

Surface Water Supply of Mariana, Caroline and Samoa Islands Through June 1960

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GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1751

*Prepared in cooperation with the
Government of Guam and the
Government of American Samoa*



UNITED STATES DEPARTMENT OF THE INTERIOR

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PREFACE

This report was prepared by the Geological Survey in cooperation with the Government of Guam and the Government of American Samoa by personnel of the Water Resources Division, L. B. Leopold, chief, under the general direction of E. L. Hendricks, chief, Surface Water Branch, and F. J. Flynn, chief, Reports Section.

The data were collected and computed under the supervision of H. S. Leak, district engineer, Honolulu.

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SURFACE WATER SUPPLY OF MARIANA, CAROLINE, AND SAMOA ISLANDS THROUGH JUNE 1960

SCOPE OF WORK

This volume contains records of daily flow of streams and ditches at 13 gaging stations on Guam, 1 on Saipan, 4 in the Caroline Islands, and 11 on Samoa through the 1960 fiscal year. Since the beginning of the stream-gaging work on Guam in 1951, Saipan in 1952, and the Caroline Islands and Samoa in 1955, records of flow of streams and ditches have been obtained at about 32 stations for periods ranging from a few months to 10 years. In addition, partial-record stations have been operated at many other points, and discharge measurements have been made at miscellaneous sites. The records through fiscal year 1960 at gaging stations, partial-record stations, and miscellaneous sites are given in this report. Ground-water studies made by the Geocliol Survey in Guam, Saipan, and Truk are covered in reports on the military geology of the respective islands, which were prepared under the direction of the Chief of Engineers, U.S. Army, and issued by the Office of the Engineer, U.S. Army Pacific. A reconnaissance-type study of the ground water of the islands of American Samoa is covered in a report to be published by the Geological Survey as a Water-Supply Paper.

COOPERATION

The work during the period 1951-60 was done under cooperative agreements with the Government of Guam and the Government of American Samoa. Assistance in the form of funds was given by the Trust Territory of Pacific Islands and the U.S. Navy.

DIVISION OF WORK

The stream-gaging work was done by the Water Resources Division of the Geological Survey under the direction of personnel shown in the preface.

Information of a more detailed nature than that published for most of the gaging stations given in this report is on file in the district office, Room 330, First Insurance Building, Honolulu. Provisional records of discharge prior to publication, and other unpublished data concerning the gaging-station records may usually be obtained from the district office.

DEFINITION OF TERMS AND ABBREVIATIONS

The terms of streamflow and other hydrologic data, as used in this report, are defined as follows:

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 herein only to those gaging stations where a continuous record of discharge is obtained.

Partial-record station is a particular site where limited streamflow 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.

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, a long reach of the channel, or an artificial structure.

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

Cubic foot per second (cfs) is the rate of discharge of a stream whose channel is 1 square foot in cross-sectional area and whose average velocity is 1 foot per second.

Million gallons per day (mgd) is the rate of discharge of a stream measured in millions of gallons per day.

Acre-foot is the quantity of water required to cover an acre to the depth of 1 foot and is equivalent to 43,560 cubic feet.

The following convenient approximate relations exist between cubic feet per second, million gallons a day, and acre-feet: 1 cubic foot per second flowing 24 hours equals about 2 acre-feet; 1,000,000 gallons equals about 3 acre-feet; and 1,000,000 gallons a day equals about 1.55 cubic feet per second.

DOWNSTREAM ORDER AND STATION NUMBERS

Gaging station records are listed in a downstream direction along the main stem. All stations on a tributary entering above a main-stem station are listed before that station. If a tributary enters between two main-stem stations, it is listed between them. Tributary streams are indicated by indentation. This downstream order and the system of indentation show which gaging stations are on tributaries between any two stations on a main stem.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. The numbers have been assigned in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and regular gaging stations, so that 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 number for each station, such as 40-8400.00, includes the district number "40" and a six digit station number. In this report, only the essential digits of the station number are shown. For example, the complete number 40-8400.00 would appear as 8400 just to the left of the station name. Also, the records are listed in downstream order by islands.

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage and measurements of discharge. 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. All records of stage are obtained from water-stage recorders or readings from staff gages that give continuous records of fluctuations. Measurements of discharge are made with a current meter by the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in Water-Supply Paper 888 and are also outlined in standard textbooks on measurement of stream discharge.

Occasionally discharge is determined from a weir or rating flume, using standard formulas.

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, and by other methods), velocity-area studies, and logarithmic plotting. For several stations the high-water ratings have been developed by the use of models. The application of the daily mean gage height to those rating tables 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, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers 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 essentially the shifting-control method.

The data herein presented generally comprise a description of the station, a skeleton rating table, and a table showing the daily discharge and monthly and yearly discharge of the stream.

The description of the station gives the location, drainage area, records available, type and history of gages, average discharge, extremes of discharge, and general remarks. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Under "Gage" are given the type of gage currently in use and the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of records available. Under "Average discharge" is given the average discharge for the number of years indicated. It is not given for stations having fewer than five complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "Extremes" are given the maximum discharge and gage height and the minimum discharge and gage height. In the first paragraph, the data given are for the complete current fiscal year unless otherwise specified. In the second paragraph, the data given are for the periods of record within the calendar year dates in the heading (not necessarily those for the complete years indicated by the heading dates). Reliable information concerning major floods that have occurred outside the period of record are 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. 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 records and conditions which affect the natural flow at the gaging station is given under "Remarks."

The daily table gives, in general, the discharge corresponding to the daily mean gage height. For stations subject to sudden or rapid diurnal fluctuation, the daily mean gage height may not indicate the true daily mean discharge, which must be obtained by averaging the discharge for parts of the day.

In the table of daily discharge, the figures for the maximum and the minimum day of each month are underlined. If the figure is repeated, it is underlined on the first day of its occurrence.

In the monthly summary below the daily table, the line headed "Total" gives the sum of the daily figures; the units of the total are cfs-days or, for stations on the Caroline Islands and American Samoa, millions of gallons. The line headed "Mean" gives the average flow in the units of the daily table and, for stations on American Samoa, also in cubic feet per second. The line headed "Ac-ft" gives discharge for the month in acre-feet.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges, not the momentary discharges when the water was at crest stage. Likewise, the minimums in this summary are the minimum daily discharges.

Peak discharges and the times of their occurrence and corresponding gage heights for most stations are listed below the table of daily and monthly discharge. 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 will be presented. Peak discharges are not published for canals, ditches, springs, or for any stream for which the peaks are subject to substantial control by man.

Footnotes to the table of daily discharge indicate periods when discharge was computed or estimated by unusual or special methods during periods of no gage-height record or of other effects that reduce the degree of accuracy of the record.

Data collected at partial-record stations and at miscellaneous sites are given at the end of the report. These are presented in two tables. 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.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of streamflow 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 description states the degree of accuracy of the record. "Excellent" indicates that, in general, the error in the daily records is believed to be less than 5 percent; "good," less than 10 percent, "fair," less than 15 percent; and "poor," probably more than 15 percent. The records of monthly and yearly mean discharge and runoff are, in general, more nearly accurate than the daily records.

Computations are carried to not more than three significant figures, except that monthly and yearly total discharge (million gallons and acre-feet) above 10,000 are carried to four significant figures.

MARIANA ISLANDS

ISLAND OF SAIPAN

8000. Donni Spring near Garapan

Location.--Lat 15°11'58" N., long 145°46'03" E., 3 miles southeast of Tanapag, 3.2 miles east of Garapan, and 5.8 miles northeast of Chalan Kanca.

Records available.--August 1952 to June 1954 (discontinued).

Gage.--Water-stage recorder and rectangular flume. Altitude of gage is 261 ft above mean sea level (from U.S. Navy).

Extremes.--1952-53: Maximum daily discharge during period August to June, 1.84 cfs Nov. 3, 4, 11, 12; minimum daily, 0.12 cfs Dec. 17-30.

1953-54: Maximum daily discharge during fiscal year, 1.72 cfs Oct. 18, 19, minimum daily, 0.05 cfs June 12-21.

Remarks.--Records good. This is the largest high-level spring in Saipan.

Discharge, in cubic feet per second, fiscal year August 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1		-	0.22	0.63	1.72	1.06	0.67	0.48	1.01	0.36	0.28	0.18
2		-	.22	.67	1.78	1.10	.88	.45	.97	.36	.28	.18
3		-	.20	.67	1.84	1.16	1.32	.45	.80	.36	.28	.18
4		-	.20	.67	1.54	1.21	1.32	.45	.76	.36	.28	.18
5		-	.24	1.01	1.78	1.16	1.22	.45	.71	.36	.26	.18
6		-	.67	1.16	1.72	1.10	1.20	.45	.67	.36	.26	.16
7		-	1.01	1.06	1.72	1.10	1.18	.45	.60	*.36	.24	.16
8		-	1.06	1.21	1.72	1.01	1.12	.45	.60	.36	.24	.16
9		-	1.21	1.48	1.72	.93	1.01	.42	.60	.36	.24	.14
10		-	1.38	1.54	1.78	.93	.95	.45	.57	.36	.24	.14
11		-	1.43	1.54	1.84	.88	.87	.48	.57	.36	.22	.14
12		-	1.43	1.54	1.84	.88	.84	.48	.54	.36	.22	.14
13		-	1.43	1.48	1.78	.88	.78	.45	.51	.36	.22	.14
14		-	1.38	1.48	1.72	.84	.73	.45	.51	.36	.22	.14
15		*0.28	1.38	1.48	1.72	.80	.68	.45	.48	.36	.20	.14
16		.28	1.38	1.43	1.72	.80	.62	.45	.48	.36	.20	.14
17		.28	1.26	1.32	1.72	.80	.61	.42	.48	.33	.20	.12
18		.28	1.21	1.26	1.65	.76	.58	.42	.45	.33	.20	.12
19		.28	1.01	1.21	1.65	.71	*.57	.42	.45	.30	.20	.12
20		.28	.88	1.21	1.60	.71	.57	.42	.45	.30	.20	.12
21		.28	.76	*1.06	1.65	.71	.57	.42	.45	.30	.20	.12
22		.26	.71	.93	1.60	.71	.54	.45	.45	.30	.20	.12
23		.26	.63	1.10	1.54	.71	.51	.48	.45	.30	.20	.12
24		.26	.60	1.21	1.48	.67	.51	1.32	.42	.30	.20	.12
25		.24	.57	1.38	1.43	.67	.51	1.32	.42	.28	.20	.12
26		.24	.57	1.43	1.38	.67	.51	1.26	.42	.28	.18	.12
27		.24	.57	1.48	1.38	.63	.48	1.21	.42	.28	.18	.12
28		.22	.54	1.54	1.26	.63	.48	1.16	.42	.28	.18	.12
29		.22	.57	1.48	1.16	.60	.48	-	.39	.28	.18	.12
30		.22	.60	1.48	1.10	.60	.48	-----	.39	.28	.18	.12
31		.22	-----	1.65	-----	.60	.48	-----	.36	-----	.18	-----
Total		-	25.32	38.79	48.84	26.02	23.27	16.96	16.80	9.90	6.76	4.18
Mean		-	0.844	1.25	1.63	0.839	0.761	0.606	0.542	0.330	0.218	0.139
Ac-ft		-	50	77	97	52	46	34	33	20	13	8.3
Calendar year		: Max		Min		Mean		Ac-ft				
Fiscal year		: Max		Min		Mean		Ac-ft				

* Discharge measurement made on this day.

8000. Donni Spring near Garapan--Continued

Discharge, in cubic feet per second, fiscal year July 1953 to June 1954

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.12	0.11	1.26	1.16	0.76	0.51	0.60	0.39	0.28	0.16	0.10	0.07
2	.12	.11	1.21	1.01	.76	.51	.60	.39	.28	.14	.10	.06
3	.12	.11	1.16	.95	.71	.48	.60	.36	.28	.14	.10	.06
4	.12	.11	1.01	.80	.67	.48	.57	.36	.26	.14	.10	.06
5	.11	.12	.93	.76	.67	.48	.57	.36	.26	.14	.10	.06
6	*.11	.12	.88	.76	.63	.48	.57	.36	.26	.14	.10	.06
7	.11	.14	.80	.71	.63	.45	.57	.36	.24	.14	.10	.06
8	.11	.14	.76	.67	.60	.45	.54	.36	.24	.14	.10	.06
9	.12	.16	.71	.63	.80	.45	.54	.36	.24	.14	.10	.06
10	.12	.16	.67	.60	.80	.45	.51	.36	.24	.14	.09	.06
11	.12	.20	.63	.60	.57	.45	.51	.33	.24	.14	.09	.06
12	.12	.26	.60	.60	.57	.45	.51	.33	.24	.12	.09	.05
13	.12	.39	.57	.57	.57	.42	.51	.33	.22	.12	.09	.05
14	.12	.57	.54	.57	.60	.42	.51	.33	.22	.12	.08	.05
15	.12	.60	.54	.63	.63	.63	.51	.30	.20	.12	.08	.05
16	.11	.67	.67	1.21	.63	*1.26	.48	.30	.20	.12	.08	.05
17	.11	.80	.88	1.65	.60	1.43	.48	.30	.20	.11	.08	a.05
18	.11	.93	1.06	1.72	.60	1.43	.48	.30	.20	.11	.08	a.05
19	.12	1.16	1.43	1.72	.60	1.38	.45	.30	.20	.11	.08	a.05
20	.11	1.26	1.54	1.65	.57	1.32	.45	.30	.20	.11	.08	a.05
21	.11	1.21	1.60	1.60	.57	1.32	.45	.30	.20	.11	.08	a.05
22	.11	1.10	1.65	1.54	.57	1.26	.45	.28	.20	.11	.08	*a.09
23	.11	.93	*1.65	1.48	.54	1.16	.45	.28	.18	.11	.08	a.09
24	.11	.80	1.65	1.48	.54	1.01	.42	.28	.18	.11	.08	a.08
25	.11	.71	1.65	1.38	.57	.93	.42	.28	.18	.11	.08	a.08
26	.11	.67	1.60	1.26	.57	.80	.42	.28	.18	.10	.08	a.08
27	.11	.67	1.54	1.21	.57	.76	.42	.28	.18	.10	.08	a.08
28	.11	.71	1.54	1.06	.54	.76	.42	.28	.18	.10	.08	a.07
29	.11	.88	1.48	.97	.51	.71	.42	-	.18	.10	.08	a.07
30	.11	1.10	1.32	.88	.51	.67	.42	-----	.16	.10	.08	a.07
31	.11	1.21	-----	.80	-----	.63	.39	-----	.16	-----	.07	-----
Total	3.53	18.11	33.53	32.61	18.06	23.94	15.24	9.04	6.68	3.65	2.69	1.88
Mean	0.114	0.584	1.12	1.05	0.602	0.772	0.492	0.323	0.215	0.122	0.087	0.063
Ac-ft	7.0	36	67	65	36	47	30	18	13	7.2	5.3	3.7
Calendar year 1953: Max		1.72		Min	0.11	Mean	0.569	Ac-ft	412			
Fiscal year 1953-54: Max		1.72		Min	0.05	Mean	0.463	Ac-ft	335			

* Discharge measurement made on this day.

a Doubtful or no gage-height record; discharge estimated on basis of probable decrease in flow and 1 discharge measurement.

8010. La Sa Fua River near Umatac

Location.--Lat 13°18'25" N., long 144°39'45" E., on left bank 0.6 mile northeast of Umatac, 3.1 miles north of Merizo, and 5.5 miles south of Agat.

Drainage area.--1.10 sq mi.

Records available.--April 1953 to July 1960 (discontinued).

Gage.--Water-stage recorder and concrete control. Altitude of gage is 130 ft (by barometer).

Average discharge.--7 years, 4.22 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1953-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1953a/ 1954	June 23, 1953	1.45	0.74	June 14, 1953	0.37	0.42
	Oct. 15, 1953	b1,050	5.47	July 9, Aug. 1, 1953,	.37	.42
				June 2-4, 20, 21, 1954		
1955	Sept. 6, 1954	b610	4.62	May 6, 1955	.45	.46
1956	Sept. 10, 1955	b505	4.31	May 23, 24, 1956	.35	.41
1957	Aug. 28, 1956	b650	4.72	June 15, 16, 17, 18,	.39	.43
				1957		
1958	Sept. 2, 1957	b730	4.93	May 16, 19, 1958	.29	.38
1959	Sept. 21, 1958	b930	5.30	June 11, 12, 13, 1959	.17	.31
1960	Nov. 29, 1959	b488	4.25	July 4, 5, 7, 1959	.20	.33

a Period April to June 1953.

b From rating curve extended above 40 cfs by test on model of station site.

1953-60: Maximum discharge, 1,050 cfs Oct. 15, 1953 (gage height, 5.47 ft), from rating curve extended above 40 cfs by test on model of station site; minimum, 0.17 cfs June 11, 12, 13, 1959.

Remarks.--Records good except those for periods of no gage-height record, which are poor.

Discharge, in cubic feet per second, 1953

Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June
1	-	0.64	0.47	9	-	0.58	0.45	17	0.76	0.55	0.43	25	0.73	0.58	0.49
2	-	.61	.49	10	(*)	.61	.43	18	.76	.67	.45	26	.67	.47	.43
3	-	.61	.47	11	0.79	.55	.45	19	.73	.52	.49	27	.64	.47	.47
4	-	*.61	.45	12	.79	.55	.43	20	.70	.52	.47	28	.64	.47	.85
5	-	.58	*.54	13	.79	.55	.45	21	.70	.49	.49	29	.64	.47	.76
6	-	.61	.58	14	.76	.52	.41	22	.67	.49	.52	30	.64	.49	.52
7	-	.58	.47	15	.76	.55	.47	23	.67	.49	.79	31	-	.58	-
8	-	.61	.47	16	.76	.70	.49	24	.70	.52	.49				
Total.....													-	17.24	15.15
Mean.....													-	0.556	0.505
Runoff in acre-feet.....													-	34	30

Peak discharge (base, 500 cfs).--No peak above base.

* Discharge measurement made on this day.

8010. La Sa Fua River near Umatac--Continued

Discharge, in cubic feet per second, fiscal year July 1953 to June 1954

Table with columns: Day, July, Aug., Sept., Oct., Nov., Dec., Jan., Feb., Mar., Apr., May, June. Rows 1-31 and Total/Means. Includes sub-totals for calendar year 1953 and 1954.

Calendar year 1953: Max - Min - Mean - Ac-ft -
Calendar year 1953-54: Max 403 Min 0.39 Mean 6.31 Ac-ft 4,570

Peak discharge (base, 500 cfs).--Oct. 15 (10 a.m.) 1,050 cfs (5.47 ft); Nov. 13 (3 p.m.) 610 cfs (4.60 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Aug. 18 to Sept. 16, Apr. 8 to May 13; discharge estimated on basis of records for Umatac River at Umatac.

Discharge, in cubic feet per second, fiscal year July 1954 to June 1955

Table with columns: Day, July, Aug., Sept., Oct., Nov., Dec., Jan., Feb., Mar., Apr., May, June. Rows 1-31 and Total/Means. Includes sub-totals for calendar year 1954 and 1955.

Calendar year 1954: Max 65 Min 0.39 Mean 3.94 Ac-ft 2,850
Calendar year 1954-55: Max 65 Min 0.52 Mean 3.85 Ac-ft 2,780

Peak discharge (base, 500 cfs).--Sept. 6 (5:30 p.m.) 610 cfs (4.62 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Sept. 9-12, Oct. 5-18, Nov. 1-11; discharge estimated on basis of records for Umatac River at Umatac.

8010. La Sa Fua River near Umatac--Continued

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.25	3.71	3.55	10.1	3.24	5.21	4.65	1.21	0.64	0.49	0.39	1.05
2	.30	2.29	39.4	11.4	2.16	5.28	3.45	1.34	.61	.47	.39	1.06
3	.30	2.54	*15.3	6.05	2.34	3.89	2.56	1.77	.61	.47	.45	.89
4	.25	2.76	6.32	9.48	1.86	3.18	2.19	1.13	.64	.47	.37	.70
5	.25	1.32	4.20	5.60	24.1	2.69	2.14	1.09	.61	.47	.51	.58
6	.32	.93	23.1	4.02	55.9	2.43	1.92	1.01	.61	.47	.47	.52
7	.25	.79	11.3	4.23	22.8	2.19	1.75	1.01	.61	.45	.41	.49
8	*.25	.67	10.5	4.22	9.95	2.08	1.65	1.01	.61	.45	.37	.57
9	.29	1.49	5.80	3.18	5.50	2.14	2.79	.97	.83	.41	.37	.58
10	.35	1.25	3.86	2.87	*3.95	2.18	2.24	.93	.61	.41	.35	.81
11	.27	.82	29.3	4.04	3.40	1.86	1.80	.89	.58	.41	.35	.52
12	.29	.85	35.3	3.35	2.88	1.70	1.92	.85	.61	.47	.52	.56
13	.29	3.94	11.1	2.75	2.56	1.70	2.36	.85	.58	.52	.39	.52
14	.27	2.08	5.95	2.43	2.36	2.02	1.92	.93	.52	.47	.37	.45
15	.46	1.46	4.33	2.19	2.75	1.65	2.09	.89	.52	1.05	.35	.43
16	.35	3.55	5.07	10.4	2.46	1.55	2.46	.89	.52	1.18	.46	.58
17	.29	29.3	4.28	9.44	1.97	*1.40	1.92	.85	.49	.58	.37	.49
18	.27	13.4	4.33	29.7	1.92	1.40	1.65	.82	1.22	.47	.37	.47
19	.29	6.62	a3.50	a8.00	1.70	1.35	1.55	.79	.58	.45	.37	.45
20	.38	3.25	a3.00	*a5.00	1.70	3.21	1.45	.79	.55	.41	*.35	.60
21	.38	2.53	a2.50	3.62	1.65	1.65	1.40	.79	.86	.41	.35	.60
22	.29	3.20	11.5	3.02	6.63	1.55	1.35	.76	.55	.41	.41	.43
23	.27	2.98	17.2	2.69	2.26	1.81	1.30	.76	*.59	.41	.41	.41
24	.34	2.43	17.4	2.59	1.92	2.53	1.30	.79	.58	.39	.49	1.95
25	1.20	2.63	22.2	2.36	9.99	1.60	1.17	.73	.49	.39	.45	1.26
26	.49	12.2	8.59	2.08	7.89	1.65	1.13	.70	.49	.39	.45	.79
27	.35	36.9	5.85	2.43	5.75	1.76	*1.18	.70	.49	.39	.47	.64
28	.40	7.80	4.15	2.70	12.6	15.8	1.38	.70	.49	.39	.47	.85
29	.95	11.2	3.51	2.19	37.3	3.12	2.23	.64	.49	.39	5.67	1.22
30	22.3	10.8	26.3	1.92	10.2	2.74	1.55	-----	.47	.37	5.73	.82
31	2.43	4.83	-----	1.70	-----	4.83	1.30	-----	.29	-----	1.64	-----
Total	35.37	180.52	349.98	165.75	251.59	88.15	59.75	25.99	18.54	14.51	27.50	21.29
Mean	1.14	5.82	11.7	5.35	8.39	2.84	1.93	0.896	0.484	0.484	0.726	0.710
Ac-ft	70	358	694	329	499	175	119	52	37	29	45	42
Calendar year 1959: Max		55.9		Min	0.18	Mean	3.25	Ac-ft	2,350			
Fiscal year 1959-60: Max		55.9		Min	0.25	Mean	3.37	Ac-ft	2,450			

Peak discharge (base, 500 cfs).--No peak above base.

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, 1960

July 1	.....	0.67	July 5	.....	0.82
2	.....	1.72	6	.....	.82
3	.....	1.04	7	.....	.67
4	.....	.97			

8160. Umatac River at Umatac

Location.--Lat 13°17'45" N., long 144°39'50" E., on left bank 0.2 mile from mouth, 0.3 mile southeast of Umatac, 5.7 miles northwest of Inarajan, and 6.0 miles south of Agat.

Drainage area.--2.04 sq mi.

Records available.--September 1952 to June 1960.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 12 ft (from topographic map). Sept. 10, 1952, to Oct. 15, 1953, water-stage recorder at same site at datum 0.62 ft higher.

Average discharge.--7 years (1953-60), 7.23 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1953-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1953 a	Feb. 22, 1953	b800	3.42	June 11, 13, 14, 1953	0.41	0.27
1954	Oct. 15, 1953	b2,370	c5.08	June 3, 21, 1954	.43	.19
1955	Oct. 31, 1954	d750	2.68	June 25, 26, 1955	.50	.20
1956	Sept. 27, 1955	d1,360	3.39	May 24, 25, 1956	.32	.19
1957	Aug. 29, 1956	d2,200	4.09	June 17, 18, 1957	.49	.19
1958	Nov. 15, 1957	d1,680	3.66	Aug. 3, 1957	.49	.19
1959	Sept. 21, 1958	d2,360	4.21	June 13, 14, 15, 1959	.25	.15
1960	Nov. 29, 1959	1,200	3.24	June 23, 1960	.20	.22

a Period September 1952 to June 1953.

b From rating curve extended above 15 cfs by test on model of station site.

c From floodmarks.

d From rating curve extended above 230 cfs on basis of slope-area measurement at gage height 3.51 ft.

1952-60: Maximum discharge, 2,370 cfs Oct. 15, 1953 (gage height, 5.08 ft, from floodmarks), from rating curve extended above 15 cfs by test on model of station site; minimum, 0.20 cfs June 23, 1960.

Remarks.--Records good except those for periods of no gage-height record, which are poor.

Discharge, in cubic feet per second, September 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			-	10.2	8.0	10.2	6.2	1.95	4.4	1.68	0.91	0.67
2			-	7.8	6.6	15.4	5.1	1.86	4.2	1.51	.85	.67
3			-	7.8	*6.2	12.1	4.4	1.86	3.9	1.51	.91	.67
4			-	6.6	5.5	8.7	3.9	2.05	5.5	1.59	*.91	*.61
5			-	8.4	21.5	7.3	4.1	1.77	4.2	1.51	.79	.73
6			-	5.8	9.3	6.8	3.75	2.05	*3.6	1.51	.85	.67
7			-	16.0	12.5	12.7	4.4	2.6	3.4	1.68	.85	.67
8			-	8.9	27	6.8	4.2	2.15	4.9	1.43	.85	.62
9			-	18.2	23	6.2	3.1	1.77	4.2	1.34	.79	.62
10			-	12.7	80	6.4	2.85	1.77	3.6	1.51	.79	.57
11			8.5	8.0	16.1	6.5	2.85	1.86	3.25	1.34	.73	.52
12			8.0	7.3	11.5	5.8	*2.75	2.15	3.25	1.43	.73	.62
13			40	*7.6	9.2	4.9	2.75	1.95	2.85	1.34	.73	.57
14			45	10.5	8.2	5.3	2.75	1.68	2.75	1.26	.67	.57
15			12.2	9.5	7.5	5.0	2.75	1.59	2.75	1.18	.67	.62
16			8.7	7.3	29	4.4	2.75	1.68	2.5	1.26	.91	.62
17			7.0	12.3	10.8	*4.4	2.6	1.68	2.5	1.18	.79	.62
18			6.3	33	8.5	4.2	2.4	1.59	2.4	1.18	.91	.62
19			5.1	18.4	11.5	3.9	2.3	1.51	2.3	1.10	.79	.62
20			4.4	10.8	12.9	3.6	2.3	1.68	2.3	1.10	.79	.62
21			3.9	8.7	9.9	3.6	2.3	*1.51	2.15	.97	.73	.62
22			3.75	7.5	8.7	3.6	2.15	1.59	2.05	.97	.79	.91
23			19.3	6.8	12.8	11.1	2.75	27.5	2.15	.97	.79	.67
24			7.3	15.9	8.0	4.5	2.3	11.8	1.95	.97	.79	.62
25			5.1	8.0	16.2	5.4	2.15	8.0	1.95	.97	.85	.57
26			4.4	15.2	8.7	4.2	1.95	6.4	1.86	.91	.73	.62
27			4.4	6.8	7.5	4.1	2.15	5.8	1.77	.91	.79	.97
28			14.7	8.0	8.3	3.6	2.05	4.7	1.77	.97	.67	1.05
29			31.3	5.3	13.4	6.0	2.05	-	1.77	.91	.67	.97
30			19.6	18.0	14.9	3.9	2.6	-----	1.68	.91	.67	.79
31			-----	14.1	-----	25.5	2.15	-----	1.68	-----	.79	-----
Total			-	339.4	433.4	216.1	92.80	240.91	89.53	37.10	24.49	20.27
Mean			-	10.9	14.4	6.97	2.99	8.60	2.89	1.24	0.790	0.676
Ac-ft			-	673	860	429	184	478	178	74	49	40
Calendar year		Max	Min	Mean	Mean	Ac-ft						
Fiscal year		Max	Min	Mean	Mean	Ac-ft						

Peak discharge (base, 850 cfs).--No peak above base.

* Discharge measurement made on this day.

8160. Umatac River at Umatac--Continued

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	1.47	8.12	8.05	20.8	8.10	10.5	6.68	2.35	1.18	0.84	0.94	1.47
2	1.47	4.95	64.2	21.0	5.30	13.9	4.95	2.55	1.18	.84	.94	1.47
3	1.50	3.75	38.2	14.3	4.95	9.50	4.30	2.35	1.08	.84	.94	1.06
4	.49	3.25	18.5	23.7	4.30	7.25	3.50	2.35	1.06	.84	.74	.84
5	.49	2.15	12.0	13.7	43.4	6.45	3.50	2.35	.94	.84	1.18	.74
6	.64	1.63	26.3	11.5	73.8	5.65	3.25	2.15	.94	.84	1.18	.74
7	.49	1.47	21.9	11.2	34.7	5.30	3.25	1.97	1.18	.84	.94	.74
8	*.49	1.18	18.4	11.1	19.4	4.95	3.00	1.97	1.06	.94	.84	.64
9	.49	1.95	12.0	9.00	13.1	4.95	4.65	1.97	1.32	.94	.74	.56
10	.64	2.15	9.00	9.00	10.5	*4.95	3.75	1.80	1.18	1.06	.49	.74
11	.56	1.63	43.8	15.6	9.00	3.75	3.25	1.80	1.18	1.06	.49	.49
12	.56	1.63	58.6	11.3	8.05	3.50	3.25	1.80	1.18	1.32	.83	.49
13	.56	4.95	24.5	12.6	7.25	3.75	3.50	1.80	.94	1.63	.64	.36
14	.49	3.00	15.0	10.0	6.45	4.30	3.25	1.80	.94	1.18	.64	.36
15	.74	2.35	11.5	9.00	6.45	3.75	3.50	1.80	.84	3.20	.56	.36
16	.74	3.25	13.8	26.2	5.30	3.50	3.50	1.80	.94	3.56	*.86	.42
17	.56	39.9	12.0	20.8	4.95	3.25	3.00	1.80	.84	1.18	.74	.36
18	.56	17.4	11.5	42.4	4.95	3.25	2.55	1.80	1.43	1.06	.74	.30
19	.49	9.50	10.0	17.4	4.60	3.25	2.55	1.63	1.06	.94	.74	.30
20	.74	5.30	8.05	*11.9	4.30	6.89	2.55	1.63	.94	.94	.84	.36
21	.84	4.30	7.25	9.50	4.30	4.18	2.55	1.47	1.47	.94	.84	.49
22	.74	8.05	17.0	8.50	7.84	3.50	2.35	1.47	.94	.94	.83	.30
23	.64	6.05	27.0	7.25	4.80	3.97	2.35	1.47	*.94	.94	.64	.25
24	.74	5.65	27.1	7.25	4.30	4.30	2.35	1.47	.94	.94	.64	1.62
25	1.54	8.00	42.5	6.85	5.75	3.25	2.15	1.47	.94	.94	.64	1.31
26	1.32	23.0	18.0	6.05	6.45	3.50	2.15	1.47	.84	.94	.64	.56
27	.94	*59.4	14.3	6.45	7.14	3.50	*2.35	1.32	.94	.94	.56	.56
28	.84	15.5	12.0	6.94	14.8	15.1	2.92	1.18	.94	.84	.56	1.14
29	1.06	18.2	10.5	5.65	87.1	5.65	4.21	1.18	.84	.94	4.86	1.63
30	37.1	17.0	50.7	5.30	17.9	4.60	3.00	-----	.84	.98	4.37	.94
31	4.81	10.0	-----	4.95	-----	8.16	2.55	-----	.84	-----	1.97	-----
Total	64.74	294.64	663.65	397.09	439.01	172.30	100.66	51.97	51.76	34.23	32.42	21.60
Mean	2.09	9.50	22.1	12.8	14.6	5.56	3.25	1.79	1.02	1.14	1.05	0.720
Ac-ft	128	584	1,320	788	871	342	200	103	63	68	64	43
Calendar year 1959: Max	87.1			Min	0.36	Mean	6.22	Ac-ft	4,510			
Fiscal year 1959-60: Max	87.1			Min	0.25	Mean	6.30	Ac-ft	4,570			
Peak discharge (base, 850 cfs).--Sept. 2 (4:30 p.m.)	900 cfs (2.90 ft); Nov. 29 (3 p.m.) 1,200 cfs (3.24 ft).											

* Discharge measurement made on this day.

8210. Geus River near Merizo

Location.--Lat 13°16'15" N., long 144°40'40" E., on left bank 0.7 mile northeast of Merizo, 2.2 miles southeast of Umatac, and 4.7 miles west of Inarajan.

Drainage area.--0.95 sq mi.

Records available.--April 1953 to June 1960.

Gage.--Water-stage recorder and broad-crested concrete weir. Altitude of gage is 85 ft (by barometer).

Average discharge.--7 years (1953-60), 2.78 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1954-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs) ^a	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1954 b/	Oct. 15, 1953	1,390	3.62	July 17, 1953	(c)	-
1955	Oct. 31, 1954	237	2.42	June 23-26, 1955	0.04	0.10
1956	Oct. 27, 1955	310	2.60	June 16, 1956	.04	.10
1957	Aug. 29, 1956	922	3.33	June 15, 1957	.06	.12
1958	Nov. 8, 1957	760	3.20	July 26, 1957	.06	.12
1959	Sept. 21, 1958	1,050	3.42	June 19, 1959	.01	.05
1960	Sept. 30, 1959	120	2.01	May 4, 5, 1960	(c)	-

a From rating curve extended above 55 cfs on basis of slope-area measurements at gage heights 3.68 and 4.16 ft.

b Period April 1953 to June 1954.

c No flow part of day.

1953-60: Maximum discharge, 1,390 cfs Oct. 15, 1953 (gage height, 3.62 ft), from rating curve extended above 55 cfs on basis of slope-area measurements at gage heights 3.68 and 4.16 ft; no flow part of day July 17, 1953, May 4, 5, 1960.

Remarks.--Records good except those for periods of fragmentary or no gage-height record, which are poor. Water is diverted half a mile upstream for domestic use and at station for irrigation and municipal use.

Discharge, in cubic feet per second, 1953

Day	1953				1954				1955						
	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June
1	-	0.16	0.16	9	-	0.10	0.12	17	†0.31	0.23	0.23	25	0.25	0.23	0.14
2	-	.16	.14	10	-	.10	.08	18	.25	*.25	.26	26	.25	.20	.13
3	-	.16	.10	11	-	.20	.10	19	.28	*.18	.31	27	.25	.20	.29
4	-	*.18	.12	12	-	.23	.10	20	.28	.18	.31	28	.23	.25	.44
5	-	.12	*.17	13	-	.06	.12	21	.31	.23	.34	29	.20	.17	.43
6	-	.12	.24	14	-	.12	.10	22	.28	.23	.37	30	.18	.18	.25
7	-	.12	.16	15	-	.14	.16	23	.28	.23	.47	31	-	.27	-
8	-	.12	.14	16	-	.25	.20	24	.25	.25	.20				
Total												-	5.62	6.58	
Mean												-	0.181	0.213	
Runoff in acre-feet												-	11	13	

Peak discharge (base, 350 cfs).--No peak above base.

* Discharge measurement made on this day.

† Result of discharge measurement.

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8210. Geus River near Merizo--Continued

Discharge, in cubic feet per second, fiscal year July 1953 to June 1954

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.25	0.62	3.5	3.0	1.98	2.5	0.98	0.59	0.55	0.25	0.38	0.18
2	.18	1.35	8.0	2.4	1.82	2.5	.93	.55	.47	.31	.25	.16
3	.20	2.2	4.5	2.0	1.74	3.1	.98	.47	.43	.37	.30	.14
4	.20	1.24	3.2	1.7	1.50	*4.0	.87	.51	.47	.40	.23	.18
5	.25	1.02	2.5	1.6	1.48	2.95	.82	.47	.43	.37	.19	.25
6	.23	.87	2.1	1.4	1.38	1.82	.82	.47	.40	.34	*.18	.25
7	.23	.40	1.9	3.0	1.52	1.48	.77	.40	.40	.31	.14	.23
8	.23	.82	1.7	1.8	1.76	1.29	.82	.40	.62	.31	.18	.63
9	.14	.65	1.5	1.4	1.36	1.22	24	.37	.47	.36	.23	.40
10	.16	10.4	1.4	1.3	2.2	1.20	5.0	.31	.40	.28	.23	.37
11	.16	.84	1.3	1.3	1.74	1.12	2.2	.31	.43	.28	.16	.28
12	.25	8.6	1.2	1.6	60	1.96	1.5	.34	.40	.28	.25	.25
13	.28	2.6	1.1	1.4	80	1.36	1.3	.28	.34	.44	.25	.25
14	.31	2.05	1.1	1.4	15	5.4	1.2	.28	.34	.28	.14	.25
15	.31	5.4	1.1	550	5.5	4.4	1.3	.28	.31	.28	.19	.25
16	.28	5.4	*1.0	100	3.7	5.6	1.1	.23	.31	.34	.18	.18
17	.30	6.8	.98	30	2.8	5.4	1.0	.23	.40	.28	.18	.14
18	3.4	30	1.84	12	2.3	2.6	*.93	.23	.34	.25	.18	.18
19	.57	8.0	2.3	6.5	2.0	1.74	.93	.18	.34	.34	.23	.20
20	.87	4.0	2.15	*4.3	1.8	1.36	.82	.47	.25	.25	.25	.14
21	*.69	2.8	4.3	3.3	1.7	1.10	.93	.23	.25	.28	.25	*.16
22	.23	2.3	2.95	2.85	1.6	5.8	.82	.51	.34	.28	.18	1.77
23	.65	1.8	2.3	2.6	1.5	2.3	.72	.55	*.40	.31	.33	.78
24	.62	7.0	2.1	2.25	8.0	1.57	.72	.51	.37	.25	.47	.47
25	.37	3.8	3.4	2.15	2.8	1.64	.72	.51	.37	.25	.31	1.55
26	.30	2.2	12.0	1.90	2.1	1.36	.88	.59	.37	.23	.23	.43
27	.43	1.7	3.4	1.82	1.8	1.36	.68	.68	.25	.23	.33	.31
28	.63	29	14.0	2.6	1.6	1.16	.68	.81	.31	.25	.20	.25
29	.54	15	5.8	3.05	1.5	1.04	.63	-	.34	.23	.25	.23
30	.49	1.3	4.0	2.75	2.5	1.04	.59	-----	.31	.18	.20	.23
31	.63	6.0	-----	2.05	-----	.98	.63	-----	.28	-----	.18	-----
Total	14.36	247.30	98.62	755.42	216.48	72.35	56.07	11.76	11.72	9.03	7.14	11.09
Mean	0.463	7.98	3.29	24.4	7.22	2.33	1.81	0.420	0.378	0.301	0.230	0.370
Ac-Ft	28	491	196	1,500	429	144	111	23	23	18	14	22

Calendar year 1953. Max - Min - Mean - Ac-ft -
Fiscal year 1953-54. Max 550 Min 0.14 Mean 4.14 Ac-ft 3,000

Peak discharge (base, 350 cfs).--Aug. 11 (2 p.m.) 350 cfs (2.50 ft); Oct. 15 (1 a.m.) 1,390 cfs (3.62 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Aug. 18 to Sept. 16, Sept. 30 to Oct. 20, Nov. 12 to Dec. 4, Jan. 10-18; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1954 to June 1955

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.28	0.12	*10	6.6	29.5	2.4	0.83	0.59	0.43	0.51	0.31	0.14
2	2.6	.78	3.0	4.2	6.2	2.15	.85	.59	.40	.40	.23	.20
3	.64	.43	4.2	12.0	3.75	1.82	.90	.68	.40	.37	.20	.12
4	.61	.46	10	6.9	2.95	1.74	.90	.68	.34	.31	.18	.10
5	1.63	.28	17	3.9	2.5	1.65	*.83	.51	.31	.25	.14	.12
6	.63	.35	20	2.95	2.15	1.57	.77	.55	.34	.23	.12	.18
7	.37	.44	8.4	2.25	1.82	1.7	.77	.55	.34	.28	.14	.16
8	.28	1.23	5.6	3.15	1.74	1.4	.93	.55	.28	.25	.24	.16
9	.25	2.95	8.4	2.6	1.57	1.4	.77	.51	.31	.52	1.93	.73
10	.23	1.84	5.0	2.05	1.50	1.4	.82	.43	.37	.34	.42	.25
11	.20	.72	2.05	2.05	10.4	1.4	.82	.51	.40	.25	.23	.18
12	.24	.72	1.65	1.90	4.4	1.2	.72	.43	.37	.25	.18	.14
13	.70	.91	1.90	1.85	2.5	1.2	.90	.55	.37	.25	.18	.20
14	.50	1.45	9.5	*1.48	2.4	1.2	1.31	.55	.51	.25	.23	.16
15	.28	1.22	14.0	1.36	2.2	1.2	1.87	.55	.28	.23	2.6	.16
16	.25	.68	4.8	1.22	2.15	1.1	.98	.43	.40	.16	.78	.14
17	.32	.55	2.05	2.05	1.65	1.1	3.5	.51	.34	.18	f.40	.12
18	1.13	1.82	1.74	1.43	29.5	1.6	1.49	.47	*.37	*.23	f.25	.12
19	.68	18	1.74	1.22	5.8	1.1	1.04	.40	.31	.37	f.77	.09
20	.37	25	16.7	1.16	5.2	1.1	.82	.37	.34	.40	f.93	.12
21	.31	5.0	14.0	2.2	3.15	1.1	.77	.68	.43	.31	f.51	.14
22	.31	2.0	9.1	2.3	3.7	1.2	.68	.55	.40	.23	f.25	.12
23	.23	1.4	4.2	1.94	5.5	1.0	.68	.37	.31	.23	f.25	.07
24	.28	4.0	2.95	1.57	8.0	1.0	.63	.40	1.03	.18	f.14	.07
25	.25	20	2.25	1.98	7.5	.95	1.22	.43	.37	.23	f.25	.07
26	.23	5.0	2.85	3.85	4.5	.95	3.9	.37	.40	.23	f.25	.07
27	.20	2.8	2.4	4.8	15	.90	1.79	.55	.47	.20	*f.3.9	.09
28	.20	2.0	10.0	6.0	4.5	.90	.93	.47	.40	.20	.21	.10
29	.18	1.5	3.9	3.3	3.2	1.0	.77	-	.37	.14	.14	.20
30	*.18	1.2	3.9	2.05	*2.6	.90	.68	-----	.34	.16	.12	.16
31	.14	1.4	-----	63	-----	.90	*.68	-----	.40	-----	.12	-----
Total	14.70	105.45	197.48	152.41	177.53	40.23	34.05	14.23	11.93	8.14	16.60	4.68
Mean	0.474	3.40	6.58	4.92	5.92	1.30	1.10	0.508	0.385	0.271	0.535	0.156
Ac-Ft	29	209	392	302	352	80	68	28	24	16	33	9.2

Calendar year 1954. Max 63 Min 0.12 Mean 2.18 Ac-ft 1,560
Fiscal year 1954-55. Max 63 Min 0.07 Mean 2.13 Ac-ft 1,540

Peak discharge (base 350 cfs).--No peak above base.

* Discharge measurement made on this day.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Note.--No gage-height record Aug. 19 to Sept. 6, Nov. 22-30, Dec. 7 to Jan. 5; discharge estimated on basis of records for nearby stations.

