

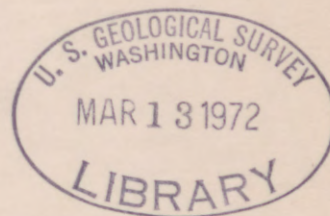
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WATER RESOURCES DATA
FOR THE
TRUST TERRITORY OF THE
PACIFIC ISLANDS



1968-70
Surface-Water Records



UNITED STATES
DEPARTMENT OF THE INTERIOR

U.S. Geological Survey

Prepared in Cooperation with the
Trust Territory of the Pacific Islands

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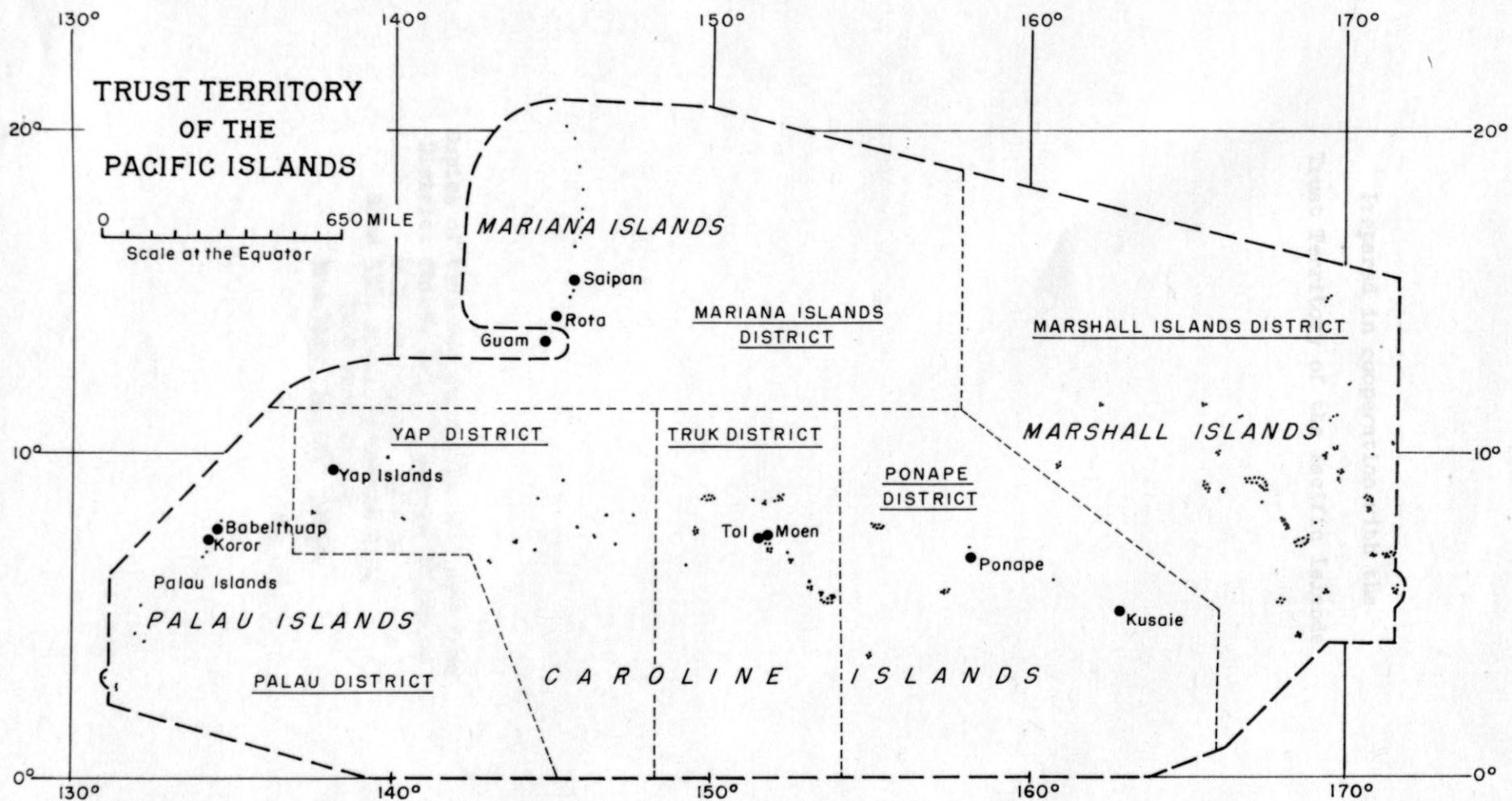
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FOR THE
TRUST TERRITORY OF THE PACIFIC ISLANDS

1968 - 1970
Surface-Water Records

By O. van der Brug

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. Geological Survey

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Trust Territory of the Pacific Islands



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Order and station numbers
and computation of data
data available
records

ILLUSTRATIONS

Graph of gaging station on Maian River
Graph of a typical gaging station
Graph of water-stage recorder on Iwanna
Graph of technician measuring small stream
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Graph of technician measuring large stream
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Graph showing artificial control, Tusu
reef, Deak Island, Cook Islands
Graph showing natural control (subject to
lift), Oot River, Rukia

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Room 330, First Insurance Bldg.
1100 Ward Avenue
Honolulu, Hawaii 96814

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WATER RESOURCES DATA FOR THE
TRUST TERRITORY OF THE PACIFIC ISLANDS

1968 - 1970

Surface-Water Records

By O. van der Brug

INTRODUCTION

Records of discharge and stage of streams for areas in the Trust Territory of the Pacific Islands were published in Water-Supply Paper 1751 entitled, "Surface Water Supply of Mariana, Caroline, and Samoa Islands through June 1960".

In this volume, records were published for the following streams in the Trust Territory:

Denni Spring, Saipan
Wichen River at altitude 18 m, Moen, Truk Islands
Imor Stream, Tol, Truk Islands
Echapachik Stream, Tol, Truk Islands
Fansinifo Stream, Dublon Island, Truk Islands.

Beginning with the 1960-61 water year, streamflow records of daily discharge are published nationally in Water-Supply Papers at 5-year intervals, and annual records are released each year by the Geological Survey on a State-boundary basis. The annual releases for Hawaii and other Pacific areas have included records of streamflow in the Trust Territory since 1968. Miscellaneous measurements made in the Trust Territory during the period 1960-68 were published in the 1968 annual report.

The purpose of this separate release is to summarize those streamflow data acquired during the water years 1968-70 and to make the data available for immediate use for planning and design. The period covers the first 2 years of a planned progressive establishment of streamflow-measurement stations throughout the Trust Territory islands. The stations are to be established on principal streams and at locations where data on quantity, quality, and dependability of streamflow are of vital concern. It is planned that this will be the first of, and will serve as the

WATER RESOURCES DATA FOR THE TRUST TERRITORY OF THE PACIFIC ISLANDS, 1968-1970

base for, a series of periodic releases of preliminary water-resource data that will meet the time requirements and immediate needs of the Trust Territory administrative offices. The 1971 water-year records and brief administrative report of ground-water and water-quality data are planned as early releases in this series.

COOPERATION

The Water Resources Division of the U.S. Geological Survey and the Trust Territory of the Pacific Islands began a cooperative program to systematically collect streamflow data in 1968. Under this program the Trust Territory government agreed to provide labor, equipment, services, and funds to be matched on an equal-value basis by the Survey. The Survey assumed the full supervision and responsibility for initiating, operating and publishing the data from the gaging stations on a mutually planned schedule in the various Districts of the Trust Territory. Stations were established on Saipan, Yap, and Truk in 1968, on Palau in 1969, on Ponape in 1970, and on Rota and Kusaie in 1971. The location of all of these stations are shown on the maps in the data section for the respective Districts. During 1971 the program was expanded to include ground-water studies and data collection on Saipan, Peleliu, and Truk. Additional stations for water-resource data will be established as funds and manpower permit to gain sufficient areal coverage to identify the resource, and to gain specific data to meet planning and development needs within the Trust Territory of the Pacific Islands.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this report, are defined as follows:

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

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

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

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

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

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Partial-record station is a particular site where limited stream-flow data are collected systematically over a period of years for use in hydrologic analyses.

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

WATER RESOURCES DATA FOR THE TRUST TERRITORY OF THE PACIFIC ISLANDS, 1968-1970

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Gaps are left in the numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 16893700, includes the part number "16" and a 6-digit number. This number appears just to the left of the station name. In this report the records are listed in downstream order by islands.

COLLECTION AND COMPUTATION OF DATA

The base data collected at gaging stations consist of records of stage (figs. 1 and 2) and measurements of discharge of streams. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. Records of stage are obtained from a water-stage recorder that gives a continuous graph of the fluctuations (fig. 3). Measurements of discharge are made with a current meter (figs. 4 and 5), using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge.



Figure 1. Gaging station on
Malem River, Kusaie.

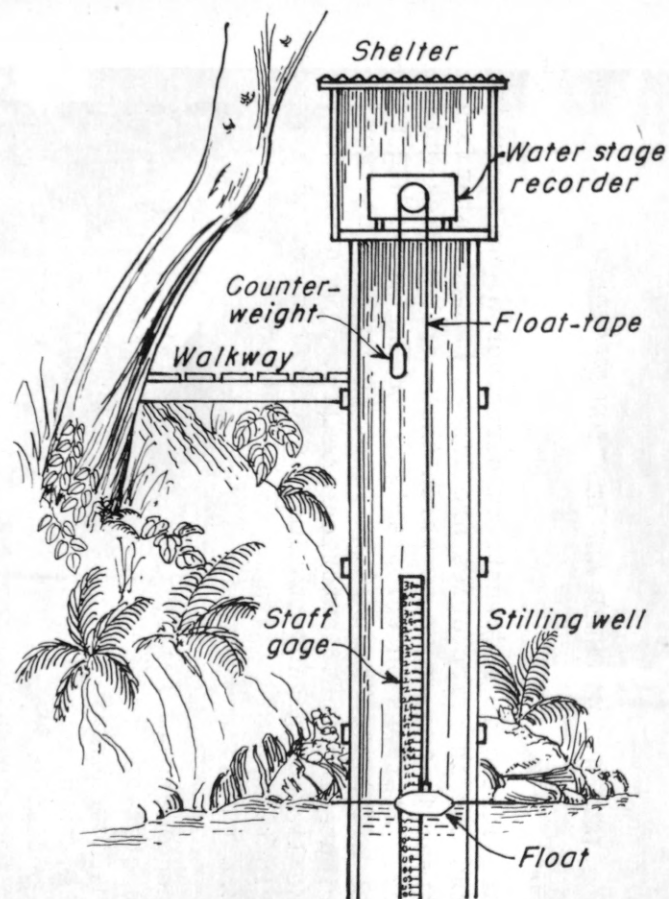


Figure 2. Section of a typical
gaging station.



Figure 3. Water-stage recorder (Stevens A35 recorder) on Tawannu River, Ponape.



Figure 4. Measuring
small stream on
Dublon Island, Truk
Islands.



Figure 5. Measuring
large stream on
Babelthuap, Palau
Islands.

For a stream-gaging station, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The application of the daily mean gage height to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control (figs. 6 and 7), the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This occurs when the recorder stops or otherwise fails to operate properly, intakes become plugged, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, discharge measurements, weather records, and comparison with other station records from the same or nearby basins.

The information in this report generally comprises a description of the station and tabulations of basic data. Tables are given showing the daily discharge as well as monthly and yearly total, mean, maximum, and minimum discharge. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, extremes of discharge, and general remarks. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD". The type of gage currently in use, the datum of the present gage above mean sea



Figure 6.
Artificial control,
Tumunu Stream,
Dublon Island,
Truk Islands.



Figure 7. Natural control (subject to shift), Okat River, Kusaie.

WATER RESOURCES DATA FOR THE
TRUST TERRITORY OF THE PACIFIC ISLANDS, 1968-1970

level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE". In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The maximum discharge, the maximum gage height, and the minimum discharge, if there is little or no regulation, are given under "EXTREMES". The maximum and minimum daily discharges are given if there is extensive regulation. In the first paragraph headed "Current year," the data given are for the complete 1970 water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record", the data given are for the period of record given in PERIOD OF RECORD paragraph. Reliable information concerning major floods or abnormally low flows that occurred outside the period of record is given in the third or last paragraph under "EXTREMES". Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder or crest-stage gage. If the maximum gage height did not occur at the same time as the maximum discharge, it is given separately. Information pertaining to the accuracy of the discharge records or to conditions that affect the natural flow at the gaging station is given under "REMARKS".

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day.

The monthly summary is given below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX." and "MIN." give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month is also expressed in acre-feet (line headed "AC-FT").

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges for the calendar and water years; likewise, the minimums in this summary are minimum daily discharges.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any springs. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE", certain periods are indicated for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage are indicated only if they are a month or more in length and the accuracy of the records is affected. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

ACCURACY OF DATA

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation, or if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station's description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based

solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversions, consumptive use, regulation, evaporation or other factors.

OTHER DATA AVAILABLE

Because the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. Only low-flow data have been collected at partial-record stations in the Trust Territory through the 1970 water year. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Data collected at partial-record stations and at miscellaneous sites are given in two tables, when applicable, at the end of the surface-water records for each geographic area in this report. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of discharge measurements at miscellaneous sites.

WATER RESOURCES DATA FOR THE
TRUST TERRITORY OF THE PACIFIC ISLANDS, 1968-1970

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Measurements of streamflow made at low-flow partial-record stations were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. In the table of discharge measurements at low-flow partial-record stations, the column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height record, and rating tables, is on file in the Guam Subdistrict office.

SURFACE WATER RECORDS

Middle Fork Talofolo Stream

Partial-record sites: Hasuget Stream
North Fork Talofolo Stream
Talofolo Stream
East Achugan Spring
West Achugan Spring

Miscellaneous measurement site: West Achugan Stream

Hydraulic Engineering Technician: Leonardo Casscho

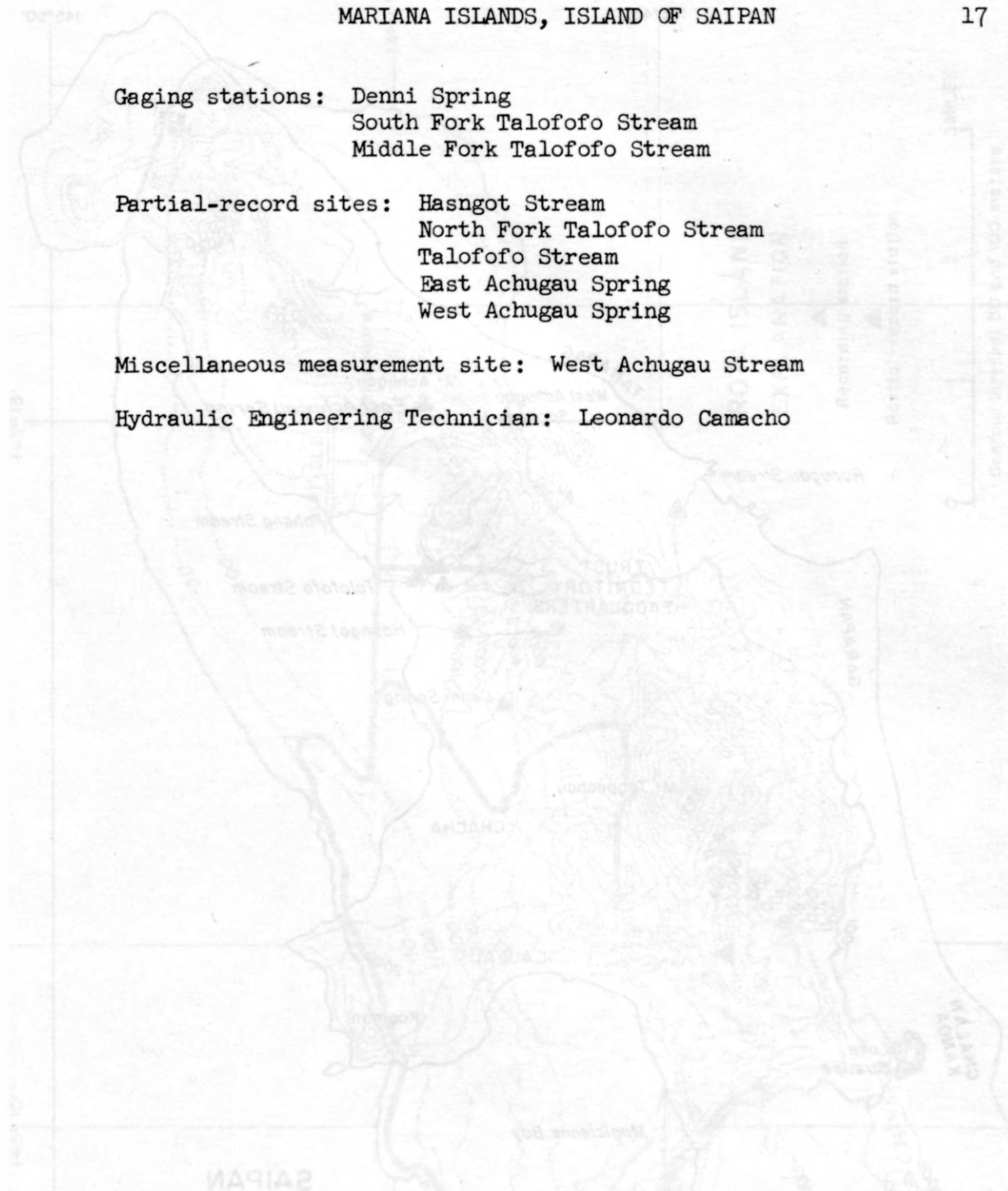
SURFACE WATER RECORDS

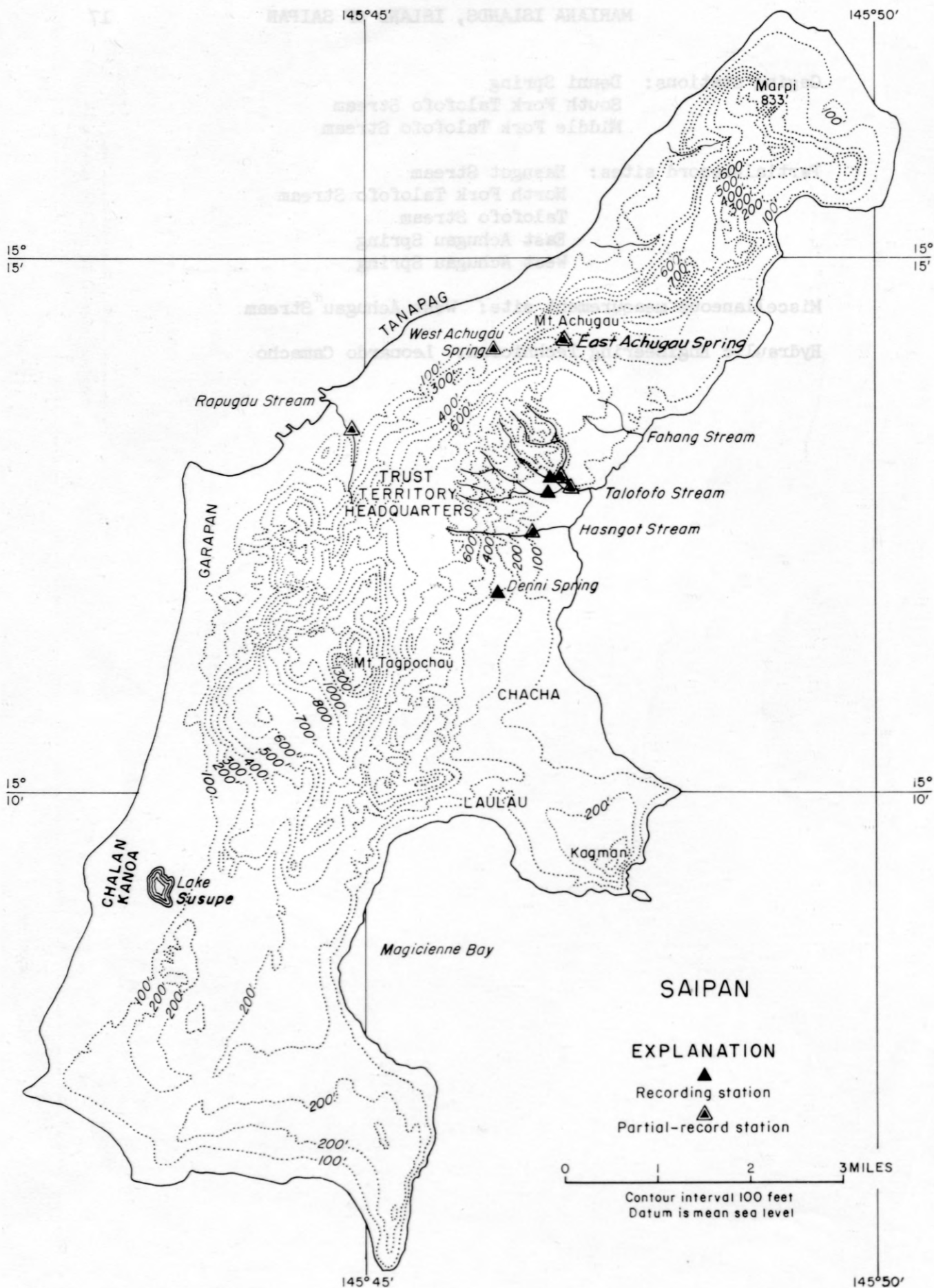
Gaging stations: Denni Spring
South Fork Talofoto Stream
Middle Fork Talofoto Stream

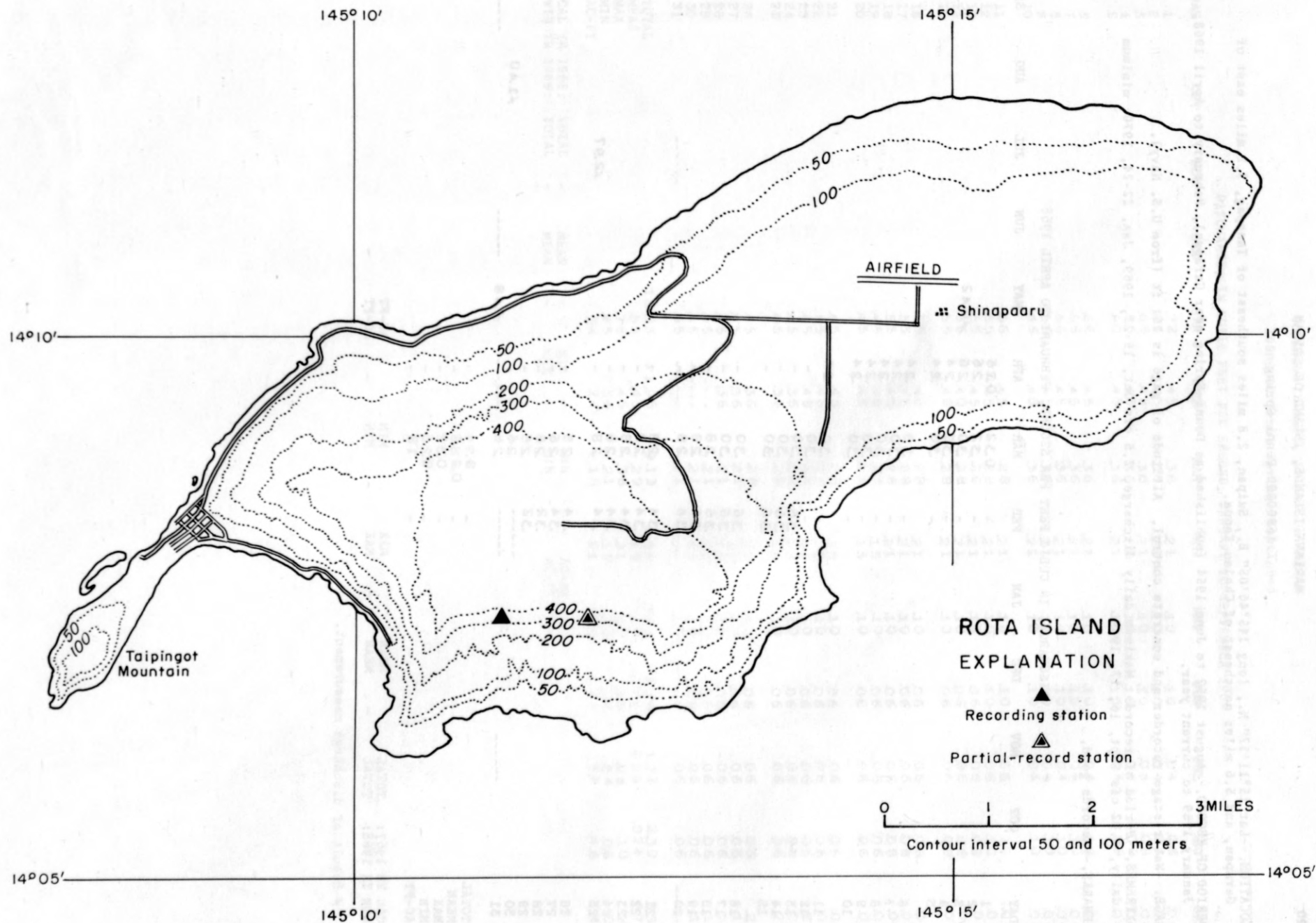
Partial-record sites: Hasngot Stream
North Fork Talofoto Stream
Talofoto Stream
East Achugau Spring
West Achugau Spring

Miscellaneous measurement site: West Achugau Stream

Hydraulic Engineering Technician: Leonardo Camacho







MARIANA ISLANDS, ISLAND OF SAIPAN

16800000 Denni Spring

LOCATION.--Lat 15°11'57" N., long 145°46'05" E., Saipan, 2.8 miles southeast of Tanapag, 3.1 miles east of Garapan, and 5.6 miles northeast of Chalan Kanoa.

PERIOD OF RECORD.--August 1952 to June 1954 (published as Donni Spring near Garapan), February to April 1968, January 1969 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 261 ft (from U.S. Navy).

EXTREMES.--Period of record: Maximum daily discharge, 2.6 cfs Oct, 19-22, 1969, Jan. 22-24, 1970; minimum daily, 0.02 cfs Sept. 16, 17, 1969.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, FEBRUARY TO APRIL 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					-	0.32	0.26					
2					-	.32	.26					
3					-	.30	.26	*0.42				
4					-	.30	.24					
5					-	.30	.24					
6					-	.30	.24					
7					-	.30	.24					
8					-	.30	.24					
9					-	.30	.24					
10					-	.30	.24					
11					-	.30	.24					
12					-	.30	-					
13					.36	.30	-					
14					.36	.30	-					
15					.36	.30	-					
16					.36	.30	-					
17					.36	.30	-					
18					.36	.28	-					
19					.36	.28	-					
20					.34	.28	-					
21					.34	.28	-					
22					.34	.28	-					
23					.34	.28	-					
24					.34	.28	-					
25					.34	.28	-			*2.97		
26					.34	.26	-					
27					.34	.26	-					
28					.32	.26	-					
29					.32	.26	-					
30					-----	.26	-				*1.40	
31		-----			-----	.26	-----	*.48	-----			-----
TOTAL					-	8.94	-					
MEAN					-	0.288	-					
MAX					-	0.32	-					
MIN					-	0.26	-					
AC-FT					-	.18	-					

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL MEAN MAX MIN AC-FT

* Result of discharge measurement.

MARIANA ISLANDS, ISLAND OF SAIPAN

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16800000 Denni Spring--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, JANUARY TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				.72	.45	.36	.21	.10	.10	.04	.06	.04
2				.66	.45	.36	.21	.10	.10	.04	.06	.04
3				.66	.45	.36	.21	.10	.10	.04	.08	.04
4				.66	.45	.36	.21	.10	.10	.04	.08	.04
5				.60	.45	.36	.21	.10	.10	.04	.08	.04
6				.66	.45	.36	.21	.10	.10	.04	.08	.04
7				.66	.45	.36	.21	.10	.10	.04	.10	.04
8				.66	.45	.36	.21	.10	.10	.04	.10	.04
9				.66	.45	.36	.21	.10	.10	.04	.10	.04
10				.66	.40	.36	.21	.10	.10	.06	.10	.04
11				.66	.45	.28	.21	.10	.10	.06	.10	.04
12				.55	.45	.28	.21	.10	.10	.06	.10	.04
13				.55	.45	.28	.21	.10	.06	.06	.08	.04
14				.55	.40	.28	.21	.10	.06	.06	.08	.04
15				.55	.40	.28	.21	.10	.06	.06	.08	.04
16				.55	.40	.28	.21	.10	.06	.06	.08	.02
17				.55	.45	.28	.21	.10	.06	.06	.08	.02
18				.55	.45	.28	.21	.10	.06	.08	.08	.04
19				.45	.45	.28	.15	.10	.06	.08	.06	.04
20				.45	.45	.28	.15	.10	.06	.06	.06	.04
21				.45	.45	.28	.15	.10	.06	.06	.06	.04
22				.45	.45	.28	.15	.10	.06	.06	.06	.04
23				.45	.45	.28	.15	.10	.06	.06	.06	.20
24				.45	.36	.28	.15	.10	.06	.06	.06	.28
25				.45	.36	.28	.15	.10	.06	.06	.06	.24
26				.45	.36	.28	.15	.10	.06	.06	.06	.21
27				.45	.36	.21	.15	.10	.06	.06	.06	.18
28				.45	.36	.21	.15	.10	.06	.06	.06	.15
29				.45	-----	.21	.15	.10	.06	.06	.06	.12
30				.45	-----	.21	.15	.10	.06	.06	.06	.10
31		-----		.45	-----	.21	-----	.10	-----	.06	.06	-----
TOTAL				16.96	11.95	9.13	5.58	3.10	2.28	1.72	2.30	2.32
MEAN				.55	.43	.29	.19	.10	.076	.055	.074	.077
MAX				.72	.45	.36	.21	.10	.10	.08	.10	.28
MIN				.45	.36	.21	.15	.10	.06	.04	.06	.02
AC-FT				34	24	18	11	6.1	4.5	3.4	4.6	4.6

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL - MEAN - MAX - MIN - AC-FT -

MARIANA ISLANDS, ISLAND OF SAIPAN

16800000 Denni Spring--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.84	.45	.60	1.1	.84	.50	.28	.24	.15	.36	.72
2	.10	.84	.50	.60	1.0	.78	.50	.24	.24	.15	.36	.96
3	.10	.78	.55	.60	.96	.78	.45	.24	.24	.15	.32	1.1
4	.10	.78	.55	.60	.96	.78	.45	.24	.24	.15	.32	1.2
5	.10	.72	.50	.60	.90	.78	.45	.24	.24	.15	.28	1.2
6	.10	.72	.50	.60	.90	.78	.45	.24	.24	.15	.28	1.1
7	.10	.66	.50	.60	1.1	.78	.45	.24	.24	.15	.36	1.1
8	.10	.66	.50	.66	1.2	.78	.40	.24	.24	.15	.55	1.0
9	.10	.60	.55	.66	1.2	.78	.40	.24	.24	.12	.55	.96
10	.10	.60	.72	.66	1.1	.78	.40	.24	.24	.12	.60	.90
11	.10	.55	.78	.66	1.1	.78	.40	.24	.24	.12	.60	.90
12	.10	.55	.78	.66	1.1	.78	.40	.21	.21	.12	.55	.84
13	.10	.55	.78	.66	1.1	.78	.40	.21	.21	.12	.55	.78
14	.10	.55	.72	.66	1.1	.72	.36	.21	.21	.12	.55	.78
15	.10	.50	.66	.66	1.1	.72	.36	.24	.21	.12	.55	.72
16	.15	.50	.66	.66	1.1	.72	.36	.24	.21	.12	.66	.72
17	1.1	.50	.60	.66	1.1	.72	.36	.24	.21	.12	.78	.66
18	2.0	.50	.60	.60	1.0	.72	.36	.24	.21	.12	.78	.66
19	2.6	.50	.66	.66	1.0	.66	.36	.24	.21	.12	.78	.66
20	2.6	.50	1.0	1.1	1.0	.66	.36	.24	.18	.12	.72	.60
21	2.6	.50	1.1	2.0	1.0	.66	.36	.24	.18	.12	.66	.60
22	2.6	.50	1.1	2.6	1.0	.66	.36	.24	.18	.12	.66	.60
23	2.2	.50	1.0	2.6	.96	.60	.32	.24	.18	.12	.72	.55
24	2.0	.45	.96	2.6	.96	.60	.32	.24	.15	.18	.78	.55
25	1.5	.45	.84	2.2	.90	.60	.32	.24	.15	.36	.78	.55
26	1.4	.45	.78	2.0	.90	.55	.32	.24	.15	.36	.78	.55
27	1.3	.45	.72	1.7	.84	.55	.32	.24	.15	.32	.72	.55
28	1.1	.45	.66	1.5	.84	.55	.32	.24	.15	.32	.72	.55
29	1.1	.45	.66	1.4	-----	.55	.28	.24	.15	.32	.66	.50
30	.96	.45	.60	1.3	-----	.55	.28	.24	.15	.32	.66	.50
31	.90	-----	.60	1.2	-----	.55	-----	.24	-----	.36	.66	-----
TOTAL	27.61	17.05	21.58	34.26	28.52	21.54	11.37	7.39	6.09	5.54	18.30	23.06
MEAN	.89	.57	.70	1.11	1.02	.69	.38	.24	.20	.18	.59	.77
MAX	2.6	.84	1.1	2.6	1.2	.84	.50	.28	.24	.36	.78	1.2
MIN	.10	.45	.45	.60	.84	.55	.28	.21	.15	.12	.28	.50
AC-FT	55	34	43	68	57	43	23	15	12	11	36	46

CAL YR 1969 TOTAL 121.58 MEAN .33 MAX 2.6 MIN .02 AC-FT 241
WTR YR 1970 TOTAL 222.31 MEAN .61 MAX 2.6 MIN .10 AC-FT 441

16801000 South Fork Talofof Stream

LOCATION.--Lat 15°13'01" N., long 145°46'42" E., Saipan, on right bank 300 ft upstream from confluence with Middle and North Forks, 2.4 miles southeast of Tanapag, and 3.8 miles east of Garapan,

DRAINAGE AREA.--0.73 sq mi,

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 664 cfs Oct. 16 (gage height, 7.22 ft), from rating curve extended above 30 cfs; no flow for many days.

