



NORGES VASSDRAGS- OG ELEKTRISITETSVESEN

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HYDROLOGISK AVDELING

THE HYDROLOGY OF CENTRAL BOHOL

The Philippines

A field and desk study

OPPDRAKSRAPPORT

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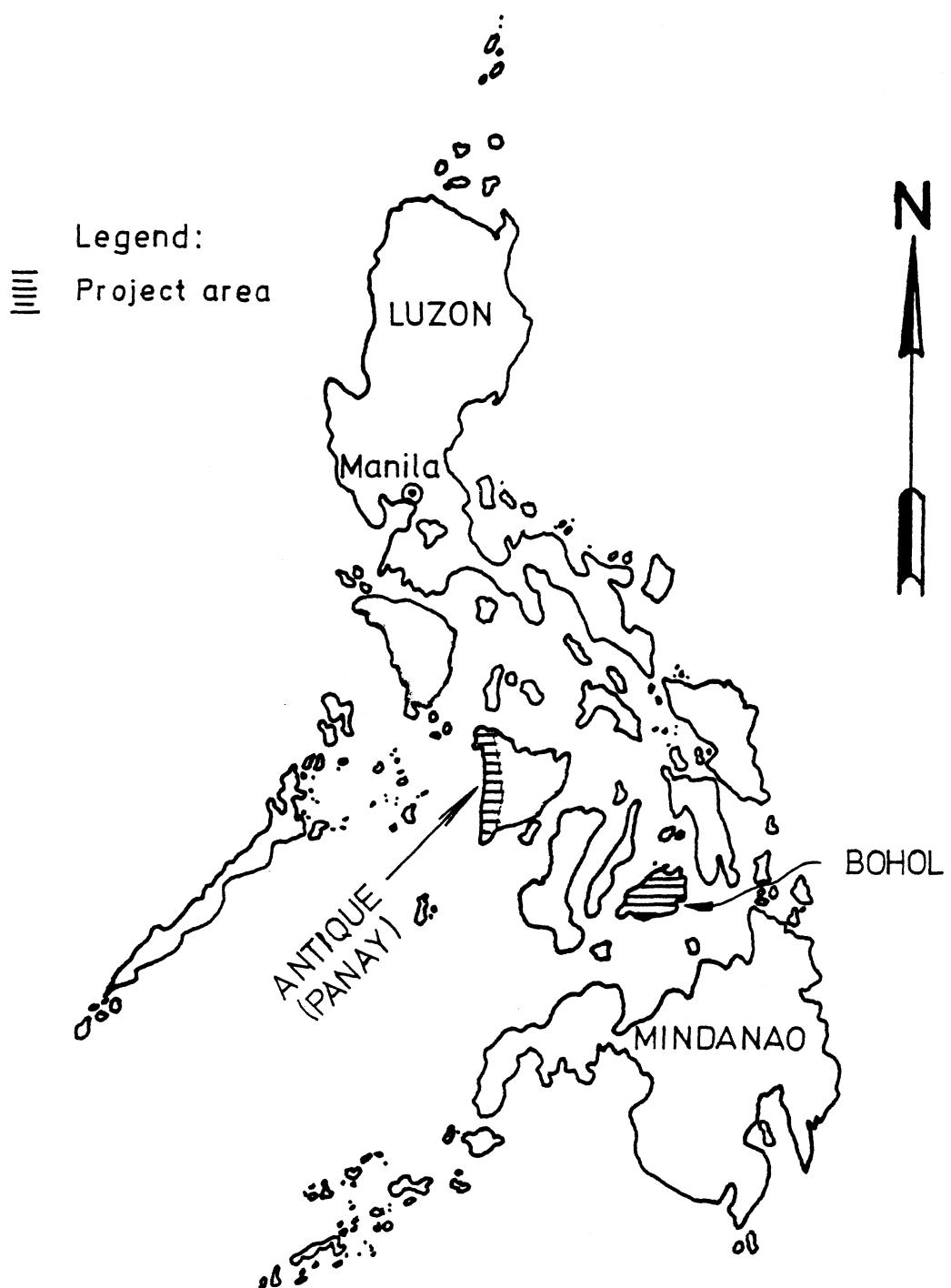
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Sammendrag:
Hydrologien i de sentrale deler av Bohol-provinsen på Filippinene er vurdert på grunnlag av feltbefaring og analyse av allerede publiserte nedbør- og avløpsdata.
Datagrunnlaget for estimering av hydrologiske parametre til bruk ved forprosjektstudie av vannkraftverk i provinsen er relativt spinkelt. Middelavløp, flomstørrelser og lavvannsverdier er overført til prosjektorrådene ved hjelp av en antatt sammenheng med nedbørfeltene størrelse og beliggenhet. Varighetskurven fra den antatt beste målestasjonen er foreløpig valgt som representativ for de sentrale deler av Bohol.
En vesentlig kompliserende faktor er de karst-hydrologiske problemene i området. Eksistensen av drenering i undergrunnen er åpenbar enkelte steder. Det topografiske og hydrologiske vannskillet stemmer ikke overens for nedslagsfeltet til Bilar River. En reduksjon til effektivt dreneringsareal er antydet.
En forsvarlig analyse av hydrologien i området krever at supplerende målestasjoner opprettes så snart som mulig. Enkelte eksisterende målestasjoner kan dessuten forbedres. Flere alternativer for plassering av nye målestasjoner er foreslått.

MAP OF THE PHILIPPINES



INDEX	PAGE
INTRODUCTION	3
DESCRIPTION OF CATCHMENTS	5
RAINFALL	6
RUNOFF	7
RIVER GAUGING STATIONS	8
Loboc River at Tigbao	8
Bilar River at Owac	9
Wahig River at Bugsoc	10
Wahig River at Pamacsalan	11
LOW FLOW ANALYSIS	13
MEAN ANNUAL FLOW	14
FLOOD STUDIES	15
AVAILABILITY OF WATER AT POSSIBLE PROJECT SITES	17
Loboc River at Janopol	17
Loboc River at Rizal	18
Wahig River at Tipolo	18
Abatan-Sinigan River	18
PROPOSED RIVER GAUGING STATIONS	19
General	19
Loboc River at Janopol	19
Loboc River at Rizal	19
Wahig River	20
Abatan-Sinigan River	20
APPENDIX	
RAINFALL - MONTHLY AND ANNUAL SUMMARIES	A1 - 6
RUNOFF - DAILY AVERAGE	B1 - 62
RUNOFF - MONTHLY AND ANNUAL SUMMARIES	B63 - 69

FORORD

I forbindelse med en forprosjektstudie av muligheten for småkraftverk på Filippinene, "Rural Hydropower Development for Bohol, Antique (Panay) and Mindoro", ble Hydrologisk Avdeling anmodet av NORCONSULT A.S. om å vurdere datagrunnlaget samt å estimere de nødvendige hydrologiske parametre for provinsen Bohol.

En feltbefaring ble foretatt i februar 1980. Beregningsarbeidet bygger for en stor del på avløpsdata publisert i Filippinske årbøker. Dessuten er det innhentet supplerende opplysninger ved direkte kontakt med de lokale hydrometeorologiske myndigheter.

Rapporten inneholder en kort geografisk beskrivelse av området og oversikt over det eksisterende stasjonsnett for måling av nedbør og avløp. Analysen er i alt vesentlig foretatt ved hjelp av Hydrologisk Avdelings standard EDB-program og kjørt på NVE's CYBER 171. Data-grunnlaget er gjengitt i Appendix. Nummer på tegningene følger NORCONSULT's arkivsystem.

Avdelingen er stor takk skyldig overfor prosjektpersonale hos NORCONSULT A.S. og Siv.ing. Elliot Strømme A.S. for faglig samarbeid og hjelp til utarbeidelse av figurer og tegninger.

Oslo, mai 1981

INTRODUCTION

The present report is the result of a field and desk study of the hydrology of Central Bohol, with emphasis on the availability of water for power production in the Loboc and Wahig Rivers.

Below is listed available reports, data and other sources of information which have been utilized.

Reports, maps and data:

- (1.) Bureau of Public Works: Water Resources Bulletin No. 1-12. Daily Runoff Records, 1908-1922 and 1945-1971.
- (2.) Philippine Atmospheric, Geophysical and Astronomical Administration: Monthly and Annual Summaries of Rainfall.
- (3.) de Vera, M.R.: Philippines Surface Water Data Systems. Economic and Social Commission for Asia and the Pacific. Bangkok 1978.
- (4.) NEA/NORCONSULT: Report on Hydrological Field Reconnaissance Bohol and Antique, February 6-13, 1980.
- (5.) Quiazon, H.P.: Groundwater Availability in Bohol. Bureau of Mines, Manila 1976.
- (6.) List of Discharge Measurements, Loboc River at Tigbao, Bilar River at Owac, Wahig River at Bugsoc and Pamacsalan River at Pamacsalan.
- (7.) National Irrigation Administration (Bohol): Map showing approximate locations of existing pumped irrigation system.
- (8.) Topographical maps 1:50,000, 1:250,000 and air photographs.

Miscellaneous:

- Correspondence:
 - National Irrigation Administration, Office of the Provincial Irrigation Engineer: List of actual irrigated area in Bohol, as of Dec 1979.
 - Ministry of Agriculture, Office of the Provincial Agriculturalist: Statistical data on crops and water requirements.
- Verbal information:
 - Mini-Hydro Office, National Electrification Administration, Manila.
 - Supervising Engineer, Water Resources Survey Division, Bureau of Public Works, Manila.
 - Statistical Division, Philippine Atmospheric, Geophysical and Astronomical Services Administration, Manila.
 - Irrigation Hydrologist, National Irrigation Administration, Manila.
 - Various pictures taken during field trips to Bohol, 1979-80.

DESCRIPTION OF CATCHMENTS

The geography of Bohol is dominated by three major river systems, the Loboc River, the Abatan-Sinigan River and the Wahig River (see Drawing 101).

Central Bohol is heavily cultivated, and is the major producer of crops in the province, as rainfall occurs throughout the year. Though extensive rainfall occurs mostly during April to October caused by the SW monsoon, most rivers are perennial. The farmers are able to harvest rice three times a year.

The Loboc River system rises in the range of mountains along the eastern and southern outskirts of the Central Bohol plateau. The Cantimok River runs northwest and Bilar River runs first southwest then northwest before they join to form the Loboc River. The Lobayog River and the Sampelangon River drain the northern parts of the catchment. By the time Loboc River enters the sea it drains 650 km². The topographical boundaries were drawn on a 1:50,000 scale map (see Drawing 121). The catchment consists mainly of karst limestone and sandstones (5). Evidence of natural springs appearing in the hillsides along the southern coast indicates a disagreement between the hydrological and topographical catchment boundaries in the mountain range. Numerous sinkholes in the areas north of Bilar probably lead to resurgence further downstream, as observed in the Loboc River near Janopol.

The major part of the catchment is dominated by a plateau with scattered hills in between flat or gently sloping cultivated areas where the river gradient is low. Thereafter a canyon is formed where the river gradually loses altitude until sea level is reached some 5-6 km from the southern coast.

Agricultural activities including gravity irrigation are common all over Bohol, especially within the Carmen, Dagohoy and Pilar municipalities where pumped irrigation is utilized as well (7). Still the actual irrigated area is mostly less than 10% of total cultivated area within a municipality, mainly due to the persistence of rainfall throughout the year.

The Wahig River emerges from the highest, eastern parts of the Sagungan Mountains and runs mainly northwest. When the river reaches the coast it drains about 600 km², mainly areas northeast of the Loboc River catchment. The boundaries were drawn on a 1:50,000 scale map (see Drawing 122). After having passed through heavily cultivated areas, the river cuts through the hills downstream of Tipolo. In this canyon-like valley are the main falls and rapids and a 30 meter loss of altitude along 5 km occurs. The 10 meter contour is reached already some 20-25 km from the coast. Though limestone appears along the southern boundaries, underground drainage is not considered to be a problem within the Wahig catchment.

The Abatan-Sinigan River system drains 365 km² to the west of the Loboc River system, emerging from the western outskirts of the Central Bohol plateau. Three main tributaries combine to form Sinigan River near Baunos, two of them with a relatively steep

gradient entering from the north while the Sinigayanan River drains the gently sloping cultivated areas in the north-eastern part of the catchment. A 50 m drop through the canyon over the next 5-6 km leads down to the 10 m contour where the steep Camugan River runs in from the east some 15-20 km from the coast. Apart from the limited sandstone formations to the west of Balilihan, the Abatan-Sinigan catchment is dominated by the Maribojoc limestone. The catchment has no significant differences in altitude between adjacent catchments, such as occur in the Bilar/Loboc configuration. Therefore major loss of water by underground drainage is not considered a major problem, though minor local seepage from one subcatchment to another may occur. The catchment boundaries were drawn on a 1:50,000 scale map (see Drawing 123).

RAINFALL

The number of long term rainfall stations in Bohol with relatively unbroken records is very limited. Table 1 shows available stations. Records of monthly and annual summaries are listed in Appendix A as copied from the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) (2).

The first station in the province was started at Tagbilaran in 1902 as a synoptic station. Unfortunately, a gap of 20 years from 1940 to 1960 disturbs a valuable long term record. Otherwise records date back only to the 1960s or later.

Standard 125 mm diameter rain gauges are used, set about 1/2 m above ground level. Gauges are usually kept in enclosures. Except for the Pamacsalan station which has a somewhat bad exposure to northerly winds, all stations are satisfactorily located. The reliability of the records is considered adequate. Monthly and annual summaries are displayed on Drawing 101.

Average annual rainfall over the plateau is 2000-2100 mm. The western and southern areas, from Loboc towards the Abatan-Sinigan River, probably receive less rain, being at lower elevation, but there are no rainfall records to support this assumption and there is no way to allow for differences in exposure to the southwest winds.

TABLE 1 RAINFALL STATIONS IN BOHOL, AVAILABLE RECORDS

Station name	Latitude North	Longitude East	Altitude m	Period
Tagbilaran	9°38'	125°52'	5	1902-40, 60-77
Bilar	9°42'	124°06	280	1975-79
Carmen	9°49'	124°12	215	1975-79
Pamacsalan	9°48'	124°19'	180	1967-76 average
Dagohoy	9°53'	124°16'	110	1956-79
Trinidad	10°05'	124°19'	5 approx.	1975-79
Inabanga	10°02'	124°03'	5 "	1975-79
Tubigon	9°57'	123°57'	5 "	1960-77

RUNOFF

Streamflow data have traditionally been collected by the Bureau of Public Works, Water Resources Survey Division (BPW-WRSD). In recent years there has been a decline of financial support for the operation and maintenance of streamflow gauging stations by the BPW (3), thus the quality of data has deteriorated. No calibration of rating curves has been carried out since 1972.

National Power Corporation (NPC) and National Irrigation Administration (NIA) and some regional development agencies have been erecting stations in cooperation with BPW during the last few years. Nevertheless the length of these records is inadequate for this study.

Longterm records have been published by BPW in Water Supply Bulletins (WSB) (1). Relevant stations are listed in Table 2. Locations are indicated on Drawing 101.

TABLE 2 RUNOFF STATIONS IN BOHOL, AVAILABLE RECORDS

Station name	River	Catchment km ²	Latitude N	Longitude E	Period
Tigbao	Loboc	618	9°40'	124°02'	1955-71
Owac	Bilar/ Loboc	67	9°41'	124°07'	1959-71
Bugsoc	Wahig	38	9°47'	124°16'	1955-71
Pamacsalan	Pamacsalan/ Wahig	28	9°51'	124°21'	1957-71

The stations were commenced by reading a staff gauge two or three times a day. Later, water stage recorders were installed at all but the Pamacsalan station. Equipment and procedures have usually been according to U.S. Geological Survey standards.

Data processing and publication was initiated in 1952-53 by a U.S.G.S. mission. Published data are copied in Appendix B, containing daily average flow as well as monthly and annual summaries. Background material for the calculation of published runoff records is difficult to recover as most of it has been lost or damaged due to various reorganisations and change of office locations of the BPW-WRSD. The possibilities of performing a thorough check on previous processing are very limited indeed. One has to accept the calculated runoff together with the indication of quality as given in the comments to each station. A limited number of discharge measurements show shifting controls at most stations.

Recent field trips indicate that stations have not been maintained properly or have been neglected completely due to the financial constraints. This applies to the period 1972 and onwards. Therefore, by utilizing records up to 1971 only, the published data and comments are considered adequate. Inspections in the field did reveal possible sources of error due to diversions of water for irrigation upstream of gauging stations (4).

RIVER GAUGING STATIONS

Loboc River at Tigbao, 618 km²

The station, which gauges 95% of the total Loboc catchment, was erected as early as 1922. During the second world war the bulk of the early records were destroyed. Available records date from the period 1955-1971, with a short break during November and December 1968. A water stage recorder operated from May 30, 1962, to December 2, 1964. Readings have been made twice a day.

The site is located about 2 km upstream of the Lotonan falls, where the present NPC Hydro Power Station has been operating since 1957. Prior to 1968 flood levels at Tigbao were controlled by the rock bar at the top of the falls. The existence of a low/medium flow control further upstream is somewhat difficult to judge. Since 1968 a spillway constructed on the rock bar raising its level by 1.70 m has given variable backwater at all levels depending on the spillway operation and the rate of water intake for power production. The records after 1968 may not be as reliable as those before 1968 therefore. A Bailey bridge near the site should give reasonable conditions for taking discharge measurements at medium and low flows. Floods will cause turbulence around the brigde footing situated in the middle of the river. A staff gauge is attached to the bridge pier and includes a crest level recorder.

Discharge measurements and the corresponding water levels at Tigbao are listed in Table 3 and plottet on Figure 3. The highest flow recorded is 52 m³/sec. Records are judged to be good up to 60 m³/sec representing 95% of the total volume of water. By estimating average monthly flow for November and December 1968, the average discharge at Tigbao amounts to 19 m³/sec or 30.7 l/sec/km² based on the topographical catchment area. A correction has to be made, for the probable loss of water due to the karst conditions in the Bilar subcatchment.

Monthly runoff statistics for Loboc River are shown on Figure 1.

TABLE 3 SUMMARY OF MEASURED DISCHARGES AT TIGBAO, 1964-1970

Date	Gauge height m	Discharge m ³ /sec
12.11.64	.87	30.0
23.12.64	.34	12.1
3.05.65	.23	9.69
17.10.65	1.21	52.0
27.05.66	.40	13.5
26.01.67	.54	26.9
30.05.67	.22	8.44
21.09.67	.30	9.16
24.12.67	.40	11.5
08.05.68	1.08	8.00 Crest of intake
20.10.68	1.80	24.8 weir at downstream
26.12.68	1.46	11.5 Hydro Power plant
26.03.69	1.29	9.52 raised by 1.70 m
21.08.69	1.49	12.4
21.09.69	1.50	11.9
26.10.69	1.60	13.4
07.03.70	1.46	11.5
24.06.70	1.98	27.3

Bilar River at Owac, 67 km²

The Bilar River drains topographically 226 km², equivalent to about 50% of the total catchment at the point of confluence with the Loboc River near Janopol. A re-examination of the topographic boundaries on the 1:50,000 scale map, demonstrated the WRB published catchment area at the gauging station to be wrong, and the figure had to be reduced from 92 km² to 67 km².

The Owac station represents 30% of the total Bilar catchment. The gauge has been read twice a day since July 1959. A stage recorder was installed in July 1961. Records from a previous gauge 200 m further downstream cannot be traced.

The control consists partly of loose medium-sized stones. High flow is affected by backwater from a diversion dam 400 m downstream. The existence of karst features at the gauge site is evident.

17 discharge measurements taken between 1965 and 1970 (Table 4) demonstrate continual shifting of datum. Great reliance cannot be placed on these records therefore.

The very low recorded yield 7 l/sec/km² is most probably far from representative for the size and exposure of the catchment only. It is assumed that the area is heavily affected by the karst limestone causing a major loss of water through underground drainage, especially towards the southwest. The steep descent of the duration curve below medium flow probably reflects the same effect (Figure 5). Numerous natural springs can be observed in the hill-sides along the southern coast, indicating great disagreement between the hydrological and topographical catchment boundaries in

the mountain range. On the other hand any leakage through limestone formations downstream to the north of the Owac station will probably lead to resurgence before reaching Tigbao gauging station.

Monthly runoff statistics are shown on Figure 1.

TABLE 4 SUMMARY OF MEASURED DISCHARGES AT OWAC, 1965-1970

Date	Gauge Height m	Discharge m ³ /sec
01.05.65	.30	.19
01.05.65	.31	.13
15.10.65	1.20	4.07
28.05.66	.75	.060
27.01.67	1.03	1.44
28.05.67	.85	.063
22.09.67	.75	.022
24.12.67	.88	.138
09.05.68	.67	.045
20.10.68	.66	.302
25.12.68	.79	.039
27.03.69	.51	.212
21.08.69	.44	.131
21.09.69	.61	.294
22.10.69	.62	.659
08.03.70	.56	.219
26.06.70	.72	.148

Wahig River at Bugsoc, 38 km²

In the catchment area several hills reach to more than 800 m altitude. The gauging station is located near Bugsoc barangay. The description given in Water Resources Bulletin is partly a confusion with the Pamacsalan station. The river changed its course during a flood in 1956 to join a tributary upstream of Bugsoc. Thereafter the station was relocated 1.5 km further downstream to its present site, increasing the catchment from 25 km² to 38 km². The location of the new station and the size of the new catchment area has not been corrected accordingly in the Bulletins.

The gauge was originally read 3 times a day. A stage recorder has been operating since February 1957. At the time of relocation the new station was equipped with a cableway.

The present control is not well defined. The gauge is situated in the middle of a gradually falling river bed covered with loose stones and gravel liable to changes during floods.

The 22 discharge measurements taken, (Table 5) during the 1963-70 period indicate substantial changes of the control, especially concerning low levels during 1968-69.

TABLE 5 SUMMARY OF MEASURED DISCHARGES AT BUGSOC, 1963-1970

Date	Gauge Height m	Discharge m ³ /sec
15.03.63	.47	1.21
15.06.63	.27	.149
24.10.63	.62	2.48
01.03.64	.51	2.01
24.06.64	.50	1.11
16.11.64	.47	1.68
02.05.65	.38	.567
16.10.65	.64	5.54
24.05.66	.29	.176
28.01.67	.49	2.80
23.09.67	.27	.189
22.12.67	.43	2.23
10.05.68	.30	.131
21.10.68	.43	1.32
23.12.68	.37	3.12
27.03.69	.10	.113
23.08.69	.17	.106
22.09.69	.25	1.27
23.10.69	.20	.698
09.05.70	.14	.552
28.06.70	.16	.631
03.08.70	.55	1.43

Records are available from 1955 to 1971. A few days missing during 1960-63 affect slightly the overall picture. Flow below 75 l/sec during Jan 1957 to Dec 1959 published in Volume 1 of the Bulletin was revised in later volumes. From 1969 the published data are classified as "poor".

There are several diversion dams upstream, periodically diverting at least 80% of the flow for rice irrigation purposes. These constructions are re-erected by the local inhabitants when destroyed by floods. In periods of no irrigation the dams are still active, but the diverted water bypasses the ricefields, as well as the gauging station.

These records are not very reliable therefore, due to poor rating as well as the diversion of water outside flooding seasons. The average measured flow of 31 l/sec/km² is probably too low.

Monthly flow statistics are shown on Figure 2.

Wahig River at Pamacsalan, 28 km²

Pamacsalan River is a tributary joining the Wahig River 4 km downstream of Sierra Bullones. The catchment comprises one southern and one eastern branch. The southern one is gauged near Pamacsalan barangay.

The catchment size given in WSB was found to be wrong. Re-examination of the topographic boundaries on the 1:50,000 scale map reduced the area from 71 km² to 28 km². The highest mountain reaches 780 m above sea level.

The records date back to August 1956, mostly based on readings taken twice a day. Low flow control is fairly stable. The 16 discharge measurements taken from 1965 to 1970 indicate two distinct periods of stage-discharge relationship (Table 6). The change has taken place during November and December 1968, where a break appears in the daily averages. By using the Bugsoc runoff station and the Dagohoy rainfall station to calculate the missing records, it is possible to estimate annual and overall average runoff from the Pamacsalan station.

No active diversions could be traced upstream of the station except a dry riverbed taking out water for irrigation during floods. Therefore the station is considered to be a reliable gauging site. The yield 44 l/sec/km² is accepted as a representative average figure for runoff from a small mountainous catchment in Central Bohol.

In connection with a planned irrigation project nearby Pamacsalan, the NIA has constructed a recording runoff station 1 km upstream of the WRB station. So far the observation period is very short and the station gives no valuable further information to this study. The station construction itself is excellent.

Monthly flow statistics are shown in Figure 2.

TABLE 6 SUMMARY OF MEASURED DISCHARGES AT PAMACSLAN, 1965-1970

Date	Gauge Height m	Discharge m ³ /sec
03.05.65	.76	.575
17.10.65	1.05	4.67
30.05.66	.66	.224
28.01.67	.83	2.06
29.05.67	.66	.513
24.09.67	.60	.152
23.12.67	.77	1.70
10.05.68	.59	.227
21.10.68	.59	.213
24.12.68	1.09	1.65
28.03.69	.82	.163
22.08.69	.80	.152
22.09.69	.96	.872
25.10.69	.95	1.17
09.03.70	.90	.577
14.06.70	.96	.832

LOW FLOW ANALYSIS

Reliability of recorded low flow very much depends on the local condition of flow control at each station, the quality of the rating, the ability of the hydrometrist to detect any changes of datum, and to be aware of the existence of any water-diverting structures upstream. The geology in Bohol, especially within the Bilar catchment causes the rivers to go dry earlier than expected, due to underground drainage.

The Tigbao and the Pamacsalan gauging stations are both considered acceptable concerning low flow records. The Bugsoc station suffers from diversions upstream, while Bilar at Owac occasionally approaches zero flow. Immediately upstream of the confluence of Bilar and Loboc Rivers, the Bilar River is frequently observed dry. The absence of grass in the riverbed indicates that water occasionally passes down the river.

Frequency analysis has been applied to annual minimum flows for all four gauging stations (Table 7). Flow duration curves has been drawn (Figures 4-7). 90% firm flow is taken from the duration curves. The result is displayed on Fig 8, where the Bugsoc station plots considerably lower than might be expected. The Owac station is disregarded as not being representative of general conditions in Bohol.

One might interpret the curves as illustrating the incapability of a small mountainous catchment to retain water compared with the larger catchment. Loboc at Tigbao has a larger contribution from groundwater during low flow conditions. The diagram shown on Figure 8 is an attempt to achieve a relationship for Central Bohol.

It should be stressed that the relationship is considered to represent catchments with average extraction of water for irrigation as well as relatively little loss due to karst conditions. The number and location of gauging stations are far from satisfactory for the estimation of low flow at ungauged sites. The local demand for irrigation water is not possible to predict and depends very much on the distribution of rainfall in time and space during the low flow season. Therefore the value of the diagram is limited. To be able to estimate the minimum flow at various hydropower sites in Bohol, there is a pressing need for new gauging stations to be erected. Proposed new gauging stations are shown on Drawing 101, 121-123, 141-145.

Table 8 shows a few observations made at the end of a four week dry spell in Bohol. Disregarding the Bilar tributary of 226 km², the Janopol observation confirms the diagram. Wahig at Tipolo carried far less water than expected. The reason is probably heavy use of water for irrigation in the area as indicated in information given by the Provincial Irrigation Engineer. The Abatan-Sinigan at Camugau still had a relatively high runoff while very little water appeared at Causwagan. No general conclusion regarding hydrological parameters can be drawn from these figures. Estimates made of low flow at various project sites are rather based upon spot observations than the general curve of Figure 8, for the upper central part of the province.

TABLE 7 SUMMARY LOW FLOW ANALYSIS

Station	Catchment km ²	\bar{Q}_{\min} m ³ /sec	Q_{20}/\bar{Q}_{\min}	q_{20} l/sec/km ²	$Q_{90\%}/\bar{Q}$	$q_{90\%}$ l/sec/km ²	Q_{meas} m ³ /sec	Q_{\min} m ³ /sec
Tigbao	618	6.5	.65	6.8	.40	12.3	8.00	3.90
Owac	67	negligible	-	NIL	.05	.4	.022	NIL
Bugsoc	38	.13	.28	.96	.11	3.4	.106	.030
Pamacsalan	28	.14	.42	2.1	.13	5.7	.152	.050

\bar{Q}_{\min} - Average annual minimum
 Q_{20} - Minimum flow, 20 year return period
 $Q_{90\%}$ - Flow exceeded 90% of obs. period
 \bar{Q} - Average annual runoff
 Q_{meas} - Lowest discharge measurement taken
 Q_{\min} - " " observed by rating

TABLE 8 OBSERVATIONS MADE AT THE END OF A 4 WEEK DRY SPELL IN BOHOL DURING MAY 1980

Site	Catchment km ²	Estimated Flow m ³ /sec
Loboc at Janopol	465	1 -2
Wahig at Tipolo	480	less than .5
Abatan-Sinigan at Camugau	25	.25
Abatan-Sinigan at Causwagan	65	Approaching NIL

MEAN ANNUAL FLOW

Tigbao gauging station on Loboc River represents the hydrology typical for a cultivated region, while the Bugsoc and Pamacsalan stations in upper Wahig River demonstrate the high runoff from small mountainous catchments. Duration curves deduced are given in Figures 4 to 7.

The runoff at the Owac gauging station in Bilar River is heavily affected by the limestone formations. The recorded runoff from this catchment is substantially lower than should be expected, clearly demonstrated by an occasionally dry river bed upstream of the confluence with the Loboc River. No human activities or vegetation within the Owac catchment can possibly explain such a low runoff. An expected yield of say 40 l/sec/km² would reduce the topographic catchment upstream by about 80%, leaving only 13 km² effectively draining to Owac and 564 km² at Tigbao. Such a consideration would

raise the runoff at Tigbao from 31 l/sec/km² to 34 l/sec/km². Pending the erection of runoff stations in the Janopol/Rizal area, 34 l/sec/km² is adopted as representative for Loboc River at Tigbao.

A straight line log-log relationship between catchment area (km²) and runoff (l/sec/km²) is established for the estimation of average runoff at various sites in Central Bohol (Figure 8). The difference in runoff between Loboc and Upper Wahig is natural as average rainfall is higher in the mountain range than over the plateau. Due to lack of more adequate gauging stations, the curve has to be considered indicative only. As demonstrated at Bugsoc, local conditions may cause the average runoff to differ substantially from the curve estimation, especially in small catchments.

Another possibility is to consider a water balance, but this is not satisfactory as the relationship between rainfall and runoff is too complex. Correlations between rainfall and runoff stations are very poor, both on monthly and annual basis, probably due to the sparse distribution of raingauges as well as the lack of more long term rainfall records. Judging from the Tigbao records, the existing rainfall records indicate an average evapotranspiration of 900-1000 mm a year.

FLOOD STUDIES

Annual maximum of floods are published in the Water Resources Bulletins (1), and are summarised in Table 9. The figures are of varying quality, as they originate from different recording procedures. Full details of the floods are not available, except for date, time, maximum water level and the corresponding flow. Judging from the time of observation, the bulk of "peak floods" recorded at Tigbao and Pamacsalan are taken from daily readings while highest floods published for the Bugsoc and Owac stations are events from different hours during daytime. No specific comments indicate whether the figures are based on water stage recorder, crest recorder, flood lines etc.

Large extrapolations were evidently made on the rating curves derived from the maximum measured discharges to arrive at rated peak flows (Table 10). Hence, taking into account the Bulletin remarks made on published records, the confidence in estimates of floods is very limited indeed.

The values in Table 9 were ranked in order of magnitude and plotted on Gumbel distribution paper using the Gringorton formula for the return period (Figure 9). Curves were fitted by eye from which the 1/100-year peak floods as listed in Table 10 were derived. A logarithmic relationship between peak flood and catchment area is indicated in Figure 10. Considering the many possible sources of error already mentioned, an envelope curve has been drawn rather than the line of best fit. The Owac station plots well below the curve, which may be caused by a shorter period of record. The overall use of the relationship should allow for considerable error of estimation, say $\pm 50\%$.

TABLE 9 ANNUAL MAXIMUM RECORDED FLOODS

	TIGBAO		OWAC		BUGSOC		PAMACASALAN	
Year	Level m	Flow m ³ /sec	Level m	Flow m ³ /sec	Level m	Flow m ³ /sec	Level m	Flow m ³ /sec
1955	4.90	563			1.98	45.4		
56	4.00	383			1.98	54.6		
57	3.26	261			2.20	73.	1.20	11.2
58	1.93	108			1.86	49.1	1.20	11.2
59	3.80	347	1.82	14.1	2.16	70.6	1.15	10.2
1960	2.50	165	2.03	19.7	1.54	29.1	1.80	31.0
61	1.86	102	1.87	2.19	1.31	17.1	.85	4.8
62	3.99	381	3.64	63.0	2.39	87.4	2.70	91.0
63	2.77	195	3.42	53.6	1.20	12.6	.95	6.6
64	5.00	571	3.89	159	2.56	110	1.93	33.0
65	3.00	225	2.18	26.9	1.55	29.7	2.06	43.0
66	2.95	219	1.80	11.4	1.19	12.3	1.28	9.5
67	2.80	199	2.18	26.9	2.10	66.2	1.60	20.0
68	3.00	145	2.06	21.7	1.65	35.7	1.44	14.2
69	2.20	53	2.18	26.9	-	1.45	1.65	17.5
1970	2.50	84	2.05	21.3	.60	1.45	1.62	16.0
71	2.20	53	2.70	49.3	.98	6.21	1.78	24.0

TABLE 10 SUMMARY OF FLOOD ESTIMATIONS

Station	Instantaneous			coeff.	q_{100}	Bulletin	Remark
	Maximum Measured	Maximum Recorded	\bar{Q}_{\max}				
	m ³ /sec	m ³ /sec	m ³ /sec		1/sec/km ²		
Tigbao	52.0	571	238	3.5	1350	Good below 55 m	
Owac	4.1	159	45	3.0	2010	Good below 2 m ³	
Bugsoc	5.5	110	41	3.3	3560	Poor when backw	
Pamacsalan	4.7	91	23	3.5	2880	Good below 20 m	
						From 1969 poor	
						Good below 3 m ³	

\bar{Q}_{\max} Mean annual maximum flood

coeff Q_{100}/\bar{Q}_{\max}

q_{100} Estimated peak runoff

AVAILABILITY OF WATER AT POSSIBLE PROJECT SITES

As outlined in previous sections, the number of good quality gauging stations is too limited to allow the use of detailed hydrological methods for the estimation of hydrological parameters. The only possibility of estimating flows at ungauged sites at present therefore is by using a simple relationship between flow and catchment size, thereby introducing a certain inaccuracy, especially concerning extreme flows. Design floods should allow for 50% error of estimation.

Pending records from a denser network of gauging stations, it is considered that the most representative duration curve is the one deduced from the Tigba records, which is adopted for general use in this study. Some comments are necessary on individual projects. The need for additional gauging stations, particularly at proposed project sites can not be stressed too strongly (see Drawing 101, 121-123, 141-145).

Loboc River at Janopol

The major loss of water through underground drainage is assumed to take place in the Bilar catchment. It is not possible to pin-point the exact figure for the hydrological catchment area for the whole Bilar tributary. The previously mentioned 80 % correction of the Owac catchment corresponds to 24% correction of the total Bilar. Omitting Bilar completely is clearly not correct as water occasionally passes down the riverbed. The following table shows two extreme alternatives:

Correction of Bilar %	Eff.catchm. Bilar km ²	Eff.catchm. Janopol km ²	Estimated Janopol 1/sec/km ²	Runoff Janopol m ³ /sec
24	171	411	33	13.6
80	45	284	35	9.9

The average annual runoff at Janopol therefore will be somewhere between 10 and 14 m³/sec.

The contribution of water during low flow is assumed to arrive from the northern 240 km² only. Using Figure 8 minimum flow (1/20 year return period) is estimated as 1.2 m³/sec, which is of the same order of magnitude as was observed after a 4 week dry spell in Bohol during May 1980. Firm flow is estimated as 2.4 m³/sec.

Floods are assumed to pass down all tributaries with relatively little loss of water due to karst drainage. Figure 10 indicates about 700 m³/sec for the 100 year flood.

Loboc River at Rizal

Despite the existence of extensive limestone formations within the 230 km² Rizal catchment, the adjacent gentle topography would allow only minor loss of water to take place along the catchment boundaries. Due to the intense irrigation activities in the Carmen area, the indicated minimum flows could prove somewhat optimistic during pronounced dry spells. Considering the dry spell observation at Tipolo the minimum estimate has been reduced accordingly.

Wahig River at Tipolo

No karst problems are anticipated. Minimum flow can be estimated according to the spot observation.

Abatan-Sinigan River

It is expected that the river system is exposed to the same type of climate as the Loboc River.

As mentioned in previous sections, there is a trend of average rainfall reducing from east to west with elevation. The fact that the established relationships between flow and catchment size represent eastern catchments mainly, demonstrates the need for a gauging station to be erected in the Abatan-Sinigan River system.

Flow estimations using the relationship directly may lead to somewhat optimistic figures, as they would be biased by the Pamacsalan runoff where the average altitude is considerably higher. It is considered prudent, therefore, to adopt average runoff comparable with the Tigbao catchment, i.e. 30-35 l/sec/km², approaching the lowest estimate towards south or extreme west.

Minimum flows are indications only, somewhat influenced by spot observations. Firm flows are estimated from the Tigbao dimensionless duration curve.

TABLE 11 HYDROLOGICAL SUMMARY OF PROJECT SITES

Project	Area km ²	Mean Flow m ³ /s	Minimum Flow m ³ /sec	Firm Flow m ³ /sec	Design Flood m ³ /sec
Loboc/Janopol	465	10-14	1.2	2.4	700
" /Rizal	230	8.3	.5	2	450
Wahig/Tipolo	480	17	.5	5.5	720
Abatan/Camugau	25	.7	NIL	.3	100
" /Baunos	110	3.8	.5	1.5	280
" /Causwagan	65	2.3	NIL	.9	200
" /Tubig Daku	25	.7	NIL	.3	100

Wahig River

See Drawing Nos. 101, 122 and 143.

National Irrigation Administration (NIA) has recently erected a new recording gauging station upstream of Pamacsalan. If the existing plans for a dam and diversion tunnel in this area is accomplished, the present gauging station near Pamacsalan will be recording only a fraction of the total catchment runoff. The Bugsoc gauging station is already affected by upstream channels diverting the water for irrigation purposes. This should altogether demonstrate the need for a gauging station near the Tipolo project area.

An existing gauging station immediately upstream of the proposed intake site should be upgraded by a relocation of the station. The gauge needs a better flow control and more firm support of the gauge staff.

A suitable site is found about 100 m upstream of the proposed tunnel outlet. A crest recorder should be installed.

Abatan-Sinigan River

See Drawing Nos. 101, 123, 144 and 145.

There are today no runoff gauging station operating within the Abatan-Sinigan River catchment. Considering the assumptions already made in this report, concerning the catchment yield near the proposed Causwagan and Baunos project sites, the establishment of new gauging stations in the river system is of utmost importance.

Two sites are considered adequate. Site one is located near the proposed Causwagan weir site. A footbridge about 100 m upstream of the weir site would serve as a good support for a low flow gauge plate and a crest recorder.

Site two is located immediately downstream of a bridge about 1.5 km upstream of the proposed Baunos weir site. The bridge is partly broken down. As parts of the low flow control might be liable to scouring effects during floods, the rating should be checked by frequently taking discharges measurements.

Of the two sites, the first one has got a better flow control, as it is formed by rock bars in the river. Considering differences in catchments size and possible local underground drainage, both gauging stations should be established.

PROPOSED RIVER GAUGING STATIONS

See Drawing Nos. 101, 121-123, 141-145.

General

As stated previously, the numbers, quality and location of gauging stations in Bohol today is far from satisfactory. An upgrading of the existing gauging stations would be useful but not sufficient. There is a pressing need for new stations to be erected in the near proximity of the proposed project sites.

The Hydrological Field Reconnaissance revealed the existence of several acceptable sites for new gauging stations.

Loboc River at Janopol

See Drawing Nos. 101, 121 and 141.

The karst geology and possible underground drainage in the area, requires the gauging station to be located relatively close to the actual project site. A suitable control is found about 200 m downstream of the proposed weir site. This part of the river consists of rapids followed by a deep pool and a drop of 2-3 m. The top of the waterfall would serve as a good water level control during both high and low flow conditions.

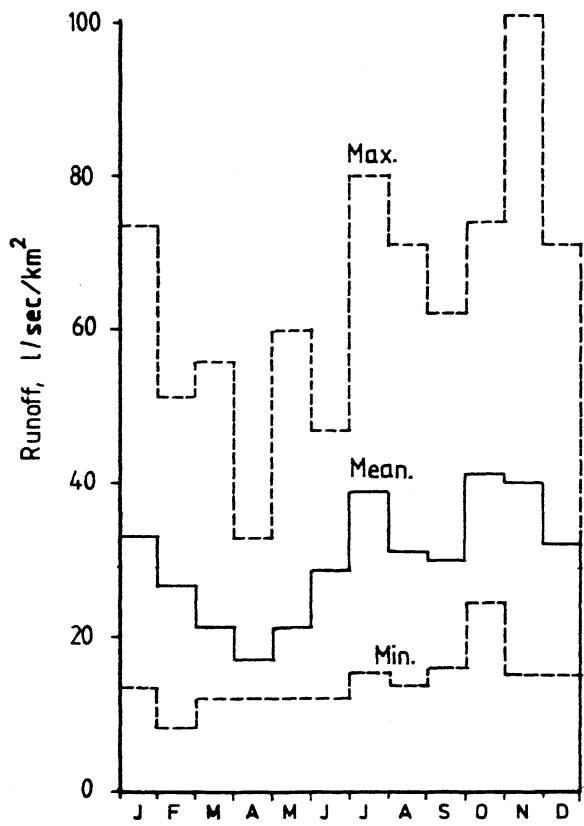
The topography of the river banks seems favourable for a proper recorder housing to be constructed. Still, an ordinary gauge plate read twice a day and supported by crest recorder observations, would give adequate information.

Loboc River at Rizal

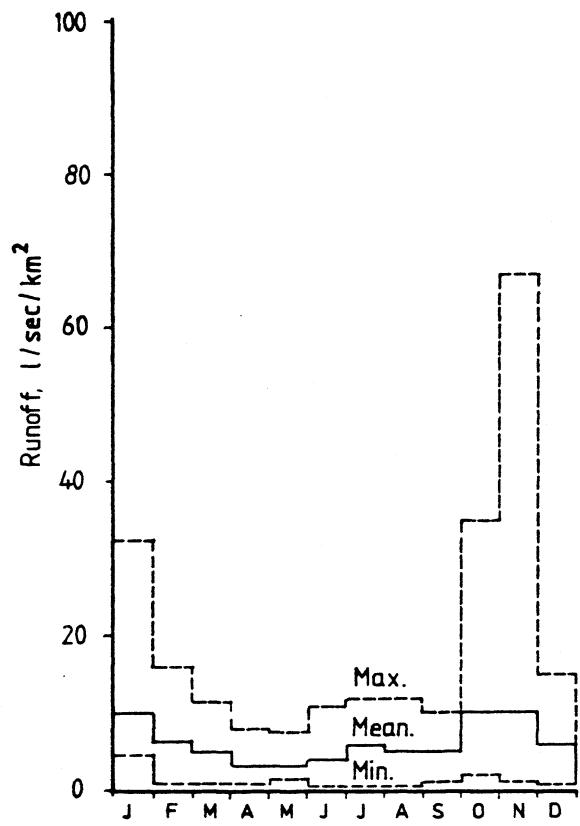
See Drawing Nos. 101, 121 and 142.