8210. Geus River near Merizo--Continued

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.10	5.82	1.65	8.48	2.23	2.07	2.82	0.63	0.25	0.23	0.07	0.37
2	.12	3.62	17.5	6.33	1.74	2.05	1.70	.68	.25	.17	.04	.40
3	.10	2.08	9.10	4.00	1.43	1.82	1.22	.59	.89	.16	.03	.37
4	.08	1.72	4.16	8.81	1.16	1.50	1.04	.59	1.23	.20	.02	.28
5	.08	.82	2.40	4.58	9.66	1.22	.98	.54	1.13	.18	.12	.23
6	.18	.51	12.5	3.06	28.3	1.16	.82	.55	.23	.14	.10	.18
7	.07	.37	8.70	2.40	13.9	1.10	.77	.43	.23	.18	.14	.20
8	*.07	.28	4.73	2.87	6.25	1.04	.72	.43	.20	.19	.18	.18
9	.08	.25	2.46	2.15	3.26	1.04	1.16	.43	.36	.19	.10	.16
10	.14	.34	1.73	2.31	2.32	*.98	1.07	.43	.28	.09	.10	.23
11	.12	.25	16.7	2.07	2.07	.87	.82	.43	.25	.10	.07	.16
12	.12	.58	28.5	1.82	1.82	.82	.83	.40	.25	.11	.32	.18
13	.10	.59	3.01	3.27	1.65	.82	.82	.40	.28	.29	.16	.16
14	.08	.59	3.91	3.06	1.43	1.04	.82	.43	.25	.14	.10	.16
15	.14	.51	2.64	2.23	1.43	.82	.77	.31	.20	.72	.08	.16
16	.14	1.58	2.89	7.39	1.29	.82	1.25	.43	.18	.97	*.14	.20
17	.10	1.55	4.76	12.4	1.22	.82	.87	.40	.20	.31	.12	.20
18	.13	2.08	4.54	14.5	1.16	.82	.72	.40	.25	.28	.14	.28
19	.12	1.76	3.28	7.18	1.10	.77	.63	.37	.20	.17	.10	.23
20	.14	.98	2.32	*3.40	1.10	1.88	.63	.37	.20	.16	.13	.24
21	.42	1.04	1.82	2.23	1.04	1.04	.63	.37	.23	.18	.23	.35
22	.14	9.30	3.80	1.90	1.84	.87	.55	.34	.20	.18	.23	.20
23	.10	4.46	14.4	1.65	1.43	1.34	.55	.37	*.20	.11	.18	.14
24	.08	5.41	10.8	1.65	1.10	1.16	.59	.37	.22	.08	.18	.70
25	.14	5.41	22.5	1.48	1.10	.93	.51	.34	.16	.08	.16	1.68
26	.14	10.2	6.41	1.36	2.34	.98	.51	.28	.17	.07	.12	.51
27	.16	*26.7	3.81	1.43	2.25	.98	*.51	.28	.15	.11	.10	.37
28	.08	5.04	2.62	1.43	5.93	6.20	.76	.28	.16	.14	.08	.31
29	.75	3.64	2.07	1.51	6.02	2.26	1.02	.28	.21	.08	1.88	.90
30	7.31	6.09	19.2	1.29	3.97	1.41	.82	-----	.20	.09	1.37	.60
31	2.19	2.72	-----	1.16	-----	2.32	.63	-----	.23	-----	.79	-----
Total	13.72	106.27	229.91	119.40	111.54	42.95	27.54	12.15	9.24	6.10	7.38	10.33
Mean	0.443	3.43	9.15	3.85	3.72	1.39	0.888	0.419	0.298	0.203	0.237	0.311
Ac-ft	27	211	456	237	221	85	55	24	18	12	15	20
Calendar year 1959:	Max	28.5		Min	0.03	Mean	1.90	Ac-ft	1,380			
Fiscal year 1959-60:	Max	28.5		Min	0.02	Mean	1.90	Ac-ft	1,380			

Peak discharge (base, 350 cfs).--No peak above base.

* Discharge measurement made on this day.

8350. Inarajan River near Inarajan

Location.--Lat 13°16'40" N., long 144°44'15" E., on right bank 0.6 mile northwest of Inarajan and 4.9 miles east of Merizo.

Drainage area.--4.50 sq mi.

Records available.--September 1952 to June 1960.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 25 ft (by barometer).

Average discharge.--7 years (1953-60), 14.7 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1953-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs) ^a	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1953 b/	Feb. 22, 1953	(c)	(c)	June 14, 1953	d1.51	-
1954	Oct. 15, 1953	2,110	12.31	July 11, 1953	1.25	0.39
1955	Sept. 6, 1954	1,640	10.21	June 23, 28, 1955	1.34	.38
1956	Sept. 10, 1955	2,080	12.25	June 7-9, 1956	1.34	.38
1957	Oct. 28, 1956	2,060	12.13	June 27, 1957	1.43	.39
1958	Oct. 6, 1957	2,110	12.27	Aug. 6, 1957	1.25	.37
1959	Sept. 21, 1958	2,080	12.20	June 17, 18, 1959	1.25	.37
1960	Sept. 2, 1959	1,380	8.90	July 14, 1959	.99	.34

a From rating curve extended above 620 cfs on basis of velocity-area study.

b Period September 1952 to June 1953.

c Unknown.

d Minimum daily.

1952-60: Maximum discharge, 2,110 cfs Oct. 15, 1953, Oct. 6, 1957, from rating curve extended above 620 cfs on basis of velocity-area studies; maximum gage height, 12.31 ft Oct. 15, 1953; minimum discharge, 0.99 cfs July 14, 1959.

Remarks.--Records good except those for periods of fragmentary or no gage-height record and those for period of indefinite stage-discharge relation, which are poor. Water diverted above the station for Inarajan domestic supply.

Discharge, in cubic feet per second, September 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			-	20	12.6	23.5	12.2	4.3	7.1	e3.4	e2.3	2.05
2			-	13.5	11.2	44	10.2	4.2	6.2	e3.4	e2.3	2.05
3			-	11.9	9.8	21.5	8.5	4.1	5.7	e3.4	e2.2	1.95
4			-	11.6	13.5	17	7.9	4.2	13.3	e3.2	e2.2	1.83
5			-	9.8	f73	14	10.5	4.1	6.5	e3.2	e2.2	2.05
6			-	9.1	18.5	13	8.5	4.2	5.9	e3.2	e2.1	2.45
7			-	22.5	23	35	7.6	4.5	8.8	e3.2	e2.1	1.83
8			-	*12.6	f44	14	8.8	4.3	8.2	e3.1	e2.1	1.72
9			-	42	f43	12	7.1	4.1	6.2	e3.1	e2.0	1.61
10			-	18.0	f35	25	6.5	4.1	6.0	e3.1	e2.0	*1.67
11			-	12.6	31	13	6.2	4.1	e5.6	e2.6	*e2.0	1.95
12			-	10.5	18.5	14	*6.2	4.3	e5.4	e2.6	e2.2	2.05
13		66	66	10.5	13.9	11	6.2	4.1	e5.2	e2.6	2.05	1.61
14		54	54	15.2	12.7	12	5.8	4.0	e5.0	e2.6	2.05	1.51
15		15.2	15.2	11.2	13.0	10	5.8	3.9	e5.0	e2.6	2.05	2.6
16			10.8	8.8	f41	10	5.6	3.9	e4.9	e2.6	2.45	4.0
17			9.8	32.5	17	*9.3	5.6	3.8	e4.9	e2.6	2.2	2.7
18			8.5	82	13.5	9.1	5.4	3.7	e4.9	e2.6	2.7	2.6
19			7.1	58	19.3	8.2	5.2	3.8	e4.7	e2.6	2.3	2.6
20			6.2	16.6	30	7.6	5.2	*3.7	e4.6	e2.6	2.3	2.45
21			5.7	20	18.0	7.6	5.0	3.7	e4.4	e2.6	2.2	2.6
22			5.7	13.2	15.2	9.7	5.0	f338	e4.3	e2.6	2.05	2.45
23			56	10.8	23	26.5	6.4	60	e4.3	e2.5	2.05	2.85
24			12.2	33.5	13.5	10.2	5.2	14.8	e4.1	e2.4	2.05	2.05
25			9.1	12.2	37.5	18.7	4.5	10.5	e4.0	e2.4	2.2	1.83
26			8.5	21.5	16.6	9.4	4.4	8.8	e3.8	e2.4	1.95	1.61
27			9.1	17.3	13.9	9.1	4.3	8.5	e3.8	e2.4	1.83	1.83
28			18.4	11.6	12.7	8.8	4.3	6.8	e3.8	e2.4	1.95	2.7
29			68	10.2	42	10.2	4.3	-	e3.6	e2.3	1.95	2.85
30			64	44	23.5	7.6	4.5	-----	e3.6	e2.3	2.05	2.05
31			-----	20	-----	49	4.4	-----	e3.6	-----	2.45	-----
Total			-	643.2	709.4	490.0	197.3	532.5	165.4	84.6	66.53	66.10
Mean			-	20.7	23.6	15.8	6.36	19.0	5.34	2.82	2.15	2.20
Ac-ft			-	1,280	1,410	972	391	1,060	328	168	132	131
Calendar year	: Max		Min		Mean		Ac-ft					
Fiscal year	: Max		Min		Mean		Ac-ft					

* Discharge measurement made on this day.

e Stage-discharge relation indefinite; discharge estimated on basis of records for nearby stations.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Note.--No gage-height record Nov. 17, Dec. 4-17, Jan. 13 to Feb. 19; discharge estimated on basis of records for nearby stations.

8350. Inarajan River near Inarajan--Continued

Discharge, in cubic feet per second, fiscal year July 1953 to June 1954

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	1.72	1.83	28	16	19	21.5	10.5	7.1	4.8	2.6	3.2	1.72
2	1.51	1.95	28	15	18	26	10.5	6.5	4.6	4.6	2.2	1.72
3	1.85	2.7	180	14	18	20.5	10.5	6.2	4.4	3.5	2.2	1.72
4	1.95	2.05	30	16	17	22	9.8	6.5	4.8	3.35	2.05	1.61
5	2.05	1.83	24	14	16	17.5	9.1	6.2	4.4	2.85	2.05	1.72
6	1.95	2.7	20	13	15	16.1	9.8	6.5	4.0	2.85	1.95	1.95
7	1.95	2.85	19	13	15	15.7	9.1	6.2	4.0	2.85	1.83	1.95
8	1.51	2.45	18	20	17	13.9	8.8	6.0	5.1	2.85	1.72	2.6
9	1.81	2.85	17	15	15	13.5	27.5	5.7	4.6	2.6	1.95	2.6
10	2.2	28	18	13	26	13.5	22	5.5	3.85	2.45	*1.95	2.05
11	1.72	470	15	12	18	13.9	14.4	5.5	4.8	2.3	1.95	2.05
12	4.8	191	14	17	400	20.5	13.5	5.5	4.2	2.45	2.45	1.83
13	2.3	53	13	13	600	14.4	12.6	5.1	4.4	3.2	1.95	1.72
14	2.2	21.5	12	17	50	154	10.5	5.1	3.85	2.6	1.95	1.83
15	2.2	36	13	1,580	36	27	*32.5	5.1	3.85	2.45	2.05	1.72
16	2.2	80	15	917	34	42	11.9	4.8	3.7	2.3	2.05	1.72
17	2.2	38	12	234	28	29	10.5	4.8	4.8	2.3	2.05	*7.2
18	2.1	180	17	60	26	19.0	9.8	4.8	*3.85	2.45	2.05	1.61
19	2.45	34	16	75	24	15.7	9.1	4.6	3.7	2.3	2.2	1.72
20	1.83	22	18	50	22	14.4	9.1	3.6	3.5	2.2	2.05	1.61
21	*1.77	20	22	*40	22	13.5	9.8	5.3	3.2	2.3	2.2	1.61
22	2.7	18	*20	32	20	67	8.5	6.5	3.35	2.3	1.55	11.5
23	1.95	15	14	30	20	16.1	8.5	4.8	3.5	2.6	2.3	2.05
24	2.2	44	14	26	*50	13.9	8.2	4.6	3.0	2.2	3.5	2.6
25	2.3	24	20	24	21	14.8	7.9	4.6	3.0	2.2	2.45	8.0
26	2.85	18	44	22	18.0	13.0	7.6	4.6	2.85	2.05	2.3	2.7
27	2.6	15	20	22	18.0	13.5	8.2	6.8	2.7	2.05	1.85	2.45
28	2.05	369	90	40	17.0	11.9	7.6	6.8	2.7	2.05	1.55	2.45
29	2.05	150	36	28	15.7	11.6	7.4	4.8	2.85	2.05	1.85	2.05
30	1.83	100	24	22	32	11.2	7.1	4.4	2.7	2.2	1.63	2.2
31	1.72	40	-----	20	-----	10.5	7.4	-----	2.7	-----	1.72	-----
Total	85.20	1,987.71	829	3,450	1,647.7	727.1	597.5	160.3	117.75	77.05	65.95	77.03
Mean	2.75	64.1	27.6	111	54.9	23.5	19.3	5.72	3.80	2.57	2.13	2.57
Ac-ft	169	3,940	1,640	6,800	3,270	1,440	1,190	318	234	153	131	153
Calendar year 1953.	Max 1,580	Min 1.51	Mean 26.9	Ac-ft 19,470								
Fiscal year 1953-54.	Max 1,580	Min 1.51	Mean 26.9	Ac-ft 13,440								

Peak discharge (base, 1,500 cfs).--Aug. 11 (3 p.m.) 1,730 cfs (10.60 ft); Aug. 18 (1 a.m.) 1,730 cfs (10.63 ft); Aug. 28 (10 a.m.) 1,780 cfs (10.61 ft); Oct. 15 (3:50 a.m.) 2,110 cfs (12.31 ft); Nov. 15 (time and discharge unknown); Jan. 9 (11 a.m.) 1,580 cfs (9.76 ft).

* Discharge measurement made on this day.
 Note.--No gage-height record Aug. 15 to Oct. 14, Oct. 18 to Nov. 24; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1954 to June 1955

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	2.3	1.95	39.5	18	138	12.5	6.4	4.7	3.25	3.25	2.65	3.05
2	11.0	5.1	15.0	15	22	12.1	5.9	4.5	3.1	2.8	1.55	3.35
3	2.85	2.85	9.1	28	19.1	11.0	6.6	4.7	2.95	2.65	1.64	1.95
4	3.6	2.3	123	16	17.4	10.3	7.2	4.9	*3.1	2.5	1.55	1.84
5	4.5	2.2	138	26	14.1	9.9	7.8	4.1	3.1	2.35	1.64	1.95
6	2.45	7.4	147	16	12.9	10.6	6.2	4.1	2.95	2.2	1.64	2.1
7	2.4	4.4	41	15	12.1	10.8	5.9	4.1	2.95	2.8	1.64	*2.3
8	2.05	9.6	42	17	11.8	10.3	7.9	3.95	2.8	2.5	2.85	2.2
9	2.05	11.1	49	16	11.0	9.3	5.9	3.75	2.95	4.4	10.1	3.6
10	1.95	4.4	44	15	10.6	9.3	6.4	3.75	3.1	2.65	2.65	2.5
11	1.83	3.2	18.5	28	58	9.6	6.2	3.95	3.4	2.35	2.2	1.84
12	1.95	7.7	14.8	*17	17.2	6.7	5.6	3.95	3.25	2.2	2.05	1.84
13	3.35	9.4	16.9	14.0	13.2	6.4	6.2	3.75	3.1	2.5	1.95	1.84
14	3.5	29.5	142	13.2	12.5	8.4	8.2	3.95	2.8	*2.35	2.5	1.95
15	2.2	5.3	175	12.1	13.0	8.1	8.3	4.1	2.65	2.2	9.6	1.84
16	2.05	3.85	42	11.8	12.8	8.4	5.6	3.75	3.5	2.2	3.1	1.63
17	1.95	3.85	28	11.8	10.3	8.4	16.2	3.95	3.1	2.05	2.35	1.95
18	3.55	4.0	20	11.0	128	9.8	6.9	3.75	2.95	2.05	2.05	2.05
19	9.3	115	17	10.3	21.5	7.8	6.2	3.4	2.9	3.1	1.95	1.84
20	3.65	78	169	9.9	25	7.5	5.9	3.4	2.65	3.25	2.2	1.74
21	2.6	25	60	10.3	13.6	7.2	5.4	5.4	3.1	2.5	1.84	1.84
22	2.85	11	90	12.0	16.9	7.2	5.2	4.9	3.3	2.2	1.84	1.63
23	2.2	7.6	36	12.9	61	7.2	4.9	3.75	2.5	2.05	1.84	1.53
24	3.0	32	24	9.9	15.8	6.6	5.2	3.25	4.2	2.05	1.74	1.63
25	2.3	71	20	16.4	21	6.6	6.5	3.25	2.95	2.2	1.74	1.63
26	2.2	14.8	22	15.6	13.6	6.6	13.5	2.95	3.4	1.95	1.74	1.53
27	1.95	10.1	18	16.5	68	6.4	6.2	4.7	2.95	1.84	6.2	1.84
28	1.95	7.9	55	12.1	17.9	6.2	5.6	3.75	2.65	2.05	3.2	1.63
29	*2.2	7.4	90	10.3	*14.7	6.6	5.4	-	2.5	1.95	2.2	2.8
30	2.05	9.2	28	9.3	15.2	*6.8	4.9	-----	2.5	1.95	1.95	1.95
31	1.95	*6.5	-----	140	-----	6.2	*5.2	-----	2.5	-----	1.84	-----
Total	93.53	513.60	1,733.8	586.4	856.2	264.4	211.5	112.45	85.00	73.09	85.89	61.27
Mean	3.02	16.6	57.8	18.9	27.9	8.53	6.82	4.02	3.00	2.44	2.77	2.04
Ac-ft	186	1,020	3,440	1,160	1,660	524	420	223	184	145	177	122
Calendar year 1954.	Max 275	Min 1.61	Mean 14.0	Ac-ft 10,170								
Fiscal year 1954-55.	Max 175	Min 1.53	Mean 12.8	Ac-ft 9,250								

Peak discharge (base, 1,500 cfs).--Sept. 4 (9:30 p.m.) 1,600 cfs (9.99 ft); Sept. 6 (7 p.m.) 1,640 cfs (10.21 ft).

* Discharge measurement made on this day.
 Note.--No gage-height record Aug. 21-24, Sept. 15 to Oct. 12, June 6, 7; discharge estimated on basis of records for nearby stations.

8350. Inarajan River near Inarajan--Continued

Discharge, in cubic feet per second, fiscal year July 1955 to June 1956

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	1.95	8.1	188	52	11.8	*8.7	7.5	3.75	2.2	2.35	1.95	*2.5
2	1.84	4.5	7.9	30.5	12.5	7.2	5.9	3.4	2.35	2.05	2.05	1.84
3	1.63	3.75	9.5	51	11.4	6.6	10.7	4.3	2.65	1.95	1.84	1.84
4	1.84	7.2	18.7	16.5	11.0	6.4	5.4	3.95	2.2	*2.35	3.0	1.95
5	1.63	3.55	36.5	24	9.6	6.2	4.9	3.25	2.2	2.2	1.95	2.2
6	*32.5	3.25	9.1	16.4	9.9	6.9	9.8	3.1	2.05	2.65	1.95	1.84
7	9.1	2.95	11.3	12.6	10.1	5.9	5.9	4.1	2.05	2.35	1.84	1.63
8	27.5	2.8	5.4	11.0	10.4	6.4	5.2	4.7	1.95	2.2	1.84	1.84
9	11.6	2.8	5.9	10.6	9.8	5.4	4.7	6.1	1.95	2.2	1.84	1.43
10	4.1	*2.8	196	9.3	16.7	5.2	*4.5	4.3	6.2	1.95	2.05	1.63
11	30	3.25	66	11.0	9.3	5.9	8.1	3.55	3.1	1.95	1.74	2.2
12	29	2.95	14.7	9.3	8.4	30	4.7	3.25	2.65	2.2	1.74	1.74
13	9.3	2.5	9.0	9.5	8.4	10.8	4.5	3.1	2.35	2.35	1.74	1.63
14	5.2	2.35	7.9	8.7	7.8	9.1	4.3	3.4	1.95	2.8	1.99	1.63
15	3.95	2.35	6.6	8.1	7.8	6.6	4.3	3.1	2.2	2.5	2.2	1.74
16	25.5	2.5	29	7.8	7.5	132	4.7	3.85	3.05	2.05	2.2	1.63
17	5.2	2.35	17.1	8.7	7.5	13.4	4.9	*2.95	2.35	2.65	2.2	4.4
18	4.1	5.9	22	7.5	11.3	9.3	4.5	2.95	2.75	2.35	1.88	39.5
19	3.4	3.0	9.5	14.0	6.9	7.8	4.1	2.6	2.8	1.95	1.84	5.2
20	4.0	3.9	29	89	6.6	9.8	3.95	2.65	1.95	2.35	2.6	3.75
21	3.1	2.5	14.2	10.0	6.6	6.9	3.95	2.5	2.9	2.35	1.95	3.4
22	3.1	3.25	23	191	7.5	6.4	3.95	2.5	1.95	1.95	1.84	3.25
23	2.95	2.8	24.5	42	9.9	6.2	4.7	2.35	1.95	1.84	1.84	3.1
24	2.95	3.1	11.9	*32.5	6.4	5.6	4.1	2.2	1.84	1.84	*1.74	8.2
25	2.8	*2.5	*6.1	35	6.2	5.4	3.75	2.95	1.95	1.84	1.95	6.3
26	4.0	2.35	25	30	6.2	5.2	3.75	2.5	1.95	1.84	3.1	6.6
27	3.25	2.2	162	105	7.5	5.2	3.75	2.35	2.45	2.35	2.5	3.95
28	2.8	2.05	218	52	30	4.9	3.55	2.2	14.8	2.35	1.84	3.1
29	3.25	2.2	76	28.5	10.3	4.9	3.55	2.2	3.2	2.8	4.6	2.65
30	10.8	2.25	24	17.1	26	4.9	3.55	-----	2.35	2.8	5.65	2.5
31	28	6.7	-----	15.2	-----	4.7	3.55	-----	2.95	-----	2.65	-----
Total	280.34	104.55	1,358.7	961.8	311.2	359.9	154.70	94.30	89.24	67.36	68.10	164.77
Mean	9.04	3.37	44.6	31.0	10.4	11.6	4.99	3.25	2.68	2.25	2.20	5.49
Ac-ft	556	207	2,660	1,910	617	714	307	187	177	134	135	327
Calendar year 1955: Max 218 Min 1.53 Mean 10.9 Ac-ft 7,930												
Fiscal year 1955-56: Max 218 Min 1.43 Mean 10.9 Ac-ft 7,930												

Peak discharge (base, 1,500 cfs).--Sept. 10 (7:30 p.m.) 2,080 cfs (12.25 ft).

* Discharge measurement made on this day.

Discharge, in cubic feet per second, fiscal year July 1956 to June 1957

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	3.7	7.8	55	11.8	7.8	32.5	13.6	5.4	3.95	*3.25	4.8	1.95
2	3.1	6.4	56	14.6	7.2	89	10.6	5.2	3.55	6.6	2.8	1.95
3	3.25	5.4	18.0	11.0	25	43	10.1	6.9	3.55	4.4	2.85	1.84
4	2.8	4.9	18.8	28	7.8	28	8.4	7.5	4.7	3.25	2.35	1.74
5	2.8	4.7	18.7	22.5	6.6	17.5	7.8	7.4	5.4	3.25	2.5	1.84
6	2.5	4.1	9.6	9.3	6.4	32	7.2	5.4	4.3	3.1	2.2	1.74
7	2.35	6.4	23	8.4	*15.8	11.0	6.9	5.3	3.95	3.1	3.95	1.74
8	3.15	7.9	29	15.3	6.9	9.3	6.6	13.9	3.55	2.95	4.2	1.95
9	8.0	27.5	86	8.4	7.5	8.4	6.8	5.9	3.95	3.1	2.35	1.84
10	3.7	12.0	21	10.8	58	7.8	61	5.4	3.55	2.95	2.2	1.84
11	5.2	14.2	85	27	9.0	7.5	12.0	5.2	3.4	2.8	2.05	1.74
12	5.3	16.5	22.5	91	120	7.2	9.3	5.2	3.95	2.8	2.2	1.95
13	17.7	7.7	12.5	21	60	7.2	7.8	4.7	3.55	2.65	2.35	3.0
14	70	6.2	11.4	15.2	17.4	402	7.2	4.5	3.4	3.4	2.5	1.84
15	8.0	8.2	129	14.9	9.0	195	7.8	4.3	3.25	2.8	2.2	1.84
16	5.4	6.0	26	10.5	151	a24	7.2	4.1	3.25	2.65	1.95	1.74
17	4.3	15.5	13.6	8.8	46	a16	20	4.1	3.25	2.65	1.95	1.74
18	*5.7	17.6	13.1	13.2	124	*11.8	7.5	*4.0	3.25	2.5	2.05	1.74
19	3.95	5.9	16.1	24	19.4	11.4	6.6	9.9	3.25	2.65	1.95	2.35
20	3.4	4.7	127	9.6	17.3	10.6	12.2	5.4	3.4	2.5	1.95	7.3
21	3.1	5.4	14.2	8.1	12.5	11.7	7.5	4.3	3.1	3.1	1.95	3.4
22	2.8	6.2	11.0	7.8	17.3	9.3	6.2	4.3	3.1	2.5	5.1	2.35
23	2.65	16.4	92	10.7	27.5	9.0	5.9	5.9	2.95	2.35	2.2	2.35
24	2.8	66	90	7.2	11.8	8.7	5.9	5.6	2.95	2.5	1.95	2.35
25	3.25	10.8	13.6	10.5	9.3	8.3	5.9	4.7	3.25	2.5	2.05	2.65
26	29	15.9	14.7	7.9	10.8	14.0	5.4	4.1	3.25	2.35	1.84	1.95
27	11.2	128	20.5	7.5	8.4	13.3	5.2	4.1	3.55	2.2	*1.84	1.74
28	12.8	63	23	204	7.8	8.7	5.4	3.95	4.1	2.5	1.84	1.95
29	37.5	*207	13.1	36	8.4	8.8	11.9	-----	3.25	2.95	1.95	1.74
30	49	*51	32	10.7	33.5	8.1	5.6	-----	2.95	2.65	1.95	1.84
31	10.7	16.6	-----	8.1	-----	8.4	5.9	-----	2.95	-----	1.95	-----
Total	329.10	845.0	1,095.4	695.4	669.4	1,079.5	307.4	158.65	114.85	88.95	75.77	65.99
Mean	10.6	27.3	36.5	22.4	29.0	34.8	9.92	5.59	3.70	2.96	2.44	2.20
Ac-ft	653	1,680	2,170	1,380	1,720	2,140	610	311	228	176	150	131
Calendar year 1956: Max 402 Min 1.43 Mean 15.2 Ac-ft 11,010												
Fiscal year 1956-57: Max 402 Min 1.74 Mean 15.7 Ac-ft 11,350												

Peak discharge (base, 1,500 cfs).--Aug. 27 (12:30 p.m.) 1,600 cfs (10.02 ft); Aug. 29 (4 p.m.) 2,040 cfs (12.03 ft); Oct. 28 (1 p.m.) 2,060 cfs (12.13 ft); Nov. 16 (8 p.m.) 1,860 cfs (11.24 ft); Dec. 14 (8:30 a.m.) 2,000 cfs (11.78 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations.

8350. Inarajan River near Inarajan--Continued

Discharge, in cubic feet per second, fiscal year July 1957 to June 1958

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	1.74	1.43	30	5.2	73	11.0	5.6	6.6	4.3	2.35	2.35	5.8
2	1.74	1.43	23	4.9	10.6	13.9	5.4	6.2	3.95	2.35	2.05	2.2
3	1.74	1.43	66	4.5	9.3	11.0	5.2	6.2	3.95	2.2	1.95	1.84
4	1.95	1.63	17.1	4.3	8.7	10.6	6.4	5.4	3.95	2.5	2.9	1.84
5	2.35	1.95	11.6	73	9.4	9.6	7.0	5.2	4.1	2.35	2.05	1.74
6	2.35	1.53	12.1	393	7.5	9.6	5.2	5.2	3.55	2.35	1.95	1.74
7	1.84	1.74	12.9	*77	8.1	9.3	5.9	5.2	4.7	2.2	1.84	2.7
8	1.74	1.63	9.2	27.5	*316	9.0	17.4	5.2	4.8	2.2	1.84	1.95
9	1.74	1.43	12.5	34.5	a35	9.0	5.9	5.2	3.75	2.35	1.84	1.84
10	2.75	1.77	9.5	17.6	a22	9.0	5.6	5.2	*3.55	3.05	1.84	54
11	*2.85	1.43	8.6	12.9	a18	8.4	6.4	4.9	3.25	2.5	1.84	8.3
12	10.1	1.43	6.2	14.8	310	9.3	8.9	4.7	3.4	2.35	*1.74	8.2
13	5.5	2.3	7.8	13.5	a30	8.4	85	3.1	4.5	1.74	59	
14	2.2	4.2	5.6	11.4	a20	8.1	149	4.9	3.25	2.8	1.63	197
15	1.84	1.84	4.7	10.3	544	12.0	19.2	4.5	3.1	2.35	1.83	16.5
16	1.74	1.63	*6.3	9.3	239	9.7	11.0	4.3	2.95	2.35	1.63	9.1
17	1.63	2.85	6.4	8.4	a40	8.1	9.3	4.3	2.8	2.8	1.63	6.6
18	1.63	6.5	5.2	7.8	a50	7.5	8.1	5.6	2.8	2.35	1.63	5.4
19	1.63	5.4	13.3	9.0	*a25	7.2	8.1	5.2	2.8	3.35	1.63	4.9
20	2.75	2.8	6.4	7.8	21	6.9	*24	4.3	2.65	2.5	1.63	4.5
21	1.84	3.55	5.9	10.1	18.5	7.5	9.3	4.1	2.65	2.5	1.74	4.3
22	1.84	5.6	31.5	42	16.8	6.9	7.8	4.1	2.65	2.35	3.55	4.6
23	1.74	5.4	11.8	17.1	15.2	6.6	7.2	4.7	2.65	2.2	2.8	4.7
24	1.63	17.4	17.1	12.3	14.1	6.4	6.6	7.5	2.65	2.2	1.95	4.9
25	1.63	8.3	51	9.3	15.7	6.2	6.4	4.5	2.65	2.05	1.84	*4.9
26	1.74	6.4	9.4	9.6	13.2	5.9	6.2	4.1	2.5	2.2	1.63	4.3
27	1.53	3.4	7.2	37	*16.5	5.6	7.5	3.95	2.8	2.2	1.63	5.6
28	1.84	63	6.4	22.5	13.2	6.4	6.4	4.1	2.5	2.2	2.25	4.8
29	1.84	24.5	5.7	*10.8	12.5	6.9	5.9	---	2.5	2.65	11.3	3.95
30	1.63	8.8	6.6	9.0	11.4	5.6	5.6	---	4.1	2.05	3.15	3.75
31	1.53	4.9	---	11.1	---	---	5.4	5.9	---	2.5	2.95	---
Total	70.60	197.60	427.0	937.5	1,923.7	257.0	469.4	140.25	100.85	74.35	72.13	438.95
Mean	2.28	6.37	14.2	30.2	64.1	8.29	15.1	5.01	3.25	2.48	2.35	14.6
Ac-ft	140	592	847	1,860	5,820	510	931	278	200	147	143	871

Calendar year 1957: Max 544 Min 1.43 Mean 12.7 Ac-ft 9,180
 Fiscal year 1957-58: Max 544 Min 1.43 Mean 14.0 Ac-ft 10,140

Peak discharge (base, 1,500 cfs).--Oct. 6 (7 a.m.) 2,110 cfs (12.27 ft); Nov. 15 (9 p.m.) 2,080 cfs (12.23 ft).

* Discharge measurement made on this day.
 a No gage-height record; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	3.75	11.0	8.4	13.2	12.1	9.3	5.4	5.2	3.4	2.85	2.05	1.53
2	4.1	32	17.4	12.9	11.4	9.0	5.4	4.5	3.55	2.5	2.2	1.53
3	3.55	11.0	13.6	12.5	11.0	8.4	5.4	5.2	3.4	2.5	1.85	1.53
4	3.95	9.3	154	11.8	10.6	8.0	5.4	5.2	3.25	2.2	2.05	1.74
5	4.4	8.7	35.5	12.1	11.0	14.9	5.2	4.7	3.1	2.2	2.05	1.53
6	3.75	7.8	18.0	11.0	11.8	9.3	4.9	4.7	3.1	2.2	2.05	1.53
7	10.5	7.5	19.0	11.5	10.6	11.4	8.0	4.7	2.95	2.05	2.05	1.53
8	21	6.9	36	13.3	11.7	12.9	6.8	4.3	3.4	2.05	1.85	1.43
9	118	6.4	23.5	10.6	11.1	17.7	5.4	4.7	3.25	2.35	1.55	1.43
10	13.3	6.4	16.8	10.6	9.3	12.5	5.6	4.3	2.95	2.35	1.85	1.53
11	9.0	7.1	32	9.6	8.7	9.3	12.3	4.1	2.8	3.95	1.85	1.43
12	6.9	6.4	14.7	9.3	8.7	8.7	7.2	4.1	*2.6	2.8	1.84	1.43
13	6.4	6.4	19.1	29.5	16.0	16.3	6.4	4.1	2.65	2.2	1.84	1.43
14	25	8.2	15.1	9.6	17.5	7.8	*5.4	4.7	2.65	2.05	1.84	1.43
15	32.5	6.4	24.5	24	10.3	7.2	5.9	4.3	2.65	2.05	1.84	1.53
16	156	6.2	42	108	9.3	6.9	5.4	4.3	2.65	2.5	1.84	1.43
17	21	7.9	27.5	11.0	9.0	7.2	5.2	3.95	2.65	2.65	1.84	1.43
18	236	7.9	*13.9	39	104	6.6	5.3	3.95	2.65	7.1	1.84	*1.34
19	41	52	15.8	100	26	6.4	10.7	4.3	2.65	3.75	1.84	1.43
20	22	63	22.5	160	*11.9	6.2	5.4	4.1	2.65	2.4	1.84	1.43
21	16.3	17.1	305	30	10.6	6.2	4.9	3.75	2.65	2.05	1.84	1.43
22	14.8	10.6	119	23.5	9.6	5.9	4.7	3.95	2.8	2.05	1.84	1.43
23	11.8	30	153	55	11.3	6.2	4.7	4.1	2.8	2.05	1.74	5.6
24	10.3	10.5	39	48	9.0	6.4	4.5	3.95	2.65	2.05	1.53	3.7
25	9.6	12.8	23.5	22	8.7	5.9	4.3	3.95	2.5	2.05	1.84	1.95
26	9.0	18.8	19.6	21	8.4	6.2	4.9	3.95	2.5	2.05	1.74	1.53
27	14.4	59	21	15.2	12.4	6.2	4.7	3.55	2.5	*2.05	1.74	4.2
28	22.5	14.0	19.1	14.1	12.8	5.9	5.2	3.55	2.5	2.05	1.63	1.95
29	26	16.7	16.8	12.9	23	5.6	13.9	---	2.35	2.2	1.74	1.53
30	23	11.0	17.5	12.5	11.0	6.4	5.4	---	2.8	2.2	1.63	1.63
31	*13.5	9.3	---	12.1	---	---	5.9	4.9	---	3.25	1.83	---
Total	895.30	486.3	1,302.8	984.8	448.8	267.8	188.6	120.15	88.25	75.30	57.56	54.57
Mean	28.9	15.7	43.4	31.8	15.0	8.64	6.08	4.29	2.85	2.51	1.86	1.82
Ac-ft	1,780	965	2,580	1,950	890	531	374	248	175	149	114	108

Calendar year 1958: Max 305 Min 1.65 Mean 15.6 Ac-ft 11,270
 Fiscal year 1958-59: Max 305 Min 1.34 Mean 13.6 Ac-ft 9,860

Peak discharge (base, 1,500 cfs).--July 18 (3 p.m.) 1,810 cfs (10.96 ft); Sept. 4 (6:30 a.m.) 1,880 cfs (11.25 ft); Sept. 21 (2 a.m.) 2,080 cfs (12.20 ft).

* Discharge measurement made on this day.

8350. Inarajan River near Inarajan--Continued

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	*1.43	17.7	5.90	30.6	14.9	7.50	8.88	4.12	2.63	1.84	1.53	2.78
2	1.63	7.57	14.0	37.0	10.3	*16.0	7.94	4.92	2.48	1.84	1.53	2.48
3	1.43	5.12	27.7	22.5	9.00	9.00	6.40	4.12	2.48	1.84	1.43	2.34
4	1.34	4.52	13.1	37.2	8.10	7.80	6.15	4.63	2.63	1.84	1.43	1.84
5	1.43	2.95	12.8	20.4	47.3	7.50	6.15	4.12	2.48	1.84	2.48	1.84
6	1.53	2.48	20.8	15.8	80.4	7.20	5.40	3.75	2.48	1.74	1.84	1.74
7	1.34	2.20	60.0	17.8	36.3	6.65	5.40	3.40	2.48	1.53	2.20	1.74
8	1.34	1.95	28.2	16.0	21.7	6.65	5.15	3.40	2.48	1.63	1.74	1.84
9	1.43	1.74	14.0	12.9	15.2	6.90	8.45	3.40	3.88	1.63	1.63	2.32
10	1.63	3.69	14.6	16.0	12.9	7.20	5.98	3.40	2.95	1.74	1.63	2.28
11	1.34	8.81	85.8	40.6	12.9	6.40	5.15	3.40	2.63	1.74	1.63	1.74
12	1.43	4.64	76.0	17.5	11.4	6.15	6.15	3.24	2.63	1.84	3.40	1.74
13	1.43	4.31	28.0	*29.7	10.6	6.40	6.15	3.40	2.63	2.78	1.84	1.63
14	1.16	3.57	19.7	17.2	9.60	8.00	5.90	3.40	2.48	2.20	1.84	1.53
15	1.53	3.09	14.7	12.9	9.30	6.40	5.90	3.24	2.34	6.06	1.74	1.43
16	1.53	4.83	21.9	43.9	9.00	6.15	8.82	3.75	2.20	6.42	1.95	1.43
17	1.25	3.62	21.1	37.5	8.70	5.90	5.40	3.24	2.20	2.20	1.84	1.74
18	1.34	3.35	16.3	60.4	8.70	5.90	5.15	3.24	3.39	1.95	*1.74	1.84
19	1.25	3.08	14.9	26.3	7.80	5.40	*5.15	3.24	2.20	1.84	1.53	1.74
20	1.83	2.48	11.0	17.9	7.80	15.5	4.92	3.08	2.20	1.84	1.74	2.15
21	3.56	2.63	9.90	15.2	7.80	7.13	4.50	3.24	2.34	1.74	1.95	2.42
22	1.53	10.1	29.6	13.2	13.7	6.40	4.31	2.95	*2.07	1.74	1.95	1.74
23	1.34	8.95	*52.2	12.5	8.55	8.11	4.12	3.24	1.95	1.74	1.74	1.53
24	1.25	10.9	72.7	12.1	7.50	7.28	4.31	3.24	1.95	1.74	1.74	5.40
25	1.25	*16.8	85.3	11.0	9.05	5.90	4.12	2.95	1.84	1.63	1.74	3.68
26	1.25	23.4	26.3	10.6	11.2	7.19	3.93	2.63	1.84	1.53	1.63	2.20
27	1.25	31.5	22.0	12.1	12.8	7.66	4.12	2.63	1.84	1.63	1.43	2.69
28	1.18	13.9	15.8	11.0	18.4	20.4	6.24	2.78	1.84	1.74	1.43	2.34
29	8.79	11.7	14.1	10.6	10.0	8.25	7.60	2.63	1.84	1.63	8.15	5.24
30	73.9	13.0	98.5	9.60	8.10	7.80	5.10	-----	1.63	1.63	8.38	2.48
31	14.7	7.50	-----	9.30	-----	12.9	4.12	-----	1.84	-----	3.14	-----
Total	138.60	262.08	1,072.90	657.30	459.00	253.62	177.06	98.78	72.85	63.09	69.97	67.89
Mean	4.47	8.45	35.8	21.2	15.3	8.18	5.71	3.41	2.35	2.10	2.26	2.26
Ac-Ft	275	520	2,130	1,300	910	503	351	196	144	125	139	135
Calendar year 1959: Max	140			Min	1.16	Mean	9.39	Ac-ft	6,800			
Fiscal year 1959-60: Max	140			Min	1.16	Mean	9.27	Ac-ft	6,730			

Peak discharge (base, 1,500 cfs).--No peak above base.

* Discharge measurement made on this day.

8400. Pauliluc River near Inarajan

Location.--Lat 13°17'05" N., long 144°45'00" E., on right bank 0.3 mile upstream from mouth, 0.9 mile northeast of Inarajan, and 3.8 miles south of Talofofo.

Drainage area.--1.86 sq mi.

Records available.--October 1952 to June 1960.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 20 ft (by barometer).

Average discharge.--7 years (1953-60), 5.06 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1953-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs) ^a	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1953 b/	Feb. 22, 1953	325	4.04	May 11, 1953	0.20	0.27
1954	Oct. 15, 1953	2,980	13.11	June 2, 1954	.16	.25
1955	Sept. 20, 1954	385	4.36	Apr. 27, May 1, 1955	.16	.25
1956	Sept. 10, 1955	630	5.66	May 18, 1956	.16	.25
1957	Dec. 14, 1956	734	6.21	June 18, 1957	.23	.28
1958	Nov. 15, 1957	1,130	7.80	Aug. 11, 1957	.18	.26
1959	Sept. 21, 1958	1,030	7.43	June 1, 2, 1959	.22	.25
1960	Sept. 2, 1959	450	4.50	July 14, 19, 1959	.24	.26

a From rating curve extended from 50 cfs to 300 cfs by test on model of station site and extended above 300 cfs by logarithmic plotting.

b Period October 1952 to June 1953.

1952-60: Maximum discharge, 2,980 cfs Oct. 15, 1953 (gage height, 13.11 ft), from rating curve extended from 50 cfs to 300 cfs by test on model of station site, and extended above by logarithmic plotting; minimum, 0.16 cfs June 2, 1954, Apr. 27, May 1, 1955, May 18, 1956.

Remarks.--Records fair except those for periods of fragmentary or no gage-height record and those above 50 cfs, which are poor.

Discharge, in cubic feet per second, October 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1				-	5.2	7.0	5.8	1.57	1.86	0.76	0.38	0.35
2				-	3.8	15.1	2.85	1.49	1.75	.66	.38	.35
3				-	3.3	8.4	2.7	1.33	1.65	.66	.38	.35
4				5.5	2.9	4.1	2.4	1.19	3.85	.61	.45	.32
5				4.9	3.0	3.6	2.7	1.19	2.25	.57	.38	.38
6				3.6	*8.0	3.2	4.6	1.41	1.56	.57	.38	.38
7				*3.85	18.9	7.0	2.7	1.65	1.75	.57	.38	.35
8				3.6	19.2	3.85	2.55	1.75	2.25	.57	.38	.35
9				10.6	26	3.2	2.25	1.65	2.4	.57	.38	.32
10				8.4	13.3	3.85	2.1	1.49	1.99	.57	.38	*.38
11				4.5	18.3	3.85	1.86	1.41	1.99	.61	.38	.35
12				3.8	7.9	4.6	1.57	1.41	1.69	.57	.38	.35
13				3.8	5.2	2.85	*1.53	1.26	1.65	.57	.38	.38
14				5.0	4.1	3.4	1.41	1.12	1.41	.57	.38	.38
15				3.8	4.1	3.0	1.49	1.12	1.12	.57	.38	.38
16				3.5	20	2.7	1.49	1.12	1.05	.53	.38	.41
17				10	6.2	*2.55	1.49	.91	1.12	.53	.38	.38
18				35	4.4	2.55	1.65	.91	1.05	.53	.45	.38
19				17	8.8	2.55	1.49	.81	.86	.53	.38	.38
20				6.4	13.4	2.25	1.41	*.81	.98	.49	.38	.38
21				7.5	7.4	2.1	1.12	.81	.91	.49	*.38	.38
22				6.0	6.6	2.1	1.12	.98	.86	.49	.38	.38
23				5.2	13.8	11.3	3.0	2.0	.81	.53	.38	.49
24				20	5.2	3.2	2.25	4.9	.86	.53	.38	.38
25				6.1	13.7	5.2	1.86	2.55	.98	.45	.38	.38
26				8.0	6.6	3.6	1.57	2.25	.91	.45	.35	.38
27				6.0	4.6	2.85	1.41	2.4	.81	.41	.35	.41
28				5.0	4.4	2.7	1.05	1.99	.76	.41	.35	.53
29				4.2	13.0	2.0	1.33	-	.71	.38	.35	.49
30				16	8.7	2.55	1.86	-----	.66	.38	.38	.41
31				8.0	-----	2.2	1.57	-----	.76	-----	.38	-----
Total				-	304.0	150.20	64.18	163.50	43.56	16.13	11.80	11.53
Mean				-	10.1	4.85	2.07	5.84	1.41	0.538	0.381	0.384
Ac-ft				-	603	298	127	324	86	32	23	23
Calendar year		Max	Min	Mean	Max	Min	Mean	Ac-ft				
Fiscal year		Max	Min	Mean	Max	Min	Mean	Ac-ft				

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 11-22, Oct. 24 to Nov. 6, Dec. 31; discharge estimated on basis of records for nearby stations.