Period of record: Maximum discharge, 1,230 cfs Nov. 19, 1968 (gage height, 7.18 ft), from rating curve extended above 1.2 cfs on basis of estimate of discharge from high-water marks; maximum gage height, 8.14 ft Nov. 2, 1968, from floodmark (backwater from vegetation); no flow for many days each year.

REMARKS.--Records poor. No diversion above station.

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (cfs)
Feb. 13, 1968.....	0.10
Mar. 27.....	No flow
May 3.....	.10
May 31.....	.08
July 24.....	.17
Aug. 30.....	7.7

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	10	2.5	.60	.25	.11				0		0
2	1.0	100	2.3	.60	.25	.16				0		0
3	1.0	15	2.1	.60	.30	.13				0		0
4	1.0	5.0	2.0	.60	.20	.11				0		0
5	1.0	4.0	1.9	.60	.20	.09				0		0
6	1.0	3.5	1.8	.60	.18	.06				0		0
7	1.0	3.5	1.7	.60	.15	.03				0		0
8	1.0	3.2	1.6	.50	.15	.02				0		0
9	1.0	3.2	1.5	.50	.15	.02				0		0
10	1.0	3.1	1.4	.50	.15	.02				0		0
11	1.0	3.0	1.3	.40	.15	.01				0		0
12	2.0	2.8	1.2	.40	.15	0				0		0
13	2.0	2.8	1.1	.40	.15	0				0		0
14	1.0	3.1	1.0	.40	.15	.03				0		0
15	1.0	16	1.0	.40	.15	0				0		0
16	1.0	11	1.0	.40	.15	0				0		0
17	1.0	3.0	1.0	.40	.18	0				0		0
18	1.0	4.3	.90	.40	.15	.03				0		0
19	1.0	60	.90	.30	.20	0				0		0
20	1.0	32	.90	.30	.18	0				0		0
21	1.0	3.1	.90	.30	.17	.02				0		0
22	5.0	4.1	.90	.30	.18	0				0		0
23	50	11	.80	.30	.19	0				0		.38
24	6.0	4.0	.80	.25	.17	0				0		0
25	5.0	3.4	.80	.30	.16	0				0		0
26	4.0	3.3	.80	.25	.15	0				0		0
27	3.5	3.0	.70	.25	.14	0				0		0
28	3.0	2.9	.70	.30	.14	0				.05		0
29	3.0	2.5	.70	.25	-----	0				0		0
30	2.5	2.9	.70	.25	-----	0				0		0
31	2.5	-----	.70	.25	-----	0	-----		-----	.13		-----
TOTAL	107.7	328.7	376.0	125.0	4.89	.84	0	0	0	.18	0	.38
MEAN	3.47	11.0	12.1	.40	.17	.027	0	0	0	.006	0	.013
MAX	50	100	2.5	.60	.30	.16	0	0	0	.13	0	.38
MIN	1.0	2.5	.70	.25	.14	0	0	0	0	0	0	0
AC-FT	214	652	75	25	9.7	1.7	0	0	0	.4	0	.8

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 492.79 MEAN 1.35 MAX 100 MIN 0 AC-FT 977

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-23	/0330	-	unknown	11-19	1400	7.18	1,230
11-2	/1200	#8.14	/1,000				

/ About.

From floodmark.

NOTE.--No gage-height record Oct. 2 to Nov. 7, Dec. 1 to Feb. 20.

MARIANA ISLANDS, ISLAND OF SAIPAN

16801000 South Fork Talofofo Stream--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.70	.21	.80	1.2	.55	.18	0	0	0	.01	17
2	0	.65	.03	.76	1.2	.55	.13	0	0	0	0	3.1
3	0	.60	0	.83	1.1	.52	.04	.04	0	0	0	1.5
4	0	.60	0	.80	1.2	.52	.01	0	0	0	.54	1.1
5	0	.50	0	.80	1.0	.58	.01	0	0	0	.28	.90
6	0	.50	0	.86	6.8	.49	.01	0	0	0	.43	.70
7	0	.40	0	1.5	1.9	.49	.32	0	0	0	8.6	.70
8	0	.40	0	1.2	1.6	.49	.08	0	0	0	1.8	.62
9	0	.35	2.7	1.0	1.4	.46	.07	0	0	0	1.4	.55
10	0	.30	1.0	1.0	1.4	.40	.01	0	0	0	1.5	.48
11	0	.30	.90	1.0	2.2	.50	0	0	0	0	1.2	.48
12	0	.30	.86	.95	3.3	.72	.01	0	0	0	.76	.48
13	0	.35	.80	.90	2.1	.40	0	0	0	0	.86	.48
14	0	.30	.64	.86	1.7	.35	0	0	0	0	.83	.48
15	0	.30	.60	.86	1.4	.30	.06	0	0	0	1.8	.48
16	127	.30	.55	.83	1.3	.30	.02	0	.27	0	3.0	.41
17	23	.25	.50	.80	1.2	.30	0	0	1.0	0	1.2	.35
18	4.0	.20	1.5	.80	1.2	.30	0	0	.17	0	.90	.30
19	2.5	.20	9.2	2.1	1.1	.25	0	0	0	0	.83	.25
20	1.5	.15	2.0	13	.90	.25	0	0	0	0	1.9	.41
21	1.1	.15	1.2	7.2	.86	.20	0	0	0	0	1.0	.21
22	1.0	.10	1.1	3.7	.80	.20	0	0	0	.01	2.9	1.3
23	1.0	.10	1.0	2.7	.72	.15	0	0	0	0	1.9	.48
24	1.5	.05	1.0	2.2	.69	.10	0	0	0	.96	1.1	1.2
25	1.3	0	.90	2.0	.64	.20	0	0	0	.11	.86	1.3
26	1.2	0	.80	1.8	.62	.20	0	0	0	0	.76	.90
27	1.1	0	.75	1.7	.55	.30	0	0	0	0	.76	.62
28	1.0	0	.70	1.5	.55	.20	0	0	0	0	.78	.30
29	.90	0	.65	2.0	-----	.15	0	0	0	0	5.1	.15
30	.80	.49	.62	1.5	-----	.10	0	0	0	.71	1.5	.12
31	.70	-----	.69	1.4	-----	.10	-----	0	-----	.17	1.4	-----
TOTAL	169.60	8.54	30.90	59.35	40.63	10.62	.95	.04	1.44	1.96	45.90	37.35
MEAN	5.47	.28	1.00	1.91	1.45	.34	.032	.001	.048	.063	1.48	1.25
MAX	127	.70	9.2	13	6.8	.72	.32	.04	1.0	.96	8.6	17
MIN	0	0	0	.76	.55	.10	0	0	0	0	0	.12
AC-FT	336	17	61	118	81	21	1.9	.08	2.9	3.9	91	74

CAL YR 1969 TOTAL 227.83 MEAN .62 MAX 127 MIN 0 AC-FT 452
WTR YR 1970 TOTAL 407.28 MEAN 1.12 MAX 127 MIN 0 AC-FT 808

PEAK DISCHARGE (BASE, 400 CFS),--Oct, 16 (1730) 664 cfs (7.22 ft).

NOTE,--No gage-height record Oct, 18 to Nov, 25,

MARIANA ISLANDS, ISLAND OF SAIPAN

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16801500 Middle Fork Talofof Stream

LOCATION.--Lat 15°13'05" N., long 145°46'36" E., Saipan, on left bank 700 ft upstream from confluence with South and North Forks, 2.2 miles southeast of Tanapag, and 3.7 miles east of Garapan.

DRAINAGE AREA.--0.35 sq mi.

PERIOD OF RECORD.--February 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 370 cfs Oct, 16 (gage height, 4.66 ft), from rating curve extended above 1.1 cfs; minimum, 0.13 cfs July 18, 19.

Period of record: Maximum discharge, 526 cfs Nov, 19, 1968 (gage height, 5.22 ft), from rating curve extended above 1.1 cfs; minimum, 0.08 cfs July 3, 1969.

REMARKS.--Records fair except those above 2.0 cfs, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, FEBRUARY TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					-	0.27	0.19	0.31	0.23	0.33	0.89	0.78
2					-	.27	.19	.31	.23	.50	.83	25
3					-	.27	.19	.31	.31	.53	1.2	27
4					-	.27	.18	.31	.23	.41	1.1	20
5					-	.31	.18	.31	.29	.36	1.3	6.2
6					-	.26	.17	.31	.29	.33	.89	4.8
7					-	.26	.18	.29	.26	.33	.78	3.7
8					-	.24	.18	.29	.24	.31	.73	2.8
9					-	.24	.17	.27	.24	.31	.69	2.3
10					-	.23	.18	.29	.24	1.2	.69	6.2
11					-	.24	10	.27	.24	1.3	.65	20
12					.33	.24	18	.27	.24	.53	.65	17
13					.33	.26	.83	.27	.24	.44	.65	4.8
14					.33	.24	.50	.29	.24	.36	2.7	3.7
15					.33	.23	.38	.31	.27	.36	3.1	2.6
16					.33	.23	.36	.31	.33	.41	.78	2.1
17					.36	.23	.33	6.1	.31	.33	3.0	3.7
18					.33	.23	.38	.47	.27	.31	1.3	1.6
19					.33	.21	.41	.33	.26	.84	.78	2.1
20					.33	.20	.38	.27	.24	.50	.73	1.7
21					.33	.21	.38	.26	.26	15	.96	1.5
22					.31	.19	.38	.24	.26	5.0	.83	1.4
23					.29	.20	.41	.24	.24	2.0	.89	1.3
24					.31	.21	.44	.24	.24	7.0	.73	1.3
25					.33	.19	.50	.23	.36	2.0	.65	1.2
26					.31	.18	.36	.23	.23	3.8	.69	1.1
27					.33	.18	.33	.23	.20	1.8	.69	1.0
28					.29	.19	.33	.23	15	1.6	1.6	.96
29					.27	.20	.33	.23	.73	1.2	1.3	.96
30					-----	.20	.31	.23	.44	1.0	3.4	1.3
31		-----			-----	.19	-----	.23	-----	1.1	.78	-----
TOTAL					-	7.07	37.15	14.48	23.16	51.49	35.96	170.10
MEAN					-	0.228	1.24	0.467	0.772	1.66	1.16	5.67
MAX					-	0.31	18	6.1	15	15	3.4	27
MIN					-	0.18	0.17	0.23	0.20	0.31	0.65	0.78
AC-FT					-	14	74	29	46	102	71	340

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL MEAN MAX MIN AC-FT

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-12	0130	3.23	160	9- 2	2200	4.07	314
6-28	0730	4.64	428				

MARIANA ISLANDS, ISLAND OF SAIPAN

16801500 Middle Fork Talofofo Stream--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	4.6	1.4	.74	.57	.39	.27	.30	.21	.13	.30	.25
2	.96	64	1.3	.74	.52	.43	.27	.30	.21	.17	.25	.17
3	.96	7.5	1.2	.74	.62	.39	.36	.30	.21	.13	.20	.17
4	.96	3.9	1.2	.74	.47	.39	.30	.30	.21	.17	.20	.19
5	.89	2.9	1.2	.74	.47	.39	.30	.27	.21	.15	.15	.17
6	.89	2.3	1.2	.74	.43	.36	.30	.27	.23	.19	.15	.19
7	.83	2.1	1.1	.74	.39	.36	.30	.27	.23	.13	.12	.21
8	.78	2.1	1.1	.68	.39	.36	.30	.33	.23	.17	.10	.17
9	.78	2.0	1.1	.68	.39	.36	.30	.30	.27	.13	.67	.17
10	.78	2.0	1.1	.68	.39	.36	.30	.33	.23	.13	.85	.13
11	.89	1.8	1.0	.62	.39	.39	.30	.27	.23	.15	.21	.15
12	1.2	1.7	1.1	.62	.39	.43	.33	.27	.25	.15	.12	.17
13	1.0	1.8	.96	.62	.36	.39	.30	.27	.21	.15	.10	.17
14	.89	2.2	.96	.62	.39	.47	.50	.21	.19	.15	.19	.15
15	.89	3.9	.96	.62	.39	.43	.30	.21	.17	.15	.25	.15
16	.89	3.0	.96	.62	.39	.47	.27	.21	.15	.17	.25	.15
17	.83	2.0	1.0	.68	.43	.47	.27	.23	.15	.19	.21	.15
18	.83	1.7	.96	.68	.39	.47	.27	.23	.15	.17	.21	.17
19	.78	35	.88	.62	.47	.43	.27	.23	.15	.30	.19	.15
20	.83	20	.88	.62	.43	.39	.27	.25	.15	.17	.19	.19
21	.89	4.5	.88	.62	.47	.36	.25	.23	.12	.21	.19	.19
22	2.6	4.5	.88	.62	.47	.30	.25	.23	.12	.17	.19	.23
23	25	5.8	.81	.62	.43	.30	.23	.23	.12	.21	.19	1.6
24	3.9	3.3	.81	.57	.43	.27	.23	.25	.13	.21	.13	.21
25	2.4	2.6	.81	.62	.43	.27	.23	.23	.12	.20	.19	.21
26	2.0	2.4	.81	.57	.43	.27	.27	.21	.15	.20	.55	.23
27	2.1	2.0	.81	.57	.43	.33	.30	.21	.27	.20	.21	.30
28	1.8	1.7	.81	.62	.39	.27	.30	.19	.19	.70	.21	.36
29	1.7	1.6	.81	.57	-----	.27	.25	.19	.13	.30	.19	.39
30	1.6	1.5	.81	.52	-----	.27	.27	.19	.12	.25	.17	.62
31	1.5	-----	.81	.57	-----	.27	-----	.19	-----	1.0	.17	-----
TOTAL	63.31	196.4	30.61	20.01	12.15	11.31	8.66	7.70	5.51	6.90	7.30	7.76
MEAN	2.04	6.55	.99	.65	.43	.36	.29	.25	.18	.22	.24	.26
MAX	25	64	1.4	.74	.62	.47	.50	.33	.27	1.0	.85	1.6
MIN	.78	1.5	.81	.52	.36	.27	.23	.19	.12	.13	.10	.13
AC-FT	126	390	61	40	24	22	17	15	11	14	14	15

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 377.62 MEAN 1.03 MAX 64 MIN .10 AC-FT 749

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-23	0330	3.83	200	11-19	1430	5.22	526
11-2	1200	5.00	460				

MARIANA ISLANDS, ISLAND OF SAIPAN

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16801500 Middle Fork Talofofo Stream--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.43	2.4	.57	.62	.52	.62	.33	.55	.23	.23	6.7
2	.27	.43	1.4	.47	.62	.52	.43	.33	.50	.27	.27	1.7
3	.25	.39	.43	.62	.68	.57	.43	.30	.50	.27	.36	.68
4	.23	.39	.33	.47	.81	.47	.47	.27	.45	.25	1.6	.52
5	.27	.39	.33	.39	.68	.62	.39	.27	.45	.27	.39	.39
6	.30	.39	.30	.47	3.5	.57	.36	.30	.40	.25	.39	.36
7	.17	.36	.36	1.5	.96	.57	.68	.30	.40	.29	4.8	.52
8	.21	.36	.36	.52	.68	.57	.39	.33	.35	.25	.62	1.1
9	.23	.36	2.5	.47	.62	.52	.52	.36	.35	.38	.81	1.5
10	.19	.36	.68	.39	.57	.47	.50	.33	.30	.27	1.3	1.6
11	.19	.33	.47	.62	1.7	.66	.40	.27	.30	.25	.52	1.1
12	.17	.36	.39	.47	2.3	.82	.40	.25	.25	.23	.25	.52
13	.17	.47	.39	.39	1.2	.39	.30	.30	.25	.21	.27	.52
14	.17	.36	.33	.36	.88	.36	.20	.30	.30	.25	.25	.52
15	.17	.47	.30	.36	.81	.36	.50	.30	.30	.21	.50	.52
16	49	.39	.33	.36	.68	.36	.40	.33	.68	.27	1.0	.47
17	12	.36	.30	.36	.62	.43	.35	.30	1.4	.23	.50	.47
18	2.0	.33	.78	.47	.62	.43	.30	.30	.30	.17	.40	.52
19	1.3	.33	6.2	2.7	.68	.47	.25	.30	.27	.17	.30	.62
20	.68	.36	1.0	9.4	.68	.62	.25	.25	.30	.27	1.0	1.0
21	.52	.36	.68	4.7	.62	.52	.25	.25	.36	.17	.50	.62
22	.50	.43	.62	2.2	.62	.39	.30	.25	.36	.25	1.7	2.3
23	.50	.33	.57	1.4	.68	.39	.30	.25	.33	.21	1.1	.81
24	.80	.43	.52	1.1	.62	.39	.30	.25	.30	1.2	.47	1.6
25	.60	.30	.47	.88	.57	.52	.30	.30	.30	.21	.36	1.1
26	.60	.30	.52	.74	.52	.62	.30	.35	.30	.19	.33	.64
27	.55	.30	.47	.68	.52	.74	.30	.40	.30	.30	.36	.52
28	.55	.30	.43	.62	.52	.68	.30	.35	.27	.43	.47	.62
29	.55	.30	.43	1.1	-----	.62	.35	.43	.25	.21	4.6	.68
30	.52	1.2	.43	.96	-----	.57	.35	.52	.25	.81	.81	.57
31	.47	-----	.47	.62	-----	.57	-----	.57	-----	.30	1.1	-----
TOTAL	74.40	11.87	25.19	36.36	24.58	16.31	11.19	9.94	11.62	9.27	27.56	30.79
MEAN	2.40	.40	.81	1.17	.88	.53	.37	.32	.39	.30	.89	1.03
MAX	49	1.2	6.2	9.4	3.5	.82	.68	.57	1.4	1.2	4.8	6.7
MIN	.17	.30	.30	.36	.52	.36	.20	.25	.25	.17	.23	.36
AC-FT	148	24	50	72	49	32	22	20	23	18	55	61

CAL YR 1969 TOTAL 198.76 MEAN .54 MAX 49 MIN .10 AC-FT 394
WTR YR 1970 TOTAL 289.08 MEAN .79 MAX 49 MIN .17 AC-FT 573

PEAK DISCHARGE (BASE, 150 CFS).--Oct. 16 (1730) 370 cfs (4.66 ft).

Discharge measurements made at low-flow partial-record stations during water years 1968-70

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Mariana Islands, Island of Saipan						
16800500	Hasngot Stream	Lat 15°12'44" N., long 145°46'23" E., Saipan, 750 ft upstream from right-bank tributary, 0.5 mile upstream from mouth, and 3.4 miles east of Garapan.	0.43	1968-70	7-25-68 8-29-68 10- 2-68 11- 6-68 1-15-69 2-20-69 3- 6-69 4-16-69 5- 1-69 5-16-69 5-29-69 6-12-69 6-27-69 7-10-69 7-24-69 8- 7-69 8-21-69 9- 4-69 9-18-69 10- 2-69 10-16-69 10-30-69 11-13-69 11-26-69 12-11-69 12-30-69 1- 8-70 1-22-70 2- 5-70 2-19-70 3- 5-70 3-19-70 4- 2-70 4-16-70 4-30-70 5-14-70 5-28-70 6-12-70 6-26-70 7- 9-70 7-23-70 8- 6-70 8-21-70 9- 3-70 9-17-70	2.3 .73 .51 1.2 .25 .16 .12 .07 .07 .06 .07 .05 .05 .02 .04 .07 .05 .04 .04 .08 .07 .28 .26 .16 .27 .22 .26 .76 .53 .38 .31 .22 .16 .10 .06 .05 .06 .05 .12 .08 .05 .15 .22 .06 .16
16801800	North Fork Talofofo Stream	Lat 15°13'07" N., long 145°46'41" E., Saipan, 300 ft upstream from confluence with South and Middle Forks and 2.3 miles southeast of Tanapag.	.45	1968-69	7-24-68 8- 3-68 10- 2-68 11- 6-68 12-12-68 1-15-69	2.1 .64 .18 1.1 .37 0
16802000	Talofofo Stream	Lat 15°13'04" N., long 145°46'44" E., Saipan, 200 ft downstream from confluence of South, Middle and North Forks, 2.4 miles southeast of Tanapag, and 3.8 miles east of Garapan.	1.56	1968-70	2- 9-68 2-13-68 3-27-68 5- 3-68 5-31-68 7-24-68 8-30-68 10- 2-68 11- 6-68 1-15-69 2-20-69 3- 6-69 4-16-69 5- 1-69 5-16-69 5-29-69 6-12-69 7-10-69 8- 7-69 8-21-69 9- 4-69 9-18-69	.16 .15 .02 .11 .10 20 11 2.0 7.4 .44 .32 .17 .08 .14 .03 .02 0 0 .07 .01 .03 0

Discharge measurements made at low-flow partial-record stations during water years 1968-70--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Mariana Islands, Island of Saipan--Continued						
16802000	Talofofo Stream	(Continued)			10- 2-69	0.10
					10-16-69	.07
					10-30-69	.99
					11-13-69	.69
					11-26-69	.10
					12-11-69	.92
					12-30-69	.40
					1- 8-70	1.0
					1-22-70	.47
					2- 5-70	1.3
					2-19-70	1.0
					3- 5-70	.64
					3-19-70	.28
					4- 2-70	.05
					4-16-70	.14
					4-30-70	.09
					5-14-70	.03
					5-28-70	.10
					6-12-70	.02
					6-18-70	.17
					6-26-70	.06
					7- 9-70	.19
					7-23-70	.02
					8- 6-70	.41
					8-20-70	2.2
					9- 3-70	2.8
					9-17-70	.40
16802500	East Achugau Spring	Lat 15°14'06" N., long 145°46'43" E., Saipan, at spring 0.4 mile east of Mount Dogas and 2.0 miles east of Tanapag.	-	1965, 1969-70	9-15-65	.17
					12-13-68	.26
					1-16-69	.11
					3- 6-69	.10
					4-17-69	.07
					5- 2-69	.06
					5-17-69	.03
					5-31-69	.05
					6-13-69	.04
					6-27-69	.05
					7-12-69	.04
					7-25-69	.03
					8- 8-69	.04
					8-22-69	.04
					9- 5-69	.05
					9-19-69	.02
					10- 3-69	.05
					10-18-69	.28
					10-31-69	.12
					11-15-69	.12
					11-28-69	.09
					12-12-69	.05
					12-31-69	.11
					1- 9-70	.12
					1-23-70	.25
					2- 6-70	.43
					2-20-70	.16
					3- 6-70	.10
					3-20-70	.15
					4- 3-70	.12
					4-17-70	.10
					5- 1-70	.10
					5-15-70	.10
					6- 1-70	.08
					6-15-70	.06
					6-30-70	.06
					7-10-70	.06
					7-24-70	.85
					8- 7-70	.44
					8-21-70	.05
					9- 4-70	.15
					9-18-70	.12

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water years 1968-70--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Mariana Islands, Island of Saipan--Continued						
16804000	West Achugau Spring	Lat 15°14'10" N., long 145°46'10" E., Saipan, at spring 0.9 mile upstream from mouth of Achugau Stream and 1.3 miles east of Tanapag.	-	1968-70	10- 5-67 12-13-68 1-15-69 2-19-69 3- 6-69 4-17-69 5- 1-69 5-17-69 5-29-69 6-13-69 6-27-69 7-12-69 7-25-69 8- 8-69 8-22-69 9- 5-69 9-19-69 10- 3-69 10-31-69 11-15-69 11-28-69 12-12-69 12-31-69 1- 9-70 2- 6-70 2-20-70 3- 6-70 3-20-70 4- 3-70 4-10-70 4-17-70 5- 1-70 5-15-70 6- 1-70 6-15-70 6-30-70 7-10-70 7-24-70 8-21-70 9-18-70	0.34 .28 .08 .05 .05 .03 .03 .02 .04 .02 .04 .02 .03 .02 .02 .02 .01 .02 .30 .15 .08 .19 .27 .29 .43 .26 .13 .14 .14 .07 .05 .06 .06 .06 .03 .02 .02 .11 .26 .26

Discharge measurements made at miscellaneous sites during water years 1968-70

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Mariana Islands, Island of Saipan						
West Achugau Stream	Philippine Sea	Lat 15°14'20" N., long 145°46'06" E., Saipan, 0.7 mile upstream from mouth and 1.2 miles east of Tanapag.			8-30-68	0.32

CAROLINE ISLANDS, PALAU ISLANDS

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Gaging stations: Adeiddo River, Babelthuap
Gihmel River, Babelthuap
Gaden River, Babelthuap

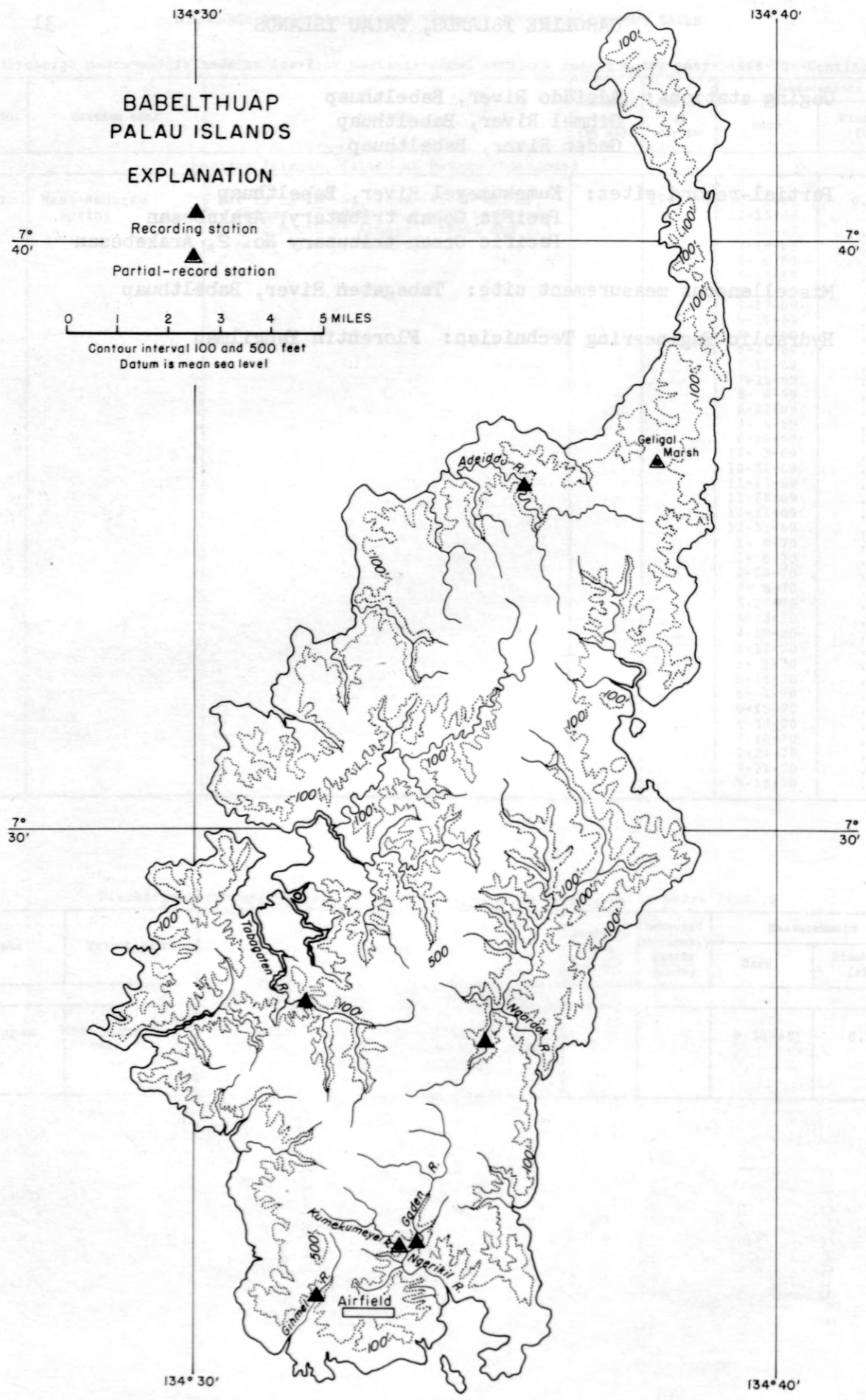
Partial-record sites: Kumekumeyel River, Babelthuap
Pacific Ocean tributary, Arakabesan
Pacific Ocean tributary No. 2, Arakabesan

