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UNITED STATES DEPARTMENT OF THE INTERIOR

SURFACE WATER SUPPLY
of the **UNITED STATES**
1928

PART XI
PACIFIC SLOPE BASINS IN CALIFORNIA

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 671

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UNITED STATES DEPARTMENT OF THE INTERIOR
RAY LYMAN WILBUR, Secretary
GEOLOGICAL SURVEY
GEORGE OTIS SMITH, Director

Water-Supply Paper 671

SURFACE WATER SUPPLY *of the* UNITED STATES 1928

PART XI PACIFIC SLOPE BASINS IN CALIFORNIA

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Prepared in cooperation with
THE STATES OF CALIFORNIA AND OREGON



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SURFACE WATER SUPPLY OF PACIFIC SLOPE BASIN IN CALIFORNIA, 1928

AUTHORIZATION AND SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the year ending September 30, 1928.

The data presented in these reports were collected by the United States Geological Survey under the following authority contained in the organic law (20 Stat. L., p. 394):

Provided, That this officer [the director] shall have the direction of the Geological Survey and the classification of public lands and examination of the geological structure, mineral resources, and products of the national domain.

The work was begun in 1888 in connection with special studies relating to irrigation. Since the fiscal year ending June 30, 1895, appropriation bills passed by Congress have carried the following items:

For gaging the streams and determining the water supply of the United States, and for the investigation of underground currents and artesian wells, and for the preparation of reports upon the best methods of utilizing the water resources.

Annual appropriations for the fiscal years ending June 30, 1895-1929

1895.....	\$12, 500. 00	1918.....	\$175, 000. 00
1896.....	24, 500. 00	1919.....	148, 244. 10
1897-1899.....	50, 000. 00	1920.....	175, 000. 00
1900.....	70, 000. 00	1921-1923.....	180, 000. 00
1901-2.....	100, 000. 00	1924-25.....	170, 000. 00
1903-1906.....	200, 000. 00	1926.....	165, 000. 00
1907.....	150, 000. 00	1927.....	151, 000. 00
1908-1910.....	100, 000. 00	1928.....	147, 000. 00
1911-1917.....	150, 000. 00	1929.....	270, 500. 00

In the execution of the work many private and State organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 10.

Measurements of stream flow have been made at about 5,480 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1928, 1,830 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements are made at

other points. In connection with this work data were also collected in regard to precipitation, evaporation, storage reservoirs, river profiles, and water power in many sections of the country and will be made available in water-supply papers from time to time.

DEFINITION OF TERMS

The volume of water flowing in a stream—the “run-off” or “discharge”—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups—(1) those that represent a rate of flow, as second-feet, gallons per minute, miner’s inches, and discharge in second-feet per square mile, and (2) those that represent the actual quantity of water, as run-off in inches, acre-feet, and millions of cubic feet. The principal terms used in this series of reports are second-feet, second-feet per square mile, run-off in inches, and acre-feet. They may be defined as follows:

“Second-feet” is an abbreviation for “cubic feet per second.” A second-foot is the rate of discharge of water flowing in a channel of rectangular cross section 1 foot wide and 1 foot deep at an average velocity of 1 foot per second. It is generally used as a fundamental unit from which others are computed.

“Second-feet per square mile” is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

“Run-off in inches” is the depth to which an area would be covered if all the water flowing from it in a given period were uniformly distributed on the surface. It is used for comparing run-off with rainfall, which is usually expressed in inches.

An “acre-foot,” equivalent to 43,560 cubic feet, is the quantity required to cover an acre to the depth of 1 foot. The term is commonly used in connection with storage for irrigation.

The following terms not in common use are here defined:

“Stage-discharge relation”; an abbreviation for the term “relation of gage height to discharge.”

“Control”; a term used to designate the natural section or stretch of the channel or artificial structure below the gage which determines the stage-discharge relation at the gage.

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1927, and ending September 30, 1928. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored as ground water, in the form of snow or ice, or in ponds, lakes, and swamps, and this stored water passes

off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water available for run-off is possibly a small quantity in the ground; therefore the run-off for the year beginning October 1 is practically all derived from precipitation within that year.

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a staff gage or from a water-stage recorder that gives continuous record of the fluctuations. Measurements of discharge are made with a current meter. The general methods are

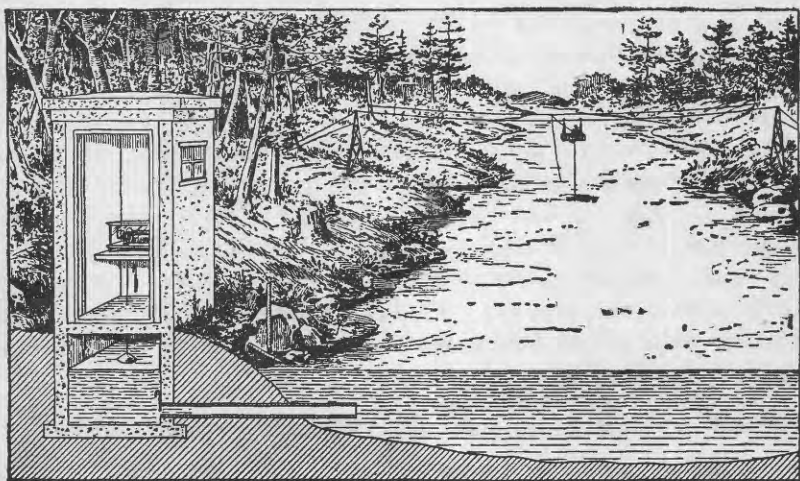


FIGURE 1.—Typical gaging station

outlined in standard textbooks on the measurement of river discharge. A typical gaging station, equipped with water-stage recorder and measuring cable and car, is shown in Figure 1.

From the discharge measurements rating tables are prepared that give the discharge for any stage. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is determined.

The data presented for each gaging station in the area covered by this report comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off.

The description of the station gives, in addition to statements regarding location and type of gage, information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded stages, and the accuracy of the records. The

maximum discharge given under "Extremes" does not represent the crest discharge unless a water-stage recorder was in operation, or unless a nonrecording gage was read at the time of the crest.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the daily gage height which may be a once-daily reading or the mean of twice-daily readings of a non-recording gage, or the mean daily gage height obtained from a water-stage recorder graph.

At stations on streams subject to sudden or rapid diurnal fluctuation the discharge obtained from the rating table and the mean daily gage height may not be the true mean discharge for the day. If such stations are equipped with water-stage recorders the mean daily discharge may be obtained by averaging discharge at regular intervals during the day or by using the discharge integrator, an instrument for obtaining mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month. On this average flow are based computations recorded in the remaining columns, which are defined on page 2.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily (1) on the permanency of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that records are accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," 20 per cent or more.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth of run-off in inches may be subject to gross errors caused by the inclusion of large non-contributing districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear

probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

The table of monthly discharge gives only a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published.

Many gaging stations on streams in the irrigated areas of the United States are located above most of the diversions from those streams, and the discharge recorded does not show the water supply available for further development, as prior appropriations below the stations must first be satisfied.

PUBLICATIONS

Investigation of water resources by the United States Geological Survey has consisted in large part of measurements of the volume of flow of streams and studies of the conditions affecting that flow, but it has comprised also investigation of such closely allied subjects as irrigation, water storage, water powers, ground waters, and quality of waters. Most of the results of these investigations have been published in the series of water-supply papers, but some have appeared in the monographs, bulletins, professional papers, and annual reports.

The results of stream-flow measurements are now published annually in 12 parts, each part covering an area whose boundaries coincide with natural drainage features as indicated below:

Part I. North Atlantic slope basins (St. John to York River).

II. South Atlantic slope and eastern Gulf of Mexico basins (James River to the Mississippi).

III. Ohio River Basin.

IV. St. Lawrence River Basin.

V. Upper Mississippi River and Hudson Bay Basins.

VI. Missouri River Basin.

VII. Lower Mississippi River Basin.

VIII. Western Gulf of Mexico basins.

IX. Colorado River Basin.

X. The Great Basin.

XI. Pacific slope basins in California.

XII. North Pacific slope basins in three parts:

A, Pacific slope basins in Washington and upper Columbia River Basin.

B, Snake River Basin.

C, Pacific slope basins in Oregon and lower Columbia River Basin.

Water-supply papers and other publications of the United States Geological Survey containing data in regard to the water resources of the United States may be obtained or consulted as indicated below:

1. Copies may be purchased at nominal cost from the Superintendent of Documents, Government Printing Office, Washington, D. C., who will, on application, furnish lists giving prices.

2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.

3. Sets are available for consultation in the local offices of the water-resources branch of the Geological Survey, as follows:

Augusta, Me., Statehouse.
Boston, Mass., 2500 Customhouse.
Hartford, Conn., 60 Washington Street.
Albany, N. Y., 506 Broadway-Arcade-Building.
Trenton, N. J., 710 Trenton Trust Building.
Charlottesville, Va., Brooks Museum, University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 210 Post Office Building.
Columbia, S. C., 801 National Loan & Exchange Bank Building.
Ocala, Fla., Post Office Building.
Chattanooga, Tenn., 630 Power Building.
Tuscaloosa, Ala., Post Office Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 315 Federal Building.
Lansing, Mich., M9 State Office Building.
Chicago, Ill., 1503 Consumers Building.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 202 Old State Capitol.
Topeka, Kans., 23 Federal Building.
Rolla, Mo., Rolla Building, School of Mines and Metallurgy.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Capitol.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 403 Post Office Building.
Salt Lake City, Utah, 313 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, Federal Building.
Helena, Mont., 416 Power Block.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 303 Customhouse.
Los Angeles, Calif., 751 South Figueroa Street, room 510.
Honolulu, Hawaii, Territorial Office Building.

A list of the Geological Survey's publications may be obtained by applying to the Director, United States Geological Survey, Washington, D. C.

Stream-flow records have been obtained at about 5,480 points in the United States, and the data obtained have been published in the reports tabulated on pages 7 and 9.

Stream-flow data in reports of the United States Geological Survey

[A=Annual Report; B=Bulletin; W=Water-Supply Paper]

Report	Character of data	Year
10th A, pt. 2	Descriptive information only	1884 to Sept., 1890.
11th A, pt. 2	Monthly discharge and descriptive information	1884 to June 30, 1891.
12th A, pt. 2	do	1884 to Dec. 31, 1892.
13th A, pt. 3	Mean discharge in second-feet	1884 to Dec. 31, 1893.
14th A, pt. 2	Monthly discharge (long-time records, 1871 to 1893)	1884 to Dec. 31, 1893.
B 131	Descriptions, measurements, gage heights, and ratings	1893 and 1894.
16th A, pt. 2	Descriptive information only	1895.
B 140	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years)	1895.
W 11	Gage heights (also gage heights for earlier years)	1895.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years)	1895 and 1896.
W 15	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas.	1897.
W 16	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)	1898.
W 35 to 39	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge	1899.
W 47 to 52	Descriptions, measurements, gage heights, and ratings	1900.
22d A, pt. 4	Monthly discharge	1900.
W 65, 66	Descriptions, measurements, gage heights, and ratings	1901.
W 75	Monthly discharge	1901.
W 82 to 85	Complete data	1902.
W 97 to 100	do	1903.
W 124 to 135	do	1904.
W 165 to 173	do	1905.
W 201 to 214	do	1906.
W 241 to 252	do	1907-8.
W 281 to 292	do	1909.
W 301 to 312	do	1910.
W 321 to 332	do	1911.
W 351 to 362	do	1912.
W 381 to 394	do	1913.
W 401 to 414	do	1914.
W 431 to 444	do	1915.
W 451 to 464	do	1916.
W 471 to 484	do	1917.
W 501 to 514	do	1918.
W 521 to 534	do	1919-20.
W 541 to 554	do	1921.
W 561 to 574	do	1922.
W 581 to 594	do	1923.
W 601 to 614	do	1924.
W 621 to 634	do	1925.
W 641 to 654	do	1926.
W 661 to 674	do	1927.
		1928.

The records at most of the stations discussed in these reports extend over a series of years. Miscellaneous measurements at many points other than regular gaging stations have been made each year and are published under "Miscellaneous discharge measurements" at the end of each report in the same relative order as the regular gaging stations. An index of the reports containing records obtained prior to 1904 has been published in Water-Supply Paper 119.

The following table gives, by years and drainage basins, the numbers of the papers on surface-water supply published from 1899 to 1928. The data for any particular station will be found in the reports covering the years during which the station was maintained. For example, data from 1910 to 1920 for any station in the area covered by Part III are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

[For basins included see p. 5]

PUBLICATIONS

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII		
												A	B	C
1899 ^a	35	35, 36	36	36	36, 37	37	37	37	37, 38	38, 39	38, 39	38	38	38
1900 ^a	47, 48	48	48, 49	49	49, 50	50	50	50	50	51	51	51	51	51
1901 ^a	65, 75	65, 75	65, 75	65, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902 ^a	82, 83	82, 83	82, 83	82, 83	83	83	83	83	83	85	85	85	85	85
1903 ^a	97	97, 98	98	98	98	98	98	98	100	100	100	100	100	100
1904 ^a	124, 125	126, 127	128	129	130, 131	132	128, 131	132	133	133, 134	134	135	135	135
1905 ^a	165, 166	167, 168	169	170	171	172	160, 173	174	175, 177	176, 177	177	178	178	177, 178
1906 ^a	201, 202	203, 204	205	206	207	208	205, 209	210	211, 213	212, 213	213	214	214	214
1907-8 ^a	241	242	243	244	245	246	247	248	249	250, 251	251	252	252	252
1909 ^a	261	262	263	264	265	266	267	268	269	270, 271	271	272	272	272
1910 ^a	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911 ^a	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912 ^a	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B	332-C
1913 ^a	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B	362-C
1914 ^a	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1915 ^a	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1916 ^a	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917 ^a	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918 ^a	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919-20 ^a	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921 ^a	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922 ^a	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923 ^a	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924 ^a	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925 ^a	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926 ^a	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927 ^a	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928 ^a	661	662	663	664	665	666	667	668	669	670	671	672	673	674

^a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in Twenty-first Annual Report, Part IV.

^b James River only.

^c Gallatin River.

^d Green and Gunnison Rivers and Grand River above junction with Gunnison.

^e Mohave River only.

^f Kings and Kern Rivers and south Pacific slope basins.

^g Rating tables and index to Water-Supply Papers 47-52 and data on precipitation, wells, and irrigation in California and Utah contained in Water-Supply Paper 52. Tables of monthly discharge for 1900 in Twenty-second Annual Report, Part IV.

^h Wissahickon and Schuylkill Rivers to James River.

ⁱ Scioto River.

^j Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte.

^k Tributaries of Mississippi from east.

^l Lake Ontario and tributaries to St. Lawrence River proper.

^m Hudson Bay only.

ⁿ New England rivers only.

^o Hudson River to Delaware River, inclusive.

^p Susquehanna River to Yackin River, inclusive.

^q Platte and Kansas Rivers.

^r Great Basin in California except Truckee and Carson River Basins.

^s Below junction with Gila.

^t Rogue, Umpqua, and Siletz Rivers only.

COOPERATION

Investigation of the water resources of California is being carried on by the United States Geological Survey in cooperation with the State in accordance with acts of the State legislature, approved March 16, 1903, March 20, 1905, March 11, 1907, and April 22, 1909, empowering the State authorities to enter into contracts with the Director of the United States Geological Survey for the purpose of making topographic maps, gaging streams, and surveying reservoir sites and canal locations for the conservation and utilization of the flood and storm waters of the State. The State funds for the work during the year 1928 were provided for in the State budget and the usual agreement was executed by B. B. Meek, director of public works, and Edward Hyatt, State engineer.

The entire expense of the stream-flow investigations in Tuolumne River Basin for the Hetch Hetchy project is paid by the city and county of San Francisco, through M. M. O'Shaughnessy, city engineer.

All stations in Los Angeles County are maintained in cooperation with the Board of Supervisors and the Department of Agriculture, represented by the Forest Service through F. E. Bonner, district engineer, and the Weather Bureau, through H. B. Hersey, meteorologist. The Forest Service pays the salary and expenses of a hydrographer detailed for field work. The Geological Survey supervises the work and compiles all stream-flow data for publication.

The stations in Santa Ana River Basin are maintained in cooperation with San Bernardino, Riverside, and Orange Counties through their boards of supervisors. Cooperation is also furnished by the Weather Bureau in maintaining precipitation stations.

Assistance in the maintenance of the river-measurement stations was furnished by the Southern California Edison Co., San Joaquin Light & Power Corporation, Pacific Gas & Electric Co., Snow Mountain Water & Power Co., city of Redlands, Merced Irrigation District, Yosemite Power Co., Southern Sierras Power Co., East Bay Municipal Utility District, and other permittees and licensees of the Federal Power Commission.

Many complete records of run-off, gage-height records, and discharge measurements are furnished by various Federal bureaus, private companies, and individuals who are interested in the water resources of California. This cooperation is acknowledged and explained in the descriptions that precede the records.

The work in Oregon was carried on under cooperative agreements between the United States Geological Survey and the State of Oregon through Rhea Luper, State engineer. Financial assistance was furnished by the United States Bureau of Reclamation, California Oregon Power Co., and Jackson County.

DIVISION OF WORK

The data for stations in California were collected and prepared for publication under the direction of H. D. McGlashan, district engineer, assisted by William Kessler, F. C. Ebert, R. C. Briggs, Charles Leidl, C. J. Emerson, Jarrett Oliver, Jesse Arnold, B. S. Barnes, G. H. Taylor, A. C. Swanson, Conrad D. Bue, and H. J. Tompkins.

The data for stations in Oregon and for stations on Klamath River, Jenny Creek, and Fall Creek near Copco, Calif., were collected and prepared for publication under the direction of F. F. Henshaw and G. H. Canfield, district engineers, assisted by K. N. Phillips, B. S. Barnes, A. H. Williams, and H. M. Orem, and by H. K. Smith and A. L. Crawford, hydrographers of the United States Bureau of Reclamation, except for stations in Goose Lake Basin and that on Long Creek near Silver Lake, for which data were collected by the State of Oregon under supervision of Rhea Luper, State engineer.

The records were reviewed and the manuscript assembled by P. R. Speer.

GAGING-STATION RECORDS

SAN DIEGO RIVER BASIN

SAN DIEGO RIVER NEAR SANTEE, CALIF.

LOCATION.—Water-stage recorder at head of Mission Gorge, near western boundary of El Cajon grant, 6 miles west of Santee, San Diego County.

DRAINAGE AREA.—375 square miles at old Mission Dam, 1½ miles upstream.

RECORDS AVAILABLE.—May, 1912, to September, 1928 (incomplete).

EXTREMES.—Maximum discharge during year, about 156 second-feet February 4 (gage height, 1.18 feet); practically no flow October 1 to November 30 and July 1 to September 30.

1912-1928: Maximum discharge, 70,200 second-feet January 27, 1916 (gage height, 25.1 feet); stream practically dry for several months each year except for a small amount of ground water being forced to surface.

REMARKS.—Records good. Discharge estimated October 1 to December 8 and June 5 to September 30. Diversions for irrigation above station. Gage-height record and results of several discharge measurements furnished by La Mesa, Lemon Grove, and Spring Valley Irrigation District.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.1	1.1	0.2	0.7	0.3	0.2	0.2
2	.1	.8	.2	1.4	.3	.2	.2
3	.1	.5	.2	.6	.4	.2	.2
4	.1	.2	28	2.5	.3	.2	.2
5	.1	.2	71	10	.2	.1	
6	.1	.2	61	9	.2	.1	
7	.1	.2	23	20	.2	.1	
8	.1	.2	11	16	.2	.2	
9	.1	.2	11	16	.2	.2	
10	.3	.2	9	11	.2	.2	
11	.6	.2	5	9	.2	.2	
12	.2	.2	3.7	9	.2	.2	
13	.2	.2	4.2	7	.2	.2	
14	.2	.2	4.6	14	.2	.2	
15	.2	.4	10	9	.2	.2	
16	.2	1.4	46	4.6	.2	.2	
17	.2	.3	18	2.9	.2	.2	.2
18	.1	.2	14	1.6	.2	.2	
19	.1	.2	20	1.6	.2	.2	
20	.2	.2	16	1.6	.2	.2	
21	.2	.2	9	1.2	.2	.2	
22	.2	.2	6	1.2	.2	.2	
23	.2	.2	4.2	.4	.2	.2	
24	.2	.2	3.3	.5	.2	.2	
25	.2	.2	2.5	1.2	.2	.2	
26	4.5	.2	1.9	4.2	.2	.2	
27	1.4	.2	.7	7	.2	.2	
28	1.2	.2	.5	4.2	.2	.2	
29	1.4	.2	.5	2.5	.5	.2	
30	1.6	.2		1.2	.2	.2	
31	1.4	.2		.5		.2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	4.5	0.1	0.51	31.4
January	1.4	.2	.31	19.1
February	71	.2	13.3	765
March	20	.4	5.71	351
April	.5	.2	.23	13.7
May	.2	.1	.19	11.7
June	.2	0	.2	11.9
The year	71	0	1.66	1,200

Note.—No flow in months for which no records are given.

SAN DIEGUITO RIVER BASIN

SANTA YSABEL CREEK NEAR MESA GRANDE, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 21, T. 12 S., R. 2 E., $4\frac{1}{2}$ miles southwest of Mesa Grande.

DRAINAGE AREA.—53.4 square miles.

RECORDS AVAILABLE.—December, 1912, to September, 1928 (discontinued).

EXTREMES.—No information for current year.

1912-1924: Maximum discharge, 21,100 second-feet January 27, 1916 (gage height, 11.0 feet); stream dry October 1-2, 1913; August 12-29, September 6-13, 1914; July 6-14, and July 23 to September 30, 1921; and July 1 to September 30, 1924.

REMARKS.—Monthly run-off in acre-feet furnished by San Diego County Water Co. and water department of city of San Diego.

Monthly run-off, in acre-feet, 1927-28

Month	Run-off	Month	Run-off	Month	Run-off
October.....	185	March.....	617	August.....	0
November.....	210	April.....	402	September.....	0
December.....	566	May.....	281		
January.....	507	June.....	71	The year.....	3,620
February.....	785	July.....	0		

SAN DIEGUITO RIVER AT LAKE HODGES, CALIF.¹

LOCATION.—In NW. $\frac{1}{4}$ sec. 18, T. 13 S., R. 2 W., at Lake Hodges Dam, $5\frac{1}{2}$ miles southwest of Escondido.

DRAINAGE AREA.—299 square miles.

RECORDS AVAILABLE.—January, 1916, to September, 1928.

REMARKS.—Diversions for irrigation in San Pasqual Valley above Lake Hodges; also pumping from wells along river. Lake Hodges Dam completed in 1919, and gaging station formerly maintained at dam site was abandoned. Following table, furnished by city of San Diego, gives monthly storage in reservoir and other data from which inflow is computed.

Inflow of San Dieguito River to Lake Hodges, Calif., 1927-28

	Storage in acre-feet		Decrease during month (acre-feet)			Inflow in acre-feet ^b
	End of month	Increase or decrease	Draft	Net evaporation ^a	Leakage or spill	
September.....	33,926					
October.....	33,131	-795	640	-180	4	29
November.....	32,768	-363	173	-252	5	67
December.....	34,583	+1,815	232	+301	6	1,752
January.....	35,794	+1,211	195	-143	4	1,553
February.....	37,751	+1,957	187	+11	1,363	3,496
March.....	37,568	-183	500	-173	1,062	1,552
April.....	36,719	-849	606	-515	5	277
May.....	35,603	-1,116	749	-507	4	144
June.....	34,285	-1,318	618	-695	4	0
July.....	32,708	-1,577	722	-852	3	0
August.....	31,134	-1,574	770	-814	3	13
September.....	29,756	-1,378	744	-652	3	21
The year.....						8,904

^a Net evaporation equals gross evaporation minus rainfall.

^b Inflow equals increase or decrease in storage, plus draft, net evaporation, and leakage.

¹ Published as "San Dieguito River near Bernardo, Calif.," 1916-1920; and as "San Dieguito River near Escondido, Calif.," 1921-1926.

SAN LUIS REY RIVER BASIN

SAN LUIS REY RIVER AT LAKE HENSHAW, NEAR MESA GRANDE, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 10, T. 11 S., R. 2 E., at Henshaw Dam, 5 miles north of Mesa Grande.

DRAINAGE AREA.—209 square miles at gaging station 1 mile below dam.

RECORDS AVAILABLE.—October, 1911, to September, 1928. Prior to completion of dam in 1923, records were collected at regular gaging station 1 mile downstream.

REMARKS.—No diversions above station. Lake Henshaw Reservoir was completed in 1923, and the gaging station formerly maintained 1 mile below dam was abandoned. The following table gives inflow of San Luis Rey River to Lake Henshaw as computed from increase or decrease in storage corrected for draft and evaporation. Complete record except inflow furnished by San Diego County Water Co.

Inflow of San Luis Rey River to Lake Henshaw, near Mesa Grande, Calif., 1927-28

	Storage in acre-feet		Decrease during month (acre-feet)		Inflow in acre-feet ^b
	End of month	Increase or decrease	Draft	Net evapo- ration ^a	
September.....	86,864				-----
October.....	85,092	-1,772	1,454.4	+532.3	214.7
November.....	84,417	-675	0	+675.0	0
December.....	86,113	+1,696	0	-999.0	697.0
January.....	87,083	+940	14.4	+203.6	1,158.0
February.....	89,283	+2,230	7.1	-235.0	2,002.1
March.....	89,218	-65	1,122.2	+423.9	1,481.1
April.....	87,526	-1,692	969.7	+1,370.6	648.3
May.....	85,215	-2,311	1,280.4	+1,445.8	415.2
June.....	82,964	-2,251	356.4	+2,165.6	271.0
July.....	80,857	-2,107	126.6	+2,629.3	648.9
August.....	76,862	-3,995	2,067.5	+2,330.5	403.0
September.....	72,669	-4,193	2,523.0	+1,975.2	305.2
The year.....		-14,195	9,921.7	+12,517.8	8,244.5

^a Net evaporation equals gross evaporation minus rainfall.

^b Inflow computed by engineers of U. S. Geol. Survey. These figures do not agree with inflow as computed by the San Diego County Water Co., as their computations are corrected for conserved evaporation in accordance with a provision in the contract with the Escondido Mutual Water Co.

SANTA MARGARITA RIVER BASIN

TEMECULA CREEK AT NIGGER CANYON, NEAR TEMECULA, CALIF.

LOCATION.—Water-stage recorder on Pauba land grant, at upper end of Nigger Canyon, 10 miles east of Temecula, Riverside County, and just below Arroyo Seco.

RECORDS AVAILABLE.—January, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, about 60 second-feet February 4 (gage height, 10.95 feet); minimum, 1.0 second-foot August 21.

1923-1928: Maximum discharge, about 17,100 second-feet February 16, 1927 (gage height, 19.5 feet); minimum, 0.8 second-foot September 30, 1924.

REMARKS.—Records fair. Gage-height record and results of many discharge measurements furnished by Vail and O'Neil companies. Discharge estimated October 22-27, March 5, March 21 to April 8, and August 31 to September 30.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	4.7	4.2	7.5	7	9	4.7	2.7	2.9	1.9	1.9	1.5
2	1.9	5	4.4	7.5	6.5	9	4.7	2.5	3.1	1.8	2.0	1.5
3	1.8	4.7	4.5	7.5	7.5	10	4.7	3.4	3.2	1.8	1.9	1.6
4	1.9	4.5	4.4	7	45	10	4.6	3.4	2.9	1.7	1.8	1.6
5	1.9	4.3	4.7	7	35	16	4.6	3.2	2.5	1.7	1.7	1.7
6	2.0	4.1	4.8	6.5	25	18	4.6	3.2	2.3	1.7	1.7	1.7
7	2.1	3.9	4.7	6.5	17	16	4.5	3.1	2.2	1.8	1.7	1.8
8	2.2	3.9	4.7	6.5	14	14	4.5	3.8	2.9	1.7	1.9	1.8
9	2.3	3.7	4.6	6	12	12	4.2	4.5	2.7	1.8	2.0	1.9
10	2.3	3.7	10	5.5	11	10	4.5	4.0	2.7	1.8	1.9	1.9
11	2.3	3.7	9	5.5	10	9.5	5	3.6	2.5	1.9	2.0	2.0
12	2.5	3.8	7.5	5.5	9	9	4.5	3.6	2.5	2.0	2.2	1.7
13	2.7	3.8	7	6.5	8.5	8	4.2	3.5	2.5	2.2	2.1	1.7
14	2.9	3.5	6.5	8	9	7.5	4.2	3.4	2.3	2.2	1.9	1.7
15	2.9	3.4	5.5	10	12	7	4.0	3.3	2.3	2.3	1.9	1.7
16	3.1	3.5	5.5	8	10	6.5	3.8	3.2	2.2	2.2	1.8	1.6
17	2.9	3.7	4.8	8	9.5	6.5	3.6	3.5	2.3	2.3	1.6	1.6
18	2.9	3.8	4.3	7.5	9	6	3.8	3.8	2.2	2.2	1.3	1.6
19	2.7	3.7	4.1	7	9	6	3.4	3.2	2.3	2.2	1.3	1.6
20	2.7	3.8	4.2	7.5	8.5	5.5	3.6	3.2	2.2	2.2	1.2	1.6
21	2.5	3.8	9.5	7.5	8	5	3.4	3.1	2.1	2.0	1.2	1.6
22	2.5	4.1	8	7.5	7.5	5	3.6	3.1	2.0	1.9	1.7	1.7
23	2.5	4.2	8	7	7.5	5	3.6	2.9	1.9	1.7	1.3	1.7
24	2.5	4.3	8.5	6.5	7.5	5	3.6	2.9	1.8	1.7	1.5	1.8
25	2.5	4.8	8.5	6.5	7.5	4.9	3.4	3.1	1.8	1.7	1.7	1.8
26	2.5	5	17	6	7.5	4.9	3.2	3.2	1.8	1.8	1.9	1.8
27	3.5	4.9	14	5.5	7.5	4.9	3.4	3.1	1.9	1.9	1.7	1.9
28	4.5	4.6	9.5	6.5	8	4.8	3.1	2.9	2.0	1.8	1.6	1.9
29	4.6	4.5	9.5	7	8.5	4.8	2.9	2.7	1.9	1.7	1.7	1.9
30	4.5	4.3	9	7	-----	4.8	2.7	2.7	1.9	2.0	1.6	1.9
31	5	-----	8	7	-----	4.7	-----	2.7	-----	1.9	1.4	-----
Month	Maximum					Minimum		Mean		Run-off in acre-feet		
October	5					1.8		2.74		168		
November	5					3.4		4.12		245		
December	17					4.1		7.06		434		
January	10					5.5		6.94		427		
February	45					6.5		11.9		684		
March	18					4.7		8.04		494		
April	5					2.7		3.95		235		
May	4.5					2.5		3.24		199		
June	3.2					1.8		2.33		139		
July	2.3					1.7		1.92		118		
August	2.2					1.2		1.71		105		
September	2.0					1.5		1.73		103		
The year	45					1.2		4.62		3,350		

TEMECULA CREEK AT RAILROAD CANYON, NEAR TEMECULA, CALIF.

LOCATION.—Water-stage recorder on Temecula land grant, at upper end of Railroad Canyon, $1\frac{1}{2}$ miles south of Temecula, Riverside County, and just below Murrieta Creek.

RECORDS AVAILABLE.—January, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, about 45 second-feet February 4 (gage height, 1.12 feet); minimum, 1.0 second-foot July 17.

1923-1928: Maximum discharge, about 27,600 second-feet February 16, 1927 (gage height, 15.0 feet); minimum, 0.4 second-foot July 16, 1925.

REMARKS.—Records fair. Pumping diversions regulated flow during irrigation season. Gage-height record and results of many discharge measurements furnished by Vail and O'Neil companies.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	20	10	13	8.5	12	8	2.2	3.1	3.1	3.2	3.7
2	5.5	13	11	13	9	13	7.5	2.5	2.1	3.1	3.3	3.7
3	5.5	13	12	13	9	15	7	5.5	4.0	2.8	1.7	2.1
4	5	13	11	12	25	12	5	2.6	4.8	2.3	1.7	2.0
5	4.6	13	11	12	19	14	5	2.8	5	1.3	1.6	1.8
6	4.2	12	12	12	17	16	5	2.6	5.5	1.8	1.5	1.6
7	4.3	12	10	12	13	14	6.5	3.6	5.5	2.4	1.6	1.6
8	4.6	12	11	11	12	13	6	9	3.6	3.1	1.4	3.0
9	4.9	12	12	10	8.5	12	6	10	3.7	4.2	1.3	3.4
10	5.5	13	14	9	8.5	12	5.5	9	4.3	2.4	1.4	3.7
11	5	12	11	10	7.5	12	5	7.5	3.7	2.3	1.4	2.6
12	5	11	14	8.5	7	11	5	5.5	3.2	2.3	1.4	2.5
13	5.5	9.5	14	9	7.5	11	5	4.8	3.8	2.6	1.7	2.8
14	7	10	14	11	8	11	5	4.6	3.4	2.0	2.1	3.2
15	7	11	13	16	14	12	3.4	4.2	3.4	2.1	2.0	3.1
16	5.5	10	13	14	12	11	2.3	2.5	3.6	1.4	2.6	3.7
17	6.5	10	13	13	12	11	2.2	2.1	3.2	1.3	1.5	2.6
18	6	11	12	12	12	10	2.4	2.3	2.8	1.4	1.6	2.1
19	4.8	11	12	12	12	10	2.6	3.4	2.4	1.6	1.5	3.0
20	4.9	10	12	12	12	9.5	3.2	4.0	2.6	1.4	1.4	2.6
21	6.5	10	16	10	10	9	3.8	3.8	2.6	1.5	1.6	4.3
22	6	10	14	9.5	9.5	10	4.0	3.7	2.6	1.6	2.3	3.7
23	6.5	10	14	9	9.5	9.5	4.0	3.1	1.8	1.4	2.4	3.7
24	6.5	10	14	9	10	8	2.9	2.1	1.7	1.5	2.0	4.0
25	7	9.5	16	8.5	10	10	2.6	2.0	1.6	1.7	1.9	3.9
26	7	9.5	19	8.5	10	9	2.5	2.5	1.5	2.5	1.8	3.2
27	7.5	9	16	8.5	11	8.5	2.1	2.1	1.7	2.5	2.3	3.6
28	8	8.5	15	9.5	11	8	2.0	2.4	2.1	2.6	2.6	4.2
29	8	9	14	10	12	6.5	2.0	3.2	2.6	2.8	3.7	3.8
30	10	9.5	14	9		7	2.2	3.7	3.2	2.9	2.0	4.0
31	15		13	9		7.5		2.4		3.0	1.9	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	15	4.2	6.30	387
November	20	8.5	11.1	660
December	19	10	13.1	806
January	16	8.5	10.8	664
February	25	7	11.3	650
March	16	6.5	10.8	664
April	8	2.0	4.19	249
May	10	2.0	3.93	242
June	5.5	1.5	3.17	189
July	4.2	1.3	2.22	136
August	3.7	1.3	1.95	120
September	4.3	1.6	3.11	185
The year	25	1.3	6.82	4,950

*Estimated.

SANTA MARGARITA RIVER NEAR FALL BROOK, CALIF.

LOCATION.—Water-stage recorder in sec. 12, T. 9 S., R. 4 W., 2 miles north of Fall Brook.

RECORDS AVAILABLE.—November, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 47 second-feet November 1 (gage height, 4.10 feet); minimum, 0.1 second-foot September 6.

1924-1928: Maximum discharge, 33,100 second-feet February 16, 1927 (gage height, 15.6 feet); minimum, 0.1 second-foot August 30, 1925, September 4, 1926, and September 6, 1928.