8400. Pauliluc River near Inarajan--Continued

Discharge, in cubic feet per second, fiscal year July 1955 to June 1956

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.42	3.8	55	14.3	2.8	*3.35	1.74	0.85	0.58	0.54	0.29	0.58
2	.42	1.49	2.9	6.8	3.55	2.05	2.05	.85	.58	.50	.29	.54
3	.46	1.41	3.0	4.8	3.8	1.85	5.4	.85	.63	*.46	.29	.54
4	.50	1.86	6.3	8.7	3.8	1.85	1.95	.79	.63	.46	.46	.46
5	.46	1.77	4.5	9.1	3.5	1.85	1.57	.91	.68	.42	.42	.42
6	*8.5	1.33	2.35	3.8	3.55	1.95	3.25	.97	.68	.46	.38	.42
7	6.9	1.18	5.3	4.8	2.8	1.77	2.5	1.04	.63	.42	.32	.35
8	10.8	1.04	2.85	3.5	4.0	1.66	1.57	1.11	.50	.38	.23	.38
9	9.9	.91	1.77	2.8	2.8	1.86	1.49	1.72	.50	.38	.23	.32
10	1.77	*7.9	54	2.6	3.25	1.66	*1.33	1.77	1.19	.35	.32	.29
11	8.4	.85	25.5	2.45	2.25	1.57	1.63	1.49	1.52	.38	.23	.35
12	22	.85	9.7	2.45	2.15	6.8	1.41	1.33	.85	.35	.23	.32
13	6.0	.85	3.6	2.35	2.05	4.7	1.41	1.18	.63	.35	.23	.26
14	2.45	.85	2.6	2.25	2.05	4.3	1.25	1.04	.58	.38	.23	.29
15	1.57	.79	2.35	2.15	2.05	2.15	1.18	.97	.58	.38	.23	.29
16	21	.68	9.7	1.95	1.95	50	1.11	1.04	.68	.35	.23	.26
17	2.7	.75	8.8	2.45	2.05	4.6	1.11	*.87	.58	.38	.23	.84
18	1.49	.85	7.5	2.05	2.85	2.8	1.04	.79	.68	.32	.23	6.8
19	1.25	.67	4.4	2.05	1.85	2.25	.97	.85	.58	.29	.23	2.8
20	1.63	1.25	*26	6.9	1.85	3.1	.97	.97	.58	.32	.37	.85
21	1.41	1.04	5.5	2.6	1.77	2.15	1.04	.85	.73	.35	.23	.58
22	1.04	1.11	7.7	16.3	1.95	1.04	1.75	.58	.29	.23	.23	.42
23	1.18	1.04	7.7	6.0	2.6	1.77	1.18	.73	.54	.23	.23	.35
24	1.25	1.04	4.1	*5.9	1.85	1.66	1.11	.73	.50	.29	*.24	.82
25	1.04	.97	5.6	15.9	1.66	1.66	1.18	.63	.50	.29	.23	.58
26	1.04	1.04	4.6	11.1	1.66	1.57	1.18	.73	.50	.29	.35	.85
27	1.11	.85	34	19.4	1.77	1.49	1.18	.68	.52	.29	.35	.63
28	1.04	.75	58	24.5	f23.5	1.49	1.18	.63	2	.32	.35	.50
29	1.70	.73	23.5	7.0	1.41	.97	.63	1.32	.35	.35	.56	.35
30	8.2	.58	7.7	5.0	f16.6	1.33	.97	-----	.91	.32	.66	.35
31	5.9	.60	-----	3.8	-----	1.25	.91	-----	.73	-----	.67	-----
Total	153.53	35.68	407.52	242.75	111.91	119.65	44.87	27.73	23.39	10.95	10.17	22.82
Mean	4.31	1.09	13.6	7.83	3.73	3.86	1.45	0.956	0.755	0.365	0.326	0.761
Ac-ft	265	67	808	461	222	237	89	55	46	22	20	45
Calendar year 1955. Max	66				0.29	Mean	3.34	Ac-ft	2,420			
Fiscal year 1955-56. Max	66				0.23	Mean	3.25	Ac-ft	2,360			
Peak discharge (base, 320 cfs).--Sept. 10 (8:30 p.m.)	630 cfs (5.66 ft); Oct. 3 (6:30 p.m.) 325 cfs (3.95 ft).											

* Discharge measurement made on this day.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Discharge, in cubic feet per second, fiscal year July 1956 to June 1957

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.46	1.66	3.8	4.0	2.45	6.1	3.3	1.63	0.91	*0.71	0.75	0.32
2	.42	2.65	10.1	2.35	1.85	36.5	3.7	1.52	.85	1.03	.73	.32
3	.46	1.57	9.1	2.35	8.5	7.4	2.7	1.63	.73	1.87	.73	.29
4	.42	1.18	6.1	6.6	2.5	4.3	2.7	1.87	.90	1.11	.58	.32
5	.58	1.25	*5.3	9.7	*1.66	3.8	2.4	2.4	1.11	.85	.50	.26
6	.35	1.11	2.45	2.45	1.57	4.1	2.25	1.75	1.11	.79	.42	.26
7	.35	.97	11.9	2.25	5.9	2.45	2.1	1.52	1.04	.68	.63	.26
8	.58	7.0	10.9	2.15	2.15	2.15	1.87	3.2	1.04	.68	1.25	.35
9	1.96	19.8	21.5	2.05	1.77	1.95	1.63	1.99	1.11	.68	1.11	.32
10	1.58	2.45	4.6	3.55	18.3	1.95	19.5	1.59	1.04	.68	.68	.32
11	1.49	2.05	13.3	18.0	3.1	*1.82	3.7	1.42	.91	.63	.54	.29
12	1.89	1.57	*9.9	31	16.2	1.57	2.4	1.42	.91	.54	.46	.32
13	2.25	1.25	4.4	4.6	46	1.57	2.1	1.25	.85	.54	.50	.35
14	60	1.11	5.0	3.5	3.05	124	1.99	1.18	.73	.54	.46	.29
15	2.6	1.38	94	11.2	2.25	75	1.99	1.11	.73	.42	.42	.32
16	1.18	2.05	7.3	7.8	26.5	9.2	1.87	1.04	.68	.42	.42	.29
17	.73	2.55	4.1	1.9	17.0	4.4	1.9	1.63	.42	.42	.29	.32
18	*.66	10.5	3.25	3.05	45	3.3	2.4	*.79	.63	.42	.38	.26
19	.63	1.77	3.1	4.4	5.9	3.3	1.87	1.41	.68	.38	.38	.35
20	.58	1.41	4.7	2.6	3.25	3.1	1.99	2.2	.63	.38	.38	.67
21	.58	1.45	5.0	2.15	2.8	3.7	2.25	1.18	.58	.50	.35	.58
22	.58	2.1	3.5	2.05	2.8	2.9	1.99	1.11	.58	.42	.76	.91
23	.58	4.8	3.5	2.45	4.8	1.75	1.25	.54	.38	1.87	.35	.35
24	.58	11.2	32	2.95	3.8	2.25	1.63	1.63	.54	.38	.79	.50
25	.63	2.8	5.4	2.25	2.25	2.25	1.52	1.52	.54	.38	.58	.54
26	2.15	2.8	3.05	2.05	2.15	4.2	1.42	1.33	.50	.38	.42	.46
27	1.46	*18.9	7.0	2.05	2.05	6.0	1.42	1.25	1.34	.35	*.58	.38
28	2.25	5.8	6.7	17.1	2.05	2.9	1.42	1.11	1.63	.42	.38	.35
29	4.5	15.3	4.2	10.1	2.45	3.5	2.1	.97	.79	.42	.35	.32
30	33.5	8.0	14.5	2.45	2.8	2.55	1.87	-----	-----	.42	.32	.32
31	3.5	6.8	-----	2.05	-----	2.7	1.63	-----	.63	-----	.35	-----
Total	129.27	145.23	369.95	171.25	245.05	333.31	89.46	42.14	25.86	17.82	18.29	11.44
Mean	4.17	4.68	12.3	5.52	8.17	10.6	2.89	1.50	0.834	0.594	0.570	0.381
Ac-ft	256	288	734	340	466	661	177	84	51	35	36	23
Calendar year 1956. Max	124				0.23	Mean	4.19	Ac-ft	3,040			
Fiscal year 1956-57. Max	124				0.26	Mean	4.38	Ac-ft	3,170			
Peak discharge (base, 320 cfs).--July 14 (7:30 a.m.)	590 cfs (5.53 ft); Sept. 15 (10 a.m.) 355 cfs (4.22 ft); Sept. 20 (9 a.m.) 325 cfs (3.96 ft); Dec. 14 (9 a.m.) 734 cfs (6.21 ft).											

* Discharge measurement made on this day.

8400. Pauliluc River near Inarajan--Continued

Discharge, in cubic feet per second, fiscal year July 1957 to June 1958

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.29	0.26	5.3	1.99	9.6	3.1	1.63	1.42	0.85	0.42	0.38	1.58
2	.29	.26	5.1	1.52	2.8	3.9	1.42	1.42	.68	.42	.35	1.50
3	.26	.26	26.5	1.33	2.7	3.3	1.52	1.63	.54	.42	.35	.68
4	.35	.23	5.9	1.25	2.4	3.3	1.75	1.52	.68	.38	.42	.46
5	.38	.32	2.9	19.2	2.7	3.1	2.7	1.42	.63	.38	.38	.38
6	.32	.26	3.65	130	2.4	2.9	1.75	1.18	.58	.38	.38	.38
7	.29	.29	2.9	27.5	2.4	2.7	1.75	.91	.75	.35	.35	.50
8	.29	.26	3.15	9.0	66	2.7	7.3	.85	.85	.35	.32	.38
9	*.29	.32	1.87	11.1	13.1	2.55	2.25	.73	.68	.35	.32	.38
10	.44	.26	1.99	6.5	4.9	2.4	1.87	.85	*.63	.38	.32	*9.6
11	.41	.23	2.2	3.7	5.2	2.25	2.1	.85	.63	.35	.32	4.7
12	.63	.26	2.1	3.5	108	2.4	2.4	.85	.63	.35	*.32	1.52
13	1.49	.35	2.1	3.3	12.7	2.7	2.9	.91	.63	.53	.29	7.9
14	1.25	.48	1.52	2.9	7.8	2.7	3.8	.63	.91	.46	.29	a40
15	.68	.42	1.25	3.3	330	3.3	5.8	.85	.54	.54	.29	5.8
16	.50	.50	*1.33	2.9	104	3.5	3.3	.85	.50	.46	.26	3.1
17	.42	.42	1.99	2.7	11.8	2.9	2.7	.85	.42	.46	.29	2.1
18	.32	.42	1.63	2.4	8.9	2.4	2.55	.97	.42	.38	.29	1.52
19	.29	.92	3.25	2.25	*6.8	1.99	2.55	1.04	.42	.50	.26	1.18
20	.44	2.35	2.25	1.99	5.5	1.75	*7.7	.91	.42	.46	.26	1.04
21	.32	1.12	1.75	2.25	4.9	1.63	2.7	.91	.42	.42	.26	.97
22	.32	1.01	10.4	13.0	4.4	1.52	2.1	.85	.42	.38	.47	1.11
23	.32	3.4	3.7	*6.7	4.4	1.75	1.99	.97	.42	.35	.35	1.33
24	.29	2.35	9.1	3.7	4.2	1.75	1.87	1.33	.42	.35	.32	1.52
25	.26	2.85	14.9	3.1	4.2	1.63	1.75	1.42	.38	.35	.29	*1.63
26	.32	1.18	2.7	3.9	4.2	1.33	1.52	1.04	.38	.38	.26	1.18
27	.26	.79	2.1	8.3	4.9	1.18	1.63	.97	.38	.35	.26	2.15
28	.32	9.2	2.25	4.9	3.7	1.23	1.52	.91	.38	.35	.32	1.63
29	.32	10.1	2.4	*2.9	3.5	1.52	1.52	-	.38	.38	1.91	1.25
30	.29	3.0	2.1	2.4	3.3	1.52	1.52	-----	.51	.35	1.84	1.04
31	.26	1.56	-----	3.1	-----	1.63	1.42	-----	.38	-----	.85	-----
Total	12.91	45.61	130.28	292.58	751.5	72.53	113.48	29.32	16.56	11.98	13.57	98.51
Mean	0.416	1.47	4.34	9.44	25.0	2.34	3.66	1.05	0.534	0.399	0.438	3.28
Ac-ft	26	90	258	580	1,490	144	225	58	33	24	27	195

Calendar year 1957: Max 330 Min 0.23 Mean 4.14 Ac-ft 2,990
 Fiscal year 1957-58: Max 330 Min 0.25 Mean 4.35 Ac-ft 3,150

Peak discharge (base, 320 cfs).--Oct. 6 (8 a.m.) 910 cfs (7.00 ft); Nov. 12 (1 p.m.) 370 cfs (4.27 ft); Nov. 15 (9:30 p.m.) 1,130 cfs (7.80 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.91	3.4	2.55	5.2	4.6	3.7	2.05	1.56	0.64	0.44	0.40	0.27
2	.91	11.2	4.3	4.3	4.6	3.7	1.90	1.40	.64	.40	.44	.24
3	.80	3.4	14.3	4.0	3.55	3.4	1.90	1.40	.64	.40	.40	.27
4	.74	3.0	*66	3.7	3.7	3.2	1.75	1.32	.60	.36	.40	.38
5	.85	2.55	8.0	4.3	3.7	5.0	1.75	1.18	.55	.36	.40	.30
6	1.04	2.55	5.2	3.7	4.3	3.2	1.64	1.18	.47	.40	.40	.30
7	1.62	2.25	5.2	3.55	4.0	3.0	3.3	1.25	.47	.36	.47	.27
8	4.6	2.25	4.3	4.6	4.6	3.85	4.2	1.25	.47	.36	.40	.27
9	*4.1	1.90	7.9	3.4	5.3	7.4	2.15	1.32	.47	.44	.40	.27
10	4.3	1.75	4.6	3.4	3.4	3.7	2.15	1.25	.47	.44	.40	.27
11	3.0	1.82	19.0	3.0	2.8	3.55	6.0	1.18	.47	.58	.40	.27
12	2.25	1.82	4.6	3.2	2.55	3.55	4.3	1.04	*.47	.47	.36	.27
13	2.05	1.90	28	12.6	5.7	3.2	2.25	.85	.47	.55	.35	.27
14	3.85	2.15	8.3	3.4	8.5	2.8	*1.82	.85	.47	.51	.33	.27
15	12.5	2.15	6.1	5.3	5.2	2.4	1.82	.80	.47	.44	.33	.30
16	*25	1.90	.91	62	3.7	2.4	1.82	.74	.47	.44	.33	.27
17	6.0	3.0	7.2	34.5	3.4	2.4	1.75	.69	.47	.44	.27	.24
18	82	2.8	4.0	14.7	35	2.25	1.75	.69	.44	.97	.27	.24
19	14.0	8.8	5.1	30.5	10.8	2.15	3.4	.69	.47	2.3	.47	.27
20	7.6	17.7	7.6	61	*6.6	2.05	2.25	.69	.47	1.30	.27	.24
21	5.5	5.5	126	15.2	3.7	2.05	1.82	.64	.44	.69	.27	.27
22	5.2	3.4	36.5	8.0	3.4	1.82	1.75	.64	.47	.61	.27	.27
23	4.0	12.1	*92	23	4.8	1.82	1.56	.64	.44	.44	.27	.68
24	3.4	3.4	18.0	26	3.4	2.05	1.40	.69	.40	.40	.27	.52
25	3.0	4.0	8.5	7.2	3.4	1.82	1.32	.64	.40	.36	.27	.44
26	2.8	4.0	7.2	8.7	3.4	2.05	1.32	.69	.40	.40	.27	.40
27	3.25	19.8	8.5	6.5	5.0	2.05	1.40	.64	.40	*.38	.27	.61
28	13.6	4.3	8.6	5.2	4.8	1.90	1.40	.64	.40	.40	.27	.60
29	a9.1	4.5	6.9	4.6	11.6	2.05	4.4	-	.36	.40	.27	.55
30	a7.7	3.7	7.8	4.0	4.6	2.15	2.2	-----	.44	.40	.30	.51
31	a4.0	2.8	-----	3.7	-----	2.15	1.56	-----	.47	-----	.27	-----
Total	276.51	145.59	546.55	382.45	174.10	88.81	70.08	26.55	14.71	16.34	10.27	10.33
Mean	8.92	4.70	16.2	12.3	5.80	2.86	2.26	0.948	0.475	0.545	0.331	0.344
Ac-ft	548	289	1,080	759	345	176	139	53	29	32	20	20

Calendar year 1958: Max 126 Min 0.26 Mean 5.20 Ac-ft 3,760
 Fiscal year 1958-59: Max 126 Min 0.24 Mean 4.83 Ac-ft 3,500

Peak discharge (base, 320 cfs).--July 18 (5:30 p.m.) 332 cfs (3.73 ft); Sept. 4 (8:30 a.m.) 332 cfs (3.73 ft); Sept. 21 (3 a.m.) 1,030 cfs (7.43 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations.

8400. Pauliluc River near Inarajan--Continued

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	*0.49	7.76	<u>1.82</u>	14.0	6.52	3.20	<u>3.20</u>	1.32	0.55	0.36	0.33	<u>1.18</u>
2	.47	3.40	43.5	25.2	4.30	*4.31	2.78	1.32	.51	.36	.33	.85
3	.40	2.15	10.9	9.40	3.70	3.20	2.25	1.32	.51	.36	.33	.64
4	.33	2.15	4.90	12.1	3.55	3.00	2.15	1.45	.54	.30	.30	.55
5	.33	<u>1.82</u>	21.1	6.90	12.1	2.40	2.15	<u>1.48</u>	.47	.30	.47	.47
6	.33	1.25	7.38	5.50	<u>40.6</u>	2.25	2.03	1.25	.47	.30	.33	.47
7	.33	.91	22.6	5.46	<u>12.0</u>	2.15	1.82	1.10	.47	.27	.40	.44
8	.33	.74	17.3	7.53	7.60	2.15	1.75	.97	<u>.40</u>	.27	.33	.47
9	.36	.69	6.81	4.55	5.15	2.03	a2.70	.91	.51	.27	.33	.47
10	.33	<u>.64</u>	4.00	4.30	4.30	2.25	a2.00	.91	.44	.27	.30	.44
11	.30	2.42	47.0	5.68	4.30	a2.10	a1.70	.85	.44	.27	.33	.40
12	.30	4.02	36.0	4.55	4.30	a2.00	a2.00	.85	.44	.27	.51	.40
13	.30	1.90	11.0	*8.57	4.00	a2.10	a2.00	.80	.44	.33	.47	.36
14	.30	1.75	7.60	5.80	3.55	a2.50	a1.90	.74	.44	.30	.47	.36
15	.33	1.48	5.80	4.30	3.40	a2.10	a1.90	.69	.44	.59	.51	<u>.30</u>
16	.33	1.56	11.1	15.2	3.20	a2.00	a2.80	.80	.44	<u>1.87</u>	.47	.30
17	.30	1.56	11.7	20.8	3.20	a1.90	a1.80	.69	.40	<u>1.45</u>	.47	.33
18	.30	1.32	9.78	<u>36.7</u>	3.00	a1.90	a1.60	.74	.61	.80	*.40	.36
19	.30	1.04	5.80	<u>9.64</u>	<u>2.55</u>	a1.90	*a1.48	.74	.60	.60	.36	.30
20	.36	.91	4.30	6.50	<u>2.78</u>	a5.00	1.40	.69	<u>.74</u>	.47	.33	.38
21	.54	.91	3.70	5.50	2.78	a2.30	1.32	.69	.60	.44	.40	.36
22	.33	1.22	23.8	4.80	4.30	a2.10	1.25	.69	*.53	.40	.40	.30
23	.33	2.42	*26.8	4.55	3.70	a2.60	1.18	.74	.55	.40	.36	.30
24	.33	3.90	20.1	4.30	3.00	a2.40	1.18	.69	.47	.40	.36	.61
25	.33	*4.46	<u>52.2</u>	4.00	3.40	a2.00	1.18	.69	.47	.33	.33	.47
26	.36	6.61	10.7	3.70	4.00	a2.30	<u>1.04</u>	.64	.44	.33	.33	.64
27	.33	* <u>14.2</u>	9.48	3.70	6.89	a2.50	1.10	.64	.44	.33	.30	.55
28	.33	4.90	6.10	4.30	8.19	6.00	1.32	.60	.40	.33	.30	.55
29	.68	3.44	5.50	4.55	4.30	<u>3.02</u>	1.74	<u>.55</u>	.40	.33	.80	1.10
30	<u>35.4</u>	4.55	44.8	4.55	3.40	2.25	2.40	-----	.40	.33	<u>3.10</u>	1.18
31	<u>5.93</u>	2.40	-----	<u>3.70</u>	-----	2.70	1.75	-----	.40	-----	<u>2.32</u>	-----
Total	51.71	88.48	492.47	260.53	178.06	80.61	56.87	25.50	14.96	13.63	16.77	15.53
Mean	1.67	2.85	16.4	8.40	5.94	2.60	1.83	0.879	0.483	0.454	0.541	0.518
Ac-ft	103	175	977	517	353	160	113	51	30	27	33	51
Calendar year 1959: Max	52.2			Min	0.24	Mean	3.56	Ac-ft	2,580			
Fiscal year 1959-60: Max	52.2			Min	0.27	Mean	3.54	Ac-ft	2,570			

Peak discharge (base, 320 cfs).--Sept. 2 (3:30 p.m.) 450 cfs (4.50 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby streams.

8450. Tolaeyuus River near Agat

Location.--Lat 13°21'55" N., long 144°42'40" E., on right bank 3.7 miles southeast of Agat and 4.8 miles southwest of Yona.

Drainage area.--6.54 sq mi.

Records available.--September 1951 to July 1960 (discontinued).

Gage.--Water-stage recorder and concrete control. Altitude of gage is 90 ft (by barometer).

Average discharge.--8 years (1952-60), 21.0 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1952-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
		Discharge (cfs)	Gage height (feet)		Discharge (cfs)	Gage height (feet)
1952a	Oct. 13, 1951	(b)	10.58	May 2, 3, 1952	0.39	0.22
1953	Sept. 8, 1952	(b)	8.13	June 26, 27, 1953	c.68	-
1954	Oct. 15, 1953	(b)	(d)	June 21, 22, 1954	.27	.19
1955	Sept. 1, 1954	(b)	12.25	July 1, 8-10, 12-17, 1954	.50	.24
1956	Sept. 29, 1955	(b)	18.30	May 15-17, 1956	.35	.21
1957	Nov. 13, 1956	(b)	10.28	June 19, 1957	.76	.28
1958	Nov. 16, 1957	(b)	19.24	July 26, 27, 1957	.50	.24
1959	Sept. 4, 1958	(b)	22.23	June 11, 12, 13, 14, 17-20, 21, 1959	.23	.18
1960	Aug. 29, 1959	(b)	10.80	July 8, 9, 28, 1959	.20	.17

a Period September 1951 to June 1952.

b Unknown.

c Minimum daily.

d About 22.5 ft.

1951-60: Maximum discharge unknown, occurred Oct. 15, 1953 (gage height, about 22.5 ft); minimum, 0.20 cfs July 8, 9, 28, 1959.

Remarks.--Records good except those for period of faulty or no gage-height record or indefinite stage-discharge relation, which are poor. Occasional backwater when capacity of underground channel outlet is exceeded.

Discharge, in cubic feet per second, September 1951 to June 1952

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			-	*a4.6	82	7.5	6.8	3.25	2.8	1.09	0.50	1.62
2			-	a4.3	28.5	8.8	6.8	4.3	3.0	1.00	.44	1.19
3			-	a4.6	38	5.2	6.2	4.3	1.87	1.00	.44	1.00
4			-	4.8	e270	4.5	6.2	3.9	1.74	.92	.56	1.86
5			-	5.4	56	3.95	6.2	3.45	1.62	.84	1.01	1.50
6			-	5.9	43	109	5.9	*3.25	1.50	.76	6.1	1.29
7			-	6.0	35.5	21	5.4	4.6	1.39	.76	10.3	1.29
8			-	67	23.5	14.3	*5.2	4.1	1.39	*.76	2.45	1.29
9			-	112	19.5	11.7	5.2	3.65	1.29	.65	1.50	1.19
10			-	51	17.5	9.7	5.4	3.65	*1.29	.65	1.29	1.00
11			-	43	17.2	8.2	5.0	3.45	1.19	.62	1.09	1.00
12			-	e250	30	5.9	4.8	3.25	1.19	.62	1.00	1.00
13			-	e359	15.7	4.8	4.8	3.1	1.19	.62	.84	.84
14			-	96	15.2	4.3	4.6	3.1	1.19	.65	.69	.84
15			-	62	13.4	4.1	5.0	2.9	1.09	.62	.69	1.00
16			-	45	12.9	4.1	5.7	2.75	1.09	.56	.69	1.33
17			-	27.5	15.2	28.5	4.8	2.6	1.09	.56	.56	1.62
18			-	21.5	16.4	13.8	7.7	2.6	1.00	.56	.56	1.19
19			-	18.9	41	12.1	5.2	2.6	1.00	.62	6.4	1.00
20			-	25	10.3	9.0	4.8	2.6	1.00	.76	2.0	.92
21			-	18.9	7.1	8.1	4.3	2.6	1.09	.62	1.19	.84
22			-	18.9	5.4	7.4	4.1	2.75	1.09	.56	*1.00	.76
23			-	17.0	2	6.3	4.1	2.6	1.00	.62	1.76	.92
24			-	23.5	4.3	6.8	4.6	2.4	1.00	.62	.69	1.39
25			-	18.9	4.3	6.8	4.1	2.15	1.33	.56	.76	1.19
26			-	31	4.1	6.8	3.9	2.15	3.05	.56	.76	1.19
27			-	a5.2	42	8.0	6.8	3.9	2.25	1.50	.62	.69
28			-	a5.0	23.5	16.3	7.4	3.65	2.25	1.62	.76	1.00
29			-	a5.8	19.5	6.8	7.3	4.1	1.87	1.50	.62	1.65
30			-	a5.2	18.2	5.4	7.1	3.65	-----	1.29	.56	3.15
31			-	-----	15.7	-----	7.1	3.45	-----	1.19	-----	1.87
Total			-	1,469.7	867.7	368.45	156.65	88.42	44.58	20.76	52.39	33.96
Mean			-	47.4	28.9	11.9	5.05	3.05	1.44	0.693	1.69	1.13
Ac-ft			-	2,920	1,720	731	311	175	88	41	104	67
Calendar year	: Max	Min	Mean	Ac-ft								
Fiscal year	: Max	Min	Mean	Ac-ft								

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations.

e stage-discharge relation indefinite; discharge estimated on basis of records for nearby stations.

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8450. Tolaeyus River near Agat--Continued

Discharge, in cubic feet per second, fiscal year July 1954 to June 1955

Table with columns: Day, July, Aug., Sept., Oct., Nov., Dec., Jan., Feb., Mar., Apr., May, June. Rows 1-31 and summary rows for Total, Mean, Ac-ft.

Calendar year 1954. Max 294 Min 0.31 Mean 20.0 Ac-ft 14,500
Fiscal year 1954-55: Max 294 Min 0.50 Mean 19.7 Ac-ft 14,230

* Discharge measurement made on this day.
e Stage-discharge relation indefinite; discharge estimated on basis of records for nearby stations.
Note.--No gage-height record Jan. 29 to Feb. 10, June 4-30; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1955 to June 1956

Table with columns: Day, July, Aug., Sept., Oct., Nov., Dec., Jan., Feb., Mar., Apr., May, June. Rows 1-31 and summary rows for Total, Mean, Ac-ft.

Calendar year 1955. Max 1,000 Min 0.76 Mean 22.1 Ac-ft 15,990
Fiscal year 1955-56: Max 1,000 Min 0.35 Mean 21.3 Ac-ft 15,480

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for nearby stations.
e Stage-discharge relation indefinite; discharge estimated on basis of records for nearby stations.

8450. Tolaeyuus River near Agat--Continued

Discharge, in cubic feet per second, fiscal year July 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	4.3	17.0	111	26	12.1	65	7.2	3.1	1.74	1.19	1.09	0.31
2	4.3	24.5	52	22.5	21.5	24	6.8	2.75	1.74	1.00	1.09	.31
3	4.3	16.1	37.5	20	11.3	18	6.5	2.75	1.74	1.00	1.00	*.27
4	4.1	13.8	42.0	17.5	10.6	13	6.3	2.75	1.62	.76	.92	.35
5	4.3	37.5	34	17.0	10.2	130	6.4	2.6	1.62	.84	.92	.44
6	5.0	19.9	28	15.7	12.5	14	6.4	2.6	1.50	.76	.84	.39
7	5.0	15.7	24	18.1	18.5	16	7.6	2.6	1.74	.76	.92	.39
8	6.7	13.4	38	17.4	22.5	26	9.3	2.4	2.15	.76	.76	.35
9	123	11.3	30	15.8	14.4	44	7.5	2.4	2.15	*.76	.76	.35
10	24.5	10.6	18	14.3	12.9	18	6.2	2.4	2.15	.84	.69	.31
11	14.3	9.8	26	14.3	11.0	15	13	2.25	2.0	1.19	.69	.27
12	11.0	8.7	16	11.9	10.2	14	*7.9	2.25	2.0	1.39	.69	.31
13	8.7	8.7	19	38.5	26.5	13	6.8	2.15	1.87	1.00	.62	.31
14	14.1	8.4	14	16.5	35	12	6.8	2.15	1.74	.92	.50	.23
15	54	8.4	*38	12.5	12.1	12	6.5	2.25	1.50	.84	.50	.35
16	145	9.0	83	77	16.6	11	6.5	2.15	1.39	.84	.50	.31
17	76	21	30	224	*10.3	10	6.2	2.0	1.39	.84	.50	.23
18	171	74	25.5	157	52	9.8	5.4	1.87	1.39	1.71	.50	.23
19	64	82	35	176	20	9.6	6.2	*2.15	1.39	2.5	.39	.23
20	46	131	31.5	81	14.3	9.2	5.7	2.15	1.50	1.29	.35	.23
21	35	46	300	54	11.7	8.8	5.4	2.15	1.39	1.19	.35	.27
22	29	31.5	174	32.5	10.2	8.7	5.2	2.15	1.39	1.00	.39	.27
23	22.5	53	213	88	9.4	8.4	5.0	2.25	1.29	.92	.39	.63
24	18.9	120	65	67	8.4	8.0	3.9	2.25	1.29	.92	.35	.92
25	17.0	126	46	33.5	8.4	8.0	4.6	2.0	1.19	1.00	.39	.69
26	14.7	45	37.5	35	7.8	7.6	4.6	2.15	1.19	1.09	.56	.44
27	14.7	64	31	25	8.4	7.3	4.3	2.0	1.19	1.09	.44	.44
28	40	31.5	45	21	46	7.0	3.9	1.74	1.19	1.09	.39	.39
29	26	50	43	16.1	90	7.0	4.6	-	1.19	1.50	.31	.35
30	*60	35	37.5	14.3	20	7.7	3.65	-	1.19	1.19	.35	.35
31	23	26	-----	12.5	-----	7.4	3.25	-----	1.29	-----	.35	-----
Total	1,090.4	1,168.8	2,100.5	1,389.9	572.8	569.5	189.60	64.41	48.11	32.16	18.50	10.92
Mean	35.2	37.7	70.0	44.8	19.1	18.4	6.12	2.30	1.55	1.07	0.597	0.364
Ac-ft	2,160	2,320	4,170	2,760	1,140	1,130	376	128	95	64	37	22

Calendar year 1958: Max 420 Min 1.09 Mean 22.9 Ac-ft 16,570
 Fiscal year 1958-59: Max 420 Min 0.23 Mean 19.9 Ac-ft 14,400

* Discharge measurement made on this day.

Note.--No gage-height record Sept. 4-15, 21, Nov. 28 to Jan. 12; discharge estimated on basis of records for nearby streams.

8450. Tolaeyuus River near Agat--Continued

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.35	12.0	41.8	50.9	40.0	16.0	14.2	4.55	1.74	1.09	1.00	2.27
2	.27	8.96	72.9	50.0	25.0	19.0	11.9	5.00	1.74	1.09	1.19	2.00
3	.27	10.5	56.8	35.0	15.0	17.0	9.39	4.55	1.87	1.19	1.88	1.62
4	.23	12.2	27.6	60.5	15.0	15.0	8.38	4.32	1.87	1.09	.84	1.39
5	.23	5.00	19.5	41.1	40.0	13.0	8.38	4.32	1.87	1.19	.76	1.29
6	.31	3.26	130	29.2	300	12.0	7.76	4.10	1.87	1.19	.84	1.09
7	.27	2.42	71.5	23.6	100	11.5	6.83	3.65	1.87	1.09	1.00	1.09
8	.20	2.00	47.3	24.1	60.0	11.0	6.52	3.45	1.87	1.09	.84	1.00
9	.20	1.74	30.9	18.9	40.0	11.0	8.58	3.28	1.87	1.09	.89	.92
10	.44	2.42	22.3	18.2	30.0	13.0	8.38	3.08	1.87	1.00	.62	.84
11	.35	2.13	180	24.4	25.0	11.0	6.83	3.08	2.13	1.00	.50	.84
12	.35	2.13	165	17.5	20.0	10.0	7.14	3.08	1.87	1.00	.62	.76
13	.39	3.18	57.2	16.6	18.0	10.0	11.2	2.91	1.74	1.19	.69	.84
14	.31	3.65	40.2	17.2	17.0	11.0	8.38	3.08	1.74	1.50	.62	.76
15	.31	3.11	*48.3	14.3	16.0	10.0	8.07	2.91	1.62	1.99	.56	.76
16	.50	6.21	38.4	60.1	15.0	*9.00	8.39	2.74	1.62	1.50	.62	.76
17	.56	12.0	37.5	72.4	14.0	8.38	7.14	2.58	1.50	1.19	.62	.59
18	.44	8.61	35.1	169	13.0	8.07	6.52	2.58	2.64	1.09	.62	.76
19	.39	7.14	28.4	51.8	12.5	7.76	6.21	2.42	1.87	1.19	.50	.76
20	.35	4.55	21.6	35.0	12.0	42.8	6.21	2.42	1.74	1.09	.50	.76
21	.44	5.57	18.2	28.4	12.0	13.4	5.68	2.42	1.62	1.00	.56	2.07
22	*.27	7.48	65.0	22.9	13.0	11.7	5.45	2.27	1.50	1.00	.84	1.09
23	.27	8.23	199	20.2	13.0	10.6	5.22	2.13	1.50	1.09	1.00	.84
24	.35	9.50	97.4	19.5	12.0	10.2	5.00	2.13	1.74	1.09	*1.09	8.54
25	.39	52.5	156	17.5	30.0	8.69	*5.00	2.00	1.62	1.00	.76	15.3
26	.39	60.6	54.5	15.2	20.0	9.39	4.55	2.00	1.62	1.00	.84	5.00
27	.44	156	42.8	12.9	18.0	9.78	4.55	2.00	1.39	1.00	.76	2.91
28	.98	36.6	34.2	*14.3	20.0	41.2	4.78	1.87	1.29	1.19	.76	2.74
29	1.72	274	27.6	16.1	25.0	14.8	5.32	1.87	*1.29	1.09	4.26	3.45
30	46.7	85.6	87.1	13.0	20.0	11.3	5.68	-----	1.19	1.00	10.3	3.08
31	7.85	35.9	-----	14.0	-----	10.6	5.00	-----	1.09	-----	4.84	-----
Total	66.52	846.19	1,933.1	1,023.8	1,008.5	418.17	222.63	86.77	52.76	34.31	41.52	66.22
Mean	2.15	27.3	64.4	33.0	33.6	13.5	7.18	2.99	1.70	1.14	1.34	2.21
Ac-ft	132	1,680	3,830	2,030	2,000	829	442	172	105	68	82	131
Calendar year 1959: Max	300			Min	0.20	Mean	15.5	Ac-ft	11,220			
Fiscal year 1959-60: Max	300			Min	0.20	Mean	15.8	Ac-ft	11,500			

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 30 to Dec. 16; discharge estimated on basis of records for Ylig River and rainfall records.

Discharge, in cubic feet per second, 1960

July 1	2.42	July 10	2.00
2	2.00	11	3.15
3	1.87	12	3.45
4	2.85	13	2.42
5	2.42	14	7.18
6	1.87	15	29.6
7	1.74	16	20.8
8	1.74	17	8.69
9	2.13	18	*7.14

* Discharge measurement made on this day.

8480. Almagosa Springs near Agat

Location.--Lat 13°20'45" N., long 144°40'45" E., on left bank 3.5 miles southeast of Agat and 3.5 miles northeast of Umatac.

Drainage area.--0.74 sq mi (of which 0.47 sq mi is noncontributing).

Records available.--September 1951 to June 1960.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 620 ft (by barometer).

Average discharge.--8 years (1952-60), 3.24 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1952-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs) ^a	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1952 ^b	Oct. 12, 1951	166	3.24	Sept. 28 to Oct. 2, 1951	c0.02	-
1953	Feb. 22, 1953	177	3.33	(d)	0	-
1954	Oct. 15, 1953	770	5.02	(d)	0	-
1955	Nov. 23, 1954	79	2.13	(d)	c.01	-
1956	Sept. 29, 1955	242	3.81	Apr. 27 to May 3, 1956	c.01	-
1957	Aug. 28, 1956	104	2.51	Mar. 26, 1957	.04	0.13
1958	Nov. 16, 1957	202	3.53	(d)	c.01	-
1959	Sept. 21, 1958	150	3.08	(d)	c.01	-
1960	Nov. 6, 1959	72.2	2.04	(d)	0	-

a From rating curve extended above 20 cfs on basis of tests on model of station site.

b Period September 1951 to June 1952.

c Minimum daily.

d Many days.

1951-60: Maximum discharge, 770 cfs Oct. 15, 1953 (gage height, 5.02 ft), from rating curve extended above 20 cfs on basis of tests on model of station site; no flow at times.

Remarks.--Records good except those for periods of fragmentary, faulty, or no gage-height record, which are poor. Several pipelines above station divert water for domestic use.

Discharge, in cubic feet per second, September 1951 to June 1952

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			-	*0.02	0.59	1.52	0.26	0.03	0.04	0.06	0.07	0.07
2			-	.02	.87	1.42	.22	.04	.04	.05	.07	.06
3			-	1.62	3.25	1.16	.24	.05	.04	.05	.12	.06
4			-	.03	3.0	.88	.18	.03	.04	.05	.14	.06
5			-	.03	13.6	.70	.16	.04	*.06	.05	.14	.06
6			-	.93	6.5	35.5	.18	.03	.05	.05	.15	.07
7			-	1.07	4.1	17.5	*.16	.76	.05	.06	.12	.07
8			-	.95	2.95	7.9	.09	*.05	.06	.06	.08	.07
9			-	20.5	2.05	4.7	.07	.04	.06	.06	.10	.07
10			-	19.9	1.52	3.4	.24	.04	.06	.07	.08	.08
11			-	14.6	1.24	2.8	.04	.04	.06	.06	.08	.10
12			-	58	1.62	1.93	.18	.04	.06	.07	.10	.06
13			-	56	.88	1.42	.04	.04	.06	.07	.08	.06
14			-	32	.64	1.08	.04	.05	.07	.08	.10	.06
15			-	14.6	.34	.82	.54	.06	.10	.07	.07	.07
16			-	8.9	.10	.64	.04	.06	.12	.07	.06	.06
17			-	5.6	.75	5.1	.04	.05	.05	.08	.07	.06
18			-	4.1	.10	2.1	.08	.05	.05	.07	.07	.06
19			-	3.1	3.1	1.01	.05	.06	.06	.07	.07	.06
20			-	2.4	1.18	.76	.04	.04	.06	.06	.07	.06
21			-	1.82	.64	.49	.04	.04	.07	.06	.07	.06
22			-	1.42	.33	.27	.04	.04	.06	.07	.07	.07
23			-	1.16	.10	.08	.05	.05	.06	.07	.06	.07
24			-	1.08	.07	.07	.05	.05	.06	.08	.06	.06
25			-	.82	.07	.05	.05	.04	.08	.10	.06	.06
26			-	f1.6	.06	.08	.04	.05	.05	.08	.06	.06
27			-	2.5	.94	.09	.03	.05	.05	.08	.06	.06
28			0.02	1.72	4.2	.22	.05	.05	.06	.07	.07	.06
29			.02	1.24	2.05	.42	.03	.04	.05	.07	.08	.06
30			.02	.94	1.33	.29	.03	-----	.05	.07	.08	.06
31			-----	.64	-----	.27	.03	-----	.05	-----	.07	-----
Total			-	267.86	85.17	94.67	3.31	2.01	1.83	2.01	2.58	1.94
Mean			-	8.64	2.84	3.05	0.107	0.069	0.059	0.067	0.083	0.065
Ac-ft			-	531	169	188	6.6	4.0	3.6	4.0	5.1	3.8
Calendar year		Max	Min	Mean	Mean	Mean	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft
Fiscal year		Max	Min	Mean	Mean	Mean	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft

Peak discharge (base, 80 cfs).--Oct. 12 (4:30 p.m.) 166 cfs (3.24 ft); Dec. 6 (1 p.m.) 91 cfs (2.33 ft).

* Discharge measurement made on this day.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

ISLAND OF GUAM

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8460. Aimagosa Springs near Agat--Continued

Discharge, in cubic feet per second, fiscal year July 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.15	11.5	0.30	3.0	7.0	4.0	4.7	0.10	1.52	0.14	0.12	0
2	.07	6.0	1.40	2.4	6.0	3.5	5.1	.10	1.08	.12	.14	0
3	.08	14.2	1.37	2.1	5.0	3.0	2.3	.12	.78	.12	.14	0
4	.11	11.9	.94	1.8	4.0	2.5	1.62	*.12	.54	.12	.14	0
5	.08	10.4	2.35	1.5	12	2.5	1.69	.12	.33	.12	.12	0
6	.08	5.3	2.05	1.3	8.0	2.0	1.24	.14	.18	.12	*.12	0
7	.08	3.55	1.15	9.0	5.0	4.0	.98	.18	.55	.12	.14	0
8	.08	*2.45	9.5	5.0	11	1.5	*.52	.30	.21	.12	.14	0
9	.07	9.3	<u>19.9</u>	8.0	18	1.5	.37	.30	.21	.12	.14	0
10	.08	17.4	8.6	6.0	6.0	1.5	.21	.30	.30	.12	.12	0
11	.07	17.7	4.7	7.0	15	1.5	.10	.33	.33	.12	.12	0
12	.08	24	4.7	6.5	*10	1.5	.08	.33	.70	.16	.10	0
13	.07	18.2	13.1	6.0	7.0	1.5	.10	.21	.33	.14	.10	0
14	.07	7.1	13.4	7.5	5.1	2.0	.17	.16	.39	.14	.10	0
15	.08	4.9	8.5	7.0	4.7	1.5	.41	.16	.27	.14	.12	0
16	.09	3.7	8.5	6.5	19.8	1.1	.41	.16	.18	.14	.01	0
17	.08	2.3	4.1	6.0	11.0	1.1	.35	.16	.18	.14	.01	0
18	.08	1.42	3.4	15	7.0	*1.1	.33	.16	.16	.14	.01	0
19	.08	.95	2.5	11	10	1.06	.24	.16	.16	.14	0	0
20	.07	1.25	2.0	8.0	20	.64	.18	.18	.16	.44	0	0
21	.06	.78	1.5	9.0	8.0	.45	.14	.18	.16	.79	0	0
22	.06	.73	.8	8.0	5.0	.33	.12	.84	.16	.14	0	0
23	.08	4.9	2.0	7.0	4.0	4.8	.12	.30	.54	.14	0	0
24	.10	1.72	1.5	14	4.5	1.24	.10	14	.16	.14	0	0
25	.07	1.16	1.1	8.5	4.0	2.55	.10	7.8	.16	.14	0	0
26	.07	.59	.8	9.0	3.5	1.24	.10	4.5	.16	.14	0	0
27	.06	.21	.7	8.0	3.2	1.34	.12	3.1	.18	.12	0	.02
28	.10	.10	1.5	7.0	3.0	1.00	.10	2.05	.16	.12	0	.04
29	.10	1.47	5.0	6.0	15	3.55	.10	-	.16	.12	0	.02
30	.99	.82	3.0	11	3.5	1.16	.10	-----	*.15	.12	0	0
31	.42	.54	-----	9.0	-----	9.6	.10	-----	.14	-----	0	-----
Total	3.78	184.54	130.36	217.1	245.3	66.26	20.30	149.42	10.56	4.89	1.91	0.06
Mean	0.122	5.95	4.35	7.00	8.18	2.14	0.655	5.54	0.341	0.163	0.062	0.002
Ac-ft	7.5	366	259	431	467	131	40	296	21	9.7	3.6	0.1

Calendar year 1952. Max 24 Min 0.03 Mean 2.35 Ac-ft 1,710

Fiscal year 1952-53: Max 84 Min 0 Mean 2.83 Ac-ft 2,050

Peak discharge (base, 80 cfs).--Feb. 22 (9 a.m.) 177 cfs (3.33 ft).