Near the Rizal project the only favourable site for a gauging station is located 300-400 m upstream of the proposed weir site where a suitable low flow control exists upstream of several consecutive rapids. During flood periods the water level at the gauge site is probably controlled by hydraulic obstructions further downstream. There are no suitable rocks nearby for recorder housing support. The station should therefore be designed as a multiple gauge plate station, read twice a day. A crest recorder should be installed.

Together with the proposed Janopol gauging station the Rizal gauging station would allow for a closer study of the contribution of water from the Bilar tributary, as well as more reliable records regarding the Loboc River catchment upstream of the junction.

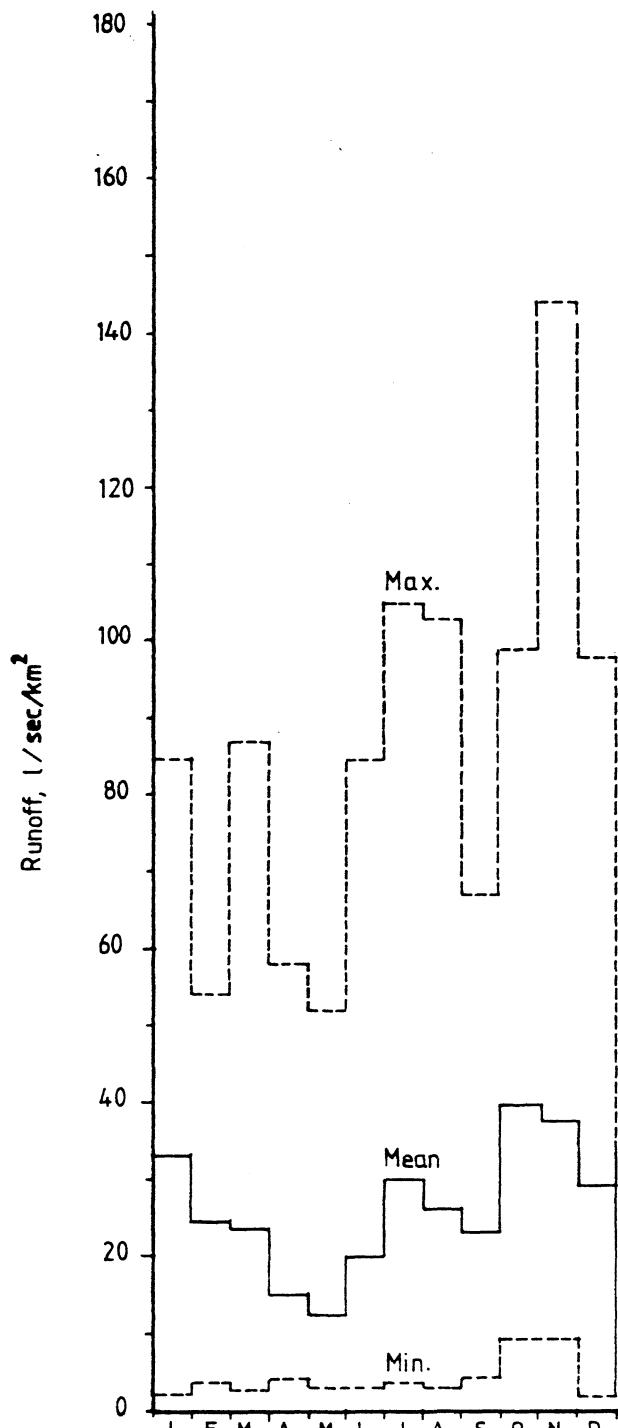


LOBOC AT TIGBAO
618 km²

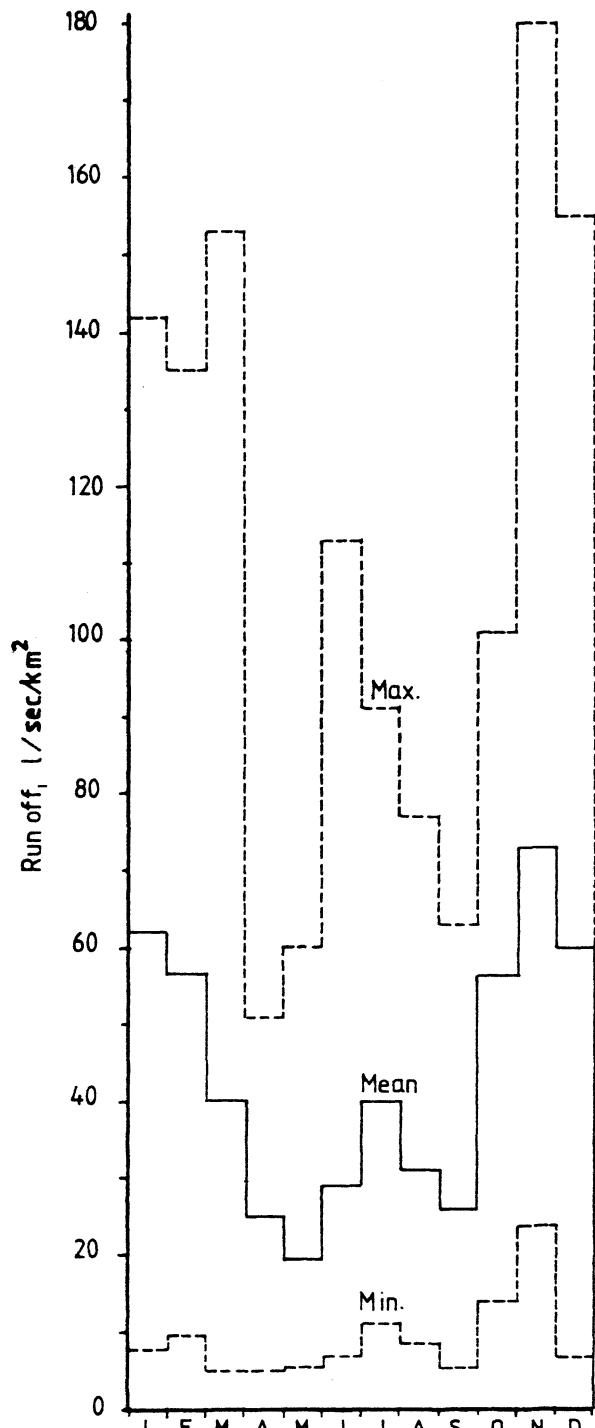


BILAR AT OWAC
67 km²

FIGURE 1
MONTHLY RUNOFF
LOBOC



WAHIG AT BUGSOC
38 km^2



PAMACALAN AT PAMACALAN
28 km^2

FIGURE 2
MONTHLY RUNOFF
WAHIG

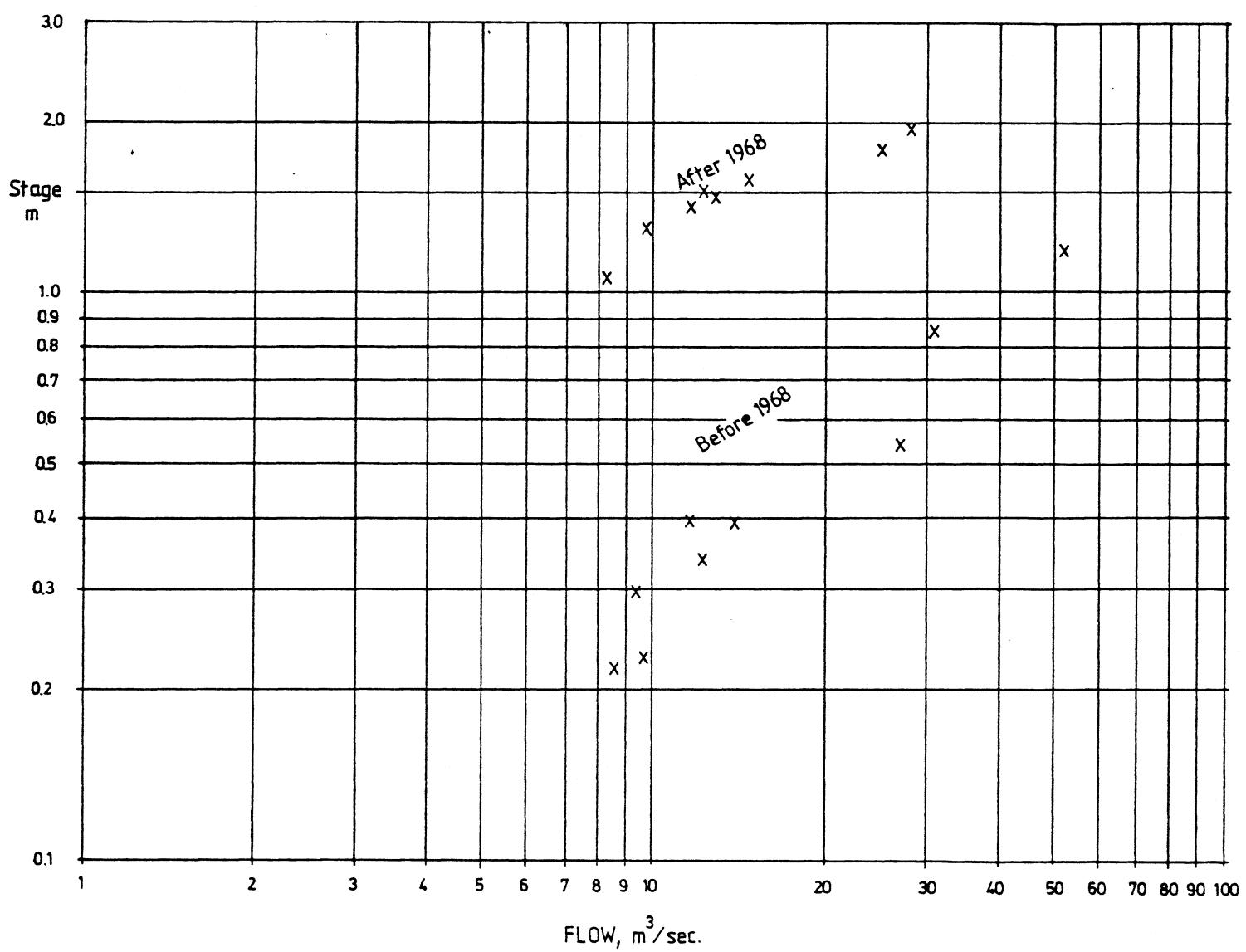


FIGURE 3
FLOW MEASUREMENT
LOBOC AT TIGBAO

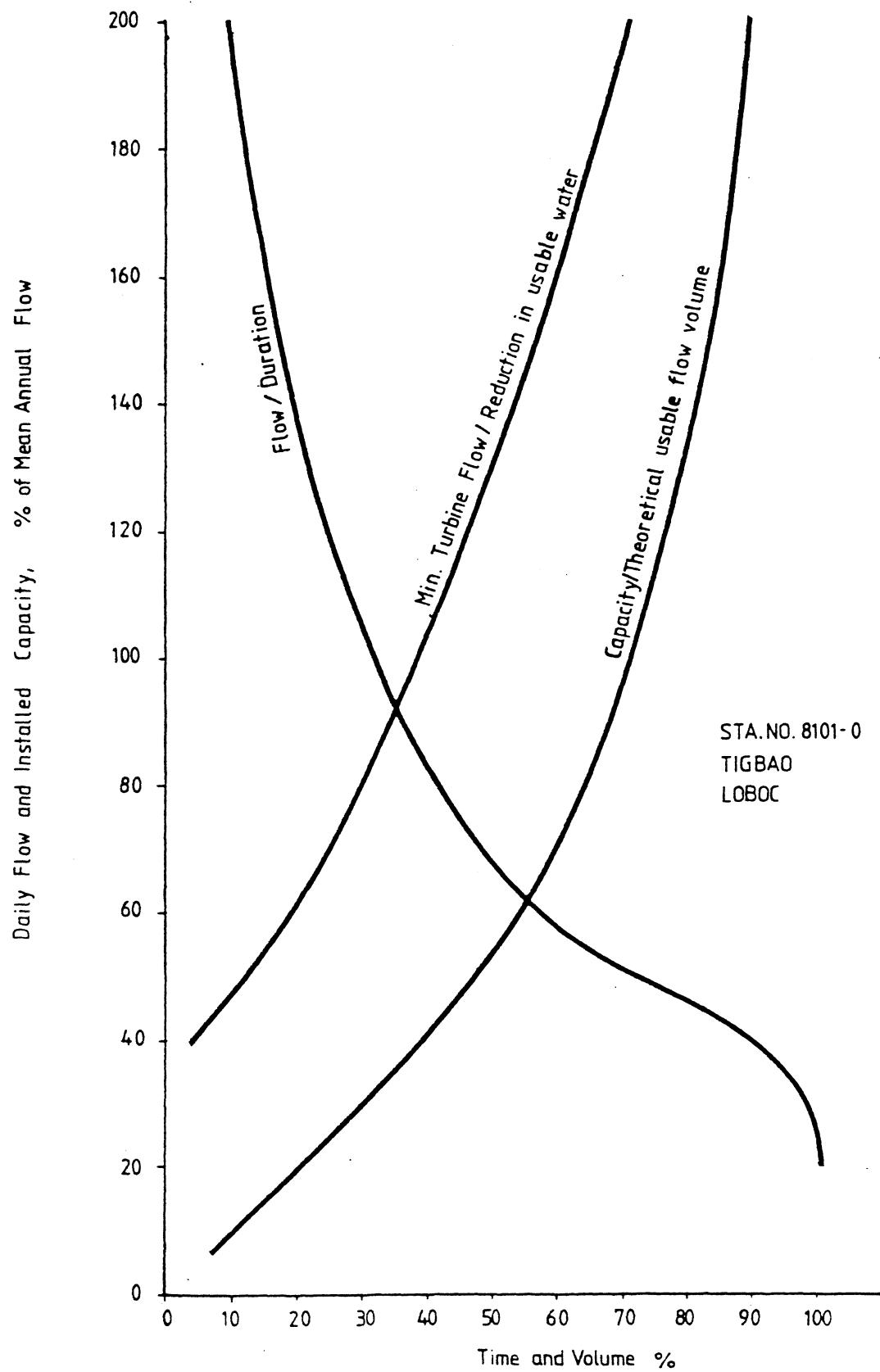


FIGURE 4
FLOW DURATION AND OUTPUT
LOBOC AT TIGBAO

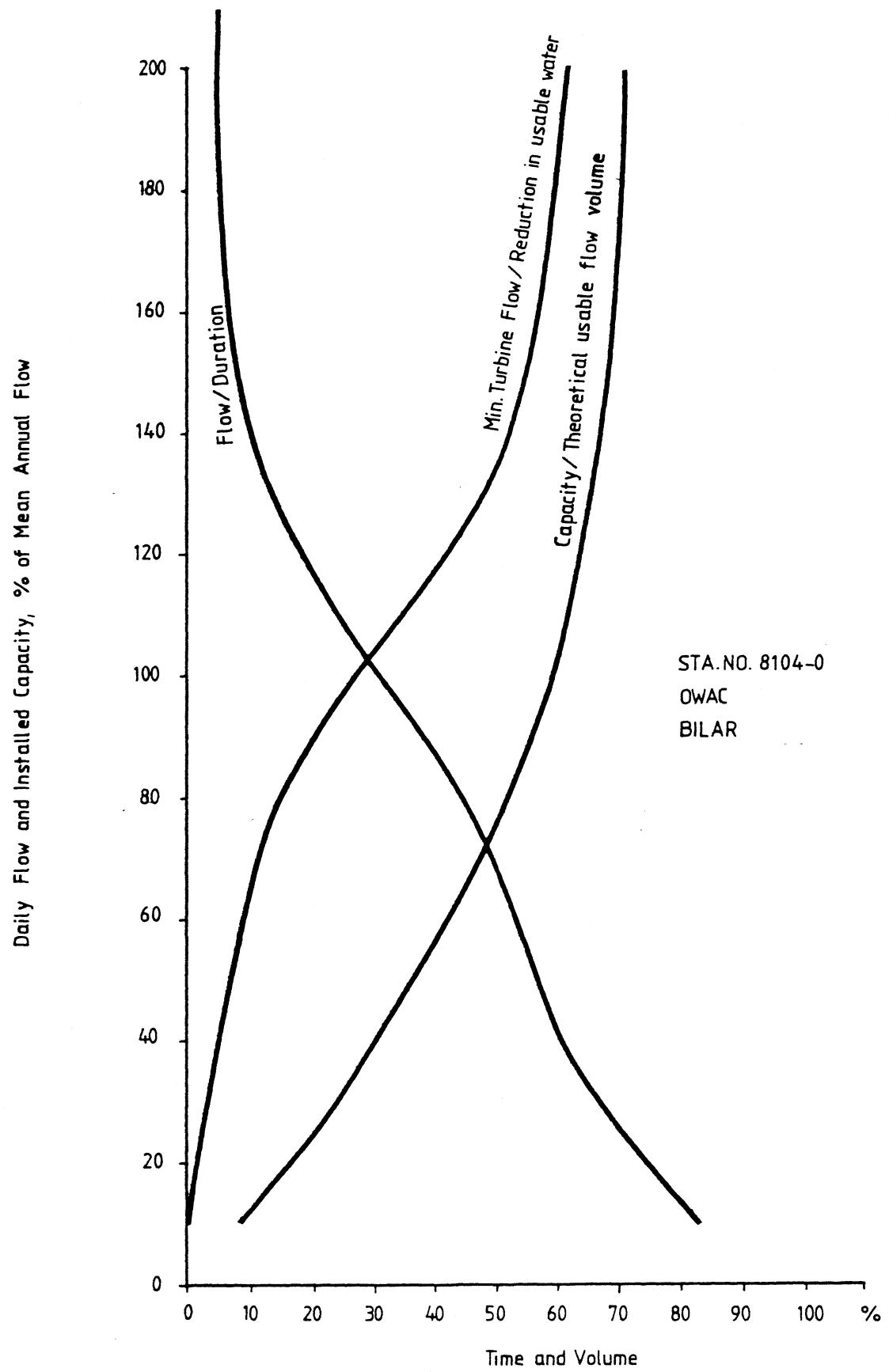


FIGURE 5
FLOW DURATION AND OUTPUT
BILAR AT OWAC

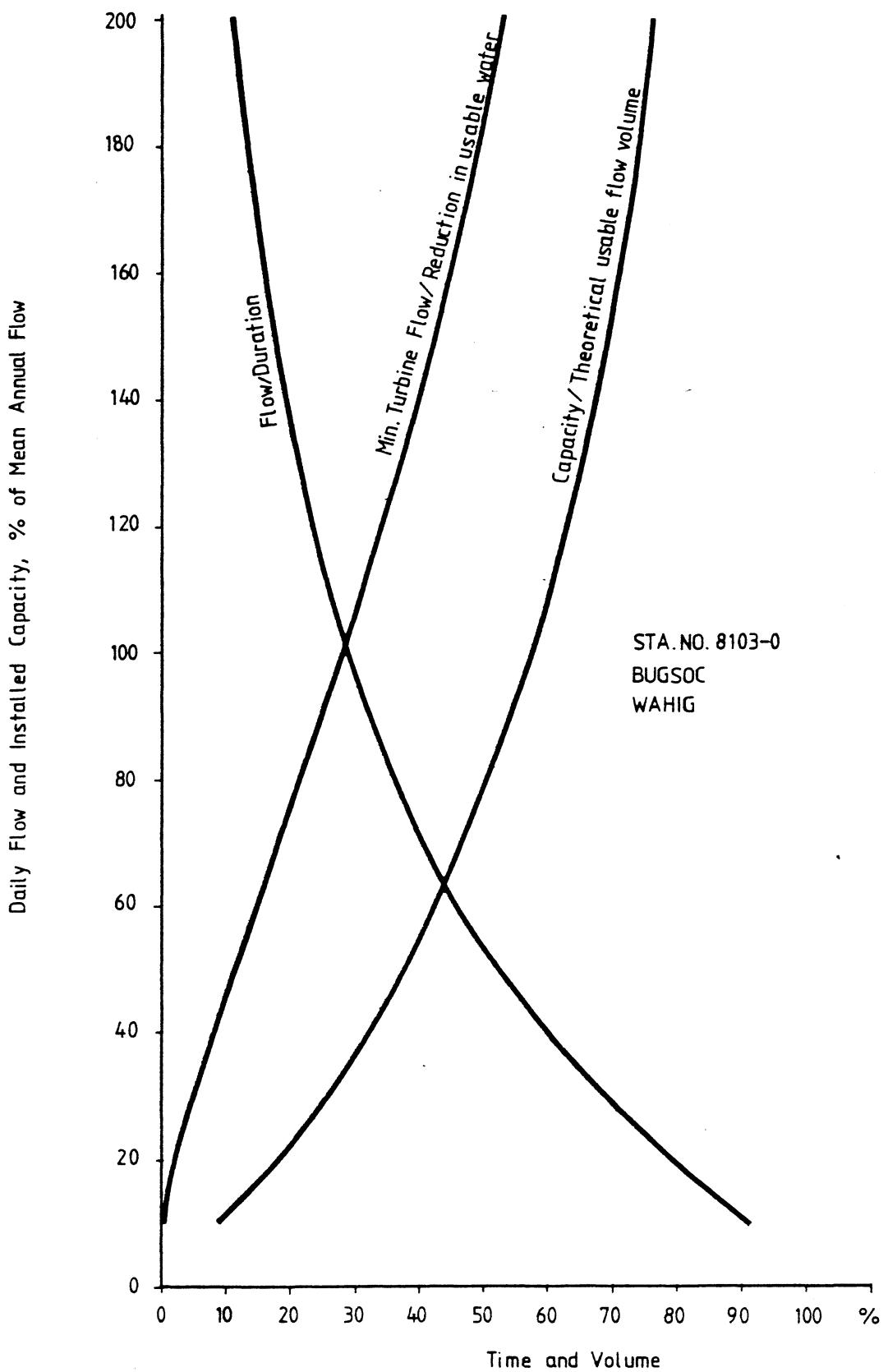


FIGURE 6
FLOW DURATION AND OUTPUT
WAHIG AT BUGSOC

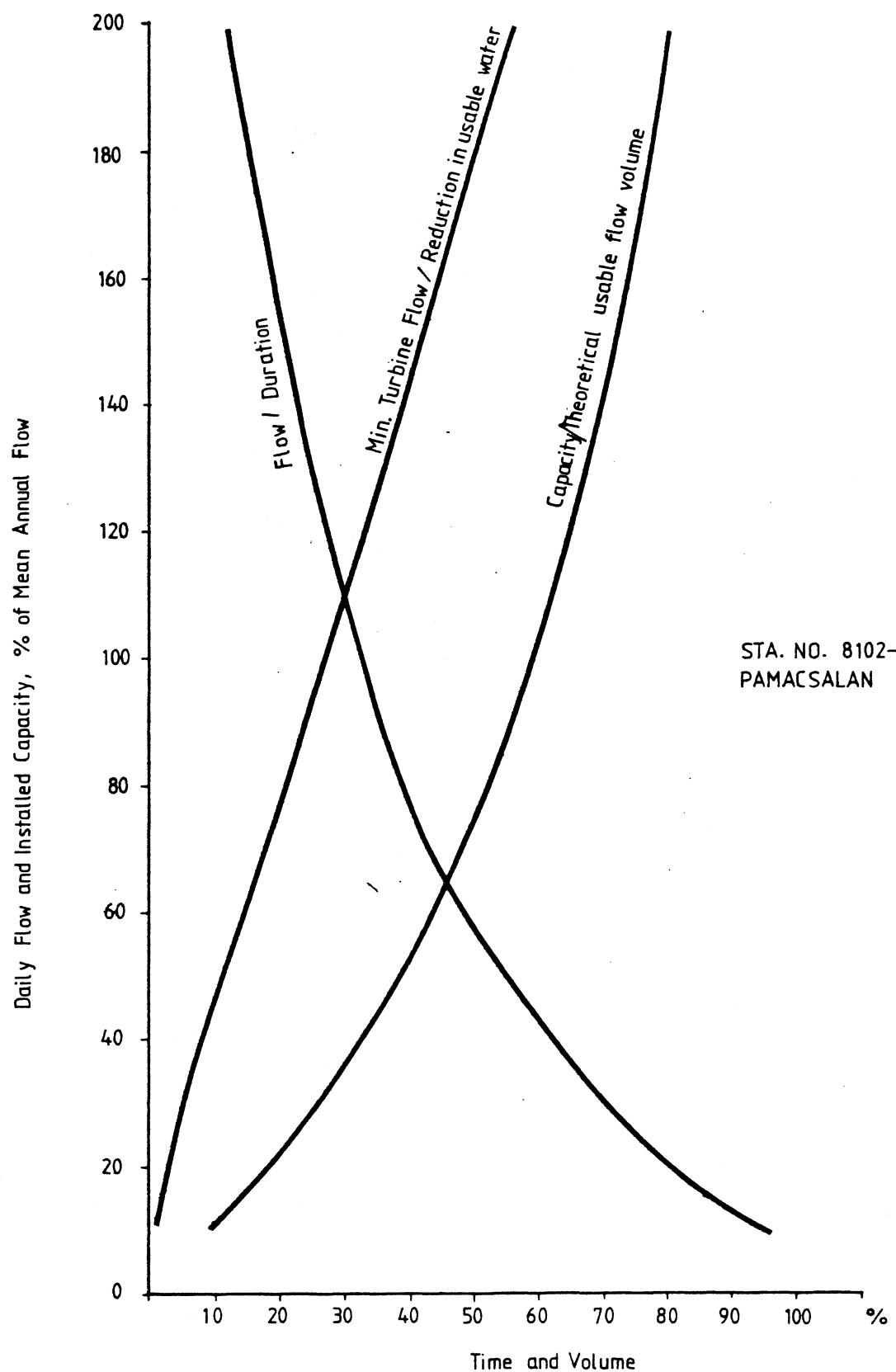
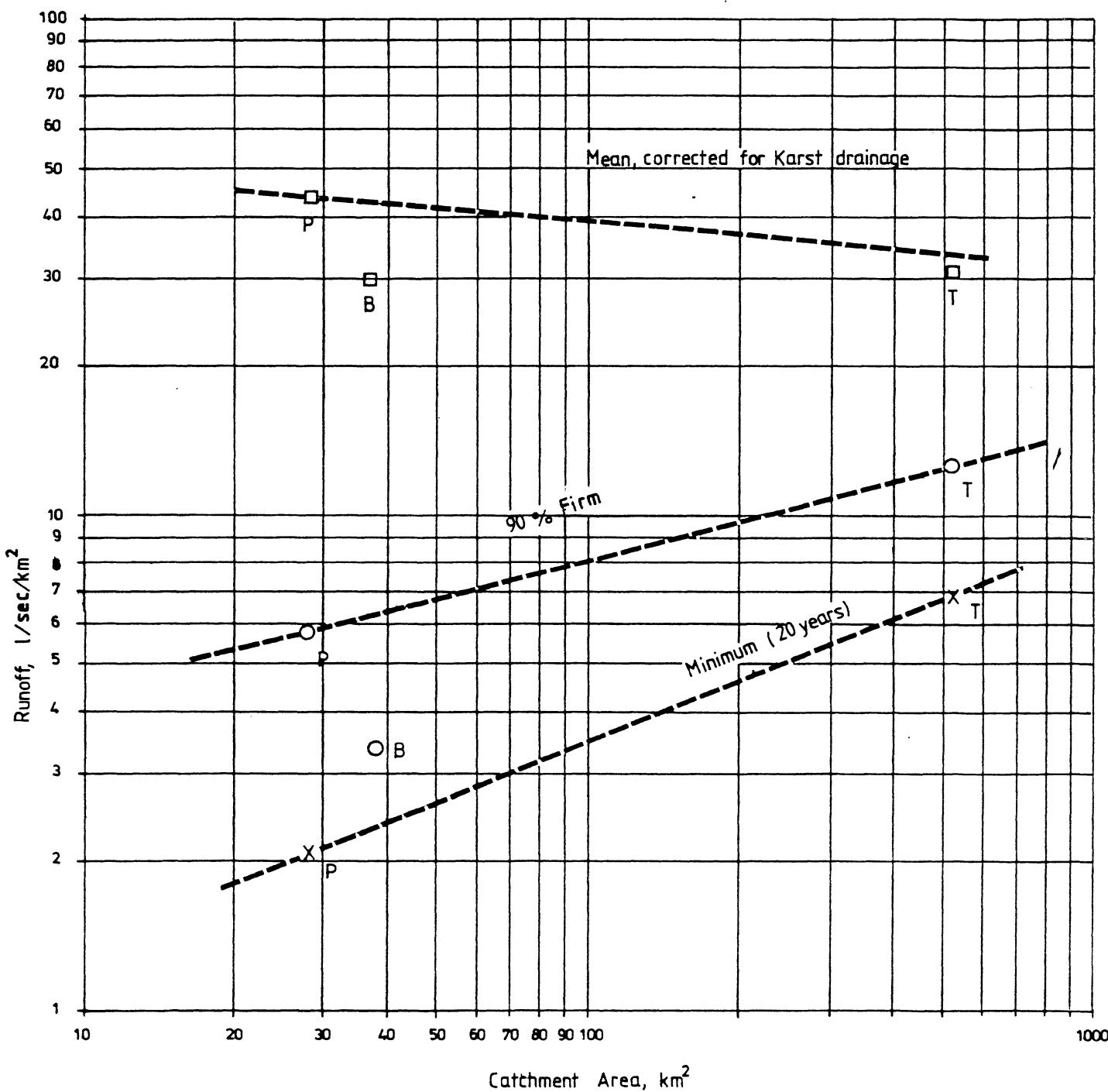


FIGURE 7

FLOW DURATION AND OUTPUT
PAMACSLAN



T - TIGBAO
 B - BUGSOC
 P - PAMACSLAN

FIGURE 8
RUNOFF / CATCHMENT AREA

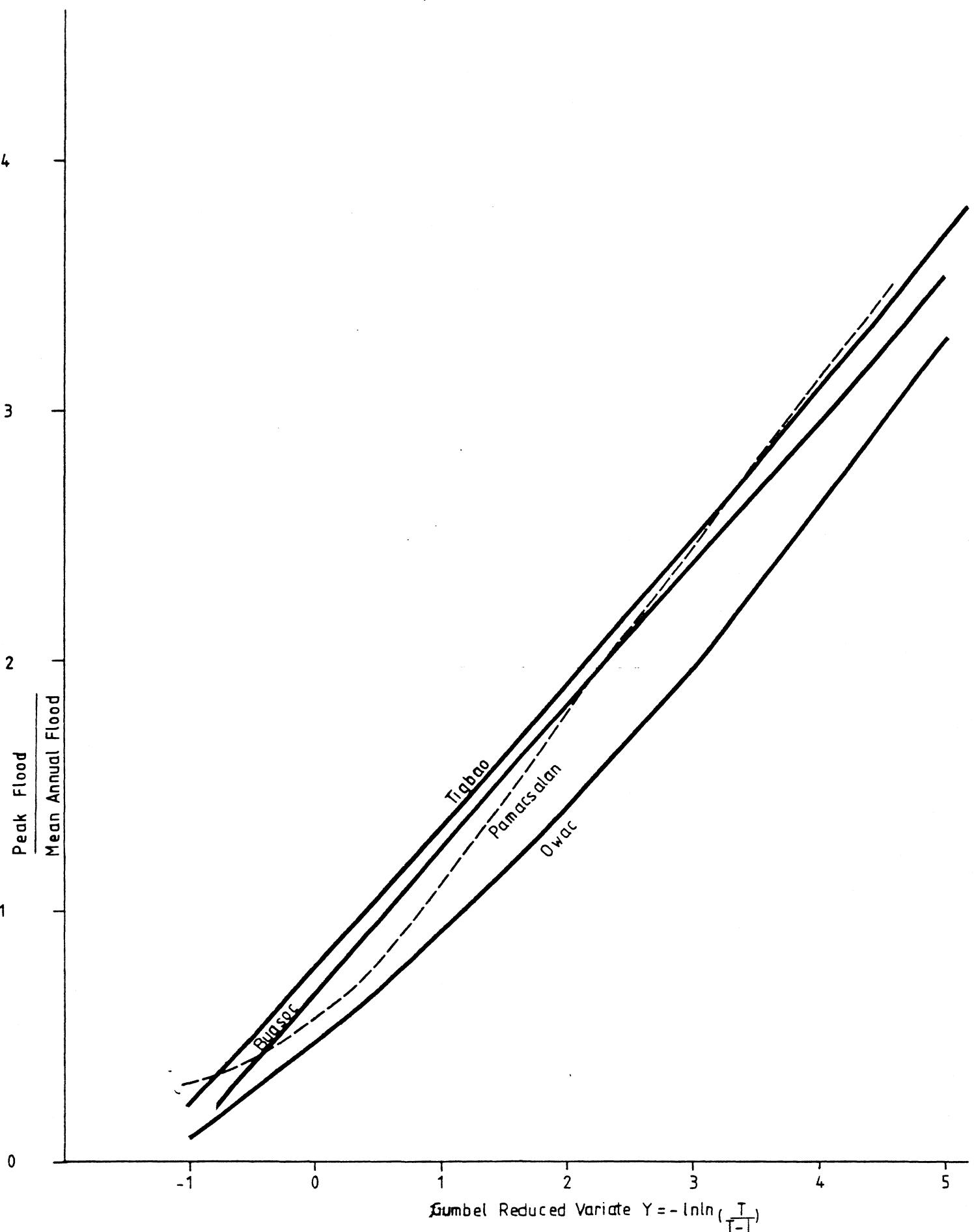
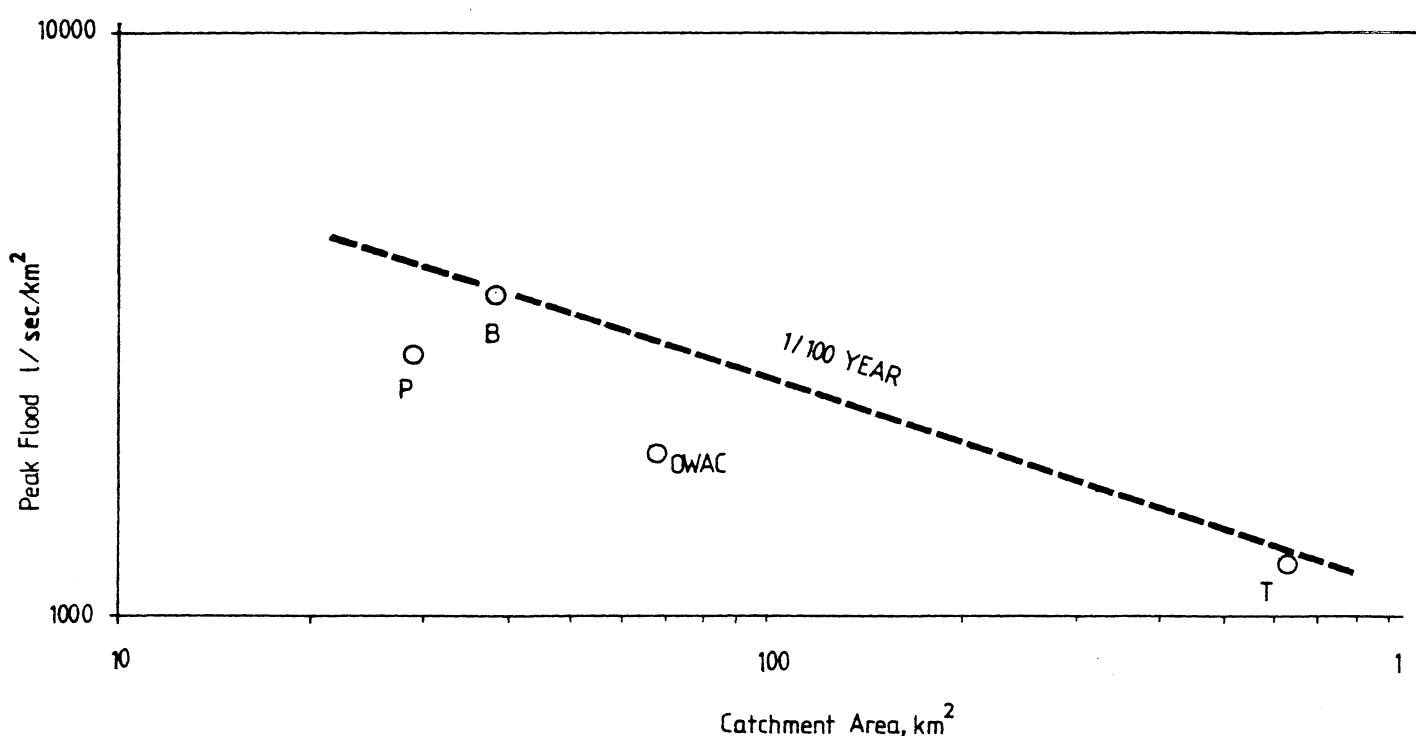


