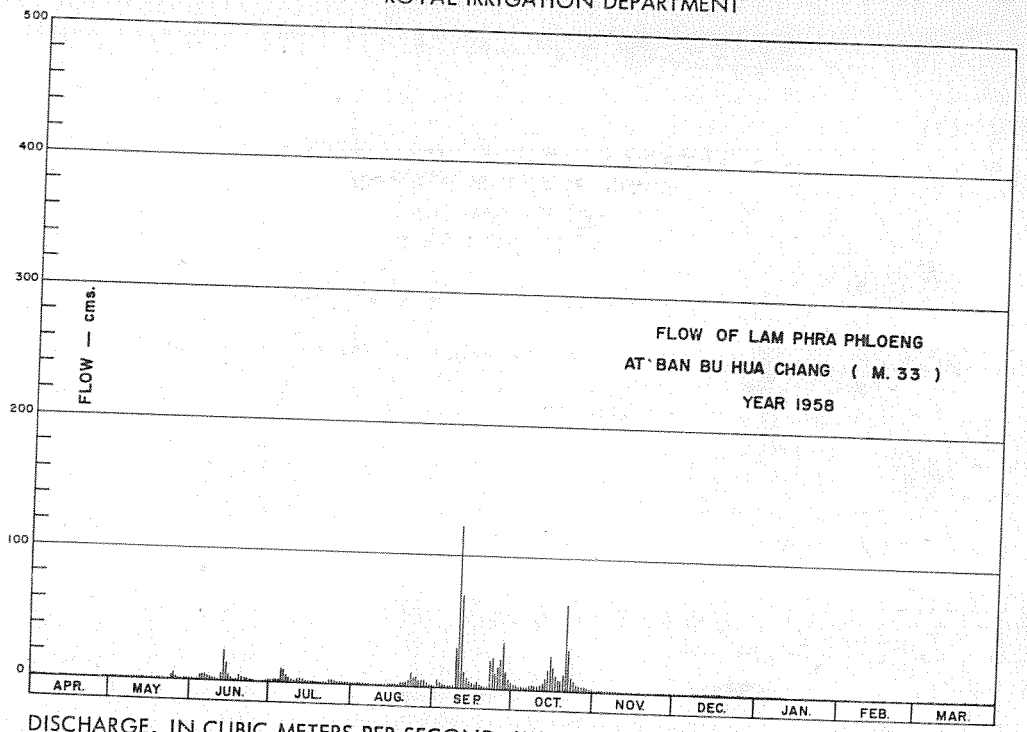
Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	227.09	227.13	227.11	227.11	227.22	227.51	228.14	227.53	227.12	227.06	227.00	226.98
2	.08	.13	.10	.28	.20	228.31	.09	.48	.11	.05	.00	.98
3	.08	.33	.15	.46	.28	227.92	227.91	.44	.11	.05	.00	.98
4	.08	.24	228.24	.38	.29	.81	.74	.41	.11	.04	226.99	.98
5	.08	.19	.26	229.12	.22	.65	.66	.39	.11	.04	.99	.98
6	227.08	227.17	228.51	229.24	227.18	227.50	227.70	227.36	227.11	227.04	226.99	226.98
7	.08	.15	.19	228.27	.17	.40	228.00	.34	.11	.04	.99	.98
8	.08	.14	227.71	227.84	.17	.39	.14	.33	.11	.04	.99	.98
9	.08	.15	.53	.55	.17	230.61	.11	.32	.10	.03	227.00	.98
10	.08	.15	.38	.43	.16	234.91	227.90	.30	.10	.03	.00	.99
11	227.08	227.14	227.39	227.79	227.14	232.66	227.81	227.28	227.10	227.03	227.00	226.99
12	.08	.12	228.74	228.17	.13	229.66	228.66	.27	.10	.03	.00	.99
13	.08	.12	230.96	227.71	.28	228.76	229.26	.25	.09	.03	226.99	.99
14	.08	.11	229.99	.47	.26	.40	.44	.24	.09	.03	.99	.99
15	.08	.74	228.27	.43	.31	.27	231.26	.23	.09	.02	.99	.99
16	227.08	227.59	227.75	227.42	227.46	228.09	230.39	227.22	227.09	227.02	226.99	227.01
17	.08	.63	.51	.35	.71	.37	229.60	.22	.09	.02	.99	.05
18	.08	.35	.41	.31	.48	227.84	.08	.21	.09	.02	.98	.04
19	.08	.71	228.35	.26	.87	.64	.06	.19	.09	.02	.98	.03
20	.08	.56	.05	.23	.87	.57	228.69	.19	.08	.01	.98	.01
21	227.08	227.24	227.79	227.26	227.83	227.54	233.40	227.18	227.08	227.01	226.98	227.00
22	.08	.18	.48	.27	228.27	230.73	231.23	.17	.08	.01	.98	226.99
23	.08	.14	.38	.32	229.42	231.03	229.40	.16	.08	.01	.98	.99
24	.08	.12	.31	.80	228.58	229.62	228.74	.16	.08	.01	.98	227.01
25	.08	228.96	.28	.69	.86	230.41	.39	.16	.08	.01	.98	.00
26	227.09	227.45	227.22	227.55	228.42	231.18	228.16	227.15	227.07	227.00	226.98	227.01
27	.11	.25	.18	.41	.54	.97	.00	.14	.07	.00	.98	.00
28	.13	.18	.16	.34	.32	229.89	227.84	.13	.07	.00	.98	226.99
29	.18	.15	.14	.30	227.82	228.70	.73	.12	.06	.00		227.00
30	.14	.13	.11	.26	.67	.33	.65	.12	.06	.00		.00
31		.12		.23	.58		.59		.06	.00		226.99
Mean	227.09	227.31	227.82	227.59	227.67	229.12	228.73	227.26	227.09	227.02	226.99	227.00
Max.	227.18	228.96	230.96	229.24	229.42	234.91	233.40	227.53	227.12	227.06	227.00	227.05
Min.	227.08	227.11	227.10	227.11	227.13	227.51	227.59	227.12	227.06	227.00	226.98	226.98

WATER YEAR 1958 : Max. 234.91 m. Min. 226.98 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		0.04	0.30	0.42	0.65	1.28	3.36	1.38	0.25	0.11	0.02	
2		0.04	0.30	0.82	0.60	5.91	3.16	1.24	0.22	0.08	0.02	
3		0.40	0.38	1.28	0.80	2.57	2.53	1.12	0.22	0.08	0.02	
4		0.22	4.19	1.05	0.82	2.18	1.97	1.06	0.22	0.06	0.01	
5		0.13	4.32	9.71	0.65	1.70	1.73	1.00	0.22	0.06	0.01	
6		0.10	5.28	9.37	0.60	1.25	1.85	0.98	0.22	0.06	0.01	
7		0.07	3.82	4.19	0.58	1.00	2.85	0.96	0.22	0.06	0.01	
8		0.05	2.05	2.46	0.58	0.98	3.36	0.95	0.22	0.06	0.01	
9		0.07	1.49	1.55	0.58	30	3.24	0.94	0.20	0.05	0.02	
10		0.07	1.05	1.19	0.55	122	2.50	0.92	0.20	0.05	0.02	0.01
11		0.05	1.07	2.33	0.50	47	2.18	0.82	0.20	0.05	0.02	0.01
12		0.02	6.70	3.63	0.50	12	4.89	0.77	0.20	0.05	0.02	0.01
13		0.02	23	2.05	0.80	6.31	9.23	0.68	0.17	0.05	0.01	0.01
14		0.01	15	1.31	0.75	4.53	11	0.64	0.17	0.05	0.01	0.01
15		1.48	4.27	1.19	0.87	3.94	26	0.60	0.17	0.04	0.01	0.01
16		0.98	2.18	1.16	1.28	3.16	17	0.56	0.17	0.04	0.01	0.03
17		1.17	1.43	0.97	1.73	4.35	11	0.56	0.17	0.04	0.01	0.08
18		0.44	1.13	0.87	1.34	2.29	8.03	0.53	0.17	0.04		0.06
19		1.27	4.65	0.75	2.73	1.67	7.91	0.46	0.17	0.04		0.05
20		0.96	3.30	0.67	2.59	1.46	13	0.46	0.15	0.03		0.03
21		0.22	2.32	0.75	2.45	1.37	65	0.42	0.15	0.03		0.02
22		0.12	1.34	0.77	4.29	21	26	0.42	0.15	0.03		0.01
23		0.05	1.05	2.31	10	23	10	0.39	0.15	0.03		0.01
24		0.02	0.87	2.35	5.71	11	6.90	0.36	0.15	0.03		0.03
25		5.37	0.80	1.99	7.19	17	4.88	0.36	0.15	0.03		0.02
26		0.90	0.65	1.55	4.93	23	3.70	0.33	0.13	0.02		0.03
27	0.01	0.50	0.55	1.13	5.54	35	3.00	0.30	0.13	0.02		0.02
28	0.04	0.40	0.52	0.95	4.45	14	2.38	0.27	0.13	0.02		0.01
29	0.12	0.38	0.50	0.85	2.42	6.42	2.00	0.25	0.11	0.02		0.02
30	0.05	0.32	0.42	0.75	1.92	4.15	1.74	0.25	0.11	0.02		0.02
31		0.30		0.67	1.64		1.54		0.11	0.02		0.01
Total	0.22	16.17	94.93	61.04	70.04	411.52	263.93	19.98	5.40	1.37	0.24	0.51
Mean	0.007	0.522	3.16	1.97	2.26	13.7	8.51	0.67	0.174	0.044	0.008	0.016
Max.	0.12	5.37	23	9.71	10	122	65	1.38	0.25	0.11	0.02	0.08
Min.	0.00	0.01	0.30	0.42	0.50	1.28	1.54	0.25	0.11	0.02	0.00	0.00
Runoff - mcm.	0.019	1.397	8.020	5.274	6.051	35.555	22.803	1.726	0.466	0.118	0.021	0.044

WATER YEAR 1958 : Max. 122 Min. 0.00 Mean 2.59 Annual Runoff 81.678 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 10	07.00	235.54	156				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
MUNE RIVER BASIN

Lam Phra Phloeng at Ban Bu Hua Chang, Nakhon Ratchasima (M.33)

Location: Lat 14° – 35' – 20" N, Long 101° – 50' – 30" E, on right bank 50 meters upstream of Lam Phra Phloeng Damsite, Ban Bu Hau Chang, Amphoe Pak Thong Chai, Nakhon Ratchasima.

Drainage Area: 822 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +226.76 m. (M.S.L.)

Bench Mark: B.M. of Survey Division No.3

Location: Near the gage site.
Elevation: +264.086 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1955 – 1964

Rating Operation:

Period of Rating: 1955 – 1964
Rated by Float: –
Rated by Current Meter: 1955 – 1964

Stability of Channel Regimes: Rather unstable, shifting adjustment and mean hourly discharge are made for flow computation.

Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relationship defined by discharge measurements made during 1959. No diversions for irrigation above gage site.

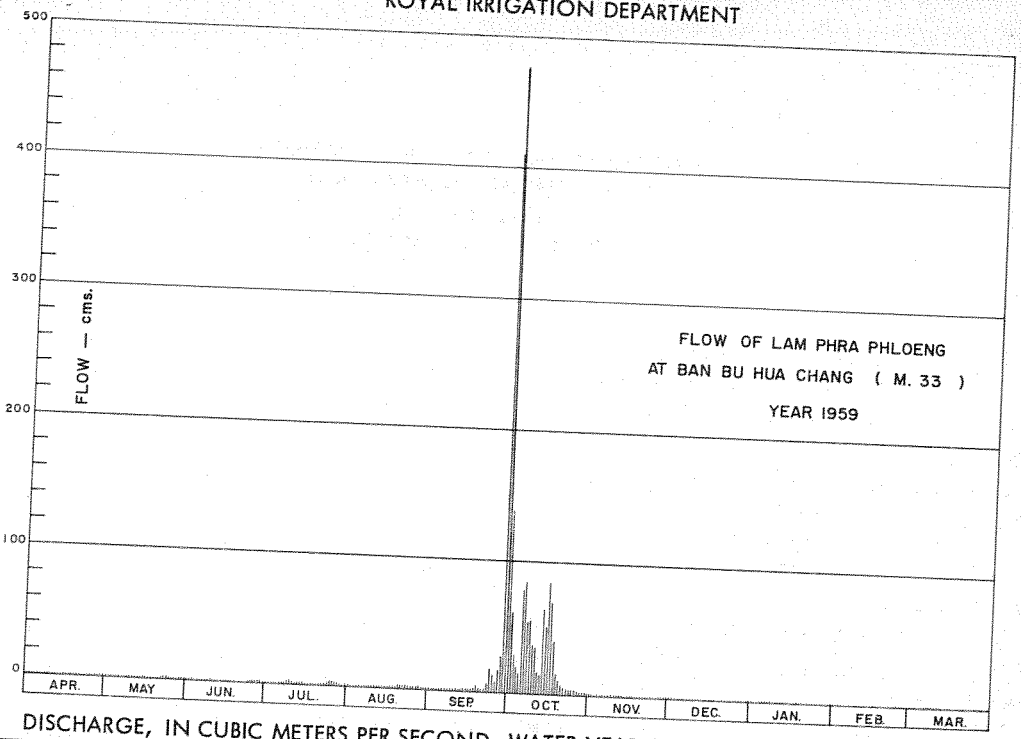
Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	226.99	227.08	227.08	227.05	227.20	227.24	234.56	227.87	227.30	227.17	227.11	227.06
2	.99	.07	.06	.05	.16	.20	233.14	.70	.28	.17	.11	.06
3	.99	.07	.05	.14	.14	.19	231.49	.62	.28	.17	.11	.10
4	.99	.11	.04	.12	.15	.35	230.76	.56	.28	.17	.11	.32
5	.99	.10	.01	.07	.16	.53	229.92	.51	.27	.17	.11	.21
6	227.00	227.12	227.00	227.05	227.13	227.30	233.69	227.49	227.26	227.17	227.10	227.17
7	226.99	.17	226.99	.03	.11	.24	.80	.48	.25	.17	.10	.14
8	.99	.15	.99	.01	.09	.23	232.96	.44	.25	.16	.10	.13
9	.99	.14	227.17	.80	.09	.63	233.15	.43	.24	.16	.10	.12
10	.98	.12	.49	228.02	.07	.39	231.97	.41	.24	.16	.10	.12
11	226.98	227.13	227.10	227.54	227.07	227.31	231.93	227.38	227.24	227.16	227.10	227.11
12	.98	.11	.05	.29	.06	.34	230.43	.39	.23	.16	.10	.11
13	.98	.12	.10	.57	.05	.28	.15	.39	.23	.16	.10	.11
14	.98	.16	.07	.64	.16	.23	232.75	.38	.23	.16	.09	.11
15	.98	.35	.03	.32	.14	.39	.65	.36	.22	.15	.09	.10
16	226.98	227.29	227.01	227.22	227.12	227.53	233.78	227.34	227.22	227.15	227.09	227.10
17	.99	.16	.00	.16	.10	.51	.38	.34	.22	.15	.09	.10
18	.99	.12	226.99	.12	.17	228.14	231.64	.33	.21	.15	.08	.10
19	.98	.12	.99	.09	.17	.30	230.23	.33	.21	.14	.08	.10
20	.98	.10	.99	.07	228.17	227.60	229.45	.33	.20	.14	.07	.10
21	226.98	227.10	226.98	227.06	227.72	227.65	228.93	227.38	227.20	227.14	227.06	227.10
22	.98	.39	.98	.04	.50	.56	.59	.40	.20	.13	.06	.10
23	227.01	.52	.98	.05	.41	229.00	.34	.37	.19	.13	.06	.10
24	.13	.20	227.16	.27	.56	.96	.18	.35	.19	.13	.06	.10
25	.12	.15	.52	.75	.43	.96	.09	.34	.19	.13	.06	.10
26	227.10	227.12	227.31	228.07	227.47	228.89	227.97	227.33	227.19	227.13	227.06	227.10
27	.09	.11	.15	227.76	.52	229.61	.89	.32	.19	.13	.06	.10
28	.12	.12	.10	.46	.44	231.28	.80	.31	.19	.12	.06	.10
29	.13	.11	.08	.38	.42	235.81	.75	.30	.19	.12	.06	.10
30	.10	.10	.06	.31	.31	236.68	.90	.30	.18	.12		.10
31		.09		.25	.24		228.17		.18	.12		.10
Mean	227.02	227.15	227.08	227.31	227.27	228.53	230.69	227.42	227.22	227.15	227.08	227.11
Max.	227.13	227.52	227.52	228.07	228.17	236.68	234.56	227.87	227.30	227.17	227.11	227.32
Min.	226.98	227.07	226.98	227.01	227.05	227.19	227.75	227.30	227.18	227.12	227.06	227.10

WATER YEAR 1959 : Max. 236.68 m. Min. 226.98 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.01	0.06	0.16	0.10	0.48	0.60	140	2.35	0.45	0.12	0.01	0.00
2	0.01	0.04	0.12	0.10	0.40	0.50	62	1.77	0.39	0.12	0.01	0.00
3	0.01	0.04	0.10	0.28	0.38	0.50	29	1.41	0.39	0.12	0.01	0.00
4	0.01	0.10	0.08	0.24	0.39	0.88	21	1.29	0.39	0.12	0.01	0.50
5	0.01	0.06	0.06	0.14	0.40	1.29	14	1.20	0.36	0.12	0.01	0.21
6	0.01	0.06	0.05	0.10	0.35	0.75	79	1.00	0.34	0.12		
7	0.01	0.16	0.04	0.09	0.28	0.60	85	0.96	0.31	0.12		0.12
8	0.01	0.15	0.04	0.06	0.23	0.58	53	0.83	0.31	0.10		0.06
9	0.01	0.11	0.34	2.34	0.23	1.74	55	0.80	0.29	0.10		0.04
10		0.08	1.30	3.16	0.21	0.98	36	0.73	0.29	0.10		0.03
11		0.09	0.20	1.44	0.21	0.78	35	0.65	0.29	0.10		0.03
12		0.07	0.10	0.64	0.20	0.85	17	0.67	0.26	0.10		0.01
13		0.07	0.20	1.56	0.39	0.70	14	0.67	0.26	0.10		0.01
14		0.16	0.14	1.80	0.40	0.58	64	0.65	0.26	0.10		0.01
15		0.68	0.09	0.72	0.38	0.98	50	0.59	0.24	0.08		
16		0.31	0.06	0.44	0.28	1.29	84	0.52	0.24	0.08		
17	0.01	0.09	0.05	0.32	0.25	1.23	66	0.52	0.24	0.08		
18	0.01	0.07	0.04	0.24	0.42	3.50	30	0.50	0.21	0.08		
19		0.05	0.04	0.18	0.42	4.20	14	0.50	0.21	0.06		
20		0.04	0.04	0.14	3.75	1.50	8.64	0.50	0.19	0.06		
21		0.04	0.03	0.15	2.05	1.65	6.50	0.65	0.19	0.06		
22		0.68	0.03	0.13	1.30	1.38	5.02	0.70	0.19	0.04		
23		1.07	0.03	0.14	1.00	6.32	4.56	0.62	0.17	0.04		
24	0.16	0.25	0.32	0.56	1.52	17	3.26	0.56	0.17	0.04		
25	0.15	0.16	1.39	2.10	1.05	13	3.50	0.52	0.17	0.04		
26	0.09	0.12	0.68	3.36	1.22	7.33	3.06	0.50	0.17	0.04		
27	0.08	0.10	0.30	2.20	1.40	14	2.62	0.50	0.17	0.04		
28	0.12	0.12	0.20	1.20	1.10	27	1.92	0.47	0.17	0.03		
29	0.09	0.10	0.16	0.92	1.05	414	1.77	0.45	0.17	0.03		
30	0.07	0.10	0.12	0.70	0.72	479	2.44	0.45	0.14	0.03		
31		0.09		0.60	0.58		3.70		0.14	0.03		
Total	0.87	5.32	6.51	26.15	23.04	1,004.71	991.99	23.53	7.77	2.40	0.05	1.03
Mean	0.029	0.172	0.217	0.843	0.743	33.5	32.0	0.784	0.251	0.077	0.002	0.033
Max.	0.16	1.07	1.39	3.36	3.75	479	136	2.35	0.45	0.12	0.01	0.50
Min.	0.00	0.04	0.03	0.06	0.20	0.50	1.77	0.45	0.14	0.03	0.00	0.00
Runoff — mcm.	0.075	0.460	0.562	2.259	1.991	86.807	85.708	2.033	0.671	0.207	0.004	0.089

WATER YEAR 1959 : Max. 479 Min. 0.00 Mean 5.73 Annual Runoff 181.126 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 29	13.00	238.08	752				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
NAKHON NAYOK RIVER BASIN

Nakhon Nayok River at Khao Kariang (Ny.1)

Location: Lat 14°- 14'- 22" N, Long 101°- 16' - 45" E, on left bank 12 kilometers upstream from Muang Nakhon Nayok and 10 kilometers from the country road, left of Suwanson Road, Amphoe Muang, Nakhon Nayok.

Drainage Area: 526 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +2.974 m. (M.S.L.)

Bench Mark: B.M. - R.I.D.

Location: On left bank near the gage line.

Elevation: +9.791 m. (M.S.L.)

Gage Reading Frequency: 12 - time daily readings at 0.00, 0.03, 0.06, 0.09 - 15.00, 18.00 and 21.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 12 readings.

Period of Available Gage Records: 1952 to date.

Rating Operation:

Period of Rating: 1952 - 57

Rated by Float: -

Rated by Current Meter: 1952 - 57

Stability of Channel Regimes: Rather unstable, shifting adjustment and mean hourly discharge are included for flow computation.

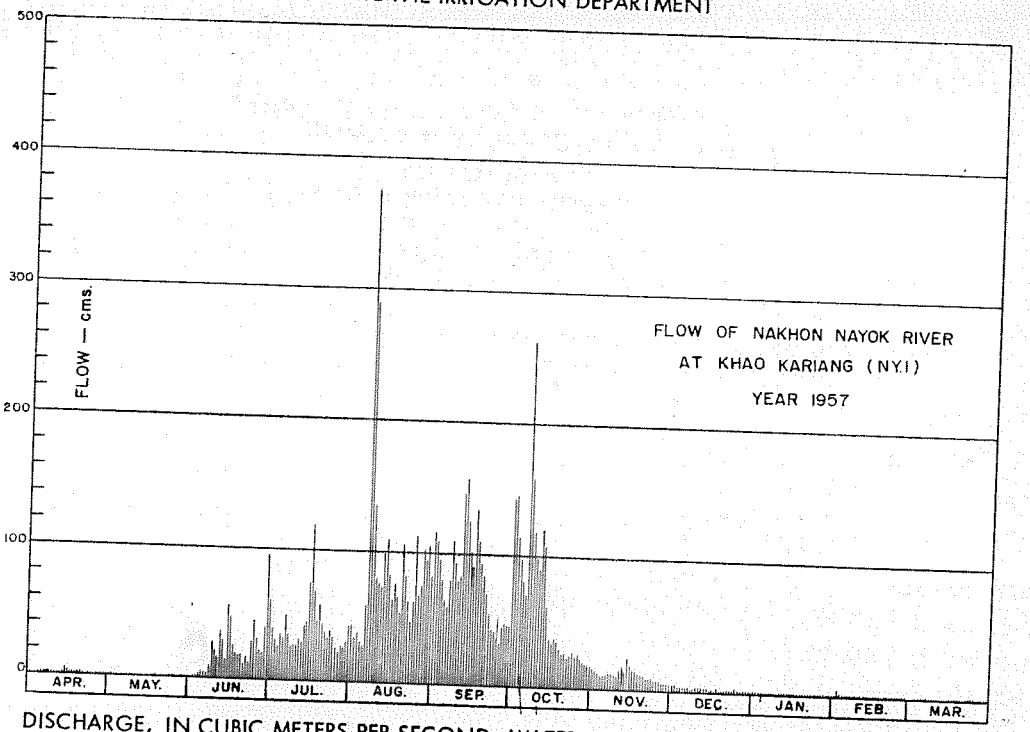
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship is defined by discharge measurements made during 1957. For drought periods stage was effected by back water at Nakhon Nayok Barrage, which is at downstream. No diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.41	3.39	3.43	5.53	5.07	6.64	6.49	4.55	4.34	4.52	3.87	3.63
2	.39	.38	.43	.06	4.86	.36	7.37	.45	.24	.52	4.10	.61
3	.38	.38	.49	4.87	.97	.18	6.46	.44	.43	.51	.17	.57
4	.39	.39	.57	.69	.82	5.83	.28	.57	.40	.49	.17	.55
5	.40	.38	.75	.92	.73	.50	5.87	.57	.33	.30	.18	.53
6	3.53	3.39	3.74	4.76	5.23	5.40	5.49	4.52	4.41	4.14	4.18	3.52
7	.56	.39	.66	5.25	8.90	6.02	7.80	.58	.33	.12	.18	.53
8	.54	.38	.73	4.94	.24	.54	.23	.55	.42	.12	.17	.53
9	.48	.38	4.53	.78	6.10	.16	6.62	.52	.47	.11	.15	.52
10	.45	.37	.17	.70	5.76	5.75	.13	.41	.29	.11	.13	.51
11	3.43	3.37	4.25	4.75	5.88	5.88	5.99	4.53	4.31	4.08	4.11	3.51
12	.48	.39	.75	.83	.87	7.10	.57	.59	.35	.05	.08	.51
13	.56	.40	.78	.82	6.35	.57	.17	.65	.33	.04	.05	.51
14	.72	.39	.38	5.13	.59	6.59	4.90	.76	.43	.02	.02	.50
15	.58	.38	5.32	.45	5.78	.23	.96	.58	.48	.00	3.99	.50
16	3.53	3.38	5.19	5.57	5.53	5.93	4.95	4.61	4.51	3.98	3.95	3.49
17	.48	.37	4.49	6.65	.96	7.03	5.07	.56	.54	.95	.92	.48
18	.47	.36	.40	5.49	.69	6.31	4.91	.48	.50	.94	.89	.48
19	.45	.34	.49	.20	.19	.27	.79	.42	.30	.91	.89	.48
20	.44	.32	.45	.45	.99	5.88	.75	.41	.34	.89	.87	.46
21	3.42	3.32	4.48	5.18	5.80	5.60	4.78	4.50	4.37	3.89	3.84	3.46
22	.40	.33	.39	.02	.51	.43	.68	.45	.37	.91	.81	.45
23	.40	.35	.32	4.83	.24	.16	.72	.51	.35	.92	.80	.45
24	.39	.34	.60	5.11	.11	.07	.79	.37	.32	.92	.76	.45
25	.38	.33	5.09	4.91	6.10	4.93	.73	.37	.35	.91	.74	.44
26	3.38	3.33	4.79	4.70	5.59	4.88	4.81	4.42	4.40	3.90	3.73	3.44
27	.38	.33	.63	.54	.82	5.22	.75	.47	.43	.90	.70	.44
28	.38	.34	.53	.76	6.25	.26	.68	.40	.46	.88	.66	.44
29	.37	.35	.36	.75	.08	.22	.72	.39	.48	.87		.44
30	.36	.40	5.72	.80	.60	.26	.55	.45	.50	.86		.45
31		.43		5.01	5.91		.64		.51	.84		.42
Mean	3.45	3.38	4.36	5.08	5.85	5.91	5.44	4.50	4.40	4.54	3.97	3.49
Max.	3.72	3.43	5.32	6.65	8.90	7.57	7.80	4.76	4.54	4.52	4.18	3.63
Min.	3.36	3.32	3.43	4.54	4.73	4.88	4.55	4.37	4.32	3.84	3.66	3.42

WATER YEAR 1957 : Max. 8.90 m. Min. 3.32 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.34	0.38	0.86	63	43	116	141	15	5.12	1.74	0.85	0.47
2	0.20	0.38	0.70	37	33	108	145	14	4.50	1.72	4.53	0.47
3	0.18	0.27	1.40	30	37	90	109	11	3.70	1.76	1.55	0.53
4	0.28	0.32	2.04	25	29	77	95	10	3.63	1.70	1.76	0.53
5	0.30	0.31	4.24	35	27	62	77	10	3.93	1.68	1.45	0.49
6	1.46	0.31	3.34	27	44	58	62	11	2.45	1.44	1.48	0.66
7	2.00	0.24	3.08	49	374	84	261	12	3.05	1.59	1.42	0.66
8	1.70	0.27	4.24	34	220	109	137	12	1.85	1.31	1.86	0.59
9	1.43	0.38	27	25	89	89	115	11	2.16	1.79	1.03	0.58
10	1.08	0.31	21	26	74	78	93	10	3.28	1.41	1.23	0.57
11	0.84	0.26	16	26	75	82	84	14	3.14	1.40	1.04	0.56
12	1.40	0.27	36	31	72	146	120	17	3.16	1.33	1.67	0.55
13	1.70	0.44	29	28	99	157	105	12	2.33	1.37	0.71	0.54
14	4.46	0.38	13	42	109	113	41	24	2.61	1.19	0.57	0.53
15	2.28	0.26	56	43	70	96	36	18	1.65	1.26	0.68	0.51
16	1.70	0.31	47	64	62	87	33	15	1.87	1.32	0.59	0.50
17	1.27	0.26	24	119	75	133	37	14	1.39	1.26	0.66	0.50
18	1.38	0.27	20	59	67	99	32	12	3.08	1.23	0.73	0.49
19	1.42	0.25	18	43	47	90	26	11	1.84	1.12	0.66	0.48
20	1.58	0.14	19	58	105	82	25	10	1.67	1.18	0.72	0.47
21	0.44	0.13	10	42	79	66	26	8.80	1.43	1.34	0.68	0.46
22	0.36	0.15	17	37	63	53	22	8.61	1.29	1.30	0.65	0.45
23	0.26	0.24	11	32	47	41	25	8.92	1.07	1.28	0.57	0.44
24	0.22	0.17	20	39	43	41	26	7.69	0.96	1.31	0.61	0.43
25	0.20	0.10	45	33	112	35	23	7.73	2.75	1.18	0.66	0.42
26	0.30	0.13	31	25	65	30	25	6.85	1.80	1.15	0.62	0.41
27	0.32	0.13	23	21	71	45	20	5.92	0.69	1.02	0.65	0.40
28	0.38	0.20	20	27	102	47	20	5.52	0.79	1.03	0.51	0.40
29	0.30	0.26	19	25	91	46	17	5.49	0.79	0.87		0.39
30	0.23	0.48	94	32	105	45	18	4.67	0.74	0.89		0.38
31		0.83		43	75		16		0.76	0.81		0.38
Total	30.01	8.83	642.23	2,143	2,604	5,009	2,012	336.46	69.48	40.98	30.14	15.24
Mean	1.00	0.28	21.4	69.1	84.0	167	64.9	11.2	2.24	1.32	1.08	0.49
Max.	4.46	0.83	94	119	374	157	261	24	5.12	1.79	4.53	0.66
Min.	0.18	0.10	0.70	21	27	30	16	4.67	0.74	0.81	0.51	0.38
Runoff - MCM.	2.593	0.763	55.489	185.155	224.986	432.778	173.837	29.070	6.003	3.541	2.604	1.317

WATER YEAR 1957 : Max. 374 Min. 0.10 Mean 35.4 Annual Runoff 1,118.134 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 7	06.00	10.27	576				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
NAKHON NAYOK RIVER BASIN

Nakhon Nayok River at Khao Kariang (Ny.1)

Location: Lat 14°- 14' - 22" N, Long 101°- 16' - 45" E, on left bank, 12 kilometers upstream from Muang Nakhon Nayok and 10 kilometers from the country road, left of Suwanson Road, Amphoe Muang, Nakhon Nayok.

Drainage Area: 526 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +2.974 m. (M.S.L.)

Bench Mark: B.M. - R.I.D.

Location: On left bank near the gage line.
Elevation: +9.791 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: 1952 to date.

Rating Operation:

Period of Rating: 1952 - 57
Rated by Float: -
Rated by Current Meter: 1952 - 57

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

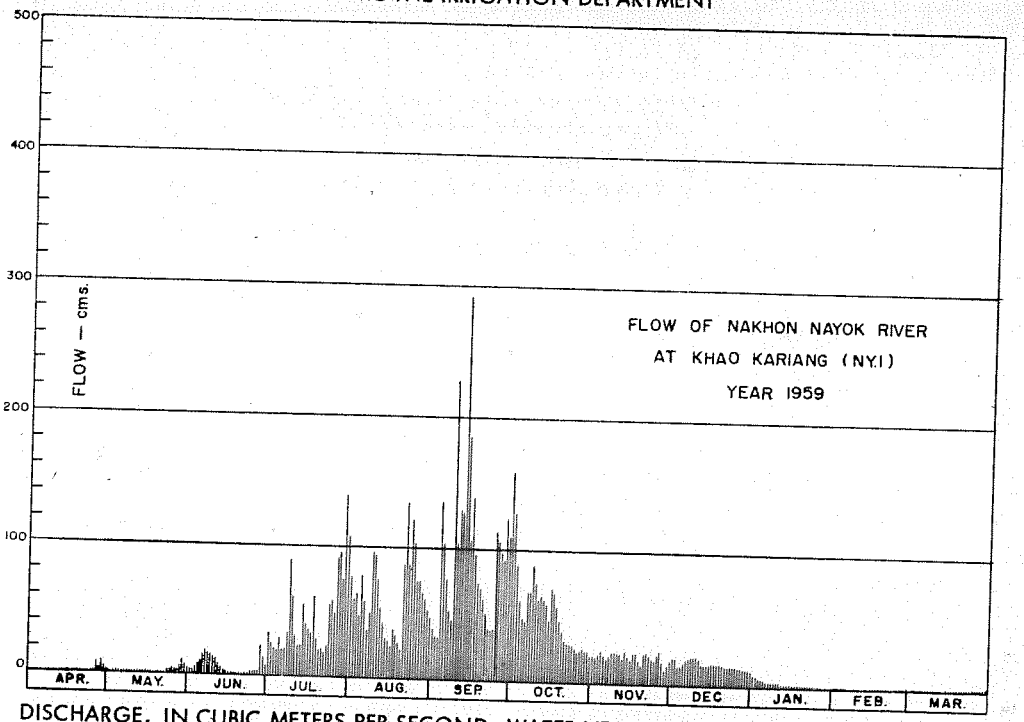
General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1955 - 57. For drought periods stage was effected by backwater at Nakhon Nayok Barrage, which is at downstream. No diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.45	3.59	3.66	4.87	5.90	4.96	7.40	4.43	4.44	3.93	3.47	3.47
2	.45	.58	.64	.58	.53	.86	6.63	.39	.45	.91	.46	.46
3	.44	.65	.87	.48	.64	.63	5.93	.50	.18	.82	.46	.47
4	.44	.58	.96	.39	.15	7.03	.49	.56	.19	.77	.46	.47
5	.42	.54	4.07	.72	.96	6.24	.23	.44	.28	.75	.46	.52
6	3.42	3.52	4.29	4.33	5.27	5.77	5.17	4.34	4.35	3.73	3.46	3.46
7	.40	.55	.39	.42	4.95	.33	.73	.50	.41	.72	.45	.43
8	.41	.53	.24	.70	5.34	.13	.71	.54	.44	.70	.45	.42
9	.41	.51	.26	6.19	6.33	8.29	6.17	.57	.44	.68	.44	.42
10	.40	.50	.17	5.43	.28	6.20	5.79	.53	.46	.64	.44	.42
11	3.40	3.52	4.13	4.61	5.52	6.91	5.58	4.47	4.43	3.61	3.44	3.41
12	.40	.58	3.93	.54	.27	.75	.66	.41	.23	.59	.44	.41
13	.40	.57	.76	.58	4.94	8.88	.60	.57	.20	.59	.43	.39
14	.40	.52	.66	5.43	.78	.39	.50	.46	.21	.56	.43	.41
15	.43	.50	.61	4.85	.73	6.34	.21	.33	.26	.54	.43	.52
16	3.40	3.50	3.56	4.98	4.58	7.08	5.79	4.49	4.28	3.52	3.43	3.45
17	.42	.50	.56	.85	.97	5.88	.71	.53	.29	.52	.43	.41
18	.42	.49	.54	5.58	.82	.86	.34	.30	.26	.52	.43	.43
19	.42	.48	.54	4.60	.60	.78	.15	.21	.27	.52	.43	.45
20	.41	.47	.53	.42	.49	.56	4.94	.51	.24	.51	.42	.44
21	3.40	3.46	3.52	4.47	5.94	5.29	4.79	4.53	4.21	3.51	3.40	3.46
22	.40	.46	.51	.35	7.00	4.96	.74	.47	.20	.51	.40	.40
23	.41	.73	.51	.50	6.02	.99	.75	.39	.20	.50	.40	.41
24	.53	.62	.62	5.42	.79	5.00	.69	.33	.19	.50	.40	.44
25	.56	.76	.62	.56	.45	6.64	.60	.51	.18	.49	.40	.44
26	4.00	3.69	3.64	5.12	5.86	6.43	4.51	4.59	4.17	3.48	3.40	3.48
27	3.63	.66	.74	6.22	.90	.30	.58	.32	.16	.48	.45	.48
28	4.01	.90	4.52	.33	.66	.21	.59	.05	.14	.47	.48	.45
29	3.74	4.10	.09	5.84	.54	.82	.55	.21	.12	.46	.51	.42
30	.62	3.94	3.91	7.09	.31	.51	.57	.36	.11	.46		.48
31		.74		6.51	.18		.40		.08	.46		.50
Mean	3.50	3.60	3.83	5.09	5.50	6.13	5.31	4.43	4.26	3.59	3.43	3.44
Max.	4.01	4.10	4.52	7.09	7.00	8.88	7.40	4.59	4.46	3.93	3.51	3.52
Min.	3.40	3.46	3.51	4.33	4.49	4.63	4.40	4.05	4.08	3.46	3.40	3.39

WATER YEAR 1959 : Max. 8.88 m. Min. 3.39 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.75	1.90	2.90	33	75	37	159	20	20	7.60	0.85	0.85
2	0.75	1.80	2.60	24	59	33	113	19	20	7.20	0.80	0.80
3	0.70	2.75	6.40	21	64	26	77	22	13	5.40	0.80	0.85
4	0.70	1.80	8.20	19	44	136	58	24	14	4.55	0.80	0.85
5	0.60	1.40	11	29	78	92	47	20	16	4.25	0.80	1.20
6	0.60	1.20	16	20	49	69	45	17	18	3.95	0.80	0.80
7	0.50	1.50	19	20	36	51	68	22	19	3.80	0.75	0.65
8	0.55	1.30	15	28	52	43	67	23	20	3.50	0.75	0.60
9	0.55	1.10	15	89	96	228	88	24	20	3.20	0.70	0.60
10	0.50	1.00	13	55	94	90	70	23	21	2.60	0.70	0.60
11	0.50	1.20	12	25	59	129	61	21	20	2.15	0.70	0.55
12	0.50	1.80	7.60	23	49	119	65	19	15	1.90	0.70	0.55
13	0.50	1.70	4.40	24	36	292	62	24	14	1.90	0.65	0.47
14	0.50	1.20	2.90	55	30	237	58	21	14	1.60	0.65	0.55
15	0.65	1.00	2.15	33	29	97	46	17	15	1.40	0.65	1.20
16	0.50	1.00	1.60	37	24	139	70	22	16	1.20	0.65	0.75
17	0.60	1.00	1.60	33	37	75	67	23	16	1.20	0.65	0.55
18	0.60	0.95	1.40	61	32	74	52	16	15	1.20	0.65	0.65
19	0.60	0.90	1.40	25	25	70	44	14	16	1.20	0.65	0.75
20	0.55	0.85	1.30	20	22	60	36	22	15	1.10	0.60	0.70
21	0.50	0.80	1.20	21	77	50	31	23	14	1.10	0.50	0.80
22	0.50	0.80	1.10	18	134	37	29	21	14	1.10	0.50	0.50
23	0.55	3.95	1.10	22	81	38	29	19	14	1.00	0.50	0.55
24	1.30	2.30	2.30	55	121	38	28	17	14	1.00	0.50	0.70
25	1.60	4.40	2.30	60	103	113	25	22	14	0.95	0.50	0.70
26	9.00	3.35	2.60	43	74	102	22	25	13	0.90	0.50	0.90
27	2.45	2.90	3.95	91	75	95	24	17	13	0.90	0.75	0.90
28	9.25	7.00	23	96	65	90	25	10	12	0.85	0.90	0.75
29	4.10	11	11	73	60	123	23	14	12	0.80	1.10	0.60
30	2.30	7.80	7.20	139	50	106	24	18	12	0.80		0.90
31		4.10		106	45		19		11	0.80		1.00
Total	43.25	75.75	201.20	1,398	1,875	2,889	1,632	599	480	71.10	20.05	22.82
Mean	1.44	2.44	6.71	45.1	60.5	96.3	52.6	19.9	15.5	2.29	0.69	0.74
Max.	9.25	11	23	139	134	292	159	25	20	7.60	1.10	1.20
Min.	0.50	0.80	1.10	18	22	26	19	10	11	0.80	0.50	0.47
Runoff - MCM.	3.741	6.545	17.384	120.787	162.000	249.609	141.004	51.753	41.472	6.143	1.734	1.971

WATER YEAR 1959 : Max. 292 Min. 0.50 Mean 25.50 Annual Runoff 804.139 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 13	06.00	9.70	429				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
NAKHON NAYOK RIVER BASIN

Khlong Tha Dan at Ban Tha Dan, Nakhon Nayok (Ny.1A)

Location: Lat 14° – 18' – 25" N, Long 101° – 19' – 40" E, on left bank, 1.8 kilometers upstream from the confluence of Lam Nang Rong and Khlong Tha Dan, Tambon Hintang, Amphoe Muang, Nakhon Nayok.