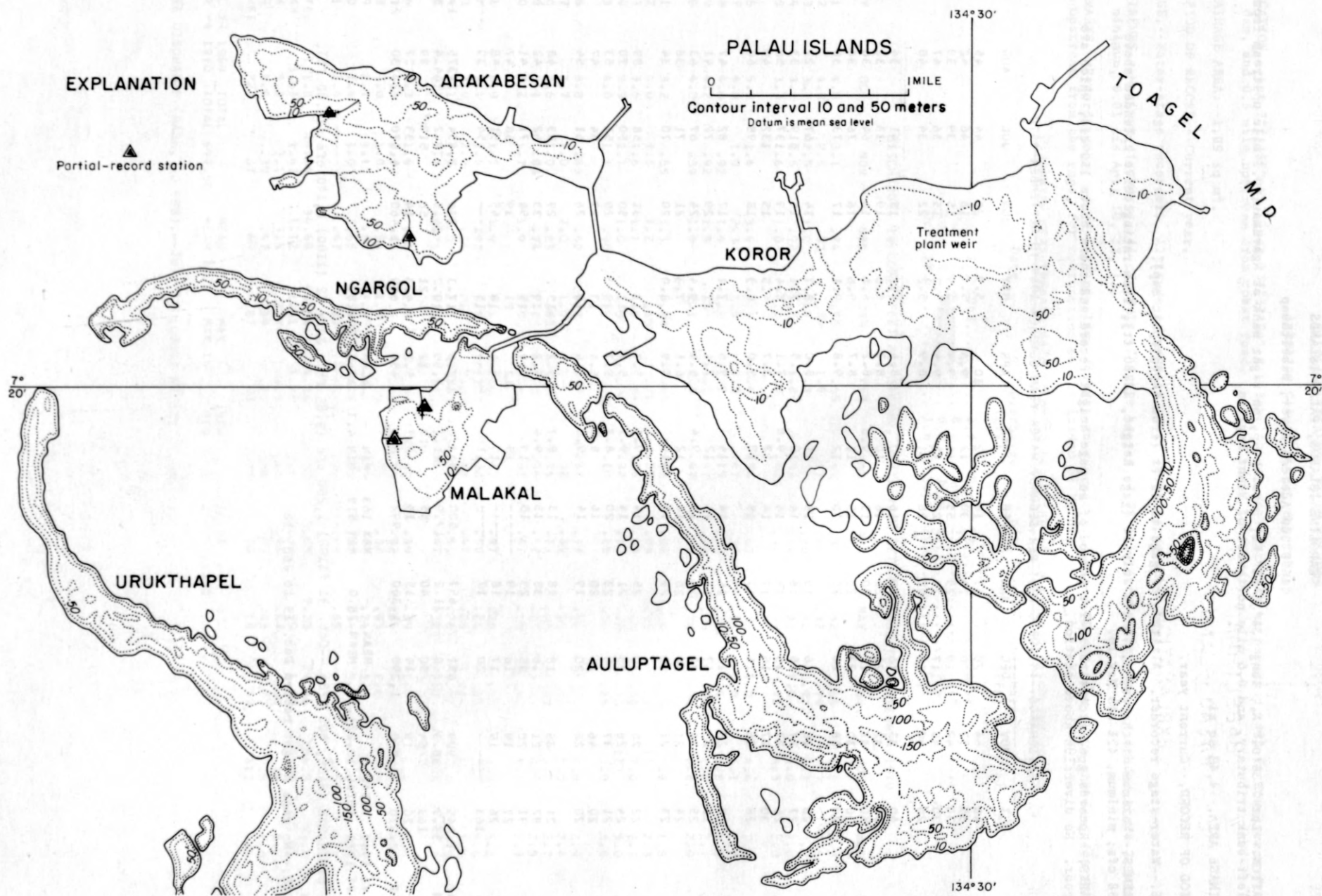
Miscellaneous measurement site: Tabagaten River, Babelthuap

Hydraulic Engineering Technician: Florentin Yangilmau

PALAU ISLANDS
Contour Interval 10 and 50 meters
(Below 1000 feet)

ARAKABESAN





CAROLINE ISLANDS, PALAU ISLANDS

16890600 Adeiddo River, Babelthuap

LOCATION.--Lat 7°36'01" N., long 134°35'38" E., Babelthuap, on right bank at Ngardmau, 0.3 mile upstream from left-bank tributary, and 0.6 mile northwest of Mount Megilon.

DRAINAGE AREA.--4.43 sq mi.

PERIOD OF RECORD.--Current year.

GAGE.--Water-stage recorder. Altitude of gage is 15 ft (from topographic map).

EXTREMES.--Maximum discharge, 2,140 cfs July 12 (gage height, 12.80 ft), from rating curve extended above 68 cfs; minimum, 4.1 cfs May 16.

REMARKS.--Records good except those for period of no gage-height record and those above 150 cfs, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	64	20	17	16	12	10	5.9	20	44	45	39
2	35	52	20	16	30	12	9.6	5.7	18	46	42	34
3	30	42	19	25	55	11	9.4	5.4	15	39	39	41
4	30	40	17	20	20	11	9.4	5.2	15	36	47	35
5	25	40	16	40	18	11	8.9	5.2	22	34	40	33
6	40	33	16	30	16	10	8.4	5.2	18	41	34	63
7	35	32	21	25	16	10	8.2	6.6	19	33	32	47
8	30	32	17	20	15	9.8	8.2	6.6	16	64	30	40
9	30	30	23	25	15	11	8.7	9.6	16	76	30	36
10	29	28	20	20	20	12	9.8	9.1	17	73	30	33
11	28	28	16	19	15	11	8.0	8.7	14	67	27	31
12	27	27	15	18	14	10	7.5	7.1	14	519	33	29
13	26	27	15	18	14	9.8	7.1	5.4	19	137	56	28
14	30	27	15	17	14	12	8.7	4.5	15	132	49	28
15	28	26	14	17	18	10	8.0	4.3	18	98	60	38
16	27	23	14	16	14	14	9.6	7.1	17	82	47	27
17	26	23	47	15	26	12	7.1	21	29	72	41	25
18	25	24	22	15	16	9.4	6.4	9.4	24	67	43	24
19	24	21	20	20	16	12	6.1	7.3	21	71	38	23
20	23	21	50	23	15	14	5.9	8.0	20	70	34	22
21	22	26	30	25	14	9.6	5.7	13	31	58	89	20
22	24	28	25	21	14	9.1	5.7	11	50	50	70	30
23	21	37	20	23	20	8.7	5.7	20	29	51	53	40
24	20	46	25	20	16	8.7	5.4	13	27	54	47	60
25	20	28	20	19	14	9.8	5.4	10	26	61	54	36
26	21	25	18	18	13	8.7	5.2	15	29	83	48	33
27	82	21	16	38	13	9.4	5.2	19	33	62	42	32
28	31	20	25	23	13	19	5.7	15	58	71	41	29
29	27	19	18	19	-----	15	12	21	39	58	47	27
30	26	19	17	18	-----	10	6.6	18	45	51	48	26
31	163	-----	20	17	-----	11	-----	15	-----	54	39	-----
TOTAL	1,045	909	651	657	500	343.0	227.6	317.3	734	2,454	1,375	1,009
MEAN	33.7	30.3	21.0	21.2	17.9	11.1	7.59	10.2	24.5	79.2	44.4	33.6
MAX	163	64	50	40	55	19	12	21	58	519	89	63
MIN	20	19	14	15	13	8.7	5.2	4.3	14	33	27	20
AC-FT	2,070	1,800	1,290	1,300	992	680	451	629	1,460	4,870	2,730	2,000

CAL YR 1969 TOTAL - MEAN - MAX 163 MIN - AC-FT -
WTR YR 1970 TOTAL 10,221.9 MEAN 28.0 MAX 519 MIN 4.3 AC-FT 20,280

PEAK DISCHARGE (BASE, 500 CFS).--Oct. 31 (1100) 1,200 cfs (9.85 ft); July 12 (1100) 2,140 cfs (12.80 ft).

NOTE.--No gage height record Dec. 19 to Jan. 18

CAROLINE ISLANDS, PALAU ISLANDS

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16891200 Gihmel River, Babelthuap

LOCATION.--Lat 7°21'59" N., long 134°32'06" E., Babelthuap, on right bank at Garuruon, 400 ft downstream from dam, and 0.5 mile upstream from coast road.

DRAINAGE AREA.--1.09 sq mi.

PERIOD OF RECORD.--Current year.

GAGE.--Water-stage recorder. Altitude of gage is 15 ft (from topographic map).

EXTREMES.--Maximum discharge, 44 cfs July 12 (gage height, 4.88 ft), from rating curve extended above 2.7 cfs; minimum, 0.01 cfs Apr. 10, 12, 13.

REMARKS.--Records poor. An 8-inch pipeline diverts an average of about 0.75 cfs from above the dam, 400 ft upstream from the gage, for consumption on the island of Koror.

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (cfs)	Date	Discharge (cfs)
Mar. 27, 1968.....	2.8	Dec. 12.....	0.54
May 17.....	6.3	Apr. 22, 1969.....	.18
Aug. 8.....	6.9	July 1.....	3.5
Oct. 10.....	1.6	Sept. 29.....	5.1

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.1	.74	.56	.65	.47	.32	.32	.65	4.6	2.5	3.0
2	4.0	2.5	.92	.39	1.8	.47	.15	.32	.74	4.7	2.5	2.5
3	3.7	2.5	1.0	2.2	3.3	.56	.20	.32	.92	4.2	2.0	2.5
4	3.2	2.5	.92	1.0	1.8	.56	.32	.32	1.0	4.0	2.0	2.0
5	3.3	1.6	1.0	2.2	1.5	.47	.32	.39	.92	4.3	2.0	2.0
6	5.3	1.4	3.4	2.5	1.4	.56	.47	.32	1.0	4.4	1.7	4.0
7	4.0	1.0	2.3	1.5	1.3	.47	.20	.26	5.0	4.1	1.7	2.5
8	4.6	.92	1.4	1.1	1.2	.15	.10	.26	2.0	5.8	1.6	1.9
9	4.2	.92	1.5	1.3	1.1	.47	.03	.20	.50	6.0	2.1	1.7
10	4.0	.39	1.4	1.1	1.0	.47	.15	.20	.30	6.8	2.0	1.6
11	3.2	.65	1.3	.83	.65	.47	.06	.15	.25	6.2	1.8	1.6
12	4.0	1.6	1.2	.65	.26	.39	.03	.15	.25	14	2.3	1.5
13	3.6	1.6	1.1	1.0	.26	.26	.06	.15	.30	7.0	2.7	1.4
14	3.9	1.7	1.0	1.0	.56	.32	.10	.10	.50	12	5.0	3.6
15	4.0	1.1	.90	1.0	3.5	.10	.15	.10	.26	7.0	3.8	11
16	3.8	.83	.80	1.3	1.7	.32	.47	.10	.20	6.0	2.9	5.3
17	3.7	1.0	2.0	1.0	2.1	.32	.39	.05	.32	5.0	2.4	4.4
18	3.6	1.0	.83	.83	1.5	.26	.39	.03	.39	5.0	2.7	3.6
19	3.1	.83	.74	2.1	1.7	.56	.47	.03	.65	4.0	2.5	3.4
20	3.2	1.7	1.9	2.5	1.4	.92	.47	.10	.56	4.0	2.3	3.5
21	2.9	1.5	1.4	1.4	1.0	.47	.47	.26	.92	3.5	5.2	3.4
22	3.1	1.6	.92	1.5	1.0	.26	.56	.26	.83	3.0	8.6	6.2
23	3.0	2.2	.74	2.7	1.0	.20	.47	.26	.74	2.5	5.6	6.0
24	3.1	2.1	1.0	2.6	1.0	.26	.56	.26	.92	4.0	4.5	8.0
25	4.1	2.1	.74	1.9	.83	.10	.47	.32	1.0	3.5	3.7	5.0
26	4.3	1.4	.56	1.6	.65	.03	.39	.39	1.0	4.1	3.8	6.0
27	4.8	1.2	.47	1.4	.83	.03	.32	.65	.92	3.8	3.0	7.0
28	3.0	1.0	.56	1.5	.39	.06	.32	.83	2.0	3.8	3.0	6.0
29	2.1	1.1	.83	1.2	-----	.39	.32	.74	1.6	3.5	2.5	4.9
30	1.4	1.0	.65	1.0	-----	.39	.32	.74	3.3	3.0	2.5	4.9
31	3.6	-----	.47	.83	-----	.32	-----	.65	-----	3.0	2.5	-----
TOTAL	111.8	44.04	34.69	43.69	35.38	11.08	9.05	9.23	29.94	156.8	93.4	120.4
MEAN	3.61	1.47	1.12	1.41	1.26	.36	.30	.30	1.00	5.06	3.01	4.01
MAX	5.3	3.1	3.4	2.7	3.5	.92	.56	.83	5.0	14	8.6	11
MIN	1.4	.39	.47	.39	.26	.03	.03	.03	.20	2.5	1.6	1.4
AC-FT	222	87	69	87	70	22	18	18	59	311	185	239

CAL YR 1969 TOTAL - MEAN - MAX - MIN - AC-FT -
 WTR YR 1970 TOTAL 699.50 MEAN 1.92 MAX 14 MIN .03 AC-FT 1,390

PEAK DISCHARGE (BASE, 30 CFS).--July 12 (0800) 44 cfs (4.88 ft).

CAROLINE ISLANDS, PALAU ISLANDS

16891300 Gaden River, Babelthuap

LOCATION.--Lat 7°22'57" N., long 134°33'40" E., Babelthuap, on left bank 750 ft upstream from confluence with Kumekumeyel River, 1.0 mile southwest of Mount Kabekobekushi, and 1.8 miles north of Airai.

DRAINAGE AREA.--4.23 sq mi.

PERIOD OF RECORD.--Current year.

GAGE.--Water-stage recorder. Altitude of gage is 7 ft (from topographic map).

EXTREMES.--Maximum discharge, 976 cfs July 12 (gage height, 10.74 ft), from rating curve extended above 60 cfs; minimum, 4.3 cfs May 15.

REMARKS.--Records fair except those above 150 cfs, which are poor. No diversion above station.

Discharge measurement made prior to beginning of continuous discharge record

Sept. 25, 1969..... 29 cfs

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	36	14	15	10	9.7	5.1	4.7	5.8	43	31	34
2	28	31	14	15	21	9.6	5.0	4.6	14	39	28	24
3	26	24	14	22	44	10	5.0	4.6	7.4	30	26	22
4	24	42	12	14	15	9.2	5.0	4.6	7.0	27	23	19
5	22	24	12	38	12	8.8	4.9	4.6	10	37	20	18
6	36	21	12	28	11	8.4	4.7	4.6	20	31	18	44
7	24	20	59	18	11	8.2	4.7	4.5	25	24	18	27
8	21	18	22	16	10	7.2	4.6	4.6	15	40	18	26
9	19	18	20	22	10	7.1	4.5	5.4	11	42	17	21
10	18	17	22	15	10	7.6	5.6	4.8	9.0	40	18	18
11	17	16	18	14	9.9	7.6	4.8	4.9	7.0	33	16	18
12	16	17	16	14	9.7	7.7	4.7	4.7	6.3	330	18	17
13	15	24	14	16	9.6	7.1	4.6	4.6	8.0	87	29	15
14	17	23	13	12	12	7.4	4.8	4.5	17	207	64	29
15	16	20	12	13	32	7.0	8.6	4.4	14	91	58	53
16	14	15	12	12	16	6.8	13	4.5	11	64	52	89
17	13	14	37	11	47	7.4	5.4	11	29	51	31	46
18	12	14	18	10	21	6.2	4.9	4.9	18	49	28	31
19	12	13	17	12	20	16	4.7	4.5	28	40	26	26
20	12	14	49	11	14	9.2	4.6	4.8	22	38	26	27
21	12	33	27	14	12	6.8	4.6	7.6	31	32	69	23
22	11	17	20	23	11	6.4	4.5	6.1	24	27	129	33
23	11	18	18	22	14	6.2	4.5	11	18	25	52	37
24	12	42	20	17	13	5.8	4.4	5.1	15	33	42	72
25	74	27	16	12	10	6.6	4.4	5.5	13	29	38	43
26	25	25	16	11	10	5.9	4.4	5.7	12	79	42	40
27	84	18	14	14	10	6.2	4.5	29	15	43	33	97
28	29	16	23	12	10	5.6	4.7	9.6	54	76	35	46
29	29	18	16	10	-----	7.4	7.5	8.6	24	49	28	43
30	22	15	15	9.7	-----	5.5	4.8	7.8	53	37	31	38
31	61	-----	18	9.6	-----	5.5	-----	7.1	-----	42	25	-----
TOTAL	767	650	610	482.3	435.2	236.1	157.5	202.9	543.5	1,815	1,089	1,076
MEAN	24.7	21.7	19.7	15.6	15.5	7.62	5.25	6.55	18.1	58.5	35.1	35.9
MAX	84	42	59	38	47	16	13	29	54	330	129	97
MIN	11	13	12	9.6	9.6	5.5	4.4	4.4	5.8	24	16	15
AC-FT	1,520	1,290	1,210	957	863	468	312	402	1,080	3,600	2,160	2,130

CAL YR 1969 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1970 TOTAL 8,064.5 MEAN 22.1 MAX 330 MIN 4.4 AC-FT 16,000

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-12	1200	10.74	976	9-16	1930	7.90	551
7-14	1530	9.62	808				

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at low-flow partial-record stations during water years 1968-70

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Palau Islands						
16891320	Kumekumeyel River, Babelthuap	Lat 7°23'01" N., long 134°33'34" E., Babelthuap, 100 ft upstream from confluence with Gaden River, 1.1 miles west of Mount Kabekobekushi, and 1.9 miles north of Airai.	1.55	1970	4-15-70 4-29-70 5-18-70 6-10-70 7- 1-70 7-23-70 8-19-70 9- 8-70	1.6 1.8 1.5 3.4 9.3 8.8 12 7.6
16891700	Pacific Ocean tributary, Arakabesan	Lat 7°21'14" N., long 134°27'10" E., Arakabesan, 0.1 mile upstream from mouth and 0.15 mile north of village of Arakabesan.	.03	1970	4-15-70	.01
16891750	Pacific Ocean tributary No. 2, Arakabesan	Lat 7°20'41" N., long 134°27'29" E., Arakabesan, 0.1 mile upstream from mouth and 0.6 mile southeast of village of Arakabesan.	.03	1970	4-15-70 5- 5-70 5-14-70 6- 9-70 6-29-70 7-24-70 8-20-70 9-10-70 9-30-70	.02 .02 .04 .04 .09 .08 .10 .10 .12

Discharge measurements made at miscellaneous sites during water years 1968-70

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Palau Islands						
Tabagaten River	Pacific Ocean	Lat 7°27'00" N., long 134°32'05" E., Babelthuap, 0.3 mile downstream from unnamed tributary, 0.7 mile northeast of Mount Karukail, and 1.0 mile south of Ngatpang.	6.34		7-16-69	77
					9-26-69	32
					11- 6-69	27
					12-23-69	32
					1-15-70	21
					3-24-70	8.5
					4-14-70	7.7
					4-28-70	3.8
					5-25-70	8.4
					6-18-70	54
					7-15-70	124
					7-29-70	51
					8-14-70	124
					9-11-70	34
					9-26-70	65

CAROLINE ISLANDS, YAP ISLANDS

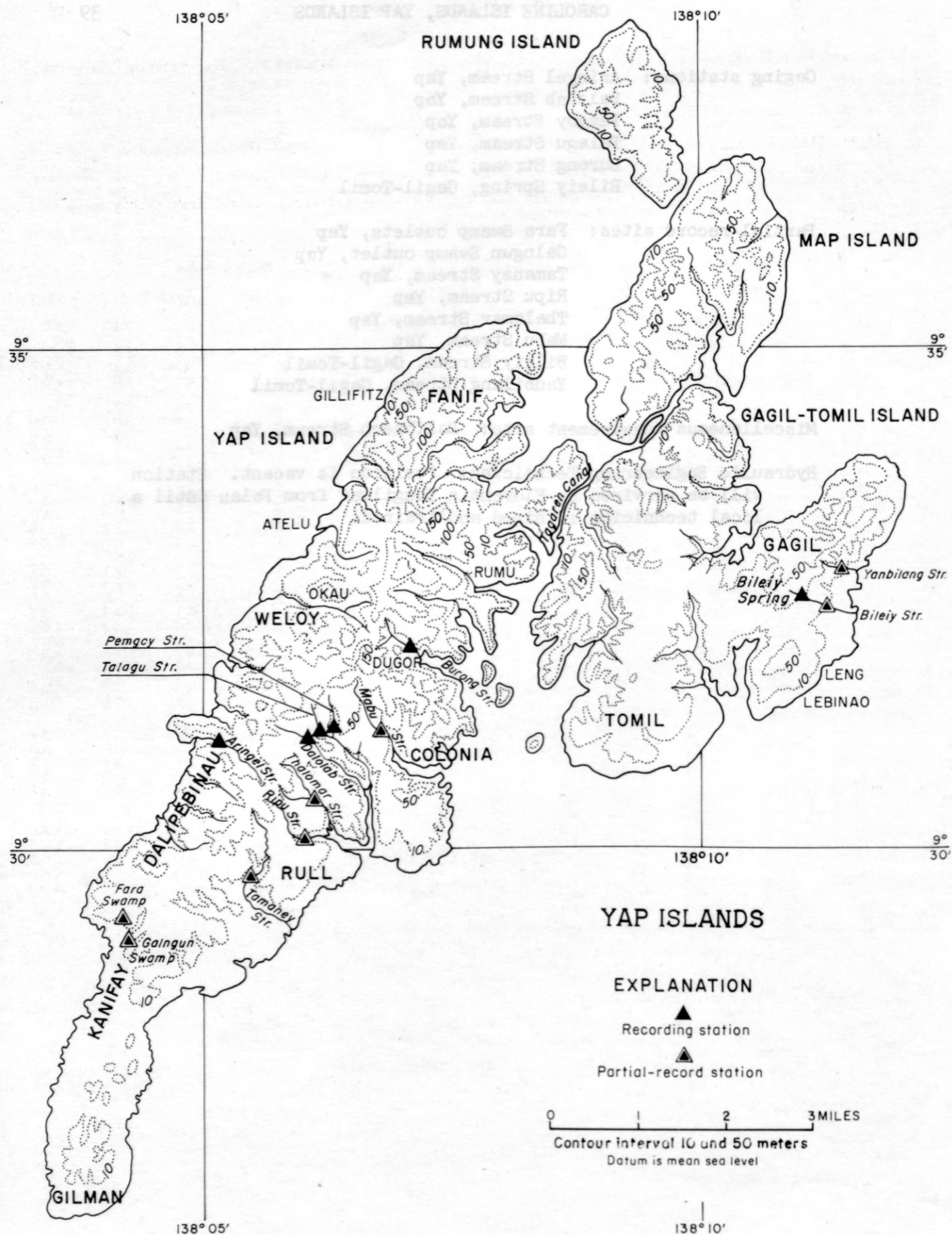
39

Gaging stations: Aringel Stream, Yap
Dalolab Stream, Yap
Pengoy Stream, Yap
Talagu Stream, Yap
Burong Stream, Yap
Bileiy Spring, Gagil-Tomil

Partial-record sites: Fara Swamp outlets, Yap
Galngun Swamp outlet, Yap
Tamaney Stream, Yap
Ripu Stream, Yap
Thalomar Stream, Yap
Mabu Stream, Yap
Bileiy Stream, Gagil-Tomil
Yanbilang Stream, Gagil-Tomil

Miscellaneous measurement site: Dalibaech Stream, Yap

Hydraulic Engineering Technician: Position is vacant. Station will be serviced by Florentin Yangilmau from Palau until a local technician is hired and trained.



CAROLINE ISLANDS, YAP ISLANDS

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16892400 Aringel Stream, Yap

LOCATION.--Lat 9°31'01" N., long 138°05'11" E., Yap, on right bank at Aringel and 0.3 mile upstream from mouth.

DRAINAGE AREA.--0.24 sq mi.

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 35 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 408 cfs Aug. 21 (gage height, 6.35 ft), from rating curve extended above 20 cfs; no flow for many days.

Period of record: Maximum discharge, 408 cfs Aug. 21, 1970 (gage height, 6.35 ft), from rating curve extended above 20 cfs; no flow for many days each year.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-		0	0	0.03	0.15	5.0
2						-		.05	0	.03	1.1	1.0
3						-		.02	0	.04	1.4	3.2
4						-		.01	0	.03	3.3	.92
5						-		0	0	8.8	3.0	2.3
6						-		0	0	.68	2.7	1.5
7						-		0	0	.16	2.9	.46
8						-		0	0	1.4	.92	.52
9	0.10					-		0	.02	.37	3.9	.46
10						-		0	0	1.8	.68	.37
11						-		0	0	1.2	.40	2.0
12						-		0	0	.40	.40	.13
13						-		0	0	1.3	.20	.10
14						-		0	0	.60	.12	.08
15						-		0	0	.19	.08	.09
16						-		0	0	1.2	.21	.07
17						-		0	0	.16	.64	.05
18						-		0	0	.16	.17	.05
19						-		0	0	.11	.13	.07
20						-		0	.02	.72	.08	1.0
21						.01		0	.06	.17	.22	4.7
22						.01		0	.92	.20	.37	13
23						.01		0	.32	.79	.68	6.7
24						.01		0	.11	.30	.22	2.0
25						0		0	.86	.52	.12	.80
26						0		0	.30	.22	.24	.34
27						0		0	.11	.15	.40	.16
28						0		0	.07	.11	.24	.11
29						0		0	.05	6.4	.15	.17
30						0		0	.04	.92	.09	.11
31						0		0		3.0	2.7	
TOTAL						-	0	0.08	2.88	28.38	37.81	54.66
MEAN						-	0	0.003	0.096	0.915	1.22	1.82
MAX						-	0	0.05	0.92	8.8	11	13
MIN						-	0	0	0	0.03	0.08	0.05
AC-FT						-	0	1.6	5.7	56	75	108

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL MEAN MAX MIN AC-FT

PEAK DISCHARGE (BASE, 200 CFS).--Sept. 22 (0630) 210 cfs (5.00 ft).

* Result of discharge measurement.

NOTE.--No gage-height record Apr. 26 to June 19.

CAROLINE ISLANDS, YAP ISLANDS

16892400 Aringel Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.01	3.3	.02			0	0	.26	2.8	2.4	.28
2	.05	.01	.72	0			0	0	.61	.68	4.5	.64
3	.05	0	2.7	.02			0	.02	1.3	.26	.76	1.6
4	.03	0	1.3	.02			0	0	1.4	.12	1.2	.88
5	.03	0	.49	.01			0	.21	.60	1.1	2.1	.46
6	.02	0	.34	0			0	.86	.92	1.1	.96	.26
7	.01	.03	2.9	0			0	.28	.96	.49	.37	.53
8	.01	.11	.30	0			0	1.0	.32	.28	.20	1.3
9	.01	.88	.15	0			0	.20	.32	.19	.26	2.5
10	.01	.64	.08	0			0	.10	.34	.15	.46	1.2
11	.01	.19	.05	.25			0	.09	1.5	2.1	.80	2.3
12	.02	.09	.03	.05			0	.07	1.3	.63	.64	1.7
13	14	.06	.02	.50			0	.09	1.1	2.0	.46	.56
14	9.4	.03	.03	.20			0	.09	.32	.53	.24	.32
15	5.6	.07	.02	.10			0	.08	.16	.64	.76	.22
16	13	.07	.02	.06			0	1.3	.11	.26	6.5	.15
17	8.9	.04	.03	.05			0	1.4	.07	.17	.52	.13
18	4.4	.03	.66	.03			0	.34	.07	.19	.26	3.1
19	2.0	.02	.19	.03			.01	.72	.05	.15	.30	.60
20	.37	.03	.09	.02			.01	.88	.03	.13	.30	.26
21	1.2	.04	.05	.01			0	1.3	.03	.62	.17	.17
22	.46	.03	.07	0			0	.76	.15	2.7	.11	.13
23	.19	.02	.08	0			0	.52	3.3	3.2	.09	.11
24	.11	.02	.05	0			0	.26	7.3	1.2	.08	4.1
25	.08	0	.65	0			0	.15	1.4	6.8	.07	.56
26	.05	0	.28	0			0	.10	.34	1.4	.05	3.2
27	.05	0	.11	0			0	.07	.17	4.7	.07	2.6
28	.04	0	.07	0			0	.05	.12	1.4	.05	1.6
29	.03	0	.04	0	-----		0	.04	.09	2.0	1.5	7.1
30	.02	0	.05	0	-----		0	.05	.08	1.5	.68	.43
31	.01	-----	.05	0	-----		-----	.15	-----	1.5	.68	-----
TOTAL	60.23	2.42	14.92	1.37	0	0	.02	11.18	36.42	152.23	57.24	61.49
MEAN	1.94	.081	.48	.044	0	0	.001	.36	1.21	4.91	1.85	2.05
MAX	14	.88	3.3	.50	0	0	.01	1.4	1.3	3.2	.21	1.3
MIN	.01	0	.02	0	0	0	0	0	.03	.12	.05	.11
AC-FT	119	4.8	30	2.7	0	0	.04	22	72	302	114	122

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 397.52 MEAN 1.09 MAX 32 MIN 0 AC-FT 788

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
7-13	0030	6.14	376	8-5	0700	5.80	325
7-23	0500	5.72	313	9-10	0330	5.02	212
7-29	0630	4.98	208				

CAROLINE ISLANDS, YAP ISLANDS

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16892400 Aringel Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	2.2	.21	3.1	.87	.03		.15	.17	8.1	.37	5.8
2	.11	.60	.13	.49	.72	.02		.11	.08	1.2	.17	9.0
3	.10	.23	.09	.23	.11	.01		.05	.05	.60	.13	11
4	.13	5.2	.06	.10	.06	.01		.02	.04	.92	.09	2.3
5	.25	5.6	.09	.05	.03	.01		.01	2.3	2.0	.05	.60
6	4.4	.80	.08	.05	.02	.01		.01	.33	.72	.99	.52
7	.43	.31	.27	.04	.01	.01		0	.09	3.5	.98	.68
8	.31	.17	.90	.03	.01	.01		0	.05	.56	6.7	.33
9	.33	.19	1.8	.04	.02	0		0	.03	.31	2.9	.17
10	.15	.11	.84	.03	.01	0		.42	.02	.19	6.4	.11
11	.09	.08	.43	.02	0	0		1.4	.01	.10	13	.09
12	.06	.07	.25	.01	0	0		.37	.05	.10	4.1	.05
13	.84	.04	.13	.01	0	0		.17	.64	.23	1.0	.04
14	.46	.04	.13	.02	0	0		.05	.27	.10	.35	.03
15	.19	.03	.17	.01	0	5.9		.03	.23	.10	14	.02
16	.11	.04	.46	0	0	.46		.04	.25	.07	.72	.02
17	.23	.07	.19	0	.01	.09		.58	.15	.05	.27	.02
18	3.6	.37	.11	0	.01	.05		.52	.17	.07	.11	.04
19	.84	.23	.08	0	0	.04		.10	.15	.10	.07	7.3
20	.31	.31	.05	0	0	.02		.04	.11	.05	.05	1.1
21	.17	2.3	.04	.01	0	.02		.03	1.1	.04	28	.84
22	.10	2.1	.03	.03	.27	.01		.02	.76	.03	1.5	.37
23	.06	3.8	.03	.69	11	0		.02	.19	4.4	.46	3.3
24	.04	3.3	.02	2.0	.40	0		.02	.07	4.5	1.4	.92
25	.04	.96	.02	.25	.10	0		.01	.05	.33	.84	.40
26	.47	.46	.01	.09	.05	0		0	.06	.11	9.1	.29
27	9.4	1.2	5.0	.06	.05	0		1.8	.07	.07	4.1	.17
28	1.1	.29	1.1	.04	.05	0		1.4	6.9	.37	2.1	.15
29	.37	.27	.21	.02	-----	0		.92	1.5	.17	7.1	.27
30	.52	.37	.09	.02	-----	0		.40	.88	4.5	.96	5.5
31	4.1	-----	3.4	.02	-----	0	-----	.17	-----	1.5	11	-----
TOTAL	29.48	31.74	16.42	7.46	13.80	6.70	0	8.86	16.77	35.09	119.01	51.43
MEAN	.95	1.06	.53	.24	.49	.22	0	.29	.56	1.13	3.84	1.71
MAX	9.4	5.6	5.0	3.1	11	5.9	0	1.8	6.9	8.1	28	11
MIN	.04	.03	.01	0	0	0	0	0	.01	.03	.05	.02
AC-FT	58	63	33	15	27	13	0	18	33	70	236	102

CAL YR 1969 TOTAL 397.59 MEAN 1.09 MAX 32 MIN 0 AC-FT 789
WTR YR 1970 TOTAL 336.76 MEAN .92 MAX 28 MIN 0 AC-FT 668

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-27	1130	5.12	225	8-26	1830	5.40	265
8-15	0800	5.44	271	8-31	1030	5.28	247
8-21	0130	6.35	408	9-19	1630	5.30	250

CAROLINE ISLANDS, YAP ISLANDS

16892800 Dalolab Stream, Yap

LOCATION.--Lat 9°31'04" N., long 138°06'04" E., Yap, on left bank at Talagu and 0.9 mile upstream from mouth.