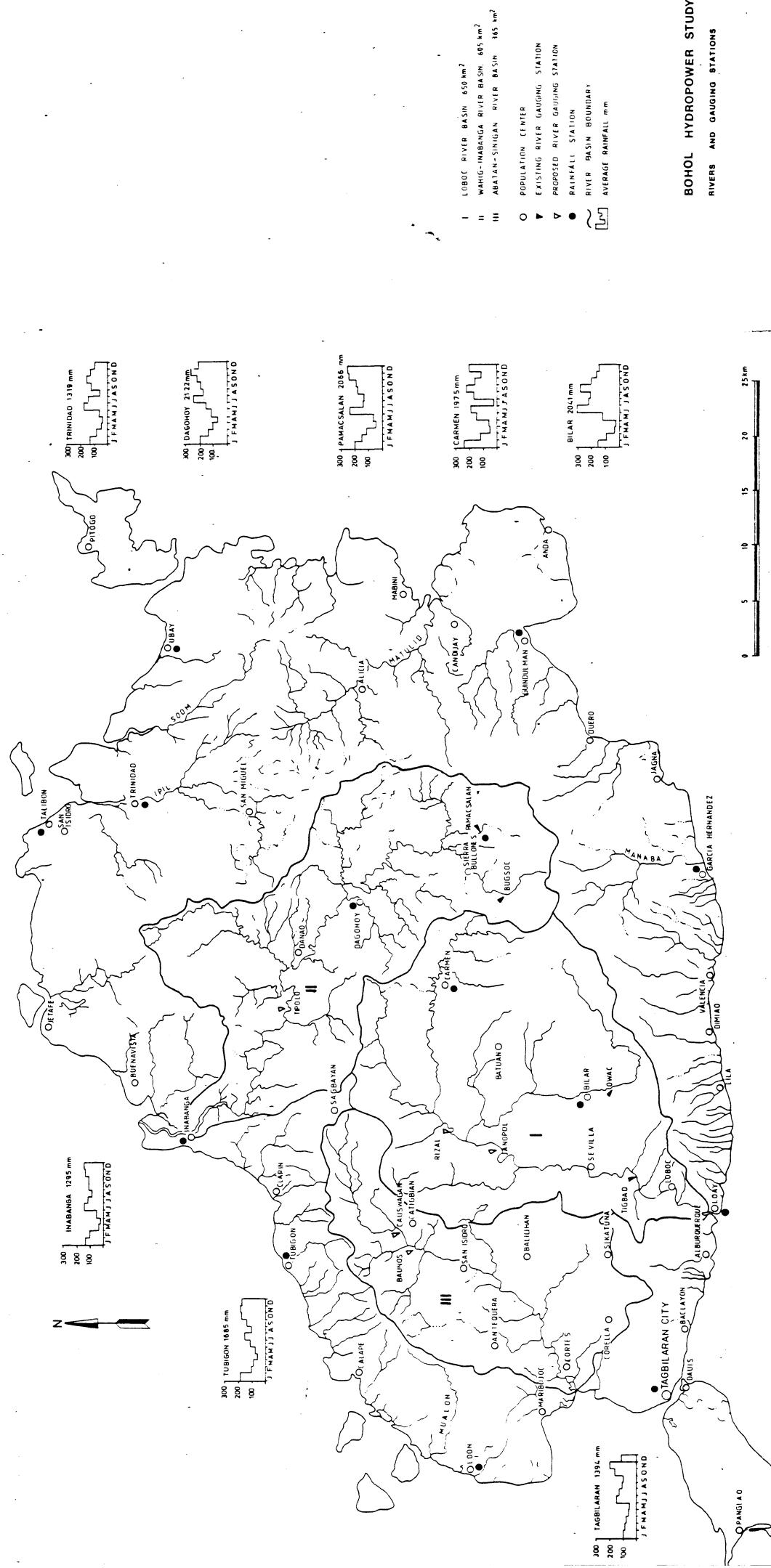
FIGURE 9

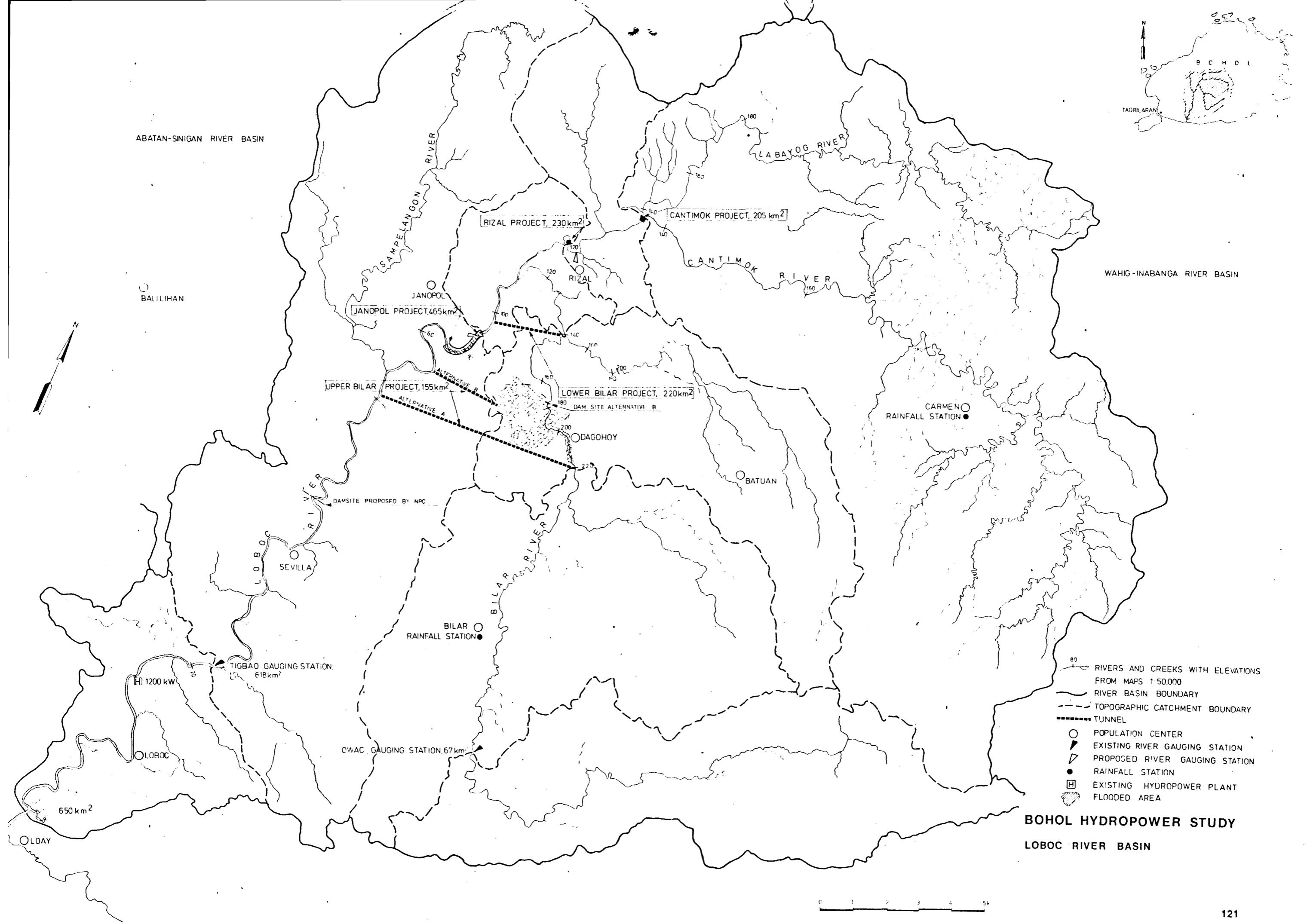
DIMENSIONLESS FLOOD FREQUENCY

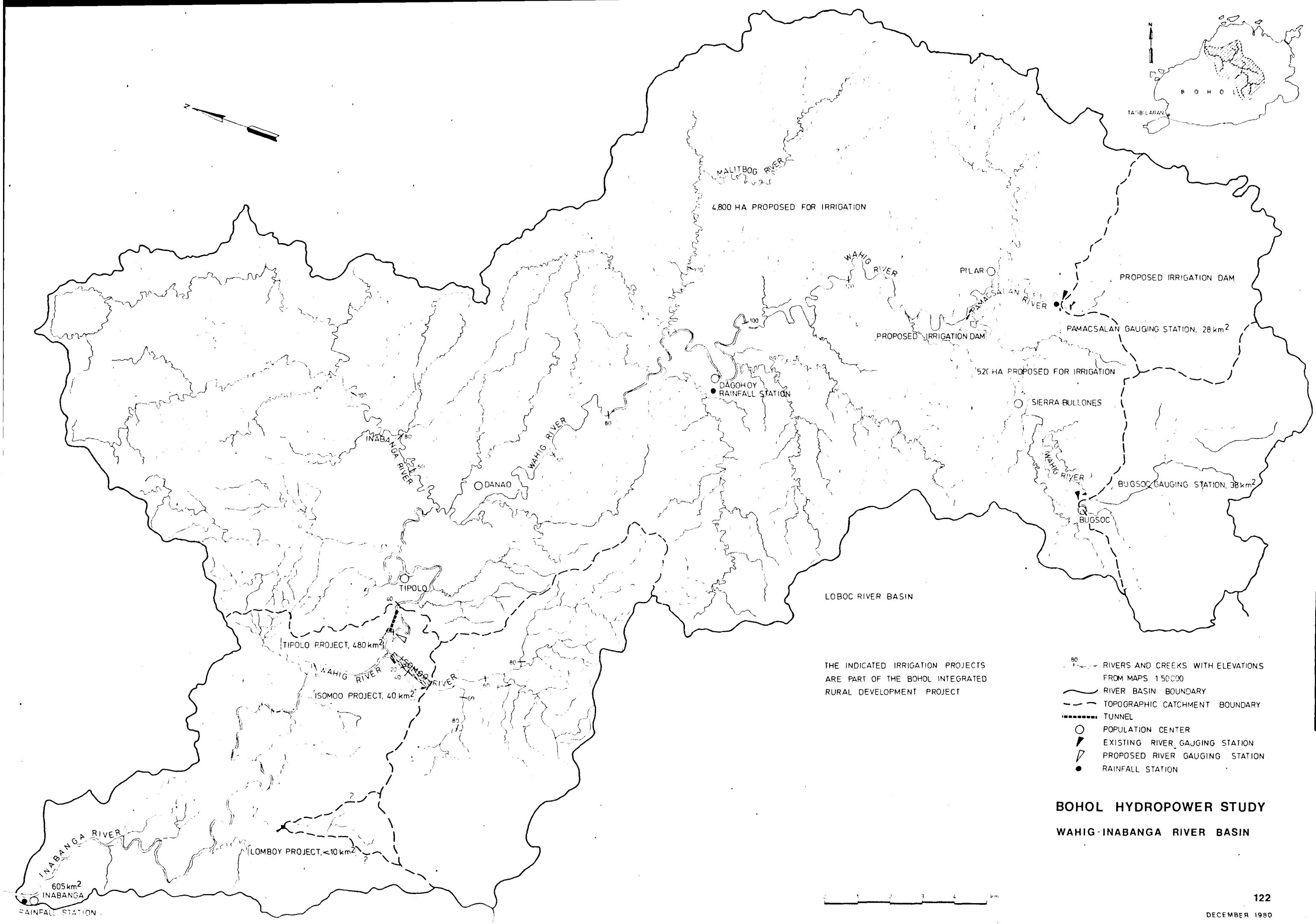


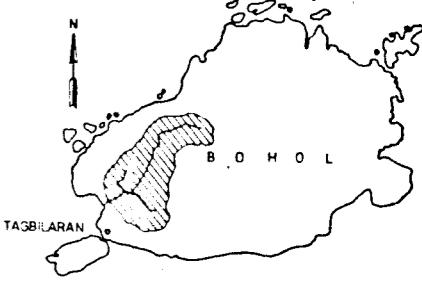
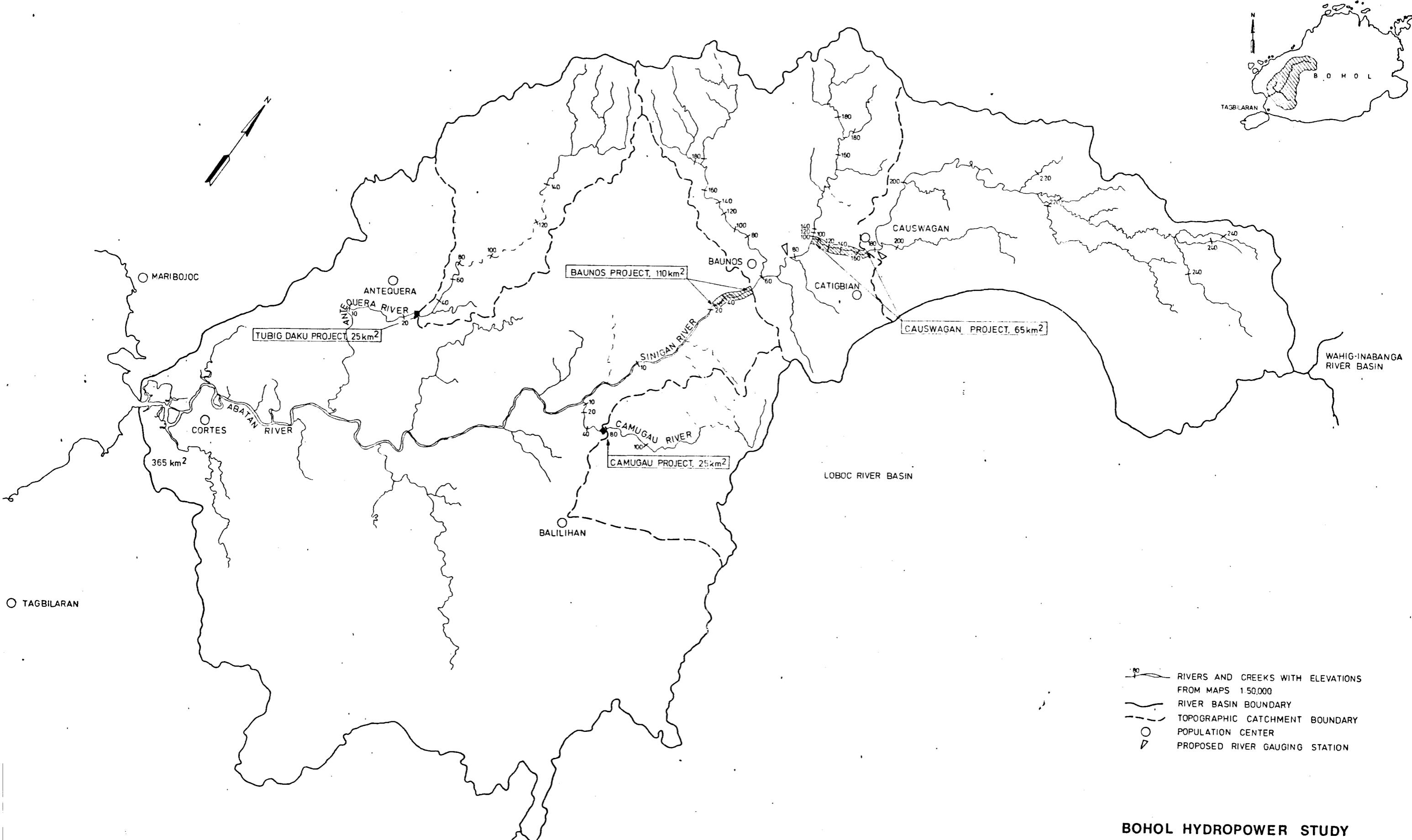
T - TIGBAO
 B - BUGSOC
 P - PAMACSLAN

FIGURE 10
DESIGN FLOOD/ CATCHMENT A.

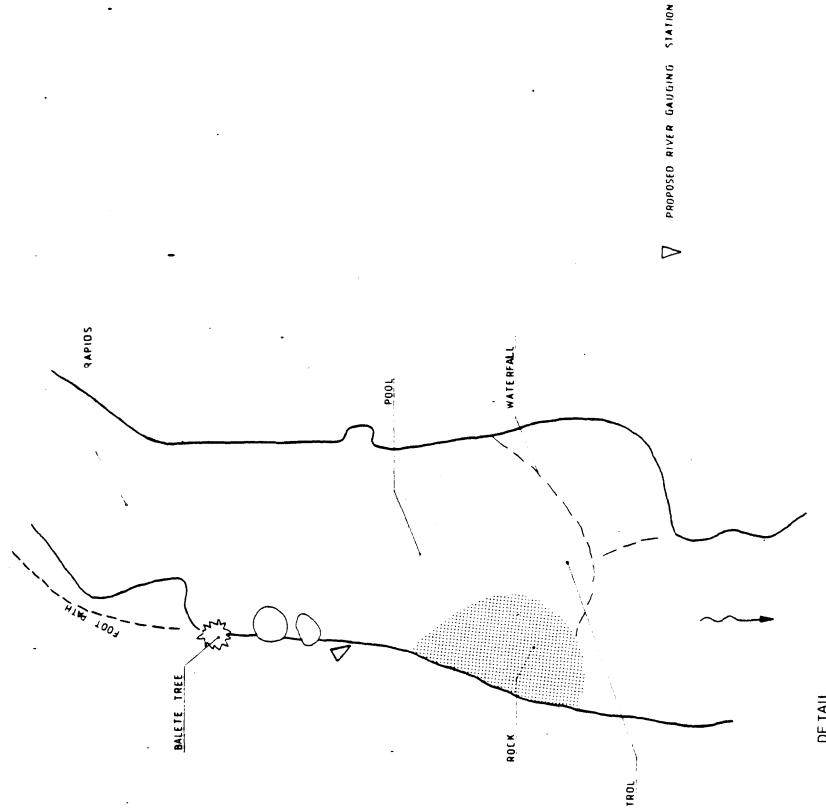




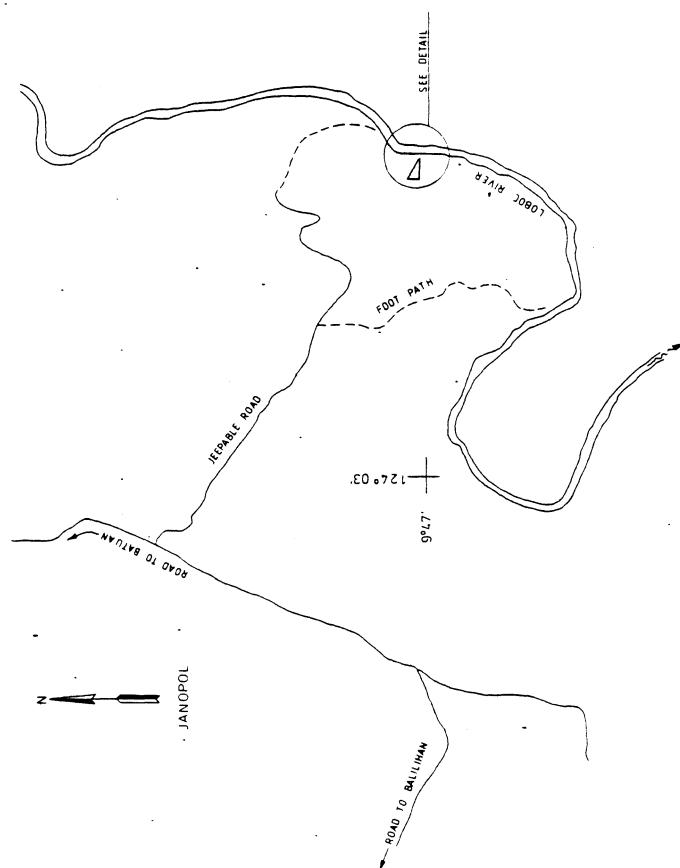




BOHOL HYDROPOWER STUDY
ABATAN-SINIGAN RIVER BASIN



DETAIL

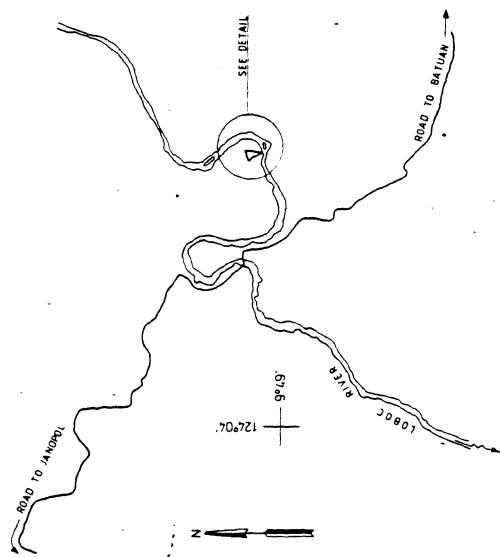
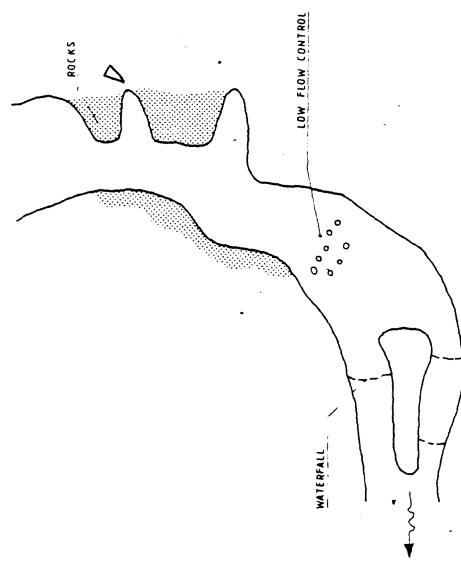


LOCATION MAP

BOHOL HYDROPOWER STUDY
PROPOSED RIVER GAUGING STATION
LOBOC RIVER AT RIZAL

142
DECEMBER 1980

DETAIL

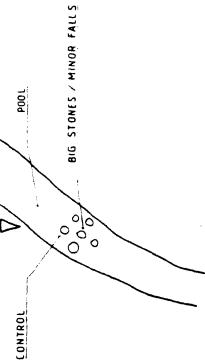


PROPOSED RIVER GAUGING STATION

143
REF ID: A 189

BOHOL HYDROPOWER STUDY
PROPOSED RIVER GAUGING STATION
WAHIG-HABANGA RIVER AT TIPOL

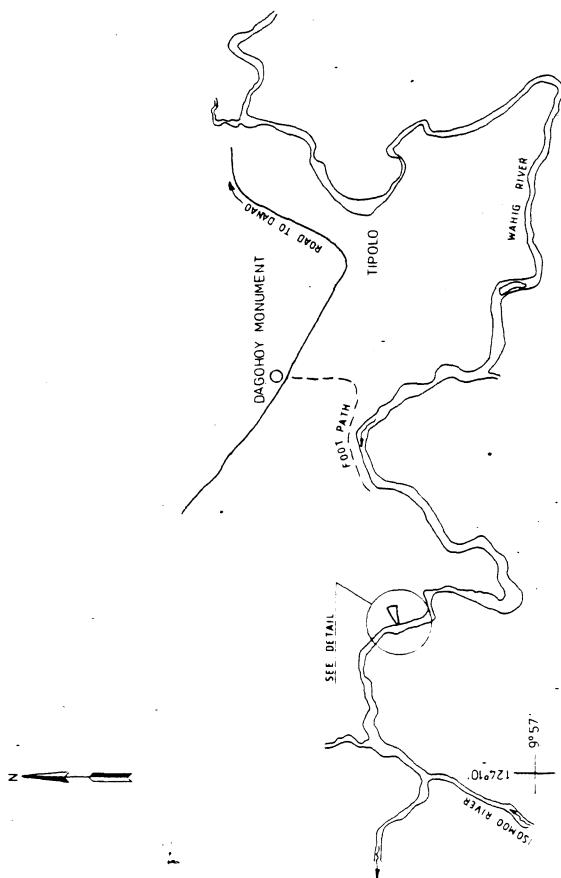
▼ PROPOSED RIVER GAUGING STATION

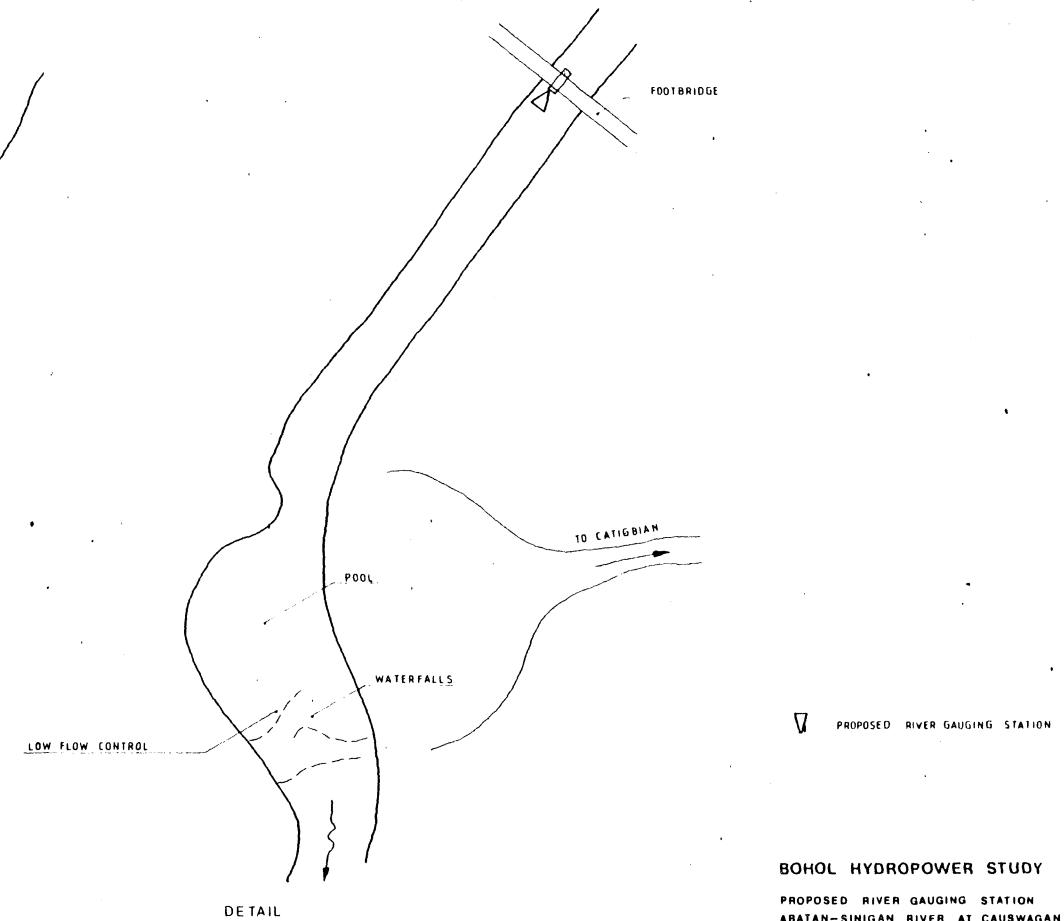
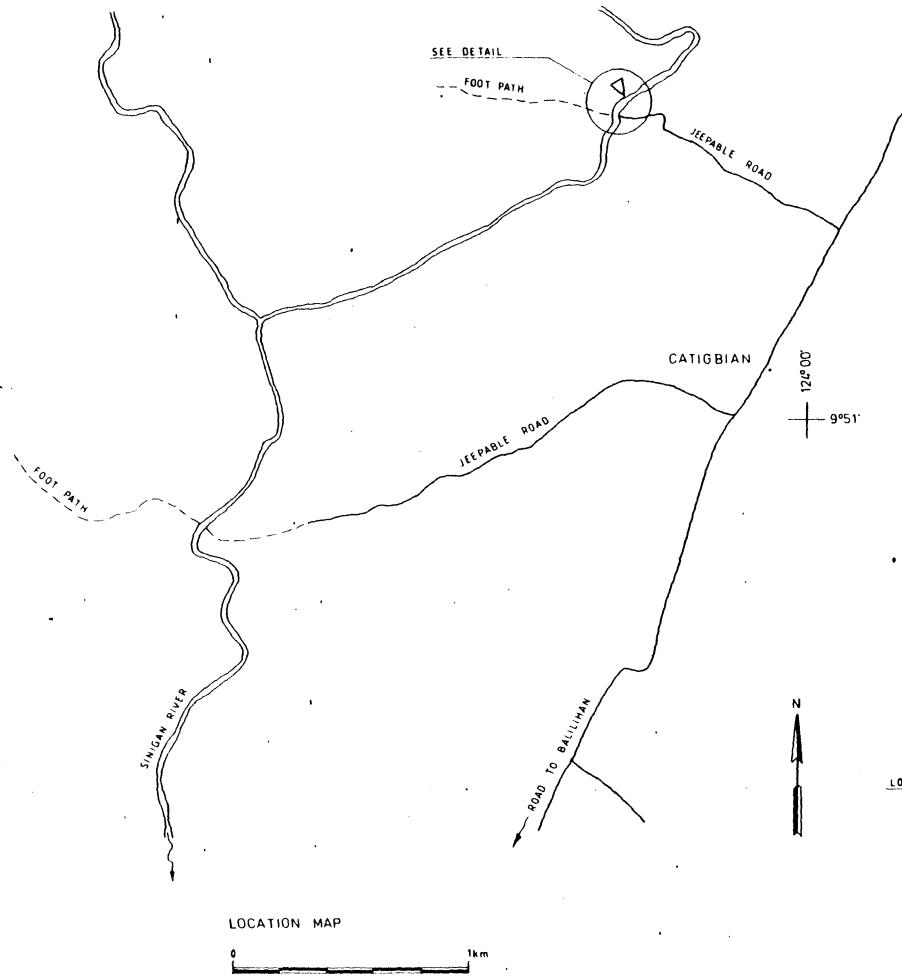


DETAIL

LOCATION MAP
1 km

SEE DETAIL



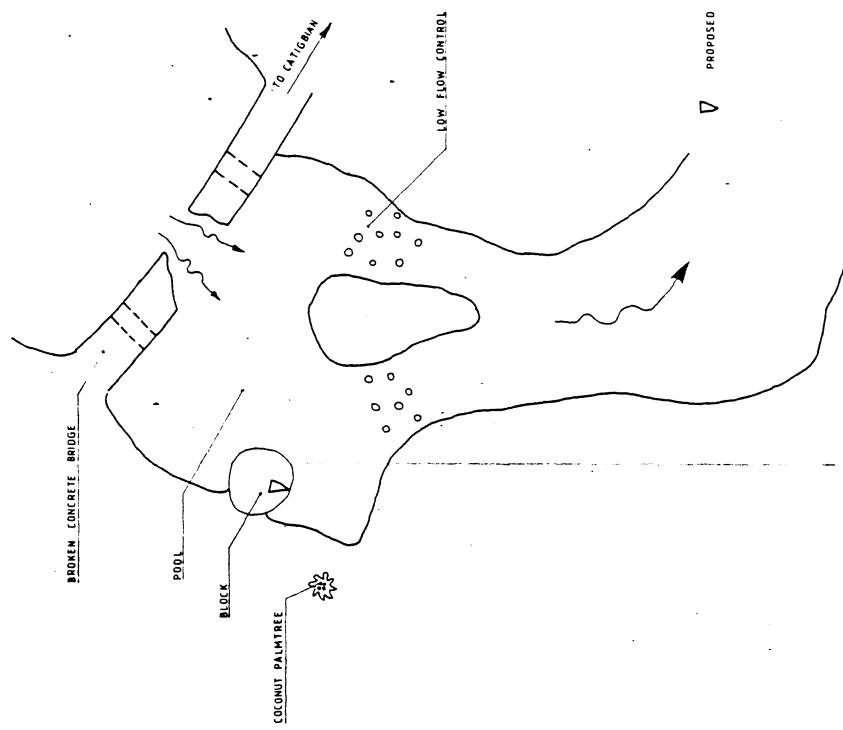


BOHOL HYDROPOWER STUDY
PROPOSED RIVER GAUGING STATION
ABATAN-SINIGAN RIVER AT CAUSWAGAN

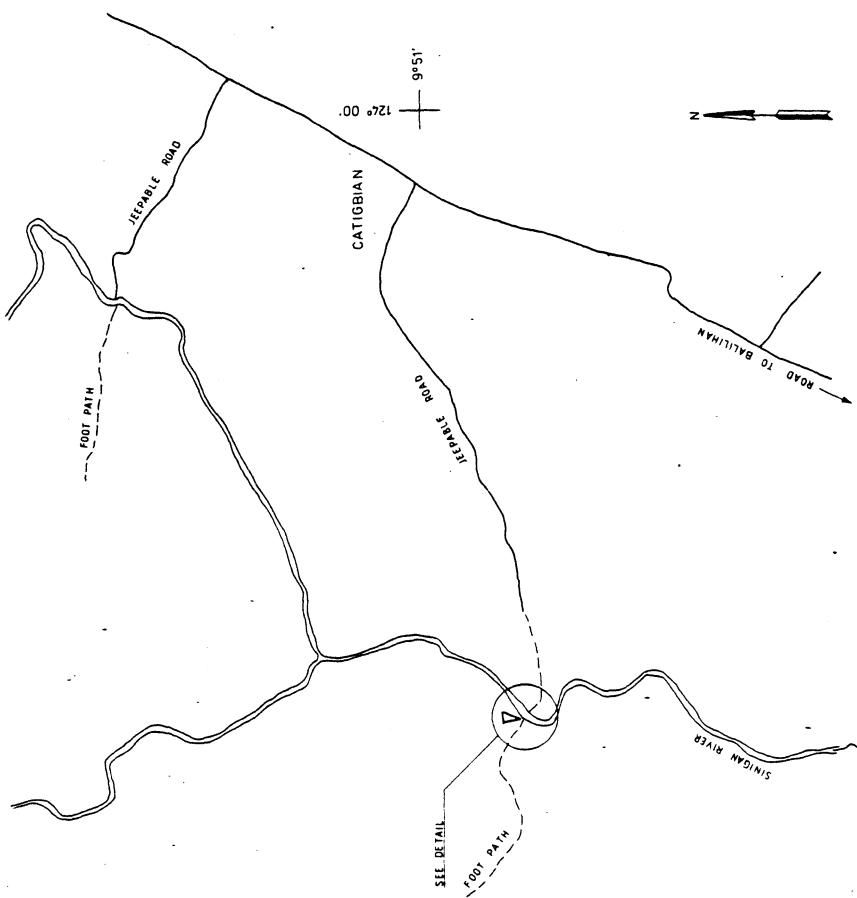
BOHOL HYDROPOWER STUDY
PROPOSED RIVER GAUGING STATION
ABATAN-SIMIGAN RIVER AT BAUNOS

145
DECEMBER 1980

DETAIL



LOCATION MAP
1km



APPENDIX A

RAINFALL - MONTHLY AND ANNUAL SUMMARIES

TAGBILARAN, MONTHLY RAINFALL IN MM.

<u>YEAR</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
1902	-	-	-	-	-	224	1380	67	472	1142	104	59	-
	164	21	36	18	162	183	395	188	100	173	142	305	1957
	93	93	76	203	70	67	74	75	79	380	260	36	1505
1905	11	19	13	11	85	68	-	133	100	111	166	99	-
	79	17	17	5	79	277	95	109	131	110	161	233	1313
	41	143	197	10	33	68	164	108	31	150	118	160	1222
	91	106	82	30	47	195	231	40	311	158	205	160	1654
	48	51	67	15	57	79	98	166	225	167	282	383	1635
1910	163	161	95	172	99	205	69	169	130	145	214	208	1827
	82	125	127	-	127	-	98	8	178	-	-	32	-
	5	156	5	58	2	47	565	251	227	200	201	40	1754
	30	-	-	35	16	-	-	139	119	-	131	119	-
	62	0	-	15	28	112	57	192	84	107	97	74	-
1915	22	0	4	20	59	-	133	118	294	212	74	98	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	118	92	-	38	142	159	-	173	161	216	252	220	-
	202	48	84	173	54	231	27	75	79	189	110	120	1386
	41	18	64	11	52	121	177	25	264	270	181	278	1503
1920	109	59	53	124	49	19	69	42	172	169	399	170	1424
	127	101	70	174	167	241	295	150	146	183	273	99	2033
	239	133	70	46	245	143	127	79	154	139	221	156	1747
	156	43	213	136	167	76	85	80	85	226	171	80	1518
	102	58	168	7	75	199	22	199	135	181	245	255	1646
1925	79	208	140	149	95	136	100	135	70	185	218	125	1638
	265	59	98	1	25	70	286	146	270	177	335	191	1923
	171	56	69	25	109	120	222	190	126	126	172	188	1574
	284	225	129	204	241	154	238	84	23	73	182	127	1962
	268	80	158	86	121	97	157	113	117	133	341	204	1874
1930	89	31	25	59	140	219	64	182	112	184	191	198	1495
	85	11	11	36	63	100	244	110	266	152	162	96	1336
	282	104	127	69	227	201	286	112	206	269	229	183	2294
	229	100	13	43	154	225	202	308	352	313	262	168	2369
	241	221	255	142	132	168	177	233	165	140	324	169	2366

TAGBILARAN, MONTHLY RAINFALL IN MM. CNTD.

<u>YEAR</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
1935	113	32	84	156	119	150	119	157	144	260	267	99	1700
	98	13	142	179	47	143	150	198	107	198	183	179	1637
	133	48	68	49	126	94	171	153	168	262	92	65	1429
	81	129	72	136	66	180	132	52	160	382	222	82	1693
	-	-	129	49	243	85	67	145	-	-	-	-	-
1940	110	-	6	178	36	98	91	131	-	-	-	-	-
1960	-	-	-	-	-	201	129	153	99	226	230	51	-
	116	67	150	86	93	136	126	72	74	120	129	166	1333
	50	148	133	18	56	190	146	159	159	184	182	79	1503
	131	95	141	35	19	9	84	153	94	113	287	66	1226
	105	175	8	234	164	121	193	73	231	199	308	113	1923
1965	143	66	114	117	45	110	95	104	111	200	161	57	1322
	20	87	44	10	73	107	228	123	63	154	226	192	1327
	249	161	155	68	82	131	166	65	47	233	176	120	1653
	45	40	45	39	82	151	53	94	88	112	236	107	1091
	25	3	30	14	34	237	145	148	76	193	135	108	1148
1970	159	62	55	14	73	303	65	58	99	156	220	96	1360
	117	183	105	66	181	129	106	193	107	385	217	83	1872
	166	84	131	25	137	106	10	164	200	72	169	120	1304
	18	10	130	70	51	31	231	186	327	127	383	176	1739
	70	132	130	196	168	268	145	11	63	317	131	98	1727
1975	201	63	36	105	72	197	-	56	202	240	124	155	-
	122	81	56	63	68	173	62	153	182	126	-	-	-
	86	112	111	0	55	103	170	171	124	135	154	38	1259
Normal													
1951-70	104	91	88	64	72	150	130	110	105	168	204	111	1394

DAGOHOY, MONTHLY RAINFALL IN MM.

<u>YEAR</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
1956	181	35	119	222	302	171	252	-	161	107	202	458	-
	195	187	102	143	47	311	410	178	135	310	124	91	2232
	132	108	75	104	67	159	252	152	130	73	164	63	1480
	265	84	239	17	89	117	443	207	178	117	128	155	2038
	261	97	57	169	125	286	173	91	245	158	264	155	2079
	180	102	55	106	69	103	410	123	240	396	182	179	2146
1960	125	291	186	22	133	232	240	297	300	130	391	161	2508
	317	153	221	53	6	47	327	232	289	332	169	75	2221
	139	320	19	81	367	108	206	56	270	179	934	252	2937
	365	172	136	73	10	327	155	174	150	206	122	189	2079
	93	58	29	66	216	61	372	219	107	354	109	187	1871
	437	261	256	50	78	129	141	113	189	144	187	192	2176
1965	124	52	83	5	3	150	116	111	210	262	400	320	1835
	30	9	82	16	95	151	249	119	86	274	230	195	1536
	78	216	34	21	42	350	264	141	154	382	209	125	2015
	267	195	158	116	249	340	213	180	203	214	331	98	2564
	389	52	151	33	189	208	136	256	284	168	162	147	2175
	34	35	28	6	1	210	194	304	244	158	501	268	1983
1970	54	278	124	111	241	230	115	106	86	319	109	252	2025
	363	127	92	149	18	227	258	108	263	227	116	174	2122
	299	66	42	13	51	198	145	238	118	72	47	343	1632
	344	296	108	3	171	126	273	284	132	132	203	50	2122
	292	134	29	68	77	268	173	86	219	172	115	193	1826
	128	42	34										
Normal													
1951-70	198	137	112	70	121	163	254	178	195	226	262	207	2122

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TUBIGON, MONTHLY RAINFALL IN MM.

<u>YEAR</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
1960	209	81	69	58	54	103	113	61	113	108	200	172	1342
	213	80	32	77	60	97	76	31	57	123	106	208	1161
	123	109	123	25	24	56	75	57	117	91	194	161	1156
	255	182	263	22	15	55	317	368	265	201	211	165	2320
	-	-	-	-	-	-	-	-	-	-	-	-	-
1965	430	355	177	165	21	128	128	206	135	200	121	185	2252
	-	-	-	-	-	-	-	-	-	-	-	-	-
	413	227	384	23	33	130	78	140	29	286	395	190	2328
	-	-	-	-	-	-	-	-	-	-	-	-	-
	119	14	68	5	30	129	146	303	88	82	170	315	1467
1970	72	104	26	88	47	314	256	104	182	477	259	215	2144
	170	350	111	52	162	285	145	164	203	405	213	76	2336
	182	99	142	44	133	265	35	233	234	52	170	151	1740
	30	45	26	4	8	178	219	199	387	82	573	469	2220
	97	198	71	28	39	144	45	37	69	218	-	433	-
1975	329	114	140	118	82	177	144	109	292	227	228	185	2145
	196	75	96	28	131	133	149	197	139	105	363	267	1879
	107	-	134	6									
Normal													
1951-70	202	115	104	68	89	124	163	108	147	184	197	183	1685

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7

PAMACSLAN, MONTHLY RAINFALL IN MM.

Average 1967-76 212 159 122 48 72 244 154 149 194 199 257 256 2066

CENTRAL CARMEN, MONTHLY RAINFALL IN MM.

<u>YEAR</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
1975	-	-	-	-	-	-	166	31	210	249	90	219	-
	271	97	57	14	234	128	236	243	266	145	157	257	2105
	201	272	129	11	137	168	202	305	129	115	177	-	-
	342	99	29	170	92	267	195	164	339	182	93	165	2037
1979	148	23	34	64	168								
Average	241	123	62	65	158	188	200	186	236	173	129	214	1975

BILAR, MONTHLY RAINFALL IN MM.

<u>YEAR</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
1975	-	-	-	-	-	-	-	-	-	263	94	234	
	172	105	39	15	145	335	168	181	223	131	125	180	1819
	49	179	75	5	125	295	388	325	205	192	337	46	2221
	269	69	15	45	108	-	135	153	462	260	127	152	-
1979	139	49	17										
Average	157	101	37	22	126	315	230	220	297	212	171	153	2041

TRINIDAD, MONTHLY RAINFALL IN MM.

<u>YEAR</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
1975	-	-	-	-	-	157	182	32	201	185	115	-	-
	163	79	93	5	110	127	159	157	145	113	211	107	1469
	169	205	67	52	17	119	129	58	128	116	-	-	-
	145	41	21	78	72	337	128	20	71	261	67	88	1329
1979	58	34	12										
Average	134	90	48	45	66	185	150	67	136	169	131	98	1319

INABANGA, MONTHLY RAINFALL IN MM.

<u>YEAR</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>ANNUAL</u>
1975	-	-	-	-	-	-	-	-	-	114	199	206	-
	222	89	25	43	121	175	270	177	83	85	161	220	1671
	76	180	20	5	27	31	78	95	76	68	102	45	803
	-	123	51	44	25	234	44	15	203	182	123	197	-
1979	131	36	69	11									
Average	143	107	41	26	58	147	131	96	121	112	146	167	1295

APPENDIX B
RUNOFF - DAILY AVERAGE
- MONTHLY AND ANNUAL SUMMARIES

STNO	NAME	MAIN RIVER	RIVER	8101 - 0	TIGBAU	LOBOC	DAILY AVERAGE						PROCESSED	
													YEAR	1955
							UTM	CATCHMENT	618,00	KM2				
ARCHIVE	F1	DISCH.	M3/S											
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	35.00	30.04	9.42	6.56	8.24	27.19	38.60	52.15	14.18	22.61	21.75	88.00		
2	35.00	23.47	8.52	6.56	8.24	22.61	31.00	49.30	18.43	18.43	23.90	56.30		
3	35.00	25.31	8.24	6.28	8.24	33.40	30.52	39.66	82.00	19.30	19.21	43.37		
4	35.00	18.04	14.18	6.28	8.24	20.46	47.68	34.96	48.22	18.04	16.48	36.52		
5	35.00	13.80	36.52	6.28	7.96	14.56	70.80	24.84	53.86	32.56	14.18	40.72		
6	35.00	12.28	31.48	7.12	8.24	12.66	38.08	21.32	72.20	38.60	15.32	130.00		
7	35.00	10.97	17.65	6.84	8.24	10.66	34.96	18.04	54.43	33.40	13.80	50.44		
8	35.00	10.66	12.28	6.84	8.24	16.32	36.52	19.60	32.92	42.68	23.04	38.08		
9	35.00	10.04	9.73	6.84	8.24	20.46	48.22	18.04	40.19	25.78	19.60	33.92		
10	35.00	9.73	8.80	6.84	8.52	20.46	32.92	19.21	34.96	25.78	16.48	30.52		
11	42.31	9.42	8.52	6.84	8.24	16.32	34.44	18.82	32.92	23.04	16.09	43.90		
12	39.13	10.35	8.52	6.84	8.24	21.75	20.89	18.43	48.76	44.44	29.08	37.04	B	
13	41.25	10.35	8.24	6.84	8.24	19.21	46.06	19.60	43.37	40.72	22.61	29.56		
14	41.25	9.42	19.21	6.84	8.24	17.26	25.31	29.08	31.48	66.70	36.52	70.10	T	
15	36.00	9.11	8.80	6.84	8.24	24.37	17.26	17.65	24.84	66.05	21.75	34.44		
16	74.30	8.52	7.68	6.84	7.96	17.65	15.32	18.82	20.89	35.48	18.04	28.60		
17	41.78	8.24	6.84	6.84	7.96	14.56	12.28	17.26	22.61	38.60	14.56	62.80		
18	58.25	8.24	6.56	6.84	8.52	11.28	11.59	31.48	35.48	36.00	23.47	38.08		
19	38.60	8.52	6.28	7.40	14.18	10.04	11.28	18.82	52.15	47.14	15.32	26.25		
20	29.56	8.52	6.56	8.24	11.28	14.18	11.90	16.48	42.13	23.47	12.28	22.18		
21	24.84	8.24	6.28	7.68	12.66	62.15	15.70	22.18	34.44	28.60	11.28	20.03		
22	23.04	8.52	6.00	7.40	16.09	41.78	24.84	16.48	22.18	26.72	10.66	18.82		
23	23.90	9.42	6.00	7.68	24.37	25.31	17.26	14.18	18.04	23.04	10.04	17.65		
24	25.31	8.80	6.00	7.40	36.00	30.52	22.61	13.80	16.09	42.84	11.28	27.19		
25	23.47	8.80	6.00	7.68	21.32	65.40	21.75	12.28	15.32	46.06	12.28	70.80		
26	19.21	9.11	6.00	8.52	14.18	45.52	33.92	11.90	18.94	36.52	12.28	22.10		
27	26.25	8.80	6.00	8.80	14.56	35.48	34.96	10.97	23.04	30.52	19.20	47.68		
28	17.26	9.42	6.00	8.24	12.66	22.18	51.58	21.32	36.52	28.60	332.40	31.96		
29	18.43		6.00	8.24	10.97	17.65	39.66	18.43	24.84	21.32	219.80	24.84		
30	26.72		6.00	8.24	10.04	34.96	61.50	23.04	31.48	36.52	155.20	26.25		
31	38.08		6.00		23.47		57.60	27.66		28.13		23.04		

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STND NAME MAIN RIVER RIVER	8101 - 0 TIGBAO MAIN RIVER LOBOC	DAILY AVERAGE										PROCESSED 81/05/25,			
							LATITUDE	N 09,39,57	YEAR 1956						
							LONGITUDE	E 124,02,04							
ARCHIVE F1	BISCH.	M3/S					UTM CATCHMENT	610,00	KK2						
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC			
1	19.50	14.18	9.11	8.52	29.56	32.92	46.60	10.97	20.03	43.37	19.60	13.04			
2	18.04	12.66	9.11	8.80	20.85	36.00	29.56	12.28	18.41	58.25	18.82	19.21			
3	16.48	11.90	9.80	9.42	149.60	41.78	31.96	10.66	16.37	37.56	18.04	23.90			
4	15.70	11.59	9.42	10.04	33.92	38.08	24.37	10.66	15.32	35.48	18.82	40.19			
5	15.70	11.28	9.42	9.73	63.45	40.72	101.80	10.04	14.56	30.52	16.37	44.98			
6	15.32	10.97	9.11	9.11	43.37	34.96	83.50	11.59	14.18	34.96	20.03	26.25			
7	15.32	10.66	8.88	10.04	43.37	48.22	52.15	54.43	13.42	23.04	14.56	28.60			
8	15.70	10.35	8.88	10.66	64.75	101.00	27.66	39.66	12.28	30.52	14.56	31.96			
9	15.70	10.66	8.88	13.80	43.37	46.60	33.92	52.15	13.42	37.44	14.18	38.60			
10	14.18	10.97	9.73	11.90	86.50	31.00	40.19	40.19	12.28	31.00	13.80	30.52			
11	13.04	11.28	10.04	16.48	43.90	30.04	43.37	30.04	11.90	87.25	13.80	23.04			
12	23.90	22.90	10.04	21.32	31.48	20.46	31.96	22.61	11.90	48.22	13.42	20.46	B		
13	49.87	31.48	9.73	47.14	22.61	19.21	28.60	46.60	11.28	40.72	33.92	39.13			
14	97.00	20.03	10.66	26.72	19.60	16.37	38.08	80.60	10.97	32.44	28.90	27.66			
15	48.22	18.43	11.28	20.89	16.37	18.43	23.90	34.96	10.66	25.78	47.14	19.60			
16	30.52	15.70	14.56	16.48	18.04	21.75	16.43	35.48	10.66	34.96	31.00	20.03			
17	23.90	13.42	11.90	69.40	36.00	20.89	23.47	25.78	11.90	41.78	26.72	18.43			
18	19.21	11.90	11.28	48.22	30.52	16.48	17.65	209.40	33.40	31.00	23.47	15.32			
19	15.48	11.28	10.97	45.52	21.75	21.32	15.70	69.40	20.89	24.84	21.32	24.39			
20	15.70	10.66	9.73	31.96	33.92	22.18	19.21	43.37	16.09	29.56	18.43	23.90			
21	14.56	21.32	9.42	23.47	28.13	19.60	51.01	47.68	14.18	49.30	16.09	23.78			
22	14.18	14.18	9.11	17.65	22.61	15.70	31.00	61.50	12.66	36.00	24.37	21.75			
23	13.42	11.28	8.80	15.70	19.60	13.42	16.09	62.80	38.08	29.00	16.48	18.04			
24	11.90	10.35	8.52	13.42	31.96	15.70	16.48	79.90	20.46	27.61	15.32	45.52			
25	11.59	9.73	8.80	12.66	17.65	21.75	15.70	38.60	18.82	20.46	14.18	31.30			
26	11.59	9.42	8.52	10.66	22.61	16.09	53.86	32.92	18.04	18.82	13.80	59.55			
27	11.59	9.42	8.52	10.04	26.28	13.04	18.82	52.15	24.37	30.04	13.42	56.30			
28	11.59	9.42	8.24	10.04	23.90	22.61	18.43	31.58	28.60	20.03	13.04	232.50			
29	11.90	9.27	8.24	10.66	18.04	18.04	16.09	37.56	20.46	19.21	12.66	135.00			
30	13.42		8.24	13.04	38.60	33.40	13.42	28.60	22.61	28.60	12.66	20.85			
31	13.42		8.80		21.75		12.66	22.61		20.89		120.30			

STNO 8101 - 0
 NAME TIGBAO
 MAIN RIVER LOBOC
 RIVER
 ARCHIVE F1

DAILY AVERAGE

PROCESSED 81/05/25.