Drainage Area: 187 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +10.59 m. (A.D.)

Bench Mark: B.M. – H.S.

Location: On left bank near the upper gage.

Elevation: 14.295 m. (A.D.)

Gage Reading Frequency: 8 – time daily readings at 03.00, 06.00, 09.00, 12.00, 15.00, 18.00, 21.00 and 24.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 8 readings.

Period of Available Gage Records: 1958 to date.

Rating Operation:

Period of Rating: 1958 – 59

Rated by Float: –

Rated by Current Meter: 1958 – 59

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

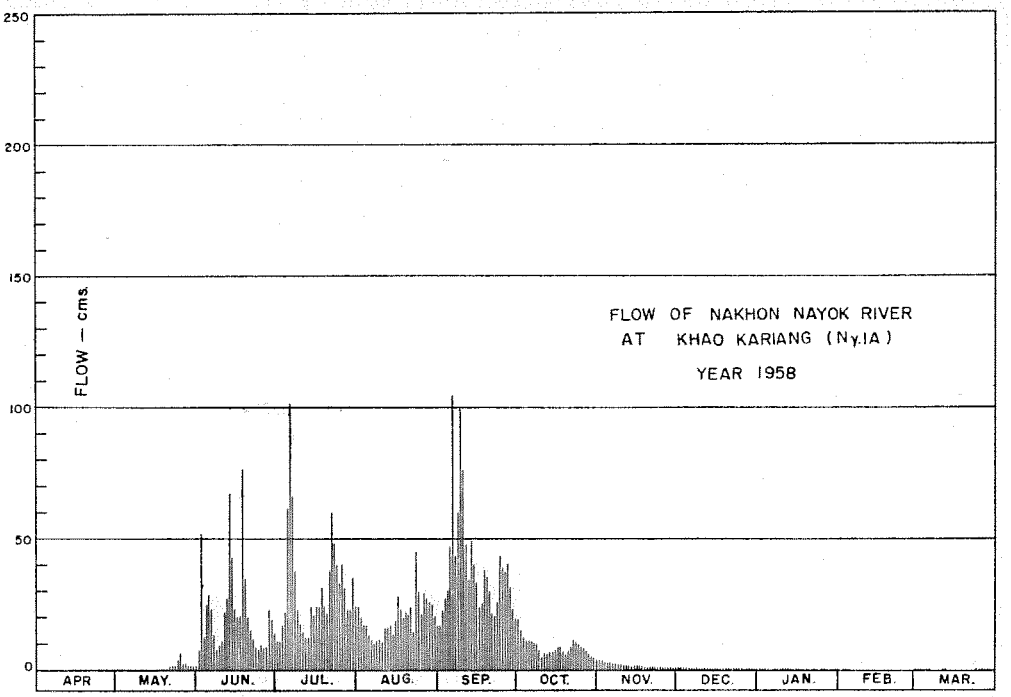
General Description: Records fair. Stage – discharge relationship used is defined by discharge measurements during 1958. No diversions for irrigation above gage site.

Remarks: Gage height record began on Mar.21, 1958. Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	10.93	11.25	11.66	12.03	12.38	12.20	12.26	11.78	11.42	11.28	11.10	11.17
2	.92	.27	12.79	.06	.25	.35	.18	.76	.42	.28	.10	.12
3	.91	.39	.02	.23	.21	.44	.10	.74	.41	.28	.06	.08
4	.90	.31	.32	.23	.18	.47	.05	.78	.40	.28	.04	.07
5	.88	.28	.49	.93	.15	.50	.01	.68	.39	.28	.03	.06
6	10.86	11.26	12.32	13.39	12.07	13.30	11.96	11.67	11.39	11.27	11.02	11.06
7	.88	.24	.06	12.79	.01	12.67	.91	.65	.38	.27	.02	.04
8	11.00	.23	11.96	.49	.05	.73	12.01	.63	.37	.26	.01	.03
9	.13	.22	12.07	.32	.08	13.31	11.86	.62	.37	.26	.01	.03
10	.15	.19	.06	.21	.04	12.97	.90	.62	.37	.25	.01	.02
11	11.13	11.17	12.30	12.13	12.21	12.67	11.90	11.61	11.36	11.25	11.01	11.02
12	.12	.19	.46	.07	.22	.49	.89	.59	.36	.24	.00	.06
13	.20	.32	13.04	.10	.27	.73	.90	.57	.36	.24	.00	.06
14	.23	.25	12.44	.37	.13	.63	.94	.56	.35	.23	.00	.04
15	.21	.21	.29	.30	.29	.50	.96	.55	.35	.23	10.99	.03
16	11.21	11.19	12.26	12.42	12.43	12.38	11.99	11.54	11.34	11.22	10.98	11.02
17	.20	.17	.19	.27	.35	.34	12.00	.53	.34	.20	.97	.02
18	.26	.18	13.10	.48	.28	.61	11.91	.51	.34	.20	.96	.01
19	.23	.26	12.37	.41	.34	.59	.87	.50	.33	.20	.96	.01
20	.22	.22	.26	.33	.35	.43	.91	.49	.33	.20	.95	.00
21	11.20	11.58	12.20	12.64	12.39	12.29	12.01	11.48	11.33	11.17	10.94	11.00
22	.17	.55	.09	.97	.17	.37	.05	.48	.33	.16	.93	10.99
23	.16	.54	11.99	.67	.84	.40	.05	.47	.32	.16	.92	11.01
24	.14	.77	.95	.69	.44	.69	.01	.46	.31	.15	.90	.22
25	.13	.97	12.01	.51	.30	.62	11.99	.46	.30	.15	.89	.34
26	11.14	11.66	11.95	12.66	12.48	12.64	11.97	11.46	11.30	11.15	10.90	11.21
27	.13	.62	.96	.47	.47	.64	.90	.45	.30	.14	.95	.15
28	.14	.54	12.36	.38	.43	.46	.86	.44	.30	.13	11.18	.16
29	.28	.54	.23	.33	.34	.34	.84	.44	.30	.12		.16
30	.23	.56	.12	.59	.33	.28	.81	.43	.29	.12		.16
31		.48		.42	.25		.80		.29	.11		.14
Mean	11.11	11.36	12.24	12.45	12.28	12.57	11.96	11.56	11.35	11.21	10.99	11.08
Max.	11.28	11.97	13.10	13.39	12.84	13.31	12.26	11.78	11.42	11.28	11.18	11.34
Min.	10.86	11.17	11.66	12.03	12.01	12.20	11.80	11.43	11.29	11.11	10.89	10.99

WATER YEAR 1958 : Max. 13.39 m. Min. 10.86 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		0.12	3.50	11	24	16	19	3.50	0.60	0.18	0.01	0.03
2		0.16	52	11	18	21	14	3.05	0.60	0.18	0.01	0.02
3		0.47	9.10	17	17	26	12	2.60	0.55	0.18	0.01	0.01
4		0.24	25	17	17	30	11	2.10	0.50	0.18		0.01
5		0.18	28	58	13	31	11	2.40	0.47	0.18		0.01
6		0.14	22	101	11	104	11	2.10	0.47	0.16		0.01
7		0.11	11	50	10	42	10	2.10	0.44	0.16		
8		0.09	7.42	31	11	46	9.76	1.80	0.41	0.14		
9	0.02	0.07	9.10	22	12	98	4.54	1.54	0.41	0.14		
10	0.02	0.04	10	17	10	65	4.98	1.42	0.41	0.12		
11	0.02	0.03	22	14	16	42	6.30	1.36	0.38	0.12		
12	0.02	0.04	27	12	16	30	5.86	1.12	0.38	0.11		0.01
13	0.04	0.27	67	12	17	49	6.08	1.00	0.38	0.11		0.01
14	0.09	0.12	29	24	13	37	6.86	1.06	0.35	0.09		
15	0.06	0.06	21	20	18	32	7.42	1.12	0.35	0.09		
16	0.06	0.04	20	24	28	24	8.26	1.18	0.33	0.07		
17	0.04	0.03	17	24	21	22	8.82	1.00	0.33	0.04		
18	0.14	0.03	76	31	20	38	6.30	0.95	0.33	0.04		
19	0.09	0.14	25	23	22	35	5.42	0.95	0.30	0.04		
20	0.07	0.07	19	21	21	28	6.30	0.95	0.30	0.04		
21	0.04	1.48	15	38	24	18	8.82	1.00	0.30	0.03		
22	0.03	1.30	11	60	10	21	11	1.00	0.30	0.03		
23	0.03	1.24	8.26	42	45	25	10	0.95	0.27	0.03		
24	0.02	3.65	7.98	40	27	43	9.43	0.90	0.24	0.02		0.07
25	0.02	6.08	9.43	32	20	38	8.26	0.80	0.21	0.02		0.33
26	0.02	1.80	8.26	40	29	37	7.98	0.80	0.21	0.02		0.06
27	0.02	2.10	8.54	30	27	40	6.08	0.80	0.21	0.02		0.02
28	0.02	1.30	23	23	26	31	5.42	0.75	0.21	0.02	0.03	0.03
29	0.18	1.18	18	23	25	22	4.76	0.75	0.21	0.02		0.03
30	0.09	1.36	13	35	21	19	4.32	0.70	0.19	0.02		0.03
31		1.06		23	17		3.95		0.19	0.01		0.02
Total	1.14	25	622.59	926	606	1,112	254.92	41.75	10.83	2.61	0.06	0.71
Mean	0.04	0.81	20.7	29.9	19.5	37.1	8.22	1.39	0.35	0.08	0.00	0.02
Max.	0.18	6.08	76	101	45	104	19	3.50	0.60	0.18	0.03	0.33
Min.	0.00	0.03	3.50	11	10	16	3.95	0.70	0.19	0.01	0.00	0.00
Runoff - RCM.	0.098	2.160	53.792	80.006	52.358	96.077	22.025	3.607	0.936	0.225	0.005	0.061

WATER YEAR 1958 : Max. 104 Min. 0.00 Mean 9.87 Annual Runoff 311.352 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 6	18.00	13.79	154				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1959
NAKHON NAYOK RIVER BASIN

Khlong Tha Dan at Ban Tha Dan, Nakhon Nayok (Ny.1A)

Location: Lat 14°- 18' - 25" N, Long 101°- 19' - 40" E, on left bank, 1.8 kilometers upstream from the confluence of Lam Nang Rong and Khlong Tha Dan, Tambon Hintang, Amphoe Muang, Nakhon Nayok.

Drainage Area: 187 sq.km. referred to AMS Map 1:50,000

Type of Gage: Staff gage.

Zero Gage at Bottom at: +10.59 m. (A.D.)

Bench Mark: B.M. - H.S.

Location: On left bank near the upper gage.
Elevation: 14.295 m. (A.D.)

Gage Reading Frequency: 8 - time daily readings at 03.00, 06.00, 09.00, 12.00, 15.00, 18.00, 21.00 and 24.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 8 readings.

Period of Available Gage Records: 1958 to date.

Rating Operation:

Period of Rating: 1958 - 59
Rated by Float: -
Rated by Current Meter: 1955 - 59

Stability of Channel Regimes: Rather unstable, shifting adjustment is included for flow computation.

Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship used is defined by discharge measurements during 1959. No diversions for irrigation above gage site.

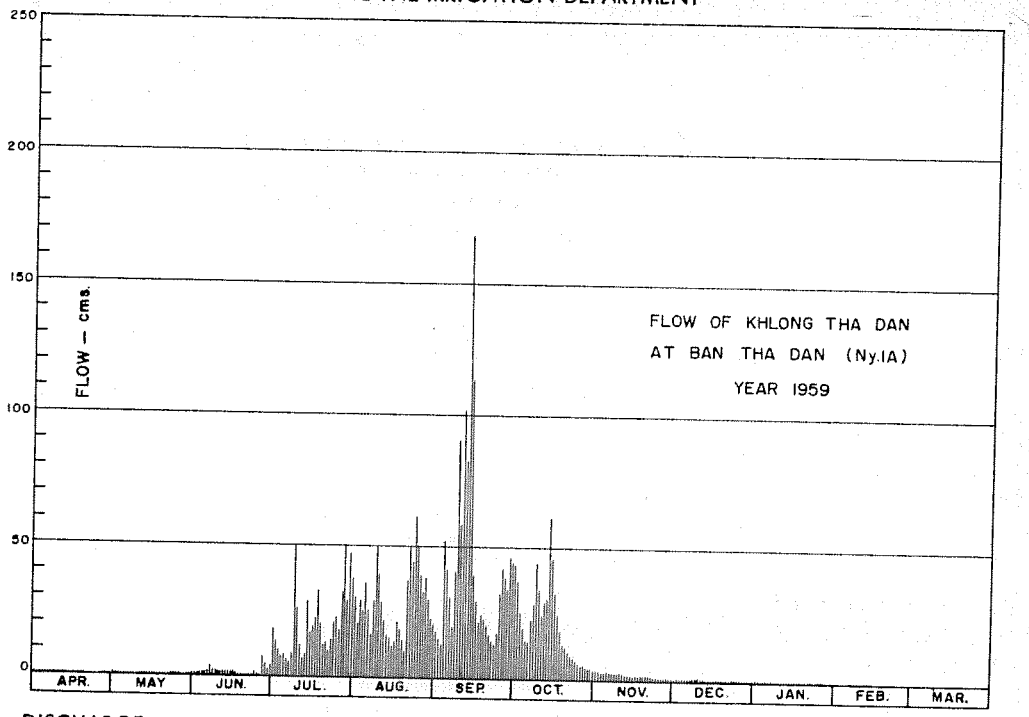
Remarks: Gage height record began on Mar. 21, 1958. Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	11.12	11.35	11.42	12.36	12.63	12.31	12.77	11.79	11.41	11.22	11.08	11.06
2	.11	.36	.42	.17	.48	.22	.64	.75	.41	.22	.07	.04
3	.09	.30	.44	.09	.72	.18	.45	.73	.40	.22	.07	.03
4	.08	.27	.52	.02	.51	.91	.35	.74	.39	.21	.07	.03
5	.06	.25	.51	.06	.74	.73	.27	.77	.38	.21	.07	.02
6	11.06	11.23	11.62	11.96	12.43	12.54	12.28	11.71	11.38	11.21	11.07	11.02
7	.05	.21	.78	.89	.31	.38	.43	.67	.37	.20	.06	.01
8	.04	.19	.69	12.00	.54	.37	.54	.67	.36	.20	.06	.01
9	.04	.18	.60	.90	.87	13.28	.63	.66	.36	.18	.05	.00
10	.03	.16	.53	.31	.76	12.77	.53	.64	.36	.17	.04	10.99
11	11.03	11.22	11.48	12.14	12.52	13.37	12.47	11.61	11.35	11.16	11.04	10.98
12	.06	.34	.43	11.94	.44	12.94	.54	.58	.34	.16	.04	.97
13	.06	.32	.39	12.02	.30	13.78	.51	.57	.33	.16	.03	.94
14	.05	.25	.37	.62	.23	.07	13.00	.54	.33	.15	.02	.93
15	.03	.23	.35	.27	.16	12.66	12.75	.54	.31	.15	.02	.91
16	11.02	11.21	11.31	12.40	12.24	12.56	12.56	11.53	11.30	11.15	11.01	10.90
17	.02	.20	.29	.47	.44	.40	.49	.52	.30	.15	.01	.89
18	.01	.19	.27	.72	.36	.47	.36	.52	.29	.15	10.99	.87
19	.00	.19	.26	.26	.21	.45	.23	.55	.29	.15	.99	.87
20	.00	.20	.25	.17	.14	.39	.18	.57	.28	.15	.97	.85
21	10.99	11.19	11.24	12.17	12.74	12.27	12.11	11.57	11.28	11.15	10.95	10.83
22	.99	.21	.23	.08	.97	.21	.04	.52	.28	.15	.95	.82
23	.98	.43	.33	.22	.76	.22	.00	.50	.27	.14	.91	.81
24	.98	.42	.50	.47	13.04	.33	11.95	.48	.26	.14	.90	.80
25	.98	.48	.44	.48	12.81	.64	.91	.47	.25	.13	.90	.79
26	11.03	11.42	11.47	12.30	12.70	12.76	11.87	11.46	11.25	11.13	10.89	10.78
27	.09	.35	12.01	.68	.62	.71	.84	.45	.24	.12	.88	.77
28	.28	.40	11.85	.94	.72	.58	.82	.44	.24	.11	.88	.76
29	.23	.52	.73	.55	.54	.79	.81	.42	.24	.10	11.00	.75
30	.40	.48	.79	.91	.46	.77	.81	.41	.23	.09		.74
31		.43		.72	.41		.77		.23	.08		.73
Mean	11.06	11.30	11.48	12.33	12.54	12.63	12.29	11.58	11.31	11.16	11.04	10.90
Max.	11.40	11.52	12.01	12.94	13.04	13.78	13.00	11.79	11.41	11.22	11.08	11.06
Min.	10.98	11.16	11.23	11.89	12.14	12.18	11.77	11.41	11.23	11.08	10.88	10.73

WATER YEAR 1959 : Max. 13.78 m. Min. 10.73 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.02	0.45	0.64	18	30	17	43	3.86	0.64	0.15	0.02	0.02
2	0.02	0.48	0.68	12	19	14	36	2.87	0.64	0.15	0.02	0.01
3	0.01	0.31	0.72	9.73	29	13	22	2.87	0.60	0.15	0.02	0.01
4	0.01	0.25	1.14	7.88	25	52	18	2.87	0.64	0.13	0.02	0.01
5	0.02	0.21	1.35	8.94	36	40	14	3.44	0.60	0.13	0.02	0.01
6	0.02	0.19	1.56	6.75	21	27	14	2.59	0.54	0.13	0.02	0.01
7	0.01	0.15	3.72	5.35	16	20	22	2.32	0.54	0.11	0.02	
8	0.01	0.09	1.97	7.15	25	19	27	2.32	0.57	0.11	0.02	
9	0.01	0.08	1.70	50	50	91	34	2.41	0.57	0.09	0.01	
10	0.01	0.05	1.21	15	37	45	27	2.23	0.54	0.09	0.01	
11	0.01	0.17	1.14	11	26	102	23	2.14	0.45	0.08	0.01	
12	0.02	0.43	0.72	6.15	21	56	29	1.79	0.48	0.08	0.01	
13	0.01	0.40	0.64	8.44	16	168	27	1.63	0.40	0.08	0.01	
14	0.01	0.11	0.51	29	15	63	61	1.28	0.37	0.07	0.01	
15	0.01	0.25	0.34	16	12	35	41	1.28	0.37	0.07	0.01	
16	0.01	0.10	0.34	19	14	29	29	1.42	0.31	0.07		
17	0.01	0.09	0.29	22	21	21	24	1.14	0.34	0.07		
18	0.01	0.03	0.27	33	18	24	18	1.21	0.29	0.07		
19	0.01	0.05	0.23	14	13	22	13	1.35	0.31	0.07		
20	0.01	0.15	0.21	12	8.66	20	12	1.49	0.27	0.07		
21		0.17	0.19	13	38	15	10	1.49	0.27	0.07		
22		0.15	0.11	9.76	50	14	8.22	1.14	0.23	0.07		
23		0.92	0.51	15	41	13	8.00	1.00	0.25	0.06		
24		0.51	1.07	21	61	17	6.55	0.92	0.21	0.06		
25		0.84	0.76	23	44	32	5.55	0.88	0.21	0.05		
26	0.01	0.68	0.96	15	36	42	5.08	0.84	0.19	0.05		
27	0.02	0.37	7.35	34	32	38	5.54	0.80	0.19	0.05		
28	0.21	0.43	4.67	50	38	32	4.27	0.76	0.19	0.04		
29	0.17	0.92	2.87	26	27	46	4.00	0.68	0.19	0.03		
30	0.54	0.64	4.13	47	21	44	4.00	0.64	0.17	0.03		
31		0.72		38	20		3.44		0.17	0.02		
Total	1.20	10.39	42.00	603.15	860.66	1,171	597.65	51.66	11.74	2.50	0.23	0.07
Mean	0.04	0.33	1.40	19.4	27.8	39	19.3	1.72	0.38	0.08	0.01	0.00
Max.	0.54	0.92	7.35	50	50	168	43	3.86	0.64	0.15	0.02	0.02
Min.	0.00	0.03	0.11	5.35	8.66	13	3.44	0.64	0.17	0.02	0.00	0.00
Runoff — mcm.	0.104	0.898	3.629	52.112	74.361	101.174	51.637	4.463	1.014	0.216	0.020	0.006

WATER YEAR 1959 : Max. 168 Min. 0.00 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept.16	06.00	14.42	290				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
PRACHIN RIVER BASIN

Prachin River at Kabin Buri, Prachin Buri (Kgt.3)

Location: Lat 13°- 59' - 15" N, Long 100°- 42' - 32" E, on left bank infront of the office of Amphoe Kabin Buri and 500 meters downstream from the confluence of Lam Phra Prong and Lam Hanuman, Prachin Buri.

Drainage Area: 7,502 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: On left bank at the fence of Amphoe Kabin Buri.
Elevation: +10.178 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 and 1964 to date
Rated by Float: -
Rated by Current Meter: 1941, 1943, 1945 and 1964 to date

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

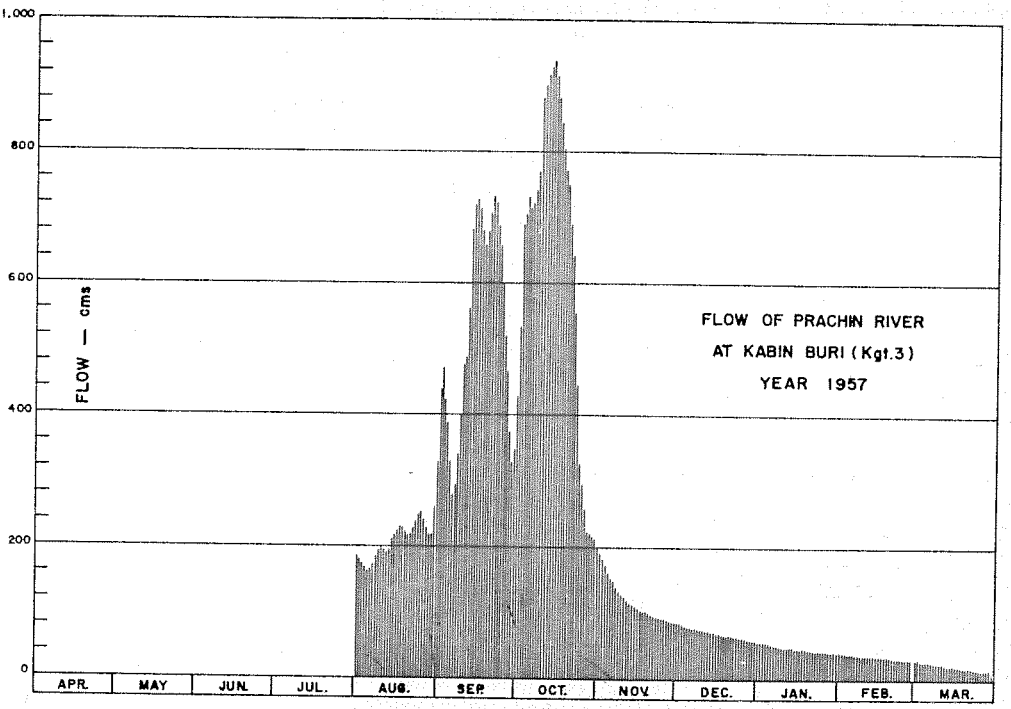
General Description: Records fair except those for period of no gage height record which are poor. Stage - discharge relationship is defined by discharge measurements made during 1964 - 1967. No state diversions for irrigation above gage site.

Remarks: Poor record for period Apr. 1 - Jul.31

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1					4.76	7.51	7.89	5.01	2.98	2.38	1.96	1.64
2					.69	8.00	9.05	4.87	.95	.36	.96	.62
3					.58	7.78	.63	.70	.93	.34	.94	.60
4					.45	.13	.77	.54	.90	.32	.93	.58
5					.37	6.48	.87	.37	.86	.30	.91	.56
6					4.44	6.07	9.76	4.23	2.85	2.28	1.91	1.54
7					.62	.33	.86	.10	.82	.26	.89	.52
8					.80	.97	10.00	3.98	.80	.24	.89	.50
9					.96	7.53	.42	.88	.79	.21	.87	.48
10					.97	.88	.83	.79	.77	.20	.86	.46
11					4.96	8.29	10.96	3.71	2.75	2.18	1.85	1.44
12					.84	.95	11.02	.66	.74	.16	.85	.42
13					.94	9.59	.08	.59	.72	.16	.84	.40
14					5.13	.79	.16	.53	.70	.15	.84	.38
15					.25	.84	.07	.48	.68	.13	.84	.36
16					5.37	9.76	10.86	3.43	2.66	2.12	1.82	1.34
17					.45	.54	.58	.39	.63	.11	.81	.32
18					.43	.38	.38	.35	.62	.10	.80	.29
19					.35	.50	.13	.31	.61	.09	.79	.28
20					.25	.67	9.93	.27	.60	.08	.78	.25
21					5.27	9.88	9.62	3.23	2.58	2.07	1.76	1.24
22					.39	.84	.18	.19	.57	.06	.75	.22
23					.54	.69	8.34	.17	.55	.05	.74	.20
24					.70	.46	7.24	.13	.53	.04	.72	.19
25					.77	.08	6.63	.11	.50	.03	.70	.18
26					5.67	8.35	6.08	3.09	2.49	2.02	1.69	1.17
27					.47	7.61	5.65	.07	.48	.01	.67	.15
28					.29	6.96	.31	.05	.46	.00	.66	.14
29					.23	.63	.30	.03	.44	.00		.13
30					.60	7.11	.20	.01	.42	1.99		.11
31					6.45		.10		.40	.97		.10
Mean					5.16	8.35	8.96	3.64	2.67	2.14	1.82	1.35
Max.					6.45	9.88	11.16	5.01	2.98	2.38	1.96	1.64
Min.					4.37	6.07	5.10	3.01	2.40	1.97	1.66	1.10

WATER YEAR 1957 : Max. 11.16 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 . TO MARCH 31,1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1					185	413	457	201	86	58	41	30
2					180	470	611	191	84	57	41	30
3					174	444	695	181	83	57	41	29
4					166	375	716	171	82	56	40	28
5					161	313	731	161	80	55	39	28
6					165	279	715	153	79	54	39	27
7					176	300	730	145	78	53	39	27
8					187	359	752	138	77	53	39	26
9					197	415	819	132	76	51	38	25
10					198	456	885	126	75	51	37	25
11					197	506	906	122	74	50	37	24
12					189	597	916	120	74	49	37	24
13					196	689	927	116	73	49	37	23
14					209	719	940	113	72	49	37	22
15					217	727	925	111	71	48	37	22
16					226	715	890	108	70	48	36	21
17					231	682	845	106	68	47	35	21
18					230	658	813	104	68	47	35	20
19					224	676	773	102	67	47	35	19
20					217	701	741	100	67	46	34	18
21					219	733	694	98	66	46	34	18
22					227	727	629	96	66	45	33	18
23					238	704	512	95	65	45	33	17
24					249	670	386	93	64	45	33	17
25					255	615	327	92	63	44	32	16
26					247	513	279	91	63	44	32	16
27					233	424	245	90	62	43	31	15
28					220	358	222	89	61	43	31	15
29					216	327	221	88	61	43		15
30					242	373	214	87	60	43		14
31					310		207		59	42		14
Total					6,581	15,938	19,723	3,620	2,194	1,508	1,013	664
Mean					212	531	636	121	70.6	48.6	36.2	21.4
Max.					310	733	940	201	86	58	41	30
Min.					161	279	207	87	59	42	31	14
Runoff — mcm.					568.598	1,377.043	1,704.067	312.768	189.561	130.291	87.523	57.369

WATER YEAR 1957 : Max. 940 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 14	06.00	11.16	940				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
PRACHIN RIVER BASIN

Prachin River at Kabin Buri, Prachin Buri (Kgt.3)

Location: Lat 13°- 59' - 15" N, Long 100°- 42' - 32" E, on left bank infront of the office of Amphoe Kabin Buri and 500 meters downstream from the confluence of Lam Phra Prong and Lam Hanuman, Prachin Buri.

Drainage Area: 7,502 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +0.00 m. (M.S.L.)

Bench Mark: B.M. - H.S./R.I.D.

Location: On left bank at the fence of Amphoe Kabin Buri.
Elevation: +10.178 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 and 1964 to date
Rated by Float: -
Rated by Current Meter: 1941, 1943, 1945 and 1964 to date

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

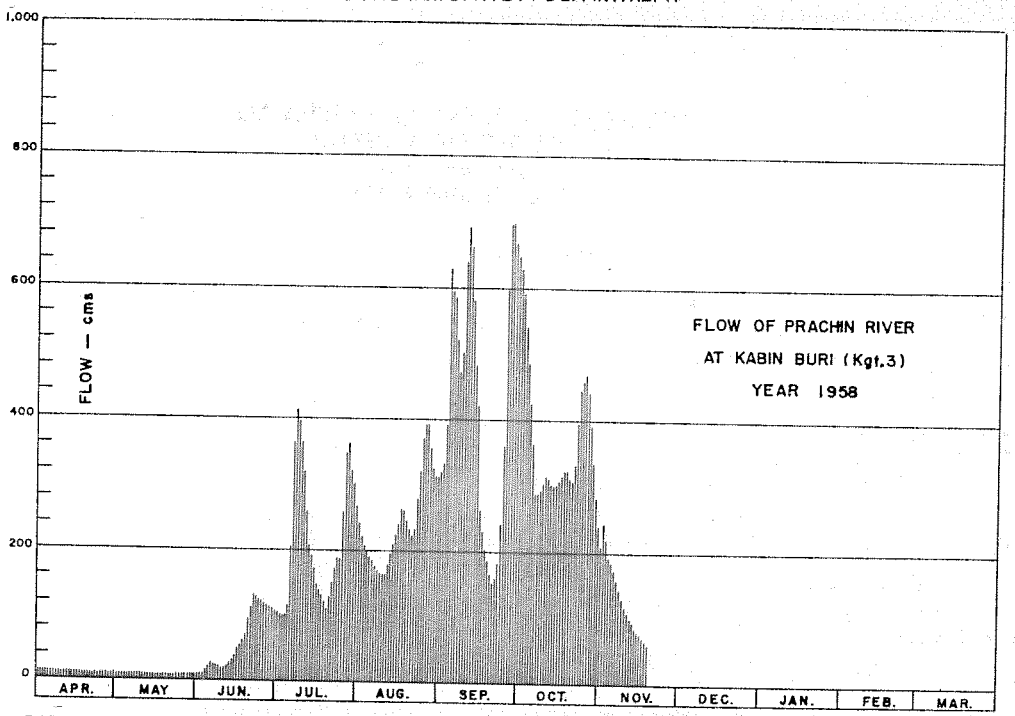
General Description: Records fair except those for period of no gage height record which are poor. Stage - discharge relationship is defined by discharge measurements made during 1964 - 1967. No state diversions for irrigation above gage site.

Remarks: Poor record for period Nov. 20, 1958 - Mar. 31, 1959

GAGE HEIGHT IN METER (M.S.L), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.10	0.94	0.93	3.40	5.66	6.52	9.17	5.15				
2	.09	.94	.99	.36	.37	.70	8.93	.63				
3	.08	.94	1.04	.32	.15	7.47	.55	.19				
4	.07	.94	.21	.35	.05	9.18	.07	4.89				
5	.07	.94	.41	.63	4.87	8.94	7.53	.71				
6	1.06	0.94	1.57	4.95	4.74	8.85	7.03	4.55				
7	.05	.93	.48	7.08	.61	.44	6.17	.31				
8	.04	.93	.42	.52	.53	.00	.20	.08				
9	.03	.93	.37	.42	.43	.31	.30	3.85				
10	.02	.92	.31	.10	.46	9.19	.42	.64				
11	1.01	0.92	1.33	6.59	4.40	9.60	6.51	3.48				
12	.00	.91	.39	5.85	.70	.40	.46	.32				
13	.00	.91	.51	.20	.97	8.74	.34	.16				
14	.00	.90	.74	4.83	5.15	.09	.32	.04				
15	0.99	.90	.89	.52	.39	7.47	.36	2.83				
16	0.99	0.89	2.21	4.28	5.57	5.87	6.42	2.72				
17	.98	.89	.37	.00	.89	.45	.52	.62				
18	.98	.88	.47	3.90	.86	.05	.60	.46				
19	.98	.88	.71	.77	.73	4.76	.59	.38				
20	.97	.87	3.18	.51	.50	.47	.47					
21	0.97	0.87	3.56	3.98	5.28	4.24	6.40					
22	.97	.86	.88	4.39	.46	.39	.70					
23	.96	.86	.84	.65	.85	.92	7.32					
24	.96	.85	.78	.85	6.43	5.82	.78					
25	.95	.86	.69	.78	7.07	7.24	.92					
26	0.95	0.89	3.63	5.49	7.33	8.95	8.00					
27	.95	.90	.57	6.87	.29	9.64	7.76					
28	.95	.91	.54	7.01	.04	.62	.29					
29	.94	.90	.50	6.81	6.78	.49	6.71					
30	.94	.88	.45	.50	.54	.34	.30					
31		.86		.02	.46		5.50					
Mean	1.00	0.90	2.33	5.13	5.60	7.47	6.99					
Max.	1.10	0.94	3.88	7.52	7.33	9.64	9.17					
Min.	0.94	0.85	0.93	3.32	4.40	4.24	5.50					

WATER YEAR 1958 : Max. 9.64 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	14	11	11	107	246	317	628	210				
2	14	11	12	105	226	333	594	244				
3	14	11	13	103	210	409	541	213				
4	13	11	17	104	203	629	478	192				
5	13	11	23	118	191	596	415	182				
6	13	11	28	196	183	583	365	172				
7	13	11	25	370	176	526	287	158				
8	13	11	24	414	171	470	289	144				
9	13	11	22	404	165	508	297	130				
10	12	10	20	372	167	631	308	119				
11	12	10	21	323	163	691	316	111				
12	12	10	23	261	181	661	311	103				
13	12	10	26	214	198	568	301	95				
14	12	10	33	189	210	481	299	89				
15	12	10	39	170	227	409	302	78				
16	12	9.80	51	156	240	263	308	73				
17	12	9.80	58	139	264	231	316	68				
18	12	9.60	62	133	262	203	324	61				
19	12	9.60	72	125	251	185	323	58				
20	11	9.40	96	112	235	167	312					
21	11	9.40	115	138	220	153	306					
22	11	9.20	132	162	232	162	333					
23	11	9.20	129	178	261	194	394					
24	11	9.00	126	190	309	259	444					
25	11	9.20	121	186	369	386	460					
26	11	9.80	118	234	395	597	470					
27	11	10	115	349	391	697	441					
28	11	10	114	363	366	694	391					
29	11	10	112	343	340	674	334					
30	11	9.60	109	315	319	652	297					
31		9.20		275	311		235					
Total	361	311.80	1,867	6,848	7,682	13,329	11,419					
Mean	12.0	10.1	62.2	221	248	444	368					
Max.	14	11	132	414	395	697	628					
Min.	11	9.00	11	103	163	153	235					
Runoff — mcm.	31.190	26.939	161.308	591.667	663.724	1,151.625	986.601					

WATER YEAR 1958 : Max. 697 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 27	06.00	9.73	710				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
PRACHIN RIVER BASIN

Prachin River at Kabin Buri, Prachin Buri (Kgt.3)

Location: Lat 13° – 59' – 15" N, Long 100° – 42' – 32" E, on left bank infront of the office of Amphoe Kabin Buri and 500 meters downstream from the confluence of Lam Phra Prong and Lam Hanuman, Prachin Buri.

