Floods of December 1955-January 1956 in the Far Western States

Part 2. Streamflow Data

By WALTER HOFMANN *and* S. E. RANTZ

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FLOODS OF DECEMBER 1955-JANUARY 1956 IN THE FAR WESTERN STATES

PART 2. STREAMFLOW DATA

By Walter Hofman and S. E. Rantz

INTRODUCTION

Water-Supply Paper 1650-B presents basic hydrologic information on the floods of December 1955-January 1956 and complements the descriptive material in 1650-A. Basic records of stage and discharge in the area covered by this report are collected by the U.S. Geological Survey as part of a continuous program in cooperation with the States of California, Idaho, Oregon, Nevada and Washington; county and city agencies within these states; and agencies of the Federal Government. The records of stage and discharge were collected and computed under the direction of the following district engineers: California, R. C. Briggs, succeeded by R. S. Lord; Idaho, T. R. Newell; Oregon, K. N. Phillips; Nevada, M. T. Wilson; Washington, F. M. Veatch.

EXPLANATION OF DATA

The report data consist of records of stage and discharge for gaging stations, and peak-stage and peak-discharge information for numerous miscellaneous sites and partial-record stations in or on the fringe of the area of intensive flooding. The records are presented in more detail than those in the regular annual reports and are more useful for the many hydraulic and hydrologic studies relative to flood phenomena.

The basic data collected at stream-gaging stations consist of records of stage, measurements of discharge, and general information useful in determining the daily flow. The records of stage are obtained either from the continuous trace of a water-stage recorder or from periodic direct readings on a nonrecording gage. Discharge measurements are generally made by use of a current meter; however, indirect methods are used at times.

In general, the information presented for each gaging station is: a description of the station, a tabulation of daily mean discharges for December 1955 and January 1956, a tabulation of stages and discharges at selected intervals during each day of the flood rise and recession for the two or three highest floodpeaks during the 2-month period. For the miscellaneous sites and partial-record stations, only the station description is presented.

The station description gives information relative to: the location of the gage; size of the drainage area above the gage; nature of the gage-height record obtained during the period covered by this report; datum of gage; definition of the stage-discharge relation; maximum stage and discharge during the December 1955 and January 1956 flood; previous maximum during the period of record; available maximum data for floods outside the period of record; the effect of regulation and diversion; and other pertinent general information.

Daily mean discharges during the months of December 1955 and January 1956 follow the station description for each gaging station. In general, this 2-month period shows antecedent conditions, flood flows, and enough of the flood-recession records to allow adequate study of the flood hydrology. Also shown in these tables are the monthly mean discharge in cubic feet per second and the volume of monthly runoff in acre-feet and in inches. The monthly runoff is not given for stations where regulation or diversion affect the runoff significantly or where the drainage area has not been determined.

The tables of stage and discharge at selected times, where such detailed definition is warranted, follow the daily mean discharge tables. Enough detail is presented so that hydrographs of the two or three highest flood peaks may be accurately constructed. Because these flood peaks did not occur on the same days throughout the entire area, the periods of detailed record do not necessarily coincide for all stations.

Most of the stage data were obtained from records of continuous water-stage recorders. For stations with nonrecording gages or where the water-stage recorder was not functioning properly, the indicated stages were obtained from graphs constructed from gage readings, floodmarks, and by comparison with nearby stations. Details of the methods used at each station are given in the "Gage-height record" paragraph of the station description.

The sites for which stage and (or) discharge data are presented in this report are numbered in downstream order from the headwater of the stream to the mouth; sites on tributaries are inserted in the order in which the tributaries enter the main stream. This is the same order in which records are presented in the Geological Survey annual series of water-supply papers. However, in the annual series publication the sites in this report are distributed among the following five separate parts: Part 10, the Great Basin; Part 11, Pacific slope basins in California; Part 12, Pacific slope basins in Washington and the upper Columbia River basin; Part 13, the Snake River basin; Part 14, Pacific slope basins in Oregon and the lower Columbia River basin. To maintain a continuous numerical sequence in this report, the site numbers have been arranged in ascending part order, beginning with Part 10.

The area covered by this report has been divided into eight subareas or hydrologic regions plus an area of minor flooding.

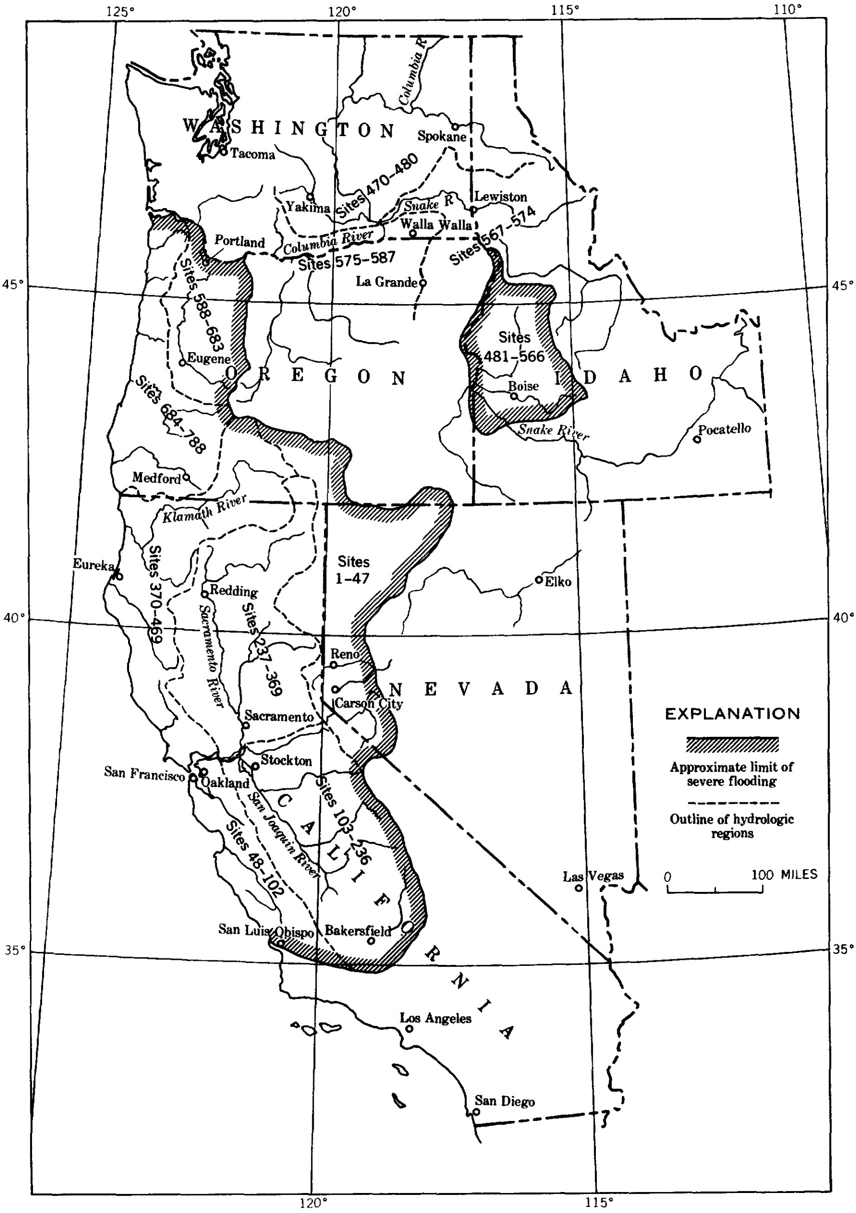

125°
120°
115°
110°
45°
40°
35°
WASHINGTON
OREGON
IDAHO
NEVADA
CALIFORNIA
Tacoma
Spokane
Yakima
Lewiston
Walla Walla
Portland
La Grande
Eugene
Boise
Pocatello
Medford
Eureka
Redding
Elko
Reno
Carson City
Sacramento
Stockton
San Francisco
Oakland
Las Vegas
San Luis Obispo
Bakersfield
Los Angeles
San Diego
Columbia R
Columbia River
Snake R
Snake River
Klamath River
Sacramento River
San Joaquin River
Sites 470-480
Sites 575-587
Sites 567-574
Sites 481-566
Sites 588-683
Sites 684-788
Sites 370-469
Sites 1-47
Sites 237-369
Sites 103-236
Sites 48-102
EXPLANATION
Approximate limit of severe flooding
Outline of hydrologic regions
0 100 MILES

Figure 1.--Map showing areas of severe flooding during December 1955-January 1956.

STREAMFLOW DATA

THE GREAT BASIN

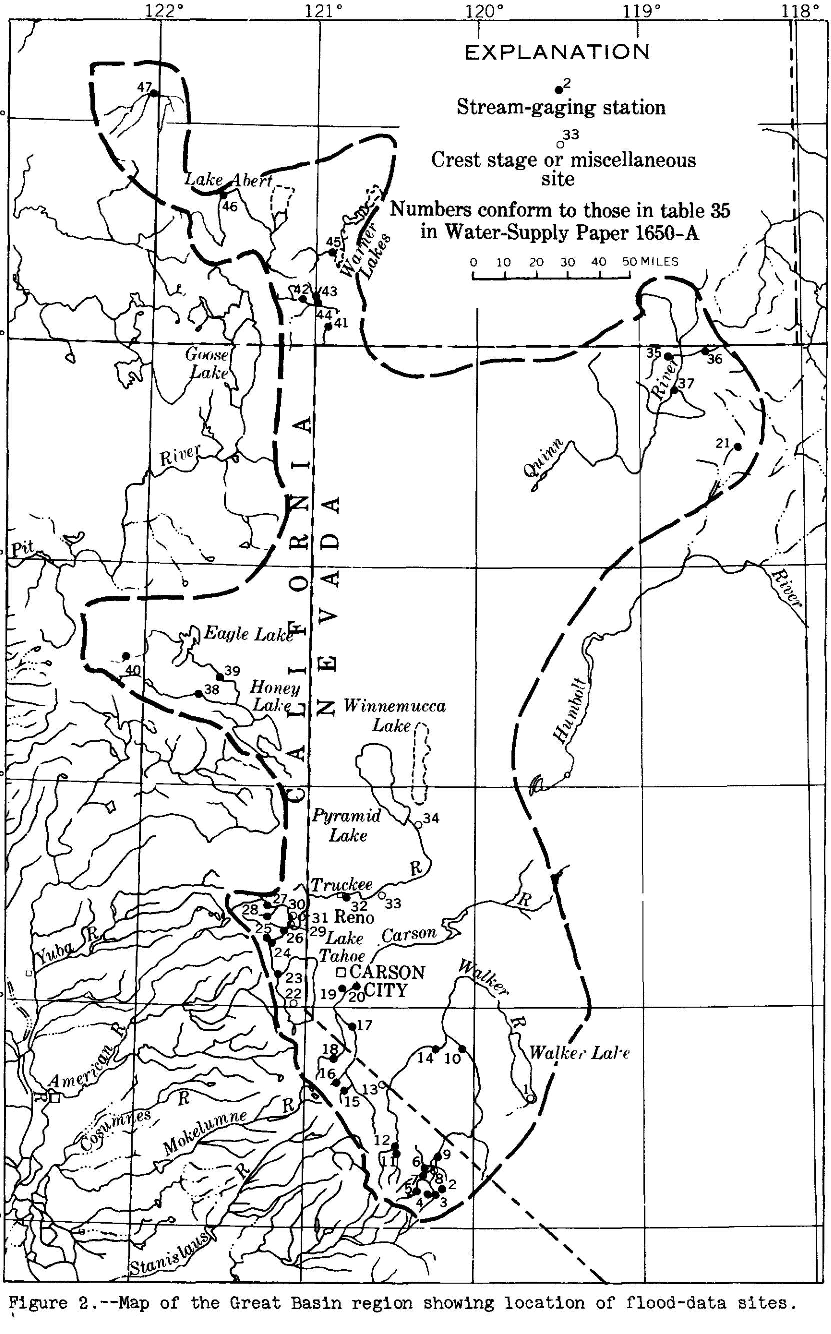

122°
121°
120°
119°
118°
43°
42°
41°
40°
39°
38°
EXPLANATION
Stream-gaging station
Crest stage or miscellaneous site
Numbers conform to those in table 35 in Water-Supply Paper 1650-A
0 10 20 30 40 50 MILES
Lake Abert
Warner Lakes
Goose Lake
River
Pit
CALIFORNIA
NEVADA
Eagle Lake
Honey Lake
Winnemucca Lake
Pyramid Lake
Truckee R
Reno
Lake Tahoe
CARSON CITY
Carson R
Walker R
Walker Lake
Yuba R
American R
Cosumnes R
Mokelumne R
Stanislaus R
Quinn River
Humbolt River

Figure 2.--Map of the Great Basin region showing location of flood-data sites.

WALKER LAKE BASIN

1. Walker Lake near Hawthorne, Nev.

Location.--Lat 38°35', long 118°42', in NE¼NE¼ sec.2, T.8 N., R.29 E., 3 miles northwest of Hawthorne.

Gage-height record.--No readings by spirit leveling from bench mark during flood period. Elevation of bench mark is 4,053.41 ft above mean sea level, adjustment of 1912.

Maxima.--December 1955 to January 1956: Elevation, 3,990 ft (estimated by Geological Survey).

1928 to November 1955: Elevation observed, 4,051.8 ft Mar. 13, 1928 (Indian Service).

An elevation of 4,078.0 ft, adjustment of 1912, was observed Sept. 27, 1908, by Geological Survey.

Remarks.--Records furnished by U.S. Navy Department. Elevation, Sept. 1, 1955, 3,991.32 ft; Apr. 16, 1956, 3,990.45 ft.

2. Virginia Creek near Bridgeport, Calif.

Location.--Lat 38°11', long 119°12', in W½ sec.22, T.4 N., R.25 E., on right bank 3 miles upstream from mouth, 1¼ miles downstream from Clearwater Creek, and 4½ miles southeast of Bridgeport.

Drainage area.--64 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,700 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 140 cfs and by slope-area measurement of 1,300 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 1,300 cfs 3:45 a.m. Dec. 23 (gage height, 8.40 ft).

1953 to November 1955: Discharge, 74 cfs Apr. 14, 1954 (gage height, 3.13 ft).

Remarks.--Flow partly regulated by Virginia Lakes and other lakes near headwaters.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7.4	22	11.....	10	16	21.....	9.2	14
2.....	7.4	21	12.....	9.9	16	22.....	174	15
3.....	6.6	20	13.....	9.2	16	23.....	536	16
4.....	7.7	18	14.....	9.6	16	24.....	129	13
5.....	8.9	18	15.....	8.9	22	25.....	97	14
6.....	14	18	16.....	8.5	26	26.....	67	14
7.....	10	18	17.....	8.5	20	27.....	43	14
8.....	10	16	18.....	8.5	17	28.....	28	14
9.....	13	17	19.....	9.2	16	29.....	26	14
10....	11	16	20.....	10	16	30.....	24	14
						31.....	24	14
Monthly mean discharge, in cubic feet per second.......................							43.4	16.8
Runoff, in inches..							0.78	0.30
Runoff, in acre-feet...							2,670	1,030

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Virginia Creek near Bridgeport, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Dec. 25--Con.		
12 p.m.......	2.20	11	6 a.m........	7.20	941	6 p.m........	3.70	90
Dec. 22			11...........	4.91	323	12 p.m.......	3.60	78
2 a.m........	2.26	14	8 p.m........	4.37	216	Dec. 26		
4............	2.56	30	12 p.m.......	3.93	136	12 m.........	3.57	68
5............	3.25	97	Dec. 24			12 p.m.......	3.43	53
8............	3.98	201	4 a.m........	3.83	114	Dec. 27		
12 m.........	4.36	252	12 m.........	4.15	162	9 a.m........	3.36	41
8 p.m........	3.84	160	2 p.m........	3.92	126	12 m.........	3.44	49
11...........	4.42	264	8............	3.82	113	12 p.m.......	3.22	30
12 p.m.......	5.73	542	12 p.m.......	3.92	126			
Dec. 23			Dec. 25					
2 a.m........	8.29	1,270	7 a.m........	3.89	115			
3:45 a.m.....	8.40	1,300	10 a.m.......	3.62	80			

3. Green Creek near Bridgeport, Calif.

Location.--Lat 38°11', long 119°14', in NE¼SE¼ sec.29, T.4 N., R.25 E., on right bank 100 ft downstream from county bridge, and 5½ miles south of Bridgeport.

Drainage area.--19.4 sq mi.

Gage-height record. Water-stage recorder graph. Altitude of gage is 6,850 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 220 cfs and extended above by logarithmic plotting and slope-area determination at peak stage. Backwater from debris at times. Stage-discharge relation affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 307 cfs 9:30 a.m. Dec. 23 (gage height, 3.39 ft, backwater from debris).
1953 to November 1955: Discharge, 228 cfs June 10, 1955 (gage height, 2.88 ft).

Remarks.--Flow regulated by West, Green, East, Summit, and other lakes.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5.7	25	11.....	8.2	20	21.....	11	21
2.....	6.5	23	12.....	7.4	20	22.....	47	21
3.....	6.5	26	13.....	7.4	20	23.....	235	20
4.....	6.5	24	14.....	7.4	19	24.....	77	20
5.....	6.8	22	15.....	7.4	21	25.....	58	20
6.....	9.4	23	16.....	6.8	34	26.....	56	20
7.....	11	21	17.....	7.4	33	27.....	46	20
8.....	10	21	18.....	7.1	27	28.....	40	20
9.....	8.5	20	19.....	6.8	23	29.....	35	19
10.....	8.5	20	20.....	8.0	22	30.....	35	18
						31.....	32	18
Monthly mean discharge, in cubic feet per second......................							26.6	22.0
Runoff, in inches..							1.58	1.31
Runoff, in acre-feet...							1,640	1,350

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	1.64	6.5	12 m.........	2.10	36	6 p.m........	2.91	216
Dec. 20			4 p.m........	2.19	48	12 p.m.......	2.67	135
12 m.........	1.69	8.2	8............	2.40	82			
12 p.m.......	1.71	9.0	12 p.m.......	2.57	122	Dec. 24		
			Dec. 23			2 a.m........	2.60	116
Dec. 21			2 a.m........	2.74	155	6............	2.47	86
12 m.........	1.75	11	4............	2.95	232	12 m.........	2.36	66
12 p.m.......	1.82	14	6............	3.04	274	6 p.m........	2.33	61
			9:30.........	3.39	307	12 p.m.......	2.28	54
Dec. 22			1 p.m........	3.23	307			
6 a.m........	1.96	23	3 p.m........	3.05	279			

4. Summers Creek near Bridgeport, Calif.

Location.--Lat 38°09', long 119°15', in NW¼NE¼ sec.6, T.3 N., R.25 E., 7½ miles southwest of Bridgeport.

Drainage area.--12.6 sq mi.

Gage-height record. Water-stage recorder graph except Dec. 25 to Jan. 1. Altitude of gage is 7,100 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 50 cfs and by slope-area measurement at 690 cfs. Discharge Dec. 25 to Jan. 1 estimated on basis of weather records and records for nearby streams.

Maxima.--December 1955 to January 1956: Discharge, 690 cfs 2 a.m. Dec. 23 (gage height, 5.95 ft, from recorder graph, 6.2 ft, from floodmarks).
1953 to November 1955: Discharge, 42 cfs Mar. 9, 1954 (gage height, 2.83 ft).

Remarks.--Flow partly regulated by Tamarack Lake and several smaller lakes.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2.1	8.6	11.....	2.7	4.9	21.....	5.4	6.4
2.....	2.2	8.2	12.....	2.6	4.9	22.....	93	6.4
3.....	2.0	7.8	13.....	2.6	4.9	23.....	175	6.4
4.....	2.0	6.4	14.....	2.5	4.9	24.....	25	6.1
5.....	2.2	6.7	15.....	2.3	9.8	25.....	14	6.1
6.....	4.8	6.4	16.....	2.2	14	26.....	13	5.8
7.....	2.7	5.8	17.....	2.2	9.4	27.....	12	5.5
8.....	3.9	5.5	18.....	2.1	7.4	28.....	10	5.2
9.....	4.6	5.2	19.....	3.4	6.7	29.....	9.0	5.5
10.....	3.0	4.9	20.....	4.2	6.4	30.....	9.0	5.2
						31.....	9.0	4.9
Monthly mean discharge, in cubic feet per second							13.9	6.53
Runoff, in inches							1.27	0.60
Runoff, in acre-feet							854	401

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis- charge	Hour	Gage height	Dis- charge	Hour	Gage height	Dis- charge
Dec. 20			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	1.79	3.7	4:30 a.m.....	3.50	79	12 p.m.......	2.70	38
			7:30.........	3.21	59			
Dec. 21			10...........	3.44	74	Dec. 24		
8 a.m........	1.75	3.0	6 p.m........	2.87	43	12 m.........	2.57	23
11...........	1.83	4.4	12 p.m.......	5.12	351	12 p.m.......	2.50	17
3 p.m........	1.81	4.1						
8............	1.87	5.2	Dec. 23					
12 p.m.......	2.34	20	2 a.m........	5.95	690			
			4............	4.80	362			
Dec. 22			6............	3.87	190			
2 a.m........	2.74	38	11 a.m.......	3.14	92			

5. Robinson Creek at Twin Lakes outlet, near Bridgeport, Calif.

Location.--Lat 38°10', long 119°19', in SE¼SE¼ sec.28, T.4 N., R.24 E., on left bank a quarter of a mile below Twin Lakes and 8 miles southwest of Bridgeport.

Drainage area.--34.7 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 7,050 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 67 cfs 1 a.m. Jan. 27 (gage height, 2.37 ft).
1953 to November 1955: Discharge, 225 cfs May 21, 1954 (gage height, 3.56 ft).

Remarks.--Flow regulated by Twin Lakes.

Mean discharge, in cubic feet per second, 1955-56, of Robinson Creek at Twin Lakes outlet, near Bridgeport, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	0.2	6.0	11.....	0.2	35	21.....	0.2	49
2.....		11	12.....		35	22.....	2.6	45
3.....		20	13.....		34	23.....	3.7	45
4.....		27	14.....		34	24.....	7.5	43
5.....		32	15.....		36	25.....	3.9	54
6.....		37	16.....		45	26.....	2.6	57
7.....		37	17.....		49	27.....	2.3	61
8.....		37	18.....		49	28.....	1.5	50
9.....		38	19.....		32	29.....	1.0	45
10.....		34	20.....		37	30.....	1.0	40
						31.....	3.0	37
Monthly mean discharge, in cubic feet per second......................							1.07	38.4
Runoff, in acre-feet..							66	2,360

6. Swager Creek near Bridgeport, Calif.

Location.--Lat 38°17', long 119°18', in SE¼NW¼ sec.23, T.5 N., R.24 E., on right bank three-quarters of a mile downstream from Yaney Canyon and 4 miles northwest of Bridgeport.

Drainage area.--53 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 1-19 when clock was stopped. Altitude of gage is 6,700 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 80 cfs and by slope-area measurement of 585 cfs. Discharge Dec. 1-19 estimated on basis of two discharge measurements, weather records, and records for nearby streams.

Maxima.--December 1955 to January 1956: Discharge, 585 cfs 4:30 a.m. Dec. 23 (gage height, 6.24 ft).

1911-15 (fragmentary), 1953 to November 1955: Discharge observed, 151 cfs June 16, 1911 (gage height, 4.1 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7	11	11.....	7	12	21.....	7.8	16
2.....		9.1	12.....		12	22.....	45	17
3.....		11	13.....		12	23.....	228	17
4.....		10	14.....		12	24.....	29	14
5.....		12	15.....		20	25.....	20	15
6.....		11	16.....		26	26.....	19	13
7.....		9.4	17.....		18	27.....	17	12
8.....		9.7	18.....		17	28.....	12	12
9.....		10	19.....		16	29.....	12	12
10.....		11	20.....	8.1	18	30.....	12	12
						31.....	12	12
Monthly mean discharge, in cubic feet per second......................							17.9	13.5
Runoff, in inches..							0.39	0.29
Runoff, in acre-feet..							1,100	831

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23			Dec. 23--Con.		
12 p.m.......	1.94	9.6	2 a.m........	4.41	228	12 p.m.......	3.05	70
			4............	5.85	490			
Dec. 22			4:30.........	6.24	585	Dec. 24		
2 a.m........	1.99	11	7............	5.44	408	5 a.m........	2.52	31
9............	2.38	32	11...........	3.98	170	8............	2.42	25
12 m.........	2.66	56	1 p.m........	3.85	154	8 p.m........	2.37	22
9 p.m........	2.67	57	5............	3.70	136	12 p.m.......	2.36	22
10...........	2.77	69	8............	3.77	144			
12 p.m.......	3.42	130	10 p.m.......	3.35	97			

7. Buckeye Creek near Bridgeport, Calif.

Location.--Lat 38°14', long 119°19', in NE¼NE¼ sec.4, T.4 N., R.24 E., on right bank at Buckeye Hot Springs, 0.6 mile downstream from Eagle Creek, and 5½ miles southwest of Bridgeport.

Drainage area.--45 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,900 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 350 cfs and by slope-area measurement at 700 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 700 cfs 7:30 a.m. Dec. 23 (gage height, 4.00 ft).

1953 to November 1955: Discharge, 438 cfs June 7, 1955 (gage height, 3.43 ft).

1910 to September 1914 (fragmentary): Flood of June 21, 1911, reached an observed stage of 4.8 ft (discharge not determined), site and datum then in use.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	14	50	11	15	34	21	21	35
2	14	49	12	15	33	22	159	37
3	14	43	13	15	32	23	419	34
4	14	39	14	15	32	24	126	34
5	17	37	15	14	49	25	95	32
6	25	37	16	14	62	26	81	34
7	18	36	17	14	46	27	63	36
8	17	34	18	14	39	28	56	36
9	18	35	19	18	37	29	54	34
10	16	34	20	19	37	30	52	32
						31	50	32
Monthly mean discharge, in cubic feet per second							48.3	37.8
Runoff, in inches							1.24	0.97
Runoff, in acre-feet							2,970	2,320

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23			Dec. 24		
12 p.m.	1.62	18	4 a.m.	3.86	625	3 a.m.	2.60	143
			6	3.90	645	6	2.52	128
Dec. 21			7	3.85	620	12 m.	2.56	135
8 a.m.	1.60	17	7:30	4.00	700	3 p.m.	2.54	132
8 p.m.	1.68	22	8	3.95	672	6	2.39	105
12 p.m.	1.92	40	11	3.65	520	12 p.m.	2.42	110
			1 p.m.	3.32	368			
Dec. 22			2	3.34	376	Dec. 25		
5 a.m.	2.31	85	8	2.94	229	4 a.m.	2.39	105
10	2.62	141	11	2.58	139	8	2.32	94
3 p.m.	2.82	188	12 p.m.	2.62	147	2 p.m.	2.32	94
9	2.98	231				12 p.m.	2.26	85
12 p.m.	3.32	342						

8. Bridgeport Reservoir near Bridgeport, Calif.

Location.--Lat 38°19'30", long 119°12'50", in SE¼ sec.34, T.6 N., R.25 E., at Bridgeport Dam on East Walker River, 4½ miles north of Bridgeport.

Drainage area.--362 sq mi.

Gage-height record.--Float gage read about 8 a.m. daily. Datum of gage is at mean sea level.

Maxima.--December 1955 to January 1956: Contents, 33,730 acre-ft Jan. 31 (elevation, 6,456.85 ft).

1926 to November 1955: Contents, 44,580 acre-ft June 12, 1938 (elevation, 6,460.7 ft).

Remarks.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft between elevations 6,412 ft (sill of outlet gate) and 6,460 ft (crest of spillway). No dead storage. Water is used for irrigation by Walker River Irrigation District. Elevations and capacity table furnished by Walker River Irrigation District.

Elevation, in feet, and contents, in acre-feet, 1955-56, of Bridgeport Reservoir near Bridgeport, Calif.

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	6,438.50	5,080	6,452.30	23,200	16	6,441.15	7,260	6,454.60	28,240
2	6,438.70	5,220	6,452.40	23,410	17	6,441.25	7,360	6,454.85	28,820
3	6,438.90	5,370	6,452.50	23,620	18	6,441.40	7,500	6,455.05	29,280
4	6,438.95	5,400	6,452.65	23,930	19	6,441.60	7,700	6,455.25	29,760
5	6,439.05	5,480	6,452.80	24,240	20	6,442.00	8,080	6,455.45	30,240
6	6,439.20	5,600	6,452.90	24,450	21	6,442.30	8,390	6,455.65	30,730
7	6,439.45	5,800	6,453.05	24,770	22	6,442.65	8,740	6,455.80	31,090
8	6,439.65	5,960	6,453.20	25,100	23	6,445.35	11,820	6,456.00	31,570
9	6,439.95	6,200	6,453.30	25,320	24	6,449.65	18,180	6,456.15	31,950
10	6,440.20	6,420	6,453.40	25,540	25	-	-	6,456.35	32,460
11	6,440.35	6,550	6,453.55	25,870	26	6,450.80	20,250	6,456.55	32,970
12	6,440.55	6,720	6,453.70	26,200	27	6,451.30	21,210	6,456.65	33,220
13	6,440.70	6,860	6,453.85	26,530	28	6,451.65	21,890	6,456.70	33,350
14	6,440.80	6,940	6,454.00	26,860	29	6,451.90	22,380	6,456.75	33,480
15	6,441.00	7,120	6,454.20	27,320	30	6,452.00	22,580	6,456.80	33,600
					31	6,452.20	23,000	6,456.85	33,730
Change in contents..............................						-	+18,030	-	+10,730

9. East Walker River near Bridgeport, Calif.

Location.--Lat 38°19'40", long 119°12'50", in SE¼NE¼ sec.34, T.6 N., R.25 E., on right bank 1,500 ft downstream from Bridgeport Reservoir, 5 miles north of Bridgeport, and 10 miles upstream from Sweetwater Creek.

Drainage area.--362 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 1-22, 3 a.m. Dec. 24, to 4 p.m. Dec. 29, and Jan. 17 to 10 a.m. Jan. 26 when low-water gage heights were not recorded. Altitude of gage is 6,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for periods of no gage-height record estimated on basis of seepage flow from Bridgeport Dam.

Maxima.--December 1955 to January 1956: Discharge, 134 cfs 4 p.m. Dec. 29 (gage height, 1.16 ft).

1921 to November 1955: Discharge, 1,240 cfs Jan. 22, 1943. Gage height, 4.95 ft Jan. 22, 1943 (top of surge).

Remarks.--Flow regulated by Bridgeport Reservoir (see station 8).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.2	41	11.....	0.2	42	21.....	0.2	0.2
2.....		41	12.....		42	22.....		
3.....		41	13.....		42	23.....	3.7	
4.....		41	14.....		42	24.....	.6	
5.....		41	15.....		43	25.....	.2	
6.....		42	16.....		19	26.....		47
7.....		41	17.....		.2	27.....		96
8.....		41	18.....			28.....		110
9.....		41	19.....			29.....	36	110
10.....		42	20.....			30.....	75	106
						31.....	41	96
Monthly mean discharge, in cubic feet per second......................							5.21	39.0
Runoff, in acre-feet..							320	2,400

10. East Walker River above Strosnider ditch, near Mason, Nev.

Location.--Lat 38°49', long 119°03', in sec.14, T.11 N., R.26 E., on left bank 0.9 mile upstream from head of Strosnider ditch, 12 miles southeast of Mason, and 13½ miles southeast of Yerington.

Drainage area.--1,100 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,574.66 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 1,640 cfs 8 to 9 a.m. Dec. 24 (gage height, 6.87 ft).

1947 to November 1955: Discharge, 1,400 cfs July 14, 1952 (gage height, 6.21 ft).

Remarks.--Flow regulated by Bridgeport Reservoir (see station 8).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	16	94	11.....	16	81	21.....	17	54
2.....	15	91	12.....	15	80	22.....	14	51
3.....	17	88	13.....	14	80	23.....	189	50
4.....	14	88	14.....	15	80	24.....	1,130	50
5.....	14	86	15.....	15	80	25.....	224	49
6.....	14	86	16.....	15	92	26.....	155	51
7.....	14	81	17.....	15	86	27.....	197	58
8.....	14	81	18.....	14	68	28.....	119	89
9.....	15	80	19.....	14	61	29.....	91	106
10.....	15	81	20.....	14	57	30.....	83	116
						31.....	104	122
Monthly mean discharge, in cubic feet per second......................							84.5	78.0
Runoff, in acre-feet..							5,190	4,790

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 22			Dec. 24--Con.			Dec. 26--Con.		
12 p.m.......	0.95	12	1 p.m........	6.39	1,450	12 p.m.......	1.95	158
			4............	6.02	1,300			
Dec. 23			5............	5.81	1,230	Dec. 27		
6 a.m........	1.02	18	7............	3.94	629	2 a.m........	2.11	190
2 p.m........	1.09	25	9............	3.31	466	4............	2.14	196
3............	1.73	116	12 p.m.......	2.82	349	7............	2.46	266
5............	2.62	303				8............	2.47	268
7............	3.38	484	Dec. 25			10............	2.33	237
8............	3.60	540	2 a.m........	2.64	307	12 m.........	2.23	215
12 p.m.......	4.21	703	6............	2.36	243	6 p.m........	1.99	166
			12 m.........	2.20	209	12 p.m.......	1.88	144
Dec. 24			12 a.m.......	2.01	170			
2 a.m........	4.83	891				Dec. 28		
4............	5.90	1,260	Dec. 26			12 m.........	1.76	115
6............	6.57	1,520	12 m.........	1.92	152	12 p.m.......	1.68	101
8............	6.87	1,640	4 p.m........	1.90	148			
9 a.m........	6.87	1,640	11 p.m.......	1.89	146			

11. East Fork West Walker River near Bridgeport, Calif.

Location.--Lat 38°21'30", long 119°26'30", in NW¼NW¼ sec.22, T.6 N., R.23 E., on right bank three-quarters of a mile north of Sonora Junction, 1½ miles upstream from mouth, and 14 miles northwest of Bridgeport.

Drainage area.--63 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,790 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 370 cfs and by slope-area measurements of 650 and 994 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 994 cfs 3:40 a.m. Dec. 23 (gage height, 2.80 ft).

1910, 1944 to November 1955: Discharge, 660 cfs Feb. 2, 1945 (gage height, 2.69 ft), from rating curve extended above 270 cfs on basis of velocity-area study and slope-area measurement of 650 cfs.

Mean discharge, in cubic feet per second, 1955-56, of East Fork West Walker River near Bridgeport, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	13	55	11.....	15	37	21.....	24	41
2.....	13	50	12.....	14	37	22.....	254	40
3.....	13	44	13.....	15	36	23.....	580	40
4.....	14	42	14.....	14	38	24.....	149	40
5.....	18	43	15.....	14	72	25.....	103	37
6.....	29	42	16.....	14	82	26.....	95	36
7.....	19	42	17.....	14	61	27.....	77	36
8.....	16	40	18.....	14	49	28.....	79	35
9.....	17	37	19.....	22	45	29.....	72	34
10.....	16	37	20.....	22	45	30.....	65	32
						31.....	60	30
Monthly mean discharge, in cubic feet per second							60.8	43.1
Runoff, in inches							1.11	0.79
Runoff, in acre-feet							3,740	2,650

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	0.81	19	2 p.m........	1.75	223	7 p.m........	2.15	435
			3............	1.78	234	10...........	1.81	284
Dec. 21			6............	1.74	219	12 p.m.......	1.64	224
6 a.m........	.77	17	9............	1.91	289			
12 m.........	.80	19	12 p.m.......	2.43	578	Dec. 24		
8 p.m........	.92	27				1 a.m........	1.61	214
12 p.m.......	1.16	56	Dec. 23			2............	1.69	242
			2 a.m........	2.71	851	9............	1.45	161
Dec. 22			3:40.........	2.80	994	2 p.m........	1.38	139
4 a.m........	1.82	250	5............	2.64	820	4............	1.25	105
6............	1.77	231	7............	2.61	790	8............	1.15	86
10 a.m.......	1.90	284	12 m.........	2.28	508	12 p.m.......	1.17	90

12. West Walker River below East Fork, near Coleville, Calif.

Location.--Lat 38°22'45", long 119°27'00", in SE¼ sec.9, T.6 N., R.23 E., on left bank 75 ft downstream from East Fork, 200 ft upstream from bridge on U.S. Highway 395, and 13 miles southeast of Coleville.

Drainage area.--182 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,650 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,900 cfs and by slope-area measurement at 6,220 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,180 cfs 7 a.m. Dec. 23 (gage height, 7.41 ft).

1938 to November 1955: Discharge, 6,220 cfs Nov. 20, 1950 (gage height, 8.10 ft).

Discharge known prior to 1938, 5,800 cfs Dec. 11, 1937, by slope-area measurement.

Remarks.--Flow slightly regulated by Poor Lake Reservoir (capacity unknown), 7 miles upstream.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	34	249	11.....	43	162	21.....	77	205
2.....	34	246	12.....	43	158	22.....	806	212
3.....	33	214	13.....	42	154	23.....	3,550	221
4.....	34	196	14.....	41	160	24.....	1,050	194
5.....	41	196	15.....	40	287	25.....	636	188
6.....	66	185	16.....	39	390	26.....	522	179
7.....	49	181	17.....	40	293	27.....	390	164
8.....	47	171	18.....	36	260	28.....	346	175
9.....	53	179	19.....	43	234	29.....	308	170
10.....	44	166	20.....	70	224	30.....	265	165
						31.....	262	152
Monthly mean discharge, in cubic feet per second							293	204
Runoff, in inches							1.86	1.29
Runoff, in acre-feet							18,020	12,560

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of West Walker River below East Fork, near Coleville, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	1.06	69	8 a.m........	2.80	518	8 a.m........	7.38	5,130
			10...........	3.07	641	12 m.........	6.71	4,190
Dec. 21			12 m.........	3.43	846	4 p.m........	6.13	3,420
8 a.m........	.96	57	1 p.m........	3.37	808	6............	5.71	2,890
10...........	1.08	72	6............	3.63	981	8............	5.53	2,680
12 m.........	.98	59	9............	3.99	1,250	12 p.m.......	4.52	1,680
6 p.m........	1.13	78	12 p.m.......	4.91	2,010			
9............	1.29	101				Dec. 24		
12 p.m.......	1.69	169	Dec. 23			6 a.m........	3.94	1,220
			3 a.m........	5.97	3,210	12 m.........	3.65	1,000
Dec. 22			5............	7.03	4,640	6 p.m........	3.33	790
4 a.m........	2.61	442	7 a.m........	7.41	5,180	12 p.m.......	3.19	709

13. Topaz Reservoir near Topaz, Calif.

Location.--Lat 38°41', long 119°31', in sec.28, T.10 N., R.22 E., 6 miles north of Topaz.

Gage-height record.--Float and staff gages read approximately once daily at unscheduled times. Datum of gage is at mean sea level.

Maxima.--December 1955 to January 1956: Contents, 36,420 acre-ft Jan. 31 (elevation, 4,994.13 ft, approximately).

1931 to November 1955: Contents, 60,240 acre-ft June 30, 1941 (elevation, 5,005.35 ft).

Remarks.--Topaz Reservoir, formerly known as Alkali Lake, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Storage began Jan. 30, 1922. Usable capacity, 59,440 acre-ft between elevations 4,972.3 ft (lowest practical elevation for diversion through tunnel, bottom of outlet tunnel at elevation 4,970 ft) and 5,005 ft (3 ft below top of levee). Capacity of reservoir increased from about 45,000 to 59,440 acre-ft in October 1937 by an earthfill, rock-faced levee at south end. Water is used for irrigation in Walker River Irrigation District. Elevations furnished by Walker River Irrigation District.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	4,975.28	4,610	4,984.90	20,220	16	4,976.74	6,910	4,989.20	27,580
2	4,975.40	4,800	4,985.20	20,730	17	4,976.84	7,070	4,989.65	28,360
3	4,975.50	4,960	4,985.50	21,240	18	4,976.94	7,230	4,990.08	29,110
4	4,975.56	5,050	4,985.80	21,740	19	4,977.08	7,450	4,990.50	29,850
5	4,975.62	5,150	4,986.05	22,170	20	4,977.24	7,700	4,990.80	30,380
6	4,975.68	5,240	4,986.35	22,680	21	-	-	4,991.15	31,000
7	-	-	4,986.65	23,190	22	-	-	4,991.45	31,530
8	-	-	4,986.95	23,700	23	-	-	4,991.75	32,070
9	-	-	4,987.20	24,130	24	-	-	-	-
10	4,976.15	5,980	4,987.50	24,640	25	-	-	-	-
11	4,976.30	6,220	4,987.80	25,160	26	-	-	-	-
12	4,976.40	6,370	4,988.20	25,840	27	4,983.10	17,220	4,993.15	34,600
13	4,976.50	6,530	4,988.25	25,930	28	-	-	4,993.50	35,240
14	4,976.58	6,660	4,988.50	26,360	29	-	-	4,993.75	35,710
15	4,976.66	6,780	4,988.75	26,800	30	-	-	4,994.00	36,180
					31	4,984.60	19,720	-	36,420
Change in contents...............................						-	+15,200	-	+16,700

14. West Walker River near Hudson, Nev.

Location.--Lat 38°49', long 119°14', in SW¼ sec.18, T.11 N., R.25 E., on left bank half a mile upstream from Wilson Canyon and 3 miles southeast of Hudson.

Drainage area.--964 sq mi.

Gage-height record.--Water-stage recorder graph except 12 m. Dec. 23 to 1:30 p.m. Dec. 26 when float wheel was loose. Altitude of gage is 4,670 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,700 cfs. Discharge for period of no gage-height record estimated on basis of flood peak, record for West Walker River below East Fork, near Coleville, Calif., and record for Topaz Reservoir.

Maxima.--December 1955 to January 1956: Discharge, 2,700 cfs Dec. 24 (gage height, 7.42 ft).

1914-25, 1947 to November 1955: Discharge, 2,530 cfs June 7, 1922 (gage height, 6.35 ft, site and datum then in use).

Remarks.--Flow regulated by off-channel storage in Topaz Reservoir since Jan. 30, 1922 (see station 13). Slight regulation by Poor Lake Reservoir (capacity unknown).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	38	188	11.....	34	68	21.....	37	57
2.....	37	178	12.....	34	96	22.....	46	57
3.....	36	171	13.....	34	110	23.....	320	55
4.....	35	156	14.....	34	74	24.....	2,450	54
5.....	35	137	15.....	34	65	25.....	1,650	57
6.....	37	107	16.....	34	66	26.....	1,050	65
7.....	36	88	17.....	32	86	27.....	852	84
8.....	35	76	18.....	32	72	28.....	397	74
9.....	34	70	19.....	35	62	29.....	279	65
10.....	34	68	20.....	35	58	30.....	232	58
						31.....	197	57
Monthly mean discharge, in cubic feet per second							265	86.4
Runoff, in acre-feet							16,270	5,310

CARSON RIVER BASIN

15. Silver Creek below Pennsylvania Creek, near Markleeville, Calif.

Location.--Lat 38°36', long 119°47', in sec.28, T.9 N., R.20 E., on left bank a quarter of a mile downstream from Pennsylvania Creek and 6½ miles south of Markleeville.

Drainage area.--20 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 390 cfs and by slope-area measurement at 1,520 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,520 cfs 3 a.m. Dec. 23 (gage height, 6.09 ft).

1946 to November 1955: Discharge, 1,260 cfs Nov. 20, 1950 (gage height, 7.95 ft, site and datum then in use), from rating curve extended above 350 cfs on basis of slope-area determination of peak flow.

Remarks.--Floodflow not regulated by three small reservoirs (total capacity, about 1,700 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4.8	32	11.....	6.8	22	21.....	31	33
2.....	5.0	30	12.....	7.4	21	22.....	556	36
3.....	5.0	30	13.....	7.1	21	23.....	611	37
4.....	4.8	29	14.....	7.1	24	24.....	183	33
5.....	5.3	29	15.....	6.8	105	25.....	119	31
6.....	11	26	16.....	6.5	88	26.....	88	29
7.....	6.2	25	17.....	6.2	53	27.....	70	28
8.....	6.5	25	18.....	5.6	44	28.....	57	26
9.....	7.4	24	19.....	7.1	40	29.....	46	25
10.....	6.5	23	20.....	14	36	30.....	39	25
						31.....	34	23
Monthly mean discharge, in cubic feet per second......................							63.6	34.0
Runoff, in inches..							3.67	1.96
Runoff, in acre-feet.....................................							3,910	2,090

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23			Jan. 15		
12 p.m.......	0.57	16	2:30 a.m.....	4.86	974	8 a.m........	1.13	29
			3............	6.09	1,520	10...........	1.25	40
Dec. 21			4............	5.22	1,120	12 m.........	1.60	75
12 m.........	.51	12	9............	4.15	660	2 p.m........	2.28	170
4 p.m........	.61	18	12 m.........	3.73	518	4............	2.56	219
8............	1.17	61	2 p.m........	3.41	421	5............	2.57	221
12 p.m.......	1.63	116	8............	2.90	293	7............	2.52	212
			12 p.m.......	2.68	244	10...........	2.17	152
Dec. 22						12 p.m.......	2.09	140
3 a.m........	2.40	244	Dec. 24					
6............	3.12	418	6 a.m........	2.50	208	Jan. 16		
7............	3.22	446	12 m.........	2.30	173	5 a.m........	1.89	112
8............	3.69	587	6 p.m........	2.19	156	2 p.m........	1.56	71
9............	4.41	814	12 p.m.......	2.13	146	12 p.m.......	1.47	61
9:30.........	4.07	701						
11...........	4.13	719	Dec. 25			Jan. 17		
1:30 p.m.....	3.63	569	12 m.........	1.92	116	12 m.........	1.38	52
2:30.........	3.89	647	12 p.m.......	1.78	97	12 p.m.......	1.33	47
6:30.........	3.64	572						
12 p.m.......	4.68	908	Jan. 14					
			12 p.m.......	1.09	26			

16. Markleeville Creek above Grover Hot Springs, near Markleeville, Calif.

Location.--Lat 38°42', long 119°51', in SE¼NE¼ sec.23, T.10 N., R.19 E., on right bank half a mile upstream from Buck Creek, 4 miles upstream from mouth, and 4 miles west of Markleeville.

Drainage area.--14 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 11 p.m. Dec. 22 to 7:30 p.m. Dec. 23, for which graph was reconstructed on basis of high-water mark in gage house. Altitude of gage is 5,880 ft (from river-profile map, extended).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 400 cfs and by slope-area measurement of 900 cfs.

Maxima.--December 1955 to January 1956: Discharge, 900 cfs 5-6 a.m. Dec 23 (gage 7.36 ft).

1946 to November 1955: Discharge, 1,740 cfs Nov. 20, 1950 (gage height, 8.49 ft, at datum 0.05 ft higher), from rating curve extended above 330 cfs on basis of slope-area determination of peak flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.7	35	11.....	3.0	21	21.....	13	32
2.....	1.5	32	12.....	3.1	20	22.....	190	34
3.....	1.4	30	13.....	3.0	20	23.....	535	35
4.....	1.4	29	14.....	2.8	22	24.....	176	30
5.....	1.7	27	15.....	2.6	58	25.....	108	31
6.....	6.0	25	16.....	2.3	63	26.....	106	29
7.....	3.4	24	17.....	2.3	49	27.....	71	27
8.....	2.8	23	18.....	2.5	47	28.....	55	25
9.....	3.1	22	19.....	11	39	29.....	48	24
10.....	2.6	21	20.....	14	34	30.....	42	22
						31.....	39	21
Monthly mean discharge, in cubic feet per second							46.9	30.7
Runoff, in inches							3.87	2.53
Runoff, in acre-feet							2,890	1,890

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 23--Con.			Dec. 26--Con.		
12 p.m.......	2.59	13	12 m.........	6.16	529	8 p.m........	3.62	95
			8 p.m........	5.10	306	12 p.m.......	3.54	84
Dec. 21			12 p.m.......	4.72	249			
12 m.........	2.47	9.8				Jan. 14		
5 p.m........	2.50	10	Dec. 24			12 p.m.......	3.02	24
8............	2.59	13	2 a.m........	4.65	238			
12 p.m.......	2.97	30	8............	4.34	193	Jan. 15		
			2 p.m........	4.10	159	9 a.m........	3.08	28
Dec. 22			7............	3.95	138	12 m.........	3.18	36
5 a.m........	3.90	118	12 p.m.......	3.84	123	2 p.m........	3.48	67
7............	4.35	178				4............	3.67	91
8............	4.23	161	Dec. 25			6............	3.76	102
10...........	4.55	210	5 a.m........	3.76	113	7............	3.81	109
11...........	4.62	221	3 p.m........	3.68	102	12 p.m.......	3.67	91
3 p.m........	4.63	223	6............	3.67	101			
4............	4.68	232	12 p.m.......	3.69	104	Jan. 16		
8............	4.49	200				4 a.m........	3.58	79
12 p.m.......	5.52	380	Dec. 26			8............	3.45	63
			6 a.m........	3.73	109	4 p.m........	3.37	54
Dec. 23			12 m.........	3.78	115	12 p.m.......	3.33	50
5 a.m........	7.36	900	2 p.m........	3.73	109			
6 a.m........	7.36	900	5 p.m........	3.76	113			

17. East Fork Carson River near Gardnerville, Nev.

Location.--Lat 38°51'30", long 119°41'50", in NE¼ sec.2, T.11 N., R.20 E., on left bank 2 miles east of Mud Lake Reservoir, 3 miles downstream from Leviathan Creek, and 7 miles southeast of Gardnerville.

Drainage area.--344 sq mi.

Gage-height record.--Water-stage recorder graph except 4 p.m. Dec. 24 to 12 m. Dec. 25, for which graph was interpolated. Datum of gage is 4,985.11 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs and by slope-area measurements of 12,100 and 16,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 17,600 cfs 9:30 a.m. Dec. 23 (gage height, 11.88 ft).

1890-93, 1900-1906, 1908-10, 1917, 1924-29, 1935-37, 1939 to November 1955: Discharge, 12,100 cfs Nov. 21, 1950 (gage height, 9.66 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	75	522	11.....	92	336	21.....	246	498
2.....	65	480	12.....	90	332	22.....	3,610	504
3.....	58	445	13.....	88	337	23.....	12,220	725
4.....	63	421	14.....	86	391	24.....	2,970	504
5.....	60	416	15.....	84	1,160	25.....	1,520	570
6.....	165	389	16.....	84	1,330	26.....	1,640	552
7.....	129	375	17.....	83	806	27.....	1,140	455
8.....	98	344	18.....	85	662	28.....	884	440
9.....	121	349	19.....	243	588	29.....	751	398
10.....	102	340	20.....	308	552	30.....	618	389
						31.....	582	358
Monthly mean discharge, in cubic feet per second......................							914	515
Runoff, in inches..							3.06	1.73
Runoff, in acre-feet...							56,210	31,670

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis- charge	Hour	Gage height	Dis- charge	Hour	Gage height	Dis- charge
Dec. 20			Dec. 25			Jan. 15		
12 p.m.......	1.74	318	6 a.m........	3.67	1,620	3 a.m........	2.15	510
			12 m.........	3.46	1,440	6............	2.16	516
Dec. 21			2 p.m........	3.44	1,420	9............	2.18	528
2 a.m........	1.67	294	6............	3.45	1,430	12 m.........	2.23	558
12 m.........	1.48	232	12 p.m.......	3.32	1,330	2 p.m........	2.29	594
6 p.m........	1.40	208				3............	2.40	660
8............	1.40	208	Dec. 26			4............	3.37	1,370
10...........	1.45	223	7 a.m........	3.16	1,200	6............	4.05	1,990
12 p.m.......	1.57	260	8............	3.18	1,210	8............	4.63	2,640
			9............	3.22	1,250	9............	4.80	2,840
Dec. 22			11...........	3.46	1,440	9:30.........	4.82	2,860
2 a.m........	2.45	678	1 p.m........	4.18	2,130	10...........	4.79	2,830
5............	4.10	2,060	2:30.........	4.46	2,440	12 p.m.......	4.39	2,360
6............	4.70	2,720	12 p.m.......	3.48	1,450			
7............	4.78	2,820				Jan. 16		
12 m.........	6.22	4,630	Dec. 27			3 a.m........	3.86	1,800
4 p.m........	6.07	4,420	3 a.m........	3.30	1,310	5............	3.61	1,570
9	6.07	4,420	6............	3.18	1,210	8............	3.37	1,370
12 p.m.......	7.76	7,290	12 m.........	3.02	1,090	10...........	3.24	1,260
			6 p.m........	2.96	1,040	12 m.........	3.13	1,170
Dec. 23			12 p.m.......	2.88	986	6 p.m........	3.00	1,080
2 a.m........	8.70	9,370				12 p.m.......	2.84	958
5............	11.17	15,340	Dec. 28					
7............	11.60	16,660	12 m.........	2.70	860	Jan. 17		
9:30.........	11.88	17,600	3 p.m........	2.68	846	6 a.m........	2.68	846
11...........	11.64	16,790	6............	2.70	860	2 p.m........	2.54	751
3 p.m........	10.32	13,030	12 p.m.......	2.63	811	6............	2.57	770
5............	9.17	10,360	Jan. 13			8............	2.56	764
12 p.m.......	6.79	5,670	12 p.m.......	1.84	358	12 p.m.......	2.49	718
Dec. 24			Jan. 14			Jan. 18		
2 a.m........	6.02	4,440	9 a.m........	1.85	362	6 a.m........	2.42	673
6............	5.27	3,410	3 p.m........	1.88	375	12 m.........	2.39	654
12 m.........	4.69	2,710	5............	1.92	393	6 p.m........	2.37	642
4 p.m........	4.39	2,360	9............	2.07	465	9............	2.37	642
12 p.m.......	3.96	1,900	12 p.m.......	2.13	498	12 p.m.......	2.36	636

18. West Fork Carson River at Woodfords, Calif.

Location.--Lat 38°46', long 119°50', in SE¼SW¼ sec.34, T.11 N., R.19 E., on left bank 0.3 mile downstream from bridge on State Highway 8, 3¾ miles downstream from Willow Creek, and 0.8 mile west of Woodfords.

Drainage area.--66 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,760 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,000 cfs and by slope-area measurement of 4,810 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,810 cfs 5:45 a.m. Dec. 23 (gage height, 8.86 ft).

1900-1920, 1938 to November 1955: Discharge, 4,730 cfs Nov. 20, 1950 (gage height, 8.35 ft, from floodmarks).

Flood of Dec. 11, 1937, reached a stage of 9.0 ft, from floodmarks (discharge, 3,500 cfs, by slope-area measurement).

Remarks.--Floodflow not regulated by several small reservoirs (total capacity, about 1,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	18	142	11.....	25	100	21.....	43	136
2.....	20	130	12.....	24	97	22.....	754	140
3.....	21	119	13.....	23	96	23.....	2,920	168
4.....	19	114	14.....	24	106	24.....	599	142
5.....	21	107	15.....	23	199	25.....	349	129
6.....	37	109	16.....	23	348	26.....	278	102
7.....	32	102	17.....	23	271	27.....	210	96
8.....	29	89	18.....	22	197	28.....	198	114
9.....	29	98	19.....	21	163	29.....	182	112
10.....	26	101	20.....	29	150	30.....	166	108
						31.....	156	103
Monthly mean discharge, in cubic feet per second......................							205	135
Runoff, in inches..							3.57	2.36
Runoff, in acre-feet...							12,580	8,310

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 23--Con.			Jan. 13		
12 p.m.......	0.70	24	10 a.m.......	7.76	3,380	12 p.m.......	2.64	96
			11...........	8.19	3,920			
Dec. 20			12 m.........	7.94	3,600	Jan. 14		
12 m.........	.79	29	2 p.m........	7.56	3,160	12 m.........	2.68	101
12 p.m.......	.89	35	5............	6.96	2,500	6 p.m........	2.78	114
			8............	6.09	1,600	12 p.m.......	2.84	122
Dec. 21			10...........	5.63	1,210			
12 m.........	.89	35	12 p.m.......	5.33	1,000	Jan. 15		
6 p.m........	1.05	46				8 a.m........	2.88	128
9............	1.18	56	Dec. 24			11...........	2.96	139
12 p.m.......	1.44	83	4 a.m........	4.94	760	1 p.m........	3.17	173
			8............	4.69	630	4............	3.54	250
Dec. 22			1 p.m........	4.47	532	6............	3.66	280
2 a.m........	1.75	122	6............	4.32	476	9............	3.79	316
4............	2.17	190	12 p.m.......	4.13	409	12 p.m.......	3.90	350
6............	2.51	254						
8............	2.93	359	Dec. 25			Jan. 16		
9:30.........	3.60	580	6 a.m........	4.00	369	5 a.m........	3.87	340
11...........	4.12	820	12 m.........	3.90	337	9............	3.87	340
1 p.m........	4.21	865	6 p.m........	3.88	331	1 p.m........	3.97	372
3............	4.51	1,010	12 p.m.......	3.80	308	4............	3.97	372
5............	4.58	1,050				12 p.m.......	3.77	311
6............	4.57	1,040	Dec. 26					
9............	4.85	1,190	6 a.m........	3.74	294	Jan. 17		
10...........	5.52	1,620	12 m.........	3.78	305	10 a.m.......	3.60	265
11...........	5.44	1,570	6 p.m........	3.58	252	1 p.m........	3.68	286
12 p.m.......	5.96	1,950	12 p.m.......	3.42	216	12 p.m.......	3.42	223
Dec. 23			Dec. 27			Jan. 18		
2 a.m........	6.87	2,720	10 a.m.......	3.30	194	12 m.........	3.28	194
4............	7.90	3,550	2 p.m........	3.43	221	6 p.m........	3.25	188
5.45.........	8.86	4,810	8............	3.41	216	12 p.m.......	3.16	172
6............	8.50	4,320	12 p.m.......	3.35	204			
9 a.m........	8.50	4,320						

19. Clear Creek near Carson City, Nev.

Location.--Lat 39°07', long 119°49', in sec.1, T.14 N., R.19 E., on left bank 3 miles upstream from mouth and 4 miles southwest of Carson City.

Drainage area.--15 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,700 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 117 cfs 5:30 p.m. Dec. 23 (gage height, 2.03 ft).
1948 to November 1955: Discharge, 106 cfs Dec. 3, 1950 (gage height, 1.95 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	4.6	8.7	11	4.0	7.7	21	7.4	9.0
2	4.2	8.4	12	4.0	7.4	22	40	15
3	4.0	7.7	13	4.0	8.4	23	78	18
4	3.7	7.4	14	4.0	11	24	28	13
5	4.2	8.0	15	4.0	30	25	18	12
6	8.0	7.7	16	4.0	19	26	18	13
7	4.8	6.9	17	4.2	14	27	15	12
8	4.4	7.2	18	4.2	12	28	13	12
9	4.6	7.2	19	14	11	29	10	13
10	4.2	7.2	20	12	10	30	9.0	11
						31	8.4	10
Monthly mean discharge, in cubic feet per second							11.3	11.1
Runoff, in inches							0.87	0.86
Runoff, in acre-feet							694	684

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 27--Con.		
12 p.m.	0.39	5.0	12 p.m.	1.61	64	6 p.m.	0.71	16
						12 p.m.	.66	14
Dec. 19			Dec. 23					
5 a.m.	.65	13	1 a.m.	1.51	55	Jan. 14		
9	.65	13	3	1.75	81	12 p.m.	.62	12
3 p.m.	.73	17	5:30	1.64	68			
8	.73	17	11	1.80	87	Jan. 15		
12 p.m.	.71	16	4 p.m.	1.84	92	7 a.m.	.64	13
			5:30	2.03	117	7:30	.70	15
Dec. 20			9	1.55	58	11	.70	15
8 a.m.	.68	15	12 p.m.	1.33	41	3:30 p.m.	1.54	58
4 p.m.	.53	9.0				5	1.46	51
12 p.m.	.49	7.7	Dec. 24			6	1.64	68
			4 a.m.	1.16	34	7:30	1.63	66
Dec. 21			12 m.	1.00	27	9	1.20	35
8 p.m.	.45	6.6	12 p.m.	.84	21	12 p.m.	.99	27
12 p.m.	.60	11						
			Dec. 25			Jan. 16		
Dec. 22			12 m.	.75	17	6 a.m.	.82	20
1:30 a.m.	.75	17	12 p.m.	.73	17	10	.77	18
2	1.09	31				3 p.m.	.80	19
4	1.21	36	Dec. 26			12 p.m.	.69	15
6	1.08	31	10 a.m.	.70	15			
9	1.49	53	7 p.m.	.95	25	Jan. 17		
2 p.m.	1.14	33	12 p.m.	.71	16	10 a.m.	.65	13
3:30	1.24	37				2 p.m.	.72	16
7:30	.96	26	Dec. 27			12 p.m.	.63	13
11 p.m.	1.76	82	12 m.	.70	15			

20. Carson River near Carson City, Nev.

Location.--Lat 39°06'30", long 119°42'30", in NW¼ sec.2, T.14 N., R.20 E., on right bank 2 miles downstream from Clear Creek, 2¼ miles upstream from bridge on road to Mexican Dam, and 5 miles southeast of Carson City.

Drainage area.--876 sq mi.

Gage-height record.--Water-stage recorder graph to 11 a.m. Dec. 23, when recorder was destroyed by flood. Graph based on staff-gage readings and high-water marks 11 a.m. Dec. 23 to Jan. 31. Datum of gage is 4,621.48 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs and by computation of flow over dam of 15,500 cfs and slope-area measurement of 30,000 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 30,000 cfs 4-6 a.m. Dec. 24 (gage height, 15.0 ft).

1939 to November 1955: Discharge, 15,500 cfs Nov. 22, 1950 (gage height, 11.4 ft, from floodmark).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	86	930	11.....	132	680	21.....	454	800
2.....	91	930	12.....	128	680	22.....	892	800
3.....	88	930	13.....	136	620	23.....	6,960	930
4.....	82	930	14.....	132	620	24.....	20,400	930
5.....	81	860	15.....	132	858	25.....	6,380	860
6.....	108	800	16.....	130	1,860	26.....	4,500	1,000
7.....	176	740	17.....	126	1,740	27.....	3,470	1,000
8.....	159	680	18.....	125	1,270	28.....	2,560	930
9.....	142	620	19.....	184	1,000	29.....	1,710	860
10.....	142	680	20.....	474	860	30.....	1,160	860
						31.....	1,000	800
Monthly mean discharge, in cubic feet per second							1,688	905
Runoff, in inches							2.22	1.19
Runoff, in acre-feet							103,800	55,650

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23			Dec. 27		
12 p.m.......	1.10	126	6 a.m........	4.33	2,260	12 m.........	5.4	3,460
			11...........	5.07	3,080	12 p.m.......	5.0	3,000
Dec. 19			4 p.m........	6.40	4,780			
6 a.m........	1.14	134	12 p.m.......	14.0	25,500	Jan. 14		
12 m.........	1.22	151				12 p.m.......	2.4	620
4 p.m........	1.35	181	Dec. 24					
12 p.m.......	1.83	351	4 a.m........	15.0	30,000	Jan. 15		
			6............	15.0	30,000	12 m.........	2.6	740
Dec. 20			12 m.........	13.0	21,500	12 p.m.......	3.4	1,330
6 a.m........	2.07	445	6 p.m........	10.3	12,280			
2 p.m........	2.23	526	12 p.m.......	8.8	8,700	Jan. 16		
12 p.m.......	2.17	495				6 p.m........	4.3	2,230
			Dec. 25			12 p.m.......	4.1	2,010
Dec. 21			6 a.m........	7.9	7,060			
6 a.m........	2.13	475	12 m.........	7.3	6,100	Jan. 17		
12 m.........	2.14	480	6 p.m........	6.9	5,500	12 m.........	3.8	1,710
12 p.m.......	1.93	375	12 p.m.......	6.6	5,060	12 p.m.......	3.6	1,510
Dec. 22			Dec. 26			Jan. 18		
6 a.m........	1.91	365	12 m.........	6.2	4,500	12 m.........	3.3	1,240
11	2.08	450	12 p.m.......	5.8	3,960	12 p.m.......	3.1	1,080
5 p.m........	3.42	1,350						
12 p.m.......	4.10	2,010						

HUMBOLDT RIVER BASIN

21. Martin Creek near Paradise Valley, Nev.

Location.--Lat 41°32'00", long 117°25'40", in NW¼SW¼ sec.12, T.42 N., R.40 E., on left bank 0.6 mile upstream from Humboldt County Recreation Park and 7 miles northeast of Paradise Valley.

Drainage area.--172 sq mi.

Gage-height record.--Water-stage recorder graph except 4 p.m. Dec. 22 to 1:30 a.m. Dec. 23, when graph was interpolated on basis of recorded flood pattern. Altitude of gage is 4,700 ft (from extension of river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,200 cfs 8:30 p.m. Jan. 15 (gage height, 5.49 ft).

1921 to November 1955: Discharge, 9,000 cfs Jan. 21, 1943 (gage height, 11.1 ft, site and datum then in use), by slope-area measurement of peak flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	7.8	26	11	8.6	17	21	38	58
2	8.0	23	12	8.2	17	22	350	66
3	7.8	21	13	8.6	20	23	538	106
4	5.9	20	14	8.6	35	24	204	53
5	4.9	24	15	8.2	506	25	90	47
6	5.6	22	16	8.6	346	26	70	41
7	7.0	28	17	10	134	27	56	35
8	7.4	19	18	9.5	95	28	42	25
9	8.2	15	19	14	79	29	30	27
10	7.8	19	20	34	67	30	26	23
						31	26	12
Monthly mean discharge, in cubic feet per second							53.5	65.4
Runoff, in inches							0.36	0.44
Runoff, in acre-feet							3,290	4,020

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23--Con.			Jan. 15--Con.		
12 p.m.	1.96	44	12 m.	3.11	289	10 a.m.	2.85	210
			2 p.m.	3.06	274	12 m.	3.12	292
Dec. 22			4:30	3.31	352	2 p.m.	3.53	426
4 a.m.	2.10	61	6:30	4.01	605	4	3.97	589
5	2.81	205	7	4.45	780	5	4.63	852
6:30	3.63	462	8	5.13	1,050	7	5.19	1,080
8:30	3.38	375	8:30	5.14	1,060	8:30	5.49	1,200
9:30	3.52	423	9	5.13	1,050	10	5.19	1,080
10	3.49	413	12 p.m.	3.66	473	12 p.m.	4.85	940
10:30	3.56	437						
11	4.05	620	Dec. 24			Jan. 16		
12 m.	4.33	732	3 a.m.	3.16	305	3 a.m.	4.01	605
1 p.m.	4.00	601	6	2.92	235	5	3.55	434
2	3.94	578	12 m.	2.69	170	7	3.31	352
4	3.51	420	12 p.m.	2.45	113	9	3.13	298
7	3.28	343				12 m.	2.99	257
10	3.15	302	Jan. 13			6 p.m.	2.86	221
12 p.m.	3.13	295	12 p.m.	1.73	21	8	2.85	218
						12 p.m.	2.72	184
Dec. 23			Jan. 14					
1 a.m.	3.16	305	3 p.m.	1.75	22	Jan. 17		
2	3.73	498	4	1.80	26	9 a.m.	2.44	121
3	4.18	672	8	1.88	33	12 m.	2.40	113
4	4.09	636	10	2.33	93	4 p.m.	2.45	123
5	4.24	696	12 p.m.	2.66	163	6	2.53	140
6	4.01	605				12 p.m.	2.40	113
7	3.91	566	Jan. 15					
8	3.90	562	5 a.m.	2.75	184			
10 a.m.	3.39	379	8 a.m.	2.74	182			

PYRAMID AND WINNEMUCCA LAKES BASIN

22. Lake Tahoe at Tahoe, Calif.

Location.--Lat 39°09'55", long 120°08'25", in NW¼ sec.7, T.15 N., R.17 E., at Tahoe, near outlet of lake.

Drainage area.--519 sq mi (includes water surface of lake, which is 193 sq mi).

Gage-height record.--Staff-gage readings made about 8 a.m. daily. Datum of gage is 6,220.0 ft above mean sea level, datum of Bureau of Reclamation.

Remarks.--Lake levels maintained by concrete regulator dam with 17 gates; storage began about 1874. Capacity, about 730,000 acre-ft between elevations 6,223.0 ft (natural rim of lake) and 6,229.1 ft (highest permissible level). Increase in capacity within the range indicated, about 120,000 acre-ft per foot of rise. Records furnished by Sierra Pacific Power Co. and Truckee-Carson Irrigation District.

Elevation, in feet, at 8 a.m. on indicated day

Day	December 1955	January 1956	Day	December 1955	January 1956	Day	December 1955	January 1956
1	6,224.71	6,226.52	11	6,224.77	6,226.77	21	6,225.11	6,227.01
2	6,224.71	6,226.54	12	6,224.76	6,226.80	22	6,225.35	6,227.03
3	6,224.70	6,226.55	13	6,224.75	6,226.83	23	6,225.81	6,227.03
4	6,224.69	6,226.55	14	6,224.74	6,226.84	24	6,226.31	6,227.14
5	6,224.67	6,226.71	15	6,224.75	6,226.88	25	6,226.35	6,227.18
6	6,224.74	6,226.78	16	6,224.77	6,226.95	26	6,226.38	6,227.21
7	6,224.76	6,226.81	17	6,224.78	6,226.95	27	6,226.43	6,227.30
8	6,224.78	6,226.76	18	6,224.80	6,226.97	28	6,226.45	6,227.33
9	6,224.78	6,226.73	19	6,225.00	6,226.98	29	6,226.46	6,227.35
10	6,224.77	6,226.74	20	6,225.07	6,226.99	30	6,226.48	6,227.39
						31	6,226.50	6,227.36

23. Truckee River at Tahoe, Calif.

Location.--Lat 39°09'55", long 120°08'45", in NW¼ sec.7, T.15 N., R.17 E., on left bank 500 ft downstream from dam at outlet of Lake Tahoe.

Drainage area.--519 sq mi.

Gage-height record.--Chain gage read once daily; additional readings are obtained if control gates are changed. Datum of gage is 6,220.13 ft above mean sea level, datum of Bureau of Reclamation.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Daily discharge, 154 cfs Dec. 6.
1895-96, 1900 to November 1955: Daily discharge, 1,820 cfs Jan. 30, 1943.

Remarks.--Flow regulated by Lake Tahoe (see station 22). Records furnished by Sierra Pacific Power Co. and Truckee-Carson Irrigation District.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	148	17	11.....	147	16	21.....	0	17
2.....	147	17	12.....	147	16	22.....	0	17
3.....	147	17	13.....	147	17	23.....	0	18
4.....	147	16	14.....	105	16	24.....	0	17
5.....	147	16	15.....	48	17	25.....	0	16
6.....	154	17	16.....	48	18	26.....	0	16
7.....	150	18	17.....	48	16	27.....	0	16
8.....	147	17	18.....	48	16	28.....	0	18
9.....	150	17	19.....	54	16	29.....	0	18
10.....	147	18	20.....	54	18	30.....	0	17
						31.....	0	18
Monthly mean discharge, in cubic feet per second........................							75	17
Runoff, in acre-feet...							4,620	1,040

24. Truckee River near Truckee, Calif.

Location.--Lat 39°17'30", long 120°12'30", in SW¼NE¼ sec.28, T.17 N., R.16 E., on left bank 1.4 miles upstream from Donner Creek and 2½ miles southwest of Truckee.

Drainage area.--565 sq mi.

Gage-height record.--Water-stage recorder graph except 12 m. Jan. 18 to 6 p.m. Jan. 22 and 12 m. Jan. 23 to Jan. 31. Altitude of gage is 5,920 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,400 cfs and by slope-area measurements of 6,480 and 8,140 cfs. Discharge for periods of no gage-height record estimated on basis of weather records, records for nearby streams, and record for Truckee River at Tahoe.

Maxima.--December 1955 to January 1956: Discharge, 7,760 cfs 5:30 a.m. Dec. 23 (gage height, 7.92 ft, from recorder graph, 8.13 ft, from floodmarks).

1944 to November 1955: Discharge, 6,480 cfs Nov. 20, 1950 (gage height, 7.62 ft), by slope-area measurement.

Remarks.--Flow regulated by Lake Tahoe (see station 22). Above Lake Tahoe outlet 519 sq mi was noncontributing during peaks of November 1950 and December 1955.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	166	159	11	172	94	21	403	200
2	163	146	12	169	92	22	3,260	230
3	163	133	13	169	96	23	5,280	257
4	160	131	14	140	125	24	1,090	220
5	163	128	15	76	500	25	541	200
6	210	126	16	76	524	26	521	180
7	184	114	17	76	311	27	379	170
8	181	103	18	80	240	28	312	150
9	184	103	19	153	220	29	240	140
10	178	99	20	282	210	30	195	140
						31	175	130
Monthly mean discharge, in cubic feet per second							501	183
Runoff in acre-feet							30,830	11,250

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23			Dec. 27--Con.		
12 p.m.	1.43	96	3 a.m.	7.88	7,660	12 p.m.	2.01	343
			5:30	7.92	7,760			
Dec. 19			1 p.m.	6.85	5,520	Jan. 13		
7 a.m.	1.50	113	4	6.38	4,690	12 p.m.	1.27	107
7 p.m.	1.81	204	8	4.72	2,510			
12 p.m.	1.83	210	12 p.m.	3.95	1,780	Jan. 14		
						12 m.	1.32	119
Dec. 20			Dec. 24			12 p.m.	1.47	156
12 m.	2.05	298	6 a.m.	3.34	1,260			
8 p.m.	2.10	320	6 p.m.	2.75	815	Jan. 15		
12 p.m.	2.07	306	12 p.m.	2.57	689	8 a.m.	1.52	170
						11	1.68	217
Dec. 21			Dec. 25			5 p.m.	2.88	906
12 m.	1.88	228	12 m.	2.33	524	7:30	3.10	1,070
3 p.m.	1.92	243	12 p.m.	2.17	426	12 p.m.	2.77	829
6	2.23	386				Jan. 16		
12 p.m.	3.50	1,220	Dec. 26			6 a.m.	2.44	598
			4 a.m.	2.14	409	12 m.	2.26	479
Dec. 22			12 m.	2.52	654	12 p.m.	2.06	367
5 a.m.	5.06	2,670	12 p.m.	2.20	442			
10	6.08	4,070				Jan. 17		
7 p.m.	5.24	2,890	Dec. 27			12 m.	1.92	304
12 p.m.	6.88	5,270	8 a.m.	2.09	382	12 p.m.	1.83	268

25. Donner Creek at Donner Lake Outlet, near Truckee, Calif.

Location.--Lat 39°19', long 120°14', in sec.17, T.17 N., R.16 E., a quarter of a mile downstream from outlet of Donner Lake, half a mile upstream from Cold Creek, and 2 miles southwest of Truckee.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,900 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maximum.--December 1955 to January 1956: Discharge, 306 cfs Dec. 28 (gage height, 4.25 ft).

Remarks.--Flow regulated by Donner Lake. Record furnished by Sierra Pacific Power Co. and Truckee-Carson Irrigation District.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	19	246	11.....	16	116	21.....	31	109
2.....	19	228	12.....	16	107	22.....	118	106
3.....	17	211	13.....	15	95	23.....	201	107
4.....	17	194	14.....	15	95	24.....	215	106
5.....	16	175	15.....	15	106	25.....	207	107
6.....	17	162	16.....	14	118	26.....	205	97
7.....	17	149	17.....	14	120	27.....	203	95
8.....	17	141	18.....	15	116	28.....	263	95
9.....	17	132	19.....	20	115	29.....	289	92
10.....	17	121	20.....	25	112	30.....	278	90
						31.....	264	87
Monthly mean discharge, in cubic feet per second......................							84.3	127
Runoff, in acre-feet..							5,180	7,830

26. Prosser Creek near Boca, Calif.

Location.--Lat 39°22', long 120°07', in NW¼ sec.32, T.18 N., R.17 E., on left bank a quarter of a mile upstream from mouth and 2 miles southwest of Boca.

Drainage area.--51 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 11 a.m. Jan. 1 to 2 p.m. Jan. 14, and 5 a.m. Jan. 19 to Jan. 31. Datum of gage is 5,574.66 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 900 cfs and by slope-area measurement of 4,550 cfs; affected by ice at times. Discharge for periods of no gage-height record computed on basis of occasional staff-gage readings 2 miles upstream, five discharge measurements, and records for Little Truckee River near Hobart Mills.

Maxima.--December 1955 to January 1956: Discharge, 4,560 cfs 5:20 a.m. Dec. 23 (gage height, 8.13 ft).

1951 to November 1955: Discharge, 1,150 cfs Mar. 9, 1954; gage height, 5.71 ft Jan. 9, 1953 (backwater from ice).

Flood of Nov. 20, 1950, reached a stage of 9.0 ft, from floodmarks (discharge, 4,320 cfs by slope-area measurement).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	17	146	11.....	19	100	21.....	263	150
2.....	17	140	12.....	18	100	22.....	2,420	150
3.....	18	130	13.....	17	100	23.....	3,490	150
4.....	20	130	14.....	17	130	24.....	981	140
5.....	20	130	15.....	17	390	25.....	491	130
6.....	25	120	16.....	17	570	26.....	507	110
7.....	23	110	17.....	17	299	27.....	359	100
8.....	22	100	18.....	17	225	28.....	280	100
9.....	21	100	19.....	76	190	29.....	216	100
10.....	20	100	20.....	187	160	30.....	166	100
						31.....	160	90
Monthly mean discharge, in cubic feet per second......................							321	155
Runoff, in inches...							7.25	3.49
Runoff, in acre-feet..							19,710	9,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Prosser Creek near Boca, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 23			Dec. 27		
12 p.m.	1.39	25	2 a.m.	7.70	4,100	8 a.m.	1.30	330
			5:20	8.13	4,560	10	1.29	327
Dec. 19			6	8.04	4,500	12 m.	1.47	384
3 a.m.	1.39	25	6:40	8.09	4,530	3 p.m.	1.49	392
12 m.	2.00	78	11	7.08	3,830	9	1.24	312
6 p.m.	2.24	109	4 p.m.	6.63	3,510	12 p.m.	1.18	294
9	2.36	128	6	5.87	2,980			
12 p.m.	2.32	121	10	4.17	1,830	Jan. 14		
			12 p.m.	3.80	1,610	12 p.m.	.56	155
Dec. 20								
4 a.m.	2.38	131	Dec. 24			Jan. 15		
12 m.	2.74	210	4 a.m.	3.20	1,250	10 a.m.	.67	175
3 p.m.	2.88	241	8	2.80	1,010	6 p.m.	2.00	645
6	2.78	219	12 m.	2.60	910	8	2.15	720
12 p.m.	2.67	195	6 p.m.	2.37	795	11	2.29	790
			12 p.m.	2.09	655	12 p.m.	2.30	795
Dec. 21								
6 a.m.	2.64	189	Dec. 25			Jan. 16		
12 m.	2.70	202	10 a.m.	1.68	462	1 a.m.	2.31	800
6 p.m.	2.95	257	1 p.m.	1.72	478	6	2.10	695
9	3.37	384	12 p.m.	1.49	392	12 m.	1.80	545
12 p.m.	4.03	714				6 p.m.	1.58	450
			Dec. 26			12 p.m.	1.33	360
Dec. 22			4 a.m.	1.44	374			
6 a.m.	5.45	1,670	8	1.56	416	Jan. 17		
9	6.42	2,510	11:30	1.97	595	5 a.m.	1.15	306
12 m.	6.76	2,900	1 p.m.	1.97	595	9	1.10	292
2 p.m.	7.08	3,240	4:30	2.18	700	12 m.	1.18	315
5	6.84	3,070	9	1.79	506	3 p.m.	1.16	309
8:30	6.47	2,780	12 p.m.	1.61	434	6	1.05	278
12 p.m.	6.98	3,280				12 p.m.	.95	252

27. Little Truckee River near Hobart Mills, Calif.

Location.--Lat 39°30', long 120°16', in sec.14, T.19 N., R.15 E., on right bank half a mile upstream from Independence Creek and 7½ miles northwest of Hobart Mills.

Drainage area.--33 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,330 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and by slope-area measurement of 5,690 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 5,690 cfs 11 a.m. Dec. 23 (gage height, 6.82 ft).

1946 to November 1955: Discharge, 7,010 cfs Nov. 20, 1950 (gage height, 7.53 ft), by slope-area measurement.

Remarks.--One transmountain diversion to Sierra Valley above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	8.2	135	11	9.5	81	21	151	130
2	8.2	119	12	9.5	80	22	1,230	130
3	7.9	113	13	9.0	81	23	3,880	133
4	7.1	108	14	9.0	87	24	1,130	114
5	7.9	113	15	8.6	184	25	498	100
6	15	99	16	9.0	302	26	363	70
7	14	82	17	9.0	274	27	260	84
8	12	71	18	11	208	28	230	85
9	12	85	19	36	171	29	198	80
10	10	84	20	69	148	30	171	75
						31	156	75
Monthly mean discharge, in cubic feet per second							276	119
Runoff, in inches							9.63	4.17
Runoff, in acre-feet							16,960	7,340

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Little Truckee River near Hobart Mills, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 27		
12 p.m.	1.10	9.0	12 p.m.	5.77	2,290	6 a.m.	2.74	254
						9	2.71	246
Dec. 18			Dec. 23			1 p.m.	2.83	276
9 a.m.	1.05	7.1	4 a.m.	6.42	3,870	7	2.73	251
12 p.m.	1.29	19	11	6.82	5,690	12 p.m.	2.71	246
			3 p.m.	6.68	4,970			
Dec. 19			7	5.97	2,660	Jan. 14		
12 m.	1.56	42	10	5.58	2,000	12 p.m.	1.99	99
12 p.m.	1.57	43	12 p.m.	5.41	1,770			
						Jan. 15		
Dec. 20			Dec. 24			8 a.m.	2.04	106
6 a.m.	1.78	66	4 a.m.	5.12	1,460	10	2.12	119
12 m.	1.84	73	10	4.73	1,130	2 p.m.	2.48	191
12 p.m.	1.89	80	1 p.m.	4.69	1,100	7	2.90	294
			8	4.17	785	10	2.98	315
Dec. 21			12 p.m.	3.97	685	12 p.m.	2.94	304
12 m.	2.08	104						
4 p.m.	2.26	132	Dec. 25			Jan. 16		
8	2.72	222	10 a.m.	3.50	480	12 m.	2.92	299
12 p.m.	3.52	448	12 m.	3.50	480	3 p.m.	2.97	312
			12 p.m.	3.22	381	12 p.m.	2.88	289
Dec. 22								
2 a.m.	4.00	650	Dec. 26			Jan. 17		
8	4.79	1,120	3 a.m.	3.17	367	6 a.m.	2.87	286
12 m.	5.02	1,310	7	3.19	372	12 m.	2.90	294
2 p.m.	4.97	1,290	10	3.30	405	6 p.m.	2.74	254
5	4.99	1,300	4 p.m.	3.17	367	12 p.m.	2.65	232
8	5.20	1,520	12 p.m.	2.89	291			

28. Sagehen Creek near Truckee, Calif.

Location.--Lat 39°25'50", long 120°14'10", in NE¼NE¼ sec.7, T.18 N., R.16 E., on left bank 1.5 miles upstream from bridge on State Highway 89 and 7.5 miles north of Truckee.

Drainage area.--11.1 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 70 cfs and by slope-area measurement at 495 cfs.

Maxima.--December 1955 to January 1956: Discharge, 495 cfs 6 a.m. Dec. 23 (gage height, 4.28 ft).

1953 to November 1955: Discharge, 72 cfs Apr. 22, 1954 (gage height, 2.21 ft), from rating curve extended above 27 cfs on basis of logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2.4	16	11	2.7	8.7	21	28	16
2	2.4	14	12	2.7	8.7	22	174	17
3	2.4	13	13	2.7	8.9	23	398	20
4	2.3	12	14	2.7	10	24	96	15
5	2.5	11	15	2.7	34	25	53	14
6	7.8	11	16	2.7	44	26	46	12
7	4.1	10	17	2.7	28	27	34	12
8	3.2	9.8	18	2.6	21	28	27	10
9	3.0	9.2	19	9.2	18	29	24	10
10	2.8	8.9	20	24	18	30	21	10
						31	17	9.5
Monthly mean discharge, in cubic feet per second							32.4	14.9
Runoff, in inches							3.37	1.54
Runoff, in acre-feet							1,990	914

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Sagehen Creek near Truckee, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21			Dec. 24		
12 p.m.	1.50	2.0	6 a.m.	2.17	21	6 a.m.	3.12	105
			3 p.m.	2.17	21	12 m.	2.94	81
Dec. 19			6	2.29	28	3 p.m.	2.95	82
2 a.m.	1.50	2.0	9	2.54	44	12 p.m.	2.82	67
4	1.70	4.5	12 p.m.	2.81	66			
5:30	1.64	3.4				Jan. 14		
6	1.57	2.6	Dec. 22			12 p.m.	1.97	12
9	1.68	4.1	3 a.m.	3.12	105			
12 m.	1.82	7.3	11	3.68	224	Jan. 15		
2 p.m.	2.00	13	8 p.m.	3.42	157	9 a.m.	1.98	12
4	2.28	27	12 p.m.	3.87	293	12 m.	2.18	21
4:30	2.31	29				4 p.m.	2.67	54
5	1.97	12	Dec. 23			8	2.86	72
9	1.98	12	3 a.m.	4.17	436	12 p.m.	2.76	61
12 p.m.	2.08	16	6	4.28	495			
			4 p.m.	4.20	451	Jan. 16		
Dec. 20			8	3.82	273	12 m.	2.52	42
6 a.m.	2.27	27	12 p.m.	3.48	171	12 p.m.	2.36	32
3 p.m.	2.25	26						
12 p.m.	2.18	21						

29. Boca Reservoir at Boca, Calif.

Location.--Lat 39°23', long 120°05', in sec.28, T.18 N., R.17 E., at Boca, and at mouth of Little Truckee River.

Drainage area.--165 sq mi, approximately (by Bureau of Reclamation).

Gage-height record.--Staff-gage readings made about 8 a.m. daily. Elevations are reduced to approximate mean sea level, datum of Bureau of Reclamation.

Maximum.--December 1955 to January 1956: Contents, 41,440 acre-ft 10:15 p.m. Dec. 23 (elevation, 5,605.55 ft).

Remarks.--Reservoir is formed by earthfill, rock-faced dam; storage began Dec. 8, 1938. Capacity, 41,140 acre-ft between elevations 5,521 ft (outlet sill) and 5,605 ft. Daily elevation and contents record furnished by Washoe County Water Conservation District. Record of maximum contents and elevation furnished by Bureau of Reclamation.

Elevation, in feet, and contents, in acre-feet, at 8 a.m. on indicated day, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	5,585.60	24,070	5,586.45	24,720	16	5,586.85	25,030	5,579.24	19,500
2	5,585.60	24,070	5,586.05	24,410	17	5,586.62	24,850	5,580.60	20,430
3	5,585.55	24,030	5,584.35	23,140	18	5,586.30	24,600	5,580.95	20,680
4	5,585.60	24,070	5,582.72	21,940	19	5,586.10	24,380	5,580.60	20,430
5	5,585.72	24,160	5,581.30	20,930	20	5,586.78	24,970	5,580.05	20,050
6	5,585.87	24,280	5,580.15	20,120	21	5,587.60	24,830	5,579.45	19,640
7	5,586.15	24,490	5,579.20	19,470	22	5,589.45	27,070	5,578.85	19,230
8	5,586.45	24,720	5,578.95	19,300	23	5,596.50	32,990	5,578.30	18,860
9	5,586.62	24,850	5,577.65	18,430	24	5,604.25	40,170	5,577.60	18,390
10	5,586.80	24,990	5,577.15	18,100	25	5,597.10	33,520	5,576.85	17,900
11	5,586.95	25,100	5,577.40	18,260	26	5,593.45	30,360	5,576.45	17,640
12	5,587.00	25,140	5,577.45	18,300	27	5,591.60	28,820	5,576.07	17,400
13	5,587.05	25,180	5,577.55	18,360	28	5,590.20	27,670	5,575.85	17,260
14	5,587.20	25,300	5,577.75	18,490	29	5,589.10	26,790	5,575.75	17,190
15	5,587.10	25,220	5,578.00	18,660	30	5,587.80	25,760	5,575.65	17,130
					31	5,586.55	24,800	5,575.55	17,070
Change in contents						-	+730	-	-7,730

30. Little Truckee River below Boca Reservoir, at Boca, Calif.
(Miscellaneous sites)

Location.--Lat 39°23', long 120°05', in sec.28, T.18 N., R.17 E., at Boca, below Boca Dam, and at mouth of Little Truckee River.

Drainage area.--165 sq mi, approximately (by Bureau of Reclamation).

Discharge record.--Discharge determined by computed flow through needle valves of Boca Dam and by computed or estimated flow over spillway of Boca Dam.

Maximum.--December 1955 to January 1956: Discharge, 8,800 cfs 10:30 a.m. to 12 m. Dec. 24.

Remarks.--Flow regulated by Boca Reservoir (see station 29). Record furnished by Washoe County Water Conservation District.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	120	400	11.....	77	167	21.....	0	550
2.....	120	667	12.....	85	180	22.....	667	550
3.....	87	800	13.....	85	180	23.....	1,080	550
4.....	70	800	14.....	118	180	24.....	5,620	550
5.....	93	800	15.....	188	180	25.....	3,670	450
6.....	53	800	16.....	177	180	26.....	2,330	367
7.....	43	485	17.....	177	327	27.....	1,670	306
8.....	46	600	18.....	177	500	28.....	1,170	275
9.....	54	400	19.....	57	550	29.....	867	260
10.....	67	200	20.....	0	550	30.....	800	250
						31.....	533	304
Monthly mean discharge, in cubic feet per second......................							655	431
Runoff, in acre-feet...							40,270	26,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 23--Con.			Dec. 26		
12 p.m.......		0	9:30 p.m.....		800	8 a.m........		3,000
			9:30.........		5,000	8............		2,000
Dec. 21			12 p.m.......		5,000	12 p.m.......		2,000
12 p.m.......		0						
12 p.m.......		400	Dec. 24			Dec. 27		
			8 a.m........		5,000	8 a.m........		2,000
Dec. 22			8............		5,500	8............		1,500
8 a.m........		400	10:30........		5,500	12 p.m.......		1,500
8............		800	10:30........		8,800			
12 p.m.......		800	12 m.........		8,800	Dec. 28		
			12...........		7,000	8 a.m........		1,500
Dec. 23			4 p.m........		7,000	8............		1,000
8 a.m........		800	4............		5,000	12 p.m.......		1,000
8............		0	12 p.m.......		5,000			
3:30 p.m.....		0				Dec. 29		
3:30.........		800	Dec. 25			8 a.m........		1,000
6............		800	8 a.m........		5,000	8............		800
6............		1,920	8............		3,000	12 p.m.......		800
8............		1,920	12 p.m.......		3,000			
8 p.m........		800						

31. Truckee River at Farad, Calif.
(Miscellaneous site)

Location.--Lat 39°26', long 120°02', in NE¼ sec.12, T.18 N., R.17 E., 0.5 mile downstream from powerplant at Farad, 3 miles downstream from Bronco Creek, and 3½ miles downstream from Iceland.

Drainage area.--940 sq mi, approximately.

Gage-height record.--Gage operated by Truckee-Carson Irrigation District; destroyed by flood. Altitude of gage is 5,200 ft (from topographic map).

Discharge record.--Peak discharge computed by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 14,400 cfs Dec. 23 (stage 1.8 ft lower than peak stage of Nov. 21, 1950).
1938 to November 1955: Discharge, 17,500 cfs Nov. 21, 1950.

Remarks.--Flow regulated by Lake Tahoe (see station 22), Boca Reservoir (see station 29), Donner and Independence Lakes, and several powerplants. Lake Tahoe outlet closed at time of peak.

32. Truckee River at Reno, Nev.

Location.--Lat 39°32', long 119°47', in sec.12, T.19 N., R.19 E., on left bank 400 ft downstream from Kietske Lane bridge, half a mile east of Reno, and 5 miles upstream from Steamboat Creek.

Drainage area.--1,070 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,440 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 14,000 cfs and extended above by logarithmic plotting. Discharge for Dec. 22-26 computed by using rate of change of stage as a factor.

Maxima.--December 1955 to January 1956: Discharge, 20,800 cfs 8:30 a.m. Dec. 23; gage height, 13.63 ft 11 a.m. Dec. 23.

1906-19, 1947 to November 1955: Discharge, 19,900 cfs Nov. 21, 1950; gage height, 13.83 ft Nov. 21, 1950.

Remarks.--Flow regulated by Lake Tahoe (see station 22), Boca Reservoir (see station 29), Donner and Independence Lakes, and several powerplants. Lake Tahoe outlet closed at time of peak.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	352	1,390	11.....	324	702	21.....	820	1,340
2.....	340	1,450	12.....	328	692	22.....	7,080	1,290
3.....	332	1,620	13.....	320	692	23.....	16,200	1,540
4.....	280	1,590	14.....	328	752	24.....	10,700	1,350
5.....	284	1,840	15.....	352	1,380	25.....	5,990	1,280
6.....	396	1,520	16.....	328	2,480	26.....	4,450	1,190
7.....	382	1,240	17.....	332	1,650	27.....	3,280	1,010
8.....	328	1,170	18.....	336	1,550	28.....	2,500	949
9.....	336	1,080	19.....	644	1,480	29.....	2,190	890
10.....	320	852	20.....	891	1,410	30.....	1,960	827
						31.....	1,730	803
Monthly mean discharge, in cubic feet per second......................							2,078	1,258
Runoff, in acre-feet..							127,800	77,370

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 24--Con.		
12 p.m.......	2.90	405	9 p.m........	10.21	9,660	8 p.m........	10.38	9,700
			10:30........	10.68	11,800	12 p.m.......	9.88	8,510
Dec. 19			12 p.m.......	11.18	11,900			
2 a.m........	3.02	460				Dec. 25		
4............	3.04	470	Dec. 23			4 a.m........	9.20	7,190
9............	3.16	540	1 a.m........	11.08	11,600	8............	8.60	6,180
12 m.........	3.24	580	2............	11.33	13,700	12 m.........	8.16	5,690
4 p.m........	3.45	694	3............	11.74	13,500	1 p.m........	8.23	5,800
8............	3.78	898	4............	11.85	14,000	4............	8.07	5,370
12 p.m.......	3.88	961	5............	12.03	16,200	8............	7.72	4,920
			6............	12.30	16,200	12 p.m.......	7.34	4,430
Dec.20			7............	12.62	16,700			
6 a.m........	3.81	916	8............	12.93	19,000	Dec. 26		
10...........	3.76	886	8:30.........	13.31	20,800	4 a.m........	6.98	4,080
12 m.........	3.70	850	9............	13.55	18,900	9............	6.72	3,830
2 p.m........	3.65	820	10...........	13.54	18,200	12 m.........	7.22	4,560
6............	3.73	868	11...........	13.63	18,400	1:30 p.m.....	7.89	5,260
10...........	3.80	910	12 m.........	13.56	17,800	2:30.........	7.68	4,760
12 p.m.......	3.79	904	1 p.m........	13.47	17,300	4............	7.52	4,750
			1:30.........	13.43	17,800	5............	7.65	5,120
Dec. 21			2:30.........	13.49	18,500	6............	7.86	5,220
6 a.m........	3.68	838	3:30.........	13.60	18,300	9............	7.52	4,610
12 m.........	3.64	814	5............	13.53	17,700	12 p.m.......	7.11	4,170
7 p.m........	3.57	772	7............	13.27	16,400			
10...........	3.58	778	9............	12.94	15,400	Dec. 27		
12 p.m.......	3.67	832	10:30........	12.38	13,100	4 a.m........	6.60	3,700
			12 p.m.......	11.91	12,600	8............	6.31	3,380
Dec. 22						12 m.........	6.08	3,130
1 a.m........	3.84	934	Dec. 24			2 p.m........	5.97	3,010
2............	4.50	1,420	1 a.m........	11.78	13,500	8............	5.97	3,010
6............	6.93	4,130	2:30.........	11.86	13,600	12 p.m.......	5.77	2,800
10...........	9.16	7,490	7............	11.05	10,900			
11...........	9.11	7,390	12 m.........	10.22	9,290	Jan. 14		
12 m.........	9.22	7,990	1:30 p.m.....	10.08	9,100	12 p.m.......	3.37	827
2 p.m........	9.70	9,270	2:30.........	9.98	9,170			
4............	10.16	9,650	3:30.........	10.45	11,800	Jan. 15		
6............	10.17	9,470	4:30.........	10.92	11,300	6 a.m........	3.51	916
7 p.m........	10.30	9,860	6 p.m........	10.73	10,300	12 m.........	3.58	962

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Truckee River at Reno, Nev.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 15--Con.			Jan. 16--Con.			Jan. 17		
1 p.m.	3.62	988	4 a.m.	6.05	3,100	6 a.m.	4.54	1,680
8	5.27	2,300	9	5.65	2,680	12 m.	4.33	1,510
10	5.30	2,330	12 m.	5.41	2,440	2 p.m.	4.30	1,490
12 p.m.	5.67	2,700	6 p.m.	5.04	2,100	4	4.45	1,610
			12 p.m.	4.80	1,890	6	4.52	1,670
Jan. 16						9	4.52	1,670
3 a.m.	6.04	3,080				12 p.m.	4.48	1,630

33. Long Valley Creek near Vista, Nev.

(Miscellaneous site)

Location.--Lat 39°30', long 119°38', in sec.21, T.19 N., R.21 E., 1 mile upstream from mouth, about 2 miles southeast of former railroad station at Vista and 9 miles southeast of Reno.

Discharge record.--Peak discharge computed by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,500 cfs Dec. 23.

34. Truckee River near Nixon, Nev.

(Miscellaneous site)

Location.--Lat 39°48', long 119°21', in NW$\frac{1}{4}$NW$\frac{1}{4}$ sec.18, T.22 N., R.24 E., 1$\frac{1}{2}$ miles south of Nixon and 6 miles upstream from Pyramid Lake.

Discharge record.--Peak discharge computed from flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 14,000 cfs Dec. 24 (gage height, 7.0 ft above crest of dam).

Flood of Nov. 21, 1950, reached a stage several feet lower than the December 1955 flood, from information by local residents.

Remarks.--Flow regulated by Lake Tahoe (see station 22), Boca Reservoir (see station 29), Donner and Independence Lakes, several powerplants, and diversion at Derby Dam. Peak discharge may have been affected by failure of Derby Dam at Derby.

BLACK ROCK DESERT BASIN

35. McDermitt Creek near McDermitt, Nev.

Location.--Lat 41°58', long 117°50', in SE$\frac{1}{4}$SE$\frac{1}{4}$ sec.8, T.47 N., R.37 E., on left bank 6$\frac{1}{2}$ miles southwest of McDermitt.

Gage-height record.--Water-stage recorder graph except 12 m. to 9 p.m. Dec. 22 when the graph was based on the adjacent record; 4:30 p.m. to 9 p.m. Dec. 23, 12 p.m. Dec. 26 to 2 p.m. Dec. 27, and 5 p.m. Jan. 15 to 4 a.m. Jan. 16 when the graph was based on surveyed flood peaks, shape of adjscent record and general shape of floods for this station.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 460 cfs and by slope-area measurements of 1,630 cfs and 2,110 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,100 cfs 12 p.m. Jan. 15 (gage height, 8.60 ft).

1948 to November 1955: Discharge, 1,240 cfs Apr. 26, 1952 (gage height, 6.83 ft), from rating curve extended above 600 cfs.

Mean discharge, in cubic feet per second, 1955-56, of McDermitt Creek near McDermitt, Nev.

Day	December	January	Day	December	January	Day	December	January
1	5.0	37	11	5.6	19	21	43	80
2	4.5	32	12	6.0	17	22	155	77
3	4.0	27	13	5.0	20	23	470	151
4	3.5	28	14	6.4	20	24	236	94
5	3.0	26	15	6.0	690	25	118	76
6	3.6	23	16	7.2	600	26	99	68
7	2.7	24	17	6.8	169	27	136	54
8	3.4	21	18	6.8	127	28	76	33
9	4.4	24	19	10	102	29	43	29
10	5.6	24	20	20	92	30	40	27
						31	43	26
Monthly mean discharge, in cubic feet per second							50.9	91.5
Runoff, in acre-feet							3,130	5,630

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23--Con.			Jan. 15--Con.		
12 p.m.	2.38	50	9 p.m.	5.91	980	2 p.m.	4.84	641
			10	5.16	740	4	5.29	780
Dec. 22			12 p.m.	4.35	496	5	5.39	812
6 a.m.	2.59	82				12 p.m.	8.60	2,100
12 m.	2.99	153	Dec. 25					
3 p.m.	3.30	216	3 a.m.	3.80	341	Jan. 16		
7	3.42	244	6	3.53	270	4 a.m.	5.62	885
10	3.34	225	9	3.36	230	5	5.39	812
11	3.34	225	3 p.m.	3.15	184	8	4.52	545
12 p.m.	3.20	194	12 p.m.	2.97	147	10	4.18	446
						12 m.	3.97	388
Dec. 23			Jan. 14			6 p.m.	3.66	304
4 a.m.	2.96	145	12 p.m.	2.23	28	12 p.m.	3.42	244
5	3.14	181						
9	3.62	293	Jan. 15			Jan. 17		
11	3.29	214	2 a.m.	2.37	45	11 a.m.	2.97	147
2 p.m.	3.43	246	4	2.83	120	3 p.m.	2.93	140
3	4.02	402	8	4.06	413	7	2.97	147
4:30	4.16	441	10	4.13	432	10	3.00	153
7 p.m.	7.74	1,650	11 a.m.	4.06	413	12 p.m.	2.97	147

36. East Fork Quinn River near McDermitt, Nev.

Location.--Lat 41°59', long 117°35', in sec.9, T.47 N., R.39 E., 1 mile downstream from South Fork and 7 miles east of McDermitt.

Gage-height record.--Water-stage recorder graph.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 700 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 1,270 cfs 7 p.m. Jan. 15 (gage height, 8.52 ft).
1948 to November 1955: Discharge, 940 cfs Apr. 6, 1952 (gage height, 6.63 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	4.8	32	11	5.3	24	21	33	70
2	4.3	28	12	5.8	23	22	260	102
3	4.5	26	13	5.8	24	23	363	111
4	3.0	24	14	4.5	61	24	148	80
5	2.8	36	15	5.0	646	25	95	70
6	3.6	32	16	6.0	456	26	81	63
7	4.1	30	17	6.0	181	27	72	55
8	4.3	26	18	6.6	111	28	57	46
9	5.0	24	19	14	90	29	44	42
10	4.5	24	20	26	76	30	39	36
						31	35	35
Monthly mean discharge, in cubic feet per second							43.6	86.6
Runoff, in acre-feet							2,860	5,320

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of East Fork Quinn River near McDermitt, Nev.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23--Con.			Jan. 14--Con.		
12 p.m.......	3.42	26	3 a.m........	5.78	374	8 p.m........	4.58	158
			8............	5.18	244	9:30.........	4.76	174
Dec. 21			9............	5.12	233	12 p.m.......	4.70	164
5 a.m........	3.38	24	12 m.........	5.12	233			
9............	3.44	28	1 p.m........	5.23	253	Jan. 15		
2 p.m........	3.47	30	2............	6.20	487	5 a.m........	4.97	200
5............	3.51	32	3............	8.48	1,250	7............	5.18	219
8............	3.60	39	5............	6.20	503	10...........	6.62	531
10...........	3.72	49	6............	5.70	374	12:30 p.m....	7.02	578
12 p.m.......	3.98	70	8............	5.25	277	7............	8.52	1,270
			12 p.m.......	4.90	212	10...........	8.14	1,120
Dec. 22						12 p.m.......	7.67	950
2 a.m........	4.38	115	Dec. 24					
5............	5.37	287	5 a.m........	4.60	163	Jan. 16		
6............	5.44	302	5 p.m........	4.35	131	2 a.m........	7.03	755
7:30.........	5.38	290	12 p.m.......	4.20	112	5............	6.35	567
8:30.........	5.38	290				8............	5.94	468
11...........	5.91	422	Jan. 13			3 p.m........	5.42	355
12 m.........	5.74	374	12 p.m.......	3.16	24	12 p.m.......	5.08	275
3 p.m........	5.58	331						
8............	4.95	203	Jan. 14			Jan. 17		
11...........	4.78	175	11 a.m.......	3.18	25	5 a.m........	4.72	205
12 p.m.......	4.88	191	1 p.m........	3.21	27	8............	4.62	185
			3............	3.28	32	3 p.m........	4.50	163
Dec. 23			4............	3.38	39	7	4.48	157
2 a.m........	5.73	362	5 p.m........	3.60	55	12 p.m.......	4.28	127

37. Quinn River near McDermitt, Nev.

Location.--Lat 41°47', long 117°48', in SW$\frac{1}{4}$ sec.15, T.45 N., R.37 E., on left bank 1$\frac{1}{2}$ miles upstream from Flat Creek and 15$\frac{1}{2}$ miles south of McDermitt.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,240 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 261 cfs 1-2 a.m. Jan. 17 (gage height, 3.22 ft).

1948 to November 1955: Discharge, 1,580 cfs Apr. 27, 1952 (gage height, 8.39 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.7	15	11.....	0.7	10	21.....	0.9	127
2.....	.6	14	12.....	.7	9.6	22.....	1.3	132
3.....	.7	12	13.....	.7	9.6	23.....	11	160
4.....	.7	11	14.....	.7	16	24.....	30	181
5.....	.7	13	15.....	.7	28	25.....	34	160
6.....	.7	14	16.....	.7	176	26.....	27	135
7.....	.7	15	17.....	.7	204	27.....	25	125
8.....	.7	13	18.....	.7	155	28.....	22	80
9.....	.7	11	19.....	1.3	138	29.....	16	70
10.....	.7	11	20.....	2.1	136	30.....	14	60
						31.....	13	45
Monthly mean discharge, in cubic feet per second......................							6.78	73.7
Runoff, in acre-feet..							417	4,530

HONEY LAKE BASIN

38. Susan River at Susanville, Calif.

Location.--Lat 40°25', long 120°40', in NE¼ sec.31, T.30 N., R.12 E., on left bank 0.5 mile west of Susanville and 1.1 miles upstream from Piute Creek.

Drainage area.--192 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,225.72 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 840 cfs and by slope-area measurement at 3,540 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,540 cfs 3:30 p.m. Dec. 23 (gage height, 6.62 ft).

1900-1905, 1913, 1917-21, 1950 to November 1955: Discharge, 2,030 cfs Jan. 9, 1953 (gage height, 5.50 ft).

Remarks.--Flow regulated by McCoy Flat and Hog Flat Reservoirs (combined capacity, 25,300 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	12	150	11.....	14	95	21.....	864	283
2.....	12	128	12.....	15	97	22.....	2,490	311
3.....	11	115	13.....	15	187	23.....	2,340	332
4.....	9.8	109	14.....	14	358	24.....	948	264
5.....	11	108	15.....	13	1,150	25.....	446	237
6.....	12	103	16.....	14	776	26.....	624	218
7.....	14	102	17.....	19	450	27.....	465	196
8.....	15	100	18.....	31	328	28.....	294	160
9.....	17	104	19.....	135	296	29.....	231	140
10.....	15	97	20.....	701	308	30.....	188	120
						31.....	171	110
Monthly mean discharge, in cubic feet per second							328	243
Runoff, in inches							1.97	1.46
Runoff, in acre-feet							20,150	14,940

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 28		
12 p.m.......	1.53	25	8 a.m........	5.89	2,520	6 a.m........	3.47	311
			11...........	6.45	3,290	12 p.m.......	3.24	253
Dec. 18			1 p.m........	5.68	2,250			
6 a.m........	1.60	29	8............	5.15	1,640	Jan. 12		
3 p.m........	1.56	27	12 p.m.......	6.12	2,830	12 p.m.......	2.46	106
7............	1.62	30						
9............	1.84	48	Dec. 23			Jan. 13		
12 p.m.......	1.80	44	1 a.m........	6.38	3,190	3 a.m........	2.51	114
			6............	5.15	1,640	8............	2.84	171
Dec. 19			9............	5.12	1,610	12 m.........	2.93	188
3 a.m........	1.71	37	11...........	5.30	1,800	6 p.m........	3.16	235
12 m.........	1.98	63	3:30 p.m.....	6.62	3,540	12 p.m.......	3.23	251
1 p.m........	1.96	61	8............	5.68	2,240			
5............	2.14	84	12 p.m.......	5.19	1,650	Jan. 14		
6............	2.69	190				4 a.m........	3.37	283
8............	3.50	460	Dec. 24			10...........	3.36	280
9............	3.26	366	3 a.m........	4.83	1,270	1 p.m........	3.46	308
12 p.m.......	3.29	376	6............	4.64	1,090	6............	3.88	490
			12 m.........	4.43	897	12 p.m.......	3.90	500
Dec. 20			12 p.m.......	4.03	581			
1 a.m........	3.30	380				Jan. 15		
5............	3.72	560	Dec. 25			5 a.m........	3.94	524
9............	4.17	822	12 m.........	3.74	420	11...........	4.54	996
12 m.........	4.09	774	12 p.m.......	3.61	364	2 p.m........	5.24	1,710
6 p.m........	4.26	882				4............	5.54	2,070
12 p.m.......	3.79	595	Dec. 26			9............	5.00	1,440
			5 a.m........	3.62	368	12 p.m.......	4.68	1,120
Dec. 21			7............	3.86	480			
10 a.m.......	3.55	482	11...........	3.76	430	Jan. 16		
3 p.m........	3.78	590	2 p.m........	4.22	716	6 a.m........	4.41	879
6............	4.26	882	4	4.67	1,110	12 m.........	4.26	748
9............	5.00	1,490	12 p.m.......	4.09	623	12 p.m.......	3.97	542
12 p.m.......	6.32	3,110						
			Dec. 27			Jan. 17		
Dec. 22			12 m.........	3.79	445	12 m.........	3.79	445
4 a.m........	6.15	2,870	12 p.m.......	3.57	348	12 p.m.......	3.62	368
6 a.m........	6.13	2,840						

39. Willow Creek near Susanville, Calif.

Location.--Lat 40°29', long 120°32', in NW¼ sec.5, T.30 N., R.13 E., on left bank 4 miles upstream from Peters Valley Creek and 8 miles northeast of Susanville.

Drainage area.--92.5 sq mi, excluding Eagle Lake basin.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,836.27 ft above mean sea level, unadjusted.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 420 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 712 cfs 2 p.m. Dec. 23 (gage height, 5.36 ft).
1950 to November 1955: Discharge, 694 cfs Apr. 6, 1952 (gage height, 5.32 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	25	96	11	22	110	21	194	111
2	25	89	12	22	130	22	357	103
3	24	84	13	21	225	23	559	98
4	23	72	14	21	312	24	546	90
5	24	65	15	21	364	25	371	55
6	25	96	16	21	298	26	357	74
7	24	86	17	22	185	27	346	87
8	24	74	18	23	133	28	238	113
9	23	95	19	62	114	29	100	95
10	22	101	20	201	115	30	115	80
						31	106	70
Monthly mean discharge, in cubic feet per second							128	123
Runoff, in inches							1.59	1.54
Runoff, in acre-feet							7,860	7,580

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23--Con.			Jan. 12		
12 p.m.	2.50	24	9 a.m.	4.77	474	12 p.m.	3.57	157
			12 m.	5.11	604			
Dec. 19			2 p.m.	5.36	712	Jan. 13		
12 m.	2.65	35	6	5.20	640	12 m.	3.91	222
10 p.m.	3.45	136	12 p.m.	5.12	608	6 p.m.	4.09	268
12 p.m.	3.47	139				12 p.m.	4.16	285
			Dec. 24					
Dec. 20			12 m.	4.99	556	Jan. 14		
4 a.m.	3.44	134	12 p.m.	4.74	464	12 m.	4.25	308
8	3.62	166				12 p.m.	4.39	347
5 p.m.	4.10	270	Dec. 25					
8	3.99	242	12 m.	4.46	368	Jan. 15		
12 p.m.	3.96	235	12 p.m.	4.16	285	8 a.m.	4.37	341
						3 p.m.	4.65	432
Dec. 21			Dec. 26			6	4.45	365
4 p.m.	3.69	178	6 a.m.	4.12	275	12 p.m.	4.32	326
8	3.48	141	11	4.64	429			
12 p.m.	3.88	216	2 p.m.	4.47	371	Jan. 16		
			4	4.72	457	12 m.	4.20	295
Dec. 22			6	4.49	377	3 p.m.	4.23	302
4 a.m.	4.27	312	12 p.m.	4.49	377	12 p.m.	4.05	258
6	4.23	302						
10	4.64	429	Dec. 27			Jan. 17		
4 p.m.	4.41	353	12 m.	4.40	350	10 a.m.	3.55	153
8	4.37	341	12 p.m.	4.24	305	12 m.	3.70	180
11	4.77	474				12 p.m.	3.60	162
12 p.m.	4.74	464	Dec. 28					
			6 p.m.	3.88	216			
Dec. 23			12 p.m.	3.38	125			
3 a.m.	4.63	426						

EAGLE LAKE BASIN

40. Pine Creek near Westwood, Calif.

Location.--Lat 40°35', long 121°06', in SE¼ sec.5, T.31 N., R.8 E., on right bank 1 mile southwest of Bogard Guard station and 19 miles north of Westwood.

Drainage area.--22.6 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,700 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 62 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 174 cfs 6:30 a.m. Dec. 23 (gage height, 3.95 ft).

1950 to November 1955: Discharge, 154 cfs May 26, 1952 (gage height, 3.91 ft), from rating curve extended above 90 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.6	12	11.....	0.7	8.1	21.....	41	8.9
2.....	.6	12	12.....	.7	7.7	22.....	78	8.5
3.....	.6	12	13.....	.7	7.3	23.....	127	7.7
4.....	.6	12	14.....	.7	7.0	24.....	60	7.3
5.....	.6	14	15.....	.7	7.7	25.....	40	7.3
6.....	.6	9.8	16.....	.7	9.8	26.....	20	6.2
7.....	.7	7.3	17.....	.7	9.8	27.....	15	5.8
8.....	.7	8.0	18.....	.6	10	28.....	14	5.4
9.....	.7	9.0	19.....	2.5	9.3	29.....	14	4.8
10.....	.7	10	20.....	27	8.9	30.....	13	3.8
						31.....	13	3.3
Monthly mean discharge, in cubic feet per second......................							15.4	8.41
Runoff, in inches......................							0.78	0.43
Runoff, in acre-feet......................							945	517

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.......	2.55	0.4	9 p.m........	3.31	31	7 p.m........	3.57	81
			12 p.m.......	3.26	27	12 p.m.......	3.52	70
Dec. 19								
12 m.........	2.51	.2	Dec. 22			Dec. 24		
4 p.m........	2.60	.7	3 a.m........	3.26	27	4 a.m........	3.50	66
9............	2.93	7.7	6............	3.38	39	1 p.m........	3.44	55
12 p.m.......	3.08	15	10...........	3.67	93	7............	3.46	59
			12 m.........	3.68	96	12 p.m.......	3.43	53
Dec. 20			2 p.m........	3.79	122			
4 a.m........	3.29	29	4............	3.80	124	Dec. 25		
9............	3.38	39	6............	3.69	98	12 m.........	3.33	37
2 p.m........	3.18	21	8............	3.65	89	12 p.m.......	3.30	33
12 p.m.......	3.23	25	10...........	3.66	91			
			12 p.m.......	3.70	100	Dec. 26		
Dec. 21						6 a.m........	3.25	28
7 a.m........	3.30	30	Dec. 23			12 m.........	3.14	19
10...........	3.45	50	4 a.m........	3.93	166	2 p.m........	3.07	14
11...........	3.59	76	6:30.........	3.95	174	5............	3.02	12
12 m.........	3.52	62	1 p.m........	3.82	140	12 p.m.......	3.03	12
3 p.m........	3.49	57						

WARNER LAKES BASIN

41. Twentymile Creek near Adel, Oreg.

Location.--Lat 42°04', long 119°57', in NW¼ sec.25, T.40 S., R.23 E., on left bank 2 miles downstream from Twelvemile Creek and 8 miles southwest of Adel.

Drainage area.--194 sq mi, including 46 sq mi in Cowhead Lake area.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,560.43 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 300 cfs and by contracted-opening measurement of 3,260 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 3,260 cfs 12 m. Dec. 23 (gage height, 14.80 ft).

1910-16, 1917-19, 1921-22, 1940 to November 1955: Discharge, 3,000 cfs Dec. 27, 1942 (gage height, 4.28 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	8.2	44	11.....	9.0	17	21.....	394	169
2.....	7.7	31	12.....	27	17	22.....	652	481
3.....	7.7	25	13.....	78	20	23.....	1,920	504
4.....	4.5	24	14.....	64	140	24.....	524	165
5.....	5	22	15.....	34	1,370	25.....	184	92
6.....	5.5	22	16.....	34	720	26.....	216	84
7.....	6.1	21	17.....	34	345	27.....	203	64
8.....	6.5	20	18.....	33	233	28.....	88	50
9.....	7.7	17	19.....	562	222	29.....	70	40
10.....	8.2	18	20.....	645	233	30.....	68	35
						31.....	58	30
Monthly mean discharge, in cubic feet per second							192	170
Runoff, in inches							1.14	1.01
Runoff, in acre-feet							11,830	10,460

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.	2.57	34	6 a.m.	5.43	546	3 p.m.	2.75	62
			11	5.25	510	8	4.43	376
Dec. 18			2 p.m.	5.69	602	12 p.m.	5.33	556
6 a.m.	2.53	30	5	5.52	564			
12 m.	2.48	27	8	6.35	732	Jan. 15		
6 p.m.	2.50	28	12 p.m.	8.78	1,320	4 a.m.	6.59	808
9	2.57	34				8	7.42	985
12 p.m.	2.83	75	Dec. 23			12 m.	8.57	1,270
			3 a.m.	8.89	1,350	4 p.m.	12.12	2,320
Dec. 19			6	10.97	1,960	8	10.74	1,890
4 a.m.	3.20	145	12 m.	14.80	3,260	12 p.m.	8.60	1,280
8	3.29	158	5 p.m.	9.85	1,620			
12 m.	3.58	202	8	9.10	1,400	Jan. 16		
2 p.m.	4.25	330	12 p.m.	7.12	914	6 a.m.	6.90	870
6	7.92	1,130				12 m.	5.48	586
9	9.37	1,550	Dec. 24			2 p.m.	5.42	574
12 p.m.	8.47	1,280	6 a.m.	5.62	614	5	5.56	602
			10	5.35	560	12 p.m.	4.59	408
Dec. 20			12 m.	4.52	394			
4 a.m.	7.40	1,030	3 p.m.	4.42	374	Jan. 17		
8	5.82	632	8	4.69	428	6 a.m.	4.15	320
12 m.	5.14	488	12 p.m.	4.22	334	11	3.97	284
5 p.m.	4.70	420				5 p.m.	4.62	414
10	4.83	446	Dec. 25			12 p.m.	4.04	298
12 p.m.	4.73	426	6 a.m.	3.50	190			
			12 m.	3.23	137	Jan. 18		
Dec. 21			3 p.m.	3.21	134	6 a.m.	3.79	248
4 a.m.	4.44	368	6	3.32	154	12 m.	3.63	216
8	4.45	370	12 p.m.	3.47	184	4 p.m.	3.67	224
2 p.m.	4.22	324				12 p.m.	3.52	194
6	4.49	378	Jan. 13					
12 p.m.	5.64	591	12 p.m.	2.46	21			
Dec. 22			Jan. 14					
2 a.m.	5.76	618	11 a.m.	2.47	22			

42. Camas Creek near Lakeview, Oreg.

Location.--Lat 42°13', long 120°06', in N½ sec.2, T.39 S., R.22 E., on left bank 0.2 mile downstream from Blue Creek and 12 miles east of Lakeview.

Drainage area.--63 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 5,472.41 ft above mean sea level (Oregon State Highway Dept. construction survey bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 350 cfs and by slope-area measurement of 1,630 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 1,630 cfs 3:30 p.m. Dec. 22 (gage height, 5.15 ft).

1912-14, 1949 to November 1955: Discharge, 660 cfs Apr. 28, 1952 (gage height, 4.24 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	16	137	11	21	49	21	266	109
2	16	91	12	49	49	22	1,160	113
3	15	70	13	86	49	23	772	104
4	12	66	14	67	54	24	399	87
5	16	61	15	57	257	25	298	73
6	19	57	16	46	330	26	248	70
7	24	54	17	32	237	27	190	65
8	24	51	18	31	172	28	137	60
9	24	50	19	69	155	29	132	55
10	21	49	20	168	132	30	152	52
						31	158	50
Monthly mean discharge, in cubic feet per second							152	97.0
Runoff, in inches							2.79	1.78
Runoff, in acre-feet							9,370	5,970

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22--Con.			Jan. 14		
12 p.m.	1.16	34	10 a.m.	4.81	1,310	9 a.m.	1.29	42
			12 m.	4.83	1,330	6 p.m.	1.50	59
Dec. 19			1 p.m.	4.78	1,280	12 p.m.	1.82	91
6 a.m.	1.19	35	3:30	5.15	1,630			
12 m.	1.34	46	6	4.98	1,460	Jan. 15		
6 p.m.	1.96	106	12 p.m.	4.31	897	6 a.m.	2.19	142
12 p.m.	2.25	144				12 m.	2.66	225
			Dec. 23			6 p.m.	3.27	381
Dec. 20			3 a.m.	4.10	750	12 p.m.	3.54	469
6 a.m.	2.28	148	6	4.50	1,040			
12 m.	2.38	162	8	4.29	883	Jan. 16		
6 p.m.	2.57	192	12 m.	4.37	939	9 a.m.	3.13	339
12 p.m.	2.59	195	6 p.m.	3.82	590	12 m.	3.10	330
			12 p.m.	3.57	480	6 p.m.	2.80	255
Dec. 21						12 p.m.	2.78	251
6 a.m.	2.73	221	Dec. 24					
12 m.	2.77	229	9 a.m.	3.26	378	Jan. 17		
6 p.m.	2.91	257	12 m.	3.39	417	9 a.m.	2.70	233
10	3.68	444	6 p.m.	3.25	375	12 m.	2.85	268
12 p.m.	3.80	485	12 p.m.	3.14	342	3 p.m.	2.84	265
						6	2.66	225
Dec. 22			Jan. 13			12 p.m.	2.45	186
6 a.m.	4.49	1,030	12 p.m.	1.35	47			

43. Drake Creek near Adel, Oreg.

Location.--Lat 42°12', long 120°00', near center of sec.9, T.39 S., R.23 E., on left bank 400 ft downstream from highway bridge, 700 ft downstream from Parsnip Creek, 1 mile upstream from mouth, and 6½ miles west of Adel.

Drainage area.--47 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 5,076.42 ft above mean sea level (Oregon State Highway Dept. construction survey bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 300 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 1,100 cfs 4 a.m. Dec. 23 (gage height, 3.93 ft).

1915, 1922-23, 1949 to November 1955: Discharge, 866 cfs Apr. 5, 1952 (gage height, 3.58 ft), from rating curve extended above 160 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56, of Drake Creek near Adel, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	4.3	7.6	11.....	5.0	7.6	21.....	119	28
2.....	4.1	7.3	12.....	6.6	7.6	22.....	347	39
3.....	4.1	7.3	13.....	11	8.6	23.....	561	55
4.....	4.0	7.3	14.....	9.4	15	24.....	66	28
5.....	3.5	7.3	15.....	6.3	213	25.....	27	20
6.....	4.0	7.0	16.....	6.3	192	26.....	23	20
7.....	4.5	7.0	17.....	6.1	111	27.....	16	13
8.....	4.5	7.0	18.....	6.3	59	28.....	12	13
9.....	4.5	7.5	19.....	63	36	29.....	12	13
10.....	5.0	7.6	20.....	121	39	30.....	8.0	12
						31.....	8.0	10
Monthly mean discharge, in cubic feet per second							47.8	32.7
Runoff, in inches							1.17	0.80
Runoff, in acre-feet							2,940	2,010

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Jan. 13		
12 p.m.......	0.74	8.1	6 a.m........	2.23	282	12 p.m.......	0.72	9.2
			11...........	2.70	454			
Dec. 19			6 p.m........	2.42	340	Jan. 14		
12 m.........	1.00	25	8............	2.50	372	12 m.........	.74	10
4 p.m........	1.47	86	12 p.m.......	2.25	288	12 p.m.......	1.02	31
7............	1.80	160						
10...........	1.70	136	Dec. 23			Jan. 15		
12 p.m.......	1.70	136	1 a.m........	2.24	287	6 a.m........	1.35	71
			4............	3.93	1,100	12 m.........	1.97	208
Dec. 20			5............	3.89	1,070	3 p.m........	2.44	354
12 m.........	1.53	94	8............	3.27	715	5............	2.54	391
9 p.m........	1.75	147	11...........	3.10	630	8............	2.44	354
12 p.m.......	1.72	140	2 p.m........	3.10	630	12 p.m.......	2.19	272
			6............	2.45	358			
Dec. 21			12 p.m.......	1.62	122	Jan. 16		
6 a.m........	1.60	108				12 m.........	1.79	162
12 m.........	1.53	94	Dec. 24			6 p.m........	1.88	185
4 p.m........	1.53	94	6 a.m........	1.27	60	12 p.m.......	1.67	133
8............	1.62	114	10	1.25	58			
12 p.m.......	2.10	243	12 m.........	1.29	63	Jan. 17		
			6 p.m........	1.30	64	8 a.m........	1.47	91
Dec. 22			12 p.m.......	1.03	32	2 p.m........	1.66	131
4 a.m........	2.29	302				12 p.m.......	1.46	89

44. Deep Creek above Adel, Oreg.

Location.--Lat 42°11', long 119°59', in E½ sec.15, T.39 S., R.23 E., on right bank a third of a mile downstream from Drake Creek and 5 miles west of Adel.

Drainage area.--249 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 28 to Jan. 3 when float was frozen. Datum of gage is 4,966.7 ft above mean sea level (Oregon State Highway Dept. construction survey bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,300 cfs and by slope-area measurement of 4,540 cfs; affected by ice at times. Discharge for period of no gage-height record estimated on basis of weather records and records for Twentymile Creek near Adel and Camas Creek near Lakeview.

Maxima.--December 1955 to January 1956: Discharge, 4,540 cfs 5 a.m. Dec. 23 (gage height, 7.29 ft).

1922-23, 1929 to November 1955: Discharge, 5,030 cfs Dec. 11, 1937 (gage height, 7.5 ft, from floodmark), from rating curve extended above 2,000 cfs on basis of velocity-area studies.

Mean discharge, in cubic feet per second, 1955-56, of Deep Creek above Adel, Oreg.

Day	December	January	Day	December	January	Day	December	January
1	42	190	11	38	126	21	688	347
2	30	185	12	89	121	22	2,960	378
3	28	180	13	222	124	23	3,360	436
4	25	170	14	196	157	24	1,090	305
5	27	152	15	146	1,190	25	689	248
6	28	150	16	127	1,200	26	585	228
7	28	145	17	93	721	27	468	178
8	36	119	18	86	556	28	350	160
9	36	120	19	197	484	29	250	150
10	36	130	20	563	444	30	220	130
						31	200	110
Monthly mean discharge, in cubic feet per second							417	301
Runoff, in inches							1.93	1.39
Runoff, in acre-feet							26,650	18,510

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 23			Jan. 14		
12 p.m.	1.50	101	2 a.m.	6.13	2,920	6 a.m.	1.62	119
			5	7.29	4,540	12 m.	1.68	129
Dec. 19			7	7.21	4,420	6 p.m.	1.88	166
12 m.	1.65	124	12 m.	6.62	3,540	12 p.m.	2.43	299
3 p.m.	1.83	156	2 p.m.	6.69	3,640			
8	2.71	373	6	6.19	2,990	Jan. 15		
12 p.m.	2.94	449	12 p.m.	5.01	1,770	12 m.	3.95	980
						4 p.m.	4.90	1,670
Dec. 20			Dec. 24			7	5.33	2,060
6 a.m.	3.19	541	6 a.m.	4.08	1,060	12 p.m.	5.16	1,900
12 m.	3.21	549	10	3.92	962			
10 p.m.	3.45	648	3 p.m.	4.02	1,020	Jan. 16		
12 p.m.	3.44	643	6	4.00	1,010	11 a.m.	4.04	1,030
			12 p.m.	3.74	854	2 p.m.	4.10	1,070
Dec. 21						6	3.99	1,000
6 a.m.	3.33	597	Dec. 25			12 p.m.	3.59	775
12 m.	3.36	609	6 a.m.	3.32	640			
6 p.m.	3.44	643	9	3.26	610	Jan. 17		
12 p.m.	4.34	1,160	12 m.	3.42	690	9 a.m.	3.31	635
			6 p.m.	3.43	695	4 p.m.	3.65	805
Dec. 22			12 p.m.	3.37	665	12 p.m.	3.39	675
12 m.	6.64	3,470						
8 p.m.	6.91	3,890	Jan. 13					
12 p.m.	6.33	3,040	12 p.m.	1.66	126			

45. Honey Creek near Plush, Oreg.

Location.--Lat 42°25', long 119°55', in NW¼ sec.29, T.36 S., R.24 E., on right bank at mouth of canyon, 1 mile northwest of Plush and 4 miles downstream from Twelvemile Creek.

Drainage area.--156 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 22 to Jan. 3, Jan. 31, when float was caught. Datum of gage is 4,538.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 200 cfs and extended above by logarithmic plotting; affected by ice at times. Discharge for periods of no gage-height record estimated on basis of weather records and records for Deep Creek above Adel and Twentymile Creek near Adel.

Maxima.--December 1955 to January 1956: Discharge, not determined, Dec. 22.
1909-15, 1921-22, 1930 to November 1955: Discharge, about 3,840 cfs Apr. 15, 1915 (gage height, 9.20 ft, site and datum then in use), from rating curve extended above 2,300 cfs by logarithmic plotting (caused by failure of storage dam on Snyder Creek); maximum discharge due to natural causes, 2,240 cfs Feb. 24, 1910 (gage height, 6.30 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56, of Honey Creek near Plush, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	3.0	25	11.....	4.8	16	21.....	111	64
2.....	2.6	24	12.....	12	25	22.....	1,000	63
3.....	2	22	13.....	22	40	23.....	500	63
4.....	1.5	20	14.....	13	65	24.....	300	46
5.....	1.7	19	15.....	9.2	548	25.....	200	44
6.....	1.9	18	16.....	8.4	313	26.....	100	41
7.....	2.5	17	17.....	5.8	142	27.....	80	26
8.....	3.2	16	18.....	6.4	103	28.....	60	24
9.....	3.2	15	19.....	8.0	81	29.....	40	20
10.....	3.6	15	20.....	98	75	30.....	35	18
						31.....	30	17
Monthly mean discharge, in cubic feet per second......................							86.1	65.3
Runoff, in inches..							0.64	0.48
Runoff, in acre-feet...							5,290	4,020

Peak discharge.--1,060 cfs 7 p.m. Jan. 15 (gage height, 7.30 ft).

ABERT LAKE BASIN

46. Chewaucan River above Conn ditch near Paisley, Oreg.

Location.--Lat 42°41', long 120°35', in SW$\frac{1}{4}$ sec.27, T.33 S., R.18 E., on right bank at footbridge 20 ft downstream from former powerplant of Paisley Electric Co., 700 ft upstream from diversion dam of Conn ditch, a quarter of a mile downstream from Mill Creek, and 2$\frac{1}{2}$ miles west of Paisley.

Drainage area.--275 sq mi.

Gage-height record.--Water-stage recorder station, destroyed by flood. Altitude of gage is 4,400 ft (from river-profile map). Staff gage, 2 miles downstream, read daily Jan. 27-31.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 240 cfs. Peak discharge determined by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 3,260 cfs, time unknown, Dec. 22 (gage height, 7.8 ft, from floodmarks).

1912-21, 1924 to November 1955: Discharge, 1,680 cfs Dec. 11, 1937 (gage height, 4.93 ft).

Discharge known, 4,000 cfs Nov. 23, 1909, from records at site 2 miles downstream below Conn ditch where records are equivalent at high flows.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	Decmeber	January
1.....	55	240	11.....	80	160	21.....	1,500	450
2.....	50	220	12.....	200	160	22.....	2,500	400
3.....	48	210	13.....	300	160	23.....	2,000	360
4.....	45	200	14.....	250	400	24.....	1,500	340
5.....	45	190	15.....	200	1,000	25.....	1,000	300
6.....	45	180	16.....	150	1,500	26.....	800	260
7.....	45	170	17.....	130	1,000	27.....	500	238
8.....	45	170	18.....	200	800	28.....	400	210
9.....	45	160	19.....	500	700	29.....	350	195
10.....	50	160	20.....	800	550	30.....	300	147
						31.....	250	122
Monthly mean discharge, in cubic feet per second......................							464	366
Runoff, in inches..							1.95	1.54
Runoff, in acre-feet...							28,530	22,520

SILVER LAKE BASIN

47. Silver Creek near Silver Lake, Oreg.

Location.--Lat 43°07', long 121°04', in SW¼ sec.28, T.28 S., R.14 E., on right bank 1½ miles downstream from former diversion dam, 1½ miles southwest of town of Silver Lake, and 3 miles upstream from Bridge Creek.

Drainage area.--221 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 30 to Jan. 5 and Jan. 31.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 600 cfs and by slope-area measurement at 930 cfs; affected by ice at times. Discharge for periods of no gage-height record estimated on basis of recorded range in stage when available, weather records, and records for Deep Creek above Adel.

Maxima.--December 1955 to January 1956: Discharge, 930 cfs 9 a.m. Dec. 22 (gage height, 7.65 ft).

1905-7, 1909 to November 1955: Discharge, 1,800 cfs Mar. 20, 1907 (gage height, 10.08 ft), from rating curve extended above 700 cfs.

Remarks.--Flow affected by Thompson Valley Reservoir (capacity, 17,400 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	8.5	34	11.....	7.7	22	21.....	96	59
2.....	7.7	32	12.....	9.0	21	22.....	612	60
3.....	7.4	30	13.....	13	20	23.....	244	73
4.....	7.0	29	14.....	13	25	24.....	134	53
5.....	5.8	28	15.....	12	97	25.....	98	43
6.....	5.8	26	16.....	11	136	26.....	80	40
7.....	6.2	25	17.....	9.8	89	27.....	71	30
8.....	6.6	25	18.....	9.8	66	28.....	59	28
9.....	6.6	24	19.....	12	58	29.....	50	25
10.....	7.4	23	20.....	24	59	30.....	40	22
						31.....	35	20
Monthly mean discharge, in cubic feet per second							55.1	42.6
Runoff, in inches							0.29	0.22
Runoff, in acre-feet							3,390	2,620

Peak discharge.--184 cfs 11 p.m. Jan. 15 (gage height, 3.69 ft).

CENTRAL-COASTAL CALIFORNIA

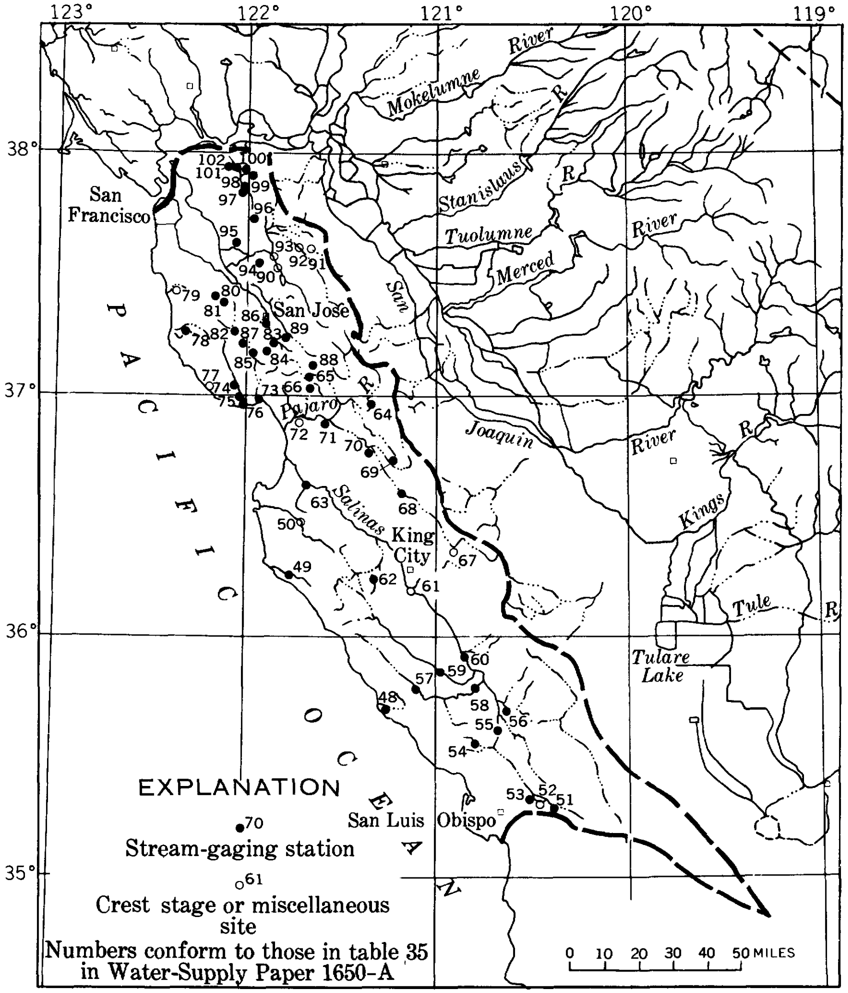

123°
122°
121°
120°
119°
38°
37°
36°
35°
San Francisco
San Jose
King City
San Luis Obispo
PACIFIC OCEAN
Mokelumne River
Stanislaus R
Tuolumne
Merced
River
San Joaquin R
Joaquin River
Pajaro
Salinas
Kings R
Tule R
Tulare Lake
EXPLANATION
•70
Stream-gaging station
○61
Crest stage or miscellaneous site
Numbers conform to those in table 35 in Water-Supply Paper 1650-A
0 10 20 30 40 50 MILES

Figure 3.--Map of the Central-coastal California region showing location of flood-data sites.

ARROYO DE LA CRUZ BASIN

48. Arroyo de la Cruz near San Simeon, Calif.

Location.--Lat 35°43'25", long 121°17'00", in Piedra Blanca Grant, on right bank 1.7 miles upstream from mouth and 7 miles northwest of town of San Simeon, San Luis Obispo County.

Drainage area.--41.4 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 22 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,600 cfs and by slope-area measurement at 17,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 17,700 cfs 8 a.m. Dec. 23 (gage height, 12.40 ft).

1950 to November 1955: Discharge, 11,600 cfs Jan. 14, 1952 (gage height, 10.80 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	212	11.....	8.4	97	21.....	122	75
2.....	0	218	12.....	8.9	92	22.....	556	74
3.....	0	152	13.....	8.4	88	23.....	7,080	85
4.....	0	131	14.....	7.4	86	24.....	2,270	82
5.....	0	129	15.....	6.9	84	25.....	547	4,530
6.....	0	129	16.....	5.9	82	26.....	987	2,150
7.....	0	114	17.....	5.5	78	27.....	453	823
8.....	0	122	18.....	5.1	76	28.....	232	349
9.....	0	109	19.....	4.7	75	29.....	168	227
10.....	.9	102	20.....	734	77	30.....	161	174
						31.....	216	147
Monthly mean discharge, in cubic feet per second......................							438	354
Runoff, in inches..							12.21	9.85
Runoff, in acre-feet..							26,950	21,760

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 23--Con.			Jan. 24		
12 p.m.......	1.79	5.1	10 p.m.......	7.75	4,380	12 p.m.......	1.89	83
			12 p.m.......	7.30	3,720			
Dec. 20						Jan. 25		
1:30 a.m.....	1.80	5.5	Dec. 24			1 a.m........	1.93	87
2............	3.28	240	2 a.m........	7.32	3,750	2............	2.03	99
3............	4.07	542	5:30.........	6.52	2,740	3............	2.50	164
5............	5.47	1,290	7:30.........	6.65	2,880	5............	9.00	6,600
6............	5.88	1,590	10...........	6.50	2,720	7............	11.70	14,900
8............	5.42	1,250	11...........	6.39	2,600	8............	11.15	12,800
9............	5.51	1,320	6 p.m........	5.00	1,360	9............	10.83	11,700
12 m.........	5.00	980	8............	4.71	1,160	12 m.........	8.45	5,550
6 p.m........	3.90	465	12 p.m.......	4.26	861	3 p.m........	6.57	2,800
9............	3.50	310				6............	5.59	1,840
12 p.m.......	3.25	232	Dec. 25			9............	5.06	1,410
			6 a.m........	3.86	635	12 p.m.......	4.74	1,180
Dec. 21			12 m.........	3.58	501			
12 p.m.......	2.50	73	6 p.m........	3.38	414	Jan. 26		
			12 p.m.......	3.39	418	1 a.m........	4.80	1,220
Dec. 22						4............	6.85	3,120
4 a.m........	2.44	64	Dec. 26			10...........	5.23	1,540
7............	2.43	62	5 a.m........	3.30	382	12 m.........	5.03	1,380
9............	2.50	73	6............	3.32	390	2 p.m........	5.30	1,600
10...........	2.61	92	8............	3.31	386	3............	5.73	1,970
12 m.........	5.00	980	9............	3.36	406	5............	7.40	3,860
1 p.m........	5.00	980	10...........	3.55	488	9............	5.66	1,900
4:30.........	4.61	785	12 m.........	6.29	2,500	11...........	5.23	1,540
6............	4.68	820	12:30 p.m....	6.18	2,390	12 p.m.......	5.15	1,480
8:30.........	4.41	694	1............	6.30	2,510			
10...........	4.70	830	2............	6.10	2,310	Jan. 27		
12 p.m.......	6.80	2,460	6............	4.59	1,070	3 a.m........	4.92	1,300
			9............	4.17	807	4............	4.72	1,160
Dec. 23			12 p.m.......	3.99	704	7............	4.42	958
3 a.m........	9.40	7,300				11...........	4.11	771
4............	8.46	5,080	Dec. 27			4 p.m........	3.82	615
6............	10.35	10,000	6 a.m........	3.65	532	9............	3.59	506
8............	12.40	17,700	12 m.........	3.41	426	12 p.m.......	3.50	465
10...........	10.90	12,000	8 p.m........	3.16	331			
1 p.m........	8.90	6,400	12 p.m.......	3.05	296			
6 p.m........	7.19	3,570						

SUR RIVER BASIN

49. Sur River at Big Sur, Calif.

Location.--Lat 36°14'45", long 121°46'20", in SW¼SW¼ sec.29, T.19 S., R.2 E., on right bank at downstream side of bridge, 0.4 mile upstream from Post Creek and 0.9 mile upstream from town of Big Sur.

Drainage area.--46.9 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,400 cfs and by slope-area measurement at 5,220 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,220 cfs 5 a.m. Dec. 23 (gage height, 11.05 ft).

1950 to November 1955: Discharge, 4,200 cfs Nov. 19, 1950 (gage height, 9.8 ft, site and datum then in use, from graph based on gage readings), from rating curve extended above 1,400 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	43	820	11.....	31	352	21.....	234	225
2.....	37	790	12.....	29	320	22.....	439	228
3.....	29	635	13.....	29	289	23.....	4,120	245
4.....	29	527	14.....	27	272	24.....	1,890	238
5.....	30	532	15.....	26	275	25.....	901	1,490
6.....	57	492	16.....	26	270	26.....	1,230	1,450
7.....	42	472	17.....	25	248	27.....	1,000	1,360
8.....	35	496	18.....	29	230	28.....	685	1,020
9.....	44	424	19.....	245	218	29.....	509	830
10.....	36	376	20.....	687	242	30.....	598	695
						31.....	780	608
Monthly mean discharge, in cubic feet per second							449	538
Runoff, in inches							11.04	13.22
Runoff, in acre-feet							27,610	33,060

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1956-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.......	3.13	35	10 p.m.......	5.06	570	11 a.m.......	7.14	1,840
			12 p.m.......	7.98	2,480	2 p.m........	6.74	1,560
Dec. 19						4............	6.61	1,470
4 a.m........	3.22	43	Dec. 23			12 p.m.......	6.24	1,220
8............	3.43	73	2 a.m........	10.07	4,300			
4 p.m........	3.81	137	4............	10.87	5,040	Dec. 27		
6............	4.17	229	5............	11.05	5,220	8 a.m........	5.94	1,050
10...........	5.82	972	8............	10.04	4,280	12 p.m.......	5.49	825
12 p.m.......	5.73	918	10...........	9.78	4,040			
			2 p.m........	9.42	3,720	Jan. 24		
Dec. 20			6............	10.48	4,670	12 p.m.......	4.05	262
2 a.m........	5.53	805	8	9.80	4,060			
4............	5.48	780	10...........	9.17	3,490	Jan. 25		
6............	5.98	1,070	12 p.m.......	8.71	3,080	1 a.m........	4.15	280
8............	5.83	978				3............	4.65	448
2 p.m........	5.13	605	Dec. 24			7:30.........	8.18	2,640
6............	4.83	462	3 a.m........	8.11	2,590	1 p.m........	7.12	1,820
12 p.m.......	4.49	340	12 m.........	7.00	1,740	8............	6.31	1,270
			12 p.m.......	6.14	1,160	12 p.m.......	6.12	1,150
Dec. 21								
12 p.m.......	3.89	176	Dec. 25			Jan. 26		
			10 a.m.......	5.67	915	2 a.m........	6.06	1,120
Dec. 22			4 p.m........	5.45	805	9............	6.25	1,230
2 a.m........	3.86	170	10...........	5.31	735	12 m.........	6.50	1,390
4............	3.85	168	12 p.m.......	5.33	745	3 p.m........	6.93	1,690
6............	3.93	185				5............	7.00	1,740
10...........	4.59	374	Dec. 26			7:30.........	7.15	1,840
12 m.........	4.83	462	2 a.m........	5.39	775	10...........	7.00	1,740
7 p.m........	4.71	416	6............	5.43	795	12 p.m.......	6.88	1,660
8 p.m........	4.74	427	8 a.m........	5.81	985			

CARMEL RIVER BASIN

50. Carmel River near Carmel Valley, Calif.

(Miscellaneous site)

Location.--Lat 36°28'15", long 121°43'00", in Los Tularcitos Grant at Camp Stephani at upper end of Carmel Valley, 1,000 ft downstream from Klondike Canyon and 13 miles southeast of Carmel.

Drainage area.--188 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 6,930 cfs Dec. 23.

SALINAS RIVER BASIN

51. Salinas River near Pozo, Calif.

Location.--Lat 35°18', long 120°24', in SE¼ sec.18, T.30 S., R.15 E., on right bank 0.4 mile downstream from highway bridge, 1.5 miles downstream from Pozo Creek, 1.7 miles west of Pozo, and 7 miles upstream from Salinas Dam.

Drainage area.--72.5 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 15-26, Jan. 4, 7-22. Altitude of gage is 1,350 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Dec. 1-26, Jan. 4, 7-22 estimated on basis of field estimate, recorded range in stage, and records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 3,920 cfs 1 p.m. Jan. 25 (gage height, 10.65 ft).

1942 to November 1955: Discharge, 5,800 cfs Jan. 21, 1943 (gage height, 13.35 ft), from rating curve extended above 2,500 cfs on basis of storage increase in Salinas Reservoir and by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1.1	19	11	1.1	4.4	21	5	3.2
2		14	12		4.2	22	20	3.1
3		12	13		4.1	23	700	3.1
4		10	14		4.0	24	600	3.1
5		7.1	15	1.5	3.8	25	300	1,260
6		6.0	16		3.6	26	250	1,470
7		5.4	17		3.5	27	109	843
8		5.1	18		3.4	28	63	265
9		4.8	19		3.3	29	40	131
10		4.6	20	3	3.3	30	28	80
						31	25	56
Monthly mean discharge, in cubic feet per second							69.9	137
Runoff, in inches							1.11	2.18
Runoff, in acre-feet							4,300	8,420

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1956

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 24			Jan. 25--Con.			Jan. 26--Con.		
12 p.m.	3.58	3.1	7 p.m.	7.25	1,110	12 p.m.	8.63	1,760
			11	6.44	870			
Jan. 25			12 p.m.	6.47	880	Jan. 27		
3 a.m.	3.67	7.1				3 a.m.	7.60	1,310
5	4.24	60	Jan. 26			6	7.04	1,090
6	4.85	170	4 a.m.	6.94	1,050	9	6.50	895
7	5.85	462	6	7.15	1,050	12 m.	6.10	753
9	7.75	1,250	7:30	7.30	1,190	4 p.m.	5.69	600
10	8.90	1,960	9	7.20	1,160	8	5.36	474
11	10.10	3,160	12 m.	6.74	981	12 p.m.	5.11	384
12 m.	10.55	3,770	2 p.m.	6.48	885			
12:30 p.m.	10.10	3,160	5	7.50	1,260	Jan. 28		
1	10.65	3,920	7	9.20	2,230	6 a.m.	4.86	301
2	9.85	2,900	9	10.50	3,740	12 m.	4.71	255
4 p.m.	8.40	1,630	11 p.m.	9.30	2,330	6	4.59	221
						12 p.m.	4.45	183

52. Salinas Reservoir near Pozo, Calif.

Location.--Lat 35°20', long 120°30', in sec.5, T.30 S., R.14 E., at left end of dam on Salinas River, 2 miles upstream from Pilitas Creek and 7.5 miles northwest of Pozo.

Drainage area.--111 sq mi.

Gage-height record.--Water-stage recorder graph. Elevations at 12 p.m. used to determine contents. Datum of gage is at mean sea level (levels by Corps of Engineers).

Maxima.--December 1955 to January 1956: Contents, 27,200 acre-ft 12 p.m. Jan. 27 (elevation, 1,302.48 ft).

1941 to November 1955: Contents, 28,600 acre-ft Mar. 15, 1952 (elevation, 1,304.26 ft).

Remarks.--Reservoir is formed by concrete-arch dam, outlet closed Dec. 6, 1941. Usable capacity, 26,000 acre-ft between elevations 1,220.3 ft (bottom of outlet pipe) and 1,301.0 ft (spillway crest) above mean sea level. Water diverted at dam into pipeline to small reservoir 10 miles below from which it is pumped to Camp San Luis Obispo and city of San Luis Obispo for water supply; water is also released down natural channel of river.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	1,284.02	14,800	1,291.85	19,500	16	1,283.88	14,700	1,292.13	19,700
2	1,284.02	14,800	1,291.90	19,500	17	1,283.87	14,700	1,292.13	19,700
3	1,284.01	14,800	1,291.95	19,600	18	1,283.86	14,700	1,292.14	19,700
4	1,284.02	14,800	1,291.97	19,600	19	1,283.86	14,700	1,292.14	19,700
5	1,284.00	14,800	1,291.99	19,600	20	1,283.87	14,700	1,292.16	19,700
6	1,284.01	14,800	1,292.02	19,600	21	1,283.87	14,700	1,292.17	19,700
7	1,284.01	14,800	1,292.04	19,600	22	1,283.95	14,800	1,292.18	19,700
8	1,283.99	14,800	1,292.05	19,600	23	1,284.47	15,000	1,292.18	19,700
9	1,283.98	14,800	1,292.07	19,600	24	1,287.97	17,100	1,292.20	19,700
10	1,283.96	14,800	1,292.08	19,700	25	1,289.19	17,800	1,296.50	22,800
11	1,283.95	14,800	1,292.08	19,700	26	1,290.53	18,600	1,301.00	26,000
12	1,283.95	14,800	1,292.10	19,700	27	1,291.22	19,100	1,302.48	27,200
13	1,283.94	14,800	1,292.10	19,700	28	1,291.45	19,200	1,301.88	26,700
14	1,283.92	14,800	1,292.12	19,700	29	1,291.58	19,300	1,301.24	26,200
15	1,283.90	14,800	1,292.13	19,700	30	1,291.67	19,400	1,300.65	25,700
					31	1,291.79	19,500	1,300.03	25,200
Change in contents................................						-	+4,700	-	+5,700

53. Salinas River above Pilitas Creek, near Santa Margarita, Calif.

Location.--Lat 35°21', long 120°31', in NE¼ sec.6, T.30 S., R.14 E., on downstream side of right bank bridge pier, 200 ft upstream from Pilitas Creek and 6 miles southeast of Santa Margarita.

Drainage area.--112 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,150 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 625 cfs 3:30 p.m. Jan. 27 (gage height, 2.90 ft).

1942 to November 1955: Discharge, 2,200 cfs Mar. 15, 1952 (gage height, 4.99 ft), from rating curve extended above 740 cfs on basis of computation of peak flow over dam.

Remarks.--Flow regulated by Salinas Reservoir (see station 52).

Mean discharge, in cubic feet per second, 1955-56, of Salinas River above Pilitas Creek, near Santa Margarita, Calif.

Day	December	January	Day	December	January	Day	December	Janaury
1	0.8	1.7	11	0.1	1.3	21	0.2	3.0
2	.9	1.5	12	.1	1.3	22	.1	2.4
3	.7	1.3	13	.1	1.2	23	3.7	2.7
4	1.3	1.3	14	.1	1.3	24	37	2.7
5	.9	1.5	15	.1	1.3	25	7.6	27
6	1.0	1.3	16	.1	1.3	26	13	34
7	.6	1.3	17	.1	1.5	27	5.3	478
8	.2	1.2	18	.1	1.7	28	2.7	552
9	.2	1.2	19	0	2.2	29	2.2	442
10	.1	1.3	20	.1	2.4	30	1.5	342
						31	2.4	334
Monthly mean discharge, in cubic feet per second							2.69	72.5
Runoff, in acre-feet							165	4,460

54. Jack Creek near Templeton, Calif.

Location.--Lat 35°34', long 120°48', in Paso de Robles Grant, on left bank 1.4 miles upstream from mouth, 1.8 miles northwest of Oakdale school, and 5.6 miles west of Templeton, San Luis Obispo County.

Drainage area.--25.4 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 980 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and by slope-area measurement at 5,040 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,040 cfs 8:30 a.m. Jan. 25 (gage height, 9.56 ft).
1949 to November 1955: Discharge, 2,690 cfs Jan. 15, 1952 (gage height, 7.81 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0	75	11	0	15	21	4.1	7.8
2	0	68	12	0	14	22	8.2	7.2
3	0	45	13	0	13	23	834	8.4
4	0	34	14	0	12	24	508	7.8
5	0	29	15	0	11	25	136	1,400
6	0	26	16	0	11	26	315	680
7	0	21	17	0	9.6	27	136	391
8	0	21	18	0	8.4	28	68	167
9	0	18	19	0	8.1	29	42	108
10	0	16	20	7.5	8.4	30	45	75
						31	210	59
Monthly mean discharge, in cubic feet per second							74.6	109
Runoff, in inches							3.39	4.94
Runoff, in acre-feet							4,590	6,690

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Jan. 25--Con.		
12 p.m.	1.74	1.6	10 p.m.	6.17	1,260	8 p.m.	4.56	454
			12 p.m.	5.75	1,010	11:30	4.36	383
Dec. 22						12 p.m.	4.47	421
6 a.m.	1.67	1.1	Dec. 24					
3:30 p.m.	1.65	1.0	1 a.m.	5.54	892	Jan. 26		
4	2.29	14	2	5.52	881	1 a.m.	5.81	1,040
7	2.32	15	5	4.74	524	4	5.15	702
10	2.41	18	7	4.65	488	6:30	5.00	635
11	2.56	27	12 m.	5.08	671	12 m.	4.46	418
12 p.m.	3.17	94	4 p.m.	4.41	400	4 p.m.	5.00	635
			8	3.93	254	6	5.69	974
Dec. 23			12 p.m.	3.68	190	8:30	5.00	635
2 a.m.	4.80	548				10	4.84	565
4	4.50	432	Jan. 24			12 p.m.	6.13	1,230
5	4.67	496	12 p.m.	2.21	11			
6	4.59	464				Jan. 27		
8	6.38	1,410	Jan. 25			1 a.m.	4.44	410
9	6.50	1,500	3 a.m.	3.02	73	3	5.00	635
12 m.	6.02	1,160	8:30	9.56	5,040	8	4.48	425
2 p.m.	5.20	725	11	7.28	2,160	2 p.m.	4.14	316
5	4.87	577	2 p.m.	5.75	1,010	12 p.m.	3.78	215
8 p.m.	5.28	761	5 p.m.	5.00	635			

55. Salinas River at Paso Robles, Calif.

Location.--Lat 35°37'40", long 120°41'05", in Paso de Robles Grant, on downstream side of left pier of bridge on State Highway 41 at Paso Robles, San Luis Obispo County, 3.5 miles upstream from Huerhuero Creek.

Drainage area.--389 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 670.61 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,000 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 12,000 cfs 3:30 p.m. Jan. 25 (gage height, 16.73 ft).

1939 to November 1955: Discharge, 14,200 cfs Mar. 9, 1943 (gage height, 16.2 ft), from rating curve extended above 6,000 cfs on basis of velocity-area studies and logarithmic plotting.

Stage known, 16.9 ft during flood of Feb. 10-13, 1938.

Remarks.--Flow regulated by Salinas Reservoir (see station 52).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0	359	11	0	99	21	0	62
2	0	295	12	0	90	22	0	58
3	0	232	13	0	84	23	371	53
4	0	198	14	0	74	24	2,150	52
5	0	154	15	0	76	25	1,190	4,830
6	0	146	16	0	76	26	863	3,340
7	0	133	17	0	72	27	962	3,410
8	0	118	18	0	70	28	385	1,690
9	0	113	19	0	65	29	225	1,230
10	0	106	20	0	63	30	160	939
						31	516	810
Monthly mean discharge, in cubic feet per second							220	616
Runoff, in acre-feet							13,530	37,880

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22			Dec. 26			Jan. 25--Con.		
12 p.m.	-	0	8 a.m.	7.62	564	12 m.	12.15	4,400
			10	7.62	564	2 p.m.	15.95	10,600
Dec. 23			12 m.	7.57	543	3:30	16.73	12,000
4 p.m.	-	0	3 p.m.	7.60	555	5	16.35	11,300
5	7.25	417	4	7.70	600	12 p.m.	13.00	5,640
8	9.44	1,590	5	8.14	810			
11	9.04	1,320	8	9.55	1,660	Jan. 26		
12 p.m.	9.04	1,320	9	9.62	1,710	3 a.m.	11.95	4,120
			10	9.56	1,670	5	11.47	3,500
Dec. 24			12 p.m.	9.27	1,470	6	11.35	3,360
1 a.m.	9.11	1,370				8	11.45	3,480
3	9.52	1,640	Dec. 27			1 p.m.	10.92	2,860
7	10.90	2,840	2 a.m.	9.10	1,360	4	10.56	2,490
8	10.95	2,900	5	9.00	1,300	6	10.45	2,380
9	10.82	2,750	12 m.	8.33	912	7	10.57	2,500
12 m.	9.88	1,900	3 p.m.	8.10	790	12 p.m.	11.95	4,120
1 p.m.	9.73	1,790	12 p.m.	7.56	539			
2	9.70	1,770				Jan. 27		
3	9.79	1,830	Dec. 28			4 a.m.	12.07	4,290
7	10.50	2,430	6 a.m.	7.32	443	6:30	12.48	4,860
8	10.51	2,440	12 m.	7.12	370	11	11.58	3,640
12 p.m.	10.15	2,120	6 p.m.	6.98	320	1 p.m.	11.17	3,140
			12 p.m.	6.86	278	5	10.64	2,570
Dec. 25						8	10.35	2,300
6 a.m.	9.28	1,480	Jan. 24			12 p.m.	10.15	2,120
12 m.	8.55	1,030	12 p.m.	6.02	56			
2 p.m.	8.36	928				Jan. 28		
4	8.26	873	Jan. 25			7 a.m.	9.77	1,820
7	8.17	825	4 a.m.	6.12	74	9 p.m.	9.17	1,400
9	8.17	825	9	7.23	410	12 p.m.	9.13	1,380
12 p.m.	8.06	770	10 a.m.	7.90	690			

56. Estrella Creek near Estrella, Calif.

Location.--Lat 35°42'35", long 120°38'20", in NW¼NW¼ sec.36, T.25 S., R.12 E., on right bank 0.2 mile downstream from mouth of Ranchito Canyon and 1.9 miles northwest of Estrella.

Drainage area.--922 sq mi, not including Carrizo Plains.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 710 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 330 cfs and by slope-area measurements at 637 and 1,310 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,310 cfs 11 p.m. Jan. 25 (gage height, 3.92 ft).
1954 to November 1955: Discharge, 250 cfs Feb. 27, 1955; gage height, 2.84 ft Jan. 19, 1955.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	53	11.....	0	8.3	21.....	2.7	9.0
2.....	0	38	12.....	0	8.3	22.....	2.7	8.3
3.....	0	18	13.....	.6	7.6	23.....	5.8	9.0
4.....	0	13	14.....	1.2	7.6	24.....	66	9.0
5.....	0	11	15.....	1.5	8.3	25.....	374	156
6.....	0	11	16.....	1.5	8.3	26.....	100	420
7.....	0	10	17.....	1.9	7.6	27.....	41	442
8.....	0	9.7	18.....	2.3	7.6	28.....	22	213
9.....	0	9.0	19.....	2.3	7.6	29.....	17	66
10.....	0	9.0	20.....	2.7	8.3	30.....	15	31
						31.....	43	19
Monthly mean discharge, in cubic feet per second......................							22.7	53.0
Runoff, in inches...							0.03	0.07
Runoff, in acre-feet..							1,390	3,260

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 23			Dec. 25--Con.			Jan. 26--Con.		
12 p.m.......	2.04	7.0	6 p.m........	2.74	220	9 a.m........	2.93	328
			12 p.m.......	2.59	148	12 m.........	2.80	250
Dec. 24						2 p.m........	2.73	215
5 a.m........	2.10	11	Jan. 24			4............	2.84	274
6............	2.20	20	12 p.m.......	2.04	9.0	7............	2.78	240
8............	2.16	16				9............	2.93	328
9............	2.30	38	Jan. 25			12 p.m.......	2.97	352
11...........	2.25	29	4 a.m........	2.10	13			
1 p.m........	2.45	80	6............	2.28	33	Jan. 27		
3............	2.53	108	7:30.........	2.67	136	10 a.m.......	2.83	268
6............	2.35	50	9............	2.82	195	12 m.........	3.06	412
9:30.........	2.30	38	10...........	3.13	340	2 p.m........	3.02	384
10...........	2.95	322	12 m.........	2.82	195	3............	3.51	811
12 p.m.......	2.89	286	2:30 p.m.....	2.52	86	12 p.m.......	3.04	398
			10:30........	2.37	48			
Dec. 25			11...........	3.92	1,310	Jan. 28		
1 a.m........	2.87	274	12 p.m.......	3.83	1,190	12 m.........	2.65	175
2............	3.24	547				12 p.m.......	2.48	104
6............	3.33	637	Jan. 26					
8............	3.27	583	2 a.m........	3.58	888			
12 m.........	2.97	352	3 a.m........	3.38	682			

57. Nacimiento River near Bryson, Calif.

Location.--Lat 35°48'06", long 121°06'50", in NW¼ sec.33, T.24 S., R.8 E., on right bank 0.6 mile upstream from Turtle Creek, 1.6 miles west of Bryson, and 10 miles southwest of Lockwood.

Drainage area.--140 sq mi.

Gage-height record.--Water-stage recorder graph.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 13,000 cfs and by slope-area measurement at 30,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 30,300 cfs 6 a.m. Dec. 23 (gage height, 24.63 ft).

October to November 1955: No flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	1,160	11.....	24	304	21.....	399	138
2.....	0	1,030	12.....	20	268	22.....	572	120
3.....	0	760	13.....	16	237	23.....	16,000	138
4.....	0	600	14.....	14	212	24.....	6,970	138
5.....	39	545	15.....	13	192	25.....	2,010	6,400
6.....	87	545	16.....	12	180	26.....	4,560	4,760
7.....	79	429	17.....	11	158	27.....	2,110	3,320
8.....	26	447	18.....	12	142	28.....	1,070	1,450
9.....	26	384	19.....	147	132	29.....	730	990
10.....	30	344	20.....	1,750	140	30.....	894	755
						31.....	1,790	615
Monthly mean discharge, in cubic feet per second.....................							1,271	872
Runoff, in inches..							10.47	7.18
Runoff, in acre-feet.......................................							78,170	53,620

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 23--Con.			Dec. 27		
12 p.m.......	4.50	17	2 a.m........	14.30	10,100	6 a.m........	8.62	2,500
			3............	17.00	14,700	12 m.........	8.10	1,940
Dec. 19			4............	20.10	20,800	6 p.m........	7.64	1,540
8 a.m........	4.52	19	5............	23.20	27,200	12 p.m.......	7.34	1,330
10...........	4.85	85	6............	24.63	30,300			
12 m.........	4.90	100	8............	22.65	26,100	Jan. 24		
6 p.m........	4.94	114	10...........	19.85	20,300	12 p.m.......	4.94	150
10...........	5.07	160	12 m.........	17.82	16,300			
11...........	6.80	990	2 p.m........	16.45	13,700	Jan. 25		
12 p.m.......	7.80	1,670	5............	15.22	11,600	3 a.m........	5.50	340
			8............	15.57	12,200	4............	6.15	635
Dec. 20			9............	15.57	12,200	5............	8.70	2,600
2 a.m........	7.87	1,730	12 p.m.......	14.94	11,100	6............	10.80	5,140
4............	9.00	2,960				7............	13.20	8,400
6............	8.85	2,780	Dec. 24			8............	15.10	11,400
8............	8.95	2,900	4 a.m........	13.58	8,970	10...........	17.00	14,700
12 m.........	8.00	1,840	6............	13.40	8,700	12 m.........	15.55	12,100
3 p.m........	7.34	1,330	8............	13.18	8,370	3 p.m........	13.00	8,100
6............	6.82	1,000	10...........	13.17	8,360	6............	11.05	5,460
9............	6.45	788	12 m.........	12.64	7,600	12 p.m.......	9.40	3,440
12 p.m.......	6.17	645	4 p.m........	11.03	5,440			
Dec. 21			8............	9.93	4,080	Jan. 26		
6 a.m........	5.80	470	12 p.m.......	9.21	3,210	2 a.m........	9.22	3,220
12 m.........	5.58	371				6............	9.28	3,300
6 p.m........	5.43	304	Dec. 25			10...........	9.20	3,200
12 p.m.......	5.32	258	6 a.m........	8.45	2,320	12 p.m.......	10.23	4,440
Dec. 22			12 m.........	7.92	1,770	5............	12.38	7,230
9 a.m........	5.24	226	6 p.m........	7.62	1,530	8............	11.88	6,540
11...........	5.32	258	12 p.m.......	7.70	1,590	12 p.m.......	11.03	5,440
12 m.........	5.62	389						
2 p.m........	6.29	705	Dec. 26			Jan. 27		
7............	6.60	870	7 a.m........	7.95	1,800	6 a.m........	10.00	4,160
10...........	6.65	900	10...........	11.00	5,400	12 m.........	9.11	3,090
12 p.m.......	8.30	2,150	12:30 p.m....	14.12	9,790	6 p.m........	8.50	2,370
			2............	13.33	8,600	12 p.m.......	8.05	1,890
			5............	11.37	5,880			
Dec. 23			9............	10.12	4,300			
1 a.m........	11.05	5,460	12 p.m.......	9.53	3,600			

58. Nacimiento River near San Miguel, Calif.

Location.--Lat 35°47'00", long 120°47'24", in SE¼ sec.4, T.25 S., R.11 E., on right bank 4 miles upstream from mouth and 5.5 miles northwest of San Miguel.

Drainage area.--354 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 1 to 10 a.m. Dec. 26. Datum of gage is 555.48 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 23,000 cfs and by slope-area measurement at 58,600 cfs. Discharge for period of no gage-height record estimated on basis of records for station near Bryson, San Antonio River at Pleyto, and two observations of no flow.

Maxima.--December 1955 to January 1956: Discharge, 58,600 cfs about 10 a.m. Dec. 23 (gage height, 13.15 ft, from floodmarks).
1939 to November 1955: Discharge, 53,100 cfs Jan. 15, 1952 (gage height, 12.57 ft), from rating curve extended above 23,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0	1,470	11	0	421	21	950	209
2		1,560	12		381	22	1,200	197
3		1,120	13		349	23	35,000	185
4		856	14		317	24	15,000	203
5		727	15		293	25	4,500	13,500
6		727	16		271	26	10,000	8,800
7		618	17		250	27	4,460	7,610
8		576	18		229	28	1,680	2,790
9		535	19	300	209	29	1,100	1,750
10		475	20	3,800	203	30	832	1,290
						31	2,170	1,040
Monthly mean discharge, in cubic feet per second							2,613	1,586
Runoff, in inches							8.51	5.16
Runoff, in acre-feet							160,600	97,510

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 26			Dec. 31--Con.			Jan. 26--Con.		
12 p.m.	6.00	8,700	12 p.m.	2.80	1,870	9 a.m.	5.73	7,690
						3 p.m.	5.18	5,930
Dec. 27			Jan. 24			5	5.40	6,560
6 a.m.	5.00	5,480	12 p.m.	1.28	203	7	6.65	11,400
2 p.m.	4.00	3,520				10	7.60	16,200
8	3.40	2,660	Jan. 25			12 p.m.	7.22	14,100
12 p.m.	3.10	2,260	8 a.m.	1.40	285			
			9	1.60	445	Jan. 27		
Dec. 30			10	7.50	15,600	6 a.m.	6.25	9,700
12 p.m.	1.92	784	11	9.15	26,000	12 m.	5.50	6,880
			1 p.m.	10.27	34,200	6 p.m.	4.74	4,900
Dec. 31			4	9.35	27,400	12 p.m.	4.17	3,810
3 a.m.	2.06	952	7	8.05	18,900			
6	2.55	1,540	12 p.m.	6.20	9,500	Jan. 28		
10	3.62	2,970				6 a.m.	3.67	3,040
12 m.	3.84	3,280	Jan. 26			12 m.	3.47	2,760
1 p.m.	3.85	3,290	5 a.m.	5.32	6,320	12 p.m.	2.95	2,060
6 p.m.	3.24	2,440	8 a.m.	5.73	7,690			

59. San Antonio River at Pleyto, Calif.

Location.--Lat 35°51'55", long 120°59'30", in Pleyto Grant, on downstream side of left abutment of highway bridge at old townsite of Pleyto, Monterey County, 1.1 miles downstream from Copperhead Creek, and 15 miles west of Bradley.

Drainage area.--282 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 720 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 14,500 cfs 12 m. Dec. 23 (gage height, 5.84 ft).

1929 to November 1955: Discharge, 13,500 cfs Feb. 2, 1945 (gage height, 5.85 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0	609	11	0	257	21	114	129
2	0	767	12	0	240	22	43	127
3	0	536	13	0	213	23	6,930	120
4	0	429	14	0	192	24	7,490	115
5	0	385	15	0	173	25	1,460	2,170
6	0	396	16	0	155	26	1,380	1,920
7	0	332	17	0	146	27	1,260	2,420
8	0	332	18	0	143	28	721	1,110
9	0	304	19	0	136	29	554	799
10	0	279	20	12	136	30	418	638
						31	821	532
Monthly mean discharge, in cubic feet per second							684	524
Runoff, in inches							2.80	2.14
Runoff, in acre-feet							42,060	32,210

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 25			Jan. 25		
12 p.m.	1.25	60	6 a.m.	3.80	1,770	3 a.m.	1.58	131
			12 m.	3.47	1,280	7	1.75	173
Dec. 22			6 p.m.	3.27	1,060	10	1.98	243
6 a.m.	1.18	47	12 p.m.	3.11	909	11	1.93	226
12 m.	1.14	40				2 p.m.	3.80	1,770
9 p.m.	1.08	31	Dec. 26			5	5.32	8,800
12 p.m.	1.20	50	6 a.m.	2.99	813	8	4.62	3,890
			10	3.01	828	12 p.m.	4.08	2,310
Dec. 23			12 m.	3.11	909			
6 a.m.	1.82	192	2 p.m.	3.18	972	Jan. 26		
7	1.95	233	4	3.42	1,220	3 a.m.	3.81	1,790
8	2.10	286	6	4.00	2,140	10	3.47	1,280
9	4.20	2,600	7	4.30	2,850	11	3.44	1,250
11	5.80	14,000	9	4.30	2,850	1 p.m.	3.45	1,260
12 m.	5.84	14,500	12 p.m.	3.95	2,040	3	3.59	1,440
2 p.m.	5.53	10,900				6	3.65	1,520
4	5.52	10,800	Dec. 27			7	3.73	1,650
6	5.47	10,300	3 a.m.	3.75	1,680	10	4.60	3,800
8	5.49	10,500	6	3.63	1,500	11	4.76	4,580
9	5.43	9,900	12 m.	3.38	1,180	12 p.m.	4.69	4,200
12 p.m.	5.67	12,500	6 p.m.	3.17	963			
			12 p.m.	3.04	852	Jan. 27		
Dec. 24						5 a.m.	4.30	2,850
1 a.m.	5.75	13,400	Dec. 28			7	4.39	3,120
2	5.75	13,400	6 a.m.	2.93	771	12 m.	4.06	2,270
5	5.57	11,400	12 m.	2.85	715	2 p.m.	3.92	1,990
8	5.25	8,150	6 p.m.	2.77	662	6	3.76	1,700
12 m.	5.10	6,800	12 p.m.	2.70	620	12 p.m.	3.58	1,420
3 p.m.	5.00	6,050						
6	4.77	4,640	Jan. 24					
12 p.m.	4.19	2,580	12 p.m.	1.51	115			

60. Salinas River near Bradley, Calif.

Location.--Lat 35°55'40", long 120°52'00", in NE¼ sec.15, T.23 S., R.10 E., on left bank 6 miles northwest of Bradley and 7 miles downstream from San Antonio River.

Drainage area.--2,522 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 25,000 cfs 6 a.m. Dec. 24 (gage height, 12.01 ft).
1948 to November 1955: Discharge, 26,800 cfs Jan. 15, 1952 (gage height, 12.35 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7.2	3,120	11.....	8.9	960	21.....	1,960	453
2.....	7.5	2,800	12.....	8.6	882	22.....	885	432
3.....	7.5	2,260	13.....	8.6	808	23.....	11,300	406
4.....	8.9	1,970	14.....	8.6	746	24.....	22,000	399
5.....	8.6	1,500	15.....	8.3	694	25.....	9,170	6,550
6.....	8.0	1,410	16.....	6.5	653	26.....	5,950	16,200
7.....	8.0	1,300	17.....	5.8	590	27.....	8,600	16,400
8.....	8.3	1,150	18.....	5.8	538	28.....	3,970	7,760
9.....	8.6	1,150	19.....	5.8	488	29.....	2,570	4,540
10.....	8.9	1,040	20.....	245	466	30.....	1,950	3,240
						31.....	3,130	2,510
Monthly mean discharge, in cubic feet per second							2,319	2,691
Runoff, in inches							1.06	1.23
Runoff, in acre-feet							142,600	165,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 19		
12 p.m.......	3.77	5.8
Dec. 20		
8:30 p.m.....	3.77	5.8
9............	4.71	328
10...........	5.50	1,050
11...........	6.76	2,880
12 p.m.......	6.90	3,160
Dec. 21		
1 a.m........	6.97	3,310
2............	6.95	3,270
4............	6.81	2,980
9............	6.29	2,070
12 m.........	6.06	1,750
6 p.m........	5.68	1,270
12 p.m.......	5.46	1,010
Dec. 22		
6 a.m........	5.28	810
12 m.........	5.17	700
6 p.m........	5.67	1,250
12 p.m.......	5.01	549
Dec. 23		
4 a.m........	5.03	567
6............	5.12	650
9............	5.49	1,040
11...........	5.83	1,450
12 m.........	8.99	9,560
1 p.m........	11.16	19,900
4............	11.92	24,400
9............	11.32	20,800
12 p.m.......	11.50	21,900
Dec. 24		
2 a.m........	11.80	23,700
6 a.m........	12.01	25,000
Dec. 24--Con.		
12 m.........	11.77	23,500
4 p.m........	11.22	20,200
8............	11.13	19,700
12 p.m.......	10.59	16,800
Dec. 25		
3 a.m........	9.73	12,700
6............	9.21	10,600
9............	8.87	9,440
12 m.........	8.58	8,430
6 p.m........	8.13	6,990
12 p.m.......	7.58	5,570
Dec. 26		
4 a.m........	7.30	4,940
8............	7.12	4,540
12 m.........	7.03	4,360
4 p.m........	7.02	4,340
6............	7.16	4,630
7............	7.53	5,460
10...........	9.64	12,400
11...........	9.95	13,700
12 p.m.......	10.00	14,000
Dec. 27		
2 a.m........	9.86	13,300
8............	8.75	8,990
3 p.m........	8.17	7,110
12 p.m.......	7.46	5,300
Dec. 28		
6 a.m........	7.08	4,460
12 m.........	6.77	3,840
6 p.m........	6.52	3,390
12 p.m.......	6.31	3,050
Jan. 24		
12 p.m.......	4.14	406
Jan. 25		
8 a.m........	4.19	502
10...........	4.32	669
2 p.m........	4.41	789
3............	8.28	7,440
4:30.........	10.32	15,400
6............	10.72	17,500
7............	10.41	15,800
10...........	10.85	18,200
11...........	10.74	17,600
12 p.m.......	10.85	18,200
Jan. 26		
2 a.m........	10.97	18,800
4:30	11.20	20,100
8............	10.86	18,200
10...........	10.55	16,600
2 p.m........	10.29	15,300
4............	10.11	14,400
7............	9.71	12,600
9............	9.67	12,500
10...........	9.78	13,000
12 p.m.......	10.70	17,400
Jan. 27		
1 a.m........	11.10	19,600
3............	11.22	20,200
12 m.........	10.55	16,600
1 p.m........	10.43	16,000
5............	10.18	14,800
12 p.m.......	9.35	11,200
Jan. 28		
8 a.m........	8.55	8,320
12 m.........	8.25	7,350
5 p.m........	7.95	6,480
12 p.m.......	7.60	5,620

61. San Lorenzo Creek at King City, Calif.

(Gaging station, discontinued 1945)

Location.--Lat 36°12'35", long 121°07'05", at south boundary of San Lorenzo Grant, 0.2 mile south of King City, Monterey County.

Drainage area.--262 sq mi.

Gage-height record.--Peak stage determined from floodmarks. Altitude of gage is 320 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 3,100 cfs Dec. 23 (gage height, 13.91 ft).

1942-45: Discharge, 3,460 cfs Feb. 2, 1945 (gage height, 11.15 ft), from rating curve extended above 980 cfs by logarithmic plotting and velocity-area study.

62. Arroyo Seco near Soledad, Calif.

Location.--Lat 36°16'50", long 121°19'20", in sec.16, T.19 S., R.6 E., on left bank just downstream from bridge, 1.5 miles downstream from Vaquero Creek and 10 miles south of Soledad.

Drainage area.--241 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 344.20 ft above mean sea level (Corps of Engineers bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 12,000 cfs and by slope-area measurement at 27,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 27,700 cfs 4:30 a.m. Dec. 23 (gage height, 14.30 ft).

1901 to November 1955: Discharge, about 22,000 cfs Feb. 21, 1917, Nov. 25, 1926 (gage height, 16.5 ft, site and datum then in use), from rating curve extended above 7,500 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	6.6	932	11	15	437	21	308	244
2	19	956	12	13	395	22	330	224
3	13	768	13	11	362	23	16,500	236
4	11	652	14	11	340	24	6,760	228
5	11	620	15	9.7	322	25	2,120	3,490
6	11	616	16	9.1	320	26	2,800	3,070
7	24	543	17	8.8	285	27	1,700	3,000
8	16	599	18	8.5	262	28	1,060	1,800
9	20	518	19	124	246	29	780	1,300
10	22	476	20	1,420	250	30	692	1,020
						31	1,150	862
Monthly mean discharge, in cubic feet per second							1,161	818
Runoff, in inches							5.55	3.92
Runoff, in acre-feet							71,370	50,330

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 20--Con.			Dec. 23		
12 p.m.	1.75	8.5	3 p.m.	5.93	1,160	1 a.m.	5.78	1,070
			6	5.43	885	2	6.20	1,340
Dec. 19			12 p.m.	4.67	574	3	12.50	19,600
12 m.	1.75	8.5				4	13.95	26,100
4 p.m.	1.77	9.1	Dec. 21			4:30	14.30	27,700
5	2.92	141	6 a.m.	4.01	372	5	14.20	27,200
6	3.17	186	12 m.	3.59	268	6	13.85	25,600
10	3.09	171	6 p.m.	3.31	213	7	13.53	24,200
11	5.50	920	12 p.m.	3.14	181	8	12.80	20,900
12 p.m.	6.65	1,760				9	12.23	18,300
			Dec. 22			10	11.93	17,100
Dec. 20			6 a.m.	3.00	155	12 m.	11.67	16,100
1 a.m.	6.83	1,980	10	2.97	150	1 p.m.	11.62	15,900
3	6.55	1,650	12 m.	2.98	152	3	11.23	14,300
4	6.48	1,580	2 p.m.	3.15	182	4	11.23	14,300
6	6.12	1,280	3	4.11	398	7	12.10	17,800
7	6.22	1,360	4	4.80	620	8	12.13	17,900
9	7.13	2,410	5	4.87	648	10	11.53	15,500
10	7.24	2,580	8	4.67	574	12 p.m.	10.95	13,200
12 m.	6.77	1,900	12 p.m.	4.83	632			

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Arroyo Seco near Soledad, Calif--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 24			Dec. 26--Con.			Jan. 25--Con.		
4 a.m.	10.20	10,300	2 p.m.	9.30	7,400	12 m.	10.20	10,300
6	9.76	8,780	3	8.85	6,050	1 p.m.	9.40	7,700
8	9.45	7,850	4	8.40	4,860	4	8.15	4,520
12 m.	8.89	6,170	6	7.72	3,420	8	7.20	2,940
4 p.m.	8.29	4,620	8	7.40	2,840	12 p.m.	6.68	2,260
8	7.84	3,660	12 p.m.	7.13	2,410			
12 p.m.	7.50	3,020				Jan. 26		
			Dec. 27			6 a.m.	6.39	1,920
Dec. 25			6 a.m.	6.76	1,890	10	6.55	2,100
6 a.m.	7.18	2,490	12 m.	6.52	1,620	12 m.	6.57	2,120
12 m.	6.91	2,090	12 p.m.	6.12	1,280	3 p.m.	7.05	2,730
4 p.m.	6.74	1,870				5	8.15	4,520
9	6.37	1,480	Jan. 24			6	8.69	5,700
12 p.m.	6.24	1,370	12 p.m.	3.42	234	9	8.30	4,820
						12 p.m.	7.98	4,180
Dec. 26			Jan. 25					
3 a.m.	6.20	1,340	3 a.m.	3.55	260	Jan. 27		
5	6.20	1,340	5	4.25	440	2 a.m.	8.07	4,360
7	6.47	1,570	7	5.00	700	6	7.59	3,510
9	6.55	1,650	8	6.30	1,420	9	7.29	3,070
11	6.88	2,050	9	7.50	3,020	12 m.	7.07	2,760
12 m.	7.50	3,020	10	9.20	7,100	6 p.m.	6.80	2,400
1 p.m.	8.70	5,600	11 a.m.	10.52	11,500	12 p.m.	6.57	2,120

63. Salinas River near Spreckels, Calif.

Location.--Lat 36°37'50", long 121°40'40", in El Toro Grant, on right bank 80 ft upstream from bridge on Salinas-Monterey highway, 0.5 mile upstream from Toro Creek, 2 miles west of Spreckels, Monterey County, and 4 miles south of Salinas.

Drainage area.--4,231 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 22.64 ft above mean sea level, adjustment of 1912.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 16,000 cfs. Discharge Dec. 1-22 estimated.

Maxima.--December 1955 to January 1956: Discharge, 23,600 cfs 3 a.m. Dec. 25 (gage height, 24.52 ft).

1929 to November 1955: Discharge, 75,000 cfs Feb. 12, 1938 (gage height, 25.0 ft), from rating curve extended above 26,000 cfs on basis of velocity-area studies, verified by slope-area measurement; gage height, 26.85 ft Jan. 16, 1952, from floodmarks.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2.0	2,600	11	2.0	1,140	21	2.0	412
2		3,560	12		980	22		385
3		2,790	13		850	23	415	400
4		2,690	14		730	24	12,200	385
5		2,210	15		690	25	19,000	643
6		1,930	16		740	26	7,550	8,980
7		1,680	17		548	27	6,340	15,400
8		1,520	18		467	28	7,630	13,700
9		1,420	19		410	29	4,020	7,250
10		1,240	20		405	30	2,970	4,850
						31	2,710	3,720
Monthly mean discharge, in cubic feet per second							2,028	2,733
Runoff, in inches							0.55	0.74
Runoff, in acre-feet							124,700	168,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22			Dec. 24--Con.			Dec. 25--Con.		
12 p.m.	6.42	43	7 a.m.	18.40	6,640	6 a.m.	24.41	23,100
			10	20.20	9,940	10	23.87	21,000
Dec. 23			2 p.m.	20.70	11,100	6 p.m.	22.30	15,500
8 a.m.	6.68	66	3	20.65	11,000	12 p.m.	20.87	11,500
9 p.m.	6.88	84	6	23.30	18,800			
10	13.80	2,670	9	24.10	21,900	Dec. 26		
12 p.m.	16.45	4,500	12 p.m.	24.47	23,400	6 a.m.	19.45	8,410
						12 m.	18.65	7,020
Dec. 24			Dec. 25			10 p.m.	17.67	5,710
3 a.m.	17.80	5,860	3 a.m.	24.52	23,600	12 p.m.	17.77	5,820

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Salinas River near Spreckels, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 27			Jan. 25			Jan. 28		
4 a.m........	18.36	6,580	5 a.m........	9.66	519	3 a.m........	22.68	16,700
6............	18.37	6,600	12 m.........	9.89	625	4............	22.68	16,700
12 m.........	17.65	5,680	10 p.m.......	10.23	795	12 m.........	21.85	14,200
5 p.m........	17.12	5,120	11...........	10.35	855	6 p.m........	20.89	11,500
8............	18.40	6,640	12 p.m.......	11.75	1,560	12 p.m.......	19.92	9,340
12 p.m.......	20.11	9,740	Jan. 26					
Dec. 28			4 a.m........	15.00	3,390	Jan. 29		
3 a.m........	20.35	10,300	6............	15.10	3,460	8 a.m........	19.05	7,690
8............	19.60	8,700	8............	15.00	3,390	4 p.m........	18.35	6,570
4 p.m........	18.18	6,330	12 m.........	19.00	7,600	12 p.m.......	17.62	5,650
12 p.m.......	17.03	5,030	6 p.m........	22.22	15,300			
			10...........	22.95	17,600	Jan. 30		
Dec. 29			11:30........	23.00	17,800	8 a.m........	17.04	5,040
8 a.m........	16.17	4,260	12 p.m.......	22.99	17,800	4 p.m........	16.57	4,600
4 p.m........	15.40	3,670	Jan. 27			12 p.m.......	16.06	4,170
12 p.m.......	14.70	3,200	8 a.m........	22.38	15,700	Jan. 31		
			4 p.m........	21.78	13,900	12 m.........	15.45	3,700
Jan. 24			6............	21.79	14,000	12 p.m.......	14.90	3,320
12 p.m.......	9.28	400	12 p.m.......	22.50	16,100			

PAJARO RIVER BASIN

64. Pacheco Creek near Dunneville, Calif.

Location.--Lat 36°58'50", long 121°22'50", in Ausaymas y San Felipe Grant, on pier of private road bridge near right bank, 3.3 miles northeast of Dunneville, Santa Clara County.

Drainage area.--146 sq mi.

Gage-height record.--Staff gage read twice daily. Altitude of gage is 240 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 820 cfs and by slope-area measurement at 12,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 12,600 cfs 9 p.m. Dec. 23 (gage height, 18.6 ft, from floodmarks).

1940 to November 1955: Discharge, 7,200 cfs Feb. 2, 1945 (gage height, 17.8 ft, from floodmarks), from rating curve extended above 4,000 cfs on basis of slope-area determination of peak flow.

Remarks.--Flow affected by detention reservoir (capacity, 6,150 acre-ft) several miles above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	394	11.....	0	152	21.....	0	226
2.....	0	298	12.....	0	124	22.....	0	207
3.....	0	202	13.....	0	115	23.....	7,730	454
4.....	0	149	14.....	0	116	24.....	4,010	472
5.....	0	310	15.....	0	158	25.....	584	3,710
6.....	0	358	16.....	0	310	26.....	500	2,230
7.....	0	229	17.....	0	202	27.....	437	1,630
8.....	0	298	18.....	0	156	28.....	224	810
9.....	0	205	19.....	0	132	29.....	150	503
10.....	0	184	20.....	0	233	30.....	110	350
						31.....	855	280
Monthly mean discharge, in cubic feet per second........................							471	490
Runoff, in inches...							3.72	3.87
Runoff, in acre-feet..							28,960	30,140

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 22			Dec. 24--Con.			Jan. 24--Con.		
12 p.m.......	-	0	9 a.m........	10.6	3,910	12 p.m.......	6.8	1,730
Dec. 23			4 p.m........	7.5	2,080			
1 a.m........	6.00	1,340	12 p.m.......	5.5	1,120	Jan. 25		
2............	10.0	3,490				8 a.m........	13.0	5,940
6............	12.6	5,580	Jan. 23			4 p.m........	9.9	3,420
2 p.m........	15.4	8,390	12 p.m.......	3.4	345	12 p.m.......	7.0	1,830
9............	18.6	12,600						
12 p.m.......	17.3	10,700	Jan. 24			Jan. 26		
Dec. 24			8 a.m........	3.2	298	9 a.m........	5.4	1,070
			4 p.m........	3.0	255	2 p.m........	9.8	3,350
5 a.m........	13.3	6,210	6 p.m........	3.1	276	12 p.m.......	8.4	2,540

65. Llagas Creek near Morgan Hill, Calif.

Location.--Lat 37°06'50", long 121°41'25", in Las Uvas Grant, on right bank 500 ft upstream from Llagas Avenue bridge, 0.3 mile upstream from small tributary, and 2.3 miles west of Morgan Hill, Santa Clara County.

Drainage area.--19.6 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 445 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 334 cfs 2 p.m. Dec. 23 (gage height, 3.39 ft).

1951 to November 1955: Discharge, 2,760 cfs Jan. 12, 1952 (gage height, 8.18 ft), from rating curve extended above 1,100 cfs by logarithmic plotting.

Remarks.--Flow regulated by Llagas Reservoir since 1955 (capacity, 7,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	137	11.....	0	30	21.....	62	48
2.....	0	137	12.....	0	16	22.....	75	48
3.....	0	137	13.....	0	16	23.....	262	48
4.....	0	156	14.....	0	22	24.....	324	48
5.....	0	237	15.....	0	26	25.....	324	78
6.....	0	251	16.....	0	26	26.....	324	135
7.....	0	213	17.....	0	26	27.....	324	134
8.....	0	154	18.....	.1	26	28.....	267	134
9.....	0	90	19.....	3.3	26	29.....	198	133
10.....	0	50	20.....	29	40	30.....	137	131
						31.....	137	93
Monthly mean discharge, in cubic feet per second........................							79.6	91.8
Runoff, in acre-feet..							4,890	5,640

66. Uvas Creek near Morgan Hill, Calif.

Location.--Lat 37°04'00", long 121°41'30", in Las Uvas Grant, on right bank 500 ft upstream from Uvas Dam, 0.6 mile downstream from Eastman Canyon, and 4.8 miles southwest of Morgan Hill, Santa Clara County.

Drainage area.--30.2 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Dec. 22 to 10 a.m. Dec. 26, 12 p.m. Jan. 10 to 11 a.m. Jan. 12. Altitude of gage is 390 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,600 cfs and by slope-area measurement at 10,300 cfs. Discharge for period Dec. 23-26 computed on basis of records for San Francisquito Creek at Stanford University. Discharge for Jan. 11 was interpolated.

Maxima.--December 1955 to January 1956: Discharge, 10,300 cfs time unknown Dec. 23 (gage height, 14.3 ft, from floodmarks).

1930 to November 1955: Discharge, 8,630 cfs Dec. 11, 1937 (gage height, 13.70 ft), from rating curve extended above 4,600 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2.7	376	11.....	2.4	140	21.....	143	111
2.....	3.8	288	12.....	1.5	114	22.....	1,810	107
3.....	2.1	212	13.....	1.6	96	23.....	5,000	114
4.....	1.5	157	14.....	1.6	118	24.....	3,000	109
5.....	1.4	288	15.....	1.5	164	25.....	500	937
6.....	2.6	233	16.....	1.5	164	26.....	1,000	740
7.....	3.8	246	17.....	1.5	136	27.....	530	554
8.....	2.8	222	18.....	3.2	126	28.....	336	430
9.....	4.6	176	19.....	929	114	29.....	241	285
10.....	3.5	162	20.....	461	124	30.....	270	222
						31.....	411	178
Monthly mean discharge, in cubic feet per second.......................							473	240
Runoff, in inches..							18.07	9.17
Runoff, in acre-feet...							29,110	14,750

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Uvas Creek near Morgan Hill, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 20--Con.			Jan. 26		
12 p.m.	2.23	1.5	12 p.m.	3.83	202	5 a.m.	5.20	530
						7	5.48	632
Dec. 18			Dec. 21			8	6.10	895
5 p.m.	2.23	1.5	12 p.m.	3.53	135	9	6.20	940
8	2.33	3.2				2 p.m.	5.55	660
11:30	2.45	6.7	Dec. 22			4	5.76	744
12 p.m.	3.35	99	3 a.m.	3.85	206	6	5.85	782
			5	5.95	906	8	6.20	940
Dec. 19			6	6.14	985	10	6.12	904
2:30 a.m.	5.12	595	9	6.35	1,080	12 p.m.	5.80	760
5:30	4.34	340	2 p.m.	5.55	751			
8	4.77	476	6	5.07	578	Jan. 27		
10	4.88	513	8	7.25	1,530	2 a.m.	5.62	688
1 p.m.	4.03	252	9	12.0	6,460	3	5.62	688
4	8.15	2,120	12 p.m.	14.0	9,760	9	5.30	565
5	8.67	2,540				3 p.m.	5.14	509
7	7.85	1,920	Jan. 24			6	5.05	478
10	6.32	1,060	12 p.m.	4.20	149	8	5.00	460
12 p.m.	6.14	985				12 p.m.	4.88	418
			Jan. 25					
Dec. 20			2 a.m.	5.10	460	Jan. 28		
5 a.m.	4.88	513	4	5.25	530	3 a.m.	4.81	386
6	4.88	513	5	6.75	1,200	5	4.80	383
9	4.68	446	6	8.45	2,300	10	5.31	596
10	4.67	442	8	7.70	1,740	12 m.	5.12	495
12 m.	4.80	486	12 m.	6.40	1,030	6 p.m.	4.80	383
4 p.m.	4.51	391	4 p.m.	5.72	728	12 p.m.	4.68	343
8 p.m.	4.08	265	12 p.m.	5.31	568			

67. San Benito River below McCoy Creek, near Hernandez, Calif.

(Gaging station, discontinued 1953)

Location.--Lat 36°23'22", long 120°53'42", in SW¼ sec.4, T.18 S., R.10 E., 0.5 mile upstream from Gomez Creek, 6 miles west of Hernandez, and 18 miles northeast of King City.

Drainage area.--108 sq mi.

Gage-height record.--Peak stage determined from floodmarks. Altitude of gage is 2,000 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 3,140 cfs Dec. 24 (gage height, 7.03 ft).

1949-53: Discharge, 2,640 cfs Jan. 14, 1952 (gage height, 7.5 ft), from rating curve extended above 630 cfs.

68. San Benito River near Willow Creek School, Calif.

Location.--Lat 36°36'55", long 121°12'50", in SW¼ sec.21, T.15 S., R.7 E., on right bank 1.8 miles northwest of Willow Creek School, 2.2 miles downstream from Willow Creek, and 10.4 miles northwest of San Benito.

Drainage area.--250 sq mi.

Gage-height record.--Water-stage recorder graph. Doubtful gage-height record Dec. 23, 24, 26; graph reconstructed on basis of recorded graph and weather records. Datum of gage is 898.57 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,900 cfs and by slope-area measurement at 3,790 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,790 cfs about 2 a.m. Dec. 24 (gage height, 5.2 ft).

1939 to November 1955: Discharge, 6,200 cfs Apr. 4, 1941 (gage height, 7.8 ft, present site and datum), from rating curve extended above 1,600 cfs.

Stage known, about 9.0 ft, from floodmarks left by high water of 1937-38.

Mean discharge, in cubic feet per second, 1955-56, of San Benito River near Willow Creek School, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	0.5	154	11.....	0.2	48	21.....	0.2	43
2.....	.2	136	12.....	.2	41	22.....	15	39
3.....	.2	102	13.....	.2	36	23.....	1,420	74
4.....	.3	72	14.....	.2	35	24.....	2,470	102
5.....	.2	87	15.....	.2	37	25.....	447	768
6.....	.4	143	16.....	.2	42	26.....	290	448
7.....	.2	87	17.....	.2	35	27.....	303	842
8.....	.5	72	18.....	.2	31	28.....	120	332
9.....	.4	62	19.....	.2	28	29.....	72	264
10.....	.2	53	20.....	.2	38	30.....	94	184
						31.....	368	139
Monthly mean discharge, in cubic feet per second......................							181	148
Runoff, in inches..							0.83	0.68
Runoff, in acre-feet...							11,120	9,070

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 24--Con.			Jan. 25		
12 p.m.......	0.78	0.2	9 p.m........	3.65	1,360	3 a.m........	2.18	280
			12 p.m.......	3.30	1,000	10...........	2.18	280
Dec. 22						12 m.........	2.43	392
4 a.m........	.80	.2	Dec. 25			1 p.m........	3.48	1,180
6............	.89	.9	6 a.m........	2.72	558	3............	3.73	1,450
10...........	1.14	8.5	12 m.........	2.40	376	4............	3.98	1,750
1 p.m........	.98	4.6	6 p.m........	2.13	261	6............	3.99	1,770
9............	.86	2.4	12 p.m.......	1.90	185	8............	3.46	1,160
11...........	2.01	162				12 p.m.......	2.95	701
12 p.m.......	1.67	111	Dec. 26					
			8 a.m........	1.75	148	Jan. 26		
Dec. 23			11...........	2.00	215	6 a.m........	2.56	440
1:30 a.m.....	1.58	95	3 p.m........	2.20	288	12 m.........	2.30	310
3............	2.13	261	6............	2.24	305	6 p.m........	2.33	323
9............	2.38	367	9:30.........	2.88	666	10...........	2.86	628
11...........	3.75	1,470	12 p.m.......	2.66	521	12 p.m.......	2.88	644
2 p.m........	4.90	3,200	Dec. 27					
11...........	3.82	1,550	3 a.m........	2.53	446	Jan. 27		
12 p.m.......	4.00	1,780	6............	2.34	348	1 a.m........	3.60	1,300
			10...........	2.20	288	3............	3.68	1,390
Dec. 24			12 m.........	2.21	292	5............	3.51	1,200
2 a.m........	5.20	3,790	6 p.m........	2.04	229	9............	3.49	1,180
7............	4.55	2,600	12 p.m.......	1.88	180	12 m.........	3.08	772
11...........	4.58	2,650				6 p.m........	2.67	473
2 p.m........	4.72	2,880	Jan. 24			12 p.m.......	2.48	370
6 p.m........	4.25	2,140	12 p.m.......	1.67	130			

69. Tres Pinos Creek near Tres Pinos, Calif.

Location.--Lat 36°45'20", long 121°17'00", in Santa Ana y Quien Sabe Grant, on right bank 3.5 miles southeast of Tres Pinos, San Benito County, and 5.5 miles upstream from mouth.

Drainage area.--209 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 570 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,000 cfs and by slope-area measurement at 4,750 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,750 cfs 10 p.m. Dec. 23 (gage height, 6.90 ft).

1940 to November 1955: Discharge, 8,060 cfs Apr. 4, 1941 (gage height, 7.75 ft), from rating curve extended above 3,500 cfs.

Flood in February 1938 reached a stage of about 9.0 ft, from floodmarks.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56, of Tres Pinos Creek near Tres Pinos, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	2.3	209	11.....	1.8	39	21.....	1.8	108
2.....	2.0	126	12.....	1.8	25	22.....	2.3	96
3.....	2.0	73	13.....	1.8	18	23.....	2,090	749
4.....	2.0	46	14.....	1.8	15	24.....	2,390	147
5.....	1.8	195	15.....	1.8	141	25.....	392	1,440
6.....	1.8	104	16.....	1.8	384	26.....	146	1,080
7.....	1.8	58	17.....	1.8	111	27.....	192	1,140
8.....	2.0	76	18.....	1.8	70	28.....	39	588
9.....	1.8	54	19.....	1.8	51	29.....	35	170
10.....	1.8	39	20.....	1.8	84	30.....	53	114
						31.....	978	105
Monthly mean discharge, in cubic feet per second.......................							205	247
Runoff, in inches..							1.13	1.36
Runoff, in acre-feet...							12,610	15,180

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 22			Dec. 25--Con.			Jan. 25		
12 p.m.......	1.98	7.2	12 p.m.......	2.52	126	6:30 a.m.....	5.04	2,040
						8............	4.93	1,910
Dec. 23			Dec. 26			10:30........	5.16	2,180
5 a.m........	2.20	39	8 a.m........	2.37	81	1 p.m........	5.05	2,050
7............	4.97	1,960	2 p.m........	2.32	67	4............	4.46	1,420
8............	5.37	2,440	3............	2.35	76	7............	4.16	1,130
10...........	6.08	3,430	5............	2.85	252	12 p.m.......	3.92	926
2 p.m........	5.03	2,030	12 p.m.......	2.90	275			
6............	4.64	1,600				Jan. 26		
8............	5.96	3,250	Jan. 22			9 a.m........	3.56	652
10...........	6.90	4,750	12 p.m.......	2.35	120	12 m.........	3.29	474
12 p.m.......	6.63	4,290				2 p.m........	2.99	316
			Jan. 23			7............	5.14	2,160
Dec. 24			12:30 a.m....	3.80	910	9............	5.23	2,280
2 a.m........	5.96	3,250	2............	4.10	1,080	12 p.m.......	4.55	1,510
4:30.........	5.62	2,770	7............	3.71	758			
7............	5.96	3,250	9............	3.82	846	Jan. 27		
10...........	6.50	4,080	11...........	3.83	854	3 a.m........	4.72	1,680
11...........	5.96	3,250	6 p.m........	3.54	638	9............	4.23	1,200
2 p.m........	4.97	1,960	10...........	3.33	498	1 p.m........	3.98	974
6............	4.25	1,220	12 p.m.......	3.05	345	7............	3.85	870
12 p.m.......	3.72	766				12 p.m.......	3.65	715
			Jan. 24					
Dec. 25			7 a.m........	2.58	146	Jan. 28		
8 a.m........	3.36	516	3 p.m........	2.41	93	8 a.m........	3.50	610
2 p.m........	2.88	266	9............	2.40	90	3 p.m........	3.55	645
4............	2.84	248	12 p.m.......	2.46	108	8............	3.32	504
8 p.m........	2.65	170				12 p.m.......	2.87	270

70. San Benito River near Hollister, Calif.

Location.--Lat 36°47'20", long 121°22'10", in SW$\frac{1}{4}$ sec.24 , T.13 S., R.5 E., on left bank 1,500 ft downstream from Bird Creek, 0.9 mile downstream from Tres Pinos Creek, 2.7 miles west of Tres Pinos, and 4.8 miles southeast of Hollister.

Drainage area.--586 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 26-30, Jan. 1-18, 30, 31. Altitude of gage is 370 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for periods of no gage-height record estimated on basis of three discharge measurements, trend of record, weather records, and records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 7,460 cfs 1 a.m. Dec. 24 (gage height, 12.55 ft).

1949 to November 1955: Discharge, 5,490 cfs Mar. 15, 1952 (gage height, 10.80 ft).

Mean discharge, in cubic feet per second, 1955-56, of San Benito River near Hollister, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	0	600	11.....	0	60	21.....	0	135
2.....	0	300	12.....	0	50	22.....	.4	110
3.....	0	150	13.....	0	45	23.....	2,870	513
4.....	0	120	14.....	0	40	24.....	5,980	380
5.....	0	180	15.....	0	90	25.....	1,190	2,230
6.....	0	350	16.....	0	350	26.....	600	1,880
7.....	0	180	17.....	0	180	27.....	550	2,540
8.....	0	120	18.....	0	100	28.....	250	1,130
9.....	0	100	19.....	0	55	29.....	100	754
10.....	0	70	20.....	0	102	30.....	300	400
						31.....	1,110	300
Monthly mean discharge, in cubic feet per second......................							418	439
Runoff, in inches..							0.82	0.86
Runoff, in acre-feet...							25,690	27,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 24			Jan. 25--Con.		
12 p.m.......	1.94	0	1 a.m........	12.55	7,460	12 m.........	8.22	2,880
			3............	12.40	7,280	2 p.m........	8.12	2,790
Dec. 22			6:30.........	11.20	5,930	3............	8.20	2,860
4 a.m........	1.95	0	11:30........	12.45	7,340	6............	7.45	2,200
5............	1.96	.1	2 p.m........	11.75	6,540	9............	8.86	3,500
8............	2.01	.6	6............	10.00	4,640	12 p.m.......	8.22	2,880
8 p.m........	1.96	.1	10...........	9.50	4,140			
10...........	1.97	.2	12 p.m.......	9.00	3,640	Jan. 26		
12 p.m.......	2.10	2.6				3 a.m........	7.35	2,120
			Dec. 25			7............	6.43	1,420
Dec. 23			2 a.m........	8.00	2,680	2:30 p.m.....	5.35	812
1 a.m........	2.15	4.0	5............	6.93	1,780	6............	6.60	1,540
2............	4.45	458	8............	6.00	1,150	7............	7.80	2,500
4............	4.79	576	2 p.m........	5.08	692	9............	9.03	3,670
5............	4.52	482	12 p.m.......	4.35	425	12 p.m.......	8.25	2,900
7............	5.53	900						
8:30.........	5.30	790	Jan. 24			Jan. 27		
9............	7.65	2,360	12 p.m.......	4.00	320	2 a.m........	7.80	2,500
12 m.........	8.93	3,570				4............	8.50	3,140
1 p.m........	9.78	4,420	Jan. 25			8............	9.08	3,720
4............	8.80	3,440	1 a.m........	4.06	338	12 m.........	7.90	2,590
6............	9.08	3,720	2:30.........	4.24	392	3 p.m........	7.72	2,430
7............	8.80	3,440	5............	5.61	940	6............	7.09	1,910
9............	10.75	5,440	8............	8.29	2,940	12 p.m.......	6.25	1,300
12 p.m.......	12.50	7,400	10 a.m.......	7.90	2,590			

71. Pajaro River at Chittenden, Calif.

Location.--Lat 36°54'00", long 121°35'50", in Salsipuedes Grant, on downstream side of right bank pier of State highway bridge, 0.6 mile downstream from Pescadero Creek, 0.6 mile southeast of Chittenden, Santa Cruz County, and 2.3 miles downstream from San Benito River.

Drainage area.--1,188 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 1-5. Datum of gage is 81.81 ft above mean sea level (levels by Weather Bureau).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 10,000 cfs and extended above on basis of slope-conveyance study. Discharge for Dec. 1-5 estimated on basis of 1 discharge measurement and records for nearby streams.

Maxima.--December 1955 to January 1956: Discharge, 24,000 cfs 9 a.m. Dec. 24 (gage height, 32.46 ft).

1939 to November 1955: Discharge, 11,100 cfs Apr. 4 or 5, 1941 (gage height, 26.2 ft, from floodmarks).

Flood in February 1938 reached a stage of 31.3 ft, from floodmarks.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56, of Pajaro River near Chittenden, Calif.

Day	December	January	Day	December	January	Day	December	January
1	1.0	2,110	11	2.1	596	21	331	764
2		1,670	12	2.0	506	22	1,210	669
3		1,210	13	1.9	437	23	11,500	1,370
4		902	14	1.9	448	24	21,700	1,240
5		1,210	15	1.9	865	25	12,100	4,880
6	1.7	1,600	16	1.9	1,440	26	4,220	7,350
7	1.5	1,150	17	1.9	885	27	2,960	8,410
8	2.1	1,040	18	2.0	678	28	1,900	5,900
9	2.8	834	19	4.1	569	29	1,310	3,180
10	2.3	682	20	773	625	30	1,010	1,920
						31	2,640	1,370
Monthly mean discharge, in cubic feet per second							1,990	1,823
Runoff, in inches							1.93	1.77
Runoff, in acre-feet							122,400	112,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 24--Con.			Jan. 24--Con.		
12 p.m.	3.32	2.5	9 a.m.	32.46	24,000	12 p.m.	11.15	1,180
			12 m.	32.17	23,100			
Dec. 19			3 p.m.	32.15	23,000	Jan. 25		
5 a.m.	3.36	2.9	6	31.71	21,800	4 a.m.	13.80	1,830
12 m.	3.35	2.8	12 p.m.	30.25	18,400	7	16.15	2,640
4 p.m.	3.45	3.9				10	19.00	4,180
6	3.61	6.3	Dec. 25			1 p.m.	21.50	6,220
11	3.62	6.5	6 a.m.	28.52	14,900	4	22.54	7,210
12 p.m.	3.84	11	12 m.	26.48	11,700	6:30	22.74	7,410
			6 p.m.	24.35	9,080	10	22.50	7,170
Dec. 20			12 p.m.	22.18	6,850	12 p.m.	22.67	7,340
2 a.m.	3.85	12						
3	5.70	136	Dec. 26			Jan. 26		
5	9.40	768	6 a.m.	19.55	4,570	1:30 a.m.	22.75	7,420
7	10.75	1,080	10	18.40	3,780	8:30	22.30	6,970
9:30	11.18	1,180	2 p.m.	18.06	3,580	12 m.	22.68	7,350
1 p.m.	10.67	1,070	5	18.24	3,680	2 p.m.	22.60	7,270
6	9.43	796	12 p.m.	17.72	3,370	8	22.74	7,410
12 p.m.	8.60	630				12 p.m.	23.50	8,170
			Dec. 27					
Dec. 21			2 a.m.	17.68	3,350	Jan. 27		
8 a.m.	7.26	392	7	17.32	3,170	3 a.m.	23.78	8,460
4 p.m.	6.20	222	9	17.44	3,230	6	23.61	8,280
12 p.m.	5.53	129	12 m.	17.15	3,080	12:30 p.m.	24.12	8,830
			12 p.m.	15.25	2,290	7	23.72	8,390
Dec. 22						12 p.m.	23.02	7,690
2 a.m.	5.43	117	Jan. 21					
3	5.60	138	12 p.m.	8.84	678	Jan. 28		
5	5.56	133				7 a.m.	21.76	6,450
6	5.63	142	Jan. 22			1 p.m.	20.95	5,720
8	7.33	403	11 a.m.	8.54	618	8	19.94	4,880
11	9.50	810	3 p.m.	8.46	603	12 p.m.	19.23	4,340
1 p.m.	10.95	1,130	7	8.67	644			
4	13.55	1,760	10	9.70	854	Jan. 29		
8	15.18	2,260	12 p.m.	9.92	902	6 a.m.	18.20	3,660
9	15.33	2,320				4 p.m.	16.42	2,750
12 p.m.	18.65	3,940	Jan. 23			12 p.m.	15.34	2,320
			5 a.m.	10.80	1,100			
Dec. 23			7	10.89	1,120	Jan. 30		
2 a.m.	19.70	4,690	11	12.18	1,420	8 a.m.	14.47	2,020
6	22.88	7,550	7 p.m.	13.44	1,730	4 p.m.	13.60	1,780
12 m.	26.10	11,100	12 p.m.	12.25	1,440	12 p.m.	12.84	1,580
6 p.m.	29.32	16,400						
12 p.m.	30.22	18,300	Jan. 24			Jan. 31		
			7 a.m.	11.65	1,300	8 a.m.	12.20	1,430
Dec. 24			1 p.m.	11.24	1,200	4 p.m.	11.67	1,300
4 a.m.	31.60	21,600	8	10.90	1,120	12 p.m.	11.25	1,200
7 a.m.	32.16	23,100	11 p.m.	10.98	1,140			

72. Corralitos Creek at Freedom, Calif.

(Miscellaneous site)

Location.--Lat 36°56'20", long 121°46'10", in Corralitos Grant, at Green Valley Road bridge, 1.1 miles downstream from unnamed tributary and 2 miles north of Watsonville, Santa Clara County.

Drainage area.--27.8 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maximum.--December 1955 to January 1956: Discharge, 3,620 cfs Dec. 22.

SOQUEL CREEK BASIN

73. Soquel Creek at Soquel, Calif.

Location.--Lat 36°59'29", long 121°57'17", in NE$\frac{1}{4}$ sec.10, T.11 S., R.1 W., on left bank 0.2 mile upstream from highway bridge in town of Soquel and 0.4 mile downstream from Bates Creek.

Drainage area.--40.4 sq mi.

Gage-height record.--Water-stage recorder graph except 2 a.m. Dec. 23 to 6 p.m. Dec. 24, for which graph was reconstructed on basis of nearby streams, and Jan. 26-31. Altitude of gage is 40 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,100 cfs and by slope-area measurement of 15,800 cfs. Discharge for period of no gage-height record estimated on basis of records for Branciforte Creek at Santa Cruz, and San Lorenzo River at Santa Cruz.

Maxima.--December 1955 to January 1956: Discharge, 15,800 cfs 2 a.m. Dec. 23 (gage height, 22.33 ft).

1951 to November 1955: Discharge, 4,910 cfs Jan. 12, 14, 1952 (gage height, 11.63 ft), from rating curve extended above 2,100 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	Decmeber	January	Day	December	January
1.....	8.9	408	11.....	8.6	141	21.....	234	169
2.....	10	354	12.....	7.7	144	22.....	4,050	176
3.....	8.0	258	13.....	7.1	153	23.....	8,800	201
4.....	6.5	234	14.....	6.5	177	24.....	1,400	161
5.....	7.4	351	15.....	6.5	650	25.....	405	776
6.....	34	230	16.....	6.2	416	26.....	1,710	640
7.....	15	209	17.....	6.5	265	27.....	483	500
8.....	13	202	18.....	7.7	231	28.....	261	360
9.....	21	165	19.....	700	203	29.....	200	290
10.....	11	158	20.....	447	227	30.....	184	240
						31.....	308	200
Monthly mean discharge, in cubic feet per second......................							625	287
Runoff, in inches..							17.83	8.18
Runoff, in acre-feet...							38,430	17,630

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 20--Con.			Dec. 23		
12 p.m.......	3.35	6.5	11 a.m.......	5.36	340	2 a.m........	22.33	15,800
			12 m.........	5.34	336	10...........	-	7,000
Dec. 18			2 p.m........	5.35	338	3 p.m........	-	10,000
6 a.m........	3.36	6.8	3............	5.42	353	8............	-	4,000
1 p.m........	3.39	7.7	4............	5.40	349	12 p.m.......	-	2,900
8............	3.40	8.0	7............	5.07	282			
10...........	3.42	8.6	9............	4.88	244	Dec. 24		
12 p.m.......	3.53	15	12 p.m.......	4.67	206	6 a.m........	-	1,800
						12 m.........	-	1,200
Dec. 19			Dec. 21			6 p.m........	-	870
2 a.m........	3.77	34	2 a.m........	4.56	186	12 p.m.......	-	650
3............	5.52	332	9............	4.50	176			
4............	6.60	670	10...........	4.55	185	Dec. 25		
5............	6.72	718	11...........	4.68	208	12 p.m.......	7.39	292
6............	6.38	588	12 m.........	4.77	224			
7............	5.94	448	1 p.m........	4.77	224	Dec. 26		
8............	5.87	430	2............	4.79	228	1 a.m........	7.39	292
10...........	7.82	1,340	3............	4.87	242	3............	7.77	405
11...........	7.66	1,240	5............	5.11	290	5............	9.32	1,420
1 p.m........	6.28	598	7............	5.16	300	7............	9.50	1,590
2............	5.77	438	9............	5.25	318	8............	9.37	1,460
3............	5.48	366	12 p.m.......	5.18	304	9............	9.71	1,800
4............	5.53	378				10...........	10.93	3,120
5............	5.90	473	Dec. 22			10...........	11.09	3,300
9............	7.55	1,190	1 a.m........	5.28	324	12 m.........	11.17	3,390
10...........	7.80	1,330	2............	5.87	461	3 p.m........	10.34	2,470
12 p.m.......	7.63	1,230	6............	11.20	4,200	8............	9.28	1,380
			7............	11.72	4,720	12 p.m.......	8.72	906
Dec. 20			8............	11.80	4,800			
1 a.m........	7.40	1,090	9............	11.80	4,800	Dec. 27		
4............	6.46	666	10...........	11.57	4,570	3 a.m........	8.39	682
5............	6.11	540	5 p.m........	8.27	1,570	6............	8.17	566
6............	5.90	473	6............	8.33	1,610	9............	7.99	485
7............	5.75	433	7............	8.48	1,720	3 p.m........	7.71	385
8............	5.63	402	10...........	18.23	11,300	12 p.m.......	7.48	317
9............	5.52	376	12 p.m.......	19.75	12,900			

SAN LORENZO RIVER BASIN

74. San Lorenzo River at Big Trees, Calif.

Location.--Lat 37°01'40", long 122°03'30", in Canada del Rincon Grant, on right bank 0.5 mile south of Big Trees station on Southern Pacific Railroad, 1.6 miles downstream from Zayante Creek, and 4 miles north of Santa Cruz, Santa Cruz County.

Drainage area.--110 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 14-31. Doubtful gage-height record Dec. 1-4, 6, 20, 23. Datum of gage is 217.0 ft above mean sea level (stadia level circuit by Geologic Survey in 1955).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 11,000 cfs and by slope-area measurement at 30,400 cfs. Discharge for periods of doubtful or no gage-height record estimated on basis of two discharge measurements and records for station at Santa Cruz.

Maxima.--December 1955 to January 1956: Discharge, 30,400 cfs 1:30 a.m. Dec. 23 (gage height, 22.55 ft).

1937 to November 1955: Discharge, 24,000 cfs Feb. 27, 1940 (gage height, 21.1 ft, from floodmarks), from rating curve extended above 11,000 cfs on basis of slope-area measurement of peak flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	140	971	11	44	526	21	679	560
2	65	794	12	38	474	22	6,180	560
3	40	630	13	34	442	23	17,000	700
4	35	572	14	31	660	24	2,710	580
5	34	830	15	30	1,400	25	1,100	1,700
6	540	714	16	29	1,100	26	3,690	1,600
7	75	797	17	29	800	27	1,420	1,300
8	68	926	18	37	560	28	872	940
9	120	674	19	1,910	480	29	674	740
10	61	603	20	1,800	640	30	642	620
						31	678	540
Monthly mean discharge, in cubic feet per second							1,319	788
Runoff, in inches							13.83	8.26
Runoff, in acre-feet							81,110	48,460

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.	1.16	28	8 a.m.	4.28	643	12 p.m.	10.00	5,050
			11	4.48	711			
Dec. 18			1 p.m.	4.53	729	Dec. 24		
4 a.m.	1.16	28	6	4.98	892	3 a.m.	8.95	4,040
8	1.36	39	12 p.m.	5.02	908	6	8.18	3,370
6 p.m.	1.27	34				9	7.50	2,830
10	1.41	42	Dec. 22			12 m.	7.00	2,450
12 p.m.	1.85	72	2 a.m.	5.75	1,190	6 p.m.	6.17	1,870
			3	7.18	1,960	12 p.m.	5.53	1,470
Dec. 19			4	8.40	2,850			
2 a.m.	2.50	160	6	10.72	5,120	Dec. 25		
3	4.00	550	8	11.92	6,650	8 a.m.	4.95	1,160
4	5.66	1,150	9	12.27	7,140	4 p.m.	4.57	965
5	6.50	1,550	11	12.00	6,760	10	4.36	874
6	6.68	1,660	1 p.m.	11.13	5,620	12 p.m.	4.50	930
8	6.42	1,510	4	9.91	4,230			
10	7.70	2,310	5	9.45	3,770	Dec. 26		
11	7.93	2,470	6	9.30	3,620	2 a.m.	5.65	1,540
1 p.m.	7.01	1,860	8	11.18	5,680	4	7.65	2,950
3	6.37	1,480	9	13.50	8,960	6	9.13	4,210
5	7.40	2,100	10	15.95	13,300	8	9.43	4,480
8	8.50	2,930	11	18.48	19,000	9	11.00	6,110
10	9.09	3,430	12 p.m.	21.35	26,800	11	12.12	7,410
11	9.11	3,450				1 p.m.	9.90	4,950
12 p.m.	8.94	3,300	Dec. 23			4	8.47	3,610
			1:30 a.m.	22.55	30,400	8	7.23	2,610
Dec. 20			3	21.00	25,800	12 p.m.	6.46	2,070
4 a.m.	7.79	2,370	4	18.67	19,500			
8	6.70	1,670	5	16.70	14,800	Dec. 27		
12 m.	5.88	1,250	7	14.75	11,100	6 a.m.	5.75	1,600
2 p.m.	5.62	1,140	8:30	15.45	12,300	12 m.	5.33	1,350
3	5.65	1,150	10	15.00	11,500	6 p.m.	4.98	1,170
7	5.22	984	12 m.	15.77	12,900	12 p.m.	4.70	1,030
12 p.m.	4.62	761	2 p.m.	17.00	15,500			
			3	17.36	16,300	Dec. 28		
Dec. 21			5	15.80	13,000	12 m.	4.31	854
2 a.m.	4.50	718	7	13.22	8,830	12 p.m.	4.05	750
7 a.m.	4.28	643	9 p.m.	11.58	6,770			

75. San Lorenzo River at Santa Cruz, Calif.

Location.--Lat 36°59'20", long 122°01'40", in Santa Cruz, Santa Cruz County, at upstream end of Odd Fellows Cemetery, 1.1 miles upstream from Branciforte Creek and 2.1 miles upstream from mouth.

Drainage area.--115 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4.01 ft above mean sea level (levels by California Div. Highways).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,500 cfs and by slope-area measurement at 30,400 cfs.

Maxima.--December 1955 to January 1956: Discharge, 30,400 cfs 3 a.m. Dec. 23 (gage height, 23.10 ft).

1952 to November 1955: Discharge, about 9,400 cfs Dec. 7, 1952 (comparison with station at Big Trees).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	134	961	11.....	50	547	21.....	790	606
2.....	63	800	12.....	40	488	22.....	6,350	606
3.....	34	606	13.....	36	462	23.....	17,400	742
4.....	26	538	14.....	33	715	24.....	3,110	624
5.....	38	855	15.....	33	1,460	25.....	1,210	1,750
6.....	577	720	16.....	33	1,230	26.....	3,750	1,720
7.....	87	769	17.....	33	755	27.....	1,560	1,400
8.....	63	980	18.....	37	606	28.....	893	1,000
9.....	112	690	19.....	1,940	510	29.....	680	794
10.....	68	625	20.....	1,840	672	30.....	645	672
						31.....	675	594
Monthly mean discharge, in cubic feet per second							1,366	822
Runoff, in inches							13.69	8.25
Runoff, in acre-feet							83,980	50,570

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 25--Con.		
12 p.m.	2.65	44	9 a.m.	12.14	8,200	12 p.m.	7.20	970
			10:30	12.63	8,880			
Dec. 19			12 m.	12.34	8,480	Dec. 26		
3 a.m.	2.71	52	2 p.m.	11.42	7,190	3 a.m.	8.27	1,770
4	3.80	300	5	10.05	5,460	6	9.98	3,480
5	5.63	1,270	7	9.43	4,780	9	10.70	4,340
6	6.08	1,620	9	11.15	6,810	10	12.42	6,690
7	6.10	1,640	10	14.00	11,000	11	12.90	7,440
8	5.94	1,510	11	16.20	15,100	1 p.m.	12.00	6,100
9	6.20	1,730	12 p.m.	18.40	19,500	3	10.90	4,580
10	6.85	2,320				6	10.08	3,600
11	7.20	2,630	Dec. 23			9	9.31	2,760
12 m.	7.00	2,450	1 a.m.	20.45	24,100	12 p.m.	8.86	2,310
2 p.m.	6.25	1,780	2	22.70	29,500			
3	6.00	1,560	3	23.10	30,400	Dec. 27		
4	6.07	1,620	4	22.63	29,100	6 a.m.	8.19	1,700
6	7.20	2,630	5	21.15	25,200	12 m.	7.81	1,390
8	7.82	3,190	6	19.25	20,200	5 p.m.	7.58	1,220
11	8.57	3,920	7	18.05	17,300	6	7.70	1,300
12 p.m.	8.42	3,770	9	16.80	14,600	8	7.53	1,180
			10	16.67	14,300	12 p.m.	7.38	1,080
Dec. 20			1 p.m.	17.50	16,100	Jan.13		
3 a.m.	7.62	3,010	3	18.45	18,300	12 p.m.	6.16	457
6	6.95	2,400	4	18.70	18,900			
10	6.22	1,750	5	18.48	18,400	Jan. 14		
12 m.	5.98	1,540	7	16.30	13,600	12 m.	6.48	601
3 p.m.	5.73	1,340	9	13.85	8,960	6 p.m.	6.98	850
7	5.48	1,160	12 p.m.	12.02	6,130	12 p.m.	7.70	1,300
12 p.m.	5.06	852						
			Dec. 24			Jan. 15		
Dec. 21			3 a.m.	11.02	4,730	1 a.m.	7.74	1,330
3 a.m.	4.88	738	6	10.33	3,900	10	7.32	1,040
9	4.72	650	9	9.74	3,210	2 p.m.	7.62	1,240
4 p.m.	4.98	798	12 m.	9.30	2,750	6	8.49	1,970
8	5.21	957	6 p.m.	8.63	2,100	8	8.61	2,080
12 p.m.	5.22	964	12 p.m.	8.17	1,680	9	8.67	2,130
						12 p.m.	8.33	1,830
Dec. 22			Dec. 25					
2 a.m.	5.34	1,050	6 a.m.	7.78	1,360	Jan. 16		
3	5.82	1,420	12 m.	7.50	1,160	6 a.m.	7.83	1,400
5	7.85	3,220	6 p.m.	7.28	1,020	12 m.	7.47	1,140
7 a.m.	10.30	5,760	10 p.m.	7.15	942	12 p.m.	7.12	898

76. Branciforte Creek at Santa Cruz, Calif.

Location.--Lat 36°58'00", long 122°01'00", in Santa Cruz, Santa Cruz County, 15 ft downstream from Market Street bridge and 1.0 mile upstream from mouth.

Drainage area.--18.5 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Dec. 22 to 6 p.m. Dec. 24; graph was drawn on basis of comparison with record for San Lorenzo River at Santa Cruz. Datum of gage is 11.22 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 530 cfs and by slope-area measurement at 8,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 8,100 cfs 11 p.m. Dec. 22 (gage height, 22.04 ft).

1940-43, 1952 to November 1955: Discharge, 3,910 cfs Feb. 9, 1941 (gage height, 15.1 ft, from floodmarks, at site 150 ft downstream at datum 4.52 ft higher).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	14	264	11	8.7	63	21	189	78
2	6.7	110	12	6.7	56	22	2,030	106
3	4.3	69	13	6.1	52	23	3,350	95
4	3.8	63	14	5.5	163	24	440	76
5	11	207	15	5.2	420	25	174	413
6	171	114	16	5.2	176	26	608	214
7	18	98	17	4.9	99	27	125	130
8	25	84	18	6.4	83	28	83	87
9	32	71	19	149	69	29	71	63
10	13	76	20	145	112	30	101	50
						31	152	39
Monthly mean discharge, in cubic feet per second							257	123
Runoff, in inches							16.01	7.64
Runoff, in acre-feet							15,800	7,540

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	3.00	11	5 a.m.	12.80	2,010	3 a.m.	8.90	902
			6	13.40	2,220	4	8.92	905
Dec. 19			8	13.32	2,190	7	7.38	602
2 a.m.	3.23	22	9	13.00	2,080	8	8.87	898
4	4.03	88	12 m.	11.67	1,650	9:30	11.14	1,490
6	4.01	86	3 p.m.	9.75	1,140	11	9.35	998
7	4.23	112	5	8.20	794	1 p.m.	7.76	598
8	5.99	378	6	8.05	761	4	7.10	422
10	5.16	246	7	9.50	1,080	8	6.30	255
2 p.m.	4.05	90	8	11.00	1,450	12 p.m.	5.86	185
5	3.86	71	10	19.30	5,640			
7	3.90	75	11	22.04	8,100	Jan. 13		
9	5.00	220	12 p.m.	21.6	7,670	12 p.m.	4.24	54
11	5.88	361						
12 p.m.	5.88	361	Dec. 23			Jan. 14		
			3 a.m.	-	5,400	7 a.m.	4.74	87
Dec. 20			6	-	3,300	1 p.m.	4.88	97
1 a.m.	5.99	378	8	-	3,300	8	6.60	350
4	4.95	212	10	-	3,000	12 p.m.	6.33	299
10	4.15	102	1 p.m.	-	4,300			
3 p.m.	4.20	108	4	-	3,000	Jan. 15		
12 p.m.	3.76	61	8	-	1,300	5 a.m.	6.15	268
			12 p.m.	-	900	6	6.25	285
Dec. 21						9	6.04	250
6 a.m.	4.08	94	Dec. 24			12 m.	7.10	452
10	4.41	134	6 a.m.	-	550	2 p.m.	8.12	690
12 m.	5.32	271	12 m.	-	380	6	7.80	612
2 p.m.	5.67	327	6 p.m.	5.66	278	12 p.m.	6.42	316
6	5.40	284	12 p.m.	5.37	231			
11	4.80	190				Jan. 16		
12 p.m.	4.87	200	Dec. 25			6 a.m.	5.75	205
			12 p.m.	4.85	160	12 m.	5.33	153
Dec. 22						6 p.m.	5.10	131
2 a.m.	5.63	321	Dec. 26			12 p.m.	4.90	114
3 a.m.	7.00	550	2 a.m.	7.85	702			

SCOTT CREEK BASIN

77. Scott Creek near Davenport, Calif.

(Miscellaneous site)

Location.--Lat 37°04'10", long 122°13'50", in Rancho Aqua Puerca y las Trancas Grant, a quarter of a mile upstream from Big Creek and 3.5 miles northwest of Davenport, Santa Cruz County.

Drainage area.--13.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 6,430 cfs Dec. 23.

PESCADERO CREEK BASIN

78. Pescadero Creek near Pescadero, Calif.

Location.--Lat 37°15'50", long 122°19'40", in SW¼ sec.5, T.8 S., R.4 W., on left bank at downstream side of highway bridge, 3.0 miles east of Pescadero and 5.3 miles upstream from mouth.

Drainage area.--46.2 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 62.3 ft above mean sea level.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,700 cfs and by slope-area measurement at 9,420 cfs.

Maxima.--December 1955 to January 1956: Discharge, 9,420 cfs 2 a.m. Dec. 23 (gage height, 21.27 ft).
1951 to November 1955: Discharge, 4,030 cfs Dec. 7, 1952 (gage height, 15.61 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5.6	211	11.....	11	189	21.....	293	358
2.....	15	202	12.....	8.3	157	22.....	1,870	331
3.....	8.8	172	13.....	7.5	144	23.....	5,560	415
4.....	6.7	159	14.....	6.3	342	24.....	1,300	326
5.....	6.7	190	15.....	5.5	1,010	25.....	415	655
6.....	24	177	16.....	5.5	707	26.....	1,550	656
7.....	21	232	17.....	5.9	374	27.....	574	558
8.....	14	313	18.....	11	302	28.....	322	430
9.....	28	218	19.....	1,010	250	29.....	240	330
10.....	18	205	20.....	816	363	30.....	205	271
						31.....	187	231
Monthly mean discharge, in cubic feet per second.......................							469	338
Runoff, in inches..							11.71	8.43
Runoff, in acre-feet...							28,860	20,780

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 20--Con.			Dec. 23		
12 p.m.......	2.54	5.9	8 a.m........	8.68	997	2 a.m........	21.27	9,420
			2 p.m........	7.13	646	3............	21.15	9,280
Dec. 18			6............	6.75	571	6............	17.25	5,120
12 m.........	2.58	7.5	12 p.m.......	5.84	411	10...........	15.43	3,660
8 p.m........	2.75	16	Dec. 21			12 m.........	15.99	4,090
12 p.m.......	2.94	28	6 a.m........	5.26	316	2 p.m........	17.18	5,060
			9............	5.02	281	4:30.........	19.20	7,020
Dec. 19			3 p.m........	4.78	248	7............	17.90	5,710
2 a.m........	3.32	69	12 p.m.......	5.01	279	12 p.m.......	14.08	2,790
5............	6.94	608						
9............	7.55	731	Dec. 22			Dec. 24		
11...........	8.90	1,050	2 a.m........	5.22	310	6 a.m........	11.75	1,680
1 p.m........	9.03	1,090	4............	6.00	438	2 p.m........	9.46	915
4............	9.41	1,190	9............	11.71	1,950	12 p.m.......	7.87	564
5:30.........	11.58	1,900	12 m.........	12.77	2,400			
7............	11.56	1,900	1 p.m........	12.83	2,420	Dec. 25		
10...........	10.50	1,520	3............	12.56	2,300	6 a.m........	7.28	469
12 p.m.......	10.12	1,410	7............	11.00	1,700	12 m.........	6.78	399
			7:30.........	10.95	1,680	6 p.m........	6.41	349
Dec. 20			9............	11.56	1,900	12 p.m.......	6.19	323
2 a.m........	9.50	1,220	12 p.m.......	18.37	6,370			

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Pescadero Creek near Pescadero, Calif--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 26			Dec. 27--Con.			Jan. 14--Con.		
2 a.m.	6.50	360	12 p.m.	6.73	392	12 p.m.	9.30	875
6	10.40	1,190						
10	13.56	2,500	Jan. 13			Jan. 15		
11	14.15	2,830	12 p.m.	4.59	143	10 a.m.	7.25	465
3 p.m.	12.42	1,960				7 p.m.	12.00	1,780
10	10.84	1,340	Jan. 14			12 p.m.	10.32	1,170
12 p.m.	9.35	888	4 p.m.	5.44	233			
			7	7.35	479	Jan. 16		
Dec. 27			8	8.45	680	12 m.	8.07	604
12 m.	7.56	509	10:30 p.m.	9.82	1,020	12 p.m.	7.14	450

PURISIMA CREEK BASIN

79. Purisima Creek near Half Moon Bay, Calif.

(Miscellaneous site)

Location.--Lat 37°25'25", long 122°23'27", in SE¼ sec.10, R.5 W., T.6 S., 3.0 miles upstream from mouth and 4.0 miles south of Half Moon Bay.

Drainage area.--6.11 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 683 cfs Dec. 22.

SAN FRANCISQUITO CREEK BASIN

80. San Francisquito Creek at Stanford University, Calif.

Location.--Lat 37°25'25", long 122°11'18", on right bank in Rinconada del Arroyo de San Francisquito Grant at golf course, 1.0 mile downstream from confluence with Los Trancos Creek and 1.2 miles west of Stanford University post office, Santa Clara County.

Drainage area.--37.7 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 120 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,560 cfs 12 p.m. Dec. 22 (gage height, 13.60 ft).
1931-41, 1950 to November 1955: Discharge, 3,650 cfs Nov. 18, 1950 (gage height, 10.4 ft).

Remarks.--Flow slightly regulated by Searsville Lake (capacity, 952 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0.6	83	11	0.1	52	21	80	151
2	.2	66	12	.1	42	22	1,720	131
3	.1	52	13	.1	38	23	2,650	187
4	.1	45	14	.1	571	24	409	132
5	.2	73	15	.2	753	25	146	369
6	3.4	50	16	.3	314	26	853	528
7	2.1	105	17	.3	149	27	258	531
8	.9	130	18	.7	127	28	100	346
9	.7	63	19	222	96	29	70	200
10	.1	73	20	149	196	30	67	146
						31	71	120
Monthly mean discharge, in cubic feet per second							220	191
Runoff, in inches							6.71	5.84
Runoff, in acre-feet							13,500	11,740

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of San Francisquito Creek at Stanford University, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	0.25	0.4	9 a.m.	7.45	2,080	1 p.m.	5.56	1,200
			10	7.70	2,200	3	5.30	1,090
Dec. 18			11	7.65	2,180	5	4.75	873
12 m.	.30	.6	12 m.	7.95	2,320	5:30	5.10	1,010
8 p.m.	.36	1.2	2 p.m.	6.77	1,740	9	3.93	576
10	.30	.6	4	5.70	1,250	12 p.m.	3.52	440
12 p.m.	.35	1.1	7	4.85	911			
			8	6.25	1,490	Dec. 27		
Dec. 19			9	9.80	3,310	6 a.m.	3.03	300
2 a.m.	.55	4.6	10	11.35	4,210	12 m.	2.79	241
3	1.62	65	12 p.m.	13.60	5,560	6 p.m.	2.57	194
5	2.37	158				12 p.m.	2.36	156
6	2.44	170	Dec. 23					
8	2.15	124	2 a.m.	12.40	4,840	Dec. 28		
9	2.14	123	4	9.62	3,210	11 a.m.	2.10	117
11	2.56	192	6	7.90	2,300	12 m.	1.80	83
12 m.	2.62	204	8:30	7.13	1,920	2 p.m.	1.67	70
2 p.m.	3.14	329	10	7.25	1,980	12 p.m.	1.56	59
3	3.53	444	12 m.	7.85	2,280	Jan. 13		
5	3.70	498	2 p.m.	9.18	2,970	12 p.m.	1.31	39
8	2.98	287	4	9.35	3,060			
12 p.m.	2.49	179	6	8.31	2,500	Jan. 14		
			8	7.13	1,920	4 a.m.	1.48	52
Dec. 20			10	6.09	1,420	8	1.99	103
4 a.m.	2.84	253	12 p.m.	5.20	1,050	10	2.13	121
6	2.72	225				12 m.	2.20	131
10	2.15	124	Dec. 24			2 p.m.	3.05	305
2 p.m.	1.98	102	4 a.m.	4.27	695	4	4.80	892
3	2.10	117	8	3.75	515	6	5.80	1,300
6	1.81	84	10	3.53	444	8	6.95	1,820
9	1.89	92	12 m.	2.87	260	10	6.20	1,470
11	2.44	170	3 p.m.	2.72	225	12 p.m.	5.16	1,030
12 p.m.	2.31	148	6	2.43	168			
			12 p.m.	2.28	143	Jan. 15		
Dec. 21						1 a.m.	5.28	1,080
2 a.m.	2.05	110	Dec. 25			5	3.65	482
8	1.69	72	6 a.m.	2.24	137	10	3.35	389
11	1.60	63	10	2.22	134	12 m.	3.50	434
12 m.	1.42	48	1 p.m.	2.18	128	2 p.m.	4.50	778
2 p.m.	1.34	42	2	2.68	217	6	5.72	1,260
4	1.56	59	6	2.35	154	9	4.86	915
6	1.65	68	12 p.m.	2.12	120	12 p.m.	4.12	641
8	1.80	83						
12 p.m.	2.09	116	Dec. 26			Jan. 16		
			2 a.m.	3.68	492	6 a.m.	3.39	401
Dec. 22			4	4.45	760	12 m.	2.95	280
2 a.m.	2.78	239	6	4.00	600	1 p.m.	2.63	206
4	4.16	656	8:30	6.20	1,470	7	2.68	217
6	4.77	881	11	5.50	1,170	8	2.38	160
8 a.m.	6.70	1,700	12 m.	5.46	1,150	12 p.m.	2.46	174

MATADERO CREEK BASIN

81. Matadero Creek at Palo Alto, Calif.

Location.--Lat 37°25'19", long 122°08'06", in Rinconada de San Francisquito Grant, on left bank 10 ft upstream from bridge at intersection of Lambert and Rose Streets, 2.0 miles southeast of post office at Palo Alto, Santa Clara County.

Drainage area.--8.10 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 25 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 390 cfs and by slope-area measurement at 854 cfs. Stage-discharge relation indefinite 9:30 p.m. Dec. 22 to 6 p.m. Dec. 23; discharge estimated on basis of records for San Francisquito Creek at Stanford University.

Maxima.--December 1955 to January 1956: Discharge, 854 cfs 9:30 p.m. Dec. 22; gage height, 9.88 ft 1 a.m. Dec. 23.

1952 to November 1955: Discharge, 535 cfs Dec. 6, 1952 (gage height, 7.1 ft, from floodmarks), from rating curve extended above 190 cfs.

Mean discharge, in cubic feet per second, 1955-56, of Matadero Creek at Palo Alto, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	0	7.0	11.....	0	5.0	21.....	0.3	5.3
2.....	0	4.1	12.....	0	3.1	22.....	171	5.6
3.....	0	2.1	13.....	0	2.3	23.....	335	5.9
4.....	0	3.6	14.....	0	65	24.....	37	6.2
5.....	0	6.7	15.....	0	85	25.....	5.8	39
6.....	0	2.7	16.....	0	12	26.....	151	62
7.....	0	19	17.....	0	4.1	27.....	12	69
8.....	.4	9.1	18.....	.2	7.0	28.....	5.3	31
9.....	0	4.1	19.....	17	3.5	29.....	3.1	9.1
10.....	0	11	20.....	8.8	26	30.....	1.9	5.9
						31.....	3.7	4.3
Monthly mean discharge, in cubic feet per second......................							24.3	17.0
Runoff, in inches..							3.46	2.41
Runoff, in acre-feet...							1,490	1,040

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Dec. 26--Con.		
12 p.m.......	-	0	12:30 p.m....	7.47	480	12 p.m.......	4.13	22
			2............	8.15	410			
Dec. 22			3............	8.00	370	Jan. 13		
1 a.m........	3.30	0	6............	6.54	260	12 p.m......	3.65	3.7
1:30.........	3.64	1.9	8............	5.67	176			
2:30.........	3.53	.8	10...........	5.36	131	Jan. 14		
3:30.........	4.51	42	12 p.m.......	4.93	81	4 a.m.......	3.77	6.7
5............	4.35	32				9...........	4.16	24
8:30.........	5.48	144	Dec. 24			12 m........	4.06	19
11:30........	4.73	63	4:30 a.m.....	4.63	54	2 p.m.......	4.69	59
12 m.........	4.83	72	6:30.........	4.70	58	5...........	5.55	158
1 p.m........	4.75	64	12 m.........	4.28	28	7...........	6.08	254
3............	4.39	37	12 p.m.......	3.90	9.5	9...........	5.18	109
6............	4.14	23				12 p.m......	4.41	39
7............	4.37	36	Dec. 25					
8............	7.00	470	12 m.........	3.77	5.3	Jan. 15		
9:30.........	9.60	854	12 p.m.......	3.67	3.1	3 a.m.......	4.22	27
11...........	9.20	700				6...........	4.19	26
12 p.m.......	9.10	630	Dec. 26			10..........	4.08	20
			1:30 a.m.....	4.02	16	12 m........	5.12	101
Dec. 23			3:30.........	6.96	453	2 p.m.......	6.44	336
1 a.m........	9.88	560	5............	5.64	167	4...........	5.62	168
3............	8.00	430	6:30.........	5.06	90	4:30........	5.82	202
4............	7.10	360	9............	7.50	590	5...........	5.78	195
5............	7.83	330	11...........	5.36	139	6...........	5.31	124
6............	7.62	270	12:30 p.m....	5.00	95	9...........	4.52	46
8............	6.73	300	1:30.........	5.15	112	12 p.m......	4.24	28
10:30 a.m....	8.38	460	4 p.m........	4.72	74			

STEVENS CREEK BASIN

82. Stevens Creek near Cupertino, Calif.

Location.--Lat 37°18'20", long 122°04'25", in SW¼ sec.22, T.7 S., R.2 W., on left bank on downstream side of highway bridge, 0.6 mile downstream from Stevens Creek Dam, and 2.5 miles southwest of Cupertino.

Drainage area.--18.0 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 385 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,420 cfs 4 p.m. Dec. 23 (gage height, 8.25 ft).
1930 to November 1955: Discharge, 1,090 cfs Feb. 28, 1940 (gage height, 7.05 ft).

Remarks.--Flow regulated by Stevens Creek Reservoir since 1936 (usable capacity, 4,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56, of Stevens Creek near Cupertino, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	0.2	48	11.....	1.4	73	21.....	0.5	95
2.....	.4	66	12.....	1.1	76	22.....	15	120
3.....	1.0	53	13.....	2.3	82	23.....	517	151
4.....	.9	43	14.....	5.9	82	24.....	517	151
5.....	.9	32	15.....	11	87	25.....	291	151
6.....	.8	32	16.....	14	130	26.....	475	202
7.....	1.2	59	17.....	12	102	27.....	212	190
8.....	1.4	71	18.....	2.1	91	28.....	124	153
9.....	.9	73	19.....	8.5	82	29.....	87	153
10.....	1.4	73	20.....	2.5	88	30.....	73	143
						31.....	64	117
Monthly mean discharge, in cubic feet per second........................							78.9	99.0
Runoff, in acre-feet..							4,850	6,090

Gage height, in feet, and discharge, in cubic feet per second, at indicated time 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 24		
12 p.m.......	1.51	2.7	12 m.........	1.79	13	4 a.m........	5.19	658
			6 p.m........	1.59	4.8	8............	4.61	549
Dec. 19			8............	1.88	19	12 m.........	4.22	479
4 a.m........	1.42	1.2	9............	2.14	42	6 p.m........	3.84	414
8............	1.71	9.4	11:30........	2.20	48	12 p.m.......	3.57	360
11...........	1.59	4.8	12 p.m.......	3.00	220			
1 p.m........	1.86	17				Dec. 25		
3............	1.87	18	Dec. 23			6 a.m........	3.38	318
7............	1.71	9.4	12:30 a.m....	3.14	258	12 m.........	3.23	280
12 p.m.......	1.66	7.3	2............	2.60	117	12 p.m.......	3.09	245
			4............	2.40	77			
Dec. 21			6............	2.38	74	Dec. 26		
12 p.m.......	1.33	.4	8............	2.31	64	4 a.m........	3.65	377
			12 m.........	2.37	72	8............	4.43	515
Dec. 22			1 p.m........	2.44	85	11...........	5.11	642
2 a.m........	1.38	.8	2............	5.98	825	4 p.m........	4.50	529
3............	1.51	2.7	4............	8.25	1,420	8............	4.10	457
4............	1.48	2.1	6............	7.70	1,260	12 p.m.......	3.87	414
6............	1.52	2.9	8............	6.59	978			
8 a.m........	1.75	11	12 p.m.......	5.90	805			

GUADALUPE RIVER BASIN

83. Alamitos Creek near Edenvale, Calif.

Location.--Lat 37°14'15", long 121°52'15", in SW¼ sec.16, T.8 S., R.1 E., on right bank 0.4 mile upstream from confluence with Guadalupe Creek and 4 miles southwest of Edenvale.

Drainage area.--35.0 sq mi.

Gage-height record.--Water-stage recorder graph to Dec. 23 when station was destroyed. After Jan. 3, once-daily staff gage readings with additional readings during high water. Doubtful or no gage-height record Dec. 20 to Jan. 3, Jan. 24-26. Altitude of gage is 200 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 110 cfs and by slope-area measurement at 4,140 cfs. Discharge for periods of doubtful or no gage-height record estimated on basis of 3 discharge measurements and records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 4,140 cfs 2:30 a.m. Dec. 23 (gage height, 6.6 ft, from floodmarks).

1930 to November 1955: Discharge, 2,670 cfs Dec. 27, 1931 (gage height, 6.60 ft, site and datum then in use), from rating curve extended above 1,800 cfs.

Remarks.--Flow regulated by Calero Reservoir (capacity, 9,213 acre-ft) and Almaden Reservoir (capacity, 2,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56, of Alamitos Creek near Edenvale, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	0	100	11.....	0	33	21.....	30	25
2.....	0	70	12.....	0	22	22.....	200	26
3.....	0	40	13.....	0	20	23.....	3,000	26
4.....	0	24	14.....	0	28	24.....	800	25
5.....	0	39	15.....	0	21	25.....	200	50
6.....	0	35	16.....	0	33	26.....	500	100
7.....	0	24	17.....	0	27	27.....	300	98
8.....	0	45	18.....	0	20	28.....	200	79
9.....	0	26	19.....	0	22	29.....	130	52
10.....	0	34	20.....	50	26	30.....	100	50
						31.....	150	46
Monthly mean discharge, in cubic feet per second.....................							183	40.8
Runoff, in acre-feet..							11,230	2,510

84. Guadalupe Creek at Guadalupe, Calif.

Location.--Lat 37°13'05", long 121°54'35", in SW¼ sec.19, T.8 S., R.1 E., on left bank 0.5 mile northwest of Guadalupe and 3.5 miles upstream from Alamitos Creek.

Drainage area.--12.7 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 325 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 530 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,320 cfs 12 p.m. Dec. 22 (gage height, 4.20 ft).

1930 to November 1955: Discharge, 1,330 cfs Jan. 12, 1952 (gage height, 4.22 ft).

Remarks.--Flow regulated by Guadalupe Reservoir (capacity, 3,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.6	75	11.....	1.8	70	21.....	30	39
2.....	1.9	74	12.....	1.4	53	22.....	171	38
3.....	1.4	70	13.....	1.4	36	23.....	701	38
4.....	1.3	71	14.....	1.4	37	24.....	175	38
5.....	1.2	77	15.....	1.4	42	25.....	128	60
6.....	1.8	73	16.....	1.4	41	26.....	269	75
7.....	1.8	80	17.....	1.3	41	27.....	172	81
8.....	2.1	80	18.....	10	47	28.....	100	81
9.....	2.4	74	19.....	160	46	29.....	75	77
10.....	2.1	74	20.....	85	41	30.....	66	77
						31.....	86	78
Monthly mean discharge, in cubic feet per second.....................							72.8	60.8
Runoff, in acre-feet..							4,470	3,740

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 20--Con.			Dec. 23--Con.		
12 p.m.......	0.47	1.3	6 p.m........	1.32	57	12 p.m.......	2.47	352
			12 p.m.......	1.22	44			
Dec. 18						Dec. 24		
2 p.m........	.49	1.5	Dec. 21			6 a.m........	2.04	196
6............	.58	3.0	12 p.m.......	1.02	25	12 m.........	1.88	152
11...........	1.35	60				6 p.m........	1.75	124
12 p.m.......	1.28	52	Dec. 22			12 p.m.......	1.63	101
			4 a.m........	1.14	36			
Dec. 19			8............	1.24	47	Dec. 25		
2 a.m........	1.60	96	12 m.........	1.21	43	12 p.m.......	1.74	122
5............	1.32	57	6 p.m........	1.17	39			
7............	1.48	78	8............	2.05	199	Dec. 26		
8:30.........	1.85	145	10...........	3.40	820	3 a.m........	2.12	223
11:30........	1.47	77	12 p.m.......	4.20	1,320	6............	2.04	196
1 p.m........	2.35	306				8............	2.76	481
2............	2.62	415	Dec. 23			10...........	2.31	291
5............	2.18	243	2 a.m........	3.13	668	2 p.m........	2.38	317
10...........	1.74	122	4............	2.90	550	8............	2.20	250
12 p.m.......	1.88	152	7............	2.92	560	12 p.m.......	2.13	226
			8............	3.10	652			
Dec. 20			12 m.........	3.64	964	Dec. 27		
2 a.m........	1.92	161	1:30 p.m.....	3.95	1,150	6 a.m........	2.02	189
5............	1.70	114	3............	3.42	832	12 m.........	1.96	172
8............	1.54	87	6............	3.00	601	6 p.m........	1.87	149
12 m.........	1.46	75	9 p.m........	2.77	486	12 p.m.......	1.78	130

85. Los Gatos Creek at Los Gatos, Calif.

Location.--Lat 37°21'30", long 121°59'15", in NE¼ sec.29, T.8 S., R.1 W., on left bank 0.3 mile downstream from Trout Creek, 0.5 mile downstream from Lexington Reservoir, and 1.0 mile south of Los Gatos.

Drainage area.--38.9 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 460 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 715 cfs 9:30 a.m. Jan. 1 (gage height, 6.74 ft).

1930-44, 1953 to November 1955: Discharge, 7,110 cfs Feb. 27, 1940 (gage height, 14.71 ft, site and datum then in use), from rating curve extended above 2,300 cfs by logarithmic plotting.

Remarks.--Flow regulated by Lexington Reservoir (capacity, 25,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	10	490	11.....	6.2	301	21.....	7.0	202
2.....	7.6	346	12.....	8.6	301	22.....	85	202
3.....	12	318	13.....	14	301	23.....	199	155
4.....	9.3	310	14.....	11	298	24.....	48	122
5.....	5.4	310	15.....	6.0	304	25.....	27	266
6.....	1.4	310	16.....	3.0	298	26.....	45	310
7.....	5.8	312	17.....	2.6	264	27.....	31	257
8.....	6.2	312	18.....	8.5	220	28.....	29	233
9.....	5.2	307	19.....	53	200	29.....	24	222
10.....	7.0	304	20.....	26	202	30.....	31	220
						31.....	383	218
Monthly mean discharge, in cubic feet per second......................							36.1	271
Runoff, in acre-feet..							2,220	16,690

86. Guadalupe River at San Jose, Calif.

Location.--Lat 37°20'00", long 121°54'00", at San Jose, Santa Clara County, on right bank 100 ft downstream from Los Gatos Creek.

Drainage area.--131 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 80 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 5,570 cfs 4:30 a.m. Dec. 23 (gage height, 13.94 ft).

1930 to November 1955: Discharge, 8,680 cfs Feb. 27, 1940 (gage height, 11.88 ft), from rating curve extended above 3,200 cfs by logarithmic plotting.

Remarks.--Flow regulated by several reservoirs (combined capacity, 46,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	446	11.....	0	417	21.....	50	293
2.....	0	449	12.....	0	392	22.....	400	310
3.....	0	392	13.....	0	366	23.....	4,490	298
4.....	0	420	14.....	0	434	24.....	1,430	204
5.....	0	455	15.....	0	504	25.....	474	361
6.....	6.7	411	16.....	0	455	26.....	942	590
7.....	0	422	17.....	0	397	27.....	468	473
8.....	13	473	18.....	13	322	28.....	243	408
9.....	1.0	411	19.....	2S7	296	29.....	160	356
10.....	0	428	20.....	243	345	30.....	111	332
						31.....	231	312
Monthly mean discharge, in cubic feet per second......................							308	393
Runoff, in acre-feet..							18,970	24,140

87. Saratoga Creek at Saratoga, Calif.

Location.--Lat 37°15'15", long 122°02'25", in Quito Grant, on right bank on downstream side of private-road bridge, 0.5 mile southwest of Saratoga, Santa Clara County, and 0.7 mile downstream from diversion dam.

Drainage area.--8.97 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 10-15. Altitude of gage is 500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 320 cfs and by slope-area measurement at 2,730 cfs. Stage-discharge relation indefinite Dec. 23 to Jan. 9; discharge estimated on basis of five discharge measurements and records for nearby stations. Discharge for Jan. 10-15 estimated on basis of one discharge measurement and records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 2,730 cfs 12 p.m. Dec. 22 (gage height, 6.40 ft).

1933 to November 1955: Discharge, 2,540 cfs Feb. 27, 1940, from rating curve extended above 510 cfs by logarithmic plotting; gage height, 5.90 ft Mar. 1, 1940.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2.6	55	11	0.1	18	21	63	71
2	1.2	50	12	.1	17	22	541	72
3	0	45	13	0	16	23	600	81
4	0	40	14	0	100	24	210	78
5	.2	30	15	0	120	25	90	132
6	6.5	30	16	0	81	26	300	144
7	1.8	30	17	.2	74	27	80	120
8	4.2	40	18	25	63	28	30	94
9	5.7	20	19	337	57	29	28	77
10	1.8	20	20	174	76	30	28	65
						31	50	53
Monthly mean discharge, in cubic feet per second							83.2	63.5
Runoff, in inches							10.70	8.16
Runoff, in acre-feet							5,120	3,910

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 20			Dec. 22--Con.		
12 p.m.	0.70	0	2 a.m.	3.15	287	12 p.m.	6.40	2,730
			6	2.96	216			
Dec. 18			12 m.	2.77	155	Jan. 24		
7 a.m.	.70	0	3 p.m.	2.75	145	12 p.m.	1.16	96
8	.90	.8	5	2.69	129			
12 m.	.78	.2	12 p.m.	2.42	81	Jan. 25		
2 p.m.	1.15	3.3				1 a.m.	1.20	100
7	1.69	21	Dec. 21			2:30	1.15	94
9	2.30	75	9 a.m.	2.24	58	4	1.60	164
10	2.59	125	12 m.	2.24	58	5	1.92	228
11	2.76	166	8 p.m.	2.21	54	9	1.50	144
12 p.m.	2.99	236	12 p.m.	2.37	74	4 p.m.	1.32	114
						12 p.m.	1.28	109
Dec. 19			Dec. 22					
1 a.m.	3.24	331	1 a.m.	2.55	102	Jan. 26		
5	2.98	232	2	2.90	191	4 a.m.	1.29	110
9	3.33	368	3	3.10	268	5:30	1.50	144
12 m.	3.20	315	9	3.26	339	7	1.73	190
2 p.m.	3.39	396	3 p.m.	3.16	299	9	1.50	144
4	3.51	456	5	3.14	291	11	1.47	139
7	3.33	368	6	3.19	311	1 p.m.	1.60	164
8	3.37	386	7	3.43	415	5	1.49	142
10	3.15	295	8	4.18	895	10	1.55	154
12 p.m.	3.17	303	10 p.m.	5.11	1,630	12 p.m.	1.47	139

COYOTE CREEK BASIN

88. Coyote Creek near Madrone, Calif.

Location.--Lat 37°10'06", long 121°38'55", near southeast corner of La Laguna Seca Grant, on right bank 1.2 miles downstream from Anderson Dam at mouth of canyon and 1.8 miles northeast of Madrone, Santa Clara County.

Drainage area.--194 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 375 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 28 cfs 12 m. Dec. 10 (gage height, 2.24 ft).

1902-12, 1916 to November 1955: Discharge, 25,000 cfs, probably Mar. 7, 1911 (record furnished by Duryea, Haehl, and Gilman).

Remarks.--Flow regulated by Coyote Reservoir since 1936 (capacity, 24,560 acre-ft) and by Anderson Reservoir since 1950 (capacity, 75,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	17	0.3	11.....	16	1.6	21.....	3.7	1.8
2.....	15	.2	12.....	17	1.6	22.....	4.4	1.8
3.....	15	.2	13.....	17	1.6	23.....	5.8	1.8
4.....	15	0	14.....	17	1.8	24.....	2.1	1.8
5.....	15	0	15.....	17	2.0	25.....	.9	2.9
6.....	15	.2	16.....	17	1.9	26.....	1.0	2.0
7.....	15	1.5	17.....	16	1.8	27.....	.6	1.8
8.....	15	1.6	18.....	17	1.8	28.....	.4	2.0
9.....	15	1.6	19.....	11	1.8	29.....	.3	1.7
10.....	17	1.6	20.....	4.0	2.0	30.....	.3	1.7
						31.....	.4	1.8
Monthly mean discharge, in cubic feet per second......................							10.4	1.49
Runoff, in acre-feet..							640	92

89. Coyote Creek near Edenvale, Calif.

Location.--Lat 37°16'15", long 121°47'55", at east boundary of Santa Teresa Grant, on left bank at "The Narrows," 1.5 miles northeast of Edenvale, Santa Clara County, and 7 miles south of San Jose.

Drainage area.--229 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 190 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,610 cfs 6:30 p.m. Dec. 23 (gage height, 5.02 ft).

1916 to November 1955: Discharge, 10,000 cfs Feb. 10, 1922 (gage height, 12.8 ft, from floodmarks), from rating curve extended above 4,900 cfs parallel to 1917 curve defined by current-meter measurements to 8,400 cfs).

Remarks.--Flow regulated by Coyote Reservoir since 1936 (capacity, 24,560 acre-ft) and by Anderson Reservoir since 1950 (capacity, 75,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	39	11.....	1.2	8.1	21.....	38	26
2.....	0	25	12.....	1.8	5.5	22.....	13	18
3.....	0	15	13.....	1.1	3.9	23.....	674	18
4.....	0	12	14.....	.7	6.2	24.....	396	17
5.....	0	12	15.....	1.0	34	25.....	83	105
6.....	0	24	16.....	1.0	52	26.....	71	68
7.....	0	14	17.....	.7	24	27.....	67	47
8.....	0	15	18.....	.4	18	28.....	34	38
9.....	0	12	19.....	3.6	14	29.....	24	35
10.....	0	8.1	20.....	39	22	30.....	18	26
						31.....	74	22
Monthly mean discharge, in cubic feet per second......................							49.8	25.3
Runoff, in acre-feet..							3,060	1,550

ALAMEDA CREEK BASIN

90. San Antonio Creek near Sunol, Calif.

(Gaging station, discontinued 1928)

Location.--Lat 37°34'25", long 121°51'00", in Valle de San Jose Grant, at former gaging station, at San Antonio Creek dam, 1.5 miles upstream from mouth and 2.5 miles southeast of Sunol, Alameda County.

Drainage area.--58.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 5,810 cfs Dec. 23.
1912-28: Daily discharge, 1,460 cfs Jan. 3, 1916.

91. Arroyo Mocho near Livermore, Calif.

(Gaging station, discontinued 1928)

Location.--Lat 37°36'50", long 121°41'15", in sec.6, T.4 S., R.3 E., at former gaging station, 4 miles upstream from mouth and 5 miles southeast of Livermore.

Drainage area.--36.7 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 1,880 cfs Dec. 23.
1912-28: Daily discharge, 700 cfs Feb. 20, 1914.

92. Arroyo Valle near Livermore, Calif.

(Gaging station, discontinued 1928; formerly published as Arroyo del Valle, near Livermore, Calif.)

Location.--Lat 37°37'15", long 121°45'30", in Valle de San Jose Grant, 600 ft upstream from former gaging station, 600 ft downstream from highway bridge, and 4.5 miles south of Livermore, Alameda County.

Drainage area.--149 sq mi.

Discharge record.--Peak discharge by slope-area and contracted-opening measurements.

Maxima.--December 1955 to January 1956: Discharge, 18,200 cfs Dec. 23.
1912-28: Daily discharge, 5,930 cfs Jan. 25, 1914.

93. Arroyo de la Laguna near Pleasanton, Calif.

(Gaging station, discontinued 1928)

Location.--Lat 37°36'25", long 121°52'30", in Valle de San Jose Grant, at former gaging station, at Laguna Dam, between Western Pacific and Southern Pacific Co. railroad bridges and 3¾ miles south of Pleasanton, Alameda County.

Drainage area.--406 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maxima.--December 1955 to January 1956: Discharge, 24,800 cfs Dec. 23.
1912-28: Daily discharge, 9,810 cfs Jan. 25, 1914.