LATITUDE N 09,39,57
 LONGITUDE E 124,02,04
 UTM
 CATCHMENT 618.00 KM2

YEAR 1957

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	53.29	11.90	10.66	7.68	9.42	8.24	19.21	18.04	8.80	19.60	10.66	8.80
2	40.19	158.50	10.66	8.52	9.42	7.96	13.42	87.25	8.80	53.86	23.90	8.80
3	43.52	66.70	10.04	49.30	9.73	9.11	14.94	31.00	8.52	40.19	39.13	8.80
4	36.00	37.04	9.73	138.00	9.73	8.52	17.65	26.25	8.52	26.72	29.08	8.80
5	26.72	38.08	9.11	47.14	9.73	14.18	31.40	34.96	8.24	17.65	24.37	8.80
6	28.13	25.31	9.42	31.48	9.42	24.37	30.04	26.13	8.24	14.56	31.48	8.52
7	54.43	17.26	11.28	22.18	9.11	16.09	35.40	19.60	8.24	11.90	38.60	8.52
8	31.96	15.70	16.48	16.87	9.42	13.04	23.90	30.04	7.96	10.97	23.04	8.24
9	25.78	15.70	13.04	15.32	10.04	10.35	16.87	52.15	7.96	10.66	10.43	8.52
10	26.25	14.94	10.97	13.04	10.04	9.11	41.78	39.13	8.52	10.04	14.18	8.80
11	20.46	14.56	10.04	11.59	9.73	8.80	33.92	37.04	8.52	9.73	12.28	8.80
12	17.26	13.30	10.97	11.28	9.11	8.52	23.90	42.31	8.80	9.42	11.59	9.42
13	19.21	12.28	34.44	10.97	11.90	8.52	17.26	44.44	9.11	9.11	10.35	9.11
14	20.89	12.66	20.89	10.97	13.42	16.09	16.09	33.92	9.11	9.73	10.04	8.80
15	26.25	17.26	14.56	10.66	13.04	13.04	31.96	22.61	9.42	10.04	9.73	8.80
16	20.89	17.65	13.04	10.35	18.82	11.59	17.65	17.26	13.42	10.97	17.26	8.80
17	23.04	16.48	11.59	23.47	19.60	18.82	43.37	14.94	11.59	10.35	23.90	8.00
18	25.68	14.94	9.11	16.48	11.59	14.56	41.25	14.94	10.97	10.35	28.60	8.32
19	34.44	13.42	8.24	12.68	10.66	22.18	23.90	14.56	10.66	10.66	56.00	9.11
20	23.90	11.59	9.42	11.90	11.28	19.60	18.04	14.18	9.42	16.87	18.04	9.42
21	18.43	10.66	10.04	11.28	18.02	14.56	16.48	11.90	8.80	20.46	14.18	9.11
22	16.48	10.04	10.04	10.97	13.42	11.28	19.60	10.66	8.80	18.82	12.28	9.11
23	15.70	10.04	9.42	10.66	11.28	9.42	14.94	10.04	8.52	17.65	10.97	8.80
24	14.94	9.73	9.42	9.73	10.35	10.04	19.60	9.42	8.24	15.70	9.73	8.80
25	13.42	9.73	8.80	8.90	9.42	9.42	21.32	8.80	7.96	14.94	9.73	8.80
26	11.90	9.42	8.52	8.80	8.80	24.34	18.43	9.11	7.96	13.28	9.73	8.80
27	24.84	9.42	8.52	8.52	8.52	18.04	11.90	11.28	7.96	10.35	9.11	8.80
28	25.31	10.04	8.24	8.52	8.24	33.86	18.04	10.66	17.26	9.11	8.80	8.80
29	16.87		8.24	9.73	8.24	34.44	29.08	10.04	18.04	9.11	8.80	8.52
30	15.04		7.96	9.42	7.96	31.00	20.03	9.42	13.42	24.84	9.11	8.52
31	11.90		7.68		7.96		19.60	9.11		14.18		8.52

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STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE								PROCESSED 81/05/25.		
								LATITUDE	N 09,39,57	YEAR	1958			
								LONGITUDE	E 124,02,04					
ARCHIVE F1	DISCH.	M3/S						UTM CATCHMENT	618,00	KM2				
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	8.52	8.24	9.73	7.96	10.66	10.04	8.52	28.60	9.73	39.08	9.42	10.66		
2	9.11	8.24	9.73	7.96	8.52	9.42	8.80	30.52	8.80	27.66	8.80	9.73		
3	8.80	8.52	9.11	7.96	8.52	9.73	15.32	22.61	8.52	27.04	8.80	8.80		
4	8.52	8.52	8.80	7.96	9.42	8.80	19.24	21.75	8.24	19.21	8.52	8.52		
5	8.52	8.52	8.24	7.40	10.66	10.04	12.66	14.56	7.96	13.42	8.52	8.24		
6	9.42	8.52	7.96	7.40	9.11	10.35	13.42	12.28	7.96	10.66	8.80	9.11		
7	9.11	8.24	8.24	7.40	8.52	9.42	20.46	10.66	7.68	10.05	8.52	10.35		
8	9.11	8.24	8.24	7.12	8.24	8.52	39.32	13.42	7.96	14.56	11.90	25.78		
9	8.80	8.24	8.24	7.40	7.96	8.24	18.04	13.80	7.96	14.56	17.65	18.82		
10	9.42	7.96	8.52	7.12	7.96	8.24	24.84	10.97	7.68	10.97	14.56	16.09		
11	9.42	7.96	8.52	7.12	7.68	7.96	24.84	10.66	7.96	10.35	14.94	13.42		
12	10.35	7.96	8.52	7.40	7.68	7.96	30.52	10.04	7.96	10.04	13.80	11.90	B	
13	9.73	7.96	8.24	7.40	7.40	7.68	24.84	16.09	8.24	10.04	10.97	10.66		
14	9.11	8.24	8.24	7.40	7.40	6.24	14.94	16.00	8.24	9.73	10.35	9.73	A	
15	8.80	8.52	8.24	7.12	7.40	12.28	11.90	14.18	7.96	9.11	8.80	8.80		
16	8.52	10.35	7.96	7.12	7.12	11.59	10.66	31.96	7.96	10.97	21.32	8.52		
17	8.52	12.66	7.96	7.12	7.12	10.35	10.04	26.72	7.68	10.35	16.09	8.24		
18	8.52	10.97	7.96	7.12	7.12	9.73	9.11	39.66	7.68	10.66	18.43	8.24		
19	8.52	9.73	7.96	7.40	7.30	13.42	9.11	31.00	44.98	11.28	32.44	7.68		
20	8.24	9.11	7.68	7.40	7.40	12.28	8.52	38.08	28.60	13.42	86.75	7.40		
21	8.24	8.80	7.68	7.40	7.40	12.66	8.52	34.44	44.98	18.82	44.98	7.12		
22	8.52	8.80	7.40	7.46	7.12	13.42	8.24	23.47	31.96	30.52	27.19	7.12		
23	8.52	8.52	7.40	7.40	7.12	14.56	10.97	18.02	15.70	22.18	36.00	6.84		
24	8.73	8.54	7.40	7.40	7.12	11.90	9.73	16.09	16.09	17.65	28.13	6.28		
25	13.80	8.24	7.40	7.96	8.52	14.94	8.52	11.28	14.18	15.32	22.18	6.28		
26	11.28	8.52	7.12	13.04	8.24	13.04	23.90	10.66	11.90	13.42	16.48	6.00		
27	10.66	8.24	7.12	12.28	7.68	16.09	41.78	10.97	9.73	11.59	14.94	5.58		
28	10.35	8.24	7.12	10.04	7.68	11.90	30.04	10.66	49.30	9.73	13.42	5.58		
29	9.73		7.12	8.52	8.52	10.35	23.04	10.66	28.13	9.42	11.90	5.58		
30	8.80		7.68	7.96	8.52	8.80	36.00	10.35	37.04	10.66	11.59	5.37		
31	8.52		7.68		9.11		24.84	10.04		9.42		5.37		

STNO 8101 - 0
 NAME TIGBAU
 MAIN RIVER LOBOC
 RIVER

DAILY AVERAGE

LATITUDE N 09,39,57
 LONGITUDE E 124,02,04
 UTM
 CATCHMENT 618,00 KK2

PROCESSED 81/05/25,

YEAR 1959

DATE	DISCH. M3/S											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	5.58	4.32	3.90	22.18	5.79	8.00	23.90	22.18	10.66	16.48	8.24	6.56
2	5.79	4.32	4.53	22.61	6.00	12.28	26.72	11.94	32.44	22.18	8.24	6.56
3	5.79	4.11	9.42	17.26	6.28	10.97	61.50	12.28	19.50	34.44	8.24	9.73
4	5.58	4.11	7.96	13.42	6.56	10.04	33.92	10.66	49.30	38.60	15.70	6.56
5	5.79	4.74	6.00	11.59	7.96	7.96	25.31	9.73	26.72	27.19	9.42	8.24
6	5.58	4.95	5.16	10.64	7.68	6.28	20.46	8.80	14.56	21.32	7.68	6.00
7	5.58	4.74	4.95	10.35	6.56	6.00	46.60	8.00	11.90	15.32	7.68	20.46
8	109.50	4.32	4.74	9.73	6.00	5.79	43.37	8.52	10.04	13.04	7.40	15.32
9	148.50	4.11	4.74	9.11	6.56	7.12	28.13	23.47	8.80	11.28	7.12	14.18
10	39.66	16.48	4.53	7.96	6.00	6.84	55.65	22.18	7.12	10.97	7.40	26.72
11	25.78	8.80	4.32	6.84	6.00	6.00	39.13	17.65	8.52	10.35	17.65	13.04
12	15.32	5.79	4.11	6.28	5.37	7.40	39.13	38.60	10.35	13.42	10.35	11.28
13	13.80	4.95	4.11	6.00	5.37	7.60	26.25	76.40	18.82	11.59	8.80	9.11
14	11.59	4.74	3.90	5.58	5.37	10.97	32.92	36.52	17.26	13.42	10.35	7.68
15	18.82	5.16	3.90	5.58	5.16	10.97	27.66	22.18	14.94	14.56	9.42	6.56
16	15.32	5.16	5.58	5.37	5.79	8.24	24.37	41.78	11.28	12.66	11.59	6.56
17	10.35	4.74	6.84	5.16	11.28	6.84	20.89	50.44	12.66	14.56	9.42	6.00
18	9.42	4.53	24.37	5.16	9.43	4.00	18.82	36.52	24.84	19.21	10.35	5.58
19	8.24	4.53	11.59	4.95	9.42	6.00	23.47	22.18	30.04	25.31	8.80	8.24
20	8.24	4.11	41.25	5.16	10.66	5.79	16.04	19.21	16.09	24.30	7.68	6.00
21	9.52	4.11	61.50	4.95	8.24	5.79	23.47	19.60	11.90	44.98	6.56	6.56
22	7.96	3.90	47.68	4.95	7.12	6.00	28.60	28.13	19.21	22.61	6.56	6.84
23	7.40	3.90	34.96	4.95	6.00	6.00	43.37	64.75	23.47	15.32	6.84	10.97
24	7.96	3.90	30.04	5.79	7.96	7.40	39.13	36.00	16.87	13.42	9.73	38.08
25	9.11	3.90	23.04	5.79	7.12	6.56	48.22	31.93	14.18	11.90	10.35	33.92
26	7.12	3.90	16.87	6.00	6.56	11.59	94.75	26.72	18.82	11.28	8.52	29.56
27	6.84	3.90	13.42	6.56	6.84	10.97	39.60	42.04	22.18	10.04	7.96	20.46
28	5.79	3.90	10.97	6.28	6.28	7.68	50.04	18.04	16.48	9.42	7.40	18.43
29	4.95		10.04	6.00	8.80	9.73	41.90	16.09	11.90	8.80	7.12	18.04
30	4.74		8.80	6.00	8.24	20.03	42.31	14.94	16.87	8.52	7.12	11.28
31	4.32		19.60		10.66		31.48	12.66		8.52		10.35

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STNO	NAME MAIN RIVER RIVER	8101 - 0 TIGBAO LOBOC	DAILY AVERAGE										CATCHMENT 618.00 KM2	PROCESSED 81/05/25, YEAR 1960	
						LATITUDE			LONGITUDE			UTM			
			ARCHIVE F1	DISCH.	M3/S	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC			
1	8.52	17.65	7.12	6.56	28.13	11.90	25.31	8.24	30.04	52.82	16.09	13.04			
2	7.68	14.18	6.84	7.96	18.82	17.66	25.00	9.42	58.25	64.75	15.70	11.90			
3	7.12	13.04	6.56	9.11	17.26	11.59	36.52	14.18	33.92	58.90	17.65	10.66			
4	6.56	12.28	6.56	7.68	14.18	11.28	30.04	43.90	23.04	47.68	17.26	10.97			
5	6.00	11.59	6.28	6.84	11.28	10.97	34.96	26.72	16.48	39.13	21.75	9.73			
6	5.58	10.66	6.28	7.12	10.04	9.73	36.52	17.65	19.21	23.90	18.82	9.11			
7	5.16	10.97	6.00	7.12	8.52	7.96	38.08	13.04	16.09	25.78	16.48	8.80			
8	5.16	42.84	6.00	7.60	8.80	6.56	25.78	9.73	13.42	23.04	14.56	13.04			
9	5.16	23.47	6.00	8.24	8.80	8.52	41.25	8.80	24.84	18.43	11.28	17.65			
10	6.00	16.87	6.00	7.68	8.24	9.73	26.72	8.24	32.04	15.32	20.46	57.60			
11	5.79	16.48	5.79	7.40	9.11	15.32	22.61	7.96	47.68	18.82	14.56	33.40			
12	5.79	20.46	5.79	7.12	9.42	13.42	21.75	7.12	25.78	16.48	13.80	128.00	B		
13	7.96	16.48	7.40	7.12	8.24	11.59	25.31	6.84	44.44	15.32	26.25	53.86			
14	6.56	14.18	10.04	6.84	8.52	45.90	34.96	6.56	26.72	14.18	19.60	36.52	C		
15	6.00	11.90	10.97	6.84	8.24	46.06	31.00	6.56	25.00	11.90	15.70	27.66			
16	5.58	11.28	11.28	6.56	7.68	31.00	25.78	6.28	33.40	11.90	40.19	19.60			
17	7.12	10.04	20.05	6.56	7.68	35.48	20.03	6.00	23.47	11.28	27.19	14.18			
18	8.52	9.42	23.47	6.20	7.96	28.60	23.04	6.00	18.43	10.35	16.87	12.28			
19	6.84	8.24	27.66	6.56	7.68	18.82	16.09	5.79	14.94	10.97	19.60	11.28			
20	5.79	7.96	24.37	7.12	7.40	25.31	13.04	5.58	35.48	46.60	23.04	10.66			
21	5.79	7.68	22.61	9.42	7.12	19.21	36.52	5.58	23.04	27.66	42.84	10.04			
22	36.00	7.40	13.04	38.60	10.66	32.44	28.13	5.37	18.04	22.63	137.00	9.42			
23	43.90	7.12	10.35	29.08	10.97	24.84	27.19	5.37	14.56	23.47	59.55	8.80			
24	17.65	7.12	8.80	16.87	18.04	44.96	20.89	5.16	16.48	18.82	60.20	8.52			
25	12.66	6.56	7.96	14.56	28.13	32.92	17.26	5.16	36.52	37.04	34.96	8.24			
26	18.82	7.40	8.24	24.84	23.90	20.03	14.56	4.95	35.48	36.00	28.60	7.68			
27	55.00	7.12	7.96	28.60	44.98	14.94	12.28	4.95	24.37	64.75	24.37	7.68			
28	131.00	7.12	7.12	41.78	26.72	12.28	11.28	10.04	29.08	30.52	20.03	7.40			
29	52.15	7.12	6.84	37.04	18.02	12.66	10.35	9.73	40.72	21.75	16.87	7.12			
30	34.96		6.84	31.00	12.66	13.04	9.42	7.96	40.72	16.09	14.94	10.04			
31	30.52		6.56		12.28		8.80	7.96		16.48		8.80			

STNO 9101 - 0
 NAME TIGBAO
 MAIN RIVER LOBOC
 RIVER
 ARCHIVE F1

DAILY AVERAGE

LATITUDE N 09,39,57
 LONGITUDE E 124,02,04
 UTM
 CATCHMENT 618,00 KM2

PROCESSED 81/05/25.

YEAR 1961

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	11,28	75,70	8,24	6,28	5,79	19,60	8,00	11,59	5,79	11,28	14,94	13,42
2	46,06	30,52	8,24	6,56	5,79	14,56	27,19	13,80	5,79	9,73	13,42	11,90
3	43,37	38,60	10,97	6,56	6,00	28,60	68,70	10,04	5,79	8,52	11,90	13,32
4	30,04	29,56	10,66	7,40	6,00	25,90	66,70	6,80	5,58	7,96	11,59	12,28
5	25,78	64,10	10,35	7,40	13,42	15,70	44,98	7,68	5,58	16,87	10,97	52,15
6	19,60	39,13	9,11	7,68	8,80	26,25	22,18	10,35	6,28	37,04	10,66	27,19
7	13,43	26,25	8,52	8,52	7,40	71,50	18,43	10,35	13,42	27,66	10,04	13,70
8	23,47	19,60	6,24	11,28	7,12	47,14	10,04	8,24	9,11	52,15	10,04	12,28
9	35,43	16,09	6,24	10,66	10,35	56,95	13,80	8,24	8,80	26,72	8,80	10,97
10	48,22	13,42	7,96	8,52	10,04	62,80	15,32	10,04	10,04	17,65	9,42	10,04
11	51,58	11,59	7,60	8,24	20,46	31,00	10,35	8,24	8,24	13,80	9,11	10,04
12	54,44	10,35	7,40	7,40	23,47	21,75	9,11	7,96	7,12	11,59	8,80	7,93
13	58,90	9,42	7,12	6,84	41,78	36,00	8,24	17,65	6,84	13,80	8,52	8,52
14	28,60	8,80	7,12	6,56	25,78	22,18	7,68	13,04	6,56	12,28	8,24	8,52
15	24,84	9,73	6,84	6,56	18,04	17,26	7,96	10,66	6,84	16,87	8,24	27,66
16	16,48	9,11	7,96	6,56	11,59	15,70	7,68	9,82	8,52	31,00	10,66	14,94
17	14,18	8,52	9,11	11,28	9,73	14,56	7,68	8,24	8,52	16,87	20,03	10,97
18	13,80	14,18	10,97	9,11	8,24	13,04	9,42	7,68	41,78	31,40	20,03	9,11
19	13,04	10,97	9,11	8,24	7,68	68,00	9,42	7,40	24,37	25,31	16,48	9,11
20	12,28	10,66	8,24	7,68	8,52	51,01	8,52	6,84	20,03	30,04	14,94	8,80
21	10,66	9,42	7,96	6,56	8,00	31,00	7,96	6,56	19,21	27,66	24,84	8,24
22	10,04	8,52	7,68	6,56	23,47	20,46	8,24	6,28	46,60	40,72	26,40	8,24
23	9,73	8,80	7,12	6,28	20,03	16,09	8,24	6,00	36,52	53,86	34,44	7,96
24	8,52	8,00	6,84	6,00	14,94	15,32	7,96	6,84	21,75	87,25	25,31	7,96
25	8,80	8,52	6,56	5,79	12,66	13,42	7,68	6,84	15,70	47,68	17,65	11,28
26	9,11	9,11	6,56	6,00	11,90	11,90	7,40	6,28	21,32	31,00	12,28	12,66
27	9,11	8,52	7,12	6,00	13,04	11,59	20,89	6,00	20,03	46,60	10,66	14,94
28	10,04	8,24	7,12	6,00	10,66	10,66	22,18	6,00	14,94	29,56	10,35	12,66
29	10,04		6,84	6,00	9,73	10,04	32,92	5,78	13,04	20,89	10,35	16,48
30	15,32		6,56	6,00	21,75	9,11	19,60	5,58	11,28	18,04	14,94	13,04
31	20,89		6,56		47,68		14,56	5,58		16,87		13,04

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7

STNO	NAME MAIN RIVER RIVER	8101 - 0 TIGBAO LOBOC	DAILY AVERAGE						PROCESSED 81/05/25.				
						LATITUDE	N 09,39,57	YEAR	1962				
						LONGITUDE	E 124,02,04						
DATE	ARCHIVE F1	DISCH. M3/S	JAN	FEB	MAR	APR	MAY	JUN	AUG	SEP	OCT	NOV	DEC
1	13.80	6.28	13.04	11.28	7.12	7.96	14.18	19.60	20.46	18.43	37.04	24.37	
2	42.31	6.28	27.66	9.42	6.84	11.59	11.28	16.09	16.87	20.46	31.00	20.46	
3	23.90	6.28	55.00	9.11	6.56	16.87	31.00	13.42	14.94	31.48	33.92	27.66	
4	14.56	6.28	52.15	22.61	6.56	23.90	51.58	12.28	12.66	18.62	21.32	20.03	
5	19.21	6.28	42.84	13.80	6.56	15.70	64.75	11.59	11.59	23.04	23.90	13.04	
6	14.18	6.56	29.08	10.35	6.28	26.25	45.52	10.66	10.97	17.65	26.25	23.90	
7	10.97	82.60	22.18	9.73	6.28	21.75	40.19	10.04	18.04	43.37	24.84	25.31	
8	10.94	56.95	19.21	9.11	6.28	24.37	26.25	59.55	19.21	58.60	27.19	20.03	
9	32.44	37.56	53.29	8.52	6.00	22.18	22.61	44.98	27.66	56.30	64.75	15.32	
10	23.04	75.70	49.87	8.24	6.00	25.31	20.46	26.72	41.25	48.76	43.90	13.42	
11	14.18	36.00	28.60	8.24	6.00	20.89	39.13	21.75	58.90	46.06	38.60	12.28	
12	28.13	27.19	20.89	7.96	5.79	18.43	31.48	18.04	48.76	42.31	24.37	11.28	
13	29.56	19.60	15.48	8.52	5.79	27.66	47.14	16.48	62.80	47.68	18.43	10.66	
14	23.47	14.56	13.80	14.56	5.79	21.75	51.01	16.87	38.60	29.56	16.09	10.35	
15	18.04	12.28	16.48	10.35	7.40	36.00	61.50	24.37	31.96	25.31	14.18	9.73	
16	14.94	13.80	68.70	8.80	7.96	37.56	31.96	32.92	47.14	21.75	12.28	9.42	
17	12.66	15.32	31.48	8.24	10.97	38.60	21.32	29.08	118.50	28.60	14.56	9.42	
18	11.90	13.80	22.61	7.96	9.42	30.52	17.26	37.04	72.90	21.32	13.80	9.73	
19	11.28	13.42	17.26	7.96	8.52	32.92	14.94	22.18	48.22	21.75	11.28	9.73	
20	10.35	48.22	13.80	8.80	8.24	26.72	16.87	16.09	43.90	36.52	10.66	9.73	
21	3.80	43.37	12.66	11.90	7.96	30.52	13.04	13.42	48.22	30.52	24.84	17.26	
22	7.96	31.48	11.90	10.66	12.65	35.48	10.97	13.42	51.58	22.61	29.56	18.04	
23	7.96	24.84	10.66	9.11	22.18	25.31	10.35	19.21	31.50	20.89	17.65	14.18	
24	7.68	32.92	10.04	8.52	16.87	27.19	10.66	83.50	47.14	22.61	13.80	13.04	
25	7.40	21.32	9.73	9.11	10.66	31.00	10.04	46.60	40.72	17.65	13.80	35.65	
26	7.12	16.09	9.42	9.73	9.42	22.18	10.97	42.84	31.96	14.56	22.61	44.44	
27	6.84	12.66	9.11	8.80	23.90	21.75	25.31	47.68	27.19	13.04	55.00	24.37	
28	6.56	10.97	9.11	8.24	15.32	24.84	47.66	40.19	21.32	11.90	165.00	16.87	
29	6.28		10.66	7.96	10.35	20.89	35.48	60.20	19.21	11.28	49.30	13.80	
30	6.28		14.56	7.40	8.80	16.09	39.13	41.25	18.04	11.59	33.40	11.90	
31	6.28		15.70		7.96		29.08	29.08		33.92		12.66	

STNO 8101 - 0
 NAME TIGBAU
 MAIN RIVER L080C
 RIVER

DAILY AVERAGE
 LATITUDE N 09,39,57
 LONGITUDE E 124,02,04
 UTM
 CATCHMENT 618,00 KM2

PROCESSED 81/05/25.

YEAR 1963

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	17.65	14.94	10.97	11.59	8.24	9.11	6.56	48.76	18.43	39.15	20.03	9.73
2	14.94	13.42	10.35	10.66	7.96	8.52	7.12	62.05	13.80	26.72	28.13	9.42
3	13.42	13.04	10.35	10.04	7.96	8.24	5.37	48.73	16.48	33.92	24.84	8.80
4	12.66	12.66	11.90	10.04	7.96	7.94	5.58	23.47	10.43	68.70	22.61	8.52
5	13.04	12.28	14.94	9.73	7.96	7.68	6.28	14.94	12.28	30.04	20.89	8.24
6	46.06	11.90	13.80	9.42	7.96	7.40	6.84	13.42	9.73	29.56	34.96	7.96
7	65.70	10.97	28.13	9.42	7.68	7.12	6.84	9.73	9.42	32.92	51.01	7.68
8	91.75	10.35	90.25	9.42	7.68	7.12	7.12	8.24	8.00	29.08	58.90	7.68
9	68.70	10.04	49.30	9.75	7.68	6.84	7.40	14.56	7.96	44.98	37.56	8.24
10	40.19	10.66	40.72	9.42	7.68	6.84	7.40	16.48	7.96	41.78	114.00	10.97
11	52.82	10.97	58.90	9.42	7.40	6.84	6.00	13.80	6.04	29.08	47.68	13.42
12	48.22	10.35	55.29	9.11	7.40	6.84	5.79	19.21	7.40	29.08	31.48	13.04
13	30.52	12.66	29.56	9.11	7.40	7.40	5.37	22.61	7.68	40.19	23.90	15.32
14	51.01	21.32	25.78	9.11	7.12	8.52	6.00	16.48	7.68	66.05	20.03	27.19
15	35.48	31.00	21.75	9.11	7.12	8.80	6.84	11.59	8.24	57.60	20.46	26.72
16	88.00	34.96	16.09	9.11	7.12	7.12	7.40	9.11	8.24	44.44	19.60	15.70
17	14.30	22.61	15.32	9.11	7.40	7.12	7.40	8.80	7.40	41.25	15.70	20.03
18	55.00	29.08	18.43	9.11	7.40	7.12	7.40	70.10	8.24	40.19	13.80	29.56
19	38.08	45.52	29.08	8.80	7.40	7.12	7.68	55.00	8.24	29.56	12.66	25.78
20	30.04	47.68	22.61	9.11	7.96	6.84	7.12	28.60	8.52	22.18	11.59	14.56
21	25.31	39.66	21.32	9.73	8.24	6.84	4.32	29.08	9.73	17.65	11.59	11.28
22	20.46	25.31	17.65	9.42	8.52	6.84	4.95	36.00	9.42	15.70	11.28	10.04
23	16.87	19.50	15.70	9.11	7.36	6.84	4.95	27.66	8.80	20.46	10.66	9.73
24	15.32	18.04	14.18	8.80	7.40	6.84	4.53	36.32	10.97	42.84	10.97	9.11
25	47.68	15.70	13.80	8.80	8.52	6.84	8.24	30.52	9.73	56.95	13.80	8.52
26	48.22	14.18	12.28	8.52	8.24	6.28	16.09	55.00	8.24	40.72	13.42	8.24
27	36.52	12.66	11.59	8.52	9.73	6.56	23.20	41.25	14.18	32.92	10.97	7.96
28	27.39	11.59	10.66	8.52	11.28	6.56	15.70	24.37	17.26	34.44	10.04	7.68
29	22.18		10.35	8.52	14.56	6.84	34.44	17.26	14.56	44.98	9.73	7.40
30	20.46		10.04	8.52	12.28	6.56	18.04	21.75	31.96	32.44	9.73	7.40
31	18.04		10.97		10.35		26.25	23.90		20.89		31.48

B
6

STNO 8101 - 0
 NAME TIGBAO
 MAIN RIVER LOBOC
 RIVER
 ARCHIVE F1
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
 1 7.68 7.40 31.96 6.28 37.56 13.04 22.18 10.04 15.70 22.61 26.72 21.00
 2 8.80 7.68 21.32 6.28 30.52 10.97 15.32 8.80 41.25 36.52 39.13 23.47
 3 8.52 7.40 17.26 6.28 26.72 9.73 12.28 8.52 29.08 46.60 49.30 23.47
 4 7.96 7.12 13.80 6.28 17.65 9.11 14.18 8.24 28.60 34.96 56.95 24.84
 5 7.40 8.52 11.59 6.28 12.28 8.52 30.52 7.96 18.82 22.18 49.87 29.08
 6 7.40 7.96 10.97 6.28 10.35 8.24 77.10 7.96 12.66 17.26 43.37 53.86
 7 7.40 7.40 10.04 6.28 9.11 7.96 47.68 7.68 10.35 18.04 69.40 93.25
 8 7.68 7.12 9.42 6.28 8.80 7.96 39.60 7.68 17.65 18.82 50.44 61.50
 9 7.40 7.12 8.52 6.28 12.66 8.24 40.72 7.58 20.89 19.21 48.22 49.30
 10 7.12 7.40 8.24 6.00 12.28 7.96 38.08 9.11 24.84 13.42 35.46 39.60
 11 6.84 7.12 7.96 6.00 23.47 10.97 34.96 8.80 16.09 11.90 30.04 32.92
 12 7.12 7.40 7.68 6.00 68.00 12.66 29.56 8.52 32.44 10.97 36.52 25.51
 13 9.73 10.97 7.40 6.00 40.19 10.35 38.08 7.96 27.19 17.26 44.98 20.89
 14 9.42 97.80 7.40 6.00 37.04 9.42 39.60 7.68 35.48 21.32 31.96 20.03
 15 15.32 156.30 7.40 6.00 19.60 18.04 69.40 7.12 23.47 14.56 31.00 19.21
 16 11.28 52.15 7.40 6.28 16.48 17.26 65.40 6.84 49.30 14.18 31.00 16.87
 17 9.40 36.00 7.12 8.52 51.01 14.18 31.00 6.56 23.47 39.66 29.56 14.18
 18 8.24 26.25 6.84 7.68 78.50 18.43 27.66 6.56 16.48 28.60 26.13 44.44
 19 7.40 19.21 6.84 6.84 61.50 19.60 33.40 6.56 12.66 29.56 441.80 26.72
 20 7.12 15.70 6.84 6.56 43.90 51.50 23.47 6.28 10.97 19.21 350.00 20.89
 21 6.84 14.94 6.84 6.00 28.13 17.65 18.04 6.00 9.73 16.48 110.00 17.65
 22 7.12 15.32 6.84 6.00 20.46 13.42 22.61 6.00 9.11 15.32 42.00 14.56
 23 7.68 25.31 6.84 6.28 16.09 28.13 30.04 6.00 8.52 13.80 31.00 12.66
 24 7.68 19.21 6.56 6.28 14.94 30.52 30.04 6.00 8.24 15.70 30.00 12.28
 25 7.40 15.32 6.56 6.28 17.26 17.65 23.04 10.66 8.24 11.90 24.00 12.28
 26 7.96 14.18 6.56 6.00 25.31 18.02 20.03 16.09 7.96 102.60 22.00 12.66
 27 8.24 16.87 6.28 6.28 18.04 22.61 13.80 9.42 9.73 17.26 100.00 39.55
 28 7.40 40.72 6.56 24.37 13.42 19.60 12.66 10.04 11.28 13.42 52.00 36.00
 29 7.12 36.34 6.28 18.02 16.48 16.87 12.20 14.56 14.18 36.00 35.00 22.18
 30 7.12 6.28 29.08 21.32 18.43 16.48 8.52 12.28 39.13 25.00 27.19
 31 7.12 6.28 16.48 11.28 7.40 11.28 23.90 23.90

PROCESSED 01/05/25,

YEAR 1964

 B
10

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE								PROCESSED	
								LATITUDE	N 09,39,57			YEAR	1965
								LONGITUDE	E 124,02,04				
				UTM	CATCHMENT	618,00	KM2						
ARCHIVE F1	DISCH.	M3/S											
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	27.19	17.65	32.92	12.28	9.73	11.59	20.89	10.04	18.43	59.55	16.48	14.94	
2	23.04	20.89	20.89	29.56	9.73	10.66	19.60	10.04	15.70	32.44	17.65	11.90	
3	19.21	18.43	17.65	27.19	9.73	12.26	21.75	9.73	13.80	34.96	16.09	11.59	
4	16.48	16.87	15.32	17.26	9.11	40.19	44.44	8.80	12.28	68.20	19.60	10.66	
5	14.56	18.43	13.04	13.80	8.00	18.43	27.66	8.52	11.28	44.44	24.37	10.66	
6	13.04	36.52	11.90	11.90	8.80	40.19	27.19	10.35	16.04	46.60	29.56	10.66	
7	11.90	23.31	13.04	11.28	8.00	29.08	14.18	10.97	42.84	27.66	22.18	11.59	
8	11.28	20.89	44.44	10.66	8.52	23.04	11.59	12.66	20.89	45.52	17.65	11.59	
9	13.04	15.70	30.52	10.66	8.80	18.43	11.28	13.80	29.56	21.32	23.47	13.80	
10	11.59	13.04	26.25	11.28	9.11	14.18	10.35	16.87	27.66	24.84	20.46	13.42	
11	41.25	12.66	20.89	11.90	9.42	25.31	10.04	27.19	22.18	35.48	16.09	11.90	
12	50.44	26.72	21.75	13.04	10.04	37.56	13.80	29.08	16.48	58.25	28.60	10.97	
13	31.48	27.66	46.60	22.18	9.42	60.05	25.78	23.04	16.48	49.87	26.72	10.66	B
14	62.15	20.46	49.30	14.18	8.80	33.40	39.13	21.75	14.18	75.00	18.43	10.35	H
15	75.70	33.40	26.72	14.18	19.60	23.47	20.89	31.96	12.66	77.80	15.32	10.97	
16	187.00	19.60	22.18	14.18	11.28	19.21	27.19	37.04	11.90	66.05	13.80	46.60	
17	170.50	16.48	19.21	13.04	10.97	17.26	28.13	30.52	10.66	59.55	13.42	49.30	
18	83.50	14.56	15.32	16.87	9.11	18.04	47.14	33.92	10.35	71.50	12.26	49.30	
19	78.50	12.66	13.42	28.13	10.97	14.56	23.04	23.04	22.61	73.60	20.03	30.52	
20	44.98	14.56	12.28	23.04	14.56	13.80	17.26	24.84	31.48	55.65	14.94	22.18	
21	36.52	46.60	11.59	33.92	23.04	12.66	13.42	26.31	27.19	77.80	13.80	24.39	
22	30.52	25.31	10.97	34.96	17.26	10.97	11.90	34.40	31.96	64.10	12.66	25.31	
23	25.78	18.82	10.66	28.60	14.18	10.35	11.28	22.61	20.03	48.22	13.04	13.04	
24	23.47	16.48	11.28	20.03	10.97	10.97	15.70	21.32	14.18	34.96	11.90	15.70	
25	22.18	14.56	10.97	17.26	9.42	10.66	14.94	28.13	14.56	28.60	29.56	13.80	
26	21.32	12.66	28.13	14.56	8.52	10.04	20.03	51.01	14.18	26.25	29.08	11.59	
27	22.61	39.13	25.78	12.28	10.97	20.46	31.48	44.98	13.42	23.90	17.65	15.32	
28	20.89	38.60	16.48	11.90	12.66	30.04	18.43	30.52	34.44	20.89	13.04	21.32	
29	19.21		13.42	10.97	15.32	24.84	13.30	29.56	70.80	20.46	13.42	17.26	
30	19.21		12.28	10.35	11.28	24.37	11.59	25.31	35.48	18.04	20.89	13.42	
31	18.43		12.28		10.35		10.66	23.47		17.26		10.97	

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE												LATITUDE N 09,39,57	LONGITUDE E 124,02,04	UTM CATCHMENT	618,00	KM2	PROCESSED 81/05/25.	
																					YEAR	1966
ARCHIVE F1	DISCH.	M3/S		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC							
DATE																						
1	10.66	3.24	7.68	6.84	7.40	12.28	17.26	37.56	21.75	10.97	20.46	39.13										
2	10.66	7.96	7.68	6.84	7.40	9.11	31.00	98.60	47.66	10.35	23.90	22.61										
3	10.35	7.68	7.96	6.84	7.12	8.52	36.00	49.30	29.56	13.04	37.56	18.43										
4	10.35	8.24	7.96	6.84	7.68	7.12	42.31	49.30	20.89	13.80	28.13	17.26										
5	10.35	7.96	7.68	6.84	7.40	6.84	37.04	46.60	17.26	23.04	25.31	23.04										
6	10.04	7.96	7.40	6.84	6.84	6.56	33.92	32.92	14.56	28.60	22.61	21.75										
7	9.73	7.96	7.40	6.84	10.35	6.84	29.00	25.78	13.04	23.90	37.04	18.04										
8	9.42	7.96	7.12	6.84	9.73	10.66	37.56	21.32	12.66	26.25	23.90	15.70										
9	9.42	7.96	7.12	7.12	8.24	7.96	32.92	19.21	11.28	20.03	30.04	13.80										
10	8.80	7.96	7.12	7.12	7.68	8.52	38.60	18.43	10.97	21.32	33.92	36.52										
11	8.80	7.68	7.12	6.84	14.10	18.43	36.00	16.87	10.66	41.25	31.00	53.29										
12	8.80	7.68	7.40	6.84	18.04	28.60	33.40	15.32	10.66	37.56	21.75	31.00										
13	8.52	7.68	7.40	7.68	13.80	21.32	62.15	14.56	10.35	40.19	44.44	21.32										
14	8.52	7.68	7.40	7.96	12.28	18.04	68.00	13.42	10.04	31.96	25.78	17.26										
15	8.52	7.68	7.40	7.96	10.97	46.04	56.30	12.66	9.73	34.44	22.18	14.94										
16	9.11	7.68	7.40	8.80	30.04	25.78	59.55	12.28	9.73	24.37	21.32	16.09										
17	9.11	7.68	7.40	7.96	29.56	22.61	46.06	11.90	9.73	31.48	21.75	16.87										
18	9.42	7.68	7.12	7.40	15.70	19.60	32.92	37.56	9.73	21.32	31.48	40.19										
19	9.73	7.40	7.12	7.12	13.42	23.90	53.29	26.25	9.73	24.37	37.04	94.00										
20	9.42	7.68	7.12	7.12	10.66	35.48	46.06	21.32	9.42	27.66	25.31	44.98										
21	9.11	7.68	7.12	7.12	10.04	48.22	30.52	16.48	9.73	45.52	19.60	29.56										
22	8.80	7.40	7.12	6.84	7.96	38.08	29.08	15.70	9.42	32.44	18.43	22.18										
23	8.80	7.40	6.84	6.84	7.68	37.04	33.92	13.80	9.42	38.60	14.56	19.60										
24	9.11	7.40	6.84	6.84	6.84	51.58	28.13	14.56	9.73	30.52	13.42	18.82										
25	10.97	7.40	6.84	7.12	6.28	29.08	22.18	33.92	9.42	38.08	28.60	18.82										
26	10.35	7.40	6.84	7.12	6.00	27.66	50.44	23.47	9.11	42.84	31.96	16.48										
27	9.73	7.40	6.84	6.84	8.80	19.21	137.00	29.08	18.43	62.15	29.56	16.87										
28	9.11	7.40	6.84	6.84	11.59	17.26	154.10	37.04	24.37	38.60	24.84	16.87										
29	8.80		6.84	6.84	11.28	12.28	105.00	43.37	14.18	42.84	22.18	16.48										
30	8.52		6.84	6.56	8.80	29.56	55.00	34.96	11.90	33.40	30.04	15.70										
31	8.24		6.84		13.80		40.19	26.72														

B
12

STND 8101 - 0
 NAME TIGBAO
 MAIN RIVER LOBOOC
 RIVER

DAILY AVERAGE
 LATITUDE N 09,39,57
 LONGITUDE E 124,02,04
 UTM
 CATCHMENT 618,00 KK2
 PROCESSED 81/05/25.
 YEAR 1968

DATE	DISCH. M3/S												DFC
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV		
1	10.97	45.52	10.35	7.96	10.66	11.30	21.00	11.30	11.30	14.00	13.10	-	
2	10.66	28.13	10.04	7.68	9.73	11.70	17.30	11.30	12.50	13.70	13.10	-	
3	10.35	21.75	9.73	7.68	9.11	15.95	14.60	11.50	12.50	14.60	18.65	-	
4	9.73	17.26	10.35	7.68	9.42	15.95	14.00	13.10	11.30	13.10	21.80	-	
5	9.73	15.32	10.04	7.68	9.73	20.45	21.35	13.40	10.50	14.60	16.40	-	
6	9.42	13.80	9.42	7.68	10.35	20.00	15.95	14.60	10.50	14.00	14.00	-	
7	9.42	14.94	9.42	7.68	11.90	16.40	18.65	17.75	10.90	12.80	13.70	-	
8	9.42	20.03	9.11	7.68	7.45	17.30	24.05	17.75	10.70	15.20	13.10	-	
9	9.42	16.09	9.11	7.68	9.00	13.70	20.45	17.75	11.30	15.20	12.80	-	
10	9.42	13.42	9.11	7.40	12.50	13.10	16.85	14.30	30.50	14.60	12.50	-	
11	9.73	12.28	8.80	7.40	12.30	13.10	17.30	14.00	20.90	14.00	12.10	-	
12	10.04	11.59	8.80	7.40	12.30	12.50	29.30	13.10	13.40	25.70	33.50	-	
13	23.90	11.28	8.80	7.40	11.90	12.10	20.90	12.80	8.40	25.10	20.90	-	B
14	18.82	10.97	8.80	7.40	11.90	11.50	22.25	12.10	25.10	23.13	16.40	-	T4
15	14.94	47.08	9.52	7.40	11.90	11.50	32.30	11.90	19.10	35.90	14.60	-	
16	13.04	25.78	8.52	7.40	10.55	14.00	35.90	11.70	16.40	27.50	13.10	-	
17	12.28	18.43	8.52	7.40	11.50	11.90	24.50	11.70	12.80	24.05	12.10	-	
18	14.94	18.43	8.52	7.68	11.50	12.10	20.70	11.30	12.50	21.80	12.50	-	
19	15.32	13.42	8.52	7.68	11.50	12.10	24.05	7.50	17.75	23.10	100.50	-	
20	13.04	11.90	8.52	7.68	11.30	15.50	19.55	28.70	15.95	24.05	-	-	
21	11.59	10.97	8.24	7.68	12.10	17.75	15.25	11.70	19.55	22.50	-	-	
22	10.66	10.35	8.24	7.68	11.50	20.45	14.30	11.70	14.90	29.30	-	-	
23	10.04	10.35	8.24	7.68	11.30	18.20	13.40	11.90	14.30	21.80	-	-	
24	10.04	10.66	8.24	7.96	11.10	19.10	14.90	13.70	13.40	18.20	-	-	
25	10.66	12.66	8.24	7.96	11.10	21.80	13.40	12.50	15.20	23.15	-	-	
26	12.28	11.90	8.24	7.96	11.90	18.20	13.10	12.10	17.30	16.40	-	11.52	
27	77.80	12.28	7.98	7.96	14.60	19.10	12.50	11.70	20.90	14.90	-	-	
28	71.50	11.59	7.96	7.96	11.90	46.50	12.50	11.50	19.10	14.60	-	-	
29	34.96	10.97	7.96	8.80	11.70	25.10	11.70	11.30	18.20	14.00	-	-	
30	31.96	-	7.96	11.59	11.70	16.40	11.70	11.10	15.95	12.50	-	-	
31	90.25	-	7.96	-	11.70	-	11.30	10.90	-	12.50	-	-	