Drainage Area: 7,502 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero gage at Bottom at: +0.00 m. (M.S.L.)

Bench Mark: B.M. – H.S./R.I.D.

Location: On left bank at the fence of Amphoe Kabin Buri.
Elevation: +10.178 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 and 1964 to date
Rated by Float: –
Rated by Current Meter: 1941, 1943, 1945 and 1964 to date

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

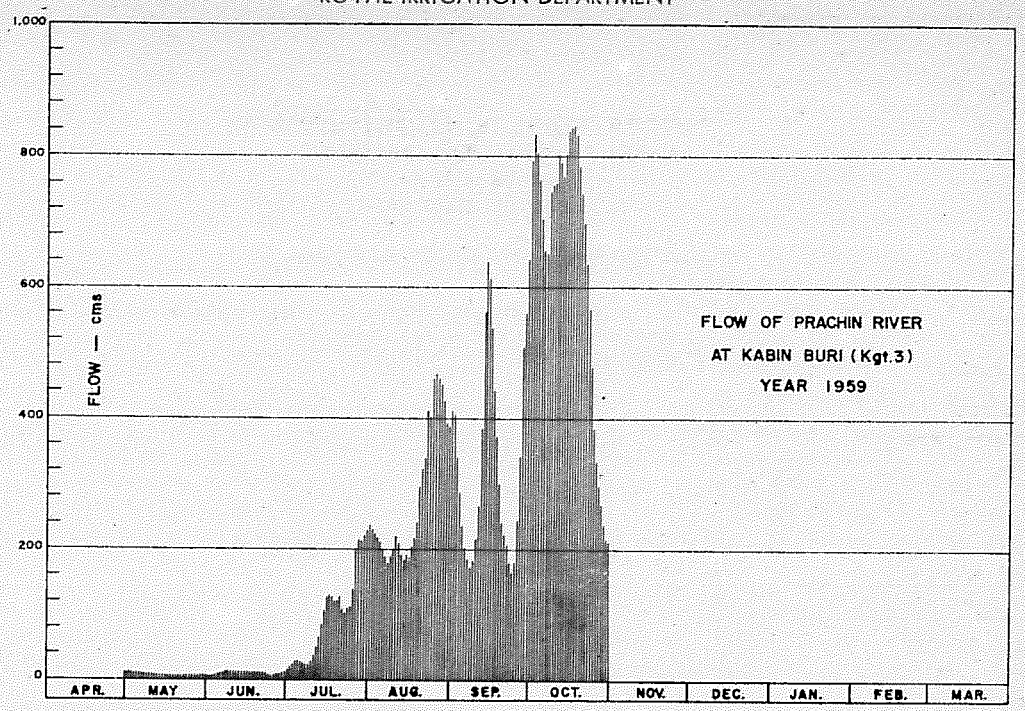
General Description: Records fair except those for period of no gage height record which are poor. Stage – discharge relationship is defined by discharge measurements made during 1964 – 1967. No state diversions for irrigation above gage site.

Remarks: Poor record for periods Apr. 1 – 30 and Nov. 1,1959 to Mar 31, 1960

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		1.00	0.74	1.15	5.53	7.50	10.26					
2		0.99	.75	.32	.46	.41	.48					
3		.98	.77	.49	.39	6.50	.33					
4		.97	.84	.66	.28	.21	.02					
5		.95	.89	.67	.14	5.60	9.73					
6		0.95	0.96	1.59	5.02	5.16	9.37					
7		.93	1.02	.51	4.89	4.83	.32					
8		.93	.05	.46	.72	.56	.95					
9		.91	.08	.44	.83	.75	10.02					
10		.87	.10	.59	5.07	5.23	.02					
11		0.85	1.10	1.89	5.28	5.81	10.28					
12		.85	.10	2.26	.21	7.00	.23					
13		.82	.07	.69	4.98	8.63	.09					
14		.82	.06	3.06	.73	9.24	.30					
15		.80	.05	.51	.85	.08	.52					
16		0.80	1.05	3.79	4.95	8.41	10.55					
17		.80	.01	.85	5.10	7.56	.58					
18		.77	.00	.82	.30	6.76	.49					
19		.77	0.99	.71	.70	.24	.24					
20		.77	.98	.70	6.25	5.74	9.93					
21		0.76	0.97	3.85	6.60	5.33	9.61					
22		.76	.95	.45	.82	.11	.27					
23		.76	.90	.35	7.48	4.68	8.82					
24		.75	.80	.50	.43	.45	.16					
25		.74	.79	.54	.94	.74	7.36					
26		0.74	0.81	4.32	7.99	5.85	6.77					
27		.76	.87	5.06	.95	7.12	.20					
28		.78	.94	.23	.89	8.28	5.80					
29		.80	.98	.22	.74	.76	.47					
30		.80	1.04	.32	.30	9.34	.26					
31		.78		.42	.24		.16					
Mean		0.84	0.95	3.08	6.00	6.53	9.05					
Max.		1.00	1.10	5.42	7.99	9.34	10.58					
Min.		0.74	0.74	1.15	4.72	4.45	5.16					

WATER YEAR 1959 : Max. 10.58 m. Min. – m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1		12	7.10	15	237	412	794					
2		12	7.25	21	232	403	829					
3		12	7.55	26	227	315	805					
4		11	8.80	31	220	290	755					
5		11	9.80	31	210	242	710					
6		11	11	29	201	211	656					
7		11	12	26	192	189	649					
8		11	13	25	182	173	744					
9		10	14	24	189	184	755					
10		9.40	14	29	205	216	755					
11		9.00	14	39	220	258	797					
12		9.00	14	53	215	362	789					
13		8.40	13	71	199	552	766					
14		8.40	13	90	183	638	800					
15		8.00	13	112	190	615	835					
16		8.00	13	126	196	521	840					
17		8.00	12	130	207	419	845					
18		7.55	12	128	221	338	830					
19		7.55	12	122	249	292	790					
20		7.55	12	122	293	252	741					
21		7.40	11	130	324	223	692					
22		7.40	11	109	344	208	642					
23		7.40	10	104	410	180	579					
24		7.25	8.00	112	405	166	489					
25		7.10	7.85	114	462	183	398					
26		7.10	8.20	158	469	261	339					
27		7.40	9.40	204	464	374	289					
28		7.70	11	216	457	504	257					
29		8.00	12	215	439	570	233					
30		8.00	13	222	392	652	218					
31		7.70		229	386		211					
Total		274.30	333.95	3,063	8,820	10,203	19,832					
Mean		8.83	11.1	98.8	284	340	640					
Max.		12	14	229	469	652	845					
Min.		7.10	7.10	15	182	166	211					
Runoff - mcm.		32.339	28.853	264.643	762.048	881.539	1,713.484					

WATER YEAR 1959 : Max. 845 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 17	06.00	10.58	845				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
RAYONG RIVER BASIN

Khlong Yai at Wat Phai Lom, Ban Khai, Rayong (Z1)

Location: Lat 12°– 46' – 46" N, Long 101°– 17' – 55" E, on left bank 600 meters downstream from Amphoe Ban Khai, Rayong.

Drainage Area: 1,255 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +105.169 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1945 – 58

Rating Operation:

Period of Rating: 1945
Rated by Float: –
Rated by Current Meter: 1945

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: No overbank flow.

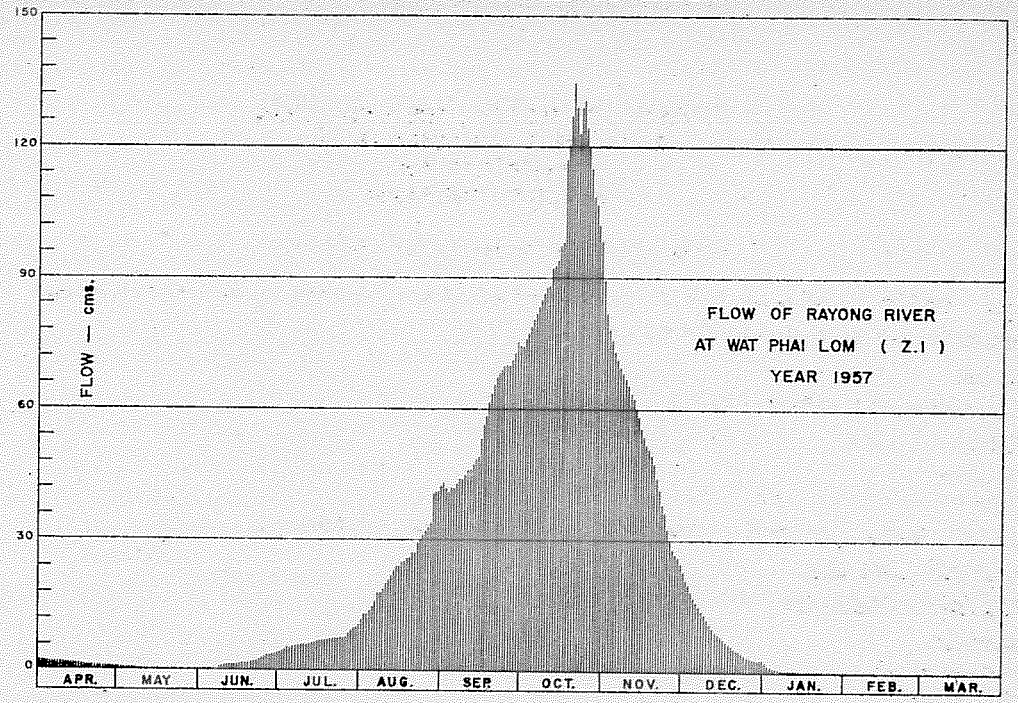
General Description: Records good. Stage – discharge relationship used by discharge measurements during 1945. No state diversions are made above gage site.

Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	101.00	100.86	100.73	101.18	101.78	103.27	104.15	104.40	102.45	100.99	100.72	100.69
2	100.99	.85	.74	.22	.84	.26	.19	.32	.36	.92	.71	.70
3	.99	.84	.75	.26	.89	.22	.22	.25	.28	.89	.71	.70
4	.98	.83	.77	.29	.96	.24	.25	.18	.20	.87	.71	.70
5	.98	.82	.79	.25	102.01	.25	.28	.13	.14	.86	.70	.70
6	100.97	100.82	100.79	101.30	102.08	103.28	104.29	104.09	102.06	100.82	100.70	100.69
7	.97	.81	.80	.31	.16	.31	.32	.05	101.98	.82	.70	.69
8	.96	.81	.82	.32	.20	.32	.34	.02	.91	.81	.69	.69
9	.96	.80	.84	.33	.24	.35	.35	103.98	.84	.81	.69	.68
10	.95	.79	.86	.32	.30	.38	.38	.93	.77	.80	.69	.67
11	100.95	100.78	100.87	101.33	102.33	103.40	104.39	103.91	101.71	100.79	100.68	100.67
12	.94	.77	.87	.34	.39	.42	.44	.85	.67	.79	.68	.67
13	.94	.76	.88	.35	.45	.44	.45	.81	.62	.78	.68	.66
14	.94	.75	.89	.37	.47	.49	.46	.75	.54	.78	.67	.66
15	.93	.74	.90	.38	.51	.59	.49	.70	.50	.78	.67	.66
16	100.93	100.73	100.90	101.39	102.53	103.69	104.51	103.65	101.46	100.77	100.67	100.65
17	.92	.72	.91	.40	.54	.78	.68	.59	.42	.77	.66	.65
18	.92	.71	.92	.41	.59	.85	.71	.55	.39	.76	.66	.65
19	.91	.71	.93	.42	.60	.90	.75	.51	.34	.76	.66	.64
20	.91	.70	.94	.43	.63	.93	.78	.41	.30	.75	.65	.64
21	100.90	100.70	100.95	101.44	102.64	103.98	104.76	103.29	101.25	100.75	100.65	100.64
22	.90	.69	.97	.45	.73	104.00	.72	.20	.23	.75	.65	.63
23	.89	.69	.99	.46	.78	.03	.77	.10	.21	.74	.66	.63
24	.89	.68	101.02	.47	.83	.07	.76	.01	.16	.74	.67	.63
25	.88	.68	.07	.48	.87	.07	.73	102.89	.13	.74	.68	.62
26	100.88	100.67	101.09	101.50	102.88	104.05	104.69	102.75	101.09	100.73	100.69	100.62
27	.87	.67	.10	.54	.92	.08	.66	.69	.06	.73	.68	.62
28	.87	.67	.11	.59	103.17	.13	.61	.63	.05	.73	.68	.61
29	.86	.67	.12	.63	.20	.16	.59	.57	.04	.72		.61
30	.86	.68	.13	.67	.22	.15	.55	.51	.03	.72		.61
31		.73		.74	.26		.48		.02	.72		.60
Mean	100.93	100.75	100.91	101.40	102.52	103.67	104.51	103.56	101.17	100.79	100.68	100.65
Max.	101.00	100.86	101.13	101.74	103.26	104.16	104.78	104.40	102.45	100.99	100.72	100.70
Min.	100.86	100.67	100.73	101.18	101.78	103.22	104.15	102.51	101.02	100.72	100.65	100.60

WATER YEAR 1957 : Max. 104.78 m. Min. 100.60 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2.50	1.10	0.15	4.30	12	43	74	89	23	2.40	0.10	
2	2.40	1.00	0.20	4.72	13	42	76	83	21	1.70	0.05	
3	2.40	0.90	0.25	5.16	13	41	78	79	20	1.40	0.05	
4	2.30	0.80	0.35	5.49	14	42	79	76	18	1.20	0.05	
5	2.30	0.70	0.45	5.05	15	42	81	73	17	1.10		
6	2.20	0.70	0.45	5.60	16	43	82	71	16	0.70		
7	2.20	0.60	0.50	5.72	18	44	83	70	15	0.70		
8	2.10	0.60	0.70	5.84	18	44	85	68	14	0.60		
9	2.10	0.50	0.90	5.96	19	45	86	67	13	0.60		
10	2.00	0.45	1.10	5.84	20	46	88	65	11	0.50		
11	2.00	0.40	1.20	5.96	21	46	88	64	11	0.45		
12	1.90	0.35	1.20	6.08	22	47	92	62	10	0.45		
13	1.90	0.30	1.30	6.20	23	48	93	60	9.56	0.40		
14	1.90	0.25	1.40	6.44	24	49	94	58	8.52	0.40		
15	1.80	0.20	1.50	6.56	24	52	97	56	8.00	0.40		
16	1.80	0.15	1.50	6.68	25	56	98	54	7.52	0.35		
17	1.70	0.10	1.60	6.80	25	59	117	52	7.04	0.35		
18	1.70	0.05	1.70	6.92	26	62	121	51	6.68	0.30		
19	1.60	0.05	1.80	7.04	26	64	128	50	6.08	0.30		
20	1.60		1.90	7.16	27	65	134	47	5.60	0.25		
21	1.50		2.00	7.28	27	67	130	43	5.05	0.25		
22	1.50		2.20	7.40	29	68	123	41	4.83	0.25		
23	1.40		2.40	7.52	30	69	132	38	4.61	0.20		
24	1.40		2.70	7.64	31	70	130	36	4.10	0.20		
25	1.30		3.20	7.76	32	70	125	33	3.80	0.20		
26	1.30		3.40	8.00	33	70	118	30	3.40	0.15		
27	1.20		3.50	8.52	34	71	115	28	3.10	0.15		
28	1.20		3.60	9.17	40	73	109	27	3.00	0.15		
29	1.10		3.70	9.69	41	75	107	26	2.90	0.10		
30	1.10		3.80	10	41	74	103	24	2.80	0.10		
31		0.15		11	42		96		2.70	0.10		
Total	53.40	9.35	50.65	213.50	781	1,687	3,162	1,621	228.29	16.40	0.25	
Mean	1.78	0.30	1.69	6.89	25.2	56.2	102	54.0	9.30	0.53	0.01	
Max.	2.50	1.10	3.80	11	42	75	134	89	23	2.40	0.10	
Min.	1.10	0.00	0.15	4.30	12	41	74	24	2.70	0.10	0.00	
Runoff - mcm.	4.614	0.808	4.376	18.446	67.478	145.757	273.197	140.054	24.908	1.417	0.022	

WATER YEAR 1957 : Max. 134 Min. 0.00 Mean 21.6 Annual Runoff 681.077 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 20	18.00	104.78	134				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
RAYONG RIVER BASIN

Khlong Yai at Wat Phai Lom, Ban Khai, Rayong (Z1)

Location: Lat 12°- 46' - 46" N, Long 101°- 17' - 55" E, on left bank 600 meters downstream from Amphoe Ban Khai, Rayong.

Drainage Area: 1,255 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +105.169 m. (M.S.L.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1945 - 58

Rating Operation:

Period of Rating: 1945
Rated by Float: -
Rated by Current Meter: 1945

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for year without actual ratings.

Overbank Flow Conditions: No overbank flow.

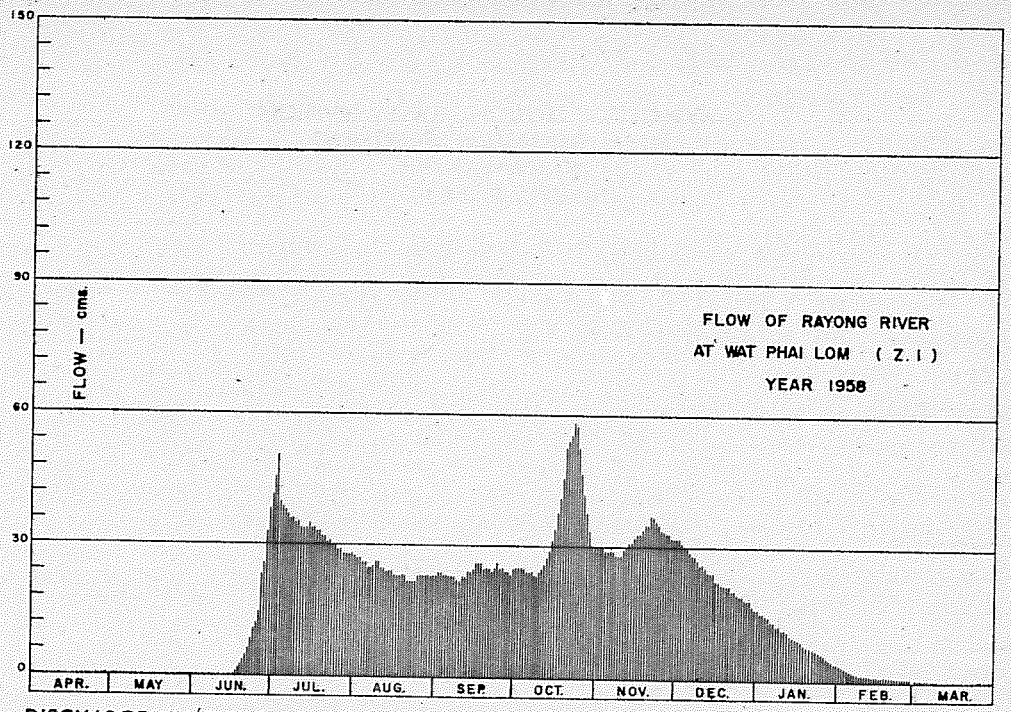
General Description: Records good. Stage - discharge relationship used by discharge measurements during 1945. No state diversions are made above gage site.

Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	100.60	100.51	100.36	103.21	102.66	102.46	102.53	102.75	102.85	102.03	101.10	100.73
2	.60	.50	.38	.36	.64	.47	.56	.76	.84	.01	.07	.72
3	.59	.50	.41	.51	.62	.47	.55	.75	.82	101.97	.04	.71
4	.59	.50	.43	.16	.60	.46	.53	.74	.79	.94	.01	.70
5	.59	.49	.47	.13	.58	.45	.51	.73	.75	.91	100.98	.69
6	100.58	100.49	100.47	103.10	102.56	102.44	102.48	102.72	102.72	101.88	100.96	100.68
7	.58	.49	.46	.07	.55	.43	.47	.71	.69	.85	.95	.67
8	.58	.48	.45	.03	.56	.42	.43	.70	.67	.82	.94	.66
9	.57	.48	.44	.01	.60	.41	.44	.70	.63	.79	.93	.65
10	.57	.48	.43	102.99	.58	.40	.48	.72	.60	.76	.92	.64
11	100.57	100.47	100.42	102.97	102.55	102.42	102.54	102.75	102.58	101.73	100.91	100.63
12	.56	.47	.41	.94	.53	.45	.61	.79	.55	.70	.90	.62
13	.56	.47	.45	.92	.50	.47	.69	.80	.51	.67	.89	.61
14	.56	.46	.52	.94	.48	.50	.77	.81	.47	.64	.88	.60
15	.55	.46	.58	.96	.47	.53	.87	.86	.42	.61	.87	.59
16	100.55	100.46	100.69	102.95	102.46	102.57	102.98	102.88	102.40	101.58	100.86	100.58
17	.55	.45	.79	.92	.45	.61	103.12	.90	.37	.55	.85	.57
18	.55	.45	.89	.90	.44	.59	.26	.93	.36	.52	.84	.56
19	.54	.45	101.00	.88	.43	.56	.40	.97	.35	.49	.83	.55
20	.54	.44	.11	.86	.42	.54	.59	.98	.34	.46	.82	.54
21	100.54	100.44	101.25	102.84	102.41	102.52	103.64	103.05	102.33	101.43	100.81	100.53
22	.54	.44	.41	.82	.40	.51	.69	.05	.30	.40	.80	.52
23	.53	.44	.57	.80	.39	.53	.74	.02	.27	.37	.79	.51
24	.53	.43	.72	.78	.41	.57	.71	102.99	.25	.34	.78	.50
25	.53	.43	.90	.76	.42	.56	.53	.95	.23	.31	.77	.49
26	100.52	100.42	101.98	102.74	102.43	102.53	103.41	102.92	102.21	101.28	100.76	100.48
27	.52	.41	102.44	.72	.44	.50	.23	.89	.18	.25	.75	.47
28	.52	.40	.61	.70	.45	.48	.08	.88	.15	.22	.74	.46
29	.51	.39	.89	.69	.44	.46	102.95	.87	.13	.19		.45
30	.51	.38	103.10	.68	.45	.48	.78	.86	.09	.16		.45
31		.37		.67	.46		.77		.06	.13		.44
Mean	100.55	100.45	101.07	102.93	102.50	102.49	102.95	102.85	102.45	101.58	100.88	100.58
Max.	100.60	100.51	103.10	103.51	102.66	102.61	103.74	103.05	102.85	102.03	101.10	100.73
Min.	100.51	100.37	100.36	102.67	102.39	102.40	102.43	102.70	102.06	101.13	100.74	100.44

WATER YEAR 1958 : Max. 103.74 m. Min. 100.44 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				41	28	23	25	30	32	16	3.50	0.15
2				45	27	24	25	30	32	15	3.20	0.10
3				50	27	24	25	30	31	15	2.90	0.05
4				40	26	23	25	29	30	14	2.60	
5				39	26	23	24	29	30	14	2.30	
6				38	25	23	24	29	29	13	2.10	
7				37	25	23	24	29	28	13	2.00	
8				36	25	23	23	28	28	12	1.90	
9				36	26	22	23	28	27	12	1.80	
10				35	26	22	24	29	26	11	1.70	
11				35	25	23	25	30	26	11	1.60	
12				34	25	23	26	30	25	11	1.50	
13				34	24	24	28	31	24	10	1.40	
14				34	24	24	30	31	24	9.82	1.30	
15				35	24	25	32	32	23	9.43	1.20	
16				34	23	26	35	33	22	9.05	1.10	
17			0.45	34	23	26	39	33	22	8.65	1.00	
18			1.40	33	23	26	42	34	21	8.26	0.90	
19			2.50	33	23	25	46	35	21	7.88	0.80	
20			3.60	32	23	25	52	35	21	7.52	0.70	
21			4.83	32	22	25	54	37	21	7.16	0.60	
22			6.92	31	22	24	56	37	20	6.80	0.50	
23			8.91	31	22	25	58	36	20	6.44	0.45	
24			11	30	22	26	57	35	19	6.08	0.40	
25			13	30	23	25	50	34	19	5.72	0.35	
26			15	29	23	25	47	34	19	5.38	0.30	
27			23	29	23	24	42	33	18	5.05	0.25	
28			26	28	23	24	38	33	18	4.72	0.20	
29			33	28	23	23	34	32	17	4.40		
30			38	28	23	24	30	32	16	4.10		
31				28	23		30		16	3.80		
Total			187.61	1,059	747	722	1,093	958	725	287.26	38.55	0.30
Mean			6.25	34.2	24.1	24.1	35.2	31.9	23.4	9.27	1.38	0.01
Max.			38	50	28	26	58	37	32	16	3.50	0.15
Min.			0.00	28	22	22	23	28	16	3.80	0.20	0.00
Runoff - mcm.			16.209	91.498	64.541	62.381	94.435	82.771	82.640	24.819	3.331	0.026

WATER YEAR 1958 : Max. 58 Min. 0.00 Mean 15.9 Annual Runoff 502.651 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 23	06.00	103.76	58				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
MAE KLONG RIVER BASIN

Khwae Yai at Kaeng Riang, Kanchanaburi (K.6)

Location: Lat 14°- 25'.- 43" N, Long 99°- 07' - 04" E, on left bank 200 meters downstream from Lan Thom Cave and about 9 kilometers upstream from Erawan Fall, Thambon Tha Kradan, Amphoe Si Sawat, Kanchanaburi.

Drainage Area: 11,789 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +53.487 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.2

Location: At the rain gage infront of the camp of station K.6
Elevation: +72.819 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: 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: Rather unstable, shifting adjustment and mean hourly discharge are included for flow computation.

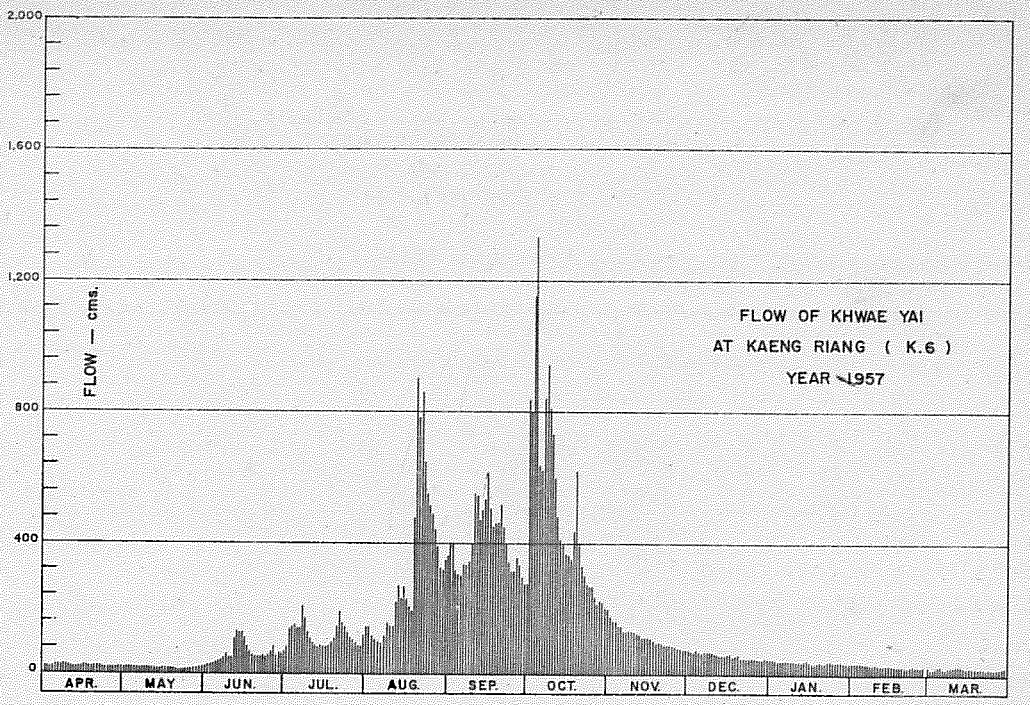
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relationship defined by discharge measurements made during 1957 No state diversions are made above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	56.02	55.91	55.97	56.70	57.57	59.60	58.80	57.97	56.80	56.43	56.25	56.07
2	.01	.97	.97	.89	.58	.86	59.47	.85	.78	.42	.29	.07
3	55.97	.95	.96	57.34	.29	.79	63.21	.76	.76	.41	.28	.06
4	56.00	.97	.98	.68	.11	.18	65.59	.66	.74	.40	.28	.06
5	.22	.94	56.03	.67	56.97	.12	64.08	.58	.73	.39	.26	.13
6	56.14	55.93	56.01	57.59	56.91	59.13	62.22	57.53	56.72	56.39	56.25	56.10
7	.12	.91	.01	.58	.97	.31	61.97	.51	.71	.38	.24	.06
8	.21	.88	.12	58.08	57.37	.52	62.75	.45	.69	.37	.23	.07
9	.14	.89	.50	57.85	.64	.46	63.10	.40	.68	.37	.22	.11
10	.08	.88	.37	.42	.58	.70	62.31	.35	.67	.36	.20	.14
11	56.04	55.89	56.37	57.12	57.44	60.62	61.56	57.30	56.65	56.35	56.19	56.18
12	.00	.90	.98	56.94	58.07	.56	60.86	.26	.64	.34	.18	.18
13	55.97	.89	57.13	.89	.69	.26	.38	.24	.64	.34	.17	.18
14	.99	.87	.13	.82	.50	.51	59.98	.22	.62	.33	.17	.12
15	56.06	.86	.26	.86	.74	.67	.71	.19	.61	.32	.16	.09
16	56.04	55.86	57.16	56.85	58.46	60.87	59.51	57.26	56.60	56.31	56.16	56.06
17	.00	.86	56.87	.81	.18	.46	.47	.24	.59	.31	.15	.06
18	.01	.85	.64	.87	57.98	.02	.43	.18	.58	.30	.14	.05
19	.03	.84	.46	.97	60.01	.14	.85	.11	.56	.29	.14	.05
20	.01	.83	.48	57.14	62.67	.14	60.92	.08	.55	.29	.13	.03
21	55.98	55.82	56.46	57.62	62.90	60.40	59.84	57.03	56.54	56.29	56.13	56.02
22	.96	.81	.49	58.02	.97	.22	.29	56.99	.53	.29	.12	.01
23	.92	.81	.47	57.68	61.82	59.78	.01	.96	.52	.30	.13	.01
24	.91	.80	.41	.54	60.83	.47	58.79	.94	.50	.30	.12	.00
25	.90	.84	.52	.32	.46	.17	.73	.92	.49	.30	.10	55.99
26	55.90	55.82	56.57	57.15	60.33	59.05	58.72	56.89	56.48	56.30	56.10	55.99
27	.88	.83	.72	.01	.13	.46	.52	.87	.47	.29	.09	.98
28	.88	.86	.49	56.97	59.78	.41	.36	.86	.46	.28	.08	.97
29	.88	.91	.58	.91	.51	.04	.36	.84	.45	.27		.97
30	.88	.91	.61	.86	.23	58.82	.22	.82	.45	.26		.97
31		.90		57.16	.39		.06		.44	.25		.97
Mean	56.01	55.88	56.49	57.24	59.02	59.79	60.36	57.24	56.60	56.33	56.18	56.06
Max.	56.22	55.97	57.26	58.08	62.97	60.87	65.59	57.97	56.80	56.43	56.29	56.18
Min.	55.88	55.80	55.96	56.70	56.91	58.82	58.06	56.82	56.44	56.25	56.08	55.97

WATER YEAR 1957 : Max. 65.59 m. Min. 55.80 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	22	20	23	76	142	377	273	200	79	48	38	24
2	21	22	25	85	147	395	836	178	78	48	39	20
3	18	20	28	129	120	396	804	162	70	46	39	23
4	20	20	31	145	109	311	1,330	165	74	46	35	22
5	30	18	35	149	97	304	1,152	142	73	46	34	26
6	26	17	36	140	90	299	642	150	67	43	34	28
7	26	19	38	143	100	339	615	135	70	44	34	22
8	29	17	47	208	129	332	832	135	69	44	32	23
9	27	19	59	179	155	348	947	136	67	46	31	26
10	24	17	51	133	146	391	810	134	68	44	32	25
11	22	18	48	113	139	552	749	135	67	45	32	27
12	21	16	112	94	207	545	587	128	63	42	28	30
13	20	16	130	88	270	473	486	121	60	40	31	30
14	22	15	123	77	233	512	411	114	60	41	31	25
15	26	17	127	86	259	540	385	114	61	43	28	21
16	27	16	123	84	243	608	364	115	63	42	29	22
17	25	15	84	81	217	517	361	113	64	39	28	24
18	23	14	68	87	196	452	351	105	56	38	27	20
19	22	15	56	96	511	458	409	102	60	39	26	21
20	26	14	55	105	902	458	620	102	63	41	27	19
21	23	12	54	149	783	514	406	101	49	37	24	23
22	23	12	53	190	857	473	335	93	53	39	24	19
23	19	13	56	158	700	411	309	91	53	40	25	20
24	20	13	52	147	551	346	273	90	50	41	26	19
25	19	16	60	128	526	318	269	89	54	40	24	19
26	20	13	68	118	489	314	268	88	51	39	24	17
27	18	16	84	104	454	355	243	83	50	41	24	17
28	19	14	60	98	400	348	218	84	48	40	24	18
29	21	17	67	88	343	305	229	82	46	37		17
30	19	17	62	83	318	277	217	79	52	37		17
31		17		115	341		198		50	36		19
Total	678	505	1,915	3,676	10,174	12,268	15,429	3,566	1,888	1,292	830	683
Mean	22.6	16.3	63.8	119	328	409	498	119	60.9	41.7	29.6	22.0
Max.	30	22	130	208	902	608	1,330	200	79	48	39	30
Min.	18	12	23	76	90	277	198	79	46	36	24	17
Runoff - mcm.	58.579	43.632	165.456	317.606	879.034	1,059.955	1,333.066	308.102	163.123	111.629	71.712	59.011

WATER YEAR 1957: Max. 1,330 Min. 12 Mean 145 Annual Runoff 4,570.906 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 4	06.00	65.83	1,373				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MAE KLONG RIVER BASIN

Khwae Yai at Kaeng Riang, Kanchanaburi (K.6)

Location: Lat 14°- 25' - 43" N, Long 99°- 07' - 04" E, on left bank 200 meters downstream from Lan Thom Cave and about 9 kilometers upstream from Erawan Fall, Thambon Tha Kradan, Amphoe Si Sawat, Kanchanaburi.

Drainage Area: 11,789 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +53.487 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.2

Location: At the rain gage infront of the camp of station K.6
Elevation: +72.819 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: 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: Rather unstable, no shifting adjustment but mean hourly discharge is included for flow computation.