94. Alameda Creek near Niles, Calif.

Location.--Lat 37°35'14", long 121°57'35", in NW¼ sec.15, T.4 S., R.1 W., on right bank 0.3 mile downstream from railroad bridge and 1.2 miles northeast of Niles.

Drainage area.--633 sq mi.

Gage-height record.--Water-stage recorder graph except for parts of Dec. 22-24 when graph was based on occasional gage readings and shape of other graphs. Altitude of gage is 100 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 29,000 cfs 4 p.m. Dec. 23 (gage height, 14.9 ft).

1916 to November 1955: Discharge, 24,300 cfs Jan. 12, 1952 (gage height, 13.92 ft).

Remarks.--Flow regulated by Calaveras Reservoir since 1925 (capacity, 96,800 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1.8	422	11	5.9	623	21	27	1,170
2	2.4	428	12	3.9	500	22	1,050	978
3	2.5	315	13	3.2	428	23	23,900	1,480
4	2.4	240	14	2.9	849	24	10,700	1,240
5	2.2	516	15	2.8	2,870	25	2,270	2,190
6	5.4	818	16	2.7	2,750	26	2,750	3,700
7	7.1	789	17	2.5	1,260	27	2,200	5,300
8	7.8	1,330	18	2.5	866	28	1,070	3,920
9	9.5	818	19	32	686	29	620	2,290
10	10	700	20	84	1,200	30	404	1,580
						31	365	1,220
Monthly mean discharge, in cubic feet per second							1,469	1,402
Runoff, in acre-feet							90,350	86,230

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 24			Jan. 24		
12 p.m.	2.48	3.8	4 a.m.	12.4	18,000	12 p.m.	5.35	1,220
			8	10.7	12,200			
Dec. 19			12 m.	9.2	8,150	Jan. 25		
4 a.m.	2.55	5.6	6 p.m.	8.10	5,520	3 a.m.	5.55	1,400
6	2.93	24	12 p.m.	7.35	4,010	4	5.48	1,340
9	2.83	17				5	5.51	1,370
12 m.	2.80	15	Dec. 25			7	5.86	1,700
4 p.m.	2.80	15	3 a.m.	7.08	3,430	9	6.00	1,840
6	3.22	56	6	6.68	2,790	12 m.	6.41	2,360
8	3.36	81	9	6.40	2,340	2 p.m.	6.63	2,710
10	3.33	75	12 m.	6.16	2,040	4	6.64	2,720
12 p.m.	3.45	100	6 p.m.	5.77	1,610	6	6.78	2,950
			12 p.m.	5.48	1,340	12 p.m.	6.59	2,640
Dec. 20								
4 a.m.	3.53	120	Dec. 26			Jan. 26		
8	3.48	107	2 a.m.	5.43	1,300	3 a.m.	6.46	2,440
2 p.m.	3.33	75	4	5.61	1,460	5	6.57	2,610
8	3.20	53	6	6.13	1,980	8	6.61	2,680
12 p.m.	3.10	40	9	6.28	2,170	10	6.91	3,160
			10	6.40	2,340	12 m.	6.90	3,140
Dec. 21			12 m.	7.00	3,300	5 p.m.	7.77	4,740
6 a.m.	3.02	32	2 p.m.	6.80	2,980	8	8.00	5,200
12 m.	2.94	25	3	6.87	3,090	10	8.02	5,240
12 p.m.	2.88	20	4	7.45	4,100	12 p.m.	8.28	5,760
			6	7.27	3,770			
Dec. 22			8	7.26	3,750	Jan. 27		
2 a.m.	2.90	22	9	7.31	3,840	3 a.m.	8.37	5,940
3	2.95	26	12 p.m.	7.10	3,460	8	8.21	5,620
4	3.48	107				12 m.	7.91	5,020
6	3.32	73	Dec. 27			3 p.m.	7.76	4,720
8	4.08	320	2 a.m.	6.89	3,120	4	7.76	4,720
12 m.	5.1	1,010	6	6.60	2,660	6	8.00	5,200
2 p.m.	5.5	1,360	9	6.39	2,330	9	7.89	4,980
4	5.7	1,540	12 m.	6.20	2,060	11	7.93	5,060
6	5.6	1,450	3 p.m.	5.98	1,820	12 p.m.	7.85	4,900
8	5.3	1,180	7	5.82	1,660			
10	5.5	1,360	12 p.m.	5.57	1,420	Jan. 28		
12 p.m.	8.9	7,400				7 a.m.	7.45	4,100
			Dec. 28			9	7.65	4,500
Dec. 23			6 a.m.	5.34	1,220	12 m.	7.39	3,980
2 a.m.	13.0	20,400	12 m.	5.15	1,050	6 p.m.	7.06	3,400
4	13.4	22,000	6 p.m.	4.97	906	12 p.m.	6.79	2,960
6	13.3	21,600	12 p.m.	4.81	778			
8:30	13.0	20,400				Jan. 29		
10	13.6	22,900	Dec. 29			6 a.m.	6.53	2,550
12 m.	14.2	25,600	6 a.m.	4.70	700	12 m.	6.31	2,210
4 p.m.	14.9	29,000	12 m.	4.54	588	12 p.m.	5.97	1,810
8	14.6	27,500	6 p.m.	4.50	560			
12 p.m.	14.0	24,700	12 p.m.	4.38	488			

SAN LORENZO CREEK BASIN

95. San Lorenzo Creek at Hayward, Calif.

Location.--Lat 37°41', long 122°04', in San Lorenzo Grant, on right bank at bridge on B Street, just outside city limits of Hayward, Alameda County, 0.5 mile downstream from Crow Creek.

Drainage area.--38.0 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 23-25, 28, 29. Datum of gage is 133.16 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,800 cfs and by slope-area measurement at 4,790 cfs. Discharge for periods of no gage-height record estimated on basis of records for San Francisquito Creek at Stanford University.

Maxima.--December 1955 to January 1956: Discharge, 4,790 cfs about 12 p.m. Dec. 22 (gage height, 20.82 ft, from floodmarks).

1940, 1946 to November 1955: Discharge observed, 2,990 cfs Feb. 27, 1940 (gage height, 13.13 ft).

Flood of Jan. 24, 1942, reached a stage of 15.7 ft, from floodmarks (discharge, about 4,200 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	26	49	11.....	0.1	54	21.....	15	87
2.....	0	41	12.....	.1	47	22.....	1,320	106
3.....	0	38	13.....	.1	43	23.....	2,500	95
4.....	0	45	14.....	.1	448	24.....	430	80
5.....	1.2	59	15.....	.1	779	25.....	150	416
6.....	9.5	41	16.....	.1	350	26.....	622	417
7.....	.4	195	17.....	.2	134	27.....	218	418
8.....	3.9	82	18.....	4.2	98	28.....	90	212
9.....	3.9	59	19.....	64	78	29.....	65	138
10.....	.4	68	20.....	56	157	30.....	63	101
						31.....	55	81
Monthly mean discharge, in cubic feet per second........................							184	162
Runoff, in inches..							5.58	4.91
Runoff, in acre-feet...							11,300	9,950

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Dec. 27--Con.		
12 p.m.......	2.60	1.2	3:30 a.m.....	8.41	988	1 p.m........	5.48	211
			4:30.........	7.92	871	4............	5.38	188
Dec. 18			6............	9.30	1,220	5............	5.38	188
2 p.m........	2.61	.1	8............	10.55	1,550	7............	5.30	170
5............	2.54	.1	9............	10.97	1,670	9............	5.24	157
6:30.........	2.78	1.3	10...........	10.70	1,600	10...........	5.20	148
7............	2.71	.6	12 m.........	8.44	996	11...........	5.18	144
9............	3.24	22	6 p.m........	6.40	528	12 p.m.......	5.16	140
10...........	3.12	15	8............	9.00	1,140			
12 p.m.......	3.40	34	9............	13.60	2,460	Jan. 13		
			10...........	17.20	3,570	12 p.m.......	4.49	46
Dec. 19			12 p.m.......	20.82	4,790			
2 a.m........	3.47	40				Jan. 14		
4............	3.97	88	Dec. 25			2 a.m........	4.61	59
8............	3.45	38	12 p.m.......	4.80	82	5............	4.92	98
10...........	3.29	26				7............	4.94	101
11:30........	3.20	20	Dec. 26			10:30........	4.88	92
2 p.m........	3.39	33	1 a.m........	5.13	134	12 m.........	5.02	114
4............	3.46	39	2............	5.64	250	1 p.m........	5.36	183
6............	4.08	100	3............	7.12	631	6............	10.16	1,440
7:30.........	4.37	135	4............	8.50	990	10...........	7.42	709
9:30.........	4.11	104	5............	8.10	886	12 p.m.......	6.61	499
12 p.m.......	4.29	125	6............	7.07	618			
			7............	6.56	486	Jan. 15		
Dec. 20			8............	7.32	683	2 a.m........	6.19	389
2 a.m........	4.05	97	10...........	9.97	1,390	3:30.........	6.00	340
4............	3.90	84	12 m.........	7.33	530	9............	5.59	238
6............	3.83	76	1 p.m........	7.75	665	10...........	5.26	161
7............	3.90	84	2............	8.80	964	1 p.m........	9.25	1,190
2 p.m........	3.42	38	5............	7.00	522	2............	9.68	1,310
10...........	3.19	22	6............	6.76	460	4:30.........	11.57	1,850
12 p.m.......	3.15	20	10...........	6.50	405	7............	9.44	1,240
Dec. 21			11...........	6.14	337	9............	8.03	868
6 a.m........	3.06	14	12 p.m.......	5.97	306	12 p.m.......	7.16	642
12 m.........	3.00	11						
2 p.m........	3.01	12	Dec. 27			Jan. 16		
4............	3.05	14	1 a.m........	5.82	293	4 a.m........	6.60	496
8............	3.03	13	2............	5.81	291	10...........	6.04	350
10...........	3.21	24	6............	5.57	233	11...........	6.00	340
12 p.m.......	3.29	29	8............	5.62	245	2 p.m........	5.79	286
			9............	5.64	250	6............	5.58	235
Dec. 22			10...........	5.62	245	12 p.m.......	5.36	183
2 a.m........	4.59	180	12 m.........	5.58	235			

PACHECO CREEK BASIN

96. San Ramon Creek at San Ramon, Calif.

Location.--Lat 37°46'20", long 121°59'40", in sec.8, T.2 S., R.1 W., on right bank 0.2 mile downstream from Bollinger Creek and 1.0 mile southwest of San Ramon.

Drainage area.--5.89 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 25, 27, 28, Jan. 28-31. Altitude of gage is 530 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 150 cfs and by culvert computation at 1,350 cfs. Discharge for Dec. 25, 27, 28, Jan. 28-31 estimated on basis of one discharge measurement and records for station at Walnut Creek.

Maxima.--December 1955 to January 1956: Discharge, 1,350 cfs about 11 p.m. Dec. 22 (gage height, 14.2 ft, from floodmarks).

1952 to November 1955: Discharge, 212 cfs Dec. 7, 1952 (gage height, 3.72 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1	0	12
2	0	9.8
3	0	8.9
4	0	11
5	0	9.5
6	0	7.7
7	0	38
8	0	17
9	0	14
10	0	17
11	0	14
12	0	13
13	0	13
14	0	64
15	0	94
16	0	43
17	0	28
18	6.8	24
19	40	21
20	24	34
21	14	21
22	327	36
23	210	26
24	52	24
25	20	86
26	61	89
27	35	69
28	15	45
29	14	30
30	13	20
31	12	16
Monthly mean discharge, in cubic feet per second	27.2	30.8
Runoff, in inches	5.33	6.03
Runoff, in acre-feet	1,670	1,890

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 17		
12 p.m.	1.10	5.6
Dec. 18		
7 a.m.	1.13	6.2
6 p.m.	1.12	6.0
11	1.33	10
12 p.m.	1.65	22
Dec. 19		
1 a.m.	1.95	42
2	2.07	52
6	1.57	18
10	1.43	13
12:30 p.m.	1.67	23
1:30	1.65	22
2:30	2.41	81
4	2.15	58
7	1.96	43
9	2.37	77
12 p.m.	1.94	41
Dec. 20		
4 a.m.	1.86	35
5	2.03	48
8	1.73	26
11	1.60	20
6 p.m.	1.47	14
12 p.m.	1.40	12
Dec. 21		
6 a.m.	1.35	11
2 p.m.	1.32	10
5	1.34	10
9	1.53	16
10	1.80	31
12 p.m.	2.10	54
Dec. 22		
2 a.m.	4.50	290
4	3.10	155
6 a.m.	4.37	277
Dec. 22--Con.		
7 a.m.	4.28	268
8	4.44	284
10	3.70	210
12 m.	3.32	177
3 p.m.	2.56	108
4	2.60	112
5	2.49	101
6	2.60	112
7	4.10	250
11	14.2	1,350
12 p.m.	-	780
Dec. 23		
2 a.m.	4.60	269
4	3.56	165
6	3.26	135
10	4.77	286
12 m.	4.20	229
1 p.m.	4.57	266
4	3.67	176
6	3.22	131
12 p.m.	2.89	98
Dec. 24		
4 a.m.	2.75	84
12 m.	2.26	42
6 p.m.	2.09	30
12 p.m.	1.96	22
Dec. 25		
12 p.m.	-	39
Dec. 26		
1 a.m.	2.37	36
3	3.17	107
6	2.42	40
8:30	3.83	173
9	3.20	110
11	2.65	58
12 m.	2.93	83
2 p.m.	3.10	100
Dec. 26--Con.		
3 p.m.	2.53	48
7	2.23	26
12 p.m.	2.06	18
Jan. 24		
12 p.m.	2.03	48
Jan. 25		
2:30 a.m.	1.92	40
4:30	4.30	270
5	4.24	264
8	2.60	100
9	2.74	114
10	2.46	86
1 p.m.	2.22	64
7	1.98	44
12 p.m.	1.94	41
Jan. 26		
5 a.m.	1.87	36
7	3.56	196
8	2.47	87
10	2.22	64
12 m.	2.87	127
3 p.m.	2.50	90
4	2.85	125
6	2.42	82
7	2.41	81
8	2.72	112
10	2.50	90
11	2.68	108
12 p.m.	2.51	91
Jan. 27		
3 a.m.	2.22	64
10:30	2.08	52
12:30 p.m.	2.72	112
2	2.65	105
4	2.18	60
6	2.29	70
12 p.m.	2.05	50

97. San Ramon Creek at Walnut Creek, Calif.

Location.--Lat 37°53'04", long 122°03'00", on boundary between Arroyo de las Nueces y Bolbones and San Ramon Grants, on left bank 0.3 mile downstream from small tributary, 1.1 miles south of town of Walnut Creek, Contra Costa County, and 1.2 miles upstream from confluence with Las Trampas Creek.

Drainage area.--50.7 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 170 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 570 cfs and by slope-area measurement at 6,890 cfs.

Maxima.--December 1955 to January 1956: Discharge, 6,890 cfs 1 a.m. Dec. 23 (gage height, 14.55 ft).

1952 to November 1955: Discharge, 1,880 cfs Dec. 7, 1952 (gage height, 7.60 ft, from reconstructed graph).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.8	20	11.....	0.8	33	21.....	24	64
2.....	1.1	17	12.....	.7	23	22.....	1,290	105
3.....	.8	14	13.....	.6	19	23.....	2,670	110
4.....	.6	16	14.....	.6	319	24.....	230	73
5.....	.6	41	15.....	.7	613	25.....	55	740
6.....	.8	20	16.....	.7	155	26.....	613	639
7.....	1.5	235	17.....	.7	70	27.....	90	450
8.....	1.1	91	18.....	1.9	56	28.....	43	170
9.....	2.2	32	19.....	37	45	29.....	29	90
10.....	1.2	65	20.....	61	180	30.....	23	70
						31.....	23	59
Monthly mean discharge, in cubic feet per second							168	149
Runoff, in inches							3.82	3.40
Runoff, in acre-feet							10,320	9,190

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Jan. 24		
12 p.m.......	0.92	0.7	6:30 p.m.....	4.72	407	6 a.m........	3.03	73
			9............	7.50	1,820	12 m.........	2.88	60
Dec. 18			12 p.m.......	12.75	5,450	8 p.m........	2.82	56
5 p.m........	.90	.6				12 p.m.......	3.50	124
9............	1.22	1.8	Dec. 23					
10...........	1.88	10	1 a.m........	14.55	6,890	Jan. 25		
11...........	1.92	11	3............	11.58	4,530	3 a.m........	4.20	255
12 p.m.......	2.06	14	5............	8.25	2,270	6............	6.85	1,450
			7............	7.18	1,630	7:30.........	8.85	2,630
Dec. 19			9............	8.12	2,190	10...........	7.00	1,540
1 a.m........	2.32	24	1 p.m........	10.27	3,610	12 m.........	5.60	790
4............	1.88	10	4............	8.88	2,650	4 p.m........	4.45	325
6............	1.87	10	8............	6.35	1,180	8............	3.98	206
8:30.........	2.38	27	10...........	5.58	780	12 p.m.......	3.72	158
11:30........	2.25	20	12 p.m.......	5.17	582			
1 p.m........	2.89	61				Jan. 26		
4............	2.60	40	Dec. 24			5 a.m........	3.53	128
6............	2.69	46	6 a.m........	4.39	307	7............	4.50	340
7............	3.08	78	12 m.........	3.78	168	8............	5.26	622
9............	2.80	54	6 p.m........	3.40	112	9............	5.16	577
10...........	2.97	68	12 p.m.......	3.12	82	11...........	5.49	735
12 p.m.......	2.95	66				12:30 p.m....	5.22	604
			Dec. 25			2............	5.75	865
Dec. 20			6 a.m........	2.91	63	4............	6.63	1,330
2 a.m........	3.08	78	12 m.........	2.77	52	7............	5.87	925
6............	3.15	85	12 p.m.......	2.56	38	9:30.........	5.33	655
12 m.........	2.82	56				12 p.m.......	6.06	1,020
6 p.m........	2.74	50	Dec. 26					
12 p.m.......	2.52	35	1 a.m........	2.59	39	Jan. 27		
			3............	4.20	255	12:30 a.m....	6.13	1,060
Dec. 21			5:30.........	5.96	970	4............	5.12	559
8 a.m........	2.35	25	7............	5.75	865	7............	4.40	310
2 p.m........	2.12	16	8............	6.28	1,140	12 m.........	3.98	206
8............	2.05	14	10...........	6.28	1,140	2 p.m........	4.45	325
10...........	2.45	31	11...........	6.70	1,370	5............	5.25	618
11...........	2.43	30	3 p.m........	5.22	604	8............	4.45	325
12 p.m.......	2.75	50	7............	4.40	310	10...........	4.75	418
			12 p.m.......	3.69	152	12 p.m.......	4.50	340
Dec. 22			Dec. 27					
1:30 a.m.....	4.25	268	6 a.m........	3.29	100	Jan. 28		
2:30.........	5.09	546	12 m.........	3.12	82	4 a.m........	4.00	210
3:30.........	4.81	438	2 p.m........	3.11	81	8............	3.85	181
4:30.........	5.45	715	12 p.m.......	2.84	57	6 p.m........	3.48	122
7............	6.74	1,390				12 p.m.......	3.34	105
8............	6.62	1,330	Jan. 23					
10:30 a.m....	7.10	1,590	12 p.m.......	3.31	102			

98. Walnut Creek at Walnut Creek, Calif.

Location.--Lat 37°53'56", long 122°03'31", on boundary between Arroyo de las Nueces y Bolbones and Canada del Hambre Grants, on downstream side of left abutment of highway bridge at town of Walnut Creek, Contra Costa County, 0.1 mile downstream from confluence of San Ramon and Las Trampas Creeks.

Drainage area.--78.1 sq mi, of which 1.2 sq mi is in Lafayette Reservoir and is noncontributing.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 130 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,400 cfs and extended to peak stage on basis of records for upstream stations.

Maxima.--December 1955 to January 1956: Discharge, 11,000 cfs 1:30 a.m. Dec. 23 (gage height, 23.22 ft).

1952 to November 1955: Discharge, 3,660 cfs Dec. 7, 1952 (gage height, 11.15 ft).

Remarks.--Flow slightly regulated by storage in Lafayette Reservoir.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	5.5	61	11	2.5	84	21	78	118
2	3.1	43	12	2.3	72	22	2,870	192
3	2.2	32	13	2.2	65	23	5,510	193
4	1.7	57	14	2.4	531	24	555	138
5	1.8	106	15	2.5	1,140	25	173	1,270
6	8.7	45	16	2.4	310	26	1,220	914
7	4.0	504	17	2.8	133	27	226	645
8	5.0	188	18	31	113	28	104	324
9	7.7	89	19	406	88	29	67	193
10	3.2	137	20	193	318	30	58	154
						31	58	126
Monthly mean discharge, in cubic feet per second							374	270
Runoff, in inches							5.53	3.99
Runoff, in acre-feet							23,030	16,630

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 27--Con.		
12 p.m.	2.20	3.0	11 p.m.	15.50	6,170	6 p.m.	3.89	176
			12 p.m.	18.90	8,210	10	3.70	140
Dec. 18						12 p.m.	3.69	138
5 p.m.	2.18	2.8	Dec. 23					
7	3.45	100	1:30 a.m.	23.22	11,000	Jan. 23		
8	3.30	78	2	22.65	10,600	12 p.m.	4.06	214
9	3.45	100	3	-	9,000			
10	3.40	92	6	-	6,500	Jan. 24		
12 p.m.	4.15	237	7	-	5,500	2 a.m.	3.84	166
			9	-	6,000	8	3.57	118
Dec. 19			11	15.90	6,410	7 p.m.	3.44	98
3 a.m.	4.79	426	1 p.m.	16.67	6,870	9	3.63	128
8	3.70	140	2	15.65	6,260	12 p.m.	4.41	308
11	4.59	382	6	10.50	3,300			
12 m.	4.44	317	9	7.80	1,820	Jan. 25		
3 p.m.	5.56	727	12 p.m.	6.60	1,210	2 a.m.	4.77	420
5	4.61	368				3	5.05	520
8	5.49	696	Dec. 24			7	12.26	4,270
10	4.86	451	4 a.m.	5.75	812	11	7.22	1,520
12 p.m.	4.70	395	11	5.02	508	1 p.m.	5.90	880
			2 p.m.	4.94	479	5	5.09	536
Dec. 20			3	4.61	368	9	4.67	386
1 a.m.	4.45	320	9	4.33	285	12 p.m.	4.50	335
3	4.35	291	12 p.m.	4.19	247			
5	4.41	308				Jan. 26		
12 m.	3.88	170	Dec. 25			5 a.m.	4.30	277
4 p.m.	3.67	135	6 a.m.	3.99	198	6	4.63	380
12 p.m.	3.17	62	12 m.	3.84	166	8	6.69	1,260
			6 p.m.	3.71	142	10	6.15	992
Dec. 21			12 p.m.	3.63	128	12 m.	6.03	938
7 a.m.	2.89	34				1 p.m.	6.12	979
2 p.m.	2.71	21	Dec. 26			3	7.38	1,600
3	3.45	100	2 a.m.	4.61	368	5	7.26	1,540
4	3.42	95	5	7.10	1,460	8	6.02	934
5	2.73	22	7	6.79	1,300	10	5.85	858
7	3.55	115	9	9.95	3,000	12 p.m.	6.60	1,210
9	3.61	125	11	9.02	2,490			
12 p.m.	4.65	380	3 p.m.	6.55	1,180	Jan. 27		
			6	5.66	772	4 a.m.	5.48	692
Dec. 22			9	5.05	520	6	5.08	532
3 a.m.	10.87	3,510	12 p.m.	4.63	383	11	4.69	392
5	9.45	2,730				12 m.	4.70	395
7	12.09	4,180	Dec. 27			3 p.m.	5.77	822
12 m.	9.45	2,730	6 a.m.	4.21	253	4:30	5.85	858
3 p.m.	6.70	1,260	9	4.11	227	8	5.09	536
6	5.54	718	2 p.m.	4.06	214	9	5.27	608
9 p.m.	11.20	3,690	3 p.m.	4.05	212	12 p.m.	5.00	500

99. Galindo Creek at Concord, Calif.

Location.--Lat 37°58'00", long 122°01'30", in Monte Del Diablo Grant, on right bank just off Cowell Road, 0.2 mile southeast of Concord, Contra Costa County, and 1.2 miles upstream from mouth.

Drainage area.--6.16 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 80 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 110 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 260 cfs 1:30 p.m. Dec. 23 (gage height, 3.45 ft).

1954 to November 1955: Discharge, 9.1 cfs Jan. 18, 1955 (gage height, 1.56 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0.9	2.0	11	0.2	2.7	21	1.5	6.7
2	.3	1.5	12	.2	1.9	22	39	8.4
3	.2	1.2	13	.2	1.9	23	125	6.3
4	.2	1.5	14	.2	32	24	13	6.0
5	.4	2.0	15	.2	55	25	3.6	40
6	.2	1.3	16	.2	14	26	54	37
7	.3	12	17	.3	6.3	27	8.4	26
8	1.1	4.6	18	1.1	6.0	28	3.8	9.8
9	.6	3.0	19	7.5	4.9	29	2.4	7.3
10	.2	5.4	20	3.0	25	30	2.7	6.3
						31	2.5	5.7
Monthly mean discharge, in cubic feet per second							8.82	11.1
Runoff, in inches							1.65	2.08
Runoff, in acre-feet							542	662

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 26--Con.			Jan. 16		
12 p.m.	1.25	1.4	3 a.m.	1.98	46	6 a.m.	1.70	16
			5	2.22	76	12 m.	1.62	12
Dec. 21			7	2.02	50	6 p.m.	1.54	8.4
3 p.m.	1.16	.6	9	2.50	114	12 p.m.	1.51	7.3
3:30	1.26	1.5	10	2.65	164			
7	1.15	.5	12 m.	2.19	72	Jan. 24		
8:30	1.41	4.3	1:30 p.m.	2.15	66	12 p.m.	1.66	14
10	1.26	1.5	2:30	2.30	66			
12 p.m.	1.52	7.7	3	2.18	70	Jan. 25		
			6	1.84	29	3 a.m.	1.79	24
Dec. 22			9	1.70	16	6	2.42	103
3 a.m.	1.97	44	12 p.m.	1.62	12	7:30	2.45	107
6	1.82	27				9	2.34	92
7:30	2.04	53	Jan. 13			12 m.	1.92	38
9	2.00	46	12 p.m.	1.37	3.4	3 p.m.	1.75	21
12 m.	1.75	21				6	1.66	14
6 p.m.	1.52	7.7	Jan. 14			12 p.m.	1.59	10
9	2.34	92	2 a.m.	1.51	7.3			
10:30	2.22	76	5	1.57	9.4	Jan. 26		
11:30	2.50	114	9	1.54	8.4	5 a.m.	1.56	9.1
12 p.m.	2.64	134	10:30	1.62	12	6	1.71	17
			12 m.	1.61	11	7	1.98	46
Dec. 23			1:30 p.m.	1.64	13	8	2.07	56
2 a.m.	2.76	151	2:30	1.73	19	8:30	2.33	90
3	2.50	114	4:30	2.33	90	10	1.98	46
4	2.32	69	5	2.31	87	11	1.90	36
6:30	2.28	83	6	2.36	94	1 p.m.	1.92	38
7:30	2.50	114	9	2.12	63	2:30	2.09	59
8:30	2.54	120	12 p.m.	1.86	32	6:30	2.00	48
11	3.04	193				9	1.85	30
12 m.	2.94	178	Jan. 15			11	1.90	36
1:30 p.m.	3.45	260	3 a.m.	1.71	17	11:30	2.01	49
5	2.50	114	6	1.73	19	12 p.m.	1.96	43
9	2.08	58	7	1.75	21			
12 p.m.	1.89	35	9	1.69	16	Jan. 27		
			10:30	1.79	24	6 a.m.	1.72	18
Dec. 24			12 m.	2.23	77	11	1.66	14
6 a.m.	1.69	16	1 p.m.	2.50	114	12 m.	1.70	16
12 m.	1.59	10	2:30	2.55	121	1:30 p.m.	1.88	34
6 p.m.	1.51	7.3	3	2.53	118	3	2.08	58
12 p.m.	1.36	3.2	4	2.52	117	4	2.02	50
			5	2.56	122	6	1.81	26
Dec. 25			5:30	2.46	108	9	1.70	16
12 p.m.	1.32	2.4	6:30	2.36	94	12 p.m.	1.67	15
			8:30	2.04	53			
Dec. 26			9	2.05	54			
2 a.m.	1.61	11	12 p.m.	1.89	35			

100. Pine Creek at Concord, Calif.

Location.--Lat 37°58'13", long 122°02'42", in Monte del Diablo Grant, on right bank at Concord, Contra Costa County, just upstream from Market Street Bridge, 0.2 mile downstream from small tributary and 0.8 mile upstream from mouth.

Drainage area.--27.0 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 30 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 80 cfs and by slope-area measurement at 982 cfs.

Maxima.--December 1955 to January 1956: Discharge, 982 cfs 2 p.m. Dec. 23 (gage height, 9.85 ft).
1952 to November 1955: Discharge, 398 cfs Dec. 7, 1952 (gage height, 6.40 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.0	12	11.....	0	13	21.....	7.5	24
2.....	.1	11	12.....	0	11	22.....	194	26
3.....	0	9.7	13.....	0	10	23.....	722	23
4.....	0	9.7	14.....	0	79	24.....	98	22
5.....	.2	11	15.....	0	169	25.....	39	154
6.....	.8	9.1	16.....	0	50	26.....	178	132
7.....	.1	28	17.....	.1	24	27.....	34	98
8.....	1.6	20	18.....	2.6	20	28.....	20	50
9.....	.4	13	19.....	16	17	29.....	15	38
10.....	.1	17	20.....	12	58	30.....	14	33
						31.....	15	30
Monthly mean discharge, in cubic feet per second							44.2	39.4
Runoff, in inches							1.89	1.68
Runoff, in acre-feet							2,720	2,420

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23--Con.			Jan. 25--Con.		
12 p.m.......	4.02	42	2 p.m........	9.85	982	6 p.m........	4.34	68
			5............	8.92	823	12 p.m.......	4.11	49
Dec. 22			7............	7.05	508			
3 a.m........	4.17	54	10...........	5.78	294	Jan. 26		
4:30.........	4.76	124	12 p.m.......	5.13	185	5 a.m........	4.00	41
5:30.........	4.69	112				7............	4.35	68
7:30.........	5.10	180	Dec. 24			8:30.........	5.56	257
9............	5.13	185	5 a.m........	4.62	117	10...........	4.98	160
12 m.........	4.64	104	9............	4.50	114	12 m.........	4.68	111
4:30 p.m.....	4.13	50	2 p.m........	4.15	78	3 p.m........	5.23	210
6............	4.35	68	12 p.m.......	3.84	51	4............	5.27	218
7............	4.85	138				9:30.........	4.71	128
10...........	8.05	676	Jan. 24			12 p.m.......	4.85	154
12 p.m.......	8.88	817	12 p.m.......	3.94	37			
						Jan. 27		
Dec. 23			Jan. 25			10 a.m.......	4.18	64
1 a.m........	8.97	832	3 a.m........	4.23	58	11:30........	4.14	62
3............	8.33	723	4............	4.37	70	1 p.m........	4.24	70
4:30.........	8.40	735	6............	6.18	362	3:30.........	4.76	149
6............	8.16	694	8............	6.69	447	8............	4.25	75
9............	9.16	864	12 m.........	5.07	175	10...........	4.18	69
11 a.m.......	9.68	953	2 p.m........	4.68	111	12 p.m.......	4.13	66

101. Grayson Creek near Hookston, Calif.

Location.--Lat 37°57'05", long 122°05'05", in Las Juntas Grant, 0.3 mile upstream from unnamed tributary, and 1.9 miles northwest of Hookston, Contra Costa County.

Drainage area.--1.94 sq mi.

Gage-height record.--Water-stage recorder graph except 12 m. Dec. 23 to 8 a.m. Dec. 24, Dec. 28 to Jan. 4. Altitude of gage is 80 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 46 cfs and by slope-area measurement at 416 cfs. Discharge for Dec. 23, 24, Dec. 28 to Jan. 4 estimated on basis of three discharge measurements, weather records, and records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 416 cfs 10 a.m. Dec. 23 (gage height, 4.72 ft, from recorder graph, 5.2 ft, from floodmarks).
1954 to November 1955: Discharge, 29 cfs Feb. 27, 1955 (gage height, 1.60 ft).

Mean discharge, in cubic feet per second, 1955-56, of Grayson Creek near Hookston, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	0	0.6	11.....	0	1.2	21.....	3.1	1.3
2.....	0	.4	12.....	0	.9	22.....	70	1.8
3.....	0	.3	13.....	0	.8	23.....	120	1.3
4.....	0	.3	14.....	0	14	24.....	5.0	1.9
5.....	0	.5	15.....	0	15	25.....	.9	16
6.....	0	.2	16.....	0	4.7	26.....	25	15
7.....	0	10	17.....	0	1.6	27.....	4.3	10
8.....	0	2.3	18.....	0	1.8	28.....	1.5	3.5
9.....	0	1.1	19.....	12	1.2	29.....	.7	2.2
10.....	0	2.2	20.....	4.5	6.6	30.....	.5	1.8
						31.....	2.0	1.6
Monthly mean discharge, in cubic feet per second......................							8.05	3.94
Runoff, in inches..							4.78	2.34
Runoff, in acre-feet...							495	242

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 22--Con.			Jan. 24		
12 p.m.......	1.59	28	12 p.m.......	2.78	173	12 p.m.......	1.39	7.8
Dec. 22			Dec. 23			Jan. 25		
1 a.m........	2.24	106	10 a.m.......	4.72	416	2 a.m........	1.36	6.1
2............	2.62	153				5............	1.90	64
3............	2.12	91	Dec. 25			6............	1.64	34
4............	1.69	39	12 p.m.......	1.11	.4	10:30........	1.42	10
4:30.........	1.65	35				12 m.........	1.41	9.2
5............	1.72	43	Dec. 26			3 p.m........	1.42	10
6............	2.36	121	6 a.m........	1.12	.5	12 p.m.......	1.31	3.9
7............	2.14	94	8............	1.66	36			
7:30.........	2.28	111	11...........	1.38	7.2	Jan. 26		
9............	1.80	52	12 m.........	1.68	38	4:30 a.m.....	1.30	3.5
10...........	1.61	30	1 p.m........	2.66	158	5:30.........	1.50	18
10:30........	1.65	35	2............	1.75	46	6............	2.02	79
1 p.m........	1.49	17	3:30	1.71	42	7:30.........	1.49	17
6............	1.40	8.5	4............	1.68	38	10...........	1.44	12
6:30.........	1.44	12	6............	1.60	29	12 m.........	1.52	20
7:30.........	1.58	27	7............	1.66	36	6 p.m........	1.45	13
8............	2.32	116	8............	1.54	22	9............	1.42	10
9............	2.98	198	11...........	1.44	12	12 p.m.......	1.48	16
10...........	2.48	136	12 p.m.......	1.44	12			
11:30 p.m....	2.84	181						

102. Grayson Creek near Pacheco, Calif.

Location.--Lat 37°57'25", long 122°04'20", in Las Juntas Grant, on downstream side of bridge, 0.6 mile downstream from unnamed tributary and 1.8 miles south of Pacheco, Contra Costa County.

Drainage area.--4.35 sq mi.

Gage-height record.--Water-stage recorder graph except 9 a.m. to 1 p.m. Dec. 23, for which graph was drawn based on high-water mark in gage house. Altitude of gage is 40 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 110 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 604 cfs about 11 a.m. Dec. 23 (gage height, 10.24 ft).

1954 to November 1955: Discharge, 67 cfs Feb. 24, 1955 (gage height, 3.70 ft).

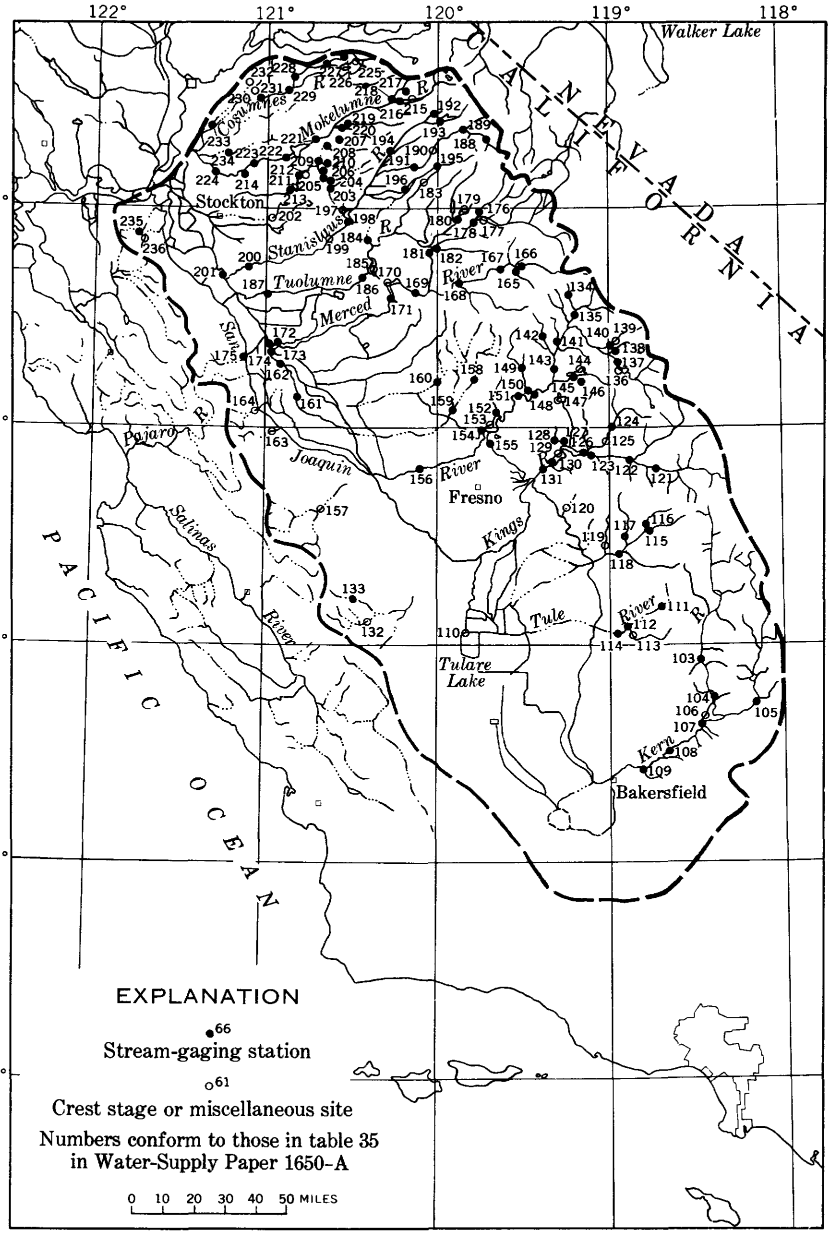
Mean discharge, in cubic feet per second, 1955-56, of Grayson Creek near Pacheco, Calif.

Day	December	January	Day	December	January	Day	December	January
1	0.6	2.5	11	0.1	2.4	21	6.4	4.6
2	.4	1.7	12	.1	1.6	22	190	6.5
3	.5	.8	13	.1	1.3	23	251	4.1
4	.4	1.4	14	.2	33	24	12	5.2
5	1.1	1.8	15	.1	52	25	2.4	50
6	.6	.9	16	.3	9.9	26	73	45
7	1.0	29	17	.2	4.3	27	7.9	23
8	2.4	6.8	18	1.0	4.4	28	2.5	9.5
9	.5	2.2	19	21	2.8	29	1.4	5.1
10	.2	6.5	20	11	19	30	1.5	3.1
						31	2.8	2.4
Monthly mean discharge, in cubic feet per second							19.1	11.1
Runoff, in inches							5.07	2.93
Runoff, in acre-feet							1,180	680

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23--Con.			Dec. 26--Con.		
12 p.m.	1.72	2.2	2:30 a.m.	6.24	234	11 a.m.	3.36	52
			3	5.84	204	12 m.	3.48	57
Dec. 21			4	5.50	180	1 p.m.	4.13	90
6 a.m.	1.65	1.3	5	5.32	167	2	3.52	58
2:30 p.m.	1.60	.8	6	5.34	169	3	3.05	41
3	1.66	1.4	6:30	5.02	146	4	2.76	31
4:30	1.64	1.2	7	5.22	160	6	2.45	22
6:30	1.69	1.8	8	7.08	302	8	2.26	16
7:30	1.76	2.8	8:30	7.02	297	12 p.m.	2.08	11
8:30	2.00	8.4	9	8.80	460			
9:30	2.70	29	10	9.90	570	Jan. 23		
10:30	3.16	45	11	10.24	604	12 p.m.	1.82	3.9
11:15	3.05	41	12 m.	10.03	583			
11:30	3.07	41	1 p.m.	9.60	540	Jan. 24		
12 p.m.	3.38	53	3	6.52	257	3 a.m.	1.79	3.3
			4:30	5.66	191	9	1.76	2.8
Dec. 22			6:30	3.86	75	6 p.m.	1.76	2.8
1 a.m.	6.10	223	10	2.90	36	7	1.82	3.9
1:30	7.54	344	10:30	2.76	31	8	1.91	6.1
2	7.96	381	12 p.m.	2.63	27	9	2.11	11
2:30	7.60	349				10	2.20	14
3:30	5.90	208	Dec. 24			11	2.36	19
4:30	5.08	151	3 a.m.	2.40	20	12 p.m.	2.65	28
5	5.40	173	6	2.24	15			
6	6.92	289	8	2.18	13	Jan. 25		
6:30	7.00	295	10	2.14	12	1 a.m.	2.39	20
7	6.48	253	3 p.m.	1.96	7.4	2	2.34	18
8	6.71	272	3	2.28	16	2:30	2.68	28
10	4.16	92	3:30	1.95	7.1	4	5.70	194
11	3.42	54	12 p.m.	1.82	3.9	4:30	6.31	240
12 m.	2.96	38				8	3.80	72
1 p.m.	2.70	29	Dec. 25			9	3.56	60
3	2.44	21	12 p.m.	1.66	1.4	10	3.00	39
5:30	2.25	16				11	2.65	28
6:30	2.40	20	Dec. 26			12 m.	2.48	22
7:30	4.50	112	1 a.m.	1.67	1.6	2 p.m.	2.28	16
8	7.00	295	2	2.28	16	5	2.14	12
8:30	8.90	470	3	4.20	94	10	2.03	9.2
9	9.72	552	3:30	4.64	120	10	2.06	10
10	8.14	398	4	4.43	108	12 p.m.	2.04	9.5
11:30	8.94	474	5	3.50	58			
12 p.m.	8.66	446	6:30	2.92	36			
			7	3.60	62			
Dec. 23			8:30	9.28	508			
2 a.m.	5.79	200	10 a.m.	4.40	106			

SAN JOAQUIN VALLEY


122°
121°
120°
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118°
38°
37°
36°
35°
34°
Walker Lake
CALIFORNIA
NEVADA
Cosumnes R
Mokelumne R
Stockton
Stanislaus R
Tuolumne
Merced
River
San Joaquin River
Pajaro R
Salinas River
Fresno
Kings
Tule
Tulare Lake
River
Kern R
Bakersfield
PACIFIC OCEAN
EXPLANATION
●66
Stream-gaging station
○61
Crest stage or miscellaneous site
Numbers conform to those in table 35 in Water-Supply Paper 1650-A
0 10 20 30 40 50 MILES

Figure 4.--Map of the San Joaquin Valley region showing location of flood-data sites.

KERN RIVER BASIN

103. Kern River near Kernville, Calif.

Location.--Lat 35°56'00", long 118°29'10", in NE¼ sec.14, T.23 S., R.32 E., on left bank 3 miles upstream from Salmon Creek and 13 miles north of Kernville.

Drainage area.--845 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,550 ft (from topographic map).

Discharge record.--Stage-discharge defined by current-meter measurements below 6,000 cfs and extended above on basis of computed flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 27,200 cfs 6:30 a.m. Dec. 23 (gage height, 17.55 ft).
1912 to November 1955: Discharge, 27,000 cfs Nov. 19, 1950 (gage height, 17.50 ft).

Remarks.--Kern River No. 3 Canal diverts 1 mile above station. Extremes do not include flow in this canal. Mean discharge figures and tabulation of discharge at indicated times are the combined flow of Kern River and Kern River No. 3 Canal.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	291	1,030	11	342	631	21	264	591
2	275	947	12	312	657	22	682	563
3	198	870	13	303	627	23	16,100	662
4	197	809	14	292	602	24	5,620	604
5	204	763	15	283	608	25	3,160	1,920
6	490	734	16	271	723	26	2,710	1,840
7	457	699	17	264	635	27	2,270	2,120
8	295	665	18	258	607	28	1,670	1,360
9	726	647	19	249	586	29	1,390	1,100
10	446	629	20	253	587	30	1,210	972
						31	1,130	909
Monthly mean discharge, in cubic feet per second							1,370	861
Runoff, in inches							1.88	1.17
Runoff, in acre-feet							84,520	52,950

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 25			Jan. 24--Con.		
12 p.m.	-	256	12 m.	-	3,170	9 p.m.	-	579
			12 p.m.	-	2,570	12 p.m.	-	608
Dec. 22								
8 a.m.	-	264	Dec. 26			Jan. 25		
2 p.m.	-	421	10 a.m.	-	2,260	2 a.m.	-	617
3	-	824	7 p.m.	-	3,350	4	-	685
4	-	866	12 p.m.	-	2,890	6	-	825
5	-	1,260				8	-	970
7	-	1,370	Dec. 27			12 m.	-	2,650
10	-	1,330	12 m.	-	2,160	2:30 p.m.	-	3,300
12 p.m.	-	1,490	12 p.m.	-	1,870	4	-	3,230
						8	-	2,500
Dec. 23			Jan. 22			12 p.m.	-	2,150
2 a.m.	9.50	4,310	12 p.m.	-	564			
4	13.30	11,800				Jan. 26		
6:30	17.55	27,400	Jan. 23			3 a.m.	-	1,850
8	17.15	25,800	5 a.m.	-	609	12 m.	-	1,610
9	17.00	25,300	6	-	617	3 p.m.	-	1,610
12 m.	15.70	19,800	7	-	685	6	-	1,560
5 p.m.	14.75	16,400	8	-	745	9	-	2,100
12 p.m.	12.20	9,550	9	-	749	12 p.m.	-	2,920
			4 p.m.	-	671			
Dec. 24			12 p.m.	-	646	Jan. 27		
6 a.m.	-	6,350				2 a.m.	-	2,990
12 m.	-	5,240	Jan. 24			10	-	2,030
7 p.m.	-	4,090	8 a.m.	-	613	4 p.m.	-	1,780
12 p.m.	-	3,830	6 p.m.	-	575	12 p.m.	-	1,600

104. Kern River at Kernville, Calif.

Location.--Lat 35°45'15", long 118°25'25", in NE¼SW¼ sec.15, T.25 S., R.33 E., on right bank 300 ft downstream from highway bridge, at new town of Kernville, 1.1 miles upstream from Caldwell Creek, 8.9 miles upstream from Isabella Dam, and 41 miles northeast of Bakersfield.

Drainage area.--1,026 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,621.57 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,200 cfs and by slope-area measurement of 29,400 cfs.

Maxima.--December 1955 to January 1956: Discharge, 29,400 cfs 8:30 a.m. Dec. 23 (gage height, 16.20 ft in gage well, 16.8 ft outside, from floodmarks).

1905-12, 1953 to November 1955: Discharge observed, 10,400 cfs Jan. 14, 1909. Stage known since at least 1912, 18.4 ft (levels by Corps of Engineers) Nov. 19, 1950 (discharge not determined).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	332	1,140	11.....	416	685	21.....	296	630
2.....	357	1,070	12.....	373	690	22.....	547	608
3.....	235	988	13.....	352	690	23.....	16,900	662
4.....	220	928	14.....	342	671	24.....	6,600	705
5.....	225	875	15.....	324	662	25.....	3,260	3,170
6.....	531	835	16.....	306	715	26.....	2,720	2,760
7.....	657	805	17.....	300	730	27.....	2,520	3,250
8.....	356	765	18.....	289	662	28.....	1,830	1,740
9.....	846	730	19.....	278	635	29.....	1,510	1,360
10.....	568	705	20.....	278	622	30.....	1,320	1,200
						31.....	1,220	1,110
Monthly mean discharge, in cubic feet per second......................							1,494	1,058
Runoff, in inches..							1.68	1.19
Runoff, in acre-feet...							91,850	65,050

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 24			Jan. 25		
12 p.m.......	4.43	286	6 a.m........	10.75	7,810	7 a.m........	5.43	695
			12 m.........	9.94	5,830	10...........	5.95	970
Dec. 22			9 p.m........	9.01	4,060	12 m.........	8.48	3,280
10 a.m.......	4.46	296	12 p.m.......	8.94	3,940	4:30 p.m.....	10.73	7,760
2 p.m........	4.68	373				8............	9.43	5,100
5............	5.65	805	Dec. 25			12 p.m.......	8.45	3,590
9............	5.50	730	12 m.........	8.42	3,200			
10...........	6.50	1,340	12 p.m.......	8.00	2,720	Jan. 26		
11...........	6.77	1,550				6 a.m........	7.81	2,750
12 p.m.......	6.78	1,550	Dec. 26			12 m.........	7.52	2,420
			12 m.........	7.62	2,320	2 p.m........	7.46	2,360
Dec. 23			2 p.m........	7.61	2,310	5............	7.56	2,470
3 a.m........	7.20	1,920	5............	8.03	2,750	8............	7.43	2,320
4............	8.60	3,440	9............	8.65	3,510	12 p.m.......	8.68	3,920
5............	12.50	12,900	12 p.m.......	8.48	3,280			
6............	13.70	17,200				Jan. 27		
7............	15.10	23,500	Dec. 27			3 a.m........	9.35	4,960
8:30.........	16.20	29,400	12 m.........	7.66	2,360	7............	8.87	4,200
11...........	15.92	27,900	12 p.m.......	7.38	2,080	12 m.........	7.88	2,840
12 m.........	15.38	24,900				6 p.m........	7.43	2,320
2 p.m........	14.57	21,000	Jan. 24			12 p.m.......	7.20	2,090
6............	13.91	18,000	12 p.m.......	5.34	653			
12 p.m.......	12.36	12,500						

105. South Fork Kern River near Onyx, Calif.

Location.--Lat 35°44', long 118°10', in SW¼ sec.24, T.25 S., R.35 E., on left bank three-quarters of a mile north of State Highway 178, 1.4 miles upstream from Canebrake Creek, and 5 miles northeast of Onyx.

Drainage area.--530 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,900 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,900 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,050 cfs 2 a.m. Dec. 24 (gage height, 5.73 ft).

1911-14, 1919-42, 1947 to November 1955: Discharge, 3,450 cfs Mar. 2, 1938 (gage height, 6.69 ft); gage height observed, 7.2 ft and rising Jan. 25, 1914, at site 140 ft upstream (discharge may have exceeded that of Mar. 2, 1938).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	39	110	11.....	43	87	21.....	31	88
2.....	43	122	12.....	41	88	22.....	36	86
3.....	26	119	13.....	38	88	23.....	634	88
4.....	23	106	14.....	36	88	24.....	1,490	84
5.....	20	104	15.....	34	92	25.....	525	417
6.....	30	104	16.....	33	101	26.....	372	446
7.....	54	96	17.....	32	101	27.....	319	469
8.....	37	88	18.....	31	93	28.....	224	196
9.....	57	87	19.....	31	93	29.....	174	132
10.....	55	84	20.....	31	90	30.....	134	122
						31.....	130	130
Monthly mean discharge, in cubic feet per second							155	135
Runoff, in inches							0.34	0.29
Runoff, in acre-feet							9,530	8,330

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 25			Jan. 26		
12 p.m.......	1.88	31	12 m.........	3.66	487	3 a.m........	3.41	373
			6 p.m........	3.45	390	10...........	3.30	330
Dec. 22			12 p.m.......	3.36	353	1 p.m........	3.36	353
3 p.m........	1.89	32				4............	3.80	560
7............	1.93	36	Dec. 26			5............	3.80	560
10...........	2.15	60	2 p.m........	3.35	350	8............	3.64	478
12 p.m.......	2.15	60	6............	3.52	421	12 p.m.......	4.15	762
			12 p.m.......	3.48	403			
Dec. 23						Jan. 27		
2 a.m........	2.19	66	Jan. 24			2 a.m........	4.17	776
4............	2.55	122	12 p.m.......	2.31	82	6............	4.00	670
6............	3.10	261				11...........	3.50	412
8............	3.85	588	Jan. 25			5 p.m........	3.24	308
11...........	3.75	534	5 a.m........	2.35	88	12 p.m.......	3.07	252
6 p.m........	4.05	700	7............	2.48	110			
9............	4.80	1,240	9............	2.80	176	Jan. 28		
12 p.m.......	5.60	1,930	10...........	3.60	458	12 m.........	2.84	186
			11...........	4.08	718	12 p.m.......	2.72	158
Dec. 24			12 m.........	4.16	769			
2 a.m........	5.73	2,050	3 p.m........	4.10	730			
9............	5.35	1,700	6............	3.88	604			
12 p.m.......	4.21	802	12 p.m.......	3.61	463			

106. Isabella Reservoir near Isabella, Calif.

Location.--Lat 35°38'50", long 118°28'50", in SW$\frac{1}{4}$ sec.19, T.26 S., R.33 E., in main control tower along left abutment of main dam on Kern River, 1.5 miles north of new town of Isabella and 2.8 miles upstream from Erskine Creek.

Drainage area.--2,093 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Corps of Engineers).

Maxima.--December 1955 to January 1956: Contents, 119,700 acre-ft Jan. 31 (elevation, 2,550.25 ft).

1953 to November 1955: Contents, 85,380 acre-ft June 9, 1954 (elevation, 2,543.60 ft).

Remarks.--Reservoir is formed by earthfill dam with sidehill spillway and auxiliary earthfill dam completed in 1954. Usable capacity, 569,700 acre-ft between elevations 2,470.0 ft (invert of main outlet) and 2,605.5 ft (spillway crest) above mean sea level; 326 acre-ft is not available for release. Surcharge flood-control storage, 271,800 acre-ft between ungated spillway crest and elevation 2,627.0 ft (maximum design flood pool). Records including extremes show total contents at 12 p.m. Water is released to Kern River through tunnel in left abutment of main dam and to Borel Canal through concrete conduit in auxiliary dam.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	2,509.72	12,810	2,540.70	78,820	16	2,511.51	14,660	2,542.87	87,930
2	2,509.77	12,860	2,541.00	80,920	17	2,511.51	14,660	2,542.98	88,360
3	2,509.77	12,860	2,541.22	81,720	18	2,511.50	14,650	2,543.07	88,710
4	2,509.77	12,860	2,541.47	82,630	19	2,511.50	14,650	2,543.14	88,980
5	2,509.77	12,860	2,541.64	83,260	20	2,511.51	14,660	2,543.20	89,210
6	2,510.33	13,420	2,541.76	83,710	21	2,511.51	14,660	2,543.28	89,520
7	2,510.76	13,860	2,541.93	84,350	22	2,511.70	14,870	2,543.35	89,790
8	2,510.80	13,900	2,542.06	84,840	23	2,526.50	38,080	2,543.45	90,180
9	2,511.35	14,490	2,542.16	85,220	24	2,531.73	51,800	2,543.60	90,780
10	2,511.50	14,650	2,542.25	85,560	25	2,534.37	59,200	2,545.35	97,870
11	2,511.52	14,670	2,542.35	85,930	26	2,536.13	64,530	2,546.77	103,900
12	2,511.53	14,680	2,542.45	86,310	27	2,537.58	69,140	2,548.50	111,600
13	2,511.53	14,680	2,542.56	86,730	28	2,538.57	72,410	2,549.19	114,700
14	2,511.53	14,680	2,542.63	87,000	29	2,539.32	74,960	2,549.60	116,600
15	2,511.52	14,670	2,542.72	87,350	30	2,539.88	76,910	2,549.97	118,400
					31	2,540.35	78,570	2,550.25	119,700
Change in contents..............................						-	+66,030	-	+41,130

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955-56

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 22			Dec.25-Con.			Jan.25-Con.		
12 p.m.....	2,511.70	14,870	12 m.......	2,533.24	55,950	12 p.m.....	2,545.35	97,870
			6 p.m......	2,533.86	57,730			
Dec. 23			12 p.m.....	2,534.37	59,200	Jan. 26		
5 a.m......	2,512.05	15,270				6 a.m......	2,545.68	99,250
9..........	2,514.30	17,980	Dec. 26			12 m.......	2,546.12	101,120
12 m.......	2,518.00	23,200	6 a.m......	2,534.80	60,480	6 p.m......	2,546.44	102,470
6 p.m......	2,523.00	31,860	12 m.......	2,535.20	61,680	12 p.m.....	2,546.77	103,900
12 p.m.....	2,526.50	38,080	6 p.m......	2,535.58	62,830			
			12 p.m.....	2,536.13	64,530	Jan. 27		
Dec. 24						6 a.m......	2,547.40	106,640
6 a.m......	2,528.40	43,420	Jan. 24			12 m.......	2,547.87	108,740
12 m.......	2,529.65	46,440	12 p.m.....	2,543.60	90,780	6 p.m......	2,548.21	110,260
6 p.m......	2,530.80	49,350				12 p.m.....	2,548.50	111,560
12 p.m.....	2,531.73	51,800	Jan. 25					
			6 a.m......	2,543.65	90,980	Jan. 28		
Dec. 25			12 m.......	2,543.95	92,170	12 m.......	2,548.88	113,310
6 a.m......	2,532.55	54,020	6 p.m......	2,544.72	95,280	12 p.m.....	2,549.19	114,740

107. Kern River below Isabella Dam, Calif.

Location.--Lat 35°38'30", long 118°28'55", in S$\frac{1}{2}$NW$\frac{1}{4}$ sec.30, T.26 S., R.33 E., on right bank 200 ft downstream from highway bridge, 0.6 mile downstream from Isabella Dam, and 1.6 miles southwest of Isabella.

Drainage area.--2,094 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,435.07 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 374 cfs 8 p.m. Dec. 29 (gage height, 6.11 ft).

1945 to November 1955: Discharge, 39,000 cfs Nov. 19, 1950 (gage height, 28.6 ft, from floodmark), from rating curve extended above 1,100 cfs on basis of slope-area measurement of peak flow.

Remarks.--Flow regulated by Isabella Reservoir (see station 106).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	12	1.0	11.....	8.2	2.8	21.....	12	1.1
2.....	13	1.2	12.....	22	2.8	22.....	14	1.1
3.....	22	2.6	13.....	22	2.4	23.....	3.1	1.8
4.....	23	1.7	14.....	22	2.4	24.....	2.0	2.2
5.....	23	2.6	15.....	22	1.9	25.....	2.0	77
6.....	14	3.7	16.....	22	1.9	26.....	1.6	255
7.....	1.2	3.2	17.....	22	1.8	27.....	1.7	98
8.....	15	3.0	18.....	22	1.8	28.....	7.4	1.6
9.....	9.7	2.6	19.....	12	1.7	29.....	87	1.4
10.....	1.2	2.6	20.....	6.4	1.6	30.....	151	4.3
						31.....	97	1.8
Monthly mean discharge, in cubic feet per second......................							22.4	15.8
Runoff, in acre-feet..							1,380	973

108. Kern River near Democrat Springs, Calif.

Location.--Lat 35°31'20", long 118°40'40", in NE$\frac{1}{4}$SE$\frac{1}{4}$ sec.6, T.28 S., R.31 E., on left bank 1.0 mile southwest of Democrat Springs and 2.1 miles upstream from Cow Creek.

Drainage area.--2,264 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,850 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,390 cfs 8 a.m. Jan. 27 (gage height, 9.60 ft).

1950 to November 1955: Discharge, 40,000 cfs Nov. 19, 1950 (gage height, 30.7 ft), from rating curve extended above 8,700 cfs on basis of computation of peak flow over dam. Basic data for computation furnished by Southern California Edison Co.

Remarks.--Flow regulated by Isabella Reservoir (see station 106). Kern River No. 1 conduit diverts above station. Extremes do not include flow in the conduit; figures of mean daily discharge are the combined flow of Kern River and the conduit.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	252	508	11.....	449	583	21.....	293	579
2.....	435	578	12.....	389	583	22.....	310	581
3.....	302	583	13.....	367	582	23.....	543	592
4.....	256	585	14.....	358	578	24.....	583	586
5.....	248	583	15.....	346	580	25.....	583	737
6.....	318	582	16.....	334	580	26.....	570	1,150
7.....	571	583	17.....	320	581	27.....	583	1,360
8.....	438	583	18.....	312	584	28.....	518	783
9.....	426	583	19.....	306	580	29.....	414	708
10.....	556	583	20.....	289	579	30.....	445	681
						31.....	448	662
Monthly mean discharge, in cubic feet per second......................							405	645
Runoff, in acre-feet..							24,920	39,630

109. Kern River below Kern Canyon powerhouse, California

Location.--Lat 35°26'10", long 118°48'50", in NW$\frac{1}{4}$SE$\frac{1}{4}$ sec.1, T.29 S., R.29 E., on left bank 1 mile downstream from Kern Canyon powerhouse, 1.3 miles upstream from Cottonwood Creek, and 11 miles northeast of Bakersfield.

Drainage area.--2,327 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 650 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 2,130 cfs 10:30 a.m. Jan. 27 (gage height, 9.35 ft).

1893 to November 1955: Discharge, 36,000 cfs Nov. 19, 1950 (gage height, 14.2 ft, at site 11 miles downstream at datum then in use).

Remarks.--Flow regulated by Isabella Reservoir since 1954 (see station 106).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	227	468	11.....	500	558	21.....	276	558
2.....	366	544	12.....	406	558	22.....	294	558
3.....	352	558	13.....	374	558	23.....	415	576
4.....	252	562	14.....	357	558	24.....	576	572
5.....	235	558	15.....	343	558	25.....	562	647
6.....	295	558	16.....	326	558	26.....	556	1,220
7.....	524	558	17.....	306	558	27.....	562	1,500
8.....	512	558	18.....	300	558	28.....	532	808
9.....	385	558	19.....	291	562	29.....	420	685
10.....	544	558	20.....	276	558	30.....	410	640
						31.....	420	626
Monthly mean discharge, in cubic feet per second......................							393	628
Runoff, in acre-feet..							24,190	38,590

TULARE LAKE BASIN

110. Tulare Lake in Kings County, Calif.

Location.--Lat 36°03'10", long 119°49'35", on west side of levee road at "Navy White House," 2.2 miles southwest of Chatom Ranch and 9.5 miles south of town of Stratford.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level.

Maxima.--December 1955 to January 1956: Elevation, 187.40 ft Jan. 31.

1906 to December 1955: Elevation, 196.8 ft June 27, 28, 1941.

Lake elevation of June 27, 28, 1941, was highest known since about 1890.

Remarks.--Tulare Lake receives water from Kings, Kaweah, and Tule Rivers during high-water periods and occasionally from Kern River, Deer Creek, and several small intermittent streams. Natural boundary of lake has been greatly altered by construction of levees and other reclamation work and storage in 1956 was confined to 12 sections or approximately 7,680 acres. Elevation at lowest point of lake is now about 180 ft above mean sea level.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	-		184.32		16	-		184.38	
2	-		184.45		17	-		184.30	
3	-		184.55		18	-		184.22	
4	-		184.65		19	-		184.16	
5	-		184.70		20	-		184.11	
6	-		184.72		21	-		184.03	
7	-		184.75		22	-		183.95	
8	-		184.75		23	-		183.91	
9	-		184.73		24	180.00		183.88	
10	-		184.71		25	180.50		183.85	
11	-		184.69		26	180.80		184.35	
12	-		184.65		27	181.00		184.85	
13	-		184.62		28	181.30		185.35	
14	-		184.52		29	181.60		186.24	
15	-		184.44		30	181.90		187.12	
					31	182.20		187.40	

Note.--Lake dry Dec. 1-23, 1955.

111. North Fork of Middle Fork Tule River near Springville, Calif.

Location.--Lat 36°11', long 118°42', in sec.23, T.20 S., R.30 E., on right bank 1 mile upstream from mouth, 2 miles downstream from Hossack Creek, and 7.8 miles northeast of Springville.

Drainage area.--39.5 sq mi.

Gage-height record.--Water-stage recorder graph except 4 a.m. to 9 p.m. Dec. 23, for which graph was reconstructed on basis of peak stage. Altitude of gage is 2,850 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 300 cfs and by critical-depth determination over falls of 12,400 cfs.

Maxima.--December 1955 to January 1956: Discharge, 12,400 cfs about 10 a.m. Dec. 23 (gage height, 12.47 ft).

1939 to November 1955: Discharge, about 11,000 cfs Nov. 19, 1950 (gage height, 13.06 ft, from floodmarks), from rating curve extended above 300 cfs on basis of estimate of peak flow over dam.

Remarks.--Pacific Gas & Electric Co. conduit near Springville diverts 2.5 miles upstream from station. About 4,500 acre-ft total was diverted during December and January.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	24	76	11.....	4.5	10	21.....	1.8	10
2.....	5.6	66	12.....	3.6	10	22.....	94	10
3.....	4.7	60	13.....	5.4	12	23.....	5,540	16
4.....	2.3	54	14.....	3.6	14	24.....	1,080	13
5.....	1.8	37	15.....	3.1	16	25.....	403	714
6.....	53	13	16.....	2.9	20	26.....	309	283
7.....	12	12	17.....	2.6	11	27.....	248	345
8.....	4.8	12	18.....	2.4	10	28.....	180	113
9.....	78	11	19.....	1.8	10	29.....	129	60
10.....	9.4	11	20.....	1.8	10	30.....	104	39
						31.....	90	32
Monthly mean discharge, in cubic feet per second.....................							271	68.1
Runoff, in acre-feet..							16,670	4,190

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 24			Jan. 25--Con.		
12 p.m.......	2.89	1.8	7 a.m........	5.55	1,370	2 a.m........	2.20	44
			9............	5.18	990	4............	2.60	77
Dec. 22			1 p.m........	4.93	785	6............	3.55	214
7 a.m........	2.91	2.0	12 p.m.......	4.64	596	8............	4.35	448
8............	3.00	3.3				9............	5.12	936
11...........	4.25	80	Dec. 25			10...........	5.65	1,480
2 p.m........	4.84	152	3 a.m........	4.56	550	12 m.........	6.36	2,560
5............	5.02	184	6............	4.38	460	2 p.m........	5.69	1,390
7............	5.05	190	4 p.m........	4.13	365	6............	4.65	535
10:30........	4.90	162	8............	3.75	258	9............	4.20	350
12 p.m.......	5.12	204	11...........	3.81	272	12 p.m.......	3.96	280
			12 p.m.......	3.77	262			
Dec. 23						Jan. 26		
2 a.m........	6.08	500	Dec. 26			10 a.m.......	3.50	180
4............	6.25	590	3 a.m........	3.62	228	4 p.m........	3.35	154
5............	-	1,240	6............	3.54	212	6............	3.50	180
6............	-	3,150	11...........	3.67	238	7............	3.80	240
7............	-	6,210	1 p.m........	3.83	278	8............	4.40	420
8............	-	9,260	3............	4.35	448	9............	4.90	680
9............	-	11,800	4............	4.38	460	10...........	5.00	750
10...........	12.47	12,400	7............	4.26	412	12 p.m.......	4.75	590
12 m.........	-	11,700	12 p.m.......	4.06	344			
2 p.m........	-	8,900				Jan. 27		
4............	-	6,980	Jan. 24			2 a.m........	5.05	785
6............	-	5,080	12 p.m.......	1.64	12	3............	4.97	729
8............	-	3,590				4............	4.65	535
9............	6.75	3,270	Jan. 25			8............	4.25	350
12 p.m.......	6.15	2,190	1 a.m........	1.66	13	2 p.m........	3.87	234
						12 p.m.......	3.56	167

112. Tule River near Porterville, Calif.

Location.--Lat 36°05', long 118°55', in NW¼ sec.25, T.21 S., R.28 E., near right bank on downstream side of highway bridge, 1 mile upstream from South Fork and 6 miles east of Porterville.

Drainage area.--261 sq mi.

Gage-height record.--Water-stage recorder graph, except part of Jan. 23, 24, 25, for which a graph was drawn based on fragmentary graph and shape of graph for station at Worth Bridge near Porterville. Altitude of gage is 580 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,600 cfs and by slope-area measurement of 24,200 cfs.

Maxima.--December 1955 to January 1956: Discharge, 24,200 cfs 5:30 a.m. Dec. 23 (gage height, 11.80 ft).

1901 to November 1955: Discharge, 25,500 cfs Nov. 19, 1950 (gage height, 13.75 ft), from rating curve extended above 750 cfs on basis of slope-area measurement of peak flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	111	362	11	152	186	21	60	192
2	152	323	12	118	188	22	376	184
3	70	290	13	102	176	23	9,090	380
4	55	265	14	92	172	24	2,230	388
5	45	245	15	84	174	25	1,260	3,080
6	399	230	16	78	248	26	1,100	2,110
7	323	220	17	70	204	27	1,180	2,380
8	129	206	18	68	188	28	840	1,250
9	486	197	19	63	178	29	608	894
10	244	188	20	59	180	30	476	719
						31	421	626
Monthly mean discharge, in cubic feet per second							663	536
Runoff, in inches							2.93	2.37
Runoff, in acre-feet							40,740	32,970

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 25--Con.			Jan. 23		
12 m.	2.07	60	12 p.m.	4.70	1,010	4 a.m.	2.69	190
						7	3.45	398
Dec. 22			Dec. 26			9	3.70	490
6 a.m.	2.07	60	12 m.	4.50	880	2 p.m.	3.57	440
12 m.	2.25	80	6 p.m.	5.05	1,280	12 p.m.	3.50	415
3 p.m.	2.55	127	9	5.32	1,510			
4	4.45	748	12 p.m.	5.20	1,400	Jan. 24		
5	4.95	995				12 p.m.	3.34	362
6	5.15	1,110	Dec. 27					
9	4.78	910	6 a.m.	4.87	1,140	Jan. 25		
12 p.m.	4.53	785	12 m.	4.93	1,180	3 a.m.	3.36	368
			3 p.m.	4.98	1,220	6	4.10	660
Dec. 23			6	4.88	1,140	8	5.20	1,400
2 a.m.	5.05	1,050	12 p.m.	4.71	1,020	10	6.30	2,610
3	5.60	1,410				12 m.	7.80	6,090
4	8.30	4,900	Dec. 28			2 p.m.	8.00	6,830
5	11.50	21,200	12 m.	4.40	820	4	7.60	5,800
5:30	11.80	24,200	12 p.m.	4.18	700	8	6.50	3,540
6	11.20	19,700				12 p.m.	5.85	2,560
7	10.90	17,700	Dec. 29					
9	10.60	15,900	12 m.	3.96	597	Jan. 26		
11	10.20	13,800	12 p.m.	3.82	538	9 a.m.	5.38	1,960
12 m.	10.00	12,800				7 p.m.	4.97	1,510
3 p.m.	8.75	7,900	Dec. 30			12 p.m.	6.60	3,710
6	8.10	6,090	12 m.	3.64	466			
9	7.55	4,800	12 p.m.	3.56	436	Jan. 27		
12 p.m.	7.05	3,820				3 a.m.	5.90	2,630
			Dec. 31			5	6.40	3,380
Dec. 24			6 a.m.	3.51	418	12 m.	5.55	2,160
6 a.m.	6.30	2,610	12 m.	3.60	450	12 p.m.	5.00	1,540
12 m.	5.80	1,970	6 p.m.	3.47	404			
6 p.m.	5.50	1,670	12 p.m.	3.43	390	Jan. 28		
12 p.m.	5.30	1,490				12 m.	4.65	1,220
			Jan. 22			12 p.m.	4.37	1,010
Dec. 25			12 p.m.	2.68	188			
12 m.	5.05	1,280						

113. South Fork Tule River near Success, Calif.

(Gaging station, discontinued 1954)

Location.--Lat 36°02', long 118°51', in SW¼ sec.4, T.22 S., R.29 E., 4 miles southeast of Success and 5 miles upstream from mouth.

Drainage area.--105 sq mi.

Discharge record.--Peak discharge by current-meter measurement at peak.

Maxima.--December 1955 to January 1956: Discharge, 3,100 cfs 2 p.m. Jan. 25 (gage height, 9.04 ft).

1930-54: Discharge, 7,100 cfs Nov. 19, 1950 (gage height, 11.36 ft), by slope-area measurement.

114. Tule River at Worth Bridge, near Porterville, Calif.

Location.--Lat 36°02'55", long 118°56'15", in NE¼NW¼ sec.3, T.22 S., R.28 E., on left bank just downstream from highway bridge, 2 miles downstream from South Fork and 5 miles east of Porterville.

Drainage area.--395 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 520 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements, one float measurement, and summation of upstream peaks.

Maxima.--December 1955 to January 1956: Discharge, 27,000 cfs 5:30 a.m. Dec. 23 (gage height, 21.65 ft).

1953 to November 1955: Discharge, 3,110 cfs Jan. 25, 1954 (gage height, 16.35 ft), from rating curve extended above 1,400 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	132	448	11.....	209	291	21.....	79	297
2.....	222	412	12.....	171	291	22.....	410	291
3.....	95	385	13.....	147	283	23.....	13,600	515
4.....	73	368	14.....	135	279	24.....	3,020	570
5.....	53	353	15.....	120	275	25.....	1,670	4,170
6.....	586	341	16.....	109	331	26.....	1,380	2,610
7.....	483	329	17.....	99	319	27.....	1,440	3,680
8.....	217	315	18.....	92	291	28.....	1,010	1,550
9.....	584	305	19.....	85	283	29.....	770	1,080
10.....	309	299	20.....	79	281	30.....	556	866
						31.....	497	745
Monthly mean discharge, in cubic feet per second							917	737
Runoff, in inches							2.68	2.15
Runoff, in acre-feet							56,390	45,330

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 24			Jan. 24		
12 p.m.......	13.06	82	6 a.m........	15.13	3,450	12 p.m.......	11.38	375
			12 m.........	14.55	2,530			
Dec. 22			6 p.m........	14.20	2,080	Jan. 25		
6 a.m........	13.06	82	12 p.m.......	14.02	1,880	4 a.m........	11.37	372
12 m.........	13.13	106				8............	11.90	525
4 p.m........	13.30	171	Dec. 25			11...........	14.00	1,860
6............	14.58	1,010	6 a.m........	13.93	1,790	12 m.........	15.50	4,850
8............	14.95	1,400	12 m.........	13.85	1,720	3:30 p.m.....	17.07	12,200
12 p.m.......	14.48	922	6 p.m........	13.66	1,540	6............	16.20	8,200
			12 p.m.......	13.50	1,410	9............	15.27	5,380
Dec. 23						12 p.m.......	14.68	4,060
1 a.m........	14.45	895	Dec. 26					
2............	14.52	958	6 a.m........	13.34	1,280	Jan. 26		
3............	14.80	1,230	12 m.........	13.21	1,190	6 a.m........	13.94	2,780
4............	15.35	1,860	3 p.m........	13.26	1,220	12 m.........	13.55	2,240
5............	19.00	10,600	6............	13.54	1,440	6 p.m........	13.22	1,840
5:30.........	21.65	27,000	9............	13.91	1,770	8............	13.18	1,800
7............	20.30	24,700	12 p.m.......	13.87	1,730	10...........	13.67	2,400
8............	20.65	25,300				12 p.m.......	14.98	4,660
10...........	19.75	24,000	Dec. 27			Jan. 27		
12 m.........	19.65	23,500	6 a.m........	13.58	1,470	1 a.m........	15.19	5,180
3 p.m........	18.30	14,500	9............	13.49	1,400	4............	14.92	4,540
6............	17.65	11,200	12 m.........	13.53	1,430	6............	15.38	5,650
8............	17.00	8,500	3 p.m........	13.58	1,470	12 m.........	14.34	3,400
12 p.m.......	16.28	6,140	12 p.m.......	13.24	1,210	6 p.m........	13.76	2,520
						12 p.m.......	13.40	2,060

115. Middle Fork Kaweah River near Potwisha Camp, Calif.

Location.--Lat 36°30'45", long 118°47'25", in NW¼ sec.25, T.16 S., R.29 E., on right bank 0.7 mile southeast of Potwisha Camp and 0.9 mile upstream from confluence with Marble Fork.

Drainage area.--100 sq mi.

Gage-height record.--No gage-height record; station destroyed by flood. Altitude of gage is 2,100 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 46,800 cfs Dec. 23 (gage height, 29 ft, from floodmarks).

1949 to November 1955: Discharge, 17,500 cfs Nov. 19, 1950 (gage height, 15.70 ft), from rating curve extended above 1,100 cfs on basis of slope-area measurement of peak flow.

116. Marble Fork Kaweah River at Potwisha Camp, Calif.

Location.--Lat 36°31'10", long 118°48'10", in SE¼ sec.23, T.16 S., R.29 E., on left bank 0.1 mile north of Potwisha Camp and 0.3 mile upstream from confluence with Middle Fork Kaweah River.

Drainage area.--50.6 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,150 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and by slope-area measurement at 12,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 12,500 cfs 5:30 a.m. Dec. 23 (gage height, 13.4 ft).

1950 to November 1955: Discharge, 4,000 cfs Nov. 18, 1950 (gage height, 10.1 ft), from rating curve extended above 1,100 cfs on basis of logarithmic plotting and an estimate of peak flow from head on diversion dam upstream.

Remarks.--Marble Fork Kaweah River No. 3 conduit diverts 0.3 mile above station. All figures are the combined flow of Marble Fork Kaweah River and Marble Fork Kaweah River No. 3 conduit, although diversion is insignificant during floodflow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	24	187	11	37	109	21	27	98
2	20	172	12	35	118	22	680	94
3	14	157	13	35	107	23	5,700	121
4	14	146	14	32	102	24	1,820	105
5	14	138	15	30	112	25	858	433
6	48	132	16	27	173	26	703	377
7	36	125	17	26	119	27	465	334
8	26	117	18	24	108	28	316	222
9	121	111	19	25	102	29	266	175
10	48	108	20	27	102	30	224	155
						31	201	138
Monthly mean discharge, in cubic feet per second							385	155
Runoff, in inches							8.76	3.53
Runoff, in acre-feet							23,650	9,510

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 24--Con.			Dec. 27--Con.		
12 p.m.	1.34	26	2:30 a.m.	8.75	2,800	12 p.m.	4.84	353
			5	8.19	2,310			
Dec. 22			4 p.m.	6.79	1,310	Jan. 24		
8:30 a.m.	1.51	45	7	7.00	1,440	12 p.m.	3.32	110
10	5.29	741	12 p.m.	6.59	1,190	Jan. 25		
11	6.18	1,090				5 a.m.	3.45	128
1 p.m.	6.34	1,170	Dec. 25			7	3.62	152
3	5.90	980	8 a.m.	6.22	972	12 m.	5.50	591
5	6.34	1,170	12 m.	6.15	930	2 p.m.	6.00	841
7	6.20	1,110	6 p.m.	5.58	630	5	5.75	715
9	5.62	866	12 p.m.	5.33	522	12 p.m.	4.93	379
11	6.38	1,190						
12 p.m.	7.93	2,150	Dec. 26			Jan. 26		
			7 a.m.	5.15	452	6 a.m.	4.68	311
Dec. 23			11	5.20	470	4 p.m.	4.56	282
4 a.m.	12.64	9,740	1 p.m.	5.75	715	6	4.69	314
5:30	13.40	12,500	2:30	6.59	1,190	8	5.55	615
10	11.50	6,760	6	6.21	966	9	5.72	700
12 m.	10.09	4,380	7:30	6.30	1,020	12 p.m.	5.33	522
6 p.m.	9.30	3,360	12 p.m.	5.61	645			
8	9.30	3,360				Jan. 27		
12 p.m.	8.58	2,650	Dec. 27			2 a.m.	5.28	502
			5 a.m.	5.31	514	4	5.01	404
Dec. 24			12 m.	5.17	460	9	4.72	321
1 a.m.	8.49	2,570	6 p.m.	5.01	404	12 p.m.	4.42	250

117. North Fork Kaweah River at Kaweah, Calif.

Location.--Lat 36°29', long 118°55', in SE¼ sec.34, T.16 S., R.28 E., on left bank 1.2 miles upstream from Mannikin Creek, 1.5 miles north of Kaweah, and 3 miles upstream from mouth.

Drainage area.--128 sq mi.

Gage-height record.--Water-stage recorder graph except 3 a.m. Dec. 23 to 2:30 p.m. Jan. 30. Staff-gage readings obtained twice daily Jan. 9, 27, 30. Datum of gage is 1,027.7 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,200 cfs and by slope-area measurement at 21,500 cfs. Discharge for period of no gage-height record estimated on basis of records for Kaweah River near Three Rivers.

Maxima.--December 1955 to January 1956: Discharge, 21,500 cfs (time unknown) Dec. 23 (gage height, 14.1 ft, from profile of floodmarks).

1910 to November 1955: Discharge, 11,200 cfs Dec. 11, 1937 (gage height, 11.0 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	40	350	11.....	58	150	21.....	38	155
2.....	46	310	12.....	48	150	22.....	821	160
3.....	26	270	13.....	44	155	23.....	10,000	300
4.....	19	250	14.....	39	150	24.....	4,500	230
5.....	17	230	15.....	36	165	25.....	2,000	1,600
6.....	78	210	16.....	33	260	26.....	1,300	1,050
7.....	85	200	17.....	30	210	27.....	1,100	1,110
8.....	41	180	18.....	28	180	28.....	950	800
9.....	243	169	19.....	30	160	29.....	650	590
10.....	87	160	20.....	33	160	30.....	500	454
						31.....	430	386
Monthly mean discharge, in cubic feet per second							753	352
Runoff, in inches							6.78	3.17
Runoff, in acre-feet							46,310	21,630

118. Kaweah River near Three Rivers, Calif.

Location.--Lat 36°24', long 118°57', in SW¼ sec.33, T.17 S., R.28 E., on left bank 2.5 miles downstream from South Fork and 3 miles southwest of Three Rivers post office.

Drainage area.--520 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 620 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,500 cfs and by slope-area measurement of 80,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 80,700 cfs 8 a.m. Dec. 23 (gage height, 22.24 ft).

1903 to November 1955: Discharge, 52,000 cfs Nov. 19, 1950 (gage height, 19.5 ft, from floodmarks), from rating curve extended above 11,000 cfs on basis of slope-area measurement of peak flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	172	1,400	11.....	300	761	21.....	179	768
2.....	304	1,200	12.....	256	747	22.....	2,570	726
3.....	153	1,110	13.....	238	761	23.....	42,800	1,160
4.....	118	1,060	14.....	221	740	24.....	15,100	917
5.....	112	1,010	15.....	207	768	25.....	8,210	7,580
6.....	436	980	16.....	194	1,000	26.....	5,590	4,430
7.....	484	935	17.....	182	866	27.....	4,840	5,020
8.....	230	899	18.....	172	768	28.....	3,330	3,180
9.....	1,050	882	19.....	165	761	29.....	2,400	2,300
10.....	446	810	20.....	170	761	30.....	1,810	1,700
						31.....	1,660	1,400
Monthly mean discharge, in cubic feet per second							3,035	1,529
Runoff, in inches							6.73	3.39
Runoff, in acre-feet							186,600	94,020

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Kaweah River near Three Rivers, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 24--Con.			Jan. 25		
12 p.m.	4.06	174	6 p.m.	9.84	10,800	6 a.m.	5.50	1,080
			9	10.22	12,100	7	6.00	1,700
Dec. 22			12 p.m.	10.07	11,600	8	7.10	3,560
1 p.m.	4.30	238				9	8.40	6,480
2	8.20	4,190	Dec. 25			12 m.	10.51	13,100
4	9.35	6,650	6 a.m.	9.52	9,670	3 p.m.	11.36	16,500
10	8.75	5,320	12 m.	8.90	7,820	7	9.65	10,100
12 p.m.	8.43	4,640	6 p.m.	8.46	6,640	12 p.m.	8.20	5,980
			12 p.m.	8.13	5,810			
Dec. 23						Jan. 26		
1 a.m.	8.62	5,040	Dec. 26			12 m.	7.05	3,470
2	10.50	9,860	12 m.	7.61	4,620	4 p.m.	7.01	3,400
3	14.50	27,200	2 p.m.	7.65	4,710	9	7.30	3,960
5	20.20	64,400	6	8.60	7,000	12 p.m.	8.88	7,760
8	22.24	80,700	7	8.42	6,530			
12 m.	18.50	55,000	12 p.m.	8.32	6,270	Jan. 27		
6 p.m.	14.20	30,000				2 a.m.	8.44	6,580
12 p.m.	12.90	23,500	Dec. 27			5	8.71	7,290
			8 a.m.	7.70	4,820	12 m.	7.41	4,180
Dec. 24			12 m.	7.65	4,710	12 p.m.	6.99	3,360
3 a.m.	12.00	19,400	12 p.m.	7.35	4,060			
5	12.27	20,600						
7	11.48	17,100	Jan. 24					
12 m.	10.68	13,800	12 p.m.	5.24	842			

119. Lime Kiln Creek (Dry Creek) near Lemon Cove, Calif.

(Miscellaneous site)

Location.--Lat 36°27'05", long 119°01'40", in E½ sec.15, T.17 S., R.27 E., 3.1 miles upstream from mouth and 4.6 miles north of Lemon Cove. Altitude is 570 ft (from topographic map).

Drainage area.--75.5 sq mi.

Discharge.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 6,070 cfs between 6 and 7 a.m. Dec. 23.

Local residents report that flood of 1867 may have exceeded that of December 1955.

120. Sand Creek near Orange Cove, Calif.

(Gaging station, discontinued 1954)

Location.--Lat 36°37'35", long 119°14'45", in NW¼ sec.15, T.15 S., R.25 E., 3.8 miles east of Orange Cove. Altitude is 710 ft (from topographic map).

Drainage area.--32 sq mi, approximately.

Discharge.--Peak discharge by slope-area measurement made 0.6 mile upstream.

Maxima.--December 1955 to January 1956: Discharge, 749 cfs Dec. 23 (gage height, 4.81 ft in gage well, 5.70 ft outside, from profile of floodmarks).

1944-54: Discharge, 446 cfs Jan. 24, 1952 (gage height, 4.12 ft), from rating curve extended above 130 cfs on basis of slope-area measurement at gage height 4.00 ft.

Flood of Mar. 9, 1943, estimated at 1,000 to 1,200 cfs by Alta Irrigation District.

121. South Fork Kings River near Cedar Grove, Calif.

Location.--Lat 36°48'25", long 118°44'55", in NW$\frac{1}{4}$ sec.8, T.13 S., R.30 E., on right bank 0.3 mile downstream from Grizzly Creek and 4.5 miles west of Cedar Grove.

Drainage area.--409 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 25 to Jan. 31. Datum of gage is 4,157.7 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,200 cfs and by slope-area measurement at 13,900 cfs. Discharge for Dec. 25 to Jan. 31 estimated on basis of records for station near Hume.

Maxima.--December 1955 to January 1956: Discharge, 13,900 cfs 4-5 a.m. Dec. 23 (gage height, 16.30 ft).

November 1950 to November 1955: Discharge, 10,000 cfs Nov. 19, 1950 (gage height, 13.80 ft), from rating curve extended above 4,100 cfs on basis of slope-area measurement of peak flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	115	600	11.....	192	330	21.....	170	320
2.....	101	550	12.....	184	340	22.....	1,540	320
3.....	115	480	13.....	184	330	23.....	9,300	400
4.....	110	440	14.....	177	330	24.....	4,940	350
5.....	118	420	15.....	174	370	25.....	3,000	780
6.....	184	400	16.....	165	500	26.....	2,000	800
7.....	172	380	17.....	162	400	27.....	1,500	780
8.....	170	360	18.....	156	350	28.....	1,200	650
9.....	240	350	19.....	207	340	29.....	900	550
10.....	205	330	20.....	172	330	30.....	800	500
						31.....	700	450
Monthly mean discharge, in cubic feet per second.....................							947	446
Runoff, in inches...							2.67	1.26
Runoff, in acre-feet..							58,220	27,430

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	7.08	179	8 p.m........	10.09	2,290	12 m.........	13.43	9,310
			10...........	10.31	2,550	4 p.m........	12.75	8,060
Dec. 22			12 p.m.......	11.44	4,140	8............	12.21	7,020
4 a.m........	7.26	228				12 p.m.......	12.05	6,710
7............	7.99	515	Dec. 23					
9............	8.67	929	2 a.m........	13.65	9,550	Dec. 24		
12 m.........	9.62	1,780	3............	14.20	11,200	3 a.m........	11.95	6,520
3 p.m........	10.20	2,420	4............	16.30	13,900	12 m.........	11.04	4,740
5............	10.00	2,190	5............	16.30	13,900	12 p.m.......	10.30	3,260
6 p.m........	10.23	2,460	7 a.m........	15.25	12,300			

122. Kings River near Hume, Calif.

Location.--Lat 36°50'50", long 118°53'50", in NE$\frac{1}{4}$SW$\frac{1}{4}$ sec.35, T.12 S., R.28 E., on right bank 0.9 mile downstream from Ten Mile Creek, 1.2 miles downstream from confluence of South and Middle Forks, and 3.8 miles north of Hume.

Drainage area.--838 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,142.7 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,500 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 38,000 cfs 4 a.m. Dec. 23 (gage height, 15.53 ft).

1921-36, 1951 to November 1955: Discharge, 12,100 cfs June 5 1952 (gage height, 11.12 ft), from rating curve extended above 6,500 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56, of Kings River near Hume, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	287	1,480	11.....	460	910	21.....	432	880
2.....	247	1,350	12.....	438	925	22.....	3,370	880
3.....	240	1,260	13.....	426	888	23.....	19,700	1,140
4.....	224	1,170	14.....	416	872	24.....	12,600	1,040
5.....	234	1,100	15.....	400	962	25.....	6,930	2,060
6.....	520	1,030	16.....	370	1,280	26.....	5,060	2,110
7.....	416	978	17.....	360	1,030	27.....	3,700	1,780
8.....	396	940	18.....	342	962	28.....	2,620	1,560
9.....	826	910	19.....	426	918	29.....	2,080	1,390
10.....	514	880	20.....	438	910	30.....	1,740	1,270
						31.....	1,600	1,160
Monthly mean discharge, in cubic feer per second							2,187	1,162
Runoff, in inches							3.01	1.60
Runoff, in acre-feet							134,500	71,450

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Jan. 24		
12 p.m.......	4.12	421	9 p.m........	11.87	12,000	8 a.m........	6.31	902
			12 p.m.......	12.22	13,500	3 p.m........	6.39	962
Dec. 22						12 p.m.......	6.98	1,490
3 a.m........	4.19	460	Dec. 24					
7............	5.60	1,460	3 a.m........	12.80	16,500	Jan. 25		
12 m.........	7.96	4,590	10...........	12.08	13,200	6 a.m........	7.45	2,020
1 p.m........	7.86	4,410	3 p.m........	11.35	10,000	10...........	8.00	2,800
2............	7.97	4,610	7:30.........	11.62	11,500	6 p.m........	7.35	1,890
3:30.........	7.67	4,080	12 p.m.......	11.07	9,400	12 p.m.......	7.13	1,640
4:30.........	7.82	4,340						
5:30.........	7.75	4,220	Dec. 25			Jan. 26		
9............	8.11	4,870	9 a.m........	10.26	7,150	7 a.m........	7.10	1,610
12 p.m.......	9.83	8,890	3 p.m........	9.88	6,260	11...........	7.22	1,740
			12 p.m.......	9.35	5,200	5 p.m........	8.16	3,040
Dec. 23						12 p.m.......	7.57	2,180
1 a.m........	11.25	13,700	Dec. 26					
2:30.........	13.00	21,700	7:30 a.m.....	8.98	4,460	Jan. 27		
3............	13.88	26,800	3 p.m........	9.67	5,840	6 a.m........	7.29	1,820
4............	15.53	38,000	12 p.m.......	9.00	4,500	12 m.........	7.24	1,760
7............	13.04	18,000				6 p.m........	7.13	1,640
8:30.........	14.70	29,000	Jan. 23			12 p.m.......	7.09	1,600
2 p.m........	13.00	17,600	12 p.m.......	6.41	978			

123. Kings River above North Fork, Calif.

Location.--Lat 36°51'45", long 119°07'25", in NE$\frac{1}{4}$ sec.27, T.12 S., R.26 E., on left bank at Rogers Crossing, 0.9 mile upstream from North Fork and 2.9 miles south of Balch Camp.

Drainage area.--956 sq mi.

Gage-height record.--Water-stage recorder graph except 4 a.m. to 11 a.m. Dec. 26 and 11 p.m. Dec. 26 to 3 a.m. Dec. 28, for which graph was reconstructed on basis of gradual recession and shape of recorder graph for station near Hume. Datum of gage is 1,003.5 ft above mean sea level (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 11,000 cfs and by slope-area measurement at 59,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 59,100 cfs 5 a.m. Dec. 23 (gage height, 16.26 ft).

1927-28, 1931 to November 1955: Discharge, 36,200 cfs Nov. 19, 1950 (gage height, 12.23 ft, from floodmark in gage well).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	317	2,170	11.....	476	1,070	21.....	425	976
2.....	311	1,900	12.....	443	1,120	22.....	3,950	958
3.....	253	1,710	13.....	429	1,040	23.....	38,200	1,680
4.....	232	1,540	14.....	407	968	24.....	22,300	1,200
5.....	241	1,420	15.....	394	1,050	25.....	9,530	4,860
6.....	503	1,320	16.....	368	1,710	26.....	5,650	3,690
7.....	486	1,220	17.....	351	1,250	27.....	4,840	4,010
8.....	372	1,130	18.....	338	1,130	28.....	3,610	2,770
9.....	990	1,090	19.....	407	1,040	29.....	3,070	2,260
10.....	570	1,020	20.....	420	1,020	30.....	2,680	1,930
						31.....	2,430	1,710
Monthly mean discharge, in cubic feet per second							3,387	1,676
Runoff, in inches							4.08	2.02
Runoff, in acre-feet							208,300	103,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Kings River above North Fork, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 24--Con.			Jan. 23		
12 p.m.	1.74	394	10 p.m.	8.83	19,200	4 a.m.	3.74	2,170
			12 p.m.	8.72	18,700	5	3.80	2,250
Dec. 22						7	3.75	2,180
3 a.m.	1.78	411	Dec. 25			12 m.	3.32	1,610
6	1.92	476	1 a.m.	8.08	15,900	6 p.m.	3.17	1,430
7	2.03	532	3	7.52	13,500	12 p.m.	3.08	1,340
8	2.85	1,060	6	6.98	11,400			
10	4.75	3,610	12 m.	6.18	8,450	Jan. 24		
12 m.	5.75	6,320	6 p.m.	5.77	7,020	12 m.	2.90	1,160
2 p.m.	5.63	5,940	12 p.m.	5.42	5,860	5 p.m.	2.83	1,100
4:30	5.82	6,550				10	2.92	1,180
6	5.72	6,220	Dec. 26			12 p.m.	3.12	1,380
10	5.58	5,780	5 a.m.	5.20	5,200			
12 p.m.	6.55	9,220	1 p.m.	5.35	5,650	Jan. 25		
			3	5.55	6,280	3 a.m.	3.68	2,080
Dec. 23			12 p.m.	5.27	5,410	6	4.64	3,790
1 a.m.	8.50	17,700				10	5.73	6,880
2	10.30	26,300	Dec. 27			12 m.	5.69	6,750
3	12.10	35,500	4 p.m.	5.00	4,660	1 p.m.	5.59	6,410
4	14.10	46,500	12 p.m.	4.82	4,210	3	5.75	6,950
5	16.26	59,100				8	5.12	4,980
6	15.02	51,800	Dec. 28			12 p.m.	4.71	3,940
6:30	15.54	54,800	12 m.	4.43	3,340			
7:30	15.77	56,200	5 p.m.	4.54	3,570	Jan. 26		
9	15.13	52,400	12 p.m.	4.42	3,320	6 a.m.	4.40	3,280
12 m.	13.50	43,200				3 p.m.	4.24	2,980
6 p.m.	11.18	30,700	Jan. 21			5	4.30	3,090
12 p.m.	10.42	26,900	12 p.m.	2.65	944	8	5.06	4,820
						12 p.m.	5.32	5,560
Dec. 24			Jan. 22					
3 a.m.	10.80	28,800	3 a.m.	2.67	960	Jan. 27		
5	10.90	29,300	12 m.	2.63	928	3 a.m.	5.25	5,350
6	10.60	27,800	6 p.m.	2.62	920	12 m.	4.56	3,610
8	9.90	24,300	8	2.65	944	3 p.m.	4.45	3,380
12 m.	9.05	29,200	10	2.76	1,030	12 p.m.	4.30	3,090
3 p.m.	8.49	17,700	12 p.m.	2.96	1,220			
7 p.m.	8.63	18,300						

124. North Fork Kings River near Cliff Camp, Calif.

Location.--Lat 37°00', long 118°59', in NW¼ sec.12, T.11 S., R.27 E., on right bank at Cliff Camp bridge, 1 mile northwest of Cliff Camp and 2.3 miles downstream from Woodchuck Creek.

Drainage area.--174 sq mi.

Gage-height record.--Water-stage recorder graph except 5 a.m. Jan. 5 to 4 p.m. Jan. 7. Datum of gage is 6,143.95 ft above mean sea level, adjustment of 1912 (levels by San Joaquin Light and Power Corp.).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,100 cfs and extended above on basis of velocity-area studies and by logarithmic plotting. Discharge for Jan. 5-7 estimated on basis of recorded range in stage and weather records.

Maxima.--December 1955 to January 1956: Discharge, 11,900 cfs 3 a.m. Dec. 23 (gage height, 16.8 ft, from recorder graph, 18.2 ft, from floodmarks).

1921 to November 1955: Discharge, 14,000 cfs Dec. 11, 1937 (gage height, 18.0 ft, from floodmarks), from rating curve extended above 4,200 cfs on basis of velocity-area studies, and by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	22	328	11	58	326	21	84	266
2	26	316	12	60	328	22	2,970	268
3	27	308	13	60	296	23	7,460	280
4	28	294	14	59	288	24	3,130	256
5	28	290	15	56	461	25	912	228
6	58	280	16	50	458	26	1,000	376
7	39	270	17	44	338	27	585	310
8	55	266	18	41	304	28	480	294
9	82	260	19	47	284	29	425	278
10	56	258	20	98	278	30	360	270
						31	342	248
Monthly mean discharge, in cubic feet per second							605	300
Runoff, in inches							4.01	1.99
Runoff, in acre-feet							37,170	18,460

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of North Fork Kings River near Cliff Camp, Calif.

Hour	Gage height	Dis-charge
Dec. 19		
12 p.m.	3.48	53
Dec. 20		
8 a.m.	3.72	81
2 p.m.	4.10	136
5	4.08	133
8	3.92	108
12 p.m.	3.78	88
Dec. 21		
6 a.m.	3.64	71
11	3.61	67
4 p.m.	3.70	78
8	3.76	86
10	3.90	105
11	4.15	144
12 p.m.	4.50	210
Dec. 22		
4 a.m.	7.20	1,210
8	9.00	2,420
9	9.35	2,720
11	8.80	2,260
1 p.m.	8.70	2,180
3	8.35	1,920
5	8.70	2,180
7	10.0	3,310
9	13.5	6,990
10 p.m.	14.0	7,590
Dec. 22--Con.		
12 p.m.	15.9	10,300
Dec. 23		
1 a.m.	16.4	11,200
2	16.45	11,300
3	16.8	11,900
4	16.3	11,000
5	16.0	10,500
9	13.8	7,300
4 p.m.	12.1	5,270
6	12.0	5,160
8	12.4	5,620
9	12.25	5,440
10	12.5	5,740
12 p.m.	12.35	5,560
Dec. 24		
4 a.m.	12.05	5,220
6	11.6	4,720
10	9.84	2,920
12 m.	9.85	2,920
4 p.m.	9.00	2,180
8	7.90	1,360
12 p.m.	7.65	1,210
Dec. 25		
4 a.m.	7.18	976
8	6.97	888
2 p.m.	6.97	888
Dec. 25--Con.		
8 p.m.	6.71	788
10	6.97	888
12 p.m.	6.91	864
Dec. 26		
4 a.m.	6.75	802
6	6.91	864
8	6.99	896
12 m.	8.35	1,660
6 p.m.	6.96	884
9	6.57	741
12 p.m.	6.40	690
Jan. 14		
12 p.m.	4.85	310
Jan. 15		
10 a.m.	4.81	302
12 m.	4.84	308
2 p.m.	5.07	354
5	6.47	711
7:30	6.77	810
12 p.m.	6.19	627
Jan. 16		
6 a.m.	5.62	480
9	5.45	438
4 p.m.	5.49	448
12 p.m.	5.04	348

125. North Fork Kings River below Rancheria Creek, Calif.

(Gaging station, discontinued 1950)

Location.--Lat 36°55'40", long 119°00'30", in SE$\frac{1}{4}$ sec.34, T.11 S., R.27 E., at former gaging station, 1 mile upstream from Balch diversion dam and 1 mile downstream from Rancheria Creek.

Drainage area.--225 sq mi.

Discharge record.--Peak discharge by computations of peak flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 24,600 cfs Dec. 23.

1926-50: Discharge, 21,000 cfs Dec. 11, 1937 (gage height, about 23 ft, from floodmarks), by computations of peak flow over Balch diversion and afterbay dams, 1 mile and 7 miles, respectively, below station.

126. Kings River below North Fork, Calif.

Location.--Lat 36°52'30", long 119°08'30", in NE¼ sec.21, T.12 S., R.26 E., on right bank, 0.8 mile downstream from North Fork, 2.4 miles southwest of Balch Camp, and 8.5 miles southeast of Trimmer.

Drainage area.--1,350 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 942.42 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 18,000 cfs and by slope-area measurement of 85,200 cfs.

Maxima.--December 1955 to January 1956: Discharge, 85,200 cfs 5 a.m. Dec. 23 (gage height, 23.08 ft).

1951 to November 1955: Discharge, 20,300 cfs May 30, 1952 (gage height, 12.22 ft).

Flood of Nov. 19, 1950, reached a stage of 21.6 ft, from floodmarks (discharge, 74,200 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	437	2,810	11	665	1,830	21	747	1,690
2	440	2,560	12	625	1,930	22	7,910	1,660
3	336	2,380	13	610	1,770	23	52,500	2,620
4	307	2,220	14	565	1,690	24	29,400	1,960
5	325	2,100	15	560	2,040	25	12,100	6,780
6	794	1,970	16	516	3,080	26	8,900	5,460
7	756	1,860	17	488	2,140	27	6,810	5,630
8	511	1,800	18	459	1,910	28	4,890	3,680
9	1,560	1,720	19	576	1,780	29	3,900	3,040
10	852	1,640	20	671	1,750	30	3,290	2,640
						31	3,060	2,380
Monthly mean discharge, in cubic feet per second							4,695	2,533
Runoff, in inches							4.01	2.16
Runoff, in acre-feet							288,700	155,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23--Con.			Dec. 27--Con.		
12 p.m.	3.09	471	8 a.m.	21.55	73,800	12 m.	8.08	6,650
			10	19.70	61,000	4 p.m.	8.01	6,480
Dec. 19			12 m.	18.50	53,500	8	7.80	6,020
12 m.	3.43	630	4 p.m.	16.65	42,600	12 p.m.	7.66	5,710
12 p.m.	3.32	575	8	15.52	36,400			
			12 p.m.	15.88	38,300	Dec. 28		
Dec. 20						6 a.m.	7.40	5,180
4 a.m.	3.17	506	Dec. 24			12 m.	7.13	4,670
12 m.	3.45	640	1 a.m.	16.16	39,900	6 p.m.	7.10	4,620
12 p.m.	3.93	920	5	16.05	39,300	12 p.m.	7.00	4,450
			9	14.90	33,000			
Dec. 21			12 m.	13.75	27,200	Jan. 24		
12 m.	3.61	726	3 p.m.	12.80	22,700	12 p.m.	5.41	2,230
12 p.m.	3.40	615	6	12.79	22,600			
			9	12.75	22,400	Jan. 25		
Dec. 22			12 p.m.	11.88	19,000	6 a.m.	7.30	4,980
6 a.m.	3.58	709				11	9.35	10,100
8	3.94	926	Dec. 25			1:30 p.m.	8.80	8,500
9	7.35	5,080	4 a.m.	10.90	15,400	3	9.20	9,660
10	8.75	8,360	8	10.20	13,000	8	8.20	6,940
12:30 p.m.	10.63	14,500	12 m.	9.73	11,400	12 p.m.	7.61	5,600
3	10.06	12,500	6 p.m.	9.17	9,570			
5	10.03	12,400	12 p.m.	8.72	8,280	Jan. 26		
7	9.66	11,100				5 a.m.	7.05	4,540
9	9.50	10,600	Dec. 26			12 m.	6.90	4,280
11	10.30	13,300	8 a.m.	8.28	7,130	5 p.m.	7.00	4,450
12 p.m.	12.85	22,900	12 m.	8.65	8,090	9	8.88	8,720
			3 p.m.	9.55	10,800	11	8.98	9,000
Dec. 23			5	9.95	12,100	12 p.m.	8.86	8,670
1 a.m.	15.20	34,600	8	9.35	10,100			
2	17.50	47,500	12 p.m.	8.75	8,360	Jan. 27		
3	19.90	62,400				6 a.m.	8.05	6,580
4	21.50	73,500	Dec. 27			12 m.	7.30	4,980
5	23.08	85,200	4 a.m.	8.36	7,340	12 p.m.	6.80	4,120
6 a.m.	22.70	82,200	8 a.m.	8.36	7,340			

127. Big Creek above Pine Flat Reservoir, Calif.

Location.--Lat 36°55'05", long 119°14'45", in NE¼ sec.4, T.12 S., R.25 E., on right bank 2.4 miles above mouth and 2.7 miles northeast of town of Trimmer.

Drainage area.--69.2 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 962.04 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 220 cfs and by slope-area measurement of 10,400 cfs.

Maxima.--December 1955 to January 1956: Discharge, 10,400 cfs 4 a.m. Dec. 23 (gage height, 9.21 ft).

1953 to November 1955: Discharge, 1,400 cfs Feb. 13, 1954 (gage height, 4.60 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	34	150	11.....	22	79	21.....	47	79
2.....	38	133	12.....	17	80	22.....	890	91
3.....	15	120	13.....	16	75	23.....	5,890	560
4.....	10	110	14.....	14	76	24.....	4,720	223
5.....	8.0	102	15.....	12	102	25.....	1,510	2,180
6.....	64	94	16.....	11	177	26.....	851	1,220
7.....	45	90	17.....	10	100	27.....	741	1,110
8.....	21	87	18.....	9.5	83	28.....	377	520
9.....	89	80	19.....	19	78	29.....	258	381
10.....	33	76	20.....	53	80	30.....	186	316
						31.....	179	265
Monthly mean discharge, in cubic feet per second......................							522	288
Runoff, in inches..							8.73	4.81
Runoff, in acre-feet...							32,110	17,690

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 24--Con.			Jan. 23--Con.		
12 p.m.......	2.07	28	12 p.m.......	6.28	2,610	5 p.m........	3.76	424
						12 p.m.......	3.40	292
Dec. 22			Dec. 25					
4 a.m........	2.07	28	3 a.m........	6.37	2,750	Jan. 24		
8............	2.33	50	9............	5.43	1,530	12 m.........	3.10	198
10...........	3.00	155	3 p.m........	4.83	1,010	7 p.m........	3.01	176
11...........	5.25	1,360	12 p.m.......	4.38	718	12 p.m.......	3.31	261
12 m.........	6.11	2,350						
4 p.m........	5.54	1,640	Dec. 26			Jan. 25		
7............	4.95	1,100	9 a.m........	4.03	535	2 a.m........	3.90	480
9............	4.65	885	1 p.m........	4.48	778	4............	4.70	920
11...........	5.38	1,480	5............	5.36	1,460	6............	5.45	1,550
12 p.m.......	6.00	2,200	12 p.m.......	4.41	736	8............	6.47	2,910
						9:30.........	7.17	4,240
Dec. 23			Dec. 27			11...........	7.06	4,020
1 a.m........	7.05	4,000	2 a.m........	4.34	694	12 m.........	7.30	4,500
2............	7.55	5,120	5............	4.47	772	3 p.m........	6.50	2,960
3............	8.44	7,620	8:30.........	4.89	1,050	6............	5.77	1,900
4............	9.21	10,400	4 p.m........	4.27	655	12 p.m.......	4.95	1,100
6............	8.62	8,220	12 p.m.......	3.92	488			
S............	7.78	5,700				Jan. 26		
11...........	7.45	4,880	Jan. 21			8 a.m........	4.51	796
12 m.........	7.58	5,200	12 p.m.......	2.37	74	11...........	4.54	814
3 p.m........	7.54	5,100				3 p.m........	4.46	766
6............	7.06	4,020	Jan. 22			6............	5.14	1,260
8............	7.60	5,250	3 p.m........	2.35	72	9............	6.31	2,660
10...........	8.02	6,360	8............	2.48	87	12 p.m.......	6.00	2,200
12 p.m.......	8.67	8,400	11...........	3.00	172			
			12 p.m.......	3.75	420	Jan. 27		
Dec. 24						1 a.m........	5.96	2,140
1 a.m........	8.85	9,020	Jan. 23			2............	5.94	2,120
3............	8.60	8,150	1 a.m........	4.54	814	6............	5.15	1,260
6............	7.65	5,380	3............	5.03	1,160	12 m.........	4.65	885
9............	7.22	4,340	6............	4.50	790	12 p.m.......	4.24	640
2 p.m........	6.55	3,050	9............	4.00	520			
6 p.m........	7.06	4,020	3 p.m........	3.62	370			

128. Sycamore Creek above Pine Flat Reservoir, Calif.

Location.--Lat 36°55'15", long 119°18'30", in NW¼ sec.1, T.12 S., R.24 E., 0.1 mile downstream from Little Dry Creek, 1.7 miles northwest of town of Trimmer, and 4.8 miles upstream from mouth.

Drainage area.--56.5 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,141.96 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,900 cfs and by slope-area measurement of 6,760 cfs.

Maxima.--December 1955 to January 1956: Discharge, 6,760 cfs 1 a.m. Dec. 24 (gage height, 9.78 ft in gage well; 11.15 ft from high-water profile).

1953 to November 1955: Discharge, 1,000 cfs Feb. 14, 1954 (gage height, 4.20 ft), from rating curve extended above 430 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	10	76	11.....	2.9	25	21.....	13	28
2.....	7.7	60	12.....	2.0	24	22.....	357	64
3.....	1.4	50	13.....	1.5	22	23.....	3,740	557
4.....	.6	45	14.....	1.2	22	24.....	3,500	123
5.....	.4	38	15.....	1.1	39	25.....	1,150	2,300
6.....	27	35	16.....	1.0	75	26.....	642	1,100
7.....	13	32	17.....	.9	33	27.....	672	998
8.....	5.0	32	18.....	1.1	27	28.....	183	348
9.....	37	28	19.....	4.8	25	29.....	103	195
10.....	5.3	26	20.....	55	29	30.....	75	143
						31.....	110	114
Monthly mean discharge, in cubic feet per second......................							346	217
Runoff, in inches..							7.06	4.42
Runoff, in acre-feet...							21,270	13,320

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 18		
12 p.m.......	0.60	1.4
Dec. 19		
5 a.m........	.67	2.5
1 p.m........	.67	2.5
2............	.92	10
12 p.m.......	.81	5.9
Dec. 20		
5 a.m........	.80	5.6
6............	1.01	16
8............	1.10	24
10...........	1.65	90
1 p.m........	1.93	133
6............	1.50	68
12 p.m.......	1.15	28
Dec. 21		
12 m.........	.90	9.5
12 p.m.......	.82	6.3
Dec. 22		
4 a.m........	.82	6.3
8............	1.10	24
6:15.........	3.00	346
9............	3.70	477
10...........	4.40	730
11...........	5.03	1,060
2 p.m........	4.06	568
5............	3.13	373
9............	2.26	195
11...........	3.50	450
12 p.m.......	5.66	1,550
Dec. 23		
1 a.m........	6.40	2,330
2............	7.31	3,450
5............	8.29	5,000
7............	8.25	4,960
6............	7.40	4,020
11...........	6.93	3,530
1 p.m........	7.47	4,100
4............	6.56	3,160
5:30.........	5.85	2,460
9............	6.70	3,300
10 p.m.......	7.50	4,130
Dec. 23--Con.		
11 p.m.......	8.15	4,840
12 p.m.......	9.10	5,940
Dec. 24		
1 a.m........	9.78	6,760
2............	9.00	5,820
4............	8.00	4,680
8............	7.66	4,310
11...........	6.45	3,050
1 p.m........	5.59	2,230
5............	6.45	3,050
8............	5.60	2,240
12 p.m.......	5.02	1,760
Dec. 25		
2 a.m........	5.28	1,960
7............	4.50	1,380
12 m.........	3.90	1,010
7 p.m........	3.48	780
12 p.m.......	2.88	512
Dec. 26		
8 a.m........	2.41	338
11...........	3.10	600
1 p.m........	4.00	1,070
2............	4.28	1,240
4............	3.96	1,050
6............	3.47	775
12 p.m.......	2.70	442
Dec. 27		
2 a.m........	3.02	566
4............	3.55	818
7............	4.38	1,300
11...........	3.55	818
3 p.m........	2.90	520
12 p.m.......	2.26	290
Jan. 21		
12 p.m.......	.68	25
Jan. 22		
6 p.m........	.88	25
10...........	1.11	49
11...........	2.50	369
12 p.m.......	4.00	1,070
Jan. 23		
1:30 a.m.....	5.07	1,800
4............	4.20	1,190
6............	3.40	740
9............	2.60	405
2 p.m........	2.12	248
3............	2.28	296
7............	2.00	215
12 p.m.......	1.70	145
Jan. 24		
8 p.m........	1.38	86
11...........	1.75	156
12 p.m.......	2.60	405
Jan. 25		
1 a.m........	3.55	616
2............	4.35	1,280
4............	5.32	2,000
6............	6.38	2,980
7............	7.01	3,610
8............	6.82	3,420
10...........	7.23	3,830
12 m.........	7.97	4,650
1 p.m........	7.10	3,700
2............	6.25	2,650
4............	5.20	1,900
7............	4.43	1,330
12 p.m.......	3.77	938
Jan. 26		
6 a.m........	3.33	705
2 p.m........	3.00	560
4............	3.23	658
5............	4.82	1,600
7:30.........	5.95	2,560
10:30........	4.76	1,560
12 p.m.......	5.30	1,980
Jan. 27		
1:30 a.m.....	5.43	2,090
6............	4.10	1,130
3 p.m........	3.33	705
12 p.m.......	2.83	492

129. Pine Flat Reservoir near Piedra, Calif.

Location.--Lat 36°49'55", long 119°19'25", in NE¼ sec.2, T.13 S., R.24 E., near center of Pine Flat Dam on Kings River, 1.9 miles upstream from Mill Creek, 3.5 miles northeast of Piedra, and 16 miles northeast of Sanger.

Drainage area.--1,542 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Corps of Engineers).

Maxima.--December 1955 to January 1956: Contents, 674,300 acre-ft 12 p.m. Jan. 31 (elevation, 890.18 ft).

1951 to November 1955: Contents, 439,000 acre-ft June 13, 1955 (elevation, 835.10 ft).

Remarks.--Reservoir is formed by gravity-type concrete dam; regulation of discharge from reservoir began Dec. 4, 1951. Capacity, 1,013,400 acre-ft between elevation 565.5 ft (bottom of lower tier of river outlets) and 953.5 ft (top of spillway gates) above mean sea level. Reservoir is used for flood control and conservation storage. Water is released down Kings River to diversion dam of Kings River Water Association. Records show total contents at 12 p.m., all of which is available for release.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	703.50	84,930	846.50	483,300	16	715.20	104,800	862.18	548,000
2	704.23	86,090	847.80	488,500	17	715.71	105,700	863.22	552,400
3	704.65	86,760	849.09	493,700	18	716.20	106,600	864.13	556,300
4	705.02	87,350	850.27	498,500	19	716.82	107,700	864.95	559,900
5	705.40	87,970	851.38	503,000	20	717.60	109,100	865.80	563,500
6	706.42	89,640	852.43	507,300	21	718.48	110,700	866.60	567,000
7	707.55	91,520	853.42	511,400	22	727.00	126,900	867.47	570,800
8	708.21	92,630	854.35	515,200	23	785.35	271,100	869.28	578,700
9	710.08	95,810	855.28	519,000	24	814.75	365,300	870.36	583,400
10	711.20	97,750	856.08	522,300	25	824.93	401,100	876.27	609,800
11	712.00	99,140	857.00	526,200	26	831.40	425,100	880.00	626,800
12	712.73	100,400	857.93	530,100	27	836.15	443,000	883.81	644,300
13	713.44	101,700	858.76	533,500	28	839.12	454,400	885.96	654,300
14	714.07	102,800	859.56	536,900	29	841.45	463,400	887.60	662,100
15	714.67	103,800	860.55	541,100	30	843.28	470,500	888.94	668,400
					31	845.00	447,300	890.18	674,300
Change in contents..............................						-	+393,400	-	+197,000

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 20			Dec. 23			Dec. 25		
12 p.m......	717.60	109,100	8:45 a.m....	753.80	186,000	7 a.m.......	819.00	380,000
			9:10........	755.44	190,000	2 p.m.......	821.86	390,100
Dec. 21			12 p.m......	785.35	271,100	12 p.m......	824.93	401,100
12 m........	718.08	109,900						
12 p.m......	718.48	110,700	Dec. 24			Dec. 26		
			9:15 a.m....	800.86	318,900	12 m........	827.72	411,300
Dec. 22			12 m........	804.02	329,100	12 p.m......	831.40	425,100
11 a.m......	718.98	111,600	4 p.m.......	807.80	341,600			
12 m........	719.55	112,600	8...........	811.55	354,300	Dec. 27		
6 p.m.......	723.60	120,200	12 p.m......	814.75	365,300	12 m........	834.12	435,300
12 p.m......	727.00	126,900				12 p.m......	836.15	443,000

130. Kings River below Pine Flat Dam, Calif.

Location.--Lat 36°49'45", long 119°20'15", in NW¼ sec.2, T.13 S., R.24 E., on left bank 0.7 mile downstream from Pine Flat Dam and 2.9 miles northeast of Piedra.

Drainage area.--1,542 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 553.49 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 248 cfs 11 p.m. Jan. 29 to 6 a.m. Jan. 31 (gage height, 2.57 ft).

1954 to November 1955: Discharge, 6,260 cfs July 9, 1954 (gage height, 6.58 ft).

Remarks.--Flow regulated by Pine Flat Reservoir (see station 129).

Mean discharge, in cubic feet per second, 1955-56, of Kings River below Pine Flat Dam, Calif.

Day	December	January	Day	Decmeber	January	Day	December	January
1.....	43	240	11.....	42	74	21.....	84	139
2.....	38	240	12.....	43	155	22.....	73	142
3.....	39	166	13.....	43	167	23.....	44	115
4.....	29	84	14.....	46	161	24.....	67	158
5.....	28	56	15.....	49	161	25.....	22	130
6.....	30	52	16.....	74	161	26.....	12	15
7.....	29	39	17.....	74	161	27.....	10	14
8.....	47	20	18.....	74	170	28.....	92	9.6
9.....	50	16	19.....	74	142	29.....	176	109
10.....	31	85	20.....	74	139	30.....	220	248
						31.....	240	91
Monthly mean discharge, in cubic feet per second........................							64.4	118
Runoff, in acre-feet..							3,960	7,260

131. Kings River at Piedra, Calif.

Location.--Lat 36°49'02", long 119°23'08", in NW¼ sec.8, T.13 S., R.24 E., on left bank 0.5 mile downstream from highway bridge at Piedra, 2 miles downstream from Mill Creek, 4 miles downstream from Pine Flat Dam, and 12 miles northeast of Sanger.

Drainage area.--1,694 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 9,380 cfs 7 a.m. Dec. 23 (gage height, 8.89 ft).

1895 to November 1955: Discharge, 91,000 cfs Nov. 19, 1950 (gage height, 21.0 ft), from rating curve extended above 30,000 cfs on basis of slope-area measurement of peak flow.

Remarks.--Flow regulated by Pine Flat Reservoir (see station 129).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	46	404	11.....	46	138	21.....	83	198
2.....	39	376	12.....	44	204	22.....	125	204
3.....	38	293	13.....	44	224	23.....	5,580	718
4.....	33	187	14.....	46	216	24.....	5,360	398
5.....	29	156	15.....	48	224	25.....	2,260	2,920
6.....	41	140	16.....	66	254	26.....	864	1,210
7.....	32	121	17.....	70	232	27.....	722	1,300
8.....	44	97	18.....	70	232	28.....	482	637
9.....	52	83	19.....	72	204	29.....	448	518
10.....	43	140	20.....	72	198	30.....	420	595
						31.....	432	384
Monthly mean discharge, in cubic feet per second........................							573	426
Runoff, in acre-feet..							35,210	26,190

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Dec. 25		
12 p.m.......	0.93	83	9 a.m........	8.82	9,200	1:30 a.m.....	6.40	4,230
			2 p.m........	7.72	6,540	8............	5.00	2,470
Dec. 22			8............	6.03	3,700	4 p.m........	4.04	1,560
1 p.m........	1.06	106	12 p.m.......	7.53	6,150	12 p.m.......	3.28	997
3............	1.20	132						
7:30.........	1.11	115	Dec. 24			Dec. 26		
10...........	1.64	232	1 a.m........	8.33	7,980	10 a.m.......	2.81	710
12 p.m.......	1.90	309	2............	8.18	7,600	6 p.m........	3.30	1,010
			6............	8.64	8,750	12 p.m.......	2.90	760
Dec. 23			11...........	6.83	4,900			
1 a.m........	3.04	844	3 p.m........	5.82	3,430	Dec. 27		
3............	4.20	1,700	8............	5.51	3,040	4 a.m........	2.77	688
4............	5.81	3,410	12 p.m.......	6.23	3,980	8............	2.83	722
5............	7.41	5,920				11...........	3.09	874
7 a.m........	8.89	9,380				12 p.m.......	2.49	546

132. Warthan Creek near Coalinga, Calif.

(Miscellaneous site)

Location.--Lat 36°06'50", long 120°22'50", in SE¼ sec.7, T.21 S., R.15 E., 2.2 miles southwest of Coalinga. Altitude is 730 ft (from topographic map).

Drainage area.--112 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 783 cfs between 12 p.m. and 5 a.m. Dec. 23.

Local residents reported that December 1955 peak was exceeded many times, notably by floods of February 1911 and Mar. 2, 1938.

133. Los Gatos Creek above Nunez Canyon near Coalinga, Calif.

Location.--Lat 36°12'55", long 120°28'10", on line between SW¼ and SE¼ of sec.5, T.20 S., R.14 E., on left bank 1.1 miles upstream from Nunez Canyon, 3.0 miles downstream from White Creek, and 8 miles northwest of Coalinga.

Drainage area.--95.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,100 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 260 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 681 cfs 9 a.m. Jan. 25 (gage height, 3.19 ft).

1949 to November 1955: Discharge, 1,250 cfs Jan. 25, 1952 (gage height, 3.70 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	13	11.....	0	2.8	21.....	0	2.1
2.....	0	14	12.....	0	2.4	22.....	0	1.4
3.....	0	7.8	13.....	0	2.1	23.....	326	1.3
4.....	0	5.2	14.....	0	1.9	24.....	291	1.4
5.....	0	5.6	15.....	0	1.9	25.....	68	194
6.....	0	9.8	16.....	0	1.7	26.....	71	108
7.....	0	5.2	17.....	0	1.7	27.....	34	110
8.....	0	4.5	18.....	0	1.6	28.....	21	36
9.....	0	3.9	19.....	0	1.4	29.....	19	30
10.....	0	3.0	20.....	0	1.9	30.....	18	23
						31.....	22	18
Monthly mean discharge, in cubic feet per second							28.1	19.9
Runoff, in inches							0.34	0.24
Runoff, in acre-feet							1,730	1,220

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22			Dec. 24--Con.			Jan. 25--Con.		
12 p.m.......	0.70	0	10 a.m.......	2.78	373	5 p.m........	2.15	110
			6 p.m........	2.40	194	7............	2.15	110
Dec. 23			12 p.m.......	2.25	142	12 p.m.......	1.94	46
1 a.m........	1.05	0	Jan. 24					
2............	1.17	.1	12 p.m.......	1.37	1.7	Jan. 26		
3............	1.14	0				6 a.m........	1.90	38
4:45.........	.95	0	Jan. 25			12 m.........	1.98	56
5............	2.30	158	3 a.m........	1.42	2.6	6 p.m........	1.96	50
5:30.........	2.90	448	4............	1.65	12	7............	2.97	498
6............	3.09	592	6............	1.72	17	9............	2.62	288
7............	3.08	584	6:15.........	1.73	18	12 p.m.......	2.33	169
10...........	2.93	470	6:30.........	2.50	234			
6 p.m........	2.71	334	6:45.........	2.79	378	Jan. 27		
8............	2.70	328	7............	2.84	410	2 a.m........	2.50	234
12 p.m.......	2.73	345	8............	2.84	410	4............	2.46	218
			9............	3.19	681	7............	2.19	122
Dec. 24			12 m.........	2.89	442	6 p.m........	1.98	56
2 a.m........	2.78	373	2 p.m........	2.45	214	12 p.m.......	1.93	43

SAN JOAQUIN RIVER BASIN

134. North Fork San Joaquin River below Iron Creek, Calif.

Location.--Lat 37°36'50", long 119°14'00", in SE$\frac{1}{4}$ sec.4, T.4 S., R.25 E., on right bank 0.8 mile downstream from Iron Creek and 27 miles northeast of town of Bass Lake.

Drainage area.--38.0 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 21-31. Altitude of gage is 6,800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 930 cfs and extended above by logarithmic plotting. Discharge for period of no gage-height record estimated on basis of records for San Joaquin River at Miller Crossing.

Maxima.--December 1955 to January 1956: Discharge, 2,400 cfs 5:30 a.m. Dec. 23 (gage height, 7.48 ft).

1920-28, 1951 to November 1955: Discharge, 2,000 cfs June 27, 1922 (gage height, 7.24 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	15	42	11.....	26	38	21.....	36	38
2.....	24	40	12.....	28	46	22.....	522	42
3.....	18	36	13.....	27	40	23.....	1,120	54
4.....	18	35	14.....	27	37	24.....	224	38
5.....	16	34	15.....	27	64	25.....	149	44
6.....	18	34	16.....	24	91	26.....	118	54
7.....	24	34	17.....	21	52	27.....	92	46
8.....	21	34	18.....	20	42	28.....	68	42
9.....	24	33	19.....	25	39	29.....	53	36
10.....	24	32	20.....	53	37	30.....	46	34
						31.....	45	32
Monthly mean discharge, in cubic feet per second							95.3	41.9
Runoff, in inches							2.89	1.27
Runoff, in acre-feet							5,860	2,580

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	4.32	44	2 p.m........	6.28	762	5:30 a.m.....	7.48	2,400
			6............	5.96	514	7............	7.38	2,220
Dec. 22			9............	6.17	666	10...........	6.67	1,160
4 a.m........	4.98	132	12 p.m.......	6.74	1,250	3 p.m........	6.06	582
7............	5.62	324				8............	5.72	373
12 m.........	6.30	780	Dec. 23			12 p.m.......	5.57	303
			3 a.m........	7.22	1,950			

135. San Joaquin River at Miller Crossing, Calif.

Location.--Lat 37°30'35", long 119°11'50", in NE$\frac{1}{4}$ sec.11, T.5 S., R.25 E., on right bank 2.4 miles downstream from North Fork San Joaquin River, 4.6 miles east of Clover Meadow ranger station, and 23 miles northeast of town of Bass Lake.

Drainage area.--254 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 1-22. Altitude of gage is 4,570 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,100 cfs and by contracted-opening measurement at 16,600 cfs. Discharge for Dec. 1-22 estimated on basis of records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 16,600 cfs 8 a.m. Dec. 23 (gage height, 21.28 ft, from recorder graph; 23.3 ft, from floodmarks).

1921-28, 1951 to November 1955: Discharge, 6,200 cfs June 4, 1922 (gage height, 17.68 ft).

Mean discharge, in cubic feet per second, 1955-56, of San Joaquin River at Miller Crossing, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	390	514	11.....	390	362	21.....	390	389
2.....		475	12.....		464	22.....		404
3.....		431	13.....		431	23.....	10,200	545
4.....		404	14.....		410	24.....	4,970	395
5.....		380	15.....		704	25.....	1,990	425
6.....		365	16.....		976	26.....	1,480	576
7.....		350	17.....		590	27.....	1,120	482
8.....		347	18.....		500	28.....	845	461
9.....		332	19.....		440	29.....	714	410
10.....		326	20.....		416	30.....	612	374
						31.....	542	344
Monthly mean discharge, in cubic feet per second							1,002	452
Runoff, in inches							4.55	2.05
Runoff, in acre-feet							61,590	27,810

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22			Dec. 24--Con.			Dec. 26--Con.		
12 p.m.......	16.0	4,080	6 p.m........	16.22	4,390	12 p.m.......	13.38	1,340
			9............	15.22	3,070	Jan. 14		
Dec. 23			12 p.m.......	14.97	2,780	12 p.m.......	11.73	520
3 a.m........	19.3	10,400						
6............	21.06	15,800	Dec. 25			Jan. 15		
8............	21.28	16,600	6 a.m........	14.40	2,180	4 a.m........	11.79	542
10...........	20.68	14,500	2 p.m........	13.96	1,780	3 p.m........	11.62	482
2 p.m........	18.90	9,440	7............	13.90	1,730	5............	11.76	531
6............	17.80	7,040	12 p.m.......	13.68	1,550	8............	13.18	1,200
12 p.m.......	17.39	6,260				12 p.m.......	13.69	1,560
			Dec. 26					
Dec. 24			10 a.m.......	13.39	1,340	Jan. 16		
6 a.m........	17.20	5,920	1 p.m........	13.53	1,440	8 a.m........	12.90	1,030
11...........	17.00	5,580	3............	13.52	1,430	4 p.m........	12.42	780
3 p.m........	16.40	4,650	6 p.m........	13.95	1,770	12 p.m.......	12.16	674

136. Florence Lake near Big Creek, Calif.

Location.--Lat 37°16", long 118°58", in NW¼ sec.1, T.8 S., R.27 E., in gatehouse of Ward tunnel intake, near dam on South Fork San Joaquin River, 16 miles northeast of town of Big Creek.

Drainage area.--171 sq mi.

Gage-height record.--Water-stage recorder graph. Elevations at 12 p.m. used to determine contents. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

Maxima.--December 1955 to January 1956: Contents, 17,400 acre-ft 12 p.m. Jan. 5 (elevation, 7,269.39 ft).

1925 to November 1955: Contents, 65,700 acre-ft July 16, 1935 (elevation, 7,328.8 ft).

Remarks.--Lake is formed by multiple-arch concrete dam; storage began in April 1925. Usable capacity, 64,400 acre-ft between elevations 7,220.9 ft (throat of Venturi tube in Ward tunnel intake) and 7,327.5 ft (top of spillway drum gates) above mean sea level. Additional storage of 168 acre-ft is not available for diversion. Water is diverted through Ward tunnel to Huntington Lake and used for power development in Big Creek plants. Records furnished by Southern California Edison Co.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	7,225.29	309	7,267.03	15,800	16	7,225.57	337	7,249.36	6,380
2	7,225.27	307	7,267.80	16,300	17	7,225.52	332	7,246.44	5,210
3	7.225.30	310	7,268.38	16,700	18	7,225.48	328	7,242.83	3,900
4	7,225.32	312	7,268.89	17,000	19	7,225.58	338	7,238.55	2,580
5	7,225.35	315	7,269.39	17,400	20	7,225.90	370	7,233.35	1,460
6	7,225.90	370	7,267.54	16,200	21	7,225.95	375	7,228.70	709
7	7,225.68	348	7,265.59	14,900	22	7,233.93	1,560	7,227.82	596
8	7,225.94	374	7,263.64	13,800	23	7,251.35	7,240	7,227.82	596
9	7,226.00	380	7,261.80	12,700	24	7,256.12	9,520	7,227.83	597
10	7,225.90	370	7,259.78	11,500	25	7,258.72	10,900	7,228.37	666
11	7,225.84	364	7,257.88	10,400	26	7,261.03	12,200	7,228.19	643
12	7,225.79	359	7,255.74	9,320	27	7,262.57	13,100	7,228.10	631
13	7,255.74	354	7,253.24	8,100	28	7,263.75	13,800	7,228.27	653
14	7,225.68	348	7,250.67	6,940	29	7,264.74	14,400	7,228.26	652
15	7,225.64	344	7,249.70	6,520	30	7,265.63	15,000	7,228.22	646
					31	7,266.38	15,400	7,228.15	637
Change in contents						-	+15,100	-	-14,800

137. South Fork San Joaquin River near Florence Lake, Calif.

Location.--Lat 37°16'20", long 118°57'50", in SE¼ sec.36, T.7 S., R.27 E., on left bank just downstream from spillway of Florence Lake Dam, and 6 miles upstream from Bear Creek.

Drainage area.--171 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 7,200 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 12 cfs 1 a.m. Dec. 23 (gage height, 9.23 ft).
1921 to November 1955: Discharge, 4,320 cfs June 6, 1940 (gage height, 15.38 ft).

Remarks.--Flow regulated by Florence Lake since 1925 (see station 136).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3.1	4.5	11.....	3.1	4.6	21.....	3.1	3.4
2.....	3.1	4.5	12.....	3.1	4.4	22.....	3.7	3.4
3.....	3.1	4.5	13.....	3.1	4.3	23.....	8.7	3.3
4.....	3.1	4.5	14.....	3.1	4.3	24.....	7.3	3.3
5.....	3.1	4.5	15.....	3.1	4.6	25.....	4.6	3.3
6.....	3.1	4.5	16.....	3.1	4.2	26.....	4.8	3.3
7.....	3.1	4.5	17.....	3.1	4.0	27.....	4.6	3.3
8.....	3.1	4.5	18.....	3.1	3.8	28.....	4.5	3.2
9.....	3.1	4.4	19.....	3.1	3.8	29.....	4.5	4.0
10.....	3.1	4.4	20.....	3.1	3.6	30.....	4.5	3.3
						31.....	4.5	3.3
Monthly mean discharge, in cubic feet per second.....................							3.77	3.98
Runoff, in acre-feet..							232	245

138. Bear Creek near Lake Thomas A. Edison, Calif.

Location.--Lat 37°20'20", long 118°58'20", in SW¼ sec.12, T.7 S., R.27 E. (unsurveyed), on right bank 0.2 mile upstream from diversion dam, 1.7 miles upstream from mouth, 2.1 miles south of Lake Thomas A. Edison, and 2.4 miles northeast of Mono Hot Springs.

Drainage area.--53.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 7,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 1,330 cfs 4:30 a.m. Dec. 23 (gage height, 6.62 ft).
1921 to November 1955: Discharge, 1,530 cfs July 21, 1936 (gage height, 6.90 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	14	55	11.....	30	36	21.....	40	38
2.....	15	50	12.....	20	37	22.....	286	37
3.....	20	45	13.....	20	36	23.....	517	39
4.....	20	40	14.....	15	37	24.....	190	40
5.....	20	35	15.....	15	40	25.....	175	35
6.....	20	40	16.....	15	40	26.....	155	40
7.....	50	40	17.....	15	45	27.....	100	40
8.....	40	35	18.....	21	42	28.....	90	40
9.....	20	35	19.....	22	41	29.....	80	40
10.....	30	34	20.....	33	39	30.....	60	40
						31.....	60	40
Monthly mean discharge, in cubic feet per second.....................							71.2	39.7
Runoff, in inches...							1.53	0.86
Runoff, in acre-feet..							4,380	2,440

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Bear Creek near Lake Thomas A. Edison, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Dec. 24		
12 p.m.	3.50	35	2 p.m.	5.16	480	3 a.m.	4.73	282
			8:30	4.67	260	6	4.69	266
Dec. 21			12 p.m.	5.16	480	11	4.39	178
1 p.m.	3.58	43				6 p.m.	4.24	143
7	3.50	35	Dec. 23			8	4.11	117
12 p.m.	3.66	52	4:30 a.m.	6.62	1,330	8:30	4.17	129
			8	5.28	540	12 p.m.	4.13	121
Dec. 22			12 m.	4.89	346			
7 a.m.	4.52	211	10 p.m.	4.56	223			
1 p.m.	4.31	158	12 p.m.	4.56	223			

139. Lake Thomas A. Edison near Big Creek, Calif.

Location.--Lat 37°22'10", long 118°59'15", in sec.35, T.6 S., R.27 E. (unsurveyed), in outlet works of dam on Mono Creek at lower end of Vermilion Valley, 18.1 miles northeast of town of Big Creek.

Drainage area.--88.9 sq mi.

Gage-height record.--Water-stage recorder graph. Elevations at 12 p.m. used to determine contents. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

Maxima.--December 1955 to January 1956: Contents, 50,300 acre-ft 12 p.m. Jan. 4 (elevation, 7,597.5 ft).

1954 to November 1955: Contents, 59,100 acre-ft 12 p.m. July 21, 1955 (elevation, 7,603.7 ft).

Remarks.--Lake is formed by earthfill dam; completed on Oct. 12, 1954, and storage began same date. Usable capacity, 125,000 acre-ft between elevations 7,508.9 ft (invert of outlet works) and 7,642.5 ft (top of gates in service spillway) above mean sea level. Water is released for diversion to Ward tunnel via Mono Creek diversion works.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	7,597.0	49,600	7,597.2	49,900	16	7,594.1	45,800	7,596.4	48,800
2	7,596.9	49,500	7,597.3	50,000	17	7,593.8	45,400	7,596.4	48,800
3	7,596.7	49,200	7,597.4	50,100	18	7,593.6	45,100	7,596.3	48,700
4	7,596.6	49,100	7,597.5	50,300	19	7,593.4	44,800	7,596.2	48,600
5	7,596.5	49,000	7,597.4	50,200	20	7,593.2	44,600	7,596.2	48,600
6	7,596.5	49,000	7,597.3	50,000	21	7,593.0	44,300	7,596.0	48,300
7	7,596.4	48,800	7,597.2	49,900	22	7,593.2	44,600	7,598.0	46,300
8	7,596.2	48,600	7,597.1	49,800	23	7,594.4	46,200	7,595.9	48,100
9	7,596.0	48,300	7,597.0	49,600	24	7,595.2	47,200	7,595.8	48,000
10	7,595.7	47,900	7,596.9	49,500	25	7,595.7	47,900	7,595.8	48,000
11	7,595.4	47,500	7,596.8	49,400	26	7,596.2	48,600	7,595.8	48,000
12	7,595.2	47,200	7,596.7	49,200	27	7,596.4	48,800	7,596.0	48,300
13	7,594.9	46,800	7,596.6	49,100	28	7,596.6	49,100	7,596.1	48,400
14	7,594.6	46,400	7,596.5	49,000	29	7,596.8	49,400	7,596.2	48,600
15	7,594.4	46,200	7,596.4	48,800	30	7,596.9	49,500	7,596.3	48,700
					31	7,597.0	49,600	7,596.3	48,700
Change in contents						-	-200	-	-900

140. Mono Creek below Lake Thomas A. Edison, Calif.

Location.--Lat 37°21'40", long 118°59'25", in SW¼ sec.35, T.6 S., R.27 E. (unsurveyed), on left bank 0.6 mile upstream from diversion dam, 1 mile downstream from Lake Thomas A. Edison, and 1.9 miles northeast of Mono Hot Springs.

Drainage area.--92.0 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 7,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 372 cfs 2:30 p.m. Dec. 5 (gage height, 6.25 ft).

1921 to November 1955: Discharge, 1,760 cfs June 2, 1938 (gage height, 8.62 ft).

Remarks.--Flow regulated by Lake Thomas A. Edison since 1954 (see station 139).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	109	22	11.....	219	153	21.....	215	150
2.....	109	21	12.....	219	153	22.....	95	150
3.....	109	29	13.....	219	153	23.....	38	150
4.....	109	156	14.....	219	153	24.....	42	150
5.....	114	153	15.....	215	135	25.....	38	104
6.....	109	153	16.....	215	99	26.....	34	34
7.....	173	153	17.....	215	150	27.....	32	27
8.....	219	153	18.....	215	150	28.....	29	24
9.....	219	153	19.....	215	150	29.....	27	23
10.....	219	153	20.....	215	150	30.....	25	24
						31.....	24	104
Monthly mean discharge, in cubic feet per second......................							137	114
Runoff, in acre-feet..							8,440	7,010

141. Jackass Creek near Jackass Meadow, Calif.

Location.--Lat 37°29'10", long 119°18'20", in NE¼ sec.23, T.5 S., R.24 E., on left bank 1.6 miles east of Jackass Meadow, 10 miles upstream from West Fork, and 18 miles northeast of town of Bass Lake.

Drainage area.--12.8 sq mi.

Gage-height record.--Water-stage recorder graph, except Dec. 29 to Jan. 31. Altitude of gage is 6,900 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 190 cfs, and extended above by logarithmic plotting; affected by ice at times. Discharge for Dec. 29-31 estimated on basis of weather records and records for Chiquito Creek near Arnold Meadow. Discharge for Jan. 1-31 not computed.

Maxima.--December 1955 to January 1956: Discharge 786 cfs 5 a.m. Dec. 23 (gage height, 11.37 ft).

1921-28, 1951 to November 1955: Discharge recorded, 435 cfs Apr. 27, 1953 (gage height, 9.81 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	-	11.....	0.1	-	21.....	0.6	-
2.....	0	-	12.....	.1	-	22.....	132	-
3.....	0	-	13.....	.1	-	23.....	495	-
4.....	0	-	14.....	.1	-	24.....	223	-
5.....	0	-	15.....	.1	-	25.....	116	-
6.....	.2	-	16.....	.1	-	26.....	80	-
7.....	.2	-	17.....	.1	-	27.....	64	-
8.....	.2	-	18.....	.1	-	28.....	50	-
9.....	.1	-	19.....	.2	-	29.....	40	-
10.....	.1	-	20.....	.3	-	30.....	35	-
						31.....	30	-
Monthly mean discharge, in cubic feet per second......................							40.9	-
Runoff, in inches..							3.68	-
Runoff, in acre-feet..							2,510	-

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Jackass Creek near Jackass Meadow, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	5.13	0.9	10 p.m.......	9.15	323	12 p.m.......	9.07	310
			12 p.m.......	10.10	489			
Dec. 22						Dec. 24		
10 a.m.......	5.20	1.6	Dec. 23			6 a.m........	9.00	300
12 m.........	7.50	120	2 a.m........	11.11	717	4 p.m........	8.00	170
1 p.m........	8.54	234	5............	11.37	786	8............	7.74	143
2............	8.25	198	10...........	10.10	489	12 p.m.......	7.61	130
4............	8.85	278	6 p.m........	9.25	339			
6 p.m........	7.72	141	10 p.m.......	9.05	308			

142. Chiquito Creek near Arnold Meadow, Calif.

Location.--Lat 37°24'50", long 119°22'50", in NE¼ sec.18, T.6 S., R.24 E., on right bank 0.5 mile downstream from Beasore Creek, 0.6 mile southwest of Arnold Meadow, and 12 miles northeast of town of Bass Lake.

Drainage area.--59.6 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and by slope-area measurement at 8,630 cfs.

Maxima.--December 1955 to January 1956: Discharge, 8,630 cfs 4:30 a.m. Dec. 23 (gage height, 16.38 ft).

1921-28, 1951 to November 1955: Discharge recorded, 1,470 cfs May 27, 1952 (gage height, 9.13 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	13	101	11.....	23	83	21.....	41	89
2.....	15	98	12.....	22	85	22.....	610	93
3.....	13	94	13.....	20	83	23.....	4,460	115
4.....	13	88	14.....	19	89	24.....	1,980	103
5.....	12	86	15.....	20	113	25.....	651	101
6.....	31	85	16.....	19	139	26.....	437	115
7.....	23	83	17.....	17	101	27.....	250	106
8.....	18	81	18.....	16	96	28.....	139	108
9.....	30	80	19.....	24	93	29.....	113	103
10.....	25	78	20.....	43	93	30.....	103	101
						31.....	103	96
Monthly mean discharge, in cubic feet per second......................							300	96.1
Runoff, in inches...							5.80	1.86
Runoff, in acre-feet..							18,450	5,910

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23			Dec. 24--Con.		
12 p.m.......	5.17	44	4:30 a.m.....	16.38	8,630	3 p.m........	9.78	1,930
			5:30.........	16.22	8,430	10...........	8.40	1,140
Dec. 22			7............	15.37	7,360	12 p.m.......	8.20	1,040
2 a.m........	5.26	56	11...........	12.76	4,440	Dec. 25		
4............	5.47	86	1 p.m........	12.00	3,680	2 a.m........	7.98	930
5............	5.64	115	4............	10.98	2,780	4............	7.88	881
5............	5.52	94	5:30.........	10.82	2,660	8............	7.60	755
6............	5.54	98	7............	10.85	2,680	3 p.m........	7.00	510
7............	5.97	179	9:30.........	10.21	2,230	8............	6.88	462
8............	6.11	212	11...........	10.80	2,640	12 p.m.......	6.70	395
11...........	6.94	486	12 p.m.......	10.72	2,580			
12 m.........	7.30	630				Dec. 26		
4 p.m........	7.38	662	Dec. 24			6 a.m........	6.40	295
7............	8.10	990	4 a.m........	10.33	2,310	8............	6.36	283
7............	8.35	1,120	6............	10.40	2,360	1 p.m........	6.94	486
8............	8.11	995	9............	10.75	2,600	5............	7.42	678
9............	8.22	1,050	12 m.........	9.99	2,070	8............	7.03	522
12 p.m.......	10.40	2,360	3 p.m........	9.60	1,810	12 p.m.......	6.63	370

143. San Joaquin River above Big Creek, Calif.

Location.--Lat 37°15'00", long 119°19'10", in NW¼ sec.11, T.8 S., R.24 E., on left bank 3 miles upstream from Big Creek.

Drainage area.--1,042 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 14,000 cfs and extended above on basis of computation of flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 63,000 cfs 5:30 a.m. Dec. 23 (gage height, 24.75 ft).

1922 to November 1955: Discharge, 52,500 cfs Dec. 11, 1937 (gage height, 24.05 ft), from rating curve extended above 14,000 cfs on basis of velocity-area studies.

Remarks.--Flow slightly regulated by Florence Lake (see station 136).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	272	1,970	11.....	413	1,390	21.....	916	1,590
2.....	300	1,820	12.....	375	1,590	22.....	9,930	1,630
3.....	223	1,700	13.....	365	1,550	23.....	43,300	3,140
4.....	194	1,590	14.....	343	1,530	24.....	26,400	2,070
5.....	180	1,550	15.....	327	2,180	25.....	9,580	3,400
6.....	513	1,500	16.....	315	3,960	26.....	7,370	4,130
7.....	544	1,430	17.....	283	2,390	27.....	5,790	3,590
8.....	368	1,410	18.....	270	1,920	28.....	3,680	2,350
9.....	700	1,340	19.....	462	1,720	29.....	2,920	1,990
10.....	543	1,300	20	922	1,660	30.....	2,370	1,820
						31.....	2,170	1,710
Monthly mean discharge, in cubic feet per second........................							3,946	2,030
Runoff, in inches..							4.37	2.25
Runoff, in acre-feet...							242,700	124,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 25--Con.			Jan. 24		
12 p.m.......	8.57	735	12 m.........	14.86	8,830	8 a.m........	10.40	2,110
			3 p.m........	14.48	7,950	12 m.........	10.23	1,970
Dec. 22			12 p.m.......	13.84	6,620	6 p.m........	10.09	1,870
3 a.m........	8.88	890				12 p.m.......	10.32	2,050
5............	9.80	1,440	Dec. 26					
8............	13.70	6,300	6 a.m........	13.36	5,740	Jan. 25		
10...........	15.55	10,600	7............	13.35	5,720	4 a.m........	10.57	2,250
1 p.m........	16.25	12,700	11...........	13.98	6,880	6............	10.85	2,500
2............	16.23	12,700	2 p.m........	15.05	9,280	8............	11.95	3,700
4............	16.02	12,000	5............	14.97	9,090	10:30........	12.59	4,530
7............	16.38	13,200	12 p.m.......	14.16	7,250	1 p.m........	12.23	4,050
9............	16.80	14,700				4............	12.25	4,080
12 p.m.......	20.20	30,000	Dec. 27			12 p.m.......	11.48	3,160
			2 a.m........	14.06	7,040			
Dec. 23			5............	14.08	7,080	Jan. 26		
2 a.m........	22.70	46,400	9............	13.67	6,300	6 a.m........	11.17	2,820
4............	24.25	58,700	2 p.m........	13.10	5,300	12 m.........	11.08	2,730
5:30.........	24.75	63,000	6............	12.80	4,830	3 p.m........	11.45	3,120
8............	24.15	57,900	12 p.m.......	12.45	4,340	5............	12.30	4,140
10...........	23.05	49,000				6............	14.00	6,920
12 m.........	21.92	40,800	Jan. 21			7............	14.40	7,770
6 p.m........	20.65	32,600	12 p.m.......	9.57	1,520	8............	14.40	7,770
8............	20.75	33,200				12 p.m.......	13.58	6,130
10...........	20.68	32,800	Jan. 22					
12 p.m.......	20.90	34,100	2 p.m........	9.51	1,490	Jan. 27		
			6............	9.62	1,550	4 a.m........	12.60	4,540
Dec. 24			9............	10.03	1,830	8............	11.92	3,660
8 a.m........	20.22	30,100	12 p.m.......	11.10	2,750	12 m.........	11.52	3,200
12 m.........	19.77	27,600				6 p.m........	11.20	2,850
2 p.m........	19.68	27,200	Jan. 23			12 p.m.......	11.00	2,650
6............	18.70	22,400	4 a.m........	12.08	3,860			
9............	17.50	17,300	5............	12.07	3,840			
12 p.m.......	16.88	15,000	9............	11.57	3,260			
			4 p.m........	11.36	3,030			
Dec. 25			8............	11.13	2,780			
6 a.m........	15.80	11,300	12 p.m.......	10.80	2,460			

144. Huntington Lake near Big Creek, Calif.

Location.--Lat 37°14', long 119°13', in SW¼ sec.14, T.8 S., R.25 E., in gate tower of dam 1 on Big Creek and 2 miles northeast of town of Big Creek.

Drainage area.--79.0 sq mi.

Gage-height record.--Water-stage recorder graph. Elevations at 12 p.m. used to determine contents. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

Maxima.--December 1955 to January 1956: Contents, 65,700 acre-ft 12 p.m. Jan. 22 (elevation, 6,932.50 ft).

1913 to November 1955: Contents, 90,300 acre-ft May 23, 1926 (elevation, 6,950.8 ft).

Remarks.--Lake is formed by four dams; storage began Apr. 11, 1913. Dams were raised in 1914 and again in 1917. Usable capacity, 89,200 acre-ft between elevations 6,819.9 ft (invert of outlet tunnel No. 1) and 6,950 ft (spillway crest at dam 1) above mean sea level. Additional storage of 600 acre-ft is not available for release. Water is used for power development in Big Creek plants. Records furnished by Southern California Edison Co.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	6,909.79	40,000	6,923.95	55,300	16	6,912.21	42,500	6,929.12	61,500
2	6,909.77	40,000	6,923.31	54,600	17	6,912.40	42,700	6,929.92	62,500
3	6,909.77	40,000	6,922.66	53,800	18	6,912.74	43,000	6,930.66	63,400
4	6,909.88	40,100	6,922.20	53,300	19	6,912.77	43,000	6,931.38	64,300
5	6,909.83	40,000	6,921.74	52,800	20	6,912.86	43,100	6,932.09	65,100
6	6,909.81	40,000	6,922.42	53,600	21	6,912.99	43,300	6,932.47	65,600
7	6,910.02	40,200	6,923.19	54,400	22	6,915.55	46,000	6,932.50	65,700
8	6,910.45	40,700	6,924.09	55,500	23	6,921.45	52,400	6,932.36	65,500
9	6,910.80	41,000	6,924.82	56,300	24	6,923.92	55,300	6,932.16	65,200
10	6,911.20	41,400	6,925.58	57,200	25	6,925.06	56,600	6,932.00	65,000
11	6,911.60	41,800	6,926.34	58,100	26	6,925.98	57,700	6,930.75	63,500
12	6,911.98	42,200	6,927.11	59,000	27	6,926.18	57,900	6,928.85	61,200
13	6,912.30	42,500	6,927.84	59,900	28	6,925.92	57,600	6,926.93	58,800
14	6,912.33	42,600	6,928.60	60,800	29	6,925.60	57,300	6,925.02	56,600
15	6,912.29	42,500	6,929.21	61,600	30	6,925.05	56,600	6,923.10	54,300
					31	6,924.55	56,000	6,921.62	52,600
Change in contents................................						-	+16,000	-	-3,400

145. Big Creek below Huntington Lake, Calif.

Location.--Lat 37°13'10", long 119°12'50", in NW¼ sec.23, T.8 S., R.25 E., on right bank 800 ft upstream from Grouse Creek and 1 mile downstream from Huntington Lake.

Drainage area.--80.0 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,600 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 45 cfs 10 p.m. Dec. 23 (gage height, 3.15 ft).

1925 to November 1955: Discharge, 2,040 cfs June 23, 1925 (gage height, 11.3 ft), siphon spillways operating at Huntington Lake.

Remarks.--Flow regulated by Huntington Lake since 1913 (see station 144).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.5	3.7	11.....	0.8	2.6	21.....	1.0	2.8
2.....	.6	3.4	12.....	.7	2.6	22.....	14	3.6
3.....	.5	3.3	13.....	.7	2.6	23.....	36	4.2
4.....	.5	3.1	14.....	.7	2.7	24.....	27	3.4
5.....	.5	3.0	15.....	.7	4.9	25.....	12	3.8
6.....	1.3	2.8	16.....	.7	4.3	26.....	14	3.7
7.....	.8	2.8	17.....	.6	3.4	27.....	8.2	3.5
8.....	.8	2.6	18.....	.6	3.1	28.....	5.4	3.2
9.....	1.9	2.6	19.....	.7	3.0	29.....	4.7	3.0
10.....	.9	2.5	20.....	.9	2.9	30.....	4.2	2.9
						31.....	3.9	2.8
Monthly mean discharge, in cubic feet per second......................							4.70	3.19
Runoff, in acre-feet..							289	196

146. Pitman Creek below Tamarack Creek, Calif.

Location.--Lat 37°11'55", long 119°12'45", in NW¼ sec.35, T.8 S., R.25 E., on right bank 0.8 mile downstream from confluence of Tamarack Creek and South Fork Tamarack Creek, 1.4 miles upstream from mouth, and 1.9 miles east of town of Big Creek.

Drainage area.--22.7 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 12-18. Altitude of gage is 7,100 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 350 cfs and by slope-area measurement at 3,220 cfs; affected by ice at times. Discharge for Jan. 12-18 estimated on basis of records for Huntington-Shaver conduit at outlet and unpublished records for Pitman Creek near Tamarack Mountain.

Maxima.--December 1955 to January 1956: Discharge, 3,670 cfs 3 a.m. Dec. 23 (gage height, 11.20 ft).

1927 to November 1955: Discharge, 3,220 cfs Nov. 19, 1950 (gage height, 10.77 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.7	63	11.....	3.0	47	21.....	6.0	51
2.....	.8	57	12.....	2.8	50	22.....	194	51
3.....	.8	52	13.....	2.7	47	23.....	1,590	55
4.....	.7	49	14.....	2.4	46	24.....	745	51
5.....	.7	48	15.....	2.2	72	25.....	196	41
6.....	2.2	46	16.....	2.4	125	26.....	160	53
7.....	3.3	44	17.....	2.4	77	27.....	130	40
8.....	3.9	42	18.....	2.2	63	28.....	100	40
9.....	8.7	40	19.....	2.2	59	29.....	84	40
10.....	5.8	43	20.....	4.4	56	30.....	73	45
						31.....	66	44
Monthly mean discharge, in cubic feet per second........................							110	52.8
Runoff, in inches..							5.57	2.68
Runoff, in acre-feet...							6,740	3,250

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23			Dec. 24		
12 p.m.......	3.12	6.4	2 a.m........	9.70	2,200	1 a.m........	8.28	1,210
			3............	11.20	3,670	3............	8.16	1,150
Dec. 22			6............	10.20	2,650	7............	8.17	1,160
10 a.m.......	3.66	33	9............	8.70	1,440	12 m.........	7.35	770
12 m.........	5.46	242	12 m.........	7.90	1,020	3 p.m........	6.70	531
5 p.m........	5.15	192	4 p.m........	7.75	948	6............	5.80	311
7............	5.20	199	12 p.m.......	8.25	1,200	12 p.m.......	5.44	238
9............	5.75	300						
12 p.m.......	8.20	1,170						

147. Shaver Lake near Big Creek, Calif.

Location.--Lat 37°09', long 119°18', in SE¼ sec.13, T.9 S., R.24 E., near center of dam on Stevenson Creek and 6 miles southwest of town of Big Creek.

Drainage area.--29.7 sq mi.

Gage-height record.--Water-stage recorder graph. Elevations at 12 p.m. used to determine contents. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

Maxima.--December 1955 to January 1956: Contents, 76,400 acre-ft 12 p.m. Dec. 27 (elevation, 5,339.77 ft).

1927 to November 1955: Contents, 135,700 acre-ft July 4, 5, 1946, Aug. 2, 3, 1952; elevation, 5,370.2 ft July 4, 5, 1946.

Remarks.--Lake is formed by concrete-arch dam; completed and storage began in 1927. Usable capacity, 135,300 acre-ft between elevations 5,225 ft (trash-rack foundation) and 5,370 ft (crest of spillway) above mean sea level. Water is received from Huntington Lake and Pitman Creek through Huntington-Shaver conduit and released for power development in Big Creek plants. Records furnished by Southern California Edison Co.

Elevation, in feet, and contents, in acre-feet, 1955-56, of Shaver Lake near Big Creek, Calif.

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	5,333.03	65,500	5,338.20	73,800	16	5,329.15	59,700	5,330.07	61,000
2	5,332.85	65,300	5,337.72	73,000	17	5,328.74	59,100	5,329.52	60,200
3	5,332.76	65,100	5,337.17	72,100	18	5,328.58	58,800	5,328.92	59,300
4	5,332.54	64,800	5,336.62	71,200	19	5,328.24	58,300	5,328.31	58,400
5	5,332.14	64,200	5,336.07	70,300	20	5,327.98	57,900	5,327.71	57,500
6	5,332.04	64,000	5,335.49	69,400	21	5,327.52	57,300	5,327.09	56,600
7	5,331.78	63,600	5,334.90	68,400	22	5,328.62	58,900	5,326.88	56,300
8	5,331.62	63,400	5,334.33	67,500	23	5,332.90	65,300	5,326.50	55,800
9	5,331.47	63,200	5,333.72	66,600	24	5,337.00	71,800	5,325.98	55,000
10	5,331.35	63,000	5,333.10	65,600	25	5,338.21	73,800	5,325.72	54,700
11	5,331.27	62,900	5,332.51	64,700	26	5,339.41	75,800	5,326.55	55,900
12	5,330.94	62,400	5,331.92	63,800	27	5,339.77	76,400	5,327.50	57,200
13	5,330.56	61,800	5,331.32	62,900	28	5,339.65	76,200	5,328.27	58,400
14	5,330.12	61,100	5,330.76	62,100	29	5,339.53	76,000	5,329.10	59,600
15	5,329.63	60,400	5,330.47	61,600	30	5,339.11	75,300	5,329.71	60,500
					31	5,338.70	74,600	5,329.98	60,900
Change in contents..............................						-	+8,600	-	-13,700

148. San Joaquin River above Willow Creek, near Auberry, Calif.

Location.--Lat 37°08'40", long 119°27'00", in SW¼ sec.15, T.9 S., R.23 E., on right bank 1,000 ft downstream from diversion dam, 0.4 mile upstream from Willow Creek, and 4.2 miles northeast of Auberry.

Drainage area.--1,299 sq mi.

Gage-height record.--Water-stage recorder graph Dec. 1-9. Altitude of gage is 1,180 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,000 cfs and extended above on basis of flood-routing study. Average discharge Dec. 9-21 estimated from Telemark readings, weather records, and records for Willow Creek at mouth, near Auberry. Daily discharge Dec. 22 to Jan. 31 estimated on basis of records for adjacent stations.

Maxima.--December 1955 to January 1956: Discharge, 73,200 cfs 4 a.m. Dec. 23 (gage height, 54.2 ft, from floodmarks).

1951 to November 1955: Discharge, 15,100 cfs Dec. 29, 1951 (gage height, 22.67 ft), from rating curve extended above 7,000 cfs by logarithmic plotting.

Remarks.--Flow regulated by nine powerplants and five reservoirs (combined capacity, about 316,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	18	230	11.....	13	5	21.....	13	5
2.....	13	10	12.....		5	22.....	8,600	5
3.....	19	5	13.....		5	23.....	47,700	2,250
4.....	20	5	14.....		5	24.....	27,200	620
5.....	20	5	15.....		130	25.....	9,000	4,100
6.....	16	230	16.....		2,300	26.....	6,000	4,000
7.....	10	5	17.....		720	27.....	4,720	2,300
8.....	13	5	18.....		140	28.....	2,440	1,100
9.....		5	19.....		5	29.....	1,460	400
10.....		5	20.....		5	30.....	600	230
						31.....	500	5
Monthly mean discharge, in cubic feet per second......................							3,501	608
Runoff, in acre-feet..							215,200	37,370

149. North Fork Willow Creek near Bass Lake, Calif.

Location.--Lat 37°17'19", long 119°31'46", in SE¼ sec.26, T.7 S., R.22 E., on right bank 1,500 ft downstream from Bass Lake spillway and 2.5 miles southeast of town of Bass Lake.

Drainage area.--50.8 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,200 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 660 cfs 4 p.m. Jan. 4 (gage height, 5.28 ft).
1940 to November 1955: Discharge, 847 cfs Feb. 11, 1941 (gage height, 5.85 ft).

Remarks.--Flow regulated by Bass Lake (usable capacity, 45,110 acre-ft). Diversion by Pacific Gas & Electric Co. conduit No. 3 near Bass Lake of 14,200 acre-ft during flood period. Estimated peak inflow into Bass Lake Dec. 23, 1955, 7,000 cfs, of which Brown's Creek contributed 48 cfs from South Fork Willow Creek.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.7	2.4	11.....	0.5	267	21.....	0.6	1.4
2.....	1.0	2.2	12.....	.5	173	22.....	12	1.8
3.....	.9	2.1	13.....	.5	51	23.....	431	48
4.....	.9	241	14.....	.5	1.3	24.....	16	87
5.....	.9	504	15.....	.4	1.7	25.....	6.7	162
6.....	1.5	462	16.....	.4	135	26.....	6.5	323
7.....	.6	405	17.....	.4	171	27.....	5.8	478
8.....	.8	366	18.....	.5	122	28.....	2.9	421
9.....	.8	327	19.....	.9	76	29.....	2.6	344
10.....	.6	334	20.....	1.1	27	30.....	2.4	269
						31.....	2.4	205
Monthly mean discharge, in cubic feet per second.....................							16.3	194
Runoff, in acre-feet...							1,000	11,920

150. Willow Creek at mouth, near Auberry, Calif.

Location.--Lat 37°09'10", long 119°27'30", in NE¼ sec.16, T.9 S., R.23 E., on left bank 40 ft upstream from bridge, 0.4 mile upstream from mouth, 1.3 miles downstream from Whiskey Creek, and 4.3 miles northeast of Auberry.

Drainage area.--130 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 4-7, 23-28, and Dec. 30 to Jan. 9. Altitude of gage is 1,200 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 800 cfs and extended to peak on basis of rate of inflow into Bass Lake. Discharge for periods of no gage-height record estimated on basis of records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 12,000 cfs about 4 a.m. Dec. 23 (gage height, 28.5 ft, from floodmarks).
1952 to November 1955: Discharge, 1,380 cfs Jan. 25, 1952 (gage height, 10.45 ft).

Remarks.--Flow regulated by Bass Lake (capacity, 45,100 acre-ft) and diversion into Pacific Gas & Electric Co. conduit No. 3.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	15	450	11.....	13	636	21.....	55	380
2.....	15	400	12.....	10	534	22.....	1,020	424
3.....	7.6	250	13.....	9.0	425	23.....	7,500	1,330
4.....	9	240	14.....	8.3	274	24.....	4,500	780
5.....	9	720	15.....	7.4	388	25.....	2,500	1,820
6.....	9	580	16.....	7.0	667	26.....	1,200	1,630
7.....	9	510	17.....	6.4	636	27.....	950	1,630
8.....	14	670	18.....	6.1	528	28.....	700	1,240
9.....	38	678	19.....	14	471	29.....	625	1,020
10.....	20	642	20.....	35	447	30.....	400	882
						31.....	500	770
Monthly mean discharge, in cubic feer per second.....................							652	711
Runoff, in acre-feet...							40,090	43,740

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Willow Creek at mouth, near Auberry, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Jan. 23			Jan. 25--Con.		
12 p.m.......	5.15	23	3:30 a.m.....	11.08	1,710	12 m.........	15.45	2,880
			8:30.........	9.98	1,200	2 p.m........	13.30	2,230
Dec. 22			11...........	10.96	1,660	6............	11.40	1,820
6 a.m........	5.09	21	5 p.m........	10.00	1,210	12 p.m.......	10.35	1,380
10...........	5.35	32	12 p.m.......	9.38	926			
12 m.........	11.80	1,940				Jan. 26		
3 p.m........	12.80	2,160	Jan. 24			6 a.m........	9.98	1,200
9............	10.70	1,530	12 m.........	8.92	738	11...........	9.80	1,120
12 p.m.......	11.50	1,850	2 p.m........	8.88	723	3 p.m........	10.10	1,260
			3............	8.60	625	5............	12.00	2,000
Jan. 21			5............	8.92	738	6............	15.75	3,000
12 p.m.......	7.69	358	8............	8.86	716	9............	14.25	2,420
			12 p.m.......	9.12	818	12 p.m.......	12.75	2,150
Jan. 22						Jan. 27		
12 m.........	7.65	348	Jan. 25			4 a.m........	11.65	1,900
5 p.m........	7.69	358	4 a.m........	10.32	1,370	8............	11.00	1,680
8............	7.92	415	8............	11.90	1,970	12 m.........	10.68	1,550
12 p.m.......	9.75	1,090	10 a.m.......	14.50	2,500	12 p.m.......	10.26	1,340

151. San Joaquin River below Kerckhoff powerhouse, California

Location.--Lat 37°04'45", long 119°33'35", in NW¼ sec.10, T.10 S., R.22 E., on left bank 1.1 miles downstream from Kerckhoff powerhouse and 1.4 miles upstream from Big Sandy Creek.

Drainage area.--1,480 sq mi.

Gage-height record.--Water-stage recorder graph to 4 a.m. Dec. 23, when recording gage was destroyed. Datum of gage is 563.4 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 20,000 cfs and extended above on basis of velocity-area studies, computed flow over Kerckhoff Dam, and peak flow of San Joaquin River near Friant. Discharge for Dec. 23 to Jan. 31 furnished by Southern California Edison Co.

Maxima.--December 1955 to January 1956: Discharge, 92,200 cfs, time unknown, Dec. 23 (gage height, 51.0 ft, from floodmarks).

1910-14, 1936-37, 1942 to November 1955: Discharge, 75,000 cfs Dec. 11, 1937 (gage height, 46.5 ft).

Remarks.--Flow regulated by 12 powerplants and 7 reservoirs with total usable capacity of about 365,000 acre-ft.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,260	4,200	11.....	615	3,410	21.....	1,930	3,500
2.....	1,040	3,800	12.....	1,050	3,440	22.....	9,200	3,440
3.....	628	3,620	13.....	830	3,460	23.....	57,000	7,440
4.....	590	3,450	14.....	1,140	3,240	24.....	40,600	5,010
5.....	688	4,000	15.....	1,190	3,740	25.....	15,500	10,400
6.....	1,060	3,500	16.....	1,320	6,450	26.....	11,000	9,800
7.....	1,390	3,600	17.....	907	4,770	27.....	9,300	6,000
8.....	1,250	3,400	18.....	567	4,100	28.....	6,870	6,120
9.....	1,270	3,350	19.....	1,200	3,860	29.....	5,720	5,140
10.....	1,100	3,260	20.....	1,690	3,660	30.....	4,550	4,730
						31.....	4,550	4,340
Monthly mean discharge, in cubic feet per second......................							6,040	4,653
Runoff, in acre-feet..							371,400	286,100

152. Fine Gold Creek near Friant, Calif.

Location.--Lat 37°04'00", long 119°38'50", in NW¼NE¼ sec.14, T.10 S., R.21 E., on right bank 1,500 ft downstream from Willow Creek and 5.5 miles northeast of Friant.

Drainage area.--92.8 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 620 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,700 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 7,450 cfs 5 a.m. Dec. 23 (gage height, 17.94 ft).

1936 to November 1955: Discharge, 10,300 cfs Mar. 12, 1938 (gage height, 20.4 ft, from floodmarks), from rating curve extended above 6,500 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	11	191	11.....	10	87	21.....	34	112
2.....	14	155	12.....	7.8	84	22.....	479	111
3.....	7.0	135	13.....	6.6	78	23.....	3,920	572
4.....	4.9	123	14.....	6.0	84	24.....	2,710	326
5.....	3.7	120	15.....	5.5	142	25.....	1,380	1,790
6.....	39	117	16.....	5.1	234	26.....	773	1,100
7.....	28	104	17.....	4.9	135	27.....	799	1,140
8.....	12	125	18.....	5.3	116	28.....	342	562
9.....	24	102	19.....	33	108	29.....	205	388
10.....	14	92	20.....	50	122	30.....	149	304
						31.....	292	253
Monthly mean discharge, in cubic feet per second							367	294
Runoff, in inches							4.56	3.65
Runoff, in acre-feet							22,560	18,070

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 24--Con.			Jan. 23--Con.		
12 p.m.	2.55	23	7 p.m.	10.25	2,260	3 a.m.	4.86	381
			9	9.92	2,110	4	5.12	443
Dec. 22			12 p.m.	9.30	1,840	6:30	6.45	810
4 a.m.	2.54	23				7	6.37	786
6	2.62	26	Dec. 25			9	5.64	579
8	2.88	40	3 a.m.	8.91	1,680	11	5.30	488
9	3.52	101	4	8.95	1,700	1 p.m.	5.50	540
11	4.12	195	7	8.92	1,690	4	6.52	831
12 m.	4.26	222	8	8.84	1,660	8	5.71	599
1 p.m.	4.63	305	9	8.87	1,670	12 p.m.	5.00	414
2	7.00	975	11	8.85	1,660			
3:30	8.38	1,470	12 m.	8.68	1,590	Jan. 24		
5	7.55	1,170	2 p.m.	8.12	1,370	6 a.m.	4.70	346
7	6.98	969	4	7.50	1,150	12 m.	4.50	304
9	6.37	786	6	7.08	1,000	6 p.m.	4.43	290
10	6.08	699	9	6.55	840	9	4.45	294
11	5.98	669	12 p.m.	6.08	702	12 p.m.	4.64	333
12 p.m.	5.98	669						
			Dec. 26			Jan. 25		
Dec. 23			3 a.m.	5.70	596	2 a.m.	5.00	414
1 a.m.	6.87	936	6	5.45	527	5	6.20	736
2	8.40	1,480	8	5.30	488	8	9.50	1,920
3	13.30	3,890	10	5.28	483	9	9.90	2,100
5	17.94	7,450	12 m.	5.68	590	1 p.m.	13.38	3,940
6	17.25	6,820	2 p.m.	6.55	840	5	9.80	2,080
7	16.50	6,190	5	8.12	1,370	7	8.67	1,640
8	16.40	6,110	6	8.02	1,330	10	7.67	1,260
10	14.62	4,760	8	7.10	1,010	12 p.m.	7.12	1,070
12 m.	13.52	4,030	10	6.43	804			
2 p.m.	12.84	3,610	11	6.48	819	Jan. 26		
4	12.11	3,200	12 p.m.	6.40	795	4 a.m.	6.37	849
6	11.94	3,110				8	6.00	739
8	11.77	3,010	Dec. 27			4 p.m.	5.50	599
10	11.50	2,870	1 a.m.	6.34	777	5	5.75	669
11	11.53	2,880	2	6.35	780	7	8.40	1,530
12 p.m.	11.85	3,060	3	6.48	819	9	10.96	2,600
			6	7.40	1,120	10	10.72	2,480
Dec. 24			8	7.62	1,190	12 p.m.	9.68	2,050
2 a.m.	13.73	4,160	9	7.54	1,160			
2:30	13.87	4,260	12 m.	6.65	870	Jan. 27		
4	13.15	3,800	3 p.m.	6.04	691	3 a.m.	8.70	1,700
6	11.67	2,960	6	5.67	588	8	7.50	1,260
8	11.05	2,640	12 p.m.	5.16	452	12 m.	6.67	1,000
9	11.00	2,620				6 p.m.	6.03	810
10	11.13	2,680	Jan. 22			12 p.m.	5.62	691
11	11.13	2,680	12 p.m.	4.10	228			
12 m.	10.96	2,600						
3 p.m.	10.35	2,310	Jan. 23					
6 p.m.	10.27	2,270	2 a.m.	4.76	359			

153. Millerton Lake at Friant, Calif.

Location.--Lat 37°00'00", long 119°42'10", in SW¼ sec.5, T.11 S., R.21 E., near center of Friant Dam on San Joaquin River, immediately upstream from Cottonwood Creek, and 0.9 mile northeast of Friant.

Drainage area.--1,633 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Maxima.--December 1955 to January 1956: Maximum contents, 470,100 acre-ft 12 p.m. Dec. 28 (elevation, 567.41 ft).

October 1941 to November 1955: 517,300 acre-ft May 21, 1954 (elevation, 577.34 ft).

Remarks.--Reservoir is formed by gravity-type concrete dam with spillway near center, completed in December 1942. Control valves installed in February 1944, and spillway gates installed in November 1947. Usable capacity, 503,200 acre-ft between elevations 375.4 ft (invert of river outlet) and 578.0 ft (top of drum-type spillway gates) above mean sea level; 17,300 acre-ft is not available for release. Millerton Lake is one of the storage units in Central Valley project. Records, including extremes, show total contents at 12 p.m.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	479.51	160,500	566.52	466,000	16	487.40	180,500	557.11	423,800
2	480.31	162,500	566.11	464,100	17	488.02	182,200	557.28	424,500
3	480.61	163,200	565.49	461,200	18	488.43	183,300	557.12	423,800
4	481.01	164,200	564.48	456,600	19	489.25	185,400	556.88	422,800
5	481.48	165,400	563.65	452,800	20	490.39	188,500	556.52	421,200
6	482.30	167,400	562.25	446,500	21	491.65	191,900	556.14	419,600
7	483.25	169,800	561.14	441,600	22	498.18	210,300	555.66	417,500
8	484.05	171,900	560.05	436,700	23	534.73	332,600	557.16	424,000
9	484.84	173,900	559.03	432,200	24	556.50	421,100	557.33	424,700
10	485.53	175,700	558.35	429,200	25	562.18	446,200	560.64	439,300
11	485.83	176,400	557.85	427,000	26	564.68	457,500	562.81	449,000
12	486.25	177,500	557.44	425,200	27	566.99	468,100	564.92	458,600
13	486.26	177,600	556.96	423,100	28	567.41	470,100	565.24	460,100
14	486.52	178,200	556.45	420,900	29	567.22	469,200	565.04	459,200
15	486.80	179,000	556.18	419,700	30	566.78	467,100	564.37	457,000
					31	566.77	467,100	563.98	454,300

Elevation, in feet, and contents, in thousands of acre-feet, at indicated time, 1955-56

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 21			Dec.24-Con.			Jan. 23		
12 p.m.....	491.65	191.9	12 p.m.....	556.50	421.1	3 a.m......	555.75	417.9
			Dec. 25			12 p.m.....	557.16	424.0
Dec. 22			12 m.......	560.70	439.6			
1 p.m......	492.50	194.3	12 p.m.....	562.18	446.2	Jan. 24		
6..........	495.20	201.8				6 p.m......	557.44	425.2
12 p.m.....	498.18	210.3	Dec. 26			12 p.m.....	557.33	424.7
			7 a.m......	562.87	449.3			
Dec. 23			4 p.m......	563.36	451.5	Jan. 25		
4 a.m......	501.80	221.0	9..........	564.33	455.9	6 a.m......	557.48	425.4
8..........	510.60	248.2	12 p.m.....	564.68	457.5	10.........	557.95	427.4
12 m.......	519.30	277.0				12 p.m.....	560.64	439.3
4 p.m......	525.40	298.3	Dec. 27					
8..........	530.40	316.4	12 m.......	566.20	464.5	Jan. 26		
12 p.m.....	534.73	332.6	12 p.m.....	566.99	468.1	9 a.m......	561.23	442.0
						7 p.m......	561.60	443.6
Dec. 24			Dec. 28			12 p.m.....	562.81	449.0
4 a.m......	539.40	350.6	12 m.......	567.29	469.5			
8..........	543.60	367.2	12 p.m.....	567.41	470.1	Jan. 27		
12 m.......	547.60	383.5				8 a.m......	564.32	455.9
4 p.m......	551.20	398.7	Jan. 22			4 p.m......	564.73	457.7
8 p.m......	554.10	410.8	12 p.m.....	555.66	417.5	12 p.m.....	564.92	458.6

154. San Joaquin River below Friant, Calif.

Location.--Lat 36°59'04", long 119°43'24", in SW¼ sec.7, T.11 S., R.21 E., on left bank 0.5 mile west of Friant, 1.5 miles downstream from Cottonwood Creek, 2 miles downstream from Friant Dam, and at mile 268.1.

Drainage area.--1,675 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 294.00 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 7,120 cfs 8:30 p.m. Jan. 5 (gage height, 9.00 ft).

1907 to November 1955: Discharge, 77,200 cfs Dec. 11, 1937 (gage height, 23.8 ft, site and datum then in use).

Remarks.--Flow regulated by Millerton Lake (see station 153) and by other reservoirs described in "Remarks" for station 151.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	68	5,180	11.....	200	4,650	21.....	185	4,630
2.....	66	5,140	12.....	416	4,630	22.....	173	4,640
3.....	65	5,380	13.....	808	4,630	23.....	464	4,710
4.....	65	6,140	14.....	808	4,630	24.....	1,500	5,030
5.....	65	6,360	15.....	808	4,650	25.....	4,590	6,020
6.....	106	6,770	16.....	500	4,670	26.....	6,390	5,920
7.....	195	6,120	17.....	103	4,640	27.....	6,360	6,330
8.....	198	6,140	18.....	92	4,640	28.....	6,260	6,260
9.....	198	5,850	19.....	93	4,630	29.....	6,210	6,220
10.....	200	5,020	20.....	140	4,640	30.....	5,850	6,200
						31.....	5,250	6,180
Monthly mean discharge, in cubic feet per second......................							1,562	5,376
Runoff, in acre-feet...							96,050	330,500

155. Little Dry Creek near Friant, Calif.

Location.--Lat 36°56'25", long 119°40'50", in SW¼SE¼ sec.28, T.11 S., R.21 E., on left bank 3.5 miles southeast of Friant and 4 miles upstream from mouth.

Drainage area.--58 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 357.02 ft above mean sea level (levels by State of California).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,760 cfs 9:30 a.m. Dec. 24 (gage height, 6.70 ft).

1941 to November 1955: Discharge, 1,810 cfs Jan. 25, 1952 (gage height, 5.63 ft), from rating curve extended above 900 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.4	99	11.....	0.4	32	21.....	1.1	48
2.....	1.4	81	12.....	.4	31	22.....	32	42
3.....	.1	89	13.....	.4	29	23.....	849	183
4.....	.1	62	14.....	.4	30	24.....	1,250	97
5.....	.1	52	15.....	.3	48	25.....	601	624
6.....	.5	57	16.....	.3	110	26.....	323	332
7.....	.7	44	17.....	.3	55	27.....	310	323
8.....	.6	55	18.....	.4	44	28.....	155	167
9.....	.5	40	19.....	1.1	39	29.....	117	155
10.....	.4	34	20.....	1.5	55	30.....	95	146
						31.....	161	135
Monthly mean discharge, in cubic feer per second......................							126	108
Runoff, in inches..							2.50	2.14
Runoff, in acre-feet...							7,750	6,620

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Little Dry Creek near Friant, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 25			Jan. 23--Con.		
12 p.m.	1.35	1.0	2 a.m.	5.14	712	12 p.m.	3.46	125
			4	5.12	701			
Dec. 22			7	5.18	734	Jan. 24		
3 a.m.	1.35	1.0	9	5.36	836	6 a.m.	3.33	100
6	1.40	1.3	6 p.m.	4.50	420	2 p.m.	3.25	87
8	1.48	2.0	12 p.m.	4.16	308	12 p.m.	3.29	93
10	1.80	6.6				Jan. 25		
11	1.81	6.8	Dec. 26			2 a.m.	3.43	119
6 p.m.	1.60	3.4	7 a.m.	3.93	240	4	3.85	218
7	2.63	60	9	3.95	246	6	4.75	522
9	3.04	130	2 p.m.	4.45	402	8	5.45	890
10	3.07	136	4	4.65	480	10	5.54	948
12 p.m.	3.42	216	6	4.45	402	12 m.	5.42	872
			12 p.m.	3.96	249	2 p.m.	5.96	1,260
Dec. 23						4	5.58	976
2 a.m.	3.90	331	Dec. 27			6	4.93	605
3	4.40	459	1 a.m.	3.95	246	9	4.50	420
4	5.48	817	2	4.00	260	12 p.m.	4.25	335
5	5.79	956	5	4.45	402			
8	6.11	1,120	7	4.72	509	Jan. 26		
11	5.90	1,010	9	4.58	452	4 a.m.	4.06	278
2 p.m.	5.90	1,010	2 p.m.	4.06	278	9	4.00	260
5	5.84	980	6	3.88	227	11	4.02	266
7	5.25	725	12 p.m.	3.74	189	3 p.m.	3.86	221
9	5.10	670				5	3.85	218
12 p.m.	5.85	985	Jan. 22			8	4.61	464
			12 p.m.	3.04	57	11	5.14	712
Dec. 24						12 p.m.	4.94	610
3 a.m.	6.50	1,490	Jan. 23					
6	6.18	1,270	5 a.m.	4.20	320	Jan. 27		
9:30	6.70	1,760	11	3.66	169	6 a.m.	4.41	388
2 p.m.	5.75	1,020	1 p.m.	3.54	142	10	4.13	299
6	6.01	1,260	5	3.57	148	3 p.m.	3.95	246
12 p.m.	5.20	745	7 p.m.	3.71	182	12 p.m.	3.79	202

156. San Joaquin River near Biola, Calif.

Location.--Lat 36°49'22", long 120°05'14", in SE¼SW¼ sec.2, T.13 S., R.17 E., on right bank 1.9 miles downstream from Skaggs Bridge, 4.2 miles northwest of Biola, and at mile 236.3.

Drainage area.--1,805 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 200 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 7,240 cfs Dec. 27 (gage height, 10.52 ft).

1952 to November 1955: Discharge, 2,240 cfs May 11, 1954 (gage height, 6.58 ft).

Remarks.--Flow regulated by Millerton Lake (see station 153) and by other reservoirs described in "Remarks" for station 151.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	59	5,640	11	185	4,760	21	136	4,530
2	65	5,370	12	185	4,590	22	190	4,490
3	68	5,230	13	197	4,560	23	262	4,560
4	63	5,640	14	819	4,540	24	1,660	4,640
5	60	5,930	15	1,070	4,540	25	4,530	5,430
6	61	6,390	16	1,110	4,600	26	6,710	6,120
7	72	6,150	17	954	4,580	27	7,120	6,540
8	103	5,860	18	356	4,530	28	7,040	6,390
9	158	5,830	19	194	4,500	29	6,820	6,170
10	179	5,310	20	148	4,510	30	6,660	6,010
						31	6,040	5,910
Monthly mean discharge, in cubic feet per second							1,719	5,285
Runoff, in acre-feet							105,700	325,000

157. Panoche Creek below Silver Creek, near Panoche, Calif.

(Gaging station, discontinued 1953)

Location.--Lat 36°37'10", long 120°40'25", in SW¼ sec.16, T.15 S., R.12 E., 1.1 miles downstream from Silver Creek, 9 miles east of Panoche, and 18 miles southwest of Mendota. Datum of gage is 558.26 ft above mean sea level, datum of 1929.

Drainage area.--299 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 1,890 cfs Dec. 23 (gage height, 5.52 ft, from crest-stage gage).

1949-53: Discharge, 3,160 cfs Jan. 12, 1952 (gage height, 7.05 ft, from floodmarks), from rating curve extended above 870 cfs on basis of slope-area measurement at gage height 6.25 ft.

158. Fresno River near Knowles, Calif.

Location.--Lat 37°14'15", long 119°46'25", in NW¼ sec.15, T.8 S., R.20 E., on left bank at Fresno Crossing, 0.1 mile downstream from Bean Gulch and 6 miles northeast of Knowles.

Drainage area.--132 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,086.4 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,500 cfs and by slope-area measurement at 13,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 13,300 cfs 5:30 a.m. Dec. 23 (gage height, 11.52 ft).

1911-13, 1915 to November 1955: Discharge, 8,540 cfs Nov. 19, 1950 (gage height, 9.31 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	36	303	11.....	46	144	21.....	141	204
2.....	53	250	12.....	37	137	22.....	1,090	209
3.....	28	215	13.....	35	131	23.....	7,610	1,160
4.....	21	193	14.....	34	148	24.....	3,760	645
5.....	20	197	15.....	32	305	25.....	1,510	2,300
6.....	62	208	16.....	31	482	26.....	1,120	1,510
7.....	94	172	17.....	28	238	27.....	1,220	1,520
8.....	42	208	18.....	31	190	28.....	560	725
9.....	83	165	19.....	94	179	29.....	386	542
10.....	71	151	20.....	179	200	30.....	299	451
						31.....	443	387
Monthly mean discharge, in cubic feet per second.....................							619	447
Runoff, in inches.....................							5.41	3.91
Runoff, in acre-feet.....................							38,070	27,510

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Dec. 25		
12 p.m.......	1.66	102	6 a.m........	11.36	12,900	6 a.m........	4.49	1,720
			8............	9.72	9,340	8............	4.56	1,780
Dec. 22			9............	9.37	8,640	12 m.........	4.28	1,550
2 a.m........	1.64	97	12 m.........	9.01	7,980	6 p.m........	3.83	1,200
4............	1.66	102	2 p.m........	8.25	6,610	12 p.m.......	3.48	962
6............	1.94	193	4............	7.88	6,010			
8............	2.67	497	6............	7.63	5,610	Dec. 26		
10...........	2.93	636	8:30.........	7.40	5,240	3 a.m........	3.31	856
11...........	3.00	675	11...........	8.06	6,300	6............	3.20	790
12 m.........	3.57	1,020	12 p.m.......	7.92	6,070	8............	3.22	802
1 p.m........	4.20	1,490				10...........	3.46	949
2............	4.50	1,730	Dec. 24			12 m.........	3.80	1,180
3............	4.65	1,860	3 a.m........	7.48	5,370	1 p.m........	3.89	1,240
4............	4.68	1,890	6............	6.75	4,250	4............	4.00	1,330
7............	4.36	1,620	8............	6.42	3,790	6............	4.15	1,450
9............	4.40	1,650	9............	6.34	3,680	9............	4.05	1,370
10...........	4.80	2,000	11...........	6.35	3,690	10...........	4.15	1,450
11...........	5.48	2,660	12 m.........	6.30	3,620	12 p.m.......	3.97	1,310
12 p.m.......	6.00	3,240	1 p.m........	6.20	3,480			
			3............	6.25	3,550	Dec. 27		
Dec. 23			4............	6.21	3,490	8 a.m........	4.41	1,660
2 a.m........	8.20	6,520	6............	5.93	3,160	1 p.m........	3.80	1,180
4............	10.85	11,600	8............	5.45	2,630	6............	3.15	942
5............	11.45	13,100	10...........	5.17	2,350	12 p.m.......	.15	760
5:30 a.m.....	11.52	13,300	12 p.m.......	4.90	2,090			

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Fresno River near Knowles, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 21			Jan. 23--Con.			Jan. 26		
12 p.m.	1.95	175	12 p.m.	3.36	886	4 a.m.	4.15	1,230
Jan. 22			Jan. 24			12 m.	3.80	990
						2 p.m.	3.75	960
4 p.m.	1.95	175	6 a.m.	3.03	692	4	3.80	990
8	2.06	215	12 m.	2.86	598	5:30	4.45	1,480
10	2.25	290	9 p.m.	2.73	528	9:30	5.73	2,880
12 p.m.	2.95	636	12 p.m.	3.00	675	11	5.82	2,980
Jan 23			Jan. 25			12 p.m.	5.77	2,920
3 a.m.	3.68	1,100	3 a.m.	3.50	975			
6	4.00	1,330	6	4.21	1,500	Jan. 27		
8	3.85	1,220	9	5.20	2,380	1 a.m.	5.70	2,840
11	4.19	1,480	11	5.85	3,060	6	4.85	1,880
1 p.m.	3.90	1,250	1:30 p.m.	7.09	4,740	12 m.	4.15	1,230
3	3.88	1,240	6	5.38	2,460	6 p.m.	3.87	1,030
6 p.m.	3.82	1,190	12 p.m.	4.46	1,490	12 p.m.	3.65	902

159. Fresno River near Daulton, Calif.

Location.--Lat 37°05'50", long 119°53'20", in NW¼ sec.3, T.10 S., R.19 E., on left bank 0.5 mile downstream from Willow Creek and 5.3 miles southeast of Daulton.

Drainage area.--270 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 385 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,400 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 17,500 cfs 8:30 a.m. Dec. 23 (gage height, 11.64 ft).

1944 to November 1955: Discharge, 10,700 cfs Nov. 19, 1950 (gage height, 10.36 ft), from rating curve extended above 5,500 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	23	630	11	54	260	21	171	362
2	55	499	12	37	252	22	784	330
3	40	418	13	31	236	23	10,400	1,350
4	24	362	14	28	256	24	7,350	920
5	19	338	15	25	439	25	2,850	3,150
6	54	367	16	23	877	26	1,940	1,990
7	117	309	17	21	460	27	2,360	2,670
8	68	392	18	20	362	28	1,090	1,260
9	61	318	19	62	318	29	734	974
10	87	278	20	149	357	30	534	825
						31	922	728
Monthly mean discharge, in cubic feet per second							972	719
Runoff, in inches							4.15	3.07
Runoff, in acre-feet							59,770	44,210

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23--Con.			Dec. 25--Con.		
12 p.m.	1.91	135	12 p.m.	8.55	8,830	12 p.m.	3.93	1,670
Dec. 22			Dec. 24			Dec. 26		
8 a.m.	1.86	124	2 a.m.	9.32	10,700	6 a.m.	3.49	1,270
10	1.90	132	3	9.32	10,700	8	3.44	1,230
12 m.	2.02	165	4	9.35	10,800	10	3.56	1,340
4 p.m.	3.16	682	6	8.75	9,310	12 m.	3.78	1,530
6	4.35	1,680	8	8.17	8,010	3 p.m.	4.62	2,390
9	5.13	2,470	10	7.75	7,220	6	4.97	2,820
12 p.m.	4.85	2,160	12 m.	7.35	6,430	8	4.84	2,660
Dec. 23			3 p.m.	7.27	6,350	10	4.84	2,660
2 a.m.	5.28	2,650	5	7.09	6,110	12 p.m.	4.79	2,600
4	7.52	6,490	6	7.11	6,150			
6	10.10	12,700	8	6.78	5,610	Dec. 27		
8:30	11.64	17,500	12 p.m.	5.92	4,190	1 a.m.	4.88	2,710
10	11.02	15,500	Dec. 25			2	4.82	2,630
12 m.	10.12	12,800	3 a.m.	5.52	3,610	4	4.79	2,600
2 p.m.	9.90	12,200	6	5.26	3,220	7	5.00	2,860
3	9.82	12,000	9	5.12	3,030	11	5.00	2,860
5	9.40	10,900	12 m.	5.00	2,860	12 m.	4.88	2,710
8	8.82	9,480	1 p.m.	5.08	2,970	6 p.m.	4.13	1,850
10	8.45	8,590	3	4.88	2,710	9	3.91	1,630
11 p.m.	8.42	8,520	6 p.m.	4.60	2,370	12 p.m.	3.71	1,470

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Fresno River near Daulton, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 21			Jan. 23--Con.			Jan. 25--Con.		
12 p.m.	2.21	333	9 p.m.	4.15	1,520	9 p.m.	5.87	3,450
			12 p.m.	3.87	1,300	12 p.m.	5.22	2,570
Jan. 22						Jan. 26		
11 a.m.	2.14	318	Jan. 24			6 a.m.	4.48	1,800
6 p.m.	2.16	328	6 a.m.	3.50	1,030	12 m.	4.12	1,500
9	2.21	333	12 m.	3.26	864	3 p.m.	4.00	1,400
12 p.m.	2.39	397	7 p.m.	3.08	747	6	4.10	1,480
			12 p.m.	3.10	760	8	4.60	1,910
Jan. 23						12 p.m.	6.43	4,380
2 a.m.	2.57	482	Jan. 25					
6	3.77	1,220	2 a.m.	3.30	890	Jan. 27		
9	4.21	1,570	5	3.80	1,240	2 a.m.	6.46	4,440
11	4.16	1,530	7	4.55	1,860	6	5.92	3,540
1 p.m.	4.34	1,680	10	5.40	2,790	12 m.	5.00	2,310
3	4.48	1,800	1 p.m.	6.38	4,290	6	4.40	1,730
5 p.m.	4.33	1,670	4 p.m.	7.53	6,520	12 p.m.	4.13	1,500

160. Chowchilla River at Buchanan damsite, California

Location.--Lat 37°13'00", long 119°59'00", in SE¼ sec.22, T.8 S., R.18 E., on right bank 1.9 miles upstream from Raynor Creek and 4.3 miles west of Raymond.

Drainage area.--238 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 407.30 ft above mean sea level, adjustment of 1912 (levels by Merced Irrigation District).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs and by slope-area measurement at 22,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 30,000 cfs 6:30 a.m. Dec. 23 (gage height, 16.50 ft).

1921-23, 1930 to November 1955: Discharge, 22,500 cfs Nov. 18, 1950 (gage height, 15.06 ft, from floodmarks).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	5.6	483	11	26	208	21	209	327
2	23	387	12	18	197	22	2,450	293
3	18	324	13	15	186	23	18,400	1,820
4	11	285	14	12	203	24	8,110	868
5	8.7	272	15	11	419	25	2,450	2,730
6	79	285	16	9.7	927	26	2,190	1,880
7	130	236	17	9.1	425	27	2,520	1,960
8	43	310	18	8.7	330	28	990	1,030
9	38	260	19	149	293	29	659	797
10	44	218	20	379	316	30	491	672
						31	646	595
Monthly mean discharge, in cubic feet per second							1,295	630
Runoff, in inches							6.28	3.05
Runoff, in acre-feet							79,640	38,750

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.	1.90	9.7	6 p.m.	3.16	135	9 a.m.	15.75	26,000
			12 p.m.	2.99	111	11	15.03	22,400
Dec. 19						1 p.m.	14.82	21,400
3 p.m.	2.09	19	Dec. 22			6	12.62	12,600
4	2.14	23	4 a.m.	2.95	105	11	11.37	8,920
5	4.10	333	7	3.03	116	12 p.m.	11.71	9,830
6	4.62	514	10	3.25	148	Dec. 24		
7	4.65	526	11	4.20	364	1 a.m.	11.60	9,500
9	4.50	468	12 m.	5.80	1,070	4	13.05	14,100
12 p.m.	4.15	348	1 p.m.	9.35	4,680	9	11.06	8,150
			3	10.08	6,000	12 m.	10.57	6,990
Dec. 20			7	9.20	4,400	2 p.m.	10.35	6,540
4 a.m.	3.86	267	9	9.46	4,870	5	10.33	6,500
10	4.20	364	12 p.m.	8.78	3,790	8	10.00	5,840
12 m.	4.20	364				12 p.m.	8.88	3,930
5 p.m.	4.53	479	Dec. 23					
6	4.54	483	1 a.m.	10.00	5,840	Dec. 25		
8	4.51	472	2	13.20	14,600	2 a.m.	8.45	3,330
12 p.m.	4.26	384	3	15.40	24,200	7	7.99	2,780
			4	16.10	27,800	9	7.92	2,700
Dec. 21			5	16.08	27,700	5 p.m.	7.04	1,930
12 m.	3.42	175	6:30 a.m.	16.50	30,000	12 p.m.	6.59	1,580

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Chowchilla River at Buchanan damsite, California--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 26			Jan. 23			Jan. 25--Con.		
9 a.m.	6.11	1,260	2 a.m.	5.41	865	12 m.	8.65	3,610
12 m.	6.29	1,370	3	8.22	1,320	2 p.m.	9.72	5,340
3 p.m.	7.20	2,060	4	7.30	2,140	3	9.54	5,010
7	8.90	3,960	5:30	7.84	2,620	6	8.43	3,300
9	8.64	3,600	8	7.45	2,260	8	7.87	2,650
10	8.74	3,740	10	7.15	2,020	10	7.40	2,220
11	8.64	3,600	12 m.	6.99	1,890	12 p.m.	7.15	2,020
12 p.m.	8.84	3,880	1 p.m.	7.10	1,980	Jan. 26		
			3	7.00	1,900	2 a.m.	7.06	1,950
Dec. 27			5	7.34	2,170	4	6.90	1,820
1 a.m.	8.76	3,760	7	7.00	1,900	9	6.42	1,460
2	8.81	3,830	9	6.59	1,580	12 m.	6.23	1,330
6	8.44	3,320	12 p.m.	6.13	1,270	2 p.m.	6.16	1,290
12 m.	7.66	2,440				4	6.17	1,290
6 p.m.	6.74	1,690	Jan. 24			6	6.68	1,650
9	6.44	1,480	6 a.m.	5.58	950	8	8.08	2,880
12 p.m.	6.22	1,320	12 m.	5.31	816	9	8.12	2,920
Jan. 21			9 p.m.	5.03	686	12 p.m.	8.51	3,410
12 p.m.	3.96	293	12 p.m.	5.12	726	Jan. 27		
Jan. 22			Jan. 25			3 a.m.	7.97	2,760
12 m.	3.87	270	3 a.m.	5.55	935	9	7.22	2,080
6 p.m.	3.88	272	6	6.85	1,780	3 p.m.	6.56	1,560
9	4.03	313	8	8.00	2,790	6	6.37	1,430
12 p.m.	4.48	461	10 a.m.	8.36	3,210	12 p.m.	6.07	1,230

161. Salt Slough near Los Banos, Calif.

Location.--Lat 37°09'35", long 120°48'45", on left bank in Sanjon de Santa Rita Grant at San Luis Ranch, 7 miles north of Los Banos, Merced County.

Gage-height record.--Water-stage recorder graph. Datum of gage is 70.60 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 510 cfs.

Maxima.--December 1955 to January 1956: Discharge, 620 cfs Jan. 30, 31 (gage height, 6.60 ft).
1940 to November 1955: Daily discharge, 2,420 cfs Mar. 9, 1941.

Remarks.--Flow affected by overflow from San Joaquin River. Salt Slough is a continuation of Pick Anderson Slough system.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	34	498	11	40	494	21	38	525
2	36	496	12	41	490	22	40	514
3	36	496	13	40	480	23	57	512
4	36	486	14	42	476	24	101	506
5	36	498	15	49	476	25	135	525
6	35	523	16	49	484	26	153	556
7	36	500	17	43	484	27	407	578
8	36	496	18	42	494	28	454	596
9	38	498	19	42	494	29	503	611
10	40	496	20	39	506	30	521	620
						31	519	618
Monthly mean discharge, in cubic feet per second							120	517
Runoff, in acre-feet							7,370	31,790

162. San Joaquin River at Fremont Ford Bridge, Calif.

Location.--Lat 37°18'35", long 120°55'45", in Orestimba Grant, on left bank 150 ft downstream from Fremont Ford Bridge, Merced County, 2.1 miles downstream from Salt Slough, 4.5 miles west of Stevinson, and 6.7 miles upstream from Merced River.

Drainage area.--8,090 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 3.73 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge and slope-stage-discharge relations defined by current-meter measurements. Discharge during periods of backwater from Merced River, Dec. 28 to Jan. 2, Jan. 27-31, computed by using fall between stations at Fremont Ford Bridge and near Newman as a factor.

Maxima.--December 1955 to January 1956: Discharge, 4,420 cfs 6 a.m. to 11 a.m. Jan. 30 (gage height, 69.78 ft, during period of backwater).

1944 to November 1955: Discharge, 4,470 cfs Mar. 25, 1952; gage height, 69.67 ft June 3, 1952.

Remarks.--Flow regulated by many reservoirs. During periods of high flow, some water bypasses this station through Mud Slough.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	44	4,320	11.....	52	4,050	21.....	45	4,040
2.....	40	4,250	12.....	76	4,020	22.....	45	3,990
3.....	44	4,320	13.....	74	4,000	23.....	93	3,940
4.....	43	4,250	14.....	48	3,970	24.....	904	3,930
5.....	43	4,250	15.....	45	3,940	25.....	2,500	4,050
6.....	38	4,270	16.....	46	3,930	26.....	3,490	4,170
7.....	40	4,270	17.....	68	3,950	27.....	4,240	4,190
8.....	49	4,230	18.....	65	4,040	28.....	4,330	4,220
9.....	55	4,160	19.....	50	4,080	29.....	4,390	4,390
10.....	51	4,090	20.....	49	4,090	30.....	4,360	4,410
						31.....	4,360	4,360
Monthly mean discharge, in cubic feet per second..........................							961	4,135
Runoff, in acre-feet..							59,060	254,200

163. Los Banos Creek near Los Banos, Calif.

(Miscellaneous site)

Location.--Lat 36°59', long 120°57', in SE$\frac{1}{4}$ sec.11, T.11 S., R.9 E., 3.8 miles upstream from Bureau of Reclamation gaging station and 5 miles southwest of Los Banos. Altitude is 270 ft (from topographic map).

Drainage area.--156 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 11,400 cfs Dec. 23.

164. San Luis Creek near Los Banos, Calif.

(Gaging station, discontinued in 1953)

Location.--Lat 37°03'55", long 121°04'15", in San Luis Gonzaga Grant, 300 ft downstream from Cottonwood Creek and 11.5 miles west of Los Banos. Altitude is 230 ft (from topographic map).

Drainage area.--84.7 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 2,640 cfs Dec. 23 (gage height, 7.07 ft inside gage well; 7.5 ft outside, from profile of floodmarks).

1949-53: Discharge, 2,760 cfs Nov. 19, 1950 (gage height, 5.60 ft), by slope-area measurement.

165. Merced River at Happy Isles Bridge, near Yosemite, Calif.

Location.--Lat 37°43'54", long 119°33'28", on right bank 10 ft downstream from Happy Isles Bridge, 0.4 mile downstream from Illilouette Creek, and 2.0 miles southeast of Yosemite National Park Headquarters, Mariposa County.

Drainage area.--181 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,016.58 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,000 cfs and by contracted-opening measurements at 8,400 and 9,260 cfs.

Maxima.--December 1955 to January 1956: Discharge, 9,860 cfs 5:30 a.m. Dec. 23 (gage height, 12.73 ft).

1915 to November 1955: Discharge, 9,260 cfs Nov. 18, 1950 (gage height, 11.55 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	21	372	11.....	64	259	21.....	96	306
2.....	26	329	12.....	66	264	22.....	2,690	329
3.....	24	315	13.....	63	257	23.....	7,480	349
4.....	24	306	14.....	62	274	24.....	2,350	309
5.....	28	303	15.....	62	449	25.....	1,240	320
6.....	66	298	16.....	56	575	26.....	1,070	326
7.....	60	290	17.....	54	425	27.....	808	320
8.....	52	277	18.....	52	352	28.....	604	320
9.....	97	267	19.....	64	317	29.....	495	309
10.....	70	262	20.....	85	312	30.....	452	301
						31.....	411	285
Monthly mean discharge, in cubic feet per second							606	322
Runoff, in inches							3.86	2.05
Runoff, in acre-feet							37,270	19,790

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23			Dec. 25		
12 p.m.......	2.62	106	2 a.m........	11.20	9,060	10 a.m.......	5.25	1,240
			4............	12.50	9,750	6 p.m........	5.12	1,140
Dec. 21			5............	12.65	9,820	12 p.m.......	5.02	1,080
12 m.........	2.50	85	5:30.........	12.73	9,860			
6 p.m........	2.51	87	6............	12.64	9,820	Dec. 26		
10...........	2.62	106	8............	11.98	9,490	6 a.m........	4.90	1,010
11...........	2.69	118	10...........	11.11	9,000	9............	5.02	1,080
12 p.m.......	2.87	155	12 m.........	10.46	8,460	12 m.........	5.22	1,210
			3 p.m........	9.23	6,880	6 p.m........	4.99	1,060
Dec. 22			6............	8.45	5,520	12 p.m.......	4.80	950
3 a.m........	3.72	423	12 p.m.......	7.52	3,780			
8............	5.34	1,300				Dec. 27		
12 m.........	6.61	2,490	Dec. 24			6 a.m........	4.65	868
3 p.m........	7.36	3,520	3 a.m........	6.97	2,940	12 m.........	4.50	785
5............	7.52	3,780	6............	6.92	2,870	6 p.m........	4.44	755
9............	8.12	4,860	12 m.........	6.42	2,280	12 p.m.......	4.33	700
12 p.m.......	9.55	7,350	6 p.m........	5.93	1,810			
			12 p.m.......	5.58	1,490			

166. Tenaya Creek near Yosemite, Calif.

Location.--Lat 37°44'32", long 119°33'25", in Yosemite National Park, on left bank at bridge, 0.7 mile upstream from mouth and 1.7 miles east of Yosemite National Park Headquarters, Mariposa County.

Drainage area.--47 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,000 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 910 cfs and by contracted-opening measurement at 5,150 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,730 cfs 4 a.m. Dec. 23 (gage height, 8.14 ft).

1904-9, 1912 to November 1955: Discharge, 6,800 cfs Dec. 11, 1937 (gage height, 10.00 ft), from rating curve extended above 2,000 cfs on basis of contracted-opening measurement of 5,150 cfs.

Mean discharge, in cubic feet per second, 1955-56, of Tenaya Creek near Yosemite, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	2.2	146	11.....	10	89	21.....	37	112
2.....	3.1	130	12.....	9.4	89	22.....	995	119
3.....	3.4	119	13.....	9.4	89	23.....	2,860	135
4.....	3.8	111	14.....	8.2	98	24.....	1,190	120
5.....	3.8	105	15.....	7.6	216	25.....	646	112
6.....	9.4	101	16.....	6.4	282	26.....	491	130
7.....	8.2	97	17.....	6.4	193	27.....	348	98
8.....	7.6	94	18.....	5.8	154	28.....	265	136
9.....	19	89	19.....	10	133	29.....	205	111
10.....	14	86	20.....	20	123	30.....	173	100
						31.....	155	91
Monthly mean discharge, in cubic feet per second							243	123
Runoff, in inches							5.96	3.01
Runoff, in acre-feet							14,940	7,550

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23--Con.			Dec. 26--Con.		
12 p.m.......	1.40	37	10 a.m.......	6.83	3,090	12 p.m.......	2.75	420
			11...........	6.53	2,770			
Dec. 21			1 p.m........	6.26	2,500	Jan. 13		
4 p.m........	1.36	32	6............	5.89	2,160	2 p.m........	1.16	89
7............	1.37	33	11...........	5.61	1,920			
9............	1.40	37	12 p.m.......	5.40	1,750	Jan. 14		
12 p.m.......	1.67	77				12 m.........	1.21	94
			Dec. 24			6 p.m........	1.28	103
Dec. 22			12:30 a.m....	5.20	1,610	10...........	1.36	113
1 a.m........	1.87	133	1:30.........	5.32	1,700	12 p.m.......	1.37	115
6............	3.46	699	4............	5.10	1,540			
7............	3.42	683	12 m.........	4.45	1,130	Jan. 15		
8............	3.64	773	5 p.m........	4.07	935	10 a.m.......	1.39	118
9............	4.09	976	12 p.m.......	3.78	801	12 m.........	1.42	122
10:30........	4.35	1,100				1 p.m........	1.46	127
11...........	4.22	1,040	Dec. 25			2............	1.58	146
2 p.m........	4.58	1,220	6 a.m........	3.59	721	5............	2.54	357
7............	4.62	1,240	8............	3.46	669	6............	2.62	381
9............	4.71	1,300	3 p.m........	3.31	609	8:30.........	2.78	429
12 p.m.......	5.92	2,190	12 p.m.......	3.05	518	12 p.m.......	2.55	360
Dec. 23			Dec. 26			Jan. 16		
1 a.m........	6.38	2,620	6 a.m........	2.91	468	9 a.m........	2.27	288
4............	8.14	4,730	8............	2.93	476	11...........	2.20	270
6............	7.90	4,400	11:30........	3.24	584	2 p.m........	2.22	275
8............	7.20	3,520	7 p.m........	2.83	444	5............	2.17	262
9:30 a.m.....	6.55	2,790	10 p.m.......	2.80	435	12 p.m.......	1.95	215

167. Merced River at Pohono Bridge, near Yosemite, Calif.

Location.--Lat 37°43'01", long 119°39'55", on left bank 150 ft upstream from Pohono Bridge, 0.4 mile upstream from Artist Creek, and 4.8 miles southwest of Yosemite National Park Headquarters, Mariposa County.

Drainage area.--321 sq mi.

Gage-height record.--Water-stage recorder graph except 3:30 a.m. Dec. 23 to 6 p.m. Dec. 27. Peak stage obtained from floodmark in gage house. Datum of gage is 3,861.66 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,100 cfs and by computations of peak flow over diversion dam 1 mile downstream of 22,000 cfs and 23,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 23,400 cfs about 6 a.m. Dec. 23 (gage height, 21.52 ft).

1916 to November 1955: Discharge, 23,000 cfs Nov. 19, 1950 (gage height, 20.98 ft, from floodmark in gage house).

Mean discharge, in cubic feet per second, 1955-56, of Merced River at Pohono Bridge near Yosemite, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	54	871	11.....	154	548	21.....	265	715
2.....	58	783	12.....	150	564	22.....	4,960	761
3.....	58	720	13.....	144	548	23.....	18,000	994
4.....	56	675	14.....	137	589	24.....	5,300	756
5.....	60	660	15.....	137	1,080	25.....	2,700	827
6.....	126	628	16.....	130	1,630	26.....	2,300	882
7.....	142	596	17.....	122	1,120	27.....	1,700	761
8.....	120	578	18.....	123	937	28.....	1,360	700
9.....	217	556	19.....	172	816	29.....	1,080	610
10.....	180	544	20.....	208	766	30.....	959	596
						31.....	926	560
Monthly mean discharge, in cubic feet per second							1,358	754
Runoff, in inches							4.88	2.71
Runoff, in acre-feet							83,500	46,360

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23--Con.			Jan. 15--Con.		
12 p.m.	3.20	276	6 a.m.	21.52	23,400	5 a.m.	4.52	761
						1 p.m.	4.58	794
Dec. 21			Dec. 27			4	4.90	970
4 a.m.	3.21	278	6 p.m.	5.96	1,670	6	5.34	1,240
8	3.14	262	12 p.m.	5.78	1,550	7	5.86	1,600
4 p.m.	3.04	238				9	6.28	1,920
8	3.11	254	Dec. 28			11	6.51	2,110
10	3.22	281	8 a.m.	5.56	1,390	11:30	6.53	2,120
12 p.m.	3.54	363	12 m.	5.34	1,240	12 p.m.	6.52	2,120
			1 p.m.	5.44	1,310			
Dec. 22			6	5.48	1,340	Jan. 16		
2 a.m.	4.20	590	9	5.41	1,290	2 a.m.	6.43	2,040
5	6.16	1,700	12 p.m.	5.25	1,180	10	5.85	1,600
6	6.95	2,340				2 p.m.	5.72	1,500
12 m.	9.40	4,980	Jan. 13			9	5.56	1,390
5 p.m.	10.60	6,740	12 p.m.	4.06	544	12 p.m.	5.41	1,290
7	11.00	7,460	Jan. 14					
9	11.54	8,520	8 a.m.	4.12	569	Jan. 17		
11	12.50	10,600	2 p.m.	4.13	574	6 a.m.	5.16	1,130
12 p.m.	13.60	13,400	6	4.19	600	10	5.09	1,080
			12 p.m.	4.41	705	2 p.m.	5.13	1,110
Dec. 23						8	5.07	1,070
2 a.m.	16.00	17,900	Jan. 15			12 p.m.	4.98	1,020
3 a.m.	17.70	20,000	1 a.m.	4.45	725			

168. South Fork Merced River near El Portal, Calif.

Location.--Lat 37°39'05", long 119°53'05", in NW¼NE¼ sec.29, T.3 S., R.19 E., on right bank 1,400 ft upstream from mouth and 6.2 miles west of El Portal.

Drainage area.--239 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,700 cfs and by slope-area measurement of 37,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 46,500 cfs 5:30 a.m. Dec. 23 (gage height, 18.70 ft).

1950 to November 1955: Discharge, 37,600 cfs Nov. 19, 1950 (gage height, 17.63 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	67	779	11.....	102	477	21.....	375	626
2.....	96	695	12.....	84	491	22.....	3,540	661
3.....	53	626	13.....	76	474	23.....	29,400	1,960
4.....	39	581	14.....	71	521	24.....	10,200	1,210
5.....	34	563	15.....	65	1,120	25.....	4,010	2,300
6.....	171	550	16.....	63	1,770	26.....	3,920	2,440
7.....	188	509	17.....	58	991	27.....	3,940	2,320
8.....	89	529	18.....	56	768	28.....	1,710	1,400
9.....	217	494	19.....	334	665	29.....	1,240	1,040
10.....	154	470	20.....	569	635	30.....	984	893
						31.....	899	779
Monthly mean discharge, in cubic feet per second							2,026	946
Runoff, in inches							9.77	4.56
Runoff, in acre-feet							124,600	58,190

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Fork Merced River near El Portal, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23--Con.			Dec. 26--Con.		
12 p.m.	3.82	66	4 a.m.	18.25	42,500	4 p.m.	11.48	6,260
			5:30	18.70	46,500	8	10.65	4,670
Dec. 19			7	18.56	45,200	12 p.m.	10.78	4,900
3 a.m.	3.97	85	9	18.61	45,700			
6	4.39	152	10	18.00	40,500	Dec. 27		
9	5.32	419	12 m.	16.80	31,500	2 a.m.	10.78	4,900
11	5.63	537	2 p.m.	15.96	26,100	4 p.m.	9.40	2,800
8 p.m.	5.16	365	4	15.44	22,700	12 p.m.	8.88	2,240
12 p.m.	5.32	419	8	14.58	17,900			
			9	14.65	18,300	Jan. 14		
Dec. 20			11	15.12	20,900	12 p.m.	6.68	626
8 a.m.	5.37	436	12 p.m.	14.80	19,100			
12 m.	5.79	606				Jan. 15		
4 p.m.	6.01	705	Dec. 24			3 a.m.	6.77	670
6	6.06	730	4 a.m.	13.37	12,200	6	6.80	685
8	6.03	715	6	13.01	10,800	12 m.	6.77	670
12 p.m.	5.81	614	8	13.05	11,000	3 p.m.	6.85	710
			10	12.66	9,560	6	7.33	984
Dec. 21			11	12.58	9,280	9	8.60	1,980
6 a.m.	5.40	447	2 p.m.	12.78	9,980	12 p.m.	9.27	2,640
12 m.	5.08	339	4	12.65	9,520			
6 p.m.	4.89	279	6	12.31	6,430	Jan. 16		
12 p.m.	4.80	253	9	11.65	6,620	3 a.m.	9.15	2,510
			12 p.m.	11.24	5,780	6	8.76	2,120
Dec. 22						12 m.	8.18	1,610
3 a.m.	4.82	259	Dec. 25			6 p.m.	7.86	1,360
6	4.98	307	6 a.m.	10.73	4,810	12 p.m.	7.66	1,210
9	6.05	725	12 m.	10.12	3,790			
12 m.	9.80	4,180	6 p.m.	9.68	3,150	Jan. 17		
2 p.m.	10.42	5,340	12 p.m.	9.37	2,760	6 a.m.	7.44	1,060
4	10.78	6,060				12 m.	7.29	959
6	10.63	5,760	Dec. 26			6 p.m.	7.20	905
9	10.65	5,800	7 a.m.	8.98	2,340	12 p.m.	7.14	869
12 p.m.	12.50	10,500	9	9.03	2,390			
			11	9.52	2,940			
Dec. 23			2 p.m.	11.18	5,660			
2 a.m.	15.50	23,200	3 p.m.	11.45	6,200			

169. Merced River at Bagby, Calif.

Location.--Lat 37°36'40", long 120°07'50", in SE¼ sec.6, T.4 S., R.17 E., on left bank 800 ft upstream from highway bridge at Bagby and 0.3 mile upstream from Flyaway Gulch.

Drainage area.--912 sq mi.

Gage-height record.--Water-stage recorder graph except 2 a.m. Dec. 23 to 11 a.m. Dec. 24, 12 m. Dec. 28 to 12 p.m. Jan. 31. Graph was reconstructed for Jan. 8, 18-31 on basis of twice-daily outside gage readings and gage-height graphs for stations at Pohono Bridge and South Fork Merced River near El Portal. Datum of gage is 779.52 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 25,000 cfs and extended above on basis of change in reservoir contents in Lake McClure about 6 miles downstream. Discharge for period of no gage-height record computed on basis of records for stations at Pohono Bridge and South Fork Merced River near El Portal, and record of change in contents in Lake McClure.

Maxima.--December 1955 to January 1956: Discharge, 92,500 cfs 10 a.m. Dec. 23 (gage height, 26.80 ft, from floodmarks).

1922 to November 1955: Discharge, 83,000 cfs Nov. 19, 1950 (gage height, 26.96 ft, from floodmarks).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	164	2,600	11	406	1,700	21	1,100	2,140
2	355	2,300	12	341	1,650	22	9,690	2,360
3	213	2,150	13	318	1,700	23	66,000	6,840
4	170	2,050	14	296	1,600	24	31,500	4,350
5	150	2,000	15	278	3,650	25	11,000	7,430
6	515	1,950	16	269	6,750	26	10,500	7,940
7	689	1,900	17	252	3,710	27	10,000	6,110
8	375	1,880	18	244	2,800	28	5,070	4,540
9	578	1,800	19	812	2,340	29	3,600	3,310
10	582	1,750	20	1,410	2,180	30	3,100	2,720
						31	2,900	2,380
Monthly mean discharge, in cubic feet per second							5,254	3,251
Runoff, in inches							6.64	4.11
Runoff, in acre-feet							323,100	199,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Merced River at Bagby, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22--Con.			Dec. 24--Con.		
12 p.m.	1.78	252	8 a.m.	4.67	3,020	8 a.m.	-	36,200
			10	6.85	7,300	9	14.85	31,800
Dec. 19			12 m.	8.69	11,900	12 m.	13.85	27,900
5 a.m.	1.87	292	1 p.m.	9.30	13,500	3 p.m.	13.33	26,100
6	2.39	569	2	9.70	14,700	6	12.45	23,000
7	2.30	515	4	10.10	15,800	9	11.28	19,200
9	2.57	689	6:30	10.43	16,700	12 p.m.	10.20	16,100
12 m.	2.58	696	8	10.13	15,900			
2 p.m.	3.05	1,080	9	10.16	15,900	Dec. 25		
5	3.25	1,270	10	10.32	16,400	6 a.m.	9.00	12,800
9	3.13	1,150	12 p.m.	12.45	23,000	12 m.	8.12	10,500
11	3.28	1,300				6 p.m.	7.40	8,840
12 p.m.	3.27	1,290	Dec. 23			12 p.m.	6.97	7,890
			2 a.m.	17.60	43,100			
Dec. 20			4	-	71,200	Dec. 26		
3 a.m.	3.14	1,160	5	-	84,600	6 a.m.	6.50	6,900
5	3.29	1,310	6	-	81,600	8	6.43	6,760
7	3.28	1,300	8	-	88,900	10	6.50	6,900
9	3.21	1,230	9	-	91,500	12 m.	7.50	9,060
12 m.	3.28	1,300	10	26.80	92,500	3 p.m.	9.15	13,200
5 p.m.	3.63	1,680	12 m.	-	80,600	5	9.72	14,700
9	3.59	1,630	5 p.m.	-	57,700	7	9.80	14,900
12 p.m.	3.52	1,540	6	-	57,700	9	9.67	14,600
			7	-	52,300	12 p.m.	9.67	14,600
Dec. 21			8	-	56,700			
12 m.	3.02	1,050	9	-	54,500	Dec. 27		
12 p.m.	2.68	766	10	-	45,800	3 a.m.	9.55	14,200
			11	-	47,900	6	8.85	12,400
Dec. 22			12 p.m.	-	52,300	9	8.20	10,700
3 a.m.	2.66	752				12 m.	7.65	9,420
5	2.69	773	Dec. 24			6 p.m.	6.80	7,520
6	3.16	1,180	1 a.m.	-	53,400	12 p.m.	6.20	6,300
7 a.m.	4.10	2,240	6 a.m.	-	39,800			

170. Lake McClure at Exchequer, Calif.

Location.--Lat 37°35'10", long 120°16'05", near center of sec.13, T.4 S., R.15 E., at center of upstream face of Exchequer Dam on Merced River, 1 mile east of Exchequer and 5.5 miles northeast of Merced Falls.

Drainage area.--1,020 sq mi.

Gage-height record.--Indicator in powerhouse at foot of dam actuated by float in reservoir and selsyn motor circuit; indicator read every half hour when powerhouse is operating, once daily (at 12 p.m.) when it is not operating. Datum of gage is at mean sea level (levels by Merced Irrigation District).

Maxima.--December 1955 to January 1956: Contents, 279,700 acre-ft 12 m. to 7 p.m. Dec. 27 (elevation, 706.4 ft).

1926 to November 1955: Contents, 290,800 acre-ft Dec. 4, 1950 (elevation, 710.5 ft).

Remarks.--Lake is formed by concrete gravity-type dam. Usable capacity, 280,900 acre-ft between elevations 442.6 ft (bottom of sluice valve) and 707.0 ft (top of spillway gates) above mean sea level. Water passes through powerplant at dam and down Merced River to diversion dam of Merced Irrigation District's main canal.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	481.8	3,800	688.7	235,300	16	524.0	15,600	687.4	232,200
2	486.6	4,610	688.4	234,600	17	525.3	16,200	686.5	230,200
3	489.0	5,040	687.1	231,500	18	526.4	16,700	684.8	226,200
4	490.5	5,310	686.2	229,500	19	529.5	18,200	683.3	222,800
5	491.6	5,520	685.3	227,400	20	535.4	21,500	683.0	222,100
6	498.3	6,980	684.3	225,100	21	539.1	23,800	683.3	222,800
7	504.8	8,640	683.7	223,700	22	573.5	50,500	683.4	223,000
8	507.8	9,540	684.1	224,600	23	672.4	198,700	687.1	231,500
9	512.3	11,000	684.5	225,600	24	698.2	258,500	686.5	230,200
10	515.1	11,900	685.0	226,700	25	700.7	264,800	688.7	235,300
11	517.3	12,700	685.3	227,400	26	703.7	272,600	692.2	243,700
12	518.9	13,400	685.7	228,300	27	706.1	278,900	694.7	249,800
13	520.4	14,000	685.8	228,500	28	703.2	271,300	693.0	245,600
14	521.7	14,500	684.9	226,500	29	699.0	260,500	690.4	239,400
15	522.9	15,100	685.3	227.400	30	693.9	247,800	687.5	232,400
					31	690.8	240,300	684.8	226,200
Change in contents						-	+236,800	-	-14,100

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955, of Lake McClure at Exchequer, Calif.

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 20			Dec.23-Con.			Dec.25-Con.		
12 p.m.....	535.4	21,500	2 p.m......	646.0	148,000	12 p.m.....	700.7	264,800
			4..........	652.6	159,700			
Dec. 21			6..........	658.3	170,300	Dec. 26		
12 p.m.....	539.1	23,800	8..........	663.4	180,300	4 a.m......	700.8	265,100
			10.........	668.0	189,500	11.........	700.7	264,800
Dec. 22			12 p.m.....	672.4	198,700	2 p.m......	700.5	264,300
6 a.m......	541.2	25,100				8..........	702.4	269,200
10:30......	544.5	27,200	Dec. 24			12 p.m.....	703.7	272,600
1:30 p.m...	549.5	30,600	3 a.m......	678.6	212,100			
8..........	564.0	41,900	6..........	683.1	222,300	Dec. 27		
10.........	568.1	45,600	9..........	686.6	230,400	6 a.m......	705.4	277,000
12 p.m.....	573.5	50,500	12 m.......	691.0	240,800	12 m.......	706.4	279,700
			3 p.m......	693.4	246,600	7 p.m......	706.4	279,700
Dec. 23			6..........	695.4	251,500	12 p.m.....	706.1	278,900
2 a.m......	581.7	58,800	9..........	697.0	255,500			
4..........	592.7	71,100	12 p.m.....	698.2	258,500	Dec. 28		
6..........	605.1	86,400				8 a.m......	705.5	277,300
8..........	616.9	102,400	Dec. 25			12 m.......	705.0	276,000
10.........	628.4	119,300	6 a.m......	699.6	262,000	5 p.m......	704.3	274,200
12 m.......	638.0	134,500	4 p.m......	700.7	264,800	12 p.m.....	703.2	271,300

171. Merced River at Exchequer, Calif.

Location.--Lat 37°34'55", long 120°16'45", on line between secs. 13 and 14, T.4 S., R.15 E., on right bank at Exchequer, 0.65 mile downstream from Lake McClure and 5 miles northeast of Merced Falls.

Drainage area.--1,035 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 10,400 cfs 6 a.m. Dec. 27 (gage height, 11.00 ft).
1915 to November 1955: Discharge, 46,200 cfs Dec. 4, 1950 (gage height, 22.6 ft, from floodmarks), from rating curve extended above 13,000 cfs on basis of computation of peak flow over dam.

Remarks.--Flow regulated by Lake McClure (see station 170).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	50	4,780	11.....	50	1,250	21.....	51	2,000
2.....	51	3,360	12.....	51	1,240	22.....	65	2,060
3.....	51	2,980	13.....	52	1,740	23.....	122	4,490
4.....	48	3,060	14.....	52	3,130	24.....	6,800	5,550
5.....	49	3,440	15.....	53	3,130	25.....	8,980	5,890
6.....	55	3,340	16.....	53	5,070	26.....	8,980	6,430
7.....	50	2,200	17.....	52	5,160	27.....	9,500	7,340
8.....	48	1,550	18.....	49	5,110	28.....	9,140	7,270
9.....	48	1,530	19.....	46	3,970	29.....	9,000	6,790
10.....	49	1,520	20.....	44	2,280	30.....	8,320	6,480
						31.....	6,330	5,790
Monthly mean discharge, in cubic feet per second......................							2,203	3,869
Runoff, in acre-feet...							135,400	237,900

Peak discharge.--Jan. 16 (7:30 a.m.) 5,410 cfs (gage height, 7.68 ft); Jan. 28 (1 a.m.) 8,000 cfs (gage height, 9.47 ft).

172. Merced River near Stevinson, Calif.

Location.--Lat 37°22'15", long 120°55'45", in SW¼NE¼ sec.36, T.6 S., R.9 E., on right bank 5 miles upstream from mouth and 6 miles northwest of Stevinson.

Drainage area.--1,274 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 55.09 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 11,200 cfs 4 a.m. Dec. 28 (gage height, 18.10 ft).

1940 to November 1955: Discharge, 13,600 cfs Dec. 5, 1950 (gage height, 19.05 ft).

Remarks.--Flow regulated by Lake McClure (see station 170).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	120	8,230	11.....	142	2,140	21.....	149	3,320
2.....	123	6,560	12.....	142	1,940	22.....	152	2,590
3.....	120	4,530	13.....	141	1,850	23.....	206	2,570
4.....	126	3,790	14.....	139	1,940	24.....	3,630	4,460
5.....	129	3,760	15.....	138	3,200	25.....	5,940	5,510
6.....	127	4,950	16.....	139	4,170	26.....	7,670	6,080
7.....	130	4,390	17.....	141	5,400	27.....	9,280	6,770
8.....	130	3,320	18.....	143	5,500	28.....	10,900	7,550
9.....	138	2,590	19.....	141	5,490	29.....	10,200	7,630
10.....	138	2,260	20.....	145	4,800	30.....	9,810	7,310
						31.....	9,540	7,000
Monthly mean discharge, in cubic feet per second							2,264	4,568
Runoff, in acre-feet							139,200	280,900

173. Merced River Slough near Newman, Calif.

Location.--Lat 37°21'35", long 120°57'40", in NE¼NE¼ sec.3, T.7 S., R.9 E., on left bank 0.1 mile downstream from bridge, 0.2 mile downstream from head of slough between Merced and San Joaquin Rivers, and 4.5 miles northeast of Newman.

Gage-height record.--Water-stage recorder graph. Datum of gage is 54.44 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 4,240 cfs 9 a.m. to 2 p.m. Dec. 28 (gage height, 10.90 ft).

1941 to November 1955: Discharge, 6,410 cfs Dec. 5, 1950 (gage height, 11.29 ft), from rating curve extended above 3,400 cfs.

Remarks.--Slough flows from Merced River to San Joaquin River, bypassing gaging station on San Joaquin River near Newman.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	2,980	11.....	0	181	21.....	0	432
2.....	0	2,060	12.....	0	142	22.....	0	270
3.....	0	833	13.....	0	125	23.....	0	234
4.....	0	537	14.....	0	126	24.....	143	500
5.....	0	505	15.....	0	280	25.....	482	784
6.....	0	746	16.....	0	428	26.....	855	1,090
7.....	0	647	17.....	0	689	27.....	2,310	1,510
8.....	0	441	18.....	0	764	28.....	4,140	2,060
9.....	0	302	19.....	0	840	29.....	4,040	2,350
10.....	0	217	20.....	0	702	30.....	3,850	2,350
						31.....	3,660	2,140
Monthly mean discharge, in cubic feet per second							628	880
Runoff, in acre-feet							38,640	54,080

174. San Joaquin River near Newman, Calif.

Location.--Lat 37°21'02", long 120°58'34", in SW¼ sec.3, T.7 S., R.9 E., on left bank at bridge on Hills Ferry road, 300 ft downstream from Merced River and 3.5 miles northeast of Newman.

Drainage area.--9,990 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 47.235 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 16,800 cfs 5-12 p.m. Dec. 29 (gage height, 17.05 ft).
1912 to November 1955: Discharge, 33,000 cfs Mar. 7, 1938 (gage height, 18.50 ft), including flow in Merced River Slough.

Remarks.--Flow regulated by many reservoirs. Record for Merced River Slough (see station 173) shows flow bypassing station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	180	15,600	11.....	203	9,560	21.....	205	10,800
2.....	180	14,400	12.....	217	9,170	22.....	205	9,920
3.....	176	12,700	13.....	231	8,920	23.....	252	9,470
4.....	180	11,700	14.....	201	8,790	24.....	2,920	9,970
5.....	185	11,500	15.....	194	9,400	25.....	6,270	11,000
6.....	183	11,900	16.....	194	9,990	26.....	e,840	11,800
7.....	183	12,000	17.....	205	10,700	27.....	12,100	12,700
8.....	189	11,400	18.....	222	11,100	28.....	15,600	13,800
9.....	205	10,600	19.....	205	11,400	29.....	16,700	15,300
10.....	201	9,990	20.....	205	11,500	30.....	16,600	16,000
						31.....	16,300	15,600
Monthly mean discharge, in cubic feet per second......................							3,224	11,570
Runoff, in acre-feet..							198,200	711,400

175. Orestimba Creek near Newman, Calif.

Location.--Lat 37°19'09", long 121°07'12", on line between secs. 17 and 20, T.7 S., R.8 E., on left bank 120 ft downstream from highway bridge, 3 miles downstream from Oso Creek, and 5 miles west of Newman.

Drainage area.--135 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 191.86 ft above mean sea level, adjustment of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 5,620 cfs 10 a.m. Dec. 23 (gage height, 5.18 ft).
1932 to November 1955: Discharge, 6,450 cfs Jan. 21, 1943 (gage height, 5.95 ft), from rating curve extended above 1,200 cfs on basis of shape of 1952 and 1955 curves defined by measurements to 5,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	124	11.....	0	75	21.....	0	74
2.....	0	122	12.....	0	60	22.....	0	61
3.....	0	80	13.....	0	50	23.....	3,170	67
4.....	0	60	14.....	0	50	24.....	1,310	66
5.....	0	110	15.....	0	57	25.....	300	478
6.....	0	165	16.....	0	75	26.....	228	391
7.....	0	105	17.....	0	67	27.....	205	464
8.....	0	180	18.....	0	56	28.....	104	251
9.....	0	114	19.....	0	48	29.....	62	162
10.....	0	90	20.....	0	67	30.....	47	117
						31.....	191	94
Monthly mean discharge, in cubic feet per second......................							181	12S
Runoff, in inches...							1.55	1.10
Runoff, in acre-feet..							11,140	7,890

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Orestimba Creek near Newman, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22			Dec. 26--Con.			Jan. 25--Con.		
12 p.m.	-	0	9 a.m.	1.50	150	6 a.m.	1.66	201
			12 m.	1.55	165	8	2.15	440
Dec. 23			2 p.m.	1.56	168	10	2.32	557
1:30 a.m.	0.20	0	3	1.72	223	11	2.69	880
2	1.32	77	4	2.08	396	12 m.	2.76	956
4	2.32	531	5	2.12	421	2 p.m.	2.70	890
6	3.19	1,500	8	2.01	356	4	2.50	700
7	4.65	4,220	12 p.m.	1.91	305	6	2.39	610
8	4.92	4,900				9	2.25	407
9	4.92	4,900	Dec. 27			12 p.m.	2.15	440
10	5.18	5,620	6 a.m.	1.76	239			
12 m.	4.85	4,720	12 m.	1.64	194	Jan. 26		
4 p.m.	4.54	3,960	12 p.m.	1.45	137	6 a.m.	2.01	356
5	4.44	3,730				12 m.	1.91	305
7	4.62	4,150	Dec. 28			4 p.m.	2.10	408
9	4.33	3,490	12 m.	1.30	100	8	2.05	379
12 p.m.	3.79	2,440	12 p.m.	1.18	77	10	2.18	459
						12 p.m.	2.52	718
Dec. 24			Jan. 22					
3 a.m.	3.46	1,900	12 p.m.	1.08	61	Jan. 27		
6	3.29	1,640				3 a.m.	2.43	643
8	3.31	1,660	Jan. 23			6	2.31	550
12 m.	3.04	1,290	12 m.	1.12	67	12 m.	2.13	427
3 p.m.	2.81	1,010	6 p.m.	1.15	72	6 p.m.	2.02	362
6	2.65	840	12 p.m.	1.13	69	12 p.m.	1.92	310
12 p.m.	2.30	542						
			Jan. 24			Jan. 28		
Dec. 25			12 m.	1.10	64	6 a.m.	1.83	268
6 a.m.	2.06	385	6 p.m.	1.10	64	12 m.	1.78	247
12 m.	1.85	278	9	1.12	67	2 p.m.	1.77	243
6 p.m.	1.63	190	12 p.m.	1.19	78	4	1.79	251
12 p.m.	1.52	156				6	1.73	227
			Jan. 25			12 p.m.	1.67	204
Dec. 26			1 a.m.	1.25	90			
6 a.m.	1.42	129	4 a.m.	1.28	96			

176. Falls Creek near Hetch Hetchy, Calif.

Location.--Lat 37°58', long 119°46', in NE¼ sec.3, T.1 N., R.20 E., on right bank in Yosemite National Park, 0.2 mile upstream from Wampana Falls, 1 mile upstream from mouth, and 2 miles northeast of Hetch Hetchy.

Drainage area.--45.2 sq mi.

Gage-height record.--Water-stage recorder graph except 11 a.m. Dec. 16 to 11 a.m. Jan. 4. Altitude of gage is 5,600 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,500 cfs and extended above on basis of velocity-area studies; affected by ice Dec. 4. Discharge for period of no gage-height record estimated on basis of recorded range in stage, weather records, and records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 6,660 cfs (time unknown) Dec. 23 (gage height, 9.00 ft, from floodmark).

1915 to November 1955: Discharge, 6,660 cfs Nov. 19, 1950 (gage height, 9.0 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	22	120	11	58	98	21	200	130
2	27	100	12	58	104	22	1,000	262
3	24	90	13	50	101	23	5,000	297
4	25	85	14	50	158	24	2,000	122
5	25	90	15	50	396	25	1,000	153
6	129	82	16	45	378	26	1,500	119
7	59	86	17	45	280	27	900	101
8	66	86	18	60	200	28	300	95
9	141	86	19	400	155	29	200	91
10	70	83	20	300	145	30	160	95
						31	140	97
Monthly mean discharge, in cubic feet per second							455	145
Runoff, in inches							11.60	3.69
Runoff, in acre-feet							27,970	8,900

177. Hetch Hetchy Reservoir at Hetch Hetchy, Calif.

Location.--Lat 37°57', long 119°47', in NW¼ sec.16, T.1 N., R.20 E., near center of O'Shaughnessy Dam on Tuolumne River at Hetch Hetchy in Yosemite National Park, 1.5 miles downstream from Falls Creek.

Drainage area.--460 sq mi.

Gage-height record.--Water-stage recorder graph. Elevations at 12 p.m. used to determine contents. Datum of gage is at mean sea level (levels by city and county of San Francisco).

Maxima.--December 1955 to January 1956: Contents, 231,000 acre-ft 12 p.m. Jan. 28 (elevation, 3,735.3 ft).
1923 to November 1955: Contents, 369,100 acre-ft Dec. 3, 1950 (elevation, 3,810.4 ft).

Remarks.--Reservoir is formed by concrete gravity-type dam, completed to crest elevation 3,726.5 ft in 1923 and raised to 3,812.0 ft in 1937; storage began Apr. 6, 1923. Ten-foot drum gates were installed on spillway in 1949. Usable capacity, 360,400 acre-ft between elevations 3,512.0 ft (somewhat above bottom outlet) and 3,806.0 ft (top of drum-type spillway gates) above mean sea level.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	3,657.9	117,400	3,722.9	210,600	16	3,648.5	106,500	3,728.3	219,400
2	3,657.0	116,400	3,723.0	210,800	17	3,647.8	105,700	3,729.2	220,900
3	3,656.0	115,200	3,723.2	211,100	18	3,647.0	104,800	3,729.8	221,900
4	3,655.0	114,000	3,723.2	211,100	19	3,647.3	105,200	3,730.3	222,700
5	3,654.1	113,000	3,723.2	211,100	20	3,647.6	105,500	3,730.6	223,200
6	3,654.1	113,000	3,723.2	211,100	21	3,647.8	105,700	3,730.7	223,400
7	3,653.5	112,300	3,723.2	211,100	22	3,669.6	132,200	3,731.7	225,000
8	3,653.1	111,800	3,723.2	211,100	23	3,704.7	182,100	3,732.9	227,000
9	3,653.3	112,100	3,722.9	210,600	24	3,711.7	192,900	3,733.3	227,700
10	3,652.7	111,400	3,722.8	210,500	25	3,715.2	198,400	3,733.9	228,700
11	3,652.1	110,700	3,722.8	210,500	26	3,718.7	203,900	3,734.8	230,200
12	3,651.5	110,000	3,722.8	210,500	27	3,720.3	206,500	3,735.1	230,700
13	3,650.8	109,100	3,722.8	210,500	28	3,721.3	208,100	3,735.3	231,000
14	3,650.0	108,200	3,723.3	211,300	29	3,721.9	209,000	3,735.3	231,000
15	3,649.3	107,400	3,726.5	216,500	30	3,722.3	209,700	3,735.2	230,800
					31	3,722.7	210,300	3,735.1	230,700
Change in contents						-	+92,000	-	+20,400

178. Tuolumne River near Hetch Hetchy, Calif.

Location.--Lat 37°56', long 119°48', in SE¼ sec.17, T.1 N., R.20 E., in Yosemite National Park, on left bank 1 mile downstream from O'Shaughnessy Dam at Hetch Hetchy and 2.5 miles downstream from Falls Creek.

Drainage area.--462 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 918 cfs 8:30 a.m. Dec. 22 (gage height, 6.57 ft).
1915 to November 1955: Discharge, 12,900 cfs June 1, 1943 (gage height, 13.90 ft).

Remarks.--Flow regulated by Hetch Hetchy Reservoir since 1923 (see station 177).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	742	752	11	738	756	21	734	787
2	738	752	12	742	756	22	514	808
3	734	756	13	742	756	23	428	822
4	728	756	14	742	756	24	592	804
5	731	759	15	738	787	25	794	804
6	745	759	16	734	787	26	808	801
7	731	756	17	734	787	27	770	780
8	734	756	18	731	787	28	756	762
9	734	756	19	734	787	29	752	759
10	731	756	20	738	787	30	752	755
						31	752	755
Monthly mean discharge, in cubic feet per second							722	772
Runoff, in acre-feet							44,380	47,490

179. Lake Eleanor near Hetch Hetchy, Calif.

Location.--Lat 37°58', long 119°53', in NW¼ sec.3, T.1 N., R.19 E., on downstream side of dam on Eleanor Creek, 720 ft from left bank, 1.7 miles upstream from Miguel Creek, and 5.5 miles northwest of Hetch Hetchy.

Drainage area.--79 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Elevations at 12 p.m. used to determine contents. Datum of gage is at mean sea level (levels by city and county of San Francisco).

Maxima.--December 1955 to January 1956: Contents, 29,600 acre-ft 8 a.m. Dec. 23 (elevation, 4,663.5 ft).

1919 to November 1955: Contents, 31,010 acre-ft Dec. 11, 1937, from capacity table then in use (elevation, 4,663.4 ft).

Remarks.--Reservoir is formed by multiple-arch dam completed in 1918; storage began June 23, 1918. Usable capacity, 26,100 acre-ft between elevations 4,620.9 ft (natural outlet of old lake) and 4,660.0 ft (top of 5-foot flashboards) above mean sea level.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	4,628.4	1,670	4,656.6	23,000	16	4,635.9	5,890	4,654.8	21,300
2	4,628.7	1,820	4,656.1	22,500	17	4,636.2	6,090	4,655.1	21,600
3	4,628.8	1,870	4,655.6	22,100	18	4,636.6	6,370	4,655.0	21,500
4	4,628.9	1,920	4,655.1	21,600	19	4,637.5	6,990	4,654.7	21,200
5	4,629.2	2,060	4,654.7	21,200	20	4,639.8	8,570	4,654.5	21,000
6	4,630.8	2,900	4,654.2	20,800	21	4,642.0	10,300	4,654.3	20,900
7	4,631.5	3,300	4,653.8	20,400	22	4,657.8	24,100	4,655.0	21,500
8	4,632.3	3,750	4,653.3	20,000	23	4,662.0	28,100	4,655.8	22,200
9	4,633.5	4,420	4,652.7	19,400	24	4,659.9	26,100	4,655.7	22,100
10	4,634.2	4,820	4,652.2	19,000	25	4,659.0	25,200	4,656.2	22,600
11	4,634.7	5,100	4,651.8	18,600	26	4,659.3	25,500	4,656.5	22,900
12	4,635.1	5,340	4,651.5	18,300	27	4,658.6	24,800	4,656.4	22,800
13	4,635.4	5,540	4,651.2	18,100	28	4,658.2	24,500	4,656.0	22,400
14	4,635.7	5,750	4,651.3	18,200	29	4,658.0	24,300	4,655.6	22,100
15	4,635.8	5,820	4,653.2	19,900	30	4,657.6	23,900	4,655.1	21,600
					31	4,657.0	23,400	4,654.6	21,100
Change in contents...............................						-	+21,870	-	-2,300

180. Eleanor Creek near Hetch Hetchy, Calif.

Location.--Lat 37°58', long 119°53', in SW¼ sec.3, T.1 N., R.19 E., in Yosemite National Park, on right bank 0.6 mile downstream from Lake Eleanor Dam, 1.1 miles upstream from Miguel Creek, and 5.5 miles northwest of Hetch Hetchy.

Drainage area.--80 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 1, 2, 5-7, 10 p.m. Dec. 23 to 10 a.m. Dec. 24. Graph for 10 p.m. Dec. 23 to 10 a.m. Dec. 24 was drawn on basis of normal recession. Altitude of gage is 4,600 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,000 cfs and extended above on basis of velocity-area studies. Discharge for Dec. 1, 2, 5-7 was estimated on basis of recorded range in stage.

Maxima.--December 1955 to January 1956: Discharge, 11,500 cfs 8 a.m. Dec. 23 (gage height, 14.80 ft).

1909 to November 1955: Discharge, 11,700 cfs Nov. 19, 1950 (gage height, 14.95 ft).

Remarks.--Flow regulated by Lake Eleanor (see station 179).

Mean discharge, in cubic feet per second, 1955-56, of Eleanor Creek near Hetch Hetchy, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	22	534	11.....	7.7	472	21.....	20	484
2.....	22	512	12.....	59	472	22.....	56	488
3.....	22	500	13.....	40	468	23.....	7,490	496
4.....	22	492	14.....	64	472	24.....	2,820	496
5.....	25	488	15.....	69	476	25.....	1,480	512
6.....	25	484	16.....	82	484	26.....	1,290	521
7.....	18	480	17.....	68	488	27.....	1,090	512
8.....	38	480	18.....	26	488	28.....	700	504
9.....	49	476	19.....	54	488	29.....	504	496
10.....	26	472	20.....	29	488	30.....	532	492
						31.....	604	488
Monthly mean discharge, in cubic feet per second......................							560	490
Runoff, in inches..							8.07	7.07
Runoff, in acre-feet...							34,420	30,150

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	2.00	25	12 p.m.......	4.60	615	8 p.m........	-	5,600
						12 p.m.......	-	4,200
Dec. 22			Dec. 23					
3 a.m........	2.32	46	2 a.m........	7.75	3,160	Dec. 24		
6............	2.30	44	4............	12.20	8,160	4 a.m........	-	3,500
8............	2.38	50	6............	14.30	10,900	10...........	7.45	2,890
10...........	2.22	38	7............	14.45	11,100	6 p.m........	6.80	2,260
4 p.m........	2.08	30	8............	14.80	11,500	12 p.m.......	6.41	1,920
9............	2.28	43	10...........	14.10	10,600			
11 p.m.......	2.98	117	6 p.m........	-	6,700			

181. South Fork Tuolumne River near Oakland recreation camp, California

Location.--Lat 37°49'16", long 120°00'48", in SE¼ sec.29, T.1 S., R.18 E., on right bank opposite Cliff House, 75 ft downstream from highway bridge on Big Oak Flat Road, 0.5 mile southwest of Oakland recreation camp, and 0.6 mile upstream from Middle Tuolumne River.

Drainage area.--87.6 sq mi.

Gage-height record.--Water-stage recorder graph except 2 a.m. to 12 p.m. Dec. 23, for which graph was reconstructed on basis of high-water mark on outside of gage. Altitude of gage is 2,800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,400 cfs, and by slope-area measurement at 11,900 cfs; affected by ice Dec. 4, 5.

Maxima.--December 1955 to January 1956: Discharge, 11,900 cfs 6 a.m. Dec. 23 (gage height, 10.9 ft).

1923 to November 1955: Discharge, 9,000 cfs Dec. 11, 1937 (gage height, 10.00 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	50	238	11.....	30	167	21.....	114	259
2.....	34	219	12.....	25	169	22.....	904	286
3.....	19	198	13.....	24	165	23.....	6,960	625
4.....	13	182	14.....	22	235	24.....	2,080	395
5.....	15	215	15.....	21	487	25.....	950	896
6.....	76	202	16.....	20	629	26.....	1,520	1,190
7.....	54	182	17.....	20	368	27.....	992	866
8.....	33	180	18.....	22	292	28.....	508	518
9.....	76	169	19.....	212	256	29.....	375	403
10.....	46	163	20.....	205	253	30.....	301	347
						31.....	271	313
Monthly mean discharge, in cubic feet per second......................							516	357
Runoff, in inches..							6.79	4.70
Runoff, in acre-feet...							31,720	21,950

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Fork Tuolumne River near Oakland recreation camp, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.......	1.52	20	12 p.m.......	7.25	3,350	1:30 p.m.....	6.83	2,790
Dec. 18			Dec. 23			6............	6.15	2,000
5 p.m........	1.53	20	2 a.m........	8.45	5,360	9............	6.11	1,960
10...........	1.73	28	4............	9.7	8,250	12 p.m.......	5.98	1,830
12 p.m.......	2.06	49	6............	10.9	11,900	Dec. 27		
Dec. 19			8............	-	9,600	3 a.m........	5.52	1,390
2 a.m........	2.50	94	2 p.m........	-	6,060	6............	5.24	1,150
5............	3.40	250	8............	-	5,660	10...........	4.99	974
9............	3.61	313	10...........	-	5,460	6 p.m........	4.57	728
12 m.........	3.47	271	12 p.m.......	7.84	4,240	12 p.m.......	4.40	640
5 p.m........	3.01	167	Dec. 24			Jan. 13		
7............	2.96	158	6 a.m........	6.33	2,190	12 p.m.......	3.02	169
12 p.m.......	3.37	243	8............	6.01	1,860	Jan. 14		
Dec. 20			10...........	5.84	1,690	4 a.m........	3.09	182
7 a.m........	3.09	182	12 m.........	5.92	1,770	10...........	3.29	224
2 p.m........	3.33	233	2 p.m........	6.02	1,970	3 p.m........	3.37	243
12 p.m.......	3.00	165	6............	5.83	1,680	9............	3.57	301
Dec. 21			9............	5.50	1,370	12 p.m.......	3.62	316
6 a.m........	2.77	129	12 p.m.......	5.35	1,240	Jan. 15		
2 p.m........	2.56	101	Dec. 25			6 a.m........	3.60	310
12 p.m.......	2.45	88	3 a.m........	5.37	1,260	12 m.........	3.56	298
Dec. 22			6............	5.13	1,070	3 p.m........	3.80	375
2 a.m........	2.51	95	9............	5.00	980	9............	4.94	944
4............	2.72	122	12 m.........	4.85	890	10:30........	5.07	1,030
6............	3.23	211	4 p.m........	4.73	818	12 p.m.......	5.05	1,020
9............	4.66	778	8............	4.68	789	Jan. 16		
11...........	5.10	1,050	12 p.m.......	4.57	728	4 a.m........	4.67	784
2 p.m........	5.25	1,160	Dec. 26			10...........	4.36	620
4............	5.25	1,160	6 a.m........	4.48	680	6 p.m........	4.10	495
8............	5.12	1,060	8............	4.53	706	12 p.m.......	3.97	443
10 p.m.......	5.73	1,580	10...........	5.06	1,020			
			1 p.m........	6.70	2,630			

182. Middle Tuolumne River at Oakland recreation camp, California

Location.--Lat 37°49'40", long 120°00'40", in NW¼ sec.28, T.1 S., R.18 E., on left bank 1,000 ft downstream from Oakland recreation camp, 0.5 mile upstream from South Fork Tuolumne River, and 4 miles east of Buck Meadows post office.

Drainage area.--71.0 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 22-29. Altitude of gage is 2,800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,400 cfs and by slope-area measurement at 4,920 cfs; affected by ice Dec. 4. Discharge for period of no gage-height record estimated on basis of records for South Fork Tuolumne River near Oakland recreation camp.

Maxima.--December 1955 to January 1956: Discharge, 4,920 cfs, time unknown, Dec. 23 (gage height, 11.75 ft, from flood profile; 11.05 ft, from inside floodmark).
1922 to November 1955: Discharge, 3,450 cfs Nov. 19, 1950 (gage height, 10.45 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	27	172	11.....	19	122	21.....	60	206
2.....	14	158	12.....	15	122	22.....	654	244
3.....	6.6	144	13.....	13	118	23.....	4,000	512
4.....	5.0	136	14.....	11	175	24.....	1,000	313
5.....	6.0	182	15.....	10	357	25.....	600	543
6.....	52	151	16.....	9.6	479	26.....	1,000	617
7.....	28	137	17.....	9.2	301	27.....	500	452
8.....	24	134	18.....	22	238	28.....	300	310
9.....	43	129	19.....	137	208	29.....	250	253
10.....	32	122	20.....	95	204	30.....	204	229
						31.....	188	208
Monthly mean discharge, in cubic feet per second......................							301	248
Runoff, in inches..							4.89	4.02
Runoff, in acre-feet...							18,510	15,230

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Middle Tuolumne River at Oakland recreation camp, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 20--Con.			Jan. 14		
12 p.m.	1.26	9.2	9:30 a.m.	2.96	119	9 a.m.	3.17	155
Dec. 18			12 m.	2.78	100	12 m.	3.21	162
3 p.m.	1.25	9.0	8 p.m.	2.46	71	3 p.m.	3.37	194
6:30	-	14	12 p.m.	2.42	68	5	3.42	204
8	-	47	Dec. 21			7	3.52	224
9	-	41	5 a.m.	2.43	69	9	3.54	229
10	-	75	1 p.m.	2.28	57	12 p.m.	3.49	218
11	-	93	9	2.22	52	Jan. 15		
12 p.m.	-	160	11	2.28	57	5 a.m.	3.42	204
Dec. 19			12 p.m.	2.35	62	9	3.45	210
1:30 a.m.	3.55	215	Dec. 22			12 m.	3.45	210
3	3.15	144	1 a.m.	2.60	84	1 p.m.	3.56	233
5	2.93	115	2	3.15	144	2:30	4.10	356
7	3.25	160	3	3.79	265	3:30	4.02	337
8:30	3.37	181	4	3.90	289	5	4.45	442
3 p.m.	2.65	88	5:30	3.83	274	8	5.33	669
5	3.10	136	6	3.95	300	10	5.46	708
9	3.00	123	7:30	5.00	545	12 p.m.	5.45	705
10	2.85	107	9	4.65	458	Jan. 16		
12 p.m.	2.82	104	11	5.60	705	1 a.m.	5.40	690
Dec. 20			12 m.	5.40	645	5	4.91	558
3 a.m.	2.73	96	4 p.m.	5.67	726	11	4.52	460
4:30	3.02	126	12 p.m.	-	1,400	8 p.m.	4.21	382
8 a.m.	2.88	110	Jan. 13			12 p.m.	4.08	351
			12 p.m.	2.98	123			

183. North Fork Tuolumne River near Long Barn, Calif.

(Miscellaneous site)

Location.--Lat 38°06', long 120°06', in SW¼ sec.22, T.3 N., R.17 E., 2 miles east of Long Barn. Altitude is 4,700 ft (from topographic map).

Drainage area.--21.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,590 cfs Dec. 23.

184. Woods Creek near Jacksonville, Calif.

Location.--Lat 37°51'30", long 120°23'45", in SE¼ sec.11, T.1 S., R.14 E., on right bank 200 ft downstream from Blue Gulch, 1.5 miles upstream from mouth, and 1.5 miles northwest of Jacksonville.

Drainage area.--98.4 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Dec. 23 to 1 p.m. Dec. 27. Datum of gage is 653.65 ft above mean sea level, unadjusted.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 730 cfs and by float measurement at 7,410 cfs and slope-area measurement at 14,400 cfs. Discharge for period of no gage-height record computed on basis of records for South Fork Calaveras River near San Andreas.

Maxima.--December 1955 to January 1956: Discharge, 14,400 cfs about 2 a.m. Dec. 23 (gage height, 14.66 ft, from floodmarks in gage well).

1925 to November 1955: Discharge, 13,500 cfs Feb. 9, 1938, from rating curve extended above 1,000 cfs on basis of velocity-area studies.

Mean discharge, in cubic feet per second, 1955-56, of Woods Creek near Jacksonville, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	73	240	11.....	28	168	21.....	207	209
2.....	58	394	12.....	20	131	22.....	2,320	454
3.....	20	196	13.....	16	116	23.....	9,430	1,030
4.....	12	154	14.....	14	450	24.....	3,340	358
5.....	10	951	15.....	12	1,820	25.....	738	687
6.....	385	422	16.....	11	826	26.....	2,300	1,480
7.....	97	264	17.....	12	331	27.....	1,020	903
8.....	36	319	18.....	11	232	28.....	340	405
9.....	139	204	19.....	300	186	29.....	168	284
10.....	53	179	20.....	493	218	30.....	146	231
						31.....	338	198
Monthly mean discharge, in cubic feet per second							714	453
Runoff, in inches							8.37	5.31
Runoff, in acre-feet							43,930	27,850

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 21--Con.			Jan. 14		
12 p.m.......	1.88	11	12 m.........	3.60	172	3 a.m........	3.49	133
			6 p.m........	3.30	130	6............	3.72	168
Dec. 19			10...........	3.18	116	9............	3.98	214
4 a.m........	1.99	16	12 p.m.......	3.21	119	12 m.........	4.49	316
6............	2.10	21				3 p.m........	5.20	486
7............	2.55	52	Dec. 22			6............	5.95	730
8............	5.75	672	1 a.m........	3.29	129	10...........	6.58	1,040
12 m.........	5.00	440	2............	3.53	162	11...........	6.57	1,030
2 p.m........	4.60	340	4............	5.15	485	12 p.m.......	6.44	962
7............	4.21	270	6............	8.45	1,890			
9............	4.52	326	7............	9.15	2,270	Jan. 15		
12 p.m.......	5.93	737	9............	9.62	2,570	6 a.m........	5.46	558
Dec. 20			10...........	10.35	3,180	9............	5.23	494
2 a.m........	6.28	877	11...........	10.56	3,390	12 m.........	5.38	534
8............	4.93	419	12 m.........	10.58	3,410	2 p.m........	6.55	1,020
10...........	4.56	333	2 p.m........	10.22	3,070	4............	9.10	3,060
1 p.m........	4.35	295	5............	8.60	1,970	8............	10.38	4,750
2............	4.28	282	7............	8.13	1,720	9............	10.20	4,480
4............	4.68	356	8............	8.35	1,840	12 p.m.......	8.30	2,280
5............	4.66	352	10...........	10.70	3,530			
6............	4.82	390	12 p.m.......	12.90	7,400	Jan. 16		
7............	5.18	494				2 a.m........	7.50	1,630
10...........	5.36	548	Dec. 23			6............	6.40	940
12 p.m.......	4.94	422	2 a.m........	14.66	14,400	12 m.........	5.67	624
						6 p.m........	5.22	491
Dec. 21			Jan. 13			12 p.m.......	4.94	420
6 a.m........	4.14	257	12 p.m.......	3.39	119			

185. Don Pedro Reservoir near La Grange, Calif.

Location.--Lat 37°42'48", long 120°24'14", in SW¼ sec.35, T.2 S., R.14 E., 300 ft from left end of Don Pedro Dam on Tuolumne River, 1 mile downstream from Rogers Creek, and 5.5 miles upstream from La Grange.

Drainage area.--1,539 sq mi.

Gage-height record.--Water-stage recorder graph. Elevations at 12 p.m. used to determine contents. Datum of gage is at mean sea level (levels by Turlock Irrigation District).

Maxima.--December 1955 to January 1956: Contents, 288,000 acre-ft 11 a.m. Dec. 24 (elevation, 604.8 ft).

1924 to November 1955: Contents, 292,100 acre-ft June 13, 1937 (elevation, 606.1 ft).

Remarks.--Reservoir is formed by concrete gravity-type dam, completed about Jan. 1, 1923; storage began Nov. 14, 1922. Usable capacity, 260,000 acre-ft between elevation 476 ft (mutually agreed-upon minimum) and 605.55 ft (top of drum-type spillway gates) above mean sea level. Water passes through powerplant at dam and down Tuolumne River to La Grange Dam, 4 miles downstream, where it is diverted into Turlock and Modesto Canals for irrigation. This reservoir is operated jointly by Turlock and Modesto Irrigation Districts. Records include 30,000 acre-ft not available for release (mutually agreed-upon minimum).

Elevation, in feet, and contents, in acre-feet, 1955-56, of Don Pedro Reservoir near La Grange, Calif.

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	511.5	66,200	596.6	262,400	16	516.8	73,500	576.7	204,000
2	512.0	66,900	594.9	257,200	17	516.7	73,400	576.8	204,300
3	512.4	67,400	592.6	250,200	18	517.1	73,900	574.8	198,700
4	513.2	68,500	590.3	243,300	19	518.3	75,700	572.7	193,000
5	512.9	68,100	589.6	241,300	20	521.9	81,000	570.8	187,800
6	514.5	70,300	587.8	235,900	21	524.6	85,100	570.4	186,700
7	515.8	72,100	585.6	229,500	22	542.4	118,600	571.0	188,300
8	516.0	72,400	583.5	223,400	23	599.0	269,800	575.6	201,000
9	516.8	73,500	581.2	216,800	24	604.2	286,100	575.4	200,400
10	518.0	75,200	578.6	209,400	25	602.8	281,700	576.8	204,300
11	518.9	76,500	575.8	201,500	26	604.6	287,400	581.0	216,200
12	518.6	76,100	572.8	193,200	27	602.3	280,100	583.8	224,300
13	518.2	75,500	571.9	190,800	28	602.2	279,800	583.3	222,800
14	517.6	74,600	571.8	190,500	29	601.3	277,000	581.7	218,200
15	517.2	74,000	574.6	198,200	30	599.8	272,300	579.7	212,500
					31	598.4	267,900	577.4	206,000
Change in contents						-	+202,000	-	-61,900

186. Tuolumne River above La Grange Dam near La Grange, Calif.

Location.--Lat 37°42'35", long 120°24'45", in NE¼ sec.3, T.3 S., R.14 E., on left bank 0.5 mile downstream from Don Pedro Dam, 3.5 miles upstream from La Grange Dam, and 5 miles upstream from La Grange.

Drainage area.--1,540 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 6, 7. Altitude of gage is 330 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Jan. 6, 7, estimated on basis of Don Pedro powerplant record.

Maxima.--December 1955 to January 1956: Discharge, 41,700 cfs 11 a.m. Dec. 24 (gage height, 34.00 ft).
1895 to November 1955: Discharge, 61,000 cfs Dec. 8, 1950 (gage height, 43.8 ft).