* Discharge measurement made on this day.
 Note.--Faulty or no gage-height record Sept. 19 to Nov. 12, Nov. 19 to Dec. 18, June 4-30; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1953 to June 1954

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	a0	0.01	14.2	4.1	4.7	5.6	0.76	0.27	0.01	1.42	1.33	0.01
2	a0	.01	13.6	2.95	4.3	*5.8	.64	.21	.01	1.52	1.33	.01
3	a0	.01	<u>14.6</u>	2.3	3.95	5.8	.49	.16	.01	1.62	1.24	0
4	a0	0	10.4	1.72	3.4	6.1	.45	.16	.01	1.52	1.24	0
5	a0	0	7.3	1.33	3.1	5.1	.33	.14	.01	1.52	*1.16	0
6	a0	.01	5.6	1.08	2.8	4.5	.33	.12	.01	1.52	1.24	0
7	a0	.01	4.3	.88	2.55	3.75	.21	.08	.01	1.52	1.16	0
8	a0	.06	3.6	.76	2.3	2.95	.12	.07	.03	1.52	1.16	0
9	a0	.01	2.95	.54	<u>2.15</u>	2.65	13.5	.06	.01	1.42	1.16	.01
10	a0	7.3	2.4	.37	3.75	2.4	17.8	.05	.01	1.42	1.03	.02
11	a0	66	2.05	.30	3.1	2.05	6.8	.04	.01	1.42	1.16	.02
12	a0	71	1.82	.33	48	2.15	3.6	.04	.01	1.42	1.24	.03
13	a0	25.5	1.42	.33	74	1.82	2.4	.03	.01	1.42	1.24	.02
14	a0	15.0	*1.08	.33	41	2.4	*1.72	.03	.01	1.42	1.16	.02
15	0	15.1	.82	<u>243</u>	19.2	3.25	1.52	.02	.84	<u>1.33</u>	1.16	*.17
16	0	35.5	1.08	212	13.0	4.7	1.08	.02	1.62	1.33	1.03	.01
17	0	31	.90	90	10.7	10.7	.88	.01	1.82	1.33	1.03	.39
18	1.27	41	1.88	38	8.6	6.78	.70	.01	1.82	1.33	1.16	.39
19	.02	24.5	1.62	28.5	7.3	4.9	.54	.01	1.62	1.33	1.16	.01
20	.02	13.4	2.05	24.5	5.8	3.6	.59	.02	1.62	1.33	1.03	.02
21	.02	9.1	2.55	20	5.3	2.8	.54	.02	1.62	1.33	1.08	.01
22	.01	5.8	3.1	16.4	4.5	2.95	.45	.02	1.82	1.42	1.01	.04
23	.01	6.2	2.15	14.2	4.3	2.4	.27	.01	1.62	1.42	.45	.02
24	.01	25	1.62	12.6	7.3	2.15	.16	.01	1.82	1.42	.18	.02
25	.01	20	1.72	11.5	8.1	1.93	.33	.01	1.52	1.42	.45	.02
26	.14	11.5	12.2	*10.7	7.0	1.72	.41	.02	1.52	1.42	.02	.02
27	<u>1.55</u>	7.5	6.5	10.4	6.5	1.62	.33	.07	1.52	1.42	.04	.02
28	1.19	43	7.3	11.1	4.7	1.42	.30	.01	1.52	1.42	.01	.01
29	.10	52	8.5	10.4	3.95	1.24	.27	-	1.52	1.42	.01	.01
30	.02	3.6	5.8	9.4	4.5	1.08	.47	-----	1.52	1.42	.01	.01
31	.01	23	-----	5.3	-----	.88	.27	-----	1.42	-----	.01	-----
Total	4.36	584.52	143.91	785.32	320.05	106.61	58.08	1.72	26.12	42.77	26.85	1.30
Mean	0.141	16.9	4.80	25.3	10.7	3.44	1.87	0.061	0.843	1.43	0.866	0.043
Ac-ft	8.7	1,160	285	1,560	635	211	115	3.4	52	85	53	2.6

Calendar year 1953. Max 243 Min 0 Mean 5.94 Ac-ft 4,230

Fiscal year 1953-54: Max 243 Min 0 Mean 5.76 Ac-ft 4,170

Peak discharge (base, 80 cfs).--Aug. 11 (11:30 p.m.) 144 cfs (3.01 ft); Aug. 28 (2:30 p.m.) 90 cfs (2.32 ft); Oct. 15 (10:30 a.m.) 770 cfs (5.02 ft); Nov. 13 (4:30 p.m.) 169 cfs (3.26 ft).

* Discharge measurement made on this day.
 a No gage-height record; discharge estimated on basis of records for nearby stations.

8490. Fena Dam spillway near Agat

Location.--Lat 13°21'30" N., long 144°42'10" E., on left bank 4.0 miles southeast of Agat and 5.5 miles southwest of Yona.

Drainage area.--5.8 sq mi.

Records available.--September 1951 to July 1952, November 1952 to June 1960.

Gage.--Water-stage recorder and concrete dam control. Datum of gage is 111.35 ft above mean sea level (from U.S. Navy construction plans).

Average discharge.--7 years (1953-60), 13.7 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1952-60 are contained in the following table:

Fiscal year	Date	Maximum		Minimum	
		Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)
1952 a/	Feb. 8, 1952	b261	0.62	(c)	0
1953 d/	Nov. 16, 1952	b626	1.11	(c)	0
1954	Oct. 15, 1953	(e)	-	(c)	0
1955	Nov. 23, 1954	b634	1.12	(c)	0
1956	Sept. 29, 1955	b1,100	1.62	(c)	0
1957	Dec. 14, 1956	b964	1.48	(c)	0
1958	Nov. 15, 1957	b1,420	1.92	(c)	0
1959	Sept. 21, 1958	b535	1.00	(c)	0
1960	Nov. 6, 1959	b398	.82	(c)	0

a Period September to June.

b From rating curve extended above 53 cfs on basis of broad-crested weir formula.

c Many periods.

d Period July, and November to June.

e Not determined.

1951-60: Maximum discharge not determined, occurred Oct. 15, 1953; no flow many times.

Remarks.--Records poor. Fena Valley Reservoir impounds low flow for domestic use. Records include only flow over spillway.

Discharge, in cubic feet per second, September 1951 to June 1952

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			-				0	108				
2			-				0	112				
3			-				0	141				
4			-				0	141				
5			-				0	136				
6			-				0	136				
7			-				0	236				
8			-				0	254				
9			-				0	248				
10			-				0	248				
11			-				0	236				
12			-				0	213				
13			-				0	189				
14			-				0	157				
15			-				0	127				
16			-				0	103				
17			-				.54	75				
18			-				9.9	55				
19			-				34	52				
20			-				48	41				
21			-				55	34				
22			-				63	25				
23			-				79	22				
24			-				89	25				
25			-				98	9.9				
26			-				98	2.8				
27			-				103	1.50				
28			0				108	0				
29			0				122	0				
30			0				112	-----				
31			-----				112	-----				-----
Total			-	0	0	0	1,131.44	3,128.20	0	0	0	0
Mean			-	0	0	0	36.5	1.08	0	0	0	0
Ac-ft			-	0	0	0	2,240	6,200	0	0	0	0
Calendar year	Max		Min			Mean		Ac-ft				
Fiscal year	: Max		Min			Mean		Ac-ft				

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8490. Fena Dam spillway near Agat--Continued

Discharge, in cubic feet per second, fiscal year July 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1					-	52	76	0				
2					-	59	19.5	0				
3					-	31	7.9	0				
4					-	26	6.0	0				
5					-	14.4	7.9	0				
6					-	9.9	9.9	0				
7					-	125	4.3	0				
8					-	37.5	1.50	0				
9					-	14.4	1.50	0				
10					-	12.1	.54	0				
11					-	16.9	0	0				
12					46	16.9	0	0				
13					28	9.9	0	0				
14					14.4	14.4	0	0				
15					14.4	9.9	0	0				
16					279	9.9	0	0				
17					94	7.9	0	0				
18					28	9.9	0	0				
19					28	14.4	0	0				
20					31	7.9	0	0				
21					34	6.0	0	0				
22					22	4.3	0	400				
23					22	4.3	0	90				
24					14.4	16.9	0	40				
25					14.4	16.9	0	28				
26					12.1	14.4	0	12.1				
27					7.9	7.9	0	6.0				
28					52	6.0	0	.54				
29					63	30.5	0	-				
30					63	7.9	0	-				
31					122	0	0	-				
Total	0	-	-	-	-	778.1	135.04	576.64	0	0	0	0
Mean	0	-	-	-	-	25.1	4.36	20.6	0	0	0	0
Ac-Ft	0	-	-	-	-	1,540	268	1,140	0	0	0	0

Calendar year : Max Min Mean Ac-ft
 Fiscal year : Max Min Mean Ac-ft

Note.--No gage-height record Jan. 20 to Feb. 24; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1953 to June 1954

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1		0	122	28	37.5	60	19.5	9.9				
2		0	113	24	37.5	50	19.5	6.0				
3		0	122	21	34	45	19.5	4.3				
4		0	75	20	34	40	22	6.0				
5		0	55	20	31	37.5	16.9	6.0				
6		0	41	19	28	31	19.5	6.0				
7		0	37.5	20	26	31	19.5	6.0				
8		0	31	18	28	31	14.4	4.3				
9		0	28	65	28	28	205	2.8				
10		0	25	23	48	25	74	1.50				
11		0	25	21	75	22	41	1.50				
12		0	25	31	350	25	31	.54				
13		0	22	21	480	25	25	.54				
14		98	19.5	21	220	49	25	0				
15		98	19.5	1,200	90	37.5	28	0				
16		186	28	1,000	65	58	25	0				
17		223	22	500	55	65	22	0				
18		458	31	250	46	37.5	22	0				
19		222	48	210	40	31	*18.4	0				
20		110	55	320	37	28	14.4	0				
21		63	67	200	37	25	19.5	0				
22		44	67	95	35	31	19.5	0				
23		37.5	36	80	34	28	14.4	0				
24		275	28	59	80	25	12.1	0				
25		197	28	55	55	28	12.1	0				
26		78	28	52	40	25	9.9	0				
27		41	28	44	35	25	12.1	.20				
28		529	60	67	33	22	12.1	0				
29		811	40	55	30	22	9.9	-				
30		489	28	44	85	22	9.9	-				
31		228	-----	41	-----	19.5	7.9	-----				
Total	0	4,189.5	1,356.5	4,624	2,256.0	1,029.0	821.0	55.58	0	0	0	0
Mean	0	135	45.2	149	75.2	33.2	26.5	1.98	0	0	0	0
Ac-Ft	0	8,310	2,690	9,170	4,470	2,040	1,630	110	0	0	0	0

Calendar year 1953: Max 1,200 Min 0 Mean 38.8 Ac-ft 28,090
 Fiscal year 1953-54: Max 1,200 Min 0 Mean 39.3 Ac-ft 28,420

* Discharge measurement made on this day.

8490. Fena Dam spillway near Agat--Continued

Discharge, in cubic feet per second, fiscal year July 1956 to June 1957

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1		0	24.5	42	7.9	14.4	12.1	6.0				
2		0	53	12.1	4.3	54	14.4	4.3				
3		0	28	6.0	6.0	44	14.4	4.3				
4		0	25	21	2.8	25	12.1	6.0				
5		0	36.5	22	<u>.54</u>	22	9.9	7.9				
6		0	16.9	7.9	1.50	22	7.9	4.3				
7		0	12.1	3.8	1.50	12.1	7.9	2.8				
8		0	19.5	2.8	1.50	9.9	4.3	<u>14.4</u>				
9		0	22	2.8	.54	12.1	4.3	4.3				
10		0	9.9	7.9	27.5	12.1	<u>114</u>	6.0				
11		0	12.1	30.5	28	4.3	37.5	2.8				
12		0	22	<u>159</u>	70	<u>2.8</u>	22	2.8				
13		0	9.9	171	38	2.8	14.4	.54				
14		0	<u>4.3</u>	39	59	<u>321</u>	12.1	0				
15		0	<u>152</u>	19.5	22	<u>314</u>	12.1	0				
16		0	31	38	52	66	7.9	0				
17		0	28	34	56	34	51	0				
18		0	12.1	37.5	<u>194</u>	22	19.5	0				
19		0	14.4	37.5	73	19.5	9.9	0				
20		0	50	22	44	16.9	16.9	0				
21		0	28	12.1	31	19.5	14.4	0				
22		0	16.9	7.3	25	14.4	6.0	0				
23		0	66	19.5	34	12.1	2.8	0				
24		0	49	14.6	25	12.1	2.8	1.50				
25		0	22	68	16.9	12.1	<u>1.50</u>	2.8				
26		0	9.9	14.4	14.4	34	1.50	0				
27		0	23	14.4	12.1	44	2.8	0				
28		0	36	34.5	9.9	19.5	2.8	0				
29		43	16.9	25	7.9	16.9	21.5	-				
30		<u>44</u>	115	*15.8	12.1	14.4	7.9	-				
31		16.9	-----	12.1	-----	14.4	14.4	-----				
Total	0	103.9	948.9	810.0	1,011.38	1,244.3	483.00	70.74	0	C	0	0
Mean	0	3.35	31.6	26.1	33.7	40.1	15.6	2.53	0	C	0	0
Ac-ft	0	206	1,880	1,610	2,010	2,470	958	140	0	C	0	0
Calendar year 1956. Max			321	Min	0	Mean	11.3	Ac-ft	8,180			
Fiscal year 1956-57. Max			321	Min	0	Mean	12.8	Ac-ft	9,270			

* Discharge measurement made on this day.

Discharge, in cubic feet per second, fiscal year July 1957 to June 1958

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1				0	31	9.9	2.8					
2				0	14.4	14.4	.54					
3				0	9.9	16.9	0					
4				0	7.9	14.4	0					
5				0	6.0	12.1	0					
6				51	9.9	9.9	0					
7				<u>205</u>	<u>4.3</u>	9.9	0					
8				71	216	12.1	4.3					
9				37.5	116	12.1	6.0					
10				28	75	12.1	4.3					
11				16.9	52	9.9	1.50					
12				12.1	205	7.9	2.8					
13				127	96	9.9	7.9					
14				52	52	12.1	181					
15				44	408	16.9	<u>49</u>					
16				28	<u>548</u>	25	14.4					
17				12.1	98	14.4	6.0					
18				6.0	55	6.0	2.8					
19				2.8	37.5	7.9	6.0					
20				2.8	31	7.9	7.9					
21				1.50	22	7.9	4.3					
22				31	22	9.9	2.8					
23				*37.5	22	9.9	0					
24				22	19.5	<u>4.3</u>	0					
25				25	22	4.3	0					
26				22	19.5	4.3	0					
27				12.1	22	4.3	0					
28				83	19.5	4.3	0					
29				25	16.9	<u>32.5</u>	0					
30				16.9	16.9	14.4	0					
31				25	-----	9.9	0					
Total	0	0	0	997.20	2,275.2	347.7	304.34	0	0	0	0	0
Mean	0	0	0	32.2	75.8	11.2	9.82	0	0	0	0	0
Ac-ft	0	0	0	1,980	4,510	690	604	0	0	0	0	0
Calendar year 1957. Max			548	Min	0	Mean	11.4	Ac-ft	8,280			
Fiscal year 1957-58: Max			548	Min	0	Mean	10.8	Ac-ft	7,780			

* Discharge measurement made on this day.

8490. Fena Dam spillway near Agat--Continued

Discharge, in cubic feet per second, fiscal year July 1954 to June 1955

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1		0	0.54	44	84	16.9	0					
2		0	25	25	34	14.4	0					
3		0	37.5	47	25	12.1	2.8					
4		0	88	31	19.5	9.9	6.0					
5		0	165	35.5	16.9	7.9	6.0					
6		0	103	*28	14.4	7.9	4.3					
7		0	92	19.5	12.1	14.4	.54					
8		0	96	41	12.1	12.1	12.1					
9		0	77	31	6.0	12.1	9.9					
10		0	66	22	6.0	12.1	9.9					
11		0	34	32.5	59	9.9	9.9					
12		0	22	41	30.5	7.9	9.9					
13		0	19.5	25	12.1	6.0	2.8					
14		0	133	14.4	14.4	4.3	9.9					
15		0	240	12.1	12.1	4.3	16.9					
16		0	74	7.9	9.9	6.0	7.9					
17		0	41	7.9	7.9	6.0	12.1					
18		0	31	7.9	120	9.9	7.9					
19		0	25	6.0	41	7.9	2.8					
20		0	90	6.0	31	4.3	.54					
21		0	125	12.1	19.5	2.8	0					
22		0	130	14.4	14.4	2.8	0					
23		.20	59	16.9	17.5	2.8	0					
24		0	44	12.1	4.3	.54	0					
25		.54	28	9.9	31	0	0					
26		0	31	19.5	25	0	19.7					
27		0	25	14.4	77	0	2.8					
28		0	87	12.1	34	0	.75					
29		0	37.5	7.9	22	0	0					
30		0	46	16.8	19.5	0	0					
31		0	-----	218	-----	0	0					
Total	0	0.74	2,072.04	838.6	1,035.3	195.24	155.43	0	0	0	0	0
Mean	0	0.024	69.1	27.1	34.5	6.30	5.01	0	0	0	0	0
Ac-ft	0	1.5	4,110	1,660	2,050	387	308	0	0	0	0	0
Calendar year 1954.	Max	240	Min	0	Mean	13.7	Ac-ft	9,950				
Fiscal year 1954-55.	Max	240	Min	0	Mean	11.8	Ac-ft	8,520				

* Discharge measurement made on this day.

Discharge, in cubic feet per second, fiscal year July 1955 to June 1956

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			18.6	80	16.9	14.4						
2			14.4	41	25	4.3						
3			6.0	82	14.4	1.50						
4			.54	25	12.1	.54						
5			.54	16.9	14.4	0						
6			0	9.9	9.9	0						
7			.75	4.3	7.9	0						
8			0	4.3	6.0	.88						
9			4.8	4.3	6.0	.32						
10			60	2.8	22	0						
11			73	2.8	9.9	0						
12			22	1.50	2.8	4.0						
13			6.0	19.0	2.8	10.8						
14			0	12.1	1.50	12.1						
15			0	4.3	.75	2.8						
16			7.4	1.50	0	173						
17			16.9	1.50	0	31.5						
18			54	1.50	2.8	14.4						
19			12.1	13.7	1.50	6.0						
20			1.50	101	0	2.8						
21			0	9.9	0	1.50						
22			70	295	0	.54						
23			31	48	4.3	0						
24			7.9	49	1.50	0						
25			47	80	.54	0						
26			20.5	92	0	0						
27			71	94	.54	0						
28			396	99	93	0						
29			385	41	22.5	0						
30			70	25	38	0						
31			-----	19.5	-----	0						
Total	0	0	1,396.93	1,260.84	317.03	281.38	0	0	0	0	0	0
Mean	0	0	46.6	40.7	10.6	9.08	0	0	0	0	0	0
Ac-ft	0	0	2,770	2,500	629	558	0	0	0	0	0	0
Calendar year 1955.	Max	396	Min	0	Mean	9.35	Ac-ft	6,760				
Fiscal year 1955-56.	Max	396	Min	0	Mean	8.90	Ac-ft	6,460				

8500. Talofofo River near Talofofo

Location.--Lat 13°21'05" N., long 144°43'50" E., on left bank 1.5 miles southwest of Talofofo and 5.3 miles north of Inarajan.

Drainage area.--16.2 sq mi.

Records available.--November 1951 to June 1960.

Gage.--Water-stage recorder and steel weir. Altitude of gage is 40 ft (by barometer).

Average discharge.--8 years (1952-60), 46.6 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1952-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1952/3	Dec. 6, 1951	b2,300	c8.60	Feb. 25,26, 1952	0.82	0.59
1953	Feb. 22, 1953	b2,550	8.83	June 18, 1953	1.06	.65
1954	Oct. 15, 1953	b8,560	12.69	June 21, 1954	1.17	.54
1955	Sept.15, 1954	b2,300	8.62	July 1, 1954	1.51	.63
1956	Sept.29, 1955	b2,550	8.78	May 24,25, 1956	1.14	.53
1957	Dec. 14, 1956	b2,550	8.77	June 18, 1957	1.32	.58
1958	Nov. 16, 1957	b3,700	9.56	May 27,28, 1958	1.39	.60
1959	Sept. 4, 1958	d2,680	8.90	June 20, 1959	.53	.26
1960	Nov. 6, 1959	d2,090	8.43	July 18, 1959	.52	.25

a Period November 1951 to June 1952.

b From rating curve extended above 80 cfs by test on model of station site.

c From floodmark.

d From rating curve extended above 745 cfs by test on model of station site.

1951-60: Maximum discharge, 8,560 cfs Oct. 15, 1953 (gage height, 12.69 ft), from rating curve extended above 80 cfs by test on model of station site; minimum, 0.52 cfs July 18, 1959.

Remarks.--Records good except those for Dec. 6, 1951, and Oct. 17-20, 1954, which are fair, and for periods of faulty or no gage-height record in 1952-53, which are poor. Water for domestic use is diverted from Fena Valley Reservoir.

Result of discharge measurement made Feb. 1, 1951, 32.2 cfs.

Discharge, in cubic feet per second, November 1951 to June 1952

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1					-	22	6.1	1.67	1.23	30	29	3.4
2					-	28	6.1	2.75	5.3	30	29	2.55
3					-	18.6	5.9	3.6	3.4	30	30	2.15
4					-	15.2	4.9	2.9	3.1	30	30	3.6
5					-	15.2	3.95	1.96	2.9	30	32	3.25
6					-	f280	4.3	1.77	2.75	30	37.5	2.75
7					-	54	3.95	5.2	2.55	30	47	2.75
8					-	33	4.5	3.75	2.55	30.5	9.0	2.75
9					-	28	*6.3	2.4	2.4	30.5	4.1	2.35
10					-	28	7.7	1.96	2.25	30.5	2.9	2.2
11					-	25	6.6	4.1	2.25	30.5	2.25	2.15
12					-	22	5.9	*3.75	2.35	30.5	2.0	2.2
13					-	18.6	5.7	3.6	2.25	30.5	1.90	*1.77
14					-	18.6	6.1	4.7	2.2	30.5	1.72	1.42
15					19.1	15.6	5.7	5.1	2.2	30.5	1.67	1.57
16					15.2	14.8	6.1	4.5	2.1	30.5	1.62	1.72
17					19.1	52	2.9	2.4	2.0	30	1.47	2.4
18					21	20	5.5	2.1	1.96	30	1.42	2.1
19					74	16.1	5.5	1.23	1.96	30	8.2	1.83
20					39	14.3	4.7	1.06	9.0	30	5.1	1.62
21					23.5	12.1	5.75	1.02	30.5	30	2.75	1.57
22					19.6	10.6	3.25	1.02	30.5	30	2.25	1.47
23					19.6	9.5	6.9	1.02	30	30	1.90	1.67
24					17.0	8.3	4.1	.98	30	30	1.67	2.35
25					16.6	6.6	2.55	.89	30.5	30	1.77	2.2
26					16.1	7.2	2.2	.85	33	30	1.67	2.0
27					22.5	4.9	2.0	.93	30.5	30	1.57	1.96
28					36.5	5.9	1.72	.98	30.5	30	1.62	1.77
29					23	5.3	2.4	.98	31.5	30	2.9	1.77
30					19.1	4.1	4.5	-----	30.5	30	5.9	1.62
31					-----	4.7	1.77	-----	30	-----	3.95	-----
Total					-	816.2	143.54	69.17	394.20	904.5	305.80	64.91
Mean					-	26.3	4.63	2.39	12.7	30.2	9.86	2.16
Ac-ft					-	1,620	285	157	782	1,750	607	129
Calendar year						Min	Mean		Ac-ft			
Fiscal year						Min	Mean		Ac-ft			

* Discharge measurement made on this day.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

8490. Fena Dam spillway near Agat--Continued

Discharge, in cubic feet per second, fiscal year July 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0	4.3	0	0	0	19.5	0.54					
2	0	22	0	0	0	7.9	.54					
3	0	9.9	0	0	0	0	0					
4	0	4.3	144	0	.28	0	0					
5	0	7.9	16.6	0	0	4.3	0					
6	0	9.9	3.55	0	12.1	4.3	0					
7	0	4.3	7.2	0	9.9	7.9	.38					
8	0	.54	0	0	24	50	4.3					
9	0	0	0	0	16.9	31	4.3					
10	0	0	0	0	7.9	22	.54					
11	0	0	1.12	0	6.0	14.4	7.9					
12	0	0	0	2.1	4.3	14.4	*9.9					
13	0	0	0	38.5	32.5	14.4	1.50					
14	0	0	0	18.6	40	12.1	.20					
15	0	0	0	7.9	19.5	9.9	0					
16	0	0	0	85	22	7.9	0					
17	0	1.50	0	142	12.1	7.9	0					
18	240	17.7	0	108	46	7.9	0					
19	42	39.5	0	89	34	4.3	0					
20	48	76	0	109	25	2.8	0					
21	32	18.8	164	80	14.4	2.8	0					
22	16	0	74	12.1	12.1	2.8	0					
23	14	0	140	45	14.4	2.8	0					
24	12.1	.50	30	58	12.1	.27	0					
25	7.9	35	.54	9.9	12.1	0	0					
26	2.8	0	0	4.3	12.1	.36	0					
27	2.8	5.0	0	.56	12.1	.54	0					
28	22	0	0	0	26.5	0	0					
29	9.9	0	0	0	82	.54	0					
30	12.1	0	0	0	34	.54	0					
31	7.9	0	0	0	0	0	0					
Total	469.5	257.14	581.01	816.96	547.08	253.55	30.10	0	0	0	0	0
Mean	15.1	8.29	19.4	26.4	18.2	8.18	0.971	0	0	0	0	0
Ac-Ft	931	510	1,150	1,820	1,090	503	60	0	0	0	0	0
Calendar year 1958:	Max 240			Min 0		Mean 8.85		Ac-ft 6,410				
Fiscal year 1958-59:	Max 240			Min 0		Mean 8.10		Ac-ft 5,860				

* Discharge measurement made on this day.
 Note.--No gage-height record July 18-23; discharge estimated on basis of daily reservoir and rain-fall records at Fena Reservoir.

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			0	48.4	0	1.39	12.1					
2			0	37.5	0	0	12.1					
3			0	22.2	0	0	7.86					
4			0	19.5	0	0	5.99					
5			0	16.9	2.86	0	4.28					
6			0	2.78	218	0	1.50					
7			0	2.78	83.6	0	1.50					
8			0	9.90	51.5	0	0					
9			0	5.99	31.1	0	7.86					
10			0	4.28	*22.2	0	7.86					
11			0	18.1	22.2	0	1.50					
12			0	22.2	22.2	0	1.50					
13			0	7.86	16.9	0	7.86					
14			0	5.99	14.4	0	5.99					
15			0	1.50	19.5	0	2.78					
16			0	16.1	16.9	0	9.90					
17			0	37.5	12.1	0	5.99					
18			0	92.6	12.1	0	1.50					
19			0	59.7	9.90	0	0					
20			0	19.5	7.86	0	0					
21			0	0	9.90	0	0					
22			0	0	14.4	0	0					
23			0	0	14.4	0	0					
24			0	0	7.86	0	0					
25			40.6	0	54.8	0	0					
26			14.4	0	44.3	0	0					
27			1.50	0	25.1	0	0					
28			0	0	18.9	0	0					
29			.54	0	75.7	0	0					
30			54.8	0	34.2	0	0					
31			0	0	0	1.50	0					
Total	0	0	111.84	451.28	860.88	2.89	98.07	0	0	0	0	0
Mean	0	0	3.73	14.6	28.7	0.093	3.18	0	0	0	0	0
Ac-Ft	0	0	222	895	1,710	5.7	195	0	0	0	0	0
Calendar year 1959:	Max 218			Min 0		Mean 3.99		Ac-ft 2,890				
Fiscal year 1959-60:	Max 218			Min 0		Mean 4.17		Ac-ft 3,030				

8500. Talofofo River near Talofofo--Continued

Discharge, in cubic feet per second, fiscal year July 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	17.1	60	28	80	60	170	104	10.6	29	9.4	4.5	3.1
2	8.5	60	32	200	55	110	49	10.3	26.5	9.2	4.1	2.6
3	9.9	140	28	80	50	76	37	10.6	26	8.8	3.95	2.4
4	120	180	24	120	50	73	29	11.0	23.5	8.3	3.75	2.4
5	24	85	22	85	160	52	35.5	9.9	26.5	8.0	3.75	2.0
6	11	80	20	75	55	47	*35	9.9	26	8.0	3.75	2.0
7	11	40	19	120	80	227	26.5	22	23	8.0	3.6	2.0
8	7.0	58	360	70	220	74	23.5	18.1	20.5	7.6	3.6	1.7
9	5.6	100	460	90	300	52	22	13.4	22.5	7.4	3.4	1.5
10	4.7	75	120	140	180	58	22	11.4	21	6.8	3.25	1.3
11	4.5	140	50	80	140	51	20	10.6	19.6	6.8	3.1	*1.19
12	3.8	223	110	65	95	46	20	*15.9	18.6	8.0	3.1	1.14
13	3.5	76	440	60	75	36	20	13.0	18	8.0	3.0	1.14
14	3.3	41	110	90	65	46	20	10.6	17	6.9	3.0	1.10
15	6.0	71	70	75	60	37	19	9.9	16	6.4	3.0	1.14
16	10	73	130	65	170	33	18	9.9	16	6.1	3.4	1.14
17	5.0	37.5	50	120	90	30	17	10.6	15	5.9	4.1	1.10
18	10	30.5	44	85	60	32	16	9.5	16	5.9	3.6	1.10
19	8.6	26	38	70	55	33.5	16	9.2	14	5.7	*3.6	1.27
20	5.2	26	34	60	140	28	16	8.8	14	5.7	3.2	1.27
21	5.4	22	30	130	65	25.5	16	8.5	13	5.5	3.2	1.14
22	9.0	20	28	140	75	24	15	1,510	13	5.7	3.2	1.14
23	6.6	60	170	101	160	73	16	456	12	5.3	2.9	1.19
24	5.4	26	75	167	70	41	15	142	12	5.3	2.7	1.27
25	6.0	22	48	71	65	44	14	80	12	5.3	2.7	1.19
26	4.5	20	40	65	55	38.5	13	54	11	5.5	2.6	1.42
27	4.3	20	56	55	50	41	13	46	11	4.9	2.5	1.27
28	5.5	24	50	48	75	27	13	34.5	10	4.7	2.4	2.35
29	20	30	220	46	150	77	12	11	10	4.5	2.4	3.4
30	10	26	120	240	70	33.5	16	-----	9.6	4.5	2.6	3.6
31	12	30	-----	100	-----	215	11.4	-----	9.6	-----	3.3	-----
Total	364.4	1,902.0	3,006	3,193	2,995	1,951.0	719.9	2,546.2	536.9	198.4	101.25	50.56
Ac-ft	11.8	61.4	100	103	99.8	62.9	23.2	90.9	17.3	6.61	3.27	1.69
Ac-ft	723	3,770	5,960	6,350	5,940	3,870	1,450	5,050	1,060	394	201	100

Calendar year 1952. Max 460 Min 0.85 Mean 41.8 Ac-ft 30,320
 Fiscal year 1952-53: Max 1,510 Min 1.10 Mean 48.1 Ac-ft 34,830

Peak discharge (base, 2,300 cfs)--Feb. 22 (1 p.m.) 2,550 cfs (8.83 ft).

* Discharge measurement made on this day.
 Note.--Faulty or no gage-height record July 4 to Aug. 11, Aug. 21 to Oct. 22, Oct. 26 to Dec. 2, Jan. 10-30, Mar. 13 to Apr. 11, May 11-15, and May 20 to June 10; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1953 to June 1954

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	2.0	5.7	142	58	73	122	29.5	17.8	9.3	3.0	2.4	1.43
2	1.57	5.1	151	47	67	88	32	16.0	7.9	4.8	2.2	1.39
3	1.42	5.3	181	40	62	*79	31	13.8	7.4	4.8	2.05	1.32
4	1.42	4.5	117	37	61	80	32	13.8	6.9	4.6	1.99	1.32
5	1.42	3.95	89	35	54	69	27	12.6	6.5	4.0	1.95	1.32
6	1.47	6.6	70	33	52	60	28	13.4	6.3	3.85	1.91	1.43
7	1.62	8.6	60	36	49	57	27.5	15.4	6.0	3.65	1.82	1.66
8	1.47	12.1	82	48	48	62	26.5	12.6	5.8	4.0	1.78	1.70
9	1.32	8.0	46	82	49	47	714	11.4	5.6	3.85	1.74	1.82
10	1.27	80	*43	42	91	51	131	10.2	5.4	3.1	1.78	1.70
11	1.23	756	42	34.5	109	42	58	9.8	5.6	2.9	1.91	1.58
12	1.52	1,200	46	48	1,040	42	*43	9.5	5.4	2.85	*2.15	1.55
13	1.90	228	37.5	39.5	1,770	41	37	9.3	5.2	2.75	2.2	1.51
14	15.6	146	37	536	110	33	91.0	9.0	5.0	2.86	1.86	1.47
15	11.1	168	23	4,360	181	80	37	9.0	5.0	2.65	1.78	1.43
16	6.1	267	41	2,800	136	146	30	8.7	4.8	2.45	1.74	*1.39
17	7.7	210	33.5	1,670	116	136	27.5	8.4	5.0	2.3	1.70	1.28
18	22.5	696	52	468	110	71	26.5	8.4	5.0	2.3	1.70	1.28
19	8.8	236	87	510	90	57	25	8.2	5.0	2.2	1.74	1.28
20	5.3	137	110	991	77	56	24	9.3	4.8	2.4	1.74	1.25
21	7.7	96	192	403	75	47	26.5	10.6	4.2	2.4	1.65	1.21
22	5.1	73	127	195	67	74	26.5	9.8	4.6	2.4	1.55	2.15
23	3.75	63	71	162	70	51	22.5	9.0	4.8	2.2	1.62	5.3
24	9.4	565	56	136	241	46	21.5	7.9	4.2	2.2	2.3	2.45
25	34.5	209	55	116	103	47	21	7.1	3.85	2.15	2.05	2.3
26	47	110	133	103	77	42	19.6	7.4	3.65	2.1	1.75	1.99
27	40	76	77	96	69	41	19.6	15.8	3.3	2.15	1.65	1.86
28	24	910	194	122	62	37	20.5	13.0	3.1	2.2	1.55	1.62
29	12.5	957	134	110	58	33	18.2	-----	3.5	2.05	1.55	1.55
30	8.5	545	77	96	147	34.5	17.3	-----	3.1	1.99	1.55	1.51
31	6.6	224	-----	82	-----	50	16.9	-----	3.1	-----	1.51	-----
Total	295.58	8,007.85	2,582.0	12,831.0	5,740	1,968.5	1,649.6	305.2	159.30	87.14	56.97	51.05
Mean	9.53	258	86.1	414	191	63.5	53.2	10.9	5.14	2.90	1.84	1.70
Ac-ft	586	15,880	5,120	25,450	11,390	3,900	3,270	605	316	173	113	101

Calendar year 1953. Max 4,360 Min 1.10 Mean 97.5 Ac-ft 70,560
 Fiscal year 1953-54: Max 4,360 Min 1.21 Mean 92.4 Ac-ft 66,900

Peak discharge (base, 2,300 cfs)--Aug. 12 (3 a.m.) 2,420 cfs (8.67 ft); Aug. 28 (4:30 a.m.) 2,420 cfs (8.73 ft); Oct. 15 (11 a.m.) 8,560 cfs (12.69 ft); Oct. 20 (5:30 p.m.) 2,300 cfs (8.67 ft); Nov. 13 (5 p.m.) 3,250 cfs (9.32 ft).

* Discharge measurement made on this day.

8500. Talofofo River near Talofofo--Continued

Discharge, in cubic feet per second, fiscal year July 1954 to June 1955

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	1.66	<u>1.62</u>	275	115	187	<u>41</u>	11.0	8.4	5.4	2.9	2.15	6.6
2	3.4	2.05	162	75	90	<u>*36.5</u>	10.2	*7.9	5.2	2.85	1.99	6.7
3	2.75	*1.96	115	114	63	31	12.1	8.7	4.8	2.75	1.82	4.8
4	1.95	1.91	194	77	55	27.5	17.3	9.8	5.0	2.65	1.78	3.25
5	1.86	1.99	509	96	44	25.5	20.0	8.2	5.0	2.55	1.78	8.3
6	1.70	2.3	193	76	36	25.5	*15.1	7.6	4.6	2.55	1.74	4.6
7	1.66	7.0	184	64	35	32	11.4	7.1	4.4	3.1	1.74	23.5
8	1.62	3.85	245	150	35	33	21.5	6.9	4.2	3.1	2.15	7.0
9	<u>1.55</u>	29.5	173	179	32	27.5	21	6.9	4.0	3.1	6.9	69
10	1.66	8.4	182	76	32	27	24	6.9	3.85	2.9	4.2	15.8
11	1.82	5.6	71	107	274	24.5	22	6.5	4.8	2.85	2.85	8.3
12	1.62	14.2	<u>49</u>	122	97	22	19.2	6.5	4.2	2.55	2.45	6.3
13	1.62	11.7	50	78	48	19.6	15.6	6.3	4.0	2.45	2.45	5.6
14	1.70	18.5	441	58	41	17.8	23.5	6.3	3.85	2.65	2.2	4.8
15	1.74	9.9	<u>888</u>	48	33.5	17.8	<u>37</u>	6.3	3.85	*2.45	<u>8.6</u>	4.2
16	1.66	6.7	199	41	30	20.5	20	6.3	*3.2	2.4	6.6	3.65
17	1.80	13.4	103	a38	<u>26.5</u>	23	21	8.5	4.5	2.15	4.0	3.85
18	8.5	11.4	77	a32	<u>31.0</u>	22.5	17.6	7.9	2.9	2.05	3.0	3.5
19	<u>15.6</u>	38.5	65	a32	85	20	13.4	6.3	2.85	2.2	2.65	3.1
20	<u>8.3</u>	81	333	a30	100	17.3	11.8	6.0	2.65	<u>7.0</u>	2.45	3.5
21	3.65	30.5	307	58	49	16.0	10.6	7.6	2.75	3.4	2.1	3.5
22	2.85	16.0	348	44	37.5	15.6	9.3	7.6	2.85	2.85	2.05	3.5
23	2.45	11.0	155	39.5	<u>52</u>	16.5	8.7	6.5	2.55	2.55	1.95	2.75
24	2.55	29	120	31	<u>121</u>	13.4	8.4	5.8	2.85	2.3	1.86	2.4
25	2.65	<u>186</u>	84	<u>28.5</u>	84	12.6	9.0	5.8	6.6	2.55	*1.74	<u>2.2</u>
26	2.15	33.5	123	84	60	12.2	36	<u>5.4</u>	3.3	2.45	<u>1.66</u>	2.55
27	1.91	24.5	85	80	183	11.4	16.6	6.0	3.3	2.1	<u>3.45</u>	2.85
28	1.78	18.2	342	47	74	<u>10.6</u>	11.4	6.0	3.1	1.99	2.6	2.4
29	1.92	22.5	35	53	19.9	10.6	10.6	6.0	2.9	2.1	2.05	3.45
30	1.70	*38.5	138	46	59	12.6	9.0	-----	2.9	<u>1.91</u>	1.91	4.3
31	1.66	26.5	-----	<u>714</u>	-----	11.0	8.4	-----	2.75	-----	1.78	-----
Total	89.34	713.68	6,417	2,815.0	2,895.5	656.3	502.7	196.0	119.10	81.21	86.65	225.05
Mean	2.88	23.0	214	90.8	96.5	21.2	16.2	7.00	3.84	2.71	2.80	7.50
Ac-ft	177	1,420	12,730	5,580	5,740	1,300	997	389	236	161	172	446

Calendar year 1954 - Max 888 Min 1.21 Mean 43.6 Ac-ft 31,520
 Fiscal year 1954-55: Max 888 Min 1.55 Mean 40.5 Ac-ft 29,350

Peak discharge (base, 2,300 cfs).--Sept. 15 (2 a.m.) 2,300 cfs (8.62 ft).

* Discharge measurement made on this day.
 a No gauge-height record; discharge estimated on basis of recorded range in stage and records for Ylig River.

Discharge, in cubic feet per second, fiscal year July 1955 to June 1956

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	4.0	29.5	309	262	44	35	<u>10.6</u>	5.0	2.9	2.75	<u>2.3</u>	2.05
2	4.3	21.5	58	128	62	21	<u>10.6</u>	4.8	3.0	<u>2.55</u>	<u>2.2</u>	1.95
3	2.9	18.2	107	235	41	17.3	10.2	5.6	3.1	*2.45	2.15	1.78
4	2.45	18.7	35	95	32	16.0	8.7	5.8	3.0	2.3	2.2	1.86
5	<u>2.2</u>	16.9	28	61	35	-----	8.4	5.0	2.9	2.2	2.2	1.99
6	89	16.0	25.5	45	27.5	12.2	9.0	6.4	2.85	2.1	2.1	1.78
7	103	16.9	23.5	37	25	11.0	8.7	5.4	2.75	<u>2.05</u>	2.1	1.62
8	<u>249</u>	13.0	<u>21.5</u>	33.5	26	17.7	8.4	7.9	2.65	2.05	2.1	2.35
9	95	11.4	25	30	24.5	14.2	*7.4	<u>12.0</u>	2.55	2.05	2.15	2.45
10	27	10.6	198	28	68	11.4	6.9	9.3	2.75	2.3	2.1	1.86
11	39.5	11.0	230	30	27	11.8	7.4	7.4	3.0	2.1	2.05	2.05
12	113	11.8	108	26.5	22	19.1	6.9	5.8	2.85	2.05	1.99	2.85
13	55	9.5	48	55	20	31	6.7	5.2	2.65	2.05	1.99	2.05
14	*28	8.7	31.5	36	18.2	36	6.5	5.0	2.55	2.05	1.91	1.91
15	21.5	8.4	27	24	17.3	20.5	6.0	4.8	2.45	2.05	1.91	1.66
16	49	*7.9	33.5	21	17.3	<u>495</u>	6.3	*5.6	2.65	2.05	1.91	<u>1.51</u>
17	24	7.1	68	31	17.3	72	6.3	4.6	2.55	2.15	1.99	<u>17.2</u>
18	18.2	19.7	127	*22.5	23	32	6.5	4.2	2.45	2.3	1.91	9.1
19	15.1	11.4	46	38.5	16.9	24.5	5.8	3.85	2.4	2.1	1.91	4.6
20	14.2	13.0	28	202	15.1	20	5.6	3.65	<u>2.3</u>	2.1	2.05	2.75
21	12.6	27	24.5	32	14.2	19.9	5.4	3.5	3.05	2.15	2.05	2.1
22	12.2	57	319	901	15.6	16.0	5.2	3.3	2.85	2.05	1.86	1.91
23	12.6	16.9	106	119	19.2	14.2	5.6	3.3	2.55	2.05	*1.95	1.82
24	11.0	47	49	109	19.7	12.6	5.6	3.1	2.4	2.1	1.21	1.91
25	25.5	34.5	147	217	<u>12.2</u>	11.4	5.2	3.65	2.3	2.1	<u>1.14</u>	3.3
26	33	17.3	80	322	13.0	11.0	5.6	3.5	2.4	2.05	1.30	2.9
27	20.5	13.8	<u>241</u>	270	15.4	10.2	5.6	3.1	2.65	2.2	1.86	2.55
28	16.0	13.4	330	305	<u>216</u>	9.5	5.2	<u>3.0</u>	4.2	2.2	1.58	2.1
29	92	11.0	<u>1,230</u>	125	44	9.3	5.0	3.0	3.85	2.3	1.51	1.99
30	118	<u>75</u>	136	75	19.7	9.0	4.8	-----	2.9	2.55	1.84	1.95
31	43	41	-----	52	-----	<u>8.7</u>	4.8	-----	2.75	-----	2.1	-----
Total	1,352.75	615.1	5,298.0	3,868.0	1,022.4	1,062.9	210.9	146.75	86.20	65.55	59.62	84.69
Mean	43.6	19.8	177	125	34.1	34.3	6.80	5.06	2.78	2.18	1.92	2.82
Ac-ft	2,680	1,220	10,510	7,670	2,030	2,110	418	291	171	130	118	168

Calendar year 1955. Max 1,330 Min 1.66 Mean 39.5 Ac-ft 28,620
 Fiscal year 1955-56: Max 1,330 Min 1.14 Mean 37.9 Ac-ft 27,520

Peak discharge (base, 2,300 cfs).--Sept. 29 (4 a.m.) 2,550 cfs (8.78 ft); Oct. 22 (11 a.m.) 2,300 cfs (8.57 ft).

* Discharge measurement made on this day.

8500. Talofoto River near Talofoto--Continued

Discharge, in cubic feet per second, fiscal year July 1956 to June 1957

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	3.65	17.2	76	101	26	30.5	22	49	8.1	6.6	*4.0	2.4
2	2.9	12.2	121	45	23	115	25	19.0	7.6	8.3	3.8	2.4
3	2.65	9.5	88	35	30.5	76	23	16.0	7.6	<u>11.9</u>	3.8	2.25
4	3.05	8.4	90	61	22	48	22	16.5	8.1	7.3	3.65	2.2
5	3.3	7.6	112	59	17.5	40.5	20.5	21	9.8	6.4	3.5	*2.25
6	2.55	7.9	*61	34	17.5	43	18.0	20	8.9	5.9	3.65	2.05
7	2.2	6.7	58	27.5	18.0	34	17.0	16.0	7.8	5.5	4.6	1.90
8	2.2	27.5	74	25.5	17.5	26	16.0	16.2	6.9	5.3	6.9	2.0
9	22	82	146	25.5	16.0	26	14.2	31	7.6	5.7	5.3	2.1
10	8.7	17.3	51	29.5	49	24.5	282	17.0	7.3	5.5	4.2	1.80
11	5.0	15.6	68	57	71	21	82	15.5	6.9	5.3	3.8	1.71
12	4.8	12.2	90	444	135	18.5	41	a14	7.8	4.8	3.8	1.67
13	7.4	10.6	50	70	631	18.5	29	a12	7.1	4.4	3.5	1.67
14	9.1	8.7	38	97	106	905	24.5	10.6	6.6	4.8	3.4	1.57
15	6.8	28	415	60	49	968	22	10.0	6.4	5.5	3.25	1.53
16	5.4	15.8	97	75	108	121	20.5	9.5	6.4	4.6	3.1	1.44
17	*3.85	157	108	159	94	89	99	9.2	6.1	4.4	3.1	1.39
18	3.3	81	52	120	563	*47	52	8.9	6.1	4.2	3.5	1.38
19	2.9	23	62	111	130	42	26	*11.9	6.1	4.0	3.4	1.57
20	2.7	17.5	204	56	89	37	24	10.9	6.1	3.8	3.25	2.85
21	2.55	15.5	86	40	82	38	56	9.5	6.1	4.4	2.8	3.65
22	2.45	20.5	60	38	56	31	24.5	9.2	5.7	4.6	6.5	2.25
23	2.2	32	200	85	66	28.5	19.0	9.2	5.5	4.4	4.6	1.96
24	12.1	24.5	225	45	49	25.5	17.0	12.0	5.3	4.2	*4.0	1.80
25	20	18.0	78	113	38	23.5	16.5	11.6	5.7	3.8	3.5	1.80
26	62	16.5	50	40	35	65	14.6	9.2	5.7	3.65	3.1	1.85
27	33	71	129	47	32.5	71	13.1	8.9	21.5	3.8	2.8	2.05
28	26	151	126	74	29.5	33	13.5	8.3	10.0	4.2	2.7	2.0
29	29	118	62	45	28.5	27	19.0	-	7.3	4.6	2.55	1.90
30	30	104	93	210	31	25	40	-	6.4	4.0	2.55	1.67
31	31	56	-----	-----	*38.5	26	22	-----	6.1	-----	2.4	-----
Total	428.75	1,161.7	3,287	2,266.5	2,650.5	3,101.0	1,114.9	412.1	230.4	155.85	115.00	59.07
Mean	13.8	37.5	110	73.1	88.4	100	36.0	14.7	7.43	5.20	3.71	1.97
Ac-ft	850	2,300	6,520	4,500	5,260	6,150	2,210	817	457	309	228	117
Calendar year 1956. Max	965	Min	1.14	Mean	37.0	Ac-ft	26,880					
Fiscal year 1956-57. Max	965	Min	1.39	Mean	41.0	Ac-ft	29,720					
Peak discharge (base, 2,300 cfs).--Nov. 13 (1:30 a.m.) 2,300 cfs (8.64 ft); Dec. 14 (11 a.m.) 2,550 cfs (8.77 ft).												