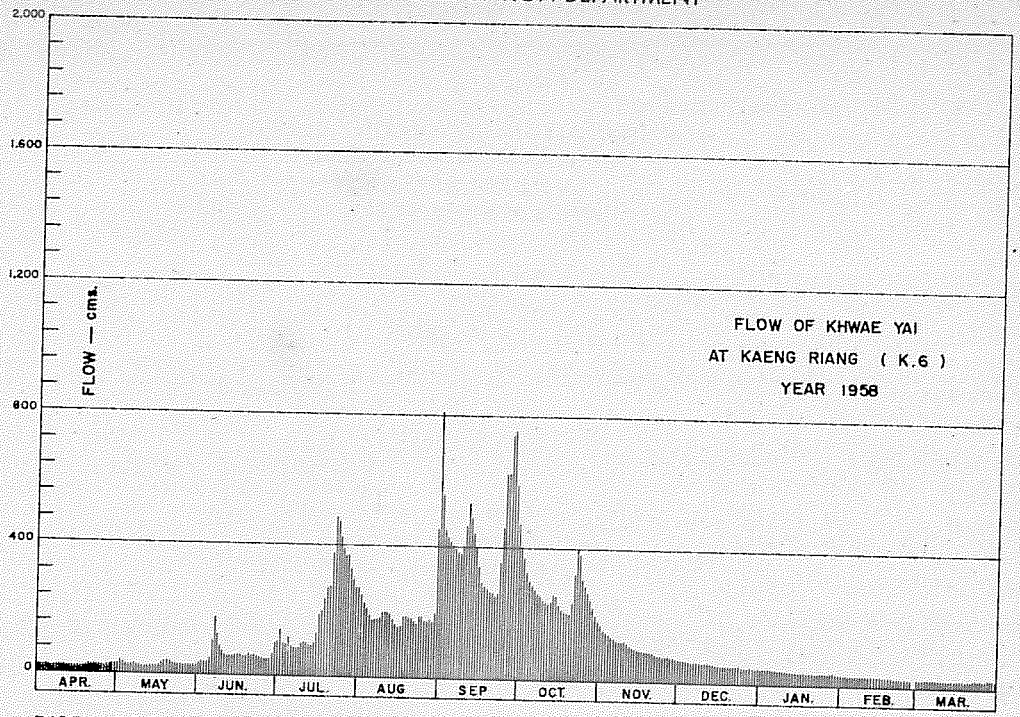
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage - discharge relationship used by discharge measurements made during 1958. No state diversions are made above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	55.96	56.08	56.20	57.08	58.75	62.78	60.46	57.76	56.66	56.33	56.14	55.97
2	.96	.26	.26	.43	.62	61.00	59.93	.66	.64	.32	.14	.97
3	.98	.16	.19	.07	.40	60.25	.57	.55	.62	.31	.13	.96
4	.99	.11	.26	56.95	.22	.12	.25	.47	.60	.30	.12	.96
5	.97	.06	.43	57.21	.01	.02	58.99	.39	.59	.30	.11	.95
6	55.96	56.04	57.08	56.94	57.84	59.82	58.85	57.33	56.58	56.29	56.10	55.95
7	.95	.06	.82	.83	.84	.85	.69	.28	.57	.29	.09	.95
8	.94	.03	.47	.81	.86	.67	.67	.24	.56	.28	.09	.94
9	.93	55.97	56.89	.82	.90	.66	.50	.20	.55	.27	.09	.94
10	.93	.96	.65	57.01	58.07	60.00	.48	.16	.54	.27	.08	.94
11	55.92	55.94	56.57	57.08	58.07	60.60	58.41	57.12	56.52	56.27	56.08	55.93
12	.91	.94	.50	.04	.01	.91	.87	.09	.51	.25	.08	.93
13	.97	.96	.49	56.94	57.98	.53	.45	.05	.50	.24	.08	.92
14	.91	.97	.50	.95	.86	.05	.64	.02	.49	.23	.08	.91
15	.90	.98	.51	57.12	.66	59.65	.58	.00	.48	.23	.08	.91
16	55.91	55.99	56.56	57.65	57.59	59.30	58.37	56.97	56.47	56.22	56.07	55.91
17	.93	56.10	.54	.96	.69	.02	.20	.95	.47	.22	.04	.91
18	.99	.24	.47	58.08	.99	58.83	.10	.93	.46	.21	.03	.90
19	56.04	.26	.50	.40	.95	.72	.10	.91	.45	.20	.02	.90
20	.04	.26	.60	.77	.88	.69	.08	.88	.44	.20	.02	.91
21	56.08	56.20	56.55	58.78	57.90	58.65	58.32	56.85	56.43	56.19	56.01	55.91
22	.09	.16	.55	59.53	.84	.58	.93	.82	.42	.18	.00	.91
23	.05	.13	.54	60.52	.71	.75	59.85	.80	.41	.18	.00	56.00
24	.02	.11	.47	.44	.99	59.73	.71	.77	.45	.16	55.99	55.95
25	55.99	.10	.41	.05	.93	60.55	.12	.76	.39	.16	.99	56.01
26	55.97	56.10	56.39	59.84	57.72	61.55	58.84	56.74	56.37	56.16	55.99	55.95
27	56.13	.09	.39	.60	.84	.56	.67	.72	.37	.16	.98	.99
28	.04	.09	.43	.63	.89	62.34	.55	.71	.37	.16	.97	56.04
29	.06	.08	.66	.26	.82	.47	.28	.70	.36	.16		55.98
30	.09	.04	57.01	.03	58.12	61.28	.06	.68	.34	.15		.95
31		.02		58.74	60.54		57.90		.34	.14		.93
Mean	55.99	56.08	56.60	58.11	57.73	60.16	58.74	57.05	56.48	56.23	56.06	55.94
Max.	56.13	56.26	57.82	60.52	60.54	62.78	60.46	57.76	56.66	56.33	56.14	56.04
Min.	55.90	55.94	56.19	56.81	57.59	58.58	57.90	56.68	56.34	56.14	55.97	55.90

WATER YEAR 1958 : Max. 62.78 m. Min. 55.90 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	22	29	36	105	271	804	477	168	70	44	32	22
2	22	40	40	137	257	548	410	158	68	43	32	22
3	23	34	35	104	233	449	366	147	67	43	32	22
4	23	31	40	93	214	433	328	140	65	42	31	22
5	22	29	51	117	193	420	298	133	64	42	31	21
6	22	26	106	93	176	396	282	128	63	41	30	21
7	21	28	174	83	176	400	265	123	63	41	29	21
8	21	26	140	82	178	378	263	120	62	41	29	21
9	20	22	88	83	182	377	244	116	61	40	29	21
10	20	22	69	99	199	418	242	119	60	40	29	21
11	20	21	63	105	199	495	234	109	59	40	29	20
12	19	21	57	102	193	535	230	106	58	39	29	20
13	22	22	56	93	190	486	238	102	57	38	29	20
14	19	22	57	93	178	424	259	100	56	38	29	19
15	19	23	58	109	158	376	253	98	55	38	29	19
16	19	23	62	157	151	334	230	95	55	37	28	19
17	20	30	60	188	161	301	212	93	55	37	26	19
18	23	38	55	200	191	280	202	92	54	37	26	19
19	26	40	57	233	187	268	202	90	53	36	25	19
20	26	40	65	274	180	265	200	87	52	36	25	19
21	29	36	61	275	182	260	224	85	51	35	25	19
22	29	34	61	398	176	253	292	83	51	35	24	19
23	27	32	60	485	163	271	400	81	50	35	24	24
24	25	31	55	474	191	386	383	79	53	34	23	21
25	23	30	50	424	185	488	312	78	48	34	23	25
26	22	30	48	399	164	625	281	76	48	34	23	21
27	32	29	48	370	176	625	262	75	48	34	23	23
28	26	29	51	374	181	738	249	74	48	34	22	26
29	28	29	70	329	174	757	220	73	47	34		23
30	29	26	99	302	204	586	198	71	45	33		21
31		25		270	498		182		45	32		20
Total	699	898	1,972	6,650	6,161	13,376	8,438	3,092	1,731	1,167	766	649
Mean	23.3	29.0	65.7	214	199	446	272	103	55.8	37.6	27.3	20.9
Max.	32	40	174	485	498	804	477	168	70	44	32	26
Min.	19	21	35	82	151	253	182	71	45	32	22	19
Runoff - mcm.	60.394	77.587	170.381	574.560	532.310	1,155.686	729.043	267.149	149.558	100.829	66.182	56.074

WATER YEAR 1958 : Max. 804 Min. 19 Mean 125 Annual Runoff 3,939.754 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Sept. 1	06.00	63.28	880				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
MAE KLONG RIVER BASIN

Khwae Yai at Kaeng Riang, Kanchanaburi (K.6)

Location: Lat 14°- 25' - 43" N, Long 99°- 07' - 04" E, on left bank 200 meters downstream from Lan Thom Cave and about 9 kilometers upstream from Erawan Fall, Thambon Tha Kradan, Amphoe Si Sawat, Kanchanaburi.

Drainage Area: 11,789 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +53.440 m. (M.S.L.)

Bench Mark: B.M. - R.I.D. No.2

Location: At the rain gage infront of the camp of station K.6
Elevation: +72.819 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: 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: Rather unstable, shifting adjustment, periodic rating curve and mean hourly discharge are included for flow computation.

Overbank Flow Conditions: No overbank flow.

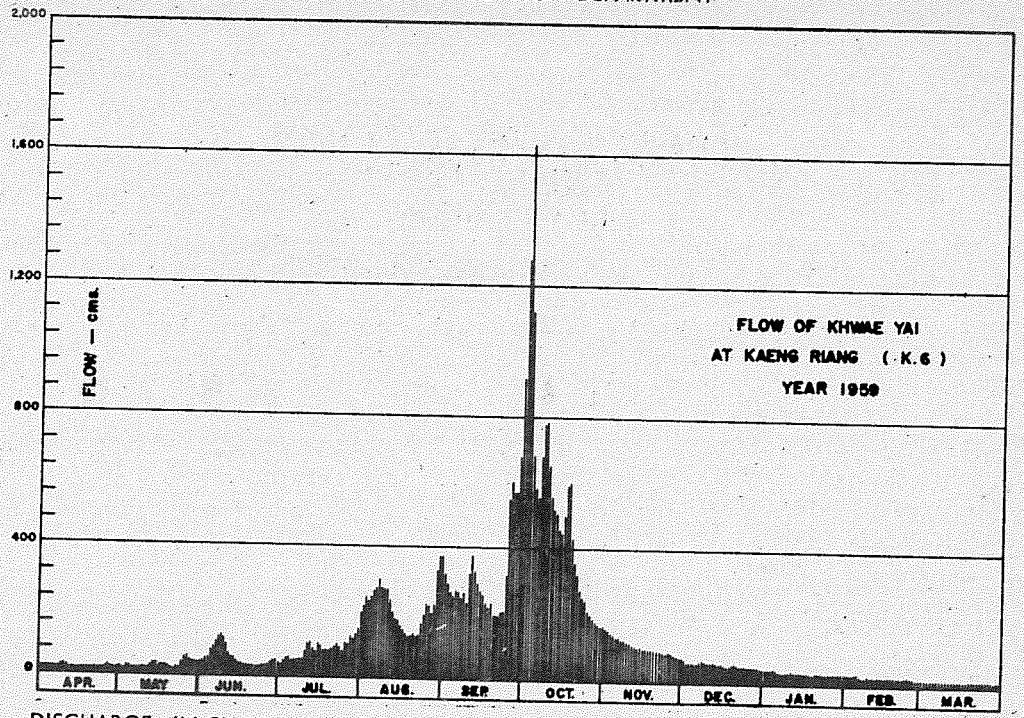
General Description: Records good. Stage - discharge relationship is defined by discharge measurements made during 1959. No state diversions are made above gage site.

GAGE HEIGHT IN METER (M.S.L), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	55.89	55.89	56.18	56.13	57.93	59.58	62.65	57.88	56.73	56.39	56.20	56.02
2	.87	.86	.21	.14	58.17	.20	64.93	.90	.72	.38	.19	.02
3	.86	.83	.29	.30	.36	58.78	65.86	.76	.71	.37	.18	.01
4	.86	.89	.35	.44	.30	.52	63.27	.61	.69	.36	.17	.00
5	.87	.90	.67	.47	.39	.46	61.78	.55	.68	.35	.16	.00
6	55.89	55.88	56.78	56.38	58.48	58.72	61.25	57.46	56.67	56.35	56.15	55.99
7	.88	.85	.91	.35	.53	.59	.06	.40	.66	.34	.15	.99
8	.90	.84	57.10	.32	.89	.49	.61	.36	.65	.33	.14	.99
9	.92	.84	.07	.31	.73	.52	62.21	.34	.64	.32	.14	.98
10	.93	.81	.04	.38	.75	.40	.07	.28	.62	.32	.13	.98
11	55.89	55.81	56.74	56.67	58.67	58.90	61.47	56.22	56.60	56.31	56.13	55.97
12	.86	.89	.51	.86	.35	59.44	.04	.17	.59	.30	.12	.97
13	.84	.97	.37	.88	.04	.14	60.87	.13	.58	.30	.11	.96
14	.84	56.13	.27	.82	57.83	58.89	.81	.09	.57	.29	.11	.96
15	.83	.09	.20	.74	.64	.79	.55	.06	.55	.28	.10	.95
16	55.83	56.03	56.15	56.87	57.45	58.58	60.43	57.03	56.54	56.28	56.09	55.95
17	.85	.02	.11	.77	.32	.37	.73	.01	.53	.28	.09	.94
18	.84	55.95	.08	.66	.26	.16	61.16	56.98	.52	.27	.08	.94
19	.83	.93	.05	.59	.23	.25	.33	.98	.51	.27	.08	.93
20	.84	.88	.04	.69	.18	.01	60.42	.98	.50	.26	.07	.93
21	55.83	55.86	56.03	56.80	57.25	57.93	59.83	56.96	56.50	56.26	56.07	55.92
22	.82	.87	.04	.79	.18	.84	.42	.93	.49	.25	.06	.92
23	.82	.94	.05	.86	.19	.91	.11	.90	.48	.25	.06	.91
24	.82	.94	.03	.73	.48	.99	58.86	.87	.47	.24	.05	.91
25	.84	56.20	.08	.72	.83	58.91	.63	.85	.45	.23	.05	.90
26	55.84	56.34	56.09	56.96	58.12	60.62	58.42	56.83	56.45	56.22	56.04	55.90
27	.93	.40	.13	.94	.09	61.07	.26	.80	.45	.21	.04	.90
28	.91	.32	.17	57.20	57.88	60.79	.11	.79	.43	.21	.03	.90
29	.88	.22	.22	.19	58.07	.77	57.98	.77	.42	.20	.03	.89
30	.84	.14	.18	.38	59.08	61.72	.90	.75	.41	.20		.89
31		.14		.50	.51		.79		.40	.20		.89
Mean	56.86	55.99	56.34	56.71	58.04	58.98	60.64	57.15	56.56	56.28	56.10	55.95
Max.	55.93	56.40	57.10	57.50	59.51	61.72	65.86	57.90	56.73	56.39	56.20	56.02
Min.	55.82	55.81	56.03	56.13	57.18	57.93	57.79	56.13	56.40	56.20	56.03	55.89

WATER YEAR 1959 : Max. 65.86 m. Min. 55.81 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	21	24	41	36	192	376	900	162	76	47	34	24
2	21	22	43	38	224	316	1,402	165	69	46	34	24
3	22	21	50	52	246	281	1,628	156	60	44	34	23
4	20	26	56	56	234	259	1,006	149	61	43	33	21
5	20	25	80	63	254	254	680	141	62	42	32	22
6	24	21	85	55	261	272	585	132	60	42	32	22
7	21	21	99	55	267	266	558	132	60	40	31	21
8	22	20	110	53	298	245	680	124	61	39	30	20
9	25	21	125	52	277	262	780	128	71	38	30	19
10	27	20	119	56	277	231	787	121	64	39	29	19
11	23	18	97	81	273	316	648	119	62	38	30	18
12	21	22	73	104	248	376	560	113	61	40	29	19
13	21	28	57	105	208	342	525	109	62	38	29	19
14	21	41	56	90	189	299	509	104	62	39	29	19
15	20	37	41	77	182	287	467	105	57	38	28	19
16	20	31	40	106	164	262	443	103	58	39	28	19
17	21	31	38	98	150	239	499	103	57	36	28	18
18	20	26	36	83	137	216	592	99	55	37	28	18
19	20	30	35	85	131	230	605	99	54	35	28	18
20	21	25	31	81	129	211	439	98	56	34	26	18
21	19	22	35	101	138	198	367	97	56	36	27	18
22	18	23	32	96	133	199	318	97	58	34	26	18
23	19	26	31	104	129	206	287	94	55	38	26	17
24	18	25	32	89	165	206	260	90	54	34	26	18
25	21	44	34	82	187	302	244	87	53	36	25	17
26	21	59	36	108	231	538	215	90	53	35	25	17
27	27	61	39	109	224	603	203	88	52	34	24	17
28	23	52	44	128	200	572	192	84	51	34	24	17
29	22	45	49	119	217	569	179	80	50	34	23	16
30	20	40	45	131	342	694	170	78	49	34		17
31		42		146	372		165		48	34		16
Total	639	949	1,689	2,639	6,679	9,627	16,893	3,347	1,807	1,177	827	587
Mean	21.3	30.6	56.3	85.1	215	321	545	111	58.3	38.0	28.5	18.9
Max.	27	61	125	146	372	694	1,628	165	76	47	34	24
Min.	18	18	31	36	129	198	165	78	48	34	23	16
Runoff - mcm.	55.210	81.994	145.930	228.010	577.066	831.773	1,459.55	289.121	156.125	101.693	71.453	50.717

WATER YEAR 1959 : Max. 1,628 Min. 16 Mean 128 Annual Runoff 4,048.704 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 3	06.00	66.53	1,792				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
MAE KLONG RIVER BASIN

Mae Klong River at Ban Tham, Khanchanaburi (K.8)

Location: Lat 13°– 58' – 06" N, Long 99°– 35' – 12" E, on left bank 350 meters downstream from Wat Tha Lo, Amphoe Tha Muang, Khanchanaburi.

Drainage Area: 27,200 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +14.00 m. (M.S.L.)

Bench Mark: B.M. – R.I.D.

Location: On left bank near the camp of station K.8

Elevation: +24.500 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:

Period of Rating: 1957 – 66

Rated by Float: –

Rated by Current Meter: 1957 – 66

Stability of Channel Regimes: Rather unstable, shifting adjustment, periodic rating curve and mean hourly discharge are included for flow computation.

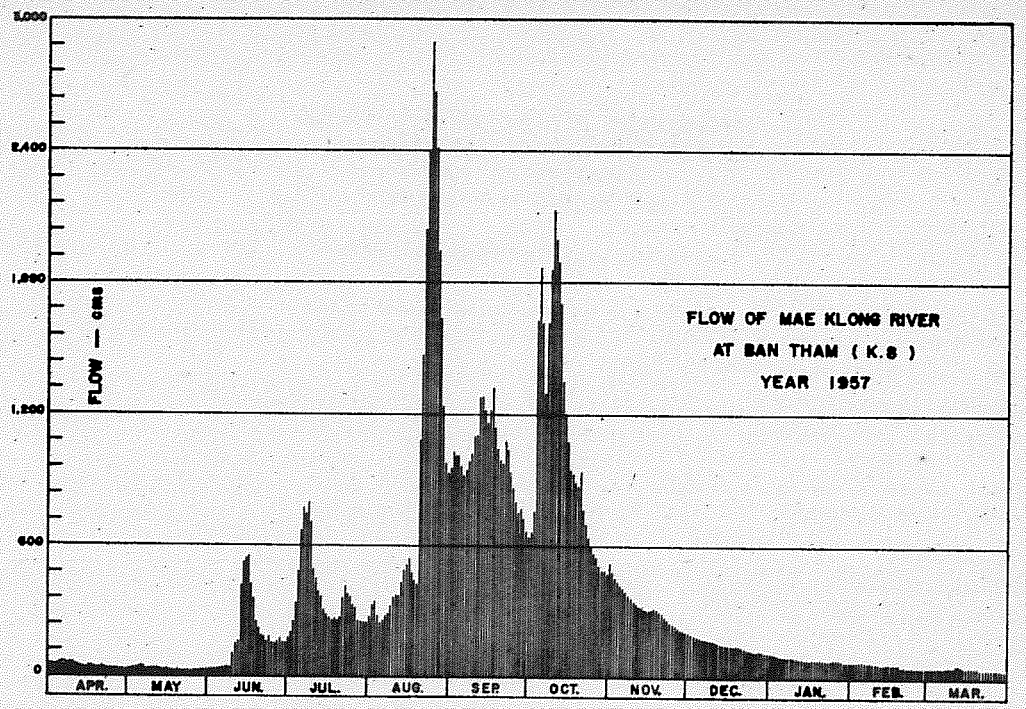
Overbank Flow Conditions: Overbank flow was observed at elev. +22.12 m. (M.S.L.) and is included for flow computation.

General Description: Records fair. Stage – discharge relationship defined by discharge measurements made during 1957. Upstream diversion of about 2,960 hectares are made at Tha Lo Project, which is about 350 meters upstream. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	14.82	14.73	14.69	15.69	16.20	18.80	17.74	17.12	15.80	15.30	15.05	14.87
2	.83	.72	.73	.85	.43	.91	.78	.02	.78	.29	.05	.86
3	.82	.74	.73	16.12	.43	.99	18.31	16.91	.76	.27	.06	.85
4	.84	.74	.73	.56	.31	19.10	20.04	.83	.73	.26	.06	.85
5	.89	.75	.76	17.30	.18	18.88	21.02	.76	.71	.25	.05	.85
6	14.93	14.77	14.80	17.97	16.23	18.69	20.42	16.70	15.70	15.23	15.04	14.86
7	.91	.78	.80	18.15	.23	.68	19.84	.63	.68	.22	.03	.87
8	.88	.75	.84	.10	.25	.67	20.09	.58	.66	.21	.03	.85
9	.91	.73	15.04	.13	.38	19.10	.75	.52	.64	.20	.01	.85
10	.90	.73	.27	17.82	.61	.14	21.10	.48	.62	.19	.00	.88
11	14.85	14.75	15.48	17.38	16.64	19.33	21.02	16.42	15.59	15.18	14.98	14.89
12	.82	.72	.54	.04	.58	.80	20.78	.38	.58	.18	.97	.82
13	.80	.71	16.28	16.78	.75	.81	.25	.35	.56	.17	.96	.93
14	.78	.70	17.27	.62	17.10	.59	19.64	.32	.55	.16	.95	.93
15	.77	.69	.42	.50	.19	.51	.23	.30	.53	.15	.95	.85
16	14.81	14.69	17.35	16.40	17.23	19.65	18.95	16.29	15.52	15.14	14.94	14.87
17	.82	.69	.08	.30	.08	.73	.68	.31	.50	.13	.94	.85
18	.80	.67	16.65	.21	16.95	.43	.67	.31	.48	.12	.93	.84
19	.80	.67	.26	.25	.93	.11	.54	.29	.47	.12	.92	.83
20	.81	.66	15.96	.28	18.49	.12	.51	.25	.47	.11	.92	.82
21	14.81	14.65	15.79	16.35	20.44	19.09	18.70	16.20	15.44	15.11	14.91	14.81
22	.79	.64	.74	.56	21.56	.12	.24	.12	.43	.10	.91	.81
23	.78	.63	.70	.70	22.34	18.95	17.98	.06	.41	.10	.90	.81
24	.74	.63	.68	.62	.51	.73	.86	.02	.39	.10	.89	.80
25	.72	.64	.62	.51	.36	.45	.77	15.98	.38	.10	.89	.80
26	14.71	14.63	15.65	16.43	21.83	18.24	17.60	15.94	15.37	15.11	14.88	14.79
27	.71	.65	.69	.32	20.93	.11	.52	.92	.35	.12	.88	.78
28	.70	.65	.73	.20	.05	.13	.41	.88	.34	.10	.87	.77
29	.70	.66	.73	.13	19.41	.03	.34	.86	.33	.08		.77
30	.71	.67	.72	.70	.04	17.86	.26	.83	.32	.07		.76
31		.69		.08	18.74		.17		.31	.06		.76
Mean	14.80	14.69	15.69	16.71	18.17	18.99	18.84	16.35	15.53	15.16	14.99	14.83
Max.	14.93	14.78	17.42	18.15	22.51	19.81	21.10	17.12	15.80	15.30	15.06	14.93
Min.	14.70	14.63	14.69	15.69	16.18	17.86	17.17	15.83	15.31	15.06	14.87	14.76

WATER YEAR 1957 : Max. 22.51 m. Min. 14.63 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	56	40	36	174	277	959	645	512	204	116	78	54
2	57	36	40	202	334	1,025	662	486	200	114	78	53
3	56	42	40	253	343	1,015	835	459	197	111	79	52
4	58	42	40	343	291	1,015	1,608	438	191	110	79	52
5	64	43	40	547	259	973	1,854	420	188	108	78	52
6	66	43	43	674	244	918	1,563	404	186	105	77	53
7	64	47	47	776	279	952	1,289	387	182	103	76	54
8	59	44	48	752	295	994	1,616	375	179	102	76	52
9	66	41	44	804	330	1,029	1,825	361	175	100	73	52
10	64	40	109	698	367	1,101	2,133	351	172	98	73	56
11	55	38	150	507	379	1,098	2,019	337	166	97	69	57
12	52	40	157	436	367	1,272	1,890	328	164	97	68	61
13	48	39	303	391	407	1,281	1,589	321	161	95	66	62
14	43	36	525	372	483	1,228	1,276	314	159	94	65	62
15	44	36	544	293	514	1,158	1,181	310	155	92	65	52
16	50	36	550	281	541	1,224	1,046	308	154	90	64	54
17	48	33	448	269	491	1,318	942	312	150	89	64	52
18	44	33	381	261	453	1,131	935	312	146	87	62	51
19	47	32	255	271	419	1,046	897	308	145	87	61	50
20	42	33	221	263	893	1,011	871	299	145	86	61	48
21	49	29	186	279	1,653	983	942	288	139	86	59	47
22	45	31	186	367	2,147	1,072	770	270	137	84	59	47
23	40	29	165	415	2,557	990	668	257	134	84	58	47
24	40	29	181	376	2,891	945	632	248	130	84	57	46
25	40	32	160	360	2,653	858	605	240	129	84	57	46
26	37	30	157	332	2,420	804	561	232	127	86	56	45
27	37	32	158	317	1,910	749	544	228	124	87	56	44
28	36	30	179	261	1,490	770	504	220	122	84	54	43
29	36	32	166	255	1,204	722	488	216	121	82		43
30	35	33	165	253	994	671	488	210	119	80		42
31		33		249	935		471		118	79		42
Total	1,478	1,116	5,754	12,031	28,820	30,312	33,349	9,751	4,819	2,901	1,867	1,571
Mean	49.3	36.0	192	388	930	1,010	1,071	325	155	93.6	86.7	50.7
Max.	66	47	550	804	2,891	1,318	2,133	512	204	116	79	62
Min.	35	29	36	174	244	671	471	210	118	79	54	42
Runoff - MCM.	127.699	96.422	497.146	1,039.478	2,490.042	2,618.957	2,881.354	842.486	416.362	250.646	161.309	135.734

WATER YEAR 1957 : Max. 2,891 Min. 29 Mean 366 Annual Runoff 11,557.642mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 24	03.00	22.54	2,914				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
MAE KLONG RIVER BASIN

Mae Klong River at Ban Tham, Khanchanaburi (K.8)

Location: Lat 13°- 58' - 06" N, Long 99°- 35' - 12" E, on left bank 350 meters downstream from Wat Tha Lo, Amphoe Tha Muang, Khanchanaburi.

Drainage Area: 27,200 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +14.00 m. (M.S.L.)

Bench Mark: B.H. - R.I.D.
Location: On left bank near the camp of station K.8
Elevation: +24.500 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:
Period of Rating: 1957 - 66
Rated by Float: -
Rated by Current Meter: 1957 - 66

Stability of Channel Regimes: Rather unstable, shifting adjustment, periodic rating curve and mean hourly discharge are included for flow computation.

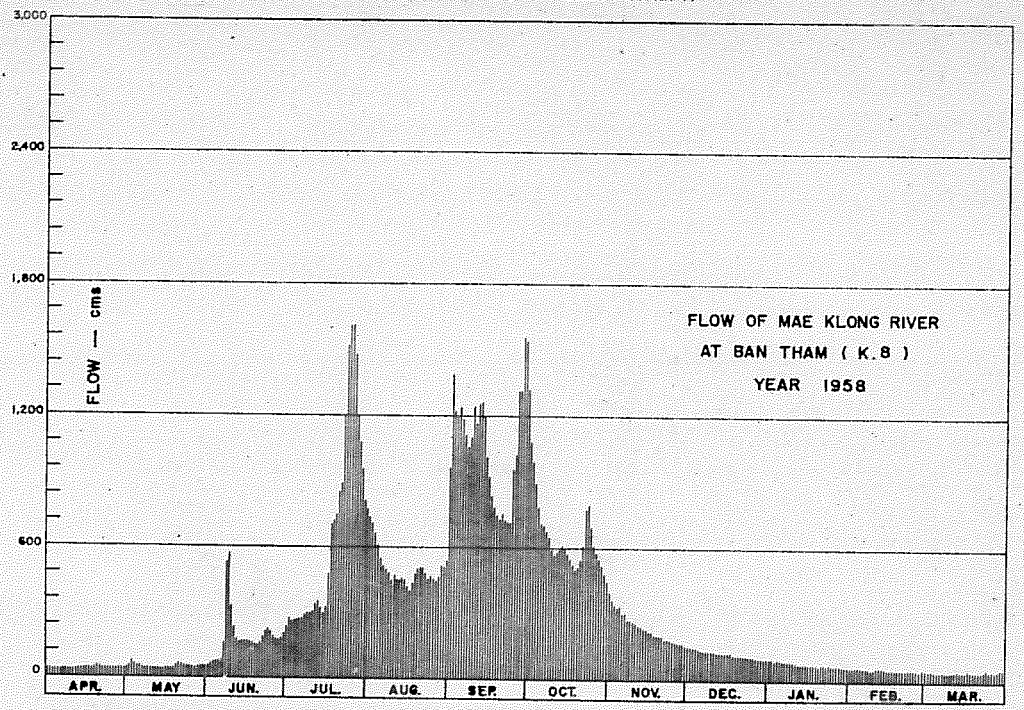
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship is defined by discharge measurements made during 1958. Upstream diversions of about 2,960 hectares are made at Tha Lo Project, which is about 350 meters upstream. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	14.76	14.86	14.89	15.90	17.97	18.57	19.59	16.63	15.47	15.08	14.90	14.77
2	.75	.93	.96	16.10	.85	19.66	.04	.52	.45	.07	.90	.76
3	.76	15.07	15.02	.05	.77	.38	18.66	.44	.43	.06	.89	.76
4	.76	.01	.01	.07	.62	.24	.38	.36	.41	.06	.89	.75
5	.76	14.96	.02	.00	.43	.31	.12	.28	.39	.05	.88	.75
6	14.76	14.91	15.12	16.03	17.23	19.31	17.87	16.22	15.38	15.04	14.88	14.74
7	.76	.87	.73	.08	.09	.08	.77	.16	.36	.04	.87	.74
8	.75	.85	17.09	.17	.01	.04	.67	.12	.34	.03	.87	.74
9	.74	.83	.09	.20	16.92	.09	.55	.08	.32	.02	.86	.73
10	.73	.79	16.42	.18	.87	.40	.44	.03	.31	.01	.85	.73
11	14.73	14.77	15.96	16.26	16.90	19.17	17.39	16.00	15.30	15.01	14.85	14.72
12	.72	.78	.73	.36	.88	.41	.38	15.96	.29	.00	.85	.75
13	.72	.76	.60	.36	.83	.47	.40	.92	.27	14.99	.85	.76
14	.71	.76	.56	.25	.84	.26	.43	.89	.26	.99	.85	.72
15	.73	.77	.54	.17	.83	18.82	.42	.87	.25	.98	.84	.71
16	14.72	14.78	15.57	16.29	16.74	18.51	17.35	15.83	15.24	14.97	14.84	14.70
17	.71	.79	.56	.95	.67	.22	.26	.80	.23	.97	.84	.74
18	.78	.82	.53	17.51	.80	.00	.12	.78	.22	.96	.83	.72
19	.86	.87	.48	.69	.94	17.83	.05	.75	.21	.96	.82	.70
20	.86	.92	.46	.84	17.01	.79	.09	.73	.20	.95	.82	.69
21	14.82	14.95	15.54	18.09	17.00	17.86	17.23	15.70	15.19	14.94	14.81	14.69
22	.83	.92	.71	.32	16.93	.84	.57	.66	.18	.94	.80	.70
23	.83	.91	.81	19.02	.85	.75	.92	.63	.17	.93	.79	.69
24	.82	.91	.84	.86	.79	.76	18.02	.61	.16	.93	.79	.74
25	.81	.89	.77	20.17	.83	18.39	17.73	.58	.15	.92	.78	.72
26	14.79	14.88	15.67	20.15	16.79	18.74	17.43	15.56	15.14	14.92	14.78	14.74
27	.76	.87	.59	19.82	.74	19.45	.29	.54	.13	.91	.77	.73
28	.80	.87	.58	.29	.88	.66	.19	.53	.11	.91	.77	.73
29	.81	.90	.64	18.88	17.01	20.07	.05	.50	.10	.91		.76
30	.81	.90	.73	.45	16.99	.12	16.90	.48	.10	.90		.74
31		.90		.17	17.10		.75		.09	.90		.73
Mean	14.77	14.87	15.64	17.38	17.03	18.87	17.61	15.90	15.25	14.98	14.84	14.73
Max.	14.86	15.07	17.09	20.17	17.97	20.12	19.59	16.63	15.47	15.08	14.90	14.77
Min.	14.71	14.76	14.89	15.90	16.67	17.75	16.75	15.48	15.09	14.90	14.77	14.69

WATER YEAR 1958 : Max. 20.17 m. Min. 14.69 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1958 TO MARCH 31,1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	36	49	56	246	781	1,006	1,316	402	156	99	66	50
2	36	56	63	285	739	1,388	1,067	372	152	98	68	52
3	35	77	74	263	718	1,218	994	347	151	94	67	47
4	36	67	75	269	676	1,189	883	332	149	98	66	49
5	36	56	74	269	615	1,240	781	337	138	91	63	46
6	36	53	84	267	556	1,182	718	307	140	91	63	40
7	36	47	196	278	528	1,135	706	307	136	88	63	42
8	35	44	529	296	503	1,060	682	276	131	85	63	44
9	35	46	567	309	489	1,113	637	274	133	87	61	41
10	34	42	325	298	464	1,237	598	263	133	81	59	43
11	36	42	216	309	475	1,171	570	258	127	82	59	44
12	36	38	185	345	456	1,255	587	248	127	78	60	46
13	36	41	167	355	449	1,263	595	241	125	78	61	49
14	35	41	167	327	464	1,200	612	235	120	78	60	44
15	37	38	169	296	456	1,008	604	229	124	80	59	44
16	43	44	170	325	430	915	576	218	124	75	58	44
17	38	41	165	511	402	832	542	218	125	74	56	53
18	42	46	163	706	451	788	531	210	118	73	55	41
19	56	52	158	721	483	757	503	208	118	73	55	44
20	53	60	151	757	506	733	520	206	115	71	56	42
21	46	64	169	857	511	763	562	198	115	73	50	44
22	43	63	194	899	506	736	649	187	112	73	49	42
23	46	56	222	1,198	483	712	772	190	110	68	52	41
24	44	59	227	1,518	459	709	796	185	110	73	52	53
25	44	56	210	1,609	469	937	718	179	110	68	53	46
26	39	49	196	1,609	456	1,021	615	174	106	67	52	49
27	39	44	178	1,474	446	1,308	590	167	102	66	48	44
28	46	54	179	1,207	462	1,316	556	167	101	68	52	48
29	42	54	185	1,077	517	1,546	517	160	99	68		42
30	36	56	206	957	514	1,538	480	158	101	70		49
31		55		816	550		449		101	63		44
Total	1,192	1,590	5,720	20,653	16,014	32,254	20,726	7,253	3,869	2,431	1,626	1,417
Mean	39.7	51.3	191	666	516	1,075	668	242	123	78.4	58.1	45.7
Max.	56	77	567	1,609	781	1,546	1,316	402	156	99	68	53
Min.	34	38	56	246	402	709	449	158	99	63	48	40
Runoff - M.C.	102.989	137.376	494.208	1,784.419	1,383.610	2,786.746	1,790.726	626.659	329.098	210.038	140.486	122.429

WATER YEAR 1958 : Max. 1,609 Min. 34 Mean 314 Annual Runoff 9,908.784 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
July 25	23.00	20.20	1,622				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
MAE KLONG RIVER BASIN

Mae Klong River at Ban Tham, Khanchanaburi (K.8)

Location: Lat 13°- 58' - 06" N, Long 99°- 35' - 12" E, on left bank 350 meters downstream from Wat Tha Lo, Amphoe Tha Muang, Khanchanaburi.

Drainage Area: 27,200 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +14.00 m. (M.S.L.)

Bench Mark: B.M. - R.I.D.

Location: On left bank near the camp of station K.8

Elevation: +24.500 m. (M.S.L.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1957 to date.

Rating Operation:

Period of Rating: 1957 - 66

Rated by Float: -

Rated by Current Meter: 1957 - 66

Stability of Channel Regimes: Rather unstable, shifting adjustment, periodic rating curve and mean hourly discharge are included for flow computation.

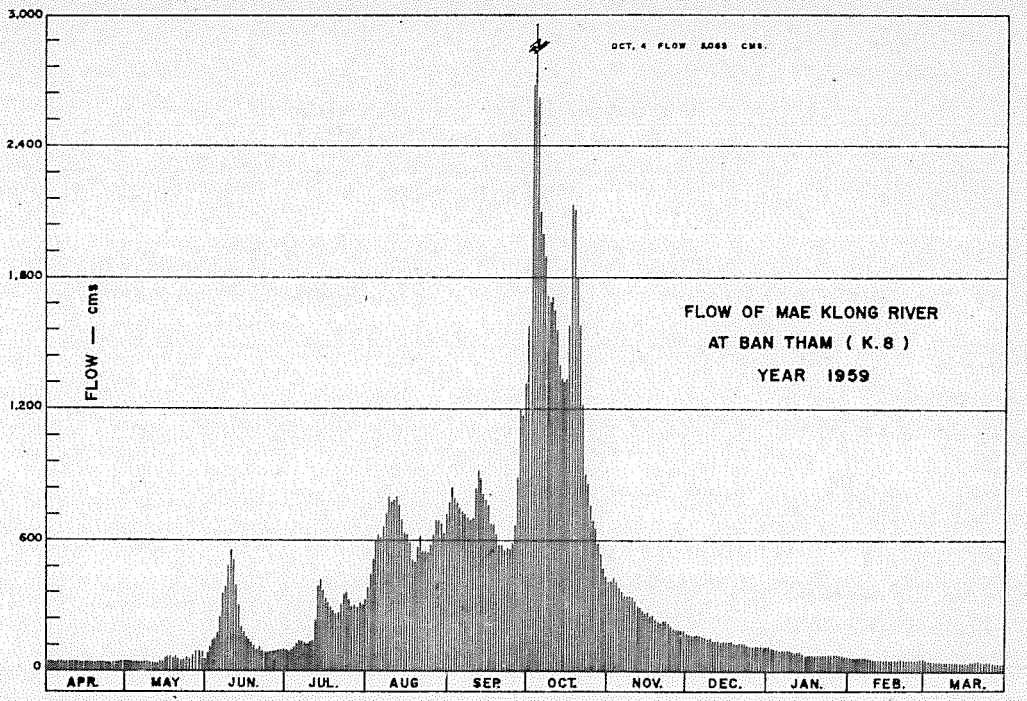
Overbank Flow Conditions: Overbank flow was observed at elev. +22.12 m. (M.S.L.) and is included for flow computation.