DRAINAGE AREA.--0.09 sq mi.

PERIOD OF RECORD.--March 1968 to current year,

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 150 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 143 cfs Aug. 21 (gage height, 4.42 ft), from rating curve extended above 17 cfs; no flow for many days.

Period of record: Maximum discharge, 143 cfs Aug. 21, 1970 (gage height, 4.42 ft), from rating curve extended above 17 cfs; no flow for many days each year.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-			0	0	0.01	1.2
2						-			0	0	5.0	3.3
3						-			0	0	1.0	1.3
4						-			0	0	1.4	.26
5						-			0	1.9	1.5	.82
6						-			0	.06	1.0	.46
7						-			0	.01	1.5	.06
8						-			0	.35	.22	.08
9						-			0	.03	1.2	.08
10						-			0	.63	.18	.08
11						-			0	.46	.15	.04
12						-			0	.05	.12	.02
13						-			0	1.1	.03	.02
14						-			0	.30	.02	.01
15						-			0	.03	.01	.02
16						-			0	.02	.01	.01
17						-			0	.26	.08	.01
18						-			0	.15	.02	.01
19						-			0	.04	.01	.01
20						-			0	.35	.01	.01
21						0			0	.04	.01	.02
22						0			0	.06	.01	3.2
23						0			0	.22	.01	2.6
24						0			0	.03	.01	.35
25						0			.04	.04	0	.10
26						0			.01	.02	.02	.02
27						0			0	.01	.03	.01
28						0			0	.01	.02	.01
29						0			0	2.1	.02	.05
30						0			0	.30	.01	.01
31						0				.04	1.2	
TOTAL						-	0	0	0.05	8.61	14.81	14.17
MEAN						-	0	0	0.002	0.278	0.478	0.472
MAX						-	0	0	0.04	2.1	5.0	3.3
MIN						-	0	0	0	0	0	0.01
AC-FT						-	0	0	0.1	18	29	28

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 75 CFS).--Aug. 2 (1300) 106 cfs (3.97 ft).

CAROLINE ISLANDS, YAP ISLANDS

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16892800 Dalolab Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.60	0				0	.04	1.1	1.0	.05
2	0	0	.08	0				0	.15	.15	2.0	.05
3	0	0	.65	.10				.05	3.4	.03	.40	1.0
4	0	0	.15	.02				0	.70	.01	4.0	1.0
5	0	0	.04	.01				0	.10	3.0	7.0	.20
6	0	0	.26	0				.10	.12	.26	.50	.04
7	0	0	.88	0				.01	.22	.06	.10	.43
8	0	.03	.03	0				.04	.03	.03	.05	4.6
9	0	.35	.01	0				.01	.04	.02	.15	.82
10	0	.10	0	0				0	.04	.03	.10	4.0
11	0	.02	0	.10				0	.30	.46	.15	.95
12	0	.01	0	.01				0	.65	2.0	.60	.70
13	5.3	.01	0	.02				.01	.35	5.4	.15	.12
14	3.0	0	0	.01				.01	.04	1.9	.05	.05
15	2.1	.01	0	0				.01	.01	.12	.10	.04
16	4.4	0	0	0				.62	.01	.02	2.0	.01
17	3.2	0	0	0				.35	0	.02	.10	.02
18	1.2	0	.05	0				.03	0	.02	.05	.88
19	.85	0	.01	0				.05	0	.02	.05	.18
20	.06	0	0	0				.22	0	.01	.05	.04
21	.99	0	0	0				.35	0	.05	.01	.03
22	.15	0	0	0				.10	.14	1.0	0	.02
23	.02	0	0	0				.10	1.2	11	0	.02
24	.01	0	0	0				.02	2.9	.46	0	2.0
25	0	0	.05	0				.01	.52	2.7	0	.15
26	0	0	.01	0				0	.06	.52	0	.71
27	0	0	0	0				0	.02	2.1	.05	.86
28	0	0	0	0				0	.01	3.8	.01	.52
29	0	0	0	0	-----			0	0	5.5	1.5	2.3
30	0	0	0	0	-----			0	0	6.0	.40	.10
31	0	-----	0	0	-----			.05	-----	.50	.20	-----
TOTAL	21.28	.53	2.82	.27	0	0	0	2.14	11.05	48.29	20.77	21.89
MEAN	.69	.018	.091	.009	0	0	0	.069	.37	1.56	.67	.73
MAX	5.3	.35	.88	.10	0	0	0	.62	3.4	11	7.0	4.6
MIN	0	0	0	0	0	0	0	0	0	.01	0	.01
AC-FT	42	1.1	5.6	.5	0	0	0	4.2	22	96	41	43

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 129.04 MEAN .35 MAX 11 MIN 0 AC-FT 256

PEAK DISCHARGE (BASE, 75 CFS)

NOTE.--No gage-height record July 30 to Sept. 5.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-24	1800	3.71	88	7-28	0200	3.56	78
7-13	0100	3.64	83	8-5	0700	3.86	98
7-23	0530	4.14	119				

CAROLINE ISLANDS, YAP ISLANDS

16892800 Dalolab Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.82	.02	1.5	.41	0		.08	.02	3.2	.08	1.0
2	.02	.15	.01	.20	.26	0		.01	.01	.30	.03	4.0
3	.02	.04	.01	.07	.03	0		0	0	.08	.02	3.0
4	.01	3.0	.01	.04	.01	0		0	0	.51	.02	1.0
5	.01	2.1	.02	.02	.01	0		0	.54	1.1	.01	.30
6	1.7	.35	.01	.02	0	0		0	.05	.10	.13	.20
7	.08	.05	.06	.01	0	0		0	.01	.59	.19	.20
8	.05	.02	.12	.01	0	0		0	0	.06	11	.10
9	.05	.04	.35	.01	0	0		0	0	.03	.77	.05
10	.02	.03	.22	.01	0	0		.01	0	.02	2.3	.02
11	.01	.03	.06	0	0	0		.23	0	.01	4.6	.01
12	.01	.02	.02	0	0	0		.01	.29	.01	1.3	.01
13	.36	.01	.01	0	0	0		0	.27	.01	.30	0
14	.08	.01	.01	0	0	0		0	.03	0	.08	0
15	.02	.01	.05	0	0	1.7		0	.02	.01	5.1	0
16	.02	.02	.03	0	0	.02		0	.01	0	.22	0
17	.03	.05	.02	0	0	0		.75	0	0	.06	0
18	.98	.26	.01	0	0	0		.12	0	.14	.03	.02
19	.18	.06	.01	0	0	0		.01	0	.05	.01	5.0
20	.03	.18	.01	0	0	0		0	0	.01	.01	.50
21	.02	1.2	.01	0	0	0		0	.49	.01	13	.20
22	.01	1.1	.01	.09	.02	0		0	.12	0	.49	.10
23	.01	1.8	0	.49	2.9	0		0	.01	1.7	.14	2.0
24	0	1.2	0	.42	.05	0		0	0	1.7	.12	.50
25	0	.40	0	.05	.01	0		0	0	.06	.14	.20
26	.08	.08	.01	.02	0	0		0	.01	.01	3.5	.10
27	2.8	.40	2.0	.01	0	0		.55	.02	.01	1.0	.06
28	.35	.04	.50	.01	0	0		.44	2.7	.04	.80	.05
29	.06	.12	.10	0	-----	0		.27	.44	.02	2.0	.10
30	.06	.10	.05	0	-----	0		.06	.22	1.5	.50	3.4
31	1.4	-----	1.5	0	-----	0	-----	.02	-----	.36	3.0	-----
TOTAL	8.50	13.69	5.24	2.98	3.70	1.72	0	2.56	5.26	11.64	50.95	22.12
MEAN	.27	.46	.17	.096	.13	.056	0	.083	.18	.38	1.64	.74
MAX	2.8	3.0	2.0	1.5	2.9	1.7	0	.75	2.7	3.2	13	5.0
MIN	0	.01	0	0	0	0	0	0	0	0	.01	0
AC-FT	17	27	10	5.9	7.3	3.4	0	5.1	10	23	101	44

CAL YR 1969 TOTAL 131.84 MEAN .36 MAX 11 MIN 0 AC-FT 262
WTR YR 1970 TOTAL 128.36 MEAN .35 MAX 13 MIN 0 AC-FT 255

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-27	1100	3.51	75	8-26	/1030	3.77	92
8-8	2000	3.76	91	9-19	/1630	4.33	135
8-21	1400	4.42	143				

/ About.

NOTE.--No gage-height record Aug. 26 to Sept. 29.

CAROLINE ISLANDS, YAP ISLANDS

47

16892900 Pemgoy Stream, Yap

LOCATION.--Lat 9°31'07" N., long 138°06'18" E., Yap, on right bank at Talagu, 100 ft upstream from Talagu Stream, and 0.8 mile upstream from mouth.

DRAINAGE AREA.--0.17 sq mi.

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 100 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 207 cfs Sept. 19 (gage height, 4.47 ft), from rating curve extended above 11 cfs; no flow for many days.

Period of record: Maximum discharge, 207 cfs Sept. 19, 1970 (gage height, 4.47 ft), from rating curve extended above 11 cfs; no flow for many days each year.

REMARKS.--Records fair. No diversion above station.

Discharge measurement made prior to beginning of continuous discharge record

Sept. 23, 1965..... 0.45 cfs

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-		0	0	0	0.04	1.8
2						-		0.02	0	0	5.5	4.6
3						-		0	0	0	.63	2.0
4						-		0	0	0	1.0	.26
5						-		0	0	1.0	1.4	.88
6						-		0	0	.03	.63	.56
7						-		0	0	.01	1.4	.12
8						-		0	0	.05	.26	.12
9	0.10					-		0	.01	.01	.92	.16
10						-		0	0	.50	1.4	.20
11						-		0	0	.25	.18	.14
12						-		0	0	.05	.16	.08
13						-		0	0	1.0	.08	.06
14						-		0	0	.25	.06	.06
15						-		0	0	.05	.04	.07
16						-		0	0	.03	.05	.05
17						-		0	0	1.7	.14	.04
18						-		0	0	.26	.05	.04
19						-		0	0	.07	.04	.04
20						-		0	0	.26	.02	.05
21						0		0	.03	.06	.02	.12
22						0		0	0	.07	.03	4.3
23						0		0	.03	.26	.04	3.9
24						0		0	.03	.07	.02	.34
25						0		0	.01	.06	0	.10
26						0		0	.16	.06	.04	.06
27						0		0	.05	.04	.09	.04
28						0		0	.01	.06	.06	.03
29						0		0	0	2.4	.05	.07
30					-----	0		0	0	.18	.04	.04
31		-----			-----	0	-----	0	-----	.07	1.2	-----
TOTAL						-	0	0.02	0.33	8.85	14.33	20.33
MEAN						-	0	0.001	0.011	0.285	0.462	0.678
MAX						-	0	0.02	0.16	2.4	5.5	4.6
MIN						-	0	0	0	0	0	0.03
AC-FT						-	0	0.04	0.7	18	28	40

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL MEAN MAX MIN AC-FT

PEAK DISCHARGE (BASE, 70 CFS).--No peak above base.

* Result of discharge measurement.

CAROLINE ISLANDS, YAP ISLANDS

16892900 Pemgoy Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.01	.56	0	.01			0	.07	.30	1.8	.16
2	.01	.01	.10	0	.01			.01	.26	.23	3.4	.23
3	.01	.01	.56	.50	.01			.02	3.3	.12	.44	3.3
4	.01	0	.20	.10	.01			.02	1.0	.06	5.7	2.1
5	.01	0	.09	.06	.01			0	.20	4.6	10	.34
6	.02	0	.09	.04	0			.21	.14	.71	.56	.16
7	.02	.05	1.0	.02	0			.07	.20	.16	.14	.20
8	.02	.10	.09	.01	0			.20	.08	.09	.08	6.0
9	.02	.30	.06	.01	0			.04	.07	.07	.07	1.4
10	.02	.15	.05	.01	0			.02	.08	.14	.07	5.7
11	.05	.05	.05	.50	0			.06	.20	1.8	.09	1.6
12	.05	.02	.04	.25	0			.06	.90	4.8	1.0	1.6
13	7.0	.02	.03	.10	0			.08	.56	7.0	.50	.34
14	4.0	.01	.03	.07	0			.20	.10	3.6	.12	.16
15	2.7	.01	.04	.05	0			.08	.06	.34	.18	.10
16	5.7	.01	.04	.03	0			.89	.04	.09	3.2	.08
17	4.2	.01	.05	.02	0			.39	.03	.08	.26	.10
18	.92	0	.23	.02	0			.07	.03	.08	.10	.39
19	.71	0	.08	.01	0			.07	.02	.06	.09	.26
20	.10	0	.06	.01	0			.14	.02	.05	.09	.10
21	.71	0	.04	.01	0			.30	.01	.08	.07	.09
22	.18	0	.06	.01	0			.18	.12	1.8	.06	.07
23	.07	0	.10	.01	0			.18	1.8	17	.05	.07
24	.06	0	.06	.02	0			.08	2.9	1.2	.06	3.3
25	.04	0	.30	.01	0			.01	1.0	4.0	.06	.39
26	.04	0	.10	.01	0			0	.12	1.5	.06	.56
27	.04	0	.06	.01	0			0	.06	2.7	.06	1.0
28	.03	.01	.06	.01	0			0	.05	7.2	.04	.92
29	.02	.01	.04	.01	-----			0	.04	6.6	2.2	3.7
30	.02	.01	.01	.01	-----			0	.04	7.8	.63	.26
31	.02	-----	0	.01	-----		-----	.08	-----	1.0	.50	-----
TOTAL	26.82	.79	4.28	1.93	.05	0	0	3.46	13.50	75.26	31.68	34.68
MEAN	.87	.026	.14	.062	.002	0	0	.11	.45	2.43	1.02	1.16
MAX	7.0	.30	1.0	.50	.01	0	0	.89	3.3	17	1.0	6.0
MIN	.01	0	0	0	0	0	0	0	.01	.05	.04	.07
AC-FT	53	1.6	8.5	3.8	.1	0	0	6.9	27	149	63	69

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 192.45 MEAN .53 MAX 17 MIN 0 AC-FT 382

PEAK DISCHARGE (BASE, 70 CFS).--July 23 (0500) 161 cfs (4.06 ft); Aug. 5 (0630) 104 cfs (3.45 ft).

CAROLINE ISLANDS, YAP ISLANDS

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16892900 Pemgoy Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	1.5	.07	2.5	.48	.02		.15	.06	4.8	.09	3.1
2	.08	.40	.05	.14	.30	.02		.06	.06	.44	.05	4.7
3	.08	.10	.04	.06	.05	.01		.01	.04	.20	.05	4.0
4	.06	4.0	.04	.06	.03	.01		0	.04	.68	.05	1.2
5	.04	3.0	.05	.04	.02	.01		0	.23	2.5	.04	.39
6	3.0	.50	.04	.03	.02	.01		0	.08	.16	.32	.27
7	.20	.20	.10	.02	.01	.01		0	.03	.23	.23	.27
8	.10	.10	.20	.02	.01	.01		0	.01	.14	3.5	.18
9	.07	.10	.50	.02	.01	0		0	0	.08	1.5	.11
10	.06	.06	.30	.02	0	0		0	0	.06	3.0	.06
11	.04	.05	.15	.01	0	0		.66	0	.04	7.3	.06
12	.03	.04	.10	.01	.01	0		.07	.24	.03	2.1	.05
13	.12	.03	.05	.01	.01	0		.03	.63	.02	.56	.04
14	.16	.03	.04	.01	.01	.01		0	.06	.06	.14	.03
15	.06	.02	.10	.01	.01	2.8		0	.05	.18	6.8	.03
16	.06	.03	.10	0	.02	.09		.01	.03	.05	.40	.02
17	.08	.10	.05	0	.02	.05		2.3	.03	.01	.15	.02
18	1.5	.30	.04	0	.03	.03		.20	.02	.02	.05	.14
19	.44	.08	.03	0	.02	.02		.07	.01	.02	.03	8.8
20	.10	.14	.03	0	.01	.02		.03	0	.06	.02	.68
21	.06	1.5	.02	.01	0	.01		.02	.79	.06	15	.16
22	.06	1.4	.02	.50	.06	0		.01	.39	.01	.80	.12
23	.05	2.0	.02	1.1	5.9	0		.01	.06	2.6	.20	3.3
24	.04	1.5	.01	1.7	.12	.01		0	.02	1.9	.20	.80
25	.04	.50	.01	.16	.06	0		0	.01	.10	.20	.27
26	.12	.18	.02	.08	.04	0		0	.08	.04	4.4	.18
27	1.8	.50	3.0	.06	.03	0		1.7	.12	.02	1.5	.12
28	.80	.09	.80	.04	.03	0		.92	4.2	.02	1.2	.11
29	.16	.16	.15	.03	-----	0		.80	.92	.02	2.3	.11
30	.18	.30	.05	.03	-----	0		.16	.26	2.5	.68	4.7
31	2.0	-----	1.1	.03	-----	0	-----	.07	-----	.44	3.2	-----
TOTAL	11.69	18.91	7.28	6.70	7.31	3.14	0	7.28	8.47	17.49	56.06	34.02
MEAN	.38	.63	.23	.22	.26	.10	0	.23	.28	.56	1.81	1.13
MAX	3.0	4.0	3.0	2.5	5.9	2.8	0	2.3	4.2	4.8	15	8.8
MIN	.03	.02	.01	0	0	0	0	0	0	.01	.02	.02
AC-FT	23	38	14	13	15	6.2	0	14	17	35	111	67

CAL YR 1969 TOTAL 198.44 MEAN .54 MAX 17 MIN 0 AC-FT 394
WTR YR 1970 TOTAL 178.35 MEAN .49 MAX 15 MIN 0 AC-FT 354

PEAK DISCHARGE (BASE, 70 CFS)

/ About,
From floodmark.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8- 8	1930	3.13	79	8-26	1800	3.05	74
8-15	0630	3.08	76	9-19	1630	4.47	207
8-21	/1300	/4.39	198				

CAROLINE ISLANDS, YAP ISLANDS

16893000 Talagu Stream, Yap

LOCATION.--Lat 9°31'08" N., long 138°06'13" E., Yap, on left bank at Talagu, 300 ft upstream from mouth, and 0.9 mile upstream from mouth of Pemgoy Stream.

DRAINAGE AREA.--0.07 sq mi,

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 130 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 145 cfs Aug. 21 (gage height, 3.30 ft), from rating curve extended above 29 cfs; no flow for many days.

Period of record: Maximum discharge, 145 cfs Aug. 21, 1970 (gage height, 3.30 ft), from rating curve extended above 29 cfs; no flow for many days each year.

REMARKS.--Records fair. No diversion above station.

Discharge measurements made prior to beginning of continuous discharge record

Sept. 20, 1965..... 0.05 cfs

23, 1965..... .19 cfs

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-		0		0	0	1.4
2						-		.01		0	4.7	3.4
3						-		0		0	1.2	1.7
4						-		0		0	1.7	.29
5						-		0		1.0	1.8	.67
6						-		0		.01	1.0	.89
7						-		0		0	1.5	.08
8						-		0		.03	.29	.06
9	✓ 0.08					-		0		0	1.3	.10
10						-		0		.50	.17	.10
11						-		0		.25	.17	.10
12						-		0		.05	.22	.03
13						-		0		1.0	.08	.01
14						-		0		.30	.03	.01
15						-		0		.05	.01	.01
16						-		0		.02	.01	0
17						-		0		1.5	.08	0
18						-		0		.25	.03	0
19						-		0		.05	.01	0
20						-		0		.25	0	0
21						0		0		.05	0	.02
22						0		0		.05	0	3.1
23						0		0		.25	.01	3.1
24						0		0		.05	0	.63
25						0		0		.04	0	.13
26						0		0		.01	.01	.04
27						0		0		0	.05	.01
28						0		0		0	.05	0
29*						0		0		2.2	.04	.06
30						0		0		.29	0	.01
31						0		0		.03	1.5	
TOTAL						-	0	0.01	0	8.23	15.96	15.95
MEAN						-	0	0.0003	0	0.265	0.515	0.532
MAX						-	0	0.01	0	2.2	4.7	3.4
MIN						-	0	0	0	0	0	0
AC-FT						-	0	0.02	0	16	32	32

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL MEAN MAX MIN AC-FT

PEAK DISCHARGE (BASE, 50 CFS).--Aug. 2 (1300) 66 cfs (2.36 ft).

* Result of discharge measurement

CAROLINE ISLANDS, YAP ISLANDS

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16893000 Talagu Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.96	0				0	.05	.59	1.2	.06
2	0	0	.13	0				0	.20	.10	2.1	.06
3	0	0	1.0	.31				0	2.0	.03	.38	1.0
4	0	0	.38	.06				0	.75	0	3.8	1.2
5	0	0	.13	.04				0	.15	2.8	7.0	.17
6	0	0	.17	.02				.60	.10	.29	.63	.06
7	0	.02	2.1	.01				.04	.15	.05	.10	.08
8	0	.06	.10	.01				.42	.05	.03	.04	3.9
9	0	.29	.05	0				.01	.05	.02	.17	.89
10	0	.13	.02	0				0	.05	.03	.08	3.9
11	0	.03	0	.43				0	.15	.63	.13	1.2
12	0	.01	0	.22				0	.50	2.7	.63	.89
13	4.7	0	0	.10				.01	.25	5.3	.22	.13
14	3.4	0	0	.06				.13	.10	2.3	.04	.05
15	2.6	0	0	.03				.05	.05	.17	.08	.03
16	4.7	0	0	.02				1.0	.02	.03	2.1	.01
17	4.0	0	0	.01				.63	.01	.02	.10	.03
18	1.4	0	.29	0				.02	.01	.03	.03	.82
19	1.3	0	.06	0				.04	.01	.01	.06	.13
20	.13	0	.04	0				.29	0	0	.08	.04
21	1.7	0	.02	0				.38	0	.03	.01	.01
22	.38	0	.03	0				.08	.05	1.0	0	.01
23	.06	0	.08	0				.08	1.0	12	0	.01
24	.03	0	.04	0				.01	2.0	.63	0	2.2
25	.01	0	.29	0				0	.70	2.5	0	.17
26	0	0	.13	0				0	.10	.76	.01	.22
27	0	0	.06	0				0	.04	1.8	.04	.89
28	0	0	.02	0				0	.01	4.5	0	.76
29	0	0	.01	0	-----			0	0	3.9	1.5	2.7
30	0	0	0	0	-----			0	0	5.2	.38	.10
31	0	-----	0	0	-----			.05	-----	.63	.22	-----
TOTAL	24.41	.54	6.11	1.37	0	0	0	3.84	8.55	48.08	21.13	21.72
MEAN	.79	.018	.20	.044	0	0	0	.12	.28	1.55	.68	.72
MAX	4.7	.29	2.1	.48	0	0	0	1.0	2.0	12	7.0	3.9
MIN	0	0	0	0	0	0	0	0	0	0	0	.01
AC-FT	48	1.1	12	2.7	0	0	0	7.6	17	95	42	43

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 135.75 MEAN .37 MAX 12 MIN 0 AC-FT 269

PEAK DISCHARGE (BASE, 50 CFS)

NOTE.--No gage-height record May 27 to June 28.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
7-13	0100	2.18	55	8-5	0700	2.62	85
7-23	0500	3.22	137				

CAROLINE ISLANDS, YAP ISLANDS

16893000 Talagu Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	1.7	.06	2.4	.21	0		0	0	3.3	.01	1.5
2	.03	.29	.04	.17	.13	0		0	0	.29	0	3.9
3	.03	.08	.02	.05	.01	0		0	0	.05	0	3.1
4	.01	2.6	.01	.03	0	0		0	0	.68	0	1.4
5	0	3.1	.02	.01	0	0		0	.05	1.6	0	.22
6	2.5	.63	.02	.01	0	0		0	0	.06	.02	.22
7	.17	.13	.06	.01	0	0		0	0	.22	.08	.29
8	.06	.04	.10	.01	0	0		0	0	.03	2.5	.13
9	.05	.08	.22	.01	0	0		0	0	.01	1.0	.04
10	.03	.03	.17	.01	0	0		0	0	0	2.4	.01
11	.01	.02	.13	0	0	0		.09	0	0	4.5	.01
12	.01	.02	.04	0	0	0		0	.13	0	1.2	0
13	.05	.01	.01	0	0	0		0	.08	0	.13	0
14	.13	0	.01	.01	0	0		0	0	0	.01	0
15	.04	0	.02	0	0	1.7		0	0	.01	5.3	0
16	.02	.02	.08	0	0	0		0	0	0	.06	0
17	.05	.10	.03	0	0	0		1.3	0	0	0	0
18	.63	.38	.02	0	0	0		.10	0	.01	0	.04
19	.38	.10	.01	0	0	0		0	0	.01	0	5.4
20	.06	.13	.01	0	0	0		0	0	0	0	.50
21	.02	1.5	.01	0	0	0		0	.43	0	12	.06
22	.01	1.4	.01	.37	.05	0		0	.06	0	.29	.02
23	.01	1.9	0	.29	3.0	0		0	0	1.4	.01	1.6
24	0	1.7	0	1.0	.05	0		0	0	1.5	0	1.2
25	0	.29	0	.04	.01	0		0	0	.02	0	.10
26	.02	.08	.01	.01	0	0		0	.02	0	3.3	.06
27	2.1	.29	2.5	0	0	0		.48	.01	0	1.0	.03
28	.63	.06	.76	0	0	0		.17	3.5	0	.76	.06
29	.08	.13	.08	0	-----	0		.10	1.0	0	1.7	.10
30	.10	.22	.04	0	-----	0		.01	.17	1.8	.22	2.9
31	1.3	-----	1.7	0	-----	0	-----	0	-----	.38	2.2	-----
TOTAL	8.57	17.03	6.19	4.43	3.46	1.7	0	2.25	5.45	11.37	38.69	22.89
MEAN	.28	.57	.20	.14	.12	.055	0	.073	.18	.37	1.25	.76
MAX	2.5	3.1	2.5	2.4	3.0	1.7	0	1.3	3.5	3.3	12	5.4
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	17	34	12	8.8	6.9	3.4	0	4.5	11	23	77	45

CAL YR 1969 TOTAL 136.48 MEAN .37 MAX 12 MIN 0 AC-FT 271
WTR YR 1970 TOTAL 122.03 MEAN .33 MAX 12 MIN 0 AC-FT 242

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	0700	2.63	85	8-21	1300	3.30	145
8-8	2000	2.15	53	8-26	1800	2.31	63
8-15	0630	2.34	65	9-19	1700	3.23	138

/ About.
From floodmark in well.

CAROLINE ISLANDS, YAP ISLANDS

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16893100 Burong Stream, Yap

LOCATION.--Lat 9°31'59" N, long 138°07'05" E., Yap, on left bank at Dugor and 0.1 mile upstream from mouth.

DRAINAGE AREA.--0.29 sq mi.

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 15 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 184 cfs Sept, 19 (gage height, 4.33 ft), from rating curve extended above 15 cfs; no flow for many days.

Period of record: Maximum discharge, 184 cfs Sept, 19, 1970 (gage height, 4.33 ft), from rating curve extended above 15 cfs; no flow for many days each year.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-		0	0	0	0.04	2.3
2						-		.05	0	0	5.5	6.9
3						-		0	0	0	1.8	5.5
4						-		0	0	0	7.4	2.2
5						-		0	0	.11	3.4	2.4
6						-		0	0	.02	1.4	2.3
7						-		0	0	0	2.8	.63
8						-		0	0	0	.95	.38
9						-		0	0	0	1.2	.60
10						-		0	0	.23	.52	.90
11						-		0	0	.64	1.1	.60
12						-		0	0	.08	1.0	.24
13						-		0	0	.48	.42	.12
14						-		0	0	.66	.17	.06
15						-		0	0	.10	.05	.12
16						-		0	0	.41	.22	.04
17						-		0	0	2.5	.66	.01
18						-		0	0	.99	.19	0
19						-		0	0	.17	.12	.01
20						-		0	0	.70	.04	.01
21						-		0	0	.12	.08	3.1
22						0		0	0	.26	.12	7.3
23						0		0	0	1.3	.04	6.9
24						0		0	0	.24	0	1.2
25						0		0	.08	.21	0	.38
26						0		0	0	.06	.06	.19
27						0		0	0	0	.28	.08
28						0		0	0	.04	.08	.03
29						0		0	0	3.2	.02	.03
30						0		0	0	.60	.01	.01
31						0		0		.12	2.6	
TOTAL						-	0	0.05	0.08	13.24	32.27	44.54
MEAN						-	0	0.002	0.003	0.427	1.04	1.48
MAX						-	0	.05	0.08	3.2	7.4	7.3
MIN						-	0	0	0	0	0	0
AC-FT						-	0	0.1	0.2	26	64	88

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL MEAN MAX MIN AC-FT

PEAK DISCHARGE (BASE, 75 CFS).--No peak above base.