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations.

Discharge, in cubic feet per second, fiscal year July 1957 to June 1958

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	1.57	2.1	43	13.9	87	28.5	11.6	9.5	9.2	4.2	2.35	3.4
2	1.57	2.05	69	12.0	42	32.5	12.4	8.6	8.9	3.1	2.1	2.3
3	*1.48	2.0	53	10.9	35.5	31	10.3	10.0	8.3	2.25	2.0	1.96
4	1.53	2.05	28	10.0	*29	28.5	9.5	8.9	8.3	2.2	2.25	1.76
5	1.57	2.25	19.7	30.5	25.5	25	9.5	8.3	9.2	2.25	2.25	1.67
6	1.67	2.35	35	774	29	22	8.9	8.1	8.9	2.3	2.05	1.53
7	1.67	2.55	49	728	24	25	9.8	7.8	8.6	7.8	1.90	1.67
8	1.67	5.7	29.5	185	522	22	18.8	8.1	8.9	2.55	1.80	1.80
9	1.53	3.65	46	91	360	21	17.5	7.8	8.9	2.7	1.85	2.0
10	1.53	2.95	21	74	233	21	12.7	7.8	8.3	3.1	1.80	45
11	1.87	2.8	17.5	51	132	19.5	12.3	7.6	8.9	3.8	1.76	17.4
12	2.45	2.95	16.5	43	696	17.0	12.7	7.6	9.2	3.25	1.71	6.9
13	3.25	3.65	14.2	180	234	18.0	14.6	7.8	*9.2	5.1	*1.67	27.5
14	2.3	6.6	12.7	147	179	18.0	676	7.8	8.9	4.2	1.62	301
15	1.90	6.1	10.9	95	1,410	21.5	105	7.8	8.6	3.4	1.53	38
16	1.71	5.3	19.5	75	2,040	27	41	7.8	8.3	3.1	1.48	18.0
17	1.67	5.3	*48	42	236	20	27.5	7.8	8.3	3.5	1.44	11.6
18	1.67	7.3	20	34	129	14.6	21.5	8.9	8.1	3.65	1.44	8.9
19	1.67	9.8	18.0	27.5	91	13.9	23.5	9.5	8.3	3.4	1.48	7.3
20	1.67	9.5	17.5	24.6	74	13.5	26	7.6	7.3	3.1	1.44	6.6
21	1.71	7.6	12.7	24.5	61	12.7	21	7.3	7.1	3.1	1.48	6.1
22	1.71	6.9	42	70	*54	12.7	*17.2	7.8	7.3	3.1	1.71	7.9
23	1.71	8.3	84	95	47	12.3	13.9	9.2	7.3	2.8	2.25	6.9
24	1.67	19.1	35.5	52	42	10.9	12.0	13.6	7.6	2.55	2.1	5.9
25	1.67	28.5	22	54	42	9.5	10.9	10.3	7.6	2.4	1.71	10.4
26	1.67	19.3	20.5	59	38.5	9.2	10.6	8.9	7.6	2.3	1.53	8.8
27	1.71	8.9	17.0	38.5	106	8.6	11.6	9.2	7.6	2.35	1.44	6.9
28	3.2	89	15.5	274	43	8.6	10.6	8.9	7.6	2.3	1.57	5.9
29	3.5	98	13.5	66	38.5	41	10.0	-	7.3	2.4	5.9	5.5
30	2.55	28	13.9	51	34	19.5	9.8	-----	6.9	5.5	3.5	4.6
31	2.25	15.0	-----	58	-----	13.9	9.8	-----	5.5	-----	2.55	-----
Total	59.25	415.55	864.6	3,490.3	7,114.0	598.4	1,218.5	240.3	251.8	97.75	61.66	575.19
Mean	1.91	13.4	28.8	113	237	19.3	39.3	8.58	8.12	3.26	1.99	19.2
Ac-ft	118	824	1,710	6,920	14,110	1,190	2,420	477	499	194	122	1,140
Calendar year 1957. Max	2,040	Min	1.39	Mean	40.1	Ac-ft	29,010					
Fiscal year 1957-58. Max	2,040	Min	1.44	Mean	41.1	Ac-ft	29,720					
Peak discharge (base, 2,300 cfs).--Nov. 16 (about 2 a.m.) 3,700 cfs (9.56 ft).												

* Discharge measurement made on this day.

8500. Talofofo River near Talofofo--Continued

Discharge, in cubic feet per second, fiscal year July 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	4.7	28	130	71	22.5	41	10.5	4.1	2.85	2.1	1.58	0.84
2	*4.7	55	90	65	33	59	10.5	3.75	2.85	*1.86	1.62	.84
3	4.5	34	74	43	22	36.5	9.5	4.4	2.75	1.71	1.44	.78
4	4.7	24	<u>1,210</u>	25	22	22	9.2	4.5	2.7	1.62	1.40	.81
5	4.7	40	144	25	25.5	51	9.2	4.4	2.6	1.58	1.40	.84
6	5.1	40	129	23.5	34	24	7.9	4.4	2.55	1.58	1.31	.90
7	5.1	25	107	25.5	41	25.5	9.5	4.5	2.55	1.49	1.36	.87
8	7.3	18.8	92	26.5	72	<u>12</u>	15.2	4.2	2.85	1.49	1.31	.81
9	125	15.7	110	21	45	<u>85</u>	13.8	*4.4	2.85	1.44	1.23	.78
10	28.5	14.5	80	19.9	34	45	9.9	4.1	2.85	1.54	1.16	.94
11	16.1	12.9	100	19.3	26.5	38.5	23	3.9	2.75	2.0	1.12	1.42
12	11.8	11.8	72	21	24	32.5	<u>24.5</u>	3.75	2.75	2.45	1.08	.74
13	9.9	*11.1	155	87	80	50.5	11.8	3.75	2.7	1.86	1.04	.74
14	11.1	<u>10.8</u>	82	58	99	26.5	8.6	3.75	2.65	1.62	.97	.74
15	68	11.5	80	33.5	42	22	7.9	3.9	2.4	1.58	.97	.86
16	160	13.3	140	216	54	19.3	7.9	3.75	2.25	1.49	.97	1.04
17	96	25.5	74	<u>529</u>	31	18.8	7.6	3.5	2.2	1.49	.97	.81
18	<u>310</u>	83	66	377	113	18.3	6.6	3.35	2.2	2.1	.95	.81
19	182	125	75	337	68	15.3	7.1	3.35	2.25	<u>3.35</u>	.90	1.59
20	94	259	79	332	48	14.5	6.6	3.35	2.3	2.2	.84	.87
21	76	113	1,000	215	33	13.3	6.1	3.35	2.25	1.76	.84	.68
22	47	72	329	96	27	13.7	5.9	3.2	2.35	1.67	.84	.89
23	35.5	114	681	191	27	12.5	5.9	3.35	2.25	1.54	<u>.81</u>	1.31
24	37	128	163	187	24	11.8	4.7	3.35	2.2	1.44	<u>.81</u>	1.63
25	28	<u>313</u>	102	90	23.5	<u>10.2</u>	5.3	3.2	2.1	<u>1.40</u>	.84	1.62
26	20.5	90	85	102	21.5	11.1	5.1	3.2	2.0	1.40	1.80	1.12
27	19.3	120	80	*72	<u>21.5</u>	11.8	4.9	3.05	1.97	1.40	*1.30	1.08
28	74	73	99	62	47	11.5	4.9	2.85	1.92	1.40	.97	1.12
29	40	93	94	55	<u>236</u>	*11.1	5.9	-	1.92	1.67	.87	.97
30	78	79	90	51	76	11.8	4.9	-----	2.0	1.76	.87	.97
31	38.5	65	-----	36.5	-----	10.5	<u>4.4</u>	-----	2.2	-----	.87	-----
Total	1,627.0	2,118.9	5,812	3,512.7	1,473.0	875.5	274.8	104.65	75.01	51.99	34.42	28.12
Mean	52.5	68.4	194	113	49.1	28.2	8.86	3.74	2.42	1.73	1.11	0.94
Ac-ft	3,230	4,200	11,550	6,970	2,920	1,740	545	208	149	103	68.3	55.8

Calendar year 1958: Max 1,210 Min 1.44 Mean 48.9 Ac-ft 35,440
 Fiscal year 1958-59: Max 1,210 Min 0.57 Mean 43.8 Ac-ft 31,720

Peak discharge (base, 2,300 cfs).--Sept. 4 (7:30 a.m.) 2,680 cfs (8.90 ft); Sept. 21 (2:30 a.m.) 2,480 cfs (8.74 ft).

* Discharge measurement made on this day.

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	1.04	12.8	33.7	133	63.5	58.0	27.3	7.34	3.62	1.81	1.23	3.19
2	.86	9.86	90.9	112	29.8	52.0	24.1	5.91	3.62	1.76	1.40	2.65
3	1.14	8.46	44.9	71.0	28.3	*51.0	17.3	5.72	3.77	1.71	1.73	2.28
4	.87	17.6	31.4	99.7	24.1	47.0	14.9	5.91	3.77	1.62	2.01	2.07
5	.87	6.30	23.4	74.8	73.9	44.2	13.7	5.52	3.77	1.62	1.54	1.92
6	.90	4.20	110	44.3	114	43.3	12.5	5.32	3.62	1.67	1.71	1.67
7	.84	3.19	89.2	39.7	217	42.4	11.1	5.32	3.77	1.62	1.71	1.62
8	.87	2.65	69.7	49.1	121	40.6	9.86	5.13	2.90	1.58	1.71	1.62
9	.81	3.29	36.2	38.8	81.0	28.0	16.3	4.94	2.77	1.62	1.54	1.58
10	1.01	5.13	*26.9	34.6	61.0	15.3	21.6	4.54	2.77	1.58	1.36	1.54
11	1.01	4.54	207	68.1	56.0	13.3	13.7	4.54	2.65	1.54	1.27	1.49
12	.97	4.06	340	59.0	53.0	11.8	12.5	4.20	2.71	1.54	1.27	1.49
13	1.30	4.50	84.0	38.8	46.0	11.5	22.8	4.20	2.71	1.58	1.27	2.15
14	1.31	5.72	50.0	36.2	37.9	12.9	17.9	4.54	2.71	1.62	1.31	2.07
15	*1.14	4.94	55.6	<u>29.0</u>	40.6	11.8	14.9	4.20	3.04	2.05	1.23	1.86
16	.97	7.49	48.0	85.2	35.4	11.5	19.8	4.35	2.90	2.79	1.23	1.86
17	.90	11.3	43.0	168	39.6	10.8	15.8	4.54	a3.80	2.02	*1.27	1.92
18	.63	11.0	46.8	366	27.6	10.8	*12.1	4.35	a4.50	1.76	1.27	2.02
19	.87	9.29	36.2	144	24.1	10.2	9.86	4.35	a3.30	1.62	1.27	2.28
20	.84	6.10	28.3	91.5	22.7	44.7	8.90	4.35	a3.00	1.49	1.27	2.28
21	.87	5.31	21.9	76.0	22.7	17.7	8.38	4.20	a3.50	1.44	1.23	2.90
22	.81	8.68	36.4	*66.0	29.8	14.1	8.12	4.20	a3.00	1.40	1.27	2.21
23	.82	10.5	33.3	84.0	29.8	13.3	7.60	4.20	a2.30	1.44	3.96	4.92
24	.62	26.4	140	82.0	23.4	13.3	7.34	4.20	a2.80	1.40	1.67	35.9
25	65	52.0	409	61.0	56.0	11.5	7.08	4.20	a2.60	1.27	1.54	16.4
26	.65	69.5	124	58.0	69.7	11.5	6.56	3.77	a2.40	1.23	1.31	4.01
27	.71	253	86.0	58.0	71.0	11.8	6.30	3.77	a2.30	1.23	1.16	3.62
28	1.07	50.0	60.3	58.0	85.0	50.2	6.30	3.92	a2.30	1.31	1.20	3.04
29	1.07	292	43.3	56.0	21.0	6.62	5.92	*a2.30	1.44	3.96	4.92	4.92
30	44.8	227	194	45.2	96.0	14.1	30.0	-----	1.97	1.31	9.64	4.90
31	10.5	46.4	-----	33.9	-----	13.3	8.38	-----	1.81	-----	8.36	-----
Total	81.36	1,253.21	5,022.1	2,421.9	1,855.9	762.9	396.10	135.65	92.38	48.03	61.56	117.96
Mean	2.62	40.4	101	76.1	61.9	24.6	12.8	4.68	2.98	1.60	1.39	3.93
Ac-ft	161	2,490	5,990	4,800	3,680	1,510	786	269	183	95	122	234

Calendar year 1959: Max 409 Min 0.57 Mean 27.3 Ac-ft 20,760
 Fiscal year 1959-60: Max 409 Min 0.62 Mean 28.0 Ac-ft 20,320

Peak discharge (base, 2,300 cfs).--No peak above base.

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby streams and weather records.

8550. Ugum River near Talofofu

Location.--Lat 13°20'00" N., long 144°44'55" E., on left bank 0.3 mile upstream from confluence with Talofofu River, 1.3 miles south of Talofofu Village, and 4.2 miles north of Inarajan.

Drainage area.--7.20 sq mi.

Records available.--June 1952 to June 1960.

Gage.--Water-stage recorder and concrete control. Datum of gage is 3.23 ft above mean sea level.

Average discharge.--8 years, 26.6 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1953-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1953	Feb. 22, 1953	1,370	10.04	July 26,27, 1952	3.4	0.44
1954	Oct. 15, 1953	4,000	11.72	June 21, 1954	3.85	.46
1955	Sept. 4, 1954	1,450	10.41	June 25-29, 1955	3.85	.46
1956	Sept.10, 1955	2,180	11.42	July 5, 1955	3.85	.46
1957	Dec. 14, 1956	1,900	11.30	June 16,17, 1957	4.1	.47
1958	Oct. 6, 1957	3,310	11.63	Aug. 6, 1957	3.6	.45
1959	Sept.21, 1958	3,240	11.62	(a)	3.4	.44
1960	Sept.25, 1959	780	6.47	June 15, 1960	3.19	.43

a Many days in June.

1952-58: Maximum discharge, 4,000 cfs Oct. 15, 1953 (gage height, 11.72 ft), from rating curve extended above 200 cfs on basis of slope-area measurements at 11.3, 11.4, 11.9 and 11.8 ft; minimum, 3.19 cfs June 15, 1960.

Remarks.--Records good except those for periods of doubtful or no gage-height record, which are poor.

Result of discharge measurement made Feb. 12, 1952, 9.12 cfs; Mar. 12, 1952, 8.33 cfs.

Discharge, in cubic feet per second, 1952

June 18.....	13.7	June 25.....	4.5
19.....	4.5	26.....	4.8
20.....	3.85	27.....	4.8
21.....	4.1	28.....	4.3
22.....	4.8	29.....	4.1
23.....	5.3	30.....	4.1
24.....	4.5		

† Result of discharge measurement.

Discharge, in cubic feet per second, fiscal year July 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	18.3	112	12.7	*39.5	29	37	31	12.7	17.5	10.4	7.6	5.6
2	7.3	26.5	33.5	49	26.5	59	24	12.2	17.0	10.4	7.6	5.6
3	6.2	54	18.8	30.5	24	37	22.5	12.2	15.9	10.4	7.3	5.6
4	13.7	40	15.8	28	22.5	32	21	12.7	23	10.0	7.3	5.6
5	10.0	25	29.5	23.5	119	27	24	12.2	16.2	10.0	7.3	5.3
6	6.6	14.3	15.4	22.5	33	26.5	22	12.7	15.4	10.0	7.0	5.3
7	7.0	10.0	13.3	67	50	50	20	15.4	15.4	10.0	7.0	5.3
8	6.2	12.2	11.9	29	95	28	19.4	13.8	17.5	10.0	7.0	5.1
9	5.8	44	137	45	86	25.5	18.8	12.2	16.2	10.0	6.6	4.5
10	4.8	44	36.5	34	91	38	17.5	12.2	16.4	10.0	6.6	*4.5
11	4.5	29.5	24	35	49	26.5	17.0	12.2	15.4	9.6	6.6	4.8
12	4.3	24	32.5	23.5	37	29	17.0	13.8	15.4	9.6	6.6	4.8
13	4.1	20	111	23.5	a31	24	17.0	12.2	14.3	9.6	6.2	4.8
14	4.1	13.7	109	36	a26	25.5	16.4	11.7	13.3	9.6	6.2	4.8
15	4.5	27	36	31	a28	23.5	16.4	11.2	13.3	9.2	6.2	5.1
16	4.3	25	29	29	a70	22	15.9	11.2	12.8	9.2	6.2	5.3
17	4.1	13.8	22	28	a40	22	15.9	*10.8	13.3	9.2	6.2	4.8
18	3.85	12.2	20	143	a30	22.5	15.4	10.0	13.3	9.2	6.2	5.1
19	4.1	10.8	16.2	59	a45	22	14.8	9.6	12.7	8.8	6.2	5.3
20	4.5	13.3	17.0	36	a55	21	14.8	10.4	12.2	8.8	6.2	5.3
21	5.1	11.2	15.9	43	a42	20	14.8	10.0	11.7	8.8	*5.9	5.1
22	5.3	11.7	14.8	31	a38	20	14.8	528	11.7	8.8	5.9	5.1
23	4.3	16.4	48	28	a50	41	17.5	94	11.7	8.4	5.6	5.9
24	4.1	10.0	33.5	82	a33	23.5	15.9	37	11.2	8.0	5.6	5.9
25	3.85	9.6	21	32	a55	30	14.8	25.5	11.2	8.0	5.6	4.8
26	3.85	10.4	18.8	35.5	a35	23.5	*13.7	22	11.2	8.0	5.6	4.8
27	6.6	11.7	18.8	28	29.5	22	13.3	20	10.8	8.0	5.9	5.1
28	5.1	10.8	25	24	29	20	13.8	18.2	10.8	8.0	5.6	6.6
29	10.8	14.8	124	24	41	25.5	13.3	-	10.8	7.6	5.6	7.6
30	7.4	21.5	105	62	48	21	14.8	-----	10.8	7.6	5.6	6.2
31	17.5	14.8	-----	46	-----	162	13.3	-----	10.8	-----	5.6	-----
Total	198.95	732.2	1,277.0	1,249.5	1,391.5	1,006.5	540.8	996.1	433.2	275.2	196.6	159.6
Mean	6.42	23.6	42.6	40.3	46.4	32.5	17.4	35.6	14.0	9.17	6.34	5.32
Ac-ft	395	1,450	2,550	2,480	2,760	2,000	1,070	1,980	859	546	390	317
Calendar year 1952: Max	-	-	-	Min	-	Mean	-	Ac-ft	-	-	-	-
Fiscal year 1952-53: Max	528	-	-	Min	3.6	Mean	23.2	Ac-ft	16,780	-	-	-

Peak discharge (base, 1,400 cfs).--No peak above base.

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for Talofofu and Inarajan Rivers.

ISLAND OF GUAM

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8550. Ugun River near Talofoto--Continued

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	4.06	37.4	*14.8	59.3	36.7	28.8	24.4	11.2	6.95	5.32	4.29	6.95
2	4.06	18.4	87.0	69.1	28.8	27.4	20.1	11.7	6.95	5.32	4.54	6.25
3	*4.06	13.0	53.2	45.3	24.8	26.4	17.0	11.2	6.95	5.06	*5.92	5.32
4	3.84	15.6	29.6	51.5	22.7	23.4	16.4	11.2	6.95	5.06	4.29	5.06
5	3.62	9.20	25.6	40.0	65.8	22.0	15.9	10.8	6.60	5.32	5.32	4.29
6	4.29	7.30	35.3	34.0	157	20.8	15.4	10.4	6.60	5.06	5.32	4.06
7	3.84	5.92	55.9	31.2	75.8	19.4	14.3	9.60	6.60	5.06	5.06	4.06
8	3.62	5.32	45.4	36.0	51.9	19.4	13.8	9.60	6.60	5.06	4.80	4.06
9	3.84	5.92	26.5	29.6	39.0	19.4	17.7	9.60	7.70	4.80	4.29	4.54
10	4.29	14.8	20.1	33.0	34.0	20.8	16.4	9.20	7.30	4.54	4.29	5.06
11	3.84	8.80	72.0	32.2	31.2	18.8	14.3	9.20	7.65	4.54	4.29	4.29
12	3.84	7.65	113	33.0	29.6	18.2	15.4	8.80	7.30	5.06	5.32	3.84
13	3.84	9.60	50.6	30.5	28.0	18.2	16.4	8.80	6.95	5.60	5.60	3.62
14	3.84	8.80	34.0	29.6	26.4	20.4	14.8	9.20	6.60	5.60	5.06	3.62
15	4.29	7.30	27.0	*26.4	27.2	*18.2	15.4	8.80	6.25	8.12	4.06	3.40
16	5.06	8.00	31.2	36.5	25.6	16.4	16.4	9.20	6.25	10.1	4.54	3.62
17	3.84	22.3	35.0	61.8	24.0	16.4	14.3	9.20	6.25	6.25	4.29	3.62
18	3.84	22.8	30.4	76.8	23.4	16.4	13.8	9.20	*10.3	5.32	4.06	3.62
19	3.84	12.8	26.4	50.8	22.7	15.9	13.3	9.20	7.65	4.80	4.06	3.62
20	3.84	8.80	22.7	38.0	22.7	26.4	*12.7	8.80	6.60	4.54	4.06	3.84
21	5.06	8.00	19.4	31.2	22.7	18.8	11.7	8.40	8.00	4.54	4.06	5.06
22	3.84	9.78	46.6	28.8	37.5	17.0	11.7	8.00	6.95	4.54	4.29	3.84
23	3.84	12.8	77.9	27.2	28.1	18.8	11.2	7.65	6.25	4.54	4.06	3.62
24	3.62	11.0	64.2	26.4	22.7	19.4	11.2	8.40	6.60	4.54	4.06	7.42
25	3.84	13.7	181	25.6	42.2	16.4	11.2	8.00	5.92	4.29	3.84	8.11
26	3.62	37.8	50.8	23.4	37.1	17.0	10.8	7.30	5.92	4.29	3.84	5.06
27	3.40	94.0	44.2	25.6	33.2	18.2	10.8	7.30	5.60	4.29	3.84	4.54
28	3.40	34.0	34.0	27.2	46.2	37.1	13.3	7.30	5.60	4.80	3.62	4.80
29	6.94	26.2	30.4	25.6	45.2	23.9	14.0	7.30	5.60	4.29	14.4	7.35
30	108	43.5	94.0	23.4	37.6	19.4	15.2	-----	5.32	4.29	16.6	5.92
31	21.8	21.1	-----	22.7	-----	20.1	11.7	-----	5.32	-----	11.9	-----
Total	246.95	561.37	1,476.1	1,132.7	1,145.8	639.2	451.0	264.55	208.08	154.94	168.57	142.46
Mean	7.97	18.1	49.2	36.5	38.2	20.6	14.5	9.12	6.71	5.16	5.44	4.75
Ac-ft	490	1,110	2,930	2,250	2,270	1,270	895	525	413	307	337	283
Calendar year 1959: Max	181				Min 3.40	Mean 18.1		Ac-ft 13,130				
Fiscal year 1959-60: Max	181				Min 3.40	Mean 18.0		Ac-ft 13,080				

Peak discharge (base, 1,400 cfs).--No peak above base.

* Discharge measurement made on this day.

8580. Ylig River near Yona

Location.--Lat 13°23'20" N., long 144°45'00" E., on right bank 2 miles from outlet into ocean, 2.1 miles southwest of Yona, and 5.8 miles south of Agana.

Drainage area.--6.58 sq mi.

Records available.--June 1952 to June 1960.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 20 ft (by barometer).

Average discharge.--8 years, 21.9 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1953-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1953	Sept. 8, 1952	2,520	14.47	June 14, 1953	0.51	0.23
1954	Oct. 15, 1953	4,040	19.36	June 21, 22, 1954	.36	.20
1955	Sept. 1, 1954	2,400	14.01	July 31, Aug. 1, 1954	.56	.24
1956	July 6, 1955	2,020	11.87	May 12-16, 1956	.56	.24
1957	Oct. 17, 1956	2,150	12.45	June 28, 29, 1957	.36	.20
1958	Nov. 15, 1957	2,810	14.70	July 27, 28, Aug. 3-5, 1957	.28	.18
1959	Sept. 4, 1958	3,420	15.87	June 18, 19, 20, 21, 22, 1959	.16	.13
1960	Sept. 11, 1959	1,770	10.62	May 16-19, 1960	.28	.18

a From rating curve extended above 260 cfs on basis of slope-area measurement at gage height 14.01 ft.

1952-60: Maximum discharge, 4,040 cfs Oct. 15, 1953 (gage height, 19.36 ft), from rating curve extended above 260 cfs on basis of slope-area measurement at gage height 14.01 ft; minimum, 0.16 cfs June 18, 19, 20, 22, 1959.

Remarks.--Records good except those for periods of doubtful or no gage-height record, which are fair for 1953-55 and poor for 1956 and 1959-60.

Discharge, in cubic feet per second, 1952

June 17.....	†0.78	June 24.....	0.82
18.....	.51	25.....	.82
19.....	.41	26.....	.75
20.....	.36	27.....	.75
21.....	.36	28.....	.61
22.....	.36	29.....	.56
23.....	.46	30.....	.61

† Result of discharge measurement.

Discharge, in cubic feet per second, fiscal year July 1952 to June 1953

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	4.8	30	18.8	38	30.5	90	21	6.0	15.4	4.7	2.3	1.51
2	2.05	28.5	23.5	116	26.5	38	17.8	5.8	14.3	4.5	2.3	1.23
3	1.71	57	19.0	35.5	24	27	15.4	5.8	13.2	4.1	2.05	1.14
4	68	71	16.6	59	23.5	24	13.5	6.0	16.2	4.1	1.93	*1.14
5	8.3	39	14.3	39	107	22	25	5.3	12.9	3.9	1.93	.96
6	4.1	37	12.9	33.5	33.5	21	15.4	5.8	11.6	3.9	1.81	.96
7	4.3	19.0	11.6	57	51	74	13.5	18.2	10.9	3.9	1.81	.96
8	2.85	17.4	32.3	30.5	154	24	12.5	8.6	10.9	3.75	*1.71	.89
9	2.3	42	78	47	187	22.5	11.9	6.7	10.6	3.6	1.71	.82
10	1.93	33	99	65	98	21	11.3	6.0	10.0	3.45	1.61	.75
11	1.81	51	29	33.5	72	20.5	10.9	5.8	9.7	3.45	1.51	.68
12	1.51	76	75	28.5	48	19.0	10.6	8.6	8.8	5.1	1.51	.61
13	1.32	27	35.3	26.5	36.5	17.8	10.3	6.2	8.3	4.7	1.41	.61
14	1.23	20.5	78	40	31	19.0	10.3	5.6	7.7	3.3	1.41	.56
15	2.55	41	44	32.5	28.5	17.4	9.7	5.1	7.7	3.3	1.41	.56
16	4.6	27	74	27.5	87	15.4	9.1	*5.8	7.2	3.15	1.71	.56
17	2.05	23	30.5	58	43	14.7	8.8	5.3	6.9	3.0	1.93	.61
18	4.6	17.8	26.5	43	30	14.7	8.3	4.7	8.6	3.0	1.71	.56
19	3.75	15.4	22.5	31	26.5	13.5	8.3	4.5	7.0	2.85	1.93	.75
20	2.15	15.4	19.9	25.5	71	13.2	8.0	4.7	6.7	2.7	1.61	.75
21	2.3	12.9	17.8	74	31	12.5	8.0	4.7	6.2	2.7	1.61	.68
22	4.3	11.9	16.2	235	33.5	*12.2	7.4	43.1	6.2	2.55	1.61	.68
23	2.7	39.5	30.2	50	32	52	7.7	122	6.2	2.55	1.51	.82
24	2.3	13.5	33.5	86	32	14.3	7.4	40.7	5.8	2.55	1.61	.95
25	2.55	11.9	*24.5	36.5	*29	43	6.9	26.5	5.8	2.55	1.41	.89
26	1.93	11.6	21	33.5	26.5	16.2	*6.7	21.5	5.3	2.55	1.32	.89
27	1.81	10.9	19.4	27	23	13.5	6.5	19.9	5.3	2.4	1.23	.61
28	2.3	16.6	35	23.5	34	13.5	6.5	17.0	5.1	2.15	1.14	1.81
29	10.1	20.5	161	21.5	77	25	6.2	7.0	4.9	2.05	1.14	3.0
30	4.7	15.4	73	165	31	13.2	7.4	13.2	4.7	2.05	1.23	1.81
31	5.6	19.6	-----	48	-----	90	6.2	-----	4.7	-----	2.61	-----
Total	166.50	872.3	1,872.5	1,665.5	1,587.5	834.1	329.7	813.1	264.8	98.55	50.52	28.76
Mean	5.37	28.1	62.4	53.7	52.9	26.9	10.6	29.0	8.54	3.28	1.63	0.959
Ac-ft	330	1,750	3,710	3,300	3,150	1,650	654	1,610	525	195	100	57

Calendar year 1952: Max - Min - Mean - Ac-ft -
 Fiscal year 1952-53: Max 431 Min 0.56 Mean 23.5 Ac-ft 17,010

Peak discharge (base, 2,000 cfs).--Sept. 8 (9 p.m.) 2,520 cfs (14.47 ft); Sept. 13 (1 p.m.) 2,020 cfs (12.52 ft).

* Discharge measurement made on this day.

8580. Ylig River near Yona--Continued

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.49	11.4	*88.1	38.8	20.3	14.7	9.72	4.70	1.81	<u>1.05</u>	0.60	2.55
2	.44	8.27	79.5	38.0	15.1	17.0	10.0	<u>4.90</u>	1.81	.98	.49	2.05
3	*.36	25.2	35.9	29.8	13.9	15.8	8.27	4.70	1.71	.98	.77	1.51
4	.44	19.1	30.9	47.6	13.5	13.2	7.98	4.70	1.71	.91	.77	1.14
5	.36	9.38	24.8	33.3	180	12.2	7.98	4.30	1.71	.91	.65	.98
6	.36	4.90	80.0	26.4	<u>232</u>	11.3	7.17	4.10	1.61	.91	.71	.77
7	.40	3.45	54.9	23.7	<u>86.8</u>	10.6	6.94	3.75	1.61	.84	.84	.71
8	.54	2.70	46.0	23.7	44.8	10.3	6.71	3.45	1.61	.84	.71	.65
9	a.50	<u>2.41</u>	27.0	20.7	32.6	10.0	10.1	3.45	1.95	.84	.54	.65
10	a.80	<u>3.30</u>	<u>22.0</u>	19.9	27.7	11.6	9.14	3.30	2.70	.77	.44	.65
11	a.80	3.00	222	38.7	25.9	9.72	7.17	3.15	3.00	.77	.40	.60
12	a.50	2.55	<u>178</u>	22.0	23.7	8.85	7.40	3.15	2.41	.77	.40	.54
13	a.40	3.58	61.2	20.7	21.1	8.85	<u>12.5</u>	3.15	2.05	.77	.40	.49
14	a.35	3.90	40.4	22.4	19.0	9.72	<u>9.14</u>	3.15	1.81	.84	.36	.49
15	a.40	3.15	64.2	*18.2	18.2	*9.14	8.56	3.15	1.61	.91	.32	.49
16	a.70	4.91	53.9	64.7	17.0	7.98	8.56	3.00	1.51	1.05	.28	.44
17	a.70	9.87	*61.6	93.4	15.8	7.40	7.69	2.85	1.41	.98	.28	.54
18	a.50	14.1	43.0	<u>151</u>	15.4	7.17	6.94	2.70	<u>3.93</u>	.84	*.28	.99
19	a.80	9.88	34.0	<u>54.2</u>	14.7	<u>6.94</u>	6.71	2.70	<u>3.00</u>	.71	.28	1.12
20	a1.30	5.33	29.1	37.2	13.5	27.3	*6.48	2.70	2.05	.65	.36	.84
21	a1.00	4.50	25.4	31.2	13.2	10.9	5.79	2.70	*1.71	.54	.60	5.94
22	a.90	7.53	75.2	26.4	14.7	9.72	5.79	2.70	1.61	.54	.71	1.85
23	a.70	9.50	189	23.7	14.3	9.43	5.56	2.29	1.51	.49	.77	.98
24	a.60	26.2	89.1	22.0	<u>12.2</u>	9.14	5.33	2.29	1.51	.49	1.23	7.86
25	a.60	136	188	21.5	<u>26.4</u>	7.98	4.90	2.29	1.51	.44	1.05	<u>13.2</u>
26	a.90	65.8	53.3	18.6	18.8	8.27	4.70	2.17	1.51	.44	.71	5.16
27	a.70	<u>214</u>	69.2	18.6	16.6	8.27	4.70	2.05	1.32	.40	.54	3.00
28	a1.00	39.2	40.4	24.0	18.6	<u>33.6</u>	4.70	2.05	1.23	.76	.49	*2.41
29	a2.00	175	38.9	17.4	23.8	<u>12.5</u>	5.28	2.05	1.23	.84	3.33	3.30
30	<u>35.9</u>	66.1	68.5	<u>15.8</u>	18.4	10.0	6.71	-----	1.23	.71	<u>5.72</u>	2.85
31	7.70	29.8	-----	<u>16.5</u>	-----	9.72	4.90	-----	<u>1.14</u>	-----	<u>4.81</u>	-----
Total	63.14	924.01	2,111.5	1,060.1	1,028.0	359.30	223.52	91.64	56.52	22.97	29.84	64.75
Mean	2.04	29.8	70.4	34.2	34.3	11.6	7.21	3.16	1.82	0.766	0.963	2.16
Ac-ft	125	1,850	4,190	2,100	2,040	713	443	182	112	46	59	128
Calendar year 1959: Max			232	Min	0.18	Mean	16.3	Ac-ft	11,830			
Fiscal year 1959-60: Max			232	Min	0.28	Mean	16.5	Ac-ft	11,970			

Peak discharge (base, 2,000 cfs).--No peak above base.

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations.

8620. Lonfit River near Ordof

Location.--Lat 13°26'05" N., long 144°45'10" E., on left bank at confluence of Lonfit and Sigua Rivers, 0.9 mile south of Ordof, 2.6 miles south of Agana, and 3.5 miles south-east of Asan.

Drainage area.--3.11 sq mi.

Records available.--September 1951 to March 1960 (discontinued).

Gage.--Water-stage recorder concrete control. Altitude of gage is 30 ft (by barometer).

Average discharge.--7 years (1952-59), 10.5 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1952-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1952a	Nov. 4, 1951	b1,520	12.09	June 13,14,30,1952	0.11	0.09
1953	Feb. 22, 1953	b1,200	9.79	June 26,27, 1953	.17	.11
1954	Oct. 15, 1953	(c)	d17.46	June 21,22, 1954	.07	.07
1955	Sept. 1, 1954	b1,520	12.09	July 28, 1954	.17	.11
1956	Sept.23, 1955	b1,540	12.27	May 16, 1956	.11	.09
1957	Dec. 15, 1956	b1,460	11.74	June 17,18, 1957	.09	.08
1958	Oct. 28, 1957	b2,070	c15.79	July 28, 1957	(e)	-
1959	Sept.21, 1958	b1,530	12.18	June 3-6,10-23,1959	0	-
1960 f	Aug. 25, 1959	b983	8.10	July 1, 1959	.05	.05

a Period September 1951 to June 1952.

b From rating curve extended above 90 cfs on basis of slope-area measurement at gage height 12.27 ft.

c Not determined.

d From floodmark.

e No flow part of day.

f Period July 1959 to March 1960.

1951-60: Maximum discharge not determined, occurred Oct. 15, 1953 (gage height, 17.46 ft, from floodmark); no flow June 3-6, 10-23, 1959.

Remarks.--Records fair for 1951-54 and good thereafter except those for periods of doubtful or no gage-height record and those above 100 cfs, which are poor.

Discharge, in cubic feet per second, September 1951 to June 1952

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			-	*2.3	113	18.0	2.3	1.05	0.69	0.61	0.30	0.30
2			-	2.1	11.2	8.0	2.45	1.17	.77	.61	.30	.25
3			-	1.80	38	5.0	2.1	1.29	.69	.61	.35	.21
4			-	6.3	262	4.2	2.1	1.05	.61	.87	.61	.25
5			-	18.6	18.8	4.0	2.3	1.05	.96	.87	.77	.35
6			-	4.0	12.2	63	2.1	.96	.96	.87	1.00	.47
7			-	3.35	12.6	9.2	1.96	.96	.69	.77	2.3	.47
8			-	106	8.4	6.0	*1.90	.96	.69	.96	.77	.30
9			-	83	7.4	8.1	1.96	.96	.69	1.17	.47	.30
10			-	37	6.3	9.3	1.96	1.05	.54	.69	.41	.25
11			-	13.5	6.6	11.2	1.65	.96	.47	.47	.47	.25
12			-	79	10.6	5.5	1.80	.96	.61	.61	.47	.21
13			-	120	5.5	4.7	1.96	.87	.54	.41	.41	.17
14			-	20.5	4.7	4.2	1.80	.87	.54	.41	.41	.21
15			-	12.6	4.5	4.0	2.3	.77	.77	.41	.47	1.54
16			-	10.8	4.2	4.5	2.1	.77	.77	.41	.47	.54
17			-	8.7	7.3	70	1.65	.77	.77	.35	.47	.35
18			-	7.4	19.3	8.3	7.0	.77	.69	.35	.47	.30
19			-	6.3	17.9	5.0	1.96	.77	.61	.41	.61	.25
20			-	7.6	6.3	4.2	1.65	.87	.69	.54	.54	.21
21			-	6.3	5.2	3.8	1.53	.96	.77	.41	.30	.25
22			-	5.0	4.5	3.35	1.53	.96	.69	.30	.30	.25
23			-	11.7	4.0	3.15	1.41	.87	.61	.30	.25	.30
24			-	15.6	4.0	3.0	1.29	.77	.61	.35	.25	.41
25			-	5.7	5.0	2.8	1.29	.77	.61	.30	.25	.30
26				3.0	5.2	4.0	2.6	1.29	.69	.96	.30	.25
27				2.45	7.0	6.5	2.45	1.17	.69	.69	.47	.25
28				2.45	4.7	17.2	3.0	1.29	.96	.77	.61	.25
29				2.45	4.2	5.2	2.6	1.53	.96	1.41	.41	.47
30				3.0	3.8	3.8	2.1	1.17	-----	.77	.30	.61
31				-----	4.0	-----	2.1	1.05	-----	.61	-----	.30
Total				624.05	636.2	285.35	59.55	26.51	22.25	16.15	15.54	10.06
Mean				20.1	21.2	9.20	1.92	0.914	0.718	0.538	0.501	0.335
Ac-ft				1,240	1,260	566	118	53	44	32	31	20
Calendar year				Max	Min	Mean		Ac-ft				
Fiscal year				Max	Min	Mean		Ac-ft				

* Discharge measurement made on this day.

8620. Lonfit River near Ordot--Continued

Discharge, in cubic feet per second, fiscal year July 1954 to June 1955

Table with 12 columns (Day, July, Aug., Sept., Oct., Nov., Dec., Jan., Feb., Mar., Apr., May, June) and 50 rows of data. Includes summary rows for Total, Mean, and Ac-ft, and a section for Calendar year 1954-55 and Fiscal year 1954-55.

Peak discharge (base, 1,200 cfs)--Sept. 1 (11 a.m.) 1,520 cfs (12.09 ft).

* Discharge measurement made on this day.
Note.--Doubtful or no gage-height record Aug. 20-30, Sept 1 to Oct. 6, Nov. 12 to Dec. 26; discharge estimated on basis of records for Ylig River.

Discharge, in cubic feet per second, fiscal year July 1955 to June 1956

Table with 12 columns (Day, July, Aug., Sept., Oct., Nov., Dec., Jan., Feb., Mar., Apr., May, June) and 50 rows of data. Includes summary rows for Total, Mean, and Ac-ft, and a section for Calendar year 1955-56 and Fiscal year 1955-56.

Peak discharge (base, 1,200 cfs)--Sept. 29 (1:30 a.m.) 1,540 cfs (12.27 ft).

* Discharge measurement made on this day.
a Doubtful or no gage-height record; discharge estimated on basis of range in stage and records for Ylig River.

8650. Pago River near Ordot

Location.--Lat 13°26'10" N., long 144°45'15" E., on left bank three-quarters of a mile south of Ordot, 2.5 miles south of Agana, and 3.6 miles southeast of Asar.

Drainage area.--6.18 sq mi.

Records available.--September 1951 to June 1960.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 25 ft (by barometer).

Average discharge.--8 years (1952-60), 21.8 cfs.

Extremes.--Maximum and minimum discharges for the fiscal years 1952-60 are contained in the following table:

Fiscal year	Maximum			Minimum		
	Date	Discharge (cfs) ^a	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1952/1953	Oct. 12, 1951 Sept. 8, 1952	2,390 2,530	9.62 d10.0	June 13, 30, 1952 May 29, June 14-16, 26, 27, 1953	c0.35 c.45	- -
1954	Oct. 15, 1953	5,310	16.76	June 4, 1954	.16	0.09
1955	Sept. 1, 1954	3,790	13.37	May 25-27, 30, 31, June 1, 4, 5, 1955	.41	.13
1956	Sept. 29, 1955	3,710	13.22	May 15, 16, 1956	.34	.12
1957	Oct. 17, 1956	4,500	15.01	June 29, 30, 1957	.12	.08
1958	Oct. 28, 1957	5,000	16.13	July 26, 27, 1957	c.10	-
1959	Sept. 21, 1958	3,690	13.09	June 5-7, 10-23, 1959	0	-
1960	Sept. 1, 1959	3,520	12.72	July 1, 2, 3, 1959	.10	.05

a From rating curve extended above 190 cfs on basis of slope-area measurements at gage heights 13.22 and 15.01 ft.

b Period September 1951 to June 1952.

c Minimum daily.

d From floodmark.

1951-60: Maximum discharge, 5,310 cfs Oct. 15, 1953 (gage height, 16.76 ft), from rating curve extended above 190 cfs on basis of slope-area measurements at gage heights 13.3 and 15.07 ft; no flow June 5-7, 10-23, 1959.

Remarks.--Records poor for 1951-52; fair for 1952-53, except those for doubtful or no gage-height record, which are poor; good for 1953-54, except those for periods of shifting-control and no gage-height record, which are poor; good for 1954-60, except those for periods of indefinite stage-discharge relation, fragmentary, doubtful, or no gage-height record, which are poor, and period when intakes were out of water in 1959, when record was fair.

Result of discharge measurement made Feb. 2, 1951, 8.87 cfs.