General Description: Records fair. Stage - discharge relationship defined by discharge measurements made during 1959. Upstream diversion of about 2,960 hectares are made at Tha Lo Project, which is about 350 meters upstream. No adjustment made for virgin flow.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	14.71	14.72	14.98	15.03	16.44	17.86	19.56	16.96	15.66	15.22	14.98	14.83
2	.70	.72	15.10	.02	.66	18.04	21.06	.94	.64	.20	.98	.83
3	.69	.73	.33	.04	17.01	.06	22.39	.88	.61	.19	.98	.82
4	.68	.72	.38	.13	.30	17.34	.96	.78	.60	.17	.97	.82
5	.73	.71	.50	.26	.33	.78	.36	.71	.58	.16	.96	.81
6	14.69	14.72	15.92	15.31	17.31	17.68	21.51	16.64	15.57	15.15	14.95	14.81
7	.68	.72	16.35	.27	.42	.73	.31	.57	.55	.14	.94	.81
8	.69	.71	.51	.23	.60	.69	20.77	.51	.53	.14	.94	.81
9	.69	.70	.88	.20	.89	.60	.55	.45	.52	.13	.94	.80
10	.72	.67	17.18	.20	.85	.62	.54	.42	.50	.13	.93	.80
11	14.72	14.66	17.04	15.31	17.81	18.08	20.50	16.38	15.48	15.12	14.93	14.79
12	.71	.66	16.62	.73	.87	.47	.25	.31	.47	.11	.92	.79
13	.70	.66	.15	16.48	.79	.39	19.89	.25	.44	.10	.91	.78
14	.69	.71	15.80	.65	.58	.20	.68	.20	.43	.10	.91	.78
15	.68	.78	.55	.43	.39	.03	.67	.15	.41	.09	.91	.77
16	14.67	14.84	15.41	16.21	17.26	17.88	19.75	16.11	15.40	15.08	14.90	14.76
17	.67	.84	.30	.15	.03	.71	20.58	.07	.38	.08	.90	.76
18	.68	.85	.20	.06	16.89	.52	21.37	.03	.37	.07	.89	.76
19	.67	.83	.16	15.97	.91	.35	.38	.00	.36	.07	.89	.75
20	.68	.85	.01	.92	17.13	.24	20.93	15.97	.35	.06	.88	.75
21	14.67	14.79	15.06	15.93	17.23	17.17	20.07	15.94	15.33	15.05	14.88	14.74
22	.69	.75	.02	16.13	.14	.15	19.23	.92	.31	.05	.87	.74
23	.66	.76	.00	.35	.05	.19	18.65	.89	.31	.05	.87	.74
24	.66	.82	14.99	.35	.03	.11	.30	.86	.29	.04	.86	.73
25	.67	.82	.98	.25	.16	.23	.02	.83	.28	.03	.86	.73
26	14.67	14.90	15.01	16.10	17.40	17.58	17.79	15.80	15.26	15.03	14.85	14.72
27	.65	.97	.02	.10	.64	18.51	.60	.77	.25	.02	.85	.72
28	.70	15.04	.02	.06	.63	19.21	.43	.74	.24	.01	.85	.72
29	.72	.06	.02	.15	.47	.22	.29	.71	.23	.00	.84	.72
30	.73	.01	.04	.12	.42	.36	.16	.69	.22	.00		.71
31		14.96		.16	.68		.05		.21	14.99		.71
Mean	14.69	14.80	15.50	15.82	17.33	17.87	19.86	16.22	15.41	15.09	14.91	14.77
Max.	14.73	15.06	17.18	16.65	17.89	19.36	22.96	16.96	15.66	15.22	14.98	14.83
Min.	14.65	14.66	14.98	15.02	16.44	17.11	17.05	15.69	15.21	14.99	14.84	14.71

WATER YEAR 1959 : Max. 22.96 m. Min. 14.65 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	43	43	84	95	390	776	1,512	415	171	111	68	52
2	41	43	111	95	443	842	2,037	418	169	108	68	49
3	42	46	144	98	503	863	2,642	438	167	107	68	48
4	40	44	153	112	611	994	3,065	408	171	104	67	47
5	50	43	180	136	630	825	2,419	390	169	103	67	46
6	43	42	260	146	622	728	2,071	376	160	101	66	46
7	42	45	351	136	658	719	1,989	355	160	100	64	46
8	43	46	397	133	734	701	1,829	342	157	96	62	46
9	42	43	480	125	806	689	1,683	344	154	96	61	46
10	47	41	555	135	776	704	1,703	340	156	94	59	47
11	46	40	519	149	785	842	1,675	307	142	92	58	45
12	43	38	417	234	803	920	1,576	294	145	89	55	43
13	43	38	304	390	761	881	1,432	300	140	85	56	43
14	40	43	228	430	686	813	1,354	278	140	82	57	42
15	40	54	178	377	625	788	1,328	264	138	82	58	39
16	41	58	163	329	622	761	1,424	268	135	82	57	35
17	42	64	138	311	527	675	1,753	260	132	82	56	37
18	39	64	124	289	511	667	2,136	252	135	82	54	39
19	38	59	117	271	498	608	2,110	236	128	82	52	38
20	41	66	95	260	569	580	1,816	226	128	82	54	38
21	38	55	108	265	622	577	1,476	220	127	79	56	38
22	42	52	95	313	560	552	1,149	230	127	79	54	39
23	40	52	92	358	541	566	900	230	122	80	52	40
24	38	61	88	363	549	560	867	212	116	82	52	40
25	37	58	87	334	586	586	761	209	119	80	53	39
26	40	70	92	302	650	681	692	200	119	82	53	36
27	38	85	93	307	699	957	602	200	117	78	55	36
28	46	93	95	296	695	1,200	566	191	116	75	55	36
29	46	95	96	315	681	1,171	549	185	114	72	55	36
30	48	88	98	311	628	1,262	494	184	113	72		34
31		52		332	716		438		111	70		34
Total	1,259	1,761	5,942	7,747	19,480	23,588	46,048	8,572	4,298	2,709	1,692	1,280
Mean	42.0	56.8	198	250	628	786	1,485	286	139	87.4	58.3	41.3
Max.	50	95	555	430	806	1,262	3,065	438	171	111	68	42
Min.	37	38	84	95	390	552	438	184	111	70	52	34
Runoff - MCM.	108.776	152.150	513.389	669.341	1,683.072	2,038.003	3,978.547	740.621	371.347	234.058	146.189	110.592

WATER YEAR 1959 : Max. 3,065 Min. 34 Mean 340 Annual Runoff 10,746.086 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 4	08.00	23.06	3,146				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
PHET RIVER BASIN

Phet River at Ban Song Phi Nong, Phetchaburi (B.3)

Location: Lat 12°– 52' – 04" N, Long 99°– 40' – 40" E, on left bank at Ban Song Phi Nong, 10 kilometers downstream from Kaeng Kra Chan Damsite, Amphoe Tha Yang, Phetchaburi.

Drainage Area: 2,244 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +41.00 m. (M.S.L.)

Bench Mark: B.M. – H.S.

Location: On left bank near the upper gage.
Elevation: +48.632 m. (M.S.L.)

Gage Reading Frequency: 12 – time daily readings at 03.00, 06.00, 09.00 – 15.00, 18.00, 21.00 and 24.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 12 readings.

Period of Available Gage Records: 1930 – 42, 1954 to date.

Rating Operation:

Period of Rating: 1954 – 59
Rated by Float: –
Rated by Current Meter: 1954 – 59

Stability of Channel Regimes: Rather unstable, shifting adjustment, periodic rating curve and mean hourly discharge are included for flow computation.

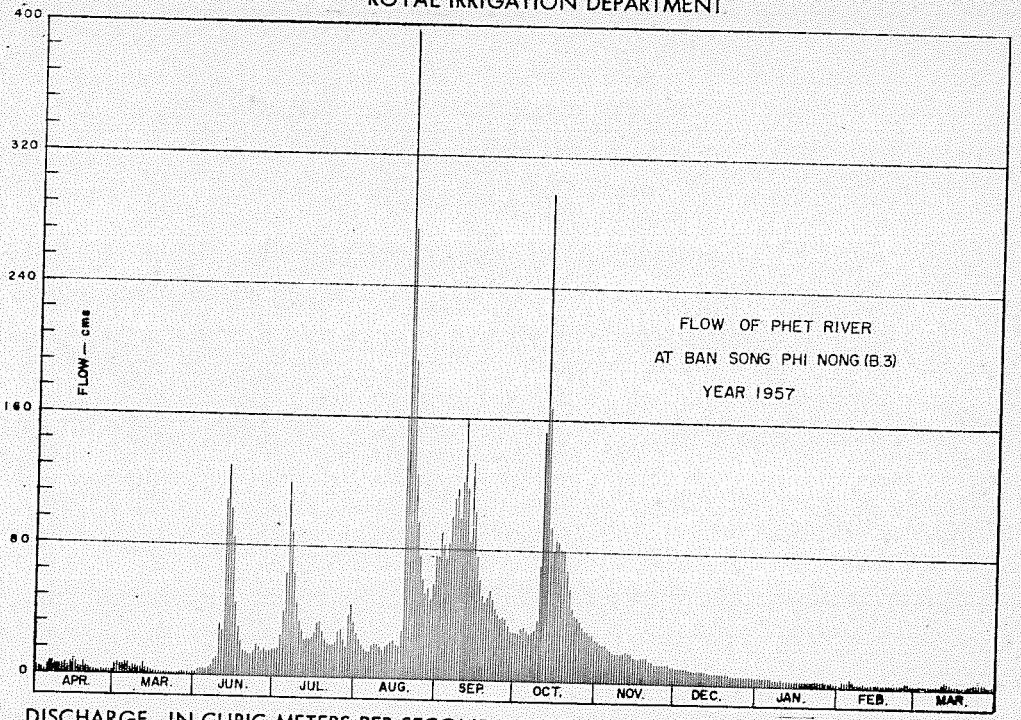
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relationship is defined by discharge measurements made during 1957. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	41.96	42.04	41.90	42.30	42.49	43.04	42.45	42.37	42.09	41.97	41.90	41.85
2	.97	.06	.96	.30	.42	.18	.45	.34	.08	.97	.93	.86
3	.93	41.99	.99	.43	.35	.08	.50	.32	.08	.96	.92	.85
4	.93	.97	.99	.67	.31	42.99	.56	.31	.08	.96	.91	.84
5	42.01	42.06	.97	.91	.29	43.07	.49	.29	.07	.96	.96	.84
6	42.08	42.05	42.01	43.42	42.28	43.28	42.46	42.28	42.07	41.95	41.93	41.86
7	.08	41.99	.03	.14	.34	.33	.48	.27	.06	.95	.90	.86
8	.01	42.03	.13	42.93	.35	.38	.50	.26	.06	.94	.89	.84
9	.01	.01	.17	.71	.36	.22	.58	.25	.05	.94	.88	.84
10	.00	41.97	.52	.58	.33	.41	.96	.24	.05	.94	.88	.83
11	42.03	41.98	42.48	42.48	42.31	43.71	43.57	42.27	42.04	41.94	41.87	41.94
12	.03	42.10	43.35	.41	.36	.39	44.28	.27	.04	.93	.86	.96
13	41.98	.00	.61	.42	.37	.13	43.63	.26	.03	.93	.86	.94
14	42.04	41.94	.25	.43	.39	.48	.16	.26	.03	.93	.86	.89
15	.11	.91	.09	.44	.37	.26	.04	.23	.02	.93	.86	.86
16	42.05	41.89	42.70	42.49	42.37	43.02	43.05	42.21	42.02	41.92	41.86	41.84
17	41.98	.88	.50	.57	.35	42.86	.03	.20	.02	.92	.85	.84
18	.95	.87	.36	.57	.48	.78	.04	.21	.01	.92	.85	.83
19	42.06	.86	.28	.48	43.57	.72	.03	.19	.01	.92	.85	.83
20	41.99	.87	.24	.41	44.83	.76	42.92	.18	.00	.92	.84	.82
21	41.93	41.87	42.23	42.36	44.37	42.78	42.80	42.16	42.00	41.93	41.84	41.86
22	.90	.87	.22	.32	43.91	.74	.71	.15	41.99	.95	.84	.90
23	.89	.88	.26	.36	.51	.67	.66	.14	.99	.94	.85	.92
24	.88	.87	.33	.40	.21	.62	.61	.14	.98	.94	.87	.89
25	.88	.89	.30	.48	.02	.58	.56	.13	.98	.93	.86	.89
26	41.89	41.91	42.26	42.49	42.89	42.59	42.51	42.12	41.98	41.92	41.89	41.92
27	.90	.92	.29	.42	.78	.56	.48	.11	.98	.92	.89	.90
28	.91	.90	.26	.35	.80	.51	.45	.11	.98	.91	.86	.86
29	.88	.89	.25	.64	.73	.48	.42	.10	.98	.91		.84
30	.89	.88	.28	.71	.85	.47	.42	.10	.97	.90		.86
31		.88		.59	43.02		.40		.97	.89		.87
Mean	41.97	41.94	42.37	42.55	42.77	42.97	42.81	42.21	42.02	41.93	41.88	41.87
Max.	42.11	42.10	43.61	43.42	44.83	43.71	44.28	42.37	42.09	41.97	41.96	41.96
Min.	41.88	41.86	41.90	42.30	42.28	42.47	42.40	42.10	41.97	41.89	41.84	41.82

WATER YEAR 1957 : Max. 44.83 m. Min. 41.82 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	4.04	6.50	2.12	18	28	76	29	26	10	5.60	2.96	2.75
2	4.04	7.20	3.59	18	24	90	29	24	9.65	5.30	4.04	2.96
3	3.17	4.52	4.52	26	21	83	32	23	9.65	5.00	4.04	2.75
4	2.75	4.52	4.76	42	18	74	33	23	9.65	5.00	4.04	2.54
5	5.60	7.55	4.28	64	17	84	31	21	9.65	5.30	5.30	2.54
6	7.90	7.20	5.60	119	17	100	29	20	9.30	5.00	4.28	2.96
7	7.90	4.52	6.50	85	21	111	30	19	8.95	4.52	3.17	2.96
8	5.30	5.90	10	63	21	117	31	18	8.60	4.76	3.17	2.54
9	5.90	5.30	12	45	21	99	37	18	8.25	4.52	3.17	2.54
10	5.30	4.28	32	35	20	121	71	18	8.60	4.52	3.38	2.33
11	6.20	4.52	28	29	19	160	152	19	8.60	4.28	3.17	4.76
12	6.85	7.90	108	23	22	117	297	20	8.25	4.04	2.96	5.30
13	5.00	4.52	149	24	21	85	167	18	7.55	3.80	2.96	4.76
14	6.85	3.59	103	24	24	133	95	18	7.90	3.80	2.96	3.59
15	9.30	2.75	85	25	23	103	80	16	7.55	3.80	2.96	2.96
16	7.20	2.12	45	28	21	76	86	16	7.55	3.59	2.96	2.84
17	4.76	1.91	30	34	21	61	85	15	7.20	3.59	2.75	2.54
18	3.80	1.70	21	35	30	52	81	16	6.85	3.59	2.75	2.33
19	7.20	1.30	16	29	161	48	80	16	6.85	3.59	2.75	2.33
20	4.76	1.50	15	24	396	51	68	16	7.20	3.38	2.54	2.12
21	3.38	1.50	14	21	274	55	57	14	6.85	3.80	2.54	2.96
22	2.75	1.30	14	20	194	50	45	13	6.20	4.28	2.54	3.80
23	2.12	1.50	16	21	125	44	41	12	5.90	4.04	2.75	4.28
24	2.12	1.20	20	23	99	41	40	12	5.90	4.04	3.17	3.59
25	1.70	1.50	18	29	76	38	37	12	5.90	4.04	2.96	3.59
26	2.12	1.70	16	30	62	39	34	12	5.60	3.80	3.59	4.28
27	1.70	1.91	17	24	54	38	32	12	5.60	3.80	3.59	3.80
28	2.33	1.70	16	20	56	34	31	12	5.90	3.59	2.96	2.96
29	1.91	1.70	16	39	50	31	29	11	5.90	3.38		2.54
30	1.91	1.50	17	45	59	30	29	11	5.60	3.17		2.96
31		1.70		35	76		27		5.30	2.96		3.17
Total	135.86	106.51	849.37	1,097	2,071	2,241	1,945	501	232.45	127.88	90.40	98.33
Mean	4.53	3.43	28.3	35.4	66.8	74.7	62.7	16.7	7.50	4.12	3.23	3.17
Max.	9.30	7.90	149	119	396	160	297	26	10	5.60	5.30	5.30
Min.	1.70	1.20	2.12	18	17	30	27	11	5.30	2.96	2.54	2.12
Runoff — mcm.	11.738	9.202	73.385	94.781	178.934	193.622	168.048	43.286	20.084	11.049	7.810	8.496

WATER YEAR 1957 : Max. 396 Min. 1.20 Mean 26.0 Annual Runoff 820.437 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Aug. 20	13.00	45.45	484				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
PHET RIVER BASIN

Phet River at Ban Song Phi Nong, Phetchaburi (B.3)

Location: Lat 12°– 52' – 04" N, Long 99°– 40' – 40" E, on left bank at Ban Song Phi Nong, 10 kilometers downstream from Kaeng Kra Chan Damsite, Amphoe Tha Yang, Phetchaburi.

Drainage Area: 2,244 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +41.00 m. (M.S.L.)

Bench Mark: B.M. – H.S.

Location: On left bank near the upper gage.
Elevation: +48.632 m. (M.S.L.)

Gage Reading Frequency: 8 – time daily readings at 03.00, 06.00, 09.00, 12.00, 15.00, 18.00, 21.00 and 24.00 hours.

Basis of Mean Daily Gage Height: Arithmetic mean of 8 readings.

Period of Available Gage Records: 1930 – 42, 1954 to date

Rating Operation:

Period of Rating: 1954 – 59
Rated by Float: –
Rated by Current Meter: 1954 – 59

Stability of Channel Regimes: Rather unstable, shifting adjustment, periodic rating curve and mean hourly discharge are included for flow computation.

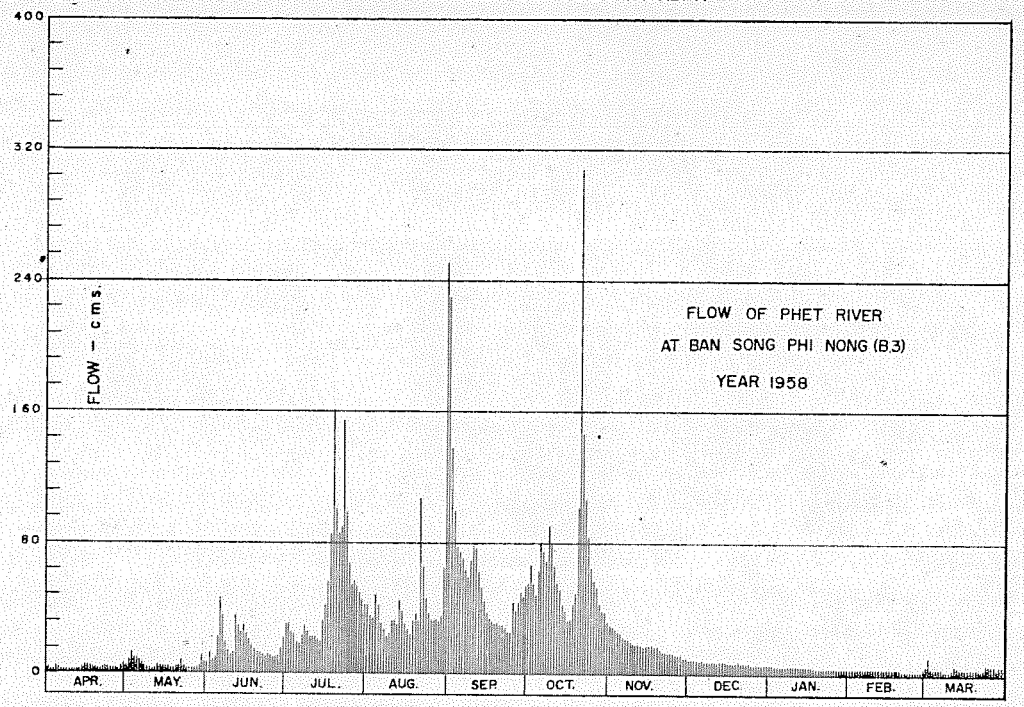
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage – discharge relationship is defined by discharge measurements made during 1958. No state diversion for irrigation above gage site.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	41.85	41.98	41.99	42.41	42.60	44.04	42.74	42.39	42.05	41.94	41.88	41.94
2	.84	42.03	42.09	.45	.53	43.51	.84	.37	.05	.94	.88	42.08
3	.84	.12	.01	.34	.52	.23	.74	.34	.04	.93	.88	41.96
4	.93	.05	.07	.32	.57	.04	.67	.32	.03	.93	.88	.90
5	.89	.07	.30	.25	.64	42.95	.85	.29	.03	.93	.88	.87
6	41.84	42.03	42.62	42.23	42.45	42.93	43.06	42.27	42.02	41.93	41.88	41.86
7	.83	41.97	.50	.31	.38	.84	42.94	.26	.02	.93	.87	.85
8	.82	.94	.24	.38	.30	.77	.87	.25	.02	.92	.87	.84
9	.81	.89	.15	.36	.35	.88	43.18	.23	.01	.92	.87	.84
10	.81	.87	.09	.29	.48	.98	.03	.22	.01	.92	.87	.83
11	41.81	41.86	42.11	42.29	42.48	42.93	42.87	42.21	42.00	41.92	41.87	41.85
12	.81	.84	.50	.29	.45	.80	.77	.20	.00	.91	.87	.95
13	.81	.96	.38	.27	.61	.70	.68	.19	.00	.91	.86	.94
14	.87	.90	.34	.27	.55	.62	.61	.18	.00	.91	.87	.88
15	.90	.90	.42	.44	.45	.56	.57	.18	.00	.91	.86	.86
16	41.90	41.91	42.34	42.64	42.39	42.51	42.49	42.19	41.99	41.91	41.86	41.86
17	.91	.90	.25	.77	.34	.46	.48	.19	.99	.91	.86	.90
18	.89	.87	.20	43.07	.46	.43	.60	.17	.99	.90	.85	.90
19	.87	.88	.15	.66	.52	.44	.69	.17	.99	.90	.85	.88
20	.86	.89	.10	.20	.48	.40	43.17	.15	.99	.90	.85	.86
21	41.84	41.90	42.13	43.07	43.20	42.39	44.69	42.13	41.98	41.90	41.84	41.85
22	.86	42.07	.09	.11	42.87	.36	43.55	.12	.97	.90	.84	.84
23	.91	41.98	.06	.65	.65	.33	.24	.11	.97	.90	.84	.89
24	.88	.91	.05	.20	.55	.33	.05	.10	.97	.90	.83	.97
25	.88	.89	.06	42.91	.52	.64	42.88	.09	.96	.90	.83	.95
26	41.88	41.89	42.05	42.77	42.49	42.53	42.77	42.08	41.96	41.90	41.83	41.94
27	.86	.89	.05	.79	.52	.60	.70	.07	.96	.89	.83	.94
28	.84	.88	.08	.75	.48	.69	.59	.07	.95	.89	.83	.90
29	.93	.92	.17	.73	.53	.69	.52	.06	.95	.89		.96
30	.98	42.11	.29	.66	.91	.74	.47	.06	.95	.89		.94
31		41.99		.61	43.97		.43		.94	.89		.93
Mean	41.86	41.94	42.20	42.66	42.59	42.74	42.86	42.18	41.99	41.90	41.86	41.90
Max.	41.98	42.12	42.62	43.66	43.97	44.04	44.69	42.39	42.05	41.94	41.88	42.08
Min.	41.81	41.84	41.99	42.23	42.30	42.33	42.43	42.06	41.94	41.89	41.83	41.83

WATER YEAR 1958 : Max. 44.69 m. Min. 41.81 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.50	4.90	7.80	31	43	222	56	30	9.20	5.50	4.00	5.50
2	3.30	9.00	12	32	36	138	67	29	9.20	5.50	4.00	11
3	3.30	14	8.90	26	35	100	56	28	8.90	5.10	4.00	6.10
4	5.10	10	11	25	49	78	49	26	9.20	5.10	4.00	4.40
5	4.20	11	23	20	43	75	63	25	8.20	5.10	4.00	3.80
6	3.30	9.00	47	19	32	71	81	23	8.50	5.10	4.00	3.60
7	3.10	6.50	36	24	28	64	75	22	8.20	5.10	3.80	3.50
8	3.00	5.50	20	30	23	60	69	21	8.20	4.90	3.80	3.30
9	2.90	4.20	14	27	25	70	91	20	8.20	4.90	3.80	3.30
10	2.90	3.80	12	23	33	79	80	19	8.20	4.90	3.80	3.10
11	2.90	3.60	13	23	33	77	66	19	7.80	4.90	3.80	3.50
12	2.90	3.30	35	23	31	63	57	19	7.80	4.60	3.80	5.90
13	2.90	6.10	29	21	45	53	52	18	7.80	4.60	3.60	5.50
14	3.80	4.50	26	20	39	45	43	17	7.80	4.60	3.80	4.00
15	4.50	4.50	30	33	31	38	39	17	7.80	4.60	3.60	3.60
16	4.50	4.60	25	44	28	35	33	18	6.90	4.60	3.60	3.60
17	4.60	4.50	21	57	25	33	33	18	6.90	4.60	3.60	4.40
18	4.20	3.80	18	86	33	31	43	17	6.90	4.40	3.50	4.40
19	3.80	4.30	15	161	37	32	50	17	7.20	4.40	3.50	4.00
20	3.60	4.80	13	101	33	30	102	15	7.50	4.40	3.50	3.60
21	3.30	5.10	14	86	108	30	308	14	6.90	4.40	3.30	3.50
22	3.60	8.50	12	90	66	28	147	14	6.60	4.40	3.30	3.30
23	4.60	5.70	11	154	47	26	107	13	6.60	4.40	3.30	4.20
24	4.00	4.10	12	99	38	26	84	13	6.50	4.40	3.10	6.50
25	4.00	3.70	11	68	35	44	65	13	6.10	4.40	3.10	5.90
26	4.00	3.90	11	55	33	39	57	12	6.10	4.40	3.10	5.50
27	3.60	3.90	11	57	34	44	53	12	6.10	4.20	3.10	5.50
28	3.30	3.90	12	54	32	50	43	12	5.90	4.20	3.10	4.40
29	5.10	4.80	16	50	36	47	39	10	5.90	4.20		6.10
30	7.00	11	23	46	66	54	38	9.90	5.90	4.20		5.50
31		7.50		43	251		32		5.50	4.00		5.10
Total	114.80	184.00	549.70	1,628	1,418	1,782	2,178	540.90	228.50	144.10	100.90	145.60
Mean	3.83	5.93	18.3	52.5	45.7	59.4	70.3	18.0	7.37	4.65	3.60	4.70
Max.	7.00	14	47	161	251	222	308	30	9.20	5.50	4.00	11
Min.	2.90	3.30	7.80	19	23	26	32	9.90	5.50	4.00	3.10	3.10
Runoff - mcm.	9.919	15.899	47.494	140.659	122.515	153.965	188.179	46.742	19.742	12.450	8.718	12.580

WATER YEAR 1958 : Max. 308 Min. 2.90 Mean 24.8 Annual Runoff 778.853 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 21	03.00	45.65	550				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
PHET RIVER BASIN

Phet River at Ban Song Phi Nong, Phetchaburi (B.3)

Location: Lat 12°- 52' - 04" N, Long 99°- 40' - 40" E, on left bank at Ban Song Phi Nong, 10 kilometers downstream from Kaeng Kra Chan Damsite, Amphoe Tha Yang, Phetchaburi.

Drainage Area: 2,244 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +41.00 m. (M.S.L.)

Bench Mark: B.M. - H.S.

Location: On left bank near the upper gage.
Elevation: +48.632 m. (M.S.L.)

Gage Reading Frequency: hourly readings.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1930 - 42, 1954 to date

Rating Operation:

Period of Rating: 1954 - 59
Rated by Float: -
Rated by Current Meter: 1954 - 59

Stability of Channel Regimes: Rather unstable, shifting adjustment, periodic rating curve and mean hourly discharge are included for flow computation.

Overbank Flow Conditions: No overbank flow.

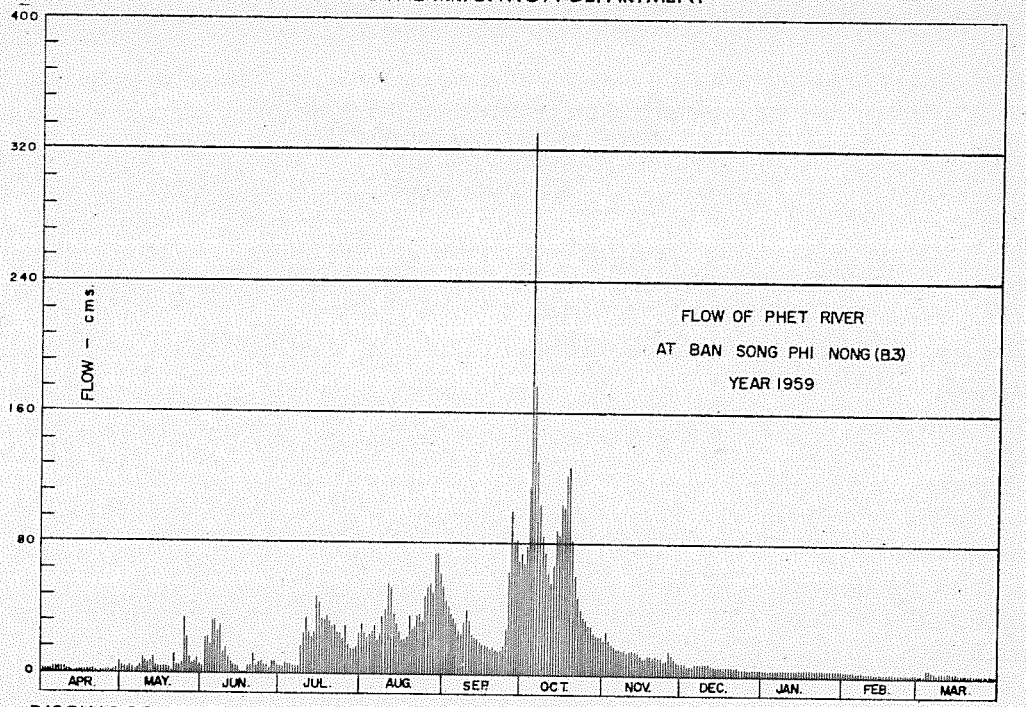
General Description: Records fair. Stage - discharge relation used is defined by discharge measurements made during 1957. No upstream state diversions for irrigation.

GAGE HEIGHT IN METER (M.S.L.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	41.89	41.96	41.99	41.98	42.47	42.79	42.99	42.28	42.06	41.93	41.88	41.84
2	.87	.94	42.33	.99	.40	.68	.95	.34	.05	.93	.88	.84
3	.85	.92	.30	42.03	.35	.63	43.02	.30	.05	.92	.88	.83
4	.87	.94	.17	.02	.35	.59	.43	.25	.05	.92	.87	.99
5	.88	.91	.14	.00	.39	.55	44.88	.23	.05	.92	.87	.95
6	41.92	41.89	42.43	41.98	42.44	42.47	43.98	42.22	42.04	41.92	41.87	41.91
7	.92	.87	.36	.96	.31	.42	.49	.20	.04	.92	.87	.89
8	.90	.96	.40	.97	.35	.38	.22	.18	.04	.92	.87	.88
9	.88	42.10	.17	42.24	.53	.55	.07	.18	.06	.91	.86	.90
10	.86	.06	.12	.40	.59	.55	42.94	.17	.03	.91	.86	.87
11	41.85	42.00	42.05	42.30	42.78	42.45	42.83	42.19	42.02	41.91	41.86	41.86
12	.84	.07	.00	.40	.71	.39	.79	.18	.01	.91	.86	.85
13	.83	.13	41.97	.33	.57	.35	.84	.16	.01	.91	.86	.84
14	.84	.00	.94	.37	.45	.32	43.10	.14	.01	.91	.85	.84
15	.85	41.94	.92	.71	.37	.29	.15	.12	.00	.91	.85	.83
16	41.84	41.92	41.90	42.65	42.30	42.27	43.26	42.12	42.00	41.90	41.85	41.83
17	.84	.93	.89	.50	.29	.24	.32	.12	.00	.90	.85	.83
18	.84	.93	.89	.50	.28	.23	.42	.12	41.99	.92	.84	.82
19	.86	.90	.98	.58	.52	.21	.46	.11	.99	.98	.84	.82
20	.89	.87	42.02	.52	.41	.22	.37	.11	.98	.95	.84	.82
21	41.85	42.13	42.13	42.41	42.43	42.19	42.82	42.10	41.98	41.93	41.84	41.81
22	.83	41.99	.02	.39	.55	.17	.69	.09	.97	.91	.84	.81
23	.84	42.00	.02	.38	.57	.20	.59	.09	.97	.90	.84	.81
24	.83	.04	.06	.32	.54	.28	.52	.09	.96	.90	.84	.82
25	.82	.44	.01	.36	.71	.48	.47	.09	.96	.90	.84	.82
26	41.83	42.31	41.97	42.41	42.79	42.83	42.43	42.19	41.96	41.89	41.84	41.81
27	.84	.09	.94	.29	.82	43.32	.40	.12	.96	.89	.83	.81
28	.86	.03	42.04	.25	.77	.14	.36	.09	.96	.89	.87	.81
29	.88	.06	.04	.22	43.02	.16	.33	.08	.95	.89	.87	.80
30	42.00	.08	.00	.24	.03	42.96	.32	.07	.94	.89		.81
31		.00		.37	42.87		.30		.94	.89		.80
Mean	41.86	42.01	42.07	42.30	42.55	42.51	42.99	42.16	42.00	41.91	41.85	41.84
Max.	42.00	42.44	42.43	42.71	43.03	43.32	44.88	42.34	42.06	41.98	41.88	41.99
Min.	41.82	41.87	41.89	41.96	42.28	42.17	42.30	42.07	41.94	41.89	41.83	41.80

WATER YEAR 1959 : Max. 44.88 m. Min. 41.80 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2.89	5.02	6.30	5.98	31	54	74	21	7.41	3.74	3.74	2.05
2	2.68	4.38	23	5.66	26	46	68	26	7.75	3.74	3.74	2.05
3	2.26	3.74	23	7.78	23	42	79	21	6.30	3.74	3.74	2.05
4	2.89	5.02	18	7.78	24	38	116	19	6.30	3.74	3.74	5.66
5	3.42	3.74	33	7.04	26	35	330	17	6.30	3.74	3.42	5.66
6	3.74	3.10	34	6.30	30	32	176	16	7.04	3.74	3.10	4.06
7	3.74	3.74	27	5.98	21	27	131	16	7.41	3.74	3.10	3.42
8	3.74	5.34	30	5.66	25	25	105	15	7.04	4.06	3.42	3.10
9	3.42	10	13	18	36	32	85	15	7.41	4.06	3.10	3.42
10	1.84	8.52	16	26	40	40	75	14	7.41	4.06	3.10	3.42
11	1.84	7.04	9.65	35	56	32	63	15	7.67	4.06	3.10	3.10
12	1.42	8.52	7.04	26	53	25	56	15	6.30	4.06	2.89	2.47
13	1.42	11	6.67	23	37	23	67	14	5.66	3.74	2.89	2.26
14	1.63	5.98	4.38	26	32	22	88	13	5.66	3.74	2.89	2.26
15	1.84	4.70	4.38	48	26	20	85	12	5.66	4.38	3.10	2.26
16	1.63	4.06	3.10	44	21	18	104	11	5.37	4.06	2.89	2.05
17	1.63	4.06	2.89	34	21	18	102	11	5.37	4.06	2.89	2.05
18	1.84	4.38	3.10	33	23	17	122	12	5.02	4.70	2.89	2.05
19	2.05	3.42	7.04	36	36	16	127	12	5.66	5.66	2.89	2.26
20	2.89	2.05	7.04	33	28	17	82	11	5.34	5.02	2.89	2.05
21	2.05	12	13	29	29	15	60	12	5.02	5.02	2.68	1.84
22	1.42	5.98	7.78	30	36	14	47	11	5.02	4.70	2.47	1.63
23	1.84	5.98	8.52	26	37	15	40	11	4.70	4.38	2.47	1.63
24	1.63	7.04	9.26	25	33	18	35	9.26	4.70	4.38	2.26	1.63
25	1.63	35	6.67	22	48	28	33	9.26	5.02	4.38	2.26	1.63
26	1.84	23	5.98	30	53	63	30	15	5.02	4.06	2.26	2.05
27	1.63	10	4.06	19	56	100	29	12	5.02	4.38	2.05	1.63
28	2.68	7.04	8.15	16	50	81	26	10	4.70	4.38	2.68	2.05
29	3.74	8.15	8.52	16	74	83	24	8.15	4.70	4.38	2.68	1.84
30	7.04	10	6.30	17	75	69	23	7.41	4.70	4.38		2.05
31		7.41		25	62		23		4.70	4.38		2.05
Total	74.31	239.41	356.83	689.18	1,168	1,025	2,505	411.08	181.38	130.66	85.33	77.73
Mean	2.48	7.72	11.9	22.2	37.6	34.1	80.8	13.7	5.85	4.21	2.94	2.50
Max.	7.04	35	34	48	75	100	330	26	7.75	5.66	3.74	5.66
Min.	1.42	2.05	2.89	5.66	21	14	23	7.41	4.70	3.74	2.05	1.63
Runoff - mcm.	6.420	20.685	30.830	59.545	100.915	88.560	216.432	35.517	15.671	11.289	7.372	6.716

WATER YEAR 1959 : Max. 330 Min. 1.42 Mean 19.2 Annual Runoff 599.954 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 4	23.00	45.17	373				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
TA PI RIVER BASIN

Phum Duang at Ban Bang Ngon, Surat Thani (X.6)

Location: Lat 9°– 04' – 25" N, Long 99°– 04' – 06" E, on left bank at Ban Bang Ngon, Amphoe Khiri Ratthanikhom, Surat Thani.

Drainage Area: 4,446 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +8.72 m. (A.D.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 – time daily readings at 06.00, 09.00, 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 – 59

Rating Operation:

Period of Rating: 1950
Rated by Float: –
Rated by Current Meter: 1950

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

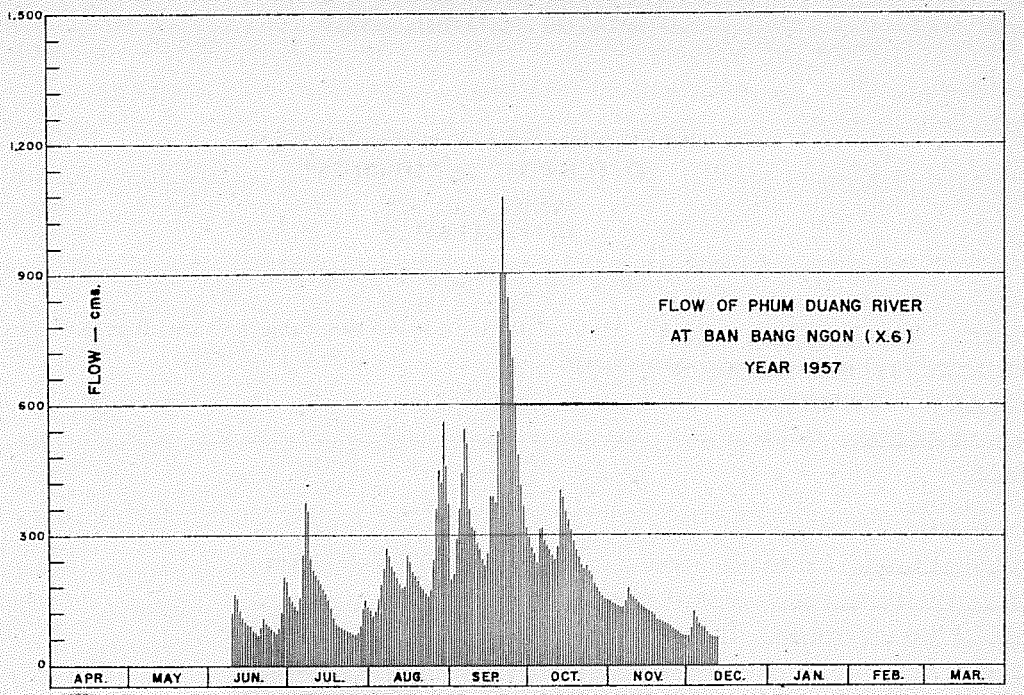
General Description: Record fair except those for period of no gage height record which are poor. Stage – discharge relationship is defined by discharge measurements made during 1950. No state diversions for irrigation above gage site.