Records.--Flow regulated by Don Pedro powerplant, Don Pedro Reservoir (see station 185), Hetch Hetchy Reservoir (see station 177), and Lake Eleanor (see station 179).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	981	8,520	11.....	530	8,340	21.....	1,210	5,490
2.....	885	8,520	12.....	1,260	8,320	22.....	1,910	4,930
3.....	663	8,600	13.....	1,380	4,920	23.....	5,960	6,200
4.....	396	8,680	14.....	1,430	5,040	24.....	32,800	7,540
5.....	1,010	8,680	15.....	1,350	6,700	25.....	19,900	7,860
6.....	1,020	8,700	16.....	1,350	7,790	26.....	18,400	8,380
7.....	918	8,700	17.....	1,080	8,390	27.....	21,000	8,500
8.....	1,130	8,640	18.....	797	8,360	28.....	9,400	8,480
9.....	1,060	8,440	19.....	1,380	7,790	29.....	8,520	8,450
10.....	732	8,360	20.....	1,130	7,340	30.....	8,520	8,380
						31.....	8,450	8,330
Monthly mean discharge, in cubic feer per second							5,050	7,786
Runoff, in acre-feet							310,500	478,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22			Dec. 23--Con.			Dec. 24--Con.		
12 p.m.......	9.30	2,740	10 p.m.......	15.83	11,300	1 p.m........	32.75	39,300
			11...........	16.57	12,500	2............	32.55	38,900
Dec. 23			12 p.m.......	17.32	13,600	4............	30.55	35,200
2 a.m........	8.00	1,750				6............	30.10	34,400
4............	7.90	1,680	Dec. 24			7............	29.20	32,800
6............	8.38	2,040	2 a.m........	19.75	17,200	8............	28.00	30,600
8............	9.26	2,710	3............	24.15	24,200	9............	26.60	28,200
9............	9.70	3,060	4............	27.70	30,100	11...........	26.40	27,900
10...........	11,20	4,540	5............	29.90	34,000	12 p.m.......	24.00	24,000
12 m.........	12.92	6,980	7............	32.60	39,000			
6 p.m........	13.12	7,280	9............	33.70	41,100	Dec. 25		
7............	14.90	9,950	10...........	33.92	41,500	5 a.m........	23.10	22,600
8............	15.05	10,200	11...........	34.00	41,700	9............	22.73	22,000
9 p.m........	15.75	11,200	12 m.........	33.80	41,300	12 m.........	21.70	20,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Tuolumne River above La Grange Dam, near La Grange, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 25--Con.			Dec. 26--Con.			Dec. 27--Con.		
2 p.m.	21.08	19,300	4 p.m.	20.30	18,100	4 p.m.	19.60	17,000
4	20.00	17,600	6	22.35	21,400	6	19.10	16,200
6	19.30	16,600	7	25.42	26,300	7	17.50	13,800
7	18.35	15,100	8	25.98	27,200	8	17.40	13,700
9	18.05	14,700	10	26.60	28,200	12 p.m.	16.85	12,900
10	20.60	18,600	11	26.75	28,500			
12 p.m.	19.73	17,200	12 p.m.	26.65	28,300	Dec. 28		
						1 a.m.	15.35	10,600
Dec. 26			Dec. 27			4	15.02	10,100
3 a.m.	18.97	16,100	2 a.m.	26.50	28,000	6	15.15	10,300
6	18.62	15,500	4	26.10	27,400	9	15.10	10,200
9	18.45	15,300	6	25.60	26,600	10	14.20	8,900
10	16.90	13,000	8	24.40	24,600	12 m.	14.15	8,820
12 m.	16.98	13,100	10	23.30	22,900	11 p.m.	14.00	8,600
2 p.m.	17.33	13,600	12 m.	22.50	21,600	12 p.m.	13.9	8,450
3 p.m.	17.70	14,200	3 p.m.	21.40	19,800			

187. Tuolumne River at Modesto, Calif.

Location.--Lat 37°37'38", long 120°59'10", in SW¼ sec.33, T.3 S., R.9 E., on left bank at U.S. Highway 99 bridge in Modesto, 0.2 mile downstream from Dry Creek.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level, unadjusted (levels by Modesto Irrigation District).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 37,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 37,600 cfs 4 a.m. Dec. 25 (gage height, 66.43 ft).

1943 to November 1955: Discharge, 57,000 cfs Dec. 9, 1950 (gage height, 69.19 ft).

Remarks.--Flow regulated by reservoirs and powerplants above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	710	8,700	11	826	8,040	21	870	7,070
2	720	8,440	12	815	8,060	22	925	5,440
3	710	8,510	13	826	6,940	23	2,770	5,710
4	784	8,420	14	815	5,250	24	17,800	8,520
5	630	8,610	15	804	6,760	25	31,400	7,680
6	710	10,500	16	804	9,110	26	18,900	8,340
7	752	9,110	17	804	8,990	27	21,000	9,020
8	773	8,700	18	1,140	8,310	28	17,600	8,720
9	848	8,650	19	994	8,050	29	9,760	8,270
10	837	8,190	20	960	7,440	30	8,440	8,100
						31	8,300	8,020
Monthly mean discharge, in cubic feet per second							4,969	8,054
Runoff, in acre-feet							305,500	495,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22			Dec. 24--Con.			Dec. 25--Con.		
12 p.m.	42.05	982	12 m.	58.25	14,800	6 p.m.	63.85	26,400
			2 p.m.	59.20	16,200	9	63.25	24,600
Dec. 23			4	60.65	18,700	12 p.m.	62.70	23,000
3 a.m.	42.05	982	6	62.25	21,900			
6	42.10	1,040	8	63.90	26,500	Dec. 26		
9	42.28	1,260	10	65.15	31,400	4 a.m.	61.90	21,100
12 m.	42.62	1,720	12 p.m.	65.93	35,200	8	61.13	19,600
2 p.m.	42.95	2,100				12 m.	60.60	18,600
4	44.10	3,020	Dec. 25			6 p.m.	59.90	17,300
6	45.50	3,920	1 a.m.	66.15	36,200	12 p.m.	59.10	16,100
8	47.20	5,030	2	66.34	37,200			
10	50.00	6,940	3	66.40	37,500	Dec. 27		
12 p.m.	52.40	8,810	4	66.43	37,600	2 a.m.	58.96	15,800
			5	66.41	37,600	4	59.16	16,200
Dec. 24			6	66.35	37,200	6	59.75	17,100
2 a.m.	54.20	10,400	8	66.10	36,000	9	61.05	19,400
4	55.40	11,600	10	65.70	34,000	12 m.	62.18	21,800
6	56.30	12,500	12 m.	65.25	31,800	3 p.m.	62.98	23,800
8	56.90	13,200	2 p.m.	64.75	29,800	5	63.28	24,600
10 a.m.	57.50	13,900	4 p.m.	64.27	27,900	7 p.m.	63.40	25,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Tuolumne River at Modesto, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 27--Con.			Dec. 28--Con.			Dec. 29		
8 p.m.	63.40	25,000	6 a.m.	61.77	20,800	4 a.m.	54.67	10,900
10	63.30	24,700	9	60.80	18,900	8	53.80	10,000
12 p.m.	63.08	24,000	12 m.	59.85	17,300	12 m.	53.13	9,440
			3 p.m.	58.88	15,700	4 p.m.	52.66	9,020
Dec. 28			6	57.88	14,400	8	52.39	8,800
3 a.m.	62.53	22,600	9	56.90	13,200	12 p.m.	52.23	8,670
			12 p.m.	55.92	12,100			

188. Middle Fork Stanislaus River at Kennedy Meadows, Calif.

Location.--Lat 38°18', long 119°45', in NE¼ sec.11, T.5 N., R.20 E., on right bank at upper end of Kennedy Meadows, 1 mile upstream from Deadman Creek, and 2 miles downstream from Relief Reservoir.

Drainage area.--49.5 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 21 to Jan. 31. Altitude of gage is 6,450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice Dec. 4. Discharge for period of no gage-height record estimated on basis of recorded range in stage, maximum stage from peak indicator, weather records, and records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 1,480 cfs, time unknown, Dec. 23 (gage height, 6.51 ft, from peak indicator).

1938 to November 1955: Discharge, 1,700 cfs Nov. 20, 1950 (gage height, 6.66 ft), from rating curve extended above 900 cfs on basis of slope-area measurement at 1,700 cfs.

Remarks.--Flow regulated by Relief Reservoir (usable capacity, 15,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	12	55	11	14	55	21	25	120
2	13		12	14		22	400	
3	12		13	13		23	1,000	
4	12		14	13		24	400	
5	14		15	14		25	200	
6	20		16	13	120	26	200	100
7	15		17	13		27	150	
8	14		18	12		28	100	
9	18		19	18		29	90	
10	14		20	29		30	80	
						31	70	
Monthly mean discharge, in cubic feet per second							97.2	84.7
Runoff, in acre-feet							5,970	5,210

189. Clark Fork Stanislaus River near Dardanelle, Calif.

Location.--Lat 38°21'50", long 119°52'30", in SE¼ sec.15, T.6 N., R.19 E., on right bank 0.3 mile upstream from mouth and 3 miles northwest of Dardanelle.

Drainage area.--65.7 sq mi.

Gage-height record.--Water-stage recorder graph except 1 a.m. Jan. 30 to 12 p.m. Jan. 31. Altitude of gage is 5,500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and by slope-area measurement at 4,350 cfs; affected by ice at times. Discharge for Jan. 30, 31 estimated on basis of weather records and by interpolation.

Maxima.--December 1955 to January 1956: Discharge, 3,340 cfs 4:30 a.m. Dec. 23 (gage height, 10.54 ft in gage well; 11.05 ft outside, from floodmark).

1950 to November 1955: Discharge, 4,350 cfs Nov. 20, 1950 (gage height, 11.88 ft).

Mean discharge, in cubic feet per second, 1955-56, of Clark Fork Stanislaus River near Dardanelle, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	26	146	11.....	31	99	21.....	67	131
2.....	34	135	12.....	32	97	22.....	1,170	142
3.....	30	128	13.....	30	96	23.....	2,220	151
4.....	35	122	14.....	31	99	24.....	689	131
5.....	53	119	15.....	31	250	25.....	385	138
6.....	77	113	16.....	31	248	26.....	330	133
7.....	49	109	17.....	31	169	27.....	268	126
8.....	38	109	18.....	31	147	28.....	224	129
9.....	54	102	19.....	39	138	29.....	191	129
10.....	38	101	20.....	54	135	30.....	169	120
						31.....	157	105
Monthly mean discharge, in cubic feet per second.....................							214	132
Runoff, in inches..							3.76	2.32
Runoff, in acre-feet...							13,180	8,130

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Jan. 14		
12 p.m.......	2.90	67	12 p.m.......	8.72	2,130	12 p.m.......	3.26	109
Dec. 21			Dec. 23			Jan. 15		
3 p.m........	2.76	52	1 a.m........	9.38	2,530	9 a.m........	3.28	112
7............	2.85	62	4............	10.47	3,290	11...........	3.34	122
8............	2.91	68	4:30.........	10.54	3,340	1 p.m........	3.59	169
10...........	3.17	102	6............	10.35	3,200	4............	4.84	457
12 p.m.......	3.45	146	12 m.........	8.82	2,190	5............	5.03	514
			2 p.m........	8.60	2,060	5:30.........	5.06	523
Dec. 22			5............	7.80	1,600	8............	4.82	451
3 a.m........	4.20	308	8............	7.57	1,480	11...........	4.46	360
6............	5.51	643	12 p.m.......	6.61	1,060	12 p.m.......	4.42	350
8............	6.31	914				Jan. 16		
8:30.........	7.28	1,340	Dec. 24			4 a.m........	4.19	299
9............	7.00	1,200	3 a.m........	6.23	916	8............	4.02	261
10...........	7.30	1,350	11...........	5.52	667	6 p.m........	3.78	209
1 p.m........	7.73	1,560	4 p.m........	5.20	565	12 p.m.......	3.68	187
2............	7.81	1,600	6............	5.15	550			
4............	7.70	1,550	8............	5.06	523	Jan. 17		
8............	7.51	1,460	10...........	4.96	493	12 m.........	3.58	167
10 p.m.......	7.75	1,580	12 p.m.......	4.88	469	12 p.m.......	3.52	155

190. Middle Fork Stanislaus River at Hells Half Acre Bridge, Calif.

(Miscellaneous site)

Location.--Lat 38°15'00", long 120°02'00", in SE¼ sec.30, T.5 N., R.18 E., 800 ft upstream from Hells Half Acre Bridge, 1.5 miles upstream from Cow Creek and 4 miles northwest of Strawberry. Altitude is 3,450 ft (from topographic map).

Drainage area.--280 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 26,600 cfs Dec. 23 (gage height, 17.72 ft, from floodmarks at gaging station established in February 1956).

191. Middle Fork Stanislaus River at Sand Bar Flat, near Avery, Calif.

Location.--Lat 38°11', long 120°09', in sec.19, T.4 N., R.17 E., on left bank 1 mile upstream from diversion dam of Pacific Gas & Electric Co. at Sand Bar Flat and 11 miles southeast of Avery.

Drainage area.--318 sq mi.

Gage-height record.--Water-stage recorder graph except 3 a.m. Dec. 22 to 12 m. Dec. 28, and Jan. 12, 13. Altitude of gage is 2,650 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs and by computations of flow over diversion dam at 20,000 cfs and 26,000 cfs. Discharge for Dec. 22-28, Jan. 12, 13, estimated on basis of records for North Fork Stanislaus River near Avery.

Maxima.--December 1955 to January 1956: Discharge, 26,000 cfs, time unknown, Dec. 23 (gage height, 20.2 ft, from floodmarks).

1905 to November 1955: Discharge, about 24,000 cfs Dec. 11, 1937 (gage height, 21.0 ft, from floodmarks, at site 150 ft downstream.

Remarks.--Flow slightly regulated by Relief Reservoir since 1909 (capacity, 15,550 acre-ft) and it was estimated that about 10,000 acre-ft was stored during the flood period.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	100	1,070	11.....	146	782	21.....	518	1,330
2.....	97	1,000	12.....	138	820	22.....	7,200	1,460
3.....	92	922	13.....	132	860	23.....	19,000	2,850
4.....	82	868	14.....	124	913	24.....	4,200	1,990
5.....	68	908	15.....	123	2,050	25.....	2,000	1,800
6.....	159	890	16.....	123	3,220	26.....	3,000	1,940
7.....	232	864	17.....	125	2,000	27.....	2,500	1,910
8.....	138	828	18.....	148	1,620	28.....	1,700	1,590
9.....	212	841	19.....	266	1,420	29.....	1,460	1,390
10.....	197	774	20.....	518	1,330	30.....	1,290	1,260
						31.....	1,180	1,180
Monthly mean discharge, in cubic feet per second							1,527	1,377
Runoff, in inches							5.53	4.99
Runoff, in acre-feet							93,880	84,650

Peak discharge.--Jan. 15 (11 p.m.) 5,020 cfs (gage height, 10.91 ft); Jan. 23 (5 a.m.) 3,350 cfs (gage height, 9.50 ft).

192. North Fork Stanislaus River below Silver Creek, Calif.

Location.--Lat 38°26'20", long 120°00'20", in SE¼ sec.20, T.7 N., R.18 E., on right bank 100 ft downstream from Silver Creek and 5.6 miles northeast of Big Meadow.

Drainage area.--29.2 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 6,800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 500 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 1,370 cfs 2 a.m. Dec. 23 (gage height, 9.17 ft).

1952 to November 1955: Discharge, 654 cfs Apr. 27, 1953 (gage height, 7.58 ft), from rating curve extended above 270 cfs by logarithmic plotting.

Remarks.--Flow not affected by storage in Lake Alpine, Union, and Utica Reservoirs (combined capacity, 9,600 acre-ft).

Mean discharge, in cubic feet per second, 1955-56, of North Fork Stanislaus River below Silver Creek, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	7.5	112	11.....	18	92	21.....	71	110
2.....	7.9	108	12.....	19	98	22.....	821	106
3.....	8.2	101	13.....	17	100	23.....	879	105
4.....	8.2	97	14.....	17	99	24.....	456	100
5.....	8.4	96	15.....	17	163	25.....	237	99
6.....	10	96	16.....	16	190	26.....	201	96
7.....	12	94	17.....	15	155	27.....	148	94
8.....	11	93	18.....	13	123	28.....	127	93
9.....	18	93	19.....	12	113	29.....	121	92
10.....	18	91	20.....	36	111	30.....	120	91
						31.....	114	90
Monthly mean discharge, in cubic feet per second......................							116	106
Runoff, in inches..							4.56	4.20
Runoff, in acre-feet...							7,110	6,550

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 22			Dec. 23--Con.		
12 p.m.......	2.43	13	1 a.m........	5.50	195	2 a.m........	9.17	1,370
			2............	5.77	236	2:30.........	8.87	1,230
Dec. 20			4............	6.28	335	3............	9.03	1,300
4 a.m........	2.57	16	6............	7.30	620	5............	8.96	1,270
10...........	3.05	28	7............	7.70	755	5............	8.80	1,200
3 p.m........	3.62	47	8:30.........	8.30	990	10...........	8.34	1,010
12 p.m.......	4.00	63	9............	7.64	734	4 p.m........	7.24	602
			11...........	8.52	1,080	9............	6.65	428
Dec. 21			1 p.m........	8.75	1,180	12 p.m.......	7.60	720
1 a.m........	4.15	71	2............	8.63	1,120			
11...........	3.75	52	4............	8.57	1,100	Dec. 24		
1 p.m........	3.74	52	8:30.........	7.97	858	2 a.m........	7.46	671
4............	3.81	54	12 p.m.......	8.67	1,140	10...........	6.75	455
6............	3.93	60				5 p.m........	6.35	352
9............	4.53	96	Dec. 23			12 p.m.......	6.06	287
12 p.m.......	5.32	173	1 a.m........	9.10	1,340			

193. Highland Creek below Spicer Meadows Reservoir, Calif.

Location.--Lat 38°23'50", long 119°59'30", in SW¼ sec.3, T.6 N., R.18 E., on right bank just downstream from Spicer Meadows Reservoir dam, 5.5 miles upstream from mouth, and 7 miles east of Big Meadow.

Drainage area.--43 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 1 p.m. Dec. 24 to 4 a.m. Jan. 17 and Jan. 28-31 when there was doubtful or no gage-height record. Stage graph estimated Dec. 24 and Jan. 17. Altitude of gage is 6,350 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,200 cfs and extended above by logarithmic plotting. Discharge for periods of doubtful or no gage-height record estimated on basis of records for station 192.

Maxima.--December 1955 to January 1956: Discharge, 8,800 cfs 5:30 a.m. Dec. 23 (gage height, 11.50 ft).

1952 to November 1955: Discharge, 2,350 cfs Mar. 9, 1954 (gage height, 8.00 ft), from rating curve extended above 450 cfs by logarithmic plotting.

Flood of Nov. 20, 1950, reached a stage of 11.50 ft, from Pacific Gas & Electric Co. recorder chart (discharge, 8,800 cfs).

Remarks.--Flow slightly regulated by Spicer Meadows Reservoir (capacity, 4,060 acre-ft).

Mean discharge, in cubic feet per second, 1955-56, of Highland Creek below Spicer Meadows Reservoir, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	1.0	150	11.....	1.3	120	21.....	1.9	117
2.....	1.0	150	12.....	1.3	130	22.....	1,890	152
3.....	1.0	140	13.....	1.3	135	23.....	5,040	182
4.....	1.0	140	14.....	1.3	140	24.....	709	122
5.....	1.0	130	15.....	1.4	150	25.....	400	118
6.....	1.2	130	16.....	1.4	300	26.....	300	113
7.....	1.2	130	17.....	1.4	230	27.....	200	91
8.....	1.2	125	18.....	1.4	159	28.....	190	90
9.....	1.2	125	19.....	1.5	136	29.....	170	90
10.....	1.3	120	20.....	1.7	130	30.....	160	85
						31.....	160	85
Monthly mean discharge, in cubic feet per second......................							298	136
Runoff, in inches..							8.00	3.65
Runoff, in acre-feet...							18,340	8,360

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	0.75	2.3	3 p.m.........	8.39	2,890	7 p.m........	8.27	2,750
			6:30..........	8.26	2,740	12 p.m.......	6.95	1,520
Dec. 22			8............	8.40	2,900			
3 a.m........	.80	2.6	12 p.m.......	10.18	5,620	Dec. 24		
7............	.80	2.6				3 a.m........	6.45	1,160
8:30.........	1.05	4.6	Dec. 23			6............	6.00	890
9............	6.00	890	5:30 a.m.....	11.50	8,800	1 p.m........	5.32	568
10...........	7.40	1,880	8............	11.10	7,760	6............	-	450
11...........	7.90	2,350	11...........	10.00	5,260	12 p.m.......	-	310
2 p.m........	8.33	2,820	3 p.m.......	8.97	3,620			

194. North Fork Stanislaus River near Avery, Calif.

Location.--Lat 38°14'45", long 120°17'20", in sec.35, T.5 N., R.15 E., on right bank 700 ft upstream from intake of Utica Canal, 3.3 miles upstream from Beaver Creek, and 5.1 miles northeast of Avery.

Drainage area.--163 sq mi.

Gage-height record.--Water-stage recorder graph except 2:30 a.m. to 11 a.m. Dec. 23, for which graph was reconstructed on basis of high-water mark in gage house and shape of graph. Altitude of gage is 3,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,500 cfs and by slope-area measurement at 29,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 32,000 cfs about 5 a.m. Dec. 23 (gage height, 14.23 ft).

1914-22, 1928 to November 1955: Discharge, 31,100 cfs Dec. 11, 1937 (gage height, 14.1 ft, from floodmarks).

Remarks.--Flow slightly regulated by four reservoirs (combined capacity, 13,600 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	41	623	11.....	66	480	21.....	491	914
2.....	35	589	12.....	67	514	22.....	8,510	1,080
3.....	29	541	13.....	59	522	23.....	23,400	1,680
4.....	24	514	14.....	51	794	24.....	4,240	1,030
5.....	23	561	15.....	52	2,130	25.....	1,920	1,330
6.....	117	511	16.....	52	2,620	26.....	2,570	1,350
7.....	96	500	17.....	62	1,450	27.....	1,620	1,030
8.....	56	480	18.....	81	1,060	28.....	1,070	838
9.....	108	462	19.....	330	896	29.....	860	725
10.....	88	458	20.....	578	908	30.....	735	670
						31.....	680	605
Monthly mean discharge, in cubic feet per second......................							1,552	899
Runoff, in inches..							10.98	6.36
Runoff, in acre-feet...							95,430	55,270

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of North Fork Stanislaus River near Avery, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 26		
12 p.m.	1.52	76	10 a.m.	9.55	8,350	4 a.m.	5.59	1,770
			11	9.58	8,440	6	5.63	1,810
Dec. 18			12 m.	9.50	8,200	8	5.77	1,930
4 a.m.	1.60	84	1 p.m.	10.10	10,000	9	5.98	2,130
4 p.m.	1.44	69	2	10.50	11,400	10	6.25	2,400
8	1.56	80	3	10.63	12,000	11	6.85	3,100
12 p.m.	1.93	121	4	10.55	11,600	12 m.	7.33	3,780
			5	10.48	11,400	1 p.m.	7.50	4,030
Dec. 19			6	10.30	10,800	2	7.40	3,880
2 a.m.	2.20	156	8	10.13	10,200	3	7.13	3,480
4	2.55	216	9	10.35	10,900	4	6.98	3,270
6	2.70	246	10	10.95	13,200	5	6.95	3,240
9	2.84	276	11	11.50	15,700	6	6.87	3,130
12 m.	3.10	340	12 p.m.	12.25	19,500	8	6.48	2,650
3 p.m.	3.25	380				10	6.18	2,330
5	3.30	395	Dec. 23			12 p.m.	6.00	2,150
7	3.50	455	1 a.m.	12.88	23,300			
8:30	3.67	514	2	-	26,100	Dec. 27		
10	3.56	476	4	-	30,000	2 a.m.	5.85	2,000
12 p.m.	3.45	440	5	14.23	32,000	4	5.72	1,890
			7	-	30,300	7	5.57	1,750
Dec. 20			9	-	28,600	9	5.48	1,670
2 a.m.	3.36	413	11	13.43	26,600	12 m.	5.35	1,560
4	3.35	410	12 m.	13.28	25,700	3 p.m.	5.28	1,500
6	3.48	449	2 p.m.	12.85	23,100	6	5.20	1,440
8	3.56	476	4	12.35	20,100	9	5.12	1,380
10	3.60	490	6	12.08	18,600	12 p.m.	4.97	1,260
12 m.	3.63	500	8	11.90	17,700			
3 p.m.	4.08	690	9	11.70	16,700	Jan. 14		
5	4.14	720	10	11.35	15,000	12 p.m.	4.67	1,030
7	4.14	720	11	10.77	12,500			
9	4.25	778	12 p.m.	10.00	9,700	Jan. 15		
11	4.25	778				1 a.m.	4.69	1,050
12 p.m.	4.20	750	Dec. 24			10	4.73	1,080
			1 a.m.	9.57	8,410	12 m.	4.84	1,160
Dec. 21			3	9.00	6,900	1 p.m.	5.06	1,330
4 a.m.	3.88	597	5	8.47	5,750	3	5.69	1,860
8	3.58	483	7	8.13	5,100	5	6.34	2,490
12 m.	3.37	416	9	7.73	4,400	6	6.89	3,160
4 p.m.	3.17	358	11	7.35	3,800	8	7.64	4,250
7	3.15	352	1 p.m.	7.03	3,340	11	8.18	5,190
9	3.27	386	3	6.80	3,040	12 p.m.	8.08	5,010
10	3.52	462	6	6.45	2,620			
11	4.00	650	8	6.28	2,430	Jan. 16		
12 p.m.	4.55	952	10	6.15	2,300	3 a.m.	7.39	3,860
			12 p.m.	6.07	2,220	7	6.64	2,840
Dec. 22						11	6.17	2,320
1 a.m.	5.08	1,340	Dec. 25			3 p.m.	5.90	2,050
2	5.65	1,820	2 a.m.	6.00	2,150	7	5.73	1,900
3	6.50	2,670	8	5.77	1,930	12 p.m.	5.55	1,740
4	7.42	3,910	12 m.	5.68	1,850			
5	8.14	5,120	3 p.m.	5.65	1,820	Jan. 17		
6	8.45	5,710	6	5.65	1,820	4 a.m.	5.39	1,590
7	8.65	6,110	10	5.67	1,840	1 p.m.	5.13	1,380
8	9.00	6,900	12 p.m.	5.65	1,820	6	5.03	1,300
9 a.m.	9.35	7,780				12 p.m.	5.17	1,420

195. South Fork Stanislaus River at Strawberry, Calif.

Location.--Lat 38°12', long 120°01', in SW$\frac{1}{4}$ sec.16, T.4 N., R.18 E., on right bank at Strawberry, 0.1 mile downstream from bridge on State Highway 108 and 0.5 mile downstream from Herring Creek.

Drainage area.--45.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,350 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and by contracted-opening measurement at 3,900 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,130 cfs 3 a.m. Dec. 23 (gage height, 7.00 ft).

1911-17, 1938 to November 1955: Discharge, 3,900 cfs Nov. 21, 1950 (gage height, 9.25 ft).

Remarks.--Flow regulated by Strawberry Reservoir since 1916 (capacity, 18,300 acre-ft).

Mean discharge, in cubic feet per second, 1955-56, of South Fork Stanislaus River at Strawberry, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	30	151	11.....	25	85	21.....	38	186
2.....	30	132	12.....	25	91	22.....	572	172
3.....	30	119	13.....	25	91	23.....	1,140	215
4.....	30	110	14.....	25	119	24.....	310	164
5.....	30	112	15.....	25	404	25.....	213	153
6.....	33	105	16.....	25	551	26.....	190	153
7.....	30	98	17.....	25	286	27.....	151	139
8.....	25	95	18.....	27	241	28.....	156	123
9.....	29	88	19.....	33	217	29.....	172	107
10.....	26	82	20.....	35	200	30.....	168	103
						31.....	162	90
Monthly mean discharge, in cubic feet per second......................							124	161
Runoff, in acre-feet..							7,610	9,880

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23--Con.			Jan. 14		
12 p.m.......	1.87	38	6 a.m........	6.50	1,800	12 p.m.......	2.65	156
			10...........	5.40	1,150			
Dec. 21			6 p.m........	4.48	701	Jan. 15		
12 m.........	1.83	35	12 p.m.......	3.84	450	10 a.m.......	2.78	182
6 p.m........	1.83	35				6 p.m........	4.48	701
12 p.m.......	2.00	51	Dec. 24			10...........	4.64	773
			6 a.m........	3.50	346	12 p.m.......	4.62	764
Dec. 22			12 m.........	3.30	296			
3 a.m........	2.70	166	12 p.m.......	3.07	243	Jan. 16		
6............	3.25	284				12 m.........	4.10	540
10...........	4.40	665	Dec. 25			12 p.m.......	3.55	360
12 m.........	4.15	560	12 m.........	2.92	210			
2 p.m........	4.62	764	12 p.m.......	2.80	186	Jan. 17		
4............	4.44	683				6 a.m........	3.35	308
8............	4.80	850	Dec. 26			12 m.........	3.20	272
12 p.m.......	5.85	1,410	4 a.m........	2.78	182	6 p.m........	3.13	257
			10...........	2.93	213	12 p.m.......	3.10	250
Dec. 23			2 p.m........	2.83	192			
3 a.m........	7.00	2,130	12 p.m.......	2.67	160			

196. South Fork Stanislaus River near Long Barn, Calif.

Location.--Lat 38°05', long 120°11', in sec.25, T.3 N., R.16 E., on left bank 600 ft downstream from Lyons Dam, 2 miles west of Long Barn, and 14 miles northeast of Sonora.

Drainage area.--67.2 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,100 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and extended above on basis of computed flow over Lyons Dam.

Maxima.--December 1955 to January 1956: Discharge, 3,160 cfs 11 a.m. Dec. 23 (gage height, 8.00 ft).

1937 to November 1955: Discharge, 4,900 cfs Nov. 21, 1950 (gage height, 9.3 ft).

Remarks.--Flow regulated by Lyons and Strawberry Reservoirs (combined usable capacity, 23,700 acre-ft). Diversion by Tuolumne Canal at Lyons Dam; Philadelphia Canal diverts 12 miles above station into basin of Middle Fork Stanislaus River.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.5	173	11.....	1.7	108	21.....	1.7	226
2.....	1.5	163	12.....	1.7	111	22.....	3.5	241
3.....	1.5	135	13.....	1.7	112	23.....	1,990	438
4.....	1.5	124	14.....	1.7	204	24.....	1,060	299
5.....	1.5	210	15.....	1.7	481	25.....	537	370
6.....	1.7	171	16.....	2.0	928	26.....	799	435
7.....	1.5	140	17.....	2.3	496	27.....	538	388
8.....	1.7	132	18.....	2.7	340	28.....	350	285
9.....	1.7	112	19.....	2.3	260	29.....	290	230
10.....	1.7	103	20.....	1.7	236	30.....	232	190
						31.....	199	156
Monthly mean discharge, in cubic feet per second......................							195	258
Runoff, in acre-feet..							11,970	15,860

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Fork Stanislaus River near Long Barn, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 22			Dec. 26--Con.			Jan. 15		
12 p.m.......	0.95	5.4	6 a.m........	4.09	507	8 a.m........	3.23	288
			10...........	4.97	828	10...........	3.28	299
Dec. 23			12 m.........	5.45	1,060	12 m.........	3.41	328
4 a.m........	.98	6.6	1 p.m........	5.49	1,080	10 p.m.......	5.12	900
6............	5.78	1,260	4............	5.40	1,040	12 p.m.......	5.37	1,020
8............	7.60	2,730	6............	5.35	1,020			
11...........	8.00	3,160	12 p.m.......	4.84	776	Jan. 16		
10 p.m.......	7.05	2,220				2 a.m........	5.48	1,080
12 p.m.......	6.73	1,940	Dec. 27			4............	5.50	1,090
			6 a.m........	4.38	598	6............	5.48	1,080
Dec. 24			12 m.........	4.08	504	12 m.........	5.25	965
6 a.m........	5.76	1,250	12 p.m.......	3.73	408	12 p.m.......	4.53	652
12 m.........	5.18	930						
12 p.m.......	4.45	622	Jan. 13			Jan. 17		
Dec. 25			12 p.m.......	2.32	124	6 a.m........	4.23	549
12 m.........	4.08	504				12 m.........	4.00	480
6 p.m........	4.14	522	Jan. 14			6 p.m........	3.83	432
12 p.m.......	4.06	498	10 a.m.......	2.74	190	12 p.m.......	3.67	392
			12 m.........	2.77	196			
Dec. 26			9 p.m........	3.16	273			
3 a.m........	3.98	474	12 p.m.......	3.20	281			

197. Melones Reservoir at Melones Dam, Calif.

Location.--Lat 37°57'15", long 120°30'45", near center of sec.11, T.1 N., R.13 E., at gate tower near left bank at Melones Dam on Stanislaus River, 0.1 mile downstream from Bear Creek.

Drainage area.--897 sq mi.

Gage-height record.--Staff gage read once daily. Datum of gage is at mean sea level (levels by Pacific Gas & Electric Co.).

Maxima.--December 1955 to January 1956: Contents observed, 108,900 acre-ft 8 a.m. Dec. 24 (elevation, 733.0 ft).

1927 to November 1955: Contents observed, 115,800 acre-ft May 27, 1951 (elevation, 736.7 ft).

Remarks.--Reservoir is formed by concrete overflow dam; storage began Aug. 21, 1926; dam completed in December 1926. Capacity for power development 1 mile below dam is 106,100 acre-ft between elevations 628.0 ft (minimum operating level) and 735.0 ft (top of drum-type spillway gates) above mean sea level; usable capacity for irrigation, 110,000 acre-ft between elevations 610.0 ft (floor of outlet tunnel) and 735.0 ft above mean sea level. Figures given herein represent total contents at 8 a.m., of which 2,630 acre-ft are not available for release. Released water flows down Stanislaus River to Goodwin Dam, where it is diverted into Oakdale and South San Joaquin Canals for irrigation. Record of contents furnished by Pacific Gas & Electric Co.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	640.1	10,700	724.6	94,300	16	640.1	10,700	728.5	100,900
2	641.4	11,300	724.6	94,300	17	640.5	10,900	725.5	95,800
3	641.7	11,400	724.4	94,000	18	641.1	11,100	725.5	95,800
4	641.9	11,500	724.2	93,600	19	640.0	10,700	724.9	94,800
5	639.9	10,600	725.0	95,000	20	648.2	14,500	724.9	94,800
6	640.8	11,000	725.1	95,200	21	654.8	18,200	724.9	94,800
7	640.3	10,800	723.7	92,800	22	661.6	22,600	724.7	94,500
8	644.5	12,700	722.7	91,200	23	724.2	93,600	726.5	97,500
9	643.2	12,100	721.5	89,300	24	733.0	108,900	725.8	96,300
10	644.2	12,500	719.9	86,800	25	727.6	99,400	725.9	96,500
11	644.0	12,400	719.1	85,600	26	727.9	99,900	726.0	96,700
12	642.3	11,700	719.8	86,600	27	728.5	100,900	726.8	98,000
13	641.1	11,100	720.4	87,600	28	726.4	97,300	725.7	96,200
14	641.3	11,200	721.7	89,600	29	725.7	96,200	725.2	95,300
15	641.0	11,100	725.7	96,200	30	725.8	96,300	724.8	94,600
					31	725.0	95,000	724.6	94,300
Change in contents..................................						-	+84,000	-	-700

198. Stanislaus River below Melones powerhouse, California

Location.--Lat 37°56'50", long 120°31'45", near line between secs. 10 and 15, T.1 N., R.13 E., on right bank 300 ft downstream from powerhouse, 0.5 mile upstream from Bear Gulch, and 1 mile downstream from Melones Dam.

Drainage area.--898 sq mi.

Gage-height record.--Water-stage recorder graph except 6 a.m. Dec. 23 to 10:30 a.m. Jan. 10. Altitude of gage is 500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 14,000 cfs and by computation of peak flow over dam at 62,800 cfs. Discharge for period of no gage-height record estimated on basis of flow over Melones Dam, power output from Melones powerhouse, and records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 62,800 cfs about 4 p.m. Dec. 23 (gage height, 29.0 ft, from floodmark).

1931 to November 1955: Discharge, 49,500 cfs Nov. 21, 1950 (gage height, 25.18 ft), from rating curve extended above 18,000 cfs on basis of computed flow over Melones Dam.

Remarks.--Flow regulated by Melones powerhouse, Melones Reservoir (see station 197), and several smaller reservoirs above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	97	3,000	11.....	730	1,880	21.....	750	3,720
2.....	311	2,500	12.....	725	1,570	22.....	2,450	3,540
3.....	403	2,300	13.....	278	1,570	23.....	45,000	7,880
4.....	259	2,200	14.....	393	1,570	24.....	20,000	5,920
5.....	57	2,900	15.....	420	4,670	25.....	5,000	5,840
6.....	352	3,700	16.....	203	12,400	26.....	14,000	7,010
7.....	484	3,700	17.....	234	7,010	27.....	12,000	8,100
8.....	720	3,500	18.....	471	5,000	28.....	8,000	5,580
9.....	720	3,400	19.....	705	3,920	29.....	4,500	4,390
10.....	494	3,020	20.....	740	3,640	30.....	4,200	3,750
						31.....	3,500	3,320
Monthly mean discharge, in cubic feet per second..........................							4,135	4,274
Runoff, in acre-feet..							254,300	262,800

199. Stanislaus River at Goodwin Dam, near Knights Ferry, Calif.

(Gaging station, discontinued 1932)

Location.--Lat 37°51'46", long 120°37'41", in SE¼ sec.10, T.1 S., R.12 E., at Goodwin Dam and 3.8 miles northeast of Knights Ferry. Altitude of pool above dam, 362 ft (from topographic map).

Drainage area.--973 sq mi (revised).

Discharge record.--Peak discharge by computation of flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 62,900 cfs 8 p.m. Dec. 23.

1903-32: Discharge, 60,000 cfs Jan. 31, 1911 (gage height, 26.0 ft, site and datum then in use).

Remarks.--Flows partly regulated by storage in Melones Reservoir (see station 197) and several smaller reservoirs.

200. Stanislaus River at Ripon, Calif.

Location.--Lat 37°43'50", long 121°06'35", in SE¼ sec.29, T.2 S., R.8 E., on left bank 15 ft downstream from railroad bridge, 1 mile southeast of Ripon, and 15 miles upstream from mouth.

Gage-height record.--Water-stage recorder graph except 5 p.m. Dec. 24 to 10 a.m. Dec. 28, for which graph was reconstructed on basis of high-water mark in gage house, two gage readings, and gage-height graphs for upstream and downstream stations. Datum of gage is at mean sea level, unadjusted (levels by Modesto Irrigation District).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 62,500 cfs 9 a.m. Dec. 24 (gage height, 63.25 ft).

1940 to November 1955: Discharge, 48,500 cfs Nov. 21, 1950 (gage height, 62.78 ft).

Flood of Feb. 12, 1938, reached a stage of 64.4 ft, from floodmarks. Flood of Apr. 1, 1940, reached a stage of 61.1 ft, from floodmarks.

Remarks.--Flow regulated by reservoirs and powerplants above station (see Remarks for station below Melones powerhouse).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	228	4,910	11	626	3,550	21	784	4,540
2	288	4,030	12	740	2,560	22	897	4,270
3	245	3,720	13	750	2,240	23	3,060	4,400
4	374	3,290	14	540	2,210	24	47,000	7,600
5	472	3,180	15	464	2,940	25	22,800	6,870
6	288	4,690	16	478	6,270	26	5,670	6,690
7	484	4,910	17	440	11,600	27	17,500	8,060
8	562	4,560	18	348	8,290	28	13,400	8,810
9	776	4,140	19	319	6,080	29	7,540	6,540
10	849	3,880	20	527	4,960	30	5,450	5,460
						31	5,120	4,600
Monthly mean discharge, in cubic feet per second							4,484	5,163
Runoff, in acre-feet							275,700	317,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 24--Con.			Dec. 28--Con.		
12 p.m.	38.97	387	6 a.m.	62.00	50,000	10 a.m.	56.30	13,400
			7	63.00	60,000	12 m.	56.04	12,400
Dec. 20			8	63.10	61,000	6 p.m.	55.59	10,900
4 a.m.	39.31	452	9	63.25	62,500	12 p.m.	55.13	9,460
8	39.51	492	12 m.	62.86	58,600			
12 m.	39.66	522	1 p.m.	62.75	57,500	Dec. 29		
3 p.m.	39.75	540	3	62.88	58,800	6 a.m.	54.66	8,240
7	39.96	585	5	62.70	57,000	12 m.	54.25	7,360
9	40.19	635	9	61.80	48,000	6 p.m.	53.88	6,730
12 p.m.	40.47	698	12 p.m.	61.20	42,600	12 p.m.	53.51	6,240
Dec. 21			Dec. 25			Dec. 30		
6 a.m.	40.71	754	6 a.m.	59.60	30,100	6 a.m.	52.99	5,680
12 m.	40.88	795	12 m.	58.05	21,200	12 m.	52.57	5,320
6 p.m.	40.98	819	6 p.m.	56.50	14,200	6 p.m.	52.36	5,150
12 p.m.	41.06	839	12 p.m.	54.90	8,840	12 p.m.	52.22	5,040
Dec. 22			Dec. 26			Dec. 31		
12 m.	41.08	844	6 a.m.	53.50	6,230	12 m.	52.33	5,120
5 p.m.	41.10	849	12 m.	52.45	5,220	12 p.m.	52.45	5,220
7	41.25	886	6 p.m.	51.60	4,630			
9	41.75	1,020	10	51.25	4,420	Jan. 1		
12 p.m.	42.95	1,350	12 p.m.	51.20	4,390	3 a.m.	52.48	5,240
						8	52.33	5,120
Dec. 23			Dec. 27			12 m.	52.11	4,970
3 a.m.	44.31	1,750	2 a.m.	51.25	4,420	6 p.m.	51.67	4,670
6	45.40	2,100	4	51.60	4,630	12 p.m.	51.17	4,370
9	46.33	2,400	6	52.50	5,260			
12 m.	48.00	2,960	8	53.90	6,760	Jan. 2		
3 p.m.	49.63	3,560	10	56.00	12,300	6 a.m.	50.69	4,120
6	50.80	4,030	12 m.	58.30	22,400	12 m.	50.38	3,960
9	51.80	4,500	2 p.m.	59.50	29,400	12 p.m.	50.20	3,870
12 p.m.	52.90	5,090	5	60.00	32,900			
			7	59.50	29,400	Jan. 15		
Dec. 24			9	58.60	24,000	12 p.m.	48.92	3,290
2 a.m.	55.00	6,930	12 p.m.	57.85	20,200			
3	58.40	20,200				Jan. 16		
4	60.00	31,500	Dec. 28			6 a.m.	50.25	3,900
5 a.m.	61.00	40,000	6 a.m.	56.85	15,600	12 m.	52.00	4,890

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Stanislaus River at Ripon, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 16--Con.			Jan. 17--Con.			Jan. 18--Con.		
6 p.m........	54.65	8,220	12 m.........	55.94	12,000	12 m.........	54.63	8,170
9............	55.60	10,900	6 p.m........	55.68	11,200	6 p.m........	54.26	7,380
12 p.m.......	55.95	12,100	12 p.m.......	55.38	10,200	12 p.m.......	53.90	6,760
Jan. 17			Jan. 18					
4 a.m........	56.11	12,700	6 a.m.......	55.01	9,130			

201. San Joaquin River near Vernalis, Calif.

Location.--Lat 37°40'34", long 121°15'51", on left bank 30 ft upstream from Durham Ferry highway bridge, 3 miles downstream from Stanislaus River, and 3.4 miles northeast of Vernalis, San Joaquin County.

Drainage area.--14,010 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 8.4 ft above datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 41,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 50,900 cfs 11 p.m. Dec. 25 (gage height, 26.89 ft), including flow through break in levee.

1922 to November 1955: Discharge recorded, about 79,000 cfs Dec. 9, 1950 (gage height, 27.75 ft), including flow through breaks in levee.

Remarks.--Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,320	34,000	11.....	1,910	25,800	21.....	1,920	26,300
2.....	1,400	32,900	12.....	1,800	24,400	22.....	2,040	25,400
3.....	1,420	31,400	13.....	1,900	23,000	23.....	3,210	23,900
4.....	1,420	29,700	14.....	1,850	21,500	24.....	15,500	23,600
5.....	1,560	28,200	15.....	1,660	20,200	25.....	40,400	25,200
6.....	1,490	27,700	16.....	1,610	21,000	26.....	47,400	25,700
7.....	1,420	28,600	17.....	1,580	24,400	27.....	39,500	27,000
8.....	1,640	28,600	18.....	1,510	27,600	28.....	42,300	29,600
9.....	1,780	27,900	19.....	1,740	27,600	29.....	40,900	30,800
10.....	1,970	27,000	20.....	1,720	27,000	30.....	37,000	31,000
						31.....	35,200	31,400
Monthly mean discharge, in cubic feet per second......................							10,905	27,050
Runoff, in acre-feet..							670,600	1,663,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22			Dec. 25--Con.			Dec. 28--Con.		
12 p.m.......	8.27	2,100	6 a.m........	24.84	35,500	9 a.m........	25.88	42,400
			9............	25.48	39,600	12 m.........	25.97	43,000
Dec. 23			12 m.........	25.78	41,700	3 p.m........	26.03	43,400
4 a.m........	8.35	2,160	6 p.m........	26.48	47,100	6............	26.05	43,600
6............	8.46	2,260	9............	26.82	50,200	9............	26.03	43,400
8............	8.58	2,370	11...........	26.89	50,900	12 p.m.......	25.98	43,100
12 m.........	9.02	2,770	12 p.m.......	26.88	50,800			
3 p.m........	9.56	3,260				Dec. 29		
6............	10.48	4,180	Dec. 26			12 m.........	25.67	40,900
12 p.m.......	11.76	5,500	6 a.m........	26.75	49,600	12 p.m.......	25.35	38,700
			12 m.........	26.55	47,800			
Dec. 24			6 p.m........	26.28	45,400	Dec. 30		
3 a.m........	12.65	6,500	12 p.m.......	25.97	43,000	12 m.........	25.07	36,900
6............	13.82	7,950	Dec. 27			12 p.m.......	24.87	35,700
9............	16.76	12,200	6 a.m........	25.58	40,300			
12 m.........	19.40	17,100	12 m.........	25.34	38,700	Dec. 31		
3 p.m........	21.17	21,200	3 p.m........	25.25	38,100	12 m.........	24.78	35,200
6............	21.49	22,000	6	25.24	38,000	12 p.m.......	24.68	34,600
12 p.m.......	22.01	23,300	12 p.m.......	25.44	39,300			
Dec. 25			Dec. 28					
1 a.m........	22.10	23,600	6 a.m........	25.75	41,400			

202. Duck Creek near Farmington, Calif.
(Miscellaneous site)

Location.--Lat 37°56'40", long 120°55'45", in NE¼NE¼ sec.13, T.1 N., R.9 E., 0.8 mile downstream from Corps of Engineers flood-warning gage, 4 miles upstream from diversion to Littlejohns Creek, and 4 miles east of Farmington. Altitude is 142 ft (from topographic map).

Drainage area.--8.25 sq mi.

Discharge record.--Peak discharge by computation of flow through culvert.

Maximum.--December 1955 to January 1956: Discharge, 940 cfs at 12 p.m. Dec. 22 (gage height, 6.60 ft).

203. San Domingo Creek near San Andreas, Calif.

Location.--Lat 38°06'55", long 120°37'00", in NE¼ sec.14, T.3 N., R.12 E., on right bank 2.5 miles upstream from mouth, 3.2 miles downstream from French Gulch, and 6.5 miles southeast of San Andreas.

Drainage area.--27.1 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,060 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 290 cfs and by slope-area measurement at 2,830 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,830 cfs 2:30 a.m. Dec. 23 (gage height, 8.24 ft).

1950 to November 1955: Discharge, 928 cfs Feb. 4, 1950 (gage height, 4.45 ft); gage height, 4.68 ft Jan. 15, 1952.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4.5	64	11.....	6.6	46	21.....	40	53
2.....	3.3	76	12.....	5.4	39	22.....	666	68
3.....	1.6	58	13.....	4.1	35	23.....	1,540	121
4.....	1.1	48	14.....	3.2	91	24.....	590	86
5.....	1.0	178	15.....	2.2	242	25.....	175	135
6.....	30	116	16.....	2.0	210	26.....	284	160
7.....	16	83	17.....	3.2	107	27.....	228	162
8.....	7.2	74	18.....	4.0	77	28.....	103	110
9.....	14	58	19.....	205	60	29.....	68	82
10.....	9.8	53	20.....	166	61	30.....	50	67
						31.....	90	55
Monthly mean discharge, in cubic feet per second							139	92.7
Runoff, in inches							5.93	3.95
Runoff, in acre-feet							8,580	5,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 26		
12 p.m.	1.05	3.3	6 a.m.	3.30	250	8 a.m.	2.94	128
Dec. 18			9	5.02	890	9	3.09	149
5 p.m.	1.02	2.8	10:30	5.44	1,100	11	3.77	269
10	1.16	6.3	12 m.	5.48	1,120	5 p.m.	4.59	487
12 p.m.	1.37	14	4 p.m.	4.31	584	12 p.m.	4.20	375
			6	4.01	494			
Dec. 19			7	4.05	488	Dec. 27		
2 a.m.	2.10	61	8	4.23	552	3 a.m.	3.96	315
5	2.83	148	12 p.m.	6.84	1,890	12 m.	3.46	208
8	2.72	130				12 p.m.	3.02	139
9	3.20	225	Dec. 23					
2 p.m.	2.70	127	2:30 a.m.	8.24	2,830	Jan. 13		
4	2.80	143	4	7.25	1,950	12 p.m.	1.97	38
7	3.72	372	6	6.48	1,370			
12 p.m.	3.92	442	8:30	6.21	1,210	Jan. 14		
			12 m.	7.18	1,890	7 a.m.	2.17	52
Dec. 20			4 p.m.	6.28	1,250	6 p.m.	2.90	122
5 a.m.	3.38	270	12 p.m.	5.89	1,040	8	3.18	162
8	2.93	167				12 p.m.	3.08	147
4 p.m.	2.31	79	Dec. 24					
12 p.m.	2.08	60	2 a.m.	5.82	1,010	Jan. 15		
			5	5.56	882	5 a.m.	2.91	123
Dec. 21			2 p.m.	4.41	433	10	2.90	122
4 a.m.	1.93	49	5	4.15	362	7 p.m.	4.45	445
1 p.m.	1.74	36	12 p.m.	3.72	259	12 p.m.	4.08	345
10	1.63	29						
12 p.m.	1.66	31	Dec. 25			Jan. 16		
			1 p.m.	3.13	154	9 a.m.	3.50	215
Dec. 22			8	3.00	136	4 p.m.	3.20	165
1 a.m.	1.71	34	12 p.m.	2.87	118	12 p.m.	2.99	135

204. San Antonio Creek near San Andreas, Calif.

Location.--Lat 38°07'50", long 120°38'10", in NE¼ sec.10, T.3 N., R.12 E., on right bank 800 ft downstream from highway bridge, 1.9 miles upstream from mouth, 5 miles downstream from Indian Creek, and 5 miles southeast of San Andreas.

Drainage area.--46.4 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 940 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 240 cfs and by slope-area measurement at 2,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,500 cfs 4 a.m. Dec. 23 (gage height, 5.66 ft in gage well; 6.55 ft outside, from floodmarks).
1950 to November 1955: Discharge, 1,220 cfs Feb. 4 and Nov. 18, 1950 (gage height, 4.50 ft, from floodmarks).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7.4	162	11.....	8.3	134	21.....	137	198
2.....	16	186	12.....	7.8	120	22.....	765	228
3.....	8.8	146	13.....	7.8	113	23.....	2,170	416
4.....	7.4	131	14.....	7.8	244	24.....	1,320	300
5.....	6.6	325	15.....	7.4	568	25.....	494	369
6.....	34	239	16.....	10	594	26.....	752	476
7.....	26	186	17.....	9.9	342	27.....	640	518
8.....	8.8	176	18.....	9.3	266	28.....	330	352
9.....	20	152	19.....	198	218	29.....	252	290
10.....	14	140	20.....	241	210	30.....	183	244
						31.....	190	210
Monthly mean discharge, in cubic feet per second......................							254	266
Runoff, in inches..							6.32	6.61
Runoff, in acre-feet...							15,650	16,370

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 26		
12 p.m.......	1.49	8.3	6 p.m........	3.54	788	7 a.m........	2.85	352
			11...........	4.03	1,140	9............	2.97	422
Dec. 18			12 p.m.......	4.44	1,470	4 p.m........	4.07	1,180
9 p.m........	1.50	8.8				7............	4.13	1,220
12 p.m.......	1.63	20	Dec. 23			12 p.m.......	3.83	991
			1 a.m........	5.11	2,010			
Dec. 19			3............	5.15	2,040	Dec. 27		
3 a.m........	1.85	42	4............	5.66	2,500	5 a.m........	3.49	753
6............	1.83	40	6............	5.17	2,060	12 p.m.......	2.94	404
7............	2.31	128	11...........	5.01	1,930			
10 p.m.......	2.88	369	12 m.........	5.25	2,140	Jan. 13		
12 p.m.......	2.84	347	4 p.m........	5.56	2,410	12 p.m.......	2.26	115
			6:30.........	5.28	2,160			
Dec. 20			8............	5.62	2,470	Jan. 14		
7 a.m........	2.65	252	12 p.m.......	5.29	2,170	6 a.m........	2.35	140
12 p.m.......	2.48	183				8 p.m........	2.90	380
			Dec. 24			12 p.m.......	2.83	342
Dec. 21			1 a.m........	5.28	2,160			
10 p.m.......	2.18	97	4............	5.00	1,920	Jan. 15		
12 p.m.......	2.20	101	12 m.........	4.10	1,200	11:30 a.m....	2.77	310
			5 p.m........	3.70	900	7 p.m........	3.86	1,010
Dec. 22			12 p.m.......	3.40	690	10:30........	3.84	998
5 a.m........	2.57	218				12 p.m.......	3.70	900
7............	3.15	530	Dec. 25					
9............	3.30	620	9 a.m........	3.13	518	Jan. 16		
10...........	4.03	1,140	11...........	3.04	464	4 a.m........	3.46	732
1 p.m........	4.23	1,300	12 p.m.......	2.89	374	9............	3.28	608
2 p.m........	3.99	1,110				12 p.m.......	2.95	410

205. South Fork Calaveras River near San Andreas, Calif.

Location.--Lat 38°08'40", long 120°39'50", in NW¼ sec.4, T.3 N., R.12 E., on right bank 0.1 mile downstream from San Antonio Creek, 1.6 miles south of the Calaveras Cement Plant, and 3.7 miles south of San Andreas.

Drainage area.--118 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 860 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,320 cfs and by slope-area measurement at 17,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 17,600 cfs 1:30 a.m. Dec. 23 (gage height, 10.29 ft).
1950 to November 1955: Discharge observed, 5,620 cfs Nov. 18, 1950 (gage height, 6.40 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	7.8	365	11	26	262	21	265	335
2	25	408	12	19	219	22	3,440	408
3	13	283	13	16	197	23	8,210	769
4	8.6	233	14	14	737	24	3,600	504
5	7.2	1,330	15	11	1,710	25	976	776
6	160	600	16	15	1,200	26	1,830	1,090
7	74	460	17	24	612	27	1,230	967
8	32	447	18	22	447	28	588	618
9	70	306	19	736	350	29	392	469
10	43	288	20	662	370	30	288	376
						31	616	315
Monthly mean discharge, in cubic feet per second							756	563
Runoff, in inches							7.38	5.50
Runoff, in acre-feet							46,450	34,610

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	1.42	35	11 p.m.	7.28	7,650	12 p.m.	4.55	2,180
			12 p.m.	7.70	8,740			
Dec. 19						Dec. 27		
2 a.m.	1.65	60	Dec. 23			6 a.m.	3.96	1,430
5	2.94	564	1:30 a.m.	10.29	17,600	12 m.	3.64	1,090
12 m.	2.90	540	4	7.60	8,480	12 p.m.	3.24	758
4 p.m.	2.86	516	9	6.75	6,390			
7	3.95	1,420	1 p.m.	7.10	7,220	Jan. 13		
11	4.16	1,660	3	6.96	6,880	12 p.m.	2.19	194
12 p.m.	4.05	1,530	5	7.55	8,350			
			8	7.12	7,270	Jan. 14		
Dec. 20			12 p.m.	6.80	6,500	8 a.m.	2.50	320
6 a.m.	3.20	730				12 m.	3.02	612
6 p.m.	2.66	403	Dec. 24			5 p.m.	3.59	1,040
12 p.m.	2.59	365	5 a.m.	6.42	5,660	9	4.12	1,610
			12 m.	5.10	3,080	12 p.m.	3.83	1,280
Dec. 21			6 p.m.	4.40	1,970			
10 p.m.	2.15	180	12 p.m.	3.97	1,440	Jan. 15		
12 p.m.	2.18	190				6 a.m.	3.35	840
			Dec. 25			12 m.	3.36	848
Dec. 22			12 m.	3.40	880	3 p.m.	4.39	1,960
2 a.m.	2.48	311	12 p.m.	3.16	702	7:30	5.38	3,580
4	4.35	1,900				12 p.m.	4.54	2,170
6	4.38	1,940	Dec. 26					
8	5.78	4,360	4 a.m.	3.13	681	Jan. 16		
11	5.67	4,140	10	3.48	944	6 a.m.	3.94	1,400
2 p.m.	5.12	3,120	1 p.m.	4.70	2,400	12 m.	3.60	1,050
6:30	4.32	1,870	3	4.61	2,260	12 p.m.	3.23	751
10 p.m.	7.68	8,690	6 p.m.	5.44	3,690			

206. Calaveritas Creek near San Andreas, Calif.

Location.--Lat 38°09'50", long 120°39'30", in SW¼ sec.28, T.4 N., R.12 E., on right bank 0.8 mile east of Calaveras Cement Plant, 1.0 mile upstream from mouth, and 2.6 miles southeast of San Andreas.

Drainage area.--53.3 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 865 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,900 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,600 cfs 3 a.m. Dec. 23 (gage height, 6.33 ft).

1950 to November 1955: Discharge observed, 3,420 cfs Nov. 18, 1950 (gage height, 6.2 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	9.0	155	11.....	16	106	21.....	98	130
2.....	6.5	215	12.....	12	92	22.....	1,910	272
3.....	5.8	148	13.....	11	87	23.....	3,130	622
4.....	5.8	121	14.....	9.0	365	24.....	1,830	289
5.....	6.8	601	15.....	8.6	1,080	25.....	490	370
6.....	95	345	16.....	8.2	746	26.....	879	648
7.....	44	229	17.....	9.8	324	27.....	660	632
8.....	22	206	18.....	13	206	28.....	258	333
9.....	38	152	19.....	361	150	29.....	152	222
10.....	29	121	20.....	323	150	30.....	119	167
						31.....	179	132
Monthly mean discharge, in cubic feet per second							346	304
Runoff, in inches							7.49	6.57
Runoff, in acre-feet							21,300	18,680

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 27		
12 p.m.......	1.03	9.4	7 p.m........	4.39	1,370	12 m.........	3.17	548
			9............	5.32	2,300	12 p.m.......	2.77	353
Dec. 18			10...........	5.23	2,200			
6 p.m........	1.01	8.6	12 p.m.......	6.00	3,140	Dec. 28		
12 p.m.......	1.52	43				12 m.........	2.48	243
			Dec. 23			12 p.m.......	2.32	191
Dec. 19			3 a.m........	6.33	3,600			
2 a.m........	2.02	104	5:30.........	6.00	3,140	Jan. 13		
6............	1.67	56	6:30.........	6.16	3,360	12 p.m.......	1.85	82
8............	2.07	115	10:30........	5.75	2,820			
10...........	1.85	75	2:30 p.m.....	5.75	2,820	Jan. 14		
11...........	2.37	202	5............	5.93	3,050	6 a.m........	2.07	123
5 p.m........	3.33	638	7............	6.15	3,350	12 m.........	2.69	321
7:30.........	3.15	538	12 p.m.......	5.91	3,020	4 p.m........	3.02	470
10:30........	3.91	1,010				7............	3.51	746
12 p.m.......	3.68	852	Dec. 24			12 p.m.......	3.29	614
			6 a.m........	5.55	2,570			
Dec. 20			12 m.........	4.76	1,710	Jan. 15		
6 a.m........	2.83	378	6 p.m........	4.09	1,130	10 a.m.......	2.91	415
12 m.........	2.42	219	12 p.m.......	3.61	806	1 p.m........	3.67	846
12 p.m.......	2.24	161				5............	5.02	1,970
			Dec. 25			6:30.........	5.16	2,130
Dec. 21			12 m.........	2.93	425	9............	5.00	1,950
12 m.........	1.91	83	12 p.m.......	2.65	305	12 p.m.......	4.39	1,370
10 p.m.......	1.76	65						
12 p.m.......	1.98	95	Dec. 26			Jan. 16		
			7 a.m........	2.61	289	6 a.m........	3.73	884
Dec. 22			11...........	3.27	604	12 m.........	3.36	656
1 a.m........	2.30	179	3 p.m........	4.54	1,510	12 p.m.......	2.94	430
3............	3.52	752	5:30.........	4.35	1,340			
4:30.........	3.40	680	7............	4.73	1,680	Jan. 17		
7............	5.35	2,340	12 p.m.......	4.16	1,190	12 m.........	2.66	309
10 a.m.......	6.02	3,170				12 p.m.......	2.49	246

207. Esperanza Creek near Mokelumne Hill, Calif.

Location.--Lat 38°19'00", long 120°35'40", in NW¼ sec.6, T.5 N., R.13 E., on right bank 600 ft upstream from mouth and 6 miles east of Mokelumne Hill.

Drainage area.--16.7 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,470 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs and by slope-area measurement at 2,030 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,060 cfs 5 p.m. Dec. 23 (gage height, 6.78 ft in well; 7.7 ft outside, from floodmarks).

1951 to November 1955: Discharge, 1,160 cfs Jan. 15, 1952 (gage height, 4.56 ft in well; 5.0 ft outside, from floodmarks).

Flood of Nov. 18, 1950, reached a stage of 6.5 ft, from floodmarks (discharge, 2,030 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	8.4	62	11.....	5.2	29	21.....	31	33
2.....	9.5	72	12.....	4.0	23	22.....	1,000	89
3.....	4.2	38	13.....	3.4	20	23.....	1,660	140
4.....	3.0	27	14.....	3.2	119	24.....	496	62
5.....	2.7	132	15.....	2.8	267	25.....	112	133
6.....	59	68	16.....	2.7	159	26.....	266	350
7.....	13	48	17.....	3.6	66	27.....	138	191
8.....	5.8	54	18.....	4.8	46	28.....	62	87
9.....	25	41	19.....	217	36	29.....	43	59
10.....	9.5	33	20.....	99	39	30.....	31	45
						31.....	38	37
Monthly mean discharge, in cubic feet per second							141	84.0
Runoff, in inches							9.72	5.80
Runoff, in acre-feet							8,650	5,170

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.......	0.93	9.1	2 p.m........	3.81	735	4 p.m........	2.60	240
			7............	2.97	347	5............	3.65	655
Dec. 19			10:30........	6.05	2,340	12 p.m.......	2.67	260
1 a.m........	.98	11	12 p.m.......	5.70	2,030			
2............	1.97	100				Dec. 27		
5............	2.86	306	Dec. 23			8 a.m........	2.11	140
9............	2.20	139	1 a.m........	6.18	2,460	5 p.m........	1.83	94
10...........	2.77	277	4:30.........	4.69	1,230	8............	1.86	99
5 p.m........	1.98	101	6:30.........	4.70	1,240	12 p.m.......	1.74	82
8:30.........	3.11	404	8............	4.84	1,340			
12 p.m.......	2.85	303	3 p.m........	5.36	1,730	Jan. 13		
			5............	6.78	3,060	12 p.m.......	1.14	21
Dec. 20			7............	5.19	1,590			
5 a.m........	2.03	109	10...........	4.74	1,270	Jan. 14		
6 p.m........	1.59	53	12 p.m.......	4.40	1,060	4 p.m........	2.32	178
12 p.m.......	1.54	48				12 p.m.......	2.09	136
			Dec. 24					
Dec. 21			4 a.m........	3.92	791	Jan. 15		
12 m.........	1.28	27	3 p.m........	2.84	311	9 a.m........	1.83	94
10 p.m.......	1.19	22	12 p.m.......	2.26	167	1 p.m........	2.18	152
12 p.m.......	1.27	26				2............	3.10	405
			Dec. 25			4............	3.17	433
Dec. 22			12 m.........	1.84	96	6............	3.57	615
2 a.m........	1.55	49	7 p.m........	1.86	99	12 p.m.......	2.77	289
3............	3.84	750	12 p.m.......	1.68	74			
4:30.........	4.45	1,090				Jan. 16		
6:30.........	3.77	715	Dec. 26			12 m.........	2.05	130
8............	5.52	1,870	9 a.m........	1.86	99	12 p.m.......	1.77	86
11 a.m.......	4.75	1,280	12 m.........	3.03	377			

208. Jesus Maria Creek near Mokelumne Hill, Calif.

Location.--Lat 38°17'00", long 120°39'00", in SE¼ sec.16, T.5 N., R.12 E., on right bank 0.6 mile upstream from mouth, 1.0 mile downstream from Wet Gulch, and 3.2 miles southeast of Mokelumne Hill.

Drainage area.--34.7 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 980 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,300 cfs and by slope-area measurement at 4,380 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,490 cfs 6 p.m. Dec. 23 (gage height, 7.63 ft).
1950 to November 1955: Discharge, 4,380 cfs Nov. 18, 1950 (gage height, 7.1 ft, from floodmarks).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	11	86	11.....	8.5	61	21.....	48	77
2.....	16	121	12.....	6.6	52	22.....	974	147
3.....	7.2	72	13.....	5.5	45	23.....	2,730	284
4.....	5.0	54	14.....	5.0	166	24.....	1,250	139
5.....	4.6	236	15.....	4.6	500	25.....	246	251
6.....	101	144	16.....	4.4	368	26.....	476	505
7.....	24	98	17.....	5.5	159	27.....	304	390
8.....	10	105	18.....	6.8	110	28.....	123	171
9.....	33	82	19.....	172	83	29.....	80	114
10.....	15	69	20.....	110	86	30.....	59	89
						31.....	67	73
Monthly mean discharge, in cubic feet per second.......................							223	159
Runoff, in inches..							7.41	5.29
Runoff, in acre-feet...							13,710	9,790

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22--Con.			Dec. 27		
12 p.m.......	1.15	13	12 p.m.......	5.75	2,200	6 a.m........	3.40	370
						12 m.........	3.07	251
Dec. 19			Dec. 23			12 p.m.......	2.75	162
4 a.m........	1.50	41	2 a.m........	6.96	4,130			
5............	2.45	185	5............	5.52	1,910	Jan. 13		
10...........	2.42	179	8............	5.85	2,320	12 p.m.......	2.04	47
11...........	2.59	215	12 m.........	5.15	1,540			
5 p.m........	2.26	151	4 p.m........	5.60	2,010	Jan. 14		
9............	2.93	299	6............	7.63	5,490	6 a.m........	2.27	76
12 p.m.......	2.65	228	8............	6.65	3,580	10...........	2.50	112
			12 p.m.......	6.06	2,620	5 p.m........	3.13	270
Dec. 20						12 p.m.......	3.13	270
4 a.m........	2.20	141	Dec. 24					
9............	1.95	101	4 a.m........	5.55	1,950	Jan. 15		
12 p.m.......	1.75	71	8............	5.05	1,420	10 a.m.......	2.78	168
			4 p.m........	4.17	762	1 p.m........	3.00	230
Dec. 21			11...........	3.97	642	2............	3.25	312
12 m.........	1.51	42	12 p.m.......	3.50	410	3............	3.95	630
12 p.m.......	1.45	36				4............	4.20	780
			Dec. 25			8............	4.73	1,150
Dec. 22			10 a.m.......	3.01	233	9............	4.70	1,130
3 a.m........	1.67	60	12 p.m.......	2.70	150	12 p.m.......	4.08	708
4............	4.40	940						
5............	4.88	1,300	Dec. 26			Jan. 16		
7............	4.65	1,120	6 a.m........	2.65	140	4 a.m........	3.72	510
10...........	5.42	1,800	11...........	3.00	230	12 m.........	3.25	312
12 m.........	4.90	1,320	1 p.m........	4.00	660	12 p.m.......	2.92	206
3 p.m........	4.07	755	4............	3.90	600			
8............	3.26	409	6............	4.66	1,100	Jan. 17		
10...........	4.70	1,160	12 p.m.......	3.93	618	12 m.........	2.71	152
11 p.m.......	5.93	2,430				12 p.m.......	2.57	125

209. North Fork Calaveras River near San Andreas, Calif.

Location.--Lat 38°13'05", long 120°41'55", in NW¼ sec.7, T.4 N., R.12 E., on right bank 0.5 mile upstream from Chili Gulch and 1.8 miles northwest of San Andreas.

Drainage area.--85.7 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 750 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,900 cfs.

Maxima.--December 1955 to January 1956: Discharge, 6,200 cfs 8:30 p.m. Dec. 23 (gage height, 12.52 ft).

1950 to November 1955: Discharge, 3,420 cfs Nov. 18, 1950 (gage height, 8.5 ft), observed at peak.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1.....	10	179
2.....	34	286
3.....	20	164
4.....	13	127
5.....	11	518
6.....	150	378
7.....	69	214
8.....	26	228
9.....	49	176
10.....	38	145
11.....	20	133
12.....	15	112
13.....	13	99
14.....	11	329
15.....	10	1,080
16.....	9.8	978
17.....	12	350
18.....	15	214
19.....	304	164
20.....	427	162
21.....	120	149
22.....	1,820	208
23.....	4,180	755
24.....	2,600	322
25.....	658	547
26.....	910	1,100
27.....	884	1,100
28.....	302	451
29.....	183	271
30.....	142	206
31.....	156	170
Monthly mean discharge, in cubic feet per second	426	365
Runoff, in inches	5.73	4.91
Runoff, in acre-feet	26,210	22,440

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 18		
12 p.m.......	1.40	17
Dec. 19		
9 a.m........	1.50	24
10...........	3.42	448
11...........	3.72	569
2 p.m........	3.37	430
4............	3.80	605
10...........	3.25	388
12 p.m.......	3.45	460
Dec. 20		
2 a.m........	4.48	944
9............	3.40	440
12 m.........	3.00	308
12 p.m.......	2.46	172
Dec. 21		
12 m.........	2.17	112
12 p.m.......	2.00	82
Dec. 22		
6 a.m........	2.13	104
7............	4.00	700
9:30.........	7.72	2,910
10:30........	7.62	2,840
12:30 p.m....	9.16	3,850
10:30........	5.29	1,410
12 p.m.......	5.95	1,810
Dec. 23		
3 a.m........	9.78	4,290
5............	11.05	5,180
8............	8.85	3,640
11...........	8.85	3,640
1 p.m........	8.25	3,250
5:30.........	9.50	4,090
8:30.........	12.52	6,200
12 p.m.......	10.15	4,540
Dec. 24		
12 m.........	6.88	2,370
12 p.m.......	4.80	1,120
Dec. 25		
12 m.........	3.79	560
12 p.m.......	3.43	391
Dec. 26		
7 a.m........	3.25	316
12 m.........	3.56	447
4 p.m........	5.27	1,400
5:30.........	5.13	1,320
8:30.........	6.42	2,090
12 p.m.......	5.75	1,690
Dec. 27		
12 m.........	4.06	708
12 p.m.......	3.52	429
Dec. 28		
12 m.........	3.15	278
12 p.m.......	2.98	222
Jan. 13		
12 p.m.......	2.34	94
Jan. 14		
12 m.........	2.90	200
8 p.m........	3.97	658
12 p.m.......	4.00	675
Jan. 15		
10:30 a.m....	3.50	420
4 p.m........	5.05	1,270
9............	6.89	2,370
12 p.m.......	6.22	1,970
Jan. 16		
6 a.m........	4.93	1,200
12 m.........	4.29	834
12 p.m.......	3.62	475
Jan. 17		
12 m.........	3.30	336
12 p.m.......	3.08	254

210. Murray Creek near San Andreas, Calif.

Location.--Lat 38°12'40", long 120°40'55", in SW¼ sec.8, T.4 N., R.12 E., on right bank 600 ft upstream from bridge on State Highway 49, 1.1 miles north of San Andreas, and 1.4 miles upstream from mouth.

Drainage area.--23.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 820 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 820 cfs and by slope-area measurement of 1,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,700 cfs 7 p.m. Dec. 23 (gage height, 6.62 ft).

1950 to November 1955: Discharge, 960 cfs probably Nov. 18, 1950 (gage height, 4.8 ft, from floodmarks, site and datum then in use), from rating curve extended above 110 cfs on basis of logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	6.1	44	11	3.8	31	21	15	36
2	5.0	44	12	3.4	28	22	395	56
3	1.6	35	13	3.0	26	23	1,130	90
4	1.2	30	14	2.6	70	24	662	65
5	1.2	92	15	2.6	274	25	111	80
6	32	82	16	2.6	175	26	133	196
7	6.9	58	17	4.2	78	27	116	144
8	4.6	53	18	3.4	57	28	52	85
9	12	41	19	44	45	29	39	63
10	5.9	36	20	38	45	30	30	51
						31	49	45
Monthly mean discharge, in cubic feet per second							94.1	72.7
Runoff, in inches							4.61	3.57
Runoff, in acre-feet							5,780	4,470

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 24			Jan. 13		
12 p.m.	1.96	13	12 m.	4.14	535	12 p.m.	2.14	27
Dec. 22			6 p.m.	3.58	285			
4 a.m.	2.10	24	12 p.m.	3.22	179	Jan. 14		
5	2.45	55				6 a.m.	2.20	32
6	3.53	268	Dec. 25			4 p.m.	2.71	83
7	3.47	249	12 m.	2.82	99	10	3.03	136
9	4.40	675	12 p.m.	2.58	68	12 p.m.	3.01	132
10	4.64	807						
11	4.73	855	Dec. 26			Jan. 15		
4 p.m.	3.80	370	8 a.m.	2.55	65	10 a.m.	2.86	106
8	3.34	211	2 p.m.	2.97	125	1 p.m.	3.19	172
10	4.00	465	3	2.96	123	3	3.71	334
12 p.m.	5.19	1,080	5	3.27	192	7	4.33	636
			5:30	3.60	292	12 p.m.	3.81	374
Dec. 23			6	3.46	246			
2:30 a.m.	5.68	1,300	7	3.54	272	Jan. 16		
6	4.85	915	12 p.m.	3.24	184	6 a.m.	3.34	211
1 p.m.	4.61	790				12 m.	3.04	138
4	4.75	865	Dec. 27			12 p.m.	2.79	95
7	6.62	1,700	12 m.	2.85	104			
12 p.m.	6.07	1,470	12 p.m.	2.63	74			

211. Cosgrove Creek near Valley Springs, Calif.

Location.--Lat 38°08'10", long 120°50'05", in SE¼ sec.35, T.4 N., R.10 E., on right bank 0.4 mile upstream from mouth and 2.7 miles south of Valley Springs.

Drainage area.--20.6 sq mi.

Gage-height record.--Water-stage recorder graph except 11 a.m. Dec. 1 to 10 a.m. Dec. 24. Altitude of gage is 550 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 900 cfs and by slope-area measurement at 3,240 cfs. Discharge for period of no gage-height record estimated on basis of records for nearby streams.

Maxima.--December 1955 to January 1956: Discharge, 3,240 cfs, time unknown, Dec. 23 (gage height, 8.96 ft).

1929 to November 1955: Discharge, 3,180 cfs Dec. 21, 1945 (gage height, 8.38 ft), from rating curve extended above 1,400 cfs on basis of velocity-area studies and logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	28	11.....	0	33	21.....	20	32
2.....	0	28	12.....	0	20	22.....	250	81
3.....	0	17	13.....	0	18	23.....	800	77
4.....	0	17	14.....	0	328	24.....	350	37
5.....	0	258	15.....	0	505	25.....	67	76
6.....	0	62	16.....	0	130	26.....	225	393
7.....	0	81	17.....	0	47	27.....	90	144
8.....	0	62	18.....	2	32	28.....	37	47
9.....	0	28	19.....	35	23	29.....	20	28
10.....	0	38	20.....	25	53	30.....	17	21
						31.....	26	18
Monthly mean discharge, in cubic feet per second......................							63.4	89.1
Runoff, in inches..							3.55	4.99
Runoff, in acre-feet..							3,900	5,480

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 25			Dec. 27--Con.			Jan. 15--Con.		
12 p.m.......	3.00	40	12 p.m.......	3.12	55	6 a.m........	3.66	156
						9............	3.58	138
Dec. 26			Jan. 13			10...........	3.60	142
5 a.m........	3.00	40	12 p.m.......	2.74	18	11...........	3.77	184
9............	3.15	59				12 m.........	4.50	420
10...........	3.50	120	Jan. 14			1 p.m........	5.20	730
11...........	4.00	250	4 a.m........	3.03	44	3............	5.68	970
12 m.........	4.21	314	8............	3.88	214	5............	6.22	1,270
2 p.m........	3.85	206	11...........	4.29	342	7............	5.84	1,060
3............	4.00	250	12 m.........	4.28	338	9............	4.85	572
4............	4.70	505	3 p.m........	4.78	541	12 p.m.......	4.15	295
5............	5.06	667	5............	4.63	474			
7............	4.68	496	6............	4.70	505	Jan. 16		
10...........	4.03	259	8............	5.15	708	6 a.m........	3.65	154
12 p.m.......	3.76	182	10...........	4.70	505	12 m.........	3.42	104
			12 p.m.......	4.20	310	6 p.m........	3.29	80
Dec. 27						12 p.m.......	3.19	65
6 a.m........	3.42	104	Jan. 15					
12 m.........	3.24	72	3 a.m........	3.84	203			

212. Hogan Reservoir near Valley Springs, Calif.

Location.--Lat 38°09'05", long 120°48'30", in SW¼ sec.31, T.4 N., R.11 E., on Calaveras River 7.2 miles upstream from gaging station at Jenny Lind and 3 miles southeast of Valley Springs.

Gage-height record.--Staff gage read once daily at 8 a.m., except as noted. No records for Dec. 4, 11, 18, Jan. 1, 22; contents interpolated.

Maximum.--December 1955 to January 1956: Contents, 55,500 acre-ft 11:30 a.m. Dec. 24 (elevation, 625.40 ft).

Remarks.--Records computed from data furnished by city of Stockton. Reservoir is formed by gravity-type concrete dam with spillway near center, and with nine fixed circular openings and one valve-operated opening at five different elevations in face of dam. Used primarily as flood-control dam beginning in 1930 (usable capacity, 75,000 acre-ft).

Elevation, in feet, and contents, in acre-feet, 1955-56, of Hogan Reservoir near Valley Springs, Calif.

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	554.90	1,160	-	2,300	16	555.50	1,190	558.50	1,450
2	555.15	1,170	562.10	1,980	17	555.35	1,180	581.90	9,080
3	555.60	1,190	561.70	1,910	18	-	1,200	574.30	5,670
4	-	1,200	561.80	1,920	19	556.15	1,220	565.10	2,560
5	555.70	1,200	561.80	1,920	20	567.90	3,270	560.10	1,680
6	556.80	1,300	572.35	4,930	21	561.70	1,910	561.40	1,860
7	558.50	1,450	568.00	3,300	22	565.65	2,680	-	2,560
8	556.90	1,300	566.80	2,980	23	603.00	25,000	567.80	3,250
9	557.00	1,310	567.00	3,020	24	625.00	55,000	566.80	2,980
10	556.85	1,300	560.80	1,780	25	619.60	46,000	564.00	2,300
11	-	1,300	558.60	1,470	26	609.00	32,000	567.20	3,080
12	556.75	1,290	559.40	1,580	27	604.70	27,000	581.80	9,000
13	556.75	1,290	558.90	1,510	28	596.70	21,000	579.40	7,790
14	556.50	1,260	559.00	1,520	29	584.50	10,600	574.60	5,780
15	556.00	1,200	570.20	4,150	30	574.20	5,640	565.00	2,540
					31	565.50	2,630	562.30	2,000

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 21			Dec.23-Con.			Dec.24-Con.		
4 p.m......	561.50	1,880	11 a.m.....	607.00	30,000	12 p.m.....	622.80	51,500
			3 p.m......	610.00	33,500	Dec. 25		
Dec. 22			6..........	613.50	38,500	8 a.m......	619.60	46,000
8 a.m......	565.65	2,680	11:45 p.m..	620.50	47,500	12 m.......	618.00	43,500
12 m.......	573.00	5,180				4 p.m......	616.00	41,000
3 p.m......	580.00	8,100	Dec. 24			6 p.m......	615.00	40,000
4..........	581.80	9,000	2 a.m......	622.20	51,000			
5..........	583.20	9,830	5..........	624.00	52,500	Dec. 26		
12 p.m.....	591.00	15,000	8..........	625.00	55,000	8 a.m......	609.00	32,000
			11:30......	625.40	55,500	12 m.......	607.00	30,000
Dec. 23			3 p.m......	625.00	55,000	4 p.m......	606.00	29,000
8 a.m......	603.00	25,000	6 p.m......	624.45	53,500	8 p.m......	606.00	29,000

213. Calaveras River at Jenny Lind, Calif.

Location.--Lat 38°05'20", long 120°51'53", in NW¼ sec.27, T.3 N., R.10 E., on right bank 70 ft downstream from bridge on Milton road, 0.2 mile south of Jenny Lind, and 6.5 miles downstream from Cosgrove Creek.

Drainage area.--395 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 220 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 14,200 cfs 5 p.m. Dec. 23 (gage height, 15.44 ft).

1907 to November 1955: Discharge, 50,000 cfs Jan. 31, 1911 (gage height, 21.0 ft), from rating curve extended above 11,000 cfs.

Remarks.--Flow regulated by Hogan Reservoir (see station 212) and by Bingham Reservoir (capacity, 775 acre-ft) on North Fork Calaveras River.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	9.2	1,250	11.....	113	815	21.....	1,210	942
2.....	14	1,200	12.....	74	693	22.....	2,890	830
3.....	38	1,000	13.....	56	595	23.....	10,500	2,010
4.....	35	750	14.....	44	1,280	24.....	10,300	2,000
5.....	26	1,890	15.....	37	3,220	25.....	8,940	1,840
6.....	40	2,740	16.....	34	3,900	26.....	7,670	2,850
7.....	414	2,060	17.....	34	3,220	27.....	6,850	3,530
8.....	178	1,690	18.....	49	2,790	28.....	5,520	3,240
9.....	117	1,120	19.....	314	1,800	29.....	3,810	2,720
10.....	162	865	20.....	2,040	1,030	30.....	2,890	2,570
						31.....	2,040	984
Monthly mean discharge, in cubic feet per second							2,143	1,852
Runoff, in inches							6.26	5.41
Runoff, in acre-feet							131,800	113,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Calaveras River at Jenny Lind, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23			Dec. 29--Con.		
12 p.m.......	2.13	53	4 a.m........	12.98	9,560	12 p.m.......	7.71	3,270
			9............	13.35	10,200			
Dec. 19			3 p.m........	13.36	10,200	Dec. 30		
6 a.m........	2.17	58	4............	15.00	13,300	12 m.........	7.33	2,930
2 p.m........	2.34	80	5............	15.44	14,200	12 p.m.......	6.77	2,440
4............	3.07	229	7............	14.55	12,400			
6............	3.90	510	9............	13.65	10,800	Jan. 13		
8............	4.52	774	12 p.m.......	13.77	11,000	12 p.m.......	3.94	558
12 p.m.......	5.67	1,380						
			Dec. 24			Jan. 14		
Dec. 20			2 a.m........	13.78	11,000	4 a.m........	3.96	567
3 a.m........	6.37	1,820	12 m.........	13.31	10,200	7............	4.13	644
9............	7.01	2,280	12 p.m.......	12.97	9,650	3 p.m........	5.37	1,350
5 p.m........	6.87	2,170				6............	6.00	1,820
12 p.m.......	6.45	1,880	Dec. 25			10...........	6.92	2,560
			6 a.m........	12.78	9,350	12 p.m.......	6.90	2,540
Dec. 21			12 p.m.......	11.97	8,160			
8 a.m........	5.75	1,430				Jan. 15		
12 m.........	5.24	1,130	Dec. 26			10 a.m.......	7.08	2,700
4 p.m........	4.87	945	9 a.m........	11.53	7,540	12 m.........	7.25	2,860
12 p.m.......	4.36	702	6 p.m........	11.62	7,670	3 p.m........	8.05	3,580
			12 p.m.......	11.38	7,330	6............	8.84	4,350
Dec. 22						10...........	8.36	3,870
5 a.m........	4.34	693	Dec. 27			12 p.m.......	8.24	3,750
6............	4.65	835	12 m.........	11.06	6,880			
7............	5.50	1,280	12 p.m.......	10.60	6,320	Jan. 16		
9............	6.13	1,660				8 a.m........	8.52	4,030
11...........	7.54	2,710	Dec. 28			12 m.........	8.51	4,020
12 m.........	8.01	3,130	12 m.........	10.00	5,600	12 p.m.......	8.22	3,730
2 p.m........	8.60	3,670	12 p.m.......	9.07	4,580			
7............	9.23	4,310				Jan. 17		
9............	9.77	4,920	Dec. 29			6 a.m........	7.97	3,500
12 p.m.......	11.39	7,050	12 m.........	8.18	3,690	12 p.m.......	7.06	2,680

214. Bear Creek near Lockeford, Calif.

Location.--Lat 38°09'15", long 121°08'15", in NW$\frac{1}{4}$SE$\frac{1}{4}$ sec.31, T.4 N., R.8 E., on right bank 15 ft downstream from county road bridge and 0.8 mile southeast of Lockeford.

Drainage area.--48.4 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 90 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,840 cfs 8 p.m. Dec. 23 (gage height, 13.48 ft).

1930-33, 1943 to November 1955: Discharge, 2,260 cfs Feb. 2, 1945 (gage height, 14.45 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	53	11.....	0.2	86	21.....	3.4	96
2.....	0	75	12.....	0	46	22.....	378	83
3.....	0	34	13.....	0	37	23.....	1,460	209
4.....	0	26	14.....	0	451	24.....	1,030	66
5.....	0	346	15.....	0	747	25.....	154	248
6.....	0	213	16.....	0	512	26.....	370	181
7.....	0	111	17.....	0	102	27.....	247	190
8.....	0	228	18.....	0	58	28.....	70	73
9.....	1.8	62	19.....	4.5	41	29.....	38	48
10.....	.6	76	20.....	21	185	30.....	27	34
						31.....	122	28
Monthly mean discharge, in cubic feet per second							127	153
Runoff, in inches							3.02	3.65
Runoff, in acre-feet							7,790	9,410

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Bear Creek near Lockeford, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	2.32	0	9 p.m.	7.20	466	6 p.m.	9.76	852
			11	8.80	682	9	9.10	728
Dec. 19			12 p.m.	9.65	830	12 p.m.	8.08	581
1 p.m.	2.33	0						
2	2.45	1.1	Dec. 23			Dec. 27		
3	2.57	3.1	2 a.m.	11.38	1,190	4 a.m.	6.90	429
4	2.62	4.1	4	12.30	1,430	8	5.52	277
6	2.66	5.0	6	12.50	1,490	12 m.	4.70	187
8	2.92	16	8	12.30	1,430	6 p.m.	4.10	121
9	2.94	18	10	11.98	1,340	12 p.m.	3.84	94
10	2.93	17	12 m.	11.85	1,300	Jan. 13		
12 p.m.	2.85	13	1 p.m.	11.82	1,300	12 p.m.	3.11	28
			2	11.90	1,320			
Dec. 20			4	12.70	1,560	Jan. 14		
1 a.m.	2.90	16	6	13.27	1,760	3 a.m.	3.19	34
2	3.20	35	8	13.48	1,840	5	3.43	56
3	3.28	42	10	13.00	1,660	7	4.58	174
6	3.23	38	12 p.m.	12.40	1,460	9	6.55	390
8	3.13	30				12 m.	7.53	509
10	3.05	24	Dec. 24			6 p.m.	8.95	703
12 m.	2.97	19	2 a.m.	12.17	1,390	10	9.82	864
4 p.m.	2.85	13	6	12.30	1,430	11	9.87	874
8	2.77	9.0	8	12.05	1,360	12 p.m.	9.82	864
12 p.m.	2.70	6.2	12 m.	10.95	1,090			
			4 p.m.	9.90	880	Jan. 15		
Dec. 21			8	7.90	557	6 a.m.	8.47	636
4 a.m.	2.64	4.5	10	6.65	402	11	6.85	424
8	2.60	3.6	12 p.m.	5.81	309	12 m.	6.90	429
12 m.	2.57	3.1				4 p.m.	9.40	782
4 p.m.	2.54	2.5	Dec. 25			8	10.92	1,080
8	2.52	2.2	4 a.m.	5.10	231	9	10.96	1,090
12 p.m.	2.53	2.4	6	4.75	192	12 p.m.	10.44	988
			8	4.54	169			
Dec. 22			12 m.	4.21	133	Jan. 16		
4 a.m.	2.72	6.9	6 p.m.	3.90	100	2 a.m.	10.07	914
5	3.08	26	12 p.m.	3.70	80	6	9.80	860
6	3.32	46				9	8.50	640
7	3.43	56	Dec. 26			12 m.	6.60	396
8	5.60	286	4 a.m.	3.65	76	6 p.m.	5.08	229
10	7.00	440	6	3.72	82	12 p.m.	4.45	160
12 m.	8.10	584	8	3.90	100			
2 p.m.	8.55	647	10	4.24	136	Jan. 17		
4	8.30	612	12 m.	5.55	280	6 a.m.	4.05	116
6	7.80	544	2 p.m.	6.50	385	12 m.	3.83	93
8 p.m.	7.22	469	4 p.m.	8.70	668	12 p.m.	3.60	71

215. Salt Springs Reservoir near West Point, Calif.

Location.--Lat 38°30', long 120°12', in SE¼ sec.33, T.8 N., R.16 E., at right end of Salt Springs Dam on North Fork Mokelumne River, 2 miles upstream from Cold Creek and 18 miles northeast of West Point.

Drainage area.--160 sq mi.

Gage-height record.--Staff gage read once daily. Datum of gage is at mean sea level (levels by Pacific Gas & Electric Co.).

Maxima.--December 1955 to January 1956: Contents observed, 106,500 acre-ft Jan. 24 (elevation, 3,921.3 ft).

1931 to November 1955: Contents observed, 140,000 acre-ft for several days in June or July each year 1948-54 (elevation, 3,958.0 ft).

Remarks.--Reservoir is formed by concrete-faced rockfill dam, completed in 1931; storage began in March 1931. Capacity, 139,000 acre-ft between elevations 3,707.25 ft (powerhouse intake) and 3,957.0 ft (upper operating limit, 1 ft below top of radial gates) above mean sea level. Additional storage of 1,860 acre-ft is available for release to river through outlet drain at elevation 3,667.75 ft. Records show contents available at 5 p.m., for use through powerhouse.

Elevation, in feet, and contents, in acre-feet, 1955-56, of Salt Springs Reservoir near West Point, Calif.

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	3,833.6	43,200	3,914.9	101,100	16	3,819.6	35,600	3,916.9	102,800
2	3,832.7	42,700	3,914.6	100,800	17	3,819.4	35,500	3,917.7	103,400
3	3,831.7	42,100	3,914.1	100,400	18	3,819.1	35,400	3,918.4	104,000
4	3,830.1	41,200	3,913.8	100,200	19	3,819.9	35,800	3,918.5	104,100
5	3,828.7	40,500	3,913.6	100,000	20	3,822.1	36,900	3,918.6	104,200
6	3,828.2	40,200	3,913.3	99,700	21	3,824.0	37,900	3,918.6	104,200
7	3,827.8	40,000	3,912.9	99,400	22	3,843.2	48,800	3,918.5	104,100
8	3,826.6	39,300	3,912.4	99,000	23	3,892.0	82,600	3,920.0	105,400
9	3,826.2	39,100	3,911.8	98,500	24	3,904.0	92,100	3,921.3	106,500
10	3,825.3	38,600	3,911.3	98,100	25	3,907.2	94,700	3,920.5	105,800
11	3,824.3	38,100	3,910.8	97,700	26	3,912.0	98,700	3,921.0	106,300
12	3,823.1	37,500	3,910.3	97,200	27	3,913.3	99,700	3,920.8	106,100
13	3,822.1	36,900	3,909.8	96,800	28	3,914.2	100,500	3,920.4	105,800
14	3,821.2	36,500	3,909.7	96,700	29	3,914.6	100,800	3,920.0	105,400
15	3,820.3	36,000	3,910.7	97,600	30	3,914.8	101,000	3,919.8	105,200
					31	3,914.9	101,100	3,919.4	104,900
Change in contents................................						-	+57,400	-	+3,800

216. North Fork Mokelumne River below Salt Springs Dam, Calif.

Location.--Lat 38°29', long 120°13', in SE¼ sec.33, T.8 N., R.16 E., on left bank 0.3 mile downstream from Salt Springs Dam and 1.7 miles upstream from Cold Creek.

Drainage area.--160 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 22-29 and Jan. 30, 31. Altitude of gage is 3,600 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for period of no gage-height record estimated on basis of records of powerhouse operation.

Maxima.--December 1955 to January 1956: Discharge, 896 cfs 8 a.m. Jan. 5 (gage height, 4.99 ft).

1926 to November 1955: Discharge, 16,000 cfs Nov. 21, 1950 (gage height, 17.20 ft), from rating curve extended above 3,000 cfs on basis of computations of flow over dam and discharge through powerhouse.

Remarks.--Flow regulated by Salt Springs Reservoir since 1931 (see station 215).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	6.8	770	11.....	3.8	453	21.....	7.8	361
2.....	6.5	824	12.....	3.8	346	22.....	280	376
3.....	6.0	855	13.....	3.7	340	23.....	780	414
4.....	5.8	886	14.....	3.5	385	24.....	780	394
5.....	6.8	891	15.....	3.5	432	25.....	780	385
6.....	7.3	886	16.....	3.5	526	26.....	780	418
7.....	4.3	810	17.....	3.5	648	27.....	790	414
8.....	4.1	756	18.....	4.0	489	28.....	780	388
9.....	4.3	742	19.....	8.2	361	29.....	770	352
10.....	4.0	711	20.....	8.5	361	30.....	774	340
						31.....	770	340
Monthly mean discharge, in cubic feet per second........................							239	537
Runoff, in acre-feet..							14,670	33,030

217. Cold Creek near Mokelumne Peak, Calif.

Location.--Lat 38°31', long 120°13', in sec.28, T.8 N., R.16 E., on right bank 2.4 miles upstream from mouth and 6 miles southwest of Mokelumne Peak.

Drainage area.--23 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Jan. 2. Altitude of gage is 6,000 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 900 cfs and by slope-area measurement at 5,500 cfs. Discharge for Jan. 2 interpolated.

Maxima.--December 1955 to January 1956: Discharge, 4,670 cfs 2 a.m. Dec. 23 (gage height, 9.00 ft).

1927 to November 1955: Discharge, 5,500 cfs Nov. 18, 1950 (gage height, 9.69 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	12	63	11.....	66	48	21.....	377	103
2.....	26	60	12.....	42	58	22.....	2,630	226
3.....	22	57	13.....	24	57	23.....	2,400	179
4.....	17	56	14.....	20	93	24.....	377	106
5.....	15	54	15.....	20	664	25.....	206	112
6.....	226	54	16.....	17	385	26.....	183	86
7.....	149	52	17.....	16	178	27.....	124	80
8.....	74	52	18.....	19	122	28.....	100	72
9.....	243	48	19.....	65	101	29.....	84	70
10.....	104	47	20.....	264	111	30.....	76	61
						31.....	68	61
Monthly mean discharge, in cubic feet per second......................							260	113
Runoff, in inches..							13.04	5.69
Runoff, in acre-feet...							16,000	6,970

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 25		
12 p.m.......	1.23	16	7 p.m........	4.02	492	9 a.m........	2.99	205
			8............	4.68	780	12 m.........	2.96	199
Dec. 18			9............	5.10	990	4 p.m........	2.95	197
12 m.........	1.19	15	10...........	5.64	1,320	8............	2.89	185
3 p.m........	1.19	15	11...........	5.44	1,180	12 p.m.......	2.83	174
6............	1.27	18	12 p.m.......	5.85	1,460			
9............	1.42	26				Dec. 26		
12 p.m.......	1.80	48	Dec. 22			4 a.m........	2.82	173
			2 a.m........	7.03	2,480	7............	2.99	205
Dec. 19			4............	7.50	2,950	9............	3.03	214
1 a.m........	1.85	52	5............	7.76	3,240	11...........	2.96	199
2............	1.84	51	6............	7.42	2,870	12 m.........	2.96	199
4............	1.74	44	7............	7.48	2,930	1 p.m........	2.98	203
8............	1.76	45	9............	7.45	2,900	4............	2.91	189
12 m.........	1.79	47	10...........	7.33	2,780	8............	2.77	164
2 p.m........	1.96	63	12 m.........	7.07	2,520	12 p.m.......	2.65	144
6............	2.21	93	3 p.m........	6.75	2,220			
10...........	2.23	96	6............	6.46	1,950	Jan. 13		
12 p.m.......	2.29	104	8............	7.00	2,450	12 p.m.......	1.90	55
			10...........	7.70	3,170			
Dec. 20			12 p.m.......	8.62	4,210	Jan. 14		
3 a.m........	2.43	123				3 a.m........	1.89	54
6............	2.53	138	Dec. 23			10...........	2.03	66
7............	2.53	138	1 a.m........	8.85	4,490	3 p.m........	2.29	95
9............	2.88	195	2............	9.00	4,670	9............	2.71	154
10...........	3.17	253	3............	8.88	4,530	12 p.m.......	2.82	173
12 m.........	3.47	328	5............	8.52	4,090			
1 p.m........	3.42	315	7............	7.95	3,440	Jan. 15		
3............	3.57	356	9............	7.43	2,880	7 a.m........	2.88	184
4............	3.53	344	12 m.........	6.65	2,120	9............	3.04	216
6............	3.59	361	2 p.m........	6.25	1,780	11...........	3.53	338
9............	3.70	392	4............	5.65	1,320	1 p.m........	4.56	720
11...........	3.67	384	6............	5.17	1,020	2:30.........	5.65	1,320
12 p.m.......	3.54	347	9............	4.65	765	5............	5.81	1,440
			12 p.m.......	4.30	600	7............	5.57	1,270
Dec. 21						12 p.m.......	4.56	720
3 a.m........	3.18	256	Dec. 24					
6............	2.80	181	4 a.m........	4.01	488	Jan. 16		
9............	2.54	139	8............	3.78	411	4 a.m........	4.03	496
12 m.........	2.40	119	12 m.........	3.56	347	8............	3.74	399
1 p.m........	2.37	115	4 p.m........	3.43	312	4 p.m........	3.41	307
2............	2.38	116	8............	3.29	276	12 p.m.......	3.14	239
4	2.57	144	12 p.m.......	3.19	251			
6 p.m........	3.45	323						

218. Bear River near Salt Springs Dam, Calif.

Location.--Lat 38°29', long 120°18', in sec.2, T.7 N., R.15 E., on right bank 200 ft upstream from diversion to Tiger Creek powerhouse conduit and highway bridge, 0.7 mile upstream from mouth, and 4 miles west of Salt Springs Dam.

Drainage area.--48 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,600 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 560 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 1,400 cfs 3 a.m. Dec. 23 (gage height, 4.00 ft).

1951 to November 1955: Discharge, 1,640 cfs June 1, 1952 (gage height, 4.12 ft), from rating curve extended above 330 cfs.

Flood in November 1950 reached a stage of 11.2 ft, from floodmarks (discharge unknown).

Remarks.--Flow regulated by Bear River and Lower Bear River Reservoirs (combined capacity, 55,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7.4	57	11.....	8.7	183	21.....	76	109
2.....	6.1	51	12.....	6.7	40	22.....	686	180
3.....	4.4	287	13.....	6.7	38	23.....	1,100	222
4.....	3.4	336	14.....	6.7	103	24.....	303	151
5.....	3.9	348	15.....	6.7	285	25.....	179	193
6.....	62	332	16.....	6.7	204	26.....	258	176
7.....	14	332	17.....	14	142	27.....	169	142
8.....	10	320	18.....	14	112	28.....	120	117
9.....	26	316	19.....	59	97	29.....	92	97
10.....	12	316	20.....	90	109	30.....	74	85
						31.....	63	74
Monthly mean discharge, in cubic feet per second							113	179
Runoff, in acre-feet							6,920	11,020

Peak discharge.--Jan. 3 (2-4 p.m.) 910 cfs (gage height, 3.40 ft); Jan. 15 (7 p.m.) 564 cfs (gage height, 2.87 ft).

219. Middle Fork Mokelumne River at West Point, Calif.

Location.--Lat 38°23'23", long 120°31'32", in SE¼NE¼ sec.10, T.6 N., R.13 E., on right bank 200 ft downstream from highway bridge, 0.6 mile south of West Point, and 4.5 miles upstream from South Fork.

Drainage area.--67.2 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 4,320 cfs 5:30 p.m. Dec. 23 (gage height, 8.98 ft).

1911 to November 1955: Discharge, 2,820 cfs Nov. 18, 1950 (gage height, 7.70 ft), from rating curve extended above 1,600 cfs on basis of slope-area measurement at 2,820 cfs.

Remarks.--Flood flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	27	280	11.....	31	198	21.....	192	352
2.....	20	280	12.....	27	186	22.....	1,310	437
3.....	17	227	13.....	25	182	23.....	3,450	759
4.....	15	203	14.....	23	386	24.....	1,600	501
5.....	15	442	15.....	21	797	25.....	733	625
6.....	114	321	16.....	21	787	26.....	1,120	876
7.....	67	257	17.....	30	508	27.....	839	766
8.....	38	247	18.....	37	420	28.....	534	554
9.....	57	218	19.....	322	366	29.....	408	462
10.....	42	206	20.....	308	360	30.....	321	400
						31.....	283	355
Monthly mean discharge, in cubic feet per second							389	418
Runoff, in inches							6.67	7.17
Runoff, in acre-feet							23,890	25,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Middle Fork Mokelumne River at West Point, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 26		
12 p.m.	1.55	34	6 p.m.	2.44	160	3 a.m.	4.00	624
			10	2.44	160	6	4.13	669
Dec. 18			12 p.m.	2.51	174	8	4.25	712
11 a.m.	1.53	33				10	4.58	842
12 m.	1.51	32	Dec. 22			12 m.	5.32	1,210
4 p.m.	1.52	32	2 a.m.	2.91	262	3 p.m.	5.75	1,480
6	1.54	34	4	3.94	557	5	6.14	1,730
8	1.60	38	6	4.90	960	9	5.85	1,540
10	1.78	54	9	6.45	1,940	12 p.m.	5.35	1,230
12 p.m.	2.02	85	11	6.55	2,020			
			11:30	6.76	2,160	Dec. 27		
Dec. 19			1 p.m.	6.34	1,870	4 a.m.	4.98	1,030
2 a.m.	2.55	182	6	5.48	1,300	10	4.53	821
3	2.77	230	8	5.31	1,200	4 p.m.	4.27	719
4	2.83	244	11	5.94	1,600	7	4.20	694
6	2.79	235	12 p.m.	6.35	1,880	12 p.m.	4.02	631
8	2.98	279						
9	3.14	321	Dec. 23			Jan. 13		
10	3.16	326	2 a.m.	7.75	3,000	12 p.m.	2.56	210
12 m.	3.06	300	5	8.15	3,400			
2 p.m.	3.01	287	6	7.80	3,050	Jan. 14		
4	3.23	345	8	7.57	2,830	8 a.m.	2.97	316
6	3.50	425	12 m.	8.23	3,490	2 p.m.	3.46	456
8	3.60	455	1 p.m.	8.50	3,790	9	3.65	505
10	3.71	488	4	8.58	3,880	12 p.m.	3.59	495
12 p.m.	3.61	458	5:30	8.98	4,320			
			8	8.88	4,210	Jan. 15		
Dec. 20			12 p.m.	7.90	3,150	6 a.m.	3.41	441
4 a.m.	3.28	359				10	3.44	450
8	3.11	313	Dec. 24			12 m.	3.74	541
10	3.06	300	3 a.m.	6.94	2,290	1 p.m.	4.20	694
12 m.	3.04	294	8	6.10	1,700	7	5.70	1,440
4	2.95	272	2 p.m.	5.47	1,300	12 p.m.	5.24	1,170
6	2.93	267	12 p.m.	4.78	931			
8	2.90	260				Jan. 16		
12 p.m.	2.84	246	Dec. 25			6 a.m.	4.68	886
			10 a.m.	4.23	705	12 m.	4.28	723
Dec. 21			3 p.m.	4.14	672	12 p.m.	3.90	592
6 a.m.	2.74	224	5	4.16	680			
12 m.	2.54	180	12 p.m.	4.04	638			

220. South Fork Mokelumne River near West Point, Calif.

Location.--Lat 38°22'07", long 120°32'52", in SW¼SE¼ sec.16, T.6 N., R.13 E., on right bank 600 ft downstream from highway bridge, 2.3 miles upstream from mouth, and 2.3 miles southwest of West Point.

Drainage area.--73.8 sq mi.

Gage-height record.--Water-stage recorder graph except 2:30 p.m. Dec. 14 to Dec. 27 and Jan. 29-31. Altitude of gage is 1,940 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,800 cfs and by slope-area measurement at 6,920 cfs. Discharge for periods of no gage-height record estimated on basis of two discharge measurements and records for Middle Fork Mokelumne River at West Point.

Maxima.--December 1955 to January 1956: Discharge, 6,920 cfs, time unknown, Dec. 23 (gage height, 14.8 ft, from floodmarks).

1933 to November 1955: Discharge, 3,760 cfs Feb. 2, 1945 (gage height, 9.55 ft), from rating curve extended above 2,600 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	39	349	11	39	224	21	250	426
2	34	358	12	34	213	22	1,500	530
3	23	271	13	30	208	23	4,000	857
4	20	245	14	25	464	24	2,000	625
5	18	490	15	20	982	25	900	746
6	158	394	16	20	965	26	1,300	1,020
7	77	322	17	35	655	27	900	929
8	46	287	18	50	535	28	675	686
9	78	248	19	400	452	29	520	550
10	51	234	20	400	448	30	403	450
						31	358	400
Monthly mean discharge, in cubic feet per second							465	502
Runoff, in inches							7.26	7.84
Runoff, in acre-feet							28,570	30,870

Peak discharge.--Jan. 15 (8 p.m.) 1,620 cfs (gage height, 7.15 ft); Jan. 22 (10 p.m.) 1,040 cfs (gage height, 6.41 ft); Jan. 26 (5 p.m.) 1,370 cfs (gage height, 6.85 ft).

221. Mokelumne River near Mokelumne Hill, Calif.

Location.--Lat 38°18'40", long 120°43'10", in sec.1, T.5 N., R.11 E., on left bank just downstream from highway bridge, 1.2 miles northwest of Mokelumne Hill and 8 miles downstream from confluence of North and South Forks.

Drainage area.--538 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 589.88 ft above mean sea level (levels by California Div. Highways, Dept. Public Works).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 23,500 cfs 8 p.m. Dec. 23 (gage height, 15.42 ft).

1927 to November 1955: Discharge, 33,700 cfs Dec. 3, 1950 (gage height, 18.5 ft).

Remarks.--Flow regulated by Salt Springs Reservoir (see station 215) and several smaller reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	629	2,150	11.....	559	2,070	21.....	1,320	2,510
2.....	584	2,240	12.....	641	1,710	22.....	9,420	2,680
3.....	600	2,000	13.....	498	1,730	23.....	21,700	4,420
4.....	676	2,270	14.....	607	2,400	24.....	10,200	3,240
5.....	454	2,930	15.....	516	4,570	25.....	4,300	3,720
6.....	847	2,620	16.....	535	5,550	26.....	5,540	4,580
7.....	804	2,400	17.....	644	3,450	27.....	4,840	4,460
8.....	690	2,370	18.....	324	2,800	28.....	3,370	3,480
9.....	707	2,260	19.....	1,110	2,570	29.....	2,760	3,090
10.....	687	2,090	20.....	1,650	2,520	30.....	2,400	2,750
						31.....	2,350	2,360
Monthly mean discharge, in cubic feet per second							2,644	2,903
Runoff, in acre-feet							162,600	178,500

Peak discharge.--Dec. 26 (5 p.m.) 8,400 cfs (gage height, 9.60 ft); 9 p.m. Jan. 15 to 1 a.m. Jan. 16, 8,200 cfs (gage height, 9.50 ft).

222. Mokelumne River at Lancha Plana, Calif.

Location.--Lat 38°13'25", long 120°53'20", in SW¼ sec.4, T.4 N., R.10 E., on left bank 1 mile east of Lancha Plana, 3 miles downstream from Pardee Dam, and 5 miles upstream from Camanche Creek.

Drainage area.--584 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 22, Dec. 25 to Jan. 13. Datum of gage is 158.95 ft above mean sea level (levels by East Bay Municipal Utility District).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Dec. 22, Dec. 25 to Jan. 13 estimated on basis of release from Pardee Dam.

Maxima.--December 1955 to January 1956: Discharge, 25,500 cfs 10 p.m. Dec. 23 (gage height, 19.15 ft).

1926 to November 1955: Discharge, 26,700 cfs Nov. 21, 1950 (gage height, 20.1 ft).

Remarks.--Flow regulated by Pardee Reservoir beginning in 1929 (total capacity, 210,000 acre-ft), Salt Springs Reservoir (see station 215), and several smaller reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	334	3,000	11.....	362	2,300	21.....	345	2,460
2.....	332	2,400	12.....	350	1,800	22.....	1,600	2,530
3.....	332	1,900	13.....	337	1,600	23.....	19,100	4,670
4.....	332	3,600	14.....	333	2,840	24.....	14,900	3,940
5.....	332	4,900	15.....	342	4,330	25.....	6,200	3,450
6.....	334	4,200	16.....	342	4,970	26.....	5,200	3,890
7.....	362	3,000	17.....	342	4,950	27.....	6,000	3,900
8.....	362	2,900	18.....	345	4,940	28.....	4,900	3,880
9.....	362	2,400	19.....	353	4,880	29.....	4,400	3,860
10.....	362	2,400	20.....	345	3,030	30.....	3,700	3,300
						31.....	3,400	2,820
Monthly mean discharge, in cubic feet per second							2,472	3,388
Runoff, in acre-feet							152,000	208,300

223. Mokelumne River near Clements, Calif.

Location.--Lat 38°12'25", long 121°05'20", in NW¼ sec.15, T.4 N., R.8 E., on left bank 700 ft upstream from highway bridge, 1 mile north of Clements, and 3 miles downstream from Murphy Creek.

Drainage area.--630 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 67.16 ft above mean sea level (levels by East Bay Municipal Utility District).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 27,300 cfs 3 a.m. Dec. 24 (gage height, 23.85 ft).

1904-51, July to November 1955: Discharge, 28,800 cfs Nov. 21, 1950 (gage height, 24.40 ft).

Remarks.--Flow regulated by Pardee Reservoir since 1929 (total capacity, 210,000 acre-ft), Salt Springs Reservoir (see station 215), and several smaller reservoirs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	362	3,300	11	385	2,360	21	375	2,550
2	350	2,640	12	378	1,960	22	902	2,560
3	350	2,020	13	358	1,610	23	16,100	4,210
4	350	2,920	14	352	2,690	24	20,600	4,460
5	355	5,100	15	365	4,540	25	7,170	3,660
6	362	4,750	16	362	5,390	26	5,300	3,980
7	378	3,120	17	368	5,110	27	6,090	4,080
8	391	3,110	18	368	5,070	28	4,960	4,000
9	397	2,540	19	421	5,000	29	4,530	3,970
10	385	2,420	20	409	3,680	30	3,850	3,590
						31	3,510	3,000
Monthly mean discharge, in cubic feet per second							2,608	3,529
Runoff, in acre-feet							160,300	217,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 24--Con.			Dec. 28--Con.		
12 p.m.	2.78	380	9 a.m.	22.70	24,200	12 m.	11.39	4,860
			12 m.	21.40	21,000	12 p.m.	11.31	4,810
Dec. 22			2 p.m.	20.50	18,800			
3 a.m.	2.84	397	4	19.63	16,900	Jan. 12		
4	2.89	412	6	18.88	15,300	12 p.m.	6.10	1,680
6	3.39	566	8	18.17	13,800			
8	3.81	714	10	17.53	12,600	Jan. 13		
10	4.53	972	12 p.m.	16.75	11,200	2 a.m.	5.76	1,510
11	4.61	1,000				6	5.65	1,460
12 m.	4.55	980	Dec. 25			12 m.	5.63	1,440
2 p.m.	4.25	868	4 a.m.	15.50	9,150	3 p.m.	5.62	1,440
4	4.05	798	8	14.50	7,690	5	6.22	1,750
8	3.63	650	12 m.	13.60	6,660	8	6.57	1,940
9	4.51	964	6 p.m.	12.42	5,650	12 p.m.	6.62	1,970
10	6.35	1,820	10	11.86	5,200			
11	8.10	2,790	12 p.m.	11.68	5,070	Jan. 14		
12 p.m.	9.45	3,600	Dec. 26			5 a.m.	6.71	2,020
			6 a.m.	11.40	4,870	10	7.47	2,430
Dec. 23			7	11.54	4,970	12 m.	7.55	2,480
2 a.m.	11.55	4,980	10	11.65	5,040	2 p.m.	7.63	2,520
4	13.05	6,160	12 m.	11.85	5,190	6	9.00	3,330
6	13.75	6,810	3 p.m.	12.12	5,410	12 p.m.	10.07	3,970
8	15.00	8,400	5	12.53	5,730			
9	16.05	10,000	6	12.62	5,810	Jan. 15		
10	16.95	11,500	7	12.63	5,810	2 a.m.	10.17	4,030
11	18.20	13,900	10	12.42	5,650	4	10.09	3,980
12 m.	19.23	16,000	12 p.m.	12.52	5,730	8	10.39	4,160
2 p.m.	21.45	21,100				11	10.45	4,200
4	22.63	24,000	Dec. 27			12 m.	10.42	4,180
6	23.30	25,800	4 a.m.	13.22	6,310	2 p.m.	10.33	4,130
7	23.47	26,200	6	13.43	6,500	6	11.42	4,880
9	23.63	26,700	8	13.50	6,560	11	12.98	6,090
12 p.m.	23.68	26,800	12 m.	13.35	6,420	12 p.m.	12.97	6,090
			6 p.m.	12.64	5,810			
Dec. 24			8	12.40	5,630	Jan. 16		
3 a.m.	23.85	27,300	12 p.m.	12.10	5,390	8 a.m.	11.96	5,280
4	23.81	27,200				12 m.	11.97	5,290
6	23.60	26,600	Dec. 28			12 p.m.	11.82	5,170
8 a.m.	23.08	25,200	6 a.m.	11.64	5,040			

224. Mokelumne River at Woodbridge, Calif.

Location.--Lat 38°09'30", long 121°18'10", in NE¼ sec.34, T.4 N., R.6 E., on left bank at Woodbridge, 0.3 mile downstream from county highway bridge and 0.4 mile downstream from dam and canal intake of Woodbridge Irrigation District.

Drainage area.--644 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 14.9 ft above mean sea level (levels by East Bay Municipal Utility District).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,200 cfs and by contracted-opening measurement at 27,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 23,000 cfs 2 p.m. Dec. 24 (gage height, 29.00 ft).

1924 to November 1955: Discharge, 27,000 cfs Nov. 22, 1950 (gage height, 29.58 ft).

Remarks.--Flow regulated by several reservoirs above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	316	3,430	11	343	2,470	21	344	3,760
2	324	3,110	12	343	2,320	22	460	3,120
3	313	2,580	13	330	1,970	23	2,180	3,100
4	312	2,180	14	313	2,020	24	14,200	3,790
5	313	2,940	15	309	2,910	25	10,100	4,060
6	322	4,100	16	318	3,950	26	5,940	3,730
7	322	4,320	17	322	4,360	27	5,250	3,810
8	349	3,460	18	325	4,750	28	5,380	3,890
9	356	3,020	19	349	4,780	29	4,880	3,860
10	348	2,620	20	385	4,740	30	4,420	3,830
						31	3,890	3,500
Monthly mean discharge, in cubic feet per second							2,053	3,435
Runoff, in acre-feet							126,300	211,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23--Con.			Dec. 24--Con.		
12 p.m.	6.73	344	4 a.m.	9.16	849	10 a.m.	28.04	17,200
			7	11.05	1,310	1 p.m.	28.96	22,800
Dec. 22			10	13.74	2,000	2	29.00	23,000
9 a.m.	7.02	388	2 p.m.	15.71	2,560	5	28.84	22,000
2 p.m.	6.95	378	6	17.37	3,090	12 p.m.	27.85	16,200
5	7.20	420	9	18.33	3,420			
6	7.89	558	12 p.m.	18.95	3,650	Dec. 25		
12 p.m.	9.05	824				6 a.m.	26.85	12,000
			Dec. 24			12 m.	25.88	9,200
Dec. 23			4 a.m.	20.02	4,060	6 p.m.	25.04	7,660
1 a.m.	9.13	842	6	21.00	4,490	12 p.m.	24.40	6,900
3 a.m.	9.12	840	8 a.m.	23.50	6,000			

225. North Fork Cosumnes River at Cosumnes Mine, Calif.

(Gaging station, discontinued 1953)

Location (revised).--Lat 38°40'10", long 120°32'00", in SW¼ sec.34, T.10 N., R.13 E., on right bank 0.3 mile downstream from Cosumnes Mine, 2.5 miles north of Grizzly Flat, 4.3 miles upstream from Steely Fork, and 15 miles southeast of Placerville. Altitude of gage about 3,205 ft (from topographic map).

Drainage area.--36.9 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 420 cfs and by slope-area measurement at 3,940 cfs.

Maxima.--December 1955 to January 1956: Discharge, 6,160 cfs Dec. 23 (gage height, 11.53 ft, from floodmarks in gage well, 11.65 ft, from floodmarks outside gage well).

1948-53: Discharge, 3,940 cfs Nov. 21, 1950 (gage height, 9.50 ft).

226. Camp Creek near Camino, Calif.

Location.--Lat 38°41'35", long 120°32'35", in NE¼ sec.28, T.10 N., R.13 E., on right bank 3.6 miles upstream from Park Creek and 7.5 miles southeast of Camino.

Drainage area.--33.0 sq mi.

Gage-height record.--Water-stage recorder graph except 5 a.m. Dec. 19 to 3 p.m. Dec. 30 and 7 a.m. Jan. 15 to 12 p.m. Jan. 31. Altitude of gage is 3,120 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,350 cfs and by slope-area measurement at 2,560 cfs. Discharge for period of no gage-height record estimated on basis of recorded ranges in stage, two discharge measurements, records for Camp Creek near Somerset, Weber Creek near Salmon Falls, and diversions out of Camp Creek into Jenkinson Lake.

Maxima.--December 1955 to January 1956: Discharge, 3,260 cfs,time unknown, Dec. 23 (gage height, 6.24 ft).

1948 to November 1955: Discharge, 2,560 cfs Nov. 20, 1950 (gage height, 5.65 ft).

Remarks.--Flow affected by diversion into Jenkinson Lake.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	8.6	10	11.....	1.6	11	21.....	10	40
2.....	3.6	11	12.....	1.4	10	22.....	300	60
3.....	2.3	9.5	13.....	1.3	10	23.....	2,000	150
4.....	1.8	9.3	14.....	1.2	25	24.....	400	70
5.....	2.3	39	15.....	1.2	800	25.....	150	450
6.....	21	27	16.....	1.2	200	26.....	200	525
7.....	3.2	17	17.....	2.0	70	27.....	100	250
8.....	2.4	14	18.....	10	40	28.....	40	150
9.....	6.2	13	19.....	25	30	29.....	15	100
10.....	2.3	12	20.....	70	35	30.....	10	85
						31.....	9.8	75
Monthly mean discharge, in cubic feet per second							110	108
Runoff, in acre-feet							6,750	6,640

227. Camp Creek near Somerset, Calif.

Location.--Lat 38°39'26", long 120°39'46", in SW¼ sec.4, T.9 N., R.12 E., on right bank 0.2 mile upstream from mouth, 1.3 miles northeast of town of Somerset, and 5.6 miles south of Camino.

Drainage area.--62.7 sq mi.

Gage-height record.--Water-stage recorder graph except 6 a.m. Jan. 15 to 12 p.m. Jan. 31. Altitude of gage is 1,820 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for period of no gage-height record estimated on basis of recorded range in stage, one discharge measurement, and records for Weber Creek near Salmon Falls.

Maxima.--December 1955 to January 1956: Discharge, 6,020 cfs 3:30 a.m. Dec. 23 (gage height, 12.48 ft).

1924, 1954 to November 1955: Daily discharge, 195 cfs Feb. 8, 1924, from rating curve extended above 32 cfs.

Remarks.--Flows partly regulated by Jenkinson Lake.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	13	39	11.....	7.6	40	21.....	26	230
2.....	14	42	12.....	6.5	36	22.....	1,940	300
3.....	8.5	35	13.....	5.7	35	23.....	4,690	450
4.....	6.5	35	14.....	5.3	84	24.....	1,530	320
5.....	5.7	118	15.....	4.9	1,500	25.....	524	900
6.....	48	90	16.....	5.1	600	26.....	715	1,100
7.....	15	68	17.....	7.1	350	27.....	533	600
8.....	8.8	55	18.....	13	250	28.....	149	400
9.....	15	47	19.....	86	220	29.....	59	300
10.....	11	45	20.....	178	230	30.....	44	250
						31.....	40	225
Monthly mean discharge, in cubic feet per second							346	290
Runoff, in inches							6.36	5.33
Runoff, in acre-feet							21,250	17,840

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Camp Creek near Somerset, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22			Dec. 25		
12 p.m.......	2.00	14	4 a.m........	3.32	121	5 a.m........	5.65	650
Dec. 18			4:30.........	6.00	780	12 m.........	5.42	572
5 p.m........	1.90	11	5:30.........	7.41	1,440	1 p.m........	4.78	399
11...........	2.09	17	7............	8.41	2,080	12 p.m.......	4.78	399
12 p.m.......	2.38	34	10...........	9.48	2,880			
			12 m.........	10.08	3,410	Dec. 26		
Dec. 19			4 p.m........	9.06	2,550	7 a.m........	4.87	421
1 a.m........	2.55	45	9............	7.75	1,640	12 m.........	5.90	742
7............	2.73	60	12 p.m.......	8.98	2,480	1 p.m........	5.73	679
2 p.m........	2.61	50				3............	6.60	1,030
6............	2.84	70	Dec. 23			6............	6.71	1,080
7............	3.61	162	1 a.m........	9.94	3,290	12 p.m.......	6.19	856
12 p.m.......	3.95	221	3:30.........	12.48	6,020			
			8............	11.22	4,540	Dec. 27		
Dec. 20			9............	11.50	4,850	12 m.........	5.70	668
2 p.m........	3.93	217	11...........	11.05	4,360	3:30 p.m.....	4.02	234
2:30.........	4.38	308	6 p.m........	12.04	5,490	5............	4.15	260
7............	2.72	59	12 p.m.......	9.78	3,140	12 p.m.......	3.97	225
12 p.m.......	2.42	36						
			Dec. 24			Dec. 28		
Dec. 21			12 m.........	7.20	1,320	1 p.m........	3.61	162
4 p.m........	2.15	20	2 p.m........	6.82	1,130	6............	2.97	82
9............	2.16	21	4............	5.79	700	12 p.m.......	2.86	71
12 p.m.......	2.37	33	12 p.m.......	5.83	715			

228. North Fork Cosumnes River near El Dorado, Calif.

Location.--Lat 38°35'20", long 120°50'35", in SW$\frac{1}{4}$ sec.35, T.9 N., R.10 E., on downstream side of left abutment of county road bridge, 0.8 mile north of Nashville, 2.6 miles upstream from mouth, and 6 miles south of El Dorado.

Drainage area.--202 sq mi.

Gage-height record.--Water-stage recorder graph except 4 a.m. Dec. 23 to 5 p.m. Jan. 11. Altitude of gage is 840 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,700 cfs and by slope-area measurement at 15,800 cfs. Discharge for period of no gage-height record estimated on basis of records for station near Plymouth.

Maxima.--December 1955 to January 1956: Discharge, 15,800 cfs, time unknown, Dec. 23 (gage height, 14.8 ft).

1911-41, 1948 to November 1955: Discharge, 10,900 cfs Nov. 18, 1950 (gage height, 12.06 ft), from rating curve extended above 3,600 cfs on basis of contracted-opening measurement of peak flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	11	600	11.....	61	420	21.....	475	1,060
2.....	28	600	12.....	47	389	22.....	5,940	1,350
3.....	20	480	13.....	43	375	23.....	10,000	2,570
4.....	15	450	14.....	39	1,000	24.....	5,200	1,760
5.....	13	1,600	15.....	34	2,640	25.....	2,100	1,990
6.....	172	1,000	16.....	33	3,470	26.....	2,500	2,410
7.....	183	750	17.....	41	2,140	27.....	2,100	2,240
8.....	78	750	18.....	84	1,480	28.....	1,000	1,570
9.....	76	560	19.....	514	1,200	29.....	700	1,280
10.....	91	500	20.....	983	1,090	30.....	650	1,040
						31.....	620	915
Monthly mean discharge, in cubic feet per second							1,092	1,280
Runoff, in inches							6.23	7.30
Runoff, in acre-feet							67,140	78,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 18--Con.			Dec. 20		
12 p.m.......	1.74	34	12 p.m.......	2.70	108	2 a.m........	6.33	1,190
						9............	6.04	988
Dec. 17			Dec. 19			7 p.m........	5.95	934
6 p.m........	1.88	43	6 a.m........	3.75	237	12 p.m.......	5.40	653
12 p.m.......	2.03	52	12 m.........	4.96	474			
			6 p.m........	5.50	698	Dec. 21		
Dec. 1e			12 p.m.......	6.32	1,190	12 m.........	4.85	435
12 m.........	2.48	88				9 p.m........	4.54	360

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of North Fork Cosumnes River near El Dorado, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21--Con.			Jan. 12			Jan. 15--Con.		
12 p.m.......	5.05	506	12 p.m.......	4.67	375	2 p.m........	7.70	2,360
						5............	8.85	3,890
Dec. 22			Jan. 13			10...........	9.55	4,980
2 a.m........	6.25	1,140	6 p.m........	4.63	367	12 p.m.......	9.45	4,820
4............	7.80	2,620	12 p.m.......	4.80	406			
6............	8.90	4,100				Jan. 16		
8............	11.00	7,500	Jan. 14			10 a.m.......	8.50	3,400
12:30 p.m....	11.95	9,400	12 m.........	6.08	910	12 p.m.......	7.92	2,620
9............	9.85	5,520	10 p.m.......	7.08	1,680			
12 p.m.......	10.15	6,000	12 p.m.......	7.00	1,600	Jan. 17		
						12 m.........	7.48	2,100
Dec. 23			Jan. 15			12 p.m.......	7.12	1,720
4 a.m........	12.55	10,700	9 a.m........	6.62	1,280			

229. Cosumnes River near Plymouth, Calif.

Location.--Lat 38°32' 20", long 120°51'45", in NW¼ sec.22, T.8 N., R.10 E., on right bank 1.8 miles downstream from confluence of Middle and North Forks and 4 miles north of Plymouth.

Drainage area.--429 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Dec. 16 to 1:40 p.m. Dec. 30. Altitude of gage is 580 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,500 cfs and extended above by logarithmic plotting. Discharge for period of no gage-height record estimated on basis of records for station at Michigan Bar.

Maxima.--December 1955 to January 1956: Discharge, 33,500 cfs, time unknown, Dec. 23 (gage height, 20.96 ft).

1951 to November 1955: Discharge, 7,380 cfs Jan. 12, 1952 (gage height, 12.32 ft).

Flood of Nov. 18, 1950, reached a discharge of 20,900 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	47	1,380	11.....	137	1,150	21.....	1,200	2,360
2.....	119	1,460	12.....	110	1,040	22.....	12,000	2,830
3.....	86	1,150	13.....	102	985	23.....	25,000	5,770
4.....	67	1,080	14.....	93	2,620	24.....	13,000	3,950
5.....	56	3,860	15.....	86	6,610	25.....	5,000	4,640
6.....	320	2,440	16.....	86	8,080	26.....	6,000	5,650
7.....	421	1,800	17.....	100	4,890	27.....	5,000	5,530
8.....	180	1,790	18.....	150	3,440	28.....	2,500	3,910
9.....	172	1,340	19.....	1,000	2,660	29.....	1,700	3,020
10.....	200	1,260	20.....	2,000	2,470	30.....	1,600	2,470
						31.....	1,520	2,130
Monthly mean discharge, in cubic feet per second...........							2,582	3,025
Runoff, in inches...........							6.94	8.13
Runoff, in acre-feet...........							158,800	186,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1956

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 13			Jan. 15--Con.			Jan. 17		
12 p.m.......	6.82	1,060	1 p.m........	10.28	4,380	12 m.........	10.57	4,790
			3............	11.70	6,520	12 p.m.......	10.04	4,050
Jan. 14			5............	13.40	9,660			
10 a.m.......	8.00	1,820	6............	14.08	11,100	Jan. 18		
3 p.m........	9.49	3,320	8............	14.60	12,300	12 m.........	9.54	3,380
10...........	10.28	4,380	12 p.m.......	14.25	11,500	12 p.m.......	9.19	2,960
12 p.m.......	10.19	4,260						
			Jan. 16					
Jan. 15			12 m.........	12.25	7,450			
9:30 a.m.....	9.57	3,420	12 p.m.......	11.33	5,930			

230. Cosumnes River at Michigan Bar, Calif.

Location.--Lat 38°30'00", long 121°02'45", in SE¼ sec.36, T.8 N., R.8 E., on downstream side of midstream pier of highway bridge at Michigan Bar, 5.5 miles southwest of Latrobe and 12 miles downstream from confluence of North and Middle Forks.

Drainage area.--537 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 168.09 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 19,000 cfs and extended above by area-velocity studies.

Maxima.--December 1955 to January 1956: Discharge, 42,000 cfs 6 p.m. Dec. 23 (gage height, 14.59 ft in gage well; 16.00 ft from floodmark).

1907 to November 1955: Discharge, 27,600 cfs Nov. 18, 1950 (gage height, 11.85 ft).

Flood in March 1907 reached a stage of 16.3 ft.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	46	1,680	11	159	1,460	21	1,470	2,420
2	91	1,850	12	125	1,280	22	13,200	2,770
3	104	1,430	13	110	1,190	23	31,700	5,580
4	78	1,330	14	99	3,140	24	16,900	3,730
5	67	4,810	15	91	7,560	25	5,800	4,130
6	153	3,040	16	88	8,590	26	7,530	5,130
7	513	2,120	17	101	4,700	27	6,500	5,300
8	216	2,240	18	156	3,280	28	3,360	3,710
9	162	1,680	19	1,200	2,670	29	2,390	2,960
10	213	1,580	20	2,530	2,520	30	1,900	2,500
						31	1,820	2,200
Monthly mean discharge, in cubic feet per second							3,189	3,180
Runoff, in inches							6.85	6.83
Runoff, in acre-feet							196,100	195,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	2.59	110	3 p.m.	10.45	20,900	12 m.	7.54	7,350
			4	10.39	20,700	2 p.m.	7.78	8,120
Dec. 18			8	9.41	16,400	6	8.40	10,200
12 m.	2.76	149	9	9.49	16,800	8	8.63	11,100
12 p.m.	3.00	216	10	9.54	17,000	12 p.m.	8.44	10,400
			12 p.m.	9.43	16,500			
Dec. 19						Dec. 27		
4 a.m.	3.35	348	Dec. 23			6 a.m.	7.58	7,480
8	3.29	321	2 a.m.	10.00	18,900	12 m.	7.13	6,070
6 p.m.	5.04	2,000	9	13.08	33,800	6 p.m.	6.81	5,130
12 p.m.	5.58	2,890	12 m.	12.08	28,800	12 p.m.	6.48	4,250
			4 p.m.	14.22	40,000	Jan. 13		
Dec. 20			6	14.59	42,000	12 p.m.	4.66	1,240
5 a.m.	5.63	2,990	8	14.22	39,600			
8	5.50	2,740	12 p.m.	13.27	33,800	Jan. 14		
3 p.m.	5.19	2,220				4 a.m.	4.81	1,430
5	5.35	2,480	Dec. 24			1 p.m.	5.80	2,860
12 p.m.	4.99	1,930	6 a.m.	11.22	22,400	8	6.92	5,440
			12 m.	9.45	14,200	12 p.m.	6.89	5,350
Dec. 21			6 p.m.	8.34	10,000			
12 m.	4.64	1,440	12 p.m.	7.77	8,080	Jan. 15		
10 p.m.	4.35	1,100				10 a.m.	6.39	4,040
12 p.m.	4.51	1,280	Dec. 25			5 p.m.	8.23	9,640
			6 a.m.	7.32	6,640	9:30	9.38	13,900
Dec. 22			12 m.	6.98	5,620	12 p.m.	9.14	13,000
3 a.m.	5.24	2,290	6 p.m.	6.67	4,740			
4	5.24	2,290	12 p.m.	6.51	4,330	Jan. 16		
6	6.68	5,660				12 m.	7.67	7,760
8	8.08	10,900	Dec. 26			12 p.m.	7.05	5,830
10	9.23	15,700	3 a.m.	6.48	4,250			
12 m.	10.25	20,000	6	6.75	4,960	Jan. 17		
1 p.m.	10.38	20,600	9	6.94	5,500	12 m.	6.61	4,590
2 p.m.	10.33	20,400	10:30 a.m.	7.82	8,250	12 p.m.	6.28	3,780

231. Deer Creek above Little Deer Creek near Sloughhouse, Calif.

(Miscellaneous site)

Location.--Lat 38°32'50", long 121°06'10", near center sec.16, T.8 N., R.8 E., three-quarters mile upstream from Little Deer Creek and 6 miles northeast of Sloughhouse. Altitude is 170 ft (from topographic map).

Drainage area.--46.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 4,460 cfs about 6 a.m. Dec. 23.

232. Carson Creek near Sloughhouse, Calif.

(Miscellaneous site)

Location.--Lat 38°33'45", long 121°07'40", SW¼NW¼ sec.8, T.8 N., R.8 E., 0.8 mile upstream from Coyote Creek, 2.5 miles upstream from mouth and 5.5 miles northeast of Sloughhouse. Altitude is 160 ft (from topographic map).

Drainage area.--23.7 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,480 cfs Dec. 23.

233. Cosumnes River at McConnell, Calif.

Location.--Lat 38°21'29", long 121°20'34", in sec.20, T.6 N., R.6 E., on downstream side of bridge on U.S. Highway 99, 0.2 mile south of McConnell, 1 mile downstream from Deer Creek, and 7 miles north of Galt.

Drainage area.--730 sq mi.

Gage-height record.--Water-stage recorder graph. Gage is set to datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 36,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 54,000 cfs 8 p.m. Dec. 23 (gage height, 46.26 ft).
1943 to November 1955: Discharge, 21,900 cfs Nov. 21, 1950 (gage height, 44.89 ft).
1931-40, 1941-42: Stage recorded, 45.94 ft Feb. 23, 24, 1936.

Remarks.--Maximum discharge affected by ponding behind levee breaks upstream. No other regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	23	1,460	11.....	168	1,320	21.....	2,330	3,190
2.....	27	1,790	12.....	122	1,030	22.....	3,790	2,700
3.....	71	1,300	13.....	97	902	23.....	34,100	5,130
4.....	71	992	14.....	87	1,730	24.....	35,600	5,710
5.....	54	2,230	15.....	76	7,740	25.....	13,800	4,670
6.....	53	6,860	16.....	70	14,500	26.....	6,740	5,710
7.....	330	2,280	17.....	72	7,920	27.....	14,700	7,850
8.....	310	2,190	18.....	86	4,780	28.....	5,900	5,380
9.....	174	1,540	19.....	231	3,550	29.....	2,520	3,860
10.....	156	1,230	20.....	2,460	3,150	30.....	1,670	3,090
						31.....	1,680	2,580
Monthly mean discharge, in cubic feet per second......................							4,115	3,818
Runoff, in inches...							6.50	6.03
Runoff, in acre-feet..							253,000	234,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Cosumnes River at McConnell, Calif.

Hour	Gage height	Discharge
Dec. 18		
12 p.m.	32.00	109
Dec. 19		
12 m.	32.38	176
5 p.m.	32.90	288
10	33.20	362
12 p.m.	34.25	682
Dec. 20		
2 a.m.	35.50	1,200
5	36.97	1,960
9	37.97	2,610
12 m.	38.28	2,830
12 p.m.	38.55	3,040
Dec. 21		
3 a.m.	38.61	3,090
12 m.	37.41	2,230
12 p.m.	36.26	1,570
Dec. 22		
5 a.m.	35.86	1,370
7	35.90	1,390
11	37.75	2,460
12 m.	38.55	3,040
2 p.m.	39.60	4,160
4	40.18	5,210
12 p.m.	41.25	8,240
Dec. 23		
2 a.m.	42.05	11,400
4	43.30	19,000
6	44.10	25,900
10	44.75	33,000
2 p.m.	45.20	38,600
5 p.m.	45.25	39,200
Dec. 23--Con.		
8 p.m.	46.26	54,000
12 p.m.	45.92	48,500
Dec. 24		
5 a.m.	45.55	43,300
1 p.m.	44.90	34,800
12 p.m.	43.70	22,200
Dec. 25		
8 a.m.	42.76	15,300
3 p.m.	42.12	11,700
12 p.m.	41.12	7,800
Dec. 26		
8 a.m.	40.55	6,120
3 p.m.	40.35	5,620
6	40.42	5,790
9	40.98	7,360
12 p.m.	42.05	11,400
Dec. 27		
3 a.m.	42.96	16,600
5	43.10	17,600
8	43.16	18,000
12 m.	42.98	16,800
8 p.m.	42.02	11,200
12 p.m.	41.56	9,360
Dec. 28		
12 m.	40.27	5,430
12 p.m.	38.92	3,380
Dec. 29		
6 a.m.	38.20	2,770
1 p.m.	37.63	2,370
3 p.m.	37.58	2,340
Dec. 29--Con.		
12 p.m.	36.98	1,970
Jan. 13		
12 p.m.	34.73	862
Jan. 14		
5 a.m.	34.78	882
8	34.94	946
12 m.	35.60	1,240
6 p.m.	37.88	2,550
9	38.60	3,080
12 p.m.	39.22	3,680
Jan. 15		
4 a.m.	39.93	4,690
8	40.85	6,960
11	41.53	9,250
3 p.m.	41.78	10,200
8	41.47	9,030
12 p.m.	41.25	8,240
Jan. 16		
1 a.m.	41.31	8,460
3	41.80	10,300
5	42.50	13,700
7	43.00	16,900
9	43.17	18,100
11:30	43.19	18,200
5 p.m.	42.79	15,400
12 p.m.	42.06	11,400
Jan. 17		
6 a.m.	41.46	8,960
8 p.m.	40.28	6,110
12 p.m.	40.00	5,680

234. Dry Creek near Galt, Calif.

Location.--Lat 38°14'48", long 121°13'03", in NE¼ sec.32, T.5 N., R.7 E., on right bank of main channel just downstream from county road bridge, 2 miles downstream from Coyote Creek and 4 miles east of Galt.

Drainage area.--325 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 52.83 ft (levels by East Bay Municipal Utility District).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 17,000 cfs 8 a.m. Dec. 24 (gage height, 14.55 ft).

1926-33, 1944 to November 1955: Discharge, 13,200 cfs Feb. 2, 1945 (gage height, 13.84 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1	0	692
2	0	984
3	0	697
4	0	508
5	0	2,430
6	0	4,260
7	0	1,400
8	0	2,060
9	0	1,020
10	0	799
11	0	787
12	0	577
13	0	467
14	0	1,640
15	0	6,340
16	0	7,780
17	0	1,960
18	0	1,100
19	22	818
20	624	908
21	270	848
22	1,840	730
23	12,800	2,140
24	13,100	1,360
25	3,890	1,440
26	2,800	1,480
27	4,600	2,140
28	1,660	1,400
29	865	941
30	637	718
31	784	591
Monthly mean discharge, in cubic feet per second	1,416	1,646
Runoff, in inches	5.02	5.84
Runoff, in acre-feet	87,100	101,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Dry Creek near Galt, Calif.

Hour	Gage height	Discharge
Dec. 18		
12 p.m.	-	0
Dec. 19		
4 p.m.	2.20	0
10	3.38	45
12 p.m.	6.87	354
Dec. 20		
3 a.m.	9.17	592
5	9.70	650
10	10.58	748
12 m.	10.86	776
5 p.m.	9.61	642
12 p.m.	7.60	428
Dec. 21		
6 a.m.	6.64	328
12 m.	5.87	252
6 p.m.	5.33	203
12 p.m.	4.88	162
Dec. 22		
3 a.m.	4.82	158
6	5.80	243
9	8.30	499
12 m.	11.00	840
2 p.m.	12.14	1,170
7	13.30	3,000
12 p.m.	14.05	8,000
Dec. 23		
6 a.m.	14.23	10,500
12 m.	14.37	12,900
6 p.m.	14.53	16,400
12 p.m.	14.46	14,700
Dec. 24		
8 a.m.	14.55	17,000
Dec. 24--Con.		
12 m.	14.50	15,600
6 p.m.	14.17	9,580
12 p.m.	13.83	5,840
Dec. 25		
6 a.m.	13.66	4,760
12 m.	13.51	3,950
6 p.m.	13.28	2,920
12 p.m.	13.01	2,030
Dec. 26		
7 a.m.	12.82	1,640
1 p.m.	13.10	2,300
10	13.68	4,880
12 p.m.	13.75	5,300
Dec. 27		
4 a.m.	13.80	5,600
12 m.	13.67	4,820
6 p.m.	13.51	3,950
12 p.m.	13.28	2,920
Dec. 28		
6 a.m.	12.97	1,940
12 m.	12.66	1,460
6 p.m.	12.33	1,230
12 p.m.	11.70	1,080
Dec. 29		
6 a.m.	10.93	930
12 m.	10.42	853
6 p.m.	9.92	778
12 p.m.	9.54	721
Jan. 13		
12 p.m.	7.43	430
Jan. 14		
6 a.m.	8.53	570
Jan. 14--Con.		
11 a.m.	10.77	906
1 p.m.	11.78	1,100
3	12.66	1,460
4	12.80	1,600
6	13.00	2,000
9	13.50	3,900
12 p.m.	13.78	5,480
Jan. 15		
6 a.m.	13.93	6,700
12 m.	13.82	5,760
6 p.m.	13.83	5,840
12 p.m.	14.10	8,600
Jan. 16		
6 a.m.	14.32	12,000
7	14.32	12,000
12 m.	14.10	8,400
6 p.m.	13.85	4,600
12 p.m.	13.67	3,050
Jan. 17		
6 a.m.	13.50	2,420
12 m.	13.13	1,790
5 p.m.	12.91	1,490
12 p.m.	12.66	1,280
Jan. 18		
6 a.m.	12.42	1,170
12 m.	12.14	1,090
6 p.m.	11.82	1,030
12 p.m.	11.28	952
Jan. 19		
6 a.m.	10.75	872
12 m.	10.25	802
6 p.m.	9.93	757
12 p.m.	9.71	726

235. Marsh Creek near Byron, Calif.

Location.--Lat 37°52'25", long 121°43'35", in Los Meganos Grant, on right bank 40 ft downstream from highway bridge on Marsh Creek road and 5.0 miles west of Byron, Contra Costa County.

Drainage area.--42.5 sq mi.

Gage-height record.--Water-stage recorder graph except 8 p.m. Dec. 29 to 9 a.m. Jan. 5, for which graph was reconstructed on basis of normal recession. Datum of gage is 177.87 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 320 cfs and by slope-area measurement at 3,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,800 cfs 2:30 a.m. Dec. 23 (gage height, 12.98 ft).
1953 to November 1955: Discharge, 86 cfs Feb. 27, 1955 (gage height, 4.48 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1	0	32
2	0	31
3	0	30
4	0	28
5	0	31
6	0	25
7	0	39
8	0	52
9	0	33
10	0	37
11	0	31
12	0	27
13	0	25
14	0	139
15	0	355
16	0	243
17	0	128
18	0	92
19	0	72
20	26	136
21	15	82
22	207	85
23	1,480	96
24	285	88
25	86	333
26	223	307
27	111	301
28	64	187
29	44	126
30	36	102
31	33	84
Monthly mean discharge, in cubic feet per second	84.2	109
Runoff, in inches	2.28	2.96
Runoff, in acre-feet	5,180	6,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Marsh Creek near Byron, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Dec. 26--Con.		
12 p.m.......	3.76	9.9	2 p.m........	9.11	1,760	3 p.m........	5.11	295
			3............	8.63	1,540	4............	5.04	279
Dec. 22			4............	8.80	1,620	5............	5.15	304
5 a.m........	3.81	13	5............	8.24	1,370	7............	4.83	233
6............	3.89	18	7............	7.31	984	9............	4.65	195
7............	4.76	145	10...........	6.51	694	12 p.m.......	4.46	158
8............	4.81	156	12 p.m.......	6.15	575			
9............	4.97	193				Jan. 13		
10...........	5.26	266	Dec. 24			12 p.m.......	3.12	25
12 m.........	5.62	372	6 a.m........	5.40	365	Jan. 14		
1 p.m........	5.42	310	12 m.........	4.90	248	4 a.m........	3.14	25
4............	5.10	224	6 p.m........	4.55	175	6............	3.21	28
6............	4.85	166	12 p.m.......	4.30	130	10...........	3.52	46
8............	4.79	152				3 p.m........	3.72	62
10...........	5.20	250	Dec. 25			5............	4.50	165
11...........	6.30	605	6 a.m........	4.10	102	8............	5.78	465
12 p.m.......	8.06	1,290	12 m.........	3.93	81	12 p.m.......	5.23	328
			6 p.m........	3.80	68			
Dec. 23			12 p.m.......	3.69	59	Jan. 15		
1 a.m........	9.50	1,960				4 a.m........	4.76	239
2............	12.50	3,540	Dec. 26			11...........	4.51	199
2:30.........	12.98	3,800	1 a.m........	3.69	59	1 p.m........	4.84	284
3............	12.00	3,260	3............	3.87	75	5:30.........	6.21	666
4............	9.40	1,910	5............	4.53	171	10...........	5.40	421
6............	8.24	1,370	6............	4.87	241	12 p.m.......	5.20	370
8............	7.84	1,200	7............	5.02	275			
9............	7.73	1,150	9............	4.86	239	Jan. 16		
10...........	7.85	1,200	10...........	5.15	304	6 a.m........	4.82	279
11...........	7.85	1,200	11:30........	4.37	358	12 m.........	4.59	228
12 m.........	8.64	1,550	1 p.m........	5.09	291	6 p.m........	4.42	193
1 p.m........	8.85	1,640	2 p.m........	5.19	314	12 p.m.......	4.33	175

236. Kellogg Creek near Byron, Calif.

(Miscellaneous site)

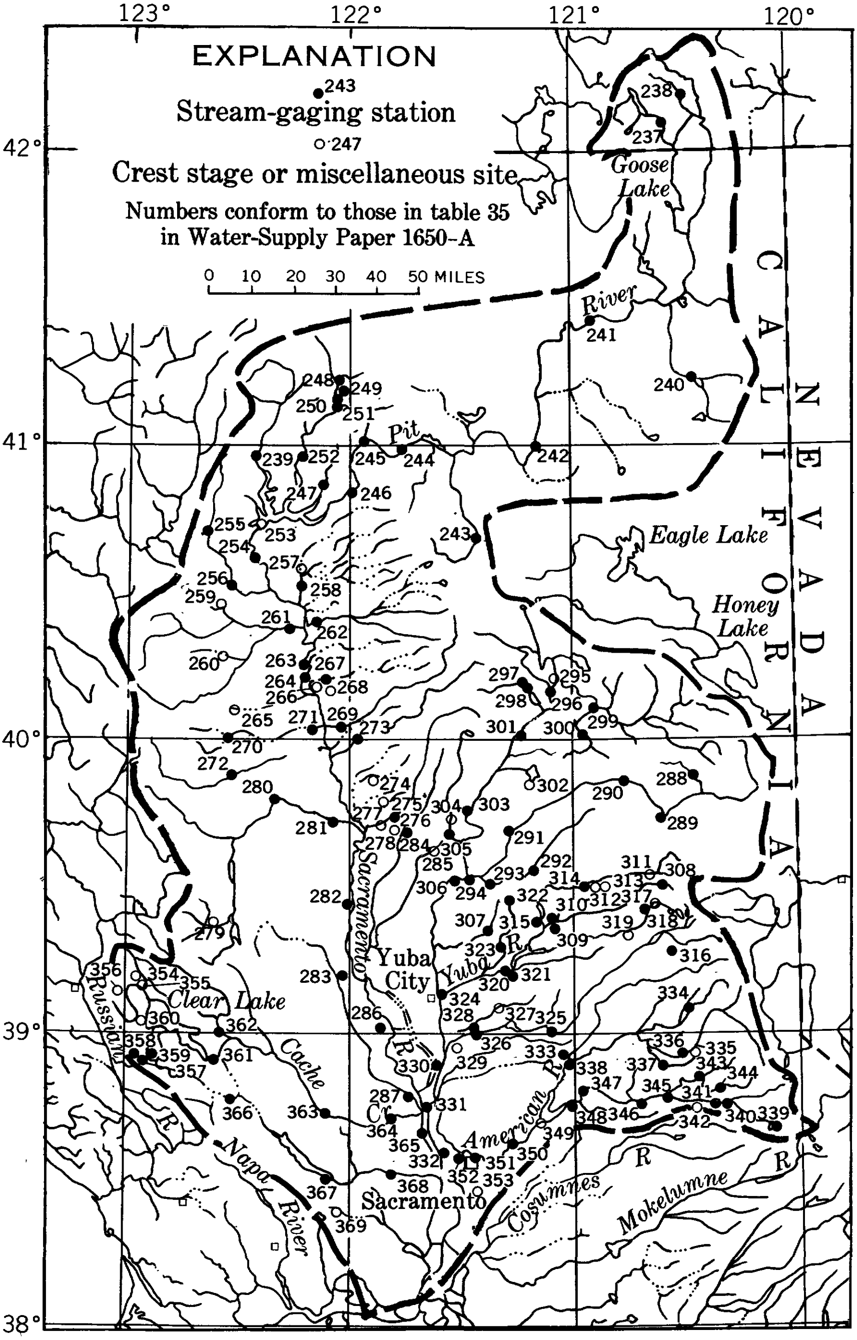
Location.--Lat 37°51'15", long 121°41'40", in SE¼SE¼ sec.12, T.1 S., R.2 E., 100 ft downstream from Vasco road bridge, 0.9 mile downstream from unnamed tributary, and 3.2 miles west of Byron.

Drainage area.--24.1 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,310 cfs Dec. 23.

SACRAMENTO VALLEY


123°
122°
121°
120°
42°
41°
40°
39°
38°
EXPLANATION
●243
Stream-gaging station
○247
Crest stage or miscellaneous site
Numbers conform to those in table 35
in Water-Supply Paper 1650-A
0 10 20 30 40 50 MILES
CALIFORNIA
NEVADA
Goose Lake
River
Pit
Eagle Lake
Honey Lake
Sacramento
Yuba City
Yuba R.
Clear Lake
Cache Cr.
Russian R.
Napa River
American R.
Sacramento
Cosumnes R.
Mokelumne R.
238
237
241
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369

Figure 5.--Map of the Sacramento Valley region showing location of flood-data sites.

GOOSE LAKE BASIN

237. Drew Creek near Lakeview, Oreg.

Location.--Lat 42°07'00", long 120°34'20", in NE¼ sec.10, T.40 S., R.18 E., on left bank 10 ft upstream from bridge to Drew Creek Forest Camp, 1¾ miles downstream from Willow Creek, 2¼ miles downstream from Drew Creek Dam, and 12½ miles southwest of Lakeview.

Drainage area.--211 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,827.0 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 483 cfs 2 p.m. Jan. 31 (gage height, 4.08 ft).

1909 to November 1955: 3,000 cfs Mar. 1, 2, 1910, from rating curve extended above 1,200 cfs.

Remarks.--Flow regulated by Drew Creek Reservoir (capacity, 62,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56, of Drew Creek near Lakeview, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	1.3	7.4	11.....	1.3	44	21.....	79	301
2.....	1.3	6.7	12.....	7.7	86	22.....	116	322
3.....	1.3	6.3	13.....	7.7	87	23.....	60	350
4.....	1.2	6.0	14.....	4.0	116	24.....	26	388
5.....	1.2	6.0	15.....	2.9	200	25.....	16	392
6.....	1.2	5.8	16.....	2.9	145	26.....	38	388
7.....	1.2	6.0	17.....	2.7	155	27.....	18	385
8.....	1.2	5.8	18.....	3.6	182	28.....	12	385
9.....	1.2	15	19.....	18	224	29.....	10	382
10.....	1.3	28	20.....	60	259	30.....	8.4	382
						31.....	8.0	427
Monthly mean discharge, in cubic feet per second......................							16.6	184
Runoff, in acre-feet..							1,020	11,290

238. Cottonwood Creek near Lakeview, Oreg.

Location.--Lat 42°14', long 120°30', in SW¼ sec.29, T.38 S., R.19 E., on right bank 600 ft downstream from Cottonwood Creek Reservoir and 10 miles northwest of Lakeview.

Drainage area.--30 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 19 to Jan. 11. Datum of gage is 5,006.93 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for period of no gage-height record estimated on basis of records for Drew Creek near Lakeview, unpublished records for Thomas Creek above Barnes Spring, near Lakeview, and observer's notes.

Maxima.--December 1955 to January 1956: Discharge, about 200 cfs Dec. 22-27 (gage height, about 4.20 ft, from observer's notes).

1908-19, 1924 to November 1955: Discharge, between 500 and 1,000 cfs during period Apr. 26 to May 1, 1927, when natural flow, estimated as 170 cfs, was augmented by water escaping from reservoir through break in outlet conduit.

Remarks.--Flow regulated by Cottonwood Creek Reservoir (capacity, 4,160 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	6.3	30	11.....	4.4	18	21.....	10	87
2.....	6.2	25	12.....	5.0	18	22.....	100	87
3.....	6.0	24	13.....	6.2	18	23.....	200	87
4.....	5.8	22	14.....	6.6	18	24.....	200	87
5.....	5.5	21	15.....	6.9	18	25.....	200	87
6.....	5.1	20	16.....	7.1	63	26.....	200	87
7.....	4.7	20	17.....	7.1	89	27.....	140	86
8.....	4.7	19	18.....	7.1	88	28.....	100	86
9.....	4.6	19	19.....	7.5	88	29.....	70	84
10.....	4.5	18	20.....	8.0	88	30.....	50	119
						31.....	35	132
Monthly mean discharge, in cubic feet per second......................							45.9	56.5
Runoff, in acre-feet..							2,830	3,480

SACRAMENTO RIVER BASIN

239. Sacramento River at Delta, Calif.

Location.--Lat 40°56'20", long 122°24'55", in NW$\frac{1}{4}$ sec.35, T.36 N., R.5 W., on left bank 0.2 mile downstream from Dog Creek, 0.6 mile southeast of Delta, and 2.8 miles south of LaMoine.

Drainage area.--427 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,075.00 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 19,000 cfs and by slope-area measurement of 37,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 37,000 cfs 2 a.m. Dec. 22 (gage height, 19.50 ft).

1944 to November 1955: Discharge, 26,900 cfs Oct. 29, 1950 (gage height, 16.61 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	435	2,000	11.....	550	4,660	21.....	17,600	3,120
2.....	409	1,800	12.....	590	3,930	22.....	26,700	3,580
3.....	374	1,780	13.....	585	4,010	23.....	15,400	4,030
4.....	347	3,000	14.....	560	5,780	24.....	7,160	3,380
5.....	370	3,540	15.....	535	12,300	25.....	6,540	3,010
6.....	565	6,660	16.....	624	8,670	26.....	7,720	2,980
7.....	502	11,200	17.....	748	5,320	27.....	5,310	2,880
8.....	512	6,180	18.....	5,390	4,010	28.....	3,690	2,570
9.....	814	3,980	19.....	11,800	3,400	29.....	2,910	2,280
10.....	590	3,980	20.....	9,800	3,320	30.....	2,400	2,050
						31.....	2,080	1,860
Monthly mean discharge, in cubic feet per second......................							4,310	4,234
Runoff, in inches..							11.64	11.43
Runoff, in acre-feet...							265,000	260,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.......	5.08	684	2 p.m........	12.85	15,400	7 a.m........	9.80	7,510
			7............	16.50	26,600	1 p.m........	10.17	8,450
Dec. 17			9............	18.00	31,800	12 p.m.......	9.40	6,570
12 m.........	5.02	651	12 p.m.......	19.20	36,000			
6 p.m........	5.22	768				Dec. 27		
12 p.m.......	5.75	1,130	Dec. 22			12 m.........	8.76	5,210
			2 a.m........	19.50	37,000	12 p.m.......	8.25	4,260
Dec. 18			6............	18.80	34,900			
3 a.m........	6.11	1,430	12 m.........	15.80	25,600	Jan. 13		
7............	7.50	2,970	7 p.m........	13.33	17,900	12 p.m.......	8.16	4,110
12 m.........	8.67	4,730	9............	13.20	17,500			
6 p.m........	10.58	8,900	12 p.m.......	13.60	18,800	Jan. 14		
9............	10.91	9,720				10 a.m.......	8.73	5,150
12 p.m.......	10.75	9,320	Dec. 23			5 p.m........	9.45	6,680
			2 a.m........	14.06	20,200	12 p.m.......	9.95	7,880
Dec. 19			10...........	13.00	16,900			
6 a.m........	10.28	8,150	6 p.m........	11.47	12,200	Jan. 15		
3:30 p.m.....	12.80	15,200	12 p.m.......	10.68	9,860	3 a.m........	10.38	9,020
6............	12.61	14,600				12 m.........	12.18	14,400
7............	12.61	14,600	Dec. 24			2 p.m........	12.32	14,800
12 p.m.......	11.81	12,200	12 m.........	9.52	6,850	6............	12.07	14,000
			8 p.m........	8.95	5,600	12 p.m.......	11.36	11,900
Dec. 20			12 p.m.......	8.78	5,250			
6 a.m........	11.11	10,200				Jan. 16		
12 m.........	10.67	9,120	Dec. 25			6 a.m........	10.70	9,920
2 p.m........	10.72	9,250	4 a.m........	8.72	5,130	12 m.........	10.14	8,370
6............	10.47	8,620	12 m.........	9.15	6,020	6 p.m........	9.70	7,270
8............	10.60	8,950	8 p.m........	10.16	8,430	12 p.m.......	9.30	6,350
12 p.m.......	11.10	10,200	10...........	10.18	8,480			
			12 p.m.......	10.11	8,300	Jan. 17		
Dec. 21						12 m.........	8.76	5,210
5 a.m........	11.13	10,300	Dec. 26			12 p.m.......	8.40	4,530
9 a.m........	11.21	10,500	5 a.m........	9.83	7,580			

240. South Fork Pit River near Likely, Calif.

Location.--Lat 41°14', long 120°25', in NE¼ sec.11, T.39 N., R.13 E., on left bank 1.3 miles downstream from West Valley Creek and 3.5 miles east of Likely.

Drainage area.--248 sq mi.

Gage-height record.--Water-stage recorder graph except 10 p.m. Jan. 24 to 12 p.m. Jan. 31. Altitude of gage is 4,580 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times. Discharge for period of no gage-height record estimated on basis of two discharge measurements and records for Pit River near Canby.

Maxima.--December 1955 to January 1956: Discharge, 228 cfs 4 p.m. Dec. 23 (gage height, 3.30 ft).

1928 to November 1955: Discharge, 1,060 cfs Apr. 27, 1932 (gage height, 5.55 ft), from rating curve extended above 600 cfs.

Remarks.--Flows regulated by West Valley Reservoir on West Valley Creek (total capacity, 17,700 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	27	45	11.....	32	63	21.....	33	74
2.....	26	40	12.....	39	54	22.....	95	81
3.....	24	40	13.....	43	67	23.....	183	57
4.....	23	40	14.....	41	92	24.....	114	49
5.....	22	42	15.....	36	102	25.....	73	45
6.....	21	46	16.....	38	64	26.....	84	41
7.....	24	49	17.....	36	56	27.....	72	38
8.....	28	50	18.....	45	57	28.....	54	36
9.....	29	55	19.....	67	67	29.....	50	33
10.....	28	60	20.....	46	85	30.....	45	31
						31.....	45	29
Monthly mean discharge, in cubic feet per second......................							49.1	54.5
Runoff, in acre-feet...							3,020	3,350

241. Pit River near Canby, Calif.

Location.--Lat 41°24', long 120°55', in SW¼ sec.10, T.41 N., R.9 E., on right bank at lower end of Warm Spring Valley and 4 miles southwest of Canby.

Drainage area.--1,430 sq mi, approximately, excluding Goose Lake Basin.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 4,260 cfs 5 p.m. Dec. 23 (gage height, 8.39 ft).

1904-5, 1929 to November 1955: Discharge, 17,000 cfs Mar. 8, 1904 (gage height, 14.0 ft, datum then in use).

Remarks.--Flow regulated by several small reservoirs (total usable capacity, about 100,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	61	465	11.....	65	670	21.....	1,540	1,620
2.....	57	390	12.....	109	808	22.....	1,510	1,610
3.....	54	350	13.....	222	963	23.....	3,420	1,670
4.....	67	420	14.....	385	1,110	24.....	3,830	1,700
5.....	50	682	15.....	340	1,650	25.....	2,910	1,520
6.....	44	676	16.....	174	3,250	26.....	2,620	1,310
7.....	44	840	17.....	117	3,180	27.....	2,360	970
8.....	65	898	18.....	172	2,500	28.....	2,250	796
9.....	70	622	19.....	1,030	1,990	29.....	1,510	628
10.....	63	640	20.....	1,600	1,770	30.....	1,170	465
						31.....	616	385
Monthly mean discharge, in cubic feet per second......................							920	1,179
Runoff, in acre-feet...							56,580	72,490

242. Pit River near Bieber, Calif.

Location.--Lat 41°00', long 121°09', in NW¼ sec.34, T.37 N., R.7 E., on right bank 1.5 miles upstream from Spring Gulch and 8 miles south of Bieber.

Drainage area.--2,970 sq mi, approximately, excluding Goose Lake basin.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,100 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,300 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 11,700 cfs 2-3 p.m. Dec. 24 (gage height, 10.78 ft).

1904-8, 1913-14, 1921-26, 1928-31, 1951 to November 1955: Discharge, 33,800 cfs Mar. 19, 1907 (gage height, 16.4 ft), from rating curve extended above 15,000 cfs by logarithmic plotting.

Remarks.--Flow regulated by many small reservoirs (total capacity, about 200,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	114	1,670	11.....	146	2,300	21.....	4,670	3,920
2.....	124	1,160	12.....	167	2,300	22.....	4,310	3,800
3.....	116	959	13.....	240	2,170	23.....	6,470	3,890
4.....	98	875	14.....	354	2,650	24.....	10,900	4,380
5.....	91	1,190	15.....	422	3,620	25.....	8,160	3,540
6.....	108	1,670	16.....	485	4,680	26.....	6,220	3,100
7.....	96	2,010	17.....	465	5,030	27.....	5,620	2,590
8.....	89	2,020	18.....	473	5,150	28.....	5,130	2,100
9.....	102	2,360	19.....	1,310	4,420	29.....	3,060	1,600
10.....	126	2,070	20.....	3,570	3,920	30.....	2,900	1,200
						31.....	2,330	900
Monthly mean discharge, in cubic feet per second.....................							2,209	2,685
Runoff, in acre-feet...							135,800	165,100

243. Hat Creek near Hat Creek, Calif.

Location.--Lat 40°41', long 121°25', in SE¼ sec.28, T.33 N., R.5 E., on right bank 1 mile northeast of Old Station post office and 8 miles southeast of Hat Creek post office.

Drainage area.--122 sq mi, approximately; hydrologic drainage boundary uncertain owing to ground-water exchange.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 300 cfs and by slope-area measurement at 3,320 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,050 cfs 1 p.m. Dec. 23 (gage height, 5.06 ft).

1926 to November 1955: Discharge, 3,320 cfs Dec. 11, 1937 (gage height, 7.75 ft, in gage well, affected by drawdown).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	128	157	11.....	126	147	21.....	192	167
2.....	126	153	12.....	126	147	22.....	708	169
3.....	126	151	13.....	124	149	23.....	859	171
4.....	119	151	14.....	124	155	24.....	384	165
5.....	126	151	15.....	123	226	25.....	258	165
6.....	128	149	16.....	123	243	26.....	226	163
7.....	124	147	17.....	124	193	27.....	194	161
8.....	128	142	18.....	128	180	28.....	182	157
9.....	126	145	19.....	139	174	29.....	174	153
10.....	126	147	20.....	152	171	30.....	163	147
						31.....	161	140
Monthly mean discharge, in cubic feet per second.....................							195	162
Runoff, in inches...							1.84	1.54
Runoff, in acre-feet...							11,990	9,990

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Hat Creek near Hat Creek, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Jan. 14		
12 p.m.	2.61	157	12 p.m.	4.41	735	1 p.m.	2.52	151
						12 p.m.	2.60	167
Dec. 21			Dec. 23					
7 a.m.	2.63	161	6 a.m.	4.90	970	Jan. 15		
9	2.65	165	12 m.	5.05	1,040	9 a.m.	2.67	182
2 p.m.	2.67	169	1 p.m.	5.06	1,050	12 m.	2.76	203
5	2.73	181	8	4.24	671	3 p.m.	2.94	249
8	2.91	224	12 p.m.	3.88	533	5	3.10	292
10:30	3.27	328				7	3.12	298
11:30	3.27	328	Dec. 24			10	3.12	298
12 p.m.	3.40	367	4 a.m.	3.65	456	12 p.m.	3.07	284
			10	3.41	381			
Dec. 22			6 p.m.	3.24	331	Jan. 16		
4 a.m.	3.93	544	12 p.m.	3.12	298	4 a.m.	3.00	265
8:30	4.40	731				1 p.m.	2.89	236
10	4.69	866	Dec. 25			6	2.86	228
12:30 p.m.	4.63	838	12 m.	2.96	254	12 p.m.	2.78	208
2	4.72	880	12 p.m.	2.86	228			
3	4.72	880				Jan. 17		
7	4.39	727	Jan. 13			6 a.m.	2.73	196
9 p.m.	4.34	707	12 p.m.	2.52	151	12 p.m.	2.68	185

244. Pit River below Pit No. 4 Dam, Calif.

Location.--Lat 40°59', long 121°47', in SW$\frac{1}{4}$ sec.17, T.36 N., R.2 E., on right bank 1 mile downstream from Pit No. 4 Dam and 3 miles downstream from Screwdriver Creek and Pit No. 3 powerhouse.

Drainage area.--4,860 sq mi, approximately, excluding Goose Lake basin.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,345 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 9,800 cfs and extended above on basis of velocity-area studies.

Maxima.--December 1955 to January 1956: Discharge, 17,200 cfs 2:30 p.m. Dec. 23 (gage height, 14.39 ft).

1927 to November 1955: Discharge, 30,200 cfs Dec. 12, 1937 (gage height, 17.90 ft).

Remarks.--Flow regulated by many small reservoirs and powerplants (total usable reservoir capacity is about 200,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	92	1,650	11	84	1,940	21	4,270	4,870
2	86	986	12	84	2,000	22	7,050	4,650
3	87	434	13	82	1,890	23	13,500	4,740
4	87	196	14	86	2,460	24	13,100	5,230
5	92	896	15	86	3,920	25	13,300	5,110
6	99	998	16	86	5,740	26	10,400	4,700
7	86	1,520	17	91	6,500	27	9,660	3,800
8	87	3,190	18	112	6,120	28	7,330	3,280
9	91	2,480	19	288	5,730	29	4,780	2,660
10	84	2,090	20	2,810	4,930	30	2,840	1,800
						31	2,200	1,330
Monthly mean discharge, in cubic feet per second							3,004	3,156
Runoff, in acre-feet							184,700	194,100

245. Pit River at Big Bend, Calif.

Location.--Lat 41°01', long 121°55', in sec.31, T.37 N., R.1 E., on left bank at Big Bend, 0.5 mile downstream from Nelson Creek, and 1 mile upstream from Kosk Creek.

Drainage area.--4,920 sq mi, approximately, excluding Goose Lake basin.

Gage-height record.--Water-stage recorder graph except Dec. 1-4, 22, 23. Datum of gage is 1,674.47 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Dec. 1-4, 22, 23 estimated on basis of weather records and records for adjacent stations. Peak discharge for Dec. 23 estimated on basis of records for adjacent stations.

Maxima.--December 1955 to January 1956: Discharge, about 18,000 cfs, time unknown, Dec. 23 (gage height unknown).
1910 to November 1955: Discharge, 34,200 cfs Dec. 12, 1937 (gage height, 16.26 ft), from rating curve extended above 12,000 cfs on basis of velocity-area studies.

Remarks.--Flow regulated by many small reservoirs and powerplants (total usable capacity, about 200,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	72	2,680	11.....	79	3,130	21.....	5,780	5,780
2.....	64	1,970	12.....	84	3,160	22.....	9,000	5,760
3.....	64	1,290	13.....	79	3,070	23.....	15,000	5,840
4.....	64	1,010	14.....	74	3,910	24.....	14,600	6,040
5.....	64	2,040	15.....	69	5,610	25.....	14,100	5,970
6.....	72	2,110	16.....	92	7,340	26.....	11,600	5,350
7.....	66	2,950	17.....	110	7,370	27.....	10,600	4,790
8.....	75	4,830	18.....	314	6,880	28.....	8,240	4,100
9.....	93	3,820	19.....	1,440	6,500	29.....	5,930	3,480
10.....	76	3,370	20.....	4,420	5,910	30.....	3,880	2,500
						31.....	3,260	1,960
Monthly mean discharge, in cubic feet per second							3,531	4,210
Runoff, in acre-feet							217,100	258,900

Peak discharge.--Jan. 8 (6:15 a.m.) 10,600 cfs (gage height, 12.18 ft).

246. Pit River near Montgomery Creek, Calif.

Location.--Lat 40°51', long 121°59', in NE¼ sec.32, T.35 N., R.1 W., on left bank 1 mile upstream from Cow Canyon Creek and 3.5 miles west of town of Montgomery Creek.

Drainage area.--5,170 sq mi, approximately, excluding Goose Lake basin.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,075.00 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 37,100 cfs 7:30 a.m. Dec. 23 (gage height, 14.12 ft).
1944 to November 1955: Discharge, 21,300 cfs Jan. 9, 1953 (gage height, 10.95 ft).

Remarks.--Flow regulated by many small reservoirs and powerplants above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2,810	8,440	11.....	2,810	9,620	21.....	19,900	12,600
2.....	2,990	7,770	12.....	3,110	9,280	22.....	28,600	13,300
3.....	2,770	6,850	13.....	2,440	9,830	23.....	32,100	13,900
4.....	2,590	7,100	14.....	2,830	12,400	24.....	23,600	13,000
5.....	2,760	8,560	15.....	2,890	17,600	25.....	21,700	12,600
6.....	2,970	8,900	16.....	3,330	17,200	26.....	21,000	11,800
7.....	2,830	12,400	17.....	4,000	15,000	27.....	19,000	11,600
8.....	2,990	12,900	18.....	6,350	13,700	28.....	15,300	10,200
9.....	3,600	10,700	19.....	12,000	13,000	29.....	12,400	9,390
10.....	3,000	10,100	20.....	14,500	12,900	30.....	9,730	8,250
						31.....	8,870	7,530
Monthly mean discharge, in cubic feet per second							9,541	11,240
Runoff, in acre-feet							586,700	691,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Pit River near Montgomery Creek, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 20--Con.			Dec. 23--Con.		
12 p.m.	5.40	5,210	9 p.m.	9.20	15,900	12 p.m.	11.67	25,700
			12 p.m.	9.10	15,500			
Dec. 18						Dec. 24		
4 a.m.	3.76	2,350	Dec. 21			12 m.	11.10	23,300
7	4.10	2,850	5 a.m.	10.10	19,300	12 p.m.	10.77	22,000
10	5.78	6,020	2 p.m.	9.30	16,200	Jan. 13		
7 p.m.	7.29	9,630	7	10.65	21,500	12 p.m.	7.55	10,700
11	7.10	9,120	11	12.88	31,100			
12 p.m.	6.36	7,320	12 p.m.	12.77	30,600	Jan. 14		
						12 m.	8.10	12,300
Dec. 19			Dec. 22			6 p.m.	8.44	13,400
2 a.m.	6.00	6,500	7 a.m.	12.67	30,100	12 p.m.	8.55	13,800
5	6.70	8,120	2 p.m.	11.98	27,100			
6	7.35	9,800	7	11.70	25,800	Jan. 15		
1 p.m.	8.70	14,100	11	12.60	29,800	6 a.m.	9.10	15,700
5	8.98	15,100	12 p.m.	12.30	28,500	4 p.m.	10.32	20,200
12 p.m.	8.55	13,500				12 p.m.	9.90	18,600
			Dec. 23					
Dec. 20			7:30 a.m.	14.12	37,100	Jan. 16		
10 a.m.	8.82	14,500	5 p.m.	13.05	31,900	12 m.	9.52	17,200
4 p.m.	8.72	14,100	9 p.m.	12.00	27,200	12 p.m.	9.18	16,000

247. Squaw Creek above Shasta Lake, Calif.

Location.--Lat 40°51'25", long 122°07'10", in SW¼ sec.29, T.35 N., R.2 W., on left bank 1.3 miles upstream from Salt Creek, about 2 miles upstream from Shasta Lake, and 10 miles west of town of Montgomery Creek.

Drainage area.--65.3 sq mi.

Gage height record.--Water-stage recorder graph. Altitude of gage is 1,170 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,200 cfs and by slope-area measurement at 11,200 cfs.

Maxima.--December 1955 to January 1956: Discharge, 17,800 cfs 10:30 p.m. Dec. 21 (gage height, 21.90 ft).
1944 to November 1955: Discharge, 11,200 cfs Mar. 9, 1954 (gage height, 18.90 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	76	746	11	140	1,340	21	9,140	915
2	71	832	12	129	1,120	22	11,200	1,040
3	64	714	13	116	1,080	23	6,870	1,390
4	56	858	14	103	1,770	24	2,400	1,080
5	60	2,120	15	91	3,670	25	1,490	905
6	158	2,010	16	129	2,540	26	1,670	940
7	133	3,140	17	204	1,500	27	1,550	1,080
8	126	2,580	18	1,720	1,090	28	1,150	1,020
9	355	1,490	19	5,160	881	29	895	809
10	186	1,330	20	5,470	881	30	742	696
						31	620	596
Monthly mean discharge, in cubic feet per second							1,686	1,360
Runoff, in inches							29.77	24.01
Runoff, in acre-feet							103,700	83,630

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 19--Con.			Dec. 21--Con.		
12 p.m.	8.45	355	12 p.m.	16.40	7,000	2 p.m.	15.20	5,300
						6	18.10	9,770
Dec. 18			Dec. 20			10:30	21.90	17,800
6 a.m.	9.35	688	6 a.m.	14.58	4,570	12 p.m.	21.60	17,000
12 m.	10.90	1,500	10	14.95	5,000			
10 p.m.	13.47	3,460	12 m.	14.82	4,840	Dec. 22		
12 p.m.	13.45	3,440	4 p.m.	14.53	4,510	6 a.m.	21.15	16,000
			9	16.28	6,820	12 m.	17.85	9,340
Dec. 19			12 p.m.	16.30	6,850	8 p.m.	16.15	6,620
3 a.m.	13.40	3,400				12 p.m.	17.25	8,340
12 m.	15.05	5,120	Dec. 21					
6 p.m.	15.95	6,320	4 a.m.	17.70	9,090	Dec. 23		
11 p.m.	16.55	7,220	12 m.	15.35	5,500	5 a.m.	18.40	10,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Squaw Creek above Shasta Lake, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 23--Con.			Jan. 13			Jan. 15--Con.		
12 m.	16.20	6,700	12 p.m.	10.33	1,160	12 m.	14.15	4,110
6 p.m.	14.70	4,700				3 p.m.	14.58	4,570
12 p.m.	13.52	3,510	Jan. 14			6	14.45	4,420
			12 m.	11.35	1,780	12 p.m.	13.70	3,670
Dec. 24			12 p.m.	12.15	2,360			
6 a.m.	12.70	2,800				Jan. 16		
12 m.	12.02	2,260	Jan. 15			6 a.m.	12.92	2,980
12 p.m.	11.18	1,670	6 a.m.	12.95	3,000	12 m.	12.17	2,380
						12 p.m.	11.36	1,790

248. McCloud River below Big Springs, near McCloud, Calif.

Location.--Lat 41°13'40", long 122°02'45", in NE¼ sec.14, T.39 N., R.2 W., 1,400 ft downstream from lower Big Springs and 5½ miles southeast of McCloud.

Drainage area.--340 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 1 to 11 a.m. Dec. 9. Datum of gage is 2,950.8 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,200 cfs and by slope-area measurement at 10,100 cfs. Discharge for period of no gage-height record was interpolated.

Maxima.--December 1955 to January 1956: Discharge, 10,100 cfs 10:30 p.m. Dec. 21 (gage height, 6.80 ft).

January to November 1955: Discharge, 1,080 cfs Mar. 29, 1955 (gage height, 2.08 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	610	990	11	610	954	21	7,210	1,040
2	610	936	12	610	927	22	7,170	1,050
3	610	909	13	610	936	23	4,930	1,150
4	618	900	14	610	974	24	2,130	1,050
5	618	900	15	610	1,370	25	1,620	1,030
6	618	954	16	618	1,510	26	1,840	999
7	618	1,010	17	618	1,240	27	1,680	963
8	618	927	18	670	1,110	28	1,330	936
9	618	900	19	1,060	1,050	29	1,180	909
10	610	909	20	3,640	1,040	30	1,080	884
						31	1,030	884
Monthly mean discharge, in cubic feet per second							1,516	1,011
Runoff, in inches							5.14	3.43
Runoff, in acre-feet							93,230	62,160

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 21--Con.			Jan. 13		
12 p.m.	1.67	758	4 p.m.	4.88	5,860	12 p.m.	1.75	945
			6	5.12	6,380			
Dec. 19			9	6.35	9,090	Jan. 14		
6 a.m.	1.71	794	10:30	6.80	10,100	12 m.	1.75	945
12 m.	1.82	900	12 p.m.	6.62	9,680	6 p.m.	1.80	990
6 p.m.	2.15	1,240				12 p.m.	1.91	1,090
12 p.m.	2.67	1,890	Dec. 22					
			1 a.m.	6.50	9,420	Jan. 15		
Dec. 20			2:30	6.70	9,860	12 m.	2.15	1,330
3 a.m.	3.02	2,380	5	6.58	9,600	9 p.m.	2.43	1,640
5	3.50	3,120	9	6.03	8,390	12 p.m.	2.48	1,700
1 p.m.	3.71	3,500	12 m.	5.58	7,400			
7	4.16	4,340	3 p.m.	5.03	6,190	Jan. 16		
10	4.57	5,170	6	4.52	5,060	1 a.m.	2.49	1,710
12 p.m.	5.00	6,120	9	4.16	4,340	3	2.48	1,700
			12 p.m.	4.06	4,140	12 m.	2.30	1,490
Dec. 21						12 p.m.	2.14	1,320
3 a.m.	5.97	8,250	Dec. 23					
4	5.98	8,280	3 a.m.	4.37	4,760	Jan. 17		
5	5.86	8,010	6	5.11	6,360	10 a.m.	2.06	1,240
7	5.28	6,740	8	5.24	6,650	12 p.m.	1.99	1,170
9	5.09	6,320	12 m.	5.00	6,120			
12 m.	5.03	6,190	6 p.m.	3.90	3,840			
2 p.m.	4.88	5,860	12 p.m.	3.28	2,770			

249. Angel Creek at mouth, near McCloud, Calif.

Location.--Lat 41°11'40", long 122°03'25", in SW¼ sec.26, T.39 N., R.2 W., 900 ft upstream from mouth and 6 miles southeast of McCloud.

Drainage area.--16.8 sq mi.

Gage-height record.--Water-stage recorder graph except 4 p.m. Dec. 13 to 10:30 a.m. Dec. 20. Altitude of gage is 2,739.3 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 330 cfs. Discharge for period of no gage-height record estimated on basis of records for McCloud River near McCloud and McCloud River below Big Springs, near McCloud.

Maxima.--December 1955 to January 1956: Discharge, 2,000 cfs 11:30 p.m. Dec. 20 (gage height, 6.27 ft).

February to November 1955: Discharge, 86 cfs Mar. 29, 1955 (gage height, 2.36 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	12	128	11	12	132	21	1,510	141
2	12	113	12	12	132	22	1,260	143
3	12	105	13	12	134	23	930	156
4	11	100	14	12	142	24	437	143
5	11	100	15	12	277	25	306	136
6	12	126	16	12	274	26	366	134
7	10	165	17	13	202	27	296	124
8	11	141	18	60	160	28	219	113
9	11	132	19	230	145	29	172	102
10	11	130	20	950	143	30	149	93
						31	136	86
Monthly mean discharge, in cubic feet per second							233	140
Runoff, in inches							15.98	9.63
Runoff, in acre-feet							14,320	8,630

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Jan. 14		
10:30 a.m.	4.00	630	7 a.m.	5.00	1,370	12 m.	1.84	136
5 p.m.	5.50	1,450	9	4.95	1,350	12 p.m.	1.96	163
8	5.35	1,350	12 m.	4.60	1,190			
11:30	6.27	2,000	3 p.m.	4.25	1,030	Jan. 15		
12 p.m.	6.17	1,960	5:30	4.20	1,010	6 a.m.	2.14	208
			10	4.55	1,170	12 m.	2.45	302
Dec. 21			12 p.m.	4.60	1,190	3 p.m.	2.55	338
3 a.m.	5.28	1,510				5	2.58	348
8	4.70	1,240	Dec. 23			8	2.56	341
11	4.53	1,160	1 a.m.	4.77	1,270	12 p.m.	2.52	327
1 p.m.	4.56	1,170	5	4.56	1,170			
4	5.26	1,500	6	4.40	1,100	Jan. 16		
7	5.95	1,840	8	4.43	1,110	12 m.	2.35	270
10	5.95	1,840	12 m.	3.98	911	12 p.m.	2.22	231
10:30	6.20	1,970	6 p.m.	3.52	718			
11	5.70	1,720	12 p.m.	3.20	590	Jan. 17		
12 p.m.	5.68	1,710				12 m.	2.11	200
			Dec. 24			12 p.m.	2.02	177
Dec. 22			6 a.m.	2.94	486			
2 a.m.	5.58	1,660	6 p.m.	2.64	369	Jan. 18		
3	5.33	1,540	12 p.m.	2.53	330	12 m.	1.94	158
5	5.12	1,430				12 p.m.	1.90	149
6 a.m.	4.92	1,330	Jan. 13					
			12 p.m.	1.83	134			

256. Clear Creek near Igo, Calif.

Location.--Lat 40°30'50", long 122°31'20", in NE¼NE¼ sec.27, T.31 N., R.6 W., on left bank at highway bridge on Redding-Igo road, 1.0 mile northeast of Igo, 8 miles southwest of Redding, and 10.5 miles upstream from mouth.

Drainage area.--228 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 700 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 18,000 cfs and by slope-area measurement at 24,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 24,500 cfs 9 p.m. Dec. 21 (gage height, 13.75 ft in gage well, about 15.5 ft outside, from floodmarks).
1940 to November 1955: Discharge, 19,200 cfs Mar. 1, 1941 (gage height, 12.2 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	120	1,440	11.....	216	2,410	21.....	10,200	1,810
2.....	125	1,210	12.....	223	1,980	22.....	14,500	1,830
3.....	105	1,000	13.....	220	1,880	23.....	7,310	2,060
4.....	93	1,250	14.....	202	4,200	24.....	3,740	1,860
5.....	232	1,480	15.....	190	7,100	25.....	3,660	1,760
6.....	552	1,900	16.....	206	5,320	26.....	3,670	1,780
7.....	271	5,410	17.....	287	3,390	27.....	2,420	1,960
8.....	223	3,480	18.....	2,950	2,330	28.....	1,740	1,680
9.....	347	2,220	19.....	8,100	1,890	29.....	1,350	1,410
10.....	260	2,180	20.....	6,860	1,880	30.....	1,110	1,210
						31.....	942	1,070
Monthly mean discharge, in cubic feet per second......................							2,336	2,335
Runoff, in inches..							11.81	11.81
Runoff, in acre-feet...							143,700	143,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 21			Dec. 26		
12 p.m.......	3.08	230	4 a.m........	7.36	5,250	12 m.........	6.94	3,710
			9............	6.88	4,260	12 p.m.......	6.55	2,900
Dec. 17			10:30........	6.82	4,140			
12 m.........	3.11	241	12 m.........	6.98	4,460	Jan. 12		
6 p.m........	3.27	303	2 p.m........	8.25	7,350	12 p.m.......	5.64	1,930
12 p.m.......	3.71	510	5............	10.52	13,700			
			9............	13.75	24,500	Jan. 13		
Dec. 18			11...........	12.45	19,900	2 a.m........	5.67	1,960
4 a.m........	3.91	626	12 p.m.......	12.60	20,400	6 p.m........	5.45	1,700
8............	4.75	1,240				8............	5.50	1,760
12 m.........	5.70	2,300	Dec. 22			12 p.m.......	6.02	2,470
5 p.m........	7.28	5,080	1 a.m........	12.63	20,500			
7............	7.72	6,070	4............	11.88	18,000	Jan. 14		
12 p.m.......	7.31	5,140	5............	12.05	18,600	6 a.m........	6.64	3,620
			2 p.m........	10.23	12,800	7............	6.64	3,620
Dec. 19			5............	9.55	10,800	6 p.m........	7.28	5,000
1:30 a.m.....	7.20	4,900	7............	9.37	10,300	12 p.m.......	7.50	5,500
8............	8.43	7,820	9............	9.32	10,200			
12 m.........	8.95	9,170	11...........	9.69	11,200	Jan. 15		
2:30 p.m.....	9.66	11,100	12 p.m.......	9.65	11,100	4 a.m........	7.82	6,270
5:30	8.88	8,990				5............	7.77	6,150
6............	9.00	9,300	Dec. 23			12 m.........	8.47	7,920
11...........	8.52	8,050	4 a.m........	8.98	8,940	1:30 p.m.....	8.53	8,080
12 p.m.......	8.60	8,260	3 p.m........	8.07	6,400	5............	8.44	7,840
			12 p.m.......	7.48	4,930	7............	8.37	7,660
Dec. 20						12 p.m.......	8.01	6,730
2:30 a.m.....	8.90	9,040	Dec. 24					
7............	7.96	6,640	8 a.m........	7.08	4,020	Jan. 16		
10...........	7.63	5,850	4 p.m........	6.76	3,320	6 a.m........	7.68	5,930
1 p.m........	7.48	5,520	12 p.m.......	6.53	2,860	6 p.m........	7.11	4,620
3............	7.79	6,240				12 p.m.......	6.90	4,160
5............	7.70	6,020	Dec. 25					
7............	7.84	6,360	5 a.m........	6.38	2,580	Jan. 17		
11...........	8.40	7,740	6 p.m........	7.37	4,670	12 m.........	6.49	3,320
12 p.m.......	8.13	7,050	12 p.m.......	7.24	4,370	12 p.m.......	6.19	2,760

257. Little Cow Creek at Palo Cedro, Calif.

(Gaging station, discontinued 1914)

Location.--Lat 40°34'35", long 122°13'30", in NE¼ sec.5, T.31 N., R.3 W., 0.6 mile downstream from French Creek and 0.8 mile northeast of Palo Cedro. Altitude is 450 ft (from topographic map).

Drainage area.--145 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 13,700 cfs Jan. 15.

1911-14: Discharge, 4,480 cfs Nov. 6, 1912 (gage height, 10.0 ft); stage known, 13.5 ft Dec. 31, 1913, discharge not determined.

Local residents reported that December 1937 flood was 6 ft higher than January 1956 flood at State Highway 44 crossing.

258. Cow Creek near Millville, Calif.

Location.--Lat 40°30'20", long 122°13'55", in NE¼NW¼ sec.32, T.31 N., R.3 W., on right bank 4.2 miles southwest of Millville and 4.3 miles downstream from Little Cow Creek.

Drainage area.--427 sq mi.

Gage-height record.--Water-stage recorder graph, except 2 p.m. Dec. 16 to 4 a.m. Dec. 17, 1 p.m. Dec. 17 to 10 a.m. Dec. 21, 9 a.m. Dec. 26 to 1 a.m. Dec. 28, 6 to 10 a.m. Jan. 1, 1 p.m. Jan. 4 to 4 a.m. Jan. 5, 5 p.m. Jan. 9 to 10 a.m. Jan. 10, 10 p.m. Jan. 13 to 2 p.m. Jan. 14. Altitude of gage is 400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 27,000 cfs. Discharge for periods of no gage-height record estimated on basis of records for Battle Creek near Cottonwood.

Maxima.--December 1955 to January 1956: Discharge, 33,000 cfs 12 m. Jan. 15 (gage height, 19.06 ft).

1949 to November 1955: Discharge, 45,200 cfs Dec. 27, 1951 (gage height, 21.55 ft), from rating curve extended above 15,000 cfs on basis of logarithmic plotting and velocity-area study.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	364	2,470	11.....	701	2,320	21.....	3,500	4,270
2.....	398	1,960	12.....	568	1,510	22.....	8,880	7,400
3.....	305	1,440	13.....	468	4,150	23.....	12,400	5,300
4.....	291	2,000	14.....	401	15,000	24.....	4,330	3,360
5.....	2,580	2,810	15.....	345	22,600	25.....	2,790	4,430
6.....	9,210	2,040	16.....	800	5,980	26.....	8,000	4,890
7.....	1,420	6,320	17.....	4,000	3,500	27.....	5,000	3,180
8.....	1,160	3,910	18.....	6,000	2,770	28.....	2,570	2,410
9.....	3,370	2,340	19.....	9,000	2,740	29.....	1,840	1,890
10.....	1,060	3,370	20.....	5,400	6,060	30.....	1,520	1,600
						31.....	1,360	1,360
Monthly mean discharge, in cubic feet per second......................							3,227	4,367
Runoff, in inches..							8.71	11.79
Runoff, in acre-feet...							198,400	268,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Cow Creek near Millville, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Jan. 13--Con.		
11 a.m.......	6.98	2,870	12 m.........	15.28	19,200	10 p.m.......	6.95	2,840
1 p.m........	6.90	2,790	3 p.m........	13.30	13,900	12 p.m.......	8.15	4,240
4............	7.20	3,090	6............	11.10	9,060			
8............	10.10	7,200	9............	10.00	7,020	Jan. 14		
10:30........	11.75	10,400	12 p.m.......	9.32	5,970	2 p.m........	16.80	23,800
12 p.m.......	11.60	10,100				5............	17.84	27,700
			Dec. 24			8............	17.14	25,000
Dec. 22			6 a.m........	8.44	4,760	12 p.m.......	16.58	23,000
5 a.m........	10.67	8,230	3 p.m........	7.80	3,960			
8............	10.50	7,920	12 p.m.......	7.17	3,260	Jan. 15		
10...........	10.72	8,320				2 a.m........	16.03	21,400
3 p.m........	9.90	6,860	Jan. 12			8............	17.47	26,200
5............	10.57	8,050	12 p.m.......	5.46	1,510	12 m.........	19.06	33,000
6............	10.44	7,810				3 p.m........	17.35	25,700
8............	11.00	8,860	Jan. 13			6............	15.62	20,200
12 p.m.......	14.08	15,800	2 a.m........	5.68	1,680	9............	13.47	14,300
			4............	7.75	3,710	12 p.m.......	8.15	4,240
Dec. 23			5............	9.25	5,840			
1:30 a.m.....	14.52	17,000	7............	11.18	9,220	Jan. 16		
4............	13.70	14,900	9............	9.95	6,940	4 a.m........	10.83	8,520
6............	12.35	11,700	12 m.........	8.10	4,170	10...........	9.70	6,540
8............	11.45	9,760	5 p.m........	7.00	2,890	6 p.m........	8.59	4,860
10 a.m.......	13.35	14,000	9 p.m........	6.70	2,590	12 p.m.......	8.15	4,240

259. North Fork Cottonwood Creek near Ono, Calif.

(Miscellaneous site)

Location.--Lat 40°27'15", long 122°33'40", in E½ sec.17, T.30 N., R.6 W., 300 ft upstream from Huling Creek and 3.4 miles southeast of Ono. Altitude is 660 ft (from topographic map).

Drainage area.--75.2 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 12,100 cfs during evening of Dec. 21.

Local residents stated that this was the highest flood during their 50-year residence.

260. Dry Creek near Cottonwood, Calif.

(Miscellaneous site)

Location.--Lat 40°16'35", long 122°32'30", in SE¼ sec.16, T.28 N., R.6 W., 1,000 ft downstream from unnamed tributary, 0.8 mile upstream from Spring Gulch, 0.9 mile northeast of Rosewood, and 1 mile downstream from Salt Creek. Altitude is 600 ft (from topographic map).

Drainage area.--130 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 8,180 cfs during evening of Jan. 15.

Local resident stated that December 1955 and January 1956 floods were higher than any previously known during 55-year residence.

261. Cottonwood Creek near Cottonwood, Calif.

Location.--Lat 40°23'10", long 122°14'15", in NE¼ sec.7, T.29 N., R.3 W., on right bank 2 miles east of Cottonwood and 2.4 miles upstream from mouth.

Drainage area.--945 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 370 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 49,000 cfs 8 a.m. Dec. 22 (gage height, 15.23 ft).

1940 to November 1955: Discharge, 52,300 cfs Mar. 1, 1941 (gage height, 15.4 ft), from rating curve extended above 30,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	234	2,870	11	872	3,650	21	9,030	4,800
2	234	1,850	12	788	2,560	22	36,900	4,380
3	226	1,260	13	702	3,590	23	16,900	5,360
4	209	1,480	14	620	15,700	24	8,470	4,070
5	719	2,640	15	550	22,400	25	5,040	6,640
6	5,S80	1,910	16	558	12,700	26	4,880	7,160
7	1,680	4,660	17	786	7,300	27	2,970	6,760
8	1,050	4,090	18	5,260	5,490	28	2,230	5,990
9	1,860	2,720	19	20,300	4,440	29	1,730	3,460
10	1,180	3,460	20	14,000	6,050	30	1,400	2,430
						31	1,190	1,860
Monthly mean discharge, in cubic feet per second							4,789	5,282
Runoff, in inches							5.84	6.44
Runoff, in acre-feet							294,400	324,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 21--Con.			Jan. 13--Con.		
12 p.m.	2.90	580	8 p.m.	9.10	10,800	12 p.m.	6.59	4,900
			10	11.30	17,700			
Dec. 17			12 p.m.	13.15	27,800	Jan. 14		
10 a.m.	2.94	612				2 a.m.	7.83	7,590
3 p.m.	3.03	686	Dec. 22			4	9.23	11,200
9	3.45	1,040	2 a.m.	14.90	45,000	7	10.24	14,100
12 p.m.	4.45	1,950	4	15.13	47,800	10	10.20	14,000
			5	15.02	46,400	4 p.m.	11.61	18,900
Dec. 18			8	15.23	49,000	7	12.00	20,800
4 a.m.	5.44	3,100	1 p.m.	14.61	41,500	10	12.18	21,700
7	5.37	3,000	6	13.02	26,900	12 p.m.	12.09	21,200
10:30	5.09	2,640	12 p.m.	11.23	17,400			
3 p.m.	5.82	3,650				Jan. 15		
6	7.00	5,760	Dec. 23			2 a.m.	11.84	20,000
8	8.50	9,260	1 a.m.	11.17	17,200	4	11.80	19,800
10	10.15	13,800	5	11.95	20,600	8	12.32	22,500
12 p.m.	11.10	17,000	9	11.42	18,200	1 p.m.	12.91	26,200
			3 p.m.	11.04	16,700	3	12.83	25,600
Dec. 19			12 p.m.	9.56	12,100	12 p.m.	11.50	18,500
2 a.m.	11.41	18,100						
7:30	9.96	13,300	Dec. 24			Jan. 16		
11	10.60	15,200	12 m.	7.99	7,980	8 a.m.	10.06	13,600
2 p.m.	11.65	19,100	12 p.m.	7.05	5,830	3 p.m.	9.18	11,100
7	13.18	28,100				12 p.m.	8.40	9,000
9	13.54	30,900	Dec. 25					
12 p.m.	13.13	27,700	10 a.m.	6.60	4,920	Jan. 17		
			1 p.m.	6.67	5,060	12 m.	7.65	7,160
Dec. 20			12 p.m.	6.35	4,420	12 p.m.	7.07	5,870
3 a.m.	12.00	20,800						
7	10.69	15,500	Jan. 12			Jan. 18		
10	10.29	14,300	12 p.m.	5.14	2,420	5 a.m.	6.95	5,620
3 p.m.	9.15	11,000				10	7.09	5,920
7	8.50	9,260	Jan. 13			12 p.m.	6.48	4,680
12 p.m.	8.02	8,050	2 a.m.	5.18	2,470			
			4	5.42	2,810	Jan. 19		
Dec. 21			8	6.19	4,120	10 a.m.	6.30	4,320
4 p.m.	7.12	6,000	12 m.	6.03	3,830	4 p.m.	6.41	4,540
6 p.m.	7.47	6,750	9 p.m.	5.90	3,600	12 p.m.	6.24	4,210

262. Battle Creek near Cottonwood, Calif.

Location.--Lat 40°23'50", long 122°08'05", in NW¼ sec.6, T.29 N., R.2 W., on left bank 6.3 miles upstream from mouth and 7.6 miles east of Cottonwood.

Drainage area.--362 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 421.47 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,800 cfs and extended above parallel to a previous curve defined by current-meter measurements to 9,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 8,540 cfs 5 p.m. Jan. 14 (gage height, 10.32 ft).

1940 to November 1955: Discharge, 12,800 cfs Feb. 6, 1942 (gage height, 11.85 ft).

Stage known, 15.8 ft Dec. 11, 1937, from floodmarks (discharge, 35,000 cfs, from slope-area measurement of peak flow).

Remarks.--Flow slightly regulated by several small reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	247	903	11.....	284	1,080	21.....	1,980	1,660
2.....	262	735	12.....	278	915	22.....	4,360	1,910
3.....	233	675	13.....	262	1,940	23.....	4,480	1,810
4.....	218	789	14.....	256	5,730	24.....	2,170	1,450
5.....	1,440	915	15.....	247	5,820	25.....	1,370	2,030
6.....	2,410	765	16.....	298	2,940	26.....	3,470	1,970
7.....	495	1,410	17.....	1,450	1,890	27.....	1,990	1,460
8.....	403	1,470	18.....	1,970	1,600	28.....	1,290	1,230
9.....	483	1,210	19.....	4,180	1,520	29.....	990	1,090
10.....	328	1,640	20.....	2,390	2,040	30.....	879	1,010
						31.....	819	945
Monthly mean discharge, in cubic feet per second.....................							1,353	1,695
Runoff, in inches..							4.31	5.40
Runoff, in acre-feet..							83,170	104,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 21			Dec. 26--Con.		
12 p.m.......	2.99	278	8 a.m........	5.30	1,710	11 a.m.......	8.66	5,700
			4 p.m........	5.05	1,520	1 p.m........	8.76	5,860
Dec. 17			7............	5.70	2,030	2:30.........	8.83	5,970
3 a.m........	2.98	275	9............	6.60	2,870	7............	7.70	4,260
5............	3.14	328	12 p.m.......	7.48	3,950	9............	7.01	3,330
9............	3.22	357				12 p.m.......	6.60	2,870
11...........	3.37	414	Dec. 22					
12 m.........	3.65	529	2 a.m........	8.10	4,820	Dec. 27		
1 p.m........	4.72	1,170	4............	8.45	5,360	5 a.m........	6.00	2,290
3............	6.20	2,360	6............	8.50	5,440	10...........	5.60	1,950
6............	6.70	2,900	9............	7.95	4,610	5 p.m........	5.27	1,690
8:30.........	7.36	3,640	10:30........	8.18	4,930	12 p.m.......	5.12	1,570
10...........	6.85	3,030	3 p.m........	7.27	3,660			
12 p.m.......	6.15	2,310	8............	6.91	3,210	Jan. 12		
			12 p.m.......	8.12	4,850	12 p.m.......	4.18	933
Dec. 18								
3 a.m........	5.08	1,440	Dec. 23			Jan. 13		
8............	4.56	1,080	1 a.m........	8.32	5,150	2 a.m........	4.13	903
12 m.........	5.07	1,440	3............	8.31	5,140	4............	4.42	1,090
6 p.m........	6.60	2,800	8............	7.42	3,870	7............	5.53	1,890
8............	6.90	3,100	12 m.........	8.06	4,760	9............	6.07	2,350
10...........	6.67	2,880	2 p.m........	7.91	4,550	12 m.........	5.75	2,070
12 p.m.......	6.55	2,740	4............	8.35	5,200	6 p.m........	5.30	1,710
			6............	8.15	4,890	8............	5.35	1,750
Dec. 19			9............	7.35	3,770	10...........	6.48	2,750
3 a.m........	6.08	2,230	12 p.m.......	6.79	3,080	12 p.m.......	8.43	5,330
5............	6.33	2,480						
7............	6.13	2,280	Dec. 24			Jan. 14		
9............	6.85	3,040	7 a.m........	6.05	2,340	1 a.m........	8.49	5,420
12 m.........	8.13	4,670	11...........	5.85	2,160	5............	7.96	4,620
2 p.m........	8.73	5,550	7 p.m........	5.36	1,760	10...........	7.58	4,090
4............	9.83	7,650	12 p.m.......	5.12	1,570	12 m.........	7.89	4,530
8............	8.32	5,150				3 p.m........	9.50	7,060
12 p.m.......	7.24	3,620	Dec. 25			5............	10.32	8,540
			1 p.m........	4.74	1,310	9............	9.12	6,430
Dec. 20			12 p.m.......	4.66	1,250	11...........	9.01	6,260
3 a.m........	6.70	2,980				12 p.m.......	8.76	5,860
6............	6.33	2,600	Dec. 26					
11...........	6.05	2,340	2 a.m........	4.64	1,240	Jan. 15		
4 p.m........	5.73	2,050	6............	4.80	1,350	1 a.m........	8.63	5,650
8............	5.65	1,990	8............	5.80	2,110	5 a.m........	9.07	6,350
12 p.m.......	5.46	1,840	9 a.m........	7.00	3,320			

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Battle Creek near Cottonwood, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 15--Con.			Jan. 16			Jan. 16--Con.		
7 a.m........	8.85	6,000	5 a.m........	7.03	3,360	3 p.m........	6.47	2,740
10:30........	9.56	7,170	10...........	6.67	2,950	5............	6.24	2,510
2 p.m........	8.85	6,000	11...........	6.82	3,110	12 p.m.......	5.88	2,180
12 p.m.......	7.73	4,300	1 p.m........	6.22	2,490			

263. Paynes Creek near Red Bluff, Calif.

Location.--Lat 40°15'50", long 122°11'10", in SE¼ sec.22, T.28 N., R.3 W., on right bank 0.4 mile upstream from mouth and 6.5 miles northeast of Red Bluff.

Drainage area.--92.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 360 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,130 cfs 5 p.m. Dec. 19 (gage height, 8.77 ft).

1949 to November 1955: Discharge, 4,060 cfs Dec. 27, 1951 (gage height, 8.10 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	12	259	11.....	57	470	21.....	475	434
2.....	12	176	12.....	46	331	22.....	839	420
3.....	12	130	13.....	41	793	23.....	906	388
4.....	12	194	14.....	36	2,810	24.....	443	301
5.....	385	320	15.....	33	2,090	25.....	272	781
6.....	1,110	235	16.....	57	786	26.....	1,450	851
7.....	209	862	17.....	254	456	27.....	645	515
8.....	121	1,090	18.....	1,040	392	28.....	345	366
9.....	166	586	19.....	2,890	348	29.....	229	286
10.....	81	1,000	20.....	906	615	30.....	170	229
						31.....	146	190
Monthly mean discharge, in cubic feet per second......................							432	603
Runoff, in inches..							5.39	7.52
Runoff, in acre-feet...							26,580	37,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 20--Con.			Dec. 25--Con.		
12 p.m.......	2.86	57	9 a.m........	5.25	1,020	12 p.m.......	3.65	235
			2 p.m........	4.79	724			
Dec. 17			12 p.m.......	4.36	492	Dec. 26		
10 a.m.......	2.82	50				4 a.m........	3.61	233
12 m.........	2.91	65	Dec. 21			6............	3.69	247
4 p.m........	3.50	193	5 a.m........	4.24	438	8............	4.37	496
6............	4.28	456	7............	4.25	442	9............	5.20	990
8............	4.73	688	3 p.m........	4.07	370	11...........	6.78	2,380
9............	4.73	688	6............	4.15	400	12 m.........	7.20	2,870
12 p.m.......	5.14	948	12 p.m.......	5.02	864	2 p.m........	7.08	2,730
						3............	7.61	3,390
Dec. 18			Dec. 22			5............	6.69	2,280
6 a.m........	4.46	540	3 a.m........	5.25	1,020	12 p.m.......	5.25	1,020
9............	4.30	465	5............	5.25	1,020			
12 m.........	4.43	525	12 m.........	4.92	802	Dec. 27		
4 p.m........	4.93	808	8 p.m........	4.59	610	6 a.m........	4.82	742
6............	5.75	1,400	10...........	4.73	688	3 p.m........	4.45	535
9............	6.70	2,290	12 p.m.......	5.56	1,250	12 p.m.......	4.27	452
12 p.m.......	6.79	2,390						
			Dec. 23			Jan. 12		
Dec. 19			2:30 a.m.....	5.91	1,530	12 p.m.......	3.93	320
4 a.m........	6.38	1,960	5............	5.73	1,380			
8............	6.47	2,050	8............	5.21	997	Jan. 13		
11...........	7.11	2,760	1 p.m........	4.77	712	2 a.m........	4.01	348
1 p.m........	7.70	3,510	6............	4.52	571	5............	4.13	392
3............	7.80	3,640	8............	4.51	566	8............	4.43	525
4............	8.15	4,140	10...........	4.64	637	10...........	5.23	1,010
5............	8.77	5,130	12 p.m.......	4.61	620	1 p.m........	5.01	857
7............	8.14	4,120				7............	4.80	730
9............	7.29	2,980	Dec. 24			10...........	5.35	1,100
12 p.m.......	6.23	1,820	5 a.m........	4.38	501	12 p.m.......	7.25	2,930
			12 p.m.......	3.94	324			
Dec. 20						Jan. 14		
4 a.m........	5.46	1,170	Dec. 25			1 a.m........	7.56	3,330
7 a.m........	5.25	1,020	12 m.........	3.75	265	3 a.m........	7.60	3,380

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Paynes Creek near Red Bluff, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 14--Con.			Jan. 15			Jan. 15--Con.		
4 a.m........	7.51	3,260	2 a.m........	6.56	2,140	8 p.m........	5.75	1,400
5:30.........	7.59	3,370	4............	6.70	2,290	12 p.m.......	5.38	1,120
9............	6.88	2,490	7............	6.93	2,550			
12 m.........	6.31	1,890	8............	6.88	2,490	Jan. 16		
2 p.m........	6.59	2,170	9............	6.94	2,560	12 m.........	4.81	736
4............	7.09	2,740	11...........	6.86	2,470	12 p.m.......	4.48	550
6:30.........	7.64	3,430	1 p.m........	6.88	2,490			
12 p.m.......	6.71	2,300	3 p.m........	6.70	2,290			

264. Sacramento River near Red Bluff, Calif.

Location.--Lat 40°13'55", long 122°10'50", in SE¼ sec.34, T.28 N., R.3 W., on left bank at lower end of Iron Canyon, 0.5 mile downstream from Sevenmile Creek and 4.6 miles northeast of Red Bluff.

Drainage area.--9,300 sq mi, approximately, excluding Goose Lake basin.

Gage-height record.--Water-stage recorder graph. Datum of gage is 253.18 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 115,000 cfs 6 p.m. Jan. 15 (gage height, 22.30 ft).

1895 to November 1955: Discharge, 291,000 cfs Feb. 28, 1940 (gage height, 38.9 ft), from rating curve extended above 170,000 cfs by logarithmic plotting and velocity-area studies.

Remarks.--Flow regulated by Shasta Lake since Dec. 30, 1943 (see station 253).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4,760	48,400	11.....	6,240	55,100	21.....	29,300	46,300
2.....	4,660	55,000	12.....	5,680	49,600	22.....	88,500	47,400
3.....	4,350	53,900	13.....	5,370	50,400	23.....	74,900	52,900
4.....	4,250	49,100	14.....	5,100	79,300	24.....	54,700	45,300
5.....	7,450	45,300	15.....	4,870	107,000	25.....	46,000	51,500
6.....	34,500	38,400	16.....	5,820	69,300	26.....	52,500	53,200
7.....	10,400	47,800	17.....	11,200	66,000	27.....	63,900	48,900
8.....	4,720	55,300	18.....	27,800	57,800	28.....	60,800	46,900
9.....	11,800	43,400	19.....	54,600	44,300	29.....	57,200	41,400
10.....	7,970	56,900	20.....	57,100	51,400	30.....	54,900	39,300
						31.....	54,000	34,500
Monthly mean discharge, in cubic feet per second......................							29,530	52,620
Runoff, in acre-feet..							1,816,000	3,236,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 21			Jan. 14		
12 p.m.......	3.25	9,860	8 a.m........	8.96	30,800	10 a.m.......	17.77	80,800
			8 p.m........	7.55	24,600	2 p.m........	17.72	80,500
Dec. 17			10...........	8.05	26,700	12 p.m.......	20.98	104,000
3 a.m........	3.52	10,700	12 p.m.......	9.75	34,600			
12 m.........	2.82	8,650				Jan. 15		
4 p.m........	2.98	9,090	Dec. 22			3 a.m........	21.23	106,000
7............	3.56	10,800	5 a.m........	17.20	77,000	10...........	20.80	103,000
12 p.m.......	7.15	23,000	10...........	21.25	107,000	6 p.m........	22.30	115,000
Dec. 18			12 m.........	21.57	109,000	8............	22.22	114,000
4 a.m........	8.70	29,600	4 p.m........	21.20	106,000	12 p.m.......	20.55	101,000
6............	9.08	31,400	12 p.m.......	17.48	78,900			
8............	9.00	31,000				Jan. 16		
3:30 p.m.....	6.74	21,400	Dec. 23			10 a.m.......	15.14	63,700
12 p.m.......	9.93	35,500	3 a.m........	16.70	73,600	2 p.m........	14.52	59,900
			9............	18.00	82,400	9............	14.31	58,700
Dec. 19			10...........	18.05	82,800	12 p.m.......	14.40	59,200
6 a.m........	12.82	50,200	6 p.m........	16.36	71,400			
8............	13.06	51,500	12 p.m.......	15.00	62,800	Jan. 17		
11...........	12.88	50,600				2 a.m........	14.42	59,300
2 p.m........	13.12	51,900	Jan. 12			2 p.m........	16.19	70,300
12 p.m.......	17.23	77,200	12 p.m.......	12.64	49,300	12 p.m.......	15.74	67,400
Dec. 20			Jan. 13			Jan. 18		
2 a.m........	17.38	78,200	6 a.m........	12.16	46,700	7 a.m........	15.52	66,000
4............	17.02	75,700	1 p.m........	13.84	55,900	8 p.m........	12.22	47,000
12 m.........	13.80	55,700	8............	12.40	48,000	12 p.m.......	12.00	45,800
12 p.m.......	9.55	33,600	12 p.m.......	12.95	50,900			

265. Red Bank Creek above Last Chance Creek, near Red Bluff, Calif.

(Miscellaneous site)

Location.--Lat 40°06'15", long 122°31'25", in SE¼ sec.15, T.26 N., R.6 W., 200 ft upstream from Last Chance Creek, 1.2 miles east of the Narrows, and 10 miles north of Paskenta. Altitude is 650 ft (from topographic map).

Drainage area.--40.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 2,990 cfs during afternoon of Jan. 15.

Local resident stated that December 1937 flood exceeded that of January 1956 and that a flood in 1890 was the greatest known.

266. Salt Creek near Red Bluff, Calif.

(Miscellaneous site)

Location.--Lat 40°12'45", long 122°07'40", in El Primer Canon Grant, 6 miles northeast of Red Bluff. Altitude is 370 ft (from topographic map).

Drainage area.--30.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 3,160 cfs, date uncertain, probably Dec. 19.

267. Antelope Creek near Red Bluff, Calif.

Location.--Lat 40°12'10", long 122°07'05", in Rio De Los Berrendos Grant, on right bank 1.8 miles upstream from diversion dam of Los Molinos Mutual Water Co., 6.5 miles east of Red Bluff, Tehama County, and 9.7 miles upstream from mouth.

Drainage area.--124 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 360 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,800 cfs and by slope-area measurement at 8,510 cfs.

Maxima.--December 1955 to January 1956: Discharge, 8,510 cfs 4 p.m. Dec. 19 (gage height, 11.78 ft).

1940 to November 1955: Discharge, 10,400 cfs Feb. 6, 1942 (gage height, 13.9 ft, site and datum then in use).

Flood in December 1937 reached a stage of about 22 ft (former site), from floodmarks.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	45	332	11.....	79	564	21.....	923	609
2.....	52	253	12.....	67	409	22.....	2,360	596
3.....	45	205	13.....	60	841	23.....	2,300	609
4.....	43	354	14.....	55	2,740	24.....	1,050	470
5.....	229	480	15.....	52	2,710	25.....	610	794
6.....	802	356	16.....	56	1,390	26.....	2,260	1,090
7.....	180	1,220	17.....	151	830	27.....	1,100	722
8.....	107	1,200	18.....	1,130	627	28.....	627	488
9.....	167	614	19.....	4,070	524	29.....	417	386
10.....	107	910	20.....	1,280	722	30.....	314	314
						31.....	268	268
Monthly mean discharge, in cubic feet per second......................							678	762
Runoff, in inches..							6.30	7.09
Runoff, in acre-feet...							41,660	46,860

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Antelope Creek near Red Bluff, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 22			Jan. 11		
12 p.m.	3.71	56	2 a.m.	8.97	2,590	12 p.m.	5.45	462
			3	8.97	2,590			
Dec. 17			6	9.19	2,820	Jan. 12		
10 a.m.	3.77	63	9	8.98	2,600	11 a.m.	5.28	404
3 p.m.	4.30	147	11	8.92	2,540	8 p.m.	5.20	380
5	4.34	155	7 p.m.	7.88	1,680	12 p.m.	5.22	386
11	5.37	434	9	8.01	1,770			
12 p.m.	5.41	448	12 p.m.	9.66	3,360	Jan. 13		
						5 a.m.	5.44	459
Dec. 18			Dec. 23			6	5.46	466
2 a.m.	5.54	496	2 a.m.	9.66	3,360	8	6.07	722
8	5.13	359	9	8.46	2,120	9:30	6.87	1,100
12 m.	5.25	395	12 m.	8.61	2,250	12 m.	6.54	940
3 p.m.	6.00	690	3 p.m.	8.26	1,960	7 p.m.	6.32	834
6	7.91	1,700	5	8.33	2,010	11	7.58	1,480
8	9.04	2,660	7	8.23	1,930	12 p.m.	8.13	1,850
11:30	9.81	3,550	12 p.m.	7.56	1,470			
12 p.m.	9.74	3,460				Jan. 14		
			Dec. 24			3 a.m.	9.23	2,860
Dec. 19			12 m.	6.66	1,000	4:30	9.34	2,980
3 a.m.	8.50	2,150	12 p.m.	6.13	748	12 m.	8.13	1,850
5	8.99	2,610				4 p.m.	9.29	2,930
7	9.06	2,680	Dec. 25			7	10.16	4,060
1 p.m.	10.80	5,300	12 m.	5.76	584	11	9.06	2,680
4	11.78	8,510	7 p.m.	5.69	556	12 p.m.	9.03	2,650
6	11.02	5,900	12 p.m.	5.56	504			
8	9.70	3,410				Jan. 15		
12 p.m.	8.36	2,040	Dec. 26			2 a.m.	8.83	2,450
			2 a.m.	5.55	500	6	9.17	2,800
Dec. 20			5	5.77	588	9	9.05	2,670
2 a.m.	7.99	1,750	8	7.00	1,170	12 m.	9.86	3,620
4	7.86	1,660	9	9.15	2,780	2 p.m.	9.43	3,090
5	7.95	1,720	10	10.65	4,950	12 p.m.	8.20	1,910
9	7.30	1,320	11	11.12	6,200			
12 p.m.	6.23	794	2 p.m.	9.58	3,270	Jan. 16		
			4	9.11	2,730	9 a.m.	7.48	1,420
Dec. 21			12 p.m.	7.76	1,590	12 p.m.	6.71	1,020
4 a.m.	6.15	758						
12 m.	5.94	663	Dec. 27					
4 p.m.	6.02	699	8 a.m.	7.00	1,170			
6	6.51	925	4 p.m.	6.53	935			
12 p.m.	8.41	2,080	12 p.m.	6.25	802			

268. Little Antelope Creek near Red Bluff, Calif.

(Miscellaneous site)

Location.--Lat 40°10'45", long 122°05'42", in El Primer Canon Grant, 300 ft downstream from Dehaven Gulch and 6.2 miles east of Red Bluff. Altitude is 380 ft (from topographic map).

Drainage area.--38.2 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 3,410 cfs, date uncertain, probably Dec. 19.

269. Mill Creek near Los Molinos, Calif.

Location.--Lat 40°03'17", long 122°01'23", in NE¼NW¼ sec.6, T.25 N., R.1 W., on right bank 5.5 miles upstream from mouth and 4½ miles northeast of Los Molinos.

Drainage area.--134 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 420 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,900 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 9,180 cfs 4 a.m. Dec. 22 (gage height, 12.25 ft).

1928 to November 1955: Discharge, 23,000 cfs Dec. 11, 1937 (gage height, 23.4 ft, from floodmarks), from rating curve extended above 3,900 cfs on basis of slope-area measurements.

Mean discharge, in cubic feet per second, 1955-56, of Mill Creek near Los Molinos, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	126	597	11.....	147	788	21.....	3,020	945
2.....	126	478	12.....	144	633	22.....	6,770	1,080
3.....	121	406	13.....	137	1,440	23.....	5,380	1,150
4.....	113	642	14.....	128	3,170	24.....	2,340	852
5.....	366	780	15.....	126	3,830	25.....	1,390	1,190
6.....	1,090	605	16.....	130	2,280	26.....	2,990	1,430
7.....	317	1,870	17.....	273	1,370	27.....	1,840	906
8.....	205	1,380	18.....	1,330	1,040	28.....	1,140	657
9.....	255	834	19.....	4,690	852	29.....	784	573
10.....	174	1,080	20.....	2,810	1,080	30.....	605	520
						31.....	537	464
Monthly mean discharge, in cubic feet per second.....................							1,278	1,127
Runoff, in inches..							10.99	9.69
Runoff, in acre-feet...							78,550	69,270

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 16		
12 p.m.......	1.81	144
Dec. 17		
4 a.m........	1.94	176
9............	1.93	174
3 p.m........	2.14	229
8............	2.87	483
12 p.m.......	3.02	544
Dec. 18		
5 a.m........	2.87	483
11...........	3.03	548
1 p.m........	3.28	661
3............	4.20	1,110
6............	6.00	2,200
8............	7.09	3,080
10...........	7.53	3,480
12 p.m.......	7.04	3,040
Dec. 19		
1:30 a.m.....	6.66	2,710
5............	7.53	3,480
6............	7.52	3,470
8............	8.04	3,940
10...........	9.01	4,940
12 m.........	9.46	5,450
3 p.m........	10.70	7,010
6:30.........	9.77	5,820
11...........	8.10	4,000
12 p.m.......	7.97	3,870
Dec. 20		
2 a.m........	7.51	3,460
8............	6.89	2,900
1 p.m........	6.52	2,600
5............	6.48	2,560
11...........	6.21	2,350
12 p.m.......	6.20	2,340
Dec. 21		
1 a.m........	6.23	2,360
8............	5.88	2,120
10...........	5.93	2,150
1 p.m........	5.89	2,120
6............	7.05	3,040
9............	9.15	5,100
12 p.m.......	11.00	7,400
Dec. 22		
1 a.m........	11.53	8,140
4............	12.25	9,180
6............	12.00	8,800
8............	11.28	7,790
9............	11.35	7,890
11...........	10.92	7,300
2 p.m........	9.80	5,860
6............	8.47	4,370
8............	8.45	4,350
10...........	9.83	5,900
11...........	9.80	5,860
12 p.m.......	9.98	6,080
Dec. 23		
1 a.m........	10.28	6,460
3............	10.43	6,660
6............	9.56	5,570
7............	9.49	5,490
10...........	9.98	6,080
11...........	10.05	6,160
5 p.m........	9.15	5,100
7............	8.41	4,310
12 p.m.......	7.38	3,340
Dec. 24		
12 m.........	5.98	2,190
12 p.m.......	5.13	1,640
Dec. 25		
10 a.m.......	4.68	1,370
2 p.m........	4.62	1,330
4............	4.67	1,360
10...........	4.40	1,210
12 p.m.......	4.48	1,250
Dec. 26		
3 a.m........	4.56	1,300
4............	4.52	1,270
6............	4.95	1,530
7............	5.75	2,020
8............	6.85	2,860
10...........	9.16	5,110
2 p.m........	7.86	3,770
3............	8.30	4,200
4............	7.91	3,820
8............	7.28	3,250
12 p.m.......	6.51	2,590
Dec. 27		
9 a.m........	5.47	1,840
6 p.m........	5.02	1,570
12 p.m.......	4.77	1,420
Jan. 12		
12 p.m.......	3.20	645
Jan. 13		
3 a.m........	3.39	726
5............	3.95	985
7............	4.96	1,540
9............	4.68	1,370
12 m.........	4.83	1,460
5 p.m........	4.61	1,330
10...........	6.05	2,240
12 p.m.......	7.00	3,000
Jan. 14		
2 a.m........	7.35	3,320
9............	6.12	2,280
1 p.m........	7.18	3,160
5............	8.27	4,170
8............	7.57	3,510
12 p.m.......	7.10	3,090
Jan. 15		
1 a.m........	7.05	3,040
3............	7.35	3,320
6............	7.27	3,240
8............	7.55	3,500
10:30........	8.87	4,790
12 m.........	8.57	4,470
2 p.m........	8.68	4,580
5............	8.38	4,280
12 p.m.......	7.25	3,220
Jan. 16		
10 a.m.......	6.07	2,250
12 p.m.......	5.17	1,660
Jan. 17		
1 p.m........	4.60	1,320
12 p.m.......	4.27	1,140
Jan. 18		
3 a.m........	4.25	1,140
5............	4.28	1,150
12 p.m.......	3.73	878

270. Elder Creek near Paskenta, Calif.

Location.--Lat 40°01'30", long 122°30'30", in NW¼ sec.14, T.25 N., R.6 W., on right bank 2.5 miles downstream from South Fork, 8 miles northwest of Flourney, and 11 miles north of Paskenta.

Drainage area.--95.8 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 720 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,200 cfs and by slope-area measurement at 7,160 cfs.

Maxima.--December 1955 to January 1956: Discharge, 11,100 cfs 8 p.m. Dec. 21 (gage height, 12.52 ft).

1948 to November 1955: Discharge, 7,160 cfs Dec. 6, 1952 (gage height, 10.97 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	12	435	11.....	36	505	21.....	3,550	466
2.....	12	216	12.....	37	413	22.....	4,370	457
3.....	10	170	13.....	31	539	23.....	2,560	466
4.....	9.9	328	14.....	27	1,260	24.....	828	407
5.....	44	366	15.....	24	1,950	25.....	626	747
6.....	239	284	16.....	34	1,010	26.....	511	754
7.....	60	713	17.....	115	668	27.....	390	713
8.....	57	451	18.....	1,620	556	28.....	279	515
9.....	98	340	19.....	3,520	473	29.....	216	398
10.....	49	668	20.....	800	535	30.....	197	340
						31.....	170	296
Monthly mean discharge, in cubic feet per second.....................							662	563
Runoff, in inches...							7.97	6.77
Runoff, in acre-feet..							40,720	34,590

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 16		
12 p.m.......	3.26	46
Dec. 17		
9 a.m........	3.28	48
1 p.m........	3.45	68
5............	3.56	83
7............	4.20	198
9............	4.62	301
11...........	4.90	385
12 p.m.......	4.90	385
Dec. 18		
9 a.m........	4.34	231
12 m.........	5.30	515
1 p.m........	6.23	928
4............	8.56	3,000
6............	10.20	5,510
9............	8.70	3,170
11...........	7.50	1,890
12 p.m.......	7.00	1,460
Dec. 19		
1 a.m........	6.79	1,300
2............	7.00	1,460
4............	7.10	1,540
7............	8.78	3,270
10...........	9.94	5,000
1:30 p.m.....	10.97	7,160
4............	9.63	4,460
7............	8.74	3,220
12 p.m.......	7.05	1,500
Dec. 20		
6 a.m........	6.25	940
7 p.m........	5.30	515
12 p.m.......	5.13	456
Dec. 21		
10 a.m.......	4.84	367
12 m.........	5.19	476
Dec. 21--Con.		
1 p.m........	6.04	830
2............	7.52	1,910
3............	8.94	3,460
5............	10.80	6,770
8............	12.52	11,100
11...........	11.62	8,720
12 p.m.......	11.64	8,770
Dec. 22		
2 a.m........	10.92	7,040
5............	9.82	4,790
6............	10.27	5,650
9............	9.38	4,060
1 p.m........	8.56	3,000
7............	8.10	2,470
9............	9.25	3,880
10...........	10.20	5,510
12 p.m.......	9.57	4,360
Dec. 23		
3 a.m........	9.17	3,770
4............	9.28	3,920
12 m.........	8.09	2,460
9 p.m........	6.65	1,200
12 p.m.......	6.50	1,100
Dec. 24		
6 p.m........	5.68	662
8............	5.79	706
12 p.m.......	6.56	616
Dec. 25		
5 a.m........	5.46	581
7............	5.56	616
12 p.m.......	5.23	505
Dec. 26		
5 a.m........	5.15	479
9............	5.37	551
3 p.m........	5.34	541
Dec. 26--Con.		
12 p.m.......	5.07	454
Jan. 12		
12 p.m.......	4.89	401
Jan. 13		
2 a.m........	5.16	482
7............	5.21	498
6 p.m........	5.02	439
9............	5.27	518
10...........	6.10	860
12 p.m.......	7.00	1,460
Jan. 14		
1 a.m........	7.00	1,460
2............	6.87	1,360
4............	6.94	1,410
8............	6.63	1,190
1 p.m........	6.55	1,140
4............	6.90	1,380
7............	6.63	1,190
11...........	6.57	1,150
12 p.m.......	6.62	1,180
Jan. 15		
1 a.m........	6.69	1,230
3............	6.65	1,200
5............	6.87	1,360
7............	8.01	2,380
8............	7.98	2,350
2 p.m........	8.17	2,540
12 p.m.......	6.96	1,430
Jan. 16		
4 a.m........	6.65	1,200
3 p.m........	6.19	905
12 p.m.......	5.91	765
Jan. 17		
10 p.m.......	5.47	585
12 p.m.......	5.48	588

271. Elder Creek at Gerber, Calif.

Location.--Lat 40°03'05", long 122°09'55", in Saucos Grant, on right bank 1.0 mile west of Gerber, Tehama County, and 3.5 miles upstream from mouth.

Drainage area.--142 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Nov. 30 to 11 a.m. Dec. 6. Altitude of gage is 240 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,300 cfs and extended above by velocity-area study. Discharge for period of no gage-height record estimated on basis of one discharge measurement and records for station near Paskenta.

Maxima.--December 1955 to January 1956: Discharge, 10,400 cfs 12:30 a.m. Dec. 22 (gage height, 13.38 ft).

1949 to November 1955: Discharge, 8,720 cfs Jan. 17, 1954 (gage height, 12.25 ft), from rating curve extended above 1,400 cfs on basis of logarithmic plotting and velocity-area study.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	15	426	11.....	32	559	21.....	1,850	434
2.....	15	264	12.....	26	393	22.....	5,260	398
3.....	10	206	13.....	23	410	23.....	2,590	422
4.....	10	214	14.....	18	1,650	24.....	828	386
5.....	90	364	15.....	15	2,070	25.....	534	963
6.....	300	270	16.....	17	1,190	26.....	523	847
7.....	84	665	17.....	55	652	27.....	411	692
8.....	47	495	18.....	1,220	510	28.....	314	562
9.....	151	332	19.....	4,390	434	29.....	248	418
10.....	58	588	20.....	1,300	490	30.....	218	356
						31.....	206	310
Monthly mean discharge, in cubic feet per second......................							673	580
Runoff, in inches..							5.46	4.71
Runoff, in acre-feet.......................................							41,370	35,640

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 20--Con.			Dec. 24--Con.		
12 p.m.......	2.48	20	7 p.m........	4.58	760	4 p.m........	4.08	696
			12 p.m.......	4.33	644	12 p.m.......	3.81	584
Dec. 17								
12 m.........	2.62	38	Dec. 21			Jan. 12		
9 p.m........	2.76	65	10 a.m.......	4.04	516	12 p.m.......	3.23	361
11...........	3.39	226	4 p.m........	3.98	492	Jan. 13		
12 p.m.......	3.41	232	6............	4.25	608	6 a.m........	3.23	361
			7............	6.00	1,550	1 p.m........	3.43	433
Dec. 18			8............	8.10	3,260	11...........	3.46	445
3 a.m........	4.08	486	9............	10.00	5,560	12 p.m.......	3.73	552
11...........	3.66	315	10...........	12.39	8,940			
3 p.m........	3.58	286	12 p.m.......	13.27	10,300	Jan. 14		
5............	3.85	390				2 a.m........	4.58	930
7............	5.80	1,370	Dec. 22			4............	6.67	2,280
8............	7.40	2,590	12:30 a.m....	13.38	10,400	7............	6.04	1,800
9............	8.80	4,040	4............	12.15	8,580	9............	5.88	1,690
10...........	10.00	5,560	6............	11.47	7,580	1 p.m........	5.57	1,480
11...........	10.30	5,950	9:30.........	9.57	5,160	9............	6.26	1,950
12 p.m.......	9.60	5,040	11...........	9.80	5,420	12 p.m.......	5.70	1,560
			3 p.m........	8.24	3,720			
Dec. 19			6............	7.15	2,680	Jan. 15		
3 a.m........	7.37	2,570	11...........	6.26	1,950	3 a.m........	5.72	1,570
5:30.........	6.53	1,920	12 p.m.......	6.55	2,180	6............	5.91	1,710
8............	7.35	2,550				8............	5.91	1,710
10...........	9.05	4,340	Dec. 23			10...........	6.83	2,400
12 m.........	9.70	5,170	1 a.m........	7.65	3,140	11:30........	7.48	2,980
3:30 p.m.....	11.60	7,760	3............	9.34	4,900	2 p.m........	6.87	2,440
5............	10.28	5,920	5............	8.17	3,650	4............	6.67	2,280
6............	10.38	6,050	7............	7.56	3,050	6............	6.77	2,360
9............	9.25	4,580	10...........	7.42	2,930	12 p.m.......	6.05	1,800
12 p.m.......	7.94	3,100	5 p.m........	6.06	1,810			
			12 p.m.......	5.13	1,220	Jan. 16		
Dec. 20						6 a.m........	5.41	1,380
4 a.m........	6.39	1,820	Dec. 24			12 m.........	4.96	1,110
12 m.........	5.15	1,040	8 a.m........	4.49	885	12 p.m.......	4.39	800

272. Thomes Creek at Paskenta, Calif.

Location.--Lat 39°52'55", long 122°33'05", in NW¼ sec.4, T.23 N., R.6 W., on left bank 0.25 mile upstream from Digger Creek and 0.3 mile upstream from highway bridge at Paskenta.

Drainage area.--188 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 750 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 11,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 23,500 cfs 12 p.m. Dec. 21 (gage height, 12.14 ft).

1921 to November 1955: Discharge, 19,600 cfs Mar. 26, 1928 (gage height, 10.5 ft, site and datum then in use), from rating curve extended above 7,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	101	635	11	298	1,330	21	6,150	1,530
2	99	462	12	357	1,150	22	16,300	1,610
3	76	378	13	274	1,620	23	10,700	2,230
4	63	680	14	230	4,160	24	4,220	1,500
5	73	1,030	15	200	7,690	25	2,410	1,490
6	830	770	16	310	4,320	26	1,970	1,450
7	380	1,240	17	482	2,210	27	1,490	1,170
8	233	930	18	1,610	1,740	28	1,040	940
9	475	770	19	6,050	1,530	29	833	797
10	266	1,080	20	3,810	1,630	30	707	698
						31	590	635
Monthly mean discharge, in cubic feet per second							2,020	1,594
Runoff, in inches							6.10	4.81
Runoff, in acre-feet							124,200	97,990

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 20			Dec. 25		
12 p.m.	3.12	190	4 a.m.	7.24	4,960	12 m.	6.01	2,340
			12 m.	6.40	3,300	12 p.m.	5.84	2,060
Dec. 16			5 p.m.	6.15	2,900			
6 a.m.	3.23	226	12 p.m.	6.14	2,890	Jan. 12		
3 p.m.	3.36	274				12 p.m.	5.13	1,090
10	3.91	546	Dec. 21					
12 p.m.	3.89	534	6 a.m.	6.12	2,860	Jan. 13		
			12 m.	5.82	2,430	3 a.m.	5.27	1,250
Dec. 17			4 p.m.	6.33	3,190	7	5.72	1,880
6 a.m.	3.73	442	6	7.60	5,840	8 p.m.	5.46	1,500
3 p.m.	3.62	385	8	9.55	11,800	12 p.m.	5.85	2,080
9	3.92	553	10	11.61	20,600			
12 p.m.	4.32	846	12 p.m.	12.14	23,500	Jan. 14		
						6 a.m.	6.60	3,400
Dec. 18			Dec. 22			8 p.m.	7.50	5,440
2 a.m.	4.50	1,000	2 a.m.	12.00	22,700	12 p.m.	7.43	5,260
6	4.59	1,080	5	11.60	20,600			
10	4.53	1,030	9	11.88	22,000	Jan. 15		
3 p.m.	5.26	1,750	12 m.	10.70	16,200	5 a.m.	7.45	5,310
6	6.19	2,960	8 p.m.	8.60	8,640	10	8.40	8,000
12 p.m.	5.33	1,820	12 p.m.	9.30	10,900	12 m.	8.95	9,760
			Dec. 23			3 p.m.	9.28	10,900
Dec. 19			3 a.m.	9.93	13,200	8	8.41	8,030
3 a.m.	5.39	1,890	5	10.52	15,500	12 p.m.	7.83	6,320
8	6.38	3,270	12 m.	9.25	10,800			
10	7.40	5,340	12 p.m.	7.69	5,930	Jan. 16		
12 m.	8.34	7,880				6 a.m.	7.30	4,940
2 p.m.	9.05	10,100	Dec. 24			12 p.m.	6.29	2,820
4	9.11	10,300	6 a.m.	7.23	4,770			
12 p.m.	7.78	6,310	12 p.m.	6.34	2,910			

273. Deer Creek near Vina, Calif.

Location.--Lat 40°00'50", long 121°56'50", in NW¼NE¼ sec.23, T.25 N., R.1 W., on left bank 0.5 mile upstream from concrete diversion dam and 7.9 miles northeast of Vina.

Drainage area.--200 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 19-31. Altitude of gage is 480 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 9,200 cfs. Discharge for period of no gage-height record estimated on basis of recorded range in stage and records for Mill Creek near Los Molinos.

Maxima.--December 1955 to January 1956: Discharge, 12,600 cfs 5:30 a.m. Dec. 22 (gage height, 12.78 ft).

1911-15, 1920-37, 1939 to November 1955: Discharge, 23,800 cfs Dec. 10, 1937 (gage height, 19.2 ft, from floodmarks), from rating curve extended above 7,000 cfs on basis of velocity-area studies.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	124	862	11	170	912	21	3,970	1,450
2	138	700	12	165	815	22	9,720	1,600
3	126	615	13	156	1,210	23	8,430	1,700
4	118	800	14	145	3,280	24	4,040	1,300
5	199	990	15	138	5,300	25	2,200	2,000
6	705	835	16	143	3,690	26	4,670	2,100
7	307	2,850	17	250	2,170	27	3,080	1,400
8	213	2,070	18	1,500	1,540	28	1,740	1,000
9	281	1,230	19	6,530	1,300	29	1,200	850
10	202	1,120	20	4,170	1,600	30	930	750
						31	815	700
Monthly mean discharge, in cubic feet per second							1,825	1,572
Runoff, in inches							10.52	9.06
Runoff, in acre-feet							112,200	96,670

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 22			Dec. 27--Con.		
12 p.m.	2.60	149	2 a.m.	12.30	11,600	12 p.m.	6.04	2,190
			4	12.66	12,300			
Dec. 17			5:30	12.78	12,600	Jan. 12		
6 a.m.	2.67	165	7	12.56	12,100	12 p.m.	4.37	830
2 p.m.	3.17	307	9	11.91	10,900			
9	3.16	304	11	11.73	10,600	Jan. 13		
12 p.m.	3.37	379	3 p.m.	10.55	8,620	7 a.m.	4.54	924
			7:30	9.28	6,630	9	4.86	1,120
Dec. 18			10	10.20	8,060	11	4.79	1,070
3 a.m.	3.46	414	12 p.m.	10.22	8,090	2 p.m.	4.92	1,160
12 m.	3.72	519				6	4.97	1,200
3 p.m.	4.48	889	Dec. 23			9	5.53	1,670
6	6.38	2,600	4 a.m.	10.74	8,920	12 p.m.	6.33	2,540
9	7.54	4,100	9	10.37	8,330			
11	7.94	4,660	2 p.m.	10.92	9,210	Jan. 14		
12 p.m.	7.65	4,250	6	10.63	8,750	2 a.m.	6.60	2,860
			12 p.m.	9.11	6,380	8	6.10	2,260
Dec. 19			Dec. 24			12 m.	6.62	2,880
2 a.m.	7.20	3,630	4 a.m.	8.30	5,160	4 p.m.	7.64	4,240
3	7.36	3,840	12 m.	7.26	3,710	6	7.79	4,450
7	7.91	4,610	4 p.m.	7.00	3,370	10	7.46	3,980
9	9.38	6,780	12 p.m.	6.44	2,670	12 p.m.	7.38	3,870
11	9.85	7,500						
2:30 p.m.	11.29	9,840	Dec. 25			Jan. 15		
5	10.78	8,990	10 a.m.	5.98	2,130	2 a.m.	7.37	3,860
10	8.84	5,970	5 p.m.	5.97	2,120	5	7.57	4,140
12 p.m.	8.45	5,380	11	5.75	1,880	8	7.90	4,600
			12 p.m.	5.85	1,980	11	8.70	5,760
Dec. 20						2 p.m.	9.18	6,480
3 a.m.	8.27	5,120	Dec. 26			4	9.23	6,560
9	7.68	4,290	2 a.m.	5.88	2,020	6	9.13	6,400
3 p.m.	7.39	3,890	4	5.80	1,930	12 p.m.	8.34	5,220
9	7.00	3,370	8	7.30	3,760			
12 p.m.	6.87	3,200	10	9.32	6,690	Jan. 16		
			12:30 p.m.	8.90	6,060	5 a.m.	7.70	4,320
Dec. 21			2	9.34	6,720	11	7.19	3,820
10 a.m.	6.74	3,030	5	8.93	6,100	12 p.m.	6.45	2,680
1 p.m.	6.56	2,810	6	8.90	6,060			
4	7.00	3,370	12 p.m.	7.79	4,450	Jan. 17		
7	7.82	4,490				12 m.	5.97	2,120
9	9.30	6,660	Dec. 27			12 p.m.	5.63	1,760
12 p.m.	10.65	8,780	6 a.m.	7.02	3,400			

274. Pine Creek near Chico, Calif.

(Miscellaneous site)

Location.--Lat 39°53'50", long 121°52'05", in NE¼ sec.33, T.24 N., R.1 E., about 1,000 ft upstream from U.S. Bureau of Reclamation gaging station and 11 miles north of Chico. Altitude is 580 ft (from topographic map).

Drainage area.--20.9 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 2,130 cfs, probably Jan. 15.

State Highway Department employee stated that flood of Dec. 9-11, 1937, overflowed U.S. Highway 99E, 7 miles downstream, to a depth of 2½ ft. No subsequent flood has overflowed the highway. January 1956 flood was 3.7 ft lower than that of Dec. 9, 1937, at highway crossing.

275. Mud Creek near Chico, Calif.

(Miscellaneous site)

Location.--Lat 39°49'35", long 121°49'35", in SE¼SE¼ sec.23, T.23 N., R.1 E., 2.8 miles southwest of Richardson Springs and 7.9 miles north of Chico post office. Altitude is 340 ft (from topographic map).

Drainage area.--22.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 1,890 cfs Jan. 15.

State Highway Department employee stated that during his 23-year residence floods caused overflow depths at U.S. Highway 99E crossing as follows:

	Deptn (feet)
Dec. 11, 1937	3
Feb. 27, 1940	1
Feb. 1, 1945	.8
Jan. 15, 1956	.6

276. Big Chico Creek near Chico, Calif.

Location.--Lat 39°46'35", long 121°45'10", in Arroyo Chico Grant, on right bank 1.8 miles upstream from golf clubhouse in Bidwell Park, 2.6 miles upstream from Lindo Channel, and 7 miles northeast of Chico, Butte County.

Drainage area.--67.9 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 7,150 cfs 2 a.m. Dec. 22 (gage height, 14.94 ft; at former site and datum, 16.03 ft).

1930 to November 1955: Discharge, 8,260 cfs Dec. 10, 1937 (gage height, 16.6 ft, site and datum then in use), from rating curve extended above 5,000 cfs on basis of rating at cable gage, velocity-area studies, and logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	44	477	11	100	710	21	2,300	550
2	54	416	12	77	574	22	5,040	578
3	45	368	13	64	713	23	3,700	570
4	40	474	14	56	2,060	24	1,990	494
5	72	810	15	49	3,110	25	1,180	586
6	529	706	16	48	2,200	26	2,360	875
7	212	2,160	17	74	1,280	27	1,850	770
8	121	2,240	18	839	855	28	1,140	582
9	226	1,140	19	4,310	622	29	738	464
10	154	900	20	2,830	622	30	546	388
						31	477	346
Monthly mean discharge, in cubic feet per second							1,009	924
Runoff, in inches							17.12	15.69
Runoff, in acre-feet							62,010	56,810

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Big Chico Creek near Chico, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.......	2.51	50	1 p.m........	5.91	1,220	12 m.........	9.10	3,020
			4............	6.85	1,720	2 p.m........	9.57	3,320
Dec. 17			8............	10.70	4,070	12 p.m.......	8.12	2,420
8 a.m........	2.51	50	12 p.m.......	14.55	6,840			
2 p.m........	2.73	82				Dec. 27		
7............	2.73	82	Dec. 22			12 m.........	6.98	1,790
12 p.m.......	3.05	145	2 a.m........	14.94	7,150	12 p.m.......	6.28	1,410
			3............	14.92	7,140			
Dec. 18			6............	13.30	5,900	Jan. 12		
7 a.m........	3.67	292	12 m.........	11.43	4,580	12 p.m.......	4.48	543
12 m.........	3.80	328	7 p.m........	9.71	3,410			
4 p.m........	4.75	650	11...........	11.55	4,660	Jan. 13		
8............	7.40	2,020	12 p.m.......	11.42	4,570	5 a.m........	4.65	610
12 p.m.......	8.85	2,860				11...........	4.82	679
			Dec. 23			4 p.m........	4.82	679
Dec. 19			5 a.m........	10.44	3,890	12 p.m.......	5.60	1,060
3 a.m........	8.23	2,490	7............	10.58	3,990			
5............	8.60	2,710	9............	10.25	3,760	Jan. 14		
10...........	11.50	4,630	10...........	10.65	4,040	9 a.m........	6.72	1,650
1 p.m........	13.10	5,750	4 p.m........	9.96	3,570	5 p.m........	8.82	2,840
3............	13.15	5,780	12 p.m.......	8.67	2,750	7............	8.83	2,850
4............	13.40	5,970				12 p.m.......	8.38	2,580
9............	11.32	4,500	Dec. 24					
12 p.m.......	10.60	4,000	12 m.........	7.18	1,900	Jan. 15		
			12 p.m.......	6.28	1,400	1 a.m........	8.36	2,570
Dec. 20						5............	8.69	2,760
2 a.m........	10.25	3,760	Dec. 25			7............	8.77	2,810
6............	10.30	3,800	12 m.........	5.77	1,140	2 p.m........	10.16	3,700
12 m.........	8.68	2,760	9 p.m........	5.57	1,040	3............	10.07	3,650
6 p.m........	7.50	2,080	12 p.m.......	5.73	1,120	12 p.m.......	8.92	2,900
12 p.m.......	6.52	1,540						
			Dec. 26			Jan. 16		
Dec. 21			5 a.m........	5.90	1,210	12 m.........	7.61	2,140
5 a.m........	6.02	1,270	7............	6.85	1,720	12 p.m.......	6.67	1,620
10 a.m.......	6.10	1,310	11 a.m.......	9.25	3,110			

277. Lindo Channel of Big Chico Creek at Chico, Calif.

(Miscellaneous site)

Location.--Lat 39°45'10", long 121°49'35", in Arroyo Chico Grant, at Longfellow Avenue Bridge, 1.8 miles north of Chico. Altitude is 210 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 6,220 cfs Dec. 22.
Flood of Dec. 10, 1937, caused 2½-foot overflow at U.S. Highway 99 crossing, from information by State Highway Department. No overflow during any subsequent flood.

278. Little Chico Creek near Chico, Calif.

(Miscellaneous site)

Location.--Lat 39°44'00", long 121°46'20", in E½ sec.29, T.22 N., R.2 E., 0.8 mile upstream from bridge on Bruce road and 3.5 miles east of Chico post office. Altitude is 285 ft (from topographic map).

Drainage area.--25.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,680 cfs, probably Dec. 22.

279. Stony Creek near Stonyford, Calif.

(Gaging station, discontinued 1934)

Location.--Lat 39°22'15", long 122°36'10", in SE$\frac{1}{4}$ sec.35, T.18 N., R.7 W., at East Park feed-canal diversion dam 3 miles west of Stonyford. Altitude is 1,300 ft (from topographic map).

Drainage area.--97 sq mi.

Discharge record.--Peak discharge by computation of flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 13,000 cfs Dec. 22.
1914, 1918-34: Daily discharge, 5,350 cfs Jan. 2, 1914.
Local residents at Stonyford reported that Dec. 10, 1937, flood was the highest since 1850. Dec. 10, 1937, flood was 1.3 ft higher than that of Dec. 22, 1955, at gaging station above Stony Gorge Reservoir (discontinued 1941).

280. Stony Creek at Black Butte damsite near Orland, Calif.

Location.--Lat 39°40', long 122°20', in SE$\frac{1}{4}$ sec.29, T.23 N., R.4 W., on right bank 120 ft downstream from diversion dam and 8.7 miles northwest of town of Orland.

Drainage area.--741 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 375 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,400 cfs and by slope-area measurement at 19,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 19,300 cfs 2 p.m. Dec. 22 (gage height, 11.33 ft).
July to November 1955: Daily discharge, 370 cfs July 11, 1955.

Remarks.--Flow regulated by East Park Reservoir (usable capacity, 50,600 acre-ft) and Stony Gorge Reservoir (usable capacity, 50,100 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	26	1,590	11.....	106	3,500	21.....	2,290	2,830
2.....	34	1,380	12.....	114	2,740	22.....	15,600	2,550
3.....	36	1,240	13.....	102	2,480	23.....	12,000	3,150
4.....	30	1,420	14.....	86	6,330	24.....	6,050	2,570
5.....	30	1,770	15.....	78	8,110	25.....	3,520	2,660
6.....	260	1,640	16.....	72	5,730	26.....	3,230	3,860
7.....	238	2,870	17.....	118	4,290	27.....	2,880	4,230
8.....	118	3,460	18.....	658	3,400	28.....	2,080	3,670
9.....	166	2,170	19.....	6,180	2,750	29.....	1,700	2,380
10.....	142	2,920	20.....	2,730	2,910	30.....	1,530	2,000
						31.....	1,420	1,740
Monthly mean discharge, in cubic feet per second.....................							2,052	3,043
Runoff, in acre-feet...							126,200	187,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 20--Con.			Jan. 13		
12 p.m.......	2.68	123	12 m.........	6.50	2,400	12 p.m.......	6.78	2,790
Dec. 18			12 p.m.......	5.82	1,620	Jan. 14		
3 a.m........	2.69	125	Dec. 21			2 a.m........	7.85	4,600
7............	3.04	218	4 p.m........	5.49	1,310	4............	8.31	5,620
10...........	3.14	256	6............	5.87	1,670	3 p.m........	8.69	6,670
3 p.m........	3.22	286	8............	6.80	2,820	6............	8.87	7,210
6............	3.60	405	9............	7.75	4,400	7............	9.00	7,600
7............	3.60	405	11...........	9.00	7,600	9............	9.09	7,960
8............	5.90	1,700	12 p.m.......	9.42	9,280	12 p.m.......	8.93	7,390
9............	6.82	2,850	Dec. 22			Jan. 15		
11...........	6.54	2,460	4:30 a.m.....	10.60	14,900	7 a.m........	8.80	7,000
12 p.m.......	6.66	2,620	6............	10.42	13,900	9............	8.88	7,240
Dec. 19			11...........	11.00	17,300	11...........	9.17	8,280
3 a.m........	6.85	2,890	2 p.m........	11.33	19,300	3 p.m........	9.22	8,480
5............	7.28	3,550	12 p.m.......	10.37	13,600	6............	9.43	9,320
7............	7.25	3,500	Dec. 23			10...........	9.38	9,120
9............	7.83	4,560	12 m.........	10.30	13,300	12 p.m.......	9.18	8,320
1 p.m........	8.75	6,850	6 p.m........	9.62	10,100	Jan. 16		
2............	9.24	8,560	12 p.m.......	9.19	8,360	2 a.m........	8.40	6,150
4............	10.07	12,200	Dec. 24			4............	8.23	5,760
7............	9.41	9,240	6 a.m........	8.83	7,090	7............	8.27	5,840
12 p.m.......	7.92	4,740	12 m.........	8.39	5,820	12 m.........	8.24	5,780
Dec. 20			6 p.m........	8.02	4,940	12 p.m.......	7.85	5,000
6 a.m........	7.14	3,320	12 p.m.......	7.73	4,360			

281. Stony Creek near Hamilton City, Calif.

Location.--Lat 39°43'20", long 122°03'10", in Capay Grant, on right bank 2.3 miles southwest of Hamilton City, 6 miles upstream from mouth, and 8 miles east of Orland, Glenn County.

Drainage area.--764 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 160 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 22,100 cfs 9 p.m. Dec. 22 (gage height, 15.96 ft).

1941 to November 1955: Discharge, 37,500 cfs Mar. 1, 1941 (gage height, 6.35 ft, site and datum then in use).

Remarks.--Flow regulated by East Park Reservoir (usable capacity, 50,620 acre-ft) and Stony Gorge Reservoir (usable capacity, 50,040 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	1,840	11.....	0	3,900	21.....	1,740	3,490
2.....	0	1,640	12.....	0	3,310	22.....	13,800	2,980
3.....	0	1,220	13.....	0	2,990	23.....	15,900	3,460
4.....	0	1,300	14.....	0	5,500	24.....	9,250	3,080
5.....	0	2,260	15.....	0	8,620	25.....	5,050	3,070
6.....	0	2,050	16.....	0	7,940	26.....	4,280	4,180
7.....	0	2,510	17.....	0	5,510	27.....	4,090	4,940
8.....	0	4,100	18.....	0	4,260	28.....	2,970	4,550
9.....	0	2,980	19.....	4,130	3,530	29.....	2,220	3,350
10.....	0	3,030	20.....	5,800	3,390	30.....	1,740	2,720
						31.....	1,540	2,240
Monthly mean discharge, in cubic feet per second......................							2,339	3,546
Runoff, in acre-feet..							143,800	218,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 18		
12 p.m.......	5.00	0
Dec. 19		
1 a.m........	6.03	57
2............	6.50	200
4............	8.00	1,380
6............	8.35	1,800
10...........	8.90	2,500
12 m.........	9.31	3,050
6 p.m........	11.14	5,970
10...........	12.87	9,920
12 p.m.......	13.30	11,200
Dec. 20		
1 a.m........	13.33	11,300
4............	12.97	9,910
7............	11.96	7,010
12 m.........	10.83	4,790
3 p.m........	10.26	3,880
6............	9.86	3,320
12 p.m.......	9.24	2,510
Dec. 21		
8 a.m........	8.66	1,820
12 m.........	8.49	1,630
8 p.m........	8.19	1,310
10...........	8.18	1,300
12 p.m.......	8.67	1,830
Dec. 22		
3 a.m........	11.00	5,100
Dec. 22--Con.		
6 a.m........	12.05	7,220
12 m.........	14.51	15,500
4 p.m........	15.24	18,800
6............	15.49	19,900
8............	15.92	21,900
9............	15.96	22,100
12 p.m.......	15.52	20,000
Dec. 23		
3 a.m........	15.00	17,700
7............	14.56	15,700
12 m.........	14.60	15,900
7 p.m........	14.50	15,400
12 p.m.......	13.85	12,600
Dec. 24		
12 m.........	12.79	9,110
9 p.m........	11.90	6,880
12 p.m.......	11.67	6,380
Dec. 25		
6 a.m........	11.22	5,500
12 m.........	10.87	4,870
4 p.m........	10.66	4,520
12 p.m.......	10.57	4,370
Dec. 26		
3 a.m........	10.44	4,160
8............	10.45	4,180
12 m.........	10.36	4,040
5 p.m........	10.58	4,390
Dec. 26--Con.		
7 p.m........	10.59	4,400
12 p.m.......	10.75	4,660
Dec. 27		
3 a.m........	10.75	4,660
12 m.........	10.37	4,050
12 p.m.......	9.94	3,440
Jan. 13		
12 p.m.......	9.68	3,080
Jan. 14		
3 a.m........	9.72	3,140
5............	9.89	3,370
7............	10.67	4,530
9............	11.11	5,300
1 p.m........	11.56	6,160
9............	12.00	7,100
12 p.m.......	12.29	7,800
Jan. 15		
3 a.m........	12.45	8,210
1 p.m........	12.50	8,340
12 p.m.......	13.05	9,850
Jan. 16		
4 a.m........	13.19	10,300
6............	13.03	9,790
8............	12.45	8,210
10...........	12.16	7,480
12 m.........	12.06	7,240
12 p.m.......	11.67	6,380

282. Sacramento River at Butte City, Calif.

Location.--Lat 39°27'35", long 121°59'35", in NE¼ sec.32, T.19 N., R.1 W., on left bank, 0.5 mile south of Butte City.

Gage-height record.--Water-stage recorder graph. Gage is set to datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 149,000 cfs 1 p.m. Jan. 16 (gage height, 94.66 ft).

1940 to November 1955: Discharge, 170,000 cfs Feb. 7, 1942 (gage height, 96.87 ft), from rating curve extended above 100,000 cfs.

Remarks.--Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control, diversions for irrigation, and return flow from irrigated area.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5,530	56,500	11.....	9,720	70,000	21.....	84,900	62,200
2.....	5,430	55,500	12.....	7,980	66,300	22.....	66,200	57,700
3.....	5,370	55,500	13.....	7,290	57,700	23.....	122,000	57,500
4.....	5,010	55,200	14.....	6,800	68,500	24.....	130,000	61,200
5.....	4,990	54,600	15.....	6,430	115,000	25.....	89,600	56,700
6.....	13,700	52,100	16.....	6,200	145,000	26.....	64,100	69,500
7.....	31,100	45,400	17.....	7,380	116,000	27.....	79,800	72,700
8.....	13,000	59,300	18.....	16,500	86,300	28.....	79,700	63,000
9.....	10,700	68,700	19.....	45,600	73,900	29.....	69,200	56,300
10.....	13,800	56,500	20.....	87,200	56,900	30.....	61,000	49,700
						31.....	57,700	45,500
Monthly mean discharge, in cubic feet per second......................							39,160	66,670
Runoff, in acre-feet..							2,408,000	4,100,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.......	72.72	9,990	6 p.m........	89.67	73,700	12 m.........	88.66	64,500
			12 p.m.......	91.44	95,400	12 p.m.......	91.10	90,600
Dec. 18								
10 a.m.......	73.79	12,700	Dec. 23			Jan. 15		
6 p.m........	76.74	21,400	6 a.m........	92.60	113,000	6 a.m........	92.04	104,000
12 p.m.......	78.52	27,600	12 m.........	93.28	124,000	12 m.........	92.72	115,000
			6 p.m........	93.85	134,000	6 p.m........	93.37	126,000
Dec. 19			12 p.m.......	94.05	138,000	12 p.m.......	93.97	137,000
6 a.m........	80.50	33,600						
12 m.........	83.48	44,100	Dec. 24			Jan. 16		
6 p.m........	86.23	57,200	1 a.m........	94.08	139,000	6 a.m........	94.46	146,000
12 p.m.......	88.13	67,200	6............	94.01	137,000	11...........	94.64	149,000
			12 m.........	93.71	132,000	1 p.m........	94.66	149,000
Dec. 20			6 p.m........	93.24	124,000	6............	94.55	147,000
6 a.m........	89.53	77,000	12 p.m.......	92.56	112,000	12 p.m.......	94.23	141,000
12 m.........	90.85	89,300						
6 p.m........	91.62	98,000	Dec. 25			Jan. 17		
12 p.m.......	91.88	102,000	12 m.........	90.93	88,400	12 m.........	92.74	115,000
			12 p.m.......	89.25	69,600	12 p.m.......	91.17	91,600
Dec. 21								
2 a.m........	91.91	102,000	Dec. 26			Jan. 18		
6............	91.73	99,600	12 m.........	88.24	61,200	6 a.m........	90.83	87,100
12 m.........	90.90	88,000	3 p.m........	88.09	60,100	6 p.m........	90.64	84,700
6 p.m........	89.43	71,300	12 p.m.......	88.95	67,000	12 p.m.......	90.54	83,500
12 p.m.......	87.86	58,900	Jan. 13					
			12 p.m.......	87.32	56,800	Jan. 19		
Dec. 22						6 a.m........	90.30	80,600
6 a.m........	86.84	54,900	Jan. 14			12 m.........	89.80	75,000
12 m.........	87.87	59,000	6 a.m........	87.71	58,300	12 p.m.......	88.15	60,600

283. Sacramento River at Colusa, Calif.

Location.--Lat 39°12'50", long 121°59'55", at north end of Jimeno Grant, on right bank just downstream from highway bridge at Colusa, Colusa County, at mile 89.4 upstream from Sacramento.

Gage-height record.--Water-stage recorder graph. Gage is set to datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 43,200 cfs 2 a.m. Jan. 17 (gage height, 66.90 ft).

1940 to November 1955: Discharge, 49,000 cfs Feb. 8, 1942 (gage height, 69.20 ft).

Remarks.--Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control and diversions for irrigation, and return flow from irrigated areas.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5,830	35,800	11.....	11,300	36,400	21.....	38,400	35,800
2.....	5,590	35,700	12.....	8,820	37,300	22.....	36,800	36,400
3.....	5,620	35,300	13.....	7,790	36,200	23.....	39,100	35,300
4.....	5,320	35,500	14.....	7,250	36,000	24.....	42,000	36,200
5.....	5,200	35,300	15.....	6,840	39,400	25.....	40,600	35,700
6.....	6,890	35,200	16.....	6,500	42,400	26.....	37,900	36,400
7.....	22,400	33,800	17.....	6,600	42,500	27.....	37,500	37,500
8.....	20,900	34,500	18.....	10,300	40,100	28.....	38,400	37,100
9.....	12,000	37,200	19.....	23,400	38,600	29.....	37,800	36,000
10.....	13,100	35,900	20.....	35,000	36,500	30.....	36,800	34,600
						31.....	36,200	33,400
Monthly mean discharge, in cubic feet per second......................							20,910	36,580
Runoff, in acre-feet..							1,286,000	2,249,000

284. Butte Creek near Chico, Calif.

Location.--Lat 39°43'34", long 121°42'28", in NW¼NW¼ sec.36, T.22 N., R.2 E., on right bank 0.7 mile downstream from Little Butte Creek and 7.5 miles east of Chico.

Drainage area.--148 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 320 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,900 cfs and by slope-area measurement of 18,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 18,700 cfs 2:30 a.m. Dec. 22 (gage height, 13.35 ft).

1930 to November 1955: Discharge, 17,000 cfs Dec. 11, 1937 (gage height, 18.9 ft, site and datum then in use), from rating curve extended above 6,000 cfs by logarithmic plotting.