REMARKS.—Records fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	35	10	15	12	12	9.5	2.1	2.3	2.1	0.9	0.7
2	5	14	11	15	16	12	9.5	2.5	2.3	2.3	1.0	1.6
3	6.5	11	11	14	20	18	11	4.2	2.9	2.5	2.0	1.6
4	7	9	12	14	30	17	7.5	3.7	4.8	1.8	1.5	.5
5	4.4	9.5	12	14	20	18	7.5	2.1	4.8	1.8	.8	.3
6	4.0	10	13	14	19	25	8	2.1	5.5	.7	.8	.2
7	3.4	11	12	14	13	21	9.5	2.5	6	1.2	.7	.3
8	4.0	11	10	13	13	20	11	5	4.8	1.0	.8	.3
9	3.4	11	11	13	12	17	9	8	2.5	2.1	.5	1.4
10	3.7	13	18	13	11	16	7.5	7.5	3.9	1.8	.5	2.1
11	5	13	26	12	9.5	15	6.5	6.5	3.9	1.0	.5	2.7
12	4.0	12	16	11	8.5	14	6.5	4.5	3.5	1.4	.4	1.5
13	4.0	11	14	12	10	14	6	3.7	3.3	1.2	.5	1.6
14	4.8	9.5	13	14	12	14	6.5	3.1	3.7	.8	1.1	1.4
15	8	11	12	18	15	15	5	4.2	3.1	.6	1.4	1.6
16	4.8	12	11	21	14	14	3.5	2.5	2.5	.4	1.3	1.5
17	5	11	12	17	15	14	2.0	2.1	2.3	.3	1.7	2.0
18	5.5	11	14	18	15	14	2.9	2.3	2.5	.3	.5	1.2
19	2.4	11	14	16	16	14	2.7	2.7	1.7	.3	.4	.7
20	3.4	10	13	16	15	14	3.5	3.7	2.1	.4	.3	1.6
21	5	9.5	16	16	14	14	3.1	4.5	1.8	.3	.3	1.4
22	9	11	14	13	13	12	3.7	4.2	2.1	.4	.7	3.1
23	9	10	12	13	13	11	3.7	3.5	1.4	.4	1.2	2.7
24	9.5	10	13	13	12	10	3.1	2.1	1.1	.3	1.3	2.7
25	13	11	16	12	12	10	2.9	2.3	.8	.7	.9	3.3
26	8	11	23	11	12	9	2.7	2.5	.7	.6	.9	3.3
27	12	11	20	10	12	8.5	2.7	2.9	.9	1.1	.8	2.1
28	13	11	19	11	12	11	2.5	2.5	.7	.8	.9	2.3
29	12	11	17	12	12	8	2.5	3.5	1.2	.7	1.4	2.7
30	16	11	18	12	-----	7.5	2.0	4.2	1.7	1.6	2.0	2.5
31	25	-----	16	13	-----	9.5	-----	4.8	-----	1.7	.8	-----
Month	Maximum					Minimum		Mean		Run-off in acre-feet		
October	25					2.4		7.25		446		
November	35					9		11.8		702		
December	26					10		14.5		892		
January	21					10		13.9		855		
February	30					8.5		14.1		811		
March	25					7.5		13.8		848		
April	11					2.0		5.47		325		
May	8					2.1		3.61		222		
June	6					.7		2.69		160		
July	2.5					.8		1.05		64.6		
August	2.0					.3		.93		57.2		
September	3.3					.2		1.70		101		
The year	35					.2		7.55		5,480		

SANTA MARGARITA RIVER AT YSIDORA, CALIF.

LOCATION.—Water-stage recorder on Santa Margarita y las Flores land grant at Ysidora, San Diego County, and 3 miles above mouth of river.

RECORDS AVAILABLE.—February, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year not recorded, but probably less than 100 second-feet.

1923-1928: Maximum discharge, about 33,600 second-feet February 16, 1927 (gage height, 18.00 feet); no flow part of each year.

REMARKS.—Monthly run-off in acre-feet estimated from numerous discharge measurements. Diversions above station for irrigation. Records furnished by Vail and O'Neil companies.

Monthly run-off, in acre-feet, 1927-28

Month	Run-off	Month	Run-off	Month	Run-off
October.....	0	March.....	809	August.....	0
November.....	193	April.....	209	September.....	0
December.....	922	May.....	107	The year.....	4,000
January.....	1,047	June.....	25		
February.....	692	July.....	.2		

SANTA ANA RIVER BASIN

SANTA ANA RIVER NEAR MENTONE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 4, T. 1 S., R. 2 W., one-fourth mile above Southern California Edison Co.'s Mentone power plant and $3\frac{1}{2}$ miles northeast of Mentone.

DRAINAGE AREA.—189 square miles.

RECORDS AVAILABLE.—July, 1896, to September, 1928.

EXTREMES.—Maximum discharge during year, 354 second-feet February 4 (gage height, 2.72 feet); minimum, 0.9 second-foot several days in September. 1896–1928: Maximum discharge, 29,100 second-feet January 27, 1916; minimum, 0.1 second-foot October 12, 1919.

REMARKS.—Records good. Diversions and regulation above station. The sum of the discharge in the river, the Mentone power plant's tailrace, and the Greenspot pipe line is given in the tables of combined discharge.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	*2.9	1.7	3.1	2.0	2.2	1.8	2.0	*1.5	1.7	3.4	1.1
2	2.5	*2.8	1.7	2.9	2.0	2.5	1.8	2.0	*1.4	1.7	1.9	1.1
3	2.5	*2.7	1.8	2.8	2.1	2.6	2.0	2.0	1.4	1.7	1.8	1.0
4	*2.4	*2.6	1.8	2.6	98	3.7	2.1	2.0	1.4	1.7	1.5	1.0
5	*2.4	*2.5	1.8	2.5	50	2.6	2.1	1.9	1.3	1.7	1.4	1.0
6	*2.3	2.4	1.8	2.5	20	5.5	2.2	1.9	*1.4	1.6	1.2	1.0
7	*2.3	2.4	1.8	2.5	9.5	2.8	2.2	1.9	*1.5	1.7	1.2	1.0
8	*2.2	2.3	1.8	2.5	5	2.4	2.2	2.0	*1.6	1.6	1.0	1.0
9	2.2	2.2	1.8	2.4	4.1	2.4	2.2	4.1	1.7	1.7	1.0	1.0
10	2.1	2.2	*3	2.4	3.2	2.4	2.2	2.9	1.7	1.6	1.0	1.2
11	2.0	2.1	*5	2.4	3.1	2.4	2.3	2.1	1.8	1.6	1.0	1.2
12	2.0	2.1	*3.5	2.4	3.1	2.3	2.3	1.9	1.8	1.6	1.3	1.2
13	2.0	2.0	*3.2	2.4	2.6	2.3	2.3	1.8	1.8	1.6	1.5	1.2
14	2.0	2.0	*3	2.5	14	2.3	2.3	1.8	1.8	1.6	1.4	1.0
15	2.0	2.0	*2.8	3.1	15	2.3	2.4	1.8	1.7	1.7	1.4	1.0
16	2.0	2.0	2.6	2.9	1.8	2.2	2.2	1.7	1.7	1.7	1.5	1.0
17	2.1	2.0	2.6	2.6	1.6	2.2	2.3	1.7	1.7	1.7	1.5	1.0
18	2.0	1.9	2.5	2.5	1.5	2.4	2.2	1.7	*1.7	1.8	1.4	1.0
19	1.9	1.9	2.5	2.5	1.5	2.4	2.3	1.6	*1.7	1.8	1.3	1.0
20	1.8	1.9	2.5	2.4	1.5	2.2	2.3	1.6	*1.8	1.8	1.3	1.0
21	1.8	1.9	2.8	2.2	1.6	2.1	2.3	1.7	*1.8	1.8	1.4	.9
22	1.8	1.9	2.8	2.2	1.6	2.1	2.3	1.7	*1.8	1.8	1.5	1.0
23	1.8	1.9	2.8	2.2	1.6	2.1	2.3	1.6	*1.8	1.7	1.8	1.0
24	1.8	1.9	2.6	2.2	1.6	2.1	2.2	1.5	*1.8	1.7	1.8	1.0
25	2.0	1.9	2.6	2.3	1.7	2.1	2.2	*1.5	*1.7	1.7	1.6	1.0
26	2.3	1.8	2.6	2.2	*1.8	2.0	2.0	*1.5	*1.7	1.8	1.5	1.0
27	2.5	1.8	2.4	2.2	1.9	2.0	2.0	1.5	*1.7	1.9	1.4	.9
28	2.5	1.8	2.4	2.1	2.0	1.9	2.0	1.6	1.7	2.0	1.3	.9
29	2.3	1.8	2.6	2.1	2.1	1.8	2.0	1.6	1.7	2.1	1.2	*.9
30	2.2	1.7	3.2	2.0	---	1.9	2.0	1.5	1.7	2.1	1.2	*.9
31	*3.0	---	3.1	2.0	---	1.8	---	1.5	---	3.4	1.2	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3.0	1.8	2.17	133
November	2.9	1.7	2.11	126
December	5	1.7	2.55	157
January	3.1	2.0	2.44	150
February	98	1.5	8.88	511
March	5.5	1.8	2.39	147
April	2.4	1.8	2.17	129
May	4.1	1.5	1.85	114
June	1.8	1.3	1.66	98.8
July	3.4	1.6	1.79	110
August	3.4	1.0	1.45	89.2
September	1.2	.9	1.02	60.7
The year	98	.9	2.51	1,830

* Estimated.

Daily and monthly discharge, in second-feet, of Santa Ana River and canals near Mentone, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	84	55	34	35	32	37	37	47	55	57	63	56
2.....	80	41	32	35	32	33	37	49	53	60	62	56
3.....	80	40	33	35	32	40	42	47	53	57	62	59
4.....	83	36	32	35	159	33	42	45	53	60	62	59
5.....	78	36	35	34	95	39	38	47	57	60	60	59
6.....	75	37	35	32	67	52	38	51	53	60	60	56
7.....	67	37	35	32	70	49	36	53	62	62	66	69
8.....	75	35	35	34	55	44	36	55	62	62	64	69
9.....	75	35	33	32	45	41	36	62	66	62	71	69
10.....	75	37	28	32	42	38	36	53	66	66	71	69
11.....	75	35	40	32	42	42	36	48	71	71	71	64
12.....	75	35	34	30	40	46	36	44	71	71	76	60
13.....	75	35	32	32	37	40	36	54	66	71	77	60
14.....	78	35	42	32	54	42	34	48	62	76	75	58
15.....	78	35	38	37	56	40	34	54	62	71	75	58
16.....	78	33	38	33	36	38	32	54	66	76	70	58
17.....	78	33	38	31	34	38	38	50	60	66	66	58
18.....	80	33	35	24	37	38	44	50	57	60	65	51
19.....	75	35	28	28	37	36	45	50	62	60	65	51
20.....	69	33	30	28	37	38	46	48	62	62	59	53
21.....	67	33	33	34	36	38	48	50	62	62	61	53
22.....	64	33	31	32	37	38	46	52	62	62	62	53
23.....	68	31	29	34	37	38	47	52	62	66	71	58
24.....	60	33	31	34	36	40	47	54	60	66	66	62
25.....	63	35	31	32	36	42	47	52	62	71	71	64
26.....	77	33	37	32	36	42	47	56	60	71	66	60
27.....	54	34	34	32	35	40	45	54	60	71	61	60
28.....	54	33	34	34	37	40	49	56	60	66	59	55
29.....	40	35	33	32	37	39	47	51	60	62	54	51
30.....	33	34	40	33	-----	38	47	51	57	62	56	49
31.....	38	-----	35	32	-----	37	-----	51	-----	63	54	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	84	33	69.4	4,270
November.....	55	31	35.4	2,110
December.....	42	28	34.0	2,090
January.....	37	24	32.4	1,990
February.....	159	32	47.1	2,710
March.....	52	33	39.9	2,450
April.....	49	32	41.0	2,440
May.....	62	44	51.2	3,150
June.....	71	53	60.8	3,620
July.....	76	57	64.9	3,990
August.....	77	54	65.2	4,010
September.....	69	49	58.6	3,490
The year.....	159	24	50.0	36,300

SANTA ANA RIVER NEAR PRADO, CALIF.

LOCATION.—Water-stage recorder at Riverside-Orange County line in lower Santa Ana Canyon, 3 miles southwest of Prado, Riverside County.

RECORDS AVAILABLE.—January, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,600 second-feet February 4, (gage height, 3.50 feet); minimum, 29 second-feet July 17.

1919-1928: Maximum discharge, about 18,000 second-feet February 16, 1927 (gage height, 11.5 feet); minimum, that of July 17, 1928.

REMARKS.—Records good. Diversions above station. Flow regulated by storage in upper river basin.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Avg.	Sept.
1.....	53	294	135	169	189	189	124	74	74	55	36	36
2.....	55	135	152	177	193	169	129	65	70	48	41	39
3.....	55	104	152	177	205	193	135	65	74	57	43	36
4.....	53	94	112	173	522	185	142	65	70	55	44	38
5.....	52	94	115	162	733	181	126	70	68	52	43	36
6.....	57	91	118	162	463	274	124	72	65	53	41	32
7.....	53	88	112	165	288	250	121	72	68	52	41	33
8.....	52	88	107	162	262	245	110	81	72	52	39	33
9.....	50	88	107	158	235	245	110	115	68	55	36	36
10.....	55	107	185	185	235	235	104	142	65	57	39	38
11.....	55	99	268	193	220	220	110	158	65	46	38	46
12.....	57	96	205	225	235	210	112	142	65	43	36	46
13.....	55	101	181	205	230	210	99	129	57	43	36	50
14.....	57	104	225	230	240	193	96	129	65	39	38	46
15.....	61	101	225	240	240	205	99	129	68	36	35	43
16.....	61	91	220	281	205	189	99	126	55	43	36	41
17.....	68	91	201	235	210	181	91	126	57	33	39	43
18.....	65	96	165	197	220	185	96	112	63	33	36	39
19.....	65	107	169	185	235	181	99	107	59	35	36	39
20.....	65	126	169	177	225	158	94	96	59	33	36	44
21.....	63	142	181	165	215	148	86	96	61	36	36	43
22.....	72	145	155	169	205	139	88	96	61	33	41	39
23.....	72	126	181	185	193	135	91	83	53	35	39	39
24.....	74	121	173	193	193	145	83	76	50	36	39	43
25.....	78	126	173	185	189	152	86	76	55	39	41	44
26.....	78	135	189	173	201	142	83	78	52	36	41	53
27.....	88	142	181	162	193	126	83	76	57	35	39	52
28.....	132	139	173	165	165	121	83	83	57	33	41	50
29.....	115	145	177	173	173	115	70	81	53	35	39	50
30.....	115	148	201	181	-----	112	74	68	57	39	36	53
31.....	193	-----	181	189	-----	110	-----	70	-----	39	36	-----

Month	Maximum	Minimum	Mean	Pun-off in acre-feet
October.....	193	50	71.7	4,410
November.....	294	88	119	7,080
December.....	268	107	171	10,500
January.....	281	158	187	11,500
February.....	733	165	252	14,500
March.....	274	110	179	11,000
April.....	142	70	102	6,070
May.....	158	65	95.4	5,870
June.....	74	50	62.1	3,700
July.....	57	33	42.5	2,610
August.....	44	35	38.6	2,370
September.....	53	32	42.0	2,500
The year.....	733	32	113	82,100

LOWER SANTA ANA RIVER

For comparative purposes discharge measurements were made on the same day during the irrigating season at several points in lower Santa Ana River drainage basin. Measurements were also made at some of these points during the irrigating season, 1916 to 1928.

Results of the measurements for the 1928 season are given in the following table.

Discharge measurements, in second-feet, 1927-28

Date	Rubidoux Bridge near Riverside, Calif.		San Pedro, Los Angeles & Salt Lake Railroad bridge near Arlington, Calif.		Pecley Bridge near Pecley, Calif.	
	Time	Dis-charge	Time	Dis-charge	Time	Dis-charge
Oct. 10.....			2.25 p. m.....	39		
June 11.....					10.25 a. m.....	36
June 25.....			10.50 a. m.....	38	2 p. m.....	40
July 2.....					4.3 p. m.....	29
July 16.....	11.25 a. m.....	5.2	9.40 a. m.....	30	10.30 a. m.....	29
July 26.....			7.45 a. m.....	32	8.15 a. m.....	28
Aug. 3.....					9.05 a. m.....	29
Aug. 10.....			7.50 a. m.....	32	8.30 a. m.....	34
Aug. 17.....			9.15 a. m.....	26	10 a. m.....	33
Aug. 24.....					4.20 p. m.....	28
Sept. 4.....			10 a. m.....	27	10.40 a. m.....	32
Sept. 13.....			3.25 p. m.....	28	3 p. m.....	31
Sept. 26.....			1.35 p. m.....	32	12.45 p. m.....	36

Date	Hamner Avenue Bridge near Corona, Calif.		Atchinson, Topeka & Santa Fe Railway bridge near Prado, Calif.		Riverside-Orange County line (Prado gaging station)	
	Time	Dis-charge	Time	Dis-charge	Time	Dis-charge
Oct. 10.....	1.35 p. m.....	43	12.30 p. m.....	74	11.50 a. m.....	59
June 11.....	11.25 a. m.....	38	12.45 p. m.....	66	1.35 p. m.....	63
June 25.....						
July 2.....	3.45 p. m.....	26	1.55 p. m.....	49	2.25 p. m.....	49
July 16.....	4.10 p. m.....	25	5 p. m.....	53	5.25 p. m.....	51
July 26.....	9.15 a. m.....	29	10.10 a. m.....	47	10.45 a. m.....	37
Aug. 3.....	9.45 a. m.....	27	2.30 p. m.....	47	1.45 p. m.....	44
Aug. 10.....	9.15 a. m.....	33	9.45 a. m.....	46	10.15 a. m.....	44
Aug. 17.....	10.50 a. m.....	28	12.20 p. m.....	43	12.45 p. m.....	40
Aug. 24.....	3.30 p. m.....	20	2.15 p. m.....	43	1.10 p. m.....	39
Sept. 4.....	11.20 a. m.....	29	12.35 p. m.....	41	12.55 p. m.....	39
Sept. 13.....	2.30 p. m.....	31	1.30 p. m.....	54	12.45 p. m.....	50
Sept. 26.....			10.15 a. m.....	55	11 a. m.....	55

SANTA ANA RIVER AT SANTA ANA, CALIF.

LOCATION.—Water-stage recorder at Fifth Street Bridge in Santa Ana, Orange County, 2 miles below junction with Santiago Creek and 10 miles above mouth.

RECORDS AVAILABLE.—January, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 370 second-feet February 4 (gage height, 2.40 feet); stream dry several months during year.

1923-1928: Maximum discharge, about 25,000 second-feet February 16, 1927 (gage height, 8.2 feet); stream dry several months each year.

REMARKS.—Records fair. Daily discharge estimated November 1, 2, 21, 24, 25, 29, 30, December 1, 5, 12, 15-17, 23, February 26, March 9, 19-23, and April 4-22. Considerable diversion above station for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1-----	5	0.4	0	11	3.7	2.3	16-----	0	0.1	6.5	3.2	4.6	0.1
2-----	5	1.8	0	9.5	3.2	5	17-----	0	.1	5	5	6.5	.1
3-----	0	1.5	0	6	4.6	6.5	18-----	0	21	4.4	1.8	5	.1
4-----	0	.7	0	105	0	.3	19-----	0	9	3.3	.9	4.0	.1
5-----	0	1.0	0	134	1.6	.3	20-----	0	7	2.5	2.3	.9	.1
6-----	0	5.5	0	17	3.2	.3	21-----	3.0	11	1.5	6.5	.8	.1
7-----	0	7	1.3	3.7	1.8	.3	22-----	4.8	.4	1.8	14	.6	.1
8-----	0	3.3	.1	2.3	4.2	.3	23-----	14	.1	2.5	18	.5	0
9-----	0	3.8	0	1.6	2.5	.3	24-----	.3	0	2.7	8.5	1.4	0
10-----	0	7.5	0	3.7	8.5	.3	25-----	.1	0	2.7	9.5	1.4	0
11-----	0	.2	0	8.5	9.5	.2	26-----	8	0	3.6	.2	1.3	0
12-----	0	.2	0	22	9.5	.2	27-----	11	0	4.4	4.5	1.8	0
13-----	0	15	0	23	8.5	.1	28-----	7	0	5	8.5	3.2	0
14-----	0	9	4.0	10	6.5	.1	29-----	.4	0	2.7	5.5	2.3	0
15-----	0	.2	6	4.2	5.5	.1	30-----	.4	0	3.3	-----	4.6	0
							31-----	-----	0	9.5	-----	3.7	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November-----	14	0	1.97	117
December-----	21	0	3.41	210
January-----	9.5	0	2.35	144
February-----	134	.2	15.5	892
March-----	9.5	0	3.72	229
April-----	6.5	0	.58	34.5
The year-----	134	0	2.24	1,630

NOTE.—No flow during October and May to September.

SOUTHERN CALIFORNIA EDISON CO.'S CANAL AND GREENSPOT PIPE LINE NEAR MENTONE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 4, T. 1 S., R. 2 W., at Southern California Edison Co.'s plant at mouth of canyon, 3 miles northeast of Mentone.

RECORDS AVAILABLE.—1896 to September, 1928.

EXTREMES.—1896–1928: Maximum mean daily canal discharge, 97 second-feet March 16, 1905; no flow during short periods nearly every year.

REMARKS.—Intake of canal is at Southern California Edison Co.'s power plant No. 2, $2\frac{1}{4}$ miles above the Mentone plant. Water is diverted from forebay of Mentone plant by the Greenspot pipe line. Canal discharge below forebay is computed from records of kilowatt output of power plant. Pipe line discharge is computed from weir record at forebay. Sum of the records of discharge of the canal and pipe line in the following table gives total flow of canal above forebay. Record furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, of Southern California Edison Co.'s canal near Mentone, Calif., 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	72	49	24	30	30	34	26	37	45	47	52	47
2.....	69	35	21	30	30	30	26	39	43	50	52	47
3.....	69	34	22	30	30	37	30	37	43	47	52	50
4.....	72	30	21	30	61	28	30	35	43	50	52	50
5.....	67	30	24	30	45	35	26	37	47	50	50	50
6.....	64	32	24	28	47	45	26	41	43	50	50	47
7.....	56	32	24	28	61	45	24	43	52	52	56	61
8.....	64	30	24	30	50	41	24	45	52	52	56	61
9.....	64	30	22	30	41	37	24	50	56	52	61	61
10.....	64	32	16	30	39	34	24	43	56	56	61	61
11.....	64	30	26	30	39	35	24	39	61	61	61	56
12.....	64	30	21	28	37	34	26	37	61	61	66	52
13.....	64	30	19.3	30	34	28	26	47	56	61	66	52
14.....	67	30	30	30	40	30	24	43	52	66	66	50
15.....	67	30	26	34	41	28	24	47	52	61	66	50
16.....	67	28	26	30	34	26	22	47	56	66	61	50
17.....	67	28	26	28	32	26	28	43	50	56	56	50
18.....	69	28	28	22	35	26	34	43	47	50	56	43
19.....	67	30	24	26	35	24	35	43	52	50	56	43
20.....	61	28	26	26	35	26	37	41	52	52	50	45
21.....	59	28	28	32	34	26	39	43	52	52	52	45
22.....	56	28	26	30	35	26	37	43	52	52	52	45
23.....	59	26	24	32	35	26	37	43	52	56	61	50
24.....	49	28	26	32	34	28	37	45	50	56	56	54
25.....	52	28	26	30	34	30	37	43	52	61	61	56
26.....	69	28	32	30	34	30	37	47	50	61	56	52
27.....	49	28	30	30	32	28	35	45	50	61	52	52
28.....	49	26	30	32	34	28	39	45	50	56	50	47
29.....	35	28	28	30	34	28	37	41	50	52	45	43
30.....	28	24	35	31	-----	26	37	41	47	52	47	41
31.....	32	-----	30	30	-----	26	-----	41	-----	52	45	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet		
October.....	72	49	24	30	30	34	26	37	45	47	52	47
November.....	69	35	21	30	30	30	26	39	43	50	52	47
December.....	69	34	22	30	30	37	30	37	43	47	52	50
January.....	72	30	21	30	61	28	30	35	43	50	52	50
February.....	67	30	24	30	45	35	26	37	47	50	50	50
March.....	64	32	24	28	47	45	26	41	43	50	50	47
April.....	56	32	24	28	61	45	24	43	52	52	56	61
May.....	64	30	24	30	50	41	24	45	52	52	56	61
June.....	64	30	22	30	41	37	24	50	56	52	61	61
July.....	64	32	16	30	39	34	24	43	56	56	61	61
August.....	64	30	26	30	39	35	24	39	61	61	61	56
September.....	64	30	21	28	37	34	26	37	61	61	66	52
October.....	64	30	21	28	37	34	26	37	61	61	66	52
November.....	64	30	21	28	37	34	26	37	61	61	66	52
December.....	64	30	21	28	37	34	26	37	61	61	66	52
January.....	64	30	21	28	37	34	26	37	61	61	66	52
February.....	64	30	21	28	37	34	26	37	61	61	66	52
March.....	64	30	21	28	37	34	26	37	61	61	66	52
April.....	64	30	21	28	37	34	26	37	61	61	66	52
May.....	64	30	21	28	37	34	26	37	61	61	66	52
June.....	64	30	21	28	37	34	26	37	61	61	66	52
July.....	64	30	21	28	37	34	26	37	61	61	66	52
August.....	64	30	21	28	37	34	26	37	61	61	66	52
September.....	64	30	21	28	37	34	26	37	61	61	66	52
The year.....	72	49	24	30	30	34	26	37	45	47	52	47

Daily and monthly discharge, in second-feet, of Greenspot pipe line near Mentone, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	9	3	8	2	0	9.1	8	8.5	8	8	8
2.....	9	3	9.1	2	0	9.1	8	8.5	8	8.5	8
3.....	9	3	9.1	2	0	9.1	8	8.5	8	8.5	8
4.....	9	3	9.1	2	0	9.1	8	8.5	8	8.5	8
5.....	9	3	9.1	2	0	9.1	8	8.5	8	8.5	8
6.....	9	3	9.1	2	0	9.1	8	8.5	8	8.5	8
7.....	9	3	9.1	2	0	9.1	8	8.5	8	8.5	7
8.....	9	3	9.1	1	0	9.1	8	8.5	8	7	7
9.....	9	3	9.1	0	1	9.1	8	8.5	8	9.1	7
10.....	9	3	9.1	0	1	9.1	7	8.5	8	9.1	7
11.....	9	3	9.1	0	4	9.1	7	8.5	8	9.1	7
12.....	9	3	9.1	0	9	7	5	8.5	8	9.1	7
13.....	9	3	9.1	0	9	7	5	8.5	8	9.1	7
14.....	9	3	9.1	0	9	7	5	8.5	8	8	7
15.....	9	3	9.1	0	9	7	5	8.5	8	8	7
16.....	9	3	9.1	0	9	7	5	8.5	8	8	7
17.....	9	3	9.1	0	9	7	5	8.5	8	8	7
18.....	8.5	3	4.4	0	9	7	5	8.5	8	8	7
19.....	6.5	3	2	0	9	7	5	8.5	8	8	7
20.....	6	3	2	0	9.1	7	5	8.5	8	8	7
21.....	6	3	2	0	9.1	7	5	8.5	8	8	7
22.....	6	3	2	0	9.1	7	7	8.5	8	8	7
23.....	7.5	3	2	0	9.1	8	7	8.5	8	8	7
24.....	9	3	2	0	9.1	8	7	8.5	8	8	7
25.....	9	3	2	0	9.1	8	7	8.5	8	8	7
26.....	6	3	2	0	9.1	8	7	8.5	8	8	7
27.....	3	3.7	2	0	9.1	8	7	8	8	8	7
28.....	3	5	2	0	9.1	8	9.1	8	8	8	7
29.....	3	5	2	0	9.1	8	8.5	8	8	8	7
30.....	3	8	2	0	9.1	8	8.5	8	8	8	7
31.....	3	-----	2	0	9.1	-----	8.5	-----	8	8	-----
Month					Maximum	Minimum	Mean	Run-off in acre-feet:			
October.....					9	3	7.50	461			
November.....					8	3	3.32	198			
December.....					9.1	2	5.94	365			
January.....					2	0	.48	29.5			
March.....					9.1	0	6.04	371			
April.....					9.1	7	8.04	478			
May.....					9.1	3	6.79	418			
June.....					8.5	8	8.43	502			
July.....					8	8	8.00	492			
August.....					9.1	7	8.24	507			
September.....					8	7	7.20	428			
The year.....					9.1	0	5.85	4,250			

NOTE.—No flow in February.

MILL CREEK NEAR CRAFTONVILLE, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 13, T. 1 S., R. 2 W., at mouth of canyon, $5\frac{1}{4}$ miles northeast of Craftonville.

RECORDS AVAILABLE.—January, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 150 second-feet February 4 (gage height, 2.19 feet); stream practically dry for several months.

1919-1928: Maximum discharge, about 4,500 second-feet February 16, 1927; no flow at times each year.

REMARKS.—Daily discharge estimated for entire year except February 4-7. Mill Creek power canals Nos. 1, 2, and 3 divert water from points just above, 3 miles above, and 6 miles above station, respectively. Combined discharge is the sum of flow in creek and the three canals.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1
2	.1	.1	.1	.1	0	.1	.1	.1	.1
3	.1	.1	.2	.1	0	.1	.1	.1	.1
4	.1	.1	.1	.1	31	.1	.1	.1	.1
5	.1	.1	.1	.1	9.5	2.0	.1	.1	.1
6	.1	.1	.1	.1	4.9	.1	.1	.1	.1
7	.1	.1	.1	.1	3.4	.1	.1	.1	.1
8	.1	.1	.1	.1	2.0	.1	.1	.1	.1
9	.1	.1	.1	.1	.1	.1	.1	.1	.1
10	.1	.1	.1	.1	.1	.1	.1	.1	.1
11	.1	0	.1	.1	.1	.1	.1	.1	.1
12	.1	0	.1	0	.1	.1	.1	.1	.1
13	.1	.1	.1	.1	.1	.1	.1	.1	.1
14	.1	.1	.1	.1	.1	.1	.1	.1	.1
15	.1	.1	.1	.1	.1	.1	.1	.1	.1
16	0	.1	.1	.1	.1	.1	.1	.1	.1
17	0	.1	.1	.1	.1	.1	.1	.1	.1
18	0	.1	.1	.1	.1	.1	.1	.1	.1
19	0	.1	.1	.1	.1	.1	.1	.1	.1
20	0	.1	.1	.1	.1	.1	.1	.1	.1
21	0	.1	.2	.1	.1	.1	.1	.1	.1
22	0	.1	.2	.1	.1	.1	.5	.1	.5
23	0	.1	.2	.1	.1	.1	.1	.1	.2
24	0	.1	.2	.1	.1	.1	.1	.1	.2
25	0	.1	.2	.1	.1	.1	.1	.1	.1
26	0	.1	.2	0	.1	.1	.1	.1	.1
27	0	.1	.2	0	.1	.1	.1	.1	.1
28	0	.1	.1	0	.1	.1	.1	.1	0
29	0	.1	.1	0	.1	.1	.1	.1	0
30	0	.1	.1	0	-----	.1	.1	.1	0
31	.2	-----	.1	0	-----	.1	-----	.1	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet		
October	0.2		0		0.05		3.1		
November	.1		0		.09		5.4		
December	.2		.1		.13		8.0		
January	.1		0		.08		4.9		
February	31		0		1.82		105		
March	2.0		.1		.16		9.8		
April	.5		.1		.11		6.5		
May	.1		.1		.10		6.1		
June	.5		0		.11		6.5		
The year	31		0		.21		155		

NOTE.—No flow in months for which no record is given.