STNO	8101 - 0		DAILY AVERAGE							PROCESSED 81/05/25.		
	NAME	TIGBAO				LATITUDE	N 09,39,57				YEAR	1967
			MAIN RIVER	LOBOC	RIVER	LONGITUDE	E 124,02,04	UTM	CATCHMENT	618.00	KM2	
DATE	ARCHIVE F1	DISCH.	M3/S	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
											OCT	NOV
											DEC	
1	14.18	16.48	37.56	11.28	10.35	9.42	19.60	8.80	7.40	8.80	11.28	11.28
2	13.80	17.65	31.00	11.28	10.35	9.11	16.08	8.80	8.80	8.52	13.04	10.66
3	12.66	16.09	41.78	11.59	10.35	8.80	14.98	7.96	15.32	8.52	16.48	10.97
4	18.80	15.70	62.80	11.90	10.04	8.52	13.90	7.96	11.90	8.24	60.70	10.97
5	60.20	15.70	37.56	13.42	10.04	8.52	27.66	7.68	11.28	7.68	41.25	10.66
6	66.70	14.56	53.66	13.04	10.04	8.52	26.72	7.68	9.73	7.68	31.48	10.04
7	77.80	14.18	100.20	13.04	10.04	8.52	27.66	7.68	8.80	21.75	28.13	9.11
8	44.44	13.42	65.40	12.66	10.04	8.52	19.60	8.52	8.24	17.24	101.00	9.11
9	34.44	13.04	134.00	12.66	9.73	8.52	16.48	8.80	7.68	13.42	56.95	8.80
10	28.25	14.94	58.90	12.28	10.04	8.52	15.32	8.24	11.90	13.80	45.52	8.80
11	20.03	14.56	40.19	12.28	9.73	8.52	13.80	8.24	8.24	14.56	31.00	8.80
12	22.61	14.18	33.92	12.28	10.35	8.52	12.28	7.64	7.12	17.26	24.84	10.04
13	18.82	16.87	28.60	11.90	13.42	8.52	23.04	7.40	6.84	15.32	23.90	9.73
14	86.50	57.60	25.78	11.90	13.04	8.52	23.47	7.40	6.56	16.48	24.84	10.35
15	42.31	114.00	22.61	11.55	12.66	8.52	15.32	7.40	6.28	40.19	22.18	43.37
16	28.13	91.00	20.89	11.55	13.80	8.52	16.87	7.68	6.28	25.31	21.75	75.00
17	24.37	62.15	23.47	12.28	12.66	8.80	15.70	7.68	5.79	30.52	17.65	61.50
18	58.25	68.70	28.13	15.32	12.28	8.80	17.26	8.80	5.79	43.90	15.32	144.10
19	169.40	39.13	23.47	12.66	11.28	10.04	24.84	8.24	6.00	44.98	13.42	55.65
20	137.00	29.08	21.75	11.90	11.28	16.09	17.65	7.68	9.73	40.72	11.90	36.00
21	102.60	24.84	18.43	11.28	10.66	20.03	14.94	7.40	7.96	19.21	11.90	26.25
22	55.65	36.00	17.26	11.28	10.35	23.90	12.28	7.12	12.28	15.70	11.28	18.04
23	39.66	27.66	16.48	10.97	11.59	27.19	10.97	7.12	15.32	14.94	10.66	13.80
24	52.92	29.08	16.09	10.97	10.66	20.03	10.04	14.94	13.80	12.28	9.73	11.90
25	36.52	26.72	14.18	11.28	9.73	23.90	10.04	12.66	19.21	11.59	9.42	11.59
26	29.56	21.75	14.18	11.28	9.42	37.56	9.73	11.28	17.65	10.35	13.42	10.55
27	29.56	19.21	14.94	10.97	9.11	21.32	9.42	10.66	12.28	10.35	11.90	9.73
28	24.37	28.60	14.18	10.66	9.11	16.09	9.73	10.35	10.97	10.04	12.28	9.42
29	20.03		12.66	10.66	8.80	13.42	9.11	8.80	9.73	10.04	11.90	10.35
30	18.82		11.90	10.35	8.80	12.28	9.11	8.24	8.80	11.90	11.90	9.73
31	16.48		11.90		9.11		9.11	7.68		10.97		9.42

STNO 8101 - 0
 NAME TIGBAO
 MAIN RIVER LOBOC
 RIVER
 ARCHIVE F1 DAILY AVERAGE
 LATITUDE N 09,39,57
 LONGITUDE E 124,02,04
 UTM CATCHMENT 618,00 KM2
 YEAR 1969

DATE	DISCH. M3/S												B 15
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	16.40	9.15	9.30	7.95	8.60	9.00	16.85	9.45	19.10	10.50	11.10	20.45	
2	13.10	9.15	9.30	7.95	8.60	9.30	27.50	9.90	15.95	10.50	10.90	18.65	
3	11.90	9.15	9.15	7.95	8.60	9.60	18.65	9.90	31.10	17.75	10.70	15.95	
4	11.30	9.60	9.15	8.00	8.60	9.60	25.10	9.75	21.80	23.15	10.50	13.40	
5	10.90	9.60	9.15	8.00	8.60	9.90	14.00	9.75	15.95	34.10	10.20	12.30	
6	10.35	9.15	9.00	8.00	8.60	10.50	38.75	9.60	12.80	41.00	10.20	11.30	
7	11.30	9.15	9.00	8.30	8.80	12.10	49.40	9.60	12.10	21.80	10.20	14.90	
8	10.90	9.45	9.00	8.30	8.80	15.95	45.80	9.75	11.90	15.50	10.20	14.00	
9	10.20	9.45	9.00	8.30	8.80	14.30	20.10	9.75	11.50	17.75	10.20	14.00	
10	9.75	9.45	9.15	8.80	8.80	13.10	30.50	10.20	11.00	24.50	10.20	13.40	
11	10.50	9.15	9.15	8.80	9.00	12.50	28.70	10.20	10.55	19.10	10.35	12.50	
12	10.35	9.00	9.15	8.80	9.00	11.30	25.70	10.05	10.55	14.60	10.50	13.40	
13	10.35	9.00	9.15	8.70	9.00	10.50	40.25	10.05	10.55	13.70	10.50	12.80	
14	12.10	9.15	9.30	8.70	9.00	9.90	21.80	9.90	10.55	12.50	12.50	11.90	
15	13.10	9.45	9.30	8.70	9.00	10.90	34.70	9.90	11.70	11.90	12.10	11.50	
16	12.80	9.15	9.30	8.70	9.00	11.10	17.75	11.70	12.10	14.90	11.50	11.50	
17	11.10	9.15	9.30	8.70	9.00	16.05	12.50	11.90	12.30	13.70	11.30	11.50	
18	10.70	9.00	9.30	8.70	8.90	28.70	12.10	15.95	11.30	20.00	11.90	19.55	
19	10.20	9.00	9.30	8.60	8.90	26.90	11.50	21.35	10.90	19.10	12.80	23.15	
20	9.90	9.00	9.30	8.60	8.90	18.65	12.50	13.70	11.30	22.25	13.70	17.75	
21	9.60	9.00	9.30	8.60	8.80	23.15	20.90	11.70	12.30	15.20	13.70	14.30	
22	9.60	8.90	9.15	8.60	8.80	14.30	14.00	11.50	11.90	15.50	13.70	12.10	
23	9.75	8.90	9.15	8.60	8.80	10.90	12.50	11.50	11.50	12.30	16.40	13.10	
24	9.30	8.90	9.15	8.50	8.80	15.50	11.70	11.50	11.30	12.10	14.00	14.30	
25	9.45	8.90	9.15	8.50	9.00	18.65	11.30	11.90	11.30	11.70	12.10	25.70	
26	9.45	8.80	9.15	8.50	9.00	12.80	10.90	12.50	11.10	13.10	10.50	31.10	
27	9.45	8.80	8.60	8.50	9.00	11.10	10.50	19.55	11.10	20.45	10.50	22.70	
28	9.30	8.80	7.50	8.50	8.90	11.10	10.05	19.55	11.10	15.20	10.50	14.90	
29	9.30		7.50	8.50	8.90	11.90	10.05	24.50	10.50	12.80	10.70	12.30	
30	9.45		7.60	8.50	9.00	12.30	9.75	21.80	10.50	11.70	10.90	20.45	
31	9.75		7.60		9.00		9.30	18.20		11.30		14.30	

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE								PROCESSED	
								LATITUDE	N 09,39,57	YEAR	1970		
								LONGITUDE	E 124,02,04				
				UTM									
				CATCHMENT	618,00	KM2							
ARCHIVE F1				DISCH.	M3/S								
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	12,80	16,40	11,90	9,45	8,20	9,15	34,10	12,10	10,05	10,90	39,50	18,65	
2	11,50	14,00	12,10	9,45	8,40	9,60	28,10	12,10	9,60	10,90	23,15	19,10	
3	10,90	12,50	11,90	9,30	8,60	9,45	15,20	11,70	9,15	12,50	15,95	16,85	
4	10,90	11,70	11,70	9,30	8,40	9,30	13,10	11,30	9,15	22,25	19,10	14,00	
5	10,90	11,30	11,30	9,30	8,40	10,70	14,30	10,90	9,00	22,25	15,95	13,10	
6	10,70	10,90	10,50	9,15	9,45	9,90	13,10	10,90	9,00	17,30	14,90	12,50	
7	10,50	10,50	9,90	9,15	10,35	9,45	11,90	10,50	10,20	21,35	15,70	12,50	
8	10,90	10,50	9,90	9,00	10,20	9,90	11,30	10,05	15,50	22,25	15,50	12,50	
9	10,90	10,90	9,75	9,00	10,05	10,05	12,30	9,60	11,90	21,35	15,20	12,10	
10	10,70	11,70	9,75	9,00	9,90	9,90	14,60	10,50	10,70	22,25	15,50	12,10	
11	10,70	28,10	9,60	8,80	9,60	9,75	23,15	10,50	10,50	34,70	14,00	12,10	
12	10,90	20,90	9,60	8,80	10,70	9,45	22,25	10,50	10,50	19,10	17,75	12,10	
13	10,90	17,30	9,45	9,15	10,35	9,00	20,45	10,50	10,35	17,30	15,50	11,00	
14	10,90	14,60	9,45	9,15	10,35	8,80	16,85	9,75	11,50	43,25	10,40	20,45	
15	10,90	43,50	9,30	9,15	10,20	9,80	15,95	9,75	12,30	24,50	17,75	13,20	
16	10,70	28,70	9,30	9,00	10,20	8,80	21,35	9,60	11,30	22,25	16,40	13,70	
17	10,70	21,35	9,30	9,00	9,15	9,75	12,80	9,60	10,50	20,45	15,50	11,90	
18	10,70	15,20	9,15	9,00	9,90	15,95	11,90	10,50	11,30	14,00	13,40	12,30	
19	10,50	13,10	9,10	8,90	9,75	17,30	12,50	11,10	14,60	12,80	12,80	11,90	
20	10,50	11,90	9,90	8,90	9,75	12,50	12,50	20,45	13,40	12,10	12,50	11,30	
21	10,50	22,25	9,90	8,90	9,60	10,35	14,00	23,60	12,50	11,70	12,10	10,90	
22	10,35	29,30	9,75	8,90	9,30	23,60	13,70	14,90	12,10	12,10	11,30	10,50	
23	10,35	23,60	9,75	8,80	9,30	18,20	18,20	18,20	11,30	12,30	10,70	10,50	
24	10,35	19,55	9,75	8,80	9,00	24,50	32,30	12,80	10,70	13,70	11,50	10,50	
25	10,20	16,40	9,60	8,70	9,00	13,40	22,25	12,10	10,20	25,10	23,15	10,35	
26	10,20	14,60	9,60	8,70	9,00	14,30	15,95	11,70	11,90	36,50	15,95	10,35	
27	10,20	19,55	10,05	8,70	8,90	11,30	13,40	11,30	12,50	33,50	14,60	10,20	
28	10,05	12,10	9,75	8,40	8,90	11,30	11,70	11,10	13,10	26,30	22,25	10,50	
29	10,05		9,75	8,30	8,80	11,30	10,90	10,50	11,90	35,30	18,20	10,50	
30	10,05		9,60	8,20	9,15	14,90	10,50	10,50	11,30	25,10	18,65	10,50	
31	20,45		9,60		9,00		10,50	10,50		31,70		10,35	

B
16

STNO 8101 - 0
 NAME TIGBAO
 MAIN RIVER LOBOOC
 RIVER

DAILY AVERAGE

PROCESSED 81/05/25.

LATITUDE N 09,39,57
 LONGITUDE E 124,02,04
 UTM
 CATCHMENT 618,00 KM2

YEAR 1971

DATE	DISCH. M3/S											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	10.50	11.50	11.10	12.50	40.25	13.10	28.70	12.10	21.35	41.75	13.70	20.00
2	10.70	11.50	11.10	12.10	26.30	14.90	22.25	11.90	31.10	38.00	14.30	17.30
3	11.30	11.30	10.70	12.10	20.00	26.30	26.90	11.90	17.30	38.00	15.50	15.20
4	13.70	10.70	10.50	12.10	16.40	22.70	30.50	11.70	29.30	42.50	47.60	14.00
5	12.75	11.90	10.35	11.90	14.30	14.90	25.10	11.70	17.30	38.00	33.50	13.10
6	37.25	12.50	10.50	11.50	14.90	19.10	19.10	11.70	21.80	27.50	51.20	12.50
7	43.25	15.95	10.50	11.10	13.40	17.75	22.25	11.30	21.35	24.50	33.50	12.50
8	32.30	14.30	10.50	10.90	14.90	16.85	34.10	11.30	22.70	21.00	26.90	12.30
9	18.20	13.40	11.30	10.90	24.50	20.00	16.50	10.90	20.00	26.90	24.05	12.10
10	16.40	46.70	11.30	10.70	26.30	26.10	44.00	10.50	18.65	32.90	26.90	14.00
11	15.50	30.50	11.30	10.50	23.15	25.10	31.70	10.50	40.25	31.70	32.90	13.70
12	12.50	20.90	29.90	10.35	27.50	25.70	20.45	12.30	24.05	28.10	25.10	14.00
13	11.50	18.65	14.60	10.20	32.30	18.65	15.50	12.50	17.75	26.90	21.80	13.70
14	11.30	35.90	22.25	10.20	67.50	16.40	17.30	14.30	14.30	25.10	18.20	13.40
15	10.90	35.30	13.70	10.20	28.10	14.60	15.50	15.20	13.10	28.10	17.30	13.10
16	10.90	35.30	26.90	10.05	22.25	14.60	14.30	29.30	12.50	38.00	21.35	13.10
17	10.90	20.90	20.00	10.05	19.10	19.10	14.30	27.50	12.10	27.50	20.90	12.50
18	10.70	18.65	16.40	10.05	19.55	14.90	13.70	16.40	12.10	21.00	18.20	12.50
19	10.70	17.75	13.40	9.90	18.20	13.40	13.70	13.40	11.90	23.15	15.50	12.80
20	10.70	17.30	12.10	9.90	21.35	13.10	13.10	12.30	12.30	22.70	14.90	12.80
21	10.50	16.85	11.70	9.75	19.10	20.45	12.30	11.70	22.25	31.00	14.60	12.50
22	10.50	15.50	11.50	9.75	17.75	31.10	12.50	11.30	25.70	41.00	25.70	12.50
23	10.70	15.95	11.30	9.60	15.20	20.90	12.30	11.30	17.30	32.90	29.30	13.70
24	10.90	15.50	10.90	9.75	15.50	23.60	12.10	11.50	19.55	26.90	25.10	13.40
25	11.50	14.60	10.50	10.50	14.30	48.50	11.70	11.70	41.00	23.60	22.25	13.10
26	13.70	13.40	10.50	10.20	11.70	40.25	10.90	12.10	34.70	22.70	22.70	13.70
27	11.90	11.70	10.50	9.90	14.30	38.75	10.90	12.50	20.90	19.10	41.00	13.70
28	11.30	11.30	11.10	9.90	21.35	42.50	11.10	11.90	28.70	15.95	41.00	13.10
29	10.90		11.50	10.05	17.30	61.10	11.30	13.10	21.35	14.90	22.70	13.10
30	10.50		14.00	14.00	14.60	38.00	14.00	12.50	23.15	14.00	21.35	12.50
31	10.50		12.50		14.30		12.30	43.25		13.70		12.30

B 17

81/05/25.

STNO	8102 - 0	DAILY AVERAGE							PROCESSED			
NAME	PAMACSLAN								YEAR			
MAIN RIVER	WAHIG								1957			
RIVER	PAMACSLAN											
ARCHIVE F1		MISCH.	M3/S		LATITUDE	N 09,50,58						
DATE	JAN	FEB	MAR	APR	JUN	LONGITUDE	E 124,21,09					
					UTM							
					CATCHMENT	28,00	KM2					
1	1.84	.24	.20	.11	.24	.14	.42	.28	.24	1.84	.38	.38
2	1.63	10.57	.20	.11	.24	.14	.38	4.12	.22	1.74	.38	.35
3	2.78	1.34	.20	8.74	.24	.13	.35	3.72	.20	1.63	.42	.31
4	1.63	1.34	.20	5.28	.24	.13	.31	3.58	.20	1.43	.42	.28
5	1.43	.58	.20	2.91	.24	.13	.28	.58	.19	1.24	.42	.24
6	4.16	.53	1.43	1.53	.24	.13	.22	.53	.13	1.15	.42	.22
7	.91	.47	1.34	1.53	.24	.13	.20	.47	.13	.98	.38	.20
8	.83	.42	1.05	.96	.24	.13	.19	.47	.12	.83	.30	.19
9	.91	.38	.38	.96	.24	.42	.19	1.74	.11	.69	.38	.17
10	.69	.35	.28	.69	.24	.38	.19	1.63	.11	.53	.38	.15
11	.69	.31	.28	.64	.24	.38	.15	1.63	.11	.35	.35	.14
12	.76	.24	2.05	.64	.24	.35	.14	5.28	.11	.24	.35	.14
13	.69	.24	.98	.38	.24	.35	.20	3.17	.11	.20	.38	.14
14	.69	.24	.35	.38	.24	.38	.22	1.84	.11	.83	.38	.14
15	.69	.22	.22	.35	.24	.31	.20	1.53	.11	.76	.38	.14
16	.64	.22	.15	.35	.24	.28	.15	.69	.11	.76	.38	.14
17	.64	.22	.14	.35	.24	.28	.20	.69	.11	.76	.38	.14
18	.38	.22	.14	.35	.24	.28	.20	.58	.11	.69	1.43	.14
19	.38	.22	.14	.35	.24	.24	.19	.58	.11	.69	1.43	.14
20	.38	.22	.14	.35	.24	.24	.24	.53	.11	.69	1.34	.14
21	.35	.22	.14	.31	.24	.14	.17	.47	.11	.69	1.24	.13
22	.28	.22	.14	.31	.24	.14	.14	.35	.11	.64	1.15	.13
23	.28	.20	.14	.31	.24	.14	.13	.31	.11	.58	1.05	.12
24	.28	.20	.14	.31	.24	.14	.13	.31	.11	.58	.98	.12
25	.28	.20	.14	.28	.24	.14	.47	.28	.11	.58	.91	.12
26	.28	.20	.13	.28	.24	.69	1.43	.28	.11	.69	.83	.12
27	.28	.20	.13	.28	.22	.91	.76	.58	.11	.47	.76	.12
28	.28	.53	.13	.28	.22	.47	.76	.53	.11	.42	.64	.12
29	.28		.13	.28	.22	.47	.42	.42	.11	.42	.58	.12
30	.24		.13	.28	.22	.47	.38	.38	.11	.38	.47	.12
31	.24		.12		.22		.31	.35		.38		.12

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN
 ARCHIVE F1 DISCH. M3/S
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
 1 .17 .12 .17 2.41 .69 .58 .83 1.24 .38 2.29 1.34 .42
 2 .17 .13 .64 2.29 1.05 .58 1.34 1.05 .38 2.17 1.34 .42
 3 .17 .13 .47 1.74 .64 .47 3.86 .98 .35 2.05 1.15 .38
 4 .19 .13 .42 1.43 .69 .47 2.29 .83 .35 1.95 1.05 .38
 5 .17 .13 .38 1.34 .76 .43 1.63 .91 .31 1.53 .98 .35
 6 .17 .28 .31 1.24 .98 .31 .69 .76 .31 1.15 .98 .35
 7 .20 .19 .19 1.15 .91 .31 1.34 .83 .38 .98 .91 .35
 8 4.48 .14 .19 1.05 .76 .42 3.04 .83 .35 .83 .91 .28
 9 9.73 .15 .19 .98 1.05 .47 2.65 .98 .28 .83 .91 .24
 10 8.56 .20 .19 .83 .91 .53 2.53 1.34 .24 .91 .91 .24
 11 7.84 .15 .17 .83 .64 1.15 2.41 1.15 .22 .98 .91 .22
 12 7.48 .13 .17 .69 .69 1.74 2.17 .91 .38 1.05 .91 .22
 13 6.11 2.41 .31 .69 .69 2.29 2.01 .83 .35 1.05 .91 .19
 14 4.64 1.21 3.17 .69 .64 2.53 1.74 .83 .35 .90 .91 .19
 15 4.96 .47 7.66 .69 .58 1.63 .91 .69 .31 .83 .91 .19
 16 4.48 .98 2.17 .64 .64 .69 .64 .69 .53 .76 .76 .19
 17 3.86 .91 2.65 .64 .76 .42 .47 .98 .69 .76 .76 .19
 18 4.16 .83 3.17 .53 .76 .31 .47 .91 2.41 1.63 1.15 .19
 19 3.04 .69 1.63 1.05 .69 .38 .53 .69 2.29 9.10 .91 .17
 20 2.53 .69 3.30 1.05 .69 .47 .53 .58 1.43 5.94 .83 .17
 21 2.05 .53 4.32 1.05 .64 .53 .53 .58 .83 5.28 .83 .17
 22 1.69 .35 3.30 1.05 .58 .58 .98 .58 .76 3.04 1.34 .14
 23 1.34 .24 2.78 1.15 .64 .58 5.12 .58 .69 2.05 1.63 .14
 24 1.15 .24 2.29 .58 .53 .58 3.17 .58 1.24 2.05 1.53 .35
 25 .83 .24 2.17 .69 .58 .58 3.04 .58 1.24 1.84 1.43 .91
 26 .64 .20 1.95 1.43 .58 .58 3.58 .58 .76 1.74 .47 .69
 27 .47 .20 1.74 1.43 .58 .58 2.65 .58 .69 1.63 .47 .69
 28 .31 .20 1.43 1.34 .58 .58 2.78 .53 1.24 1.53 .47 .58
 29 .22 .17 1.34 1.34 .58 .53 2.17 .53 2.41 1.43 .42 .58
 30 .17 2.65 1.34 .58 .58 1.63 .42 2.41 1.43 .42 .38
 31 .14 2.41 .58 .58 1.53 .42 .42 1.34 .28

PROCESSED 01/05/25,

YEAR 1959

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20

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN
 ARCHIVE F1 DISCH. M3/S
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
 1 .13 .15 .17 .22 .12 .22 .14 .35 .19 .24 .22 3.30
 2 .13 .15 .15 .20 .14 .20 .14 .28 .19 .24 .19 2.78
 3 .13 .15 .14 .17 .20 .17 .14 .22 .17 .22 .15 2.41
 4 .13 .15 .13 .14 .28 .17 .98 .64 .15 .22 .17 2.05
 5 .12 .17 .13 .14 .24 .17 .58 .53 .15 .22 .17 2.65
 6 .12 .15 .13 .14 .20 .17 .47 .42 .15 .20 .17 4.16
 7 .12 .14 1.76 .13 .17 .17 4.64 .35 .15 .20 .17 4.80
 8 .12 .13 1.43 .11 .14 .17 3.86 .24 .15 .20 .17 4.16
 9 .12 .13 1.24 .11 .13 .15 3.17 .20 .15 .19 .17 3.58
 10 .53 .13 .98 .11 .13 .15 2.78 .17 .15 .20 .17 3.04
 11 .42 .13 .76 .11 .12 .15 2.41 .15 .15 .19 .17 2.65
 12 .36 .13 .58 .11 .12 .15 2.05 .14 .14 .20 .17 2.29
 13 .35 .53 .42 .11 .12 .15 1.84 .14 .38 .20 .17 1.84
 14 .31 .47 .24 .11 .12 .14 .64 .14 .31 .20 .17 1.53
 15 .28 .83 .22 .11 .12 .15 .58 .14 .24 .20 .17 1.24
 16 .24 2.65 .17 .11 .12 .17 .38 .14 .19 .19 .76 .98
 17 .22 2.53 .15 .11 .12 .17 .28 .13 .19 .19 .98 .83
 18 .17 2.17 .14 .11 .12 .15 .20 1.24 .17 .19 1.24 .69
 19 .15 1.95 .13 .11 .12 .15 .17 3.58 .17 .19 1.34 .53
 20 .15 1.74 .13 .12 .12 .15 .14 3.17 .17 1.24 10.15 .38
 21 .24 1.43 .13 .11 .12 .15 .14 2.78 .17 1.15 6.45 .31
 22 .22 .53 .13 .11 .12 .22 .14 2.41 .17 1.05 5.44 .24
 23 .20 .64 .12 .11 .12 .19 .13 1.95 .17 .98 4.96 .20
 24 .19 .58 .12 .11 .58 .17 .20 1.63 .15 .91 4.48 .20
 25 .17 .47 .12 .11 .47 .17 .42 1.34 .15 .83 4.16 .20
 26 .19 .42 .12 1.24 .42 .17 2.05 .98 .15 .76 3.86 .20
 27 .15 .28 .11 .98 .38 .17 3.58 .69 .15 .69 3.44 .20
 28 .15 .22 .11 .83 .38 .17 3.17 .53 .15 .64 2.91 .20
 29 .15 .11 .64 .31 .14 2.78 .35 .15 .58 2.69 .20
 30 .15 .11 .47 .28 .14 2.53 .22 .15 .53 2.41 .20
 31 .15 .24 .28 2.17 .15 .47 .20

DAILY AVERAGE
 LATITUDE N 09°50'58"
 LONGITUDE E 124°21'09"
 UTM CATCHMENT 28.00 KN2
 PROCESSED 81/05/25.
 YEAR 1958

B
E

PROCESSED 81/05/25.

STNO	8102 - 0	DAILY AVERAGE										YEAR	1960
NAME	PAMACSLAN	LATITUDE N 09,50,58											
MAIN RIVER	WAHIG	LONGITUDE E 124,21,09											
RIVER	PAMACSLAN	UTM CATCHMENT 28,00 KM2											
ARCHIVE F1	DISCH.	M3/S											
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	,31	1.95	,15	,10	,76	,47	,76	,83	,83	3.17	1.74	,69	
2	,28	1.95	,14	,10	,69	,42	,64	1.43	1.95	2.91	3.44	,64	
3	,24	1.62	,14	,10	,69	,38	,76	1.15	2.29	2.65	3.17	,58	
4	,22	,90	,13	,10	,69	,35	,85	,91	2.05	2.29	2.91	,53	
5	,20	,76	,13	,10	,58	,28	2.65	,83	1.84	2.05	2.53	,69	
6	,17	,64	,13	,31	,58	,22	2.41	,83	1.74	2.65	2.05	,47	
7	,15	1.05	,13	,24	,58	,19	2.17	,83	1.34	3.44	1.74	,38	
8	,15	1.34	,13	,22	,76	,14	1.63	,69	1.15	3.17	1.74	7.66	
9	,19	,90	,13	,19	,76	,17	1.24	,69	,91	2.91	1.63	,62	
10	,24	,91	,12	,14	,64	,19	,83	,69	1.15	2.78	1.53	5.60	
11	,64	,76	,12	,13	,64	,20	,83	,69	,91	2.65	1.53	22.50	
12	,64	,64	,12	,13	,58	,28	,91	,38	,91	2.29	1.43	5.28	
13	,22	,64	,11	,13	,58	,28	,83	,31	1.15	2.05	1.24	3.86	
14	,14	,53	,12	,13	,55	,35	,91	,24	1.34	1.74	1.15	2.91	
15	,15	,47	,12	,13	,47	,42	,83	,20	1.15	1.54	1.05	2.78	
16	,15	,38	,12	,13	,47	9.73	,83	,24	1.15	1.15	,98	2.65	
17	,15	,28	,12	,14	,58	6.28	,83	,31	,98	1.34	,98	2.42	
18	,22	,38	,11	,14	,58	4.00	,69	,38	,98	1.24	,91	2.29	
19	,28	,42	,11	,13	,47	3.72	,58	,38	,83	1.15	,83	2.05	
20	1.84	,47	,12	,13	,47	3.44	,58	,31	,91	1.05	1.63	1.95	
21	4.80	,58	,11	,13	,47	3.04	,64	,31	,98	,91	2.65	1.84	
22	2.53	,53	,11	2.41	,47	2.65	,69	,31	,91	,91	2.41	1.63	
23	1.34	,42	,11	2.17	,47	22.50	,85	,31	,83	,83	2.29	1.53	
24	1.05	,38	,11	1.95	,76	8.74	,69	,53	,83	,76	2.17	1.53	
25	1.24	,17	,11	1.74	1.15	5.20	,69	,69	2.78	,69	1.95	1.53	
26	1.95	,17	,11	5.12	,98	3.30	,83	,69	5.28	2.05	1.84	1.34	
27	4.16	,17	,10	2.91	,76	2.41	,98	,58	4.80	3.86	1.74	1.15	
28	3.30	,17	,10	2.41	,69	1.74	,98	,47	4.32	3.44	1.74	1.05	
29	3.04	,16	,10	,83	,58	1.53	,83	,38	2.65	3.30	1.53	1.53	
30	2.53		,10	,76	,58	,83	,69	,31	2.17	3.04	,98	2.05	
31	2.29		,10		,47		,64	,42		1.63		2.41	

B 21

STNO	DAILY AVERAGE											PROCESSED 81/05/25.	
	NAME	LATITUDE N 09°50'58"											YEAR 1961
		LONGITUDE E 124°21'09"											
MAIN RIVER	WAHIG	UTM	CATCHMENT	28.00	KM2								
RIVER	PAMACSLAN												
ARCHIVE F1	DISCH.	M3/S											
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	2.65	3.17	1.74	1.53	.64	.24	.20	.42	.28	.76	.58	.58	
2	2.65	3.04	1.74	1.43	.58	.20	.20	.38	.22	.69	.58	.58	
3	2.41	2.78	1.53	1.15	.47	.38	.83	.35	.24	.76	.69	1.95	
4	2.17	2.65	1.53	.98	.38	.38	3.86	.31	.31	.76	.64	3.86	
5	1.95	2.41	.98	.83	.31	.35	2.91	.38	.30	.69	.58	3.38	
6	1.74	2.29	.83	.69	.35	.31	2.17	.83	2.91	1.15	.53	3.44	
7	2.65	2.29	1.05	2.53	.31	.31	.64	1.24	1.53	.83	.98	3.30	
8	3.58	2.05	.98	1.43	.31	.31	.31	.83	.98	.76	.83	3.04	
9	3.44	1.95	.83	.90	.35	.20	.35	2.65	.83	.65	1.19	2.91	
10	3.17	1.95	.76	.64	.31	.20	.42	1.43	.69	.58	.98	2.65	
11	2.65	1.74	.64	.58	.28	.22	.38	1.15	.69	.53	.83	2.53	
12	4.64	1.74	.50	.53	.24	.24	.35	.98	.58	.47	.76	2.41	
13	3.36	1.35	.47	.47	.24	.24	.24	.69	.47	1.63	.64	2.17	
14	3.17	1.53	.58	.58	.22	.24	.24	.64	.42	1.43	.50	2.05	
15	2.53	1.43	.58	.53	.22	.51	.52	.58	.31	1.24	.47	1.95	
16	2.41	1.34	.47	.58	.20	.20	.31	.47	2.41	2.78	.38	1.84	
17	2.41	1.24	.30	.50	.22	.20	.35	.30	1.74	2.53	1.53	1.74	
18	2.17	1.15	.35	.47	.24	.22	.38	.38	.98	2.29	1.34	1.53	
19	2.17	.98	.31	.42	.24	.24	.38	.31	.76	2.05	1.15	1.43	
20	2.05	.69	.31	.69	.22	.24	.42	.24	.83	1.95	1.84	1.34	
21	1.95	.69	.24	.69	.22	.31	.38	.69	1.63	1.74	2.53	.98	
22	1.84	.83	.24	.58	.20	.35	.42	.35	1.43	1.43	2.29	.98	
23	1.74	.91	.53	.53	.20	.22	.38	.24	1.24	2.70	2.05	.98	
24	1.63	.98	.98	.47	.24	.20	.30	.22	.53	4.80	1.95	.83	
25	1.43	1.05	.83	.53	.24	.22	.31	.35	.47	4.32	1.84	.69	
26	1.34	1.24	.69	.50	.22	.28	.31	.24	.42	3.17	1.53	.69	
27	2.65	1.53	.69	.53	.22	.28	.24	.22	.35	2.91	3.17	.64	
28	2.65	1.74	.50	.42	.20	.35	3.30	.24	.31	2.17	4.64	.53	
29	2.65		.47	.38	.20	.35	.69	.24	.28	1.74	3.44	.42	
30	3.58		.30	.31	.24	.31	.53	.24	.31	1.53	2.65	.38	
31	3.17		1.43		.24		.42	.22		1.24		.28	

B
22

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN

DAILY AVERAGE

LATITUDE N 09,50,58
 LONGITUDE E 124,21,09
 UTM
 CATCHMENT 28,00 KM2

PROCESSED 81/05/25.

YEAR 1962

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.65	.69	3.72	1.15	.53	.69	2.41	.64	1.15	.98	1.53	1.53
2	2.53	.69	3.44	1.05	.47	.69	2.05	.69	.83	.83	1.63	2.53
3	2.41	1.05	3.04	.98	.47	.58	1.84	1.95	.76	.76	1.95	2.41
4	2.17	1.34	2.91	.83	.42	.53	1.63	2.41	.64	.69	1.95	2.17
5	2.05	1.63	2.65	1.53	.42	.47	1.53	2.17	.47	.58	1.74	1.95
6	1.74	4.00	2.41	1.34	.38	.42	1.34	2.05	.47	.47	1.53	1.84
7	1.63	34.00	2.29	1.34	.38	.69	1.15	1.84	2.41	.42	1.34	1.74
8	1.53	5.60	2.29	1.15	.42	.69	1.05	1.74	2.17	2.65	1.34	.69
9	1.34	5.28	2.05	.98	.42	.64	.98	1.15	1.84	2.41	1.15	.69
10	1.24	4.96	1.95	.98	.42	1.53	.83	.69	1.53	2.41	.69	.58
11	1.53	4.48	1.74	.91	.47	1.43	2.65	.58	.69	2.17	1.53	.53
12	1.43	3.72	1.63	1.34	.47	1.53	4.32	.47	.58	1.95	1.34	.47
13	1.34	3.44	1.53	1.24	.47	1.34	3.72	2.65	3.78	1.95	1.15	.47
14	1.15	3.17	1.84	1.15	.42	1.15	3.17	2.41	2.41	2.29	1.05	.42
15	1.05	2.78	1.63	1.05	.47	.98	2.65	2.28	2.17	2.05	.83	3.17
16	.91	2.53	1.43	.98	.42	.69	2.29	2.05	1.95	1.84	.64	3.17
17	.69	2.65	1.34	.98	.69	1.34	1.95	2.65	1.74	1.74	2.41	2.91
18	.69	2.41	1.24	.83	.64	1.53	1.63	2.41	1.63	1.63	2.17	2.78
19	.64	2.05	.90	.83	.47	1.34	1.34	2.17	1.34	1.43	2.05	2.53
20	.53	1.84	1.05	.69	.31	1.15	.98	2.05	1.24	5.28	1.84	2.41
21	.47	1.63	.83	.69	.69	.83	.83	1.95	.98	4.96	1.74	2.17
22	.42	1.24	.69	.83	.64	1.53	.69	1.84	.83	4.64	1.43	1.95
23	.38	1.15	2.65	.98	.50	2.17	.69	1.74	2.65	4.48	1.14	1.74
24	1.53	2.78	2.41	.91	.53	1.95	.98	4.80	2.05	3.86	1.05	2.65
25	1.43	2.41	2.17	.91	.42	1.53	1.53	4.64	1.53	3.58	.91	4.64
26	1.34	2.05	1.95	.83	.58	1.34	1.34	3.50	1.34	3.30	24.90	5.28
27	1.15	1.63	1.74	.69	.69	1.15	1.15	3.30	1.24	2.65	6.11	4.64
28	.98	3.72	.69	.64	.83	.76	1.15	2.76	.91	2.41	2.53	4.48
29	.83		.69	.58	.69	2.65	.98	2.17	.83	2.17	2.17	2.65
30	.76		1.34	.53	.64	2.41	.83	1.74	1.15	1.74	1.53	2.41
31	.76		1.05		.58		.69	1.34		1.53		2.05

B
23

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN

DATE	DAILY AVERAGE												CATCHMENT	KM2	YEAR	1963
	F1	DISCH.	M3/S	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
1	2.05	1.84	1.43	.83	.58	.42	.15	1.34	.98	.98	1.63	.28				
2	1.95	1.74	1.24	.76	.58	.42	.15	1.24	.83	.76	1.63	.22				
3	1.74	1.34	.98	.64	.47	.42	.20	1.15	.76	.69	1.74	.20				
4	1.53	1.24	.91	.58	.42	.35	.35	.98	.53	1.24	2.29	.28				
5	.69	1.05	.76	.53	.47	.35	.31	.91	.35	2.05	2.41	.31				
6	.58	.98	.69	.47	.42	.31	.28	.83	.28	1.53	2.53	.35				
7	.53	.91	1.84	.38	.42	.28	.24	.76	.22	.69	2.65	.28				
8	.47	.76	1.63	.35	.42	.22	.22	.69	.84	2.05	3.30	.22				
9	1.34	.64	1.63	.31	.35	.22	.20	.58	1.53	2.65	3.04	.20				
10	3.17	.47	1.43	.28	.35	.17	.17	.53	1.15	4.00	2.78	.19				
11	2.78	1.15	1.24	.69	.35	.17	.17	1.43	.98	4.16	2.53	.47				
12	2.53	2.17	1.05	.58	.31	.15	.15	3.04	.76	4.00	2.17	.42				
13	2.29	2.05	.83	.53	.35	.35	.14	2.78	.64	4.32	1.74	.35				
14	2.17	1.84	.58	.47	.35	.31	.64	2.65	.55	3.30	1.43	.31				
15	1.95	1.63	.98	.42	.38	.28	1.63	2.17	.38	3.04	1.15	.28				
16	1.63	1.43	1.05	.42	.12	.17	1.53	1.95	.31	2.78	.98	.22				
17	4.00	1.24	1.43	.38	.42	.17	1.34	1.74	.24	2.65	.69	.17				
18	3.86	1.05	1.34	.42	.42	.15	1.24	1.55	.22	2.53	.53	.64				
19	3.44	.91	1.15	.42	.38	.14	1.05	1.34	.19	2.41	1.43	.64				
20	3.30	.83	1.05	.38	.42	.35	1.95	1.95	3.30	2.29	2.65	.53				
21	2.91	3.04	.98	.35	.42	.28	3.04	1.63	2.78	2.17	2.41	.47				
22	2.78	2.65	.83	.31	.38	.28	2.91	1.43	2.17	2.05	1.95	.38				
23	2.53	2.05	.83	.83	.35	.22	2.53	3.44	1.95	1.74	1.43	.35				
24	2.17	1.95	.69	.83	.38	.22	2.29	3.04	1.63	1.05	1.34	.31				
25	5.60	1.74	.58	.76	.42	.20	1.95	2.65	1.43	1.24	.98	1.15				
26	6.28	1.95	.58	.69	.35	.19	1.74	2.41	1.05	1.34	.76	.98				
27	3.86	1.24	.47	.64	.31	.17	1.53	1.84	.83	1.34	.64	.83				
28	3.58	1.05	.38	.53	.35	.15	1.95	1.74	1.05	1.43	.47	.76				
29	3.30	.31	.47	.35	.15	1.84	1.53	.91	1.43	.38	.53					
30	2.78	.91	.47	.42	.15	1.43	1.43	.64	1.53	.28	.42					
31	2.17	.83		.42		1.24	1.24		1.63		.31					

PROCESSED 81/05/25.

B 24

STNO 8102 - 0
 NAME PAMACSLAK
 MAIN RIVER WAHIG
 RIVER PAMACSLAK

DAILY AVERAGE

PROCESSED 81/05/25.