Remarks.--Flows not materially affected by storage or diversions.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	191	1,060	11.....	272	1,700	21.....	4,390	1,430
2.....	220	940	12.....	215	1,430	22.....	12,000	1,460
3.....	167	830	13.....	232	1,950	23.....	9,780	1,500
4.....	159	955	14.....	215	4,180	24.....	3,860	1,270
5.....	189	1,270	15.....	203	6,270	25.....	2,460	1,380
6.....	856	1,150	16.....	203	3,970	26.....	4,990	1,730
7.....	425	3,000	17.....	305	2,370	27.....	3,190	1,460
8.....	295	3,140	18.....	1,050	1,750	28.....	2,020	1,210
9.....	430	2,030	19.....	6,150	1,490	29.....	1,490	1,090
10.....	330	1,880	20.....	5,310	1,500	30.....	1,210	992
						31.....	1,090	925
Monthly mean discharge, in cubic feet per second......................							2,061	1,849
Runoff, in inches...							16.06	14.40
Runoff, in acre-feet..							126,700	113,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Butte Creek near Chico, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 27		
12 p.m.......	2.92	456	6 a.m........	12.20	15,600	12 m.........	5.84	3,000
			10...........	11.00	12,500	12 p.m.......	5.35	2,460
Dec. 18			2 p.m........	9.65	9,340	Jan. 12		
6 a.m........	3.15	582	7............	8.32	6,680	12 p.m.......	3.98	1,530
12 m.........	3.18	599	12 p.m.......	10.00	10,100			
6 p.m........	4.15	1,300				Jan. 13		
12 p.m.......	5.80	2,960	Dec. 23			4 a.m........	3.98	1,530
			3 a.m........	10.85	12,100	11...........	4.42	2,010
Dec. 19			6............	10.00	10,100	6 p.m........	4.43	2,080
2 a.m........	5.85	3,020	7............	9.92	9,930	12 p.m.......	4.93	2,550
5............	5.80	2,960	8............	10.00	10,100			
10...........	7.50	5,260	10...........	10.66	11,700	Jan. 14		
4 p.m........	8.93	7,860	3 p.m........	10.00	10,100	5 a.m........	5.53	3,190
8............	10.10	10,300	8............	8.87	7,740	10...........	5.95	3,670
12 p.m.......	8.95	7,900	12 p.m.......	7.85	5,840	3 p.m........	6.80	4,740
						7............	7.43	5,640
Dec. 20			Dec. 24			12 p.m.......	7.11	5,180
5 a.m........	8.37	6,770	6 a.m........	7.00	4,490			
12 m.........	7.48	5,230	12 m.........	6.33	3,580	Jan. 15		
3 p.m........	6.90	4,350	6 p.m........	5.92	3,090	2 a.m........	7.05	5,080
5............	6.80	4,210	12 p.m.......	5.62	2,760	6............	7.15	5,210
12 p.m.......	6.00	3,180				11...........	8.11	6,480
			Dec. 25			2 p.m........	8.59	7,190
Dec. 21			12 m.........	5.20	2,300	7............	8.70	7,400
8 a.m........	5.52	2,650	3 p.m........	5.35	2,460	12 p.m.......	7.90	5,930
1 p.m........	5.37	2,490	7............	5.22	2,320			
6............	6.40	3,670	12 p.m.......	5.40	2,520	Jan. 16		
8............	8.00	6,100				6 a.m........	7.05	4,560
10...........	10.35	10,900	Dec. 26			12 m.........	6.47	3,760
12 p.m.......	12.40	16,100	3 a.m........	5.28	2,390	6 p.m........	5.99	3,170
			5............	5.52	2,650	12 p.m.......	5.68	2,830
Dec. 22			8............	6.90	4,350			
1 a.m........	13.00	17,700	1 p.m........	8.94	7,880	Jan. 17		
2:30.........	13.35	18,700	8............	7.62	5,450	12 m.........	5.23	2,330
4 a.m	13.05	17,900	12 p.m.......	6.87	4,310	12 p.m.......	4.88	1,980

285. Dry Creek near Oroville, Calif.

(Miscellaneous site)

Location.--Lat 39°38'10", long 121°35'35", in NW¼ sec.36, T.21 N., R.3 E., 1.3 miles upstream from Horsethief Canyon and 8.9 miles north of Oroville. Altitude is 360 ft (from topographic map).

Drainage area.--17.7 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,120 cfs Dec. 22 or 23.

286. Sacramento River below Wilkins Slough, Calif.

Location.--Lat 39°00'35", long 121°49'25", in Jimeno Grant, on right bank 1,500 ft downstream from Wilkins Slough, Colusa County, 6 miles southeast of Grimes, and at mile 62.9 upstream from Sacramento.

Gage-height record.--Water-stage recorder graph except 4 p.m. Dec. 23 to 1 p.m. Dec. 26, and 5 p.m. Jan. 14 to 10 a.m. Jan. 27. Graph was reconstructed for Dec. 24, 25 on basis of trend of rising and falling stage. Gage is set to datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for period of no gage-height record estimated on basis of records for station at Knights Landing.

Maxima.--December 1955 to January 1956: Daily discharge, 26,300 cfs Jan. 17; gage height, 50.77 ft, probably Jan. 17.

1940 to November 1955: Discharge, 26,600 cfs Feb. 8, 1942 (gage height, 52.29 ft).

Remarks.--Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control and diversions for irrigation, and return flow from irrigated areas.

Mean discharge, in cubic feet per second, 1955-56, of Sacramento River below Wilkins Slough, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	6,150	24,000	11.....	12,800	23,900	21.....	24,200	24,600
2.....	5,740	23,900	12.....	10,700	24,100	22.....	24,500	24,400
3.....	5,620	23,800	13.....	9,170	24,000	23.....	25,200	24,200
4.....	5,480	23,800	14.....	8,330	24,000	24.....	26,000	24,200
5.....	5,240	23,700	15.....	7,760	24,600	25.....	26,100	24,200
6.....	5,370	23,700	16.....	7,330	25,700	26.....	25,600	24,000
7.....	14,100	23,400	17.....	6,990	26,300	27.....	25,000	24,300
8.....	20,200	23,400	18.....	8,460	26,200	28.....	25,100	24,300
9.....	15,300	24,000	19.....	16,200	25,700	29.....	25,000	24,000
10.....	12,700	23,900	20.....	22,700	25,200	30.....	24,600	23,700
						31.....	24,300	23,300
Monthly mean discharge, in cubic feet per second........................							15,550	24,270
Runoff, in acre-feet..							955,900	1,493,000

287. Sacramento River at Knights Landing, Calif.

Location.--Lat 38°48'10", long 121°42'55", in NE¼ sec.14, T.11 N., R.2 E., on left bank just upstream from Southern Pacific Railroad bridge at Knights Landing, 13.1 miles upstream from Feather River and at mile 34.0 upstream from Sacramento.

Gage-height record.--Water-stage recorder graph. Gage is set to datum of Corps of Engineers. Auxiliary water-stage recorder at site 6.0 miles downstream from base gage at datum of Corps of Engineers.

Discharge record.--Slope-stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 27,800 cfs 8 p.m. Dec. 24; gage height, 41.26 ft Dec. 23.
1940 to November 1955: Discharge, 27,900 cfs Feb. 9, 1942; gage height, 41.83 ft Feb. 8, 1942.

Remarks.--Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control and diversions for irrigation, and return flow from irrigated areas.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	6,770	24,700	11.....	14,400	24,500	21.....	25,000	24,500
2.....	6,350	24,800	12.....	12,900	24,800	22.....	25,000	24,800
3.....	6,140	24,500	13.....	10,800	24,600	23.....	25,000	24,500
4.....	5,980	24,700	14.....	9,420	24,400	24.....	26,300	24,400
5.....	5,780	24,600	15.....	8,600	24,400	25.....	26,600	24,500
6.....	5,470	24,200	16.....	7,990	24,000	26.....	24,900	24,700
7.....	11,400	24,200	17.....	7,530	24,800	27.....	23,800	25,000
8.....	22,800	23,800	18.....	8,320	25,500	28.....	23,600	25,500
9.....	18,000	24,500	19.....	13,600	25,300	29.....	24,200	25,200
10.....	13,700	24,800	20.....	21,400	25,200	30.....	24,700	24,600
						31.....	24,800	23,700
Monthly mean discharge, in cubic feet per second........................							15,850	24,640
Runoff, in acre-feet..							974,400	1,515,000

288. Big Grizzly Creek near Portola, Calif.

Location.--Lat 39°52', long 120°28', in NE¼ sec.12, T.23 N., R.13 E., on left bank 4.8 miles north of Portola and 5.4 miles upstream from mouth.

Drainage area.--44.6 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,580 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 400 cfs and by slope-area measurement at 1,780 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 2,140 cfs 3 a.m. Dec. 22 (gage height, 8.10 ft).

1925-32, 1950-53, 1954 to November 1955: Discharge, 2,680 cfs Mar. 26, 1928 (gage height, 7.50 ft, datum then in use), from rating curve extended above 330 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2.5	76	11	2.5	40	21	775	140
2	2.1	68	12	2.7	42	22	1,480	134
3	1.6	59	13	2.1	47	23	1,350	187
4	1.6	43	14	2.2	80	24	436	134
5	1.6	48	15	2.1	243	25	273	100
6	4.1	50	16	2.5	391	26	320	80
7	5.0	34	17	3.9	266	27	380	57
8	3.9	30	18	3.5	180	28	212	53
9	3.1	43	19	8.8	146	29	146	50
10	2.2	39	20	172	147	30	111	48
						31	97	46
Monthly mean discharge, in cubic feet per second							187	100
Runoff, in inches							4.84	2.59
Runoff, in acre-feet							11,520	6,150

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	0.40	1.9	10 a.m.	7.25	1,650	7 p.m.	4.53	479
			2 p.m.	6.70	1,370	12 p.m.	4.46	459
Dec. 19			7	5.77	932			
6 a.m.	.37	1.6	9	5.95	1,010	Dec. 27		
1 p.m.	.46	2.7	12 p.m.	6.80	1,420	11 a.m.	4.14	376
3	.90	14				1 p.m.	4.21	393
5	1.20	24	Dec. 23			5	4.15	378
6	.95	15	3 a.m.	7.18	1,610	12 p.m.	3.59	252
12 p.m.	1.14	22	10	6.82	1,430			
			2 p.m.	7.32	1,690	Jan. 13		
Dec. 20			6	6.35	1,200	12 p.m.	2.22	56
4 a.m.	1.55	42	9	5.53	832			
10	1.95	66	12 p.m.	4.86	581	Jan. 14		
11	2.30	95				12 m.	2.39	73
12 m.	3.40	255	Dec. 24			6 p.m.	2.57	93
1 p.m.	2.16	82	4 a.m.	4.38	437	12 p.m.	2.79	120
2	3.00	186	10	4.10	366			
4	3.35	246	5 p.m.	4.62	506	Jan. 15		
6	3.73	321	12 p.m.	4.00	342	12 m.	3.21	184
12 p.m.	4.00	385				4 p.m.	3.75	285
			Dec. 25			8	4.25	403
Dec. 21			4 a.m.	3.70	274	12 p.m.	4.42	448
11 a.m.	4.23	442	10	3.42	221			
2 p.m.	4.75	595	2 p.m.	3.55	244	Jan. 16		
5	6.05	1,090	6	3.97	335	12 m.	4.20	390
7	6.63	1,350	12 p.m.	3.58	250	6 p.m.	4.11	368
12 p.m.	7.25	1,660				12 p.m.	3.92	323
			Dec. 26					
Dec. 22			6 a.m.	3.49	233	Jan. 17		
1 a.m.	7.65	1,870	10	3.34	206	8 a.m.	3.67	268
3	8.10	2,140	2 p.m.	3.78	292	1 p.m.	3.67	268
7 a.m.	7.20	1,620	4 p.m.	4.25	403	12 p.m.	3.41	219

289. Middle Fork Feather River near Clio, Calif.

Location.--Lat 39°45'10", long 120°35'40", in SE¼ sec.23, T.22 N., R.12 E., on left bank 0.6 mile upstream from Frazier Creek, 1.0 mile northwest of Clio, and 2.2 miles southeast of Blairsden.

Drainage area.--698 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,380 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,200 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 14,400 cfs 1 p.m. Dec. 23 (gage height, 15.77 ft).

1925 to November 1955: Discharge, 11,000 cfs Mar. 26, 1928 (gage height, 12.0 ft, site and datum then in use), from rating curve extended above 4,700 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	72	1,220	11.....	93	1,020	21.....	2,440	1,580
2.....	55	970	12.....	85	1,130	22.....	6,830	1,480
3.....	52	902	13.....	80	1,550	23.....	11,500	1,510
4.....	49	839	14.....	73	1,980	24.....	10,500	1,470
5.....	58	978	15.....	67	3,640	25.....	7,740	1,210
6.....	181	1,040	16.....	71	3,850	26.....	7,100	1,000
7.....	80	1,480	17.....	76	3,770	27.....	6,020	848
8.....	73	1,260	18.....	145	2,990	28.....	4,050	924
9.....	99	1,020	19.....	1,340	2,060	29.....	2,380	1,050
10.....	95	1,060	20.....	1,160	1,730	30.....	2,160	1,080
						31.....	1,580	974
Monthly mean discharge, in cubic feet per second							2,139	1,536
Runoff, in inches							3.53	2.54
Runoff, in acre-feet							131,500	94,440

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 23			Dec. 29--Con.		
12 p.m.......	3.15	90	4 a.m........	13.62	8,900	12 p.m.......	9.07	2,450
			8............	14.70	11,500			
Dec. 18			1 p.m........	15.77	14,400	Jan. 13		
12 m.........	2.97	74	7............	15.04	12,400	12 p.m.......	8.14	1,700
3 p.m........	3.00	76	12 p.m.......	14.54	11,100			
6............	3.65	146				Jan. 14		
8............	4.35	239	Dec. 24			10 a.m.......	8.29	1,800
10...........	5.37	418	3 a.m........	14.34	10,600	2 p.m........	8.50	1,960
12 p.m.......	5.65	488	10...........	14.49	11,000	6............	8.81	2,210
			12 p.m.......	13.86	9,490	12 p.m.......	9.09	2,470
Dec. 19								
4 a.m........	6.10	620	Dec. 25			Jan. 15		
8............	7.01	964	6 a.m........	13.43	8,560	9 a.m........	9.62	3,000
12 m.........	8.04	1,450	4 p.m........	12.56	6,910	12 m.........	10.20	3,620
4 p.m........	8.97	2,100	12 p.m.......	12.40	6,640	4 p.m........	11.04	4,640
6............	8.74	1,910				12 p.m.......	10.90	4,460
8............	8.96	2,090	Dec. 26					
12 p.m.......	7.88	1,370	3 a.m........	12.31	6,500	Jan. 16		
			8............	12.72	7,200	3 a.m........	10.74	4,270
Dec. 20			11...........	13.17	8,040	2 p.m........	9.97	3,350
4 a.m........	7.66	1,260	4 p.m........	12.93	7,570	8............	10.32	3,760
8............	7.40	1,140	7............	12.54	6,870	12 p.m.......	10.73	4,260
11...........	7.53	1,200	12 p.m.......	12.20	6,320			
7 p.m........	7.17	1,040				Jan. 17		
12 p.m.......	7.22	1,060	Dec. 27			10 a.m.......	10.20	3,620
			7 a.m........	12.05	6,080	4 p.m........	10.20	3,620
Dec. 21			12 m.........	12.10	6,160	6............	10.29	3,730
6 a.m........	8.10	1,480	12 p.m.......	11.71	5,570	12 p.m.......	10.17	3,580
12 m.........	8.98	2,100						
4 p.m........	9.40	2,500	Dec. 28			Jan. 18		
8............	10.37	3,540	6 a.m........	11.02	4,610	6 a.m........	9.93	3,310
12 p.m.......	12.08	5,930	12 m.........	10.39	3,850	12 m.........	9.60	2,980
			7 p.m........	10.01	3,390	12 p.m.......	9.00	2,380
Dec. 22			12 p.m.......	9.64	3,020			
3 a.m........	12.94	7,480				Jan. 19		
9............	13.55	8,750	Dec. 29			12 m.........	8.57	2,020
2 p.m........	12.20	6,120	6 a.m........	8.91	2,290	12 p.m.......	8.29	1,800
7............	11.46	4,940	11...........	8.62	2,060			
12 p.m.......	12.76	7,130	8 p.m........	9.10	2,480			

290. Middle Fork Feather River below Sloat, Calif.

Location.--Lat 39°52'00", long 120°46'15", in SW¼ sec.8, T.23 N., R.11 E., on right bank 0.6 mile downstream from Bell Bar Creek, 1.1 miles west of Bell Bar, and 2.2 miles west of Sloat.

Drainage area.--836 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,010 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,200 cfs and by slope-area measurement at 31,200 cfs.

Maxima.--December 1955 to January 1956: Discharge, 31,200 cfs 3:30 p.m. Dec. 23 (gage height, 19.25 ft).

1940 to November 1955: Discharge, 13,300 cfs Nov. 21, 1950 (gage height, 12.25 ft, site and datum then in use), from rating curve extended above 2,300 cfs on basis of a previous curve defined to 8,700 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	115	1,760	11.....	190	1,480	21.....	4,500	2,160
2.....	118	1,440	12.....	159	1,550	22.....	16,900	2,030
3.....	106	1,310	13.....	144	2,100	23.....	24,600	2,220
4.....	99	1,230	14.....	132	2,660	24.....	16,200	2,040
5.....	99	1,500	15.....	125	5,150	25.....	10,800	1,900
6.....	326	1,450	16.....	130	5,670	26.....	11,100	1,790
7.....	218	1,940	17.....	156	4,710	27.....	8,540	1,490
8.....	156	1,830	18.....	219	3,760	28.....	5,600	1,420
9.....	190	1,420	19.....	3,410	2,710	29.....	3,170	1,400
10.....	172	1,540	20.....	3,720	2,330	30.....	2,790	1,420
						31.....	2,220	1,280
Monthly mean discharge, in cubic feet per second......................							3,755	2,151
Runoff, in inches..							5.18	2.97
Runoff, in acre-feet...							230,900	132,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 28--Con.		
12 p.m.......	2.99	162	12 p.m.......	13.35	16,100	2 p.m........	7.92	4,840
						12 p.m.......	7.91	4,830
Dec. 18			Dec. 23					
6 a.m........	3.05	182	2 a.m........	14.52	19,000	Jan. 12		
3 p.m........	3.02	172	6............	15.50	21,500	12 p.m.......	5.30	1,710
9............	3.36	302	10...........	17.30	26,000			
12 p.m.......	3.75	508	2 p.m........	18.33	28,600	Jan. 13		
			3:30.........	19.25	31,200	6 a.m........	5.49	1,880
Dec. 19			8............	17.50	26,500	12 m.........	5.80	2,170
3 a.m........	4.55	1,050	12 p.m.......	15.48	21,400	12 p.m.......	6.05	2,420
10...........	5.97	2,340						
2 p.m........	7.42	4,060	Dec. 24			Jan. 14		
6............	8.54	5,900	5 a.m........	13.87	17,400	12 m.........	6.16	2,530
8............	8.63	6,060	9............	13.39	16,200	7 p.m........	6.51	2,880
12 p.m.......	8.30	5,470	3 p.m........	13.05	15,400	12 p.m.......	6.76	3,180
			12 p.m.......	12.19	13,400			
Dec. 20						Jan. 15		
4 a.m........	7.40	4,030	Dec. 25			8 a.m........	7.10	3,610
1 p.m........	7.04	3,530	12 m.........	10.98	10,700	1 p.m........	7.77	4,600
3............	7.06	3,550	6 p.m........	10.29	9,330	5............	9.14	7,030
12 p.m.......	6.55	2,930	12 p.m.......	10.02	8,790	7............	9.44	7,630
						9............	9.51	7,770
Dec. 21			Dec. 26			12 p.m.......	9.26	7,270
3 a.m........	6.42	2,790	4 a.m........	10.07	8,890			
8............	6.58	2,970	9............	10.91	10,600	Jan. 16		
3 p.m........	7.15	3,680	1 p.m........	12.09	13,200	6 a.m........	8.79	6,350
7............	8.42	5,690	3............	12.21	13,500	5 p.m........	7.86	4,750
12 p.m.......	11.34	11,500	6............	12.05	13,100	12 p.m.......	8.04	5,030
			12 p.m.......	10.60	9,950			
Dec. 22						Jan. 17		
4 a.m........	14.34	18,600	Dec. 27			3 a.m........	8.24	5,360
6............	14.80	19,800	6 a.m........	10.09	8,930	1 p.m........	7.67	4,440
9............	15.18	20,700	12 m.........	9.84	8,430	12 p.m.......	7.63	4,380
11...........	15.43	21,300	4 p.m........	9.77	8,290			
1 p.m........	14.79	19,700	12 p.m.......	9.34	7,430	Jan. 18		
5............	12.70	14,500				6 a.m........	7.50	4,170
8............	11.77	12,500	Dec. 28			6 p.m........	6.91	3,360
10 p.m.......	12.06	13,100	6 a.m........	8.78	6,330	12 p.m.......	6.70	3,110

291. Middle Fork Feather River near Merrimac, Calif.

Location.--Lat 39°42'30", long 121°16'15", in NE¼ sec.2, T.21 N., R.6 E., on right bank 400 ft downstream from bridge on Milsap Bar road, 500 ft downstream from Little North Fork, 4.5 miles southeast of Merrimac, and 20 miles northeast of Oroville.

Drainage area.--1,078 sq mi.

Gage-height record.--Water-stage recorder graph except 5 a.m. Dec. 6 to 3 p.m. Jan. 3; peak stage for Dec. 23 from floodmarks. Altitude of gage is 1,560 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 13,000 cfs and extended to peak flow of 62,000 cfs on basis of comparison of peaks at upstream and downstream stations and study of runoff per square mile for intervening areas. Discharge for period of no gage-height record estimated on basis of records for stations below Sloat and Feather River at Bidwell Bar.

Maxima.--December 1955 to January 1956: Discharge, 62,000 cfs, time unknown, Dec. 23 (gage height, 21.2 ft).

1951 to November 1955: Discharge, 25,900 cfs Jan. 9, 1953 (gage height, 15.06 ft), from rating curve extended above 13,000 cfs on basis of slope-area measurement at gage height 17.1 ft.

Flood of Nov. 21, 1950, reached a stage of 17.1 ft, from floodmarks (discharge, 34,300 cfs, on basis of slope-area measurement of peak flow). Flood of Dec. 10, 1937, reached a stage of about 19.4 ft.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	359	4,200	11.....	530	3,310	21.....	11,000	5,100
2.....	341	3,500	12.....	440	3,180	22.....	22,000	5,110
3.....	310	3,100	13.....	400	4,740	23.....	49,000	6,300
4.....	266	2,860	14.....	370	7,580	24.....	35,000	5,120
5.....	320	3,350	15.....	350	12,700	25.....	26,000	4,810
6.....	900	3,030	16.....	360	12,400	26.....	26,000	5,190
7.....	640	3,890	17.....	440	9,050	27.....	21,000	4,520
8.....	440	4,140	18.....	900	7,380	28.....	13,000	3,860
9.....	520	3,220	19.....	8,000	5,760	29.....	7,800	3,550
10.....	490	3,440	20.....	9,000	5,330	30.....	6,200	3,350
						31.....	5,200	3,080
Monthly mean discharge, in cubic feet per second......................							7,986	5,037
Runoff, in inches..							8.54	5.39
Runoff, in acre-feet...							491,100	309,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1956

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan., 12			Jan. 14--Con.			Jan. 16--Con.		
12 p.m.......	6.92	3,250	12 p.m.......	9.90	8,780	6 p.m........	10.65	10,600
Jan. 13			Jan. 15			12 p.m.......	10.30	9,740
3 a.m........	7.15	3,550	4 a.m........	10.02	9,070	Jan. 17		
9............	7.79	4,530	8............	10.30	9,740	3 a.m........	10.25	9,620
12 m.........	8.02	4,940	12 m.........	11.10	11,900	7............	10.29	9,720
5 p.m........	8.24	5,350	4 p.m........	12.28	15,500	6 p.m........	9.74	8,430
12 p.m.......	8.63	6,100	8............	12.80	17,300	8............	9.74	8,430
			12 p.m.......	12.47	16,300	10...........	9.62	8,160
Jan. 14			Jan. 16			12 p.m.......	9.61	8,140
6 a.m........	8.91	6,660	6 a.m........	11.84	14,100	Jan. 18		
12 m.........	9.34	7,550	12 m.........	11.17	12,100	12 m.........	9.30	7,470
7 p.m........	9.90	8,780				12 p.m.......	8.80	6,440

292. Lost Creek near Clipper Mills, Calif.

Location.--Lat 39°34'25", long 121°08'25", in SW¼ sec.24, T.20 N., R.7 E., on left bank 0.3 mile downstream from Lost Creek Reservoir, 0.3 mile downstream from Pinkard Creek, and 2.8 miles north of town of Clipper Mills.

Drainage area.--30.1 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Nov. 30 to 3 p.m. Dec. 14. Altitude of gage is 3,170 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 520 cfs and extended above on basis of comparison of downstream peaks and study of runoff per square mile for intervening areas. Discharge for period of no gage-height record interpolated.

Maxima.--December 1955 to January 1956: Discharge, 5,000 cfs 2 a.m. Dec. 22 (gage height, 6.90 ft).

1927-41, 1948 to November 1955: Discharge, 3,380 cfs Dec. 10, 1937 (gage height, 6.80 ft), from rating curve extended above 450 cfs on basis of determination of flow over dam at gage height 6.2 ft.

Remarks.--Flow partly regulated by Lost Creek Reservoir (capacity, 5,780 acre-ft with 5 ft of flashboards).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0.6	280	11	0.4	276	21	1,290	480
2	.6	242	12	.4	276	22	3,840	630
3	.5	218	13	.4	575	23	3,700	594
4	.5	224	14	.4	1,120	24	1,640	470
5	.5	260	15	.3	1,950	25	734	490
6	.5	221	16	.4	1,010	26	1,250	666
7	.5	325	17	.6	634	27	904	470
8	.5	280	18	1.3	505	28	540	400
9	.5	260	19	675	445	29	410	340
10	.4	316	20	1,230	495	30	332	304
						31	300	276
Monthly mean discharge, in cubic feet per second							544	485
Runoff, in acre-feet							33,430	29,820

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23			Jan. 13		
12 p.m.	1.22	2.5	1:30 a.m.	5.81	3,660	8 a.m.	2.92	500
			4:30	5.61	3,340	12 m.	2.94	510
Dec. 19			2 p.m.	6.27	4,410	8 p.m.	3.32	734
3 p.m.	1.42	6.9	12 p.m.	5.25	2,790	12 p.m.	3.49	853
4	4.31	868						
7	5.66	2,440	Dec. 24			Jan. 14		
12 p.m.	5.26	1,850	2 p.m.	4.00	1,280	9 a.m.	3.89	1,180
			12 p.m.	3.57	916	8 p.m.	3.87	1,160
Dec. 20						12 p.m.	3.95	1,240
11 a.m.	4.64	1,140	Dec. 25					
5 p.m.	4.57	1,180	3 p.m.	3.21	666	Jan. 15		
12 p.m.	4.16	762	12 p.m.	3.12	612	6 a.m.	4.40	1,690
						12 m.	5.20	2,720
Dec. 21			Dec. 26			12 p.m.	4.13	1,410
4 a.m.	4.01	657	5 a.m.	3.15	630			
11	3.88	578	9	3.60	940	Jan. 16		
2 p.m.	4.08	706	10:30	4.00	1,280	6 a.m.	3.85	1,140
7	5.14	1,690	5 p.m.	4.65	1,980	12 m.	3.64	972
12 p.m.	6.75	4,620	12 p.m.	4.02	1,300	12 p.m.	3.30	720
			Dec. 27					
Dec. 22			1 p.m.	3.42	804	Jan. 17		
2 a.m.	6.90	5,000	12 p.m.	3.19	654	12 m.	3.15	630
7	6.50	4,820				12 p.m.	3.03	558
6 p.m.	5.00	2,440	Jan. 12					
12 p.m.	5.76	3,580	12 p.m.	2.73	405			

293. South Fork Feather River at Enterprise, Calif.

Location.--Lat 39°32'15", long 121°20'45", in NW¼ sec.6, T.19 N., R.6 E., on left bank 0.5 mile upstream from McCabe Creek, 1 mile upstream from highway bridge at Enterprise, and 11 miles east of Oroville.

Drainage area.--134 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 640 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,600 cfs and extended above on basis of computed flow over diversion dam a quarter of a mile upstream.

Maxima.--December 1955 to January 1956: Discharge, 19,200 cfs 7 a.m. Dec. 22 (gage height, 21.60 ft).
1911 to November 1955: Discharge, 17,300 cfs Dec. 10, 1937 (gage height, 20.4 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	121	975	11.....	120	922	21.....	5,370	1,640
2.....	111	849	12.....	107	840	22.....	15,400	1,700
3.....	75	756	13.....	98	1,350	23.....	14,800	2,190
4.....	62	801	14.....	91	3,250	24.....	4,890	1,670
5.....	92	1,020	15.....	86	5,820	25.....	2,670	1,700
6.....	557	825	16.....	108	4,520	26.....	4,720	2,380
7.....	284	1,220	17.....	280	2,700	27.....	3,360	1,970
8.....	162	1,250	18.....	578	1,940	28.....	2,060	1,500
9.....	193	933	19.....	4,580	1,550	29.....	1,460	1,230
10.....	155	968	20.....	5,540	1,580	30.....	1,140	1,070
						31.....	986	940
Monthly mean discharge, in cubic feet per second							2,266	1,679
Runoff, in inches							19.50	14.45
Runoff, in acre-feet							139,400	103,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 22			Dec. 27		
12 p.m.......	3.55	155	2 a.m........	20.90	17,900	9 a.m........	10.50	3,450
			7............	21.60	19,200	12 p.m.......	9.37	2,500
Dec. 17			12 m.........	20.60	17,300			
4 a.m........	4.00	228	3 p.m........	19.00	14,400	Dec. 28		
12 m.........	4.13	254	7............	15.55	8,990	12 m.........	8.75	2,020
12 p.m.......	4.87	415	9............	16.75	10,700	12 p.m.......	8.30	1,710
			12 p.m.......	19.55	15,400			
Dec. 18						Jan. 12		
4 a.m........	4.94	432	Dec. 23			12 p.m.......	6.35	825
1 p.m........	4.75	386	1 a.m........	19.85	16,000			
6............	5.35	537	5............	18.75	14,000	Jan. 13		
9............	6.80	975	2 p.m........	21.30	18,600	8 a.m........	7.18	1,120
12 p.m.......	8.18	1,640	6............	19.25	14,900	2 p.m........	7.98	1,520
			9............	16.65	10,600	9............	8.29	1,700
Dec. 19			12 p.m.......	14.90	8,120	12 p.m.......	8.65	1,960
6 a.m........	8.65	1,960						
12 m.........	11.10	4,000	Dec. 24			Jan. 14		
6 p.m........	14.10	7,130	6 a.m........	12.75	5,650	12 m.........	10.20	3,180
8............	15.22	8,540	12 m.........	11.45	4,350	8 p.m........	11.46	4,360
12 p.m.......	14.50	7,610	12 p.m.......	10.37	3,330	12 p.m.......	11.28	4,180
Dec. 20			Dec. 25			Jan. 15		
1 p.m........	12.00	4,900	6 p.m........	9.10	2,280	3 a.m........	11.12	4,020
3	12.17	5,070	12 p.m.......	9.10	2,280	9............	11.65	4,550
12 p.m.......	11.28	4,180				3 p.m........	14.20	7,250
			Dec. 26			6............	14.83	8,030
Dec. 21			1 a.m........	9.03	2,220	12 p.m.......	13.45	6,400
11 a.m.......	10.33	3,300	6............	9.70	2,760			
3 p.m........	10.70	3,630	9............	11.80	4,700	Jan. 16		
9............	15.45	8,850	4 p.m........	14.00	7,010	10 a.m.......	11.53	4,430
12 p.m.......	19.60	15,500	12 p.m.......	11.68	4,580	12 p.m.......	10.37	3,330

294. Feather River at Bidwell Bar, Calif.

Location.--Lat 39°33'15", long 121°26'15", in NE¼NW¼ sec.32, T.20 N., R.5 E., on left bank just upstream from suspension bridge at Bidwell Bar, 2 miles upstream from North Fork and 7 miles northeast of Oroville.

Drainage area.--1,353 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 22-29. Altitude of gage is 290 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 26,000 cfs and extended above by studies of upstream and downstream peaks. Discharge for period of no gage-height record computed on basis of records for station near Oroville minus gaged inflow.

Maxima.--December 1955 to January 1956: Discharge, 104,000 cfs Dec. 23 (gage height, 25.5 ft).

1911 to November 1955: Discharge, 93,000 cfs Dec. 11, 1937 (gage height, 24.0 ft, from floodmarks), from rating curve extended above 25,000 cfs on basis of velocity-area and A$\sqrt{d}$ studies.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	614	5,860	11.....	785	5,240	21.....	19,500	8,310
2.....	654	5,000	12.....	750	4,910	22.....	65,000	8,450
3.....	516	4,430	13.....	694	7,450	23.....	81,000	10,500
4.....	453	4,620	14.....	645	14,800	24.....	36,000	8,370
5.....	477	5,620	15.....	609	24,300	25.....	21,000	8,440
6.....	3,040	4,800	16.....	697	21,900	26.....	31,000	9,790
7.....	1,780	6,530	17.....	1,560	15,100	27.....	25,000	8,440
8.....	968	6,960	18.....	2,730	12,000	28.....	15,000	6,820
9.....	1,150	5,220	19.....	18,800	8,930	29.....	9,900	6,070
10.....	980	5,430	20.....	22,200	8,440	30.....	8,000	5,570
						31.....	6,640	5,070
Monthly mean discharge, in cubic feet per second......................							12,200	8,496
Runoff, in inches...							10.39	7.24
Runoff, in acre-feet..							750,000	522,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 20			Jan. 14--Con.		
12 p.m.......	3.50	605	4 a.m........	14.80	26,100	1 p.m........	12.50	15,700
			7............	14.50	24,600	7............	13.12	18,300
Dec. 16			11...........	13.80	21,200	12 p.m.......	13.00	17,800
12 m.........	3.62	654	2 p.m........	13.50	19,900			
6 p.m........	3.78	726	4............	13.58	20,200	Jan. 15		
10...........	4.01	846	12 p.m.......	12.70	16,600	2 p.m........	12.92	17,500
12 p.m.......	4.36	1,050				8............	13.30	19,000
			Dec. 21			1 p.m........	14.50	24,600
Dec. 17			6 a.m........	11.92	13,700	4............	15.60	30,400
2 p.m........	4.68	1,260	12 m.........	11.65	12,900	8............	15.85	31,800
6............	4.82	1,370	3 p.m........	11.87	13,600	12 p.m.......	15.45	29,600
12 m.........	4.83	1,370	6............	13.20	18,600			
4 p.m........	5.05	1,560	9............	16.00	32,600	Jan. 16		
7............	5.50	1,960	12 p.m.......	19.50	55,200	6 a.m........	14.46	24,400
12 p.m.......	5.75	2,210				12 m.........	13.82	21,300
			Dec. 22			6 p.m........	13.25	18,800
Dec. 18			2 a.m........	22.50	78,500	12 p.m.......	12.75	16,800
4 a.m........	5.96	2,420						
3 p.m........	5.62	2,080	Jan. 12			Jan. 17		
8............	6.60	3,160	12 p.m.......	8.20	4,800	6 a.m........	12.50	15,900
12 p.m.......	8.62	6,040				9............	12.47	15,800
			Jan. 13			3 p.m........	12.16	14,600
Dec. 19			4 a.m........	8.50	5,220	12 p.m.......	11.75	13,200
2 a.m........	9.45	7,450	9............	9.65	7,130			
6............	10.10	8,720	12 m.........	10.08	7,960	Jan. 18		
10...........	11.90	13,700	10 p.m.......	10.63	9,220	12 m.........	11.40	12,100
2 p.m........	13.60	20,300	12 p.m.......	10.95	10,100	12 p.m.......	10.90	10,600
6............	15.40	29,300						
9:30.........	16.18	33,700	Jan. 14					
12 p.m.......	15.87	31,900	7 a.m........	11.65	12,400			

295. Lake Almanor near Prattville, Calif.

Location.--Lat 40°10'30", long 121°05'25", in NW¼ sec.28, T.27 N., R.8 E., at outlet tower at dam on North Fork Feather River and 5 miles southeast of Prattville.

Drainage area.--506 sq mi.

Gage-height record.--Staff-gage read once daily. Datum of gage is at mean sea level.

Maxima.--December 1955 to January 1956: Contents, 446,000 acre-ft 12 p.m. Jan. 31 (elevation, 4,463.91 ft).

1913 to November 1955: Contents, 798,900 acre-ft June 9, 1928 (elevation, 4,480.5 ft).

Remarks.--Lake is formed by earthfill dam; storage began in July 1913; dam raised to elevation 4,455 ft above mean sea level in 1917 and to 4,515 ft above mean sea level in 1927. Usable capacity, 649,800 acre-ft between elevations 4,400 ft (bottom of outlet to river) and 4,474 ft (present upper storage limit). Water is diverted by tunnel to Butt Valley Reservoir for use in Caribou powerplant and some is released down North Fork Feather River (see station 296). Records show contents at 12 p.m. interpolated from readings made at 5 p.m. Contents are available for diversion to Butt Valley Reservoir except 15,700 acre-ft (below elevation, 4,429 ft) that can only be released down river.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	4,453.19	266,100	4,459.86	373,600	16	4,452.82	260,600	4,462.07	412,500
2	4,453.15	265,500	4,460.02	376,300	17	4,452.83	260,700	4,462.26	415,900
3	4,453.10	264,700	4,460.19	379,300	18	4,453.00	263,200	4,462.43	418,900
4	4,453.05	264,000	4,460.34	381,900	19	4,453.37	268,800	4,462.57	421,500
5	4,453.05	264,000	4,460.51	384,800	20	4,453.71	273,900	4,462.70	423,800
6	4,453.11	264,900	4,460.62	386,800	21	4,454.19	281,300	4,462.82	426,000
7	4,453.07	264,300	4,460.77	389,400	22	4,454.78	290,400	4,462.96	428,500
8	4,453.06	264,100	4,460.97	392,900	23	4,455.56	302,600	4,463.09	430,900
9	4,453.06	264,100	4,461.17	396,400	24	4,457.04	326,300	4,463.24	433,600
10	4,453.04	263,800	4,461.32	399,100	25	4,457.61	335,700	4,463.44	437,300
11	4,453.00	263,200	4,461.37	400,000	26	4,458.26	346,400	4,463.60	440,200
12	4,452.95	262,500	4,461.36	399,800	27	4,458.69	353,600	4,463.68	441,700
13	4,452.91	261,900	4,461.48	401,900	28	4,459.03	359,400	4,463.76	443,200
14	4,452.88	261,500	4,461.64	404,800	29	4,459.31	364,100	4,463.82	444,300
15	4,452.84	260,900	4,461.88	409,000	30	4,459.55	368,200	4,463.88	445,400
					31	4,459.75	371,700	4,463.91	446,000
Change in contents................................						-	+105,600	-	+74,300

296. North Fork Feather River near Prattville, Calif.

Location.--Lat 40°10', long 121°06', in SW¼ sec.28, T.27 N., R.8 E., on left bank 0.5 mile downstream from Almanor Dam, 5 miles southeast of Prattville, and 9 miles upstream from Butt Creek.

Drainage area.--507 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,380 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 17 cfs 1:30 p.m. Dec. 23 (gage height, 1.65 ft).

1905 to November 1955: Discharge, 10,000 cfs Mar. 19, 1907, before construction of dam (gage height, 16.2 ft, at former site), from rating curve extended above 3,700 cfs.

Remarks.--Flow regulated by Lake Almanor since 1913 (see station 295).

Mean discharge, in cubic feet per second, 1955-56, of North Fork Feather River near Prattville, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	6.2	7.8	11.....	6.7	7.8	21.....	10	8.3
2.....	6.2	7.2	12.....	6.7	7.8	22.....	12	8.3
3.....	6.2	7.2	13.....	6.7	8.3	23.....	13	8.3
4.....	6.2	7.8	14.....	6.7	8.3	24.....	9.4	8.3
5.....	6.2	7.8	15.....	6.7	10	25.....	8.3	8.3
6.....	6.7	7.8	16.....	6.7	9.4	26.....	10	8.3
7.....	6.7	7.8	17.....	6.7	8.3	27.....	8.8	8.3
8.....	6.7	7.8	18.....	6.7	8.3	28.....	8.3	8.3
9.....	6.7	7.8	19.....	9.4	8.3	29.....	7.8	8.3
10.....	6.7	7.8	20.....	8.8	8.3	30.....	7.8	8.3
						31.....	7.8	7.8
Monthly mean discharge, in cubic feet per second							7.73	8.14
Runoff, in acre-feet							475	501

297. Butt Creek above Almanor-Butt Creek tunnel, near Prattville, Calif.

Location.--Lat 40°11', long 121°11', in NW$\frac{1}{4}$ sec.22, T.27 N., R.7 E., on left bank 0.2 mile upstream from outlet of tunnel from Lake Almanor to Butt Creek and 2.2 miles southwest of Prattville.

Drainage area.--67.0 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 290 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 2,200 cfs 7 a.m. Dec. 22 (gage height, 5.16 ft).

1936-37, 1938 to November 1955: Discharge, 1,500 cfs Feb. 28, 1940 (gage height, 5.75 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	37	135	11.....	37	102	21.....	518	218
2.....	32	120	12.....	38	100	22.....	1,450	245
3.....	31	113	13.....	35	130	23.....	1,120	292
4.....	27	111	14.....	34	204	24.....	552	221
5.....	29	120	15.....	33	489	25.....	339	201
6.....	53	106	16.....	40	454	26.....	449	194
7.....	51	92	17.....	48	308	27.....	349	174
8.....	40	96	18.....	70	251	28.....	231	156
9.....	42	109	19.....	362	226	29.....	189	139
10.....	36	106	20.....	589	229	30.....	162	128
						31.....	145	118
Monthly mean discharge, in cubic feet per second							231	183
Runoff, in inches							3.98	3.16
Runoff, in acre-feet							14,220	11,280

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.......	1.64	87	2 p.m........	2.66	392	7 a.m........	3.95	1,100
			4............	2.71	412	10...........	4.19	1,290
Dec. 19			6............	2.88	490	12 m.........	3.95	1,100
4 a.m........	1.89	143	12 p.m.......	3.66	926	1 p.m........	4.01	1,150
7............	2.10	201				3............	4.37	1,450
10...........	2.34	275	Dec. 22			4............	4.38	1,460
12 m.........	2.53	340	3 a.m........	4.11	1,260	5............	4.30	1,390
3 p.m........	2.84	471	4............	4.33	1,440	8............	3.62	859
6............	3.03	565	5............	4.65	1,720	12 p.m.......	3.48	768
9............	3.11	606	6............	4.64	1,720			
12 p.m.......	3.16	633	7............	5.16	2,200	Dec. 24		
			8............	4.70	1,770	6 a.m........	3.25	632
Dec. 20			9............	4.55	1,620	12 m.........	3.06	530
1 a.m........	3.20	655	10...........	4.70	1,770	6 p.m........	2.92	460
2............	3.20	655	11...........	4.65	1,720	12 p.m.......	2.79	401
10...........	3.04	570	12 m.........	5.06	2,100			
12 m.........	3.05	575	1 p.m........	4.90	1,970	Dec. 25		
2 p.m........	3.05	575	6............	3.98	1,120	6 a.m........	2.66	349
5............	3.02	560	8............	3.81	992	12 m.........	2.60	325
8............	3.04	570	11...........	3.79	978	9............	2.60	325
10...........	3.04	570	12 p.m.......	3.65	880	12 p.m.......	2.55	308
12 p.m.......	2.99	545	Dec. 23			Dec. 26		
Dec. 21			3 a.m........	4.00	1,140	3 a.m........	2.51	295
12 m.........	2.69	404	4 a.m........	4.08	1,200	7 a.m........	2.68	357

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Butt Creek above Almanor-Butt Creek tunnel, near Prattville, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 26--Con.			Jan. 14			Jan. 15--Con.		
9 a.m.	2.61	329	4 a.m.	1.98	156	8 a.m.	2.63	337
12 m.	2.85	428	7	1.97	154	5 p.m.	3.28	649
2 p.m.	3.11	556	12 m.	2.08	179	6	3.29	654
6	3.23	622	6 p.m.	2.33	242	7	3.45	750
7	3.22	616	10	2.52	299	12 p.m.	3.24	627
12 p.m.	2.99	495	12 p.m.	2.56	312			
						Jan. 16		
Jan. 13			Jan. 15			6 a.m.	3.00	500
12 p.m.	2.01	162	5 a.m.	2.53	302	12 m.	2.87	436
						12 p.m.	2.66	349

298. Butt Creek below Almanor-Butt Creek tunnel, near Prattville, Calif.

Location.--Lat 40°11', long 121°11', in NW¼ sec.22, T.27 N., R.7 E., on right bank 400 ft downstream from outlet of tunnel from Lake Almanor to Butt Creek and 2.2 miles southwest of Prattville.

Drainage area.--67.3 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,070 cfs 1 p.m. Dec. 22 (gage height, 4.24 ft).
1938 to November 1955: Discharge, 2,170 cfs Mar. 30, 1940 (gage height, 4.37 ft).

Remarks.--Flow includes diversion from Lake Almanor except for period Dec. 20 to Jan. 11 when tunnel flow was shut down; December flood peak not affected.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	920	149	11	927	542	21	520	1,100
2	920	135	12	927	948	22	1,560	1,120
3	920	130	13	927	990	23	1,620	1,160
4	920	128	14	927	1,050	24	664	1,100
5	920	135	15	927	1,380	25	375	1,080
6	927	123	16	927	1,380	26	488	1,070
7	934	104	17	927	1,190	27	388	1,060
8	934	108	18	934	1,120	28	254	1,050
9	934	121	19	1,140	1,100	29	207	1,030
10	927	121	20	1,240	1,100	30	178	1,020
						31	162	1,000
Monthly mean discharge, in cubic feet per second							822	769
Runoff, in acre-feet							50,530	47,290

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.	2.84	948	6 p.m.	2.00	465	5 p.m.	4.13	1,970
			8	2.20	565	7	3.97	1,830
Dec. 19			12 p.m.	2.89	983	10	3.27	1,260
6 a.m.	2.86	962				12 p.m.	3.02	1,070
12 m.	2.97	1,040	Dec. 22					
5 p.m.	3.17	1,180	6 a.m.	3.91	1,780	Dec. 24		
6	3.44	1,390	8	4.12	1,960	4 a.m.	2.66	831
12 p.m.	3.59	1,510	11	4.14	1,980	12 m.	2.29	614
			1 p.m.	4.24	2,070	12 p.m.	1.96	447
Dec. 20			2	4.20	2,030	Dec. 25		
3 a.m.	3.61	1,530	4	3.80	1,680	12 p.m.	1.71	339
10	3.51	1,450	6	3.27	1,260			
2 p.m.	3.50	1,440	8	3.04	1,090	Dec. 26		
3	3.47	1,420	10	2.99	1,050	4 a.m.	1.67	324
5	3.19	1,190	12 p.m.	3.08	1,120	7	1.80	375
8	2.21	570				10	1.78	367
12 p.m.	2.16	545	Dec. 23			12 m.	1.93	434
			5 a.m.	3.71	1,610	3 p.m.	2.29	614
Dec. 21			7	3.73	1,630	6	2.42	687
2 p.m.	1.87	406	10	3.91	1,780	8	2.43	693
4 p.m.	1.89	416	1 p.m.	3.91	1,780	12 p.m.	2.20	565

299. Indian Creek near Crescent Mills, Calif.

Location.--Lat 40°05', long 120°56', in SW$\frac{1}{4}$ sec.25, T.26 N., R.9 E., on left bank 0.8 mile upstream from Dixie Creek and 1.5 miles south of town of Crescent Mills.

Drainage area.--746 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,800 cfs and by slope-area measurement of 31,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 31,500 cfs 12:30 a.m. Dec. 24 (gage height, 17.80 ft).

1906-9, 1911-18, 1930 to November 1955: Discharge, 14,000 cfs Feb. 28, 1940 (gage height, 16.07 ft), from rating curve extended above 4,000 cfs by logarithmic plotting.

Remarks.--Flow slightly regulated by Round Valley Reservoir and Taylor Lake (combined usable capacity, 5,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	77	1,540	11	105	1,280	21	3,960	2,160
2	80	1,340	12	98	1,190	22	12,100	2,030
3	79	1,100	13	96	1,450	23	25,400	2,300
4	70	1,060	14	92	2,040	24	22,700	2,330
5	75	1,530	15	88	3,090	25	7,110	2,080
6	165	1,400	16	92	6,180	26	5,620	2,220
7	133	1,550	17	105	4,870	27	7,920	2,170
8	118	1,910	18	208	3,380	28	4,710	1,840
9	141	1,500	19	2,060	2,610	29	3,070	1,620
10	120	1,410	20	3,840	2,300	30	2,110	1,390
						31	1,700	1,180
Monthly mean discharge, in cubic feet per second							3,363	2,066
Runoff, in inches							5.20	3.19
Runoff, in acre-feet							206,800	127,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 23--Con.			Dec. 28--Con.		
12 p.m.	2.55	128	6 p.m.	17.40	29,500	6 p.m.	8.76	4,090
			12 p.m.	17.78	31,400	12 p.m.	8.43	3,700
Dec. 18								
12 m.	2.59	134	Dec. 24			Dec. 29		
6 p.m.	3.07	220	12:30 a.m.	17.80	31,500	12 m.	7.79	3,050
12 p.m.	4.32	562	6	17.35	29,200	12 p.m.	7.20	2,490
			12 m.	16.20	23,500			
Dec. 19			4 p.m.	15.05	18,700	Jan. 13		
6 a.m.	5.48	1,050	8	13.90	14,900	12 p.m.	6.21	1,710
12 m.	7.20	2,070	12 p.m.	12.75	11,700			
8 p.m.	8.63	3,330				Jan. 14		
12 p.m.	8.82	3,540	Dec. 25			12 m.	6.65	2,040
			6 a.m.	11.32	8,240	12 p.m.	7.08	2,380
Dec. 20			12 m.	10.43	6,550			
12 m.	9.12	3,900	6 p.m.	9.74	5,400	Jan. 15		
12 p.m.	9.23	4,040	12 p.m.	9.32	4,790	12 m.	7.64	2,900
						6 p.m.	8.24	3,500
Dec. 21			Dec. 26			12 p.m.	8.88	4,240
6 a.m.	9.20	4,000	6 a.m.	9.18	4,600			
5 p.m.	8.98	3,740	12 m.	9.57	5,140	Jan. 16		
12 p.m.	9.45	4,350	6 p.m.	10.30	6,320	10 a.m.	10.47	6,630
			12 p.m.	11.22	8,040	3 p.m.	10.74	7,110
Dec. 22						12 p.m.	10.20	6,140
4 a.m.	10.00	5,200	Dec. 27					
7	11.00	7,000	6 a.m.	11.68	9,000	Jan. 17		
12 m.	13.10	12,000	10	11.58	8,760	12 m.	9.30	4,760
8 p.m.	15.20	19,300	3 p.m.	11.06	7,720	12 p.m.	8.54	3,830
12 p.m.	15.50	20,500	12 p.m.	10.17	6,090			
						Jan. 18		
Dec. 23			Dec. 28			12 m.	8.13	3,390
6 a.m.	15.70	21,300	5 a.m.	9.78	5,470	12 p.m.	7.63	2,890
12 m.	16.50	25,000	12 m.	9.11	4,510			

300. Spanish Creek above Blackhawk Creek at Keddie, Calif.

Location.--Lat 40°00'05", long 120°57'20", in NE¼ sec.27, T.25 N., R.9 E., on right bank 200 ft upstream from Blackhawk Creek and 0.9 mile southeast of Keddie.

Drainage area.--184 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,250 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,400 cfs and by slope-area measurement of 13,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 13,100 cfs 3:30 p.m. Dec. 23 (gage height, 12.47 ft in gage well, 13.3 ft outside, from floodmarks).

1933 to November 1955: Discharge, 12,400 cfs Dec. 11, 1937 (gage height, 12.43 ft), from rating curve extended above 4,400 cfs by logarithmic plotting.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	62	560	11	98	713	21	2,390	788
2	72	480	12	91	618	22	7,990	768
3	68	413	13	87	1,010	23	11,000	1,120
4	61	467	14	82	1,540	24	3,720	852
5	63	768	15	78	2,670	25	1,590	800
6	284	585	16	83	2,390	26	3,740	1,420
7	182	1,160	17	132	1,330	27	2,550	1,120
8	120	1,100	18	362	990	28	1,350	820
9	155	695	19	4,420	820	29	913	668
10	124	774	20	3,290	800	30	684	575
						31	585	500
Monthly mean discharge, in cubic feet per second							1,498	946
Runoff, in inches							9.38	5.92
Runoff, in acre-feet							92,080	58,140

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 27--Con.		
12 p.m.	2.58	165	8 a.m.	10.97	10,200	12 m.	5.70	2,310
			1 p.m.	10.65	9,630	12 p.m.	5.12	1,710
Dec. 18			4	9.25	7,160			
6 a.m.	2.71	201	7	8.30	5,630	Dec. 28		
4 p.m.	2.73	208	10	7.95	5,110	12 m.	4.66	1,310
7	3.20	390	12 p.m.	8.50	5,940	12 p.m.	4.38	1,080
9	4.05	840						
12 p.m.	4.82	1,440	Dec. 23			Jan. 12		
			2 a.m.	10.40	9,180	12 p.m.	3.64	607
Dec. 19			5	11.25	10,700			
4 a.m.	5.72	2,330	12 m.	12.15	12,500	Jan. 13		
8	6.05	2,700	3:30 p.m.	12.47	13,100	4 a.m.	3.80	695
2 p.m.	7.60	4,620	7	11.90	12,000	8	4.34	1,060
6	9.25	7,160	12 p.m.	9.30	7,250	12 p.m.	4.54	1,210
8	9.45	7,500						
10	9.32	7,280	Dec. 24			Jan. 14		
12 p.m.	8.75	6,340	9 a.m.	6.75	3,500	6 a.m.	4.81	1,430
			3 p.m.	6.15	2,800	2 p.m.	4.88	1,490
Dec. 20			12 p.m.	5.51	2,100	9	5.27	1,860
4 a.m.	7.30	4,210				12 p.m.	5.23	1,820
8	6.58	3,300	Dec. 25					
12 m.	6.20	2,860	12 m.	4.89	1,500	Jan. 15		
8 p.m.	5.86	2,490	12 p.m.	4.59	1,250	6 a.m.	5.12	1,710
12 p.m.	5.48	2,070				10	5.34	1,930
			Dec. 26			2 p.m.	6.00	2,640
Dec. 21			4 a.m.	4.64	1,290	6	7.09	3,940
6 a.m.	5.15	1,740	7	5.35	1,940	8	7.27	4,170
2 p.m.	5.00	1,600	12 m.	7.35	4,280	12 p.m.	6.90	3,690
6	5.80	2,420	3 p.m.	8.35	5,700			
9	7.10	3,950	6	8.72	6,290	Jan. 16		
12 p.m.	8.60	6,100	12 p.m.	7.27	4,170	6 a.m.	6.15	2,800
						12 m.	5.60	2,200
Dec. 22			Dec. 27			12 p.m.	5.01	1,610
2 a.m.	10.00	8,460	6 a.m.	6.28	2,950			

301. East Branch of North Fork Feather River near Rich Bar, Calif.

Location.--Lat 40°01', long 121°13', in NE¼ sec.20, T.25 N., R.7 E., on left bank 0.4 mile upstream from mouth and 1.5 miles west of Rich Bar.

Drainage area.--1,035 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 15,000 cfs and extended to peak stage on basis of studies of peaks at upstream and downstream stations.

Maxima.--December 1955 to January 1956: Discharge, 48,000 cfs 8 p.m. Dec. 23 (gage height, 16.52 ft).

1950 to November 1955: Discharge, 18,500 cfs Jan. 9, 1953 (gage height, 11.68 ft), from rating curve extended above 7,600 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	179	2,620	11.....	292	2,660	21.....	7,010	3,560
2.....	202	2,360	12.....	267	2,440	22.....	18,700	3,330
3.....	197	2,030	13.....	255	2,890	23.....	38,500	3,920
4.....	187	1,930	14.....	240	4,110	24.....	31,700	3,800
5.....	179	2,860	15.....	232	6,190	25.....	11,200	3,460
6.....	445	2,630	16.....	232	9,600	26.....	10,600	4,080
7.....	474	3,160	17.....	282	7,310	27.....	12,800	4,000
8.....	340	4,060	18.....	499	5,030	28.....	7,070	3,310
9.....	376	2,910	19.....	7,200	4,040	29.....	4,600	2,840
10.....	358	2,810	20.....	9,980	3,700	30.....	3,460	2,470
						31.....	2,860	2,120
Monthly mean discharge, in cubic feet per second......................							5,513	3,620
Runoff, in inches...							6.14	4.03
Runoff, in acre-feet..							339,000	222,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 23			Dec. 28--Con.		
12 p.m.......	3.52	324	3 a.m........	13.90	27,400	12 m.........	10.00	6,800
			6............	14.45	31,200	12 p.m.......	9.57	5,520
Dec. 18			9............	14.95	34,900			
6 a.m........	3.57	340	12 m.........	15.50	39,300	Jan. 12		
12 m.........	3.76	410	3 p.m........	16.20	45,100	12 p.m.......	8.01	2,380
4 p.m........	4.04	518	8............	16.52	48,000			
8............	4.53	718	12 p.m.......	16.25	45,600	Jan. 13		
12 p.m.......	5.10	980				8 a.m........	8.13	2,570
			Dec. 24			1 p.m........	8.40	3,040
Dec. 19			3 a.m........	15.80	41,700	6............	8.51	3,240
2 a.m........	5.55	1,240	6............	15.40	38,500	12 p.m.......	8.59	3,380
4............	6.70	2,180	10...........	14.80	33,700			
6............	7.40	3,060	2 p.m........	14.20	29,500	Jan. 14		
9............	8.35	4,740	6............	13.50	24,600	12 m.........	8.95	4,100
12 m.........	8.85	5,940	9............	13.00	21,600	12 p.m.......	9.30	4,850
3 p.m........	9.58	8,230	12 p.m.......	12.50	18,600			
6............	10.32	11,300				Jan. 15		
9............	10.95	14,400	Dec. 25			3 a.m........	9.35	4,980
11...........	11.13	15,300	4 a.m........	11.85	14,900	7............	9.36	5,000
12 p.m.......	11.12	15,300	8............	11.35	12,400	12 m.........	9.55	5,480
			12 m.........	10.90	10,200	4 p.m........	9.84	6,320
Dec. 20			6 p.m........	10.45	8,400	10...........	10.58	8,920
3 a.m........	10.93	13,600	12 p.m.......	10.14	7,290	12 p.m.......	10.68	9,320
8............	10.30	10,200						
2 p.m........	9.93	8,600	Dec. 26			Jan. 16		
12 p.m.......	9.67	7,460	3 a.m........	10.05	6,980	2 a.m........	10.71	9,440
			8............	10.18	7,430	5............	10.68	9,320
Dec. 21			12 m.........	10.71	9,440	4 p.m........	10.84	9,980
12 m.........	9.30	6,230	3 p.m........	11.30	12,100	8............	10.80	9,800
3 p.m........	9.27	6,140	6............	11.78	14,500	12 p.m.......	10.62	9,080
7............	9.54	6,770	9............	11.95	15,400			
9............	9.90	7,850	12 p.m.......	11.87	15,000	Jan. 17		
12 p.m.......	10.60	10,200				12 m.........	10.12	7,220
			Dec. 27			12 p.m.......	9.64	5,720
Dec. 22			12 m.........	11.55	13,400			
2 a.m........	11.20	12,800	6 p.m........	11.12	11,200	Jan. 18		
6............	11.95	16,100	12 p.m.......	10.70	9,400	12 m.........	9.36	5,000
12 m.........	12.60	19,500				12 p.m.......	9.10	4,400
6 p.m........	12.95	21,400	Dec. 28					
12 p.m.......	13.52	24,700	6 a.m........	10.30	7,850			

302. Bucks Lake near Bucks Lodge, Calif.

(Formerly published as Bucks Creek Reservoir near Bucks Ranch)

Location.--Lat 39°53'45", long 121°12'10", in NW¼ sec.33, T.24 N., R.7 E., in intake tower No. 2, upstream from dam on Bucks Creek, 2 miles northwest of Bucks Lodge and 15 miles west of Quincy.

Drainage area.--28 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Feather River Power Co.).

Maxima.--December 1955 to January 1956: Contents, 73,800 acre-ft Jan. 27-29 (elevation, 5,138.7 ft).

1928 to November 1955: Contents, 105,800 acre-ft June 23, 1938 (elevation, 5,157.1 ft).

Remarks.--Reservoir is formed by concrete-faced rockfill dam completed in 1927; storage began in May 1927. Capacity, 101,400 acre-ft between elevations 5,064.75 ft (sill of outlet gate) and 5,154.85 ft (spillway crest) above mean sea level. Released water flows down Bucks Creek to Lower Bucks Lake, where it enters tunnel that discharges into Grizzly Creek, thence to Bucks Creek powerhouse. Records show total contents at 12 p.m., of which 274 acre-ft is not available for release.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	5,108.5	30,700	5,130.8	61,200	16	5,107.4	29,400	5,135.1	68,000
2	5,108.3	30,500	5,131.6	62,500	17	5,107.5	29,500	5,135.5	68,600
3	5,108.3	30,500	5,131.9	62,900	18	5,107.5	29,500	5,135.8	69,100
4	5,108.4	30,600	5,132.2	63,400	19	5,107.6	29,600	5,136.1	69,600
5	5,108.5	30,700	5,132.5	63,900	20	5,111.7	34,600	5,136.5	70,200
6	5,108.6	30,800	5,132.6	64,000	21	5,113.7	37,000	5,136.8	70,700
7	5,108.5	30,700	5,133.0	64,600	22	5,120.7	46,400	5,137.2	71,300
8	5,108.5	30,700	5,133.0	64,600	23	5,125.9	53,900	5,137.6	72,000
9	5,108.5	30,700	5,133.0	64,600	24	5,126.2	54,300	5,137.9	72,500
10	5,108.4	30,600	5,133.0	64,600	25	5,127.3	55,900	5,138.2	72,900
11	5,108.4	30,600	5,133.0	64,600	26	5,129.0	58,500	5,138.6	73,600
12	5,108.3	30,500	5,132.9	64,500	27	5,129.6	59,400	5,138.7	73,800
13	5,108.2	30,400	5,133.1	64,800	28	5,130.0	60,000	5,138.7	73,800
14	5,107.9	30,000	5,133.5	65,400	29	5,130.0	60,000	5,138.7	73,800
15	5,107.7	29,800	5,134.6	67,200	30	5,130.8	61,200	5,138.6	73,600
					31	5,130.8	61,200	5,138.4	73,300
Change in contents................................						-	+30,400	-	+12,100

303. North Fork Feather River at Big Bar, Calif.

Location.--Lat 39°48', long 121°27', in NE¼ sec.6, T.22 N., R.5 E., on left bank between railroad and highway bridges, 0.2 mile downstream from Big Bar and 6 miles upstream from intake of powerplant at Big Bend.

Drainage area.--1,945 sq mi.

Gage-height record.--Water-stage recorder graph except 5 a.m. Dec. 28 to 8:30 a.m. Dec. 29. Altitude of gage is 1,320 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 34,000 cfs, and extended above by logarithmic plotting. Discharge for Dec. 28, 29 estimated on basis of partial record and normal recession from peak flow.

Maxima.--December 1955 to January 1956: Discharge, 72,400 cfs 10 a.m. Dec. 23 (gage height, 30.60 ft).

1911-37, 1939 to November 1955: Discharge, 66,900 cfs Dec. 11, 1937 (gage height, 29.7 ft, from floodmarks), from rating curve extended above 34,000 cfs by logarithmic plotting.

Remarks.--Flow regulated by Lake Almanor (see station 295), Bucks Lake (see station 302), and Butt Valley Reservoir.

Mean discharge, in cubic feet per second, 1955-56, of North Fork Feather River at Big Bar, Calif.

Day	December	January	Day	December	January	Day	December	January
1	1,840	5,630	11	1,190	5,920	21	22,000	8,000
2	1,720	5,190	12	1,640	5,490	22	46,700	7,840
3	1,490	4,710	13	1,940	6,990	23	59,800	8,710
4	1,460	4,840	14	2,030	10,800	24	34,200	7,960
5	1,570	6,500	15	2,060	16,300	25	15,500	7,670
6	2,770	5,820	16	2,050	15,800	26	20,500	8,750
7	1,940	7,090	17	2,320	10,900	27	18,900	8,440
8	1,950	7,890	18	3,020	9,850	28	13,000	7,250
9	2,080	6,320	19	19,500	8,510	29	8,500	6,470
10	1,910	6,220	20	24,700	8,300	30	7,000	5,870
						31	6,100	5,450
Monthly mean discharge, in cubic feet per second							10,690	7,790
Runoff, in acre-feet							657,300	479,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 17		
12 p.m.	5.25	2,620
Dec. 18		
1 a.m.	5.05	2,460
2	5.00	2,420
6	5.04	2,450
7	4.90	2,340
9	4.85	2,300
10	4.75	2,220
12 m.	4.80	2,260
2 p.m.	4.93	2,360
4	5.15	2,540
6	5.50	2,820
8	5.90	3,180
9	8.20	5,640
10	8.40	5,880
11	8.95	6,580
12 p.m.	9.10	6,780
Dec. 19		
1 a.m.	9.35	7,100
2	9.90	7,860
6	10.70	8,980
7	11.32	9,910
8	12.00	11,000
9	13.89	14,600
10	14.50	15,900
11	15.40	18,000
12 m.	16.05	19,700
1 p.m.	16.85	22,000
2	17.00	22,400
5	18.75	27,800
8	20.20	32,500
10	20.06	32,000
12 p.m.	19.75	31,000
Dec. 20		
4 a.m.	19.15	29,100
5	19.10	28,900
7	18.60	27,300
1 p.m.	17.37	23,500
2	17.35	23,400
3	17.38	23,500
4	17.35	23,400
5	17.20	23,000
8	16.25	20,300
12 p.m.	15.26	17,700
Dec. 21		
3 a.m.	14.75	16,500
4	14.70	16,300
5	14.60	16,100
7	14.50	15,900
9	14.37	15,600
10	14.28	15,400
12 m.	14.07	15,000
1 p.m.	14.15	15,100
2	14.50	15,900
3	15.00	17,100
4	15.95	19,500
5	17.15	22,800
6	18.20	26,000
7	19.30	29,600
8	20.54	33,600
9	21.90	38,300
10	22.70	41,000
11	23.56	44,000
12 p.m.	24.25	46,500
Dec. 22		
3 a.m.	25.55	51,200
4	25.37	50,500
6	24.85	48,700
8	25.19	49,900
9	25.19	49,900
10	25.05	49,400
3 p.m.	23.00	42,000
6	22.50	40,300
7	22.65	40,800
8	22.95	41,800
9	23.55	44,000
10	25.00	49,200
11	26.15	53,400
11:30	24.10	46,000
12 p.m.	27.50	59,500
Dec. 23		
12:30 a.m.	24.10	47,400
1	25.52	52,300
2	29.06	66,200
3	28.76	65,000
4	27.54	60,200
5	28.09	62,400
6	28.80	65,200
7	29.10	66,400
8	29.40	67,600
9	29.80	69,200
10	30.60	72,400
11	30.30	71,200
12 m.	29.10	66,400
1 p.m.	28.90	65,600
3	27.34	59,400
3:30	27.10	58,400
4	26.71	56,800
7	25.60	52,600
8	25.25	51,400
9	25.21	51,200
11	23.60	45,600
11:30	24.10	47,400
12 p.m.	23.50	45,200
Dec. 24		
1 a.m.	23.75	46,100
2	23.45	45,100
3	22.80	42,800
4	22.90	43,200
5	22.20	40,700
6	22.00	40,000
7	21.70	39,100
8	20.80	36,400
9	21.10	37,300
11	20.50	35,500
12 m.	19.85	33,600
1 p.m.	19.55	32,600
2	19.45	32,400
6	17.95	27,900
9	17.00	25,300
10	16.75	24,600
11	16.40	23,700
12 p.m.	15.75	22,000
Dec. 25		
1 a.m.	15.35	21,000
2	15.45	21,300
6	14.20	18,200
7	13.45	16,500
8	16.60	24,300
9 a.m.	12.90	15,300
Dec. 25--Con.		
10 a.m.	12.75	15,000
11	13.16	15,900
12 m.	9.50	8,950
1 p.m.	8.20	6,820
2	11.40	12,400
3	12.20	13,900
4	14.00	17,700
4:30	11.70	12,900
5	13.21	16,000
5:30	10.50	10,700
6	11.10	11,800
7	12.30	14,100
8	12.00	13,500
10	11.25	12,100
11	11.10	11,800
12 p.m.	11.35	12,300
Dec. 26		
1 a.m.	11.60	12,700
2	11.40	12,400
3	10.40	10,500
4	10.20	10,200
5	13.10	15,700
6	10.60	10,900
7	12.44	14,400
8	13.74	17,100
9	14.90	19,900
10	19.30	31,900
11	15.60	21,700
12 m.	12.70	14,900
1 p.m.	18.10	28,300
2	16.25	23,400
3	16.80	24,800
4	16.10	23,000
5	17.50	26,600
6	18.25	28,800
7	15.85	22,300
8	17.60	26,900
9	17.60	26,900
10	16.90	25,000
11	17.20	25,800
12 p.m.	16.70	24,500
Dec. 27		
2 a.m.	16.20	23,200
4	15.35	21,000
6	15.00	20,100
9	14.65	19,300
10	13.54	16,700
11	15.39	21,100
12 m.	14.45	18,800
2 p.m.	14.19	18,200
4	14.10	17,900
8	13.45	16,500
10	13.00	15,500
12 p.m.	12.90	15,300
Jan. 12		
12 p.m.	7.23	5,380
Jan. 13		
1 a.m.	7.24	5,400
9	8.10	6,660
2 p.m.	8.42	7,170
8	8.94	8,000
12 p.m.	9.54	9,020
Jan. 14		
3 a.m.	9.71	9,310

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of North Fork Feather River at Big Bar, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 14--Con.			Jan. 15--Con.			Jan. 16--Con.		
5:30 a.m.....	9.18	8,410	5 p.m........	14.70	19,400	12 p.m.......	11.80	13,100
12 m.........	10.23	10,200	9............	14.10	17,900			
5 p.m........	11.75	13,000	10...........	14.77	19,500	Jan. 17		
6............	11.67	12,900	12 p.m.......	14.55	19,000	1 a.m........	11.45	12,500
10...........	11.76	13,000				2:30.........	9.95	9,720
12 p.m.......	12.07	13,600	Jan. 16			12 m.........	11.00	11,600
			5 a.m........	13.51	16,600	2 p.m........	10.82	11,300
Jan. 15			8............	13.18	15,900	3............	10.41	10,500
4 a.m........	11.97	13,400	5 p.m........	12.80	15,100	5............	10.69	11,000
6............	11.64	12,800	9............	12.55	14,600	7............	10.46	10,600
3 p.m........	14.40	18,700	11 p.m.......	12.50	14,500	10...........	10.76	11,200
						12 p.m.......	10.61	10,900

304. Concow Creek near Yankee Hill, Calif.

(Gaging station, discontinued 1952)

Location.--Lat 39°46', long 121°32', in NE$\frac{1}{4}$ sec.16, T.22 N., R.4 E., at Lake Wilenor Dam 4 miles north of Yankee Hill post office. Altitude is 1,850 ft (from topographic map).

Drainage area.--14.7 sq mi.

Discharge record.--Peak discharge by computation of flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 2,300 cfs Dec. 23.
1927-52: Discharge, 2,260 cfs Feb. 1, 1952 (gage height, 5.75 ft), by computation of flow over dam.

Remarks.--Flow regulated by Lake Wilenor.

305. West Branch Feather River near Yankee Hill, Calif.

Location.--Lat 39°41'55", long 121°33'38", in SE$\frac{1}{4}$SE$\frac{1}{4}$ sec.6, T.21 N., R.4 E., on right bank 800 ft upstream from highway bridge, 1.7 miles downstream from Concow Creek, 2.1 miles west of Yankee Hill, and 4.9 miles southeast of Paradise.

Drainage area.--145 sq mi.

Gage-height record.--Water-stage recorder graph except 9 p.m. Dec. 21 to 10 a.m. Dec. 28. Altitude of gage is 650 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 15,000 cfs. Discharge for period of no gage-height record estimated on basis of records for Big Chico Creek near Chico and Butte Creek near Chico.

Maxima.--December 1955 to January 1956: Discharge, 21,300 cfs, time unknown, Dec. 22 (gage height, 30.2 ft).
1930 to November 1955: Discharge, 21,400 cfs Dec. 11, 1937 (gage height, 30.3 ft).

Remarks.--Flows slightly affected by regulation.

Mean discharge, in cubic feet per second 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	33	1,050	11.....	85	1,220	21.....	8,700	1,720
2.....	51	872	12.....	81	984	22.....	15,000	1,820
3.....	26	788	13.....	67	1,870	23.....	10,000	1,980
4.....	15	1,040	14.....	59	5,210	24.....	5,000	1,420
5.....	43	1,520	15.....	53	7,840	25.....	2,500	1,540
6.....	1,020	1,240	16.....	63	4,500	26.....	4,500	2,150
7.....	296	3,070	17.....	290	2,580	27.....	3,200	1,620
8.....	136	2,470	18.....	1,370	1,840	28.....	2,280	1,240
9.....	235	1,400	19.....	8,170	1,510	29.....	1,610	1,020
10.....	127	1,380	20.....	7,460	1,720	30.....	1,230	884
						31.....	1,020	780
Monthly mean discharge, in cubic feet per second........................							2,410	1,944
Runoff, in inches..							19.16	15.46
Runoff, in acre-feet...							148,200	119,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of West Branch Feather River near Yankee Hill, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 20			Jan. 14		
12 p.m.	3.34	95	1 a.m.	18.75	9,580	2 a.m.	11.40	3,280
			5	18.78	9,600	6	12.09	3,810
Dec. 17			1 p.m.	15.40	6,560	9	12.80	4,380
2 a.m.	4.05	188	3	15.83	6,950	6 p.m.	16.08	7,170
7	3.90	167	10	13.88	5,240	12 p.m.	15.10	6,290
12 m.	4.10	195	12 p.m.	13.58	5,000			
4 p.m.	4.96	358				Jan. 15		
12 p.m.	5.79	587	Dec. 21			2 a.m.	14.76	5,980
			3 a.m.	12.60	4,220	6	14.90	6,110
Dec. 18			5	12.41	4,070	8	15.45	6,600
4 a.m.	6.26	728	8	12.73	4,320	2 p.m.	19.17	9,970
7	6.31	743	1 p.m.	12.75	4,340	3:30	19.35	10,200
11	6.21	713	3	14.10	5,420	8	17.90	8,810
2 p.m.	6.39	767	6	20.00	10,800	12 p.m.	15.70	6,830
5	7.95	1,320	9	27.60	18,500			
8	10.30	2,570	12 p.m.	30.00	21,100	Jan. 16		
10	11.97	3,720				6 a.m.	13.75	5,140
12 p.m.	12.13	3,840	Jan. 12			12 m.	12.59	4,210
			12 p.m.	7.27	928	12 p.m.	11.21	3,150
Dec. 19								
3 a.m.	12.09	3,810	Jan. 13			Jan. 17		
5	12.71	4,310	3 a.m.	7.39	976	6 a.m.	10.69	2,780
9	16.25	7,320	7	8.61	1,540	12 p.m.	9.62	2,120
3 p.m.	19.55	10,400	12 m.	9.67	2,150			
4	19.55	10,400	4 p.m.	9.60	2,110			
7	21.65	12,400	8	10.00	2,350			
12 p.m.	18.95	9,760	12 p.m.	10.82	2,870			

306. Feather River near Oroville, Calif.

Location.--Lat 39°32'00", long 121°28'35", in NE¼ sec.2, T.19 N., R.4 E., on left bank 75 ft upstream from bridge on Feather River Highway, 1.9 miles downstream from North Fork, and 4 miles northeast of Oroville business district.

Drainage area.--3,611 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 182.02 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 203,000 cfs 12:30 p.m. Dec. 23 (gage height, 76.77 ft).

1902 to November 1955: Discharge observed, 230,000 cfs Mar. 19, 1907 (gage height, 28.2 ft, reading on Weather Bureau staff gage at bridge in Oroville, equivalent to 39.3 ft at staff gage at cable, 1,000 ft upstream; probably had been higher during night).

Remarks.--Flow partly regulated by Lake Almanor (see station 295), Bucks Lake (see station 302), Butt Valley Reservoir, and smaller reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2,550	13,500	11	2,260	13,300	21	49,500	19,000
2	2,630	12,000	12	2,570	12,200	22	150,000	19,000
3	2,200	10,700	13	2,780	16,500	23	172,000	22,500
4	1,980	11,200	14	2,900	35,000	24	90,800	18,800
5	2,180	14,800	15	2,770	59,500	25	43,300	19,000
6	8,450	14,500	16	2,920	49,100	26	62,300	22,300
7	5,170	17,700	17	4,620	31,500	27	49,600	20,500
8	3,370	19,500	18	7,110	24,300	28	31,200	16,700
9	3,920	14,200	19	50,500	19,900	29	20,400	14,800
10	3,490	13,800	20	65,900	19,300	30	16,700	13,400
						31	14,500	12,400
Monthly mean discharge, in cubic feet per second							28,410	20,030
Runoff, in inches							9.07	6.39
Runoff, in acre-feet							‡1,747	‡1,232

‡ Expressed in thousands.

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Feather River near Oroville, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 23--Con.			Dec. 29		
12 p.m.	9.26	3,140	12:30 p.m.	76.77	203,000	4 a.m.	30.06	22,000
			5	72.81	181,000	6	30.76	22,900
Dec. 17			9	67.66	154,000	12 m.	29.56	21,300
2 a.m.	10.68	3,990	12 p.m.	63.81	135,000	4 p.m.	28.81	20,200
1 p.m.	11.18	4,290				6	27.16	18,100
8	13.41	5,730	Dec. 24			10	25.06	15,700
12 p.m.	13.66	5,890	4 a.m.	60.16	117,000	12 p.m.	25.21	15,900
			8	56.48	99,200			
Dec. 18			10	54.71	91,200	Jan. 12		
5 a.m.	14.28	6,330	2 p.m.	52.56	81,500	12 p.m.	21.28	11,800
3 p.m.	13.61	5,860	6	50.56	72,800			
8	16.26	7,830	9	48.96	66,400	Jan. 13		
12 p.m.	23.26	14,600	12 p.m.	47.41	60,200	3 a.m.	21.48	12,000
						6	23.01	13,600
Dec. 19			Dec. 25			12 m.	26.46	17,300
2 a.m.	28.26	20,500	4 a.m.	45.18	52,200	3 p.m.	27.23	18,200
9	33.56	28,200	9	42.28	44,300	6	27.61	18,700
12 m.	40.56	41,900	10	44.04	48,700	9	28.48	19,800
4 p.m.	48.76	67,300	12 m.	40.71	40,800	12 p.m.	30.21	22,200
6	51.86	79,400	2 p.m.	39.96	39,200			
10	55.56	95,000	4	36.09	31,600	Jan. 14		
12 p.m.	54.86	91,900	6	40.08	39,400	3 a.m.	32.53	25,600
			8:30	37.63	34,500	6	33.61	27,300
Dec. 20			10	38.49	36,200	9	34.46	28,700
6 a.m.	50.81	75,200	12 p.m.	37.44	34,200	12 m.	37.56	34,400
10	49.06	68,400				3 p.m.	40.81	41,000
4 p.m.	45.41	55,900	Dec. 26			6	42.71	45,400
8	44.86	54,200	2 a.m.	36.49	32,300	12 p.m.	42.16	44,000
12 p.m.	42.16	46,000	5	37.26	33,800			
			6	36.86	33,000	Jan. 15		
Dec. 21			8	41.06	41,600	2 a.m.	41.82	43,200
6 a.m.	38.78	37,900	10	47.16	59,200	7	42.51	44,900
10	37.81	35,900	1 p.m.	54.26	89,200	9	44.16	49,100
1 p.m.	37.46	35,200	2	51.86	78,400	12 m.	47.76	61,600
3	37.42	35,100	4	54.26	89,200	4 p.m.	51.18	75,400
6	41.26	43,700	7	53.34	85,000	6	51.66	77,500
8	47.16	61,700	9	52.11	79,500	12 p.m.	49.21	67,400
10	55.16	93,200	11	49.96	70,400			
12 p.m.	64.16	139,000	12 p.m.	50.16	71,200	Jan. 16		
						6 a.m.	45.76	54,300
Dec. 22			Dec. 27			12 m.	43.88	48,300
2 a.m.	69.06	161,000	4 a.m.	47.26	59,600	6 p.m.	40.91	41,200
5	71.76	175,000	8	44.66	50,600	12 p.m.	39.13	37,500
8	70.98	171,000	1 p.m.	42.36	44,500			
10	71.66	175,000	2	43.01	46,100	Jan. 17		
2 p.m.	66.56	149,000	5	41.88	43,400	3 a.m.	38.16	35,600
6	61.26	122,000	8	41.26	42,000	5	36.96	33,200
9	59.86	115,000	12 p.m.	39.81	38,900	6	37.46	34,200
12 p.m.	65.36	143,000				12 m.	36.09	31,600
			Dec. 28			6 p.m.	34.41	28,600
Dec. 23			5 a.m.	38.31	35,900	12 p.m.	33.44	27,000
2:30 a.m.	71.27	172,000	10	36.69	32,700			
4	68.56	159,000	5 p.m.	34.16	28,200	Jan. 18		
6	70.16	167,000	8	32.11	24,900	12 m.	31.85	24,500
10 a.m.	74.16	188,000	12 p.m.	31.11	23,400	8 p.m.	30.21	22,200
						12 p.m.	29.91	21,800

307. South Honcut Creek near Bangor, Calif.

Location.--Lat 39°22'05", long 121°22'15", in SE¼ sec.35, T.18 N., R.5 E., on right bank 2.3 miles southeast of Bangor and 3.3 miles upstream from Tennessee Creek.

Drainage area.--30.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 620 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,200 cfs, and by slope-area measurement of 6,340 cfs.

Maxima.--December 1955 to January 1956: Discharge, 6,340 cfs 1 p.m. Dec. 23 (gage height, 11.15 ft).

1950 to November 1955: Discharge, 3,170 cfs Nov. 20, 1950 (gage height, 8.68 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	7.3	192	11	15	95	21	474	141
2	10	118	12	13	78	22	1,260	396
3	5.7	87	13	10	275	23	1,440	270
4	3.5	158	14	8.2	1,180	24	354	153
5	14	144	15	7.2	1,690	25	150	416
6	868	95	16	11	442	26	1,050	509
7	69	440	17	94	217	27	275	353
8	32	264	18	289	150	28	138	204
9	53	130	19	1,670	125	29	96	146
10	22	119	20	533	192	30	80	117
						31	107	98
Monthly mean discharge, in cubic feet per second							295	290
Runoff, in inches							11.17	10.97
Runoff, in acre-feet							18,170	17,840

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.	2.83	20	7 p.m.	6.35	882	4 a.m.	4.20	166
			8	6.14	770	6	4.82	305
Dec. 17			10	7.40	1,630	8	5.88	677
8 a.m.	2.75	17	12 p.m.	8.35	2,640	9	7.40	1,630
12 m.	2.83	20				11	8.97	3,380
3 p.m.	3.18	42	Dec. 22			1 p.m.	7.00	1,290
4	3.60	78	1 a.m.	8.72	3,080	3	8.40	2,700
5	4.75	265	2	8.12	2,390	5	6.60	1,030
6	4.98	322	3	8.17	2,450	8	5.79	641
12 p.m.	4.17	150	5	7.25	1,500	12 p.m.	5.29	449
			7	6.54	987			
Dec. 18			8	6.55	992	Jan. 12		
6 a.m.	3.73	92	9	7.09	1,360	12 p.m.	3.45	72
1 p.m.	3.47	65	10	7.03	1,310			
3	3.53	71	2 p.m.	5.85	632	Jan. 13		
5	4.00	125	6	5.37	440	3 a.m.	3.47	74
6	5.00	327	8	5.82	619	5	3.63	90
8	5.92	664	10	7.17	1,430	7	4.15	158
10	6.50	965	11	7.43	1,660	9	5.12	392
12 p.m.	7.28	1,520	12 p.m.	7.30	1,540	1 p.m.	5.22	425
						7	4.12	153
Dec. 19			Dec. 23			12 p.m.	5.85	665
3 a.m.	6.40	910	1 a.m.	7.71	1,940			
5	5.96	682	3	6.60	1,020	Jan. 14		
6	5.95	678	6	5.87	642	8 a.m.	5.85	665
10	6.55	992	9	5.70	565	10	6.60	1,030
12 m.	7.50	1,730	11	6.50	965	12 m.	7.00	1,290
4 p.m.	9.00	3,420	12 m.	8.20	2,480	3 p.m.	7.87	2,120
6	8.10	2,370	1 p.m.	11.15	6,340	12 p.m.	6.48	964
8	8.45	2,760	2	8.50	2,820			
10	7.30	1,540	4	7.40	1,630	Jan. 15		
12 p.m.	6.72	1,090	5	7.40	1,630	2 a.m.	6.39	915
			8	6.50	975	5	7.42	1,650
Dec. 20			12 p.m.	5.76	629	9	7.05	1,330
2 a.m.	6.45	938				11	8.65	3,000
3	6.50	965	Dec. 24			12 m.	8.50	2,820
11	5.42	457	9 a.m.	5.00	356	2	8.60	2,940
4 p.m.	5.00	327	6 p.m.	4.60	250	5	7.55	1,780
12 p.m.	4.52	215	12 p.m.	4.37	198	12 p.m.	6.00	730
			Dec. 25					
Dec. 21			12 m.	4.05	142	Jan. 16		
6 a.m.	4.25	164	12 p.m.	3.85	116	6 a.m.	5.48	518
12 m.	4.08	136				12 m.	5.15	402
3 p.m.	4.10	139	Dec. 26			12 p.m.	4.73	282
5 p.m.	4.47	205	2 a.m.	3.83	113			

308. Middle Yuba River at Milton, Calif.

Location.--Lat 39°31'22", long 120°35'01", in SW¼ sec.12, T.19 N., R.12 E., on right bank at diversion dam of Nevada Irrigation District, at old townsite of Milton, 4 miles southeast of Sierra City and 8 miles upstream from South Fork of Middle Yuba River.

Drainage area.--39.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,700 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,500 cfs and extended above by weir formula.

Maxima.--December 1955 to January 1956: Discharge, 6,680 cfs 4 a.m. Dec. 23 (gage height, 4.15 ft).
1925-34, 1935 to November 1955: Discharge, 6,800 cfs Dec. 11, 1937 (gage height, 4.18 ft).

Remarks.--Milton-Bowman tunnel diverts water above station to Bowman Lake; floodflow only slightly affected.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	0	11.....	0	0.7	21.....	416	73
2.....	0	0	12.....	0	1.0	22.....	3,610	99
3.....	0	0	13.....	0	11	23.....	5,090	143
4.....	0	0	14.....	0	58	24.....	733	88
5.....	0	0	15.....	0	441	25.....	128	73
6.....	0	0	16.....	0	522	26.....	165	26
7.....	0	0	17.....	0	221	27.....	26	30
8.....	0	0	18.....	0	143	28.....	0	54
9.....	0	.1	19.....	63	110	29.....	0	68
10.....	0	7.0	20.....	327	94	30.....	0	46
						31.....	0	26
Monthly mean discharge, in cubic feet per second							341	75.3
Runoff, in acre-feet							20,940	4,630

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.......	-	0	12 p.m.......	3.20	4,380	6 a.m........	0.17	30
						12 m.........	.58	263
Dec. 19			Dec. 23			4 p.m........	.65	316
3 p.m........	-	0	2 a.m........	3.88	6,000	12 p.m.......	.37	126
4............	0.25	63	4............	4.15	6,680			
5............	.46	181	6............	3.95	6,180	Dec. 27		
12 p.m.......	.50	207	8............	4.05	6,420	3 a.m........	.29	83
			2 p.m........	3.95	6,180	9............	.12	13
Dec. 20			6............	2.90	3,730	12 m.........	.02	.4
11 a.m.......	.73	380	12 p.m.......	1.72	1,600	1 p.m........	-	0
12 p.m.......	.67	331				Jan. 14		
			Dec. 24			12 p.m.......	.35	116
Dec. 21			6 a.m........	1.25	935			
1 p.m........	.57	256	12 m.........	.98	619	Jan. 15		
6............	.73	380	12 p.m.......	.59	270	6 a.m........	.37	126
9............	1.03	673				12 m.........	.60	277
12 p.m.......	1.53	1,320	Dec. 25			8 p.m........	1.28	974
			12 m.........	.33	104	12 p.m.......	1.18	846
Dec. 22			12 p.m.......	.18	34			
3 a.m........	2.24	2,450				Jan. 16		
11...........	3.60	5,320	Dec. 26			6 a.m........	.97	608
8 p.m........	2.35	2,650	3 a.m........	.13	16	12 p.m.......	.63	300

309. Middle Yuba River above Oregon Creek, Calif.

Location.--Lat 39°23'35", long 121°04'50", in SE¼ sec.28, T.18 N., R.8 E., on left bank 1,000 ft upstream from Oregon Creek and 2 miles northeast of North San Juan.

Drainage area.--162 sq mi.

Gage-height record.--Water-stage recorder graph except 1 a.m. Jan. 22 to 2:30 p.m. Jan. 26. Altitude of gage is 1,440 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,200 cfs and by slope-area measurement at 19,500 cfs. Discharge for period of no gage-height record estimated on basis of records for Oregon Creek near North San Juan.

Maxima.--December 1955 to January 1956: Discharge, 26,400 cfs 9 a.m. Dec. 22 (gage height, 17.25 ft).

1941 to November 1955: Discharge, 19,500 cfs Nov. 21, 1950 (gage height, 15.25 ft).

Remarks.--Flows slightly affected by diversion to Bowman Lake.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	210	905	11.....	181	930	21.....	3,780	1,210
2.....	126	820	12.....	165	880	22.....	18,900	1,380
3.....	88	726	13.....	152	1,210	23.....	19,200	1,800
4.....	73	830	14.....	141	2,800	24.....	6,410	1,400
5.....	92	1,450	15.....	134	5,450	25.....	2,900	1,500
6.....	880	1,070	16.....	160	4,420	26.....	4,230	1,900
7.....	388	1,040	17.....	402	2,500	27.....	3,020	1,650
8.....	220	995	18.....	593	1,700	28.....	1,760	1,240
9.....	300	935	19.....	3,720	1,370	29.....	1,330	1,050
10.....	232	970	20.....	4,620	1,180	30.....	1,080	906
						31.....	930	822
Monthly mean discharge, in cubic feet per second......................							2,465	1,517
Runoff, in inches..							17.54	10.80
Runoff, in acre-feet...							151,600	93,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 22--Con.			Dec. 27		
12 p.m.......	3.58	270	6 a.m........	16.50	23,600	12 m.........	7.60	2,860
Dec. 17			9............	17.25	26,400	12 p.m.......	6.93	2,120
6 a.m........	3.92	367	12 m.........	16.50	23,600	Jan. 12		
1 p.m........	3.86	348	3 p.m........	14.40	17,000	12 m.........	5.05	855
12 p.m.......	4.52	604	8............	12.98	13,200	Jan. 13		
Dec. 18			12 p.m.......	14.15	16,300	3 a.m........	5.10	880
3 a.m........	4.58	631	Dec. 23			9............	5.52	1,090
5 p.m........	4.17	458	2 a.m........	15.07	19,000	6 p.m........	5.98	1,370
9............	4.63	654	4............	14.73	18,000	12 p.m.......	6.58	1,800
12 p.m.......	5.40	1,030	6............	15.07	19,000	Jan. 14		
Dec. 19			8............	14.98	18,700	6 a.m........	6.98	2,170
2 a.m........	6.08	1,440	12 m.........	16.90	25,000	12 m.........	7.62	2,880
5............	6.68	1,890	1 p.m........	17.02	25,500	7 p.m........	8.15	3,560
11...........	8.00	3,360	4............	16.37	23,100	12 p.m.......	8.07	3,450
6 p.m........	9.73	5,940	8............	13.58	14,700	Jan. 15		
12 p.m.......	9.29	5,220	12 p.m.......	12.28	11,400	3 a.m........	8.01	3,370
Dec. 20			Dec. 24			8............	8.15	3,560
7 a.m........	8.84	4,530	6 a.m........	10.63	7,660	12 m.........	9.25	5,160
1 p.m........	9.18	5,050	12 m.........	9.58	5,690	6 p.m........	10.98	8,400
12 p.m.......	8.23	3,660	12 p.m.......	8.28	3,730	12 p.m.......	10.12	6,640
Dec. 21			Dec. 25			Jan. 16		
6 a.m........	7.62	2,880	12 m.........	7.48	2,720	6 a.m........	9.18	5,050
3 p.m........	7.12	2,310	12 p.m.......	7.23	2,430	12 m.........	8.57	4,140
9............	9.15	5,000	Dec. 26			12 p.m.......	7.80	3,100
12 p.m.......	12.60	12,200	3 a.m........	7.22	2,420	Jan. 17		
Dec. 22			12 m.........	8.90	4,620	12 m.........	7.25	2,460
2 a.m........	14.00	15,900	5 p.m........	9.78	6,030	12 p.m.......	6.78	1,980
			12 p.m.......	8.65	4,250			

310. Oregon Creek near North San Juan, Calif.

Location.--Lat 39°24'10", long 121°04'35", in NW¼NW¼ sec.27, T.18 N., R.8 E., on right bank 0.7 mile upstream from mouth and 2.7 miles northeast of North San Juan.

Drainage area.--34.4 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 1-4. Altitude of gage is 1,580 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,000 cfs. Discharge for period of no gage-height record computed on basis of records for Middle Yuba River above Oregon Creek.

Maxima.--December 1955 to January 1956: Discharge, 5,390 cfs 7 a.m. Dec. 22 (gage height, 11.90 ft).

1910 to November 1955: Discharge recorded, 3,240 cfs Nov. 21, 1950 (gage height, 9.80 ft), but was exceeded by floods of Dec. 31, 1913, Feb. 20, 1927, and Mar. 25, 1928; formerly published discharges for these floods may be in error.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	60	237	11.....	53	323	21.....	859	440
2.....	40	212	12.....	45	290	22.....	3,450	532
3.....	25	181	13.....	40	472	23.....	3,380	678
4.....	20	237	14.....	36	1,350	24.....	1,600	518
5.....	26	522	15.....	33	2,080	25.....	726	562
6.....	428	355	16.....	55	1,360	26.....	1,100	702
7.....	117	340	17.....	182	702	27.....	808	582
8.....	63	342	18.....	259	515	28.....	530	455
9.....	131	286	19.....	1,210	416	29.....	395	375
10.....	78	340	20.....	1,100	419	30.....	306	315
						31.....	250	272
Monthly mean discharge, in cubic feet per second.....................							561	529
Runoff, in inches..							18.82	17.74
Runoff, in acre-feet...							34,520	32,550

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 21			Dec. 26--Con.		
12 p.m.......	2.42	33	3 p.m........	5.55	548	1 p.m........	7.07	1,260
			6............	5.98	702	5............	7.65	1,610
Dec. 16			8............	6.57	975	12 p.m.......	6.85	1,130
6 a.m........	2.45	34	10...........	7.70	1,640			
12 m.........	2.55	40	12 p.m.......	9.30	2,830	Jan. 12		
6 p.m........	2.93	63				12 p.m.......	4.56	278
12 p.m.......	3.68	136	Dec. 22					
			2 a.m........	10.30	3,700	Jan. 13		
Dec. 17			4............	9.75	3,200	3 a.m........	4.55	276
12 m.........	3.68	136	7............	11.90	5,390	9............	5.00	380
4 p.m........	4.00	178	12 m.........	10.00	3,420	3 p.m........	5.52	537
9............	4.70	308	7 p.m........	8.76	2,400	8............	5.80	635
12 p.m.......	4.63	293	12 p.m.......	9.75	3,200	12 p.m.......	6.20	795
Dec. 18			Dec. 23			Jan. 14		
2 p.m........	4.00	178	2 a.m........	10.12	3,530	3 a.m........	6.50	940
6............	4.14	200	5............	9.40	2,910	5 p.m........	7.80	1,710
12 p.m.......	5.46	518	1 p.m........	10.65	4,050	12 p.m.......	7.48	1,510
			12 p.m.......	9.10	2,670			
Dec. 19			Dec. 24			Jan. 15		
2 a.m........	6.10	750	12 m.........	7.30	1,400	3 a.m........	7.37	1,440
6............	6.16	777	12 p.m.......	6.47	925	9............	7.65	1,610
4 p.m........	7.80	1,710				4 p.m........	9.50	2,990
9............	7.55	1,550	Dec. 25			12 p.m.......	8.35	2,100
12 p.m.......	7.10	1,280	12 m.........	5.95	690			
			12 p.m.......	5.70	600	Jan. 16		
Dec. 20						6 a.m........	7.60	1,580
5 p.m........	6.73	1,060	Dec. 26			3 p.m........	6.90	1,160
12 p.m.......	6.17	782	3 a.m........	5.70	600	12 p.m.......	6.40	890

311. North Yuba River near Sierra City, Calif.

(Gaging station, discontinued 1944)

Location.--Lat 39°34', long 120°40', in NW¼ sec.32, T.20 N., R.12 E., 1.5 miles west of Sierra City and 2.5 miles downstream from South Fork of North Fork. Altitude of gage is 4,100 ft (from topographic map).

Drainage area.--91.8 sq mi (revised).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 11,400 cfs about 10 a.m. Dec. 23 (gage height, 9.63 ft in abandoned gage house, 10.1 ft outside, from floodmarks).

1923-44: Discharge, 9,800 cfs Dec. 11, 1937 (gage height, 10.0 ft), from rating curve extended above 2,500 cfs.

312. Rock Creek at Goodyears Bar, Calif.

(Miscellaneous site)

Location.--Lat 39°32'10", long 120°53'00", in NW¼ sec.8, T.19 N., R.10 E., 600 ft upstream from Woodruff Creek, a quarter of a mile above mouth, and 0.3 mile south of Goodyears Bar. Altitude is 2,680 ft (from topographic map).

Drainage area.--4.83 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 1,570 cfs about 2 to 3 p.m. Dec. 23.

1910-23: Discharge, about 1,600 cfs Mar. 25, 1928, at discontinued gaging station 350 ft downstream from Woodruff Creek (drainage area, 8.98 sq mi, revised).

Local resident stated that December 1955 flood was the highest during 12-year residence.

313. Woodruff Creek at Goodyears Bar, Calif.

(Miscellaneous site)

Location.--Lat 39°32'05", long 120°53'05", in NW¼ sec.8, T.19 N., R.10 E., 0.2 mile above mouth, 0.4 mile south of Goodyears Bar. Altitude is 2,780 ft (from topographic map).

Drainage area.--4.12 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 786 cfs about 2 to 3 p.m. Dec. 23.

Local resident stated that December 1955 flood was the highest during 12-year residence.

314. North Yuba River below Goodyears Bar, Calif.

Location.--Lat 39°32', long 120°56', in SW¼ sec.11, T.19 N., R.9 E., on right bank 3.5 miles downstream from Goodyears Creek, 4 miles southwest of Goodyears Bar, and 6 miles southwest of Downieville.

Drainage area.--245 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 20-26. Altitude of gage is 2,450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,300 cfs, and by float measurement at 17,900 cfs and slope-area measurement at 26,400 cfs. Discharge for period of no gage-height record estimated on basis of one discharge measurement and records for Oregon Creek near North San Juan.

Maxima.--December 1955 to January 1956: Discharge, 26,800 cfs 1 p.m. Dec. 23 (gage height, 19.30 ft).

1930-37, 1938 to November 1955: Discharge, 26,400 cfs Nov. 20, 1950 (gage height, 19.15 ft).

Mean discharge, in cubic feet per second, 1955-56, of North Yuba River below Goodyears Bar, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	345	1,560	11.....	291	1,470	21.....	6,200	2,000
2.....	234	1,450	12.....	289	1,400	22.....	18,500	2,000
3.....	192	1,340	13.....	271	1,630	23.....	21,100	2,600
4.....	170	1,290	14.....	257	3,210	24.....	8,980	2,200
5.....	195	1,700	15.....	250	6,280	25.....	4,540	2,300
6.....	841	1,560	16.....	347	5,630	26.....	6,000	2,900
7.....	524	1,520	17.....	588	3,300	27.....	4,640	2,530
8.....	330	1,600	18.....	928	2,560	28.....	3,020	2,080
9.....	451	1,430	19.....	6,370	2,160	29.....	2,400	1,780
10.....	341	1,460	20.....	6,710	2,000	30.....	1,960	1,580
						31.....	1,700	1,440
Monthly mean discharge, in cubic feet per second........................							3,192	2,192
Runoff, in inches..							15.02	10.32
Runoff, in acre-feet...							196,300	134,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Dec. 27--Con.		
12 p.m.......	4.52	794	5 p.m........	15.00	15,400	12 m.........	9.04	4,450
			7............	14.45	14,100	12 p.m.......	8.33	3,610
Dec. 18			10...........	15.20	15,900	Jan. 12		
1 p.m........	4.12	628	12 p.m.......	16.60	19,500	12 p.m.......	5.70	1,360
7............	5.00	1,030						
9............	5.75	1,480	Dec. 23			Jan. 13		
12 p.m.......	6.75	2,210	2 a.m........	16.80	20,000	6 a.m........	5.70	1,360
			3............	16.65	19,600	12 m.........	6.08	1,590
Dec. 19			7............	17.60	22,100	6 p.m........	6.41	1,820
6 a.m........	8.49	3,930	10...........	17.93	23,000	12 p.m.......	6.83	2,140
12 m.........	10.75	6,980	1 p.m........	19.30	26,800			
4 p.m........	12.35	9,630	2............	19.05	26,100	Jan. 14		
7............	12.00	9,000	5............	17.55	21,900	4 a.m........	7.40	2,660
12 p.m.......	10.96	7,200	12 p.m.......	14.20	13,500	1 p.m........	7.87	3,130
						7............	8.66	3,990
Dec. 20			Dec. 24			12 p.m.......	8.69	4,030
2 a.m........	10.83	6,980	6 a.m........	12.95	10,800			
11...........	11.08	7,410	12 m.........	11.74	8,540	Jan. 15		
2 p.m........	10.85	7,020	6............	10.86	7,030	3 a.m........	8.58	3,900
12 p.m.......	9.52	5,050	12 p.m.......	9.96	5,640	8............	8.77	4,120
						11...........	9.55	5,080
Dec. 21			Dec. 25			5 p.m........	12.00	9,000
9 a.m........	8.68	4,020	12 m.........	8.92	4,300	7............	12.27	9,490
1 p.m........	8.60	3,920	12 p.m.......	8.62	3,940	12 p.m.......	11.53	8,170
4............	9.16	4,590						
8............	12.35	9,630	Dec. 26			Jan. 16		
12 p.m.......	15.15	15,800	3 a.m........	8.54	3,850	6 a.m........	10.55	6,530
			9............	9.41	4,900	12 m.........	9.74	5,340
Dec. 22			2 p.m........	11.20	7,610	6 p.m........	9.15	4,580
3 a.m........	16.70	19,700	5............	11.61	8,310	12 p.m.......	8.65	3,980
3:30.........	16.65	19,600	12 p.m.......	10.38	6,260			
9............	17.83	22,700				Jan. 17		
1 p.m........	16.60	19,500	Dec. 27			12 m.........	7.96	3,220
2 p.m........	16.50	19,200	6 a.m........	9.60	5,150	12 p.m.......	7.50	2,760

315. North Yuba River below Bullards Bar Dam, Calif.

Location.--Lat 39°24'15", long 121°08'30", in SW$\frac{1}{4}$ sec.24, T.18 N., R.7 E., on right bank 2,000 ft downstream from Bullards Bar Dam, 3 miles upstream from confluence with Middle Yuba River, and 3 miles northwest of San Juan.

Drainage area.--482 sq mi.

Gage-height record.--Water-stage recorder graph except 10 a.m. Dec. 2 to Jan. 31. Record from 2 p.m. Jan. 20 to Jan. 31 from record at Colgate diversion dam. Altitude of gage is 1,390 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 32,000 cfs and by computation of flow over dam at 42,300 cfs. Discharge for period of no gage-height record estimated on basis of spill over Bullards Bar Dam and release from powerhouse, and records for North Yuba River below Goodyears Bar.

Maxima.--December 1955 to January 1956: Discharge, 70,000 cfs, time unknown, Dec. 23 (gage height, 39.0 ft, from floodmarks).

1940 to November 1955: Discharge, 47,100 cfs Nov. 21, 1950 (gage height, 31.3 ft).

Remarks.--Flows slightly regulated by Bullards Bar Reservoir.

Mean discharge, in cubic feet per second, 1955-56, of North Yuba River below Bullards Bar Dam, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	428	3,730	11.....	785	3,400	21.....	14,500	5,600
2.....	436	3,370	12.....	712	3,080	22.....	50,000	5,400
3.....	456	3,100	13.....	679	4,050	23.....	57,000	7,950
4.....	452	2,850	14.....	640	10,200	24.....	21,200	5,980
5.....	445	3,950	15.....	599	17,400	25.....	10,400	5,600
6.....	485	3,270	16.....	719	13,600	26.....	15,100	7,280
7.....	539	3,140	17.....	1,490	8,540	27.....	11,400	6,700
8.....	561	3,880	18.....	2,100	6,150	28.....	7,560	5,220
9.....	625	3,210	19.....	19,400	5,000	29.....	5,530	4,420
10.....	903	3,280	20.....	17,700	4,920	30.....	4,720	3,840
						31.....	4,100	3,390
Monthly mean discharge, in cubic feet per second......................							8,118	5,532
Runoff, in inches..							19.42	13.23
Runoff, in acre-feet...							499,200	340,200

316. South Yuba River near Cisco, Calif.

Location.--Lat 39°19', long 120°33', in sec.19, T.17 N., R.13 E., on right bank 0.5 mile downstream from Rattlesnake Creek, 1 mile west of Cisco Grove, and 1.2 miles northwest of Cisco.

Drainage area.--51.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,600 cfs and by slope-area measurement at 11,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 10,200 cfs 7 a.m. Dec. 23 (gage height, 14.84 ft).

1942 to November 1955: Discharge, 11,700 cfs Nov. 20, 1950 (gage height, 15.82 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	9.1	208	11.....	29	143	21.....	1,240	280
2.....	8.0	189	12.....	32	153	22.....	6,370	367
3.....	7.3	171	13.....	29	235	23.....	7,790	409
4.....	6.4	160	14.....	28	415	24.....	1,400	271
5.....	6.7	166	15.....	28	1,560	25.....	846	286
6.....	97	171	16.....	34	1,330	26.....	856	229
7.....	56	155	17.....	44	636	27.....	520	211
8.....	34	147	18.....	43	412	28.....	385	200
9.....	54	137	19.....	565	334	29.....	307	178
10.....	33	141	20.....	982	307	30.....	259	169
						31.....	232	160
Monthly mean discharge, in cubic feet per second......................							720	320
Runoff, in inches..							16.13	7.17
Runoff, in acre-feet...							44,290	19,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 26		
12 p.m.......	2.64	63	10 a.m.......	13.16	7,810	6 a.m........	4.80	680
Dec. 19			3 p.m........	12.39	6,810	12 m.........	5.79	1,120
3 a.m........	3.04	118	7............	11.15	5,300	6 p.m........	5.42	949
9............	4.41	514	12 p.m.......	13.04	7,650	12 p.m.......	4.73	652
3 p.m........	5.60	960	Dec. 23			Jan. 14		
11...........	4.72	622	3 a.m........	14.78	10,100	12 p.m.......	4.67	628
12 p.m.......	4.77	640	5............	14.69	9,940	Jan. 15		
Dec. 20			7............	14.84	10,200	6 a.m........	4.80	680
3 a.m........	5.36	864	10...........	14.63	9,840	9............	5.12	814
8............	6.15	1,200	12 m.........	14.23	9,270	12 m.........	6.16	1,310
4 p.m........	5.51	924	3 p.m........	13.49	8,240	3 p.m........	7.38	2,070
8............	5.70	1,000	6............	11.65	5,920	6............	8.32	2,760
12 p.m.......	5.45	900	9............	9.36	3,620	7............	8.41	2,830
Dec. 21			12 p.m.......	7.92	2,440	9............	8.26	2,710
4 a.m........	5.26	824	Dec. 24			12 p.m.......	7.59	2,210
1 p.m........	5.06	744	3 a.m........	7.00	1,810	Jan. 16		
6............	6.31	1,280	9............	6.09	1,280	3 a.m........	6.94	1,770
9............	7.95	2,260	1 p.m........	5.85	1,160	12 m.........	6.00	1,230
12 p.m.......	9.54	3,590	5............	6.07	1,260	6 p.m........	5.58	1,020
Dec. 22			12 p.m.......	5.70	1,080	12 p.m.......	5.20	850
5 a.m........	11.96	6,270	Dec. 25					
			12 p.m.......	4.85	700			

317. Bowman Lake near Graniteville, Calif.

Location.--Lat 39°27', long 120°39', in SW$\frac{1}{4}$ sec.5, T.18 N., R.12 E., on rockfill portion of Bowman Dam on Canyon Creek, 4 miles east of Graniteville and 8 miles south of Sierra City.

Drainage area.--29.4 sq mi.

Gage-height record.--Staff gage read irregularly. Datum of gage is 5,000.0 ft above mean sea level. Gage readings have been reduced to elevations above mean sea level.

Maxima.--December 1955 to January 1956: Contents, 64,200 acre-ft Jan. 30 (elevation, 5,558.0 ft).

1926 to November 1955: Contents observed, 70,500 acre-ft one or more days in 1937, 1943, 1950, 1951, 1953 and 1954 (elevation, 5,565.9 ft).

Remarks.--Lake is formed by one rockfill and one concrete-arch dam; they were completed and storage began in November 1926. Capacity, 68,200 acre-ft between elevations 5,400 ft (bottom of outlet tunnel) and 5,563 ft (crest of concrete-arch dam) above mean sea level. Flashboards are occasionally added, increasing elevation to 5,564.5 ft and capacity to 69,400 acre-ft. Lake receives water from Middle Yuba River through Milton-Bowman tunnel and releases it through Bowman-Spaulding Canal which conveys it to reservoirs of Pacific Gas & Electric Co. Water is eventually used for irrigation by Nevada Irrigation District. Record of contents, computed from gage readings made at irregular times, shows total contents, all of which are available for release.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	5,471.3	10,700	5,538.7	48,900	16	5,472.4	11,200	5,549.0	57,000
2	5,470.9	10,600	5,539.5	49,400	17	5,472.5	11,200	5,550.2	58,000
3	5,470.5	10,400	5,540.0	49,800	18	5,472.6	11,200	5,550.9	58,500
4	5,470.1	10,200	5,540.5	50,200	19	5,474.6	12,000	5,551.6	59,100
5	5,469.7	10,100	5,541.1	50,700	20	5,478.0	13,400	5,552.2	59,600
6	5,469.3	9,920	5,541.6	51,100	21	5,481.0	14,600	5,552.9	60,100
7	5,470.1	10,200	5,542.0	51,400	22	5,501.0	24,600	5,553.5	60,600
8	5,469.8	10,100	5,542.3	51,600	23	5,517.0	34,200	5,554.4	61,300
9	5,470.6	10,400	5,542.5	51,800	24	5,526.0	40,000	5,555.0	61,800
10	5,470.5	10,400	5,543.0	52,200	25	5,528.0	41,400	5,555.7	62,400
11	5,470.2	10,300	5,544.0	53,000	26	5,531.0	43,500	5,556.5	63,000
12	5,471.4	10,800	5,544.8	53,600	27	5,533.0	44,900	5,557.0	63,400
13	5,471.9	11,000	5,545.3	54,000	28	5,534.4	45,900	5,557.5	63,800
14	5,472.2	11,100	5,546.1	54,700	29	5,535.3	46,500	5,557.8	64,000
15	5,472.3	11,100	5,547.0	55,400	30	5,538.7	48,900	5,558.0	64,200
					31	5,537.8	48,300	5,557.9	64,100
Change in contents................................						-	+37,400	-	+15,800

318. Canyon Creek below Bowman Lake, Calif.

Location.--Lat 39°26', long 120°40', in SE$\frac{1}{4}$ sec.7, T.18 N., R.12 E., on left bank 1 mile downstream from Bowman Lake, 3 miles upstream from Texas Creek, and 9 miles south of Sierra City.

Drainage area.--30.4 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,100 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 180 cfs 3 a.m. Dec. 22 (gage height, 3.10 ft).

1927 to November 1955: Discharge, 2,520 cfs Dec. 4, 1950 (gage height, 6.28 ft), from rating curve extended above 820 cfs.

Remarks.--Flow regulated by Bowman Lake (see station 317).

Mean discharge, in cubic feet per second, 1955-56, of Canyon Creek below Bowman Lake, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	1.8	3.5	11.....	2.2	3.6	21.....	44	3.7
2.....	1.3	3.7	12.....	2.1	4.1	22.....	123	19
3.....	1.0	3.3	13.....	1.6	12	23.....	84	10
4.....	.8	2.0	14.....	1.5	22	24.....	8.9	6.3
5.....	.8	2.9	15.....	1.4	42	25.....	7.4	8.5
6.....	19	2.6	16.....	5.0	5.4	26.....	34	14
7.....	3.5	3.5	17.....	5.6	2.3	27.....	7.7	4.7
8.....	1.8	3.1	18.....	5.8	2.2	28.....	4.1	8.8
9.....	6.1	2.1	19.....	81	3.2	29.....	2.6	9.6
10.....	2.3	3.3	20.....	41	4.3	30.....	2.5	3.7
						31.....	3.0	2.8
Monthly mean discharge, in cubic feet per second							16.3	7.17
Runoff, in acre-feet							1,010	441

319. South Yuba River near Washington, Calif.

(Gaging station, discontinued 1953)

Location.--Lat 39°22', long 120°45', in SE¼ sec.5, T.17 N., R.11 E., 0.2 mile downstream from Canyon Creek and 2.3 miles east of Washington. Altitude is 2,810 ft (from topographic map).

Drainage area.--198 sq mi (revised).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 26,300 cfs Dec. 23 (gage height, 24.8 ft at 1953 gage site; 17.8 ft at former site 0.8 mile downstream).

1942-53: Discharge, 24,700 cfs (revised) Nov. 20, 1950 (gage height, 23.08 ft at 1953 gage site; 17.34 ft at former site 0.8 mile downstream), from rating curve extended above 4,700 cfs on basis of slope-area measurement at 26,300 cfs.

Remarks.--Flow regulated by Lake Spaulding (capacity, 70,500 acre-ft), Bowman Lake (see station 317), and many smaller reservoirs.

320. Yuba River at Englebright Dam, Calif.

Location.--Lat 39°14'22", long 121°16'00", in SW¼SE¼ sec.14, T.16 N., R.6 E., on left bank upstream from spillway of Englebright Dam, 1 mile upstream from Deer Creek and 2.5 miles northeast of Smartville.

Drainage area.--1,104 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 526.99 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurement below 25,000 cfs and by computation of flow over spillway of dam of 147,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 148,000 cfs Dec. 23, including flow through powerhouse.

1941 to November 1955: Discharge, 109,000 cfs Nov. 21, 1950, including flow through powerhouse, from rating curve extended above 25,000 cfs on basis of computation of flow over spillway of dam of 80,000 cfs.

Remarks.--Flows partly regulated by several reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	580	6,230	11.....	655	6,340	21.....	22,200	9,450
2.....	505	5,940	12.....	630	5,720	22.....	98,900	9,720
3.....	545	5,180	13.....	570	6,930	23.....	122,000	14,700
4.....	595	5,330	14.....	670	19,200	24.....	48,600	10,900
5.....	600	9,120	15.....	680	34,100	25.....	20,800	11,200
6.....	620	7,350	16.....	690	28,800	26.....	26,700	13,900
7.....	640	6,600	17.....	690	16,600	27.....	23,800	13,300
8.....	640	7,640	18.....	640	11,700	28.....	13,400	9,890
9.....	645	6,120	19.....	25,200	9,350	29.....	9,450	8,060
10.....	650	6,180	20.....	34,100	8,950	30.....	7,560	6,860
						31.....	6,660	6,070
Monthly mean discharge, in cubic feet per second							15,180	10,560
Runoff, in inches							15.85	11.03
Runoff, in acre-feet							933,500	649,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Yuba River at Englebright Dam, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 27		
12 p.m.......	-	710	10 p.m.......	11.76	75,200	12 m.........	5.46	21,700
			12 p.m.......	12.23	80,200	12 p.m.......	4.71	17,200
Dec. 19								
6 a.m........	-	710	Dec. 23			Jan. 12		
7............	1.26	2,570	1 a.m........	12.81	86,600	12 p.m.......	2.21	5,500
8............	2.76	7,560	5............	15.02	112,000			
10...........	4.56	16,300	8............	15.61	119,000	Jan. 13		
4 p.m........	8.31	42,100	12 m.........	17.48	144,000	6 a.m........	2.24	5,610
8............	9.58	53,300	3 p.m........	17.73	148,000	12 m.........	2.44	6,340
12 p.m.......	9.01	48,200	5............	17.58	146,000	12 p.m.......	3.31	9,850
			8............	16.16	127,000			
Dec. 20			12 p.m.......	13.31	92,100	Jan. 14		
10 a.m.......	7.26	33,700				12 m.........	4.94	18,600
12 m.........	6.93	31,300	Dec. 24			3 p.m........	5.96	24,800
2 p.m........	6.90	31,100	6 a.m........	10.21	59,200	12 p.m.......	6.01	25,100
12 p.m.......	6.06	25,400	12 m.........	8.36	42,500			
			6 p.m........	7.16	33,000	Jan. 15		
Dec. 21			12 p.m.......	6.34	27,200	9 a.m........	6.02	25,100
10 a.m.......	4.99	18,800				12 m.........	6.69	29,600
2 p.m........	4.54	16,200	Dec. 25			8 p.m........	9.25	50,300
5............	4.61	16,600	12 m.........	5.16	19,900	12 p.m.......	8.70	45,400
10...........	6.66	29,400	12 p.m.......	4.54	16,200			
12 p.m.......	9.06	48,600				Jan. 16		
			Dec. 26			10 a.m.......	6.68	29,600
Dec. 22			4 a.m........	4.56	16,300	12 m.........	5.79	23,600
4 a.m........	13.66	96,100	12 m.........	5.81	23,800	12 p.m.......	5.24	20,300
8............	16.06	125,000	4 p.m........	7.48	35,300			
10...........	16.48	131,000	8............	8.00	39,500	Jan. 17		
1 p.m........	15.96	124,000	12 p.m.......	7.36	34,500	12 m.........	4.54	16,200
6 p.m........	12.76	86,000				12 p.m.......	4.06	13,600

321. Deer Creek near Smartville, Calif.

Location.--Lat 39°13'28", long 121°16'03", in SW$\frac{1}{4}$SE$\frac{1}{4}$ sec.23, T.16 N., R.6 E., on left bank 400 ft upstream from county road bridge, 1 mile upstream from mouth, and 2 miles northeast of Smartville.

Drainage area.--84.6 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,200 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 11,300 cfs 12:30 p.m. Dec. 23 (gage height, 13.60 ft).
1935 to November 1955: Discharge, 11,300 cfs Mar. 9, 1943 (gage height, 13.62 ft).

Remarks.--Flow partly regulated by Scotts Flat Reservoir beginning in 1949 (usable capacity, 26,300 acre-ft) and Deer Creek Reservoir (capacity, 1,400 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	146	726	11.....	50	498	21.....	914	633
2.....	58	585	12.....	42	450	22.....	4,700	1,190
3.....	31	450	13.....	37	638	23.....	5,650	939
4.....	20	571	14.....	34	2,620	24.....	1,260	641
5.....	50	1,350	15.....	31	3,910	25.....	656	1,420
6.....	1,590	699	16.....	41	1,990	26.....	2,940	1,560
7.....	148	845	17.....	115	1,150	27.....	1,600	1,500
8.....	107	766	18.....	392	835	28.....	928	855
9.....	178	523	19.....	4,440	645	29.....	668	645
10.....	77	569	20.....	1,790	681	30.....	530	554
						31.....	540	495
Monthly mean discharge, in cubic feet per second							960	998
Runoff, in inches							13.08	13.60
Runoff, in acre-feet							59,030	61,350

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Deer Creek near Smartville, Calif.

Hour	Gage height	Discharge
Dec. 16		
12 p.m.......	1.92	42
Dec. 17		
1 p.m........	2.00	49
5............	2.57	114
8............	3.78	322
12 p.m.......	3.55	270
Dec. 18		
6 a.m........	2.91	156
3 p.m........	2.52	105
7............	3.30	220
8............	4.15	421
10...........	5.65	1,100
12 p.m.......	8.10	3,360
Dec. 19		
1 a.m........	8.52	3,820
6............	6.64	1,900
10...........	8.48	3,780
1 p.m........	10.40	6,080
2............	10.39	6,070
4............	10.76	6,580
8............	9.80	5,310
9............	10.26	5,880
12 p.m.......	8.40	3,690
Dec. 20		
6 a.m........	7.15	2,390
2 p.m........	5.98	1,340
3............	6.11	1,450
6............	5.52	1,010
12 p.m.......	4.66	589
Dec. 21		
6 a.m........	4.11	410
4 p.m........	3.64	290
6............	3.87	345
8............	5.15	805
9 p.m........	6.30	1,600
Dec. 21--Con.		
10 p.m.......	7.70	2,940
11...........	9.80	5,310
12 p.m.......	10.90	6,780
Dec. 22		
2:30 a.m.....	12.10	8,660
4............	11.35	7,460
6............	9.59	5,060
9............	10.97	6,880
12 m.........	8.60	3,910
7 p.m........	6.26	1,570
11...........	8.88	4,220
12 p.m.......	8.64	3,950
Dec. 23		
2 a.m........	9.85	5,370
4............	8.50	3,800
7............	7.12	2,360
9............	9.45	4,890
11...........	11.60	7,860
12:30 p.m....	13.60	11,300
5............	10.95	6,850
8............	9.50	4,950
12 p.m.......	7.25	2,490
Dec. 24		
2 a.m........	6.90	2,140
3............	6.96	2,200
9............	5.88	1,270
5 p.m........	5.09	776
12 p.m.......	4.67	593
Dec. 25		
6 a.m........	4.46	516
12 p.m.......	5.27	865
Dec. 26		
2 a.m........	5.29	875
6............	6.70	1,950
11 a.m.......	8.90	4,240
Dec. 26--Con.		
1 p.m........	8.21	3,480
3............	9.79	5,300
7............	8.06	3,320
12 p.m.......	7.01	2,250
Dec. 27		
12 m.........	6.20	1,520
12 p.m.......	5.69	1,130
Jan. 12		
12 p.m.......	4.20	435
Jan. 13		
6 a.m........	4.27	456
12 m.........	4.63	577
4 p.m........	4.66	589
10...........	5.40	940
12 p.m.......	6.40	1,680
Jan. 14		
4 a.m........	6.58	1,840
7............	6.33	1,620
2 p.m........	8.30	3,580
7............	8.25	3,520
12 p.m.......	7.11	2,350
Jan. 15		
3 a.m........	7.02	2,260
6............	7.96	3,210
8:30.........	7.71	2,950
11...........	9.00	4,350
3:30 p.m.....	10.83	6,680
7............	8.99	4,340
12 p.m.......	7.58	2,820
Jan. 16		
6 a.m........	7.00	2,240
12 m.........	6.68	1,930
12 p.m.......	6.08	1,420

322. Dry Creek near Brownsville, Calif.

Location.--Lat 39°28'40", long 121°15'15", in NW¼ sec.25, T.19 N., R.6 E., on left bank 0.2 mile downstream from New York Creek and 0.9 mile northeast of Brownsville.

Drainage area.--20.4 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,220 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 920 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 1,890 cfs 2 a.m. Dec. 22 (gage height, 7.48 ft).

1948 to November 1955: Discharge, 1,190 cfs Feb. 1, 1952 (gage height, 6.65 ft), from rating curve extended above 390 cfs on basis of slope-area measurement at 834 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	41	174	11.....	20	106	21.....	400	162
2.....	20	118	12.....	17	92	22.....	1,000	268
3.....	15	94	13.....	15	250	23.....	882	210
4.....	12	167	14.....	14	561	24.....	284	155
5.....	49	193	15.....	14	803	25.....	154	250
6.....	442	125	16.....	24	345	26.....	502	377
7.....	49	255	17.....	68	220	27.....	219	275
8.....	33	188	18.....	185	175	28.....	141	199
9.....	51	126	19.....	829	155	29.....	108	166
10.....	26	129	20.....	358	204	30.....	90	145
						31.....	95	131
Monthly mean discharge, in cubic feet per second......................							199	220
Runoff, in inches...							11.22	12.43
Runoff, in acre-feet..							12,210	13,520

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Dry Creek near Brownsville, Calif.

Hour	Gage height	Dis-charge
Dec. 16		
12 p.m.......	1.75	30
Dec. 17		
8 a.m........	1.80	32
12 m.........	1.99	44
3 p.m........	2.36	78
5............	2.67	114
7............	2.84	136
10...........	2.72	120
12 p.m.......	2.55	100
Dec. 18		
6 a.m........	2.22	64
10...........	2.13	56
1 p.m........	2.29	71
3............	2.62	108
5............	3.19	185
7............	3.92	323
11...........	4.87	633
12 p.m.......	4.84	621
Dec. 19		
4 a.m........	4.50	500
10...........	5.02	693
12 m.........	5.35	825
4 p.m........	6.34	1,290
5............	6.13	1,180
7............	6.36	1,300
10...........	5.32	813
12 p.m.......	4.85	625
Dec. 20		
2 a.m........	4.81	609
6............	4.46	486
12 m.........	3.86	308
6 p.m........	3.45	229
12 p.m.......	3.04	164
Dec. 21		
10 a.m.......	2.70	118
1 p.m........	2.90	144
4 p.m........	3.81	296
Dec. 21--Con.		
7 p.m........	4.84	621
12 p.m.......	7.13	1,680
Dec. 22		
2 a.m........	7.48	1,890
5:30.........	5.81	1,030
9............	6.41	1,320
1 p.m........	4.91	649
5:30.........	4.19	397
9............	5.32	813
12 p.m.......	5.90	1,070
Dec. 23		
3 a.m........	5.00	685
7............	4.38	458
10...........	5.33	817
12 m.........	7.24	1,740
2 p.m........	6.52	1,380
6............	5.66	962
9............	4.80	605
12 p.m.......	4.42	472
Dec. 24		
6 a.m........	3.97	336
12 m.........	3.61	258
6 p.m........	3.36	213
12 p.m.......	3.21	188
Dec. 25		
12 p.m.......	2.80	130
Dec. 26		
3 a.m........	2.82	133
5............	3.33	207
7............	4.15	385
9............	4.89	641
11...........	5.60	935
1 p.m........	5.17	753
3............	5.44	863
5............	5.10	725
8............	4.31	434
12 p.m.......	3.88	313
Dec. 27		
6 a.m........	3.53	243
12 m.........	3.32	206
12 p.m.......	3.08	169
Jan. 12		
12 p.m.......	2.50	94
Jan. 13		
3 a.m........	2.75	124
5............	3.22	189
8............	3.81	296
11...........	3.92	323
5 p.m........	3.52	242
8............	3.65	265
12 p.m.......	4.05	357
Jan. 14		
4 a.m........	4.10	370
9............	4.56	521
12 m.........	4.87	633
4 p.m........	5.23	777
6............	5.14	741
9............	4.79	602
12 p.m.......	4.57	524
Jan. 15		
2 a.m........	4.48	493
5............	4.88	637
8............	4.92	653
11...........	5.98	1,110
1 p.m........	6.34	1,290
2:30.........	6.45	1,340
6............	5.34	821
9............	4.80	605
12 p.m.......	4.54	514
Jan. 16		
6 a.m........	4.15	385
12 m.........	3.91	321
12 p.m.......	3.61	258

323. Dry Creek at Virginia Ranch, Calif.

Location.--Lat 39°19'20", long 121°18'45", in NW¼ sec.21, T.17 N., R.6 E., on right bank, 0.4 mile south of Virginia Ranch, 3.0 miles downstream from Willow Glen Creek, and 5.5 miles east of Loma Rica.

Drainage area.--71.3 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,060 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,700 cfs, and by slope-area measurement of 7,400 cfs.

Maxima.--December 1955 to January 1956: Discharge, 9,120 cfs 2:30 a.m. Dec. 22 (gage height, 9.85 ft).

1948 to November 1955: Discharge, 7,400 cfs Nov. 20, 1950 (gage height, 9.15 ft).

Remarks.--Medium and low flows partly regulated by Lake Mildred (capacity, 1,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	23	572	11.....	54	292	21.....	1,430	461
2.....	11	377	12.....	40	236	22.....	4,820	1,020
3.....	7.2	260	13.....	33	643	23.....	4,270	743
4.....	6.9	417	14.....	28	3,280	24.....	1,110	446
5.....	47	659	15.....	25	4,560	25.....	453	1,020
6.....	2,070	360	16.....	45	1,190	26.....	2,200	1,350
7.....	277	679	17.....	264	605	27.....	745	966
8.....	107	711	18.....	691	457	28.....	413	600
9.....	178	356	19.....	5,150	388	29.....	289	450
10.....	89	360	20.....	1,920	565	30.....	241	377
						31.....	370	333
Monthly mean discharge, in cubic feet per second......................							884	798
Runoff, in inches..							14.30	12.90
Runoff, in acre-feet...							54,360	49,060

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Dry Creek at Virginia Ranch, Calif.

Hour	Gage height	Discharge
Dec. 15		
12 p.m.	1.85	29
Dec. 16		
12 m.	1.97	37
6 p.m.	2.18	54
12 p.m.	2.46	84
Dec. 17		
11 a.m.	2.69	116
2 p.m.	3.03	181
4	3.67	360
8	4.32	614
12 p.m.	4.14	536
Dec. 18		
2 p.m.	3.34	257
4	3.40	274
7	4.51	700
9	5.43	1,270
10	6.04	1,820
12 p.m.	7.40	3,700
Dec. 19		
1 a.m.	7.52	3,920
6	6.44	2,270
9	7.35	3,620
10	7.35	3,620
1 p.m.	8.70	6,350
3	9.54	8,350
6	9.08	7,230
8	9.10	7,280
12 p.m.	8.00	4,840
Dec. 20		
6 a.m.	6.65	2,540
12 m.	5.68	1,480
6 p.m.	4.90	910
12 p.m.	4.41	654
Dec. 21		
2 p.m.	3.81	410
4 p.m.	3.98	472
Dec. 21--Con.		
6 p.m.	5.00	970
8	5.94	1,720
9	7.00	3,040
11	9.40	8,000
12 p.m.	9.78	8,950
Dec. 22		
2:30 a.m.	9.85	9,120
7	8.08	5,010
9	8.53	5,980
2 p.m.	6.85	2,820
6	5.84	1,630
8	6.50	2,340
10	7.70	4,250
12 p.m.	7.89	4,620
Dec. 23		
2 a.m.	7.64	4,140
8	6.16	1,940
11	7.62	4,100
1:30 p.m.	9.37	7,930
4	8.71	6,370
7	7.95	4,740
9	7.28	3,500
12 p.m.	6.35	2,160
Dec. 24		
3 a.m.	6.00	1,780
9	5.15	1,060
12 p.m.	4.25	582
Dec. 25		
12 p.m.	3.67	360
Dec. 26		
3 a.m.	3.65	353
6	4.30	605
8	5.45	1,290
10	6.93	2,940
11	7.52	3,920
1 p.m.	7.40	3,700
3 p.m.	7.90	4,640
Dec. 26--Con.		
8 p.m.	6.48	2,320
12 p.m.	5.48	1,310
Dec. 27		
3 a.m.	5.03	988
12 m.	4.42	659
12 p.m.	4.08	512
Jan. 12		
12 p.m.	3.19	218
Jan. 13		
4 a.m.	3.25	233
8	4.10	520
11	4.79	850
1 p.m.	4.90	910
7	4.64	767
10	4.95	940
12 p.m.	4.48	686
Jan. 14		
8 a.m.	6.00	1,780
10	6.82	2,770
1 p.m.	7.89	4,620
4	8.40	5,690
7	8.26	5,390
12 p.m.	7.03	3,090
Jan. 15		
3 a.m.	6.69	2,590
6	7.52	3,920
9	7.38	3,670
12 m.	8.78	6,530
3 p.m.	9.40	8,000
8	7.58	4,020
12 p.m.	6.45	2,280
Jan. 16		
6 a.m.	5.55	1,370
12 m.	5.08	1,020
12 p.m.	4.56	725

324. Yuba River near Marysville, Calif.

Location.--Lat 39°10'35", long 121°31'25", in New Helvetia Grant, on left bank 4.2 miles northeast of Marysville, Yuba County, and 5 miles downstream from Dry Creek.

Drainage area.--1,335 sq mi.

Gage-height record.--Water-stage recorder graph, except Dec. 21 to Jan. 31. Station destroyed by flood Dec. 23. Gage is set to datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 42,000 cfs and extended above by logarithmic plotting. Discharge for Dec. 21 to Jan. 31 estimated on basis of records for upstream stations plus estimated inflow for intervening area.

Maxima.--December 1955 to January 1956: Daily discharge, 136,000 cfs Dec. 23; gage height, 88.85 ft probably Dec. 23, from levels of Jan. 24, 1956.

1943-44, 1944 to November 1955: Discharge, 78,800 cfs Nov. 21, 1950; gage height, 72.04 ft Nov. 21, 1950, at former site, 4 miles downstream, at Marysville.

Remarks.--Flow regulated by several reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	540	8,100	11	734	7,420	21	26,000	11,000
2	728	7,280	12	698	6,640	22	113,000	13,000
3	658	6,150	13	692	8,850	23	136,000	17,100
4	636	6,740	14	680	28,300	24	52,100	12,400
5	636	11,800	15	674	47,100	25	22,400	14,700
6	3,330	8,770	16	692	33,200	26	34,000	18,200
7	1,400	8,800	17	771	19,000	27	26,900	16,700
8	856	9,830	18	1,250	13,400	28	15,200	11,900
9	964	7,360	19	24,200	10,800	29	10,700	9,600
10	828	7,470	20	42,800	10,800	30	8,570	8,170
						31	7,940	7,230
Monthly mean discharge, in cubic feet per second							17,310	13,160
Runoff, in inches							14.95	11.36
Runoff, in acre-feet							1,064,000	808,900

325. Bear River near Auburn, Calif.

Location.--Lat 39°00'45", long 121°06'10", in NE¼ sec.5, T.13 N., R.8 E., on right bank 300 ft upstream from bridge on State Highway 49, 2.6 miles upstream from Wolf Creek, and 8 miles north of Auburn.

Drainage area.--140 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,250 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,600 cfs and by computed flow over Van Giesen Dam, 3 miles upstream from station, at 14,800 cfs and 19,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 19,700 cfs 9:30 a.m. Dec. 22 (gage height, 16.56 ft).

1940 to November 1955: Discharge, 19,300 cfs Jan. 21, 1943 (gage height, 16.45 ft, present datum).

Remarks.--Flow slightly regulated by Combie Reservoir (capacity, 7,840 acre-ft) and other small reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	14	1,170	11.....	44	1,160	21.....	2,160	1,360
2.....	20	1,240	12.....	47	1,050	22.....	13,400	1,520
3.....	19	1,050	13.....	47	1,100	23.....	13,000	2,240
4.....	18	915	14.....	46	2,960	24.....	5,600	1,530
5.....	20	2,420	15.....	43	6,160	25.....	2,540	2,210
6.....	63	1,790	16.....	43	4,250	26.....	4,400	2,000
7.....	44	1,400	17.....	47	2,120	27.....	3,090	1,950
8.....	48	1,480	18.....	56	1,630	28.....	1,890	1,730
9.....	50	1,200	19.....	3,700	1,410	29.....	1,520	1,430
10.....	46	1,220	20.....	4,460	1,310	30.....	1,260	1,280
						31.....	1,140	1,150
Monthly mean discharge, in cubic feet per second......................							1,899	1,788
Runoff, in inches..							15.64	14.73
Runoff, in acre-feet...							116,800	110,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22--Con.			Jan. 13		
12 p.m.......	4.87	144	9 p.m........	12.06	7,960	12 p.m.......	7.00	1,350
			12 p.m.......	13.25	10,600			
Dec. 19						Jan. 14		
1 a.m........	4.93	158	Dec. 23			4 a.m........	7.81	1,990
4............	4.77	124	4 a.m........	14.00	12,300	7............	7.89	2,060
8............	4.83	138	7............	13.08	10,200	2 p.m........	8.93	3,090
9............	6.25	692	9............	13.20	10,500	7............	9.82	4,150
10:30........	8.27	2,110	4 p.m........	15.86	17,500	12 p.m.......	10.21	4,670
1 p.m........	9.90	4,140	12 p.m.......	13.50	11,200			
7............	12.15	8,140				Jan. 15		
8:30.........	12.06	7,960	Dec. 24			1 a.m........	10.21	4,670
10...........	12.26	8,380	4 a.m........	12.20	8,250	7............	9.50	3,750
12 p.m.......	11.95	7,720	11...........	10.42	4,980	9............	9.50	3,750
			6 p.m........	9.19	3,380	11...........	9.75	4,060
Dec. 20			8............	9.26	3,460	2 p.m........	10.53	5,140
6 a.m........	10.51	5,090	12 p.m.......	8.96	3,130	4............	11.75	7,320
9............	10.33	4,800				6............	12.95	9,900
11...........	10.35	4,830	Dec. 25			7:30.........	13.14	10,300
6 p.m........	9.00	2,930	12 m.........	8.33	2,470	10...........	13.00	10,000
12 p.m.......	8.81	2,700	6 p.m........	8.05	2,200	12 p.m.......	12.36	8,600
			11...........	8.08	2,230			
Dec. 21			12 p.m.......	8.05	2,200	Jan. 16		
1 a.m........	8.82	2,710				5 a.m........	10.65	5,330
11...........	7.82	1,710	Dec. 26			11...........	9.50	3,750
2 p.m........	7.86	1,740	2 a.m........	8.06	2,210	2 p.m........	9.13	3,310
5............	7.65	1,570	8............	8.92	3,080	8............	8.70	2,840
9............	8.25	2,090	12 m.........	10.00	4,380	11...........	8.53	2,670
12 p.m.......	10.00	4,290	3............	11.15	6,180	12 p.m.......	8.68	2,820
			6............	11.39	6,620			
Dec. 22			9............	11.07	6,040	Jan. 17		
2 a.m........	12.60	9,130	12 p.m.......	10.35	4,880	1 a.m........	8.72	2,860
4............	15.50	16,400				8............	8.02	2,180
6............	16.50	19,500	Dec. 27			2 p.m........	7.89	2,060
8...	16.38	19,100	5 a.m........	9.42	3,650	3............	7.47	1,710
9:30.........	16.56	19,700	9............	9.00	3,170	11...........	7.59	1,800
11...........	16.35	19,000	4 p.m........	8.40	2,540	12 p.m.......	7.70	1,890
5 p.m........	12.85	9,680	12 p.m.......	8.13	2,280			

326. Bear River near Wheatland, Calif.

Location.--Lat 39°00'01", long 121°24'20", in sec.3, T.13 N., R.5 E., in midstream on downstream side of bridge on U.S. Highway 99E, 1 mile southeast of Wheatland and 6.5 miles downstream from Rock Creek.

Drainage area.--295 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 78.92 ft above mean sea level (levels by California Div. Water Resources).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 19,000 cfs and by float measurement at 33,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 33,000 cfs 2 p.m. Dec. 22 (gage height, 19.30 ft).

1928 to November 1955: Discharge, 31,300 cfs Jan. 21, 1943, of which 25,600 cfs was in main channel and 5,700 cfs through levee break 0.5 mile upstream, determined by contracted-opening measurement and other data; gage height, 20.83 ft Nov. 21, 1950.

Remarks.--Flow slightly regulated by Combie Reservoir (capacity, 7,840 acre-ft), Camp Far West Reservoir (capacity, 5,000 acre-ft), and other small reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	170	1,920	11.....	174	1,390	21.....	3,170	1,780
2.....	218	1,920	12.....	147	1,240	22.....	22,000	2,210
3.....	96	1,550	13.....	132	1,260	23.....	22,100	3,570
4.....	69	1,300	14.....	120	5,360	24.....	13,000	2,000
5.....	69	3,630	15.....	110	10,700	25.....	4,290	3,850
6.....	1,540	2,660	16.....	98	8,100	26.....	7,310	3,700
7.....	421	1,800	17.....	160	3,550	27.....	5,460	3,840
8.....	221	2,040	18.....	393	2,340	28.....	3,010	2,480
9.....	438	1,450	19.....	7,070	1,890	29.....	2,300	1,860
10.....	249	1,460	20.....	9,390	1,780	30.....	1,870	1,580
						31.....	1,790	1,390
Monthly mean discharge, in cubic feet per second......................							3,470	2,761
Runoff, in inches..							13.56	10.79
Runoff, in acre-feet...							213,400	169,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.......	3.72	320	12 m.........	19.08	31,700	12 p.m.......	11.85	10,000
			2 p.m........	19.30	33,000			
Dec. 18			5............	18.70	29,700	Dec. 27		
2 a.m........	4.19	579	8............	17.10	22,600	4 a.m........	10.33	7,350
12 m.........	3.79	355	12 p.m.......	15.30	17,400	8............	9.20	5,600
6 p.m........	3.65	288				12 m.........	8.64	4,820
12 p.m.......	3.80	360	Dec. 23			6 p.m........	8.06	4,070
			2 a.m........	15.05	16,800	12 p.m.......	7.63	3,570
Dec. 19			8............	15.84	18,800			
2 a.m........	5.35	1,370	12 m.........	16.05	19,400	Jan. 13		
6............	7.27	3,160	4 p.m........	17.35	23,600	12 p.m.......	5.40	1,590
9............	7.07	2,940	9:30.........	19.05	31,600	Jan. 14		
12 m.........	8.30	4,370	12 p.m.......	18.62	29,300	3 a.m........	6.13	2,100
2 p.m........	10.20	7,140				6............	7.25	3,160
5............	12.60	11,500	Dec. 24			12 m.........	8.13	4,160
10...........	14.55	15,600	3 a.m........	17.00	22,200	6 p.m........	11.07	8,630
12 p.m.......	14.72	16,000	7............	15.15	17,100	10...........	11.53	9,450
			12 m.........	12.05	10,400	12 p.m.......	11.37	9,170
Dec. 20			3 p.m........	10.80	8,140			
4 a.m........	13.90	14,200	6............	10.05	6,900	Jan. 15		
7............	12.40	11,100	12 p.m.......	9.00	5,320	4 a.m........	10.80	8,140
12 m.........	11.10	8,680				10...........	10.58	7,770
5 p.m........	10.17	7,070	Dec. 25			12 m.........	10.85	8,230
8............	9.15	5,420	6 a.m........	8.58	4,730	8 p.m........	14.35	15,200
12 p.m.......	8.35	4,270	12 m.........	8.19	4,230	11...........	14.98	16,600
			6 p.m........	7.82	3,780	12 p.m.......	14.93	16,500
Dec. 21			12 p.m.......	7.59	3,530			
6 a.m........	7.78	3,530				Jan. 16		
12 m.........	7.11	2,750	Dec. 26			3 a.m........	14.18	14,800
3 p.m........	6.85	2,490	4 a.m........	7.62	3,560	9............	10.39	7,440
8............	6.85	2,490	6............	7.92	3,900	3 p.m........	9.03	5,360
10...........	7.45	3,130	8............	8.74	4,960	12 p.m.......	8.02	4,020
12 p.m.......	8.65	4,690	10...........	9.50	6,050			
			12 m.........	10.12	7,010	Jan. 17		
Dec. 22			2 p.m........	11.20	8,860	2 a.m........	7.88	3,860
3 a.m........	12.40	11,100	6............	12.30	10,900	5............	7.92	3,900
6............	15.25	17,300	8............	12.49	11,300	3 p.m........	7.64	3,580
9 a.m........	17.35	23,600	10 p.m.......	12.34	11,000	12 p.m.......	6.78	2,680

327. Dry Creek near Cabbage Patch, Calif.

(Miscellaneous site)

Location.--Lat 39°06'30", long 121°20'15", in W½ sec.32, T.15 N., R.6 E., in Camp Beale Military Reservation, 1.7 miles west of Waldo Junction and 8 miles northeast of Wheatland. Altitude is 180 ft (from topographic map).

Drainage area.--79.4 sq mi.

Discharge record.--Peak discharge computed from flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 13,900 cfs Dec. 23.

Local resident stated that Dec. 23, 1955, flood was the highest for streams in this vicinity since about 1910.

328. Dry Creek near Wheatland, Calif.

Location.--Lat 39°01'35", long 121°26'10", in Johnson Rancho land grant, on left bank 2,300 ft upstream from bridge on U.S. Highway 99E, 1.3 miles northwest of Wheatland, and 5 miles upstream from mouth.

Drainage area.--99.5 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 62.83 ft above mean sea level (levels by California Div. Water Resources).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,400 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 8,790 cfs 5 p.m. Dec. 23 (gage height, 13.45 ft).

1946 to November 1955: Discharge, 5,610 cfs Jan. 12, 1952 (gage height, 11.54 ft).

Remarks.--Records do not include flow bypassing through Best Slough. See station 327 for maximum discharge upstream from Best Slough.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4.5	242	11.....	31	156	21.....	478	190
2.....	37	231	12.....	19	115	22.....	2,960	557
3.....	22	146	13.....	12	174	23.....	4,710	866
4.....	13	122	14.....	9.0	2,350	24.....	1,350	332
5.....	9.3	487	15.....	7.6	3,970	25.....	319	1,410
6.....	303	318	16.....	7.6	1,130	26.....	1,910	911
7.....	104	253	17.....	12	340	27.....	684	800
8.....	43	508	18.....	69	202	28.....	248	401
9.....	65	183	19.....	3,360	150	29.....	158	212
10.....	51	178	20.....	1,750	242	30.....	127	156
						31.....	215	123
Monthly mean discharge, in cubic feet per second.....................							616	563
Runoff, in acre-feet..							37,860	34,620

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21			Dec. 24		
12 p.m.......	4.20	19	12 m.........	5.97	277	3 a.m........	8.95	2,020
Dec. 18			6 p.m........	5.85	242	12 m.........	7.75	1,100
5 a.m........	4.20	19	9............	6.54	464	6 p.m........	7.02	654
8............	5.15	95	12 p.m.......	8.95	2,020	12 p.m.......	7.59	983
8 p.m........	4.92	68	Dec. 22			Dec. 25		
12 p.m.......	5.42	140	3 a.m........	11.05	4,270	12 p.m.......	5.78	223
Dec. 19			6............	11.43	4,850	Dec. 26		
2 a.m........	6.90	600	10...........	10.24	3,230	4 a.m........	5.90	256
4............	8.55	1,700	2 p.m........	9.98	2,950	6............	7.00	645
7............	9.28	2,290	9:30	7.75	1,100	8............	8.32	1,520
9............	9.27	2,280	12 p.m.......	9.20	2,220	12 m.........	10.00	2,970
1 p.m........	10.65	3,720	Dec. 23			5 p.m........	10.20	3,190
6............	11.75	5,370	4 a.m........	10.88	4,030	9............	9.50	2,490
8............	11.88	5,600	7............	10.30	3,300	12 p.m.......	8.37	1,560
12 p.m.......	11.55	5,040	9............	9.38	2,380	Dec. 27		
Dec. 20			1 p.m........	11.41	4,820	6 a.m........	7.30	800
3 a.m........	10.30	3,300	3............	12.45	6,700	12 m.........	6.75	540
6............	9.05	2,100	5............	13.45	8,790	12 p.m.......	6.20	348
12 m.........	8.18	1,400	8............	12.35	6,500	Jan. 12		
6 p.m........	7.33	818	10...........	11.38	4,770	12 p.m.......	5.22	105
12 p.m.......	6.84	576	12 p.m.......	10.45	3,480			

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Dry Creek near Wheatland, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 13			Jan. 14--Con.			Jan. 15--Con.		
9 a.m.	5.27	113	9 p.m.	11.02	4,230	12 p.m.	10.25	3,240
3 p.m.	5.82	234	12 p.m.	10.55	3,600	Jan. 16		
10	5.80	228				6 a.m.	8.05	1,300
12 p.m.	6.10	316	Jan. 15			12 m.	7.30	800
			5 a.m.	9.12	2,160	6 p.m.	6.85	580
Jan. 14			9	10.38	3,400	12 p.m.	6.54	464
3 a.m.	7.25	770	12 m.	10.58	3,640			
8	8.91	1,990	5 p.m.	11.72	5,320	Jan. 17		
12 m.	8.72	1,840	8	12.23	6,260	12 m.	6.15	332
5 p.m.	10.42	3,440	10 p.m.	11.50	4,960	12 p.m.	5.82	234

329. Yankee Slough near Rio Oso, Calif.

(Miscellaneous site)

Location.--Lat 38°58'25", long 120°29'10", on line between secs. 13 and 14, T.13 N., R.4 E., at Pleasant Grove Road crossing 3 miles east of Rio Oso. Altitude is 60 ft (from topographic map).

Discharge record.--Peak discharge from logarithmic extension of rating curve defined by current-meter measurements of 192 and 1,320 cfs.

Maximum.--December 1955 to January 1956: Discharge, 2,200 cfs Dec. 23 and Jan. 26.

Remarks.--Peak discharge affected at times by breaks in left bank of Bear River levee upstream. Discharge through levee breaks Jan. 21, 1943, and Nov. 21, 1950, estimated as 5,700 and 5,200 cfs, respectively. No breaks in Bear River levee in December 1955 or January 1956.

330. Feather River at Nicolaus, Calif.

Location.--Lat 38°54'00", long 121°35'05", on left bank at Nicolaus, Sutter County, 0.3 mile downstream from highway bridge and 2.7 miles downstream from Bear River.

Gage-height record.--Water-stage recorder graph except Dec. 1-8. Gage is set to datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Dec. 1-8 estimated on basis of records for upstream stations.

Maxima.--December 1955 to January 1956: Discharge, 357,000 cfs 12 p.m. Dec. 23 (gage height, 48.70 ft); gage height, 51.60 ft 12:20 p.m. Dec. 23.
1943 to November 1955: Discharge, 145,000 cfs Nov. 21, 1950 (gage height, 47.80 ft).

Remarks.--Flow partly regulated by reservoirs and powerplants. Flow bypassing station through break in levee estimated to have totaled 500,000 acre-ft.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	3,000	28,300	11	4,620	25,400	21	104,000	34,600
2	3,600	26,800	12	3,630	24,000	22	154,000	36,700
3	3,200	26,600	13	3,480	24,200	23	313,000	38,700
4	2,800	24,900	14	3,620	37,400	24	109,000	42,200
5	2,900	25,400	15	3,660	83,600	25	54,400	42,900
6	9,000	26,400	16	3,600	106,000	26	51,300	50,800
7	11,000	24,700	17	3,780	79,200	27	60,100	49,900
8	6,700	27,700	18	5,480	50,000	28	58,900	41,300
9	5,440	29,500	19	15,000	37,400	29	48,900	33,600
10	5,280	25,800	20	72,200	33,800	30	38,500	29,700
						31	31,600	27,300
Monthly mean discharge, in cubic feet per second							38,570	38,530
Runoff, in acre-feet							2,372,000	2,369,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Feather River at Nicolaus, Calif.

Hour	Gage height	Discharge
Dec. 18		
12 p.m.	27.12	6,890
Dec. 19		
4 a.m.	27.23	7,070
8	28.35	8,900
12 m.	30.65	13,000
4 p.m.	32.90	17,400
8	35.90	24,000
12 p.m.	38.00	32,000
Dec. 20		
4 a.m.	40.00	45,000
8	41.66	60,300
12 m.	42.90	75,200
4 p.m.	43.68	86,400
8	44.32	97,300
12 p.m.	44.75	106,000
Dec. 21		
6 a.m.	44.92	109,000
12 m.	44.82	107,000
6 p.m.	44.52	101,000
12 p.m.	44.12	93,700
Dec. 22		
3 a.m.	44.02	91,900
8	44.42	99,100
12 m.	45.64	126,000
6 p.m.	48.90	216,000
9	49.85	246,000
12 p.m.	50.35	263,000
Dec. 23		
6 a.m.	51.00	284,000
10:20	51.34	295,000
12:20 p.m.	51.60	304,000
12:30	51.00	330,000
12:40	51.30	328,000
1:10	51.30	330,000
4	49.80	340,000
8	49.40	350,000
12 p.m.	48.70	357,000
Dec. 24		
1 a.m.	48.60	345,000
2	48.10	296,000
3	47.40	238,000
4	46.40	171,000
5	45.30	124,000
6	44.70	108,000
8	43.50	81,100
10	42.90	70,800
12 m.	42.50	66,000
3 p.m.	42.18	62,800
6	41.93	60,500
9	41.76	58,800
12 p.m.	41.62	57,300
Dec. 25		
6 a.m.	41.48	54,800
12 m.	41.54	55,400
6 p.m.	41.57	53,500
12 p.m.	41.51	50,700
Dec. 26		
12 m.	41.48	50,400
12 p.m.	41.83	53,600
Jan. 13		
12 p.m.	37.82	26,300
Jan. 14		
6 a.m.	38.30	29,400
12 m.	39.03	35,200
6 p.m.	39.80	41,800
12 p.m.	40.88	60,300
Jan. 15		
6 a.m.	41.78	74,300
12 m.	42.25	83,000
6 p.m.	42.70	92,000
12 p.m.	43.53	110,000
Jan. 16		
3 a.m.	43.87	117,000
6	43.80	116,000
12 m.	43.55	110,000
6 p.m.	42.98	97,600
12 p.m.	42.58	89,600
Jan. 17		
12 m.	42.02	78,400
12 p.m.	41.53	70,200

331. Sacramento River at Verona, Calif.

Location.--Lat 38°46'50", long 121°36'10", in SE¼ sec.23, T.11 N., R.3 E., on left bank 0.8 mile southeast of Verona, 1 mile downstream from Feather River, 6.2 miles east of Knights Landing, and at mile 19.6 upstream from Sacramento.

Gage-height record.--Water-stage recorder graph. Datum of gage is 0.06 ft below datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 71,400 cfs 3 p.m. Dec. 23 (gage height, 39.81 ft).

1926 to November 1955: Discharge, 79,200 cfs Mar. 1, 1940 (gage height, 41.20 ft).

Remarks.--Flows affected by Shasta Lake and several other reservoirs and powerplants above station, and by bypassing for flood control. When discharge exceeds about 55,000 cfs, flow begins over Fremont weir (just upstream) into Yolo bypass (see station 365). Elevation of crest of Fremont weir is 33.5 ft, datum of Corps of Engineers.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1	8,990	59,700
2	8,970	58,900
3	9,200	58,200
4	8,720	57,800
5	8,230	57,600
6	9,130	58,200
7	20,000	57,600
8	28,100	57,500
9	25,800	57,700
10	21,300	57,800
11	20,200	57,600
12	17,800	57,400
13	15,100	57,300
14	13,600	58,200
15	12,600	61,400
16	11,700	65,300
17	11,300	66,300
18	12,800	65,400
19	22,900	64,000
20	47,800	62,300
21	59,200	61,000
22	62,400	60,100
23	70,000	60,200
24	66,200	60,200
25	63,600	60,400
26	65,400	60,600
27	65,800	60,600
28	65,800	60,700
29	64,700	60,100
30	63,000	59,400
31	61,200	58,400
Monthly mean discharge, in cubic feet per second	33,600	59,930
Runoff, in acre-feet	2,066,000	3,685,000

332. Sacramento weir near Sacramento, Calif.

Location.--Lat 38°36'25", long 121°33'15", on left bank of Sacramento River opposite center of Sacramento weir, 3.2 miles upstream from American River, 4 miles northwest of Sacramento, and at mile 4.2 upstream from Sacramento.

Gage-height record.--Water-stage recorder graph. Gage is set to datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by weir formula and checked by current-meter measurements.

Maxima.--December 1955 to January 1956: Daily discharge, 48,800 cfs Dec. 24.
1926 to November 1955: Discharge, 118,000 cfs Mar. 26, 1928; gage height, 32.92 ft Nov. 21, 1950.

Remarks.--Crest of weir is at elevation 25.0 ft and top of movable gates at 31.0 ft. Weir consists of 48 gates, each 38.1 ft long. Flow over weir enters Yolo bypass by way of Sacramento bypass. Flows regulated by weir gates. Record furnished by California Department of Water Resources.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	6,330	11.....	0	0	21.....	0	0
2.....	0	5,570	12.....	0	0	22.....	0	0
3.....	0	3,890	13.....	0	0	23.....	19,600	0
4.....	0	1,890	14.....	0	0	24.....	48,800	0
5.....	0	277	15.....	0	0	25.....	43,500	0
6.....	0	0	16.....	0	2,470	26.....	45,700	0
7.....	0	0	17.....	0	4,240	27.....	45,200	0
8.....	0	0	18.....	0	3,470	28.....	36,400	0
9.....	0	0	19.....	0	828	29.....	27,200	0
10.....	0	0	20.....	0	0	30.....	19,400	0
						31.....	11,400	0
Monthly mean discharge, in cubic feet per second.....................							9,587	934
Runoff, in acre-feet...							589,500	57,450

333. North Fork American River at North Fork Dam, Calif.

Location.--Lat 38°56'15", long 121°01'25", in SW¼NW¼ sec.31, T.13 N., R.9 E., on left bank 50 ft upstream from spillway of North Fork Dam, 2 miles upstream from Middle Fork, and 4 miles northeast of Auburn.

Drainage area.--343 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 715.0 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 22,000 cfs and extended above on basis of computed flow over spillway of dam.

Maxima.--December 1955 to January 1956: Discharge, 49,100 cfs 3 p.m. Dec. 23 (gage height, 10.22 ft).
1941 to November 1955: Discharge, 46,600 cfs Nov. 20, 1950 (gage height, 9.96 ft).

Remarks.--Flows not affected by storage and diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	218	1,980	11.....	445	2,030	21.....	5,940	2,880
2.....	315	1,950	12.....	384	1,900	22.....	34,600	2,960
3.....	200	1,710	13.....	346	1,950	23.....	41,600	5,690
4.....	159	1,560	14.....	308	5,110	24.....	14,700	3,500
5.....	148	3,950	15.....	279	12,800	25.....	6,550	4,660
6.....	1,500	3,230	16.....	286	10,500	26.....	9,880	5,160
7.....	1,080	2,530	17.....	477	5,510	27.....	7,920	4,950
8.....	531	2,530	18.....	880	3,920	28.....	4,740	3,850
9.....	643	2,140	19.....	7,880	3,100	29.....	3,340	3,020
10.....	652	2,080	20.....	9,310	2,830	30.....	2,540	2,480
						31.....	2,170	2,160
Monthly mean discharge, in cubic feet per second.....................							5,162	3,697
Runoff, in inches..							17.35	12.43
Runoff, in acre-feet...							317,400	227,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of North Fork American River at North Fork Dam, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 22--Con.			Dec. 28--Con.		
12 p.m.	0.69	293	11 a.m.	9.93	46,300	12 p.m.	3.35	3,900
			2 p.m.	9.38	41,200			
Dec. 17			6	7.95	29,200	Dec. 29		
6 a.m.	.76	346	9	7.54	26,100	12 m.	3.10	3,290
12 m.	.95	498	12 p.m.	8.30	32,000	12 p.m.	2.90	2,880
6 p.m.	1.04	573						
12 p.m.	1.17	688	Dec. 23			Jan. 12		
			4 a.m.	9.86	45,700	12 p.m.	2.22	1,850
Dec. 18			7	9.28	40,300			
8 a.m.	1.44	955	3 p.m.	10.22	49,100	Jan. 13		
6 p.m.	1.35	865	8	9.20	39,600	12 m.	2.22	1,850
9	1.35	865	12 p.m.	7.73	27,500	6 p.m.	2.33	1,990
12 p.m.	1.52	1,040				12 p.m.	2.62	2,400
			Dec. 24					
Dec. 19			6 a.m.	6.32	17,700	Jan. 14		
4 a.m.	2.60	2,370	12 m.	5.50	13,000	4 a.m.	3.04	3,160
6	3.20	3,520	6 p.m.	4.97	10,200	12 m.	3.58	4,560
10	4.00	6,000	12 p.m.	4.60	8,440	9 p.m.	4.49	7,960
3 p.m.	5.10	10,900				12 p.m.	4.55	8,220
8	5.73	14,300	Dec. 25					
12 p.m.	5.27	11,800	3 p.m.	3.94	5,780	Jan. 15		
			5	3.90	5,640	8 a.m.	4.35	7,370
Dec. 20			12 p.m.	3.87	5,530	12 m.	4.66	8,720
5 a.m.	4.87	9,720				4 p.m.	6.20	17,000
11	5.05	10,600	Dec. 26			8	7.10	22,900
6 p.m.	4.44	7,750	6 a.m.	4.00	6,000	12 p.m.	6.38	18,100
9	4.32	7,240	12 m.	4.74	9,090			
12 p.m.	4.34	7,330	3 p.m.	5.62	13,700	Jan. 16		
			8	5.77	14,500	6 a.m.	5.35	12,200
Dec. 21			12 p.m.	5.25	11,700	12 m.	4.80	9,380
12 m.	3.68	4,880				12 p.m.	4.21	6,800
6 p.m.	3.53	4,410	Dec. 27					
10	4.12	6,460	6 a.m.	4.72	9,000	Jan. 17		
12 p.m.	5.56	13,300	12 m.	4.36	7,410	12 m.	3.83	5,390
			6 p.m.	4.14	6,530	12 p.m.	3.55	4,470
Dec. 22			12 p.m.	3.95	5,820			
2 a.m.	7.18	23,500				Jan. 18		
4	8.52	33,800	Dec. 28			12 m.	3.35	3,900
7 a.m.	9.56	42,800	12 m.	3.60	4,620	12 p.m.	3.16	3,430

334. Middle Fork American River at French Meadows, Calif.

Location.--Lat 39°07', long 120°28', in NE¼ sec.36, T.15 N., R.13 E., on left bank at downstream end of French Meadows, 4.5 miles upstream from Chipmunk Creek and 14 miles south of Cisco.

Drainage area.--46.7 sq mi.

Gage-height record.--Water-stage recorder graph except 1 a.m. Dec. 29 to 2:30 p.m. Jan. 2 and 4 a.m. Jan. 28 to 12 p.m. Jan. 31. Altitude of gage is 5,050 ft (from Bureau of Reclamation reservoir map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,400 cfs and by slope-area measurement at 16,300 cfs. Discharge for periods of no gage-height record estimated on basis of records for Rubicon River near Georgetown.

Maxima.--December 1955 to January 1956: Discharge, 16,300 cfs 4 a.m. Dec. 23 (gage height, 14.95 ft).

1951 to November 1955: Discharge, 3,310 cfs Apr. 27, 1953 (gage height, 8.84 ft).

Mean discharge, in cubic feet per second, 1955-56, of Middle Fork American River at French Meadows, Calif.

Day	December	January	Day	December	January	Day	December	January
1	11	200	11	31	121	21	875	346
2	12	170	12	31	126	22	8,000	552
3	11	150	13	29	155	23	11,300	808
4	8.1	142	14	28	448	24	1,680	430
5	9.7	145	15	28	1,790	25	762	581
6	69	142	16	30	1,340	26	1,120	507
7	63	139	17	45	598	27	680	362
8	35	128	18	52	424	28	424	300
9	48	116	19	310	346	29	350	250
10	39	116	20	742	340	30	280	220
						31	230	200
Monthly mean discharge, in cubic feet per second							882	377
Runoff, in inches							21.77	9.31
Runoff, in acre-feet							54,210	23,190

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 27		
12 p.m.	3.56	85	7 p.m.	10.72	6,200	6 a.m.	6.08	765
Dec. 19			12 p.m.	12.92	10,800	12 m.	5.81	630
5 a.m.	4.07	150	Dec. 23			12 p.m.	5.52	503
12 m.	4.88	310	2 a.m.	14.42	14,700	Jan. 12		
5 p.m.	5.34	459	4	14.95	16,300	12 p.m.	4.07	125
10	5.39	476	7	14.34	14,500	Jan. 13		
12 p.m.	5.48	512	8	14.45	14,800	12 m.	4.13	133
Dec. 20			12 m.	13.77	13,000	6 p.m.	4.34	167
6 a.m.	6.00	750	4 p.m.	12.98	11,000	12 p.m.	4.77	258
7	6.15	830	8	10.27	5,430	Jan. 14		
10	6.02	760	12 p.m.	8.60	3,020	6 a.m.	4.87	284
12 m.	5.98	740	Dec. 24			12 m.	5.13	362
4 p.m.	6.00	750	6 a.m.	7.68	2,020	6 p.m.	5.80	625
9	6.17	842	12 m.	7.12	1,520	12 p.m.	6.12	786
12 p.m.	6.01	755	6 p.m.	6.73	1,200	Jan. 15		
Dec. 21			12 p.m.	6.42	974	4 a.m.	6.05	750
3 a.m.	5.84	670	Dec. 25			10	6.39	953
12 m.	5.41	484	6 a.m.	6.16	808	2 p.m.	7.54	1,890
3 p.m.	5.40	480	12 m.	5.97	710	7	9.09	3,650
6	6.00	750	12 p.m.	5.93	690	10	8.54	2,950
9	7.22	1,600	Dec. 26			12 p.m.	8.11	2,450
12 p.m.	8.56	2,970	3 a.m.	5.91	680	Jan. 16		
Dec. 22			9	6.32	904	6 a.m.	7.22	1,600
3 a.m.	10.70	6,160	1 p.m.	7.18	1,560	12 m.	6.71	1,190
5	11.80	8,200	2	7.07	1,480	6 p.m.	6.41	967
7	12.17	8,980	5	7.17	1,560	12 p.m.	6.11	780
10	12.49	9,780	8	6.90	1,340			
2 p.m.	12.32	9,350	12 p.m.	6.47	1,010			
5 p.m.	11.20	7,060						

335. South Fork Rubicon River at mouth near Georgetown, Calif.

(Gaging station, discontinued 1911)

Location.--Lat 38°58'05", long 120°27'55", in SE$\frac{1}{4}$ sec.13, T.13 N., R.13 E., a quarter of a mile upstream from mouth and 21 miles east of Georgetown. Altitude is 3,600 ft (from topographic map).

Drainage area.--56.9 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 11,700 cfs Dec. 23 (gage height, 19.2 ft at gage established in July 1956).
1909-11: Daily discharge, 1,710 cfs Jan. 30, 1911.

336. Rubicon River near Georgetown, Calif.

Location.--Lat 38°57'30", long 120°29'05", in SE¼ sec.23, T.13 N., R.13 E., on left bank 1.3 miles downstream from South Fork and 20 miles east of Georgetown.

Drainage area.--198 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,350 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 11,000 cfs and by slope-area measurement at 44,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 51,000 cfs 11 a.m. Dec. 23 (gage height, 18.76 ft in gage well; about 21.5 ft outside, from floodmarks).
1909-14, 1943 to November 1955: Discharge, 44,600 cfs Nov. 18, 1950 (gage height, 18.10 ft in gage well; 22.8 ft outside, from floodmarks).

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	84	755	11.....	192	584	21.....	2,570	1,360
2.....	79	696	12.....	190	608	22.....	22,900	1,920
3.....	70	628	13.....	168	694	23.....	37,900	3,070
4.....	59	584	14.....	150	1,880	24.....	5,980	1,620
5.....	59	765	15.....	146	6,010	25.....	2,670	2,270
6.....	816	676	16.....	148	5,280	26.....	3,820	1,900
7.....	533	668	17.....	259	2,320	27.....	2,350	1,400
8.....	227	592	18.....	324	1,630	28.....	1,550	1,160
9.....	444	548	19.....	1,730	1,360	29.....	1,190	952
10.....	288	532	20.....	3,080	1,340	30.....	944	855
						31.....	840	751
Monthly mean discharge, in cubic feet per second							2,960	1,465
Runoff, in inches							17.24	8.53
Runoff, in acre-feet							182,000	90,070

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 22			Dec. 26--Con.		
12 p.m.......	3.02	144	2 a.m........	12.00	10,000	12 p.m.......	8.68	3.560
			4............	13.20	13,800			
Dec. 16			6............	14.50	19,500	Jan. 12		
7 a.m........	3.00	142	8............	15.08	22,500	12 p.m.......	4.95	620
9 p.m........	3.09	153	10...........	15.74	26,400			
12 p.m.......	3.21	169	2 p.m........	16.41	30,900	Jan. 13		
			9............	15.28	23,700	8 a.m........	4.93	612
Dec. 17			12 p.m.......	16.08	28,600	5 p.m........	5.08	672
6 a.m........	3.63	238				12 p.m.......	5.78	1,030
3 p.m........	3.63	238	Dec. 23					
11...........	4.23	379	2 a.m........	16.90	34,400	Jan. 14		
12 p.m.......	4.22	376	4............	18.00	43,700	3 a.m........	6.11	1,230
			6............	18.40	47,400	6............	6.10	1,220
Dec. 18			8............	18.05	44,200	12 m.........	6.78	1,700
3 p.m........	3.74	260	11...........	18.76	51,000	4 p.m........	7.38	2,190
8............	3.93	302	3 p.m........	17.85	42,400	10...........	8.17	2,970
12 p.m.......	4.63	499	6............	16.93	34,600	12 p.m.......	8.16	2,960
			8............	16.05	28,400			
Dec. 19			9............	15.18	23,100	Jan. 15		
2 a.m........	5.32	780	10...........	14.30	18,500	6 a.m........	7.90	2,680
7............	6.32	1,360	12 p.m.......	13.05	13,200	12 m.........	9.00	3,970
9............	6.21	1,290				2 p.m........	10.40	6,250
3 p.m........	7.27	2,100	Dec. 24			4............	11.60	9,000
6............	8.08	2,870	3 a.m........	11.80	9,500	6:30.........	12.30	10,900
9............	7.52	2,320	7............	10.50	6,450	8............	12.06	10,200
12 p.m.......	7.48	2,280	4 p.m........	9.13	4,140	9:30.........	12.25	10,800
Dec. 20			12 p.m.......	8.48	3,320	12 p.m.......	11.85	9,620
9 a.m........	8.56	3,410	Dec. 25			Jan. 16		
6 p.m........	8.25	3,060	4 p.m........	7.55	2,340	4 a.m........	11.00	7,520
10...........	8.48	3,320	12 p.m.......	7.58	2,370	8............	10.20	5,850
12 p.m.......	8.28	3,090	Dec. 26			12 m.........	9.50	4,650
Dec. 21			4 a.m........	7.52	2,320	6 p.m........	8.75	3,640
8 a.m........	7.36	2,170	10...........	8.35	3,160	12 p.m.......	8.20	3,000
5 p.m........	6.79	1,710	12 m.........	9.44	4,570			
8............	7.43	2,240	2 p.m........	10.25	5,950	Jan. 17		
10...........	9.10	4,100	4............	9.65	4,890	12 m.........	7.38	2,220
12 p.m.......	10.70	6,850	7 p.m........	9.81	5,150	12 p.m.......	6.91	1,850

337. Pilot Creek near Georgetown, Calif.

Location.--Lat 38°54'14", long 120°36'11", in NW¼ sec.11, T.12 N., R.12 E., on left bank 2.6 miles upstream from Mutton Canyon and 12 miles east of Georgetown.

Drainage area.--15.1 sq mi.

Gage-height record.--Water-stage recorder graph except 10 p.m. Dec. 14 to 12:30 p.m. Jan. 10. Altitude of gage is 4,120 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 79 cfs and by slope-area measurement at 3,040 cfs. Discharge for period of no gage-height record estimated on basis of recorded range in stage and records for Silver Creek near Placerville.

Maxima.--December 1955 to January 1956: Discharge, 3,040 cfs time unknown, Dec. 23 (gage height, 8.06 ft).

1946 to November 1955: Discharge, 3,040 cfs Nov. 18, 1950 (gage height, 10.84 ft in well; 13.3 ft outside, from floodmarks, at site 300 ft downstream at datum 5.67 ft lower), from rating curve extended above 190 cfs by slope-area measurement of peak flow.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2.4	110	11.....	5.1	77	21.....	150	120
2.....	2.1	100	12.....	4.0	75	22.....	900	143
3.....	1.6	95	13.....	3.2	79	23.....	1,800	223
4.....	1.4	90	14.....	2.6	144	24.....	500	166
5.....	2.0	110	15.....	2.5	277	25.....	250	255
6.....	45	100	16.....	2.5	305	26.....	300	258
7.....	18	95	17.....	10	187	27.....	230	204
8.....	8.4	90	18.....	60	155	28.....	170	160
9.....	18	85	19.....	160	134	29.....	140	138
10.....	9.0	81	20.....	200	126	30.....	130	121
						31.....	120	108
Monthly mean discharge, in cubic feet per second......................							169	142
Runoff, in inches..							12.92	10.86
Runoff, in acre-feet...							10,410	8,750

338. Middle Fork American River near Auburn, Calif.

Location.--Lat 38°55'05", long 121°00'20", in SE¼ sec.6, T.12 N., R.9 E., on left bank at abandoned plant of Mountain Quarry Co., 1.9 miles upstream from mouth and 3.5 miles northeast of Auburn.

Drainage area.--619 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 568.5 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 32,000 cfs and by float measurement at 68,200 cfs.

Maxima.--December 1955 to January 1956: Discharge, 79,000 cfs 6 a.m. Dec. 23 (gage height, 33.9 ft).

1911 to November 1955: Discharge, 68,500 cfs Nov. 20, 1950 (gage height, 34.7 ft, from floodmarks), from rating curve extended above 32,000 cfs on basis of slope-area measurement of peak flow.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	247	3,070	11.....	620	2,770	21.....	7,420	4,990
2.....	390	3,130	12.....	515	2,680	22.....	51,000	5,090
3.....	300	2,710	13.....	484	2,670	23.....	67,400	11,600
4.....	242	2,510	14.....	438	6,320	24.....	26,200	6,610
5.....	213	5,080	15.....	403	18,500	25.....	11,300	9,160
6.....	1,920	4,330	16.....	403	20,100	26.....	15,500	9,290
7.....	1,600	3,630	17.....	634	8,850	27.....	12,300	7,960
8.....	760	3,430	18.....	1,210	6,280	28.....	7,140	6,250
9.....	936	2,960	19.....	8,270	5,100	29.....	5,330	5,120
10.....	948	2,810	20.....	11,000	4,680	30.....	3,800	4,280
						31.....	3,650	3,700
Monthly mean discharge, in cubic feet per second......................							7,825	5,989
Runoff, in inches..							14.57	11.15
Runoff, in acre-feet...							481,100	368,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Middle Fork American River near Auburn, Calif.

Hour	Gage height	Discharge
Dec. 16		
12 p.m.	3.38	410
Dec. 17		
12 m.	3.96	606
12 p.m.	4.73	912
Dec. 18		
6 a.m.	5.57	1,280
11	5.54	1,270
7 p.m.	5.20	1,120
12 p.m.	5.95	1,460
Dec. 19		
4 a.m.	7.80	2,490
6	9.60	4,210
10	12.15	7,830
2 p.m.	12.88	9,200
8	15.02	13,900
10	15.18	14,300
12 p.m.	15.02	13,900
Dec. 20		
6 a.m.	13.60	10,700
8	13.65	10,800
12 m.	14.18	11,900
7 p.m.	12.98	9,400
12 p.m.	13.23	9,900
Dec. 21		
8 a.m.	12.12	7,780
6 p.m.	10.86	5,800
8 p.m.	10.78	5,690
Dec. 21--Con.		
10 p.m.	11.12	6,170
12 p.m.	13.25	9,940
Dec. 22		
3 a.m.	20.50	29,300
6	26.30	49,600
1 p.m.	31.63	69,900
6	28.20	56,900
10	25.95	48,300
12 p.m.	27.20	53,100
Dec. 23		
3 a.m.	31.10	67,900
6	33.9	79,000
9	31.70	70,200
12 m.	31.75	70,400
4 p.m.	31.50	69,400
8	30.65	66,200
12 p.m.	26.20	49,300
Dec. 24		
4 a.m.	22.0	34,200
12 m.	18.8	24,100
6 p.m.	16.75	18,400
12 p.m.	15.55	15,200
Dec. 25		
12 m.	13.62	10,700
6 p.m.	12.98	9,400
12 p.m.	12.86	9,160
Dec. 26		
3 a.m.	12.86	9,160
Dec. 26--Con.		
7 a.m.	13.13	9,700
1 p.m.	15.50	15,100
4	18.65	23,600
9	18.10	22,100
12 p.m.	16.85	18,600
Dec. 27		
9 a.m.	14.38	12,400
6 p.m.	13.18	9,800
12 p.m.	12.60	8,640
Jan. 13		
12 p.m.	8.35	2,910
Jan. 14		
12 m.	10.88	5,830
12 p.m.	13.60	10,700
Jan. 15		
1 a.m.	13.69	10,900
10	13.28	10,000
5 p.m.	18.90	24,400
9	22.21	34,900
12 p.m.	21.30	31,900
Jan. 16		
12 m.	16.80	18,500
12 p.m.	14.00	11,500
Jan. 17		
12 m.	12.48	8,420
12 p.m.	11.70	7,060

339. Silver Lake outlet near Kirkwood, Calif.

Location.--Lat 38°40', long 120°08', in SW¼ sec.32, T.10 N., R.17 E., on right bank 1,000 ft downstream from Silver Lake Dam and 3 miles southwest of Kirkwood.

Drainage area.--14.9 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 7,200 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 200 cfs and extended above by logarithmic plotting; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 443 cfs 3:30 p.m. Dec. 23 (gage height, 4.72 ft).

1922 to November 1955: Discharge, 676 cfs Nov. 21, 1950 (gage height, 6.03 ft).

Remarks.--Flow regulated by Silver Lake since beginning of record (usable capacity, 8,590 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2.5	55	11	1.5	48	21	0.4	51
2		54	12		48	22	32	50
3		53	13		47	23	302	50
4		52	14		47	24	353	49
5		51	15		47	25	262	49
6	2.0	51	16	1.0	49	26	190	49
7		51	17	1.0	51	27	139	48
8		50	18	1.0	51	28	103	47
9		50	19	.5	51	29	82	47
10		49	20	.4	51	30	68	47
						31	60	47
Monthly mean discharge, in cubic feet per second							52.4	49.7
Runoff, in acre-feet							3,220	3,050

340. South Fork American River near Kyburz, Calif.

Location.--Lat 38°45'49", long 120°19'39", in SW¼SW¼ sec.29, T.11 N., R.15 E., on right bank beside U.S. Highway 50, 0.8 mile downstream from Silver Fork of South Fork and 1.9 miles southwest of Kyburz.

Drainage area.--196 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,840 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,500 cfs and by contracted-opening measurement at 14,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 13,800 cfs 9 a.m. Dec. 23 (gage height, 9.25 ft).

1922 to November 1955: Discharge, 14,500 cfs Nov. 21, 1950 (gage height, 9.40 ft).

Remarks.--Flow partly regulated by four reservoirs since beginning of record (total usable capacity, 37,100 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1.....	6.8	580
2.....	5.8	535
3.....	5.8	498
4.....	4.0	485
5.....	7.5	498
6.....	117	467
7.....	43	424
8.....	5.2	400
9.....	20	412
10.....	5.5	400
11.....	5.5	396
12.....	5.2	408
13.....	5.0	400
14.....	6.0	508
15.....	6.8	1,500
16.....	6.2	1,980
17.....	8.5	1,120
18.....	9.2	863
19.....	193	752
20.....	439	746
21.....	461	724
22.....	6,090	798
23.....	10,700	1,170
24.....	3,140	776
25.....	1,760	863
26.....	1,720	807
27.....	1,310	702
28.....	958	641
29.....	782	565
30.....	680	512
31.....	625	472
Monthly mean discharge, in cubic feet per second	940	690
Runoff, in inches	5.53	4.06
Runoff, in acre-feet	57,780	42,450

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 17		
12 p.m.......	0.82	7.0
Dec. 18		
2 a.m........	.87	8.5
4 p.m........	.81	6.8
10...........	.93	10
12 p.m.......	1.45	37
Dec. 19		
3 a.m........	1.96	85
10...........	2.25	138
10:30........	2.10	111
8:30 p.m.....	3.01	362
12 p.m.......	2.97	346
Dec. 20		
12 p.m.......	3.34	505
Dec. 21		
2 a.m........	3.30	485
2 p.m........	2.79	285
5 p.m........	2.78	282
Dec. 21--Con.		
8 p.m........	3.00	358
9............	3.22	485
12 p.m.......	4.66	1,670
Dec. 22		
6 a.m........	6.80	5,000
10...........	7.70	7,400
11:30........	7.79	7,680
1 p.m........	7.70	7,400
4............	7.70	7,400
8............	7.27	6,180
10...........	7.50	6,800
12 p.m.......	8.30	9,480
Dec. 23		
4 a.m........	8.90	12,000
6............	8.85	11,800
9............	9.25	13,800
6 p.m........	8.40	9,900
12 p.m.......	6.85	5,150
Dec. 24		
3 a.m........	6.40	4,200
Dec. 24--Con.		
8 a.m........	5.95	3,370
3 p.m........	5.50	2,660
12 p.m.......	5.05	2,080
Jan. 14		
12 p.m.......	3.51	690
Jan. 15		
3 a.m........	3.54	707
5............	3.54	707
8............	3.60	740
10...........	3.71	807
12 m.........	4.04	1,070
11:30 p.m....	5.93	3,330
12 p.m.......	5.86	3,220
Jan. 16		
3 a.m........	5.44	2,580
7............	5.11	2,150
9............	5.00	2,020
4 p.m........	4.66	1,660
12 p.m.......	4.39	1,390

341. Alder Creek near White Hall, Calif.

Location.--Lat 38°45'19", long 120°22'17", in NE¼SE¼ sec.35, T.11 N., R.14 E., on right bank 0.9 mile upstream from mouth and 2.2 miles southeast of White Hall.

Drainage area.--22.8 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 9 to 13. Altitude of gage is 3,840 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 500 cfs, and extended above by logarithmic plotting. Discharge for period of no gage-height record estimated on basis of recorded range in stage, weather records, and normal recession.

Maxima.--December 1955 to January 1956: Discharge, 5,500 cfs 2:30 a.m. Dec. 23 (gage height, 8.40 ft, from floodmark).

1922 to November 1955: Discharge, about 3,700 cfs Mar. 25, 1928 (gage height, 7.1 ft, from floodmarks).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2.4	122	11	16	60	21	248	157
2	2.4	108	12	15	60	22	1,350	244
3	2.4	94	13	15	63	23	3,440	420
4	2.4	86	14	3.1	131	24	895	274
5	2.5	91	15	3.1	518	25	552	370
6	56	81	16	3.1	546	26	764	352
7	33	76	17	17	325	27	516	257
8	18	73	18	17	238	28	325	187
9	23	63	19	138	190	29	219	153
10	17	62	20	302	183	30	165	135
						31	136	117
Monthly mean discharge, in cubic feet per second							300	188
Runoff, in inches							15.17	9.52
Runoff, in acre-feet							18,440	11,580

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	1.27	1.2	4 a.m.	4.65	1,260	10 a.m.	3.90	755
			5	4.80	1,380	11	4.46	1,120
Dec. 18			6	4.67	1,280	2 p.m.	4.30	1,010
12 m.	1.25	.8	7	4.90	1,460	4	4.21	952
8 p.m.	1.23	.6	8	5.18	1,680	12 p.m.	3.80	695
12 p.m.	1.31	2.2	9	5.50	1,970			
			10	5.35	1,840	Dec. 27		
Dec. 19			12 m.	5.20	1,700	12 m.	3.45	498
3 a.m.	1.53	16	2 p.m.	5.10	1,620	12 p.m.	3.25	395
5	1.76	38	4	4.65	1,260			
7	1.99	67	6	4.25	975	Jan. 12		
1 p.m.	2.40	153	12 p.m.	4.50	1,150	12 p.m.	1.93	58
3	2.57	202						
6	2.42	159	Dec. 23			Jan. 13		
12 p.m.	2.65	226	2:30 a.m.	8.40	5,500	4 p.m.	1.94	59
			3	7.50	4,220	12 p.m.	2.06	76
Dec. 20			5	7.10	3,700			
10 a.m.	2.91	310	10	7.55	4,280	Jan. 14		
1 p.m.	2.87	297	4 p.m.	7.25	3,900	12 m.	2.39	129
4	2.90	307	7	6.05	2,500	6 p.m.	2.57	163
5	2.95	324	12 p.m.	4.90	1,450	9	2.60	169
8	2.85	290				12 p.m.	2.59	167
12 p.m.	2.73	252	Dec. 24					
			3 a.m.	4.55	1,180	Jan. 15		
Dec. 21			9	4.25	978	5 a.m.	2.56	161
6 a.m.	2.52	187	4 p.m.	3.75	665	9	2.65	180
12 m.	2.39	150	12 p.m.	3.75	665	11	2.90	250
2 p.m.	2.37	145				3 p.m.	3.95	785
4	2.39	150	Dec. 25			7	4.37	1,060
8	2.78	268	9 a.m.	3.53	542	12 p.m.	4.02	828
10	3.23	427	8 p.m.	3.48	514			
12 p.m.	3.68	635	12 p.m.	3.43	486	Jan. 16		
						5 a.m.	3.68	624
Dec. 22			Dec. 26			11	3.49	520
1 a.m.	4.10	875	2 a.m.	3.42	481	6 p.m.	3.39	465
2 a.m.	4.48	1,140	6 a.m.	3.55	552	12 p.m.	3.24	390

342. Plum Creek near Riverton, Calif.

(Gaging station, discontinued 1939)

Location.--Lat 38°45', long 120°26', in NE¼SE¼ sec.32, T.11 N., R.14 E., 1½ miles upstream from mouth and 2 miles southeast of Riverton. Altitude is 3,820 ft (from topographic map).

Drainage area.--6.8 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 1,400 cfs Dec. 23.
1922-39: Discharge, 635 cfs Mar. 25, 1928 (gage height, 4.10 ft), from rating curve extended above 100 cfs.
Local power company employee stated that December 1955 flood was higher than November 1950 flood and was highest observed in 8-year residence.

343. Silver Creek at Union Valley, Calif.

Location.--Lat 38°51'55", long 120°25'35", in SE¼ sec.20, T.12 N., R.14 E., on right bank 0.6 mile downstream from confluence of Big Silver Creek and Jones Fork Silver Creek, near lower end of Union Valley, and 6.6 miles north of Riverton.

Drainage area.--82.7 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 24 to Jan. 3. Altitude of gage is 4,530 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,200 cfs and by slope-area measurement at 12,100 cfs. Discharge for period of no gage-height record estimated on basis of records for station near Placerville.

Maxima.--December 1955 to January 1956: Discharge, 15,800 cfs 5 a.m. Dec. 23 (gage height, 18.85 ft).
1924 to November 1955: Discharge, 12,100 cfs Nov. 20, 1950 (gage height, 16.55 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	36	360	11.....	69	283	21.....	696	591
2.....	32	360	12.....	66	289	22.....	8,060	923
3.....	28	320	13.....	62	304	23.....	11,100	1,500
4.....	22	303	14.....	58	672	24.....	2,200	733
5.....	29	355	15.....	59	2,240	25.....	1,100	1,240
6.....	221	332	16.....	61	1,920	26.....	1,250	872
7.....	199	315	17.....	98	1,110	27.....	900	643
8.....	93	287	18.....	125	625	28.....	650	542
9.....	149	272	19.....	480	532	29.....	500	470
10.....	101	274	20.....	704	561	30.....	440	434
						31.....	400	395
Monthly mean discharge, in cubic feet per second........................							967	647
Runoff, in inches..							13.49	9.02
Runoff, in acre-feet..							59,480	39,780

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 19--Con.			Dec. 22--Con.		
12 p.m.......	1.53	86	12 p.m.......	3.76	618	7 p.m........	13.30	7,610
						12 p.m.......	16.25	11,700
Dec. 17			Dec. 20					
12 m.........	1.55	89	5:30 a.m.....	4.24	796	Dec. 23		
9 p.m........	1.88	143	9............	4.03	715	2 a.m........	17.95	14,300
12 p.m.......	1.82	133	12 m.........	4.08	734	5............	18.85	15,800
			12 p.m.......	3.79	629	8............	17.90	14,200
Dec. 18						2 p.m........	16.10	11,400
3 p.m........	1.56	90	Dec. 21			5............	15.00	9,850
9............	1.90	147	2 p.m........	3.40	500	8............	11.75	5,850
12 p.m.......	2.53	272	9............	5.48	1,330	12 p.m.......	9.15	3,610
			11...........	7.05	2,190			
Dec. 19			12 p.m.......	7.95	2,760	Dec. 24		
2 a.m........	3.02	392				10 a.m.......	6.79	2,030
4............	3.29	467	Dec. 22			Jan. 12		
7............	3.20	442	3 a.m........	10.87	5,030	12 p.m.......	2.61	289
8............	3.31	473	9............	14.40	9,020			
2 p.m........	3.22	448	12:30 p.m....	15.11	10,000	Jan. 13		
9 p.m........	3.74	612	2 p.m........	14.96	9,790	1 p.m........	2.61	289

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Silver Creek at Union Valley, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 13--Con.			Jan. 15			Jan. 16--Con.		
6 p.m.	2.66	301	4 a.m.	4.57	928	1 p.m.	6.35	1,770
12 p.m.	3.00	387	12 m.	6.12	1,650	12 p.m.	5.17	1,190
			3 p.m.	8.10	2,870			
Jan. 14			8	9.88	4,180	Jan. 17		
2 a.m.	3.08	409	12 p.m.	9.01	3,510	12 m.	4.49	896
12 m.	3.88	661				12 p.m.	4.03	715
9 p.m.	4.65	960	Jan. 16					
12 p.m.	4.63	952	5 a.m.	7.73	2,620			

344. South Fork Silver Creek near Ice House, Calif.

Location.--Lat 38°49'18", long 120°21'37", in SE¼SW¼ sec.1, T.11 N., R.14 E., on left bank 0.3 mile upstream from Peavine Creek, 0.9 mile northeast of Ice House, and 5.9 miles northeast of Riverton.

Drainage area.--28.4 sq mi.

Gage-height record.--Water-stage recorder graph except 8 p.m. Dec. 3 to 1 p.m. Dec. 12. Altitude of gage is 5,300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 540 cfs and by slope-area measurement at 3,900 cfs. Discharge for period of no gage-height record estimated on basis of recorded range in stage and records for Silver Creek at Union Valley.

Maxima.--December 1955 to January 1956: Discharge, 3,940 cfs 6 a.m. Dec. 23 (gage height, 6.71 ft).

1924 to November 1955: Discharge, 3,900 cfs Nov. 18, 1950 (gage height, 6.69 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	9.2	110	11	25	76	21	88	169
2	8.6	102	12	21	76	22	1,300	259
3	11	93	13	16	81	23	2,780	327
4	12	86	14	15	156	24	636	203
5	15	80	15	15	417	25	300	230
6	60	92	16	16	499	26	276	186
7	50	85	17	20	276	27	206	160
8	25	77	18	21	201	28	166	151
9	40	77	19	44	171	29	147	136
10	30	74	20	63	171	30	134	126
						31	120	114
Monthly mean discharge, in cubic feet per second							215	163
Runoff, in inches							8.73	6.63
Runoff, in acre-feet							13,230	10,040

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Jan. 13		
12 p.m.	0.72	22	7 a.m.	3.17	583	12 m.	1.25	76
Dec. 18			9	4.04	970	12 p.m.	1.37	95
5 p.m.	.68	19	4 p.m.	5.38	1,980			
12 p.m.	.80	28	12 p.m.	5.54	2,160	Jan. 14		
						6 p.m.	1.83	191
Dec. 19			Dec. 23			12 p.m.	1.87	201
6 p.m.	1.08	54	2 a.m.	6.03	2,790			
12 p.m.	1.07	53	6	6.71	3,940	Jan. 15		
			7	6.50	3,550	6 a.m.	1.91	210
Dec. 20			10	6.45	3,460	9	2.00	232
1 p.m.	1.18	66	5 p.m.	5.83	2,520	3 p.m.	2.93	496
12 p.m.	1.20	68	12 p.m.	4.44	1,210	7	3.54	733
						12 p.m.	3.34	651
Dec. 21			Dec. 24					
3 p.m.	1.19	67	6 a.m.	3.57	746	Jan. 16		
7	1.37	95	12 m.	3.08	548	12 m.	2.94	499
12 p.m.	1.94	218	12 p.m.	2.53	370	12 p.m.	2.44	346
Dec. 22			Jan. 12					
4 a.m.	2.75	435	12 p.m.	1.25	76			

345. Silver Creek near Placerville, Calif.

Location.--Lat 38°47'30", long 120°35'15", in NE¼ sec.24, T.11 N., R.12 E., on right bank 0.2 mile upstream from mouth and 12 miles northeast of Placerville.

Drainage area.--176 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,070 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,900 cfs and by slope-area measurement at 25,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 27,500 cfs 7 a.m. Dec. 23 (gage height, 14.50 ft).

1921 to November 1955: Discharge, 25,800 cfs Nov. 18, 1950 (gage height, 14.25 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	90	890	11	164	675	21	1,280	1,360
2	83	830	12	140	670	22	13,000	1,680
3	68	745	13	126	680	23	21,500	3,370
4	52	715	14	119	1,470	24	5,720	1,860
5	66	923	15	111	4,120	25	2,590	2,780
6	550	840	16	122	4,450	26	3,040	2,410
7	382	808	17	250	2,180	27	2,300	1,810
8	213	735	18	361	1,510	28	1,530	1,480
9	326	685	19	1,390	1,250	29	1,220	1,240
10	250	675	20	1,650	1,250	30	1,060	1,110
						31	945	1,010
Monthly mean discharge, in cubic feet per second							1,958	1,491
Runoff, in inches							12.83	9.76
Runoff, in acre-feet							120,400	91,660

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	2.53	148	4 a.m.	10.20	8,230	12 m.	7.48	3,280
			6	10.90	10,200	6 p.m.	8.22	4,260
Dec. 17			8	12.00	14,000	12 p.m.	7.32	3,080
12 m.	2.87	225	12 m.	12.70	17,100			
12 p.m.	3.45	400	8 p.m.	12.05	14,200	Dec. 27		
			12 p.m.	12.50	16,200	12 m.	6.42	2,150
Dec. 18						12 p.m.	6.04	1,810
3 a.m.	3.47	407	Dec. 23					
4 p.m.	3.09	283	3 a.m.	13.60	21,800	Jan. 13		
8	3.20	316	4	14.00	24,200	12 p.m.	4.60	835
12 p.m.	3.90	574	5	14.10	24,800			
			7	14.50	27,500	Jan. 14		
Dec. 19			8	14.20	25,500	12 m.	5.53	1,400
6 a.m.	5.46	1,400	9	14.00	24,200	9 p.m.	6.33	2,060
4 p.m.	5.57	1,470	5 p.m.	13.80	23,000	12 p.m.	6.37	2,090
9	5.92	1,720	9	12.55	16,400			
12 p.m.	5.95	1,740	12 p.m.	11.25	11,200	Jan. 15		
						6 a.m.	6.30	2,030
Dec. 20			Dec. 24			12 m.	6.99	2,720
3 a.m.	5.90	1,700	4 a.m.	10.15	8,110	3 p.m.	8.50	4,710
8	6.13	1,890	8	9.27	6,130	9	10.10	7,990
12 m.	5.85	1,660	12 m.	8.65	4,960	12 p.m.	9.83	7,340
8 p.m.	5.60	1,490	4 p.m.	8.20	4,230			
12 p.m.	5.45	1,390	12 p.m.	7.42	3,200	Jan. 16		
						6 a.m.	8.83	5,280
Dec. 21			Dec. 25			12 m.	8.07	4,050
6 a.m.	5.15	1,210	6 a.m.	7.05	2,780	12 p.m.	7.05	2,780
5 p.m.	4.83	1,030	6 p.m.	6.60	2,320			
10	5.75	1,600	12 p.m.	6.48	2,200	Jan. 17		
12 p.m.	6.80	2,520				12 m.	6.38	2,100
			Dec. 26			12 p.m.	5.96	1,730
Dec. 22			5 a.m.	6.40	2,130			
2 a.m.	8.50	4,710	8 a.m.	6.50	2,220			

346. South Fork American River near Camino, Calif.

Location.--Lat 38°46'20", long 120°42'05", in SE¼NW¼ sec.25, T.11 N., R.11 E., on right bank 400 ft upstream from Iowa Canyon Creek, 1 mile downstream from intake of American River flume, and 2.8 miles northwest of Camino.

Drainage area.--497 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 23 to Jan. 3. Altitude of gage is 1,630 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 24,000 cfs and by computed flow over dam at 49,800 cfs. Discharge for period of no gage-height record estimated on basis of records for upstream stations.

Maxima.--December 1955 to January 1956: Discharge, 49,800 cfs about 11 a.m. Dec. 23 (gage height, 32.6 ft, from floodmarks).

1922 to November 1955: Discharge, 46,000 cfs Nov. 21, 1950 (gage height, 29.4 ft, from floodmarks), from rating curve extended above 24,000 cfs on basis of flow at upstream and downstream stations.

Remarks.--Flow partly regulated by four reservoirs since beginning of record (total usable capacity, 37,100 acre-ft). Diversion above station by American River flume Dec. 1-21.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	59	2,300	11.....	165	1,590	21.....	2,380	3,070
2.....	71	2,000	12.....	145	1,560	22.....	23,800	3,590
3.....	34	1,800	13.....	113	1,570	23.....	40,000	7,160
4.....	13	1,660	14.....	94	3,070	24.....	15,000	4,300
5.....	26	2,430	15.....	94	8,170	25.....	8,000	6,070
6.....	900	2,090	16.....	99	9,520	26.....	9,000	5,840
7.....	626	1,920	17.....	246	5,190	27.....	6,000	4,660
8.....	266	1,760	18.....	420	3,700	28.....	4,000	3,660
9.....	365	1,670	19.....	2,700	3,060	29.....	3,200	3,030
10.....	332	1,600	20.....	3,450	2,960	30.....	2,800	2,660
						31.....	2,600	2,410
Monthly mean discharge, in cubic feet per second.....................							4,097	3,422
Runoff, in inches..							9.50	7.94
Runoff, in acre-feet...							251,900	210,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Jan. 14--Con.		
12 p.m.......	4.32	643	8 p.m........	6.91	2,110	11 p.m.......	9.63	4,440
			9............	7.25	2,380	12 p.m.......	9.65	4,460
Dec. 19			10...........	7.75	2,800			
4 a.m........	6.25	1,640	12 p.m.......	9.65	4,730	Jan. 15		
5............	6.88	2,090				4 a.m........	9.58	4,390
8............	7.72	2,780	Dec. 22			6............	9.51	4,310
9............	7.76	2,810	4 a.m........	17.10	16,000	8............	9.55	4,360
11...........	7.73	2,790	5............	18.50	18,800	10...........	9.71	4,530
12 m.........	7.77	2,820	6............	20.50	22,800	12 m.........	10.30	5,210
5 p.m........	8.04	3,070	7............	21.20	24,200	2 p.m........	11.75	7,100
7............	8.38	3,380	8............	22.10	26,200	5............	14.88	12,000
9............	8.79	3,790	9............	23.15	28,500	7............	16.37	14,700
12 p.m.......	8.82	3,820	10...........	23.80	30,000	9............	16.79	15,400
			11:30........	24.36	31,200	12 p.m.......	16.24	14,400
Dec. 20			1 p.m........	23.95	30,300			
1 a.m........	8.79	3,790	3............	23.15	28,500	Jan. 16		
3............	8.66	3,660	7............	21.00	23,800	6 a.m........	14.33	11,100
5............	8.66	3,660	8............	20.79	23,400	12 m.........	13.00	8,900
8............	8.83	3,830	9............	21.15	24,100	7 p.m........	11.99	7,440
2 p.m........	8.33	3,330	10...........	22.00	26,000	12 p.m.......	11.32	6,520
9............	8.05	3,080	12 p.m.......	24.60	31,700			
12 p.m.......	7.85	2,900				Jan. 17		
			Jan. 13			6 a.m........	10.69	5,700
Dec. 21			12 p.m.......	6.40	1,760	12 m.........	10.19	5,080
1 a.m........	7.75	2,800				6 p.m........	9.81	4,640
2............	7.46	2,550	Jan. 14			12 p.m.......	9.37	4,170
6:30.........	7.12	2,280	5 a.m........	7.00	2,150	Jan. 18		
7............	7.28	2,400	12 m.........	8.03	2,920	6 a.m........	9.11	3,910
3 p.m........	6.69	1,950	6 p.m........	9.12	3,920	12 m.........	8.87	3,670
6............	6.65	1,920	9............	9.51	4,310	6 p.m........	8.64	3,460
7 p.m........	6.74	1,990	10 p.m.......	9.60	4,410	12 p.m.......	8.48	3,310

347. South Fork American River near Lotus, Calif.

Location.--Lat 38°49'05", long 120°56'45", in SW¼ sec.11, T.11 N., R.9 E., on left bank 0.4 mile downstream from Greenwood Creek, 2.4 miles northwest of Lotus, and 3.3 miles northwest of Coloma.

Drainage area.--678 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 635 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 71,800 cfs 5 p.m. Dec. 23 (gage height, 21.37 ft in gage well; 22.0 ft outside, from floodmarks).

1951 to November 1955: Discharge, 10,000 cfs Mar. 9, 1954 (gage height, 10.51 ft).

Stage known 1862 to November 1955: 20.4 ft Nov. 21, 1950, from floodmarks (discharge, 64,500 cfs).

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1.....	228	2,550
2.....	355	2,530
3.....	260	2,220
4.....	232	2,090
5.....	184	4,860
6.....	1,530	3,550
7.....	1,230	2,840
8.....	604	2,690
9.....	674	2,320
10.....	680	2,210
11.....	437	2,100
12.....	381	1,990
13.....	348	1,970
14.....	310	4,310
15.....	294	11,700
16.....	310	13,100
17.....	393	6,310
18.....	787	4,380
19.....	3,730	3,660
20.....	5,110	3,530
21.....	3,240	3,560
22.....	33,300	4,000
23.....	62,400	8,920
24.....	23,200	5,260
25.....	8,440	7,060
26.....	10,500	7,510
27.....	8,600	6,760
28.....	4,880	4,830
29.....	3,630	3,890
30.....	2,980	3,390
31.....	2,700	3,030
Monthly mean discharge, in cubic feet per second......................	5,869	4,488
Runoff, in inches..	9.98	7.63
Runoff, in acre-feet...	360,900	275,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge
Dec. 17		
12 p.m.......	5.61	727
Dec. 18		
6 a.m........	5.85	910
9............	5.64	748
5 p.m........	5.52	667
12 p.m.......	5.96	998
Dec. 19		
5 a.m........	6.90	1,970
12 m.........	8.27	4,050
3 p.m........	8.36	4,210
9............	9.12	5,950
12 p.m.......	9.21	6,190
Dec. 20		
1 a.m........	9.29	6,390
12 m.........	8.72	4,970
6 p.m........	8.45	4,380
12 p.m.......	8.39	4,260
Dec. 21		
12 m.........	7.64	2,990
1 p.m........	7.66	3,030
9............	7.40	2,630
12 p.m.......	7.75	3,170
Dec. 22		
2 a.m........	8.85	5,280
4 a.m........	10.15	8,890
Dec. 22--Con.		
6 a.m........	12.60	17,800
10...........	17.40	43,600
2 p.m........	18.79	53,000
11...........	16.08	35,500
12 p.m.......	16.15	35,900
Dec. 23		
7:30 a.m.....	21.05	69,400
8:30.........	20.92	68,400
11...........	21.10	69,800
3 p.m........	21.00	69,000
5............	21.37	71,800
8............	20.95	68,600
12 p.m.......	18.00	47,500
Dec. 24		
9 a.m........	13.50	21,600
12 p.m.......	10.82	11,100
Dec. 25		
6 p.m........	9.48	6,920
12 p.m.......	9.35	6,560
Dec. 26		
4 a.m........	9.31	6,450
8............	9.60	7,260
4 p.m........	11.65	14,000
7:30.........	11.95	15,200
12 p.m.......	11.36	13,000
Dec. 27		
12 m.........	9.73	7,630
12 p.m.......	9.15	6,030
Dec. 28		
12 m.........	8.60	4,700
12 p.m.......	8.30	4,100
Jan. 13		
12 p.m.......	6.96	2,040
Jan. 14		
12 m.........	8.16	3,850
9 p.m........	9.42	6,760
12 p.m.......	9.45	6,840
Jan. 15		
10 a.m.......	9.23	6,240
7 p.m........	12.80	18,600
10:30........	13.53	21,800
12 p.m.......	13.43	21,300
Jan. 16		
12 m.........	10.96	11,500
12 p.m.......	9.85	7,990
Jan. 17		
12 m.........	9.18	6,110
12 p.m.......	8.75	5,040

348. Weber Creek near Salmon Falls, Calif.

Location.--Lat 38°45'40", long 120°59'20", in sec.32, T.11 N., R.9 E., on left bank 1 mile upstream from mouth, 3.9 miles east of Salmon Falls, and 6 miles southwest of Coloma.

Drainage area.--100 sq mi (by Bureau of Reclamation).

Gage-height record.--Water-stage recorder graph. Altitude of gage is 610 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,900 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 11,800 cfs 5:30 p.m. Dec. 23 (gage height, 15.92 ft).
1943 to November 1955: Discharge, 6,740 cfs Nov. 18, 1950 (gage height, 14.2 ft).

Remarks.--Flows not affected by regulation.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	18	308	11.....	28	288	21.....	309	298
2.....	25	355	12.....	22	235	22.....	5,540	498
3.....	15	237	13.....	19	211	23.....	7,160	875
4.....	13	233	14.....	17	1,020	24.....	2,760	500
5.....	12	1,600	15.....	16	2,160	25.....	809	941
6.....	156	755	16.....	18	1,310	26.....	2,250	1,390
7.....	67	518	17.....	22	599	27.....	1,030	1,120
8.....	35	500	18.....	45	417	28.....	500	643
9.....	47	350	19.....	883	328	29.....	340	459
10.....	40	345	20.....	686	332	30.....	263	360
						31.....	267	300
Monthly mean discharge, in cubic feet per second......................							755	629
Runoff, in inches..							8.71	7.25
Runoff, in acre-feet...							46,440	38,650

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.......	6.65	96	2 p.m........	13.05	5,020	11 a.m.......	12.30	3,750
			5............	11.82	3,060	12 m.........	12.64	4,290
Dec. 19			7:30.........	11.21	2,290	4 p.m........	12.00	3,310
2 a.m........	7.70	246	9............	12.00	3,310	7............	11.64	2,840
4............	8.70	474	10...........	12.80	4,570	12 p.m.......	10.67	1,810
7............	9.33	708	12 p.m.......	13.70	6,270			
12 m.........	8.77	496				Dec. 27		
2 p.m........	8.58	438	Dec. 23			6 a.m........	9.89	1,200
5............	10.00	1,100	1 a.m........	14.46	7,910	12 m.........	9.44	924
8............	11.03	2,080	6............	13.22	5,330	6 p.m........	9.15	775
9............	11.00	2,050	8............	13.15	5,200	12 p.m.......	8.89	651
12 p.m.......	10.42	1,460	10...........	13.33	5,530			
			12 m.........	13.55	5,970	Jan. 12		
Dec. 20			1 p.m........	13.80	6,470	12 p.m.......	7.40	215
3 a.m........	9.90	1,030	3............	15.30	10,000			
5............	9.53	806	5:30.........	15.92	11,800	Jan. 13		
9............	9.14	626	7............	15.00	9,250	7 p.m........	7.32	200
12 m.........	8.77	496	9............	13.82	6,510	12 p.m.......	7.56	247
3 p.m........	8.43	398	12 p.m.......	13.06	5,040			
5............	8.38	385				Jan. 14		
8............	9.42	750	Dec. 24			8 a.m........	8.37	456
12 p.m.......	8.82	513	3 a.m........	12.90	4,750	12 m.........	9.56	996
			10...........	11.60	2,790	9 p.m........	10.83	1,960
Dec. 21			12 m.........	11.20	2,330	12 p.m.......	10.58	1,730
3 a.m........	8.40	390	2 p.m........	10.88	2,000			
7............	8.07	316	4............	10.68	1,820	Jan. 15		
12 m.........	7.79	262	7............	10.32	1,520	6 a.m........	9.96	1,250
7 p.m........	7.60	229	12 p.m.......	9.90	1,210	9............	9.75	1,110
10...........	7.75	255				11...........	9.72	1,090
12 p.m.......	8.80	506	Dec. 25			12 m.........	9.93	1,230
			12 m.........	9.10	750	3 p.m........	11.45	2,610
Dec. 22			6 p.m........	8.83	627	5:30.........	12.57	4,180
1 a.m........	10.00	1,100	12 p.m.......	8.63	547	8............	12.20	3,590
2............	11.50	2,640				12 p.m.......	11.25	2,380
3............	13.35	5,570	Dec. 26					
5............	14.55	8,130	2 a.m........	8.60	535	Jan. 16		
8............	15.00	9,250	4............	8.85	635	6 a.m........	10.34	1,530
9............	15.27	9,970	6............	10.06	1,320	6 p.m........	9.44	924
10...........	15.00	9,250	8............	10.30	1,500	12 p.m.......	9.15	775
12 m.........	14.30	7,550	9 a.m........	10.50	1,660			

349. Folsom Reservoir near Folsom, Calif.

Location.--Lat 38°42'29", long 121°09'22", in NW¼NE¼ sec.24, T.10 N., R.7 E., 0.7 mile downstream from South Fork American River and 2.3 miles northeast of Folsom.

Drainage area.--1,875 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Maxima.--December 1955 to January 1956: Contents, 889,600 acre-ft 11 a.m. Dec. 24 (elevation, 455.16 ft).

February to November 1955: Contents, 455,300 acre-ft June 4, 5, 1955 (elevation, 408.50 ft).

Remarks.--Reservoir is formed by concrete gravity-type dam with rolled-earth wing dams, auxiliary dams, and dikes, completed May 14, 1956. Control valves installed July 23, 1956, and spillway gates installed July 31, 1955. Usable capacity, 1,000,000 acre-ft between elevations 205.5 ft (invert of lower tier of river outlets) and 466.0 ft (gross pool elevation) above mean sea level, practically all of which is available for release. Spillway design flood pool elevation, 475.4 ft (capacity, 1,120,000 acre-ft). Folsom Reservoir is one of the storage units in the Central Valley project. Records, including extremes, show contents at 12 p.m. except as noted.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January	
	Elevation	Contents	Elevation	Contents
1	357.67	173,500	416.25	516,800
2	358.16	175,200	415.75	512,700
3	358.77	177,400	414.86	505,400
4	359.26	179,200	414.18	499,900
5	359.30	179,300	415.06	507,000
6	361.45	187,300	413.88	497,500
7	363.60	195,600	414.31	501,000
8	364.52	199,200	415.00	506,500
9	365.44	203,000	414.83	505,200
10	366.82	208,600	414.62	503,500
11	367.71	212,400	414.30	500,900
12	367.98	213,500	414.11	499,300
13	368.17	214,300	414.31	501,000
14	368.57	216,000	415.91	514,000
15	368.82	217,100	421.41	560,400
16	369.09	218,300	424.72	589,400
17	369.86	221,700	422.07	566,100
18	371.37	228,400	417.80	529,700
19	379.16	266,300	415.12	507,500
20	388.77	320,400	414.89	505,700
21	393.98	352,900	414.80	504,900
22	424.10	583,900	415.07	507,100
23	452.88	865,100	417.17	524,400
24	452.99	866,300	416.30	517,200
25	445.13	784,400	416.78	521,200
26	439.48	727,800	416.64	520,000
27	433.39	669,000	416.37	517,800
28	426.87	608,700	415.04	506,900
29	421.50	561,200	413.03	490,700
30	418.03	531,600	411.29	476,900
31	416.69	520,400	411.35	477,400
Change in contents...............................	-	+347,300	-	-43,000

Elevation, in feet, and contents, in thousands of acre-feet, at indicated time, 1955-56

Hour	Elevation	Contents
Dec. 16		
12 p.m.....	369.09	218.3
Dec. 17		
12 m.......	369.41	219.7
12 p.m.....	369.86	221.7
Dec. 18		
12 m.......	370.53	224.6
12 p.m.....	371.37	228.4
Dec. 19		
12 m.......	373.40	237.8
12 p.m.....	379.16	266.3
Dec. 20		
12 m.......	384.60	295.9
12 p.m.....	388.77	320.4
Dec. 21		
12 m.......	391.91	339.7
12 p.m.....	393.98	352.9
Dec. 22		
3 a.m......	395.30	361.5
6..........	397.85	378.6
9..........	402.75	412.7
12 m.......	408.00	451.5
3 p.m......	413.40	493.6
6..........	418.10	532.2
9..........	421.40	560.3
12 p.m.....	424.10	583.9
Dec. 23		
3 a.m......	427.25	612.1
Dec.23-Con.		
6 a.m......	430.90	645.6
9..........	435.30	687.2
12 m.......	439.25	725.5
3 p.m......	443.20	764.8
6..........	447.30	806.6
9..........	450.50	839.9
12 p.m.....	452.88	865.1
Dec. 24		
3 a.m......	454.20	879.3
8..........	455.15	889.5
11.........	455.16	889.6
3 p.m......	454.80	885.7
12 p.m.....	452.99	866.3
Dec. 25		
12 m.......	449.45	828.9
12 p.m.....	445.13	784.4
Dec. 26		
12 m.......	441.15	744.3
12 p.m.....	439.48	727.8
Dec. 27		
12 m.......	436.72	700.9
12 p.m.....	433.39	669.0
Dec. 28		
12 m.......	429.93	636.6
12 p.m.....	426.87	608.7
Dec. 29		
12 m.......	424.07	583.7
Dec.29-Con.		
12 p.m.....	421.50	561.2
Dec. 30		
12 m.......	419.45	543.6
12 p.m.....	418.03	531.6
Jan. 13		
12 p.m.....	414.31	501.0
Jan. 14		
12 m.......	415.06	507.0
12 p.m.....	415.91	514.0
Jan. 15		
12 m.......	417.70	528.8
12 p.m.....	421.41	560.4
Jan. 16		
5 p.m......	424.93	591.3
12 p.m.....	424.72	589.4
Jan. 17		
12 m.......	423.85	581.7
12 p.m.....	422.07	566.1
Jan. 18		
12 m.......	420.30	550.8
12 p.m.....	417.80	529.7
Jan. 19		
12 m.......	415.83	513.3
12 p.m.....	415.12	507.5

350. American River at Fair Oaks, Calif.

Location.--Lat 38°38'15", long 121°15'55", on right bank just upstream from old highway bridge and 1,500 ft upstream from the new highway bridge at Fair Oaks, Sacramento County, 2.6 miles downstream from Nimbus Dam, 10 miles downstream from South Fork, and at mile 19.2.

Drainage area.--1,921 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 64.79 ft above mean sea level.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 71,500 cfs 4 a.m. Dec. 24 (gage height, 20.35 ft).
1904 to November 1955: Discharge, 180,000 cfs Nov. 21, 1950 (gage height, 31.85 ft).

Remarks.--Flow regulated by Folsom Reservoir (see station 349), and several smaller reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	582	10,700	11.....	637	8,540	21.....	821	12,500
2.....	621	11,100	12.....	629	8,220	22.....	6,910	12,100
3.....	613	10,400	13.....	621	6,560	23.....	47,300	19,200
4.....	590	9,910	14.....	653	11,800	24.....	69,300	20,500
5.....	590	13,500	15.....	637	22,600	25.....	68,500	20,400
6.....	621	18,700	16.....	629	32,400	26.....	67,900	25,900
7.....	621	9,040	17.....	629	33,500	27.....	60,400	24,000
8.....	661	7,710	18.....	613	33,300	28.....	47,600	21,400
9.....	677	8,800	19.....	685	24,000	29.....	35,000	20,900
10.....	677	8,980	20.....	773	12,900	30.....	24,800	17,500
						31.....	14,000	10,100
Monthly mean discharge, in cubic feet per second							14,690	16,360
Runoff, in acre-feet							903,100	1,006,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 24--Con.			Dec. 28--Con.		
12 p.m.	1.87	904	10 p.m.	19.92	68,900	9 p.m.	14.30	37,700
			12 p.m.	19.92	68,900	12 p.m.	14.35	38,000
Dec. 22								
4 p.m.	1.87	904	Dec. 25			Dec. 29		
4:15	7.30	11,000	12 m.	19.90	68,800	5 a.m.	14.18	37,100
6	7.35	11,200	12 p.m.	19.70	67,600	8	14.24	37,400
8	10.25	20,600				10	13.72	34,900
10	11.70	26,400	Dec. 26			4 p.m.	13.93	35,900
12 p.m.	13.80	35,300	5 a.m.	19.43	66,000	7	13.75	35,100
			10	19.70	67,600	9	12.30	28,600
Dec. 23			2 p.m.	19.90	68,800	12 p.m.	12.38	28,900
2 a.m.	14.10	36,700	5	19.75	67,900			
5	13.15	32,400	9	20.05	69,700	Dec. 30		
8	14.10	36,700	12 p.m.	19.90	68,800	2 a.m.	12.30	28,600
9	14.90	40,700				4	12.05	27,400
10	14.70	39,700	Dec. 27			1 p.m.	12.12	27,700
12 m.	15.30	42,700	5 a.m.	19.10	64,000	4	11.25	23,800
3 p.m.	17.00	52,000	7	19.22	64,700	7	10.37	20,300
5	17.60	55,300	12 m.	18.25	58,900	8	9.75	17,800
8	18.95	63,100	3 p.m.	18.38	59,700	12 p.m.	9.72	17,700
12 p.m.	20.25	70,900	8	17.80	56,400			
			9	17.10	52,600	Dec. 31		
Dec. 24			12 p.m.	17.04	52,200	5 a.m.	9.80	18,000
1 a.m.	19.85	68,500				7	8.62	13,800
4	20.35	71,500	Dec. 28			5 p.m.	8.70	14,100
10	20.30	71,200	5 a.m.	16.65	50,100	6	7.62	10,700
1 p.m.	19.40	65,800	10	17.15	52,800	12 p.m.	7.55	10,400
5	20.12	70,100	4 p.m.	16.16	47,400			
7 p.m.	19.60	67,000	7 p.m.	15.35	43,000			

351. American River at Sacramento, Calif.

Location.--Lat 38°34'05", long 121°25'20", on left bank at H Street Bridge, just east of Sacramento, Sacramento County, 6.5 miles upstream from mouth.

Gage-height record.--Water-stage recorder graph except 2 a.m. Jan. 4 to 5 p.m. Jan. 5. Gage is set to datum of Corps of Engineers. Auxiliary water-stage recorder 2.8 miles downstream from base gage.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 72,100 cfs 12 p.m. Dec. 26 (gage height, 38.93 ft).

1921, 1929-32, 1934 to November 1955: Discharge, 106,000 cfs plus estimated overflow of 70,000 cfs Nov. 21, 1950 (gage height, 45.73 ft).

Remarks.--Flow regulated by Folsom Reservoir (see station 349) and several smaller reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	582	10,600	11.....	654	8,740	21.....	209	13,400
2.....	618	11,200	12.....	627	8,620	22.....	4,410	12,300
3.....	618	10,300	13.....	645	7,170	23.....	41,600	17,700
4.....	600	9,910	14.....	654	10,600	24.....	69,200	21,700
5.....	600	13,500	15.....	664	20,200	25.....	70,300	20,000
6.....	627	18,700	16.....	636	33,500	26.....	70,800	26,300
7.....	627	9,420	17.....	654	36,200	27.....	60,400	25,100
8.....	664	8,690	18.....	636	36,100	28.....	47,600	22,100
9.....	683	9,080	19.....	712	26,700	29.....	35,000	21,500
10.....	683	9,400	20.....	382	14,000	30.....	24,800	20,100
						31.....	14,000	12,100
Monthly mean discharge, in cubic feet per second......................							14,540	16,930
Runoff, in acre-feet..							894,300	1,041,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Jan. 14		
12 p.m.......	17.78	810	7 a.m........	33.32	31,200	3 a.m........	25.47	7,880
			11...........	34.58	38,400	8............	25.22	5,940
Dec. 20			7 p.m........	36.55	53,800	3 p.m........	26.17	8,780
10 a.m.......	17.77	467	12 p.m.......	37.68	64,000	5............	27.55	14,900
3 p.m........	18.80	0				8............	28.65	18,300
7............	19.86	0	Dec. 24			12 p.m.......	29.21	18,100
12 p.m.......	21.46	642	7 a.m........	38.57	70,300			
			12 m.........	38.69	70,900	Jan. 15		
Dec. 21			4 p.m........	38.40	68,800	3 a.m........	29.45	18,800
5 a.m........	22.54	456	7............	38.54	70,300	6............	28.73	13,900
3 p.m........	23.67	0	10...........	38.44	69,800	10...........	28.62	13,100
12 p.m.......	24.23	0	12 p.m.......	38.48	70,000	2 p.m........	29.68	16,200
						4............	30.95	21,100
Dec. 22			Dec. 25			6............	32.10	27,900
1 p.m........	25.15	0	12 m.........	38.58	70,500	12 p.m.......	33.37	33,000
3............	26.12	7,310	12 p.m.......	38.54	70,300			
8............	27.36	7,880	Dec. 26			Jan. 16		
10...........	28.52	16,900	7 a.m........	38.48	70,000	1 a.m........	33.44	34,000
12 p.m.......	29.94	18,800	7 p.m........	38.80	71,500	6............	32.58	26,800
			12 p.m.......	38.93	72,100	4 p.m........	34.26	37,100
Dec. 23						12 p.m.......	34.42	37,800
2 a.m........	31.55	26,400	Jan. 13					
4 a.m........	32.80	31,300	12 p.m.......	25.11	6,540			

352. Sacramento River at Sacramento, Calif.

Location.--Lat 38°35'10", long 121°30'15", at I Street Bridge in Sacramento and 0.7 mile downstream from American River.

Gage-height record.--Water-stage recorder graph except 12 m. Dec. 23 to 1:30 p.m. Jan. 7, for which graph was reconstructed on basis of frequent Telemark readings. Datum of gage is 0.12 ft above mean sea level.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 95,300 cfs 4:30 p.m. Dec. 23 (gage height, 28.67 ft).

1949 to November 1955: Discharge, 104,000 cfs 10:00 a.m. to 12 m. Nov. 21, 1950; gage height, 30.14 ft 12 m. Nov. 21, 1950.

Maximum known prior to Nov. 21, 1950: Discharge, 103,000 cfs Jan. 17, 1909 (gage height, 29.6 ft), from reports of California Division of Water Resources.

Remarks.--Flow regulated by Shasta Lake (see station 253), Folsom Reservoir (see station 349), and several other reservoirs and powerplants above station, and by bypassing for flood control. When discharge at Verona exceeds about 55,000 cfs, flow begins over Fremont weir (26 miles upstream) into Yolo bypass (see station 365). When stage at Sacramento reaches 27.5 ft, gates are opened in Sacramento weir 4 miles upstream (see station 332) to reduce discharge at Sacramento.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	10,100	66,600	11	21,700	66,400	21	66,200	74,300
2	9,860	65,700	12	20,200	65,900	22	71,900	72,500
3	10,200	65,300	13	17,100	64,400	23	90,200	75,700
4	9,980	65,800	14	15,300	66,500	24	86,200	79,600
5	9,820	66,500	15	14,000	77,100	25	84,500	79,700
6	10,000	73,500	16	13,200	87,700	26	85,600	83,500
7	17,900	67,400	17	12,600	88,600	27	85,300	83,500
8	28,400	65,700	18	13,800	88,100	28	82,200	81,300
9	28,000	66,300	19	21,600	85,700	29	78,100	79,800
10	23,700	66,700	20	47,000	76,500	30	74,400	78,200
						31	69,400	72,200
Monthly mean discharge, in cubic feet per second							39,630	74,090
Runoff, in acre-feet							2,437,000	4,555,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Dec. 29--Con.		
12 p.m.	10.65	33,500	4:30 p.m.	28.67	95,300	6 p.m.	25.03	77,400
			6	28.30	93,800	10	25.03	77,300
Dec. 20			10	27.30	89,700	12 p.m.	24.80	76,500
3 a.m.	11.78	38,200	12 p.m.	27.33	89,800			
6	12.86	41,500				Dec. 30		
9	13.86	44,600	Dec. 24			6 a.m.	24.41	75,000
12 m.	14.74	47,400	6 a.m.	27.53	86,500	12 m.	24.21	74,300
3 p.m.	15.46	49,700	12 m.	27.44	86,200	6 p.m.	24.10	73,800
6	16.31	52,500	6 p.m.	27.17	85,100	12 p.m.	23.73	72,400
9	17.29	55,700	12 p.m.	26.93	84,100			
12 p.m.	18.14	58,600				Dec. 31		
			Dec. 25			6 a.m.	23.25	70,600
Dec. 21			6 a.m.	26.90	84,400	12 m.	22.83	69,100
3 a.m.	18.85	62,900	12 m.	26.93	84,500	6 p.m.	22.56	68,100
6	19.33	64,600	6 p.m.	26.98	84,700	12 p.m.	22.33	67,200
9	19.77	66,200	12 p.m.	27.01	84,800			
12 m.	20.10	67,500				Jan. 13		
3 p.m.	20.38	68,500	Dec. 26			12 p.m.	20.94	63,600
6	20.41	68,200	6 a.m.	27.03	85,300			
9	20.64	68,400	12 m.	27.08	85,500	Jan. 14		
12 p.m.	20.89	68,500	3 p.m.	27.21	86,000	1 a.m.	20.95	63,600
			12 p.m.	27.22	86,100	5	21.13	64,200
Dec. 22						9	21.18	64,400
3 a.m.	21.04	68,700	Dec. 27			12 m.	21.38	65,200
6	21.21	69,000	6 a.m.	27.23	86,100	4 p.m.	21.67	66,200
9	21.41	69,400	12 m.	27.06	85,400	6	22.37	68,800
12 m.	21.65	69,500	6 p.m.	26.89	84,800	9	23.10	71,600
3 p.m.	22.20	71,600	12 p.m.	26.62	83,700	12 p.m.	23.63	73,600
6	22.94	74,400						
9	23.74	77,400	Dec. 28			Jan. 15		
12 p.m.	24.88	81,900	6 a.m.	26.37	82,700	4 a.m.	24.04	75,100
			12 m.	26.25	82,200	9	24.00	75,000
Dec. 23			6 p.m.	26.21	82,000	12 m.	24.03	75,100
3 a.m.	26.11	84,800	12 p.m.	25.71	80,000	2 p.m.	24.20	75,700
6	26.95	88,200				4	24.52	77,000
9	27.53	90,600	Dec. 29			6	25.16	79,400
12 m.	28.06	92,800	6 a.m.	25.33	78,500	8	25.68	81,500
3 p.m.	28.46	94,400	12 m.	25.18	77,900	10 p.m.	26.08	83,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Sacramento River at Sacramento, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 15--Con.			Jan. 17--Con.			Jan. 19--Con.		
12 p.m.......	26.44	84,600	10 p.m.......	27.62	89,100	12 m.........	26.92	86,600
			12 p.m.......	27.60	89,000	4 p.m........	26.63	85,400
Jan. 16						8............	26.15	83,500
4 a.m........	26.93	86,500	Jan. 18			12 p.m.......	25.40	80,500
8............	27.02	86,900	3 a.m........	27.45	88,600			
12 m.........	27.18	87,600	8............	27.20	87,600	Jan. 20		
10 p.m.......	27.70	89,700	10...........	27.17	87,400	4 a.m........	24.87	78,600
12 p.m.......	27.67	89,600	12 m.........	27.26	87,800	8	24.12	75,700
			4 p.m........	27.35	88,200	10...........	23.96	75,100
Jan. 17			8............	27.38	88,300	12 m.........	24.05	75,400
3 a.m........	27.58	88,900	12 p.m.......	27.35	88,200	4 p.m........	24.12	75,700
6............	27.37	88,100				8............	24.12	75,700
8............	27.31	87,800	Jan. 19			12 p.m.......	24.10	75,600
12 m.........	27.42	88,300	4 a.m........	27.20	87,700			
6 p.m........	27.57	88,900	9 a.m........	26.87	86,400			

353. Elder Creek at Florin, Calif.

(Miscellaneous site)

Location.--Lat 38°29'00", long 121°23'42", in SE¼ sec.2, T.7 N., R.5 E., at Fransinetti road crossing, 1 mile south of Florin. Altitude is 30 ft (from topographic map).

Drainage area.--15.8 sq mi.

Discharge record.--Peak discharge by contracted-opening and flow-over-road measurement.

Maxima.--December 1955 to January 1956: Discharge, 806 cfs Dec. 22. Local resident stated that December 1955 flood was the highest in about 20 years.

354. Middle Creek near Upper Lake, Calif.

(Corps of Engineers gaging station)

Location.--Lat 39°12'35", long 122°55'30", in SW¼ sec.25, T.16 N., R.10 W., at Corps of Engineers gaging station at bridge 3 miles north of Upper Lake. Altitude is 1,420 ft (from topographic map).

Drainage area.--46 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maxima.--December 1955 to January 1956: Discharge, 5,600 cfs at 12 p.m. Dec. 21 (gage height, 9.65 ft).

1948 to November 1955: Discharge, 3,880 cfs Dec. 3, 1950 (gage height, 8.17 ft).

Peak discharge during flood of Dec. 10-11, 1937, 11,000 cfs on basis of slope-area measurement by Corps of Engineers.

355. Clover Creek near Upper Lake, Calif.

(Corps of Engineers gaging station)

Location.--Lat 39°10'20", long 122°52'40", in SE¼ sec.5, T.15 N., R.9 W., at Corps of Engineers gaging station at bridge 1.7 miles northeast of Upper Lake. Altitude is 1,400 ft (from topographic map).

Drainage area.--14 sq mi.

Discharge record.--Peak discharge by slope-area and contracted-opening measurements.

Maxima.--December 1955 to January 1956: Discharge, 2,280 cfs at 12 p.m. Dec. 21 (gage height, 9.45 ft).

1948 to November 1955: Discharge, 1,600 cfs Dec. 3, 1950 (gage height, 8.0 ft).

Peak discharge during flood of Dec. 10-11, 1937, 3,400 cfs on basis of slope-area measurement by Corps of Engineers.

356. Scotts Creek near Lakeport, Calif.

(Corps of Engineers gaging station)

Location.--Lat 39°03'40", long 122°56'50", in NW¼SE¼ sec.14, T.14 N., R.10 W., at Corps of Engineers gaging station at bridge 2 miles northwest of Lakeport. Altitude is 1,430 ft (from topographic map).

Drainage area.--54 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 7,660 cfs 1:30 p.m. Dec. 22 (gage height, 17.0 ft).

1948 to November 1955: Discharge, 7,300 cfs Dec. 3, 1950 (gage height, 16.05 ft).

Peak discharge during flood of Dec. 10-11, 1937, 11,000 cfs on basis of slope-area measurement by Corps of Engineers.

357. Adobe Creek near Kelseyville, Calif.

Location.--Lat 38°55'40", long 122°52'45", in SE¼ sec.5, T.12 N., R.9 W., on left bank 2.5 miles upstream from Highland Creek and 4.2 miles south of Kelseyville.

Drainage area.--6.39 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 25-28. Altitude of gage is 1,490 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 410 cfs and by flow-over-dam measurement at 1,250 cfs. Discharge for Jan. 25-28 estimated on basis of records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 1,250 cfs 10 p.m. Dec. 21 (gage height, 8.72 ft).

1954 to November 1955: Discharge, 416 cfs Nov. 15, 1954 (gage height, 6.32 ft).

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	8.9	52	11.....	1.1	80	21.....	404	38
2.....	.8	32	12.....	.9	47	22.....	573	39
3.....	.4	25	13.....	.7	60	23.....	347	37
4.....	.4	85	14.....	.6	203	24.....	88	32
5.....	12	62	15.....	.5	205	25.....	47	90
6.....	41	42	16.....	.7	103	26.....	189	165
7.....	4.3	449	17.....	1.9	52	27.....	77	145
8.....	2.4	148	18.....	245	37	28.....	38	160
9.....	2.4	91	19.....	648	29	29.....	23	47
10.....	1.4	142	20.....	183	49	30.....	17	33
						31.....	15	25
Monthly mean discharge, in cubic feet per second							95.9	90.5
Runoff, in inches							17.31	16.32
Runoff, in acre-feet							5,900	5,560

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 18--Con.			Dec. 19--Con.		
12 p.m.......	4.01	0.7	9 p.m........	6.45	455	1 p.m........	7.94	954
Dec. 17			10...........	6.13	359	2............	7.50	800
6 a.m........	4.02	.8	10:30........	6.19	377	2:30.........	7.41	768
12 m.........	4.06	1.4	12 p.m.......	5.96	310	3:30.........	7.32	737
6 p.m........	4.10	2.4	Dec. 19			4............	7.50	800
10...........	4.14	3.4	1 a.m........	5.97	312	6............	7.02	632
10:30........	4.15	3.6	2............	5.97	312	7............	6.69	527
12 p.m.......	4.29	10	3............	6.13	359	9............	6.28	404
Dec. 18			4............	6.83	569	10...........	6.13	359
3 a.m........	4.31	12	5............	7.60	835	12 p.m.......	6.05	335
8............	4.29	10	6............	7.82	912	Dec. 20		
11...........	4.50	29	7:30.........	7.43	776	3 a.m........	5.84	278
1 p.m........	5.07	108	8:30.........	7.60	835	6............	5.68	237
2............	5.96	310	9............	7.65	852	11...........	5.37	166
4............	6.59	497	10...........	7.74	884	6 p.m........	5.15	122
6............	7.80	905	10:30........	7.68	863	10...........	5.06	106
8 p.m........	7.00	625	12 m.........	8.00	975	12 p.m.......	5.09	111

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Adobe Creek near Kelseyville, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 22--Con.			Jan. 7		
2 a.m........	5.08	110	5:30 p.m.....	5.67	235	3 a.m.......	5.00	96
5............	5.00	96	7............	6.12	356	4...........	5.45	183
8............	4.96	90	8............	6.44	452	6...........	6.00	320
11:30........	4.97	91	10...........	7.49	796	9...........	6.59	497
1 p.m........	5.19	130	11...........	6.96	611	10..........	6.90	590
3............	5.84	278	12 p.m.......	6.58	494	11..........	7.62	842
3:30.........	5.81	271				11:30.......	7.67	860
5............	6.72	536	Dec. 23			12 m........	7.53	810
6............	7.42	772	12:30 a.m....	6.52	476	1 p.m.......	7.70	870
7:30.........	8.40	1,120	2............	6.95	608	2...........	7.31	734
8:30.........	8.22	1,050	4............	6.64	512	3...........	7.13	670
10...........	8.72	1,250	6............	6.74	542	4...........	7.06	646
11...........	8.62	1,210	8............	6.36	428	4:30........	7.10	660
12 p.m.......	8.26	1,070	10...........	6.16	368	6...........	6.73	539
			12 m.........	6.00	320	9...........	6.20	380
Dec. 22			6 p.m........	5.56	208	12 p.m......	5.86	284
1 a.m........	7.84	919	12 p.m.......	5.26	144			
3............	7.39	762				Jan. 8		
4............	7.68	863	Dec. 24			3 a.m.......	5.62	223
4:30.........	7.59	832	6 a.m........	5.06	106	6...........	5.44	181
5............	7.62	842	12 m.........	4.90	80	12 m........	5.20	132
6............	7.73	880	6 p.m........	4.80	65	6 p.m.......	5.03	101
7............	7.35	748	12 p.m.......	4.75	58	12 p.m......	4.90	80
9............	6.80	560						
12 m.........	6.24	392	Jan. 6					
3 p.m........	5.86	284	12 p.m.......	4.63	44			

358. Highland Creek near Kelseyville, Calif.

Location.--Lat 38°56'10", long 122°54'25", in NW¼ sec.31, T.13 N., R.9 W., on downstream side of middle pier of Highland Springs Road bridge at Highland Springs, 1.6 miles upstream from mouth and 4.8 miles southwest of Kelseyville.

Drainage area.--12.7 sq mi.

Gage-height record.--Water-stage recorder graph except 2 p.m. Dec. 19 to 2 p.m. Dec. 20, 4 p.m. Dec. 21 to 2 p.m. Dec. 22, 1 p.m. Jan. 20 to 12 p.m. Jan. 31. Altitude of gage is 1,440 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for periods of no gage-height record estimated on basis of records for nearby stations.

Maxima.--December 1955 to January 1956: Discharge, 1,820 cfs 12 m. Dec. 19 (gage height, 10.92 ft).

1954 to November 1955: Discharge, 408 cfs Nov. 15, 1954 (gage height, 6.4 ft, from floodmarks).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.7	112	11.....	4.2	120	21.....	570	50
2.....	1.3	52	12.....	3.8	74	22.....	800	55
3.....	.7	36	13.....	3.7	78	23.....	532	45
4.....	.6	78	14.....	3.4	336	24.....	136	40
5.....	14	64	15.....	3.4	413	25.....	86	100
6.....	51	50	16.....	4.0	189	26.....	331	200
7.....	7.7	786	17.....	5.5	99	27.....	130	150
8.....	5.7	233	18.....	401	72	28.....	62	180
9.....	5.3	150	19.....	1,100	58	29.....	38	90
10.....	4.4	214	20.....	280	109	30.....	29	60
						31.....	27	45
Monthly mean discharge, in cubic feet per second......................							150	140
Runoff, in inches..							13.59	12.70
Runoff, in acre-feet..							9,210	8,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 18--Con.			Dec. 18--Con.		
12 p.m.......	3.07	8.0	12 m.........	5.00	142	12 p.m.......	6.35	396
			1 p.m.......	6.00	316			
Dec. 18			2...........	7.00	560	Dec. 19		
6 a.m........	3.16	10	4............	8.23	909	2 a.m........	6.52	437
7............	3.20	12	5............	8.77	1,070	4............	7.72	762
8............	3.32	16	6............	10.04	1,510	6............	10.09	1,530
10 a.m.......	3.83	40	8 p.m........	8.09	867	8 a.m........	9.52	1,330

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Highland Creek near Kelseyville, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19--Con.			Dec. 22--Con.			Dec. 24--Con.		
10 a.m.	10.14	1,550	4 a.m.	-	1,050	12 m.	5.16	125
12 m.	10.92	1,820	5	-	1,000	6 p.m.	5.00	102
1 p.m.	10.53	1,690	6	-	1,100	12 p.m.	4.85	82
2	9.72	1,400	2 p.m.	6.75	495			
6	-	940	3	6.58	451	Jan. 6		
12 p.m.	-	540	4	6.46	422	12 p.m.	4.75	70
			5	6.31	386			
Dec. 20			6	6.23	367	Jan. 7		
6 a.m.	-	350	7	6.42	413	1 a.m.	5.01	103
12 m.	-	230	9	7.81	787	2:30	5.43	167
2 p.m.	5.42	206	10	8.40	960	4	6.75	464
3	5.40	202	11	9.50	1,320	7	7.70	740
6	5.28	183	12 p.m.	8.88	1,110	9	8.00	830
9	5.18	167	Dec. 23			11	9.46	1,310
12 p.m.	5.14	161	1 a.m.	7.96	818	12 m.	9.42	1,300
			1:30	7.82	776	1 p.m.	9.68	1,390
Dec. 21			2:30	8.03	839	3	8.84	1,090
3 a.m.	5.03	146	3:30	7.77	761	4:30	9.21	1,220
6	4.90	130	4	8.04	842	7	8.00	830
10:30	4.83	122	5:30	7.63	719	12 p.m.	6.65	436
12 m.	4.93	134	6:30	7.85	785			
3 p.m.	5.92	300	8:30	7.19	587	Jan. 8		
4	6.15	349	10	6.93	514	6 a.m.	6.00	274
7	-	1,600	12:30 p.m.	6.65	436	3 p.m.	5.53	183
8	-	1,500	1:30	6.73	458	12 p.m.	5.19	130
10	-	1,800	4	6.56	412			
12 p.m.	-	1,400	12 p.m.	5.77	228			
Dec. 22			Dec. 24					
3 a.m.	-	1,000	6 a.m.	5.40	162			

359. Kelsey Creek near Kelseyville, Calif.

Location.--Lat 38°55'45", long 122°50'35", in SE¼ sec.34, T.13 N., R.9 W., on left bank 1.5 miles downstream from Widow Creek and 3.5 miles south of Kelseyville.

Drainage area.--37.2 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,600 cfs and by computation of flow over dam at 8,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 8,800 cfs 11:30 p.m. Dec. 21 (gage height, 12.80 ft).

1946 to November 1955: Discharge, 8,150 cfs Jan. 17, 1954 (gage height, 14.8 ft, from floodmarks, site and datum then in use), from rating curve extended above 2,000 cfs on basis of computation of peak flow over dam.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	10	360	11	14	391	21	2,370	217
2	11	206	12	13	299	22	4,260	228
3	9.1	163	13	12	318	23	2,560	213
4	8.5	381	14	11	788	24	712	189
5	33	319	15	10	824	25	422	475
6	216	276	16	12	487	26	1,200	808
7	36	2,060	17	18	333	27	494	639
8	21	810	18	1,480	262	28	322	765
9	22	485	19	5,120	217	29	226	289
10	17	562	20	1,350	284	30	187	233
						31	159	193
Monthly mean discharge, in cubic feet per second							688	454
Runoff, in inches							21.33	14.07
Runoff, in acre-feet							42,320	27,920

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 18--Con.			Dec. 19--Con.		
12 p.m.	3.79	28	6 p.m.	10.30	4,180	6 a.m.	11.32	5,980
			8	11.12	5,620	7	11.59	6,460
Dec. 18			9	10.88	5,180	9	11.67	6,610
2 a.m.	3.87	32	10	9.90	3,550	12 m.	12.00	7,200
6	3.94	35	12 p.m.	8.80	2,130	2 p.m.	12.32	7,840
10	4.12	48				4	11.45	6,210
12 m.	4.37	72	Dec. 19			6	11.13	5,630
2 p.m.	6.32	522	2 a.m.	9.08	2,450	9	9.90	3,550
4 p.m.	8.88	2,220	4 a.m.	9.65	3,200	12 p.m.	8.90	2,240

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Kelsey Creek near Kelseyville, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 24--Con.		
2 a.m.	8.76	2,090	8 a.m.	11.18	5,720	12 p.m.	6.19	477
8	8.14	1,530	12 m.	9.35	2,780			
12 m.	7.72	1,220	3 p.m.	8.57	1,900	Jan. 6		
6 p.m.	7.25	942	6	8.26	1,630	12 p.m.	5.48	271
12 p.m.	6.95	785	9	9.28	2,690			
			11:30	10.52	4,540	Jan. 7		
Dec. 21			12 p.m.	10.35	4,260	4 a.m.	6.10	448
4 a.m.	6.94	780				6	7.38	1,020
9	6.69	666	Dec. 23			10	8.80	2,130
2 p.m.	7.11	866	1:30 a.m.	9.85	3,480	1 p.m.	9.98	3,670
5	8.50	1,840	3	10.05	3,780	2	9.97	3,660
6	9.40	2,850	8	9.80	3,410	4	10.15	3,940
8	11.33	5,990	12 m.	9.10	2,470	6	9.80	3,410
10	12.45	8,100	4 p.m.	8.58	1,910	8	8.88	2,220
11:30	12.80	8,800	8	8.03	1,440	12 p.m.	8.00	1,420
12 p.m.	12.75	8,700	12 p.m.	7.53	1,110			
						Jan. 8		
Dec. 22			Dec. 24			6 a.m.	7.29	964
2 a.m.	12.25	7,700	6 a.m.	7.08	850	12 m.	6.79	710
4	11.45	6,210	12 m.	6.67	658	6 p.m.	6.52	598
6 a.m.	11.58	6,440	6 p.m.	6.39	546	12 p.m.	6.30	515

360. Clear Lake at Lakeport, Calif.

Location.--Lat 39°03', long 122°55', in SE¼ sec.24, T.14 N., R.10 W., at municipal wharf on north side of Third Street in Lakeport.

Drainage area.--528 sq mi, approximately, including water surface of lake (65 sq mi).

Gage-height record.--Water-stage recorder graph. Record of daily gage heights furnished by the Clear Lake Water Co.

Maxima.--December 1955 to January 1956: Daily gage height, 8.59 ft Jan. 27.
1913 to November 1955: Gage height observed, 11.12 ft Jan. 28, 1914.

Remarks.--This natural lake is regulated by a concrete overflow dam at outlet, completed in 1915. Capacity between gage heights 0.00 and 7.56 ft (limits stipulated by court decree of 1920), about 319,000 acre-ft. Water is released down natural channel of Cache Creek, from which it is diverted for irrigation (see Cache Creek near Lower Lake).

Gage height, in feet, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0.27	6.01	11	0.63	6.88	21	3.05	8.23
2	.29	5.99	12	.64	6.92	22	4.34	8.22
3	.30	5.95	13	.65	7.02	23	5.05	8.23
4	.32	5.94	14	.67	7.45	24	5.38	8.30
5	.45	5.94	15	.69	7.92	25	5.57	8.34
6	.53	5.95	16	.70	8.16	26	5.93	8.50
7	.58	6.40	17	.74	8.22	27	6.05	8.59
8	.60	6.56	18	1.12	8.23	28	6.07	8.58
9	.62	6.71	19	2.12	8.24	29	6.10	8.57
10	.63	6.83	20	2.53	8.25	30	6.04	8.52
						31	6.03	8.45

361. Cache Creek near Lower Lake, Calif.

Location.--Lat 38°55', long 122°34', in sec.6, T.12 N., R.6 W., on left bank 500 ft downstream from Clear Lake Dam, 1.5 miles downstream from Copsey Creek, and 2.5 miles northeast of Lower Lake.

Drainage area.--528 sq mi, including water surface of Clear Lake (65 sq mi).

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,280 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 4,710 cfs 5 p.m. Dec. 27 (gage height, 8.30 ft).
1944 to November 1955: Discharge, 5,750 cfs Jan. 8, 1953 (gage height, 8.85 ft).

Remarks.--Flow regulated by Clear Lake (see station 360).

Mean discharge, in cubic feet per second, 1955-56, of Cache Creek near Lower Lake, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	0.5	2,040	11.....	0.4	2,380	21.....	1.4	2,970
2.....	.5	1,910	12.....	.4	2,330	22.....	1.6	2,980
3.....	.4	1,870	13.....	.4	2,380	23.....	1.2	2,970
4.....	.4	1,950	14.....	.4	2,810	24.....	1.0	2,960
5.....	.5	1,900	15.....	.4	2,920	25.....	1.0	3,320
6.....	.5	1,870	16.....	.4	2,910	26.....	298	3,560
7.....	.4	2,820	17.....	.4	2,940	27.....	1,530	3,390
8.....	.4	2,340	18.....	.6	2,940	28.....	1,950	3,220
9.....	.4	2,310	19.....	33	2,940	29.....	1,920	3,170
10.....	.4	2,500	20.....	1.4	3,010	30.....	1,890	3,140
						31.....	1,900	3,080
Monthly mean discharge, in cubic feet per second.....................							308	2,704
Runoff, in acre-feet..							18,920	166,300

362. North Fork Cache Creek near Lower Lake, Calif.

Location.--Lat 39°01', long 122°33', in NE¼ sec.31, T.14 N., R.6 W., on right bank 500 ft upstream from Sweet Hollow Creek, 3 miles upstream from mouth, and 7 miles northeast of Lower Lake.

Drainage area.--198 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,035.60 ft above mean sea level, preliminary adjustment of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,600 cfs and by slope-area measurement at 20,000 cfs for peak of Feb. 28, 1940.

Maxima.--December 1955 to January 1956: Discharge, 15,900 cfs 2:30 a.m. Dec. 22 (gage height, 12.56 ft).

1930 to November 1955: Discharge, 20,300 cfs Dec. 11, 1937 (gage height, 13.98 ft, from floodmarks).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	15	620	11.....	84	2,100	21.....	3,090	1,220
2.....	23	548	12.....	69	1,650	22.....	11,000	1,120
3.....	23	472	13.....	57	1,500	23.....	7,820	1,080
4.....	18	642	14.....	50	4,440	24.....	3,370	956
5.....	52	926	15.....	47	4,900	25.....	1,880	1,360
6.....	1,060	750	16.....	52	3,260	26.....	2,950	2,570
7.....	205	3,570	17.....	87	1,940	27.....	1,890	2,180
8.....	118	3,270	18.....	1,710	1,580	28.....	1,290	1,710
9.....	150	1,940	19.....	7,740	1,300	29.....	878	1,380
10.....	111	2,490	20.....	3,350	1,440	30.....	690	1,100
						31.....	572	890
Monthly mean discharge, in cubic feet per second......................							1,627	1,771
Runoff, in inches..							9.47	10.31
Runoff, in acre-feet...							100,100	108,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 19--Con.			Dec. 22--Con.		
12 p.m.......	1.97	111	12 p.m.......	9.01	6,300	10 p.m.......	9.22	6,770
						12 p.m.......	10.13	9,100
Dec. 18			Dec. 20					
1 a.m........	1.99	114	6 a.m........	7.94	4,340	Dec. 23		
2...........	2.13	140	12 m.........	6.92	3,000	1:30 a.m.....	10.54	10,200
4...........	2.57	233	6 p.m........	6.05	2,060	4...........	10.12	9,070
6...........	2.69	262	12 p.m.......	5.61	1,680	7...........	10.15	9,150
1 p.m........	2.81	293				10..........	10.00	8,760
2...........	2.90	320	Dec. 21			6 p.m........	9.04	6,370
5...........	4.48	1,010	6 a.m........	5.42	1,500	12 p.m.......	8.40	5,060
7...........	6.16	2,300	12 m.........	5.29	1,400			
8...........	8.64	5,540	1 p.m........	5.20	1,340	Dec. 24		
9...........	9.46	7,360	4...........	5.42	1,500	6 a.m........	7.84	4,060
9:30........	9.70	7,980	6...........	6.20	2,220	12 m.........	7.30	3,220
12 p.m.......	9.17	6,650	7...........	7.30	3,480	6 p.m........	6.82	2,580
			8...........	8.20	4,760	12 p.m.......	6.47	2,210
Dec. 19			10..........	10.57	10,200			
4 a.m........	7.98	4,410	12 p.m.......	12.06	14,400	Jan. 12		
5...........	8.05	4,520				12 p.m.......	5.57	1,490
6...........	8.32	4,960	Dec. 22					
10..........	10.10	9,020	1 a.m........	12.43	15,500	Jan. 13		
11..........	10.03	8,840	2:30........	12.56	15,900	4 a.m........	5.53	1,460
1 p.m........	10.30	9,540	6...........	11.90	13,900	8...........	5.70	1,580
3...........	10.48	10,000	9...........	11.65	13,200	6 p.m........	5.37	1,350
5...........	10.53	10,100	3 p.m........	10.00	8,760	9...........	5.50	1,440
8 p.m........	10.12	9,070	7:30 p.m.....	9.10	6,500	12 p.m.......	6.34	2,080

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of North Fork Cache Creek near Lower Lake, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 14			Jan. 15			Jan. 16		
4 a.m........	7.93	4,210	7 a.m........	7.81	4,020	6 a.m........	7.63	3,730
8............	8.25	4,790	2 p.m........	8.77	5,800	12 m.........	7.25	3,150
1 p.m........	8.11	4,540	4:30.........	8.81	5,880	6 p.m........	6.93	2,720
6............	8.40	5,060	8............	8.51	5,280	12 p.m.......	6.62	2,360
8............	8.34	4,950	12 p.m.......	8.12	4,560			
12 p.m.......	8.02	4,380						

363. Cache Creek near Capay, Calif.

Location.--Lat 38°43'40", long 122°06'15", in Canada de Capay Grant, in Yolo County, on right bank 1.8 miles upstream from Clear Lake Water Co's diversion dam, 3.2 miles northwest of Capay, and 5.4 miles northwest of Esparto.

Drainage area.--1,052 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 240 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 18,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 31,800 cfs 8:30 a.m. Dec. 22 (gage height, 17.54 ft).

1942 to November 1955: Discharge, 35,000 cfs Jan. 21, 1943 (gage height, 17.54 ft), from rating curve extended above 6,300 cfs on basis of 1956 rating defined to 18,000 cfs.

Remarks.--Flow regulated by Clear Lake (see station 360).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7.4	3,100	11.....	123	5,610	21.....	3,370	4,890
2.....	8.4	2,910	12.....	99	4,740	22.....	20,400	4,570
3.....	9.2	2,720	13.....	81	4,300	23.....	14,900	4,540
4.....	11	2,690	14.....	70	7,620	24.....	6,300	4,290
5.....	13	3,180	15.....	62	9,330	25.....	3,280	5,710
6.....	405	2,880	16.....	58	9,040	26.....	6,010	8,880
7.....	526	5,380	17.....	58	6,300	27.....	4,420	8,530
8.....	217	10,600	18.....	117	5,400	28.....	4,020	6,740
9.....	145	5,550	19.....	14,800	4,900	29.....	3,350	5,640
10.....	158	5,500	20.....	10,300	5,000	30.....	3,060	5,190
						31.....	2,910	4,890
Monthly mean discharge, in cubic feet per second......................							3,203	5,504
Runoff, in acre-feet..							196,900	338,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.......	1.56	59	12 p.m.......	10.10	6,060	3 p.m........	11.82	9,270
						12 p.m.......	10.06	6,000
Dec. 18			Dec. 22					
12 m.........	1.64	72	4 a.m........	14.56	17,600	Dec. 27		
9 p.m........	1.97	142	8:30 p.m.....	17.54	31,800	12 m.........	8.66	4,160
12 p.m.......	3.10	570	6............	14.75	18,400	6 p.m........	8.23	3,730
			12 p.m.......	13.05	12,500	12 p.m.......	7.95	3,450
Dec. 19								
1 a.m........	3.38	700	Dec. 23			Dec. 28		
2............	4.85	1,500	1 a.m........	12.95	12,200	2 a.m........	9.20	4,780
3............	7.40	3,560	4............	14.12	16,000	5............	8.95	4,480
4............	10.00	6,740	9............	14.58	17,700	12 m.........	8.42	3,920
5............	11.70	9,660	12 m.........	14.46	17,200	12 p.m.......	8.09	3,590
6............	12.55	11,400	2 p.m........	14.28	16,500			
12 m.........	13.20	13,000	12 p.m.......	12.06	9,840	Jan. 14		
2 p.m........	14.35	16,800				12 p.m.......	11.37	9,440
4............	15.35	20,900	Dec. 24					
8:30.........	16.26	25,100	6 a.m........	10.98	7,540	Jan. 15		
12 p.m.......	15.60	22,000	12 m.........	9.95	5,820	3 a.m........	11.34	9,380
			12 p.m.......	8.53	4,030	12 m.........	10.69	8,120
Dec. 20						4 p.m........	10.62	8,000
6 a.m........	13.35	13,400	Dec. 25			10...........	12.46	12,200
12 m.........	11.55	8,670	12 m.........	7.63	3,180	12 p.m.......	12.42	12,000
12 p.m.......	8.38	3,880	6 p.m........	7.30	2,920			
			12 p.m.......	7.15	2,830	Jan. 16		
Dec. 21						6 a.m........	11.57	9,920
9 a.m........	7.58	3,140	Dec. 26			6 p.m........	10.50	7,780
5 p.m........	6.95	2,710	6 a.m........	7.02	2,750	12 p.m.......	10.20	7,240
9 p.m........	7.75	3,280	12 m.........	11.30	8,160			

364. Cache Creek at Yolo, Calif.

Location.--Lat 38°43'30", long 121°48'25", in Rio Jesus Maria Grant, on left bank 800 ft upstream from highway bridge and 0.5 mile south of Yolo, Yolo County.

Drainage area.--1,137 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 52.27 ft above mean sea level, adjustment of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 22,500 cfs 6:30 p.m. Dec. 22 (gage height, 28.63 ft).

1903 to November 1955: Discharge, 28,700 cfs plus overflow on right bank estimated as 10,000 cfs Feb. 28, 1940 (gage height, 33.0 ft). Stage observed, 34.2 ft Mar. 10, 1904.

Remarks.--Flow regulated by Clear Lake (see station 360).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	0	3,220	11	0	5,940	21	3,790	5,110
2	0	3,280	12	0	4,910	22	14,200	4,680
3	0	2,860	13	0	4,370	23	16,900	4,700
4	0	2,720	14	0	6,590	24	8,770	4,420
5	0	3,440	15	0	9,440	25	3,720	6,430
6	0	3,220	16	0	9,370	26	4,940	8,690
7	83	3,370	17	0	6,650	27	5,470	10,000
8	17	10,700	18	0	5,610	28	4,320	7,720
9	0	5,720	19	5,660	4,990	29	3,670	6,160
10	0	5,270	20	13,300	5,080	30	3,260	5,460
						31	3,090	4,990
Monthly mean discharge, in cubic feet per second							2,942	5,649
Runoff, in acre-feet							180,900	347,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 28		
12 p.m.	-	0	4 p.m.	28.00	21,600	4 a.m.	10.33	3,720
			6:30	28.63	22,500	8	12.47	5,390
Dec. 19			10	28.00	21,600	12 m.	11.30	4,460
9 a.m.	-	0	12 p.m.	27.10	20,300	12 p.m.	10.63	3,950
10	8.00	2,020						
11	10.90	4,160	Dec. 23			Jan. 13		
12 m.	12.90	5,730	6 a.m.	23.25	15,300	12 p.m.	11.23	4,400
1 p.m.	14.30	6,850	8	22.85	14,800			
2	15.35	7,710	5:30 p.m.	25.53	18,200	Jan. 14		
4	16.60	8,770	8	25.25	17,800	5 a.m.	11.14	4,340
6	18.00	9,960	12 p.m.	23.55	15,700	12 m.	13.10	5,890
8	19.95	11,800				9 p.m.	17.91	9,880
10	22.10	14,000	Dec. 24			12 p.m.	17.92	9,890
12 p.m.	24.15	16,400	6 a.m.	18.85	10,700			
			12 m.	15.35	7,710	Jan. 15		
Dec. 20			12 p.m.	11.94	4,960	3 a.m.	17.80	9,790
5 a.m.	25.93	18,700				6	17.92	9,890
7	25.50	18,200	Dec. 25			9	17.75	9,750
12 m.	22.20	14,100	12 m.	10.15	3,590	4 p.m.	16.70	8,860
6 p.m.	17.00	9,110	12 p.m.	9.02	2,740	8	16.77	8,910
12 p.m.	12.85	5,690				12 p.m.	17.85	9,830
			Dec. 26			Jan. 16		
Dec. 21			10 a.m.	8.74	2,540	5 a.m.	19.07	10,900
6 a.m.	11.05	4,270	2 p.m.	11.85	4,890	8	18.55	10,500
12 m.	10.03	3,500	9	17.46	9,500	4 p.m.	16.40	8,600
6 p.m.	9.49	3,100	12 p.m.	16.30	8,520	12 p.m.	15.13	7,520
12 p.m.	9.17	2,860						
			Dec. 27			Jan. 17		
Dec. 22			6 a.m.	13.33	6,070	6 a.m.	14.42	6,950
3 a.m.	10.05	3,520	12 m.	12.07	5,070	6 p.m.	13.59	6,280
12 m.	22.90	14,900	12 p.m.	10.62	3,940	12 p.m.	13.23	5,990

365. Yolo bypass near Woodland, Calif.

Location.--Lat 38°40'40", long 121°38'35", on left bank just upstream from Sacramento and Woodland Railroad bridge, 6 miles upstream from Sacramento bypass, 7 miles downstream from Fremont weir, and 7 miles east of Woodland, Yolo County.

Gage-height record.--Water-stage recorder graph except 7 a.m. Dec. 3 to 4 p.m. Dec. 9. Gage is set to datum of Corps of Engineers.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for period of no gage-height record interpolated.

Maxima.--December 1955 to January 1956: Discharge, 253,000 cfs 4 p.m. Dec. 23 (gage height, 31.60 ft).

1940 to November 1955: Discharge, 272,000 cfs Feb. 8, 1942 (gage height, 32.00 ft).

Remarks.--Flow is that from Cache Creek and Knights Landing Ridge Cut plus floodwater passing over Fremont weir.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	9.6	67,600	11.....	23	41,600	21.....	53,200	87,100
2.....	10	56,800	12.....	30	39,800	22.....	105,000	75,800
3.....	10	50,000	13.....	33	39,000	23.....	230,000	71,900
4.....	10	45,400	14.....	32	42,000	24.....	163,000	71,300
5.....	15	43,000	15.....	29	68,400	25.....	119,000	73,100
6.....	15	43,000	16.....	27	125,000	26.....	153,000	75,500
7.....	20	40,400	17.....	28	152,000	27.....	161,000	80,300
8.....	20	42,800	18.....	27	144,000	28.....	162,000	81,500
9.....	20	40,800	19.....	189	124,000	29.....	147,000	75,500
10.....	21	41,400	20.....	10,000	103,000	30.....	119,000	65,300
						31.....	89,800	55,800
Monthly mean discharge, in cubic feet per second.....................							48,790	69,780
Runoff, in acre-feet.....................							3,000,000	4,290,000

366. Putah Creek near Guenoc, Calif.

Location.--Lat 38°46'45", long 122°31'00", in Guenoc land grant, on right bank just upstream from Coyote Valley damsite, 2.8 miles upstream from Soda Creek, 3.2 miles downstream from highway bridge at Guenoc, Lake County, and 5.6 miles northeast of Middletown.

Drainage area.--112 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 1 to 1 p.m. Dec. 21 and 1 p.m. Dec. 22 to 5 p.m. Dec. 26. Datum of gage is 913.4 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 13,000 cfs. Discharge for periods of no gage-height record estimated on the basis of three discharge measurements, floodmarks, records for nearby streams, and fragmentary gage-height record for Dec. 22.

Maxima.--December 1955 to January 1956: Discharge, 29,200 cfs 2 a.m. Dec. 22 (gage height, 21.80 ft).

1904-6, 1930 to November 1955: Discharge, 32,000 cfs Dec. 11, 1937 (gage height, 22.7 ft), from rating curve extended above 7,200 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	15	971	11.....	80	1,310	21.....	3,000	705
2.....	25	632	12.....	20	956	22.....	14,000	691
3.....	25	490	13.....	50	1,010	23.....	7,000	649
4.....	20	1,170	14.....	45	2,700	24.....	3,000	570
5.....	100	1,230	15.....	45	2,760	25.....	1,500	2,440
6.....	1,400	850	16.....	50	1,620	26.....	4,000	2,890
7.....	200	4,530	17.....	200	1,060	27.....	1,460	2,270
8.....	110	2,290	18.....	2,000	848	28.....	903	1,400
9.....	140	1,380	19.....	7,500	705	29.....	652	980
10.....	110	1,970	20.....	3,500	900	30.....	533	788
						31.....	514	649
Monthly mean discharge, in cubic feet per second.....................							1,684	1,401
Runoff, in inches.....................							17.33	14.43
Runoff, in acre-feet.....................							103,500	86,170

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Putah Creek near Guenoc, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Jan. 4--Con.			Jan. 7--Con.		
1 p.m........	8.90	3,250	11 a.m.......	4.35	505	10 a.m.......	9.80	4,200
1:30.........	9.08	3,430	2 p.m........	6.10	1,210	12 m.........	10.85	5,480
4............	11.50	6,370	6............	8.19	2,590	2 p.m........	12.15	7,340
6............	12.85	8,460	12 p.m.......	7.00	1,710	4............	13.18	8,990
8............	14.50	11,400				8............	11.25	6,220
10...........	18.20	19,300	Jan. 5			12 p.m.......	9.28	3,940
12 p.m.......	21.00	26,800	6 a.m........	6.30	1,320			
			8............	6.30	1,320	Jan. 8		
Dec. 22			4 p.m........	5.82	1,070	4 a.m........	8.32	2,970
2 a.m........	21.80	29,200	12 p.m.......	5.62	979	12 m.........	7.22	2,050
4............	20.50	25,400				12 p.m.......	6.38	1,460
6............	18.50	20,000	Jan. 6					
11...........	15.75	13,800	4 a.m........	5.48	916	Jan. 9		
1 p.m........	13.20	9,020	8............	5.52	934	12 m.........	5.93	1,200
			10 p.m.......	5.17	789	6 p.m........	6.46	1,510
Jan. 3			12 p.m.......	5.18	792	10...........	6.47	1,510
12 p.m.......	4.17	452				12 p.m.......	6.58	1,580
			Jan. 7					
Jan. 4			3 a.m........	5.46	907			
8 a.m........	4.11	435	8 a.m........	8.55	2,920			

367. Putah Creek near Winters, Calif.

Location.--Lat 38°31', long 122°05', in NE¼ sec.28, T.8 N., R.2 W., on left bank 6 miles west of Winters and 8 miles downstream from Capell Creek.