CAROLINE ISLANDS, YAP ISLANDS
16893100 Burong Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	2.5	0				0	0	.45	1.0	.38
2	0	0	.28	0				0	.22	1.1	4.8	.63
3	0	0	1.0	.08				0	3.7	.52	.90	4.1
4	0	0	.35	.02				0	1.6	.17	7.1	3.0
5	0	0	.21	.01				0	.63	8.9	17	.70
6	0	0	.90	0				2.0	1.8	1.2	1.2	.42
7	0	.07	3.3	0				.12	.75	.33	.49	.46
8	0	.24	.30	.01				.52	.21	.17	.30	9.7
9	0	.46	.12	.01				.02	.12	.06	.30	1.2
10	0	.17	.04	0				0	.17	.30	1.1	6.8
11	0	.04	.01	.13				0	.60	1.0	.63	1.8
12	0	.01	0	.10				0	.86	6.4	.60	2.1
13	11	.01	0	.05				0	1.0	7.3	.56	.85
14	6.2	0	0	.02				0	.26	5.8	.33	.42
15	5.4	0	0	.01				0	.06	.75	.28	.28
16	11	0	0	.01				1.4	.02	.26	4.8	.24
17	8.9	0	0	0				1.1	0	.14	.66	.17
18	3.1	0	.49	0				.14	0	.10	.38	.12
19	2.7	0	.12	0				.02	0	.06	.30	.14
20	.46	0	.03	0				.49	0	.04	.30	.26
21	3.4	0	.01	0				.70	0	.82	.17	.30
22	.52	0	.37	0				.30	.88	3.2	.08	.17
23	.21	0	.30	0				.35	2.0	25	.08	.12
24	.08	0	.10	0				.12	3.0	1.9	.06	3.2
25	.03	0	.38	0				.01	1.6	5.0	.19	.70
26	.02	0	.26	0				0	.38	2.3	.24	.91
27	.02	0	.08	0				0	.14	1.1	.26	1.0
28	.01	0	.03	0				0	.03	12	.21	.90
29	0	0	.01	0	-----			0	0	8.6	3.5	3.8
30	0	0	.01	0	-----			0	0	13	1.2	.75
31	0	-----	0	0	-----		-----	0	-----	1.5	.70	-----
TOTAL	53.05	1.00	11.20	.45	0	0	0	7.29	20.03	109.47	49.72	45.62
MEAN	1.71	.033	.36	.015	0	0	0	.24	.67	3.53	1.60	1.52
MAX	11	.46	3.3	.13	0	0	0	2.0	3.7	25	17	9.7
MIN	0	0	0	0	0	0	0	0	0	.04	.06	.12
AC-FT	105	2.0	22	.9	0	0	0	14	40	217	99	90

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 297.83 MEAN .82 MAX 25 MIN 0 AC-FT 591

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-13	1300	3.32	78	8-5	0700	3.66	107
7-23	0500	4.18	162				

CAROLINE ISLANDS, YAP ISLANDS

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16893100 Burong Stream, Yap--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	2.3	.37	3.0	.37	.03		.10	.49	6.5	.34	5.1
2	.12	.55	.20	.50	.49	.02		0	.09	2.3	.16	9.9
3	.09	.81	.12	.25	.09	.01		0	.01	.60	.09	6.1
4	.05	7.5	.07	.10	.03	.01		0	0	.46	.06	1.0
5	.03	6.1	.07	.05	.02	0		0	.04	3.2	.04	.40
6	4.9	1.0	.07	.05	.01	0		0	.05	.37	.20	.22
7	.46	.37	.12	.04	.01	0		0	.01	.25	.40	.52
8	.18	.18	.16	.03	.01	0		0	0	.18	4.9	.28
9	.10	.10	.52	.03	.01	0		0	0	.40	4.0	.10
10	.07	.07	.43	.02	0	0		0	0	.40	7.3	.08
11	.04	.05	.34	.01	0	0		.32	0	.10	13	.04
12	.03	.03	.16	.01	0	0		.01	.12	.05	3.2	.02
13	.30	.01	.08	0	0	0		0	.34	.03	1.2	.02
14	.40	.01	.16	0	0	0		0	.14	.03	.34	.01
15	.09	.01	.28	0	0	2.9		0	.07	.12	15	.01
16	.06	.02	.40	0	0	.14		0	.03	.03	.96	.01
17	.06	.03	.14	0	.07	.04		1.7	.01	.01	.31	.01
18	.25	.55	.08	0	.09	.05		.37	0	0	.14	1.6
19	.60	.16	.06	0	.02	.04		.02	0	0	.08	14
20	.37	1.8	.04	0	.01	.01		.02	0	1.6	.05	1.6
21	.18	5.0	.03	.01	0	.01		.14	.47	.55	20	.73
22	.09	2.4	.02	1.3	.28	0		.01	.25	.14	2.2	.52
23	.06	3.6	.02	1.0	7.4	0		0	.03	3.6	.52	3.0
24	.03	2.4	.01	2.2	5.8	0		.01	.01	5.1	.18	4.5
25	.03	.86	.01	.25	.10	0		.01	0	.43	.09	1.2
26	.06	.37	.01	.08	.06	0		0	.01	.14	7.2	.46
27	3.0	1.0	5.0	.04	.05	0		1.0	.07	.08	3.4	.22
28	.68	.34	1.0	.03	.03	0		1.2	7.0	.91	2.5	.64
29	.20	1.6	.20	.02	-----	0		2.6	1.9	.25	.43	1.1
30	.25	1.6	.10	.02	-----	0		.37	3.4	8.8	.31	6.6
31	1.8	-----	4.0	.01	-----	0	-----	.16	-----	1.4	3.6	-----
TOTAL	14.76	40.82	14.27	9.05	14.95	3.26	0	8.04	14.54	38.03	92.20	59.99
MEAN	.48	1.36	.46	.29	.53	.11	0	.26	.48	1.23	2.97	2.00
MAX	4.9	7.5	5.0	3.0	7.4	2.9	0	2.6	7.0	8.8	20	14
MIN	.03	.01	.01	0	0	0	0	0	0	0	.04	.01
AC-FT	29	81	28	18	30	6.5	0	16	29	75	183	119

CAL YR 1969 TOTAL 302.43 MEAN .83 MAX 25 MIN 0 AC-FT 600
WTR YR 1970 TOTAL 309.91 MEAN .85 MAX 20 MIN 0 AC-FT 615

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-15	0700	3.92	132	8-26	1830	3.32	78
8-21	0130	3.56	98	9-19	1630	4.33	184

NOTE.--No gage-height record Dec, 22 to Jan, 21.

CAROLINE ISLANDS, YAP ISLANDS

16893300 Bileiy Spring, Gagil-Tomil

LOCATION.--Lat 9°32'19" N., long 138°10'59" E., Gagil-Tomil, on right bank at Binau, 200 ft downstream from main spring, and 0.6 mile upstream from mouth.

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 70 ft (from topographic map).

EXTREMES.--Period of record: Maximum daily discharge, 1.4 cfs Aug. 5, 1969; no flow for many days in 1968 and 1969.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-	0.08	0.02		0	0.05	0.19
2						-	.08	.25		0	.11	.39
3						-	.09	.10		0	.11	.46
4						-	.09	.09		0	.05	.42
5						-	.09	.08		.06	.03	.39
6						-	.08	.08		0	.05	.36
7						-	.08	.07		0	.05	.33
8						-	.08	.06		0	.05	.27
9						-	.08	.05		0	.09	.24
10	40.11					-	.06	.05		0	.09	.24
11						-	.06	.04		.01	.15	.21
12						-	.08	.04		.01	.15	.19
13						-	.06	.03		.01	.10	.17
14						-	.10	.03		.01	.10	.15
15						-	.08	.02		.01	.09	.15
16						-	.06	.02		0	.09	.15
17						-	.05	.01		.01	.08	.15
18						-	.04	.01		0	.08	.15
19						-	.04	.01		0	.08	.15
20						.08	.03	.01		.01	.08	.15
21						.06	.03	0		.01	.08	.13
22						.06	.03	0		.01	.08	.15
23						.06	.03	0		.01	.08	.15
24						.08	.05	0		.01	.08	.15
25						.09	.03	0		.01	.08	.13
26						.09	.03	0		.01	.08	.13
27						.09	.02	0		.01	.06	.11
28						.09	.02	0		.01	.05	.11
29						.09	.02	0		.06	.05	.11
30						.09	.02	0		.05	.06	.11
31						.08	-----	0	-----	.05	.08	-----
TOTAL						-	1.69	1.07	0	0.37	2.46	6.19
MEAN						-	0.056	0.035	0	0.012	0.079	0.206
MAX						-	0.10	0.25	0	0.06	0.15	0.46
MIN						-	0.02	0	0	0	0.03	0.11
AC-FT						-	3.4	2.1	0	0.7	4.9	12

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -

* Result of discharge measurement.

NOTE.--No gage-height record Apr. 11 to May 23.

CAROLINE ISLANDS, YAP ISLANDS

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16893300 Bileiy Spring, Gagil-Tomil--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.17	.13	.01				0	.01	.02	.46	.11
2	.09	.17	.05	.01				0	.01	.02	.46	.11
3	.11	.15	.06	.01				0	.05	.01	.39	.11
4	.09	.13	.06	.01				0	.02	.02	.42	.09
5	.09	.13	.06	.01				0	.01	.15	1.4	.09
6	.11	.13	.06	0				.02	.02	.09	.90	.09
7	.08	.13	.06	0				0	.01	.08	.70	.09
8	.08	.11	.06	0				0	.01	.06	.58	.19
9	.08	.11	.06	0				0	.01	.05	.54	.17
10	.08	.09	.06	0				0	.01	.06	.46	.36
11	.08	.08	.06	0				0	.01	.03	.46	.33
12	.11	.08	.06	0				0	.02	.11	.42	.33
13	.74	.08	.06	0				0	.01	.30	.36	.33
14	.66	.06	.05	0				0	.01	.30	.30	.30
15	.78	.06	.05	0				0	.02	.21	.30	.27
16	.96	.05	.05	0				.02	.05	.21	.42	.24
17	.82	.05	.05	0				.02	.03	.19	.39	.21
18	.82	.05	.05	0				.01	.05	.17	.36	.19
19	.86	.05	.03	0				0	.03	.15	.33	.17
20	.42	.05	.03	0				.01	.01	.13	.30	.16
21	.36	.03	.03	0				.02	.01	.25	.27	.14
22	.33	.03	.02	0				.01	.03	.50	.24	.14
23	.30	.03	.02	0				.03	.02	1.0	.19	.13
24	.27	.03	.02	0				.01	.03	.50	.17	.22
25	.24	.03	.02	0				.01	.05	.50	.15	.19
26	.24	.02	.02	0				0	.02	.30	.15	.22
27	.21	.02	.01	0				0	.02	.20	.13	.24
28	.20	.02	.01	0				0	.01	.70	.13	.22
29	.19	.02	.01	0				0	.01	.50	.13	.24
30	.17	.02	.01	0				0	.02	.90	.11	.24
31	.17	-----	.01	0				0	-----	.50	.11	-----
TOTAL	9.85	2.18	1.33	.05	0	0	0	.16	.62	8.21	11.73	5.92
MEAN	.32	.073	.043	.002	0	0	0	.005	.021	.26	.38	.20
MAX	.96	.17	.13	.01	0	0	0	.03	.05	1.0	1.4	.36
MIN	.08	.02	.01	0	0	0	0	0	.01	.01	.11	.09
AC-FT	20	4.3	2.6	.1	0	0	0	.3	1.2	16	23	12

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 40.05 MEAN .11 MAX 1.4 MIN 0 AC-FT 79

CAROLINE ISLANDS, YAP ISLANDS

16893300 Bileiy Spring, Gagil-Tomil--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.15	.18	.22	.06	.02	.01	.02	.02	.12	.08	.29
2	.22	.15	.18	.22	.06	.02	.01	.02	.01	.11	.08	.48
3	.22	.15	.16	.22	.06	.02	.01	.01	.01	.10	.08	.51
4	.21	.21	.16	.21	.05	.02	.01	.01	.02	.10	.08	.51
5	.21	.38	.16	.19	.05	.02	.01	.01	.02	.10	.07	.42
6	.22	.32	.16	.19	.05	.02	.01	.01	.01	.09	.07	.39
7	.19	.30	.15	.18	.04	.02	.01	.01	.01	.09	.07	.33
8	.18	.26	.15	.18	.04	.02	.01	.01	.01	.09	.07	.29
9	.16	.24	.15	.16	.05	.02	.01	.01	.01	.08	.07	.26
10	.15	.21	.14	.14	.04	.02	.01	.01	.01	.08	.08	.23
11	.14	.19	.14	.13	.04	.02	.01	.03	.01	.08	.27	.20
12	.13	.19	.13	.12	.04	.02	.01	.02	.02	.08	.23	.19
13	.16	.18	.13	.11	.04	.02	.01	.01	.01	.08	.21	.17
14	.14	.18	.13	.11	.03	.02	.01	.01	.02	.07	.20	.16
15	.12	.16	.13	.10	.03	.04	.01	.01	.01	.06	.29	.15
16	.10	.15	.11	.10	.03	.02	.01	.01	.01	.06	.27	.14
17	.13	.14	.11	.09	.03	.02	.01	.02	.01	.06	.23	.14
18	.11	.14	.11	.09	.03	.02	.01	.01	.01	.06	.20	.13
19	.11	.13	.11	.08	.03	.02	.01	.02	.01	.06	.18	.14
20	.10	.14	.11	.09	.03	.02	.01	.01	.01	.06	.15	.14
21	.11	.16	.10	.09	.03	.02	.01	.01	.02	.06	.87	.13
22	.11	.16	.10	.08	.04	.02	.01	.01	.02	.06	.64	.13
23	.11	.18	.10	.08	.09	.01	.01	.02	.02	.06	.51	.16
24	.11	.19	.10	.09	.08	.02	.01	.02	.01	.06	.42	.29
25	.11	.19	.09	.07	.08	.01	.01	.01	.01	.06	.33	.36
26	.10	.19	.09	.07	.06	.01	.01	.01	.02	.06	.36	.29
27	.10	.19	.18	.06	.04	.01	.01	.02	.02	.06	.39	.26
28	.10	.18	.16	.06	.02	.01	.01	.02	.04	.06	.33	.23
29	.10	.19	.15	.06	-----	.01	.01	.02	.05	.06	.31	.21
30	.10	.19	.16	.06	-----	.01	.01	.02	.09	.10	.29	.19
31	.13	-----	.18	.06	-----	.01	-----	.02	-----	.08	.29	-----
TOTAL	4.40	5.79	4.21	3.71	1.27	.56	.30	.45	.55	2.35	7.72	7.52
MEAN	.14	.19	.14	.12	.045	.018	.010	.015	.018	.076	.25	.25
MAX	.22	.38	.18	.22	.09	.04	.01	.03	.09	.12	.87	.51
MIN	.10	.13	.09	.06	.02	.01	.01	.01	.01	.06	.07	.13
AC-FT	8.7	11	8.4	7.4	2.5	1.1	.6	.9	1.1	4.7	15	15

CAL YR 1969 TOTAL 41.09 MEAN .11 MAX 1.4 MIN 0 AC-FT 82
WTR YR 1970 TOTAL 38.83 MEAN .11 MAX .87 MIN .01 AC-FT 77

Discharge measurements made at low-flow partial-record stations during water years 1968-70

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Yap islands						
16892450	Fara Swamp outlets, Yap	Lat 9°29'06" N., long 138°04'06" E., and lat 9°29'12" N., long 138°04'03" E., Yap, 0.9 mile northwest of Lamer and 4.1 miles southwest of Colonia.	0.29	1968-70	10- 9-67 9-25-68 9-20-69 10-16-69 6-14-70 7-30-70 9- 1-70	0.25 .58 .48 .10 .07 .30 4.4
16892460	Galngun Swamp outlet, Yap	Lat 9°29'02" N., long 138°04'23" E., Yap, 0.5 mile northwest of Lamer and 3.9 miles southwest of Colonia.	.16	1968-70	10- 9-67 9-25-68 10-15-68 9-20-69 7-14-70 7-30-70 9- 1-70 9-18-70	.23 .50 1.2 .40 .15 .24 2.8 .15
16892500	Tamaney Stream, Yap	Lat 9°29'45" N., long 138°05'34" E., Yap, at abandoned German dam, 0.5 mile northwest of Inuf, and 2.3 miles southwest of Colonia.	.21	1968-70	8-22-68 9- 4-68 10-17-68 9-19-69 9-30-69 10-14-69 11- 6-69 11-20-69 5-12-70 7-14-70 7-30-70 9- 2-70 9-22-70	.97 .53 3.2 .45 .38 .15 .24 .06 .39 .07 .39 3.8 .38
16892600	Ripu Stream, Yap	Lat 9°30'05" N., long 138°06'02" E., Yap, 1,000 ft upstream from mouth and 1.6 miles southwest of Colonia.	.24	1968-70	3- 7-68 7-29-68 8- 8-68 9- 4-68 9-17-68 10-17-68 12- 6-68 6-14-69 6-28-69 9-19-69 9-29-69 10-16-69 11- 4-69 11-20-69 7-14-70 7-31-70 9- 2-70 9-22-70	.63 3.5 .88 .61 .07 3.3 .25 .50 .15 .43 3.8 .19 .15 .07 .10 .05 3.3 .21
16892700	Thalamar Stream, Yap	Lat 9°30'27" N., long 138°06'05" E., Yap, 5 ft upstream from confluence with Dinay Stream and 1.4 miles southwest of Colonia.	.14	1965, 1968-70	9-23-65 10-10-67 3-23-68 8- 8-68 9- 4-68 10-17-68 6-14-69 6-27-69 9-19-69 9-30-69 10-14-69 11- 4-69 7-14-70 7-30-70 9- 2-70 9-23-70	.48 .24 .04 1.0 1.2 5.6 .36 .12 .52 .64 .32 .25 .08 .74 3.8 .26
16893050	Mabu Stream, Yap	Lat 9°31'07" N., long 138°06'52" E., Yap, 500 ft upstream from mouth and 0.4 mile northwest of Colonia.	.30	1968-70	9-26-68 10-16-68 6-14-69 9-18-69 10- 8-69 11- 4-69 11-20-69 1-21-70 7-14-70 7-30-70 9- 2-70 9-24-70	.14 27 .20 .14 .14 .37 .11 .42 .03 .08 7.2 1.6

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record station during water years 1968-70--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Yap Islands--Continued						
16893310	Bileiy Stream, Gagil-Tomil	Lat 9°32'15" N., long 138°11'11" E., Gagil-Tomil, 0.3 mile downstream from Bileiy Spring, 0.4 mile upstream from mouth, and 0.4 mile south of Gatjapar.	0.15	1968-70	10-10-67 3-20-68 8-19-68 10- 4-68 10-23-68 10-31-68 11-19-68 12- 3-68 1- 7-69 2-10-69 6-13-69 9-19-69 9-29-69 11- 6-69 11-18-69 1-14-70 1-29-70 8-31-70 9-15-70 9-29-70	0.32 .12 .27 .10 .25 .24 .16 .31 .10 0 a.02 .36 .46 .88 .32 .24 .20 1.2 .15 .19
16893350	Yanbilang Stream, Gagil-Tomil	Lat 9°32'45" N., long 138°11'26" E., Gagil-Tomil, 500 ft upstream from mouth and 0.3 mile northeast of Gatjapar.	.03	1968-70	10-10-67 10-14-68 11-19-68 12- 3-68 1- 7-69 2-10-69 4-18-69 6-13-69 10-15-69 11- 6-69 8-31-70 9-29-70	.04 1.6 0 .51 0 0 0 a.01 .02 .12 .71 .07

a Revised.

Discharge measurements made at miscellaneous sites during water years 1968-70

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Yap Islands						
Dalibaech Stream, Yap	Pacific Ocean	Lat 9°30'26" N., long 138°06'06" E., at inflow to reservoir, 20 ft below confluence of Thalomar and Dinay Streams, and 1.4 miles southwest of Colonia.			9-21-65	0.19
					9-23-65	.46

CAROLINE ISLANDS, TRUK ISLANDS

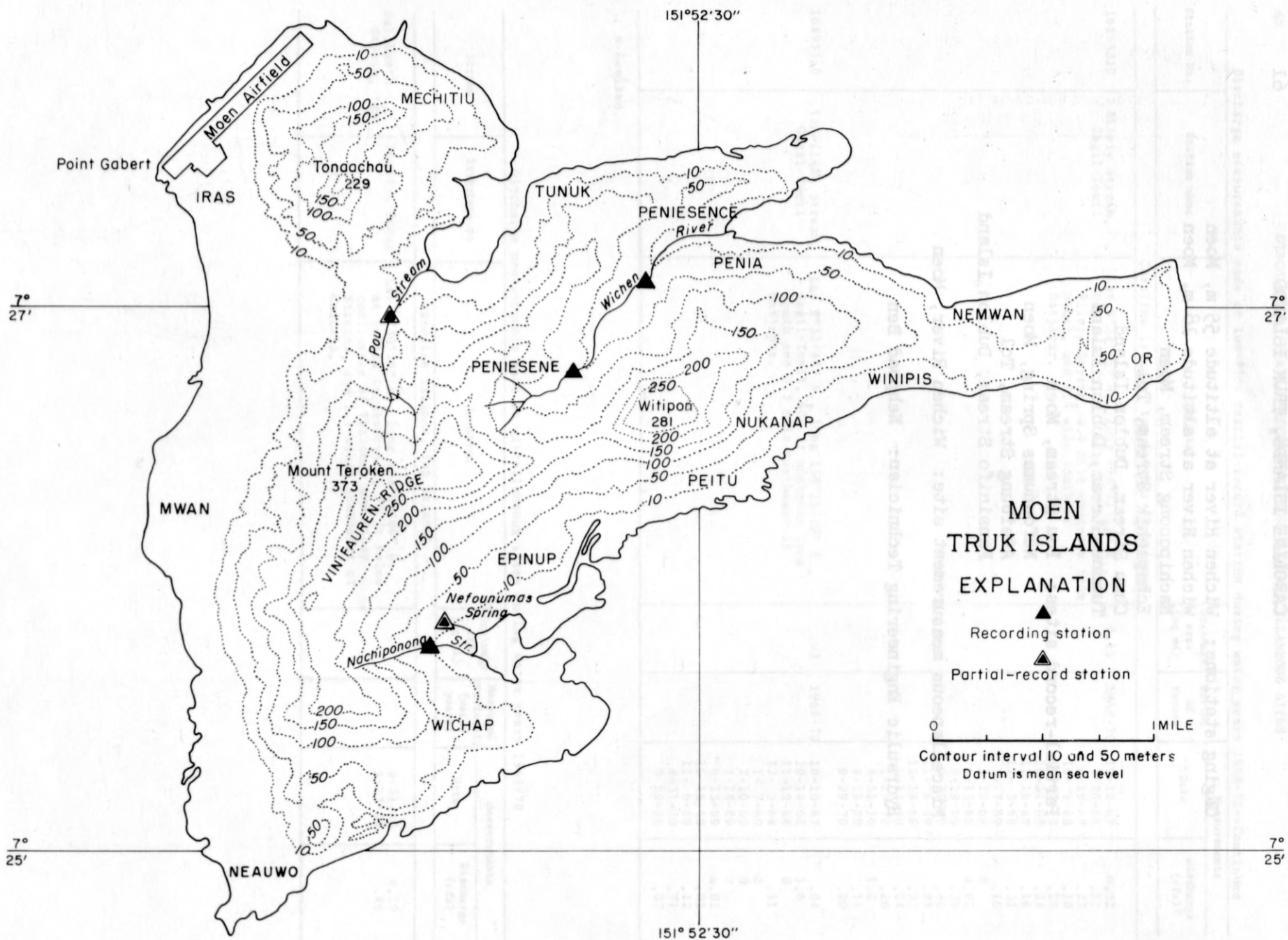
61

Gaging stations: Wichen River at altitude 55 m, Moen
Wichen River at altitude 18 m, Moen
Nachiponong Stream, Moen
Echapachik Stream, Tol
Chun Stream, Dublon Island
Tumunu Stream, Dublon Island

Partial-record sites: Pou Stream, Moen
Nefounumas Spring, Moen
Afeibung Stream, Tol
Fansinifo Stream, Dublon Island

Miscellaneous measurement site: Wichen River, Moen

Hydraulic Engineering Technician: Nehpoad Ben

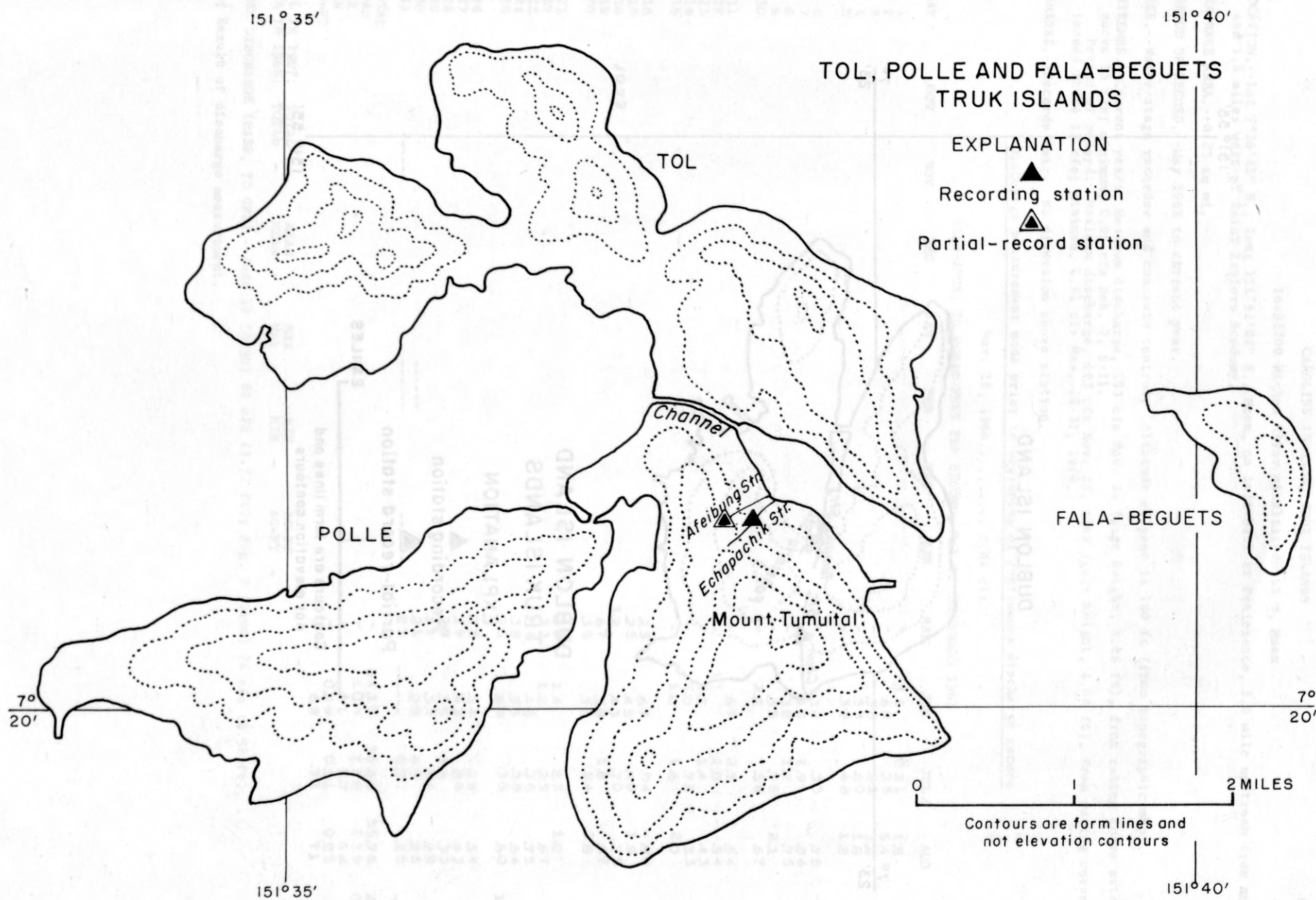


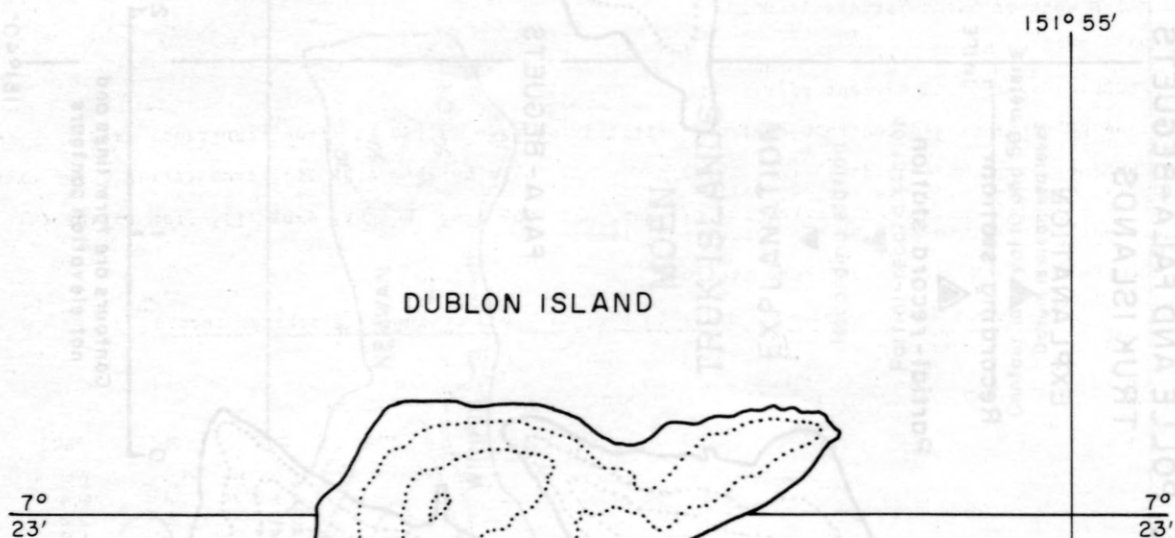
MOEN TRUK ISLANDS EXPLANATION

▲ Recording station

▲ Partial-record station

0 1 MILE
Contour interval 10 and 50 meters
Datum is mean sea level





DUBLON ISLAND
TRUK ISLANDS

EXPLANATION

▲ Recording station

△ Partial-record station

0 1 2 MILES

Contours are form lines and
not elevation contours

CAROLINE ISLANDS, TRUK ISLANDS

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16893700 Wichen River at altitude 55 m, Moen

LOCATION.--Lat 7°26'45" N., long 151°52'02" E., Moen, on left bank at Peniesence, 1.0 mile upstream from mouth, and 1.6 miles west of Saint Xaviers Academy,

DRAINAGE AREA.--0.23 sq mi,

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 180 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 193 cfs Nov. 25 (gage height, 4.08 ft), from rating curve extended above 13 cfs; minimum, 0.05 cfs Feb. 7, 9-11.