Discharge, in cubic feet per second, September 1951 to June 1952

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1			-	6.2	f220	39.5	5.3	2.1	1.2	1.2	0.60	0.70
2			-	5.9	25	16.0	5.3	2.65	1.3	1.2	.60	.50
3			-	5.0	40	12.4	5.0	2.85	1.2	1.2	.70	.40
4			-	13.5	f440	10.3	5.0	2.45	1.1	1.7	1.3	.50
5			-	35.5	39.5	10.3	5.0	*2.1	*1.8	1.7	1.5	.70
6			-	10.1	29	100	4.7	1.94	1.8	1.7	2.2	*.90
7			-	9.5	29	19.4	4.2	2.1	1.2	1.5	5.0	.90
8			-	24.0	21.5	15.7	*4.1	2.1	1.2	1.9	1.6	.60
9			-	16.0	18.8	16.9	4.2	1.94	1.2	2.3	.90	.60
10			-	74	17.2	18.0	4.2	2.25	1.1	*1.3	.80	.50
11			-	29	16.7	19.6	3.7	1.94	1.0	.90	.90	.50
12			-	242	26.5	11.9	3.7	1.78	1.2	1.1	.90	.40
13			-	f277	14.7	10.7	3.5	1.6	1.1	.80	.90	.35
14			-	48	13.2	9.8	3.25	1.6	1.1	.80	.80	.40
15			-	31	12.8	9.8	4.1	1.5	1.5	.80	.90	3.0
16			-	27	11.9	14.1	4.5	1.5	1.5	.80	.90	1.1
17			-	22.5	15.4	82	3.5	1.5	1.5	.70	.90	.70
18			-	18.8	48	14.7	12.4	1.5	1.3	.70	.90	.60
19			-	16.7	45	11.9	4.2	1.5	1.2	.90	1.2	.50
20			-	17.5	14.2	10.7	3.7	1.7	1.3	1.1	1.1	.40
21			-	15.7	11.3	9.8	3.25	1.9	1.5	.80	.62	.50
22			-	13.2	9.8	9.4	3.25	1.9	1.3	.60	.60	.50
23			-	19.9	8.6	8.6	3.2	1.6	1.2	.60	.50	.60
24			-	31	9.0	7.6	2.85	1.3	1.2	.70	.50	.80
25			-	13.7	10.2	6.9	2.85	1.3	1.2	.60	.50	.60
26			-	f8.5	13.2	9.0	6.5	2.65	1.2	2.0	.60	.60
27			-	6.2	14.2	17.2	6.2	2.65	1.2	1.3	.90	.50
28			-	5.9	11.5	55	7.2	2.65	1.9	1.5	1.1	.60
29			-	5.9	10.7	12.9	5.9	3.5	1.9	2.6	.80	.50
30			-	8.6	9.8	9.8	5.6	2.65	-----	1.6	.60	1.3
31			-	-----	9.8	-----	5.3	2.1	1.2	-----	.70	-----
Total			-	1,451.9	1,251.2	530.7	125.15	52.80	42.4	31.60	31.72	20.00
Mean			-	46.8	41.7	17.1	4.04	1.82	1.37	1.05	1.02	0.67
Ac-ft			-	2,880	2,480	1,050	248	105	84	63	63	40

* Discharge measurement made on this day.

† Result of discharge measurement.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Note.--Stage-discharge relation indefinite Feb. 13 to June 30; discharge estimated on basis of records for Lonfit River.

ISLAND OF GUAM

8650. Pago River near Ordot--Continued

Discharge, in cubic feet per second, fiscal year July 1958 to June 1959

Table with 12 columns (Day, July, Aug., Sept., Oct., Nov., Dec., Jan., Feb., Mar., Apr., May, June) and 32 rows of discharge data. Includes summary rows for Total, Mean, and Ac-ft for the fiscal year 1958-59.

Calendar year 1958: Max 415 Min 0.27 Mean 22.1 Ac-ft 16,000
Fiscal year 1958-59: Max 415 Min 0 Mean 19.6 Ac-ft 14,180

Peak discharge (base, 2,400 cfs).--Sept. 21 (2:30 a.m.) 3,690 cfs (13.09 ft).

* Discharge measurement made on this day.

Note.--No gage-height record May 13-29; discharge estimated on basis of records for nearby streams.

Discharge, in cubic feet per second, fiscal year July 1959 to June 1960

Table with 12 columns (Day, July, Aug., Sept., Oct., Nov., Dec., Jan., Feb., Mar., Apr., May, June) and 32 rows of discharge data. Includes summary rows for Total, Mean, and Ac-ft for the fiscal year 1959-60.

Calendar year 1959: Max 304 Min 0 Mean 19.2 Ac-ft 13,880
Fiscal year 1959-60: Max 304 Min 0.14 Mean 19.2 Ac-ft 13,970

Peak discharge (base, 2,400 cfs).--Sept. 1 (11:30 p.m.) 3,520 cfs (12.72 ft); Sept. 6 (5:30 p.m.) 2,670 cfs (10.40 ft); Nov. 5 (9:30 p.m.) 2,920 cfs (11.12 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations and weather records.

TRUK ISLANDS

8920. Wichen River at Peniesence

Location--Sheet 4544 II NW, Army Map Service series W856, LP 755239, 0.4 mile upstream from mouth and half a mile southwest of Peniesence, Island of Moen, Truk Islands.

Drainage area--1.48 sq km, 165 acres.

Records available--April 1955 to March 1956 (discontinued).

Gage--Staff gage, read twice daily; elevation, 18.3 meters.

Extremes--1955-56: Maximum daily discharge, 3.55 mgd Sept. 30; minimum daily, 0.08 mgd Apr. 2.

Remarks--Records poor. Results of discharge measurements, in million gallons a day, made at site are as follows:

Feb. 5, 1955..... 0.290
Feb. 19, 1955..... .450
June 6, 1957..... 2.39

Discharge, in million gallons a day, 1955-56

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.10	2.05	0.89	1.95	1.95	2.3	3.5	2.35	3.0	3.35	0.59	0.35
2	.08	1.84	.80	1.87	1.80	2.2	3.45	3.4	2.9	3.5	.87	.28
3	.14	1.52	.71	1.80	1.73	2.1	3.45	3.35	2.9	3.45	2.3	.23
4	.12	1.64	3.45	1.87	1.58	2.05	3.5	3.25	3.25	3.35	2.65	.19
5	.26	2.3	3.35	1.58	1.45	2.75	3.5	3.15	2.65	3.4	3.5	.18
6	.21	2.65	3.25	1.52	1.50	3.35	3.5	3.0	2.55	3.5	3.35	.19
7	.16	2.45	3.15	1.45	1.60	3.25	3.5	3.5	2.45	3.5	3.25	2.9
8	.13	1.95	3.0	1.38	1.56	3.15	3.5	3.45	2.4	3.35	3.0	2.8
9	.17	1.80	2.9	1.64	1.64	3.0	3.45	3.5	2.3	3.2	2.8	2.55
10	.14	1.65	2.75	3.4	2.25	2.9	3.35	3.5	2.2	3.0	2.65	3.25
11	.18	1.55	2.55	3.25	3.35	2.75	3.25	3.45	2.1	2.9	2.45	3.45
12	2.55	2.4	2.45	3.0	3.25	2.5	3.15	3.35	2.05	2.75	2.3	3.25
13	2.85	3.25	2.35	2.8	3.15	2.9	3.0	3.5	1.95	2.65	2.1	3.0
14	3.35	3.15	2.15	2.65	3.45	2.8	2.9	3.5	1.87	2.55	1.95	2.8
15	3.4	1.58	1.95	2.45	3.35	3.15	2.8	3.35	1.80	2.35	1.80	2.65
16	3.35	1.45	3.2	2.35	3.25	3.5	2.75	3.4	1.73	2.3	1.65	2.45
17	3.3	1.32	2.9	2.2	3.0	3.25	2.65	3.5	1.65	2.2	1.52	2.3
18	3.3	2.45	2.8	2.1	2.8	3.15	2.95	3.5	1.58	2.1	1.38	2.2
19	3.4	2.2	2.8	2.05	2.6	3.0	2.8	3.5	1.52	2.05	1.28	2.05
20	3.2	2.05	2.75	1.95	2.5	2.8	3.15	3.35	1.45	1.95	1.15	1.87
21	3.15	1.87	2.65	1.87	2.45	2.65	3.5	3.25	1.38	1.87	1.04	1.73
22	3.0	1.65	2.75	1.82	2.35	2.55	3.45	3.15	1.32	1.15	.84	1.58
23	2.9	1.58	2.75	1.78	2.3	2.6	3.35	3.0	1.26	1.04	.94	1.45
24	2.3	1.45	2.65	1.73	2.2	3.2	3.25	2.9	1.20	.94	.75	3.45
25	2.8	1.32	2.55	1.57	2.1	3.45	3.15	2.8	1.15	.84	.67	3.25
26	3.3	1.20	2.65	1.38	2.75	3.4	3.0	3.1	1.09	.75	.59	3.0
27	3.0	1.15	2.45	1.64	3.4	3.4	2.9	3.45	1.04	.67	.52	2.8
28	2.9	1.03	2.3	1.96	2.8	3.4	3.2	3.35	.99	.59	.45	2.65
29	2.7	.89	2.2	2.3	2.65	3.35	3.5	3.25	3.5	.38	.39	3.0
30	2.45	.81	2.05	2.1	2.45	3.55	3.5	3.15	3.4	.45	-----	3.45
31	-----	.89	-----	2.0	2.35	-----	3.5	-----	3.2	.39	-----	3.25
Total	58.89	55.09	75.15	63.21	75.56	88.40	100.40	98.25	63.73	66.47	48.71	68.53
Mean	1.96	1.78	2.50	2.04	2.44	2.95	3.24	3.28	2.06	2.14	1.68	2.21

Climatic year 1955-56: Max 3.55 Min 0.08 Mean 2.36

a At least; flow exceeded capacity of flume.

8940. Imor Stream at Fasan

Location.--Sheet 4543 IV NW, Army Map Service series W856, LP 475124, 0.05 mile upstream from mouth and 0.4 mile southwest of Fasan, Island of Tol, Truk Islands.

Drainage area.--0.12 sq km, 29 acres.

Records available.--April 1955 to March 1957 (discontinued).

Gage.--Staff gage, read twice daily; elevation, 7.62 meters.

Extremes.--1955-56: Maximum daily discharge, 4.7 mgd Dec. 30; minimum daily, 0.01 mgd Apr. 1, 2.
1956-57: Maximum daily discharge, 3.25 mgd Dec. 3; minimum daily, 0.01 mgd Mar. 31.

Remarks.--Records fair. Results of discharge measurements, in million gallons a day, made at site are as follows:

Jan. 28, 1955..... 1.20
June 21, 1957..... .245

Discharge, in million gallons a day, 1955-56

Da _y	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.01	0.41	0.28	0.25	0.34	0.22	1.43	0.26	1.31	0.71	0.08	0.05
2	.01	.27	.27	.22	.18	.25	.82	.23	1.27	.34	.08	.04
3	.28	.19	.39	.80	.17	.21	.46	.26	.35	1.58	.45	.04
4	.21	.87	.50	.53	.25	.21	.30	.18	.35	1.16	1.16	.04
5	.06	.90	.21	.39	.41	.80	.19	.18	.21	1.22	.93	.06
6	.05	1.49	.94	.21	.30	.65	.45	.18	.15	1.75	.80	.03
7	.02	.83	.51	.25	.42	.46	.78	.25	.12	1.99	.52	.12
8	.05	.51	.30	.29	3.0	1.19	1.06	.36	.12	1.24	.45	.38
9	.03	.26	.45	.25	1.29	.56	.33	.38	.21	1.05	.30	.29
10	.03	.25	.26	.27	1.54	.38	.74	.40	.25	.80	.25	.76
11	.03	.27	.17	.21	.39	.25	4.1	.39	.38	.48	.23	.79
12	2.25	.85	.18	.31	.32	.35	.84	.27	.30	.33	.13	.44
13	1.15	2.2	.13	.62	.25	.26	.65	.27	.21	.25	.76	.18
14	1.16	.76	.10	.39	.19	.21	.45	.28	.21	.21	.27	.15
15	.45	.82	.10	.28	.23	.32	.33	.26	.48	.30	.13	.13
16	1.12	.56	.43	.21	.22	.27	.23	.22	.30	.26	.10	.12
17	.97	.44	.27	.15	.33	.57	.30	.32	.18	.23	.08	.09
18	1.02	1.41	.26	.45	.74	.74	.22	.21	.13	.19	.08	.05
19	1.47	2.55	.28	.32	.46	.53	.43	.13	.08	.15	.09	.12
20	1.80	1.55	.39	.13	.35	.37	.76	.13	1.41	.11	.19	.06
21	1.11	.83	.30	.18	1.00	.48	.97	.12	.70	.19	.10	.06
22	.57	1.55	.27	.26	1.06	.21	.75	.13	.26	.17	.06	.08
23	.39	1.27	.21	.39	.53	.25	.37	.12	.15	.09	.06	.13
24	.27	.57	.53	.26	.30	.18	.19	.17	.11	.06	.06	.09
25	.85	.76	.23	.60	.33	.72	.22	.12	.10	.06	.05	.48
26	.88	.43	.72	.39	1.15	1.58	.21	.09	.09	.12	.06	.21
27	.61	.57	1.27	.31	.40	1.22	.19	.09	.08	.10	.06	.13
28	.39	.40	.72	.30	.27	.88	.45	.12	.18	.07	.05	.13
29	.33	.38	.26	.22	.38	.46	.81	1.93	.31	.04	.05	1.00
30	.40	.31	.27	.32	.32	.30	.66	.72	4.7	.06	-----	1.31
31	-----	.19	-----	.61	.21	-----	.36	-----	1.07	.14	-----	.49
Total	17.93	24.45	11.20	11.67	17.33	15.08	20.04	8.77	15.77	15.47	7.63	8.03
Mean	0.598	0.789	0.373	0.376	0.559	0.503	0.646	0.292	0.509	0.496	0.263	0.259

Climatic year 1955-56: Max 4.7 Min 0.01 Mean 0.474

8940. Imor Stream at Fasan--Continued

Discharge, in million gallons a day, 1956-57

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.34	1.21	0.26	0.06	0.16	0.46	0.28	0.08	0.29	0.76	0.04	0.86
2	.25	.78	.28	.17	.17	.50	.21	.08	1.19	1.05	.05	1.05
3	1.04	.50	.21	.13	.93	.18	.22	.18	3.25	1.71	.33	1.97
4	.56	.32	.74	.80	1.33	.23	.16	.12	1.01	.76	.45	.17
5	.30	.21	.96	.32	.60	.28	.11	.08	.67	.44	.28	.14
6	.22	1.07	.41	.18	.34	.18	.16	.06	.33	.22	.22	.11
7	.18	.49	.30	.11	.36	.15	.40	.06	.30	.17	.22	.09
8	.21	.40	.28	.90	.75	.19	.27	.05	.54	.16	.30	.08
9	2.2	.84	.22	.49	1.24	.21	.21	.05	1.65	.12	.26	.30
10	1.29	.61	.33	.27	.53	.50	.15	.05	1.38	.14	.13	.08
11	1.36	.45	.32	.76	.25	.25	.15	.81	.61	.15	.10	.06
12	1.11	1.22	.34	.33	.19	.78	.26	.89	.34	.21	.08	.06
13	.70	.39	.26	.25	.18	.41	1.71	.61	.22	.25	.08	.06
14	.54	.45	.19	.18	.15	.35	.58	.40	.21	.26	.05	.05
15	.41	.45	.21	.15	.17	.25	.96	.45	.22	.22	.05	.05
16	.59	.76	.17	.11	.13	.46	2.85	.23	.30	.19	.04	.05
17	.71	.50	.13	.10	.16	.33	1.27	.60	.17	.15	.05	.05
18	2.85	.31	.16	.06	.10	.26	.46	.28	.18	.11	.05	.04
19	1.16	.27	.14	.08	.39	.21	.30	.21	.13	.10	.04	.03
20	.57	.82	.12	.08	1.03	.15	.22	.22	.11	.08	.06	.03
21	.71	.41	.09	.08	.33	.13	.21	.26	.13	.08	.06	.04
22	.50	.30	.11	.08	.27	.13	.21	1.06	.12	.44	.08	.04
23	.32	.23	.14	.10	.56	.13	.18	.39	.09	.80	.28	.03
24	.22	.25	.13	.08	.23	.13	.13	.30	.30	.36	.10	.03
25	.19	.27	.10	.09	.21	.18	.09	.19	.61	.21	.08	.03
26	.18	.22	.08	.10	.14	.36	.08	.29	.57	.25	.10	.02
27	.17	.22	.08	.06	.36	.87	.09	.18	.90	.19	.06	.03
28	.15	.28	.16	.09	.23	.58	.08	.13	1.45	.08	.30	.03
29	.12	.22	.12	.08	.25	1.19	.06	.11	1.07	.31	-----	.03
30	.83	.21	.10	.13	.63	.85	.09	.13	.50	.18	-----	.02
31	-----	.18	-----	.18	.25	-----	.11	-----	1.07	.08	-----	.01
Total	19.98	14.84	7.14	6.80	12.64	10.86	12.26	8.55	20.11	10.21	3.94	3.94
Mean:	0.666	0.479	0.238	0.213	0.408	0.362	0.395	0.285	0.649	0.329	0.141	0.127
Climatic year 1956-57:		Max	3.25	Min	0.01	Mean	0.359					

8950. Echapachik Stream at Fasan

Location--Sheet 4543 IV NW, Army Map Service series W856, LP 482126, 0.2 mile upstream from mouth and 0.2 mile south of Fasan, Island of Tol, Truk Islands.

Drainage area--0.32 sq km, 80 acres.

Records available--April 1955 to March 1957 (discontinued).

Gage--Staff gage, read twice daily; elevation, 1.52 meters.

Extremes--1955-56: Maximum daily discharge, 4.8 mgd Dec. 30; minimum daily, 0.01 mgd Apr. 1-2, Mar. 6.

1956-57: Maximum daily discharge, 2.65 mgd Oct. 13; no flow Mar. 24-25.

Remarks--Records good. Results of discharge measurements, in million gallons a day, made at site are as follows:

Jan. 28, 1955..... 1.96
June 20, 1957..... .866

Discharge, in million gallons a day, 1955-56

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.01	0.32	0.27	0.23	0.34	0.36	1.25	0.26	0.48	0.39	0.03	0.03
2	.01	.24	.23	1.15	.25	.38	.89	.17	.63	.21	.05	.03
3	.69	1.16	.19	.92	.23	.19	.45	.15	.50	1.35	1.73	.03
4	.33	.58	.16	.52	.17	.17	.50	.14	.33	1.16	.45	.04
5	.16	.75	.19	.29	.14	.28	.22	.14	.22	.90	.45	.02
6	.10	1.13	1.20	.24	.11	4.5	.24	.14	.18	2.65	1.15	.01
7	.04	.84	.74	.19	.10	1.02	3.95	.14	.16	1.02	.39	.05
8	.03	.39	.36	.23	1.12	1.82	2.4	.28	.19	4.1	.31	.19
9	.04	.28	.23	.25	1.53	.88	.42	.46	.28	1.65	.17	.21
10	.05	.19	.18	.19	2.05	.58	.70	.54	.59	.72	.10	.78
11	e.03	.16	.14	.89	.87	.30	4.6	.61	.60	.45	.08	1.42
12	2.7	.65	.23	.49	.38	.23	.63	.43	.46	.25	.10	.48
13	.98	2.05	.16	.28	.23	.19	.36	.32	.29	.22	1.71	.19
14	1.11	1.54	.13	.18	.19	.18	.36	.39	.53	.15	.36	.08
15	.72	.76	.18	.43	.19	.91	.29	.36	.96	.14	.17	.08
16	1.75	.53	.54	.28	.16	.68	.22	.26	.46	.05	.13	.05
17	1.23	.28	.38	.16	1.13	1.05	.18	.25	.32	.05	.10	.05
18	1.33	1.49	.25	.13	1.20	.62	.15	.19	.19	.05	.09	.04
19	2.15	2.05	.39	.10	.60	1.10	.13	.14	.15	.05	.09	.03
20	1.91	1.15	.40	.08	.61	.81	.21	.09	.34	.05	.10	.03
21	1.25	.52	.24	.06	.92	.39	.21	.16	.45	.05	.08	.03
22	.58	1.34	.21	.08	1.19	.28	1.32	.10	.22	.10	.06	.03
23	.26	1.46	.20	.63	.85	.17	.42	.09	.17	.05	.09	.04
24	.19	.66	.56	.33	.34	.14	.18	.15	.09	.05	.08	.06
25	.80	.46	.32	.33	.22	.68	.16	.10	.10	.08	.04	.23
26	.94	.35	.17	.22	.25	1.38	.23	.22	.08	.13	.04	.10
27	.79	1.12	.94	.89	.25	1.00	.30	.08	.09	.10	.04	.07
28	.43	.49	.87	.41	.24	1.00	.45	.10	.49	.08	.03	.04
29	.27	.28	.34	.23	.40	.45	.61	.54	.34	.06	.04	.67
30	.25	.19	.35	.94	.35	.74	1.09	.66	4.8	.05	-----	.89
31	-----	1.73	-----	.61	.32	-----	.45	-----	.83	.05	-----	.63
Total	21.10	24.15	10.75	11.96	16.93	22.48	23.35	7.66	15.52	16.80	8.26	6.63
Mean	0.703	0.779	0.358	0.386	0.546	0.749	0.753	0.255	0.501	0.542	0.285	0.214

Climatic year 1955-56: Max 4.8 Min 0.01 Mean 0.507

e Estimated on basis of comparison with Imor Stream.

8950. Echapachik Stream at Fasan--Continued

Discharge, in million gallons a day, 1956-57

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.94	0.85	0.13	0.06	0.14	1.85	0.43	0.05	0.05	0.78	0.09	0.67
2	.52	1.18	.17	.09	.11	1.00	.21	.04	.28	1.20	.06	1.28
3	1.46	.52	.14	.10	2.3	.81	.14	.25	1.09	2.1	.10	.49
4	.78	.27	.28	.98	1.33	.27	.11	.14	1.53	.74	.28	.39
5	.36	.21	.41	.67	.75	.26	.08	.10	.67	1.24	.22	.14
6	.19	.61	.40	.43	.51	.19	.06	.07	.38	.75	.14	.10
7	.15	.56	.35	.34	.28	.07	.45	.05	.20	.38	.14	.05
8	.22	.43	.36	1.01	.36	.17	.26	.08	.28	.22	.15	.03
9	1.34	1.28	.40	.74	1.86	.10	.14	.04	.36	.13	.16	.04
10	1.56	.84	.26	.30	.52	.83	.10	.06	.98	.12	.10	.04
11	2.0	.41	.23	1.31	.26	.36	.35	.76	.80	.08	.08	.03
12	1.25	1.18	e.26	.59	.16	.12	.84	.34	.45	.11	.05	.03
13	.70	.58	1.28	.23	.12	.16	2.65	.18	.27	.08	.06	.03
14	.49	.50	.81	.19	.10	.10	.80	.23	.14	1.18	.05	.01
15	.88	.48	.36	.09	.10	.09	.28	.23	.11	.41	.05	.02
16	.72	.70	.21	.08	.08	1.27	1.54	.34	.12	.20	.05	.01
17	.63	.41	.15	.08	.07	.74	1.32	.83	.12	.12	.04	.01
18	2.55	.58	.12	.07	.08	.24	.45	.41	.09	.08	.04	.01
19	1.46	.72	.09	.05	.08	.16	.24	.14	.07	.08	.03	.01
20	1.11	1.46	.08	.05	.50	.10	.24	.30	.05	.06	.05	.01
21	.66	.75	.08	.04	.52	.19	.16	.23	.06	.07	.04	.01
22	.45	.30	.05	.06	.22	.27	.17	1.28	.05	.28	.03	.01
23	.29	.19	.13	.04	.17	.16	.13	.79	.06	1.47	.76	.01
24	.27	.35	.13	.09	.15	.14	e.13	.43	.09	.58	.29	0
25	.21	.17	.04	.06	.74	.35	.14	.30	.09	.21	.12	0
26	.16	.39	.04	2.1	.53	.38	.14	.34	.06	.14	.08	.01
27	.10	.43	.01	.85	.26	1.01	.11	.19	.06	.12	.05	.03
28	.13	.16	.06	.50	.16	.65	.08	.14	1.92	.08	.08	.03
29	.08	.21	.09	.38	.17	.60	.07	.07	1.02	.10	-----	.02
30	.65	.16	.04	.21	.11	.88	.10	.06	.49	.13	-----	.01
31	-----	.15	-----	.12	.43	-----	.08	-----	.34	.09	-----	.01
Total	22.31	17.03	7.15	11.90	12.97	13.46	12.00	8.47	12.28	13.33	3.38	3.54
Mean	0.744	0.549	0.238	0.384	0.419	0.449	0.387	0.282	0.396	0.430	0.121	0.114

Climatic year 1956-57: Max 2.65 Min 0 Mean 0.378

e Estimated on basis of comparison with Imor Stream.

3970. Fansinfo Stream at Roro

Location--Sheet 4544 II SW, Army Map Service series W856, LP 763156, a quarter of a mile upstream from mouth and 0.15 mile south of Roro, Island of Dublon, Truk Islands.

Drainage area--0.15 sq km, 38 acres.

Records available--April 1955 to March 1957 (discontinued).

Gage--Staff gage, read twice daily; elevation, 24.4 meters.

Extremes--1955-56: Maximum daily discharge, 4.2 mgd Aug. 10; minimum daily, 0.003 mgd Apr. 1-2.

1956-57: Maximum daily discharge, 4.0 mgd Apr. 18; minimum daily, 0.01 mgd many days in March.

Remarks--Records good. Results of discharge measurements, in million gallons a day, made at site are as follows:

Feb. 11, 1955..... 0.150
June 10, 1957..... .079

Discharge, in million gallons a day, 1955-56

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.003	0.38	0.49	0.25	0.31	0.36	2.0	0.41	0.98	0.38	0.03	0.05
2	.003	.34	.45	.21	.20	.22	1.07	.35	1.85	.25	.04	.03
3	.04	.24	.39	.19	.15	.15	.71	.25	1.13	1.47	.17	.03
4	.05	.79	.41	.65	.58	.12	.54	.21	.66	1.33	.93	.03
5	.01	.74	.28	.22	.08	.08	.39	.25	.56	.85	1.36	.03
6	.01	.85	.34	.17	.06	.46	.28	.23	.34	2.05	.52	.01
7	.01	.74	.58	.20	.06	.29	.41	.49	.34	1.31	.28	.03
8	.01	.61	.36	.45	.54	.23	.45	.43	.76	1.53	.20	.04
9	.01	.36	.29	.68	.36	.74	.35	.65	.83	1.20	.08	.05
10	.04	.29	.26	.38	4.2	.36	1.06	.63	.50	.67	.07	.89
11	.03	.32	.23	1.51	.96	.19	1.11	.43	.40	.56	.06	.30
12	2.25	.48	.19	.78	.78	.24	.46	.39	.30	.58	.06	.18
13	2.1	3.25	.15	.45	.78	.89	.32	.39	.36	.30	.06	.10
14	2.45	3.8	.08	.80	.30	1.95	.25	.34	.36	.23	.05	.06
15	1.28	1.95	.07	.88	.30	.93	.21	.27	.26	.19	.04	.13
16	1.28	.92	.36	.62	.26	.61	.16	.85	.21	.16	.03	.12
17	1.01	.61	.29	.38	2.3	1.40	.32	.96	.17	.08	.03	.08
18	1.40	3.1	.23	.45	.96	.72	.15	.56	.15	.06	.05	.08
19	2.3	3.5	.34	.34	.65	.52	.08	.50	.08	.06	.04	.13
20	2.25	2.45	.26	.26	.85	.40	.12	.36	.05	.06	.40	.06
21	1.31	1.68	.23	.20	.65	.30	.06	.27	.06	.05	.21	.16
22	.78	1.13	.19	.25	1.03	.24	.31	.21	.06	.04	.15	.27
23	.52	1.13	.23	1.16	.78	.21	.19	.20	.06	.04	.08	.23
24	.35	.76	.15	.52	.45	.80	.22	.48	.05	.04	.06	.08
25	1.22	.48	.43	.48	.30	.78	.19	.35	.04	.04	.04	.36
26	.94	.34	.36	.38	.18	1.62	.20	.25	.04	.04	.04	.30
27	1.20	.26	.88	.70	.30	1.16	.14	.21	.03	.04	.04	.19
28	.74	.22	.39	.43	.27	.63	.30	.18	.06	.03	.03	.12
29	.50	.21	.28	.48	.27	.48	.19	.48	.06	.03	.04	.08
30	.34	1.20	.21	.49	.33	.40	1.16	.83	1.92	.03	-----	.36
31	-----	.52	-----	.25	.19	-----	.72	-----	.68	.03	-----	.26
Total	24.42	34.35	9.40	15.28	19.24	17.46	14.12	12.41	13.15	13.53	5.18	4.84
Mean	0.814	1.11	0.313	0.493	0.621	0.582	0.455	0.414	0.424	0.436	0.179	0.156

Climatic year 1955-56: Max 4.2 Min 0.003 Mean 0.501

8970. Fansinifo Stream at Roro--Continued

Discharge, in million gallons a day, 1956-57

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	0.28	1.54	0.18	0.06	0.27	1.31	0.08	0.06	0.28	1.00	0.08	0.25
2	.34	1.25	.16	.05	.43	.50	.10	.04	1.89	2.05	.08	.25
3	.48	.76	.26	.26	.35	.30	.07	.06	.80	2.13	.34	.14
4	.32	.60	.12	.60	.80	.26	.06	.12	.94	1.40	.25	.06
5	.21	.45	.58	.38	.61	.23	.06	.15	.76	1.22	.19	.17
6	.19	1.85	.46	.30	.39	.21	.06	.06	.61	.98	.12	.08
7	.28	.67	.27	.25	.30	.17	.06	.04	.30	.74	.08	.05
8	.34	.50	.45	.48	.83	.15	.05	.05	.43	.54	.12	.04
9	2.2	.41	.36	.58	.58	.12	.04	.05	2.5	.36	.06	.04
10	2.9	.36	.70	.43	.42	2.05	.19	.08	1.06	.29	.06	.04
11	2.9	.34	.23	.32	.34	.70	.06	1.87	.76	.23	.05	.04
12	1.99	.61	.35	.24	.27	.49	.17	.94	.67	.19	.08	.04
13	.87	.41	.87	.21	.20	.34	.06	.64	.52	.17	.05	.03
14	.76	.36	.52	.17	.18	.30	.12	.52	.39	1.02	.04	.03
15	.70	.58	.43	.19	.14	.23	.08	1.19	.38	.52	.04	.03
16	.87	.78	.36	.16	.19	.30	.16	.94	.40	.36	.04	.03
17	.74	.61	.25	.08	.17	.22	.28	.74	.34	.24	.04	.04
18	4.0	1.36	.23	.08	.12	.60	.24	.56	.28	.27	.04	.03
19	2.4	.76	.19	.06	.25	.67	.18	.43	.25	.55	.04	.01
20	1.22	.56	.15	.06	.34	.33	.12	.35	.21	.17	.03	.03
21	.94	.43	.12	.06	.24	.41	.08	.26	.16	.12	.04	.03
22	.72	.36	.12	.06	.21	.43	.19	.18	.13	.16	.05	.01
23	.50	.43	.21	.05	.21	.36	.19	.60	.16	.30	.04	.01
24	.35	.31	.21	.06	.09	.27	.15	.40	.17	.21	.04	.01
25	.22	.59	.21	.05	.12	.24	.08	.28	.12	.17	.16	.01
26	.36	.30	.15	.25	.12	.31	.07	.25	.18	.24	.06	.03
27	.25	.27	.08	.19	.05	.27	.06	.23	.29	.18	.04	.01
28	.22	.24	.08	.35	.05	.19	.05	.19	2.75	.12	.11	.01
29	.21	.25	.06	.60	.17	.11	.05	.17	2.05	.15	-----	.01
30	1.86	.22	.06	.28	.18	.14	.04	.16	1.27	.21	-----	.01
31	-----	.22	-----	.18	.41	-----	.15	-----	1.16	.13	-----	.01
Total	29.62	18.58	9.03	7.67	9.03	12.21	5.35	11.61	22.21	16.89	2.31	1.56
Mean	0.967	0.593	0.301	0.247	0.291	0.407	0.108	0.387	0.716	0.545	0.072	0.050
Climatic year 1956-57:			Max 4.0	Min 0.01	Mean 0.394							

ISLAND OF TUFUILLA

9060. Vaitolu Stream near Aoa

Location.--Lat 14°17'50" S., long 170°35'45" W., on left bank three-eighths of a mile above Aoa Village and 0.5 mile above mouth.

Drainage area.--0.22 sq mi.

Records available.--March 1958 to June 1960.

Gage.--Water-stage recorder. Altitude of gage is 185 ft (from topographic map).

Extremes.--Maximum and minimum discharges for the fiscal years 1958-60 are contained in the following table:

Fiscal year	Date	Maximum		Gage height (feet)	Date	Minimum		Gage height (feet)
		Discharge				Discharge		
		Mgd	Cfs			Mgd	Cfs	
1958 b/	May 4, 1958	11.4	17.6	2.36	Apr. 25-30, 1958	0.11	0.17	1.16
1959	Feb. 5, 1959	83.5	129	4.75	(c)	.06	.09	1.13
1960	Jan. 19, 1960	70.2	109	4.45	June 22-27, 1960	.03	.05	1.12

a From rating curve extended above 2 mgd by logarithmic plotting.

b Period March to June 1958.

c Many days.

1958-60: Maximum discharge, 83.5 mgd (129 cfs) Feb. 5, 1959 (gage height, 4.75 ft), from rating curve extended above 2 mgd by logarithmic plotting; minimum, 0.03 mgd (0.05 cfs) June 22-27, 1960 (gage height, 1.12 ft).

Remarks.--Records fair.

Discharge, in million gallons a day, March to June 1958

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1									-	0.43	0.39	1.18
2									-	.55	.17	1.41
3									-	.25	.15	.43
4									-	.56	.97	.22
5									-	.58	.62	.17
6									-	.33	.36	.35
7									-	.34	.20	.46
8									-	.27	.17	.25
9									-	.20	.20	.20
10									-	.28	.28	.26
11									-	.27	.25	.61
12									-	*.20	.17	.50
13									-	.20	.15	.25
14									-	.21	.15	.20
15									-	.22	.13	.20
16									-	.27	.13	.17
17									-	.22	.13	*.22
18									-	.20	.16	.15
19									-	.20	.15	.15
20									-	.17	.93	.15
21									-	.15	.64	.13
22									-	.15	.25	.15
23									-	.13	.20	.44
24									-	*.13	.17	.32
25									-	.13	.15	.22
26									-	0.15	.15	.17
27									-	.19	.13	.15
28									-	.32	.15	.15
29									-	.27	.15	.15
30									-	.50	.32	.15
31									-	.60	-----	-----
Total									-	7.32	8.12	9.56
Mean									-			
mgd									-	0.244	0.262	0.319
cfs									-	0.376	0.405	0.494
Ac-ft									-	22	25	29
Calendar year		Max		Min		Mean (mgd)		Mean (cfs)		Ac-ft		
Fiscal year		Max		Min		Mean (mgd)		Mean (cfs)		Ac-ft		

* Discharge measurement made on this day.

9120. Afono Stream at Afono

Location.--Lat 14°16'55" S., long 170°39'10" W., on left bank at Afono Village and 1,500 ft above mouth.

Drainage area.--1.01 sq mi.

Records available.--October 1958 to June 1960.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 20 ft (from topographic map).

Extremes.--Maximum and minimum discharges for the fiscal years 1959-60 are contained in the following table:

Fiscal year	Maximum				Minimum			
	Date	Discharge a/		Gage height (feet)	Date	Discharge		Gage height (feet)
		Mgd	Cfs			Mgd	Cfs	
1959 b/	Feb. 5, 1959	486	752	4.69	June 9, 1959	0.23	0.36	1.44
1960	Sept. 8, 1959	131	203	3.43	July 16, 1959	.23	.36	1.44

a From rating curve extended above 14 mgd on basis of logarithmic plotting.

b Period from October 1958 to June 1959.

1958-60: Maximum discharge, 486 mgd (752 cfs) Feb. 5, 1959 (gage height, 4.69 ft), from rating curve extended above 14 mgd by logarithmic plotting; minimum, 0.23 mgd (0.36 cfs) June 9, July 16, 1959.

Remarks.--Records good except those for periods of no gage-height record, which are poor. A 2-inch pipeline diverts 0.037 mgd above station for domestic use in Afono.

Discharge, in million gallons a day, October 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1				-	0.86	3.17	0.57	1.50	1.96	0.68	3.83	0.38
2				-	.82	2.31	.48	1.66	1.66	.68	1.14	.57
3				-	.68	1.86	.48	1.71	2.04	.62	.80	.40
4				-	*.52	1.96	.52	3.65	2.19	.62	.62	.29
5				-	.52	1.47	1.02	41.3	2.44	.68	*.57	.29
6				-	.52	1.29	.74	4.64	1.66	.62	.52	.36
7				-	1.06	1.21	2.78	3.32	1.38	.62	.52	.29
8				-	.80	1.14	2.98	2.72	1.29	.57	.48	.29
9				-	.68	1.69	1.56	2.31	1.14	*.62	.48	.26
10				-	.57	1.47	.92	1.96	2.02	.52	.44	.43
11				-	.48	*1.83	.86	4.01	1.56	.52	.52	*1.21
12				-	.52	3.52	10.6	*a14.5	*1.21	.52	.44	1.36
13				-	*.48	2.07	2.89	a18.0	1.14	.52	.44	.92
14				-	.40	1.38	1.66	a13.0	.92	.44	*.44	.52
15				-	.36	1.06	*1.29	a22.0	.86	.44	.60	.40
16				-	.52	.99	1.14	a8.60	.80	.48	.48	.32
17				-	.40	.86	1.14	a5.40	.74	.48	.69	.29
18				-	.36	.80	1.06	a3.00	1.12	.62	.68	.48
19				-	.32	.74	.92	2.31	.92	.66	.48	.57
20				-	.36	.83	1.22	1.96	.80	.66	.48	.36
21				-	5.23	.88	2.85	1.66	.74	.92	.44	.32
22				-	2.57	.68	5.61	1.47	.86	.57	.44	.36
23				-	2.44	.68	3.61	1.38	5.42	.48	.40	.32
24				-	2.31	.62	6.33	1.81	4.19	.44	.44	.29
25				-	*0.62	3.56	.62	2.87	6.87	1.56	.40	.44
26				-	.68	2.79	.57	3.42	8.06	1.14	.62	.40
27				-	.62	3.17	.67	5.72	5.00	.99	.52	.44
28				-	.57	28.6	1.10	2.44	2.57	.92	.40	.48
29				-	.64	8.76	2.33	1.76	-.86	.44	.48	.40
30				-	1.06	4.10	1.06	2.06	-----	.80	.92	.40
31				-	.99	-----	.68	1.66	-----	.74	-----	.32
Total				-	72.56	41.54	73.16	186.17	46.07	17.80	19.25	18.37
Mean:				-	2.42	1.34	2.36	6.65	1.49	0.593	0.621	0.612
mgd				-	3.74	2.07	3.85	10.3	2.31	0.918	0.961	0.947
cfs				-	223	127	225	571	141	55	59	56
Ac-ft				-								
Calendar year					Max	Min	Mean(mgd)	Mean(cfs)			Ac-ft	
Fiscal year					Max	Min	Mean(mgd)	Mean(cfs)			Ac-ft	

Peak discharge (base, 70 mgd).--Nov. 28 (7 a.m.) 143 mgd (221 cfs), 3.50 ft; Jan. 12 (10 a.m.) 79.2 mgd (123 cfs), 3.06 ft; Feb. 5 (4 a.m.) 486 mgd (752 cfs), 4.69 ft.

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby stations.

9120. Afono Stream at Afono--Continued

Discharge, in million gallons a day, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.32	1.97	1.76	0.48	1.75	0.44	4.10	4.31	1.29	1.08	0.52	0.48
2	.36	3.50	1.76	.44	1.29	.40	2.72	2.44	1.21	1.21	.84	.57
3	.32	1.06	9.04	.62	.99	.57	2.19	1.96	1.14	.80	.86	.48
4	.32	.74	18.4	.48	1.96	.40	1.76	2.65	1.06	.68	.62	.48
5	.36	.62	6.14	.40	2.76	.74	1.56	2.72	.99	.57	.62	.48
6	.36	.52	12.0	.40	1.56	2.03	1.56	6.99	.99	.57	.62	.44
7	.32	.48	4.87	.40	.99	4.03	1.91	5.60	.92	.57	.52	.44
8	.29	.52	19.1	.68	.99	.99	4.58	1.38	5.02	.92	.57	.48
9	.40	.48	4.28	.44	1.86	2.07	1.14	4.89	1.37	.62	.44	*.36
10	*.32	.44	2.72	.36	1.06	*1.38	1.06	2.87	*1.72	.57	.74	.36
11	.36	.48	2.07	.32	.80	2.06	.92	*2.07	.99	.57	2.10	.40
12	.32	.40	1.66	1.53	.95	2.07	.92	*1.76	*.99	.52	*1.72	.40
13	.29	.40	1.47	.62	1.56	1.47	.86	1.56	.86	.52	.99	.36
14	.26	.40	1.21	.44	1.56	1.47	*.92	11.6	1.06	.57	6.67	.40
15	.26	.68	1.06	*.40	1.66	9.17	.74	3.96	1.21	.52	1.47	1.56
16	.26	.44	.99	.44	5.20	3.02	1.05	2.44	.92	.57	.99	.68
17	1.10	.52	.99	.44	.80	1.76	4.37	5.83	1.61	.86	.92	2.22
18	6.37	.40	.99	1.26	1.14	1.38	10.9	2.72	1.38	.68	.86	1.38
19	1.56	.36	.99	1.38	.86	1.29	16.6	1.96	3.46	.57	.80	6.06
20	1.14	.32	.92	1.14	.74	1.14	5.68	2.42	1.86	.52	1.06	2.57
21	.86	.36	.80	3.31	.68	1.06	7.14	3.92	1.21	.74	.74	1.56
22	.68	.32	.68	.99	.57	1.38	4.46	2.19	.92	.83	.62	1.56
23	.57	.32	.68	.68	.57	27.7	3.32	2.44	.86	1.40	.62	1.38
24	.48	.29	.62	.91	.57	18.4	3.02	2.21	.80	.86	.62	.99
25	.44	.29	.62	1.66	.52	9.63	2.31	5.98	.74	.68	.57	.99
26	.44	5.79	.52	.99	.48	9.41	1.86	2.44	.80	.68	.86	.86
27	.44	5.89	.52	.68	.44	5.02	1.66	2.07	1.54	.57	.68	3.19
28	.40	1.66	.62	.57	.79	9.12	1.66	1.86	.99	.52	.92	4.35
29	.36	16.7	.52	.62	.52	8.00	2.69	1.56	.74	.52	.68	1.96
30	.76	4.64	.48	.99	.48	6.18	4.71	-----	.68	.48	.62	1.38
31	1.56	2.57	-----	.62	-----	8.88	6.15	-----	.62	-----	.57	-----
Total	22.28	53.56	98.48	24.69	36.10	146.25	101.32	100.44	35.85	20.42	31.34	38.74
Mean:												
mgd	0.719	1.73	3.28	0.796	1.20	4.72	3.27	3.46	1.16	0.681	1.01	1.29
cfs	1.11	2.67	5.08	1.23	1.86	7.30	5.06	5.36	1.79	1.05	1.56	2.00
Ac-ft	68.0	164	302	76.0	111	449	311	308	110	63.0	96.0	119
Calendar year 1959: Max	41.3			Min	0.26	Mean(mgd)	2.03	Mean(cfs)	3.14	Ac-ft	2,280	
Fiscal year 1959-60: Max	27.7			Min	0.26	Mean(mgd)	1.94	Mean(cfs)	3.00	Ac-ft	2,180	
Peak discharge (base, 70 mgd).--Aug. 29 (6 a.m.) 81.6 mgd (126 cfs), 3.08 ft; Sept. 8 (1 a.m.) 131 mgd (203 cfs), 3.43 ft; Dec. 25 (8 a.m.) 74.4 mgd (115 cfs), 3.02 ft.												

* Discharge measurement made on this day.

9205. Aasu Stream at Aasu

Location.--Lat 14°19'00" S., long 170°45'35" W., on right bank at Aasu Village and 300 ft above mouth.

Drainage area.--1.01 sq mi.

Records available.--October 1958 to June 1960.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5 ft (by hand levels from high-tide mark).

Extremes.--Maximum and minimum discharges for the fiscal years 1959-60 are contained in the following table:

Fiscal year	Date	Maximum			Minimum			
		Discharge		Gage height (feet)	Date	Discharge		Gage height (feet)
		Mgd	Cfs			Mgd	Cfs	
1959 b/	Feb. 13, 1959	123	190	3.20	Apr. 29-30, 1959	0.48	0.74	0.09
1960	Aug. 29, 1959	189	292	3.62	July 14-17, 1959	.37	.57	.07

a From rating curve extended above 10 mgd by logarithmic plotting.

b Period October 1958 to June 1959.

1958-60: Maximum discharge, 189 mgd (292 cfs) Aug. 29, 1959 (gage height, 3.20 ft); minimum, 0.37 mgd (0.57 cfs) July 14-17, 1959.

Remarks.--Records fair for 1959, and good for 1960.