Drainage area.--577 sq mi.

Gage-height record.--Water-stage recorder graph, except Jan. 12-16. Datum of gage is 160.75 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 30,000 cfs and extended above by logarithmic plotting. Discharge for Jan. 12-16 estimated on basis of records for station near Davis.

Maxima.--December 1955 to January 1956: Discharge, 55,400 cfs 11 a.m. Dec. 22 (gage height, 26.73 ft).

1930 to November 1955: Discharge, 81,000 cfs Feb. 27, 1940 (gage height, 30.5 ft).

Maximum stage known since at least 1905, that of Feb. 27, 1940, on basis of records for station at Winters.

Remarks.--Flow slightly regulated by Monticello Reservoir (maximum detention storage estimated as 28,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4.8	1,720	11.....	36	3,440	21.....	9,610	2,320
2.....	5.0	1,850	12.....	32	2,600	22.....	35,500	1,920
3.....	4.7	1,340	13.....	26	2,100	23.....	33,700	2,060
4.....	4.1	1,170	14.....	22	3,500	24.....	14,200	1,650
5.....	5.0	2,990	15.....	20	7,000	25.....	4,890	7,490
6.....	6.6	2,060	16.....	20	6,400	26.....	8,060	8,700
7.....	112	3,740	17.....	21	3,200	27.....	8,530	9,110
8.....	107	9,840	18.....	40	2,520	28.....	2,890	6,670
9.....	56	3,560	19.....	14,400	2,040	29.....	1,980	3,750
10.....	40	3,340	20.....	21,100	2,450	30.....	1,540	2,830
						31.....	1,460	2,300
Monthly mean discharge, in cubic feet per second......................							5,110	3,731
Runoff, in inches...							10.21	7.45
Runoff, in acre-feet..							314,200	229,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Putah Creek near Winters, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.	4.17	22	11 a.m.	26.73	55,400	8 a.m.	11.56	3,270
			12 m.	26.50	54,000	9	12.07	3,880
Dec. 18			2 p.m.	25.65	49,100	10	13.06	5,300
6 a.m.	4.20	23	4	24.15	41,200	12 m.	15.42	9,640
6 p.m.	4.60	48	6	22.54	33,900	2 p.m.	16.35	11,900
12 p.m.	5.05	86	8	21.25	28,500	4	16.60	12,500
			10	20.37	25,000	7	16.75	12,900
Dec. 19			12 p.m.	20.01	23,500	10	16.70	12,800
1 a.m.	5.60	158				12 p.m.	16.57	12,400
2	8.57	1,050	Dec. 23					
4	12.30	4,180	2 a.m.	20.24	24,500	Dec. 27		
6	14.32	7,480	4	20.98	27,400	2 a.m.	16.43	12,100
8	15.13	9,060	8	22.91	35,600	6	16.02	11,000
10	15.74	10,400	10	23.73	39,300	10	15.42	9,640
2 p.m.	16.96	13,400	2 p.m.	24.56	43,300	12 m.	15.03	8,860
3	17.18	14,000	4	24.05	40,800	4 p.m.	14.06	7,010
4	17.76	15,800	6	23.15	36,700	8	12.94	5,100
6	19.81	22,800	8	22.13	32,100	12 p.m.	12.17	4,000
8	21.24	28,500	10	21.10	27,900			
10	22.18	32,300	12 p.m.	20.21	24,300	Dec. 28		
12 p.m.	22.50	33,800				6 a.m.	11.46	3,160
			Dec. 24			12 m.	11.08	2,780
Dec. 20			2 a.m.	19.46	21,600	6 p.m.	10.78	2,480
2 a.m.	22.12	32,000	4	18.70	19,000	12 p.m.	10.56	2,310
4	21.45	29,300	6	17.85	16,000			
8	20.03	23,600	8	17.32	14,500	Jan. 6		
12 m.	19.26	20,900	10	16.91	13,300	12 p.m.	9.94	1,850
4 p.m.	17.87	16,100	2 p.m.	16.54	12,400			
8	16.98	13,400	6	16.13	11,300	Jan. 7		
12 p.m.	16.58	12,400	10	15.58	9,960	12 m.	9.71	1,690
			12 p.m.	15.23	9,260	4 p.m.	10.67	2,400
Dec. 21						6	13.03	5,250
4 a.m.	16.18	11,400	Dec. 25			8	14.77	8,340
8	15.70	10,200	2 a.m.	14.80	8,400	10	15.52	9,840
12 m.	15.11	9,020	6	13.66	6,290	12 p.m.	16.02	11,000
4 p.m.	14.45	7,710	8	13.12	5,390			
7	14.21	7,280	10	12.64	4,660	Jan. 8		
8	14.42	7,660	2 p.m.	11.93	3,720	4 a.m.	16.30	11,800
12 p.m.	16.11	11,300	6	11.50	3,200	8	16.00	11,000
			10	11.24	2,940	12 m.	15.82	10,600
Dec. 22			12 p.m.	11.14	2,840	6 p.m.	14.95	8,700
2 a.m.	16.91	13,300				12 p.m.	13.44	5,900
3	18.07	16,700	Dec. 26					
4	19.92	23,200	2 a.m.	11.07	2,770			
6 a.m.	24.15	41,200	6 a.m.	11.04	2,740			

368. Putah Creek near Davis, Calif.

Location.--Lat 38°31'24", long 121°47'10", in SE$\frac{1}{4}$ sec.19, T.8 N., R.2 E., in Los Putos Grant, on right bank 3.3 miles southwest of Davis and 9.9 miles east of Winters.

Drainage area.--636 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 45 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 46,600 cfs 1 p.m. Dec. 22 (gage height, 24.36 ft).

1948 to November 1955: Discharge, 39,000 cfs Dec. 7, 1952 (gage height, 21.50 ft).

Remarks.--Flow slightly regulated by Monticello Reservoir.

Mean discharge, in cubic feet per second, 1955-56, of Putah Creek near Davis, Calif.

Day	December	January	Day	December	January	Day	December	January
1	0	1,400	11	0	3,900	21	10,300	2,470
2	0	1,900	12	0	2,530	22	30,500	1,790
3	0	1,290	13	0	1,980	23	32,500	2,000
4	0	1,070	14	0	3,840	24	18,000	1,580
5	0	2,380	15	0	6,940	25	6,650	6,180
6	0	2,060	16	0	6,640	26	5,960	8,700
7	0	2,220	17	0	3,600	27	9,440	9,280
8	0	10,000	18	0	2,580	28	3,610	7,810
9	0	5,080	19	7,100	2,030	29	2,140	4,400
10	0	3,420	20	22,500	2,200	30	1,610	3,080
						31	1,420	2,380
Monthly mean discharge, in cubic feet per second							4,895	3,765
Runoff, in inches							8.87	6.83
Runoff, in acre-feet							301,000	231,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 27		
12 p.m.	-	0	12 m.	24.05	45,600	6 a.m.	12.02	10,700
			1 p.m.	24.36	46,600	4 p.m.	11.00	9,000
Dec. 19			5	23.30	43,000	8	10.38	8,020
8 a.m.	-	0	8	21.50	36,900	12 p.m.	8.85	5,790
9	3.50	750	12 p.m.	19.30	29,800			
10	4.70	1,510				Dec. 28		
12 m.	5.72	2,300	Dec. 23			6 a.m.	7.45	4,000
2 p.m.	6.50	3,000	6 a.m.	17.76	25,100	12 m.	6.81	3,310
3	7.00	3,500	10	20.30	33,000	6 p.m.	6.42	2,920
4	11.00	9,000	2 p.m.	21.76	37,800	12 p.m.	6.11	2,640
5	14.30	15,600	5	21.82	38,000			
7	14.50	16,000	9	20.86	34,800	Jan. 6		
9	16.25	20,700	12 p.m.	19.67	30,900	12 p.m.	4.92	1,660
12 p.m.	17.98	25,700						
			Dec. 24			Jan. 7		
Dec. 20			6 a.m.	17.10	23,100	12 m.	4.68	1,500
4 a.m.	19.10	29,100	10	15.25	18,000	6 p.m.	4.71	1,520
5	19.20	29,400	12 m.	14.13	15,200	12 p.m.	9.25	6,900
8	18.40	27,000	6 p.m.	13.02	12,700			
12 m.	17.00	22,800	12 p.m.	12.18	11,000	Jan. 8		
4 p.m.	15.85	19,600				5 a.m.	11.33	10,900
12 p.m.	13.42	13,500	Dec. 25			8:30	11.58	11,400
			6 a.m.	10.95	8,920	6 p.m.	10.76	9,950
Dec. 21			12 m.	9.10	6,140	12 p.m.	9.85	8,480
6 a.m.	12.43	11,500	6 p.m.	7.70	4,290			
12 m.	11.75	10,200	12 p.m.	6.99	3,490	Jan. 9		
4 p.m.	11.16	9,260				6 a.m.	8.23	6,120
12 p.m.	10.19	7,740	Dec. 26			12 m.	7.03	4,490
			8 a.m.	6.72	3,220	12 p.m.	6.00	3,220
Dec. 22			10	6.84	3,340			
2 a.m.	11.15	9,240	2 p.m.	8.15	4,840	Jan. 10		
5	13.10	12,800	4	10.10	7,600	8 a.m.	5.75	2,940
7	16.30	20,800	9	12.30	11,200	1 p.m.	6.09	3,330
10 a.m.	21.60	37,200	12 p.m.	12.38	11,400	12 p.m.	6.87	4,280

369. Ulatis Creek near Vacaville, Calif.

(Miscellaneous site)

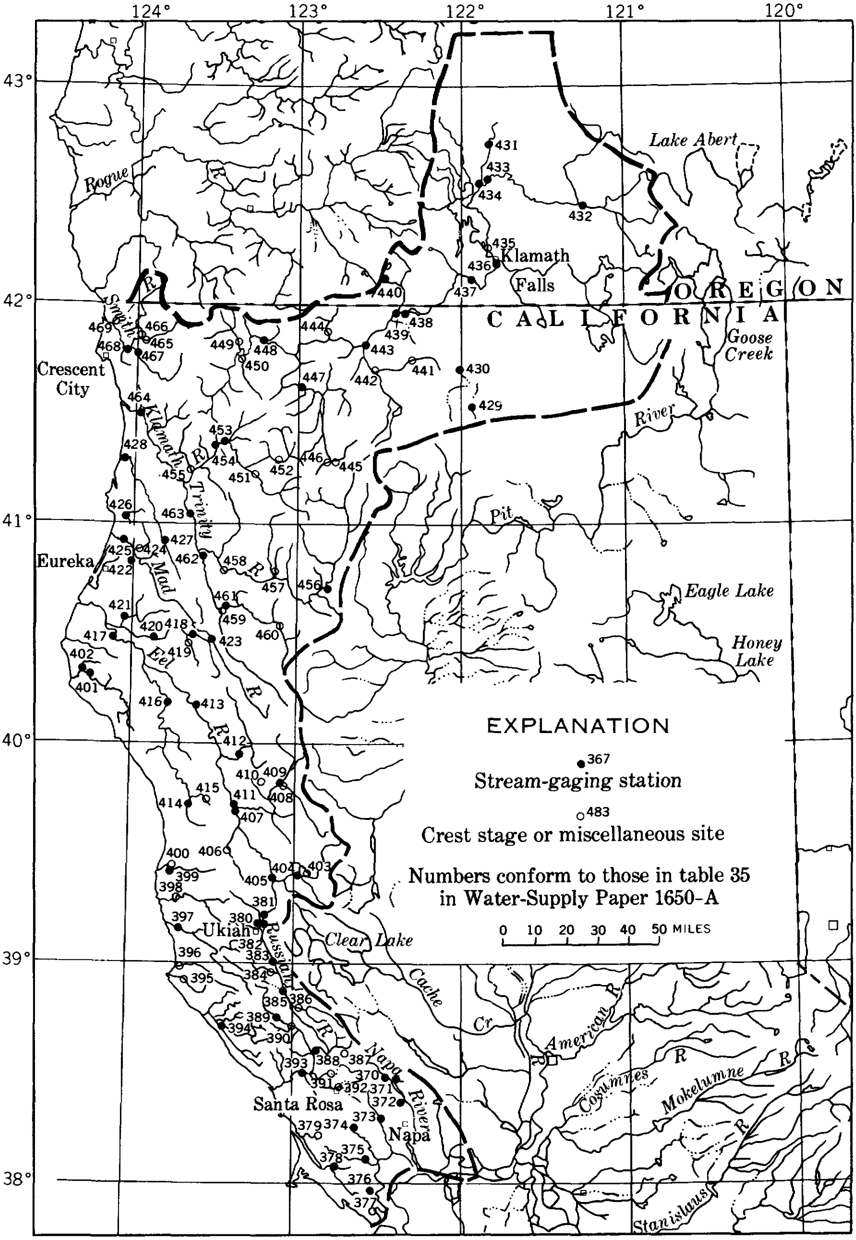
Location.--Lat 38°24'35", long 122°02'35", in Los Putos Grant at Suetta Ranch, 5 miles northwest of Vacaville, Solano County.

Drainage area.--4.29 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 972 cfs Dec. 22.

NORTH-COASTAL CALIFORNIA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Eureka
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407
EXPLANATION
367
Stream-gaging station
483
Crest stage or miscellaneous site
Numbers conform to those in table 35
in Water-Supply Paper 1650-A
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Cosumnes
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Santa Rosa
372
Napa River
373
379
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Napa
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377
Stanislaus

Figure 6.--Map of the North-coastal California region showing location of flood-data sites.

NAPA RIVER BASIN

370. Napa River near St. Helena, Calif.

Location.--Lat 38°29'40", long 122°25'50", in SE¼ sec.32, T.8 N., R.5 W., on right bank 0.2 mile upstream from highway bridge, 1.3 miles northeast of Zinfandel, and 2.5 miles east of St. Helena.

Drainage area.--81.3 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 200 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 12,600 cfs 5 a.m. Dec. 22 (gage height, 15.17 ft).
1929-32, 1939 to November 1955: Discharge, 11,800 cfs Feb. 6, 1942 (gage height, 14.6 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1.8	392	11	6.9	512	21	2,550	484
2	1.8	275	12	5.7	382	22	8,460	512
3	2.0	224	13	5.3	474	23	5,730	500
4	1.9	364	14	4.9	2,160	24	1,450	414
5	2.7	436	15	4.6	2,870	25	689	2,270
6	111	334	16	6.1	1,420	26	3,010	1,820
7	28	1,620	17	20	736	27	1,080	1,590
8	10	1,140	18	939	549	28	604	1,010
9	10	614	19	5,910	402	29	405	639
10	8.9	690	20	2,070	644	30	311	460
						31	290	340
Monthly mean discharge, in cubic feet per second							1,088	848
Runoff, in inches							15.43	12.02
Runoff, in acre-feet							66,900	52,120

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22			Dec. 26--Con.		
12 p.m.	1.24	33	1 a.m.	14.53	11,700	7 a.m.	6.50	2,640
			2	14.98	12,400	9	10.56	6,550
Dec. 18			5	15.17	12,600	10	10.88	6,940
10 a.m.	1.29	40	8	15.03	12,400	11	11.01	7,090
12 m.	1.37	53	10	14.32	11,400	12 m.	10.50	6,480
2 p.m.	1.60	92	12 m.	12.01	8,350	2 p.m.	8.36	4,210
4	2.64	364	3 p.m.	8.49	4,330	4	7.23	3,220
8	6.74	2,830	5	7.34	3,310	6	6.36	2,530
9	8.09	3,970	6	7.21	3,210	9	5.59	1,970
10	8.32	4,180	7	7.16	3,170	12 p.m.	5.08	1,630
12 p.m.	7.49	3,430	12 p.m.	11.67	7,910			
						Dec. 27		
Dec. 19			Dec. 23			4 a.m.	4.60	1,340
2 a.m.	6.74	2,830	1 a.m.	11.45	7,620	8	4.28	1,150
3	6.51	2,650	2	11.21	7,330	12 m.	4.03	1,000
6	6.86	2,930	5	9.42	5,250	4 p.m.	3.95	958
8	7.71	3,630	8	10.78	6,820	8	3.77	858
12 m.	11.66	7,900	9	11.56	7,770	12 p.m.	3.58	760
1 p.m.	12.13	8,510	10	11.81	8,090			
2	12.45	8,920	12 m.	11.72	7,980	Jan. 13		
5	12.01	8,350	3 p.m.	9.85	5,720	12 p.m.	3.25	608
7	12.39	8,850	6	8.08	3,960			
10	10.86	6,910	9	7.04	3,070	Jan. 14		
12 p.m.	8.31	4,170	12 p.m.	6.27	2,460	3 a.m.	4.19	1,090
						6	5.56	1,950
Dec. 20			Dec. 24			8	5.71	2,060
1 a.m.	7.72	3,640	4 a.m.	5.51	1,920	10	5.61	1,990
4	7.59	3,520	8	4.98	1,570	12 m.	5.64	2,010
9	5.95	2,220	12 m.	4.58	1,330	3 p.m.	5.96	2,230
12 m.	5.21	1,710	8 p.m.	4.08	1,030	5	6.47	2,620
4 p.m.	4.56	1,320	12 p.m.	3.87	914	7	7.33	3,300
8	4.16	1,070				8	7.47	3,420
12 p.m.	3.87	914	Dec. 25			9	7.34	3,310
			6 a.m.	3.61	775	10	7.08	3,100
Dec. 21			12 m.	3.39	670	12 p.m.	6.27	2,460
4 a.m.	3.87	914	6 p.m.	3.21	590			
7	4.03	1,000	12 p.m.	3.07	528	Jan. 15		
12 m.	3.87	914				3 a.m.	5.63	2,000
2 p.m.	4.02	996	Dec. 26			4	5.51	1,920
6	6.23	2,420	2 a.m.	3.04	516	7	5.71	2,060
8	8.74	4,570	3	3.12	549	9	5.61	1,990
10	12.61	9,130	4	3.42	684	10	5.82	2,130
12 p.m.	14.27	11,400	6 a.m.	4.88	1,510	12 m.	6.92	2,980

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Napa River near St. Helena, Calif--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 15--Con.			Jan. 15--Con.			Jan. 16--Con.		
2 p.m........	7.99	3,880	9 p.m........	7.00	3,040	7 a.m........	5.06	1,620
4............	8.58	4,410	12 p.m.......	6.12	2,340	10...........	4.74	1,450
5............	8.64	4,470				12 m.........	4.52	1,290
6............	8.46	4,300	Jan. 16			6 p.m........	4.19	1,090
7 p.m........	8.00	3,890	4 a.m........	5.41	1,850	12 p.m.......	3.91	936

371. Conn Creek near St. Helena, Calif.

Location.--Lat 38°28'55", long 122°22'25", in SW¼SW¼ sec.1, T.7 N., R.5 W., in outlet pool at toe of Conn Dam, 1.8 miles upstream from bridge on State Highway 28, 5.4 miles east of St. Helena, and 8 miles upstream from mouth. Auxiliary gage on crest of spillway.

Drainage area.--52.3 sq mi.

Gage-height record.--Water-stage recorder graphs from base and auxiliary gages. Altitude of gage is 230 ft (from topographic map).

Discharge record.--Stage-discharge relation for spillway defined by current-meter measurements below 1,300 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 3,600 cfs 12 m. Dec. 23 (gage height, 3.70 ft, spillway datum).
1929 to November 1955: Discharge, 7,700 cfs Feb. 27, 1940 (gage height, 11.80 ft, site and datum then in use).

Remarks.--Flow regulated by Lake Hennessey beginning in December 1945 (capacity, 31,000 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	144	11.....	0	198	21.....	0	280
2.....	0	134	12.....	0	176	22.....	1,930	256
3.....	0	107	13.....	0	170	23.....	2,880	256
4.....	0	92	14.....	0	343	24.....	984	232
5.....	0	107	15.....	0	697	25.....	408	819
6.....	0	97	16.....	0	743	26.....	1,220	856
7.....	0	204	17.....	0	460	27.....	691	850
8.....	0	411	18.....	0	359	28.....	380	751
9.....	0	283	19.....	0	280	29.....	243	536
10.....	0	232	20.....	0	286	30.....	182	338
						31.....	160	262
Monthly mean discharge, in cubic feet per second......................							293	354
Runoff, in acre-feet..							18,010	21,740

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 25			Jan. 24		
12 p.m.......	-	0	6 a.m........	0.96	460	12 p.m.......	0.68	268
			12 m.........	.84	373			
Dec. 22			9 p.m........	.75	312	Jan. 25		
1 a.m........	-	0	12 p.m.......	.90	415	4 a.m........	1.00	490
2............	0.24	46				8............	1.50	930
3............	.50	165	Dec. 26			12 m.........	1.58	1,010
4............	.90	415	1 a.m........	1.10	570	2 p.m........	1.58	1,010
5............	1.36	799	2............	1.80	1,220	4............	1.56	987
6............	1.85	1,270	3............	1.97	1,390	8............	1.50	930
7............	2.60	2,100	7............	1.99	1,410	12 p.m.......	1.42	854
10...........	2.96	2,560	10...........	1.99	1,410			
12 m.........	3.12	2,770	12 m.........	1.96	1,380	Jan. 26		
4 p.m........	2.92	2,510	4 p.m........	1.80	1,220	4 a.m........	1.36	799
8............	2.72	2,250	8............	1.65	1,070	8............	1.47	902
10...........	2.95	2,540	12 p.m.......	1.54	968	12 m.........	1.45	882
12 p.m.......	3.22	2,910				6 p.m........	1.42	854
			Dec. 27			12 p.m.......	1.40	835
Dec. 23			6 a.m........	1.37	808			
2 a.m........	3.28	2,990	12 m.........	1.21	664	Jan. 27		
6............	3.16	2,820	6 p.m........	1.10	570	8 a.m........	1.34	781
9............	3.40	3,160	12 p.m.......	.98	475	12 m.........	1.40	835
12 m.........	3.70	3,600				4 p.m........	1.46	892
4 p.m........	3.28	2,990	Dec. 28			6............	1.49	920
8............	2.85	2,420	6 a.m........	.91	422	12 p.m.......	1.46	892
12 p.m.......	2.40	1,860	12 m.........	.85	380			
Dec. 24			6 p.m........	.78	332	Jan. 28		
2 a.m........	2.00	1,420	12 p.m.......	.73	300	6 a.m........	1.36	799
6............	1.76	1,180				12 m.........	1.27	718
8............	1.68	1,100	Dec. 29			6 p.m........	1.20	655
12 m.........	1.47	902	6 a.m........	.67	262	12 p.m.......	1.33	772
6 p.m........	1.29	736	12 m.........	.63	238			
12 p.m.......	1.11	578	12 p.m.......	.57	204			

372. Dry Creek near Napa, Calif.

Location.--Lat 38°21'23", long 122°21'50", in Napa Grant, on right bank 3.7 miles upstream from mouth and 5.5 miles northwest of Napa, Napa County.

Drainage area.--17.4 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 190 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 2,600 cfs 12:15 p.m. Dec. 19 (gage height, 7.25 ft).

1951 to November 1955: Discharge, 2,380 cfs Dec. 6, 1952 (gage height, 7.05 ft, site and datum then in use), from rating curve extended above 450 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.0	89	11.....	3.4	93	21.....	439	91
2.....	1.2	70	12.....	2.9	81	22.....	1,490	89
3.....	.7	62	13.....	2.6	81	23.....	1,100	84
4.....	.6	69	14.....	2.2	316	24.....	414	81
5.....	1.5	69	15.....	1.9	417	25.....	206	268
6.....	23	62	16.....	3.2	276	26.....	492	294
7.....	7.8	311	17.....	9.8	160	27.....	278	272
8.....	4.8	286	18.....	230	118	28.....	160	208
9.....	5.9	160	19.....	1,210	93	29.....	102	149
10.....	4.3	124	20.....	406	107	30.....	81	110
						31.....	76	89
Monthly mean discharge, in cubic feet per second......................							218	154
Runoff, in inches..							14.45	10.21
Runoff, in acre-feet...							13,410	9,480

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 21--Con.			Dec. 25		
12 p.m.......	3.20	11	2 p.m........	3.93	172	12 m.........	4.00	200
			4............	4.15	260	12 p.m.......	3.87	149
Dec. 18			5............	4.27	308			
9 a.m........	3.16	9.5	6............	4.27	308	Dec. 26		
12 m.........	3.18	10	8............	4.94	639	2 a.m........	3.86	146
4 p.m........	3.43	26	9............	5.73	1,210	4............	4.00	200
6............	4.29	374	10...........	6.33	1,730	6............	4.59	446
8............	4.77	676	12 p.m.......	6.70	2,060	7............	4.75	528
10...........	5.60	1,260				8............	5.29	873
12 p.m.......	4.77	676	Dec. 22			9............	5.89	1,340
			2 a.m........	7.00	2,350	11...........	4.97	657
Dec. 19			4............	6.57	1,940	12 m.........	4.99	669
1 a.m........	4.67	610	6............	6.56	1,930	1 p.m........	4.89	609
4............	4.70	630	8............	6.75	2,100	3............	4.71	506
5............	5.08	886	10...........	6.14	1,560	6............	4.57	436
6............	5.55	1,220	12 m.........	5.65	1,150	12 p.m.......	4.40	360
7............	5.39	1,100	5 p.m........	5.07	720			
9............	5.49	1,170	6............	5.07	720	Dec. 27		
11...........	6.10	1,640	8............	5.56	1,080	6 a.m........	4.29	316
12 m.........	7.00	2,380	9............	6.00	1,430	12 m.........	4.18	272
12:15 p.m....	7.25	2,600	10...........	5.88	1,330	12 p.m.......	4.02	208
1............	6.71	2,070	11...........	6.20	1,610	Jan. 13		
2............	6.14	1,560	12 p.m.......	6.00	1,430	12 p.m.......	3.68	93
3............	6.02	1,450						
4............	5.87	1,330	Dec. 23			Jan. 14		
7............	6.00	1,430	2 a.m........	5.52	1,050	2 a.m........	3.79	121
9............	5.52	1,050	4............	5.33	901	6............	4.26	304
12 p.m.......	5.07	720	6............	5.48	1,010	9............	4.17	268
			8............	6.07	1,490	12 m.........	4.26	304
Dec. 20			10...........	6.53	1,910	2 p.m........	4.28	312
3 a.m........	4.97	657	12 m.........	5.90	1,350	4............	4.53	418
6............	4.71	506	4 p.m........	5.45	990	7............	4.66	480
12 m.........	4.41	364	8............	5.11	747	12 p.m.......	4.41	364
6 p.m........	4.17	268	12 p.m.......	4.89	609			
12 p.m.......	4.02	208				Jan. 15		
			Dec. 24			8 a.m........	4.27	308
Dec. 21			6 a.m........	4.67	485	12 m.........	4.58	441
6 a.m........	3.90	160	12 m.........	4.48	396	3:30 p.m.....	4.93	633
9............	3.87	149	6 p.m........	4.33	332	6............	4.67	485
12 m.........	3.92	168	12 p.m.......	4.19	276	12 p.m.......	4.41	364

SONOMA CREEK BASIN

373. Sonoma Creek at Boyes Hot Springs, Calif.

Location.--Lat 38°18'49", long 122°29'09", in Agua Caliente Grant, on left bank 10 ft downstream from county highway bridge at Boyes Hot Springs, Sonoma County, and 2.2 miles northwest of Sonoma.

Drainage area.--62.7 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 75 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,100 cfs and by slope-area measurement at 8,880 cfs.

Maxima.--December 1955 to January 1956: Discharge, 8,880 cfs 1 a.m. Dec. 22 (gage height, 17.1 ft).

February to November 1955: Discharge, 937 cfs Apr. 21 (gage height, 7.27 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3.2	346	11.....	2.8	274	21.....	1,610	321
2.....	4.0	202	12.....	1.6	214	22.....	5,010	386
3.....	1.1	163	13.....	1.6	276	23.....	3,540	338
4.....	.8	192	14.....	1.3	1,810	24.....	1,010	304
5.....	9.5	184	15.....	.8	2,190	25.....	465	1,010
6.....	164	155	16.....	9.4	934	26.....	2,380	998
7.....	19	1,300	17.....	50	474	27.....	745	845
8.....	7.4	697	18.....	1,170	361	28.....	400	528
9.....	15	361	19.....	4,200	294	29.....	276	361
10.....	5.7	388	20.....	1,310	475	30.....	212	281
						31.....	226	224
Monthly mean discharge, in cubic feet per second......................							737	545
Runoff, in inches..							13.55	10.02
Runoff, in acre-feet...							45,320	33,490

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 20--Con.			Dec. 23--Con.		
12 p.m.......	4.55	48	9 p.m........	6.50	550	10 a.m.......	13.55	5,810
			12 p.m.......	6.29	466	11...........	13.04	5,380
Dec. 18						12 m.........	12.37	4,850
9 a.m........	4.41	35	Dec. 21			2 p.m........	10.91	3,690
11...........	4.55	48	8 a.m........	5.97	361	4............	10.15	3,120
12 m.........	4.84	81	12 m.........	6.15	418	6............	9.35	2,560
3 p.m........	7.35	925	2 p.m........	6.22	442	9............	8.55	2,040
6............	8.96	2,080	4............	7.35	988	12 p.m.......	7.93	1,660
8............	9.96	2,870	5............	7.53	1,100			
9............	11.50	4,100	6............	7.78	1,280	Dec. 24		
10...........	12.60	5,000	7............	8.70	1,920	6 a.m........	7.15	1,200
11...........	11.62	4,200	8............	10.26	3,110	12 m.........	6.60	930
12 p.m.......	11.01	3,710	10...........	15.00	7,040	6 p.m........	6.22	759
			11...........	15.10	7,120	12 p.m.......	5.90	620
Dec. 19			12 p.m.......	16.75	8,560			
2 a.m........	9.86	2,790				Dec. 25		
3............	9.61	2,610	Dec. 22			6 a.m........	5.64	524
4............	9.86	2,790	1 a.m........	17.10	8,880	12 m.........	5.40	450
5............	11.36	3,990	2............	16.90	8,700	6 p.m........	5.21	397
6............	11.70	4,260	3............	15.82	7,740	12 p.m.......	5.06	356
7............	10.96	3,670	4............	14.97	7,010			
8............	10.85	3,580	5............	14.70	6,780	Dec. 26		
9............	11.06	3,750	6............	14.25	6,400	1 a.m........	5.05	353
11...........	13.14	5,460	7............	14.10	6,280	2............	5.12	372
12 m.........	14.50	6,620	8............	14.36	6,500	3............	5.82	588
1 p.m........	13.90	6,100	9............	13.70	5,940	4............	7.27	1,270
2............	12.99	5,330	10...........	12.85	5,230	5............	9.44	2,620
3............	12.73	5,110	12 m.........	11.02	3,780	7............	10.79	3,600
6............	11.86	4,390	2 p.m........	9.75	2,840	8............	13.14	5,460
7............	12.54	4,990	4............	9.12	2,410	9............	14.09	6,270
8............	12.00	4,500	6............	8.70	2,140	10...........	12.34	4,820
10...........	10.55	3,340	7............	9.07	2,380	11...........	11.14	3,860
12 p.m.......	9.62	2,620	8............	10.10	3,080	12 m.........	10.77	3,590
			10...........	12.37	4,850	2 p.m........	9.52	2,670
Dec. 20			12 p.m.......	13.25	5,810	4............	8.56	2,040
1 a.m........	9.44	2,480				6............	7.95	1,670
2:30.........	9.92	2,840	Dec. 23			9............	7.37	1,320
3............	9.82	2,760	1 a.m........	12.60	5,030	12 p.m.......	6.89	1,060
5............	9.04	2,180	2............	11.50	4,150			
7............	8.30	1,640	4............	9.93	2,960	Dec. 27		
9............	7.85	1,320	5............	9.70	2,800	6 a.m........	6.48	876
12 m.........	7.38	1,010	6............	10.15	3,120	12 m.........	6.14	723
3 p.m........	7.10	835	7............	10.95	3,720	6 p.m........	5.85	600
6 p.m........	6.75	662	9 a.m........	12.80	5,190	12 p.m.......	5.58	504

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Sonoma Creek at Boyes Hot Springs, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 12			Jan. 14--Con.			Jan. 15--Con.		
12 p.m.......	4.38	202	9 a.m........	7.40	1,340	3 p.m........	11.17	3,890
			2 p.m........	8.35	1,910	7............	8.86	2,240
Jan. 13			5............	9.93	2,960	10...........	8.06	1,740
5 a.m........	4.36	198	6:30.........	10.19	3,150	12 p.m.......	7.70	1,520
10...........	4.93	323	9............	9.15	2,430			
7 p.m........	4.74	279	12 p.m.......	8.03	1,720	Jan. 16		
9............	4.77	285				5 a.m........	7.07	1,160
11...........	5.05	353	Jan. 15			9............	6.65	952
12 p.m.......	5.38	444	2 a.m........	7.67	1,500	3 p.m........	6.30	795
			7............	7.30	1,280	8............	6.04	678
Jan. 14			9............	7.94	1,660	12 p.m.......	5.87	608
5 a.m........	7.56	1,440	12 m.........	10.32	3,250			

PETALUMA CREEK BASIN

374. Petaluma Creek near Petaluma, Calif.

Location.--Lat 38°15'40", long 122°39'35", in Roblar de la Miseria Grant, on right bank 70 ft downstream from county highway bridge, 1.3 miles downstream from Lichau Creek, and 2.0 miles northwest of Petaluma, Sonoma County.

Drainage area.--29.6 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 20 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,860 cfs 4 a.m. Dec. 22 (gage height, 13.55 ft).

1948 to November 1955: Discharge, 1,360 cfs Dec. 3, 1950 (gage height, 12.55 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	227	11.....	0.1	69	21.....	246	84
2.....	0	76	12.....	0	47	22.....	1,470	178
3.....	0	43	13.....	0	66	23.....	1,220	137
4.....	0	37	14.....	0	1,150	24.....	266	64
5.....	.1	65	15.....	0	1,190	25.....	61	596
6.....	20	53	16.....	0	300	26.....	968	260
7.....	2.8	418	17.....	2.8	62	27.....	209	237
8.....	.5	377	18.....	72	60	28.....	62	95
9.....	.6	63	19.....	1,190	50	29.....	39	49
10.....	.3	159	20.....	667	301	30.....	54	39
						31.....	255	32
Monthly mean discharge, in cubic feet per second......................							220	212
Runoff, in inches..							8.55	8.27
Runoff, in acre-feet...							13,500	13,060

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 21			Dec. 24		
12 p.m.......	3.74	4.2	4 a.m........	6.29	121	4 a.m........	8.62	464
			10...........	5.85	92	10...........	7.29	225
Dec. 18			12 m.........	5.90	95	4 p.m........	6.57	144
10 a.m.......	3.51	3.0	4 p.m........	6.45	134	8............	5.91	96
2 p.m........	3.59	3.4	8............	8.00	344	12 p.m.......	5.64	81
5............	4.00	6.0	12 p.m.......	11.55	1,180			
8............	7.62	183				Dec. 25		
10...........	8.52	361	Dec. 22			8 a.m........	5.31	65
12 p.m.......	8.95	468	2 a.m........	13.08	1,700	4 p.m........	5.05	55
			4............	13.55	1,860	12 p.m.......	4.81	45
Dec. 19			10...........	13.28	1,770			
4 a.m........	10.65	895	6 p.m........	11.21	1,080	Dec. 26		
12 m.........	11.72	1,220	9............	10.91	993	1 a.m........	4.80	45
2 p.m........	12.10	1,360	12 p.m.......	11.95	1,300	3............	6.00	101
5............	12.91	1,640				4............	7.18	210
12 p.m.......	11.88	1,280	Dec. 23			6............	8.80	500
			2 a.m........	12.63	1,540	8............	12.00	1,320
Dec. 20			6............	11.91	1,290	11...........	13.53	1,860
6 a.m........	10.86	978	10...........	11.37	1,130	12 m.........	13.29	1,770
12 m.........	9.35	617	3 p.m........	12.16	1,380	4 p.m........	11.99	1,320
8 p.m........	7.57	267	8............	11.20	1,080	8............	10.77	952
12 p.m.......	7.04	193	12 p.m.......	9.84	725	12 p.m.......	9.16	575

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Petaluma Creek near Petaluma, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 27			Jan. 13--Con.			Jan. 15--Con.		
4 a.m........	7.94	333	12 p.m.......	6.27	120	8:30 a.m.....	9.89	736
7............	7.29	225	Jan. 14			1 p.m........	11.40	1,140
5 p.m........	6.14	111	3 a.m........	8.16	373	4:30.........	13.00	1,670
12 p.m.......	5.72	85	5............	9.81	718	5............	12.99	1,670
			9............	11.63	1,210	9............	11.90	1,290
Jan. 12			1 p.m........	11.63	1,210	12 p.m.......	10.82	966
12 p.m.......	4.74	43	5............	12.47	1,480			
			7:30.........	13.53	1,860	Jan. 16		
Jan. 13			9............	13.32	1,780	4 a.m........	8.94	528
6 a.m........	4.71	42	12 p.m.......	12.45	1,480	7............	7.98	340
9............	4.90	49				12 m.........	6.99	187
1 p.m........	5.64	81	Jan. 15			12 p.m.......	5.60	79
9:30 p.m.....	5.57	78	4 a.m........	11.22	1,090			

NOVATO CREEK BASIN

375. Novato Creek near Novato, Calif.

Location.--Lat 38°06'45", long 122°35'05", in Novato Grant, on right bank 500 ft downstream from highway bridge and 1 mile west of U.S. Highway 101 in Novato, Marin County.

Drainage area.--17.2 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 45 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 720 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,120 cfs 6 a.m. Dec. 22 (gage height, 7.88 ft).
1946 to November 1955: Discharge, 1,130 cfs Dec. 3, 1950 (gage height, 7.97 ft).

Remarks.--Flow partly regulated by Stafford Lake (capacity, 4,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.3	138	11.....	0.3	71	21.....	131	82
2.....	.3	92	12.....	.3	57	22.....	554	84
3.....	.2	73	13.....	.3	60	23.....	649	74
4.....	.2	66	14.....	.3	402	24.....	340	69
5.....	.7	57	15.....	.3	549	25.....	155	211
6.....	3.0	48	16.....	.9	311	26.....	535	180
7.....	.4	197	17.....	1.0	149	27.....	249	137
8.....	.4	188	18.....	47	102	28.....	125	99
9.....	.5	102	19.....	365	72	29.....	79	74
10.....	.3	93	20.....	128	120	30.....	101	60
						31.....	150	49
Monthly mean discharge, in cubic feet per second.....................							117	131
Runoff, in inches..							7.82	8.79
Runoff, in acre-feet...							7,180	8,060

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 19--Con.			Dec. 21		
12 p.m.......	0.64	0.8	9 a.m........	3.79	368	6 a.m........	1.74	69
			12 m.........	6.59	872	2 p.m........	1.71	66
Dec. 18			3 p.m........	4.37	467	5............	1.87	82
7 a.m........	.63	.7	4............	3.94	394	6............	1.87	82
8............	.71	2.1	6............	3.94	394	8............	2.82	209
12 m.........	.74	3.0	8............	3.17	263	10...........	3.42	305
3 p.m........	1.05	15	11...........	2.74	197	12 p.m.......	5.90	742
6............	1.74	69	12 p.m.......	2.79	204			
9............	2.77	202				Dec. 22		
11...........	2.58	173	Dec. 20			1 a.m........	6.65	884
12 p.m.......	2.65	184	2 a.m........	2.83	210	3:30.........	4.93	567
			6............	2.39	147	5............	6.43	842
Dec. 19			10...........	2.16	116	6............	7.88	1,120
2 a.m........	2.50	162	12 m.........	2.17	117	8............	5.64	668
3............	2.70	191	3 p.m........	2.05	102	10...........	4.64	479
5............	2.80	206	5............	2.07	104	12 m.........	3.80	332
7 a.m........	3.48	316	12 p.m.......	1.88	83	5 p.m........	3.07	212

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Novato Creek near Novato, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 22--Con.			Dec. 26--Con.			Jan. 13--Con.		
6 p.m.	3.13	222	5 a.m.	4.75	499	12 p.m.	2.50	132
7	3.79	330	6	4.65	481			
8:30	6.50	840	7	5.95	730	Jan. 14		
10	5.25	592	8	7.45	1,030	5 a.m.	3.31	251
12 p.m.	4.72	494	11	5.80	700	7	3.10	217
			12 m.	6.07	754	10	3.32	252
Dec. 23			4 p.m.	5.15	574	12 m.	3.32	252
3 a.m.	3.96	359	8	4.44	443	3 p.m.	5.60	660
4	3.90	349	12 p.m.	3.95	358	4	5.87	714
6	4.21	402				8	5.45	630
8	5.25	592	Dec. 27			12 p.m.	4.76	501
10	6.98	956	6 a.m.	3.54	288			
12 m.	6.68	876	12 m.	3.23	238	Jan. 15		
2 p.m.	6.85	910	2 p.m.	3.21	235	3 a.m.	4.42	440
7	5.73	686	7	2.97	196	5	4.41	438
12 p.m.	4.92	530	12 p.m.	2.78	168	7:30	4.14	390
						12 m.	5.92	724
Dec. 24			Dec. 28			3 p.m.	5.90	720
6 a.m.	4.21	402	8 a.m.	2.52	134	8	5.00	545
12 m.	3.77	327	4 p.m.	2.31	110	12 p.m.	4.54	461
6 p.m.	3.35	257	12 p.m.	2.17	96			
12 p.m.	3.09	215				Jan. 16		
			Jan. 12			6 a.m.	3.95	358
Dec. 25			12 p.m.	1.68	54	12 m.	3.63	303
6 a.m.	2.86	180				6 p.m.	3.31	251
12 m.	2.64	149	Jan. 13			12 p.m.	3.03	206
12 p.m.	2.29	108	6 a.m.	1.66	52			
			9	1.80	63	Jan. 17		
Dec. 26			2 p.m.	1.71	56	8 a.m.	2.72	160
2 a.m.	2.30	109	8	1.69	54	4 p.m.	2.48	130
4 a.m.	4.49	452	10 p.m.	1.89	70	12 p.m.	2.30	109

CORTE MADERA CREEK BASIN

376. Corte Madera Creek at Ross, Calif.

Location.--Lat 37°57'45", long 122°33'20", in Punta de Quentin Grant, on left bank behind fire station at Ross, Marin County, 1.7 miles southwest of San Rafael and 4 miles upstream from mouth.

Drainage area.--18.3 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 8 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,600 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 3,620 cfs 7 a.m. Dec. 22 (gage height, 17.45 ft).

1951 to November 1955: Discharge, 3,300 cfs Dec. 3, 1951 (gage height, 16.65 ft).

Remarks.--Flow slightly regulated by Phoenix Lake (capacity, 612 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	9.4	328	11	5.4	81	21	504	78
2	2.6	140	12	5.1	65	22	2,360	86
3	2.2	89	13	4.5	77	23	1,540	75
4	2.2	103	14	4.2	477	24	359	74
5	38	89	15	4.2	552	25	160	349
6	151	72	16	7.7	262	26	631	310
7	13	311	17	14	134	27	221	229
8	14	207	18	446	101	28	116	146
9	10	118	19	1,700	71	29	72	103
10	6.9	115	20	410	114	30	126	77
						31	159	61
Monthly mean discharge, in cubic feet per second							293	164
Runoff, in inches							18.49	10.35
Runoff, in acre-feet							18,050	10,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Corte Madera Creek at Ross, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22			Dec. 26--Con.		
12 p.m.	3.84	9.7	2:30 a.m.	16.61	3,280	10 a.m.	8.00	730
			4	15.96	3,020	12 m.	8.47	833
Dec. 18			5:30	17.00	3,440	6 p.m.	6.55	436
4 a.m.	3.83	9.2	7	17.45	3,620	12 p.m.	5.93	312
7	4.37	68	9	16.00	3,040			
12 m.	4.05	26	10	14.90	2,620	Dec. 27		
1 p.m.	4.69	119	12 m.	12.55	1,860	6 a.m.	5.60	250
2	5.15	199	2 p.m.	10.72	1,360	7	5.69	266
3	5.10	190	4	9.49	1,080	12 m.	5.40	214
4	5.50	262	5	9.14	1,000	6 p.m.	5.20	178
6	6.14	381	6	9.12	996	12 p.m.	5.05	151
8	8.00	750	7	10.04	1,200			
8:30	12.00	1,700	8	13.34	2,100	Jan. 12		
9:30	14.47	2,470	9	15.52	2,860	12 p.m.	4.52	64
11	12.80	1,930	11	14.45	2,460			
12 p.m.	12.46	1,830	12 p.m.	13.80	2,250	Jan. 13		
						5 a.m.	4.50	61
Dec. 19			Dec. 23			10	4.60	75
2 a.m.	10.04	1,200	2 a.m.	11.49	1,560	8 p.m.	4.60	75
3:30	10.17	1,230	4	9.88	1,160	12 p.m.	5.03	147
4:30	9.73	1,130	6	9.16	988			
6	10.61	1,340	8	10.29	1,260	Jan. 14		
8	12.85	1,940	9	12.19	1,750	5:30 a.m.	6.01	328
9	14.65	2,530	10	14.20	2,380	8:30	5.82	290
11	15.59	2,880	11:30	15.68	2,920	1 p.m.	6.28	382
1 p.m.	14.44	2,460	2 p.m.	13.75	2,230	3 p.m.	7.45	616
3:30	12.63	1,880	4	11.79	1,640	5	8.89	926
4:30	13.14	2,030	6	10.06	1,200	6	8.88	924
6	12.01	1,700	8	8.94	937	9	7.80	686
7	10.79	1,380	12 p.m.	7.68	662	12 p.m.	7.00	526
8	9.85	1,160						
10	8.67	897	Dec. 24			Jan. 15		
12 p.m.	8.26	807	4 a.m.	6.82	490	3 a.m.	6.58	442
			8	6.33	392	4	6.63	452
Dec. 20			12 m.	5.97	320	8	6.22	370
4 a.m.	7.00	550	4 p.m.	5.74	275	12 m.	8.32	800
2 p.m.	5.80	316	8	5.54	239	2 p.m.	8.09	750
5	5.65	289	12 p.m.	5.40	214	4	8.20	774
6	5.74	305				7	7.00	526
10	5.42	248	Dec. 25			12 p.m.	6.42	410
12 p.m.	5.31	228	8 a.m.	5.16	171			
			4 p.m.	5.00	142	Jan. 16		
Dec. 21			12 p.m.	4.88	122	4 a.m.	6.06	338
6 a.m.	5.22	212				10	5.66	261
10	5.55	271	Dec. 26			4 p.m.	5.42	218
2 p.m.	5.66	291	1 a.m.	5.25	187	12 p.m.	5.17	173
4:30	6.55	460	3	8.12	756			
5:30	6.33	417	4	8.78	902			
8	8.55	871	5	7.40	606			
10	10.17	1,230	6	8.12	756			
11	12.00	1,700	7:30	10.90	1,410			
12 p.m.	14.70	2,550	9 a.m.	8.75	895			

COYOTE CREEK BASIN

377. Coyote Creek tributary near Mill Valley, Calif.

(Miscellaneous site)

Location.--Lat 37°52'10", long 122°31'39", 0.1 mile upstream from Oakwood Valley, 0.6 mile upstream from mouth, and 2.7 miles south of Mill Valley.

Drainage area.--0.57 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 159 cfs Jan. 14.

LAGUNITAS CREEK BASIN

378. Arroyo Nicasio near Point Reyes Station, Calif.

Location.--Lat 38°04'20", long 122°45'30", in Nicasio (Buckelew) Grant, on left bank 0.9 mile upstream from mouth and 2.7 miles east of Point Reyes Station, Marin County.

Drainage area.--36.2 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 60 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,900 cfs and by slope-area measurement at 9,010 cfs.

Maxima.--December 1955 to January 1956: Discharge, 9,010 cfs 6 a.m. Dec. 22 (gage height, 14.57 ft).

1953 to November 1955: Discharge, 6,860 cfs Jan. 17, 1954 (gage height, 12.88 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1.1	536	11	4.2	144	21	1,040	168
2	.4	231	12	3.6	116	22	4,220	192
3	.5	150	13	3.2	122	23	2,160	168
4	.4	146	14	2.8	1,190	24	547	157
5	1.7	130	15	2.7	1,460	25	210	552
6	65	105	16	6.1	513	26	1,510	307
7	16	1,060	17	30	231	27	398	304
8	7.7	479	18	501	178	28	202	208
9	8.9	242	19	3,130	126	29	128	146
10	5.6	220	20	771	243	30	309	109
						31	403	87
Monthly mean discharge, in cubic feet per second							506	323
Runoff, in inches							16.12	10.29
Runoff, in acre-feet							31,120	19,870

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 24--Con.		
12 p.m.	3.00	25	7 a.m.	4.58	373	12 p.m.	4.35	294
			11	4.77	443			
Dec. 18			1 p.m.	4.71	419	Dec. 25		
6 a.m.	2.95	21	4	5.37	707	12 p.m.	3.84	157
12 m.	3.00	25	5	5.31	679	Dec. 26		
2 p.m.	3.36	64	7	6.30	1,150	1 a.m.	3.84	157
4	4.21	250	10	9.20	3,010	2	3.95	182
8	6.84	1,420	12 p.m.	12.25	6,100	4	7.30	1,680
10:30	8.34	2,340				5	7.72	1,930
12 p.m.	7.96	2,080	Dec. 22			7	11.32	5,050
			1 a.m.	12.73	6,680	10	7.42	1,750
Dec. 19			3:30	11.22	4,940	11	7.64	1,880
3 a.m.	7.52	1,810	6	14.57	9,010	1 p.m.	6.90	1,460
5	7.85	2,010	9	10.50	4,200	2	6.42	1,210
6	7.85	2,010	1 p.m.	8.02	2,110	6	5.70	855
8	9.00	2,850	3	7.25	1,650	12 p.m.	5.15	608
10	12.20	6,040	5:30	6.76	1,380			
11	13.20	7,240	6	6.88	1,440	Jan. 13		
1 p.m.	11.60	5,360	8:30	11.50	5,250	12 p.m.	4.44	324
4	9.54	3,290	12 p.m.	8.73	2,630			
5	9.70	3,430				Jan. 14		
7	8.45	2,420	Dec. 23			5 a.m.	5.45	742
9	7.10	1,560	2 a.m.	7.50	1,800	7	5.11	590
11:30	6.55	1,280	5	6.76	1,380	10:30	5.55	788
12 p.m.	6.67	1,340	7	7.50	1,800	12 m.	5.48	756
			9	10.00	3,700	4 p.m.	8.98	2,830
Dec. 20			10:30	9.70	3,430	8	7.06	1,540
1 a.m.	7.07	1,550	12 m.	10.00	3,700	12 p.m.	6.00	1,000
4	6.13	1,060	2 p.m.	9.02	2,870			
8	5.58	801	6	7.20	1,620	Jan. 15		
12 m.	5.35	698	9	6.52	1,260	3 a.m.	5.79	896
4 p.m.	5.03	554	12 p.m.	6.00	1,000	4:30	6.03	1,020
6	4.99	536				7	5.64	828
10	4.76	439	Dec. 24			9	7.40	1,740
12 p.m.	4.75	435	4 a.m.	5.51	770	12 m.	8.90	2,770
			8	5.17	616	4 p.m.	7.50	1,800
Dec. 21			12 m.	4.89	491	8	6.28	1,140
1 a.m.	4.77	443	6 p.m.	4.59	376	12 p.m.	5.75	878

WALKER CREEK BASIN

379. North Fork Walker Creek near Tomales, Calif.

(Miscellaneous site)

Location.--Lat 38°12'35", long 122°50'55", in NE¼ sec.9, T.4 N., R.9 W., 1 mile upstream from mouth and 4 miles southeast of Tomales.

Drainage area.--19.9 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,720 cfs Dec. 22.

RUSSIAN RIVER BASIN

380. Russian River near Ukiah, Calif.

Location.--Lat 39°12'10", long 123°12'00", in Yokayo Rancho Grant, on left bank 200 ft downstream from York Creek, 0.7 mile upstream from East Fork, and 3.6 miles north of Ukiah, Mendocino County.

Drainage area.--99.6 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 614.02 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 13,000 cfs and by slope-area measurement at 18,900 cfs.

Maxima.--December 1955 to January 1956: Discharge, 18,900 cfs 11 p.m. Dec. 21 (gage height, 19.0 ft).

1911-13, 1952 to November 1955: Discharge, 13,600 cfs Nov. 6, 1912 (gage height, 19.5 ft, from graph based on gage readings), from rating curve extended above 4,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	102	540	11.....	118	890	21.....	5,450	1,020
2.....	92	360	12.....	83	560	22.....	12,800	1,390
3.....	58	289	13.....	61	869	23.....	5,320	1,280
4.....	42	684	14.....	46	8,360	24.....	1,670	855
5.....	815	742	15.....	47	8,380	25.....	1,580	1,850
6.....	3,600	612	16.....	124	2,370	26.....	1,700	1,710
7.....	422	3,120	17.....	663	1,210	27.....	1,300	1,340
8.....	332	1,680	18.....	2,830	1,140	28.....	855	925
9.....	463	897	19.....	7,090	904	29.....	580	703
10.....	196	1,390	20.....	1,610	1,670	30.....	424	540
						31.....	335	435
Monthly mean discharge, in cubic feet per second							1,639	1,571
Runoff, in inches							18.97	18.19
Runoff, in acre-feet							100,800	96,620

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 18--Con.			Dec. 19--Con.		
12 p.m.......	2.90	69	9 a.m........	4.62	686	9 p.m........	9.75	4,300
			11...........	4.78	774	12 p.m.......	8.26	3,050
Dec. 16			12 m.........	5.21	1,030			
4 a.m........	2.89	67	1 p.m........	6.45	1,770	Dec. 20		
6............	2.94	76	2............	8.10	2,920	2 a.m........	7.66	2,610
12 m.........	3.03	93	3............	9.55	4,120	4............	7.14	2,250
4 p.m........	3.33	168	4............	11.35	5,940	6............	6.81	2,020
5............	3.37	180	5............	12.85	7,840	12 m.........	5.83	1,400
7............	3.39	186	6............	13.17	8,300	6 p.m........	5.34	1,100
10...........	3.46	209	8............	11.40	5,990	12 p.m.......	5.02	912
12 p.m.......	3.44	202	10...........	9.10	3,720			
			12 p.m.......	8.05	2,880	Dec. 21		
Dec. 17						6 a.m........	4.69	724
6 a.m........	3.33	168	Dec. 19			10...........	4.56	655
8............	3.34	171	3 a.m........	8.19	2,990	12 m.........	4.65	702
10...........	3.54	235	4............	8.02	2,860	1 p.m........	5.00	900
12 m.........	4.52	635	5............	8.25	3,040	2............	6.00	1,500
2 p.m........	5.12	972	6............	9.17	3,780	3............	7.40	2,430
4............	5.57	1,240	8............	11.55	6,160	4............	9.15	3,760
7............	5.35	1,110	10...........	13.88	9,410	5............	11.60	6,220
8............	5.51	1,210	12 m.........	16.00	13,000	6............	14.25	10,000
10...........	5.48	1,190	1 p.m........	16.70	14,300	7............	16.85	14,600
12 p.m.......	5.34	1,100	2............	17.36	15,600	8............	18.10	17,100
			3............	17.00	14,900	10...........	18.9	18,700
Dec. 18			5............	13.55	8,880	11...........	19.0	18,900
4 a.m........	4.89	834	7 p.m........	11.50	6,100	12 p.m.......	18.9	18,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Russian River near Ukiah, Calif.--Continued

Hour	Gage height	Discharge
Dec. 22		
1 a.m.	18.65	18,700
4	17.53	18,000
7	17.90	18,600
8	17.46	17,900
9	16.45	16,300
10	15.43	14,700
12 m.	13.25	11,200
2 p.m.	11.55	8,770
4	10.45	7,230
7	9.70	6,180
9	11.00	8,000
11	13.57	11,700
12 p.m.	13.10	11,000
Dec. 23		
2 a.m.	10.95	7,930
4	11.77	9,080
6	10.80	7,720
9	9.35	5,690
12 m.	8.52	4,620
4 p.m.	7.63	3,560
8	6.87	2,780
12 p.m.	6.35	2,360
Dec. 24		
8 a.m.	5.58	1,790
4 p.m.	5.10	1,450
12 p.m.	4.72	1,180
Dec. 25		
5 a.m.	4.58	1,090
Dec. 25--Con.		
9 a.m.	5.15	1,480
11	5.16	1,490
3 p.m.	5.55	1,760
7	6.19	2,230
12 p.m.	5.31	1,600
Dec. 26		
5 a.m.	4.95	1,340
7	4.94	1,340
12 m.	6.46	2,450
3 p.m.	5.78	1,930
7	5.40	1,660
12 p.m.	5.01	1,390
Jan. 12		
12 p.m.	3.72	508
Jan. 13		
2 a.m.	3.86	599
4	4.33	911
8	3.97	670
12 m.	3.83	580
4:30 p.m.	3.73	514
6	3.76	534
8	4.04	716
10	5.41	1,670
12 p.m.	8.02	4,020
Jan. 14		
1 a.m.	9.15	5,410
3 a.m.	11.56	8,780
Jan. 14--Con.		
4 a.m.	11.69	8,970
7	12.31	9,830
9:30	11.35	8,490
12 m.	12.12	9,570
1:30 p.m.	11.84	9,180
5	12.56	10,200
7	11.28	8,390
9	9.97	6,560
12 p.m.	9.00	5,200
Jan. 15		
1 a.m.	9.41	5,770
3	10.89	7,850
6	10.11	6,750
7	10.37	7,120
8	11.73	9,020
9	13.22	11,200
11	14.22	12,800
12 m.	14.47	13,200
1 p.m.	14.55	13,300
3	13.05	10,900
5	11.11	8,150
8	9.50	5,900
12 p.m.	8.28	4,340
Jan. 16		
1 a.m.	8.00	4,000
6	6.88	2,790
12 m.	6.00	2,080
3 p.m.	5.74	1,900
6	5.51	1,740
12 p.m.	5.15	1,480

381. East Fork Russian River near Calpella, Calif.

Location.--Lat 39°14'20", long 123°08'55", in sec.13, T.16 N., R.12 W., on right bank 1.4 miles downstream from Cold Creek and 3 miles east of Calpella.

Drainage area.--94.0 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 720 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 13,300 cfs 11 p.m. Dec. 21 (gage height, 15.06 ft).

1941 to November 1955: Discharge, 11,300 cfs Jan. 21, 1951 (gage height, 13.7 ft), from rating curve extended above 4,800 cfs by logarithmic plotting.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1	213	386
2	251	454
3	210	412
4	186	615
5	878	738
6	2,290	562
7	327	3,010
8	477	1,290
9	540	833
10	325	1,140
11	249	815
12	201	639
13	193	963
14	177	5,580
15	239	5,350
16	318	1,650
17	645	1,030
18	2,140	972
19	4,990	623
20	1,180	1,340
21	4,040	887
22	7,280	1,230
23	2,640	1,060
24	707	846
25	884	1,580
26	1,190	1,490
27	776	1,240
28	482	923
29	342	775
30	255	687
31	206	619
Monthly mean discharge, in cubic feet per second	1,124	1,282
Runoff, in inches	13.78	15.72
Runoff, in acre-feet	69,090	78,820

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of East Fork Russian River near Calpella, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 15			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.	3.10	255	12 m.	4.58	727	4 p.m.	5.93	1,360
			2 p.m.	5.50	1,140	8	5.34	1,060
Dec. 16			3	6.87	1,910	12 p.m.	4.86	842
2 a.m.	3.16	270	4	8.65	3,520			
12 m.	3.27	298	6	11.75	7,700	Dec. 27		
2 p.m.	3.37	322	8	13.97	11,300	10 a.m.	4.50	695
4	3.55	370	9	14.70	12,700	12 m.	4.56	719
9	3.55	370	10	14.78	12,800	2 p.m.	5.18	986
12 p.m.	3.46	345	11	15.06	13,300	6	4.75	795
			12 p.m.	14.90	13,000	12 p.m.	4.33	627
Dec. 17								
8 a.m.	3.33	312	Dec. 22			Dec. 28		
12 m.	4.03	520	3 a.m.	14.00	11,400	6 a.m.	4.05	528
3 p.m.	5.20	995	4	13.90	11,200	12 m.	3.86	463
4	5.44	1,110	8	14.25	11,800	6 p.m.	3.73	424
5	5.43	1,100	10	12.20	8,420	12 p.m.	3.66	403
12 p.m.	4.83	828	12 m.	10.00	5,150			
			2 p.m.	8.56	3,420	Jan. 12		
Dec. 18			4	7.70	2,580	12 p.m.	4.26	601
10 a.m.	4.15	562	6	7.22	2,180			
11	4.16	566	7	7.42	2,340	Jan. 13		
1 p.m.	5.35	1,060	10	10.65	6,060	3 a.m.	4.71	779
2	7.10	2,080	11	11.15	6,780	5	5.30	1,040
4	9.20	4,140	12 p.m.	10.80	6,270	9	4.70	775
7	10.28	5,540				12 m.	4.51	699
9	9.32	4,280	Dec. 23			6 p.m.	4.37	643
12 p.m.	7.55	2,440	2 a.m.	9.58	4,600	9	5.55	1,160
			4	9.60	4,630	10	6.70	1,810
Dec. 19			5	9.50	4,500	12 p.m.	8.50	3,350
3 a.m.	8.10	2,950	8	8.30	3,150			
4	8.00	2,850	12 m.	6.92	1,940	Jan. 14		
5	8.12	2,970	6 p.m.	5.96	1,370	3 a.m.	11.20	6,850
8	9.95	5,080	12 p.m.	5.26	1,020	6	11.05	6,620
11	11.38	7,120				10	10.20	5,430
1 p.m.	12.40	8,740	Dec. 24			12 m.	10.48	5,820
2	12.74	9,280	6 a.m.	4.80	815	4 p.m.	11.07	6,660
3	12.62	9,090	12 m.	4.47	683	8	9.60	4,630
5	11.27	6,960	6 p.m.	4.18	573	12 p.m.	8.25	3,100
7	9.30	4,260	12 p.m.	3.95	492	Jan. 15		
10	7.40	2,320				4 a.m.	9.72	4,790
12 p.m.	6.83	1,890	Dec. 25			6	9.37	4,340
			5 a.m.	3.86	463	8	10.70	6,130
Dec. 20			11	5.36	1,070	10	12.14	8,320
1 a.m.	6.74	1,830	12 m.	5.28	1,030	12 m.	12.38	8,710
8	5.68	1,230	3 p.m.	5.68	1,230	1 p.m.	12.48	8,870
10	5.54	1,160	6	5.78	1,280	4	10.65	6,060
4 p.m.	4.88	851	9	5.15	972	7	8.88	3,770
6	5.13	963	12 p.m.	4.76	799	12 p.m.	7.56	2,450
12 p.m.	4.91	864						
			Dec. 26			Jan. 16		
Dec. 21			5 a.m.	4.46	679	6 a.m.	6.85	1,900
2 a.m.	4.85	838	8	5.61	1,200	12 m.	6.31	1,580
4	4.95	882	9	5.45	1,120	6 p.m.	5.86	1,320
10 a.m.	4.60	735	12 m.	7.30	2,240	12 p.m.	5.57	1,180

382. East Fork Russian River near Ukiah, Calif.

Location.--Lat 39°11'50", long 123°10'25", in Yokayo Rancho Grant, on left bank on upstream side of private road bridge, 1.3 miles upstream from mouth and 3.7 miles northeast of Ukiah, Mendocino County.

Drainage area.--104 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 627.42 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,700 cfs and extended above on basis of peak flow of station upstream which was defined to 8,600 cfs. Stage-discharge relation indefinite at times; discharge estimated on basis of records for station near Calpella.

Maxima.--December 1955 to January 1956: Discharge, 13,300 cfs 11:30 p.m. Dec. 21 (gage height, 16.86 ft).

1911-13, 1951 to November 1955: Discharge, 10,300 cfs Jan. 17, 1954 (gage height, 15.60 ft).

Remarks.--Flow not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56, of East Fork Russian River near Ukiah, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	215	374	11.....	260	820	21.....	4,100	890
2.....	270	457	12.....	210	640	22.....	7,300	1,250
3.....	218	414	13.....	200	1,000	23.....	2,700	1,080
4.....	191	565	14.....	190	5,600	24.....	750	850
5.....	742	708	15.....	250	5,400	25.....	882	1,600
6.....	2,320	550	16.....	320	1,700	26.....	1,100	1,500
7.....	350	3,000	17.....	650	1,050	27.....	813	1,250
8.....	500	1,300	18.....	2,100	980	28.....	550	930
9.....	550	835	19.....	5,000	640	29.....	370	780
10.....	350	1,150	20.....	1,300	1,350	30.....	290	668
						31.....	244	613
Monthly mean discharge, in cubic feet per second							1,138	1,289
Runoff, in inches							12.62	14.28
Runoff, in acre-feet							69,990	79,230

Peak discharge.--Dec. 6 (5 a.m.) 4,880 cfs (gage height, 12.15 ft); Dec. 19 (3 p.m.) 8,800 cfs; Jan. 7 (8 a.m.) 4,100 cfs; Jan. 15 (2 p.m.) 8,400 cfs.

383. Russian River near Hopland, Calif.

Location.--Lat 39°01'35", long 123°07'45", in Rancho de Sanel Grant, on right bank 0.2 mile downstream from McNab Creek, 4 miles north of Hopland, Mendocino County, and 17 miles upstream from Sulphur Creek.

Drainage area.--362 sq mi.

Gage-height record.--Water-stage recorder graph except 2 a.m. Dec. 7 to 4 p.m. Dec. 9, 5 p.m. Jan. 11 to 12 p.m. Jan. 13, and 12 p.m. Jan. 29 to 12 p.m. Jan. 31. Datum of gage is 497.43 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 34,000 cfs. Discharge for periods of no gage-height record estimated on basis of records for upstream and downstream stations.

Maxima.--December 1955 to January 1956: Discharge, 45,000 cfs 4:30 a.m. Dec. 22 (gage height, 27.00 ft).

1939 to November 1955: Discharge, 34,100 cfs Feb. 28, 1940; gage height, 26.12 ft Jan. 21, 1943.

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	245	1,240	11.....	728	2,650	21.....	8,200	3,460
2.....	380	1,130	12.....	605	2,200	22.....	33,800	3,680
3.....	294	976	13.....	545	2,300	23.....	14,300	3,840
4.....	249	1,360	14.....	486	17,000	24.....	4,450	3,000
5.....	583	1,810	15.....	473	19,900	25.....	3,560	5,300
6.....	7,270	1,540	16.....	600	7,820	26.....	4,370	4,650
7.....	1,600	7,060	17.....	1,160	4,240	27.....	3,430	4,060
8.....	900	5,320	18.....	5,810	3,700	28.....	2,350	3,210
9.....	1,400	2,850	19.....	22,000	3,240	29.....	1,570	2,620
10.....	918	3,170	20.....	8,440	4,290	30.....	1,160	2,300
						31.....	924	1,950
Monthly mean discharge, in cubic feet per second							4,284	4,254
Runoff, in inches							13.64	13.55
Runoff, in acre-feet							263,400	261,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 18--Con.			Dec. 19		
12 p.m.......	6.51	760	7 a.m........	8.06	1,850	1 a.m........	17.84	17,300
Dec. 17			8............	8.00	1,800	3............	16.68	14,600
2 a.m........	6.55	782	10............	7.86	1,690	4............	16.06	13,300
4............	6.56	788	11............	7.85	1,680	5............	15.77	12,700
12 m.........	6.48	744	12 m.........	7.96	1,770	6............	15.92	13,000
2 p.m........	6.53	772	1 p.m........	8.23	1,980	7............	16.20	13,600
3............	6.65	840	2............	8.78	2,480	9............	17.30	16,000
6............	7.77	1,620	3............	9.75	3,450	11............	18.85	20,100
8............	8.41	2,140	4............	11.14	5,100	12 m.........	19.45	21,800
9............	8.52	2,240	5............	12.90	7,740	1 p.m........	19.95	23,400
11............	8.45	2,180	6............	14.57	10,500	2............	20.01	23,500
12 p.m.......	8.45	2,180	7............	15.80	12,800	5............	21.57	28,200
			8............	16.59	14,400	6............	22.32	30,500
Dec. 18			9............	17.06	15,400	7............	22.77	31,800
2 a.m........	8.45	2,180	10............	17.32	16,100	8............	23.00	32,500
4 a.m........	8.35	2,080	12 p.m.......	17.78	17,200	9 p.m........	23.06	32,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Russian River near Hopland, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19--Con.			Dec. 22--Con.			Jan. 14		
10 p.m.	22.70	31,600	4 a.m.	26.88	44,600	2 a.m.	11.71	5,890
12 p.m.	21.18	27,000	4:30	27.00	45,000	3	13.47	8,650
			6	26.64	43,700	5	15.60	12,400
Dec. 20			10	25.64	40,400	9	18.00	17,800
1 a.m.	19.75	22,800	1 p.m.	24.63	37,400	11	19.00	20,500
2	17.94	17,600	3	23.51	34,000	12 m.	19.20	21,100
3	16.40	14,000	5	21.95	29,400	1 p.m.	19.20	21,100
4	15.28	11,800	7	19.95	23,400	3	18.83	20,000
5	14.57	10,500	10	17.64	16,800	9	19.44	21,800
7	13.59	8,840	11	17.52	16,500	10	19.37	21,600
9	12.71	7,440	12 p.m.	17.62	16,800	11	19.18	21,000
12 m.	12.00	6,300				12 p.m.	18.75	19,800
3 p.m.	11.39	5,450	Dec. 23					
5	11.15	5,110	1 a.m.	17.71	17,000	Jan. 15		
9	10.80	4,660	3	18.31	18,600	1 a.m.	18.01	17,800
12 p.m.	10.64	4,470	5	19.40	21,700	4	16.50	14,200
			6	19.46	21,900	6	16.57	14,400
Dec. 21			7	19.33	21,500	7	16.66	14,600
1 a.m.	10.54	4,350	10	18.26	18,400	11	17.90	17,500
4	10.29	4,050	12 m.	17.08	15,500	1 p.m.	19.15	21,000
11	9.78	3,480	2 p.m.	15.34	11,900	3	20.72	25,700
12 m.	9.76	3,460	7	13.10	8,060	5	21.49	28,000
2 p.m.	10.25	4,000	12 p.m.	11.91	6,170	6	21.63	28,400
4	11.41	5,470				7	21.37	27,600
6	14.07	9,630	Dec. 24			10	19.10	20,800
8	17.45	16,400	8 a.m.	10.78	4,640	12 p.m.	16.95	15,200
10	19.57	22,200	10	10.82	4,680			
12 p.m.	22.54	31,100	12 m.	10.57	4,380	Jan. 16		
			12 p.m.	9.45	3,150	2 a.m.	15.30	11,800
Dec. 22						5	13.92	9,370
1 a.m.	24.12	35,900	Jan. 13			2 p.m.	12.11	6,480
3 a.m.	26.37	42,800	12 p.m.	9.45	3,150	12 p.m.	11.11	5,050

384. Feliz Creek near Hopland, Calif.

(Miscellaneous site)

Location.--Lat 38°58'20", long 123°08'30", in Rancho de Sanel Grant, 200 ft upstream from road bridge, 0.2 mile upstream from Johnson Creek, and 1.4 miles west of Hopland, Mendocino County.

Drainage area.--31.2 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,710 cfs Dec. 21.

385. Russian River near Cloverdale, Calif.

Location.--Lat 38°52'55", long 123°03'15", in SW¼ sec.14, T.12 N., R.11 W., on left bank at Lambert Ranch, 400 ft downstream from Commisky Creek and 5 miles northwest of Cloverdale.

Drainage area.--502 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 373.44 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 21,000 cfs and extended above on basis of peak flow at upstream and downstream stations.

Maxima.--December 1955 to January 1956: Discharge, 53,000 cfs 12 m. Dec. 22 (gage height, 30.9 ft, from floodmark).

1951 to November 1955: Discharge, 33,300 cfs Jan. 17, 1954 (gage height, 25.55 ft).

Remarks.--Flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56, of Russian River near Cloverdale, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	214	2,510	11.....	696	4,290	21.....	9,270	4,220
2.....	402	2,090	12.....	556	3,190	22.....	41,500	4,220
3.....	342	1,820	13.....	468	3,290	23.....	22,500	5,210
4.....	286	2,550	14.....	423	17,300	24.....	6,630	3,730
5.....	432	3,130	15.....	412	23,500	25.....	5,040	7,710
6.....	7,140	2,730	16.....	486	13,500	26.....	6,900	7,420
7.....	1,780	10,900	17.....	804	5,390	27.....	4,970	6,360
8.....	945	9,220	18.....	5,730	4,320	28.....	3,450	4,510
9.....	1,510	4,710	19.....	22,500	3,500	29.....	2,570	3,430
10.....	930	5,240	20.....	14,600	5,360	30.....	2,100	2,820
						31.....	1,790	2,410
Monthly mean discharge, in cubic feet per second							5,399	5,825
Runoff, in inches							12.40	13.38
Runoff, in acre-feet							332,000	358,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 20--Con.			Dec. 23--Con.		
12 p.m.......	6.65	560	4 a.m........	22.15	26,300	6 p.m........	17.89	15,900
			7............	20.00	20,600	9............	16.27	12,600
Dec. 17			8............	18.47	17,100	12 p.m.......	15.11	10,500
6 a.m........	6.95	680	10...........	16.60	13,300			
2 p.m........	7.14	770	1 p.m........	14.80	9,940	Dec. 24		
6............	7.11	755	7............	13.42	7,670	3 a.m........	14.22	8,950
8............	7.23	815	12 p.m.......	12.79	6,660	1 p.m........	12.30	5,880
10...........	8.01	1,250				12 p.m.......	11.15	4,280
12 p.m.......	8.82	1,840	Dec. 21					
			1 a.m........	11.76	5,080	Jan. 13		
Dec. 18			1 p.m........	11.86	5,220	12 p.m.......	11.36	4,530
2 a.m........	9.17	2,150	4............	13.45	7,720			
8............	9.28	2,260	6............	15.80	11,700	Jan. 14		
11...........	9.42	2,400	8............	18.53	17,300	3 a.m........	13.42	7,670
1 p.m........	10.06	3,040	10...........	20.43	21,600	5............	15.26	10,800
4............	12.52	6,230	12 p.m.......	22.17	26,400	11...........	18.80	17,900
5............	13.71	8,140				6 p.m........	21.52	24,600
6............	14.96	10,200	Dec. 22			12 p.m.......	21.08	23,300
8............	16.27	12,600	4 a.m........	24.04	31,600			
9............	16.77	13,600	6............	26.00	37,500	Jan. 15		
11...........	16.92	13,900	7............	27.45	41,900	2 a.m........	21.27	23,900
12 p.m.......	17.15	14,400	9............	29.51	48,500	8:30.........	19.14	18,600
			12 m.........	30.9	53,000	3 p.m........	21.02	23,200
Dec. 19			3 p.m........	29.84	49,600	10:30........	23.34	29,700
4 a.m........	18.81	17,900	6............	28.28	44,600	12 p.m.......	22.92	28,500
11...........	21.06	23,300	12 p.m.......	24.67	33,500			
4 p.m........	22.35	26,900				Jan. 16		
9............	21.56	24,700	Dec. 23			4 a.m........	19.88	20,300
12 p.m.......	22.06	26,100	5 a.m........	22.29	26,700	9............	16.48	13,100
			9............	22.47	27,200	12 m.........	15.38	11,000
Dec. 20			3 p.m........	20.50	21,800	5 p.m........	14.16	8,860
2 a.m........	22.50	27,300	5 p.m........	18.90	18,100	12 p.m.......	13.04	7,060

386. Big Sulphur Creek near Cloverdale, Calif.

(Miscellaneous site)

Location.--Lat 38°49'10", long 122°58'55", in NE¼ sec.9, T.11 N., R.10 W., 2.1 miles northeast of Cloverdale, 2.2 miles upstream from mouth, and 3.4 miles downstream from Little Sulphur Creek.

Drainage area.--81.7 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 20,000 cfs Dec. 22.

387. Franz Creek near Kellogg, Calif.

(Miscellaneous site)

Location.--Lat 38°36'33", long 122°41'49", in SW¼ sec.24, T.9 N., R.8 W., 0.2 mile downstream from right-bank tributary and 2 miles southwest of Kellogg.

Drainage area.--14.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 4,130 cfs Dec. 22.

388. Russian River near Healdsburg, Calif.

Location.--Lat 38°36'45", long 122°50'05", in Sotoyome Grant, on left bank 2 miles east of Healdsburg, Sonoma County, and 3.5 miles upstream from Dry Creek.

Drainage area.--791 sq mi.

Gage-height record.--Water-stage recorder graph except 8 a.m. Dec. 22 to 3 p.m. Dec. 24, for which graph was reconstructed on basis of occasional staff-gage readings and records for station near Cloverdale, and 8 p.m. Jan. 16 to 9 a.m. Jan. 20. Datum of gage is 76.84 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Jan. 17-19 estimated on basis of records for station near Cloverdale.

Maxima.--December 1955 to January 1956: Discharge, 65,400 cfs about 9 p.m. Dec. 22 (gage height, 26.16 ft).

1939 to November 1955: Discharge, 67,000 cfs Feb. 28, 1940 (gage height, 30.0 ft).

Flood in December 1937 reached a stage of 30.8 ft, from floodmarks.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	258	4,460	11.....	1,080	7,880	21.....	16,700	7,770
2.....	294	3,820	12.....	890	5,540	22.....	53,900	6,690
3.....	386	3,020	13.....	765	5,280	23.....	47,000	8,460
4.....	352	4,260	14.....	680	16,100	24.....	16,700	6,370
5.....	346	5,870	15.....	610	32,500	25.....	8,420	11,200
6.....	4,580	4,740	16.....	620	27,700	26.....	13,800	13,200
7.....	4,280	13,900	17.....	877	15,000	27.....	9,940	12,600
8.....	1,520	17,400	18.....	5,060	9,000	28.....	6,440	9,450
9.....	1,530	8,520	19.....	33,100	7,000	29.....	4,520	6,620
10.....	1,400	8,870	20.....	34,500	8,520	30.....	3,500	5,160
						31.....	3,260	4,180
Monthly mean discharge, in cubic feet per second.....................							8,945	9,712
Runoff, in inches.....................							13.04	14.16
Runoff, in acre-feet.....................							550,000	597,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 22--Con.			Dec. 27--Con.		
12 p.m.......	1.78	670	6 a.m........	21.80	45,200	12 p.m.......	8.17	7,610
Dec. 17			9............	23.50	52,700			
8 a.m........	1.90	730	12 m.........	24.7	58,200	Dec. 28		
12 m.........	2.08	824	2 p.m........	25.3	61,100	6 a.m........	7.92	7,180
5 p.m........	2.48	1,060	6............	25.3	61,100	12 m.........	7.47	6,430
12 p.m.......	2.59	1,120	9............	26.16	65,400	6 p.m........	7.02	5,730
			12 p.m.......	25.S	63,600	12 p.m.......	6.71	5,270
Dec. 18								
6 a.m........	2.88	1,300	Dec. 23			Jan. 12		
S............	3.34	1,590	7 a.m........	24.4	56,800	12 p.m.......	6.47	4,940
12 m.........	4.40	2,420	12 m.........	21.8	45,200			
3 p.m........	5.62	3,790	3 p.m........	21.2	42,600	Jan. 13		
6............	8.61	8,400	7............	19.5	36,300	5 a.m........	6.40	4,840
9............	10.95	12,900	12 p.m.......	17.0	28,400	9............	6.60	5,120
12 p.m.......	12.45	16,200				12 m.........	6.76	5,340
			Dec. 24			4 p.m........	6.86	5,490
Dec. 19			6 a.m........	14.3	20,800	10...........	6.94	5,610
4 a.m........	14.40	21,000	12 m.........	12.0	15,200	12 p.m.......	7.27	6,110
8............	16.95	28,200	4 p.m........	10.86	12,700			
12 m.........	18.45	32,800	8............	10.10	11,200	Jan. 14		
4 p.m........	20.75	40,800	12 p.m.......	9.45	9,910	4 a.m........	9.20	9,460
6............	21.50	43,900				8............	10.30	11,600
9............	21.70	44,700	Dec. 25			12 m.........	12.00	15,200
12 p.m.......	21.63	44,400	6 a.m........	8.67	8,510	6 p.m........	14.85	22,300
			12 m.........	8.22	7,700	12 p.m.......	16.30	26,900
Dec. 20			6 p.m........	8.50	8,200			
3 a.m........	21.78	45,100	12 p.m.......	8.73	8,610	Jan. 15		
6............	21.15	42,400				4 a.m........	16.95	29,800
9............	20.15	38,600	Dec. 26			6............	16.82	30,900
12 m.........	19.50	36,300	4 a.m........	8.80	8,740	9............	17.00	31,400
4 p.m........	18.25	32,200	6............	9.58	10,200	12 m.........	17.85	35,400
8............	15.20	23,300	8............	11.90	15,000	1 p.m........	17.90	36,000
12 p.m.......	12.90	17,300	10...........	13.46	18,600	7............	17.13	33,700
			12 m.........	12.67	16,700	12 p.m.......	17.06	33,600
Dec. 21			1 p.m........	12.50	16,300			
6 a.m........	11.62	14,400	8............	11.95	15,100	Jan. 16		
12 m.........	10.87	12,700	12 p.m.......	11.10	13,200	3 a.m........	17.00	33,400
2 p.m........	10.92	12,800				6............	17.47	35,000
6............	12.60	16,500	Dec. 27			9............	17.32	34,500
9............	14.80	22,100	4 a.m........	10.57	12,100	12 m.........	16.25	31,000
12 p.m.......	18.25	32,200	8............	9.88	10,800	4 p.m........	13.75	23,200
			12 m.........	9.23	9,510	8............	12.10	18,500
Dec. 22			3 p.m........	8.89	8,900	12 p.m.......	11.0	15,600
3 a.m........	20.30	39,100	7 p.m........	8.52	8,240			

389. Dry Creek near Cloverdale, Calif.

Location.--Lat 38°44'59", long 123°05'28", in NE¼NE¼ sec.5, T.10 N., R.11 W., on left bank 500 ft downstream from Smith Creek and 5 miles southwest of Cloverdale.

Drainage area.--87.8 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 320 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 9,400 cfs and by slope-area measurement at 17,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 17,600 cfs 1 a.m. Dec. 22 (gage height, 17.80 ft).

1941 to November 1955: Discharge, 15,600 cfs Jan. 21, 1943 (gage height, 16.65 ft).

Flood of December 1937 reached a stage of about 18 ft, from floodmarks.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	19	930	11	52	920	21	4,930	565
2	25	702	12	46	714	22	10,500	600
3	19	595	13	41	738	23	5,290	570
4	15	1,010	14	36	2,590	24	2,310	522
5	235	822	15	35	3,300	25	1,660	1,340
6	890	714	16	57	1,790	26	1,860	1,240
7	165	2,280	17	129	948	27	1,170	1,110
8	89	1,620	18	3,390	678	28	714	801
9	93	1,060	19	8,750	546	29	555	590
10	65	1,200	20	2,530	726	30	518	470
						31	486	395
Monthly mean discharge, in cubic feet per second							1,506	1,035
Runoff, in inches							19.77	13.59
Runoff, in acre-feet							92,580	63,640

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 24--Con.		
12 p.m.	3.57	242	10 a.m.	5.46	1,510	12 p.m.	6.50	1,680
			12 m.	5.55	1,600			
Dec. 18			2 p.m.	6.06	2,050	Dec. 25		
2 a.m.	3.59	250	4	7.22	3,100	6 a.m.	6.45	1,620
4	3.57	242	6	10.25	6,300	12 m.	6.61	1,780
6	3.62	264	8	14.75	12,600	6 p.m.	6.51	1,680
8	3.86	380	10	16.74	15,800	12 p.m.	6.21	1,400
10	4.16	551	12 p.m.	17.62	17,300			
12 m.	4.58	826				Dec. 26		
2 p.m.	5.75	1,780	Dec. 22			2 a.m.	6.16	1,350
4	7.35	3,220	1 a.m.	17.80	17,600	6	6.62	1,790
6	10.65	6,780	3	17.03	16,300	10	7.16	2,370
8	12.20	8,780	5	16.80	15,900	2 p.m.	7.07	2,270
10	14.03	11,400	6	17.20	16,500	6	6.62	1,790
12 p.m.	14.43	12,100	8	15.82	14,300	12 p.m.	6.34	1,520
			10	13.57	10,800			
Dec. 19			12 m.	11.68	8,080	Jan. 13		
2 a.m.	14.12	11,600	2 p.m.	10.35	6,360	12 p.m.	5.78	1,120
4	13.40	10,500	4	9.49	5,290			
6	11.20	7,460	6	8.98	4,680	Jan. 14		
8	11.98	8,470	8	9.60	5,420	4 a.m.	6.53	1,800
10	12.76	9,560	10	11.70	8,110	8	6.97	2,270
1 p.m.	14.08	11,500	11:30	12.44	9,120	12 m.	7.37	2,740
3	13.48	10,600	12 p.m.	12.25	8,850	6 p.m.	7.89	3,370
4	12.90	9,760				12 p.m.	7.79	3,250
6	11.03	7,240	Dec. 23					
8	9.68	5,650	2 a.m.	10.94	7,060	Jan. 15		
10	8.68	4,550	4	10.63	6,650	3 a.m.	7.55	2,960
12 p.m.	7.93	3,790	6	10.90	7,000	7	7.35	2,720
			8	10.35	6,290	11	8.25	3,800
Dec. 20			12 m.	9.28	4,980	2 p.m.	8.64	4,270
2 a.m.	7.48	3,340	4 p.m.	8.71	4,270	6	7.93	3,420
6	7.02	2,920	8	8.16	3,610	12 p.m.	7.22	2,560
12 m.	6.44	2,400	12 p.m.	7.79	3,150			
4 p.m.	6.16	2,140				Jan. 16		
8	6.00	2,000	Dec. 24			6 a.m.	6.78	2,060
12 p.m.	5.82	1,840	6 a.m.	7.36	2,620	12 m.	6.46	1,730
Dec. 21			12 m.	7.03	2,230	12 p.m.	5.90	1,220
6 a.m.	5.57	1,610	6 p.m.	6.72	1,990			

390. Dry Creek near Healdsburg, Calif.

(Gaging station, discontinued 1942)

Location.--Lat 38°43'15", long 122°59'50", near northwest corner Tzabaco Rancho Grant, 0.5 mile downstream from mouth of Warm Springs Creek, 4.5 miles north of Geyserville, and 10 miles northwest of Healdsburg.

Drainage area.--131 sq mi (revised).

Gage-height record.--Staff gage (Corps of Engineers). Datum of gage is 189.46 ft above mean sea level, supplementary adjustment of 1934 (levels by Corps of Engineers).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 28,900 cfs Dec. 22 (gage height, 19.0 ft).

1939-42: Discharge, 22,500 cfs Feb. 28, 1940 (gage height, 16.9 ft, from graph based on gage readings).

Flood of December 1937 reached a stage of 21.8 ft, from floodmarks (discharge, about 25,000 cfs).

391. Mark West Creek near Windsor, Calif.

(Gaging station, discontinued 1941)

Location.--Lat 38°30', long 122°45', in SW¼ sec.28, T.8 N., R.8 W., at bridge on U.S. Highway 101, 4.5 miles southeast of Windsor and 5 miles upstream from confluence with Laguna de Santa Rosa.

Drainage area.--49 sq mi.

Gage-height record.--Staff gage. Datum of gage is 135.10 ft above mean sea level, datum of 1929.

Discharge record.--Peak discharge by contracted-opening measurement.

Maxima.--December 1955 to January 1956: Discharge, 11,000 cfs Dec. 22.

1940-41: Discharge, 6,500 cfs Apr. 4, 1941 (gage height, 13.9 ft).

Floods of Feb. 4 and Dec. 11, 1937, reached stages of 17.5 ft and 15.65 ft, respectively, from floodmarks (California Div. Highways).

392. Santa Rosa Creek at Santa Rosa, Calif.

(Gaging station, discontinued 1941)

Location.--Lat 38°26'05", long 122°43'00", in Cabeza de Santa Rosa Grant, 30 ft downstream from A Street Bridge in Santa Rosa, Sonoma County.

Drainage area.--53 sq mi.

Gage-height record.--Peak stage determined from floodmarks. Datum of gage is 137.95 ft above mean sea level, datum of 1929.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 7,940 cfs Dec. 22 (gage height, 16.5 ft).

1939-41: Discharge, 9,080 cfs Feb. 27, 1940 (gage height, 19.2 ft, from floodmarks), from rating curve extended above 5,000 cfs.

393. Russian River near Guerneville, Calif.

Location.--Lat 38°30'00", long 122°56'05", in NE¼ sec.35, T.8 N., R.10 W., on left bank 0.6 mile downstream from Hobson Creek and 3.4 miles east of Guerneville.

Drainage area.--1,342 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 23 to Jan. 15 and Jan. 26-31, for which gage-height graph based on partial recorder graph and twice-daily readings at former gage at Guerneville was used. Altitude of gage is 70 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 90,100 cfs 3 p.m. Dec. 23 (gage height, 49.7 ft, from floodmarks).

1939 to November 1955: Discharge, 88,400 cfs Feb. 28, 1940 (gage height, 46.87 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	274	8,100	11	1,400	15,600	21	45,100	12,400
2	280	7,530	12	1,120	9,660	22	73,800	10,300
3	373	4,930	13	932	7,950	23	87,900	12,400
4	386	5,570	14	808	22,900	24	68,900	10,100
5	392	10,300	15	719	49,400	25	32,000	17,600
6	4,740	7,530	16	712	50,700	26	27,800	22,900
7	6,930	18,700	17	925	25,500	27	27,300	22,800
8	2,460	40,500	18	4,880	14,100	28	14,600	18,200
9	1,890	20,800	19	44,400	10,500	29	8,480	12,300
10	1,920	17,100	20	66,800	12,100	30	5,680	9,360
						31	5,910	7,880
Monthly mean discharge, in cubic feet per second							17,410	16,640
Runoff, in inches							14.96	14.29
Runoff, in acre-feet							1,071,000	1,023,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 17		
12 p.m.	6.37	1,240
Dec. 18		
6 a.m.	6.72	1,410
10	7.10	1,600
12 m.	7.63	1,880
2 p.m.	8.79	2,570
4	10.69	3,850
6	13.26	6,190
8	16.35	10,300
10	19.85	15,800
12 p.m.	22.47	20,400
Dec. 19		
2 a.m.	24.60	24,700
4	26.40	28,500
6	28.00	32,000
8	29.65	36,000
10	31.35	40,000
12 m.	33.10	44,200
3 p.m.	35.80	51,100
6	38.15	57,600
9	39.85	62,400
12 p.m.	41.02	65,700
Dec. 20		
4 a.m.	42.00	68,400
8:30	42.35	69,400
12 m.	42.15	68,800
4 p.m.	41.55	67,100
8	40.60	64,500
12 p.m.	38.90	59,700
Dec. 21		
4 a.m.	36.60	53,300
8	34.20	46,900
12 m.	31.90	41,400
4 p.m.	30.35	37,600
6	30.12	37,100
8	30.67	38,400
10	32.24	42,200
12 p.m.	34.70	48,200
Dec. 22		
4 a.m.	39.90	62,500
8	43.12	71,500
12 m.	45.28	77,600
4 p.m.	46.52	81,100
8	47.36	83,400
12 p.m.	48.05	85,300
Dec. 23		
6 a.m.	48.95	87,900
12 m.	49.55	89,600
3 p.m.	49.70	90,100
6	49.30	88,900
12 p.m.	47.65	84,200
Dec. 24		
4 a.m.	46.36	80,600
8	44.78	76,200
12 m.	42.85	70,800
4 p.m.	40.50	64,200
8	37.38	55,500
12 p.m.	34.57	47,900
Dec. 25		
6 a.m.	31.0	39,200
12 m.	27.4	30,700
6 p.m.	24.2	23,800
12 p.m.	22.8	21,000
Dec. 26		
6 a.m.	22.4	20,200
12 m.	25.7	27,000
8 p.m.	30.0	36,800
12 p.m.	29.8	36,300
Dec. 27		
6 a.m.	27.9	31,800
12 m.	25.55	26,700
6 p.m.	23.6	22,600
12 p.m.	22.2	19,800
Dec. 28		
12 m.	19.2	14,200
12 p.m.	17.0	10,300
Dec. 29		
12 m.	15.8	8,400
12 p.m.	14.7	6,830
Jan. 13		
12 p.m.	16.5	9,500
Jan. 14		
6 a.m.	19.5	14,700
12 m.	23.2	21,800
6 p.m.	27.5	30,900
12 p.m.	31.0	39,200
Jan. 15		
6 a.m.	33.3	44,700
12 m.	35.5	50,300
6 p.m.	37.18	54,900
9	37.45	55,700
10	37.45	55,700
12 p.m.	37.40	55,500
Jan. 16		
6 a.m.	36.87	54,000
12 m.	36.36	52,600
3 p.m.	35.85	51,200
6	34.60	48,000
9	33.00	44,000
12 p.m.	31.10	39,400
Jan. 17		
4 a.m.	28.45	33,100
8	26.15	27,900
12 m.	24.30	24,000
4 p.m.	22.85	21,100
8	21.60	18,600
12 p.m.	20.70	16,900
Jan. 18		
6 a.m.	19.68	15,000
12 m.	19.02	13,800
6 p.m.	18.56	13,000
12 p.m.	18.10	12,200

GUALALA RIVER BASIN

394. South Fork Gualala River near Annapolis, Calif.

Location.--Lat 38°42'10", long 123°25'00", in NE¼ sec.21, T.10 N., R.14 W., on right bank 1,000 ft downstream from Wheatfield Fork Gualala River and 4.8 miles west of Annapolis.

Drainage area.--161 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 60 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 13,000 cfs and by slope-area measurement at 55,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 55,000 cfs 2:30 a.m. Dec. 22 (gage height, 24.57 ft).

1950 to November 1955: Discharge, 35,900 cfs Jan. 17, 1954 (gage height, 18.60 ft), from rating curve extended above 12,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	62	1,920	11	138	2,170	21	8,180	1,020
2	110	1,280	12	104	1,570	22	25,500	1,070
3	72	1,020	13	80	1,570	23	7,860	1,200
4	54	2,130	14	66	9,030	24	2,950	932
5	305	1,990	15	57	9,410	25	2,020	2,090
6	5,470	1,450	16	90	4,380	26	2,910	2,440
7	850	6,000	17	368	1,870	27	2,180	2,250
8	360	3,930	18	6,600	1,100	28	1,440	1,730
9	330	2,190	19	17,900	778	29	1,090	1,190
10	200	2,740	20	5,680	1,310	30	952	897
						31	877	720
Monthly mean discharge, in cubic feet per second							3,060	2,367
Runoff, in inches							21.91	16.95
Runoff, in acre-feet							188,100	145,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 21--Con.			Dec. 25--Con.		
12 p.m.	3.14	58	12 m.	6.43	2,900	8 a.m.	5.47	1,810
			3 p.m.	6.80	3,330	10	5.53	1,860
Dec. 16			5	7.95	4,960	12 m.	5.70	2,010
3 p.m.	3.24	78	7	10.55	10,300	3 p.m.	6.08	2,370
12 p.m.	3.51	174	8	11.95	13,600	4	6.08	2,370
			9	14.35	20,200	6	5.90	2,190
Dec. 17			10	17.00	28,200	12 p.m.	5.56	1,880
2 a.m.	3.58	205	11	19.50	36,800			
11	3.74	294	12 p.m.	22.00	45,500	Dec. 26		
10 p.m.	4.15	590				4 a.m.	5.43	1,770
12 p.m.	4.33	752	Dec. 22			6	5.48	1,810
			2:30 a.m.	24.57	55,000	8	5.86	2,150
Dec. 18			3	24.36	54,100	2:30 p.m.	7.90	4,480
5 a.m.	4.72	1,110	6	20.20	37,800	6	7.29	3,700
7	4.79	1,180	11	16.35	24,300	9	6.84	3,170
9	4.99	1,380	1 p.m.	14.03	17,300	12 p.m.	6.49	2,790
1 p.m.	6.29	2,740	3	12.45	13,100			
4	8.27	5,480	5	11.39	10,600	Dec. 27		
10	15.58	23,600	8	10.50	8,700	6 a.m.	6.11	2,400
12 p.m.	13.55	17,500	9	10.64	8,980	12 m.	5.83	2,130
			12 p.m.	12.46	13,100	6 p.m.	5.60	1,920
Dec. 19						12 p.m.	5.35	1,710
2 a.m.	11.82	13,200	Dec. 23					
5	10.88	10,900	1 a.m.	12.72	13,800	Dec. 28		
6	11.16	11,500	2	12.57	13,400	6 a.m.	5.14	1,540
10	15.54	23,500	6	10.55	8,800	12 m.	4.98	1,420
11	15.64	23,800	8	10.10	7,980	12 p.m.	4.71	1,230
12 m.	15.63	23,700	9	10.08	7,940			
3 p.m.	15.96	24,700	10	10.12	8,020	Jan. 13		
4	15.63	23,700	11	10.04	7,870	12 p.m.	5.48	1,810
11	11.37	12,000	12 m.	9.81	7,480			
12 p.m.	10.86	10,900	9 p.m.	8.13	4,800	Jan. 14		
			12 p.m.	7.71	4,220	2 a.m.	6.55	2,860
Dec. 20						5	8.83	5,880
7 a.m.	8.72	6,290	Dec. 24			12 m.	11.82	11,600
8	8.52	5,930	6 a.m.	7.07	3,430	5 p.m.	12.36	12,900
6 p.m.	7.20	3,840	12 m.	6.53	2,830	6	12.31	12,700
9	6.96	3,520	6 p.m.	6.11	2,400	12 p.m.	10.40	8,520
12 p.m.	6.73	3,250	12 p.m.	5.76	2,060			
						Jan. 15		
Dec. 21			Dec. 25			3 a.m.	9.76	7,390
9 a.m.	6.48	2,950	4 a.m.	5.57	1,890	6 a.m.	9.79	7,440

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Fork Gualala River near Annapolis, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 15--Con.			Jan. 15--Con.			Jan. 16		
8 a.m........	9.62	7,150	4 p.m........	12.35	12,800	6 a.m........	8.49	5,330
9............	9.98	7,770	6............	11.89	11,700	12 m.........	7.63	4,940
1 p.m........	12.02	12,000	12 p.m.......	9.59	7,100	6 p.m........	7.04	3,250
						12 p.m.......	6.56	2,670

GARCIA RIVER BASIN

395. Garcia River near Point Arena, Calif.

(Crest-stage station)

Location.--Lat 38°55'40", long 123°37'50", on left bank at fork 0.6 mile downstream from North Fork Garcia River, 3.5 miles northeast of Point Arena, and 7.8 miles upstream from mouth.

Drainage area.--98.2 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 40 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,200 cfs and by slope-area measurement at 26,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 26,300 cfs about 3 a.m. Dec. 22 (gage height, 20.75 ft, from gage; 20.78 ft, from high-water profile).

1951 to November 1955: Discharge, 22,200 cfs Jan. 17, 1954 (gage height, 19.7 ft).

ALDER CREEK BASIN

396. Alder Creek near Manchester, Calif.

(Miscellaneous site)

Location.--Lat 38°59'45", long 123°40'50", at ford 1.0 mile upstream from State Highway 1 bridge, 1.3 miles upstream from mouth, and 1.9 miles north of Manchester.

Drainage area.--26.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 5,030 cfs Dec. 22.

NAVARRO RIVER BASIN

397. Navarro River near Navarro, Calif.

Location.--Lat 39°10'15", long 123°39'55", in SE¼ sec.7, T.15 N., R.16 W., on left bank 2.7 miles downstream from North Fork, 5.4 miles upstream from mouth, and 6.6 miles west of Navarro.

Drainage area.--304 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 20 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 19,000 cfs and by slope-area measurement at 64,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 64,500 cfs 7 a.m. Dec. 22 (gage height, 40.60 ft).

1950 to November 1955: Discharge, 30,400 cfs Jan. 17, 1954 (gage height, 33.42 ft).

Flood of December 1937 reached a stage of 38.2 ft, from floodmarks.

Mean discharge, in cubic feet per second, 1955-56, of Navarro River near Navarro, Calif.

Day	December	January	Day	December	January	Day	December	January
1	70	1,680	11	436	2,710	21	6,300	2,380
2	189	1,490	12	338	2,100	22	37,800	2,410
3	145	1,260	13	268	2,030	23	14,000	2,920
4	97	1,690	14	216	9,430	24	4,880	2,400
5	113	2,300	15	184	14,900	25	3,630	3,820
6	3,440	2,040	16	194	7,970	26	4,100	3,880
7	1,160	5,730	17	296	3,640	27	3,380	3,390
8	623	5,420	18	2,720	2,580	28	2,590	2,740
9	714	3,090	19	17,100	2,030	29	1,980	2,130
10	569	2,950	20	8,430	2,460	30	1,570	1,640
						31	1,330	1,320
Monthly mean discharge, in cubic feet per second							3,834	3,436
Runoff, in inches							14.54	13.03
Runoff, in acre-feet							235,800	211,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.	5.47	406	2 p.m.	11.83	3,400	8 a.m.	12.20	3,640
			6	13.95	4,860	10	12.18	3,630
Dec. 18			8	18.47	8,770	12 m.	12.50	3,850
6 a.m.	5.94	542	10	25.59	17,000	4 p.m.	13.83	4,780
11	6.15	605	12 p.m.	30.15	23,400	12 p.m.	12.55	3,880
2 p.m.	6.60	745						
6	10.25	2,800	Dec. 22			Jan. 13		
8	15.16	6,940	2 a.m.	35.40	36,800	12 p.m.	9.62	2,070
11	20.60	12,100	7	40.60	64,500			
12 p.m.	20.92	12,400	2 p.m.	35.80	38,300	Jan. 14		
			6	29.90	23,000	2 a.m.	10.20	2,420
Dec. 19			11	24.10	15,000	4	12.00	3,500
1 a.m.	20.89	12,400	12 p.m.	24.40	15,400	7	16.65	7,080
2	20.48	12,000				9	18.59	8,890
6	18.14	9,640	Dec. 23			10	18.37	8,670
7	18.06	9,560	4:30 a.m.	27.69	19,800	3 p.m.	20.14	10,500
9	18.80	10,300	2 p.m.	22.35	12,900	5	22.76	13,400
11:30	22.00	13,600	12 p.m.	16.81	7,320	6	22.47	13,100
12 m.	23.00	14,700				8	24.47	15,500
2 p.m.	27.00	19,100	Dec. 24			9	24.66	15,800
6	32.00	26,800	7 a.m.	14.57	5,360	12 p.m.	23.90	14,800
7:30	32.47	27,900	3 p.m.	13.03	4,220	Jan. 15		
12 p.m.	28.07	20,300	12 p.m.	11.86	3,420	3 a.m.	22.38	13,000
						5	22.00	12,500
Dec. 20			Dec. 25			7	21.97	12,500
2 a.m.	24.40	15,400	8 a.m.	11.26	3,060	9:30	22.00	12,500
6	19.98	10,300	10	11.30	3,080	1 p.m.	23.70	14,500
11	16.52	6,970	3 p.m.	12.10	3,570	1 p.m.	24.61	15,700
8 p.m.	13.93	4,850	9	13.61	4,630	5:30	27.20	19,100
12 p.m.	13.47	4,530	10	13.64	4,650	12 p.m.	23.25	14,000
			12 p.m.	13.38	4,470			
Dec. 21						Jan. 16		
6 a.m.	12.75	4,020	Dec. 26			2 a.m.	21.72	12,200
8	12.54	3,880	3 a.m.	12.73	4,010	12 m.	16.48	6,930
11 a.m.	12.00	3,500	5 a.m.	12.32	3,720	12 p.m.	13.61	4,630

BIG RIVER BASIN

398. Big River near Mendocino, Calif.

(Crest-stage station)

Location.--Lat 39°18'50", long 123°42'15", on right bank 150 ft upstream from Little North Fork Big River, 5.0 miles east of Mendocino, and 11 miles upstream from mouth.

Drainage area.--152 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 40 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,600 cfs and by slope-area measurement at 31,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 31,300 cfs Dec. 22 (gage height, 31.9 ft, from floodmarks).

1951 to November 1955: Discharge, 24,900 cfs Dec. 27, 1952 (gage height, 28.99 ft).

NOYO RIVER BASIN

399. Noyo River near Fort Bragg, Calif.

Location.--Lat 39°26', long 123°44', in SW¼ sec.10, T.18 N., R.17 W., on right bank 0.7 mile downstream from South Fork and 3.5 miles east of Fort Bragg.

Drainage area.--105 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 50 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,200 cfs, and extended above by slope-conveyance study.

Maxima.--December 1955 to January 1956: Discharge, 22,000 cfs 7 a.m. Dec. 22 (gage height, 25.64 ft).

1951 to November 1955: Discharge, 16,000 cfs Dec. 27, 1951 (gage height, 24.56 ft), from rating curve extended above 3,600 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	81	433	11.....	240	977	21.....	3,090	1,040
2.....	148	381	12.....	185	815	22.....	15,600	1,030
3.....	123	339	13.....	148	731	23.....	4,750	1,310
4.....	96	462	14.....	126	4,630	24.....	1,940	1,100
5.....	248	747	15.....	107	7,270	25.....	1,220	1,210
6.....	2,800	760	16.....	107	3,350	26.....	1,250	1,320
7.....	843	1,730	17.....	186	1,530	27.....	1,170	1,350
8.....	396	2,000	18.....	1,210	1,030	28.....	929	1,090
9.....	404	1,190	19.....	4,820	820	29.....	737	838
10.....	316	1,000	20.....	3,200	907	30.....	577	664
						31.....	457	541
Monthly mean discharge, in cubic feet per second......................							1,532	1,374
Runoff, in inches..							16.83	15.09
Runoff, in acre-feet...							94,220	84,490

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Jan. 14		
12 p.m.......	4.52	409	8 p.m........	13.10	4,280	2 a.m........	7.37	1,140
			10...........	17.55	8,870	5............	9.82	1,950
Dec. 18			12 p.m.......	21.60	14,900	8............	13.02	3,310
7 a.m........	5.16	588				11...........	15.26	4,630
11...........	5.33	639	Dec. 22			3 p.m........	17.47	6,320
4 p.m........	6.92	1,190	2 a.m........	24.10	19,100	7............	18.51	7,360
7............	8.92	1,970	4............	25.25	21,200	8............	18.57	7,430
9............	10.40	2,600	6............	25.60	21,900	9............	18.49	7,340
12 p.m.......	12.14	3,600	7............	25.64	22,000	12 p.m.......	17.60	6,450
			10...........	25.36	21,200			
Dec. 19			12 m.........	24.88	19,700	Jan. 15		
12:30 a.m....	12.15	3,600	3 p.m........	22.79	14,300	3 a.m........	16.76	5,710
6............	10.87	2,840	6............	20.04	9,160	5............	16.58	5,560
8............	10.66	2,730	9............	18.03	6,880	7............	16.81	5,750
10...........	10.72	2,760	12 p.m.......	17.19	6,070	10...........	17.84	6,690
1 p.m........	12.55	3,880				3 p.m........	20.25	9,450
3............	15.15	6,050	Dec. 23			4:30.........	20.43	9,700
6:30.........	17.23	8,450	2:30 a.m.....	17.32	6,190	6............	20.20	9,380
12 p.m.......	15.15	6,050	6:30.........	16.72	5,680	9............	18.75	7,620
			8............	16.73	5,680	12 p.m.......	17.14	6,030
Dec. 20			12 m.........	15.66	4,910			
4 a.m........	13.25	4,400	6 p.m........	13.73	3,690	Jan. 16		
11...........	11.05	2,930	12 p.m.......	12.00	2,800	5 a.m........	14.71	4,280
6 p.m........	9.53	2,210	Dec. 24			11...........	12.65	3,120
12 p.m.......	8.77	1,910	6 a.m........	10.60	2,230	6 p.m........	11.00	2,380
			12 m.........	9.62	1,870	12 p.m.......	9.93	1,980
Dec. 21			6 p.m........	8.79	1,590			
10 a.m.......	7.75	1,500	12 p.m.......	8.13	1,370	Jan. 17		
1 p.m........	7.72	1,490				9 a.m........	8.72	1,560
3............	8.04	1,620	Jan. 13			12 p.m.......	7.55	1,200
6 p.m........	9.79	2,330	12 p.m.......	6.25	825			

PUDDING CREEK BASIN

400. Pudding Creek near Fort Bragg, Calif.
(Miscellaneous site)

Location.--Lat 39°27'46", long 123°43'26", in NE¼ sec.3, T.18 N., R.11 W., a quarter of a mile downstream from Little Valley Creek and 4.8 miles east of Fort Bragg.

Drainage area.--11.8 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,940 cfs Dec. 23.

MATTOLE RIVER BASIN

401. Mattole River near Petrolia, Calif.

Location.--Lat 40°18'40", long 124°16'10", in NW¼ sec.11, T.2 S., R.2 W., on right bank 0.2 mile downstream from Clear Creek, 1.2 miles southeast of Petrolia, and 1.3 miles upstream from North Fork.

Drainage area.--242 sq mi.

Gage-height record.--Water-stage recorder graph except 12:01 to 10 a.m. Dec. 1. Altitude of gage is 40 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 24,000 cfs and by slope-area measurement at 90,400 cfs. Discharge for Dec. 1 estimated on basis of records for South Fork Eel River near Miranda.

Maxima.--December 1955 to January 1956: Discharge, 90,400 cfs 1 a.m. Dec. 22 (gage height, 29.60 ft).

1911-13, 1950 to November 1955: Discharge, 48,000 cfs Jan. 25, 1912 (gage height, 27.1 ft, from graph based on gage readings, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	640	3,920	11	1,800	8,000	21	38,400	3,100
2	1,100	3,740	12	1,470	6,660	22	45,900	3,620
3	978	3,770	13	1,230	7,290	23	15,800	6,330
4	846	6,690	14	1,090	10,900	24	8,240	4,270
5	2,060	6,860	15	1,010	18,600	25	7,490	3,340
6	8,830	6,690	16	2,160	10,500	26	9,060	2,950
7	4,060	11,200	17	5,140	5,320	27	7,280	3,000
8	2,700	8,580	18	21,100	3,840	28	5,490	2,650
9	3,280	6,930	19	27,300	3,070	29	4,480	2,300
10	2,290	7,240	20	20,000	2,950	30	3,860	2,010
						31	3,450	1,790
Monthly mean discharge, in cubic feet per second							8,340	5,745
Runoff, in inches							39.73	27.37
Runoff, in acre-feet							512,800	353,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 15		
12 p.m.	4.50	1,090
Dec. 16		
6 a.m.	4.83	1,360
11	5.39	1,970
4 p.m.	6.12	2,880
9	6.28	3,090
12 p.m.	6.21	2,990
Dec. 17		
8 a.m.	5.96	2,670
10	5.99	2,710
12 m.	6.21	2,990
3 p.m.	6.96	4,040
6	8.76	6,890
9	10.75	10,500
12 p.m.	12.43	13,900
Dec. 18		
3 a.m.	13.78	17,100
5:30	15.01	20,300
6:30	14.99	20,300
11	14.33	18,500
4 p.m.	16.12	23,700
8	16.93	26,500
12 p.m.	16.02	23,400
Dec. 19		
6 a.m.	14.41	18,700
8	14.56	19,100
9	14.86	19,900
11	16.68	25,600
2 p.m.	19.17	35,500
5	19.93	38,900
5:30	19.86	38,600
9	18.00	30,500
12 p.m.	16.33	24,400
Dec. 20		
5 a.m.	14.58	19,200
10	13.36	16,100
12 m.	13.25	15,800
1:30 p.m.	13.36	16,100
5	15.19	20,900
8	16.21	24,000
10	16.23	24,100
12 p.m.	15.68	22,300
Dec. 21		
5 a.m.	14.18	18,100
9	13.63	16,700
12 m.	14.42	18,700
2 p.m.	16.83	26,100
4	20.50	41,600
6	24.25	60,600
8	27.64	79,200
11	29.54	90,100
12 p.m.	29.42	89,400
Dec. 22		
1 a.m.	29.60	90,400
4	27.37	77,700
7	25.12	65,200
10	22.20	50,000
12 m.	19.67	37,700
4 p.m.	16.33	24,400
9	14.14	18,000
11	14.07	17,800
12 p.m.	14.26	18,300
Dec. 23		
4 a.m.	15.38	21,400
8	14.10	17,900
12:30 p.m.	12.86	14,900
8	11.52	12,300
10 p.m.	10.93	11,300
Dec. 23--Con.		
12 p.m.	10.53	10,600
Dec. 24		
6 a.m.	9.61	9,080
12 m.	8.97	8,060
9 p.m.	8.16	6,840
12 p.m.	8.01	6,620
Jan. 13		
12 p.m.	8.38	7,170
Jan. 14		
7 a.m.	9.60	9,060
1 p.m.	10.77	11,000
8	12.40	14,000
10	12.46	14,100
12 p.m.	12.39	14,000
Jan. 15		
4 a.m.	12.28	13,800
7	12.50	14,200
11	14.14	18,000
1 p.m.	15.48	21,700
3:30	16.51	25,000
4:30	16.57	25,200
6	16.34	24,500
9	15.08	20,500
12 p.m.	13.81	17,100
Jan. 16		
3 a.m.	12.74	14,300
9	11.38	10,900
3 p.m.	10.44	8,680
12 p.m.	9.46	6,780

402. North Fork Mattole River at Petrolia, Calif.

Location.--Lat 40°19'35", long 124°17'35", in NE¼ sec.4, T.2 S., R.2 W., on left bank 0.5 mile west of Petrolia and 0.7 mile upstream from mouth.

Drainage area.--37.6 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 50 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,300 cfs, by shape of previous curve defined to 3,500 cfs, and by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 9,600 cfs 11 p.m. Dec. 21 (gage height, 10.60 ft).

1951 to November 1955: Discharge, 5,760 cfs Dec. 30, 1954 (gage height, 9.60 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January
1	305	490
2	211	396
3	155	468
4	108	1,460
5	460	848
6	1,340	1,630
7	430	1,810
8	310	815
9	270	615
10	187	966
11	157	793
12	131	900
13	102	1,020
14	83	3,240
15	79	3,650
16	253	966
17	1,570	514
18	3,150	356
19	3,420	286
20	2,450	339
21	4,940	344
22	3,990	862
23	2,040	768
24	964	430
25	1,840	370
26	2,360	402
27	1,350	468
28	623	389
29	438	339
30	322	290
31	257	253
Monthly mean discharge, in cubic feet per second	1,106	854
Runoff, in inches	33.92	26.19
Runoff, in acre-feet	68,020	52,520

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 15		
12 p.m.	5.22	98
Dec. 16		
6 a.m.	5.51	175
12 m.	5.85	306
4 p.m.	5.94	343
6	5.93	338
9	5.85	306
12 p.m.	5.76	265
Dec. 17		
6 a.m.	5.68	233
8	5.72	249
12 m.	6.75	926
3 p.m.	7.67	2,250
4	7.87	2,640
6	8.18	3,270
8	8.34	3,600
10	8.20	3,310
12 p.m.	8.13	3,160
Dec. 18		
1 a.m.	8.00	2,900
3	7.87	2,640
5	7.99	2,880
8	7.75	2,400
10	8.00	2,900
12 m.	8.75	4,500
1 p.m.	8.95	4,960
3	8.52	3,990
6	8.00	2,900
7	7.87	2,640
9	7.85	2,600
10	8.00	2,900
12 p.m.	8.20	3,310
Dec. 19		
3 a.m.	8.31	3,540
5	8.43	3,800
7	8.45	3,840
8	9.19	5,540
9	8.74	4,480
10	8.80	4,620
12 m.	8.74	4,480
2 p.m.	8.28	3,480
5	8.20	3,310
6	8.00	2,900
7 p.m.	7.75	2,400
Dec. 19--Con.		
9 p.m.	7.44	1,830
12 p.m.	7.40	1,760
Dec. 20		
4 a.m.	7.47	1,890
6	7.23	1,480
8	7.13	1,320
9	7.35	1,680
12 m.	7.73	2,370
2 p.m.	7.92	2,740
3	8.17	3,250
5	8.55	4,060
6	8.42	3,770
7	8.44	3,820
9	8.10	3,100
10	7.85	2,600
12 p.m.	7.64	2,200
Dec. 21		
6 a.m.	7.27	1,540
8	7.48	1,900
10	8.00	2,900
12 m.	9.00	5,080
2 p.m.	9.75	7,000
3	10.02	7,780
4	10.40	8,960
5	9.80	7,140
6	10.00	7,720
7	10.25	8,480
8	9.95	7,570
9	9.25	5,680
10	10.20	8,320
11	10.60	9,600
12 p.m.	10.30	S,640
Dec. 22		
2 a.m.	9.20	5,520
5	9.77	7,060
6	9.10	5,260
8	8.45	3,580
10	S.10	2,740
12 m.	7.82	2,100
2 p.m.	7.80	2,060
3	7.50	1,450
4	8.00	2,500
6	8.12	2,790
8	8.24	3,080
11 p.m.	9.00	5,000
Dec. 22--Con.		
12 p.m.	9.30	5,780
Dec. 23		
3 a.m.	8.55	3,830
5	8.10	2,740
6	7.92	2,320
7	7.82	2,100
12 m.	7.55	1,540
3 p.m.	7.47	1,400
6	7.27	1,080
7	7.20	990
8	7.15	930
10	7.19	978
12 p.m.	7.30	1,120
Dec. 24		
3 a.m.	7.35	1,200
6	7.32	1,150
9	7.30	1,120
11	7.20	990
3 p.m.	7.11	882
6	7.03	793
9	6.95	710
12 p.m.	6.94	700
Jan. 11		
12 p.m.	6.84	606
Jan. 12		
12 m.	6.70	490
5 p.m.	6.70	490
7	7.15	930
9	8.15	2,860
10	8.12	2,790
17 p.m.	7.65	1,740
Jan. 13		
6 a.m.	7.02	782
12 m.	6.92	680
7 p.m.	7.00	760
12 p.m.	7.90	2,280
Jan. 14		
4 a.m.	7.50	1,450
6	7.75	1,960
8	8.60	3,960
12 m.	8.90	4,740
2 p.m.	8.94	4,840

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of North Fork Mattole River at Petrolia, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 14--Con.			Jan. 15--Con.			Jan. 15--Con.		
8 p.m.	8.08	2,690	5 a.m.	9.70	6,860	5 p.m.	8.02	2,550
10	8.24	3,080	6	9.10	5,260	8	7.60	1,640
11	8.07	2,670	8	9.35	5,910	12 p.m.	7.38	1,250
12 p.m.	8.22	3,030	10	9.40	6,040			
			1 p.m.	8.08	2,690			
Jan. 15			2	8.12	2,790			
4 a.m.	9.00	5,000	3 p.m.	8.20	2,980			

EEL RIVER BASIN

403. Lake Pillsbury near Potter Valley, Calif.

Location.--Lat 39°24'30", long 122°57'30", on line between secs. 14 and 23, T.18 N., R.10 W., at Scott Dam near right bank of Eel River, 0.3 mile downstream from Rice Fork and 10.2 miles northeast of town of Potter Valley.

Drainage area.--288 sq mi.

Gage-height record.--Once-daily wire-weight-gage readings Dec. 1, 2, 14-16; water-stage recorder graph 1:30 p.m. Dec. 20 to 12 p.m. Jan. 31. Datum of gage is at mean sea level.

Maxima.--December 1955 to January 1956: Contents, 91,900 acre-ft 8:30 a.m. Dec. 22 (elevation, 1,909.2 ft).

1922 to November 1955: Contents, 95,600 acre-ft May 13, 16, 1925 (elevation, 1,910.8 ft).

Remarks.--Reservoir is formed by concrete overflow type dam; storage began in December 1921. Capacity, 93,700 acre-ft between elevations 1,822.4 ft (sill of outlet gate) and 1,910.0 ft (top of spillway gates) above mean sea level. Elevation of crest of spillway, 1,900.0 ft. Water is released down Eel River to Van Arsdale Reservoir, from which it is diverted through tunnel to Potter Valley powerhouse, from which it flows into East Fork Russian River. Records show contents available for release. Recorder records show contents at 12 p.m.; occasional wire-weight-gage readings Dec. 1, 2, 14-16 show contents at various hours.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	1,863.1	19,000	1,900.9	73,900	16	1,878.0	35,500	1,902.8	77,800
2	1,863.3	19,200	1,900.8	73,700	17	-	-	1,902.1	76,300
3	-	-	1,900.7	73,500	18	-	-	1,901.8	75,700
4	-	-	1,901.9	75,900	19	-	-	1,901.6	75,300
5	-	-	1,901.9	75,900	20	1,902.4	76,900	1,901.7	75,500
6	-	-	1,901.8	75,700	21	1,907.6	88,200	1,901.5	75,100
7	-	-	1,903.4	79,000	22	1,906.2	85,100	1,901.8	75,700
8	-	-	1,902.4	76,900	23	1,904.2	80,700	1,901.7	75,500
9	-	-	1,901.9	75,900	24	1,902.5	77,200	1,901.5	75,100
10	-	-	1,902.7	77,600	25	1,902.1	76,300	1,901.6	75,300
11	-	-	1,902.2	76,500	26	1,902.6	77,400	1,901.9	75,900
12	-	-	1,901.8	75,700	27	1,901.9	75,900	1,901.6	75,300
13	-	-	1,902.2	76,500	28	1,901.5	75,100	1,901.4	74,900
14	1,877.9	35,400	1,903.9	80,100	29	1,901.2	74,500	1,901.2	74,500
15	1,877.9	35,400	1,904.4	81,200	30	1,901.1	74,300	1,901.1	74,300
					31	1,900.9	73,900	1,901.0	74,100
Change in contents						-	+55,000	-	+200

404. Eel River below Scott Dam, near Potter Valley, Calif.

Location.--Lat 39°24'30", long 122°58'15", in SE¼ sec.15, T.18 N., R.10 W., on left bank 0.4 mile upstream from Soda Creek, 0.7 mile downstream from Scott Dam, and 9.7 miles northeast of town of Potter Valley.

Drainage area.--290 sq mi.

Gage-height record.--Water-stage recorder graph except 3 to 11 a.m. Dec. 22, 10 p.m. Dec. 22 to 10 a.m. Dec. 23, 5 a.m. Jan. 19 to 10 a.m. Jan. 20, 2 a.m. Jan. 21 to 7 p.m. Jan. 22, for which graph was reconstructed on basis of high-water mark in gage house and record for Lake Pillsbury, 0.7 mile upstream. Altitude of gage is 1,740 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,100 cfs and extended above on basis of computed flow over Scott Dam at various stages, including peak of this flood.

Maxima.--December 1955 to January 1956: Discharge, 40,000 cfs 8:30 a.m. Dec. 22 (gage height, 21.85 ft, from floodmark in gage house).
1922 to November 1955: Discharge, 41,100 cfs Dec. 11, 1937 (gage height, 22.9 ft, from floodmarks), from rating curve extended above 2,900 cfs on basis of computed flow over Scott Dam.

Remarks.--Flow partly regulated by Lake Pillsbury (see station 403).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	120	1,420	11.....	118	5,560	21.....	10,600	3,070
2.....	167	1,280	12.....	118	4,040	22.....	29,400	2,980
3.....	166	1,100	13.....	118	4,290	23.....	18,800	3,680
4.....	166	2,080	14.....	161	9,790	24.....	8,180	3,060
5.....	174	3,800	15.....	202	13,300	25.....	4,830	3,000
6.....	172	3,180	16.....	192	9,380	26.....	5,450	3,650
7.....	83	6,320	17.....	174	5,190	27.....	4,810	3,490
8.....	117	5,690	18.....	195	3,930	28.....	3,340	2,820
9.....	118	3,850	19.....	3,580	3,170	29.....	2,390	2,300
10.....	118	5,320	20.....	8,940	3,260	30.....	1,820	1,960
						31.....	1,480	1,690
Monthly mean discharge, in cubic feet per second......................							3,429	4,118
Runoff, in acre-feet...							210,800	253,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 21--Con.			Dec. 25--Con.		
12 p.m.......	3.65	178	4 p.m........	11.68	7,830	12 p.m.......	9.51	4,500
			6............	13.53	11,400	Jan. 12		
Dec. 18			7............	14.90	14,600	12 p.m.......	8.83	3,670
10 a.m.......	3.65	178	9............	17.70	22,800			
12 m.........	3.69	184	11...........	19.20	28,700	Jan. 13		
6 p.m........	3.93	228	12 p.m.......	19.50	29,900	2 a.m........	8.93	3,790
10...........	3.84	211				6............	9.33	4,270
12 p.m.......	3.88	218	Dec. 22			10...........	9.45	4,420
			6 a.m........	21.30	37,600	6 p.m........	9.32	4,260
Dec. 19			8:30.........	21.85	40,000	8............	9.35	4,300
3 a.m........	3.85	213	10...........	21.10	36,600	12 p.m.......	9.90	5,010
6............	3.99	240	12 m.........	19.90	31,500			
11...........	4.13	271	4 p.m........	18.15	24,500	Jan. 14		
12 m.........	4.34	325	7............	17.05	20,600	6 a.m........	12.14	8,630
1 p.m........	4.38	336	9............	16.85	20,000	8 p.m........	13.92	12,300
2............	4.23	296	12 p.m.......	17.15	20,900	12 p.m.......	13.58	11,500
3............	7.00	1,870						
4............	9.35	4,350	Dec. 23			Jan. 15		
5............	10.90	6,540	6 a.m........	17.45	22,000	4 a.m........	13.27	10,800
6............	12.00	8,380	12 m.........	17.00	20,400	6............	13.26	10,800
7............	12.80	9,880	3 p.m........	16.25	18,200	8............	13.39	11,100
8............	13.25	10,800	6............	15.50	16,100	3 p.m........	15.32	15,600
11...........	13.74	11,900	9............	14.75	14,200	5............	15.48	16,000
12 p.m.......	13.71	11,800	12 p.m.......	14.00	12,400	8............	15.28	15,500
						12 p.m.......	14.54	13,700
Dec. 20			Dec. 24					
4 a.m........	13.25	10,800	6 a.m........	12.60	9,480	Jan. 16		
8............	12.68	9,640	12 m.........	11.65	7,760	8 a.m........	12.95	10,200
12 m.........	12.13	8,610	6 p.m........	10.90	6,510	4 p.m........	11.70	7,850
4 p.m........	11.73	7,910	12 p.m.......	10.30	5,580	12 p.m.......	10.88	6,480
8............	11.37	7,300						
12 p.m.......	11.16	6,960	Dec. 25			Jan. 17		
			4 a.m........	9.97	5,110	8 a.m........	10.20	5,430
Dec. 21			8............	9.78	4,850	4 p.m........	9.72	4,780
12 m.........	10.60	6,080	12 m.........	9.67	4,710	8............	9.50	4,490
2 p.m........	10.85	6,460	6 p.m........	9.62	4,650	12 p.m.......	9.35	4,300

405. Eel River at Van Arsdale Dam, near Potter Valley, Calif.

Location.--Lat 39°23'25", long 123°06'55", in NE¼ sec.30, T.18 N., R.11 W., on left bank 500 ft downstream from Van Arsdale Dam and 5 miles north of town of Potter Valley.

Drainage area.--347 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Dec. 21 to 11 a.m. Jan. 10 and 6 p.m. Jan. 11 to 12 p.m. Jan. 13. Altitude of gage is 1,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 11,000 cfs and extended above on basis of computed flow over Van Arsdale Dam. Discharge for periods of no gage-height record estimated on basis of records at upstream and downstream stations.

Maxima.--December 1955 to January 1956: Discharge, 48,600 cfs Dec. 22 (gage height, 31.4 ft, from floodmarks).

1909 to November 1955: Discharge, about 40,000 cfs Mar. 26, 1928 (gage height, 27.0 ft).

Remarks.--Flow regulated by storage in Lake Pillsbury (see station 403); 25,000 acre-ft diverted to Russian River basin through Potter Valley powerhouse during the period.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	59	1,430	11.....	3.3	5,500	21.....	11,800	2,830
2.....	5.0	1,150	12.....	5.2	4,000	22.....	35,000	2,720
3.....	3.0	980	13.....	5.2	4,200	23.....	21,000	3,500
4.....	3.3	2,100	14.....	4.2	10,300	24.....	9,050	2,830
5.....	177	4,000	15.....	5.2	14,200	25.....	5,650	2,830
6.....	890	3,200	16.....	32	10,000	26.....	6,200	3,580
7.....	87	6,300	17.....	184	5,300	27.....	5,500	3,430
8.....	19	5,800	18.....	1,040	3,810	28.....	3,750	2,660
9.....	86	3,900	19.....	5,650	2,950	29.....	2,700	2,090
10.....	6.8	5,200	20.....	10,900	3,050	30.....	2,100	1,700
						31.....	1,700	1,430
Monthly mean discharge, in cubic feet per second....................							3,988	4,096
Runoff, in acre-feet....................................							245,200	251,800

Peak discharge.--Dec. 6 (4:30 a.m.) 1,840 cfs (gage height, 8.75 ft); Dec. 19 (12 p.m.) 14,300 cfs (gage height, 17.14 ft); Jan. 15 (5 p.m.) 16,700 cfs (gage height, 18.18 ft).

406. Outlet Creek at Longvale, Calif.

(Miscellaneous site)

Location.--Lat 39°32'55", long 123°25'25", in NE¼ sec.33, T.20 N., R.14 W., 0.2 mile upstream from Long Valley Creek, 0.5 mile south of Longvale, 8.1 miles upstream from mouth, and 9.5 miles south of Laytonville.

Drainage area.--101 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 23,100 cfs Dec. 23.

407. Eel River above Dos Rios, Calif.

Location.--Lat 39°41'20", long 123°21'30", in SW¼ sec.7, T.21 N., R.13 W., on left bank 1.8 miles upstream from Middle Fork and 2.1 miles south of Dos Rios.

Drainage area.--703 sq mi.

Gage-height record.--Water-stage recorder graph except 1 a.m. Dec. 22 to 4 p.m. Jan. 8. Altitude of gage is 950 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 27,000 cfs and by slope-area measurement at 123,000 cfs. Discharge for period of no gage-height record estimated on basis of records for Middle Fork Eel River below Black Butte River, near Covelo and station below Dos Rios.

Maxima.--December 1955 to January 1956: Discharge, 123,000 cfs about 6 a.m. Dec. 22 (gage height, 45.4 ft, from floodmarks).
1950 to November 1955: Discharge, 55,000 cfs Jan. 9, 1953 (gage height, 28.90 ft).

Remarks.--Flow partly regulated by Lake Pillsbury (see station 403) and by diversion through Potter Valley powerhouse.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	723	3,600	11	800	12,000	21	30,700	7,780
2	855	3,000	12	593	8,340	22	90,000	7,540
3	467	1,900	13	467	8,850	23	45,000	9,760
4	303	5,000	14	373	28,S00	24	17,000	7,510
5	1,870	8,600	15	330	39,500	25	14,000	8,930
6	12,000	6,000	16	1,100	25,900	26	13,000	11,000
7	3,330	17,500	17	3,070	13,500	27	11,000	11,000
8	1,800	13,000	18	11,300	9,730	28	7,000	7,960
9	2,700	9,650	19	26,100	7,460	29	5,200	5,640
10	1,300	11,200	20	22,800	8,6S0	30	4,200	4,440
						31	3;300	3,720
Monthly mean discharge, in cubic feet per second							10,730	10,560
Runoff, in inches							17.55	17.28
Runoff, in acre-feet							659,900	649,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 19--Con.			Jan. 13--Con.		
12 p.m.	4.90	415	5 a.m.	16.85	15,500	6 p.m.	13.31	8,560
			6	17.04	15,900	8	13.40	8,720
Dec. 16			10	21.40	27,000	9	13.60	9,080
4 a.m.	5.17	523	12 m.	23.47	33,200	12 p.m.	15.50	12,600
7	5.46	647	1 p.m.	23.85	34,400			
10	6.02	916	2	23.96	34,700	Jan. 14		
12 m.	6.52	1,200	4	23.97	34,700	3 a.m.	18.17	1S,400
3 p.m.	6.90	1,450	6	23.75	34,000	6	20.00	23,000
4:30	7.21	1,670	10	21.50	27,300	11	22.90	31,500
7	7.19	1,650	11	21.28	26,600	5 p.m.	24.40	36,200
10	7.00	1,520	12 p.m.	21.50	27,300	7	24.30	35,800
12 p.m.	6.97	1,500				12 p.m.	23.20	32,400
			Dec. 20					
Dec. 17			1 a.m.	21.85	28,400	Jan. 15		
7 a.m.	6.86	1,420	2	21.96	28,700	1 a.m.	23.00	31,800
9	6.92	1,460	3	21.95	28,600	4	23.47	33,200
10	7.05	1,560	4	21.86	28,400	6	23.52	33,400
12 m.	7.90	2,200	12 m.	19.70	22,200	10	25.65	40,600
1 p.m.	8.44	2,670	5 p.m.	18.60	19,400	1 p.m.	27.40	46,700
8	11.18	5,480	10	17.93	17,800	2	27.63	47,500
10	11.82	6,240	12 p.m.	17.50	16,900	4	27.20	46,000
11	11.90	6,340				12 p.m.	24.63	37,000
12 p.m.	11.88	6,320	Dec. 21					
			4 a.m.	16.96	15,700	Jan. 16		
Dec. 18			8	16.44	14,600	5 a.m.	23.00	31,800
2 a.m.	11.78	6,200	9	16.25	14,200	8	22.00	28,800
3	11.77	6,180	11	16.11	13,800	12 m.	20.66	24,800
4	11.80	6,220	12 m.	16.26	14,200	4 p.m.	19.56	21,900
S	11.72	6,120	1 p.m.	16.77	15,300	12 p.m.	17.73	17,400
9	11.73	6,140	4	21.50	27,300			
10	11.78	6,200	6	26.50	43,600	Jan. 17		
11	11.96	6,420	7	28.90	52,400	6 a.m.	16.71	15,200
12 m.	12.26	6,840	8	30.84	60,200	12 m.	15.82	13,200
1 p.m.	13.00	8,000	10	34.25	73,800	6 p.m.	15.05	11,700
5	18.25	18,600	11	36.50	83,000	10	14.65	11,000
6	18.95	20,300	12 p.m.	38.60	92,500	12 p.m.	14.52	10,700
6:30	19.10	20,700						
8	18.84	20,000	Jan. 12			Jan. 18		
11	18.00	18,000	12 p.m.	12.68	7,420	3 a.m.	14.41	10,500
12 p.m.	17.65	17,200				4	14.44	10,600
			Jan. 13			7	14.39	10,500
Dec. 19			2 a.m.	12.94	7,890	1 p.m.	13.95	9,710
1 a.m.	17.40	16,700	4	13.49	8,880	12 p.m.	13.15	8,270
3 a.m.	17.20	16,200	12 m.	13.35	8,630			

408. Black Butte River near Covelo, Calif.

(Crest-stage station)

Location.--Lat 39°49'20", long 123°04'50", in SE¼ sec.28, T.23 N., R.11 W., on left bank 0.5 mile upstream from mouth and 9.1 miles east of Covelo.

Drainage area.--161 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,450 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 25,000 cfs Dec. 21 (gage height, 35.8 ft, from floodmarks).

409. Middle Fork Eel River below Black Butte River, near Covelo, Calif.

Location.--Lat 39°49'35", long 123°05'30", in NW¼ sec.28, T.23 N., R.11 W., on right bank 0.2 mile downstream from Black Butte River and 8.6 miles east of Covelo.

Drainage area.--367 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Dec. 21 to 9 p.m. Jan. 6, and Jan. 29-31. Altitude of gage is 1,430 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 19,000 cfs and by slope-area measurement at 89,100 cfs. Discharge for periods of no gage-height record estimated on basis of records for Eel River stations above and below Dos Rios.

Maxima.--December 1955 to January 1956: Discharge, 89,100 cfs 12 p.m. Dec. 21 (gage height, 25.0 ft, from floodmarks).

1951 to November 1955: Discharge, 41,100 cfs Jan. 9, 1953 (gage height, 16.85 ft), from rating curve extended above 19,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	717	2,800	11.....	1,620	5,080	21.....	28,600	4,900
2.....	544	2,600	12.....	1,460	3,990	22.....	62,000	7,020
3.....	422	3,000	13.....	1,110	6,000	23.....	30,000	8,220
4.....	346	3,500	14.....	930	17,100	24.....	15,000	5,180
5.....	953	3,700	15.....	858	33,700	25.....	5,500	4,390
6.....	7,260	3,500	16.....	1,550	12,700	26.....	6,000	4,200
7.....	2,070	4,430	17.....	2,550	6,440	27.....	4,600	3,760
8.....	1,560	3,480	18.....	7,960	5,940	28.....	3,800	3,160
9.....	2,600	3,060	19.....	27,800	4,930	29.....	3,050	2,800
10.....	1,440	4,730	20.....	14,600	5,340	30.....	2,400	2,300
						31.....	2,600	1,950
Monthly mean discharge, in cubic feet per second							7,803	5,932
Runoff, in inches							24.51	18.64
Runoff, in acre-feet							479,800	364,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 14			Dec. 18			Dec. 20--Con.		
12 p.m.......	4.66	870	7 a.m........	8.24	4,050	3 p.m........	11.63	12,000
			12 m.........	8.52	4,490	6............	11.81	12,600
Dec. 15			3 p.m........	9.77	7,290	9............	11.85	12,700
6 a.m........	4.59	835	5............	11.38	13,000	12 p.m.......	11.68	12,100
12 m.........	4.53	805	7............	12.06	15,800			
6 p.m........	4.58	830	9............	11.89	15,000	Dec. 21		
12 p.m.......	4.98	1,050	12 p.m.......	11.36	12,900	6 a.m........	11.10	10,300
						10...........	10.75	9,350
Dec. 16			Dec. 19			12 m.........	10.93	9,820
6 a.m........	5.12	1,130	2 a.m........	11.21	12,300	2 p.m........	12.45	15,100
9............	5.25	1,220	3............	11.22	12,300	4............	14.65	27,000
12 m.........	5.55	1,440	5............	11.35	12,800	6............	17.70	45,300
3 p.m........	6.06	1,840	8............	13.35	21,800	8............	20.70	63,300
6............	6.38	2,090	12 m.........	16.35	38,100	10...........	23.6	80,700
9............	6.40	2,110	2 p.m........	17.54	45,200	12 p.m.......	25.0	89,100
12 p.m.......	6.24	1,980	3............	17.35	44,000			
			5............	16.85	40,800	Jan. 12		
Dec. 17			8............	15.58	32,900	12 p.m.......	8.12	4,210
9 a.m........	5.81	1,640	12 p.m.......	13.76	21,700			
12 m.........	6.01	1,800				Jan. 13		
4 p.m........	7.00	2,640	Dec. 20			3 a.m........	9.35	6,280
7............	7.95	3,650	6 a.m........	12.77	16,600	6............	9.77	7,090
10...........	8.55	4,540	10...........	12.07	13,600	12 m.........	9.19	5,990
12 p.m.......	8.59	4,610	2 p.m........	11.63	12,000	5 p.m........	8.87	5,420

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Middle Fork Eel River below Black Butte River near Covelo, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 13--Con.			Jan. 14--Con.			Jan. 15--Con.		
8 p.m.	8.88	5,430	12 p.m.	13.00	17,800	12 p.m.	14.15	24,000
12 p.m.	9.58	6,710						
			Jan. 15			Jan. 16		
Jan. 14			6 a.m.	14.65	27,000	6 a.m.	12.30	14,500
6 a.m.	11.85	12,700	9	16.45	37,800	12 m.	11.30	10,900
12 m.	13.20	18,800	12 m.	17.70	45,300	12 p.m.	10.12	7,830
5 p.m.	14.15	24,000	2 p.m.	18.15	48,000			
7 p.m.	14.10	23,700	6 p.m.	16.50	38,100			

410. Short Creek near Covelo, Calif.

(Miscellaneous site)

Location.--Lat 39°44'50", long 123°10'55", in NW¼ sec.27, T.23 N., R.12 W., 2.2 miles downstream from Tank Creek, 3.5 miles upstream from mouth, and 4.4 miles northeast of Covelo.

Drainage area.--15.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 3,780 cfs Dec. 21.

411. Eel River below Dos Rios, Calif.

Location.--Lat 39°44'15", long 123°22'15", in NE¼ sec.25, T.22 N., R.14 W., on left bank 1.1 miles downstream from Burger Creek, 1.7 miles northwest of Dos Rios, and 2.2 miles downstream from Middle Fork.

Drainage area.--1,481 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 120,000 cfs and extended above on basis of slope-conveyance study.

Maxima.--December 1955 to January 1956: Discharge, 283,000 cfs 7 a.m. Dec. 22 (gage height, 49.86 ft).

1911-13, 1951 to November 1955: Discharge, 123,000 cfs Jan. 9, 1953 (gage height, 32.08 ft).

Remarks.--Flow partly regulated by Lake Pillsbury (see station 403).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,860	8,850	11	3,050	21,900	21	69,500	15,200
2	1,930	7,500	12	2,850	15,100	22	216,000	16,000
3	1,110	6,080	13	2,220	19,500	23	116,000	22,200
4	784	11,800	14	1,840	59,000	24	44,100	15,500
5	3,460	17,600	15	1,610	89,900	25	28,500	16,900
6	25,000	13,300	16	3,260	53,900	26	28,500	19,500
7	6,970	33,100	17	6,810	26,000	27	23,700	19,300
8	4,170	25,900	18	25,400	19,100	28	16,500	13,900
9	7,190	16,200	19	71,100	15,000	29	12,000	10,100
10	3,870	20,700	20	52,400	16,600	30	9,490	8,120
						31	7,810	6,780
Monthly mean discharge, in cubic feet per second							25,770	21,310
Runoff, in inches							20.06	16.59
Runoff, in acre-feet							1,585,000	1,310,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 15			Dec. 16--Con.			Dec. 17--Con.		
12 p.m.	7.93	1,650	11 p.m.	10.38	5,030	1 p.m.	10.44	5,130
			12 p.m.	10.37	5,010	3	11.00	6,200
Dec. 16						6	12.09	8,730
1 a.m.	7.98	1,710	Dec. 17			9	13.05	11,400
3	8.08	1,820	2 a.m.	10.29	4,870	11	13.70	13,400
10	8.73	2,580	5	10.15	4,640	12 p.m.	13.91	14,100
11	8.92	2,830	7	10.07	4,510			
1 p.m.	9.32	3,370	8:30	10.04	4,460	Dec. 18		
7	10.16	4,660	10	10.09	4,540	1 a.m.	14.08	14,700
9 p.m.	10.33	4,940	12 m.	10.23	4,770	3 a.m.	14.17	15,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Eel River below Dos Rios, Calif.--Continued

Hour	Gage height	Discharge
Dec. 18--Con.		
5 a.m.	14.12	14,800
8:30	14.00	14,400
10	13.90	14,000
12 m.	14.08	14,700
1 p.m.	14.30	15,400
3	15.70	20,900
5	18.40	33,000
7	21.00	46,500
8	21.50	49,200
9	21.98	51,900
10	21.95	51,700
11	21.62	49,900
12 p.m.	21.20	47,600
Dec. 19		
2 a.m.	20.20	42,100
4	19.70	39,500
5:30	19.48	38,400
7	19.90	40,500
8	20.75	45,100
9	21.90	51,400
12 m.	26.40	79,800
2 p.m.	28.65	95,600
3	29.20	99,600
4	29.65	103,000
5	29.95	106,000
6	29.80	104,000
7	29.50	102,000
8	29.00	98,000
10	27.20	84,500
12 p.m.	25.90	75,300
Dec. 20		
1 a.m.	25.45	72,200
2	25.20	70,400
4	24.70	67,000
6	24.00	62,500
9	23.00	56,000
1 p.m.	21.70	48,200
5	20.62	41,900
6	20.42	40,800
8	20.20	39,600
9	20.20	39,600
12 p.m.	20.05	38,800
Dec. 21		
1 a.m.	19.90	38,000
4	19.55	36,200
7	19.00	33,500
10	18.45	31,000
11	18.35	30,600
12 m.	18.32	30,400
Dec. 21--Con.		
1 p.m.	18.50	31,200
2	19.05	33,800
3	20.10	39,000
5	24.10	63,200
6	27.30	85,200
8	34.00	138,000
10	40.20	191,000
12 p.m.	45.20	236,000
Dec. 22		
1 a.m.	47.20	256,000
2	48.55	270,000
3	49.00	274,000
5	49.00	274,000
7	49.86	283,000
9	48.80	272,000
11	46.95	254,000
12 m.	45.15	236,000
1 p.m.	43.30	219,000
4	38.00	171,000
7	34.07	139,000
8:30	33.20	132,000
9	33.20	132,000
10	33.76	136,000
12 p.m.	34.85	145,000
Dec. 23		
1 a.m.	35.08	147,000
3	35.38	149,000
4:30	35.72	152,000
6	35.32	149,000
8	34.40	141,000
9	33.73	136,000
12 m.	31.57	119,000
1 p.m.	30.90	113,000
2	30.20	108,000
3	29.60	103,000
4	29.00	98,000
6	27.95	90,100
8	26.80	81,600
10	25.75	74,200
12 p.m.	24.75	67,400
Dec. 24		
2 a.m.	23.85	61,500
4	23.15	57,000
6	22.45	52,700
9	21.50	47,000
12 m.	20.62	41,900
3 p.m.	19.85	37,800
6	19.20	34,500
9	18.63	31,800
Dec. 24--Con.		
12 p.m.	18.13	29,600
Dec. 25		
4 a.m.	17.55	27,000
6	17.37	26,200
8	17.27	25,700
10	17.31	25,900
12 m.	17.50	26,800
3 p.m.	17.90	28,600
6	18.52	31,300
8	18.69	32,100
9	18.66	32,000
10	18.52	31,300
12 p.m.	18.13	29,600
Jan. 12		
12 p.m.	14.27	14,300
Jan. 13		
3 a.m.	14.60	15,500
7	16.38	22,000
9	16.35	21,900
6 p.m.	15.28	17,900
8	15.31	18,000
12 p.m.	17.45	26,500
Jan. 14		
4 a.m.	20.90	43,400
8	22.65	53,900
6 p.m.	25.96	75,700
7	26.05	76,400
12 p.m.	24.62	66,500
Jan. 15		
1 a.m.	24.31	64,500
3	24.18	63,700
6	24.82	67,800
9	27.00	83,000
11	29.00	98,000
3 p.m.	31.54	118,000
5	31.25	116,000
12 p.m.	26.90	82,300
Jan. 16		
7 a.m.	24.00	62,500
2 p.m.	21.50	47,000
12 p.m.	19.00	33,500
Jan. 17		
12 m.	17.13	25,100
12 p.m.	15.99	20,500

412. North Fork Eel River near Mina, Calif.

Location.--Lat 39°56'15", long 123°20'45", in SW¼ sec.8, T.24 N., R.13 W., on right bank 1.2 miles upstream from Asbill Creek, 2 miles south of Mina, and 8.8 miles northeast of Nashmead.

Drainage area.--251 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,030 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,600 cfs and by slope-area measurement at 58,400 cfs.

Maxima.--December 1955 to January 1956: Discharge, 58,400 cfs 3:30 a.m. Dec. 22 (gage height, 24.00 ft).

1953 to November 1955: Discharge, 23,200 cfs Jan. 17, 1954 (gage height, 25.4 ft, from floodmarks, site and datum then in use).

Flood in December 1937 reached a stage of about 30.7 ft (former site and datum), from information by local resident.

Mean discharge, in cubic feet per second, 1955-56, of North Fork Eel River near Mina, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	1,270	1,470	11.....	734	3,900	21.....	18,000	2,320
2.....	839	1,300	12.....	565	2,740	22.....	34,300	3,580
3.....	509	1,130	13.....	422	4,560	23.....	12,700	4,740
4.....	329	2,880	14.....	335	10,300	24.....	4,920	3,090
5.....	1,720	3,180	15.....	284	14,500	25.....	3,730	2,800
6.....	5,990	2,620	16.....	634	6,670	26.....	4,350	3,540
7.....	1,570	6,160	17.....	2,330	3,710	27.....	3,370	3,260
8.....	1,100	3,540	18.....	8,550	3,260	28.....	2,330	2,400
9.....	1,940	3,010	19.....	14,300	2,450	29.....	1,660	1,790
10.....	945	4,930	20.....	6,710	2,720	30.....	1,280	1,390
						31.....	1,050	1,140
Monthly mean discharge, in cubic feet per second......................							4,476	3,712
Runoff, in inches..							20.56	17.05
Runoff, in acre-feet...							275,200	228,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 15		
12 p.m.......	5.40	320
Dec. 16		
3 a.m........	5.65	398
6............	5.74	429
9............	5.74	429
12 m.........	5.91	489
3 p.m........	6.45	708
9............	7.18	1,070
12 p.m.......	7.07	1,000
Dec. 17		
9 a.m........	6.69	816
12 m.........	6.87	905
3 p.m........	7.80	1,460
5............	9.65	3,050
9............	12.30	6,160
10:30........	12.43	6,330
12 p.m.......	12.18	6,000
Dec. 18		
4 a.m........	11.20	4,770
7............	10.73	4,210
8............	10.73	4,210
11...........	10.90	4,410
3 p.m........	13.85	8,520
7............	17.18	17,800
9............	16.57	15,700
12 p.m.......	15.20	11,600
Dec. 19		
4 a.m........	14.03	8,870
5............	13.97	8,750
7............	13.97	8,750
10...........	16.50	15,400
1 p.m........	18.20	21,800
2............	18.25	22,000
4............	17.87	20,500
8............	16.20	14,500
12 p.m.......	14.80	10,600
Dec. 20		
4 a.m........	13.80	8,430
7............	12.99	7,100
3 p.m........	11.77	5,470
5............	11.65	5,320
7............	11.68	5,350
10:30........	11.99	5,760
12 p.m.......	11.81	5,520
Dec. 21		
6 a.m........	11.10	4,650
9............	10.77	4,250
10...........	10.75	4,230
4 p.m........	16.45	15,300
8............	22.05	43,400
10...........	23.55	54,800
12 p.m.......	23.60	55,200
Dec. 22		
2 a.m........	23.73	56,200
3:30.........	24.00	58,400
5............	23.74	56,300
7............	23.55	54,800
10...........	21.45	39,200
12 m.........	19.75	29,000
3 p.m........	17.90	20,600
6............	16.60	15,800
9............	15.77	13,200
12 p.m.......	17.10	17,600
Dec. 23		
3 a.m........	17.61	19,400
6............	17.11	17,600
10...........	15.93	13,700
1 p.m........	14.98	11,000
5............	14.10	9,000
9............	13.30	7,570
12 p.m.......	12.78	6,800
Dec. 24		
6 a.m........	11.91	5,650
12 m.........	11.22	4,790
6 p.m........	10.61	4,070
12 p.m.......	10.13	3,540
Dec. 25		
4 a.m........	9.87	3,270
6............	9.83	3,230
12 m.........	9.92	3,320
3 p.m........	10.05	3,460
6	10.63	4,090
9:30.........	11.47	5,090
12 p.m.......	11.07	4,610
Dec. 26		
4 a.m........	10.39	3,830
9............	9.90	3,300
12 m.........	10.65	4,120
3 p.m........	11.83	5,550
Dec. 26--Con.		
4 p.m........	11.65	5,320
5............	11.65	5,320
8............	11.30	4,890
12 p.m.......	10.69	4,160
Jan. 12		
12 p.m.......	10.32	3,750
Jan. 13		
2 a.m........	12.15	5,960
3............	12.46	6,370
4............	12.31	6,170
8............	11.08	4,630
12 m.........	10.44	3,880
3 p.m........	10.14	3,550
5............	10.00	3,400
6............	10.00	3,400
8............	10.25	3,680
10...........	11.27	4,850
12 p.m.......	12.65	6,620
Jan. 14		
1 a.m........	13.17	7,360
6............	14.13	9,070
8............	14.13	9,070
10...........	14.42	9,700
12 m.........	14.96	11,000
5 p.m........	15.89	13,600
6............	15.83	13,400
10...........	14.65	10,200
12 p.m.......	14.34	9,530
Jan. 15		
1 a.m........	14.44	9,750
4............	15.50	12,400
6............	15.80	13,300
1 p.m........	17.94	20,800
2............	17.83	20,300
6............	16.12	14,300
9............	15.12	11,400
12 p.m.......	14.42	9,700
Jan. 16		
6 a.m........	13.32	7,600
12 m.........	12.45	6,360
12 p.m.......	11.14	4,700

413. Eel River at Alderpoint, Calif.

Location.--Lat 40°10'35", long 123°36'20", in NW¼ sec.27, T.3 S., R.5 E., on left bank at Alderpoint 600 ft downstream from Carter Creek, and 11.4 miles northeast of Garberville.

Drainage area.--2,079 sq mi.

Gage-height record.--Water-stage recorder graph except 12:30 a.m. Dec. 22 to 11 a.m. Dec. 31. Altitude of gage is 270 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 110,000 cfs and by slope-area measurement at 376,000 cfs. Discharge for Dec. 22-31 estimated on basis of records for station below Dos Rios and for North Fork Eel River near Mina.

Maxima.--December 1955 to January 1956: Discharge, 376,000 cfs about 9 a.m. Dec. 22 (gage height, 72.5 ft, from floodmarks).

September to November 1955: Discharge, 19,900 cfs 11 p.m. Nov. 20 (gage height, 12.15 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2,280	10,600	11	4,460	31,400	21	71,100	22,200
2	4,370	10,600	12	3,980	21,800	22	260,000	20,500
3	2,370	8,570	13	3,030	26,100	23	150,000	33,200
4	1,550	12,500	14	2,400	66,000	24	60,000	24,300
5	2,710	24,300	15	2,040	106,000	25	37,000	23,300
6	35,700	17,900	16	2,930	73,100	26	37,000	28,500
7	14,600	35,900	17	8,960	37,300	27	31,000	31,900
8	6,710	39,300	18	33,300	28,200	28	22,000	23,600
9	10,700	24,000	19	89,200	22,400	29	16,000	16,300
10	6,880	27,800	20	74,000	22,300	30	12,000	12,200
						31	10,000	11,200
Monthly mean discharge, in cubic feet per second							32,850	28,990
Runoff, in inches							18.22	16.08
Runoff, in acre-feet							2,020,000	1,782,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis- charge	Hour	Gage height	Dis- charge	Hour	Gage height	Dis- charge
Dec. 15			Dec. 20--Con.			Jan. 14--Con.		
12 p.m.	4.14	2,010	12 p.m.	22.78	50,300	10 p.m.	34.10	90,400
						12 p.m.	33.85	89,400
Dec. 16			Dec. 21					
6 a.m.	4.22	2,130	4 a.m.	22.03	48,100	Jan. 15		
12 m.	4.40	2,400	8	21.16	45,500	6 a.m.	33.18	86,700
6 p.m.	5.12	3,640	11	20.58	43,700	9	34.35	91,400
12 p.m.	5.84	5,080	12 m.	20.66	44,000	12 m.	37.60	104,000
			3 p.m.	23.10	51,400	5 p.m.	42.80	129,000
Dec. 17			5	27.50	66,800	6:30	43.35	132,000
6 a.m.	6.58	6,680	7	34.05	90,200	9	42.55	128,000
12 m.	6.78	7,120	9	42.10	126,000	12 p.m.	39.62	113,000
2 p.m.	6.92	7,420	11	51.30	184,000			
6	8.32	10,500	12 p.m.	55.40	217,000	Jan. 16		
12 p.m.	11.73	18,800				4 a.m.	35.00	94,000
			Jan. 11			12 m.	28.15	69,000
Dec. 18			12 p.m.	14.59	25,800	5 p.m.	25.00	58,000
6 a.m.	13.87	24,200				12 p.m.	21.90	47,700
7	14.02	24,600	Jan. 12					
8	14.02	24,600	2 p.m.	12.88	20,600	Jan. 17		
9	14.05	24,600	8	12.43	19,300	5 a.m.	20.00	42,000
11	13.96	24,400	10	12.43	19,300	1 p.m.	18.00	36,000
12 m.	13.99	24,500	12 p.m.	12.70	20,100	6	16.80	32,400
6 p.m.	19.45	40,400				8	16.63	31,900
12 p.m.	28.10	68,800	Jan. 13			12 p.m.	16.04	30,100
			7 a.m.	14.55	25,600			
Dec. 19			10	14.62	25,900	Jan. 18		
2 a.m.	29.15	72,500	12 m.	15.49	28,500	10 a.m.	15.62	28,900
9	26.18	62,100	2 p.m.	15.75	29,200	11	15.52	28,600
12 m.	28.20	69,200	6	15.00	27,000	3 p.m.	15.50	28,500
3 p.m.	37.00	102,000	8	14.78	26,300	8	15.07	27,200
6	41.00	120,000	9	14.86	26,600	12 p.m.	14.48	25,400
8:30	42.60	128,000	12 p.m.	15.80	29,400			
12 p.m.	40.75	119,000				Jan. 19		
			Jan. 14			8 a.m.	13.57	22,700
Dec. 20			5 a.m.	20.35	43,000	11	13.35	22,000
6 a.m.	32.75	85,100	8	24.70	57,000	6 p.m.	13.10	21,300
12 m.	28.10	68,800	2 p.m.	30.00	75,500	12 p.m.	12.93	20,800
6 p.m.	24.80	57,300	6 p.m.	33.00	86,000			

414. South Fork Eel River near Branscomb, Calif.

Location.--Lat 39°43'09", long 123°39'06", in NW¼ sec.32, T.22 N., R.16 W., on right bank 0.4 mile upstream from Jack of Hearts Creek and 4.7 miles north of Branscomb.

Drainage area.--43.9 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,380 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,600 cfs and by slope-area measurement at 20,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 20,100 cfs 2:30 a.m. Dec. 22 (gage height, 16.20 ft).
1946 to November 1955: Discharge, 8,740 cfs Jan. 21, 1951 (gage height, 11.1 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	187	376	11	306	755	21	5,230	690
2	158	315	12	237	613	22	11,400	896
3	130	277	13	192	723	23	3,200	1,120
4	103	544	14	158	2,780	24	1,310	805
5	399	637	15	150	4,610	25	922	785
6	2,090	575	16	336	1,850	26	1,040	800
7	707	1,620	17	793	950	27	963	865
8	525	1,280	18	1,910	708	28	726	721
9	597	819	19	3,380	538	29	530	542
10	402	822	20	2,000	708	30	409	422
						31	329	343
Monthly mean discharge, in cubic feet per second							1,317	951
Runoff, in inches							34.58	24.98
Runoff, in acre-feet							80,960	58,490

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 20--Con.			Dec. 24--Con.		
12 p.m.	2.27	186	12 m.	5.51	1,790	12 p.m.	4.13	945
			4 p.m.	5.40	1,710			
Dec. 16			6	5.28	1,630	Jan. 12		
4 a.m.	2.25	180	9	5.38	1,700	12 p.m.	3.74	750
8	2.38	219	12 p.m.	5.23	1,590			
10	2.62	292				Jan. 13		
12 m.	2.67	310	Dec. 21			2 a.m.	4.07	915
2:30 p.m.	3.24	526	4 a.m.	5.00	1,430	6	3.68	721
5	3.11	474	10	4.80	1,310	12 m.	3.46	622
7	3.13	482	2 p.m.	6.10	2,250	6 p.m.	3.42	604
12 p.m.	2.90	390	4	8.05	4,110	10	3.79	775
			6	10.65	7,960	12 p.m.	4.57	1,170
Dec. 17			7	12.20	10,800			
6 a.m.	2.79	352	8	13.25	13,000	Jan. 14		
8	2.85	372	9	13.90	14,600	1 a.m.	4.94	1,390
10	3.00	430	10	14.60	16,200	3	5.40	1,710
12 m.	3.50	640	11	15.25	17,800	4	5.49	1,770
3 p.m.	3.87	815	12 p.m.	15.65	18,800	6	6.04	2,200
6	4.70	1,250				10	7.07	3,070
9	5.23	1,590	Dec. 22			12 m.	7.24	3,240
12 p.m.	5.14	1,530	1 a.m.	16.07	19,800	1 p.m.	7.29	3,290
			2:30	16.20	20,100	4	7.77	3,800
Dec. 18			6	15.68	18,800	6	7.54	3,540
1 a.m.	5.13	1,520	7	15.68	18,800	11	6.70	2,730
9	4.71	1,260	8	15.25	17,800	12 p.m.	6.76	2,780
11	4.76	1,290	10	13.10	12,700			
12 m.	4.92	1,380	12 m.	11.30	9,100	Jan. 15		
3 p.m.	6.10	2,250	2 p.m.	10.15	7,100	3 a.m.	7.33	3,330
6:30	7.17	3,170	6	8.45	4,600	5	7.39	3,390
10	6.28	2,390	7	8.30	4,410	6	7.53	3,530
12 p.m.	6.06	2,220	9:30	8.55	4,720	8	8.64	4,840
			12 p.m.	8.29	4,400	11	10.00	6,860
Dec. 19						12:30 p.m.	10.45	7,620
2 a.m.	5.94	2,120	Dec. 23			2	10.00	6,860
5	5.94	2,120	2 a.m.	7.99	4,040	6	8.21	4,300
6	5.87	2,070	4:30	8.67	4,880	9	7.52	3,520
8	6.20	2,330	6	8.25	4,350	12 p.m.	6.89	2,900
10	7.55	3,560	9	7.47	3,470			
1:30 p.m.	8.97	5,300	1 p.m.	6.87	2,880	Jan. 16		
6	8.12	4,190	7	6.13	2,270	3 a.m.	6.44	2,520
12 p.m.	6.87	2,880	12 p.m.	5.63	1,870	6	6.05	2,210
						12 m.	5.43	1,730
Dec. 20			Dec. 24			6 p.m.	4.98	1,420
6 a.m.	6.15	2,290	6 a.m.	5.10	1,500	12 p.m.	4.63	1,210
10 a.m.	5.67	1,910	12 m.	4.70	1,250			

415. Tenmile Creek near Laytonville, Calif.

(Miscellaneous site)

Location.--Lat 39°45'55", long 123°32'35", in NW¼ sec.16, T.22 N., R.15 W., 0.15 mile upstream from Spring Creek, 0.3 mile downstream from Steep Creek, and 6.3 miles northwest of Laytonville.

Drainage area.--50.3 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 16,300 cfs Dec. 22.

416. South Fork Eel River near Miranda, Calif.

Location.--Lat 40°10'55", long 123°46'30", in NW¼ sec.30, T.3 S., R.4 E., on right bank at Sylvandale campgrounds on U.S. Highway 101, 0.5 mile upstream from Rocky Glen Creek, 4.3 miles southeast of Miranda, and 20 miles upstream from mouth.

Drainage area.--537 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Dec. 21 to 2 p.m. Dec. 27. Altitude of gage is 250 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 52,000 cfs and by slope-area measurement at 173,000 cfs. Discharge for period of no gage-height record estimated on basis of records for station near Branscomb.

Maxima.--December 1955 to January 1956: Discharge, 173,000 cfs about 5 a.m. Dec. 22 (gage height, 42.7 ft, from floodmarks).
1940 to November 1955: Discharge, 73,200 cfs Dec. 27, 1945 (gage height, 27.73 ft).

Remarks.--Flood flows not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	885	3,820	11.....	2,910	9,500	21.....	37,300	7,020
2.....	1,580	4,160	12.....	2,410	7,150	22.....	100,000	7,820
3.....	1,180	3,470	13.....	2,030	8,740	23.....	40,000	12,000
4.....	931	5,990	14.....	1,760	22,500	24.....	18,000	8,860
5.....	2,730	9,180	15.....	1,570	42,900	25.....	11,000	8,290
6.....	18,500	7,240	16.....	2,280	25,000	26.....	12,000	8,540
7.....	7,260	16,500	17.....	6,350	12,200	27.....	11,000	10,200
8.....	4,210	15,200	18.....	20,200	8,980	28.....	10,200	8,620
9.....	5,200	9,640	19.....	37,200	6,940	29.....	7,420	6,310
10.....	3,620	9,450	20.....	29,100	7,080	30.....	5,480	4,840
						31.....	4,200	3,950
Monthly mean discharge, in cubic feet per second							13,180	10,390
Runoff, in inches							28.29	22.31
Runoff, in acre-feet							810,300	638,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 18--Con.			Dec. 20--Con.		
12 p.m.	4.21	1,580	11 a.m.	12.37	16,400	6 p.m.	15.15	23,700
			12 m.	12.38	16,400	12 p.m.	14.45	21,800
Dec. 16			2 p.m.	13.07	18,100			
5 a.m.	4.33	1,730	5	15.10	23,600	Dec. 21		
10	4.56	2,010	12 p.m.	16.98	29,000	5 a.m.	13.91	20,300
2 p.m.	4.91	2,460				10	13.22	18,500
9	5.27	2,950	Dec. 19			11	13.22	18,500
12 p.m.	5.50	3,270	2 a.m.	17.10	29,400	1 p.m.	14.00	20,500
			3	16.96	29,000	3	16.90	28,800
Dec. 17			7	15.84	25,700	5	19.50	38,500
5 a.m.	5.84	3,750	9	16.11	26,400	7	23.35	55,100
8	5.79	3,680	10	16.52	27,700	9	28.85	83,200
10	5.88	3,800	3 p.m.	19.70	39,300	12 p.m.	33.15	108,000
12 m.	6.12	4,150	6	22.47	51,100			
3 p.m.	7.12	5,690	8	23.06	53,800	Dec. 27		
7	9.12	9,240	10	22.86	52,900	12 p.m.	10.08	11,800
12 p.m.	12.29	16,200	12 p.m.	22.12	49,500			
						Dec. 28		
Dec. 18			Dec. 20			6 a.m.	9.72	11,000
1 a.m.	12.46	16,600	6 a.m.	17.86	32,100	12 m.	9.34	10,200
6	12.92	17,700	10	16.21	26,700	6 p.m.	8.93	9,360
7 a.m.	12.93	17,700	4 p.m.	15.25	24,000	12 p.m.	8.58	8,660

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Fork Eel River near Miranda, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 11			Jan. 13--Con.			Jan. 15--Con.		
12 p.m.......	8.23	7,990	7 p.m........	8.16	7,850	6 a.m........	17.55	32,900
			9............	8.35	8,220	12 m.........	21.16	46,200
Jan. 12			12 p.m.......	9.12	9,740	2 p.m........	22.41	51,800
12 m.........	7.65	6,890				5............	23.45	56,500
7 p.m........	7.43	6,490	Jan. 14			9............	21.66	48,500
9............	7.54	6,690	6 a.m........	11.08	14,100	12 p.m.......	19.36	39,200
12 p.m.......	8.30	8,120	10...........	13.70	21,100			
			2 p.m........	15.33	25,800	Jan. 16		
Jan. 13			6............	16.98	30,900			
2 a.m........	8.61	8,720	8............	17.31	32,100	6 a.m........	16.60	29,700
4............	8.79	9,080	10...........	17.37	32,300	10...........	15.51	26,300
7............	8.62	8,740	12 p.m.......	17.22	31,700	12 m.........	14.75	24,000
11...........	8.88	9,260	Jan. 15			1 p.m........	14.15	22,400
1 p.m........	8.81	9,120	2 a.m........	17.09	31,300	6............	13.01	19,100
						12 p.m.......	11.80	15,900

417. Eel River at Scotia, Calif.

Location.--Lat 40°29'30", long 124°05'55", in SW$\frac{1}{4}$ sec.5, T.1 N., R.1 E., near center of span in left pier of bridge on U.S. Highway 101, 0.5 mile north of Scotia and 6 miles upstream from Van Duzen River.

Drainage area.--3,113 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 36.15 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 200,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 541,000 cfs 4 p.m Dec. 22 (gage height, 61.90 ft).

1910-15, 1916 to November 1955: Discharge, 345,000 cfs Dec. 11, 1937 (gage height, 55.1 ft); gage height observed, 55.5 ft Feb. 2, 1915.

Remarks.--Flood flow not affected by regulation or diversion.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3,440	20,600	11.....	11,100	52,400	21.....	114,000	37,000
2.....	8,200	22,500	12.....	9,100	40,000	22.....	433,000	33,600
3.....	6,760	18,500	13.....	7,660	42,100	23.....	282,000	50,900
4.....	4,700	24,200	14.....	6,100	74,700	24.....	113,000	43,400
5.....	5,140	44,100	15.....	5,120	152,000	25.....	62,600	36,400
6.....	49,000	37,400	16.....	6,250	144,000	26.....	64,300	40,700
7.....	39,900	60,500	17.....	15,100	68,400	27.....	61,000	49,100
8.....	17,000	73,500	18.....	58,900	47,800	28.....	45,100	43,100
9.....	18,000	47,300	19.....	134,000	38,700	29.....	32,800	30,800
10.....	16,300	43,600	20.....	167,000	35,200	30.....	25,400	24,000
						31.....	20,700	19,600
Monthly mean discharge, in cubic feet per second......................							59,440	48,260
Runoff, in inches..							22.02	17.88
Runoff, in acre-feet...							3,655,000	2,967,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 15			Dec. 18--Con.			Dec. 21--Con.		
12 p.m.......	11.77	4,880	12 p.m.......	29.26	88,800	3 p.m........	30.48	97,400
						6............	32.80	114,000
Dec. 16			Dec. 19			9............	36.50	144,000
6 a.m........	11.81	4,980	6 a.m........	33.00	115,000	12 p.m.......	41.20	192,000
11...........	11.95	5,320	8............	34.05	123,000			
1 p.m........	12.11	5,720	12 m.........	34.75	129,000	Dec. 22		
6............	12.84	7,720	4 p.m........	35.98	139,000	4 a.m........	48.30	291,000
12 m.........	13.26	8,980	8............	38.75	164,000	7............	54.30	393,000
			12 p.m.......	41.70	198,000	11...........	59.60	495,000
Dec. 17						2 p.m........	61.55	534,000
6 a.m........	13.66	10,200	Dec. 20			4............	61.90	541,000
12	14.36	12,300	2 a.m........	42.70	211,000	6............	61.60	535,000
4 p.m........	15.19	15,100	4............	43.15	217,000	8............	60.45	512,000
8............	16.78	21,300	7............	42.35	207,000	12 p.m.......	56.25	430,000
12 p.m.......	19.55	33,800	9............	41.10	191,000			
			1 p.m........	37.70	154,000	Dec. 23		
Dec. 18			6............	35.05	131,000	5 a.m........	51.00	335,000
4 a.m........	21.15	41,800	12 p.m.......	33.25	117,000	8............	48.50	294,000
8............	23.20	52,000				3 p.m........	46.10	258,000
12 m.........	24.70	60,200	Dec. 21			6............	44.50	235,000
3 p.m........	25.15	62,900	4 a.m........	31.70	106,000	12 p.m.......	39.80	176,000
5............	25.55	65,300	8............	30.55	97,800			
8 p.m........	27.10	74,600	12 m.........	29.90	93,300			

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Eel River at Scotia, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 24			Dec. 27--Con.			Jan. 14--Con.		
5 a.m........	36.10	140,000	8 a.m........	24.85	65,200	12 m.........	24.97	65,800
8............	34.05	124,000	4 p.m........	23.55	58,000	6 p.m........	30.40	99,100
12 m.........	31.70	108,000	12 p.m.......	22.60	52,800	12 p.m.......	33.80	123,000
4 p.m........	29.50	93,200				Jan. 15		
8............	27.85	83,100	Dec. 28			6 a.m........	35.34	134,000
12 p.m.......	26.50	75,000	12 m.........	21.20	45,100	12 m.........	36.35	142,000
			12 p.m.......	19.75	37,400	6 p.m........	39.30	170,000
Dec. 25						12 p.m.......	42.05	203,000
6 a.m........	24.95	65,700	Dec. 29					
12 m.........	24.10	61,000	12 m.........	18.80	32,700	Jan. 16		
7 p.m........	23.25	56,400	12 p.m.......	17.94	28,400	1 a.m........	42.20	205,000
12 p.m.......	23.85	59,700				3............	41.80	200,000
			Dec. 30			7............	39.40	171,000
Dec. 26			12 m.........	17.28	25,300	12 m.........	35.50	135,000
8 a.m........	25.15	66,900	12 p.m.......	16.71	22,700	6 p.m........	31.90	109,000
12 m.........	24.85	65,200				12 p.m.......	29.00	90,000
4 p.m........	24.75	64,600	Jan. 13					
9............	24.55	63,500	12 p.m.......	21.35	45,900	Jan. 17		
12 p.m.......	24.75	64,600				6 a.m........	26.80	76,800
			Jan. 14			12 m.........	25.05	66,300
Dec. 27			3 a.m........	21.55	47,000	6 p.m........	23.75	59,100
5 a.m........	25.22	67,300	8 a.m........	22.85	54,200	12 p.m.......	22.67	53,200

418. Van Duzen River near Dinsmores, Calif.

Location.--Lat 40°29'15", long 123°37'50", in SE¼ sec.5, T.1 N., R.5 E., on right bank 1.4 miles west of Dinsmores, 2.0 miles upstream from South Fork, and 8.9 miles east of Bridgeville.

Drainage area.--80.2 sq mi.

Gage-height record.--Water-stage recorder graph except 12 p.m. Jan. 23 to 12 p.m Jan. 31. Altitude of gage is 2,320 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 13,000 cfs and extended above by logarithmic plotting. Discharge for period of no gage-height record estimated on basis of records for station near Bridgeville.

Maxima.--December 1955 to January 1956: Discharge, 21,400 cfs 2:30 a.m. Dec. 22 (gage height, 19.25 ft).
1953 to November 1955: Discharge, 14,000 cfs Jan. 16, 1954 (gage height, 14.60 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	674	570	11.....	530	1,820	21.....	8,990	1,140
2.....	488	545	12.....	453	1,410	22.....	13,700	1,370
3.....	366	731	13.....	366	2,020	23.....	6,990	1,630
4.....	278	2,600	14.....	305	4,270	24.....	2,740	1,330
5.....	931	2,160	15.....	284	6,150	25.....	1,940	1,070
6.....	2,550	1,940	16.....	815	2,910	26.....	2,300	1,080
7.....	937	1,920	17.....	1,610	1,670	27.....	1,640	1,100
8.....	663	1,200	18.....	4,960	1,440	28.....	1,110	900
9.....	943	1,160	19.....	7,890	1,180	29.....	820	740
10.....	558	1,980	20.....	5,350	1,300	30.....	652	610
						31.....	540	500
Monthly mean discharge, in cubic feet per second.......................							2,335	1,627
Runoff, in inches..							33.56	23.39
Runoff, in acre-feet...							143,500	100,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 15			Dec. 17			Dec. 18--Con.		
12 p.m.......	2.34	334	9 a.m........	3.49	785	4 p.m........	8.50	5,320
			4 p.m........	4.55	1,500	8............	10.93	8,300
Dec. 16			7............	5.80	2,550	12 p.m.......	9.28	6,220
4 a.m........	2.44	369	12 p.m.......	7.35	4,060			
7............	2.70	460				Dec. 19		
12 m.........	3.81	966	Dec. 18			6 a.m........	7.97	4,740
5 p.m........	4.18	1,220	5 a.m........	6.74	3,440	10...........	10.05	7,140
6............	4.18	1,220	9............	7.48	4,200	4 p.m........	13.63	12,100
12 p.m.......	3.87	1,000	1 p.m........	6.82	3,520	8 p.m........	11.75	9,450

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Van Duzen River near Dinsmores, Calif.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19--Con.			Dec. 23			Jan. 13		
12 p.m.	9.55	6,540	3 a.m.	12.99	11,200	1:30 a.m.	5.62	2,680
			8	11.03	8,440	9	4.68	1,920
Dec. 20			1 p.m.	9.08	5,980	5 p.m.	4.22	1,560
5 a.m.	8.25	5,040	7	7.73	4,540	7	4.25	1,580
11:30	7.54	4,260	12 p.m.	6.85	3,740	10	4.80	2,020
3:30 p.m.	8.25	5,040				12 p.m.	5.90	2,900
7:30	9.58	6,580	Dec. 24					
12 p.m.	8.70	5,540	10 a.m.	5.72	2,760	Jan. 14		
			12 p.m.	4.76	1,990	5 a.m.	7.22	4,080
Dec. 21						12:30 p.m.	8.28	5,080
10 a.m.	6.80	3,500	Dec. 25			10	7.04	3,920
2 p.m.	9.60	6,600	7 a.m.	4.48	1,760	12 p.m.	7.16	4,020
4	12.30	10,200	3 p.m.	4.42	1,720			
6	14.85	14,000	8	5.10	2,260	Jan. 15		
8	16.85	17,200	11	5.43	2,520	5 a.m.	8.16	4,960
10	18.42	20,000	12 p.m.	5.37	2,480	9	9.60	6,600
12 p.m.	18.99	21,000				1:30 p.m.	11.67	9,340
			Jan. 11			5	9.85	6,900
Dec. 22			12 p.m.	4.06	1,430	8	8.50	5,320
2:30 a.m.	19.25	21,400				12 p.m.	7.52	4,350
5	18.64	20,400	Jan. 12					
9	16.65	16,800	4 p.m.	3.69	1,160	Jan. 16		
11	14.54	13,500	7	3.91	1,320	4 a.m.	6.77	3,670
2 p.m.	12.08	9,910	10	4.67	1,920	10	6.00	2,980
8	10.03	7,120	12 p.m.	5.41	2,510	4 p.m.	5.28	2,400
12 p.m.	11.45	9,030				12 p.m.	4.81	2,030

419. South Fork Van Duzen River near Bridgeville, Calif.

(Crest-stage station)

Location.--Lat 40°26'40", long 123°39'10", in NE¼ sec.30, T.1 N., R.5 E., 0.3 mile upstream from Butte Creek, 3.1 miles upstream from mouth, and 8 miles east of Bridgeville.

Drainage area.--36.2 sq mi.

Gage-height record.--Crest stage only. Altitude of gage is 2,320 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 8,990 cfs Dec. 22 (gage height, 11.91 ft, from floodmarks).

420. Van Duzen River near Bridgeville, Calif.

Location.--Lat 40°27'50", long 123°51'25", in E½ sec.17, T.1 N., R.3 E., on downstream side of right pier of bridge on State Highway 36, 0.3 mile downstream from Pip Creek, 0.5 mile upstream from Rogers Creek, and 4 miles west of Bridgeville.

Drainage area.--214 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 15,000 cfs and by slope-area measurement at 43,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 43,500 cfs 1 a.m. Dec. 22 (gage height, 21.3 ft, from floodmarks).
1950 to November 1956: Discharge, 25,200 cfs Jan. 16, 1954 (gage height, 17.23 ft).

Mean discharge, in cubic feet per second, 1955-56, of Van Duzen River near Bridgeville, Calif.

Day	December	January	Day	December	January	Day	December	January
1	1,950	1,940	11	1,250	4,480	21	22,300	2,860
2	1,710	1,730	12	1,070	3,340	22	30,300	5,050
3	1,230	1,810	13	842	5,270	23	17,300	6,140
4	850	6,350	14	681	12,000	24	6,330	3,570
5	2,610	5,450	15	578	15,300	25	4,640	2,630
6	7,590	4,370	16	1,590	7,540	26	6,460	2,650
7	2,500	6,900	17	4,390	4,080	27	4,370	2,880
8	1,570	3,800	18	16,000	3,410	28	2,970	2,200
9	2,100	3,460	19	22,200	2,950	29	2,160	1,750
10	1,280	4,920	20	15,600	3,180	30	1,680	1,420
						31	1,340	1,190
Monthly mean discharge, in cubic feet per second							6,046	4,343
Runoff, in inches							32.57	23.39
Runoff, in acre-feet							371,800	267,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 21			Dec. 28		
12 p.m.	4.90	590	5 a.m.	12.01	13,800	6 a.m.	6.90	3,180
			10	10.90	10,500	12 m.	6.68	2,920
Dec. 16			12 m.	11.62	12,700	12 p.m.	6.36	2,530
6 a.m.	5.08	716	2 p.m.	13.30	17,900			
9	5.25	850	4	15.85	26,000	Jan. 11		
10	5.35	930	5	17.30	30,700	12 p.m.	7.17	3,540
12 m.	5.82	1,340	7	19.50	37,700			
4 p.m.	6.94	2,590	10	20.30	40,300	Jan. 12		
5	7.02	2,700	12 p.m.	20.95	42,300	12 m.	6.74	2,990
6	6.97	2,630				6 p.m.	6.64	2,870
10	6.95	2,600	Dec. 22			9	7.13	3,480
12 p.m.	6.85	2,480	1 a.m.	21.3	43,500	12 p.m.	8.63	5,770
			7	19.92	39,000			
Dec. 17			10	18.50	34,500	Jan. 13		
6 a.m.	6.43	1,980	12 m.	16.93	29,500	1:30 a.m.	9.00	6,440
8	6.35	1,900	3 p.m.	15.00	23,300	3	8.81	6,100
9	6.37	1,920	8	13.64	18,900	8	8.33	5,250
10	6.49	2,050	12 p.m.	14.15	20,600	12 m.	7.78	4,390
12 m.	7.00	2,670				5 p.m.	7.43	3,900
4 p.m.	8.47	4,910	Dec. 23			7	7.50	4,000
6	9.40	6,720	4 a.m.	15.55	25,100	12 p.m.	10.08	8,680
10	10.48	9,350	8	14.45	21,500			
11	10.90	10,500	12 m.	13.02	17,000	Jan. 14		
12 p.m.	10.98	10,700	6 p.m.	11.50	12,300	4 a.m.	10.88	10,600
			12 p.m.	10.38	9,340	8	10.96	10,800
Dec. 18						12 m.	11.61	12,600
1 a.m.	10.88	10,500	Dec. 24			4 p.m.	12.54	15,400
4	11.46	12,200	6 a.m.	9.45	7,340	10	11.27	11,600
6	11.55	12,400	12 m.	8.75	5,990	12 p.m.	11.10	11,200
9	11.88	13,400	5 p.m.	8.30	5,200			
11	11.65	12,800	12 p.m.	7.87	4,520	Jan. 15		
12 m.	11.80	13,200				1 a.m.	11.08	11,100
1 p.m.	12.20	14,400	Dec. 25			5	11.44	12,100
6	14.60	22,000	7 a.m.	7.58	4,110	12 m.	13.69	19,100
8	14.95	23,100	12 m.	8.08	4,850	2:30 p.m.	14.12	20,500
10	14.73	22,400	4 p.m.	7.77	4,380	6	13.05	17,100
12 p.m.	13.90	19,800	7	7.87	4,520	12 p.m.	11.07	11,100
			12 p.m.	8.88	6,220			
Dec. 19						Jan. 16		
6 a.m.	12.12	14,200	Dec. 26			6 a.m.	10.11	8,740
10	14.45	21,500	1 a.m.	8.88	6,220	12 m.	9.43	7,300
12 m.	16.20	27,100	7	8.17	4,990	6 p.m.	8.77	6,030
4 p.m.	17.17	30,200	10	9.13	6,700	12 p.m.	8.20	5,040
7	16.02	26,600	12 m.	9.40	7,240			
12 p.m.	13.30	17,900	1 p.m.	9.67	7,780	Jan. 17		
			3	9.79	8,040	6 a.m.	7.80	4,420
Dec. 20			7	9.16	6,760	12 m.	7.46	3,940
4 a.m.	12.02	13,900	12 p.m.	8.49	5,520	9 p.m.	7.20	3,580
11	11.28	11,600				12 p.m.	7.18	3,550
2 p.m.	12.15	14,200	Dec. 27					
7	13.77	19,400	9 a.m.	7.80	4,420			
9	14.36	21,300	6 p.m.	7.45	3,930			
12 p.m.	13.32	17,900	12 p.m.	7.19	3,570			

421. Yager Creek near Carlotta, Calif.

Location.--Lat 40°34'15", long 124°02'55", in NE¼ sec.10, T.2 N., R.1 E., on right bank 0.8 mile upstream from Cooper Mill Creek and 2.4 miles north of Carlotta.

Drainage area.--127 sq mi.

Gage-height record.--No record; station destroyed by flood. Altitude of gage is 210 ft (from topographic map).

Discharge record.--Peak discharge by slope-conveyance measurement.

Maxima.--December 1955 to January 1956: Discharge, 28,000 cfs Dec. 22 (gage height, 17.4 ft).

1953 to November 1955: Discharge, 9,300 cfs Nov. 23, 1953 (gage height, 10.75 ft).

Flood of Jan. 18, 1953, reached a stage of 17.4 ft (discharge, 28,000 cfs).

JACOBY CREEK BASIN

422. Jacoby Creek near Freshwater, Calif.

Location.--Lat 40°47'30", long 124°00'10", in NW¼ sec.30, T.5 N., R.2 E., 300 ft downstream from unnamed tributary, 3.7 miles northeast of Freshwater, and 6.5 miles southeast of Arcata.

Drainage area.--6.07 sq mi.

Gage-height record.--Water-stage recorder graph except 1 a.m. Jan. 22 to 12 p.m Jan. 31. Altitude of gage is 800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 140 cfs and by slope-area measurement at 1,490 cfs. Discharge for Jan. 22-31 estimated on basis of records for Little River at Crannell.

Maxima.--December 1955 to January 1956: Discharge, 1,490 cfs 11:30 p.m. Dec. 21 (gage height, 6.75 ft).

1954 to November 1955: Discharge, 1,670 cfs Dec. 30, 1954 (gage height, 7.20 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	72	47	11	14	33	21	353	54
2	78	38	12	16	38	22	548	130
3	57	28	13	14	64	23	221	100
4	24	49	14	12	127	24	87	70
5	26	53	15	10	221	25	55	55
6	62	46	16	21	103	26	80	47
7	34	96	17	50	63	27	70	110
8	20	75	18	97	44	28	50	60
9	19	48	19	103	38	29	38	45
10	15	40	20	82	43	30	28	32
						31	22	27
Monthly mean discharge, in cubic feet per second							76.7	65.3
Runoff, in inches							14.57	12.40
Runoff, in acre-feet							4,720	4,010

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Jan. 13		
12 p.m.	2.11	87	5 p.m.	3.26	258	12 p.m.	1.86	60
			7	3.36	284			
Dec. 21			11	3.22	249	Jan. 14		
10 a.m.	1.98	72	12 p.m.	3.50	320	5 a.m.	1.86	60
1 p.m.	2.09	84				11	2.40	119
2	2.34	113	Dec. 23			2 p.m.	2.94	192
5	4.05	487	1 a.m.	3.67	368	7	2.63	148
7	4.78	741	8	3.18	240	9	2.68	154
8	4.93	795	4 p.m.	2.81	172	12 p.m.	3.18	240
9	5.25	910	12 p.m.	2.44	124			
10	5.61	1,040				Jan. 15		
11:30	6.75	1,490	Dec. 25			1 a.m.	3.22	249
12 p.m.	6.60	1,430	12 p.m.	1.75	49	5	3.02	206
						9	3.49	317
Dec. 22			Dec. 26			11	3.40	294
2 a.m.	5.60	1,040	6 a.m.	1.73	47	6 p.m.	2.77	167
3	5.35	946	11	2.31	108	12 p.m.	2.48	129
5	5.06	842	12 m.	2.34	112			
10	4.17	528	9 p.m.	2.09	84			
3 p.m.	3.38	289	12 p.m.	2.07	82			

MAD RIVER BASIN

423. Mad River near Forest Glen, Calif.

Location.--Lat 40°27'00", long 123°30'10", in NE¼ sec.21, T.1 N., R.6 E., of left bank just downstream from Lamb Creek, 9.3 miles northwest of Forest Glen.

Drainage area.--139 sq mi.

Gage-height record.--Water-stage recorder graph Dec. 1-21. Stage graph for Jan. 13-31 based on twice-daily wire-weight-gage readings and record for station near Arcata, and at datum 4.17 ft lower than recorder datum. Altitude of gage is 2,440 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,100 cfs and by slope-area measurement at 39,200 cfs. Discharge for period of no gage-height record estimated on basis of records for station near Arcata.

Maxima.--December 1955 to January 1956: Discharge, 39,200 cfs about 4 a.m. Dec. 22 (gage height, 23.6 ft, from floodmarks).
1953 to November 1955: Discharge, 12,900 cfs Jan. 17, 1954 (gage height, 16.02 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	269	630	11	440	1,520	21	10,100	1,700
2	353	600	12	350	1,200	22	14,500	1,890
3	257	570	13	281	2,920	23	4,000	2,720
4	190	870	14	228	5,140	24	2,600	1,880
5	664	1,500	15	199	7,790	25	2,300	1,580
6	2,830	1,000	16	395	4,330	26	2,020	1,540
7	876	1,570	17	1,020	2,020	27	1,250	1,480
8	595	1,250	18	4,110	2,020	28	1,000	1,140
9	900	940	19	7,910	1,770	29	820	895
10	584	1,400	20	4,920	1,770	30	680	698
						31	580	642
Monthly mean discharge, in cubic feet per second							2,168	1,838
Runoff, in inches							17.99	15.24
Runoff, in acre-feet							133,300	113,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 19			Jan. 13		
12 p.m.	4.02	208	6 a.m.	11.64	5,250	12 p.m.	13.3	2,960
			10	12.40	6,160			
Dec. 16			2 p.m.	14.15	8,870	Jan. 14		
4 a.m.	4.15	234	5	15.55	11,800	4 a.m.	14.0	3,570
8	4.58	331	6	15.50	11,700	8	15.7	5,280
10	4.86	400	9	14.60	9,760	1 p.m.	16.2	5,830
5 p.m.	5.25	515	12 p.m.	13.38	7,570	6	16.4	6,060
12 p.m.	5.18	494	Dec. 20			12 p.m.	16.0	5,610
			4 a.m.	12.05	5,740			
Dec. 17			12 m.	10.75	4,300	Jan. 15		
6 a.m.	5.11	473	4 p.m.	10.88	4,430	2 a.m.	16.6	6,300
12 m.	5.38	554	8	10.70	4,250	6	16.9	6,660
6 p.m.	7.35	1,470	12 p.m.	10.45	4,000	12 m.	18.5	8,780
12 p.m.	8.99	2,710				2 p.m.	18.8	9,260
			Dec. 21			5	18.9	9,440
Dec. 18			9 a.m.	9.45	3,100	12 p.m.	17.0	6,780
6 a.m.	9.30	2,960	11	9.80	3,410			
11	8.82	2,580	1 p.m.	11.10	4,660	Jan. 16		
4 p.m.	11.30	4,880	3	13.10	7,140	8 a.m.	15.1	4,630
8	12.45	6,230	6	17.3	16,200	4 p.m.	14.0	3,570
11	13.02	7,030	9	20.0	25,000	12 p.m.	13.1	2,800
12 p.m.	12.85	6,790	12 p.m.	22.2	33,600			

424. North Fork Mad River at Korbel, Calif.

(Miscellaneous site)

Location.--Lat 40°52'10", long 123°52'50", in SW¼ sec.28, T.6 N., R.2 E., 0.2 mile downstream from Sullivan Gulch, 0.3 mile south of Korbel, 1.5 miles southeast of Blue Lake, and 2.8 miles upstream from mouth.

Drainage area.--46.9 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 11,600 cfs Dec. 22.

425. Mad River near Arcata, Calif.

Location.--Lat 40°54'30", long 124°03'00", in NW¼NE¼ sec.15, T.6 N., R.1 E., on right bank 0.5 mile downstream from Warren Creek, 0.6 mile upstream from bridge on U.S. Highway 299, and 3.1 miles northeast of Arcata.

Drainage area.--485 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 30 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 29,000 cfs and slope-area measurement at 77,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 77,800 cfs 7 a.m. Dec. 22 (gage height, 27.30 ft).

1910-13, 1950 to November 1955: Discharge, 75,000 cfs Jan. 17, 1953 (gage height, 26.15 ft), from rating curve extended above 34,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	3,610	2,860	11	2,380	7,160	21	24,100	6,460
2	3,900	2,920	12	2,150	5,400	22	63,100	11,100
3	3,040	2,500	13	1,670	7,260	23	31,300	15,100
4	1,830	5,090	14	1,330	20,700	24	16,000	8,580
5	2,300	7,140	15	1,100	32,400	25	9,310	5,820
6	12,300	5,360	16	1,370	19,700	26	9,440	4,710
7	6,110	8,170	17	3,100	10,400	27	8,650	7,470
8	3,160	6,760	18	12,300	7,780	28	6,180	5,500
9	3,740	4,880	19	22,600	6,460	29	4,300	3,740
10	2,790	6,320	20	20,500	6,500	30	3,200	2,860
						31	2,520	2,380
Monthly mean discharge, in cubic feet per second							9,335	8,048
Runoff, in inches							22.19	19.13
Runoff, in acre-feet							574,000	494,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 21			Dec. 26--Con.		
12 p.m.	3.83	1,040	1:30 a.m.	12.58	21,300	11 a.m.	8.47	8,380
			1:30 p.m.	10.40	13,900	4 p.m.	9.58	11,400
Dec. 16			3	10.59	14,500	5	9.57	11,400
6 a.m.	3.89	1,080	4	11.04	15,900	12 p.m.	9.07	9,910
12 m.	4.03	1,180	7	15.20	30,500			
5 p.m.	4.51	1,570	10	20.00	48,600	Jan. 12		
12 p.m.	5.03	2,100	12 p.m.	23.45	62,400	12 p.m.	7.35	5,900
Dec. 17			Dec. 22			Jan. 13		
3 a.m.	5.20	2,300	1 a.m.	25.05	68,800	4 a.m.	8.28	7,900
8	5.20	2,300	4	27.00	76,600	1 p.m.	7.98	7,160
12 m.	5.16	2,250	7	27.30	77,800	7	7.97	7,140
3 p.m.	5.27	2,380	9	26.98	76,500	9	7.93	7,060
7	6.22	3,770	12 m.	25.27	69,700	12 p.m.	8.12	7,500
10	7.38	5,960	7 p.m.	19.85	48,000			
12 p.m.	8.10	7,450	12 p.m.	17.09	37,100	Jan. 14		
						3 a.m.	9.00	9,700
Dec. 18			Dec. 23			6	10.50	14,200
5 a.m.	9.37	10,800	1 a.m.	16.78	36,000	11	11.84	18,700
7	9.46	11,100	3	16.58	35,300	3 p.m.	14.00	26,300
9	9.59	11,500	7	17.01	36,800	6	15.35	31,000
1 p.m.	9.74	11,900	8	16.94	36,600	8	15.20	30,500
3	9.76	12,000	4 p.m.	14.67	28,600	11	14.45	27,900
5	10.03	12,800	6	14.14	26,800	12 p.m.	14.48	28,000
11	11.58	17,800	12 p.m.	12.68	21,700			
12 p.m.	11.70	18,200				Jan. 15		
			Dec. 24			2 a.m.	14.87	29,300
Dec. 19			6 p.m.	10.10	13,000	5	15.63	32,000
1 a.m.	11.81	18,600	9	9.80	12,100	9	15.65	32,100
3	11.80	18,600	10	9.57	11,400	11	16.00	33,300
7	11.58	17,800	11	9.12	10,100	2 p.m.	16.95	36,600
10	11.62	18,000	12 p.m.	9.48	11,100	4	16.80	36,100
11	11.80	18,600				12 p.m.	14.55	28,200
6 p.m.	14.90	29,400	Dec. 25					
8	14.99	29,800	12:30 a.m.	9.58	11,400	Jan. 16		
12 p.m.	14.23	27,100	2	9.38	10,800	2 a.m.	14.00	26,300
			8	8.92	9,500	2 p.m.	11.50	17,600
Dec. 20			12 m.	8.72	9,000	12 p.m.	10.20	13,300
1 a.m.	14.23	27,100	4 p.m.	8.66	8,850			
3	13.95	26,100	12 p.m.	8.34	8,050	Jan. 17		
1 p.m.	11.33	17,000				2 p.m.	9.00	9,700
5	10.94	15,600	Dec. 26			12 p.m.	8.38	8,150
10	12.22	20,100	4 a.m.	8.48	8,400			
12 p.m.	12.47	20,900	10 a.m.	8.42	8,250			

LITTLE RIVER BASIN

426. Little River at Crannell, Calif.

Location.--Lat 41°00'40", long 124°04'50", in NE¼ sec.8, T.7 N., R.1 E., on right bank at Crannell, 0.5 mile upstream from Coon Creek and 9.1 miles north of Arcata.

Drainage area.--44.3 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 17.62 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,700 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 8,480 cfs 2 a.m. Dec. 22 (gage height, 9.63 ft).

Flood of Jan. 17-18, 1953, reached a stage of 15.7 ft, observed by an employee of Hammond Lumber Co.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	735	306	11	227	698	21	2,300	640
2	542	272	12	244	488	22	4,730	1,410
3	472	228	13	191	645	23	1,860	1,200
4	234	411	14	142	1,730	24	925	676
5	423	475	15	114	4,370	25	550	488
6	1,080	382	16	148	1,450	26	625	470
7	462	769	17	403	802	27	640	1,210
8	278	610	18	1,540	615	28	540	662
9	263	532	19	1,250	511	29	386	439
10	191	879	20	893	595	30	289	330
						31	231	258
Monthly mean discharge, in cubic feet per second							739	792
Runoff, in inches							19.23	20.61
Runoff, in acre-feet							45,440	48,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 16		
12 p.m.	2.37	200
Dec. 17		
11 a.m.	2.30	178
6 p.m.	2.81	370
8	3.51	726
10	4.08	1,060
12 p.m.	5.04	1,730
Dec. 18		
1 a.m.	5.64	2,230
3	6.37	2,920
6	5.49	2,090
9	4.73	1,510
3 p.m.	4.13	1,090
9	4.00	1,010
12 p.m.	3.85	920
Dec. 19		
10 a.m.	3.50	720
1 p.m.	4.00	1,010
2	4.53	1,370
3	5.19	1,850
5	5.70	2,280
8	5.15	1,820
10	4.73	1,510
12 p.m.	4.42	1,290
Dec. 20		
4:30 a.m.	4.00	1,010
8 a.m.	3.77	872

Hour	Gage height	Discharge
Dec. 20--Con.		
4 p.m.	3.55	748
12 p.m.	3.77	872
Dec. 21		
10 a.m.	3.53	736
3 p.m.	4.42	1,290
4	5.60	2,190
5	6.77	3,370
8	8.16	5,440
10	8.46	5,980
12 p.m.	9.00	7,050
Dec. 22		
2 a.m.	9.63	8,480
4:30	8.81	6,670
6	9.05	7,160
10	7.83	4,880
1 p.m.	7.02	3,680
5	6.38	2,930
8	6.09	2,640
12 p.m.	5.91	2,470
Dec. 23		
8 a.m.	5.43	2,040
4 p.m.	4.97	1,680
12 p.m.	4.37	1,260
Dec. 24		
7 a.m.	4.00	1,010
1 p.m.	3.83	908
7	3.54	747

Hour	Gage height	Discharge
Dec. 24--Con.		
12 p.m.	3.39	665
Jan. 13		
12 p.m.	3.34	640
Jan. 14		
6 a.m.	3.82	902
11	4.43	1,300
2 p.m.	5.17	1,840
4	5.93	2,490
8	6.48	3,030
11	6.11	2,660
12 p.m.	6.36	2,910
Jan. 15		
1 a.m.	6.95	3,590
2	7.71	4,690
4	8.63	6,310
8	7.87	4,940
10	8.35	5,780
12 m.	8.84	6,730
2 p.m.	7.93	5,040
3	7.41	4,220
5	6.50	3,050
8	5.86	2,420
12 p.m.	5.36	1,990
Jan. 16		
8 a.m.	4.82	1,570
2 p.m.	4.52	1,360
7	4.27	1,190
12 p.m.	4.00	1,010

REDWOOD CREEK BASIN

427. Redwood Creek near Blue Lake, Calif.

Location.--Lat 40°54'20", long 123°48'55", in NE¼ sec.15, T.6 N., R.3 E., on right bank 400 ft upstream from Lupton Creek and 9.1 miles east of town of Blue Lake.

Drainage area.--67.5 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 850 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,800 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 12,100 cfs 12 p.m. Dec. 21 (gage height, 13.68 ft).

1953 to November 1955: Discharge, 9,200 cfs Dec. 31, 1954 (gage height, 11.64 ft).

Flood of Jan. 17, 1953, reached a stage of 15.3 ft, from floodmarks.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	937	734	11	520	830	21	5,040	2,150
2	588	640	12	437	757	22	7,900	3,550
3	441	625	13	355	950	23	4,740	2,780
4	313	1,270	14	310	4,340	24	2,720	1,890
5	862	1,020	15	286	5,740	25	2,050	1,470
6	2,010	812	16	457	3,150	26	2,260	1,150
7	790	1,100	17	748	2,140	27	1,780	1,360
8	670	842	18	1,920	1,780	28	1,230	1,040
9	696	724	19	3,170	2,420	29	888	782
10	512	874	20	2,470	2,400	30	724	615
						31	635	522
Monthly mean discharge, in cubic feet per second							1,563	1,628
Runoff, in inches							26.70	27.80
Runoff, in acre-feet							96,120	100,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 21--Con.			Jan. 13--Con.		
12 p.m.	3.08	472	6 a.m.	5.86	2,030	2 p.m.	4.48	729
			9	5.69	1,910	6	4.48	729
Dec. 17			11	5.76	1,960	7	4.63	818
3 a.m.	3.01	445	1 p.m.	6.50	2,530	12 p.m.	6.10	2,000
8	2.93	414	5:30	12.04	9,760			
11	2.97	430	6	11.27	8,680	Jan. 14		
1 p.m.	3.10	480	10	12.34	10,200	3 a.m.	7.00	2,920
7	4.83	1,350	12 p.m.	13.68	12,100	5	7.40	3,360
9	4.97	1,430				8	7.30	3,250
12 p.m.	4.64	1,230	Dec. 22			9	7.65	3,650
			3 a.m.	12.90	11,000	10	9.26	3,970
Dec. 18			4	13.10	11,200	12 m.	9.10	4,240
8 a.m.	4.94	1,410	6	12.30	10,100	12:30 p.m.	8.30	4,520
1:30 p.m.	5.06	1,490	12 m.	10.10	7,040	3	9.50	6,200
5	7.10	3,050	6 p.m.	9.00	5,500	4	9.70	6,480
6	7.15	3,100	8	9.25	5,850	10	8.28	4,490
12 p.m.	6.30	2,370	11	8.85	5,290	12 p.m.	9.14	5,700
			12 p.m.	9.10	5,640			
Dec. 19						Jan. 15		
5:30 a.m.	5.71	1,930	Dec. 23			2 a.m.	9.70	6,480
7:30	6.00	2,130	2:30 a.m.	9.90	6,760	5	9.73	6,520
1 p.m.	9.42	6,090	10	8.30	4,520	7	9.05	5,570
3	8.04	4,160	4 p.m.	8.05	4,170	10	10.09	7,030
5	7.82	3,870	12	7.35	3,300	11	10.47	7,560
8	6.67	2,670				2 p.m.	9.75	6,550
12 p.m.	5.94	2,090	Jan. 11			4	8.95	5,430
			12 p.m.	4.45	712	6	8.33	4,560
Dec. 20						11	7.75	3,780
7 a.m.	5.49	1,770	Jan. 12			12 p.m.	7.75	3,780
11	5.49	1,770	5 p.m.	4.30	635			
1 p.m.	5.69	1,910	7	4.46	718	Jan. 16		
6	7.45	3,420	11	5.35	1,340	6 p.m.	6.92	2,830
10	7.92	4,000	12 p.m.	5.15	1,180	12 p.m.	6.62	2,520
12 p.m.	6.85	2,820						
			Jan. 13					
Dec. 21			2 a.m.	4.87	979			
3 a.m.	6.27	2,350	7 a.m.	4.63	818			

428. Redwood Creek at Orick, Calif.

Location.--Lat 41°17'20", long 124°03'30", in NE¼ sec.4, T.10 N., R.1 E., on downstream side of left pier of bridge on U.S. Highway 101 at Orick and 0.9 mile downstream from Prairie Creek.

Drainage area.--278 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 10 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 24,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 50,000 cfs 6 a.m. Dec. 22 (gage height, 23.95 ft, from floodmarks).

1911-13, 1953 to November 1955: Discharge, 27,200 cfs Nov. 24, 1953 (gage height, 19.22 ft).

Flood of Jan. 18, 1953, reached a stage of 23.95 ft, from floodmarks (discharge, 50,000 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3,790	2,760	11.....	2,310	4,870	21.....	13,900	5,580
2.....	3,770	2,500	12.....	2,060	4,040	22.....	35,300	9,130
3.....	3,020	2,250	13.....	1,700	4,600	23.....	17,300	12,400
4.....	2,010	3,330	14.....	1,460	11,500	24.....	9,420	7,440
5.....	2,360	4,100	15.....	1,310	21,200	25.....	6,100	5,320
6.....	8,010	3,300	16.....	1,610	15,000	26.....	5,950	4,370
7.....	4,940	4,550	17.....	2,190	8,390	27.....	5,670	5,740
8.....	3,340	4,410	18.....	7,630	6,790	28.....	4,420	4,680
9.....	3,750	3,910	19.....	10,400	5,720	29.....	3,480	3,560
10.....	2,600	4,870	20.....	9,520	5,680	30.....	2,870	2,870
						31.....	2,360	2,400
Monthly mean discharge, in cubic feet per second......................							5,953	6,041
Runoff, in inches...							24.69	25.05
Runoff, in acre-feet..							366,000	371,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 20--Con.			Dec. 26		
12 p.m.......	7.95	1,290	5 p.m........	11.98	8,220	6 a.m........	11.00	5,000
			9............	12.18	8,670	12 m.........	11.40	5,800
Dec. 16			12 p.m.......	12.65	9,800	6 p.m........	12.05	7,120
4 a.m........	7.95	1,290				12 p.m.......	11.68	6,310
8............	8.00	1,330	Dec. 21					
3 p.m........	8.42	1,690	2:30 a.m.....	12.82	10,200	Dec. 27		
6............	8.68	1,960	5............	12.68	9,870	6 a.m........	11.45	5,910
9............	8.77	2,050	10...........	12.03	8,330	6 p.m........	11.22	5,440
12 p.m.......	8.76	2,040	12 m.........	12.00	8,260	12 p.m.......	11.00	5,000
Dec. 17			2 p.m........	12.24	8,820			
6 a.m........	8.61	1,890	4............	13.08	10,800	Jan. 13		
12 m.........	8.47	1,740	6............	14.95	15,500	12 p.m.......	10.78	4,420
6 p.m........	8.62	1,900	9............	19.10	26,800			
8............	9.01	2,400	12 p.m.......	21.50	35,800	Jan. 14		
10...........	9.66	3,450				6 a.m........	12.07	7,050
12 p.m.......	10.72	5,440	Dec. 22			12 m.........	13.30	9,980
			3 a.m........	23.20	45,100	6 p.m........	15.60	16,400
Dec. 18			6............	23.95	50,000	8............	16.30	18,300
3 a.m........	11.82	7,860	9............	23.15	44,800	10...........	16.55	19,000
5:30.........	12.12	8,530	12 m.........	21.35	35,000	12 p.m.......	16.65	19,400
8............	11.97	8,190	4 p.m........	19.67	28,400			
12 m.........	11.51	7,180	8............	18.18	23,900	Jan. 15		
3 p.m........	11.44	7,030	12 p.m.......	17.30	21,300	6 a.m........	19.00	21,300
6............	11.66	7,510				12 m.........	19.90	21,900
8............	11.68	7,560	Dec. 23			3 p.m........	20.00	22,200
12 p.m.......	12.24	8,820	6 a.m........	16.82	19,900	8............	18.35	21,400
			12 m.........	16.00	17,500	12 p.m.......	16.90	20,100
Dec. 19			6 p.m........	15.07	14,900			
8 a.m........	11.74	7,690	12 p.m.......	14.20	12,500	Jan. 16		
10...........	11.78	7,780				6 a.m........	15.85	17,100
2 p.m........	12.64	9,780	Dec. 24			12 m.........	15.08	14,900
6............	14.58	14,500	6 a.m........	13.50	10,500	6 p.m........	14.25	12,600
7............	14.78	15,000	12 m.........	13.00	9,200	12 p.m.......	13.50	10,600
8............	14.77	15,000	6 p.m........	12.50	8,120			
12 p.m.......	13.92	12,800	12 p.m.......	12.10	7,230	Jan. 17		
						6 a.m........	12.85	9,080
Dec. 20			Dec. 25			12 m.........	12.45	8,120
6 a.m........	12.82	10,200	8 a.m........	11.63	6,200	8 p.m........	12.00	7,340
12 m.........	12.15	8,600	4 p.m........	11.38	5,760	12 p.m.......	11.90	7,120
4 p.m........	11.95	8,150	12 p.m.......	11.22	5,440			

LOWER KLAMATH LAKE BASIN

429. Antelope Creek near Tennant, Calif.

Location.--Lat 41°32'45", long 121°55'05", in NW¼ sec.25, T.43 N., R.1 W., on right bank 2.5 miles south of Tennant, 4 miles downstream from Frog Lake, and 17 miles southeast of town of Mount Hebron.

Drainage area.--18.8 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,080 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 200 cfs and extended above by logarithmic plotting; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 422 cfs 7 a.m. Dec. 22 (gage height, 3.93 ft).
1952 to November 1955: Discharge, 194 cfs May 27, 1952 (gage height, 2.82 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	14	49	11.....	14	37	21.....	140	47
2.....	13	45	12.....	13	35	22.....	362	46
3.....	12	43	13.....	13	34	23.....	313	44
4.....	12	42	14.....	13	38	24.....	166	42
5.....	13	40	15.....	13	81	25.....	116	40
6.....	13	39	16.....	13	83	26.....	97	40
7.....	13	33	17.....	12	64	27.....	77	39
8.....	13	45	18.....	10	56	28.....	68	36
9.....	14	42	19.....	30	52	29.....	65	32
10.....	14	39	20.....	68	50	30.....	56	28
						31.....	51	24
Monthly mean discharge, in cubic feet per second							59.4	44.0
Runoff, in inches							3.64	2.70
Runoff, in acre-feet							3,650	2,710

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 21--Con.			Dec. 24--Con.		
12 p.m.......	1.22	13	2 p.m........	3.09	134	12 p.m.......	2.28	132
			12 p.m.......	3.68	258			
Dec. 18						Jan. 13		
9 a.m........	1.25	14	Dec. 22			12 m.........	1.16	33
5 p.m........	1.04	6.8	2 a.m........	3.89	388			
12 p.m.......	1.02	6.2	3............	3.83	342	Jan. 14		
			5............	3.92	413	11 a.m.......	1.18	34
Dec. 19			7............	3.93	422	12 p.m.......	1.43	50
12 m.........	1.53	24	9............	3.91	418			
10 p.m.......	2.23	60	9:30 p.m.....	3.33	297	Jan. 15		
12 p.m.......	2.24	60	12 p.m.......	3.48	326	12 m.........	1.78	78
						10 p.m.......	2.13	114
Dec. 20			Dec. 23			12 p.m.......	2.11	111
10 a.m.......	2.28	63	2 a.m........	3.70	370			
8 p.m........	2.47	76	5:30.........	3.82	395	Jan. 16		
12 p.m.......	2.64	88	3 p.m........	3.28	288	6 a.m........	1.91	90
			12 p.m.......	2.82	210	3 p.m........	1.76	76
Dec. 21			Dec. 24			12 p.m.......	1.67	69
5 a.m........	2.56	82	12 m.........	2.49	160			

430. Butte Creek near Macdoel, Calif.

Location.--Lat 41°43', long 122°00', in NE¼ sec.30, T.45 N., R.1 W., on right bank 7 miles south of Macdoel and 7.5 miles downstream from Little Antelope Creek.

Drainage area.--178 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 238 cfs 5 a.m. Jan. 16 (gage height, 5.42 ft).
1921-22, 1951 to November 1955: Discharge, 156 cfs June 10, 1922 (gage height, 2.91 ft).

Remarks.--Flows slightly affected by overflow from Antelope Creek through diversion ditch above station flowing into Butte Creek.

Mean discharge, in cubic feet per second, 1955-56, of Butte Creek near Macdoel, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	9.4	36	11.....	9.4	32	21.....	22	67
2.....	9.4	34	12.....	9.4	36	22.....	45	59
3.....	8.8	33	13.....	9.4	42	23.....	167	67
4.....	6.8	32	14.....	9.1	50	24.....	155	63
5.....	7.3	31	15.....	9.1	92	25.....	100	50
6.....	12	30	16.....	8.8	193	26.....	70	42
7.....	11	29	17.....	9.1	97	27.....	53	40
8.....	13	28	18.....	10	69	28.....	50	35
9.....	11	28	19.....	13	62	29.....	45	30
10.....	9.4	30	20.....	18	62	30.....	41	25
						31.....	38	20
Monthly mean discharge, in cubic feet per second......................							31.9	49.8
Runoff, in inches..							0.21	0.32
Runoff, in acre-feet..							1,960	3,060

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 24--Con.			Jan. 15		
12 p.m.......	2.39	25	7 p.m........	4.40	152	10 a.m.......	3.42	79
			10...........	3.83	108	9 p.m........	3.95	116
Dec. 22			12 p.m.......	3.82	107	12 p.m.......	4.60	168
6 a.m........	2.56	36						
8 p.m........	2.75	49	Dec. 25			Jan. 16		
12 p.m.......	3.10	78	6 a.m........	3.93	115	2 a.m........	5.00	200
			12 m.........	3.75	102	5............	5.42	238
Dec. 23			2 p.m........	3.97	118	9............	5.29	226
3 a.m........	3.88	130	6............	3.42	79	3 p.m........	5.00	200
5............	4.65	172	12 p.m.......	3.37	76	5............	4.85	188
8............	4.83	186				8............	4.24	139
6 p.m........	4.61	169	Dec. 26			12 p.m.......	4.10	128
12 p.m.......	4.88	190	5 a.m........	3.47	83			
			4 p.m........	3.20	64	Jan. 17		
Dec. 24			12 p.m.......	3.06	56	8 a.m........	3.75	102
1 a.m........	4.90	192				10...........	3.57	90
11...........	4.27	142	Jan. 14			2 p.m........	3.63	94
2 p.m........	4.57	166	12 p.m.......	3.16	62	12 p.m.......	3.37	76

KLAMATH RIVER BASIN

431. Williamson River near Klamath Agency, Oreg.

Location.--Lat 42°44', long 121°50', in SW¼ sec.1, T.33 S., R.7 E., on right bank 250 ft downstream from bridge, 0.6 mile southwest of railroad station at Kirk, about 10 miles upstream from Spring Creek, and 10 miles northeast of Klamath Agency.

Drainage area.--1,290 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,481.10 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,140 cfs 4:30 a.m. Dec. 23 (gage height, 5.65 ft).

1908-10, 1954 to November 1955: Daily discharge, 1,590 cfs Mar. 13, 1910, estimated on basis of a gage-height record about 11 miles downstream below Spring Creek.

Remarks.--Natural regulation by marshes above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	410	832	11.....	410	683	21.....	560	808
2.....	410	816	12.....	442	690	22.....	938	816
3.....	414	832	13.....	480	690	23.....	1,010	824
4.....	414	816	14.....	495	662	24.....	992	718
5.....	388	792	15.....	500	739	25.....	1,010	739
6.....	313	776	16.....	490	768	26.....	983	725
7.....	297	641	17.....	460	784	27.....	880	683
8.....	333	532	18.....	414	792	28.....	912	704
9.....	357	549	19.....	455	784	29.....	776	683
10.....	388	634	20.....	485	792	30.....	746	676
						31.....	808	662
Monthly mean discharge, in cubic feet per second......................							580	730
Runoff, in inches..							0.41	0.52
Runoff, in acre-feet..							35,640	44,910

432. Sprague River near Beatty, Oreg.

Location.--Lat 42°27', long 121°15', in NW¼SE¼ sec.13, T.36 S., R.12 E., on right bank 1½ miles east of Beatty and 4 miles upstream from Sycan River.

Drainage area.--513 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,305.35 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Backwater from aquatic vegetation at times.

Maxima.--December 1955 to January 1956: Discharge, 3,340 cfs 8 a.m. Dec. 23 (gage height, 9.44 ft).
1912-26, 1953 to November 1955: Discharge, 2,020 cfs Mar. 10, 1954 (gage height, 7.96 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	226	399	11.....	214	597	21.....	1,300	1,070
2.....	233	387	12.....	356	739	22.....	2,170	1,010
3.....	222	373	13.....	624	729	23.....	3,150	1,300
4.....	191	383	14.....	700	819	24.....	2,270	1,110
5.....	174	379	15.....	459	1,680	25.....	1,390	765
6.....	206	394	16.....	371	2,660	26.....	1,020	643
7.....	202	410	17.....	365	2,020	27.....	1,140	575
8.....	200	361	18.....	357	1,220	28.....	809	522
9.....	204	343	19.....	562	948	29.....	453	459
10.....	200	401	20.....	873	1,010	30.....	385	466
						31.....	394	373
Monthly mean discharge, in cubic feet per second......................							691	792
Runoff, in inches..							1.55	1.78
Runoff, in acre-feet...							42,490	48,680

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 23			Jan. 15		
12 p.m.......	4.86	665	8 a.m........	9.44	3,340	6 a.m........	6.44	1,170
			12 m.........	9.42	3,320	12 m.........	7.48	1,720
Dec. 20			6 p.m........	9.24	3,140	6 p.m........	8.15	2,170
6 a.m........	5.13	739	12 p.m.......	8.97	2,870	12 p.m.......	8.53	2,450
12 m.........	5.60	880						
6 p.m........	6.02	1,010	Dec. 24			Jan. 16		
12 p.m.......	6.18	1,060	6 a.m........	8.65	2,560	12 m.........	8.87	2,770
			12 m.........	8.13	2,140	3 p.m........	8.89	2,790
Dec. 21			6 p.m........	7.94	2,010	12 p.m.......	8.65	2,560
8 a.m........	6.30	1,110	12 p.m.......	7.68	1,840			
12 m.........	6.49	1,200				Jan. 17		
6 p.m........	7.08	1,490	Dec. 25			12 m.........	7.97	2,030
12 p.m.......	7.61	1,800	6 a.m........	7.26	1,590	12 p.m.......	7.04	1,470
			12 m.........	6.78	1,340			
Dec. 22			4 p.m........	6.52	1,210	Jan. 18		
6 a.m........	7.83	1,930	12 p.m.......	6.20	1,070	12 m.........	6.50	1,200
12 m.........	8.06	2,090				12 p.m.......	6.04	1,010
6 p.m........	8.38	2,330	Jan. 14					
12 p.m.......	8.98	2,880	12 p.m.......	5.68	904			

433. Sprague River near Chiloquin, Oreg.

Location.--Lat 42°35', long 121°51', in NE¼ sec.35, T.34 S., R.7 E., on right bank 1¼ miles east of Chiloquin and 4 miles upstream from Modoc Point Canal intake.

Drainage area.--1,580 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 28 to 9 a.m Jan. 3. Datum of gage is 4,202.43 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for period of no gage-height record estimated on basis of weather records and records for station near Beatty and Williamson River below Sprague River near Chiloquin.

Maxima.--December 1955 to January 1956: Discharge, 5,380 cfs 9 p.m. Dec. 25 (gage height, 6.63 ft).
1920 to November 1955: Discharge, 6,650 cfs Apr. 1, 1943 (gage height, 7.47 ft).

Mean discharge, in cubic feet per second, 1955-56, of Sprague River near Chiloquin, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	515	1,200	11.....	421	843	21.....	1,070	3,080
2.....	482	1,100	12.....	482	899	22.....	1,650	2,810
3.....	454	1,100	13.....	454	1,050	23.....	2,270	2,810
4.....	438	1,130	14.....	538	1,250	24.....	3,930	2,710
5.....	426	1,080	15.....	738	1,530	25.....	4,920	2,770
6.....	370	1,060	16.....	885	1,960	26.....	5,070	2,690
7.....	400	1,060	17.....	878	2,820	27.....	4,220	2,330
8.....	375	998	18.....	780	4,180	28.....	3,200	1,930
9.....	410	927	19.....	752	4,330	29.....	2,200	1,700
10.....	410	906	20.....	794	3,750	30.....	1,600	1,490
						31.....	1,300	1,290
Monthly mean discharge, in cubic feet per second......................							1,369	1,896
Runoff, in inches..							1.00	1.38
Runoff, in acre-feet...							84,160	116,600

Peak discharge.--Jan. 18 (12 p.m.) 4,500 cfs (gage height, 6.07 ft).

434. Williamson River below Sprague River near Chiloquin, Oreg.

Location.--Lat 42°34', long 121°52', in sec.3, T.35 S., R.7 E., on left bank a quarter of a mile downstream from Sprague River and three-quarters of a mile southwest of Chiloquin.

Drainage area.--3,000 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 28 to 10 a.m. Jan. 3 and 11 a.m. Jan. 27 to 11 a.m. Jan. 31. Gage heights for Dec. 28-30 and Jan. 30 computed from graph based on once-daily observer's readings. Datum of gage is 4,155.55 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for days of no gage-height record estimated from weather records and records for station near Klamath Agency and Sprague River near Chiloquin.

Maxima.--December 1955 to January 1956: Discharge, 6,430 cfs 9 p.m. Dec. 25 (gage height, 6.78 ft).

1917 to November 1955: Discharge, 7,660 cfs Apr. 1, 1943 (gage height, 7.29 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,330	2,400	11.....	1,200	1,930	21.....	2,030	4,370
2.....	1,280	2,350	12.....	1,330	2,000	22.....	2,950	4,160
3.....	1,240	2,320	13.....	1,340	2,180	23.....	3,510	4,160
4.....	1,230	2,320	14.....	1,410	2,340	24.....	4,980	3,930
5.....	1,220	2,280	15.....	1,590	2,700	25.....	5,930	4,020
6.....	1,100	2,250	16.....	1,770	3,150	26.....	6,180	3,960
7.....	1,090	2,190	17.....	1,780	3,910	27.....	5,360	3,300
8.....	1,070	2,000	18.....	1,650	5,230	28.....	4,050	3,000
9.....	1,140	1,850	19.....	1,630	5,530	29.....	3,030	2,700
10.....	1,160	1,930	20.....	1,690	4,970	30.....	2,620	2,490
						31.....	2,500	2,200
Monthly mean discharge, in cubic feet per second......................							2,270	3,040
Runoff, in inches..							0.87	1.17
Runoff, in acre-feet...							139,600	186,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 24			Dec. 26--Con.		
12 p.m.......	3.62	1,790	12 m.........	5.95	5,070	3 p.m........	6.64	6,190
			6 p.m........	6.16	5,410	12 p.m.......	6.49	5,930
Dec. 21			8............	6.16	5,410			
12 m.........	3.78	1,980	11...........	6.33	5,680	Dec. 27		
6 p.m........	3.92	2,140	12 p.m.......	6.34	5,690	6 a.m........	6.35	5,710
12 p.m.......	4.14	2,410				6 p.m........	5.92	5,020
			Dec. 25			12 p.m.......	5.76	4,770
Dec. 22			5 a.m........	6.43	5,840	Jan. 14		
6 a.m........	4.40	2,750	11...........	6.33	5,680	12 p.m.......	4.16	2,440
12 m.........	4.58	3,000	1 p.m........	6.34	5,690			
6 p.m........	4.71	3,180	8............	6.72	6,320	Jan. 15		
12 p.m.......	4.80	3,310	9............	6.78	6,430	12 m.........	4.34	2,660
			11...........	6.73	6,340	6 p.m........	4.49	2,880
Dec. 23			12 p.m.......	6.72	6,320	12 p.m.......	4.57	2,990
12 m.........	4.86	3,390						
6 p.m........	5.00	3,600	Dec. 26			Jan. 16		
12 p.m.......	5.33	4,100	12 m.........	6.66	6,220	12 m.........	4.67	3,130

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Williamson River below Sprague River near Chiloquin, Oreg.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 16--Con.			Jan. 18--Con.			Jan. 20		
12 p.m.......	4.83	3,350	12 m.........	6.06	5,250	12 m.........	5.89	4,970
			3 p.m........	6.16	5,410	12 p.m.......	5.69	4,650
Jan. 17			8............	6.28	5,600			
6 a.m........	4.96	3,540	12 p.m.......	6.31	5,650	Jan. 21		
12 m.........	5.16	3,840				12 m.........	5.49	4,340
12 p.m.......	5.70	4,670	Jan. 19			12 p.m.......	5.36	4,140
			6 a.m........	6.31	5,650			
Jan. 18			4 p.m........	6.21	5,490			
6 a.m........	5.88	4,960	12 p.m.......	6.08	5,280			

435. Upper Klamath Lake near Klamath Falls, Oreg.

Location.--Lat 42°15', long 121°48', in SW$\frac{1}{4}$ sec.19, T.38 S., R.9 E., at southeast end of lake, 1 mile upstream from outlet and 2 miles northwest of Klamath Falls.

Drainage area.--3,810 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,098.22 ft above mean sea level, datum of Bureau of Reclamation. Gage readings have been reduced to elevations above Bureau of Reclamation datum.

Maxima.--December 1955 to January 1956: Elevation, 4,142.68 ft 11 p.m. Jan. 22.
1904 to November 1955: Elevation, 4,144.98 ft about Apr. 20, 1904, from high-water marks.

Remarks.--Reservoir is formed by concrete dam at outlet of natural lake completed in 1921, which replaced a temporary dam built in 1919; storage began Apr. 15, 1919. Capacity, 584,000 acre-ft between elevations 4,135.0 and 4,143.3 ft. Dead storage below elevation 4,135 ft not known; lake level ordinarily maintained between elevations, 4,137 ft (contents, 118,600 acre-ft) and 4,143.3 ft. Water stored may be diverted through "A" Canal for irrigation of land under Klamath project of Bureau of Reclamation, or released to Link River through dam or powerplants at Klamath Falls. Area of lake at high stages is partly controlled by diking. Lake elevations, particularly extremes, are very much affected by wind.

Elevation, in feet, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4,140.53	4,141.84	11.....	4,140.67	4,141.55	21.....	4,140.73	4,142.02
2.....	4,140.56	4,141.81	12.....	4,140.66	4,141.50	22.....	4,141.13	4,142.10
3.....	4,140.59	4,141.78	13.....	4,140.81	4,141.48	23.....	4,141.47	4,142.18
4.....	4,140.62	4,141.67	14.....	4,140.87	4,141.48	24.....	4,141.19	4,142.31
5.....	4,140.55	4,141.79	15.....	4,140.78	4,141.56	25.....	4,140.67	4,142.43
6.....	4,140.69	4,141.24	16.....	4,140.76	4,141.69	26.....	4,141.35	4,142.40
7.....	4,140.66	4,141.71	17.....	4,140.75	4,141.72	27.....	4,141.86	4,142.33
8.....	4,140.59	4,141.68	18.....	4,140.57	4,141.77	28.....	4,142.07	4,142.34
9.....	4,140.69	4,141.64	19.....	4,140.71	4,141.86	29.....	4,142.07	4,142.32
10.....	4,140.69	4,141.59	20.....	4,140.83	4,141.95	30.....	4,141.94	4,142.31
						31.....	4,141.86	4,142.29

436. Link River at Klamath Falls, Oreg.

Location.--Lat 42°13', long 121°48', in NW$\frac{1}{4}$ sec.32, T.38 S., R.9 E., on left bank 600 ft upstream from outlet of Keno Canal and three-eighths of a mile above Main Street Bridge at Klamath Falls.

Drainage area.--3,810 sq mi, approximately (including Crater Lake basin).

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,083.71 ft above mean sea level, datum of 1929, or 4,085.50 ft above mean sea level, datum of Bureau of Reclamation.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 5,880 cfs 4 p.m. Jan. 29 (gage height, 3.81 ft).
1904 to November 1955: Discharge, 9,400 cfs May 12, 1904 (gage height, 7.30 ft at bridge).

Remarks.--Regulation since April 1919 by Upper Klamath Lake (see station 435). Records presented herein include flow in Keno Canal which since August 1923 has diverted from Upper Klamath Lake at Link River dam, 4,800 ft above station, for power generation and returns flow to Link River 600 ft below station.

Mean discharge, in cubic feet per second, 1955-56, of Link River at Klamath Falls, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	1,500	5,450	11.....	2,460	5,480	21.....	2,490	4,530
2.....	1,490	5,390	12.....	2,340	5,430	22.....	2,660	4,870
3.....	1,500	5,450	13.....	2,540	5,430	23.....	2,690	5,260
4.....	2,060	5,520	14.....	2,380	5,400	24.....	2,640	5,390
5.....	2,460	5,520	15.....	2,180	4,720	25.....	2,740	5,360
6.....	2,470	5,130	16.....	2,050	4,010	26.....	3,480	5,260
7.....	2,450	5,520	17.....	2,290	4,020	27.....	4,150	5,300
8.....	2,430	5,530	18.....	2,400	4,020	28.....	4,550	5,530
9.....	2,460	5,520	19.....	2,520	4,020	29.....	4,680	5,850
10.....	2,460	5,490	20.....	2,590	4,260	30.....	5,050	5,820
						31.....	5,480	5,350
Monthly mean discharge, in cubic feet per second							2,763	5,156
Runoff, in acre-feet							169,900	317,000

437. Klamath River at Keno, Oreg.

Location.--Lat 42°08', long 121°58', in SE¼ sec.35, T.39 S., R.7 E., on left bank 2 miles west of Keno and 5 miles upstream from Spencer Creek.

Drainage area.--3,920 sq mi, approximately (not including Lost River or Lower Klamath Lake basins).

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,970 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 7,150 cfs 2 p.m. Jan. 25 (gage height, 11.00 ft).

1904-13, 1930 to November 1955: Discharge, 6,830 cfs May 1-6, 1938 (gage height, 10.10 ft, at datum 0.72 ft higher).

Remarks.--Flow regulated by Upper Klamath Lake (see station 435).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,860	5,670	11.....	2,840	6,110	21.....	4,440	6,370
2.....	1,870	5,700	12.....	2,820	6,230	22.....	5,440	6,460
3.....	1,880	5,700	13.....	2,930	6,180	23.....	5,640	6,790
4.....	2,360	5,810	14.....	3,160	6,270	24.....	5,660	7,020
5.....	2,840	5,920	15.....	3,200	6,680	25.....	5,810	7,080
6.....	2,840	5,840	16.....	3,030	6,700	26.....	5,850	6,910
7.....	2,840	5,900	17.....	2,760	6,700	27.....	5,740	6,720
8.....	2,820	5,950	18.....	2,730	6,730	28.....	5,440	6,580
9.....	2,840	6,010	19.....	2,780	6,480	29.....	5,620	6,620
10.....	2,840	6,010	20.....	3,300	6,300	30.....	5,280	6,670
						31.....	5,600	6,600
Monthly mean discharge, in cubic feet per second							3,712	6,345
Runoff, in acre-feet							228,200	390,200

438. Fall Creek at Copco, Calif.

Location.--Lat 41°58', long 122°22', in NE¼ sec.36, T.48 N., R.5 W., on right bank 1,500 ft upstream from mouth and 0.8 mile south of Fall Creek powerplant and Copco post office.

Drainage area.--20 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 7 a.m. Dec. 28 to 10 a.m. Dec. 29. Datum of gage is 2,362.77 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 90 cfs and by slope-area measurements of 180 cfs and 875 cfs.

Maxima.--December 1955 to January 1956: Discharge, 875 cfs 7 a.m. Dec. 22 (gage height, 4.35 ft).

1928 to November 1955: Discharge observed, 350 cfs Jan. 7, 1948 (gage height, 3.22 ft).

Remarks.--Flows not affected by regulation or diversions.

Mean discharge, in cubic feet per second, 1955-56, of Fall Creek at Copco, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	71	58	11.....	60	68	21.....	247	98
2.....	54	57	12.....	59	64	22.....	474	147
3.....	48	59	13.....	58	80	23.....	244	141
4.....	46	74	14.....	54	134	24.....	124	110
5.....	52	67	15.....	50	249	25.....	94	99
6.....	58	61	16.....	51	149	26.....	87	90
7.....	52	66	17.....	53	115	27.....	78	81
8.....	61	64	18.....	73	106	28.....	70	74
9.....	69	60	19.....	129	109	29.....	64	69
10.....	60	63	20.....	86	115	30.....	61	65
						31.....	59	63
Monthly mean discharge, in cubic feet per second......................							91.8	92.1
Runoff, in inches..							5.29	5.31
Runoff, in acre-feet..							5,640	5,660

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22			Jan. 14		
12 p.m.......	1.64	73	3 a.m........	4.01	695	8 a.m........	1.89	93
			4............	3.86	620	12 m.........	2.36	159
Dec. 19			6............	3.99	685	4 p.m........	2.46	189
7 a.m........	1.57	66	7............	4.35	875	10...........	2.24	152
1 p.m........	2.32	165	10...........	3.54	476	12 p.m.......	2.44	185
5............	2.59	214	6 p.m........	2.88	258			
12 p.m.......	1.99	116	12 p.m.......	3.16	325	Jan. 15		
						4 a.m........	2.97	298
Dec. 20			Dec. 23			8............	2.89	278
6 a.m........	1.75	86	2 a.m........	3.44	411	12 m.........	2.96	295
12 m.........	1.67	77	6............	3.03	292	8 p.m........	2.50	196
6 p.m........	1.68	78	12 m.........	2.66	212	12 p.m.......	2.39	176
12 p.m.......	1.82	94	12 p.m.......	2.33	154			
						Jan. 16		
Dec. 21			Dec. 24			12 m.........	2.20	146
12 m.........	1.71	81	10 a.m.......	2.09	118	12 p.m.......	2.08	128
4 p.m........	2.91	282	6 p.m........	2.09	118			
9............	3.93	655	12 p.m.......	1.99	105	Jan. 17		
11...........	3.75	568	Jan. 13			12 m.........	1.96	112
12 p.m.......	3.79	586	12 p.m.......	1.69	70	12 p.m.......	1.93	108

439. Klamath River below Fall Creek, near Copco, Calif.

Location.--Lat 41°58', long 122°22', in NE¼ sec.36, T.48 N., R.5 W., on right bank 500 ft downstream from Fall Creek, half a mile downstream from Copco plant 2 of the California Oregon Power Co., and 1 mile south of Copco.

Drainage area.--4,370 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,310 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,600 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 12,000 cfs 11 p.m. Dec. 21 (gage height, 8.15 ft).

1923 to November 1955: Discharge, 9,660 cfs Apr. 27, May 3, 1938 (gage height, 7.30 ft); gage height, 7.31 ft Apr. 21, 1952.

Remarks.--Flow regulated by Upper Klamath Lake (see station 435) and Copco Lake.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2,490	6,050	11.....	2,970	6,320	21.....	6,420	7,050
2.....	2,580	5,960	12.....	2,880	6,620	22.....	10,400	7,650
3.....	2,180	6,180	13.....	2,880	6,820	23.....	8,520	7,910
4.....	1,320	6,520	14.....	3,050	7,190	24.....	6,890	7,840
5.....	2,540	6,290	15.....	3,280	9,050	25.....	6,980	7,860
6.....	3,250	6,290	16.....	3,280	8,250	26.....	6,590	7,740
7.....	3,280	6,250	17.....	3,180	7,720	27.....	6,050	7,500
8.....	3,200	6,320	18.....	3,420	7,670	28.....	6,270	7,210
9.....	3,320	6,180	19.....	3,590	7,500	29.....	6,340	7,140
10.....	3,300	6,320	20.....	3,830	7,310	30.....	5,650	7,010
						31.....	5,740	6,800
Monthly mean discharge, in cubic feet per second......................							4,376	7,049
Runoff, in acre-feet..							269,100	433,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Klamath River below Fall Creek near Copco, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 21--Con.			Dec. 22--Con.		
12 p.m.......	5.22	4,670	11 p.m.......	8.15	12,000	12 p.m.......	7.05	9,020
			12 p.m.......	8.10	11,900			
Dec. 21						Dec. 23		
4 a.m........	5.30	4,810	Dec. 22			2 a.m........	7.35	9,790
6............	5.50	5,190	2 a.m........	7.60	10,400	9............	7.20	9,400
1 p.m........	5.20	4,630	6............	7.90	11,300	12 m..........	6.85	8,520
6............	6.25	6,780	6 p.m........	7.65	10,600	6 p.m........	6.35	7,310
8 p.m........	7.60	10,200	9 p.m........	6.40	7,430	12 p.m.......	6.40	7,430

440. Keene Creek at Hyatt Prairie, near Ashland, Oreg.

Location.--Lat 42°10', long 122°29', in SW$\frac{1}{4}$ sec.16, T.39 S., R.3 E., on right bank a quarter of a mile upstream from Burnt Creek, half a mile downstream from Hyatt Prairie Reservoir Dam, and 12 miles east of Ashland.

Drainage area.--About 11 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,715 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 70 cfs and extended above on basis of computation of flow over Columbus-type control at gage height 5.33 ft.

Maxima.--December 1955 to January 1956: Discharge, 8.1 cfs 6:30 p.m. Dec. 22 (gage height, 2.42 ft).
1917-22, 1948 to November 1955: Discharge, 751 cfs May 3, 1954 (gage height, 5.33 ft), caused by failure of flashboards on spillway of Hyatt Prairie Reservoir Dam.

Remarks.--Flow completely regulated by Hyatt Prairie Reservoir (capacity, 16,180 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.4	0.8	11.....	0.4	0.5	21.....	2.4	1.7
2.....	.3	.7	12.....	.4	.5	22.....	4.8	1.9
3.....	.3	.7	13.....	.6	.5	23.....	2.6	1.7
4.....	.3	.6	14.....	.6	1.2	24.....	1.9	1.6
5.....	.3	.6	15.....	.6	3.4	25.....	1.6	1.6
6.....	.3	.6	16.....	.6	2.7	26.....	1.4	1.4
7.....	.3	.6	17.....	.5	2.2	27.....	1.2	1.3
8.....	.3	.6	18.....	.6	1.9	28.....	1.1	1.1
9.....	.3	.5	19.....	.8	1.9	29.....	.9	1.1
10.....	.3	.5	20.....	.9	1.8	30.....	.8	1.0
						31.....	.8	.9
Monthly mean discharge, in cubic feet per second......................							0.92	1.23
Runoff, in acre-feet..							57	76

441. Little Shasta River near Little Shasta, Calif.

(Miscellaneous site)

Location.--Lat 41°44'30", long 122°19'40", in SE$\frac{1}{4}$ sec.17, T.45 N., R.4 W., 1.0 mile upstream from Terwilliger Ranch, 1.2 miles downstream from Dewey Gulch, and 3.7 miles northeast of Little Shasta.

Drainage area.--54.9 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,430 cfs Dec. 22.

442. Shasta River near Montague, Calif.

(Gaging station, discontinued 1933)

Location.--Lat 41°42'30", long 122°32'20", in NE$\frac{1}{4}$ sec.33, T.45 N., R.6 W., at highway bridge, three-quarters of a mile downstream from Little Shasta River and 1$\frac{1}{4}$ miles southwest of Montague.

Drainage area.--670 sq mi (revised).

Discharge record.--Peak discharge by contracted-opening measurement.

Maxima.--December 1955 to January 1956: Discharge, 4,870 cfs Dec. 22.
1911-13, 1917-22, 1923-33: Discharge, 5,700 cfs Feb. 11, 1925 (gage height, 14.9 ft), from rating curve extended above 950 cfs by logarithmic plotting.

443. Shasta River near Yreka, Calif.

Location.--Lat 41°49'30", long 122°35'40", in E$\frac{1}{2}$ sec.24, T.46 N., R.7 W., on right bank 0.5 mile upstream from mouth and 7 miles north of Yreka.

Drainage area.--796 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,000 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 6,090 cfs 3 a.m. Dec. 22 (gage height, 9.43 ft).
1933-41, 1944 to November 1955: Discharge, 2,520 cfs Jan. 18, 1953 (gage height, 6.90 ft), from rating curve extended above 1,100 cfs by logarithmic plotting and velocity-area studies.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	208	375	11.....	203	414	21.....	1,800	858
2.....	199	349	12.....	203	397	22.....	5,440	858
3.....	191	344	13.....	199	437	23.....	4,330	1,000
4.....	182	388	14.....	195	756	24.....	2,080	840
5.....	203	450	15.....	195	2,060	25.....	1,210	804
6.....	254	442	16.....	199	2,060	26.....	986	798
7.....	216	576	17.....	208	1,330	27.....	918	774
8.....	203	702	18.....	428	1,000	28.....	655	696
9.....	233	522	19.....	574	918	29.....	518	595
10.....	212	450	20.....	780	1,010	30.....	455	540
						31.....	424	496
Monthly mean discharge, in cubic feet per second.......							777	750
Runoff, in inches.......							11.26	10.86
Runoff, in acre-feet.......							47,800	46,090

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.......	3.93	424	10 p.m.......	8.64	4,920	11 a.m.......	8.36	4,520
			10:30........	8.85	5,220	4 p.m........	7.64	3,600
Dec. 19			11...........	8.74	5,060	8............	7.27	3,160
10 a.m.......	3.85	388	12 p.m.......	8.80	5,140	12 p.m.......	7.00	2,860
12 m.........	3.89	406						
4 p.m........	4.41	645	Dec. 22			Dec. 24		
5............	4.55	720	3 a.m........	9.43	6,090	8 a.m........	6.45	2,270
9............	4.91	937	7............	9.10	5,590	4 p.m........	5.97	1,790
12 p.m.......	4.93	951	9............	9.04	5,500	12 p.m.......	5.65	1,500
			12 m.........	8.59	4,850			
Dec. 20			2 p.m........	9.10	5,590	Jan. 14		
12 p.m.......	4.55	720	5............	9.20	5,740	12 p.m.......	4.96	972
			9............	8.65	4,930			
Dec. 21			10...........	8.64	4,920	Jan. 15		
5 a.m........	4.68	798	12 p.m.......	8.74	5,060	6 a.m........	5.67	1,510
11...........	4.65	780				12 m.........	6.41	2,230
2 p.m........	4.75	840	Dec. 23			5 p.m........	6.94	2,790
4............	5.22	1,150	3 a.m........	9.12	5,620	6............	6.94	2,790
6............	6.72	2,550	4:30.........	9.14	5,650	12 p.m.......	6.55	2,370
9:30 p.m.....	8.95	5,360	6 a.m........	9.09	5,580			

444. Beaver Creek near Walker, Calif.

(Crest-stage station)

Location.--Lat 41°53'50", long 122°49'20", in W½ sec.30, T.47 N., R.8 W., on right bank just upstream from Buckhorn Gulch, 2.0 miles upstream from mouth and 15 miles northwest of Yreka.

Drainage area.--103 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,900 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 4,120 cfs 2 a.m. Dec. 22 (gage height, 4.90 ft, from floodmarks).

445. East Fork Scott River at Callahan, Calif.

(Miscellaneous site)

Location.--Lat 41°18'40", long 122°47'50", in SW¼ sec.16, T.40 N., R.8 W., at Callahan ranger station and just upstream from mouth.

Drainage area.--57.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 6,600 cfs Dec. 22.

446. South Fork Scott River near Callahan, Calif.

(Miscellaneous site)

Location.--Lat 41°17'45", long 122°48'20", in SE¼ sec.20, T.40 N., R.8 W., 0.9 mile downstream from Boulder Creek, 1 mile southwest of Callahan, and 1.3 miles upstream from mouth.

Drainage area.--42 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 3,320 cfs Dec. 22.

447. Scott River near Fort Jones, Calif.

Location.--Lat 41°38'35", long 123°00'35", in NW¼ sec.28, T.44 N., R.10 W., on right bank 150 ft south of road from Fort Jones to Scott Bar, 1.8 miles upstream from Snow Creek, and 10.5 miles downstream from Fort Jones.

Drainage area.--662 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,625.80 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,500 cfs and by slope-area measurement at 38,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 38,500 cfs 10 a.m. Dec. 22 (gage height, 21.40 ft).
1941 to November 1955: Discharge, 16,000 cfs Jan. 19, 1953 (gage height, 15.08 ft), from rating curve extended above 3,400 cfs).

Remarks.--Flow not affected by irrigation diversions.

Mean discharge, in cubic feet per second, 1955-56, of Scott River near Fort Jones, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	367	1,480	11.....	610	1,520	21.....	8,860	3,260
2.....	394	1,380	12.....	860	1,470	22.....	30,300	3,840
3.....	330	1,370	13.....	805	1,630	23.....	15,500	5,160
4.....	295	2,120	14.....	698	2,500	24.....	8,060	3,840
5.....	287	2,300	15.....	638	10,300	25.....	4,950	3,320
6.....	515	1,770	16.....	698	10,700	26.....	4,000	3,040
7.....	638	2,220	17.....	785	5,690	27.....	3,200	2,740
8.....	512	1,970	18.....	1,160	4,380	28.....	2,540	2,380
9.....	590	1,620	19.....	2,940	3,810	29.....	2,090	2,130
10.....	536	1,520	20.....	4,470	3,690	30.....	1,850	1,870
						31.....	1,620	1,690
Monthly mean discharge, in cubic feet per second							3,261	3,120
Runoff, in inches							5.68	5.43
Runoff, in acre-feet							200,500	191,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Jan. 13		
12 p.m.......	4.47	795	4 a.m........	17.33	24,500	12 p.m.......	5.70	1,660
			6............	19.22	30,700			
Dec. 18			8............	21.00	37,100	Jan. 14		
8 a.m........	4.72	920	10...........	21.40	38,500	9 a.m........	6.00	1,920
2 p.m........	5.03	1,090	12 m.........	21.25	38,000	2 p.m........	6.56	2,440
5............	5.42	1,320	2 p.m........	20.83	36,500	6............	7.14	3,020
8............	5.83	1,600	4............	20.26	34,400	9............	7.67	3,600
12 p.m.......	6.12	1,830	6............	19.26	30,900	12 p.m.......	8.32	4,450
			8............	18.31	27,700			
Dec. 19			10...........	17.42	24,700	Jan. 15		
6 a.m........	6.68	2,320	12 p.m.......	16.72	22,600	3 a.m........	9.16	5,620
12 m.........	7.24	2,880				6............	10.04	6,960
6 p.m........	7.77	3,440	Dec. 23			9............	10.93	8,470
9............	8.22	3,940	2 a.m........	16.00	20,400	12 m.........	11.98	10,400
12 p.m.......	8.61	4,410	5............	15.22	18,200	3 p.m........	12.82	12,300
			8............	14.59	16,500	6............	13.51	13,800
Dec. 20			11...........	14.07	15,200	9............	13.93	14,800
6 a.m........	8.87	4,750	3 p.m........	13.60	14,000	12 p.m.......	14.05	15,100
10...........	8.58	4,380	7............	13.07	12,900			
2 p.m........	8.26	3,990	9............	12.70	12,000	Jan. 16		
7............	8.56	4,350	12 p.m.......	12.25	11,100	4 a.m........	13.62	14,100
10...........	8.94	4,840				8............	12.74	12,100
12 p.m.......	9.22	5,230	Dec. 24			12 m.........	11.90	10,400
			4 a.m........	11.67	9,940	4............	11.11	8,820
Dec. 21			7............	11.20	9,000	8............	10.48	7,670
4 a.m........	9.53	5,660	10...........	10.75	8,150	12 p.m.......	10.06	7,000
8............	9.92	6,270	1 p.m........	10.39	7,520			
11...........	10.53	7,360	5............	9.99	6,880	Jan. 17		
2 p.m........	11.25	8,800	9............	9.65	6,340	6 a.m........	9.55	6,180
5............	12.09	10,600	12 p.m.......	9.39	5,950	12...........	9.11	5,550
8............	12.91	12,400				6 p.m........	8.80	5,120
10...........	13.83	14,600	Dec. 25			12 p.m.......	8.60	4,840
12 p.m.......	14.85	17,200	6 a.m........	8.95	5,330			
			12 m.........	8.63	4,880			
Dec. 22			6 p.m........	8.33	4,460			
2 a.m........	16.00	20,400	12 p.m.......	8.21	4,290			

448. Klamath River near Seiad Valley, Calif.

Location.--Lat 41°51'20", long 123°13'50", in SE¼ sec.4, T.46 N., R.12 W., on right bank 0.4 mile upstream from Bittenbender Creek, 1.4 miles downstream from Grider Creek, and 2.2 miles west of town of Seiad Valley.

Drainage area.--6,980 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 1 a.m. Dec. 22 to 4 p.m. Jan. 11, 2 a.m. to 5 p.m. Jan. 22, and 6 a.m. Jan. 29 to 12 p.m. Jan. 31. Altitude of gage is 1,320 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 25,000 cfs and by slope-area measurements at 55,200 and 122,000 cfs. Discharge for periods of no gage-height record estimated on basis of records for downstream stations.

Maxima.--December 1955 to January 1956: Discharge, 122,000 cfs between 9 a.m. and 12 m. Dec. 22 (gage height, 29.2 ft, from floodmarks).
1912-25, 1951 to November 1955: Discharge, 55,200 cfs Jan. 19, 1953 (gage height, 20.10 ft).

Remarks.--Flow slightly regulated by reservoirs and powerplants above station.

Mean discharge, in cubic feet per second, 1955-56, of Klamath River near Seiad Valley, Calif.

Day	December	January	Day	December	January	Day	December	January
1.....	3,970	8,200	11.....	5,090	10,800	21.....	27,900	16,900
2.....	4,210	7,700	12.....	5,430	10,800	22.....	62,000	18,600
3.....	3,590	7,400	13.....	5,310	11,600	23.....	44,000	24,400
4.....	2,790	8,300	14.....	5,260	14,300	24.....	31,000	19,800
5.....	2,380	11,700	15.....	5,280	38,100	25.....	22,000	17,600
6.....	4,650	11,000	16.....	5,510	36,400	26.....	19,000	16,700
7.....	5,020	11,300	17.....	5,650	23,100	27.....	16,000	15,600
8.....	4,800	11,600	18.....	7,060	19,500	28.....	13,800	14,100
9.....	5,510	10,400	19.....	12,100	18,100	29.....	11,500	12,500
10.....	5,210	10,300	20.....	16,900	18,300	30.....	10,100	11,000
						31.....	9,100	9,600
Monthly mean discharge, in cubic feet per second							12,330	15,350
Runoff, in inches							2.04	2.53
Runoff, in acre-feet							757,900	943,500

Peak discharge.--Jan. 15 (8 p.m.) 50,400 cfs (gage height, 19.23 ft); Jan. 23 (3:30 a.m.) 26,500 cfs (gage height, 13.86 ft).

449. Indian Creek near Happy Camp, Calif.

(Crest-stage station)

Location.--Lat 41°51'40", long 123°24'00", in SE¼ sec.16, T.17 N., R.7 E., on left bank 100 ft downstream from Luther Gulch, 1.0 mile upstream from former gaging station, 4.8 miles north of Happy Camp, and 5.7 miles upstream from mouth.

Drainage area.--118 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,350 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 23,000 cfs 9 p.m. Dec. 21.
1911-15: Discharge observed, 8,430 cfs Feb. 17, 1912 (gage height, 10.6 ft, site and datum then in use), from rating curve extended above 1,300 cfs.

450. Elk Creek near Happy Camp, Calif.

(Crest-stage station)

Location.--Lat 41°45'00", long 123°21'10", in W½ sec.25, T.16 N., R.7 E., on left bank 0.7 mile downstream from East Fork, 3.2 miles upstream from mouth, and 3.2 miles southeast of Happy Camp.

Drainage area.--91.1 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,300 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 14,400 cfs Dec. 21 (gage height, 8.35 ft, from floodmarks).

451. South Fork Salmon River near Forks of Salmon, Calif.

(Crest-stage station)

Location.--Lat 41°13'20", long 123°15'00", in NE¼ sec.31, T.39 N., R.12 W., on left bank 100 ft downstream from Methodist Creek, 4.5 miles southeast of Forks of Salmon, and 5.5 miles upstream from mouth.

Drainage area.--251 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,450 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 24,200 cfs 9 p.m. Dec. 22 (gage height, 12.2 ft, from floodmarks).

452. North Fork Salmon River at Sawyers Bar, Calif.

(Crest-stage station)

Location.--Lat 41°18', long 123°08', in SE¼ sec.29, T.40 N., R.11 W., on right bank just downstream from Jessops Gulch at Sawyers Bar.

Drainage area.--135 sq mi.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 19,200 cfs Dec. 22 (gage height, 18.15 ft, from floodmarks).

453. Salmon River at Somesbar, Calif.

Location.--Lat 41°22'50", long 123°28'10", in NW¼ sec.2, T.11 N., R.6 E., on right bank 0.5 mile east of Somesbar post office and 1.5 miles upstream from mouth.

Drainage area.--746 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 500 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 15,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 84,000 cfs 6:30 a.m. Dec. 22 (gage height, 28.80 ft).

1911-15, 1927 to November 1955: Discharge, 45,900 cfs Jan. 18, 1953 (gage height, 19.23 ft), from rating curve extended above 15,000 cfs by logarithmic plotting.

Maximum discharge since 1890, 49,000 cfs February 1927 (gage height, 24.8 ft, at bridge gage 0.5 mile downstream).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,900	2,940	11	3,180	3,590	21	30,300	9,130
2	1,760	2,600	12	3,600	3,590	22	63,700	12,800
3	1,400	2,650	13	2,990	4,190	23	29,900	16,400
4	1,130	4,740	14	2,540	9,890	24	16,100	11,100
5	1,500	5,460	15	2,400	34,600	25	10,800	8,790
6	4,800	4,210	16	3,060	22,300	26	8,760	7,460
7	3,120	4,380	17	3,320	13,500	27	7,220	6,570
8	2,280	3,900	18	6,930	10,900	28	5,560	5,580
9	2,850	3,400	19	12,700	9,830	29	4,330	4,890
10	2,340	3,360	20	15,200	9,770	30	3,640	4,360
						31	3,110	3,900
Monthly mean discharge, in cubic feet per second							8,465	8,090
Runoff, in inches							13.08	12.50
Runoff, in acre-feet							520,500	497,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 16			Dec. 20--Con.			Dec. 22--Con.		
12 p.m.	5.57	3,450	2 p.m.	9.22	12,600	4 p.m.	21.25	53,000
			8	10.45	16,100	8	18.75	43,000
Dec. 17			12 p.m.	12.38	21,600	10	17.70	39,100
12 m.	5.37	3,040				12 p.m.	16.90	36,200
6 p.m.	5.50	3,300	Dec. 21					
12 p.m.	5.80	3,950	2:30 a.m.	12.91	23,200	Dec. 23		
			6	12.38	21,600	2 a.m.	16.40	34,400
Dec. 18			11:30	11.56	19,200	8	16.28	34,000
4 a.m.	6.28	5,090	2 p.m.	11.93	20,300	12 m.	15.45	31,000
8	6.86	6,480	4	13.25	24,300	6 p.m.	13.98	25,900
12 m.	7.18	7,270	6	16.20	34,100	12 p.m.	12.55	21,300
6 p.m.	7.43	7,900	7	18.25	41,600			
12 p.m.	8.05	9,480	8	20.10	48,600	Dec. 24		
			10	23.60	62,400	6 a.m.	11.50	18,000
Dec. 19			12 p.m.	25.70	70,900	12 m.	10.71	15,700
8 a.m.	7.77	8,750				1 p.m.	10.63	15,400
11	8.08	9,560	Dec. 22			2	10.49	15,000
2 p.m.	9.22	12,600	2 a.m.	27.10	76,800	6	10.15	14,000
5	10.92	17,400	4	27.77	79,600	12 p.m.	9.65	12,600
7	11.42	18,800	6:30	28.80	84,000			
12 p.m.	10.83	17,100	8	28.35	82,100	Dec. 25		
			10	26.80	75,600	6 a.m.	9.28	11,500
Dec. 20			12 m.	24.95	67,800	12 m.	8.99	10,700
8 a.m.	9.65	13,800	2 p.m.	23.30	61,200	6 p.m.	8.70	9,910

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Salmon River at Somesbar, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 25--Con.			Jan. 15			Jan. 16--Con.		
12 p.m.	8.55	9,490	4 a.m.	13.85	25,500	8 a.m.	13.40	24,000
			6	15.50	31,200	12 m.	12.60	21,400
Jan. 13			9	17.00	36,600	6 p.m.	11.80	18,900
12 p.m.	6.65	4,550	12 m.	18.30	41,300	12 p.m.	11.00	16,500
			2 p.m.	18.73	43,000			
Jan. 14			6	17.95	40,000	Jan. 17		
6 a.m.	7.11	5,650	9	16.90	36,200	6 a.m.	10.30	14,500
12 m.	8.08	8,170	12 p.m.	15.40	30,800	12 m.	9.82	13,100
4 p.m.	9.35	11,700				12 p.m.	9.32	11,600
8	10.80	15,900	Jan. 16					
12 p.m.	11.92	19,300	4 a.m.	14.32	27,100			

454. Klamath River at Somesbar, Calif.

Location.--Lat 41°22'40", long 123°29'30", in NE¼ sec.4, T.11 N., R.6 E., on left bank 300 ft downstream from Salmon River and 1 mile west of Somesbar post office.

Drainage area.--8,480 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 5:30 p.m. Dec. 21 to 2 p.m. Jan. 23; graph based on once-daily staff-gage readings used Dec. 29 to Jan. 23. Altitude of gage is 450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 49,000 cfs and extended above on basis of slope-conveyance study. Discharge for Dec. 21-28 estimated on basis of records for station near Klamath.

Maxima.--December 1955 to January 1956: Discharge, 202,000 cfs 7 a.m. Dec. 22 (gage height, 59.4 ft, from floodmarks).

1911-15, 1927 to November 1955: Discharge, 137,000 cfs Jan. 18, 1953 (gage height, 49.7 ft).

Flood of Feb. 21, 1927, reached a stage of 50.8 ft, from floodmarks (discharge, 141,000 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	11,300	21,600	11	14,000	27,000	21	75,000	36,600
2	10,400	21,600	12	15,000	27,000	22	170,000	35,200
3	8,720	21,600	13	14,100	27,000	23	115,000	57,900
4	7,100	31,100	14	12,400	34,900	24	70,000	48,100
5	6,930	33,800	15	11,900	98,200	25	50,000	40,500
6	14,400	28,400	16	15,000	80,900	26	43,000	37,200
7	13,400	28,400	17	15,900	52,500	27	37,000	34,800
8	11,300	28,400	18	24,800	40,800	28	32,000	31,800
9	15,000	28,400	19	43,300	36,600	29	28,400	28,900
10	12,600	27,000	20	52,500	40,800	30	24,400	26,600
						31	23,000	24,600
Monthly mean discharge, in cubic feet per second							32,190	36,720
Runoff, in inches							4.38	4.99
Runoff, in acre-feet							1,979,000	2,258,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 19			Dec. 20		
12 p.m.	11.40	16,000	7 a.m.	17.88	33,500	4 a.m.	24.05	51,200
			10	18.30	34,600	10	23.20	48,600
Dec. 18			1 p.m.	20.50	40,800	1 p.m.	22.95	47,900
2 a.m.	11.60	16,500	4	24.70	53,100	2	22.97	47,900
6	13.05	20,400	6	26.00	57,000	6	24.60	52,800
12 m.	14.92	25,500	7:30	26.20	57,600	10	27.50	61,600
4 p.m.	15.58	27,300	10	25.80	56,400	12 p.m.	28.95	66,200
8	16.85	30,700	12 p.m.	25.10	54,300			
11	17.75	33,100						
12 p.m.	17.80	33,300						

455. Bluff Creek near Weitchpec, Calif.

(Crest-stage station)

Location.--Lat 41°14'10", long 123°39'30", in NW¼ sec.30, T.10 N., R.5 E., on left bank at Bluff Creek guard station, 0.8 mile upstream from mouth and 4 miles northeast of Weitchpec.

Drainage area.--74.6 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 400 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 20,200 cfs 12 p.m. Dec. 21 (gage height, 25.6 ft, from floodmarks).

456. Trinity River at Lewiston, Calif.

Location.--Lat 40°42', long 122°48', in NE¼ sec.19, T.33 N., R.8 W., on downstream side of left pier of highway bridge at Lewiston and 0.8 mile downstream from Deadwood Creek.

Drainage area.--727 sq mi.

Gage-height record.--Water-stage recorder graph except 10 p.m. Dec. 21 to 3 p.m. Dec. 29, for which graph was reconstructed on basis of high-water mark in gage house and outside gage readings. Datum of gage is 1,794.10 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 39,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 71,600 cfs 2 a.m. Dec. 22 (gage height, 27.3 ft).