Period of record: Maximum discharge, 193 cfs Nov. 25, 1969 (gage height, 4.08 ft), from rating curve extended above 13 cfs; minimum, 0.01 cfs Mar. 29-31, 1969,

REMARKS.--Records fair. No diversion above station.

Discharge measurement made prior to beginning of continuous discharge record

Mar. 16, 1966..... 0.04 cfs

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	1.6	0.21	1.8	0.21
2								-	.60	.25	6.4	.21
3								-	.38	.91	3.2	1.0
4								-	.33	.60	1.8	.43
5								-	.38	.48	1.2	.25
6								-	.38	.33	.75	.25
7								-	.48	1.9	.54	.25
8								-	.38	1.2	.75	.84
9								-	.33	.75	2.1	.43
10								-	2.2	.54	.67	.25
11								-	.67	2.7	.54	.25
12								-	11	1.0	.54	.25
13								-	4.1	1.4	.43	.21
14								-	2.0	.75	.33	.21
15								-	1.0	1.6	2.0	.21
16								.25	.67	.84	.94	1.5
17								.25	.48	.40	1.9	.84
18								3.2	.43	.70	.75	.38
19								.67	.38	1.8	.67	.25
20								.38	.33	.94	2.8	.25
21								.33	1.4	.67	1.0	.23
22								.33	1.2	.25	.67	.22
23								.54	.48	.38	.75	.25
24								.38	.33	.38	.54	.50
25								.25	.60	.33	.60	10
26								.25	.54	.29	.54	1.5
27								.29	.43	.84	.43	1.0
28								.29	.38	3.4	.33	.50
29								.21	.33	.84	.29	.40
30								.21	.29	.43	.25	.30
31								.25	-----	5.7	.25	-----
TOTAL								-	34.10	36.68	35.76	23.37
MEAN								-	1.14	1.18	1.15	0.779
MAX								-	11	5.7	6.4	10
MIN								-	0.29	0.21	0.25	0.21
AC-FT								-	.68	.73	.71	.46

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 70 CFS).--June 12 (0230) 82 cfs (2.71 ft); Aug. 2 (1100) 74 cfs (2.58 ft).

* Result of discharge measurement.

CAROLINE ISLANDS, TRUK ISLANDS

16893700 Wichen River at altitude 55 m, Moen--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	2.5	.29	.54	.05	.03	.05	.18	3.0	1.0	.48	.56
2	1.5	.94	.21	.43	.07	.03	.04	.11	2.4	.60	.64	.48
3	1.1	.60	.18	.33	.07	.03	.04	.11	1.6	3.9	1.1	.44
4	.90	.43	.21	.29	.04	.11	.03	.18	1.2	2.0	2.8	.60
5	.80	.38	.29	.25	.04	.05	.04	.18	.94	3.7	2.0	.56
6	.60	.38	.21	.25	.04	.04	.25	.13	.67	1.8	.92	4.4
7	.70	.33	.57	.21	.05	.04	.25	.11	.60	1.2	1.1	1.1
8	.70	.38	.38	.21	.05	.04	.11	.11	2.6	1.3	.74	6.4
9	.54	.48	8.5	.18	.04	.07	.07	.11	1.3	2.6	.64	1.5
10	.43	.43	1.3	.18	.04	.07	.04	.15	.84	1.9	.60	3.4
11	.38	.29	.54	.18	.04	.04	.04	.21	.67	1.2	.56	1.2
12	.38	.25	.38	.15	.04	.03	.13	.43	.75	.75	.52	.79
13	.29	.21	.29	.15	.03	.07	.09	7.3	.54	.67	5.6	.69
14	.25	.21	.25	.13	.03	.04	.48	2.5	.38	.67	7.1	1.2
15	.21	.21	.84	.13	.03	.07	.25	1.3	.38	.75	1.3	.79
16	.21	1.3	.33	.13	.04	.04	.67	2.2	.29	.94	.85	.64
17	.18	1.5	.29	.11	.03	.04	.29	1.3	.21	1.0	.69	.64
18	.15	1.6	.29	.11	.04	.03	.15	2.2	.54	.67	.64	1.2
19	.15	.54	9.4	.11	.04	.03	.11	2.2	7.2	.54	4.0	.79
20	.13	.92	2.8	.11	.04	.04	.09	2.2	2.0	.48	1.0	.64
21	.21	.75	4.0	.11	.04	.04	.09	3.5	3.7	5.1	.74	.60
22	.18	.60	4.6	.13	.05	.03	.09	2.0	3.9	9.3	.85	1.5
23	.13	.67	10	.13	.07	.03	.07	2.0	1.8	4.0	.56	.85
24	.11	.67	12	.11	.05	.03	.54	1.2	2.5	1.8	.52	.69
25	.13	.38	7.0	.09	.03	.02	.21	1.0	2.2	1.2	.48	.69
26	.15	1.4	10	.11	.03	.02	.13	4.6	1.4	.92	.44	.69
27	.15	.75	2.5	.09	.03	.02	.09	1.8	.94	.74	.56	.60
28	.13	.43	1.6	.07	.03	.02	.09	1.2	.84	.60	.48	.52
29	.13	.33	1.0	.07	-----	.02	.25	.75	.54	.64	.56	.44
30	.23	.29	.67	.05	-----	.02	.21	1.6	.54	.64	.52	.56
31	1.3	-----	.54	.05	-----	.02	-----	1.8	-----	.52	.48	-----
TOTAL	31.22	20.15	81.46	5.19	1.18	1.21	4.99	44.66	46.47	53.13	39.47	35.16
MEAN	1.01	.67	2.63	.17	.042	.039	.17	1.44	1.55	1.71	1.27	1.17
MAX	13	2.5	12	.54	.07	.11	.67	7.3	7.2	9.3	7.1	6.4
MIN	.11	.21	.18	.05	.03	.02	.03	.11	.21	.48	.44	.44
AC-FT	62	40	162	10	2.3	2.4	9.9	89	92	105	78	70

CAL YR 1968: TOTAL - MEAN - MAX - MIN AC-FT
WTR YR 1969: TOTAL 364.29 MEAN 1.00 MAX 13 MIN .02 AC-FT 723

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
12- 9	0130	2.86	92	12-24	1800	2.53	71
12-19	1500	2.90	95				

CAROLINE ISLANDS, TRUK ISLANDS

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16893700 Wichen River at altitude 55 m, Moen--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	2.3	.60	4.0	.34	.64	.07	.34	.85	1.1	.37	2.8
2	.44	1.2	.74	1.6	.25	.40	.07	.40	.69	1.1	.37	.92
3	.37	9.7	.60	2.5	.19	.34	.10	.92	.69	.79	.34	.64
4	.34	4.3	.52	6.5	.13	.37	.10	.52	.92	.64	.31	.56
5	.31	1.8	.44	4.6	.10	.37	.16	.40	1.1	.56	.69	.60
6	.31	1.1	.48	1.3	.07	.34	.13	.44	.79	.52	.56	.48
7	.28	.85	1.9	.85	.05	.31	.13	3.3	.64	.44	.40	.40
8	.25	.64	2.2	.64	.07	.28	.13	1.1	.52	.44	.31	.52
9	.25	.60	.74	.56	.05	.31	.13	2.2	.48	.37	.28	.44
10	.25	.52	.60	.52	.05	.40	.13	1.6	.52	.34	1.7	.40
11	.25	.48	.48	.44	.05	.48	.22	1.1	.48	.34	3.1	.37
12	.22	.64	.44	.34	.10	.48	.40	.85	.44	.34	.60	.34
13	.25	1.3	.37	.31	.10	.37	.37	.64	.40	.34	.52	.31
14	.34	.64	.34	.64	.10	.34	.48	.79	.37	.34	.40	.28
15	.28	.56	.31	.40	.10	.37	.74	6.1	.37	.40	.31	.28
16	.25	.48	.28	.44	.10	.31	.37	4.0	.34	.74	.64	.25
17	.25	.85	.34	5.2	.31	.31	.31	4.6	2.2	.52	.74	.25
18	.25	.64	2.6	1.0	5.6	.31	.28	1.5	2.2	.44	.56	.22
19	.22	.56	4.4	.64	9.0	.28	.28	.92	.92	.40	.48	.19
20	.22	.56	.92	.48	1.5	.28	.25	.79	.69	.37	.44	.28
21	.22	.52	.60	.40	.85	.28	.25	.60	.56	.37	.40	.28
22	.22	4.7	.44	.37	.64	.28	.34	.48	.52	.34	.64	.22
23	.37	1.0	.37	.34	.64	.25	5.6	.44	.64	.34	.52	.34
24	.28	2.3	.37	.31	.52	.22	.56	.37	.85	.34	.48	.56
25	.40	19	.37	.31	.48	.19	.44	4.2	.64	.31	.44	.34
26	.31	1.5	.40	.31	.44	.13	2.2	1.0	.52	.31	.40	.48
27	11	.85	.34	.28	.34	.10	2.0	.79	.56	.34	.74	1.3
28	1.3	.74	.40	.31	.74	.13	1.2	.60	8.0	.60	.69	.79
29	.64	.64	.34	5.7	-----	.13	.60	2.4	2.0	.52	.64	.69
30	1.1	.60	.37	.74	-----	.10	.40	5.5	1.6	.37	.48	.64
31	1.6	-----	.40	.44	-----	.07	-----	1.3	-----	.34	.56	-----
TOTAL	23.29	61.57	23.70	42.47	22.91	9.17	18.44	50.19	31.50	14.71	19.11	16.17
MEAN	.75	2.05	.76	1.37	.82	.30	.61	1.62	1.05	.47	.62	.54
MAX	11	19	4.4	6.5	9.0	.64	5.6	6.1	8.0	1.1	3.1	2.8
MIN	.22	.48	.28	.28	.05	.07	.07	.34	.34	.31	.28	.19
AC-FT	46	122	47	84	45	18	37	100	62	29	38	32

CAL YR 1969 TOTAL 340.02 MEAN .93 MAX 19 MIN .02 AC-FT 674
WTR YR 1970 TOTAL 333.23 MEAN .91 MAX 19 MIN .05 AC-FT 661

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-27	1300	3.30	125	11-25	0700	4.08	193
11-3	0300	2.68	80	2-18	2300	2.64	77

CAROLINE ISLANDS, TRUK ISLANDS

16893800 Wichen River at altitude 18 m, Moen

LOCATION.--Lat 7°27'05" N., long 151°52'18" E., Moen, on left bank at Peniesence and 0.5 mile upstream from mouth.

DRAINAGE AREA.--0.60 sq mi (revised).

PERIOD OF RECORD.--April 1955 to March 1956 (published as "at Peniesence"), May 1968 to current year. All figures of discharge above 3 cfs (2 mgd) prior to April 1956 are unreliable and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 60 ft (from topographic map). Prior to Apr. 1, 1956, non-recording gage at site 100 ft downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 724 cfs Nov. 25 (gage height, 6.18 ft), from rating curve extended above 26 cfs; minimum, 0.07 cfs Mar. 24-26, Apr. 1.

Period of record: Maximum discharge, 724 cfs Nov. 25, 1969 (gage height, 6.18 ft), from rating curve extended above 26 cfs; minimum, 0.03 cfs Mar. 31, 1969.

REVISIONS.--The maximum daily discharge for the period April 1955 to March 1956, published in WSP 1751, is unreliable owing to undefined high-water rating and should not be used.

REMARKS.--Records poor. No diversion above station.

REVISIONS.--Figures of daily discharge above 3 cfs (2 mgd) for the period April 1955 to March 1956, published in WSP 1751, are unreliable owing to undefined high-water rating and should not be used.

Discharge measurement made prior to beginning of continuous discharge record

Mar. 16, 1966..... 0.16 cfs

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	4.0	0.30	4.0	0.30
2								-	2.1	.30	1.4	.28
3								-	1.1	2.6	6.0	2.2
4								-	.70	1.6	2.8	.88
5								-	.70	1.1	2.0	.40
6								-	.64	.52	1.3	.30
7								-	.94	5.3	1.1	.34
8								-	.46	2.9	1.2	1.8
9								-	.34	1.7	4.0	.88
10								-	4.0	.88	1.4	.40
11								.52	2.2	6.7	1.0	.30
12								.46	2.1	2.2	.94	.32
13								.30	9.5	2.7	.70	.26
14								.32	5.2	1.3	.58	.24
15								.38	2.5	2.1	3.7	.24
16								.46	1.5	1.7	2.6	3.7
17								.46	1.0	.64	3.0	2.1
18								6.5	.70	1.2	1.9	.82
19								1.8	.76	2.6	1.8	.40
20								.88	.71	1.3	7.3	.34
21								.70	4.9	.82	2.5	.32
22								.52	3.6	.52	1.4	.36
23								1.2	1.2	.58	1.5	.32
24								.64	.64	.46	1.0	1.0
25								.40	1.7	.40	3.1	2.1
26								.36	.82	.38	1.8	2.7
27								.46	.38	2.0	.82	1.5
28								.46	.46	5.1	.46	.88
29								.36	.30	1.9	.36	.58
30								.34	.34	8.6	.34	.58
31								.46	-----	14	.34	-----
TOTAL								-	74.39	74.40	74.94	45.74
MEAN								-	2.48	2.40	2.42	1.52
MAX								-	21	14	14	21
MIN								-	0.30	0.30	0.34	0.24
AC-FT								-	148	148	149	91

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL MEAN MAX MIN AC-FT

PEAK DISCHARGE (BASE, 170 CFS).--June 12 (0300) 232 cfs (3.59 ft); Aug. 2 (1200) 200 cfs (3.45 ft).

* Result of discharge measurement.

CAROLINE ISLANDS, TRUK ISLANDS

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16893800 Wichen River at altitude 18 m, Moen--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	5.0	.46	1.1	.09	.08	.08	.26	6.0	2.3	.90	.75
2	2.7	1.9	.34	.70	.08	.08	.06	.14	4.7	1.7	1.4	.55
3	1.8	1.1	.28	.50	.06	.08	.06	.11	3.3	7.3	2.7	.47
4	1.2	.64	.32	.44	.05	.18	.04	.17	2.6	4.2	4.9	.80
5	1.1	.58	.46	.38	.06	.09	.04	.20	2.2	6.3	4.7	.90
6	.88	.58	.34	.32	.06	.07	.42	.17	1.7	3.7	2.8	5.4
7	.94	.52	1.6	.29	.05	.06	.41	.13	1.5	2.6	3.2	2.6
8	.94	.52	.66	.26	.05	.17	.17	.10	5.3	2.8	2.3	9.3
9	.70	.82	20	.26	.05	.07	.08	.08	2.9	5.1	1.8	3.3
10	.70	.52	2.4	.25	.05	.08	.04	.08	2.0	3.7	1.4	4.7
11	.70	.34	1.2	.20	.05	.09	.04	.29	1.5	2.6	1.5	2.7
12	.58	.34	.70	.20	.05	.09	.13	.73	1.7	2.0	1.5	1.8
13	.40	.32	.40	.20	.05	.14	.14	12	1.2	1.7	8.1	1.3
14	.34	.28	.38	.15	.05	.09	1.1	5.7	.90	1.8	9.7	2.8
15	.30	.28	1.9	.15	.06	.13	.48	2.8	.70	1.8	3.2	2.0
16	.32	2.6	.52	.15	.09	.07	1.5	4.1	.60	2.8	2.2	1.4
17	.24	3.4	.40	.12	.07	.09	.60	2.8	.70	2.6	1.7	1.3
18	.22	4.0	.40	.12	.07	.06	.19	3.9	.95	1.7	1.6	2.9
19	.18	1.7	26	.12	.08	.07	.12	4.3	12	1.4	5.4	2.2
20	.16	1.6	6.0	.12	.07	.06	.09	4.2	4.1	1.1	2.3	1.6
21	.36	1.6	7.7	.12	.08	.06	.08	5.5	7.0	7.6	1.7	1.2
22	.32	1.3	8.1	.15	.09	.05	.05	4.1	6.7	11	1.7	3.0
23	.18	1.5	14	.15	.06	.05	.05	4.1	3.7	5.3	1.1	2.2
24	.15	1.4	16	.12	.06	.05	1.1	2.7	4.7	3.3	1.0	1.7
25	.15	.94	11	.10	.04	.05	.48	2.5	4.2	2.5	.80	1.7
26	.15	1.5	15	.12	.04	.05	.17	8.6	3.0	2.1	.75	1.7
27	.20	1.4	4.3	.08	.05	.04	.09	3.7	2.2	1.5	.90	1.3
28	.19	.76	2.9	.09	.06	.04	.10	2.8	2.0	1.3	.70	1.1
29	.16	.52	2.1	.08	-----	.04	.32	2.0	1.4	1.4	1.0	.95
30	4.2	.40	1.5	.07	-----	.04	.48	3.4	1.4	1.4	.95	1.2
31	34	-----	1.2	.07	-----	.03	-----	3.9	-----	1.1	.75	-----
TOTAL	63.86	38.36	148.56	7.18	1.72	2.35	8.71	85.56	92.85	97.7	74.65	64.82
MEAN	2.06	1.28	4.79	.23	.061	.076	.29	2.76	3.10	3.15	2.41	2.16
MAX	34	5.0	26	1.1	.09	.18	1.5	12	12	11	9.7	9.3
MIN	.15	.28	.28	.07	.04	.03	.04	.08	.60	1.1	.70	.47
AC-FT	127	76	294	14	3.4	4.7	17	170	184	194	148	129

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 686.32 MEAN 1.88 MAX 34 MIN .03 AC-FT 1,360

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1430	3.40	190	12-19	1500	4.42	508
12-9	0030	3.95	335				

CAROLINE ISLANDS, TRUK ISLANDS

16893800 Wichen River at altitude 18 m, Moen--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	4.1	1.6	7.9	.56	1.6	.10	.40	1.7	2.7	.64	7.5
2	.80	2.9	3.0	3.9	.48	.96	.10	.56	1.1	2.6	.56	2.1
3	.70	12	1.8	6.1	.32	.64	.14	2.4	1.4	1.8	.48	1.4
4	.60	6.0	.80	13	.25	.53	.14	1.0	2.6	1.3	.48	1.1
5	.55	3.9	.80	8.4	.19	.72	.19	.48	3.4	1.1	2.0	1.2
6	.65	2.6	.90	3.6	.19	.64	.10	.64	2.0	1.0	.80	.90
7	.65	2.0	4.0	1.8	.14	.56	.14	7.6	1.6	.72	.64	.65
8	.55	1.5	5.9	1.4	.48	.56	.25	2.8	1.0	.72	.48	1.0
9	.47	1.3	2.0	1.2	.19	.56	.25	5.2	.80	.64	.40	.80
10	.50	1.1	1.2	1.0	.14	.56	.14	3.9	.96	.56	5.8	.65
11	.35	1.0	1.1	.80	.14	.64	.14	2.8	.80	.56	9.3	.60
12	.32	1.4	1.0	.64	.14	.72	1.1	2.0	.80	.56	1.3	.55
13	.32	3.4	.90	.56	.10	.56	1.0	1.8	.64	.48	1.0	.50
14	.80	1.7	.80	1.4	.10	.50	1.7	2.0	.56	.32	.64	.45
15	.41	1.2	.70	.96	.10	.55	1.9	13	.56	.96	.48	.45
16	.32	1.0	.60	.80	.10	.50	.72	10	.40	2.2	1.5	.40
17	.26	2.0	.50	9.2	.48	.50	.56	12	5.5	1.0	1.7	.40
18	.20	1.5	5.3	2.3	18	.50	.48	3.4	5.2	.80	1.1	.48
19	.18	1.1	9.2	1.4	21	.45	.48	2.0	2.4	.72	.96	.32
20	.18	1.1	2.7	.96	3.6	.40	.40	2.2	1.6	.64	.80	.72
21	.17	.95	1.2	.72	2.0	.40	.32	1.2	1.1	.64	.72	.56
22	.16	6.2	.90	.64	1.4	.35	.79	.96	.80	.56	1.6	.25
23	.75	2.3	.80	.56	1.4	.30	14	.80	1.1	.56	1.0	.56
24	.47	3.3	1.3	.48	.96	.25	.96	.56	2.2	.56	1.0	1.4
25	.80	46	1.0	.56	.80	.25	.72	9.0	1.3	.48	.96	.48
26	.44	5.3	.90	.48	.64	.19	4.8	2.3	.96	.48	.90	.96
27	13	2.4	.70	.40	.56	.25	4.6	1.7	1.0	.64	1.7	4.7
28	4.0	2.0	.80	.40	2.2	.19	2.8	1.1	20	1.3	1.5	2.2
29	2.1	1.8	.70	16	-----	.19	1.4	4.6	3.3	1.0	1.4	1.6
30	3.1	1.3	.70	1.8	-----	.14	.80	11	3.2	.64	.90	1.2
31	3.0	-----	.70	.80	-----	.14	-----	2.8	-----	.56	1.1	-----
TOTAL	37.75	124.35	54.50	90.16	56.66	15.30	41.22	112.20	69.98	28.80	43.84	36.08
MEAN	1.22	4.15	1.76	2.91	2.02	.49	1.37	3.62	2.33	.93	1.41	1.20
MAX	13	46	9.2	16	21	1.6	14	13	20	2.7	9.3	7.5
MIN	.16	.95	.50	.40	.10	.14	.10	.40	.40	.32	.40	.25
AC-FT	75	247	108	179	112	30	82	223	139	57	87	72

CAL YR 1969 TOTAL 652.14 MEAN 1.79 MAX 46 MIN .03 AC-FT 1,290
WTR YR 1970 TOTAL 710.84 MEAN 1.95 MAX 46 MIN .10 AC-FT 1,410

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-27	1230	3.92	180	1-29	0200	3.69	192
11-25	0800	6.18	724	2-18	2300	3.95	229

CAROLINE ISLANDS, TRUK ISLANDS

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16894200 Nachiponong Stream, Moen

LOCATION.--Lat 7°25'45" N, long 151°51'31" E, Moen, on left bank at Wichap, 300 ft downstream from dam site, and 0.2 mile upstream from mouth,

DRAINAGE AREA.--0.16 sq mi.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 33 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 26 cfs Nov. 25 (gage height, 3.32 ft), from rating curve extended above 0.4 cfs; minimum, 0.03 cfs Feb. 15, Apr. 4.

Period of record: Maximum discharge, 26 cfs Nov. 25, 1969 (gage height, 3.32 ft, from rating curve extended above 0.4 cfs; no flow Mar. 26-31, 1969,

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	0.49	0.13	0.20	0.16
2								-	.22	.16	.55	.15
3								-	.16	.20	.34	.40
4								-	.15	.26	.27	.30
5								-	.15	.20	.23	.25
6								-	.12	.15	.20	.25
7								-	.14	.26	.18	.25
8								-	.11	.24	.17	.50
9								-	.07	.23	.23	.30
10								-	.25	.17	.15	.20
11								-	.12	.15	.14	.18
12								-	.69	.26	.19	.20
13								-	.29	.19	.17	.18
14								-	.22	.17	.15	.15
15								.11	.18	.15	.22	.15
16								.08	.16	.16	.15	.75
17								.06	.14	.14	.20	.50
18		0.32						.24	.12	.14	.20	.30
19								.17	.11	.32	.12	.28
20								.10	.11	.20	.34	.26
21								.08	.30	.16	.19	.24
22								.11	.32	.13	.19	.21
23								.37	.17	.12	.20	.19
24								.19	.13	.11	.20	.27
25								.12	.30	.09	.22	1.0
26								.11	.23	.12	.20	.30
27								.11	.19	.36	.15	.20
28								.12	.16	.40	.14	.17
29								.08	.15	.19	.14	.09
30								.11	.15	.46	.16	.11
31		-----			-----		-----	.11	-----	.55	.16	-----
TOTAL								-	6.10	6.57	6.35	8.49
MEAN								-	0.203	0.212	0.205	0.283
MAX								-	0.69	0.55	0.55	1.0
MIN								-	0.07	0.09	0.12	0.09
AC-FT								-	12	13	13	17

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 10 CFS).--No peak above base.

* Result of discharge measurement.

NOTE.--No gage-height record Aug. 2.

CAROLINE ISLANDS, TRUK ISLANDS

16894200 Nachiponong Stream, Moen--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.56	.18	.29	.02	.01	.06	.08	.78	.53	.24	.30
2	.18	.38	.14	.22	.03	.01	.02	.02	.65	.23	.35	.23
3	.18	.32	.12	.19	.03	.01	.02	.02	.54	.82	.50	.24
4	.20	.28	.17	.18	.03	.06	.01	.11	.49	.65	.80	.29
5	.20	.23	.20	.16	.03	.04	.01	.10	.48	.83	.70	.21
6	.18	.23	.13	.14	.03	.03	.20	.06	.38	.56	.50	.76
7	.20	.20	.21	.12	.03	.02	.21	.06	.44	.48	.60	.48
8	.17	.20	.14	.12	.03	.02	.11	.04	.92	.49	.40	.95
9	.19	.24	1.0	.11	.03	.01	.02	.04	.49	1.2	.35	.49
10	.16	.20	.50	.10	.02	.01	.01	.03	.44	.69	.33	.91
11	.15	.15	.30	.08	.02	.01	.01	.11	.43	.53	.30	.54
12	.13	.16	.25	.08	.02	.01	.08	.29	.46	.46	.36	.48
13	.11	.14	.18	.08	.02	.06	.06	1.2	.33	.44	.92	.42
14	.09	.12	.18	.06	.02	.03	.29	.72	.28	.40	1.2	.40
15	.08	.19	.33	.05	.02	.04	.12	.46	.24	.42	.54	.30
16	.15	.24	.17	.05	.02	.02	.36	.83	.24	.48	.42	.31
17	.11	.19	.14	.04	.02	.02	.13	.49	.28	.33	.37	.28
18	.09	.53	.15	.04	.02	.01	.06	.62	.27	.29	.37	.48
19	.09	.28	1.3	.04	.01	.01	.04	.76	.84	.28	.81	.33
20	.09	.37	.78	.04	.01	.01	.03	.76	.32	.30	.30	.27
21	.16	.33	1.0	.04	.02	.01	.04	.99	.55	1.0	.29	.27
22	.15	.27	.90	.05	.03	.01	.02	.54	.54	1.4	.30	.55
23	.12	.23	1.8	.04	.01	.01	.01	.51	.40	.91	.26	.33
24	.12	.25	.23	.04	.01	.01	.23	.49	.72	.76	.23	.29
25	.15	.20	1.5	.03	.01	.01	.11	.61	.37	.60	.19	.29
26	.14	.50	2.0	.04	.01	0	.06	.91	.34	.53	.22	.37
27	.15	.30	.75	.02	.01	0	.04	.54	.29	.42	.34	.36
28	.10	.22	.50	.02	.01	0	.04	.48	.29	.34	.30	.33
29	.09	.20	.38	.04	-----	0	.12	.43	.20	.33	.26	.33
30	.37	.18	.33	.02	-----	0	.16	.73	.21	.33	.24	.44
31	2.2	-----	.28	.02	-----	0	-----	.54	-----	.27	.26	-----
TOTAL	6.80	7.89	18.31	2.55	.57	.49	2.68	13.57	13.21	17.30	13.25	12.23
MEAN	.22	.26	.59	.082	.020	.016	.089	.44	.44	.56	.43	.41
MAX	.22	.56	.23	.29	.03	.06	.36	1.2	.92	1.4	1.2	.95
MIN	.08	.12	.12	.02	.01	0	.01	.02	.20	.23	.19	.21
AC-FT	13	16	36	5.1	1.1	1.0	5.3	27	26	34	26	24

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 108.85 MEAN .30 MAX 2.3 MIN 0 AC-FT 216

PEAK DISCHARGE (BASE, 10 CFS).--Dec. 19 (1430) 13 cfs (3.10 ft, from floodmark in well).

CAROLINE ISLANDS, TRUK ISLANDS

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16894200 Nachiponong Stream, Moen--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.69	.22	.90	.22	.34	.06	.18	.38	.58	.25	1.1
2	.16	.55	.43	.72	.17	.23	.06	.79	.36	.60	.22	.53
3	.11	1.4	.39	.69	.14	.18	.07	.58	.34	.46	.18	.36
4	1.2	1.2	.36	1.1	.14	.16	.05	.22	.60	.46	.17	.34
5	.55	1.1	.34	.69	.14	.14	.08	.17	.72	.32	.64	.63
6	.36	.93	.36	.50	.18	.13	.06	.22	.43	.32	.24	.34
7	.25	.66	.57	.46	.10	.12	.05	1.0	.31	.27	.17	.23
8	.17	.46	.72	.43	.11	.11	.05	.50	.29	.23	.16	.29
9	.13	.43	.48	.32	.06	.10	.05	1.2	.34	.18	.14	.18
10	.14	.38	.36	.32	.06	.16	.04	.90	.46	.29	.61	.16
11	.17	.34	.29	.31	.06	.25	.04	.72	.31	.22	1.2	.16
12	.17	.46	.25	.25	.06	.25	.13	.53	.31	.17	.27	.17
13	.13	1.1	.22	.25	.06	.22	.06	.46	.22	.16	.32	.11
14	.11	.53	.17	.48	.04	.18	.25	.46	.18	.12	.27	.08
15	.12	.31	.18	.29	.04	.18	.50	1.2	.18	.27	.25	.08
16	.11	.27	.18	.29	.04	.17	.08	.96	.16	.82	.32	.10
17	.16	.65	.43	1.0	.34	.15	.10	.81	.77	.31	.23	.11
18	.11	.36	.81	.55	1.2	.15	.08	.55	1.1	.18	.31	.13
19	.10	.27	1.0	.48	1.4	.14	.08	.48	.60	.17	.20	.10
20	.10	.32	.34	.38	.55	.13	.07	.38	.31	.14	.27	.13
21	.17	.29	.27	.34	.46	.12	.07	.29	.25	.14	.29	.11
22	.10	1.1	.25	.32	.38	.10	.15	.27	.17	.13	.47	.08
23	.20	.41	.22	.25	.38	.10	2.0	.20	.27	.12	.25	.52
24	.27	.74	.20	.18	.29	.09	.31	.18	.46	.12	.31	.36
25	.32	2.6	.18	.20	.20	.08	.32	1.3	.20	.12	.20	.16
26	.18	.72	.23	.27	.16	.07	1.4	.50	.20	.16	.29	.34
27	2.0	.48	.25	.20	.14	.10	.85	.46	.20	.17	1.0	1.0
28	.61	.38	.43	.16	.85	.12	.50	.38	2.5	.41	.99	.55
29	.29	.29	.27	1.0	-----	.06	.31	.75	.75	.34	.38	.34
30	.53	.27	.27	.48	-----	.05	.25	1.4	.84	.17	.23	.31
31	.94	-----	.29	.34	-----	.05	-----	.53	-----	.14	.46	-----
TOTAL	10.28	19.69	10.96	14.15	7.97	4.43	8.12	18.57	14.21	8.29	11.29	9.10
MEAN	.33	.66	.35	.46	.28	.14	.27	.60	.47	.27	.36	.30
MAX	2.0	2.6	1.0	1.1	1.4	.34	2.0	1.4	2.5	.82	1.2	1.1
MIN	.10	.27	.17	.16	.04	.05	.04	.17	.16	.12	.14	.08
AC-FT	20	39	22	28	16	8.8	16	37	28	16	22	18

CAL YR 1969 TOTAL 116.78 MEAN .32 MAX 2.6 MIN 0 AC-FT 232
WTR YR 1970 TOTAL 137.06 MEAN .38 MAX 2.6 MIN .04 AC-FT 272

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-27	1100	2.70	20	2-18	2300	2.52	13
11-25	0700	3.32	26				

CAROLINE ISLANDS, TRUK ISLANDS

16895000 Echapachik Stream, Tol

LOCATION.--Lat 7°20'57" N., long 151°37'26" E., Tol, on right bank 0.2 mile upstream from mouth and 0.6 mile north of Mount Tumuitai.