Remarks: No gage height record for periods Apr. 1 – Jun. 8 and Dec. 13, 1957 – Mar. 31, 1958.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				9.62	9.31	9.92	10.53	9.51	8.76			
2				.53	.18	10.02	.44	.48	.97			
3				.45	.33	.51	.31	.45	9.31			
4				.35	.60	11.03	.18	.44	.16			
5				.64	.89	.41	.69	.42	.09			
6				9.48	10.21	11.86	10.71	9.39	9.02			
7				11.04	.43	.68	.54	.52	8.99			
8				10.95	.32	.03	.47	.78	.92			
9			9.27	.37	.19	10.76	.41	.65	.81			
10			.67	.11	.05	.67	.35	.57	.77			
11			9.56	10.00	9.94	10.54	10.28	9.52	8.75			
12			.35	9.93	.85	.42	.47	.46	.73			
13			.16	.85	.76	.32	11.19	.42				
14			.11	.72	.77	.19	.11	.39				
15			.04	.64	10.30	.37	10.92	.36				
16			9.02	9.59	10.21	11.13	10.79	9.34				
17			8.94	.37	.07	.12	.73	.27				
18			.83	.11	9.97	.04	.59	.18				
19			.81	.03	.92	.61	.41	.13				
20			9.00	8.99	.84	13.14	.31	.11				
21			9.16	8.95	9.74	13.88	10.22	9.08				
22			.07	.92	.69	.28	.11	.06				
23			8.99	.88	.64	.01	.18	.04				
24			.93	.86	.77	12.79	.07	.00				
25			.89	.84	10.18	.47	9.97	8.99				
26			8.86	8.80	10.89	11.91	9.89	8.93				
27			.97	.85	11.42	.45	.78	.86				
28			9.48	9.02	.26	.24	.68	.81				
29			.96	.38	10.91	.00	.61	.76				
30			.89	.54	.57	10.73	.56	.76				
31				.41	.10		.54					
Mean				9.49	10.07	11.22	10.00	9.26				
Max.				11.04	11.42	13.88	11.19	9.78				
Min.				8.80	9.18	9.92	9.54	8.76				

WATER YEAR 1957 : Max. 13.88 m. Min. – m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				158	123	197	285	145	66			
2				148	110	210	270	142	87			
3				138	125	282	250	138	123			
4				127	156	371	231	137	108			
5				161	193	448	311	135	99			
6				277	235	546	315	132	92			
7				373	269	507	286	146	89			
8				356	252	380	275	178	82			
9			119	259	233	323	266	162	71			
10			164	221	213	308	256	152	67			
11			155	207	199	286	246	146	65			
12			127	203	187	267	275	140	64			
13			108	187	176	252	402	135				
14			101	172	177	233	386	132				
15			94	161	249	259	351	129				
16			92	155	235	390	328	126				
17			84	130	216	388	318	119				
18			73	101	203	373	294	110				
19			71	93	197	491	266	103				
20			90	89	186	871	250	101				
21			108	85	173	1,074	237	98				
22			97	82	167	909	221	96				
23			89	78	161	836	231	94				
24			83	76	177	776	216	90				
25			79	74	231	690	203	89				
26			76	70	345	557	193	83				
27			87	75	450	456	178	76				
28			142	92	417	412	166	71				
29			202	131	349	365	157	66				
30			193	149	291	318	151	66				
31				134	220		149					
Total				4,621	6,915	13,675	7,963	3,537				
Mean				149	223	456	257	118				
Max.				373	450	1,074	402	178				
Min.				70	110	197	149	66				
Runoff - mcm.				399.254	597.456	1,181.520	688.003	305.597				

WATER YEAR 1957 : Max. 1,074 Min. 66 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
TA PI RIVER BASIN

Phum Duang at Ban Bang Ngon, Surat Thani (X.6)

Location: Lat 9°- 04' - 25" N, Long 99°- 04' - 06" E, on left bank at Ban Bang Ngon, Amphoe Khiri Ratthanikhom, Surat Thani.

Drainage Area: 4,446 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +8.72 m. (A.D.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 59

Rating Operation:

Period of Rating: 1950
Rated by Float: -
Rated by Current Meter: 1950

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

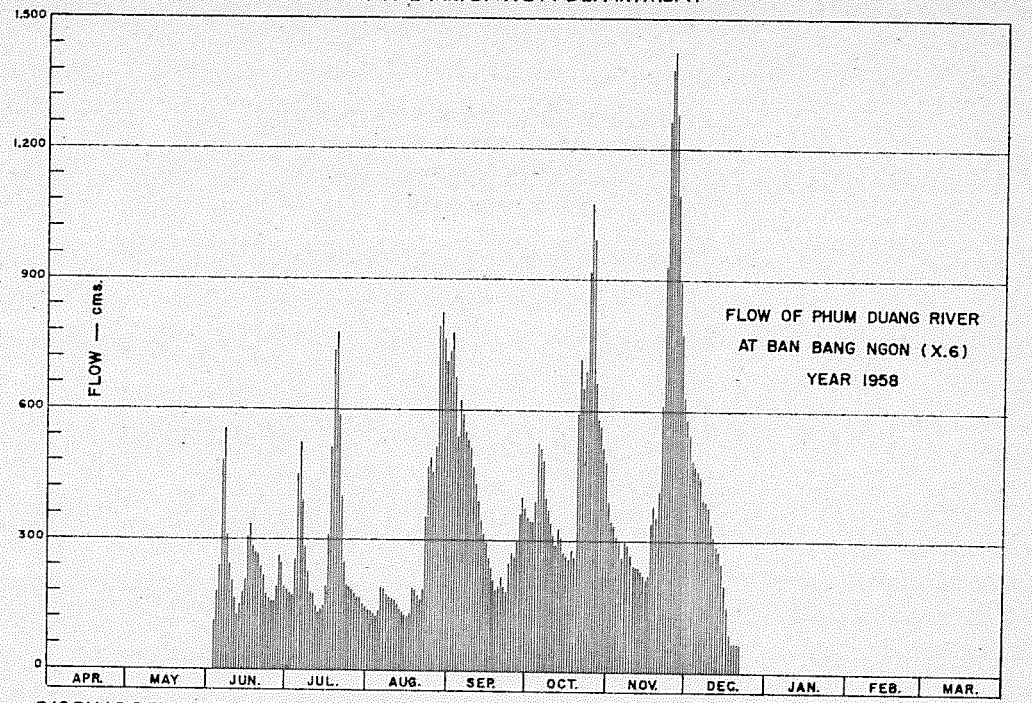
General Description: Record fair except those for period of no gage height record which are poor. Stage - discharge relationship is defined by discharge measurements made during 1950. No state diversions for irrigation above gage site.

Remarks: No gage height record for periods Apr.1 - Jun.2 and Dec.22 - Mar.31

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				9.84	9.47	12.61	10.95	11.13	11.96			
2				.78	.43	.79	.88	10.87	.84			
3			9.23	.72	.39	.39	.86	.81	.58			
4			.86	10.40	.31	11.82	11.26	.69	.52			
5			10.21	11.44	.42	12.18	.76	.56	.44			
6			11.58	11.77	9.88	12.10	11.71	10.36	11.36			
7			.44	.23	.86	11.94	.58	.62	.15			
8			10.70	10.54	.79	.79	.14	.59	.11			
9			.29	.20	.72	.73	.01	.45	.05			
10			9.89	9.82	.68	.54	10.85	.34	10.89			
11			9.65	9.75	9.65	11.34	10.68	10.24	10.63			
12			.33	.54	.59	.18	.56	.26	.54			
13			.53	.38	.46	10.89	.77	.21	.48			
14			.81	.47	.42	.78	.66	.15	.28			
15			10.14	.59	.37	.61	.43	.05	9.91			
16			10.65	9.90	9.28	10.40	10.39	10.14	9.47			
17			.79	10.47	.44	.22	.34	.89	8.94			
18			.56	11.69	.88	.08	.51	11.07	.76			
19			.43	12.63	.84	9.82	.97	10.92	.76			
20			.40	.79	.74	.90	11.95	11.28	.74			
21			10.23	12.09	9.67	10.10	12.56	12.13	8.74			
22			.03	11.33	10.02	9.94	.31	13.29				
23			9.75	10.33	.95	.80	.51	14.56				
24			.68	9.92	11.50	10.26	13.10	.90				
25			.62	.88	.61	.44	.86	15.02				
26			9.61	9.82	11.43	10.37	13.57	14.77				
27			.93	.72	.86	.65	12.47	.08				
28			10.39	.69	12.85	11.09	.01	13.10				
29			.28	.68	.96	.17	11.92	12.49				
30			9.89	.56	.78	.02	.77	.10				
31				.50	.33		.56					
Mean				10.37	10.31	11.10	11.51	11.69				
Max.				12.79	12.96	12.79	13.86	15.02				
Min.				9.38	9.28	9.80	10.34	10.05				

WATER YEAR 1958 : Max. 15.02 m. Min. - m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				186	141	728	356	390	568			
2				178	136	776	344	342	542			
3			114	171	132	670	340	332	485			
4			189	264	123	537	417	311	471			
5			235	454	135	619	524	290	454			
6			485	526	191	600	513	258	438			
7			454	410	189	564	485	299	394			
8			313	286	180	531	392	294	386			
9			247	234	171	518	367	272	374			
10			193	184	166	476	338	255	345			
11			162	174	162	433	310	240	301			
12			125	149	155	400	290	243	286			
13			148	131	140	345	325	235	277			
14			182	140	135	327	306	227	246			
15			226	155	130	298	269	213	195			
16			304	194	120	264	262	226	141			
17			328	275	137	237	255	345	84			
18			290	509	191	217	282	378	66			
19			269	733	186	184	260	351	66			
20			264	776	173	194	566	421	65			
21			238	598	164	220	714	607	65			
22			211	431	210	199	650	911				
23			174	253	356	181	701	1,276				
24			166	197	467	243	860	1,384				
25			158	191	491	270	1,069	1,423				
26			157	184	452	259	988	1,342				
27			198	176	546	304	690	1,132				
28			262	167	792	382	579	860				
29			246	166	822	398	559	695				
30			193	151	774	369	526	600				
31				144	706		480					
Total			6,666	8,788	8,873	11,743	15,117	16,152				
Mean			222	283	286	391	488	538				
Max.			485	776	822	776	1,069	1,423				
Min.			64	131	120	181	255	213				
Runoff – mcm.			575.942	759.283	766.627	1,014.595	1,306.109	1,395.533				

WATER YEAR 1958 : Max. 1,423 Min. – Mean – Annual Runoff – mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
TA PI RIVER BASIN

Phum Duang at Ban Bang Ngon, Surat Thani (X.6)

Location: Lat 9°- 04' - 25" N, Long 99°- 04' - 06" E, on left bank at Ban Bang Ngon, Amphoe Khiri Ratthanikhom, Surat Thani.

Drainage Area: 4,446 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Staff gage.

Zero Gage at Bottom at: +8.72 m. (A.D.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: 5 - time daily readings at 06.00, 09.00, 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 - 59

Rating Operation:

Period of Rating: 1950
Rated by Float: -
Rated by Current Meter: 1950

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

General Description: Record fair except those for period of no gage height record which are poor. Stage - discharge relationship is defined by discharge measurements made during 1950. No state diversions for irrigation above gage site.

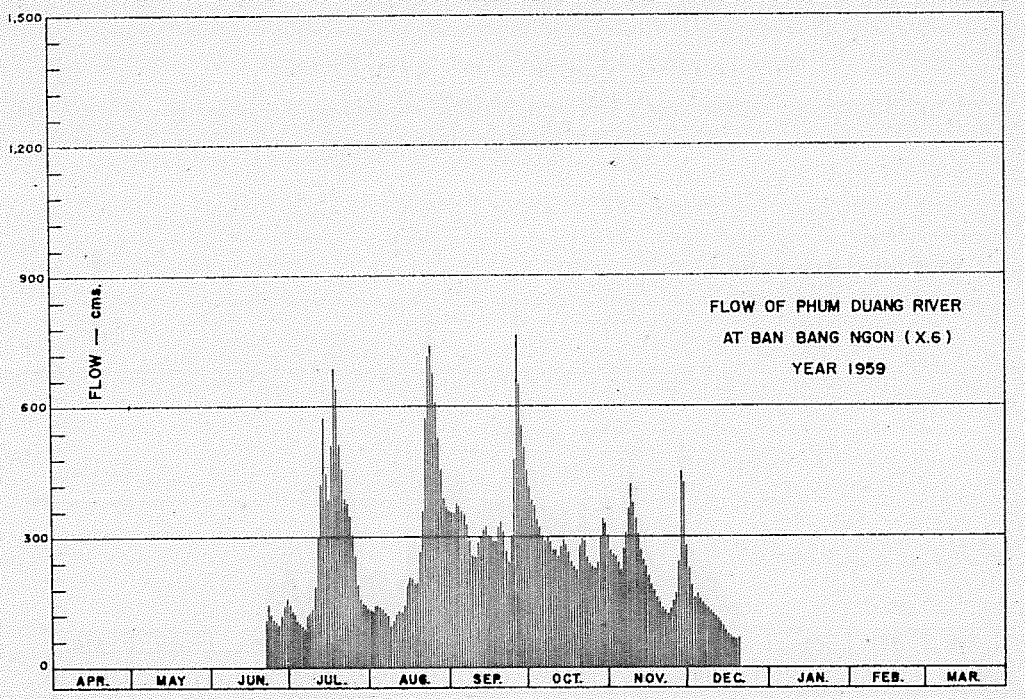
Remarks: No gage height record for periods Apr.1 - Jun.21 and Dec.21 - Mar.31

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				9.47	9.39	10.92	11.22	10.42	10.08			
2				.40	.34	.91	.07	.38	9.87			
3				.28	.46	11.07	.01	.32	.74			
4				.20	.48	.02	10.85	.22	.71			
5				.07	.42	10.95	.70	.12	.64			
6				9.04	9.38	10.91	10.59	10.47	9.54			
7				8.99	.34	.81	.53	.82	.49			
8				9.26	.26	.58	.61	11.28	.43			
9				.33	.08	.34	.58	.20	.35			
10				.41	.19	.33	.47	10.99	.29			
11				9.90	9.36	10.55	10.42	10.84	9.21			
12				10.76	.29	.63	.33	.53	.17			
13				11.42	.31	.73	.51	.33	.12			
14				.98	.53	.77	.59	.26	.02			
15				.68	.80	.66	.51	.04	8.91			
16				11.10	10.02	10.62	10.37	9.98	8.87			
17				.66	9.95	.58	.26	.83	.81			
18				12.46	.81	.54	.17	.68	.77			
19				.28	.96	.76	.12	.57	.74			
20				11.80	10.38	.82	.51	.53	.73			
21				11.57	10.96	10.71	10.61	9.42				
22			9.13	.28	11.98	.42	.58	.30				
23			.48	.09	12.55	.23	.38	.25				
24			.28	.02	.65	.73	.23	.41				
25			.14	10.78	.45	11.75	.18	.67				
26			9.09	10.41	12.11	12.73	10.14	9.70				
27			.06	.08	11.80	.35	.26	10.58				
28			.20	9.67	.50	11.88	.60	11.40				
29			.48	.52	.19	.69	.87	.30				
30			.63	.47	.02	.43	.79	10.51				
31				.43	10.98		.59					
Mean				10.38	10.32	10.95	10.54	10.24				
Max.				12.46	12.65	12.73	11.22	11.40				
Min.				8.99	9.08	10.23	10.12	9.25				

WATER YEAR 1959 : Max. 12.73 m. Min. - m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1				141	132	351	408	267	217			
2				133	126	349	378	261	190			
3				120	140	378	367	252	173			
4				111	142	369	338	237	169			
5				97	135	356	313	223	161			
6				94	131	349	294	275	149			
7				89	126	332	285	333	143			
8				118	118	293	298	421	136			
9				125	98	255	293	404	127			
10				134	111	253	275	363	121			
11				194	129	288	267	337	112			
12				323	121	301	253	285	109			
13				450	123	318	282	253	102			
14				573	140	325	294	243	92			
15				507	181	306	282	212	81			
16				384	210	299	259	204	77			
17				502	200	293	243	185	71			
18				688	182	286	230	166	67			
19				643	202	323	223	152	65			
20				533	261	333	282	148	64			
21				482	358	315	298	135				
22			103	421	573	267	293	122				
23			142	382	711	238	261	116				
24			120	369	738	318	238	134				
25			104	327	685	522	231	164				
26			99	266	602	760	226	168				
27			96	217	533	660	243	293				
28			111	164	467	551	296	446				
29			142	146	402	509	342	425				
30			160	141	369	452	328	282				
31				136	361		294					
Total				9,010	8,815	10,949	8,914	7,506				
Mean				291	284	365	288	250				
Max.				688	738	760	408	446				
Min.				89	98	238	223	116				
Runoff - mcm.				778.464	761.616	945.994	770.170	648.518				

WATER YEAR 1959 : Max. 760 Min. - Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
KHLONG U-TA-PHAO RIVER BASIN

Khlong Wat at Ton Nga Chang, Songkhla (X.14)

Location: Lat 6° – 55' – 00" N, Long 100° – 25' – 00" E, on left bank at Ton Nga Chang Fall, 5 kilometers from Phet Kasem Highway at Ban Tha Rae, which is 15 kilometers from Amphoe Hat Yai, Songkhla.

Drainage Area: 71 sq.km. referred to GSGS Map 1:253,440.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +109.50 m. (A.D.)

Bench Mark: B.M. – H.S./R.I.D.

Location: On left bank near the gage site.
Elevation: +114.958 m. (A.D.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1954 to date.

Rating Operation:

Period of Rating: 1954 to date
Rated by Float: –
Rated by Current Meter: 1954 to date

Stability of Channel Regimes: Rather unstable, no shifting adjustment but mean hourly discharge is included for flow computation.

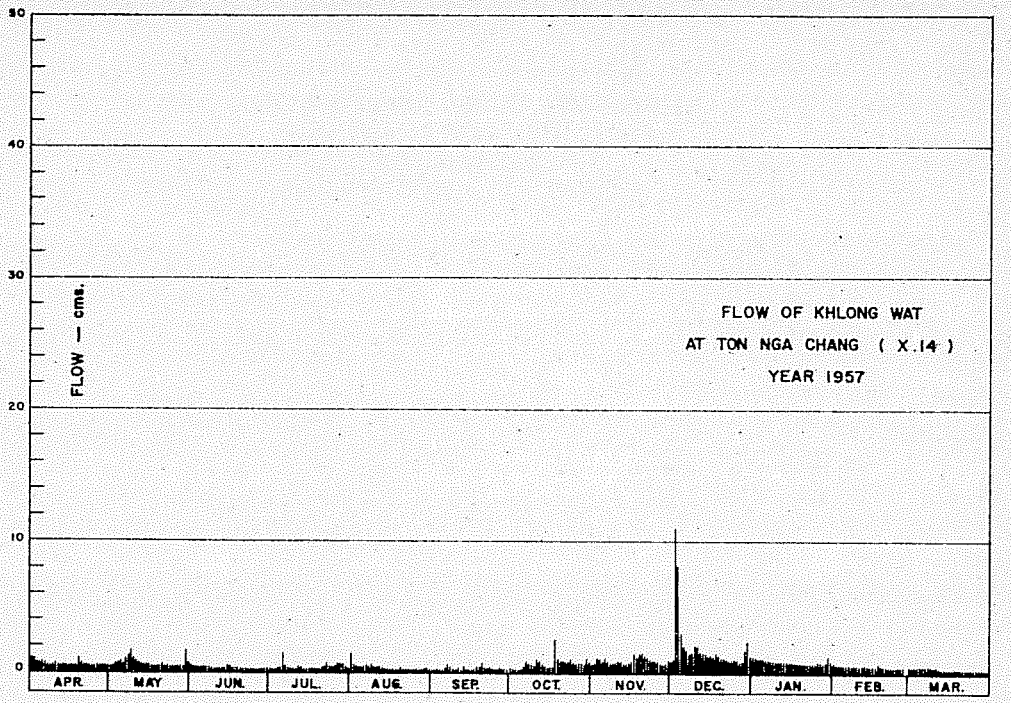
Overbank Flow Conditions: No overbank flow.

General Description: Records good. Stage – discharge relationship is defined by discharge measurements made during 1957. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	109.85	109.71	109.75	109.67	109.82	109.67	109.74	109.79	109.84	109.89	109.80	109.72
2	.83	.71	.74	.67	.80	.67	.70	.81	.85	.87	.79	.72
3	.78	.77	.73	.67	.75	.68	.69	.86	110.42	.86	.78	.72
4	.78	.77	.72	.67	.74	.68	.69	.87	.34	.85	.78	.72
5	.80	.83	.72	.72	.72	.67	.67	.86	.08	.85	.77	.72
6	109.78	109.79	109.72	109.92	109.72	109.75	109.68	109.90	110.02	109.85	109.77	109.72
7	.76	.85	.71	.79	.79	.76	.78	.86	.00	.84	.76	.75
8	.75	.86	.70	.74	.74	.71	.82	.83	109.95	.83	.76	.73
9	.75	.94	.70	.79	.79	.68	.79	.81	.96	.83	.77	.72
10	.78	.86	.69	.74	.74	.67	.79	.83	110.02	.82	.76	.71
11	109.76	109.82	109.69	109.72	109.72	109.70	109.86	109.82	110.00	109.83	109.75	109.71
12	.74	.80	.69	.71	.71	.69	.83	.82	109.96	.82	.75	.71
13	.74	.77	.69	.71	.71	.72	.79	.81	.93	.82	.76	.70
14	.74	.76	.69	.70	.70	.69	.75	.79	.95	.81	.75	.70
15	.73	.77	.76	.69	.69	.68	.74	.78	.92	.81	.75	.69
16	109.74	109.76	109.71	109.69	109.69	109.67	109.74	109.79	109.93	109.80	109.75	109.68
17	.74	.75	.70	.68	.68	.67	.73	.94	.91	.80	.75	.68
18	.76	.74	.73	.69	.69	.72	.92	.90	110.00	.79	.79	.68
19	.83	.73	.70	.69	.69	.70	.88	.92	109.92	.79	.75	.68
20	.77	.72	.69	.70	.70	.79	.81	.93	.90	.79	.75	.67
21	109.75	109.76	109.69	109.68	109.68	109.71	109.82	109.92	109.90	109.78	109.74	109.67
22	.74	.73	.68	.67	.67	.70	.83	.90	.89	.78	.74	.68
23	.73	.73	.68	.67	.67	.71	.83	.89	.91	.78	.73	.68
24	.73	.72	.68	.67	.67	.70	.84	.85	.87	.78	.73	.67
25	.73	.71	.67	.67	.67	.68	.82	.83	.87	.78	.73	.67
26	109.75	109.71	109.67	109.67	109.67	109.69	109.79	109.82	109.86	109.82	109.73	109.67
27	.73	.71	.67	.67	.67	.69	.78	.82	.85	.80	.73	.67
28	.74	.72	.67	.67	.67	.68	.77	.81	.85	.78	.72	.67
29	.72	.72	.67	.69	.69	.68	.76	.80	.97	.79		.66
30	.71	.86	.67	.69	.69	.68	.84	.83	110.06	.88		.66
31		.79		.68	.68	.69	.81		109.92	.81		.66
Mean	109.76	109.77	109.70	109.71	109.71	109.70	109.79	109.84	109.96	109.82	109.75	109.69
Max.	109.85	109.94	109.75	109.92	109.82	109.79	109.92	109.94	110.42	109.89	109.80	109.75
Min.	109.71	109.71	109.67	109.67	109.67	109.67	109.67	109.78	109.84	109.79	109.72	109.66

WATER YEAR 1957 : Max. 110.42 m. Min. 109.66 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.08	0.44	0.59	0.32	1.45	0.33	0.55	0.65	0.87	1.31	0.80	0.45
2	0.94	0.44	8.53	0.32	0.60	0.33	0.40	0.76	0.93	1.21	0.75	0.45
3	0.70	0.73	0.50	0.32	0.56	0.37	0.37	1.03	11	1.15	0.71	0.45
4	0.71	0.71	0.47	0.31	0.54	0.36	0.36	1.04	6.88	1.10	0.72	0.45
5	0.82	0.97	0.46	0.47	0.46	0.34	0.33	0.93	3.02	1.10	0.70	0.45
6	0.70	0.78	0.46	1.55	0.47	0.55	0.38	1.31	2.05	1.07	0.66	0.41
7	0.60	1.20	0.44	0.56	0.70	0.64	0.88	0.97	1.85	1.02	0.65	0.58
8	0.58	1.23	0.40	0.42	0.56	0.44	0.66	0.82	1.54	0.99	0.63	0.50
9	0.56	1.70	0.40	0.38	0.76	0.36	0.76	0.73	1.59	0.98	0.62	0.45
10	0.75	1.12	0.37	0.38	0.54	0.33	0.57	0.79	2.08	0.96	0.61	0.41
11	0.60	0.89	0.38	0.37	0.46	0.43	1.18	0.80	2.10	0.98	0.59	0.41
12	0.54	0.79	0.38	0.56	0.44	0.38	0.98	0.83	1.60	0.96	0.60	0.41
13	0.53	0.67	0.38	0.42	0.43	0.48	0.72	0.76	1.60	0.97	0.65	0.38
14	0.53	0.63	0.37	0.35	0.39	0.37	0.57	0.67	1.58	0.89	0.59	0.38
15	0.50	0.66	0.65	0.34	0.38	0.35	0.51	0.60	1.38	0.87	0.59	0.34
16	0.57	0.63	0.44	0.34	0.37	0.33	0.54	0.92	1.41	0.84	0.57	0.30
17	0.53	0.58	0.41	0.33	0.35	0.33	0.49	1.58	1.29	0.83	0.57	0.30
18	0.58	0.55	0.49	0.33	0.38	0.50	2.59	1.24	1.59	0.81	0.76	0.30
19	1.06	0.49	0.40	0.36	0.37	0.41	1.22	1.40	1.33	0.81	0.60	0.30
20	0.68	0.49	0.38	0.36	0.42	0.82	0.85	1.45	1.21	0.78	0.57	0.27
21	0.59	0.62	0.37	0.41	0.34	0.46	0.89	1.35	1.20	0.78	0.54	0.27
22	0.53	0.51	0.35	0.42	0.33	0.39	0.94	1.20	1.15	0.76	0.52	0.30
23	0.50	0.49	0.36	0.78	0.33	0.44	0.95	1.17	1.07	0.75	0.50	0.30
24	0.49	0.49	0.34	0.50	0.34	0.40	1.05	0.95	1.02	0.76	0.49	0.27
25	0.46	0.44	0.33	0.42	0.32	0.35	0.88	0.87	1.03	0.76	0.49	0.27
26	0.60	0.44	0.33	0.44	0.33	0.38	0.76	0.82	1.02	0.95	0.48	0.25
27	0.52	0.44	0.33	0.68	0.33	0.41	0.69	0.78	0.98	0.86	0.47	0.25
28	0.54	0.46	0.32	0.73	0.32	0.37	0.66	0.75	0.97	0.76	0.47	0.25
29	0.49	0.46	0.33	0.73	0.39	0.36	0.61	0.69	1.68	0.81		0.25
30	0.44	1.61	0.32	0.43	0.40	0.36	1.11	0.89	2.40	1.33		0.25
31		0.76		0.39	0.35		0.86		1.35	0.90		0.25
Total	18.72	22.42	12.28	14.52	14.61	12.37	24.31	28.75	60.85	29.05	16.90	10.90
Mean	0.60	0.72	0.42	0.47	0.47	0.41	0.79	0.96	1.96	0.94	0.60	0.35
Max.	1.08	1.70	0.65	1.55	1.45	0.64	2.59	1.58	11	1.33	0.80	0.58
Min.	0.44	0.44	0.32	0.31	0.32	0.33	0.33	0.60	0.87	0.75	0.47	0.25
Runoff - MCM.	1.617	1.937	1.067	1.254	1.262	1.069	2.100	2.484	5.257	2.510	1.460	0.942

WATER YEAR 1957 : Max. 11 Min. 0.25 Mean 0.73 Annual Runoff 22.955 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Dec. 3	06.00	111.30	36				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
KHLONG U-TA-PHAO RIVER BASIN

Khlong Wat at Ton Nga Chang, Songkhla (X.14)

Location: Lat 6°- 55' - 00" N, Long 100°- 25' - 00 E, on left bank at Ton Nga Chang Fall, 5 kilometers from Phet Kasem Highway at Ban Tha Rae, which is 15 kilometers from Amphoe Hat Yai, Songkhla.

Drainage Area: 71 sq.km. referred to GSGS Map 1:253,440

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +109.50 m. (A.D.)

Bench Mark: B.M. - H.S./R.I.D.

Location: On left bank near the gage site.
Elevation: +114.958 m. (A.D.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1954 to date.

Rating Operation:

Period of Rating: 1954 to date
Rated by Float: -
Rated by Current Meter: 1954 to date

Stability of Channel Regimes: Rather unstable, periodic rating curve and mean hourly discharge are included for flow computation.

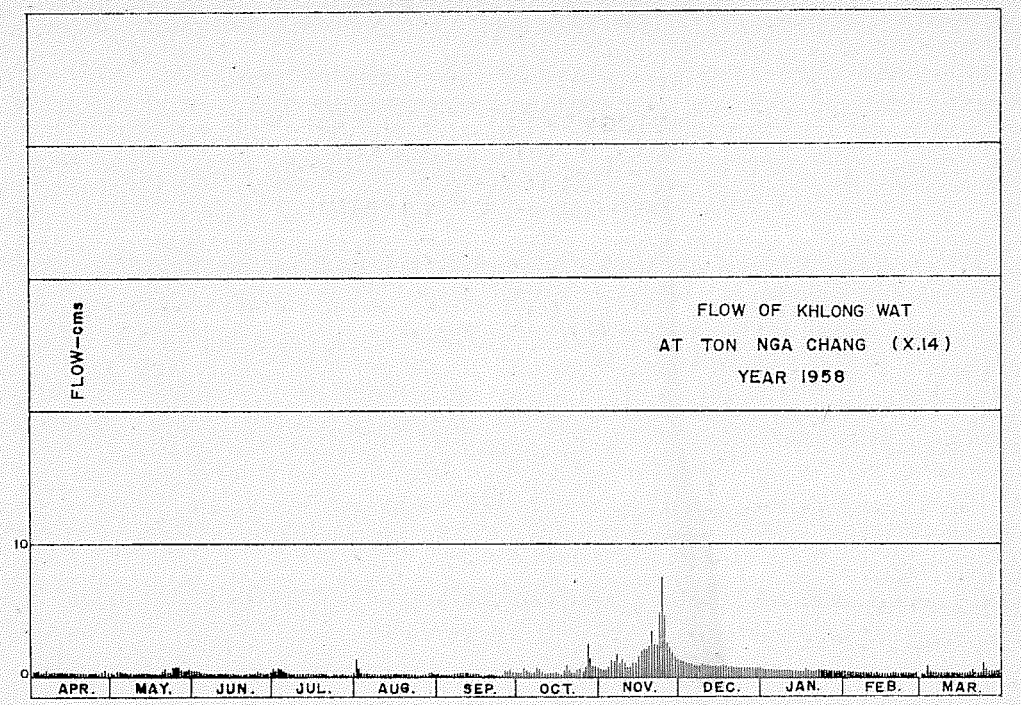
Overbank Flow Conditions: No overbank flow.

General Description: Records fair. Stage - discharge relationship is defined by discharge measurements made during 1958. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	109.66	109.64	109.71	109.79	109.83	109.63	109.67	109.75	109.90	109.74	109.68	109.64
2	.65	.64	.72	.73	.74	.64	.65	.75	.89	.74	.68	.63
3	.65	.70	.71	.77	.68	.63	.78	.76	.88	.74	.67	.76
4	.65	.71	.70	.76	.67	.62	.73	.80	.87	.74	.67	.66
5	.78	.66	.68	.72	.66	.62	.69	.89	.86	.74	.67	.64
6	109.70	109.64	109.67	109.69	109.65	109.62	109.67	109.86	109.85	109.73	109.67	109.64
7	.67	.64	.66	.68	.65	.67	.80	.96	.84	.72	.67	.64
8	.67	.67	.66	.67	.65	.67	.78	.83	.83	.72	.66	.64
9	.66	.65	.65	.66	.65	.64	.72	.89	.86	.72	.66	.64
10	.66	.64	.64	.65	.64	.68	.70	.84	.82	.72	.66	.63
11	109.66	109.64	109.65	109.65	109.64	109.69	109.68	109.80	109.85	109.74	109.66	109.63
12	.65	.65	.64	.65	.64	.69	.67	.78	.83	.74	.66	.62
13	.65	.67	.67	.65	.65	.67	.66	.87	.82	.73	.66	.62
14	.65	.68	.66	.64	.64	.64	.67	.85	.82	.72	.65	.62
15	.65	.65	.65	.64	.65	.64	.68	.92	.81	.72	.65	.62
16	109.65	109.65	109.64	109.64	109.66	109.64	109.66	109.96	109.81	109.71	109.65	109.62
17	.66	.64	.64	.67	.64	.63	.65	110.02	.81	.75	.65	.62
18	.65	.65	.64	.65	.64	.63	.69	.02	.81	.73	.65	.62
19	.67	.66	.63	.64	.64	.63	.83	.01	.79	.72	.65	.62
20	.66	.71	.63	.64	.66	.62	.73	.17	.80	.71	.65	.73
21	109.65	109.75	109.67	109.64	109.65	109.64	109.70	110.09	109.79	109.71	109.64	109.67
22	.65	.68	.64	.63	.64	.63	.69	.00	.78	.71	.64	.65
23	.65	.66	.64	.63	.64	.62	.73	.19	.78	.70	.64	.64
24	.65	.75	.65	.64	.63	.63	.77	.44	.77	.70	.64	.79
25	.65	.79	.71	.64	.63	.63	.72	.17	.77	.70	.64	.71
26	109.65	109.81	109.68	109.63	109.63	109.69	109.70	110.07	109.76	109.70	109.64	109.66
27	.64	.74	.67	.65	.64	.67	.96	.01	.76	.69	.64	.70
28	.65	.73	.66	.64	.63	.75	.88	109.97	.75	.69	.64	.68
29	.64	.71	.65	.63	.72	.70	.85	.94	.75	.69		.73
30	.64	.76	.71	.63	.64	.68	.81	.92	.75	.69		.73
31		.73		.64	.63		.78		.75	.68		.69
Mean	109.66	109.69	109.66	109.66	109.66	109.65	109.73	109.95	109.81	109.72	109.65	109.66
Max.	109.78	109.81	109.72	109.79	109.83	109.75	109.96	110.44	109.90	109.75	109.68	109.79
Min.	109.64	109.64	109.63	109.63	109.63	109.62	109.65	109.75	109.75	109.68	109.64	109.62

WATER YEAR 1958 : Max. 110.44 m. Min. 109.62 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.27	0.22	0.41	0.77	1.27	0.22	0.30	0.56	1.25	0.59	0.40	0.28
2	0.24	0.19	0.46	0.49	0.53	0.19	0.25	0.54	1.18	0.59	0.40	0.26
3	0.24	0.43	0.41	0.70	0.33	0.19	0.64	0.58	1.17	0.59	0.36	0.83
4	0.24	0.41	0.38	0.61	0.30	0.17	0.50	0.76	1.15	0.59	0.36	0.34
5	0.99	0.28	0.32	0.47	0.27	0.17	0.36	1.27	1.04	0.59	0.36	0.28
6	0.40	0.22	0.30	0.35	0.24	0.17	0.30	1.02	0.96	0.55	0.36	0.28
7	0.30	0.22	0.27	0.32	0.24	0.30	0.39	1.72	0.92	0.52	0.36	0.28
8	0.30	0.32	0.27	0.30	0.24	0.29	0.67	0.86	0.87	0.52	0.34	0.28
9	0.27	0.24	0.24	0.27	0.24	0.22	0.46	1.21	1.05	0.52	0.34	0.28
10	0.27	0.22	0.22	0.24	0.22	0.33	0.39	0.92	0.86	0.52	0.34	0.26
11	0.24	0.22	0.24	0.24	0.22	0.39	0.35	0.72	0.98	0.59	0.34	0.26
12	0.24	0.25	0.22	0.24	0.22	0.36	0.29	0.67	0.86	0.59	0.34	0.23
13	0.24	0.31	0.31	0.24	0.24	0.30	0.27	1.14	0.82	0.55	0.34	0.23
14	0.24	0.33	0.27	0.22	0.22	0.22	0.31	0.96	0.84	0.52	0.31	0.23
15	0.24	0.24	0.24	0.22	0.25	0.22	0.34	1.47	0.79	0.52	0.31	0.23
16	0.24	0.24	0.22	0.22	0.27	0.22	0.27	1.85	0.84	0.48	0.31	0.23
17	0.27	0.22	0.22	0.30	0.22	0.19	0.24	2.16	0.84	0.62	0.31	0.23
18	0.24	0.23	0.22	0.24	0.22	0.19	0.37	2.06	0.84	0.55	0.31	0.23
19	0.27	0.24	0.19	0.22	0.22	0.19	0.94	2.04	0.76	0.52	0.31	0.23
20	0.27	0.47	0.19	0.22	0.25	0.17	0.48	3.45	0.80	0.48	0.31	0.55
21	0.24	0.61	0.30	0.22	0.24	0.22	0.37	2.78	0.76	0.48	0.28	0.36
22	0.24	0.33	0.22	0.19	0.22	0.19	0.38	1.87	0.73	0.48	0.28	0.31
23	0.24	0.27	0.22	0.19	0.22	0.17	0.51	4.08	0.73	0.45	0.28	0.28
24	0.24	0.75	0.24	0.23	0.19	0.19	0.64	7.52	0.69	0.45	0.28	1.04
25	0.24	0.77	0.43	0.22	0.19	0.19	0.44	3.47	0.69	0.45	0.28	0.48
26	0.24	0.80	0.32	0.19	0.19	0.43	0.37	2.54	0.65	0.45	0.28	0.34
27	0.22	0.50	0.29	0.24	0.22	0.29	2.48	2.05	0.65	0.42	0.28	0.45
28	0.45	0.47	0.27	0.22	0.19	0.59	1.13	1.73	0.62	0.42	0.28	0.40
29	0.22	0.41	0.24	0.19	0.49	0.39	0.78	1.55	0.62	0.42		0.55
30	0.22	0.61	0.44	0.19	0.22	0.32	0.79	1.36	0.62	0.42		0.55
31		0.51		0.26	0.19		0.67		0.62	0.40		0.42
Total	8.56	11.53	8.57	9.22	8.77	7.68	16.68	54.91	26.20	15.84	9.05	11.20
Mean	0.29	0.37	0.29	0.30	0.28	0.26	0.54	1.83	0.85	0.51	0.32	0.36
Max.	0.99	0.80	0.46	0.77	1.27	0.59	2.48	7.52	1.25	0.62	0.40	1.04
Min.	0.22	0.19	0.19	0.19	0.19	0.17	0.24	0.54	0.62	0.40	0.28	0.23
Runoff - mcm.	0.739	0.996	0.740	0.797	0.758	0.663	1.441	4.744	2.264	1.369	0.782	0.968

WATER YEAR 1958 : Max. 7.52 Min. 0.17 Mean 0.52 Annual Runoff 16.261 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 27	06.00	110.83	14				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
KHLONG U-TA-PHAO RIVER BASIN

Khlong Wat at Ton Nga Chang, Songkhla (X.14)

Location: Lat 6°– 55' – 00" N, Long 100°– 25' – 00" E, on left bank at Ton Nga Chang Fall, 5 kilometers from Phet Kasem Highway at Ban Tha Rae, which is 15 kilometers from Amphoe Hat Yai, Songkhla.