1911 to November 1955: Discharge, 40,300 cfs Feb. 28, 1940, from rating curve extended above 13,000 cfs; gage height, 21.1 ft Jan. 7, 1948.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	755	2,630	11	832	5,720	21	29,100	5,280
2	770	2,320	12	1,120	4,810	22	38,700	5,550
3	658	2,260	13	1,080	5,310	23	14,700	6,990
4	576	3,370	14	1,010	8,430	24	8,560	5,500
5	562	4,020	15	992	21,000	25	6,040	4,680
6	654	4,180	16	1,180	16,200	26	4,780	4,280
7	674	7,840	17	1,400	9,470	27	4,240	3,950
8	610	5,530	18	4,140	6,740	28	3,890	3,460
9	782	4,060	19	12,900	5,500	29	3,470	3,080
10	720	4,520	20	14,100	5,590	30	3,120	2,840
						31	2,770	2,630
Monthly mean discharge, in cubic feet per second							5,319	5,734
Runoff, in inches							8.43	9.09
Runoff, in acre-feet							327,000	352,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 20			Dec. 22--Con.		
12 p.m.	7.67	1,620	6 a.m.	13.62	12,800	4 a.m.	25.6	61,800
			12 m.	13.17	11,600	6	21.5	41,400
Dec. 18			4 p.m.	13.37	12,200	9	19.8	34,300
6 a.m.	8.04	2,010	8	14.55	15,600	12 m.	19.25	32,100
12 m.	9.32	3,690	12 p.m.	16.02	20,200	6 p.m.	18.5	29,100
4 p.m.	10.05	4,880				12 p.m.	17.2	24,200
8	11.11	6,840	Dec. 21					
12 p.m.	11.93	8,610	4 a.m.	16.78	22,800	Dec. 23		
			12 m.	15.90	19,800	6 a.m.	15.0	16,900
Dec. 19			4 p.m.	17.20	24,200	12 m.	13.8	13,300
1 a.m.	12.02	8,810	6	19.25	32,100	12 p.m.	12.6	10,000
6	11.73	8,170	8	22.25	44,800			
10	12.12	9,050	10	24.40	55,200	Jan. 12		
1 p.m.	13.35	12,100	12 p.m.	26.1	64,600	12 p.m.	10.20	4,780
4	14.95	16,800						
8	16.01	20,100	Dec. 22			Jan. 13		
12 p.m.	15.10	17,200	2 a.m.	27.3	71,600	6 a.m.	10.78	5,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Trinity River at Lewiston, Calif.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 13--Con.			Jan. 15--Con.			Jan. 17		
12 m.........	10.57	5,410	8 a.m........	15.52	18,600	6 a.m........	12.70	10,300
8 p.m........	10.34	5,000	12 m.........	16.84	23,000	12 m.........	12.32	9,330
12 p.m.......	10.48	5,240	4 p.m........	17.60	25,700	6 p.m........	11.98	8,510
			5............	17.68	26,000	12 p.m.......	11.68	7,790
Jan. 14			7............	17.60	25,700			
6 a.m........	10.95	6,140	12 p.m.......	16.77	22,700	Jan. 18		
12 m.........	11.60	7,600				6 a.m........	11.49	7,340
6 p.m........	12.90	10,800	Jan. 16			12 m.........	11.18	6,640
12 p.m.......	13.70	13,100	6 a.m........	15.60	18,800	12 p.m.......	10.76	5,760
			12 m.........	14.60	15,700			
Jan. 15			6 p.m........	13.80	13,300			
3 a.m.......	14.18	14,400	12 p.m.......	13.20	11,700			

457. North Fork Trinity River near Helena, Calif.

(Miscellaneous site)

Location.--Lat 40°47'00", long 123°07'45", in SE$\frac{1}{4}$ sec.20, T.34 N., R.11 W., 500 ft upstream from East Fork and 0.8 mile north of Helena.

Drainage area.--105 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 21,600 cfs Dec. 21.

458. Trinity River near Burnt Ranch, Calif.

(Gaging station, discontinued 1940)

Location.--Lat 40°47', long 123°25', in sec.29, T.5 N., R.7 E., 2 miles upstream from highway bridge at Cedar Flat and 7 miles upstream from Burnt Ranch post office.

Drainage area.--1,429 sq mi.

Gage-height record.--Peak stage determined from floodmarks. Datum of gage is 1,007.98 ft above mean sea level (general adjustment of 1929).

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 172,000 cfs Dec. 22.
1931-40: Discharge, 80,700 cfs Feb. 28, 1940 (gage height, 33.8 ft, from floodmarks), from rating curve extended above 24,000 cfs on basis of logarithmic extension and velocity-area studies.

459. South Fork Trinity River near Hyampom, Calif.

(Crest-stage station)

Location.--Lat 40°36'00", long 123°26'50", in N$\frac{1}{2}$ sec.36, T.3 N., R.6 E., on left bank 1.0 mile upstream from Hayfork Creek and 1.2 miles south of Hyampom.

Drainage area.--342 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,300 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 39,400 cfs about 12 p.m. Dec. 21 (gage height, 22.2 ft, from floodmarks).

460. Hayfork Creek near Hayfork, Calif.

(Crest-stage station)

Location.--Lat 40°31'10", long 123°05'00", in SE¼ sec.22, T.31 N., R.11 W., on right bank 3.7 miles upstream from Carr Creek and 5.7 miles southeast of Hayfork.

Drainage area.--87.2 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 2,570 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 3,880 cfs Dec. 22 (gage height, 15.15 ft, from gage; 16.5 ft, from floodmarks).

461. Hayfork Creek near Hyampom, Calif.

Location.--Lat 40°37'35", long 123°26'00", in NW¼ sec.19, T.3 N., R.7 E., on right bank 1.2 miles upstream from mouth and 1.3 miles northeast of Hyampom.

Drainage area.--379 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,280 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,100 cfs and by slope-area measurement at 25,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 25,300 cfs 3 a.m. Dec. 22 (gage height, 18.00 ft).
1953 to November 1955: Discharge, 17,900 cfs Jan. 17, 1954 (gage height, 15.37 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	309	1,030	11.....	601	2,520	21.....	8,720	2,900
2.....	352	940	12.....	686	2,330	22.....	18,200	2,880
3.....	272	915	13.....	565	3,320	23.....	11,200	3,770
4.....	228	1,650	14.....	472	7,690	24.....	5,330	3,050
5.....	237	2,450	15.....	409	12,700	25.....	3,250	2,660
6.....	962	2,150	16.....	464	8,190	26.....	2,670	2,560
7.....	747	3,050	17.....	944	4,940	27.....	2,280	2,400
8.....	505	2,600	18.....	5,020	3,790	28.....	1,780	2,040
9.....	835	2,060	19.....	11,900	3,080	29.....	1,440	1,790
10.....	646	2,200	20.....	7,580	3,100	30.....	1,200	1,600
						31.....	1,040	1,440
Monthly mean discharge, in cubic feet per second							2,930	3,155
Runoff, in inches							8.91	9.60
Runoff, in acre-feet							180,200	194,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 19--Con.			Dec. 24		
12 p.m.......	4.92	619	12 p.m.......	13.67	13,400	6 a.m........	10.20	6,060
						1 p.m........	9.55	5,020
Dec. 17			Dec. 20			12 p.m.......	8.73	3,880
4 a.m........	5.04	673	8 a.m........	11.00	7,500			
7............	5.08	691	1 p.m........	10.16	5,990	Jan. 13		
1 p.m........	5.06	682	12 p.m.......	10.02	5,740	12 p.m.......	9.17	4,460
3............	5.12	709						
5............	5.36	825	Dec. 21			Jan. 14		
8............	6.11	1,290	10 a.m.......	9.32	4,680	4 a.m........	10.08	5,840
12 p.m.......	7.62	2,620	12 m.........	9.28	4,620	8............	10.30	6,240
			2 p.m........	9.66	5,190	11...........	10.65	6,870
Dec. 18			10...........	15.75	19,000	4 p.m........	11.90	9,300
2 a.m........	7.95	2,950	12 p.m.......	16.96	22,400	6............	12.29	10,100
11...........	8.15	3,180				12 p.m.......	12.24	10,000
1 p.m........	8.12	3,140	Dec. 22					
3............	8.48	3,580	3 a.m........	18.00	25,300	Jan. 15		
5............	9.65	5,180	7............	17.50	23,900	1 a.m........	12.19	9,920
8............	12.30	10,200	11...........	16.14	20,100	4............	12.40	10,400
10...........	12.72	11,100	5 p.m........	13.33	12,600	2 p.m........	14.37	15,300
12 p.m.......	12.27	10,100	8............	12.57	10,800	4............	14.30	15,100
			10...........	12.61	10,900	12 p.m.......	12.80	11,300
Dec. 19			12 p.m.......	13.04	11,900			
4 a.m........	11.00	7,500				Jan. 16		
8............	10.40	6,420	Dec. 23			10 a.m.......	11.40	8,300
11...........	10.75	7,050	5 a.m........	14.05	14,400	5 p.m........	10.68	6,920
5 p.m........	15.89	19,400	7............	14.03	14,400	12 p.m.......	10.17	6,010
6............	16.18	20,200	4 p.m........	12.00	9,500			
7 p.m........	16.00	19,700	12 p.m.......	10.93	7,370			

462. South Fork Trinity River near Salyer, Calif.

Location.--Lat 40°50'30", long 123°34'00", in SE¼ sec.1, T.5 N., R.5 E., on right bank 4 miles south of Salyer and 8 miles upstream from mouth.

Drainage area.--899 sq mi.

Gage-height record.--Water-stage recorder graph except 11 p.m. Dec. 19 to 6 a.m. Dec. 27. Altitude of gage is 550 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 21,000 cfs and extended above on basis of slope-conveyance study. Discharge for Dec. 20-27 estimated on basis of records for Trinity River at Lewiston and Hayfork Creek near Hyampom.

Maxima.--December 1955 to January 1956: Discharge, 65,100 cfs Dec. 22 (gage height, 39.4 ft, from floodmarks).

1911-13, 1950 to November 1955: Discharge, 32,100 cfs Jan. 17, 1954 (gage height, 27.80 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,290	3,930	11	2,170	8,600	21	35,000	9,400
2	1,450	3,580	12	2,170	7,640	22	60,000	9,810
3	1,150	3,400	13	1,860	9,670	23	35,000	13,100
4	912	5,850	14	1,590	18,800	24	18,000	10,500
5	1,130	9,160	15	1,420	28,400	25	12,000	8,840
6	5,880	7,610	16	1,680	21,200	26	9,000	8,010
7	3,760	9,670	17	2,800	14,100	27	8,500	7,610
8	2,330	8,440	18	9,850	11,500	28	6,690	6,480
9	3,070	6,870	19	21,400	10,200	29	5,670	5,470
10	2,500	7,460	20	24,000	10,000	30	4,800	4,770
						31	4,090	4,280
Monthly mean discharge, in cubic feet per second							9,392	9,495
Runoff, in inches							12.04	12.17
Runoff, in acre-feet							577,500	583,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 19--Con.			Jan. 15		
12 p.m.	7.97	1,380	4:30 a.m.	22.15	20,600	5 a.m.	24.19	24,200
Dec. 16			7	21.65	19,700	7	24.68	25,200
4 a.m.	8.01	1,400	9	20.85	18,400	9	25.50	26,800
7	8.10	1,450	11	20.35	17,600	12 m.	26.82	29,800
2 p.m.	8.60	1,730	1 p.m.	20.65	18,000	4 p.m.	27.90	32,400
10	9.07	2,050	4	22.00	20,300	4:30	28.21	33,100
12 p.m.	9.13	2,090	6	23.50	22,900	7	28.00	32,600
			9	25.85	27,500	10	26.85	29,800
Dec. 17			12 p.m.	27.8	32,100	12 p.m.	25.94	27,700
6 a.m.	9.25	2,180						
12 m.	9.37	2,270	Jan. 12			Jan. 16		
2 p.m.	9.50	2,370	12 p.m.	14.44	8,160	3 a.m.	24.83	25,500
4	9.78	2,600				6	23.89	23,600
6	10.30	3,080	Jan. 13			8	23.32	22,600
8	11.00	3,860	4 a.m.	14.93	8,900	12 m.	22.28	20,800
12 p.m.	12.25	5,550	8	15.78	10,200	5 p.m.	21.05	18,700
			11	15.90	10,400	9	20.20	17,300
Dec. 18			5 p.m.	15.36	9,580	12 p.m.	19.70	16,500
2 a.m.	13.27	6,980	7	15.29	9,460			
8	14.86	9,290	9	15.38	9,610	Jan. 17		
11	15.12	9,680	10	15.61	9,980	7 a.m.	18.75	15,000
1 p.m.	15.18	9,770	12 p.m.	16.33	11,100	1 p.m.	17.96	13,700
4	15.17	9,760				7	17.34	12,700
6	15.27	9,900	Jan. 14			12 p.m.	17.03	12,200
8	16.10	11,200	2 a.m.	17.30	12,700			
9	17.04	12,600	5	19.00	15,400	Jan. 18		
10	18.20	14,300	7	19.72	16,600	8 a.m.	16.92	12,100
11	19.20	15,800	10	20.56	17,900	1 p.m.	16.62	11,600
12 p.m.	20.36	17,600	12 m.	21.00	18,600	6	16.18	10,900
			4 p.m.	22.63	21,400	10	15.92	10,500
Dec. 19			8	23.77	23,400	12 p.m.	15.80	10,300
2 a.m.	21.60	19,600	12 p.m.	24.11	24,000			

463. Trinity River near Hoopa, Calif.

Location.--Lat 41°01'50", long 123°39'05", in SE¼ sec.31, T.8 N., R.5 E., in Hoopa Indian Reservation, on left bank 0.7 mile downstream from Campbell Creek and 1¾ miles southeast of Hoopa.

Drainage area.--2,846 sq mi.

Gage-height record.--Water-stage recorder graph except 5 p.m. Dec. 22 to 12 m. Dec. 23, for which graph was reconstructed on basis of nearby records as a normal recession graph. Altitude of gage is 315 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 55,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 190,000 cfs 12 m. Dec. 22 (gage height, 36.90 ft).

1911-14, 1916-18, 1931 to November 1955: Discharge, 124,000 cfs Feb. 28, 1940 (gage height, 31.2 ft), from rating curve extended above 53,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4,720	14,200	11.....	7,010	23,000	21.....	68,500	31,100
2.....	5,450	12,700	12.....	8,110	22,300	22.....	158,000	31,200
3.....	4,490	11,700	13.....	7,250	24,700	23.....	115,000	43,500
4.....	3,740	14,700	14.....	6,310	43,700	24.....	71,200	35,400
5.....	4,070	22,600	15.....	5,720	92,100	25.....	45,500	29,100
6.....	13,200	20,100	16.....	6,380	84,400	26.....	39,100	25,500
7.....	10,100	25,000	17.....	8,500	54,400	27.....	34,000	24,500
8.....	6,790	26,600	18.....	21,700	41,700	28.....	28,100	21,600
9.....	8,140	21,100	19.....	51,600	34,700	29.....	23,500	18,900
10.....	7,460	19,900	20.....	61,300	32,400	30.....	19,100	16,600
						31.....	15,800	14,900
Monthly mean discharge, in cubic feet per second.......................							28,060	30,140
Runoff, in inches...							11.37	12.21
Runoff, in acre-feet..							1,725,000	1,853,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 20--Con.			Dec. 25--Con.		
12 p.m.......	9.12	7,380	12 p.m.......	21.15	56,600	2 p.m........	19.35	43,600
						8............	18.92	41,000
Dec. 17			Dec. 21			12 p.m.......	18.78	40,200
12 m.........	9.35	8,050	3 a.m........	21.63	59,500			
3 p.m........	9.43	8,290	6............	21.81	60,600	Jan. 13		
5............	9.54	8,620	11...........	21.61	59,400	12 p.m.......	16.59	27,000
8............	9.87	9,610	3 p.m........	21.98	61,600			
12 p.m.......	10.57	11,700	8............	25.07	81,500	Jan. 14		
			12 p.m.......	29.22	113,000	6 a.m........	17.50	32,500
Dec. 18						12 m.........	18.95	41,200
6 a.m........	12.26	16,800	Dec. 22			6 p.m........	20.80	52,700
9............	13.05	19,200	3 a.m........	31.85	136,000	9............	22.12	61,300
12 m.........	13.47	20,500	6............	34.05	158,000	12 p.m.......	23.40	69,800
6 p.m........	14.63	24,800	9............	35.85	177,000			
12 p.m.......	17.38	37,000	12 m.........	36.90	190,000	Jan. 15		
			3 p.m........	35.30	171,000	7 a.m........	25.25	82,800
Dec. 19			6............	34.20	159,000	12 m.........	26.70	93,200
3 a.m........	18.72	43,600	12 p.m.......	31.90	136,000	4 p.m........	27.85	102,000
5:30.........	18.96	44,800				6............	28.25	105,000
9............	18.65	43,200	Dec. 23			9:30.........	28.60	108,000
11...........	18.68	43,400	6 a.m........	30.45	123,000	12 p.m.......	28.25	105,000
3 p.m........	19.71	48,600	12 m.........	29.48	115,000			
9............	23.47	70,900	6 p.m........	28.37	106,000	Jan. 16		
10...........	24.02	74,400	12 p.m.......	26.70	93,200	8 a.m........	26.50	91,800
12 p.m.......	24.43	77,100				4 p.m........	24.35	76,400
			Dec. 24			12 p.m.......	22.72	65,200
Dec. 20			10 a.m.......	23.75	72,200			
3 a.m........	23.87	73,500	12 p.m.......	20.95	53,700	Jan. 17		
12 m.........	21.40	58,100				12 m.........	20.88	53,200
3 p.m........	20.66	53,800	Dec. 25			12 p.m.......	19.73	45,900
6 p.m........	20.38	52,300	4 a.m........	20.40	50,100			

464. Klamath River near Klamath, Calif.

Location.--Lat 41°30'45", long 123°58'30", in SW¼ sec.17, T.13 N., R.2 E., on right bank 2.8 miles upstream from Turwar Creek and 3.3 miles east of Klamath.

Drainage area.--12,100 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 6 a.m. Dec. 22 to 1 p.m. Dec. 24 when gage heights were from graph based on partial recorder graph, peak stage from floodmarks and records for other streams. Datum of gage is 5.60 ft above mean sea level (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 230,000 cfs and extended to peak stage by flood-routing study.

Maxima.--December 1955 to January 1956: Discharge, 425,000 cfs 1:30 p.m. Dec. 22 (gage height, 49.7 ft).

1910-26, 1950 to November 1955: Discharge, 297,000 cfs Jan. 18, 1953 (gage height, 43.67 ft).

Remarks.--Flow only slightly affected by regulation, storage, and diversion above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	22,000	43,500	11	26,900	58,000	21	171,000	89,600
2	25,900	40,200	12	29,200	56,200	22	378,000	96,300
3	21,300	38,000	13	27,800	58,300	23	254,000	136,000
4	16,700	49,400	14	24,300	89,000	24	169,000	110,000
5	14,900	68,200	15	21,900	211,000	25	115,000	88,800
6	34,600	58,800	16	24,400	213,000	26	98,300	77,400
7	37,000	60,000	17	30,200	141,000	27	89,300	73,800
8	27,200	64,400	18	50,400	109,000	28	73,800	65,900
9	30,700	54,800	19	100,000	93,800	29	61,800	56,900
10	28,700	54,100	20	146,000	90,900	30	53,300	50,400
						31	46,400	45,300
Monthly mean discharge, in cubic feet per second							72,580	82,000
Runoff, in inches							6.92	7.81
Runoff, in acre-feet							4,463,000	5,042,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Jan. 13		
12 p.m.	12.80	32,000	12 p.m.	39.80	268,000	12 p.m.	17.25	61,000
Dec. 18			Dec. 22			Jan. 14		
6 a.m.	14.34	41,000	4 a.m.	45.90	342,000	6 a.m.	17.98	66,800
12 m.	15.65	49,600	8	48.70	400,000	12 m.	19.90	82,200
6 p.m.	17.20	60,600	12 m.	49.65	424,000	6 p.m.	22.70	107,000
12 p.m.	18.27	69,200	1:30 p.m.	49.7	425,000	12 p.m.	26.20	139,000
			4	49.45	419,000			
Dec. 19			8	47.88	381,000	Jan. 15		
6 a.m.	20.16	84,400	12 p.m.	45.0	328,000	6 a.m.	31.00	182,000
12 m.	21.85	99,600				12 m.	35.00	220,000
6 p.m.	23.24	112,000	Dec. 23			6 p.m.	37.55	246,000
12 p.m.	26.60	142,000	6 a.m.	40.5	275,000	11	38.25	252,000
			12 m.	38.0	250,000	12 p.m.	38.20	252,000
Dec. 20			6 p.m.	35.5	225,000			
4 a.m.	28.44	159,000	12 p.m.	33.5	205,000	Jan. 16		
6	28.60	160,000				6 a.m.	36.60	236,000
12 m.	27.40	150,000	Dec. 24			12 m.	34.45	214,000
6 p.m.	25.90	136,000	6 a.m.	31.5	186,000	6 p.m.	32.00	191,000
9	25.55	133,000	12 m.	29.7	170,000	12 p.m.	29.65	170,000
12 p.m.	25.75	135,000	6 p.m.	27.60	151,000			
			12 p.m.	25.85	136,000	Jan. 17		
Dec. 21						6 a.m.	27.93	154,000
8 a.m.	28.12	156,000	Dec. 25			12 m.	26.15	138,000
12 m.	28.54	160,000	6 a.m.	24.46	123,000	6 p.m.	24.85	127,000
4 p.m.	29.00	164,000	12 m.	23.35	113,000	12 p.m.	23.92	118,000
7 p.m.	31.56	187,000	12 p.m.	21.95	101,000			

SMITH RIVER BASIN

465. Middle Fork Smith River at Gasquet, Calif.

(Crest-stage station)

Location.--Lat 41°50'30", long 123°57'10", in NE¼ sec.28, T.17 N., R.2 E., on left bank 0.9 mile southeast of Gasquet and 1.0 mile upstream from mouth.

Drainage area.--130 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 400 ft (from topographic map).

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 26,000 cfs about 2 a.m. Dec. 22 (gage height, 11.5 ft, from floodmarks).

466. North Fork Smith River at Gasquet, Calif.

(Crest-stage station)

Location.--Lat 41°51'30", long 123°58'00", in NE¼ sec.20, T.17 N., R.2 E., on left bank 0.7 mile upstream from mouth and 0.7 mile north of Gasquet.

Drainage area.--158 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 350 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maximum.--December 1955 to January 1956: Discharge, 50,600 cfs Dec. 22 (gage height, 20.9 ft, from floodmarks).

467. South Fork Smith River near Crescent City, Calif.

Location.--Lat 41°47'30", long 124°01'30", in SE¼ sec.11, T.16 N., R.1 E., 300 ft downstream from Craigs Creek, 2.0 miles upstream from mouth, and 9.5 miles east of Crescent City.

Drainage area.--295 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 150 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 42,000 cfs and by slope-area measurement at 108,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 108,000 cfs 2:30 a.m. Dec. 22 (gage height, 36.95 ft).

1911-13, 1954 to November 1955: Gage height observed, 28.6 ft (site and datum then in use) Feb. 17, 1912 (discharge not determined, backwater from Smith River).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7,030	3,260	11.....	4,010	9,610	21.....	38,100	7,450
2.....	5,100	3,300	12.....	3,710	6,920	22.....	59,700	17,700
3.....	3,780	4,850	13.....	3,110	7,000	23.....	17,900	15,200
4.....	2,760	9,480	14.....	2,560	12,500	24.....	10,800	9,030
5.....	3,230	8,370	15.....	2,320	32,100	25.....	9,010	6,330
6.....	8,430	6,300	16.....	5,240	16,900	26.....	14,100	5,130
7.....	5,560	7,070	17.....	4,950	10,300	27.....	10,100	5,270
8.....	4,780	5,660	18.....	11,300	8,640	28.....	6,800	4,410
9.....	6,160	5,490	19.....	14,500	7,400	29.....	4,920	3,460
10.....	4,180	8,940	20.....	13,900	7,920	30.....	3,800	2,890
						31.....	3,070	2,480
Monthly mean discharge, in cubic feet per second							9,513	8,431
Runoff, in inches							37.18	32.95
Runoff, in acre-feet							584,900	518,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Fork Smith River near Crescent City, Calif.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 20--Con.			Dec. 25		
12 p.m.	9.14	2,450	9 a.m.	14.74	10,800	8 a.m.	12.88	7,710
			11	14.76	10,800	12 m.	12.72	7,450
Dec. 16			2 p.m.	15.13	11,600	2 p.m.	12.90	7,740
4 a.m.	9.31	2,610	6	17.18	15,700	6	14.07	9,830
7	9.69	2,990	10	19.35	20,800	12 p.m.	16.00	13,500
10	10.88	4,360	12 p.m.	19.55	21,300			
1 p.m.	12.62	6,890				Jan. 13		
3	13.14	7,750	Dec. 21			12 p.m.	12.15	6,540
4:30	13.25	7,950	4 a.m.	19.43	21,000			
12 p.m.	12.18	6,190	8	18.55	18,800	Jan. 14		
			10:30	18.27	18,100	4 a.m.	12.44	7,000
Dec. 17			1 p.m.	18.85	19,500	8	13.67	9,110
6 a.m.	11.58	5,310	4	23.60	33,100	2 p.m.	15.75	13,000
2 p.m.	11.00	4,520	6	28.55	53,800	6	17.70	16,900
8	10.81	4,270	8	32.70	78,600	9	18.82	19,500
12 p.m.	11.40	5,060	12 p.m.	36.00	101,000	12 p.m.	19.05	20,000
Dec. 18			Dec. 22			Jan. 15		
4 a.m.	13.95	9,210	2:30 a.m.	36.95	108,000	3 a.m.	21.00	25,200
7	14.90	11,100	6	34.70	91,900	6	24.00	34,500
9:30	15.12	11,500	9	31.60	71,400	12:30 p.m.	26.50	44,200
12:30 p.m.	14.97	11,200	12 m.	27.78	50,000	5	23.40	32,400
3	15.35	12,000	3 p.m.	24.90	37,600	9	21.00	25,200
6	16.17	13,600	6	22.82	30,500	12 p.m.	19.73	21,800
8	16.18	13,700	12 p.m.	20.20	23,000			
9	16.10	13,500				Jan. 16		
12 p.m.	16.10	13,500	Dec. 23			4 a.m.	18.62	19,000
			3 a.m.	19.88	22,200	8	18.34	18,300
Dec. 19			12 m.	17.92	17,400	4 p.m.	17.10	15,700
6 a.m.	15.33	12,000	6 p.m.	16.85	15,200	12 p.m.	15.68	12,900
12 m.	16.70	14,700	12 p.m.	15.90	13,300			
3:30 p.m.	18.27	18,100						
12 p.m.	16.22	13,700	Dec. 24					
			8 a.m.	14.92	11,400			
Dec. 20			4 p.m.	14.09	9,860			
6 a.m.	15.05	11,400	12 p.m.	13.44	8,690			

468. Smith River near Crescent City, Calif.

Location.--Lat 41°47'20", long 124°03'20", in SW¼ sec.10, T.16 N., R.1 E., on left bank 0.5 mile downstream from South Fork and 8 miles east of Crescent City.

Drainage area.--613 sq mi.

Gage-height record.--Water-stage recorder graph except for several periods between Dec. 28 and Jan. 31 when graph was doubtful. Altitude of gage is 90 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 33,000 cfs and by slope-area measurement at 152,000 cfs. Discharge for periods of doubtful gage-height record estimated on basis of record for South Fork Smith River near Crescent City.

Maxima.--December 1955 to January 1956: Discharge, 165,000 cfs 3:30 a.m. Dec. 22 (gage height, 41.20 ft).
1931 to November 1955: Discharge, 152,000 cfs Oct. 29, 1950 (gage height, 39.51 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	15,600	7,600	11	8,140	22,600	21	67,800	16,000
2	11,400	7,700	12	8,030	16,200	22	111,000	37,500
3	8,440	13,880	13	7,020	16,400	23	40,600	33,200
4	6,040	21,800	14	5,480	34,000	24	23,300	20,000
5	7,500	18,900	15	4,820	72,000	25	20,500	14,000
6	18,400	15,800	16	10,500	39,000	26	38,400	11,200
7	12,400	17,900	17	11,100	21,300	27	24,200	11,400
8	10,600	14,300	18	22,900	17,600	28	16,000	9,500
9	13,400	13,500	19	30,200	16,100	29	11,500	7,700
10	8,560	20,500	20	27,500	16,900	30	8,000	6,300
						31	7,400	5,500
Monthly mean discharge, in cubic feet per second							19,890	19,230
Runoff, in inches							37.42	36.17
Runoff, in acre-feet							1,223,000	1,183,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Smith River near Crescent City, Calif.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 14			Dec. 20--Con.			Dec. 25--Con.		
12 p.m.	10.05	4,950	12 m.	17.23	21,300	6 p.m.	17.95	22,000
			3 p.m.	17.63	22,600	9	19.95	29,900
Dec. 15			8	20.74	34,100	12 p.m.	21.36	36,800
9 a.m.	9.83	4,640	12 p.m.	23.25	46,200			
6 p.m.	10.02	4,910				Dec. 26		
12 p.m.	10.03	4,920	Dec. 21			2 a.m.	21.85	39,200
			1 a.m.	23.32	46,600	7	21.24	36,200
Dec. 16			6	22.94	44,700	8	21.24	36,200
6 a.m.	10.38	5,410	10	22.05	40,200	11	21.90	39,500
10	11.85	7,870	12 m.	22.05	40,200	1 p.m.	22.64	43,200
12 m.	13.35	11,000	2 p.m.	23.20	46,000	3	22.62	43,100
2 p.m.	14.57	14,000	4	26.60	65,100	7	21.68	38,400
4	15.25	15,700	6	31.15	93,000	12 p.m.	20.32	31,600
6	15.22	15,600	8	34.75	117,000			
12 p.m.	14.72	14,300	10	37.32	136,000	Dec. 27		
			12 p.m.	39.05	149,000	6 a.m.	19.25	27,000
Dec. 17						12 m.	18.31	23,300
7 a.m.	13.78	12,100	Dec. 22			6 p.m.	17.77	21,300
2 p.m.	12.99	10,200	3 a.m.	41.00	163,000	12 p.m.	16.95	18,800
9	12.56	9,240	3:30	41.20	165,000			
12 p.m.	12.97	10,100	4	40.90	163,000	Jan. 14		
			8	38.37	144,000	12 p.m.	24.45	52,500
Dec. 18			12 m.	33.40	108,000			
3 a.m.	15.15	15,400	6 p.m.	27.85	72,600	Jan. 15		
7	17.70	22,800	9	26.10	62,100	6 a.m.	28.90	78,900
9	18.01	23,700	12 p.m.	24.88	54,800	9	29.60	83,100
11	18.03	23,800				12 m.	31.00	92,000
1 p.m.	17.85	23,200	Dec. 23			4 p.m.	28.40	75,900
3	17.97	23,600	6 a.m.	23.40	47,000	8	25.75	60,000
7	19.37	28,500	12 m.	21.95	39,800	12 p.m.	23.95	49,800
9	19.38	28,500	6 p.m.	20.70	33,500			
12 p.m.	19.30	28,200	12 p.m.	19.83	29,400	Jan. 16		
						3 a.m.	23.05	45,200
Dec. 19			Dec. 24			8	22.80	44,000
2 a.m.	19.27	28,100	6 a.m.	18.90	25,600	4 p.m.	21.12	35,600
7	18.62	25,900	12 m.	18.22	23,000	12 p.m.	19.35	27,400
9	18.66	26,000	6 p.m.	17.55	20,700			
3 p.m.	21.05	35,500	12 p.m.	16.80	18,300	Jan. 17		
5	21.22	36,300				8 a.m.	18.10	22,600
12 p.m.	19.31	28,300	Dec. 25			4 p.m.	17.08	19,200
			5 a.m.	16.25	16,700	8	16.60	17,700
Dec. 20			2 p.m.	16.28	16,800	12 p.m.	16.45	17,300
10 a.m.	17.30	21,500	4 p.m.	16.70	18,000			

469. Rowdy Creek near Smith River, Calif.

(Miscellaneous site)

Location.--Lat 41°55'20", long 124°08'40", in sec.26, T.18 N., R.1 W., at road bridge, 0.4 mile south of town of Smith River and 1.4 miles upstream from mouth.

Drainage area.--35.0 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 4,760 cfs Dec. 22.

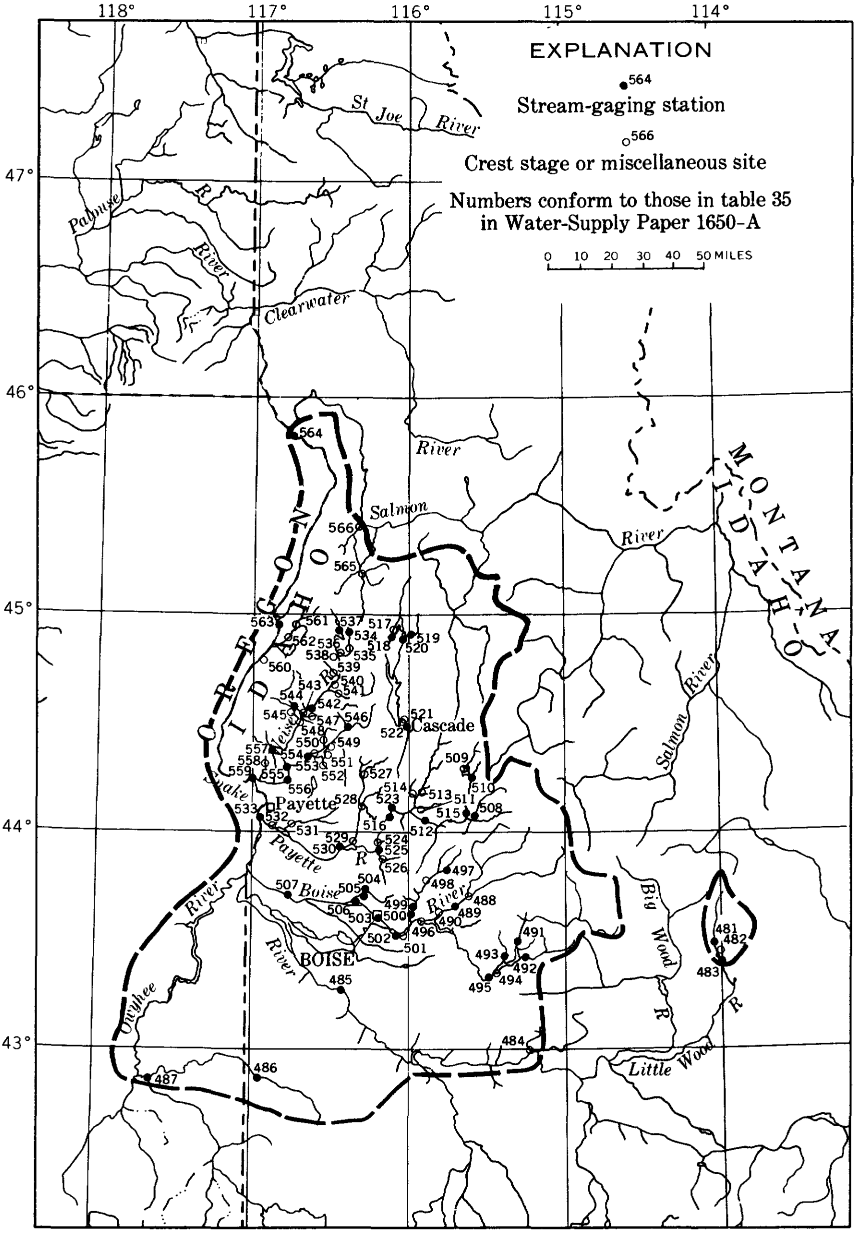
118°
117°
116°
115°
114°
47°
46°
45°
44°
43°
EXPLANATION
●564
Stream-gaging station
○566
Crest stage or miscellaneous site
Numbers conform to those in table 35 in Water-Supply Paper 1650-A
0 10 20 30 40 50 MILES
St Joe River
Palouse R
River
Clearwater
River
Salmon
River
OREGON
IDAHO
MONTANA
IDAHO
Salmon River
Snake
Payette
Cascade
Payette R
Boise R
Boise River
River
BOISE
Owyhee River
Big Wood R
Little Wood R
Weiser R
481
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Figure 7.--Map of areas of minor flooding in Oregon, Washington, and Idaho showing location of flood-data sites.

SPOKANE RIVER BASIN

470. Spokane River at Spokane, Wash.

Location.--Lat 47°39'35", long 117°26'50", in SW¼ sec.13, T.25 N., R.42 E., on right bank at Cochran Street in Spokane and half a mile upstream from Latah Creek.

Drainage area.--4,290 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,696.6 ft above mean sea level, datum of 1929 (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 23,400 cfs 9:30 a.m. Dec. 26 (gage height, 25.20 ft).
1891 to November 1955: Discharge, 49,000 cfs (estimated) May 31, 1894.

Remarks.--Flow partly regulated by powerplant of Washington Water Power Co. at Post Falls, Idaho, and at Spokane, and by Coeur d'Alene Lake.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	6,330	20,300	11.....	6,330	12,800	21.....	14,000	6,660
2.....	6,930	19,300	12.....	8,540	11,300	22.....	15,300	6,620
3.....	6,350	18,400	13.....	14,800	9,420	23.....	15,800	6,570
4.....	6,400	17,900	14.....	14,700	9,200	24.....	18,600	6,690
5.....	6,330	17,200	15.....	14,400	9,250	25.....	21,400	8,220
6.....	6,180	16,700	16.....	11,700	8,940	26.....	22,500	8,130
7.....	5,920	16,100	17.....	8,520	8,360	27.....	22,700	7,660
8.....	5,940	15,600	18.....	7,790	8,300	28.....	22,400	6,620
9.....	6,540	14,000	19.....	6,690	8,270	29.....	21,900	6,620
10.....	6,260	13,200	20.....	9,840	7,810	30.....	21,200	6,540
						31.....	20,900	6,640
Monthly mean discharge, in cubic feet per second....................							12,360	10,950
Runoff, in inches....................							3.32	2.94
Runoff, in acre-feet....................							760,000	673,000

471. Stevens Creek tributary near Moran, Wash.

(Crest-stage station)

Location.--Lat 47°33'35", long 117°21'00", in NE¼ sec.22, T.24 N., R.43 E., at crossing of Palouse Highway, 2.8 miles south of Moran.

Drainage area.--1.82 sq mi.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 47.4 cfs Dec. 22 (gage height, 8.06 ft).
1953 to November 1955: Discharge, 40.1 cfs Aug. 20, 1954 (gage height, 7.58 ft).

472. Latah Creek at Spokane, Wash.

Location.--Lat 47°39'10", long 117°26'55", in NW¼ sec.24, T.25 N., R.42 E., on left bank in Spokane, three-quarters of a mile upstream from mouth.

Drainage area.--619 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,720 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,400 cfs; affected by ice Dec. 21 and Jan. 26-31.

Maxima.--December 1955 to January 1956: Discharge, 11,300 cfs 10 a.m. Dec. 22 (gage height, 12.16 ft).
1948 to November 1955: Discharge, 11,900 cfs May 24, 1948 (gage height, from floodmark, 18.73 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56, of Latah Creek at Spokane, Wash.

Day	December	January	Day	December	January	Day	December	January
1	288	261	11	187	517	21	2,070	710
2	410	226	12	5,450	621	22	9,280	1,310
3	310	285	13	3,020	589	23	5,080	2,510
4	246	2,540	14	852	573	24	1,810	1,680
5	160	1,860	15	358	470	25	969	910
6	144	1,200	16	304	616	26	1,180	550
7	160	1,140	17	256	1,820	27	2,590	350
8	125	910	18	231	1,280	28	1,160	250
9	162	557	19	259	934	29	609	200
10	150	509	20	331	775	30	334	180
						31	282	170
Monthly mean discharge, in cubic feet per second							1,251	855
Runoff, in inches							2.33	1.59
Runoff, in acre-feet							76,890	52,570

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 10			Dec. 14--Con.			Dec. 22--Con.		
12 p.m.	3.58	140	6 p.m.	5.21	630	2 a.m.	10.59	7,080
			12 p.m.	4.80	470	4	10.63	7,170
Dec. 11						5	11.50	9,370
6 a.m.	3.66	156	Dec. 15			7:30	12.00	10,800
12 m.	3.74	172	4 a.m.	4.73	446	8	11.89	10,500
3 p.m.	3.73	170	9	4.47	361	10	12.16	11,300
6	3.78	181	5 p.m.	4.27	302	12 m.	11.97	10,700
9	3.95	219	8	4.23	290	3 p.m.	11.60	9,650
11	4.34	322	12 p.m.	4.29	307	5	11.40	9,100
12 p.m.	5.06	569				7	11.44	9,210
			Dec. 19			8	11.54	9,480
Dec. 12			12 p.m.	4.29	307	10	11.46	9,260
1 a.m.	6.34	1,250				11	11.53	9,450
3	8.04	2,790	Dec. 20			12 p.m.	11.40	9,100
5	9.01	4,080	12 m.	4.40	340			
8	9.78	5,380	6 p.m.	4.40	340	Dec. 23		
10	10.08	5,970	12 p.m.	4.37	331	6 a.m.	10.24	6,300
11	10.50	6,870				12 m.	9.32	4,560
12 m.	10.66	7,240	Dec. 21			6 p.m.	8.60	3,490
1:30 p.m.	10.72	7,380	2 a.m.	4.46	358	12 p.m.	8.05	2,800
4	10.60	7,100	4	5.64	830			
7	10.28	6,390	5	6.11	1,100	Dec. 24		
10	10.17	6,160	6	7.88	1,500	6 a.m.	7.41	2,120
12 p.m.	9.98	5,770	8	7.06	1,800	12 m.	6.91	1,680
			1 p.m.	7.43	2,140	6 p.m.	6.54	1,390
Dec. 13			2:30	8.10	2,200	9	6.50	1,360
6 a.m.	8.83	3,810	4	7.67	2,220	12 p.m.	6.44	1,320
12 m.	8.00	2,740	6	7.54	2,250			
6 p.m.	7.22	1,950	8	7.95	2,680	Dec. 25		
12 p.m.	6.59	1,420	10	9.12	4,240	6 a.m.	6.12	1,100
			12 p.m.	9.74	5,310	12 m.	5.84	934
Dec. 14						6 p.m.	5.59	805
6 a.m.	5.96	1,010	Dec. 22			10	5.51	765
12 m.	5.63	825	1 a.m.	9.75	5,320	12 p.m.	5.53	775

SCOOTENEY RESERVOIR BASIN

473. Scooteney Reservoir tributary near Cunningham, Wash.

(Crest-stage station)

Location.--Lat 46°49'30", long 118°55'30", on line between sec.33, T.16 N., R.31 E., and sec.4, T.15 N., R.31 E., at county road crossing, 5.6 miles west of Cunningham.

Drainage area.--6.06 sq mi.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 24.1 cfs Jan. 4 (gage height, 5.92 ft).
1954 to November 1955: No flow.

YAKIMA RIVER BASIN

474. Shenando Creek tributary near Goldendale, Wash.
(Crest-stage station)

Location.--Lat 46°00'20", long 120°38'30", in NW$\frac{1}{4}$SE$\frac{1}{4}$ sec.14, T.6 N., R.17 E., at crossing of U.S. Highway 97, 2 miles northeast of Satus Pass and 14 miles northeast of Goldendale.

Drainage area.--0.28 sq mi.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 11.0 cfs Dec. 21 (gage height, 18.87 ft).
1954 to November 1955: No peaks recorded.

475. Shenando Creek near Goldendale, Wash.
(Crest-stage station)

Location.--Lat 46°01'10", long 120°37'50", in W$\frac{1}{2}$ sec.12, T.6 N., R.17 E., at crossing of U.S. Highway 97, 3 miles northeast of Satus Pass and 15 miles northeast of Goldendale.

Drainage area.--7.9 sq mi, approximately.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 281 cfs Dec. 21 (gage height, 32.42 ft).
1953 to November 1955: Discharge, 287 cfs Jan. 9, 1953 (gage height, 32.6 ft).

476. Satus Creek tributary near Toppenish, Wash.
(Miscellaneous site)

Location.--Lat 46°05'30", long 120°32'50", in SE$\frac{1}{4}$ sec. 15, T.7 N., R.18 E.,,at crossing of U.S. Highway 97, 25 miles south of Toppenish.

Drainage area.--8.4 sq mi, approximately.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge 955 cfs Dec. 21.
Flood of Jan. 9, 1953, had a discharge of 756 cfs.

477. Satus Creek below Bull Creek, near Toppenish, Wash.
(Miscellaneous site)

Location.--Lat 46°05'50", long 120°32'40", in NW$\frac{1}{4}$ sec.15, T.7 N., R.18 E., 200 ft downstream from bridge on U.S. Highway 97 and $21\frac{1}{2}$ miles southwest of Toppenish.

Drainage area.--97.2 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 6,020 cfs Dec. 21.

ESQUATZEL COULEE BASIN

478. Providence Coulee at Cunningham, Wash.

Location.--Lat 46°49'20", long 118°48'30", near township line in NW$\frac{1}{4}$ sec.4, T.15 N., R.32 E., on right bank on upstream side of Northern Pacific Railroad bridge at Cunningham.

Drainage area.--27.8 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 22, 23, Jan. 4, and 5, for which graph was reconstructed on basis of outside gage readings and floodmarks. Altitude of gage is 1,160 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 352 cfs 10:30 a.m. Jan. 4 (gage height, 5.26 ft).
1953 to November 1955: Discharge, 106 cfs Feb. 7, 1955 (gage height, 3.48 ft).

Mean discharge, in cubic feet per second, 1955-56, of Providence Coulee at Cunningham, Wash.

Day	December	January	Day	December	January	Day	December	January
1.....	0	0	11.....	0	0	21.....	0	0
2.....	0	0	12.....	0	0	22.....	20	0
3.....	0	0	13.....	0	0	23.....	.6	0
4.....	0	90	14.....	0	0	24.....	0	0
5.....	0	1.4	15.....	0	0	25.....	0	0
6.....	0	0	16.....	0	2.6	26.....	0	0
7.....	0	0	17.....	0	1.1	27.....	0	0
8.....	0	0	18.....	0	.1	28.....	0	0
9.....	0	0	19.....	0	0	29.....	0	0
10.....	0	0	20.....	0	0	30.....	0	0
						31.....	0	0
Monthly mean discharge, in cubic feet per second.....................							0.66	3.07
Runoff, in inches...							0.03	0.13
Runoff, in acre-feet..							41	189

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23			Jan. 4--Con.		
12 p.m.......	-	0	3 a.m........	2.21	1.8	12 m.........	5.06	312
			6............	2.11	.9	2 p.m........	4.63	229
Dec. 22			9............	2.00	.3	4............	3.78	105
7:30 a.m.....	-	0	12 m.........	1.91	.1	6............	3.05	34
8............	3.02	31	3 p.m........	1.82	0	8............	2.80	19
11............	2.92	25				10............	2.62	11.5
1 p.m........	2.83	20	Jan. 3			12 p.m.......	2.49	7.2
2............	3.30	54	12 p.m.......	-	0			
3............	3.60	85				Jan. 5		
4............	3.20	45	Jan. 4			3 a.m........	2.32	3.7
4:30.........	2.84	21	7 a.m........	-	0	6............	2.18	2.0
5............	4.04	136	8............	1.80	0	9............	2.06	1.1
5:30.........	2.95	27	9............	4.50	206	12 m.........	1.96	.6
6............	2.92	25	10...........	5.15	330	3 p.m........	1.85	.3
9............	2.47	6.8	10:30........	5.26	352	6............	1.75	.2
12 p.m.......	2.32	3.5	11 a.m.......	5.20	340	9 p.m........	1.66	0

479. Esquatzel Coulee at Connell, Wash.

Location.--Lat 46°39'40", long 118°51'40", in NE¼ sec.36, T.14 N., R.31 E., on right bank 30 ft downstream from Main Street in Connell.

Drainage area.--240 sq mi.

Gage-height record.--Water-stage recorder graph except 12 m. Jan. 4 to 7 a.m. Jan. 5, for which graph was reconstructed on basis of outside gage readings and floodmarks. Altitude of gage is 840 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,550 cfs 3 p.m. Jan. 4 (gage height, 9.00 ft).

1953 to November 1955: Discharge, 229 cfs Feb. 7, 1955 (gage height, 4.69 ft).

Flood of Feb. 16, 1949, had a discharge of 1,760 cfs, from indirect measurement of peak flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	0	11.....	0	0	21.....	0	0
2.....	0	0	12.....	0	0	22.....	27	0
3.....	0	0	13.....	0	0	23.....	15.5	0
4.....	0	405	14.....	0	0	24.....	.7	0
5.....	0	64	15.....	0	0	25.....	0	0
6.....	0	3.2	16.....	0	0	26.....	0	0
7.....	0	.1	17.....	0	36	27.....	0	0
8.....	0	0	18.....	0	2.1	28.....	0	0
9.....	0	0	19.....	0	.1	29.....	0	0
10.....	0	0	20.....	0	0	30.....	0	0
						31.....	0	0
Monthly mean discharge, in cubic feet per second.....................							1.39	16.5
Runoff, in inches...							0.007	0.08
Runoff, in acre-feet..							86	1,010

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Esquatzel Coulee at Connell, Wash.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23--Con.			Jan. 5		
12 p.m.......	-	0	12 p.m.......	3.38	9.4	3 a.m........	4.46	142
						7............	4.02	73
Dec. 22			Dec. 24			11...........	3.74	40
4 p.m........	-	0	3:30 a.m.....	2.97	0	3 p.m........	3.61	27
5............	4.14	90	Jan. 3			6............	3.56	22
6:30.........	4.05	77	12 p.m.......	-	0	12 p.m.......	3.32	6.5
8............	4.32	118						
12 p.m.......	3.85	52	Jan. 4			Jan. 6		
			12 m.........	-	0	5 a.m........	3.23	3.4
Dec. 23			1 p.m........	7.60	980	5............	3.33	7.0
6 a.m........	3.51	18	2............	8.10	1,180	10...........	3.26	4.4
10...........	3.40	10.5	3............	9.00	1,550	5 p.m........	3.13	1.2
12 m.........	3.43	12.5	4............	8.25	1,240	12 p.m.......	3.04	.2
6 p.m........	3.25	4.0	6............	7.45	920			
9............	3.23	3.4	9............	6.05	498	Jan. 7		
10 p.m.......	3.35	8.0	12 p.m.......	4.98	242	5 a.m........	2.97	0

480. Esquatzel Coulee at Eltopia, Wash.

Location.--Lat 46°27'40", long 119°01'00", in SE¼ sec.2, T.11 N., R.30 E., on left bank at upstream side of railroad bridge in Eltopia.

Drainage area.--394 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 580 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 126 cfs 6 p.m. Jan. 5 (gage height, 6.87 ft).

1953 to November 1955: No flow.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....		0	11.....		0	21.....		0
2.....		0	12.....		0	22.....		0
3.....		0	13.....		0	23.....		0
4.....		0	14.....		0	24.....		0
5.....		50	15.....		0	25.....		0
6.....		37	16.....		0	26.....		0
7.....		2.1	17.....		0	27.....		0
8.....		0	18.....		0	28.....		0
9.....		0	19.....		0	29.....		0
10.....		0	20.....		0	30.....		0
						31.....		0
Monthly mean discharge, in cubic feet per second......................							0	2.87
Runoff, in inches..							0	0.008
Runoff, in acre-feet...							0	177

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1956

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 4			Jan. 5--Con.			Jan. 6--Con.		
12 p.m.......	-	0	6 p.m........	6.87	126	6 p.m........	4.89	13
			7............	6.86	125	8............	4.74	9.1
Jan. 5			8............	6.81	121	10...........	4.67	7.4
1 p.m........	4.30	0	10...........	6.66	109	12 p.m.......	4.65	7.0
1:30.........	6.25	78	12 p.m.......	6.46	93			
2............	6.53	98				Jan. 7		
3............	6.69	111	Jan. 6			6 a.m........	4.53	4.4
4............	6.74	115	6 a.m........	5.90	55	12 m.........	4.34	.7
5 p.m........	6.84	124	12 m.........	5.40	30	2 p.m........	4.30	0

WEST-CENTRAL IDAHO

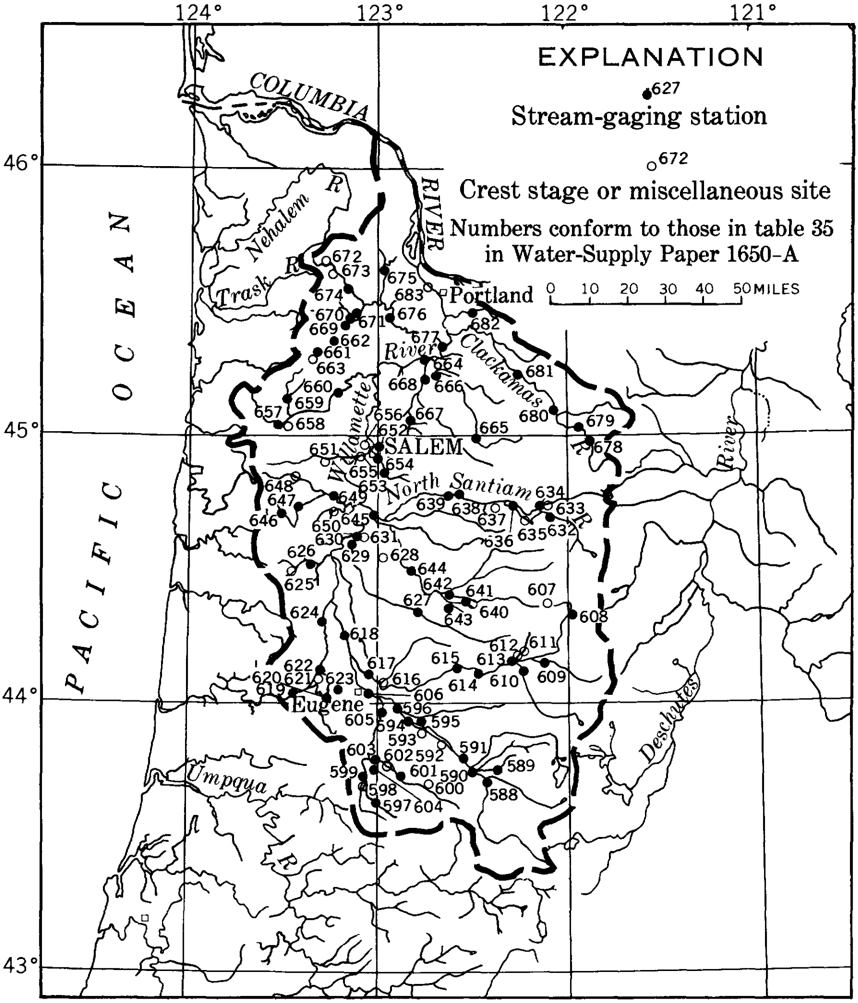
124°
123°
122°
121°
46°
45°
44°
43°
EXPLANATION
627
Stream-gaging station
672
Crest stage or miscellaneous site
Numbers conform to those in table 35 in Water-Supply Paper 1650-A
0 10 20 30 40 50 MILES
PACIFIC OCEAN
COLUMBIA RIVER
Nehalem R
Trask R
Portland
Clackamas R
Willamette River
SALEM
North Santiam R
Eugene
Umpqua R
Deschutes River

Figure 8.--Map of the West-central Idaho region showing location of flood-data sites.

MALAD RIVER BASIN

481. Little Wood River at Campbell Ranch, near Carey, Idaho

(Partial-record station)

Location.--Lat 43°28', long 114°03', in SW¼NW¼ sec.35, T.2 N., R.20 E., on left bank at Campbell Ranch, above flow line of Little Wood Reservoir, 1½ miles downstream from High Five Creek, 2½ miles downstream from Muldoon Creek, 11 miles east of Bellevue, and 12 miles northwest of Carey.

Drainage area.--267 sq mi.

Gage-height record.--Floodmark only. Altitude of gage is 5,250 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,110 cfs Dec. 22 (gage height, 6.34 ft).

1920-26, 1941-42, 1944 to November 1955: Discharge recorded, 2,350 cfs Apr. 27, 1952 (gage height, 5.44 ft).

482. Little Wood Reservoir near Carey, Idaho

Location.--Lat 43°25'30", long 114°01'30", in NW¼NW¼ sec.13, T.1 N., R.20 E., at dam on Little Wood River 8½ miles northwest of Carey, Idaho.

Drainage area.--279 sq mi.

Gage-height record.--Intermittent staff-gage readings. Datum of gage is 5,100 ft above mean sea level (Bureau of Reclamation bench marks).

Maxima.--December 1955 to January 1956: Contents observed, 10,380 acre-ft Dec. 29, 31, Jan. 1 (gage height, 92.2 ft).

Remarks.--Reservoir is formed by earth and rockfill dam constructed in 1939. Capacity of reservoir is 12,180 acre-ft between gage heights 27.4 ft (bottom of outlet gates) and 97.4 ft (top of flashboards in spillway). Contents based on contents-stage relation curve developed by the Bureau of Reclamation in November 1954.

Gage height, in feet, and contents, in acre-feet, 1955-56

Date	Gage height	Contents	Date	Gage height	Contents
Dec. 2, 1955	46.04	959	Dec. 30, 1955	92.1	10,350
Dec. 5	45.07	875	Dec. 31	92.2	10,380
Dec. 7	44.76	849	Jan. 1, 1956	92.2	10,380
Dec. 22	45.5	912	Jan. 2	92.12	10,350
Dec. 23	62.4	3,048	Jan. 3	91.98	10,310
Dec. 24	84.75	8,094	Jan. 9	90.66	9,867
Dec. 25	88.1	9,084	Jan. 12	89.98	9,654
Dec. 26	89.9	9,629	Jan. 20	87.7	8,965
Dec. 27	91.24	10,060	Jan. 24	85.94	8,443
Dec. 28	91.7	10,210	Jan. 31	83.44	7,712
Dec. 29	92.2	10,380			
Change in contents, December 1955					+9,440
Change in contents, January 1956					-2,668

483. Little Wood River near Carey, Idaho

Location.--Lat 43°23', long 114°00', in E½ sec.30, T.1 N., R.21 E., on right bank a third of a mile upstream from West Canal, 1 1/3 miles upstream from East Canal, 2 miles downstream from Little Fish Creek, 3 miles downstream from Little Wood Reservoir, and 6 miles northwest of Carey.

Drainage area.--312 sq mi.

Gage-height record.--Water-stage recorder graph. No record Dec. 26 to Jan. 11, except range in stage. Datum of gage is 4,990.59 ft above mean sea level, unadjusted.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,000 cfs; affected by ice at times. Discharge Dec. 26 to Jan. 11 estimated on basis of weather records and records for station below Little Wood Reservoir near Carey.

Maxima.--December 1955 to January 1956: Discharge, 816 cfs 12 m. Dec. 22 (gage height, 5.09 ft).

1904-5, 1926 to November 1955: Discharge, 6,000 cfs (due to failure of reservoirs on Little Fish Creek) Apr. 20, 1938 (gage height, 12.81 ft, from floodmark).

Remarks.--Flow regulated by Little Wood Reservoir (see station 482) and Campbell, Cameron, and Howard Reservoirs (combined capacity, 690 acre-ft) on South Fork Muldoon and Little Fish Creeks. Mean daily flow through gates at Little Wood Reservoir was about 46 cfs, 58 cfs, 61 cfs, and 66 cfs on Dec. 22, 23, 24, and 25, respectively.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	47	140	11.....	38	138	21.....	43	122
2.....	47	140	12.....	39	138	22.....	425	122
3.....	48	140	13.....	39	140	23.....	454	122
4.....	48	140	14.....	39	138	24.....	188	122
5.....	47	140	15.....	39	138	25.....	109	122
6.....	46	140	16.....	39	142	26.....	95	121
7.....	44	140	17.....	39	134	27.....	85	120
8.....	41	140	18.....	40	130	28.....	95	120
9.....	38	140	19.....	42	126	29.....	125	120
10.....	38	138	20.....	42	122	30.....	140	110
						31.....	140	85
Monthly mean discharge, in cubic feet per second.......................							88.4	130
Runoff, in acre-feet..							5,430	7,990

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 22--Con.			Dec. 24		
12 p.m.......	2.45	47	10 p.m.......	4.18	472	6 a.m........	3.42	224
			12 p.m.......	4.50	590	12 m.........	3.25	180
Dec. 22						6 p.m........	3.11	148
2 a.m........	2.54	57	Dec. 23			12 p.m.......	3.01	128
4............	2.92	111	2 a.m........	4.64	642			
6............	3.31	195	7............	3.96	394	Dec. 25		
8............	3.72	314	11...........	4.35	535	6 a.m........	2.94	115
10...........	4.44	566	2 p.m........	4.85	720	12 m.........	2.90	107
12 m.........	5.09	816	5............	3.77	330	6 p.m........	2.87	102
2 p.m........	4.61	633	8............	3.28	187	12 p.m.......	2.84	97
5............	4.45	570	10...........	3.54	258			
8 p.m........	4.21	484	12 p.m.......	3.60	276			

KING HILL CREEK BASIN

484. King Hill Creek near King Hill, Idaho

(Gaging station, discontinued 1941)

Location.--Lat 43°01', long 115°14', in SW¼ sec.2, T.5 S., R.10 E., at road bridge, 1½ miles upstream from mouth and 1¾ miles northwest of King Hill.

Drainage area.--83.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 1,370 cfs Dec. 23.

1913, 1938-41: Discharge observed, 763 cfs Mar. 31, 1940 (gage height, 7.20 ft).

SNAKE RIVER MAIN STEM

485. Snake River near Murphy, Idaho

Location.--Lat 43°18', long 116°26', in NE¼ sec.35, T.1 S., R.1 W., on right bank 4¼ miles downstream from Swan Falls powerplant and 7½ miles northeast of Murphy.

Drainage area.--41,900 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,271.17 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 15,700 cfs 4 p.m. Jan. 17 and 10 a.m. Jan. 18; gage height, 6.53 ft 10 a.m. Jan. 18.

1912 to November 1955: Discharge, 47,300 cfs June 22, 1918 (gage height, 13.95 ft at site 3½ miles upstream at datum 9.79 ft higher).

Remarks.--Flow regulated by many reservoirs upstream. Between this station and station at King Hill, flow is regulated at Swan Falls and by C. J. Strike Reservoir.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	10,300	8,790	11.....	9,330	9,540	21.....	11,000	12,300
2.....	9,990	7,130	12.....	9,900	7,780	22.....	12,100	9,810
3.....	9,000	10,400	13.....	10,500	10,700	23.....	14,200	10,700
4.....	8,440	12,400	14.....	10,300	12,100	24.....	14,300	13,200
5.....	8,530	12,800	15.....	11,100	8,860	25.....	11,100	13,500
6.....	8,730	13,300	16.....	11,300	10,600	26.....	11,000	13,800
7.....	9,360	10,700	17.....	7,980	14,600	27.....	11,000	14,800
8.....	10,200	8,970	18.....	7,100	15,300	28.....	13,000	15,100
9.....	9,150	10,300	19.....	8,610	14,900	29.....	14,600	13,700
10.....	8,300	12,900	20.....	9,860	13,500	30.....	14,500	9,660
						31.....	11,900	11,800
Monthly mean discharge, in cubic feet per second......................							10,540	11,740
Runoff, in acre-feet..							648,000	721,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 24--Con.			Jan. 16		
12 p.m.......	3.72	7,080	6 p.m........	6.15	14,400	1 a.m........	4.14	8,270
			9............	5.99	14,000	10...........	4.16	8,320
Dec. 19			12 p.m.......	5.42	12,200	12 m.........	5.55	12,600
12 m.........	3.72	7,080				12 p.m.......	5.57	12,600
3 p.m........	5.00	10,900	Dec. 25					
7............	5.07	11,100	4 a.m........	4.91	10,600	Jan. 17		
12 p.m.......	4.46	9,210	8............	5.32	11,900	4 a.m........	5.96	13,900
			1 p.m........	5.32	11,900	9............	5.91	13,700
Dec. 20			7............	4.76	10,100	1 p.m........	6.38	15,200
2 a.m........	4.26	8,610	12 p.m.......	4.76	10,100	4............	6.52	15,700
6............	4.19	8,410				12 p.m.......	6.44	15,400
8............	4.44	9,150	Jan. 12					
10...........	4.42	9,090	12 p.m.......	4.41	9,060	Jan. 18		
2 p.m........	5.00	10,900				5 a.m........	6.32	15,100
12 p.m.......	5.01	10,900	Jan. 13			10...........	6.53	15,700
			10 a.m.......	4.40	9,030	6 p.m........	6.34	15,100
Dec. 21			3 p.m........	4.72	9,990	12 p.m.......	6.44	15,400
1 a.m........	5.00	10,900	4............	5.69	13,000			
3............	4.77	10,100	12 p.m.......	5.92	13,800	Jan. 19		
5............	4.77	10,100				8 a.m........	6.39	15,300
7............	5.11	11,200	Jan. 14			11...........	6.04	14,100
10 p.m.......	5.15	11,300	3 a.m........	6.04	14,100	3 p.m........	6.07	14,200
12 p.m.......	5.19	11,400	6............	5.76	13,200	8............	6.40	15,300
			10...........	4.81	10,300	12 p.m.......	6.37	15,200
Dec. 22			1 p.m........	5.15	11,300			
6 a.m........	5.02	10,900	10...........	5.41	12,100	Jan. 20		
9............	5.45	12,200	12 p.m.......	5.16	11,400	5 a.m........	6.33	15,100
7 p.m........	5.53	12,500				9............	5.81	13,300
12 p.m.......	6.03	14,100	Jan. 15			2 p.m........	5.80	13,300
			2 a.m........	5.10	11,200	4............	5.48	12,300
Dec. 23			5............	4.29	8,700	12 p.m.......	5.46	12,300
12 m.........	6.01	14,000	8............	3.90	7,580			
12 p.m.......	6.20	14,600	3 p.m........	3.91	7,610			
			5............	4.51	9,360			
Dec. 24			10...........	4.60	9,630			
12 m.........	6.15	14,400	12 p.m.......	4.23	8,530			

OWYHEE RIVER BASIN

486. Jordan Creek above Lone Tree Creek, near Jordan Valley, Oreg.

Location.--Lat 42°52', long 116°57', in SE¼NE¼ sec.29, T.6 S., R.5 W., on right bank half a mile below proposed damsite, 0.6 mile upstream from Morgan ranchhouse, 1 mile downstream from Williams Creek, 4 miles upstream from Lone Tree Creek, and 9 miles southeast of Jordan Valley.

Drainage area.--440 sq mi, approximately; 450 sq mi, approximately, at site 2 miles downstream.

Gage-height record.--Water-stage recorder graph except Jan. 31. Datum of gage is 4,501.98 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times. Discharge Jan. 31 estimated on basis of weather records and records for nearby streams.

Maxima.--December 1955 to January 1956: Discharge, 2,120 cfs 8 p.m. Dec. 23 (gage height, 7.74 ft).

1945-53, April to November 1955: Discharge, 3,250 cfs Apr. 14, 1952 (gage height, 5.57 ft, site 2 miles downstream at datum 30.45 ft lower).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	30	170	11	28	109	21	135	313
2	26	154	12	32	106	22	345	358
3	26	141	13	36	118	23	1,340	550
4	19	137	14	30	141	24	855	350
5	20	140	15	34	1,100	25	476	281
6	24	133	16	36	1,050	26	415	273
7	26	130	17	37	577	27	358	249
8	22	120	18	33	452	28	269	180
9	24	108	19	37	400	29	196	207
10	25	118	20	73	350	30	196	209
						31	200	180
Monthly mean discharge, in cubic feet per second							174	287
Runoff, in inches							0.46	0.75
Runoff, in acre-feet							10,720	17,660

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Jan. 14--Con.		
12 p.m.	1.96	42	2 p.m.	7.29	1,800	12 p.m.	4.51	478
			3	7.47	1,930			
Dec. 20			6	7.48	1,940	Jan. 15		
1 p.m.	2.15	55	8	7.74	2,120	2 a.m.	4.81	568
4	2.53	93	10	7.42	1,890	5	5.47	793
12 p.m.	2.85	134	12 p.m.	6.91	1,550	12 m.	6.09	1,070
						1 p.m.	6.26	1,160
Dec. 21			Dec. 24			4	6.39	1,230
2 a.m.	2.91	142	6 a.m.	5.85	952	6	6.66	1,400
10	2.87	137	12 m.	5.34	744	9	7.15	1,710
6 p.m.	2.81	128	8 p.m.	5.03	636	10	7.01	1,620
12 p.m.	2.84	133	11	4.88	589	12 p.m.	6.98	1,600
			12 p.m.	4.72	541			
Dec. 22						Jan. 16		
4 a.m.	2.88	138	Dec. 25			1 a.m.	6.54	1,530
7	2.98	153	2 a.m.	4.57	496	6	6.18	1,310
9	3.12	175	12 m.	4.45	462	11	5.65	1,000
1 p.m.	3.75	295	4 p.m.	4.43	458	5 p.m.	5.30	829
2	4.07	368	6	4.52	481	12 p.m.	4.95	688
5	4.48	470	12 p.m.	4.43	458			
9	5.17	684				Jan. 17		
11	5.28	723	Jan. 13			12 m.	4.52	541
12 p.m.	5.29	726	12 p.m.	2.73	118	6 p.m.	4.59	562
						12 p.m.	4.37	490
Dec. 23			Jan. 14					
6 a.m.	5.32	737	12 m.	2.62	104	Jan. 18		
8	5.53	817	6 p.m.	2.71	115	6 a.m.	4.25	455
10	5.85	952	8	2.86	135	12 p.m.	4.17	435
12 m.	6.51	1,310	10 p.m.	3.60	265			

487. Owyhee River near Rome, Oreg.

Location.--Lat 42°52', long 117°38', in NE¼ sec.14, T.31 S., R.41 E., on right bank half a mile downstream from Jordan Creek and 2½ miles north of Rome.

Drainage area.--About 8,000 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 3,343.96 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 23,000 cfs 3 p.m. Jan. 16 (gage height, 14.23 ft).

1949 to November 1955: Discharge, 27,800 cfs Apr. 14, 1952 (gage height, 15.60 ft).

Remarks.--Flow partly regulated by Antelope Reservoir (capacity, 36,600 acre-ft), Wild Horse Reservoir (capacity, 32,700 acre-ft), and many small reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	144	509	11.....	144	345	21.....	218	2,070
2.....	148	533	12.....	144	318	22.....	260	2,130
3.....	144	485	13.....	144	306	23.....	5,690	3,570
4.....	150	438	14.....	153	336	24.....	9,030	4,360
5.....	148	410	15.....	153	1,120	25.....	3,720	3,550
6.....	137	404	16.....	141	17,300	26.....	2,680	2,420
7.....	94	378	17.....	146	11,000	27.....	2,070	1,930
8.....	137	366	18.....	148	5,860	28.....	1,980	1,740
9.....	150	345	19.....	148	3,510	29.....	1,520	1,470
10.....	146	321	20.....	155	2,500	30.....	928	1,180
						31.....	614	1,000
Monthly mean discharge, in cubic feet per second							1,019	2,329
Runoff, in inches							0.15	0.34
Runoff, in acre-feet							62,650	143,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 22			Dec. 26--Con.			Jan. 15--Con.		
12 p.m.......	1.56	277	12 p.m.......	4.85	2,280	4 p.m........	4.18	1,650
						8............	4.76	2,190
Dec. 23			Dec. 27			12 p.m.......	5.66	3,300
1 a.m........	5.35	2,880	12 m.........	4.68	2,110			
3............	7.10	5,570	8 p.m........	4.42	1,870	Jan. 16		
5............	7.30	5,910	12 p.m.......	4.37	1,820	6 a.m........	11.56	15,000
7............	7.01	5,420				12 m.........	13.94	22,000
3 p.m........	5.58	3,190	Dec. 28			3 p.m........	14.23	23,000
6............	8.38	7,860	3 a.m........	4.40	1,850	8............	13.35	20,100
9............	9.07	9,250	8............	4.72	2,150	12 p.m.......	12.29	16,900
12 p.m.......	8.85	8,800	10...........	4.73	2,160			
			6 p.m........	4.52	1,960	Jan. 17		
Dec. 24			12 p.m.......	4.32	1,780	6 a.m........	10.24	11,800
4 a.m........	9.99	11,200				12 m.........	9.50	10,200
8............	10.47	12,300	Dec. 29			6 p.m........	9.18	9,480
12 m.........	9.33	9,790	6 a.m........	4.23	1,700	12 p.m.......	8.53	8,160
6 p.m........	7.85	6,880	11...........	4.05	1,550			
12 p.m.......	6.75	4,980	1 p.m........	4.04	1,540	Jan. 18		
			6............	3.83	1,390	6 a.m........	7.68	6,640
Dec. 25			12 p.m.......	3.49	1,150	12 m.........	7.03	5,530
6 a.m........	6.15	4,020				6 p.m........	6.68	4,940
12 m.........	5.84	3,560	Jan. 14			12 p.m.......	6.42	4,510
12 p.m.......	5.48	3,050	12 p.m.......	1.79	345			
						Jan. 19		
Dec. 26			Jan. 15			6 a.m........	6.03	3,920
10 a.m.......	5.30	2,820	6 a.m........	1.88	372	12 m.........	5.66	3,370
2 p.m........	5.10	2,570	12 m.........	2.26	509	6 p.m........	5.43	3,050
6 p.m........	5.00	2,450	2 p.m........	2.63	665	12 p.m.......	5.29	2,860

BOISE RIVER BASIN

488. Middle Fork Boise River near Twin Springs, Idaho

(Gaging station, discontinued 1950)

Location.--Lat 43°42'45", long 115°37'50", in sec.4, T.4 N., R.7 E., 1,000 ft upstream from confluence with North Fork Boise River and 4½ miles northeast of Twin Springs.

Drainage area.--382 sq mi.

Discharge record.--Peak discharge from stage-discharge relation defined by current-meter measurements below 3,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,020 cfs Dec. 23 (gage height, 7.10 ft, from floodmark).

1946-50: Discharge, 4,370 cfs May 29, 1948 (gage height, 7.40 ft); gage height, about 11.0 ft Feb. 10, 1949 (result of snowslide).

489. Boise River near Twin Springs, Idaho

Location.--Lat 43°40', long 115°44', in sec.27, T.4 N., R.6 E., a quarter of a mile upstream from Birch Creek, 1½ miles upstream from flow line of Arrowrock Reservoir, 4 miles downstream from Twin Springs, and 13 miles upstream from Arrowrock.

Drainage area.--830 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 3,251.08 ft above mean sea level (unadjusted).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 10,300 cfs 6 p.m. Dec. 23 (gage height, 8.31 ft).

1911 to November 1955: Discharge, 10,300 cfs May 17, 1927 (gage height, 8.30 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	605	1,240	11.....	481	848	21.....	1,330	1,080
2.....	557	1,150	12.....	531	816	22.....	5,930	1,040
3.....	493	1,060	13.....	605	848	23.....	8,480	1,050
4.....	451	1,050	14.....	428	832	24.....	5,920	970
5.....	329	1,050	15.....	412	1,040	25.....	3,440	792
6.....	538	979	16.....	704	1,600	26.....	2,510	925
7.....	577	934	17.....	598	1,410	27.....	2,150	925
8.....	481	925	18.....	531	1,260	28.....	1,800	744
9.....	518	832	19.....	639	1,190	29.....	1,460	745
10.....	487	872	20.....	1,100	1,140	30.....	1,360	824
						31.....	1,360	648
Monthly mean discharge, in cubic feet per second							1,510	994
Runoff, in inches							2.10	1.38
Runoff, in acre-feet							92,840	61,130

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 24--Con.		
12 p.m.......	2.49	518	6 a.m........	4.80	3,250	6 p.m........	5.65	4,690
			9............	5.64	4,680	12 p.m.......	5.39	4,230
Dec. 19			12 m.........	6.58	6,510			
6 a.m........	2.57	570	3 p.m........	7.28	7,990	Dec. 25		
12 m.........	2.61	598	7............	7.73	8,980	6 a.m........	5.10	3,730
6 p.m........	2.73	688	12 p.m.......	7.36	8,170	12 m.........	4.89	3,390
12 p.m.......	2.97	880				12 p.m.......	4.54	2,840
			Dec. 23					
Dec. 20			8 a.m........	6.88	7,140	Dec. 26		
4 a.m........	3.15	1,040	10...........	6.92	7,220	12 m.........	4.29	2,470
8............	3.21	1,100	12 m.........	7.23	7,880	6 p.m........	4.20	2,340
4 p.m........	3.27	1,160	3 p.m........	7.83	9,210	12 p.m.......	4.20	2,340
12 p.m.......	3.29	1,180	5............	8.27	10,200			
			6............	8.31	10,300	Dec. 27		
Dec. 21			9............	8.02	9,640	6 a.m........	4.15	2,270
12 m.........	3.29	1,180	12 p.m.......	7.65	8,810	12 m.........	4.05	2,130
4 p.m........	3.37	1,270				12 p.m.......	3.92	1,950
12 p.m.......	3.90	1,920	Dec. 24					
			4 a.m........	7.03	7,460			
Dec. 22			8 a.m........	6.55	6,450			
3 a.m........	4.26	2,430	12 m.........	6.13	5,610			

490. Cottonwood Creek at Arrowrock Reservoir, Idaho

(Gaging station, discontinued 1941)

Location.--Lat 43°38', long 115°49', in NW¼NE¼ sec.2, T.3 N., R.5 E., at flow line of Arrowrock Reservoir, three-quarters of a mile downstream from Ranger Creek and Cottonwood ranger station, and 5½ miles northeast of Arrowrock.

Drainage area.--21.4 sq mi. At site March 1914 to September 1918, 19.9 sq mi.

Discharge record.--Peak discharge from stage-discharge relation defined by current-meter measurements below 60 cfs, and extended above by velocity-area and conveyance-slope analyses.

Maxima.--December 1955 to January 1956: Discharge, 330 cfs Dec. 23 (gage height, 4.76 ft, from floodmark).
1914-18, 1939-41: Discharge, 166 cfs Apr. 26, 1917 (gage height, 2.30 ft, site and datum then in use).

491. South Fork Boise River near Featherville, Idaho

Location.--Lat 43°29'40", long 115°18'20", in lot 6, NE¼ sec.19, T.2 N., R.10 E., on right bank 2½ miles upstream from Deer Creek and 8 miles southwest of Featherville.

Drainage area.--635 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 6 to Jan. 4, when range in stage was recorded. Altitude of gage is 4,220 ft (from topographic map of Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Dec. 6 to Jan. 4 estimated on basis of range in stage, weather records, and records for South Fork Payette River at Lowman and other nearby streams.

Maxima.--December 1955 to January 1956: Discharge, 2,000 cfs probably Dec. 23 (gage height, 4.53 ft).
1945 to November 1955: Discharge, 5,530 cfs Apr. 28, 1952 (gage height, 7.47 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	263	480	11.....	195	373	21.....	540	350
2.....	232	460	12.....	220	355	22.....	1,200	342
3.....	182	440	13.....	250	368	23.....	1,700	350
4.....	170	430	14.....	175	342	24.....	1,200	310
5.....	140	445	15.....	170	382	25.....	900	238
6.....	210	415	16.....	290	415	26.....	800	286
7.....	230	378	17.....	250	378	27.....	700	310
8.....	200	378	18.....	220	337	28.....	640	270
9.....	210	328	19.....	280	332	29.....	550	260
10.....	200	378	20.....	450	337	30.....	530	282
						31.....	510	256
Monthly mean discharge, in cubic feet per second							445	355
Runoff, in inches							0.81	0.64
Runoff, in acre-feet							27,390	21,830

492. Lime Creek near Bennett, Idaho

Location.--Lat 43°25', long 115°16', in SW¼NE¼ sec.16, T.1 N., R.10 E., on right bank 0.4 mile upstream from flow line of Anderson Ranch Reservoir, 2 miles upstream from mouth, and 12 miles northeast of Bennett.

Drainage area.--131 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 29-31. Altitude of gage is 4,250 ft (from topographic map of Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times. Discharge for period of no gage-height record estimated on basis of weather records and records for nearby streams.

Maxima.--December 1955 to January 1956: Discharge, 660 cfs 3 a.m. Dec. 23 (gage height, 4.97 ft), release from snowslide upstream.
1945 to November 1955: Discharge, 1,180 cfs Apr. 19, 1946, Apr. 27, 1952; gage height, 8.02 ft Feb. 15, 1949, backwater from snowslide.

Mean discharge, in cubic feet per second, 1955-56, of Lime Creek near Bennett, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	27	76	11.....	27	55	21.....	44	73
2.....	22	70	12.....	30	54	22.....	173	70
3.....	20	69	13.....	28	57	23.....	510	70
4.....	19	70	14.....	24	53	24.....	344	59
5.....	18	69	15.....	25	64	25.....	192	55
6.....	21	63	16.....	27	99	26.....	154	56
7.....	25	60	17.....	30	88	27.....	141	58
8.....	22	55	18.....	27	81	28.....	102	54
9.....	23	53	19.....	33	78	29.....	72	45
10.....	23	58	20.....	40	84	30.....	80	43
						31.....	80	41
Monthly mean discharge, in cubic feet per second							77.5	63.9
Runoff, in inches							0.68	0.56
Runoff, in acre-feet							4,770	3,930

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21			Dec. 23			Dec. 24		
12 p.m.......	2.78	49	2 a.m........	4.15	364	6 a.m........	4.20	394
			3............	4.97	660	12 m.........	4.01	334
Dec. 22			4............	4.54	506	12 p.m.......	3.68	239
6 a.m........	2.96	73	6............	4.42	464			
12 m.........	3.22	118	10...........	4.46	478	Dec. 25		
2 p.m........	3.47	174	3 p.m........	4.70	565	6 a.m........	3.53	204
3............	3.72	237	6............	4.73	576	12 m.........	3.43	180
5............	3.87	278	8............	4.70	565	3 p.m........	3.45	185
8............	3.96	307	12 p.m.......	4.47	484	6............	3.43	180
12 p.m.......	4.13	358				12 p.m.......	3.36	165

493. Fall Creek near Anderson Ranch Dam, Idaho

Location.--Lat 43°26'00", long 115°23'10", in SE¼ sec.9, T.1 N., R.9 E., on right bank 1½ miles downstream from Mill Creek and 6 miles northeast of Anderson Ranch Dam.

Drainage area.--55.3 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,350 ft (from Bureau of Reclamation topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 438 cfs 3 p.m. Dec. 23 (gage height, 4.78 ft); gage height, 4.89 ft 10 a.m. Dec. 8, backwater from ice.
1945 to November 1955: Discharge, 948 cfs Apr. 27, 1952 (gage height, 6.25 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	30	56	11.....	22	38	21.....	31	58
2.....	26	54	12.....	29	37	22.....	161	56
3.....	21	50	13.....	26	37	23.....	369	54
4.....	20	50	14.....	22	34	24.....	251	48
5.....	18	49	15.....	23	68	25.....	160	43
6.....	20	46	16.....	25	104	26.....	120	44
7.....	22	43	17.....	26	77	27.....	97	46
8.....	20	39	18.....	26	69	28.....	77	42
9.....	22	38	19.....	26	62	29.....	66	40
10.....	21	38	20.....	27	62	30.....	64	37
						31.....	62	34
Monthly mean discharge, in cubic feet per second							62.3	50.1
Runoff, in inches							1.30	1.04
Runoff, in acre-feet							3,830	3,080

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Fall Creek near Anderson Ranch Dam, Idaho

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	2.85	27	4 p.m........	4.62	200	12 p.m.......	4.44	329
			6............	4.79	300			
Dec. 21			7............	4.66	340	Dec. 24		
11 a.m.......	2.85	27	8............	4.60	360	6 a.m........	4.28	281
3 p.m........	2.91	32	10...........	4.58	374	7............	4.19	256
6............	2.91	32	12 p.m.......	4.50	348	8............	4.24	270
12 p.m.......	3.03	44				11...........	4.13	241
			Dec. 23			5 p.m........	4.09	231
Dec. 22			6 a.m........	4.38	311	12 p.m.......	3.91	189
11 a.m.......	3.25	70	9............	4.44	329			
12 m.........	3.56	80	1 p.m........	4.75	428	Dec. 25		
1 p.m........	3.90	100	3............	4.78	438	12 m.........	3.77	160
2 p.m........	4.60	130	6 p.m........	4.72	419	12 p.m.......	3.63	133

494. Anderson Ranch Reservoir at Anderson Ranch Dam, Idaho

Location.--Lat 43°21'30", long 115°27'10", in SE¼ sec.1, T.1 S., R.8 E., on inlet structure of outlet works of dam on South Fork Boise River, 1½ miles downstream from Camas Creek and 3 miles northwest of Bennett (Dixie store).

Drainage area.--980 sq mi, approximately.

Gage-height record.--Staff gage or supplementary pressure gage in powerhouse read once daily. Time of reading variable. No reading Dec. 14, 31, Jan. 2, 14. Datum of gage is at mean sea level (surveys by Bureau of Reclamation).

Discharge and contents record.--Maximum inflow rate computed from outflow and rate of change in contents determined from graph based on once-daily readings (two readings Dec. 23), Lucky Peak Reservoir gage-height graph, and records for South Fork Boise River at Anderson Ranch Dam. Contents Dec. 31 estimated on basis of inflow-outflow studies.

Maxima.--December 1955 to January 1956: Contents observed, 253,600 acre-ft 4 p.m. Dec. 26 (elevation, 4,142.36 ft); rate of inflow, at least 4,600 cfs Dec. 23.

1945 to November 1955: Contents observed, 470,700 acre-ft June 27, 1954 (elevation, 4,197.37 ft).

Remarks.--Reservoir is formed by earthfill dam. Storage began Dec. 15, 1945. Usable contents, 464,200 acre-ft between elevations 3,992 and 4,196 ft (top of spillway gates). Elevation of spillway crest is 4,174 ft, and of top of dam is 4,206 ft. Figures given herein represent usable contents.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	4,141.53	251,000	4,140.69	248,300	16	4,137.96	239,600	4,137.52	238,300
2	4,141.50	250,900	-	-	17	4,137.16	237,200	4,137.44	238,000
3	4,141.05	249,400	4,140.68	248,200	18	4,136.76	235,900	4,137.02	236,700
4	4,141.00	249,300	4,140.45	247,500	19	4,136.76	235,900	4,136.68	235,700
5	4,141.00	249,300	4,140.22	246,800	20	4,137.00	236,700	4,136.20	234,200
6	4,140.92	249,000	4,139.88	245,700	21	4,137.12	237,000	4,136.19	234,200
7	4,141.00	249,300	4,139.53	244,600	22	4,137.22	237,300	4,136.31	234,500
8	4,141.00	249,300	4,139.35	244,000	23	4,138.50	241,300	4,136.62	235,500
9	4,140.89	248,900	4,139.15	243,400	24	4,140.88	248,900	4,136.57	235,300
10	4,140.81	248,700	4,138.73	242,100	25	4,141.70	251,500	4,136.33	234,600
11	4,140.84	248,800	4,138.08	240,000	26	4,142.36	253,600	4,136.00	233,600
12	4,140.83	248,700	4,137.88	239,400	27	4,142.30	253,400	4,135.78	232,900
13	4,140.32	247,100	4,137.53	238,300	28	4,142.10	252,800	4,134.80	229,900
14	-	-	-	-	29	4,141.78	251,800	4,134.46	228,900
15	4,138.68	241,900	4,137.12	237,000	30	4,141.20	249,900	4,133.90	227,200
					31	-	249,500	4,133.20	225,100
Change in contents..............................						-	-1,800	-	-24,400

495. South Fork Boise River at Anderson Ranch Dam, Idaho

Location.--Lat 43°20', long 115°29', in SW¼ sec.11, T.1 S., R.8 E., on right bank 600 ft upstream from Dixie Creek, 1½ miles downstream from Anderson Ranch Reservoir, and 2¼ miles northwest of Bennett (Dixie store).

Drainage area.--982 sq mi.

Gage-height record.--Water-stage graph. Altitude of gage is 3,850 ft (from Bureau of Reclamation topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,560 cfs 4 p.m. Jan. 16 (gage height, 4.63 ft).
1943 to November 1955: Discharge, 9,100 cfs Apr. 17, 1943 (gage height, 10.06 ft).

Remarks.--Flow regulated by Anderson Ranch Reservoir (see station 494).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	499	1,200	11.....	26	1,160	21.....	679	455
2.....	796	468	12.....	1,140	1,230	22.....	694	134
3.....	888	1,270	13.....	1,380	1,010	23.....	918	904
4.....	26	1,240	14.....	1,490	992	24.....	1,180	652
5.....	116	1,190	15.....	1,510	78	25.....	762	1,020
6.....	316	941	16.....	1,520	937	26.....	1,190	926
7.....	146	1,150	17.....	1,350	984	27.....	1,520	1,060
8.....	723	592	18.....	707	1,260	28.....	1,440	1,500
9.....	592	1,210	19.....	383	1,160	29.....	1,500	1,230
10.....	132	1,310	20.....	252	1,020	30.....	1,480	1,280
						31.....	982	1,140
Monthly mean discharge, in cubic feet per second......................							850	990
Runoff, in acre-feet..							52,240	60,900

496. Arrowrock Reservoir at Arrowrock, Idaho

Location.--Lat 43°36', long 115°55', in E½ sec.13, T.3 N., R.4 E., at dam on Boise River at Arrowrock, 14 miles east of Boise.

Drainage area.--2,210 sq mi, approximately.

Gage-height record.--Staff graduated on face of dam read once daily at 8 a.m. Datum of gage is at mean sea level (surveys by Bureau of Reclamation).

Discharge record.--Maximum inflow rate computed from rate of change in contents determined from graph based on gage readings and shape of recorder graph for Lucky Peak Reservoir. Record of outflow computed from spillway and gate-rating curves and record of gate changes furnished by Boise Project Board of Control. No outflow Dec. 1 to Jan. 4, Jan. 13-16.

Maxima.--December 1955 to January 1956: Contents observed, 291,200 acre-ft 8 a.m. Jan. 18 (elevation, 3,217.5 ft); rate of inflow, about 16,700 cfs Dec. 23.
1917 to November 1955: Contents observed, 301,200 acre-ft May 29, 1948 (elevation, 3,219.1 ft).

Remarks.--Reservoir is formed by gravity-section concrete-arch dam completed in 1915 and raised 5 ft in 1937; storage began in 1915. Capacity, 286,600 acre-ft between elevations 2,974 ft (9.5 ft above sluice-gate sill) and 3,216 ft (highest position of movable crest of spillway).

Mean outflow, in cubic feet per second, January 1956

Day	Discharge	Day	Discharge	Day	Discharge	Day	Discharge
1.......	0	9.......	3,050	17.......	1,020	25.......	4,850
2.......	0	10.......	4,330	18.......	4,300	26.......	4,800
3.......	0	11.......	5,010	19.......	4,220	27.......	4,760
4.......	0	12.......	3,580	20.......	4,700	28.......	4,720
5.......	70	13.......	0	21.......	5,050	29.......	4,680
6.......	2,180	14.......	0	22.......	4,990	30.......	4,620
7.......	3,260	15.......	0	23.......	4,940	31.......	4,580
8.......	3,060	16.......	0	24.......	4,900		
Monthly mean discharge, in cubic feet per second................................							2,957
Runoff, in acre-feet..							181,800

Elevation, in feet, and contents, in acre-feet, 1955-56, of Arrowrock Reservoir at Arrowrock, Idaho

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	3,131.9	93,730	3,209.6	267,300	16	3,152.9	131,800	3,214.8	282,900
2	3,133.3	96,110	3,211.3	272,400	17	3,154.9	135,800	3,216.7	288,800
3	3,135.0	99,000	3,212.5	276,000	18	3,156.8	139,600	3,217.5	291,200
4	3,136.6	101,700	3,214.0	280,500	19	3,158.3	142,600	3,216.2	287,200
5	3,137.5	103,200	3,215.5	285,000	20	3,159.9	145,800	3,215.4	284,700
6	3,138.2	104,400	3,216.9	289,400	21	3,161.3	148,700	3,213.8	279,900
7	3,139.2	106,100	3,216.3	287,500	22	3,164.5	155,400	3,211.8	273,900
8	3,140.4	108,200	3,215.7	285,700	23	3,174.4	176,700	3,209.7	267,600
9	3,141.1	109,500	3,214.8	282,900	24	3,185.0	201,500	3,208.0	262,700
10	3,143.0	112,900	3,214.2	281,100	25	3,191.0	216,600	3,206.0	256,900
11	3,144.1	114,900	3,212.5	276,000	26	3,194.8	226,500	3,204.1	251,500
12	3,145.0	116,500	3,210.5	270,000	27	3,198.0	234,800	3,202.3	246,400
13	3,146.7	119,700	3,210.7	270,600	28	3,200.9	242,500	3,200.8	242,200
14	3,148.9	123,900	3,212.0	274,500	29	3,203.4	249,500	3,199.2	237,900
15	3,150.9	127,800	3,213.4	278,700	30	3,205.6	255,700	3,197.0	232,200
					31	3,207.8	262,100	3,195.0	227,000
Change in contents..............................						-	+171,430	-	-35,100

497. Bannock Creek near Idaho City, Idaho

Location.--Lat 43°48'30", long 115°46'30", in SE¼SW¼ sec.32, T.6 N., R.6 E., on right bank three-quarters of a mile upstream from South Fork, 2¼ miles upstream from mouth, and 3 miles southeast of Idaho City.

Drainage area.--4.5 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,090 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 31 cfs 3 p.m. Dec. 23 (gage height, 1.91 ft).

1939-41, 1950 to November 1955: Discharge, 39 cfs Apr. 26, 1952 (gage height, 1.95 ft), from rating curve extended above 18 cfs; maximum gage height, 2.03 ft Feb. 6, 1952 (backwater from ice).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.9	4.6	11.....	0.8	2.8	21.....	3.6	4.3
2.....	.8	4.3	12.....	.9	2.8	22.....	15	4.3
3.....	.8	4.1	13.....	.8	2.8	23.....	21	4.0
4.....	.8	3.9	14.....	.8	2.4	24.....	17	3.9
5.....	.8	3.9	15.....	.9	4.5	25.....	12	3.5
6.....	.9	3.5	16.....	.9	4.8	26.....	9.4	3.4
7.....	.8	3.4	17.....	.9	4.5	27.....	7.9	3.5
8.....	.8	3.3	18.....	.8	4.4	28.....	6.7	3.0
9.....	.8	3.1	19.....	2.3	4.4	29.....	5.9	2.6
10.....	.8	3.0	20.....	3.7	4.4	30.....	5.5	2.3
						31.....	5.1	2.1
Monthly mean discharge, in cubic feet per second..........................							4.20	3.61
Runoff, in inches...							1.08	0.92
Runoff, in acre-feet..							258	222

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 20--Con.			Dec. 22--Con.		
12 p.m.......	0.49	1.1	4 p.m........	0.81	3.5	12 p.m.......	1.42	15
			12 p.m.......	.74	2.8			
Dec. 19						Dec. 23		
6 a.m........	.62	1.9	Dec. 21			5 a.m........	1.32	12
10...........	.62	1.9	6 a.m........	.73	2.7	8............	1.35	13
1 p.m........	.57	1.5	2 p.m........	.75	2.9	12 m.........	1.77	26
4............	.62	1.9	7............	.94	5.2	1 p.m........	1.86	29
6............	.69	2.4	12 p.m.......	.99	5.9	3............	1.91	31
8............	.88	4.5				12 p.m.......	1.69	23
9............	.82	3.8	Dec. 22					
12 p.m.......	.93	5.2	3 a.m........	1.07	7.0	Dec. 24		
			11...........	1.63	21	12 m.........	1.47	16
Dec. 20			1 p.m........	1.68	23	6 p.m........	1.39	14
10 a.m.......	.81	3.5	9 p.m........	1.40	14	12 p.m.......	1.38	14

498. Moore Creek above Thorn Creek, near Idaho City, Idaho

(Gaging station, discontinued 1941)

Location.--Lat 43°46', long 115°55', in NW¼NW¼ sec.18, T.5 N., R.5 E., 1¾ miles upstream from Thorn Creek and 5½ miles southwest of Idaho City.

Drainage area.--119 sq mi.

Discharge record.--Peak discharge from stage-discharge relation defined by current-meter measurements below 700 cfs, and extended above by conveyance-slope analysis.

Maxima.--December 1955 to January 1956: Discharge, 1,650 cfs Dec. 23 (gage height, 6.70 ft, from floodmark).
1939-41: Discharge, 725 cfs Mar. 27, 1940 (gage height, 4.38 ft).

499. Moore Creek above Robie Creek, near Arrowrock, Idaho

Location.--Lat 43°38'45", long 115°58'45", in SE¼ sec.28, T.4 N., R.4 E., on left bank at State roadside park, 1.7 miles upstream from Robie Creek, 5 miles northwest of Arrowrock, and 5.8 miles upstream from mouth.

Drainage area.--399 sq mi.

Gage-height record.--Water-stage recorder graph except 12:30 p.m. Dec. 27 to 4 p.m. Dec. 29. Graph partly estimated Dec. 27, 29 on basis of records for nearby streams. Altitude of gage is 3,120 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times. Discharge Dec. 28 estimated on basis of weather records and records for nearby streams.

Maxima.--December 1955 to January 1956: Discharge, 5,440 cfs 8 p.m. Dec. 23 (gage height, 9.55 ft).
1950 to November 1955: Discharge, 3,620 cfs Apr. 27, 1952 (gage height, 8.23 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	150	400	11	106	246	21	555	590
2	131	364	12	117	234	22	2,790	565
3	106	329	13	136	252	23	4,330	616
4	110	322	14	87	246	24	3,200	535
5	68	333	15	80	456	25	1,620	396
6	85	304	16	114	1,190	26	1,110	440
7	126	288	17	134	956	27	880	452
8	102	278	18	136	814	28	660	326
9	102	240	19	188	718	29	470	348
10	104	255	20	482	664	30	436	372
						31	428	275
Monthly mean discharge, in cubic feet per second							618	445
Runoff, in inches							1.78	1.29
Runoff, in acre-feet							37,970	27,380

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Dec. 24		
12 p.m.	2.73	126	4 a.m.	4.95	1,120	3 a.m.	8.70	4,340
			6	5.48	1,490	6	8.23	3,830
Dec. 19			8	6.05	1,890	9	7.73	3,340
5 a.m.	2.73	126	10	6.69	2,400	12 m.	7.37	3,010
12 m.	2.97	186	12 m.	7.38	3,020	6 p.m.	6.80	2,500
6 p.m.	3.07	214	2 p.m.	8.04	3,640	12 p.m.	6.35	2,130
12 p.m.	3.48	315	5	8.54	4,160			
			7	8.64	4,270	Dec. 25		
Dec. 20			12 p.m.	8.45	4,060	6 a.m.	5.86	1,750
6 a.m.	3.73	440				12 m.	5.64	1,600
12 m.	3.88	510	Dec. 23			6 p.m.	5.40	1,430
6 p.m.	3.97	555	3 a.m.	8.29	3,890	12 p.m.	5.20	1,290
12 p.m.	3.93	535	6	8.07	3,670			
Dec. 21			9	7.79	3,390	Dec. 26		
6 a.m.	3.89	510	12 m.	8.12	3,720	6 a.m.	5.04	1,180
12 m.	3.84	485	2 p.m.	8.69	4,330	12 m.	4.90	1,090
5 p.m.	3.93	530	4	9.21	4,970	6 p.m.	4.77	1,010
12 p.m.	4.41	802	6	9.49	5,360	12 p.m.	4.75	1,000
			8	9.55	5,440			
Dec. 22			10	9.41	5,240			
2 a.m.	4.59	904	12 p.m.	9.19	4,950			

500. Robie Creek near Arrowrock, Idaho

Location.--Lat 43°37'30", long 115°59'45", in N½ sec.5, T.3 N., R.4 E., on left bank 0.5 mile upstream from mouth and 5 miles northwest of Arrowrock.

Drainage area.--15.8 sq mi.

Gage-height record.--Water-stage recorder graph except 5 a.m. Dec. 25 to 3 p.m. Dec. 29. Mean daily gage height estimated Dec. 25 and 29 on basis of partial record and records for nearby streams. Altitude of gage is 3,080 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 103 cfs, and extended above by logarithmic plotting; affected by ice at times. Discharge Dec. 26-28 estimated on basis of weather records and records for Moore Creek above Robie Creek.

Maxima.--December 1955 to January 1956: Discharge, 163 cfs 4 p.m. Dec. 23 (gage height, 2.67 ft).

1950 to November 1955: Discharge, 118 cfs Jan. 18, 1953 (gage height, 2.43 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5.4	7.7	11.....	3.2	5.8	21.....	7.4	16
2.....	4.8	7.2	12.....	3.7	5.8	22.....	40	16
3.....	3.8	6.5	13.....	3.7	6.5	23.....	98	19
4.....	3.1	6.2	14.....	3.0	6.2	24.....	51	17
5.....	3.0	7.7	15.....	2.8	19	25.....	26	15
6.....	4.4	7.0	16.....	3.0	26	26.....	23	15
7.....	3.7	6.7	17.....	3.2	22	27.....	19	14
8.....	3.5	6.7	18.....	3.2	20	28.....	15	12
9.....	3.4	6.2	19.....	3.7	18	29.....	11	13
10.....	3.2	6.2	20.....	5.0	17	30.....	8.7	12
						31.....	8.2	11
Monthly mean discharge, in cubic feet per second							12.3	12.1
Runoff, in inches							0.89	0.88
Runoff, in acre-feet							754	743

501. Lucky Peak Reservoir near Boise, Idaho

Location.--Lat 43°32', long 116°04', in SW¼NW¼ sec.12, T.2 N., R.3 E., at outlet control tower, at dam on Boise River, 2 miles upstream from diversion dam for New York Canal, 7 miles downstream from mouth of Moore Creek, and 9 miles southeast of Boise.

Drainage area.--2,680 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Corps of Engineers).

Discharge record.--Maximum inflow rate computed from rate of change in contents.

Maxima.--December 1955 to January 1956: Contents, 260,900 acre-ft 12 p.m. Jan. 31 (elevation, 3,042.87 ft); rate of inflow from drainage below Arrowrock Dam, 5,800 cfs 8 p.m. Dec. 23.

1954 to November 1955: Contents, 305,100 acre-ft June 25, 1955 (elevation, 3,059.32 ft).

Remarks.--Reservoir is formed by earthfill dam. Storage began Oct. 16, 1954. Dam completed in February 1955. Capacity, 307,040 acre-ft between elevations 2,824.0 ft (floor of outlet tunnel) and 3,060.0 ft (spillway crest). Minimum proposed operating level, 2,905.0 ft (28,770 acre-ft), but all storage can be released.

Elevation, in feet, and contents, in acre-feet, 1955-56, of Lucky Peak Reservoir near Boise, Idaho

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	2,917.58	39,810	2,951.71	80,240	16	2,921.19	43,340	2,988.19	139,920
2	2,917.89	40,100	2,952.35	81,150	17	2,921.48	43,640	2,990.65	144,540
3	2,918.13	40,330	2,952.89	81,920	18	2,921.77	43,930	2,995.12	153,130
4	2,918.40	40,600	2,953.43	82,690	19	2,922.16	44,330	2,999.04	160,870
5	2,918.59	40,780	2,954.18	83,770	20	2,923.14	45,330	3,003.25	169,390
6	2,918.78	40,960	2,957.50	88,620	21	2,924.33	46,560	3,007.62	178,480
7	2,919.09	41,270	2,962.19	95,720	22	2,929.38	52,010	3,011.89	187,610
8	2,919.31	41,480	2,966.49	102,450	23	2,937.04	60,940	3,015.98	196,570
9	2,919.55	41,720	2,970.53	108,990	24	2,942.14	67,330	3,019.87	205,280
10	2,919.80	41,960	2,975.84	117,870	25	2,944.64	70,580	3,023.52	213,640
11	2,920.04	42,200	2,981.81	128,290	26	2,946.31	72,810	3,027.05	221,880
12	2,920.28	42,440	2,985.97	135,820	27	2,947.67	74,640	3,030.53	230,170
13	2,920.58	42,730	2,986.19	136,220	28	2,948.73	76,090	3,033.80	238,120
14	2,920.77	42,920	2,986.54	136,860	29	2,949.56	77,240	3,036.95	245,910
15	2,920.92	43,070	2,987.09	137,880	30	2,950,28	78,240	3,039.95	253,450
					31	2,951.01	79,260	3,042.87	260,900
Change in contents...............................						-	+39,840	-	+181,640

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 18			Dec.22-Con.			Dec. 24		
12 p.m.....	2,921.77	43,930	4 a.m......	2,924.64	46,890	3 a.m......	2,938.04	62,170
Dec. 19			6..........	2,924.83	47,090	6..........	2,938.87	63,190
			8..........	2,925.10	47,370	9..........	2,939.59	64,090
5 a.m......	2,921.85	44,010	10.........	2,925.41	47,700	12 m.......	2,940.26	64,930
12 m.......	2,921.94	44,100	12 m.......	2,925.82	48,140	6 p.m......	2,941.25	66,190
6 p.m......	2,922.05	44,210	2 p.m......	2,926.30	48,650	12 p.m.....	2,942.14	67,330
12 p.m.....	2,922.16	44,330	5..........	2,927.15	49,560			
Dec. 20			7..........	2,927.80	50,270	Dec. 25		
6 a.m......	2,922.34	44,510	12 p.m.....	2,929.39	52,030	6 a.m......	2,942.92	68,330
12 m.......	2,922.57	44,740				12 m.......	2,943.55	69,150
6 p.m......	2,922.85	45,030	Dec. 23			6 p.m......	2,944.12	69,900
12 p.m.....	2,923.14	45,330	3 a.m......	2,930.33	53,080	12 p.m.....	2,944.64	70,580
			6..........	2,931.15	54,010			
Dec. 21			9..........	2,931.95	54,920	Dec. 26		
6 a.m......	2,923.41	45,610	12 m.......	2,932.72	55,810	6 a.m......	2,945.13	71,230
12 m.......	2,923.70	45,910	2 p.m......	2,933.30	56,490	12 m.......	2,945.54	71,780
5 p.m......	2,923.94	46,160	4..........	2,933.96	57,260	6 p.m......	2,945.92	72,280
12 p.m.....	2,924.33	46,560	6..........	2,934.72	58,160	12 p.m.....	2,946.31	72,810
			8..........	2,935.50	59,080			
Dec. 22			10.........	2,936.30	60,050			
2 a.m......	2,924.46	46,700	12 p.m.....	2,937.04	60,940			

502. Boise River near Boise, Idaho

Location.--Lat 43°32', long 116°04', in NE¼ sec.11, T.2 N., R.3 E., at gate-control house at outlet works of Lucky Peak Reservoir, 1.8 miles upstream from diversion dam for New York Canal, 7½ miles downstream from mouth of Moore Creek, and 9 miles southeast of Boise.

Drainage area.--2,680 sq mi, approximately.

Gage-height record.--Water-stage recorder graph of elevation of Lucky Peak Reservoir. Gate-opening readings available three times daily and after every gate change during period of operation. Datum of reservoir gage is at mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Discharge obtained from slide-gate rating curves furnished by Corps of Engineers and adjusted on basis of discharge measurements. Curves based on model studies and discharge measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,100 cfs Jan. 31 (one slide gate open to 2.15 ft).

1895-1916, 1954 to November 1955: Discharge observed, 35,500 cfs June 14, 1896.

Remarks.--Flow regulated by Lucky Peak Reservoir (see preceding station), Arrowrock Reservoir (see station 496), and Anderson Ranch Reservoir (see station 494).

Mean discharge, in cubic feet per second, 1955-56, of Boise River near Boise, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	1	1	11.....	1	1	21.....	1	1,040
2.....	1	1	12.....	1	1	22.....	1	1,020
3.....	1	1	13.....	1	1	23.....	1	1,030
4.....	1	1	14.....	1	1	24.....	1	996
5.....	1	1	15.....	1	1	25.....	1	1,050
6.....	1	1	16.....	1	1	26.....	1	1,060
7.....	1	1	17.....	1	5	27.....	1	1,070
8.....	1	1	18.....	1	694	28.....	1	1,080
9.....	1	1	19.....	1	1,040	29.....	1	1,080
10.....	1	1	20.....	1	1,040	30.....	1	1,090
						31.....	1	1,100
Monthly mean discharge, in cubic feet per second......................							1.0	465
Runoff, in acre-feet...							61	28,580

503. Boise River at Boise, Idaho

Location.--Lat 43°37', long 116°13', in SW¼ sec.10, T.3 N., R.2 E., on right bank at Capital Boulevard Bridge at Boise.

Drainage area.--2,760 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Jan. 29-31. Graph partly estimated for Jan. 31. Datum of gage is 2,675.46 ft above mean sea level (datum of Corps of Engineers, Boise River surveys).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times. Discharge Jan. 29, 30 estimated on basis of records for stations near Boise and at Notus.

Maxima.--December 1955 to January 1956: Daily discharge, 1,080 cfs Jan. 31.
1940 to November 1955: Discharge, 21,000 cfs Apr. 20, 1943 (gage height, 10.00 ft at site 1 mile upstream at datum 13.69 ft higher).

Remarks.--Flow regulated by Lucky Peak Reservoir (see station 501), Arrowrock Reservoir (see station 496), and Anderson Ranch Reservoir (see station 494).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	15	17	11.....	13	11	21.....	13	1,020
2.....	14	16	12.....	13	10	22.....	15	1,020
3.....	13	13	13.....	12	10	23.....	39	1,020
4.....	12	13	14.....	12	12	24.....	42	1,020
5.....	13	13	15.....	11	27	25.....	31	1,030
6.....	17	13	16.....	11	33	26.....	27	1,040
7.....	16	12	17.....	11	30	27.....	22	1,060
8.....	13	11	18.....	10	262	28.....	19	1,060
9.....	15	11	19.....	11	958	29.....	17	1,060
10.....	14	12	20.....	12	1,000	30.....	16	1,070
						31.....	17	1,080
Monthly mean discharge, in cubic feet per second......................							16.6	450
Runoff, in acre-feet...							1,020	27,700

504. Spring Valley Creek near Eagle, Idaho

Location.--Lat 43°44'20", long 116°18'00", on right bank in SE¼ sec.26, T.5 N., R.1 E., half a mile upstream from mouth and 4 miles northeast of Eagle.

Drainage area.--20.9 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,721.70 ft above mean sea level, preliminary unadjusted.

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 54 cfs 5 p.m. Dec. 23 (gage height, 2.18 ft).
June 1954 to November 1955: Discharge, 60 cfs Apr. 22, 1955 (gage height, 2.19 ft).

Mean discharge, in cubic feet per second, 1955-56, of Spring Valley Creek near Eagle, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	0.1	2.6	11.....	0.4	1.3	21.....	2.2	7.0
2.....	.1	2.4	12.....	.6	1.3	22.....	6.2	11
3.....	.1	2.3	13.....	.7	1.9	23.....	28	22
4.....	.1	2.3	14.....	.5	1.9	24.....	18	14
5.....	.1	2.3	15.....	.5	16.5	25.....	9.3	12.5
6.....	.1	2.1	16.....	.6	14.5	26.....	6.4	12.5
7.....	.1	1.9	17.....	.6	9.8	27.....	5.3	12
8.....	.1	1.8	18.....	.6	8.8	28.....	4.1	7.0
9.....	.3	1.6	19.....	.8	8.4	29.....	2.6	9.0
10.....	.4	1.5	20.....	2.1	7.4	30.....	2.4	9.0
						31.....	2.9	4.0
Monthly mean discharge, in cubic feet per second							3.11	6.86
Runoff, in inches							0.17	0.38
Runoff, in acre-feet							191	422

505. Dry Creek near Eagle, Idaho

Location.--Lat 43°43'55", long 116°18'15", in NW¼ sec.35, T.5 N., R.1 E., on left bank 80 ft downstream from State Highway 15, 500 ft downstream from Spring Valley Creek, and 3.6 miles northeast of Eagle.

Drainage area.--59.4 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,692.80 ft above mean sea level, preliminary unadjusted.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 156 cfs 7 p.m. Dec. 23 (gage height, 3.73 ft).

June 1954 to November 1955: Discharge, 149 cfs Apr. 22, 1955 (gage height, 3.14 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.5	15	11.....	1.6	6.7	21.....	9.1	29
2.....	1.4	12	12.....	1.6	6.7	22.....	30	36
3.....	1.4	10	13.....	2.4	7.8	23.....	96	66
4.....	1.4	9.9	14.....	1.4	7.8	24.....	78	43
5.....	1.4	10	15.....	1.5	52	25.....	40	32
6.....	1.5	9.1	16.....	1.6	56	26.....	29	30
7.....	1.6	8.2	17.....	2.4	44	27.....	25	28
8.....	1.6	7.4	18.....	2.4	36	28.....	20	17
9.....	1.8	7.1	19.....	3.1	32	29.....	13	22
10.....	1.6	7.1	20.....	6.7	30	30.....	12	22
						31.....	16	9.5
Monthly mean discharge, in cubic feet per second							13.2	22.9
Runoff, in inches							0.26	0.44
Runoff, in acre-feet							809	1,410

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21			Dec. 23--Con.			Dec. 25--Con.		
12 p.m.......	1.61	11	3 p.m........	3.33	129	12 p.m.......	1.97	32
			5............	3.72	154			
Dec. 22			6............	3.70	153	Jan. 14		
3 a.m........	1.67	14	7............	3.73	156	12 p.m.......	1.63	12
6............	1.67	14	10...........	3.25	122	Jan. 15		
9............	1.79	19	12 p.m.......	3.07	107	6 a.m........	1.86	25
12 m.........	1.94	27				9............	1.88	26
3 p.m........	2.11	38	Dec. 24			1 p.m........	2.16	51
5............	2.33	52	6 a.m........	2.71	90	4............	2.62	105
10...........	2.25	47	12 m.........	2.50	74	7............	2.44	85
12 p.m.......	2.26	48	6 p.m........	2.35	65	12 p.m.......	2.35	74
			12 p.m.......	2.24	55			
Dec. 23						Jan. 16		
3 a.m........	2.31	51	Dec. 25			6 a.m........	2.25	62
6............	2.48	64	6 a.m........	2.13	45	12 m.........	2.13	50
10...........	2.53	67	12 m.........	2.05	38	6 p.m........	2.14	51
12 m.........	2.87	92	6 p.m........	2.01	35	12 p.m.......	2.14	51

506. Dry Creek at Eagle, Idaho

Location.--Lat 43°41'45", long 116°22'05", in SW¼ sec.8, T.4 N., R.1 E., 40 ft downstream from State Highway 44, 0.4 mile upstream from mouth, and 0.7 mile west of Eagle.

Drainage area.--66.4 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,545.82 ft above mean sea level, preliminary unadjusted.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 149 cfs 9 p.m. Dec. 23 (gage height, 4.20 ft).

June 1954 to November 1955: Discharge, 136 cfs Apr. 22, 1955 (gage height, 4.12 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	9.0	11.....	0	3.4	21.....	1.8	23
2.....	0	7.9	12.....	0	3.4	22.....	17	28
3.....	0	7.3	13.....	0	4.7	23.....	77	62
4.....	0	7.3	14.....	0	5.6	24.....	76	34
5.....	0	7.3	15.....	0	47	25.....	35	24
6.....	0	6.6	16.....	0	56	26.....	24	23
7.....	0	5.3	17.....	0	37	27.....	19	23
8.....	0	4.2	18.....	0	30	28.....	15	13
9.....	0	3.7	19.....	0	27	29.....	9.7	16
10.....	0	3.7	20.....	0	24	30.....	7.9	16
						31.....	10	7.8
Monthly mean discharge, in cubic feet per second							9.43	18.4
Runoff, in inches							0.16	0.32
Runoff, in acre-feet							580	1,130

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Jan. 14		
12 p.m.......	2.24	0	12 p.m.......	3.57	35	12 p.m.......	3.03	8.3
Dec. 21			Dec. 23			Jan. 15		
3 a.m........	2.24	0	6 a.m........	3.64	42	3 a.m........	3.07	9.7
4............	2.82	1.3	12 m.........	3.70	49	6............	3.27	18
12 m.........	2.86	2.0	3 p.m........	3.90	81	11...........	3.34	22
6 p.m........	2.88	2.4	6............	4.11	127	3 p.m........	3.68	51
12 p.m.......	2.90	2.8	9............	4.20	149	6............	4.05	118
			12 p.m.......	4.11	127	9............	3.89	83
Dec. 22						12 p.m.......	3.91	87
3 a.m........	2.96	4.2	Dec. 24					
6............	3.05	6.9	6 a.m........	3.94	93	Jan. 16		
9............	3.05	6.9	12 m.........	3.82	71	6 a.m........	3.79	65
12 m.........	3.14	10	6 p.m........	3.73	56	12 m.........	3.69	50
4 p.m........	3.38	21	12 p.m.......	3.64	44	6 p.m........	3.64	44
7 p.m......	3.58	36				12 p.m.......	3.65	45

507. Boise River at Notus, Idaho

Location.--Lat 43°43', long 116°48', in SE¼ sec.34, T.5 N., R.4 W., on right bank 1,100 ft upstream from county road bridge, a quarter of a mile southeast of Notus, and 7 miles northwest of Caldwell.

Drainage area.--3,820 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,288.55 ft above mean sea level (datum of Corps of Engineers, Boise River surveys).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 2,100 cfs 10 a.m. Jan. 23 (gage height, 4.41 ft).

1920 to November 1955: Discharge, 20,500 cfs Apr. 20, 1943 (gage height, 10.43 ft).

Remarks.--Flow regulated by Lucky Peak Reservoir (see station 501), Arrowrock Reservoir (see station 496), and Anderson Ranch Reservoir (see station 494).

Mean discharge, in cubic feet per second, 1955-56, of Boise River at Notus, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	692	615	11.....	615	534	21.....	554	1,600
2.....	678	601	12.....	615	534	22.....	574	1,630
3.....	657	580	13.....	601	534	23.....	776	1,940
4.....	636	580	14.....	587	548	24.....	962	1,740
5.....	629	580	15.....	574	685	25.....	796	1,690
6.....	650	567	16.....	587	888	26.....	728	1,680
7.....	650	560	17.....	587	760	27.....	706	1,720
8.....	622	548	18.....	580	699	28.....	678	1,660
9.....	636	534	19.....	574	990	29.....	643	1,670
10.....	622	534	20.....	560	1,550	30.....	622	1,690
						31.....	615	1,620
Monthly mean discharge, in cubic feet per second.....................							645	1,034
Runoff, in acre-feet..							39,680	63,590

PAYETTE RIVER BASIN

508. South Fork Payette River at Lowman, Idaho

Location.--Lat 44°05'00", long 115°37'30", in SW$\frac{1}{4}$ sec.27, T.9 N., R.7 E., on right bank 1,200 ft upstream from Rock Creek, half a mile northwest of Lowman, and 4,100 ft downstream from Clear Creek.

Drainage area.--456 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,790 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 3,170 cfs 5 p.m. Dec. 22 (gage height, 5.59 ft).

1941 to November 1955: Discharge, 5,450 cfs May 21, 1954 (gage height, 6.83 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	363	624	11.....	340	450	21.....	701	444
2.....	350	596	12.....	397	439	22.....	2,120	444
3.....	340	561	13.....	358	444	23.....	2,800	444
4.....	308	547	14.....	242	439	24.....	2,010	422
5.....	254	540	15.....	300	507	25.....	1,390	358
6.....	350	515	16.....	382	562	26.....	1,110	417
7.....	358	497	17.....	377	496	27.....	957	422
8.....	323	490	18.....	363	472	28.....	824	358
9.....	363	461	19.....	422	461	29.....	704	402
10.....	345	467	20.....	534	450	30.....	666	392
						31.....	680	315
Monthly mean discharge, in cubic feet per second.....................							678	466
Runoff, in inches...							1.72	1.18
Runoff, in acre-feet..							41,710	28,630

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Dec. 24--Con.		
12 p.m.......	3.34	568	6 p.m........	5.46	2,960	12 m.........	4.75	1,950
			8............	5.41	2,880	6 p.m........	4.60	1,770
Dec. 21			12 p.m.......	5.41	2,880	12 p.m.......	4.44	1,590
6 a.m........	3.37	589						
2 p.m........	3.52	696	Dec. 23			Dec. 25		
12 p.m.......	3.82	948	2 a.m........	5.45	2,940	4 a.m........	4.37	1,510
			9............	5.17	2,530	2 p.m........	4.21	1,340
Dec. 22			11...........	5.19	2,560	12 p.m.......	4.09	1,220
2 a.m........	3.85	1,010	3 p.m........	5.49	3,010			
6............	4.13	1,280	5............	5.55	3,100	Dec. 26		
10...........	4.61	1,810	12 p.m.......	5.22	2,600	3 p.m........	3.94	1,060
2 p.m........	5.30	2,720				12 p.m.......	3.93	1,050
4............	5.42	2,900	Dec. 24					
5 p.m........	5.59	3,170	6 a.m........	4.95	2,210			

509. Deadwood Reservoir near Lowman, Idaho

Location.--Lat 44°18', long 115°39', in SE¼ sec.8, T.11 N., R.7 E., at dam on Deadwood River, 15 miles north of Lowman.

Drainage area.--108 sq mi.

Gage-height record.--Staff gage read once daily between 2 and 4 p.m. Dec. 2-30 and between 10 a.m. and 1 p.m. Dec. 1, Dec. 31 to Jan. 31. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Datum of Geological Survey levels (1952, preliminary) is 22.8 ft higher.

Maxima.--December 1955 to January 1956: Elevation observed, 5,300.63 ft Jan. 31.
1935 to November 1955: Elevation observed, 5,337.1 ft June 1, 2, 1943.

Remarks.--Reservoir is formed by concrete-arch dam completed in 1930; storage began Nov. 2, 1930. Reported capacity, 160,400 acre-ft between elevations 5,230.0 ft (minimum operating level because of fish protection, 27 ft above sill of emergency gate in front of needle valve) and 5,334.0 ft (crest of spillway). Storage below elevation 5,230 ft, about 1,500 acre-ft. Water used to augment flow of Payette River at Black Canyon powerplant near Emmett.

Cooperation.--Gage readings furnished by Bureau of Reclamation.

Elevation, in feet, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5,290.92	5,297.00	11.....	5,291.94	5,298.46	21.....	5,293.20	5,299.74
2.....	5,291.10	5,297.23	12.....	5,292.00	5,298.56	22.....	5,293.80	5,299.84
3.....	5,291.14	5,297.27	13.....	5,292.10	5,298.73	23.....	5,294.50	5,299.96
4.....	5,291.17	5,297.52	14.....	5,292.15	5,298.76	24.....	5,295.20	5,300.08
5.....	5,291.20	5,297.68	15.....	5,292.17	5,299.20	25.....	5,295.60	5,300.10
6.....	5,291.42	5,297.82	16.....	5,292.45	5,299.22	26.....	5,295.82	5,300.22
7.....	5,291.52	5,297.94	17.....	5,292.56	5,299.27	27.....	5,296.10	5,300.38
8.....	5,291.54	5,298.10	18.....	5,292.63	5,299.32	28.....	5,296.32	5,300.45
9.....	5,291.68	5,298.16	19.....	5,292.86	5,299.60	29.....	5,296.44	5,300.53
10.....	5,291.74	5,298.30	20.....	5,293.08	5,299.63	30.....	5,296.54	5,300.61
						31.....	5,296.85	5,300.63

510. Deadwood River below Deadwood Reservoir, near Lowman, Idaho

Location.--Lat 44°18', long 115°39', in NE¼ sec.17, T.11 N., R.7 E., on right bank 300 ft upstream from Wilson Creek, a quarter of a mile downstream from Deadwood Dam at lower end of Deadwood Basin, 15 miles north of Lowman, and 18 miles upstream from mouth.

Drainage area.--108 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 5,180.52 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 8.9 cfs 8 p.m. Dec. 23 to 4 a.m. Dec. 24 (gage height, 1.33 ft).
1926 to November 1955: Discharge, 2,580 cfs July 14, 1953; gage height, 8.79 ft July 27, 1954, present datum.

Remarks.--Flow completely regulated by Deadwood Reservoir (see station 509).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1.8	4.5	11.....	1.9	3.9	21.....	2.9	3.1
2.....	1.8	4.5	12.....	2.0	3.9	22.....	5.1	3.1
3.....	1.8	4.7	13.....	1.9	3.7	23.....	7.8	3.1
4.....	1.8	4.5	14.....	1.9	3.7	24.....	8.0	3.1
5.....	1.8	4.5	15.....	2.0	3.7	25.....	6.2	3.1
6.....	1.7	4.3	16.....	2.0	3.7	26.....	5.3	2.9
7.....	1.8	4.3	17.....	2.1	3.5	27.....	5.1	2.9
8.....	1.8	4.3	18.....	2.1	3.4	28.....	5.1	2.9
9.....	1.8	4.1	19.....	2.1	3.2	29.....	4.9	2.8
10.....	1.8	4.1	20.....	2.1	3.2	30.....	4.7	2.8
						31.....	4.5	2.9
Monthly mean discharge, in cubic feet per second......................							3.15	3.63
Runoff, in acre-feet..							194	223

511. Deadwood River near Lowman, Idaho

(Gaging station, discontinued 1953)

Location.--Lat 44°05', long 115°40', in sec.29, T.9 N., R.7 E., 700 ft upstream from mouth and 2½ miles west of Lowman.

Drainage area.--230 sq mi, approximately, of which 108 sq mi was noncontributing because of regulation.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,200 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,470 cfs Dec. 22 (gage height, 3.45 ft, from floodmark).
1921-53: Discharge, 4,230 cfs May 9, 1928 (gage height, 5.17 ft).

Remarks.--Practically no flow past Deadwood Dam; regulation by Deadwood Reservoir (see station 509).

512. South Fork Payette River near Garden Valley, Idaho

Location.--Lat 44°04', long 115°56', in sec.1, T.8 N., R.4 E., on right bank at Garden Valley ranger station, 300 ft upstream from Station Creek, 2.7 miles southeast of Garden Valley, and 5.9 miles upstream from Middle Fork.

Drainage area.--779 sq mi, of which 108 sq mi was noncontributing because of regulation.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,090 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 6,530 cfs 11:30 p.m. Dec. 22 (gage height, 5.92 ft).
1921 to November 1955: Discharge observed, 10,600 cfs May 26, 1928 (gage height, 8.0 ft).

Remarks.--Practically no flow past Deadwood Dam; regulated by Deadwood Reservoir (see station 509).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	544	984	11.....	475	668	21.....	1,170	676
2.....	520	917	12.....	544	634	22.....	3,950	668
3.....	498	851	13.....	592	651	23.....	5,740	694
4.....	482	833	14.....	380	634	24.....	3,830	651
5.....	342	824	15.....	400	728	25.....	2,440	536
6.....	460	762	16.....	560	879	26.....	1,870	600
7.....	520	736	17.....	560	788	27.....	1,590	634
8.....	452	719	18.....	536	728	28.....	1,340	552
9.....	490	660	19.....	634	702	29.....	1,120	568
10.....	468	676	20.....	917	694	30.....	984	576
						31.....	1,040	490
Monthly mean discharge, in cubic feet per second							1,143	700
Runoff, in acre-feet							70,310	43,070

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	2.40	955	3 p.m........	5.18	4,920	10 p.m.......	5.52	5,640
			5............	5.60	5,820	12 p.m.......	5.30	5,170
Dec. 21			6............	5.68	6,000			
12 m.........	2.51	1,060	11...........	5.73	6,110	Dec. 24		
3 p.m........	2.60	1,150	11:30........	5.92	6,530	6 a.m........	4.87	4,320
6............	2.78	1,330	12 p.m.......	5.84	6,350	12 m.........	4.53	3,720
12 p.m.......	3.08	1,670				6 p.m........	4.22	3,220
			Dec. 23			12 p.m.......	4.02	2,920
Dec. 22			1 a.m........	5.82	6,300			
4 a.m........	3.32	1,960	5............	5.78	6,220	Dec. 25		
7............	3.58	2,290	9............	5.49	5,580	12 m.........	3.65	2,390
9............	3.92	2,770	12 m.........	5.31	5,190	12 p.m.......	3.41	2,070
11...........	4.42	3,540	4 p.m........	5.45	5,490			
1 p.m........	4.67	3,960	7 p.m........	5.62	5,860			

513. Middle Fork Payette River near Crouch, Idaho

(Miscellaneous site)

Location.--Lat 44°12', long 115°56', in NE¼ sec.13, T.10 N., R.4 E., 0.1 mile downstream from Boise National Forest boundary, 1 mile downstream from Big Bulldog Creek, and 7 miles north of Crouch.

Drainage area.--210 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,690 cfs Dec. 22.

514. Scriver Creek near Crouch, Idaho

(Miscellaneous site)

Location.--Lat 44°11', long 115°59', in SE¼ sec.21, T.10 N., R.4 E., 80 ft downstream from canal diversion box, 1.3 miles upstream from mouth, and 5 miles north of Crouch.

Drainage area.--27.3 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 406 cfs Dec. 22.

515. Anderson Creek near Crouch, Idaho

(Miscellaneous site)

Location.--Lat 44°06', long 115°56', in NW¼ sec.24, T.9 N., R.4 E., 2 miles upstream from mouth and 2¼ miles southeast of Crouch.

Drainage area.--34.0 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 690 cfs Dec. 22.

516. South Fork Payette River near Banks, Idaho

Location.--Lat 44°05'30", long 116°06'00", in sec.28, T.9 N., R.3 E., on right bank 1 mile upstream from North Fork Payette River and 1½ miles northeast of Banks.

Drainage area.--1,200 sq mi, approximately, of which 108 sq mi was noncontributing because of regulation.

Gage-height record.--Water-stage recorder graph except Dec. 29 to Jan. 10. Altitude of gage is 2,805 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge during period of no gage-height record estimated on basis of records for North Fork Payette River near Banks and Payette River near Horseshoe Bend.

Maxima.--December 1955 to January 1956: Discharge, 12,400 cfs 1 a.m. Dec. 23 (gage height, 10.87 ft).
1921 to November 1955: Discharge, 13,800 cfs May 17, 1927 (gage height, 10.6 ft, from floodmarks).

Remarks.--Practically no flow past Deadwood Dam; regulated by Deadwood Reservoir (see station 509).

Mean discharge, in cubic feet per second, 1955-56, of South Fork Payette River near Banks, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	798	1,730	11.....	648	1,100	21.....	2,180	1,290
2.....	744	1,550	12.....	726	1,060	22.....	8,290	1,280
3.....	687	1,450	13.....	834	1,100	23.....	10,700	1,380
4.....	665	1,400	14.....	520	1,070	24.....	7,040	1,270
5.....	488	1,350	15.....	456	1,360	25.....	4,350	1,090
6.....	575	1,300	16.....	816	1,890	26.....	3,280	1,140
7.....	732	1,200	17.....	780	1,610	27.....	2,850	1,180
8.....	632	1,150	18.....	738	1,460	28.....	2,370	1,010
9.....	660	1,150	19.....	897	1,390	29.....	2,000	1,040
10.....	660	1,100	20.....	1,810	1,340	30.....	1,700	1,050
						31.....	1,800	798
Monthly mean discharge, in cubic feet per second......................							1,981	1,267
Runoff, in acre-feet..							121,800	77,930

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.......	1.00	732	12 p.m.......	4.26	3,290	7 p.m........	9.62	10,300
						9............	9.55	10,200
Dec. 19			Dec. 22			12 p.m.......	9.16	9,630
12 m.........	1.18	840	2 a.m........	4.68	3,720			
4 p.m........	1.28	905	4............	5.66	4,830	Dec. 24		
8............	1.48	1,040	6............	6.07	5,330	4 a.m........	8.45	8,550
12 p.m.......	1.91	1,320	8............	6.64	6,050	8............	7.75	7,550
			10...........	7.33	6,960	12 m.........	7.17	6,750
Dec. 20			12 m.........	8.18	8,160	4 p.m........	6.74	6,180
3 a.m........	2.30	1,590	2 p.m........	9.03	9,420	8............	6.38	5,720
6............	2.63	1,850	4............	9.88	10,800	12 p.m.......	6.04	5,300
9............	2.76	1,950	6............	10.53	11,800			
12 m.........	2.67	1,880	8............	10.83	12,300	Dec. 25		
6 p.m........	2.63	1,850	10...........	10.86	12,400	6 a.m........	5.59	4,750
12 p.m.......	2.65	1,870	12 p.m.......	10.77	12,200	12 m.........	5.20	4,290
						6 p.m........	4.85	3,900
Dec. 21			Dec. 23			12 p.m.......	4.60	3,630
6 a.m........	2.63	1,830	1 a.m........	10.87	12,400			
10...........	2.73	1,910	2............	10.85	12,400	Dec. 26		
12 m.........	2.85	2,010	4............	10.62	11,900	6 a.m........	4.39	3,420
2 p.m........	2.88	2,030	8............	10.03	11,000	12 m.........	4.19	3,220
6............	3.32	2,410	12 m.........	9.47	10,100	6 p.m........	4.05	3,080
9 p.m........	3.73	2,780	2 p.m........	9.41	10,000	12 p.m.......	4.12	3,150

517. Payette Lake at McCall, Idaho

Location.--Lat 44°55', long 116°07', in sec.8, T.18 N., R.3 E., at outlet of lake on North Fork Payette River, at McCall.

Drainage area.--144 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 4,982.73 ft above mean sea level (unadjusted).

Maxima.--December 1955 to January 1956: Gage height, 3.44 ft 11 p.m. Dec. 26.
1921 to November 1955: Gage height observed, 8.75 ft July 13, 1935.

Remarks.--Flow from Payette Lake is regulated within natural range by taintor gates and removable stoplogs of a buttress and slab-type dam. Gates open during flood period.

Gage height, in feet, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2.30	3.13	11.....	2.18	2.68	21.....	2.40	2.56
2.....	2.27	3.08	12.....	2.18	2.64	22.....	2.78	2.56
3.....	2.25	3.03	13.....	2.15	2.63	23.....	3.18	2.55
4.....	2.21	2.97	14.....	2.13	2.64	24.....	3.33	2.53
5.....	2.22	2.92	15.....	2.12	2.71	25.....	3.38	2.49
6.....	2.22	2.88	16.....	2.13	2.68	26.....	3.42	2.47
7.....	2.20	2.83	17.....	2.12	2.64	27.....	3.40	2.45
8.....	2.20	2.80	18.....	2.14	2.62	28.....	3.35	2.43
9.....	2.19	2.75	19.....	2.23	2.60	29.....	3.28	2.42
10.....	2.17	2.72	20.....	2.27	2.58	30.....	3.21	2.39
						31.....	3.17	2.37

518. North Fork Payette River at McCall, Idaho

Location.--Lat 44°54'30", long 116°07'30", in sec.8, T.18 N., R.3 E., on left bank at McCall, a quarter of a mile downstream from outlet of Payette Lake.

Drainage area.--144 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,970 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 512 cfs 11 p.m. Dec. 26 (gage height, 3.59 ft).

1908-17, 1919 to November 1955: Discharge, 4,260 cfs June 10, 1933, June 4, 1948; gage height, 7.71 ft June 4, 1948.

Remarks.--Gates at outlet of Payette Lake open during flood period. Flow affected only by natural regulation of lake.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	173	393	11.....	142	261	21.....	179	222
2.....	170	380	12.....	142	251	22.....	248	222
3.....	162	359	13.....	140	248	23.....	377	222
4.....	154	343	14.....	132	241	24.....	455	219
5.....	149	332	15.....	128	251	25.....	485	210
6.....	154	316	16.....	126	258	26.....	496	201
7.....	152	305	17.....	126	251	27.....	506	196
8.....	147	294	18.....	126	241	28.....	496	190
9.....	149	282	19.....	142	235	29.....	443	184
10.....	142	272	20.....	158	229	30.....	420	181
						31.....	406	173
Monthly mean discharge, in cubic feet per second......................							240	257
Runoff, in acre-feet..							14,730	15,790

519. Lake Fork Payette River above Jumbo Creek, near McCall, Idaho

Location.--Lat 44°55', long 115°59', in NE¼ sec.8, T.18 N., R.4 E., on left bank 200 ft upstream from bridge at abandoned powerplant, a quarter of a mile upstream from Jumbo Creek, 3½ miles upstream from Lake Fork Reservoir dam, and 5½ miles east of McCall.

Drainage area.--48.9 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 17-20. Altitude of gage is 5,140 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,300 cfs and extended above by logarithmic plotting; affected by ice at times. Discharge during period of no gage-height record estimated on basis of weather records and records for station below Lake Irrigation District Canal.

Maxima.--December 1955 to January 1956: Discharge, 1,030 cfs 4 p.m. Dec. 22 (gage height, 7.26 ft).

1945 to November 1955: Discharge, 2,600 cfs June 3, 1948 (gage height, 9.19 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	57	112	11.....	48	68	21.....	174	58
2.....	54	96	12.....	61	66	22.....	683	57
3.....	52	89	13.....	50	66	23.....	468	56
4.....	47	91	14.....	40	60	24.....	246	52
5.....	40	84	15.....	54	66	25.....	181	45
6.....	50	80	16.....	60	72	26.....	156	48
7.....	48	76	17.....	57	64	27.....	143	52
8.....	45	75	18.....	54	63	28.....	124	48
9.....	54	70	19.....	74	60	29.....	102	50
10.....	48	72	20.....	100	61	30.....	100	46
						31.....	108	40
Monthly mean discharge, in cubic feet per second......................							115	65.9
Runoff, in inches...							2.72	1.55
Runoff, in acre-feet..							7,100	4,050

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955, of Lake Fork Payette River above Jumbo Creek, near McCall, Idaho

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	4.08	111	7 a.m........	6.15	466	7 p.m........	5.78	345
			8............	6.17	472	12 p.m.......	5.59	304
Dec. 21			10...........	6.68	676			
6 a.m........	4.28	129	2 p.m........	7.18	971	Dec. 24		
10...........	4.68	172	4............	7.26	1,030	12 m.........	5.28	237
2 p.m........	4.76	182	8............	7.13	902	12 p.m.......	5.09	207
7............	4.98	213	12 p.m.......	6.87	746			
12 p.m.......	5.22	253				Dec. 25		
			Dec. 23			12 m.........	4.88	178
Dec. 22			6 a.m........	6.48	545	12 p.m.......	4.75	162
4 a.m........	5.57	321	2 p.m........	6.07	414			

520. Lake Fork Payette River below Lake Irrigation District Canal, near McCall, Idaho

Location.--Lat 44°54', long 116°03', in SW¼ sec.13, T.18 N., R.3 E., on right bank 300 ft downstream from diversion dam for Lake Irrigation District Canal, half a mile downstream from Lake Fork Reservoir, and 3 miles southeast of McCall.

Drainage area.--64 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 5,080 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,500 cfs and extended above by logarithmic plotting; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 222 cfs 4 p.m. Dec. 26 to 1 a.m. Dec. 27 (gage height, 3.86 ft).
1940 to November 1955: Discharge, 2,120 cfs June 3, 1948 (gage height, 7.09 ft).

Remarks.--Flow affected by natural regulation of Lake Fork Reservoir and by capacity of gates at dam.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	85	184	11.....	61	117	21.....	90	92
2.....	80	178	12.....	61	113	22.....	136	88
3.....	78	171	13.....	63	110	23.....	205	85
4.....	73	162	14.....	59	105	24.....	218	84
5.....	70	156	15.....	57	103	25.....	220	80
6.....	68	150	16.....	57	103	26.....	221	76
7.....	67	142	17.....	59	101	27.....	220	73
8.....	66	135	18.....	59	98	28.....	216	70
9.....	66	128	19.....	63	95	29.....	210	68
10.....	63	122	20.....	71	93	30.....	198	67
						31.....	191	66
Monthly mean discharge, in cubic feet per second.......................							111	110
Runoff, in acre-feet..							6,840	6,770

521. Cascade Reservoir at Cascade, Idaho

Location.--Lat 44°31'30", long 116°03'05", in NE¼NE¼ sec.26, T.14 N., R.3 E., just upstream from left abutment of dam on North Fork Payette River, half a mile downstream from Willow Creek and three-quarters of a mile northwest of Cascade.

Drainage area.--620 sq mi.

Gage-height record.--Once-daily staff-gage readings at 3 or 3:30 p.m. except Dec. 25, 31, Jan. 7, 21, when gage was read at 5 or 5:30 p.m. Datum of gage is at mean sea level (preliminary, unadjusted levels by Coast and Geodetic Survey).

Discharge record.--Maximum inflow rate computed from rate of change in contents determined from gage-height graph based on gage readings and shape of graph for Payette Lake at McCall.

Maxima.--December 1955 to January 1956: Contents observed, 302,800 acre-ft Jan. 30, 31 (elevation, 4,809.37 ft); rate of inflow about 11,000 cfs about 12 m. to 4 p.m. Dec. 22.

1948 to November 1955: Contents observed, 405,100 acre-ft June 20, 1953 (elevation, 4,815.01 ft).

Remarks.--Reservoir is formed by earthfill dam completed in May 1949. Storage began Nov. 7, 1947. Capacity, 703,200 acre-ft between elevations 4,766 ft (4.0 ft above sill of outlet tunnel) and 4,828 ft (top of spillway gates). Figures herein show contents above elevation 4,766 ft. The Bureau of Reclamation plans to limit withdrawal to elevation 4,787.5 ft, retaining 50,000 acre-ft capacity as dead storage. Contents table computed from tables furnished by Bureau of Reclamation (revised 1950). Water is used for irrigation of lands in the Payette Division of the Boise project and for power at Black Canyon powerplant near Emmett.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	4,801.83	188,700	4,806.70	259,400	16	4,802.40	196,400	4,808.40	286,600
2	4,801.90	189,700	4,806.85	261,700	17	4,802.40	196,400	4,808.55	289,100
3	4,801.92	189,900	4,807.00	264,100	18	4,802.38	196,100	4,808.65	290,700
4	4,801.94	190,200	4,807.15	266,400	19	4,802.38	196,100	4,808.75	292,400
5	4,801.96	190,500	4,807.30	268,800	20	4,802.50	197,700	4,808.85	294,000
6	4,802.00	191,000	4,807.35	269,600	21	4,802.90	203,200	4,808.95	295,700
7	4,802.02	191,300	4,807.45	271,200	22	4,804.00	218,900	4,809.00	296,600
8	4,802.02	191,300	4,807.55	272,800	23	4,804.90	232,000	4,809.10	298,200
9	4,802.04	191,500	4,807.65	274,400	24	4,805.20	236,500	4,809.20	299,900
10	4,802.06	191,800	4,807.70	275,200	25	4,805.50	241,000	4,809.25	300,700
11	4,802.10	192,300	4,807.80	276,800	26	4,805.70	244,000	4,809.30	301,600
12	4,802.20	193,700	4,807.90	278,400	27	4,806.00	248,600	4,809.33	302,100
13	4,802.25	194,300	4,808.00	280,100	28	4,806.30	253,200	4,809.33	302,100
14	4,802.30	195,000	4,808.10	281,700	29	4,806.45	255,500	4,809.35	302,400
15	4,802.35	195,700	4,808.30	285,000	30	4,806.55	257,000	4,809.37	302,800
					31	4,806.60	257,800	4,809.37	302,800
Change in contents..................................						-	+70,100	-	+45,000

522. North Fork Payette River at Cascade, Idaho

Location.--Lat 44°31', long 116°02', in NE¼ sec.36, T.14 N., R.3 E., on right bank at Cascade, 285 ft downstream from Halleck and Howard milldam, half a mile upstream from Beaver Creek, and 1½ miles downstream from Cascade Dam.

Drainage area.--626 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,730 ft (from topographic map by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,210 cfs 5-8 p.m. Dec. 19 (gage height, 2.15 ft).

1941 to November 1955: Discharge recorded, 7,320 cfs May 10, 1947 (gage height, 6.29 ft).

Remarks.--Flow regulated by Cascade Reservoir (see station 521), Payette Lake (see station 517), Lake Fork Reservoir, and occasionally by milldam at Cascade. Gate openings at Cascade Reservoir not changed Dec. 21-26; flow passing reservoir was about 170 cfs.

Mean discharge, in cubic feet per second, 1955-56, of North Fork Payette River at Cascade, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	206	417	11.....	198	220	21.....	246	225
2.....	198	417	12.....	202	220	22.....	374	230
3.....	198	315	13.....	202	220	23.....	241	230
4.....	198	215	14.....	198	220	24.....	178	225
5.....	198	215	15.....	198	235	25.....	172	225
6.....	331	220	16.....	539	249	26.....	172	322
7.....	411	215	17.....	1,170	235	27.....	202	477
8.....	311	215	18.....	1,170	235	28.....	225	484
9.....	198	220	19.....	1,190	230	29.....	220	484
10.....	198	220	20.....	616	230	30.....	259	484
						31.....	411	435
Monthly mean discharge, in cubic feet per second......................							349	283
Runoff, in acre-feet...							21,480	17,420

523. North Fork Payette River near Banks, Idaho

Location.--Lat 44°07', long 116°06', in SE¼ sec.16, T.9 N., R.3 E., on right bank 40 ft downstream from highway bridge, 2½ miles north of Banks, and 3 miles upstream from confluence with South Fork.

Drainage area.--933 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 3,081.13 ft above mean sea level, preliminary unadjusted elevation.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 5,400 cfs 12 p.m. Dec. 22 (gage height, 11.14 ft).

1947 to November 1955: Discharge, 8,830 cfs May 11, 1947 (gage height, about 13.5 ft).

Remarks.--Flow regulated by Cascade Reservoir (see station 521), Payette Lake (see station 517), Lake Fork Reservoir, and occasionally by milldam at Cascade.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	347	755	11.....	332	482	21.....	1,070	588
2.....	335	750	12.....	372	454	22.....	3,400	569
3.....	314	711	13.....	378	460	23.....	3,050	577
4.....	308	585	14.....	314	447	24.....	1,650	543
5.....	261	536	15.....	280	544	25.....	1,190	450
6.....	228	517	16.....	350	936	26.....	945	485
7.....	419	499	17.....	875	889	27.....	1,000	604
8.....	489	496	18.....	1,360	735	28.....	840	655
9.....	372	430	19.....	1,400	659	29.....	612	707
10.....	323	478	20.....	1,540	619	30.....	581	707
						31.....	643	635
Monthly mean discharge, in cubic feet per second......................							825	597
Runoff, in acre-feet...							50,730	36,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	6.61	1,240	10 a.m.......	8.90	2,870	12 p.m.......	7.88	2,040
			11...........	9.40	3,350	Dec. 24		
Dec. 21			3 p.m........	10.05	4,060	10 a.m.......	7.32	1,650
5 a.m........	6.16	995	6............	10.94	5,140	2 p.m........	7.12	1,530
9............	6.04	935	11...........	10.88	5,060	3............	7.03	1,480
12 m.........	6.06	945	12 p.m.......	11.14	5,400	8............	7.07	1,500
10 p.m.......	6.59	1,230				12 p.m.......	6.96	1,440
12 p.m.......	6.78	1,330	Dec. 23					
			4 a.m........	10.27	4,310	Dec. 25		
Dec. 22			10...........	8.91	2,880	6 a.m........	6.72	1,300
4 a.m........	7.35	1,670	2 p.m........	8.33	2,380	12 m.........	6.44	1,150
7 a.m........	7.98	2,110	4 p.m........	8.15	2,240	12 p.m.......	6.23	1,030

524. Porter Creek near Gardena, Idaho

(Gaging station, discontinued, 1945)

Location.--Lat 43°57', long 116°11', in NE¼ sec.14, T.7 N., R.2 E., at Rood ranch-house, 0.6 mile upstream from mouth and 2 miles south of Gardena.

Drainage area.--21.2 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 60 cfs.

Maxima.--December 1955 to January 1956: Discharge, 140 cfs Dec. 22 (gage height, 2.9 ft, from floodmark).
1938-45: Discharge, 181 cfs Aug. 11, 1941 (gage height, 3.58 ft, from floodmark).

525. Payette River near Horseshoe Bend, Idaho

Location.--Lat 43°56'30", long 116°12'00", in SE¼ sec.15, T.7 N., R.2 E., on left bank 300 ft upstream from bridge on State Highway 15, half a mile downstream from Porter Creek, and 2 miles north of Horseshoe Bend.

Drainage area.--2,230 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,625.61 ft above mean sea level, unadjusted.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 19,200 cfs 3 a.m. Dec. 23 (gage height, 14.05 ft).
1906-16, 1919 to November 1955: Discharge, 22,100 cfs June 9, 1921 (gage height, 9.57 ft, at site 1,000 ft downstream at datum 2.1 ft lower).

Remarks.--Flow regulated by Deadwood Reservoir (see station 509), Payette Lake (see station 517), Cascade Reservoir (see station 521), and Lake Fork Reservoir.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,210	2,630	11.....	1,000	1,670	21.....	3,350	2,030
2.....	1,140	2,430	12.....	1,100	1,580	22.....	11,400	2,030
3.....	1,030	2,250	13.....	1,280	1,620	23.....	15,600	2,190
4.....	1,020	2,090	14.....	928	1,590	24.....	9,670	2,000
5.....	850	2,000	15.....	751	2,140	25.....	6,040	1,710
6.....	808	1,900	16.....	1,130	3,110	26.....	4,620	1,750
7.....	1,140	1,800	17.....	1,560	2,760	27.....	4,190	1,920
8.....	1,200	1,780	18.....	2,290	2,370	28.....	3,530	1,840
9.....	1,080	1,610	19.....	2,300	2,210	29.....	2,800	1,860
10.....	1,020	1,640	20.....	3,450	2,110	30.....	2,470	1,900
						31.....	2,550	1,600
Monthly mean discharge, in cubic feet per second........................							2,985	2,004
Runoff, in acre-feet..							183,500	123,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 24--Con.		
12 p.m.......	6.66	3,530	3 p.m........	11.98	13,200	12 m.........	10.33	9,410
			6............	13.09	16,300	6 p.m........	9.71	8,130
Dec. 21			9............	13.88	18,700	12 p.m.......	9.29	7,280
6 a.m........	6.26	3,090	12 p.m.......	13.98	19,000			
9............	6.18	3,000				Dec. 25		
12 m.........	6.21	3,030	Dec. 23			6 a.m........	8.89	6,570
4 p.m........	6.36	3,200	3 a.m........	14.05	19,200	12 m.........	8.49	5,940
8............	6.81	3,710	10...........	12.88	15,700	6 p.m........	8.17	5,470
12 p.m.......	7.36	4,380	3 p.m........	12.20	13,800	12 p.m.......	7.92	5,120
			6............	12.07	13,400			
Dec. 22			9............	12.07	13,400	Dec. 26		
3 a.m........	7.91	5,100	12 p.m.......	11.92	13,000	12 m.........	7.52	4,570
7............	9.25	7,200				8 p.m........	7.30	4,280
12 m.........	10.82	10,500	Dec. 24			12 p.m.......	7.37	4,370
1 p.m........	11.45	11,800	6 a.m........	11.09	11,000			

526. Harris Creek near Horseshoe Bend, Idaho

(Miscellaneous site)

Location.--Lat 43°54', long 116°12', in NE¼ sec.3, T.6 N., R.2 E., 0.1 mile upstream from unnamed tributary, 0.9 mile upstream from mouth, and 1½ miles south of Horseshoe Bend.

Drainage area.--74.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,240 cfs Dec. 22.

527. Cottonwood Creek near Ola, Idaho

(Miscellaneous site)

Location.--Lat 44°15', long 116°18', in sec.35, T.11 N., R.1 E., half a mile upstream from mouth and 5 miles north of Ola.

Drainage area.--29.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 722 cfs Dec. 22.

528. Little Squaw Creek near Ola, Idaho

(Miscellaneous site)

Location.--Lat 44°08', long 116°18', in sec.11, T.9 N., R.1 E., 1 mile upstream from mouth and 3½ miles south of Ola.

Drainage area.--75.3 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,000 cfs Dec. 22.

529. Squaw Creek near Sweet, Idaho

(Miscellaneous site)

Location.--Lat 43°57'20", long 116°20'00", near line between secs. 9 and 10, T.7 N., R.1 E., 0.2 mile upstream from Sweet cemetery and 1¼ miles southwest of Sweet.

Drainage area.--341 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 4,970 cfs Dec. 22.

530. Payette River near Emmett, Idaho

Location.--Lat 43°56', long 116°27', in sec.22, T.7 N., R.1 W., on right bank three-eighths of a mile downstream from Black Canyon Dam and 5 miles northeast of Emmett.

Drainage area.--2,680 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,400 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 22,700 cfs 12 p.m. Dec. 22 (gage height, 12.98 ft).

1925 to November 1955: Discharge, 22,800 cfs May 1, 1938 (gage height, 12.90 ft).

Remarks.--Flow regulated by several reservoirs on tributary streams.

Mean discharge, in cubic feet per second, 1955-56, of Payette River near Emmett, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	1,710	3,100	11.....	1,330	1,900	21.....	4,010	2,700
2.....	1,700	2,930	12.....	1,280	1,830	22.....	12,800	2,850
3.....	1,640	2,650	13.....	1,650	1,910	23.....	20,600	3,890
4.....	1,530	2,520	14.....	1,530	1,970	24.....	12,600	2,960
5.....	1,380	2,390	15.....	1,060	3,430	25.....	7,560	2,380
6.....	1,200	2,270	16.....	1,010	5,140	26.....	5,560	2,260
7.....	1,450	2,130	17.....	1,120	4,020	27.....	5,250	2,390
8.....	1,520	2,130	18.....	1,400	3,330	28.....	4,300	2,180
9.....	1,420	1,940	19.....	1,550	3,060	29.....	3,380	2,180
10.....	1,460	1,880	20.....	2,560	2,870	30.....	2,840	2,220
						31.....	2,850	1,910
Monthly mean discharge, in cubic feet per second......................							3,589	2,623
Runoff, in acre-feet..							220,700	161,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 24--Con.		
12 p.m.......	3.14	1,790	2 p.m........	9.72	13,600	6 a.m........	10.15	14,600
			4............	10.67	16,000	9............	9.66	13,400
Dec. 21			8............	12.00	19,800	12 m.........	9.15	12,200
4 a.m........	3.14	1,790	12 p.m.......	12.98	22,700	3 p.m........	9.25	12,400
6............	3.56	2,300				4............	8.18	9,950
7............	5.25	4,630	Dec. 23			10...........	8.18	9,950
2 p.m........	5.20	4,560	5 a.m........	12.87	22,400	12 p.m.......	7.74	9,000
8............	5.23	4,600	8............	12.92	22,600			
10...........	5.89	5,640	12 m.........	12.57	21,500	Dec. 25		
12 p.m.......	6.10	5,990	4 p.m........	11.98	19,700	4 a.m........	7.78	9,090
			8............	11.38	18,000	7............	7.10	7,700
Dec. 22			12 p.m.......	10.88	16,600	1 p.m........	6.98	7,460
5 a.m........	6.54	6,750				5............	6.69	6,910
8............	7.77	9,150	Dec. 24			9............	6.40	6,390
10 a.m.......	8.04	9,700	3 a.m........	10.73	16,200	12 p.m.......	6.47	6,520

531. Willow Creek near New Plymouth, Idaho

(Miscellaneous site)

Location.--Lat 44°01', long 116°44', in sec.19, T.8 N., R.3 W., an eighth of a mile east of Clifford Barker house and 5 miles northeast of New Plymouth.

Drainage area.--138 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,640 cfs Jan. 15.

532. Little Willow Creek near New Plymouth, Idaho

(Miscellaneous site)

Location.--Lat 44°01'55", long 116°50'10", in sec.17, T.8 N., R.4 W., 0.5 mile upstream from mouth and 4½ miles north of New Plymouth.

Drainage area.--157 sq mi.

Discharge record.--peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,050 cfs Dec. 22.

533. Payette River near Payette, Idaho

Location.--Lat 44°02'30", long 116°55'30", in SW¼ sec.10, T.8 N., R.5 W., on right bank at highway bridge, 1¾ miles south of Payette.

Drainage area.--3,240 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,138.44 ft above mean sea level, unadjusted.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 21,900 cfs 9:30 p.m. Dec. 23 (gage height, 12.75 ft).

1935 to November 1955: Discharge, 23,400 cfs May 2, 1938 (gage height, 11.90 ft).

Remarks.--Flow regulated by several reservoirs on tributary streams.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,990	3,360	11.....	1,770	2,250	21.....	3,520	3,000
2.....	2,090	3,280	12.....	1,680	2,140	22.....	8,040	3,050
3.....	2,010	3,030	13.....	1,920	2,080	23.....	19,400	5,050
4.....	1,900	2,860	14.....	2,010	2,310	24.....	17,000	3,540
5.....	1,860	2,750	15.....	1,680	3,330	25.....	9,590	2,860
6.....	1,630	2,690	16.....	1,350	6,100	26.....	6,620	2,470
7.....	1,660	2,490	17.....	1,390	4,650	27.....	5,880	2,610
8.....	1,880	2,410	18.....	1,610	3,720	28.....	4,950	2,450
9.....	1,840	2,290	19.....	1,900	3,360	29.....	4,100	2,290
10.....	1,820	2,160	20.....	3,370	3,130	30.....	3,360	2,470
						31.....	3,150	2,200
Monthly mean discharge, in cubic feet per second......................							3,967	2,980
Runoff, in acre-feet..							243,900	183,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.......	6.07	2,390	1 p.m........	6.09	2,450	9:30 p.m.....	12.75	21,900
			2............	6.10	2,470	12 p.m.......	12.69	21,700
Dec. 20			4............	7.05	4,400			
2 a.m........	6.27	2,790	5............	7.17	4,670	Dec. 24		
4............	6.56	3,400	8............	7.10	4,510	3 a.m........	12.46	20,700
5............	6.63	3,570	12 p.m.......	7.25	4,830	9............	11.78	18,000
6............	6.62	3,550				2 p.m........	11.33	16,400
10............	6.33	2,940	Dec. 22			9............	10.40	13,100
5 p.m........	6.18	2,630	1 a.m........	7.24	4,810	11............	10.31	12,800
6............	6.17	2,610	2............	7.25	4,830	12 p.m.......	10.18	12,400
7............	6.23	2,730	4............	7.38	5,120			
9............	7.42	5,220	6............	7.70	5,880	Dec. 25		
10............	7.61	5,660	9............	7.86	6,260	2 a.m........	9.79	11,200
11............	7.69	5,860	12 m.........	8.14	6,930	6............	9.64	10,700
12 p.m.......	7.50	5,410	3 p.m........	8.63	8,180	8............	9.45	10,200
			6............	9.38	10,300	2 p.m........	9.19	9,370
Dec. 21			12 p.m.......	10.60	14,400	5............	8.81	8,230
2 a.m........	6.58	3,420				6............	8.80	8,200
3............	6.36	3,000	Dec. 23			8............	8.83	8,290
5............	6.20	2,670	12 m.........	12.38	20,400	12 p.m.......	8.63	7,690
7 a.m........	6.16	2,590	2 p.m........	12.57	21,200			

WEISER RIVER BASIN

534. Weiser River at Tamarack, Idaho

Location.--Lat 44°57', long 116°23', in NW¼NE¼ sec.31, T.19 N., R.1 E., on left bank 43 ft upstream from railroad bridge, 0.65 mile south of Tamarack, and 1½ miles upstream from Beaver Creek.

Drainage area.--36.5 sq mi.

Gage-height record.--Water-stage recorder graph except Jan. 14-16. Altitude of gage is 4,080 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 550 cfs and by slope-area measurement of 1,320 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 1,320 cfs 4 p.m. Dec. 22 (gage height, 7.17 ft).
1936 to November 1955: Discharge observed, 775 cfs Mar. 27, 1940 (gage height, 6.00 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	22	87	11.....	17	37	21.....	291	35
2.....	20	75	12.....	18	35	22.....	1,040	35
3.....	18	64	13.....	17	34	23.....	741	34
4.....	15	61	14.....	16	33	24.....	360	32
5.....	15	55	15.....	16	32	25.....	202	32
6.....	17	52	16.....	16	31	26.....	175	31
7.....	18	48	17.....	17	32	27.....	234	30
8.....	18	45	18.....	18	33	28.....	158	29
9.....	18	37	19.....	31	33	29.....	110	27
10.....	18	40	20.....	77	34	30.....	120	26
						31.....	107	25
Monthly mean discharge, in cubic feet per second......................							128	39.8
Runoff, in inches..							4.03	1.26
Runoff, in acre-feet...							7,850	2,450

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 24--Con.		
12 p.m.......	1.66	20	12 p.m.......	5.05	578	12 m.........	4.24	348
Dec. 19			Dec. 22			6 p.m........	4.02	304
12 m.........	1.78	26	4 a.m........	5.51	658	12 p.m.......	3.82	258
6 p.m........	2.00	39	8............	6.42	982	Dec. 25		
12 p.m.......	2.20	54	12 m.........	6.95	1,210	12 m.........	3.53	196
Dec. 20			4 p.m........	7.17	1,320	12 p.m.......	3.34	160
6 a.m........	2.35	68	8............	6.98	1,240	Dec. 26		
12 m.........	2.42	74	12 p.m.......	6.67	1,100	12 m.........	3.21	136
6 p.m........	2.56	88	Dec. 23			3 p.m........	3.25	143
12 p.m.......	2.70	104	6 a.m........	6.06	849	8............	3.73	236
Dec. 21			12 m.........	5.70	715	12 p.m.......	3.99	288
6 a.m........	3.20	190	6 p.m........	5.32	600	Dec. 27		
12 m.........	3.56	262	12 p.m.......	4.89	498	6 a.m........	3.83	256
6 p.m........	4.10	371	Dec. 24			12 p.m.......	3.49	188
			6 a.m........	4.51	411			

535. East Fork Weiser River near Starkey, Idaho

(Gaging station, discontinued 1939)

Location.--Lat 44°51', long 116°23', in SE¼ sec.31, T.18 N., R.1 E., at crossing of U.S. Highway 95 just upstream from mouth and 3¼ miles east of Starkey.

Drainage area.--31.6 sq mi.

Discharge record.--Peak discharge by computation of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 821 cfs Dec. 22.
1937-39: Discharge observed, probably in excess of 400 cfs May 1, 1938.

536. Weiser River at Starkey, Idaho

(Gaging station, discontinued 1949)

Location.--Lat 44°51', long 116°27', in sec.34, T.18 N., R.1 W., at Starkey Hot Springs, 200 ft upstream from Warm Springs Creek and 8½ miles north of Council.

Drainage area.--106 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,200 cfs and verified by current-meter measurement of 251 cfs Dec. 29, 1955.

Maxima.--December 1955 to January 1956: Discharge, 2,800 cfs Dec. 22 (gage height, 6.62 ft, from floodmark).
1939-49: Discharge, 2,450 cfs Mar. 27, 1940 (gage height, 6.00 ft).

537. Lost Creek near Tamarack, Idaho

Location.--Lat 44°57', long 116°28', in SE¼NW¼ sec.28, T.19 N., R.1 W., on right bank a quarter of a mile downstream from dam of Lost Valley Reservoir, 4 miles west of Tamarack, and 16 miles north of Council.

Drainage area.--29.4 sq mi.

Gage-height record.--No record except staff-gage reading Jan. 19. Datum of gage is 4,729.6 ft above mean sea level (river-profile survey).

Discharge record.--No change in reservoir gates during period; discharge based on two discharge measurements.

Maxima.--December 1955 to January 1956: Daily discharge, 5.5 cfs Dec. 1 to Jan. 31.
1910-14, 1920-21, 1924 to November 1955: Discharge, 688 cfs May 17, 18, 1921 (gage height, 4.29 ft).

Remarks.--Flow regulated by Lost Valley Reservoir.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	Decmeber	January	Day	December	January
1.....	5.5	5.5	11.....	5.5	5.5	21.....	5.5	5.5
2.....	5.5	5.5	12.....	5.5	5.5	22.....	5.5	5.5
3.....	5.5	5.5	13.....	5.5	5.5	23.....	5.5	5.5
4.....	5.5	5.5	14.....	5.5	5.5	24.....	5.5	5.5
5.....	5.5	5.5	15.....	5.5	5.5	25.....	5.5	5.5
6.....	5.5	5.5	16.....	5.5	5.5	26.....	5.5	5.5
7.....	5.5	5.5	17.....	5.5	5.5	27.....	5.5	5.5
8.....	5.5	5.5	18.....	5.5	5.5	28.....	5.5	5.5
9.....	5.5	5.5	19.....	5.5	5.4	29.....	5.5	5.5
10.....	5.5	5.5	20.....	5.5	5.5	30.....	5.5	5.5
						31.....	5.5	5.5
Monthly mean discharge, in cubic feet per second........................							5.50	5.50
Runoff, in acre-feet..							338	338

538. West Fork Weiser River near Fruitvale, Idaho

(Gaging station, discontinued 1949)

Location.--Lat 44°50', long 116°28', in NW¼ sec.9, T.17 N., R.1 W., 1¼ miles northwest of Fruitvale and 1½ miles upstream from mouth.

Drainage area.--78 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 734 cfs Dec. 22.
1910-13, 1919-25, 1937-49: Discharge observed, 1,170 cfs Mar. 31, 1940 (gage height, 3.79 ft, site and datum then in use).

539. Hornet Creek near Council, Idaho

(Gaging station, discontinued 1943)

Location.--Lat 44°45', long 116°29', in sec.5, T.16 N., R.1 W., 2¼ miles upstream from mouth and 2.5 miles northwest of Council.

Drainage area.--107 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 2,090 cfs Dec. 22.
1937-43: Discharge observed, 1,180 cfs Feb. 28, 1940 (gage height, 6.90 ft, datum then in use).

540. Weiser River near Council, Idaho

(Gaging station, discontinued 1953)

Location.--Lat 44°41', long 116°29', in sec.29, T.16 N., R.1 W., 0.7 mile downstream from Cottonwood Creek, 2 miles upstream from Middle Fork, and 3¼ miles southwest of Council.

Drainage area.--390 sq mi.

Discharge record.--Peak discharge from stage-discharge relation defined by current-meter measurements below 3,200 cfs and verified by current-meter measurement of 953 cfs Dec. 29, 1955.

Maxima.--December 1955 to January 1956: Discharge, 6,600 cfs Dec. 22 (gage height, 9.86 ft).
1937-53: Discharge, 6,700 cfs Mar. 16 or 17, 1938 (gage height, 7.6 ft, from floodmark, at site 370 ft downstream at datum 0.58 ft higher).

541. Middle Fork Weiser River near Mesa, Idaho

(Gaging station, discontinued 1949)

Location.--Lat 44°39', long 116°27', in NW¼ sec.10, T.15 N., R.1 W., 1¾ miles north of Mesa and 2½ miles upstream from mouth.

Drainage area.--86.5 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 1,710 cfs Dec. 22.
1910-13, 1919-21, 1937-49: Discharge observed, 1,440 cfs May 27, 1913 (gage height, 6.3 ft, site and datum then in use).

542. Weiser River near Cambridge, Idaho

Location.--Lat 44°35', long 116°38', in NE¼ sec.1, T.14 N., R.3 W., on left bank 2¼ miles northeast of Cambridge and 2½ miles upstream from Rush Creek.

Drainage area.--605 sq mi.

Gage-height record.--Water-stage recorder graph prior to Dec. 22, when gage was destroyed by flood. Wire-weight gage on downstream side of highway bridge at Cambridge, 2¼ miles downstream from recording gage beginning Dec. 23. Altitude of recording gage was 2,660 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,200 cfs; affected by ice at times. Discharge for Dec. 22 computed from graph based on floodmark and from recorder graph for station near Weiser.

Maxima.--December 1955 to January 1956: Discharge, 10,100 cfs Dec. 22, time unknown (gage height, 13.9 ft, from floodmark, at site in use beginning Dec. 23).
1939 to November 1955: Maximum discharge, 6,670 cfs Mar. 31, 1940 (gage height, 8.30 ft).

Remarks.--Flow partly regulated by Lost Valley Reservoir and other reservoirs.

Mean discharge, in cubic feet per second, 1955-56, of Weiser River near Cambridge, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	469	979	11.....	196	555	21.....	3,920	881
2.....	388	842	12.....	232	525	22.....	8,520	860
3.....	306	800	13.....	252	575	23.....	7,790	1,300
4.....	232	758	14.....	151	597	24.....	4,130	1,020
5.....	180	724	15.....	190	1,110	25.....	2,170	718
6.....	232	690	16.....	240	2,360	26.....	1,900	707
7.....	236	668	17.....	252	1,470	27.....	2,680	836
8.....	185	646	18.....	236	1,160	28.....	1,920	602
9.....	211	540	19.....	1,270	993	29.....	1,380	550
10.....	202	540	20.....	3,760	951	30.....	1,190	500
						31.....	1,140	400
Monthly mean discharge, in cubic feet per second......................							1,489	834
Runoff, in inches..							2.84	1.59
Runoff, in acre-feet...							91,560	51,290

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 18		
12 p.m.......	1.36	249
Dec. 19		
6 a.m........	1.52	306
9............	1.98	507
11...........	2.26	649
12 m.........	3.76	1,600
1 p.m........	2.65	865
4............	3.15	1,180
6............	4.10	1,860
9............	5.55	3,160
12 p.m.......	6.24	3,870
Dec. 20		
4 a.m........	6.52	4,180
8............	6.33	3,970
1 p.m........	5.90	3,510
6............	6.04	3,650
12 p.m.......	5.86	3,470
Dec. 21		
3 a.m........	5.82	3,430
12 m.........	6.07	3,690
3 p.m........	6.10	3,720
6............	6.47	4,130
9............	7.02	4,740
12 p.m.......	7.50	5,320
Dec. 22		
6 a.m........	-	7,100
12 m.........	-	9,300
6 p.m........	-	10,100
Dec. 22--Con.		
12 p.m.......	-	9,800
Dec. 23		
6 a.m........	-	8,800
12 m.........	12.65	7,780
6 p.m........	12.07	6,790
12 p.m.......	11.42	5,780
Dec. 24		
6 a.m........	10.80	4,850
12 m.........	10.25	4,020
6 p.m........	9.80	3,350
12 p.m.......	9.40	2,790
Dec. 25		
6 a.m........	9.02	2,290
12 m.........	8.83	2,060
6 p.m........	8.80	2,020
12 p.m.......	8.65	1,860
Dec. 26		
6 a.m........	8.45	1,650
12 m.........	8.35	1,560
6 p.m........	8.77	1,990
12 p.m.......	9.50	2,930
Dec. 27		
4 a.m........	9.70	3,210
12 m.........	9.32	2,680
6 p.m........	9.05	2,320
12 p.m.......	8.92	2,160
Dec. 28		
6 a.m........	8.86	2,090
12 m.........	8.75	1,960
6 p.m........	8.55	1,750
12 p.m.......	8.35	1,560
Dec. 29		
12 m.........	8.12	1,350
12 p.m.......	8.00	1,240
Jan. 14		
12 p.m.......	6.90	525
Jan. 15		
6 a.m........	6.95	550
12 m.........	7.15	658
6 p.m........	7.70	1,000
9............	9.40	2,790
12 p.m.......	9.80	3,350
Jan. 16		
6 a.m........	9.33	2,690
12 m.........	8.97	2,220
6 p.m........	8.75	1,960
12 p.m.......	8.55	1,750
Jan. 17		
6 a.m........	8.35	1,560
12 m.........	8.25	1,460
6 p.m........	8.13	1,360
12 p.m.......	8.00	1,240

543. Rush Creek at Cambridge, Idaho

(Gaging station, discontinued 1943)

Location.--Lat 44°35', long 116°40', in SW$\frac{1}{4}$ sec.2, T.14 N., R.3 W., in Cambridge, 150 ft upstream from Superior Street, and three-eighths of a mile upstream from mouth.

Drainage area.--32 sq mi, approximately.

Discharge record.--Peak discharge from stage-discharge relation defined by current-meter measurements below 330 cfs and verified by current-meter measurement of Dec. 28, 1955.

Maxima.--December 1955 to January 1956: Discharge, 469 cfs Dec. 22 (gage height, 5.56 ft).

1938-43: Discharge observed, 582 cfs Mar. 16, 1938 (gage height, 6.07 ft).

544. Pine Creek near Cambridge, Idaho

Location.--Lat 44°35', long 116°44', in $SW\frac{1}{4}$ sec.32, T.15 N., R.3 W., on right bank 300 ft upstream from West Fork and 3.2 miles northwest of Cambridge.

Drainage area.--54 sq mi, approximately.

Gage-height record.--Staff gage read twice daily except afternoon of Dec. 21 and morning of Dec. 22 when gage was overtopped. Graph constructed for Dec. 19 to Dec. 25 on basis of gage readings and floodmark. Altitude of gage is 2,800 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 190 cfs and extended above on basis of slope-area measurement at peak stage and slope-conveyance study; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 420 cfs 3 a.m. Dec. 22 (gage height, 3.65 ft).

1938 to November 1955: Discharge observed, 505 cfs May 27, 1948 (gage height, 3.60 ft), but may have been more when gage was overtopped June 3, 1948.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	16	53	11.....	13	33	21.....	290	49
2.....	14	53	12.....	13	33	22.....	362	69
3.....	13	43	13.....	11	38	23.....	212	57
4.....	11	45	14.....	10	45	24.....	117	49
5.....	10	40	15.....	11	60	25.....	74	56
6.....	11	38	16.....	11	72	26.....	64	50
7.....	12	35	17.....	12	61	27.....	83	45
8.....	9.5	33	18.....	15	54	28.....	85	40
9.....	10	33	19.....	35	49	29.....	69	38
10.....	10	33	20.....	94	48	30.....	59	35
						31.....	57	30
Monthly mean discharge, in cubic feet per second							58.5	45.7
Runoff, in inches							1.25	0.98
Runoff, in acre-feet							3,600	2,810

545. West Fork Pine Creek near Cambridge, Idaho

(Miscellaneous site)

Location.--Lat 44°35', long 116°45', in $S\frac{1}{2}$ sec.31, T.15 N., R.3 W., half a mile upstream from mouth and $3\frac{1}{2}$ miles northwest of Cambridge.

Drainage area.--29 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 499 cfs Dec. 22.

546. Little Weiser River near Indian Valley, Idaho

Location.--Lat 44°30', long 116°24', in $NE\frac{1}{4}$ sec.1, T.13 N., R.1 W., on left bank 60 ft downstream from barn at Richardson ranch, 1 mile upstream from diversion that feeds C. Ben Ross Reservoir, and $4\frac{3}{4}$ miles southeast of Indian Valley.

Drainage area.--81.9 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,250 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 620 cfs and extended above by logarithmic plotting; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 1,200 cfs 12 m. Dec. 22 (gage height, 4.67 ft).

1920-21, 1923-27, 1938 to November 1955: Discharge observed, about 1,840 cfs Feb. 4, 1925.

Mean discharge, in cubic feet per second, 1955-56, of Little Weiser River near Indian Valley, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	42	94	11.....	30	60	21.....	375	112
2.....	38	85	12.....	68	59	22.....	920	114
3.....	34	79	13.....	52	65	23.....	502	147
4.....	25	77	14.....	32	62	24.....	298	112
5.....	20	85	15.....	40	411	25.....	218	94
6.....	36	77	16.....	45	410	26.....	233	90
7.....	32	74	17.....	42	239	27.....	202	85
8.....	28	71	18.....	39	177	28.....	159	75
9.....	31	64	19.....	321	143	29.....	124	75
10.....	28	62	20.....	392	126	30.....	115	62
						31.....	107	45
Monthly mean discharge, in cubic feet per second......................							149	114
Runoff, in inches..							2.10	1.60
Runoff, in acre-feet..							9,180	7,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Jan. 15		
12 p.m.......	1.27	55	12 p.m.......	3.46	626	6 a.m........	1.37	72
						9............	1.60	101
Dec. 19			Dec. 22			2 p.m........	3.55	642
4 a.m........	1.81	124	2 a.m........	3.50	642	4............	3.57	650
10...........	1.93	146	6............	4.66	1,190	7............	4.06	870
5 p.m........	3.16	514	8............	4.34	1,020	10...........	3.69	696
9............	3.63	694	9............	4.64	1,180	12 p.m.......	3.74	716
12 p.m.......	3.16	514	12 m.........	4.67	1,200			
			4 p.m........	4.21	945	Jan. 16		
Dec. 20			6............	3.92	800	3 a.m........	3.30	559
8 a.m........	2.78	382	12 p.m.......	3.47	615	8............	2.87	418
11...........	2.87	412				11...........	2.74	377
12 p.m.......	2.52	300	Dec. 23			12 p.m.......	2.42	284
			2 a.m........	3.55	642			
Dec. 21			6............	3.32	566	Jan. 17		
2 p.m........	2.40	263	12 p.m.......	2.70	365	12 m.........	2.22	230
4............	2.50	293				4 p.m........	2.23	233
7............	3.50	642	Jan. 14			12 p.m.......	2.10	200
10 p.m.......	3.40	603	12 p.m.......	1.30	64			

547. Little Weiser River near mouth, near Cambridge, Idaho

(Miscellaneous site)

Location.--Lat 44°33', long 116°39', in SW¼ sec.13, T.14 N., R.3 W., 2 miles upstream from mouth and 2 miles southeast of Cambridge.

Drainage area.--206 sq mi.

Discharge record.--Peak discharge from stage-discharge relation defined by current-meter measurements below 1,300 cfs and extended above by velocity-area and conveyance-slope analyses.

Maximum.--December 1955 to January 1956: Discharge, 4,800 cfs Dec. 22.

548. Weiser River below Little Weiser River, near Cambridge, Idaho

(Miscellaneous site)

Location.--Lat 44°33', long 116°42', in SW¼ sec.15, T.14 N., R.3 W., 0.3 mile downstream from bridge on former location of U.S. Highway 95 and 2 miles southwest of Cambridge.

Drainage area.--952 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 16,600 cfs Dec. 22.

549. Crane Creek above Crane Creek Reservoir, near Crane, Idaho

(Miscellaneous site)

Location.--Lat 44°24', long 116°32', in SW¼ sec.1, T.12 N., R.2 W., an eighth of a mile downstream from buildings of James West ranch, 3 miles southwest of Crane, and 11 miles southeast of Midvale.

Drainage area.--120 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 4,120 cfs Dec. 22.

550. Hog Creek near Crane, Idaho

(Miscellaneous site)

Location.--Lat 44°25', long 116°33', in SW¼ sec.35, T.13 N., R.2 W., 0.4 mile upstream from county road bridge, 3½ miles west of Crane, and 9½ miles southeast of Midvale.

Drainage area.--25 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 339 cfs Dec. 22.

551. Mill Creek near Crane, Idaho

(Miscellaneous site)

Location.--Lat 44°22'15", long 116°31'55", in SW¼ sec.13, T.12 N., R.2 W., above county road bridge 4 miles southwest of Crane and 12 miles southeast of Midvale.

Drainage area.--10 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 305 cfs Dec. 22.

552. South Fork Crane Creek near Crane, Idaho

(Miscellaneous site)

Location.--Lat 44°20', long 116°33', in SW¼ sec.35, T.12 N., R.2 W., above county road bridge 7½ miles southwest of Crane and 13½ miles southeast of Midvale.

Drainage area.--52 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,060 cfs Dec. 22.

553. Crane Creek Reservoir near Midvale, Idaho

Location.--Lat 44°21'30", long 116°37'00", in SE¼ sec.19, T.12 N., R.2 W., at gate-control structure near left end of dam on Crane Creek, 9½ miles southwest of Midvale.

Drainage area.--242 sq mi.

Gage-height record.--Staff gage read intermittently to tenths or hundredths of a foot. Altitude of gage is 3,190 ft (by barometer).

Maxima.--December 1955 to January 1956: Gage height observed, 47.31 ft 11:30 a.m. Jan. 19 (contents, about 34,800 acre-ft).

1923 to November 1955: Gage height observed, 56.3 ft Feb. 22, 1927 (contents not determined).

Remarks.--Reservoir is formed by earth dam completed in 1910 and raised in 1920-21 Spillway crest is at gage height 54.9 ft and bottom of outlet tunnel is at gage height 6.56 ft. Approximate capacity is 51,700 acre-ft between gage heights 8.0 and 55.0 ft, based on yield table computed by the Geological Survey in 1927 and extended above 43.0 ft by the Idaho Department of Reclamation in 1935. No usable contents below about 7.0 ft gage height.

Gage height, in feet, and contents, in acre-feet

Date	Gage height	Contents	Date	Gage height	Contents
Dec. 6, 1955.........	33.42	12,700	Jan. 16, 1956.........	46.7	33,700
Dec. 20...............	38.7	19,900	Jan. 19...............	47.31	34,800
Dec. 23...............	45.8	32,000	Jan. 21...............	47.0	34,200
Dec. 26...............	47.3	34,800	Jan. 28...............	46.2	32,700
Dec. 31...............	45.7	31,800	Jan. 29...............	46.2	32,700
Jan. 7, 1956.........	44.8	30,100			

554. Crane Creek near Midvale, Idaho

Location.--Lat 44°21'30", long 116°37'10", in SE¼ sec.19, T.12 N., R.2 W., on left bank 400 ft downstream from Crane Creek Dam and 9½ miles southeast of Midvale.

Drainage area.--242 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,140 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Gate in dam closed Dec. 1-19.

Maxima.--December 1955 to January 1956: Discharge, 706 cfs 8 a.m. Dec. 27 (gage height, 4.76 ft).

1910-16, 1924 to November 1955: Discharge, 4,240 cfs Dec. 3, 1910 (gage height, 8.9 ft, site and datum then in use).

Remarks.--Flow regulated by Crane Creek Reservoir (see station 553).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0	392	11.....	0	167	21.....	0.6	571
2.....	0	392	12.....	0	167	22.....	.6	642
3.....	0	388	13.....	0	167	23.....	121	648
4.....	0	388	14.....	0	167	24.....	348	648
5.....	0	388	15.....	0	167	25.....	348	648
6.....	0	388	16.....	0	347	26.....	484	648
7.....	0	273	17.....	0	520	27.....	700	642
8.....	0	169	18.....	0	520	28.....	700	620
9.....	0	169	19.....	0	520	29.....	694	560
10.....	0	169	20.....	3.3	520	30.....	694	520
						31.....	620	520
Monthly mean discharge, in cubic feet per second......................							152	421
Runoff, in acre-feet..							9,350	25,870

555. Crane Creek at mouth, near Weiser, Idaho

Location.--Lat 44°18', long 116°47', in sec.14, T.11 N., R.4 W., on right bank just downstream from highway bridge at Harris ranch, a quarter of a mile upstream from mouth, and 10 miles northeast of Weiser.

Drainage area.--288 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,240 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 1,780 cfs 9 p.m. Dec. 19 (gage height, 5.26 ft).
1920 to November 1955: Discharge, 2,350 cfs about Feb. 7, 1925 (gage height, 6.80 ft), from rating curve extended above 1,000 cfs.

Remarks.--Flow regulated by Crane Creek Reservoir (see station 553).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	10	405	11.....	7.5	173	21.....	215	615
2.....	13	400	12.....	8.5	178	22.....	305	859
3.....	8.8	395	13.....	8.0	198	23.....	252	1,150
4.....	7.1	395	14.....	7.0	184	24.....	431	823
5.....	6.2	420	15.....	9.0	344	25.....	421	758
6.....	7.8	430	16.....	9.2	703	26.....	596	740
7.....	6.2	343	17.....	8.1	670	27.....	882	732
8.....	5.3	204	18.....	7.1	599	28.....	821	698
9.....	6.5	181	19.....	487	575	29.....	794	631
10.....	5.9	173	20.....	485	575	30.....	785	575
						31.....	723	568
Monthly mean discharge, in cubic feet per second......................							237	506
Runoff, in acre-feet..							14,560	31,130

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23--Con.			Jan. 16--Con.		
12 p.m.......	1.87	7.1	8 p.m........	4.06	547	2 p.m........	3.87	430
			9............	4.08	561	3............	4.30	740
Dec. 19			12 p.m.......	3.99	499	4............	4.33	767
8 a.m........	1.87	7.1				7............	4.42	850
10...........	1.95	10	Dec. 24			9............	4.41	840
12 m.........	2.15	20	11 a.m.......	3.80	395	12 p.m.......	4.34	776
3 p.m........	3.55	290	12 p.m.......	3.90	445			
6............	4.75	1,200				Jan. 17		
9............	5.26	1,780	Dec. 25			6 a.m........	4.21	664
12 p.m.......	4.72	1,160	12 m.........	3.81	400	10...........	4.16	623
			4 p.m........	3.80	395	8 p.m........	4.24	689
Dec. 20			10...........	3.91	451	12 p.m.......	4.16	623
2 a.m........	4.30	740	12 p.m.......	3.90	445			
6............	3.85	420				Jan. 20		
9............	3.70	350	Dec. 26			12 p.m.......	4.10	575
11...........	3.74	368	4 a.m........	3.88	435			
3 p.m........	4.00	505	1 p.m........	3.92	457	Jan. 21		
12 p.m.......	3.68	342	4............	3.97	487	5 p.m........	4.10	575
			5............	4.15	615	6............	4.25	698
Dec. 21			6............	4.48	910	7............	4.28	723
6 a.m........	3.48	265	9............	4.51	940	12 p.m.......	4.29	732
12 m.........	3.19	175	12 p.m.......	4.64	1,070			
2 p.m........	3.13	160				Jan. 22		
8............	3.15	165	Dec. 27			3 p.m........	4.31	749
12 p.m.......	3.26	195	8 a.m........	4.44	870	5............	4.34	776
			12 m.........	4.40	830	7............	4.46	890
Dec. 22			12 p.m.......	4.41	840	11...........	5.03	1,510
8 a.m........	3.90	445				12 p.m.......	5.06	1,540
10...........	3.96	481	Jan. 14					
12 m.........	3.90	445	12 p.m.......	3.21	181	Jan. 23		
6 p.m........	3.30	207				5 a.m........	4.81	1,260
12 p.m.......	2.91	109	Jan. 15			9............	4.73	1,170
			6 a.m........	3.20	178	1 p.m........	4.61	1,040
Dec. 23			12 m.........	3.26	195	6............	4.65	1,080
3 a.m........	2.87	102	4 p.m........	3.64	325	8............	4.62	1,050
5............	3.02	133	7............	4.16	623	12 p.m.......	4.47	900
8............	3.46	258	12 p.m.......	4.38	812			
12 m.........	3.21	181				Jan. 24		
2 p.m........	3.22	184	Jan. 16			12 m.........	4.35	785
7............	3.35	222	2 a.m........	4.43	860	6 p.m........	4.40	830
7 p.m........	3.90	445	11 a.m.......	3.94	469	12 p.m.......	4.33	767

556. Weiser River near Weiser, Idaho

Location.--Lat 44°16'50", long 116°47'00", in NW¼ sec.23, T.11 N., R.4 W., on right bank 0.4 mile upstream from county road bridge, 1¾ miles downstream from Crane Creek, and 9½ miles northeast of Weiser.

Drainage area.--1,460 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. No record Dec. 15, 16, except range in stage. Altitude of gage is 2,220 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements; affected by ice at times. Discharge Dec. 15, 16 estimated on basis of records for station near Cambridge.

Maxima.--December 1955 to January 1956: Discharge, 19,900 cfs 1:30 a.m. Dec. 23 (gage height, 11.06 ft).

1890-91, 1894-1904, 1910-14, 1952 to November 1955: Discharge observed, 16,900 cfs Mar. 8, 1904 (gage height, 10.5 ft, site and datum then in use), from rating curve extended above 4,000 cfs. Flood of Mar. 19, 1932, reached a discharge of about 17,500 cfs.

Remarks.--Flow partly regulated by Crane Creek Reservoir (see station 553), Lost Valley Reservoir, and other small reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	700	1,940	11	334	923	21	7,530	2,190
2	744	1,770	12	392	923	22	16,000	2,450
3	560	1,620	13	420	1,010	23	16,100	3,840
4	454	1,520	14	250	1,270	24	8,110	3,050
5	292	1,520	15	330	1,910	25	4,770	2,220
6	280	1,500	16	500	7,120	26	4,030	1,970
7	330	1,340	17	508	4,320	27	5,560	2,030
8	329	1,160	18	478	3,090	28	4,080	1,710
9	300	1,080	19	1,620	2,580	29	3,040	1,580
10	360	939	20	7,170	2,320	30	2,550	1,460
						31	2,410	1,180
Monthly mean discharge, in cubic feet per second							2,920	2,050
Runoff, in acre-feet							179,600	126,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23			Dec. 29		
12 p.m.	2.66	463	1:30 a.m.	11.06	19,900	12 m.	5.11	2,920
			6	10.74	18,700	5 p.m.	5.02	2,780
Dec. 19			9	10.32	17,200	12 p.m.	5.00	2,760
9 a.m.	2.70	483	12 m.	9.99	16,000			
12 m.	2.75	508	6 p.m.	9.33	13,600	Jan. 14		
2 p.m.	2.90	587	12 p.m.	8.76	11,800	12 p.m.	3.61	1,150
4	3.42	923						
6	4.10	1,580	Dec. 24			Jan. 15		
8	4.61	2,190	6 a.m.	8.18	9,940	9 a.m.	3.61	1,150
9	8.08	9,640	12 m.	7.35	7,540	12 m.	3.67	1,200
10	6.59	5,680	3 p.m.	7.06	6,770	6 p.m.	4.12	1,680
11	6.34	5,140	6	6.88	6,330	8	4.93	2,740
12 p.m.	6.52	5,520	9	6.71	5,940	10	6.12	4,840
			12 p.m.	6.60	5,700	12 p.m.	6.92	6,600
Dec. 20								
2 a.m.	6.90	6,380	Dec. 25			Jan. 16		
4	7.01	6,640	6 a.m.	6.40	5,270	2 a.m.	7.27	7,510
12 m.	7.33	7,480	12 m.	6.12	4,700	4	7.47	8,060
1 p.m.	7.37	7,590	6 p.m.	5.86	4,200	5	7.48	8,090
12 p.m.	7.35	7,540	12 p.m.	5.81	4,110	10	7.39	7,840
						12 m.	7.29	7,560
Dec. 21			Dec. 26			3 p.m.	7.03	6,870
4 a.m.	7.28	7,350	12 m.	5.62	3,770	6	6.89	6,520
8	7.16	7,030	5 p.m.	5.60	3,730	12 p.m.	6.47	5,570
12 m.	7.07	6,800	7	5.88	4,240			
4 p.m.	7.16	7,030	9	5.96	4,390	Jan. 17		
6	7.28	7,350	12 p.m.	6.30	5,060	6 a.m.	6.11	4,840
9	7.83	8,890				12 m.	5.72	4,090
12 p.m.	8.16	9,880	Dec. 27			3 p.m.	5.59	3,860
			1 a.m.	6.67	5,880	12 p.m.	5.46	3,620
Dec. 22			8	6.85	6,290			
3 a.m.	8.36	10,500	12 m.	6.62	5,770	Jan. 18		
6	8.93	12,300	6 p.m.	6.25	4,980	6 a.m.	5.27	3,300
9	9.71	14,900	12 p.m.	6.11	4,700	12 m.	5.07	2,970
12 m.	10.38	17,300				6 p.m.	5.01	2,880
4 p.m.	10.88	19,200	Dec. 28			12 p.m.	4.95	2,780
8	11.00	19,700	12 m.	5.73	3,980			
12 p.m.	11.04	19,900	12 p.m.	5.54	3,640			

557. Mann Creek near Weiser, Idaho

Location.--Lat 44°23'30", long 116°53'40", in NE¼ sec.11, T.12 N., R.5 W., on left bank 2 miles upstream from U.S. Highway 95, 10 miles northeast of Weiser, and 11½ miles upstream from mouth.

Drainage area.--56 sq mi, approximately.

Gage-height record.--From graph based on twice-daily staff-gage readings. Altitude of gage is 2,830 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 270 cfs; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 550 cfs 2 p.m. Dec. 22 (gage height, 3.00 ft).

1911-13, 1920, 1937 to November 1955: Discharge, 1,540 cfs Mar. 27, 1940 (gage height, 5.45 ft, from floodmark, site and datum then in use), from rating curve extended above slope-area measurement at gage height, 4.21 ft.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	10	28	11.....	7.6	17	21.....	142	41
2.....	9.5	26	12.....	7.8	22	22.....	403	46
3.....	8.1	23	13.....	7.0	27	23.....	196	65
4.....	5.2	22	14.....	6.0	24	24.....	109	43
5.....	5.0	22	15.....	7.5	166	25.....	76	54
6.....	7.5	20	16.....	8.5	180	26.....	67	43
7.....	8.4	20	17.....	9.0	101	27.....	65	40
8.....	5.9	20	18.....	9.8	65	28.....	65	36
9.....	7.6	18	19.....	17	55	29.....	62	34
10.....	7.8	18	20.....	108	47	30.....	55	30
						31.....	44	26
Monthly mean discharge, in cubic feet per second							49.9	44.5
Runoff, in inches							1.03	0.92
Runoff, in acre-feet							3,070	2,740

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Jan. 14		
12 p.m.......	1.05	9.8	12 m.........	1.95	125	12 p.m.......	1.10	26
			6 p.m........	2.10	164			
Dec. 19			12 p.m.......	2.27	217	Jan. 15		
S a.m........	1.05	9.8				4 a.m........	1.15	32
12 m.........	1.09	11	Dec. 22			S............	1.37	65
4 p.m........	1.20	16	6 a.m........	2.50	299	12 m.........	1.95	215
12 p.m.......	1.50	41	9............	2.66	377	2 p.m........	2.10	267
			12 m.........	2.93	502	4............	2.15	285
Dec. 20			2 p.m........	3.00	550	12 p.m.......	2.00	232
6 a.m........	1.77	85	6............	2.85	510			
12 m.........	2.03	145	12 p.m.......	2.46	365	Jan. 16		
6 p.m........	1.95	125				12 m.........	1.82	177
12 p.m.......	1.90	113	Dec. 23			12 p.m.......	1.67	134
			8 a.m........	2.00	206			
Dec. 21			4 p.m........	1.77	139			
6 a.m........	1.90	113	12 p.m.......	1.70	123			

558. Monroe Creek above Sheep Creek, near Weiser, Idaho

(Gaging station, discontinued 1949)

Location.--Lat 44°20', long 116°56', in SE¼ sec.34, T.12 N., R.5 W., on farm road bridge adjacent to U.S. Highway 95, 0.5 mile upstream from Sheep Creek and 6 miles north of Weiser.

Drainage area.--32 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 271 cfs Dec. 22 (gage height, 3.9 ft).

1945-49: Discharge observed, 170 cfs Mar. 18, 19, 1946 (gage height, 2.40 ft).

SNAKE RIVER MAIN STEM

559. Snake River at Weiser, Idaho

Location.--Lat 44°14'40", long 116°58'25", in sec.31, T.11 N., R.5 W., on right bank a third of a mile upstream from highway bridge at Weiser and a third of a mile downstream from Weiser River.

Drainage area.--69,200 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except at times Dec. 22-24 and Jan. 14, when intake action was sluggish. For these periods a graph was drawn on basis of gage readings and graph for station at Oxbow. Datum of gage is 2,086.64 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 52,500 cfs 1 a.m. Dec. 24 (gage height, 10.73 ft).

1910 to November 1955: Discharge, 84,500 cfs Apr. 29, 1952 (gage height, 14.67 ft).

Flood of Mar. 3, 1910, reached a stage of 15.7 ft on old Weather Bureau gage (discharge, about 100,000 cfs). Flood of June 1894 was considerably higher.

Remarks.--Flow regulated by many reservoirs above station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	14,600	21,000	11	12,400	17,800	21	22,500	22,600
2	15,000	18,000	12	12,700	15,800	22	31,300	21,600
3	14,700	14,400	13	13,200	12,600	23	49,000	23,800
4	13,000	14,700	14	14,800	14,800	24	48,200	22,500
5	13,200	18,800	15	13,800	18,100	25	35,000	23,000
6	11,400	18,800	16	14,300	27,200	26	27,400	21,900
7	12,600	18,800	17	14,800	24,500	27	25,300	21,400
8	12,900	17,500	18	13,700	24,600	28	23,400	22,200
9	13,800	15,000	19	11,400	24,500	29	22,400	21,900
10	13,700	14,000	20	18,300	24,000	30	22,500	21,400
						31	22,200	16,400
Monthly mean discharge, in cubic feet per second							19,470	19,790
Runoff, in acre-feet							1,197,000	1,217,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Jan. 14		
12 p.m.	3.44	11,300	1 p.m.	7.43	31,100	5 p.m.	4.35	15,000
			5	7.89	33,800	7	4.60	16,100
Dec. 19			7	8.15	35,400	8	4.78	16,900
4 a.m.	3.39	11,100	12 p.m.	9.08	41,300	12 p.m.	5.08	18,200
9	3.39	11,100						
3 p.m.	3.45	11,300	Dec. 23			Jan. 15		
7	3.45	11,300	3 a.m.	9.52	44,100	3 a.m.	5.15	18,600
9	3.48	11,400	8	10.00	47,400	5	5.16	18,600
10	3.63	12,000	11	10.36	49,900	3 p.m.	4.86	17,200
11	3.83	12,800	3 p.m.	10.60	51,600	5	4.85	17,200
12 p.m.	3.93	13,200	7	10.68	52,200	7	4.95	17,600
			12 p.m.	10.72	52,400	10	5.27	19,200
Dec. 20						12 p.m.	5.52	20,400
3 a.m.	4.66	16,300	Dec. 24					
4	4.70	16,500	1 a.m.	10.73	52,500	Jan. 16		
8	5.08	18,200	4	10.64	51,900	3 a.m.	6.54	25,900
11	5.26	19,100	2 p.m.	10.10	48,100	4	6.78	27,200
4 p.m.	5.22	18,900	5	9.85	46,400	6	6.96	28,300
6	5.25	19,000	12 p.m.	9.01	40,900	8	7.02	28,600
10	5.45	20,000				10	7.03	28,700
12 p.m.	5.73	21,400	Dec. 25			8 p.m.	6.73	27,000
			6 a.m.	8.41	37,000	12 p.m.	6.73	27,000
Dec. 21			12 m.	8.04	34,700			
2 a.m.	6.20	24,000	10 p.m.	7.45	31,200	Jan. 17		
4	6.41	25,200	12 p.m.	7.39	30,800	4 a.m.	6.46	25,500
10	5.76	21,600				9	6.13	23,600
3 p.m.	5.55	20,600	Dec. 26			1 p.m.	6.10	23,500
6	5.59	20,800	2 a.m.	7.34	30,500	10	6.29	24,500
7	5.69	21,200	1 p.m.	6.64	26,400	12 p.m.	6.30	24,600
10	6.15	23,800	5	6.52	25,800			
12 p.m.	6.34	24,800	12 p.m.	6.42	25,200			
Dec. 22			Jan. 13					
8 a.m.	6.98	28,400	12 p.m.	3.82	12,800			

BROWNLEE CREEK BASIN

560. Brownlee Creek near Heath, Idaho

(Miscellaneous site)

Location.--Lat 44°47', long 116°55', in SW¼ sec.23, T.17 N., R.5 W., half a mile above mouth, 3 miles northwest of Heath, and 5½ miles northwest of Brownlee ranger station.

Drainage area.--62 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 159 cfs Dec. 22.

WILD HORSE CREEK BASIN

561. Wild Horse Creek above Butte Creek, near Wild Horse, Idaho

(Miscellaneous site)

Location.--Lat 44°56', long 116°44', in SW¼ sec.32, T.19 N., R.3 W., 1.8 miles below upper bridge across Wild Horse Creek and 8 miles northeast of Wild Horse.

Drainage area.--120 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,550 cfs Dec. 22.

562. Wild Horse Creek below Butte Creek, near Wild Horse, Idaho

(Miscellaneous site)

Location.--Lat 44°53', long 116°46', in NW¼ sec.24, T.18 N., R.4 W., 400 ft downstream from road bridge and 4 miles northeast of Wild Horse.

Drainage area.--140 sq mi, approximately.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,990 cfs Dec. 22.

SNAKE RIVER MAIN STEM

563. Snake River at Oxbow, Oreg.

Location.--Lat 44°57', long 116°51', in NW¼ sec.16, T.7 S., R.48 E., at Oxbow, five-eighths of a mile upstream from intake of diversion tunnel for Oxbow powerplant.

Drainage area.--72,800 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,696.71 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 52,100 cfs 9 a.m. Dec. 24; gage height, 16.84 ft 1 a.m. Dec. 24.

1923 to November 1955: Discharge, 89,700 cfs Apr. 28, 1952 (gage height, 23.10 ft).

Remarks.--Flow regulated by many reservoirs above station.

Mean discharge, in cubic feet per second, 1955-56, of Snake River at Oxbow, Oreg.

Day	December	January	Day	December	January	Day	December	January
1	13,800	23,100	11	13,600	16,900	21	24,800	25,200
2	15,700	20,800	12	12,800	18,300	22	30,300	23,200
3	15,600	16,900	13	13,300	14,900	23	43,800	24,400
4	14,600	14,600	14	14,400	14,000	24	51,200	24,800
5	13,800	17,900	15	14,700	18,500	25	41,200	24,200
6	12,800	19,700	16	14,300	24,800	26	32,100	23,100
7	12,700	20,000	17	14,900	28,500	27	27,400	22,300
8	12,900	19,900	18	15,300	26,600	28	26,400	22,700
9	13,900	16,600	19	12,800	26,600	29	23,600	22,700
10	14,300	15,100	20	15,200	25,800	30	23,200	22,600
						31	23,600	20,000
Monthly mean discharge, in cubic feet per second							20,290	21,120
Runoff, in acre-feet							1,248,000	1,299,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Jan. 14		
12 p.m.	8.69	12,100	12 m.	15.65	44,600	6 a.m.	9.08	13,400
			6 p.m.	16.42	48,900	12 m.	9.15	13,600
Dec. 20			12 p.m.	16.81	51,000	6 p.m.	9.35	14,400
12 m.	9.00	13,100				12 p.m.	9.69	15,700
3 p.m.	9.61	15,300	Dec. 24					
6	10.36	18,400	1 a.m.	16.84	51,200	Jan. 15		
9	10.82	20,400	2	16.70	51,600	6 a.m.	9.86	16,300
12 p.m.	11.11	21,700	9	16.75	52,100	12 m.	10.44	18,800
			2 p.m.	16.69	51,700	6 p.m.	10.84	20,500
Dec. 21			6	16.54	50,800	12 p.m.	10.92	20,900
3 a.m.	11.24	22,300	12 p.m.	16.14	48,500			
6	11.29	22,600				Jan. 16		
9	11.40	23,000	Dec. 25			6 a.m.	10.83	20,400
12 m.	11.70	24,400	4 a.m.	15.76	46,300	9	10.91	20,800
3 p.m.	12.24	27,100	8	15.28	43,600	12 m.	11.24	22,300
6	12.38	27,900	12 m.	14.74	40,500	3 p.m.	12.19	26,800
12 p.m.	12.10	26,400	4 p.m.	14.35	38,400	6	12.81	30,200
			8	14.00	36,500	9	12.97	31,000
Dec. 22			12 p.m.	13.78	35,300	12 p.m.	12.93	30,800
5 a.m.	12.05	26,200						
9	12.48	28,400	Dec. 26			Jan. 17		
12 m.	12.90	30,600	6 a.m.	13.42	33,400	6 a.m.	12.71	29,600
3 p.m.	13.24	32,400	12 m.	13.11	31,800	12 m.	12.60	29,000
12 p.m.	13.70	34,900	6 p.m.	12.96	30,900	6 p.m.	12.27	27,200
			12 p.m.	12.64	29,200	12 p.m.	11.99	25,800
Dec. 23								
3 a.m.	14.06	36,600	Jan. 13					
6 a.m.	14.56	39,100	12 p.m.	9.08	13,400			

564. Snake River near Joseph, Idaho

Location.--Lat 45°49', long 116°45', in SW¼ sec.18, T.4 N., R.49 E., on left bank at mile 53.2 from Lewiston, at China Gulch, a quarter of a mile downstream from Mountain Sheep Dam, 0.7 mile upstream from Imnaha River, 0.9 mile downstream from Divide Creek, 13 miles west of Joseph, and 22 miles west of Whitebird.

Drainage area.--73,800 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 9 a.m. Dec. 24 to 10 a.m. Jan. 5. Gage-height graph for Dec. 24, Jan. 3, 5 constructed on basis of fragmentary recorder records, floodmark, staff-gage reading and shape of graph for station at Oxbow. Datum of gage is 940.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge Dec. 25 to Jan. 2, Jan. 4 estimated on basis of records for station at Oxbow. Backwater from Imnaha River at times.

Maxima.--December 1955 to January 1956: Discharge, 58,200 cfs about 3 p.m. Dec. 24 (gage height, 17.02 ft).

April to November 1955: Discharge, 31,800 cfs Apr. 24, 1955 (gage height, 9.11 ft).

Remarks.--Flow regulated by many reservoirs above station.

Mean discharge, in cubic feet per second, 1955-56, of Snake River near Joseph, Idaho

Day	December	January	Day	December	January	Day	December	January
1.....	13,900	25,000	11.....	14,600	15,600	21.....	21,900	26,300
2.....	15,700	23,000	12.....	13,500	19,200	22.....	34,200	25,100
3.....	16,300	20,000	13.....	13,700	17,600	23.....	44,300	24,700
4.....	15,900	16,000	14.....	13,800	14,500	24.....	56,700	27,100
5.....	14,200	16,200	15.....	15,400	16,800	25.....	47,000	25,100
6.....	14,400	20,400	16.....	15,000	22,600	26.....	38,000	25,100
7.....	12,300	20,500	17.....	15,100	30,700	27.....	30,000	23,900
8.....	13,600	20,600	18.....	15,600	27,700	28.....	28,000	23,400
9.....	13,600	19,400	19.....	15,400	27,600	29.....	26,000	23,900
10.....	14,400	16,800	20.....	14,100	27,100	30.....	25,000	23,700
						31.....	25,000	22,800
Monthly mean discharge, in cubic feet per second......................							21,500	22,210
Runoff, in acre-feet..							1,322,000	1,365,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 22--Con.			Jan. 15--Con.		
12 p.m.......	3.07	13,800	3 p.m........	10.72	34,100	12 m.........	4.32	16,700
			5............	11.34	36,200	3 p.m........	4.47	17,100
Dec. 20			7............	11.53	36,800	7............	4.87	18,200
2 a.m........	2.98	13,300	11...........	12.32	39,600	12 p.m.......	5.67	20,300
5............	3.00	13,400	12 p.m.......	12.40	40,000			
12 m.........	3.25	14,000				Jan. 16		
7 p.m........	3.56	14,700	Dec. 23			5 a.m........	6.42	22,300
12 p.m.......	3.65	14,900	3 a.m........	12.90	42,000	8............	6.61	22,900
			12 m.........	13.05	42,600	5 p.m........	6.47	22,500
Dec. 21			2 p.m........	13.22	43,200	7............	6.52	22,600
2 a.m........	3.85	15,100	4............	13.54	44,400	9............	6.72	23,200
4............	4.47	16,700	8............	14.52	48,100	12 p.m.......	7.75	26,200
8............	6.00	20,700	12 p.m.......	15.55	52,000	Jan. 17		
12 m.........	6.88	23,200				2 a.m........	8.72	29,100
2 p.m........	7.17	24,000	Dec. 24			4............	9.38	31,200
6............	7.48	24,900	3 a.m........	16.05	54,500	6............	9.63	32,000
10...........	7.98	26,400	7............	16.62	56,600	8............	9.66	32,100
12 p.m.......	8.46	27,900	3 p.m........	17.02	58,200	12 m.........	9.49	31,600
			12 p.m.......	16.76	57,200	12 p.m.......	8.84	29,400
Dec. 22								
4 a.m........	9.98	31,700	Jan. 14			Jan. 18		
6............	10.46	33,200	12 p.m.......	3.47	14,600	9 a.m........	8.08	27,200
8............	10.54	33,500				11...........	8.03	27,000
11...........	10.54	33,500	Jan. 15			8 p.m........	8.25	27,700
1 p.m........	10.32	32,700	3 a.m........	3.59	14,900	12 p.m.......	8.26	27,700

SALMON RIVER BASIN

565. Little Salmon River near Pollock, Idaho

(Miscellaneous site)

Location.--Lat 45°13'05", long 116°18'50", in NE¼ sec.27, T.22 N., R.1 E., at Elk Lake road, 7½ miles south of Pollock.

Drainage area.--345 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maximum.--December 1955 to January 1956: Discharge, 4,480 cfs Dec. 22.

566. Little Salmon River at Riggins, Idaho

(Gaging station, discontinued 1955)

Location.--Lat 45°24'50", long 116°19'30", in SE¼SW¼ sec.15, T.24 N., R.1 E., on right bank 250 ft upstream from highway bridge, half a mile upstream from mouth, and three-quarters of a mile southwest of Riggins.

Drainage area.--576 sq mi.

Discharge record.--Peak discharge from stage-discharge relation defined by current-meter measurements below 3,200 cfs, and extended by velocity-area and conveyance-slope analyses.

Maxima.--December 1955 to January 1956: Discharge, 8,500 cfs Dec. 22 (gage height, 8.34 ft).

1951 to February 1955: Discharge, 5,650 cfs June 13, 1953 (gage height, 7.39 ft).

Flood about June 1, 1948, reached a discharge of 9,200 cfs (slope-area measurement).

AREAS OF MINOR FLOODING IN WASHINGTON AND OREGON

ASOTIN CREEK BASIN

567. Asotin Creek near Asotin, Wash.

Location.--Lat 46°19'30", long 117°12'30", in SE¼ sec.19, T.10 N., R.45 E., on left bank half a mile upstream from Washington Water Power Co. diversion for water supply and irrigation, 5 miles upstream from George Creek, and 8 miles west of Asotin.

Drainage area.--156 sq mi.

Gage-height record.--Staff gage with crest-stage indicator; twice-daily gage readings except Dec. 20-25 which is based on graph reconstructed on basis of gage and crest-stage readings. Altitude of gage is 1,380 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 280 cfs and by slope-area measurement of 1,040 cfs; affected by ice Dec. 14-19 and Jan. 27-31. Shifting-control method used at times.

Maxima.--December 1955 to January 1956: Discharge, 1,040 cfs 7:30 p.m. Dec. 22 (gage height, 3.94 ft).

1904-6, 1910-11, 1928 to November 1955: Discharge observed, 1,180 cfs Apr. 15, 1904 (gage height, 4.3 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	55	90	11.....	50	58	21.....	223	107
2.....	55	86	12.....	69	54	22.....	720	95
3.....	54	83	13.....	78	64	23.....	582	90
4.....	53	83	14.....	70	61	24.....	334	85
5.....	50	74	15.....	65	72	25.....	226	72
6.....	51	71	16.....	60	149	26.....	184	62
7.....	50	69	17.....	55	149	27.....	162	60
8.....	50	69	18.....	55	136	28.....	142	55
9.....	48	64	19.....	60	119	29.....	113	50
10.....	48	61	20.....	72	115	30.....	103	45
						31.....	92	40
Monthly mean discharge, in cubic feet per second							130	80.3
Runoff, in inches							0.96	0.59
Runoff, in acre-feet							7,990	4,930

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 22--Con.			Dec. 23--Con.		
12 p.m.......	0.96	63	8 a.m........	3.20	655	12 p.m.......	2.12	416
			10...........	3.40	742			
Dec. 20			12 m.........	3.42	768	Dec. 24		
6 a.m........	.96	63	2 p.m........	3.39	796	6 a.m........	1.94	362
12 m.........	.97	64	4............	3.33	792	12 m.........	1.82	327
6 p.m........	1.05	75	5............	3.34	816	6 p.m........	1.73	301
12 p.m.......	1.27	111	6............	3.48	872	12 p.m.......	1.63	273
			7............	3.83	1,000			
Dec. 21			7:30.........	3.94	1,040	Dec. 25		
6 a.m........	1.52	159	9............	3.77	980	6 a.m........	1.50	238
12 m.........	1.76	215	12 p.m.......	3.33	826	12 m.........	1.43	219
6 p.m........	2.01	27S				6 p.m........	1.39	208
12 p.m.......	2.33	369	Dec. 23			12 p.m.......	1.36	201
			6 a.m........	2.86	661			
Dec. 22			12 m.........	2.58	563			
4 a.m........	2.65	465	6 p.m........	2.35	485			

DRY CREEK BASIN

568. Dry Creek near Clarkston, Wash.
(Crest-stage station)

Location.--Lat 46°23'10", long 117°08'15", in SW¼ sec.35, T.11 N., R.45 E., at crossing on State Highway 3K and 4½ miles southwest of Clarkston.

Drainage area.--2.29 sq mi.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 61.1 cfs Dec. 22 (gage height, 10.54 ft).

1954 to November 1955: No flow.

SNAKE RIVER MAIN STEM

569. Snake River near Clarkston, Wash.

Location.--Lat 46°25'30", long 117°10'30", in lot 1, sec.16, T.11 N., R.45 E., on right bank 2 miles upstream from Alpowa Creek, 7 miles downstream from Clarkston, and 134 miles upstream from mouth.

Drainage area.--103,200 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 670 ft above mean sea level (Corps of Engineers bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 174,800 cfs 9 a.m. Dec. 23 (gage height, 28.63 ft).

1909 to November 1955: Discharge, 369,000 cfs May 29, 1948 (gage height, 40.36 ft, from high-water mark in well).

Maximum stage known, 24.7 ft June 5, 1894, Riparia site and datum, determined from floodmarks by Weather Bureau (discharge, 409,000 cfs).

Remarks.--Regulation by many storage reservoirs upstream.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	30,600	48,800	11.....	26,900	34,400	21.....	45,200	50,600
2.....	31,800	48,100	12.....	35,000	36,100	22.....	116,400	48,900
3.....	32,400	45,300	13.....	41,400	36,900	23.....	169,000	47,800
4.....	31,200	41,100	14.....	34,900	34,400	24.....	145,900	50,300
5.....	29,000	40,100	15.....	30,600	34,400	25.....	119,800	47,500
6.....	27,300	42,200	16.....	29,600	51,000	26.....	93,300	44,800
7.....	26,100	42,200	17.....	29,500	64,100	27.....	81,700	41,200
8.....	25,800	42,500	18.....	29,400	60,600	28.....	72,200	40,200
9.....	26,100	41,100	19.....	29,800	55,700	29.....	64,000	40,500
10.....	26,700	36,500	20.....	30,600	53,300	30.....	54,800	39,400
						31.....	50,400	37,000
Monthly mean discharge, in cubic feet per second							52,170	44,420
Runoff, in inches							0.58	0.50
Runoff, in acre-feet							3,208,000	2,731,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 22			Dec. 24--Con.		
12 p.m.......	13.28	30,000	1 a.m........	19.75	74,200	6 p.m........	25.93	139,200
			4............	20.47	80,700	12 p.m.......	25.42	133,000
Dec. 20			6............	21.27	88,700	Dec. 25		
6 a.m........	13.18	29,500	10...........	23.47	112,200	6 a.m........	24.95	127,400
12 m.........	13.23	29,800	12 m.........	24.06	119,100	12 m.........	24.35	120,200
6 p.m........	13.55	31,400	4 p.m........	24.95	129,800	6 p.m........	23.68	112,500
12 p.m.......	13.89	33,000	8............	26.45	148,800	12 p.m.......	22.99	104,900
			12 p.m.......	27.64	164,200			
Dec. 21						Dec. 26		
3 a.m........	14.01	33,700	Dec. 23			6 a.m........	22.31	98,100
4............	13.79	32,600	3 a.m........	28.50	173,000	12 m.........	21.76	92,600
10...........	14.72	37,600	9............	28.63	174,800	6 p.m........	21.26	87,700
12 m.........	15.24	40,600	12 m.........	28.51	173,100	12 p.m.......	20.89	84,400
2:30 p.m.....	16.64	49,700	6 p.m........	27.98	165,700			
4............	16.41	48,100	12 p.m.......	27.43	158,600	Dec. 27		
6............	16.71	50,200				6 a.m........	20.76	83,200
8............	16.93	51,700	Dec. 24			12 m.........	20.71	82,800
9............	18.55	63,800	6 a.m........	26.95	152,400	6 p.m........	20.42	80,200
12 p.m.......	20.66	82,600	12 m.........	26.47	146,100	12 p.m.......	20.03	76,700

PALOUSE RIVER BASIN

570. Palouse River near Colfax, Wash.

Location.--Lat 46°55'30", long 117°19'10", in NW¼SW¼ sec.31, T.17 N., R.44 E., on right bank 3½ miles northeast of Colfax and 4 miles upstream from mouth of South Fork.

Drainage area.--491 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 15-20. Record doubtful Jan. 5-17 due to faulty intake action. Records Dec. 21, 22, and Jan. 15-17 based on graph reconstructed from gage readings.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,500 cfs and by indirect measurement of 4,790 cfs; affected by ice Dec. 16-18 and Jan. 28-31.

Maxima.--December 1955 to January 1956: Discharge, 4,790 cfs 1 a.m. Dec. 22 (gage height, 7.60 ft).

September to November 1955: Discharge, 1,480 cfs Nov. 26 (gage height, 4.81 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	175	386	11.....	126	482	21.....	1,180	847
2.....	158	355	12.....	974	442	22.....	3,810	982
3.....	143	390	13.....	612	508	23.....	3,880	1,100
4.....	117	812	14.....	374	464	24.....	2,500	926
5.....	90	731	15.....	300	473	25.....	1,320	712
6.....	70	634	16.....	260	1,570	26.....	1,290	513
7.....	80	618	17.....	220	2,110	27.....	1,280	446
8.....	72	550	18.....	200	1,410	28.....	1,040	400
9.....	61	468	19.....	220	1,000	29.....	681	340
10.....	59	459	20.....	300	896	30.....	472	280
						31.....	398	250
Monthly mean discharge, in cubic feet per second......................							725	695
Runoff, in inches..							1.70	1.63
Runoff, in acre-feet...							44,550	42,750

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 23--Con.			Jan. 16		
12 p.m.......	3.15	390	8 a.m........	7.14	4,110	6 a.m........	4.08	896
Dec. 21			10...........	7.01	3,920	10...........	4.43	1,170
3 a.m........	3.07	359	10...........	7.13	4,090	12 m.........	4.69	1,380
7............	3.26	434	2 p.m........	6.98	3,880	2 p.m........	4.94	1,590
11...........	3.04	348	6............	6.85	3,700	6............	5.72	2,350
2 p.m........	3.07	359	12 p.m.......	6.57	3,330	9............	5.87	2,520
3............	5.35	1,970	Dec. 24			12 p.m.......	5.80	2,440
6............	6.10	2,770	6 a.m........	6.22	2,900	Jan. 17		
8............	5.30	1,920	12 m.........	5.87	2,520	6 a.m........	5.61	2,230
10...........	5.35	1,970	6 p.m........	5.47	2,090	12 m.........	5.42	2,040
12 p.m.......	7.10	4,050	12 p.m.......	5.05	1,680	7 p.m........	5.41	2,030
Dec. 22			Dec. 25			12 p.m.......	5.17	1,790
1 a.m........	7.60	4,790	6 a.m........	4.71	1,400	Jan. 18		
6............	6.35	3,060	9............	4.66	1,360	6 a.m........	4.84	1,500
8............	6.65	3,440	3 p.m........	4.43	1,170	12 m.........	4.64	1,340
9............	6.50	3,240	8............	4.46	1,200	6 p.m........	4.53	1,250
11...........	6.80	3,630	12 p.m.......	4.42	1,170	10...........	4.57	1,290
12 m.........	6.70	3,500	Jan. 14			12 p.m.......	4.52	1,250
2 p.m........	6.70	3,500	12 p.m.......	3.26	434	Jan. 19		
3............	6.93	3,810	Jan. 15			6 a.m........	4.29	1,060
6............	7.05	3,980	12 m.........	3.26	434	12 m.........	4.11	918
10...........	7.28	4,310	3 p.m........	3.27	438	2 p.m........	4.07	889
11...........	7.10	4,050	8............	3.42	504	6............	4.16	958
12 p.m.......	7.10	4,050	12 p.m.......	3.84	731	9............	4.16	958
Dec. 23						12 p.m.......	4.10	910
1 a.m........	7.17	4,150						

571. Palouse River tributary at Colfax, Wash.

(Crest-stage station)

Location.--Lat 46°53'10", long 117°23'20", in SE¼SW¼ sec.10, T.16 N., R.43 E., at crossing on State Highway 295 and 1 mile west of Colfax.

Drainage area.--2.10 sq mi.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 70.5 cfs Dec. 22 (gage height, 19.18 ft).
1954 to November 1955: Discharge, 17.9 cfs Feb. 9, 1955 (gage height, 16.19 ft).

572. North Pine Creek tributary near Plaza, Wash.

(Crest-stage station)

Location.--Lat 47°18'40", long 117°23'20", in E½ sec.16, T.21 N., R.43 E., at crossing on U.S. Highway 195 and 0.7 mile south of Plaza.

Drainage area.--1.72 sq mi.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 80.9 cfs Dec. 22 (gage height, 8.28 ft, from gage; 8.4 ft, from high-water mark).
1954 to November 1955: Discharge 67.0 cfs Feb. 9, 1955 (gage height, 7.84 ft).

573. Union Flat Creek near Colfax, Wash.

Location.--Lat 46°49'00", long 117°26'05", in SW¼SW¼ sec.5, T.15 N., R.43 E., on right bank 5½ miles southwest of Colfax.

Drainage area.--189 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,865 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 730 cfs and extended above on basis of logarithmic plotting; affected by ice Jan. 28-31.

Maxima.--December 1955 to January 1956: Discharge, 1,790 cfs 10 p.m. Dec. 21 (gage height, 7.10 ft).
1953 to November 1955: Discharge, 926 cfs Feb. 9, 1955 (gage height, 5.84 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	45	44	11.....	66	62	21.....	737	144
2.....	40	48	12.....	456	71	22.....	1,060	186
3.....	34	53	13.....	184	104	23.....	504	323
4.....	30	144	14.....	54	99	24.....	122	161
5.....	21	124	15.....	35	94	25.....	85	100
6.....	30	76	16.....	32	1,000	26.....	116	75
7.....	23	76	17.....	29	782	27.....	199	56
8.....	18.5	79	18.....	32	306	28.....	84	45
9.....	26	46	19.....	51	172	29.....	54	40
10.....	23	56	20.....	69	153	30.....	41	35
						31.....	50	30
Monthly mean discharge, in cubic feet per second.....................							140	154
Runoff, in inches..							0.86	0.94
Runoff, in acre-feet...							8,630	9,490

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Union Flat Creek near Colfax, Wash.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22			Jan. 16--Con.		
12 p.m.......	1.93	40	4 a.m........	5.65	1,020	4 a.m........	4.77	664
			7............	6.30	1,350	6............	4.89	706
Dec. 19			12 m.........	5.92	1,160	8............	5.05	770
6 a.m........	2.02	48	4 p.m........	5.35	890	10...........	5.25	850
12 m.........	2.06	51	8............	5.26	854	11...........	6.02	1,210
6 p.m........	2.10	54	12 p.m.......	5.15	810	1 p.m........	6.25	1,320
12 p.m.......	2.17	60				2............	6.35	1,380
			Dec. 23			3:30.........	6.43	1,420
Dec. 20			6 a.m........	5.55	975	5............	6.36	1,380
6 a.m........	2.16	59	8............	5.15	810	6............	6.32	1,360
12 m.........	2.14	58	10...........	4.25	485	8............	6.16	1,280
6 p.m........	2.25	68	12 m.........	3.77	342	10...........	6.02	1,210
12 p.m.......	2.72	119	6 p.m........	3.22	216	12 p.m.......	5.95	1,180
			12 p.m.......	2.99	173			
Dec. 21						Jan. 17		
3 a.m........	2.95	150	Dec. 24			4 a.m........	5.76	1,080
4............	4.90	601	6 a.m........	2.90	158	8............	5.46	934
5............	5.60	840	12 m.........	2.46	95	12 m.........	4.96	734
6............	5.42	777	6 p.m........	2.54	105	4 p.m........	4.52	577
7............	5.64	854	12 p.m.......	2.40	88	6............	4.42	542
10...........	5.51	808	Jan. 14			8............	4.40	535
11...........	5.42	777	12 p.m.......	2.27	74	12 p.m.......	4.31	504
1 p.m........	5.05	648						
2............	3.90	329	Jan. 15			Jan. 18		
3............	4.50	483	8 a.m........	2.29	76	3 a.m........	4.18	464
4............	4.54	494	12 m.........	2.20	67	6............	3.90	380
5............	4.90	601	3 p.m........	2.29	76	9............	3.44	262
7............	5.40	770	6............	2.44	93	12 m.........	3.28	228
8............	6.25	1,090	9............	2.77	138	3 p.m........	3.30	232
9............	6.50	1,190	12 p.m.......	3.27	226	6............	3.36	245
10...........	7.10	1,790				9............	3.40	253
11...........	6.50	1,450	Jan. 16			12 p.m.......	3.47	268
12 p.m.......	6.17	1,280	2 a.m........	3.72	328			

574. Palouse River at Hooper, Wash.

Location.--Lat 46°45'30", long 118°08'50", in SE$\frac{1}{4}$ sec.27, T.15 N., R.37 E., on left bank 150 ft downstream from State Highway 11B bridge at Hooper and 0.4 mile upstream from Cow Creek.

Drainage area.--2,540 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,040 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 12,000 cfs; affected by ice Jan. 29-31.

Maxima.--December 1955 to January 1956: Discharge, 15,200 cfs 10 a.m. Dec. 22 (gage height, 14.01 ft).

1897-1916, 1951 to November 1955: Discharge, 29,800 cfs Mar. 2, 1910 (gage height, 22.00 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	718	1,050	11.....	387	1,440	21.....	2,390	2,340
2.....	746	968	12.....	2,750	1,540	22.....	12,400	2,440
3.....	640	1,080	13.....	4,170	1,480	23.....	8,730	2,950
4.....	562	4,900	14.....	1,980	1,720	24.....	5,860	3,000
5.....	458	3,410	15.....	1,130	1,410	25.....	3,580	2,300
6.....	373	2,410	16.....	868	2,430	26.....	2,600	1,880
7.....	364	2,060	17.....	718	6,170	27.....	3,360	1,490
8.....	370	1,980	18.....	610	3,880	28.....	2,700	1,260
9.....	408	1,660	19.....	504	2,840	29.....	2,050	1,100
10.....	370	1,400	20.....	605	2,260	30.....	1,530	900
						31.....	1,200	750
Monthly mean discharge, in cubic feet per second							2,101	2,145
Runoff, in inches							0.95	0.97
Runoff, in acre-feet							129,200	131,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Palouse River at Hooper, Wash.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23--Con.			Jan. 16--Con.		
12 p.m.	6.12	691	6 p.m.	11.81	8,410	9 p.m.	9.52	3,920
			12 p.m.	11.36	7,300	12 p.m.	9.96	4,610
Dec. 21								
6 a.m.	6.12	691	Dec. 24			Jan. 17		
1 p.m.	6.24	757	6 a.m.	10.97	6,440	5 a.m.	11.31	7,180
4	6.81	1,100	12 m.	10.68	5,860	7	11.46	7,540
5	7.60	1,670	6 p.m.	10.32	5,220	11	11.38	7,350
5:30	10.03	4,720	12 p.m.	9.93	4,560	2 p.m.	11.02	6,540
6:30	9.27	3,560				6	10.43	5,410
8	10.22	5,040	Dec. 25			12 p.m.	9.83	4,400
9	11.03	6,570	6 a.m.	9.57	4,000			
12 p.m.	12.63	10,700	12 m.	9.26	3,540	Jan. 18		
			6 p.m.	8.95	3,120	4 a.m.	9.71	4,210
Dec. 22			12 p.m.	8.67	2,750	9	9.76	4,290
3 a.m.	13.43	13,200				12 m.	9.64	4,100
10	14.01	15,200	Jan. 15			6	9.20	3,460
12 m.	13.75	14,300	12 p.m.	7.20	1,360	12 p.m.	8.86	3,000
6 p.m.	12.45	10,200						
12 p.m.	12.18	9,400	Jan. 16			Jan. 19		
			6 a.m.	7.22	1,370	6 a.m.	8.79	2,910
Dec. 23			11	7.30	1,430	12 m.	8.90	3,050
6 a.m.	12.16	9,350	1 p.m.	8.00	2,030	6 p.m.	8.64	2,720
12 m.	11.97	8,820	3 p.m.	9.08	3,290	12 p.m.	8.35	2,380

WALLA WALLA RIVER BASIN

575. Hatley Creek near Dayton, Wash.

(Crest-stage station)

Location.--Lat 46°16'50", long 117°53'40", on line between secs. 2 and 11, T.9 N., R.39 E., at crossing on North Touchet Road, 5 miles southeast of Dayton.

Drainage area.--4.12 sq mi.

Gage-height record.--Crest stages only.

Discharge record.--Peak discharge by measurement of flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 88.5 cfs Dec. 22 (gage height, 13.43 ft).

1955 to November 1956: No flow.

576. East Fork Touchet River near Dayton, Wash.

(Gaging station, discontinued 1951)

Location.--Lat 46°16'45", long 117°54'05", in NW¼NW¼ sec.11, T.9 N., R.39 E., on right bank 250 ft upstream from water-supply headworks of city of Dayton, 1,000 ft upstream from Hatley Creek, three-quarters of a mile downstream from Wolf Creek, 3 miles upstream from confluence with South Fork, and 4 miles southeast of Dayton.

Drainage area.--102 sq mi.

Discharge record.--Peak discharge computed by measurement of flow over dam. Datum of gage is 1,868.3 ft above mean sea level (river-profile survey).

Maxima.--December 1955 to January 1956: Discharge, 1,320 cfs Dec. 22 (gage height, 5.86 ft).

1941 to November 1955: Discharge, 1,530 cfs probably Jan. 7, 1948 (gage height, 5.28 ft).

577. Touchet River at Bolles, Wash.

Location.--Lat 46°16'30", long 118°13'15", on line between secs. 7 and 8, T.9 N., R.37 E., on right bank just downstream from bridge on State Highway 3E, a quarter of a mile southeast of Bolles and 3 miles west of Waitsburg.

Drainage area.--372 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,150 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,300 cfs and by indirect measurement of 3,410 cfs; affected by ice Jan. 30, 31. Shifting-control method used at times.

Maxima.--December 1955 to January 1956: Discharge, 3,410 cfs 5 a.m. Dec. 12 (gage height, 9.81 ft).

1924-29, 1951 to November 1955: Discharge, 4,470 cfs Jan. 13, 1928 (gage height, 7.04 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	398	322	11.....	698	306	21.....	1,400	777
2.....	374	295	12.....	2,110	312	22.....	2,820	743
3.....	339	273	13.....	1,060	368	23.....	2,040	749
4.....	290	344	14.....	619	356	24.....	1,310	662
5.....	262	386	15.....	454	777	25.....	800	558
6.....	268	350	16.....	368	1,780	26.....	755	483
7.....	256	339	17.....	295	1,400	27.....	749	438
8.....	246	350	18.....	240	1,090	28.....	616	374
9.....	339	306	19.....	251	906	29.....	501	300
10.....	284	295	20.....	386	876	30.....	426	220
						31.....	368	150
Monthly mean discharge, in cubic feet per second......................							690	545
Runoff, in inches...							2.14	1.69
Runoff, in acre-feet..							42,450	33,490

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 10			Dec. 13--Con.			Dec. 22		
12 p.m.......	5.38	339	6 p.m........	6.33	880	1 a.m........	8.81	2,600
Dec. 11			12 p.m.......	6.13	772	5............	8.38	2,250
6 a.m........	5.52	421				5:30.........	8.94	2,700
12 m.........	6.13	772	Dec. 14			8:30.........	8.96	2,720
6 p.m........	6.47	972	6 a.m........	5.95	668	9............	9.51	3,160
12 p.m.......	6.38	918	12 m.........	5.83	598	10:30........	9.71	3,320
			6 p.m........	5.77	564	2 p.m........	9.20	2,910
Dec. 12			12 p.m.......	5.69	519	2:30.........	9.50	3,150
1 a.m........	6.37	912				5............	9.14	2,860
2............	6.50	990	Dec. 20			6............	9.30	2,990
2:30.........	8.20	2,120	12 p.m.......	5.98	684	12 p.m.......	8.87	2,650
3:30.........	8.69	2,500						
4:30.........	8.39	2,260	Dec. 21			Dec. 23		
5............	9.81	3,410	1 a.m........	5.94	662	6 a.m........	8.28	2,180
6:30.........	9.18	2,890	4............	7.24	1,450	12 m.........	8.00	1,980
7............	9.48	3,130	8............	7.15	1,380	6 p.m........	7.83	1,860
12 m.........	8.30	2,190	10...........	6.90	1,230	12 p.m.......	7.56	1,670
6 p.m........	7.85	1,880	1 p.m........	6.82	1,180			
12 p.m.......	7.29	1,480	4:30.........	6.83	1,190	Dec. 24		
			5............	7.12	1,360	6 a.m........	7.24	1,450
Dec. 13			8:30.........	7.18	1,410	12 m.........	6.97	1,270
6 a.m........	6.88	1,220	9............	8.73	2,530	6 p.m........	6.77	1,150
12 m.........	6.54	1,010	12 p.m.......	8.50	2,350	12 p.m.......	6.61	1,060

UMATILLA RIVER BASIN

578. Umatilla River near Umatilla, Oreg.

Location.--Lat 45°54'20", long 119°19'40", in NW¼ sec.21, T.5 N., R.28 E., on left bank 1½ miles downstream from West Division main canal of Umatilla project, 1¾ miles southeast of Umatilla, and 2 miles upstream from mouth.

Drainage area.--2,290 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Jan. 28-31 when once-daily Telemark readings were used as mean daily gage heights. Datum of gage is 330.47 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 5,850 cfs 4:30 p.m. Dec. 23 (gage height, 6.28 ft).

1903 to November 1955: Discharge, 19,600 cfs May 31, 1906 (gage height, 11.0 ft), from rating curve extended above 11,000 cfs by logarithmic plotting.

Remarks.--Flow affected by diversion upstream to Cold Springs Reservoir, an off-channel reservoir (capacity, 50,000 acre-ft), and by McKay Reservoir (capacity, 73,830 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	715	706	11.....	443	481	21.....	851	2,470
2.....	742	654	12.....	1,500	494	22.....	3,620	2,070
3.....	697	598	13.....	2,780	520	23.....	5,430	1,900
4.....	630	697	14.....	1,590	590	24.....	3,780	1,700
5.....	548	583	15.....	1,030	1,030	25.....	2,280	1,420
6.....	507	555	16.....	810	4,910	26.....	1,650	1,230
7.....	474	520	17.....	679	4,750	27.....	1,460	1,040
8.....	431	520	18.....	576	3,290	28.....	1,320	970
9.....	425	514	19.....	527	2,700	29.....	1,120	860
10.....	443	494	20.....	481	2,550	30.....	926	760
						31.....	780	590
Monthly mean discharge, in cubic feet per second......................							1,266	1,360
Runoff, in acre-feet..							77,840	83,640

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 23--Con.			Jan. 15--Con.		
12 p.m.......	3.45	555	9 p.m........	6.21	5,680	12 p.m.......	5.02	3,000
			12 p.m.......	6.06	5,330			
Dec. 21						Jan. 16		
12 m.........	3.60	670	Dec. 24			3 a.m........	5.17	3,330
6 p.m........	3.83	893	3 a.m........	5.81	4,750	6............	5.82	4,780
9............	4.18	1,330	6............	5.62	4,320	9............	5.88	4,910
12 p.m.......	4.56	2,030	12 m.........	5.32	3,660	12 m.........	6.03	5,260
			6 p.m........	5.08	3,140	6 p.m........	6.17	5,590
Dec. 22			12 p.m.......	4.92	2,780	12 p.m.......	6.22	5,710
3 a.m........	4.76	2,450						
6............	5.07	3,110	Dec. 25			Jan. 17		
9............	5.29	3,600	12 m.........	4.66	2,240	3 a.m........	6.21	5,680
12 m.........	5.42	3,880	12 p.m.......	4.49	1,880	6............	6.10	5,420
6 p.m........	5.56	4,190				9............	5.84	4,820
12 p.m.......	5.74	4,590	Jan. 14			12 m.........	5.80	4,730
			12 p.m.......	3.53	614	6 p.m........	5.54	4,150
Dec. 23						12 p.m.......	5.39	3,820
6 a.m........	6.00	5,190	Jan. 15					
12 m.........	6.21	5,680	12 m.........	3.69	751	Jan. 18		
4:30 p.m.....	6.28	5,850	6 p.m........	3.99	1,080	12 m.........	5.12	3,220
6 p.m........	6.27	5,830	9 p.m........	4.35	1,610	12 p.m.......	4.97	2,890

ROCK CREEK BASIN

579. Rock Creek near Goldendale, Wash.
(Miscellaneous site)

Location.--Lat 45°50'30", long 120°31'40", in W½ sec.11, T.4 N., R.18 E., 400 ft downstream from county road crossing and 17 miles east of Goldendale.

Drainage area.--65.3 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 2,870 cfs Dec. 21.

Flood of Jan. 9, 1953, had a discharge of 2,580 cfs.

JOHN DAY RIVER BASIN

580. John Day River at McDonald Ferry, Oreg.

Location.--Lat 45°35'20", long 120°24'30", in NW¼ sec.11, T.1 N., R.19 E., on left bank at McDonald Ferry, half a mile downstream from Rock Creek and 10 miles east of Klondike.

Drainage area.--7,580 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 392.27 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 22,800 cfs 9 p.m. Dec. 23 (gage height, 9.78 ft).

1904 to November 1955: Discharge, 27,800 cfs Feb. 6, 1907 (gage height, 10.8 ft); gage height, 13.2 ft, from floodmark, Feb. 8, 1950 (ice jam).

Discharge known, 39,100 cfs, from rating curve extended above 22,000 cfs, probably occurred in 1894 (gage height, 12.8 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,860	2,690	11.....	1,430	2,050	21.....	3,950	6,720
2.....	1,660	3,000	12.....	2,060	2,130	22.....	10,400	6,530
3.....	1,650	3,040	13.....	3,300	2,210	23.....	21,500	7,240
4.....	1,590	3,210	14.....	5,550	2,190	24.....	17,500	8,990
5.....	1,480	2,900	15.....	3,340	3,320	25.....	10,300	6,610
6.....	1,340	2,830	16.....	2,220	11,100	26.....	7,680	5,160
7.....	1,130	2,740	17.....	1,980	15,800	27.....	6,950	4,250
8.....	1,050	2,550	18.....	2,340	10,700	28.....	6,810	4,040
9.....	1,340	2,480	19.....	2,210	8,520	29.....	5,250	3,910
10.....	1,360	2,360	20.....	1,940	7,500	30.....	4,060	3,360
						31.....	3,090	3,480
Monthly mean discharge, in cubic feet per second......................							4,462	4,955
Runoff, in inches..							0.68	0.75
Runoff, in acre-feet...							274,400	304,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 23--Con.			Jan. 16		
12 p.m.......	3.21	1,800	9 p.m........	9.78	22,800	4 a.m........	5.75	7,320
			12 p.m.......	9.69	22,400	8............	6.64	10,100
Dec. 21						12 m.........	6.24	8,800
12 m.........	4.25	3,620	Dec. 24			4 p.m........	7.15	11,800
4 p.m........	4.52	4,180	4 a.m........	9.44	21,300	6............	7.95	14,900
8............	5.46	6,500	8............	9.04	19,500	8............	8.30	16,300
12 p.m.......	5.34	6,180	12 m.........	8.54	17,300	12 p.m.......	8.76	18,200
			4 p.m........	8.06	15,300			
Dec. 22			12 p.m.......	7.40	12,800	Jan. 17		
4 a.m........	5.10	5,550				2:30 a.m.....	8.84	18,600
8............	5.85	7,620	Dec. 25			4............	8.81	18,400
12 m.........	6.68	10,200	12 m.........	6.65	10,100	6............	8.70	18,000
4 p.m........	7.35	12,600	12 p.m.......	6.10	8,370	8............	8.52	17,200
8............	7.84	14,500				12 m.........	8.11	15,500
12 p.m.......	8.64	17,700	Jan. 14			12 p.m.......	7.36	12,600
			12 p.m.......	3.50	2,240			
Dec. 23						Jan. 18		
4 a.m........	9.23	20,300	Jan. 15			6 a.m........	7.10	11,700
8............	9.44	21,300	12 m.........	3.92	2,980	12 m.........	6.77	10,500
12 m.........	9.60	22,000	12 p.m.......	4.90	5,060	6 p.m........	6.50	9,630
4 p.m........	9.75	22,700				12 p.m.......	6.40	9,310

DESCHUTES RIVER BASIN

581. Deschutes River at Moody, near Biggs, Oreg.

Location.--Lat 45°37'20", long 120°54'05", in SE¼ sec.26, T.2 N., R.15 E., on right bank at Moody, 1½ miles upstream from mouth and 5 miles southwest of Biggs.

Drainage area.--10,500 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 167.43 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 19,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 28,900 cfs 8-10 p.m. Dec. 22 (gage height, 7.91 ft).
1897-99, 1906 to November 1955: Discharge, 43,600 cfs Jan. 7, 1923 (gage height, 10.2 ft, at site 300 ft downstream at datum 0.5 ft lower), from rating curve extended above 15,000 cfs.

Remarks.--Flows affected by storage in Crescent Lake, and in Crane Prairie, Wickiup, and Ochoco Reservoirs (combined capacity, 370,500 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7,380	8,340	11.....	7,270	7,650	21.....	11,800	14,300
2.....	7,200	8,190	12.....	10,200	7,500	22.....	26,800	13,200
3.....	6,870	8,010	13.....	10,600	7,430	23.....	25,900	14,800
4.....	6,620	8,410	14.....	9,290	7,220	24.....	20,700	13,900
5.....	6,510	9,250	15.....	8,750	14,100	25.....	18,100	12,400
6.....	6,260	8,680	16.....	8,080	26,100	26.....	14,200	10,900
7.....	6,510	8,450	17.....	7,600	19,200	27.....	12,500	10,100
8.....	6,440	8,190	18.....	7,450	17,800	28.....	11,400	9,370
9.....	6,870	7,830	19.....	7,090	15,600	29.....	10,200	8,980
10.....	6,400	7,650	20.....	7,050	14,800	30.....	9,290	8,720
						31.....	8,750	8,150
Monthly mean discharge, in cubic feet per second......................							10,330	11,140
Runoff, in inches..							1.13	1.22
Runoff, in acre-feet...							634,900	684,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 24			Jan. 15--Con.		
12 p.m.......	3.24	7,120	7 a.m........	6.51	21,200	7 p.m........	6.94	23,600
			6 p.m........	6.29	20,000	12 p.m.......	7.68	27,600
Dec. 21			12 p.m.......	6.25	19,800			
6 a.m........	3.33	7,450				Jan. 16		
9............	3.53	8,190	Dec. 25			7 a.m........	7.90	28,800
12 m.........	4.22	10,800	8 a.m........	6.15	19,400	8............	7.89	28,800
3 p.m........	4.86	13,400	12 m.........	6.01	18,600	10...........	7.79	28,200
6............	5.31	15,400	8 p.m........	5.52	16,200	2 p.m........	7.34	25,800
10...........	5.87	18,000	12 p.m.......	5.30	15,200	6............	6.90	23,400
12 p.m.......	6.70	22,200				12 p.m.......	6.66	22,000
			Dec. 26					
Dec. 22			6 a.m........	5.11	14,300	Jan. 17		
2 a.m........	7.04	24,100	12 m.........	5.07	14,100	4 a.m........	6.50	21,200
7............	7.07	24,300	6 p.m........	5.04	14,000	8............	6.25	19,800
11...........	7.73	27,900	12 p.m.......	4.92	13,400	6 p.m........	5.84	17,800
1 p.m........	7.81	28,400				12 p.m.......	5.73	17,200
4............	7.77	28,100	Jan. 14			Jan. 18		
8............	7.91	28,900	12 p.m.......	3.37	7,260	8 a.m........	5.82	17,700
12 p.m.......	7.90	28,800				1 p.m........	5.95	18,400
			Jan. 15			12 p.m.......	5.75	17,400
Dec. 23			6 a.m........	3.50	7,720			
3 a.m........	7.83	28,500	9............	3.69	8,410	Jan. 19		
10...........	7.56	27,000	12 m.........	4.16	10,200	12 m.........	5.36	15,400
8 p.m........	6.85	23,100	3 p.m........	5.19	14,700	8 p.m........	5.17	14,600
12 p.m.......	6.66	22,000	6 p.m........	6.53	21,300	12 p.m.......	5.21	14,700

COLUMBIA RIVER MAIN STEM

582. Columbia River near The Dalles, Oreg.

Location.--Lat 45°39'00", long 120°58'00", in NE¼ sec.20, T.2 N., R.15 E., on left bank 300 ft upstream from staff gage in entrance to Celilo Canal, just upstream from Celilo Falls, 3 miles downstream from Deschutes River, 11 miles east of The Dalles, and at mile 201.

Drainage area.--237,000 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 0.12 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 320,000 cfs 12 m. Dec. 24 (gage height, 137.01 ft).

1858 to November 1955: Discharge, 1,240,000 cfs June 6, 1894 (gage height, 106.5 ft on gage at The Dalles, 160.1 ft at present site).

Remarks.--Flow affected by Franklin D. Roosevelt Lake above Grand Coulee Dam and by reservoirs in Kootenai, Flathead, Pend Orielle, Spokane, Chelan, Yakima, and Snake River basins (combined capacity, about 25,000,000 acre-ft).

Mean discharge, cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	128,000	166,000	11.....	111,000	143,000	21.....	125,000	163,000
2.....	126,000	160,000	12.....	112,000	143,000	22.....	170,000	157,000
3.....	123,000	156,000	13.....	118,000	140,000	23.....	218,000	156,000
4.....	118,000	157,000	14.....	142,000	137,000	24.....	306,000	153,000
5.....	122,000	166,000	15.....	147,000	143,000	25.....	277,000	155,000
6.....	114,000	159,000	16.....	139,000	159,000	26.....	234,000	159,000
7.....	120,000	154,000	17.....	130,000	177,000	27.....	212,000	146,000
8.....	115,000	151,000	18.....	123,000	185,000	28.....	190,000	139,000
9.....	125,000	145,000	19.....	121,000	186,000	29.....	196,000	139,000
10.....	116,000	145,000	20.....	111,000	175,000	30.....	183,000	129,000
						31.....	169,000	128,000
Monthly mean discharge, in cubic feet per second.......................							152,900	153,900
Runoff, in acre-feet..							9,404,000	9,463,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 25		
12 p.m.......	130.48	111,000	12 p.m.......	132.82	176,000	8 a.m........	136.15	289,000
						1 p.m........	135.82	277,000
Dec. 21			Dec. 23			7............	135.32	259,000
6 a.m........	130.80	119,000	6 a.m........	133.47	196,000	12 p.m.......	135.14	252,000
12 m.........	131.06	126,000	6 p.m........	134.72	237,000			
7 p.m........	131.22	130,000	12 p.m.......	135.66	271,000	Dec. 26		
9............	131.33	133,000				12 m.........	134.60	233,000
12 p.m.......	131.89	148,000	Dec. 24			6 p.m........	134.31	223,000
			2 a.m........	136.02	284,000	12 p.m.......	134.26	221,000
Dec. 22			7............	136.75	311,000			
4 a.m........	132.64	170,000	10...........	136.99	320,000	Dec. 27		
7............	132.79	175,000	12 m.........	137.01	320,000	6 a.m........	134.38	226,000
11...........	132.84	176,000	5 p.m........	136.77	311,000	9............	134.31	223,000
4 p.m........	132.63	170,000	12 p.m.......	136.38	297,000	7 p.m........	133.50	196,000
9 p.m........	132.65	170,000				12 p.m.......	133.34	192,000

KLICKITAT RIVER BASIN

583. Little Klickitat River near Wahkiacus, Wash.

Location.--Lat 45°50'30", long 121°03'20", in SE¼ sec.9, T.4 N., R.14 E., on right bank half a mile downstream from Bowman Creek, three-quarters of a mile upstream from mouth, and 2 miles northeast of Wahkiacus.

Drainage area.--280 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 30, 31, Jan. 8-13, and Jan. 31. Datum of gage is 576.2 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,500 cfs 6 p.m. Dec. 21 (gage height, 8.63 ft, from recorder graph; 9.00 ft, from floodmarks).

1944 to November 1955: Discharge, 7,000 cfs Jan. 7, 1948 (gage height, 9.4 ft, from high-water mark).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	468	450	11.....	1,760	530	21.....	2,730	1,090
2.....	374	428	12.....	1,500	500	22.....	4,450	1,150
3.....	300	419	13.....	788	510	23.....	2,430	1,240
4.....	239	1,360	14.....	525	595	24.....	1,530	943
5.....	212	930	15.....	441	1,880	25.....	1,250	754
6.....	280	1,100	16.....	387	1,720	26.....	1,360	670
7.....	356	1,020	17.....	340	1,380	27.....	946	610
8.....	446	700	18.....	288	1,960	28.....	705	572
9.....	522	620	19.....	270	1,430	29.....	588	520
10.....	505	560	20.....	330	1,300	30.....	520	465
						31.....	480	400
Monthly mean discharge, in cubic feet per second.....................							881	897
Runoff, in inches..							3.63	3.69
Runoff, in acre-feet...							54,190	55,150

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 25--Con.			Jan. 18		
12 p.m.......	3.67	270	12 p.m.......	5.76	1,500	5 a.m........	6.36	2,180
						7............	6.48	2,330
Dec. 20			Dec. 26			8............	6.47	2,310
6 a.m........	3.67	270	12 m.........	5.64	1,380	1 p.m........	6.06	1,830
3 p.m........	3.80	320	12 p.m.......	5.41	1,160	2............	6.05	1,820
8............	4.05	428				5............	6.20	1,990
12 p.m.......	4.13	464	Jan. 14			6............	6.21	2,000
			12 p.m.......	4.58	545	10...........	6.10	1,870
Dec. 21						12 p.m.......	5.94	1,690
6 a.m........	4.67	752	Jan. 15			Jan. 19		
10...........	5.41	1,290	2 a.m........	4.57	540	4 a.m........	5.60	1,340
12 m.........	6.19	2,060	6............	4.75	640	10...........	5.40	1,150
2 p.m........	7.54	3,760	9............	5.50	1,240	12 m.........	5.39	1,140
6............	8.63	5,500	12 m.........	6.57	2,440	2 p.m........	5.45	1,200
12 p.m.......	8.04	4,510	3 p.m........	7.04	3,060	7............	6.01	1,770
			4............	7.08	3,110	8............	6.05	1,820
Dec. 22			5............	7.08	3,110	10...........	6.01	1,770
3 a.m........	7.92	4,330	8............	6.85	2,800	12 p.m.......	5.91	1,660
6............	8.02	4,480	12 p.m.......	6.34	2,160			
12 m.........	8.61	5,470				Jan. 20		
6 p.m........	7.77	4,100	Jan. 16			4 a.m........	5.67	1,410
12 p.m.......	7.13	3,180	6 a.m........	5.82	1,560	8............	5.52	1,260
			1 p.m........	5.58	1,320	12 m.........	5.44	1,190
Dec. 23			4............	5.86	1,610	4 p.m........	5.44	1,190
12 m.........	6.50	2,350	6............	6.13	1,910	8............	5.55	1,290
12 p.m.......	6.08	1,850	8............	6.27	2,070	10...........	5.58	1,320
			9............	6.27	2,070	12 p.m.......	5.55	1,290
Dec. 24			12 p.m.......	6.14	1,920			
12 m.........	5.75	1,490				Jan. 21		
6 p.m........	5.66	1,400	Jan. 17			6 a.m........	5.35	1,100
12 p.m.......	5.53	1,270	6 a.m........	5.67	1,410	12 m.........	5.23	997
			12 m.........	5.43	1,180	3 p.m........	5.21	979
Dec. 25			2 p.m........	5.39	1,140	6............	5.25	1,020
10 a.m.......	5.38	1,130	5............	5.49	1,230	10...........	5.41	1,160
6 p.m........	5.51	1,250	8............	5.65	1,390	11...........	5.43	1,180
10 p.m.......	5.74	1,480	12 p.m.......	5.67	1,410	12 p.m.......	5.43	1,180

HOOD RIVER BASIN

584. Hood River near Hood River, Oreg.

Location.--Lat 45°42'00", long 121°30'40", in SE¼ sec.36, T.3 N., R.10 E., on right bank at Powerdale, a quarter of a mile upstream from Pacific Power & Light Co.'s plant and three-quarters of a mile south of town of Hood River.

Drainage area.--329 sq mi.

Gage-height record.--Water-stage recorder graph for river station; powerplant output record and hourly Venturi meter readings for Pacific Power & Light Co.'s conduit. Datum of gage is 106.37 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 15,000 cfs 12:30 a.m. Dec. 12.
1913 to November 1955: Discharge, 34,000 cfs Jan. 6, 1923 (gage height, 11.1 ft, site then in use), no diversion by power conduit.

Remarks.--All records presented herein include flow in Pacific Power & Light Co.'s conduit, which diverts 3 miles above station and returns water to river a quarter of a mile below station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2,860	1,660	11	5,950	1,640	21	6,420	2,460
2	2,500	1,550	12	8,710	1,590	22	10,400	2,520
3	2,140	1,560	13	4,380	1,570	23	5,860	2,690
4	1,880	3,430	14	3,170	1,590	24	3,990	2,330
5	1,760	2,740	15	2,690	3,400	25	3,210	2,080
6	1,790	2,360	16	2,410	3,370	26	2,980	1,940
7	1,750	2,170	17	2,240	2,780	27	2,610	1,790
8	1,720	1,960	18	2,020	2,880	28	2,240	1,650
9	1,790	1,800	19	1,920	2,720	29	2,020	1,540
10	1,840	1,670	20	2,320	2,790	30	1,850	1,450
						31	1,730	1,340
Monthly mean discharge, in cubic feet per second							3,198	2,162
Runoff, in inches							11.21	7.58
Runoff, in acre-feet							196,700	132,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 9			Dec. 12--Con.			Dec. 21		
12 p.m.	-	1,700	6 a.m.	-	10,600	3 a.m.	-	3,990
			9	-	8,620	6	-	3,850
Dec. 10			12 m	-	7,410	12 m	-	4,300
12 m	-	1,630	6 p.m.	-	6,310	3 p.m.	-	5,350
6 p.m.	-	1,910	12 p.m.	-	5,390	6	-	8,480
12 p.m.	-	2,580				9	-	13,200
			Dec. 13			10	-	13,300
Dec. 11			12 m	-	4,290	12 p.m.	-	12,100
6 a.m.	-	3,570	12 p.m.	-	3,570			
10	-	5,860	Dec. 19			Dec. 22		
6 p.m.	-	6,670	12 p.m.	-	1,890	10 a.m.	-	10,600
8	-	7,390				2 p.m.	-	11,000
12 p.m.	-	13,300	Dec. 20			12 p.m.	-	7,420
			6 a.m.	-	1,890			
Dec. 12			12 m	-	2,220	Dec. 23		
12:30 a.m.	-	15,000	8 p.m.	-	2,650	12 m	-	5,680
3 a.m.	-	13,900	12 p.m.	-	3,660	12 p.m.	-	4,670

WIND RIVER BASIN

585. Wind River above Trout Creek, near Carson, Wash.

Location.--Lat 45°48'30", long 121°54'30", in NE¼ sec.26, T.4 N., R.7 E., on left bank 30 ft downstream from bridge, three-quarters of a mile upstream from Trout Creek, and 7 miles northwest of Carson.

Drainage area.--108 sq mi.

Gage-height record.--Staff gage with crest-stage indicator; twice-daily gage readings except Dec. 8-14, 19-25, Jan. 3, 4, 15, and 16, which are based on graph reconstructed on basis of gage and crest-stage readings. Datum of gage is 890.3 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,800 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 6,480 cfs 9 p.m. Dec. 21 (gage height, 13.35 ft).

1944 to November 1955: Discharge, 8,880 cfs Feb. 8, 1945 (gage height, 15.5 ft, from high-water mark).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,420	772	11	3,140	866	21	3,500	1,360
2	1,250	727	12	4,150	828	22	5,550	1,360
3	1,100	807	13	2,300	796	23	3,330	1,640
4	980	1,900	14	1,620	793	24	2,220	1,370
5	912	1,920	15	1,240	1,200	25	1,820	1,160
6	838	1,660	16	1,070	2,100	26	1,600	1,020
7	800	1,400	17	905	1,800	27	1,360	908
8	930	1,180	18	835	1,680	28	1,140	793
9	912	1,020	19	781	1,500	29	1,010	727
10	1,000	919	20	1,480	1,460	30	930	673
						31	818	650
Monthly mean discharge, in cubic feet per second							1,643	1,193
Runoff, in inches							17.54	12.74
Runoff, in acre-feet							101,000	73,370

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 9			Dec. 14			Dec. 21--Con.		
12 p.m.	5.45	888	6 a.m.	7.45	1,800	9 p.m.	13.35	6,480
			12 m.	7.07	1,600	12 p.m.	13.08	6,190
Dec. 10			6 p.m.	6.73	1,440			
6 a.m.	5.42	877	12 p.m.	6.50	1,320	Dec. 22		
12 m.	5.43	880				3 a.m.	12.76	5,860
3 p.m.	5.48	898	Dec. 18			6	12.62	5,720
6	5.76	1,000	12 p.m.	5.16	786	11	12.65	5,750
12 p.m.	7.15	1,640				1 p.m.	12.62	5,720
			Dec. 19			4	12.47	5,570
Dec. 11			6 a.m.	5.10	765	7	12.18	5,280
6 a.m.	8.08	2,150	4 p.m.	5.10	765	12 p.m.	11.33	4,500
12 m.	9.05	2,740	8	5.18	793			
4 p.m.	10.05	3,440	12 p.m.	5.40	870	Dec. 23		
8	11.40	4,560				6 a.m.	10.37	3,700
9	12.00	5,100	Dec. 20			12 m.	9.72	3,200
10	12.30	5,400	6 a.m.	5.97	1,090	6 p.m.	9.28	2,900
11	12.40	5,500	12 m.	6.73	1,440	12 p.m.	8.76	2,560
12 p.m.	12.38	5,480	6 p.m.	7.56	1,850			
			9	7.97	2,080	Dec. 24		
Dec. 12			11	8.02	2,110	6 a.m.	8.36	2,320
4 a.m.	12.16	5,260	12 p.m.	8.01	2,110	12 m.	8.11	2,170
8	11.60	4,740				6 p.m.	7.99	2,090
2 p.m.	10.47	3,780	Dec. 21			12 p.m.	7.85	2,010
8	9.62	3,130	2 a.m.	7.98	2,090			
12 p.m.	9.18	2,830	4	8.04	2,120	Dec. 25		
			8	8.40	2,340	12 m.	7.48	1,810
Dec. 13			4 p.m.	9.50	3,050	6 p.m.	7.29	1,720
6 a.m.	8.68	2,510	5	10.30	3,640	12 p.m.	7.17	1,660
12 m.	8.25	2,250	6	12.00	5,100			
6 p.m.	7.92	2,050	7	13.05	6,160			
12 p.m.	7.72	1,930	8 p.m.	13.28	6,410			

586. Wind River near Carson, Wash.

Location.--Lat 45°44'10", long 121°48'10", in SW¼NE¼ sec.21, T.3 N., R.8 E., on right bank three-quarters of a mile upstream from Little Wind River, 1 mile northeast of Carson, and 2½ miles upstream from mouth. Records include flow of Little Wind River.

Drainage area.--225 sq mi, including that of Little Wind River.

Gage-height record.--Water-stage recorder graph. Datum of gage is 112.6 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 14,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 18,500 cfs 10 p.m. Dec. 21 (gage height, 16.70 ft).

1934 to November 1955: Discharge, 20,000 cfs Dec. 29, 1937 (gage height, 17.30 ft, as explained above).

Remarks.--Flows not affected by regulation.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2,970	1,580	11	6,980	1,920	21	8,080	3,130
2	2,840	1,440	12	9,750	1,790	22	13,900	3,290
3	2,440	1,680	13	4,800	1,800	23	7,530	4,270
4	2,100	5,600	14	3,370	1,810	24	4,850	3,310
5	1,900	5,710	15	2,790	3,190	25	3,640	2,650
6	1,900	4,180	16	2,420	5,660	26	3,530	2,270
7	2,020	3,430	17	2,130	4,430	27	3,120	1,980
8	2,060	2,800	18	1,920	4,030	28	2,570	1,710
9	2,370	2,380	19	1,780	3,610	29	2,180	1,520
10	2,300	2,080	20	2,980	3,510	30	1,920	1,360
						31	1,680	1,210
Monthly mean discharge, in cubic feet per second							3,704	2,882
Runoff, in inches							18.98	14.77
Runoff, in acre-feet							227,700	177,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 9			Dec. 12--Con.			Dec. 21--Con.		
12 p.m.	8.00	2,280	12 p.m.	11.40	6,110	12 m.	10.59	4,940
						2 p.m.	11.01	5,520
Dec. 10			Dec. 13			5	11.86	6,860
12 m.	7.82	2,140	6 a.m.	10.85	5,290	6	13.54	10,100
3 p.m.	7.86	2,170	12 m.	10.40	4,690	7	15.14	13,800
6	8.01	2,290	6 p.m.	10.03	4,240	8	15.99	16,200
9	8.39	2,590	12 p.m.	9.70	3,860	9	16.57	18,000
12 p.m.	8.80	2,960				10	16.70	18,500
			Dec. 14			11	16.63	18,300
Dec. 11			6 a.m.	9.43	3,570	12 p.m.	16.39	17,400
3 a.m.	9.10	3,240	12 m.	9.20	3,340			
6	9.50	3,640	6 p.m.	9.00	3,140	Dec. 22		
9	10.47	4,780	12 p.m.	8.86	3,010	3 a.m.	15.79	15,600
12 m.	11.52	6,300				6	15.44	14,600
3 p.m.	12.43	7,880	Dec. 19			9	15.24	14,100
5	13.01	9,000	12 p.m.	7.26	1,740	12 m.	15.31	14,300
7	13.38	9,760				3	15.19	14,000
10	14.75	12,900	Dec. 20			6	14.75	12,900
11	15.20	14,000	4 a.m.	7.32	1,780	12 p.m.	13.57	10,200
11:30	15.38	14,400	8	7.87	2,180			
12 p.m.	15.36	14,400	12 m.	8.59	2,770	Dec. 23		
			4 p.m.	9.23	3,370	6 a.m.	12.71	8,410
Dec. 12			8	10.01	4,210	12 m.	12.08	7,240
1 a.m.	15.42	14,600	10	10.64	5,000	6 p.m.	11.59	6,400
2	15.30	14,200	12 p.m.	10.71	5,090	12 p.m.	11.29	5,910
5	14.60	12,500						
5:30	14.72	12,800	Dec. 21			Dec. 24		
8	14.05	11,200	2 a.m.	10.67	5,040	6 a.m.	10.91	5,320
10	13.48	9,970	6	10.41	4,700	12 m.	10.52	4,730
12 m.	13.00	8,980	8	10.36	4,640	6 p.m.	10.27	4,380
6 p.m.	12.08	7,240	10 a.m.	10.39	4,680	12 p.m.	10.02	4,030

SANDY RIVER BASIN

587. Sandy River below Bull Run River, near Bull Run, Oreg.

Location.--Lat 45°27'20", long 122°15'00", in NW¼ sec.30, T.1 S., R.5 E., on left bank 1 mile downstream from Bull Run River and 2 miles northwest of Bull Run.

Drainage area.--440 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 200 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 30,900 cfs 4 a.m. Dec. 12 (gage height, 14.97 ft).
1910-14, 1929 to November 1955: Discharge, 58,000 cfs Mar. 31, 1931 (gage height, 20.6 ft), from rating curve extended above 18,000 cfs.