Daily and monthly discharge, in second-feet, of Mill Creek and canals near Craftonville, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	24.0	29	19.9	21.4	18.9	20.8	21.6	22	18.3	15.9	11.9	10.1
2-----	23	26	20.6	21.0	18.5	22.9	22.0	23	19.6	15.3	11.8	10.0
3-----	23	23	20.7	20.9	20.2	27	23.1	22	19.9	15.6	11.4	10.1
4-----	23	23	20.1	20.7	63	25	25	23	18.6	15.5	11.5	10.4
5-----	23	22	20.0	20.6	41	16.7	24	21	18.3	14.6	11.3	9.9
6-----	23	25	19.5	20.9	37	29	23	21	17.7	14.0	11.6	10.1
7-----	23	24	19.7	21.0	32	28	21.5	22	17.6	14.5	11.7	10.0
8-----	23	22	20.1	20.4	29	25	21.8	23	17.5	14.8	11.7	10.3
9-----	22	23	19.6	20.5	25.7	25	21.8	24	17.7	14.2	11.8	10.3
10-----	22	24	21.5	19.8	28	25	21.2	24	17.7	13.3	11.4	10.6
11-----	22	23	21.6	19.1	25	23	21.3	24	17.7	13.7	11.2	10.7
12-----	22	22	22.1	18.7	25	24	21.6	21	18.8	13.9	10.4	10.7
13-----	22	22.2	21.5	18.7	25	22.4	22	21	17.7	14.3	10.8	10.5
14-----	22	22	21.4	18.6	23.7	23	22.2	21	16.8	14.4	11.1	10.3
15-----	21	22	21.1	19.9	23.5	23	21.8	20.6	16.7	15.7	11.0	10.5
16-----	22	21.6	21.1	19.1	21.5	23	21.8	20.0	16.3	13.7	10.7	10.4
17-----	21	22	21.0	18.9	21.2	22.4	21.8	20.0	16.9	13.6	10.5	10.3
18-----	21	21.8	20.6	18.5	22.0	22.2	21.3	20.0	16.9	13.8	10.6	10.4
19-----	21	21	20.4	18.6	22.3	22.1	23	20.3	16.9	13.6	10.4	10.4
20-----	21	21.4	20.5	19.4	22.3	22.1	24	19.5	16.9	13.1	9.9	10.2
21-----	20.4	21.2	20.8	19.9	22.2	21.5	24	19.1	16.8	12.9	10.1	10.3
22-----	20.8	21	20.5	19.6	21.9	22.0	23	18.9	16.1	12.9	10.7	9.8
23-----	20.8	21.6	20.3	19.2	21.7	22.2	23	18.7	16.1	13.1	10.2	9.7
24-----	20.6	21.6	20.2	19.5	21.7	21.9	22	18.2	16.3	12.6	10.5	9.8
25-----	21	21.0	20.6	19.2	21.5	23.8	22	18.2	15.7	11.5	10.3	10.1
26-----	24	20.9	20.5	18.9	21.2	25.0	22	17.6	15.7	12.2	10.5	10.3
27-----	25	21.0	20.9	18.9	21.3	24.0	22	17.5	16.1	12.6	10.3	9.8
28-----	25	21.2	20.8	19.1	21.4	23.7	22	17.7	15.8	12.6	10.4	10.1
29-----	24	21.0	21.0	19.1	21.6	23.8	22	17.1	15.1	11.8	10.5	10.1
30-----	23	20.6	23.0	19.1	-----	22.4	22	17.5	17.1	11.3	10.3	10.0
31-----	26	-----	22.1	18.9	-----	22.2	-----	17.5	-----	11.3	10.3	-----
Month					Maximum		Minimum		Mean		Run-off in acre-feet	
October-----					26		20.4		22.4		1,380	
November-----					29		20.6		22.4		1,330	
December-----					23.0		19.5		20.8		1,280	
January-----					21.4		18.5		19.6		1,210	
February-----					63		18.5		25.5		1,470	
March-----					29		20.8		23.7		1,460	
April-----					25		21.2		22.3		1,330	
May-----					24		17.1		20.3		1,260	
June-----					19.9		15.1		17.2		1,020	
July-----					15.9		11.3		13.6		886	
August-----					11.9		9.9		10.9		670	
September-----					10.7		9.7		10.2		607	
The year-----					63		9.7		19.0		13,800	

SURFACE WATER SUPPLY, 1928, PART XI

MILL CREEK POWER CANAL NO. 3 AT INTAKE NEAR FOREST HOME, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 12, T. 1 S., R. 1 W., 200 feet below intake on Mill Creek and half a mile west of Forest Home.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15.1	25	14.7	13.5	13.5	14.3	15.1	*15.1	12.3	10.3	8.3	7.5
2	15.1	17.5	14.3	13.1	13.9	15.1	14.7	*15.2	13.1	10.3	8.3	7.1
3	15.1	15.9	14.3	13.1	16.3	15.9	15.5	*15.3	13.1	9.9	8.3	6.7
4	15.5	15.9	14.7	13.1	*16.5	15.5	15.9	*15.4	12.7	10.3	8.7	6.7
5	15.9	16.3	14.7	13.1	16.7	16.3	15.5	15.5	12.3	10.3	8.7	6.4
6	15.9	17.5	14.7	13.1	15.5	16.3	14.7	*15.5	11.9	10.3	8.7	6.1
7	15.5	16.7	14.7	13.1	16.3	15.9	14.7	*15.5	11.9	9.5	8.3	6.4
8	15.1	16.7	14.7	13.1	15.9	15.5	14.3	*15.5	11.9	9.1	7.9	8.3
9	14.7	16.3	14.7	13.1	15.9	15.9	14.3	*15.5	11.9	9.1	7.9	7.9
10	14.7	17.5	14.7	12.7	15.5	15.5	14.3	15.5	11.9	9.1	7.9	7.5
11	14.3	16.7	15.1	12.7	13.5	15.9	14.3	15.9	12.3	9.1	8.3	7.9
12	14.3	17.1	14.7	12.7	13.5	15.9	14.7	15.9	11.9	9.1	7.9	7.9
13	14.3	18.5	15.1	12.7	13.5	15.5	15.1	15.5	11.1	10.3	7.5	7.5
14	14.3	18.0	15.1	*12.1	13.5	15.5	14.7	15.5	10.7	10.7	7.5	7.5
15	*14.5	17.5	15.1	11.5	13.1	14.7	14.7	15.5	10.7	10.3	7.5	7.5
16	14.7	17.1	15.1	12.3	13.1	14.3	14.7	15.9	10.7	9.1	7.5	*7.3
17	14.7	16.7	15.1	12.7	13.1	13.9	14.7	15.5	10.7	9.1	7.5	7.1
18	14.7	16.7	14.3	13.1	13.5	13.9	15.1	15.1	10.7	9.9	7.5	7.1
19	14.7	16.7	14.7	13.9	13.5	14.3	14.7	15.1	11.1	9.9	7.9	7.1
20	14.7	16.7	14.7	14.3	13.5	13.9	14.7	13.9	11.9	10.3	7.9	7.1
21	14.7	16.7	14.7	14.3	14.3	14.3	14.7	13.9	11.5	10.3	7.5	7.1
22	14.7	16.7	14.3	14.3	14.3	14.7	14.3	13.9	11.1	10.3	7.9	7.1
23	14.7	16.7	14.3	13.9	13.9	14.7	13.5	13.9	10.3	9.5	7.9	7.1
24	14.7	16.7	14.3	13.9	13.9	15.1	13.9	12.7	10.3	9.5	7.9	*7.0
25	15.9	16.3	14.7	13.9	13.9	16.7	13.1	12.3	10.3	9.1	6.7	*6.9
26	16.7	15.9	14.7	13.9	14.3	16.3	13.1	12.3	10.3	8.7	7.1	*6.8
27	17.5	15.9	14.3	13.5	14.3	16.3	*13.9	12.7	9.9	8.7	6.7	*6.7
28	17.5	15.5	13.9	13.5	14.3	15.9	14.7	12.7	9.9	8.3	6.7	*6.6
29	*17.5	15.5	14.3	*13.5	14.3	15.5	*14.8	11.9	9.9	7.9	6.7	*6.5
30	*17.5	15.1	13.9	*13.5	-----	15.5	*15.0	11.9	10.3	7.9	6.7	*6.4
31	*20	-----	13.5	13.5	-----	14.7	-----	11.9	-----	7.9	6.7	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	20	14.3	15.5	953
November	25	15.1	16.9	1,040
December	15.1	13.5	14.6	898
January	14.3	11.5	13.2	812
February	16.7	13.1	14.4	828
March	16.7	13.9	15.3	941
April	15.9	13.1	14.6	869
May	15.9	11.9	14.4	885
June	13.1	9.9	11.3	672
July	10.7	7.9	9.49	584
August	8.7	6.7	7.69	473
September	8.3	6.1	7.09	422
The year	25	6.1	12.9	9,350

* Estimated or interpolated.

MILL CREEK POWER CANALS NOS. 2 AND 3 NEAR CRAFTONVILLE, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 13, T. 1 S., R. 2 W., at Southern California Edison Co.'s power plant, 5 miles northeast of Craftonville.

RECORDS AVAILABLE.—January, 1919, to September, 1928.

EXTREMES.—1919-1928: Maximum mean daily discharge, 36 second-feet November 19, 1923, and June 7, 1924; no flow May 27, 1923.

REMARKS.—Records good. Discharge computed from weir records at tailrace of power plant. Intake of canal No. 2 on Mill Creek in sec. 8, T. 1 S., R. 1 W., and of canal No. 3 in sec. 13, T. 1 S., R. 1 W., 3 miles above intake for No. 2. The canals serve power plants Nos. 2 and 3 which discharge into a common tailrace. Records furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	23	27	17.6	18.3	15.6	17.6	13.6	21	17.2	15.4	11.6	9.8
2.....	22	24	18.2	17.9	15.2	18.8	16.7	22	18.6	14.8	11.5	9.6
3.....	22	22	18.4	17.8	16.6	22	19.7	21	19.0	15.1	11.1	9.8
4.....	22	22	18.2	17.6	22	21	22	22	17.8	15.0	11.2	10.1
5.....	22	21	18.2	17.5	19.8	19.8	21	20	17.4	14.1	11.0	9.6
6.....	22	23	18	17.8	22	22	20	20	16.8	13.5	11.2	9.8
7.....	22	22	18.2	17.9	21	22	18.8	21	16.7	14.0	11.3	9.7
8.....	22	20	18.6	17.3	20	21	19.2	22	16.6	14.4	11.2	10.0
9.....	21	21	18.1	17.3	19.8	21	19.2	22	16.9	13.8	11.4	9.9
10.....	21	22	18.9	16.6	22	21	18.8	22	16.9	12.8	11.0	10.2
11.....	21	21*	18.4	16.8	20	20	18.9	23	16.9	13.2	10.9	10.3
12.....	21	20	19	17	21	21	19.2	20	18.0	13.4	10.1	10.4
13.....	21	19.8	18.6	16.9	21	19.0	20	20	16.9	13.8	10.5	10.2
14.....	21	20	18.8	16.6	19.5	20	19.9	20	16.0	13.9	10.8	10.0
15.....	20	20	18.8	17.3	19.4	20	19.6	19.6	16.0	15.3	10.7	10.2
16.....	21	19.3	18.8	16.8	17.4	20	19.6	19.1	15.6	13.3	10.3	10.2
17.....	20	19.8	18.6	16.6	17.5	17.6	19.6	19.1	16.2	13.2	10.1	10.1
18.....	20	19.6	18	16.2	18.6	17.4	19.1	19.1	16.2	13.4	10.3	10.2
19.....	20	18.8	18	16.3	18.8	15.4	21	19.4	16.2	13.2	10.1	10.2
20.....	20	19.2	18.1	17.1	18.8	13.4	22	18.6	16.2	12.7	9.6	10.0
21.....	19.4	19	18.1	17	18.7	15.0	22	18.1	16.2	12.6	9.8	10.1
22.....	19.8	18.8	17.8	16.4	18.4	17.2	21	17.9	15.4	12.6	10.3	9.6
23.....	19.8	19.4	17.6	16	18.2	17.4	22	17.7	15.6	12.8	9.9	9.5
24.....	19.6	19.6	17.5	16.3	18.2	17.1	21	17.2	15.8	12.3	10.2	9.6
25.....	20	19	17.6	16.0	18.1	19.0	21	17.1	15.2	11.2	10.0	9.9
26.....	23	19	17.5	15.8	18	20	21	16.5	15.2	11.9	10.2	10.1
27.....	24	19	17.9	15.8	17.9	19.2	21	16.4	15.6	12.3	10.0	9.6
28.....	24	19.2	17.9	15.8	18.0	18.9	21	16.4	15.4	12.3	10.1	9.9
29.....	23	19	17.9	16.0	18.4	16.4	21	15.8	14.6	11.5	10.2	9.9
30.....	22	18.6	19.5	15.8	-----	14.2	21	16.2	16.6	11.0	10.0	9.8
31.....	24	-----	18.9	15.6	-----	14.0	-----	16.2	-----	11.0	10.0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	24	19.4	21.4	1,320
November.....	27	18.6	20.4	1,210
December.....	19.5	17.5	18.2	1,120
January.....	18.3	15.6	16.8	1,030
February.....	22	15.2	19.0	1,090
March.....	22	13.4	18.7	1,150
April.....	22	13.6	20.0	1,190
May.....	23	15.8	19.2	1,180
June.....	19.0	14.6	16.5	982
July.....	15.4	11.0	13.2	812
August.....	11.6	9.6	10.5	646
September.....	10.4	9.5	9.94	591
The year.....	27	9.5	17.0	12,300

MILL CREEK POWER CANAL NO. 1 NEAR CRAFTONVILLE, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 13, T. 1 S., R. 2 W., one-fourth mile below intake and 5 miles northeast of Craftonville.

RECORDS AVAILABLE.—January, 1919, to September, 1928.

REMARKS.—Records good. Discharge estimated October 1, 5-7, 30, 31, November 1, and September 26-30. Canal diverts water from Mill Creek at gaging station on Mill Creek near Craftonville. After going through Mill Creek power house No. 1 water is distributed for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	2.2	2.2	3.0	3.3	3.1	7.9	0.8	1.0	0.5	0.3	0.3
2	1.2	1.8	2.3	3.0	3.3	4.0	5.2	.7	.9	.5	.3	.4
3	.9	1.3	2.1	3.0	3.6	4.9	3.3	.8	.8	.5	.3	.3
4	.9	1.3	1.8	3.0	10.2	4.0	3.0	.8	.7	.5	.3	.3
5	.9	1.4	1.7	3.0	11.7	4.9	2.6	.8	.8	.5	.3	.3
6	.9	1.8	1.4	3.0	9.8	7.3	2.6	.7	.8	.5	.4	.3
7	.9	1.8	1.4	3.0	7.5	5.4	2.6	.7	.8	.5	.4	.3
8	.9	1.8	1.4	3.0	6.6	4.1	2.5	1.2	.8	.4	.5	.3
9	.8	1.9	1.4	3.1	5.8	3.8	2.5	1.8	.7	.4	.4	.4
10	.7	2.1	2.5	3.1	5.4	3.6	2.3	1.4	.7	.5	.4	.4
11	.8	1.9	3.1	2.2	4.7	3.3	2.3	1.2	.7	.5	.3	.4
12	.9	2.2	3.0	1.7	4.1	3.1	2.3	1.0	.7	.5	.3	.3
13	.9	2.3	2.8	1.7	4.1	3.3	2.2	.9	.7	.5	.3	.3
14	.9	2.3	2.5	1.9	4.1	3.1	2.2	.9	.7	.5	.3	.3
15	.9	2.2	2.2	2.5	4.0	3.0	2.1	.9	.6	.4	.3	.3
16	1.0	2.2	2.2	2.2	4.0	3.1	2.1	.8	.6	.4	.4	.2
17	.9	2.1	2.3	2.2	3.6	4.7	2.1	.8	.6	.4	.4	.2
18	1.0	2.1	2.5	2.2	3.3	4.7	2.1	.8	.6	.4	.3	.2
19	1.0	2.1	2.3	2.2	3.4	6.6	2.2	.8	.6	.4	.3	.2
20	1.0	2.1	2.3	2.2	3.4	8.6	2.1	.8	.6	.4	.3	.2
21	1.0	2.1	2.5	2.8	3.4	6.4	1.5	.9	.5	.3	.3	.2
22	1.0	2.1	2.5	3.1	3.4	4.7	1.3	.9	.2	.3	.4	.2
23	1.0	2.1	2.5	3.1	3.4	4.7	1.2	.9	.3	.3	.3	.2
24	1.0	1.9	2.5	3.1	3.4	4.7	1.3	.9	.3	.3	.3	.2
25	1.2	1.9	2.8	3.1	3.3	4.7	1.2	1.0	.4	.3	.3	.2
26	1.2	1.8	2.8	3.1	3.1	4.7	1.0	1.0	.4	.3	.3	.2
27	1.0	1.9	2.8	3.1	3.3	4.7	.9	1.0	.4	.3	.3	.2
28	1.0	1.9	2.8	3.3	3.3	4.7	.8	1.2	.4	.3	.3	.2
29	1.0	1.9	3.0	3.1	3.1	7.3	.8	1.2	.5	.3	.3	.2
30	1.0	1.9	3.4	3.3		8.1	.8	1.2	.5	.3	.3	.2
31	2.3		3.1	3.3		8.1		1.2		.3		
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October	2.3		0.7		1.01		62.1					
November	2.3		1.3		1.95		116					
December	3.4		1.4		2.39		147					
January	3.3		1.7		2.76		170					
February	11.7		3.1		4.68		269					
March	8.6		3.0		4.88		300					
April	7.9		.8		2.23		133					
May	1.8		.7		.97		59.6					
June	1.0		.2		.61		36.3					
July	.5		.3		.40		24.6					
August	.5		.3		.33		20.3					
September	.4		.2		.26		15.5					
The year	11.7		.2		1.86		1,350					

PLUNGE CREEK NEAR EAST HIGHLANDS, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 1, T. 1 S., R. 3 W., at mouth of canyon, 2 miles northeast of East Highlands.

RECORDS AVAILABLE.—January, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 240 second-feet February 4 (gage height, 2.35 feet); no flow for several months during year.

1919-1928: Maximum discharge, 1,420 second-feet February 16, 1927 (gage height, 3.80 feet); no flow for several months during each year.

REMARKS.—Records good. Discharge estimated March 4-7. Diversions for irrigation at several points above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1	0	7	0	3.7	0.1	0.3	0	0
2	0	2.5	0	3.4	.1	.5	0	0
3	0	1.4	0	2.5	.1	.9	.2	0
4	0	.9	.2	1.9	69	7	.6	0
5	0	.9	.4	1.9	29	5	.2	0
6	0	1.8	.3	2.2	15	10	0	0
7	0	1.0	.4	3.1	10	6.5	0	0
8	0	.9	.4	2.5	7.5	6	0	.2
9	0	.8	.2	1.9	5.5	6	0	.8
10	0	.8	5.5	.8	2.7	6	0	.8
11	0	.5	7.5	.8	1.8	6	0	2.6
12	0	.6	4.9	.7	1.7	5.5	0	.6
13	0	2.2	1.9	.7	1.6	4.5	0	.6
14	0	.9	1.4	.8	1.6	1.1	0	.3
15	0	.5	1.3	1.6	1.4	.4	0	0
16	0	.5	1.2	2.2	1.1	.2	0	0
17	0	.4	1.2	1.8	1.1	.4	0	0
18	0	.4	2.0	1.8	1.1	3.0	0	0
19	0	.3	1.6	1.3	1.1	.6	0	0
20	0	.2	.8	1.3	1.1	.1	0	0
21	0	.3	1.4	1.3	1.1	0	0	0
22	0	1.3	1.6	1.3	1.0	0	0	0
23	0	.3	1.0	1.3	.8	0	0	0
24	0	.1	.9	1.3	.8	0	0	0
25	0	.1	.9	1.0	.8	.2	0	0
26	0	0	1.8	.9	.6	.2	0	0
27	.3	0	1.8	.9	.5	.3	0	0
28	1.3	0	1.6	.9	.4	.2	0	0
29	.5	0	2.4	.9	.3	.1	0	0
30	.7	0	8.5	.3		0	0	0
31	4.0		4.9	.1		0		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4.0	0	0.22	13.5
November	7	0	.89	63.0
December	8.5	0	1.87	115
January	3.7	.1	1.52	93.5
February	69	.1	5.48	315
March	10	0	2.55	167
April	.6	0	.03	1.8
May	8	0	.65	40.0
The year	69	0	1.09	789

NOTE.—No flow in months for which no record is given.

SURFACE WATER SUPPLY, 1928, PART XI

SAN TIMOTEO CREEK NEAR REDLANDS, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 10, T. 2 S., R. 3 W., $2\frac{1}{2}$ miles south of Redlands.

RECORDS AVAILABLE.—October, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, about 60 second-feet February 4; no flow several months during year.

1926-1928: Maximum discharge, about 3,000 second-feet February 16, 1927; no flow several months each year.

REMARKS.—Discharge estimated October 1 to December 25. Except during high water the entire flow is diverted above station. Record of daily discharge furnished by State division of engineering and irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1			0.6	0.8	0.2	0.2	0
2			.4	.8	.2	.2	0
3			.3	1.0	6	.2	.1
4			.2	22	5	.2	.1
5			.2	5	3	.2	.1
6		0.2	.2	4.0	3	.1	.1
7			.3	2.8	2.5	.1	.1
8			.3	1.0	1.9	.1	.1
9			.2	.2	1.9	.1	.1
10			.2	2.5	1.9	.1	.2
11			.2	3.0	1.8	.1	.2
12			.2	2.5	1.8	.1	.2
13			.2	2.5	1.7	.1	.2
14			.2	2.5	1.7	.1	.2
15			.4	1.0	1.7	.1	.2
16		0.2	.3	1.0	1.5	.1	.2
17			.8	.8	1.4	.1	.1
18		.3	2.0	.8	1.3	.1	.1
19			1.8	.7	1.1	.1	.1
20			1.8	.6	1.1	.1	0
21			1.6	.6	1.1	.1	0
22			1.6	.5	1.0	.1	0
23			1.3	.3	1.0	.1	0
24			1.3	.2	1.0	.1	0
25			1.2	.1	.9	.1	0
26		.3	1.2	.1	.9	.1	0
27		1.3	1.2	.1	.8	.1	0
28		1.3	1.0	.1	.7	.1	0
29		2.0	.8	.1	.6	.1	0
30		3.0	.8		.4	.1	0
31		.8	.8		.3		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November			0.20	11.9
December	3.0		.49	30.1
January	2.0	0.2	.76	46.7
February	22	.1	1.99	114
March	6	.2	1.59	97.8
April	.2	.1	.12	7.1
May	.2	0	.08	4.9
The year	22	0	.43	312

NOTE.—No flow in months for which no record is given.

WARM CREEK NEAR COLTON, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 21, T. 1 S., R. 4 W., at Colton Avenue highway bridge, $\frac{1}{4}$ miles east of Colton.

RECORDS AVAILABLE.—August, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 495 second-feet February 4 (gage height, 4.50 feet); minimum, 23 second-feet August 17.

1920-1928: Maximum discharge, 2,780 second-feet December 21, 1922; minimum, that of August 17, 1928.

REMARKS.—Records good. Discharge interpolated October 8, January 1, 3-5, 9-12. Diversion for irrigation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	35	61	50	72	65	62	54	43	41	30	29	28
2.....	36	62	46	73	65	65	50	43	42	30	29	27
3.....	37	51	44	74	70	66	60	41	42	29	30	27
4.....	38	51	45	75	210	63	56	40	42	29	30	27
5.....	39	51	48	76	81	69	64	38	42	29	31	26
6.....	40	53	47	77	69	71	62	39	39	28	37	26
7.....	41	54	50	74	66	66	60	40	37	28	39	26
8.....	41	56	51	70	64	69	58	42	36	29	34	26
9.....	41	57	49	70	63	69	56	56	34	29	32	26
10.....	41	61	64	70	63	69	55	50	34	30	32	26
11.....	41	61	66	70	63	67	54	47	34	30	33	27
12.....	40	64	59	70	62	66	52	45	33	30	31	27
13.....	40	64	59	71	63	66	50	40	33	30	29	27
14.....	40	63	60	70	63	66	49	38	32	30	28	27
15.....	40	62	60	74	63	63	48	36	32	30	26	27
16.....	39	62	61	76	63	61	49	34	32	30	25	26
17.....	39	62	61	71	64	60	48	32	33	30	24	26
18.....	40	60	60	70	64	58	49	30	34	29	24	26
19.....	39	60	60	70	66	56	48	27	34	29	24	25
20.....	39	59	59	70	67	52	48	29	35	30	24	25
21.....	38	59	64	70	67	50	48	34	36	30	25	25
22.....	39	58	60	71	68	48	47	45	35	30	25	25
23.....	40	57	58	71	69	50	48	47	36	30	25	25
24.....	40	56	58	69	69	58	47	44	35	29	25	25
25.....	46	55	59	68	70	56	46	42	33	29	25	25
26.....	47	54	67	66	68	51	46	40	32	28	26	26
27.....	53	54	64	65	66	50	46	42	32	28	26	26
28.....	54	53	64	63	63	50	46	41	31	28	26	26
29.....	48	52	70	64	62	49	45	40	30	28	27	26
30.....	47	50	76	65	-----	58	45	41	30	28	27	27
31.....	74	-----	70	65	-----	56	-----	41	-----	29	27	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	74	35	42.3	2,600
November.....	64	50	57.1	3,400
December.....	76	44	58.4	3,590
January.....	77	63	70.3	4,320
February.....	210	62	70.9	4,080
March.....	71	48	60.0	3,690
April.....	69	45	51.7	3,080
May.....	56	27	40.2	2,470
June.....	42	30	35.0	2,080
July.....	30	28	29.2	1,800
August.....	39	24	28.2	1,730
September.....	28	25	26.1	1,550
The year.....	210	24	47.4	34,400

Daily and monthly discharge, in second-feet, of Warm Creek and Meeks & Daley Canal near Colton, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	61	53	72	65	66	65	55	58	47	48	46
2	50	52	56	73	66	68	70	56	59	49	48	44
3	52	51	56	74	70	69	78	54	59	47	50	43
4	52	51	56	75	210	67	68	52	58	47	48	46
5	53	51	52	76	81	72	76	52	58	46	48	44
6	53	53	57	77	69	76	74	54	52	45	38	45
7	54	54	55	74	66	60	72	55	52	45	39	45
8	53	56	51	70	64	69	70	57	52	46	44	44
9	53	57	57	70	63	69	68	64	50	44	48	43
10	54	61	68	70	63	69	67	50	50	46	49	44
11	54	61	66	70	63	67	66	47	5	46	51	44
12	53	64	59	70	62	66	64	48	5	47	49	46
13	53	64	59	71	63	66	63	49	50	47	47	46
14	53	63	60	70	63	66	61	47	49	47	46	44
15	53	62	60	74	63	63	61	46	50	47	43	44
16	51	62	61	76	64	61	63	45	49	47	43	43
17	50	62	61	71	64	60	60	43	5	44	40	43
18	52	60	60	70	64	58	61	44	52	46	40	42
19	51	60	60	70	66	57	60	44	53	45	40	41
20	51	59	59	70	67	57	60	42	52	46	40	43
21	51	59	64	70	67	58	60	47	53	46	41	42
22	51	58	60	71	68	59	59	62	52	46	42	43
23	51	57	59	71	69	63	57	64	52	45	42	44
24	52	56	59	69	69	69	58	61	58	43	43	43
25	53	58	60	68	70	65	59	60	5	41	42	43
26	54	59	68	66	68	60	59	57	50	43	45	44
27	59	56	64	65	68	60	59	58	50	43	45	42
28	54	55	64	63	67	60	59	58	49	44	44	44
29	48	55	70	64	66	60	58	56	48	45	45	45
30	47	54	76	65	64	64	57	58	48	45	45	46
31	74		70	66		64		59		46	45	
Month					Maximum	Minimum	Mean	Run-off in acre-feet				
October					74	47	52.8	3,250				
November					64	51	57.7	3,430				
December					76	51	60.6	3,730				
January					77	63	70.4	4,380				
February					210	62	71.3	4,100				
March					76	57	64.4	3,960				
April					78	57	63.7	3,790				
May					64	42	53.0	3,260				
June					59	48	52.0	3,090				
July					49	41	45.5	2,800				
August					51	38	44.5	2,740				
September					46	41	43.9	2,610				
The year					210	38	56.6	41,100				

STRAWBERRY CREEK NEAR ARROWHEAD SPRINGS, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 11, T. 1 N., R. 4 W., at Del Rosa Water Co.'s diversion dam, half a mile south of Arrowhead Springs. RECORDS AVAILABLE.—December, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, about 50 second-feet February 4 (gage height, 2.60 feet); minimum, 0.2 second-foot July 29.

1919-1928: Maximum discharge, 408 second-feet January 2, 1922; maximum gage height, 4.35 feet February 16, 1927; minimum discharge, 0.2 second-foot several days during summers of 1925 and 1928.

REMARKS.—Records good. Discharge interpolated December 13-18, January 2, 3, and July 2-10. Small diversion above station for domestic use.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.8	7.0	1.8	3.4	2.4	2.0	2.3	1.4	1.1	0.5	0.2	0.3
2.....	.8	2.8	1.8	3.3	2.4	4.3	2.3	1.2	.7	.5	.2	.2
3.....	.8	1.9	1.7	3.1	2.9	3.7	3.5	1.2	.7	.5	.2	.2
4.....	.9	1.7	1.8	3.0	23	2.9	2.9	.9	.7	.4	.3	.2
5.....	.9	1.8	1.9	3.0	15	3.5	2.7	.9	.6	.4	.2	.2
6.....	1.0	2.0	2.2	2.9	9	7	2.5	.7	.5	.4	.2	.2
7.....	.8	2.1	2.2	2.9	7	4.1	2.1	1.2	.5	.3	.2	.2
8.....	.8	2.3	2.1	2.7	5.5	3.5	1.8	1.6	.9	.3	.2	.2
9.....	.8	2.1	2.4	2.6	4.3	3.3	1.8	3.1	.9	.3	.2	.2
10.....	.8	2.8	5.5	2.9	3.7	2.7	2.0	2.7	.9	.3	.2	.3
11.....	.8	2.2	5.0	2.5	3.5	2.5	2.1	2.3	1.1	.2	.2	.3
12.....	.8	2.1	2.9	2.4	3.5	2.5	2.1	2.1	1.1	.3	.2	.3
13.....	.8	2.4	2.9	2.4	3.5	2.5	2.0	1.8	.9	.3	.2	.3
14.....	.8	2.5	2.9	2.6	3.5	2.7	1.8	2.0	.6	.2	.2	.3
15.....	.8	2.2	2.8	3.8	3.3	2.5	1.8	2.1	.6	.2	.2	.3
16.....	.8	1.8	2.8	3.3	2.9	2.3	1.8	2.0	.6	.2	.2	.3
17.....	.8	1.7	2.8	3.2	2.9	2.3	2.0	2.0	.6	.2	.2	.3
18.....	.8	1.8	2.8	3.0	2.5	2.1	1.8	1.6	.7	.2	.2	.2
19.....	.8	1.8	2.8	2.9	2.5	2.0	1.6	1.8	1.2	.2	.2	.2
20.....	.8	1.8	3.0	2.9	2.3	2.1	2.1	1.8	1.4	.2	.2	.2
21.....	.7	2.1	3.2	2.9	2.5	2.0	1.8	1.6	1.1	.2	.2	.2
22.....	.8	2.1	3.1	2.8	2.3	1.8	1.6	1.4	.6	.2	.2	.3
23.....	.8	1.9	3.0	2.8	2.3	2.3	1.6	1.2	.5	.2	.3	.3
24.....	.8	1.8	3.0	2.8	2.3	3.1	1.8	1.1	.5	.2	.3	.3
25.....	1.2	1.9	3.4	2.6	2.3	3.3	2.0	1.1	.4	.2	.3	.3
26.....	2.9	2.0	3.4	2.5	2.0	3.1	1.8	1.1	.4	.2	.3	.3
27.....	3.9	2.1	3.3	2.5	1.8	3.5	1.6	1.1	.5	.2	.3	.3
28.....	3.3	2.0	3.2	2.5	2.0	3.1	1.6	1.2	.5	.2	.3	.3
29.....	2.4	2.0	6.5	2.5	2.0	2.9	1.6	1.1	.5	.2	.3	.3
30.....	2.1	1.9	4.7	2.5	-----	2.5	1.2	.9	.5	.2	.3	.3
31.....	7	-----	3.9	2.6	-----	2.3	-----	1.1	-----	.2	.3	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	7					0.7			1.36		83.6	
November.....	7					1.7			2.22		132	
December.....	6.5					1.7			3.06		188	
January.....	3.8					2.4			2.83		174	
February.....	23					1.8			4.31		248	
March.....	7					1.8			2.92		180	
April.....	3.5					1.2			1.99		118	
May.....	3.1					.7			1.53		94.7	
June.....	1.4					.4			.73		43.4	
July.....	.5					.2			.27		16.6	
August.....	.3					.2			.23		14.1	
September.....	.3					.2			.26		15.5	
The year.....	23					.2			1.80		1,310	

WATERMAN CANYON CREEK NEAR ARROWHEAD SPRINGS, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 2, T. 1 N., R. 4 W., 600 feet above old toll house and 1 mile northwest of Arrowhead Springs.

DRAINAGE AREA.—4.55 square miles.

RECORDS AVAILABLE.—November, 1911, to October, 1914; December, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 39 second-feet February 4 (gage height, 3.08 feet); no flow for long periods in July, August, and September. 1911-1914, 1920-1928: Maximum discharge, 164 second-feet January 2, 1922; no flow at times during summers of 1924, 1925, 1926, and 1928.

REMARKS.—Records good. Discharge estimated December 12-15 and January 22 to February 9. Small diversion above station for domestic use. Slight regulation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	0.2	2.5	1.1	1.4	1.1	1.5	1.0	0.7	0.4	0.3	0
2.....	.2	1.4	1.0	1.4	1.0	2.0	1.1	.7	.4	.3	0
3.....	.2	1.1	.9	1.3	6	2.1	2.5	.7	.4	.2	0
4.....	.3	1.0	.9	1.3	14	1.7	1.6	.6	.4	.2	0
5.....	.3	1.0	1.0	1.2	6	2.1	1.4	.5	.4	.2	.1
6.....	.4	1.3	1.0	1.2	5	2.1	1.3	.6	.3	.1	.1
7.....	.3	1.3	1.0	1.2	4.5	1.6	1.2	.8	.4	.1	0
8.....	.2	1.3	1.0	1.1	3.7	1.8	1.0	.9	.6	.1	0
9.....	.2	1.2	1.1	1.1	3.4	1.5	1.0	1.8	.6	.1	0
10.....	.2	1.8	2.4	1.1	3.2	1.4	1.2	1.0	.6	.1	0
11.....	.2	1.3	2.4	1.0	2.9	1.3	1.1	.8	.6	.1	0
12.....	.2	1.2	2.1	1.0	2.8	1.4	1.0	.7	.6	.1	0
13.....	.2	1.4	1.8	1.0	2.5	1.4	1.0	.7	.6	.1	0
14.....	.2	1.4	1.5	1.1	2.4	1.4	1.0	.7	.5	.1	0
15.....	.2	1.0	1.2	1.7	2.3	1.4	1.0	.8	.4	.1	0
16.....	.2	1.0	1.0	1.5	2.2	1.3	.9	.7	.3	.1	0
17.....	.2	.9	.9	1.4	2.0	1.1	1.0	.7	.4	.1	0
18.....	.2	.8	.9	1.3	1.8	1.0	1.0	.7	.5	.1	0
19.....	.2	.9	.8	1.1	1.7	.9	1.0	.7	.6	.1	0
20.....	.2	1.0	.8	1.0	1.7	.8	1.1	.7	.6	.1	0
21.....	.2	1.3	1.1	1.0	1.6	.8	1.0	.8	.6	.1	0
22.....	.2	1.1	1.0	1.0	1.6	.8	1.0	.7	.4	.1	0
23.....	.2	1.1	1.0	1.0	1.6	1.0	1.0	.6	.4	.1	0
24.....	.3	1.1	1.0	1.0	1.6	1.4	1.1	.6	.4	.1	0
25.....	.6	1.1	1.0	1.0	1.6	1.9	1.0	.5	.3	0	0
26.....	1.4	1.1	1.2	1.0	1.6	1.4	.9	.5	.3	0	0
27.....	1.4	1.0	1.0	1.0	1.6	2.0	.9	.5	.3	0	0
28.....	1.1	1.0	1.1	1.0	1.6	1.5	.8	.5	.4	0	0
29.....	.7	1.0	1.5	1.0	1.5	1.3	.8	.5	.4	0	0
30.....	.6	1.1	1.8	1.0	-----	1.2	.7	.5	.3	0	0
31.....	4.2	-----	1.4	1.0	-----	1.2	-----	.5	-----	0	0
Month	Maximum			Minimum			Mean			Run-off in acre-feet	
October.....	4.2			0.2			0.50			30.7	
November.....	2.5			.8			1.19			70.8	
December.....	2.4			.8			1.22			75.0	
January.....	1.7			1.0			1.14			70.1	
February.....	14			1.0			2.91			167	
March.....	2.1			.8			1.43			87.9	
April.....	2.5			.7			1.09			64.9	
May.....	1.8			.5			.70			43.0	
June.....	.6			.3			.45			26.8	
July.....	.3			0			.10			6.1	
August.....	.1			0			.01			.6	
The year.....	14			0			.89			643	

NOTE.—No flow in September.

CITY CREEK NEAR HIGHLAND, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 27, T. 1 N., R. 3 W., $1\frac{1}{4}$ miles northeast of Highland.

RECORDS AVAILABLE.—October, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 369 second-feet February 4 (gage height, 6.03 feet); no flow for several months.

1919-1928: Maximum discharge, 2,360 second-feet April 5, 1926; maximum gage height, 9.8 feet February 16, 1927; no flow for several months during each year except 1923.

REMARKS.—Records good. Diversion above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1.....	0	17	0.2	9.5	0.6	0.3	0.3	0.1
2.....	0	7.5	.2	8.5	.4	4.1	.6	.1
3.....	0	4.9	.2	8	1.8	13	1.9	.1
4.....	0	4.2	.1	7.5	134	9	1.1	.1
5.....	0	3.8	.1	7	43	5.5	.4	0
6.....	0	5	.2	7	20	15	.4	0
7.....	0	5	.2	6.5	14	10	.3	0
8.....	0	4.6	.2	6	10	9	.4	1.2
9.....	0	4.4	.2	6	8	8.5	.4	10
10.....	0	6	14	6	7	6	.4	4.0
11.....	0	5	16	5.5	6	5.5	.9	1.2
12.....	0	4.6	11	4.9	5.5	6	1.2	.9
13.....	0	4.7	9	4.9	6	7	1.2	.8
14.....	0	5.5	9	4.9	7	5.5	.6	.4
15.....	0	4.4	8.5	9	7	3.6	.3	.1
16.....	0	4.0	7	8.5	4.6	3.3	.2	.1
17.....	0	4.0	6	7	4.4	3.2	.2	.1
18.....	0	4.0	6	7	4.0	1.4	.2	.1
19.....	0	4.0	5.5	6.5	3.6	1.3	.2	.1
20.....	0	3.8	5	7	3.8	1.2	.2	.1
21.....	0	4.2	6.5	7	3.8	1.2	.2	0
22.....	0	4.2	6	5.5	6	1.3	.1	0
23.....	0	3.5	6	6	4.2	1.2	.1	0
24.....	0	3.3	5.5	7.5	6	1.9	.1	0
25.....	.8	1.7	6	6.5	6	2.2	.1	0
26.....	2.3	1.1	8	5	4.2	1.2	.1	0
27.....	8	1.1	7.5	5	3.0	1.4	.1	0
28.....	8	.8	7.5	5	2.0	1.0	.1	0
29.....	4.4	.3	8.5	1.7	.8	.4	.1	0
30.....	3.0	.2	16	.7	-----	.4	.1	0
31.....	10	-----	11	.7	-----	.3	-----	0
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
October.....	10		0		1.18		72.6	
November.....	17		.2		4.23		252	
December.....	16		.1		6.04		371	
January.....	9.5		.7		6.06		373	
February.....	134		.4		11.3		650	
March.....	15		.3		4.22		259	
April.....	1.9		.1		.42		25.0	
May.....	10.0		0		.63		38.7	
The year.....	134		0		2.81		2,040	

NOTE.—No flow in months for which no record is given.