LATITUDE N 09,50,58
 LONGITUDE E 124,21,09

UTM
 CATCHMENT 28,00 KM2

YEAR 1964

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.35	.69	2.53	.58	.69	.69	.69	.38	.63	1.05	1.43	3.86
2	.31	.63	1.95	.84	.64	.69	1.63	.42	.53	.83	1.74	3.22
3	.28	.83	2.29	.84	.53	.58	1.05	.42	.47	2.41	2.53	5.44
4	.22	1.05	2.05	.64	1.43	2.05	1.24	.58	1.34	1.95	1.84	4.48
5	.20	1.34	1.84	.64	1.24	1.74	1.05	.64	1.74	2.29	1.34	4.48
6	.92	1.74	1.64	.69	1.24	1.63	.69	.53	1.34	1.95	1.63	4.32
7	.83	2.53	1.53	.64	1.05	1.53	.53	.50	.98	1.05	4.32	7.13
8	.69	2.78	1.34	.69	1.15	1.43	3.72	1.53	.83	1.15	2.65	5.12
9	.64	1.55	1.15	.84	1.05	1.34	2.41	1.24	.83	.98	2.29	4.48
10	.53	1.53	1.05	.98	.91	1.15	1.34	1.15	.76	.69	2.05	4.00
11	.47	1.84	.83	.84	.83	1.05	.96	.98	.83	.64	1.84	5.60
12	.42	1.15	.76	.76	.64	.91	1.05	.91	.91	.47	2.17	5.28
13	.35	8.20	.69	.58	1.63	.69	1.53	.76	.90	1.05	1.24	5.12
14	.31	3.72	.64	.58	2.91	.69	3.58	.69	.98	.56	1.15	4.80
15	.24	3.17	.64	1.34	3.30	.64	1.74	.64	.98	.98	1.43	4.16
16	.22	2.78	.53	2.29	3.58	.58	.91	.47	1.15	3.44	1.24	4.00
17	1.15	2.41	.58	2.17	3.30	2.41	.83	.42	1.05	1.04	1.05	4.00
18	.91	2.17	.64	2.05	2.78	2.29	.98	.30	.98	1.95	2.17	4.48
19	.98	1.88	.76	1.95	2.65	2.05	.91	.35	.63	2.41	4.32	4.26
20	.76	1.43	.58	1.74	2.41	1.84	.91	.32	.69	2.03	30.55	4.16
21	.76	3.04	.53	1.55	2.05	1.74	.83	.52	.64	2.29	14.75	4.00
22	.54	3.52	.42	1.43	2.05	1.53	.83	.20	.64	2.05	8.02	3.86
23	.39	3.50	.35	1.30	1.74	1.95	.96	.37	.38	1.95	6.45	3.30
24	2.35	4.16	.31	1.15	1.63	1.63	1.24	.42	.53	1.95	5.72	3.17
25	1.55	3.72	.20	1.15	1.55	1.53	.83	.47	.69	2.17	5.28	4.64
26	1.74	3.44	1.24	1.05	1.45	1.34	.76	.91	1.05	2.05	4.96	3.86
27	1.63	3.04	1.15	.98	1.53	1.15	.83	1.74	1.24	1.63	4.96	3.44
28	1.24	2.70	.91	.98	1.63	.98	.91	2.17	1.43	1.64	4.48	4.16
29	.56	2.62	.91	.91	1.53	.83	.76	1.43	1.43	2.41	4.32	3.17
30	.56		.76	.69	1.15	.69	.76	1.14	1.15	1.53	4.16	2.91
31	.69		.64		.76		.64	.76		1.43		3.17

B 25

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN

DAILY AVERAGE

LATITUDE N 09,50,58
 LONGITUDE E 124,21,09
 UTM
 CATCHMENT 28,00 KM2

PROCESSED 81/05/25,

YEAR 1965

DATE	DISCH. M3/S											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.08	2.92	2.60	1.80	.78	.84	.84	.20	.18	2.92	2.40	.60
2	.99	2.00	2.00	1.80	.66	.99	.60	.25	.18	2.10	1.71	.54
3	.84	2.20	1.80	1.62	.60	.84	.78	.25	.15	1.62	1.08	.54
4	.90	2.40	1.62	1.17	.60	.72	.66	.20	.18	2.30	1.26	.40
5	.78	5.20	1.62	1.35	.72	.66	.48	.20	.90	3.04	1.26	.52
6	.72	3.28	1.62	1.35	.60	.60	.72	.15	.90	4.30	1.17	.66
7	.78	2.60	2.60	1.26	.54	.54	.60	.20	.42	3.16	1.08	.64
8	.78	2.20	5.05	1.17	.60	2.50	.48	.20	.72	2.40	1.62	.66
9	.84	2.20	2.80	.99	.60	1.62	.25	.20	1.35	2.20	2.92	.78
10	.78	2.40	2.20	1.17	.54	1.44	.15	.15	3.40	2.70	2.42	.60
11	3.52	2.60	1.90	.99	.48	1.17	.15	.13	1.44	2.30	5.20	.54
12	2.20	3.28	14.50	.90	.60	.84	.13	.13	1.26	1.80	3.76	.66
13	2.00	2.30	41.80	1.08	.60	.66	.13	.13	1.17	1.71	2.60	.72
14	3.28	2.50	5.90	1.26	.48	.66	.20	.15	1.17	1.80	2.00	.70
15	5.50	2.80	4.45	1.17	.48	.66	.15	.15	.90	1.44	1.80	1.06
16	19.20	2.20	4.15	1.62	.48	.54	.20	.15	.60	5.70	1.44	11.50
17	15.40	1.80	3.16	3.76	.48	.30	1.53	.20	.30	4.30	1.08	5.50
18	9.50	1.80	3.04	2.40	.48	.66	2.20	.15	.28	2.80	.99	5.05
19	7.30	1.71	2.92	1.90	.42	.54	1.80	.14	.30	3.04	.90	3.40
20	5.50	2.60	2.70	1.53	.42	.36	.76	.15	.30	2.40	.90	3.76
21	4.60	2.50	2.40	1.71	.42	.22	.25	.15	.42	2.60	.78	3.76
22	3.88	2.20	2.40	1.53	.42	.16	.54	.18	.30	2.40	.90	3.20
23	3.40	2.00	2.20	1.44	.54	.18	1.08	.20	.54	2.30	3.20	2.40
24	2.60	1.90	2.00	1.35	.66	.15	1.62	.72	.54	2.00	1.62	2.20
25	2.92	1.80	1.80	1.17	.78	.12	.48	.30	.30	1.53	1.08	2.20
26	2.92	1.80	3.52	.99	.66	.15	1.26	.22	.42	1.44	1.17	2.40
27	2.80	4.60	2.20	.99	.60	.25	.72	.42	1.17	1.35	.66	2.30
28	2.40	3.76	1.80	.84	.60	.36	.30	.30	2.40	1.26	.76	2.20
29	2.30		1.53	.72	.66	.15	.25	.22	1.71	1.53	.76	2.20
30	2.40		1.17	.60	.54	.36	.20	.22	1.35	1.82	.72	1.00
31	2.00		1.53		.60		.20	.18		1.71		2.20

B 26

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN

DAILY AVERAGE

LATITUDE N 09,50,58
 LONGITUDE E 124,21,09
 UTM
 CATCHMENT

PROCESSED 81/05/25.

YEAR 1966

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.71	.42	1.26	.22	.54	.20	.18	4.30	1.80	.84	1.62	1.06
2	1.17	.30	.72	.20	.42	.22	.20	4.15	1.53	.90	1.44	1.35
3	1.62	.30	.54	.20	.42	.22	.84	4.60	1.26	1.17	1.17	.99
4	1.35	.36	.42	.18	.30	.15	2.30	4.00	.99	1.35	1.17	1.80
5	1.26	.42	.30	.18	.30	.14	.60	3.04	.78	1.62	1.80	1.48
6	1.17	.42	.30	.18	.25	.20	.30	2.60	.78	2.20	1.80	1.24
7	2.10	.42	.30	.15	.25	.15	.18	2.40	.66	3.76	1.71	1.17
8	2.20	.66	.22	.30	.30	.14	.72	2.10	.56	4.90	1.90	1.08
9	.78	.36	.20	.25	.30	.18	.99	2.00	.54	2.10	2.92	1.08
10	.84	.42	.25	.22	.42	.48	1.08	1.71	.54	3.76	2.00	.84
11	1.26	.42	.30	.20	.60	.42	.99	1.62	.66	3.20	2.00	.84
12	1.35	.42	.30	.22	.90	.30	.72	1.26	.78	3.76	4.75	1.53
13	1.44	.54	.48	.22	1.26	.25	1.17	1.26	.66	2.60	3.52	1.08
14	1.62	.54	.54	.25	2.00	.22	2.20	1.26	.72	2.40	2.00	.78
15	1.62	.54	.54	.42	2.50	.22	2.40	.99	.66	2.20	2.40	.66
16	.66	.42	.42	.54	4.00	.20	3.64	1.44	.54	1.90	3.40	.92
17	.90	.36	.42	.54	2.10	.14	4.90	1.35	.48	1.62	3.04	1.62
18	.84	.54	.48	.78	1.08	.18	3.52	1.26	.30	1.80	3.04	8.00
19	.78	.60	.42	.60	.20	.15	3.28	1.17	.66	1.90	2.40	3.35
20	.78	.54	.54	.54	.42	.14	2.20	.99	.54	1.44	2.00	3.52
21	.78	.30	.36	.42	.42	.14	2.30	.78	.30	1.26	1.80	2.40
22	.99	.42	.30	.30	.14	.14	2.30	.78	.36	1.26	1.44	1.26
23	1.53	.54	.42	.36	.15	.13	2.20	1.62	.54	1.71	1.26	2.00
24	3.28	.78	.25	.30	.15	.13	2.40	2.40	.54	2.40	1.17	2.00
25	2.30	.42	.22	.42	.15	.12	2.40	1.90	.42	2.40	1.08	2.00
26	1.71	.30	.30	.42	.18	.12	4.60	1.71	.42	2.92	1.44	1.80
27	1.08	.36	.22	.36	.18	.08	6.70	1.44	.54	3.28	1.44	1.80
28	.78	.78	.22	.36	.20	.11	9.00	1.35	.78	2.20	1.53	1.71
29	.78	.22	.42	.20	.13	.08	6.70	2.30	1.08	2.30	3.76	1.80
30	.66	.25	.36	.18	.15	.05	3.76	1.26	.99	1.90	1.62	2.10
31	.48	.20			.18		3.04	.78		1.62		2.20

B 27

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN

DAILY AVERAGE

LATITUDE N 09,50,58
 LONGITUDE E 124,21,09
 UTM
 CATCHMENT 28,00 KM2

PROCESSED 81/05/25.

YEAR 1967

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.20	1.80	3.04	.90	.90	.36	.40	.14	.25	.15	1.71	1.53
2	2.10	1.71	2.50	1.08	1.17	.30	.42	.15	.42	.15	1.17	1.71
3	2.10	2.70	5.05	.99	1.08	.30	1.80	.14	.54	.15	1.90	1.62
4	3.04	3.88	3.76	.90	.99	.30	1.44	.13	.30	.14	.40	1.53
5	5.20	2.60	2.60	.84	.90	.36	.60	.14	.23	.14	2.92	1.53
6	4.75	2.20	2.20	.84	.99	.36	.48	.15	.23	.20	2.30	1.17
7	4.60	1.80	10.60	.84	.84	.25	.42	.18	.23	.25	4.60	.90
8	3.16	3.40	3.88	.84	.84	.23	.25	.18	.20	.25	6.50	.66
9	2.80	3.76	6.50	.84	.84	.30	.23	.15	.15	.36	3.64	.54
10	2.40	2.40	3.40	.84	.84	.42	.20	.15	.15	.30	2.80	.60
11	2.40	2.20	3.52	.78	.84	.36	.20	.14	.20	.25	2.50	.99
12	2.30	2.00	2.72	.72	.84	.30	.36	.18	.15	.42	2.30	.90
13	7.75	3.28	2.40	.72	.84	.36	.25	.18	.18	.99	2.30	.90
14	8.50	5.20	2.30	.72	.78	.42	.20	.14	.14	3.40	2.20	2.00
15	6.30	10.60	2.00	.72	.72	.36	.18	.48	.13	3.65	2.10	7.10
16	3.22	5.35	2.00	.72	.48	.30	.15	.84	.13	3.28	1.90	5.90
17	3.64	5.35	1.71	.72	.42	.20	.18	.30	.14	2.80	1.62	4.15
18	5.35	3.76	2.00	.72	.42	.20	.99	.20	.15	1.90	1.17	10.30
19	9.25	3.16	1.71	.84	.36	.23	.72	.15	.15	1.62	1.17	5.35
20	9.00	2.60	1.71	.90	.36	.25	.23	.15	.13	1.17	1.08	3.76
21	5.35	2.40	1.62	.99	.25	.60	.20	.15	.15	1.08	.84	3.04
22	3.88	3.04	1.62	.99	.42	.54	.23	.42	.15	1.17	.90	2.10
23	3.28	2.50	1.53	.99	.42	.36	.15	.99	.15	.90	1.17	1.71
24	2.92	2.40	1.35	.99	.40	.42	.23	.99	.15	.84	1.71	1.53
25	2.60	2.50	1.26	1.44	.48	.60	.18	.72	.15	.78	2.00	1.35
26	2.70	2.30	1.26	1.08	.48	.36	.18	.48	.20	.78	2.10	1.08
27	3.28	1.90	1.26	.99	.48	.36	.20	.36	.20	.60	2.50	1.17
28	2.00	2.30	1.26	.99	.48	.36	.15	.42	.15	.42	1.90	1.17
29	2.00		1.26	.99	.54	.48	.14	.25	.15	.48	1.80	1.08
30	1.80		1.17	.99	.42	.60	.13	.18	.15	.54	1.62	.90
31	1.71		1.08		.42		.14	.18		.54		.90

B
28

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN
 ARCHIVE F1 DISCH. M3/S
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

	DAILY AVERAGE												PROCESSED 81/05/25,	
													YEAR 1968	
	LATITUDE N 09,50,58 LONGITUDE E 124,21,09 UTM CATCHMENT 26,00 KM2													
1	.78	1.44	.78	.09	.15	.09	.10	.11	.08	.14	.25	-		
2	.99	1.26	.72	.10	.14	.09	.10	.10	.08	.11	.30	-		
3	.90	1.08	.60	.10	.13	.09	.10	.30	.08	.10	.66	-		
4	.90	.84	.48	.10	.15	.48	.09	.36	.08	.10	.36	-		
5	.84	2.10	.48	.10	.15	.13	.08	2.30	.06	.10	.25	-		
6	.78	2.70	.48	.13	.15	.10	.08	1.53	.05	.10	.18	-		
7	.66	2.20	.72	.13	.20	.10	.08	.48	.09	.11	.20	-		
8	.54	1.26	.48	.13	.20	.10	.08	.15	.08	.15	.48	-		
9	.60	.90	.30	.13	.18	.10	.10	.12	.08	.15	.30	-		
10	.60	.78	.30	.11	.23	.10	.10	.11	.08	.11	.20	-		
11	1.35	.78	.66	.13	.15	.10	2.20	.11	.08	.72	.14	-		
12	2.20	.72	.54	.13	.14	.10	2.80	.10	.12	.48	.30	-		
13	2.92	.66	.54	.13	.13	.10	1.08	.09	1.35	1.26	.23	-	B 29	
14	3.16	.60	.48	.12	.12	.10	.60	.09	.60	1.44	.30	-		
15	1.35	.54	.30	.11	.12	.10	.30	.09	.34	.84	.23	-		
16	1.17	.54	.25	.12	.13	.10	1.26	.09	.18	.60	.15	-		
17	1.71	.66	.20	.13	.13	.10	1.44	.08	.14	.90	.14	-		
18	1.90	.60	.20	.13	.13	.10	.84	.09	.78	.78	1.53	-		
19	1.44	.48	.23	.13	.12	.10	2.10	.10	.72	.72	-	-		
20	1.17	.60	.25	.12	.11	.10	1.53	.11	.30	.23	-	-		
21	.84	.72	.11	.12	.10	.09	.48	.10	.15	.20	-	-		
22	1.53	.54	.12	.13	.10	.09	.11	.09	.23	.20	-	-		
23	2.50	.90	.14	.13	.10	.09	.11	.09	.15	.18	-	-		
24	1.44	1.17	.23	.14	.12	.09	.09	.15	.25	.42	-	1.49		
25	4.60	.99	.13	.13	.14	.09	.08	.10	.42	.30	-	1.35		
26	13.30	.72	.11	.11	.13	.09	.08	.09	1.08	.48	-	5.00		
27	4.75	.66	.11	.11	.12	1.53	.08	.09	.72	.25	-	5.60		
28	3.16	.66	.10	.11	.13	1.53	.09	.10	.30	.20	-	2.35		
29	2.00	.72	.10	.10	.11	.48	.09	.09	.23	.15	-	9.20		
30	2.20		.10	.10	.10	.10	.13	.08	.08	.23	-	3.60		
31	1.71		.10		.09		.08	.09		.15		2.74		

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN

DATE	ARCHIVE F1	DAILY AVERAGE												CATCHMENT	28.00 KM2	N 09,50,58 E 124,21,09	YEAR 1969	PROCESSED 81/05/25.		
																			LATITUDE	LONGITUDE
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC							
1		2.61	.41	.10	.15	.26	.16	.80	.11	3.00	.26	1.00	.65							
2		1.63	.35	.44	.23	.18	.16	.32	.10	.90	.32	.70	.55							
3		1.35	.41	.44	.16	.18	.15	.29	.09	1.00	.26	.65	.38							
4		1.21	.41	.29	.35	.18	.12	.23	.09	.75	.50	.65	.55							
5		1.07	.35	.29	.16	.18	.23	.38	.09	.50	2.09	.55	.35							
6		1.21	.70	.26	.14	.18	.18	.55	.11	.80	1.42	.95	.47							
7		.85	.60	.20	.15	.29	.15	.55	.11	.47	1.07	2.22	.35							
8		.90	.47	.12	.15	.29	.29	.38	.13	.35	.80	1.26	.55							
9		.80	.41	1.63	.13	.32	.18	.29	.12	.41	.47	.85	1.35							
10		.90	.26	.75	.13	.23	.20	.41	.12	.44	.35	1.00	1.56							
11		.65	.32	.32	.13	.13	.17	.32	.11	.35	.35	1.14	1.07							
12		1.07	.26	.26	.15	.75	.15	.29	.12	.35	.60	1.14	.80							
13		.85	.18	.26	.15	.50	.16	.80	.12	.26	.70	.85	.60	B						
14		.85	.13	.23	.13	.26	1.35	.55	.12	.23	.50	.80	.44		30					
15		.85	.11	.20	.13	.23	.44	.38	.14	.26	.38	.80	.47							
16		1.00	.10	.20	.14	.17	.29	.35	.15	.38	.44	.50	.38							
17		.80	.10	.15	.12	.16	.23	.13	.18	.41	.60	.44	.38							
18		.75	.12	.15	.09	.14	.20	.08	.13	.35	.50	.38	.50							
19		.65	.12	.16	.10	.13	.18	.18	.13	.70	.38	.80	.55							
20		.47	.10	.18	.10	.10	.17	.20	.18	.80	.50	.70	1.00							
21		.44	.10	.38	.10	.14	.15	.23	.16	.80	.65	1.28	.95							
22		.47	.13	.41	.16	.11	.14	.16	.14	.85	.55	1.20	.60							
23		.50	.16	.20	.60	.11	.55	.15	.16	.65	.80	1.21	.95							
24		.55	.32	.16	.70	.16	.95	.15	.18	.44	1.07	1.21	1.35							
25		.60	.11	.17	.60	.16	.65	.12	.18	.47	1.14	1.49	4.40							
26		.50	.12	.18	.95	.14	.44	.14	.75	.38	.80	1.96	3.20							
27		.47	.10	.16	.80	.14	.26	.14	.55	.32	.41	1.28	2.35							
28		.38	.09	.16	.50	.15	.17	.15	.44	.23	.44	1.07	4.40							
29		.35		.20	.29	.29	.29	.13	.35	.18	.60	.85	2.61							
30		.80		.17	.20	.20	.26	.11	13.80	.17	1.07	.80	1.70							
31		.80		.15		.15		.13	2.22		1.28		1.42							

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN

DAILY AVERAGE

LATITUDE N 09,50,58
 LONGITUDE E 124,21,09
 UTM
 CATCHMENT 28,00 KM²

PROCESSED 81/05/25.

YEAR 1970

DATE	DISCH. M ³ /S											DEC
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	
1	1.00	.30	1.28	.41	.26	.14	2.78	.26	.17	.50	2.61	2.22
2	.85	.47	1.14	.41	.35	.15	.90	.32	.35	.38	3.40	2.74
3	.75	.38	.50	.35	.26	.15	.41	.23	.23	.44	1.49	2.22
4	.85	.44	.50	.32	.26	.14	.65	.17	.35	.38	2.74	1.70
5	.85	.38	.41	.35	.23	.12	.70	.26	.41	.26	1.00	2.61
6	.60	.29	.60	.36	.35	.44	.65	.38	.47	.47	.70	2.61
7	.75	.43	.41	.35	.32	.35	.60	.32	.29	.38	.38	2.61
8	.55	.80	.26	.47	.23	.18	.70	.26	.17	.26	.44	2.09
9	.44	1.21	.26	.39	.26	.35	1.00	.35	.23	.18	.41	1.14
10	.35	3.00	.50	.38	.21	.20	.80	1.21	.29	.26	.35	2.42
11	.35	2.48	.58	.29	.32	.15	1.49	.75	.15	.41	.20	2.09
12	.26	2.09	.32	.29	.20	.12	.80	.70	.16	.50	1.21	4.80
13	.28	1.07	.38	.38	.18	.12	.50	.33	.13	.50	.85	4.40
14	.28	.80	.44	.35	.18	.17	1.00	.20	.17	6.20	4.60	2.48
15	.29	3.60	.50	.29	.16	.13	.75	.17	.15	2.22	2.35	1.70
16	.23	1.96	.65	.23	.17	.11	1.70	.19	.16	1.35	3.40	.85
17	.41	1.14	.65	.23	.17	.13	.95	.19	.29	1.14	.85	1.28
18	.29	.85	.55	.38	.17	.53	.78	.18	.29	1.00	.47	1.21
19	.32	.70	.44	.26	.17	.70	.55	.44	.23	.90	1.00	1.00
20	.29	.47	.35	.29	.44	.38	.38	.80	.32	.75	.70	.85
21	.32	10.70	.32	.29	.35	.44	.26	.65	.44	.95	.38	.75
22	.26	3.60	.35	.26	.44	.29	1.21	.38	.32	.44	.85	.65
23	1.49	2.48	.29	.38	.38	.35	.60	.26	.41	.70	1.49	.55
24	.85	1.14	.44	.29	.29	.60	.47	.38	.47	.70	5.00	.50
25	.47	1.28	.50	.23	.26	.44	1.56	.35	.44	6.50	2.74	.50
26	.38	1.28	.47	.32	.26	.44	.50	.23	.32	3.00	1.83	.47
27	.32	1.07	.41	.35	.38	.35	.50	.17	.41	5.60	3.20	.41
28	.44	1.42	.38	.29	.26	.38	.32	.18	.55	5.60	2.74	.44
29	2.61		.32	.29	.20	.55	.26	.35	.90	2.74	2.48	.65
30	1.28		.44	.26	.20	5.90	.23	.35	.65	2.09	1.07	.85
31	.70		.41		.16		.32	.23		3.80		.65

B
31

STNO 8102 - 0
 NAME PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN
 ARCHIVE F1 DISCH. M3/S
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
 1 .50 ,95 ,60 ,75 1.56 1.35 4.80 ,80 1.83 1.49 1.56 1.70
 2 .44 ,75 ,60 ,70 ,90 2.87 4.60 ,65 1.35 1.63 1.70 1.63
 3 2.87 ,65 ,60 ,60 ,70 5.00 4.80 ,58 ,90 3.60 2.22 1.56
 4 2.48 5.60 ,50 ,50 ,55 1.83 4.80 ,44 ,80 4.20 3.00 1.35
 5 2.48 1.00 ,75 ,41 ,47 2.87 4.80 ,32 ,65 2.61 10.70 1.35
 6 11.00 3.00 1.00 ,35 ,35 1.96 4.00 1.42 ,75 1.83 17.50 1.35
 7 8.90 3.40 1.00 ,85 ,23 3.20 2.48 1.07 ,90 1.49 13.40 1.35
 8 4.60 3.80 2.22 ,65 ,41 1.35 4.60 ,47 ,80 1.21 10.40 1.28
 9 2.35 3.80 4.40 ,50 3.60 1.00 6.80 ,32 ,90 1.14 9.80 1.28
 10 1.83 11.14 2.61 ,47 1.83 1.28 3.80 ,35 ,65 1.35 4.80 1.28
 11 1.56 3.80 2.61 ,47 ,95 8.30 2.61 ,50 ,50 2.48 3.80 1.28
 12 1.28 9.50 1.96 ,75 ,90 4.40 2.35 ,44 ,55 2.87 3.20 1.28
 13 1.00 5.00 2.35 ,70 ,75 2.48 1.83 ,55 ,50 2.22 2.87 1.07
 14 ,90 3.80 1.21 ,65 ,55 1.70 2.22 ,35 ,44 2.22 2.48 1.00
 15 ,80 3.20 2.22 ,65 ,70 1.35 2.09 ,44 ,44 2.35 2.74 1.00
 16 ,70 2.74 2.61 ,65 5.30 1.96 1.70 3.40 ,41 2.35 2.35 1.00
 17 ,60 1.96 1.83 ,65 2.74 2.35 1.56 2.61 ,38 1.56 1.96 1.07
 18 ,85 1.83 1.49 ,60 1.49 1.56 1.28 1.14 1.28 1.35 1.85 1.07
 19 ,75 1.49 1.35 ,47 ,90 1.14 1.21 ,75 ,80 1.21 1.70 1.00
 20 ,70 1.35 1.21 ,44 1.28 ,95 1.21 ,53 ,80 2.09 1.63 1.00
 21 ,55 2.74 1.00 ,38 ,95 ,90 ,95 ,47 ,75 18.50 12.20 1.00
 22 ,90 1.49 ,85 ,35 1.35 7.70 ,85 ,26 ,80 5.00 3.00 1.49
 23 ,85 1.20 ,80 ,44 2.48 7.10 ,75 ,23 ,65 4.00 2.48 1.14
 24 ,80 1.21 ,70 ,41 1.00 4.20 ,70 ,26 ,85 3.20 2.61 ,95
 25 2.35 1.14 ,55 ,90 ,70 5.00 ,65 ,26 1.07 2.61 3.00 ,90
 26 1.28 ,90 1.00 ,80 ,85 4.00 ,55 ,35 3.00 2.48 3.00 ,90
 27 ,94 ,85 1.35 ,65 ,65 8.00 ,65 ,41 2.35 2.09 4.80 ,80
 28 ,85 ,70 1.49 ,55 ,50 3.80 ,50 ,38 2.74 1.96 3.40 ,80
 29 ,70 ,90 ,41 1.70 2.35 1.63 ,47 2.87 1.70 13.80 ,95
 30 ,80 ,95 ,41 1.49 1.70 1.00 ,60 2.09 1.49 1.83 ,85
 31 ,80 ,70 1.96 ,41 ,60 2.35 ,70 ,70 ,70

PROCESSED 01/05/25,

YEAR 1971

B
32

STNO 8103 - 0
NAME BUGSOC

MAIN RIVER WAHIG
RIVER

DAILY AVERAGE

PROCESSED 01/05/25.

LATITUDE N 09,47,30
LONGITUDE E 124,16
UTM
CATCHMENT 38,00 KM2

YEAR 1955

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.00	1.57	1.19	.30	.46	5.56	2.55	1.19	1.48	.60	1.86	5.76
2	1.00	1.38	1.19	.30	.46	2.07	2.79	1.10	1.95	.84	1.48	4.94
3	1.00	1.19	3.94	.30	.46	1.19	8.76	1.28	1.86	.68	1.28	4.94
4	1.00	1.10	5.35	.30	.39	1.10	4.41	1.28	1.86	.76	1.19	3.62
5	1.00	1.10	4.26	.30	.32	1.00	2.07	2.07	1.19	1.10	1.00	8.20
6	2.00	1.10	2.07	.25	.32	1.00	1.86	1.38	1.57	1.19	.84	5.14
7	2.00	1.10	1.66	.25	.32	1.19	1.95	1.76	1.19	1.48	.68	2.67
8	2.00	1.00	1.19	.25	1.00	1.10	1.76	1.95	1.48	1.19	1.48	2.79
9	2.00	.92	1.00	.25	.84	.53	2.91	1.10	1.48	1.00	1.48	2.31
10	3.00	1.00	1.10	.25	.60	.39	1.95	1.10	2.31	2.31	1.19	2.07
11	3.00	1.19	1.19	.25	.39	.60	1.86	.84	1.57	2.31	1.28	2.31
12	4.00	1.19	.92	.25	.39	1.00	1.95	2.79	2.59	2.31	1.10	1.95
13	5.97	1.00	.92	.32	.32	1.20	1.95	1.57	2.67	2.43	.84	2.07
14	3.78	.84	.84	.32	.32	1.19	1.76	1.10	1.86	3.94	1.10	1.95
15	2.91	.84	.76	.32	.32	.84	1.28	1.00	1.57	2.55	.92	4.94
16	4.41	.76	.60	.32	.32	.84	1.38	1.95	1.48	2.31	.84	3.60
17	2.79	.68	.60	.25	.32	.84	2.07	1.66	1.19	1.86	.68	7.36
18	3.47	.84	.46	.32	.32	.76	2.07	1.28	1.00	1.48	.60	4.73
19	2.91	.84	.53	.32	.46	.76	1.76	1.19	1.00	1.28	.53	3.40
20	2.55	.84	.53	.32	.53	.76	1.38	1.38	1.00	1.28	.92	2.60
21	2.19	1.57	.46	.32	.53	1.76	1.38	1.19	.92	1.48	.39	2.30
22	2.91	1.19	.46	.32	.39	1.38	1.10	1.10	.76	1.28	.22	2.00
23	2.55	1.19	.46	.32	.32	1.86	1.00	1.76	.68	1.86	.22	2.30
24	2.31	1.00	.39	.39	.25	1.86	1.00	1.66	.60	1.57	3.62	2.60
25	1.86	1.19	.39	.39	.25	2.31	1.48	1.87	.68	1.57	2.19	10.32
26	2.07	1.00	.76	.39	.30	3.15	1.28	1.28	.68	2.43	2.31	5.30
27	1.76	1.19	.60	.39	.39	2.91	1.57	.76	.60	2.43	13.56	3.10
28	1.95	1.19	.53	.46	.32	1.28	1.28	.60	.60	2.07	35.15	2.50
29	3.47		.46	.46	.25	1.19	1.38	2.07	.60	.76	40.74	2.10
30	2.43		.46	.39	.32	1.19	1.86	1.19	.60	2.31	43.06	2.00
31	1.76		.32		.53		1.10	1.00		2.31		1.90

B
33

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER
 ARCHIVE F1
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
 1 1.90 1.10 .95 .90 2.20 2.50 2.90 1.60 2.20 1.60 1.20 ,46
 2 1.90 1.10 .95 .90 1.80 2.75 2.40 2.00 1.80 2.30 1.10 ,46
 3 1.80 1.10 .95 .90 2.40 3.10 2.80 1.90 1.50 2.00 1.00 ,42
 4 1.60 1.10 .95 .90 1.90 2.40 2.40 1.50 1.20 1.70 ,90 ,71
 5 1.50 1.10 .95 .90 2.20 2.25 10.00 1.40 1.10 1.50 ,70 ,52
 6 1.40 1.10 .95 .90 2.10 2.60 8.00 5.00 1.00 1.70 ,60 ,38
 7 1.40 1.10 .95 .90 1.80 11.00 5.60 6.00 ,90 1.90 ,60 ,82
 8 1.30 1.10 .95 .95 1.90 10.00 4.00 7.00 ,90 1.00 ,65 ,86
 9 1.20 1.10 .95 1.00 2.00 7.10 2.50 6.00 ,90 2.00 ,75 ,79
 10 1.10 1.30 .95 1.20 4.10 5.30 2.90 5.00 ,90 1.60 ,90 ,56
 11 1.00 2.50 .95 1.40 3.30 4.30 3.30 4.00 ,90 2.80 1.40 ,60
 12 3.00 7.20 .95 6.00 2.80 3.00 4.00 4.00 ,90 2.20 2.40 ,64
 13 15.00 4.90 .95 2.50 2.20 2.30 3.10 5.00 ,90 2.00 2.00 ,42
 14 10.00 2.70 1.00 4.50 1.60 2.09 2.60 4.00 ,90 2.00 1.40 ,75
 15 7.00 2.40 1.20 3.00 1.60 2.00 2.60 4.00 ,80 2.10 1.20 ,68
 16 4.00 1.80 1.10 1.80 1.60 3.40 3.20 5.00 ,80 2.50 1.20 ,68
 17 2.60 1.40 1.10 2.50 1.60 2.70 2.70 6.00 ,80 2.00 1.10 ,60
 18 2.30 1.20 1.10 3.80 1.60 2.10 2.20 9.00 1.60 1.80 1.10 ,60
 19 2.00 1.10 1.10 2.20 1.60 2.00 2.70 4.00 2.00 1.60 1.05 1.18
 20 1.50 1.10 1.10 5.40 1.60 2.00 3.20 4.00 1.10 2.10 ,32 ,90
 21 1.40 2.10 1.10 3.70 1.60 2.20 8.00 2.60 1.10 2.40 ,31 1.18
 22 1.30 1.40 1.10 2.50 1.60 2.50 7.00 3.00 1.10 2.10 ,50 ,75
 23 1.20 1.00 1.10 1.60 1.60 2.10 7.50 3.50 3.10 1.60 ,36 1.98
 24 1.10 ,95 1.10 1.40 1.60 1.80 5.00 4.30 1.90 1.40 ,30 1.98
 25 1.00 ,95 1.10 1.30 1.60 2.10 9.00 3.10 1.10 1.40 ,48 4.07
 26 1.00 ,95 1.00 1.40 1.60 2.60 4.00 2.70 1.00 1.40 ,46 3.20
 27 1.00 ,95 1.00 1.40 1.60 3.20 2.10 2.50 1.10 2.10 ,46 3.92
 28 1.00 ,95 1.00 1.40 1.60 1.50 2.10 3.50 2.40 1.80 ,44 43.92
 29 1.00 ,95 ,95 1.40 1.60 1.40 1.80 3.00 1.40 1.50 ,42 2.67
 30 1.00 ,95 1.40 1.60 2.00 1.80 2.60 1.20 1.30 ,40 1.69
 31 1.00 ,95 ,95 1.40 1.60 1.60 1.60 2.40 1.20 1.20 1.05

PROCESSED 81/05/25.

YEAR 1956

B
34

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER

DAILY AVERAGE

LATITUDE N 09,47,30
 LONGITUDE E 124,16
 UTM
 CATCHMENT 38,00 KM2

PROCESSED 81/05/25.

YEAR 1957

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.17	.05	.25	.06	.27	.06	2.17	2.47	.20	.83	.17	.06
2	1.67	20.44	.20	2.17	.25	.06	1.43	5.40	.17	1.55	.17	.06
3	1.30	2.05	.15	19.40	.25	.06	.90	3.17	.17	.83	.17	.06
4	.83	1.80	.10	9.20	.25	.06	.83	2.30	.15	.75	.17	.06
5	1.05	1.30	.13	3.53	.20	.10	.97	1.80	.15	.80	.15	.06
6	.90	.90	1.80	2.30	.17	.20	1.17	1.17	.13	.45	.53	.06
7	1.55	.83	2.17	1.93	.17	.07	1.30	4.73	.10	.37	.37	.06
8	.83	.67	.83	1.55	.17	.06	1.05	5.17	.06	.23	.20	.06
9	.60	.67	.37	1.05	.15	.06	.75	11.24	.07	.31	.15	.06
10	.37	.60	.27	.90	.15	.10	.53	5.63	.06	.37	.15	.06
11	.30	.30	.25	.75	.17	.06	.60	4.95	.07	.30	.15	.06
12	.30	.37	3.17	.67	.60	.05	.45	9.20	.06	.45	.13	.06
13	.30	.45	1.55	.60	.45	.06	.37	3.70	.07	.49	.10	.06
14	.45	.83	.60	.60	.20	.06	.90	2.65	.23	.20	.07	.06
15	.30	.83	.27	.60	.15	.07	1.55	2.05	.27	.20	.25	.06
16	.30	.60	.23	.53	.15	.15	.83	1.30	.45	.20	.15	.06
17	.60	.45	.17	.53	.15	.15	2.05	.97	.23	.25	.25	.06
18	.67	.30	.17	.45	.15	.45	1.67	.83	.17	.27	2.65	.04
19	.50	.23	.17	.45	.13	.45	1.05	.67	.15	.25	2.17	.06
20	.20	.20	.17	.53	.13	.23	.97	.53	.17	.53	.83	.10
21	.15	.17	.17	.45	.10	.20	.67	.37	.20	.53	.30	.07
22	.15	.15	.13	.37	.10	.20	.75	.30	.20	.83	.23	.06
23	.10	.15	.10	.30	.07	.20	.37	.37	.20	.90	.20	.06
24	.06	.13	.07	.37	.06	1.80	.75	.27	.75	.75	.15	.06
25	.06	.10	.06	.30	.06	.75	3.35	.27	1.55	.60	.13	.06
26	.06	.10	.06	.37	.06	5.40	4.50	.53	.53	.45	.10	.06
27	.06	.15	.06	.37	.06	3.70	4.05	.37	.45	.37	.06	.06
28	.06	.27	.06	.30	.06	4.50	3.70	.30	.37	.30	.07	.06
29	.06		.06	.27	.06	4.95	2.47	.27	.30	.27	.06	.06
30	.05		.06	.30	.06	3.87	1.43	.25	.27	.20	.06	.06
31	.05		.06		.06		.97	.23		.17		.06

B
C5

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER
 ARCHIVE F1
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
 1 . .06 .05 .13 .13 .30 2.65 .67 1.80 .30 .25 1.43 3.53
 2 .06 .05 .10 .10 .30 2.30 .60 1.80 .27 .30 1.35 2.05
 3 .06 .06 .07 .10 .37 1.55 .97 1.67 .25 .37 1.55 1.05
 4 .06 .06 .07 .10 .37 1.17 1.55 1.67 .27 .45 1.17 2.05
 5 .06 .06 .07 .10 .37 .75 3.00 1.43 .27 .30 1.43 2.83
 6 .06 .05 .06 .10 .30 .45 4.95 1.30 .25 .30 2.17 6.30
 7 .07 .05 .25 .10 .25 .45 7.75 1.30 .20 .30 1.67 11.24
 8 .06 .05 .27 .10 .25 .45 4.08 1.30 .17 .30 1.43 11.58
 9 .06 .05 .20 .07 .27 .45 1.80 1.30 .15 .30 1.43 4.73
 10 .17 .05 .20 .07 .30 .45 1.67 1.17 .13 .25 1.30 3.35
 11 .13 .05 .13 .10 .53 .45 1.55 1.17 .07 .25 1.17 2.47
 12 .08 .05 .10 .10 .60 .45 1.38 1.05 .06 .22 1.17 1.93
 13 .06 .06 .07 .10 .53 .45 1.67 .97 .06 .37 .90 1.17 B
 14 .06 .06 .06 .13 .37 .67 1.67 .97 .06 .37 .75 1.17 C
 15 .05 1.05 .06 .15 .27 .90 1.30 .97 .06 .45 1.30 1.09
 16 .05 .53 .06 .17 .25 1.30 .90 .97 .07 .53 1.80 .45
 17 .05 .13 .06 .17 .25 .83 .90 1.05 .07 .67 1.55 1.43
 18 .05 .06 .06 .15 .06 .53 .83 1.05 .27 .97 4.95 1.43
 19 .05 .05 .05 .13 .17 .53 .83 2.17 .83 2.83 11.24 1.30
 20 .05 .05 .05 .13 .30 .60 .75 3.70 .67 4.73 12.60 1.30
 21 .06 .05 .05 .10 .37 .60 .75 3.00 .45 5.12 4.73 1.12
 22 .06 .05 .05 .13 .45 .60 1.05 2.47 .37 9.20 2.47 1.05
 23 .15 .05 .05 .13 .83 .60 1.43 2.05 .25 4.73 2.05 .83
 24 .06 .05 .05 .10 2.47 .60 1.08 1.67 .20 3.12 8.33 .60
 25 .06 .05 .05 .37 1.55 .53 .83 1.17 .17 2.47 4.73 .60
 26 .06 .05 .05 .83 2.05 .83 1.43 1.17 .15 2.17 2.83 .53
 27 .05 .12 .05 .53 1.43 1.17 2.17 .90 .15 4.95 1.67 .53
 28 .05 .17 .05 .30 1.80 .97 3.12 .90 .17 3.87 .97 .45
 29 .05 .05 .27 8.04 .83 2.83 .67 .17 2.65 2.65 .45
 30 .05 .06 .30 4.50 .67 2.30 .67 .23 1.93 5.85 .37
 31 .05 .06 3.17 2.05 .67 .67 1.67 .37

PROCESSED 81/05/25.

YEAR 1958

B
C

STNO 8103 -- 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER
 ARCHIVE F1

DAILY AVERAGE

LATITUDE N 09,47,30
 LONGITUDE E 124,16
 UTM
 CATCHMENT

PROCESSED 01/05/25.

YEAR 1960

DATE	DISCH, M3/S											CATCHMENT	38.00	KM2
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV			
1	.60	3.52	-	.10	1.30	.68	1.17	.75	2.30	4.27	1.93	,45		
2	-	-	.25	-	1.05	.52	2.65	1.30	1.55	4.27	1.93	,45		
3	-	4.95	-	-	.98	.38	1.80	2.05	1.93	3.00	1.80	,45		
4	.25	-	.23	.07	.82	.30	2.17	3.18	1.43	2.30	1.80	,45		
5	-	1.93	-	.07	.82	.30	1.80	1.67	1.30	2.05	1.55	,38		
6	.23	-	-	.15	.75	.30	1.55	1.17	1.30	1.93	1.30	,38		
7	-	-	.20	.25	.68	.30	2.17	.98	.90	6.59	1.30	1.93		
8	.20	3.70	-	.38	.82	.27	1.43	1.05	.82	8.91	1.17	3.70		
9	-	-	.17	.38	.75	.30	1.17	.98	.68	5.40	1.17	6.30		
10	-	2.05	-	.30	.60	.75	.98	.82	.60	3.88	1.30	3.70		
11	.17	-	.15	.27	.60	2.82	.98	.60	.45	3.35	1.17	3.52		
12	-	1.67	-	.27	.52	2.05	.98	.52	.38	2.82	.98	8.91		
13	.23	-	-	.27	.52	2.05	1.80	.45	.52	2.65	1.55	3.35	B	
14	-	-	.30	.30	.45	2.17	1.05	.45	.98	3.00	1.43	2.30	38	
15	.20	.98	-	.30	.45	1.05	.98	.38	3.88	2.48	.75	1.80		
16	-	-	.25	.27	.45	2.17	.82	.45	1.93	2.17	.60	1.55		
17	-	.98	-	.27	.38	3.70	.75	.38	1.30	2.30	.52	1.30		
18	.23	-	.25	.27	.30	1.93	.98	.30	.98	2.48	.45	1.05		
19	-	.90	-	.27	.30	1.30	.75	.25	.90	3.35	.38	.98		
20	.27	-	-	.27	.30	1.43	.82	.20	.98	4.73	.30	.82		
21	-	-	.25	.90	.60	2.05	.82	.20	.90	3.18	5.85	.75		
22	6.07	1.05	-	4.27	.75	1.67	.68	.17	1.30	4.05	3.35	.68		
23	-	-	.20	1.80	.60	1.30	.98	.15	1.93	3.35	3.00	.75		
24	-	1.05	-	2.17	.60	7.17	.60	.15	1.67	3.18	2.65	.68		
25	1.80	-	.15	3.18	.60	4.05	.82	.15	1.67	2.65	1.93	.68		
26	-	.52	-	2.48	.75	3.00	.98	.15	1.43	4.27	1.93	.60		
27	6.30	-	-	2.30	.90	2.30	3.53	.15	3.70	4.27	1.17	.52		
28	-	-	-	1.93	.82	2.17	2.48	.17	2.17	3.18	.90	.68		
29	8.62	-	.10	1.55	.60	1.67	1.55	.17	2.82	3.00	.68	.60		
30	-	-	-	1.30	.75	1.55	1.43	.20	3.35	2.82	.52	.52		
31	-	-	.10	-	.82	-	1.05	.27	-	1.93	-	.60		

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE												LATITUDE N 09,47,30	LONGITUDE E 124,16	PROCESSED 81/05/25.		
																			YEAR	1959
				8103	0	DISCH.	M3/S	JAN	FEB	MAR	APR	MAY	JUN	JUL.	AUG	SEP	OCT	NOV	DEC	
1				.83	.75	.53	1.55	.07	.10	.23	.60	.07	.17	.97	.23					
2	1.43			.67	1.43	1.67	.07	.06	.15	.37	.17	3.53	.97	.23						
3	1.05			.90	.45	1.17	.07	.06	3.87	.30	.53	3.87	.97	.20						
4	.83			1.17	.17	.90	.07	.06	.37	.25	.75	3.35	.90	.17						
5	.83			1.17	.20	.83	.13	.06	.10	.15	.30	2.47	.90	.23						
6	.83			1.30	.07	.53	.10	.06	.45	.10	.13	2.05	.83	.27						
7	.83			1.30	.13	.37	.07	.06	.90	.06	.07	1.80	.75	.30						
8	3.00			1.55	.10	.27	.07	.07	3.35	.17	.06	1.55	.75	.27						
9	6.59			1.55	.10	.27	.07	.07	4.50	3.35	.05	1.55	.75	.25						
10	4.95			1.17	.10	.37	.13	.06	3.17	2.30	.05	1.93	1.05	.27						
11	3.53			1.17	.07	.27	.07	.06	1.93	.90	.05	1.30	1.17	.30						
12	2.65			1.30	.06	.23	.06	.13	.90	1.30	1.55	1.30	.83	.27						
13	4.05			1.30	.23	.23	.07	.60	.60	1.93	7.46	2.47	.83	.23						
14	6.07			2.05	11.24	.23	.06	.23	.83	.53	4.05	2.47	.90	.20						
15	3.70			.90	8.04	.25	.06	.15	1.43	.20	2.05	1.93	.83	.20						
16	2.05			.60	1.93	.25	.30	.13	.30	.25	.90	1.55	1.93	.17						
17	2.47			.53	3.17	.23	.37	.07	.25	.37	1.30	1.43	1.43	.17						
18	3.35			.53	1.67	.20	.15	.06	.23	.30	5.40	1.43	.90	.17						
19	3.70			.67	.97	.17	.07	.06	.10	.17	4.27	4.27	.75	.17						
20	2.65			.45	8.04	.20	.10	.06	.10	.07	2.30	4.05	.60	.20						
21	2.05			.30	4.95	.15	.07	.06	.15	.27	3.35	2.83	.45	.20						
22	1.80			.25	3.87	.10	.06	.06	.25	1.05	4.05	2.17	1.17	.17						
23	1.67			.25	2.30	.07	.06	.06	2.30	2.83	2.17	2.05	.90	.17						
24	1.67			.23	1.80	.10	.06	.06	4.95	1.30	1.43	1.93	.75	.53						
25	1.55			.20	1.17	.07	.06	.06	9.20	1.30	1.17	1.67	.53	1.05						
26	1.55			.20	.60	.07	.06	.06	21.40	.53	.97	1.43	.45	1.05						
27	1.05			.25	.27	.06	.06	.06	5.85	.23	.97	1.30	.37	1.17						
28	.90			.15	.20	.13	.06	.06	3.35	.25	.97	1.17	.30	1.17						
29	.83				.10	.12	.13	.06	2.83	.25	2.42	1.05	.23	1.30						
30	.95				1.05	.06	.06	.45	1.93	.27	3.00	1.05	.23	1.43						
31	.75				1.43		.05		.97	.15		1.05		1.43						

B 37

PROCESSED 81/05/25.