Discharge in million gallons a day, October 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1				-	2.30	9.60	1.27	3.42	5.40	1.63	5.48	1.56
2				-	2.30	7.89	1.17	2.88	4.95	1.37	2.43	1.82
3				-	3.46	6.52	1.07	3.50	4.95	1.27	1.50	1.27
4				-	2.30	6.30	1.97	7.22	9.91	1.27	1.27	1.07
5				-	2.04	5.62	4.73	17.9	6.52	1.17	1.07	.98
6				-	1.90	4.95	2.30	6.75	5.18	.98	1.07	1.07
7				-	4.31	4.32	1.77	5.62	4.50	1.17	1.24	.90
8				-	2.57	3.96	1.90	4.95	4.14	.90	.90	.90
9				-	2.17	4.14	1.37	4.72	3.78	.90	.82	.82
10				-	2.04	3.60	1.27	4.50	5.07	.74	.82	.98
11				-	2.04	3.24	1.37	6.28	3.96	.74	2.92	.98
12				-	1.77	3.06	15.2	17.2	3.60	.74	1.27	1.47
13				-	1.77	2.70	6.30	26.8	3.60	.89	1.07	1.27
14				-	1.77	2.43	4.14	24.1	3.42	.74	.98	.90
15				-	1.64	2.30	3.78	28.7	2.88	.67	.90	.82
16				-	1.77	1.90	3.24	19.5	2.43	.74	.74	.74
17				-	1.64	1.77	3.42	15.4	3.08	.90	.74	1.67
18				-	1.37	1.64	3.06	11.5	11.8	1.40	.74	1.66
19				-	1.37	1.50	2.88	*9.03	*4.90	1.31	.87	2.71
20				-	*1.64	1.80	2.70	7.60	3.60	2.08	.82	1.07
21				-	10.1	1.77	3.06	6.75	2.88	1.50	.80	.90
22				3.06	6.52	1.64	4.14	6.08	2.70	.90	.90	1.22
23				*3.49	5.18	1.37	14.0	5.40	3.24	.74	.90	1.17
24				2.88	4.91	1.27	15.4	6.05	2.57	1.02	1.21	.90
25				2.57	6.09	1.17	7.60	10.2	2.30	.74	.90	2.61
26				2.30	5.18	1.07	5.62	13.5	2.17	.74	.90	1.27
27				2.17	6.59	1.07	*5.62	9.11	1.90	.60	.82	1.07
28				1.90	9.67	1.64	4.72	6.30	1.90	.54	.97	.90
29				2.38	12.6	6.02	4.14	-	1.77	.54	3.90	.82
30				4.39	9.03	2.30	3.78	-----	1.64	1.67	2.38	.82
31				3.24	-----	1.64	3.42	-----	1.50	-----	1.37	-----
Total				-	118.04	100.20	134.41	290.96	122.24	30.62	42.50	35.34
Mean:				-	3.93	3.23	4.34	10.4	3.94	1.02	1.37	1.18
mgd				-	6.08	5.00	6.71	16.1	6.10	1.58	2.12	1.83
cfs				-	362	308	412	893	375	94	130	108
Ac-ft				-								
Calendar year		Max	Min		Mean(mgd)		Mean(cfs)		Ac-ft			
Fiscal year		Max	Min		Mean(mgd)		Mean(cfs)		Ac-ft			

Peak discharge (base, 70 mgd)--Jan. 12 (10:30 a.m.) 78.2 mgd (121 cfs), 2.82 ft; Jan. 23 (8:30 p.m.) 111 mgd (172 cfs), 3.10 ft; Feb. 13 (7:50 p.m.) 123 mgd (190 cfs), 3.20 ft; Mar. 4 (5:30 p.m.) 89.4 mgd (138 cfs), 2.92 ft; Mar. 18 (12 m.) 99.0 mgd (153 cfs), 3.00 ft.

* Discharge measurement made on this day.

9205. Aasu Stream at Aasu--Continued

Discharge, in million gallons a day, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.90	2.55	10.7	1.27	3.06	<u>1.63</u>	7.60	6.73	2.50	2.15	0.67	1.76
2	.90	3.73	10.7	1.81	3.40	<u>1.76</u>	6.07	5.40	2.03	<u>3.15</u>	4.44	1.37
3	.82	2.70	14.8	1.37	8.36	5.73	5.62	4.50	1.90	<u>2.30</u>	4.10	1.17
4	.74	2.03	<u>44.8</u>	1.27	<u>16.1</u>	7.22	4.95	5.62	1.76	1.76	3.24	1.07
5	.74	1.76	21.0	1.17	<u>10.7</u>	4.65	4.50	4.50	1.63	1.50	1.76	.98
6	.74	1.37	22.7	1.07	7.32	7.10	5.08	4.32	1.48	1.63	1.50	.90
7	.60	1.37	16.7	.98	7.15	10.3	4.14	5.63	1.37	1.50	1.27	.90
8	.60	1.37	15.0	3.04	6.52	15.7	3.60	4.32	1.27	1.50	1.17	.82
9	.74	1.37	10.7	1.63	6.30	7.32	3.06	4.53	2.38	1.37	1.07	.74
10	.54	1.37	8.74	1.17	5.40	5.85	2.88	3.78	2.53	1.27	1.71	.82
11	.54	1.27	7.32	1.07	4.72	5.85	2.56	3.60	1.37	1.37	2.57	.74
12	.60	1.17	6.30	.98	4.14	5.40	2.30	3.78	1.27	1.50	2.03	.67
13	.48	1.17	5.62	.98	5.75	4.95	2.30	3.24	1.07	1.50	1.63	.60
14	.42	1.07	4.95	.90	4.95	10.1	2.16	<u>7.86</u>	1.32	1.63	<u>11.9</u>	.60
15	.42	1.89	4.50	1.07	4.61	<u>53.5</u>	<u>2.03</u>	5.40	1.27	1.17	5.15	<u>11.1</u>
16	.42	1.27	3.96	1.72	6.97	14.3	2.73	4.50	<u>.98</u>	1.27	3.42	*3.78
17	1.90	1.50	*4.32	1.63	4.32	9.03	8.95	4.50	1.37	1.31	3.42	3.42
18	9.01	1.17	3.42	3.05	3.42	7.32	<u>16.4</u>	4.32	1.37	1.17	3.87	3.06
19	2.56	.98	3.24	<u>6.93</u>	3.24	6.30	13.9	3.60	<u>6.88</u>	.98	3.47	7.40
20	1.90	.98	3.24	4.77	2.88	5.62	10.5	5.23	3.24	.90	2.88	11.1
21	2.03	.98	2.56	2.70	2.88	4.95	*9.74	6.72	2.30	*.90	2.43	6.52
22	1.63	.90	2.30	2.43	2.56	5.47	9.31	4.50	1.63	1.07	2.16	4.72
23	1.37	<u>.82</u>	2.16	1.90	3.36	42.6	9.63	5.88	1.37	1.37	1.90	4.32
24	1.27	<u>.82</u>	2.03	2.63	2.56	37.2	13.6	4.32	*1.17	.98	1.76	3.96
25	1.17	.90	1.76	3.78	2.81	22.6	10.1	*3.96	1.17	2.07	1.63	3.78
26	1.07	15.3	1.63	2.43	2.43	21.9	8.17	3.42	1.39	2.35	1.90	3.42
27	1.07	<u>64.4</u>	1.50	2.56	2.30	13.8	6.75	3.06	4.09	1.17	1.76	4.52
28	.90	14.0	2.22	2.30	2.03	12.7	6.52	2.70	2.16	.98	1.76	5.84
29	.90	52.6	1.76	2.78	1.90	10.4	9.93	<u>2.56</u>	1.63	<u>.82</u>	2.56	3.78
30	1.97	20.9	1.50	5.75	<u>1.76</u>	9.13	8.50	-----	1.63	.82	2.39	3.24
31	4.48	15.0	-----	3.24	-----	10.5	6.23	-----	1.37	-----	1.90	-----
Total	43.43	216.71	242.13	70.38	143.90	380.88	209.81	132.50	58.70	43.46	83.42	97.10
Mean:												
mgd	1.40	7.06	8.07	2.27	4.80	12.3	6.77	4.57	1.89	1.45	2.69	3.24
cfs	2.17	10.9	12.5	3.51	7.43	19.0	10.5	7.07	2.93	2.24	4.16	5.01
Ac-ft	133	671	743	216	442	1,170	644	407	180	133	256	298
Calendar year 1959: Max	64.4											
Min				0.42								
Mean(mgd)						4.81				7.44		5,390
Mean(cfs)							4.72				7.30	Ac-ft
Fiscal year 1959-60: Max		64.4										5,290
Min												
Mean(mgd)												
Mean(cfs)												
Ac-ft												
Peak discharge (base, 70 mgd)--Aug. 29 (6 a.m.)												
189 mgd (169 cfs), 3.08 ft; Dec. 15 (7:30 p.m.)												
110 mgd (170 cfs), 3.09 ft; Dec. 23 (8 p.m.)												
119 mgd (184 cfs), 3.17 ft.												

* Discharge measurement made on this day.

9310. Atauloma Stream at Afao

Location.--Lat 14°21'05" S., long 170°47'45" W., on left bank at Afao Village, 100 ft above bridge and 500 ft above mouth.

Drainage area.--0.59 sq mi.

Records available.--October 1958 to June 1960.

Gage.--Water-stage recorder. Altitude of gage is 20 ft (by hand levels from high-tide mark).

Extremes.--Maximum and minimum discharges for the fiscal years 1959-60 are contained in the following table:

Fiscal year	Maximum				Minimum			
	Date	Discharge		Gage height (feet)	Date	Discharge		Gage height (feet)
		Mgd	Cfs			Mgd	Cfs	
1959 b/ 1960	Feb. 13, 1959 Dec. 23, 1959	170 112	263 173	3.06 2.68	June 29,30,1959 July 14, Aug. 22, 24-25, 1959	0.12 .11	0.19 .17	0.43 .42

a From rating curve extended above 2 mgd by application of weir formula.

b Period October 1958 to June 1959.

1958-60: Maximum discharge, 170 mgd (263 cfs) Feb. 13, 1959 (gage height, 3.06 ft), from rating curve extended above 2 mgd by application of weir formula; minimum, 0.11 mgd (0.17 cfs) July 14, Aug. 22, 24-25, 1959.

Remarks.--Records good except for period of no gage-height record, which are fair. Metered flow of 10,400 gallons per day (average) diverted above station for domestic use.

Discharge, in million gallons a day, October 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1				-	0.34	1.28	0.23	0.37	0.68	0.40	2.93	0.36
2				-	.45	.78	.19	.34	.64	.37	.83	.62
3				-	.51	.64	.19	.50	.60	.34	.51	.37
4				-	.34	.64	.31	.87	*1.05	.28	.40	*.26
5				-	.26	.51	1.01	4.19	.73	.28	.34	.23
6				-	.31	.44	.48	1.13	.73	.28	.31	.23
7				-	1.46	.40	.34	.94	.60	.28	.55	.21
8				-	.48	.37	.37	.73	.51	.28	.34	.19
9				-	.34	.37	.28	.64	.48	.27	.37	.17
10				-	.26	.40	.26	.55	1.31	.27	.28	.19
11				-	.31	.40	.28	.86	.73	.21	.78	.19
12				-	.23	.34	8.10	5.24	.55	.21	*.40	.26
13				-	.21	.34	2.22	14.2	.51	.21	.31	.21
14				-	.21	.28	1.13	6.96	.74	.21	.31	.17
15				-	.21	.28	1.14	7.72	.51	.27	.26	.15
16				-	.23	.28	.73	3.45	*.44	.21	.23	.15
17				-	.21	.26	.68	2.07	1.09	.28	.21	.15
18				-	.19	.26	.60	1.34	3.74	.40	.21	.31
19				-	.17	.25	.48	1.06	1.41	.40	.19	.28
20				-	.21	.31	.48	.94	.83	.57	.19	.17
21				-	2.38	.31	.48	.78	.73	.51	.17	.15
22				-	*1.75	.26	.77	.73	.64	.28	.17	.19
23				-	.78	.23	2.00	.73	.60	.27	.17	.26
24				-	1.03	.21	2.47	1.11	.51	.21	.15	.15
25				-	1.92	.21	1.25	1.72	.48	.21	.15	.26
26				-	.89	.21	.94	1.95	.44	.31	.15	.17
27				-	.78	.25	1.00	1.27	.44	.21	.15	.15
28				-	2.13	.60	.68	.83	.40	.15	.18	.15
29				-	*0.38	2.42	.57	.51	.48	.17	1.44	.14
30				-	*.45	1.06	.34	.44	.37	.27	.66	.14
31				-	.88	-----	.26	.37	-----	.34	-----	.31
Total				-	22.07	12.48	30.41	63.22	23.31	8.97	13.65	6.63
Mean:				-								
mgd				-	0.736	0.403	0.981	2.26	0.752	0.298	0.440	0.221
cfs				-	1.14	0.624	1.52	3.50	1.16	0.467	0.681	0.342
Ac-ft				-	68	38	93	194	72	28	42	20
Calendar year	Max	Min										
Fiscal year	Max	Min										
Peak discharge (base, 40 mgd)	--Feb. 13 (8:30 p.m.) 170 mgd (263 cfs), 3.06 ft.											
* Discharge measurement made on this day.												
a No gage-height record; discharge estimated on basis of records for nearby streams.												

9310. Atauloma Stream at Afao--Continued

Discharge, in million gallons a day, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
1	0.14	0.42	1.13	0.31	0.60	0.44	1.51	2.20	0.64	0.50	0.23	0.78	
2	.14	.78	1.06	*.81	.51	3.03	1.28	1.35	.55	.69	.46	.71	
3	.15	.48	2.33	.48	.86	5.09	1.06	1.06	.51	.51	1.19	.60	
4	.15	.28	10.6	.51	3.08	3.32	3.94	1.00	.48	.40	.60	.48	
5	.14	.23	3.38	.40	2.12	2.13	.83	*1.17	.44	.37	.37	.44	
6	.14	.17	3.86	.31	1.00	5.07	.83	1.00	.60	.34	.28	*.37	
7	.14	.15	2.64	.28	1.54	3.82	.78	1.63	.40	.31	.26	.37	
8	.14	.15	1.81	.78	1.35	3.05	.73	1.00	.40	*.34	.23	.34	
9	.14	.19	1.28	*.53	1.06	1.66	.68	5.69	.51	.31	.23	.31	
10	.14	.15	1.06	.37	.78	1.13	.60	1.39	.48	.31	.32	.31	
11	.12	.15	.83	.31	.64	1.00	.68	1.43	.37	.31	.45	.28	
12	.12	.15	.78	.28	.51	1.58	.51	1.20	.44	.34	1.75	.28	
13	.12	.14	.68	.28	.60	1.00	.44	1.00	.34	*.31	.64	*.28	
14	.11	.14	.64	.26	.62	4.56	.48	3.91	.40	.31	3.61	.26	
15	.12	.27	.55	.40	.91	9.49	.44	1.66	.44	.26	1.06	1.56	
16	.12	.15	.51	.98	1.92	3.57	.56	1.13	.48	.28	.64	.51	
17	.51	.19	8.83	1.08	.78	2.30	5.52	1.37	.51	.26	.48	.67	
18	2.23	.15	.60	1.17	.77	1.81	8.81	1.28	.51	*.23	*1.51	1.48	
19	.44	.14	.55	2.90	.68	1.35	5.48	1.00	3.01	.23	.73	1.49	
20	.34	.14	.55	*1.58	.88	1.52	2.31	2.58	.83	.21	.51	2.11	
21	.31	.14	*.48	.78	.80	1.06	1.66	2.89	*.64	.28	.44	.85	
22	.26	.14	.40	.80	.60	1.26	1.66	1.55	.51	.34	.37	.68	
23	.17	.14	.40	.51	.48	1.43	1.43	2.05	.48	.34	.34	.55	
24	.15	.12	.37	.51	.40	9.58	2.78	1.28	.40	.23	*.31	.48	
25	.15	.12	*.37	.60	1.63	4.46	7.37	1.23	*.37	.30	.31	.44	
26	.15	3.43	.34	.44	.96	3.37	2.41	1.06	.64	.40	.44	.37	
27	.15	11.7	.31	.52	.60	2.42	1.43	.89	2.15	.26	*.40	.62	
28	.14	2.21	*1.44	.40	.80	3.21	1.28	.73	.83	.26	.44	1.57	
29	.14	9.33	.55	.54	.72	2.63	*1.31	.55	.23	.23	.73	.64	
30	.30	2.83	.37	1.50	.51	1.81	2.20	-----	.51	.21	2.51	.64	
31	.60	1.66	-----	.68	-----	2.10	2.55	-----	.44	-----	1.00	-----	
Total	8.17	36.84	46.70	21.10	28.31	105.62	61.15	46.81	19.86	9.67	22.84	19.45	
Mean:	mgd	0.264	1.19	1.56	0.681	0.944	3.41	1.97	1.61	0.641	0.322	0.737	0.648
	cfs	0.408	1.84	2.41	1.05	1.46	5.28	3.05	2.50	0.991	0.499	1.14	1.00
	Ac-ft	25.0	113	143	65.0	87.0	324	188	144	61.0	30.0	70.0	60.0
Calendar year 1959:	Max	16.8			Min	0.11	Mean(mgd)	1.08	Mean(cfs)	1.67	Ac-ft	1,210	
Fiscal year 1959-60:	Max	16.8			Min	0.11	Mean(mgd)	1.17	Mean(cfs)	1.81	Ac-ft	1,310	
Peak discharge (base, 40 mgd).--Dec. 3 (7 p.m.)							91.2 mgd (141 cfs),		2.51 ft;				
							Dec. 23 (1 p.m.)		112 mgd				
							(173 cfs), 2.68 ft;		Jan. 17 (11 p.m.)				
							108 mgd (167 cfs),		2.85 ft;				
							Jan. 25 (2 p.m.)		76 mgd (118 cfs)				
							2.37 ft;		Feb. 9 (11 a.m.)				
							84.5 mgd (131 cfs),		2.45 ft.				

* Discharge measurement made on this day.

9325. Asili Stream at Asili

Location--Lat 14°21'05" S., long 170°47'30" W., on left bank at Asili Village, 100 ft above bridge on coastal road and 200 ft above mouth.

Drainage area--0.61 sq mi.

Records available--March 1958 to October 1958 (discontinued).

Gage--Water-stage recorder and concrete control. Altitude of gage is 5 ft (by hand levels from high-tide mark).

Extremes--Maximum discharge during period March to June 1958, 241 mgd (373 cfs) May 5 (gage height 4.03 ft), based on estimate of critical flow; minimum, 0.66 mgd (1.02 cfs) Apr. 29.

Maximum discharge, during period July to October 1958, 900 mgd (1,390 cfs) Oct. 4 (gage height 6.05 ft), based on estimate of critical flow; minimum, 0.29 mgd (0.45 cfs) Sept. 23.

Remarks--Records fair.

Discharge, in million gallons a day, March to June 1958														
Day	Mar.	Apr.	May	June	Day	Mar.	Apr.	May	June	Day	Mar.	Apr.	May	June
1	-	3.80	3.48	13.6	11	-	1.63	2.05	10.5	21	1.91	0.89	5.28	2.39
2	-	3.45	1.63	10.9	12	-	1.63	1.73	8.82	22	1.63	*.83	2.64	2.16
3	-	3.30	1.19	5.32	13	-	1.36	1.54	5.32	23	1.45	.83	2.03	6.89
4	-	*6.22	*2.55	3.80	14	-	*1.31	1.36	3.99	24	1.36	.83	1.73	4.79
5	-	5.41	15.6	3.30	15	-	1.45	1.27	3.30	25	1.69	.76	1.54	3.30
6	-	3.45	14.4	8.46	16	-	1.86	2.26	4.35	26	1.19	.83	*1.36	2.27
7	-	2.64	4.18	6.25	17	-	1.27	1.63	7.24	27	1.63	1.11	1.36	2.27
8	-	2.27	2.90	4.18	18	2.27	1.19	1.36	4.18	28	4.78	.89	1.11	2.05
9	-	1.94	3.05	3.77	19	2.79	1.11	1.36	3.30	29	8.41	.83	1.11	1.85
10	-	1.83	2.64	6.83	20	2.51	.96	6.55	*2.62	30	3.45	1.10	1.04	1.53
										31	4.00	-	1.43	-
Total											-	56.93	93.37	152.11
Mean discharge, in million gallons a day												1.90	3.01	5.07
Mean discharge, in cubic feet per second												2.94	4.86	7.84
Runoff, in acre-feet												175	287	467

* Discharge measurement made on this day.

Discharge, in million gallons a day, July to October 1958														
Day	July	Aug.	Sept.	Oct.	Day	July	Aug.	Sept.	Oct.	Day	July	Aug.	Sept.	Oct.
1	2.05	1.83	0.83	3.93	11	0.89	1.45	0.51	*1.73	21	0.83	0.76	0.36	1.19
2	2.32	1.73	.66	2.05	12	.83	2.07	.87	1.54	22	.76	1.04	*.32	.96
3	1.54	1.27	.71	4.35	13	.76	1.54	.66	1.40	23	.76	.89	*.32	1.19
4	1.36	1.77	.66	69.9	14	.76	1.63	.51	1.25	24	2.08	.78	.83	1.11
5	1.19	1.45	1.43	28.9	15	.76	1.36	.47	1.15	25	.96	.76	4.67	.88
6	1.45	1.19	.96	10.9	16	3.13	1.19	.43	1.04	26	.76	.76	1.76	.76
7	1.11	.96	.66	6.03	17	1.11	1.11	.43	4.58	27	.76	.70	.83	-
8	1.04	1.40	.61	3.60	18	.96	1.04	.40	1.73	28	.89	.61	.61	-
9	.96	2.03	.56	2.77	19	.83	.96	.43	*1.45	29	.66	.61	3.20	-
10	.96	2.05	.54	2.16	20	.83	.89	.47	1.27	30	7.78	.61	2.97	-
										31	3.75	.78	-	-
Total											44.81	37.18	28.67	-
Mean discharge, in million gallons a day											1.45	1.20	0.96	-
Mean discharge, in cubic feet per second											2.24	1.86	1.49	-
Runoff, in acre-feet											138	114	88	-

* Discharge measurement made on this day.

No gage-height record; discharge estimated on basis of records for nearby streams.

9480. Matuu Stream at Matuu--Continued

Discharge, in million gallons a day, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.19	1.78	0.50	0.19	0.91	0.19	1.45	1.77	0.31	0.29	0.14	0.31
2	0.19	2.74	.50	.19	.60	.17	.95	.73	.31	.27	.25	*.34
3	.16	.82	*3.72	.19	*.50	1.06	.73	.50	.29	.23	.60	.23
4	.14	.44	8.77	.27	1.30	2.55	.60	.54	.29	.19	.31	.19
5	.18	.34	1.81	.19	1.92	1.36	.54	.39	.25	.19	.19	.17
6	.54	.16	5.73	.17	.68	3.34	.64	.59	.29	.21	.17	*.16
7	.19	.23	3.06	.14	.66	4.50	.54	1.78	*.25	*.17	.14	.17
8	.16	.23	5.55	.50	a.64	9.42	*.44	*1.55	.31	.23	.12	.14
9	.21	.23	1.23	.27	a.62	1.30	.39	3.48	.25	.17	.11	.14
10	.16	.21	.77	.17	a.70	.82	.34	.86	.25	.17	.53	.14
11	.14	.21	*.68	.14	a.62	.73	.31	1.13	.31	.16	1.20	.12
12	.22	.17	.56	.14	a.60	.60	.29	.77	.47	*.16	2.55	.12
13	.14	.16	.48	.14	a.60	.44	.27	.64	.33	.14	.64	*.11
14	.14	.14	.44	.12	.60	.87	.36	7.97	.69	.14	4.66	.12
15	.12	.31	.36	.17	.48	1.62	.27	1.45	.61	.14	.86	3.30
16	.12	.17	.34	1.37	1.34	1.00	.76	.86	.31	.55	.42	.54
17	1.07	.34	.85	.77	.44	.56	1.65	.91	.80	.51	.42	.42
18	4.37	.16	.50	.92	.29	.64	4.36	.82	.60	.29	.60	.42
19	1.54	.14	.50	1.24	.25	.56	4.28	.64	2.34	.21	.39	3.35
20	.68	.12	.44	1.09	.25	.48	1.45	1.37	1.65	.19	.29	*2.18
21	.36	.12	.31	1.89	.37	.39	1.10	1.91	.95	.33	.27	.86
22	.29	.11	*.29	.82	.21	1.71	1.23	.77	.50	.27	.23	.92
23	.25	.11	.25	.44	*.21	21.7	2.34	.56	.39	.39	.19	.56
24	.23	.11	.23	.44	.25	10.3	3.09	.44	.34	.63	.19	.39
25	.21	*.11	.23	.54	.23	13.4	*1.00	.96	.31	.44	.17	.29
26	.19	3.32	.21	*.31	.19	3.30	.73	.56	.36	.98	*.27	.16
27	.19	6.45	.21	.31	.17	2.83	.54	.54	1.44	.48	.23	1.82
28	.16	.99	.21	.27	.95	5.24	.54	.42	.60	.25	.21	2.00
29	.14	10.6	*.27	.34	.44	2.95	1.14	.34	.39	.19	.23	.56
30	.73	1.59	.21	2.31	.27	2.64	1.74	-----	.31	.16	.43	*.39
31	1.71	.82	-----	.77	-----	3.96	.84	-----	*.25	.31	-----	-----
Total	15.12	33.43	39.21	16.82	17.29	100.65	34.91	35.25	16.75	8.73	17.32	20.62
Mean:												
mgd	0.488	1.08	1.31	0.543	0.576	3.25	1.13	1.22	0.540	0.291	0.559	0.687
cfs	0.755	1.67	2.02	0.840	0.891	5.02	1.74	1.88	0.836	0.45c	0.864	1.06
Ac-ft	46.0	103	120	52	53	309	107	108	51.0	27.0	53.0	63.0

Calendar year 1959: Max 21.7 Min 0.11 Mean(mgd) 1.15 Mean(cfs) 1.78 Ac-ft 1,290
 Fiscal year 1959-60: Max 21.7 Min 0.11 Mean(mgd) 0.973 Mean(cfs) 1.51 Ac-ft 1,090

Peak discharge (base, 50 mgd).--Aug. 29 (5 a.m.) 97.2 mgd (150 cfs), 2.71 ft; Dec. 8 (12:30 a.m.) 96 mgd (149 cfs), 2.70 ft; Dec. 25 (2:30 a.m.) 150 mgd (232 cfs), 3.09 ft; May 14 (1:30 p.m.) 55.9 mgd (86.5 cfs), 2.31 ft.

* Discharge measurement made on this day.
 a No gage-height record; discharge estimated on basis of record for West Branch Alega Stream.

9495. Faga'alu Stream near Faga'alu

Location.--Lat 14°18'40" S., long 170°41'40" W., on right bank 75 ft above pipeline intake and 0.5 mile west of Faga'alu.

Drainage area.--0.42 sq mi.

Records available.--April 1957 to June 1958 (discontinued).

Gage.--Staff gage read once daily, and concrete control. Altitude of gage is 75 ft (from topographic map). Prior to Nov. 18, 1957, at datum 0.71 ft lower.

Extremes.--1957: Maximum discharge during period April to June not determined; minimum observed, 0.37 mgd (0.58 cfs) May 31.
 1957-58: Maximum discharge during fiscal year not determined; minimum observed, 0.28 mgd (0.43 cfs) Feb. 1, 2.

Remarks.--Records poor.

Discharge, in million gallons a day, 1957

Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June
1	-	0.81	0.39	9	-	2.10	8.74	17	0.44	0.58	0.44	25	0.60	0.42	0.72
2	-	.62	.42	10	-	4.23	.43	18	.41	.65	1.22	26	*.49	.41	.62
3	-	.62	.42	11	-	1.86	.44	19	.42	.58	1.80	27	.45	.41	.75
4	-	.58	.43	12	-	1.96	5.00	20	.42	.50	.65	28	.46	.39	1.39
5	-	.45	.49	13	-	1.62	.45	21	1.74	.47	5.00	29	.46	.41	.91
6	-	.42	.42	14	-	.84	.41	22	5.15	.44	2.10	30	.49	.39	.68
7	-	.45	8.20	15	-	.58	.39	23	1.39	.43	.62	31	-	.37	-
8	-	.47	3.90	16	*0.49	.45	.52	24	.62	.43	1.80				
Total.....													-	24.96	49.75
Mean discharge, in million gallons a day.....													-	0.81	1.66
Mean discharge, in cubic feet per second.....													-	1.25	2.57
Runoff, in acre-feet.....													-	77	155

* Discharge measurement made on this day.

Discharge, in million gallons a day, fiscal year July 1957 to June 1958

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.57	0.52	0.30	0.32	0.55	0.58	0.51	0.28	0.41	2.90	0.90	a7.0
2	.47	.50	.29	.32	2.04	.58	.51	.28	.37	2.26	.45	15.7
3	.44	.57	.29	.32	.62	.52	1.22	.31	.35	1.50	4.5	2.50
4	.44	.53	.29	.31	.45	.68	1.28	.30	.35	.66	15.0	1.68
5	.42	.46	.29	.31	.39	.94	.94	.30	.35	2.18	1.60	.76
6	.42	.45	.29	.30	.35	4.78	.79	.29	.35	*.94	6.50	a9.0
7	.39	.41	.60	.29	5.30	2.90	.55	1.50	.35	.55	1.50	99.0
8	4.69	.40	.88	.55	5.75	2.26	.50	.94	.63	.51	.73	2.26
9	8.32	.39	.45	.55	8.74	4.23	.48	7.86	.72	.47	1.16	1.33
10	1.98	.42	.42	.55	2.34	1.62	.43	6.67	.60	.43	1.28	9.64
11	1.86	.41	.43	.39	1.50	.72	.40	.94	2.58	.55	2.90	3.90
12	.94	.34	.35	.35	1.68	.60	4.00	2.74	.68	.45	1.50	4.12
13	.81	.34	.34	.33	.42	.68	.39	2.74	1.86	.43	.94	1.74
14	.58	.34	.33	.32	.35	.66	.52	3.10	.60	.40	.68	1.50
15	.49	.32	.33	.32	1.22	.63	.66	6.50	.63	.40	.55	.82
16	.45	.32	.36	.32	.53	.60	4.45	.72	.40	.51	.94	.94
17	.88	.31	.34	.33	4.45	.60	.63	4.45	1.62	.41	.50	4.78
18	.52	.31	.32	.39	54.0	.50	.55	2.26	.68	.40	.47	1.28
19	.46	.32	.32	1.11	35.5	.50	.43	3.40	.56	.42	.52	.76
20	.44	.32	.32	.58	22.0	.46	.39	3.10	.51	.38	.52	a.75
21	.44	.44	.31	4.01	14.5	.46	.58	1.74	.46	.38	1.74	.72
22	.42	.46	.31	1.74	.68	.54	.76	.82	.68	.34	.63	.47
23	.42	.37	.42	.75	.51	.55	.52	.58	.51	.34	3.90	.46
24	.40	.35	.36	5.30	.50	1.98	.55	.48	.46	.34	1.68	2.90
25	.40	.33	.39	1.44	.50	1.50	.46	.46	.42	.34	.58	3.40
26	.40	.32	.36	1.11	.47	2.42	.38	.43	.41	.33	.55	a1.80
27	.40	.32	.35	.91	.51	2.58	.37	.47	.45	.33	.55	.90
28	.39	.32	.34	1.05	.82	.94	.34	.42	1.62	.40	.52	.72
29	.41	.32	.33	.78	.60	.82	.35	-	.94	.33	.43	.54
30	.43	.31	.32	.60	.58	.52	.30	-----	1.74	.33	.40	.50
31	.57	.31	-----	.81	-----	.48	.30	-----	1.92	-----	.42	-----
Total	31.05	11.85	11.05	26.76	166.85	37.75	16.87	57.26	24.51	20.10	52.45	181.87
Mean:	1.00	0.382	0.368	0.863	5.56	1.22	0.544	2.04	0.791	0.670	1.63	6.06
mgd	1.55	0.591	0.569	1.34	8.60	1.89	0.842	3.16	1.22	1.04	2.61	9.58
cfs	95	36	34	82	512	116	52	176	75	62	161	558
Ac-ft												

Calendar year 1957: Max - Min - Mean(mgd) - Mean(cfs) - Ac-ft -
 Fiscal year 1957-58: Max 99 Min 0.28 Mean(mgd) 1.75 Mean(cfs) 2.71 Ac-ft 1,960

* Discharge measurement made on this day.
 a No gage-height record; discharge estimated on basis of record for Matuu Stream.

9500. Utumoa pipeline diversion near Pago Pago

Location.--Lat 14°18'40" S., long 170°42'30" W., at stilling basin 150 ft below diversion on Utumoa Stream and 1.1 miles south of Pago Pago.

Records available.--April 1957 to June 1958 (discontinued).

Gage.--Staff gage, read twice daily, and V-notch weir. Altitude of gage is 460 ft (from topographic map).

Extremes.--1957: Maximum discharge during period April to June not determined; minimum observed, 0.15 mgd (0.23 cfs) Apr. 9, 10, June 2.
1957-58: Maximum discharge during fiscal year not determined; no flow Feb. 9.

Remarks.--Records poor. These records combined with those of Utumoa Stream will show total flow at 460 ft altitude.

Discharge, in million gallons a day, 1957															
Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June
1	-	0.23	0.16	9	0.15	0.46	0.46	17	0.19	0.31	0.20	25	0.29	0.19	0.39
2	-	.20	.15	10	.15	.46	.36	18	.19	.24	.20	26	.25	.18	.36
3	-	.20	.16	11	.22	.46	.28	19	.36	.23	.59	27	.23	.20	.39
4	-	.22	.20	12	.32	.46	.28	20	.18	.24	.27	28	.23	.18	.42
5	-	.18	.20	13	.42	.42	.25	21	.32	.22	.46	29	.22	.19	.42
6	-	.17	.17	14	.28	.37	.23	22	.46	.20	.46	30	.28	.19	.39
7	-	.18	.46	15	.24	.32	.23	23	.32	.19	.46	31	-	.17	-
8	-	.29	.39	16	.22	.29	.24	24	.31	.19	.46				
Total.....													-	8.03	9.49
Mean discharge, in million gallons a day.....														0.259	0.316
Mean discharge, in cubic feet per second.....														0.401	0.469
Runoff, in acre-feet.....														25	29

Discharge, in million gallons a day, fiscal year July 1957 to June 1958

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.31	0.20	0.12	0.11	0.36	0.29	0.27	0.18	0.25	0.46	0.29	0.49
2	.29	.19	.12	.10	.39	.28	.28	.18	.24	.41	.25	.46
3	.27	.18	.12	.11	.39	.29	.32	.18	.23	.39	.46	.46
4	.25	.19	.12	.10	.36	.46	.29	.18	.22	.37	.46	.46
5	.23	.18	.12	.10	.31	.46	.27	.18	.22	.42	.42	.46
6	.23	.18	.12	.10	.29	.46	.29	.19	.22	.32	.46	.60
7	.20	.17	.23	.11	.27	.46	.25	.46	.22	.34	.42	2.06
8	.28	.17	.39	.36	.46	.46	.23	.39	.23	.34	.36	.46
9	.46	.16	.20	.24	.46	.46	.23	0	.22	.27	.36	.46
10	.42	.18	.17	.24	.46	.46	.22	.46	.34	.27	.39	.46
11	.42	.18	.29	.28	.46	.46	.20	.46	.46	.27	.46	.46
12	.39	.15	.17	.24	.46	.46	.22	.46	.32	.27	.46	1.40
13	.34	.15	.16	.18	.39	.36	.20	.46	.34	.25	.39	.46
14	.29	.15	.16	.17	.37	.36	.20	.36	.39	.23	.34	.46
15	.25	.15	.14	.15	.32	.31	.29	.46	.32	.25	.32	.46
16	.25	.14	.14	.15	.46	.29	.24	.46	.39	.24	.42	.46
17	.46	.14	.15	.17	.46	.28	.34	.46	.37	.23	.29	.46
18	.28	.14	.14	.46	.46	.28	.29	.46	.31	.20	.24	.46
19	.24	.14	.13	.46	.46	.31	.25	.46	.32	.22	.24	.46
20	.46	.13	.12	.41	.46	.27	.22	.46	.28	.18	.46	.42
21	.24	.37	.14	.46	.46	.31	.23	.39	.25	.20	.46	.39
22	.22	.16	.15	.46	.46	.25	.22	.37	.27	.20	.36	.32
23	.22	.15	.27	.46	.39	.25	.24	.36	.24	.17	.46	.34
24	.20	.22	.15	.46	.32	.32	.46	.32	.23	.17	.46	.42
25	.19	.14	.13	.46	.29	.27	.23	.31	.22	.17	.34	.38
26	.20	.14	.15	.46	.29	.37	.20	.29	.31	.17	.29	.46
27	.18	.14	.15	.46	.29	.46	.22	.46	.37	.17	.28	.39
28	.17	.14	.13	.46	.46	.36	.19	.29	.46	.20	.25	.39
29	.23	.15	.11	.46	.37	.28	.20	-	.46	.10	.23	.34
30	.23	.14	.11	.46	.31	.27	.18	-	.46	.17	.25	.34
31	.27	.14	-----	.37	-----	.25	.18	-----	.46	-----	.27	-----
Total	8.67	5.16	4.76	9.21	11.69	10.85	7.65	9.67	9.62	7.73	11.14	15.64
Mean												
mgd	0.280	0.166	0.159	0.297	0.390	0.350	0.247	0.345	0.310	0.258	0.359	0.521
cfs	0.433	0.257	0.246	0.460	0.603	0.542	0.382	0.534	0.480	0.399	0.555	0.806
Ac-ft	27	16	15	28	36	33	23	30	30	24	34	48

Calendar year 1957: Max - Min - Mean(mgd) - Mean(cfs) - Ac-ft -
Fiscal year 1957-58: Max 2.06 Min 0 Mean(mgd) 0.306 Mean(cfs) 0.473 Ac-ft 344

9505. Utumoa Stream near Pago Pago

Location.--Lat 14°18'41" S., long 170°42'30" W., on left bank 150 ft below pipeline diversion and 1.1 miles south of Pago Pago.

Drainage area.--0.11 sq mi.

Records available.--April 1957 to June 1958 (discontinued).

Gage.--Staff gage read once daily and V-notch sharp-crested weir. Altitude of gage is 460 ft (from topographic map).

Extremes.--1957: Maximum discharge during period April to June not determined; minimum observed, 0.03 mgd (0.05 cfs) Apr. 17-18, 20.
1957-58: Maximum discharge during fiscal year not determined; minimum observed, 0.03 mgd (0.05 cfs) several times during year.

Remarks.--Records poor. These records combined with those of Utumoa pipeline diversion will show total flow at this point.

Discharge, in million gallons a day, 1957

Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June
1	-	0.06	0.06	9	-	2.06	1.88	17	0.03	0.17	0.06	25	0.08	0.08	0.11
2	-	.05	.08	10	-	.77	.16	18	.05	.12	.05	26	.08	.06	.16
3	-	.05	.08	11	-	.48	.13	19	.10	.11	.15	27	.06	.08	.16
4	-	.07	.09	12	0.09	.39	.13	20	.05	.12	.06	28	.05	.06	.17
5	-	.05	.09	13	.09	.31	.14	21	.68	.11	.32	29	.06	.08	.16
6	-	.04	.06	14	.06	.23	.10	22	.22	.10	.72	30	.09	.08	.14
7	-	.04	3.60	15	.04	.18	.05	23	.09	.09	.14	31	-	.06	-
8	-	.06	.17	16	.04	.15	.08	24	.08	.09	.16	-	-	-	-
Total													-	6.38	9.41
Mean discharge, in million gallons a day													-	0.206	0.314
Mean discharge, in cubic feet per second													-	0.519	0.486
Runoff, in acre-feet													-	20	29

Discharge, in million gallons a day, fiscal year July 1957 to June 1958

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June									
1	0.09	0.05	0.03	0.03	0.11	0.08	0.08	0.05	0.10	0.20	0.12	2.0									
2	.09	.05	.03	.03	.15	.08	.08	.04	.09	.14	.16	6.20									
3	.08	.04	.03	.03	.13	.08	.09	.04	.08	.12	.42	1.47									
4	.08	.05	.03	.03	.10	.42	.11	.04	.07	.12	2.78	.50									
5	.06	.04	.03	.03	.10	.68	.09	.05	.07	.17	.15	.29									
6	.06	.04	.05	.03	.08	.54	.08	.06	.06	.12	.65	4.0									
7	.05	.04	.06	.03	.08	.80	.07	.31	.07	.14	.17	2.06									
8	.09	.04	.15	.06	.72	.37	.07	.39	.23	.54	.13	1.19									
9	1.59	.04	.04	.07	2.06	.68	.07	3.09	.07	.11	.13	.37									
10	.63	.05	.04	.06	1.19	.25	.06	1.29	.12	.10	.17	3.35									
11	.29	.04	.06	.06	.58	.19	.06	.44	.20	.10	.32	1.25									
12	.14	.03	.04	.06	.41	.31	.06	.42	.14	.10	.17	.46									
13	.12	.03	.03	.04	.19	.14	.05	.32	.10	.09	.15	.46									
14	.10	.03	.03	.04	.15	.13	.06	.18	.13	.08	.13	.56									
15	.09	.03	.03	.04	.14	.10	.10	3.09	.14	.09	.11	.22									
16	.08	.03	.03	.04	.24	.10	.08	.94	.22	.08	.17	.22									
17	.32	.03	.05	.04	.25	.09	.11	.72	.10	.08	.11	.54									
18	.08	.03	.04	.22	16.0	.08	.07	.44	.10	.07	.08	.19									
19	.06	.03	.03	.14	7.70	.10	.06	.41	.10	.08	.09	.17									
20	.50	.03	.03	.08	3.35	.08	.05	.52	.10	.08	1.88	.15									
21	.07	.09	.03	2.02	.80	.10	.06	.20	.10	.06	.17	.15									
22	.06	.04	.03	6.88	.25	.07	.06	.37	.09	.05	.10	.13									
23	.05	.03	.06	.22	.18	.07	.06	.15	.08	.06	.37	.12									
24	.05	.05	.03	3.35	.14	.10	.58	.13	.08	.06	.20	2.55									
25	.05	.03	.03	1.12	.12	.08	.06	.12	.08	.06	.11	2.55									
26	.05	.03	.04	.68	.10	.11	.05	.11	.10	.06	.10	2.45									
27	.04	.03	.03	.77	.10	.29	.05	.48	.28	.06	.11	1.29									
28	.04	.03	.04	.68	.25	.10	.05	.37	.25	.06	.10	1.15									
29	.06	.03	.03	.24	.11	.07	.05	-	.23	.06	.09	1.00									
30	.06	.03	.03	.17	.10	.07	.05	-----	.80	.06	.25	.17									
31	.08	.03	-----	.14	-----	.07	.05	-----	.20	-----	.27	-----									
Total	5.21	1.17	1.17	11.23	35.88	6.43	2.62	14.77	4.58	3.01	9.96	37.01									
Mean:																					
mgd	0.168	0.038	0.039	0.362	1.20	0.207	0.085	0.528	0.148	0.100	0.321	1.23									
cfs	0.260	0.059	0.056	0.560	1.86	0.320	0.132	0.817	0.229	0.155	0.487	1.90									
Ac-ft	16	3.6	3.6	34	110	20	8.0	45	14	9.2	31	114									
Calendar year 1957: Max													-	Min	-	Mean(mgd)	-	Mean(cfs)	-	Ac-ft	-
Fiscal year 1957-58: Max													16.0	Min	0.03	Mean(mgd)	0.365	Mean(cfs)	0.565	Ac-ft	409

9600. West Branch Alega Stream at Alega

Location.--Lat 14°18'05" S., long 170°38'35" W., on left bank 500 ft above confluence with East Branch and 0.25 mile northwest of Alega Village.

Drainage area.--0.16 sq mi.

Records available.--March 1958 to June 1960.

Gage.--Water-stage recorder. Altitude of gage is 85 ft (from topographic map).

Extremes.--Maximum and minimum discharges for the fiscal years 1958-60 are contained in the following table:

Fiscal year	Date	Maximum			Minimum			
		Discharge a/		Gage height (feet)	Discharge		Gage height (feet)	
		Mgd	Cfs		Mgd	Cfs		
1958 b/	June 23, 1958	55.2	85.4	3.15	Apr. 26, 27, 1958	0.41	0.63	0.91
1959	Feb. 5, 1959	34.8	53.8	2.72	June 15-17, 1959	.25	.39	.83
1960	Sept. 8, 1959	25.8	39.9	2.44	July 11-12, 1959	.20	.31	.83

a From rating curve extended above 4 mgd on basis of logarithmic plotting.
 b Period from March to June 1958.

1958-60: Maximum discharge, 55.2 mgd (85.4 cfs) June 23, 1958 (gage height, 3.15 ft), from rating curve extended above 4 mgd by logarithmic plotting; minimum, 0.20 mgd (0.31 cfs) July 11-12, 1959.

Remarks.--Records fair 1958-59 and good in 1960, except those for periods of no gage-height record, which are poor.

Discharge, in million gallons a day, 1958

Day	Mar.	Apr.	May	June	Day	Mar.	Apr.	May	June	Day	Mar.	Apr.	May	June
1	-	1.35	1.46	2.81	11	-	*0.62	0.58	2.03	21	0.66	0.48	0.96	0.66
2	-	.94	.62	2.64	12	-	.58	.55	1.58	22	.62	.48	.55	.62
3	-	.84	.71	1.20	13	-	.58	.51	1.09	23	.58	.48	.51	.48
4	-	.95	1.38	*.79	14	-	.58	.48	.94	24	.55	.44	.55	2.17
5	-	1.12	1.10	.79	15	-	*.58	.48	.94	25	.55	.44	.48	1.44
6	-	.89	1.09	1.98	16	-	.66	.44	.89	26	.55	.41	.48	1.14
7	-	.79	1.07	1.54	17	-	.55	.44	1.04	27	.58	.41	.48	.99
8	-	.66	.58	1.07	18	-	.55	.51	.79	28	*.66	.44	.44	.89
9	-	.62	.58	.94	19	0.74	.55	.48	.74	29	.70	.44	.44	.79
10	-	.66	.66	1.16	20	.66	.51	1.02	.66	30	2.04	.63	.44	.74
										31	2.61	-	.48	-

Total.....	-	-	-	-	-	-	-	-	-	-	19.43	20.19	19.29	39.29
Mean discharge, in million gallons a day.....	-	-	-	-	-	-	-	-	-	-	0.648	0.651	0.651	1.33
Mean discharge, in cubic feet per second.....	-	-	-	-	-	-	-	-	-	-	1.00	1.01	1.01	2.03
Runoff, in acre-feet.....	-	-	-	-	-	-	-	-	-	-	60	62	62	121

Peak discharge (base, 20 mgd).--June 23 (4:30 p.m.) 55.2 mgd (85.4 cfs), 3.15 ft.