DRAINAGE AREA.--0.15 sq mi (revised).

PERIOD OF RECORD.--April 1955 to March 1957 (published as "at Fasan"), May 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map). Prior to Apr. 1, 1957, non-recording gage at same site at different datum.

EXTREMES.--Current year: Maximum discharge, 51 cfs Sept. 1 (gage height, 3.23 ft), from rating curve extended above 0.7 cfs; minimum, 0.05 cfs Feb. 16.

Period of record: Maximum discharge, 51 cfs Sept. 1, 1970 (gage height, 3.23 ft), from rating curve extended above 0.7 cfs; no flow Mar. 24, 25, 1957, and for many days in 1969.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	0.28	0.13	0.35	0.05
2								-	.28	.13	.43	.06
3								-	.16	.12	.63	.50
4								-	.09	.12	.29	.28
5								-	.06	.09	.23	.15
6								-	.06	.08	.20	.10
7								-	.05	.17	.19	.08
8								.23	.04	.32	.16	.08
9								.23	.04	.33	.38	.12
10								.20	.04	.21	.30	.11
11								.16	.04	.16	.84	.09
12								.12	.12	.12	.95	.07
13								.09	.15	.09	.54	.06
14								.09	.18	.08	.33	.05
15								.08	.15	.11	.26	.05
16								.06	.15	.11	.22	.18
17								.06	.10	.09	.19	.28
18								.21	.10	.09	.20	.18
19								.39	.10	.10	.19	.12
20	.0.61							.16	.10	.50	1.0	.09
21								.13	.10	.70	.50	.12
22								.13	.10	.20	.30	.11
23								.14	.10	.18	.20	.08
24								.08	.15	.11	.15	.14
25								.06	.12	.09	.15	1.1
26								.08	.08	.08	.10	.33
27								.08	.06	.18	.13	.19
28								.08	.05	.21	.08	.13
29								.05	.08	.16	.07	.09
30								.04	.15	.15	.06	.09
31		-----			-----		-----	.09	-----	.48	.06	-----
TOTAL								-	3.28	5.69	9.68	5.08
MEAN								-	0.109	0.184	0.312	0.169
MAX								-	0.28	0.70	1.0	1.1
MIN								-	0.04	0.08	0.06	0.05
AC-FT								-	6.5	11	19	10

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 10 CFS).--No peak above base.

* Result of discharge measurement.

CAROLINE ISLANDS, TRUK ISLANDS

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16895000 Echapachik Stream, Tol--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.54	.20	.15	.01	0	.10	.02	.44	.13	.05	.15
2	.17	.35	.20	.12	.01	0	.05	.01	.29	.08	.06	.10
3	.15	.39	.15	.10	.01	0	.03	.02	.16	.45	.07	.08
4	.12	.39	.15	.09	.01	.01	.01	.05	.09	.29	.20	.08
5	.13	.32	.30	.08	.01	.01	.01	.02	.09	.29	.10	.07
6	.13	.30	.28	.07	.01	.01	.05	.01	.09	.23	.07	.16
7	.09	.46	.22	.07	.01	0	.05	0	.09	.14	.10	.14
8	.12	.33	.35	.06	.01	0	.02	0	.41	.09	.20	1.1
9	.16	.32	1.6	.06	.01	0	.02	.01	.32	.42	.10	1.1
10	.16	.32	.33	.06	.01	0	.01	.01	.23	.34	3.7	2.0
11	.13	.30	.22	.05	.01	0	.01	.01	.18	.18	3.3	1.2
12	.11	.28	.15	.05	.01	0	.01	.01	.14	.10	.41	.53
13	.10	.29	.12	.05	.01	.02	.01	.01	.10	.06	.29	.23
14	.09	.29	.10	.05	.01	.05	.05	.01	.10	.06	.49	.32
15	.09	.32	.09	.05	.01	.10	.02	.10	.09	.11	1.9	.44
16	.09	.39	.07	.05	.01	.05	.10	.28	.08	.54	1.1	.32
17	.09	.38	.06	.06	0	.01	.01	.24	.08	.34	.72	.89
18	.09	.36	.06	.10	0	0	.01	.40	.10	.17	.41	4.5
19	.09	.34	.56	.20	.01	0	.01	.38	.79	.11	.26	1.2
20	.08	.32	.20	.25	0	0	.01	.16	.28	.10	.22	.56
21	.08	.38	2.3	.15	0	0	.20	.23	.16	.46	.22	.50
22	.13	.32	.49	.10	0	0	.10	.19	.11	.47	.20	.56
23	.09	.36	.65	.06	0	0	.05	.19	.10	.28	.15	.53
24	.09	.30	.53	.04	0	0	.03	.14	.09	.14	.12	.34
25	.06	.27	.79	.03	0	0	.02	.08	.12	.08	.10	.29
26	.06	.26	1.6	.03	0	0	.01	.07	.11	.06	.08	.24
27	.05	.28	.40	.02	0	.01	.01	.06	.20	.06	.15	.22
28	.05	.26	.27	.02	0	.03	.01	.06	.16	.06	.12	.19
29	.05	.25	.19	.01	-----	.05	.05	.06	.11	.05	.09	.16
30	.06	.24	.15	.01	-----	.02	.03	.08	.08	.05	.17	.15
31	1.6	-----	.12	.01	-----	0	-----	.10	-----	.05	.17	-----
TOTAL	4.65	9.91	12.90	2.25	.17	.37	1.10	3.01	5.39	5.99	26.03	18.35
MEAN	.15	.33	.42	.073	.006	.012	.037	.097	.18	.19	.84	.61
MAX	1.6	.54	2.3	.25	.01	.10	.20	.40	.79	.54	4.9	4.5
MIN	.05	.24	.06	.01	0	0	.01	0	.08	.05	.05	.07
AC-FT	9.2	20	26	4.5	.3	.7	2.2	6.0	11	12	52	36

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 90.12 MEAN .25 MAX 4.9 MIN 0 AC-FT 179

PEAK DISCHARGE (BASE, 10 CFS)

NOTE.--No gage-height record Mar. 7 to May 15.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	0600	2.28	12	12-21	2100	3.05	28
12- 8	2400	2.90	26	8-14	0100	1.80	12

CAROLINE ISLANDS, TRUK ISLANDS
16895000 Echapachik Stream, Tol--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.82	.64	.53	.14	.22	.06	.24	.22	1.6	.11	9.2
2	.14	.53	.75	1.0	.13	.20	.06	.18	.17	.67	.12	.75
3	.12	7.5	.67	.75	.13	.18	.08	.16	.16	.32	.11	.20
4	.12	1.7	.55	3.7	.13	.14	.07	.14	.18	.25	.10	.12
5	.10	1.0	.49	3.0	.13	.15	.09	.12	.67	.25	.12	.09
6	.10	.75	.43	1.3	.14	.13	.07	.09	.75	.20	.12	.08
7	.23	.64	.52	.75	.13	.11	.06	.15	.46	.20	.12	.08
8	.24	.52	1.0	.52	.14	.10	.06	.12	.32	.15	.11	.09
9	.22	.40	1.3	.40	.13	.09	.09	.62	.20	.15	.11	.08
10	.16	.36	.90	.34	.12	.17	.06	1.3	.17	.10	.13	.08
11	.10	.38	.61	.30	.10	.32	.06	.67	.14	.09	.14	.07
12	.09	.75	.52	.26	.09	.28	.18	.38	.19	.12	.12	.07
13	.10	1.3	.43	.24	.09	.24	.13	.22	.16	.12	.40	.07
14	.09	.75	.38	.32	.08	.17	.24	.17	.12	.13	.38	.06
15	.08	.43	.32	.24	.08	.13	.24	2.1	.18	.12	.22	.06
16	.09	.30	.30	.50	.07	.11	.22	.67	.17	.20	.17	.07
17	.09	.43	.28	2.4	2.7	.10	.19	.36	.28	.17	.14	.09
18	.09	.46	.36	1.4	8.6	.09	.14	.26	.43	.15	.13	.15
19	.09	.36	1.5	.75	5.2	.09	.11	.24	1.2	.14	.12	.12
20	.08	.24	1.2	.40	1.4	.08	.11	.22	.49	.13	.11	.11
21	.08	.19	.64	.22	.85	.08	.10	.18	.26	.12	.10	.10
22	.10	.20	.43	.18	.52	.08	.13	.16	.18	.11	.11	.11
23	2.0	.22	.34	.15	.38	.07	1.0	.16	.14	.10	.22	.25
24	1.4	.26	.28	.12	.30	.07	.43	.15	.16	.12	.24	.34
25	.93	3.5	.24	.11	.24	.07	.26	1.9	.13	.11	.19	.22
26	1.6	2.3	.22	.11	.18	.07	.50	.61	.11	.10	.15	.13
27	3.7	1.2	.18	.10	.17	.07	2.6	.43	.14	.14	1.2	.95
28	2.4	.75	.22	.10	.28	.06	1.7	.36	1.6	.14	1.0	.43
29	1.3	.58	.17	.15	-----	.06	.58	.32	.49	.13	.40	.40
30	1.2	.61	.19	.16	-----	.06	.34	.40	.49	.12	.36	.28
31	1.0	-----	.22	.15	-----	.06	-----	.34	-----	.11	.35	-----
TOTAL	18.23	29.43	16.28	20.65	22.65	3.85	9.96	13.42	10.36	6.56	7.40	14.85
MEAN	.59	.98	.53	.67	.81	.12	.33	.43	.35	.21	.24	.50
MAX	3.7	7.5	1.5	3.7	8.6	.32	2.6	2.1	1.6	1.6	1.2	9.2
MIN	.08	.19	.17	.10	.07	.06	.06	.09	.11	.09	.10	.06
AC-FT	36	58	32	41	45	7.6	20	27	21	13	15	29

CAL YR 1969 TOTAL 126.60 MEAN .35 MAX 7.5 MIN 0 AC-FT 251
WTR YR 1970 TOTAL 173.64 MEAN .48 MAX 9.2 MIN .06 AC-FT 344

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11- 3	0100	2.84	42	9- 1	0500	3.23	51
2-18	2230	3.01	48				

CAROLINE ISLANDS, TRUK ISLANDS

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16896800 Chun Stream, Dublon Island

LOCATION.--Lat 7°22'36" N., long 151°52'13" E., Dublon Island, on right bank at Chun, 0.4 mile upstream from mouth, and 1.8 miles west of Penienuk.

DRAINAGE AREA.--0.09 sq mi.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder, Altitude of gage is 50 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 39 cfs Feb, 18 (gage height, 3.00 ft), from rating curve extended above 0.8 cfs; minimum, 0.07 cfs Feb, 13, 14.

Period of record: Maximum discharge, 39 cfs Feb, 18, 1970 (gage height, 3.00 ft), from rating curve extended above 0.8 cfs; minimum, 0.01 cfs May 16, 1968, and on many days February to April, 1969,

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	0.60	0.06	0.09	0.08
2								-	.24	.14	.55	.08
3								-	.16	.12	.22	.10
4								-	.12	.12	.18	.11
5								-	.10	.11	.17	.12
6								-	.10	.10	.15	.10
7								-	.09	.22	.09	.10
8								-	.10	.16	.08	.08
9								-	.09	.14	.11	.10
10								.11	.16	.13	.13	.09
11								.08	.10	.13	.16	.08
12								.06	.09	.14	.16	.09
13								.05	.09	.14	.15	.08
14								.04	.08	.14	.14	.08
15								.03	.08	.14	.17	.08
16								.02	.07	.60	.18	.08
17								.02	.07	.17	.13	.08
18								.03	.06	.16	.16	.13
19	.048							.03	.06	.36	.12	.10
20								.03	.06	.20	.18	.10
21								.02	1.4	.16	.12	.09
22								.02	.48	.14	.11	.07
23								.08	.24	.32	.10	.07
24								.06	.17	.13	.10	.10
25								.05	.16	.09	.10	.30
26								.08	.14	.10	.09	.15
27								.14	.10	.19	.08	.11
28								.11	.10	.16	.08	.08
29								.11	.10	.08	.07	.09
30								.10	.09	.09	.08	.11
31		-----			-----		-----	.10	-----	.14	.09	-----
TOTAL								-	5.50	5.08	4.34	3.03
MEAN								-	0.183	0.164	0.140	0.101
MAX								-	.14	.060	.055	.030
MIN								-	0.06	0.06	0.07	0.07
AC-FT								-	11	10	8.6	6.0

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 10 CFS)

* Result of discharge measurement.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6- 1	1600	2.02	11	8- 2	1100	2.10	14
6-21	1900	2.43	36				

CAROLINE ISLANDS, TRUK ISLANDS

16896800 Chun Stream, Dublon Island--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.3	.24	.38	.09	.03	.19	.03	.41	.21	.15	.30
2	.24	.78	.28	.26	.10	.02	.04	.03	.32	.19	.20	.28
3	.19	.59	.28	.21	.10	.02	.03	.06	.21	.38	.50	.30
4	.11	.45	.28	.21	.10	.03	.02	.11	.15	.24	.70	.38
5	.11	.34	.32	.21	.09	.02	.02	.06	.17	.70	.50	.45
6	.13	.34	.32	.21	.09	.02	.06	.05	.26	.34	.30	.82
7	.17	.28	.32	.21	.08	.02	.06	.08	.59	.28	.52	.80
8	.15	.28	.34	.21	.08	.02	.03	.08	1.6	.34	.48	1.5
9	.17	.34	.66	.19	.08	.02	.02	.07	.34	.34	.52	.70
10	.13	.30	.41	.19	.07	.02	.02	.10	.21	.32	.56	1.1
11	.15	.30	.38	.17	.06	.02	.02	.17	.17	.26	.45	.7
12	.15	.30	.34	.19	.06	.02	.03	.87	.30	.21	.51	.56
13	.15	.34	.32	.19	.06	.04	.02	1.4	.17	.21	1.0	.48
14	.13	.48	.30	.17	.04	.03	.05	1.1	.13	.19	1.3	.70
15	.13	.34	.52	.17	.04	.09	.03	.78	.13	.30	.70	.56
16	.13	.38	.34	.19	.05	.04	.06	.82	.13	.40	.56	.48
17	.10	.90	.34	.19	.04	.03	.02	.63	.13	.30	.56	.52
18	.10	.70	.41	.26	.09	.03	.02	.83	.19	.25	.59	.78
19	.10	.45	1.6	.30	.05	.02	.02	.66	1.1	.20	.66	.56
20	.11	.34	.76	.28	.03	.03	.02	.54	.38	.25	.59	.48
21	.15	.30	1.1	.19	.03	.02	.02	.66	.34	.40	.56	.52
22	.19	.30	1.0	.19	.04	.02	.02	.34	.41	.70	.52	.74
23	.21	.26	2.0	.17	.03	.02	.02	.26	.34	.50	.48	.56
24	.21	.26	1.1	.13	.03	.02	.03	.17	.71	.40	.45	.45
25	.26	.26	.97	.11	.02	.02	.02	.13	.41	.30	.41	.41
26	.28	.26	1.5	.12	.02	.02	.02	.21	.28	.25	.38	.38
27	.21	.26	.66	.10	.02	.02	.03	.12	.26	.20	.38	.34
28	.21	.24	.48	.10	.02	.02	.05	.10	.24	.20	.34	.32
29	.21	.26	.38	.10	-----	.02	.07	.08	.19	.20	.34	.30
30	1.1	.24	.32	.09	-----	.02	.06	.21	.17	.15	.32	.30
31	3.3	-----	.30	.09	-----	.02	-----	.21	-----	.15	.32	-----
TOTAL	9.98	12.17	18.57	5.78	1.61	.79	1.12	10.96	10.44	9.36	15.85	16.77
MEAN	.32	.41	.60	.19	.058	.025	.037	.35	.35	.30	.51	.56
MAX	3.3	1.3	2.0	.38	.10	.09	.19	1.4	1.6	.70	1.3	1.5
MIN	.10	.24	.24	.09	.02	.02	.02	.03	.13	.15	.15	.28
AC-FT	20	24	37	11	3.2	1.6	2.2	22	21	19	31	33

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 113.40 MEAN .31 MAX 3.3 MIN .02 AC-FT 225

PEAK DISCHARGE (BASE, 10 CFS).--Dec. 23 (1500) 18 cfs (2.04 ft); June 8 (0500) 10 cfs (2.00 ft).

CAROLINE ISLANDS, TRUK ISLANDS

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16896800 Chun Stream, Dublon Island--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.63	.48	.86	.21	.62	.11	.23	.23	.40	.26	.51
2	.30	.48	.70	.70	.17	.48	.11	.26	.21	.35	.25	.37
3	.28	.52	.58	.51	.17	.40	.12	.54	.21	.30	.21	.30
4	.32	.70	.51	1.5	.17	.37	.10	.30	.30	.30	.21	.28
5	.28	.52	.44	1.2	.17	.34	.10	.23	.65	.35	.28	.40
6	.34	.48	.48	.70	.19	.30	.10	.19	.40	.40	.21	.34
7	.41	.41	.62	.60	.21	.26	.12	.19	.34	.40	.17	.30
8	.30	.41	.70	.58	.25	.25	.16	.17	.30	.44	.17	.30
9	.26	.38	.40	.51	.21	.23	.17	.34	.26	.40	.17	.28
10	.28	.34	.34	.51	.17	.25	.16	.48	.25	.40	.84	.28
11	.24	.34	.30	.51	.10	.30	.14	.30	.25	.37	1.0	.28
12	.24	.34	.26	.48	.09	.25	.21	.26	.24	.34	.44	.26
13	.78	.41	.25	.44	.08	.23	.23	.25	.22	.30	.37	.26
14	.78	.32	.26	.82	.08	.23	.23	.23	.20	.28	.34	.25
15	.45	.30	.26	.65	.08	.21	.30	1.5	.18	.48	.30	.25
16	.38	.30	.26	.65	.08	.21	.19	.92	.16	.30	.28	.25
17	.32	.52	.28	1.7	.37	.19	.19	.51	.30	.26	.26	.25
18	.30	.38	.37	1.1	2.8	.21	.23	.37	.40	.25	.28	.25
19	.28	.34	.87	.65	2.1	.23	.28	.34	.30	.23	.26	.26
20	.30	.38	.65	.48	1.0	.17	.26	.26	.25	.23	.26	.28
21	.30	.32	.51	.37	.87	.17	.28	.23	.25	.23	.25	.34
22	.26	.41	.34	.34	.65	.17	.26	.21	.20	.23	.25	.26
23	.38	.32	.26	.30	.65	.17	1.3	.19	.25	.23	.23	.28
24	.32	.32	.26	.30	.54	.17	.28	.16	.30	.23	.23	.44
25	.34	2.6	.23	.28	.51	.16	.23	.65	.20	.23	.21	.30
26	.30	.85	.23	.26	.44	.16	.70	.30	.20	.23	.21	.34
27	.74	.62	.23	.26	.37	.16	.76	.23	.25	.25	.30	.87
28	.59	.55	.37	.25	.92	.16	.51	.19	2.0	.28	.25	.40
29	.41	.51	.25	.25	-----	.14	.34	.21	1.0	.28	.25	.34
30	.41	.48	.30	.23	-----	.12	.26	.48	.50	.25	.23	.37
31	.45	-----	.28	.23	-----	.12	-----	.28	-----	.25	.25	-----
TOTAL	11.66	15.48	12.27	18.22	13.65	7.43	8.43	11.00	10.80	9.47	9.22	9.89
MEAN	.38	.52	.40	.59	.49	.24	.28	.35	.36	.31	.30	.33
MAX	.78	2.6	.87	1.7	2.8	.62	1.3	1.5	2.0	.48	1.0	.87
MIN	.24	.30	.23	.23	.08	.12	.10	.16	.16	.23	.17	.25
AC-FT	23	31	24	36	27	15	17	22	21	19	18	20

CAL YR 1969 TOTAL 112.09 MEAN .31 MAX 2.6 MIN .02 AC-FT 222
WTR YR 1970 TOTAL 137.52 MEAN .38 MAX 2.8 MIN .08 AC-FT 273

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	0700	2.51	32	5-15	0900	2.64	19
2-18	2200	3.00	39				

CAROLINE ISLANDS, TRUK ISLANDS

16897200 Tumunu Stream, Dublon Island

LOCATION.--Lat 7°22'42" N., long 151°52'51" E., Dublon Island, on left bank at Roro, 0.1 mile upstream from mouth, and 1.1 miles west of Penienuk.

DRAINAGE AREA.--0.26 sq mi.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 15 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 168 cfs Feb. 18 (gage height, 5.08 ft), from rating curve extended above 5.4 cfs; minimum, 0.08 cfs Feb. 14-16.

Period of record: Maximum discharge, 168 cfs Feb. 18, 1970 (gage height, 5.08 ft), from rating curve extended above 5.4 cfs; minimum, 0.02 cfs Mar. 1, 2, 1969.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	0.24	0.16	3.3	0.32
2								-	.23	.28	6.3	.30
3								-	.22	.30	3.3	.28
4								-	.22	.45	1.8	.24
5								-	.21	.85	1.4	.23
6								-	.21	.50	.85	.23
7								-	.21	.22	.71	.24
8								-	.20	1.4	.50	.35
9								-	.18	1.5	1.6	.28
10								-	.20	.92	1.1	.22
11								-	.15	1.9	3.4	.20
12								-	.20	1.3	3.4	.19
13								-	.20	.92	2.2	.19
14								-	.17	.57	1.6	.22
15								-	.14	.71	1.9	.19
16								-	.14	.92	2.0	.28
17								-	.13	.64	1.5	.38
18								-	.12	.57	2.5	.25
19	✓ 1.23							-	.12	2.9	1.9	.20
20								-	.12	1.3	3.6	.16
21								-	2.1	.64	2.3	.18
22								-	1.1	.38	1.8	.15
23								-	.25	.38	3.1	.13
24								.23	.28	1.2	.92	.18
25								.21	.25	.78	.85	.29
26								2.1	.23	.71	.57	.35
27								.71	.22	.23	.41	.23
28								.42	.20	.23	.38	.19
29								.38	.19	1.5	.35	.18
30								.30	.18	1.4	.32	.16
31								.25		4.6	.32	
TOTAL								-	8.74	39.20	54.18	9.60
MEAN								-	0.291	1.26	1.75	0.320
MAX								-	.21	4.6	6.3	2.9
MIN								-	0.12	0.16	0.32	0.13
AC-FT								-	17	78	107	19

CAL YR 1967: TOTAL MEAN MAX MIN AC-FT
WTR YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 30 CFS).--June 21 (2100) 34 cfs (2.63 ft); Aug. 2 (1200) 31 cfs (2.56 ft).

✓ Result of discharge measurement.

CAROLINE ISLANDS, TRUK ISLANDS

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16897200 Tumunu Stream, Dublon Island--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	3.9	.38	1.2	.12	.04	.39	.04	.86	.35	.25	.40
2	.30	2.6	.35	.95	.10	.04	.14	.04	.82	.28	.30	.40
3	.25	2.1	.30	.86	.08	.04	.06	.04	.48	.70	1.0	.48
4	.28	1.8	.28	.78	.06	.16	.05	.12	.32	.50	2.0	.74
5	.20	1.7	.42	.70	.06	.10	.04	.04	.28	.90	1.0	1.0
6	.19	1.5	.30	.66	.06	.06	.19	.04	.30	.62	.80	1.8
7	.17	1.2	.30	.66	.06	.06	.21	.04	1.1	.48	1.5	1.8
8	.19	1.4	.28	.62	.06	.06	.06	.05	.32	.62	1.4	2.5
9	.14	1.1	1.1	.54	.06	.12	.04	.06	.86	.62	1.5	1.5
10	.12	.90	.66	.50	.05	.05	.04	.12	.50	.54	1.4	2.1
11	.18	.74	.42	.45	.05	.04	.04	.12	.40	.45	1.2	1.4
12	.18	.70	.32	.42	.05	.05	.06	1.2	.66	.38	1.2	1.1
13	.18	.62	.28	.42	.05	.14	.04	3.0	.38	.32	2.1	1.0
14	.17	.66	.28	.42	.05	.06	.06	2.1	.28	.25	2.8	1.2
15	.16	1.2	.48	.38	.06	.28	.04	1.8	.23	.38	1.8	1.0
16	.21	.70	.32	.38	.12	.06	.17	1.9	.23	.71	1.5	.78
17	.19	2.7	.30	.32	.06	.06	.06	.78	.23	.45	1.5	.74
18	.19	1.6	.32	.30	.10	.06	.06	.82	.28	.35	1.5	1.1
19	.18	1.2	2.2	.32	.12	.04	.04	2.2	1.6	.28	1.6	1.0
20	.17	.95	2.2	.35	.06	.04	.04	2.2	.58	.35	1.4	.86
21	.20	1.0	.32	.32	.10	.04	.04	1.9	.54	.66	1.2	1.1
22	.22	.95	.33	.35	.16	.04	.04	1.6	.58	1.2	1.0	1.2
23	.17	.82	.74	.25	.12	.04	.04	1.1	.48	.78	1.0	1.2
24	.14	.70	4.2	.21	.08	.04	.04	.66	1.0	.54	.90	1.1
25	.15	.66	.35	.17	.06	.04	.04	.40	.78	.42	.78	1.0
26	.21	.66	7.5	.16	.06	.04	.04	.62	.58	.38	.70	1.0
27	.16	.58	2.6	.12	.05	.04	.04	.30	.54	.28	.74	1.0
28	.18	.48	1.9	.12	.04	.04	.04	.23	.40	.30	.62	.90
29	.14	.48	1.6	.12	-----	.04	.10	.17	.32	.30	.58	.82
30	2.7	.42	1.3	.10	-----	.04	.05	.50	.28	.25	.50	.82
31	1.3	-----	1.2	.12	-----	.04	-----	.32	-----	.25	.45	-----
TOTAL	26.82	36.02	49.19	13.27	2.10	2.00	2.30	24.51	19.09	14.89	36.22	33.04
MEAN	.87	1.20	1.59	.43	.075	.065	.077	.79	.64	.48	1.17	1.10
MAX	13	3.9	7.5	1.2	.16	.28	.39	3.0	3.2	1.2	2.8	2.5
MIN	.12	.42	.28	.10	.04	.04	.04	.04	.23	.25	.25	.40
AC-FT	53	71	98	26	4.2	4.0	4.6	49	38	30	72	66

CAL YR 1968: TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1969: TOTAL 259.45 MEAN .71 MAX 13 MIN .04 AC-FT 515

PEAK DISCHARGE (BASE, 30 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-31	1200	2.88	43	12-26	0200	2.61	33
12-23	1500	3.00	48				

CAROLINE ISLANDS, TRUK ISLANDS

16897200 Tumunu Stream, Dublon Island--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	1.5	.86	1.4	.27	1.1	.15	.27	.31	1.0	.43	1.1
2	.70	1.3	1.2	1.2	.27	.73	.15	.47	.27	.90	.47	.86
3	.62	1.3	.63	.73	.25	.63	.20	1.0	.31	.80	.39	.67
4	.58	1.9	.47	4.3	.25	.59	.17	.31	.43	.70	.35	.63
5	.50	1.5	.31	3.3	.24	.51	.18	.22	1.1	.80	.73	.98
6	.66	1.4	.25	2.1	.22	.47	.17	.18	.98	.90	.51	.67
7	.70	1.3	.43	1.2	.20	.47	.15	.22	.67	.85	.31	.59
8	.54	1.2	1.9	1.0	.22	.39	.15	.15	.59	.80	.24	.59
9	.45	1.1	1.1	.98	.18	.31	.15	.47	.55	.63	.22	.59
10	.48	1.0	.67	.73	.18	.35	.13	.80	.55	.63	2.0	.55
11	.42	1.0	.55	.59	.17	.43	.13	.59	.47	.59	2.4	.55
12	.35	.95	.47	.47	.15	.39	.31	.43	.43	.55	1.5	.51
13	1.2	1.0	.39	.35	.13	.35	.35	.35	.31	.47	1.2	.47
14	1.2	.86	.31	2.5	.15	.35	.35	.31	.25	.43	1.0	.43
15	.82	.78	.24	1.1	.12	.31	.59	3.6	.24	.80	.98	.39
16	.74	.74	.24	.70	.10	.31	.25	2.0	.22	.55	.80	.39
17	.70	1.0	.35	3.0	1.8	.27	.20	1.3	.55	.39	.73	.31
18	.66	.95	.55	2.2	18	.27	.17	.86	.67	.35	.80	.31
19	.62	.86	2.1	1.3	6.6	.25	.15	.67	.55	.27	.63	.27
20	.62	.86	1.0	.92	1.5	.24	.15	.51	.39	.25	.63	.35
21	.58	.82	.59	.80	1.2	.24	.13	.39	.31	.25	.59	.43
22	.54	1.0	.43	.59	1.1	.22	.18	.35	.27	.25	.51	.27
23	.70	.86	.39	.43	1.1	.22	2.0	.31	.31	.25	.47	.31
24	.58	.86	.39	.43	1.0	.20	.51	.24	.51	.27	.47	.63
25	.66	11	.25	.39	.98	.20	.43	1.3	.27	.25	.39	.39
26	.62	4.0	.31	.35	.80	.20	1.0	.55	.24	.24	.35	.51
27	1.6	2.8	.27	.35	.67	.20	1.6	.43	.35	.31	.55	1.7
28	1.6	1.7	.67	.35	2.1	.22	.92	.35	4.0	.47	.43	.63
29	1.2	1.3	.39	.47	-----	.20	.55	.39	2.0	.47	.35	.47
30	1.4	.92	.47	.35	-----	.18	.39	.63	1.0	.35	.27	.67
31	1.3	-----	.43	.31	-----	.17	-----	.43	-----	.35	.39	-----
TOTAL	24.16	47.76	18.61	34.89	39.95	10.97	11.96	20.08	19.10	16.12	21.09	17.22
MEAN	.78	1.59	.60	1.13	1.43	.35	.40	.65	.64	.52	.68	.57
MAX	1.6	11	2.1	4.3	18	1.1	2.0	3.6	4.0	1.0	2.4	1.7
MIN	.35	.74	.24	.31	.10	.17	.13	.15	.22	.24	.22	.27
AC-FT	48	95	37	69	79	22	24	40	38	32	42	34

CAL YR 1969 TOTAL 237.95 MEAN .65 MAX 11 MIN .04 AC-FT 472
WTR YR 1970 TOTAL 281.91 MEAN .77 MAX 18 MIN .10 AC-FT 559

PEAK DISCHARGE (BASE, 30 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	0700	4.54	129	5-15	0830	2.66	30
2-18	2230	5.08	168				

Discharge measurements made at low-flow partial-record stations during water years 1968-70

Discharge measurements made at low flow partial record stations during water years 1968-70						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Truk Islands						
16893900	Pou Stream, Moen	Lat 7°26'53" N., long 151°51'21" E., Moen, 0.6 mile north of Mount Teroken and 0.4 mile upstream from mouth.	0.17	1968-70	10-20-67 11-22-68 12-28-68 2- 2-69 6- 6-69 6-18-69 8-26-69 9-12-69 9-25-69 11- 5-69 12- 3-69 4-17-70 4-30-70 5-13-70	0.10 .30 .13 .02 .12 .04 .24 .42 .39 1.7 .62 .08 .31 .32
16894300	Nefounumas Spring, Moen	Lat 7°25'50" N., long 151°51'35" E., Moen, 0.2 mile upstream from mouth of Nefounumas Stream and 0.6 mile south-east of Mount Teroken.	-	1969-70	11-23-68 12-28-68 1-23-69 6- 3-69 6-20-69 9-12-69 9-25-69 11- 5-69	.30 .22 .14 .09 .22 .15 .10 .24
16895100	Afeibung Stream, Tol	Lat 7°20'55" N., long 151°37'22" E., Tol, 0.3 mile upstream from mouth and 0.6 mile northwest of Mount Tumutal.	.08	1968-70	10-20-67 12-17-68 1-20-69 1-29-69 3-10-69 5- 7-69 6- 4-69 8- 8-69 8-29-69 9- 9-69 9-24-69 10- 7-69 3- 3-70 3-20-70 4- 2-70 4-16-70 5-11-70 7-10-70 9-15-70	.55 .24 .15 .02 0 0 .05 .12 .05 .23 .30 .80 .08 .04 .02 .02 .11 .09 .04
16897000	Fansinifo Stream (formerly at Roro), Dublon Island	Lat 7°22'39" N., long 151°52'44" E., Dublon Island, 700 ft upstream from mouth and 0.5 mile northeast of Mount Tolomen. <u>a</u> /	.06	1955-57* 1969-70	1-20-69 6- 5-69 8-18-69 9- 2-69 9-15-69 9-29-69 10-15-69 10-27-69 11-26-69 1- 7-70 1-23-70 1-30-70 3-27-70 4-13-70 5- 5-70 7- 7-70 7-22-70	.36 .08 .42 .09 .44 .29 .29 .61 1.2 .52 .15 .12 .07 .07 .07 .13 .06

* Operated as a continuous-record gaging station.
a Revised.