CITY CREEK WATER CO.'S CANAL NEAR HIGHLAND, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 28, T. 1 N., R. 3 W., 1 mile northeast of Highland.

RECORDS AVAILABLE.—May, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 6.9 second-feet April 3; canal dry for several periods at times.

1924-1928: Maximum discharge, 10 second-feet May 30, 1927.

REMARKS.—Records good. Discharge estimated November 25 to December 1 and February 9-27. Canal diverts water from City Creek half a mile above gage. At times water is pumped from the canal above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	0	3.6	0	2.6	4.3	4.7	4.2	3.6	1.4	0.5	0.4
2	2.0	0	3.8	0	2.2	4.1	5.3	4.2	3.3	1.5	.6	.3
3	2.0	0	3.7	0	1.1	0	5.3	4.2	3.0	1.3	.8	.3
4	2.0	0	3.4	0	0	0	3.3	3.9	2.7	1.1	1.0	.3
5	2.3	0	4.4	0	0	.5	3.9	3.8	2.4	1.1	1.0	.3
6	2.6	0	4.7	0	.4	0	4.0	3.4	2.2	1.1	.8	.4
7	2.5	0	4.7	0	.8	0	3.9	3.1	1.7	1.1	.6	.4
8	2.0	0	4.7	0	.6	0	3.9	3.1	3.2	1.0	.5	.4
9	2.0	0	4.7	0	.6	0	3.9	1.5	3.3	1.0	.4	.4
10	2.0	0	0	0	.6	0	3.9	2.0	2.3	.7	.4	.4
11	2.0	0	0	0	.6	0	4.0	2.6	2.6	.6	.4	.4
12	2.0	0	0	0	.6	0	4.2	2.2	2.8	.8	.4	.4
13	1.9	0	0	0	.5	.4	4.2	2.0	2.4	.8	.4	.4
14	1.9	0	0	0	.3	1.8	4.9	2.2	2.2	.8	.4	.4
15	1.7	0	0	0	.4	2.5	5.3	2.4	1.9	.8	.4	.4
16	1.7	0	0	0	.6	3.2	5.3	2.2	2.1	.8	.4	.4
17	1.7	0	0	0	.6	3.3	5.3	2.0	2.3	.7	.5	.4
18	1.8	0	0	0	.6	3.2	4.9	2.3	2.4	.7	.4	.4
19	1.8	0	0	0	.6	3.8	3.8	2.1	2.5	.6	.4	.4
20	1.8	0	0	0	.6	3.9	4.2	2.4	2.8	.7	.4	.4
21	1.9	0	0	0	.6	3.9	3.8	2.8	2.3	.8	.4	.3
22	2.0	0	0	0	.3	4.0	3.6	2.6	1.8	.8	.4	.4
23	2.0	0	0	0	.6	4.5	4.7	2.0	1.6	.6	.4	.4
24	2.6	0	0	0	.3	4.7	4.7	3.0	1.5	.6	.4	.4
25	2.3	1.5	0	.5	.4	4.7	4.5	3.0	1.5	.5	.4	.6
26	0	2.3	0	1.2	.6	3.9	4.4	3.0	1.2	.5	.4	.6
27	0	2.2	0	1.2	1.3	4.0	4.1	3.0	1.4	.4	.4	.6
28	0	2.6	0	1.1	1.9	5.0	3.6	3.0	1.4	.5	.4	.6
29	0	3.6	0	3.1	3.1	5.1	3.8	2.8	1.4	.4	.4	.6
30	0	3.6	0	4.4	---	5.1	4.2	2.8	1.3	.4	.4	.6
31	0	---	0	3.4	---	4.7	---	3.9	---	.5	.4	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.6	0	1.63	100
November	3.6	0	.53	31.5
December	4.7	0	1.22	75.0
January	4.4	0	.48	29.5
February	3.1	.0	.81	46.6
March	5.1	0	2.60	160
April	5.3	3.3	4.32	257
May	4.2	1.5	2.83	174
June	3.6	1.2	2.24	133
July	1.5	.4	.79	48.6
August	1.0	.4	.49	30.1
September	.6	.3	.42	25.0
The year	5.3	0	1.53	1,110

DEVIL CANYON CREEK NEAR SAN BERNARDINO, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 6, T. 1 N., R. 4 W., 7.3 miles northwest of San Bernardino.

DRAINAGE AREA.—6.16 square miles.

RECORDS AVAILABLE.—November, 1911, to October, 1914; December, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 58 second-feet February 4 (gage height, 2.72 feet); stream practically dry for long periods during year.

1919-1928: Maximum discharge, 220 second-feet April 7, 1926 (gage height, 3.75 feet); stream practically dry September 27 and 28, 1921, and several months during summers of 1924, 1925, 1926, 1927, and 1928.

REMARKS. Records good. Discharge estimated except February 4-10. Water diverted above gage by city of San Bernardino and spread over canyon floor to increase absorption.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1.....			0.1	0.3	0.2	0.2	0.2	0.1	0.1
2.....			.1	.2	.2	.2	.2	.1	.1
3.....			.1	.2	.2	.2	.2	.1	.1
4.....			.2	.2	20	.2	.2	.1	.1
5.....			.2	.2	8.5	.2	.2	.1	.1
6.....			.2	.2	6	.2	.2	.1	.1
7.....			.2	.2	3.7	.2	.2	.1	.1
8.....			.2	.2	2.2	.2	.2	.1	.1
9.....			.2	.2	.5	.2	.2	.1	.1
10.....			.4	.2	.4	.2	.2	.1	.1
11.....			.5	.2	.4	.2	.1	.1	.1
12.....			.4	.2	.4	.2	.1	.1	.1
13.....			.4	.2	.4	.2	.1	.1	.1
14.....			.3	.2	.4	.2	.1	.1	.1
15.....			.3	.2	.4	.2	.1	.1	.1
16.....	0.1	0.1	.3	.2	.3	.2	.1	.1	0
17.....			.2	.2	.3	.2	.1	.1	0
18.....			.3	.2	.2	.2	.1	.1	0
19.....			.3	.2	.2	.2	.1	.1	0
20.....			.3	.2	.2	.2	.1	.1	0
21.....			.7	.2	.2	.2	.1	.1	0
22.....			.5	.2	.2	.2	.1	.1	0
23.....			.5	.2	.2	.2	.1	.1	0
24.....			.5	.2	.2	.2	.1	.1	0
25.....			.5	.2	.2	.2	.1	.1	0
26.....			.7	.2	.2	.2	.1	.1	0
27.....			.7	.2	.1	.3	.1	.1	0
28.....			.5	.2	.2	.3	.1	.1	0
29.....			.5	.2	.2	.2	.1	.1	0
30.....			.5	.2		.2	.1	.1	0
31.....			.5	.2		.2		.1	
Month	Maximum		Minimum		Mean		Run-off in acre-feet		
October.....					0.1		6.1		
November.....					.1		6.0		
December.....			0.7	0.1	.36		22.1		
January.....			.3	.2	.20		12.3		
February.....			20	.1	1.61		92.6		
March.....			.3	.2	.21		12.9		
April.....			.2	.1	.13		7.7		
May.....			.1	.1	.10		6.1		
June.....			.1	0	.05		3.0		
The year.....			20	0	.23		169		

NOTE.—No flow in months for which no record is given.

LYTLE CREEK AND FONTANA PIPE LINE NEAR FONTANA, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 6, T. 1 N., R. 5 W., unsurveyed, one-fourth mile below Lytle Creek power plant of Southern California Edison Co. and $7\frac{1}{2}$ miles north of Fontana.

RECORDS AVAILABLE.—October, 1918, to September, 1928.

EXTREMES.—No flow past Lytle Creek station except for few hours on scattered days.

1918-1928: Maximum discharge, about 5,300 second-feet February 16, 1927 (gage height, 5.40 feet); no flow in creek during greater part of each year.

REMARKS.—Entire flow of creek is diverted about 3 miles above gage for the Lytle Creek power plant and is carried directly across creek by a siphon to the headworks of the Fontana pipe line, which serves the Fontana power plant. Records of daily discharge of pipe line determined from kilowatt output of power plant and furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	36	27	26	26	23	24	23	25	22	19	15.3	14.5
2.	36	25	25	26	23	25	23	25	22	18.8	15.9	14.3
3.	35	25	24	26	30	27	28	25	21	18.8	15.8	14.1
4.	36	24	24	26	42	25	25	25	21	18.8	16.9	14.4
5.	36	25	26	26	27	27	24	25	21	18	16.2	13.9
6.	36	26	26	25	26	28	24	26	21	18.2	15.7	13.9
7.	35	26	26	25	26	27	24	26	21	18.5	15.7	14
8.	35	26	26	25	26	26	23	26	21	18.5	15.8	14.3
9.	34	26	26	25	26	26	23	27	22	18.2	15.3	14.3
10.	34	28	36	25	26	27	23	27	22	17.3	16.2	14.8
11.	34	26	30	25	27	27	22	26	22	18.2	15.2	15.5
12.	33	27	27	25	27	27	21	26	22	17.2	15.7	15.5
13.	33	27	28	25	27	27	23	26	22	17.5	15.5	14.4
14.	33	26	28	25	27	26	22	26	22	17.5	16	14.1
15.	32	26	27	26	28	25	22	26	22	17.7	15.5	14.6
16.	32	26	27	25	28	25	24	25	23	16.5	15.3	14.8
17.	32	25	26	25	27	25	25	22	23	17.0	14.6	14.1
18.	32	25	27	25	27	24	25	21	23	16.9	13.8	13.9
19.	32	25	27	25	27	24	27	21	23	16.2	11.8	13.2
20.	32	25	26	25	27	24	29	20	23	15.7	12.9	12.6
21.	31	25	27	25	27	23	29	21	23	14.4	13.6	12.1
22.	30	24	27	25	27	24	28	19.7	22	14.6	13.4	12.1
23.	30	24	26	24	27	24	27	19	21	15.3	13.9	11.2
24.	30	26	27	24	27	24	27	19	21	14.3	14.3	11.2
25.	30	26	28	23	27	24	27	24	20	14	13.4	12.2
26.	31	26	30	23	26	23	26	24	21	14.4	14	13.4
27.	32	26	27	23	26	24	26	24	19.5	14.6	14	13.4
28.	33	26	27	23	25	24	26	23	19.7	14.8	15.2	14.2
29.	32	26	26	23	24	23	26	22	19.5	15.3	14	14.4
30.	32	26	26	23	23	23	25	22	19.8	15.3	13.8	15.5
31.	27		26	23	23	23	22	23		15.8	14.6	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	36	27	32.8	2,020
November.....	28	24	25.7	1,530
December.....	36	24	26.9	1,650
January.....	26	23	24.7	1,520
February.....	42	23	27.0	1,550
March.....	28	23	25.0	1,540
April.....	29	21	24.9	1,480
May.....	27	19	23.8	1,460
June.....	23	19.5	21.5	1,280
July.....	19	14	16.7	1,030
August.....	16.9	11.8	14.8	910
September.....	15.5	11.2	13.8	821
The year.....	42	11.2	23.1	16,800

CAJON CREEK NEAR KEENBROOK, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 12, T. 2 N., R. 6 W., 300 feet above mouth of Lone Pine Creek and 1 mile north of Keenbrook.

RECORDS AVAILABLE.—December, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 205 second-feet February 4 (gage height, 3.52 feet); minimum, 1.0 second-foot August 10.

1919-1928: Maximum discharge, about 5,000 second-feet December 20, 1921 (gage height, 9.0 feet); minimum, 0.05 second-foot June 25, 1920.

REMARKS.—Records good. Discharge estimated July 14-19 and July 24 to August 5. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	1.9	1.9	2.9	2.5	2.9	2.9	2.2	2.0	1.6	1.3	1.4
2	1.4	1.8	1.9	2.9	2.5	2.7	3.2	2.2	1.9	1.6	1.2	1.4
3	1.4	1.8	1.9	2.9	6	3.2	3.9	2.2	1.9	1.6	1.2	1.4
4	1.4	1.8	1.9	2.9	65	2.9	3.2	2.0	1.9	1.6	1.2	1.4
5	1.6	1.9	2.0	2.9	15	8	3.0	1.9	1.8	1.6	1.2	1.4
6	1.4	2.0	2.2	2.7	7	4.9	2.9	2.0	1.6	1.6	1.2	1.4
7	1.4	2.0	2.2	2.7	4.7	3.8	2.9	2.2	1.6	1.6	1.3	1.4
8	1.4	2.2	2.2	2.7	4.1	3.4	2.7	2.2	1.8	1.4	1.4	1.4
9	1.3	2.2	2.2	2.5	3.6	3.0	2.9	2.5	1.8	1.4	1.3	1.4
10	1.3	2.4	3.2	2.5	3.0	3.0	2.7	2.5	1.6	1.4	1.2	1.4
11	1.2	2.2	3.8	2.5	2.9	3.0	2.7	2.5	1.8	1.4	1.4	1.4
12	1.2	2.0	2.9	2.4	2.9	3.2	2.7	2.5	1.8	1.4	1.6	1.4
13	1.3	2.0	2.7	2.4	2.9	3.2	2.7	2.4	1.4	1.4	1.6	1.4
14	1.6	2.2	2.7	2.4	2.9	3.2	2.5	2.5	1.6	1.4	1.4	1.4
15	1.4	2.0	2.5	2.4	2.9	3.0	2.5	2.7	1.4	1.4	1.6	1.6
16	1.4	1.9	2.5	2.5	2.9	3.2	2.7	2.7	1.4	1.4	1.4	1.4
17	1.4	1.9	2.5	2.4	2.7	3.0	2.7	2.5	1.4	1.4	1.3	1.4
18	1.4	1.9	2.5	2.4	2.7	3.2	2.5	2.5	1.8	1.4	1.3	1.4
19	1.3	1.9	2.5	2.4	2.7	3.2	2.5	2.5	1.8	1.4	1.3	1.4
20	1.3	1.9	2.5	2.2	2.7	3.0	2.7	2.4	1.9	1.4	1.2	1.4
21	1.3	2.0	3.0	2.2	2.9	3.0	2.4	2.5	1.8	1.4	1.2	1.4
22	1.3	1.9	2.9	2.4	3.0	3.2	2.2	2.5	1.8	1.4	1.3	1.4
23	1.3	1.8	2.9	2.4	2.9	3.2	2.2	2.4	1.8	1.4	1.3	1.4
24	1.3	1.8	3.2	2.4	2.9	3.4	2.2	2.0	1.8	1.4	1.3	1.4
25	1.4	1.8	3.0	2.4	3.0	3.4	2.4	2.0	1.6	1.4	1.6	1.4
26	1.6	1.8	4.5	2.4	2.9	3.4	2.4	2.0	1.6	1.4	1.6	1.3
27	1.8	1.8	3.6	2.5	2.9	3.2	2.4	2.0	1.6	1.4	1.4	1.3
28	1.8	1.9	3.2	2.5	2.9	3.2	2.2	2.0	1.6	1.3	1.4	1.3
29	1.8	1.9	3.2	2.5	2.9	3.2	2.2	2.0	1.6	1.3	1.4	1.3
30	1.8	1.9	2.9	2.5	3.2	3.2	2.0	2.0	1.6	1.3	1.4	1.3
31	2.0	---	2.9	2.5	---	3.2	---	2.0	---	1.3	1.4	---
Month							Maximum	Minimum	Mean	Run-off in acre-feet		
October							2.0	1.2	1.45	89.2		
November							2.4	1.8	1.95	116		
December							4.5	1.9	2.71	167		
January							2.9	2.2	2.53	156		
February							65	2.5	5.79	333		
March							8	2.7	3.37	207		
April							3.9	2.0	2.64	157		
May							2.7	1.9	2.27	140		
June							2.0	1.4	1.70	101		
July							1.6	1.3	1.43	87.9		
August							1.6	1.2	1.35	83.0		
September							1.6	1.3	1.39	82.7		
The year							65	1.2	2.37	1,720		

LONE PINE CREEK NEAR KEENBROOK, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 12, T. 2 N., R. 6 W., 50 feet above Atchison, Topeka & Santa Fe Railway bridge and 1 mile north of Keenbrook.

RECORDS AVAILABLE.—December, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 27 second-feet February 4 (gage height, 2.56 feet); minimum, 0.1 second-foot at times during year.

1919-1928: Maximum discharge, about 810 second-feet December 19, 1922 (gage height, 4.1 feet); minimum, 0.1 second-foot at times during 1926, 1927, and 1928.

REMARKS.—Records fair. Discharge interpolated between discharge measurements for entire year except for February 4. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
2	.1	.2	.1	.2	.2	.2	.2	.1	.1	.1	.1	.1
3	.1	.2	.2	.2	.3	.2	.2	.1	.1	.1	.1	.1
4	.1	.2	.2	.2	7.5	.2	.2	.1	.1	.1	.1	.1
5	.1	.2	.2	.2	.5	.3	.2	.1	.1	.1	.1	.1
6	.1	.2	.2	.2	.4	.4	.2	.1	.1	.1	.1	.1
7	.1	.2	.2	.2	.3	.3	.2	.1	.1	.1	.1	.1
8	.1	.2	.2	.2	.2	.3	.2	.1	.1	.1	.1	.1
9	.1	.2	.2	.2	.2	.3	.2	.1	.1	.1	.1	.1
10	.1	.2	.5	.2	.2	.3	.2	.1	.1	.1	.1	.1
11	.1	.2	.4	.2	.2	.3	.2	.1	.1	.1	.1	.1
12	.1	.2	.2	.2	.2	.3	.2	.1	.1	.1	.1	.1
13	.1	.2	.2	.2	.2	.3	.2	.1	.1	.1	.1	.1
14	.1	.2	.2	.2	.2	.3	.2	.1	.1	.1	.1	.1
15	.1	.2	.2	.3	.2	.3	.2	.1	.1	.1	.1	.1
16	.1	.2	.2	.3	.2	.2	.2	.1	.1	.1	.1	.1
17	.1	.2	.2	.3	.2	.2	.2	.1	.1	.1	.1	.1
18	.1	.2	.2	.3	.2	.2	.2	.1	.1	.1	.1	.1
19	.1	.2	.2	.3	.2	.2	.2	.1	.1	.1	.1	.1
20	.1	.2	.2	.3	.2	.2	.2	.1	.1	.1	.1	.1
21	.1	.2	.2	.2	.2	.2	.2	.1	.1	.1	.1	.1
22	.1	.2	.2	.2	.2	.2	.2	.1	.1	.1	.1	.1
23	.1	.2	.2	.2	.2	.2	.2	.1	.1	.1	.2	.1
24	.2	.2	.2	.2	.2	.2	.2	.1	.1	.1	.2	.1
25	.2	.2	.2	.2	.2	.2	.2	.1	.1	.1	.2	.2
26	.2	.2	.2	.2	.2	.2	.2	.1	.1	.1	.2	.2
27	.2	.1	.2	.2	.2	.2	.2	.1	.1	.1	.2	.2
28	.2	.1	.2	.2	.2	.2	.2	.1	.1	.1	.1	.2
29	.2	.1	.2	.2	.2	.2	.1	.1	.1	.1	.1	.2
30	.2	.1	.2	.2	.2	.2	.1	.1	.1	.1	.1	.2
31	.2		.2	.2		.2		.1		.1	.1	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.2	0.1	0.13	8.0
November	.2	.1	.19	11.3
December	.5	.1	.21	12.9
January	.3	.2	.22	13.5
February	7.5	.2	.48	27.6
March	.4	.2	.24	14.8
April	.2	.1	.19	11.3
May	.1	.1	.10	6.1
June	.1	.1	.10	6.0
July	.1	.1	.10	6.1
August	.2	.1	.12	7.4
September	.2	.1	.12	7.1
The year	7.5	.1	.18	132

WEEKS & DALEY CANAL NEAR COLTON, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 21, T. 1 S., R. 4 W., on Colton Avenue, 1 mile below intake and 1 mile east of Colton.

RECORDS AVAILABLE.—September, 1920, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 20 second-feet August 3; no flow at times.

1920-1928: Maximum mean daily discharge, 21 second-feet June 16 and July 6, 1926; no flow at times each year.

REMARKS.—Records good. Intake is on right bank of Warm Creek $1\frac{1}{2}$ miles northeast of Colton. Water is used for irrigation in vicinity of Colton.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12.6	0	2.7	0.3	0.4	4.0	10.6	11.9	17.3	17.0	19.5	17.6
2.....	14.1	0	9.5	.3	.3	2.5	11.4	12.8	16.6	18.6	19.0	17.4
3.....	14.7	0	12.0	.2	.3	2.6	8.5	13.3	16.8	17.9	20	16.3
4.....	14.2	0	11.4	.2	.3	4.2	11.9	11.9	16.0	17.6	17.8	19.0
5.....	14.1	0	4.3	.2	.2	2.9	11.8	13.8	15.5	17.3	16.6	18.4
6.....	13.4	0	9.6	.2	.2	5.0	12.0	14.6	13.3	17.1	.5	19.0
7.....	12.9	0	5.1	.2	.1	2.8	12.2	14.7	15.0	17.1	.3	19.1
8.....	12.4	0	0	.2	.2	0	11.9	15.4	16.2	17.0	10.0	17.9
9.....	11.9	0	7.7	.2	.2	0	11.9	8.5	16.3	15.5	16.2	17.1
10.....	13.0	0	4.5	.2	.2	0	12.0	.2	16.5	16.5	16.8	17.9
11.....	13.4	0	.2	.2	.2	0	11.9	.2	16.8	16.2	17.8	16.8
12.....	13.4	0	.2	.2	0	.1	11.8	2.7	16.8	16.8	18.3	19.0
13.....	13.0	0	.1	.2	0	.1	12.8	8.9	16.8	16.6	17.8	18.7
14.....	12.8	0	.1	.3	0	0	12.4	8.9	17.1	16.8	17.8	17.3
15.....	12.8	0	.1	.3	.1	0	13.3	9.9	17.6	17.1	17.4	17.1
16.....	12.2	0	.1	.3	.5	0	13.8	11.0	17.4	16.6	17.9	17.1
17.....	11.2	0	.1	.3	.4	.1	12.2	11.3	17.6	14.1	16.3	16.6
18.....	11.6	0	0	.3	.3	.1	12.2	13.8	17.9	17.0	15.8	16.5
19.....	12.4	0	0	.2	.2	1.0	12.0	17.1	18.6	16.3	16.2	16.3
20.....	12.2	0	.1	.2	.2	4.6	12.4	12.8	17.4	16.2	16.2	18.1
21.....	13.1	0	.1	.2	.1	8.1	11.8	12.6	17.4	16.0	16.3	17.4
22.....	12.2	0	0	.2	.1	10.6	12.0	17.3	17.3	15.8	17.0	17.8
23.....	11.3	0	.6	.2	.1	12.8	8.9	16.6	16.2	15.2	17.3	19.1
24.....	11.8	0	1.4	.2	.1	11.0	11.4	17.1	17.6	14.2	17.9	18.1
25.....	6.8	3.0	.8	.2	.1	8.6	12.6	17.6	17.9	11.8	17.4	18.3
26.....	7.1	4.8	.5	.1	.1	9.1	12.8	17.3	17.9	15.4	19.0	18.4
27.....	6.9	2.5	.4	.1	2.1	10.0	13.0	16.5	18.3	15.2	18.6	16.3
28.....	0	2.1	.4	.1	4.2	9.8	13.0	16.6	18.3	15.8	17.8	18.4
29.....	0	3.1	.5	.1	4.1	11.3	13.0	16.3	18.3	16.8	18.1	18.8
30.....	0	3.5	.4	.3		5.6	12.0	17.1	17.9	17.3	18.0	19.3
31.....	0		.4	.5		7.5		17.6		17.4	17.8	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	14.7	0	10.5	646
November.....	4.8	0	.63	37.5
December.....	12.0	0	2.36	145
January.....	5	.1	.22	13.5
February.....	4.2	0	.53	30.5
March.....	12.8	0	4.34	267
April.....	13.8	8.5	12.0	714
May.....	17.6	.2	12.8	787
June.....	18.6	13.3	17.0	1,010
July.....	18.6	11.8	16.3	1,000
August.....	20	.3	16.2	996
September.....	19.3	16.3	17.8	1,060
The year.....	20	0	9.25	6,710

SAN JACINTO RIVER NEAR SAN JACINTO, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 13, T. 5 S., R. 1 E., at highway bridge $\frac{8}{10}$ miles southeast of San Jacinto.

RECORDS AVAILABLE.—October, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 42 second-feet December 30 (gage height, 3.00 feet); practically no flow August 5 to September 30.

1920–1928: Maximum discharge, about 45,000 second-feet February 16, 1927; stream usually dry several months each year.

REMARKS.—Records good. Discharge interpolated February 16–20, 22–24, and 26–29. Water is diverted from several tributaries above station. Flow regulated by storage in Lake Hemet on South Fork of San Jacinto River; some water released October 1–31.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	13	27	2.0	18	4.2	6	5.5	0.6	0.5	0.1	0.1
2	8	6	2.0	11	3.8	6	4.5	.6	.5	.1	.1
3	3.5	7	2.0	14	4.2	11	4.5	.6	.5	.1	.1
4	4.4	6	.6	11	5.5	11	6	19	.5	.1	.1
5	4.4	4.5	.6	10	30	11	5	19	.5	.1	0
6	4.4	4.5	.5	10	27	33	1.0	19	.5	.1	0
7	4.4	4.2	.4	10	22	22	1.0	18	.5	.1	0
8	8	2.3	.4	8	21	18	1.0	17	.5	.1	0
9	3.5	2.3	.4	6	21	17	8	25	.5	.1	0
10	3.5	2.0	.5	6	19	11	9	24	.5	.1	0
11	3.5	1.3	.6	6	19	14	6	8	.4	.1	0
12	8.5	.7	.5	6	18	11	7	1.7	.4	.1	0
13	8.5	.7	.6	6	18	12	5.5	1.3	.4	.1	0
14	8	.6	.6	5.5	17	12	8.5	1.0	.4	.1	0
15	8	.6	.7	7	18	9	5.5	1.0	.4	.1	0
16	8	.6	.7	5.5	16	5.5	3.0	1.0	.4	.1	0
17	8	.6	.7	2.3	14	4.5	4.5	1.0	.4	.1	0
18	8	2.0	.5	2.3	12	3.8	17	.7	.4	.1	0
19	8	1.5	.5	2.3	10	3.0	17	.7	.3	.1	0
20	8	1.5	.6	2.3	9	2.3	12	.7	.2	.1	0
21	8	2.3	.6	2.3	8	2.3	19	.7	.2	.1	0
22	8	3.0	.4	4.2	6	2.3	19	.7	.2	.1	0
23	8	3.0	.4	3.8	5	2.3	19	.6	.2	.1	0
24	8	3.0	.4	4.2	4	5.5	3.0	.6	.2	.1	0
25	8	2.3	.4	3.8	3.0	21	1.3	.6	.2	.1	0
26	9	2.0	.4	3.8	4.0	15	.7	.6	.2	.1	0
27	10	2.3	.4	3.8	5	11	.7	.6	.2	.1	0
28	19	2.0	.7	4.2	6	11	.7	.6	.2	.1	0
29	16	2.0	1.5	4.5	6	9	.6	.5	.1	.1	0
30	13	2.3	42	5	-----	7	.6	.5	.1	.1	0
31	14	-----	25	4.5	-----	7	-----	.5	-----	.1	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	19	3.5	8.21	505
November	27	.6	3.34	199
December	42	.4	2.83	174
January	18	2.3	6.24	384
February	30	3.0	12.3	708
March	33	2.3	10.2	627
April	19	.6	6.54	389
May	25	.5	5.37	330
June	.5	.1	.35	20.8
July	.1	.1	.10	6.1
August	.1	0	.013	.8
The year	42	0	4.60	3,340

NOTE.—No flow in September.

SAN JACINTO RIVER NEAR ELSINORE, CALIF.

LOCATION.—Water-stage recorder near east line sec. 9, T. 6 S., R. 4 W., $2\frac{1}{4}$ miles above Elsinore Lake (low-water stage), and 2 miles southeast of Elsinore.

DRAINAGE AREA.—717 square miles.

RECORDS AVAILABLE.—January, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, about 2.0 second-feet February 4 (gage height, 2.56 feet); stream dry several months.

1916-1928: Maximum discharge, about 16,000 second-feet February 17, 1927 (gage height, 11.8 feet); stream dry for several months each year.

REMARKS.—Records fair. Discharge estimated for entire year. Storage and diversions above station for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1.....	0	0.2	0	0.1	0.2	0.2	0.1
2.....	0	.1	0	.1	.2	.2	.1
3.....	0	.1	0	.1	.2	.2	.1
4.....	0	.1	0	.1	.4	.3	.1
5.....	0	.1	0	.1	.3	.3	.1
6.....	0	.1	0	.1	.2	.3	.1
7.....	0	.1	0	.1	.2	.2	.1
8.....	0	0	0	.1	.2	.2	.1
9.....	0	0	0	.1	.2	.2	.1
10.....	0	0	0	.1	.2	.2	0
11.....	0	0	0	.1	.2	.2	0
12.....	0	0	0	.1	.2	.2	0
13.....	0	0	0	.1	.2	.2	0
14.....	0	0	0	.1	.2	.2	0
15.....	0	0	0	.2	.2	.2	0
16.....	0	0	0	.2	.2	.2	0
17.....	0	0	0	.2	.2	.2	0
18.....	0	0	0	.2	.2	.2	0
19.....	0	0	0	.2	.2	.2	0
20.....	0	0	0	.2	.2	.2	0
21.....	0	0	0	.2	.2	.2	0
22.....	0	0	0	.2	.2	.2	0
23.....	0	0	0	.2	.2	.2	0
24.....	0	0	0	.2	.2	.2	0
25.....	0	0	0	.2	.2	.2	0
26.....	0	0	0	.2	.2	.2	0
27.....	0	0	0	.2	.2	.2	0
28.....	0	0	0	.2	.2	.2	0
29.....	.2	0	.1	.1	.2	.2	0
30.....	.4	0	.1	.2	-----	.2	0
31.....	.4	-----	.1	.2	-----	.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.4	0	0.03	1.8
November.....	.2	0	.03	1.8
December.....	.1	0	.01	.6
January.....	.2	.1	.15	9.2
February.....	.4	.2	.21	12.1
March.....	.3	.1	.21	12.9
April.....	.1	0	.03	1.8
The year.....	.4	0	.06	40.2

NOTE.—No flow in months for which no record is given.

ELSINORE LAKE AT ELSINORE, CALIF.

LOCATION.—Staff gage on northeast shore near outlet at F'sinore, Riverside County. Several gages at different datums used during year but all readings have been reduced to same datum. Zero of gage is 1,200 feet above mean sea level.

RECORDS AVAILABLE.—December, 1915, to September, 1928.

REMARKS.—Elsinore Lake overflows only during and after years of heavy rainfall. Temescal Creek is the high-water outlet. The surface of the lake has been below the outlet since July, 1917.

Daily gage height, in feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.		55.6						54.8				52.4
2.				55.5					54.3			
3.			55.4			55.4	55.2					
4.	55.9				55.6						53.0	52.3
5.		55.6						54.7	54.2			
6.			55.4		55.6	55.4						
7.				55.5	55.6		55.1				52.9	
8.	55.8	55.6						54.6				52.2
9.									54.2			
10.			55.4	55.5		55.4	55.0					
11.	55.8				55.5						52.9	52.2
12.		55.6		55.5				54.6	54.1	53.5		
13.			55.4			55.4						
14.				55.4	55.5		55.0			53.5	52.8	
15.	55.8	55.6						54.6				52.1
16.									54.0			
17.	55.7		55.4	55.4		55.4	55.0			53.4		
18.	55.7				55.4						52.7	52.0
19.		55.6		55.5				54.5	54.0			
20.			55.4			55.4						
21.				55.4	55.4		55.0			53.3	52.6	
22.	55.6	55.6						54.4				51.9
23.												
24.			55.4	55.4	55.4	55.3	54.8			53.3		
25.	55.6			55.4	55.4						52.6	51.9
26.		55.6						54.4				
27.			55.4			55.3						
28.				55.4	55.4		54.8			53.2	52.5	
29.	55.6	55.5						54.4	53.8			51.8
30.												
31.			55.5	55.4		55.2				53.1		

SAN ANTONIO CREEK NEAR CLAREMONT, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 36, T. 2 N., R. 8 W., half a mile above Southern California Edison Co.'s Sierra power plant, and 8 miles northeast of Claremont.

DRAINAGE AREA.—16.9 square miles.

RECORDS AVAILABLE.—March, 1901, to September, 1928.

EXTREMES.—Maximum discharge during year (estimated), 10 second-feet February 4; minimum, about 0.2 second-foot several days July to September.

1917-1928: Maximum discharge, 1,020 second-feet December 19, 1921 (gage height, 8.20 feet); minimum (estimated), 0.1 second-foot in August and September, 1919, and September and October, 1925.