Drainage Area: 71 sq.km. referred to GSGS Map 1:253,440.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +109.50 m. (A.D.)

Bench Mark: B.M. – H.S./R.I.D.

Location: On left bank near the gage site.
Elevation: +114.958 m. (A.D.)

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1954 to date

Rating Operation:

Period of Rating: 1954 to date
Rated by Float: –
Rated by Current Meter: 1954 to date

Stability of Channel Regimes: Rather unstable, periodic rating curve and mean hourly discharge are included for flow computation.

Overbank Flow Conditions: No overbank flow.

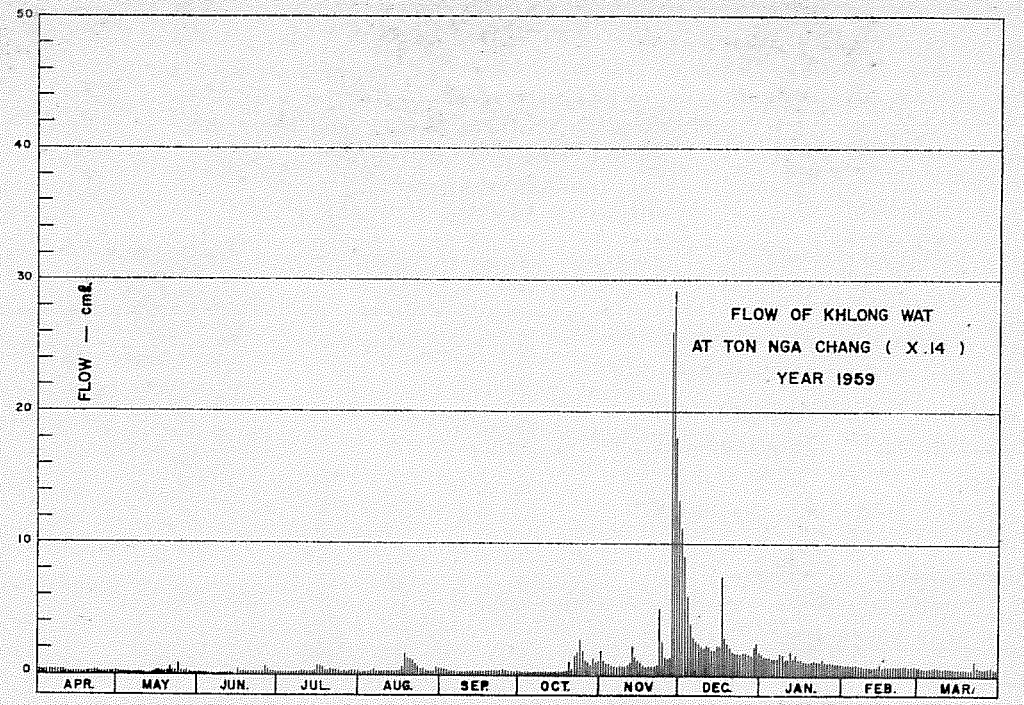
General Description: Records fair. Stage – discharge relationship is defined by discharge measurements made during 1959. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	109.67	109.63	109.61	109.63	109.63	109.75	109.65	110.02	110.65	109.98	109.85	109.78
2	.65	.62	.61	.62	.63	.75	.65	109.90	.56	.96	.84	.77
3	.65	.62	.61	.63	.63	.72	.66	.85	.48	.96	.84	.77
4	.65	.61	.61	.62	.66	.70	.69	.84	.35	.95	.84	.76
5	.64	.61	.61	.62	.66	.69	.66	.81	.26	.93	.83	.76
6	109.64	109.61	109.61	109.62	109.74	109.68	109.65	109.80	110.14	109.93	109.83	109.77
7	.63	.61	.61	.61	.70	.68	.67	.79	.12	.93	.83	.80
8	.63	.61	.61	.62	.65	.67	.66	.81	.11	.98	.82	.77
9	.63	.61	.61	.62	.65	.67	.65	.81	.09	.93	.82	.76
10	.63	.61	.61	.64	.64	.68	.67	.79	.04	.92	.81	.76
11	109.62	109.61	109.61	109.63	109.64	109.67	109.65	109.82	110.08	109.92	109.81	109.75
12	.61	.60	.61	.67	.64	.67	.68	.87	.06	110.03	.81	.75
13	.61	.60	.61	.69	.65	.68	.66	.99	.03	109.94	.81	.75
14	.61	.62	.60	.65	.67	.66	.66	.95	.03	.98	.80	.74
15	.61	.63	.60	.66	.66	.65	.68	.87	.07	.92	.84	.74
16	109.61	109.65	109.69	109.75	109.67	109.65	109.68	109.83	110.07	109.90	109.81	109.73
17	.61	.66	.66	.80	.74	.66	.68	.81	.38	.90	.80	.73
18	.61	.63	.64	.80	.94	.65	.67	.80	.12	.89	.80	.72
19	.61	.64	.62	.73	.92	.65	.72	.78	.07	.88	.80	.72
20	.63	.64	.66	.69	.90	.65	.86	.80	.04	.89	.79	.72
21	109.63	109.74	109.63	109.73	109.93	109.65	109.75	109.78	110.01	109.90	109.79	109.72
22	.67	.70	.63	.71	.88	.64	.93	.78	.00	.90	.79	.82
23	.64	.64	.67	.71	.79	.69	110.01	110.13	109.99	.88	.79	.77
24	.62	.80	.63	.69	.76	.74	.06	.11	.99	.92	.78	.74
25	.62	.68	.63	.66	.74	.72	.05	109.95	.98	.88	.78	.73
26	109.61	109.65	109.78	109.66	109.72	109.68	109.91	109.91	110.00	109.87	109.78	109.73
27	.62	.63	.74	.65	.70	.66	.87	.94	109.98	.86	.78	.75
28	.61	.63	.70	.65	.70	.65	.84	110.90	.96	.86	.79	.80
29	.62	.62	.65	.65	.69	.65	.91	.95	110.03	.86	.79	.77
30	.63	.61	.64	.64	.80	.65	.88	.77	.11	.86		.73
31		.61		.64	.76		.87		.01	.85		.74
Mean	109.63	109.64	109.64	109.67	109.73	109.68	109.76	109.97	110.12	109.91	109.81	109.75
Max.	109.67	109.80	109.78	109.80	109.94	109.75	110.06	110.95	110.65	110.03	109.85	109.82
Min.	109.61	109.60	109.60	109.61	109.63	109.64	109.65	109.78	109.96	109.85	109.78	109.72

WATER YEAR 1959 : Max. 110.95 m. Min. 109 60 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.30	0.22	0.18	0.22	0.22	0.54	0.26	1.97	13	1.61	0.94	0.65
2	0.26	0.20	0.18	0.20	0.22	0.47	0.26	1.16	11	1.50	0.90	0.61
3	0.26	0.20	0.18	0.22	0.22	0.43	0.28	0.94	8.52	1.50	0.90	0.61
4	0.26	0.18	0.18	0.20	0.29	0.34	0.34	0.90	5.65	1.44	0.90	0.58
5	0.24	0.18	0.18	0.20	0.28	0.32	0.28	0.76	4.17	1.33	0.85	0.58
6	0.24	0.18	0.18	0.20	0.50	0.30	0.26	0.72	2.83	1.33	0.85	0.61
7	0.22	0.18	0.18	0.18	0.36	0.30	0.30	0.68	2.64	1.33	0.85	0.72
8	0.22	0.18	0.18	0.20	0.26	0.30	0.28	0.76	2.55	1.61	0.81	0.61
9	0.22	0.18	0.18	0.20	0.26	0.30	0.26	0.76	2.39	1.61	0.81	0.58
10	0.22	0.18	0.18	0.24	0.24	0.32	0.30	0.68	2.02	1.27	0.76	0.58
11	0.20	0.18	0.18	0.22	0.24	0.30	0.26	0.85	2.39	1.27	0.76	0.54
12	0.18	0.16	0.18	0.32	0.24	0.30	0.32	1.03	2.16	1.98	0.76	0.54
13	0.18	0.16	0.18	0.35	0.26	0.32	0.28	2.28	1.94	1.38	0.76	0.54
14	0.18	0.20	0.16	0.26	0.30	0.28	0.28	1.44	1.94	1.61	0.72	0.50
15	0.18	0.22	0.16	0.28	0.28	0.26	0.32	1.03	2.24	1.27	0.90	0.50
16	0.18	0.26	0.48	0.68	0.39	0.26	0.34	0.85	2.34	1.16	0.76	0.47
17	0.18	0.29	0.31	0.78	0.53	0.28	0.32	0.76	7.53	1.16	0.72	0.47
18	0.18	0.22	0.24	0.74	1.66	0.26	0.30	0.72	2.64	1.12	0.72	0.43
19	0.18	0.25	0.20	0.47	1.30	0.26	0.43	0.65	2.24	1.07	0.72	0.43
20	0.23	0.24	0.28	0.34	1.28	0.26	1.05	0.72	2.02	1.12	0.68	0.43
21	0.22	0.62	0.22	0.54	1.36	0.26	0.54	0.65	1.79	1.16	0.68	0.43
22	0.36	0.37	0.22	0.40	1.07	0.24	1.54	0.65	1.72	1.16	0.68	1.12
23	0.24	0.24	0.30	0.42	0.68	0.34	1.79	5.12	1.66	1.07	0.68	0.61
24	0.20	0.88	0.22	0.34	0.58	0.52	2.72	2.74	1.66	1.26	0.65	0.50
25	0.20	0.32	0.22	0.28	0.50	0.43	2.09	1.44	1.61	1.07	0.65	0.47
26	0.18	0.26	0.65	0.28	0.43	0.32	1.22	1.22	1.72	1.03	0.65	0.47
27	0.20	0.22	0.50	0.26	0.36	0.28	1.03	1.43	1.61	0.98	0.65	0.54
28	0.18	0.22	0.36	0.26	0.36	0.26	0.90	26	1.50	0.98	0.68	0.72
29	0.20	0.20	0.26	0.26	0.34	0.26	1.33	29	1.94	0.98	0.68	0.61
30	0.22	0.18	0.24	0.24	0.72	0.26	1.07	18	2.58	0.98		0.47
31		0.18		0.24	0.58		1.03		1.79	0.94		0.50
Total	6.51	7.75	7.36	10.02	16.31	9.63	21.98	86.25	102.33	39.28	22.07	17.42
Mean	0.22	0.25	0.24	0.32	0.53	0.32	0.709	2.87	3.30	1.27	0.76	0.56
Max.	0.36	0.88	0.65	0.78	1.66	0.54	2.72	29	13	1.98	0.94	1.12
Min.	0.18	0.16	0.16	0.18	0.22	0.24	0.26	0.65	1.50	0.94	0.65	0.43
Runoff - mcm.	0.562	0.670	0.636	0.866	1.409	0.832	1.899	7.452	8.841	3.394	1.907	1.505

WATER YEAR 1959 : Max. 29 Min. 0.16 Mean 0.95 Annual Runoff 29.973 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Nov. 29	05.00	111.55	75				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1957
KHLONG SAO THONG RIVER BASIN

Khlong Khao Kaeo, Kra Rom Fall, Nakhon Si Thammarat (X.15)

Location: Lat 8°– 21' – 29" N, Long 99°– 43' – 15" E, on left bank at Kra Rom Fall, 20 kilometers upstream from Amphoe Lan Sai Nakhon Si Thammarat.

Drainage Area: 50 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +95.448 m. (A.D.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1956 – 59

Rating Operation:

Period of Rating: 1956 – 57
Rated by Float: –
Rated by Current Meter: 1956 – 57

Stability of Channel Regimes: Rather unstable, mean hourly discharge is computed for flow computation.

Overbank Flow Conditions: No overbank flow.

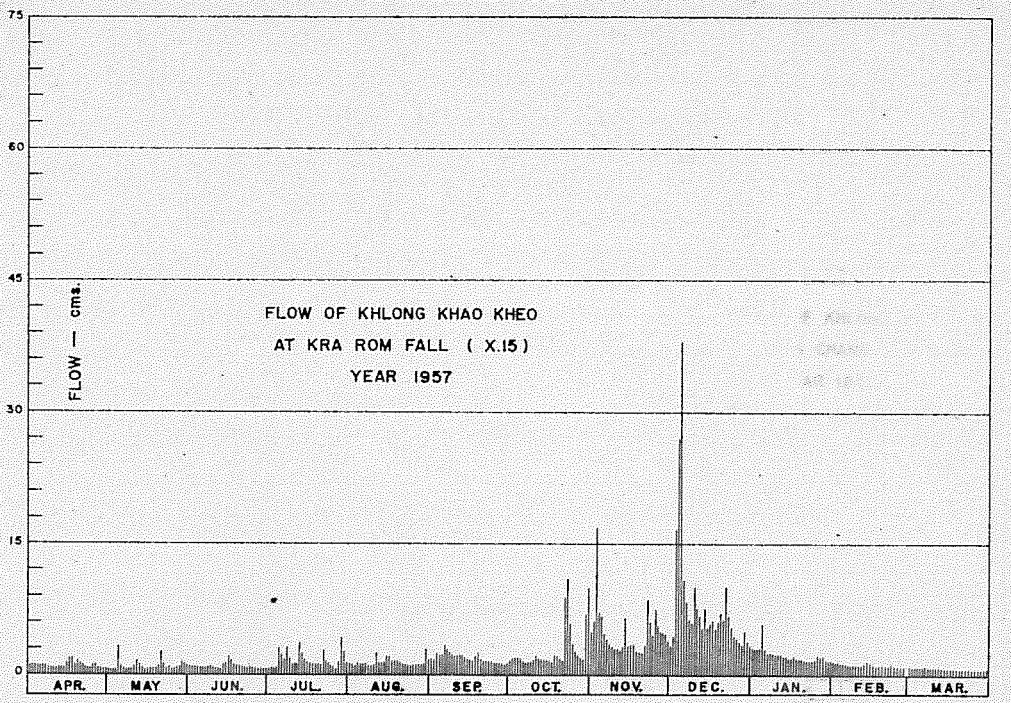
General Description: Records good. Stage – discharge relationship is defined by discharge measurements made during 1957. No state diversions for irrigation above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	96.17	96.13	96.18	96.12	96.19	96.27	96.23	96.46	96.37	96.37	96.25	96.17
2	.18	.13	.16	.13	.18	.25	.28	.52	.43	.37	.24	.16
3	.17	.13	.15	.14	.17	.32	.28	.98	.90	.37	.23	.15
4	.17	.18	.15	.21	.20	.30	.28	.52	97.17	.35	.23	.16
5	.17	.31	.15	.35	.18	.30	.27	.53	.39	.48	.23	.16
6	96.17	96.17	96.15	96.31	96.19	96.41	96.24	96.45	96.74	96.36	96.22	96.16
7	.17	.14	.13	.23	.20	.36	.22	.41	.64	.33	.21	.17
8	.15	.13	.17	.32	.17	.34	.20	.39	.55	.33	.21	.16
9	.15	.15	.18	.26	.17	.30	.22	.36	.53	.32	.21	.16
10	.15	.15	.14	.19	.16	.29	.26	.35	.71	.31	.21	.15
11	96.15	96.21	96.12	96.19	96.28	96.30	96.31	96.36	96.60	96.33	96.20	96.15
12	.15	.24	.12	.19	.20	.30	.27	.35	.57	.32	.20	.15
13	.16	.22	.12	.33	.20	.30	.26	.36	.50	.30	.21	.15
14	.15	.16	.17	.29	.21	.27	.25	.51	.61	.29	.25	.14
15	.20	.13	.22	.24	.28	.25	.26	.37	.51	.28	.23	.14
16	96.26	96.14	96.25	96.22	96.28	96.23	96.23	96.38	96.53	96.27	96.20	96.14
17	.27	.15	.24	.20	.23	.25	.22	.38	.54	.30	.19	.14
18	.19	.15	.18	.19	.25	.31	.32	.34	.50	.29	.19	.13
19	.24	.15	.18	.20	.24	.32	.31	.34	.54	.27	.19	.13
20	.20	.19	.17	.19	.21	.25	.26	.32	.58	.27	.19	.13
21	96.19	96.27	96.15	96.18	96.19	96.23	96.23	96.36	96.55	96.25	96.17	96.13
22	.16	.20	.14	.23	.18	.22	.59	.61	.73	.25	.17	.13
23	.15	.15	.14	.24	.17	.22	.67	.54	.56	.25	.21	.13
24	.14	.18	.15	.20	.17	.21	.49	.42	.51	.24	.19	.12
25	.19	.15	.13	.17	.17	.21	.38	.57	.46	.26	.17	.12
26	96.19	96.15	96.13	96.16	96.19	96.21	96.34	96.49	96.44	96.31	96.17	96.12
27	.15	.16	.12	.12	.18	.21	.30	.45	.42	.29	.17	.12
28	.14	.17	.12	.26	.19	.19	.28	.44	.40	.31	.17	.11
29	.13	.23	.12	.38	.18	.18	.27	.43	.48	.27		.11
30	.13	.22	.12	.28	.36	.21	.55	.41	.44	.25		.11
31		.21		.21	.25		.68		.39	.25		.11
Mean	96.17	96.17	96.15	96.22	96.21	96.27	96.32	96.45	96.59	96.30	96.20	96.14
Max.	96.27	96.31	96.25	96.38	96.36	96.41	96.67	96.98	97.39	96.48	96.25	96.17
Min.	96.13	96.13	96.12	96.12	96.16	96.18	96.20	96.32	96.37	96.24	96.17	96.11

WATER YEAR 1957 : Max. 96.98 m. Min. 96.11 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.05	0.60	1.10	0.70	1.40	2.03	1.65	5.00	3.10	3.10	1.70	1.00
2	1.10	0.60	1.00	0.80	1.30	1.80	2.02	6.33	4.50	3.10	1.60	0.90
3	1.05	0.60	0.95	0.80	1.15	2.61	2.02	17	17	3.10	1.50	0.80
4	1.05	1.14	0.95	1.04	1.50	2.34	2.02	7.24	27	2.90	1.50	0.90
5	1.05	3.31	0.95	3.15	1.30	2.34	1.95	6.93	38	5.90	1.50	0.90
6	1.05	0.95	0.95	2.67	1.40	3.58	1.72	4.80	11	3.00	1.40	0.90
7	1.05	0.70	0.85	1.70	1.50	3.00	1.58	4.05	8.50	2.60	1.30	1.00
8	0.85	0.60	1.05	3.11	1.15	2.78	1.43	3.70	6.40	2.60	1.30	0.90
9	0.85	0.75	1.10	2.00	1.15	2.34	1.58	3.20	6.00	2.40	1.30	0.90
10	0.85	0.75	0.90	1.30	1.05	2.25	1.82	3.00	10	2.30	1.30	0.80
11	0.85	1.30	0.75	1.30	2.60	2.34	2.27	3.20	7.60	2.60	1.20	0.80
12	0.85	1.70	0.75	1.30	1.50	2.34	1.95	3.00	6.90	2.40	1.20	0.80
13	0.95	1.45	0.75	3.79	1.50	2.34	1.82	3.20	5.40	2.20	1.30	0.80
14	0.85	0.85	1.29	2.40	1.45	2.03	1.80	6.50	7.80	2.10	1.70	0.75
15	1.30	0.60	1.50	1.80	2.15	1.80	1.82	3.40	5.60	2.00	1.50	0.75
16	1.90	0.70	2.18	1.60	2.15	1.65	1.65	3.50	6.00	1.90	1.20	0.75
17	2.00	0.75	1.75	1.40	1.65	1.80	1.58	3.50	6.20	2.20	1.10	0.75
18	1.20	0.75	1.10	1.30	1.80	2.45	2.35	2.85	5.40	2.10	1.10	0.70
19	1.65	0.75	1.10	1.40	1.75	2.55	2.27	2.85	6.20	1.90	1.10	0.70
20	1.30	1.15	1.05	1.30	1.45	1.80	1.82	2.55	7.00	1.90	1.10	0.70
21	1.20	2.69	0.95	1.20	1.25	1.65	1.65	3.54	6.40	1.70	1.00	0.70
22	0.95	1.25	0.90	2.90	1.20	1.55	8.99	8.80	10	1.70	1.00	0.70
23	0.85	0.75	0.90	1.80	1.10	1.55	11	7.03	6.60	1.70	1.30	0.70
24	0.80	1.00	0.95	1.40	1.10	1.45	5.65	4.54	5.60	1.60	1.10	0.60
25	1.20	0.75	0.85	1.10	1.10	1.45	3.50	7.64	4.60	1.80	1.00	0.60
26	1.20	0.75	0.85	1.00	1.25	1.45	2.85	6.09	4.20	2.30	1.00	0.60
27	0.85	0.85	0.75	0.66	1.20	1.45	2.30	5.10	3.90	2.10	1.00	0.60
28	0.80	0.95	0.75	2.30	1.25	1.25	2.00	5.04	3.60	2.30	1.00	0.60
29	0.70	1.60	0.75	4.41	1.20	1.20	1.80	4.70	5.00	1.90		0.60
30	0.70	1.45	0.75	2.30	3.00	1.45	6.92	4.30	4.20	1.70		0.60
31		1.30		1.50	1.80		10		3.40	1.70		0.60
Total	32.05	33.34	30.42	55.37	46.35	60.62	93.78	152.58	253.10	72.80	35.30	23.40
Mean	1.07	1.07	1.01	1.79	1.49	2.02	3.02	5.09	8.16	2.35	1.26	0.75
Max.	2.00	3.31	2.18	4.41	3.00	3.58	11	17	38	5.90	1.70	1.00
Min.	0.70	0.60	0.75	0.66	1.05	1.20	1.43	2.55	3.10	1.60	1.00	0.60
Runoff - mcm.	2.769	2.889	2.628	4.784	4.005	5.237	8.102	13.183	21.868	6.290	3.050	2.022

WATER YEAR 1957 : Max. 38 Min. 0.60 Mean 2.44 Annual Runoff 76.819 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Dec. 5	01.00	98.63	103				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT

WATER YEAR 1958
KHLONG SAO THONG RIVER BASIN

Khlong Khao Kaeo, Kra Rom Fall, Nakhon Si Thammarat (X.15)

Location: Lat 8°- 21' - 29" N, Long 99°- 43' - 15" E, on left bank at Kra Rom Fall, 20 kilometers upstream from Amphoe Lan Saka, Nakhon Si Thammarat.

Drainage Area: 50 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +95.448 m. (A.D.)

Bench Mark:

Location:
Elevation:

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

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

Period of Available Gage Records: 1956 - 1959

Rating Operation:

Period of Rating: 1956 - 1957
Rated by Float: -
Rated by Current Meter: 1956 - 1957

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

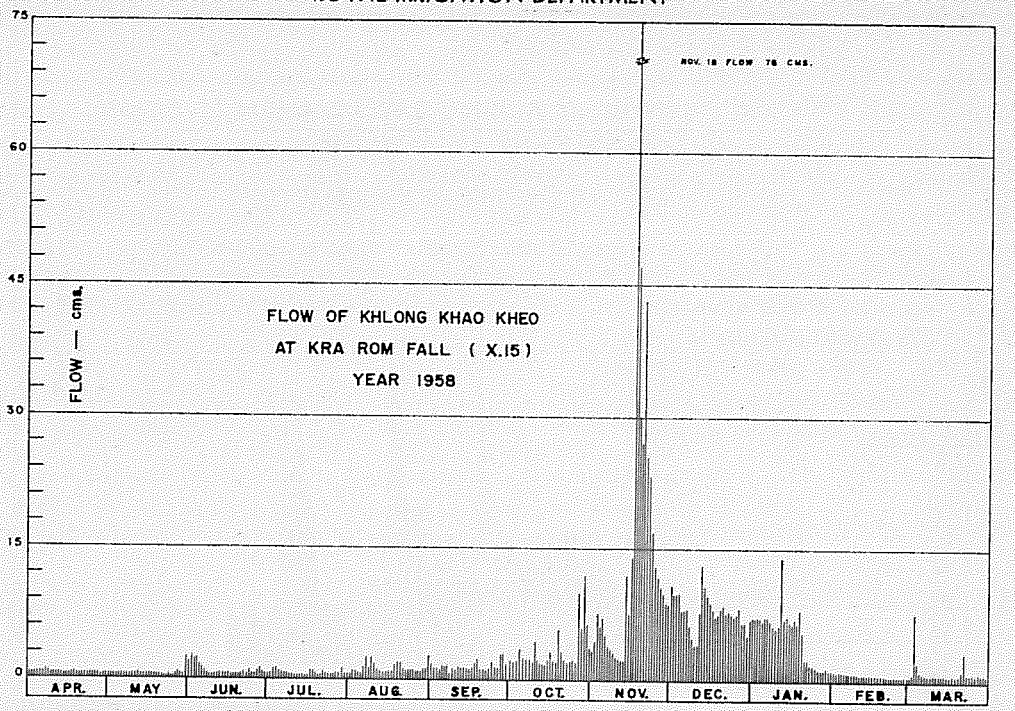
Overbank Flow Conditions: No overbank flow.

General Description: Records good, except those for period of no record which are poor. Stage - discharge relationship is defined by discharge measurement made during 1957. No state diversion for irrigation above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	96.09	96.08	96.24	96.10	96.10	96.22	96.28	96.34	96.92	96.57	96.18	96.10
2	.09	.07	.31	.11	.15	.19	.25	.39	.68	.56	.18	.13
3	.08	.06	.27	.17	.13	.19	.33	.58	.68	.57	.18	.59
4	.08	.06	.29	.18	.11	.15	.37	.47	.69	.56	.18	.25
5	.10	.06	.21	.16	.10	.21	.34	.56	.60	.55	.17	.17
6	96.10	96.05	96.17	96.12	96.20	96.20	96.28	96.43	96.60	96.57	96.16	96.14
7	.14	.05	.12	.10	.30	.21	.27	.40	.61	.57	.16	.13
8	.12	.05	.09	.09	.19	.10	.27	.36	.49	.54	.15	.13
9	.09	.07	.08	.08	.30	.17	.24	.34	.46	.51	.15	.13
10	.08	.06	.08	.07	.23	.19	.41	.31	.41	.51	.15	.12
11	96.08	96.08	96.09	96.07	96.19	96.20	96.29	96.29	96.41	96.52	96.14	96.12
12	.08	.09	.10	.06	.13	.18	.24	.27	.60	.85	.14	.12
13	.08	.07	.11	.05	.14	.17	.23	.26	.78	.55	.14	.12
14	.07	.06	.10	.06	.12	.17	.21	.76	.71	.57	.13	.12
15	.07	.06	.10	.05	.13	.16	.27	.58	.67	.55	.13	.11
16	96.07	96.06	96.11	96.05	96.13	96.17	96.34	96.84	96.64	96.53	96.13	96.11
17	.08	.06	.08	.14	.13	.21	.26	97.36	.61	.56	.12	.12
18	.08	.07	.08	.14	.22	.28	.24	98.36	.57	.53	.12	.11
19	.07	.08	.07	.10	.25	.18	.46	97.34	.58	.60	.12	.11
20	.07	.07	.08	.04	.23	.17	.36	.26	.61	.48	.12	.15
21	96.07	96.03	96.11	96.09	96.19	96.15	96.27	97.68	96.63	96.29	96.12	96.35
22	.07	.03	.13	.13	.16	.16	.26	.21	.59	.30	.11	.14
23	.07	.04	.10	.09	.14	.18	.24	.13	.60	.23	.11	.12
24	.07	.07	.16	.08	.15	.28	.27	96.95	.58	.23	.11	.12
25	.07	.03	.09	.08	.15	.20	.29	.82	.57	.22	.10	.13
26	96.07	96.06	96.09	96.07	96.12	96.18	96.25	96.77	96.59	96.21	96.10	96.12
27	.06	.10	.13	.12	.14	.32	.71	.73	.61	.20	.10	.16
28	.05	.13	.17	.11	.13	.33	.41	.68	.54	.20	.10	.12
29	.06	.05	.12	.17	.17	.24	.76	.64	.54	.21		.12
30	.07	.09	.10	.12	.15	.25	.47	.63	.43	.20		.11
31		.30		.10	.31		.37		.55	.19		.21
Mean	96.08	96.07	96.13	96.10	96.17	96.20	96.33	96.76	96.59	96.44	96.13	96.15
Max.	96.14	96.30	96.31	96.18	96.31	96.33	96.76	98.36	96.78	96.85	96.18	96.59
Min.	96.05	96.03	96.07	96.04	96.10	96.10	96.21	96.26	96.41	96.19	96.10	96.10

WATER YEAR 1958 : Max. 98.36 m. Min. 96.03 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.65	0.60	1.94	0.70	0.70	1.72	2.38	3.20	10	7.03	1.34	0.70
2	0.65	0.55	2.75	0.78	1.10	1.42	2.05	3.95	9.28	6.84	1.34	0.94
3	0.60	0.50	2.27	1.26	0.94	1.42	3.05	7.22	9.28	7.03	1.34	7.41
4	0.60	0.50	2.49	1.34	0.78	1.10	3.65	5.22	9.49	6.84	1.34	2.05
5	0.70	0.50	1.61	1.18	0.70	1.61	3.20	6.84	7.60	6.65	1.26	1.26
6	0.70	0.45	1.26	0.86	1.50	1.50	2.38	4.58	7.60	7.03	1.18	1.02
7	1.02	0.45	0.86	0.70	2.60	1.61	2.27	4.10	7.81	7.03	1.18	0.94
8	0.86	0.45	0.65	0.65	1.42	0.70	2.27	3.50	5.54	6.46	1.10	0.94
9	0.65	0.55	0.60	0.60	2.60	1.26	1.94	3.20	5.06	5.89	1.10	0.94
10	0.60	0.50	0.60	0.55	1.83	1.42	4.26	2.75	4.26	5.89	1.10	0.86
11	0.60	0.60	0.65	0.55	1.42	1.50	2.49	2.49	4.26	6.08	1.02	0.86
12	0.60	0.65	0.70	0.50	0.94	1.34	1.94	2.27	7.60	13	1.02	0.86
13	0.60	0.55	0.78	0.45	1.02	1.26	1.83	2.16	12	6.65	1.02	0.86
14	0.55	0.50	0.70	0.50	0.86	1.26	1.67	11	9.94	7.03	0.94	0.86
15	0.55	0.50	0.70	0.45	0.94	1.18	2.27	7.22	9.07	6.65	0.94	0.78
16	0.55	0.50	0.78	0.45	0.94	1.26	3.20	13	8.44	6.27	0.94	0.78
17	0.60	0.50	0.60	1.02	0.94	1.61	2.16	30	7.81	6.84	0.86	0.86
18	0.60	0.55	0.60	1.02	1.72	2.38	1.94	78	7.03	6.27	0.86	0.78
19	0.55	0.60	0.55	0.70	2.05	1.34	5.06	29	7.22	7.60	0.86	0.78
20	0.55	0.55	0.60	0.40	1.83	1.26	3.50	26	7.81	5.38	0.86	1.10
21	0.55	0.35	0.78	0.65	1.42	1.10	2.27	43	8.03	2.49	0.86	3.35
22	0.55	0.35	0.94	0.94	1.18	1.18	2.16	24	7.41	2.60	0.78	1.02
23	0.55	0.40	0.70	0.65	1.02	1.34	1.94	21	7.60	1.83	0.78	0.86
24	0.55	0.55	1.18	0.60	1.10	1.83	2.27	16	7.22	1.83	0.78	0.86
25	0.55	0.35	0.65	0.60	1.10	1.50	2.49	13	7.03	1.72	0.70	0.94
26	0.55	0.50	0.65	0.55	0.86	1.34	2.05	11	7.41	1.61	0.70	0.86
27	0.50	0.70	0.94	0.86	1.02	2.90	9.94	10	7.81	1.50	0.70	1.18
28	0.45	0.94	1.26	0.78	0.94	3.05	5.06	9.28	6.46	1.50	0.70	0.86
29	0.50	0.45	0.86	1.26	1.26	1.94	11	8.44	6.46	1.61		0.86
30	0.55	0.65	0.70	0.86	1.10	2.05	5.22	8.23	4.58	1.50		0.78
31		2.60		0.70	2.75		3.65		6.65	1.42		1.61
Total	18.08	18.39	30.35	23.11	40.58	46.38	101.50	409.65	233.76	158.07	27.60	38.76
Mean	0.60	0.59	1.01	0.75	1.31	1.55	3.27	13.6	7.54	5.10	0.98	1.25
Max.	1.02	2.60	2.75	1.34	2.75	3.05	11	78	12	13	1.34	7.41
Min.	0.45	0.35	0.55	0.40	0.70	0.70	1.61	2.16	4.26	1.42	0.70	0.70
Runoff — mcm.	1.562	1.589	2.622	1.997	3.506	4.007	8.770	35.394	20.197	13.657	2.385	3.349

WATER YEAR 1958 : Max. 78 Min. 0.35 Mean 3.14 Annual Runoff 99.034 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Nov. 18	18.00	99.25	137				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
KHLONG SAO THONG RIVER BASIN

Khlong Khao Kaeo, Kra Rom Fall, Nakhon Si Thammarat (X.15)

Location: Lat 8° – 21' – 29" N, Long 99° – 43' – 15" E, on left bank at Kra Rom Fall, 20 kilometers upstream from Amphoe Lan Saka, Nakhon Si Thammarat.

Drainage Area: 50 sq.km. referred to AMS Map 1:50,000.

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +95.448 m. (A.D.)

Bench Mark:

Location:

Elevation:

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

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

Period of Available Gage Records: 1956 – 1959

Rating Operation:

Period of Rating: 1956 – 1957

Rated by Float: –

Rated by Current Meter: 1956 – 1957

Stability of Channel Regimes: Stable, no shifting adjustment for flow computation for years without actual ratings.

Overbank Flow Conditions: No overbank flow.

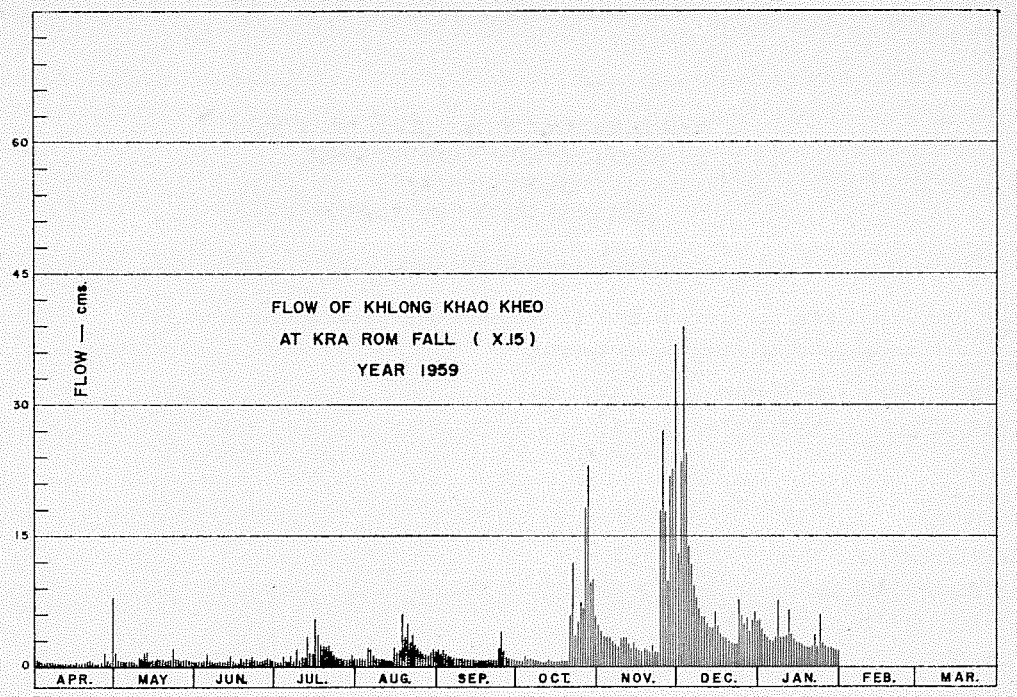
General Description: Records good, except those for period of no record which are poor. Stage – discharge relationship is defined by discharge measurement made during 1957. No state diversion for irrigation above gage site.