Discharge measurements made at miscellaneous sites during water years 1968-70

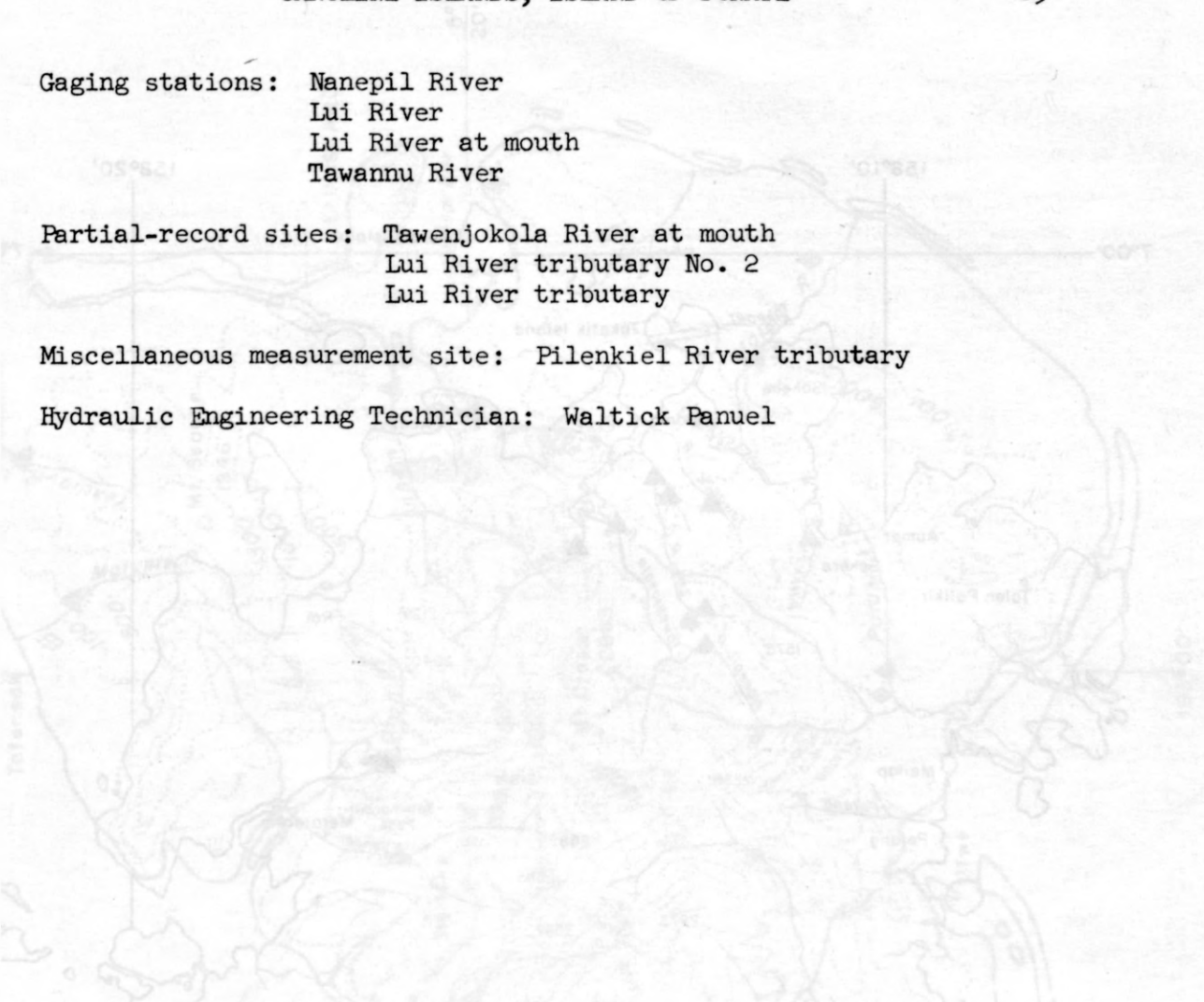
Discharge measurements made at Moen, Caroline Islands						
Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Truk Islands						
Wichen River, Moen	Truk Lagoon	Lat 7°26'41" N., long 151°51'58" E., Moen, 1.1 miles above mouth and 1.7 miles west of Saint Xaviers Academy.			10-18-67	0.37
Wichen River, Moen	Truk Lagoon	Lat 7°26'47" N., long 151°52'06" E., Moen, 0.9 mile above mouth and 1.6 miles west of Saint Xaviers Academy.			3-16-66 3-17-66	.08 6.4

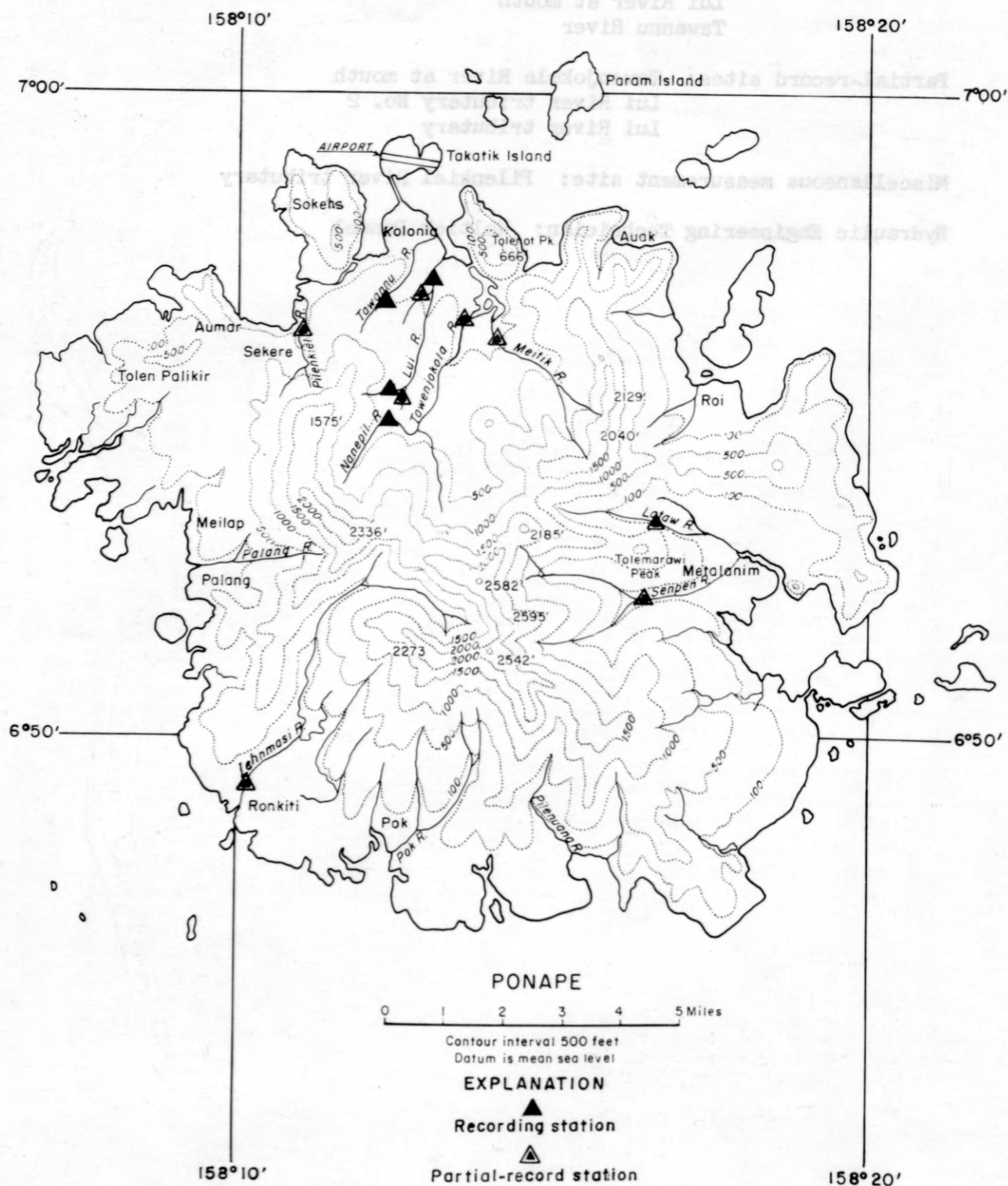
Gaging stations: Nanepil River
Lui River
Lui River at mouth
Tawannu River

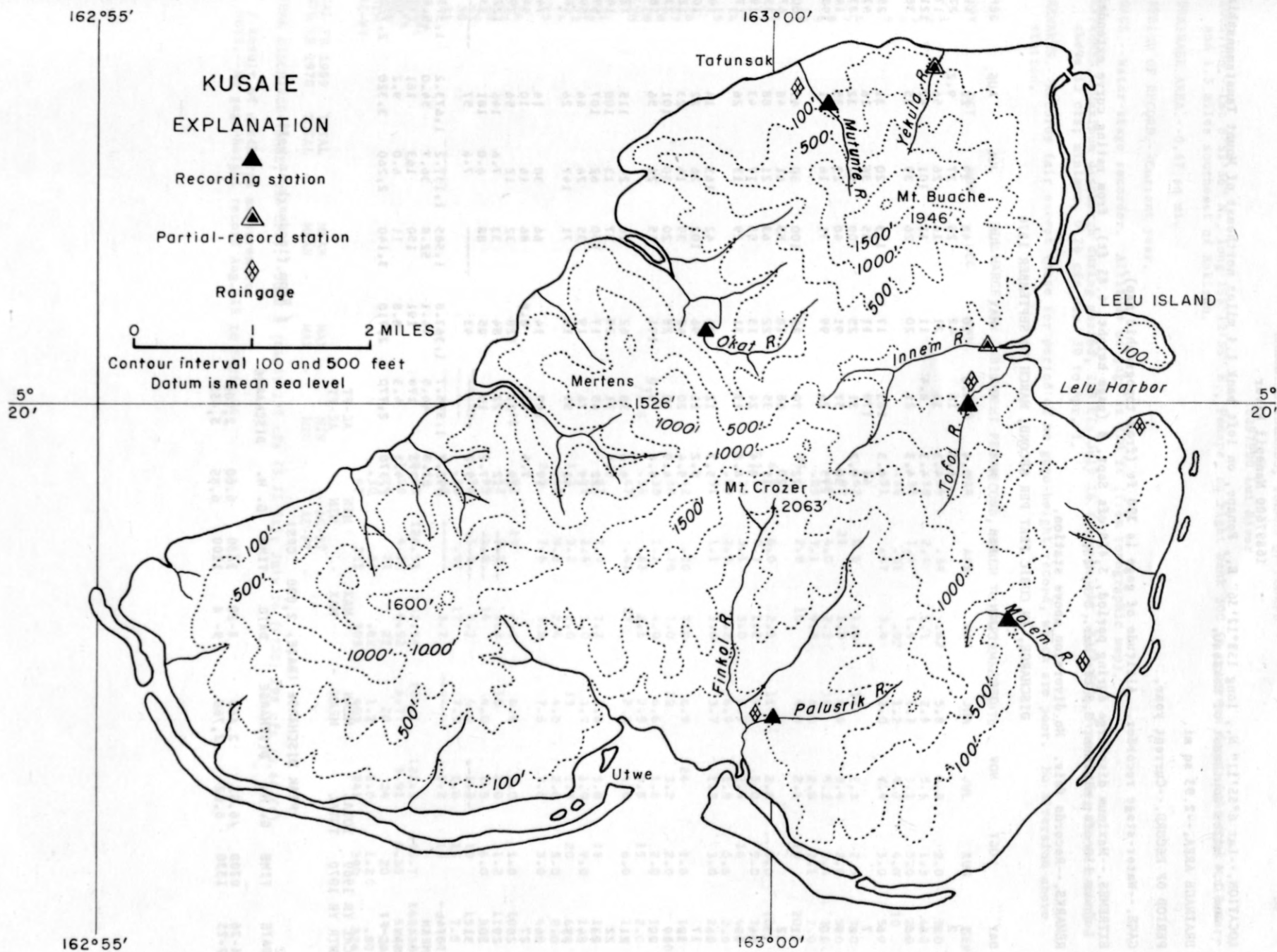
Partial-record sites: Tawenjokola River at mouth
Lui River tributary No. 2
Lui River tributary

Miscellaneous measurement site: Pilenkiel River tributary

Hydraulic Engineering Technician: Waltick Panuel







CAROLINE ISLANDS, ISLAND OF PONAPE

16897600 Nanepil River

LOCATION.--Lat 6°55'11" N., long 158°12'36" E., Ponape, on left bank 1.4 miles northeast of Mount Tamatamansakir and 1.4 miles southeast of Rekisau.

DRAINAGE AREA.--2.93 sq mi.

PERIOD OF RECORD.--Current year.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 3,450 cfs Sept. 4 (gage height, 6.85 ft), from rating curve extended above 110 cfs; minimum, 3.8 cfs Mar. 3-6, 23.

REMARKS.--Records fair. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						5.4	4.3	10	48	39	22	41
2						4.9	16	42	25	37	9.2	27
3						4.3	16	21	16	26	56	17
4						4.3	8.4	11	11	101	42	121
5						4.3	21	20	26	39	35	38
6						4.3	163	17	123	20	31	25
7						41	179	11	35	34	16	43
8						9.2	31	25	100	52	32	23
9						30	57	91	40	23	35	14
10						273	26	99	31	16	71	198
11						72	79	23	100	30	47	100
12						20	88	16	53	61	48	67
13						11	35	22	63	21	88	35
14						8.4	24	13	53	17	43	19
15						6.8	17	31	29	13	26	17
16						5.7	12	84	42	163	14	19
17						5.2	11	96	102	26	22	10
18						5.4	20	42	39	14	23	12
19						4.9	10	28	20	30	101	23
20						4.6	8.0	191	15	26	56	18
21						4.6	38	62	16	24	115	12
22						5.4	31	25	37	13	100	16
23						22	45	17	150	62	107	59
24						19	76	19	35	24	44	59
25						41	59	19	71	147	26	48
26						19	169	14	66	30	14	74
27						7.6	93	8.8	86	16	10	54
28						25	21	128	32	12	56	29
29					-----	12	22	54	33	7.6	146	122
30					-----	7.2	16	85	88	6.0	181	33
31		-----			-----	5.2	-----	43	-----	7.6	57	-----
TOTAL						692.7	1,395.7	1,367.8	1,585	1,137.2	1,673.2	1,373
MEAN						22.3	46.5	44.1	52.8	36.7	54.0	45.8
MAX						273	179	191	150	163	181	198
MIN						4.3	4.3	8.8	11	6.0	9.2	10
AC-FT						1,370	2,770	2,710	3,140	2,260	3,320	2,720

CAL YR 1969	TOTAL	MEAN	MAX	MIN	AC-FT
WTR YR 1970	TOTAL -	MEAN -	MAX -	MIN -	AC-FT -

PEAK DISCHARGE (BASE, 2,000 CFS)

/ From floodmark in well.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	0200	6.52	2,460	8-29	1430	6.60	2,700
7-25	1330	6.62	2,760	9- 4	1100	6.85	3,450

CAROLINE ISLANDS, ISLAND OF PONAPE

89

16897900 Lui River

LOCATION.--Lat 6°55'36" N., long 158°12'55" E., Ponape, on right bank 300 ft upstream from right-bank tributary and 1.3 miles southeast of Rekisau.

DRAINAGE AREA.--0.47 sq mi.

PERIOD OF RECORD.--Current year.

GAGE.--Water-stage recorder. Altitude of gage is 270 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 298 cfs July 16 (gage height, 3.44 ft), from rating curve extended above 13 cfs; minimum, 0.26 cfs Mar. 30 to Apr. 1.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						.34	.34	.62	5.8	4.8	2.0	7.0
2						.38	2.4	5.1	2.8	5.6	1.3	4.0
3						.38	1.4	1.9	1.7	3.1	5.0	2.0
4						.38	.51	.92	1.2	9.7	4.0	10
5						.51	.47	3.4	2.0	4.4	3.0	5.0
6						.62	8.6	1.9	16	2.3	2.5	3.0
7						.92	21	1.0	4.6	3.4	2.0	5.0
8						.30	4.0	2.3	18	5.2	3.4	3.0
9						.85	7.1	9.8	6.0	2.8	7.1	2.0
10						24	2.8	10	4.4	2.1	10	20
11						6.3	6.0	2.3	11	2.6	5.0	10
12						1.5	9.7	1.2	9.4	5.0	5.0	7.0
13						.78	3.1	3.0	8.7	2.4	14	4.0
14						.55	2.3	1.2	6.9	1.5	5.6	2.5
15						.51	1.1	3.0	3.7	1.2	3.0	2.0
16						.42	.70	7.0	6.9	24	1.8	1.5
17						.38	.78	7.0	20	3.2	2.0	.80
18						.38	1.2	4.0	6.6	1.8	2.0	1.0
19					72.8	.34	.62	2.5	2.5	5.5	15	2.0
20						.47	.47	22	2.3	4.0	6.0	1.5
21						.51	2.9	7.2	1.8	3.8	18	1.0
22						.62	2.4	3.0	3.7	1.9	7.0	1.8
23						1.2	3.2	2.0	13	1.5	20	6.0
24						.62	9.2	2.4	4.0	2.0	5.0	8.0
25						2.5	7.6	3.0	7.8	7.6	3.0	4.0
26						.92	19	2.6	6.8	3.0	1.8	10
27					74.8	.42	3.7	1.2	10	2.0	1.2	11
28						.85	1.8	14	4.0	1.5	6.0	5.5
29						.38	1.2	6.3	4.0	1.2	10	15
30						.30	.92	17	7.5	1.0	15	7.5
31						.30	-----	3.7	-----	1.2	10	-----
TOTAL						48.93	126.51	152.54	203.1	121.3	196.7	163.10
MEAN						1.58	4.22	4.92	6.77	3.91	6.35	5.44
MAX						24	21	22	20	24	20	20
MIN						.30	.34	.62	1.2	1.0	1.2	.80
AC-FT						97	251	303	403	241	390	324

CAL YR 1969 TOTAL MEAN MAX MIN AC-FT
WTR YR 1970 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 250 CFS).--June 8 (0500) 272 cfs (3.31 ft); July 16 (0730) 298 cfs (3.44 ft).

/ Result of discharge measurement.

NOTE.--No gage-height record Aug. 15 to Sept. 26.

CAROLINE ISLANDS, ISLAND OF PONAPE

16898200 Lui River at mouth

LOCATION.--Lat 6°57'07" N., long 158°13'16" E., Ponape, on right bank 0.4 mile upstream from mouth and 1.3 miles west of Tolenot Peak,

DRAINAGE AREA.--2.06 sq mi,

PERIOD OF RECORD.--Current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map),

EXTREMES.--Maximum discharge during period, 1,280 cfs June 17 (gage height, 4.14 ft), from rating curve extended above 92 cfs; minimum, 3.0 cfs Mar. 6.

REMARKS.--Records fair. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						3.7	3.6	6.2	25	24	11	28
2	0.5	8.8	8.2	5.8	8.2	3.5	7.9	13	16	26	8.7	20
3	1.1	8.2	8.5	1.2	8.5	3.4	6.1	7.9	12	18	19	15
4	0.2	1.1	1.1	0.1	0.1	3.3	4.0	5.6	9.8	30	20	16
5	0.8	1.0	1.1	1.1	1.1	3.3	5.0	9.8	9.5	20	21	19
6	0.5	0.8	0.5	0.5	0.5	3.2	25	7.3	42	14	15	14
7	0.5	0.5	0.5	0.5	0.5	4.1	100	5.3	18	18	11	14
8	0.5	0.5	0.5	0.5	0.5	3.3	15	7.1	84	24	12	11
9	0.2	0.2	0.2	0.2	0.2	5.0	25	30	27	15	39	8.5
10	1.1	0.5	0.5	0.5	0.5	114	12	30	20	13	33	105
11	0.1	1.5	0.8	0.1	0.1	31	35	12	41	14	27	40
12	0.2	0.5	1.1	1.5	0.8	11	40	7.3	40	24	22	57
13	0.2	0.5	0.8	1.1	0.8	7.1	25	9.5	40	15	46	27
14	0.1	0.5	1.8	0.5	0.8	5.9	12	7.1	32	10	22	16
15	0.2	0.1	0.8	1.1	0.5	5.1	9.0	8.1	22	8.9	15	14
16	0.2	0.1	1.5	0.5	0.5	4.7	7.0	22	29	138	12	12
17	0.1	0.5	0.8	0.5	0.5	4.2	6.5	23	113	20	9.3	9.1
18	0.1	0.5	0.5	0.5	0.5	4.1	10	21	27	14	9.1	9.3
19	0.5	0.5	0.5	0.5	0.5	3.9	7.0	16	17	19	36	8.5
20	0.1	0.5	0.5	0.5	0.5	3.9	6.5	94	15	15	29	8.1
21	0.8	0.8	1.5	1.5	1.5	3.7	14	37	12	15	102	6.8
22	0.1	0.5	0.5	1.1	0.5	3.5	12	19	13	9.3	34	6.6
23	0.1	0.5	1.5	0.5	0.5	4.8	12	14	49	8.3	117	20
24	0.5	0.5	0.5	0.5	0.5	4.9	27	15	19	8.5	27	27
25	0.2	0.5	0.5	0.5	0.5	7.1	27	18	32	16	18	18
26	0.5	0.5	0.5	0.5	0.5	5.3	68	15	27	11	14	56
27	0.1	0.5	0.5	0.5	0.5	4.3	18	10	64	8.7	11	48
28	0.1	0.5	0.5	1.1	1.5	5.6	12	92	27	8.3	20	35
29	0.5	0.5	0.5	0.5	0.5	4.5	8.9	34	22	6.8	18	53
30	0.1	0.5	0.5	0.5	0.5	4.0	7.3	68	32	5.6	65	41
31	0.1	0.5	0.5	0.5	0.5	3.7	-----	21	-----	6.4	35	-----
TOTAL						279.1	567.8	685.2	936.3	583.8	878.1	762.9
MEAN	1.801	4.101	1.801	1.801	1.801	9.00	18.9	22.1	31.2	18.8	28.3	25.4
MAX	8.8	8.8	8.8	8.8	8.8	114	100	94	113	138	117	105
MIN	0.1	0.1	0.1	0.1	0.1	3.2	3.6	5.3	9.5	5.6	8.7	6.6
AC-FT	0.1	0.1	0.1	0.1	0.1	554	1,130	1,360	1,860	1,160	1,740	1,510

CAL YR 1969 TOTAL MEAN MAX MIN AC-FT
WTR YR 1970 TOTAL MEAN MAX MIN AC-FT

PEAK DISCHARGE (BASE, 1,200 CFS).--June 17 (0200) 1,280 cfs (4.14 ft); Aug. 21 (1430) 1,260 cfs (4.12 ft),

/ Result of discharge measurement.

CAROLINE ISLANDS, ISLAND OF PONAPE

91

16898300 Tawannu River

LOCATION.--Lat 6°56'57" N., long 158°12'50" E., Ponape, on left bank 1.3 miles northeast of Rekisau and 1.8 miles west of Tolenot Peak.

DRAINAGE AREA.--1.00 sq mi.

PERIOD OF RECORD.--Current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 110 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 357 cfs Aug. 21 (gage height, 2.99 ft), from rating curve extended above 76 cfs; minimum, 0.10 cfs Apr. 1.

REMARKS.--Records fair. During dry periods, up to 360,000 gal per day is diverted 100 ft above station for domestic use in Kolonia.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						.92	.15	2.3	9.7	9.7	3.0	10
2						.80	.35	3.9	6.3	11	2.6	8.9
3						.68	.40	2.7	5.1	8.1	7.7	6.0
4						.50	.40	1.8	4.0	9.7	8.9	5.8
5						.45	2.0	3.0	3.8	7.7	8.9	6.0
6						.40	15	2.4	14	5.8	7.3	4.8
7						.50	40	1.8	8.9	6.5	5.8	4.6
8						.35	8.0	1.9	22	9.3	5.1	3.8
9						1.0	10	9.9	10	6.0	16	3.0
10						39	5.0	16	7.3	5.1	17	26
11						13	15	5.8	20	5.3	15	17
12						5.5	20	4.0	17	8.9	11	24
13						3.5	10	4.0	18	5.8	19	12
14					/ .78	2.6	5.0	3.1	14	4.3	11	7.3
15						2.2	3.0	3.8	9.3	3.7	7.7	5.3
16						1.7	2.2	11	10	47	5.8	4.3
17						1.2	2.5	14	36	9.7	4.6	3.3
18						1.2	4.0	13	11	6.0	4.1	3.1
19						1.0	2.2	10	7.7	5.5	9.3	3.0
20						.98	2.0	34	6.0	4.8	10	3.1
21						.92	3.4	16	4.8	4.3	38	2.4
22					/ 1.9	.74	3.1	8.1	4.6	3.0	14	2.3
23						.92	2.7	6.0	17	2.6	38	7.3
24						.86	3.8	6.3	8.1	2.3	12	9.3
25						1.4	5.8	7.7	12	3.3	7.7	6.5
26						1.1	17	6.9	10	3.0	6.0	17
27						.74	6.5	4.8	23	2.5	4.6	16
28						.80	4.8	34	12	2.4	4.8	12
29					-----	.50	3.7	15	9.7	1.9	7.7	14
30					-----	.40	2.7	16	13	1.5	25	14
31		-----			-----	.30	-----	8.5	-----	1.9	11	-----
TOTAL						86.16	200.70	277.7	354.3	208.6	348.6	262.1
MEAN						2.78	6.69	8.96	11.8	6.73	11.2	8.74
MAX						39	40	34	36	47	38	26
MIN						.30	.15	1.8	3.8	1.5	2.6	2.3
AC-FT						171	398	551	703	414	691	520

CAL YR 1969 TOTAL MEAN MAX MIN AC-FT
WTR YR 1970 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 300 CFS).--Aug. 21 (1400) 357 cfs (2.99 ft).

/ Result of discharge measurement.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water years 1968-70

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Island of Ponape						
16897800	Tawenjokola River at mouth	Lat 6°56'42" N., long 158°13'50" E., Ponape, 0.1 mile upstream from mouth and 1.1 miles southwest of Tolenot Peak.	10.9	1970	2-22-70	42
16898000	Lui River tributary No. 2	Lat 6°55'20" N., long 158°12'55" E., Ponape, 0.3 mile upstream from mouth and 1.5 miles southeast of Rekisau.	.04	1970	2-19-70 3-25-70 5-11-70 5-19-70 6- 4-70 6-18-70 7-21-70 8- 7-70 9- 1-70 9-24-70	1.1 .40 .35 1.1 .29 1.2 1.2 .37 2.1 2.1
16898100	Lui River tributary	Lat 6°57'04" N., long 158°13'15" E., Ponape, at mouth and 1.4 miles southwest of Tolenot Peak.	.36	1970	2-14-70 5-11-70 5-20-70 6-19-70 7-20-70 9- 2-70 9-22-70	1.6 1.2 10 4.8 1.4 4.6 .99

Discharge measurements made at miscellaneous sites during water years 1968-70

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Caroline Islands, Island of Ponape						
Pilenkiel River tributary	Pilenkiel River	Lat 6°55'44" N., long 158°11'42" E., Ponape, 0.7 mile southwest of Rekisau and 3.1 miles southwest of Kolonia.			10-16-67	0.42

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