REMARKS.—Records fair. Daily discharge estimated or interpolated between discharge measurements. The Southern California Edison Co. diverts water for power development above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.3	1.6	1.5	1.7	1.4	1.8	1.4	0.6	0.4	0.3	0.3	0.2
2.....	1.3	1.6	1.5	1.7	1.4	1.8	1.4	.6	.4	.3	.3	.2
3.....	1.3	1.6	1.5	1.7	1.8	1.9	1.4	.6	.4	.4	.3	.2
4.....	1.3	1.5	1.5	1.7	5	2.0	1.5	.6	.4	.4	.3	.2
5.....	1.3	1.5	1.6	1.7	4.4	2.1	1.5	.6	.3	.4	.3	.2
6.....	1.3	1.5	1.6	1.6	3.8	2.1	1.5	.6	.3	.4	.3	.2
7.....	1.3	1.5	1.6	1.6	3.3	2.2	1.5	.6	.3	.4	.2	.2
8.....	1.3	1.4	1.6	1.6	2.6	2.1	1.5	.7	.3	.4	.2	.2
9.....	1.3	1.4	1.7	1.6	1.8	2.1	1.5	.7	.3	.4	.2	.2
10.....	1.2	1.4	1.7	1.6	2.2	2.0	1.5	.7	.3	.3	.2	.2
11.....	1.2	1.4	1.7	1.6	2.0	2.0	1.4	.7	.3	.3	.2	.2
12.....	1.2	1.4	1.7	1.6	1.9	1.9	1.4	.7	.3	.3	.2	.2
13.....	1.2	1.4	1.8	1.6	1.8	1.9	1.4	.8	.3	.3	.2	.2
14.....	1.2	1.4	1.8	1.6	1.8	1.8	1.4	.8	.3	.3	.2	.2
15.....	1.2	1.4	1.8	1.5	1.8	1.8	1.3	.8	.3	.3	.2	.2
16.....	1.1	1.4	1.8	1.5	1.8	1.8	1.3	.8	.4	.3	.2	.2
17.....	1.1	1.4	1.8	1.5	1.8	1.7	1.3	.8	.4	.3	.2	.2
18.....	1.1	1.4	1.8	1.5	1.8	1.7	1.3	.8	.4	.3	.2	.2
19.....	1.1	1.4	1.8	1.5	1.8	1.6	1.3	.8	.4	.3	.2	.2
20.....	1.1	1.4	1.8	1.4	1.8	1.6	1.2	.7	.4	.3	.2	.2
21.....	1.1	1.4	1.8	1.4	1.8	1.6	1.2	.7	.4	.3	.2	.2
22.....	1.2	1.4	1.8	1.4	1.8	1.6	1.1	.7	.4	.3	.2	.2
23.....	1.2	1.4	1.8	1.4	1.8	1.6	1.0	.6	.4	.3	.2	.2
24.....	1.2	1.4	1.8	1.4	1.8	1.5	.9	.6	.4	.2	.2	.2
25.....	1.3	1.4	1.8	1.4	1.8	1.5	.8	.6	.3	.2	.2	.2
26.....	1.3	1.4	1.8	1.4	1.8	1.5	.7	.6	.3	.2	.2	.2
27.....	1.3	1.4	1.8	1.4	1.8	1.5	.7	.5	.3	.2	.2	.2
28.....	1.3	1.4	1.7	1.4	1.8	1.4	.7	.5	.3	.2	.2	.2
29.....	1.4	1.4	1.7	1.4	1.8	1.4	.7	.5	.3	.2	.2	.2
30.....	1.4	1.5	1.7	1.4	-----	1.4	.7	.5	.3	.2	.2	.2
31.....	2.4	-----	1.7	1.4	-----	1.4	-----	.4	-----	.2	.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2.4	1.1	1.27	78.1
November.....	1.6	1.4	1.44	85.7
December.....	1.8	1.5	1.71	105
January.....	1.7	1.4	1.52	93.5
February.....	5	1.4	2.14	123
March.....	2.2	1.4	1.75	108
April.....	1.5	.7	1.22	72.6
May.....	.8	.4	.65	40.0
June.....	.4	.3	.34	20.2
July.....	.4	.2	.30	18.4
August.....	.3	.2	.22	13.5
September.....	.2	.2	.20	11.9
The year.....	5	.2	1.06	770

Daily and monthly discharge, in second-feet, of San Antonio Creek and Southern California Edison Co.'s canal near Claremont, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	13.1	12.2	11.5	11.9	11.2	13.8	16.2	13.6	11.0	9.6	8.0	6.8
2-----	13.2	12.2	11.7	11.7	11.2	13.8	16.3	13.6	11.2	9.4	7.8	6.8
3-----	12.9	12.2	11.4	11.5	12.9	14.5	17.0	13.5	11.2	9.4	8.0	6.9
4-----	12.9	12.0	11.5	11.7	23	14.4	16.7	13.4	11.0	9.6	7.9	7.1
5-----	12.7	12.0	11.6	11.7	18.8	15.6	16.9	12.6	10.8	9.4	7.9	7.0
6-----	12.3	12.3	11.8	11.2	17.4	15.3	16.7	12.7	10.7	9.4	7.7	6.8
7-----	12.3	11.9	11.5	11.3	16.7	15.1	16.7	12.8	11.1	9.5	7.6	6.7
8-----	12.6	12.0	11.4	11.3	15.2	14.7	16.5	13.5	10.8	9.3	7.5	6.8
9-----	12.5	11.9	11.6	11.4	14.4	14.8	16.4	14.2	11.0	9.2	7.4	7.0
10-----	12.3	12.7	12.8	11.5	14.0	15.0	16.1	13.7	11.1	9.0	7.5	7.0
11-----	12.0	12.2	12.3	11.4	14.2	14.8	16.0	13.8	11.1	8.9	7.4	7.0
12-----	11.8	11.8	12.0	11.4	14.3	15.0	15.8	13.5	11.3	8.7	7.3	7.0
13-----	12.2	11.7	12.1	11.5	14.8	15.2	15.3	13.5	11.1	8.6	7.4	6.8
14-----	12.2	11.6	12.0	11.6	14.8	15.4	15.4	13.4	10.1	8.6	7.4	6.8
15-----	12.2	11.8	12.0	11.3	14.6	15.1	15.4	13.5	10.1	8.7	7.4	6.6
16-----	11.4	11.6	12.0	11.5	15.0	15.1	15.3	13.5	10.1	8.6	7.4	6.8
17-----	11.3	11.6	11.8	11.4	14.6	15.1	15.1	13.6	10.1	8.6	7.2	6.4
18-----	11.3	11.6	11.7	11.7	14.4	15.1	15.0	13.4	10.3	8.6	7.0	6.6
19-----	11.4	11.6	11.8	11.2	14.0	15.2	14.5	13.0	10.2	8.5	7.1	6.4
20-----	11.3	11.8	11.8	11.4	13.9	15.4	14.6	12.9	10.2	8.3	7.0	6.4
21-----	11.3	11.6	11.8	11.3	13.9	15.4	14.6	12.6	10.2	8.7	7.2	6.4
22-----	11.4	11.8	11.5	11.5	14.0	15.3	14.4	12.5	10.1	8.3	7.4	6.4
23-----	11.3	11.5	11.8	11.3	13.7	15.4	14.2	12.4	10.1	8.3	7.1	6.2
24-----	11.4	11.6	11.6	11.2	13.8	15.6	14.3	12.4	10.2	8.2	7.2	6.8
25-----	11.8	11.6	12.2	11.2	13.6	15.5	14.2	12.0	9.8	7.9	7.0	6.4
26-----	12.4	11.5	13.2	11.2	13.7	15.9	13.8	11.6	9.9	7.9	7.1	6.5
27-----	12.8	11.9	12.2	11.4	13.7	15.8	13.9	11.9	9.9	7.8	7.0	6.6
28-----	12.0	11.8	11.9	11.4	13.8	15.8	13.7	11.5	9.9	8.0	7.1	6.4
29-----	11.8	11.7	11.9	11.4	13.9	16.0	13.7	11.7	9.8	7.6	6.8	6.4
30-----	11.6	11.4	11.7	11.4	-----	15.9	13.7	11.4	9.6	7.6	6.8	6.5
31-----	15.3	-----	11.8	11.1	-----	16.0	-----	11.3	-----	7.8	7.0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	15.3	11.3	12.2	750
November-----	12.7	11.4	11.8	702
December-----	13.2	11.4	11.9	732
January-----	11.9	11.1	11.4	701
February-----	23	11.2	14.6	840
March-----	16.0	13.8	15.2	935
April-----	17.0	13.7	15.3	910
May-----	14.2	11.3	12.9	793
June-----	11.3	9.6	10.5	625
July-----	9.6	7.6	8.65	532
August-----	8.0	6.8	7.34	451
September-----	7.1	6.2	6.68	397
The year-----	23	6.2	11.5	8,370

SOUTHERN CALIFORNIA EDISON CO.'S CANAL NEAR CLAREMONT, CALIF.

LOCATION.—Hook gage in NW. $\frac{1}{4}$ sec. 1, T. 1 N., R. 8 W., in tailrace of Sierra power house, $1\frac{1}{2}$ miles below intake and 8 miles northeast of Claremont.

RECORDS AVAILABLE.—January, 1917, to September, 1928.

REMARKS.—Canal diverts water from San Antonio Creek in SE. $\frac{1}{4}$ sec. 25, T. 2 N., R. 8 W., 1 mile above gaging station on San Antonio Creek near Claremont. The water is used for power development at Sierra power house and then returned to creek. Discharge record furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.8	10.6	10.0	10.2	9.8	12.0	14.8	13.0	10.6	9.3	7.7	6.6
2	11.9	10.6	10.2	10.0	9.8	12.0	14.9	13.0	10.8	9.1	7.5	6.6
3	11.6	10.6	9.9	9.8	11.1	12.6	15.6	12.9	10.8	9.0	7.7	6.7
4	11.6	10.5	10.0	10.0	17.9	12.4	15.2	12.8	10.6	9.2	7.6	6.9
5	11.4	10.5	10.0	10.0	14.4	13.5	15.4	12.0	10.5	9.0	7.6	6.8
6	11.0	10.8	10.2	9.6	13.6	13.2	15.2	12.1	10.4	9.0	7.4	6.6
7	11.0	10.4	9.9	9.7	13.4	12.9	15.2	12.2	10.8	9.1	7.4	6.5
8	11.3	10.6	9.8	9.7	12.6	12.6	15.0	12.8	10.5	8.9	7.3	6.6
9	11.2	10.5	9.9	9.8	12.6	12.7	14.9	13.5	10.7	8.8	7.2	6.8
10	11.1	11.3	11.1	9.9	11.8	13.0	14.6	13.0	10.8	8.7	7.3	6.8
11	10.8	10.8	10.6	9.8	12.2	12.8	14.6	13.1	10.8	8.6	7.2	6.8
12	10.6	10.4	10.3	9.8	12.4	13.1	14.4	12.8	11.0	8.4	7.1	6.8
13	11.0	10.3	10.3	9.9	13.0	13.3	13.9	12.7	10.8	8.3	7.2	6.6
14	11.0	10.2	10.2	10.0	13.0	13.6	14.0	12.6	9.8	8.3	7.2	6.6
15	11.0	10.4	10.2	9.8	12.8	13.3	14.1	12.7	9.8	8.4	7.2	6.4
16	10.3	10.2	10.2	10.0	13.2	13.3	14.0	12.7	9.7	8.3	7.2	6.6
17	10.2	10.2	10.0	9.9	12.8	13.4	13.8	12.8	9.7	8.3	7.0	6.2
18	10.2	10.2	9.9	10.2	12.6	13.4	13.7	12.6	9.9	8.3	6.8	6.4
19	10.3	10.2	10.0	9.7	12.2	13.6	13.2	12.2	9.8	8.2	6.9	6.2
20	10.2	10.4	10.0	10.0	12.1	13.8	13.4	12.2	9.8	8.0	6.8	6.2
21	10.2	10.2	10.0	9.9	12.1	13.8	13.4	11.9	9.8	8.4	7.0	6.2
22	10.2	10.4	9.7	10.1	12.2	13.7	13.3	11.8	9.7	8.0	7.2	6.2
23	10.1	10.1	10.0	9.9	11.9	13.8	13.2	11.8	9.7	8.0	6.9	6.0
24	10.2	10.2	9.8	9.8	12.0	14.1	13.4	11.8	9.8	8.0	7.0	6.6
25	10.5	10.2	10.4	9.8	11.8	14.0	13.4	11.4	9.5	7.7	6.8	6.2
26	11.1	10.1	11.4	9.8	11.9	14.4	13.1	11.0	9.6	7.7	6.9	6.3
27	11.5	10.5	10.4	10.0	11.9	14.3	13.2	11.4	9.6	7.6	6.8	6.4
28	10.7	10.4	10.2	10.0	12.0	14.4	13.0	11.0	9.6	7.8	6.9	6.2
29	10.4	10.3	10.2	10.0	12.1	14.6	13.0	11.2	9.5	7.4	6.6	6.2
30	10.2	9.9	10.0	10.0	-----	14.5	13.0	10.9	9.3	7.4	6.6	6.3
31	12.9	-----	10.1	9.7	-----	14.6	-----	10.9	-----	7.6	6.8	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet		
October	12.9			10.1			10.9			670		
November	11.3			9.9			10.4			619		
December	11.4			9.7			10.2			627		
January	10.2			9.6			9.90			609		
February	17.9			9.8			12.5			719		
March	14.6			12.0			13.4			824		
April	15.6			13.0			14.1			839		
May	13.5			10.9			12.2			750		
June	11.0			9.3			10.1			601		
July	9.3			7.4			8.35			513		
August	7.7			6.6			7.12			438		
September	6.9			6.0			6.48			386		
The year	17.9			6.0			10.5			7,600		

SANTIAGO CREEK NEAR VILLA PARK, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 13, T. 4 S., R. 9 W., at mouth of canyon, $1\frac{1}{4}$ miles northeast of Villa Park, and five-eighths of a mile below diversion dam of Serrano and Carpenter Water Companies.

RECORDS AVAILABLE.—June, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 355 second-feet February 4 (gage height, 1.85 feet); no flow most of year.

1920-1928: Maximum discharge, about 11,000 second-feet February 16, 1927 (gage height, 8.4 feet); no flow several months each year.

REMARKS.—Records fair. Discharge estimated for entire year except October 31 to November 3, December 10, February 3-6, and March 4-7. Serrano & Carpenter Canal diverts water at diversion dam above gage. The Irvine Co. also diverts water above gage at times.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1	0	46	0.1	0.6	0.1	0.2	0.1
2	0	7.5	.1	.7	.1	.2	.1
3	0	7	.1	.7	.8	3.3	.1
4	0	6.5	.1	1.0	124	5.5	.1
5	0	5	.1	1.2	52	7.5	.1
6	0	4.0	.1	1.1	5	23	.1
7	0	2.0	.1	.4	2.4	5.5	.1
8	0	1.0	.1	.2	.2	3.0	.1
9	0	1.0	.1	.2	.2	1.0	.1
10	0	1.0	6.5	.2	.3	1.0	.1
11	0	1.0	3.4	.2	.3	1.0	.1
12	0	.7	3.0	.2	.2	.7	.1
13	0	.2	3.0	.2	.2	.4	.1
14	0	.2	3.0	.2	.6	.4	.1
15	0	.4	3.0	1.1	1.6	.4	.1
16	0	1.2	1.6	1.2	.4	.6	.1
17	0	1.7	.7	.3	.2	.5	.1
18	0	1.7	1.1	.3	.2	.4	.1
19	0	1.6	1.3	.3	.3	.3	.1
20	0	1.5	1.5	.3	.3	.1	.1
21	0	1.4	1.9	.3	.4	.1	0
22	0	1.4	1.9	1.6	.4	.1	0
23	0	1.4	1.8	1.4	.3	.1	0
24	0	1.4	1.8	.3	.4	.1	0
25	0	.6	2.6	.2	.2	.1	0
26	0	.4	3.3	.2	.2	.1	0
27	0	.2	1.6	.2	.2	.1	0
28	0	.2	.6	.1	.2	.1	0
29	0	.1	1.7	.1	.2	.1	0
30	0	.1	3.3	.1	-----	.1	0
31	22	-----	2.3	.1	-----	.1	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
October	22	0	0.71	43.7			
November	46	.1	3.28	195			
December	6.5	.1	1.67	103			
January	1.6	.1	.49	30.1			
February	124	.1	6.62	381			
March	23	.1	1.81	111			
April	.1	0	.07	4.2			
The year	124	0	1.20	868			

NOTE.—No flow in months for which no discharge is given.

Daily and monthly discharge, in second-feet, of Santiago Creek and Serrano & Carpenter Canal near Villa Park, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.1	46	2.4	3.4	2.5	3.1	4.8	5.4	4.7	5.7	5.4	3.3
2	4.9	9	2.4	3.4	2.4	3.3	4.8	5.2	4.7	5.9	5.2	3.2
3	4.7	9	2.2	3.4	2.4	4.8	4.7	5.1	4.7	6.0	5.2	3.1
4	4.7	8.5	2.2	3.4	124	5.5	4.5	4.9	4.9	6.2	5.0	3.1
5	4.6	6.5	2.5	3.4	52	7.5	4.4	5.1	4.7	6.1	4.8	2.9
6	4.4	5.4	2.7	3.4	5	23	4.4	4.9	4.7	5.9	4.7	2.9
7	4.4	5.2	2.8	3.3	3.5	5.5	4.4	4.7	4.9	5.9	4.6	2.8
8	4.4	5	2.8	3.4	3.4	5.5	4.2	4.8	4.9	5.9	4.4	2.9
9	4.4	5	2.8	3.5	3.1	4.8	4.1	4.8	4.7	5.9	4.3	2.9
10	4.4	5.0	7	3.5	3.0	4.8	4.1	4.9	4.7	5.9	4.2	2.8
11	4.3	4.8	3.4	3.3	3.0	4.8	4.1	5.0	4.7	6.1	4.2	2.8
12	4.3	4.5	3	3.1	3.1	5.0	4.1	5.0	4.6	6.0	4.1	2.7
13	4.4	4.0	3	3	3.1	5.1	4.2	5.2	4.4	5.8	4.0	2.7
14	4.6	3.9	3	3	3.1	5.1	6.0	5.4	4.4	5.7	4.0	2.7
15	4.6	3.8	3	3	3.4	5.0	7.7	5.1	4.3	5.5	3.8	2.7
16	4.7	3.8	3	3	3.5	4.9	7.5	5.1	4.4	5.4	3.7	2.7
17	4.4	3.6	2.9	3.1	3.4	4.8	6.7	4.9	4.4	5.4	3.7	2.7
18	4.3	3.6	2.9	3	3.4	4.8	6.6	4.7	4.5	5.5	3.7	2.6
19	4.0	3.5	2.9	3	3.2	4.9	6.6	4.6	4.5	5.5	3.7	2.6
20	3.8	3.4	3.1	3	3.2	4.7	6.2	4.8	4.6	5.7	3.6	2.6
21	3.7	3.3	3.5	3.1	3.2	5.0	5.7	5.1	4.6	5.7	3.3	2.6
22	3.7	3.2	3.4	3	3.2	5.2	5.5	4.9	4.9	5.7	3.3	2.7
23	3.7	3.0	3.3	3	3.2	5.2	5.5	4.6	5.2	5.7	3.4	2.7
24	3.7	3.0	3.3	2.9	3.1	5.2	6.1	4.7	5.4	5.5	3.4	2.6
25	3.7	2.9	3.3	2.8	3.1	5.2	6.1	4.7	5.4	5.7	3.4	2.6
26	3.6	2.9	3.3	2.8	3.1	5.2	6.1	4.7	5.2	5.7	3.3	2.6
27	4.0	2.7	3	2.8	3.1	5.2	6.1	4.9	5.3	5.7	3.3	2.6
28	4.0	2.6	2.9	2.7	3.1	5.2	5.9	4.9	5.4	5.7	3.4	2.6
29	3.8	2.5	3	2.6	3.1	5.0	5.7	4.9	5.5	5.6	3.4	2.5
30	3.8	2.5	3.3	2.6	---	4.8	5.4	4.9	5.7	5.5	3.4	2.5
31	23	---	3.3	2.5	---	5.2	---	4.7	---	5.4	3.3	---
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October						23	3.6	4.84	298			
November						46	2.5	5.74	342			
December						7	2.2	3.08	189			
January						3.5	2.5	3.08	189			
February						124	2.4	9.03	519			
March						23	3.1	5.59	344			
April						7.7	4.1	5.41	322			
May						5.4	4.6	4.92	308			
June						5.7	4.3	4.83	287			
July						6.2	5.4	5.74	353			
August						5.4	3.3	3.97	244			
September						3.3	2.5	2.76	164			
The year						124	2.2	4.90	3,550			

SERRANO & CARPENTER CANAL NEAR VILLA PARK, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 13, T. 4 S., R. 9 W., at division box, half a mile above mouth of Santiago Creek Canyon and $2\frac{1}{4}$ miles north-east of Villa Park.

RECORDS AVAILABLE.—August, 1920, to September, 1928.

EXTREMES.—1920-1928: Maximum mean daily discharge, 16.8 second-feet May 20, 1922; no water is diverted at times.

REMARKS.—Records good. Canal diverts from Santiago Creek at Point of Rocks. At the division box the flow is divided between the John T. Carpenter and Serrano Water Companies and is carried through concrete pipe lines to orchard lands on the north and south sides of Santiago Creek. During periods of shortage both companies augment their supply by pumping.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5.1	0	2.3	2.8	2.4	2.9	4.7	5.4	4.7	5.7	5.4	3.3
2.....	4.9	1.6	2.3	2.7	2.3	3.1	4.7	5.2	4.7	5.9	5.2	3.2
3.....	4.7	2.2	2.1	2.7	1.6	1.5	4.6	5.1	4.7	6.0	5.2	3.1
4.....	4.7	1.8	2.1	2.4	0	0	4.4	4.9	4.9	6.2	5.0	3.1
5.....	4.6	1.6	2.4	2.2	0	0	4.3	5.1	4.7	6.1	4.8	2.9
6.....	4.4	1.4	2.6	2.3	0	0	4.3	4.9	4.7	5.9	4.7	2.9
7.....	4.4	3.2	2.7	2.9	1.1	0	4.3	4.7	4.9	5.9	4.6	2.8
8.....	4.4	4.0	2.7	3.2	3.2	2.5	4.1	4.8	4.9	5.9	4.4	2.9
9.....	4.4	4.0	2.7	3.3	2.9	3.8	4.0	4.8	4.7	5.9	4.3	2.9
10.....	4.4	4.0	.6	3.3	2.7	3.8	4.0	4.9	4.7	5.9	4.2	2.8
11.....	4.3	3.8	0	3.1	2.7	3.8	4.0	5.0	4.7	6.1	4.2	2.8
12.....	4.3	3.8	0	2.9	2.9	4.3	4.0	5.0	4.6	6.0	4.1	2.7
13.....	4.4	3.8	0	2.8	2.9	4.7	4.1	5.2	4.4	5.8	4.0	2.7
14.....	4.6	3.7	0	2.8	2.5	4.7	5.9	5.4	4.4	5.7	4.0	2.7
15.....	4.6	3.4	0	1.9	1.8	4.6	7.6	5.1	4.3	5.5	3.8	2.7
16.....	4.7	2.6	1.4	1.8	3.1	4.3	7.4	5.1	4.4	5.4	3.7	2.7
17.....	4.4	1.9	2.2	2.8	3.2	4.3	6.6	4.9	4.4	5.4	3.7	2.7
18.....	4.3	1.9	1.8	2.7	3.2	4.4	6.5	4.7	4.5	5.5	3.7	2.6
19.....	4.0	1.9	1.6	2.7	2.9	4.6	6.5	4.6	4.5	5.5	3.7	2.6
20.....	3.8	1.9	1.6	2.7	2.9	4.6	6.1	4.8	4.6	5.7	3.6	2.6
21.....	3.7	1.9	1.6	2.8	2.8	4.9	5.7	5.1	4.6	5.7	3.3	2.6
22.....	3.7	1.8	1.5	1.4	2.8	5.1	5.5	4.9	4.9	5.7	3.3	2.7
23.....	3.7	1.6	1.5	1.6	2.9	5.1	5.5	4.6	5.2	5.7	3.4	2.7
24.....	3.7	1.6	1.5	2.6	2.7	5.1	6.1	4.7	5.4	5.5	3.4	2.6
25.....	3.7	2.3	.7	2.6	2.9	5.1	6.1	4.7	5.4	5.7	3.4	2.6
26.....	3.6	2.5	0	2.6	2.9	5.1	6.1	4.7	5.2	5.7	3.3	2.6
27.....	4.0	2.5	1.4	2.6	2.9	5.1	6.1	4.9	5.3	5.7	3.3	2.6
28.....	4.0	2.4	2.3	2.6	2.9	5.1	5.9	4.9	5.4	5.7	3.4	2.6
29.....	3.8	2.4	1.3	2.5	2.9	4.9	5.7	4.9	5.5	5.6	3.4	2.5
30.....	3.8	2.4	0	2.5	---	4.7	5.4	4.9	5.7	5.5	3.4	2.5
31.....	1.3	---	1.0	2.4	---	5.1	---	4.7	---	5.4	3.3	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5.1	1.3	4.14	255
November.....	4.0	0	2.46	146
December.....	2.7	0	1.42	87.3
January.....	3.3	1.4	2.59	159
February.....	3.2	0	2.41	139
March.....	5.1	0	3.78	232
April.....	7.6	4.0	5.34	318
May.....	5.4	4.0	4.92	303
June.....	5.7	4.2	4.83	287
July.....	6.2	5.4	5.74	353
August.....	5.4	3.2	3.97	244
September.....	3.3	2.5	2.76	164
The year.....	7.6	0	3.70	2,690

• Interpolated.

SAN GABRIEL RIVER BASIN

SAN GABRIEL RIVER NEAR AZUSA, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 23, T. 1 N., P. 10 W., half a mile above Southern California Edison Co.'s power house and 2 miles north of Azusa.

DRAINAGE AREA.—214 square miles.

RECORDS AVAILABLE.—1894, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,810 second-feet February 4 (gage height, 5.08 feet); no flow October 1 to February 3 and March 20 to September 30.

1894–1928: Maximum discharge, 40,000 second-feet January 18, 1916 (gage height, 12.0 feet); stream dry for several months each year.

REMARKS.—Records good. The power canal of the Southern California Edison Co. diverts about 5 miles above station.

Daily and monthly discharge, in second-feet, 1927–28

Day	Feb.	Mar.	Day	Feb.	Mar.	Day	Feb.	Mar.
1.....	0	1	11.....	21	1	21.....	7	0
2.....	0	1	12.....	16	.9	22.....	3	0
3.....	0	2	13.....	15	.9	23.....	3	0
4.....	672	10	14.....	14	.8	24.....	3	0
5.....	248	6	15.....	12	.8	25.....	3	0
6.....	118	39	16.....	11	.6	26.....	3	0
7.....	72	10	17.....	11	.5	27.....	3	0
8.....	56	3	18.....	11	.4	28.....	3	0
9.....	43	2	19.....	9	.2	29.....	2	0
10.....	31	1	20.....	10	.0	30.....		0
						31.....		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February.....	672	0	48.4	2,780
March.....	39	0	2.62	161
The year.....	672	0	4.06	2,940

NOTE.—No flow October to January and April to September.

Daily and monthly discharge, in second-feet, of San Gabriel River and Southern California Edison Co.'s canal near Azusa, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	31	74	41	63	45	68	61	44	29	19.0	8.8	9.3
2.....	30	57	40	62	43	68	65	46	20	18.8	9.5	8.8
3.....	30	49	40	62	55	80	76	45	20	17.8	9.9	8.8
4.....	30	46	37	60	754	88	71	43	27	16.8	10.1	8.8
5.....	31	44	38	60	330	86	66	40	23	16.3	12.0	9.2
6.....	31	48	39	59	200	120	63	40	25	16.3	10.8	9.3
7.....	30	47	41	58	154	91	61	41	25	15.9	10.3	9.5
8.....	30	47	41	57	138	84	59	47	25	16.1	9.9	9.1
9.....	29	45	41	57	125	83	58	61	25	16.1	10.3	9.3
10.....	28	63	78	54	112	82	57	60	20	16.0	9.7	10.3
11.....	29	56	80	53	103	80	59	55	26	15.0	9.9	11.0
12.....	28	50	71	51	98	80	59	51	26	15.0	8.8	11.0
13.....	27	50	62	51	96	81	58	48	20	14.2	10.1	11.0
14.....	27	52	56	53	92	82	58	47	20	13.7	10.3	10.0
15.....	28	50	58	58	86	79	57	48	24	13.5	11.8	10.0
16.....	27	47	57	55	84	76	55	48	22	13.7	11.6	10.4
17.....	27	45	55	53	80	74	55	48	22	13.7	11.8	9.5
18.....	28	44	52	53	79	73	56	44	23	13.0	11.6	9.4
19.....	27	44	54	52	74	70	55	43	25	13.2	11.4	8.2
20.....	27	43	51	51	74	69	55	40	26	13.4	11.0	7.7
21.....	27	43	57	50	72	68	54	39	25	14.2	10.3	6.4
22.....	27	45	58	50	68	68	52	38	23	14.2	10.8	7.7
23.....	27	43	55	48	68	70	52	37	21	13.5	10.6	8.1
24.....	28	44	53	47	69	74	51	33	21	12.8	9.7	8.6
25.....	29	43	59	46	69	77	51	33	20	12.2	9.9	8.6
26.....	42	43	80	47	67	77	49	32	13.2	11.6	10.4	9.7
27.....	52	42	80	47	73	79	48	32	13.2	11.4	10.6	10.1
28.....	48	42	69	46	70	79	47	31	13.4	11.4	10.8	9.7
29.....	43	42	66	44	69	70	46	31	13.2	10.6	10.0	9.3
30.....	40	42	65	46	-----	68	45	30	13.2	11.0	9.7	9.7
31.....	62	-----	64	46	-----	66	-----	30	-----	9.7	9.8	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	62	27	32.3	1,990
November.....	74	42	47.7	2,840
December.....	80	37	56.1	3,450
January.....	63	44	52.9	3,250
February.....	754	43	119	6,840
March.....	120	66	77.7	4,780
April.....	76	45	56.6	3,370
May.....	61	30	42.1	2,590
June.....	29	18.2	23.8	1,420
July.....	19.0	9.7	14.2	873
August.....	12.0	8.8	10.4	640
September.....	11.0	6.4	9.28	552
The year.....	754	6.4	44.9	32,600

SOUTHERN CALIFORNIA EDISON CO.'S CANAL NEAR AZUSA, CALIF.

LOCATION.—Hook gage and weirs at Southern California Edison Co.'s power house in sec. 22, T. 1 N., R. 10 W., $1\frac{1}{2}$ miles north of Azusa.

RECORDS AVAILABLE.—1896, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 82 second-feet February 4-9, 11, and 12.

1896-1928: Maximum mean daily discharge, 97 second-feet November 27, 1906; canal usually dry for a few days each year.

REMARKS.—Records good. Intake is on San Gabriel River in SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 31, T. 2 N., R. 9 W., 5 miles above gage. The water is used for power development and irrigation. During the rainy season part of the water from the power plant is wasted back into San Gabriel River below the gaging station. Discharge record furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	31	74	41	63	45	67	61	44	29	19.0	8.8	9.3
2.....	30	57	40	62	43	67	65	46	29	18.8	9.5	8.8
3.....	30	49	40	62	55	78	76	45	29	17.8	9.9	8.8
4.....	30	46	37	60	82	78	71	43	27	16.8	10.1	8.8
5.....	31	44	38	60	82	80	66	40	23	16.3	12.0	9.2
6.....	31	48	39	59	82	81	63	40	25	16.3	10.8	9.3
7.....	30	47	41	58	82	81	61	41	25	15.9	10.3	9.5
8.....	30	47	41	57	82	81	59	47	25	16.1	9.9	9.1
9.....	29	45	41	57	82	81	58	61	25	16.1	10.3	9.3
10.....	28	63	78	54	81	81	57	60	26	16.0	9.7	10.3
11.....	29	56	80	53	82	79	59	55	26	15.0	9.9	11.0
12.....	28	50	71	51	82	79	59	51	26	15.0	8.8	11.0
13.....	27	50	62	51	81	80	58	48	26	14.2	10.1	11.0
14.....	27	52	56	53	78	81	58	47	26	13.7	10.3	10.0
15.....	28	50	58	58	74	78	57	48	24	13.5	11.8	10.0
16.....	27	47	57	55	73	75	55	48	22	13.7	11.6	10.4
17.....	27	45	55	53	69	74	55	48	22	13.7	11.8	9.5
18.....	28	44	52	53	68	73	56	44	23	13.0	11.6	9.4
19.....	27	44	54	52	65	70	55	43	25	13.2	11.4	8.2
20.....	27	43	51	51	64	69	55	40	26	13.4	11.0	7.7
21.....	27	43	57	50	65	68	54	39	25	14.2	10.3	6.4
22.....	27	45	58	50	65	68	52	38	23	14.2	10.8	7.7
23.....	27	43	55	48	66	70	52	37	21	13.5	10.6	8.1
24.....	28	44	53	47	66	74	51	33	21	12.8	9.7	8.6
25.....	29	43	59	46	66	77	51	33	20	12.2	9.9	8.6
26.....	42	43	80	47	64	77	49	32	19.2	11.6	10.4	9.7
27.....	52	42	80	47	65	79	48	32	18.2	11.4	10.6	10.1
28.....	48	42	69	46	67	79	47	31	18.4	11.4	10.8	9.7
29.....	43	42	66	44	67	70	46	31	19.2	10.6	10.0	9.3
30.....	40	42	65	46	-----	68	45	30	19.2	11.0	9.7	9.7
31.....	62	-----	64	46	-----	66	-----	30	-----	9.7	9.8	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	62	27	32.3	1,990
November.....	74	42	47.7	2,840
December.....	80	37	56.1	3,450
January.....	63	44	52.9	3,250
February.....	82	43	70.4	4,050
March.....	81	66	75.1	4,620
April.....	76	45	56.6	3,370
May.....	61	30	42.1	2,590
June.....	29	18.2	23.8	1,420
July.....	19.0	9.7	14.2	873
August.....	12.0	8.8	10.4	640
September.....	11.0	6.4	9.28	552
The year.....	82	6.4	40.8	29,600

ROGERS CREEK NEAR AZUSA, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 23, T. 1 N., R. 10 W., half a mile above mouth of creek and 2 $\frac{1}{2}$ miles north of Azusa.

DRAINAGE AREA.—6.4 square miles.

RECORDS AVAILABLE.—October, 1917, to September, 1928. Discharge measurements only, May, 1916, to June, 1917.

EXTREMES.—Maximum discharge during year, 64 second-feet February 4 (gage height, 4.33 feet); no flow October 1-4, April 27 to May 6, and May 25 to September 30.

1917-1928: Maximum discharge, about 2,600 second-feet April 7, 1926; stream dry several months each year.

REMARKS.—Records fair. Two small diversions above station divert all the water at times.

Daily and monthly discharge, in second-feet, 1917-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1	0	1.0	0.5	0.14	0.1	0.4	0.8	0
2	0	.5	0.5	0.14	0.1	0.4	.8	0
3	0	.4	0.5	1.3	.8	1.9	2.5	0
4	0	.4	0.4	1.0	23	1.1	1.3	0
5	0.1	.5	0.4	.9	5.5	1.8	1.0	0
6	0.1	.5	0.4	.9	2.5	1.6	.9	0
7	0.1	.5	0.4	.9	1.8	1.2	.9	.1
8	0.1	.5	0.4	.9	1.6	1.1	.8	.8
9	0.1	.5	0.4	1.1	1.4	1.0	.7	1.0
10	0.1	1.0	0.8	1.0	1.1	1.0	.6	0.8
11	0.1	.7	0.5	1.0	.9	.9	.5	0.7
12	0.1	.6	2.5	.9	.8	.9	.4	.7
13	0.1	.8	1.8	.8	.8	.9	.3	.6
14	0.1	.8	1.7	.6	.7	.9	.2	.6
15	0.1	.7	1.5	.8	.6	.8	0.1	.6
16	0.1	.7	1.4	.8	.5	.8	0.1	.6
17	0.1	.6	1.4	.8	.5	.8	0.1	.6
18	0.1	.6	1.4	.7	.5	.6	0.1	.6
19	0.1	.6	1.4	.6	.5	.7	0.1	.5
20	0.1	0.6	1.4	.6	.5	.6	0.1	.5
21	0.1	0.6	2.4	.6	.5	.5	0.1	.5
22	0.1	0.6	2.1	.6	.4	.5	0.1	.4
23	0.1	0.6	1.6	.6	.4	.6	0.1	.2
24	0.1	0.5	1.5	.6	.4	.8	0.1	.1
25	.3	0.5	1.9	.6	.4	.8	0.1	0
26	.6	0.5	2.9	.6	0.4	.8	0.1	0
27	.8	0.5	2.4	.6	0.4	1.2	0	0
28	.7	0.5	1.8	.2	0.4	1.0	0	0
29	.6	0.5	1.7	0.1	0.4	.8	0	0
30	.5	0.5	1.6	0.1	-----	.8	0	0
31	2.7	-----	1.5	0.1	-----	.8	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.7	0	0.26	16.0
November	1.0	.4	.59	35.1
December	.8	.4	1.70	105
January	1.4	.1	.75	46.1
February	23	.1	1.65	94.9
March	1.9	.4	.90	55.3
April	2.5	0	.43	25.6
May	1.0	0	.32	19.7
The year	23	0	.55	398

• Estimated.