Remarks: No gage height record for period Feb.1 – Mar.31

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	96.14	96.23	96.12	96.12	96.16	96.26	96.14	96.43	96.82	96.48		
2	.12	.14	.12	.11	.18	.22	.14	.40	97.00	.42		
3	.11	.13	.13	.11	.17	.27	.13	.37	.56	.38		
4	.11	.12	.15	.19	.16	.22	.19	.36	.15	.36		
5	.11	.10	.22	.14	.29	.20	.16	.37	96.84	.34		
6	96.10	96.10	96.14	96.12	96.27	96.19	96.17	96.34	96.76	96.33		
7	.10	.10	.12	.20	.21	.18	.15	.31	.66	.37		
8	.10	.10	.11	.14	.19	.18	.14	.29	.60	.58		
9	.09	.09	.11	.27	.16	.17	.13	.36	.54	.36		
10	.09	.17	.12	.15	.16	.17	.13	.36	.51	.36		
11	96.09	96.16	96.10	96.19	96.15	96.16	96.12	96.36	96.50	96.38		
12	.09	.22	.11	.17	.15	.16	.12	.32	.46	.54		
13	.09	.23	.14	.38	.14	.16	.15	.29	.43	.39		
14	.09	.13	.19	.24	.14	.15	.14	.33	.43	.36		
15	.09	.12	.13	.22	.29	.15	.13	.28	.53	.33		
16	96.10	96.12	96.11	96.48	96.24	96.14	96.13	96.26	96.43	96.32		
17	.09	.16	.11	.40	.26	.14	.12	.25	.41	.31		
18	.09	.14	.17	.32	.52	.14	.13	.29	.37	.30		
19	.09	.16	.12	.31	.37	.15	.14	.26	.36	.28		
20	.12	.13	.17	.28	.46	.14	.14	.24	.34	.28		
21	96.14	96.12	96.15	96.31	96.32	96.15	96.46	96.31	96.33	96.31		
22	.10	.14	.20	.25	.38	.14	.78	.25	.32	.39		
23	.09	.26	.15	.22	.31	.13	.37	.23	.31	.29		
24	.08	.17	.13	.20	.27	.26	.46	97.02	.59	.52		
25	.08	.14	.12	.18	.24	.41	.58	.26	.51	.33		
26	96.10	96.12	96.13	96.17	96.23	96.21	96.54	97.07	96.46	96.30		
27	.23	.14	.14	.16	.21	.17	.99	96.68	.50	.28		
28	.13	.14	.18	.16	.20	.16	97.07	97.11	.40	.29		
29	.10	.13	.14	.16	.24	.15	96.68	.13	.49	.27		
30	.60	.12	.13	.21	.27	.15	.69	.53	.54	.26		
31		.11		.16	.25		.50		.47	.26		
Mean	96.12	96.14	96.14	96.22	96.24	96.18	96.32	96.50	96.57	96.35		
Max.	96.60	96.26	96.22	96.48	96.52	96.41	97.07	97.53	97.56	96.58		
Min.	96.08	96.09	96.10	96.11	96.14	96.14	96.12	96.23	96.31	96.26		

WATER YEAR 1959 : Max. 97.56 m. Min. – m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.82	1.66	0.66	0.66	0.98	2.02	0.82	4.54	13	5.44		
2	0.66	0.82	0.66	0.58	1.14	1.54	0.82	4.00	19	4.36		
3	0.58	0.74	0.74	0.58	1.06	2.14	0.74	3.55	39	3.70		
4	0.58	0.66	0.90	1.22	0.98	1.54	1.22	3.40	29	3.40		
5	0.58	0.50	1.54	0.82	2.38	1.30	0.98	3.55	14	3.10		
6	0.50	0.50	0.82	0.66	2.14	1.22	1.06	3.10	12	2.95		
7	0.50	0.50	0.66	1.30	1.42	1.14	0.90	2.65	9.38	3.55		
8	0.50	0.50	0.58	0.82	1.22	1.14	0.82	2.38	8.00	7.52		
9	0.34	0.34	0.58	2.14	0.98	1.06	0.74	3.40	6.60	3.40		
10	0.34	1.06	0.66	0.90	0.98	1.06	0.74	3.25	6.00	3.40		
11	0.34	0.98	0.50	1.22	0.90	0.98	0.66	3.25	5.80	3.70		
12	0.34	1.54	0.58	1.06	0.90	0.98	0.66	2.80	5.08	6.60		
13	0.34	1.66	0.82	3.70	0.82	0.98	0.90	2.38	4.54	3.85		
14	0.34	0.74	1.22	1.78	0.82	0.90	0.82	2.95	4.54	3.40		
15	0.34	0.66	0.74	1.54	2.38	0.90	0.74	2.26	6.40	2.95		
16	0.50	0.66	0.58	5.44	1.78	0.82	0.74	2.02	4.54	2.80		
17	0.34	0.98	0.58	4.00	2.02	0.82	0.66	1.90	4.18	2.65		
18	0.34	0.82	1.06	2.80	6.20	0.82	0.74	2.38	3.55	2.50		
19	0.34	0.98	0.66	2.65	3.55	0.90	0.82	2.02	3.40	2.26		
20	0.66	0.74	1.06	2.26	5.08	0.82	0.82	1.78	3.10	2.26		
21	0.82	0.66	0.90	2.65	2.80	0.90	5.08	2.65	2.95	2.65		
22	0.50	0.82	1.30	1.90	3.70	0.82	12	1.90	2.80	3.85		
23	0.34	2.02	0.90	1.54	2.65	0.74	3.55	1.66	2.65	2.38		
24	0.28	1.06	0.74	1.30	2.14	2.02	5.08	19	7.76	6.20		
25	0.28	0.82	0.66	1.14	1.78	4.18	7.52	27	6.00	2.95		
26	0.50	0.66	0.74	1.06	1.66	1.42	6.60	21	5.08	2.50		
27	1.66	0.82	0.82	0.98	1.42	1.06	18	9.84	5.80	2.26		
28	0.74	0.82	1.14	0.98	1.30	0.98	21	22	4.00	2.38		
29	0.50	0.74	0.82	0.98	1.78	0.90	9.84	23	5.62	2.14		
30	8.00	0.66	0.74	1.42	2.14	0.90	11	37	6.60	2.02		
31		0.58		0.98	1.90		5.80		5.26	2.02		
Total	22.90	26.70	24.36	51.06	61.00	37.00	121.87	222.61	255.63	105.14		
Mean	0.76	0.86	0.81	1.65	1.97	1.23	3.93	7.42	8.25	3.39		
Max.	8.00	2.02	1.54	5.44	6.20	4.18	21	37	39	7.52		
Min.	0.28	0.34	0.50	0.58	0.74	0.74	0.66	1.66	2.65	2.02		
Runoff - mcm.	1.978	2.307	2.105	4.411	5.270	3.197	10.529	19.233	22.086	9.084		

WATER YEAR 1959 : Max. 39 Min. 0.28 Mean - Annual Runoff - mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Nov. 30	15.00	98.04	91				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1957
KHLONG DUSON RIVER BASIN

Khlong Duson at Khuan Don, Satun (X.16)

Location: Lat 6°- 40' - 00" N, Long 100°- 06' - 00" E, on right bank at Khuan Don, Amphoe Muang, Satun.

Drainage Area: 120 sq.km. referred to GSGS.4218 Map 1:253,440.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +45.560 m. (A.D.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1956 - 59

Rating Operation:

Period of Rating: 1956 - 59
Rated by Float: -
Rated by Current Meter: 1956 - 59

Stability of Channel Regimes: Rather unstable, shifting adjustment and mean hourly discharge are included for flow computation.

Overbank Flow Conditions: No overbank flow.

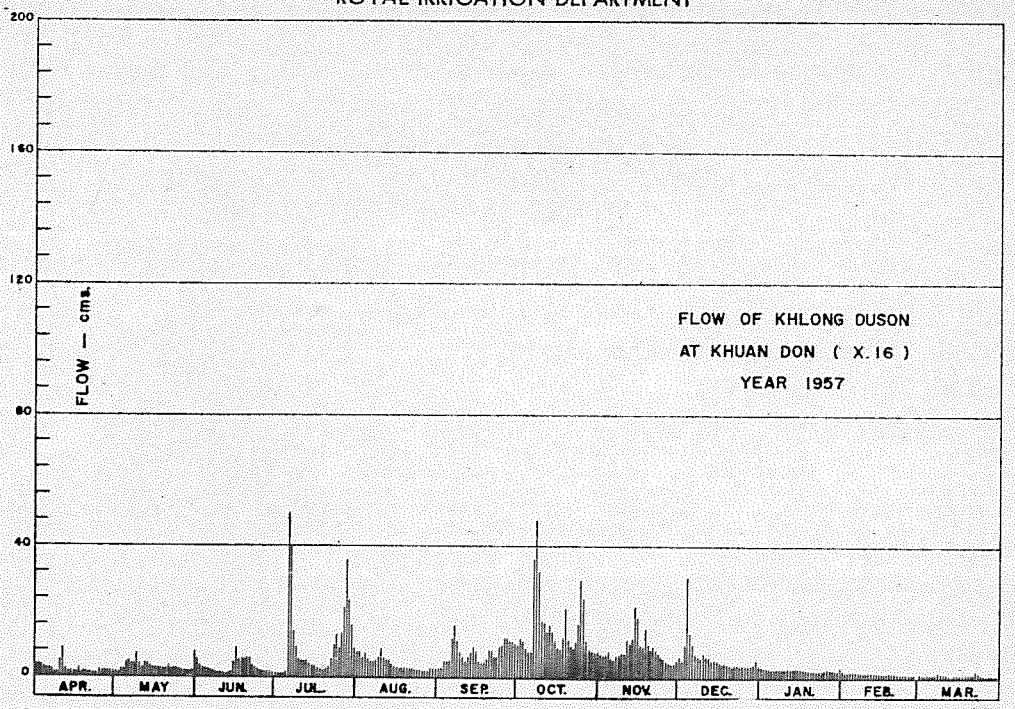
General Description: Records good. Stage - discharge relationship is defined by discharge measurements made during 1957. No state diversions above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	46.51	46.37	16.62	46.38	46.74	46.46	46.84	46.70	46.68	46.53	46.41	46.32
2	.53	.37	.49	.38	.73	.48	.89	.69	.58	.52	.39	.32
3	.49	.46	.49	.38	.67	.62	.87	.69	.82	.50	.38	.32
4	.49	.44	.48	.38	.63	.63	.76	.75	47.69	.50	.38	.32
5	.44	.59	.46	.38	.64	.62	.70	.67	46.94	.49	.38	.32
6	46.49	46.58	46.44	47.92	46.61	46.92	46.69	46.66	46.79	46.49	46.38	46.32
7	.44	.55	.41	.82	.61	47.14	47.50	.67	.73	.48	.38	.33
8	.40	.53	.40	.08	.63	46.94	48.20	.67	.68	.47	.38	.38
9	.39	.70	.38	46.78	.68	.76	47.74	.63	.65	.47	.37	.33
10	.54	.57	.36	.70	.79	.66	.19	.65	.71	.47	.37	.31
11	46.75	46.47	46.36	46.63	46.67	46.61	47.16	46.95	46.69	46.47	46.37	46.30
12	.49	.56	.36	.64	.61	.64	.04	.86	.65	.47	.36	.29
13	.44	.59	.36	.67	.65	.70	.12	.89	.62	.46	.36	.22
14	.41	.50	.36	.59	.57	.79	.06	47.34	.62	.46	.36	.29
15	.38	.48	.55	.56	.53	.76	46.92	.28	.61	.45	.35	.29
16	46.38	46.49	46.80	46.52	46.51	46.59	46.82	46.86	46.60	46.44	46.35	46.29
17	.44	.50	.59	.49	.51	.55	.77	.79	.59	.44	.35	.29
18	.38	.47	.62	.48	.49	.55	.92	47.00	.59	.44	.35	.29
19	.40	.48	.62	.48	.49	.61	47.12	46.83	.59	.43	.36	.32
20	.43	.46	.64	.57	.48	.70	46.90	.72	.57	.42	.35	.30
21	46.38	46.50	46.63	46.57	46.48	46.74	46.86	46.79	46.56	46.41	46.34	46.33
22	.37	.46	.54	.64	.48	.63	.81	.78	.54	.41	.33	.37
23	.36	.44	.48	.77	.47	.64	.85	.72	.55	.40	.33	.31
24	.36	.47	.44	.96	.46	.82	47.06	.67	.53	.40	.32	.28
25	.43	.45	.42	.83	.45	.79	.57	.63	.52	.40	.32	.27
26	46.37	46.42	46.41	46.92	46.44	46.85	47.25	46.61	46.52	46.44	46.32	46.25
27	.44	.41	.40	47.29	.44	.89	46.92	.59	.53	.45	.32	.25
28	.44	.40	.40	.56	.46	.85	.81	.58	.52	.41	.32	.26
29	.40	.41	.39	.48	.49	.83	.75	.56	.55	.41		.25
30	.41	.43	.38	.10	.46	.80	.71	.61	.61	.42		.24
31		.80		46.85	.50		.77		.54	.50		.24
Mean	46.44	46.49	46.48	46.80	46.56	46.72	47.02	46.76	46.66	46.45	46.35	46.30
Max.	46.75	46.80	46.80	47.92	46.79	47.14	48.20	47.34	47.69	46.53	46.41	46.38
Min.	46.36	46.37	46.36	46.38	46.44	46.46	46.69	46.56	46.52	46.40	46.32	46.22

WATER YEAR 1957 : Max. 48.20 m. Min. 46.22 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1,1957 TO MARCH 31, 1958

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	3.45	1.70	5.90	1.50	7.85	2.50	9.75	7.10	6.50	3.60	2.10	1.10
2	3.90	1.50	3.30	1.40	7.70	2.70	12	6.50	4.90	3.30	2.00	1.10
3	3.15	2.50	3.15	1.40	5.70	5.30	11	6.80	9.75	3.00	1.90	1.10
4	3.15	2.50	2.90	1.40	7.25	5.30	8.75	8.00	31	3.00	2.00	1.10
5	2.40	4.70	2.70	1.70	6.10	5.10	7.25	5.90	13	2.90	2.00	1.00
6	2.80	4.90	2.60	50	5.10	12	7.85	5.50	9.50	2.80	2.00	1.00
7	2.50	4.35	2.20	38	4.70	16	36	6.65	7.85	2.70	2.00	1.30
8	1.20	4.20	2.00	14	5.50	12	48	6.65	6.80	2.80	1.80	2.10
9	1.60	7.25	1.70	9.50	6.30	8.25	33	7.40	6.10	2.70	1.70	1.60
10	4.27	4.70	1.60	6.10	8.50	6.30	17	7.70	7.40	2.70	1.80	1.40
11	8.90	3.15	1.40	5.30	6.30	4.90	17	12	6.95	2.70	1.90	0.90
12	3.15	4.35	1.40	5.10	5.10	5.90	14	10	5.90	2.70	1.70	0.90
13	2.30	4.35	1.40	5.30	5.50	7.40	16	12	5.30	2.70	1.80	0.60
14	2.00	3.75	1.70	4.05	3.90	9.25	14	22	5.50	2.60	1.60	0.90
15	1.60	3.00	5.07	3.75	3.30	8.25	12	18	5.30	2.60	1.50	0.90
16	1.60	3.15	9.00	3.15	3.15	5.10	9.25	10	5.10	2.60	1.50	0.90
17	2.70	3.15	4.90	2.60	3.15	4.05	8.25	9.00	4.35	2.60	1.50	1.00
18	1.50	2.80	5.90	2.40	2.90	4.50	13	15	4.50	2.50	1.50	0.95
19	1.90	2.90	5.50	2.30	2.90	5.30	21	11	4.50	2.40	1.70	1.20
20	1.50	2.50	5.90	3.00	3.15	8.25	11	8.25	4.35	2.40	1.60	1.00
21	1.60	3.45	5.70	3.45	2.80	8.25	10	9.75	3.90	2.30	1.40	1.30
22	1.40	2.60	3.90	5.10	2.70	6.30	9.25	8.75	3.75	2.20	1.40	2.00
23	1.40	2.50	3.15	8.89	2.40	6.30	11	7.55	4.05	2.30	1.40	1.40
24	1.40	2.80	2.50	13	2.40	9.50	17	6.80	3.90	2.10	1.20	1.00
25	2.50	2.50	2.40	9.25	2.30	9.75	30	5.90	3.75	2.30	1.10	0.95
26	1.90	2.10	2.20	13	2.20	12	20	5.30	3.50	2.70	1.00	0.75
27	2.20	2.30	1.90	22	2.10	12	11	4.70	3.60	2.80	1.10	0.75
28	2.20	1.80	1.90	36	2.30	11	9.25	4.35	3.60	2.50	1.10	0.80
29	1.90	2.00	1.80	25	2.90	11	8.00	4.20	4.05	2.20		0.75
30	2.00	2.20	1.60	16	2.50	10	7.10	4.90	5.30	2.30		0.70
31		7.85		9.50	3.00		8.00		3.90	3.30		0.70
Total	74.07	103.50	97.27	323.44	131.65	234.45	466.70	257.65	197.85	82.30	45.40	33.15
Mean	2.47	3.33	3.24	10.4	4.25	7.81	15.0	8.59	6.38	2.65	1.62	1.07
Max.	8.90	7.85	9.00	50	8.50	16	48	22	31	3.60	2.10	2.10
Min.	1.20	1.50	1.40	1.40	2.10	2.50	7.10	4.20	3.50	2.10	1.00	0.60
Runoff - MCM.	6.400	8.942	8.404	27.945	11.374	20.256	40.323	22.261	17.094	7.111	3.922	2.864

WATER YEAR 1957 : Max. 50 Min. 0.60 Mean 5.83 Annual Runoff 184.009 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Oct. 7	23.00	49.26	94				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1958
KHLONG DUSON RIVER BASIN

Khlong Duson at Khuan Don, Satun (X.16)

Location: Lat 6°- 40' - 00" N, Long 100°- 06' - 00" E, on right bank at Khuan Don, Amphoe Muang, Satun.

Drainage Area: 120 sq.km. referred to GSGS.4218 Map 1:253,440.

Type of Gage: Water - stage recorder.

Zero Gage at Bottom at: +45.560 m. (A.D.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1956 - 59

Rating Operation:

Period of Rating: 1956 - 59
Rated by Float: -
Rated by Current Meter: 1956 - 59

Stability of Channel Regimes: Rather unstable, mean hourly discharge is included for flow computation.

Overbank Flow Conditions: No overbank flow.

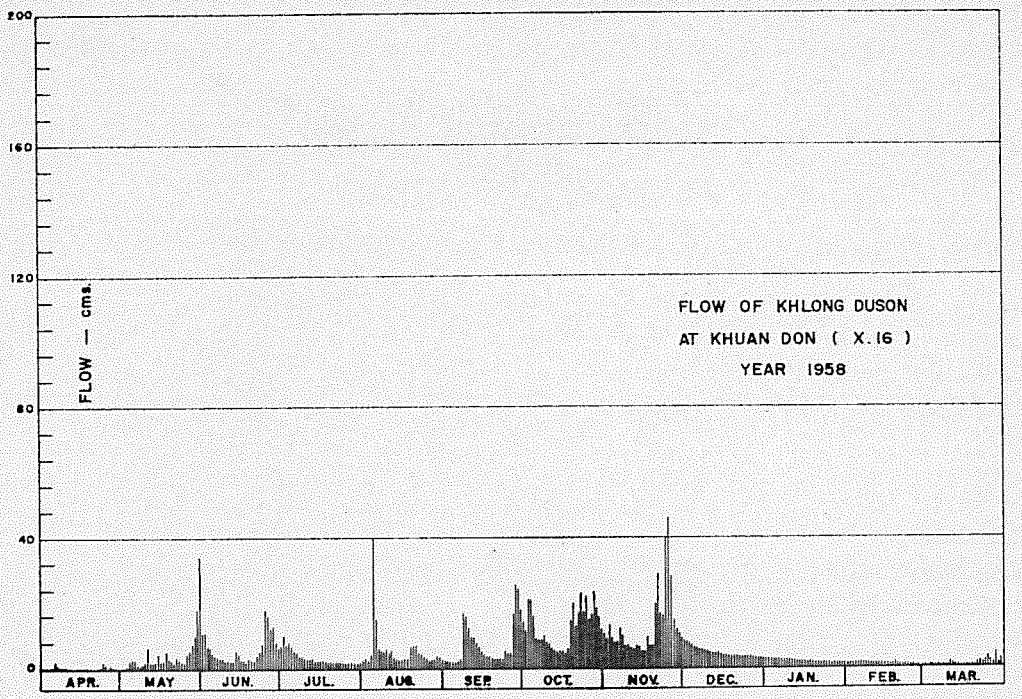
General Description: Records good. Stage - discharge relationship is defined by discharge measurements made during 1958. No state diversion above gage site.

Remarks: Discharge record for period of no flow are omitted.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1,1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	46.24	46.23	46.94	46.75	46.42	46.44	47.10	46.94	46.81	46.50	46.37	46.28
2	.23	.21	.90	.91	.46	.44	46.95	.89	.79	.49	.37	.27
3	.22	.35	.74	.74	.42	.42	47.28	47.02	.75	.48	.38	.27
4	.22	.42	.66	.77	.72	.41	.35	46.83	.72	.48	.38	.34
5	.25	.50	.58	.72	47.93	.40	.04	.77	.71	.47	.39	.28
6	46.38	46.45	46.51	46.63	47.01	46.40	46.86	46.77	46.69	46.47	46.38	46.26
7	.27	.33	.50	.58	46.71	.51	.80	.95	.67	.47	.38	.26
8	.24	.29	.48	.54	.64	47.16	.81	.97	.62	.47	.38	.26
9	.23	.32	.47	.52	.63	.14	.85	.72	.65	.46	.38	.26
10	.23	.38	.44	.49	.66	46.99	.79	.74	.63	.45	.36	.26
11	46.21	46.64	46.45	46.47	46.58	46.86	46.76	46.68	46.62	46.45	46.35	46.35
12	.21	.42	.43	.36	.54	.84	.69	.64	.61	.45	.34	.31
13	.21	.40	.45	.48	.50	.82	.64	.62	.59	.43	.34	.30
14	.20	.48	.56	.44	.48	.69	.62	.70	.59	.43	.34	.29
15	.20	.61	.49	.44	.47	.62	.62	.65	.58	.43	.34	.28
16	46.20	46.44	46.45	46.43	46.48	46.57	46.64	46.64	46.57	46.43	46.33	46.28
17	.20	.46	.44	.45	.50	.54	.59	.84	.55	.43	.31	.27
18	.20	.62	.50	.50	.47	.52	.58	.72	.55	.43	.32	.26
19	.18	.51	.48	.44	.73	.51	47.01	.71	.53	.41	.44	.27
20	.18	.45	.45	.42	.75	.49	.30	47.09	.52	.40	.35	.28
21	46.19	46.43	46.44	46.41	46.72	46.47	47.00	47.59	46.52	46.40	46.33	46.37
22	.18	.50	.59	.40	.59	.50	.13	.19	.52	.40	.33	.40
23	.25	.48	.63	.40	.58	.49	.40	.11	.52	.39	.31	.34
24	.36	.40	.74	.39	.52	.62	.14	.90	.51	.39	.30	.36
25	.27	.40	47.19	.38	.48	.60	.35	48.11	.51	.39	.30	.47
26	46.22	46.49	47.14	46.38	46.46	46.63	47.10	47.55	46.51	46.38	46.29	46.41
27	.25	.55	46.97	.38	.45	47.09	.13	.20	.50	.38	.27	.35
28	.23	.72	.97	.39	.47	.27	.41	.01	.50	.38	.27	.56
29	.22	.86	.80	.38	.57	.46	.03	46.91	.50	.38		.40
30	.22	47.11	.69	.37	.52	.32	.11	.85	.50	.38		.43
31		.72		.37	.47		46.99		.50	.38		.38
Mean	46.22	46.52	46.64	46.48	46.61	46.71	46.94	46.98	46.59	46.43	46.34	46.35
Max.	46.38	47.72	47.19	46.91	47.93	47.46	47.41	48.11	46.81	46.50	46.44	46.56
Min.	46.18	46.21	46.43	46.36	46.42	46.40	46.58	46.62	46.50	46.38	46.27	46.26

WATER YEAR 1958 : Max. 48.11 m. Min. 46.18 m.



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1958 TO MARCH 31, 1959

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.32	0.24	11	7.50	2.08	2.36	15	11	8.71	3.20	1.50	0.64
2	0.24	0.08	11	11	2.64	2.36	12	10	8.30	3.06	1.50	0.56
3	0.16	1.30	7.30	7.30	2.08	2.08	20	13	7.50	2.92	1.60	0.56
4	0.16	2.08	5.74	7.90	9.40	1.94	22	9.13	6.90	2.92	1.60	1.20
5	0.40	3.20	4.32	6.90	40	1.80	14	7.90	6.70	2.78	1.70	0.64
6	1.60	2.50	3.34	5.17	15	1.80	9.76	7.90	6.31	2.78	1.60	0.48
7	0.56	1.10	3.20	4.32	6.70	3.34	8.50	12	5.93	2.78	1.60	0.48
8	0.32	0.72	2.92	3.76	5.36	17	8.71	12	4.98	2.78	1.60	0.48
9	0.24	1.00	2.78	3.48	5.17	16	9.55	6.90	5.55	2.64	1.60	0.48
10	0.24	1.60	2.36	3.06	5.74	13	8.30	7.30	5.17	2.50	1.40	0.48
11	0.08	5.36	2.50	2.78	4.32	9.76	7.70	6.12	4.98	2.50	1.30	1.30
12	0.08	2.08	2.22	1.40	3.76	9.34	6.31	5.36	4.79	2.50	1.20	0.90
13	0.08	1.80	2.50	2.92	3.20	8.92	5.36	4.98	4.46	2.22	1.20	0.80
14		2.92	4.04	2.36	2.92	6.31	4.98	6.50	4.46	2.22	1.20	0.72
15		4.79	3.06	2.36	2.78	4.98	4.98	5.55	4.32	2.22	1.20	0.64
16		2.36	2.50	2.22	2.92	4.18	5.36	5.36	4.18	2.22	1.10	0.64
17		2.64	2.36	2.50	3.20	3.76	4.46	9.34	3.90	2.22	0.90	0.56
18		4.98	3.20	3.20	2.78	3.48	4.32	6.90	3.90	2.22	1.00	0.64
19		3.34	2.92	2.36	7.10	3.34	14	6.70	3.62	1.94	2.36	0.56
20		2.50	2.50	2.08	7.50	3.06	20	15	3.48	1.80	1.30	0.64
21		2.22	2.36	1.94	6.90	2.78	13	29	3.48	1.80	1.10	1.50
22		3.20	4.46	1.80	4.46	3.20	17	17	3.49	1.80	1.10	1.80
23	0.40	2.92	5.17	1.80	4.32	3.06	23	16	3.48	1.70	0.90	1.20
24	1.40	1.80	7.30	1.70	3.48	4.98	16	40	3.34	1.70	0.80	1.40
25	0.56	1.80	17	1.60	2.92	4.60	22	47	3.34	1.70	0.80	2.78
26	0.16	3.06	16	1.60	2.64	5.17	15	28	3.34	1.60	0.72	1.94
27	0.40	3.90	12	1.60	2.50	15	16	18	3.20	1.60	0.56	1.30
28	0.24	6.90	12	1.70	2.78	20	23	13	3.20	1.60	0.56	4.04
29	0.16	9.76	8.50	1.60	4.18	25	14	11	3.20	1.60		1.80
30	0.16	17	6.31	1.50	3.48	21	16	9.55	3.20	1.60		2.22
31		34		1.50	2.78		13		3.20	1.60		1.60
Total	7.96	133.15	160.86	102.91	175.09	229.60	393.29	397.49	144.60	88.72	35.00	34.98
Mean	0.26	4.29	5.36	3.32	5.65	7.65	12.7	13.2	4.66	2.86	1.25	1.13
Max.	1.60	34	17	11	40	25	23	47	8.71	3.20	2.36	4.04
Min.	0.00	0.08	2.22	1.50	2.08	1.80	4.32	4.98	3.20	1.60	0.56	0.48
Runoff - MCM.	0.688	11.504	13.898	8.891	15.128	19.837	33.978	34.341	12.493	7.665	3.024	3.022

WATER YEAR 1958 : Max. 47 Min. 0.00 Mean 5.21 Annual Runoff 164.460 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Nov. 24	23.00	48.45	59				

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT
WATER YEAR 1959
KHLONG DUSON RIVER BASIN

Khlong Duson at Khuan Don, Satun (X.16)

Location: Lat 6°– 40' – 00" N, Long 100°– 06' – 00" E, on right bank at Khuan Don, Amphoe Muang, Satun.

Drainage Area: 120 sq.km. referred to GSGS 4218 Map 1:253,440

Type of Gage: Water – stage recorder.

Zero Gage at Bottom at: +45.560 m. (A.D.)

Bench Mark:

Location:
Elevation:

Gage Reading Frequency: Recording.

Basis of Mean Daily Gage Height: Arithmetic mean of 24 hourly readings.

Period of Available Gage Records: 1956 – 59.

Rating Operation:

Period of Rating: 1956 – 59
Rated by Float: –
Rated by Current Meter: 1956 – 59

Stability of Channel Regimes: Fairly stable, no shifting adjustment for flow computation.

Overbank Flow Conditions: No overbank flow.

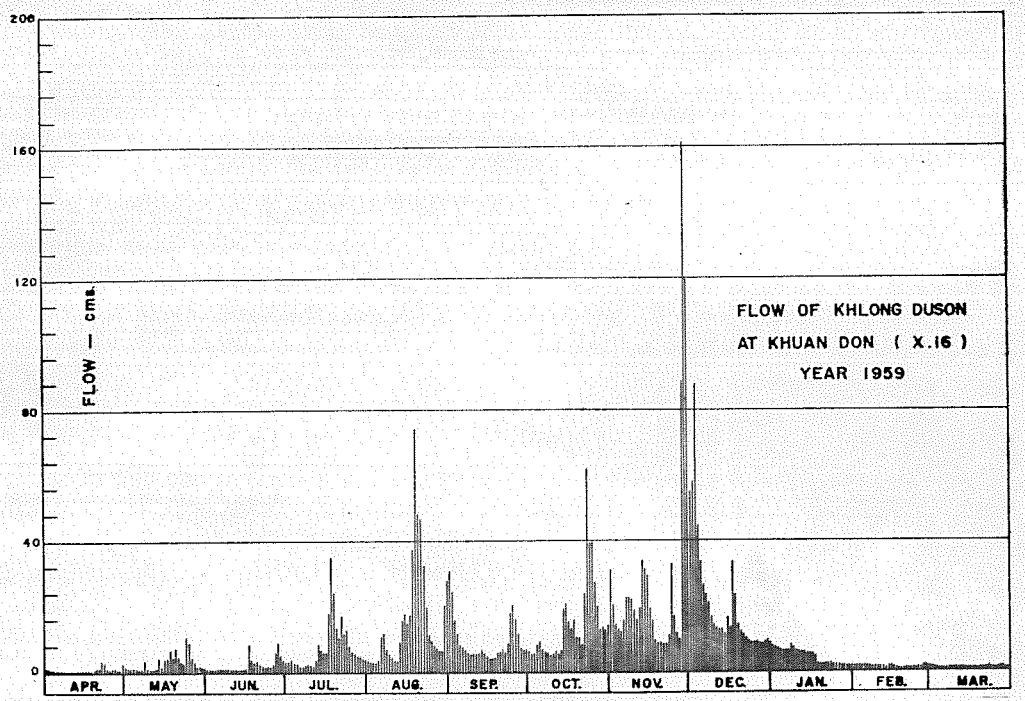
General Description: Records good. Stage – discharge relationship is defined by discharge measurements made during 1959. No state diversions above gage site.

GAGE HEIGHT IN METER (A.D.), WATER YEAR APRIL 1, 1959 TO MARCH 31,1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	46.38	46.41	46.40	46.52	46.57	47.61	46.71	47.60	48.36	46.83	45.33	45.29
2	.33	.39	.39	.52	.54	.38	.67	.41	.40	.81	.33	.26
3	.32	.37	.40	.53	.52	.14	.65	.11	49.14	.79	.33	.23
4	.31	.39	.39	.53	.52	46.97	.78	.01	48.12	.78	.33	.22
5	.31	.38	.38	.48	.59	.88	.82	46.99	47.77	.76	.32	.22
6	46.31	46.34	46.37	46.45	46.81	46.82	46.71	47.12	47.57	46.76	45.31	45.22
7	.29	.30	.38	.43	.96	.77	.67	.41	.42	.75	.31	.22
8	.27	.53	.39	.45	.73	.73	.68	.35	.35	.83	.31	.22
9	.27	.41	.39	.47	.63	.71	.64	.34	.28	.81	.32	.23
10	.27	.37	.39	.46	.58	.74	.66	.22	.21	.76	.33	.22
11	46.27	46.38	46.38	46.44	46.55	46.71	46.71	47.13	47.19	46.74	45.32	45.21
12	.26	.38	.38	.54	.52	.71	.65	.24	.13	.75	.31	.21
13	.26	.36	.38	.80	.79	.75	.67	.39	.09	.68	.31	.21
14	.25	.61	.38	.77	47.08	.72	47.16	.64	.07	.68	.31	.20
15	.25	.41	.38	.70	.17	.61	.76	.52	.22	.67	.32	.20
16	46.25	46.59	46.42	46.72	47.07	46.63	47.08	47.26	47.15	46.66	45.31	45.20
17	.26	.58	.74	47.19	.19	.63	.00	.06	.82	.65	.29	.19
18	.25	.70	.58	.89	48.12	.64	.01	46.92	.45	45.39	.29	.19
19	.28	.58	.53	.53	.91	.77	46.87	.87	.16	.38	.29.	.18
20	.36	.78	.54	.12	.22	.71	.88	.85	.07	.37	.29	.18
21	46.38	46.65	46.50	46.94	48.16	46.75	46.80	46.85	47.02	45.39	45.28	45.18
22	.60	.57	.45	47.19	47.76	.67	47.40	.83	46.97	.40	.27	.22
23	.51	.52	.44	46.98	.38	.80	48.61	.93	.96	.37	.27	.27
24	.35	.93	.44	47.02	.13	47.12	47.96	47.64	.93	.38	.25	.21
25	.32	.89	.43	46.83	46.76	.26	.94	.17	.91	.36	.24	.20
26	46.32	46.63	46.54	46.73	46.89	47.12	47.53	46.78	46.90	45.33	45.23	45.19
27	.35	.55	.77	.68	.85	46.90	.27	.88	.90	.35	.28	.19
28	.35	.49	.85	.68	.81	.78	.12	48.79	.87	.35	.34	.25
29	.32	.46	.66	.63	.78	.72	.06	50.62	.88	.34	.32	.24
30	.40	.44	.58	.62	47.28	.72	.04	48.86	.94	.33		.20
31		.41		.62	.52		.08		.88	.33		.19
Mean	46.32	46.51	46.47	46.76	47.08	46.85	47.05	47.40	47.33	46.12	45.30	45.21
Max.	46.60	46.93	46.85	47.89	48.91	47.61	48.61	50.62	49.14	46.83	45.34	45.29
Min.	46.25	46.30	46.37	46.43	46.52	46.61	46.64	46.83	46.87	45.33	45.23	45.18

WATER YEAR 1959 : Max. 50.62 m. Min. 46.25 m.

HYDROLOGY SECTION, SURVEY DIVISION
ROYAL IRRIGATION DEPARTMENT



DISCHARGE, IN CUBIC METERS PER SECOND, WATER YEAR APRIL 1, 1959 TO MARCH 31, 1960

Day	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	1.30	1.94	1.20	3.06	3.62	31	6.50	31	55	8.10	2.00	1.70
2	0.90	1.50	1.10	3.20	3.20	23	5.74	23	57	7.50	2.00	1.70
3	0.80	1.30	1.10	4.18	3.06	15	5.55	15	88	7.30	2.00	1.40
4	0.72	1.50	1.10	3.06	3.06	11	8.30	13	46	6.70	2.00	1.30
5	0.72	1.50	0.90	2.50	4.04	8.71	9.55	12	34	6.50	1.90	1.30
6	0.72	1.10	1.00	2.08	11	7.50	6.90	15	27	6.50	1.80	1.40
7	0.72	0.80	1.10	1.80	12	6.70	5.93	23	23	6.50	1.80	1.20
8	0.56	3.90	1.20	2.22	7.10	5.93	5.93	23	20	8.70	1.60	1.40
9	0.56	1.60	1.20	2.36	5.17	5.74	4.98	22	18	7.90	1.80	1.40
10	0.48	1.30	1.10	2.36	4.32	5.93	5.55	19	15	6.70	2.00	1.30
11	0.48	1.40	1.00	1.94	4.04	5.93	6.50	16	14	6.31	1.80	1.20
12	0.48	1.50	1.10	3.48	3.34	5.74	5.36	20	13	6.31	1.80	1.10
13	0.40	1.20	1.20	8.30	8.30	6.90	6.50	34	13	6.12	1.60	1.30
14	0.40	4.46	1.20	7.50	16	5.93	19	32	12	6.12	1.80	1.10
15	0.40	1.70	1.10	6.31	18	4.98	21	29	17	5.93	2.00	1.10
16	0.40	4.18	1.40	5.74	15	4.60	16	20	14	5.74	1.70	1.00
17	0.40	4.32	8.71	16	18	4.60	13	15	34	5.55	1.40	0.90
18	0.40	6.31	4.04	35	49	4.32	16	10	22	2.60	1.30	1.00
19	0.64	4.18	3.20	24	75	5.93	11	8.71	15	2.40	1.30	0.90
20	1.20	7.30	3.34	14	48	6.31	11	8.92	13	2.20	1.40	0.90
21	1.40	5.36	2.60	11	47	6.90	8.50	8.92	12	2.70	1.30	0.90
22	3.76	3.76	1.94	17	32	5.74	26	7.50	11	2.70	1.20	1.00
23	3.20	3.06	1.70	12	23	9.13	62	12	10	2.50	1.30	1.70
24	1.20	11	1.70	13	13	18	39	33	9.34	2.70	1.10	1.20
25	0.90	9.34	1.60	8.50	9.76	21	40	18	9.34	2.30	1.10	1.30
26	0.90	4.79	2.92	6.31	8.30	17	25	13	9.13	2.10	1.10	1.10
27	1.10	3.34	7.10	5.36	7.70	11	19	10	9.13	2.30	1.70	1.10
28	1.20	2.08	9.13	4.98	6.50	7.70	13	80	8.71	2.30	2.10	1.70
29	0.80	1.94	5.17	4.98	6.50	6.50	14	161	9.34	2.10	1.90	1.40
30	2.64	1.70	3.76	4.60	20	6.90	13	94	10	2.00		0.90
31		1.40		4.32	28		15		9.13	2.00		0.90
Total	29.78	100.76	74.91	241.14	513.01	285.62	464.79	827.05	657.12	147.38	47.80	37.80
Mean	0.99	3.25	2.50	7.77	16.5	9.53	15.0	27.6	21.2	4.74	1.65	1.22
Max.	3.76	11	9.13	35	75	31	62	161	88	8.70	2.10	1.70
Min.	0.40	0.80	0.90	1.80	3.06	4.32	4.98	7.50	8.71	2.00	1.10	0.90
Runoff - mcm.	2.573	8.706	6.472	20.884	44.324	24.677	40.158	71.457	56.775	12.734	4.130	3.266

WATER YEAR 1959 : Max. 161 Min. 0.40 Mean 9.37 Annual Runoff 296.179 mcm.

Momentary Peak Discharge

Date	Time	Gage-Height	Discharge	Date	Time	Gage-Height	Discharge
Nov. 29	05.00	50.91	175				