STNO	DAILY AVERAGE												YEAR 1962
	LATITUDE N 09,47,30 LONGITUDE E 124,16												
	UTM CATCHMENT 38,00 KK2												
NAME BUGSOC		MAIN RIVER WAHIG		RIVER		ARCHIVE F1		DISCH.		M3/S			
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	,30	,06	1.45	,42	,29	,21	,42	,52	,60	1.40	-	-	
2	,97	,06	1.45	,42	,23	,38	,40	,42	,52	-	,96	-	
3	1.30	,06	1.75	,42	,21	,34	,52	,40	,50	1.28	-	,56	
4	,45	,06	1.98	,42	,20	,32	,75	,40	,48	-	-	-	
5	,82	,17	1.45	,42	,23	,42	1.28	,40	,46	1.68	1.52	1.45	
6	,45	,75	1.34	,40	,24	,60	1.34	,40	,46	-	-	-	
7	,30	14.60	1.34	,38	,23	,60	,79	,82	,46	-	1.40	2.20	
8	,22	3.10	1.34	,36	,20	,34	,52	1.90	,52	2.12	-	-	
9	,82	2.05	1.52	,34	,20	,48	,50	1.18	,96	-	2.20	-	
10	,30	2.90	1.52	,34	,20	,50	,44	,75	1.75	1.82	-	1.40	
11	,20	1.68	1.34	,34	,20	,48	,48	,60	1.90	-	-	-	
12	1.30	1.52	1.34	,36	,20	,56	,42	,56	1.12	1.68	1.23	1.23	
13	,82	1.45	1.34	,34	,20	,71	,46	,52	1.06	-	-	-	
14	,52	1.23	1.34	,32	,20	2.05	1.52	,75	,86	-	,96	,52	
15	,37	1.40	1.28	,32	,20	1.40	1.18	,90	1.90	1.28	-	-	
16	,30	1.98	1.52	,32	,20	1.01	,75	,90	2.20	-	,86	-	
17	,25	1.45	1.28	,32	,34	,86	,56	,64	1.90	1.12	-	-	
18	,20	2.12	1.26	,32	,27	1.06	,48	,52	,60	-	-	,60	
19	,15	1.52	,52	,32	,26	1.34	,46	,52	1.60	1.18	,75	,90	
20	,12	3.34	,42	,34	,26	1.12	,40	,48	1.68	-	-	-	
21	,12	2.70	,42	,34	,27	,86	,40	,46	2.05	-	1.45	1.45	
22	,20	2.30	,42	,32	,24	,82	,40	,60	-	1.75	-	-	
23	,20	1.75	,42	,32	,23	,75	,42	,90	-	-	,82	-	
24	,15	1.82	,42	,30	,21	,64	,44	1.75	2.90	1.52	-	-	
25	,10	1.45	,42	,29	,18	,52	,40	1.18	-	-	-	2.40	
26	,10	1.45	,42	,29	,18	,64	,42	1.45	2.30	1.34	1.34	3.20	
27	,06	1.45	,42	,27	,20	,60	1.12	1.82	-	-	-	-	
28	,06	1.40	,42	,26	,21	,64	,90	1.28	1.68	-	,62	1.01	
29	,06	-	,42	,26	,18	,48	,64	1.06	-	1.01	-	-	
30	,06	-	,42	,29	,17	,46	,75	1.01	-	-	1.45	-	
31	,06	-	,42	-	,17	-	,36	,79	-	,90	-	,71	

B 40

STNO	NAME	MAIN RIVER	RIVER	ARCHIVE F1	DAILY AVERAGE								N 09,47,30	E 124,16	PROCESSED	81/05/25.	
									LATITUDE		LONGITUDE				YEAR	1961	
							UTM		CATCHMENT		38.00		KM2				
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1	3.52	2.82	1.55	.45	.25	-	-	-	.06	.52	1.05	.10					
2	3.70	2.30	1.80	.38	-	.23	-	.82	.06	.52	-	.10					
3	7.17	2.05	1.17	.30	.23	-	.17	-	.06	.45	.30	.15					
4	3.52	2.05	.82	.38	-	-	-	.82	.08	.38	-	.10					
5	2.30	4.95	.68	.52	.23	.38	1.30	-	.15	.82	-	.17					
6	1.93	3.00	.60	.75	-	-	-	-	3.88	.82	.25	.17					
7	3.00	1.93	.52	1.55	-	.25	.38	.25	.90	1.05	-	.10					
8	2.05	1.55	.45	.82	.38	-	-	-	.52	1.17	.20	.06					
9	3.70	1.43	.38	.52	-	.30	-	.20	.23	.75	-	.06					
10	6.07	1.30	.30	.60	.23	-	.27	-	.10	.68	.17	.06					
11	5.17	1.17	.38	.60	-	-	-	.52	.08	.52	-	.06					
12	8.04	1.17	.38	.45	.30	.38	.20	-	.08	.45	-	.06					
13	4.50	1.30	.45	.60	-	-	-	-	.08	.45	.20	.06					
14	3.88	1.17	.45	.98	-	.30	.15	1.05	.08	.60	-	.06				B 39	
15	3.35	.90	.75	-	.52	-	-	-	.08	1.55	.20	.20					
16	2.65	1.05	.75	-	-	.23	-	.30	.13	1.05	-	.13					
17	2.30	1.17	.52	.52	.25	-	.13	-	.17	.75	.30	.06					
18	2.17	.90	.45	-	-	-	-	.17	.25	3.00	.25	.06					
19	1.67	.82	.30	.38	.30	5.17	.23	-	.17	-	.20	.06					
20	1.55	.75	.27	-	-	-	-	-	.38	1.30	.13	.07					
21	1.43	.68	.25	.30	-	.52	-	.13	1.55	-	.15	.06					
22	1.43	.60	.23	-	.30	-	.20	.05	2.05	-	2.48	.06					
23	1.30	.60	.23	-	-	-	-	.05	1.05	1.30	.90	.06					
24	1.30	.60	.27	.27	.38	.27	.17	.07	.60	-	.38	.06					
25	1.17	.60	1.17	-	-	-	-	.05	.52	.90	.20	.82					
26	.98	.68	.45	.27	.27	.17	.15	.05	.68	-	.17	.68					
27	3.18	.75	.52	-	-	-	-	.04	.52	1.30	.15	.45					
28	3.35	.68	.45	.25	-	.20	.75	.05	.90	-	.15	.20					
29	4.27	-	.30	-	.23	-	-	.08	.75	-	.10	.98					
30	3.35	-	.25	-	-	.20	-	.05	.60	1.05	.07	.38					
31	4.05	-	.27	-	.20	-	.52	.05	-	-	.30						

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER
 ARCHIVE F1

DAILY AVERAGE

PROCESSED 81/05/25.

LATITUDE N 09,47,30
 LONGITUDE E 124,16
 UTM
 CATCHMENT 38.00 KM2

YEAR 1963

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	-	1.75	.68	.32	.30	.18	.14	2.34	1.06	2.60	1.60	.79
2	.60	-	-	.30	.30	.17	.20	1.52	.90	1.12	1.52	.71
3	-	-	-	.30	.30	.15	.34	.75	.90	1.12	1.82	.64
4	.50	.90	.64	.30	.27	.15	.30	.46	.82	2.05	1.90	.60
5	-	-	-	.30	.27	.15	.21	.46	.75	1.60	1.90	.56
6	-	-	-	.30	.27	.15	.20	.32	.68	1.98	1.90	.56
7	-	1.23	.64	.30	.27	.15	.17	.42	.68	1.82	3.00	.56
8	-	.79	3.20	.34	.26	.15	.17	.48	.64	1.90	3.20	.56
9	4.07	-	-	.30	.23	.15	.17	.71	.60	2.05	2.20	.68
10	-	-	-	.30	.21	.15	.17	.79	.52	2.20	2.40	.79
11	7.38	.71	1.68	.29	.20	.14	.17	1.23	.50	2.12	2.05	.71
12	-	-	-	.30	.20	.15	.15	1.28	.64	2.70	1.75	.64
13	-	.86	1.45	.32	.18	.25	.17	1.06	.75	2.90	1.52	.60
14	3.20	-	-	.30	.21	.18	.15	.79	.75	3.64	1.40	.68
15	-	2.40	1.28	.30	.21	.15	.14	.60	.75	2.80	1.28	.75
16	5.82	-	1.01	.30	.20	.15	.14	.56	.86	2.40	1.18	.64
17	-	-	1.01	.30	.18	.15	.14	.52	1.34	2.20	1.12	.64
18	3.92	2.70	2.80	.30	.21	.15	.14	.64	.28	2.05	1.01	.64
19	-	-	1.45	.29	.21	.14	.14	.90	1.12	2.05	.96	.56
20	-	1.75	1.18	.32	.23	.14	.14	.79	1.18	1.96	.90	.68
21	1.82	-	.96	.34	.24	.14	.14	.79	1.60	1.75	.86	.75
22	-	1.34	.86	.30	.18	.14	.14	.90	3.20	1.68	.82	.79
23	3.92	-	.71	.30	.27	.14	.14	.96	1.75	2.40	.79	.79
24	-	-	.68	.30	.26	.14	.14	3.00	1.52	3.10	.86	.79
25	12.60	.90	.60	.30	.18	.14	.25	1.90	1.18	3.34	.96	.79
26	-	-	.52	.32	.21	.14	.60	2.50	1.23	2.60	.90	.79
27	-	.71	.42	.32	.29	.14	.30	1.75	1.12	2.20	.82	.75
28	3.92	-	.40	.34	.36	.14	.27	1.82	1.23	2.20	.79	.75
29	-	-	.34	.34	.36	.14	.27	1.40	1.45	2.12	.75	.75
30	2.80	-	.32	.32	.27	.14	.26	1.23	1.75	1.82	.96	.82
31	-	-	.32	-	.21	-	.40	1.18	-	1.68	-	.90

B
41

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER
 ARCHIVE F1 DISCH. M3/S
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

DATE	DAILY AVERAGE												LATITUDE N 09,47,30	LONGITUDE E 124,16	UTM CATCHMENT 38,00 KM2	YEAR 1964	PROCESSED 81/05/25,
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1	.96	.22	1.82	.71	.96	.75	.64	.44	.52	1.68	1.45	.86					
2	.90	1.45	1.68	.71	.90	.68	.60	.44	.68	2.05	1.68	.86					
3	.90	1.34	1.60	.75	.79	.60	.56	.44	1.28	2.20	2.20	.86					
4	.90	2.20	1.45	.75	.79	.50	.52	.44	1.40	1.68	1.98	.86					
5	.96	1.80	1.45	.60	.75	.46	.64	.44	.96	1.45	1.82	.86					
6	.90	1.23	1.45	.75	.68	.44	1.60	.44	.82	1.45	1.75	.86					
7	.96	1.12	1.34	.64	.79	.40	1.40	.44	.90	1.60	1.52	1.52					
8	.90	1.12	1.34	.71	.79	.40	.86	.44	.96	2.12	1.68	.86					
9	.90	1.12	1.34	.75	.75	.40	.96	.44	.79	1.52	1.82	.90					
10	.90	1.06	1.34	.71	1.23	.40	.90	.44	1.18	1.45	1.75	.86					
11	.86	1.06	1.34	.75	2.50	.40	.90	.44	1.12	1.34	1.90	.86					
12	1.34	1.68	1.34	.75	2.30	.38	.75	.44	1.01	1.28	2.30	.86					
13	1.23	1.82	1.34	.75	2.20	.44	.71	.44	.96	1.23	2.90	.86					
14	1.12	7.38	1.34	.86	1.68	.60	1.26	.36	.96	1.18	2.40	.79					
15	1.06	3.00	1.34	.86	1.90	.56	1.82	.32	.96	1.18	1.28	.79					
16	.96	2.50	1.34	.86	2.80	.56	1.01	.32	1.12	2.70	2.50	.79					
17	.90	1.82	1.34	.86	2.80	.56	.79	.42	.82	2.50	1.98	.79					
18	.90	1.40	1.34	.82	2.60	.52	.66	.44	.82	2.12	2.90	.79					
19	.90	1.18	1.34	.82	2.30	.48	.64	.44	.60	2.20	43.28	.79					
20	.90	1.18	1.34	.75	1.52	.48	.60	.44	.52	1.82	5.04	.79					
21	.90	1.23	1.34	.71	1.23	.52	.56	.44	.50	1.82	1.98	.79					
22	1.06	1.75	1.10	.71	1.01	.75	.60	.44	.46	1.60	1.18	.79					
23	1.23	1.90	.82	.75	1.52	1.06	.64	.44	.52	1.52	.96	.79					
24	1.06	1.25	.82	.71	.86	1.01	.75	.44	1.01	1.45	.90	.79					
25	1.01	1.23	.82	.60	.82	.68	.64	.36	.79	1.40	.90	.66					
26	1.06	1.18	.82	.86	.75	.60	.52	.64	.96	1.34	.90	.82					
27	1.01	5.54	.82	.96	.71	.56	.50	.60	1.98	1.28	.90	.82					
28	.96	3.10	.82	1.68	.68	.56	.46	.56	2.70	1.40	.90	.82					
29	.96	2.46	.82	1.68	.50	.56	.44	.52	2.12	1.40	.90	.82					
30	.90		.82	1.12	.75	.58	.44	.48	1.75	1.52	.90	.82					
31	1.52		.82		.82			.44	.46		1.45	1.12					

B 42

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER

DAILY AVERAGE

PROCESSED 81/05/25.

LATITUDE N 09,47,30
 LONGITUDE E 124,16
 UTM
 CATCHMENT 38.00 KM2

YEAR 1965

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.79	.75	.68	1.06	.64	.68	1.82	1.01	1.60	3.49	2.05	.86
2	.79	.68	.64	1.06	.56	.79	1.28	1.01	1.48	4.00	2.00	.76
3	.68	.71	.60	1.01	.56	.75	2.20	.96	1.34	4.80	1.98	.68
4	.68	.79	.60	.86	.52	.71	2.12	.86	1.50	6.02	1.90	.72
5	.68	1.40	.60	.79	.52	.71	1.34	.86	1.85	4.80	1.82	.75
6	.68	1.28	.60	.79	.50	.79	.90	.90	2.12	3.78	1.70	.79
7	.64	.82	1.06	.79	.50	.79	.79	1.05	2.38	3.65	1.55	.73
8	.64	.68	1.23	.77	.50	.82	.82	1.23	2.60	3.34	1.45	.68
9	.64	.71	.68	.75	.50	.79	.79	1.23	3.49	3.53	1.55	.67
10	.64	.64	.60	.75	.50	.75	.82	1.28	3.78	3.60	1.75	.64
11	1.40	.82	.60	.75	.50	.90	.82	1.34	2.60	3.64	1.65	.60
12	.71	.96	1.52	.75	.50	1.18	.86	1.23	2.50	3.30	1.52	.54
13	.90	.64	4.65	.75	.50	1.34	1.12	1.23	2.40	3.20	1.70	.56
14	1.60	.86	1.98	.75	.50	1.23	1.60	1.34	2.05	3.65	2.00	.54
15	2.70	.82	1.68	.75	.50	.96	1.34	1.40	1.82	4.65	2.40	.75
16	8.16	.60	1.68	.75	.50	.86	1.12	1.28	1.75	5.43	2.05	1.00
17	3.10	.60	1.68	1.82	.50	.86	2.40	1.40	1.82	4.90	1.52	1.45
18	2.12	.60	1.68	1.34	.50	.96	2.12	1.40	2.60	4.07	1.49	1.25
19	1.75	.60	1.68	1.34	.44	.96	1.40	1.34	2.90	4.00	1.45	.96
20	1.75	1.01	1.68	1.34	.53	.90	1.16	1.34	2.90	3.92	1.40	.71
21	1.52	.71	1.45	1.60	.60	.86	.90	1.34	2.50	4.50	1.38	.64
22	1.06	.64	1.28	1.60	.56	.79	1.18	1.52	2.40	3.04	1.34	.52
23	1.01	.68	1.28	1.60	.52	.75	1.75	1.40	2.70	4.20	1.30	.64
24	1.01	.60	1.34	1.45	.50	.75	2.20	1.30	3.20	5.40	1.23	.79
25	1.06	.60	1.23	1.28	.44	.79	1.60	1.23	3.20	2.80	1.06	.66
26	1.06	.60	2.05	1.18	.46	.79	1.60	2.12	3.00	2.60	.96	.56
27	1.06	1.45	1.68	.96	.49	.86	1.34	1.82	3.20	2.40	.92	.46
28	.79	.68	1.68	.86	.52	.90	1.18	1.75	3.00	2.26	.87	.46
29	.86		1.34	.79	.64	.82	1.06	1.60	3.78	2.12	.79	.44
30	.75		1.12	.75	.68	1.68	1.01	1.75	2.90	2.10	.81	.39
31	.75		1.06		.68		1.01	1.75		2.08		.36

B
43

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER

DAILY AVERAGE
 LATITUDE N 09,47,30
 LONGITUDE E 124,16
 UTM CATCHMENT 38.00 KK2
 PROCESSED 81/05/25.
 YEAR 1966

DATE	DISCH. M3/S											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.36	.28	.34	.25	.26	.23	.31	1.52	.36	.38	.71	.42
2	.34	.29	.32	.26	.28	.22	.31	.96	.38	.36	.75	.40
3	.32	.31	.31	.26	.34	.20	.25	1.90	.34	.38	.64	.48
4	.32	.32	.31	.25	.42	.20	.96	1.23	.31	.38	.60	.46
5	.31	.32	.31	.25	.42	.20	.44	.96	.26	.46	.52	.42
6	.31	.31	.29	.28	.42	.20	.29	.75	.25	.60	.52	.36
7	.31	.31	.29	.26	.38	.19	.29	.71	.23	1.12	.50	.34
8	.31	.31	.31	.26	.32	.19	.60	.64	.22	.60	.90	.32
9	.32	.31	.32	.25	.29	.28	.48	.52	.20	.50	.68	.36
10	.32	.29	.31	.25	.36	.26	.40	.48	.18	1.28	.60	.64
11	.31	.29	.29	.25	.46	.25	.44	.46	.18	1.12	.60	.44
12	.29	.29	.29	.31	.42	.31	.38	.46	.18	.90	.71	.38
13	.29	.31	.29	.36	.38	.28	1.18	.42	.18	.86	.56	.34
14	.31	.32	.28	.32	.52	.31	1.01	.38	.17	.75	.52	.32
15	.31	.32	.28	.31	.60	.34	.79	.36	.16	.64	.79	.32
16	.32	.32	.28	.31	.79	.28	.86	.29	.15	.56	.75	.44
17	.32	.31	.28	.29	.60	.25	1.18	.48	.15	.52	.86	1.06
18	.31	.31	.26	.29	.44	.25	.90	.32	.14	.52	.90	2.30
19	.29	.31	.26	.28	.34	.56	.86	.31	.18	.50	.71	1.18
20	.29	.29	.26	.28	.26	.46	.64	.28	.28	.52	.56	.71
21	.29	.29	.26	.29	.25	.34	.68	.29	.28	.52	.48	.60
22	.32	.31	.26	.31	.23	.71	.68	.28	.29	.96	.42	.56
23	.34	.32	.26	.31	.22	.75	.64	.64	.31	.68	.56	.56
24	.36	.32	.25	.29	.20	.46	.50	.60	.29	.56	.36	.52
25	.34	.32	.25	.28	.20	.34	.50	.42	.29	1.01	.36	.50
26	.32	.34	.25	.26	.17	.56	1.98	.50	.46	1.52	.38	.50
27	.31	.34	.25	.26	.16	.68	3.00	.32	.82	1.06	.30	.48
28	.31	.36	.25	.25	.16	.32	2.80	.68	.52	1.12	.30	.46
29	.29		.25	.25	.17	.29	1.68	.52	.42	1.18	1.01	.46
30	.28		.25	.26	.17	.25	1.12	.46	.40	.90	.52	.44
31	.28		.25		.25			.86	.42		.79	.46

B
44

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER
 ARCHIVE F1
 DISCH. M3/S
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

DATE	DAILY AVERAGE											YEAR	1968
	LATITUDE	LONGITUDE	UTM	CATCHMENT	38.00	KM2							
1	1.34	1.12	.86	.32	.17	.17	.46	.40	.44	.71	1.06	1.23	
2	1.23	1.12	.82	.32	.17	.18	.44	.42	.44	.60	1.34	1.28	
3	1.18	1.12	.71	.32	.17	.20	.42	.50	.46	.56	1.40	1.23	
4	1.12	1.06	.56	.32	.17	.25	.42	.52	.46	.52	1.75	1.23	
5	1.06	1.01	.48	.32	.17	.28	.42	.68	.48	.52	1.40	1.28	
6	1.06	1.12	.50	.32	.19	.28	.42	.68	.48	.52	1.18	1.40	
7	.86	1.12	.52	.32	.15	.28	.44	.71	.48	.52	1.18	1.40	
8	.86	1.06	.46	.32	.15	.31	.46	.64	.44	.56	1.18	1.40	
9	.86	.71	.42	.26	.14	.32	.68	.52	.44	.60	1.12	1.40	
10	1.75	.64	.42	.26	.14	.34	.86	.50	.44	.68	1.12	1.40	
11	2.05	.64	.48	.26	.14	.32	.79	.48	.44	.71	1.12	1.40	
12	2.60	.56	.46	.26	.14	.31	.71	.40	2.70	.82	1.23	1.45	
13	1.75	.48	.42	.26	.14	.31	.71	.46	6.02	.86	1.40	1.52	
14	1.12	.50	.42	.26	.14	.32	.68	.46	3.92	1.06	1.28	1.52	
15	.90	.60	.40	.26	.14	.32	.68	.46	2.40	1.06	1.23	1.40	
16	1.23	.56	.38	.26	.15	.32	.68	.44	.64	1.12	1.23	1.40	
17	1.18	.46	.36	.26	.16	.32	.68	.44	.52	1.18	1.34	1.40	
18	.71	.42	.34	.26	.16	.31	.60	.44	.48	1.28	1.34	1.40	
19	.60	.42	.32	.26	.16	.31	.52	.44	.50	1.40	1.82	1.40	
20	.52	.40	.32	.26	.16	.31	.50	.46	.56	1.45	2.70	1.40	
21	.52	.38	.31	.26	.16	.32	.48	.46	.60	1.68	2.12	1.82	
22	.71	.38	.31	.23	.16	.38	.48	.46	.64	1.75	1.68	2.60	
23	.96	.52	.29	.23	.16	.40	.48	.46	.71	1.90	1.68	3.34	
24	.68	.71	.28	.23	.16	.46	.48	.48	.76	1.90	1.60	3.34	
25	1.45	.50	.28	.23	.15	.40	.46	.48	.86	1.82	1.60	3.49	
26	5.62	.48	.26	.22	.15	.32	.44	.48	1.12	1.82	1.34	4.07	
27	3.00	.46	.26	.22	.15	.46	.44	.46	1.40	1.82	1.18	4.65	
28	1.68	.42	.26	.22	.15	.60	.42	.46	1.18	1.82	1.12	4.07	
29	1.45	.64	.34	.22	.16	.52	.42	.44	1.01	1.68	1.12	3.92	
30	1.60	.34	.22	.16	.50	.40	.44	.86	1.52	1.18	3.20		
31	1.18	.36		.16			.40	.44		1.28		1.45	

B 46

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE										LATITUDE N 09° 47' 30"	LONGITUDE E 124° 16'	UTM CATCHMENT	PROCESSED 81/05/25.	
				F1	DISCH.	M3/S	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
8103 - 0	BUGSOC	WAHIG																
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21	10.90	.82	.29	.31	.20	.12	.23	.08	.06	.42	.44							
22	8.16	.96	.28	.32	.20	.22	.22	.08	.12	.40	.44							
23	5.62	1.01	.26	.32	.20	.23	.20	.32	.17	.38	.46							
24	4.07	.90	.25	.31	.18	.18	.17	.36	.20	.36	.50							
25	3.20	.68	.25	.31	.17	.18	.18	.31	.26	.36	.50							
26	3.00	.60	.25	.29	.17	.31	.16	.26	.26	.32	.46							
27	2.80	.68	.25	.31	.16	.23	.15	.23	.23	.31	.48							
28	2.05	.52	.25	.31	.15	.18	.14	.20	.22	.31	.44							
29	1.82		.25	.34	.26	.23	.14	.17	.18	.32	.42							
30	1.60		.22	.34	.28	.52	.13	.14	.14	.32	.38							
31	1.52		.22			.22				.12	.12							

B
G

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER

DAILY AVERAGE

LATITUDE
 LONGITUDE
 UTM

N 09,47,30
 E 124,16
 CATCHMENT

PROCESSED 81/05/25,

YEAR 1969

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.52	.29	.13	.14	.12	.13	.13	.09	.52	.82	.60	.29
2	.42	.29	.13	.18	.12	.12	.14	.09	.56	.82	.56	.29
3	.32	.29	.14	.17	.13	.14	.14	.10	.60	.86	.56	.28
4	.31	.28	.14	.16	.14	.15	.15	.10	.68	.86	.56	.28
5	.29	.26	.14	.16	.15	.15	.14	.09	.71	.82	.56	.28
6	.29	.25	.15	.16	.15	.15	.13	.09	.79	.82	.52	.28
7	.29	.23	.14	.17	.15	.14	.12	.10	.82	.82	.52	.28
8	.31	.22	.16	.17	.14	.14	.13	.10	.90	.79	.48	.28
9	.31	.20	.16	.16	.14	.13	.15	.10	.86	.79	.46	.31
10	.32	.17	.16	.16	.13	.15	.13	.11	.86	.79	.44	.32
11	.32	.16	.16	.15	.13	.16	.12	.12	.96	.75	.44	.31
12	.31	.15	.16	.15	.13	.16	.13	.12	1.12	.75	.44	.29
13	.31	.15	.17	.16	.14	.16	.14	.13	1.18	.75	.46	.28
14	.34	.15	.18	.16	.15	.15	.15	.10	1.23	.68	.46	.26
15	.36	.15	.18	.15	.15	.14	.16	.08	1.28	.64	.44	.25
16	.32	.15	.18	.14	.16	.14	.15	.09	1.23	.64	.42	.25
17	.29	.15	.18	.14	.16	.13	.13	.10	1.23	.68	.42	.26
18	.29	.14	.17	.15	.15	.13	.12	.12	1.28	.68	.42	.23
19	.31	.14	.16	.15	.15	.12	.12	.11	1.28	.71	.42	.22
20	.32	.14	.16	.13	.16	.12	.13	.11	1.23	.75	.42	.23
21	.31	.13	.17	.13	.16	.13	.14	.10	1.18	.68	.42	.23
22	.29	.13	.17	.15	.14	.14	.13	.10	1.18	.64	.40	.25
23	.31	.13	.17	.16	.13	.15	.12	.10	1.12	.73	.38	.26
24	.32	.13	.17	.16	.13	.15	.12	.11	1.12	.52	.36	.28
25	.31	.12	.17	.15	.14	.16	.13	.11	1.06	.56	.34	.38
26	.29	.12	.17	.15	.14	.16	.13	.25	1.01	.60	.34	.52
27	.28	.12	.11	.15	.13	.15	.13	.42	1.01	.64	.32	.50
28	.29	.12	.11	.15	.13	.14	.13	.46	.96	.64	.32	.48
29	.31		.11	.14	.14	.13	.14	.52	.96	.68	.31	.48
30	.31		.11	.13	.15	.12	.14	1.45	.86	.68	.29	.44
31	.29		.11		.14		.11	.90		.64		.40

B
17

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER
 ARCHIVE F1
 DISCH. M3/S
 DATE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE								LATITUDE N 09,47,30	LONGITUDE E 124,16	UTM CATCHMENT	PROCESSED 01/05/25,					
																YEAR	1970			
																38.00	KM2			
1	.17	.14	1.18	.56	.48	.56	.52	.46	.26	.25	.50	.15								
2	.17	.15	.46	.56	.48	.56	.53	.48	.28	.25	.52	.11								
3	.18	.16	.46	.52	.48	.60	.56	.50	.28	.25	.56	.11								
4	.18	.17	.48	.52	.46	.60	.56	.50	.26	.26	.60	.12								
5	.20	.18	.48	.52	.46	.60	.52	.52	.26	.28	.56	.12								
6	.20	.20	.60	.56	.46	.60	.52	.56	.26	.28	.52	.12								
7	.18	.20	.60	.56	.46	.60	.56	.60	.25	.32	.56	.11								
8	.18	.18	.60	.60	.44	.56	.60	.60	.25	.36	.60	.12								
9	.17	.18	.60	.60	.44	.56	.60	.56	.26	.40	.64	.14								
10	.17	.20	.60	.50	.44	.52	.52	.52	.26	.40	.60	.38								
11	.17	.22	.56	.50	.46	.52	.52	.52	.25	.40	.56	.52								
12	.18	.23	.56	.50	.46	.56	.52	.50	.25	.38	.56	.56								
13	.17	.25	.71	.50	.42	.56	.60	.50	.23	.40	.52	.64								
14	.16	.25	.71	.52	.42	.56	.60	.46	.23	.42	.52	.71								
15	.10	.23	.71	.56	.44	.56	.64	.46	.23	.44	.50	.64								
16	.15	.22	.71	.56	.44	.56	.64	.46	.22	.46	.48	.52								
17	.10	.22	.71	.52	.44	.52	.68	.44	.22	.46	.50	.90								
18	.20	.20	.68	.52	.40	.52	.68	.44	.23	.46	.52	1.45								
19	.23	.40	.68	.52	.40	.50	.68	.42	.23	.44	.56	1.12								
20	.25	.52	.64	.50	.42	.50	.71	.40	.23	.44	.60	.96								
21	.25	.52	.64	.50	.42	.50	.75	.40	.22	.42	.60	.90								
22	.23	.50	.64	.48	.40	.56	.79	.40	.22	.42	.60	.75								
23	.23	.48	.60	.48	.40	.56	.82	.38	.23	.40	.56	.71								
24	.23	.48	.60	.50	.40	.60	.90	.36	.23	.44	.60	.64								
25	.25	.52	.56	.50	.38	.60	.86	.36	.22	.48	.68	.52								
26	.25	.60	.36	.50	.38	.60	.79	.34	.22	.52	.64	.46								
27	.25	1.18	.56	.50	.40	.60	.71	.34	.22	.56	.60	.44								
28	.26	1.18	.56	.50	.40	.60	.68	.32	.20	.60	.60	.42								
29	.26		.56	.48	.38	.64	.60	.32	.20	.68	.56	.40								
30	.25		.52	.48	.38	.64	.56	.31	.22	.71	.52	.32								
31	.25		.52		.38		.52	.29		.64		.32								

B
48

STNO 8103 - 0
 NAME BUGSOC
 MAIN RIVER WAHIG
 RIVER
 ARCHIVE F1

DAILY AVERAGE

LATITUDE N 09,47,30
 LONGITUDE E 124,16
 UTM
 CATCHMENT 38,00 KM2

PROCESSED 01/05/25

YEAR 1971

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.71	.32	3.21	.68	.13	.25	.25	.06	.17	.09	.71	.31
2	.68	.34	5.43	.32	.15	.52	.25	.06	.17	.09	.64	.29
3	.64	.36	5.04	.32	.17	.56	.25	.06	.17	.10	.52	.28
4	.60	.38	5.24	.31	.20	.60	.23	.07	.17	.11	.56	.28
5	.56	.40	5.43	.29	.23	.52	.22	.08	.18	.11	.60	.28
6	.52	.40	5.24	.29	.22	.50	.20	.09	.20	.12	.52	.28
7	.56	.40	4.84	.31	.25	.48	.17	.09	.22	.12	.50	.28
8	.60	.42	4.65	.31	.28	.50	.16	.08	.23	.11	.46	.29
9	.60	.42	4.36	.29	.29	.52	.15	.07	.20	.11	.44	.29
10	.60	.40	4.07	.29	.32	.50	.15	.08	.17	.12	.42	.28
11	.56	.38	3.92	.29	.26	.48	.14	.09	.17	.13	.38	.25
12	.52	.36	3.78	.28	.17	.46	.13	.10	.16	.15	.36	.20
13	.50	.38	3.64	.26	.16	.44	.12	.11	.15	.17	.38	.14
14	.48	.40	3.34	.25	.15	.42	.11	.11	.10	.22	.40	.14
15	.46	.42	3.20	.23	.14	.40	.10	.10	.17	.25	.42	.12
16	.46	.46	3.00	.22	.13	.38	.09	.09	.17	.32	.40	.13
17	.46	.52	2.80	.22	.12	.42	.08	.10	.16	.42	.36	.13
18	.48	.64	2.70	.20	.13	.46	.08	.11	.16	.52	.36	.14
19	.46	.71	2.60	.18	.14	.46	.07	.12	.15	1.82	.36	.16
20	.44	.75	2.50	.18	.13	.44	.06	.13	.14	4.65	.36	.17
21	.40	.79	2.30	.20	.12	.42	.06	.13	.13	1.18	.36	.17
22	.36	.82	2.20	.18	.12	.44	.06	.12	.12	.17	.36	.16
23	.36	.68	2.05	.17	.12	.48	.07	.11	.11	1.18	.36	.16
24	.34	.52	1.98	.17	.11	.50	.07	.09	.10	2.70	.36	.16
25	.32	.56	1.82	.16	.10	.52	.07	.07	.09	4.65	.36	.16
26	.32	.60	1.68	.15	.09	.52	.06	.07	.08	3.20	.38	.16
27	.52	.75	1.60	.14	.10	.56	.06	.06	.07	2.20	.38	.15
28	.42	.96	1.52	.13	.11	.60	.05	.06	.07	1.45	.38	.15
29	.40		1.45	.12	.11	.60	.05	.06	.07	.90	.36	.13
30	.40		1.34	.11	.10	.64	.04	.05	.07	.79	.36	.12
31	.36		1.23		.12		.04	.05		.75		.11

B 49

STNO 8104 - 0
 NAME DWAC
 MAIN RIVER LOBOC
 RIVER BILAR

DAILY AVERAGE

PROCESSED 81/05/25.

LATITUDE N 09,41,30
 LONGITUDE E 124,06,42
 UTM
 CATCHMENT 67,00 KM2

YEAR 1959

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	-	-	-	-	-	-	-	.01	.11	4.06	.01	.00
2	-	-	-	-	-	-	-	.01	-	3.95	.01	.00
3	-	-	-	-	-	-	-	.01	-	4.06	.01	.01
4	-	-	-	-	-	-	-	.01	-	3.40	.01	.01
5	-	-	-	-	-	-	-	.01	-	1.10	.01	.00
6	-	-	-	-	-	-	-	.01	-	.45	.01	.00
7	-	-	-	-	-	-	-	.01	-	.09	.01	.00
8	-	-	-	-	-	-	-	.01	-	.02	.01	.00
9	-	-	-	-	-	-	-	.02	-	.02	.01	.00
10	-	-	-	-	-	-	-	2.85	-	.02	.01	.00
11	-	-	-	-	-	-	-	1.33	-	.01	.01	.00
12	-	-	-	-	-	-	-	.30	-	.01	.01	.00
13	-	-	-	-	-	-	-	5.27	-	.01	.01	.00
14	-	-	-	-	-	-	-	.75	-	.01	.01	.00
15	-	-	-	-	-	-	-	.09	-	.02	.01	.00
16	-	-	-	-	-	-	-	.11	-	.02	.01	.00
17	-	-	-	-	-	-	-	.30	-	.01	.01	.00
18	-	-	-	-	-	-	-	.05	-	.01	.01	.00
19	-	-	-	-	-	-	-	.02	-	.07	.01	.00
20	-	-	-	-	-	-	-	.02	-	.90	.00	.00
21	-	-	-	-	-	-	-	2.05	-	1.05	.00	.00
22	-	-	-	-	-	-	-	.11	.25	.07	.00	.00
23	-	-	-	-	-	-	.30	3.18	.45	.02	.00	.00
24	-	-	-	-	-	-	.95	2.61	.30	.01	.00	.00
25	-	-	-	-	-	-	.01	1.05	.05	.01	.00	.00
26	-	-	-	-	-	-	11.24	.50	.40	.01	.01	.00
27	-	-	-	-	-	-	2.05	.11	.19	.01	.01	.00
28	-	-	-	-	-	-	.30	.16	.11	.01	.01	.00
29	-	-	-	-	-	-	.01	.07	2.85	.01	.00	.00
30	-	-	-	-	-	-	.07	.16	1.81	.01	.00	.00
31	-	-	-	-	-	-	.55	.02	-	.01	.00	

STNO 8104 - 0
 NAME DWAC
 MAIN RIVER LOBOC
 RIVER BILAK
 ARCHIVE F1

DAILY AVERAGE

PROCESSED 81/05/25.

LATITUDE N 09,41,30
 LONGITUDE E 124,06,42
 UTM
 CATCHMENT 67,00 KM2

YEAR 1960

DATE	DISCH. M3/S											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	,00	,01	,00	,00	,00	,00	,01	,00	,05	,29	,02	,05
2	,00	,01	,00	,00	,00	,00	,01	,00	,02	,50	,02	,08
3	,00	,00	,00	,00	,00	,00	,00	,01	,15	,21	,05	,10
4	,00	,00	,00	,00	,00	,00	,00	,45	,16	,77	,30	,10
5	,00	,00	,00	,00	,00	,00	,70	,02	,02	,05	,14	,12
6	,00	,00	,00	,00	,00	,00	,04	,02	,06	,65	,03	,19
7	,00	,01	,00	,00	,00	,00	,00	,01	,00	,94	,03	,23
8	,00	,01	,00	,00	,00	,00	,00	,01	,00	,94	,02	,25
9	,00	,01	,00	,00	,00	,00	,01	,01	,01	,85	,02	,41
10	,00	,01	,00	,00	,00	,00	,00	,01	,01	,49	,02	,56
11	,00	,01	,00	,00	,00	,65	,01	,01	,00	,80	,03	,41
12	,00	,00	,00	,00	,00	,25	,01	,01	,11	,40	,02	,95
13	,00	,00	,00	,00	,00	,01	,01	,01	,65	,11	,02	,67
14	,00	,00	,00	,00	,00	,00	,60	,01	,04	,03	,02	,48
15	,00	,00	,00	,00	,00	,00	,10	,00	,45	,02	,02	,32
16	,00	,01	,00	,00	,00	,01	,01	,00	,30	,02	,03	,19
17	,00	,01	,00	,00	,00	,06	,01	,01	,04	,02	,85	,12
18	,00	,01	,00	,00	,00	,01	,01	,01	,01	,02	,30	,12
19	,00	,01	,00	,00	,00	,00	,01	,00	,01	,02	,03	,17
20	,00	,01	,01	,00	,00	,06	,01	,00	,14	,45	,02	,38
21	,00	,00	,00	,00	,00	,09	,01	,00	,06	,00	,382	,42
22	,00	,00	,00	,00	,00	,01	,02	,00	,01	,10	,45	,48
23	,00	,00	,00	,00	,00	,00	,02	,00	,49	,80	,14	,49
24	,00	,00	,00	,00	2.37	,01	,02	,00	,19	,33	,09	,49
25	,00	,00	,00	,00	,25	,00	,01	,00	,10	,85	,06	,46
26	,00	,00	,00	,00	,55	,00	,01	,00	,05	,57	,05	,48
27	,00	,00	,00	,00	,45	,00	,41	,00	,01	,00	,05	,49
28	8.71	,00	,00	,00	,02	,03	,30	,00	,02	,25	,04	,49
29	5.05	,00	,00	,00	,00	,25	,01	,00	,13	,09	,04	,48
30	1.00	,00	,00	,00	,00	,02	,00	,00	,90	,04	,04	,48
31	,11	,00			,00		,00	,00		,03		,48

B

51

STNO	DAILY AVERAGE												N 09,41,30 E 124,06,42	YEAR 1961	PROCESSED 01/05/25.		
													UTM	CATCHMENT	67.00 KM2		
NAME	8104 - 0	DISCH,	M3/S	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
RIVER	MAIN RIVER LOBOC	ARCHIVE F1	DISCH,	M3/S	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1		,46	,83	,56	,49	,44	,80	,25	,04	,46	,42	,07	,46				
2		,48	,62	,56	,49	,44	,40	,24	,11	,49	,44	,07	,45				
3		,52	,52	,62	,49	,44	,11	,34	,30	,51	,45	,07	,46				
4		,99	,46	,54	,49	,42	,06	1.05	,46	,46	,85	,07	,46				
5		,62	,45	,52	,49	,41	,07	,69	,49	,48	1.05	,07	,46				
6		,48	,57	,52	,51	,35	,07	,49	,48	,48	,95	,07	,48				
7		,46	,64	,54	,51	,29	,10	,49	,48	,48	,71	,07	,48				
8		,56	,56	,56	,29	,29	,10	,49	,49	,45	,57	,07	,46				
9		,52	,45	,52	,35	,27	,76	,49	,49	,45	,46	,07	,45				
10		1.34	,45	,52	,45	,26	,07	,49	,42	,46	,42	,06	,45				
11		1.29	,44	,51	,46	,27	,04	,49	,42	,48	,41	,06	,44				
12		,99	,54	,51	,46	,27	,18	,49	,46	,46	,39	,06	,42				
13		1.16	,56	,52	,46	,29	,21	,56	,51	,45	,39	,06	,46				
14		,57	,57	,54	,46	,29	,06	,52	,48	,42	,40	,06	,46				
15		,46	,54	,54	,46	,29	,05	,51	,49	,41	,42	,06	,46				
16		,48	,52	,54	,46	,29	,05	,51	,51	,45	,45	,06	,44				
17		,56	,52	,54	,49	,29	,04	,48	,49	,32	,52	,06	,45				
18		,36	,52	,54	,49	,29	,04	,46	,48	,45	,51	,07	,46				
19		,42	,51	,52	,46	,29	,25	,46	,48	,42	,59	,07	,48				
20		,52	,52	,52	,46	,29	,45	,49	,48	,42	,78	,32	,44				
21		,51	,54	,52	,46	,31	,18	,51	,48	,34	,99	,85	,45				
22		,52	,54	,52	,46	,33	,10	,48	,48	,56	,78	,52	,40				
23		,52	,52	,52	,46	,21	,11	,46	,49	,28	,95	,45	,44				
24		,56	,52	,52	,46	,19	,10	,46	,48	,54	,73	,39	,45				
25		,56	,52	,52	,45	,19	,09	,49	,46	,67	,71	,36	,54				
26		,56	,54	,51	,44	,19	,09	,49	,46	,59	,24	,40	,46				
27		,48	,52	,49	,44	,17	,14	,46	,46	,48	,14	,44	,41				
28		,48	,56	,49	,33	,17	,15	,11	,46	,46	,11	,44	,42				
29		,48		,49	,35	,18	,16	,05	,46	,41	,08	,45	,46				
30		,73		,49	,41	,29	,24	,04	,46	,41	,08	,46	,44				
31		,57		,49		1.05		,04	,45		,07		,45				

B
52

STNO 8104 -- 0
 NAME OWAC
 MAIN RIVER LOBOC
 RIVER BILAR

DAILY AVERAGE

LATITUDE N 09,41,30
 LONGITUDE E 124,06,42
 UTM
 CATCHMENT 67,00 KH2

PROCESSED 01/05/25.