NOTE.—No flow in months for which no record is given.

FISH CREEK NEAR DUARTE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 15, T. 1 N., R. 10 W., three-fourths of a mile above mouth of canyon and 4 miles northeast of Duarte.

DRAINAGE AREA.—6.5 square miles.

RECORDS AVAILABLE.—July to September, 1916; July, 1917, to September, 1928.

EXTREMES.—Maximum discharge during year, 97 second-feet February 4 (gage height, 3.56 feet); minimum, probably less than 0.1 second-foot August 20 to September 11 and September 22–26.

1916–1928: Maximum discharge, about 2,180 second-feet April 4, 1925 (gage height, 8.0 feet); no flow during periods in 1919, 1920, 1921, and 1924.

REMARKS.—Records fair. No diversions or regulation above station. Discharge estimated October 28–30 and November 10–28.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.8	2.1	1.8	2.2	1.4	1.4	1.2	0.8	0.4	0.2	0.1	-----
2.....	.6	1.2	1.9	2.0	1.4	1.4	1.4	.8	.4	.2	.1	-----
3.....	.6	1.1	1.9	1.7	1.5	3.3	5	.8	.4	.2	.1	-----
4.....	.7	1.0	1.8	1.7	30	2.2	2.5	.8	.4	.2	.2	-----
5.....	.8	1.0	2.0	1.7	5.5	3.4	2.0	.8	.4	.2	.2	-----
6.....	.9	1.0	2.2	1.7	3.2	3.3	1.8	.8	.4	.2	.2	-----
7.....	.9	1.0	2.2	1.7	2.5	2.3	1.7	.8	.4	.2	.1	-----
8.....	.7	1.0	2.2	1.7	2.2	2.1	1.6	1.0	.4	.2	.1	-----
9.....	.7	1.0	2.2	1.7	2.1	1.9	1.5	1.7	.5	.2	.1	-----
10.....	.7	2.0	11	1.7	2.1	1.7	1.4	1.4	.4	.2	.1	-----
11.....	.7	1.5	6	1.7	2.1	1.8	1.3	1.2	.5	.2	.1	-----
12.....	.7	1.4	4.0	1.7	2.1	1.7	1.2	1.2	.4	.2	.1	0.2
13.....	.7	1.8	2.9	1.7	2.0	1.6	1.2	1.2	.5	.2	.1	.2
14.....	.7	1.8	2.8	1.7	1.9	1.5	1.2	1.2	.4	.2	.1	.2
15.....	.7	1.8	2.6	1.7	1.8	1.5	1.2	1.2	.3	.2	.1	.2
16.....	.6	1.8	2.4	1.7	1.7	1.4	1.2	1.2	.4	.2	.1	.1
17.....	.6	1.8	2.2	1.5	1.7	1.4	1.2	1.2	.4	.1	.1	.1
18.....	.6	1.8	2.0	1.4	1.7	1.2	1.1	1.2	.4	.1	.1	.2
19.....	.5	1.8	1.8	1.4	1.6	1.2	1.1	1.2	.5	.1	.1	.1
20.....	.5	1.8	1.6	1.4	1.5	1.2	1.1	1.1	.6	.2	-----	.4
21.....	.5	1.8	2.6	1.4	1.4	1.2	1.1	1.0	.6	.2	-----	.1
22.....	.5	1.8	2.2	1.4	1.4	1.2	1.1	.9	.6	.2	-----	-----
23.....	.5	1.8	2.0	1.4	1.4	1.4	1.1	.8	.5	.2	-----	-----
24.....	.5	1.8	1.9	1.4	1.4	1.7	1.0	.8	.5	.1	-----	-----
25.....	.6	1.8	2.2	1.4	1.4	1.8	1.0	.8	.4	.1	-----	-----
26.....	1.1	1.8	3.0	1.4	1.4	1.6	1.0	.7	.3	.1	-----	-----
27.....	1.1	1.8	2.7	1.4	1.4	2.3	1.0	.7	.2	.1	-----	.1
28.....	.7	1.8	2.5	1.4	1.4	2.0	1.0	.6	.2	.1	-----	.1
29.....	.6	1.8	2.3	1.4	1.4	1.4	.9	.6	.3	.1	-----	.1
30.....	.6	1.9	2.2	1.4	-----	1.3	.8	.5	.3	.1	-----	.1
31.....	3.3	-----	2.3	1.4	-----	1.3	-----	.5	-----	.1	-----	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3.3	0.5	0.76	46.7
November.....	2.1	1.0	1.59	94.6
December.....	11	1.6	2.69	165
January.....	2.2	1.4	1.58	97.2
February.....	30	1.4	2.85	164
March.....	3.4	1.2	1.76	108
April.....	5	.8	1.40	83.3
May.....	1.7	.5	.95	58.4
June.....	.6	.2	.41	24.4
July.....	.2	.1	.16	9.3
August.....	.2	-----	.08	4.9
September.....	.2	-----	.07	4.2
The year.....	30	-----	1.19	860

NOTE.—Discharge less than 0.1 second-foot Aug. 20 to Sept. 11 and Sept. 22–26.

SAWPIT CREEK NEAR MONROVIA, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 13, T. 1 N., R. 11 W., three-eighths mile below highway bridge and 2 miles north of Monrovia.

DRAINAGE AREA.—5.3 square miles at old location upstream.

RECORDS AVAILABLE.—November, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 4 second-feet February 4; stream dry at gage for several months.

1916-1928: Maximum discharge (estimated), 2,000 second-feet April 7, 1926; stream dry several months each year.

REMARKS.—Discharge estimated during November, December, and September. Part of the water supply for Monrovia is diverted from creek above gage. Flow completely regulated by flood-control dam above station. City of Monrovia furnished observer for water-stage recorder.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Sept.
1	0	0.1	0.2	0.2	C	0	0	0
2	0	.1	.2	.2	.1	0	0	0
3	0	.1	.2	.2	C	0	0	0
4	0	.1	.2	.2	1.2	0	0	0
5	0	.1	.2	.2	.4	.2	0	0
6	0	.1	.2	.2	.3	0	0	0
7	0	.1	.2	.2	.2	0	0	0
8	0	.1	.2	.2	.1	0	0	0
9	0	.1	.2	.1	C	0	0	0
10	0	.1	.3	0	C	0	0	0
11	0	.2	.3	0	C	0	0	0
12	0	.2	.2	0	C	0	.4	0
13	0	.2	.2	0	C	0	.1	0
14	0	.2	.1	.1	C	0	0	0
15	0	.2	.1	.1	C	0	0	0
16	0	.2	.1	0	C	0	0	0
17	0	.2	.1	0	C	0	0	0
18	0	.2	.1	0	C	0	0	0
19	0	.2	.1	0	C	0	0	.8
20	0	.2	.2	0	C	0	0	1.0
21	0	.2	.3	0	C	0	0	.9
22	0	.2	.2	0	C	0	0	.7
23	0	.2	.1	0	0	0	0	.6
24	0	.2	.1	0	0	0	0	.5
25	0	.2	.2	.1	0	0	0	.7
26	0	.2	.4	0	0	0	0	.8
27	0	.2	.2	0	0	0	0	.8
28	0	.2	.2	0	0	0	0	.7
29	0	.2	.2	0	.2	0	0	.6
30	0	.2	.2	0	0	0	0	.6
31	.2		.2	0	0	0	0	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.2	0	0.0065	0.4
November	.2	.1	.167	9.9
December	.4	.1	.190	11.7
January	.2	0	.065	4.0
February	1.2	0	.088	4.9
March	.2	0	.0065	.4
April	.4	0	.0167	1.0
September	1.0	0	.290	17.3
The year	1.2	0	.0683	49.6

NOTE.—No flow in months for which no discharge is given.

Daily and monthly discharge, in second-feet, of Sawpit Creek and Monrovia pipe line near Monrovia, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	1.6	1.5	1.7	1.3	1.3	1.5	1.1	1.2	0.8	0.8	0.8
2	1.2	1.6	1.5	1.7	1.4	1.3	1.5	1.1	1.2	.8	.8	.8
3	1.2	1.6	1.5	1.7	1.5	1.7	1.5	1.1	1.2	.8	.8	.8
4	1.2	1.4	1.5	1.7	2.8	1.9	1.7	1.1	1.1	.8	.8	.8
5	1.2	1.4	1.5	1.7	2.0	2.1	1.7	1.1	1.1	.8	.8	.8
6	1.2	1.4	1.5	1.7	2.0	1.9	1.5	1.1	1.1	.8	.8	.8
7	1.2	1.4	1.5	1.7	1.9	1.8	1.5	1.1	1.1	.8	.8	.8
8	1.2	1.4	1.5	1.7	1.8	1.6	1.5	1.1	1.1	.8	.8	.8
9	1.2	1.4	1.5	1.6	1.7	1.5	1.5	1.1	1.1	.8	.8	.8
10	1.2	1.6	1.8	1.5	1.7	1.5	1.5	1.1	1.1	.8	.8	.8
11	1.2	1.7	2.0	1.5	1.7	1.5	1.5	1.2	1.1	.8	.8	.8
12	1.2	1.5	1.9	1.3	1.7	1.5	1.9	1.3	1.1	.8	.8	.8
13	1.2	1.7	1.7	1.3	1.5	1.5	1.6	1.3	1.1	.8	.8	.8
14	1.2	1.9	1.8	1.4	1.5	1.5	1.4	1.3	1.1	.8	.8	.8
15	1.2	1.7	1.8	1.6	1.5	1.5	1.4	1.3	1.1	.8	.8	.8
16	1.1	1.7	1.8	1.5	1.5	1.5	1.3	1.3	1.1	.8	.8	.8
17	1.1	1.7	1.7	1.4	1.5	1.5	1.3	1.3	1.1	.8	.8	.8
18	1.1	1.7	1.7	1.3	1.5	1.5	1.3	1.3	1.1	.8	.8	.8
19	1.1	1.7	1.7	1.3	1.3	1.5	1.3	1.3	1.1	.8	.8	1.6
20	1.1	1.5	1.8	1.3	1.3	1.5	1.3	1.3	1.1	.8	.8	1.8
21	1.1	1.5	2.0	1.3	1.3	1.5	1.3	1.3	1.1	.8	.8	1.7
22	1.1	1.5	2.0	1.3	1.3	1.5	1.3	1.3	1.0	.8	.8	1.5
23	1.1	1.5	1.7	1.3	1.3	1.5	1.2	1.3	1.0	.8	.8	1.4
24	1.1	1.5	1.6	1.3	1.3	1.8	1.2	1.3	1.0	.8	.8	1.3
25	1.1	1.5	1.9	1.4	1.3	1.5	1.1	1.3	1.0	.8	.8	1.5
26	1.3	1.5	2.3	1.3	1.3	1.6	1.2	1.2	.9	.8	.8	1.6
27	1.3	1.5	1.9	1.3	1.3	1.7	1.2	1.2	.9	.8	.8	1.6
28	1.3	1.5	1.9	1.3	1.3	1.7	1.2	1.2	.8	.8	.8	1.5
29	1.3	1.5	1.9	1.3	1.5	1.5	1.1	1.2	.8	.8	.8	1.4
30	1.3	1.5	1.9	1.3	-----	1.5	1.1	1.2	.8	.8	.8	1.4
31	1.7	-----	1.9	1.3	-----	1.5	-----	1.2	-----	.8	.8	-----
Month					Maximum	Minimum	Mean	Run-off in acre-feet				
October					1.7	1.1	1.20	73.8				
November					1.9	1.4	1.55	92.2				
December					2.3	1.5	1.75	108				
January					1.7	1.3	1.45	89.2				
February					2.8	1.3	1.55	89.2				
March					2.1	1.3	1.58	97.2				
April					1.9	1.1	1.39	82.7				
May					1.3	1.1	1.21	74.4				
June					1.2	.8	1.05	62.5				
July					.8	.8	.80	49.2				
August					.8	.8	.80	49.2				
September					1.8	.8	1.09	64.9				
The year					2.8	.8	1.28	932				

MONROVIA PIPE LINE NEAR MONROVIA, CALIF.

LOCATION.—Staff gage and weirs near southeast corner sec. 14, T. 1 N., R. 11 W., 300 feet above settling reservoir at mouth of Sawpit Canyon and $1\frac{1}{2}$ miles north of Monrovia.

RECORDS AVAILABLE.—May, 1916, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 1.9 second-feet December 26 and March 4-6; minimum mean daily discharge, 0.8 second-foot June 23 to September 30.

1916-1928: Maximum mean daily discharge, 6.1 second-feet May 9, 1922; no flow November 11, 1924, April 8 and 16, 1926, and February 16, 1927.

REMARKS.—Records excellent. The Monrovia pipe line furnishes part of the water supply of Monrovia. It obtains its water from two branches of Sawpit Creek. Most of this water is collected by tunnels driven into the side of the canyon. Gage-height record furnished by city of Monrovia.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	1.5	1.3	1.5	1.3	1.3	1.5	1.1	1.2	0.8	0.8	0.8
2	1.2	1.5	1.3	1.5	1.3	1.3	1.5	1.1	1.2	.8	.8	.8
3	1.2	1.5	1.3	1.5	1.5	1.7	1.5	1.1	1.2	.8	.8	.8
4	1.2	1.3	1.3	1.5	1.6	1.9	1.7	1.1	1.1	.8	.8	.8
5	1.2	1.3	1.3	1.5	1.6	1.9	1.7	1.1	1.1	.8	.8	.8
6	1.2	1.3	1.3	1.5	1.7	1.9	1.5	1.1	1.1	.8	.8	.8
7	1.2	1.3	1.3	1.5	1.7	1.8	1.5	1.1	1.1	.8	.8	.8
8	1.2	1.3	1.3	1.5	1.7	1.6	1.5	1.1	1.1	.8	.8	.8
9	1.2	1.3	1.3	1.5	1.7	1.5	1.5	1.1	1.1	.8	.8	.8
10	1.2	1.5	1.5	1.5	1.7	1.5	1.5	1.1	1.1	.8	.8	.8
11	1.2	1.5	1.7	1.5	1.7	1.5	1.5	1.2	1.1	.8	.8	.8
12	1.2	1.3	1.7	1.3	1.7	1.5	1.5	1.3	1.1	.8	.8	.8
13	1.2	1.5	1.5	1.3	1.5	1.5	1.5	1.3	1.1	.8	.8	.8
14	1.2	1.7	1.7	1.3	1.5	1.5	1.4	1.3	1.1	.8	.8	.8
15	1.2	1.5	1.7	1.5	1.5	1.5	1.4	1.3	1.1	.8	.8	.8
16	1.1	1.5	1.7	1.5	1.5	1.5	1.3	1.3	1.1	.8	.8	.8
17	1.1	1.5	1.6	1.4	1.5	1.5	1.3	1.3	1.1	.8	.8	.8
18	1.1	1.5	1.6	1.3	1.5	1.5	1.3	1.3	1.1	.8	.8	.8
19	1.1	1.5	1.6	1.3	1.3	1.5	1.3	1.3	1.1	.8	.8	.8
20	1.1	1.3	1.6	1.3	1.3	1.5	1.3	1.3	1.1	.8	.8	.8
21	1.1	1.3	1.7	1.3	1.3	1.5	1.3	1.3	1.1	.8	.8	.8
22	1.1	1.3	1.8	1.3	1.3	1.5	1.3	1.3	1.0	.8	.8	.8
23	1.1	1.3	1.6	1.3	1.3	1.5	1.2	1.3	1.0	.8	.8	.8
24	1.1	1.3	1.5	1.3	1.3	1.8	1.2	1.3	1.0	.8	.8	.8
25	1.1	1.3	1.7	1.3	1.3	1.5	1.1	1.3	1.0	.8	.8	.8
26	1.3	1.3	1.9	1.3	1.3	1.6	1.2	1.2	.9	.8	.8	.8
27	1.3	1.3	1.7	1.3	1.3	1.7	1.2	1.2	.9	.8	.8	.8
28	1.3	1.3	1.7	1.3	1.3	1.7	1.2	1.2	.8	.8	.8	.8
29	1.3	1.3	1.7	1.3	1.3	1.5	1.1	1.2	.8	.8	.8	.8
30	1.3	1.3	1.7	1.3	1.5	1.1	1.2	.8	.8	.8	.8	.8
31	1.5	1.7	1.3	1.3	1.5	1.5	1.2	.8	.8	.8	.8	.8

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1.5	1.1	1.19	73.2
November	1.7	1.3	1.39	82.7
December	1.9	1.3	1.56	95.9
January	1.5	1.3	1.39	85.5
February	1.7	1.3	1.47	84.6
March	1.9	1.3	1.57	96.5
April	1.7	1.1	1.37	81.5
May	1.3	1.1	1.21	74.4
June	1.2	.8	1.05	62.5
July	.8	.8	.80	49.2
August	.8	.8	.80	49.2
September	.8	.8	.80	47.6
The year	1.9	.8	1.22	883

SAN GABRIEL RIVER BASIN

61

SAN DIMAS CREEK NEAR SAN DIMAS, CALIF

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 25, T. 1 N., R. 9 W., at mouth of San Dimas Canyon, 3 miles northeast of San Dimas.

DRAINAGE AREA.—18.3 square miles.

RECORDS AVAILABLE.—December, 1916, to September, 1928. Discharge measurements only, April to September, 1916.

EXTREMES.—Maximum discharge during year, 54 second-feet April 13 (gage height, 1.80 feet); practically no flow September 4-7, 18, and 21.

1916-1928: Maximum discharge, 1,140 second-feet February 9, 1922; stream often dry for several months during year.

REMARKS.—Records good. Discharge April 4-11 and October 1-26 estimated. Water diverted just below gage for irrigation. Los Angeles County flood-control reservoir three-fourths mile above station regulates flow during storms.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.2	0.6	2.1	1.4	0.7	0.5	1.8	1.8	1.7	0.2	0.1
2	.1	.1	.7	2.0	1.2	.7	.5	1.9	1.3	1.6	.2	.1
3	.1	.1	.6	1.9	1.8	.8	.6	2.0	1.3	1.4	.2	.1
4	.1	.1	.5	1.8	7.0	.8	.6	1.9	1.3	1.4	.2	.1
5	.1	.1	.6	1.7	.7	.7	.6	1.7	1.5	1.3	.2	.1
6	.1	.3	.7	1.7	.6	.5	.6	1.8	1.8	1.4	.2	.1
7	.1	.3	.8	1.7	.6	.5	.6	1.9	1.9	1.4	.1	.1
8	.1	.6	.8	1.6	.5	.4	.5	1.7	1.9	1.4	.1	.2
9	.1	.6	.9	1.5	.4	.4	.5	.8	1.8	1.4	.1	.2
10	.1	1.1	4.8	1.6	.4	.4	.5	.6	1.8	1.3	.1	.2
11	.1	.9	4.5	1.6	.4	.4	.5	.6	1.9	1.2	.1	.2
12	.1	.8	3.0	1.6	.4	.4	.5	.5	1.9	1.2	.1	.2
13	.1	1.0	2.5	1.6	.4	.5	2.0	.6	1.9	1.2	.1	.2
14	.1	1.0	2.3	1.8	.4	.5	.6	.7	1.9	1.2	.1	.1
15	.1	.8	2.2	1.9	.4	.5	.5	.8	1.9	1.1	.1	.1
16	.1	.7	2.0	2.0	.4	.4	.5	.8	1.6	1.2	.2	.1
17	.1	.6	1.8	1.9	.4	.4	.6	1.1	1.5	1.2	.1	.1
18	.1	.6	1.6	1.7	.4	.4	.7	1.0	1.6	1.2	.1	.1
19	.1	.6	1.5	1.6	.4	.4	.8	1.2	1.7	1.1	.1	.1
20	.1	.6	1.5	1.6	.5	.4	.9	1.6	1.7	1.1	.1	.1
21	.1	.7	2.0	1.7	.7	.4	.9	1.2	1.7	1.0	.1	.1
22	.1	.7	2.1	1.7	.7	.5	.8	1.2	1.7	.7	.1	.1
23	.1	.7	1.9	1.8	.6	.5	.8	1.2	1.6	.3	.1	.1
24	.1	.6	1.8	1.8	.6	.6	1.0	1.4	1.5	.3	.1	.1
25	.2	.6	1.6	1.7	.6	.6	1.6	1.4	1.5	.2	.1	.1
26	.2	.7	3.7	1.7	.6	.5	1.7	1.4	1.4	.2	.1	.1
27	.2	.7	3.0	1.7	.6	.6	1.7	1.4	1.4	.2	.1	.1
28	.2	.6	2.5	1.6	.6	.5	1.7	1.5	1.4	.2	.1	.1
29	.2	.6	2.4	1.4	.6	.5	1.7	1.7	1.5	.2	.1	.1
30	.2	.6	2.4	1.4		.4	1.7	2.1	1.7	.2	.1	.1
31	.3		2.2	1.4		.4		2.1		.2	.1	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.3	0.1	0.13	8.0
November	1.1	.1	.59	35.1
December	4.8	.5	1.92	113
January	2.1	1.4	1.70	105
February	7.0		.84	48.3
March	.8	.4	.51	31.4
April	2.0	.5	.89	53.0
May	2.1	.5	1.34	82.4
June	1.9	1.3	1.64	97.6
July	1.7	.2	.96	59.0
August	.2	.1	.12	7.4
September	.2	.1	.12	7.1
The year	7.0	.1	.90	652

SURFACE WATER SUPPLY, 1928, PART XI

DALTON CREEK NEAR GLENDORA, CALIF.

LOCATION.—Water-stage recorder at center of sec. 21, T. 1 N., R. 9 W., at Glendora Irrigation Co.'s dam one-fourth mile above mouth and $2\frac{1}{2}$ miles northeast of Glendora.

DRAINAGE AREA.—7.5 square miles.

RECORDS AVAILABLE.—December, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 13 second-feet February 4 (gage height, 1.26 feet); no flow during greater part of year.

1919-1928: Maximum discharge, 660 second-feet February 16, 1927 (gage height, 3.30 feet); no flow for several months during each year.

REMARKS.—Records good. The Glendora Irrigation Co. diverts water half a mile and $1\frac{1}{2}$ miles above gage through a 10-inch pipe line. A 12-inch pipe line diverts water at the dam. Flow regulated by storage in flood-control dam.

Daily and monthly discharge, in second-feet, 1927-28

Day	Feb.	Mar.	Apr.	Day	Feb.	Mar.	Apr.	Day	Feb.	Mar.	Apr.
1	0	0	0	11	0	0.1	0	21	0	0	0
2	0	0	0	12	0	.1	0	22	0	0	0
3	0	0	.3	13	0	.1	0	23	0	0	0
4	4.2	0	.2	14	0	0	0	24	0	0	0
5	2.0	.1	.2	15	0	0	0	25	0	0	0
6	1.2	.5	.1	16	0	0	0	26	0	0	0
7	.6	.1	.1	17	0	0	0	27	0	0	0
8	.4	.1	.1	18	0	0	0	28	0	0	0
9	0	.1	0	19	0	0	0	29	0	0	0
10	0	.1	0	20	0	0	0	30	0	0	0
								31	0	0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February	4.2	0	0.290	16.7
March	.5	0	.042	2.6
April	.3	0	.033	2.0
The year	4.2	0	.029	21.3

NOTE.—No flow October to January and May to September.

LOS ANGELES RIVER BASIN

PACOIMA CREEK NEAR SAN FERNANDO, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 24, T. 3 N., R. 15 W., 600 feet above mouth of canyon and 4 miles northeast of San Fernando.

DRAINAGE AREA.—27.9 square miles.

RECORDS AVAILABLE.—March, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year not determined; no flow for several months.

1916-1928: Maximum discharge, about 1,860 second-feet February 16, 1927 (gage height, 15.4 feet); usually no flow for several months each year.

REMARKS.—Records fair. Discharge estimated for entire year on basis of discharge measurements. Flow regulated by flood-control dam above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Feb.	Mar.	Apr.	Day	Oct.	Feb.	Mar.	Apr.
1.....	0	0	0	0	16.....	1	2	3.0	2
2.....	0	0	0	0	17.....	1	1	2.5	8
3.....	0	0	.1	0	18.....	.8	0	2.5	1
4.....	0	46	.3	2	19.....	.4	0	2.5	0
5.....	0	5	.2	3.1	20.....	0	0	2.5	0
6.....	5	4	.1	3	21.....	0	0	1.2	0
7.....	20	4	2.0	3	22.....	0	0	0	0
8.....	22	3	2.5	2	23.....	0	0	0	0
9.....	22	3	3.0	1	24.....	0	0	0	0
10.....	22	3	3.0	0	25.....	0	0	0	0
11.....	22	3	3.0	.5	26.....	0	0	1.5	0
12.....	5	3	3.0	0	27.....	0	0	3	0
13.....	5	2	2.9	0	28.....	0	0	3	0
14.....	10	0	3.0	0	29.....	0	0	3	0
15.....	5	2	3.0	0	30.....	0		1	0
					31.....	0		0	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	22	0	4.55	280
February.....	46	0	2.79	160
March.....	3	0	1.67	103
April.....	8	0	.85	50.6
The year.....	46	0	.82	594

NOTE.—No flow November to January and May to September.

TUJUNGA CREEK NEAR SUNLAND, CALIF.

LOCATION.—Water-stage recorder near center of sec. 32, T. 3 N., R. 13 W. (unsurveyed), at a partly constructed and abandoned dam, 2 miles above mouth of canyon, and 4 miles northeast of Sunland.

DRAINAGE AREA.—106 square miles.

RECORDS AVAILABLE.—October, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, about 850 second-feet February 4; minimum, 0.1 second-foot August 4-10 and August 19 to September 30.

1916-1928: Maximum discharge, 8,600 second-feet December 19, 1921 (gage height, 6.20 feet); minimum (estimated), 0.1 second-foot September 20-23, 1919, and several days in August, September, and October, 1924, and August and September, 1928.

REMARKS.—Records good except those for February 4, which are fair. Two or three ranches divert a part of the low-water flow above station for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	7.5	4.8	12	6.5	12	8	4.0	1.3	0.4	0.2	0.1
2	1.3	3.2	4.2	11	6.5	13	9	4.5	1.2	.4	.2	.1
3	1.3	2.9	4.2	11	14	22	15	4.2	1.2	.4	.2	.1
4	1.2	1.8	4.2	10	350	23	11	3.2	1.2	.4	.1	.1
5	1.3	2.2	4.2	10	103	22	10	3.2	1.1	.4	.1	.1
6	1.4	2.6	4.8	10	56	23	9	3.2	1.1	.4	.1	.1
7	1.3	3.2	5	9.5	42	19	8.5	4.0	1.1	.4	.1	.1
8	1.2	4.0	5	8.5	38	16	7.5	4.8	1.1	.4	.1	.1
9	1.2	3.6	5.5	8.5	32	15	7	8.5	1.1	.4	.1	.1
10	1.1	4.0	16	8.5	26	14	8	8	1.1	.4	.1	.1
11	1.2	3.0	14	8	23	12	7.5	8	1.0	.4	.2	.1
12	1.1	2.9	9.5	8	20	12	6.5	6.5	.9	.4	.2	.1
13	1.1	3.8	8	8	18	11	7	4.8	.9	.3	.2	.1
14	1.1	3.8	8	8	15	11	7	4.0	.8	.3	.2	.1
15	1.1	3.2	8	8	15	11	6	4.2	.8	.3	.2	.1
16	1.0	2.9	7.5	8	15	11	6	4.0	.7	.3	.2	.1
17	1.0	2.7	7	8	15	12	6	4.0	.6	.3	.2	.1
18	1.0	2.7	6	8	15	12	6.5	3.5	.6	.3	.2	.1
19	1.0	2.9	6	8	14	12	6	3.0	.5	.3	.1	.1
20	1.0	3.2	6.5	8	14	11	5.5	2.7	.4	.3	.1	.1
21	1.0	3.5	9.5	7.5	14	10	5	2.7	.4	.3	.1	.1
22	1.0	4.0	9.5	8	13	9	5	2.6	.4	.3	.1	.1
23	1.0	4.2	8.5	8	13	10	5	2.2	.4	.3	.1	.1
24	1.0	4.5	8	7.5	13	14	5	1.7	.3	.3	.1	.1
25	1.2	4.5	11	7.5	12	15	5	1.5	.3	.3	.1	.1
26	2.9	4.8	27	7.5	12	12	5	1.3	.3	.3	.1	.1
27	5.5	5	20	7	11	15	5	1.2	.3	.3	.1	.1
28	5	5	15	6.5	10	14	4.5	1.2	.3	.2	.1	.1
29	4.3	5	15	6.5	10	9.5	3.8	1.2	.4	.2	.1	.1
30	3.6	4.8	15	6.5	-----	8.5	4.0	1.2	.4	.2	.1	.1
31	10	-----	12	6.5	-----	8.5	-----	1.2	-----	.2	.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	10	1.0	1.93	119
November	7.5	1.8	3.71	221
December	27	4.2	9.32	573
January	12	6.5	8.32	512
February	350	6.5	32.6	1,880
March	23	8.5	13.5	830
April	15	3.8	6.81	405
May	8.5	1.2	3.66	225
June	1.3	.2	.74	44.0
July	.4	.2	.33	20.3
August	.2	.1	.14	8.6
September	.1	.1	.10	6.0
The year	350	.1	6.67	4,840

HAINES CREEK NEAR TUJUNGA, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 18, T. 2 N., P. 13 W., 800 feet above mouth of canyon and $1\frac{1}{2}$ miles northeast of Tujunga.

DRAINAGE AREA.—1.2 square miles.

RECORDS AVAILABLE.—February, 1917, to September, 1928.

EXTREMES.—Maximum discharge during year, 0.06 second-foot February 4 (gage height, 0.37 foot); minimum, about 0.001 second-foot September 13. 1917–1928: Maximum discharge, 15 second-feet January 2, 1922 (gage height, 1.74 feet); stream dry during periods in 1921, 1925, and 1926.

REMARKS.—Records fair. Mean monthly discharge estimated from volumetric measurements. A tunnel driven into stream bed 1 mile above station diverts into a 4-inch pipe past gage for domestic supply of Tujunga. Similar tunnel short distance below station diverts small supply for part of year. Occasional discharge measurements of these diversions are made. Several small check dams have been built across stream in upper part of drainage basin.

Discharge measurements of diversions from Haines Creek near Tujunga, Calif., 1927–28

Date	Discharge in second-feet		Date	Discharge in second-feet		Date	Discharge in second-feet	
	Upper	Lower		Upper	Lower		Upper	Lower
Oct. 18.....	0.04	0.08	Apr. 10.....	0.06	0.10	July 9.....	0.03	0.03
Nov. 15.....	.05	.07	Apr. 27.....	.06	.10	July 26.....	.03	.02
Dec. 12.....	.06	.02	May 1.....	.05	.10	July 31.....	.02	.07
Dec. 26.....	.07	.09	May 10.....	.06	.10	Aug. 23.....	.03	.07
Mar. 10.....	.07	.14	June 5.....	.04	.08	Sept. 6.....	.03	.07
Mar. 15.....	.06	.11	June 23.....	.03	.05	Sept. 13.....	.03	.07
Mar. 28.....	.07	.12	July 3.....	.04	.04			

Monthly discharge of Haines Creek near Tujunga, Calif., 1927–28

Month	Mean discharge in second-feet	Run-off in acre-feet	Month	Mean discharge in second-feet	Run-off in acre-feet	Month	Mean discharge in second-feet	Run-off in acre-feet
October.....	0.004	0.25	March.....	0.020	1.23	August.....	0.002	0.12
November.....	.004	.24	April.....	.010	.60	September.....	.002	.12
December.....	.007	.43	May.....	.008	.49			
January.....	.010	.61	June.....	.005	.30	The year.....	.008	5.7
February.....	.020	1.15	July.....	.003	.18			

ARROYO SECO NEAR PASADENA, CALIF.

LOCATION.—Water-stage recorder near south line of sec. 30, T. 2 N., R. 12 W (unsurveyed), $1\frac{1}{2}$ miles above mouth of Millard Canyon, and $5\frac{1}{2}$ miles northwest of Pasadena.

DRAINAGE AREA.—16.4 square miles.

RECORDS AVAILABLE.—December, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 298 second-feet February 4 (gage height, 3.45 feet); minimum, less than 0.1 second-foot July 16 to September 30.

1910-1928: Maximum discharge, about 5,630 second-feet February 20, 1914 (gage height, 12.5 feet); stream practically dry July 20 to September 30, 1925, and August 12 to November 23, 1926.

REMARKS.—Records good below 60 second-feet and fair above. Mean monthly discharge estimated July, August, and September. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0.2	1.9	1.3	4.4	2.3	1.6	1.4	1.0	0.4	0.1
2.....	.2	1.5	1.3	4.0	2.2	1.6	1.4	1.1	.4	.1
3.....	.2	1.2	1.2	3.8	3.2	4.0	3.6	1.0	.4	.1
4.....	.2	1.0	1.0	3.5	86	3.6	4.0	.9	.4	.1
5.....	.2	.9	1.3	3.2	29	4.0	3.6	.9	.4	.1
6.....	.2	.9	1.4	3.1	13	5.5	3.3	1.4	.4	.1
7.....	.2	.9	1.4	3.0	8	3.3	3.1	2.3	.4	.1
8.....	.2	.9	1.4	2.8	6	2.8	2.7	2.4	.4	.1
9.....	.2	.9	1.4	2.7	5	2.5	2.4	2.0	.4	.1
10.....	.2	1.8	4.6	2.7	4.9	2.3	2.3	2.0	.5	.1
11.....	.2	1.4	4.2	2.6	4.9	2.2	2.2	1.9	.5	.1
12.....	.2	1.4	2.8	2.6	4.5	2.2	1.9	1.8	.6	.1
13.....	.2	1.9	2.3	2.4	4.0	2.2	1.8	1.6	.6	.1
14.....	.2	1.8	2.3	2.4	3.5	2.2	1.8	1.3	.6	.1
15.....	.2	1.5	2.3	2.4	3.0	1.9	1.8	1.3	.6	.1
16.....	.2	1.5	2.2	2.4	2.7	1.8	1.5	1.3	.6	-----
17.....	.2	1.3	2.1	2.8	2.4	1.5	1.8	1.3	.5	-----
18.....	.2	1.2	2.0	2.7	2.3	1.5	1.6	1.2	.4	-----
19.....	.2	1.1	1.8	2.6	2.2	1.4	1.6	1.1	.4	-----
20.....	.2	1.1	1.8	2.4	2.2	1.3	1.6	1.0	.4	-----
21.....	.2	1.1	2.3	2.4	2.0	1.3	1.5	.9	.3	-----
22.....	.2	1.2	2.6	2.3	2.0	1.3	1.6	.8	.2	-----
23.....	.2	1.2	2.4	2.3	1.9	1.3	1.6	.7	.2	-----
24.....	.2	1.2	2.2	2.3	1.8	3.1	1.6	.7	.2	-----
25.....	.2	1.2	2.8	2.3	1.6	2.7	1.5	.6	.1	-----
26.....	.2	1.2	24	2.3	1.6	1.9	1.4	.6	.1	-----
27.....	.3	1.2	14	2.3	1.6	4.2	1.4	.6	.1	-----
28.....	.4	1.2	8	2.3	1.5	2.7	1.3	.5	.1	-----
29.....	.4	1.2	6	2.3	1.5	1.9	1.2	.4	.1	-----
30.....	.5	1.2	6.5	2.3	-----	1.6	1.2	.4	.1	-----
31.....	1.6	-----	4.9	2.3	-----	1.4	-----	.4	-----	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet			
October.....	1.6		0.2		0.27		16.6			
November.....	1.9		.9		1.27		75.6			
December.....	24		1.0		3.74		230			
January.....	4.4		2.3		2.71		167			
February.....	86		1.5		7.13		410			
March.....	5.5		1.3		2.35		144			
April.....	4.0		1.2		1.99		118			
May.....	2.4		.4		1.14		70.1			
June.....	.6		.1		.36		21.4			
July.....	.1		-----		.10		6.1			
August.....	-----		-----		.05		3.1			
September.....	-----		-----		.05		3.0			
The year.....	86		-----		1.74		1,260			

NOTE.—Daily discharge less than 0.1 second-foot July 16 to September 30.