* Discharge measurement made on this day.

Discharge, in million gallons a day, fiscal year July 1958 to June 1959

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.74	0.38	0.38	1.34	0.38	1.26	0.35	0.70	1.09	0.55	1.69	0.38
2	.74	.41	.35	.58	.35	.79	.30	.62	*.99	.55	.62	.38
3	.66	.38	.35	.48	.35	.70	.30	.66	1.24	.55	1.24	.38
4	.62	.38	.35	1.32	.35	.74	.32	1.02	1.14	.55	.51	.30
5	.62	.38	.45	1.20	.35	.55	.50	6.62	1.06	.55	.51	.30
6	.58	.38	.38	*.58	.35	.55	.38	1.74	.84	.51	.48	.32
7	.55	.38	.35	.55	.38	.51	.62	1.26	.79	.44	.44	.30
8	.55	.38	.35	.51	.38	.51	.71	1.14	.74	.44	*.44	.30
9	.55	.44	.31	.48	.35	.51	.48	.94	.74	.44	.44	.30
10	.55	.48	.31	.41	.35	.48	.38	.74	.94	.38	.44	.35
11	.55	.48	.33	.41	.35	.48	.41	1.20	.74	.38	.44	.57
12	.55	.55	.40	.38	.35	.63	3.33	4.00	.66	.38	.41	.35
13	.51	.38	.54	.38	.35	.48	1.04	4.83	.66	.38	.38	.30
14	*.51	.78	.33	.38	.35	.41	.66	3.55	.62	.35	.38	.28
15	.51	.48	.32	.47	.35	.41	.62	5.77	.62	.32	.38	.25
16	1.56	.38	.31	.41	.35	.38	.51	*3.06	.58	.35	.35	.25
17	.58	.38	.30	1.24	.32	.38	.55	2.24	.55	.32	.44	.25
18	.51	.35	.30	.58	*.28	.38	.48	1.58	.91	.38	.41	.28
19	.48	.38	.50	.48	.28	.38	.48	1.52	.66	.46	.38	.30
20	.48	.35	.30	.44	.28	.55	.59	1.18	.58	.44	.38	.32
21	.44	.35	.30	.41	1.35	.58	1.16	.99	.61	.44	.35	.35
22	.44	.38	*.30	.41	.65	.38	1.59	.94	.88	.32	.35	.38
23	.44	.38	.28	.41	.55	.35	1.62	.84	2.32	.32	.35	.44
24	.52	.38	.28	.38	.55	.35	*2.07	.91	1.77	.34	.32	.44
25	.44	.38	2.15	.38	1.15	.35	1.84	2.20	.89	.38	.32	1.09
26	.41	.38	.58	.38	1.13	.35	1.37	2.82	.74	.58	.38	*.38
27	.41	.35	.28	.38	.89	.58	1.80	1.99	.70	.44	.32	.34
28	.41	.35	.28	.35	4.41	.53	.99	1.32	.70	.44	.32	.32
29	.41	.38	1.13	.44	2.46	.64	.79	-	.66	.44	.42	.35
30	.41	.38	.79	.44	1.45	.38	.90	-----	.62	.76	.45	.35
31	.38	.38	-----	.44	-----	.35	.66	-----	.58	-----	.35	-----
Total	17.07	12.59	13.38	17.04	21.44	15.89	28.00	56.18	26.58	13.22	13.80	10.84
Mean:												
mgd	0.551	0.406	0.446	0.550	0.715	0.512	0.903	2.01	0.857	0.441	0.445	0.361
cfs	0.853	0.628	0.690	0.851	1.11	0.794	1.40	3.11	1.33	0.682	0.689	0.559
Ac-ft	52	39	41	52	66	49	86	172	82	41	42	33

Calendar year 1958: Max - Min - Mean(mgd) - Mean(cfs) - Ac-ft -
 Fiscal year 1958-59: Max 6.62 Min 0.25 Mean(mgd) 674 Mean(cfs) 1.04 Ac-ft 755

Peak discharge (base, 20 mgd).--Jan. 12 (10 a.m.) 25.1 mgd (39.8 cfs), 2.42 ft; Feb. 5 (4 a.m.) 34.8 mgd (53.8 cfs), 2.72 ft; Mar. 23 (8:30 p.m.) 20.7 mgd (32.0 cfs), 2.27 ft.

* Discharge measurement made on this day.

Note.--No gage-height record Sept. 4-22; discharge estimated on basis of records for nearby stations.

9600. West Branch Alega Stream at Alega--Continued

Discharge, in million gallons a day, fiscal year July 1959 to June 1960

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	*0.30	a1.00	0.58	0.38	0.51	0.23	1.64	1.69	*0.79	0.63	0.38	*0.38
2	.30	a2.00	.55	.35	.41	.23	1.26	1.04	.70	.84	.41	.38
3	.30	.38	1.88	.44	.38	.28	1.04	*.89	.66	.51	.44	.38
4	.32	.35	4.48	.38	.44	.28	.89	.97	.66	.48	.38	.38
5	.32	.32	2.07	.38	.91	.25	.79	.84	.62	.48	.35	.35
6	.32	.32	3.52	.38	.41	.55	.74	1.85	.62	.48	.35	.35
7	.32	.32	2.31	*.38	.38	1.50	.82	1.60	.62	.44	.38	.35
8	.30	.35	5.86	.44	.41	*1.45	.92	1.70	.58	.44	.38	*.32
9	.30	.35	2.07	.38	.55	.66	.58	1.89	.67	.44	*.35	.30
10	.28	.32	1.38	.35	.38	.44	.55	1.20	.70	.44	.50	.30
11	.28	.35	1.09	.35	.35	.62	.51	1.04	.58	.44	.80	*.30
12	.28	.35	.99	.77	.38	.55	.48	.89	.62	.44	.67	.30
13	.28	.32	.84	.41	.38	.41	.48	.89	.58	.44	.47	.30
14	.28	.32	*.74	.44	.41	.38	.51	3.34	.86	.41	1.79	.30
15	.30	.38	.70	.38	.48	1.75	.44	1.77	.66	.38	.55	.57
16	.35	.38	.62	.44	*1.09	.62	.60	1.38	*.55	.38	.44	.32
17	.62	.38	.62	.41	.48	.55	1.54	1.53	.84	.73	.44	.38
18	1.42	.38	.62	.62	.41	.44	3.30	1.14	.66	.48	.41	.32
19	.48	.35	.58	.79	.35	.38	4.69	.99	1.50	.41	.44	.80
20	.38	.35	.44	.70	.35	.38	*1.98	1.65	.94	*.38	*.44	.55
21	.35	.35	.44	1.65	.35	.38	1.93	1.91	.66	.56	.38	.38
22	.30	.35	.44	.55	.28	.48	1.58	1.14	.58	.70	.38	.51
23	.30	.35	*.44	.38	.25	7.48	1.38	1.20	.58	.81	.38	.38
24	.30	.32	.44	.44	.28	5.29	1.26	*1.11	.55	.51	.38	.32
25	a.30	.32	.44	.38	.25	3.02	1.04	1.67	.51	.44	*.38	.32
26	a.30	1.76	.44	.38	.25	3.19	.94	1.09	.58	.41	.44	.32
27	a.30	1.03	.41	.32	.23	1.98	.84	1.04	.92	.38	.38	.89
28	a.25	.45	.38	.32	.39	2.94	.84	.89	.58	.38	.38	.95
29	a.27	3.44	.38	.41	.25	2.67	1.16	.84	.55	.38	.38	.48
30	a.58	1.20	.38	.51	.25	2.42	1.11	-----	.51	.38	.38	.44
31	a.70	.70	-----	*.44	-----	2.76	2.05	-----	.48	-----	.38	-----
Total	11.68	19.54	35.93	14.95	12.24	44.54	37.59	39.18	20.71	14.62	14.61	12.62
Mean:												
mgd	0.377	0.630	1.20	0.482	0.408	1.44	1.21	1.35	0.668	0.487	0.471	0.421
cfs	0.583	0.975	1.85	0.746	0.631	2.22	1.88	2.09	1.03	0.754	0.729	0.651
Ac-ft	36	60	110	46.0	38.0	137	115	120	64.0	45.0	45.0	39.0

Calendar year 1959: Max 7.48 Min 0.23 Mean(mgd) 0.788 Mean(cfs) 1.22 Ac-ft 883
 Fiscal year 1959-60: Max 7.48 Min 0.23 Mean(mgd) 0.760 Mean(cfs) 1.18 Ac-ft 855

Peak discharge (base, 20 mgd).--Aug. 29 (6 a.m.) 20.9 mgd (32.3 cfs), 2.28 ft; Sept. 8 (1 a.m.) 25.8 mgd (39.9 cfs), 2.44 ft; Dec. 23 (7 a.m.) 24.8 mgd (38.4 cfs), 2.41 ft; Jan. 19 (1 a.m.) 22.1 mgd (34.2 cfs), 2.32 ft.

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby streams.

As 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 floodflow analyses. 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.

Records collected at partial-record stations are presented in tables of discharge at low-flow stations. Measurements made at miscellaneous sites for both low flow and high flow are given in other tables.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following tables. Most of these measurements 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 stream.

Discharge measurements at low-flow partial-record stations on Island of Guam, Mariana Islands

Station No.	Station name	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge (cfs)
8100	Right Branch Umatac River at Umatac.	Lat 13°17'50" N., long 144°39'50" E., 50 ft upstream from Left Branch and 0.3 mile southeast of Umatac Catholic Church.	0.95	3-30-60	.395
				5-10-60	.296
				6-15-60	.267
8120	Left Fork of Left Branch Umatac River near Umatac.	Lat 13°17'25" N., long 144°39'50" E., 0.4 mile upstream from Right Fork and 1.2 miles southeast of Umatac Catholic Church.	.35	3-30-60	.119
				5-10-60	.107
				6-15-60	.078
8130	Piga Spring near Umatac.	Lat 13°17'55" N., long 144°40'47" E., at Umatac village water diversion at the source of the Right Fork of Left Branch Umatac River, 1.4 miles due east of the Umatac church.	-	2-23-55	.190
				2-23-55	.138
8140	Right Fork of Left Branch Umatac River at Umatac.	Lat 13°17'40" N., long 144°40'20" E., 50 ft upstream from Left Fork and 0.9 mile southeast of Umatac Catholic Church.	.36	3-30-60	.117
				5-10-60	.082
				6-15-60	.057
8170	Toguan River near Umatac.	Lat 13°17'05" N., long 144°39'35" E., at highway bridge, 1.0 mile south of Umatac Catholic Church.	.48	10- 2-51	.309
				3-30-60	.084
				5-10-60	.023
				6-15-60	.029
8200	Geus River above diversion near Merizo.	Lat 13°16'45" N., long 144°40'55" E., just upstream from pipeline diversion to village of Merizo, and 2.0 miles northeast of Merizo School.	.50	5-10-60	.060
				6-15-60	.075
8205	Siligin Spring near Merizo.	Lat 13°16'44" N., long 144°40'55" E., 0.2 mile above Geus River diversion dam and 1.6 miles northeast of Merizo School.	-	4-26-54	.106
				4-26-54	.139
				4-27-54	.141
				4-27-54	.109
				5- 6-54	.108
				5-13-54	.099
6- 2-54	.115				
6-21-54	.109				
8300	Right Fork of Right Branch Inarajan River near Inarajan.	Lat 13°17'00" N., long 144°43'25" E., just above confluence with Left Fork, 1.6 miles northwest of Inarajan Catholic Church and 5.35 miles southwest of Talofofo School.	1.40	4-18-60	.766
				5-27-60	.493
				6-15-60	.569
8310	Left Fork of Right Branch Inarajan River near Inarajan.	Lat 13°17'00" N., long 144°43'25" E., just above confluence with Right Fork, 1.65 miles northwest of Inarajan Catholic Church and 5.3 miles southwest of Talofofo School.	.97	4-18-60	.869
				5-27-60	.655
				6-15-60	.691
8330	Right Fork of Left Branch Inarajan River near Inarajan.	Lat 13°17'25" N., long 144°43'45" E., just above filter plant, 1.65 miles northwest of Inarajan Catholic Church and 4.9 miles southwest of Talofofo School.	.84	4-18-60	.470
				5-27-60	.289
				6-15-60	.467
8340	Left Fork of Left Branch Inarajan River near Inarajan.	Lat 13°17'10" N., long 144°44'10" E., just upstream from confluence with Right Fork, 1.0 mile northwest of Inarajan Catholic Church and 4.8 miles southwest of Talofofo School.	.39	4-18-60	.107
				5-27-60	.076
				6-15-60	.067
8420	Asalonso River near Talofofo.	Lat 13°19'41" N., long 144°45'34" E., 300 ft below highway bridge on Route 4, 1.8 miles south of Talofofo village school.	1.50	10- 2-51	.481
8520	Sarasa River near Talofofo.	Lat 13°20'20" N., long 144°44'05" E., 50 ft upstream from Talofofo River, 1.6 miles southwest of Talofofo School and 4.5 miles northwest of Inarajan church.	1.01	4-25-60	.115
				5-25-60	.130

Discharge measurements at low flow-partial-record stations on Island of Guam,
Mariana Islands--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge (cfs)
8590	Left Branch Ylig River above pumping station near Yona.	Lat 13°24'05" N., long 144°45'05" E., 0.2 mile upstream from pumping station, 0.28 mile upstream from Ylig River, 1.7 miles southwest of Yona Catholic Church and 3.2 miles north of Talofofo Catholic Church.	1.98	6-28-60	0.373
8670	Janum Spring near Yigo.	Lat 13°30'56" N., long 144°54'49" E., in small cave at sea level in limestone cliff on edge of reef, 2.2 miles southeast of Yigo.	-	7-2-53	2.40
				9-21-53	2.24
				6-1-54	3.39
				6-18-54	3.56
				6-30-54	3.56
				10-11-54	4.24
				6-4-55	2.31
				11-22-55	2.57
8850	Taleyfac River near Agat.	Lat 13°21'40" N., long 144°39'00" E., 800 ft upstream from bridge on Agat-Umatac Road, 1.7 miles southwest of Agat School and 5.0 miles northwest of Umatac Catholic Church.	1.77	7-10-59	.087
				4-20-60	.311
				5-20-60	.147
				6-29-60	1.18

Discharge measurements at low-flow partial-record stations on Island of Tutuila, American Samoa

Station No.	Station name	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge*
9000	Vailoa Stream at Tula Village.	Lat 14°17'12" S., long 170°34'36" W., at Tula Village, 100 ft above old reservoir.	0.06	10-29-58	0.010 (.06)
				7-29-59	.006 (.010)
9010	Right Fork Vaisa Stream at Onenoa Village.	Lat 14°17'03" S., long 170°34'55" W., at Onenoa Village, 100 ft above a branch and 10 ft below a 15-foot waterfall.	.03	10-28-58	.015 (.023)
				7-29-59	.022 (.034)
				8-11-59	.022 (.034)
9020	Left Fork Vaisa Stream at Onenoa Village.	Lat 14°17'06" S., long 170°34'56" W., at Onenoa Village, 20 ft below a 30-foot waterfall and 6 ft above an 8-foot waterfall.	.09	10-28-58	.061 (.095)
				7-29-59	.062 (.095)
				8-11-59	.067 (.088)
9030	Afimua Stream at Onenoa Village.	Lat 14°17'08" S., long 170°35'06" W., at Onenoa Village, 10 ft below a branch and 25 ft above large tree on right bank.	.07	10-28-58	.016 (.024)
				7-29-59	.018 (.023)
				8-11-59	.020 (.031)
9040	Laloulu Stream at Aoa Village.	Lat 14°17'34" S., long 170°35'09" W., at Aoa Village 50 ft above reservoir and 100 ft downstream from a small stream.	.03	10-17-58	.012 (.018)
				7-29-59	.006 (.009)
9050	Lepa Stream at Aoa Village.	Lat 14°17'49" S., long 170°35'32" W., at Aoa Village, 100 ft above two waterfalls and 100 ft downstream from lower bridge.	.06	10-17-58	.070 (.109)
				7-29-59	.025 (.039)
				8-11-59	.036 (.055)
9070	Panota Stream at Masausi Village.	Lat 14°17'16" S., long 170°36'23" W., at Masausi Village, 75 ft below 50-foot waterfall, 20 ft above breadfruit tree on right bank.	.05	11-4-58	.043 (.066)
				8-1-59	.025 (.039)
9080	Vaipito Stream at Masausi Village.	Lat 14°17'24" S., long 170°36'33" W., at Masausi Village, 10 ft above trail crossing, immediately above 8-foot waterfall and 40 ft above 40-foot waterfall at large tree on left bank.	.08	11-4-58	.045 (.070)
				8-1-59	.020 (.051)
9090	Tagau Stream at Masefau Village.	Lat 14°17'10" S., long 170°38'32" W., at Masefau Village, 100 ft above reservoir and 50 ft below 75-foot waterfall.	.02	11-4-58	.017 (.026)
				8-1-59	.015 (.023)
9100	Talaola Stream at Masefau Village.	Lat 14°17'04" S., long 170°38'16" W., at Masefau Village.	.39	11-4-58	.225 (.349)
				8-1-59	.299 (.462)

* Discharge figures opposite date are in million gallons a day; figures in parentheses immediately below are in cubic feet per second.

Discharge measurements at low-flow partial-record stations on Island of Tutuila,
American Samoa--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge*
9110	Pago Stream at Afono Village.	Lat 14°17'24" S., long 170°39'04" W., at Afono Village, 25 ft above reservoir.	0.32	8- 1-59	0.140 (.216)
				8- 7-59	.078 (.120)
9130	G'ao'a Stream at Vatia Village.	Lat 14°16'33" S., long 170°40'41" W., at Vatia Village, 15 ft below a branch and 7 ft below a small tree on right bank.	.26	11- 4-58	.212 (.328)
				8- 1-59	.153 (.236)
9140	Leafu Stream at Vatia Village.	Lat 14°16'21" S., long 170°40'45" W., at Vatia Village, 70 ft above reservoir.	.12	11- 4-58	.240 (.370)
				8- 1-59	.098 (.152)
9160	Leua Stream at Fagasa Village.	Lat 14°18'28" S., long 170°45'10" W., at Fagasa Village, 100 ft below old U.S. Marine Corps reservoir.	.14	7-22-59	.189 (.292)
				8- 4-59	.119 (.184)
				8-12-59	.044 (.068)
9170	Leele Stream at Fagasa Village.	Lat 14°18'35" S., long 170°45'10" W., at Fagasa Village, 40 ft above crossing of 2-inch galvanized pipe taking water from spring at road-side. Concrete sump built around spring outlet.	.26	7-22-59	.370 (.572)
				8- 4-59	.427 (.661)
				8-12-59	.162 (.250)
9180	Lesina Stream at Fagasa Village.	Lat 14°18'45" S., long 170°45'35" W., at Fagasa Village under crossing of 3-inch galvanized pipe carrying water from spring to village and 75 ft above last house of village.	.30	7-22-59	.044 (.068)
				8- 4-59	.045 (.070)
				8-12-59	.005 (.008)
9190	Fagafue Stream near Aasu Village.	Lat 14°19'33" S., long 170°45'11" W., near Aasu above three inflows on right bank.	.69	7-27-59	.737 (1.14)
				8-14-59	.737 (1.14)
9200	Aasu Stream at Aasu Village.	Lat 14°19'56" S., long 170°45'56" W., at Aasu Village, 300 ft below 100-foot waterfall in a pool 25 ft long.	.73	7-29-59	1.19 (1.84)
				8-14-59	1.19 (1.84)
9220	Vaisa Stream at Aoloua Tuai Village.	Lat 14°19'06" S., long 170°46'53" W., at Aoloua Tuai Village.	.29	7-27-59	.271 (.419)
				8-14-59	.210 (.325)
9230	Vailolo Stream at Aoloua Tuai Village.	Lat 14°19'15" S., long 170°47'14" W., at Aoloua Tuai Village, 100 ft below branch.	.67	7-27-59	1.05 (1.63)
				8-14-59	.704 (1.09)
9240	Matavai Stream at Fagamalo Village.	Lat 14°19'15" S., long 170°46'18" W., at Fagamalo Village, 25 ft upstream from 90° bend to right in stream, 5 ft above first small waterfall in a series of small waterfalls.	.18	7-27-59	.147 (.228)
				8-14-59	.158 (.245)
9250	Moloata Stream at Moloata Village.	Lat 14°19'44" S., long 170°48'16" W., at Moloata Village, 100 ft below 45° bend to right in stream, 50 ft below point where stream comes back to one channel after being divided by boulders. No. 35 chiseled on rock on right bank.	.47	7-27-59	.840 (1.30)
				8-14-59	.698 (1.08)
9260	Vaitete Stream at Poloa Village.	Lat 14°20'29" S., long 170°49'20" W., at Poloa Village.	.12	7-28-59	.035 (.054)
				8- 5-59	.031 (.048)
9270	Leafu Stream at Amanave Village.	Lat 14°20'50" S., long 170°49'28" W., at Amanave Village, 100 ft above village reservoir between a medium size and a large pool about 3 ft and 5 ft from each.	.04	4-15-59	.052 (.080)
				8- 3-59	.140 (.216)
9280	Afutele Stream at Agugulu Village.	Lat 14°21'13" S., long 170°46'46" W., at Agugulu Village, 30 ft downstream from branch and at mouth of pool.	.15	4-29-59	.153 (.237)
				8- 3-59	.251 (.388)
9290	Utumea Stream at Utumea Village.	Lat 14°21'04" S., long 170°46'30" W., at Utumea Village, 50 ft above village reservoir.	.14	4-29-59	.181 (.280)
				8- 3-59	.224 (.347)

* Discharge figures opposite date are in million gallons a day; figures in parentheses immediately below are in cubic feet per second.

Discharge measurements at low-flow partial-record stations on Island of Tutuila,
American Samoa--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge*
9300	Utuanua Tele Stream at Seetaga Village.	Lat 14°20'43" S., long 170°48'12" W., at Seetaga Village, 15 ft above first waterfall and 35 ft below second waterfall. Village trail at left bank and taro plantation at right bank.	0.12	4-29-59	0.156 (.241)
				8-3-59	.659 (1.02)
9320	Asili Stream near Asili Village.	Lat 14°20'45" S., long 170°47'29" W., near Asili Village, 100 ft below branch.	.38	7-22-59	.982 (1.52)
				8-5-59	1.14 (1.77)
9325	Asili Stream at Asili Village.	Lat 14°21'06" S., long 170°47'26" W., at Asili Village, 30 ft above former gaging station control.	.54	7-22-59	1.36 (2.11)
				8-5-59	1.49 (2.30)
9330	Vaipuga Stream at Amaluia Village.	Lat 14°20'47" S., long 170°47'09" W., at Amaluia Village.	.19	7-23-59	.106 (.164)
				8-5-59	.152 (.235)
9340	Leafu Stream near Leone Village.	Lat 14°20'49" S., long 170°46'40" W., near Leone Village, 30 ft above new reservoir which is 30 ft above 100-foot waterfall.	.20	11-5-58	1.79 (2.77)
				8-4-59	2.04 (3.16)
9350	Fuafua Stream at Malaeloa Village.	Lat 14°21'02" S., long 170°45'51" W., at Malaeloa Village, 35 ft below branch.	.35	7-23-59	.321 (.496)
				8-5-59	.341 (.528)
				9-13-59	.238 (.368)
9355	Sigaloa Spring at Malaeloa Village.	Lat 14°21'23" S., long 170°45'53" W., at Malaeloa Village, 20 ft above reservoir on left bank of valley.	-	7-23-59	.009 (.014)
				8-5-59	.014 (.021)
				8-13-59	.006 (.010)
9360	Leaveave Stream at Mapusaga Fou Village.	Lat 14°20'16" S., long 170°45'08" W., at Mapusaga Fou Village immediately above reservoir.	.05	7-24-59	.240 (.371)
				8-6-59	.156 (.242)
9370	Mapusaga Tuai Stream at Mapusaga Tuai Village.	Lat 14°20'44" S., long 170°44'54" W., at Mapusaga Tuai Village, 40 ft above reservoir.	.08	7-24-59	.089 (.137)
				8-6-59	.079 (.122)
9380	Right Branch Taumata Stream at old Government dairy.	Lat 14°19'30" S., long 170°44'07" W., at old Government dairy, 1000 ft above reservoir and 75-foot waterfall.	.08	7-24-59	.047 (.073)
				8-6-59	.049 (.076)
				8-13-59	.039 (.060)
9390	Left Branch Taumata Stream at old Government dairy.	Lat 14°19'39" S., long 170°43'51" W., at old Government dairy, 75 ft below a small branch.	.24	7-24-59	.083 (.128)
				8-6-59	.108 (.167)
				8-13-59	.074 (.115)
9400	Right Branch Vaitete Stream at Tafuna Village.	Lat 14°20'05" S., long 170°43'39" W., at Tafuna Village, above reservoir and second pool.	.25	10-18-58	.736 (1.14)
				8-4-59	.549 (.850)
				8-13-59	.270 (.418)
9410	Left Branch Vaitete Stream at Tafuna Village.	Lat 14°20'09" S., long 170°43'29" W., at Tafuna Village.	.11	10-18-58	.251 (.388)
				8-4-59	.181 (.280)
				8-13-59	.104 (.161)
9420	Asofitu Stream near Nuuuili Village.	Lat 14°20'05" S., long 170°43'09" W., near Nuuuili 50 ft below 20-foot waterfall.	.10	7-23-59	.092 (.143)
				8-6-59	.107 (.165)
				8-13-59	.093 (.144)
9430	Papa Stream near Nuuuili Village.	Lat 14°19'59" S., long 170°42'53" W., near Nuuuili Village, 20 ft above 2d waterfall above reservoir and 30 ft below 15-foot waterfall.	.16	7-24-59	.334 (.517)
				8-6-59	.366 (.567)
				8-13-59	.301 (.466)

* Discharge figures opposite date are in million gallons a day; figures in parentheses immediately below are in cubic feet per second.

Discharge measurements at low-flow partial-record stations on Island of Tutuila,
American Samoa--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge*
9440	Tausee Stream near Nuuuli Village.	Lat 14°19'51" S., long 170°42'34" W., near Nuuuli Village 200 ft below 100-foot waterfall.	0.61	7-28-59	0.717 (1.11)
				8- 5-59	1.23 (1.90)
				8-12-59	.750 (1.16)
9450	Amaile Stream at Nuuuli Village.	Lat 14°19'54" S., long 170°41'55" W., at Nuuuli Village, 200 ft below 100-foot waterfall.	.14	7-23-59	.136 (.210)
				8- 5-59	.158 (.244)
9460	Avau Stream at Faganeanea Village.	Lat 14°19'37" S., long 170°41'45" W., at Faganeanea Village, above 4th waterfall above Right Branch.	.08	7-23-59	.051 (.079)
				8- 4-59	.077 (.119)
9470	Afu Stream at Faganeanea Village.	Lat 14°19'24" S., long 170°41'34" W., at Faganeanea Village, immediately below 60-foot waterfall.	.21	10-18-58	.300 (.484)
				7-30-59	.056 (.086)
				8-13-59	.054 (.083)
9490	Faga'alu Stream at Faga'alu Village.	Lat 14°18'43" S., long 170°41'58" W., at Faga'alu Village, immediately above Virgin Pool waterfall.	.24	7-25-59	.144 (.223)
				8- 7-59	.160 (.248)
9510	Vaipito Stream at Pago Pago Village.	Lat 14°18'58" S., long 170°42'39" W., at Pago Pago Village, 50 ft above Steffany Reservoir.	.09	7-22-59	.137 (.212)
				8- 4-59	.145 (.224)
				8-12-59	.071 (.110)
9530	Matagimale Stream above reservoir at Aua.	Lat 14°17'21" S., long 170°40'07" W., above village reservoir, midway between upper and lower waterfalls at Aua.	.09	1- 2-59	.077 (.119)
				7-28-59	.066 (.101)
9535	Lalolama Stream at Aua.	Lat 14°17'29" S., long 170°39'43" W., at trail crossing at Aua.	.10	1- 2-59	.069 (.107)
				7-28-59	.068 (.105)
9550	Ogesosopo Stream at Ogesosopo Village.	Lat 14°18'18" S., long 170°40'01" W., at Ogesosopo Village, 30 ft below 75-foot waterfall, 15 ft above 10-foot waterfall, and 200 ft above village catchment.	.05	7-28-59	.042 (.065)
				8- 4-59	.083 (.097)
9555	Vaisina Stream at Laulii Fou Village.	Lat 14°18'37" S., long 170°39'40" W., at Laulii Fou Village, 40 ft above reservoir.	.04	7-28-59	.015 (.023)
				8- 4-59	.018 (.028)
9560	Uluulooa Stream at Laulii Tuai Village.	Lat 14°18'18" S., long 170°39'25" W., at Laulii Tuai Village, 20 ft below 7-foot waterfall.	.05	7-24-59	.021 (.032)
				8- 6-59	.034 (.053)
9565	Maga Stream at Laulii Tuai Village.	Lat 14°18'13" S., long 170°39'22" W., at Laulii Tuai Village, 10 ft below 40-foot waterfall immediately above confluence of Maga and Klaseugogo Streams.	.21	7-24-59	.212 (.328)
				8- 6-59	.370 (.572)
9570	Lese'a Stream at Laulii Tuai Village.	Lat 14°18'15" S., long 170°39'19" W., at Laulii Tuai Village, 15 ft below branch and 60 ft below waterfall.	.17	7-24-59	.107 (.166)
				8- 6-59	.149 (.231)
9580	Middle Fork Visa Stream at Aumi Village.	Lat 14°18'29" S., long 170°38'54" W., at Aumi Village, 15 ft above 3d waterfall.	.05	11- 3-58	.060 (.092)
				7-24-59	.045 (.070)
				8-11-59	.052 (.080)
9585	Left Branch Visa Stream at Aumi Village.	Lat 14°18'32" S., long 170°38'53" W., at Aumi Village, 10 ft above 1st waterfall and 20 ft below 2d waterfall.	.02	11- 3-58	.016 (.024)
				7-24-59	.017 (.027)
				8-11-59	.021 (.035)
9610	Auto Stream at Auto Village.	Lat 14°17'46" S., long 170°38'09" W., at Auto Village, 60 ft above reservoir and 200 ft below a tributary, above a 100-foot waterfall, and 300 ft upstream from trail crossing.	.14	11- 3-58	.177 (.274)
				8- 3-59	.243 (.376)

* Discharge figures opposite date are in million gallons a day; figures in parentheses immediately below are in cubic feet per second.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements at low-flow partial-record stations on Island of Tutuila,
American Samoa--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge*
9620	Lalo'i Stream at Amouli Village.	Lat 14°18'11" S., long 170°35'35" W., at Amouli Village, 10 ft above reservoir.	0.08	10-29-58	0.050 (.077)
				7-29-59	.017 (.027)
				8-11-59	.026 (.040)
9630	Televai Stream at Amouli Village.	Lat 14°17'54" S., long 170°35'11" W., at Amouli Village, 50 ft below a branch.	.10	10-17-58	.040 (.062)
				7-29-59	.017 (.027)
				8-11-59	.026 (.040)
9650	Valalili Stream at Alao Village.	Lat 14°17'50" S., long 170°34'23" W., at Alao Village, 200 ft above new reservoir.	.05	10-28-58	.036 (.056)
				7-29-59	.035 (.054)
				8-11-59	.043 (.067)
9660	Vai fusi Stream at Alao Village.	Lat 14°17'46" S., long 170°34'21" W., at Alao Village, 25 ft above old reservoir.	.02	10-28-58	.010 (.016)
				7-29-59	.010 (.016)
				8-11-59	.009 (.013)

* Discharge figures opposite date are in million gallons a day; figures in parentheses immediately below are in cubic feet per second.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following tables. Those that are measurements of base flow are designated by an asterisk (*).

Discharge measurements made at points other than gaging stations on Guam, Mariana Islands, during 1951, 1952, 1953

Stream	Tributary to	Location	Date	Discharge
Agat River.....	Pacific Ocean..	Above falls, about 2 miles east of Agat.	1-12-52 2-13-52 3-26-52	0.43 .181 .280
Do.....	...do.....	At altitude 150 ft, at Agat.	5-15-53 6-12-53	.341 .263
Springs.....	Unnamed stream.	1 mile south of Agat, above proposed FHA housing project.	9-24-52	.153
Do.....	...do.....	1.25 miles south of Agat, above proposed FHA housing project.	9-24-52	.747
Umatac River....	Pacific Ocean..	50 ft above highway bridge, at Umatac.	10- 2-51	2.21
Geus River.....	...do.....	At headwaters, above upper Merizo Dam, near Merizo.	10- 2-51 10-27-51	.372 .108
Inarajan River...	...do.....	500 ft above highway bridge, at Inarajan.	10- 2-51	3.88
Paulliluc River...	...do.....	200 ft above highway bridge, near Inarajan.	10- 2-51	1.00
Maemong River....	Tolaeyuus River	At cavern outlet, 100 ft above site of gaging station on Tolaeyuus River, near Agat.	5-27-51	2.89
Tolaeyuus River..	Maagas River...	At entrance to last cavern, $\frac{1}{2}$ mile below site of gaging station on Tolaeyuus River, near Agat.	5-27-51	2.51
Maagas River.....	Talofofu River.	At final cavern outlet at Lost River pumping station No. 1, near Agat.	5-27-51 6-10-51	2.41 .464
Sigua River.....	Pago River.....	500 ft above confluence with Pago River.	12- 3-52	4.70
Janum Springs....	Pacific Ocean..	At outlet of cave, near Yiga.	3-27-52 4-11-52 5-12-52 6-10-52 7- 9-52 8- 6-52 9- 4-52 4-14-53 5-14-53 6-12-53	1.93 1.80 2.27 2.07 2.04 2.34 1.89 1.93 2.05 2.12

Discharge measurements made at points other than gaging stations on Caroline Islands, 1955 and 1957

Stream	Tributary to	Location				Date	Discharge (mgd)
		Peninsula	Map No./	UTM coordinates	Elevation (meters)		
Tol Island							
Unnamed stream...	Pacific Ocean..	Pata.....	1	LP445151	45	1-29-55 6-17-57	0.130 *b Trickle
Do.....	...do.....	...do....	1	LP440153	25	1-29-55 6-17-57	.216 *.001
Do.....	...do.....	...do....	1	LP432153	20	1-29-55 6-17-57	.161 *.003
Do.....	...do.....	...do....	1	LP430153	15	1-29-55 6-17-57	Trickle * Trickle
Do.....	...do.....	...do....	1	LP429155	20	1-29-55 6-17-57	Trickle *.001
Do.....	...do.....	...do....	1	LP441163	6	1-29-55 6-17-57	.130 Dry
Do.....	...do.....	...do....	1	LP445159	15	1-29-55 6-17-57	.130 * Trickle
Do.....	...do.....	...do....	1	LP446158	12	1-29-55 6-17-57	.161 Dry
Do.....	...do.....	Polle....	2	LP457126	2	1-31-55 6-18-57	*.161 .048
Do.....	...do.....	...do....	2	LP455125	2	1-31-55 6-18-57	*.003 .026
Do.....	...do.....	...do....	2	LP453121	10	1-31-55 6-18-57	*.181 b.023
Do.....	...do.....	...do....	2	LP452120	25	1-31-55 6-18-57	*.161 b.032

* Base flow.

a Army Map Service, Far East, series W856S, 1959.

b Upstream, may not be equivalent to measurement made in 1955.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at points other than gaging stations on Caroline Islands,
1955 and 1957--Continued

Stream	Tributary to	Location				Date	Discharge (mgd)
		Peninsula	Map No. a/	UTM coordinates	Elevation (meters)		
Tol Island--Continued							
Unnamed stream...	Pacific Ocean..	Polle....	2	LP448121	2	1-31-55 6-18-57	* Trickle 0.073
Do.....	..do.....	..do....	2	LP440119	2	1-31-55 6-19-57	*.014 .033
Do.....	..do.....	..do....	2	LP435118	5	1-31-55 6-19-57	*.003 .043
Do.....	..do.....	..do....	2	LP430119	6	1-31-55 6-19-57	*.001 .040
Do.....	..do.....	..do....	2	LP424116	2	1-31-55 6-19-57	.006 .017
Do.....	..do.....	..do....	2	LP456114	6	1-31-55 6-20-57	*.323 .176
Do.....	..do.....	..do....	2	LP459119	6	1-31-55 6-20-57	* Trickle Trickle
Do.....	..do.....	..do....	2	LP458116	3	6-20-57	.004
Do.....	..do.....	..do....	2	LP454111	2	6-20-57	.017
Do.....	..do.....	Tol.....	1	LP476147	8	2- 1-55 6-19-57	*.001 c.014
Do.....	..do.....	..do....	2	LP481140	1	1-27-55 6-19-57	*.019 d1.01
Do.....	..do.....	..do....	2	LP494143	10	1-27-55 6-19-57	*.065 c.001
Do.....	..do.....	..do....	2	LP495144	8	1-27-55 6-19-57	*.096 d.971
Do.....	..do.....	..do....	2	LP497140	5	6-19-57	.036
Do.....	..do.....	..do....	2	LP493117	1.5	1-28-55 6-20-57	.469 .023
Do.....	..do.....	..do....	2	LP494116	6	1-28-55 6-20-57	.101 .510
Do.....	..do.....	..do....	2	LP494114	8	6-20-57	.432
Do.....	..do.....	..do....	2	LP480125	3	1-28-55 6-20-57	1.80 .441
Do.....	..do.....	..do....	2	LP473120	1.5	1-28-55 6-21-57	2.22 .927
Do.....	..do.....	..do....	2	LP473118	15	6-21-57	.042
Do.....	..do.....	..do....	2	LP472115	1.5	1-28-55 6-21-57	5.50 .765
Do.....	..do.....	..do....	2	LP472113	8	6-21-57	.112
Do.....	..do.....	..do....	2	LP471111	1.5	1-28-55 6-21-57	.520 .127
Do.....	..do.....	..do....	2	LP467106	6	1-28-55 6-21-57	1.66 .017
Do.....	..do.....	..do....	2	LP465098	2	1-28-55 6-21-57	.648 .191
Moen Island							
Village intake...	Pacific Ocean..		6	LP741203	8	6- 5-57	0.038
Unnamed spring...	..do.....		6	LP730205	20	6- 5-57	c.007
Unnamed stream...	..do.....		6	LP728211	25	2- 8-55 6- 5-57	*.004 .065
Do.....	..do.....		6	LP727213	14	2- 8-55 6- 5-57	*.003 .158
Do.....	..do.....		6	LP728224	14	6- 5-57	c.006
Do.....	..do.....		6	LP729226	8	2- 9-55 6- 5-57	*.003 .121
Do.....	..do.....		6	LP729227	10	2- 9-55 6- 5-57	*.004 .193
Do.....	..do.....		6	LP730228	11	2- 9-55 6- 5-57	*.006 .534
Do.....	..do.....		5	LP769240	3	6- 6-57	*.026

* Base flow.

a Army Map Service, Far East, series W856S, 1959.

c Estimated.

d Downstream, may not be equivalent to measurement made in 1955.

Discharge measurements made at points other than gaging stations on Caroline Islands,
1955 and 1957--Continued

Stream	Tributary to	Location				Date	Discharge (mgd)
		Peninsula	Map No.a/	UTM coordinates	Elevation (meters)		
Moer Island--Continued							
Unnamed stream...	Pacific Ocean..		5	LP765240	3	6- 6-57	*0.163
Do.....	...do.....		5	LP761240	8	6- 6-57	*.069
Unnamed seep.....	...do.....		5	LP756245	8	6- 6-57	*.022
Do.....	...do.....		5	LP748241	8	6- 6-57	*c.014
Do.....	...do.....		5	LP743237	2	6- 6-57	*c.022
Unnamed stream...	...do.....		5	LP740237	2	2- 9-55 6- 6-57	*.058 *d.138
Unnamed seep.....	...do.....		5	LP739237	2	6- 6-57	*.217
Unnamed stream...	...do.....		5	LP739238	2	6- 6-57	*.924
Do.....	...do.....		5	LP739238	2	6-14-57	*.115
Do.....	...do.....		6	LP739230	130	2- 9-55 6-14-57	*.043 *b.017
Dublon Island							
Unnamed stream...	Pacific Ocean..		6	LP771147	15	6- 8-57	*0.001
Do.....	...do.....		6	LP769145	25	2-11-55 6- 8-57	*.001 *.001
Do.....	...do.....		7	LP764144	20	6- 8-57	Dry
Do.....	...do.....		7	LP762143	25	6- 8-57	*.043
Do.....	...do.....		7	LP757143	30	6- 8-57	*.004
Do.....	...do.....		6	LP768155	2	2-11-55 6-10-57	*.043 *.137
Do.....	...do.....		6	LP767156	5	2-11-55 6-10-57	*.014 *.050
Do.....	...do.....		6	LP766157	2	6-10-57	*.009
Do.....	...do.....		6	LP761158	20	2-11-55 6-10-57	*.146 *b.043
Do.....	...do.....		6	LP767160	2	2-11-55 6-10-57	*.001 *.042
Do.....	...do.....		6	LP767163	2	6-10-57	*c.004
Do.....	...do.....		6	LP765168	8	2-14-55 6-11-57	*.006 *.012
Do.....	...do.....		6	LP751161	10	2-14-55 6-11-57	*.006 *.017
Do.....	...do.....		6	LP751159	14	2-14-55 6-11-57	*.004 *.029
Do.....	...do.....		6	LP753155	20	2-14-55 6-11-57	*.009 b.226
Pefan Island							
Unnamed stream...	Pacific Ocean..		7	LP754119	10	2-18-55 6-12-57	*0.003 *.032
Do.....	...do.....		7	LP733120	15	2-18-55 6-12-57	*.003 *.040
Do.....	...do.....		7	LP732122	8	2-18-55 6-12-57	*.003 *.099
Do.....	...do.....		7	LP733123	6	2-18-55 6-12-57	*.007 *.024
Do.....	...do.....		7	LP704135	1.5	2-17-55 6-12-57	*.003 *.030
Do.....	...do.....		7	LP708129	6	2-17-55 6-12-57	*.006 bc.003
Do.....	...do.....		7	LP737132	12	2-17-55 6-12-57	*.003 cd.007
Do.....	...do.....		7	LP733124	8	6-12-57	.001
Do.....	...do.....		7	LP718124	8	2-17-55 6-13-57	*.014 *.004
Do.....	...do.....		7	LP719121	6	2-18-55 6-13-57	.017 *c.004

* Base flow.

a Army Map Service, Far East, series W856S, 1959.

b Upstream, may not be equivalent to measurement made in 1955.

c Estimated.

d Downstream, may not be equivalent to measurement made in 1955.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at points other than gaging stations on Carolina Islands,
1955 and 1957--Continued

Stream	Tributary to	Location				Date	Discharge (mgd)
		Peninsula	Map No. & /	UTM coordinates	Elevation (meters)		
Fefan Island--Continued							
Unnamed stream...	Pacific Ocean..		7	LP720119	2	2-18-55 6-13-57	*0.022 *.092
Do.....	...do.....		7	LP721117	1.5	6-13-57	*.078
Do.....	...do.....		7	LP724100	5	2-18-55 6-13-57	*.004 *.009
Uman Island							
Unnamed stream...	Pacific Ocean..		7	LP775066	12	6-15-57	*0.022
Do.....	...do.....		7	LP772066	60	6-15-57	Dry
Do.....	...do.....		7	LP770061	9	3-10-55 6-15-57	*.006 *.046
Palabagueta Island							
Unnamed stream...	Pacific Ocean..		4	LP530132	6	2-16-55 6-21-57	*0.001 *.017
Do.....	...do.....		4	LP530131	2	6-21-57	*.009
Do.....	...do.....		4	LP531129	3	2-16-55 6-21-57	*.009 *.029
Do.....	...do.....		4	LP532126	1.5	6-21-57	*c.007
Do.....	...do.....		4	LP534125	12	6-21-57	*.003
Udot Island							
Unnamed stream...	Pacific Ocean..		3	LP584171	3	2-15-55 6-22-57	*0.004 * Trickle
Do.....	...do.....		3	LP585170	3	2-15-55 6-22-57	*.001 *c.003
Do.....	...do.....		3	LP580171	8	2-15-55 6-22-57	*.017 *.009
Do.....	...do.....		3	LP580171	15	2-15-55 6-22-57	*.001 *.003
Do.....	...do.....		3	LP579171	5	2-15-55 6-22-57	*.004 *.007
Do.....	...do.....		3	LP576163	1.5	6-22-57	*.006
Do.....	...do.....		3	LP576161	27	6-22-57	*.022
Do.....	...do.....		3	LP577158	11	2-15-55 6-22-57	*.008 *.009
Do.....	...do.....		3	LP583159	3	2- 3-55 6-22-57	* Trickle *.137
Do.....	...do.....		3	LP589157	27	2-15-55 6-22-57	*.009 *.030
Do.....	...do.....		3	LP594157	6	2-15-55 6-23-57	*.029 *.027

* Base flow.
a Army Map Service, Far East, series W856S, 1959.
c Estimated.

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