Remarks.--Flow slightly regulated by Bull Run Lake and Lake Ben Morrow of Portland Water Bureau.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	6,030	2,620	11.....	12,200	3,130	21.....	13,400	7,120
2.....	5,560	2,580	12.....	20,300	3,080	22.....	20,100	7,170
3.....	4,630	2,960	13.....	9,310	3,310	23.....	11,100	7,230
4.....	3,830	10,600	14.....	5,850	3,890	24.....	7,040	5,610
5.....	3,490	8,710	15.....	4,360	17,400	25.....	5,280	4,420
6.....	3,730	6,280	16.....	3,920	11,600	26.....	5,380	3,740
7.....	3,710	4,750	17.....	4,120	7,540	27.....	4,840	3,320
8.....	3,700	3,880	18.....	3,490	7,970	28.....	3,980	2,780
9.....	4,670	3,500	19.....	3,710	8,100	29.....	3,430	2,590
10.....	4,400	3,150	20.....	5,220	8,880	30.....	3,020	2,350
						31.....	2,730	2,200
Monthly mean discharge, in cubic feet per second......................							6,340	5,563
Runoff, in inches...							16.61	14.58
Runoff, in acre-feet..							389,800	342,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 9			Dec. 13--Con.			Dec. 21--Con.		
12 p.m.......	6.13	4,490	10 p.m.......	7.84	7,750	2 p.m........	9.69	12,200
			11...........	7.34	6,720	6............	11.13	16,400
Dec. 10			12 p.m.......	7.28	6,600	9............	12.77	22,200
12 m.........	5.85	4,060				12 p.m.......	13.09	23,400
6 p.m........	5.93	4,180	Dec. 14					
10...........	6.46	5,050	7 a.m........	6.90	5,860	Dec. 22		
12 p.m.......	7.06	6,160	12 m.........	7.02	6,090	1 a.m........	12.80	22,300
			10 p.m.......	6.63	5,350	6............	12.57	21,500
Dec. 11			12 p.m.......	6.00	4,280	7............	12.70	21,900
2 a.m........	7.57	7,190				2 p.m........	12.40	20,800
6............	8.19	8,520	Dec. 18			6............	11.72	18,400
8............	8.89	10,100	12 p.m.......	4.77	2,690	12 p.m.......	10.70	15,000
11...........	10.26	13,700						
8 p.m........	10.58	14,700	Dec. 19			Dec. 23		
10...........	10.92	15,700	7 a.m........	4.86	2,790	2 a.m........	10.16	13,400
12 p.m.......	12.41	20,900	8............	5.63	3,740	6............	9.58	11,900
			7 p.m........	6.08	4,410	7............	9.78	12,400
Dec. 12			12 p.m.......	6.02	4,310	3 p.m........	8.95	10,300
2 a.m........	14.20	27,800				12 p.m.......	8.27	8,690
4............	14.97	30,900	Dec. 20					
6............	14.40	28,600	1 a.m........	5.30	3,310	Dec. 24		
10...........	12.72	22,000	4............	5.27	3,270	1 a.m........	7.77	7,610
1 p.m........	11.74	18,500	7............	5.39	3,430	7............	7.37	6,780
8............	10.35	14,000	8............	6.15	4,520	8 p.m........	7.78	7,630
12 p.m.......	9.59	11,900	12 m.........	6.73	5,540	12 p.m.......	7.06	6,160
			9 p.m........	7.40	6,840			
Dec. 13			12 p.m.......	7.77	7,610	Dec. 25		
7 a.m........	8.76	9,820				1 a.m........	6.50	5,120
8............	8.84	10,000	Dec. 21			8............	6.24	4,670
4 p.m........	8.19	8,520	3 a.m........	8.17	8,470	9............	6.76	5,590
5............	8.31	8,780	5............	8.32	8,810	7 p.m........	6.59	5,280
7 p.m........	8.04	8,190	6 a.m........	8.78	9,870	12 p.m.......	6.77	5,610

WILLAMETTE VALLEY

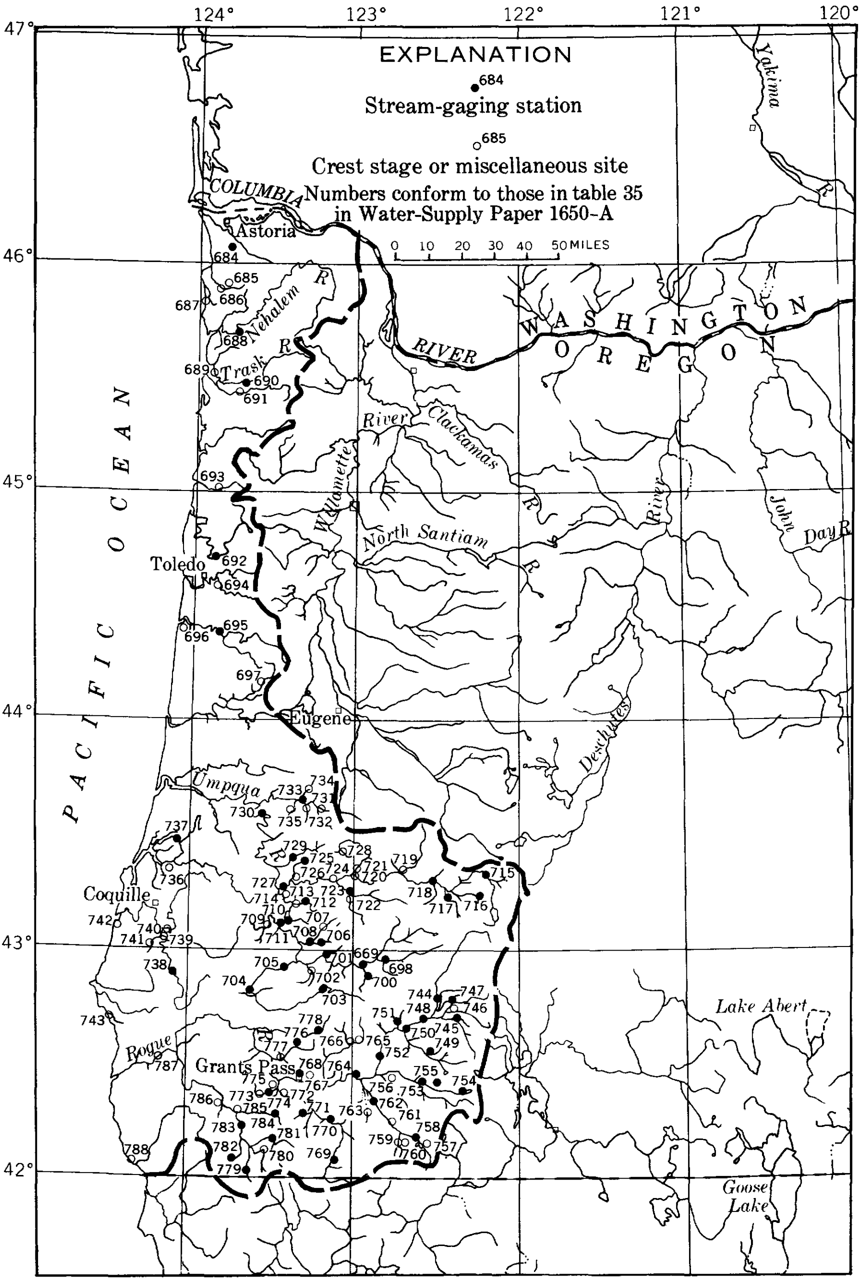
EXPLANATION
684
Stream-gaging station
685
Crest stage or miscellaneous site
Numbers conform to those in table 35 in Water-Supply Paper 1650-A
0 10 20 30 40 50 MILES
124°
123°
122°
121°
120°
47°
46°
45°
44°
43°
42°
PACIFIC OCEAN
COLUMBIA RIVER
WASHINGTON
OREGON
Astoria
Toledo
Eugene
Coquille
Grants Pass
Nehalem R
Trask R
Willamette River
Clackamas R
North Santiam R
River
Deschutes
John Day R
Yakima R
Umpqua R
Rogue
Lake Abert
Goose Lake

Figure 9.--Map of the Willamette Valley region showing location of flood-data sites.

WILLAMETTE RIVER BASIN

588. Middle Fork Willamette River above Salt Creek, near Oakridge, Oreg.

Location.--Lat 43°43'30", long 122°26'20", in SW¼ sec.22, T.21 S., R.3 E., on left bank 400 ft upstream from Salt Creek and 2 miles southeast of Oakridge.

Drainage area.--392 sq mi.

Gage-height record.--Water-stage recorder graph except 4 a.m. to 10:30 a.m. Dec. 22, for which graph was reconstructed on basis of high-water mark in gage well. Datum of gage is 1,202.8 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,000 cfs and by slope-area measurement at 30,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 33,300 cfs about 8 a.m. Dec. 22 (gage height, 12.71 ft).

1913-14, 1935 to November 1955: Discharge, 34,000 cfs Dec. 28, 1945 (gage height, 12.06 ft), from rating curve extended above 13,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4,240	1,890	11.....	4,960	2,050	21.....	15,400	3,990
2.....	3,220	1,720	12.....	6,840	2,250	22.....	26,100	7,600
3.....	2,240	1,810	13.....	5,640	2,590	23.....	11,200	7,700
4.....	1,720	2,620	14.....	3,550	4,900	24.....	6,220	4,720
5.....	1,560	2,620	15.....	2,570	12,300	25.....	4,580	3,410
6.....	2,010	2,220	16.....	2,880	8,030	26.....	5,020	2,730
7.....	2,090	2,100	17.....	3,240	4,920	27.....	4,260	2,240
8.....	2,030	1,940	18.....	3,160	4,160	28.....	3,310	1,860
9.....	2,880	1,830	19.....	3,330	3,910	29.....	2,710	1,690
10.....	2,800	1,860	20.....	4,040	3,890	30.....	2,310	1,480
						31.....	2,030	1,340
Monthly mean discharge, in cubic feet per second......................							4,779	3,496
Runoff, in inches..							14.05	10.28
Runoff, in acre-feet...							293,800	214,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.......	5.30	3,460	4 p.m........	11.13	24,200	9 p.m........	7.43	9,000
			7............	10.34	20,500	12 p.m.......	7.52	9,320
Dec. 20			12 p.m.......	9.45	16,500			
6 a.m........	5.22	3,280				Jan. 15		
12 m.........	5.16	3,160	Dec. 23			3 a.m........	7.51	9,280
3 p.m........	5.23	3,310	6 a.m........	8.59	13,100	6............	8.01	11,000
6............	5.64	4,240	12 m.........	7.95	10,800	8............	8.45	12,600
12 p.m.......	6.88	7,890	6 p.m........	7.42	8,970	11...........	8.77	13,700
			12 p.m.......	7.02	7,760	2 p.m........	9.02	14,600
Dec. 21						3............	9.05	14,700
4 a.m........	8.06	12,500	Dec. 24			4............	8.98	14,400
7............	8.62	15,000	6 a.m........	6.63	6,780	7............	8.69	13,400
9............	8.62	15,000	12 m.........	6.35	6,080	12 p.m.......	8.03	11,100
11...........	8.66	15,100	6 p.m........	6.15	5,580			
12 m.........	8.59	14,800	12 p.m.......	5.97	5,130	Jan. 16		
2 p.m........	8.57	14,700				6 a.m........	7.47	9,140
3............	8.59	14,800	Jan. 13			12 m.........	6.99	7,680
8............	9.55	18,300	12 p.m.......	4.65	2,490	6 p.m........	6.63	6,780
12 p.m.......	10.76	24,000				12 p.m.......	6.30	5,950
			Jan. 14					
Dec. 22			3 a.m........	4.67	2,520	Jan. 17		
2 a.m........	11.60	27,900	7............	4.85	2,820	6 a.m........	6.06	5,350
4............	12.18	30,700	12 m.........	5.31	3,670	12 m.........	5.84	4,830
8............	12.71	33,300	4	6.11	5,480	6 p.m........	5.67	4,440
11 a.m.......	12.12	29,700	7 p.m........	7.12	8,060	12 p.m.......	5.56	4,190

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589. Salmon Creek near Oakridge, Oreg.

Location.--Lat 43°45'20", long 122°23'00", in SW¼ sec.7, T.21 S., R.4 E., on right bank a quarter of a mile upstream from Slide Creek and 4 miles east of Oakridge.

Drainage area.--117 sq mi at cable a quarter of a mile above gage, where all discharge measurements are made.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,421.83 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,000 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 7,640 cfs 8 a.m. Dec. 22 (gage height, 8.20 ft).

1913-19, 1933 to November 1955: Discharge, 8,040 cfs Dec. 28, 1945 (gage height, 8.40 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,410	605	11.....	1,360	530	21.....	3,340	1,350
2.....	1,190	555	12.....	2,530	555	22.....	6,250	2,380
3.....	969	555	13.....	2,100	600	23.....	3,200	2,490
4.....	796	653	14.....	1,470	1,170	24.....	1,940	1,680
5.....	736	648	15.....	1,170	3,320	25.....	1,450	1,300
6.....	826	605	16.....	1,160	2,480	26.....	1,400	1,070
7.....	814	585	17.....	1,120	1,640	27.....	1,190	892
8.....	814	550	18.....	1,130	1,430	28.....	990	760
9.....	899	525	19.....	1,130	1,300	29.....	826	697
10.....	920	511	20.....	1,240	1,280	30.....	719	620
						31.....	648	565
Monthly mean discharge, in cubic feet per second......................							1,475	1,094
Runoff, in inches...							14.54	10.78
Runoff, in acre-feet..							90,720	67,240

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.......	3.47	1,110	12 p.m.......	6.33	4,360	12 m.........	3.12	864
Dec. 20			Dec. 23			2 p.m........	3.33	1,010
10 a.m.......	3.42	1,070	6 a.m........	5.84	3,660	6............	4.18	1,720
12 m.........	3.44	1,090	12 m.........	5.41	3,080	8............	4.50	2,040
4 p.m........	3.65	1,250	6 p.m........	5.09	2,700	10...........	4.65	2,200
10...........	4.10	1,640	12 p.m.......	4.78	2,340	12 p.m.......	4.69	2,240
12 p.m.......	4.29	1,830	Dec. 24			Jan. 15		
Dec. 21			6 a.m........	4.56	2,100	4 a.m........	5.14	2,760
4 a.m........	4.89	2,460	12 m.........	4.37	1,910	8............	5.73	3,500
6............	5.28	2,930	6 p.m........	4.23	1,770	10...........	5.80	3,600
8............	5.43	3,110	12 p.m.......	4.08	1,620	2 p.m........	5.90	3,740
12 m.........	5.48	3,170	Dec. 25			4............	5.91	3,750
2 p.m........	5.56	3,280	6 a.m........	3.96	1,510	6............	5.83	3,640
6............	6.00	3,880	12 m.........	3.85	1,420	12 p.m.......	5.50	3,200
8............	6.16	4,110	6 p.m........	3.80	1,370	Jan. 16		
12 p.m.......	6.94	5,340	9............	3.80	1,370	6 a.m........	5.17	2,790
Dec. 22			12 p.m.......	3.85	1,420	12 m.........	4.84	2,400
4 a.m........	7.85	6,960	Jan. 13			6 p.m........	4.62	2,160
6............	8.08	7,400	12 p.m.......	2.65	595	12 p.m.......	4.40	1,940
8............	8.20	7,640	Jan. 14			Jan. 17		
9............	8.16	7,560	2 a.m........	2.66	600	6 a.m........	4.22	1,760
11...........	7.96	7,160	4	2.71	626	12 m.........	4.07	1,610
1 p.m........	7.66	6,600	10 a.m.......	2.98	778	6 p.m........	3.94	1,500
6 p.m........	7.04	5,510				12 p.m.......	3.90	1,460

590. North Fork of Middle Fork Willamette River near Oakridge, Oreg.

Location.--Lat 43°45'30", long 122°30'20", SW¼ sec.7, T.21 S., R.3 E., on left bank 1 mile upstream from mouth and 2½ miles northwest of Oakridge.

Drainage area.--246 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,029.6 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,000 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 13,400 cfs 6:30 a.m. Dec. 22 (gage height, 14.60 ft).
1909-16, 1935 to November 1955: Discharge, 17,000 cfs Dec. 28, 1945 (gage height, 16.6 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	3,410	1,180	11	2,990	1,020	21	7,840	3,010
2	2,630	1,060	12	5,720	1,060	22	11,600	5,040
3	2,030	1,030	13	4,340	1,170	23	6,640	5,150
4	1,610	1,210	14	2,950	2,400	24	4,050	3,330
5	1,440	1,210	15	2,230	7,760	25	2,940	2,500
6	1,750	1,150	16	2,380	5,520	26	2,990	2,040
7	1,710	1,140	17	2,340	3,470	27	2,460	1,720
8	1,690	1,060	18	2,350	3,220	28	1,980	1,450
9	1,840	1,010	19	2,350	2,960	29	1,650	1,320
10	1,810	986	20	2,810	2,950	30	1,410	1,160
						31	1,260	1,040
Monthly mean discharge, in cubic feet per second							3,071	2,269
Runoff, in inches							14.39	10.63
Runoff, in acre-feet							188,800	139,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Jan. 14--Con.		
12 p.m.	6.57	2,370	12 m.	10.11	6,410	6 a.m.	5.21	1,320
			6 p.m.	9.55	5,680	10	5.48	1,500
Dec. 20			12 p.m.	9.00	5,020	12 m.	5.71	1,670
6 a.m.	6.49	2,300				2 p.m.	6.05	1,930
12 m.	6.50	2,310	Dec. 24			4	6.77	2,570
2 p.m.	6.58	2,380	6 a.m.	8.54	4,470	6	7.66	3,480
4	6.88	2,680	12 m.	8.11	3,970	8	8.42	4,320
6	7.48	3,280	6 p.m.	7.77	3,600	10	9.03	5,060
10	8.34	4,230	12 p.m.	7.48	3,280	12 p.m.	9.17	5,220
12 p.m.	8.75	4,720						
			Dec. 25			Jan. 15		
Dec. 21			6 a.m.	7.23	3,030	2 a.m.	9.46	5,570
2 a.m.	9.60	5,750	12 m.	7.03	2,830	4	9.76	5,960
4	10.47	6,910	4 p.m.	6.94	2,740	6	10.97	7,610
6	10.87	7,470	12 p.m.	7.20	3,000	10	11.88	8,930
10	11.00	7,650				12 m.	11.96	9,050
12 m.	11.01	7,660	Dec. 26			2 p.m.	11.89	8,950
2 p.m.	11.12	7,830	4 a.m.	7.35	3,150	6	11.50	8,380
4	11.32	8,120	12 m.	7.20	3,000	12 p.m.	10.66	7,170
8	11.89	8,950	6 p.m.	7.13	2,930			
10	12.41	9,750	12 p.m.	6.99	2,790	Jan. 16		
12 p.m.	13.27	11,100				6 a.m.	9.98	6,240
			Dec. 27			8	9.74	5,930
Dec. 22			2 a.m.	6.91	2,710	12 m.	9.34	5,430
2 a.m.	14.07	12,500	4	6.90	2,700	7 p.m.	8.71	4,670
4	14.47	13,200	10	6.67	2,470	12 p.m.	8.30	4,180
6:30	14.60	13,400	6 p.m.	6.50	2,310			
9	14.39	13,000	12 p.m.	6.38	2,210	Jan. 17		
12 m.	14.01	12,400				6 a.m.	7.90	3,740
6 p.m.	12.77	10,300	Jan. 13			12 m.	7.59	3,400
12 p.m.	11.73	8,720	12 p.m.	4.96	1,150	6 p.m.	7.32	3,120
						12 p.m.	7.27	3,070
Dec. 23			Jan. 14					
6 a.m.	10.98	7,620	2 a.m.	5.00	1,170			

591. Middle Fork Willamette River below North Fork, near Oakridge, Oreg.

Location.--Lat 43°48'10", long 122°33'30", in SW¼ sec.27, T.20 S., R.2 E., on left bank half a mile below Whitehead Creek, 4 miles below North Fork of Middle Fork Willamette River, and 7 miles northwest of Oakridge.

Drainage area.--924 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 934.76 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 40,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 72,900 cfs 9 a.m. Dec. 22 (gage height, 13.36 ft).

1911-12, 1923 to November 1955: Discharge, 81,800 cfs Dec. 28, 1945 (gage height, 18.8 ft, from floodmark, former site and datum).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	11,200	4,230	11.....	10,900	4,230	21.....	30,700	9,720
2.....	9,100	3,820	12.....	17,200	4,550	22.....	60,300	17,700
3.....	6,900	3,730	13.....	14,800	5,050	23.....	28,100	19,000
4.....	5,420	5,020	14.....	9,860	9,300	24.....	15,300	11,600
5.....	4,670	5,100	15.....	7,360	28,000	25.....	10,900	8,320
6.....	5,600	4,600	16.....	7,670	19,400	26.....	11,500	6,650
7.....	6,080	4,500	17.....	8,200	11,900	27.....	9,710	5,510
8.....	5,780	4,250	18.....	8,090	10,400	28.....	7,590	4,650
9.....	7,460	3,990	19.....	8,230	9,600	29.....	6,140	4,180
10.....	6,940	3,960	20.....	9,400	9,440	30.....	5,200	3,690
						31.....	4,580	3,310
Monthly mean discharge, in cubic feet per second....................							11,640	8,045
Runoff, in inches....................							14.53	10.04
Runoff, in acre-feet....................							715,800	494,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge
Dec. 19		
12 p.m.......	5.02	8,380
Dec. 20		
6 a.m........	4.94	8,090
12 m.........	4.87	7,840
2 p.m........	4.88	7,880
6............	5.34	9,660
12 p.m.......	6.79	16,200
Dec. 21		
4 a.m........	7.81	21,900
8............	8.96	29,900
10...........	9.06	30,700
12 m.........	9.09	30,900
2 p.m........	9.08	30,800
5............	9.31	32,700
9............	10.15	40,000
12 p.m.......	11.04	48,000
Dec. 22		
3 a.m........	12.09	58,600
5............	12.77	66,100
7............	13.22	71,200
9............	13.36	72,900
11...........	13.23	71,400
2 p.m........	12.73	65,600
6............	11.75	55,100
12 p.m.......	10.37	41,900
Dec. 23		
6 a.m........	9.31	32,700
12 m.........	8.56	26,900
6 p.m........	7.86	22,200
Dec. 23--Con.		
12 p.m.......	7.35	19,100
Dec. 24		
6 a.m........	6.97	17,000
12 m.........	6.57	15,000
6 p.m........	6.26	13,600
12 p.m.......	6.00	12,400
Dec. 25		
6 a.m........	5.74	11,400
4 p.m........	5.45	10,200
8............	5.46	10,200
12 p.m.......	5.63	10,900
Dec. 26		
4 a.m........	5.82	11,700
8............	5.87	11,900
12 m.........	5.81	11,600
6 p.m........	5.76	11,400
12 p.m.......	5.65	11,000
Dec. 27		
6 a.m........	5.50	10,400
12 m.........	5.32	9,680
6 p.m........	5.14	8,990
12 p.m.......	5.01	8,540
Dec. 28		
6 a.m........	4.85	7,980
12 m.........	4.74	7,590
6 p.m........	4.61	7,140
12 p.m.......	4.48	6,740
Jan. 13		
12 p.m.......	3.88	5,000
Jan. 14		
4 a.m........	3.90	5,050
8............	4.11	5,630
12 m.........	4.46	6,680
4 p.m........	5.28	9,520
8............	6.79	16,200
10...........	7.27	18,700
12 p.m.......	7.43	19,600
Jan. 15		
2 a.m........	7.50	20,000
5............	7.81	21,900
9............	8.83	28,800
12 m.........	9.19	31,700
5 p.m........	9.43	33,600
8............	9.14	31,300
12 p.m.......	8.60	27,200
Jan. 16		
6 a.m........	7.86	22,200
12 m.........	7.28	18,700
6 p.m........	6.78	16,100
12 p.m.......	6.43	14,400
Jan. 17		
6 a.m........	6.10	12,800
12 m.........	5.82	11,700
6 p.m........	5.59	10,800
12 p.m.......	5.49	10,400

592. Fern Creek near Lowell, Oreg.

(Crest-stage station)

Location.--Lat 43°51'50", long 122°41'05", in W½NW¼ sec.3, T.20 S., R.1 E., at culvert at mouth on State Highway 58, 6 miles southeast of Lowell.

Drainage area.--0.44 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 950 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 30 cfs Dec. 21 (gage height, 5.45 ft).

1952 to November 1955: Discharge, 22 cfs Nov. 23, 1953 (gage height, 5.17 ft).

593. Lookout Point Reservoir near Lowell, Oreg.

Location.--Lat 43°54'50", long 122°45'00", in SE¼ sec.13, T.19 S., R.1 W., in elevator house at right end of spillway section of dam across Middle Fork Willamette River, 1½ miles east of Lowell.

Drainage area.--991 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Corps of Engineers).

Storage record.--Contents in acre-feet from capacity table furnished by Corps of Engineers.

Maxima.--December 1955 to January 1956: Inflow, 76,000 cfs 9 a.m. Dec. 22; outflow, 15,200 cfs 10 a.m. Dec. 28; contents, 426,500 acre-ft 12 p.m. Dec. 26 (elevation, 922.06 ft).

1953 to November 1955: Contents, 448,400 acre-ft June 14, 1955 (elevation, 927.23 ft).

Remarks.--Inflow and outflow records furnished by Corps of Engineers. Usable capacity is 349,400 acre-ft between elevations 819 ft (proposed lower limit of operation) and 929 ft (top of spillway gates). Total capacity is 456,000 acre-ft. Figures shown herein are for total storage.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	852.20	183,900	897.12	328,100	16	858.82	202,300	859.85	205,300
2	853.15	186,500	891.24	306,800	17	857.43	198,400	858.63	201,800
3	850.81	180,200	885.46	286,400	18	856.46	195,700	856.62	196,100
4	847.08	170,400	880.77	270,400	19	855.57	193,200	853.89	188,500
5	842.84	159,600	875.29	252,300	20	857.46	198,500	851.53	182,100
6	839.71	151,900	869.48	234,000	21	878.08	261,500	849.05	175,500
7	838.64	149,300	863.22	215,100	22	909.27	374,500	855.02	191,700
8	837.68	147,000	856.41	195,500	23	919.66	416,400	862.56	213,100
9	838.36	148,700	848.84	175,000	24	920.94	421,700	861.64	210,500
10	838.26	148,400	840.69	154,300	25	919.98	417,700	858.20	200,600
11	841.59	156,500	832.44	135,000	26	922.06	426,500	853.48	187,400
12	853.41	187,200	827.41	123,900	27	920.44	419,600	847.75	172,200
13	860.71	207,800	826.89	122,800	28	916.98	405,400	840.61	154,100
14	861.76	210,800	830.97	131,700	29	912.47	387,200	832.46	135,000
15	860.37	206,800	852.47	184,700	30	907.60	367,900	827.47	124,000
					31	902.54	348,500	827.68	124,500
Change in contents................................						-	+174,700	-	-224,000

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955-56, of Lookout Point Reservoir near Lowell, Oreg.

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 19			Dec. 24-Con.			Jan. 13		
12 p.m......	855.57	193,200	12 m........	920.89	421,500	12 p.m......	826.89	122,800
			6 p.m.......	920.98	421,900			
Dec. 20			12 p.m......	920.94	421,700	Jan. 14		
7 a.m.......	855.42	192,800				7 a.m.......	827.72	124,600
2 p.m.......	855.10	191,900	Dec. 25			12 m........	827.63	124,400
8...........	856.11	194,700	4 a.m.......	920.82	421,200	6 p.m.......	828.18	125,600
12 p.m......	857.46	198,500	12 m........	920.20	418,600	12 p.m......	830.97	131,700
			8 p.m.......	919.71	416,600			
Dec. 21			12 p.m......	919.98	417,700	Jan. 15		
6 a.m.......	860.79	208,000				6 a.m.......	835.17	141,200
12 m........	866.14	223,800	Dec. 26			12 m........	841.13	155,300
6 p.m.......	871.59	240,500	6 a.m.......	920.78	421,100	6 p.m.......	846.78	169,600
12 p.m......	878.08	261,500	12 m........	921.50	424,100	12 p.m......	852.47	184,700
			8 p.m.......	922.05	426,400			
Dec. 22			12 p.m......	922.06	426,500	Jan. 16		
6 a.m.......	886.78	291,000				6 a.m.......	856.04	194,500
12 m........	896.26	325,000	Dec. 27			12 m........	858.12	200,300
6 p.m.......	904.00	354,000	6 a.m.......	921.99	426,200	6 p.m.......	859.29	203,600
12 p.m......	909.27	374,500	12 m........	921.74	425,100	12 p.m......	859.85	205,300
			6 p.m.......	921.25	423,000			
Dec. 23			12 p.m......	920.44	419,600	Jan. 17		
6 a.m.......	913.50	391,300				3 a.m.......	859.91	205,400
12 m........	916.53	403,600	Dec. 28			9...........	859.72	204,900
6 p.m.......	918.43	411,400	6 a.m.......	919.73	416,700	12 m........	859.73	204,900
12 p.m......	919.66	416,400	12 m........	918.94	413,500	6 p.m.......	859.26	203,600
Dec. 24			6 p.m.......	917.98	409,500	12 p.m......	858.63	201,800
6 a.m.......	920.41	419,500	12 p.m......	916.98	405,400			

594. Middle Fork Willamette River near Dexter, Oreg.

Location.--Lat 43°56'40", long 122°50'10", near center of sec.5, T.19 S., R.1 W., on right bank three-quarters of a mile upstream from Lost Creek and 2 miles northwest of Dexter.

Drainage area.--1,001 sq mi.

Gage-height record.--Water-stage recorder graph except 5 p.m. Dec. 21 to 10 p.m. Dec. 22. Altitude of gage is 600 ft (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Dec. 21, 22 estimated on basis of records of release at Dexter Dam.

Maxima.--December 1955 to January 1956: Discharge, 16,900 cfs 6 p.m. Jan. 26 (gage height, 8.30 ft).
June to November 1955: Discharge, 12,600 cfs Nov. 29 (gage height, 7.23 ft).

Remarks.--Flow regulated by Lookout Point Reservoir (see station 593).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7,610	14,700	11.....	8,090	14,700	21.....	1,500	14,400
2.....	8,630	14,700	12.....	4,550	9,580	22.....	350	12,200
3.....	10,700	14,700	13.....	4,560	7,200	23.....	8,540	10,700
4.....	10,900	14,500	14.....	8,900	5,890	24.....	14,000	14,500
5.....	10,900	14,600	15.....	9,860	4,660	25.....	14,400	14,600
6.....	10,100	14,600	16.....	10,900	11,300	26.....	9,290	14,500
7.....	8,110	14,600	17.....	11,100	14,700	27.....	14,300	14,400
8.....	7,920	14,600	18.....	10,800	14,700	28.....	16,100	14,300
9.....	7,750	14,700	19.....	10,500	14,600	29.....	16,100	14,500
10.....	8,090	14,700	20.....	9,680	14,300	30.....	15,600	10,300
						31.....	14,600	3,200
Monthly mean discharge, in cubic feet per second.....................							9,820	12,800
Runoff, in acre-feet..							603,800	784,700

595. Fall Creek below Winberry Creek, near Fall Creek, Oreg.

Location.--Lat 43°56'40", long 122°46'30", near center of sec.2, T.19 S., R.1 W., on left bank 10 ft upstream from highway bridge, 1½ miles downstream from Winberry Creek, 2½ miles southeast of Fall Creek, and 5 miles above mouth.

Drainage area.--186 sq mi.

Gage-height record.--Water-stage recorder graph except 6 a.m. Dec. 30 to 2:30 p.m. Jan. 5, for which gage heights were computed from graph based on once-daily staff-gage readings. Datum of gage is 637.80 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 10,000 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 12,800 cfs 6:30 a.m. Dec. 22 (gage height, 13.74 ft).

1935 to November 1955: Discharge, 22,500 cfs Dec. 28, 1945 (gage height, 18.0 ft, from floodmark).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3,750	760	11.....	3,300	1,370	21.....	7,020	2,240
2.....	3,190	710	12.....	5,400	1,550	22.....	9,870	4,040
3.....	2,230	660	13.....	3,180	1,900	23.....	4,860	4,610
4.....	1,540	1,020	14.....	1,960	2,920	24.....	2,740	2,590
5.....	1,320	1,020	15.....	1,420	8,480	25.....	2,300	1,820
6.....	1,820	950	16.....	1,650	4,320	26.....	4,000	1,360
7.....	1,960	1,180	17.....	1,830	2,540	27.....	2,640	1,070
8.....	2,160	1,190	18.....	2,110	2,540	28.....	1,810	860
9.....	2,770	1,040	19.....	2,010	2,320	29.....	1,330	780
10.....	2,340	1,120	20.....	2,390	2,100	30.....	1,140	660
						31.....	910	583
Monthly mean discharge, in cubic feet per second......................							2,805	1,945
Runoff, in inches..							17.39	12.06
Runoff, in acre-feet...							172,500	119,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 23--Con.			Jan. 14		
12 p.m.......	5.27	1,910	6 p.m........	7.74	3,940	2 a.m........	4.99	1,710
			12 p.m.......	7.20	3,440	12 m.........	5.57	2,120
Dec. 20						3 p.m........	6.09	2,490
5 a.m........	5.16	1,830	Dec. 24			8............	8.53	4,840
3 p.m........	5.35	1,960	6 a.m........	6.73	3,020	10...........	9.30	5,790
6............	5.98	2,410	12 m.........	6.32	2,680	12 p.m.......	9.36	5,870
10...........	8.11	4,340	6 p.m........	6.01	2,430			
12 p.m.......	8.34	4,610	12 p.m.......	5.74	2,240	Jan. 15		
						1 a.m........	9.33	5,830
Dec. 21			Dec. 25			6............	10.55	7,470
3 a.m........	8.92	5,300	6 a.m........	5.50	2,070	12 m.........	12.40	10,400
6............	10.36	7,200	2 p.m........	5.29	1,920	2 p.m........	12.90	11,200
8............	10.71	7,690	6............	5.72	2,220	6............	11.85	9,460
2 p.m........	10.24	7,040	12 p.m.......	7.62	3,820	12 p.m.......	9.88	6,540
7............	10.68	7,650						
9............	10.59	7,530	Dec. 26			Jan. 16		
12 p.m.......	11.19	8,400	6 a.m........	8.30	4,560	6 a.m........	8.61	4,930
			12 m.........	8.00	4,220	12 m.........	7.81	4,010
Dec. 22			6 p.m........	7.49	3,700	6 p.m........	7.29	3,520
4 a.m........	13.03	11,500	12 p.m.......	6.99	3,250	12 p.m.......	6.81	3,090
6:30.........	13.74	12,800						
12 m.........	12.57	10,700	Dec. 27			Jan. 17		
6 p.m........	11.12	8,290	6 a.m........	6.61	2,910	6 a.m........	6.39	2,730
12 p.m.......	10.04	6,760	12 m.........	6.20	2,580	12 m.........	6.06	2,470
			6 p.m........	5.91	2,360	6 p.m........	5.77	2,260
Dec. 23			12 p.m.......	5.63	2,160	12 p.m.......	5.78	2,270
6 a.m........	9.24	5,710	Jan. 13					
12 m.........	8.42	4,700	12 p.m.......	5.03	1,740			

596. Middle Fork Willamette River at Jasper, Oreg.

Location.--Lat 43°59'50", long 122°54'20", in SW¼SW¼ sec.14, T.18 S., R.2 W., on right bank 25 ft downstream from highway bridge at Jasper, 650 ft downstream from Hills Creek, and 7½ miles southeast of Springfield.

Drainage area.--1,340 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 513.45 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 21,100 cfs 8 a.m. Dec. 22 and 6 p.m. Jan. 22 (gage height, 8.86 ft).

1905-12, 1913-17, 1952 to November 1955: Discharge, 94,000 cfs Nov. 23, 1909 (gage height, 17.4 ft, datum then in use, from graph based on gage readings), from rating curve extended above 10,000 cfs by logarithmic plotting.

Remarks.--Flow regulated by Lookout Point Reservoir (see station 593).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	14,500	16,400	11.....	13,900	17,500	21.....	15,800	18,000
2.....	14,600	16,300	12.....	14,600	12,900	22.....	17,700	19,400
3.....	14,800	16,200	13.....	10,400	10,800	23.....	18,100	19,300
4.....	13,800	16,800	14.....	12,700	10,900	24.....	19,000	19,400
5.....	13,500	16,900	15.....	12,600	18,700	25.....	19,400	18,000
6.....	13,600	17,000	16.....	14,600	19,400	26.....	19,300	17,000
7.....	11,700	18,000	17.....	14,600	19,400	27.....	19,800	16,200
8.....	12,100	17,500	18.....	14,700	19,200	28.....	19,800	15,900
9.....	13,300	17,200	19.....	14,900	18,700	29.....	18,800	15,800
10.....	12,500	17,200	20.....	15,100	17,800	30.....	17,900	12,200
						31.....	16,500	4,580
Monthly mean discharge, in cubic feet per second.....................							15,310	16,470
Runoff, in acre-feet..							941,400	1,013,000

597. Coast Fork Willamette River at London, Oreg.

Location.--Lat 43°38'30", long 123°05'10", in SW¼ sec.20, T.22 S., R.3 W., on left bank 0.6 mile north of London and 11 miles south of Cottage Grove.

Drainage area.--69 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 852.58 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,500 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 6,210 cfs 5 a.m. Dec. 22 (gage height, 10.88 ft).

1935 to November 1955: Discharge, 8,800 cfs Dec. 28, 1945 (gage height, 13.25 ft), from rating curve extended above 4,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,420	431	11.....	994	917	21.....	3,220	795
2.....	978	383	12.....	1,660	878	22.....	4,340	1,570
3.....	655	403	13.....	1,030	1,060	23.....	2,000	1,810
4.....	481	655	14.....	655	1,190	24.....	1,200	1,060
5.....	417	625	15.....	522	2,150	25.....	1,460	760
6.....	441	610	16.....	979	1,720	26.....	3,540	595
7.....	548	670	17.....	1,010	1,140	27.....	1,580	486
8.....	851	635	18.....	966	1,030	28.....	971	399
9.....	1,100	558	19.....	1,250	1,020	29.....	710	347
10.....	939	620	20.....	1,570	950	30.....	558	295
						31.....	464	259
Monthly mean discharge, in cubic feet per second.....................							1,242	839
Runoff, in inches..							20.76	14.02
Runoff, in acre-feet..							76,380	51,610

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Coast Fork Willamette River at London, Oreg.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Jan. 13		
12 p.m.	4.55	1,260	9 a.m.	5.92	2,080	12 p.m.	3.88	884
			4 p.m.	5.40	1,770			
Dec. 20			12 p.m.	4.90	1,470	Jan. 14		
5 a.m.	4.33	1,130				6 a.m.	4.01	956
8	4.51	1,240	Dec. 24			10	4.01	956
11	4.38	1,160	6 a.m.	4.64	1,310	1 p.m.	4.17	1,040
3 p.m.	4.71	1,360	12 m.	4.41	1,180	7	5.14	1,610
7	6.30	2,340	6 p.m.	4.24	1,080	9	5.21	1,660
9	6.48	2,470	12 p.m.	4.07	988	12 p.m.	5.16	1,630
11	6.45	2,440						
12 p.m.	6.50	2,480	Dec. 25			Jan. 15		
			7 a.m.	3.94	917	2 a.m.	5.24	1,670
Dec. 21			12 m.	3.93	912	5	5.64	1,910
1 a.m.	6.66	2,590	3 p.m.	4.34	1,140	7	5.84	2,030
4:30	8.05	3,630	5	4.80	1,410	12 m.	6.85	2,720
6	7.90	3,510	9	6.91	2,770	8 p.m.	5.90	2,070
10	7.25	3,000	12 p.m.	8.18	3,730	12 p.m.	5.70	1,950
1 p.m.	6.87	2,740						
3	7.11	2,910	Dec. 26			Jan. 16		
5	7.69	3,340	2 a.m.	8.94	4,350	2 a.m.	5.73	1,970
7	7.68	3,330	3:30	9.15	4,540	5	5.69	1,940
10	7.99	3,580	7	8.93	4,340	6 p.m.	5.04	1,550
12 p.m.	8.82	4,250	1 p.m.	7.98	3,570	12 p.m.	4.74	1,370
			7	6.80	2,690			
Dec. 22			12 p.m.	6.07	2,180	Jan. 17		
3 a.m.	10.43	5,770				6 a.m.	4.50	1,230
5	10.88	6,210	Dec. 27			4 p.m.	4.16	1,040
10	9.67	5,030	4 a.m.	5.61	1,900	6	4.12	1,020
2 p.m.	8.31	3,840	1 p.m.	4.92	1,480	12 p.m.	4.14	1,030
5	7.65	3,310	12 p.m.	4.42	1,180			
9	7.06	2,870						
12 p.m.	6.77	2,670	Dec. 28					
			6 a.m.	4.20	1,060			
Dec. 23			2 p.m.	3.96	928			
2 a.m.	6.67	2,600	12 p.m.	3.72	800			

598. Cottage Grove Reservoir near Cottage Grove, Oreg.

Location.--Lat 43°43', long 123°03', in NE¼ sec.28, T.21 S., R.3 W., in east abutment of dam on Coast Fork Willamette River, 5½ miles south of Cottage Grove.

Drainage area.--104 sq mi.

Gage-height record.--Water-stage recorder graph except 1:30 p.m. Jan. 30 to 3 p.m. Feb. 1, for which graph was reconstructed on basis of dam tender's log of operations. Datum of gage is at mean sea level (levels by Corps of Engineers).

Storage record.--Contents in acre-feet from capacity table furnished by Corps of Engineers.

Maxima.--December 1955 to January 1956: Inflow, 8,000 cfs 6 a.m. Dec. 22; outflow, 3,220 cfs 8:30 a.m. Dec. 30; contents, 33,380 acre-ft 5 p.m. Dec. 23 (elevation, 791.38 ft).

1942 to November 1955: Contents, 34,750 acre-ft May 3, 1949 (elevation, 792.42 ft).

Remarks.--Inflow records furnished by Corps of Engineers. Usable capacity, 33,090 acre-ft between elevations 719.0 ft (outlet conduit) and 791.0 ft (crest of spillway).

Elevation, in feet, and contents, in acre-feet, at 12 p.m., 1955-56, of Cottage Grove Reservoir near Cottage Grove, Oreg.

Day	December		January	
	Elevation	Contents	Elevation	Contents
1	754.78	4,500	765.08	9,870
2	752.32	3,600	758.18	6,030
3	750.82	3,130	751.92	3,470
4	751.23	3,250	750.65	3,070
5	750.84	3,130	750.25	2,950
6	751.24	3,260	751.41	3,310
7	752.49	3,650	752.67	3,710
8	754.96	4,570	752.42	3,630
9	758.69	6,280	751.26	3,260
10	758.70	6,280	750.99	3,180
11	758.79	6,330	752.18	3,550
12	764.52	9,530	752.14	3,540
13	765.78	10,310	752.19	3,560
14	764.14	9,300	753.16	3,880
15	761.86	7,970	762.80	8,510
16	762.38	8,270	767.32	11,290
17	762.43	8,300	765.80	10,320
18	762.54	8,360	762.71	8,460
19	766.98	11,070	758.91	6,390
20	772.86	15,250	754.36	4,330
21	782.81	24,100	750.94	3,160
22	789.96	31,740	756.38	5,180
23	791.03	32,970	761.67	7,870
24	788.64	30,250	760.28	7,110
25	787.14	28,610	756.99	5,460
26	791.26	33,240	752.17	3,550
27	789.94	31,720	750.17	2,930
28	786.76	28,200	750.12	2,910
29	782.80	24,090	750.05	2,890
30	777.71	19,280	749.98	2,870
31	771.67	14,340	750.08	2,900
Change in contents................................	-	+11,170	-	-11,440

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955-56

Hour	Elevation	Contents
Dec. 18		
12 p.m......	762.54	8,360
Dec. 19		
2 a.m.......	762.53	8,350
8...........	762.70	8,450
12 m........	763.78	9,080
6 p.m.......	765.51	10,140
12 p.m......	766.98	11,070
Dec. 20		
6 a.m.......	768.17	11,860
12 m........	769.39	12,690
6 p.m.......	770.73	13,650
12 p.m......	772.86	15,250
Dec. 21		
6 a.m.......	775.45	17,340
12 m........	777.89	19,450
6 p.m.......	780.32	21,680
12 p.m......	782.81	24,100
Dec. 22		
6 a.m.......	785.44	26,790
12 m........	787.69	29,210
6 p.m.......	789.01	30,670
12 p.m......	789.96	31,740
Dec. 23		
6 a.m.......	790.69	32,580
12 m........	791.18	33,140
Dec. 23-Con.		
5 p.m.......	791.38	33,380
12 p.m......	791.03	32,970
Dec. 24		
6 a.m.......	790.59	32,460
12 m........	790.02	31,810
6 p.m.......	789.37	31,070
12 p.m......	788.64	30,250
Dec. 25		
6 a.m.......	787.87	29,400
12 m........	787.16	28,630
7 p.m.......	786.62	28,050
12 p.m......	787.14	28,610
Dec. 26		
6 a.m.......	788.65	30,270
12 m........	790.09	31,890
6 p.m.......	790.96	32,890
12 p.m......	791.26	33,240
Dec. 27		
2 a.m.......	791.27	33,250
12 m........	790.94	32,870
6 p.m.......	790.53	32,390
12 p.m......	789.94	31,720
Dec. 28		
6 a.m.......	789.24	30,930
12 m........	788.47	30,070
Dec. 28-Con.		
6 p.m.......	787.63	29,140
12 p.m......	786.76	28,200
Jan. 13		
12 p.m......	752.19	3,560
Jan. 14		
6 a.m.......	751.80	3,430
1 p.m.......	751.51	3,340
4...........	751.57	3,360
8...........	752.32	3,600
12 p.m......	753.16	3,880
Jan. 15		
8 a.m.......	755.36	4,740
12 m........	757.46	5,680
6 p.m.......	760.43	7,190
12 p.m......	762.80	8,510
Jan. 16		
6 a.m.......	764.75	9,670
9...........	765.66	10,230
4 p.m.......	766.65	10,860
12 p.m......	767.32	11,290
Jan. 17		
9 a.m.......	767.62	11,490
4 p.m.......	766.84	10,980
12 p.m......	765.80	10,320

599. Coast Fork Willamette River below Cottage Grove Dam, Oreg.

Location.--Lat 43°43'00", long 123°03'10", in NE¼ sec.28, T.21 S., R.3 W., on right bank at bridge a quarter of a mile downstream from Cottage Grove Dam and 5¼ miles south of Cottage Grove.

Drainage area.--104 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 711.00 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 3,220 cfs 8:30 a.m. Dec. 30 (gage height, 9.36 ft).

1939 to November 1955: Discharge, 3,460 cfs May 4, 1949 (gage height, 9.75 ft).

Remarks.--Flow regulated since Oct. 31, 1942, by Cottage Grove Reservoir (see station 598).

Mean discharge, in cubic feet per second, 1955-56, of Coast Fork Willamette River below Cottage Grove Dam, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	1,300	2,860	11.....	1,460	1,070	21.....	256	1,680
2.....	1,990	2,330	12.....	880	1,260	22.....	1,740	1,250
3.....	1,290	1,780	13.....	1,100	1,450	23.....	2,230	1,270
4.....	646	1,090	14.....	1,510	1,500	24.....	2,980	1,860
5.....	686	907	15.....	1,470	886	25.....	2,970	1,830
6.....	609	763	16.....	1,490	1,120	26.....	2,990	1,780
7.....	640	880	17.....	1,540	2,060	27.....	3,040	1,010
8.....	906	1,020	18.....	1,520	2,350	28.....	3,060	560
9.....	814	1,040	19.....	657	2,350	29.....	2,950	505
10.....	1,460	970	20.....	228	2,260	30.....	3,050	435
						31.....	2,980	393
Monthly mean discharge, in cubic feet per second							1,627	1,372
Runoff, in acre-feet							100,100	84,340

600. Prather Creek near Disston, Oreg.

(Crest-stage station)

Location.--Lat 43°42'45", long 122°44'25", in NE¼SW¼ sec.30, T.21 S., R.1 E., at dam 0.2 mile northwest of Rujada ranger station, a quarter of a mile upstream from mouth, and 1.8 miles northeast of Disston.

Drainage area.--5.69 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,350 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 80 cfs and by determination of flow over dam at 279 cfs.

Maxima.--December 1955 to January 1956: Discharge, 264 cfs Dec. 21 (gage height, 5.65 ft).

1952 to November 1955: Discharge, 286 cfs Nov. 22, 1953 (gage height, 5.73 ft).

601. Row River above Pitcher Creek, near Dorena, Oreg.

Location.--Lat 43°44'10", long 122°52'20", in NE¼ sec.24, T.21 S., R.2 W., on right bank half a mile above Pitcher Creek and 1½ miles northwest of Dorena.

Drainage area.--211 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 856.16 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 9,300 cfs and extended above by logarithmic plotting; affected by ice at times.

Maxima.--December 1955 to January 1956: Discharge, 19,200 cfs 4 a.m. Dec. 22 (gage height, 13.62 ft).

1935 to November 1955: Discharge, 19,600 cfs Dec. 28, 1945 (gage height, 14.33 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3,940	762	11.....	4,180	1,720	21.....	11,400	2,110
2.....	2,570	675	12.....	5,470	1,860	22.....	13,500	5,670
3.....	1,670	834	13.....	3,340	2,310	23.....	5,480	5,590
4.....	1,180	2,010	14.....	1,900	3,790	24.....	3,000	2,790
5.....	1,010	1,660	15.....	1,390	7,950	25.....	2,640	1,770
6.....	1,500	1,260	16.....	2,510	4,640	26.....	5,720	1,310
7.....	1,770	1,220	17.....	2,820	2,740	27.....	3,360	1,010
8.....	2,070	1,220	18.....	2,820	2,520	28.....	2,030	786
9.....	3,130	1,050	19.....	2,850	2,390	29.....	1,390	680
10.....	2,890	1,230	20.....	3,860	2,180	30.....	1,010	570
						31.....	882	493
Monthly mean discharge, in cubic feet per second							3,332	2,155
Runoff, in inches							18.20	11.77
Runoff, in acre-feet							204,900	132,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Row River above Pitcher Creek near Dorena, Oreg.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Jan. 13		
12 p.m.	7.08	3,100	12 p.m.	7.62	3,860	12 p.m.	6.08	1,960
Dec. 20			Dec. 24			Jan. 14		
6 a.m.	6.87	2,830	6 a.m.	7.26	3,340	4 a.m.	6.06	1,940
12 m.	6.75	2,690	12 m.	6.93	2,910	8	6.25	2,130
2 p.m.	6.79	2,740	6 p.m.	6.68	2,610	12 m.	6.77	2,710
6	7.97	4,400	12 p.m.	6.48	2,380	4 p.m.	7.80	4,130
9	9.34	6,820				8	9.54	7,240
12 p.m.	9.73	7,670	Dec. 25			9	9.61	7,390
			6 a.m.	6.24	2,120	10	9.59	7,350
Dec. 21			12 m.	6.05	1,930	12 p.m.	9.41	6,970
2 a.m.	10.02	8,350	2 p.m.	6.06	1,940			
6	11.45	12,000	4	6.19	2,070	Jan. 15		
8	11.31	11,600	8	7.35	3,470	2 a.m.	9.28	6,700
12 m.	10.57	9,670	12 p.m.	8.82	5,850	3	9.27	6,680
2 p.m.	10.46	9,400				6	9.66	7,510
6	11.62	12,400	Dec. 26			10	10.35	9,140
10	12.73	15,900	2 a.m.	9.13	6,420	12 m.	10.51	9,520
12 p.m.	12.88	16,400	4	9.20	6,550	1 p.m.	10.54	9,600
			6	9.18	6,510	4	10.25	8,900
Dec. 22			12 m.	8.81	5,830	6	9.91	8,080
2 a.m.	13.36	18,200	6 p.m.	8.43	5,160	12 p.m.	9.03	6,230
3	13.31	18,000	12 p.m.	8.01	4,470			
4	13.62	19,200				Jan. 16		
5	13.42	18,400	Dec. 27			6 a.m.	8.47	5,230
6	13.57	19,000	6 a.m.	7.60	3,830	12 m.	8.05	4,530
12 m.	11.90	13,200	12 m.	7.22	3,290	6 p.m.	7.69	3,960
5 p.m.	10.72	10,000	6 p.m.	6.87	2,830	12 p.m.	7.33	3,440
9	10.05	8,420	12 p.m.	6.59	2,500			
12 p.m.	9.69	7,580				Jan. 17		
			Dec. 28			6 a.m.	7.02	3,030
Dec. 23			6 a.m.	6.36	2,250	12 m.	6.74	2,680
6 a.m.	9.10	6,360	12 m.	6.13	2,010	6 p.m.	6.48	2,380
12 m.	8.52	5,310	6 p.m.	5.89	1,780	12 p.m.	6.38	2,270
6 p.m.	8.04	4,510	12 p.m.	5.74	1,650			

602. Dorena Reservoir near Cottage Grove, Oreg.

Location.--Lat 43°47', long 122°57', in SE¼ sec.32, T.20 S., R.2 W., on left side of dam in concrete shelter over 42-inch circular well in concrete part of dam on Row River, 5 miles east of Cottage Grove.

Drainage area.--265 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Corps of Engineers).

Storage record.--Contents, in acre-feet, from capacity table furnished by Corps of Engineers.

Maxima.--December 1955 to January 1956: Inflow, 23,200 cfs 5 a.m. Dec. 22; outflow, 8,500 cfs 5:30 p.m. Dec. 22; contents, 84,060 acre-ft 10:30 a.m. Dec. 23 (elevation, 838.37 ft).

1949 to November 1955: Contents, 76,210 acre-ft May 27, 1953 (elevation, 834.31 ft).

Remarks.--Inflow and outflow records furnished by Corps of Engineers. Usable capacity, 77,510 acre-ft between elevation 739.0 ft (sill of outlet gates) and 835.0 ft (crest of spillway).

Elevation, in feet, and contents, in acre-feet, at 12 p.m., 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	783.10	14,390	801.79	30,210	16	796.85	25,360	808.54	37,610
2	786.30	16,630	792.66	21,630	17	796.16	24,720	806.45	35,230
3	786.34	16,660	783.22	14,470	18	795.35	23,990	803.12	31,600
4	783.36	14,560	781.06	13,060	19	798.73	27,150	799.42	27,820
5	779.21	11,900	778.80	11,650	20	806.77	35,590	794.84	23,530
6	776.75	10,420	774.93	9,360	21	826.22	61,880	789.72	19,230
7	775.37	9,610	773.51	8,560	22	837.82	82,970	797.47	25,940
8	777.40	10,800	772.44	7,980	23	837.65	82,640	807.07	35,930
9	783.74	14,820	771.30	7,380	24	834.34	76,270	806.29	35,050
10	785.73	16,210	771.18	7,320	25	830.42	69,060	803.34	31,830
11	790.00	19,450	772.83	8,190	26	833.40	74,500	799.29	27,700
12	801.12	29,520	774.06	8,870	27	832.74	73,280	793.86	22,670
13	803.94	32,470	774.43	9,080	28	829.00	66,570	787.17	17,270
14	801.92	30,340	780.84	12,920	29	823.95	58,250	779.11	11,840
15	789.09	18,730	802.21	30,650	30	817.78	49,190	772.89	8,230
					31	810.31	39,690	771.93	7,710
Change in contents						-	+31,040	-	-31,980

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955-56, of Dorena Reservoir near Cottage Grove, Oreg.

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 18			Dec. 24			Jan. 14-Con.		
12 p.m.	795.35	23,990	6 a.m.	837.02	81,410	1 p.m.	773.91	8,780
			12 m.	836.27	79,960	6	774.90	9,340
Dec. 19			6 p.m.	835.37	78,230	12 p.m.	780.84	12,920
10 a.m.	794.79	23,490	12 p.m.	834.34	76,270			
4 p.m.	796.34	24,890				Jan. 15		
12 p.m.	798.73	27,150	Dec. 25			6 a.m.	785.53	16,070
			6 a.m.	833.19	74,110	12 m.	791.86	20,960
Dec. 20			12 m.	831.95	71,820	6 p.m.	798.07	26,510
6 a.m.	800.28	28,680	6 p.m.	830.80	69,740	12 p.m.	802.21	30,650
12 m.	801.75	30,170	11	830.39	69,010			
5 p.m.	803.07	31,550	12 p.m.	830.42	69,060	Jan. 16		
12 p.m.	806.77	35,590				6 a.m.	805.21	33,850
			Dec. 26			12 m.	807.33	36,220
Dec. 21			6 a.m.	830.96	70,030	5 p.m.	808.26	37,280
6 a.m.	811.56	41,190	9	831.20	70,460	9	808.47	37,530
12 m.	816.50	47,470	4 p.m.	832.46	72,760	12 p.m.	808.54	37,610
6 p.m.	820.81	53,480	12 p.m.	833.40	74,500			
12 p.m.	826.22	61,880				Jan. 17		
			Dec. 27			3 a.m.	808.55	37,620
Dec. 22			4 a.m.	833.67	75,010	10	808.37	37,410
6 a.m.	831.64	71,260	9	833.83	75,310	6 p.m.	807.33	36,220
12 m.	835.30	78,100	4 p.m.	833.59	74,860	12 p.m.	806.45	35,230
6 p.m.	836.96	81,290	12 p.m.	832.74	73,280			
12 p.m.	837.82	82,970				Jan. 18		
			Jan. 13			6 a.m.	805.56	34,240
Dec. 23			12 p.m.	774.43	9,080	12 m.	804.71	33,310
6 a.m.	838.29	83,900				6 p.m.	803.92	32,450
10:30	838.37	84,060	Jan. 14			12 p.m.	803.12	31,600
6 p.m.	838.09	83,500	6 a.m.	773.93	8,800			
12 p.m.	837.65	82,640	10 a.m.	773.77	8,710			

603. Row River near Cottage Grove, Oreg.

Location.--Lat 43°47'40", long 122°59'40", in NE¼ sec.36, T.20 S., R.3 W., on right bank 1½ miles upstream from Mosby Creek, 2 miles downstream from Dorena Dam, and 3 miles east of Cottage Grove.

Drainage area.--270 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 685.24 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,000 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 9,060 cfs 5:30 p.m. Dec. 22 (gage height, 11.02 ft).

1939 to November 1955: Discharge, 21,400 cfs Dec. 28, 1945 (gage height, 18.20 ft).

Remarks.--Flow regulated by Dorena Reservoir (see station 602).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,840	5,930	11	3,310	1,830	21	912	4,950
2	2,290	5,300	12	2,300	2,070	22	7,160	3,940
3	2,330	4,790	13	2,510	2,740	23	7,330	2,340
4	2,740	3,160	14	3,560	2,780	24	6,940	4,140
5	2,890	2,640	15	3,800	1,350	25	7,220	4,070
6	2,760	2,950	16	3,930	2,030	26	5,380	3,950
7	2,700	2,120	17	3,910	4,610	27	4,890	3,930
8	2,510	1,950	18	4,020	5,070	28	5,920	3,930
9	1,690	1,710	19	2,120	5,030	29	5,920	3,890
10	3,160	1,680	20	580	4,990	30	5,990	2,660
						31	6,030	882
Monthly mean discharge, in cubic feet per second							3,827	3,336
Runoff, in acre-feet							235,300	205,100

604. Mosby Creek at mouth, near Cottage Grove, Oreg.

Location.--Lat 43°46'40", long 123°00'10", in sec.1, T.21 S., R.3 W., on left bank two-thirds of a mile upstream from mouth and 3½ miles southeast of Cottage Grove.

Drainage area.--96 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 6:30 p.m. Dec. 21 to 11:30 a.m. Dec. 22, for which graph was reconstructed on basis of high-water mark and fragmentary chart record. Datum of gage is 676.62 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 6,920 cfs about 5 a.m. Dec. 22 (gage height, 10.66 ft).

1946 to November 1955: Discharge, 7,160 cfs Oct. 28, 1950 (gage height, 10.82 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,720	360	11.....	1,380	1,060	21.....	4,340	826
2.....	1,210	319	12.....	1,900	1,010	22.....	5,340	2,020
3.....	800	350	13.....	1,290	1,130	23.....	2,510	2,280
4.....	530	898	14.....	725	1,370	24.....	1,390	1,180
5.....	445	856	15.....	525	2,860	25.....	1,380	808
6.....	536	724	16.....	1,000	1,930	26.....	3,710	610
7.....	833	1,000	17.....	1,220	1,190	27.....	1,800	461
8.....	1,000	956	18.....	1,210	1,030	28.....	986	350
9.....	1,530	760	19.....	1,440	1,060	29.....	664	296
10.....	1,150	826	20.....	1,920	968	30.....	500	249
						31.....	396	225
Monthly mean discharge, in cubic feet per second......................							1,460	967
Runoff, in inches..							17.58	11.61
Runoff, in acre-feet...							90,010	59,430

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge
Dec. 19		
12 p.m.......	4.52	1,690
Dec. 20		
4 a.m........	4.31	1,530
6............	4.25	1,490
9............	4.28	1,510
12 m.........	4.17	1,430
2 p.m........	4.21	1,460
4............	4.42	1,620
8............	6.00	2,860
10...........	6.49	3,250
12 p.m.......	6.64	3,370
Dec. 21		
2 a.m........	6.80	3,500
4............	7.42	4,010
6............	8.00	4,530
7............	8.20	4,710
9............	7.95	4,480
12 m.........	7.41	4,000
2 p.m........	7.21	3,830
4............	7.45	4,040
6:30.........	7.95	4,480
9............	8.60	5,070
12 p.m.......	9.50	5,880
Dec. 22		
2 a.m........	10.00	6,330
4............	10.50	6,780
5............	10.66	6,920
7............	10.50	6,780
9............	10.10	6,420
11:30........	9.39	5,780
4 p.m........	8.02	4,550
8............	7.12	3,760
10...........	6.79	3,490
12 p.m.......	6.55	3,300
Dec. 23		
6 a.m........	6.08	2,920
12 m.........	5.50	2,460
Dec. 23--Con.		
6 p.m........	5.06	2,110
12 p.m.......	4.67	1,800
Dec. 24		
2 a.m........	4.56	1,720
6............	4.33	1,550
12 m.........	4.08	1,370
6 p.m........	3.84	1,200
12 p.m.......	3.64	1,070
Dec. 25		
6 a.m........	3.47	956
10...........	3.41	916
12 m.........	3.40	910
2 p.m........	3.45	942
4............	3.66	1,080
6............	4.11	1,390
8............	5.04	2,090
11...........	6.66	3,390
12 p.m.......	7.00	3,660
Dec. 26		
2 a.m........	7.61	4,180
4............	7.87	4,410
6............	7.92	4,460
8............	7.74	4,300
10...........	7.48	4,060
12 m.........	7.28	3,880
6 p.m........	6.45	3,220
12 p.m.......	5.67	2,600
Dec. 27		
6 a.m........	5.09	2,130
11...........	4.61	1,760
2 p.m........	4.41	1,610
6............	4.22	1,460
12 p.m.......	3.93	1,260
Dec. 28		
6 a.m........	3.68	1,090
12 m.........	3.48	962
Dec. 28--Con.		
6 p.m........	3.33	868
12 p.m.......	3.20	790
Jan. 13		
12 p.m.......	3.50	975
Jan. 14		
3 a.m........	3.48	962
6............	3.52	988
9............	3.57	1,020
12 m.........	3.69	1,100
2 p.m........	3.85	1,200
4............	4.18	1,440
6............	4.65	1,790
8............	5.09	2,130
10...........	5.24	2,250
12 p.m.......	5.22	2,240
Jan. 15		
2 a.m........	5.18	2,200
4............	5.26	2,270
6............	5.51	2,470
11...........	6.64	3,370
1 p.m........	6.81	3,510
2............	6.79	3,490
4............	6.63	3,360
8............	6.04	2,890
12 p.m.......	5.55	2,500
Jan. 16		
2 a.m........	5.35	2,340
6............	5.07	2,120
12 m.........	4.74	1,860
6 p.m........	4.49	1,670
12 p.m.......	4.23	1,470
Jan. 17		
6 a.m........	3.99	1,300
12 m.........	3.78	1,160
6 p.m........	3.63	1,060
9............	3.56	1,010
12 p.m.......	3.56	1,010

605. Coast Fork Willamette River near Goshen, Oreg.

Location.--Lat 43°58'40", long 122°58'00", in NW¼ sec.29, T.18 S., R.2 W., on right bank at downstream side of highway bridge, 2.5 miles east of Goshen and 6½ miles above confluence with Middle Fork Willamette River.

Drainage area.--642 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 473.80 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 13,000 cfs and by slope-area measurement at 24,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 25,400 cfs 12 m. Dec. 26 (gage height, 16.44 ft).

1905-12, 1950 to November 1955: Discharge, 58,500 cfs Nov. 22, 1909 (gage height, 19.5 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 15,000 cfs by logarithmic plotting.

Remarks.--Flow regulated by Cottage Grove Reservoir (see station 598) and Dorena Reservoir (see station 602).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5,880	10,100	11.....	7,990	5,280	21.....	14,000	8,820
2.....	7,990	9,070	12.....	8,370	5,580	22.....	21,200	9,420
3.....	6,340	7,620	13.....	6,180	6,540	23.....	18,300	8,810
4.....	4,760	7,240	14.....	6,950	7,370	24.....	14,600	9,460
5.....	4,790	5,760	15.....	6,520	9,530	25.....	13,900	7,880
6.....	4,920	6,240	16.....	8,620	7,520	26.....	22,800	7,220
7.....	5,300	6,580	17.....	9,360	9,190	27.....	14,400	6,230
8.....	5,860	6,040	18.....	8,730	10,100	28.....	12,300	5,310
9.....	6,820	5,050	19.....	7,990	9,880	29.....	11,000	5,070
10.....	7,780	5,040	20.....	7,160	9,700	30.....	10,500	4,620
						31.....	10,400	2,130
Monthly mean discharge, in cubic feet per second......................							9,730	7,240
Runoff, in inches..							17.48	13.00
Runoff, in acre-feet...							598,400	445,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 22--Con.			Dec. 26--Con.		
12 p.m.......	9.49	8,150	12 p.m.......	15.14	21,400	6 a.m........	15.92	23,800
						8............	16.20	24,600
Dec. 20			Dec. 23			10...........	16.38	25,200
6 a.m........	8.63	6,710	6 a.m........	14.42	19,400	12 m.........	16.44	25,400
8............	8.57	6,610	10...........	14.16	18,600	2 p.m........	16.37	25,200
10...........	8.60	6,660	6 p.m........	13.57	17,100	4............	16.12	24,400
12 m.........	8.64	6,720	11...........	13.16	16,000	12 p.m.......	14.07	18,400
2 p.m........	8.53	6,550	12 p.m.......	13.15	16,000			
4............	8.48	6,470				Dec. 27		
6............	8.61	6,680	Dec. 24			6 a.m........	12.96	15,500
12 p.m.......	10.07	9,240	2 a.m........	13.14	16,000	12 m.........	12.06	13,400
			4............	13.05	15,700	2 p.m........	11.90	13,100
Dec. 21			8............	12.70	14,900	4............	11.92	13,100
6 a.m........	11.29	11,700	12 m.........	12.55	14,500	8............	11.74	12,700
12 m.........	13.02	15,700	2 p.m........	12.46	14,300	12 p.m.......	11.94	13,200
2 p.m........	13.14	16,000	6............	12.22	13,800			
4............	13.08	15,800	12 p.m.......	12.02	13,300	Dec. 28		
6............	12.96	15,500				2 a.m........	11.94	13,200
8............	13.01	15,600	Dec. 25			4............	11.87	13,000
12 p.m.......	13.46	16,800	6 a.m........	11.96	13,200	8............	11.67	12,600
			12 m.........	11.93	13,100	6 p.m........	11.32	11,800
Dec. 22			2 p.m........	11.99	13,300	12 p.m.......	11.22	11,600
2 a.m........	13.59	17,100	4............	12.09	13,500			
6............	14.36	19,200	6............	12.32	14,000	Dec. 29		
12 m.........	15.65	23,000	8............	12.66	14,800	6 a.m........	11.08	11,300
3 p.m........	15.88	23,600	12 p.m.......	13.88	17,900	12 m.........	10.94	11,000
4............	15.88	23,600				6 p.m........	10.82	10,700
6............	15.82	23,500	Dec. 26			12 p.m.......	10.80	10,700
8 p.m........	15.63	22,900	4 a.m........	15.40	22,200			

606. Willamette River at Springfield, Oreg.

Location.--Lat 44°02'45", long 123°01'40", in SE$\frac{1}{4}$ sec.34, T.17 S., R.3 W., near center of span on downstream side of highway bridge at Springfield, at mile 185.6.

Drainage area.--2,030 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 423.77 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 41,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 48,500 cfs 4-6 p.m. Dec. 26 (gage height, 9.94 ft).

1911-13, 1919 to November 1955: Discharge, 140,000 cfs Dec. 29, 1945 (gage height, 20.9 ft), from rating curve extended above 93,000 cfs.

Stage recorded by Weather Bureau, 22.0 ft Jan. 25, 1903, at Eugene. Floods in December 1861 and February 1890 reached about the same stage.

Remarks.--Flow regulated by Lookout Point Reservoir (see station 593), Cottage Grove Reservoir (see station 598), and Dorena Reservoir (see station 602).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	19,500	28,200	11.....	21,500	24,200	21.....	30,100	28,800
2.....	22,400	27,200	12.....	22,700	20,100	22.....	37,800	30,200
3.....	21,300	25,600	13.....	16,300	18,400	23.....	37,400	30,300
4.....	18,400	26,000	14.....	19,400	19,000	24.....	34,900	30,600
5.....	17,900	24,400	15.....	18,600	30,200	25.....	34,800	27,800
6.....	18,000	25,200	16.....	21,700	28,700	26.....	44,300	25,900
7.....	16,900	26,900	17.....	23,100	30,200	27.....	37,000	24,400
8.....	17,300	25,800	18.....	22,900	30,700	28.....	34,400	22,700
9.....	20,200	24,100	19.....	24,600	30,400	29.....	32,100	22,300
10.....	19,800	24,000	20.....	22,800	29,400	30.....	30,600	18,600
						31.....	28,700	6,990
Monthly mean discharge, in cubic feet per second.....................							25,400	25,400
Runoff, in acre-feet..							1,562,000	1,562,000

Gage-height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 26--Con.			Jan. 18--Con.		
12 p.m.......	7.34	24,700	4 p.m........	9.94	48,500	12 m.........	7.76	30,600
			6............	9.94	48,500	6 p.m........	7.82	31,100
Dec. 21			12 p.m.......	9.28	42,700	12 p.m.......	7.81	31,000
4 a.m........	7.56	26,100						
6............	7.91	28,600	Dec. 27			Jan. 19		
10...........	8.25	31,000	7 a.m........	8.67	38,000	6 a.m........	7.76	30,600
12 m.........	8.44	32,400	4 p.m........	8.28	34,700	12 m.........	7.74	30,400
2 p.m........	8.47	32,600	12 p.m.......	8.34	35,200	6 p.m........	7.73	30,300
6............	8.36	31,800				12 p.m.......	7.68	29,900
12 p.m.......	8.30	31,400	Jan. 13					
			12 p.m.......	5.97	18,400	Jan. 20		
Dec. 22						6 a.m........	7.65	29,700
2 a.m........	8.32	32,200	Jan. 14			12 m.........	7.60	29,300
4............	8.51	33,700	4 a.m........	5.87	17,800	6 p.m........	7.59	29,200
8............	9.10	38,400	8............	5.77	17,200	12 p.m.......	7.58	29,100
12 m.........	9.40	40,800	11...........	5.77	17,200			
2 p.m........	9.41	40,900	6 p.m........	6.16	19,600	Jan. 21		
4............	9.40	40,800	12 p.m.......	7.01	25,100	6 a.m........	7.57	29,100
12 p.m.......	8.91	36,900				12 m.........	7.51	28,600
			Jan. 15			6 p.m........	7.52	28,700
Dec. 23			2 a.m........	7.07	25,500	12 p.m.......	7.49	28,400
1 a.m........	8.88	37,400	8............	7.88	31,500			
6............	9.04	38,700	10...........	7.95	32,100	Jan. 22		
8............	9.00	38,400	2 p.m........	7.95	32,100	6 a.m........	7.49	28,400
12 m.........	8.96	38,100	4............	8.07	33,100	12 m.........	7.63	29,500
6 p.m........	8.72	36,200	5............	8.07	33,100	4 p.m........	7.72	30,300
12 p.m.......	8.67	35,800	11...........	7.46	28,200	7............	8.06	33,000
			12 p.m.......	7.45	28,200	11...........	8.08	33,100
Dec. 24						12 p.m.......	7.99	32,400
6 a.m........	8.58	35,800	Jan. 16					
12 m.........	8.46	34,900	6 a.m........	7.50	28,500	Jan. 23		
6 p.m........	8.37	34,200	12 m.........	7.51	28,600	2 a.m........	7.77	30,700
12 p.m.......	8.28	33,400	4 p.m........	7.45	28,200	4............	7.75	30,500
			8............	7.60	29,300	6............	7.85	31,300
Dec. 25			12 p.m.......	7.67	29,900	10...........	7.81	31,000
6 a.m........	8.27	34,200				3 p.m........	7.62	29,500
12 m.........	8.27	34,200	Jan. 17			11...........	7.61	29,400
6 p.m........	8.40	35,200	2 a.m........	7.75	30,500	12 p.m.......	7.64	29,600
10...........	8.68	37,400	10...........	7.75	30,500			
12 p.m.......	8.70	37,600	4 p.m........	7.64	29,600	Jan. 24		
			8............	7.70	30,100	6 a.m........	7.89	31,600
Dec. 26			12 p.m.......	7.73	30,300	10...........	7.88	31,500
2 a.m........	8.72	38,300				6 p.m........	7.71	30,200
6............	9.06	41,000	Jan. 18			12 p.m.......	7.59	29,200
1 p.m........	9.93	48,400	6 a.m........	7.75	30,500			

607. Hackleman Creek near Upper Soda, Oreg.

(Crest-stage station)

Location (revised).--Lat 44°23'50", long 122°07'30", in NW¼ sec.32, T.13 S., R.6 E., at culvert at U.S. Highway 20 crossing, 1.3 miles upstream from Indian Creek, and 7 miles east of Upper Soda.

Drainage area.--0.21 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 3,970 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurement at 3 cfs and by measurement of flow through culvert at 62 cfs.

Maxima.--December 1955 to January 1956: Discharge, 62 cfs Jan. 15 (gage height, 4.23 ft).
1952 to November 1955: Discharge, 56 cfs Nov. 22, 1953 (gage height, 4.04 ft).

608. McKenzie River at outlet of Clear Lake, Oreg.

Location.--Lat 44°21'40", long 121°59'40", in SE¼ sec.8, T.14 S., R.7 E., on west bank of Clear Lake in narrow channel 150 ft above outlet, and at mile 85.9 (river-profile survey).

Drainage area.--101 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 3,015.32 ft above mean sea level (levels by Eugene Water and Electric Board).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,500 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 2,970 cfs 5:30 a.m. Dec. 22 (gage height, 7.66 ft).
1912-15, 1947 to November 1955: Discharge, 2,600 cfs Jan. 18, 1953 (gage height, 7.21 ft), from rating curve extended above 1,400 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	884	948	11.....	839	665	21.....	1,800	1,030
2.....	853	896	12.....	1,290	648	22.....	2,740	1,100
3.....	811	864	13.....	1,140	637	23.....	1,840	1,170
4.....	772	892	14.....	916	648	24.....	1,490	1,090
5.....	769	884	15.....	846	981	25.....	1,410	1,020
6.....	769	833	16.....	842	1,170	26.....	1,360	984
7.....	741	798	17.....	839	984	27.....	1,280	948
8.....	706	752	18.....	825	960	28.....	1,190	912
9.....	674	718	19.....	839	980	29.....	1,120	880
10.....	650	686	20.....	955	1,010	30.....	1,050	840
						31.....	988	802
Monthly mean discharge, in cubic feet per second							1,072	895
Runoff, in inches							12.24	10.21
Runoff, in acre-feet							65,910	55,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23			Jan. 15		
12 p.m.......	3.74	876	6 a.m........	6.04	1,980	6 a.m........	3.48	798
Dec. 20			12 m.........	5.69	1,800	12 m.........	3.94	976
12 m.........	3.84	916	6 p.m........	5.43	1,660	6 p.m........	4.38	1,170
6 p.m........	4.04	996	12 p.m.......	5.25	1,580	12 p.m.......	4.56	1,250
12 p.m.......	4.42	1,150	Dec. 24			Jan. 16		
Dec. 21			6 a.m........	5.15	1,520	1:30 a.m.....	4.57	1,260
6 a.m........	5.09	1,450	12 m.........	5.07	1,480	6............	4.52	1,230
12 m.........	5.70	1,750	6 p.m........	5.00	1,450	12 m.........	4.40	1,180
6 p.m........	6.37	2,100	12 p.m.......	4.98	1,440	6 p.m........	4.26	1,120
12 p.m.......	7.33	2,670	Jan. 13			12 p.m.......	4.12	1,050
Dec. 22			12 p.m.......	2.98	623	Jan. 17		
3 a.m........	7.60	2,940	Jan. 14			12 m.........	3.93	972
5:30.........	7.66	2,970	12 m.........	3.02	637	12 p.m.......	3.86	944
10...........	7.59	2,930	6 p.m........	3.08	658			
6 p.m........	7.08	2,600	12 p.m.......	3.22	707			
12 p.m.......	6.53	2,270						

609. McKenzie River at McKenzie Bridge, Oreg.

Location.--Lat 44°10'50", long 122°07'20", in NE¼ sec.18, T.16 S., R.6 E., on left bank 1.7 miles east of village of McKenzie Bridge, 2¾ miles upstream from Horse Creek, and at mile 66.4 (river-profile survey).

Drainage area.--345 sq mi at measuring section three-quarters of a mile upstream from gage.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,419.04 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,200 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 13,000 cfs 3 a.m. Dec. 22 (gage height, 7.79 ft).

1910 to November 1955: Discharge, 16,500 cfs Jan. 6, 1923 (gage height, 8.3 ft, from floodmarks, site and datum then in use), from rating curve extended above 6,300 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3,420	2,800	11.....	3,910	2,360	21.....	9,180	3,890
2.....	3,120	2,670	12.....	6,330	2,330	22.....	11,400	4,480
3.....	2,850	2,640	13.....	4,570	2,330	23.....	7,280	4,620
4.....	2,640	2,910	14.....	3,630	2,590	24.....	5,240	3,990
5.....	2,590	2,910	15.....	3,180	5,640	25.....	4,440	3,560
6.....	2,770	2,800	16.....	3,010	5,000	26.....	4,190	3,280
7.....	2,700	2,660	17.....	2,900	4,010	27.....	3,840	3,050
8.....	2,630	2,540	18.....	2,830	3,910	28.....	3,520	2,850
9.....	2,550	2,460	19.....	2,910	3,840	29.....	3,280	2,740
10.....	2,560	2,390	20.....	3,610	3,910	30.....	3,080	2,580
						31.....	2,900	2,480
Monthly mean discharge, in cubic feet per second......................							3,970	3,233
Runoff, in inches..							13.27	10.80
Runoff, in acre-feet...							244,100	198,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.......	2.80	3,050	12 p.m.......	6.02	8,940	3 p.m........	2.41	2,510
						12 p.m.......	3.06	3,440
Dec. 20			Dec. 23					
5 a.m........	2.79	3,040	3 a.m........	5.76	8,400	Jan. 15		
12 m.........	2.93	3,240	2 p.m........	5.03	6,930	3 a.m........	3.33	3,860
3 p.m........	3.07	3,460	12 p.m.......	4.54	5,960	6............	3.77	4,570
10...........	3.92	4,820				11...........	4.89	6,650
12 p.m.......	4.32	5,540	Dec. 24			1 p.m........	5.05	6,970
			10 a.m.......	4.17	5,270	3............	4.99	6,850
Dec. 21			7 p.m........	3.96	4,890	9............	4.58	6,030
4 a.m........	5.43	7,730	12 p.m.......	3.85	4,700	12 p.m.......	4.42	5,730
6............	5.78	8,440						
9............	5.94	8,770	Dec. 25			Jan. 16		
1 p.m........	5.94	8,770	9 a.m........	3.69	4,430	6 a.m........	4.19	5,300
4............	6.17	9,260	2 p.m........	3.63	4,340	5 p.m........	3.86	4,720
8............	7.24	11,600	12 p.m.......	3.64	4,350	12 p.m.......	3.66	4,390
12 p.m.......	7.54	12,400						
			Jan. 13			Jan. 17		
Dec. 22			12 p.m.......	2.23	2,300	6 a.m........	3.52	4,160
3 a.m........	7.79	13,000				12 m.........	3.40	3,970
9............	7.44	12,100	Jan. 14			8 p.m........	3.28	3,780
12 m.........	7.37	11,900	11 a.m.......	2.29	2,370	12 p.m.......	3.30	3,810

610. South Fork McKenzie River near Rainbow, Oreg.

Location.--Lat 44°08'10", long 122°14'40", in NE¼ sec.31, T.16 S., R.5 E., on right bank 0.2 mile upstream from Cougar Creek, 2 miles south of Rainbow, and 5 miles southeast of town of Blue River.

Drainage area.--211 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 6-9, 17-20, 26, Dec. 29 to Jan. 2, Jan. 5-14.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,200 cfs and extended above by logarithmic plotting. Discharge for periods of no gage-height record estimated on basis of one discharge measurement, recorded range in stage, and records for McKenzie River at McKenzie bridge and near Vida, and Blue River near Blue River.

Maxima.--December 1955 to January 1956: Discharge, 17,400 cfs 4 a.m. Dec. 22 (gage height, 8.60 ft).

1947 to November 1955: Discharge, 16,400 cfs Jan. 18, 1953 (gage height, 8.34 ft).

Discharge known, 24,500 cfs Dec. 28, 1945 (gage height, 8.8 ft, from floodmarks, at Corps of Engineers gage at site 40 ft upstream; corresponding gage height at present site and datum, about 9.3 ft), computed by Corps of Engineers.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3,220	900	11.....	4,430	1,200	21.....	9,060	2,830
2.....	2,650	800	12.....	6,740	1,400	22.....	14,300	3,410
3.....	2,310	1,090	13.....	4,050	2,000	23.....	6,800	4,600
4.....	2,130	1,580	14.....	2,710	3,000	24.....	3,910	3,060
5.....	2,160	1,500	15.....	2,140	7,960	25.....	2,860	2,240
6.....	3,000	1,200	16.....	2,240	5,490	26.....	3,200	1,800
7.....	2,600	1,000	17.....	2,200	3,250	27.....	2,450	1,560
8.....	2,400	950	18.....	2,200	2,960	28.....	1,970	1,340
9.....	3,200	900	19.....	2,500	2,780	29.....	1,600	1,100
10.....	3,460	900	20.....	3,200	2,720	30.....	1,300	950
						31.....	1,000	900
Monthly mean discharge, in cubic feet per second							3,484	2,173
Runoff, in inches							19.03	11.87
Runoff, in acre-feet							214,200	133,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Jan. 14		
12 p.m.......	4.75	4,620	6 a.m........	8.50	17,000	12 p.m.......	4.75	4,620
			7............	8.90	17,000			
Dec. 21			10...........	8.20	15,800	Jan. 15		
1 a.m........	4.90	4,960	3 p.m........	7.59	13,400	3 a.m........	4.88	4,910
4............	5.82	7,360	12 p.m.......	6.53	9,600	5............	5.07	5,380
6............	6.20	8,500				8............	5.70	7,020
8............	6.30	8,800	Dec. 23			10...........	6.21	8,530
10...........	6.30	8,800	9 a.m........	5.70	7,020	1 p.m........	6.65	10,000
1 p.m........	6.19	8,470	3 p.m........	5.35	6,080	3:30.........	6.81	10,600
3............	6.24	8,620	12 p.m.......	4.84	4,820	6............	6.61	9,880
7............	6.72	10,300				12 p.m.......	5.98	7,840
12 p.m.......	7.93	14,700	Dec. 24					
			11 a.m.......	4.38	3,880	Jan. 16		
Dec. 22			4 p.m........	4.23	3,600	2 a.m........	5.73	7,100
1 a.m........	8.30	16,200	12 p.m.......	4.00	3,200	1 p.m........	4.96	5,100
4 a.m........	8.60	17,400				12 p.m.......	4.41	3,940

611. Lookout Creek tributary No. 3 near Blue River, Oreg.

(Crest-stage station)

Location.--Lat 44°13'10", long 122°14'30", in NE¼ sec.31, T.15 S., R.5 E., at weir on Lookout Creek road, 0.1 mile upstream from mouth and 6 miles northeast of Blue River.

Drainage area.--0.34 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,520 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through trapezoidal flume.

Maxima.--December 1955 to January 1956: Discharge, 36 cfs Jan. 15 (gage height, 2.57 ft).
1952 to November 1955: Discharge, 47 cfs Jan. 18, 1953 (gage height, 2.80 ft).

612. Lookout Creek tributary near Blue River, Oreg.

(Crest-stage station)

Location.--Lat 44°12'25", long 122°15'30", in NW¼ sec.6, T.16 S., R.5 E., at weir on Lookout Creek road, 0.1 mile upstream from mouth and 5.4 miles northeast of town of Blue River.

Drainage area.--0.41 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,400 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through trapezoidal flume.

Maxima.--December 1955 to January 1956: Discharge, 41 cfs Dec. 21 (gage height, 2.73 ft).
1953 to November 1955: Discharge, 44 cfs Nov. 22, 1953 (gage height, 2.80 ft).

613. Blue River near Blue River, Oreg.

Location.--Lat 44°11'00", long 122°16'50", near line between secs. 13 and 14, T.16 S., R.4 E., on right bank 3 miles upstream from Quartz Creek and 3½ miles northeast of town of Blue River.

Drainage area.--75 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,220 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,300 cfs and extended above on basis of shape of previous curve defined below 7,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 9,500 cfs 7 p.m. Dec. 21 (gage height, 7.70 ft).
1935 to November 1955: Discharge, 13,300 cfs Dec. 28, 1945 (gage height, 9.80 ft), from rating curve extended above 6,500 cfs.

Mean discharge, in cubic feet per second, 1955-56, of Blue River near Blue River, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	1,700	354	11.....	2,860	511	21.....	8,090	1,680
2.....	1,180	316	12.....	4,620	551	22.....	6,730	2,360
3.....	860	406	13.....	2,050	600	23.....	2,750	2,220
4.....	656	1,130	14.....	1,170	1,200	24.....	1,420	1,340
5.....	632	968	15.....	824	5,000	25.....	1,000	950
6.....	1,150	698	16.....	833	2,620	26.....	1,120	707
7.....	1,070	565	17.....	824	1,550	27.....	977	579
8.....	932	478	18.....	851	1,680	28.....	716	472
9.....	896	413	19.....	1,150	1,660	29.....	565	432
10.....	942	394	20.....	2,260	1,690	30.....	472	361
						31.....	400	322
Monthly mean discharge, in cubic feet per second......................							1,668	1,103
Runoff, in inches..							25.64	16.96
Runoff, in acre-feet...							102,500	67,850

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.......	3.01	1,360	12 m.........	6.34	6,770	8 p.m........	3.87	2,370
			6 p.m........	5.53	5,230	12 p.m.......	4.14	2,770
Dec. 20			12 p.m.......	4.88	4,010			
5 a.m........	2.95	1,300				Jan. 15		
9............	3.09	1,450	Dec. 23			2 a.m........	4.30	3,100
1 p.m........	3.21	1,590	6 a.m........	4.41	3,180	4............	4.67	3,700
9............	4.78	3,890	12 m.........	4.06	2,650	10...........	6.48	7,090
12 p.m.......	5.68	5,570	6 p.m........	3.76	2,220	11...........	6.50	7,130
			12 p.m.......	3.50	1,870	12 m.........	6.40	6,940
Dec. 21						8 p.m........	5.03	4,340
4 a.m........	6.82	7,740	Dec. 24			10...........	4.79	3,900
6............	7.05	8,200	6 a.m........	3.30	1,590	12 p.m.......	4.60	3,580
8............	7.20	8,500	12 m.........	3.12	1,380			
9............	7.16	8,420	6 p.m........	2.98	1,230	Jan. 16		
12 m.........	6.79	7,680	12 p.m.......	2.86	1,110	6 a.m........	4.21	2,960
2 p.m........	6.71	7,530				12 m.........	3.91	2,520
4............	6.80	7,700	Jan. 13			6 p.m........	3.71	2,230
7............	7.70	9,500	12 p.m.......	2.24	565	12 p.m.......	3.48	1,920
10...........	7.50	9,100						
12 p.m.......	7.50	9,100	Jan. 14			Jan. 17		
			6 a.m........	2.27	586	6 a.m........	3.29	1,690
Dec. 22			12 m.........	2.42	707	12 m.........	3.13	1,500
2 a.m........	7.50	9,040	2 p.m........	2.61	878	6 p.m........	3.00	1,350
6 a.m........	7.10	8,240	4 p.m........	3.02	1,310	12 p.m.......	3.04	1,390

614. McKenzie River near Vida, Oreg.

Location.--Lat 44°07'30", long 122°28'10", in NE¼ sec.5, T.17 S., R.3 E., on left bank 1 mile upstream from head of Martin Rapids, 5 miles east of Vida, and at mile 44.3 (river-profile survey).

Drainage area.--930 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 1 to Jan. 4, Jan. 13-31; peak stage of Dec. 22 from floodmarks. Datum of gage is 855.56 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 32,000 cfs and extended above by logarithmic plotting. Discharge for periods of no gage-height record estimated on basis of recorded range in stage, weather records, and records for stations at McKenzie Bridge and near Coburg.

Maxima.--December 1955 to January 1956: Discharge, 51,700 cfs about 6 a.m. Dec. 22 (gage height, 15.00 ft).

1924 to November 1955: Discharge, 64,400 cfs Dec. 28, 1945 (gage height, 17.70 ft).

Mean discharge, in cubic feet per second, 1955-56, of McKenzie River near Vida, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	13,000	6,000	11.....	17,000	5,930	21.....	40,000	13,000
2.....	11,000	6,000	12.....	25,000	6,150	22.....	50,000	16,000
3.....	9,000	7,000	13.....	16,000	7,000	23.....	25,000	17,000
4.....	8,000	9,000	14.....	12,000	12,000	24.....	16,000	13,000
5.....	8,000	7,750	15.....	9,000	25,000	25.....	12,000	10,000
6.....	10,000	6,940	16.....	9,000	18,000	26.....	14,000	9,000
7.....	9,500	6,600	17.....	9,000	13,000	27.....	11,000	8,000
8.....	9,000	6,110	18.....	9,000	12,000	28.....	9,000	7,000
9.....	9,000	5,770	19.....	10,000	12,000	29.....	8,000	6,500
10.....	11,000	5,600	20.....	15,000	12,000	30.....	7,000	6,200
						31.....	6,500	6,000
Monthly mean discharge, in cubic feet per second......................							13,770	9,727
Runoff, in inches..							17.08	12.06
Runoff, in acre-feet...							846,900	598,100

615. Gate Creek at Vida, Oreg.

Location.--Lat 44°08'45", long 122°34'15", in sec.28, T.16 S., R.2 E., on right bank at Vida, 300 ft downstream from bridge on U.S. Highway 126 and 1,000 ft upstream from mouth.

Drainage area.--47.6 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 764.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,400 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 3,680 cfs 5 a.m. Dec. 22 (gage height, 8.38 ft).

1951 to November 1955: Discharge, 5,510 cfs Jan. 18, 1953 (gage height, 9.38 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	Janaury	Day	December	January	Day	December	January
1.....	1,100	328	11.....	1,200	454	21.....	3,100	820
2.....	876	300	12.....	1,780	499	22.....	3,030	1,190
3.....	688	331	13.....	1,010	596	23.....	1,570	1,240
4.....	512	548	14.....	684	786	24.....	963	856
5.....	520	552	15.....	512	2,000	25.....	819	628
6.....	796	442	16.....	488	1,250	26.....	1,150	487
7.....	748	388	17.....	442	892	27.....	911	403
8.....	720	376	18.....	456	868	28.....	648	337
9.....	756	343	19.....	524	804	29.....	490	300
10.....	716	346	20.....	769	804	30.....	406	262
						31.....	349	232
Monthly mean discharge, in cubic feet per second......................							927	634
Runoff, in inches..							22.45	15.36
Runoff, in acre-feet...							56,990	39,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 23--Con.			Jan. 13		
12 p.m.......	4.32	568	6 p.m........	5.99	1,320	12 p.m.......	4.31	524
			12 p.m.......	5.72	1,180			
Dec. 20						Jan. 14		
4 a.m........	4.29	556	Dec. 24			2 a.m........	4.30	520
9............	4.47	628	6 a.m........	5.49	1,060	10...........	4.40	560
11...........	4.48	632	12 m.........	5.28	940	2 p.m........	4.63	656
4 p.m........	4.68	712	6 p.m........	5.12	864	9............	6.01	1,340
8............	5.27	955	12 p.m.......	4.96	796	12 p.m.......	6.08	1,380
12 p.m.......	6.52	1,690						
			Dec. 25			Jan. 15		
Dec. 21			6 a.m........	4.81	732	3 a.m........	6.30	1,510
4 a.m........	7.54	2,640	1 p.m........	4.71	688	10...........	7.53	2,630
8............	8.28	3,540	8............	5.38	1,000	6 p.m........	6.93	2,020
1 p.m........	7.84	3,000	12 p.m.......	5.56	1,100	12 p.m.......	6.30	1,510
6............	8.34	3,630						
11...........	8.07	3,270	Dec. 26			Jan. 16		
12 p.m.......	8.10	3,310	6 a.m........	5.70	1,170	6 a.m........	6.01	1,340
Dec. 22			12 m.........	5.71	1,180	12 m.........	5.80	1,220
5 a.m........	8.38	3,680	6 p.m........	5.66	1,150	6 p.m........	5.67	1,160
12 m.........	8.01	3,200	12 p.m.......	5.53	1,080	12 p.m.......	5.50	1,060
6 p.m........	7.46	2,550	Dec. 27			Jan. 17		
12 p.m.......	7.03	2,120	6 a.m........	5.38	1,000	6 a.m........	5.30	950
Dec. 23			12 m.........	5.19	896	12 m.........	5.12	864
6 a.m........	6.65	1,790	6 p.m........	5.05	832	6 p.m........	4.98	804
12 m.........	6.33	1,530	12 p.m.......	4.86	752	12 p.m.......	5.07	844

616. Mohawk River near Springfield, Oreg.

(Gaging station, discontinued 1952)

Location.--Lat 44°06', long 122°57', in sec.17, T.17 S., R.2 W., at bridge 1.5 miles upstream from mouth and 4.5 miles northeast of Springfield.

Drainage area.--180 sq mi, approximately.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 9,200 cfs Dec. 22 (gage height, 22.9 ft).

1935-52: Discharge, 8,600 cfs Dec. 28, 1945 (gage height, 22.1 ft, from floodmarks).

617. McKenzie River near Coburg, Oreg.

Location.--Lat 44°06'45", long 123°02'45", in NE¼NE¼ sec.9, T.17 S., R.3 W., on left bank at downstream side of Armitage Bridge, 2 miles southeast of Coburg and 3 miles upstream from mouth.

Drainage area.--1,310 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 396.32 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 40,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 73,500 cfs 2:30 p.m. Dec. 22 (gage height, 16.25 ft).

1944 to November 1955: Discharge, 88,200 cfs Dec. 29, 1945 (gage height, 17.36 ft), from rating curve extended above 59,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	19,200	10,400	11	19,300	10,500	21	50,400	16,400
2	18,300	9,860	12	33,600	11,000	22	68,900	19,400
3	14,700	9,530	13	28,900	11,500	23	48,300	25,400
4	12,100	11,400	14	18,800	11,800	24	26,600	19,300
5	11,000	12,700	15	14,400	30,200	25	20,200	14,600
6	13,200	11,800	16	13,600	32,400	26	24,800	12,200
7	13,700	11,900	17	13,000	20,300	27	20,800	10,800
8	12,300	11,300	18	12,900	17,800	28	16,300	9,500
9	14,600	10,500	19	14,800	16,800	29	13,400	8,820
10	12,800	10,300	20	17,700	16,600	30	12,000	8,070
						31	11,100	7,430
Monthly mean discharge, in cubic feet per second							20,700	14,210
Runoff, in inches							18.22	12.51
Runoff, in acre-feet							1,273,000	873,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.	6.19	13,100	12 m.	13.76	54,800	6 p.m.	11.48	39,900
			2 p.m.	14.42	59,600	9	10.97	36,800
Dec. 19			4	14.91	63,300	12 p.m.	10.49	33,900
4 a.m.	6.19	13,100	6	15.25	65,900			
8	6.33	13,600	7	15.28	66,100	Dec. 24		
12 m.	6.57	14,600	9	15.26	66,000	4 a.m.	9.97	30,800
6 p.m.	6.96	16,200	11	15.09	64,700	9	9.34	27,300
9	7.14	17,000	12 p.m.	15.07	64,500	12 m.	9.06	25,900
12 p.m.	7.24	17,500				6 p.m.	8.56	23,600
			Dec. 22			12 p.m.	8.13	21,900
Dec. 20			3 a.m.	15.09	64,700			
2 a.m.	7.23	17,400	6	15.31	66,300	Dec. 25		
6	7.10	16,800	9	15.65	68,900	6 a.m.	7.76	20,500
12 m.	7.10	16,800	12 m.	16.07	72,100	12 m.	7.49	19,500
4 p.m.	7.17	17,200	2:30 p.m.	16.25	73,500	2 p.m.	7.46	19,400
6	7.26	17,600	3	16.22	73,300	4	7.41	19,100
8	7.45	18,400	4	16.18	72,900	6	7.44	19,300
10	7.79	20,000	6	16.04	71,800	8	7.57	19,900
12 p.m.	8.34	22,400	8	15.78	69,800	10	7.77	20,500
			12 p.m.	15.20	65,500	12 p.m.	8.07	21,700
Dec. 21								
2 a.m.	9.17	26,400	Dec. 23			Dec. 26		
4	10.04	31,200	6 a.m.	13.94	56,100	4 a.m.	8.61	23,900
8 a.m.	11.97	42,800	12 m.	12.73	47,700	8 a.m.	9.04	25,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of McKenzie River near Coburg, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 26--Con.			Jan. 13			Jan. 15--Con.		
10 a.m.	9.14	26,300	12 p.m.	5.14	11,300	9 p.m.	12.20	44,300
11	9.15	26,400				10	12.24	44,600
12 m.	9.13	26,200	Jan. 14			11	12.36	45,300
2 p.m.	9.06	25,900	6 a.m.	5.11	11,200	12 p.m.	12.23	44,500
8	8.75	24,600	10	5.13	11,200			
12 p.m.	8.57	23,700	2 p.m.	5.20	11,400	Jan. 16		
			5	5.31	11,800	4 a.m.	11.53	40,200
Dec. 27			8	5.58	12,600	8	10.64	34,800
6 a.m.	8.19	22,200	10	5.92	13,400	12 m.	9.98	30,900
12 m.	7.80	20,700	12 p.m.	6.48	15,400	6 p.m.	9.27	27,000
6 p.m.	7.47	19,400				9	8.94	25,300
12 p.m.	7.19	18,400	Jan. 15			12 p.m.	8.72	24,200
			4 a.m.	7.73	20,400	Jan. 17		
Dec. 28			7	8.33	22,600	6 a.m.	8.22	21,900
6 a.m.	6.89	17,000	9	8.67	24,200	12 m.	7.79	20,000
12 m.	6.66	16,200	12 m.	9.47	28,000	6 p.m.	7.47	18,500
6 p.m.	6.45	15,300	2 p.m.	10.11	31,700	9	7.31	17,800
12 p.m.	6.24	14,700	6 p.m.	11.48	39,900	12 p.m.	7.24	17,500

618. Willamette River at Harrisburg, Oreg.

Location.--Lat 44°16'05", long 123°10'25", in SW¼NE¼ sec.16, T.15 S., R.4 W., on right bank 10 ft downstream from east end of State highway bridge at Harrisburg and at mile 162.9.

Drainage area.--3,420 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 290.07 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 114,000 cfs 10:30 p.m. Dec. 22 (gage height, 16.25 ft).

1944 to November 1955: Discharge, 210,000 cfs Dec. 29, 1945 (gage height, 19.69 ft), from rating curve extended above 89,000 cfs.

Flood in 1861 reached a stage of about 21 ft, from information by local residents.

Flood of Jan. 1, 1943, reached a stage of 19.1 ft, from Weather Bureau records.

Remarks.--Flow partly regulated by Lookout Point Reservoir (see station 593), Cottage Grove Reservoir (see station 598), and Dorena Reservoir (see station 602).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	38,000	37,900	11	41,200	34,600	21	66,000	48,600
2	43,500	36,600	12	52,100	34,000	22	104,000	49,900
3	39,600	34,600	13	54,200	30,500	23	98,600	60,000
4	33,700	36,600	14	41,700	30,900	24	68,300	55,000
5	31,000	38,000	15	35,500	52,800	25	56,200	47,200
6	33,400	36,600	16	36,800	70,900	26	66,900	41,300
7	33,700	39,400	17	38,500	56,000	27	63,200	38,200
8	31,100	37,500	18	37,500	51,400	28	51,700	34,900
9	37,300	35,000	19	41,200	50,800	29	46,200	33,300
10	35,200	34,400	20	42,900	49,400	30	42,000	31,300
						31	39,200	20,000
Monthly mean discharge, in cubic feet per second							47,750	41,540
Runoff, in acre-feet							2,936,000	2,554,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Willamette River at Harrisburg, Oreg.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 23--Con.			Dec. 27--Con.		
12 p.m.......	10.25	45,000	12 p.m.......	13.88	80,600	12 p.m.......	11.38	54,400
Dec. 20			Dec. 24			Jan. 14		
6 p.m........	9.75	41,200	8 a.m........	13.07	70,800	12 p.m.......	8.57	33,700
12 p.m.......	10.02	43,200	4 p.m........	12.40	64,000			
			12 p.m.......	11.94	59,500	Jan. 15		
Dec. 21						4 a.m........	9.42	39,000
4 a.m........	10.55	47,400	Dec. 25			8............	10.40	46,200
12 m.........	12.34	63,400	8 a.m........	11.57	56,100	4 p.m........	11.88	58,900
8 p.m........	14.24	85,400	12 m.........	11.46	55,100	12 p.m.......	13.30	73,600
12 p.m.......	15.05	96,700	8 p.m........	11.44	55,000			
			12 p.m.......	11.61	56,500	Jan. 16		
Dec. 22						3 a.m........	13.62	77,400
4 a.m........	15.25	99,500	Dec. 26			5............	13.67	78,000
8............	15.18	98,500	6 a.m........	12.08	60,800	8............	13.60	77,200
12 m.........	15.34	101,000	12 m.........	12.76	67,600	12 m.........	13.20	72,400
4 p.m........	15.79	107,000	4 p.m........	13.17	72,000	6 p.m........	12.50	65,000
8............	16.16	113,000	8............	13.36	74,300	12 p.m.......	12.04	60,400
10:30........	16.25	114,000	12 p.m.......	13.36	74,300			
12 p.m.......	16.21	113,000				Jan. 17		
			Dec. 27			12 m.........	11.58	56,200
Dec. 23			6 a.m........	12.87	68,700	6 p.m........	11.28	53,500
4 a.m........	15.98	110,000	12 m.........	12.24	62,400	12 p.m.......	11.10	51,900
12 m.........	15.26	99,600	6 p.m........	11.71	57,400			

619. Long Tom River near Noti, Oreg.

Location.--Lat 44°03'00", long 123°25'30", in sec.33, T.17 S., R.6 W., on left bank an eighth of a mile upstream from railroad bridge, 1 mile downstream from Noti Creek, and 1½ miles southeast of Noti.

Drainage area.--88 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 388.76 ft above mean sea level (levels by Weather Bureau).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,800 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 6,990 cfs 12:30 a.m. Dec. 22 (gage height, 20.17 ft).

1935 to November 1955: Discharge, 5,400 cfs Jan. 28, 1954 (gage height, 18.56 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	561	724	11.....	1,130	1,110	21.....	4,980	1,200
2.....	749	689	12.....	1,360	987	22.....	5,260	1,110
3.....	739	778	13.....	1,130	910	23.....	3,010	1,240
4.....	547	1,570	14.....	788	874	24.....	1,890	1,340
5.....	520	2,710	15.....	606	1,680	25.....	1,390	1,160
6.....	748	1,910	16.....	657	2,660	26.....	2,520	1,130
7.....	678	1,990	17.....	636	2,100	27.....	2,600	839
8.....	619	1,520	18.....	748	1,500	28.....	1,610	711
9.....	814	1,270	19.....	1,690	1,240	29.....	1,160	615
10.....	788	1,180	20.....	2,560	1,230	30.....	920	573
						31.....	765	506
Monthly mean discharge, in cubic feet per second......................							1,425	1,260
Runoff, in inches...							18.67	16.51
Runoff, in acre-feet..							87,620	77,470

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 18--Con.			Dec. 19--Con.		
12 p.m.......	5.77	584	10 p.m.......	8.36	960	6 p.m........	13.44	2,060
			12 p.m.......	8.53	987	12 p.m.......	15.02	2,760
Dec. 18								
3 a.m........	5.68	571	Dec. 19			Dec. 20		
5............	5.68	571	2 a.m........	8.72	1,020	2 a.m........	15.13	2,830
7............	5.86	596	4............	9.04	1,070	4............	15.14	2,830
12 m.........	6.84	734	6............	9.62	1,170	6............	15.07	2,670
4 p.m........	7.64	848	8............	10.46	1,330	12 m.........	14.87	2,360
6............	7.98	899	10...........	11.36	1,510	4 p.m........	14.82	2,340
8 p.m........	8.19	932	12 m.........	11.97	1,660	6 p.m........	14.83	2,340

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Long Tom River near Noti, Oreg.--Continued

Hour	Gage height	Dis- charge	Hour	Gage height	Dis- charge	Hour	Gage height	Dis- charge
Dec. 20--Con.			Dec. 26			Jan. 14--Con.		
8 p.m.	14.90	2,470	6 a.m.	13.10	1,960	8 a.m.	7.40	812
10	15.10	2,690	12 m.	14.59	2,520	12 m.	7.45	820
12 p.m.	15.37	2,970	2 p.m.	15.29	2,920	4 p.m.	7.68	854
			5	15.66	3,160	8	8.46	976
Dec. 21			8	15.76	3,230	12 p.m.	9.12	1,090
6 a.m.	16.70	3,890	10	15.74	3,220			
9	17.48	4,480	12 p.m.	15.69	3,180	Jan. 15		
12 m.	17.96	4,870				4 a.m.	9.96	1,240
6 p.m.	19.27	6,070	Dec. 27			8	10.96	1,430
10	19.99	6,790	4 a.m.	15.47	3,030	4 p.m.	12.94	1,910
11	20.12	6,930	8	15.16	2,850	8	13.80	2,180
12 p.m.	20.16	6,980	4 p.m.	14.29	2,370	12 p.m.	14.52	2,480
			12 p.m.	13.21	1,990			
Dec. 22						Jan. 16		
12:30 a.m.	20.17	6,990	Dec. 28			4 a.m.	14.96	2,730
2	20.08	6,890	6 a.m.	12.41	1,770	7	15.00	2,750
3	19.98	6,780	12 m.	11.64	1,580	10	14.99	2,740
6	19.33	6,130	6 p.m.	11.01	1,440	2 p.m.	14.92	2,700
12 m.	18.17	5,050	12 p.m.	10.49	1,340	6	14.79	2,620
6 p.m.	17.31	4,350				12 p.m.	14.62	2,530
12 p.m.	16.58	3,810	Dec. 29					
			4 a.m.	10.10	1,260	Jan. 17		
Dec. 23			10	9.62	1,170	6 a.m.	14.20	2,330
6 a.m.	15.94	3,360	6 p.m.	9.05	1,080	12 m.	13.52	2,090
12 m.	15.37	2,970	12 p.m.	8.67	1,010	6 p.m.	12.77	1,860
6 p.m.	14.83	2,650				12 p.m.	12.09	1,690
12 p.m.	14.17	2,320	Dec. 30					
			6 a.m.	8.41	968	Jan. 18		
Dec. 24			12 m.	8.10	918	6 a.m.	11.66	1,580
6 a.m.	13.53	2,090	6 p.m.	7.80	872	12 m.	11.32	1,500
12 m.	12.75	1,860	12 p.m.	7.53	832	6 p.m.	10.91	1,420
6 p.m.	12.05	1,680				12 p.m.	10.41	1,320
12 p.m.	11.37	1,510	Dec. 31					
			6 a.m.	7.30	798	Jan. 19		
Dec. 25			12 m.	7.06	764	5 a.m.	10.02	1,250
6 a.m.	10.80	1,400	6 p.m.	6.80	728	10	9.93	1,230
10	10.51	1,340	12 p.m.	6.68	711	6 p.m.	9.95	1,230
2 p.m.	10.38	1,320	Jan. 13			12 p.m.	9.96	1,240
4	10.40	1,320	12 p.m.	7.56	836			
6	10.52	1,340						
8	10.76	1,390	Jan. 14					
12 p.m.	11.47	1,540	4 a.m.	7.43	816			

620. Coyote Creek near Crow, Oreg.

Location.--Lat 44°01'19", long 123°15'17", in NE$\frac{1}{4}$ sec.11, T.18 S., R.5 W., on right bank just upstream from backwater of Fern Ridge Reservoir, 1 mile downstream from Spencer Creek and 5 miles northeast of Crow.

Drainage area.--94 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 9 p.m. Dec. 21 to 9 a.m. Jan. 3, 5 p.m. Jan. 15 to 10 a.m. Jan. 17, for which graph was drawn on basis of once-daily Telemark readings and high-water mark in gage house. Datum of gage is 374.0 ft above mean sea level (Corps of Engineers bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,700 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 10,100 cfs about 9 p.m. Dec. 21 (gage height, 14.32 ft).

1940 to November 1955: Discharge, 9,260 cfs Dec. 28, 1945 (gage height, 14.13 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	604	396	11	1,140	898	21	8,650	720
2	996	407	12	1,140	678	22	5,880	722
3	1,080	404	13	979	662	23	2,570	1,120
4	696	886	14	701	724	24	1,260	1,320
5	512	1,660	15	483	1,920	25	4,610	982
6	662	1,370	16	781	2,550	26	7,390	646
7	714	2,230	17	851	1,470	27	3,110	490
8	704	1,730	18	1,170	1,170	28	1,660	353
9	1,220	1,280	19	3,200	892	29	1,060	281
10	1,260	1,080	20	3,520	802	30	648	255
						31	440	206
Monthly mean discharge, in cubic feet per second							1,926	978
Runoff, in inches							23.62	11.99
Runoff, in acre-feet							118,400	60,110

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Coyote Creek near Crow, Oreg.

Hour	Gage height	Discharge
Dec. 15		
12 p.m.	6.75	494
Dec. 16		
3 a.m.	6.90	513
9	7.82	652
12 m.	8.40	775
4 p.m.	8.95	925
9	9.33	1,070
11	9.34	1,070
12 p.m.	9.30	1,060
Dec. 17		
2 a.m.	9.16	999
6	8.73	859
9	8.53	808
12 m.	8.44	785
2 p.m.	8.44	785
8	8.63	832
12 p.m.	8.64	835
Dec. 18		
3 a.m.	8.56	815
4	8.56	815
6	8.69	848
12 m.	9.64	1,220
7 p.m.	10.14	1,500
9	10.16	1,510
12 p.m.	10.04	1,440
Dec. 19		
2 a.m.	10.02	1,430
4	10.09	1,470
8	10.71	1,940
1 p.m.	12.17	3,900
3	12.45	4,440
5	12.55	4,660
7	12.55	4,660
10	12.51	4,570
12 p.m.	12.39	4,320
Dec. 20		
6 a.m.	11.84	3,330
Dec. 20--Con.		
10 a.m.	11.66	3,050
1 p.m.	11.66	3,050
5	11.85	3,350
9	12.14	3,840
12 p.m.	12.48	4,510
Dec. 21		
4 a.m.	13.46	7,080
8	13.99	8,860
10	14.15	9,460
11	14.18	9,570
12 m.	14.18	9,570
5 p.m.	14.11	9,310
9	14.32	10,100
12 p.m.	14.11	9,310
Dec. 22		
8 a.m.	13.20	6,300
4 p.m.	12.62	4,820
12 p.m.	12.06	3,700
Dec. 23		
8 a.m.	11.55	2,890
4 p.m.	10.92	2,150
12 p.m.	10.32	1,620
Dec. 24		
8 a.m.	9.78	1,300
6 p.m.	9.27	1,040
12 p.m.	9.65	1,220
Dec. 25		
8 a.m.	11.30	2,570
4 p.m.	12.95	5,620
10	14.04	9,050
12 p.m.	14.19	9,610
Dec. 26		
2 a.m.	14.21	9,690
6	14.06	9,120
4 p.m.	13.20	6,300
12 p.m.	12.50	4,550
Dec. 27		
8 a.m.	11.90	3,430
4 p.m.	11.30	2,570
12 p.m.	10.86	2,090
Dec. 28		
8 a.m.	10.50	1,750
4 p.m.	10.16	1,510
12 p.m.	9.91	1,360
Jan. 13		
12 p.m.	7.37	575
Jan. 14		
4 a.m.	7.33	569
12 m.	7.87	662
6 p.m.	8.68	845
12 p.m.	9.26	1,040
Jan. 15		
6 a.m.	9.67	1,230
12 m.	10.47	1,730
6 p.m.	11.28	2,550
12 p.m.	11.83	3,320
Jan. 16		
2 a.m.	11.88	3,400
8	11.60	2,960
4 p.m.	10.85	2,080
12 p.m.	10.45	1,710
Jan. 17		
6 a.m.	10.20	1,540
12 m.	10.15	1,500
6 p.m.	9.91	1,360
12 p.m.	9.76	1,280
Jan. 18		
8 a.m.	9.74	1,260
4 p.m.	9.49	1,140
12 p.m.	9.05	958

621. Fern Ridge Reservoir near Elmira, Oreg.

Location.--Lat 44°07'20", long 123°17'55", near center of sec.4, T.17 S., R.5 W., in control house at spillway section of dam across Long Tom River and Coyote Creek, 4½ miles northeast of Elmira.

Drainage area.--252 sq mi, not including Amazon Creek basin.

Gage-height record.--Water-stage recorder graph except 4 a.m. Dec. 26 to 3 a.m. Dec. 29, for which graph was reconstructed on basis of dam tender's staff-gage readings. Datum of gage is at mean sea level (levels by Corps of Engineers).

Storage record.--Contents, in acre-feet, from capacity table furnished by Corps of Engineers.

Maxima.--December 1955 to January 1956: Inflow, 24,000 cfs 11 p.m. Dec. 21; outflow, 10,400 cfs 8:30 a.m. Dec. 26 when operational difficulties were experienced with spillway gates; contents, 124,500 acre-ft 7:30 a.m. Dec. 27 (elevation, 375.83 ft).

1941 to November 1955: Contents, 105,400 acre-ft Jan. 1, 1943 (elevation, 373.94 ft).

Remarks.--Inflow records furnished by Corps of Engineers. Reservoir is formed by earthfill dam with concrete outlet and spillway completed in 1941 by Corps of Engineers; storage began Nov. 13, 1941. Capacity, 101,200 acre-ft between elevations 340 ft (sill of outlet gate) and 373.5 ft (normal maximum operating pool level). Reservoir used for flood control and improvement of navigation. Beginning in November 1951, most of flow of Amazon Creek has been diverted in SE¼ sec.29, T.17 S., R.4 W., and discharged into Fern Ridge Reservoir; drainage area at point of diversion, 21.3 sq mi.

Elevation, in feet, and contents, in acre-feet, 1955-56, of Fern Ridge Reservoir near Elmira, Oreg.

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	356.60	13,590	371.67	85,050	16	357.33	15,300	368.40	60,940
2	356.44	13,240	370.57	76,260	17	356.43	13,220	368.62	62,380
3	356.21	12,740	369.43	67,890	18	356.62	13,640	368.36	60,680
4	355.59	11,460	369.67	69,590	19	361.20	26,480	367.98	58,260
5	355.02	10,350	370.31	74,280	20	365.62	44,840	367.53	55,490
6	354.75	9,860	370.67	77,020	21	371.45	83,230	366.99	52,290
7	354.40	9,230	370.99	79,530	22	373.87	104,700	366.54	49,740
8	354.52	9,440	370.91	78,890	23	374.36	109,500	366.20	47,880
9	354.89	10,110	370.51	75,800	24	374.24	108,300	365.51	44,280
10	355.70	11,680	369.87	71,040	25	374.40	109,900	364.48	39,320
11	356.19	12,700	369.19	66,220	26	375.70	123,100	363.15	33,620
12	357.68	16,160	368.32	60,420	27	375.55	121,500	361.52	27,580
13	358.85	19,250	367.32	54,230	28	374.78	113,600	359.65	21,560
14	358.75	18,970	366.78	51,090	29	373.71	103,200	357.69	16,180
15	357.80	16,460	367.37	54,530	30	373.30	99,370	355.23	10,750
					31	372.69	93,840	353.98	8,520
Change in contents................................						-	+79,660	-	-85,320

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 18			Dec. 23			Dec. 27-Con.		
12 p.m......	356.62	13,640	7 a.m.......	374.18	107,700	5 a.m.......	375.82	124,400
			4 p.m.......	374.32	109,100	7:30.........	375.83	124,500
Dec. 19			12 p.m......	374.36	109,500	12 m.........	375.80	124,200
6 a.m.......	356.90	14,280				4 p.m.......	375.75	123,600
12 m........	358.60	18,560	Dec. 24			12 p.m......	375.55	121,500
6 p.m.......	360.00	22,620	4 a.m.......	374.40	109,900			
12 p.m......	361.20	26,480	11..........	374.38	109,700	Dec. 28		
			12 p.m......	374.24	108,300	8 a.m.......	375.35	119,400
Dec. 20						4 p.m.......	375.06	116,500
8 a.m.......	362.68	31,780	Dec. 25			12 p.m......	374.78	113,600
4 p.m.......	364.18	37,970	4 a.m.......	374.25	108,400			
12 p.m......	365.62	44,840	1 p.m.......	374.17	107,600	Dec. 29		
			8...........	374.25	108,400	8 a.m.......	374.46	110,400
Dec. 21			12 p.m......	374.40	109,900	4 p.m.......	374.08	106,700
8 a.m.......	367.59	55,850				12 p.m......	373.71	103,200
4 p.m.......	369.79	70,460	Dec. 26					
12 p.m......	371.45	83,230	8 a.m.......	374.89	114,700	Dec. 30		
			4 p.m.......	375.43	120,300	9 a.m.......	373.30	99,370
Dec. 22			12 p.m......	375.70	123,100	1 p.m.......	373.27	99,090
11 a.m......	373.13	97,810				5...........	373.32	99,550
6 p.m.......	373.57	101,900	Dec. 27			12 p.m......	373.30	99,370
12 p.m......	373.87	104,700	2 a.m.......	375.78	124,000			

622. Long Tom River below Fern Ridge Dam, near Smithfield, Oreg.

Location.--Lat 44°07'25", long 123°17'50", in SE¼ sec.4, T.17 S., R.5 W., on left bank in canalized river channel, 1,000 ft downstream from Fern Ridge Dam, which impounds runoff of Long Tom River and Coyote Creek, and 2½ miles south of Smithfield.

Drainage area.--252 sq mi, not including Amazon Creek basin.

Gage-height record.--Water-stage recorder graph. Datum of gage is 332.00 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,900 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 10,400 cfs 8:30 a.m. Dec. 26 (gage height, 13.97 ft).

1939 to November 1955: Discharge, 11,500 cfs Jan. 1, 1943 (gage height, 15.12 ft, at site 2½ miles downstream at datum 11.09 ft lower).

Remarks.--Records include diversion for irrigation and stockwater to Coyote Creek channel through 24-inch concrete pipe 600 ft long. The diversion is several hundred feet upstream and point of return to Long Tom River is about 2½ miles downstream. Record for Coyote Creek is based on daily staff-gage readings and occasional measurements. Flow regulated by Fern Ridge Reservoir (see station 621). Since November 1951, most of flow of Amazon Creek has been diverted in SE¼ sec.29, T.17 S., R.4 W., and discharged into Fern Ridge Reservoir; drainage area at point of diversion, 21.3 sq mi.

Mean discharge, in cubic feet per second, 1955-56, of Long Tom River below Fern Ridge Dam, near Smithfield, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	2,130	5,880	11.....	2,400	4,860	21.....	600	4,030
2.....	2,450	5,810	12.....	1,690	4,980	22.....	3,490	4,060
3.....	2,430	5,800	13.....	1,240	4,970	23.....	4,710	4,120
4.....	2,390	3,320	14.....	2,130	4,480	24.....	5,010	4,650
5.....	2,340	2,680	15.....	2,960	3,220	25.....	5,010	4,860
6.....	2,280	3,760	16.....	3,080	2,840	26.....	5,920	4,880
7.....	2,240	4,320	17.....	3,000	3,760	27.....	7,880	4,760
8.....	2,220	4,320	18.....	2,960	4,180	28.....	7,770	4,280
9.....	2,270	4,760	19.....	923	4,100	29.....	7,580	3,640
10.....	2,330	4,960	20.....	53	4,090	30.....	4,230	3,540
						31.....	4,060	2,280
Monthly mean discharge, in cubic feat per second							3,219	4,264
Runoff, in acre-feet							197,900	262,200

623. Amazon Creek near Eugene, Oreg.

Location.--Lat 44°03'40", long 123°11'40", in SE¼ sec.29, T.17 S., R.4 W., on right bank 250 ft upstream from diversion structure and 5 miles west of Eugene.

Drainage area.--21.3 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 372.41 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,800 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 2,720 cfs 7:30 a.m. Dec. 21 (gage height, 9.25 ft).
1954 to November 1955: Discharge, 815 cfs Nov. 19, 1955 (gage height, 6.14 ft, from floodmark).

Remarks.--Records include diversion at station to Fern Ridge Reservoir; diversion during this period amounted to 25,130 acre-ft.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	166	78	11.....	102	85	21.....	1,990	83
2.....	174	61	12.....	190	73	22.....	492	163
3.....	75	75	13.....	75	102	23.....	263	211
4.....	40	330	14.....	52	209	24.....	120	120
5.....	103	171	15.....	61	365	25.....	716	57
6.....	128	432	16.....	277	228	26.....	1,320	44
7.....	86	424	17.....	96	100	27.....	237	39
8.....	224	195	18.....	316	132	28.....	117	20
9.....	142	142	19.....	862	117	29.....	75	14
10.....	206	110	20.....	624	122	30.....	52	8.7
						31.....	41	4.2
Monthly mean discharge, in cubic feet per second							304	139
Runoff, in inches							16.45	7.53
Runoff, in acre-feet							18,690	8,560

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 19--Con.			Dec. 21--Con.		
12 p.m.......	4.04	71	5 p.m........	6.15	804	12 m.........	8.33	1,800
			8............	5.41	472	2 p.m........	8.01	1,650
Dec. 18			12 p.m.......	4.93	294	5............	8.59	1,920
4 a.m........	4.03	69				6............	8.54	1,890
5............	4.10	83	Dec. 20			8............	7.86	1,590
7............	5.08	359	5 a.m........	4.64	203	10...........	6.83	1,110
9............	5.85	670	7............	4.74	235	12 p.m.......	6.45	934
10:30........	6.12	795	9............	5.12	360			
3 p.m........	5.09	356	11...........	5.89	684	Dec. 22		
6............	4.72	236	1:30 p.m.....	6.15	804	3 a.m........	6.32	887
11...........	4.48	166	4............	5.75	620	7............	5.60	556
12 p.m.......	4.49	169	7............	5.53	521	9............	5.37	462
			12 p.m.......	8.78	2,000	3 p.m........	4.98	318
Dec. 19						5............	5.05	342
2 a.m........	4.70	229	Dec. 21			7............	5.05	342
4............	5.58	548	2 a.m........	9.04	2,500	12 p.m.......	4.77	252
8............	6.88	1,140	4............	8.91	2,380			
10...........	7.87	1,590	5............	8.93	2,400	Dec. 23		
12 m.........	8.20	1,740	7:30.........	9.25	2,720	1 a.m........	4.78	262
2 p.m........	7.60	1,470	9 a.m........	9.13	2,600	4 a.m........	4.96	318

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Amazon Creek near Eugene, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 23--Con.			Dec. 26--Con.			Jan. 14--Con.		
7 a.m........	4.98	324	10 a.m.......	8.07	1,690	1 p.m........	4.59	186
9............	5.04	344	12 m.........	7.89	1,610	4............	4.86	270
5 p.m........	4.62	212	6 p.m........	5.86	664	6............	5.22	395
12 p.m.......	4.46	168	8............	5.45	481	8............	5.11	355
			12 p.m.......	5.01	313	12 p.m.......	4.72	226
Dec. 24								
6 a.m........	4.33	134	Dec. 27			Jan. 15		
12 m.........	4.25	115	3 a.m........	4.84	280	3 a.m........	4.79	248
12 p.m.......	4.13	89	5............	4.82	274	6............	5.19	384
			10...........	4.62	212	10:30........	5.96	715
Dec. 25			12 m.........	4.67	227	1 p.m........	5.43	478
8 a.m........	4.08	79	3 p.m........	4.60	205	4............	4.94	295
9............	4.12	87	5............	4.77	258	9............	4.64	201
11...........	4.50	179	12 p.m.......	4.46	168	12 p.m.......	4.93	292
2 p.m........	6.25	858						
5............	7.34	1,340	Jan. 13			Jan. 16		
7............	7.50	1,420	12 p.m.......	4.06	64	4 a.m........	5.18	380
11...........	8.55	1,900				6............	5.06	336
12 p.m.......	8.62	1,930	Jan. 14			10...........	4.70	220
			3 a.m........	4.07	66	2 p.m........	4.53	171
Dec. 26			6............	4.37	130	6............	4.50	163
3 a.m........	8.45	1,870	9............	4.64	201	12 p.m.......	4.35	124
6 a.m........	8.58	1,960	12 m.........	4.59	186			

624. Long Tom River at Monroe, Oreg.

Location.--Lat 44°18'50", long 123°17'45", in NE$\frac{1}{4}$ sec.33, T.14 S., R.5 W., on left bank in canalized river channel at Monroe, 800 ft upstream from concrete drop structure, and just downstream from Shafer Creek.

Drainage area.--391 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 270.00 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 11,000 cfs 3 a.m. Dec. 22 (gage height, 10.26 ft).

1920 to November 1955: Discharge, 19,300 cfs Jan. 2, 1943 (gage height, 17.14 ft, site and datum then in use, from graph based on gage readings).

Remarks.--Flow regulated by Fern Ridge Reservoir (see station 621).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3,200	7,180	11.....	4,130	6,520	21.....	7,760	5,840
2.....	3,840	7,110	12.....	3,700	6,310	22.....	9,980	5,880
3.....	3,500	7,280	13.....	2,390	6,490	23.....	7,970	6,310
4.....	3,210	7,620	14.....	2,690	6,380	24.....	7,200	6,420
5.....	3,270	5,730	15.....	3,780	6,310	25.....	6,870	6,490
6.....	3,560	6,100	16.....	4,450	6,200	26.....	9,600	6,290
7.....	3,270	7,380	17.....	4,290	5,620	27.....	10,700	6,240
8.....	3,270	7,080	18.....	4,530	6,060	28.....	10,400	5,730
9.....	3,820	6,520	19.....	5,080	5,990	29.....	9,630	4,810
10.....	3,630	6,750	20.....	4,370	6,130	30.....	7,350	4,610
						31.....	4,570	3,500
Monthly mean discharge, in cubic feet per second......................							5,355	6,222
Runoff, in acre-feet..							329,300	382,600

625. Rock Creek near Philomath, Oreg.

(Crest-stage station; gaging station discontinued 1952)

Location.--Lat 44°30'05", long 123°26'20", in NE¼ sec.29, T.12 S., R.6 W., at dam 250 ft upstream from State Highway 34 crossing, 0.2 mile upstream from mouth, and 4.5 miles southwest of Philomath.

Drainage area.--14.6 sq mi.

Gage-height record.--Crest stages only. Datum of gage is 354.16 ft above mean sea level, datum of 1929 (Oregon State Highway Dept. bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 210 cfs and by slope-area measurement at 2,170 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,190 cfs Dec. 21 (gage height, 6.82 ft).
1945 to November 1955: Discharge, 1,650 cfs Jan. 6, 1948 (gage height, 5.78 ft).

626. Marys River near Philomath, Oreg.

Location.--Lat 44°31'35", long 123°20'00", in SW¼ sec.18, T.12 S., R.5 W., near midspan on downstream side of bridge, 2 miles southeast of Philomath and 3½ miles upstream from Muddy Creek.

Drainage area.--159 sq mi (including drainage area of Evergreen Creek above road crossing 1½ miles south of station).

Gage-height record.--Wire-weight gage read twice daily. Gage heights from graph of twice-daily readings. Altitude of gage is 218 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 8,660 cfs 3 p.m. Dec. 21 (gage height, 20.83 ft).
1940 to November 1955: Discharge, 8,250 cfs Dec. 15, 1946 (gage height, 20.67 ft, from floodmark).

Remarks.--Records include flow of Evergreen Creek at road crossing 1½ miles south, which may at times be mingled with overflow from Marys River.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,370	1,210	11.....	2,090	1,490	21.....	6,740	1,990
2.....	1,880	1,290	12.....	2,740	1,270	22.....	7,180	1,790
3.....	1,850	2,200	13.....	2,470	1,210	23.....	4,450	1,770
4.....	1,440	6,820	14.....	1,850	1,240	24.....	2,850	1,880
5.....	1,460	6,340	15.....	1,360	3,000	25.....	2,110	1,740
6.....	1,540	5,000	16.....	1,180	4,100	26.....	2,860	1,500
7.....	1,480	4,060	17.....	982	3,760	27.....	3,060	1,340
8.....	1,420	3,080	18.....	1,290	2,890	28.....	2,250	1,100
9.....	1,870	2,280	19.....	2,850	2,320	29.....	1,680	1,070
10.....	1,810	1,800	20.....	4,140	2,250	30.....	1,320	980
						31.....	1,100	860
Monthly mean discharge, in cubic feet per second							2,344	2,375
Runoff, in inches							17.00	17.22
Runoff, in acre-feet							144,100	146,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 20--Con.			Dec. 23--Con.		
12 p.m.......	8.88	917	12 p.m.......	19.22	4,600	12 p.m.......	17.22	3,420
Dec. 18			Dec. 21			Dec. 24		
9 a.m........	9.20	982	8 a.m........	19.40	4,960	8 a.m........	16.28	3,060
4 p.m........	11.25	1,440	3 p.m........	20.83	8,660	4 p.m........	15.25	2,640
12 p.m.......	13.46	2,030	12 p.m.......	20.70	8,200	12 p.m.......	14.20	2,280
Dec. 19			Dec. 22			Dec. 25		
9 a.m........	15.28	2,600	8 a.m........	20.46	7,380	6 a.m........	13.60	2,100
4 p.m........	17.03	3,210	4 p.m........	20.35	7,050	12 m.........	13.35	2,030
12 p.m.......	17.88	3,610	12 p.m.......	19.98	6,000	6 p.m........	13.46	2,060
						12 p.m.......	13.95	2,200
Dec. 20			Dec. 23					
9 a.m........	18.22	3,790	9 a.m........	19.14	4,640	Dec. 26		
4 p.m........	19.20	4,580	3 p.m........	18.25	3,940	12 m.........	16.00	2,920

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Marys River near Philomath, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 26--Con.			Jan. 2--Con.			Jan. 4--Con.		
6 p.m.	16.70	3,200	6 p.m.	10.55	1,350	8:30 a.m.	20.68	8,130
12 p.m.	16.95	3,300	12 p.m.	11.98	1,680	4 p.m.	20.58	7,780
						12 p.m.	20.50	7,500
Dec. 27			Jan. 3					
6 a.m.	16.84	3,260	6 a.m.	13.45	2,060	Jan. 5		
12 m.	16.45	3,100	9	14.00	2,220	9 a.m.	20.30	6,900
12 p.m.	15.32	2,660	12 m.	14.20	2,280	4 p.m.	19.90	5,800
			6 p.m.	14.27	2,310	12 p.m.	19.38	4,930
Jan. 1			9	14.50	2,380			
12 p.m.	9.95	1,220	12 p.m.	15.18	2,620	Jan. 6		
						9 a.m.	18.90	4,420
Jan. 2			Jan. 4			4 p.m.	19.85	5,700
6 a.m.	9.72	1,170	3 a.m.	18.00	3,800	12 p.m.	19.35	4,900
12 m.	9.82	1,190	6 a.m.	20.10	6,300			

627. Calapooya River at Holley, Oreg.

Location.--Lat 44°21'05", long 122°47'10", in SE¼ sec.15, T.14 S., R.1 W., on right bank a quarter of a mile southwest of Holley and 5 miles upstream from Brush Creek.

Drainage area.--105 sq mi.

Gage-height record.--Staff gage read once daily at stages below 3.0 ft and two or more times daily at higher stages. Graph based on these readings and record for Wiley Creek near Foster was drawn for entire period. Datum of gage is 527.20 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 10,700 cfs 8:30 a.m. Dec. 21 (gage height, 12.67 ft).

1935 to November 1955: Discharge, 12,200 cfs Dec. 28, 1945 (gage height, 14.1 ft, from floodmark).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,870	778	11	2,300	996	21	9,310	1,640
2	1,640	645	12	3,760	1,100	22	7,010	2,140
3	1,300	780	13	2,310	1,150	23	3,680	2,280
4	968	1,850	14	1,540	1,290	24	2,130	1,620
5	1,030	1,680	15	1,220	3,810	25	1,990	1,220
6	1,620	1,390	16	1,080	2,790	26	3,220	978
7	1,430	1,490	17	942	1,900	27	2,230	839
8	1,380	1,120	18	1,010	1,860	28	1,490	680
9	1,480	944	19	1,980	1,760	29	1,120	590
10	1,340	872	20	2,930	1,700	30	921	526
						31	795	454
Monthly mean discharge, in cubic feet per second							2,162	1,383
Runoff, in inches							23.74	15.18
Runoff, in acre-feet							132,900	85,040

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 24		
12 p.m.	3.95	1,340	6 a.m.	12.00	9,800	6 a.m.	5.15	2,360
			8	12.65	10,600	12 m.	4.85	2,100
Dec. 19			8:30	12.67	10,700	6 p.m.	4.60	1,890
8 a.m.	4.50	1,760	12 m.	11.70	9,440	12 p.m.	4.25	1,610
4 p.m.	5.18	2,310	2 p.m.	11.85	9,620			
8	5.27	2,390	4	11.90	9,680	Jan. 13		
12 p.m.	5.15	2,280	12 p.m.	11.30	8,960	12 p.m.	3.50	1,080
Dec. 20			Dec. 22			Jan. 14		
4 a.m.	4.90	2,080	6 a.m.	10.65	8,180	6 a.m.	3.45	1,050
8	4.80	2,000	12 m.	9.65	6,980	12 m.	3.65	1,180
10	4.80	2,000	6 p.m.	8.75	5,920	4 p.m.	3.83	1,310
12 m.	4.85	2,040	12 p.m.	7.85	4,970	6	3.95	1,400
2 p.m.	4.95	2,120				12 p.m.	4.70	1,970
4	5.34	2,460	Dec. 23					
12 p.m.	9.40	6,680	6 a.m.	7.10	4,220	Jan. 15		
			12 m.	6.45	3,570	6 a.m.	6.05	3,180
Dec. 21			6 p.m.	5.95	3,080	10	7.65	4,770
4 a.m.	11.15	8,780	12 p.m.	5.55	2,720	11:30 a.m.	7.8	4,920

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Calapooya River at Holly, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 15--Con.			Jan. 16			Jan. 17		
2 p.m........	7.65	4,770	6 a.m........	5.95	3,080	6 a.m........	4.80	2,050
4............	7.35	4,470	12 m.........	5.55	2,720	12 m.........	4.55	1,850
6............	7.05	4,170	6 p.m........	5.30	2,500	4 p.m........	4.40	1,730
8............	6.75	3,870	12 p.m.......	5.05	2,280	10...........	4.35	1,690
12 p.m.......	6.35	3,470				12 p.m.......	4.40	1,730

628. Butte Creek near Plainview, Oreg.

(Crest-stage station)

Location.--Lat 44°28'25", long 122°57'25", in NW$\frac{1}{4}$NE$\frac{1}{4}$ sec.5, T.13 S., R.2 W., at road crossing, 2.9 miles southeast of Plainview.

Drainage area.--5.06 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 315 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 294 cfs Dec. 21 (gage height, 16.23 ft).

1954 to November 1955: Discharge, 143 cfs Nov. 17, 1954 (gage height, 14.11 ft).

629. Calapooya River at Albany, Oreg.

Location.--Lat 44°37'15", long 123°07'40", in NW$\frac{1}{4}$ sec.13, T.11 S., R.4 W., near right bank on upstream side of highway bridge, half a mile downstream from Oak Creek, 1$\frac{1}{2}$ miles southwest of Albany, and 3 miles upstream from mouth.

Drainage area.--372 sq mi.

Gage-height record.--Twice-daily wire-weight-gage readings. Datum of gage is 180.37 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 21,000 cfs and extended above by logarithmic plotting. Backwater from Willamette River at times.

Maxima.--December 1955 to January 1956: Discharge, 32,700 cfs 6:30 a.m. Dec. 22 (gage height, 22.12 ft, observed).

1940 to November 1955: Discharge, 24,900 cfs Jan. 8, 1948; gage height, 25.5 ft Jan. 2, 1943, from graph based on gage readings (backwater from Willamette River).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2,460	1,140	11.....	3,760	2,450	21.....	13,400	4,010
2.....	3,780	1,770	12.....	4,560	2,230	22.....	26,400	3,230
3.....	4,140	2,160	13.....	6,280	2,420	23.....	13,500	3,550
4.....	2,900	5,730	14.....	5,060	2,550	24.....	8,420	4,780
5.....	2,040	8,190	15.....	2,780	4,100	25.....	5,350	3,560
6.....	2,370	6,710	16.....	2,120	7,560	26.....	9,350	2,070
7.....	2,810	7,570	17.....	2,170	6,180	27.....	13,000	1,810
8.....	2,620	6,960	18.....	2,120	4,050	28.....	6,270	1,710
9.....	3,470	4,160	19.....	4,400	3,570	29.....	3,660	1,250
10.....	3,860	2,820	20.....	8,660	3,720	30.....	1,940	1,280
						31.....	1,220	1,100
Monthly mean discharge, in cubic feet per second......................							5,641	3,690
Runoff, in inches..							17.48	11.44
Runoff, in acre-feet...							346,800	226,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Calapooya River at Albany, Oreg.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Dec. 28		
12 p.m.	8.70	1,950	12 p.m.	21.00	16,000	12 m.	16.75	6,360
						6 p.m.	15.90	5,340
Dec. 18			Dec. 23			12 p.m.	15.20	4,890
8 a.m.	8.55	1,900	12 m.	21.15	12,900			
4 p.m.	9.30	2,140	6 p.m.	21.20	12,500	Dec. 29		
8	10.00	2,390	12 p.m.	21.00	12,000	12 m.	13.70	3,570
12 p.m.	10.80	2,710				12 p.m.	12.20	2,620
			Dec. 24					
Dec. 19			6 a.m.	20.35	10,200	Jan. 14		
6 a.m.	11.95	3,310	12 m.	19.25	7,900	12 p.m.	10.57	2,670
12 m.	13.20	4,260	6 p.m.	18.35	6,780			
6 p.m.	14.45	5,420	12 p.m.	17.30	5,580	Jan. 15		
12 p.m.	15.45	6,480				8 a.m.	12.15	3,560
			Dec. 25			12 m.	13.00	4,220
Dec. 20			6 a.m.	16.45	4,920	4 p.m.	13.50	4,670
6 a.m.	16.35	7,610	12 m.	16.00	5,010	12 p.m.	14.25	5,370
12 m.	17.30	8,980	6 p.m.	15.85	5,540			
6 p.m.	17.90	10,000	12 p.m.	15.80	6,260	Jan. 16		
12 p.m.	17.70	9,600				6 a.m.	15.20	6,360
			Dec. 26			12 m.	16.50	8,000
Dec. 21			8 a.m.	16.05	7,250	4 p.m.	16.95	8,680
6 a.m.	17.60	9,500	12 m.	17.00	8,750	8	17.05	8,820
12 m.	18.00	10,300	6 p.m.	18.35	11,400	12 p.m.	16.90	8,600
4 p.m.	19.15	13,600	12 p.m.	19.30	14,600			
8	20.35	19,500				Jan. 17		
12 p.m.	21.40	26,300	Dec. 27			12 m.	15.79	5,750
			7 a.m.	19.75	16,800	12 p.m.	14.80	4,620
Dec. 22			12 m.	19.40	15,000			
6:30 a.m.	22.12	32,700	6 p.m.	18.40	9,230	Jan. 18		
12 m.	21.70	29,100	12 p.m.	17.85	7,770	12 m.	13.88	4,000
6 p.m.	21.15	22,700				12 p.m.	13.10	3,580

630. Willamette River at Albany, Oreg.

Location.--Lat 44°38'20", long 123°06'20", in SW$\frac{1}{4}$ sec.6, T.11 S., R.3 W., on right bank at Albany, a quarter of a mile downstream from Calapooya River and at mile 120.0.

Drainage area.--4,840 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 172.18 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 155,000 cfs 6 p.m. Dec. 23 (gage height, 26.70 ft).

1878-82, 1892 to November 1955: Discharge, 266,000 cfs Jan. 14, 1881 (gage height, 32.8 ft).

Stage known, 36.0 ft Dec. 4, 1861 (discharge, 340,000 cfs, from rating curve extended above 220,000 cfs). Flood of Feb. 4, 1890, reached a stage of 33.9 ft (discharge, 291,000 cfs).

Remarks.--Flow partly regulated by Lookout Point, Cottage Grove, Fern Ridge, and Dorena Reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	44,400	52,900	11	52,000	50,800	21	81,100	68,400
2	53,500	53,000	12	59,400	49,600	22	120,000	66,000
3	57,800	52,700	13	68,200	46,600	23	150,000	67,500
4	52,200	62,800	14	67,800	45,700	24	136,000	76,000
5	44,700	73,300	15	54,900	52,700	25	102,000	74,100
6	43,700	69,200	16	48,000	75,300	26	90,200	63,600
7	46,200	68,600	17	49,600	90,600	27	105,000	56,200
8	45,000	68,500	18	50,400	80,900	28	102,000	50,800
9	47,100	61,200	19	56,700	72,300	29	82,300	45,900
10	51,400	53,800	20	68,600	70,200	30	69,400	43,200
						31	59,000	35,700
Monthly mean discharge, in cubic feet per second							69,630	61,230
Runoff, in inches							16.59	14.58
Runoff, in acre-feet							4,282,000	3,765,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Willamette River at Albany, Oreg.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23--Con.			Jan. 14		
12 p.m.	12.45	51,400	12 p.m.	26.45	151,000	12 p.m.	11.43	46,500
Dec. 19			Dec. 24			Jan. 15		
6 a.m.	12.85	53,400	6 a.m.	25.88	145,000	4 a.m.	11.58	47,200
6 p.m.	14.15	59,800	12 m.	25.10	137,000	8	11.96	48,900
12 p.m.	14.72	62,700	6 p.m.	24.16	128,000	12 m.	12.55	51,800
			12 p.m.	23.15	118,000	6 p.m.	13.54	56,800
Dec. 20						12 p.m.	14.70	62,600
12 m.	15.82	68,600	Dec. 25					
6 p.m.	16.40	71,800	12 m.	21.15	101,000	Jan. 16		
12 p.m.	16.75	73,700	6 p.m.	20.28	95,100	6 a.m.	15.88	68,900
			12 p.m.	19.50	89,800	12 m.	17.05	75,400
Dec. 21						6 p.m.	18.20	81,800
4 a.m.	16.90	74,600	Dec. 26			12 p.m.	19.13	87,400
8	17.12	75,800	4 a.m.	19.26	88,300			
12 m.	17.55	78,100	8	19.20	87,900	Jan. 17		
4 p.m.	18.35	82,700	12 m.	19.30	88,600	6 a.m.	19.78	91,700
8	19.44	89,500	4 p.m.	19.50	89,800	10	19.93	92,600
12 p.m.	20.68	97,900	8	20.00	93,100	11	19.93	92,600
			12 p.m.	20.58	97,200	4 p.m.	19.74	91,400
Dec. 22						12 p.m.	19.12	87,400
6 a.m.	22.28	111,000	Dec. 27					
12 m.	23.40	121,000	6 a.m.	21.24	102,000	Jan. 18		
6 p.m.	24.46	130,000	12 m.	21.74	106,000	12 m.	18.00	80,600
12 p.m.	25.42	140,000	6 p.m.	22.15	109,000	12 p.m.	16.98	75,000
			12 p.m.	22.25	110,000			
Dec. 23						Jan. 19		
6 a.m.	26.02	146,000	Dec. 28			6 a.m.	16.62	73,000
12 m.	26.45	151,000	6 a.m.	21.95	108,000	12 m.	16.42	71,900
3 p.m.	26.62	154,000	12 m.	21.34	103,000	12 p.m.	16.26	71,000
6	26.70	155,000	6 p.m.	20.60	97,300			
9 p.m.	26.64	154,000	12 p.m.	19.70	91,200			

631. Cox Creek at Albany, Oreg.

(Crest-stage station)

Location.--Lat 44°38'35", long 123°04'05", in SW¼ sec.4, T.11 S., R.3 W., at dam at outlet of Waverly Lake, at Albany.

Drainage area.--15.2 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 200 ft (from topographic map).

Discharge record.--Peak discharge computed from flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 765 cfs Dec. 21 (gage height, 12.34 ft).

1953 to November 1955: Discharge, 716 cfs Jan. 28, 1954 (gage height, 12.23 ft).

632. North Santiam River below Boulder Creek, near Detroit, Oreg.

Location.--Lat 44°42'25", long 122°06'00", in SE¼NW¼ sec.17, T.10 S., R.6 E., on right bank half a mile downstream from Boulder Creek and 3 miles southeast of Detroit.

Drainage area.--216 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,590.07 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 15,200 cfs 3 a.m. Dec. 22 (gage height, 8.98 ft).

1907-9, 1928 to November 1955: Discharge, 20,300 cfs Dec. 28, 1945 (gage height, 11.24 ft, at site 2¼ miles downstream at datum 114.39 ft lower).

Mean discharge, in cubic feet per second, 1955-56, of North Santiam River below Boulder Creek, near Detroit, Oreg.

Day	December	January	Day	December	January	Day	December	January
1	2,340	1,430	11	2,960	1,340	21	8,880	2,600
2	2,000	1,360	12	5,720	1,320	22	11,600	2,940
3	1,700	1,370	13	3,610	1,320	23	5,960	2,910
4	1,500	2,040	14	2,600	1,600	24	3,790	2,370
5	1,450	1,970	15	2,080	5,230	25	2,910	2,020
6	1,590	1,770	16	1,890	4,280	26	2,720	1,800
7	1,520	1,620	17	1,730	3,000	27	2,350	1,640
8	1,480	1,460	18	1,580	2,880	28	2,010	1,470
9	1,450	1,370	19	1,920	2,740	29	1,790	1,380
10	1,470	1,310	20	2,760	2,720	30	1,620	1,280
						31	1,480	1,190
Monthly mean discharge, in cubic feet per second							2,854	2,056
Runoff, in inches							15.23	10.97
Runoff, in acre-feet							175,500	126,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Jan. 13		
12 p.m.	3.87	1,540	9 a.m.	8.63	12,100	12 p.m.	3.71	1,280
			2 p.m.	8.48	11,600			
Dec. 19			8	7.68	8,790	Jan. 14		
4 p.m.	4.34	2,120	12 p.m.	7.30	7,680	12 m.	3.76	1,330
12 p.m.	4.33	2,110				4 p.m.	3.99	1,560
			Dec. 23			12 p.m.	4.91	2,690
Dec. 20			12 m.	6.55	5,810			
6 a.m.	4.31	2,080	12 p.m.	5.98	4,560	Jan. 15		
12 m.	4.60	2,500				4 a.m.	5.31	3,300
6 p.m.	4.99	3,080	Dec. 24			6	5.63	3,860
9	5.34	3,730	12 m.	5.55	3,710	10	6.65	6,050
12 p.m.	5.96	5,000	12 p.m.	5.23	3,170	12 m.	6.89	6,630
						1 p.m.	6.93	6,720
Dec. 21			Dec. 25			8	6.62	5,980
4 a.m.	6.58	6,550	12 m.	4.98	2,790	12 p.m.	6.36	5,370
12 m.	6.83	7,190	6 p.m.	5.02	2,850			
3 p.m.	7.35	8,780	12 p.m.	5.04	2,880	Jan. 16		
6	8.20	11,900				12 m.	5.78	4,160
9	8.66	13,700	Dec. 26			12 p.m.	5.38	3,410
12 p.m.	8.76	14,100	12 m.	4.91	2,690			
			6 p.m.	4.91	2,690	Jan. 17		
Dec. 22			12 p.m.	4.82	2,570	6 p.m.	4.96	2,760
3 a.m.	8.98	15,200				12 p.m.	4.96	2,760

633. Wind Creek near Detroit, Oreg.

(Crest-stage station)

Location (revised).--Lat 44°45'20", long 122°07'10", in NE¼ sec.31, T.9 S., R.6 E., at culvert on Breitenbush River road, near mouth and 2 miles northeast of Detroit.

Drainage area.--1.03 sq mi (revised).

Gage-height record.--Crest stages only. Altitude of gage is 1,700 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 104 cfs Jan. 15 (gage height, 11.17 ft).

1953 to November 1955: Discharge, 109 cfs Dec. 20, 1953 (gage height, 11.30 ft).

634. Breitenbush River above Canyon Creek, near Detroit, Oreg.

Location.--Lat 44°45'10", long 122°07'40", in SE¼NE¼ sec.36, T.9 S., R.5 E., on left bank 600 ft upstream from Canyon Creek and 1½ miles northeast of Detroit.

Drainage area.--106 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,573.95 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 9,220 cfs 2 a.m. Dec. 22 (gage height, 10.80 ft).

1932 to November 1955: Discharge, 11,600 cfs Dec. 28, 1945 (gage height, 11.86 ft, at site 0.2 mile downstream at datum 13.46 ft lower).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,460	660	11	2,760	750	21	6,240	1,580
2	1,190	635	12	4,410	774	22	7,720	1,830
3	960	700	13	2,340	774	23	3,420	1,790
4	806	1,840	14	1,500	1,210	24	1,990	1,360
5	746	1,550	15	1,150	5,740	25	1,530	1,080
6	883	1,200	16	1,020	3,290	26	1,440	900
7	876	996	17	953	2,020	27	1,220	774
8	834	864	18	883	1,870	28	1,010	685
9	876	762	19	1,380	1,730	29	870	635
10	911	705	20	2,390	1,710	30	768	561
						31	690	525
Monthly mean discharge, in cubic feet per second							1,781	1,339
Runoff, in inches							19.38	14.56
Runoff, in acre-feet							109,500	82,310

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.	4.36	827	4 a.m.	10.75	9,130	2 p.m.	4.35	870
			6	10.56	8,800	4	4.68	1,080
Dec. 19			10	10.46	8,630	8	5.77	1,920
3 a.m.	4.46	897	12 m.	10.29	8,340	12 p.m.	6.93	3,180
6	4.73	1,090	4 p.m.	9.60	7,170			
9	4.86	1,200	8	8.84	5,920	Jan. 15		
12 m.	5.10	1,410	12 p.m.	8.16	4,910	2 a.m.	7.30	3,660
3 p.m.	5.35	1,650				4	7.50	3,920
6	5.45	1,750	Dec. 23			6	8.11	4,740
9	5.45	1,750	6 a.m.	7.52	3,950	8	9.04	6,220
12 p.m.	5.40	1,700	12 m.	7.02	3,300	10	9.82	7,540
			6 p.m.	6.60	2,780	11:30	10.07	7,970
Dec. 20			12 p.m.	6.27	2,410	2 p.m.	9.81	7,530
4 a.m.	5.34	1,640				6	9.04	6,220
6	5.35	1,650	Dec. 24			10	8.18	4,840
10	5.60	1,900	12 m.	5.79	1,940	12 p.m.	7.95	4,520
2 p.m.	6.03	2,330	12 p.m.	5.46	1,660			
6	6.65	3,000				Jan. 16		
9	7.03	3,440	Dec. 25			6 a.m.	7.36	3,740
12 p.m.	7.73	4,310	12 m.	5.21	1,460	12 m.	6.92	3,170
			6 p.m.	5.30	1,530	12 p.m.	6.28	2,420
Dec. 21			12 p.m.	5.26	1,500			
2 a.m.	8.10	4,830				Jan. 17		
8	7.97	4,650	Dec. 26			12 m.	5.82	1,970
12 m.	8.28	5,080	12 m.	5.12	1,390	8 p.m.	5.61	1,780
4 p.m.	9.56	7,100	6 p.m.	5.17	1,430	12 p.m.	5.62	1,790
6	10.27	8,310	12 p.m.	5.08	1,360			
8	10.61	8,890				Jan. 18		
10	10.66	8,970	Jan. 13			6 a.m.	5.82	1,920
12 p.m.	10.66	8,970	12 p.m.	4.16	756	12 m.	5.84	1,940
						12 p.m.	5.61	1,740
Dec. 22			Jan. 14					
2 a.m.	10.80	9,220	12 m.	4.22	792			

635. Detroit Reservoir near Detroit, Oreg.

Location.--Lat 44°43'20", long 122°15'20", in NW¼ sec.7, T.10 S., R.5 E., in control house near right abutment of Detroit Dam and 5 miles west of Detroit.

Drainage area.--437 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is at mean sea level (levels by Corps of Engineers).

Storage record.--Contents from capacity table furnished by Corps of Engineers.

Maxima.--December 1955 to January 1956: Inflow, 37,200 cfs 3 a.m. Dec. 22; outflow, 15,000 cfs 8 a.m. Jan. 10; contents, 390,700 acre-ft 10 a.m. Dec. 27 (elevation, 1,549.90 ft).

1953 to November 1955: Contents, 444,500 acre-ft June 8, 1955 (elevation, 1,566.02 ft).

Remarks.--Inflow and outflow records furnished by Corps of Engineers. Usable capacity is 340,200 acre-ft between elevations 1,425.0 ft (proposed lower limit of operation) and 1,569.0 ft (top of spillway gates). Total capacity is 454,900 acre-ft. Figures shown herein are for total storage.

Elevation, in feet, and contents, in acre-feet, 1955-56

Day	December		January		Day	December		January	
	Elevation	Contents	Elevation	Contents		Elevation	Contents	Elevation	Contents
1	1,509.05	276,400	1,518.78	301,000	16	1,489.52	230,700	1,482.84	216,500
2	1,506.75	270,700	1,511.22	281,800	17	1,488.10	227,600	1,486.52	224,200
3	1,501.60	258,300	1,508.18	274,200	18	1,486.35	223,800	1,487.20	225,600
4	1,494.58	242,000	1,511.42	282,400	19	1,487.25	225,800	1,484.48	219,900
5	1,486.16	223,400	1,512.40	284,800	20	1,494.15	241,000	1,484.10	219,100
6	1,478.00	206,600	1,508.20	274,300	21	1,516.35	294,700	1,485.00	221,000
7	1,471.38	193,600	1,502.60	260,700	22	1,537.23	351,500	1,487.38	226,000
8	1,466.30	184,000	1,494.00	240,700	23	1,545.35	376,100	1,489.42	230,500
9	1,466.30	184,000	1,484.10	219,100	24	1,547.90	384,300	1,488.64	228,800
10	1,464.40	180,500	1,472.65	196,000	25	1,546.48	379,700	1,483.60	218,100
11	1,471.70	194,200	1,463.10	178,200	26	1,548.91	387,500	1,477.84	206,300
12	1,486.60	224,400	1,458.10	169,200	27	1,548.82	387,200	1,471.08	193,100
13	1,491.16	234,400	1,455.22	164,000	28	1,544.32	372,900	1,463.78	179,400
14	1,491.48	235,100	1,454.08	161,900	29	1,538.70	355,700	1,460.81	174,100
15	1,490.72	233,400	1,472.45	195,700	30	1,532.43	337,600	1,457.58	168,200
					31	1,525.68	319,000	1,455.84	165,100
Change in contents...............................						-	+38,000	-	-153,900

Elevation, in feet, and contents, in acre-feet, at indicated time, 1955-56

Hour	Elevation	Contents	Hour	Elevation	Contents	Hour	Elevation	Contents
Dec. 18			Dec. 23			Dec. 28		
12 p.m....	1,486.35	223,800	8 a.m.....	1,540.96	362,500	8 a.m.....	1,547.50	383,000
			4 p.m.....	1,543.64	370,800	4 p.m.....	1,546.10	378,500
Dec. 19			12 p.m....	1,545.35	376,100	12 p.m....	1,544.32	372,900
6 a.m.....	1,486.02	223,100						
12 m......	1,485.94	223,000	Dec. 24			Jan. 13		
6 p.m.....	1,486.14	223,400	8 a.m.....	1,547.28	382,300	12 p.m....	1,455.22	164,000
12 p.m....	1,487.25	225,800	12 m......	1,547.80	384,000			
			4 p.m.....	1,547.80	384,000	Jan. 14		
Dec. 20			12 p.m....	1,547.90	384,300	12 m......	1,453.75	161,400
8 a.m.....	1,489.20	230,000				6 p.m.....	1,453.37	160,700
4 p.m.....	1,491.25	234,600	Dec. 25			12 p.m....	1,454.08	161,900
8.........	1,492.25	236,800	8 a.m.....	1,547.93	384,400			
12 p.m....	1,494.15	241,000	4 p.m.....	1,547.18	382,000	Jan. 15		
			12 p.m....	1,546.48	379,700	4 a.m.....	1,455.30	164,100
Dec. 21						8.........	1,457.60	168,300
8 a.m.....	1,500.30	255,200	Dec. 26			12 m......	1,461.60	175,500
4 p.m.....	1,506.90	271,100	4 a.m.....	1,546.60	380,100	4 p.m.....	1,466.00	183,400
12 p.m....	1,516.35	294,700	12 m......	1,547.73	383,700	8.........	1,469.50	190,000
			12 p.m....	1,548.91	387,500	12 p.m....	1,472.45	195,700
Dec. 22								
8 a.m.....	1,525.00	317,200	Dec. 27			Jan. 16		
4 p.m.....	1,532.35	337,400	10 a.m....	1,549.90	390,700	8 a.m.....	1,477.33	205,300
12 p.m....	1,537.23	351,500	8 p.m.....	1,549.32	388,800	4 p.m.....	1,480.00	210,600
			12 p.m....	1,548.82	387,200	12 p.m....	1,482.84	216,500

636. North Santiam River at Niagara, Oreg.

Location.--Lat 44°45'10", long 122°17'50", in NE¼NE¼ sec.34, T.9 S., R.4 E., on left bank 0.8 mile below Big Cliff Dam and 2.1 miles east of Niagara.

Drainage area.--453 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,093.78 ft above mean sea level (Bureau Public Roads bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 15,100 cfs 8:30 a.m. Jan. 11 (gage height, 9.15 ft).

1908-19, 1938 to November 1955: Discharge, 63,200 cfs Nov. 22, 1909 (gage height, 16.4 ft, from floodmark, site and datum then in use), from rating curve extended above 35,000 cfs.

Remarks.--Flow regulated by Detroit Reservoir (see station 635).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7,850	12,200	11.....	4,000	12,600	21.....	2,290	5,480
2.....	7,750	12,300	12.....	2,140	7,620	22.....	2,060	5,460
3.....	10,000	6,630	13.....	3,920	5,600	23.....	2,020	5,440
4.....	11,400	4,080	14.....	5,260	5,420	24.....	3,960	6,280
5.....	12,700	4,520	15.....	5,260	3,640	25.....	8,410	9,810
6.....	12,800	9,960	16.....	5,300	2,270	26.....	2,760	9,750
7.....	10,500	10,700	17.....	5,340	4,270	27.....	4,880	9,750
8.....	8,380	13,500	18.....	5,380	7,200	28.....	10,900	9,810
9.....	3,440	14,400	19.....	4,760	9,600	29.....	12,100	5,560
10.....	5,750	14,800	20.....	2,260	7,240	30.....	12,100	5,040
						31.....	12,100	3,610
Monthly mean discharge, in cubic feet per second							6,702	7,888
Runoff, in acre-feet							412,100	485,000

637. North Santiam River tributary near Gates, Oreg.

(Crest-stage station)

Location (revised).--Lat 44°45'20", long 122°23'25", in SW¼ sec.25, T.9 S., R.3 E., at culvert on State Highway 22, a quarter of a mile upstream from mouth and 1.3 miles east of Gates.

Drainage area.--1.97 sq mi (revised).

Gage-height record.--Crest stages only. Altitude of gage is 950 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 40 cfs and by flow through culvert at 86 cfs.

Maxima.--December 1955 to January 1956: Discharge, 81 cfs Dec. 21 (gage height, 17.28 ft).

1951 to November 1955: Discharge, 86 cfs Jan. 9, 1953 (gage height, 17.44 ft).

638. Little North Santiam River near Mehama, Oreg.

Location.--Lat 44°47'30", long 122°34'40", in NW¼ sec.16, T.9 S., R.2 E., on left bank 2 miles east of Mehama and 2 miles upstream from mouth.

Drainage area.--110 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 655.41 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 13,700 cfs 11:30 a.m. Jan. 15 (gage height, 12.16 ft).

1931 to November 1955: Discharge, 19,900 cfs Dec. 28, 1945 (gage height, 15.20 ft), from rating curve extended above 13,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2,200	752	11.....	6,520	1,120	21.....	8,460	2,340
2.....	1,880	710	12.....	7,920	1,200	22.....	8,850	3,250
3.....	1,430	961	13.....	2,820	1,340	23.....	3,620	2,980
4.....	1,140	4,180	14.....	1,670	2,090	24.....	2,050	1,850
5.....	1,080	2,580	15.....	1,260	9,570	25.....	1,550	1,370
6.....	1,460	1,710	16.....	1,210	4,020	26.....	2,140	1,100
7.....	1,450	1,420	17.....	1,340	2,350	27.....	1,860	919
8.....	1,310	1,180	18.....	1,260	2,820	28.....	1,320	770
9.....	1,560	1,020	19.....	2,340	2,970	29.....	1,080	686
10.....	1,540	933	20.....	3,510	2,870	30.....	898	585
						31.....	770	520
Monthly mean discharge, in cubic feet per second......................							2,500	2,005
Runoff, in inches..							26.20	21.02
Runoff, in acre-feet...							153,700	123,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 18		
12 p.m.......	5.30	1,160
Dec. 19		
4 a.m........	5.34	1,190
6............	5.47	1,300
3 p.m........	6.86	3,080
5............	7.01	3,340
9............	6.99	3,300
12 p.m.......	6.88	3,120
Dec. 20		
6 a.m........	6.68	2,790
8............	6.67	2,770
12 m.........	6.96	3,250
6 p.m........	7.47	4,150
10...........	7.61	4,400
12 p.m.......	8.00	5,130
Dec. 21		
2 a.m........	8.52	6,120
9............	9.61	8,300
3 p.m........	9.72	8,520
6............	10.10	9,280
9............	10.94	11,000
12 p.m.......	11.16	11,500
Dec. 22		
4 a.m........	10.56	10,200
6............	10.43	9,940
9............	10.60	10,300
10...........	10.60	10,300
1 p.m........	10.20	9,480

Hour	Gage height	Discharge
Dec. 22--Con.		
6 p.m........	9.10	7,280
9............	8.45	5,980
12 p.m.......	8.02	5,170
Dec. 23		
6 a.m........	7.50	4,200
12 m.........	7.10	3,490
6 p.m........	6.77	2,930
12 p.m.......	6.52	2,530
Dec. 24		
12 m.........	6.16	2,010
12 p.m.......	5.84	1,640
Dec. 25		
12 m.........	5.63	1,440
6 p.m........	5.71	1,510
12 p.m.......	5.97	1,780
Dec. 26		
6 a.m........	6.18	2,030
12 m.........	6.27	2,160
8 p.m........	6.40	2,350
12 p.m.......	6.34	2,260
Dec. 27		
12 m.........	6.01	1,820
12 p.m.......	5.74	1,540
Jan. 13		
12 p.m.......	5.39	1,230

Hour	Gage height	Discharge
Jan. 14		
11 a.m.......	5.30	1,160
2 p.m........	5.38	1,220
4............	5.62	1,430
6............	6.09	1,920
8............	6.97	3,270
10...........	8.20	5,510
12 p.m.......	9.43	7,940
Jan. 15		
2 a.m........	9.85	8,780
6............	10.20	9,480
9............	11.37	11,900
11...........	12.13	13,600
11:30........	12.16	13,700
1 p.m........	11.85	13,000
3............	10.67	10,400
6............	9.53	8,140
9............	8.77	6,620
12 p.m.......	8.34	5,780
Jan. 16		
4 a.m........	7.85	4,840
8............	7.53	4,250
12 m.........	7.30	3,840
12 p.m.......	6.80	2,980
Jan. 17		
12 m.........	6.34	2,260
10 p.m.......	6.10	1,930
12 p.m.......	6.15	2,000

639. North Santiam River at Mehama, Oreg.

Location.--Lat 44°47'20", long 122°37'00", in NW$\frac{1}{4}$ sec.18, T.9 S., R.2 E., on right bank 300 ft downstream from highway bridge and 0.5 mile downstream from Little North Santiam River.

Drainage area.--665 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 602.49 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 16,000 cfs and by slope-area measurement at 76,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 25,300 cfs 11 a.m. Jan. 15 (gage height, 9.51 ft).

1905-7, 1910-14, 1921 to November 1955: Discharge, 76,600 cfs Dec. 28, 1945 (gage height, 15.37 ft); gage height, 17.5 ft Nov. 20, 1921, and Jan. 6, 1923, from floodmark, at site then in use.

Remarks.--Flow regulated by Detroit Reservoir (see station 635).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	12,200	13,800	11.....	13,400	15,200	21.....	16,500	9,560
2.....	10,800	13,700	12.....	13,800	10,700	22.....	16,300	10,600
3.....	12,900	9,110	13.....	8,560	8,370	23.....	8,360	10,200
4.....	13,400	11,700	14.....	8,500	8,960	24.....	7,170	9,560
5.....	14,700	8,540	15.....	7,840	17,700	25.....	11,300	12,500
6.....	15,300	13,600	16.....	7,620	8,780	26.....	8,190	12,000
7.....	13,700	13,800	17.....	7,740	7,960	27.....	7,920	11,800
8.....	11,900	15,500	18.....	7,780	10,600	28.....	13,600	11,600
9.....	6,410	16,200	19.....	9,390	14,000	29.....	14,300	7,620
10.....	8,890	16,400	20.....	8,070	12,500	30.....	14,000	6,570
						31.....	13,800	5,080
Monthly mean discharge, in cubic feet per second......................							11,110	11,430
Runoff, in acre-feet..							683,000	702,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22--Con.			Dec. 28--Con.		
12 p.m.......	5.53	7,710	12 p.m.......	6.48	10,900	6 p.m........	7.42	14,500
						12 p.m.......	7.42	14,500
Dec. 19			Dec. 23					
6 a.m........	5.69	8,210	12 m.........	5.64	8,050	Jan. 13		
2 p.m........	6.48	10,900	12 p.m.......	5.10	6,460	12 p.m.......	5.63	8,020
5............	6.63	11,400						
7............	6.64	11,400	Dec. 24			Jan. 14		
8............	6.52	11,000	6 a.m........	4.88	5,880	12 m.........	5.54	7,740
10...........	5.54	7,740	2 p.m........	4.76	5,570	6 p.m........	5.92	8,960
12 p.m.......	5.38	7,260	5............	6.13	9,660	9............	6.60	11,300
			12 p.m.......	6.03	9,320	12 p.m.......	7.59	15,300
Dec. 20			Dec. 25					
6 a.m........	5.24	6,860	10 a.m.......	5.95	9,060	Jan. 15		
9............	5.27	6,940	2 p.m........	7.02	12,900	2 a.m........	7.94	16,800
12 m.........	5.60	7,930	12 p.m.......	7.30	14,000	6............	8.32	18,700
4 p.m........	5.89	8,860				10...........	9.40	24,600
8............	6.04	9,360	Dec. 26			11...........	9.51	25,300
10...........	6.04	9,360	2 a.m........	7.30	14,000	1 p.m........	8.68	20,500
12 p.m.......	6.32	10,300	3............	6.26	10,100	5............	7.65	15,500
			6............	6.30	10,200	9............	7.00	12,800
Dec. 21			8............	5.20	6,740	12 p.m.......	6.60	11,300
5 a.m........	7.18	13,500	8 p.m........	5.26	6,910			
10...........	7.70	15,800	12 p.m.......	5.18	6,680	Jan. 16		
3 p.m........	8.15	17,800				4 a.m........	6.19	9,870
7............	8.68	20,500	Dec. 27			8............	5.87	8,790
10:30........	8.70	20,600	12 m.........	4.82	5,720	12 m.........	5.72	8,300
12 p.m.......	8.67	20,500	4 p.m........	6.16	9,760	4 p.m........	5.64	8,050
			8............	6.10	9,560	8............	5.55	7,780
Dec. 22			12 p.m.......	7.17	13,500	9............	5.75	8,400
6 a.m........	8.14	17,800				12 p.m.......	5.61	7,960
12 m.........	8.14	17,800	Dec. 28					
6 p.m........	7.28	13,900	4 p.m........	7.05	13,000			

640. Sheek Creek near Cascadia, Oreg.

(Crest-stage station; previously published as South Santiam River tributary)

Location.--Lat 44°23'25", long 122°30'25", in SW¼SE¼ sec.36, T.13 S., R.2 E., at U.S. Highway 20 crossing, 0.1 mile upstream from mouth, 0.1 mile east of Cascadia ranger station, and 1.7 miles west of Cascadia.

Drainage area.--0.94 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 800 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 44 cfs Dec. 21 (gage height, 13.21 ft).

1952 to November 1955: Discharge, 72 cfs Dec. 4, 1953 (gage height, 14.90 ft).

641. South Santiam River below Cascadia, Oreg.

Location.--Lat 44°23'30", long 122°30'35", in SE¼ sec.36, T.13 S., R.2 E., on right bank 100 ft downstream from bridge at Cascadia ranger station, half a mile downstream from Tollgate Creek, half a mile upstream from Deer Creek, and 1½ miles southwest of Cascadia. All records computed are for site at gaging cable 0.7 mile upstream, above Tollgate Creek.

Drainage area.--174 sq mi at gaging cable.

Gage-height record.--Water-stage recorder graph. Datum of gage is 759.38 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 14,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 20,900 cfs 7 p.m. Dec. 21 (gage height, 16.64 ft).

1935 to November 1955: Discharge, 23,400 cfs Dec. 28, 1945 (gage height, 18.65 ft), from rating curve extended above 12,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	3,250	938	11.....	6,400	1,440	21.....	18,400	2,740
2.....	2,600	896	12.....	8,880	1,540	22.....	14,800	4,130
3.....	1,940	1,140	13.....	4,160	1,700	23.....	6,300	3,970
4.....	1,460	2,970	14.....	2,510	2,260	24.....	3,430	2,590
5.....	1,530	2,540	15.....	1,790	8,310	25.....	2,750	1,860
6.....	2,540	1,830	16.....	1,650	4,900	26.....	4,280	1,450
7.....	2,090	1,630	17.....	1,450	2,970	27.....	2,960	1,180
8.....	1,940	1,380	18.....	1,490	3,060	28.....	1,980	980
9.....	2,210	1,160	19.....	2,520	2,850	29.....	1,470	884
10.....	2,390	1,120	20.....	4,170	2,740	30.....	1,180	745
						31.....	986	665
Monthly mean discharge, in cubic feet per second......................							3,726	2,212
Runoff, in inches..							24.69	14.66
Runoff, in acre-feet..							229,100	136,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.......	4.73	1,550	7 a.m........	16.14	19,900	12 p.m.......	7.52	4,380
			9............	16.01	19,600			
Dec. 19			1 p.m........	14.98	17,600	Dec. 24		
6 a.m........	5.22	1,950	3............	15.14	17,900	12 m.........	6.63	3,310
12 m.........	5.99	2,660	7............	16.64	20,900	12 p.m.......	6.04	2,710
6 p.m........	6.51	3,180	12 p.m.......	15.48	18,600			
12 p.m.......	6.38	3,050				Dec. 25		
			Dec. 22			12 m.........	5.64	2,320
Dec. 20			4 a.m........	15.45	18,500	3 p.m........	5.68	2,350
5 a.m........	6.18	2,850	8............	14.50	16,600	6............	6.16	2,830
2 p.m........	6.90	3,630	12 m.........	13.92	15,400	9............	6.88	3,610
6............	7.62	4,500	6 p.m........	12.10	12,000	12 p.m.......	7.19	3,980
9............	8.66	5,990	12 p.m.......	10.60	9,140			
12 p.m.......	11.10	10,100				Dec. 26		
			Dec. 23			6 a.m........	7.70	4,600
Dec. 21			6 a.m........	9.50	7,300	12 m.........	7.61	4,480
2 a.m........	13.60	14,800	12 m.........	8.70	6,050	6 p.m........	7.36	4,180
4 a.m........	15.25	18,100	6 p.m........	8.06	5,100	12 p.m.......	6.97	3,710

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Santiam River below Cascadia, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 13			Jan. 15--Con.			Jan. 16--Con.		
12 p.m.......	4.70	1,530	8 a.m........	10.48	8,920	12 m.........	7.79	4,720
Jan. 14			10...........	11.50	10,800	12 p.m.......	6.88	3,610
12 m.........	4.74	1,560	12 m.........	11.73	11,300			
4 p.m........	5.26	1,980	2 p.m........	11.48	10,800	Jan. 17		
8............	7.00	3,750	6............	10.40	8,780	12 m.........	6.18	2,850
12 p.m.......	7.86	4,810	12 p.m.......	9.10	6,660	8 p.m........	5.94	2,610
Jan. 15			Jan. 16			12 p.m.......	6.07	2,740
4 a.m........	8.44	5,660	6 a.m........	8.37	5,560			

642. Middle Santiam River at mouth, near Foster, Oreg.

Location. Lat 44°25'25", long 122°37'20", in NE¼SE¼ sec.24, T.13 S., R.1 E., on right bank half a mile upstream from mouth and 2½ miles northeast of Foster.

Drainage area.--287 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 562.14 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 32,500 cfs 9 p.m. Dec. 21 (gage height, 18.35 ft).

1951 to November 1955: Discharge, 38,400 cfs Nov. 22, 1953 (gage height, 19.67 ft).

For flood of Dec. 28, 1945, flow of 41,800 cfs occurred at former station upstream where drainage area is 6 percent smaller.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5,600	1,840	11.....	13,300	2,670	21.....	26,600	5,490
2.....	4,790	1,750	12.....	19,200	2,850	22.....	26,400	8,290
3.....	3,700	2,190	13.....	7,830	3,180	23.....	10,900	7,910
4.....	2,940	6,380	14.....	4,790	4,430	24.....	5,790	5,140
5.....	2,980	5,050	15.....	3,540	22,600	25.....	4,390	3,780
6.....	4,700	3,630	16.....	3,250	11,300	26.....	5,120	2,980
7.....	4,370	3,060	17.....	2,970	6,350	27.....	4,600	2,460
8.....	3,850	2,580	18.....	2,910	6,440	28.....	3,440	2,030
9.....	4,170	2,240	19.....	5,060	6,090	29.....	2,760	1,820
10.....	3,960	2,120	20.....	7,430	6,000	30.....	2,290	1,560
						31.....	1,940	1,400
Monthly mean discharge, in cubic feet per second......................							6,628	4,697
Runoff, in inches..							26.63	18.87
Runoff, in acre-feet...							407,500	288,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 25--Con.		
12 p.m.......	7.30	2,870	9 p.m........	18.35	32,500	2 p.m........	8.20	4,030
			12 p.m.......	17.94	30,600	6............	8.30	4,170
Dec. 19						10...........	8.85	4,940
4 a.m........	7.42	3,020	Dec. 22			12 p.m.......	8.87	4,970
8............	8.02	3,800	4 a.m........	18.22	31,900			
12 m.........	9.07	5,250	8............	17.82	30,100	Dec. 26		
4 p.m........	9.84	6,420	12 m.........	17.42	28,300	12 m.........	8.91	5,020
7............	10.20	7,040	2 p.m........	17.08	26,900	9 p.m........	9.18	5,400
8............	10.20	7,040	8............	15.17	19,700	12 p.m.......	9.12	5,320
12 p.m.......	9.94	6,590	12 p.m.......	14.15	16,500			
						Dec. 27		
Dec. 20			Dec. 23			6 a.m........	8.88	4,980
8 a.m........	9.46	5,820	6 a.m........	12.82	12,600	6 p.m........	8.33	4,210
12 m.........	9.80	6,350	12 m.........	11.79	10,300	12 p.m.......	8.11	3,910
4 p.m........	10.36	7,330	6 p.m........	10.97	8,540			
8............	11.17	8,960	12 p.m.......	10.32	7,260	Jan. 13		
12 p.m.......	12.98	13,200				12 p.m.......	7.36	2,940
			Dec. 24					
Dec. 21			6 a.m........	9.78	6,320	Jan. 14		
2 a.m........	14.92	18,900	12 m.........	9.34	5,640	6 a.m........	7.29	2,860
4............	16.12	23,100	6 p.m........	9.03	5,190	12 m.........	7.32	2,890
8............	17.10	27,000	12 p.m.......	8.71	4,740	2 p.m........	7.41	3,000
10...........	17.44	28,400				4............	7.68	3,350
4 p.m........	17.08	26,900	Dec. 25			6............	8.50	4,450
7 p.m........	17.80	30,000	10 a.m.......	8.28	4,140	8 p.m........	9.93	6,570

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Middle Santiam River at mouth, near Foster, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 14--Con.			Jan. 15--Con.			Jan. 17		
10 p.m.......	11.77	10,300	2 p.m........	17.94	30,600	12 m.........	9.64	6,090
12 p.m.......	13.07	13,500	6............	16.10	23,000	8 p.m........	9.20	5,430
			10...........	14.70	18,200	12 p.m.......	9.17	5,390
Jan. 15			12 p.m.......	14.14	16,400			
2 a.m........	14.12	16,400				Jan. 18		
4............	14.30	16,900	Jan. 16			12 m.........	10.20	7,040
6............	14.88	18,700	4 a.m........	13.16	13,700	3 p.m........	10.19	7,020
8............	16.26	23,600	8............	12.56	12,200	12 p.m.......	9.62	6,060
10...........	17.70	29,600	12 m.........	12.06	10,900			
12 m.........	18.25	32,000	12 p.m.......	10.71	8,010			

643. Wiley Creek near Foster, Oreg.

Location.--Lat 44°22'20", long 122°37'20", in NE$\frac{1}{4}$ sec.12, T.14 S., R.1 E., on right bank 0.4 mile downstream from Little Wiley Creek and $3\frac{1}{2}$ miles southeast of Foster.

Drainage area.--52 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 1 a.m. Dec. 30 to Jan. 31. Datum of gage is 718.08 ft above mean sea level (Corps of Engineers bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,000 cfs and extended above by logarithmic plotting. Discharge Dec. 30 to Jan. 31 estimated on basis of record for Calapooya River at Holley. Backwater from debris at times.

Maxima.--December 1955 to January 1956: Discharge, 6,290 cfs 7 a.m. Dec. 21 (gage height, 8.42 ft, momentary backwater from debris).

1947 to November 1955: Discharge, 5,410 cfs Jan. 7, 1948 (gage height, 7.52 ft); gage height, 7.80 ft Jan. 18, 1953, backwater from debris.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	924	340	11.....	1,000	460	21.....	5,500	780
2.....	760	300	12.....	1,900	500	22.....	3,530	1,100
3.....	580	340	13.....	973	550	23.....	1,620	1,200
4.....	435	950	14.....	635	600	24.....	915	800
5.....	495	800	15.....	490	2,000	25.....	890	600
6.....	754	650	16.....	450	1,300	26.....	1,590	460
7.....	640	750	17.....	390	900	27.....	966	400
8.....	640	550	18.....	445	860	28.....	637	320
9.....	694	440	19.....	940	840	29.....	478	270
10....	625	400	20.....	1,390	800	30.....	380	230
						31.....	360	200
Monthly mean discharge, in cubic feet per second......................							1,033	667
Runoff, in inches..							22.90	14.80
Runoff, in acre-feet...							63,520	41,040

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 24		
12 p.m.......	2.48	460	6:30 a.m.....	7.81	6,220	12 m.........	2.96	884
			7............	8.42	6,290	12 p.m.......	2.71	731
Dec. 19			7:30.........	7.76	6,140			
3 a.m........	2.68	560	12 m.........	7.06	5,110	Dec. 25		
6............	3.07	772	3 p.m........	7.35	5,520	8 a.m........	2.57	654
9............	3.30	910	6............	7.84	6,260	1 p.m........	2.61	676
1 p.m........	3.68	1,180	9............	6.93	4,930	4............	2.85	815
6............	3.66	1,160	12 p.m.......	6.78	4,720	8............	3.60	1,350
12 p.m.......	3.43	1,000				12 p.m.......	3.93	1,610
			Dec. 22					
Dec. 20			12:30 a.m....	7.05	5,100	Dec. 26		
4 a.m........	3.32	924	3............	6.71	4,630	4 a.m........	4.21	1,860
10...........	3.60	1,120	6............	6.37	4,190	10...........	3.97	1,650
4 p.m........	3.75	1,220	12 m.........	5.83	3,540	12 m.........	3.98	1,650
6............	3.92	1,360	6 p.m........	5.11	2,740	12 p.m.......	3.48	1,250
8............	4.40	1,760	12 p.m.......	4.58	2,200			
10...........	5.24	2,540						
12 p.m.......	6.42	3,910	Dec. 23					
			12 m.........	3.89	1,580			
Dec. 21			6 p.m........	3.59	1,340			
2 a.m........	7.30	5,450	12 p.m.......	3.35	1,160			

644. South Santiam River at Waterloo, Oreg.

Location.--Lat 44°29'55", long 122°49'20", in NW¼ sec.28, T.12 S., R.1 W., on left bank 600 ft downstream from bridge at Waterloo and 2 miles upstream from Hamilton Creek.

Drainage area.--640 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 370.39 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 62,800 cfs 11 p.m. Dec. 21 (gage height, 19.95 ft).

1905-7, 1910-11, 1923 to November 1955: Discharge, 74,200 cfs Dec. 28, 1945 (gage height, 22.85 ft), from rating curve extended above 37,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	11,200	4,130	11.....	20,200	5,710	21.....	52,400	10,400
2.....	10,100	3,870	12.....	30,500	6,220	22.....	50,200	14,400
3.....	7,850	4,490	13.....	16,000	6,850	23.....	23,000	15,300
4.....	6,000	11,800	14.....	9,850	7,470	24.....	13,300	10,600
5.....	5,420	11,300	15.....	7,140	31,100	25.....	10,100	7,850
6.....	9,070	8,340	16.....	6,380	20,600	26.....	15,400	6,130
7.....	8,540	8,210	17.....	5,710	12,600	27.....	12,100	5,080
8.....	7,320	6,460	18.....	5,760	12,000	28.....	8,480	4,150
9.....	8,860	5,350	19.....	10,200	11,400	29.....	6,490	3,780
10.....	7,550	4,930	20.....	14,100	11,400	30.....	5,220	3,250
						31.....	4,420	2,830
Monthly mean discharge, in cubic feet per second......................							13,190	8,968
Runoff, in inches..							23.76	16.15
Runoff, in acre-feet...							811,000	551,400

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.......	6.07	6,000	6 a.m........	19.14	58,500	4 p.m........	6.25	6,490
			9............	18.70	56,100	6............	6.48	7,140
Dec. 19			12 m.........	18.03	52,700	8............	7.10	9,010
4 a.m........	6.16	6,240	4 p.m........	16.92	47,100	12 p.m.......	9.22	15,900
8............	6.66	7,670	8............	15.16	38,800			
12 m.........	7.60	10,600	12 p.m.......	13.66	32,400	Jan. 15		
4 p.m........	8.26	12,800				3 a.m.......	10.40	20,000
9............	8.63	14,000	Dec. 23			6...........	11.20	22,800
12 p.m.......	8.48	13,500	4 a.m........	12.59	28,100	9...........	12.28	26,900
			8............	11.74	24,800	12 m........	14.76	37,100
Dec. 20			12 m.........	11.08	22,400	2 p.m.......	16.04	42,900
8 a.m........	8.02	12,000	6 p.m........	10.12	19,000	3:30........	16.28	44,000
12 m.........	8.27	12,800	12 p.m.......	9.35	16,400	6...........	15.55	40,600
7 p.m........	9.00	15,200				9...........	14.08	34,100
10...........	9.70	17,600	Dec. 24			12 p.m......	12.83	29,000
12 p.m.......	10.82	21,500	6 a.m........	8.81	14,600			
			12 m.........	8.35	13,100	Jan. 16		
Dec. 21			12 p.m.......	7.64	10,700	4 a.m.......	11.70	24,700
2 a.m........	12.60	28,100				8...........	10.88	21,700
4............	15.06	38,400	Dec. 25			12 m........	10.36	19,900
6............	17.07	47,800	10 a.m.......	7.22	9,380	6 p.m.......	9.65	17,400
8............	18.50	55,100	2 p.m........	7.18	9,260	12 p.m......	9.06	15,400
10...........	19.31	59,400	6............	7.32	9,690			
12 m.........	19.56	60,700	8............	7.52	10,500	Jan. 17		
2 p.m........	19.41	59,900	12 p.m.......	8.36	13,100	8 a.m.......	8.41	13,300
4............	19.03	57,900				8 p.m.......	7.70	10,900
6............	18.96	57,500	Jan. 13			12 p.m......	7.60	10,600
11...........	19.95	62,800	12 p.m.......	6.21	6,380			
12 p.m.......	19.83	62,200						
			Jan. 14					
Dec. 22			6 a.m........	6.12	6,130			
3 a.m........	19.10	58,200	12 m.........	6.13	6,160			

645. Santiam River at Jefferson, Oreg.

Location.--Lat 44°42'55", long 123°00'40", in SE¼ sec.11, T.10 S., R.3 W., on right bank 350 ft upstream from railroad bridge at Jefferson, 2 miles downstream from confluence of North Santiam and South Santiam Rivers, and 9 miles upstream from mouth.

Drainage area.--1,790 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 199.63 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 115,000 cfs 7:30 a.m. Dec. 22 (gage height, 21.11 ft).

1905-6, 1907-16, 1939 to November 1955: Discharge, 161,000 cfs Nov. 22, 1909 (gage height, 18.2 ft, from floodmark, site and datum then in use; corresponding gage height at present site, 23.0 ft, from curve of relation).

Discharge known, about 202,000 cfs Nov. 21, 1921 (gage height, 19.5 ft, site and datum in use prior to Oct. 1, 1940; corresponding gage height at present site, 24.4 ft, from curve of relation).

Remarks.--Flow regulated by Detroit Reservoir (see station 635).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	29,600	20,500	11.....	39,400	24,900	21.....	71,100	25,100
2.....	25,800	20,000	12.....	58,000	21,300	22.....	106,000	28,600
3.....	26,000	17,200	13.....	36,900	18,500	23.....	55,000	34,000
4.....	22,600	34,700	14.....	23,900	18,200	24.....	28,500	26,400
5.....	23,200	30,200	15.....	18,600	53,600	25.....	25,700	24,000
6.....	27,500	29,600	16.....	17,000	49,900	26.....	39,400	21,400
7.....	27,700	32,300	17.....	16,000	28,200	27.....	31,200	19,700
8.....	22,700	27,900	18.....	16,500	27,700	28.....	27,800	18,100
9.....	22,700	26,600	19.....	24,700	30,900	29.....	25,400	14,800
10.....	19,700	25,300	20.....	31,600	31,700	30.....	22,800	11,900
						31.....	20,900	10,000
Monthly mean discharge, in cubic feet per second........................							31,740	25,910
Runoff, in acre-feet..							1,952,000	1,593,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22			Jan. 14		
12 p.m.......	9.64	17,200	4 a.m........	21.04	114,000	12 m.........	9.59	17,100
			7:30.........	21.11	115,000	4 p.m........	9.68	17,400
Dec. 19			12 m.........	20.78	109,000	8............	10.13	19,000
3 a.m........	9.60	17,100	8 p.m........	20.07	96,300	12 p.m.......	11.00	22,700
6............	9.74	17,600	12 p.m.......	19.28	84,600			
9............	10.27	19,600				Jan. 15		
3 p.m........	12.08	27,900	Dec. 23			4 a.m........	12.82	32,000
6............	12.74	31,600	4 a.m........	18.09	71,400	8............	14.64	43,500
9............	13.13	33,800	8............	16.86	60,600	12 m.........	15.80	52,100
12 p.m.......	13.30	34,800	12 m.........	15.75	51,700	4 p.m........	17.48	65,900
			6 p.m........	14.50	42,500	6............	18.28	73,200
Dec. 20			12 p.m.......	13.51	36,100	8............	18.65	77,000
1 a.m........	13.30	34,800				10...........	18.73	77,900
7............	12.43	29,900	Dec. 24			12 p.m.......	18.58	76,300
11...........	12.22	28,700	6 a.m........	12.67	31,200			
2 p.m........	12.30	29,200	12 m.........	11.98	27,400	Jan. 16		
7............	13.00	33,000	7 p.m........	11.32	24,100	4 a.m........	17.50	66,000
12 p.m.......	13.35	35,100	12 p.m.......	11.76	26,300	8............	16.12	54,700
						12 m.........	14.97	45,800
Dec. 21			Dec. 25			6 p.m........	13.89	38,500
3 a.m........	13.64	36,900	12 m.........	11.17	23,500	12 p.m.......	13.15	33,900
6............	14.38	41,700	3 p.m........	11.12	23,200			
9............	15.78	51,900	6............	11.66	25,800	Jan. 17		
12 m.........	17.30	64,400	12 p.m.......	12.85	32,200	6 a.m........	12.59	30,700
3 p.m........	19.18	83,300				12 m.........	11.88	26,900
6............	20.54	105,000	Jan. 13			4 p.m........	11.57	25,400
9............	20.88	111,000	12 p.m.......	9.86	18,000	8............	11.71	26,000
12 p.m.......	21.03	114,000				12 p.m.......	11.65	25,800

646. Luckiamute River near Hoskins, Oreg.

Location.--Lat 44°43'10", long 123°30'10", in NE¼ sec.11, T.10 S., R.7 W., on right bank a quarter of a mile downstream from Benton County line and 3½ miles northwest of Hoskins.

Drainage area.--34 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 378.7 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 3,780 cfs 10 a.m. Jan. 4 (gage height, 10.35 ft).

1934 to November 1955: Discharge, 5,560 cfs Dec. 14, 1946, Feb. 17, 1949; gage height, 13.22 ft Dec. 14, 1946.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	580	343	11.....	1,660	420	21.....	1,880	800
2.....	664	549	12.....	1,910	381	22.....	1,760	800
3.....	610	1,390	13.....	964	396	23.....	1,140	804
4.....	490	2,850	14.....	640	564	24.....	854	728
5.....	517	1,490	15.....	505	1,780	25.....	691	598
6.....	553	1,100	16.....	478	1,880	26.....	715	483
7.....	505	852	17.....	394	1,260	27.....	652	408
8.....	538	688	18.....	394	952	28.....	544	342
9.....	568	576	19.....	667	896	29.....	454	320
10.....	672	486	20.....	906	900	30.....	382	280
						31.....	332	250
Monthly mean discharge, in cubic feet per second.....................							762	825
Runoff, in inches...							25.84	27.96
Runoff, in acre-feet..							46,850	50,710

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22			Jan. 3--Con.		
12 p.m.......	3.08	365	4 a.m........	7.41	2,080	12 m.........	5.69	1,280
			12 m.........	6.61	1,680	6 p.m........	5.63	1,250
Dec. 18			12 p.m.......	5.86	1,350	8............	5.84	1,340
6 a.m........	3.05	356				12 p.m.......	6.77	1,760
12 m.........	3.25	415	Dec. 23					
8 p.m........	3.20	400	12 m.........	5.28	1,110	Jan. 4		
12 p.m.......	3.38	454	12 p.m.......	5.00	1,000	4 a.m........	8.22	2,490
						8............	9.93	3,520
Dec. 19			Dec. 24			10...........	10.35	3,780
4 a.m........	3.86	598	12 m.........	4.60	840	12 m.........	10.06	3,600
10...........	4.21	704	12 p.m.......	4.30	735	4 p.m........	9.10	3,020
6 p.m........	4.18	694				8............	8.10	2,430
12 p.m.......	4.42	777	Dec. 25			12 p.m.......	7.40	2,080
			12 m.........	4.05	655			
Dec. 20			6 p.m........	4.18	694	Jan. 5		
8 a.m........	4.81	924	12 p.m.......	4.22	707	6 a.m........	6.61	1,680
8 p.m........	4.86	944				12 m.........	6.06	1,440
12 p.m.......	4.79	916	Jan. 1			6 p.m........	5.61	1,240
			12 p.m.......	2.93	324	12 p.m.......	5.25	1,100
Dec. 21								
3 a.m........	4.74	896	Jan. 2			Jan. 6		
6............	4.88	952	9 a.m........	2.93	324	3 a.m........	5.13	1,050
9............	5.55	1,220	4 p.m........	3.93	619	8............	5.70	1,280
12 m.........	6.40	1,590	6............	4.06	658	12 m.........	5.34	1,140
3 p.m........	8.25	2,510	8............	4.40	770	6 p.m........	5.06	1,020
5............	9.20	3,080	12 p.m.......	5.88	1,360	12 p.m.......	4.88	952
7............	9.35	3,170						
8............	9.19	3,070	Jan. 3					
12 p.m.......	8.20	2,480	3 a.m........	6.30	1,540			

647. Luckiamute River at Pedee, Oreg.

Location.--Lat 44°44'35", long 123°25'25", in SE¼ sec.33, T.9 S., R.6 W., on left bank half a mile downstream from Pedee Creek and three-quarters of a mile southwest of Pedee.

Drainage area.--115 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 245.47 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 8,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 9,540 cfs 7 p.m. Dec. 21 (gage height, 15.96 ft).

1940 to November 1955: Discharge, 13,500 cfs Feb. 17, 1949 (gage height, 18.46 ft, from floodmark).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,360	920	11.....	3,320	1,140	21.....	5,490	1,860
2.....	1,620	1,140	12.....	4,590	1,010	22.....	5,090	1,780
3.....	1,450	2,640	13.....	2,460	996	23.....	2,960	1,850
4.....	1,170	7,450	14.....	1,620	1,250	24.....	2,100	1,800
5.....	1,280	4,240	15.....	1,240	4,090	25.....	1,670	1,520
6.....	1,390	3,310	16.....	1,160	4,450	26.....	2,060	1,250
7.....	1,340	2,640	17.....	970	3,170	27.....	1,960	1,100
8.....	1,420	2,010	18.....	988	2,370	28.....	1,460	920
9.....	1,490	1,610	19.....	1,910	2,090	29.....	1,180	898
10.....	1,640	1,330	20.....	2,520	2,090	30.....	988	785
						31.....	844	695
Monthly mean discharge, in cubic feet per second......................							1,959	2,078
Runoff, in inches..							19.64	20.83
Runoff, in acre-feet..							120,500	127,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22			Jan. 2--Con.		
12 p.m.......	4.97	1,180	4 a.m........	13.17	6,300	12 p.m.......	6.84	2,100
			8............	12.01	5,360			
Dec. 19			12 m.........	11.26	4,830	Jan. 3		
6 a.m........	5.85	1,600	6 p.m........	10.28	4,170	6 a.m........	8.00	2,800
10...........	6.95	2,170	12 p.m.......	9.40	3,640	12 m.........	7.60	2,560
12 m.........	7.17	2,300				4 p.m........	7.42	2,450
8 p.m........	6.72	2,040	Dec. 23			8............	7.68	2,610
12 p.m.......	6.80	2,080	6 a.m........	8.70	3,220	12 p.m.......	9.28	3,570
			12 m.........	8.06	2,840			
Dec. 20			6 p.m........	7.82	2,690	Jan. 4		
3 a.m........	6.93	2,160	12 p.m.......	7.52	2,510	2 a.m........	11.00	4,650
7............	7.59	2,550				4............	13.00	6,150
11...........	7.53	2,520	Dec. 24			6............	14.30	7,430
2 p.m........	7.73	2,640	12 m.........	6.75	2,060	11...........	15.90	9,460
6............	7.70	2,620	12 p.m.......	6.20	1,780	6 p.m........	14.90	8,130
10...........	7.93	2,760				12 p.m.......	12.80	5,990
12 p.m.......	7.86	2,720	Dec. 25					
			12 m.........	5.79	1,580	Jan. 5		
Dec. 21			6 p.m........	5.92	1,640	6 a.m........	11.38	4,920
4 a.m........	7.63	2,580	12 p.m.......	6.25	1,800	12 m.........	10.08	4,050
8............	8.58	3,150				6 p.m........	9.14	3,480
10...........	10.31	4,190	Jan. 1			12 p.m.......	8.38	3,030
12 m.........	11.40	4,930	12 p.m.......	4.34	893			
2 p.m........	12.53	5,770				Jan. 6		
4............	14.58	7,750	Jan. 2			5 a.m........	7.84	2,700
7............	15.96	9,540	8 a.m........	4.27	862	11...........	9.69	3,810
12 p.m.......	14.53	7,690	12 m.........	4.42	929	1 p.m........	9.78	3,870
			6 p.m........	5.20	1,280	12 p.m.......	8.40	3,040

648. Waymire Creek near Falls City, Oreg.

(Crest-stage station; previously published as Mitchell Creek)

Location.--Lat 44°52'00", long 123°24'45", in NW¼ sec.22, T.8 S., R.6 W., at culvert on county road, 0.8 mile upstream from mouth and 1 mile east of Falls City.

Drainage area.--3.46 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 350 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 200 cfs and by flow through culvert at 510 cfs.

Maxima.--December 1955 to January 1956: Discharge, 522 cfs Dec. 21 (gage height, 16.33 ft).

1953 to November 1955: Discharge, 304 cfs Feb. 12, 1954 (gage height, 14.49 ft).

649. Luckiamute River near Suver, Oreg.

Location.--Lat 44°47'00", long 123°14'00", in SW¼SW¼ sec.18, T.9 S., R.4 W., on right bank 10 ft upstream from highway bridge at Helmick State Park, 3 miles northwest of Suver, and 4½ miles downstream from Little Luckiamute River.

Drainage area.--240 sq mi.

Gage-height record.--Water-stage recorder graph except 6 p.m. Dec. 29 to 3:30 p.m. Jan. 4 and 5:30 p.m. Jan. 10 to 3 p.m. Jan. 17. Datum of gage is 171.92 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 14,000 cfs and extended above by logarithmic plotting. Discharge for Dec. 30 to Jan. 4 and Jan. 11-17 estimated on basis of comparison with records for stations at Pedee and Hoskins and South Yamhill River near Whiteson.

Maxima.--December 1955 to January 1956: Discharge, 16,200 cfs 9:30 p.m. Jan. 4 (gage height, 30.46 ft).

1905-11, 1940 to November 1955: Discharge, 23,800 cfs Feb. 18, 1949 (gage height, 33.10 ft).

Stage known, 33.5 ft, probably on Dec. 29, 1937, from information by local residents (discharge, 25,000 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2,570	2,100	11.....	3,800	2,600	21.....	6,200	4,450
2.....	2,840	3,000	12.....	6,050	2,300	22.....	12,600	3,930
3.....	3,010	7,000	13.....	5,900	2,200	23.....	7,630	3,740
4.....	2,440	14,000	14.....	4,220	3,000	24.....	5,560	3,780
5.....	2,170	11,400	15.....	2,830	9,000	25.....	4,230	3,490
6.....	2,780	7,120	16.....	2,410	10,000	26.....	3,940	2,790
7.....	2,940	6,650	17.....	2,120	7,500	27.....	4,410	2,360
8.....	2,580	5,070	18.....	1,830	5,700	28.....	3,710	1,970
9.....	3,150	3,860	19.....	2,920	4,860	29.....	2,800	1,810
10.....	2,810	3,020	20.....	4,500	4,730	30.....	2,400	1,660
						31.....	2,000	1,440
Monthly mean discharge, in cubic feet per second.......................							3,850	4,727
Runoff, in inches..							18.49	22.71
Runoff, in acre-feet...							236,700	290,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 21--Con.			Dec. 23--Con.		
12 p.m.......	15.66	2,000	6 p.m........	26.68	6,490	12 p.m.......	26.10	6,260
			9............	27.40	7,670			
Dec. 19			12 p.m.......	28.70	10,500	Dec. 24		
6 a.m........	16.70	2,260				8 a.m........	25.60	5,720
12 m.........	18.94	2,870	Dec. 22			4 p.m........	25.11	5,390
6 p.m........	21.22	3,540	2 a.m........	29.56	12,600	12 p.m.......	24.28	4,910
9............	22.00	3,780	4............	30.06	14,100			
12 p.m.......	22.53	3,960	6............	30.19	15,400	Dec. 25		
			8............	30.09	15,100	12 m.........	22.76	4,180
Dec. 20			12 m.........	29.48	13,500	8 p.m........	21.74	3,810
12 m.........	23.80	4,470	6 p.m........	28.52	11,000	12 p.m.......	21.45	3,720
12 p.m.......	25.06	5,120	12 p.m.......	27.78	9,310			
						Dec. 26		
Dec. 21			Dec. 23			2 a.m........	21.40	3,700
12 m.........	25.82	5,580	6 a.m........	27.28	8,240	6 a.m........	21.52	3,740

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Luckiamute River near Suver, Oreg.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 26--Con.			Jan. 5			Jan. 6--Con.		
12 m.	22.08	3,930	4 a.m.	29.77	14,300	4 p.m.	26.42	6,690
6 p.m.	22.63	4,130	8	29.12	12,500	12 p.m.	26.70	7,130
12 p.m.	22.96	4,260	12 m.	28.53	11,100			
			4 p.m.	27.99	9,790	Jan. 7		
Jan. 4			8	27.56	8,830	3 a.m.	26.76	7,230
4 p.m.	29.59	13,800	12 p.m.	27.24	8,150	6	26.70	7,130
6	30.13	15,300				12 m.	26.44	6,720
8	30.40	16,000	Jan. 6			12 p.m.	25.64	5,760
9:30	30.46	16,200	6 a.m.	26.78	7,270			
12 p.m.	30.28	15,700	12 m.	26.50	6,810			

650. Soap Creek tributary near Suver, Oreg.

(Crest-stage station)

Location.--Lat 44°42'00", long 123°13'10", in SW¼NE¼ sec.18, T.10 S., R.4 W., at U.S. Highway 99W crossing, 1.2 miles south of Polk County line, and 3 miles south of Suver.

Drainage area.--0.57 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 215 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements at 2 cfs and by flow through culvert at 81 cfs.

Maxima.--December 1955 to January 1956: Discharge, 80 cfs Dec. 21 (gage height, 4.53 ft).

1952 to November 1955: Discharge, 63 cfs Feb. 17, 1953 (gage height, 4.10 ft).

651. Rickreall Creek near Dallas, Oreg.

(Miscellaneous site)

Location.--Lat 44°55'10", long 123°16'45", in E½ sec.34, T.7 S., R.5 W., at county road bridge, 1.8 miles east of Dallas about 5½ miles upstream from Mud Slough.

Drainage area.--43.4 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maximum.--December 1955 to January 1956: Discharge, 7,120 cfs Dec. 21.

652. Willamette River at Salem, Oreg.

Location.--Lat 44°56'40", long 123°02'30", in SW¼ sec.22, T.7 S., R.3 W., on right bank 300 ft upstream from Center Street Bridge at Salem and at mile 85.1.

Drainage area.--7,280 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 114.14 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 240,000 cfs 6:30 a.m. Dec. 23 (gage height, 25.46 ft).

1909-16, 1927 to November 1955: Discharge, 315,000 cfs Nov. 25, 1909 (gage height, 30.5 ft).

Discharge known, 500,000 cfs Dec. 4, 1861 (gage height, about 39 ft), from rating curve extended above 250,000 cfs in 1916. Flood of Feb. 5, 1890, reached a stage of 37.1 ft. Flood of Jan. 8, 1923, was measured at 344,000 cfs, at or very close to peak (gage height, 30.35 ft).

Remarks.--Floodflow partly regulated by Lookout Point, Cottage Grove, Fern Ridge, Dorena, and Detroit Reservoirs.

Mean discharge, in cubic feet per second, 1955-56, of Willamette River at Salem, Oreg.

Day	December	January
1.....	75,300	79,500
2.....	79,100	76,900
3.....	87,400	78,800
4.....	83,400	96,400
5.....	74,200	125,000
6.....	73,200	120,000
7.....	78,000	117,000
8.....	74,400	110,000
9.....	75,600	101,000
10.....	75,000	89,000
11.....	82,600	81,400
12.....	105,000	77,000
13.....	123,000	72,000
14.....	112,000	67,800
15.....	91,000	85,600
16.....	72,500	126,000
17.....	68,100	134,000
18.....	68,700	129,000
19.....	76,300	118,000
20.....	99,500	112,000
21.....	125,000	106,000
22.....	201,000	99,300
23.....	235,000	103,000
24.....	208,000	107,000
25.....	167,000	106,000
26.....	143,000	98,000
27.....	146,000	84,800
28.....	145,000	76,100
29.....	133,000	68,400
30.....	109,000	60,100
31.....	91,800	53,200
Monthly mean discharge, in cubic feet per second......................	109,000	95,430
Runoff, in inches..	17.26	15.11
Runoff, in acre-feet.......................................	6,700,000	5,868,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge
Dec. 18		
12 p.m.......	10.05	69,900
Dec. 19		
6 a.m........	10.27	71,500
12 m.........	10.69	74,700
4 p.m........	11.12	78,000
8............	11.75	83,000
12 p.m.......	12.37	88,000
Dec. 20		
6 a.m........	13.21	94,700
12 m.........	13.86	99,900
6 p.m........	14.42	105,000
12 p.m.......	14.90	109,000
Dec. 21		
8 a.m........	15.60	116,000
2 p.m........	16.40	124,000
6	17.38	134,000
12 p.m.......	19.00	151,000
Dec. 22		
6 a.m........	20.90	175,000
12 m.........	23.15	206,000
4 p.m........	24.26	222,000
8............	24.95	232,000
12 p.m.......	25.29	237,000
Dec. 23		
6:30 a.m.....	25.46	240,000
12 m.........	25.31	238,000
Dec. 23--Con.		
6 p.m........	24.92	232,000
12 p.m.......	24.46	225,000
Dec. 24		
12 m.........	23.40	210,000
12 p.m.......	21.84	188,000
Dec. 25		
12 m.........	20.24	166,000
12 p.m.......	18.70	148,000
Dec. 26		
4 a.m........	18.34	144,000
8............	18.18	142,000
12 m.........	18.15	142,000
12 p.m.......	18.34	144,000
Dec. 27		
12 m.........	18.50	146,000
12 p.m.......	18.54	146,000
Dec. 28		
12 m.........	18.55	146,000
6 p.m........	18.48	145,000
12 p.m.......	18.26	143,000
Dec. 29		
6 a.m........	17.90	139,000
12 m.........	17.36	134,000
12 p.m.......	16.10	121,000
Jan. 14		
12 p.m.......	9.79	69,300
Jan. 15		
4 a.m........	10.18	72,100
8............	10.87	76,900
12 m.........	11.94	84,500
6 p.m........	13.40	96,200
12 p.m.......	14.62	107,000
Jan. 16		
6 a.m........	15.93	119,000
12 m.........	17.01	130,000
4 p.m........	17.40	134,000
8............	17.50	135,000
12 p.m.......	17.48	135,000
Jan. 17		
12 m.........	17.38	134,000
12 p.m.......	17.33	133,000
Jan. 18		
6 a.m........	17.22	132,000
6 p.m........	16.60	126,000
12 p.m.......	16.20	122,000
Jan. 19		
12 m.........	15.73	117,000
12 p.m.......	15.36	114,000

653. Mill Creek at penitentiary annex, near Salem, Oreg.

Location.--Lat 44°52'55", long 122°58'35", in NE¼ sec.18, T.8 S., R.2 W., on left bank at State penitentiary annex, 2¾ miles downstream from Battle Creek, 5 miles southeast of Salem, and 7 miles upstream from mouth.

Drainage area.--104 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 231.96 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,700 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 4,810 cfs 7 p.m. Dec. 21 (gage height, 8.28 ft).

1938 to November 1955: Discharge, 5,140 cfs Feb. 18, 1949 (gage height, 7.67 ft).

Discharge known, 8,320 cfs Dec. 29, 1937, computed by velocity-area method on basis of discharge measurement of 7,300 cfs made on that day.

Mean discharge, in cubic feet per second, 1955-56, of Mill Creek at penitentiary annex, near Salem, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	936	654	11.....	1,730	788	21.....	3,350	1,080
2.....	1,120	655	12.....	2,100	668	22.....	3,110	1,040
3.....	1,010	879	13.....	1,180	928	23.....	1,790	1,240
4.....	706	3,090	14.....	816	894	24.....	1,290	1,240
5.....	833	2,300	15.....	668	2,100	25.....	1,090	840
6.....	924	1,990	16.....	674	1,650	26.....	2,940	699
7.....	828	2,480	17.....	615	1,050	27.....	2,330	668
8.....	911	1,550	18.....	721	1,210	28.....	1,350	548
9.....	1,520	1,150	19.....	1,500	1,160	29.....	920	584
10.....	1,050	952	20.....	2,060	1,240	30.....	716	489
						31.....	594	403
Monthly mean discharge, in cubic feet per second......................							1,335	1,168
Runoff, in inches..							14.80	12.95
Runoff, in acre-feet...							82,080	71,840

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 17		
12 p.m.......	2.52	587
Dec. 18		
6 a.m........	2.43	556
8............	2.44	559
10...........	2.61	618
1 p.m........	3.06	784
3............	3.25	860
5............	3.30	880
9............	3.27	868
12 p.m.......	3.27	868
Dec. 19		
3 a.m........	3.34	896
4............	3.40	920
6............	3.63	1,020
1 p.m........	4.97	1,760
3............	5.21	1,910
5............	5.30	1,970
7............	5.27	1,950
9............	5.20	1,900
12 p.m.......	5.00	1,780
Dec. 20		
3 a.m........	4.78	1,650
5............	4.78	1,650
8............	4.97	1,760
11...........	5.27	1,950
3 p.m........	5.80	2,330
6............	5.99	2,480
8............	5.97	2,470
10...........	5.91	2,420
12 p.m.......	5.80	2,330
Dec. 21		
4 a.m........	5.60	2,250
6............	5.56	2,220
8............	5.68	2,310
10...........	6.04	2,600
2 p.m........	7.14	3,640
5............	8.04	4,540
7............	8.28	4,810
8............	8.18	4,700
9............	8.17	4,690
11...........	8.07	4,580
12 p.m.......	8.05	4,560
Dec. 22		
1 a.m........	7.94	4,440
6............	7.27	3,770
12 m.........	6.38	2,950
3 p.m........	6.01	2,660
6............	5.73	2,430
9............	5.47	2,230
12 p.m.......	5.27	2,090
Dec. 23		
3 a.m........	5.10	1,970
Dec. 23--Con.		
6 a.m........	4.97	1,880
12 m.........	4.82	1,790
9 p.m........	4.50	1,600
12 p.m.......	4.42	1,550
Dec. 24		
6 a.m........	4.23	1,440
6 p.m........	3.68	1,150
12 p.m.......	3.46	1,040
Dec. 25		
6 a.m........	3.28	952
10...........	3.19	916
12 m.........	3.18	912
2 p.m........	3.24	936
3............	3.32	970
5............	3.58	1,100
12 p.m.......	4.60	1,660
Dec. 26		
5 a.m........	5.73	2,430
9............	6.52	3,070
12 m.........	6.82	3,340
3 p.m........	6.93	3,440
5............	6.89	3,400
7............	6.80	3,320
9............	6.69	3,220
12 p.m.......	6.50	3,050
Dec. 27		
6 a.m........	6.06	2,700
12 m.........	5.55	2,290
6 p.m........	5.08	1,960
12 p.m.......	4.68	1,710
Dec. 28		
6 a.m........	4.32	1,490
6 p.m........	3.73	1,180
12 p.m.......	3.51	1,060
Jan. 1		
12 p.m.......	2.52	657
Jan. 2		
6 a.m........	2.37	604
12 m.........	2.28	573
2 p.m........	2.30	580
4............	2.40	615
6............	2.56	671
11...........	3.11	884
12 p.m.......	3.16	904
Jan. 3		
2 a.m........	3.16	904
6............	3.11	884
12 m.........	2.92	808
3 p.m........	2.91	804
4 p.m........	2.95	820
Jan. 3--Con.		
5 p.m........	2.96	824
7............	3.04	856
9............	3.21	924
11...........	3.50	1,060
12 p.m.......	3.77	1,200
Jan. 4		
1 a.m........	4.08	1,350
5............	5.78	2,470
7............	6.60	3,140
8............	6.82	3,340
10...........	7.06	3,560
2 p.m........	7.22	3,720
6............	7.26	3,560
12 p.m.......	6.91	3,240
Jan. 5		
6 a.m........	6.31	2,740
12 m.........	5.66	2,220
6 p.m........	5.09	1,830
12 p.m.......	4.63	1,560
Jan. 6		
4 a.m........	4.37	1,440
6............	4.31	1,370
7............	4.31	1,370
8............	4.35	1,390
12 m.........	4.86	1,700
3 p.m........	5.55	2,290
6............	5.97	2,630
12 p.m.......	6.41	2,980
Jan. 7		
2 a.m........	6.45	3,010
5............	6.39	2,960
7............	6.26	2,860
10...........	6.00	2,650
5 p.m........	5.31	2,120
9............	5.04	1,930
12 p.m.......	4.86	1,820
Jan. 8		
12 m.........	4.44	1,560
12 p.m.......	3.92	1,270
Jan. 9		
8 a.m........	3.63	1,120
10...........	3.67	1,140
12 m.........	3.61	1,120
3 p.m........	3.60	1,110
6............	3.67	1,140
12 p.m.......	3.63	1,120
Jan. 10		
3 a.m........	3.53	1,080
12 m.........	3.19	916
4 p.m........	3.11	884
12 p.m.......	3.04	856

654. Mill Creek at Salem, Oreg.

Location.--Lat 44°56'05", long 123°01'00", in NE¼ sec.26, T.7 S., R.3 W., on left bank at State Street Bridge in Salem, 220 ft downstream from 19th Street diversion.

Drainage area.--110 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 166.12 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 1,150 cfs 1:30 a.m. Dec. 22 (gage height, 6.53 ft).
1938 to November 1955: Discharge, 1,350 cfs Jan. 28, 1954 (gage height, 7.07 ft).

Remarks.--Flow diverted into Shelton flood bypass 1¼ miles upstream from station.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	414	292	11.....	561	313	21.....	850	416
2.....	448	294	12.....	645	294	22.....	833	400
3.....	421	357	13.....	489	359	23.....	479	434
4.....	347	834	14.....	388	345	24.....	414	448
5.....	382	667	15.....	349	707	25.....	365	347
6.....	416	559	16.....	352	590	26.....	706	303
7.....	393	649	17.....	336	416	27.....	646	294
8.....	388	476	18.....	363	434	28.....	434	263
9.....	535	386	19.....	535	428	29.....	347	267
10.....	423	354	20.....	686	451	30.....	310	259
						31.....	281	200
Monthly mean discharge, in cubic feet per second........................							469	414
Runoff, in acre-feet..							28,830	25,460

655. Glenn Creek near Salem, Oreg.

(Crest-stage station; previously published as Glen Creek)

Location.--Lat 44°57'05", long 123°05'00", in SE¼NW¼ sec.20, T.7 S., R.3 W., at culvert on Glenn Creek road, 1.5 miles northwest of Salem.

Drainage area.--2.72 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 250 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 100 cfs and by flow through culvert at 153 cfs.

Maxima.--December 1955 to January 1956: Discharge, 172 cfs Dec. 21 (gage height, 14.26 ft), backwater from debris.
1951 to November 1955: Discharge, 156 cfs Jan. 20, 1953 (gage height, 13.28 ft).

656. Glenn Creek tributary at Brush College, near Salem, Oreg.

(Crest-stage station; previously published as Glen Creek tributary)

Location.--Lat 44°58'20", long 123°04'30", in S½SE¼ sec.8, T.7 S., R.3 W., on county road, 0.8 mile upstream from mouth and 2½ miles northwest of Salem.

Drainage area.--4.83 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 150 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 190 cfs Jan. 4 (gage height, 16.4 ft).
1951 to November 1955: Discharge, 238 cfs Jan. 20, 1953 (gage height, 16.53 ft).

657. South Yamhill River near Willamina, Oreg.

Location.--Lat 45°02'50", long 123°30'10", in sec.14, T.6 S., R.7 W., on left bank 2¼ miles southwest of Willamina and 3 miles upstream from Willamina Creek.

Drainage area.--133 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 235.55 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 15,000 cfs 7 p.m. Dec. 21 (gage height, 14.44 ft).

1934 to November 1955: Discharge, 15,200 cfs Feb. 10, 1949 (gage height, 14.80 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,850	979	11.....	3,000	1,240	21.....	8,720	2,020
2.....	1,950	2,440	12.....	4,430	1,080	22.....	7,540	1,800
3.....	1,720	5,180	13.....	2,680	1,210	23.....	3,980	1,790
4.....	1,430	8,950	14.....	1,800	1,520	24.....	2,680	1,620
5.....	1,580	5,300	15.....	1,370	4,410	25.....	2,300	1,340
6.....	1,770	4,620	16.....	1,200	5,660	26.....	2,710	1,150
7.....	1,710	3,070	17.....	986	3,800	27.....	2,240	997
8.....	2,160	2,290	18.....	980	2,880	28.....	1,700	854
9.....	2,100	1,800	19.....	2,470	2,530	29.....	1,340	848
10.....	1,870	1,450	20.....	5,160	2,360	30.....	1,080	710
						31.....	892	610
Monthly mean discharge, in cubic feet per second......................							2,497	2,468
Runoff, in inches..							21.64	21.39
Runoff, in acre-feet...							153,500	151,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge
Dec. 17		
12 p.m.......	3.00	890
Dec. 18		
6 a.m........	2.94	854
6 p.m........	3.19	1,000
12 p.m.......	3.79	1,390
Dec. 19		
4 a.m........	4.95	2,300
8............	4.98	2,320
12 m.........	5.36	2,660
6 p.m........	5.11	2,440
9............	5.52	2,810
12 p.m.......	6.25	3,500
Dec. 20		
4 a.m........	7.23	4,540
8............	8.16	5,680
12 m.........	8.18	5,700
6 p.m........	7.25	5,160
9............	8.03	5,510
12 p.m.......	7.76	5,170
Dec. 21		
6 a.m........	6.98	4,250
10...........	7.95	5,400
2 p.m........	10.97	9,610
6............	14.20	14,600
7............	14.44	15,000
9............	14.02	14,300
12 p.m.......	12.48	11,900
Dec. 22		
4 a.m........	10.70	9,220
Dec. 22--Con.		
8 a.m........	9.65	7,710
12 m.........	9.21	7,090
6 p.m........	8.69	6,370
12 p.m.......	7.82	5,240
Dec. 23		
6 a.m........	7.18	4,470
12 m.........	6.65	3,840
6 p.m........	6.25	3,400
12 p.m.......	6.05	3,190
Dec. 24		
8 a.m........	5.70	2,840
4 p.m........	5.32	2,500
12 p.m.......	4.98	2,200
Dec. 25		
6 a.m........	4.84	2,090
12 m.........	4.88	2,120
6 p.m........	5.36	2,530
12 p.m.......	5.60	2,750
Jan. 1		
12 p.m.......	3.26	961
Jan. 2		
3 a.m........	3.23	943
8............	3.47	1,090
12 m.........	4.75	2,020
3 p.m........	5.77	2,910
6............	6.20	3,340
9............	7.25	4,550
12 p.m.......	8.35	5,920
Jan. 3		
2 a.m........	8.51	6,130
4............	8.38	5,960
8............	7.78	5,190
12 m.........	7.24	4,540
4 p.m........	7.07	4,330
8............	7.60	4,970
12 p.m.......	8.44	6,040
Jan. 4		
4 a.m........	9.85	7,990
8............	11.50	10,400
11...........	11.99	11,100
4 p.m........	11.02	9,680
8............	9.95	8,130
12 p.m.......	9.08	6,910
Jan. 5		
6 a.m........	8.47	6,080
12 m.........	7.82	5,240
6 p.m........	7.16	4,440
12 p.m.......	6.75	3,950
Jan. 6		
3 a.m........	6.60	3,780
7............	7.68	5,070
11...........	8.09	5,590
3 p.m........	7.65	5,030
6............	7.20	4,490
12 p.m.......	6.60	3,780

658. South Yamhill River tributary near Willamina, Oreg.

(Crest-stage station)

Location (revised).--Lat 45°02'35", long 123°28'20", in SW¼ sec.18, T.6 S., R.6 W., at culvert at State Highway 22 crossing, 2 miles upstream from mouth and 3 miles southeast of Willamina.

Drainage area.--1.81 sq mi (revised).

Gage-height record.--Crest stages only. Altitude of gage is 300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 50 cfs and by flow through culvert at 423 cfs.

Maxima.--December 1955 to January 1956: Discharge, 420 cfs Dec. 21 (gage height, 21.00 ft).

1953 to November 1955: Discharge, 179 cfs Feb. 12, 1954 (gage height, 11.48 ft).

659. Willamina Creek near Willamina, Oreg.

Location.--Lat 45°08'30", long 123°29'35", in W½NE¼ sec.13, T.5 S., R.7 W., on left bank 4½ miles north of Willamina and 7 miles upstream from mouth.

Drainage area.--65 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 1 to 10 a.m. Dec. 2, 7:30 p.m. Dec. 3 to 11:15 a.m. Dec. 9. Datum of gage is 315.1 ft above mean sea level (river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,000 cfs and by slope-area measurement of 7,760 cfs. Discharge for periods of no gage-height record estimated on basis of recorded range in stage and records for South Yamhill River near Willamina.

Maxima.--December 1955 to January 1956: Discharge, 7,760 cfs 5:30 p.m. Dec. 21 (gage height, 11.65 ft).

1934 to November 1955: Discharge, 6,380 cfs Feb. 17, 1949 (gage height, 10.25 ft, from rating curve extended above 3,400 cfs by logarithmic plotting.

Flood of Mar. 31, 1931, reached a stage of about 12 ft, from information by local resident (discharge, about 8,200 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	900	484	11.....	1,270	617	21.....	3,880	1,040
2.....	1,000	1,090	12.....	1,650	565	22.....	2,900	935
3.....	854	1,720	13.....	1,140	545	23.....	1,710	886
4.....	650	3,280	14.....	832	666	24.....	1,290	791
5.....	750	2,040	15.....	657	1,420	25.....	1,060	674
6.....	850	1,750	16.....	565	1,750	26.....	1,200	585
7.....	800	1,270	17.....	466	1,420	27.....	1,020	509
8.....	900	1,020	18.....	468	1,250	28.....	782	449
9.....	850	836	19.....	851	1,180	29.....	625	410
10.....	786	701	20.....	1,760	1,160	30.....	529	358
						31.....	466	322
Monthly mean discharge, in cubic feet per second......................							1,079	1,023
Runoff, in inches..							19.14	18.15
Runoff, in acre-feet...							66,370	62,920

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 20--Con.			Dec. 22--Con.		
12 p.m.......	3.58	428	12 p.m.......	6.32	1,860	6 p.m........	7.02	2,400
						12 p.m.......	6.60	2,060
Dec. 18			Dec. 21					
7 a.m........	3.55	418	5 a.m........	6.16	1,750	Dec. 23		
9 p.m........	3.83	517	9............	6.83	2,240	6 a.m........	6.28	1,840
12 p.m.......	4.13	637	12 m.........	8.11	3,370	12 m.........	6.04	1,670
			2 p.m........	9.66	5,090	6 p.m........	5.86	1,540
Dec. 19			4............	11.28	7,220	12 p.m.......	5.81	1,510
12 m.........	4.69	886	5:30.........	11.65	7,760			
4 p.m........	4.62	854	8............	10.00	5,500	Dec. 24		
12 p.m.......	5.11	1,100	10...........	9.30	4,660	12 m.........	5.45	1,280
			12 p.m.......	8.92	4,210	12 p.m.......	5.12	1,100
Dec. 20								
6 a.m........	6.07	1,690	Dec. 22			Dec. 25		
12 m.........	6.33	1,870	6 a.m........	8.02	3,280	6 a.m........	4.98	1,030
6 p.m........	6.55	2,020	12 m.........	7.47	2,780	12 m.........	4.88	980

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Willamina Creek near Willamina, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 25--Con.			Jan. 2--Con.			Jan. 4--Con.		
6 p.m........	5.10	1,090	12 p.m.......	6.05	1,680	12 m.........	8.21	3,470
12 p.m.......	5.25	1,160				6 p.m........	7.52	2,830
			Jan. 3			12 p.m.......	7.18	2,520
Jan. 1			6 a.m........	5.80	1,500			
12 p.m.......	3.69	466	12 m.........	5.71	1,440	Jan. 5		
			6 p.m........	6.36	1,890	6 a.m........	6.81	2,230
Jan. 2			9............	6.59	2,050	6 p.m........	6.23	1,800
4 a.m........	3.84	521	12 p.m.......	7.22	2,560	12 p.m.......	6.13	1,730
8............	4.78	930						
12 m.........	5.05	1,060	Jan. 4			Jan. 6		
3 p.m........	5.22	1,150	3 a.m........	8.30	3,560	4 a.m........	6.51	2,000
6............	5.81	1,510	6............	8.90	4,190	4 p.m........	6.03	1,660
9 p.m........	6.08	1,700	9 a.m........	8.60	3,860	12 p.m.......	5.74	1,460

660. South Yamhill River near Whiteson, Oreg.

Location.--Lat 45°10'10", long 123°12'25", in NW¼ sec.5, T.5 S., R.4 W., near left bank on downstream side of Whiteson Bridge on Pacific Highway West, 1 mile downstream from Salt Creek, and 1¼ miles northwest of Whiteson.

Drainage area.--502 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 82.30 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 36,800 cfs 8 a.m. Dec. 22 (gage height, 45.25 ft).

1940 to November 1955: Discharge, 28,900 cfs Feb. 11, 1949 (gage height, 43.39 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5,860	3,470	11.....	6,820	4,880	21.....	23,000	8,190
2.....	6,440	4,570	12.....	9,470	4,120	22.....	32,200	7,310
3.....	6,750	11,200	13.....	10,100	4,020	23.....	18,100	6,310
4.....	5,690	26,700	14.....	7,760	3,930	24.....	12,400	6,160
5.....	4,620	26,300	15.....	5,310	9,580	25.....	10,200	5,540
6.....	5,420	17,800	16.....	4,220	11,600	26.....	9,180	4,720
7.....	6,200	15,800	17.....	3,740	13,200	27.....	9,480	4,030
8.....	6,000	11,200	18.....	3,230	10,800	28.....	8,180	3,390
9.....	7,430	8,520	19.....	4,800	9,340	29.....	5,950	3,240
10.....	6,750	6,320	20.....	9,880	8,510	30.....	4,530	3,180
						31.....	3,580	2,770
Monthly mean discharge, in cubic feet per second....................							8,493	8,603
Runoff, in inches..							19.51	19.76
Runoff, in acre-feet...							522,200	529,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22			Dec. 25--Con.		
12 p.m.......	16.54	3,260	4 a.m........	44.82	36,600	12 m.........	34.70	10,100
			8............	45.25	36,800	6 p.m........	33.50	9,750
Dec. 19			12 m.........	44.96	35,300	12 p.m.......	32.40	9,200
6 a.m........	17.80	3,640	4 p.m........	44.22	30,400			
12 m.........	19.80	4,290	8............	43.40	27,100	Dec. 26		
6 p.m........	24.22	6,090	12 p.m.......	42.64	22,400	6 a.m........	31.71	9,120
12 p.m.......	26.76	7,120				12 m.........	31.61	9,070
			Dec. 23			6 p.m........	31.96	9,230
Dec. 20			6 a.m........	41.82	20,000	12 p.m.......	32.25	9,380
6 a.m........	29.20	8,440	12 m.........	41.14	17,900			
12 m.........	31.70	9,600	6 p.m........	40.32	16,000	Jan. 1		
6 p.m........	34.32	11,000	12 p.m.......	39.58	14,600	12 p.m.......	18.78	3,950
12 p.m.......	37.10	13,800						
			Dec. 24			Jan. 2		
Dec. 21			6 a.m........	38.78	12,700	8 a.m........	18.99	4,190
4 a.m........	38.50	16,400	12 m.........	38.23	12,100	4 p.m........	19.69	4,420
8............	39.57	20,700	6 p.m........	37.44	11,900	12 p.m.......	24.58	6,230
12 m.........	40.55	23,700	12 p.m.......	36.55	11,200			
4 p.m........	41.35	26,900				Jan. 3		
8............	42.05	27,700	Dec. 25			6 a.m........	29.45	8,420
12 p.m.......	43.40	31,100	6 a.m........	35.75	10,600	12 m.........	33.18	10,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Yamhill River near Whiteson, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 3--Con.			Jan. 5--Con.			Jan. 8		
6 p.m........	36.98	13,600	6 p.m........	41.80	22,900	8 a.m........	36.86	11,800
12 p.m.......	38.97	18,900	12 p.m.......	41.03	20,600	4 p.m........	35.47	10,500
						12 p.m.......	33.86	9,680
Jan. 4			Jan. 6					
4 a.m........	39.92	21,800	6 a.m........	40.38	18,600	Jan. 9		
8............	41.15	24,100	12 m.........	39.85	17,200	8 a.m........	32.08	8,970
12 m.........	41.93	26,000	6 p.m........	39.65	16,700	4 p.m........	30.03	8,140
4 p.m........	43.31	30,700	12 p.m.......	39.87	17,200	12 p.m.......	28.03	7,240
8............	44.05	31,700						
12 p.m.......	44.24	32,500	Jan. 7			Jan. 10		
			6 a.m........	39.84	17,100	8 a.m........	26.33	6,650
Jan. 5			12 m.........	39.36	16,100	4 p.m........	24.43	5,970
6 a.m........	43.52	29,600	6 p.m........	38.83	15,000	12 p.m.......	22.97	5,410
12 m.........	42.65	26,100	12 p.m.......	38.09	13,000			

661. Haskins Creek below reservoir, near McMinnville, Oreg.

Location.--Lat 45°18'40", long 123°20'55", in NE¼ sec.18, T.3 S., R.5 W., on right bank 800 ft below dam of McMinnville water-supply reservoir and 11 miles northwest of McMinnville.

Drainage area.--7.1 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 707 ft above mean sea level (topographic survey of 1955).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 446 cfs 8:30 p.m. Dec. 21 (gage height, 3.52 ft); no flow in diversion pipeline.
1951 to November 1955: Discharge, 558 cfs Apr. 9, 1952.

Remarks.--Records include flow in pipeline which diverts 600 ft above station for McMinnville city water supply. Peak flows affected by Haskins Creek Reservoir (usable capacity, 733 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	105	53	11.....	153	73	21.....	303	118
2.....	109	87	12.....	187	66	22.....	378	105
3.....	95	156	13.....	138	65	23.....	224	94
4.....	83	275	14.....	103	73	24.....	150	82
5.....	77	254	15.....	85	142	25.....	135	69
6.....	92	207	16.....	75	200	26.....	131	60
7.....	89	146	17.....	65	161	27.....	113	50
8.....	104	122	18.....	62	140	28.....	93	47
9.....	102	100	19.....	93	137	29.....	79	42
10.....	100	87	20.....	186	131	30.....	62	38
						31.....	56	35
Monthly mean discharge, in cubic feet per second.....................							123	110
Runoff, in inches..							20.05	17.89
Runoff, in acre-feet...							7,590	6,770

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22			Jan. 2--Con.		
12 p.m.......	1.94	78	8 a.m........	3.39	407	12 p.m.......	2.44	160
			4 p.m........	3.22	356			
Dec. 19			12 p.m.......	3.04	305	Jan. 3		
6 a.m........	1.95	80				7 a.m........	2.33	136
8............	2.02	92	Dec. 23			12 m.........	2.36	143
11...........	2.03	94	6 a.m........	2.91	272	9 p.m........	2.53	180
5 p.m........	1.97	83	12 m.........	2.67	213	12 p.m.......	2.56	187
12 p.m.......	2.25	140	3 p.m........	2.54	185			
			12 p.m.......	2.46	167	Jan. 4		
Dec. 20						7 a.m........	2.88	265
4 a.m........	2.41	155	Dec. 24			2:30 p.m.....	3.06	310
8............	2.44	162	12 m.........	2.37	148	12 p.m.......	2.99	292
11...........	2.60	196	12 p.m.......	2.30	135	Jan. 5		
9 p.m........	2.68	215				10 a.m.......	2.86	263
12 p.m.......	2.67	213	Jan. 1			11...........	2.78	243
			12 p.m.......	1.80	49	12 m.........	2.89	271
Dec. 21						12 p.m.......	2.60	199
5 a.m........	2.60	196	Jan. 2					
7............	2.62	201	8 a.m........	1.82	52	Jan. 6		
10...........	2.75	232	11...........	2.04	83	2 a.m........	2.58	194
3 p.m........	3.19	347	2 p.m........	2.11	95	6............	2.73	231
7............	3.46	428	5............	2.12	97	8............	2.74	233
8:30.........	3.52	446	8............	2.27	124	2 p.m........	2.67	216
12 p.m.......	3.48	434	10 p.m.......	2.40	151	12 p.m.......	2.46	167

662. North Yamhill River at Pike, Oreg.

Location.--Lat 45°22'10", long 123°15'15", in NW¼ sec.25, T.2 S., R.5 W., on right bank 500 ft downstream from Turner Creek, 0.5 mile southeast of Pike, and 4 miles northwest of Yamhill.

Drainage area.--66.8 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 192.66 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,500 cfs and by slope-area measurement at 9,530 cfs.

Maxima.--December 1955 to January 1956: Discharge, 9,530 cfs 4 p.m. Dec. 21 (gage height, 12.42 ft).
1948 to November 1955: Discharge, 6,280 cfs Feb. 10, 1949 (gage height, 9.98 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	760	480	11.....	1,110	587	21.....	4,200	960
2.....	790	958	12.....	1,230	536	22.....	2,660	850
3.....	676	1,860	13.....	845	532	23.....	1,720	815
4.....	563	3,180	14.....	658	676	24.....	1,330	750
5.....	532	1,960	15.....	563	1,400	25.....	1,150	636
6.....	765	1,840	16.....	522	1,690	26.....	1,280	552
7.....	745	1,300	17.....	448	1,270	27.....	1,010	484
8.....	820	996	18.....	424	1,130	28.....	780	430
9.....	755	800	19.....	767	1,150	29.....	641	394
10.....	745	675	20.....	2,190	1,080	30.....	548	346
						31.....	472	310
Monthly mean discharge, in cubic feet per second							1,023	988
Runoff, in inches							17.65	17.05
Runoff, in acre-feet							62,870	60,750

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22			Jan. 3		
12 p.m.......	3.29	496	4 a.m........	7.18	3,010	4 a.m........	5.67	1,780
			8............	6.98	2,830	8............	5.46	1,630
Dec. 19			12 m.........	6.66	2,550	2 p.m........	5.67	1,780
3 a.m........	3.67	666	4 p.m........	6.57	2,480	8............	6.05	2,060
7............	3.65	658	12 p.m.......	6.05	2,060	10...........	6.20	2,180
11...........	4.02	840				12 p.m.......	6.16	2,150
3 p.m........	3.87	765	Dec. 23					
7............	3.85	755	12 m.........	5.45	1,620	Jan. 4		
12 p.m.......	4.58	1,150	6 p.m........	5.32	1,530	2 a.m........	6.37	2,320
			9............	5.56	1,700	6............	8.04	3,840
Dec. 20			12 p.m.......	5.37	1,570	8............	8.43	4,270
5 a.m........	5.86	2,000				10...........	8.32	4,150
9............	5.88	2,020	Dec. 24			4 p.m........	7.18	3,010
1 p.m........	6.72	2,680	12 m.........	4.98	1,310	12 p.m.......	6.45	2,380
5............	6.57	2,560	12 p.m.......	4.67	1,120			
8............	6.50	2,500				Jan. 5		
12 p.m.......	5.97	2,080	Dec. 25			6 a.m........	6.23	2,200
			11 a.m.......	4.54	1,040	12 m.........	5.85	1,900
Dec. 21			3 p.m........	4.87	1,240	12 p.m.......	5.41	1,600
4 a.m........	5.60	1,730	12 p.m.......	4.85	1,230			
5............	5.60	1,730				Jan. 6		
8............	6.17	2,160	Jan. 1			2 a.m........	5.37	1,570
10...........	7.09	2,930	12 p.m.......	3.34	456	6............	6.18	2,160
12 m.........	8.58	4,440				12 m.........	6.00	2,020
2 p.m........	11.20	7,700	Jan. 2			6 p.m........	5.60	1,730
4............	12.42	9,530	4 a.m........	3.34	456	12 p.m.......	5.33	1,540
6............	10.32	6,520	8............	3.42	488			
8............	8.91	4,800	2 p.m........	4.75	1,170			
10...........	8.20	4,020	6............	4.76	1,180			
12 p.m.......	7.73	3,530	12 p.m.......	6.00	2,020			

663. Panther Creek near Carlton, Oreg.

(Crest-stage station)

Location.--Lat 45°18'20", long 123°21'00", in SW¼ sec.18, T.3 S., R.5 W., above Carlton water-supply dam, 5½ miles upstream from Beaver Creek and 9 miles west of Carlton.

Drainage area.--3.19 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 700 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 120 cfs and computed from flow over dam at 492 cfs.

Maxima.--December 1955 to January 1956: Discharge, 492 cfs Dec. 21 (gage height, 14.72 ft).

1952 to November 1955: Discharge, 212 cfs Feb. 12, 1954 (gage height, 13.77 ft).

664. Willamette River at Wilsonville, Oreg.

Location.--Lat 45°17'35", long 122°46'15", in SE¼ sec.23, T.3 S., R.1 W., in upstream side of pier of bridge at Wilsonville, 1¼ miles downstream from Corral Creek and 3 miles upstream from Molalla River.

Drainage area.--8,400 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 50.00 ft above mean sea level, datum of 1929; gage readings have been reduced to elevations above mean sea level.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 235,000 cfs 6-7 a.m. Dec. 24 (elevation, 85.95 ft).

1948 to November 1955: Discharge, 248,000 cfs Jan. 21, 1953 (elevation, 90.00 ft, site then in use); about 87 ft at present site.

Stage known, about 105 ft Dec. 4, 1861.

Remarks.--Flow partly regulated by Lookout Point, Cottage Grove, Fern Ridge, Dorena, and Detroit Reservoirs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	90,900	98,300	11.....	92,600	102,000	21.....	133,000	129,000
2.....	91,200	89,200	12.....	112,000	92,700	22.....	176,000	122,000
3.....	94,600	95,600	13.....	125,000	87,200	23.....	217,000	117,000
4.....	96,400	119,000	14.....	130,000	81,900	24.....	232,000	119,000
5.....	89,900	150,000	15.....	118,000	93,400	25.....	212,000	120,000
6.....	84,600	157,000	16.....	97,000	122,000	26.....	183,000	116,000
7.....	87,100	152,000	17.....	82,300	142,000	27.....	166,000	105,000
8.....	89,200	143,000	18.....	78,500	147,000	28.....	158,000	91,900
9.....	89,500	130,000	19.....	82,800	143,000	29.....	151,000	82,000
10.....	89,900	116,000	20.....	104,000	135,000	30.....	137,000	73,500
						31.....	116,000	66,000
Monthly mean discharge, in cubic feet per second......................							122,800	114,100
Runoff, in inches..							16.85	15.66
Runoff, in acre-feet...							7,550,000	7,017,000

Elevation, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Elevation	Discharge	Hour	Elevation	Discharge	Hour	Elevation	Discharge
Dec. 18			Dec. 22			Dec. 24--Con.		
12 p.m.......	66.90	78,200	6 a.m........	78.24	165,000	6 p.m........	85.50	230,000
			12 m.........	79.40	176,000	12 p.m.......	85.02	226,000
Dec. 19			6 p.m........	80.62	187,000			
6 a.m........	67.02	79,000	12 p.m.......	81.95	199,000	Dec. 25		
12 m.........	67.40	81,500				12 m.........	83.56	213,000
6 p.m........	68.02	85,800	Dec. 23			12 p.m.......	81.78	197,000
12 p.m.......	68.80	91,300	6 a.m........	83.16	209,000			
			12 m.........	84.16	218,000	Dec. 26		
Dec. 20			6 p.m........	85.10	227,000	12 m.........	80.14	182,000
12 m.........	70.56	104,000	12 p.m.......	85.70	232,000	6 p.m........	79.42	176,000
12 p.m.......	72.40	118,000				12 p.m.......	78.86	171,000
			Dec. 24					
Dec. 21			6 a.m........	85.95	235,000	Dec. 27		
12 m.........	73.96	131,000	7............	85.95	235,000	12 m.........	78.20	165,000
12 p.m.......	76.80	153,000	12 m.........	85.80	233,000	12 p.m.......	77.70	161,000

Elevation, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Willamette River at Wilsonville, Oreg.--Continued

Hour	Elevation	Discharge	Hour	Elevation	Discharge	Hour	Elevation	Discharge
Jan. 14			Jan. 16--Con.			Jan. 18--Con.		
12 p.m.......	67.42	81,600	12 p.m.......	74.45	135,000	8 p.m........	76.05	147,000
						12 p.m.......	75.93	146,000
Jan. 15			Jan. 17					
4 a.m........	67.73	83,800	6 a.m........	75.06	139,000	Jan. 19		
12 m.........	68.88	91,900	12 m.........	75.48	143,000	12 m.........	75.46	143,000
6 p.m........	70.12	101,000	12 p.m.......	75.88	146,000	12 p.m.......	75.04	139,000
12 p.m.......	71.20	109,000						
			Jan. 18			Jan. 20		
Jan. 16			10 a.m.......	76.08	148,000	12 m.........	74.51	135,000
12 m.........	72.86	122,000	2 p.m........	76.08	148,000	12 p.m.......	74.06	131,000

665. Molalla River above Pine Creek, near Wilhoit, Oreg.

Location.--Lat 45°00'30", long 122°29'00", near line between secs. 30 and 31, T.6 S., R.3 E., on right bank 1,700 ft upstream from Pine Creek and 5 miles southeast of Wilhoit.

Drainage area.--96 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except 6:30 p.m. Dec. 21 to 1:30 p.m. Dec. 22, and 11:30 a.m. Jan. 23 to Jan. 30. Altitude of gage is 780 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,500 cfs and extended above by logarithmic plotting. Discharges for Dec. 21, 22, Jan. 24-31, estimated on basis of records for station near Canby.

Maxima.--December 1955 to January 1956: Discharge, 10,700 cfs 6 p.m. Dec. 21 (gage height, 16.04 ft).

1935 to November 1955: Discharge, 12,200 cfs Jan. 7, 1948 (gage height, 13.17 ft), from rating curve extended above 4,800 cfs on basis of shape of previous curve defined to 7,000 cfs; gage height, 14.92 ft Jan. 9, 1953.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,630	584	11.....	4,330	931	21.....	7,500	1,640
2.....	1,480	615	12.....	5,400	973	22.....	8,500	1,690
3.....	1,260	1,230	13.....	2,300	1,000	23.....	3,200	1,830
4.....	1,060	5,600	14.....	1,370	1,170	24.....	1,870	1,500
5.....	1,060	2,900	15.....	944	5,160	25.....	1,430	1,200
6.....	1,380	1,950	16.....	776	3,130	26.....	1,760	1,000
7.....	1,510	1,500	17.....	713	1,980	27.....	1,600	800
8.....	1,500	1,110	18.....	636	1,890	28.....	1,160	700
9.....	1,660	937	19.....	1,880	1,910	29.....	881	600
10.....	1,490	804	20.....	3,150	1,960	30.....	700	550
						31.....	588	500
Monthly mean discharge, in cubic feet per second							2,088	1,592
Runoff, in inches							25.07	19.12
Runoff, in acre-feet							128,400	97,870

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 9			Dec. 12--Con.			Dec. 19--Con.		
12 p.m.......	6.10	1,490	6 a.m........	12.50	7,000	6 a.m........	5.65	1,040
			9............	11.42	5,950	9............	6.54	1,680
Dec. 10			12 m.........	10.48	5,060	12 m.........	7.33	2,310
12 m.........	5.89	1,340	3 p.m........	9.82	4,430	2 p.m........	7.69	2,600
6 p.m........	5.99	1,410	6............	9.24	3,900	4............	7.78	2,670
9............	6.25	1,610	12 p.m.......	8.37	3,150	7............	7.68	2,590
12 p.m.......	7.23	2,390				12 p.m.......	7.34	2,320
			Dec. 13					
Dec. 11			6 a.m........	7.66	2,580	Dec. 20		
3 a.m........	7.85	2,970	12 m.........	7.23	2,230	3 a.m........	7.25	2,250
6............	8.34	3,460	12 p.m.......	6.58	1,710	8............	7.51	2,460
9............	8.98	4,110				10...........	7.96	2,820
12 m.........	9.29	4,310	Dec. 14			12 m.........	8.50	3,260
7 p.m........	9.97	4,900	12 m.........	6.08	1,340	3 p.m........	8.89	3,590
9............	10.78	5,580	12 p.m.......	5.74	1,100	6............	9.20	3,860
10...........	11.56	6,270				9............	9.31	3,960
12 p.m.......	12.86	7,410	Dec. 18			12 p.m.......	9.73	4,340
			12 p.m.......	5.05	615			
Dec. 12						Dec. 21		
3 a.m........	13.42	7,940	Dec. 19			3 a.m........	9.58	4,200
4 a.m........	13.32	7,840	3 a.m........	5.21	727	6 a.m........	9.86	4,470

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Molalla River above Pine Creek, near Wilhoit, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 21--Con.			Dec. 24			Jan. 3--Con.		
9 a.m.	10.31	4,890	6 a.m.	6.40	2,090	6 p.m.	5.33	1,220
12 m.	11.10	5,640	10	6.15	1,870	8	5.78	1,530
3 p.m.	12.64	7,140	6 p.m.	5.88	1,650	10	6.43	2,070
5	14.68	9,260	12 p.m.	5.71	1,520	12 p.m.	7.48	3,170
6 p.m.	16.04	10,700						
			Dec. 25			Jan. 4		
Dec. 22			6 a.m.	5.54	1,400	3 a.m.	8.84	4,910
1:30 p.m.	10.27	6,940	12 m.	5.45	1,340	6	10.00	6,530
3	9.94	6,440	3 p.m.	5.45	1,300	7:30	10.32	7,010
6	9.48	5,790	6	5.69	1,470	11	10.12	6,710
9	8.98	5,090	12 p.m.	5.85	1,590	2 p.m.	9.82	6,270
12 p.m.	8.60	4,600				6	9.07	5,210
			Jan. 2			12 p.m.	8.22	4,110
Dec. 23			12 p.m.	4.82	881			
4 a.m.	8.07	3,930				Jan. 5		
8	7.63	3,410	Jan. 3			3 a.m.	7.78	3,590
12 m.	7.32	3,050	5 a.m.	5.05	1,020	9	7.25	2,980
6 p.m.	6.97	2,670	12 m.	5.09	1,040	2 p.m.	7.01	2,710
12 p.m.	6.68	2,360	4 p.m.	5.14	1,070	12 p.m.	6.56	2,240

666. Molalla River near Canby, Oreg.

Location.--Lat 45°14'40", long 122°41'10", in NE¼ sec.9, T.4 S., R.1 E., on left bank 145 ft downstream from Good's bridge, 1½ miles downstream from Milk Creek, and 1½ miles south of Canby.

Drainage area.--323 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 104.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 16,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 20,200 cfs 2 a.m. Dec. 22 (gage height, 14.42 ft).

1928 to November 1955: Discharge, 25,100 cfs Jan. 7, 1948 (gage height, 14.9 ft, site and datum then in use, about 15.6 ft, present site and datum).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	3,380	2,060	11	6,120	2,900	21	12,000	3,940
2	3,400	1,970	12	12,000	2,830	22	15,900	3,900
3	2,940	2,880	13	6,260	2,950	23	8,290	4,160
4	2,380	11,400	14	3,820	2,950	24	5,210	3,630
5	2,220	9,110	15	2,870	10,400	25	3,940	2,910
6	2,610	6,130	16	2,480	8,340	26	5,980	2,430
7	3,170	5,780	17	2,370	5,000	27	6,310	2,130
8	3,170	4,260	18	2,310	4,560	28	4,290	1,780
9	4,180	3,350	19	4,400	4,420	29	3,140	1,670
10	3,330	2,830	20	6,980	4,440	30	2,480	1,470
						31	2,080	1,290
Monthly mean discharge, in cubic feet per second							4,839	4,125
Runoff, in inches							17.27	14.72
Runoff, in acre-feet							297,500	253,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Dec. 24--Con.		
12 p.m.	4.52	2,320	12 m.	10.19	10,700	12 p.m.	6.24	4,310
			6 p.m.	11.95	14,200			
Dec. 19			12 p.m.	14.05	19,200	Dec. 25		
4 a.m.	4.62	2,420				12 m.	5.77	3,720
8	5.09	2,930	Dec. 22			4 p.m.	5.74	3,690
12 m.	6.36	4,470	2 a.m.	14.42	20,200	8	5.90	3,880
4 p.m.	7.46	6,010	6	13.80	18,600	12 p.m.	6.28	4,360
7	7.68	6,340	12 m.	12.47	15,400			
12 p.m.	7.51	6,080	4 p.m.	12.18	14,700	Jan. 2		
			8	11.27	12,800	12 p.m.	4.50	2,300
Dec. 20			12 p.m.	10.40	11,100			
4 a.m.	7.35	5,840				Jan. 3		
6	7.33	5,820	Dec. 23			8 a.m.	5.01	2,840
12 m.	7.90	6,680	6 a.m.	9.47	9,350	12 m.	5.09	2,930
6 p.m.	8.74	8,060	12 m.	8.73	8,040	6 p.m.	5.14	2,980
12 p.m.	9.12	8,720	6 p.m.	8.14	7,060	10	5.35	3,220
			12 p.m.	7.68	6,340	12 p.m.	5.63	3,560
Dec. 21								
4 a.m.	9.40	9,220	Dec. 24			Jan. 4		
8 a.m.	9.37	9,170	12 m.	6.83	5,100	2 a.m.	6.05	4,060

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Molalla River near Canby, Oreg.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Jan. 4--Con.			Jan. 5--Con.			Jan. 6--Con.		
6 a.m.	8.80	8,160	12 m.	9.15	8,770	12 p.m.	7.83	6,570
10	11.23	12,700	6 p.m.	8.38	7,450	Jan. 7		
2 p.m.	12.24	14,900	12 p.m.	7.76	6,460			
5	12.40	15,200				6 a.m.	7.66	6,310
8	12.13	14,600	Jan. 6			12 m.	7.33	5,820
12 p.m.	11.28	12,800	8 a.m.	7.21	5,640	6 p.m.	6.95	5,270
			11	7.17	5,580	12 p.m.	6.67	4,880
Jan. 5			6 p.m.	7.79	6,500	Jan. 8		
6 a.m.	10.14	10,600	9 p.m.	7.90	6,680	12 m.	6.19	4,250
						12 p.m.	5.72	3,660

667. Pudding River near Mount Angel, Oreg.

Location.--Lat 45°03'50", long 122°49'45", in SE$\frac{1}{4}$ sec.8,T.6 S., R.1 W., on left bank on downstream side of Cline Bridge, 1$\frac{1}{2}$ miles west of Mount Angel and 4 miles upstream from Little Pudding River.

Drainage area.--204 sq mi.

Gage-height record.--Water-stage recorder graph except 12 m. Dec. 24 to 1 p.m. Dec. 29. Datum of gage is 119.76 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for Dec. 25-28 estimated on basis of records for station at Aurora.

Maxima.--December 1955 to January 1956: Discharge, 7,620 cfs 3 a.m. Dec. 22; gage height, 27.83 ft 9 a.m. Dec. 22.

1939 to November 1955: Discharge, 15,000 cfs Feb. 17, 1949; gage height, 30.38 ft Feb. 18, 1949.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2,090	1,540	11	2,880	2,080	21	5,000	2,870
2	2,180	1,410	12	4,310	1,770	22	6,870	2,710
3	2,170	1,600	13	3,930	1,790	23	5,130	2,820
4	1,870	4,660	14	3,030	1,760	24	4,200	2,780
5	1,720	5,940	15	2,380	4,120	25	3,300	2,350
6	1,880	4,690	16	2,000	5,220	26	3,000	1,950
7	2,110	4,730	17	1,780	3,930	27	5,200	1,670
8	2,100	3,720	18	1,640	3,440	28	3,500	1,410
9	2,590	2,970	19	2,170	3,100	29	2,920	1,290
10	2,450	2,450	20	3,180	3,090	30	2,200	1,180
						31	1,740	1,050
Monthly mean discharge, in cubic feet per second							2,952	2,777
Runoff, in inches							16.68	15.69
Runoff, in acre-feet							181,500	170,800

Gate height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22--Con.			Jan. 4--Con.		
12 p.m.	12.57	1,660	12 m.	27.79	6,930	6 p.m.	25.17	6,200
			6 p.m.	27.48	6,490	9	26.03	6,690
Dec. 19			12 p.m.	26.94	5,640	11	26.40	6,830
4 a.m.	12.67	1,680				12 p.m.	26.60	6,850
6	12.84	1,780	Dec. 23					
8	13.26	1,920	12 m.	25.59	5,160	Jan. 5		
12 m.	14.42	2,190	12 p.m.	24.31	4,570	1 a.m.	26.74	6,830
4 p.m.	15.66	2,450				3	26.90	6,700
8	16.55	2,600	Dec. 24			6	27.02	6,470
12 p.m.	17.08	2,690	12 m.	22.67	3,820	9	26.94	6,220
						12 m.	26.75	5,900
Dec. 20			Jan. 2			6 p.m.	26.12	5,400
6 a.m.	17.67	2,870	12 p.m.	12.85	1,470	12 p.m.	25.38	5,000
12 m.	18.52	3,140						
6 p.m.	19.68	3,510	Jan. 3			Jan. 6		
12 p.m.	20.56	3,750	6 a.m.	13.29	1,540	8 a.m.	24.30	4,560
			12 m.	13.54	1,560	12 m.	23.97	4,540
Dec. 21			6 p.m.	13.78	1,630	3 p.m.	23.90	4,650
8 a.m.	21.43	4,060	10	14.23	1,760	6	23.95	4,680
12 m.	22.25	4,660	12 p.m.	14.67	1,960	12 p.m.	24.18	4,790
6 p.m.	24.46	5,940						
12 p.m.	26.42	7,200	Jan. 4			Jan. 7		
			3 a.m.	16.14	2,410	6 a.m.	24.34	4,870
Dec. 22			6	18.25	3,120	8	24.34	4,870
3 a.m.	27.29	7,620	9	20.44	3,940	2 p.m.	24.17	4,780
6	27.73	7,580	12 m.	22.46	4,860	12 p.m.	23.36	4,380
9 a.m.	27.83	7,180	3 p.m.	24.05	5,660			

668. Pudding River at Aurora, Oreg.

Location.--Lat 45°14'00", long 122°45'00", in SE¼ sec.12, T.4 S., R.1 W., on upstream side of highway bridge at Aurora, half a mile upstream from Mill Creek.

Drainage area.--479 sq mi.

Gage-height record.--Graph of once-daily wire-weight-gage readings. Datum of gage is 77.23 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 16,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 12,300 cfs 8:30 a.m. Dec. 22 (gage height, 21.18 ft).

1928 to November 1955: Discharge, 25,400 cfs Dec. 30, 1937 (gage height, 24.5 ft, from graph based on gage readings).

Stage known, 25.0 ft about Jan. 7, 1923 (discharge, 27,900 cfs, from rating curve extended above 16,000 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	4,660	4,720	11	4,610	5,530	21	6,190	5,940
2	4,560	4,250	12	5,190	5,120	22	11,500	5,630
3	4,430	3,890	13	6,050	5,050	23	11,000	5,440
4	4,160	5,890	14	5,920	4,520	24	8,340	5,410
5	3,740	9,600	15	5,200	5,030	25	7,160	5,380
6	3,720	8,300	16	4,800	7,440	26	7,030	5,050
7	3,940	9,480	17	4,430	6,850	27	8,840	4,610
8	4,090	8,400	18	3,980	6,360	28	7,700	4,140
9	4,480	7,100	19	3,980	6,440	29	6,600	3,580
10	4,750	6,160	20	4,740	6,200	30	5,840	3,200
						31	5,200	2,680
Monthly mean discharge, in cubic feet per second							5,704	5,722
Runoff, in inches							13.73	13.77
Runoff, in acre-feet							350,700	351,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23--Con.			Jan. 4		
12 p.m.	13.05	3,820	4 p.m.	20.75	11,000	6 a.m.	15.30	4,850
			12 p.m.	20.10	9,400	12 m.	16.80	5,700
Dec. 19						6 p.m.	18.20	6,800
8 a.m.	13.08	3,840	Dec. 24			12 p.m.	19.45	8,290
4 p.m.	13.45	4,000	8 a.m.	19.58	8,490			
12 p.m.	14.25	4,360	4 p.m.	19.25	8,010	Jan. 5		
Dec. 20			12 p.m.	18.95	7,620	6 a.m.	20.35	9,980
8 a.m.	15.00	4,700				10	20.60	10,600
4 p.m.	15.30	4,850	Dec. 25			4 p.m.	20.30	9,850
12 p.m.	15.60	5,000	8 a.m.	18.70	7,320	12 p.m.	19.55	8,440
			4 p.m.	18.40	7,000			
Dec. 21			12 p.m.	18.10	6,700	Jan. 6		
8 a.m.	16.05	5,230				8 a.m.	19.20	7,940
4 p.m.	17.65	6,320	Dec. 26			4 p.m.	19.40	8,220
8	18.80	7,440	8 a.m.	17.95	6,560	12 p.m.	19.90	9,020
12 p.m.	20.15	9,500	4 p.m.	18.50	7,100			
			12 p.m.	19.35	8,150	Jan. 7		
Dec. 22						8 a.m.	20.25	9,720
6 a.m.	21.15	12,200	Jan. 2			4 p.m.	20.20	9,600
8:30	21.18	12,300	12 p.m.	13.40	3,980	12 p.m.	20.00	9,200
12 m.	21.15	12,200						
6 p.m.	20.80	11,200	Jan. 3			Jan. 8		
12 p.m.	20.80	11,200	10 a.m.	13.00	3,800	12 m.	19.50	8,360
			4 p.m.	13.10	3,840	12 p.m.	19.00	7,680
Dec. 23			10	13.40	3,980			
8 a.m.	20.95	11,600	12 p.m.	13.75	4,140			

669. Tualatin River at Gaston, Oreg.

Location.--Lat 45°26'15", long 123°10'05", in W½ sec.34, T.1 S., R.4 W., on right bank 1.5 miles west of Gaston.

Drainage area.--51 sq mi, approximately, at measuring section at Gaston.

Gage-height record.--Graph of twice-daily staff-gage readings except Jan. 26, 27. Altitude of gage is 175 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,000 cfs and extended above by logarithmic plotting. Discharge Jan. 26, 27 estimated on basis of records for Scoggin Creek near Gaston and station near Dilley.

Maxima.--December 1955 to January 1956: Discharge, 8,170 cfs about 7 p.m. Dec. 21 (gage height, 13.18 ft).
1940 to November 1955: Discharge, 4,820 cfs Feb. 17, 1949 (gage height, 12.23 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	686	347	11	996	460	21	3,820	742
2	703	563	12	1,180	427	22	2,850	710
3	567	1,780	13	727	438	23	1,460	649
4	470	3,330	14	542	536	24	1,060	604
5	431	1,870	15	470	1,240	25	892	564
6	462	1,440	16	442	1,420	26	977	500
7	549	1,100	17	387	1,130	27	754	400
8	563	789	18	352	942	28	558	335
9	587	586	19	566	800	29	468	304
10	607	502	20	1,240	800	30	407	262
						31	357	232
Monthly mean discharge, in cubic feet per second							843	832
Runoff, in inches							19.05	18.82
Runoff, in acre-feet							51,830	51,180

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23--Con.			Jan. 4		
12 p.m.	2.88	371	12 m.	7.70	1,330	5 a.m.	12.30	4,770
Dec. 19			5 p.m.	7.50	1,290	8	12.20	4,520
5 a.m.	2.95	387	12 p.m.	7.40	1,270	6 p.m.	10.68	2,280
2 p.m.	4.48	669				12 p.m.	9.80	1,890
9	4.63	690	Dec. 24					
12 p.m.	5.15	763	8 a.m.	6.66	1,120	Jan. 5		
			5 p.m.	5.91	972	5 a.m.	9.47	1,790
Dec. 20			12 p.m.	5.46	882	6 p.m.	10.02	1,960
8 a.m.	7.38	1,140				12 p.m.	9.53	1,810
12 m.	7.64	1,190	Dec. 25					
12 p.m.	9.64	1,730	8 a.m.	5.08	806	Jan. 6		
			12 m.	5.05	800	8 a.m.	8.30	1,480
Dec. 21			5 p.m.	5.89	968	5 p.m.	7.52	1,290
3 a.m.	9.70	1,750	12 p.m.	6.25	1,040	12 p.m.	7.20	1,230
9	9.27	1,590						
12 m.	9.72	1,760	Jan. 1			Jan. 7		
5 p.m.	12.85	6,670	12 p.m.	2.65	316	8 a.m.	6.75	1,140
7	13.18	8,170				6 p.m.	6.30	1,050
9	13.10	7,770	Jan. 2			12 p.m.	5.90	970
12 p.m.	12.45	5,220	8 a.m.	2.75	340			
			6 p.m.	4.55	703	Jan. 8		
Dec. 22			12 p.m.	7.00	1,190	8 a.m.	5.08	806
8 a.m.	11.08	2,610				6 p.m.	4.65	721
5 p.m.	10.69	2,280	Jan. 3			12 p.m.	4.40	676
12 p.m.	10.18	2,010	3 a.m.	8.50	1,520			
			11	8.54	1,540			
Dec. 23			5 p.m.	9.32	1,750			
8 a.m.	8.30	1,480	12 p.m.	11.43	3,000			

670. Scoggin Creek near Gaston, Oreg.

Location.--Lat 45°27'30", long 123°09'15", in NW¼ sec.26, T.1 S., R.4 W., on left bank 100 ft upstream from highway bridge, 1½ miles upstream from mouth, and 1.7 miles northwest of Gaston.

Drainage area.--44.0 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 168.92 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 5,320 cfs 7 p.m. Dec. 21 (gage height, 15.94 ft).