LOS ANGELES RIVER BASIN

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SANTA ANITA CREEK NEAR SIERRA MADRE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 10, T. 1 N., R. 11 W., at head of Hermit's Falls, 4 miles northeast of Sierra Madre.

DRAINAGE AREA.—10.5 square miles.

RECORDS AVAILABLE.—July, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 42 second-feet February 4 (gage height, 2.08 feet); minimum, 0.1 second-foot July 23 to September 30. 1916-1928: Maximum discharge, about 1,400 second-feet April 7, 1926 (gage height, 10.7 feet); minimum, 0.1 second-foot September 30, 1925 and July 23 to September 30, 1928.

REMARKS.—Records good. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	1.8	1.2	3.2	1.5	2.2	2.4	1.1	0.9	0.5	0.1	0.1
2	.4	1.2	1.2	3.1	1.5	2.2	2.4	1.1	.8	.4	.1	.1
3	.4	1.0	1.1	3.0	2.1	3.2	5.5	1.2	.7	.4	.1	.1
4	.3	1.0	1.0	2.8	2.2	2.5	3.4	1.1	.6	.4	.1	.1
5	.4	1.0	1.1	2.7	9.5	3.2	3.1	.9	.5	.3	.1	.1
6	.5	1.1	1.0	2.7	6	3.4	3.0	1.0	.4	.4	.1	.1
7	.4	1.2	1.1	2.4	4.5	2.9	2.8	1.2	.4	.3	.1	.1
8	.3	1.2	1.1	2.3	3.8	2.9	2.5	1.6	.5	.4	.1	.1
9	.3	1.2	1.1	2.1	3.4	2.8	2.2	2.2	.6	.3	.1	.1
10	.2	2.3	4.2	2.0	3.1	2.7	2.2	2.0	.6	.3	.1	.1
11	.3	1.4	3.0	1.8	2.8	2.5	2.2	1.7	.6	.3	.1	.1
12	.3	1.2	2.3	1.7	2.7	2.7	2.1	1.6	.6	.2	.1	.1
13	.2	1.7	2.1	1.6	2.7	2.7	2.0	1.4	.6	.2	.1	.1
14	.3	1.7	2.3	1.5	2.5	2.8	1.7	1.5	.6	.2	.1	.1
15	.3	1.5	2.2	1.5	2.5	2.7	1.7	1.6	.4	.2	.1	.1
16	.2	1.3	2.0	1.5	2.4	2.7	1.7	1.6	.4	.2	.1	.1
17	.2	1.2	2.0	1.4	2.4	2.7	1.7	1.5	.4	.2	.1	.1
18	.2	1.2	2.0	1.4	2.4	2.5	1.7	1.4	.6	.2	.1	.1
19	.2	1.2	2.0	1.4	2.4	2.5	1.7	1.3	.8	.2	.1	.1
20	.2	1.2	1.8	1.4	2.4	2.4	1.7	1.3	.8	.2	.1	.1
21	.2	1.3	2.8	1.4	2.4	2.4	1.6	1.2	.7	.2	.1	.1
22	.2	1.4	2.7	1.5	2.3	2.4	1.5	1.2	.6	.2	.1	.1
23	.2	1.5	2.4	1.5	2.3	2.4	1.4	1.1	.5	.1	.1	.1
24	.3	1.3	2.4	1.5	2.3	3.7	1.3	1.0	.5	.1	.1	.1
25	.4	1.3	3.2	1.6	2.3	3.1	1.4	1.0	.5	.1	.1	.1
26	.8	1.3	7.5	1.6	2.3	2.8	1.2	1.0	.5	.1	.1	.1
27	.9	1.3	4.6	1.5	2.2	4.4	1.2	1.0	.5	.1	.1	.1
28	.9	1.3	3.8	1.4	2.2	3.2	1.2	1.0	.5	.1	.1	.1
29	.8	1.2	3.8	1.4	2.2	3.0	1.1	1.1	.5	.1	.1	.1
30	.8	1.2	3.8	1.4	-----	2.5	1.1	1.1	.6	.1	.1	.1
31	3.2	-----	3.4	1.5	-----	2.4	-----	1.0	-----	.1	.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3.2	0.2	0.47	28.9
November	2.3	1.0	1.32	78.6
December	7.5	1.0	2.46	151
January	3.2	1.4	1.86	114
February	22	1.5	3.56	205
March	4.4	2.2	2.79	172
April	5.5	1.1	2.02	120
May	2.2	.9	1.29	79.3
June	.9	.4	.57	33.9
July	.5	.1	.23	14.1
August	.1	.1	.10	6.1
September	.1	.1	.10	6.0
The year	22	.1	1.39	1,010

LITTLE SANTA ANITA CREEK NEAR SIERRA MADRE, CALIF.

LOCATION.—Water-stage recorder near center of W. ½ sec. 9, T. 1 N., R. 11 W., 2 miles northeast of Sierra Madre.

DRAINAGE AREA.—1.9 square miles.

RECORDS AVAILABLE.—April, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 25 second-feet February 4 (gage height, 1.55 feet); minimum, 0.03 second-foot August and September.

1916-1928: Maximum stage, 11.75 feet April 7, 1926 (discharge, not determined); no flow during periods in 1919, 1924, and 1925.

REMARKS.—Records good. Discharge estimated June 14 to September 30. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1.....	0.1	0.4	0.1	0.3	0.1	0.2	0.2	0.1	0.1
2.....	.1	.3	.1	.3	.1	.2	.2	.1	.1
3.....	.1	.2	.1	.3	.2	.4	.5	.1	.1
4.....	.1	.2	.1	.3	3.5	.3	.3	.1	.1
5.....	.1	.2	.1	.3	1.2	.4	.2	.1	-----
6.....	.1	.2	.1	.3	.9	.4	.2	.1	-----
7.....	.1	.2	.1	.3	.7	.4	.2	.1	-----
8.....	.1	.2	.2	.3	.6	.3	.2	.2	-----
9.....	.1	.2	.2	.3	.6	.3	.2	.2	-----
10.....	.1	.4	.5	.3	.5	.3	.2	.2	-----
11.....	.1	.2	.4	.3	.5	.3	.2	.2	-----
12.....	.1	.2	.3	.2	.4	.3	.2	.1	-----
13.....	.1	.3	.3	.2	.4	.3	.2	.2	-----
14.....	.1	.3	.4	.2	.3	.3	.2	.2	-----
15.....	.1	.2	.4	.2	.3	.2	.2	.2	-----
16.....	.1	.2	.3	.2	.2	.2	.2	.2	-----
17.....	.1	.2	.2	.2	.2	.2	.2	.2	-----
18.....	.1	.2	.2	.2	.2	.2	.2	.1	-----
19.....	.1	.1	.2	.2	.2	.2	.2	.1	-----
20.....	.1	.1	.2	.2	.2	.2	.2	.2	-----
21.....	.1	.1	.4	.2	.2	.2	.2	.1	-----
22.....	.1	.1	.3	.2	.2	.2	.2	.2	-----
23.....	.1	.1	.2	.2	.2	.2	.2	.1	-----
24.....	.1	.1	.2	.2	.2	.4	.2	.1	-----
25.....	.1	.1	.3	.2	.2	.3	.2	.1	-----
26.....	.1	.1	.4	.2	.2	.2	.2	.1	-----
27.....	.2	.1	.3	.1	.2	.4	.2	.1	-----
28.....	.1	.1	.3	.1	.2	.3	.2	.1	-----
29.....	.1	.1	.3	.1	.2	.2	.1	.1	-----
30.....	.2	.1	.4	.1	-----	.2	.1	.1	-----
31.....	.9	-----	.3	.1	-----	.2	-----	.1	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet		
October.....	0.9		0.1		0.13		8.0		
November.....	.4		.1		.18		10.7		
December.....	.5		.1		.25		15.4		
January.....	.3		.1		.22		13.5		
February.....	3.5		.1		.45		25.9		
March.....	.4		.2		.27		16.6		
April.....	.5		.1		.21		12.5		
May.....	.2		.1		.14		8.6		
June.....	.1		-----		.07		4.2		
July.....	-----		-----		.04		2.5		
August.....	-----		-----		.03		1.8		
September.....	-----		-----		.03		1.8		
The year.....	3.5		-----		.17		122		

* Estimated.

NOTE.—Daily discharge June 5 to Sept. 30 was less than 0.1 second-foot.

EATON CREEK NEAR PASADENA, CALIF.

LOCATION.—Water-stage recorder near line between secs. 2 and 11, T. 1 N., R. 12 W., at mouth of canyon just above Mount Wilson toll bridge, and 4 miles northeast of Pasadena.

DRAINAGE AREA.—6.5 square miles.

RECORDS AVAILABLE.—March, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, 569 second-feet February 4 (gage height, 3.5 feet); no flow for several months.

1918-1928: Maximum discharge, about 1,360 second-feet April 7, 1926 (gage height, 5.0 feet); no flow for long periods each year.

REMARKS.—Records good. City of Pasadena diverts water above station; records of diversion furnished by city.

Daily and monthly discharge, in second-feet, 1927-28

Date	Discharge	Date	Discharge	Date	Discharge
Dec. 25.....	1.0	Feb. 4.....	119	Feb. 9.....	0.6
Dec. 26.....	5.0	Feb. 5.....	18	Feb. 14.....	.3
Dec. 27.....	.7	Feb. 6.....	6.0	Feb. 15.....	1.3
Dec. 29.....	.1	Feb. 7.....	.1	Apr. 3.....	.2
Feb. 3.....	.1				

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	5.0	0	0.22	13.5
February.....	119	0	5.01	288
April.....	.2	0	.007	.4
The year.....	119	0	.42	302

NOTE.—No flow during year ending Sept. 30, 1928, except during days given in the above table.

Monthly diversions, in acre-feet, by city of Pasadena from Eaton Creek, 1927-28

Month	Run-off	Month	Run-off	Month	Run-off
October.....	25.6	March.....	93.3	August.....	7.7
November.....	57.8	April.....	72.9	September.....	4.2
December.....	81.0	May.....	50.0		
January.....	84.2	June.....	29.8	The year.....	630.2
February.....	109.2	July.....	14.5		

SANTA YNEZ RIVER BASIN

SANTA YNEZ RIVER NEAR LOMPOC, CALIF.

LOCATION.—Staff gage near east boundary of La Mision Vieja de la Purisima grant, $1\frac{1}{2}$ miles east of Lompoc, Santa Barbara County.

DRAINAGE AREA.—790 square miles.

RECORDS AVAILABLE.—November, 1906, to September, 1918; April, 1925, to September, 1928 (discharge not computed for 1909).

EXTREMES.—Maximum discharge during year, 2,150 second-feet December 25 (gage height, 5.00 feet); minimum, 0.1 second-foot several days in October. 1906-1918, 1925-1928: Maximum discharge, 41,800 second-feet January 25, 1914 (gage height, 13.0 feet); minimum, 0.1 second-foot October 8-10, 1925, and several days in September and October, 1927.

REMARKS.—Records fair. Water is diverted by the city of Santa Barbara at Gibraltar Dam, and some irrigation water is pumped from wells along banks of river.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	38	18	92	37	61	87	18	9.5	1.8	1.0	0.9
2	.1	48	18	80	37	61	76	18	7	2.7	1.0	1.0
3	.1	38	18	73	64	85	68	16	8.5	1.8	1.8	.9
4	.1	34	13	70	650	111	68	16	8	2.7	1.8	.9
5	.1	29	18	64	810	218	65	16	6	1.8	1.0	2.7
6	.1	27	18	57	385	163	65	18	1.0	1.8	.9	2.7
7	.1	27	19	51	258	136	58	19	1.8	2.7	1.0	2.7
8	.1	27	19	51	196	118	56	22	2.7	1.8	1.0	1.0
9	.1	27	19	51	178	102	47	20	1.0	1.8	.9	.9
10	.1	42	29	48	158	87	42	20	7	1.0	1.0	1.0
11	.1	29	26	44	142	84	42	19	3.6	1.8	1.8	1.8
12	.1	32	26	44	150	73	38	19	3.6	1.8	1.0	1.8
13	.1	32	24	48	139	70	38	22	4.4	1.8	1.0	.7
14	.1	29	27	44	128	70	38	19	3.6	1.8	1.0	.8
15	.1	27	26	44	111	68	34	19	2.7	1.8	.9	.9
16	.1	27	20	44	103	65	31	16	2.7	1.8	1.0	.8
17	.1	23	21	42	100	63	32	14	5	1.0	.6	.9
18	.1	23	21	42	92	65	29	15	3.6	1.8	1.0	.9
19	.1	21	21	44	90	65	31	12	3.6	1.8	1.0	.9
20	.1	21	24	40	85	58	29	14	2.7	2.7	.6	1.0
21	.1	21	24	38	80	58	31	15	1.8	1.8	.6	1.0
22	.1	21	24	38	75	56	32	14	3.6	1.8	.6	1.8
23	.1	21	24	38	73	56	31	12	.9	.8	.4	1.0
24	.1	21	24	38	68	89	29	14	2.7	.8	.6	2.7
25	.1	21	2,150	38	68	92	25	15	1.8	1.0	.3	2.7
26	.1	21	490	37	64	112	27	14	.9	1.0	.5	1.0
27	35	21	139	37	59	105	25	14	.8	1.8	.5	1.0
28	111	21	103	37	59	108	20	11	.9	1.8	1.0	1.0
29	59	21	85	37	59	95	23	11	.7	1.8	.6	1.0
30	40	21	98	37	---	89	19	11	.8	1.0	.7	.9
31	53	---	100	37	---	87	---	9.5	---	1.0	.8	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	111	0.1	9.70	596
November	48	21	27.0	1,610
December	2,150	18	119	7,320
January	92	37	47.9	2,950
February	810	37	156	8,970
March	218	56	89.4	5,500
April	87	19	41.2	2,450
May	22	9.5	15.9	978
June	9.5	.7	3.43	204
July	2.7	.8	1.70	105
August	1.8	.2	.90	55.3
September	2.7	.7	1.31	78.0
The year	2,150	.1	42.4	30,800

SALINAS RIVER BASIN

ARROYO SECO NEAR SOLEDAD, CALIF.

LOCATION.—Staff gage in sec. 21, T. 19 S., R. 6 E., at Pettitt ranch, 15 miles south of Soledad.

DRAINAGE AREA.—215 square miles.

RECORDS AVAILABLE.—January, 1901, to September, 1928.

EXTREMES.—Maximum discharge during year, 7,300 second-feet March 24 (gage height, 10.0 feet); probably no flow in October.

1901–1928: Maximum discharge, about 22,000 second-feet February 21, 1917, and November 27, 1926 (gage height, 16.5 feet); stream dry during periods in 1902, 1903, 1904, 1906, 1913, 1914, 1919, 1921, 1924, and 1926.

REMARKS.—Records fair. Daily discharge not determined October 1–29 and March 25–31. Mean monthly discharge partly estimated for October and March. No diversions.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		53	32	265	68	56	400	72	27	7.5	1.2	0.5
2		27	32	176	68	58	1,230	72	25	7.5	1.2	.5
3		27	29	130	1,600	72	840	65	21	6.5	1.2	.5
4		27	29	118	2,590	72	510	65	20	6	1.0	.5
5		27	29	105	1,090	80	380	65	20	6	1.0	.5
6		27	29	95	665	88	340	65	21	9	1.0	.5
7		27	29	85	510	88	322	58	21	4.9	.9	.5
8		27	29	71	340	88	305	58	21	4.0	.9	.5
9		27	27	68	270	80	270	56	16	3.6	.9	.5
10		27	27	68	210	80	240	56	18	3.6	.8	.5
11		27	27	68	210	72	210	53	18	3.6	.8	.5
12		39	27	68	156	72	210	53	18	3.6	.8	.5
13		53	27	65	156	72	196	51	16	3.6	.8	.5
14		75	27	65	146	58	196	51	16	3.2	.8	.5
15		68	27	62	132	58	182	51	16	3.2	.8	.5
16		62	39	62	108	58	169	48	14	2.8	.7	.5
17		62	68	59	104	58	156	48	13	2.8	.7	.5
18		59	39	59	94	58	144	48	13	2.8	.7	.5
19		53	39	59	88	56	132	45	13	2.4	.7	.5
20		42	27	59	80	56	120	44	13	2.4	.7	.5
21		39	37	56	72	53	120	44	13	2.0	.7	.4
22		39	37	53	72	70	108	42	13	1.8	.7	.4
23		37	34	59	69	500	108	39	13	1.8	.7	.5
24		37	39	62	65	3,030	108	37	12	1.6	.7	.4
25		37	39	59	58		98	35	12	1.6	.6	.4
26		34	335	59	58		88	35	10	1.6	.6	.4
27		34	205	59	58		80	33	10	1.4	.6	.4
28		34	155	56	58		72	33	10	1.4	.6	.4
29		32	155	56	56		82	31	10	1.2	.6	.4
30	59	32	155	85			72	29	8.5	1.2	.6	.4
31	53		155	68				29		1.2	.6	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	59		* 5.0	307
November	75	27	39.7	2,360
December	355	27	64.0	3,940
January	265	53	79.9	4,910
February	2,590	56	319	18,300
March	3,030	53	415	25,500
April	1,230	72	250	14,900
May	72	29	48.7	2,990
June	27	8.5	15.7	934
July	9	1.2	3.4 ¹	210
August	* 1.2	.6	.79	48.6
September	.5	.4	.47	28.0
The year	3,030		103	74,400

* Estimated.

COYOTE CREEK BASIN

COYOTE CREEK NEAR MADRONE, CALIF.

LOCATION.—Staff gage in northwest corner of San Jose grant, one-fourth mile below mouth of Las Animas Creek and $2\frac{1}{4}$ miles north east of Madrone, Santa Clara County.

DRAINAGE AREA.—193 square miles.

RECORDS AVAILABLE.—October, 1902, to September, 1912; December, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,580 second-feet March 27 (gage height, 10.0 feet); minimum, 0.1 second-foot September 22 and 23 (gage height, 1.62 feet).

1902-1912, 1916-1928: Maximum discharge, 25,000 second-feet, probably occurred March 7, 1911; no flow during several short periods from 1902-1911, from August 8 to November 15, 1920, and from July 16 to September 15, 1924.

REMARKS.—Records good. Discharge interpolated July 26 to August 11. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.4	1.3	1.2	27	8.5	9.5	103	17	6	2.0	0.8	0.2
2.....	.5	1.0	1.2	21	8.5	9.5	145	16	6	2.4	.8	.3
3.....	.5	.7	1.1	17	12	9.5	648	16	5.5	2.4	.8	.3
4.....	.5	.7	1.0	16	1,080	9	300	15	5	2.3	.7	.3
5.....	.5	.6	1.1	13	237	9.5	177	15	4.9	2.3	.7	.3
6.....	.5	.5	1.0	12	98	10	125	14	4.5	2.1	.7	.3
7.....	.5	.6	1.1	11	66	13	103	14	3.9	2.0	.6	.3
8.....	.5	.6	1.1	10	41	11	84	14	3.9	1.9	.6	.2
9.....	.5	.7	1.3	10	34	10	70	14	3.6	2.0	.6	.2
10.....	.4	2.6	2.3	10	28	10	58	13	4.0	1.9	.5	.2
11.....	.5	1.9	1.6	9.5	22	11	50	13	4.2	1.8	.5	.2
12.....	.5	1.5	1.5	9	19	12	44	12	4.2	1.8	.5	.3
13.....	.5	3.0	1.5	8.5	17	12	40	12	3.9	1.6	.6	.3
14.....	.5	1.9	1.7	8	16	12	38	12	3.9	1.6	.6	.3
15.....	.5	1.5	1.5	8	15	12	38	12	3.5	1.4	.5	.2
16.....	.5	.9	1.5	7.5	14	12	37	11	3.5	1.3	.4	.2
17.....	.6	.9	1.5	7	13	12	32	11	3.4	1.4	.4	.2
18.....	.5	1.2	1.5	7	12	11	29	11	3.4	1.4	.4	.2
19.....	.5	1.2	1.4	6.5	12	11	26	11	3.4	1.3	.4	.2
20.....	.5	1.2	1.4	6.5	12	10	28	10	3.4	1.3	.4	.2
21.....	.5	2.3	1.5	6	11	10	28	10	3.4	1.4	.3	.2
22.....	.5	1.8	1.5	7	11	10	26	9.5	3.4	1.3	.4	.1
23.....	.5	1.6	1.5	7.5	10	16	24	8.5	2.8	1.2	.4	.1
24.....	.5	1.4	1.6	6.5	10	411	23	8.5	2.6	1.2	.4	.2
25.....	.5	1.3	3.4	6	10	1,130	23	8	2.5	1.1	.5	.2
26.....	.5	1.3	3.0	6	10	920	22	8	2.4	1.1	.5	.2
27.....	.6	1.3	2.8	6.5	9.5	1,990	21	7.5	2.4	1.0	.5	.2
28.....	.6	1.3	3.2	7	10	692	20	7.5	2.3	1.0	.5	.2
29.....	.6	1.3	168	9.5	9.5	273	19	7.5	2.3	.9	.5	.2
30.....	.6	1.2	108	8.5	-----	160	18	7	2.1	.9	.4	.2
31.....	2.2	-----	47	8	-----	119	-----	6.5	-----	.9	.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2.2	0.4	0.56	34.4
November.....	3.0	.5	1.31	78.0
December.....	168	1.0	11.9	732
January.....	27	6	9.77	601
February.....	1,080	8.5	64.0	3,680
March.....	1,990	9	189	11,600
April.....	648	18	80.0	4,760
May.....	17	6.5	11.3	695
June.....	6	2.1	3.68	219
July.....	2.4	.9	1.55	95.3
August.....	.8	.3	.52	32.0
September.....	.3	.1	.22	13.1
The year.....	1,990	.1	31.1	22,500

COYOTE CREEK BASIN

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COYOTE CREEK NEAR EDENVALE, CALIF.

LOCATION.—Staff gage at east boundary of Santa Teresa grant at "The Narrows,"
1½ miles northeast of Edenvale, Santa Clara County.

RECORDS AVAILABLE.—October, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,430 second-feet March 27 (gage
height, 7.80 feet); no flow except on days shown.

1916-1928: Maximum discharge, 10,000 second-feet February 10, 1922:
(gage height, 12.8 feet); no flow during greater part of each year.

REMARKS.—Records good. Water is pumped from wells along river above
station for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Feb.	Mar.	Apr.	Day	Dec.	Feb.	Mar.	Apr.
1	0	0	0	16	16	0	0	0	0
2	0	0	0	11	17	0	0	0	0
3	0	0	0	515	18	0	0	0	0
4	0	470	0	216	19	0	0	0	0
5	0	151	0	106	20	0	0	0	0
6	0	29	0	65	21	0	0	0	0
7	0	0	0	34	22	0	0	0	0
8	0	0	0	14	23	0	0	0	0
9	0	0	0	0	24	0	0	202	0
10	0	0	0	0	25	0	0	470	0
11	0	0	0	0	26	0	0	768	0
12	0	0	0	0	27	0	0	1,830	0
13	0	0	0	0	28	0	0	470	0
14	0	0	0	0	29	0	0	178	0
15	0	0	0	0	30	78		86	0
					31	0		40	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	78	0	2.52	155
February	470	0	22.4	1,290
March	1,830	0	130	7,990
April	515	0	32.6	1,940
The year	1,830	0	15.7	11,400

NOTE.—No flow October, November, January, and May to September.

ALAMEDA CREEK BASIN

ALAMEDA CREEK NEAR SUNOL CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 7, T. 5 S., R. 2 E., 1 mile above junction with Calaveras Creek and $7\frac{1}{2}$ miles southeast of Sunol.

DRAINAGE AREA.—33.1 square miles.

RECORDS AVAILABLE.—May, 1911, to September, 1928.

EXTREMES.—1911-1928: Maximum mean daily discharge, 1,660 second-feet February 21, 1917; no flow during a part of most years.

REMARKS. No diversions. Record, in million gallons, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0	15	12	2.0	41	15	0.9
2	0	12	12	1.9	371	14	.9
3	0	10	57	1.5	266	13	.8
4	0	8	271	1.4	146	11	.8
5	0	6.5	56	1.2	86	10	.6
6	0	5.5	30	1.2	56	8.5	.6
7	0	4.5	22	1.2	43	7.5	.5
8	0	4.5	15	1.2	32	6	.3
9	0	5	12	1.2	28	6	.2
10	0	5	10	1.2	27	5.5	0
11	0	5	9.5	1.4	25	5.5	0
12	0	5	8	1.4	23	4.5	0
13	0	5	6.5	1.4	20	3.6	0
14	0	5	6	1.9	18	2.8	0
15	3.6	5	6	2.0	17	2.5	0
16	2.2	5.5	5.5	2.0	17	2.3	0
17	2.2	5.5	5.5	2.5	16	2.3	0
18	2.2	5.5	5	3.6	16	2.3	0
19	2.2	5.5	5	5.5	16	2.2	0
20	2.6	5.5	4.5	4.5	16	2.2	0
21	2.6	5.5	4.2	5	16	2.2	0
22	2.6	5.5	3.6	4.5	15	2.0	0
23	2.6	41	3.2	224	15	1.9	0
24	2.6	28	2.9	413	15	1.7	0
25	12	20	2.8	315	15	1.5	0
26	29	13	2.5	938	15	1.5	0
27	19	13	2.3	885	15	1.4	0
28	26	13	2.2	217	15	1.4	0
29	422	15	2.2	91	15	1.2	0
30	50	15	-----	60	15	1.2	0
31	26	13	-----	43	-----	1.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	422	0	19.7	1,210
January	41	4.5	10.1	621
February	271	2.2	20.2	1,160
March	938	1.2	121	7,440
April	371	15	47.8	2,840
May	15	1.1	4.66	287
June	.9	0	.19	11.3
The year	938	0	18.7	13,600

NOTE. No flow in months for which no record is given.

ALAMEDA CREEK AT SUNOL CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 7, T. 4 S., R. 1 E., at Sunol Dam, 1 mile below junction with Arroyo de la Laguna and 1 mile west of Sunol.

DRAINAGE AREA.—620 square miles.

RECORDS AVAILABLE.—October, 1900, to September, 1928.

EXTREMES.—1901-1928: Maximum mean daily discharge, 14,700 second-feet March 7, 1911; no flow for part of nearly every year.

REMARKS.—Spring Valley Water Co.'s aqueduct diverts at station. Regulation caused by operations at dam on Calaveras Creek. Records, in millions of gallons per day, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1.....	0	0	0	0	1.9	50	0.2	4.5
2.....	0	0	0	0	1.9	608	.2	4.5
3.....	0	0	0	0	1.9	960	.2	4.5
4.....	0	0	0	443	1.9	416	.2	4.5
5.....	0	0	0	200	1.9	251	.9	4.5
6.....	0	0	0	69	1.9	166	32	22
7.....	0	0	0	13	1.9	95	27	22
8.....	0	0	0	6.5	1.9	54	27	22
9.....	0	0	0	5.5	1.9	25	38	22
10.....	0	0	0	5	2.6	16	38	22
11.....	0		0	4.5	2.5	5.5	38	22
12.....	0	0	0	4.5	2.5	1.2	38	22
13.....	0	0	0	4.3	2.2	.5	38	20
14.....	4.5	0	0	4.3	2.0	.3	38	20
15.....	.5	0	0	4.3	1.9	.2	38	20
16.....	0	0	0	4.0	1.9	.2	38	20
17.....	0	0	0	3.9	.8	.2	38	20
18.....	0	0	0	3.9	.8	.3	35	20
19.....	0	0	0	3.9	.8	.3	32	20
20.....	0	0	0	3.7	.8	.3	32	25
21.....	0	0	0	3.7	.5	.3	30	25
22.....	0	0	0	0	.3	.2	27	25
23.....	0	0	17	2.2	.2	.2	27	25
24.....	0	0	8.5	2.0	413	.2	20	25
25.....	0	0	5.5	1.9	1,290	.2	14	25
26.....	0	0	0	1.9	1,250	.2	9	25
27.....	0	0	0	1.9	2,830	.2	6	25
28.....	0	0	0	1.9	876	.2	5.5	30
29.....	0	54	0	1.9	300	.2	5	30
30.....	0	0	9	-----	166	.2	4.5	30
31.....	-----	7.5	1.5	-----	65	-----	4.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November.....	4.5	0	0.17	10.1
December.....	54	0	2.00	123
January.....	17	0	1.34	82.4
February.....	443	0	27.5	1,580
March.....	2,830	.2	233	14,300
April.....	960	.2	88.4	5,260
May.....	38	.2	21.9	1,350
June.....	30	4.5	20.2	1,200
The year.....	2,830	0	33.0	23,900

NOTE.—No flow in months for which no record is given.

ALAMEDA CREEK NEAR NILES, CALIF.

LOCATION.—Water-stage recorder in sec. 15, T. 4 S., R. 1 W., one-eighth mile above highway bridge and $1\frac{1}{4}$ miles northeast of Niles.

DRAINAGE AREA.—633 square miles.

RECORDS AVAILABLE.—October, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,850 second-feet March 27 (gage height, 8.50 feet); no flow October 1 to November 21 and July 8 to September 30.

1916-1928: Maximum discharge, 13,900 second-feet February 10, 1922 (gage height, 12.44 feet); no flow during periods in 1918, 1920, and 1924-1928.

REMARKS.—Records excellent. Water diverted from the gravel at lower end of Livermore Valley above station. (See Spring Valley Water Co.'s aqueduct near Sunol.) Regulation and storage at dam on Calaveras Creek.

Daily and monthly discharge, in second-feet, 1927-28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	0.3	8	5.5	2.0	110	2.0	4.4	0.4
2.....	0	.3	5	4.7	2.0	699	1.8	4.0	.4
3.....	0	.3	3.7	8	2.1	1,040	1.9	2.7	.4
4.....	0	.3	2.3	453	2.0	536	1.6	1.7	.4
5.....	0	.2	2.0	199	2.1	309	1.3	1.1	.4
6.....	0	.2	1.8	84	2.1	209	40	.9	.3
7.....	0	.2	1.7	27	2.3	134	59	.8	.1
8.....	0	.2	1.8	15	3.1	91	67	.6	0
9.....	0	.3	2.0	10	4.0	50	70	.6	0
10.....	0	.4	1.8	8	3.6	32	67	.6	0
11.....	0	.4	1.8	7	3.2	20	70	.6	0
12.....	0	.3	1.7	6	3.1	9	44	.6	0
13.....	0	.4	1.7	5.5	2.9	7	29	.6	0
14.....	0	.9	1.7	4.7	2.6	6	50	.6	0
15.....	0	.7	1.6	4.0	2.2	5	56	.6	0
16.....	0	.6	1.4	3.7	2.0	4.8	63	.6	0
17.....	0	.5	1.3	3.4	1.3	4.4	41	.6	0
18.....	0	.5	1.3	3.2	1.1	4.0	43	.4	0
19.....	0	.5	1.3	3.1	1.0	3.9	60	.4	0
20.....	0	.5	1.3	2.9	.9	3.6	63	.5	0
21.....	0	.5	1.3	2.8	.9	3.3	47	.5	0
22.....	.6	.5	1.3	2.6	.9	3.1	41	.5	0
23.....	.6	.5	1.0	2.6	12	2.8	43	.5	0
24.....	.5	.5	43	2.6	418	2.8	38	.5	0
25.....	.5	.6	13	2.6	1,460	2.6	44	.5	0
26.....	.5	.6	4.2	2.5	1,360	2.4	40	.5	0
27.....	.4	.6	2.5	2.3	3,660	2.4	44	.5	0
28.....	.4	.7	2.1	2.2	1,250	2.3	40	.5	0
29.....	.4	332	13	2.1	489	2.4	9	.5	0
30.....	.4	124	19	-----	260	2.3	7	.4	0
31.....	-----	34	8	-----	159	-----	4.4	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November.....	0.6	0	0.14	8.3
December.....	332	.2	16.2	996
January.....	43	1.3	5.25	323
February.....	453	2.1	30.3	1,740
March.....	3,660	.9	294	18,100
April.....	1,040	2.3	110	6,550
May.....	70	1.3	38.3	2,360
June.....	4.4	.4	.93	55.3
July.....	.4	0	.08	4.9
The year.....	3,660	0	41.5	30,100

NOTE.—No flow in months for which no record is given.

ALAMEDA CREEK BASIN

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CALAVERAS CREEK NEAR SUNOL, CALIF.

LOCATION.—Water-stage recorder just above weir in sec. 13, T. 5 S., R. 1 E., 500 feet below Calaveras Dam, 1 mile above junction with Alameda Creek, and 8 miles southeast of Sunol.

DRAINAGE AREA.—100 square miles.

RECORDS AVAILABLE.—June, 1910, to September, 1928.

EXTREMES.—1910-1928: Maximum mean daily discharge, 3,830 second-feet March 7, 1911; no flow for short periods nearly every year since construction of Calaveras Dam.

REMARKS.—No diversions. Water is stored in Calaveras Reservoir and when released it flows down the natural channel of Calaveras Creek past the station. Record, in million gallons, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	59	63	59	0	11	16	0	50	52	59	63	63
2.....	59	63	59	0	11	16	0	50	56	59	63	63
3.....	60	63	59	0	0	16	0	50	56	59	63	63
4.....	63	63	59	4.9	0	16	0	50	58	59	57	63
5.....	63	63	59	4.7	0	16	0	110	57	60	62	63
6.....	63	63	59	4.7	0	16	0	110	56	60	51	63
7.....	63	63	59	12	0	16	0	110	56	64	58	57
8.....	63	63	59	23	0	16	0	110	56	61	66	63
9.....	63	63	59	25	0	16	0	110	54	61	63	62
10.....	63	63	56	25	9.5	16	0	112	54	61	57	62
11.....	63	63	58	25	10	16	2.8	91	54	61	63	62
12.....	63	63	57	25	10	16	6.5	80	48	61	63	62
13.....	63	63	48	25	10	16	13	94	51	61	63	62
14.....	63	63	47	25	12	16	21	104	53	61	63	62
15.....	63	63	41	25	12	16	21	104	53	61	63	64
16.....	63	63	41	21	12	16	21	94	54	63	63	64
17.....	63	63	41	19	16	16	21	92	54	63	57	67
18.....	63	63	41	19	16	16	22	103	56	63	63	64
19.....	63	63	41	19	16	16	22	106	61	63	63	64
20.....	63	63	41	19	16	16	22	99	59	63	63	64
21.....	63	63	41	19	16	16	22	90	59	63	63	64
22.....	63	63	25	19	16	16	22	94	59	63	63	64
23.....	63	63	27	8	16	12	29	96	59	63	63	64
24.....	63	63	27	0	16	0	36	96	58	63	57	64
25.....	63	63	27	0	16	0	37	96	57	63	63	63
26.....	63	59	25	7	16	0	43	96	57	63	63	63
27.....	63	59	24	9.5	16	0	42	96	58	60	63	63
28.....	63	59	24	1.2	16	0	42	72	59	57	63	63
29.....	63	59	2.0	0	16	0	42	56	59	55	63	66
30.....	63	59	0	0	0	0	46	55	59	63	63	63
31.....	63	0	0	8	0	0	54	54	63	57	57	63

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	63	59	62.2	3,820
November.....	63	59	61.8	3,080
December.....	59	0	40.7	2,500
January.....	25	0	12.7	781
February.....	16	0	10.7	604
March.....	16	0	11.6	713
April.....	46	0	17.8	1,080
May.....	112	50	88.2	5,420
June.....	61	48	56.0	3,330
July.....	64	55	60.9	3,740
August.....	66	51	61.2	3,760
September.....	67	57	63.0	3,750
The year.....	112	0	45.7	33,200

SAN ANTONIO CREEK NEAR SUNOL, CALIF.