YEAR 1962

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.45	.36	.41	.46	.07	.22	.35	.49	.15	.12	.35	.24
2	.46	.36	.41	.42	.07	.21	.34	.48	.11	.10	.19	.22
3	.41	.35	.39	.41	.07	.20	.33	.49	.10	.10	.26	.21
4	.44	.34	.71	.39	.07	.20	.78	.46	.10	.10	.19	.15
5	.45	.34	.67	.38	.07	.23	1.02	.42	.09	.10	.13	.12
6	.40	.42	.54	.36	.07	.25	.74	.40	.09	.10	.12	.67
7	.38	3.63	.40	.34	.06	.26	.60	.46	.09	.10	.11	.54
8	.59	.48	.29	.31	.07	.27	.45	.76	.09	.26	.35	.26
9	.95	.33	.26	.24	.07	.27	.41	.76	.09	.48	.30	.17
10	.45	.52	.51	.22	.07	.28	.48	.59	.32	.29	.34	.15
11	.32	.24	.46	.21	.06	.42	.48	.51	1.12	.33	.22	.12
12	.30	.17	.34	.19	.06	.38	.51	.56	.32	.24	.15	.12
13	.32	.11	.42	.18	.07	.39	.74	.57	.52	.19	.12	.11
14	.41	.07	.41	.18	.07	.38	.85	.59	.28	.16	.10	.11
15	.45	.06	.41	.18	.07	.35	1.16	.52	.26	.12	.10	.11
16	.46	.06	.45	.18	.07	.35	.54	.49	.22	.11	.10	.11
17	.46	.06	.52	.18	.08	.32	.48	.51	.76	.11	.10	.11
18	.46	.06	.38	.18	.06	.33	.49	.83	.48	.10	.10	.11
19	.44	.07	.39	.18	.06	.36	.49	.54	1.45	.12	.10	.11
20	.45	.39	.46	.15	.24	.36	.51	.49	.39	.18	.10	.11
21	.42	.99	.44	.15	.11	.41	.49	.76	1.34	.13	.76	.11
22	.44	.80	.42	.14	.11	.42	.48	.78	1.19	.30	.18	.11
23	.45	.57	.40	.12	.09	.38	.48	.74	.44	.30	.12	.11
24	.44	.74	.39	.09	.10	.35	.51	2.94	2.67	.24	.11	.15
25	.45	.51	.35	.09	.12	.35	.51	1.19	1.02	.15	.11	.30
26	.42	.46	.41	.09	.10	.38	.56	1.16	.42	.11	.11	.29
27	.40	.48	.48	.09	.11	.39	.69	.34	.30	.10	5.93	.17
28	.40	.42	.46	.09	.10	.39	.85	.59	.24	.10	4.57	.13
29	.40		.46	.09	.18	.38	.67	.60	.22	.10	.57	.12
30	.44		.48	.08	.15	.36	.69	.40	.16	.10	.33	.14
31	.41		.48		.19		.57	.23			.34	.39

B
53

STNO 8104 - 0
 NAME DWAC
 MAIN RIVER LOBOC
 RIVER BILAK
 ARCHIVE F1

DAILY AVERAGE

LATITUDE N 09° 41,30
 LONGITUDE E 124° 06,42
 UTM
 CATCHMENT 67,00 KM2

PROCESSED 81/05/25,

YEAR 1963

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.64	.49	.20	.39	.31	.17	.69	.60	.69	2.85	.39	.59
2	.71	.54	.19	.39	.35	.15	.69	.54	.69	1.02	.22	.59
3	.69	.67	.20	.39	.35	.25	.60	.62	.71	.83	.15	.59
4	.71	.42	.15	.38	.35	.59	.62	.62	.67	.71	.13	.59
5	.74	.56	.38	.35	.36	.64	.62	.59	.64	.52	.12	.59
6	.63	.46	.39	.35	.36	.64	.60	.57	.64	.62	.14	.59
7	1.05	.52	1.39	.39	.38	.69	.60	.59	.64	.83	.78	.59
8	1.34	.52	.56	.40	.36	.48	.60	.59	.62	1.12	5.59	.60
9	1.09	.52	.46	.39	.34	.71	.62	.59	.62	1.16	1.16	.62
10	3.21	.52	.45	.38	.34	.71	.64	.56	.62	.67	1.06	.78
11	2.05	.54	.48	.39	.35	.62	.64	.56	.62	.92	.69	.67
12	.88	.56	.34	.39	.35	.64	.64	.78	.60	.88	.41	.56
13	2.76	.51	.34	.39	.35	.64	.69	.62	.60	.30	.30	.67
14	2.19	.60	.36	.38	.39	.64	.67	.57	.60	1.98	.22	.71
15	3.85	.71	.31	.38	.38	.62	.64	.56	.60	1.29	.18	.71
16	4.57	.57	.28	.39	.32	.62	.64	.56	.56	.92	.15	.59
17	2.40	.62	.27	.34	.31	.62	.60	.57	.57	1.02	.13	.54
18	1.29	.76	.32	.35	.38	.60	.60	.60	.39	.33	.12	.59
19	1.34	.74	.44	.34	.38	.62	.60	.78	.30	.22	.12	.59
20	1.02	.57	.36	.35	.19	.62	.56	.67	.46	.17	.12	.60
21	.83	.62	.32	.33	.13	.60	.62	.62	.78	.14	.11	.62
22	.69	.57	.36	.34	.13	.60	.60	.60	1.77	.11	.12	.62
23	.54	.52	.34	.34	.13	.62	.59	.60	.56	.12	.12	.59
24	.40	.44	.30	.34	.13	.62	.59	.64	.52	.12	.12	.60
25	.51	.30	.30	.34	.13	.64	.57	3.96	.59	.62	.17	.62
26	.92	.22	.35	.34	.13	.67	.51	3.21	.48	1.19	.54	.60
27	1.09	.32	.36	.31	.13	.67	.57	1.09	1.39	.54	.57	.60
28	.95	.29	.36	.32	.32	.60	.56	.69	1.55	.62	.59	.60
29	.80		.36	.34	.31	.62	.56	.69	.59	1.29	.62	.60
30	.62		.36	.34	.16	.62	.62	.60	.57	.46	.64	.60
31	.54		.36		.15		.64	.69		.22		.60

B
54

STNO 8104 - 0
 NAME DWAC
 MAIN RIVER LOBOC
 RIVER BILAR
 ARCHIVE F1

DATE	DAILY AVERAGE											CATCHMENT	YEAR	PROCESSED 81/05/25
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV			
1	.86	.39	.86	.46	.11	.56	1.39	.56	.71	.29	.43	.62		
2	.52	.52	.69	.92	.12	.60	.69	.49	.67	.35	.67	.60		
3	.71	.44	.62	.44	.12	.52	.64	.56	.71	1.34	.62	.62		
4	.67	.36	.59	.27	.12	.69	.76	.59	.67	3.30	.71	.62		
5	.67	.59	.59	.25	.12	.80	.59	.67	.76	1.05	.83	.62		
6	.67	.92	.44	.24	.12	.67	.67	.60	.62	2.26	.60	.62		
7	.67	.60	.52	.24	.17	.56	.67	.59	.62	1.16	.41	.64		
8	.80	.62	.92	.23	.15	.67	.71	.59	.67	.52	.31	.62		
9	.74	.59	.95	.25	.13	.67	.62	.49	.69	.37	.59	.64		
10	.76	.59	.80	.25	.14	.67	.67	.60	1.91	.47	.32	.64		
11	1.34	.69	.64	.25	.14	1.29	.67	.62	.80	1.55	.33	.64		
12	.99	.78	.52	.20	.14	2.58	.74	.49	.71	1.65	.24	.62		
13	.71	.76	4.30	.13	.25	1.20	.69	.56	.36	8.86	.15	.62		
14	1.29	.71	1.70	.11	.49	.56	.49	.59	.36	6.56	.12	.67		
15	1.75	.76	.92	.11	.52	.67	.59	.26	.36	7.48	.13	.67		
16	20.02	.67	.62	.12	.52	.64	.56	.59	.54	10.93	.14	.67		
17	18.73	.71	.46	.36	.56	.62	.67	.64	.56	6.10	.12	.62		
18	14.00	.69	.41	.16	.54	.62	.76	.64	.56	3.96	.12	.62		
19	3.74	.62	.32	.12	.54	.62	.62	.67	.54	5.76	.12	.62		
20	1.84	.67	.32	.12	.56	.71	.67	.71	.56	2.58	.16	.62		
21	1.20	.99	.34	.11	.56	.67	.64	.99	.71	5.76	.21	.62		
22	.95	.45	.31	.11	.57	.71	.67	.59	.62	3.96	.24	.74		
23	.80	.56	.29	.36	.56	.69	.67	.36	.42	2.26	.49	.71		
24	.71	.59	.30	.12	.56	.62	.46	.59	.25	1.70	.49	.76		
25	.62	.62	.31	.11	.54	.71	.46	.56	.25	1.34	.56	.76		
26	.59	.60	.86	.11	.56	.76	.54	2.12	.20	1.05	.67	.78		
27	.59	.74	.80	.11	.56	.71	.59	.43	.23	.78	.62	.78		
28	.56	.99	.44	.11	.56	.60	.67	.19	1.94	.67	.56	.76		
29	.67		.37	.11	.56	.67	.62	.15	1.05	.56	.59	.76		
30	.76		.49	.11	.64	1.60	.62	.13	.36	.39	.62	.76		
31	.59		.67		.62		.64	.47		.39		.76		

 B
56

PROCESSED 81/05/25.

STND	8104	0	DAILY AVERAGE												YEAR	1964		
									LATITUDE	N 09,41,30								
NAME	DWAC								LONGITUDE	E 124,06,42								
MAIN RIVER	LOBOC								UTM									
RIVER	BILAR								CATCHMENT	67.00	KM2							
ARCHIVE F1	DISCH.		M3/S															
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC						
1	.60	.54	.56	.46	.62	.10	.59	.52	.42	.32	.14	.35						
2	.59	.54	.52	.45	.49	.10	.76	.56	.46	1.05	.38	.57						
3	.59	.54	.52	.45	.57	.10	.71	.51	.42	1.70	.49	1.05						
4	.59	.54	.52	.38	.30	.10	.62	.52	.41	.40	.62	.99						
5	.59	.52	.52	.17	.17	.10	.69	.54	.40	.19	.59	1.09						
6	.59	.52	.54	.11	.20	.11	.80	.54	.40	.11	.64	1.24						
7	.59	.52	.54	.09	.34	.23	.56	.52	.46	.14	1.91	2.76						
8	.62	.51	.52	.10	.39	.28	.60	.49	.52	.29	.27	1.39						
9	.67	.51	.51	.12	.40	.46	.69	.49	.45	.16	.19	1.05						
10	.67	.51	.51	.12	.39	.46	.78	.54	.42	.12	.30	1.54						
11	.67	.51	.51	.09	.39	.49	.78	.54	.45	.12	.11	1.19						
12	.67	.51	.51	.08	1.60	.51	.54	.51	.44	.24	.17	.85						
13	.60	.51	.51	.08	1.24	.49	.52	.51	.44	.22	.11	.54						
14	.54	.83	.52	.09	.67	.49	.52	.49	.45	.24	.51	.62						
15	.48	4.74	.52	.09	.18	.51	.71	.48	.52	.25	.21	.59						
16	.56	1.02	.52	.08	.30	.51	.59	.49	.46	.25	.17	.60						
17	.56	.46	.54	.09	.71	.52	.49	.51	.41	.24	.26	.54						
18	.56	.45	.54	.09	.88	.52	.52	.49	.39	.30	.27	.60						
19	.49	.52	.52	.09	2.33	.54	.57	.48	.38	.74	72.02	.67						
20	.52	.51	.52	.09	.41	.54	.54	.45	.42	.19	54.85	.64						
21	.54	.51	.51	.08	.23	.56	.56	.44	.40	.46	12.68	.69						
22	.56	.52	.51	.09	.14	.54	.56	.44	.38	.18	3.52	.64						
23	.57	.56	.49	.09	.10	.56	.67	.44	.36	.41	1.44	.69						
24	.56	.59	.49	.11	.10	.56	.76	.46	.36	.30	1.24	.64						
25	.54	.49	.49	.29	.10	.52	.76	.46	.36	.38	.64	.67						
26	.54	.49	.48	.24	.16	.57	.59	.54	.35	.46	.46	.67						
27	.52	.49	.46	.34	.17	.57	.31	.49	.35	.21	3.41	.67						
28	.52	.62	.48	.30	.14	.60	.52	.46	.30	.22	1.77	.62						
29	.52	.59	.48	.30	.30	.67	.56	.44	.35	.14	.99	.64						
30	.54		.49	.41	.22	.64	.59	.41	.34	.16	.51	.69						
31	.54		.46		.12		.57	.41		.10		.62						

B
55

STNO 8104 - 0
 NAME DWAC
 MAIN RIVER LOBOC
 RIVER BILAR

DAILY AVERAGE

PROCESSED 81/05/25.

LATITUDE N 09,41,30
 LONGITUDE E 124,06,42
 UTM CATCHMENT 67,00 KM2

YEAR 1966

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.74	.67	.62	.49	.46	.07	.21	.14	.10	.00	.01	.12
2	.76	.67	.59	.49	.46	.07	.16	.24	.11	.00	.00	.11
3	.74	.64	.59	.49	.49	.06	.16	.28	.12	.01	.00	.12
4	.76	.69	.67	.51	.51	.06	.18	.18	.12	.01	.01	.12
5	.71	.60	.59	.49	.49	.06	.14	.16	.10	.01	.00	.12
6	.76	.57	.59	.49	.46	.06	.15	.14	.09	.05	.01	.12
7	.74	.62	.67	.47	.44	.06	.10	.09	.10	.06	.00	.14
8	.67	.71	.59	.46	.44	.06	.09	.01	.10	.03	.00	.14
9	.74	.64	.56	.46	.47	.06	.10	.01	.08	.01	.35	.12
10	.71	.62	.56	.46	.05	.06	.16	.08	.10	.25	.04	.05
11	.71	.69	.51	.49	.06	.06	.10	.08	.12	.69	.00	.24
12	.67	.64	.52	.51	.05	.05	.10	.09	.10	.12	.00	.15
13	.67	.64	.56	.49	.06	.06	.39	.10	.09	.04	.00	.06
14	.62	.71	.59	.52	.06	.07	.39	.15	.08	.01	.00	.21
15	.62	.62	.67	.56	.08	.09	.25	.12	.08	.00	.10	.22
16	.71	.60	.56	.52	.08	.09	1.03	.12	.08	.09	.11	.16
17	.62	.69	.57	.49	.07	.08	.27	.16	.10	.06	.12	.16
18	.60	.60	.57	.49	.07	.08	.16	.12	.10	.00	.13	2.14
19	.67	.62	.59	.49	.06	.11	.22	.14	.12	.00	.19	1.38
20	.64	.69	.64	.51	.06	.09	.18	.14	.05	.00	.15	.25
21	.60	.62	.57	.51	.07	.09	.14	.08	.07	.00	.14	.10
22	.71	.59	.57	.49	.07	.09	.15	.10	.06	.00	.12	.22
23	.69	.67	.57	.49	.06	.15	.25	.11	.06	.00	.11	.19
24	.62	.59	.59	.49	.06	.43	.18	.16	.07	.00	.11	.19
25	.62	.59	.59	.49	.06	.16	.11	.12	.01	.00	.11	.19
26	.59	.59	.56	.46	.06	.09	.25	.12	.06	.35	.11	.19
27	.69	.67	.57	.46	.06	.09	3.09	.12	.08	.28	.12	.19
28	.62	.59	.56	.46	.07	.15	9.32	.22	.10	.01	.10	.19
29	.71		.64	.45	.07	.10	6.69	.15	.03	.02	.12	.19
30	.67		.54	.46	.07	.19	.51	.14	.08	.16	.12	.19
31	.71		.52		.08		.27	.10		.01		.18

B
57

PROCESSED 81/05/25.

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE								YEAR	1967
				DISCH.	M3/S			LATITUDE	LONGITUDE	N 09,41,30	E 124,06,42		
ARCHIVE F1					UTM	CATCHMENT	67.00	KK2					
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	.19	.76	.86	.69	.36	.06	.12	.10	.08	.05	.02	.01	
2	.16	.80	.80	.67	.39	.06	.10	.12	.08	.05	.02	.02	
3	.16	.71	1.70	.71	.47	.06	.04	.08	.06	.05	.02	.02	
4	.19	.64	1.50	.78	.41	.06	.19	.08	.06	.05	.02	.02	
5	.18	.67	.89	.78	.36	.06	.19	.07	.06	.04	.02	.03	
6	.24	.67	.80	.78	.39	.06	.12	.06	.06	.04	.02	.03	
7	.39	.71	2.12	.78	.36	.06	.11	.06	.05	.04	.08	.03	
8	.06	.76	1.29	.78	.36	.06	.11	.06	.05	.03	14.00	.03	
9	.14	.71	1.50	.76	.36	.06	.11	.06	.05	.03	1.00	.03	
10	.12	.71	1.24	.56	.36	.06	.10	.08	.04	.04	.35	.03	
11	.16	.69	1.05	.41	.36	.06	.14	.06	.04	.04	.10	.04	
12	.16	.67	.86	.39	.36	.06	.08	.08	.05	.04	.03	.03	
13	.10	.69	.67	.39	.36	.07	.09	.06	.05	.04	.02	.04	
14	2.04	.86	.60	.39	.36	.07	.12	.05	.05	.05	.02	.05	
15	.35	6.56	.43	.39	.36	.06	.19	.06	.05	.11	.02	8.86	
16	.19	2.76	.43	.44	.36	.06	.12	.05	.04	.10	.02	5.57	
17	.24	3.12	.59	.39	.43	.06	.12	.05	.04	.87	.02	.87	
18	.35	1.84	.56	.39	.44	.06	.11	.05	.05	.30	.02	14.86	
19	13.34	1.20	.45	.39	.51	.06	.16	.06	.04	.03	.02	1.17	
20	16.58	1.02	.52	.37	.05	.07	.11	.05	.04	.02	.02	.45	
21	2.47	.92	.56	.37	.02	.07	.10	.04	.03	.02	.02	.31	
22	2.19	.92	.39	.37	.03	.07	.16	.06	.02	.02	.02	.25	
23	1.65	.89	.36	.37	.08	.10	.14	.09	.03	.02	.02	.18	
24	1.50	.99	.34	.37	.07	.07	.10	.08	.02	.02	.02	.13	
25	1.45	.87	.57	.37	.07	.09	.14	.06	.04	.02	.02	.10	
26	1.45	.92	.62	.43	.07	.07	.16	.05	.04	.02	.02	.10	
27	1.39	.80	.62	.57	.07	.08	.10	.06	.04	.02	.02	.12	
28	.80	.86	.67	.49	.06	.08	.09	.06	.05	.02	.02	.16	
29	.71		.67	.37	.07	.07	.09	.06	.05	.02	.02	.13	
30	.86		.67	.39	.07	.07	.10	.06	.05	.02	.02	.14	
31	.80		.69		.06		.12	.06				.10	

B

58

STNO 8104 - 0
 NAME DWAC
 MAIN RIVER LOBOC
 RIVER BILAK
 ARCHIVE F1

DATE	DAILY AVERAGE												LATITUDE N 09,41,30	LONGITUDE E 124,06,42	UTM CATCHMENT 67,00 KH2	YEAR 1968	PROCESSED 01/05/25
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1	.10	.35	.06	.05	.05	.02	.01	.01	.18	.19	.21	.00					
2	.13	.05	.10	.05	.05	.02	.01	.01	.18	.19	.21	.00					
3	.14	.04	.06	.04	.05	.02	.01	.01	.18	.19	.25	.00					
4	.19	.16	.07	.04	.05	.02	.01	.01	.17	.59	.24	.00					
5	.13	.10	.05	.06	.05	.02	.01	.00	.16	.44	.21	.00					
6	.14	.11	.05	.05	.05	.02	.01	.01	.16	.22	.19	.00					
7	.09	.08	.05	.04	.04	.02	.01	.02	.16	.22	.18	.00					
8	.10	.09	.05	.04	.04	.02	.01	.01	.16	.29	.18	.00					
9	.16	.14	.05	.05	.06	.01	.01	.01	.16	.34	.19	.00					
10	.14	.10	.12	.05	.05	.01	.01	.01	.15	.30	.18	.00					
11	.14	.18	.05	.05	.04	.01	.01	.01	.15	.32	.20	.01					
12	.08	.10	.06	.05	.04	.01	.01	.01	.14	.27	.25	.01					
13	.15	.06	.06	.05	.04	.01	.01	.01	.17	.23	.25	.02					
14	.11	.09	.14	.05	.04	.01	.01	.01	.16	.19	.25	.02					
15	.10	.22	.14	.04	.04	.02	.01	.01	.16	.25	.25	.02					
16	.14	.10	.10	.05	.04	.02	.01	.00	.16	.33	.25	.04					
17	.06	.05	.07	.04	.04	.01	.01	.00	.14	1.65	.24	.04					
18	.09	.06	.06	.04	.04	.01	.01	.01	.14	.59	.25	.04					
19	.11	.14	.06	.05	.04	.01	.01	.01	.16	.76	.32	.04					
20	.08	.08	.10	.06	.03	.01	.01	.01	.24	.39	13.34	.04					
21	.14	.08	.06	.06	.02	.01	.01	.00	.23	.27	2.23	.04					
22	.11	.21	.05	.07	.02	.01	.01	.00	.22	.30	.43	.04					
23	.12	.08	.06	.05	.02	.01	.01	3.24	.23	.32	.12	.04					
24	.08	.08	.06	.05	.02	.01	.01	.28	.27	.24	.05	.04					
25	.15	.06	.08	.04	.02	.01	.01	.23	.49	.22	.51	.04					
26	.16	.11	.05	.05	.02	.01	.01	.23	.62	.22	.08	.06					
27	4.59	.11	.05	.04	.02	.02	.01	.18	.44	.22	.02	1.38					
28	1.10	.11	.04	.04	.02	.01	.01	.18	.23	.22	.01	.64					
29	.31	.09	.04	.04	.02	.01	.01	.18	.20	.21	.00	.41					
30	.27		.05	.04	.02	.01	.01	.18	.19	.21	.00	.78					
31	.27		.06		.02		.01	.18		.21		.62					

B

59

PROCESSED 01/05/25.

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE								YEAR	1969
								LATITUDE		N 09,41,30			
				LONGITUDE		E 124,06,42							
				UTM		CATCHMENT		67,00	KM2				
ARCHIVE F1		DISCH.	M3/S										
DATE		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		.51	.46	.33	.19	.03	.03	.03	.25	.24	.24	.49	.37
2		.44	.46	.32	.18	.03	.03	.03	.24	.47	.23	.49	.39
3		.47	.39	.31	.18	.03	.03	.02	.24	.49	.25	.49	.33
4		.49	.44	.28	.18	.03	.03	.02	.23	.56	.27	.49	.67
5		.49	.42	.27	.17	.03	.02	.03	.23	.86	.78	.49	.56
6		.49	.42	.29	.16	.03	.02	.03	.22	.39	1.39	.49	.49
7		.49	.42	.29	.15	.03	.03	.62	.21	.30	.60	.49	.49
8		.49	.42	.27	.15	.03	.19	4.41	.21	.29	.39	.46	.52
9		.51	.41	.29	.14	.03	.14	.51	.19	.29	.39	.46	.52
10		.51	.41	.27	.13	.03	.14	.32	.25	.29	.37	.44	.52
11		.49	.42	.25	.12	.03	.76	.33	.23	.29	.37	.44	.47
12		.51	.42	.26	.11	.03	.34	.32	.21	.30	.46	.44	.49
13		.51	.39	.25	.11	.03	.12	.33	.18	.31	.46	.44	.51
14		.49	.39	.24	.11	.03	.03	.34	.17	.29	.47	.42	.47
15		.47	.39	.24	.10	.03	.03	.60	.16	.29	.52	.43	.49
16		.49	.41	.23	.10	.03	.03	.42	.16	.27	.80	.42	.49
17		.49	.36	.21	.10	.03	.03	.35	.17	.27	.92	.43	.49
18		.49	.36	.21	.10	.03	.03	.32	.15	.28	.62	.51	.45
19		.49	.36	.12	.11	.03	.03	.32	.14	.29	.59	.64	.45
20		.47	.36	.11	.15	.03	.03	.39	.15	.27	.59	.60	.45
21		.49	.37	.14	.17	.03	.03	.36	.13	.27	.67	.52	.45
22		.49	.37	.16	.19	.03	.03	.35	.13	.25	.62	.49	.45
23		.46	.36	.17	.19	.03	.03	.34	.13	.25	.64	.44	.46
24		.49	.35	.18	.19	.03	.03	.34	.13	.26	.62	.42	.43
25		.46	.35	.19	.19	.03	.03	.32	.13	.25	.59	.42	.45
26		.46	.34	.20	.19	.03	.03	.32	.13	.26	.62	.41	.44
27		.46	.34	.21	.20	.03	.03	.31	.13	.25	.99	.42	.44
28		.46	.34	.21	.20	.03	.02	.29	.36	.25	.62	.42	.43
29		.47		.21	.19	.03	.02	.27	.71	.24	.46	.42	.39
30		.46		.21	.20	.03	.03	.27	.36	.24	.45	.41	.39
31		.46		.21		.03		.25	.43		.45		.37

B
60

STNO 8104 - 0
 NAME DWAC
 MAIN RIVER LOBOC
 RIVER BILAR

DAILY AVERAGE

PROCESSED 81/05/25.

N 09,41,30
E 124,06,42

YEAR 1970

LATITUDE
LONGITUDE
UTM

CATCHMENT 67.00 KM2

ARCHIVE F1 DISCH. M3/S

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	.37	.23	.24	.07	.03	.03	.62	.19	.12	.22	.31	.05
2	.37	.23	.23	.03	.03	.03	.49	.24	.10	.19	.19	.04
3	.36	.24	.23	.03	.03	.03	.29	.23	.09	.19	.09	.04
4	.37	.23	.24	.03	.03	.03	.20	.21	.06	.17	.04	.04
5	.37	.24	.23	.03	.03	.03	.18	.19	.05	.16	.04	.04
6	.37	.24	.23	.03	.03	.03	.16	.20	.04	.14	.04	.06
7	.37	.24	.23	.03	.03	.03	.15	.19	.03	.14	.04	.04
8	.36	.23	.23	.03	.03	.03	.13	.17	.03	.14	.04	.11
9	.37	.23	.23	.03	.03	.03	.13	.16	.03	.22	.04	.21
10	.37	.24	.23	.03	.03	.03	.12	.14	.03	.46	.04	.30
11	.37	.24	.23	.03	.03	.03	.12	.11	.03	.33	.08	.34
12	.36	.24	.22	.03	.03	.03	.12	.12	.03	.24	.04	.39
13	.37	.24	.21	.03	.03	.03	.13	.11	.03	.43	.04	.41
14	.36	.24	.20	.03	.03	.03	.17	.10	.03	7.25	.04	.44
15	.36	.24	.20	.03	.03	.03	.19	.09	.03	.49	.04	.36
16	.36	.24	.20	.03	.03	.03	.16	.07	.03	.18	.04	.36
17	.35	.24	.20	.03	.03	.03	.15	.05	.03	.09	.04	.36
18	.36	.24	.19	.03	.03	.03	.15	.04	.03	.05	.04	.49
19	.34	.24	.19	.03	.03	.13	.78	.04	.03	.04	.04	.36
20	.32	.24	.18	.03	.03	.23	.43	.04	.03	.05	.04	.36
21	.31	.24	.17	.03	.03	.09	.27	.04	.03	.04	.04	.36
22	.31	.92	.17	.03	.03	.04	.23	.04	.03	.03	.04	.37
23	.31	.46	.17	.03	.03	.03	.28	.05	.03	.03	.04	.37
24	.31	.27	.17	.03	.03	.54	.52	.46	.03	.04	.04	.37
25	.31	.25	.17	.03	.03	.37	.57	.25	1.24	.23	.04	.37
26	.30	.23	.12	.03	.03	.16	.31	.16	.57	.92	.04	.35
27	.27	.24	.12	.03	.03	.09	.28	.12	.78	.57	.13	.41
28	.26	.23	.12	.03	.03	.04	.24	.09	.42	.25	.14	.41
29	.24		.10	.03	.03	.03	.22	.16	.27	.42	.08	.43
30	.24		.10	.03	.03	.46	.21	.14	.24	.17	.06	.41
31	.24		.09		.03		.20	.14		.19		.41

B
61

STNO	NAME	MAIN RIVER	RIVER	DAILY AVERAGE												LATITUDE N 09,41,30	LONGITUDE E 124,06,42	UTM CATCHMENT	67,00 KM2	PROCESSED 01/05/25.	
																				YEAR	1971
				8104 - 0	DWAC	LOBOC	BILAR	DISCH.	M3/S	APR	MAY	JUN	JUL	AUG	SEP						
1				,39	,37	,47	,41	2,12	,19	,62	,46	,24	,18	,15	,19						
2				,36	,37	,47	,39	,32	,33	,42	,46	,13	,32	,14	,23						
3				,41	,35	,47	,41	,28	,14	,51	,47	,12	,29	,13	,20						
4				,37	,35	,46	,41	,34	,08	,44	,47	,11	1,02	,24	,20						
5				,35	,42	,45	,37	,19	,21	,39	,49	,11	,74	,51	,31						
6				,37	,43	,44	,41	,22	,21	,62	,47	,13	,31	1,20	,23						
7				,41	,62	,45	,42	,31	,13	,54	,47	,29	,18	,37	,39						
8				,54	,57	,45	,41	,32	,11	,32	,47	,33	,18	,27	,43						
9				,41	,56	,45	,39	,32	,09	,60	,49	,74	,23	,20	,44						
10				,39	2,76	,45	,39	,32	,09	10,01	,47	,33	,19	,37	,44						
11				,43	,56	,45	,37	,33	,23	,83	,47	,71	4,29	,31	,45						
12				,43	,31	,43	,37	,39	,29	,51	,47	,41	2,47	,23	,46						
13				,43	,41	,37	,36	,32	,45	,47	,47	,44	3,21	,19	,46						
14				,41	,45	,37	,36	,57	,42	,54	,46	,45	1,20	,24	,45						
15				,41	,95	,46	,37	,27	,44	,39	,47	,45	1,50	,22	,47						
16				,41	,42	,46	,36	,12	,42	,51	,47	,45	1,09	,19	,49						
17				,41	,28	,44	,36	,29	,44	,54	,47	,44	,42	,16	,49						
18				,42	,20	,44	,36	,27	,52	,31	,46	,44	,27	,12	,49						
19				,41	,15	,43	,36	,19	,49	,25	,45	,45	,19	,12	,49						
20				,42	,08	,42	,36	,13	,44	,46	,45	,49	,16	,11	,49						
21				,41	,04	,42	,35	,09	,44	,45	,44	,47	20,62	,10	,49						
22				,42	,04	,43	,35	,13	,52	,44	,45	,56	2,12	,27	,49						
23				,41	,25	,43	,34	,09	,47	,45	,45	,34	,76	,23	,49						
24				,39	,47	,42	,33	,08	1,12	,46	,49	,26	2,26	,18	,49						
25				,39	,46	,42	,34	,07	1,45	,45	,64	,47	,42	,14	,49						
26				,39	,43	,42	,32	,06	,78	,46	,54	,47	,34	,11	,49						
27				,39	,44	,43	,33	,09	2,94	,49	,44	1,65	,29	,37	,49						
28				,37	,47	,42	,33	,14	2,76	,49	,45	,89	,25	,32	,54						
29				,37		,42	,33	,13	3,03	,49	,46	,56	,23	,37	,54						
30				,36		,42	,33	,06	,89	,46	,51	,36	,19	,19	,52						
31				,37		,41		,80		,47	1,02		,17		,51						

B

O

MONTHLY AVERAGE

PROCESSED 81/05/29.

STNO 8101 0 TIGBAO
 MAIN RIVER LOBOC
 RIVER

CATCHMENT 618, KM2

M3/SEC

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-	-	-	-	-	-	-
1955	34.16	11.65	10.01	7.22	11.93	24.88	32.16	22.45	34.90	34.13	45.43	42.78	26.07
1956	20.60	15.27	9.60	19.45	36.26	28.26	32.12	43.44	17.27	34.15	19.30	43.42	26.75
1957	25.26	22.30	11.31	19.21	10.91	15.30	23.26	23.65	9.73	15.87	18.44	8.77	16.97
1958	9.23	8.74	8.04	7.92	8.07	10.67	18.09	18.74	15.96	14.87	18.87	9.28	12.39
1959	17.71	5.00	14.28	8.27	7.20	8.26	36.10	26.19	17.59	18.87	8.99	13.06	15.26
1960	18.30	12.77	10.22	13.87	13.88	20.16	25.82	9.58	29.89	27.51	27.54	19.47	19.09
1961	22.91	18.77	7.90	7.35	14.54	26.97	17.41	8.46	14.51	27.05	15.80	13.66	16.26
1962	14.81	24.95	23.97	9.83	9.40	24.74	29.13	28.94	37.74	28.00	31.11	17.84	23.33
1963	36.36	19.40	23.29	9.30	8.36	7.25	9.51	27.71	10.90	36.66	24.73	13.14	18.94
1964	8.09	23.78	9.29	8.13	26.63	15.90	30.34	8.30	18.89	24.59	66.50	28.99	22.39
1965	40.22	21.95	20.56	17.38	11.27	21.73	20.47	23.57	21.86	45.46	18.74	18.09	23.49
1966	9.40	7.71	7.22	7.12	11.21	21.81	48.87	28.07	14.17	30.25	26.60	25.23	19.93
1967	45.32	31.17	34.00	11.88	10.61	13.25	18.80	8.60	9.92	17.49	24.50	22.44	20.64
1968	19.88	17.08	8.78	7.83	11.20	16.89	18.60	13.16	15.44	19.13	23 e	25 e	16 e
1969	10.70	9.12	8.95	8.46	8.85	13.75	20.75	12.79	12.92	17.10	11.49	15.78	12.59
1970	11.00	17.76	10.00	8.95	9.41	12.06	16.49	11.91	11.53	21.52	16.50	13.66	13.37
1971	14.51	18.78	13.37	10.69	21.47	24.48	18.41	14.24	21.53	27.71	25.40	13.49	18.65
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-

B
63

MONTHLY AVERAGE

PROCESSED 81/05/29.

DATA FOR PERIOD 1/ 1 1955 -31/12 1971

STNO 8101 0 TIGBAO

CATCHMENT 618. KM2 M3/SEC

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
MEAN	21.09	16.83	13.58	10.76	13.60	18.02	24.49	19.40	18.51	25.90	24.9	20.2	19.0
MAX	45.32	31.17	34.00	19.45	36.26	28.26	48.87	43.44	37.74	45.46	66.50	43.42	26.75
MIN	8.09	5.00	7.22	7.12	7.20	7.25	9.51	8.30	9.73	14.87	8.99	8.77	12.39

L/SEC/KM2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	B
MEAN	34.12	27.24	21.97	17.40	22.00	29.16	39.63	31.39	29.96	41.91	40.2	32.9	30.7	64
MAX	73.33	50.44	55.01	31.47	58.67	45.72	79.08	70.30	61.07	73.56	107.60	70.26	43.28	
MIN	13.10	8.10	11.68	11.52	11.64	11.73	15.39	13.43	15.74	24.06	14.55	14.18	20.05	

MONTHLY AVERAGE

PROCESSED 81/05/29.

STNO 8102 0 PAMACSLAN
 MAIN RIVER WAHIG
 RIVER PAMACSLAN

CATCHMENT 28.0 KM2

M3/SEC

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-	-	-	-	-	-	-
1955	-	-	-	-	-	-	-	-	-	-	-	-	-
1956	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	.83	.73	.37	1.00	.24	.29	.31	1.22	.13	.77	.65	.17	.56
1958	.20	.68	.34	.24	.21	.17	1.42	.82	.18	.44	1.93	1.56	.68
1959	2.65	.44	1.74	1.11	.70	.73	1.91	.77	.82	1.97	.95	.33	1.19
1960	1.12	.70	.12	.78	.63	2.78	.98	.56	1.70	2.12	1.78	2.91	1.35
1961	2.54	1.67	.75	.75	.28	.28	.73	.57	.82	1.69	1.44	1.68	1.10
1962	1.27	3.75	1.85	.96	.51	1.19	1.62	2.09	1.44	2.25	2.45	2.25	1.79
1963	2.58	1.46	.99	.52	.39	.25	1.11	1.68	1.02	2.10	1.66	.42	1.18
1964	.74	2.52	1.01	1.10	1.65	1.31	1.20	.75	.93	1.61	4.40	4.28	1.78
1965	3.68	2.56	4.23	1.39	.57	.64	.64	.21	.84	2.39	1.64	2.09	1.74
1966	1.28	.46	.38	.34	.67	.19	2.51	1.93	.71	2.28	2.09	1.85	1.23
1967	3.92	3.18	2.59	.90	.65	.36	.37	.30	.19	.96	2.09	2.23	1.47
1968	2.06	.97	.33	.12	.13	.22	.53	.24	.31	.38	2.8 e	4.0 e	1.0 e
1969	.85	.25	.29	.26	.21	.30	.29	.69	.57	.69	1.01	1.19	.55
1970	.62	1.64	.49	.32	.26	.48	.78	.36	.33	1.63	1.70	1.59	.85
1971	1.85	2.82	1.40	.57	1.28	3.12	2.33	.75	1.09	2.77	4.99	1.14	2.00
1972	-	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-

B
65

MONTHLY AVERAGE

PROCESSED

81/05/29.

DATA FOR PERIOD 1/ 1 1957 -31/12 1971

STNO 8102 0 PAMACSLAN

CATCHMENT 28.0 KM2 M3/SEC

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
MEAN	1.75	1.59	1.13	.69	.56	.82	1.12	.86	.74	1.60	2.1	1.8	1.2
MAX	3.92	3.75	4.23	1.39	1.65	3.12	2.51	2.09	1.70	2.77	4.99	4.28	2.00
MIN	.20	.25	.12	.12	.13	.17	.29	.21	.13	.38	.65	.17	.55

L/SEC/KM2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
MEAN	62.32	56.71	40.18	24.64	19.93	29.25	39.82	30.82	26.36	57.25	73.3	65.9	44.0
MAX	140.04	133.82	150.89	49.54	58.79	111.46	89.64	74.68	60.82	99.03	178.29	152.71	71.39
MIN	7.18	8.96	4.21	4.18	4.79	5.89	10.46	7.57	4.57	13.68	23.04	6.00	19.75

B
96

MONTHLY AVERAGE

PROCESSED 81/05/29.

STNO 8103 0 BUGSOC
MAIN RIVER WAHIG
RIVER

MONTHLY AVERAGE

PROCESSED 81/05/29.

STNO 8104 0 OWAC
 MAIN RIVER LOBOC
 RIVER BILAR

CATCHMENT 67.0 KM2

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1951	-	-	-	-	-	-	-	-	-	-	-	-	-
1952	-	-	-	-	-	-	-	-	-	-	-	-	-
1953	-	-	-	-	-	-	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-	-	-	-	-	-	-
1955	-	-	-	-	-	-	-	-	-	-	-	-	-
1956	-	-	-	-	-	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-	-	-	-	-	-
1958	-	-	-	-	-	-	-	-	-	-	-	-	-
1959	-	-	-	-	-	-	-	.68	-	.63	.01	.00	-
1960	.48	.00	.00	.00	.12	.08	.11	.02	.41	1.18	.56	.36	.28
1961	.62	.54	.53	.45	.32	.17	.44	.44	.47	.52	.21	.45	.43
1962	.44	.48	.44	.21	.09	.33	.60	.83	.50	.17	.54	.19	.40
1963	1.32	.52	.38	.36	.28	.58	.61	.82	.69	.77	.53	.61	.63
1964	.57	.70	.51	.18	.46	.43	.62	.49	.41	.33	5.36	.84	.90
1965	2.57	.65	.72	.22	.38	.79	.66	.58	.65	2.75	.41	.67	.93
1966	.68	.64	.58	.49	.18	.10	.82	.16	.08	.07	.08	.26	.35
1967	1.63	1.20	.81	.51	.26	.07	.12	.06	.05	.07	.53	1.09	.53
1968	.31	.11	.07	.05	.04	.01	.01	.32	.21	.34	.70	.14	.19
1969	.48	.39	.23	.16	.03	.08	.42	.22	.32	.85	.46	.46	.34
1970	.33	.27	.19	.03	.03	.09	.26	.14	.15	.45	.06	.29	.19

B 68

MONTHLY AVERAGE

PROCESSED

81/05/29,

DATA FOR PERIOD 23/7 1959 -31/12 1971

STNO 8104 0 OWAC

CATCHMENT 67.0 KM2 M3/SEC

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
MEAN	.82	.50	.41	.25	.21	.28	.46	.40	.36	.76	.75	.45	.48
MAX	2.57	1.20	.81	.51	.46	.79	.82	.83	.69	2.75	5.36	1.09	.93
MIN	.31	.00	.00	.00	.03	.01	.01	.02	.05	.07	.01	.00	.19

L/SEC/KM2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
MEAN	12.24	7.42	6.06	3.76	3.09	4.22	6.81	6.03	5.43	11.34	11.13	6.66	7.13
MAX	38.28	17.97	12.04	7.63	6.91	11.76	12.27	12.34	10.27	41.10	80.03	16.31	13.84
MIN	4.66	.07	.03	.03	.37	.21	.16	.30	.70	1.06	.09	.06	2.85

B
69