1940 to November 1955: Discharge, 3,460 cfs Feb. 17, 1949 (gage height, 15.53 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	491	246	11.....	789	349	21.....	2,610	602
2.....	500	344	12.....	972	311	22.....	1,980	581
3.....	440	887	13.....	658	309	23.....	1,100	528
4.....	383	1,820	14.....	492	342	24.....	824	498
5.....	348	1,350	15.....	409	768	25.....	665	424
6.....	402	1,070	16.....	381	900	26.....	730	366
7.....	471	828	17.....	333	714	27.....	613	319
8.....	470	613	18.....	298	656	28.....	476	267
9.....	478	485	19.....	422	646	29.....	379	236
10.....	469	404	20.....	1,150	652	30.....	311	201
						31.....	256	181
Monthly mean discharge, in cubic feet per second......................							655	577
Runoff, in inches..							17.16	15.13
Runoff, in acre-feet...							40,260	35,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 23--Con.			Jan. 4--Con.		
12 p.m.......	4.00	310	12 p.m.......	9.44	965	8 a.m........	12.28	1,650
						12 m.........	13.42	2,290
Dec. 19			Dec. 24			2 p.m........	13.59	2,440
9 a.m........	4.92	406	6 a.m........	8.98	887	4............	13.46	2,320
2 p.m........	5.52	462	12 m.........	8.59	824	8............	12.97	1,980
9............	5.57	467	6 p.m........	8.08	751	12 p.m.......	12.52	1,750
12 p.m.......	6.15	526	12 p.m.......	7.70	701			
						Jan. 5		
Dec. 20			Dec. 25			6 a.m........	11.86	1,520
6 a.m........	8.65	834	6 a.m........	7.40	662	12 m.........	11.15	1,340
12 m.........	10.50	1,180	12 m.........	7.18	633	6 p.m........	10.40	1,150
7 p.m........	11.90	1,520	7 p.m........	7.48	672	12 p.m.......	9.78	1,030
12 p.m.......	12.25	1,640	12 p.m.......	7.66	696			
						Jan. 6		
Dec. 21			Jan. 1			4 a.m........	9.52	980
2 a.m........	12.29	1,650	12 p.m.......	3.97	245	8............	10.00	1,070
9............	11.86	1,520				2 p.m........	10.46	1,160
2 p.m........	12.85	1,920	Jan. 2			6............	10.14	1,100
5............	15.00	3,820	6 a.m........	3.83	227	12 p.m.......	9.54	983
7............	15.94	5,320	12 m.........	4.07	258			
12 p.m.......	14.68	3,480	6 p.m........	5.53	428	Jan. 7		
			10...........	6.47	541	6 a.m........	9.05	898
Dec. 22			12 p.m.......	8.06	748	12 m.........	8.57	821
6 a.m........	13.27	2,170				6 p.m........	8.09	753
12 m.........	12.56	1,770	Jan. 3			12 p.m.......	7.67	697
6 p.m........	11.98	1,540	4 a.m........	8.98	887			
12 p.m.......	11.38	1,400	8............	8.72	845	Jan. 8		
			6 p.m........	9.12	909	6 a.m........	7.40	662
Dec. 23			12 p.m.......	9.73	1,020	12 m.........	6.98	607
6 a.m........	10.60	1,200				6 p.m........	6.67	567
12 m.........	9.87	1,040	Jan. 4			12 p.m.......	6.42	535
6 p.m........	9.42	962	4 a.m........	10.65	1,210			

671. Tualatin River near Dilley, Oreg.

Location.--Lat 45°28'30", long 123°07'25", in NW¼ sec.24, T.1 S., R.4 W., on left bank 5 ft upstream from county road bridge, 1 mile south of Dilley, and 1¼ miles downstream from Scoggin Creek.

Drainage area.--133 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 151.57 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 13,200 cfs 12:30 a.m. Dec. 22 (gage height, 14.78 ft).

1940 to November 1955: Discharge, 9,460 cfs Feb. 17, 1949 (gage height, 13.89 ft, from graph based on gage readings).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,540	855	11	1,790	1,110	21	6,200	1,820
2	1,580	997	12	2,600	997	22	8,130	1,760
3	1,390	2,300	13	1,980	968	23	3,640	1,600
4	1,120	4,800	14	1,430	960	24	2,660	1,550
5	991	4,100	15	1,140	1,940	25	2,040	1,300
6	1,030	3,000	16	1,030	2,620	26	2,080	1,120
7	1,320	2,590	17	912	2,360	27	1,960	991
8	1,270	1,920	18	813	1,970	28	1,580	857
9	1,400	1,580	19	958	1,860	29	1,240	790
10	1,280	1,280	20	2,340	1,910	30	1,040	704
						31	902	610
Monthly mean discharge, in cubic feet per second							1,916	1,717
Runoff, in inches							16.61	14.88
Runoff, in acre-feet							117,800	105,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23			Jan. 3--Con.		
12 p.m.	9.85	804	8 a.m.	12.80	3,810	12 m.	12.13	2,320
Dec. 19			4 p.m.	12.61	3,340	6 p.m.	12.28	2,620
6 a.m.	10.04	831	12 p.m.	12.49	3,040	12 p.m.	12.40	2,860
6 p.m.	10.99	1,060						
12 p.m.	11.27	1,190	Dec. 24			Jan. 4		
			8 a.m.	12.38	2,820	6 a.m.	12.73	3,510
Dec. 20			4 p.m.	12.23	2,520	1 p.m.	13.40	5,080
6 a.m.	11.73	1,660	12 p.m.	12.09	2,240	2	13.27	5,170
12 m.	12.09	2,240				7	13.65	6,710
6 p.m.	12.44	2,940	Dec. 25			12 p.m.	13.43	5,780
12 p.m.	12.81	3,840	8 a.m.	11.99	2,040			
			4 p.m.	11.93	1,960	Jan. 5		
Dec. 21			12 p.m.	11.96	2,000	8 a.m.	13.01	4,390
6 a.m.	12.98	4,300				4 p.m.	12.67	3,480
12 m.	13.19	4,930	Jan. 1			12 p.m.	12.50	3,060
4 p.m.	13.49	6,020	12 p.m.	10.21	857			
8	14.09	9,100				Jan. 6		
12 p.m.	14.77	13,200	Jan. 2			10 a.m.	12.42	2,900
			6 a.m.	10.13	844	6 p.m.	12.50	3,060
Dec. 22			12 m.	10.29	873	12 p.m.	12.48	3,020
12:30 a.m.	14.78	13,200	4 p.m.	10.72	976			
4	14.58	12,000	8	11.28	1,200	Jan. 7		
8	14.16	9,520	12 p.m.	11.70	1,610	8 a.m.	12.35	2,760
12 m.	13.74	7,160				4 p.m.	12.19	2,440
6 p.m.	13.35	5,460	Jan. 3			12 p.m.	12.04	2,140
12 p.m.	13.05	4,510	6 a.m.	11.97	2,020			

672. Beaver Creek near Glenwood, Oreg.

(Crest-stage station)

Location.--Lat 45°40'10", long 123°17'25", in SW¼ sec.10, T.2 N., R.5 W., at culvert, 1.7 miles northwest of Glenwood and 2½ miles upstream from mouth.

Drainage area.--4.70 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 550 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 100 cfs and by flow through culvert at 265 cfs.

Maxima.--December 1955 to January 1956: Discharge, 265 cfs Jan. 4 (gage height, 17.17 ft).

1951 to November 1955: Discharge, 229 cfs Dec. 9, 1953 (gage height, 17.04 ft).

673. Bateman Creek near Glenwood, Oreg.

(Crest-stage station; previously published as Gales Creek tributary near Gales Creek, Oreg.)

Location.--Lat 45°37'30", long 123°15'40", in SE¼ sec.26, T.2 N., R.5 W., at culvert on State Highway 6, 0.1 mile upstream from mouth and 3½ miles northeast of Gales Creek.

Drainage area.--1.34 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 35 cfs and by flow through culvert at 145 cfs.

Maxima.--December 1955 to January 1956: Discharge, 145 cfs Dec. 21 (gage height, 16.0 ft).

1951 to November 1955: Discharge, 115 cfs Feb. 12, 1954 (gage height, 13.88 ft).

674. Gales Creek near Forest Grove, Oreg.

Location.--Lat 45°33'20", long 123°11'05", in E½ sec.21, T.1N., R.4 W., on left bank at upstream side of bridge, 2½ miles southeast of village of Gales Creek and 4½ miles northwest of Forest Grove.

Drainage area.--66 sq mi, approximately.

Gage-height record.--Water-stage recorder graph to 1 p.m. Jan. 3. Graph for Jan. 4-31 constructed from twice-daily wire-weight-gage readings, except Jan. 4 and 10 when gage was read once daily. Datum of gage is 202.81 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 6,300 cfs 7 p.m. Dec. 21 (gage height, 11.86 ft).

1940 to November 1955: Discharge, 6,410 cfs Feb. 17, 1949 (gage height, 10.90 ft, from floodmark at downstream side of bridge at datum 0.44 ft higher).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	744	459	11.....	1,290	564	21.....	3,860	945
2.....	732	712	12.....	1,600	520	22.....	3,560	870
3.....	656	1,800	13.....	1,080	528	23.....	2,080	820
4.....	568	3,330	14.....	804	654	24.....	1,520	835
5.....	528	2,260	15.....	660	1,500	25.....	1,220	726
6.....	674	1,940	16.....	572	1,690	26.....	1,180	618
7.....	784	1,340	17.....	484	1,250	27.....	1,000	548
8.....	852	969	18.....	444	1,080	28.....	800	476
9.....	848	712	19.....	587	1,120	29.....	658	403
10.....	816	645	20.....	1,890	1,090	30.....	540	360
						31.....	462	324
Monthly mean discharge, in cubic feet per second......................							1,080	1,003
Runoff, in inches..							18.87	17.52
Runoff, in acre-feet...							66,430	61,660

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22--Con.			Jan. 3		
12 p.m.......	2.56	484	6 p.m........	7.13	2,900	4 a.m........	5.15	1,630
			12 p.m.......	6.60	2,550	8............	5.35	1,750
Dec. 19						2 p.m........	5.45	1,810
10 a.m.......	2.80	580	Dec. 23			8............	5.70	1,960
6 p.m........	2.82	588	6 a.m........	6.10	2,220	12 p.m.......	6.05	2,190
12 p.m.......	3.29	776	12 m.........	5.75	2,000			
Dec. 20			9 p.m........	5.60	1,900	Jan. 4		
3 a.m........	3.90	1,040	12 p.m.......	5.40	1,780	4 a.m........	6.90	2,740
6............	4.55	1,360				8............	8.00	3,510
10...........	5.14	1,690	Dec. 24			12 m.........	8.50	3,860
2 p.m........	5.94	2,170	8 a.m........	5.10	1,600	4 p.m........	8.30	3,720
6............	6.70	2,630	4 p.m........	4.80	1,420	5............	8.40	3,790
7............	6.76	2,670	12 p.m.......	4.55	1,270	12 p.m.......	7.35	3,060
10...........	6.68	2,620						
12 p.m.......	6.53	2,530	Dec. 25			Jan. 5		
			11 a.m.......	4.34	1,160	8 a.m........	6.35	2,390
Dec. 21			4 p.m........	4.57	1,280	12 m.........	6.00	2,160
5 a.m........	6.01	2,170	12 p.m.......	4.40	1,190	6 p.m........	5.65	1,930
8............	6.25	2,320				12 p.m.......	5.35	1,750
10...........	6.65	2,580	Dec. 26					
12 m.........	7.30	3,020	3 a.m........	4.40	1,190	Jan. 6		
1 p.m........	7.85	3,400	7............	4.50	1,240	2 a.m........	5.30	1,720
2............	8.65	3,960	3 p.m........	4.38	1,180	10...........	6.10	2,220
3............	9.65	4,660	12 p.m.......	4.23	1,100	4 p.m........	5.75	2,000
4............	10.70	5,440				12 p.m.......	5.20	1,660
5............	11.50	6,040	Jan. 1					
7............	11.86	6,300	12 p.m.......	2.77	434	Jan. 7		
10...........	11.20	5,810				12 m.........	4.60	1,300
12 p.m.......	10.60	5,360	Jan. 2			12 p.m.......	4.25	1,110
			8 a.m........	2.82	452			
Dec. 22			2 p.m........	3.50	735	Jan. 8		
3 a.m........	9.60	4,630	5............	3.60	780	12 m.........	3.95	995
6............	8.70	4,000	8............	4.15	1,060	12 p.m.......	3.75	855
12 m.........	7.85	3,400	12 p.m.......	4.80	1,420			

675. McKay Creek near North Plains, Oreg.

Location.--Lat 45°37'35", long 122°58'30", in SE$\frac{1}{4}$ sec.30, T.2 N., R.2 W., on downstream end of left timber bridge bent, about 1$\frac{3}{4}$ miles upstream from Jackson Creek and 2$\frac{1}{2}$ miles northeast of North Plains.

Drainage area.--27.6 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 172.57 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,000 cfs 8:30 p.m. Dec. 21 (gage height, 11.35 ft).
1940-43, 1948 to November 1955: Discharge, 2,100 cfs Feb. 17, 1949 (gage height, 11.23 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	244	122	11.....	427	179	21.....	869	274
2.....	241	136	12.....	568	162	22.....	839	294
3.....	215	551	13.....	348	166	23.....	610	287
4.....	178	823	14.....	244	163	24.....	403	260
5.....	162	736	15.....	188	300	25.....	295	223
6.....	188	555	16.....	162	368	26.....	292	194
7.....	241	411	17.....	139	299	27.....	280	164
8.....	266	309	18.....	133	260	28.....	221	130
9.....	271	244	19.....	190	249	29.....	173	115
10.....	256	207	20.....	607	279	30.....	142	93
						31.....	121	79
Monthly mean discharge, in cubic feet per second......................							307	278
Runoff, in inches..							12.82	11.63
Runoff, in acre-feet...							18,870	17,120

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 22--Con.			Jan. 3--Con.		
12 p.m.......	5.41	130	4 p.m........	10.96	806	6 a.m........	9.63	446
			12 p.m.......	10.79	747	9............	10.06	532
Dec. 18						12 m.........	10.37	602
8 a.m........	5.32	127	Dec. 23			3 p.m........	10.51	650
12 m.........	5.40	130	8 a.m........	10.51	650	12 p.m.......	10.73	714
6 p.m........	5.60	138	4 p.m........	10.14	558			
12 p.m.......	5.68	141	12 p.m.......	9.85	500	Jan. 4		
						10 a.m.......	11.10	860
Dec. 19			Dec. 24			1 p.m........	11.12	870
8 a.m........	6.30	170	8 a.m........	9.49	424	4............	11.10	860
12 m.........	6.74	194	4 p.m........	9.12	368	12 p.m.......	10.98	813
4 p.m........	6.99	209	12 p.m.......	8.80	335			
8............	7.17	220				Jan. 5		
12 p.m.......	7.51	242	Dec. 25			8 a.m........	10.87	774
			12 m.........	8.34	291	4 p.m........	10.67	711
Dec. 20			8 p.m........	8.05	269	12 p.m.......	10.38	630
3 a.m........	8.08	282	12 p.m.......	8.03	268			
6............	9.09	378				Jan. 6		
9............	10.00	540	Jan. 1			8 a.m........	10.04	548
12 m.........	10.64	702	12 p.m.......	5.19	111	4 p.m........	10.11	562
3 p.m........	10.90	785				12 p.m.......	9.70	480
9............	11.02	828	Jan. 2					
12 p.m.......	11.01	824	4 a.m........	5.08	107	Jan. 7		
			8............	5.08	107	12 m.........	9.29	408
Dec. 21			10...........	5.13	109	12 p.m.......	8.84	349
8 a.m........	10.95	802	12 m.........	5.34	117			
12 m.........	10.99	816	6 p.m........	6.22	153	Jan. 8		
8:30 p.m.....	11.35	1,000	9............	6.81	187	9 a.m........	8.58	324
12 p.m.......	11.26	946	12 p.m.......	7.72	242	3 p.m........	8.25	296
						12 p.m.......	7.86	266
Dec. 22			Jan. 3					
8 a.m........	11.11	865	3 a.m........	8.87	337			

676. Tualatin River at Farmington, Oreg.

Location.--Lat 45°27'00", long 122°57'00", in SE¼ sec.29, T.1 S., R.2 W., on upstream side of highway bridge at Farmington, 5½ miles southeast of Hillsboro.

Drainage area.--568 sq mi.

Gage-height record.--Twice-daily wire-weight-gage readings. Peak stage for Dec. 22 from floodmark. Datum of gage is 100.42 ft above mean sea level, datum of 1929. Twice-daily readings of auxiliary staff gage at highway bridge 6½ miles downstream used to determine fall.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 21,000 cfs. Fall used as a factor throughout period.

Maxima.--December 1955 to January 1956: Discharge, 24,200 cfs about 8 p.m. Dec. 22 (gage height, 36.03 ft).

1939 to November 1955: Discharge, 17,400 cfs Feb. 18, 1949; gage height, 34.5 ft Feb. 18, 1949, from graph based on gage readings.

Stage known, about 37 ft Dec. 22 or 23, 1933.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	7,290	4,810	11.....	5,300	6,380	21.....	8,580	6,890
2.....	6,520	5,030	12.....	5,600	5,780	22.....	21,800	6,840
3.....	6,350	5,320	13.....	6,280	5,270	23.....	19,000	6,710
4.....	5,650	7,860	14.....	6,880	5,000	24.....	13,000	6,540
5.....	5,400	15,800	15.....	6,570	5,600	25.....	10,100	6,440
6.....	5,350	14,100	16.....	5,900	6,380	26.....	8,990	6,010
7.....	5,070	12,100	17.....	5,290	6,970	27.....	8,320	5,770
8.....	4,940	10,000	18.....	4,910	7,450	28.....	7,810	5,460
9.....	4,980	8,420	19.....	4,830	7,270	29.....	6,770	4,820
10.....	5,140	7,150	20.....	5,740	7,140	30.....	6,080	4,290
						31.....	5,740	3,930
Monthly mean discharge, in cubic feet per second......................							7,425	7,017
Runoff, in inches..							15.07	14.24
Runoff, in acre-feet...							456,600	431,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 24			Jan. 4--Con.		
12 p.m.......	25.58	4,920	8 a.m........	34.18	13,900	4 p.m........	31.00	8,240
			4 p.m........	33.74	12,100	8............	32.08	9,830
Dec. 20			12 p.m.......	33.30	10,800	12 p.m.......	33.00	12,000
8 a.m........	26.26	5,320						
4 p.m........	27.64	6,110	Dec. 25			Jan. 5		
12 p.m.......	28.40	6,660	8 a.m........	33.04	10,300	4 a.m........	33.80	14,800
			4 p.m........	32.70	10,100	8............	34.26	16,400
Dec. 21			12 p.m.......	32.35	9,270	12 m.........	34.42	17,100
8 a.m........	29.16	7,000				4 p.m........	34.43	16,600
12 m.........	29.90	7,380	Dec. 26			12 p.m.......	34.24	15,300
4 p.m........	31.00	8,330	8 a.m........	32.22	8,990			
8............	32.45	11,200	4 p.m........	32.16	8,910	Jan. 6		
12 p.m.......	33.80	14,800	12 p.m.......	32.08	8,860	8 a.m........	34.05	14,200
						4 p.m........	33.93	13,800
Dec. 22			Jan. 2			12 p.m.......	33.80	13,300
4 a.m........	34.90	19,200	12 p.m.......	26.10	5,180			
8............	35.44	21,500				Jan. 7		
4 p.m........	35.94	23,800	Jan. 3			8 a.m........	33.62	12,400
8............	36.03	24,200	8 a.m........	26.18	5,160	4 p.m........	33.43	11,700
12 p.m.......	35.90	23,600	4 p.m........	26.44	5,290	12 p.m.......	33.20	11,100
			12 p.m.......	27.50	5,830			
Dec. 23						Jan. 8		
8 a.m........	35.43	20,000	Jan. 4			8 a.m........	32.90	10,500
4 p.m........	35.00	17,400	8 a.m........	28.80	6,570	4 p.m........	32.47	9,430
12 p.m.......	34.58	15,400	12 m.........	29.90	7,380	12 p.m.......	32.28	9,180

677. Tualatin River near Willamette, Oreg.

Location.--Lat 45°21'05", long 122°40'35", in SW¼ sec.34, T.2 S., R.1 E., on left bank 300 ft upstream from county bridge, 1 mile northwest of Willamette, and 1¾ miles above mouth.

Drainage area.--710 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 85.61 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 21,400 cfs 10 p.m. Dec. 23 (gage height, 16.27 ft).
1928 to November 1955: Discharge, 29,300 cfs Dec. 23, 1933.

Remarks.--Records include flow of Oswego Canal, which diverts water 4½ miles above station for recreational use in Oswego Lake and development of power between outlet of that lake and Willamette River, to which water is returned.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	Decmeber	January
1.....	10,300	6,530	11.....	5,940	8,750	21.....	8,410	7,550
2.....	9,300	6,040	12.....	6,450	7,710	22.....	11,800	7,470
3.....	8,370	6,500	13.....	6,420	6,990	23.....	19,800	7,410
4.....	7,580	8,570	14.....	6,510	6,460	24.....	19,900	7,340
5.....	7,020	9,620	15.....	6,700	7,180	25.....	16,000	7,090
6.....	6,640	14,000	16.....	6,730	7,070	26.....	12,900	6,800
7.....	6,140	15,800	17.....	6,510	6,860	27.....	11,300	6,370
8.....	5,880	14,100	18.....	6,130	7,050	28.....	10,000	5,970
9.....	5,950	11,900	19.....	6,110	7,360	29.....	8,990	5,580
10.....	5,780	10,100	20.....	7,090	7,600	30.....	8,020	5,120
						31.....	7,170	4,620
Monthly mean discharge, in cubic feet per second.....................							8,769	7,984
Runoff, in inches..							14.24	12.96
Runoff, in acre-feet...							539,200	490,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 23--Con.			Jan. 4		
12 p.m.......	9.48	5,920	7 a.m........	-	19,400	3 a.m........	10.28	7,130
			8............	-	19,300	9............	11.14	8,530
Dec. 19			4 p.m........	-	21,100	2 p.m........	11.68	9,460
8 a.m........	9.57	6,060	10...........	-	21,400	4............	11.71	9,500
4 p.m........	9.66	6,180	12 p.m.......	-	21,300	12 p.m.......	11.43	9,010
12 p.m.......	9.72	6,270						
			Dec. 24			Jan. 5		
Dec. 20			8 a.m........	-	20,600	4 a.m........	11.35	8,870
6 a.m........	10.04	6,760	4 p.m........	-	19,400	8............	11.39	8,940
12 m.........	10.36	7,260	12 p.m.......	-	18,000	12 m.........	11.57	9,250
6 p.m........	10.50	7,480				4 p.m........	11.89	9,820
12 p.m.......	10.47	7,430	Dec. 25			12 p.m.......	12.74	11,400
			12 m.........	14.69	16,000			
Dec. 21			12 p.m.......	13.92	14,000	Jan. 6		
6 a.m........	10.45	7,400				6 a.m........	13.41	12,700
10...........	10.54	7,540	Dec. 26			12 m.........	14.09	14,300
2 p.m........	10.92	8,170	6 a.m........	13.60	13,300	6 p.m........	14.51	15,400
6............	11.70	9,500	6 p.m........	13.18	12,400	12 p.m.......	14.74	16,000
10...........	12.15	10,400	12 p.m.......	13.00	12,000			
12 p.m.......	12.25	10,600				Jan. 7		
			Jan. 1			5 a.m........	14.79	16,100
Dec. 22			12 p.m.......	9.68	6,200	12 m.........	14.73	16,000
6 a.m........	12.19	10,300				6 p.m........	14.62	15,600
9............	12.27	10,600	Jan. 2			12 p.m.......	14.46	15,200
12 m.........	12.52	11,100	10 a.m.......	9.50	5,950			
4 p.m........	13.07	12,100	6 p.m........	9.49	5,940	Jan. 8		
8............	13.78	13,700	12 p.m.......	9.72	6,270	8 a.m........	14.20	14,500
12 p.m.......	14.66	15,900				12 p.m.......	13.52	13,000
			Jan. 3					
Dec. 23			12 m.........	9.87	6,490			
4 a.m........	-	18,000	12 p.m.......	10.03	6,740			

678. Clackamas River at Big Bottom, Oreg.

Location.--Lat 45°01'00", long 121°55'00", in SE¼ sec.26, T.6 S., R.7 E., on right bank just downstream from Pot Creek at lower end of Big Bottom, half a mile upstream from site of proposed dam and 28 miles southeast of Estacada.

Drainage area.--136 sq mi at measuring section 2,000 ft downstream.

Gage-height record.--Water-stage recorder graph prior to 9 a.m. Dec. 22, at which time gage was destroyed by flood. Datum of gage is 2,057.56 ft above mean sea level, datum of 1929 (Public Roads Administration bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,800 cfs and extended above by logarithmic plotting. Discharge for period of no gage-height record estimated on basis of two discharge measurements, weather records, and records for station above Three Lynx Creek and Oak Grove Fork above powerplant intake.

Maxima.--December 1955 to January 1956: Discharge, 5,650 cfs 11 p.m. Dec. 21 (gage height, 8.96 ft).

1920 to November 1955: Discharge, 6,750 cfs Mar. 31, 1931, Dec. 15, 1946, from rating curves extended above 3,500 and 1,700 cfs, respectively; gage height, 8.63 ft Jan. 18, 1953.

Remarks.--Inflow between gage and measuring section 2,000 ft downstream included in record.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,040	750	11	1,160	800	21	3,940	1,600
2	895	750	12	2,690	850	22	3,400	1,600
3	795	800	13	1,550	850	23	2,400	1,600
4	715	1,500	14	1,140	900	24	1,800	1,300
5	686	1,500	15	970	2,100	25	1,500	1,100
6	730	1,300	16	885	2,000	26	1,400	1,000
7	682	1,100	17	825	1,900	27	1,200	900
8	666	950	18	755	1,800	28	1,000	800
9	670	850	19	870	1,800	29	900	700
10	662	800	20	1,310	1,800	30	850	650
						31	800	600
Monthly mean discharge, in cubic feet per second							1,254	1,192
Runoff, in inches							10.63	10.10
Runoff, in acre-feet							77,130	73,290

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 10			Dec. 12--Con.			Dec. 20--Con.		
12 p.m.	3.64	810	6 p.m.	5.73	2,330	12 p.m.	5.85	2,450
			12 p.m.	5.32	1,950			
Dec. 11						Dec. 21		
4 a.m.	3.89	935	Dec. 13			2 a.m.	6.31	2,940
8	4.00	1,000	6 a.m.	4.99	1,670	4	6.51	3,180
12 m.	4.21	1,130	12 m.	4.78	1,510	10	6.54	3,220
5 p.m.	4.41	1,250	12 p.m.	4.47	1,290	1 p.m.	6.82	3,580
8	4.61	1,390				3	7.28	3,930
10	4.83	1,540	Dec. 19			5	7.98	4,680
12 p.m.	5.29	1,920	12 p.m.	3.90	940	8	8.64	5,440
						11	8.96	5,650
Dec. 12			Dec. 20			12 p.m.	8.94	5,610
2 a.m.	5.94	2,540	4 a.m.	3.87	925			
4	6.43	3,090	8	3.95	970	Dec. 22		
6	6.66	3,370	12 m.	4.24	1,140	6 a.m.	8.60	5,030
7	6.69	3,410	4 p.m.	4.64	1,410	9 a.m.	8.49	4,850
11 a.m.	6.39	3,040	8 p.m.	5.08	1,740			

679. Oak Grove Fork above powerplant intake, Oregon

Location.--Lat 45°04'30", long 121°57'00", in SW$\frac{1}{4}$ sec.3, T.6 S., R.7 E., on right bank, two-thirds of a mile upstream from Kink Creek, 1 mile upstream from intake of power development of Portland General Electric Co., and 24 miles southeast of Estacada.

Drainage area.--126 sq mi, includes that of Spring Creek.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,052.31 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,400 cfs and by slope-area measurement of 2,280 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,280 cfs 11 a.m. Dec. 22 (gage height, 4.46 ft).

1909 to November 1955: Discharge, 5,000 cfs Jan. 7, 1923 (gage height, 5.45 ft, site and datum then in use), computed from flow at stations on Clackamas River.

Remarks.--Records include flow of Spring Creek.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,040	836	11.....	875	804	21.....	1,420	1,060
2.....	948	788	12.....	1,320	780	22.....	2,140	1,070
3.....	876	780	13.....	1,070	740	23.....	1,780	1,080
4.....	812	1,040	14.....	924	793	24.....	1,500	860
5.....	740	972	15.....	852	1,400	25.....	1,340	940
6.....	719	908	16.....	788	1,360	26.....	1,250	932
7.....	670	860	17.....	748	1,190	27.....	1,140	892
8.....	649	812	18.....	698	1,160	28.....	1,060	836
9.....	628	764	19.....	698	1,110	29.....	1,010	796
10.....	625	764	20.....	823	1,110	30.....	948	748
						31.....	884	705
Monthly mean discharge, in cubic feet per second							999	932
Runoff, in inches							9.14	8.53
Runoff, in acre-feet							61,440	57,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 23			Jan. 14		
12 p.m.......	2.74	698	6 a.m........	4.07	1,880	10 a.m.......	2.77	719
			12 m.........	3.95	1,760	2 p.m........	2.82	756
Dec. 20			8 p.m........	3.85	1,660	8............	3.01	908
3 a.m........	2.73	691	12 p.m.......	3.80	1,610	12 p.m.......	3.15	1,020
2 p.m........	2.90	820						
8............	3.06	948	Dec. 24			Jan. 15		
12 p.m.......	3.22	1,080	12 m.........	3.68	1,490	3 a.m........	3.22	1,080
			12 p.m.......	3.59	1,410	6............	3.39	1,220
Dec. 21						9............	3.66	1,470
5 a.m........	3.34	1,180	Dec. 25			11...........	3.75	1,560
8............	3.32	1,160	12 m.........	3.50	1,320	12 m.........	3.76	1,570
12 m.........	3.40	1,230	12 p.m.......	3.47	1,290	6 p.m........	3.72	1,530
3............	3.64	1,450				12 p.m.......	3.66	1,470
6............	3.95	1,760	Dec. 26					
9............	4.08	1,890	12 m.........	3.42	1,250	Jan. 16		
12 p.m.......	4.18	1,990	6 p.m........	3.41	1,240	12 m.........	3.53	1,350
			12 p.m.......	3.36	1,190	12 p.m.......	3.42	1,250
Dec. 22						Jan. 17		
4 a.m........	4.31	2,130	Dec. 27			12 m.........	3.34	1,180
8............	4.38	2,200	12 m.........	3.30	1,140	8 p.m........	3.30	1,140
11...........	4.46	2,280	12 p.m.......	3.24	1,090	12 p.m.......	3.32	1,160
1 p.m........	4.45	2,270						
4............	4.38	2,200	Jan. 13			Jan. 18		
8............	4.24	2,050	12 p.m.......	2.78	726	10 a.m.......	3.34	1,180
12 p.m.......	4.14	1,950				12 p.m.......	3.27	1,120

680. Clackamas River above Three Lynx Creek, Oreg.

Location.--Lat 45°07'30", long 122°04'20", in NE¼ sec.21, T.5 S., R.6 E., on right bank just downstream from powerplant, 500 ft upstream from Three Lynx Creek and 17 miles southeast of Estacada.

Drainage area.--479 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,091.69 ft above mean sea level, datum of 1929, supplementary adjustment of 1947 (levels by Portland General Electric Co.).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 15,000 cfs and by slope-area measurement at 34,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 34,100 cfs 10 p.m. Dec. 21 (gage height, 15.06 ft).

1909-13, 1921 to November 1955: Discharge, 34,800 cfs Mar. 31, 1931 (gage height, 15.5 ft), from rating curve extended above 11,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4,850	2,850	11.....	7,550	3,110	21.....	19,900	5,780
2.....	4,320	2,700	12.....	14,600	3,090	22.....	25,400	5,910
3.....	3,730	2,940	13.....	7,560	3,070	23.....	12,600	6,340
4.....	3,310	7,740	14.....	5,130	3,500	24.....	7,740	5,060
5.....	3,070	6,500	15.....	4,160	13,000	25.....	5,970	4,280
6.....	3,380	4,860	16.....	3,680	10,300	26.....	5,560	3,840
7.....	3,470	4,120	17.....	3,380	6,780	27.....	4,910	3,480
8.....	3,280	3,590	18.....	2,980	6,580	28.....	4,180	3,110
9.....	3,470	3,210	19.....	3,860	6,320	29.....	3,680	2,920
10.....	3,340	2,940	20.....	6,720	6,500	30.....	3,290	2,600
						31.....	3,020	2,380
Monthly mean discharge, in cubic feet per second.....................							6,196	4,819
Runoff, in inches..							14.91	11.60
Runoff, in acre-feet...							381,000	296,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Jan. 14		
12 p.m.......	3.92	3,240	5 p.m........	12.00	22,600	6 a.m........	3.20	2,340
			7............	13.80	29,100	7............	3.70	2,950
Dec. 19			10...........	15.06	34,100	8............	3.90	3,210
2 a.m........	3.85	3,140	12 p.m.......	15.00	33,800	2 p.m........	4.03	3,380
3............	3.22	2,360				5............	4.30	3,730
5............	3.25	2,400	Dec. 22			8............	4.86	4,520
7............	4.07	3,430	8 a.m........	13.50	28,000	12 p.m.......	5.84	6,180
4 p.m........	4.84	4,490	4 p.m........	12.10	23,000			
8............	5.02	4,760	12 p.m.......	10.10	16,600	Jan. 15		
11...........	5.04	4,790				2 a.m........	5.82	6,140
12 p.m.......	4.53	4,050	Dec. 23			5............	6.48	7,480
			6 a.m........	9.20	14,000	7............	7.24	9,120
Dec. 20			8............	9.18	13,900	8............	8.15	11,200
6 a.m........	4.57	4,110	4 p.m........	8.10	11,100	10...........	9.40	14,600
7............	5.22	5,070	10...........	7.58	9,890	12 m.........	10.30	17,200
12 m.........	5.86	6,220	12 p.m.......	7.24	9,120	2 p.m........	10.55	18,000
4 p.m........	6.59	7,710				5............	10.28	17,200
8............	7.46	9,620	Dec. 24			8............	9.72	15,500
11...........	8.00	10,900	3 a.m........	6.84	8,240	12 p.m.......	9.10	13,700
12 p.m.......	7.90	10,640	7............	6.58	7,690			
			9............	6.86	8,280	Jan. 16		
Dec. 21			3 p.m........	6.53	7,580	1 a.m........	8.62	12,400
3 a.m........	8.78	12,800	10...........	6.23	6,960	7............	7.95	10,800
7............	9.76	15,600	12 p.m.......	6.03	6,560	8............	8.16	11,300
10...........	9.76	15,600				4 p.m........	7.42	9,530
1 p.m........	10.14	16,800	Jan. 13			12 p.m.......	6.87	8,300
3 p.m........	10.80	18,800	12 p.m.......	3.20	2,340			

681. Clackamas River near Cazadero, Oreg.

Location.--Lat 45°14'30", long 122°16'20", in NE¼ sec.11, T.4 S., R.4 E., on right bank half a mile upstream from backwater from Cazadero Dam of Portland General Electric Co. and 2½ miles southeast of Cazadero.

Drainage area.--657 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 533.3 ft above mean sea level, datum of 1929 (Bureau of Public Roads bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,000 cfs and by computation of peak flow over dam at 42,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 42,600 cfs 11:30 p.m. Dec. 21 (gage height, 22.62 ft).
1908 to November 1955: Discharge, 60,800 cfs Mar. 31, 1931 (gage height, 24.5 ft), by computation of peak flow over dam, from data furnished by Portland General Electric Co.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	6,510	3,930	11.....	9,790	4,240	21.....	25,200	7,790
2.....	6,120	3,690	12.....	20,500	4,310	22.....	33,000	7,750
3.....	5,430	4,070	13.....	10,600	4,250	23.....	16,100	8,280
4.....	4,780	11,500	14.....	7,170	4,430	24.....	9,990	6,920
5.....	4,470	9,540	15.....	6,260	18,200	25.....	7,600	5,900
6.....	4,880	6,790	16.....	5,490	14,400	26.....	7,370	5,400
7.....	5,170	5,780	17.....	5,170	9,400	27.....	6,650	4,900
8.....	4,950	5,010	18.....	4,600	8,760	28.....	5,600	4,340
9.....	5,430	4,440	19.....	5,630	8,360	29.....	4,980	4,030
10.....	5,000	4,040	20.....	8,980	8,560	30.....	4,480	3,640
						31.....	4,160	3,310
Monthly mean discharge, in cubic feet per second......................							8,454	6,644
Runoff, in inches..							14.83	11.66
Runoff, in acre-feet...							519,800	408,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 21--Con.			Jan. 14		
12 p.m.......	6.89	4,820	10 p.m.......	22.40	41,900	3 a.m........	6.48	4,210
			11:30........	22.62	42,600	6............	6.12	3,720
Dec. 19			12 p.m.......	22.58	42,400	10...........	6.03	3,600
5 a.m........	6.85	4,760				8 p.m........	7.05	5,060
6............	6.48	4,210	Dec. 22			10...........	7.46	5,720
8............	6.52	4,270	3 a.m........	21.62	39,600	12 p.m.......	8.31	7,190
12 m.........	7.60	5,950	6............	20.54	36,500			
6 p.m........	7.96	6,560	9............	20.09	35,200	Jan. 15		
12 p.m.......	8.11	6,830	12 m.........	19.59	33,800	3 a.m........	9.70	9,900
			4 p.m........	18.52	30,800	7............	11.00	12,600
Dec. 20			8............	16.96	26,700	9............	12.80	16,600
4 a.m........	7.80	6,290	12 p.m.......	15.38	22,800	11...........	15.08	22,000
8............	8.02	6,670				1 p.m........	16.23	24,900
12 m.........	8.98	8,460	Dec. 23			2:30.........	16.41	25,300
6 p.m........	10.20	10,900	2 a.m........	14.33	20,200	4............	16.28	25,000
12 p.m.......	11.67	14,100	5............	13.45	18,100	8............	15.08	22,000
			9............	13.00	17,100	12 p.m.......	13.98	19,400
Dec. 21			4 p.m........	11.75	14,200			
4 a.m........	12.82	16,700	12 p.m.......	10.80	12,200	Jan. 16		
7............	13.80	19,000				4 a.m........	12.68	16,300
9............	14.50	20,600	Dec. 24			8............	12.20	15,300
12 m.........	14.80	21,400	8 a.m........	9.73	9,960	4 p.m........	11.26	13,200
2 p.m........	15.50	23,000	12 m.........	9.73	9,960	12 p.m.......	10.40	11,300
4............	16.92	26,600	12 p.m.......	9.05	8,600			
6............	18.96	32,000	Jan. 13					
8 p.m........	21.15	38,200	12 p.m.......	6.60	4,380			

682. Johnson Creek at Sycamore, Oreg.

Location.--Lat 45°28'40", long 122°30'25", in lot 2, SW¼ sec.13, T.1 S., R.2 E., on right bank a third of a mile southwest of Sycamore station and 2½ miles east of city limits of Portland.

Drainage area.--28.2 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 228.47 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 1,820 cfs 12 m. Jan. 4 (gage height, 13.23 ft).
1940 to November 1955: Discharge, 2,110 cfs Feb. 10, 1949 (gage height, 13.77 ft, from floodmark).

Mean discharge, in cubic feet per second, 1955-56, of Johnson Creek at Sycamore, Oreg.

Day	December	January	Day	December	January	Day	December	January
1	224	115	11	373	136	21	839	232
2	202	175	12	432	111	22	611	222
3	167	462	13	204	145	23	247	312
4	122	1,320	14	130	227	24	158	240
5	159	438	15	99	1,120	25	124	160
6	161	404	16	92	394	26	394	120
7	139	414	17	104	200	27	363	98
8	220	251	18	97	252	28	200	79
9	293	190	19	211	296	29	134	85
10	210	156	20	542	283	30	101	74
						31	80	56
Monthly mean discharge, in cubic feet per second							240	283
Runoff, in inches							9.80	11.56
Runoff, in acre-feet							14,740	17,390

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22			Jan. 3		
12 p.m.	2.93	89	6 a.m.	9.16	755	1 a.m.	7.29	487
			9	8.12	597	2	7.38	498
Dec. 19			12 m.	7.47	510	4	7.49	513
1 a.m.	2.94	89	8 p.m.	6.27	369	5	7.50	514
6	3.54	127	12 p.m.	5.79	319	2 p.m.	6.45	388
11	5.05	248				3	6.45	388
5 p.m.	5.35	276	Dec. 23			8	7.05	458
9	5.27	268	12 m.	4.94	239	10	7.43	505
12 p.m.	5.56	296	12 p.m.	4.39	191	12 p.m.	7.96	574
Dec. 20			Dec. 24			Jan. 4		
2 a.m.	5.79	319	12 m.	3.93	154	1 a.m.	8.46	644
7	7.69	539	12 p.m.	3.65	134	5	11.27	1,210
8	7.76	548				7	12.46	1,560
10	7.86	561	Dec. 25			9	12.98	1,720
2 p.m.	8.43	640	12 m.	3.37	115	12 m.	13.23	1,820
4	8.48	647	5 p.m.	3.34	113	2 p.m.	13.10	1,770
7	8.38	633	11	3.72	139	4	12.57	1,590
10	8.10	594	12 p.m.	3.90	152	9	10.30	979
12 p.m.	7.76	548				12 p.m.	9.30	780
			Jan. 1					
Dec. 21			12 p.m.	3.26	109	Jan. 5		
5 a.m.	6.96	447				5 a.m.	7.78	550
7	6.89	439	Jan. 2			10	6.80	428
9	6.99	451	10 a.m.	3.09	98	12 m.	6.52	396
11	7.62	530	12 m.	3.29	110	4 p.m.	6.01	341
4 p.m.	10.99	1,140	4 p.m.	4.72	219	12 p.m.	5.30	271
6	11.97	1,400	7	4.82	228			
7	12.07	1,430	9	5.47	287			
12 p.m.	11.47	1,270	12 p.m.	7.05	458			

683. Willamette River tributary at Portland, Oreg.

(Crest-stage station)

Location.--Lat 45°33'50", long 122°44'40", in SE¼SE¼ sec.13, T.1 N., R.1 W., at intersection of Balboa and Culebra Streets in northwest Portland, and 0.3 mile upstream from mouth.

Drainage area.--1.46 sq mi.

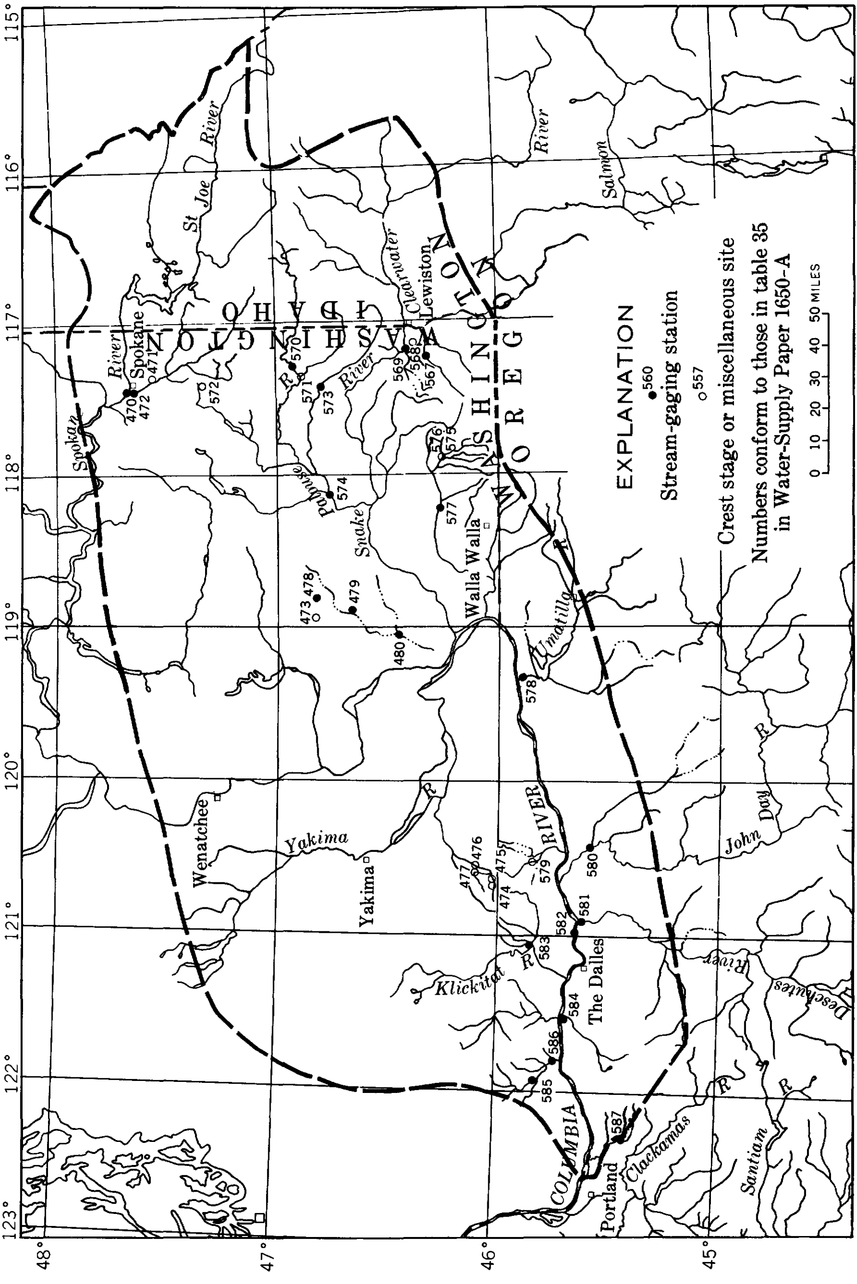
Gage-height record.--Crest stages only. Altitude of gage is 25 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements at 2 cfs and by flow through culvert at 306 cfs.

Maxima.--December 1955 to January 1956: Discharge, 306 cfs Dec. 21 (gage height, 13.33 ft).

1951 to November 1955: Discharge, 223 cfs Jan. 22, 1954 (gage height unknown).

COASTAL OREGON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Walla Walla
Wenatchee
Yakima
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Portland
Spokane River
St Joe River
Clearwater
Salmon River
Palouse
Snake River
Yakima
Klickitat R
COLUMBIA RIVER
Umatilla
John Day R
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EXPLANATION
●560 Stream-gaging station
○557 Crest stage or miscellaneous site
Numbers conform to those in table 35 in Water-Supply Paper 1650-A
0 10 20 30 40 50 MILES

Figure 10.--Map of the Coastal Oregon region showing location of flood-data sites.

YOUNGS RIVER BASIN

684. Youngs River near Astoria, Oreg.

Location.--Lat 46°04'00", long 123°47'20", in NW¼ sec.27, T.7 N., R.9 W., on left bank 50 ft upstream from crest of Youngs River Falls, 2½ miles southwest of Olney, and 9 miles southeast of Astoria.

Drainage area.--40.1 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 63.27 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,500 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 3,580 cfs 6 p.m. Dec. 21 (gage height, 11.90 ft).
1927 to November 1955: Discharge, 6,300 cfs Nov. 24, 1927 (gage height, 6.52 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	608	246	11	1,830	324	21	2,090	470
2	656	606	12	1,460	280	22	1,740	415
3	491	1,540	13	684	304	23	990	506
4	372	1,780	14	428	346	24	1,350	488
5	376	1,660	15	322	870	25	1,050	388
6	410	1,850	16	257	1,560	26	861	316
7	378	950	17	206	828	27	664	249
8	574	622	18	222	614	28	470	216
9	569	485	19	612	604	29	356	194
10	505	378	20	2,100	560	30	282	167
						31	224	148
Monthly mean discharge, in cubic feet per second							746	644
Runoff, in inches							21.46	18.52
Runoff, in acre-feet							45,890	39,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 9			Dec. 18--Con.			Dec. 22--Con.		
12 p.m.	5.12	476	6 p.m.	3.86	210	9 a.m.	8.61	1,850
			10	4.47	324	12 m.	8.39	1,760
Dec. 10			12 p.m.	5.27	521	3 p.m.	8.47	1,790
12 m.	4.89	412	Dec. 19			6	8.10	1,620
4 p.m.	4.90	415	4 a.m.	6.21	838	12 p.m.	7.30	1,270
7	5.38	554	10	5.37	551			
10	6.16	821	4 p.m.	5.08	464	Dec. 23		
12 p.m.	6.13	810	8	5.27	521	8 a.m.	6.77	1,060
			12 p.m.	6.31	874	4 p.m.	6.32	878
Dec. 11						12 p.m.	6.08	793
4 a.m.	6.05	782	Dec. 20					
8	6.98	1,140	3 a.m.	7.70	1,440	Dec. 24		
10	8.65	1,870	6	8.46	1,790	3 a.m.	6.09	796
12 m.	9.28	2,160	9	8.68	1,890	6	6.70	1,030
3 p.m.	9.25	2,140	12 m.	9.71	2,380	9	8.00	1,580
6	10.02	2,530	3 p.m.	10.58	2,810	12 m.	9.14	2,090
9	10.80	2,920	6	10.46	2,750	3 p.m.	8.26	1,700
12 p.m.	10.23	2,640	9	9.70	2,370	6	7.62	1,410
			12 p.m.	8.61	1,850	12 p.m.	6.96	1,130
Dec. 12								
4 a.m.	8.90	1,980	Dec. 21			Dec. 25		
8	8.00	1,580	4 a.m.	7.62	1,410	6 a.m.	6.54	966
12 m.	7.37	1,300	9	7.09	1,190	12 m.	6.72	1,040
6 p.m.	6.81	1,070	1 p.m.	8.50	1,800	6 p.m.	7.00	1,150
12 p.m.	6.36	894	3	10.43	2,740	12 p.m.	6.58	982
			6	11.90	3,580			
Dec. 17			9	10.58	2,810	Dec. 26		
12 p.m.	3.72	188	12 p.m.	9.40	2,220	8 a.m.	6.20	835
						4 p.m.	6.28	863
Dec. 18			Dec. 22			12 p.m.	6.06	786
8 a.m.	3.66	180	6 a.m.	8.33	1,730			

NECANICUM RIVER BASIN

685. North Fork Necanicum River near Seaside, Oreg.
(Crest-stage station)

Location.--Lat 45°54'35", long 123°48'30", in NE¼NW¼ sec.21, T.5 N., R.9 W., at fish hatchery diversion dam, near mouth, 2½ miles west of Wolf Creek Junction and 8 miles southeast of Seaside.

Drainage area.--5.70 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 300 cfs and by determination of flow over dam at 650 cfs.

Maxima.--December 1955 to January 1956: Discharge, 610 cfs Dec. 21 (gage height, 7.08 ft).
1951 to November 1955: Discharge, 680 cfs Nov. 26, 1955 (gage height, 7.25 ft).

686. South Fork Necanicum River near Seaside, Oreg.
(Crest-stage station)

Location.--Lat 45°53'40", long 123°50'20", in NW¼ sec.29, T.5 N., R.9 W., at dam on Hollenback road, 1 mile upstream from mouth and 8 miles southeast of Seaside.

Drainage area.--7.99 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 300 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,200 cfs and by determination of flow over dam at 4,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, not determined, occurred Dec. 21 (gage height, 8.85 ft, affected by backwater from debris).
1952 to November 1955: Discharge, 2,320 cfs Jan. 22, 1954 (gage height, 8.52 ft, affected by backwater from debris).

ASBURY CREEK BASIN

687. Asbury Creek near Cannon Beach, Oreg.
(Crest-stage station)

Location.--Lat 45°48'55", long 123°57'50", in SW¼ sec.19, T.4 N., R.10 W., at culvert on U.S. Highway 101, at Arch Cape, just upstream from mouth and 6 miles south of Cannon Beach.

Drainage area.--1.97 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 30 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 52 cfs and by flow through culvert at 260 cfs.

Maxima.--December 1955 to January 1956: Discharge, 260 cfs Dec. 21 (gage height, 8.96 ft).
1951 to November 1955: Discharge, 260 cfs Nov. 26, 1955 (gage height, 8.97 ft).

NEHALEM RIVER BASIN

688. Nehalem River near Foss, Oreg.

Location.--Lat 45°42'15", long 123°45'20", in NW¼ sec.35, T.3 N., R.9 W., on right bank a quarter of a mile upstream from Cook Creek and 2.2 miles northeast of Foss.

Drainage area.--667 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 32.60 ft above mean sea level, datum of 1929 (Oregon State Highway Dept. bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 39,300 cfs 9-10 p.m. Dec. 21 (gage height, 19.67 ft).
1939 to November 1955: Discharge, 36,900 cfs Feb. 17, 1949 (gage height, 19.04 ft).

Mean discharge, in cubic feet per second, 1955-56, of Nehalem River near Foss, Oreg.

Day	December	January
1.....	9,200	4,220
2.....	9,800	5,430
3.....	9,440	13,000
4.....	7,790	23,000
5.....	6,650	24,300
6.....	6,520	23,200
7.....	7,410	18,000
8.....	8,440	13,000
9.....	8,880	9,260
10.....	8,350	7,250
11.....	14,400	6,080
12.....	19,100	5,420
13.....	13,600	5,420
14.....	9,120	5,570
15.....	6,820	11,300
16.....	5,520	17,600
17.....	4,640	14,800
18.....	4,180	11,200
19.....	5,960	9,560
20.....	12,800	9,060
21.....	25,800	8,400
22.....	36,000	7,700
23.....	30,400	7,430
24.....	19,800	7,430
25.....	14,200	7,000
26.....	12,200	6,140
27.....	10,400	5,240
28.....	8,480	4,440
29.....	6,820	3,850
30.....	5,570	3,340
31.....	4,650	2,900
Monthly mean discharge, in cubic feet per second......................	11,390	9,695
Runoff, in inches..	19.68	16.76
Runoff, in acre-feet..	700,000	596,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 17		
12 p.m.......	6.15	4,260
Dec. 18		
6 a.m........	6.04	4,110
12 m.........	6.00	4,050
9 p.m........	6.13	4,230
12 p.m.......	6.53	4,790
Dec. 19		
4 a.m........	7.52	6,230
8............	7.57	6,310
12 m.........	7.35	5,980
6 p.m........	7.14	5,660
12 p.m.......	7.69	6,500
Dec. 20		
6 a.m........	9.38	9,560
12 m.........	11.07	13,300
6 p.m........	12.24	16,100
9............	12.59	17,000
12 p.m.......	12.81	17,500
Dec. 21		
9 a.m........	13.19	18,600
12 m.........	13.80	20,400
2 p.m........	14.81	23,400
4............	16.92	29,800
6............	19.09	37,300
7............	19.50	38,800
9............	19.67	39,300
10...........	19.67	39,300
12 p.m.......	19.53	38,900
Dec. 22		
6 a.m........	18.75	36,100
Dec. 22--Con.		
12 m.........	18.66	35,800
6 p.m........	18.58	35,500
12 p.m.......	18.19	34,200
Dec. 23		
6 a.m........	17.78	32,700
12 m.........	17.25	30,900
6 p.m........	16.44	28,300
12 p.m.......	15.35	25,000
Dec. 24		
6 a.m........	14.23	21,700
12 m.........	13.53	19,600
6 p.m........	12.86	17,600
12 p.m.......	12.16	15,900
Dec. 25		
9 a.m........	11.38	14,000
9 p.m........	11.21	13,600
12 p.m.......	11.09	13,300
Dec. 26		
8 a.m........	10.72	12,500
4 p.m........	10.46	11,900
12 p.m.......	10.24	11,400
Jan. 1		
12 p.m.......	6.03	4,090
Jan. 2		
4 a.m........	6.01	4,060
8............	6.13	4,230
12 m.........	6.57	4,850
4 p.m........	7.02	5,480
Jan. 2--Con.		
8 p.m........	8.05	7,090
12 p.m.......	9.45	9,700
Jan. 3		
4 a.m........	9.92	10,600
8............	10.34	11,600
12 m.........	10.69	12,400
4 p.m........	11.20	13,600
8............	12.13	15,800
12 p.m.......	13.21	18,600
Jan. 4		
6 a.m........	14.33	22,000
12 m.........	15.03	24,100
6 p.m........	15.14	24,400
12 p.m.......	15.06	24,200
Jan. 5		
12 m.........	15.14	24,400
12 p.m.......	15.06	24,200
Jan. 6		
5 a.m........	15.38	25,100
10 p.m.......	15.14	24,400
3 p.m........	14.61	22,800
8............	14.00	21,000
12 p.m.......	13.61	19,800
Jan. 7		
4 a.m........	13.34	19,000
12 m.........	13.04	18,100
6 p.m........	12.68	17,200
12 p.m.......	12.15	15,900

PACIFIC OCEAN TRIBUTARY

689. Patterson Creek at Bay City, Oreg.

(Crest-stage station; previously published as Pacific Ocean tributary at Bay City, Oreg.

Location.--Lat 45°31'40", long 123°53'15", in SE¼ sec.34, T.1 N., R.10 W., at culvert on U.S. Highway 101 at Bay City, 0.3 mile upstream from mouth.

Drainage area.--1.87 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 50 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 30 cfs and by flow through culvert at 206 cfs.

Maxima.--December 1955 to January 1956: Discharge, 188 cfs Dec. 21 (gage height, 12.85 ft).

1951 to November 1955: Discharge, 207 cfs Nov. 26, 1955 (gage height, 13.08 ft).

WILSON RIVER BASIN

690. Wilson River near Tillamook, Oreg.

Location.--Lat 45°29'10", long 123°43'30", in NW$\frac{1}{4}$ sec.18, T.1 S., R.8 W., on right bank 1 mile upstream from North Fork and 6$\frac{1}{2}$ miles east of Tillamook.

Drainage area.--159 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 1 to 11:30 a.m. Dec. 28 and 5 p.m. Dec. 28 to 4 p.m. Jan. 3. Peak stage for Dec. 21 from floodmark. Datum of gage is 42.13 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 11,000 cfs and extended above by logarithmic plotting. Discharge Dec. 1-27, Dec. 29 to Jan. 3 was estimated on basis of recorded range in stage, weather records, and records for Nehalem River near Foss.

Maxima.--December 1955 to January 1956: Discharge, 21,100 cfs about 12 p.m. Dec. 21 (gage height, 15.28 ft).

1914-16, 1931 to November 1955: Discharge, 30,000 cfs Dec. 21, 1933 (gage height, 19.28 ft, at site 100 ft downstream at datum 0.93 ft higher), from rating curve extended above 15,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4,600	1,800	11.....	8,000	1,910	21.....	14,000	3,250
2.....	4,800	2,500	12.....	7,500	1,900	22.....	10,000	3,120
3.....	4,200	5,000	13.....	4,800	2,080	23.....	7,000	3,070
4.....	3,600	10,700	14.....	3,400	2,360	24.....	5,000	2,720
5.....	3,200	7,020	15.....	2,500	6,950	25.....	4,400	2,230
6.....	3,600	5,400	16.....	2,000	9,100	26.....	3,800	1,920
7.....	4,000	3,850	17.....	1,800	5,720	27.....	3,000	1,600
8.....	4,400	2,820	18.....	1,600	4,050	28.....	2,200	1,410
9.....	4,000	2,340	19.....	2,500	3,860	29.....	1,900	1,240
10.....	4,400	2,020	20.....	6,000	3,800	30.....	1,700	1,060
						31.....	1,500	943
Monthly mean discharge, in cubic feet per second......................							4,368	3,476
Runoff, in inches..							31.67	25.20
Runoff, in acre-feet..							268,600	213,700

TRASK RIVER BASIN

691. Trask River near Tillamook, Oreg.

(Gaging station, discontinued 1955)

Location.--Lat 45°26'30", long 123°43'00", in NW$\frac{1}{4}$ sec.31, T.1 S., R.8 W., on right bank, 0.5 mile upstream from Gold Creek and 6 miles east of Tillamook.

Drainage area.--143 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 12,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 20,200 cfs, date unknown (gage height, 13.09 ft).

1931-55: Discharge, 20,000 cfs Dec. 22, 1933 (gage height, 13.00 ft).

Flood of November 1921 or March 1931 reached a stage of about 17 ft (discharge, 30,000 cfs).

SILETZ RIVER BASIN

692. Siletz River at Siletz, Oreg.

Location.--Lat 44°42'55", long 123°53'10", in NW¼SW¼ sec.11, T.10 S., R.10 W., on right bank 1½ miles east of Siletz.

Drainage area.--202 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 102.32 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 13,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 26,400 cfs 11 a.m. Jan. 4 (gage height, 21.02 ft).

1905-12, 1924 to November 1955: Discharge, 37,000 cfs Feb. 17, 1949 (gage height, 25.17 ft).

Discharge known, 40,800 cfs Nov. 20, 1921 (gage height, 31.6 ft, former site and datum), from rating curve extended above 19,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1✓...	3,660	1,980	11.....	10,000	2,760	21.....	13,300	4,880
2.....	4,050	3,140	12.....	14,000	2,540	22.....	14,000	5,300
3.....	3,740	9,310	13.....	6,790	2,760	23.....	7,730	5,050
4.....	3,010	19,700	14.....	4,200	3,540	24.....	5,160	4,360
5.....	3,000	10,800	15.....	3,090	12,500	25.....	4,080	3,570
6.....	3,220	7,180	16.....	2,810	13,100	26.....	4,500	2,950
7.....	3,190	5,450	17.....	2,320	8,960	27.....	4,220	2,550
8.....	3,600	4,440	18.....	2,400	6,340	28.....	3,360	2,140
9.....	4,320	3,720	19.....	4,380	5,470	29.....	2,720	1,980
10.....	4,270	3,140	20.....	8,010	5,370	30.....	2,240	1,740
						31.....	1,900	1,530
Monthly mean discharge, in cubic feet per second......................							5,073	5,427
Runoff, in inches..							28.95	30.98
Runoff, in acre-feet...							311,900	333,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Jan. 3		
12 p.m.......	6.28	2,120	12 p.m.......	12.59	9,880	3 a.m........	12.34	9,510
						5............	12.56	9,840
Dec. 18			Dec. 23			8............	12.35	9,520
8 a.m........	6.21	2,070	8 a.m........	11.41	8,170	12 m.........	11.81	8,730
4 p.m........	6.84	2,640	4 p.m........	10.57	7,000	4 p.m........	11.62	8,470
12 p.m.......	7.07	2,870	12 p.m.......	9.98	6,170	8............	12.14	9,210
						12 p.m.......	13.60	11,500
Dec. 19			Dec. 24					
4 a.m........	7.64	3,440	8 a.m........	9.38	5,410	Jan. 4		
8............	8.52	4,400	4 p.m........	8.88	4,810	3 a.m........	14.80	13,500
2 p.m........	8.93	4,870	12 p.m.......	8.45	4,320	5............	16.20	16,000
8............	8.86	4,780				7............	18.34	20,300
12 p.m.......	9.24	5,240	Dec. 25			9............	20.24	24,600
			8 a.m........	8.12	3,960	11...........	21.02	26,400
Dec. 20			12 m.........	8.06	3,900	1 p.m........	20.67	25,600
4 a.m........	10.21	6,490	12 p.m.......	8.42	4,290	4............	19.27	22,400
8............	11.71	8,590				8............	17.35	18,300
11...........	12.12	9,180	Dec. 26			12 p.m.......	15.84	15,300
2 p.m........	12.06	9,090	8 a.m........	8.60	4,490			
7............	11.53	8,340	4 p.m........	8.67	4,570	Jan. 5		
12 p.m.......	11.36	8,100	12 p.m.......	8.67	4,570	4 a.m........	14.67	13,200
						10...........	13.40	11,100
Dec. 21			Dec. 27			4 p.m........	12.28	9,420
6 a.m........	10.78	7,290	6 a.m........	8.55	4,440	8............	11.67	8,540
9............	11.19	7,870	6 p.m........	8.17	4,020	12 p.m.......	11.18	7,850
12 m.........	12.39	9,580	12 p.m.......	7.95	3,780			
3 p.m........	15.10	14,000				Jan. 6		
5............	17.35	18,300	Jan. 1			4 a.m........	10.83	7,360
7............	19.80	23,600	12 p.m.......	5.91	1,930	9............	11.28	7,990
8:30.........	20.20	24,500				3 p.m........	10.56	6,980
10...........	19.60	23,100	Jan. 2			12 p.m.......	9.88	6,040
12 p.m.......	18.52	20,700	6 a.m........	5.83	1,870			
			9	5.95	1,960	Jan. 7		
Dec. 22			12 m.........	6.35	2,280	12 m.........	9.40	5,430
4 a.m........	16.75	17,100	3 p.m........	7.24	3,070	12 p.m.......	8.97	4,910
8............	15.60	14,900	9............	8.87	4,790			
4 p.m........	14.00	12,100	12 p.m.......	11.80	8,720			

SALMON RIVER BASIN

693. Alder Brook near Rose Lodge, Oreg.

(Crest-stage station)

Location.--Lat 45°01'20", long 123°51'10", in SE$\frac{1}{4}$ sec.25, T.6 S., R.10 W., at culvert on State Highway 18, 0.1 mile upstream from mouth and 1.5 miles northeast of Rose Lodge.

Drainage area.--1.09 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 250 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 50 cfs and by flow through culvert at 82 cfs.

Maxima.--December 1955 to January 1956: Discharge, 80 cfs Dec. 21 (gage height, 11.61 ft).

1953 to November 1955: Discharge, 101 cfs Dec. 30, 1954 (gage height, 11.97 ft).

YAQUINA RIVER BASIN

694. Elk Creek near Elk City, Oreg.

(Miscellaneous site)

Location.--Lat 44°35'40", long 123°50'50", on line between secs. 24 and 25, T.11 S., R.10 W., 0.6 mile downstream from Bear Creek and $2\frac{1}{4}$ miles southeast of Elk City.

Drainage area.--85.0 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 13,200 cfs (date unknown).

ALSEA RIVER BASIN

695. Alsea River near Tidewater, Oreg.

Location.--Lat 44°23'10", long 123°49'50", in NW$\frac{1}{4}$NW$\frac{1}{4}$ sec.6, T.14 S., R.9 W., on right bank three-quarters of a mile downstream from Grass Creek, 2.3 miles upstream from Scott Creek, and 3.8 miles southeast of Tidewater.

Drainage area.--334 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 48.16 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 19,500 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 32,200 cfs 12 p.m. Dec. 21 (gage height, 23.80 ft).

1939 to November 1955: Discharge, 27,800 cfs Jan. 7, 1948 (gage height, 22.43 ft).

Stage known, 29.5 ft on or about Feb. 3, 1890, from floodmark shown by a local resident.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4,090	3,090	11.....	6,710	4,650	21.....	19,100	5,580
2.....	5,180	3,610	12.....	10,900	4,060	22.....	22,300	5,230
3.....	5,110	6,930	13.....	7,370	3,850	23.....	11,700	5,300
4.....	3,890	22,200	14.....	4,900	4,210	24.....	8,070	5,230
5.....	3,700	15,600	15.....	3,740	11,700	25.....	6,220	4,640
6.....	4,020	10,900	16.....	3,380	14,300	26.....	9,410	3,980
7.....	3,810	9,370	17.....	2,850	11,000	27.....	10,200	3,500
8.....	3,720	7,550	18.....	3,190	7,800	28.....	6,830	2,950
9.....	4,780	6,280	19.....	7,620	6,240	29.....	4,860	2,760
10.....	4,420	5,430	20.....	10,700	5,990	30.....	3,820	2,540
						31.....	3,120	2,280
Monthly mean discharge, in cubic feet per second.......................							6,765	6,734
Runoff, in inches...							23.35	23.24
Runoff, in acre-feet..							416,000	414,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Alsea River near Tidewater, Oreg.

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Jan. 2--Con.		
12 p.m.	6.30	2,640	4 p.m.	17.03	18,300	12 m.	6.84	3,120
			8	15.90	16,100	4 p.m.	7.29	3,540
Dec. 18			12 p.m.	15.00	14,500	8	8.12	4,380
6 a.m.	6.23	2,580				12 p.m.	9.53	6,110
12 m.	6.64	2,940	Dec. 23					
6 p.m.	7.53	3,780	6 a.m.	14.06	12,900	Jan. 3		
12 p.m.	8.00	4,250	12 m.	13.18	11,500	3 a.m.	10.20	7,060
			6 p.m.	12.44	10,400	6	10.34	7,260
Dec. 19			12 p.m.	11.92	9,580	3 p.m.	9.72	6,380
6 a.m.	8.92	5,300				6	9.73	6,390
12 m.	10.75	7,840	Dec. 24			9	10.24	7,120
4 p.m.	12.00	9,700	12 m.	10.87	8,010	12 p.m.	11.55	9,020
6	12.27	10,100	12 p.m.	9.93	6,670			
8	12.30	10,200				Jan. 4		
12 p.m.	11.98	9,670	Dec. 25			3 a.m.	13.97	12,800
			6 a.m.	9.59	6,200	6	17.18	18,500
Dec. 20			12 m.	9.33	5,830	9	20.00	24,100
3 a.m.	11.81	9,420	6 p.m.	9.50	6,070	12 m.	21.55	27,300
6	12.00	9,700	12 p.m.	9.99	6,760	2 p.m.	21.87	27,900
12 m.	12.80	10,900				3	21.85	27,900
8 p.m.	13.31	11,700	Dec. 26			6	21.28	26,700
12 p.m.	13.43	11,900	6 a.m.	10.55	7,550	9	20.26	24,600
			12 m.	11.84	9,460	12 p.m.	18.94	22,000
Dec. 21			4 p.m.	12.76	10,900			
6 a.m.	13.48	12,000	8	13.18	11,500	Jan. 5		
9	14.07	13,000	12 p.m.	13.28	11,700	6 a.m.	16.84	17,900
12 m.	15.68	15,700				12 m.	15.29	15,000
3 p.m.	18.31	20,700	Dec. 27			6 p.m.	14.08	13,000
6	21.38	26,900	6 a.m.	12.92	11,100	12 p.m.	13.10	11,400
9	23.19	30,800	12 m.	12.28	10,200			
12 p.m.	23.80	32,200	12 p.m.	11.10	8,350	Jan. 6		
						3 a.m.	12.69	10,800
Dec. 22			Jan. 1			6	12.58	10,600
2 a.m.	23.56	31,700	12 p.m.	6.80	3,080	12 m.	12.90	11,100
4	22.83	30,000				6 p.m.	12.88	11,100
8	20.51	25,100	Jan. 2			12 p.m.	12.59	10,600
12 m.	18.37	20,800	8 a.m.	6.71	3,000			

696. South Fork Weiss Creek near Waldport, Oreg.

(Crest-stage station)

Location.--Lat 44°23'40", long 124°01'30", in SW¼ sec.33, T.13 S., R.11 W., at Waldport municipal water-supply dam, 0.1 mile above mouth, and 3½ miles southeast of Waldport.

Drainage area.--0.33 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 500 ft (from topographic map).

Discharge record.--Peak discharge computed from flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 26 cfs Dec. 21 (gage height, 6.81 ft.

1952 to November 1955: Discharge, 30 cfs Jan. 17, 1953 (gage height, 6.92 ft).

SIUSLAW RIVER BASIN

697. Lake Creek at Triangle Lake, Oreg.

(Gaging station, discontinued 1955)

Location.--Lat 44°09'40", long 123°34'10", in SW¼ sec.20, T.16 S., R.7 W., on right bank, 500 ft downstream from outlet of Triangle Lake.

Drainage area.--50 sq mi, approximately.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,400 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, about 3,600 cfs Dec. 21 (gage height, about 7.7 ft).

1931-55: Discharge, 4,180 cfs Feb. 18, 1949 (gage height, 8.33 ft); gage height, 8.68 ft Feb. 18, 1949 (backwater from debris).

UMPQUA RIVER BASIN

698. Jackson Creek near Tiller, Oreg.

Location.--Lat 42°57'15", long 122°49'40", in SW¼NE¼ sec.21, T.30 S., R.1 W., on right bank 0.8 mile downstream from Beaver Creek and 6½ miles northeast of Tiller.

Drainage area.--152 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 5-19. Altitude of gage is 1,270 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,200 cfs and by slope-area measurement at 10,600 cfs. Discharge for Dec. 5-19 was estimated on basis of recorded range in stage and records for South Umpqua River at Tiller.

Maxima.--December 1955 to January 1956: Discharge, 10,600 cfs 12:30 a.m. Dec. 22 (gage height, 13.55 ft).

October to November 1955: Discharge, 3,490 cfs Nov. 19 (gage height, 7.28 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,600	456	11.....	1,800	770	21.....	6,020	1,120
2.....	1,080	402	12.....	1,900	730	22.....	7,290	2,380
3.....	760	488	13.....	1,500	890	23.....	3,230	2,800
4.....	528	910	14.....	1,000	1,630	24.....	1,790	1,560
5.....	460	875	15.....	850	4,000	25.....	1,390	1,110
6.....	750	720	16.....	1,000	2,270	26.....	1,570	865
7.....	800	855	17.....	1,200	1,410	27.....	1,240	705
8.....	750	745	18.....	1,400	1,100	28.....	932	580
9.....	1,200	640	19.....	1,700	1,160	29.....	735	488
10.....	1,100	730	20.....	2,190	1,210	30.....	592	428
						31.....	508	368
Monthly mean discharge, in cubic feet per second......................							1,576	1,110
Runoff, in inches..							11.96	8.42
Runoff, in acre-feet...							96,920	68,220

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 25--Con.			Jan. 18		
12 p.m.......	5.55	1,950	2 p.m........	4.59	1,270	12 m.........	4.33	1,120
			12 p.m.......	5.16	1,650	12 p.m.......	4.14	1,000
Dec. 20								
11 a.m.......	5.08	1,600	Dec. 26			Jan. 19		
5 p.m........	5.97	2,290	8 a.m........	5.11	1,620	3 a.m........	4.11	986
12 p.m.......	7.60	3,810	2 p.m........	5.07	1,590	10	4.57	1,260
			12 p.m.......	4.82	1,410	12 m.........	4.62	1,290
Dec. 21						7 p.m........	4.60	1,280
2 a.m........	7.79	4,000	Dec. 27			12 p.m.......	4.01	926
6............	7.77	3,980	12 m.........	4.53	1,240			
10...........	7.58	3,790	12 p.m.......	4.25	1,070	Jan. 20		
12 m.........	7.87	4,080				2 a.m........	4.49	1,210
4 p.m........	10.95	7,400	Jan. 13			7............	4.59	1,270
7............	12.45	9,200	12 p.m.......	3.85	845	12 m.........	4.53	1,240
12 p.m.......	13.52	10,600				12 p.m.......	4.43	1,180
			Jan. 14					
Dec. 22			12 m.........	4.55	1,250	Jan. 21		
12:30 a.m....	13.55	10,600	6 p.m........	6.00	2,310	12 m.........	4.24	1,060
2	13.40	10,400	12 p.m.......	6.79	3,010	5 p.m........	4.24	1,060
4............	13.00	9,980				12 p.m.......	4.60	1,280
10...........	11.00	7,460	Jan. 15					
4 p.m........	9.50	5,800	1 a.m........	6.89	3,100	Jan. 22		
12 p.m.......	8.35	4,560	6	8.64	4,850	5 a.m........	4.67	1,320
			12 m.........	8.30	4,510	12 m.........	5.40	1,830
Dec. 23			6 p.m........	7.54	3,750	2 p.m........	6.00	2,300
6 a.m........	7.60	3,810	12 p.m.......	6.78	3,000	8............	7.93	4,140
12 m.........	6.85	3,060				12 p.m.......	7.73	3,940
6 p.m........	6.40	2,660	Jan. 16					
12 p.m.......	5.92	2,250	10 a.m.......	6.00	2,310	Jan. 23		
			12 m.........	5.87	2,210	12 m.........	6.41	2,670
Dec. 24			12 p.m.......	5.23	1,700	5 p.m........	6.00	2,310
12 m.........	5.27	1,730				12 p.m.......	5.61	2,000
12 p.m.......	4.85	1,440	Jan. 17					
			12 m.........	4.76	1,380	Jan. 24		
Dec. 25			12 p.m.......	4.43	1,180	12 m.........	4.92	1,480
12 m.........	4.58	1,270				12 p.m.......	4.57	1,260

699. South Umpqua River at Tiller, Oreg.

Location.--Lat 42°55'50", long 122°56'50", in NE¼ sec.33, T.30 S., R.2 W., on right bank 0.3 mile upstream from Elk Creek, 0.4 mile downstream from Salt Creek, and 0.4 mile east of Tiller.

Drainage area.--449 sq mi.

Gage-height record.--Water-stage recorder graph. Drawdown corrections applied above 9.2 ft on basis of curve based on inside and outside readings. Datum of gage is 991.8 ft above mean sea level, datum of 1929 (from river-profile survey).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 33,300 cfs 3 a.m. Dec. 22 (gage height, 20.45 ft, from recorder graph; 20.85 ft, from floodmarks).

1910-11, 1939 to November 1955: Discharge, 37,400 cfs Oct. 29, 1950 (gage height, 22.35 ft, referred to outside gage).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	5,630	1,510	11.....	6,000	2,580	21.....	16,500	4,550
2.....	3,940	1,310	12.....	6,200	2,460	22.....	25,300	12,800
3.....	2,790	1,420	13.....	5,110	2,910	23.....	11,400	13,100
4.....	2,040	2,380	14.....	3,460	6,180	24.....	6,100	6,580
5.....	1,660	2,330	15.....	2,780	15,400	25.....	4,660	4,500
6.....	2,500	1,950	16.....	3,420	8,560	26.....	5,810	3,450
7.....	2,530	2,600	17.....	4,120	5,030	27.....	4,270	2,760
8.....	2,450	2,330	18.....	4,890	3,950	28.....	3,210	2,190
9.....	3,960	2,000	19.....	5,370	4,320	29.....	2,460	1,840
10.....	3,860	2,250	20.....	5,890	4,820	30.....	2,020	1,560
						31.....	1,700	1,360
Monthly mean discharge, in cubic feet per second..........							5,227	4,225
Runoff, in inches..........							13.42	10.85
Runoff, in acre-feet..........							321,400	259,800

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 15			Dec. 20--Con.			Dec. 25--Con.		
12 p.m.......	5.42	2,670	12 p.m.......	11.22	10,500	4 p.m........	6.80	4,270
						12 p.m.......	8.26	6,040
Dec. 16			Dec. 21					
6 a.m........	5.37	2,620	8 a.m........	12.50	13,000	Jan. 13		
12 m.........	5.94	3,180	12 m.........	12.40	12,800	12 p.m.......	5.30	2,720
10 p.m.......	7.37	4,700	6 p.m........	15.87	20,400			
12 p.m.......	7.39	4,730	12 p.m.......	19.62	30,000	Jan. 14		
						6 a.m........	5.57	2,990
Dec. 17			Dec. 22			12 m.........	6.76	4,220
12 m.........	6.83	4,100	1 a.m........	20.42	32,200	6 p.m........	10.50	9,540
10 p.m.......	6.38	3,620	2............	20.70	32,900	11...........	12.18	12,700
12 p.m.......	6.41	3,650	3............	20.85	33,300	12 p.m.......	12.16	12,600
			6............	20.40	32,400			
Dec. 18			10...........	18.38	27,200	Jan. 15		
8 a.m........	7.55	4,920	10 p.m.......	13.89	16,200	2 a.m........	12.27	12,800
3 p.m........	7.59	4,970	12 p.m.......	13.63	15,700	8............	14.75	18,200
9............	8.06	5,550				12 m.........	14.46	17,500
12 p.m.......	7.98	5,440	Dec. 23			1 p.m........	14.44	17,500
			6 a.m........	12.56	13,400	12 p.m.......	11.73	11,800
Dec. 19			12 m.........	11.34	11,100			
9 a.m........	7.50	4,680	6 p.m........	10.40	9,370	Jan. 16		
1 p.m........	7.83	5,260	12 p.m.......	9.46	7,790	9 a.m........	10.14	8,920
5............	8.37	5,950				12 m.........	9.73	8,230
12 p.m.......	7.98	5,440	Dec. 24			12 p.m.......	8.37	6,190
			12 m.........	8.14	5,890			
Dec. 20			12 p.m.......	7.30	4,840	Jan. 17		
12 m.........	7.23	4,540				12 m.........	7.34	4,880
6 p.m........	8.44	6,040	Dec. 25			12 p.m.......	6.71	4,170
9 p.m........	9.94	8,280	12 m.........	6.67	4,120			

700. Elk Creek near Drew, Oreg.

Location.--Lat 42°53'25", long 122°55'00", in SW¼ sec.11, T.31 S., R.2 W., on right bank 100 ft downstream from Dixon Creek, a quarter of a mile upstream from Drew Creek, 1¼ miles northwest of Drew, and 3½ miles southeast of Tiller.

Drainage area.--54.4 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,279.25 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,700 cfs and by slope-area measurement at 7,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 7,500 cfs 7 p.m. Dec. 21 (gage height, 10.34 ft).

1954 to November 1955: Discharge, 1,400 cfs Nov. 19, 1955 (gage height, 5.50 ft).

Stage known, 11.8 ft, from floodmark, probably for flood of January or November 1953 (discharge not determined).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	440	151	11	376	335	21	3,730	371
2	292	137	12	320	286	22	2,900	866
3	228	397	13	258	332	23	1,030	850
4	146	770	14	181	453	24	537	458
5	133	478	15	152	1,320	25	573	329
6	270	347	16	252	728	26	811	306
7	195	446	17	277	418	27	462	258
8	292	341	18	722	359	28	315	203
9	432	290	19	957	422	29	236	163
10	368	335	20	1,100	440	30	182	137
						31	130	119
Monthly mean discharge, in cubic feet per second							590	414
Runoff, in inches							12.51	8.78
Runoff, in acre-feet							36,290	25,480

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.	3.25	288	12 p.m.	9.18	5,430	6 p.m.	4.35	638
						12 p.m.	4.13	542
Dec. 18			Dec. 22					
4 a.m.	4.30	680	2 a.m.	9.25	5,540	Jan. 13		
9	4.34	696	4	8.55	4,500	12 p.m.	3.44	304
2 p.m.	4.17	628	12 m.	6.70	2,380			
7	4.92	1,010	6 p.m.	5.83	1,630	Jan. 14		
12 p.m.	4.57	805	12 p.m.	5.53	1,390	5 a.m.	3.60	350
						10	3.63	359
Dec. 19			Dec. 23			12 m.	3.76	401
8 a.m.	4.20	640	2 a.m.	5.62	1,470	7 p.m.	4.31	620
2 p.m.	5.53	1,420	12 m.	4.92	944	10	4.29	610
6	5.13	1,140	6 p.m.	4.72	822	12 p.m.	4.43	675
12 p.m.	4.61	826	12 p.m.	4.45	685			
						Jan. 15		
Dec. 20			Dec. 24			6 a.m.	5.60	1,450
12 m.	4.06	584	12 m.	4.07	518	8	5.70	1,530
4 p.m.	4.88	988	12 p.m.	3.83	426	11	6.07	1,830
8	6.00	1,780				1 p.m.	5.84	1,640
12 p.m.	7.17	2,840	Dec. 25			8	5.15	1,100
			6 a.m.	3.70	380	11	5.12	1,080
Dec. 21			10	3.70	380	12 p.m.	5.10	1,070
1 a.m.	7.47	3,160	12 m.	3.74	394			
4	6.82	2,490	6 p.m.	4.57	745	Jan. 16		
12 m.	6.00	1,770	12 p.m.	5.18	1,130	12 m.	4.41	665
3 p.m.	7.65	3,360				12 p.m.	4.05	510
6	10.09	7,000	Dec. 26					
7	10.34	7,500	2 a.m.	5.30	1,210	Jan. 17		
8	10.08	6,980	9 a.m.	4.67	795	12 m.	3.77	404
11 p.m.	8.97	5,100	12 m.	4.62	770	12 p.m.	3.62	356

701. Days Creek at Days Creek, Oreg.

Location.--Lat 42°58'55", long 123°08'55", in NE¼ sec.10, T.30 S., R.4 W., on downstream side of bridge, 20 ft upstream from Wood Creek, 1 mile northeast of town of Days Creek, and 1½ miles upstream from mouth.

Drainage area.--55.3 sq mi.

Gage-height record.--Wire-weight gage usually read twice daily except Dec. 1-15, 24-29, and Jan. 11. Doubtful gage-height record Dec. 17. Peak stage for Dec. 26 from floodmarks. Altitude of gage is 810 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 660 cfs and by slope-area measurement of 3,450 cfs (peak of Feb. 21, 1956). Discharge for periods of doubtful or no gage-height record estimated on basis of weather records and records for North Myrtle Creek near Myrtle Creek.

Maxima.--December 1955 to January 1956: Discharge, 2,620 cfs about 2 a.m. Dec. 26 (gage height, 9.34 ft).

October to November 1955: Discharge not determined; no gage-height record Oct. 13 to Nov. 30.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	550	54	11.....	280	280	21.....	1,330	184
2.....	300	42	12.....	350	144	22.....	1,570	768
3.....	240	49	13.....	250	214	23.....	825	860
4.....	160	119	14.....	180	258	24.....	450	410
5.....	130	119	15.....	140	716	25.....	600	172
6.....	110	111	16.....	172	399	26.....	2,000	182
7.....	100	255	17.....	200	237	27.....	700	153
8.....	150	194	18.....	390	192	28.....	250	88
9.....	350	207	19.....	355	163	29.....	140	64
10.....	250	248	20.....	494	214	30.....	76	59
						31.....	60	51
Monthly mean discharge, in cubic feet per second							424	232
Runoff, in inches							8.84	4.85
Runoff, in acre-feet							26,090	14,290

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 22--Con.			Jan. 15		
12 p.m.......	3.5	317	9 p.m........	5.6	1,120	6 a.m........	5.2	960
			12 p.m.......	5.7	1,160	12 m.........	4.8	800
Dec. 20						12 p.m.......	4.0	482
12 m.........	3.8	410	Dec. 23					
12 p.m.......	4.9	840	2 a.m........	5.7	1,160	Jan. 16		
			6............	5.4	1,040	6 a.m........	4.0	482
Dec. 21			6 p.m........	4.3	600	12 m.........	3.8	410
9 a.m........	4.7	760	12 p.m.......	4.0	482	6 p.m........	3.5	317
12 m.........	5.2	960				12 p.m.......	3.4	290
11 p.m.......	9.3	2,600	Jan. 13					
12 p.m.......	9.0	2,480	12 p.m.......	3.0	196	Jan. 17		
						12 m.........	3.2	241
Dec. 22			Jan. 14			12 p.m.......	2.9	176
6 a.m........	7.5	1,880	12 m.........	3.0	196			
3 p.m........	5.9	1,240	12 p.m.......	3.9	445			

702. Canyon Creek near Canyonville, Oreg.

(Crest-stage station)

Location.--Lat 42°55'10", long 123°16'20", in SE¼ sec.34, T.30 S., R.5 W., at concrete dam 0.5 mile south of Canyonville and 2½ miles upstream from mouth.

Drainage area.--36.9 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 800 cfs and from flow through culvert at 2,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,810 cfs Dec. 21 (gage height, 28.66 ft).

1950 to November 1955: Discharge, 3,700 cfs Oct. 29, 1950 (gage height unknown).

703. Cow Creek near Azalea, Oreg.

Location.--Lat 42°49'30", long 123°10'40", in sec.4, T.32 S., R.4 W., on right bank 4 miles northeast of Azalea.

Drainage area.--78 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,685 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,000 cfs and by slope-area measurement at 5,920 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,180 cfs 9 p.m. Dec. 21 (gage height, 12.76 ft).

1926 to November 1955: Discharge, 5,920 cfs Oct. 29, 1950 (gage height, 14.37 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	330	275	11.....	252	638	21.....	3,620	553
2.....	238	240	12.....	262	570	22.....	3,180	981
3.....	175	667	13.....	238	646	23.....	1,370	1,260
4.....	128	1,160	14.....	191	648	24.....	774	742
5.....	123	862	15.....	161	1,690	25.....	1,320	550
6.....	232	630	16.....	315	1,320	26.....	2,330	525
7.....	183	826	17.....	340	758	27.....	985	424
8.....	253	606	18.....	860	592	28.....	612	345
9.....	494	500	19.....	1,360	623	29.....	438	290
10.....	268	553	20.....	1,400	634	30.....	345	255
						31.....	280	221
Monthly mean discharge, in cubic feet per second.....................							744	664
Runoff, in inches...							10.99	9.81
Runoff, in acre-feet..							45,730	40,830

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 15			Dec. 20--Con.			Dec. 25--Con.		
12 p.m.......	2.20	167	6 p.m........	6.54	1,860	12 m.........	3.63	642
			12 p.m.......	8.55	3,050	6 p.m........	6.54	2,020
Dec. 16						12 p.m.......	9.23	3,420
6 a.m........	2.27	181	Dec. 21					
12 m.........	2.72	280	2 a.m........	8.95	3,270	Dec. 26		
6 p.m........	3.47	496	6............	8.35	2,940	2 a.m........	9.63	3,620
12 p.m.......	3.28	439	12 m.........	7.53	2,460	6............	8.12	2,820
			6 p.m........	12.15	4,880	12 m.........	6.88	2,190
Dec. 17			9............	12.76	5,180	6 p.m........	5.92	1,710
12 m.........	2.90	325	12 p.m.......	11.95	4,780	12 p.m.......	5.21	1,360
9 p.m........	2.71	278						
12 p.m.......	2.77	292	Dec. 22			Jan. 13		
			1 a.m........	11.86	4,730	12 p.m.......	3.35	542
Dec. 18			2............	11.95	4,780			
6 a.m........	3.73	574	6............	11.00	4,300	Jan. 14		
9............	4.47	838	12 m.........	8.38	2,960	12 m.........	3.48	588
12 m.........	4.44	826	6 p.m........	6.78	2,140	6 p.m........	3.83	722
3 p.m........	4.34	786	10...........	6.17	1,840	12 p.m.......	4.25	890
6............	4.82	979	12 p.m.......	6.14	1,820			
9:30.........	6.07	1,590				Jan. 15		
12 p.m.......	5.90	1,500	Dec. 23			2 a.m........	4.37	938
			2 a.m........	6.10	1,800	6............	5.22	1,360
Dec. 19			6............	5.70	1,600	9............	6.35	1,920
6 a.m........	5.08	1,100	12 m.........	5.13	1,320	12 m.........	6.64	2,070
9............	4.86	997	6 p.m........	4.79	1,140	2 p.m........	7.07	2,280
12 m.........	5.56	1,320	12 p.m.......	4.45	975	6............	6.35	1,920
4:30 p.m.....	6.46	1,820				12 p.m.......	5.71	1,600
12 p.m.......	5.21	1,150	Dec. 24					
			12 m.........	3.90	750	Jan. 16		
Dec. 20			12 p.m.......	3.57	620	6 a.m........	5.58	1,540
6 a.m........	4.55	870				12 m.........	5.16	1,330
11...........	4.26	754	Dec. 25			12 p.m.......	4.38	942
12 m.........	4.30	770	6 a.m........	3.45	578			

704. West Fork Cow Creek near Glendale, Oreg.

Location.--Lat 42°48'10", long 123°37'10", in NW¼SW¼ sec.11, T.32 S., R.8 W., on left bank 1 mile upstream from mouth and 11 miles northwest of Glendale.

Drainage area.--83.6 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 25 to 12 m. Jan. 3. Datum of gage is 1,035.14 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,300 cfs and by slope-area measurement of 10,600 cfs. Discharge for period of no gage-height record estimated on basis of records for Cow Creek near Riddle and weather records.

Maxima.--December 1955 to January 1956: Discharge, 10,600 cfs 6 p.m. Dec. 21 (gage height, 18.60 ft).

Aug. 17, 1955, to November 1955: Discharge, 3,180 cfs Nov. 19, 1955 (gage height, 11.66 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,130	460	11.....	576	1,210	21.....	5,990	1,040
2.....	990	550	12.....	530	1,310	22.....	4,990	2,000
3.....	750	1,200	13.....	478	1,730	23.....	1,990	2,060
4.....	480	3,280	14.....	389	1,720	24.....	1,320	1,260
5.....	514	1,820	15.....	340	3,990	25.....	2,500	888
6.....	878	1,510	16.....	1,050	3,100	26.....	5,800	728
7.....	731	1,300	17.....	898	1,710	27.....	2,500	620
8.....	918	1,000	18.....	1,210	1,240	28.....	1,200	491
9.....	1,310	916	19.....	2,940	1,150	29.....	800	412
10.....	748	1,040	20.....	2,570	1,160	30.....	600	345
						31.....	500	294
Monthly mean discharge, in cubic feet per second							1,536	1,340
Runoff, in inches							21.18	18.48
Runoff, in acre-feet							94,450	82,380

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 15			Dec. 20--Con.			Jan. 14--Con.		
12 p.m.......	5.13	391	11 a.m.......	9.37	1,820	12 m.........	8.42	1,360
			8 p.m........	12.61	3,890	4 p.m........	9.03	1,660
Dec. 16			12 p.m.......	12.18	3,540	8............	10.89	2,670
4 a.m........	5.66	503				12 p.m.......	10.71	2,570
10...........	8.23	1,290	Dec. 21					
12 m.........	8.45	1,380	3 a.m........	12.30	3,640	Jan. 15		
6 p.m........	8.24	1,300	5............	12.27	3,620	2 a.m........	11.08	2,790
12 p.m.......	7.81	1,130	10...........	12.58	3,860	6............	13.15	4,340
			12 m.........	12.50	3,800	11...........	14.20	5,300
Dec. 17			6 p.m........	18.60	10,600	6 p.m........	12.34	3,670
12 m.........	7.03	869	12 p.m.......	16.74	8,090	10...........	11.88	3,320
12 p.m.......	6.53	722				12 p.m.......	11.97	3,380
			Dec. 22					
Dec. 18			4 a.m........	16.29	7,550	Jan. 16		
8 a.m........	8.00	1,200	12 m.........	13.40	4,560	3 a.m........	12.19	3,550
12 m.........	8.20	1,280	5 p.m........	11.83	3,290	4............	12.34	3,670
6 p.m........	8.23	1,290	12 p.m.......	10.70	2,560	6............	12.33	3,660
9............	8.48	1,390				12 m.........	11.64	3,160
12 p.m.......	9.15	1,720	Dec. 23			4 p.m........	11.16	2,850
			7 a.m........	10.00	2,140	7............	10.83	2,640
Dec. 19			12 m.........	9.62	1,950	12 p.m.......	10.21	2,270
6 a.m........	11.35	2,970	4 p.m........	9.30	1,790			
12 m.........	12.65	3,920	12 p.m.......	8.90	1,590	Jan. 17		
6 p.m........	11.30	2,940				2 a.m........	10.00	2,140
12 p.m.......	10.00	2,140	Jan. 13			12 m.........	9.00	1,640
			12 p.m.......	8.43	1,360	12 p.m.......	8.31	1,310
Dec. 20			Jan. 14					
7 a.m........	9.33	1,800	6 a.m........	8.30	1,310			

705. Cow Creek near Riddle, Oreg.

Location.--Lat 42°55'25", long 123°25'40", in NE¼ sec.32, T.30 S., R.6 W., on left bank about 1,500 ft upstream from Council Creek and 3½ miles southeast of Riddle.

Drainage area.--456 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 682.60 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 28,100 cfs and by slope-area measurement at 41,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 38,200 cfs 8:30 a.m. Dec. 26 (gage height, 27.35 ft).

September 1954 to November 1955: Discharge, 8,990 cfs Dec. 31, 1954 (gage height, 10.22 ft).

Discharge known, 41,100 cfs Oct. 29, 1950 (gage height, about 28.5 ft), from slope-area measurement.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2,630	2,140	11.....	1,780	6,220	21.....	24,300	3,840
2.....	2,870	2,580	12.....	1,570	6,090	22.....	26,000	5,900
3.....	2,260	4,150	13.....	1,490	7,210	23.....	10,600	9,620
4.....	1,450	13,300	14.....	1,300	5,990	24.....	5,890	6,290
5.....	1,280	9,820	15.....	1,100	14,400	25.....	10,600	4,250
6.....	1,980	6,770	16.....	2,550	13,900	26.....	31,100	3,560
7.....	2,060	8,040	17.....	3,200	7,640	27.....	12,300	3,510
8.....	2,400	5,860	18.....	4,900	5,070	28.....	5,970	2,760
9.....	5,340	4,360	19.....	13,700	4,310	29.....	3,770	2,270
10.....	2,510	4,840	20.....	11,900	4,250	30.....	2,800	1,940
						31.....	2,190	1,680
Monthly mean discharge, in cubic feet per second.......................							6,574	5,889
Runoff, in inches..							16.62	14.89
Runoff, in acre-feet...							404,200	362,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 15			Dec. 21--Con.			Dec. 27--Con.		
12 p.m.......	3.43	1,100	12 m.........	18.70	21,500	8 p.m........	10.00	8,780
			2 p.m........	19.60	22,900	12 p.m.......	9.20	7,790
Dec. 16			6............	24.60	31,800			
6 a.m........	3.64	1,270	8............	25.40	33,500	Dec. 28		
12 m.........	5.00	2,530	12 p.m.......	24.95	32,500	12 m.........	7.55	5,810
4 p.m........	6.10	3,690				12 p.m.......	6.44	4,480
10...........	6.25	3,860	Dec. 22					
12 p.m.......	6.20	3,800	4 a.m........	25.30	33,300	Jan. 13		
			6............	25.15	32,900	12 p.m.......	7.70	5,990
Dec. 17			12 m.........	22.40	27,400			
4 a.m........	6.14	3,730	6 p.m........	17.80	20,000	Jan. 14		
12 m.........	5.62	3,160	12 p.m.......	14.25	14,700	12 m.........	7.18	5,370
12 p.m.......	5.00	2,530				2 p.m........	7.20	5,390
			Dec. 23			4............	7.38	5,610
Dec. 18			4 a.m........	12.97	12,800	8............	8.30	6,710
3 a.m........	5.08	2,610	12 m.........	11.20	10,400	12 p.m.......	9.30	7,910
12 m.........	7.25	5,060	6 p.m........	10.00	8,680			
6 p.m........	8.03	6,080	12 p.m.......	9.15	7,740	Jan. 15		
12 p.m.......	9.45	7,920				6 a.m........	12.20	11,800
			Dec. 24			12 m.........	15.50	16,600
Dec. 19			12 m.........	7.75	5,720	3 p.m........	16.24	17,700
6 a.m........	13.00	12,900	12 p.m.......	6.70	4,390	12 p.m.......	14.80	15,600
12 m.........	15.25	16,200						
2 p.m........	15.40	16,400	Dec. 25			Jan. 16		
6............	14.45	15,000	5 a.m........	6.42	4,050	5 a.m........	14.75	15,500
12 p.m.......	12.70	12,500	9............	6.75	4,450	9............	14.80	15,600
			3 p.m........	10.00	8,680	12 m.........	14.30	14,800
Dec. 20			8............	19.00	22,000	6 p.m........	12.60	12,300
6 a.m........	11.05	10,100	12 p.m.......	22.80	28,200	12 p.m.......	11.10	10,200
11...........	10.00	8,680						
12 m.........	10.05	8,750	Dec. 26			Jan. 17		
1 p.m........	10.20	8,960	8:30 a.m.....	27.35	38,200	6 a.m........	9.85	8,580
3............	10.85	9,870	12 m.........	26.65	36,500	12 m.........	8.90	7,430
6............	13.70	13,900	6 p.m........	22.20	27,100	6 p.m........	8.15	6,530
10...........	16.25	17,700	12 p.m.......	17.43	19,500	12 p.m.......	7.60	5,870
12 p.m.......	16.55	18,200						
			Dec. 27			Jan. 18		
Dec. 21			6 a.m........	14.10	14,500	12 m.........	6.87	4,990
3 a.m........	16.60	18,200	12 m.........	11.28	10,500	12 p.m.......	6.40	4,430

706. South Myrtle Creek near Myrtle Creek, Oreg.

Location.--Lat 43°01'55", long 123°11'30", in SE¼ sec.20, T.29 S., R.4 W., on left bank 0.6 mile downstream from School Hollow and 5.5 miles east of town of Myrtle Creek.

Drainage area.--43.9 sq mi.

Gage-height record.--Twice-daily staff-gage readings above 3.0 ft and once-daily readings below. Peak stage for Dec. 26 from floodmarks. Altitude of gage is 620 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,100 cfs. Peak discharge by slope-area measurement. Backwater from debris at times.

Maxima.--December 1955 to January 1956: Discharge, 2,140 cfs about 1 a.m. Dec. 26 (gage height, 7.95 ft).

October to November 1955: Discharge, 780 cfs Nov. 19 (gage height, 3.75 ft). Stage known, about 9.0 ft, from floodmark (date unknown).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	646	138	11.....	338	360	21.....	1,030	288
2.....	432	119	12.....	380	288	22.....	1,320	950
3.....	288	125	13.....	330	360	23.....	772	871
4.....	163	203	14.....	198	493	24.....	441	480
5.....	140	174	15.....	154	931	25.....	584	360
6.....	140	220	16.....	188	546	26.....	1,280	240
7.....	128	440	17.....	214	400	27.....	581	198
8.....	148	323	18.....	416	288	28.....	323	174
9.....	323	316	19.....	384	342	29.....	255	142
10.....	272	360	20.....	488	323	30.....	188	128
						31.....	152	123
Monthly mean discharge, in cubic feet per second......................							410	345
Runoff, in inches..							10.76	9.07
Runoff, in acre-feet...							25,180	21,230

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23			Dec. 27		
12 p.m.......	2.70	323	12 m.........	3.80	805	12 m.........	3.30	565
			12 p.m.......	3.30	565	12 p.m.......	3.00	440
Dec. 20								
10 a.m.......	2.60	288	Dec. 24			Jan. 13		
4 p.m........	3.50	655	12 m.........	2.95	420	12 p.m.......	2.60	288
12 p.m.......	3.80	805	12 p.m.......	2.80	360	Jan. 14		
			Dec. 25			12 m.........	3.00	440
Dec. 21			11 a.m.......	2.70	323	12 p.m.......	3.80	805
10 a.m.......	3.70	755	4 p.m........	2.50	255			
2 p.m........	3.90	860	10...........	5.70	1,580	Jan. 15		
4............	4.50	1,190	12 p.m.......	6.20	1,740	8 a.m........	4.50	1,190
12 p.m.......	5.50	1,740				6 p.m........	3.80	805
			Dec. 26			12 p.m.......	3.50	655
Dec. 22			1 a.m........	7.95	2,140			
2 a.m........	5.80	1,900	6............	5.20	1,580	Jan. 16		
5 p.m........	4.10	970	12 m.........	4.40	1,140	12 m.........	3.30	565
12 p.m.......	4.00	915	12 p.m.......	3.70	755	12 p.m.......	2.90	400

707. West Fork Frozen Creek near Myrtle Creek, Oreg.

(Crest-stage station)

Location.--Lat 43°05'15", long 123°11'50", in SE¼SW¼ sec.32, T.28 S., R.4 W., at culvert on Frozen Creek, 0.1 mile upstream from mouth and 6.2 miles northeast of Myrtle Creek.

Drainage area.--3.16 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 860 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 305 cfs Dec. 26 (gage height, 19.64 ft).

1954 to November 1955: Discharge, 80 cfs Dec. 30, 1954, revised (gage height, 16.31 ft).

708. North Myrtle Creek near Myrtle Creek, Oreg.

Location.--Lat 43°02'30", long 123°15'30", in SW¼ sec.14, T.29 S., R.5 W., on right bank 0.1 mile downstream from Bilger Creek, 1.5 miles northeast of town of Myrtle Creek, and 2.5 miles upstream from confluence with South Myrtle Creek.

Drainage area.--54.2 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 660 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 680 cfs. Peak discharge by slope-area measurement. Backwater from debris at times.

Maxima.--December 1955 to January 1956: Discharge, 2,960 cfs 7 a.m. Dec. 26 (gage height, 11.58 ft, affected by backwater from debris).
October to November 1955: Discharge, 696 cfs Nov. 19 (gage height, 4.50 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	348	136	11	310	344	21	1,120	198
2	434	115	12	364	304	22	1,420	408
3	344	107	13	335	301	23	572	1,220
4	221	144	14	242	256	24	337	624
5	167	174	15	186	732	25	404	490
6	140	206	16	286	611	26	2,280	354
7	115	278	17	382	316	27	988	270
8	205	253	18	478	248	28	483	208
9	442	227	19	528	219	29	281	176
10	344	256	20	664	216	30	188	155
						31	144	134
Monthly mean discharge, in cubic feet per second							476	312
Runoff, in inches							10.12	6.64
Runoff, in acre-feet							29,260	19,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Dec. 27--Con.		
12 p.m.	4.07	494	12 p.m.	4.69	422	12 p.m.	5.53	661
Dec. 20			Dec. 24			Dec. 28		
11 a.m.	3.91	430	12 m.	4.28	332	12 m.	4.82	454
8 p.m.	5.46	1,050	12 p.m.	3.99	261	12 p.m.	4.38	364
12 p.m.	5.45	1,050	Dec. 25					
			6 a.m.	3.86	227	Jan. 14		
Dec. 21			12 m.	3.91	240	12 p.m.	4.20	322
6 a.m.	5.50	966	1 p.m.	3.90	237			
12 m.	5.20	801	8	5.04	482	Jan. 15		
6 p.m.	6.29	1,310	12 p.m.	8.25	1,560	3 a.m.	4.20	322
12 p.m.	7.03	1,770				8	5.20	551
			Dec. 26			12 m.	5.68	736
Dec. 22			5 a.m.	11.35	2,910	5 p.m.	6.73	1,090
7 a.m.	8.51	2,000	7	11.58	2,960	8	6.78	1,120
12 m.	7.79	1,510	12 m.	10.76	2,600	12 p.m.	6.22	867
10 p.m.	6.00	646	6 p.m.	9.04	1,940			
12 p.m.	5.98	736	12 p.m.	7.82	1,460	Jan. 16		
						6 a.m.	5.75	721
Dec. 23			Dec. 27			12 m.	5.30	596
12 m.	5.23	564	12 m.	6.31	916	12 p.m.	4.52	396

709. Olalla Creek near Tenmile, Oreg.

(Miscellaneous site)

Location.--Lat 43°06'50", long 123°30'30", in SE¼ sec.22, T.28 S., R.7 W., at State Highway 42 crossing, half a mile east of Tenmile and 3½ miles west of Brockway.

Drainage area.--116 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maximum.--December 1955 to January 1956: Discharge, 16,900 cfs Dec. 26.

710. Lookingglass Creek at Brockway, Oreg.

Location.--Lat 43°07'05", long 123°26'15", in SW$\frac{1}{4}$ sec.20, T.28 S., R.6 W., on right bank 0.4 mile northeast of Brockway and 0.8 mile upstream from mouth.

Drainage area.--158 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 493.19 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,700 cfs and by slope-area measurement at 35,000 cfs. Backwater from South Umpqua River at times.

Maxima.--December 1955 to January 1956: Discharge, 35,000 cfs 8:30 a.m. Dec. 26 (gage height, 24.93 ft).

October to November 1955: Discharge, 2,190 cfs Nov. 19 (gage height, 10.06 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,650	580	11.....	1,300	1,720	21.....	9,390	944
2.....	2,120	535	12.....	1,120	1,620	22.....	15,900	2,730
3.....	1,730	648	13.....	920	1,900	23.....	4,170	4,460
4.....	864	2,200	14.....	717	1,880	24.....	1,960	2,240
5.....	598	1,790	15.....	568	5,100	25.....	4,860	1,350
6.....	642	2,580	16.....	1,730	4,460	26.....	26,400	1,110
7.....	672	3,130	17.....	1,630	2,310	27.....	4,430	988
8.....	1,070	1,920	18.....	1,980	1,540	28.....	1,800	774
9.....	2,060	1,740	19.....	4,820	1,290	29.....	1,120	636
10.....	1,340	1,840	20.....	4,060	1,170	30.....	798	522
						31.....	600	430
Monthly mean discharge, in cubic feet per second......................							3,323	1,811
Runoff, in inches..							24.25	13.21
Runoff, in acre-feet...							204,300	111,300

Peak discharge.--Dec. 22 (8 a.m.) 22,300 cfs (gage height, 23.01 ft); Jan. 6 (6:30 a.m.) 5,260 cfs (gage height, 13.74 ft); Jan. 15 (2 p.m.) 6,520 cfs (gage height, 14.73 ft); Jan. 23 (2 a.m.) 6,070 cfs (gage height, 14.39 ft).

711. South Umpqua River near Brockway, Oreg.

Location.--Lat 43°08'00", long 123°23'50", in SW$\frac{1}{4}$ sec.15, T.28 S., R.6 W., on downstream side of right pier of Winston Bridge on U.S. Highway 99, $2\frac{1}{2}$ miles northeast of Brockway and 4 miles downstream from Lookingglass Creek.

Drainage area.--1,670 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 461.84 ft above mean sea level, datum of 1929 (Oregon State Highway Dept. bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements.

Maxima.--December 1955 to January 1956: Discharge, 91,300 cfs 1 p.m. Dec. 22 (gage height, 31.55 ft).

1905-12, 1923-26, 1942 to November 1955: Discharge, 102,000 cfs Oct. 29, 1950 (gage height, 32.4 ft), from rating curve extended above 76,000 cfs on basis of slope-conveyance study.

The flood of 1890 reached a stage of about 33.1 ft, according to a local resident.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	11,800	5,880	11.....	12,800	15,100	21.....	49,800	13,300
2.....	14,300	5,720	12.....	11,800	14,600	22.....	81,000	20,000
3.....	10,800	6,640	13.....	12,100	16,300	23.....	41,500	39,100
4.....	6,820	19,900	14.....	8,550	15,300	24.....	22,900	22,600
5.....	5,000	19,100	15.....	6,400	39,200	25.....	22,000	15,000
6.....	5,700	15,200	16.....	7,980	37,500	26.....	74,300	11,800
7.....	7,500	20,600	17.....	13,200	22,700	27.....	34,300	10,600
8.....	6,640	15,500	18.....	14,700	15,400	28.....	17,000	8,350
9.....	16,000	12,300	19.....	28,000	13,500	29.....	11,100	6,760
10.....	10,500	13,200	20.....	26,800	14,300	30.....	8,100	5,780
						31.....	6,480	4,940
Monthly mean discharge, in cubic feet per second......................							19,540	16,010
Runoff, in inches..							13.49	11.05
Runoff, in acre-feet...							1,202,000	984,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Umpqua River near Brockway, Oreg.

Hour	Gage height	Discharge
Dec. 17		
12 p.m.	10.93	11,200
Dec. 18		
2 a.m.	10.85	11,000
12 m.	11.98	14,300
6 p.m.	12.90	17,200
12 p.m.	13.54	19,400
Dec. 19		
12 m.	16.40	29,100
4 p.m.	17.16	31,700
8	17.50	32,900
12 p.m.	17.19	31,900
Dec. 20		
8 a.m.	15.30	25,400
12 m.	14.60	23,000
2 p.m.	14.41	23,300
4	14.52	22,800
12 p.m.	17.66	33,400
Dec. 21		
6 a.m.	20.50	43,600
12 m.	21.84	48,600
6 p.m.	23.45	54,900
12 p.m.	27.15	70,400
Dec. 22		
4 a.m.	29.26	80,000
6	30.30	85,100
12 m.	31.48	90,900
1 p.m.	31.55	91,300
4	31.00	88,500
12 p.m.	24.50	59,200
Dec. 23		
6 a.m.	21.36	46,800
12 m.	19.71	40,600
6 p.m.	17.95	34,400
12 p.m.	16.44	29,300
Dec. 24		
12 m.	14.44	22,500
12 p.m.	12.89	17,200
Dec. 25		
8 a.m.	12.33	15,400
12 m.	12.53	16,100
6 p.m.	14.64	23,200
12 p.m.	21.92	48,900
Dec. 26		
4 a.m.	27.84	73,500
8	30.00	83,600
12 m.	30.34	85,300
4 p.m.	29.59	81,600
12 p.m.	23.80	56,300
Dec. 27		
6 a.m.	19.56	40,100
12 m.	17.14	31,700
6 p.m.	15.51	26,100
12 p.m.	14.30	22,000
Dec. 28		
12 m.	12.62	16,400
12 p.m.	11.60	13,200
Jan. 13		
12 p.m.	12.21	15,000
Jan. 14		
12 m.	11.77	13,700
4 p.m.	11.97	14,300
12 p.m.	13.91	20,700
Jan. 15		
6 a.m.	17.20	31,900
12 m.	20.20	42,400
6 p.m.	22.12	49,700
12 p.m.	21.13	45,900
Jan. 16		
6 a.m.	19.80	41,000
12 m.	18.94	37,900
12 p.m.	16.44	29,300
Jan. 17		
12 m.	14.28	21,900
12 p.m.	13.00	17,600
Jan. 18		
12 m.	12.28	15,200
12 p.m.	11.78	13,700
Jan. 21		
12 p.m.	11.36	12,500
Jan. 22		
6 a.m.	11.62	13,300
12 m.	12.24	15,100
4 p.m.	14.00	21,000
8	16.34	28,900
12 p.m.	20.52	43,600
Jan. 23		
4 a.m.	21.34	46,700
12 m.	19.44	39,700
4 p.m.	18.24	35,500
12 p.m.	16.61	29,800
Jan. 24		
6 a.m.	15.43	25,800
12 m.	14.38	22,200
6 p.m.	13.61	19,600
12 p.m.	13.02	17,700
Jan. 25		
12 m.	12.12	14,800
12 p.m.	11.42	12,700

712. Deer Creek near Roseburg, Oreg.

Location.--Lat 43°13'05", long 123°17'15", in SE¼ sec.16, T.27 S., R.5 W., on left bank 200 ft upstream from Shick Creek, 2.8 miles east of Roseburg, and 3 miles upstream from mouth.

Drainage area.--54.3 sq mi.

Gage-height record.--Staff gage read once daily, twice daily at stages above 4.0 ft. Peak stage for Dec. 26 from floodmarks. Datum of gage is 486.1 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,200 cfs and by slope-area measurements at 6,460 cfs and 6,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 6,800 cfs about 2 a.m. Dec. 26 (gage height, 13.67 ft).

October to November 1955: Discharge, 960 cfs Nov. 19 (gage height, 5.9 ft, from graph drawn on basis of staff-gage readings).

Flood of Oct. 29, 1950, reached a stage of 13.38 ft, from floodmarks (discharge, 6,460 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	550	168	11	385	565	21	1,090	315
2	556	135	12	550	395	22	1,610	1,320
3	362	115	13	330	362	23	1,060	1,040
4	226	298	14	252	546	24	600	526
5	254	254	15	212	595	25	1,550	338
6	238	192	16	610	520	26	4,200	320
7	178	335	17	580	364	27	1,430	219
8	490	559	18	715	372	28	601	165
9	610	577	19	715	398	29	319	138
10	478	520	20	692	392	30	219	118
						31	212	102
Monthly mean discharge, in cubic feet per second							706	396
Runoff, in inches							14.98	8.40
Runoff, in acre-feet							43,390	24,320

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Deer Creek near Roseburg, Oreg.

Hour	Gage height	Discharge
Dec. 19		
12 p.m.......	4.78	574
Dec. 20		
10 a.m.......	4.64	532
4 p.m........	5.50	800
12 p.m.......	5.92	968
Dec. 21		
10 a.m.......	6.14	1,060
4 p.m........	6.20	1,080
8............	6.48	1,190
12 p.m.......	6.97	1,390
Dec. 22		
6 a.m........	7.70	1,750
10...........	7.82	1,810
6 p.m........	7.30	1,550
12 p.m.......	6.83	1,330
Dec. 23		
8 a.m........	6.33	1,130
4 p.m........	5.96	984
12 p.m.......	5.52	808
Dec. 24		
6 a.m........	5.09	667
4 p.m........	4.64	532
Dec. 24--Con.		
12 p.m.......	4.42	466
Dec. 25		
10 a.m.......	5.75	900
2 p.m........	6.16	1,060
6............	7.60	1,700
12 p.m.......	12.30	5,300
Dec. 26		
2 a.m........	13.67	6,800
8............	11.72	4,720
4 p.m........	10.07	3,260
12 p.m.......	8.66	2,300
Dec. 27		
6 a.m........	7.64	1,720
12 m.........	6.88	1,350
6 p.m........	6.21	1,080
12 p.m.......	5.68	872
Dec. 28		
8 a.m........	5.04	652
4 p.m........	4.57	511
12 p.m.......	4.20	410
Dec. 29		
8 a.m........	3.91	338
Dec. 29--Con.		
4 p.m........	3.68	286
12 p.m.......	3.53	256
Jan. 13		
12 p.m.......	4.06	375
Jan. 14		
10 a.m.......	4.24	420
4 p.m........	4.82	586
12 p.m.......	5.85	940
Jan. 15		
8 a.m........	5.08	664
6 p.m........	4.18	405
12 p.m.......	4.30	435
Jan. 16		
4 a.m........	4.60	520
10...........	4.96	628
4 p.m........	4.54	502
12 p.m.......	4.30	435
Jan. 17		
6 a.m........	4.17	402
4 p.m........	3.84	320
12 p.m.......	3.90	335

713. Parrott Creek at Roseburg, Oreg.

(Crest-stage station; previously published as South Umpqua River tributary)

Location.--Lat 43°11'45", long 123°20'50", in NE¼ sec.25, T.27 S., R.6 W., at culvert on South Starmer Street between Masters and Booth Streets in Roseburg, and half a mile upstream from mouth.

Drainage area.--2.42 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 550 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 75 cfs and from flow through culvert at 286 cfs.

Maxima.--December 1955 to January 1956: Discharge, 290 cfs Dec. 21 (gage height, 15.24 ft).

1951 to November 1955: Discharge, 168 cfs Jan. 18, 1953 (gage height, 12.94 ft).

714. Marks Creek near Roseburg, Oreg.

(Crest-stage station; previously published as South Umpqua River tributary near Roseburg)

Location.--Lat 43°15'55", long 123°23'50", in NE¼SW¼ sec.3, T.27 S., R.6 W., at road crossing on Garden Valley Road, 1 mile upstream from mouth and 3.8 miles northwest of Roseburg.

Drainage area.--1.26 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 450 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurement at 18 cfs and from flow through culvert at 238 cfs.

Maxima.--December 1955 to January 1956: Discharge, 235 cfs Dec. 21 (gage height, 15.08 ft).

1951 to November 1955: Discharge, 140 cfs Jan. 18, 1953 (gage height, 13.37 ft).

715. North Umpqua River below Lemolo Reservoir, near Toketee Falls, Oreg.

Location.--Lat 43°19'20", long 122°11'40", in NW$\frac{1}{4}$NW$\frac{1}{4}$ sec.11, T.26 S., R.5 E., on right bank 1,900 ft downstream from Lemolo No. 1 diversion dam and 13 miles east of Toketee Falls.

Drainage area.--170 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 4,025 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements for all stages on canal and below 310 cfs on river, extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 1,160 cfs 9 p.m. Dec. 22 (river gage height, 6.50 ft).
1927 to November 1955: Discharge, 1,190 cfs June 9, 1933 (gage height, 2.34 ft; at site 1 mile upstream, drainage area, 165 sq mi, at datum about 65 ft higher).

Remarks.--Flows slightly regulated by Lemolo Reservoir and Diamond Lake. Records include flow in Lemolo No. 1 power canal which diverts water 0.36 mile above the station for power generation and returns it 4.3 miles downstream.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	537	536	11.....	400	676	21.....	639	651
2.....	396	540	12.....	325	652	22.....	987	671
3.....	393	586	13.....	457	650	23.....	1,070	651
4.....	502	670	14.....	435	701	24.....	1,010	681
5.....	403	599	15.....	445	755	25.....	818	681
6.....	414	537	16.....	418	736	26.....	1,050	681
7.....	435	531	17.....	405	748	27.....	700	674
8.....	432	444	18.....	396	744	28.....	544	671
9.....	448	608	19.....	502	591	29.....	550	634
10.....	433	687	20.....	473	661	30.....	544	639
						31.....	545	570
Monthly mean discharge, in cubic feet per second							552	640
Runoff, in inches							3.74	4.34
Runoff, in acre-feet							33,930	39,380

716. Clearwater River above Trap Creek, near Toketee Falls, Oreg.

Location.--Lat 43°14'40", long 122°17'10", in SE$\frac{1}{4}$ sec.1, T.27 S., R.4 E., on right bank 900 ft downstream from Clearwater No. 1 diversion dam, about 0.4 mile upstream from Trap Creek, and 8 miles east of Toketee Falls.

Drainage area.--41.6 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 3,862.84 ft above mean sea level (levels by California Oregon Power Co.).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 60 cfs, and extended above by logarithmic plotting. Backwater from log jam Dec. 21 to Jan. 31.

Maxima.--December 1955 to January 1956: Discharge, 598 cfs 6 a.m. Dec. 22.
1927 to November 1955: Discharge, 487 cfs Oct. 29, 1950 (gage height, 2.28 ft, former site and datum), from rating curve extended above 290 cfs by logarithmic plotting.

Remarks.--Records presented herein include flow in Clearwater No. 1 power canal, which diverts water 300 ft above station for generation of power and returns it to Clearwater River about 2$\frac{1}{2}$ miles below station.

Mean discharge, in cubic feet per second, 1955-56, of Clearwater River above Trap Creek, near Toketee Falls, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	177	240	11.....	182	198	21.....	363	247
2.....	173	230	12.....	191	197	22.....	471	282
3.....	170	229	13.....	181	197	23.....	412	296
4.....	168	230	14.....	176	217	24.....	418	305
5.....	159	222	15.....	183	299	25.....	404	294
6.....	171	218	16.....	185	291	26.....	382	273
7.....	168	213	17.....	184	261	27.....	351	257
8.....	170	204	18.....	178	250	28.....	328	236
9.....	168	201	19.....	201	246	29.....	316	231
10.....	172	200	20.....	220	247	30.....	258	218
						31.....	247	213
Monthly mean discharge, in cubic feet per second......................							243	240
Runoff, in inches..							6.73	6.65
Runoff, in acre-feet...							14,930	14,760

Peak discharge.--Jan. 15 (4 p.m.) 321 cfs; Jan. 22 (2 p.m.) 353 cfs.

717. Fish Creek at Big Camas ranger station, near Toketee Falls, Oreg.

Location.--Lat 43°14', long 122°26', in SE$\frac{1}{4}$ sec.10, T.27 S., R.3 E., on right bank half a mile upstream from Camas Creek, three-quarters of a mile east of Big Camas ranger station, and 3$\frac{1}{2}$ miles south of Toketee Falls.

Drainage area.--68.8 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 22 to 10 a.m. Dec. 23, for which graph was reconstructed on basis of high-water mark in gage house and outside gage readings, and Jan. 6-8, 10-13, 24-29. Datum of gage is 2,860.44 ft above mean sea level, datum of 1929 (levels by California-Oregon Power Co.).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs and extended above by logarithmic plotting. Discharge for periods of no gage-height record estimated on basis of weather records and records for Clearwater River above Trap Creek, near Toketee Falls.

Maxima.--December 1955 to January 1956: Discharge, 9,880 cfs about 2 a.m. Dec. 22 (river gage height, 10.9 ft, from floodmarks).

1947 to November 1955: Discharge, 5,160 cfs Jan. 18, 1953 (river gage height, 7.17 ft), from rating curve extended above 700 cfs on basis of contracted-opening measurement at 3,740 cfs (no flow in canal).

Remarks.--All records presented herein include flow in Fish Creek power canal, which diverts water about 2 miles above station for power generation at Fish Creek powerplant; diversion discharged to North Umpqua River just below Toketee Falls. Peak flow of Dec. 22 affected by failure of power canal diversion dam.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	429	493	11.....	490	210	21.....	2,770	727
2.....	355	435	12.....	762	210	22.....	5,720	1,110
3.....	293	424	13.....	650	300	23.....	2,330	1,300
4.....	252	454	14.....	493	421	24.....	1,560	1,100
5.....	244	374	15.....	434	1,630	25.....	1,230	900
6.....	281	330	16.....	460	1,320	26.....	1,090	750
7.....	254	300	17.....	448	830	27.....	947	600
8.....	247	260	18.....	479	694	28.....	812	500
9.....	235	235	19.....	607	665	29.....	698	400
10.....	263	220	20.....	821	704	30.....	685	330
						31.....	652	273
Monthly mean discharge, in cubic feet per second......................							871	597
Runoff, in inches..							14.59	10.00
Runoff, in acre-feet...							53,540	36,690

718. North Umpqua River above Copeland Creek, near Toketee Falls, Oreg.

Location.--Lat 43°17'45", long 122°32'10", in NW¼ sec.24, T.26 S., R.2 E., on right bank half a mile upstream from Copeland Creek and 4¾ miles west of Toketee Falls.

Drainage area.--475 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,580 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 10,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 25,000 cfs 4 a.m. Dec. 22 (gage height, 14.84 ft).

1949 to November 1955: Discharge, 17,200 cfs Jan. 18, 1953 (gage height, 12.23 ft).

Remarks.--Flow slightly regulated by Lemolo Reservoir and Diamond Lake.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	2,610	2,200	11	2,950	2,130	21	9,850	3,920
2	2,320	2,180	12	4,150	2,220	22	19,600	7,610
3	1,790	2,150	13	3,550	2,370	23	9,930	6,810
4	1,490	2,320	14	2,670	3,720	24	6,280	4,560
5	1,620	2,330	15	2,370	9,910	25	4,600	3,720
6	1,680	2,250	16	2,410	6,510	26	4,600	3,200
7	1,860	2,150	17	2,460	4,490	27	3,740	2,810
8	1,810	1,530	18	2,510	3,840	28	3,000	2,560
9	1,820	2,200	19	2,810	3,700	29	2,670	2,380
10	1,790	2,030	20	3,230	3,740	30	2,550	2,230
						31	2,300	2,180
Monthly mean discharge, in cubic feet per second							3,775	3,418
Runoff, in inches							9.16	8.30
Runoff, in acre-feet							232,100	210,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.	5.35	2,920	12 m.	13.39	20,700	12 p.m.	7.96	6,960
Dec. 20			6 p.m.	11.90	16,200			
2 a.m.	5.00	2,570	12 p.m.	10.60	13,000	Jan. 15		
6	4.98	2,550				6 a.m.	9.15	9,420
12 m.	5.22	2,790	Dec. 23			11	10.00	11,500
6 p.m.	6.05	3,780	6 a.m.	10.00	11,500	4 p.m.	10.00	11,500
12 p.m.	6.80	4,930	12 m.	9.20	9,540	8	9.35	9,880
			12 p.m.	8.20	7,400	12 p.m.	8.62	8,240
Dec. 21								
5 a.m.	8.20	7,400	Dec. 24			Jan. 16		
6	7.85	6,760	12 m.	7.50	6,130	6 a.m.	7.93	6,900
8	8.30	7,600	12 p.m.	7.10	5,440	12 m.	7.75	6,580
9	8.10	7,210				6 p.m.	7.28	5,750
12 m.	8.20	7,400	Jan. 13			12 p.m.	7.08	5,410
4 p.m.	9.50	10,200	12 p.m.	4.94	2,370			
6	10.44	12,600				Jan. 17		
12 p.m.	13.14	19,900	Jan. 14			4 a.m.	6.51	4,460
			6 a.m.	5.00	2,440	9	6.49	4,440
Dec. 22			12 m.	5.48	3,010	12 m.	6.64	4,660
4 a.m.	14.84	25,000	6 p.m.	6.70	4,760	12 p.m.	6.23	4,040

719. Steamboat Creek near Glide, Oreg.

(Partial-record station)

Location.--Lat 43°21'00", long 122°43'40", in N½ sec.32, T.25½ S., R.1 E., on right bank in Canton Creek Service Park, about 0.5 mile above mouth and 19 miles northeast of Glide.

Drainage area.--227 sq mi.

Gage-height record.--Staff gage read only when discharge measurements are made; peak stage determined from crest-stage gage and by levels to floodmarks. Datum of gage is 1,128.71 ft above mean sea level (Bureau of Public Roads bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,700 cfs and by slope-area measurement at 26,900 cfs.

Maxima.--December 1955 to January 1956: Discharge, 26,900 cfs about 6 a.m Dec. 22 (gage height, 17.9 ft).

October to November 1955: Discharge, 9,800 cfs Nov. 19, 1955 (gage height, 11.6 ft, observed at peak).

720. North Umpqua River above Rock Creek, near Glide, Oreg.

(Gage station, discontinued 1945)

Location.--Lat 43°20', long 123°00', in NW¼ sec.12, T.26 S., R.3 W., half a mile upstream from Rock Creek and 5 miles northeast of Glide.

Drainage area.--886 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 18,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 68,000 cfs Dec. 22 (gage height, 23.1 ft).
1924-45: Discharge, 53,000 cfs Feb. 20, 1927 (gage height, 20.18 ft).
Flood of Oct. 29, 1950, reached a stage of 20.5 ft (discharge, 55,000 cfs).

721. Rock Creek near Glide, Oreg.

(Partial-record station)

Location.--Lat 43°20'30", long 122°59'30", in NE¼NE¼ sec.1, T.26 S., R.3 W., on right bank a mile above mouth and 6 miles northeast of Glide.

Drainage area.--97.4 sq mi.

Gage-height record.--Staff gage read only when discharge measurements are made; peak stage determined from crest-stage gage. Altitude of gage is 910 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,100 cfs and by slope-area measurement at 12,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 12,300 cfs Dec. 22 (gage height, 14.83 ft).
October to November 1955: Discharge, 5,680 cfs Nov. 19, 1955 (gage height, 10.32 ft).

722. Cavitt Creek near Peel, Oreg.

(Partial-record station)

Location.--Lat 43°13'20", long 123°01'05", in NE¼ sec.14, T.27 S., R.3 W., 1.5 miles upstream from mouth, 1.5 miles south of Peel, and 8.8 miles southeast of Glide.

Drainage area.--56.9 sq mi.

Gage-height record.--Crest stages and occasional staff-gage readings. Peak stage for Dec. 26 from floodmark. Altitude of gage is 940 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 800 cfs and by slope-area measurement at 4,930 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,930 cfs about 1 a.m Dec. 26 (gage height, 7.5 ft).
October to November 1955: Discharge, 1,650 cfs Nov. 19, 1955 (gage height, 5.3 ft, from graph based on staff-gage readings).

723. Little River at Peel, Oreg.

Location.--Lat 43°15'10", long 123°01'30", in NW¼ sec.2, T.27 S., R.3 W., on left bank 0.6 mile southeast of Peel and 0.8 mile downstream from Cavitt Creek.

Drainage area.--177 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 828.33 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,600 cfs and by slope-area measurement at 15,800 cfs.

Maxima.--December 1955 to January 1956: Discharge, 15,800 cfs 3 a.m. Dec. 22 (gage height, 16.55 ft).
1954 to November 1955: Discharge, 8,340 cfs Dec. 30, 1954 (gage height, 11.72 ft).
Discharge known, 22,700 cfs Nov. 22, 23, 1953 (gage height, 20.6 ft, from floodmark).

Mean discharge, in cubic feet per second, 1955-56, of Little River at Peel, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	2,320	631	11.....	2,860	1,380	21.....	7,670	1,720
2.....	1,880	554	12.....	3,450	1,430	22.....	11,000	5,860
3.....	1,320	608	13.....	2,530	1,710	23.....	4,440	5,130
4.....	914	1,220	14.....	1,530	2,630	24.....	2,420	2,520
5.....	810	1,150	15.....	1,150	6,510	25.....	2,820	1,600
6.....	1,130	936	16.....	1,680	3,590	26.....	5,550	1,210
7.....	1,070	978	17.....	1,960	2,060	27.....	2,590	936
8.....	1,450	924	18.....	2,160	1,730	28.....	1,590	738
9.....	2,280	828	19.....	2,420	1,850	29.....	1,130	618
10.....	2,010	1,040	20.....	3,050	1,870	30.....	882	546
						31.....	702	478
Monthly mean discharge, in cubic feet per second							2,541	1,774
Runoff, in inches							16.55	11.55
Runoff, in acre-feet							156,200	109,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 19			Dec. 23--Con.			Jan. 13		
12 p.m.......	6.32	2,380	6 p.m........	7.68	3,680	12 p.m.......	5.17	1,440
			12 p.m.......	7.13	3,130			
Dec. 20						Jan. 14		
6 a.m........	6.05	2,140	Dec. 24			6 a.m........	5.31	1,540
11...........	5.88	1,980	6 a.m........	6.68	2,700	12 m.........	5.77	1,890
2 p.m........	6.41	2,460	12 m.........	6.31	2,370	4 p.m........	6.98	2,980
5............	7.76	3,760	6 p.m........	6.03	2,120	8............	8.60	4,660
9............	9.01	5,110	12 p.m.......	5.77	1,890	10...........	8.69	4,760
12 p.m.......	9.30	5,430				12 p.m.......	8.66	4,730
Dec. 21			Dec. 25					
2 a.m........	9.80	5,980	6 a.m........	5.54	1,700	Jan. 15		
5............	10.03	6,240	12 m.........	5.46	1,640	2 a.m........	8.91	5,000
7............	10.15	6,380	2 p.m........	5.59	1,740	6............	10.84	7,210
8............	10.16	6,390	6............	7.17	3,170	7............	11.02	7,430
12 m.........	9.43	5,570	10...........	10.11	6,330	9............	10.96	7,350
4 p.m........	11.03	7,440	12 p.m.......	11.72	8,340	12 m.........	11.38	7,890
8............	13.43	10,700				2 p.m........	11.20	7,660
12 p.m.......	15.40	13,900	Dec. 26			9............	9.34	5,470
			1 a.m........	11.83	8,480	12 p.m.......	8.84	4,920
Dec. 22			2............	11.69	8,300			
3 a.m........	16.55	15,800	5............	10.81	7,170	Jan. 16		
6............	15.80	14,600	8............	9.86	6,050	6 a.m........	8.11	4,120
12 m.........	13.60	11,000	12 m.........	9.09	5,200	12 m.........	7.50	3,500
6 p.m........	11.12	7,560	6 p.m........	8.17	4,190	6 p.m........	6.98	2,980
9............	10.35	6,620	12 p.m.......	7.41	3,410	12 p.m.......	6.55	2,580
12 p.m.......	9.93	6,120						
			Dec. 27			Jan. 17		
Dec. 23			6 a.m........	6.91	2,910	6 a.m........	6.19	2,260
3 a.m........	9.47	5,620	12 m.........	6.47	2,510	6 p.m........	5.66	1,800
6............	9.08	5,190	6 p.m........	6.19	2,260	12 p.m.......	5.61	1,760
12 m.........	8.27	4,300	12 p.m.......	5.86	1,960			

724. North Umpqua River near Glide, Oreg.

(Gaging station, discontinued 1938)

Location.--Lat 43°18'20", long 123°07'00", in SW¼ sec.13, T.26 S., R.4 W., 1 mile downstream from Little River and 1 mile west of Glide.

Drainage area.--1,210 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 40,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 90,000 cfs Dec. 22 (gage height, 21.7 ft).

1915-20, 1921-22, 1927-38: Discharge, 59,500 cfs Mar. 19, 1932 (gage height, 17.3 ft).

Flood of Nov. 22, 1909, reached a stage of about 22.6 ft (discharge, 94,000 cfs).

725. Sutherlin Creek at Sutherlin, Oreg.

Location.--Lat 43°23'20", long 123°18'10", in SW¼ sec.16, T.25 S., R.5 W., on right bank at downstream side of Waite Street Bridge in Sutherlin and about 1½ miles upstream from Cooper Creek.

Drainage area.--16.4 sq mi.

Gage-height record.--Staff gage and crest-stage indicator; gage read once daily, twice daily at stages over 4.0 ft, except no readings Dec. 4, 11, 18, and Jan. 1, 8, 29. Datum of gage is 512.46 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 950 cfs and by slope-area measurement at 1,220 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,350 cfs about 6 a.m. Dec. 26 (gage height, 7.77 ft).

October to November 1955: Discharge, 332 cfs Nov. 19 (gage height, 4.3 ft, from graph based on staff-gage readings).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	281	61	11.....	280	140	21.....	679	80
2.....	254	63	12.....	281	133	22.....	713	210
3.....	138	104	13.....	110	95	23.....	292	248
4.....	90	146	14.....	48	124	24.....	125	146
5.....	92	82	15.....	36	379	25.....	350	86
6.....	53	220	16.....	251	198	26.....	955	82
7.....	42	298	17.....	170	111	27.....	348	53
8.....	80	180	18.....	200	120	28.....	140	42
9.....	236	121	19.....	364	113	29.....	76	38
10.....	199	119	20.....	323	112	30.....	65	35
						31.....	59	31
Monthly mean discharge, in cubic feet per second							236	128
Runoff, in inches							16.62	9.00
Runoff, in acre-feet							14,540	7,870

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23			Dec. 28--Con.		
12 p.m.......	3.70	236	9 a.m........	4.22	318	12 m.........	2.88	142
			5 p.m........	3.93	270	12 p.m.......	2.55	106
Dec. 19			12 p.m.......	3.40	199			
3 a.m........	3.64	228				Jan. 13		
9............	4.07	293	Dec. 24			12 p.m.......	2.70	122
5 p.m........	5.01	478	6 a.m........	2.90	144			
8............	5.20	525	12 m.........	2.60	111	Jan. 14		
12 p.m.......	4.75	422	12 p.m.......	2.40	90	4 a.m........	2.74	126
						10...........	2.62	113
Dec. 20			Dec. 25			2 p.m........	2.60	111
8 a.m........	3.46	206	6 a.m........	2.55	106	8............	2.80	133
10...........	3.40	199	12 m.........	3.60	223	12 p.m.......	3.05	160
4 p.m........	4.38	347	12 p.m.......	6.58	914			
12 p.m.......	4.88	450				Jan. 15		
			Dec. 26			6 a.m........	3.85	258
Dec. 21			6 a.m........	7.77	1,350	12 m.........	5.07	492
9 a.m........	5.80	680	10...........	7.44	1,220	4 p.m........	5.29	548
12 m.........	5.98	734	5 p.m........	5.82	686	12 p.m.......	4.30	332
5 p.m........	5.62	630	12 p.m.......	5.30	550			
12 p.m.......	6.80	990	Dec. 27			Jan. 16		
			10 a.m.......	4.76	425	6 a.m........	3.62	226
Dec. 22			5 p.m........	3.40	199	12 m.........	3.25	182
4 a.m........	7.10	1,100	12 p.m.......	3.15	172	6 p.m........	3.00	155
9............	6.62	927				12 p.m.......	2.85	138
5 p.m........	4.60	391	Dec. 28					
12 p.m.......	4.40	351	6 a.m........	3.00	155			

726. Sutherlin Creek at Wilbur, Oreg.

(Miscellaneous site)

Location.--Lat 43°19'20", long 123°20'30", in N½ sec.13, T.26 S., R.6 W., at road crossing in Wilbur, 3 miles north of Winchester, and about 5 miles south of Sutherlin.

Drainage area.--22.6 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maximum.--December 1955 to January 1956: Discharge, 3,830 cfs Dec. 22.

727. North Umpqua River at Winchester, Oreg.

Location.--Lat 43°16'20", long 123°24'40", in NE¼NE¼ sec.33, T.26 S., R.6 W., on right bank 1.8 miles upstream from confluence with South Umpqua River and 3 miles west of Winchester.

Drainage area.--1,344 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 370 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 39,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 92,500 cfs 9 a.m. Dec. 22 (gage height, 29.14 ft).

1908-13, 1923-29, 1954 to November 1955: Discharge, 100,000 cfs Nov. 23, 1909 (gage height, 28.1 ft, site and datum then in use), from rating curve extended above 42,000 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	15,900	5,390	11	19,300	9,280	21	40,900	14,400
2	14,800	4,860	12	24,000	9,610	22	80,800	29,900
3	10,300	4,660	13	20,400	11,300	23	39,500	37,200
4	6,910	7,370	14	12,200	15,600	24	21,000	19,900
5	5,880	8,490	15	8,940	46,500	25	17,400	13,200
6	7,080	8,230	16	11,700	31,400	26	44,100	9,980
7	8,670	9,050	17	15,000	17,800	27	20,700	7,940
8	8,380	7,450	18	13,700	14,100	28	12,200	6,550
9	15,100	6,550	19	15,300	14,000	29	8,830	5,660
10	11,000	7,710	20	15,500	14,800	30	7,270	5,060
						31	5,900	4,440
Monthly mean discharge, in cubic feet per second							18,020	13,170
Runoff, in inches							15.46	11.30
Runoff, in acre-feet							1,108,000	810,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 24--Con.			Jan. 14--Con.		
12 p.m.	10.50	21,800	8 a.m.	10.70	22,400	4 p.m.	8.37	14,300
			12 m.	10.15	20,500	8	10.96	23,400
Dec. 21			12 p.m.	9.02	16,600	12 p.m.	14.53	36,100
4 a.m.	13.18	31,100						
8	14.97	37,900	Dec. 25			Jan. 15		
12 m.	16.25	43,000	12 m.	8.38	14,300	4 a.m.	15.30	39,200
8 p.m.	16.90	45,600	8 p.m.	9.95	19,800	8	16.28	43,100
12 p.m.	21.74	65,000	12 p.m.	12.40	28,400	12 m.	18.10	50,400
						4 p.m.	18.86	53,400
Dec. 22			Dec. 26			5	18.94	53,800
4 a.m.	26.59	83,600	4 a.m.	15.96	41,800	8	18.48	51,900
8	29.06	92,200	8	18.18	50,700	12 p.m.	16.90	45,600
9	29.14	92,500	10	18.51	52,000			
12 m.	28.27	89,400	12 m.	18.38	51,500	Jan. 16		
4 p.m.	26.46	83,100	4 p.m.	17.50	48,000	4 a.m.	15.28	39,100
8	23.89	73,600	8	15.88	41,500	8	13.85	33,500
12 p.m.	20.58	60,300	12 p.m.	13.63	32,700	12 m.	12.81	29,800
						4 p.m.	12.03	27,100
Dec. 23			Dec. 27			8	11.40	24,900
4 a.m.	17.95	49,800	4 a.m.	11.68	25,900	12 p.m.	10.70	22,400
8	16.28	43,100	8	10.42	21,500			
12 m.	14.93	37,700	12 m.	9.70	19,000	Jan. 17		
4 p.m.	13.58	32,500	12 p.m.	8.56	15,000	12 m.	9.17	17,100
8	12.83	29,900	Jan. 13			12 p.m.	8.47	14,600
12 p.m.	12.15	27,500	12 p.m.	7.08	10,400			
Dec. 24			Jan. 14					
4 a.m.	11.20	24,200	12 m.	7.33	11,200			

728. Calapooya Creek above Hinkle Creek, near Nonpareil, Oreg.

(Miscellaneous site)

Location.--Lat 43°26'20", long 123°05'20", in NE¼ sec.31, T.24 S., R.3 W., 1,000 ft upstream from Hinkle Creek and 4 miles northeast of Nonpareil.

Drainage area.--49.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 4,980 cfs Dec. 21, 22.

729. Calapooya Creek near Oakland, Oreg.

Location.--Lat 43°24'10", long 123°21'45", in NW¼ sec.13, T.25 S., R.6 W., near center of span and downstream side of county bridge half a mile downstream from Williams Creek, 2.5 miles northwest of Sutherlin, and 3.5 miles southwest of Oakland.

Drainage area.--210 sq mi.

Gage-height record.--Wire-weight gage and crest-stage indicator. Wire-weight gage read twice daily. Peak stage for Dec. 26 from floodmarks. Datum of gage is 371.26 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,000 cfs and by contracted-opening measurement at 20,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 20,300 cfs about 7 a.m. Dec. 26 (gage height, 20.47 ft).

October to November 1955: Discharge, 9,900 cfs Nov. 19 (gage height, 17.0 ft, from graph drawn on basis of wire-weight-gage readings).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	4,320	1,150	11.....	2,610	2,640	21.....	10,200	1,910
2.....	4,620	974	12.....	3,930	2,190	22.....	12,600	3,180
3.....	2,370	966	13.....	2,880	2,550	23.....	6,730	5,600
4.....	1,580	1,590	14.....	1,600	2,860	24.....	3,190	3,000
5.....	1,330	1,600	15.....	1,300	7,100	25.....	3,910	1,940
6.....	1,270	1,920	16.....	2,820	5,610	26.....	15,200	1,590
7.....	1,270	2,710	17.....	3,120	2,820	27.....	5,230	1,270
8.....	1,680	2,090	18.....	3,370	2,280	28.....	2,330	998
9.....	3,060	1,910	19.....	5,240	2,190	29.....	1,700	862
10.....	2,230	2,120	20.....	5,320	2,110	30.....	1,380	758
						31.....	1,150	678
Monthly mean discharge, in cubic feet per second.....................							3,856	2,296
Runoff, in inches..							21.17	12.60
Runoff, in acre-feet...							237,100	141,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 23			Jan. 13		
12 p.m.......	10.94	3,260	8 a.m........	15.26	7,260	12 p.m.......	9.24	2,350
			4 p.m........	14.23	6,050			
Dec. 19			12 p.m.......	12.81	4,650	Jan. 14		
6 a.m........	11.50	3,650				4 a.m........	9.21	2,330
12 m.........	13.55	5,350	Dec. 24			12 m.........	9.60	2,500
6 p.m........	15.12	7,070	8 a.m........	11.30	3,510	6 p.m........	11.02	3,310
12 p.m.......	14.62	6,480	4 p.m........	9.86	2,630	12 p.m.......	12.24	4,190
			12 p.m.......	8.90	2,210			
Dec. 20			Dec. 25			Jan. 15		
8 a.m........	11.24	3,470	7 a.m........	8.50	2,060	8 a.m........	14.58	6,440
4 p.m........	12.17	4,140	10...........	8.75	2,150	2 p.m........	16.44	9,000
12 p.m.......	17.13	10,200	6 p.m........	12.80	4,640	12 p.m.......	15.31	7,330
			12 p.m.......	17.30	10,500			
Dec. 21						Jan. 16		
5 a.m........	17.59	11,100	Dec. 26			8 a.m........	14.35	6,180
12 m.........	17.15	10,200	7 a.m........	20.47	20,300	4 p.m........	13.24	5,040
7 p.m........	16.85	9,660	12 m.........	19.82	17,700	12 p.m.......	11.84	3,890
12 p.m.......	16.92	9,770	6 p.m........	18.55	13,500			
			12 p.m.......	16.38	8,910	Jan. 17		
Dec. 22						8 a.m........	10.32	2,890
4 a.m........	17.78	11,500	Dec. 27			6 p.m........	9.34	2,390
9:30.........	19.80	17,600	8 a.m........	14.00	5,800	12 p.m.......	9.20	2,330
4 p.m........	17.90	11,800	4 p.m........	11.92	3,940			
12 p.m.......	16.51	9,120	12 p.m.......	10.45	2,970			

730. Umpqua River near Elkton, Oreg.

Location.--Lat 43°35', long 123°33', in sec.8, T.23 S., R.7 W., on right bank 4 miles south of Elkton.

Drainage area.--3,683 sq mi.

Gage-height record.--Staff gage read twice daily. Datum of gage is 91.57 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 180,000 cfs and by slope-area measurement at 208,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 218,000 cfs 7 p.m. Dec. 22 (gage height, 45.6 ft, from floodmark).

1905 to November 1955: Discharge, 208,000 cfs Oct. 30, 1950 (gage height, 44.2 ft).

Flood of 1861 reached a stage of 45.5 ft (discharge, 218,000 cfs).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	24,300	16,400	11.....	32,700	28,200	21.....	89,200	32,300
2.....	39,700	13,700	12.....	41,000	30,000	22.....	176,000	39,300
3.....	30,800	12,900	13.....	42,200	30,000	23.....	128,000	90,600
4.....	19,900	21,400	14.....	26,700	33,200	24.....	60,500	60,000
5.....	14,700	36,300	15.....	18,900	80,100	25.....	46,000	36,300
6.....	13,400	26,400	16.....	22,200	98,700	26.....	136,000	28,900
7.....	15,400	37,100	17.....	37,500	61,100	27.....	91,900	22,900
8.....	17,300	31,500	18.....	33,400	37,400	28.....	42,400	18,300
9.....	34,200	25,300	19.....	48,400	32,700	29.....	27,800	15,400
10.....	30,000	27,100	20.....	61,100	33,100	30.....	20,900	13,400
						31.....	17,600	11,800
Monthly mean discharge, in cubic feet per second.......................							46,450	34,900
Runoff, in inches..							14.54	10.92
Runoff, in acre-feet...							2,856,000	2,146,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 19			Dec. 24			Jan. 13		
12 p.m.......	19.5	59,000	6 a.m........	21.4	68,100	12 p.m.......	13.1	31,100
			12 m.........	19.6	59,400			
Dec. 20			6 p.m........	18.0	52,000	Jan. 14		
12 m.........	19.8	60,400	12 p.m.......	16.7	46,200	8 a.m........	12.9	30,400
12 p.m.......	20.7	64,700				2 p.m........	13.0	30,800
			Dec. 25			8............	14.4	36,300
Dec. 21			6 a.m........	15.5	41,000	12 p.m.......	16.9	47,100
6 a.m........	21.8	70,000	12 m.........	15.0	38,800	Jan. 15		
9............	23.1	76,000	4 p.m........	15.8	42,200	6 a.m........	20.6	64,000
12 m.........	25.2	87,100	8............	18.1	52,500	12 m.........	24.5	83,600
4 p.m........	28.1	102,000	12 p.m.......	22.4	73,000	6 p.m........	26.9	95,900
8............	29.8	112,000				12 p.m.......	28.9	107,000
12 p.m.......	31.5	122,000	Dec. 26					
			4 a.m........	26.7	94,800	Jan. 16		
Dec. 22			8............	31.3	121,000	4 a.m........	29.3	109,000
6 a.m........	34.2	139,000	12 m.........	35.9	150,000	8............	28.9	107,000
9............	36.8	156,000	6 p.m........	40.0	178,000	12 m.........	27.9	101,000
12 m.........	40.8	184,000	12 p.m.......	35.6	148,000	6 p.m........	26.0	91,200
4 p.m........	44.8	212,000				12 p.m.......	23.7	79,500
7............	45.6	218,000	Dec. 27					
10...........	44.9	213,000	4 a.m........	30.8	118,000	Jan. 17		
12 p.m.......	43.5	203,000	8............	27.5	99,100	8 a.m........	21.6	69,000
			4 p.m........	23.1	76,000	12 m.........	20.0	61,300
Dec. 23			12 p.m.......	19.5	59,000	5 p.m........	17.8	51,100
4 a.m........	39.2	172,000				12 p.m.......	16.0	43,100
8............	35.2	146,000	Dec. 28					
12 m.........	31.0	119,000	6 a.m........	17.2	48,400	Jan. 18		
4 p.m........	27.7	100,000	12 m.........	15.4	40,500	8 a.m........	14.9	38,400
8............	25.3	87,600	6 p.m........	14.1	35,100	5 p.m........	14.1	35,100
12 p.m.......	23.6	79,000	12 p.m.......	13.4	32,300	12 p.m.......	13.7	33,400

731. Elk Creek above Bennet Creek near Yoncalla, Oreg.

(Miscellaneous site)

Location.--Lat 43°37'10", long 123°12'50", in sec. 30 or 31, T.22 S., R.4 W., 0.4 mile upstream from Bennet Creek and 4 miles northeast of Yoncalla.

Drainage area.--37.6 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,700 cfs Dec. 21.

732. Yoncalla Creek near Yoncalla, Oreg.

(Partial-record station)

Location.--Lat 43°37'30", long 123°17'10", in SW¼ sec.27, T.22 S., R.5 W., on right bank about 1½ miles above mouth, 1.8 miles north of Yoncalla, and 3.3 miles southeast of Drain.

Drainage area.--26.0 sq mi.

Gage-height record.--Crest stages and occasional staff-gage readings. Datum of gage is 319.65 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 1,480 cfs about 10 a.m. Dec. 26 (gage height, 14.48 ft).

October to November 1955: Discharge, 1,130 cfs Nov. 19, 1955 (gage height, 12.80 ft).

733. Elk Creek near Drain, Oreg.

Location.--Lat 43°38'30", long 123°17'50", in SE¼ sec.21, T.22 S., R.5 W., on right bank at downstream side of county bridge about 1,000 ft downstream from Yoncalla Creek and 1.7 miles southeast of Drain.

Drainage area.--104 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 305.96 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,500 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 9,100 cfs 10:30 a.m. Dec. 26 (gage height, 19.06 ft).

October to November 1955: Discharge, 4,830 cfs Nov. 19 (gage height, 13.76 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,880	417	11.....	1,490	1,100	21.....	5,260	800
2.....	1,780	350	12.....	1,840	880	22.....	4,810	1,660
3.....	1,100	373	13.....	1,320	990	23.....	2,600	2,490
4.....	650	812	14.....	735	1,090	24.....	1,590	1,450
5.....	553	984	15.....	553	2,730	25.....	2,080	885
6.....	566	1,060	16.....	1,740	2,570	26.....	7,520	655
7.....	820	2,030	17.....	1,940	1,350	27.....	2,450	492
8.....	1,210	1,540	18.....	1,700	1,090	28.....	1,100	369
9.....	1,950	1,190	19.....	2,860	1,020	29.....	712	308
10.....	1,420	1,220	20.....	2,750	954	30.....	536	264
						31.....	420	219
Monthly mean discharge, in cubic feet per second......................							1,869	1,076
Runoff, in inches...							20.72	11.92
Runoff, in acre-feet..							114,900	66,130

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 21			Dec. 24		
12 p.m.......	6.68	1,270	2 a.m........	12.63	4,080	6 a.m........	8.15	1,820
			5............	12.80	4,180	12 m.........	7.47	1,550
Dec. 18			10...........	14.49	5,340	6 p.m........	6.88	1,340
3 a.m........	6.47	1,190	3 p.m........	13.87	4,910	12 p.m.......	6.37	1,160
1 p.m........	8.95	2,140	11...........	17.04	7,330			
12 p.m.......	7.60	1,600	12 p.m.......	16.93	7,240	Dec. 25		
						8 a.m........	5.88	1,010
Dec. 19			Dec. 22			10...........	6.08	1,070
1 a.m........	7.55	1,580	5 a.m........	15.05	5,740	4 p.m........	8.08	1,790
5............	7.87	1,710	9............	14.48	5,340	12 p.m.......	15.17	5,840
12 m.........	10.80	3,000	8 p.m........	11.51	3,410			
6 p.m........	12.84	4,200	12 p.m.......	10.75	2,980	Dec. 26		
12 p.m.......	11.31	3,290				3 a.m........	16.95	7,260
Dec. 20			Dec. 23			6............	18.26	8,380
4 a.m........	9.99	2,600	5 a.m........	10.20	2,700	9............	18.97	9,020
10...........	9.11	2,200	9............	10.29	2,740	10:30........	19.06	9,100
3 p.m........	9.42	2,340	1 p.m........	10.18	2,690	12 m.........	18.98	9,030
12 p.m.......	12.48	3,990	12 p.m.......	8.88	2,110	2 p.m........	18.58	8,670

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Elk Creek near Drain, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 26--Con.			Jan. 13			Jan. 15--Con.		
6 p.m........	16.80	7,140	12 p.m.......	5.33	858	12 p.m.......	10.88	3,040
12 p.m.......	13.16	4,410	Jan. 14			Jan. 16		
Dec. 27			3 a.m........	5.29	848	2 a.m........	10.58	2,890
6 a.m........	10.71	2,960	6............	5.48	895	4............	10.50	2,850
11...........	9.29	2,280	10...........	5.90	1,020	9............	10.68	2,940
4 p.m........	8.23	1,850	3 p.m........	5.87	1,010	12 m.........	10.20	2,700
12 p.m.......	7.24	1,460	12 p.m.......	7.76	1,660	12 p.m.......	8.16	1,820
			Jan. 15			Jan. 17		
Dec. 28			5 a.m........	8.05	1,780	6 a.m........	7.35	1,500
6 a.m........	6.55	1,220	7............	8.47	1,950	12 m.........	6.76	1,300
12 m.........	6.04	1,060	4 p.m........	11.94	3,660	6 p.m........	6.28	1,130
12 p.m.......	5.30	850	5:30.........	12.10	3,760	9............	6.16	1,100
			7 p.m........	11.95	3,670	12 p.m.......	6.21	1,110

734. Pass Creek near Drain, Oreg.

(Partial-record station)

Location.--Lat 43°41'50", long 123°17'00", in NW¼SW¼ sec.34, T.21 S., R.5 W., on right bank 0.2 mile downstream from Sand Creek, 3 miles northeast of Drain, and 3½ miles upstream from mouth.

Drainage area.--61.9 sq mi.

Gage-height record.--Crest stages and occasional staff-gage readings. Peak stage for Dec. 26 from floodmark. Datum of gage is 302.06 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,000 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 5,410 cfs about 8 a.m. Dec. 26 (gage height, 13.57 ft).

October to November 1955: Discharge, 2,020 cfs Nov. 19, 1955 (gage height, 8.85 ft, from floodmark).

735. Bear Creek near Drain, Oreg.

(Crest-stage station)

Location.--Lat 43°38'00", long 123°21'55", in NW¼ sec.25, T.22 S., R.6 W., at Drain water-supply dam, 0.8 mile downstream from Lost Cabin Creek and 3½ miles southwest of Drain.

Drainage area.--5.13 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 520 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 180 cfs and by determination of flow over dam at 394 cfs.

Maxima.--December 1955 to January 1956: Discharge, 452 cfs Dec. 21 (gage height, 15.59 ft, affected by backwater from debris), by slope-area measurement.

1951 to November 1955: Discharge, 412 cfs Jan. 27, 1954 (gage height, 15.07 ft).

COOS RIVER BASIN

736. Daniels Creek near Eastside, Oreg.

(Gaging station, discontinued 1953)

Location.--Lat 43°20'45", long 124°05'25", near center sec.2, T.26 S., R.12 W., on left bank at downstream side of county bridge, 0.1 mile downstream from Morgan Creek and 5.5 miles southeast of Eastside.

Drainage area.--14.5 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,200 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,800 cfs Dec. 21 (gage height, 10.7 ft).

1950-53: Discharge, 1,290 cfs Jan. 18, 1953 (gage height, 10.26 ft).

737. West Fork Millicoma River near Allegany, Oreg.

Location.--Lat 43°28'35", long 124°03'20", in SW¼NW¼ sec.19, T.24 S., R.11 W., on left bank at county road bridge, 3¾ miles north of Allegany.

Drainage area.--46.5 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 76.95 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,500 cfs.

Maxima.--December 1955 to January 1956: Discharge, 5,440 cfs 7:30 a.m. Dec. 21 (gage height, 12.06 ft).

1954 to November 1955: Discharge, 7,990 cfs Dec. 30, 1954 (gage height, 15.70 ft).

The flood of January or November 1953 reached a stage of about 17.9 ft, from information furnished by local resident.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	1,270	352	11.....	1,030	838	21.....	4,860	874
2.....	1,070	468	12.....	2,380	695	22.....	3,780	2,110
3.....	856	760	13.....	1,050	898	23.....	2,070	1,730
4.....	525	2,470	14.....	585	1,070	24.....	1,270	1,030
5.....	420	1,490	15.....	396	3,110	25.....	1,200	655
6.....	535	1,260	16.....	796	2,920	26.....	3,550	496
7.....	690	1,200	17.....	740	1,390	27.....	1,800	412
8.....	832	976	18.....	1,020	994	28.....	921	326
9.....	1,120	1,080	19.....	2,870	785	29.....	565	287
10.....	715	1,030	20.....	2,150	874	30.....	392	257
						31.....	296	221
Monthly mean discharge, in cubic feet per second							1,347	1,066
Runoff, in inches							33.39	26.44
Runoff, in acre-feet							82,820	65,570

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 20--Con.			Dec. 22--Con.		
12 p.m.......	5.83	1,200	10 p.m.......	7.92	2,540	10 p.m.......	8.42	2,890
			12 p.m.......	8.82	3,170	12 p.m.......	8.28	2,800
Dec. 19								
3 a.m........	6.14	1,380	Dec. 21			Dec. 23		
6............	7.24	2,070	3 a.m........	10.60	4,420	6 a.m........	7.73	2,410
10...........	10.20	4,140	6............	11.86	5,300	12 m.........	7.12	1,980
12 m.........	10.87	4,610	7:30.........	12.06	5,440	4 p.m........	6.79	1,770
2 p.m........	10.43	4,300	12 m.........	11.38	4,970	12 p.m.......	6.46	1,580
4............	9.53	3,670	1 p.m........	11.37	4,960			
8............	8.01	2,610	6............	11.87	5,310	Dec. 24		
12 p.m.......	7.12	1,980	10...........	10.80	4,560	6 a.m........	6.26	1,460
			12 p.m.......	10.44	4,310	12 m.........	5.94	1,260
Dec. 20						12 p.m.......	5.38	940
5 a.m........	6.56	1,640	Dec. 22					
7............	6.59	1,650	2 a.m........	10.34	4,240	Dec. 25		
10...........	6.98	1,890	6............	10.49	4,340	4 a.m........	5.26	880
2 p.m........	7.74	2,420	10...........	10.26	4,180	10...........	5.21	855
4............	7.84	2,490	12 m.........	10.08	4,060	1 p.m........	5.24	870
8 p.m........	7.73	2,410	6 p.m........	8.92	3,240	3 p.m........	5.37	935

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of West Fork Millicoma River near Allegany, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 25--Con.			Dec. 28--Con.			Jan. 15--Con.		
6 p.m........	5.92	1,250	12 p.m.......	4.90	700	3 p.m........	9.53	3,670
12 p.m.......	8.31	2,820				7............	8.29	2,800
			Jan. 13			9............	7.95	2,560
Dec. 26			12 p.m.......	5.02	760	12 p.m.......	7.83	2,480
3 a.m........	9.33	3,530						
6............	9.89	3,920	Jan. 14			Jan. 16		
9............	10.02	4,010	4 a.m........	4.96	730	2 a.m........	7.96	2,570
12 m.........	9.97	3,980	10...........	4.96	730	8............	9.04	3,330
6 p.m........	9.20	3,440	1 p.m........	5.07	785	11...........	9.31	3,520
12 p.m.......	8.15	2,700	3............	5.34	920	1 p.m........	9.20	3,440
			9............	6.92	1,850	4............	8.71	3,100
Dec. 27			10...........	7.10	1,970	9............	7.70	2,390
6 a.m........	7.29	2,100	12 p.m.......	7.25	2,080	12 p.m.......	7.22	2,050
12 m.........	6.68	1,710						
6 p.m........	6.23	1,440	Jan. 15			Jan. 17		
12 p.m.......	5.83	1,200	2 a.m........	7.37	2,160	6 a.m........	6.51	1,610
			4............	7.71	2,400	12 m.........	6.02	1,310
Dec. 28			9............	9.84	3,890	7 p.m........	5.63	1,080
6 a.m........	5.57	1,040	11:30........	10.32	4,220	12 p.m.......	5.56	1,040
12 m.........	5.29	895	1 p.m........	10.22	4,150			

COQUILLE RIVER BASIN

738. South Fork Coquille River at Powers, Oreg.

Location.--Lat 42°53'40", long 124°04'10", in SE$\frac{1}{4}$ sec.12, T.31 S., R.12 W., on left bank half a mile northeast of bridge at Powers and three-quarters of a mile upstream from Woodward Creek.

Drainage area.--169 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 4-10, when lower range of stage was obtained. Datum of gage is 197.42 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 14,000 cfs and by contracted-opening measurement at 24,400 cfs.

Maxima.--December 1955 to January 1956: Discharge, 28,000 cfs 10 p.m. Dec. 21 (gage height, 19.75 ft).

1916-26, 1928 to November 1955: Discharge, 30,500 cfs Dec. 28, 1945 (gage height, 20.57 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	2,960	1,650	11.....	1,730	3,920	21.....	18,000	2,730
2.....	2,860	2,240	12.....	2,030	3,670	22.....	16,600	5,490
3.....	2,270	4,250	13.....	1,620	4,120	23.....	5,870	6,060
4.....	1,600	10,500	14.....	1,250	5,830	24.....	3,550	3,420
5.....	1,300	5,730	15.....	1,100	13,200	25.....	9,880	2,310
6.....	1,500	5,790	16.....	2,990	10,200	26.....	18,600	1,900
7.....	1,600	5,890	17.....	2,510	4,470	27.....	6,710	1,600
8.....	1,400	3,690	18.....	3,390	3,330	28.....	3,560	1,370
9.....	2,600	3,830	19.....	9,730	2,970	29.....	2,380	1,180
10.....	1,500	3,960	20.....	8,260	3,040	30.....	1,800	1,010
						31.....	1,420	848
Monthly mean discharge, in cubic feet per second.....................							4,599	4,200
Runoff, in inches..							31.37	28.65
Runoff, in acre-feet.......................................							282,800	258,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 20			Dec. 22--Con.			Dec. 24		
12 p.m.......	11.97	12,300	4 a.m........	18.38	25,000	12 m.........	6.33	3,480
			8............	15.94	19,900	12 p.m.......	5.74	2,890
Dec. 21			12 m.........	13.51	15,100			
4 a.m........	11.97	12,300	4 p.m........	11.77	12,000	Dec. 25		
8............	11.73	11,900	8............	10.36	9,610	3 a.m........	5.69	2,840
12 m.........	12.46	13,200	12 p.m.......	9.56	8,300	5............	5.94	3,130
4 p.m........	17.90	24,000				12 m.........	9.51	8,220
8............	18.96	26,300	Dec. 23			4 p.m........	12.21	12,800
10...........	19.75	28,000	4 a.m........	8.85	7,180	9............	15.77	19,500
12 p.m.......	19.58	27,700	8............	8.31	6,360	12 p.m.......	16.30	20,600
			12 m.........	7.79	5,610			
Dec. 22			5 p.m........	7.32	4,950	Dec. 26		
2 a.m........	19.28	27,000	12 p.m.......	6.90	4,360	2 a.m........	16.50	21,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of South Fork Coquille River at Powers, Oreg.--Continued

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 26--Con.			Dec. 27--Con.			Jan. 15--Con.		
4 a.m.	16.65	21,300	12 p.m.	7.07	4,600	12 m.	14.65	17,100
6	17.35	22,800				8 p.m.	11.78	11,500
8	18.29	24,800	Jan. 13			10	11.65	11,300
9	18.45	25,200	12 p.m.	6.21	3,450	12 p.m.	11.90	11,700
12 m.	16.61	21,200						
4 p.m.	13.86	15,700	Jan. 14			Jan. 16		
8	12.15	12,700	4 a.m.	6.14	3,370	6 a.m.	12.43	12,700
12 p.m.	10.73	10,200	12 m.	7.31	4,930	12 m.	11.47	10,900
			8 p.m.	10.12	9,200	4 p.m.	10.47	9,150
Dec. 27			12 p.m.	10.01	9,020	12 p.m.	8.75	6,200
4 a.m.	9.53	8,250						
8	8.95	7,320	Jan. 15			Jan. 17		
12 m.	8.35	6,420	4 a.m.	11.19	11,000	12 m.	7.31	4,170
6 p.m.	7.64	5,400	11 a.m.	14.72	17,400	12 p.m.	6.62	3,340

739. South Fork Coquille River below Middle Fork, near Myrtle Point, Oreg.

(Miscellaneous site)

Location.--Lat 43°02'25", long 124°07'25", in SE$\frac{1}{4}$ sec.21, T.29 S., R.12 W., 1.3 miles southeast of Myrtle Point.

Drainage area.--553 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 124,000 cfs 7 a.m. Dec. 26.

740. North Fork Coquille River near Myrtle Point, Oreg.

(Gaging station, discontinued 1946)

Location.--Lat 43°06'10", long 124°04'30", in NW$\frac{1}{4}$ sec.36, T.28 S., R.12 W., 0.3 mile downstream from mouth of East Fork and 4$\frac{1}{2}$ miles northeast of Myrtle Point.

Drainage area.--276 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs, and extended on basis of slope-conveyance study.

Maxima.--December 1955 to January 1956: Discharge, 20,000 cfs Dec. 26 (gage height, 37.0 ft).
1929-46: Discharge, 26,900 cfs Dec. 28, 1945 (gage height, 39.3 ft).
Stage known, 41.2 ft during winter of 1909-10.

741. Gettys Creek near Myrtle Point, Oreg.

(Crest-stage station)

Location.--Lat 43°00'30", long 124°12'40", in SW$\frac{1}{4}$ sec.35, T.29 S., R.13 W., at culvert on county road, a quarter of a mile upstream from mouth and 5$\frac{1}{2}$ miles southwest of Myrtle Point.

Drainage area.--1.45 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 125 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurement at 45 cfs and from flow through culvert at 220 cfs.

Maxima.--December 1955 to January 1956: Discharge, 223 cfs Dec. 21 (gage height, 16.33 ft).
1952 to November 1955: Discharge, 176 cfs Jan. 18, 1953 (gage height, 14.34 ft).

742. Geiger Creek near Bandon, Oreg.

(Crest-stage station)

Location.--Lat 43°08'15", long 124°22'45", in SE$\frac{1}{4}$ sec.32, T.28 S., R.14 W., at culvert on county road, 1 mile upstream from mouth and 1.8 miles southeast of Bandon.

Drainage area.--1.36 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 125 ft (from topographic map).

Discharge record.--Peak discharge computed from flow through culvert.

Maxima.--December 1955 to January 1956: Discharge, 131 cfs Dec. 21 (gage height, 24.10 ft).
1953 to November 1955: Discharge, 101 cfs Nov. 22, 1953 (gage height, 22.10 ft).

BRUSH CREEK BASIN

743. Dry Run Creek near Port Orford, Oreg.

(Crest-stage station; previously published as Brush Creek tributary near Port Orford)

Location.--Lat 42°41'20", long 124°26'00", in NW$\frac{1}{4}$ sec.25, T.33 S., R.15 W., at culvert in Humbug State Park, just upstream from mouth, 5 miles southeast of Port Orford.

Drainage area.--0.86 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 30 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by a current-meter measurement at 12 cfs and from flow through culvert at 154 cfs.

Maxima.--December 1955 to January 1956: Discharge, 133 cfs Jan. 4 (gage height 16.90 ft).
1953 to November 1955: Discharge, 151 cfs Dec. 30, 1954 (gage height, 17.82 ft).

ROGUE RIVER BASIN

744. Rogue River above Prospect, Oreg.

Location.--Lat 42°47', long 122°30', in NE$\frac{1}{4}$ sec.19, T.32 S., R.3 E., on left bank 1$\frac{1}{2}$ miles upstream from intake of diversion of the California Oregon Power Co., 2 miles northwest of Prospect, 3 miles upstream from Mill Creek, and at mile 169.7 (river-profile survey).

Drainage area.--332 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,620 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,000 ft and by slope-area measurement of 16,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 16,600 cfs 2 a.m. Dec. 22 (gage height, 10.01 ft).
1908-12, 1923 to November 1955: Discharge, 11,900 cfs Dec. 28, 1945 (gage height, 8.4 ft, from floodmark).

Mean discharge. in cubic feet per second, 1955-56, of Rogue River above Prospect, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	1,490	1,160	11.....	1,520	920	21.....	6,880	2,200
2.....	1,140	1,100	12.....	1,970	913	22.....	9,450	3,920
3.....	968	1,050	13.....	2,050	960	23.....	5,900	4,350
4.....	857	1,130	14.....	1,570	1,610	24.....	3,560	2,680
5.....	815	1,180	15.....	1,370	5,730	25.....	2,530	2,060
6.....	857	1,100	16.....	1,370	4,010	26.....	2,150	1,770
7.....	808	1,090	17.....	1,400	2,510	27.....	1,870	1,600
8.....	808	1,050	18.....	1,440	2,180	28.....	1,590	1,450
9.....	892	984	19.....	1,830	2,060	29.....	1,400	1,320
10.....	913	944	20.....	2,420	2,110	30.....	1,260	1,220
						31.....	1,220	1,080
Monthly mean discharge, in cubic feet per second........................							2,074	1,853
Runoff, in inches..							7.20	6.43
Runoff, in acre-feet...							127,500	113,900

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22			Jan. 13		
12 p.m.......	2.89	1,350	2 a.m........	10.01	16,600	12 p.m.......	3.46	1,970
			4............	9.00	13,500			
Dec. 18			8............	7.25	8,780	Jan. 14		
12 m.........	2.96	1,420	12 m.........	7.00	8,200	8 a.m........	2.48	984
12 p.m.......	3.10	1,570	6 p.m........	6.35	6,780	12 m.........	2.56	1,050
			12 p.m.......	6.25	6,580	4 p.m........	2.83	1,290
Dec. 19						8............	3.68	2,250
6 a.m........	3.14	1,610	Dec. 23			12 p.m.......	4.34	3,220
11...........	3.15	1,620	9 a.m........	6.25	6,580			
6 p.m........	3.55	2,080	12 m.........	6.04	6,160	Jan. 15		
12 p.m.......	3.74	2,340	6 p.m........	5.53	5,210	4 a.m........	4.96	4,230
			12 p.m.......	5.13	4,520	6............	5.82	5,740
Dec. 20						2 p.m........	6.36	6,810
6 a.m........	3.62	2,180	Dec. 24			6............	6.17	6,420
12 m.........	3.54	2,070	6 a.m........	4.78	3,930	12 p.m.......	5.71	5,540
2 p.m........	3.54	2,070	10...........	4.56	3,580			
6............	3.80	2,420	6 p.m........	4.30	3,160	Jan. 16		
12 p.m.......	4.70	3,800	12 p.m.......	4.13	2,900	6 a.m........	5.20	4,640
						12 m.........	4.71	3,820
Dec. 21			Dec. 25			6 p.m........	4.41	3,340
8 a.m........	5.47	5,110	12 m.........	3.85	2,490	12 p.m.......	4.17	2,960
12 m.........	5.55	5,250	12 p.m.......	3.67	2,240			
2 p.m........	5.62	5,380	Dec. 26			Jan. 17		
6............	6.50	7,100	10 a.m.......	3.56	2,100	12 m.........	3.82	2,450
8............	7.50	9,380	2 p.m........	3.62	2,180	8 p.m........	3.68	2,250
10...........	9.60	15,300	6............	3.62	2,180	12 p.m.......	3.66	2,230
12 p.m.......	10.00	16,600	12 p.m.......	3.52	2,050			

745. South Fork Rogue River near Prospect, Oreg.

Location.--Lat 42°42', long 122°23', in NE¼ sec.18, T.33 S., R.4 E., on right bank 500 ft downstream from diversion dam and intake of South Fork power canal, an eighth of a mile downstream from Imnaha Creek, and 6 miles southeast of Prospect.

Drainage area.--79 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 3,330 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 410 cfs and by computation of flow over dam at 3,180 cfs. Flow in canal computed from powerplant output records furnished by the California Oregon Power Co.

Maxima.--December 1955 to January 1956: Discharge, 3,180 cfs 9 a.m. Dec. 22 (gage height, 8.3 ft; no flow in canal).

1924-31, 1949 to November 1955: Discharge, 2,540 cfs Nov. 23, 1953 (gage height, 7.34 ft), from rating curve extended above 780 cfs by logarithmic plotting (no flow in canal).

Remarks.--All records include flow in South Fork power canal which diverts water 500 ft above station and delivers water to Rogue River above South Fork.

Mean discharge, in cubic feet per second, 1955-56, of South Fork Rogue River near Prospect, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	197	279	11.....	266	234	21.....	635	569
2.....	168	277	12.....	290	229	22.....	2,130	933
3.....	156	272	13.....	318	227	23.....	1,080	864
4.....	146	281	14.....	278	293	24.....	733	660
5.....	144	275	15.....	255	669	25.....	577	584
6.....	173	263	16.....	257	641	26.....	517	519
7.....	161	260	17.....	265	517	27.....	446	465
8.....	154	249	18.....	295	506	28.....	390	412
9.....	159	243	19.....	322	548	29.....	331	384
10.....	171	240	20.....	362	575	30.....	312	356
						31.....	294	332
Monthly mean discharge, in cubic feet per second......................							387	424
Runoff, in inches..							5.64	6.19
Runoff, in acre-feet...							23,770	26,090

Peak discharge.--Jan. 15 (6 p.m.) 807 cfs; Jan. 22 (6:30 p.m.) 1,280 cfs.

746. Middle Fork Rogue River near Prospect, Oreg.

(Gaging station, discontinued 1955)

Location.--Lat 42°44'10", long 122°24'05", in NE$\frac{1}{4}$ sec.1, T.33 S., R.3 E., on right bank 850 ft downstream from diversion dam and intake of Middle Fork power canal and 4.5 miles southeast of Prospect.

Drainage area.--57 sq mi, approximately.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 630 cfs and by slope-area measurement at 3,230 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,230 cfs Dec. 22 (gage height, 5.65 ft); no flow in canal.
1925-55: Discharge, 3,120 cfs Nov. 23, 1953 (including flow in power canal).

747. Red Blanket Creek near Prospect, Oreg.

Location.--Lat 42°47', long 122°26', in NE$\frac{1}{4}$ sec.23, T.32 S., R.3 E., on right bank 3 miles northeast of Prospect.

Drainage area.--40 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,780 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 360 cfs and by slope-area measurement of 1,840 cfs.

Maxima.--December 1955 to January 1956: Discharge, 1,840 cfs 4 a.m. Dec. 22 (gage height, 7.30 ft).
1925 to November 1955: Discharge, 1,630 cfs Nov. 29, 1942 (gage height, 5.1 ft from floodmark, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	174	183	11.....	207	138	21.....	598	330
2.....	148	171	12.....	264	141	22.....	1,400	574
3.....	132	174	13.....	261	143	23.....	699	538
4.....	119	177	14.....	216	282	24.....	454	398
5.....	119	162	15.....	198	812	25.....	346	326
6.....	134	159	16.....	204	566	26.....	300	286
7.....	121	156	17.....	201	378	27.....	268	254
8.....	123	148	18.....	225	338	28.....	234	231
9.....	121	143	19.....	240	338	29.....	216	216
10.....	134	143	20.....	268	346	30.....	204	201
						31.....	189	189
Monthly mean discharge, in cubic feet per second......................							275	279
Runoff, in inches..							7.92	8.03
Runoff, in acre-feet...							16,890	17,140

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Red Blanket Creek near Prospect, Oreg.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 22--Con.			Jan. 14--Con.		
12 p.m.	3.74	366	6 p.m.	5.60	1,110	4 p.m.	3.61	314
			12 p.m.	5.17	938	8	4.02	478
Dec. 21						12 p.m.	4.13	522
8 a.m.	3.90	430	Dec. 23					
12 m.	3.91	434	6 a.m.	4.82	798	Jan. 15		
5 p.m.	4.27	578	12 m.	4.51	674	7 a.m.	4.80	790
8	5.26	974	4 p.m.	4.34	606	12 m.	5.05	890
9	5.26	974	12 p.m.	4.16	534	3 p.m.	5.32	998
12 p.m.	6.42	1,440				6	5.14	926
			Jan. 13			12 p.m.	4.65	730
Dec. 22			12 p.m.	3.08	145			
2 a.m.	6.75	1,590				Jan. 16		
4	7.30	1,840	Jan. 14			6 a.m.	4.39	626
7	7.07	1,740	6 a.m.	3.18	174	12 m.	4.20	550
12 m.	6.40	1,440	10 a.m.	3.23	189	12 p.m.	3.94	446

748. Rogue River below South Fork Rogue River, near Prospect, Oreg.

Location.--Lat 42°42', long 122°36', in NW¼ sec.16, T.33 S., R.2 E., on right bank at downstream side of county road bridge 6 miles southwest of Prospect and at mile 160.4 (river-profile survey).

Drainage area.--643 sq mi.

Gage-height record.--Water-stage recorder graph except 4 p.m. Dec. 24 to 4 p.m. Jan. 6. Altitude of gage is 1,708 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 5,000 cfs and by slope-area measurement of 34,000 cfs. Discharge for period of no gage-height record estimated on basis of records for station at Dodge Bridge near Eagle Point.

Maxima.--December 1955 to January 1956: Discharge, 34,000 cfs 6 a.m. Dec. 22 (gage height, 17.30 ft).

1929 to November 1955: Discharge, 20,500 cfs Jan. 18, 1953 (gage height, 12.50 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	3,110	2,400	11	3,220	2,330	21	11,100	5,100
2	2,530	2,300	12	3,870	2,320	22	26,300	7,850
3	2,160	2,400	13	4,060	2,440	23	12,400	9,810
4	1,910	2,800	14	3,270	3,350	24	8,000	6,590
5	1,840	2,700	15	2,930	10,300	25	6,000	5,330
6	2,060	2,400	16	3,020	8,030	26	5,000	4,680
7	1,960	2,700	17	3,140	5,570	27	4,400	4,190
8	1,940	2,550	18	3,460	4,920	28	3,600	3,730
9	2,190	2,460	19	3,950	4,920	29	3,000	3,410
10	2,260	2,370	20	4,700	5,130	30	2,700	3,180
						31	2,500	2,920
Monthly mean discharge, in cubic feet per second							4,599	4,232
Runoff, in inches							8.25	7.59
Runoff, in acre-feet							282,800	260,200

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 18			Dec. 22			Jan. 14--Con.		
12 p.m.	3.50	3,530	4 a.m.	16.03	30,500	10 p.m.	4.90	5,720
Dec. 19			6	17.30	34,000	12 p.m.	5.35	6,380
12 m.	3.55	3,590	8	16.30	31,300			
7 p.m.	4.40	4,650	12 m.	14.88	27,400	Jan. 15		
12 p.m.	4.40	4,650	12 p.m.	11.34	18,500	8 a.m.	7.51	10,100
						12 m.	8.16	11,400
Dec. 20			Dec. 23			3 p.m.	8.43	12,000
12 m.	4.08	4,230	4 a.m.	10.00	15,400	6	8.30	11,700
5 p.m.	4.29	4,510	7	9.20	13,600	12 p.m.	7.68	10,500
8	4.78	5,180	12 m.	8.26	11,600			
12 p.m.	5.68	6,430	12 p.m.	6.77	8,770	Jan. 16		
						6 a.m.	6.87	8,950
Dec. 21			Jan. 13			12 m.	6.22	7,800
3 a.m.	6.13	7,360	12 p.m.	2.18	2,440	6 p.m.	5.72	6,970
6	6.50	8,000				12 p.m.	5.31	6,320
12 m.	6.80	8,540	Jan. 14					
3 p.m.	7.40	9,660	1 a.m.	2.01	2,290	Jan. 17		
6	9.00	12,800	2 p.m.	2.72	2,960	12 m.	4.72	5,470
12 p.m.	14.00	24,300	5 p.m.	3.02	3,290	12 p.m.	4.40	5,020

749. South Fork Big Butte Creek near Butte Falls, Oreg.

Location.--Lat 42°32', long 122°33', in SW¼ sec.11, T.35 S., R.2 E., on right bank just downstream from Ginger Creek and 1 mile east of Butte Falls.

Drainage area.--135 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 2,360 ft (from river-profile map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,600 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 2,770 cfs 5 a.m. Dec. 22 (gage height, 4.50 ft).

1910-11, 1915, 1917-22, 1925 to November 1955: Discharge, 2,470 cfs Feb. 20, 1927 (gage height, 4.05 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	260	355	11.....	339	334	21.....	839	682
2.....	256	286	12.....	339	334	22.....	2,220	1,020
3.....	228	273	13.....	360	387	23.....	1,490	1,390
4.....	185	315	14.....	324	550	24.....	980	1,050
5.....	192	320	15.....	296	1,010	25.....	740	837
6.....	277	350	16.....	334	920	26.....	795	708
7.....	264	371	17.....	382	714	27.....	767	591
8.....	266	350	18.....	517	662	28.....	656	517
9.....	376	334	19.....	553	682	29.....	541	478
10.....	339	339	20.....	584	708	30.....	469	440
						31.....	404	405
Monthly mean discharge, in cubic feet per second......................							535	571
Runoff, in inches..							4.56	4.88
Runoff, in acre-feet..							32,870	35,130

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23			Jan. 14--Con.		
12 p.m.......	1.86	604	2 a.m........	3.51	1,820	12 p.m.......	2.02	708
			12 m.........	3.05	1,450			
Dec. 21			12 p.m.......	2.68	1,180	Jan. 15		
6 a.m........	1.87	610				4 a.m........	2.34	928
12 m.........	1.85	598	Dec. 24			7............	2.43	991
4 p.m........	2.03	714	12 m.........	2.37	949	8............	2.42	984
12 p.m.......	3.54	1,850	12 p.m.......	2.22	844	2 p.m........	2.63	1,140
						12 p.m.......	2.47	1,020
Dec. 22			Jan. 13					
4 a.m........	4.33	2,600	12 p.m.......	1.58	433	Jan. 16		
5............	4.50	2,770				4 a.m........	2.51	1,050
8............	4.32	2,590	Jan. 14			8............	2.41	977
12 m.........	4.04	2,310	6 a.m........	1.64	469	12 m.........	2.30	900
6 p.m........	3.58	1,880	12 m.........	1.73	523	12 p.m.......	2.14	788
12 p.m.......	3.55	1,860	6 p.m........	1.91	636			

750. Big Butte Creek near McLeod, Oreg.

Location.--Lat 42°39'25", long 122°41'20", in NW¼ sec.3, T.34 S., R.1 E., on right bank 50 ft downstream from bridge on county road, 1 mile upstream from mouth, and 1 mile south of McLeod.

Drainage area.--249 sq mi.

Gage-height record.--Staff gage read twice daily. Datum of gage is 1,526.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,300 cfs and by slope-area measurement at 8,950 cfs.

Maxima.--December 1955 to January 1956: Discharge, 8,950 cfs about 3 a.m. Dec. 22 (gage height, 12.75 ft, from floodmarks).

1945 to November 1955: Discharge, 6,390 cfs Jan. 18, 1953 (gage height, 11.1 ft, observed at peak), from rating curve extended above 2,700 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56, of Big Butte Creek near McLeod, Oreg.

Day	December	January	Day	December	January	Day	December	January
1	1,230	729	11	766	696	21	3,090	1,540
2	721	680	12	788	696	22	6,380	3,290
3	540	747	13	775	985	23	3,990	3,110
4	424	680	14	730	1,470	24	2,490	2,040
5	512	700	15	628	3,060	25	1,720	1,660
6	703	729	16	662	2,370	26	1,720	1,440
7	640	960	17	1,160	1,620	27	1,480	1,160
8	630	792	18	1,270	1,600	28	1,160	980
9	955	708	19	1,450	1,760	29	960	882
10	720	688	20	1,490	1,750	30	832	819
						31	729	738
Monthly mean discharge, in cubic feet per second							1,334	1,325
Runoff, in inches							6.18	6.14
Runoff, in acre-feet							82,010	81,480

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Jan. 13		
12 p.m.	4.5	1,160	7 a.m.	5.2	1,540	12 p.m.	4.0	1,000
			12 m.	5.3	1,600			
Dec. 18			6 p.m.	8.8	4,320	Jan. 14		
12 m.	4.9	1,360	12 p.m.	12.1	8,040	12 m.	4.6	1,300
3 p.m.	4.9	1,360				9 p.m.	5.8	2,030
12 p.m.	4.5	1,160	Dec. 22			12 p.m.	6.2	2,310
Dec. 19			3 a.m.	12.75	8,950			
10 a.m.	4.4	1,110	12 m.	10.2	5,820	Jan. 15		
12 m.	4.6	1,210	4 p.m.	9.5	5,120	3 a.m.	6.5	2,520
6 p.m.	6.0	2,000	12 p.m.	9.1	4,720	8	6.9	2,800
12 p.m.	5.7	1,810				1 p.m.	8.0	3,670
			Dec. 23			12 p.m.	7.2	3,020
Dec. 20			12 m.	8.4	4,030			
12 m.	4.7	1,260	12 p.m.	7.4	3,180	Jan. 16		
12 p.m.	5.4	1,630				12 m.	6.2	2,310
			Dec. 24			12 p.m.	5.5	1,830
Dec. 21			12 m.	6.4	2,450			
4 a.m.	5.4	1,660	12 p.m.	5.6	1,890			

751. Elk Creek near Trail, Oreg.

Location.--Lat 42°39'50", long 122°44'50", in NE¼NW¼ sec.31, T.33 S., R.1 E., on right bank 0.4 mile upstream from mouth and 3.3 miles northeast of Trail.

Drainage area.--133 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,456.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 3,000 cfs and by slope-area measurement of 13,700 cfs.

Maxima.--December 1955 to January 1956: Discharge, 13,700 cfs 2 a.m. Dec. 22 (gage height, 14.34 ft).

1945 to November 1955: Discharge, 10,000 cfs Jan. 18, 1953 (gage height, 13.32 ft, at site 0.3 mile upstream at datum 12.14 ft higher).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	1,080	248	11	1,300	644	21	5,990	1,420
2	845	206	12	1,130	595	22	8,440	3,450
3	556	260	13	943	742	23	2,890	3,490
4	412	868	14	640	1,430	24	1,590	1,800
5	342	896	15	500	4,400	25	1,070	1,260
6	586	595	16	562	2,560	26	966	1,000
7	592	658	17	810	1,570	27	854	819
8	578	562	18	1,410	1,260	28	609	658
9	1,130	488	19	1,620	1,340	29	446	543
10	894	530	20	1,730	1,560	30	335	458
						31	274	366
Monthly mean discharge, in cubic feet per second							1,327	1,183
Runoff, in inches							11.50	10.26
Runoff, in acre-feet							81,570	72,750

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Elk Creek near Trail, Oreg.

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Jan. 14		
12 p.m.	4.84	810	2 p.m.	7.96	3,620	6 a.m.	5.22	889
			6	11.54	8,920	12 m.	5.48	1,080
Dec. 18			9	13.83	12,800	8 p.m.	6.90	2,310
6 a.m.	5.70	1,410	12 p.m.	14.22	13,500	12 p.m.	7.23	2,650
8 p.m.	5.94	1,580						
12 p.m.	5.89	1,540	Dec. 22			Jan. 15		
			2 a.m.	14.34	13,700	2 a.m.	7.51	2,960
Dec. 19			6	13.30	11,900	6	8.81	4,540
10 a.m.	5.62	1,360	12 m.	10.84	7,740	12 m.	9.52	5,630
2 p.m.	5.96	1,600	6 p.m.	9.12	5,000	2 p.m.	9.38	5,410
6	6.39	1,960	12 p.m.	8.44	4,040	9	8.27	3,840
12 p.m.	6.25	1,830				12 p.m.	7.96	3,460
			Dec. 23					
Dec. 20			6 a.m.	7.92	3,410	Jan. 16		
12 m.	5.74	1,440	12 m.	7.31	2,740	6 a.m.	7.48	2,930
4 p.m.	5.82	1,500	6 p.m.	6.96	2,370	12 m.	7.06	2,470
8	6.29	1,860	12 p.m.	6.61	2,020	6 p.m.	6.76	2,170
12 p.m.	7.20	2,770				12 p.m.	6.49	1,910
			Dec. 24					
Dec. 21			12 m.	6.07	1,540	Jan. 17		
4 a.m.	7.79	3,420	12 p.m.	5.73	1,260	12 m.	6.06	1,530
7	7.86	3,500				12 p.m.	5.80	1,320
9	7.76	3,380	Jan. 13					
12 m.	7.72	3,340	12 p.m.	5.00	735			

752. Rogue River at Dodge Bridge, near Eagle Point, Oreg.

Location.--Lat 42°31'30", long 122°50'30", in SE¼ sec.17, T.35 S., R.1 W., on right bank at Dodge Bridge, 0.6 mile downstream from Reese Creek, 4½ miles northwest of Eagle Point, and at mile 134.9 (river-profile survey).

Drainage area.--1,210 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,273.66 ft above mean sea level, datum of 1929. Gage-height record above 4.0 ft corrected for drawdown.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 16,000 cfs and extended above on basis of peak flows at upstream and downstream stations.

Maxima.--December 1955 to January 1956: Discharge, 75,000 cfs 4 a.m. Dec. 22 (gage height, 12.90 ft).

1938 to November 1955: Discharge, 44,600 cfs Jan. 18, 1953 (gage height, 11.08 ft), from rating curve extended above 17,000 cfs on basis of logarithmic plotting and shape of previous curve defined to 30,000 cfs.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	6,540	4,350	11	5,980	4,460	21	27,600	9,340
2	4,950	4,040	12	6,090	4,290	22	47,800	16,200
3	3,880	4,200	13	6,510	5,090	23	21,500	19,600
4	3,140	5,520	14	5,190	7,460	24	13,100	12,600
5	3,030	5,330	15	4,400	18,900	25	9,730	9,660
6	4,310	4,660	16	5,000	15,100	26	8,750	8,360
7	3,800	5,750	17	5,750	10,300	27	7,970	7,100
8	4,130	5,020	18	8,900	9,380	28	6,370	6,190
9	5,360	4,440	19	9,470	9,590	29	5,500	5,570
10	4,420	4,440	20	10,200	9,970	30	4,970	5,140
						31	4,510	4,660
Monthly mean discharge, in cubic feet per second							8,673	7,958
Runoff, in inches							8.26	7.58
Runoff, in acre-feet							533,300	489,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 18--Con.			Dec. 20		
12 p.m.	3.46	5,520	12 p.m.	4.54	8,570	12 m.	4.67	9,000
						3 p.m.	4.65	8,920
Dec. 18			Dec. 19			6	4.82	9,520
4 a.m.	4.86	9,660	10 a.m.	4.19	7,520	12 p.m.	5.96	13,900
6	5.04	10,300	12 m.	4.36	8,030			
12 m.	4.70	9,100	4 p.m.	5.34	11,500	Dec. 21		
4 p.m.	4.54	8,570	6	5.43	11,800	6 a.m.	6.66	17,100
8 p.m.	4.64	8,890	12 p.m.	5.28	11,200	12 m.	6.85	18,000

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56, of Rogue River at Dodge Bridge, near Eagle Point, Oreg.--Continued

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 21--Con.			Dec. 23--Con.			Jan. 15		
3 p.m........	7.66	22,100	12 m.........	7.39	20,800	6 a.m........	6.77	17,600
7............	11.18	50,400	6 p.m........	6.81	17,800	12 m.........	7.56	21,600
8............	10.80	46,100	12 p.m.......	6.31	15,400	2 p.m........	7.65	22,000
12 p.m.......	12.22	64,100				12 p.m.......	6.95	18,600
			Dec. 24					
Dec. 22			12 m.........	5.68	12,800	Jan. 16		
4 a.m........	12.90	75,000	12 p.m.......	5.30	11,300	6 a.m........	6.63	17,000
6............	11.66	56,400				12 m.........	6.21	14,900
12 m.........	10.86	46,700	Jan. 13			6 p.m........	5.80	13,300
6 p.m........	9.48	33,900	12 p.m.......	3.28	5,090	12 p.m.......	5.50	12,100
12 p.m.......	8.65	28,000						
			Jan. 14			Jan. 17		
Dec. 23			6 a.m........	3.56	5,780	12 m.........	4.97	10,000
3 a.m........	8.58	27,600	12 m.........	3.78	6,350	12 p.m.......	4.74	9,240
6 a.m........	8.18	25,200	12 p.m.......	5.48	12,000			

753. South Fork Little Butte Creek near Lake Creek, Oreg.

Location.--Lat 42°24'30", long 122°36'00", in SE¼ sec.29, T.36 S., R.2 E., on left bank a quarter of a mile upstream from intake of Rogue River Valley Canal and 1½ miles southeast of Lake Creek post office.

Drainage area.--138 sq mi.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,720 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,100 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 3,410 cfs 5 a.m. Dec. 22 (gage height, 6.84 ft).

1921 to November 1955: Discharge, 3,920 cfs Jan. 7, 1948 (gage height, 6.48 ft), from rating curve extended above 840 cfs by logarithmic plotting.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	335	197	11.....	204	167	21.....	980	388
2.....	238	182	12.....	210	164	22.....	2,550	558
3.....	179	185	13.....	228	200	23.....	1,280	546
4.....	116	204	14.....	191	349	24.....	634	420
5.....	140	182	15.....	176	1,010	25.....	478	356
6.....	298	167	16.....	210	643	26.....	448	322
7.....	218	210	17.....	207	464	27.....	372	288
8.....	200	182	18.....	291	412	28.....	308	246
9.....	302	167	19.....	413	440	29.....	249	218
10.....	200	164	20.....	448	420	30.....	235	194
						31.....	207	152
Monthly mean discharge, in cubic feet per second.....................							405	316
Runoff, in inches...							3.38	2.64
Runoff, in acre-feet..							24,880	19,430

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 20			Dec. 23--Con.			Jan. 14--Con.		
12 p.m.......	2.67	448	6 a.m........	4.55	1,500	4 p.m........	2.51	344
			12 m.........	4.02	1,140	5............	2.62	388
Dec. 21			4 p.m........	3.94	1,080	8............	2.63	392
11 a.m.......	2.61	424	6............	3.80	998	12 p.m.......	3.35	745
1 p.m........	2.67	448	12 p.m.......	3.46	815			
8............	5.12	1,920				Jan. 15		
11...........	6.06	2,690	Dec. 24			3 a.m........	3.72	945
12 p.m.......	5.94	2,590	8 a.m........	3.19	645	6............	3.92	1,080
			2 p.m........	3.03	565	9............	3.90	1,060
Dec. 22			6............	3.10	600	12 m.........	4.04	1,150
5 a.m........	6.84	3,410	12 p.m.......	2.97	536	6 p.m........	3.86	1,030
12 m.........	6.01	2,650				12 p.m.......	3.53	840
7 p.m........	4.86	1,710	Jan. 13					
10...........	5.35	2,100	12 p.m.......	2.21	238	Jan. 16		
12 p.m.......	5.24	2,010				6 a.m........	3.31	720
			Jan. 14			12 m.........	3.12	610
Dec. 23			9 a.m........	2.33	280	12 p.m.......	2.93	518
2 a.m........	5.20	1,980	12 m.........	2.44	319			

754. North Fork Little Butte Creek at Fish Lake, near Lake Creek, Oreg.

Location.--Lat 42°23', long 122°21', in SE$\frac{1}{4}$ sec.4, T.37 S., R.4 E., on right bank half a mile downstream from outlet of Fish Lake and 14 miles east of Lake Creek post office.

Drainage area.--18 sq mi, approximately.

Gage-height record.--Water-stage recorder graph except Dec. 1 to 10:30 a.m. Dec. 11. Datum of gage is 4,571.41 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements. Discharge for period of no gage-height record interpolated.

Maxima.--December 1955 to January 1956: Discharge, 18 cfs Jan. 22-31 (gage height, 1.14 ft).

1914 to November 1955: Discharge, about 940 cfs June 5, 1917, computed from rate of change in contents of reservoir after a break in dam.

Remarks.--Flow regulated by Fish Lake (capacity, 8,150 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	10	13	11.....	11	14	21.....	13	16
2.....	10	13	12.....	11	14	22.....	13	18
3.....	10	13	13.....	11	15	23.....	13	18
4.....	10	14	14.....	11	15	24.....	13	18
5.....	10	14	15.....	11	16	25.....	13	18
6.....	10	14	16.....	11	15	26.....	13	18
7.....	10	14	17.....	11	15	27.....	13	18
8.....	10	15	18.....	11	15	28.....	13	18
9.....	10	15	19.....	11	16	29.....	13	18
10.....	11	15	20.....	11	16	30.....	13	18
						31.....	13	18
Monthly mean discharge, in cubic feet per second							11.4	15.7
Runoff, in acre-feet							702	966

755. North Fork Little Butte Creek near Lake Creek, Oreg.

Location.--Lat 42°24'10", long 122°32'20", in SW$\frac{1}{4}$ sec.25, T.36 S., R.2 E., on right bank a quarter of a mile upstream from Hanley South Canal diversion and 4$\frac{1}{2}$ miles east of Lake Creek post office.

Drainage area.--38 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,125.01 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 160 cfs and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 281 cfs 1 a.m. Dec. 22 (gage height, 2.51 ft).

1911-13, 1922-28, 1931 to November 1955: Discharge, 680 cfs Dec. 30, 1924 (gage height, 3.30 ft).

Remarks.--Flow regulated by Fish Lake (capacity, 8,150 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	88	67	11.....	69	67	21.....	134	108
2.....	67	65	12.....	69	67	22.....	217	150
3.....	57	65	13.....	72	76	23.....	164	164
4.....	49	65	14.....	65	110	24.....	110	131
5.....	60	62	15.....	62	140	25.....	95	115
6.....	78	62	16.....	70	110	26.....	97	110
7.....	64	67	17.....	76	97	27.....	95	100
8.....	69	67	18.....	92	97	28.....	82	95
9.....	78	67	19.....	80	110	29.....	74	88
10.....	67	69	20.....	76	108	30.....	70	86
						31.....	69	82
Monthly mean discharge, in cubic feet per second							84.4	92.5
Runoff, in acre-feet							5,190	5,690

Peak discharge.--Jan. 14 (12 p.m.) 185 cfs (gage height, 2.25 ft); Jan. 22 (6 p.m.) 240 cfs (gage height, 2.38 ft).

756. Dry Creek near Eagle Point, Oreg.

(Miscellaneous site)

Location.--Lat 42°24'50", long 122°46'10", in NW$\frac{1}{4}$ sec.25, T.36 S., R.1 W., 3 miles upstream from mouth and 4$\frac{1}{4}$ miles southeast of Eagle Point.

Drainage area.--13.4 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 1,020 cfs Dec. 22.

757. Emigrant Creek above Hill Creek near Ashland, Oreg.

(Miscellaneous site)

Location.--Lat 42°08'30", long 122°35'20", in N$\frac{1}{2}$ sec.33, T.39 S., R.2 E., at State Highway 66 crossing, a quarter of a mile downstream from Sampson Creek and 7 miles southeast of Ashland.

Drainage area.--51.6 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maximum.--December 1955 to January 1956: Discharge, 2,580 cfs Dec. 22.

758. Emigrant Creek near Ashland, Oreg.

Location.--Lat 42°09'50", long 122°36'20", in NE$\frac{1}{4}$ sec.20, T.39 S., R.2 E., on right bank 1,100 ft downstream from Emigrant Gap Reservoir Dam and 6 miles southeast of Ashland.

Drainage area.--64.3 sq mi.

Gage-height record.--Water-stage recorder graph except 8 p.m. Dec. 21 to 8 a.m. Dec. 22 and 10 a.m. Dec. 22 to 3:30 p.m. Dec. 28. Graph was reconstructed for Dec. 21 to 12 m. Dec. 22 on basis of high-water mark. Datum of gage is 2,053.73 ft above mean sea level (levels by Bureau of Reclamation).

Discharge records.--Stage-discharge relation defined by current-meter measurements below 650 cfs and by slope-area measurement at 4,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,600 cfs about 12 p.m. Dec. 21 (gage height, 8.55 ft, from floodmark).

1920 to November 1955: Discharge, 5,260 cfs Feb. 20, 1927, by computation of peak flow over dam.

Remarks.--Flow regulated by Emigrant Gap Reservoir since 1924 (capacity, 7,720 acre-ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	0.3	80	11.....	1.4	246	21.....	1,000	258
2.....	.3	76	12.....	1.7	242	22.....	1,500	256
3.....	.3	79	13.....	2.0	234	23.....	700	258
4.....	.3	278	14.....	2.0	234	24.....	450	258
5.....	.3	222	15.....	2.2	278	25.....	300	256
6.....	.3	135	16.....	2.6	426	26.....	250	254
7.....	.6	192	17.....	2.9	308	27.....	200	248
8.....	1.9	172	18.....	3.6	268	28.....	158	244
9.....	2.0	214	19.....	4.4	258	29.....	124	236
10.....	1.2	252	20.....	5.0	260	30.....	105	230
						31.....	86	165
Monthly mean discharge, in cubic feet per second							158	230
Runoff, in acre-feet							9,740	14,120

759. West Fork Ashland Creek near Ashland, Oreg.

(Crest-stage station; gaging station discontinued 1932)

Location.--Lat 42°09'00", long 122°42'55", in NW¼ sec.28, T.39 S., R.1 E., at small dam above Ashland water-supply reservoir, 2½ miles south of Ashland.

Drainage area.--10.5 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 2,930 ft (by barometer).

Discharge record.--Peak discharge computed from flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 208 cfs Dec. 21, including estimated bypass flow (gage height, 14.85 ft).
1924-32, 1953 to November 1955: Discharge, 281 cfs Feb. 20, 1927 (gage height, 3.15 ft, site and datum then in use).

760. East Fork Ashland Creek near Ashland, Oreg.

(Crest-stage station; gaging station discontinued 1932)

Location.--Lat 42°09'10", long 122°42'30", in NW¼ sec.28, T.39 S., R.1 E., at small dam above Ashland water-supply reservoir, 2½ miles south of Ashland.

Drainage area.--8.14 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 2,850 ft (by barometer).

Discharge record.--Peak discharge computed from flow over dam.

Maxima.--December 1955 to January 1956: Discharge, 292 cfs Dec. 21, including estimated bypass flow (gage height, 5.22 ft).
1924-32, 1953 to November 1955: Discharge, 292 cfs Feb. 20, 1927 (gage height, 3.50 ft, site and datum then in use).

761. Meyer Creek near Ashland, Oreg.

(Crest-stage station)

Location.--Lat 42°14'00", long 122°44'20", in SE¼ sec.30, T.38 S., R.1 E., at bridge on Valley View Road, 1 mile upstream from mouth and 3 miles northwest of Ashland.

Drainage area.--5.90 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,750 ft (from topographic map).

Discharge record.--Peak discharge computed from flow over weir.

Maxima.--December 1955 to January 1956: Discharge, 154 cfs Dec. 21 (gage height, 11.89 ft).
1953 to November 1955: Discharge, 111 cfs Oct. 10, 1953 (gage height, 11.55 ft).

762. Bear Creek at Medford, Oreg.

Location.--Lat 42°19'40", long 122°52'00", in NW¼ sec.30, T.37 S., R.1 W., on left bank just upstream from Main Street Bridge in Medford.

Drainage area.--279 sq mi.

Gage-height record.--Water-stage recorder graph except 2 p.m. Dec. 20 to 9:30 a.m. Dec. 22, for which graph was reconstructed on basis of high-water mark in well, and records for Emigrant Creek near Ashland. Datum of gage is 1,343.47 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,900 cfs, and extended above by logarithmic plotting.

Maxima.--December 1955 to January 1956: Discharge, 9,400 cfs 5 a.m. Dec. 22 (gage height, 7.50 ft).
1915 to November 1955: Discharge, 8,300 cfs Feb. 20, 1927 (gage height, about 11.0 ft, from floodmarks, at site 40 ft upstream), from rating curve extended above 2,000 cfs by area-velocity and slope-area measurements.

Remarks.--Flow partly regulated by Emigrant Gap Reservoir (capacity, 8,340 acre-ft).

Mean discharge, in cubic feet per second, 1955-56, of Bear Creek at Medford, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	260	340	11.....	264	582	21.....	2,080	856
2.....	165	308	12.....	212	540	22.....	6,060	1,210
3.....	120	355	13.....	196	612	23.....	3,180	1,240
4.....	96	738	14.....	162	1,130	24.....	1,400	928
5.....	98	660	15.....	.138	2,820	25.....	920	816
6.....	204	462	16.....	186	1,580	26.....	936	880
7.....	159	912	17.....	179	1,110	27.....	772	793
8.....	135	606	18.....	380	976	28.....	606	695
9.....	360	522	19.....	629	1,040	29.....	480	636
10.....	260	588	20.....	614	1,030	30.....	420	594
						31.....	360	528
Monthly mean discharge, in cubic feet per second......................							711	842
Runoff, in acre-feet..							43,700	51,740

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 18			Dec. 22			Jan. 14		
12 p.m.......	1.40	320	5 a.m........	7.50	9,400	6 a.m........	2.11	737
			12 m.........	6.13	6,270	11............	2.33	904
Dec. 19			6 p.m........	4.51	3,360	1 p.m........	2.66	1,170
3 a.m........	1.58	410	9............	4.33	3,100	3............	2.91	1,410
9............	1.41	325	12 p.m.......	4.98	4,100	8............	2.96	1,460
12 m.........	1.58	410				12 p.m.......	3.56	2,100
5 p.m........	2.58	1,100	Dec. 23					
12 p.m.......	2.30	880	3 a.m........	5.35	4,740	Jan. 15		
			6............	4.98	4,100	3 a.m........	4.48	3,310
Dec. 20			12 m.........	4.21	2,930	6............	4.85	3,880
6 a.m........	1.98	648	4 p.m........	3.92	2,560	8............	4.83	3,850
12 m.........	1.82	552	12 p.m.......	3.38	1,900	12 m.........	4.15	2,860
12 p.m.......	1.80	540				6 p.m........	3.70	2,270
			Dec. 24			12 p.m.......	3.29	1,800
Dec. 21			12 m.........	2.82	1,320			
9 a.m........	1.83	558	12 p.m.......	2.55	1,080	Jan. 16		
12 m.........	2.00	660				6 a.m........	3.23	1,730
6 p.m........	4.50	3,340	Jan. 13			12 m.........	3.11	1,610
12 p.m.......	6.50	7,060	12 p.m.......	1.97	642	12 p.m.......	2.79	1,290

763. Griffin Creek near Medford, Oreg.

(Crest-stage station)

Location.--Lat 42°16'00", long 122°54'50", in NE¼ sec.15, T.38 S., R.2 W., at culvert on Griffin Creek road, 4 miles southwest of Medford, 4½ miles southeast of Jacksonville, and 9 miles upstream from mouth.

Drainage area.--5.41 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,800 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 25 cfs and from flow through culvert at 117 cfs.

Maxima.--December 1955 to January 1956: Discharge, 74 cfs Dec. 21 (gage height, 12.25 ft).

1953 to November 1955: Discharge, 117 cfs Jan. 27, 1954 (gage height, 13.92 ft).

764. Rogue River at Raygold, near Central Point, Oreg.

Location.--Lat 42°26'20", long 122°59'10", in sec.18, T.36 S., R.2 W., on right bank at Raygold, just downstream from dam and powerhouse of the California Oregon Power Co., half a mile downstream from Bear Creek, 6 miles northwest of Central Point, and at mile 121.9 (river-profile survey).

Drainage area.--2,020 sq mi, approximately.

Gage-height record.--Staff gage read twice daily. Graph for Dec. 17-26 and Jan. 13-18 was constructed on basis of staff-gage readings, high-water marks, and recorder graph for station 4 miles downstream. Datum of gage is 1,121.78 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 36,000 cfs and by slope-area measurement at 113,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 110,000 cfs about 9 a.m. Dec. 22 (gage height, 23.1 ft).

1905 to November 1955: Discharge, 110,000 cfs Feb. 21, 1927 (gage height, 24.8 ft, from floodmark), from rating curve extended above 36,000 cfs by logarithmic plotting.

Greatest flood known, in winter of 1861-62, reached a stage of about 32 ft; flood in February 1890 reached a stage of about 27½ ft (information furnished by Corps of Engineers).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	7,610	5,050	11	6,950	5,730	21	26,000	11,000
2	6,530	4,860	12	6,780	5,450	22	79,300	23,100
3	5,000	4,570	13	7,130	7,030	23	37,900	27,900
4	3,740	6,490	14	6,000	10,200	24	18,400	15,900
5	3,760	6,950	15	5,090	30,900	25	12,400	11,500
6	6,110	5,650	16	6,070	23,200	26	10,600	10,000
7	5,090	9,350	17	7,390	13,200	27	9,720	8,870
8	4,260	6,910	18	12,500	11,600	28	8,060	7,720
9	7,830	5,530	19	11,100	12,400	29	6,740	6,910
10	5,630	5,730	20	13,200	12,800	30	6,000	6,320
						31	5,390	5,650
Monthly mean discharge, in cubic feet per second							11,560	10,600
Runoff, in inches							6.60	6.05
Runoff, in acre-feet							710,600	651,500

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge
Dec. 16		
12 p.m.	4.9	7,830
Dec. 17		
6 p.m.	4.6	7,170
12 p.m.	4.5	6,950
Dec. 18		
6 a.m.	6.7	12,400
10	8.0	16,600
6 p.m.	6.6	12,100
12 p.m.	6.2	11,000
Dec. 19		
4 a.m.	6.0	10,500
10	5.4	8,990
2 p.m.	5.4	8,990
6	6.1	10,700
10	8.2	17,300
12 p.m.	8.2	17,300
Dec. 20		
12 m.	6.4	11,500
6 p.m.	6.3	11,300
12 p.m.	7.3	14,200
Dec. 21		
6 a.m.	8.2	17,300
12 m.	8.8	19,500
6 p.m.	10.3	25,300

Hour	Gage height	Discharge
Dec. 21--Con.		
9 p.m.	15.5	51,000
12 p.m.	17.3	62,100
Dec. 22		
4 a.m.	19.7	80,600
9	23.1	110,000
3 p.m.	20.0	83,000
12 p.m.	14.0	42,000
Dec. 23		
6 a.m.	15.1	48,600
4 p.m.	12.2	33,400
12 p.m.	9.9	23,700
Dec. 24		
8 a.m.	8.7	19,200
12 p.m.	7.4	14,500
Dec. 25		
12 m.	6.6	12,100
12 p.m.	6.2	11,000
Dec. 26		
12 m.	6.0	10,500
12 p.m.	5.9	10,200
Jan. 12		
12 p.m.	4.2	6,320

Hour	Gage height	Discharge
Jan. 13		
8 a.m.	4.7	7,390
4 p.m.	4.4	6,740
12 p.m.	4.8	7,610
Jan. 14		
8 a.m.	5.3	8,750
2 p.m.	5.6	9,470
12 p.m.	7.7	15,500
Jan. 15		
6 a.m.	11.0	28,100
10	12.7	35,600
12 m.	13.0	37,000
12 p.m.	11.8	31,600
Jan. 16		
12 m.	9.5	22,200
12 p.m.	8.1	16,900
Jan. 17		
6 a.m.	7.2	13,900
4 p.m.	6.6	12,100
12 p.m.	6.4	11,500
Jan. 18		
8 a.m.	6.5	11,800
4 p.m.	6.4	11,500
12 p.m.	6.3	11,300

765. Evans Creek above West Fork, at Meadows Bridge, Oreg.

(State-operated gaging station, discontinued 1953)

Location.--Lat 42°35'35", long 122°57'45", in NW¼ sec.29, T.34 S., R.2 W., 200 ft upstream from Meadows Road crossing and 3.5 miles upstream from West Fork Evans Creek.

Drainage area.--33.7 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 750 cfs and by slope-area measurement at 4,520 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,520 cfs Dec. 22 (gage height, 7.14 ft, from high-water profile).

1941-53: Discharge, 2,630 cfs Dec. 28, 1945 (gage height, 6.60 ft), from rating curve extended above 120 cfs.

Remarks.--Records other than the slope-area measurement furnished by State engineer of Oregon.

766. Evans Creek at Bybee Springs, near Rogue River, Oreg.

(State-operated gaging station, discontinued 1953)

Location.--Lat 42°34'50", long 123°01'35", in SW¼ sec.26, T.34 S., R.3 W., about 1 mile downstream from West Fork, 7 miles northeast of Wimer, and 12.5 miles northeast of Rogue River.

Drainage area.--116 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,200 cfs and by slope-area measurement at 8,250 cfs.

Maxima.--December 1955 to January 1956: Discharge, 9,150 cfs Dec. 22 (gage height, 12.1 ft).

1925-27, 1940-53: Discharge, 11,100 cfs Feb. 20, 1927 (gage height, 12.5 ft, site and datum then in use), from rating curve extended above 1,200 cfs.

Remarks.--Records other than the slope-area measurement furnished by State engineer of Oregon.

767. Jones Creek near Grants Pass, Oreg.

(Crest-stage station)

Location.--Lat 42°26'10", long 123°17'10", in SE¼ sec.16, T.36 S., R.5 W., at dam 200 ft downstream from A Street Bridge, three-quarters of a mile upstream from mouth, and 2 miles east of Grants Pass.

Drainage area.--7.41 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,000 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 320 cfs and by slope-area measurements at 564 cfs and at 1,380 cfs (Feb. 22, 1956).

Maxima.--December 1955 to January 1956: Discharge, 278 cfs Dec. 21 (gage height, 13.12 ft).

1951 to November 1955: Discharge, 502 cfs Jan. 27, 1954 (gage height, 14.70 ft).

768. Rogue River at Grants Pass, Oreg.

Location.--Lat 42°25'50", long 123°19'00", in NW$\frac{1}{4}$ sec.20, T.36 S., R.5 W., on right bank at city of Grants Pass filter plant, 0.6 mile upstream from U.S. Highway 99 bridge at Grants Pass, and at mile 98.0 (river-profile survey).

Drainage area.--2,420 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 888.28 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 33,000 cfs and by slope-area measurement of 135,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 135,000 cfs 8 a.m. Dec. 22 (gage height, 29.60 ft).

1939 to November 1955: Discharge, 77,000 cfs Jan. 18, 1953 (gage height, 23.9 ft), from rating curve extended above 28,000 cfs on basis of slope-area measurement at gage height 21.25 ft.

Flood in winter of 1861-62 reached a stage of about 39 ft (information furnished by Corps of Engineers). Flood of February 1890 reached a stage of about 32 ft, and that of Feb. 21, 1927, about 28 ft, according to local resident.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	9,000	6,640	11.....	8,130	7,840	21.....	32,000	14,900
2.....	8,290	6,300	12.....	7,900	7,420	22.....	107,000	23,300
3.....	6,110	6,260	13.....	8,450	9,090	23.....	54,500	40,200
4.....	4,500	9,510	14.....	7,120	13,100	24.....	24,700	22,600
5.....	3,980	10,200	15.....	5,910	42,800	25.....	16,800	16,100
6.....	7,050	10,400	16.....	6,750	32,400	26.....	16,600	13,800
7.....	6,400	12,500	17.....	9,100	18,900	27.....	14,000	12,200
8.....	5,040	10,200	18.....	15,200	15,500	28.....	11,000	10,100
9.....	9,800	8,220	19.....	16,200	16,100	29.....	8,960	8,800
10.....	6,820	7,990	20.....	18,200	16,600	30.....	7,770	7,920
						31.....	6,950	7,160
Monthly mean discharge, in cubic feet per second							15,170	14,360
Runoff, in inches							7.23	6.84
Runoff, in acre-feet							932,700	882,700

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22			Dec. 26--Con.		
12 p.m.......	3.65	8,240	4 a.m........	26.80	110,000	12 p.m.......	6.28	15,600
			8............	29.60	135,000			
Dec. 18			12 m.........	28.80	130,000	Jan. 13		
4 a.m........	4.35	9,920	4 p.m........	25.70	108,000	12 p.m.......	3.66	8,820
8............	6.80	16,400	8............	22.10	86,600			
12 m.........	7.76	19,300	12 p.m.......	19.10	69,600	Jan. 14		
4 p.m........	7.15	17,400				4 a.m........	3.88	9,320
8............	6.76	16,300	Dec. 23			8............	4.65	11,200
12 p.m.......	6.65	16,000	4 a.m........	18.00	63,700	4 p.m........	5.50	13,400
			8............	18.35	65,600	12 p.m.......	8.05	21,000
Dec. 19			12 m.........	17.00	58,500			
4 a.m........	6.45	15,500	4 p.m........	14.70	47,300	Jan. 15		
8............	5.97	14,100	8............	13.00	39,700	6 a.m........	11.55	33,700
12 m.........	5.85	13,800	12 p.m.......	11.80	34,700	10...........	15.00	48,700
4 p.m........	6.50	15,600				1 p.m........	15.90	53,000
8............	7.65	19,000	Dec. 24			6............	15.55	51,300
12 p.m.......	8.57	21,800	6 a.m........	10.10	28,100	12 p.m.......	13.85	43,400
			12 m.........	8.80	23,400			
Dec. 20			6 p.m........	7.95	20,600	Jan. 16		
6 a.m........	7.69	19,100	12 p.m.......	7.36	18,800	8 a.m........	12.00	35,500
12 m.........	6.75	16,300				4 p.m........	10.20	28,500
6 p.m........	6.67	16,100	Dec. 25			12 p.m.......	8.70	23,100
12 p.m.......	8.15	20,500	8 a.m........	6.68	16,800	Jan. 17		
			4 p.m........	6.20	15,400	12 m.........	7.20	18,300
Dec. 21			12 p.m.......	6.88	17,400	12 p.m.......	6.35	15,800
6 a.m........	9.64	25,300						
12 m.........	9.72	25,600	Dec. 26			Jan. 18		
4 p.m........	10.85	29,500	4 a.m........	7.05	17,900	6 a.m........	6.24	15,500
8............	14.40	43,200	12 m.........	6.59	16,500	12 m.........	6.35	15,800
12 p.m.......	20.00	67,700	6 p.m........	6.32	15,700	12 p.m.......	6.03	14,900

769. Applegate River near Copper, Oreg.

Location.--Lat 42°03'30", long 123°06'50", in SE¼ sec.25, T.40 S., R.4 W., on right bank a quarter of a mile downstream from French Gulch, 1½ miles downstream from Squaw Creek and 3 miles northeast of Copper store.

Drainage area.--220 sq mi.

Gage-height record.--Water-stage recorder graph except 5 p.m. Dec. 21 to 5 p.m. Jan. 2. Graph for part of Dec. 21 reconstructed on basis of high-water mark in gage house and records for stations downstream. Datum of gage is 1,759.66 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 7,000 cfs and by slope-area measurement of 20,300 cfs. Discharge for period of no gage-height record estimated on basis of floodmark and record for station near Applegate.

Maxima.--December 1955 to January 1956: Discharge, 20,300 cfs about 9 p.m. Dec. 21 (gage height, 23.47 ft).

1938 to November 1955: Discharge, 15,300 cfs Jan. 18, 1953 (gage height, 19.48 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1	396	1,050	11	618	1,280	21	11,800	1,870
2	315	1,000	12	817	1,290	22	16,000	2,940
3	245	1,300	13	715	1,410	23	4,000	3,480
4	206	1,440	14	553	2,040	24	2,600	2,360
5	285	1,620	15	518	7,320	25	2,200	1,920
6	472	1,600	16	839	4,440	26	3,000	1,700
7	366	1,490	17	762	2,810	27	2,000	1,530
8	351	1,310	18	1,480	2,210	28	1,500	1,380
9	518	1,190	19	3,810	2,070	29	1,300	1,250
10	402	1,160	20	5,070	2,010	30	1,200	1,150
						31	1,100	1,050
Monthly mean discharge, in cubic feet per second							2,111	1,957
Runoff, in inches							11.06	10.26
Runoff, in acre-feet							129,800	120,300

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Jan. 17		
12 p.m.	3.68	730	10 a.m.	11.59	7,150	12 m.	6.18	2,760
Dec. 18			12 m.	12.20	7,700	12 p.m.	5.73	2,400
6 a.m.	4.20	1,040	4 p.m.	18.75	14,500	Jan. 21		
12 m.	5.04	1,630	9	23.47	20,300	12 p.m.	4.86	1,780
2 p.m.	5.04	1,630	12 p.m.	22.40	18,900	Jan. 22		
6	5.33	1,860	Jan. 13			6 a.m.	4.93	1,830
12 p.m.	5.64	2,110	12 p.m.	4.20	1,360	12 m.	5.38	2,150
Dec. 19			Jan. 14			6 p.m.	7.82	4,140
6 a.m.	5.69	2,150	6 a.m.	4.37	1,460	8	8.43	4,690
9	6.22	2,580	12 m.	4.80	1,740	10	9.12	5,310
12 m.	8.14	4,110	12 p.m.	6.96	3,390	12 p.m.	8.68	4,910
3 p.m.	10.78	6,420	Jan. 15			Jan. 23		
6	9.46	5,230	4 a.m.	9.54	5,690	6 a.m.	7.54	3,890
12 p.m.	8.23	4,180	8	12.09	8,190	10	6.96	3,390
Dec. 20			12 m.	13.42	9,560	6 p.m.	6.43	2,960
8 a.m.	7.35	3,480	6 p.m.	11.76	7,860	12 p.m.	6.19	2,770
12 m.	7.73	3,780	12 p.m.	10.05	6,150	Jan. 24		
4 p.m.	9.64	5,400	Jan. 16			12 m.	5.60	2,300
8	12.19	7,690	12 m.	7.83	4,150	12 p.m.	5.28	2,080
12 p.m.	12.90	8,330	12 p.m.	6.86	3,310			
Dec. 21								
2 a.m.	13.05	8,460						

770. Applegate River near Applegate, Oreg.

Location.--Lat 42°14'30", long 123°08'10", in NE¼ sec.26, T.38 S., R.4 W., on left bank 0.9 mile downstream from Keeler Creek and 2 miles southeast of Applegate.

Drainage area.--480 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,285.33 ft above mean sea level, datum of 1929.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,000 cfs and by slope-area measurement at 47,600 cfs.

Maxima.--December 1955 to January 1956: Discharge, 47,600 cfs 10 p.m. Dec. 21 (gage height, 18.00 ft).
1938 to November 1955: Discharge, 29,100 cfs Jan. 18, 1953 (gage height, 15.60 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	482	1,220	11.....	690	1,700	21.....	17,800	2,470
2.....	415	1,080	12.....	908	1,700	22.....	26,200	3,380
3.....	343	1,270	13.....	838	1,930	23.....	7,460	4,760
4.....	284	3,140	14.....	665	2,600	24.....	3,820	3,300
5.....	299	2,740	15.....	610	8,860	25.....	2,890	2,680
6.....	570	2,070	16.....	856	6,150	26.....	3,860	2,390
7.....	478	2,280	17.....	880	3,860	27.....	2,900	2,140
8.....	407	1,900	18.....	1,520	3,180	28.....	2,180	1,840
9.....	700	1,680	19.....	4,790	2,800	29.....	1,740	1,650
10.....	550	1,630	20.....	5,960	2,700	30.....	1,490	1,520
						31.....	1,310	1,360
Monthly mean discharge, in cubic feet per second							3,029	2,645
Runoff, in inches							7.28	6.35
Runoff, in acre-feet							186,200	162,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 21--Con.			Jan. 13		
12 p.m.......	3.10	820	5 a.m........	9.97	10,800	12 p.m.......	4.40	1,870
			12 m.........	9.12	8,970			
Dec. 18			3 p.m........	9.97	10,800	Jan. 14		
8 a.m........	3.52	1,110	6............	13.86	21,100	6 a.m........	4.48	1,950
3 p.m........	4.35	1,820	10...........	18.00	47,600	12 m.........	4.80	2,280
6............	4.41	1,880	12 p.m.......	17.62	43,800	6 p.m........	5.41	3,100
12 p.m.......	4.94	2,430				12 p.m.......	6.29	4,240
			Dec. 22					
Dec. 19			3 a.m........	17.38	41,600	Jan. 15		
8 a.m........	5.03	2,540	5............	17.43	42,100	4 a.m........	6.11	3,960
12 m.........	5.82	3,550	8............	16.58	35,200	8............	9.05	8,820
4 p.m........	8.74	8,200	12 m.........	14.26	22,700	12 m.........	10.18	11,300
6............	8.86	8,440	6 p.m........	11.39	14,100	3 p.m........	10.60	12,200
12 p.m.......	7.32	5,780	9............	10.53	12,100	4............	10.65	12,400
			12 p.m.......	10.10	11,100	7............	9.95	10,800
Dec. 20			Dec. 23			12 p.m.......	8.87	8,460
10 a.m.......	6.45	4,480	6 a.m........	9.06	8,850			
2 p.m........	6.65	4,780	12 m.........	8.08	7,000	Jan. 16		
8............	8.56	7,850	12 p.m.......	6.75	4,920	6 a.m........	8.09	7,010
12 p.m.......	9.51	9,790				12 m.........	7.38	5,870
			Dec. 24			12 p.m.......	6.50	4,550
Dec. 21			12 m.........	5.89	3,650			
2 a.m........	9.92	10,700	12 p.m.......	5.39	3,080			

771. Powell Creek near Williams, Oreg.

Location.--Lat 42°16'00", long 123°17'40", near center of sec.16, T.38 S., R.5 W., on left bank 0.1 mile upstream from Blodgett ditch intake and 2 miles northwest of Williams.

Drainage area.--8.6 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Altitude of gage is 1,680 ft (by barometer).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 550 cfs and by slope-area measurement of 780 cfs.

Maxima.--December 1955 to January 1956: Discharge, 972 cfs 2 a.m. Dec. 22 (gage height, 5.37 ft).
1946 to November 1955: Discharge, 1,110 cfs Jan. 18, 1953 (gage height, 5.36 ft).

Mean discharge, in cubic feet per second, 1955-56, of Powell Creek near Williams, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	30	40	11.....	23	60	21.....	406	76
2.....	18	37	12.....	20	62	22.....	493	128
3.....	13	49	13.....	17	63	23.....	214	152
4.....	11	96	14.....	14	92	24.....	125	106
5.....	11	90	15.....	12	313	25.....	115	79
6.....	26	70	16.....	21	231	26.....	174	68
7.....	24	79	17.....	27	134	27.....	123	55
8.....	30	60	18.....	76	105	28.....	82	44
9.....	60	53	19.....	121	100	29.....	59	38
10.....	32	54	20.....	119	93	30.....	48	34
						31.....	42	31
Monthly mean discharge, in cubic feet per second							83.4	86.8
Runoff, in inches							11.18	11.64
Runoff, in acre-feet							5,130	5,340

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 16			Dec. 22			Dec. 28--Con.		
12 p.m.......	2.10	26	2 a.m........	5.37	972	12 p.m.......	2.04	68
			7............	4.39	512			
Dec. 17			10...........	4.39	512	Jan. 13		
8 p.m........	2.06	24	1 p.m........	3.97	385	12 p.m.......	1.96	62
12 p.m.......	2.37	47	4............	3.75	329			
			12 p.m.......	3.50	272	Jan. 14		
Dec. 18						6 a.m........	2.06	70
6 a.m........	2.62	71	Dec. 23			12 m.........	2.37	95
1 p.m........	2.67	76	12 m.........	3.17	207	4 p.m........	2.46	104
5............	2.82	91	2 p.m........	3.16	205	5............	2.42	100
12 p.m.......	2.80	89	12 p.m.......	2.91	163	9............	2.59	118
						12 p.m.......	2.76	140
Dec. 19			Dec. 24					
4 a.m........	2.74	83	12 m.........	2.60	119	Jan. 15		
7............	2.79	88	12 p.m.......	2.40	98	3 a.m........	3.02	180
12 m.........	3.36	164				6............	3.53	279
2 p.m........	3.35	162	Dec. 25			9............	4.03	401
12 p.m.......	2.99	109	12 m.........	2.28	87	11...........	4.15	435
			5 p.m........	2.72	135	7 p.m........	3.67	310
Dec. 20			12 p.m.......	2.99	175	12 p.m.......	3.59	292
10 a.m.......	2.83	92						
3 p.m........	2.95	104	Dec. 26			Jan. 16		
8............	3.41	173	2 a.m........	3.03	182	2 a.m........	3.69	315
12 p.m.......	3.33	158	8............	2.95	169	12 m.........	3.23	218
			12 m.........	3.05	186	6 p.m........	3.07	189
Dec. 21			12 p.m.......	2.86	155	12 p.m.......	2.92	164
8 a.m........	3.16	130						
11...........	3.41	173	Dec. 27			Jan. 17		
2 p.m........	4.37	475	12 m.........	2.61	120	12 m.........	2.68	129
6............	4.91	777	12 p.m.......	2.38	96	12 p.m.......	2.54	112
8............	4.73	668						
10...........	5.06	882	Dec. 28					
12 p.m.......	4.94	798	12 m.........	2.22	83			

772. Applegate River near Wilderville, Oreg.

(Gaging station, discontinued 1955)

Location.--Lat 42°21'10", long 123°24'10", in W½ sec.15, T.37 S., R.6 W., on left bank 900 ft downstream from Jackson Creek and 4 miles southeast of Wilderville.

Drainage area.--694 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 12,000 cfs and by slope-area measurement at 66,500 cfs (adjusted for drainage area at station).

Maxima.--December 1955 to January 1956: Discharge, 66,500 cfs Dec. 22 (gage height, 20.3 ft).

1938-55: Discharge, 47,500 cfs Jan. 18, 1953 (gage height, 18.3 ft, from floodmark).

773. Butcherknife Creek near Wonder, Oreg.

(Crest-stage station)

Location.--Lat 42°20'40", long 123°34'00", in NE¼ sec.19, T.37 S., R.7 W., at culvert near U.S. Highway 199, half a mile upstream from mouth, and 2 miles southwest of Wonder.

Drainage area.--3.07 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,200 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 90 cfs and from flow through culvert at 365 cfs.

Maxima.--December 1955 to January 1956: Discharge, 369 cfs Dec. 21 (gage height, 16.84 ft).
1953 to November 1955: Discharge, 367 cfs Jan. 27, 1954 (gage height, 16.82 ft).

774. Slate Creek at Wonder, Oreg.

Location.--Lat 42°21'40", long 123°31'10", in SW¼ sec.10, T.37 S., R.7 W., on left bank half a mile upstream from Elliot Creek and 0.4 mile east of Wonder.

Drainage area.--30.9 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,034.85 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,100 cfs and by slope-area measurements at 2,940 and 4,020 cfs.

Maxima.--December 1955 to January 1956: Discharge, 3,920 cfs 5 p.m. Dec. 21 (gage height, 9.60 ft).
1913, 1943 to November 1955: Discharge, 4,020 cfs Oct. 29, 1950 (gage height, 9.72 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	207	202	11.....	164	605	21.....	2,570	313
2.....	199	303	12.....	127	484	22.....	1,840	622
3.....	152	856	13.....	107	484	23.....	787	769
4.....	107	1,340	14.....	90	617	24.....	490	515
5.....	152	773	15.....	83	1,500	25.....	1,290	342
6.....	372	767	16.....	196	1,000	26.....	2,260	295
7.....	284	904	17.....	229	543	27.....	777	288
8.....	374	518	18.....	952	388	28.....	430	265
9.....	444	449	19.....	1,330	368	29.....	292	213
10.....	234	518	20.....	1,060	362	30.....	222	177
						31.....	179	150
Monthly mean discharge, in cubic feet per second							581	546
Runoff, in inches							21.66	20.38
Runoff, in acre-feet							35,700	33,580

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 26		
12 p.m.......	3.10	276	10 a.m.......	6.43	1,740	8 a.m........	7.70	2,520
			12 m.........	7.10	2,120	10...........	7.80	2,590
Dec. 18			5 p.m........	9.60	3,920	6 p.m........	6.20	1,610
6 a.m........	4.00	570	12 p.m.......	8.48	3,080	12 p.m.......	5.30	1,160
9............	4.42	738						
12 m.........	4.45	750	Dec. 22			Jan. 13		
5 p.m........	5.92	1,460	3 a.m........	8.20	2,870	12 m.........	3.62	453
10...........	6.02	1,510	12 m.........	6.18	1,600			
12 p.m.......	6.28	1,650	9 p.m........	5.10	1,060	Jan. 14		
			12 p.m.......	5.02	1,020	8 a.m........	3.73	490
Dec. 19						6 p.m........	4.39	741
1 a.m........	6.33	1,680	Dec. 23			12 p.m.......	4.72	884
8............	5.75	1,360	12 m.........	4.44	761			
10...........	6.12	1,570	12 p.m.......	4.05	605	Jan. 15		
6 p.m........	5.28	1,130				6 a.m........	6.19	1,600
12 p.m.......	4.70	855	Dec. 24			10...........	6.71	1,890
			12 m.........	3.71	484	12 m.........	6.59	1,820
Dec. 20			12 p.m.......	3.41	385	10 p.m.......	5.49	1,260
9 a.m........	4.11	614				12 p.m.......	5.48	1,250
4 p.m........	5.16	1,070	Dec. 25					
11...........	7.00	2,060	4 a.m........	3.33	362	Jan. 16		
12 p.m.......	6.90	2,000	12 m.........	4.10	625	6 a.m........	5.38	1,200
			6 p.m........	7.25	2,210	12 m.........	5.00	1,010
Dec. 21			12 p.m.......	8.98	3,460	6 p.m........	4.60	830
8 a.m........	6.37	1,700				12 p.m.......	4.29	701

775. Round Prairie Creek near Wilderville, Oreg.

(Crest-stage station)

Location.--Lat 42°22'40", long 123°29'45", in SW¼ sec.2, T.37 S., R.7 W., at culvert on U.S. Highway 199, 0.1 mile upstream from mouth and 1½ miles west of Wilderville.

Drainage area.--3.16 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 1,000 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 50 cfs and from flow through culvert at 305 cfs.

Maxima.--December 1955 to January 1956: Discharge, 262 cfs Dec. 21 (gage height, 6.30 ft).
1953 to November 1955: Discharge, 305 cfs Jan. 27, 1954 (gage height, 6.73 ft).

776. Jumpoff Joe Creek near Merlin, Oreg.

(State-operated gaging station)

Location.--Lat 42°34'10", long 123°19'30", in NW¼SW¼ sec.32, T.34 S., R.5 W., just downstream from Jack Creek and 6 miles northeast of Merlin.

Drainage area.--28.0 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 300 cfs and by slope-area measurements at 2,700 and 3,300 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,700 cfs Dec. 21 (gage height, 9.0 ft, from floodmark).
1922, 1929-30, 1932 to November 1955: Discharge, 3,300 cfs Oct. 29, 1950 (gage height, 9.8 ft, from floodmark)

Remarks.--Records other than slope-area measurements furnished by State engineer of Oregon.

777. Jumpoff Joe Creek at Merlin, Oreg.

(Miscellaneous site)

Location.--Lat 42°31'10", long 123°26'20", in NW¼ sec.20, T.35 S., R.6 W., 1 mile west of Merlin and 3 miles above mouth.

Drainage area.--76.7 sq mi.

Discharge record.--Peak discharge by contracted-opening measurement.

Maximum.--December 1955 to January 1956: Discharge, 8,780 cfs Dec. 22.

778. Grave Creek at Pease Bridge, near Placer, Oreg.

Location.--Lat 42°38'30", long 123°12'40", in SE¼ sec.6, T.34 S., R.4 W., on right bank half a mile downstream from Pease Bridge, 0.4 mile upstream from Boulder Creek, and 5 miles east of Placer. All records are computed for site half a mile upstream at Pease Bridge where most discharge measurements are made.

Drainage area.--22 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 2,354.2 ft above mean sea level, datum of 1929 (Bureau of Reclamation bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 550 cfs and by slope-area measurement at 4,610 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,610 cfs 5:30 p.m. Dec. 21 (gage height, 9.66 ft).
1940 to November 1955: Discharge, 3,550 cfs Oct. 29, 1950 (gage height, 6.95 ft, at former site about half a mile upstream at datum 29.9 ft higher).

Mean discharge, in cubic feet per second, 1955-56, of Grave Creek at Pease Bridge, near Placer, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	188	89	11.....	225	213	21.....	2,650	314
2.....	148	77	12.....	254	233	22.....	1,730	669
3.....	110	161	13.....	205	275	23.....	514	576
4.....	82	463	14.....	141	398	24.....	286	299
5.....	74	317	15.....	114	1,370	25.....	448	210
6.....	137	269	16.....	213	625	26.....	834	166
7.....	131	281	17.....	257	326	27.....	367	129
8.....	209	186	18.....	511	302	28.....	222	100
9.....	260	148	19.....	854	305	29.....	154	85
10.....	183	141	20.....	982	352	30.....	119	72
						31.....	98	64
Monthly mean discharge, in cubic feet per second......................							410	297
Runoff, in inches..							21.47	15.58
Runoff, in acre-feet..							25,190	18,280

Gage height, in feet, and discharge, in cubic feer per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.......	3.09	272	5:30 p.m.....	9.66	4,610	12 m.........	4.47	800
			10...........	8.38	3,990	12 p.m.......	3.80	510
Dec. 18			12 p.m.......	8.74	3,720			
6 a.m........	3.11	278				Dec. 27		
11...........	3.45	388	Dec. 22			12 m.........	3.30	335
12 m.........	3.46	391	1 a.m........	8.62	3,610	12 p.m.......	3.14	287
1 p.m........	3.46	391	9............	6.15	1,760			
6	4.56	845	12 m.........	5.46	1,350	Jan. 13		
12 p.m.......	4.56	845	7 p.m........	4.58	855	12 p.m.......	2.97	236
			12 p.m.......	4.36	747			
Dec. 19						Jan. 14		
7 a.m........	4.23	688	Dec. 23			6 a.m........	3.03	254
11...........	4.80	970	12 m.........	3.69	472	8............	3.04	257
12 m.........	4.84	992	12 p.m.......	3.38	363	12 m.........	3.20	305
2 p.m........	4.99	1,080				6 p.m........	4.03	602
6............	4.68	915	Dec. 24			10...........	4.06	614
12 p.m.......	4.20	675	12 m.........	-	275	12 p.m.......	4.19	670
			6 p.m........	-	257			
Dec. 20			12 p.m.......	-	225	Jan. 15		
10 a.m.......	3.77	500				5 a.m........	5.78	1,540
12 m.........	3.96	574	Dec. 25			8............	5.97	1,650
5 p.m........	5.14	1,170	6 a.m........	2.87	208	11...........	6.32	1,860
8............	5.94	1,630	12 m.........	2.96	233	12 m.........	6.25	1,820
12 p.m.......	7.14	2,400	1 p.m........	4.07	618	8 p.m........	4.95	1,060
			12 p.m.......	5.28	1,240	12 p.m.......	4.68	920
Dec. 21								
1 a.m........	6.86	2,200	Dec. 26			Jan. 16		
4............	6.37	1,890	1 a.m........	5.38	1,300	12 m.........	3.98	582
11...........	5.39	1,300	8............	4.57	850	12 p.m.......	3.53	416
1 p.m........	5.96	1,650	10 a.m.......	4.58	855			

779. East Fork Illinois River near Takilma, Oreg.

Location.--Lat 42°00'40", long 123°37'30". in SE¼ sec.10, T.41 S., R.8 W., on right bank 500 ft upstream from county road bridge, a quarter of a mile upstream from Long Gulch, and 3 miles south of Takilma.

Drainage area.--42.6 sq mi.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,746.6 ft above mean sea level (Bureau of Reclamation bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 4,100 cfs.

Maxima.--December 1955 to January 1956: Discharge, 8,230 cfs 2 a.m. Dec. 22 (gage height, 10.05 ft).

1941 to November 1955: Discharge, 6,750 cfs Oct. 29, 1950 (gage height, 8.75 ft).

Mean discharge, in cubic feet per second, 1955-56, of East Fork Illinois River near Takilma, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	630	257	11.....	541	525	21.....	4,670	656
2.....	385	243	12.....	469	491	22.....	4,640	1,760
3.....	234	540	13.....	365	545	23.....	1,420	1,480
4.....	167	1,130	14.....	252	1,550	24.....	796	751
5.....	418	785	15.....	218	3,970	25.....	914	513
6.....	1,160	569	16.....	466	1,630	26.....	1,530	402
7.....	606	617	17.....	458	847	27.....	859	328
8.....	554	429	18.....	1,350	724	28.....	525	269
9.....	775	375	19.....	2,170	775	29.....	378	232
10.....	480	420	20.....	1,980	790	30.....	297	203
						31.....	247	183
Monthly mean discharge, in cubic feet per second......................							966	774
Runoff, in inches...							26.15	20.94
Runoff, in acre-feet..							59,410	47,580

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Dec. 27--Con.		
12 p.m.......	3.83	585	6 a.m........	9.66	7,320	6 p.m........	4.63	728
			9............	8.36	4,610	12 p.m.......	4.44	643
Dec. 18			12 m.........	7.81	3,740			
2 a.m........	4.29	805	6 p.m........	7.01	2,660	Jan. 13		
10...........	4.91	1,160	12 p.m.......	6.48	2,060	12 p.m.......	4.22	553
12 m.........	4.91	1,160						
4 p.m........	5.82	1,880	Dec. 23			Jan. 14		
12 p.m.......	5.71	1,780	6 a.m........	6.03	1,630	6 a.m........	4.79	805
			12 m.........	5.69	1,350	12 m.........	5.72	1,380
Dec. 19			6 p.m........	5.41	1,160	6 p.m........	6.61	2,200
6 a.m........	5.52	1,610	12 p.m.......	5.18	1,020	12 p.m.......	7.35	3,100
9............	5.72	1,790						
12 m.........	6.71	2,870	Dec. 24			Jan. 15		
1 p.m........	6.94	3,180	6 a.m........	4.93	875	4 a.m........	8.23	4,400
6............	6.36	2,460	12 m.........	4.73	775	8............	8.43	4,730
12 p.m.......	5.70	1,770	6 p.m........	4.59	710	10...........	8.83	5,460
			12 p.m.......	4.41	630	12 m.........	8.35	4,600
Dec. 20						6 p.m........	7.60	3,440
8 a.m........	5.18	1,350	Dec. 25			12 p.m.......	6.84	2,460
12 m.........	5.41	1,520	8 a.m........	4.33	597			
6 p.m........	6.41	2,510	12 m.........	4.57	702	Jan. 16		
10...........	6.86	3,070	6 p.m........	5.41	1,160	6 a.m........	6.38	1,960
12 p.m.......	6.82	3,020	12 p.m.......	6.21	1,790	12 m.........	5.92	1,540
						6 p.m........	5.55	1,260
Dec. 21			Dec. 26			12 p.m.......	5.26	1,070
8 a.m........	6.41	2,480	7 a.m........	5.86	1,490			
12 m.........	6.93	3,070	12 m.........	6.14	1,730	Jan. 17		
6 p.m........	9.61	7,660	6 p.m........	5.78	1,420	6 a.m........	5.02	922
10...........	9.71	7,780	12 p.m.......	5.39	1,140	12 m.........	4.81	815
12 p.m.......	9.96	8,130				6 p.m........	4.66	742
			Dec. 27			12 p.m.......	4.67	746
Dec. 22			6 a.m........	5.11	976			
2 a.m........	10.05	8,230	12 m.........	4.86	840			

780. Althouse Creek near Holland, Oreg.

(Gaging station, discontinued 1953)

Location.--Lat 42°06'00", long 123°31'30", in SE$\frac{1}{4}$ sec.9, T.40 S., R.7 W., on right bank half a mile upstream from Carter Gulch and 2 miles southeast of Holland.

Drainage area.--23.8 sq mi.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 460 cfs and by slope-area measurements at 1,520 and 2,170 cfs.

Maxima.--December 1955 to January 1956: Discharge, 2,680 cfs Dec. 22 (gage height, 6.5 ft).

1944-45, 1946-53: Discharge, 2,680 cfs Jan. 18, 1953 (gage height, 6.50 ft).

781. Sucker Creek near Holland, Oreg.

Location.--Lat 42°09'00", long 123°27'50", in NE¼ sec.25, T.39 S., R.7 W., on right bank 1 mile downstream from Grayback Creek and 4 miles northeast of Holland.

Drainage area.--76 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,777.22 ft above mean sea level (Bureau of Reclamation bench mark).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 2,100 cfs and extended above on basis of shape of previous curves defined to 5,100 cfs by a slope-area measurement.

Maxima.--December 1955 to January 1956: Discharge, 7,150 cfs 5 a.m. Dec. 22 (gage height, 7.95 ft).
1941 to November 1955: Discharge, 6,580 cfs Jan. 18, 1953 (gage height, 7.75 ft).

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	332	403	11.....	312	597	21.....	3,580	872
2.....	224	371	12.....	308	608	22.....	4,620	1,390
3.....	168	527	13.....	286	666	23.....	1,850	1,600
4.....	138	928	14.....	244	1,150	24.....	1,150	1,100
5.....	176	788	15.....	224	3,930	25.....	1,130	884
6.....	348	678	16.....	328	2,140	26.....	1,560	739
7.....	272	711	17.....	328	1,340	27.....	1,050	608
8.....	293	586	18.....	746	1,080	28.....	732	516
9.....	430	520	19.....	1,530	1,020	29.....	565	466
10.....	304	525	20.....	1,530	984	30.....	484	423
						31.....	423	387
Monthly mean discharge, in cubic feet per second......................							828	921
Runoff, in inches..							12.56	13.96
Runoff, in acre-feet...							50,910	56,600

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 21--Con.			Dec. 27		
12 p.m.......	2.89	376	12 p.m.......	7.60	6,200	12 m.........	3.98	1,030
						12 p.m.......	3.72	844
Dec. 18			Dec. 22					
4 a.m........	3.22	530	5 a.m........	7.95	7,150	Jan. 13		
12 m.........	3.46	666	12 m.........	6.55	4,100	12 p.m.......	3.44	654
6 p.m........	3.98	1,030	8 p.m........	5.65	2,760			
12 p.m.......	4.00	1,040	12 p.m.......	5.50	2,570	Jan. 14		
						6 a.m........	3.57	739
Dec. 19			Dec. 23			12 m.........	4.02	1,060
6 a.m........	4.00	1,040	12 m.........	4.78	1,730	6 p.m........	4.52	1,480
10...........	4.33	1,310	12 p.m.......	4.40	1,370	12 p.m.......	5.02	1,990
12 m.........	4.80	1,750						
3 p.m........	5.24	2,250	Dec. 24			Jan. 15		
12 p.m.......	4.52	1,480	12 m.........	4.12	1,140	3 a.m........	6.00	3,250
			12 p.m.......	3.89	963	6............	6.85	4,630
Dec. 20						11...........	7.12	5,140
9 a.m........	4.18	1,180	Dec. 25			12 m.........	7.02	4,940
12 m.........	4.35	1,320	6 a.m........	3.83	921	6 p.m........	6.27	3,660
6 p.m........	4.84	1,790	12 m.........	3.90	970	12 p.m.......	5.70	2,830
12 p.m.......	5.11	2,090	6 p.m........	4.27	1,260			
			12 p.m.......	4.85	1,800	Jan. 16		
Dec. 21						12 m.........	5.10	2,080
8 a.m........	4.95	1,920	Dec. 26			12 p.m.......	4.62	1,570
12 m.........	5.45	2,500	2 a.m........	4.94	1,900			
7 p.m........	7.65	6,320	8............	4.55	1,500	Jan. 17		
8............	7.70	6,450	12 m.........	4.64	1,590	12 m.........	4.32	1,300
9 p.m........	7.35	5,600	12 p.m.......	4.32	1,300	12 p.m.......	4.20	1,200

782. West Fork Illinois River below Rock Creek, near O'Brien, Oreg.

Location.--Lat 42°02'20", long 123°44'50", in SW¼SE¼ sec.34, T.40 S., R.9 W., on left bank 900 ft downstream from Rock Creek and 3 miles southwest of O'Brien.

Drainage area.--42.4 sq mi.

Gage-height record.--Water-stage recorder graph except Dec. 1 to 1:30 p.m. Jan. 14. Datum of gage is 1,516.14 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 6,200 cfs and by slope-area measurement of 12,100 cfs. Discharge for period of no gage-height record estimated on the basis of weather records, recorded range in stage, and records for East Fork Illinois River near Takilma and Illinois River at Kerby.

Maxima.--December 1955 to January 1956: Discharge, 12,100 cfs about 3 a.m. Dec. 22 (gage height, 14.79 ft, from floodmark on inside gage).

1954 to November 1955: Discharge, 5,200 cfs Dec. 30, 1954 (gage height, 11.50 ft).

During flood of Oct. 28, 1950, flow of 14,200 cfs occurred at former station downstream where the drainage area is 15 percent larger. The 1955 flood at that site was slightly lower.

Mean discharge, in cubic feet per second, 1955-56

Day	December	January	Day	December	January	Day	December	January
1.....	800	340	11.....	650	700	21.....	5,500	747
2.....	480	320	12.....	580	650	22.....	6,500	1,930
3.....	300	700	13.....	500	750	23.....	1,800	1,780
4.....	210	1,400	14.....	320	3,200	24.....	1,100	906
5.....	500	1,000	15.....	280	4,850	25.....	1,300	591
6.....	1,400	740	16.....	600	2,240	26.....	1,900	509
7.....	780	800	17.....	550	1,100	27.....	1,000	459
8.....	680	550	18.....	1,500	1,010	28.....	650	384
9.....	950	500	19.....	2,400	888	29.....	500	326
10.....	600	550	20.....	2,200	900	30.....	380	284
						31.....	320	252
Monthly mean discharge, in cubic feet per second......................							1,201	1,011
Runoff, in inches..							32.66	27.50
Runoff, in acre-feet...							73,840	62,190

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1956

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Jan. 14			Jan. 17			Jan. 22--Con.		
12 p.m.......	10.68	4,100	12 m.........	6.88	1,030	10 p.m.......	9.96	3,210
			7 p.m........	6.58	912	12 p.m.......	9.60	2,830
Jan. 15			12 p.m.......	6.88	1,030			
3 a.m........	11.64	5,400				Jan. 23		
10...........	12.34	6,480	Jan. 21			6 a.m........	8.72	2,080
5 p.m........	10.60	4,000	12 p.m.......	5.96	693	12 m.........	8.07	1,640
9............	10.04	3,300				6 p.m........	7.59	1,360
12 p.m.......	9.62	2,850	Jan. 22			8............	7.58	1,350
			2 a.m........	5.98	699	12 p.m.......	7.20	1,160
Jan. 16			4............	6.10	740			
1 a.m........	9.56	2,790	6............	6.33	820	Jan. 24		
6............	9.56	2,790	11...........	7.60	1,360	12 m.........	6.50	880
12 m.........	8.91	2,230	5 p.m........	10.06	3,320	12 p.m.......	6.00	705
12 p.m.......	7.72	1,430	7 p.m........	10.02	3,280			

783. Illinois River at Kerby, Oreg.

Location.--Lat 42°12'00", long 123°39'20", in NW¼ sec.9, T.39 S., R.8 W., on right bank at Finch Bridge and half a mile west of Kerby.

Drainage area.--364 sq mi.

Gage-height record.--Staff gage read twice daily. Peak stage Dec. 22 from floodmarks. Datum of gage is 1,234.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Discharge record.--Stage-discharge relation defined by current-meter measurements below 9,600 cfs and by slope-area measurement of 49,000 cfs.

Maxima.--December 1955 to January 1956: Discharge, 56,800 cfs about 9 a.m. Dec. 22 (gage height, 14.4 ft).

1926 to November 1955: Discharge, 52,000 cfs Feb. 20, 1927 (gage height, 19.6 ft, site and datum then in use).

Mean discharge, in cubic feet per second, 1955-56, of Illinois River at Kerby, Oreg.

Day	December	January	Day	December	January	Day	December	January
1.....	4,270	3,640	11.....	2,540	7,190	21.....	22,700	5,050
2.....	2,900	3,480	12.....	2,460	5,320	22.....	44,900	9,670
3.....	2,060	4,950	13.....	2,080	6,050	23.....	16,800	11,000
4.....	1,560	10,800	14.....	1,680	14,000	24.....	8,980	6,110
5.....	2,020	8,360	15.....	1,500	29,400	25.....	7,130	4,400
6.....	6,220	5,520	16.....	2,560	16,900	26.....	17,000	3,810
7.....	4,190	7,980	17.....	3,260	7,680	27.....	10,500	3,360
8.....	3,060	5,520	18.....	8,920	6,860	28.....	6,110	2,800
9.....	4,640	4,920	19.....	11,900	6,080	29.....	4,530	2,350
10.....	2,800	6,350	20.....	10,300	6,020	30.....	3,680	1,990
						31.....	3,220	1,790
Monthly mean discharge, in cubic feet per second......................							7,305	7,076
Runoff, in inches...							23.14	22.41
Runoff, in acre-feet..							449,200	435,100

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge	Hour	Gage height	Dis-charge
Dec. 17			Dec. 22--Con.			Dec. 27--Con.		
12 p.m.......	4.9	4,740	9 a.m........	14.4	56,800	12 m.........	6.5	9,800
			4 p.m........	13.0	46,300	12 p.m.......	5.75	7,250
Dec. 18			12 p.m.......	10.8	31,900			
8 a.m........	6.2	8,900				Jan. 13		
2 p.m........	6.2	8,900	Dec. 23			12 p.m.......	5.4	6,200
6............	6.5	10,000	3 a.m........	9.7	25,400			
10...........	7.0	12,100	6............	8.4	18,400	Jan. 14		
12 p.m.......	6.95	11,900	9............	7.9	15,900	6 a.m........	6.15	8,580
			3 p.m........	7.4	13,400	12 m.........	7.4	13,400
Dec. 19			6............	7.25	12,800	6 p.m........	8.7	19,900
8 a.m........	6.7	10,800	12 p.m.......	6.9	11,300	12 p.m.......	9.2	22,400
12 m.........	6.95	11,900	Dec. 24					
5 p.m........	7.4	13,900	12 m.........	6.2	8,750	Jan. 15		
12 p.m.......	6.65	10,600	12 p.m.......	5.7	7,100	6 a.m........	9.8	26,000
						12 m.........	10.8	31,900
Dec. 20			Dec. 25			3 p.m........	11.5	36,200
10 a.m.......	5.9	7,850	12 m.........	5.5	6,500	12 p.m.......	10.0	27,200
12 m.........	6.05	8,380	4 p.m........	5.55	6,650			
6 p.m........	6.75	11,000	10...........	6.1	8,400	Jan. 16		
12 p.m.......	7.75	15,600	12 p.m.......	6.45	9,620	6 a.m........	8.8	20,400
						12 m.........	7.9	15,900
Dec. 21			Dec. 26			6 p.m........	7.2	12,600
3 a.m........	8.1	17,400	5 a.m........	8.0	16,400	12 p.m.......	6.6	10,200
5............	8.2	17,900	7............	8.2	17,400			
8............	8.1	17,400	10...........	8.2	17,400	Jan. 17		
9............	8.1	17,400	3 p.m........	8.6	19,400	6 a.m........	6.1	8,400
12 m.........	8.7	20,400	5............	8.65	19,600	4 p.m........	5.6	6,800
6 p.m........	9.95	27,500	8............	8.45	18,600	8............	5.5	6,500
12 p.m.......	11.3	35,500	12 p.m.......	7.90	15,900	12 p.m.......	5.5	6,500
Dec. 22			Dec. 27					
6 a.m........	13.0	47,000	6 a.m........	7.1	12,100			

784. Deer Creek near Dryden, Oreg.

Location.--Lat 42°15'50", long 123°27'00", near center of sec. 18, T.38 S., R.6 W., on left bank 500 ft downstream from confluence of North and South Forks and 5 miles east of Dryden.

Drainage area.--23 sq mi, approximately.

Gage-height record.--Water-stage recorder graph. Datum of gage is 1,650.10 ft above mean sea level (levels by Bureau of Reclamation).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 1,500 cfs and by slope-area measurement of 4,400 cfs.

Maxima.--December 1955 to January 1956: Discharge, 4,400 cfs 8 p.m. Dec. 21 (gage height, 7.67 ft).

1941 to November 1955: Discharge, about 5,000 cfs Jan. 18, 1953 (gage height, 7.61 ft, backwater from logs); gage height, 7.92 ft Oct. 29, 1950.

Mean discharge, in cubic feet per second, 1955-56, of Deer Creek near Dryden, Oreg.

Day	December	January	Day	December	January	Day	December	January
1	315	204	11	194	379	21	2,820	313
2	167	190	12	181	382	22	2,290	748
3	122	268	13	149	428	23	758	613
4	97	645	14	116	662	24	450	309
5	122	512	15	105	1,940	25	440	215
6	275	370	16	222	842	26	801	196
7	203	420	17	236	420	27	530	143
8	222	346	18	575	364	28	340	120
9	331	307	19	1,150	364	29	268	105
10	209	331	20	1,000	370	30	238	95
						31	208	84
Monthly mean discharge, in cubic feet per second							488	409
Runoff, in inches							24.47	20.51
Runoff, in acre-feet							30,020	25,160

Gage height, in feet, and discharge, in cubic feet per second, at indicated time, 1955-56

Hour	Gage height	Discharge	Hour	Gage height	Discharge	Hour	Gage height	Discharge
Dec. 17			Dec. 21--Con.			Dec. 26--Con.		
12 p.m.	3.30	229	12 m.	6.28	2,360	7 a.m.	4.00	775
			8 p.m.	7.67	4,400	12 m.	4.22	892
Dec. 18			9	7.29	3,830	12 p.m.	3.80	675
9 a.m.	4.39	596	12 p.m.	7.24	3,740			
1 p.m.	4.30	555				Dec. 27		
6	4.68	744	Dec. 22			12 m.	3.43	512
12 p.m.	4.72	766	2 a.m.	7.14	3,580	12 p.m.	3.20	420
			4	7.34	3,910			
Dec. 19			12 m.	5.50	1,830	Jan. 13		
7 a.m.	4.50	650	12 p.m.	4.50	1,030	12 p.m.	3.16	388
12 m.	5.52	1,300						
3 p.m.	6.23	1,930	Dec. 23			Jan. 14		
12 p.m.	5.06	966	12 m.	3.91	730	12 m.	3.60	560
			12 p.m.	3.50	540	12 p.m.	4.60	1,140
Dec. 20								
4 a.m.	4.65	728	Dec. 24			Jan. 15		
9	4.36	582	12 m.	3.27	448	6 a.m.	5.70	2,040
12 m.	4.46	630	12 p.m.	3.08	364	12 m.	6.43	2,800
4 p.m.	5.00	930	Dec. 25			8 p.m.	5.04	1,460
10	6.23	1,930	12 m.	2.99	331	12 p.m.	4.85	1,310
12 p.m.	6.19	1,890	6 p.m.	3.37	488			
			12 p.m.	4.09	820	Jan. 16		
Dec. 21						6 a.m.	4.44	1,020
3 a.m.	6.17	2,230	Dec. 26			12 m.	3.99	770
9 a.m.	5.90	1,930	1 a.m.	4.12	835	12 p.m.	3.50	540

785. Snailback Creek near Selma, Oreg.

(Miscellaneous site)

Location.--Lat 42°17'05", long 123°41'40", in NW¼ sec.7, T.38 S., R.9 W., at road crossing, 0.5 mile upstream from mouth and 4 miles west of Selma.

Drainage area.--1.62 sq mi.

Discharge record.--Peak discharge determined from flow through culvert.

Maximum.--December 1955 to January 1956: Discharge, 278 cfs Dec. 21.

786. Illinois River below Rancherie Creek, near Selma, Oreg.

(Miscellaneous site)

Location.--Lat 42°18'20", long 123°46'40", in SE¼ sec.32, T.37 S., R.9 W., 0.1 mile downstream from Rancherie Creek and 8 miles west of Selma.

Drainage area.--579 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 85,000 cfs Dec. 22.

787. Rogue River below Illinois River, near Agness, Oreg.

(Miscellaneous site)

Location.--Lat 42°31'20", long 124°09'50", in NW¼ sec.29, T.35 S., R.12 W., 0.6 mile downstream from Tom East Creek and 5½ miles southwest of Agness.

Drainage area.--4,890 sq mi.

Discharge record.--Peak discharge by slope-area measurement.

Maximum.--December 1955 to January 1956: Discharge, 414,000 cfs Dec. 22.

EILER CREEK BASIN

788. Ransom Creek near Brookings, Oreg.

(Crest-stage station)

Location.--Lat 42°03'45", long 124°18'00", in NE¼ sec.1, T.41 S., R.14 W., at culvert on U.S. Highway 101, just upstream from mouth, and 1.2 miles northwest of Brookings.

Drainage area.--0.74 sq mi.

Gage-height record.--Crest stages only. Altitude of gage is 40 ft (from topographic map).

Discharge record.--Stage-discharge relation defined by current-meter measurements below 35 cfs and from flow through culvert at 178 cfs.

Maxima.--December 1955 to January 1956: Discharge, 211 cfs Dec. 21 (gage height, 23.06 ft).

1953 to November 1955: Discharge, 300 cfs Jan. 17, 1953 (gage height, 24.8 ft).

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