LOCATION.—Water-stage recorder at San Antonio Creek dam site on Valle de San Jose grant, $1\frac{1}{2}$ miles above junction with Alameda Creek and $2\frac{1}{2}$ miles southeast of Sunol, Alameda County.

DRAINAGE AREA.—39.7 square miles, since change of location in 1915 or 1916.

RECORDS AVAILABLE.—January, 1912, to September, 1928.

EXTREMES.—1912-1928: Maximum mean daily discharge, 1,460 second-feet January 3, 1916; no flow for a part of the time during most years.

REMARKS.—Discharge estimated July 18-31. No diversions. Record, in million gallons, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	0	9	6	2.9	39	1.4	0.3	0.2
2	0	6.5	7	2.9	207	1.2	.5	.2
3	0	5	23	3.1	126	1.2	.5	.2
4	0	4.3	180	3.1	83	.5	.5	.2
5	0	3.6	41	3.2	58	.8	.5	.2
6	0	2.8	23	3.2	47	.8	.5	.2
7	0	2.2	19	3.1	43	.8	.5	.2
8	0	1.7	15	3.1	31	1.5	.5	.2
9	0	1.5	11	2.9	23	1.7	.5	.2
10	0	1.2	7.5	2.9	17	.9	.5	.2
11	0	.9	6.5	2.8	7	.8	.5	.2
12	0	.9	5.5	2.8	3.2	.8	.5	.2
13	0	.8	4.5	2.6	4.3	.9	.5	.2
14	0	.8	4.0	2.6	3.9	1.2	.5	.2
15	0	.8	3.9	1.4	5.5	11	.5	.2
16	0	.6	3.4	1.4	5.5	1.2	.5	.2
17	0	.5	3.4	1.5	3.2	1.2	.5	.2
18	0	.5	3.2	1.5	3.2	1.7	.5	.2
19	0	.3	3.2	2.3	2.6	1.7	.5	.2
20	.6	.3	3.1	1.9	1.7	1.7	.5	.2
21	.8	.3	3.1	2.6	.9	1.7	.5	.2
22	.8	6.5	2.8	1.9	1.9	1.4	.5	.2
23	.9	107	2.8	40	2.2	.8	.5	.2
24	.9	31	2.8	122	3.1	.8	.5	.2
25	1.2	15	2.8	339	3.1	.8	.3	.2
26	1.4	11	2.8	408	1.1	.6	.3	.2
27	1.5	7.5	2.8	415	1.4	.8	.3	.2
28	1.9	9	2.8	152	1.4	.9	.3	.2
29		20	2.9	66	1.7	1.2	.3	.2
30		33	11	48	1.7	1.1	.2	.2
31		17	7.5	41		.3		.2

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	131	0	6.17	379
January	107	.7	8.75	538
February	130	2.8	13.7	788
March	415	1.4	54.4	3,340
April	207	.8	24.5	1,480
May	11	.7	1.09	67.6
June	.5	.7	.42	25.6
July	.2	.2	.15	9.2
The year	415	0	9.11	6,610

NOTE.—No flow in months for which no record is given.

ARROYO DE LA LAGUNA NEAR PLEASANTON, CALIF.

LOCATION.—Water-stage recorder at Laguna Dam on Valle de San Jose grant, between the Western Pacific and Southern Pacific Cos.' railroad bridges, $3\frac{3}{4}$ miles south of Pleasanton, Alameda County.

DRAINAGE AREA.—412 square miles, since change of location in 1915 or 1916.

RECORDS AVAILABLE.—January, 1912, to September, 1928. Previous to 1918 station was at bridge on county road No. 2,000, 2 miles west of Pleasanton.

EXTREMES.—1912-1928: Maximum mean daily discharge, 9,810 second-feet January 25, 1914; no flow during a part of some years.

REMARKS.—No diversions. Record, in million gallons, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0	0.9	0.8	0.6	58	2.2	1.1
2	0	.9	.8	.6	183	1.9	1.1
3	0	.9	.8	.6	469	1.9	.9
4	0	.9	72	.6	224	1.9	.9
5	0	.9	20	.6	125	1.9	.9
6	0	.9	15	.6	66	1.9	.8
7	0	.9	7.5	.6	43	1.9	.8
8	0	.9	1.5	.6	40	1.9	.8
9	0	.9	1.2	.5	37	1.7	.8
10	0	.9	.8	.5	33	1.9	.6
11	0	.9	.8	.5	29	1.9	.6
12	0	.9	.8	.5	26	1.7	.6
13	0	.9	.8	.5	22	1.7	.6
14	0	.9	.8	.5	19	1.7	.6
15	0	.9	.8	.5	17	1.5	.5
16	0	.8	.8	.5	15	1.5	.5
17	0	.8	.8	.5	13	1.5	.5
18	0	.8	.8	.5	11	1.5	.5
19	0	.8	.8	.5	9.5	1.5	.5
20	0	.8	.8	.5	8	1.5	.5
21	0	.8	.8	.5	7	1.4	.8
22	0	.8	.8	.5	6	1.4	.8
23	0	.8	.8	.8	5	1.2	.8
24	0	.8	.6	115	4.5	1.2	.3
25	0	.8	.6	597	4.0	1.2	.3
26	0	.8	.6	685	3.7	1.4	.3
27	0	.8	.6	1,890	3.2	1.2	.2
28	0	.8	.6	605	2.8	1.2	.2
29	0	.8	.6	215	2.6	1.2	.2
30	.9	.8	-----	110	2.5	1.1	0
31	.9	.8	-----	66	-----	1.1	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
December	0.9	0	0.06	3.7			
January	.9	.8	.85	52.8			
February	72	.6	4.60	265			
March	1,890	.5	139	8,550			
April	469	2.5	49.6	2,950			
May	2.2	1.1	1.67	96.5			
June	1.1	0	.64	32.1			
The year	1,890	0	16.4	11,900			

NOTE.—No flow in months for which no record is given.

TASSAJERO CREEK NEAR PLEASANTON, CALIF.

LOCATION.—Water-stage recorder just below Santa Rita highway bridge on Santa Rita grant, 3 miles north of Pleasanton, Alameda County.

DRAINAGE AREA.—27.9 square miles.

RECORDS AVAILABLE.—December, 1914, to May, 1919; October, 1921, to September, 1928.

EXTREMES.—1914-1919, 1921-1928: Maximum mean daily discharge, 372 second-feet January 14, 1916; no flow during a part of each year.

REMARKS.—No information about diversions. Record, in million gallons, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	Day	Dec.	Jan.	Feb.	Mar.	Apr.
1.....	0	0.2	0.5	0	4.0	16.....	0	0	0	0	0.6
2.....	0	.2	.5	0	42	17.....	0	0	0	0	.3
3.....	0	.2	.5	0	25	18.....	0	0	0	0	0
4.....	0	.2	5.5	0	6.5	19.....	0	0	0	0	0
5.....	0	0	1.4	0	3.1	20.....	0	0	0	0	0
6.....	0	0	.8	0	2.9	21.....	0	0	0	0	0
7.....	0	0	.5	0	2.8	22.....	0	0	0	0	0
8.....	0	0	.2	0	2.5	23.....	0	0	0	0	0
9.....	0	0	.2	0	2.3	24.....	0	0	0	1.7	0
10.....	0	0	.2	0	2.2	25.....	0	0	0	143	0
11.....	0	0	.2	0	2.0	26.....	0	0	0	68	0
12.....	0	0	.2	0	2.0	27.....	0	0	0	64	0
13.....	0	0	0	0	1.5	28.....	.5	0	0	9.5	0
14.....	0	0	0	0	1.2	29.....	11	12	0	6	0
15.....	0	0	0	0	.9	30.....	.5	1.2	-----	4.8	0
						31.....	.3	.5	-----	4.0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	11	0	0.38	23.4
January.....	12	0	.46	28.3
February.....	5.5	0	.35	20.1
March.....	143	0	9.69	596
April.....	42	0	3.38	201
The year.....	143	0	1.20	869

NOTE.—No flow in months for which no record is given.

ARROYO MOCHO NEAR LIVERMORE, CALIF.

LOCATION.—Water-stage recorder in sec. 6, T. 4 S., R. 3 E., 4 miles above junction with Dry Creek and 5 miles southeast of Livermore.

DRAINAGE AREA.—38.3 square miles.

RECORDS AVAILABLE.—January, 1912, to September, 1928.

EXTREMES.—1912-1928: Maximum mean daily discharge, 700 second-feet February 20, 1914 (no record for flood of January, 1914); no flow during a part of each year.

REMARKS.—No diversions. Record, in million gallons, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0	5.5	1.2	0.8	4.6	0.3	0.2
2	0	2.6	2.2	.8	34	.3	.2
3	0	1.9	.8	.8	40	.3	.2
4	0	.8	42	.8	22	.3	.2
5	0	.6	22	.8	11	.3	.2
6	0	.6	7.5	1.1	9.5	.3	0
7	0	.6	2.9	1.5	7	.5	0
8	0	.6	2.9	1.1	5.5	.5	0
9	0	.6	2.0	.8	3.7	.5	0
10	0	.6	1.5	.8	2.5	.5	0
11	0	.6	2.2	.8	1.4	.5	0
12	0	.6	2.2	.8	1.4	.5	0
13	0	.6	1.5	.8	.8	.3	0
14	.6	.6	1.2	.8	.8	.3	0
15	.6	.6	.8	.8	.8	.3	0
16	.6	.6	.8	.8	.8	.2	0
17	.6	.6	.8	.8	.8	.2	0
18	.6	.6	.8	.8	.6	.2	0
19	.6	.8	.8	.6	.6	.2	0
20	.6	.8	.8	.6	.6	.2	0
21	.6	.8	.8	.5	.6	.2	0
22	.6	.8	.8	.5	.6	.2	0
23	.6	.8	.8	.8	.5	.2	0
24	.6	.8	.8	22	.5	.2	0
25	.6	.8	.8	42	.5	.2	0
26	.6	.8	.8	49	.5	.2	0
27	.6	.8	.8	89	.5	.2	0
28	1.2	.8	.8	26	.5	.2	0
29	17	10	.8	12	.3	.2	0
30	14	2.6	-----	10	.3	.2	0
31	6.5	1.9	-----	9.5	-----	.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	17	0	1.54	94.7
January	10	.6	1.34	82.4
February	42	.8	3.81	219
March	89	.5	8.96	551
April	40	.3	5.09	303
May	.5	.2	.26	16.0
June	.2	0	.08	1.8
The year	89	0	1.75	1,270

NOTE.—No flow in months for which no record is given.

ARROYO LAS POSITAS NEAR LIVERMORE, CALIF.

LOCATION.—Water-stage recorder at bridge on Hayward-Tracy highway, on Valle de San Jose grant, 2 miles northwest of Livermore, Alameda County.

DRAINAGE AREA.—69.5 square miles.

RECORDS AVAILABLE.—January, 1912, to September, 1919; October, 1921, to September, 1922; and October, 1923, to September, 1928.

EXTREMES.—1912-1919, 1921-22, 1923-1928: Maximum mean daily discharge, 499 second-feet January 17, 1916; no flow during a part of most years.

REMARKS.—No diversions. Record, in million gallons, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	Day	Dec.	Jan.	Feb.	Mar.	Apr.
1	0	0.3	0	0.3	0	16	0	0.2	0.2	0.3	0
2	0	.3	.2	.3	7.5	17	0	.2	.2	.3	0
3	0	.3	.2	.3	12	18	0	.2	.2	.2	0
4	0	.2	1.5	.3	3.4	19	0	.2	.2	.2	0
5	0	.2	.2	.3	1.4	20	0	.2	.2	.2	0
6	0	.2	.2	.3	.9	21	0	.2	.2	.2	0
7	0	.2	0	.3	.6	22	0	.2	.3	.2	0
8	0	.2	0	.3	.3	23	0	.2	.3	0	0
9	0	.2	0	.3	.3	24	0	.2	.3	.2	0
10	0	.2	0	.3	.3	25	0	.2	.3	7.5	0
11	0	.2	0	.3	.2	26	0	.2	.3	8	0
12	0	.2	0	.3	.2	27	0	.2	.3	46	0
13	0	.2	.2	.3	.2	28	3.2	.2	.3	7.5	0
14	.2	.2	.6	.3	.2	29	5.5	.9	.3	1.9	0
15	.2	.2	.3	.3	.2	30	2.6	.3		.5	0
						31	1.5	0		0	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	5.5	0	0.44	27.1
January	.9	0	.19	11.7
February	1.5	0	.23	13.2
March	46	0	2.51	154
April	12	0	.93	55.3
The year	46	0	.36	261

NOTE.—No flow in months for which no record is given.

ARROYO DEL VALLE NEAR LIVERMORE, CALIF.

LOCATION.—Water-stage recorder at Cresta Blanca winery, 600 feet below highway bridge, on Valle de San Jose grant, $4\frac{1}{2}$ miles south of Livermore, Alameda County.

DRAINAGE AREA.—149 square miles.

RECORDS AVAILABLE.—January, 1912, to September, 1928.

EXTREMES.—1912-1928: Maximum mean daily discharge, 5,930 second-feet January 25, 1914; no flow during a part of each year.

REMARKS.—No diversions. Record, in million gallons, furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	7.5	4.6	3.9	47	5	0.8	0.2
2.....	0	5.5	3.6	4.0	161	4.3	.6	.2
3.....	0	5.5	5.5	4.3	283	3.4	.5	.2
4.....	0	5.5	221	5	145	2.3	.5	.2
5.....	0	2.5	102	5.5	93	2.0	.5	.2
6.....	0	2.5	52	5	58	2.3	.5	.2
7.....	0	2.6	35	4.3	40	2.9	.5	.2
8.....	0	2.6	25	4.3	35	3.7	.5	.2
9.....	0	2.8	20	4.0	30	3.9	.5	.2
10.....	0	2.9	15	4.0	27	3.9	.5	.2
11.....	0	3.1	13	3.9	25	3.7	.5	.2
12.....	0	3.2	13	3.9	25	1.7	.5	.2
13.....	0	3.4	11	3.6	25	1.7	.5	.2
14.....	0	3.6	8.5	3.4	22	2.2	.5	.2
15.....	0	3.7	6	2.6	19	2.5	.3	.2
16.....	0	3.9	5.5	2.5	19	2.5	.2	.2
17.....	0	4.0	5.5	2.2	19	1.7	.2	.2
18.....	0	4.2	5.5	2.0	16	1.5	.2	0
19.....	0	4.2	5	1.7	15	.9	.2	0
20.....	0	4.2	4.3	1.5	14	.9	.2	0
21.....	0	4.2	4.0	1.5	12	1.2	.2	0
22.....	0	4.2	3.9	1.7	12	1.2	.2	0
23.....	0	11	3.9	3.2	11	1.1	.2	0
24.....	0	25	3.6	317	12	.9	.2	0
25.....	0	22	3.6	605	8.5	.9	.2	0
26.....	0	19	3.4	469	7.5	.9	.2	0
27.....	0	16	3.4	1,400	5.5	.9	.2	0
28.....	0	14	3.6	418	4.2	.9	.2	0
29.....	56	11	3.6	170	3.7	.9	.2	0
30.....	45	9.5	-----	106	4.2	.9	.2	0
31.....	21	7.5	-----	57	-----	.8	-----	0
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
December.....	56		0		3.97		244	
January.....	25		2.5		7.11		437	
February.....	221		3.4		20.5		1,180	
March.....	1,400		1.5		117		7,190	
April.....	283		3.7		39.9		2,370	
May.....	5		.8		2.06		127	
June.....	.8		.2		.32		19.0	
July.....	.2		0		.08		4.9	
The year.....	1,400		0		15.9		11,600	

NOTE.—No flow in months for which no record is given.

SPRING VALLEY WATER CO.'S AQUEDUCT NEAR NILES, CALIF.

LOCATION.—At Venturi meter half a mile northeast of Niles, Alameda County.
RECORDS AVAILABLE.—April, 1903, to September, 1928.

EXTREMES.—1903-1928: Maximum mean daily discharge, 87 second-feet June 29, 1926; no flow November 23, 1924.

REMARKS.—Records good. Water is occasionally wasted a short distance above the Venturi meter, but this waste is included in the published discharge. This aqueduct diverts water from Alameda Creek at Suisun for storage in San Mateo County reservoirs which supply San Francisco and vicinity with water for domestic use. Records in million gallons per day furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	75	77	76	35	32	26	76	63	63	63	63	63
2.....	75	76	76	26	33	26	46	63	63	64	63	63
3.....	75	76	76	25	38	26	40	63	63	63	63	63
4.....	75	76	71	23	36	26	67	64	63	63	62	63
5.....	76	77	76	24	47	25	74	63	63	64	62	63
6.....	76	77	76	25	71	27	73	62	63	64	56	63
7.....	76	77	70	25	50	27	73	64	63	63	64	63
8.....	76	76	76	39	37	27	73	62	63	63	62	62
9.....	75	75	75	42	34	26	72	63	63	64	63	58
10.....	76	76	75	48	28	26	72	62	63	64	63	63
11.....	77	76	75	48	34	28	72	62	63	64	63	63
12.....	77	75	76	48	32	26	74	63	63	64	63	63
13.....	76	75	74	47	31	26	70	63	63	64	63	63
14.....	76	76	64	48	30	26	69	62	63	64	63	63
15.....	75	76	63	48	29	26	68	63	63	63	63	63
16.....	76	75	63	39	29	26	63	62	62	64	63	63
17.....	76	76	63	35	26	27	52	63	63	64	63	63
18.....	76	75	63	29	28	25	56	63	63	64	62	62
19.....	76	75	63	36	29	26	57	63	63	64	63	64
20.....	76	75	65	40	28	25	54	62	63	64	59	64
21.....	76	75	65	35	28	25	54	62	64	64	64	64
22.....	76	74	49	40	28	25	51	63	63	64	63	64
23.....	72	75	48	25	28	46	54	64	63	64	63	64
24.....	71	76	49	35	28	38	56	61	63	64	63	64
25.....	78	75	49	33	27	45	62	63	63	64	63	64
26.....	77	75	48	29	27	42	63	63	63	63	63	64
27.....	76	75	49	31	27	36	63	63	62	63	63	64
28.....	76	75	48	24	27	55	63	64	63	63	64	64
29.....	76	75	37	32	27	71	63	63	63	63	63	64
30.....	76	75	39	37	---	75	63	63	63	62	64	64
31.....	77	---	47	35	---	75	---	64	---	63	64	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	78	71	75.7	4,650
November.....	77	74	75.6	4,500
December.....	76	37	62.6	3,850
January.....	48	23	35.0	2,150
February.....	71	26	32.7	1,880
March.....	75	25	34.1	2,100
April.....	76	40	63.1	3,750
May.....	64	61	62.7	3,860
June.....	64	61	62.8	3,740
July.....	64	62	63.5	3,900
August.....	64	56	62.5	3,540
September.....	64	58	63.2	3,760
The year.....	78	23	57.8	42,000

KERN RIVER BASIN

KERN RIVER NEAR KERNVILLE, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ sec. 14, T. 23 S., R. 32 E., 3 miles above Salmon Creek and 15 miles north of Kernville.

RECORDS AVAILABLE.—January, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,460 second-feet May 30 (gage height, 7.67 feet); minimum, 3.4 second-feet February 18.

1912-1928: Maximum discharge, 9,690 second-feet January 17, 1916 (gage height, 8.8 feet, old datum); no flow at intervals July 31, 1924, to February 7, 1925.

REMARKS.—Records excellent. Kern River No. 3 Canal diverts about 1 mile above station. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5	3.9	6.5	8	4.2	5	6	510	880	5.5	5.5	5
2	6.5	3.9	6.5	8	4.2	4.7	6	476	882	4.2	6	5
3	6	4.4	6.5	8	4.7	4.9	7	384	1,010	5.5	5	5
4	6.5	4.2	8.5	8	4.9	4.4	6	357	1,040	5.5	5	4.9
5	6.5	4.2	7	8	4.4	4.7	7	432	960	5.5	5.5	4.7
6	6	4.9	7	8	4.2	4.2	7	491	916	5.5	5	4.4
7	5.5	4.2	7.5	8	4.2	4.4	6.5	468	816	5.5	5.5	3.9
8	5.5	4.2	7.5	8	4.2	4.4	7.5	509	646	5.5	5.5	5
9	5.5	4.4	5.5	8	4.2	4.4	7.5	426	486	5.5	5.5	6.5
10	5.5	177	5.5	8	4.2	4.4	8	302	384	5.5	4.9	4.9
11	5.5	6.5	6	8	4.1	4.4	8	372	246	5	5	4.9
12	5.5	6	5.5	7.5	4.1	4.4	44	534	150	5	5	5
13	6	7.5	6	5.5	4.1	4.4	41	675	98	4.9	5.5	5
14	6	6	6	5.5	4.1	4.7	11	761	84	6	5.5	4.9
15	6	6.5	5.5	5.5	4.1	4.4	9	822	90	6	5.5	4.9
16	6	6	5.5	5.5	3.7	4.4	10	643	91	5.5	5.5	5
17	5.5	6	5.5	8	3.7	4.7	10	468	80	5.5	5.5	5
18	4.4	6	5.5	33	3.4	4.4	7.5	417	88	5.5	5.5	5.5
19	4.2	6	6	4.4	3.7	4.7	8	418	86	5.5	5	5.5
20	4.2	6	5.5	4.7	3.7	4.9	10	448	68	5.5	5	5.5
21	4.2	6.5	6	4.4	3.7	4.9	9	289	38	5.5	4.9	5.5
22	4.2	8.5	6	21	3.9	5	10	240	26	5	4.9	4.9
23	4.2	7	6	4.9	3.9	5.5	10	328	30	4.9	4.9	4.9
24	4.2	7	6.5	4.9	10	501	16	568	38	4.7	5.5	4.9
25	4.4	7	8	4.7	215	638	10	689	47	5	5	4.9
26	4.7	7	8	4.4	228	376	11	676	53	6	5	5
27	4.9	6.5	8	4.4	188	320	51	850	29	5	4.9	6
28	4.4	6.5	8	4.7	24	116	98	1,030	4.1	5	4.9	5.5
29	4.4	7	8.5	4.7	6.5	46	198	1,240	3.6	5.5	4.9	5.5
30	4.4	6.5	8.5	4.7	21	360	21	1,240	3.7	5.5	5.5	6
31	5.5	-----	8	4.4	-----	8	-----	1,000	-----	5.5	4.7	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	6.5	4.2	5.25	323
November	177	3.9	11.5	684
December	8.5	5.5	6.60	406
January	33	4.4	7.57	465
February	228	3.4	26.3	1,510
March	638	4.2	68.8	4,230
April	360	6	33.3	1,980
May	1,240	240	583	35,800
June	1,040	3.6	312	18,600
July	6	4.2	5.35	329
August	6	4.7	5.21	320
September	6	3.9	5.09	303
The year	1,240	3.4	89.5	65,000

Daily and monthly discharge, in second-feet, of Kern River and Kern River No. 3 Canal near Kernville, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	226	395	268	253	232	237	547	1,070	1,490	430	206	129
2.....	226	330	206	258	232	241	510	1,040	1,490	402	202	125
3.....	226	348	206	253	259	268	520	944	1,620	366	193	125
4.....	218	357	288	248	295	258	510	917	1,650	376	185	125
5.....	222	348	279	248	254	250	520	992	1,560	376	182	125
6.....	218	434	270	244	258	249	539	1,050	1,520	376	176	124
7.....	218	483	270	240	267	249	548	1,030	1,420	376	168	124
8.....	218	395	258	244	267	249	548	1,070	1,250	358	164	125
9.....	214	367	246	244	258	254	548	986	1,090	358	160	126
10.....	214	727	234	248	240	267	549	872	980	348	160	125
11.....	214	510	260	244	249	276	568	942	842	339	160	125
12.....	206	454	246	248	249	294	624	1,110	746	321	156	125
13.....	206	512	256	250	249	294	611	1,250	694	303	152	125
14.....	206	463	278	250	244	295	571	1,340	680	313	156	122
15.....	202	464	268	238	244	294	569	1,400	686	304	164	119
16.....	202	444	268	214	220	249	570	1,220	687	304	194	119
17.....	202	435	260	208	232	304	570	1,040	676	294	176	116
18.....	196	425	234	213	239	321	540	994	684	286	168	116
19.....	196	415	246	224	240	331	530	949	682	268	160	116
20.....	196	397	246	237	240	340	514	896	664	252	156	120
21.....	196	388	238	232	240	349	494	895	634	244	152	116
22.....	196	350	246	229	236	368	514	846	622	229	148	116
23.....	196	315	230	237	236	378	532	934	626	225	144	116
24.....	196	324	226	225	230	1,090	566	1,170	634	217	142	116
25.....	212	324	244	233	246	1,240	551	1,300	643	213	141	116
26.....	304	324	236	228	228	976	552	1,280	649	218	141	116
27.....	340	314	232	228	210	910	611	1,460	615	213	141	123
28.....	303	306	232	233	252	706	658	1,640	523	213	141	122
29.....	285	306	258	250	242	636	758	1,850	485	214	137	122
30.....	276	296	244	250	-----	611	920	1,850	447	214	134	123
31.....	406	-----	248	236	-----	578	-----	1,610	-----	214	133	-----
Month	Maximum						Minimum		Mean		Run-off in acre-feet	
October.....	406						196		230		14,100	
November.....	727						296		397		23,600	
December.....	296						226		256		15,700	
January.....	258						208		238		14,600	
February.....	295						210		244		14,000	
March.....	1,240						237		431		26,500	
April.....	920						494		572		34,000	
May.....	1,850						846		1,160		71,300	
June.....	1,650						447		900		53,600	
July.....	430						213		296		18,200	
August.....	206						133		161		9,900	
September.....	129						116		121		7,200	
The year.....	1,850						116		417		303,000	

KERN RIVER AT ISABELLA, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 17, T. 26 S., R. 33 E., half a mile above South Fork of Kern River and half a mile north of Isabella.

DRAINAGE AREA.—1,220 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1912 (fragmentary); October, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,680 second-feet May 29 (gage height, 9.71 feet); minimum, 1.0 second-foot August 14.

1925-1928: Maximum discharge, 4,500 second-feet November 27, 1926 (gage height, 12.73 feet); minimum, 0.9 second-foot August 14, 1926.

REMARKS.—Records good. Discharge estimated March 5-14. Diversions for irrigation and power above station. Flow regulated by operation of power plants. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	2.6	33	3.2	3.2	3.8	5	66	488	1,010	9	1.4	1.4
2-----	2.6	6	3.2	3.1	3.8	5	36	540	970	9	1.4	1.4
3-----	2.6	4.2	3.4	3.1	5.5	5	45	453	1,080	9	1.4	1.4
4-----	2.4	4.2	3.4	3.1	8.5	5.5	31	388	1,160	8	1.4	1.4
5-----	2.4	3.8	3.4	3.1	8.5	5.5	31	428	1,080	8	1.4	1.4
6-----	2.4	5	3.4	3.1	7.5	5.5	46	516	1,020	7	1.4	1.4
7-----	2.6	5.5	3.4	3.1	7.5	5.5	50	527	932	8	1.4	1.4
8-----	2.6	5	3.4	3.1	7.5	5.5	39	542	760	8	1.2	1.4
9-----	2.6	4.6	3.4	3.1	7	5.5	40	525	520	8	1.2	1.4
10-----	2.6	84	3.8	3.1	7	5.5	40	413	432	7	1.2	1.4
11-----	2.6	83	4.2	3.2	6.5	5.5	46	348	332	7	1.2	1.4
12-----	2.6	8.5	3.4	3.2	6.5	5.5	69	541	204	5.5	1.1	1.6
13-----	2.6	6	3.4	3.2	6.5	5.5	98	684	141	5	1.1	1.8
14-----	2.6	16	4.2	3.4	6.5	5.5	81	802	106	4.0	1.1	1.8
15-----	2.7	5	3.4	3.4	6.5	5.5	43	904	99	4.0	1.1	1.8
16-----	2.7	4.6	3.2	3.2	6.5	5.5	63	796	105	3.5	1.2	1.6
17-----	2.7	3.8	3.4	3.2	6.5	5.5	57	564	104	2.7	1.2	1.4
18-----	2.7	3.8	3.4	3.2	6.5	6	39	472	94	2.7	1.2	1.4
19-----	2.7	4.2	3.4	3.2	6.5	6	27	422	110	2.7	1.2	1.4
20-----	2.7	3.8	3.4	3.4	6.5	6	23	400	101	2.7	1.2	1.4
21-----	2.7	3.8	3.4	3.4	5.5	6	20	356	84	2.4	1.2	1.4
22-----	2.7	3.4	3.4	3.4	5.5	6.5	19	323	56	2.4	1.2	1.4
23-----	2.9	3.1	3.2	3.8	5	6.5	20	318	54	2.4	1.2	1.4
24-----	3.1	3.1	3.2	3.4	5	794	31	554	56	2.4	1.4	1.4
25-----	3.1	3.1	3.4	3.4	5	1,030	36	757	68	2.1	1.4	1.4
26-----	3.4	3.2	3.2	3.4	5	740	24	794	79	1.8	1.4	1.4
27-----	37	3.2	3.2	3.4	5	532	39	900	70	1.8	1.4	1.4
28-----	103	3.2	3.2	3.4	5	356	73	1,120	28	1.8	1.4	1.4
29-----	7	3.2	4.2	3.4	5	204	150	1,360	14	1.8	1.6	1.6
30-----	5	3.2	5.5	3.8	-----	149	300	1,410	9	1.8	1.4	1.6
31-----	16	-----	3.4	3.8	-----	107	-----	1,170	-----	1.6	1.4	-----
Month						Maximum	Minimum		Mean	Run-off in acre-feet		
October-----						103	2.4		7.67	472		
November-----						84	3.1		10.9	649		
December-----						5.5	3.2		3.51	216		
January-----						3.8	3.1		3.30	203		
February-----						8.5	3.8		6.12	352		
March-----						1,030	5		130	7,990		
April-----						300	19		56.1	3,340		
May-----						1,410	318		639	39,300		
June-----						1,160	9		363	21,600		
July-----						9	1.6		4.62	284		
August-----						1.6	1.1		1.29	79.3		
September-----						1.8	1.4		1.47	87.5		
The year-----						1,410	1.1		103	74,600		

Daily and monthly discharge, in second-feet, of Kern River and Borel Canal near Isabella, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	213	453	315	276	249	259	640	1,050	1,570	429	189	114
2.....	213	347	315	276	249	259	599	1,100	1,530	409	181	110
3.....	213	345	315	276	270	278	608	1,020	1,640	389	177	106
4.....	212	355	315	276	320	288	594	951	1,730	378	173	106
5.....	208	345	295	267	300	270	594	991	1,650	368	165	106
6.....	208	415	305	267	290	270	609	1,080	1,590	367	161	105
7.....	209	446	286	257	290	270	613	1,090	1,510	368	153	104
8.....	209	405	276	257	290	270	602	1,100	1,330	359	149	104
9.....	209	375	267	267	290	270	603	1,090	1,090	359	145	105
10.....	209	584	268	267	271	278	603	976	1,010	348	145	106
11.....	204	646	277	267	270	288	609	911	903	338	145	103
12.....	200	488	276	267	270	308	632	1,100	773	326	141	107
13.....	196	496	267	267	270	318	661	1,250	715	297	137	107
14.....	196	527	296	267	270	326	644	1,360	680	287	137	104
15.....	196	485	295	257	270	318	606	1,470	673	296	145	101
16.....	191	475	286	230	252	308	626	1,360	673	296	169	100
17.....	191	454	276	225	252	326	610	1,130	667	295	165	97
18.....	196	454	257	196	270	337	602	1,040	663	286	153	97
19.....	191	444	257	239	270	347	580	985	684	267	145	96
20.....	191	424	257	248	270	357	555	953	675	248	141	96
21.....	191	414	257	248	270	366	541	919	653	238	137	94
22.....	191	383	257	225	260	376	540	886	630	224	133	93
23.....	196	334	248	268	259	386	562	881	623	216	133	93
24.....	196	344	239	248	250	1,260	594	1,120	630	203	130	94
25.....	204	344	257	248	161	1,560	599	1,320	643	199	126	95
26.....	267	344	257	248	250	1,300	577	1,360	653	195	126	98
27.....	310	344	257	248	250	1,100	602	1,460	644	199	130	97
28.....	317	334	257	248	317	919	636	1,680	570	195	126	101
29.....	290	334	277	257	278	767	713	1,920	504	195	127	104
30.....	278	324	288	268	-----	712	863	1,970	449	195	119	107
31.....	367	-----	267	258	-----	681	-----	1,730	-----	195	119	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	367					191			221		13,600	
November.....	646					324			415		24,700	
December.....	315					239			276		17,000	
January.....	276					196			255		15,700	
February.....	320					161			268		15,400	
March.....	1,560					259			496		30,500	
April.....	863					540			614		36,500	
May.....	1,970					851			1,200		73,800	
June.....	1,730					449			926		55,100	
July.....	429					195			289		17,800	
August.....	189					119			146		8,980	
September.....	114					93			102		6,070	
The year.....	1,970					93			434		315,000	

KERN RIVER BASIN

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KERN RIVER NEAR BAKERSFIELD, CALIF.

LOCATION.—Water-stage recorder in sec. 2, T. 29 S., R. 28 E., at mouth of lower canyon, 5 miles northeast of Bakersfield.

DRAINAGE AREA.—2,345 square miles.

RECORDS AVAILABLE.—January, 1894, to June, 1907; March, 1908, to September, 1928.

EXTREMES.—1896–1928: Maximum discharge, 18,287 second-feet January 26, 1914; minimum, 57 second-feet in November, 1924.

REMARKS.—Several small diversions on main river and South Fork for irrigation. There are four hydroelectric plants on Kern River above station. Complete record, except run-off in acre-feet, furnished by Kern County Land Co., through A. K. Warren, engineer.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	228	388	346	306	327	300	730	934	1,782	477	183	125
2.....	227	464	340	311	319	289	681	1,142	1,682	440	183	119
3.....	225	404	335	319	315	290	665	1,201	1,656	421	174	117
4.....	227	416	337	324	346	313	685	1,166	1,732	404	170	117
5.....	225	408	339	331	370	308	670	1,134	1,748	393	168	112
6.....	222	394	338	329	338	305	663	1,176	1,687	380	168	108
7.....	222	410	336	333	326	307	666	1,209	1,642	365	157	107
8.....	219	464	326	340	331	308	671	1,274	1,503	361	154	104
9.....	210	448	318	337	329	299	664	1,252	1,316	350	151	106
10.....	208	432	307	331	327	304	655	1,165	1,128	346	145	104
11.....	203	543	312	326	314	313	641	1,087	998	343	143	107
12.....	199	618	315	316	310	314	625	1,105	925	343	145	112
13.....	195	531	314	302	311	325	629	1,247	854	348	138	110
14.....	192	534	319	301	315	333	649	1,352	806	331	129	112
15.....	191	562	344	302	316	342	643	1,389	766	318	132	112
16.....	189	521	336	293	317	335	609	1,435	758	303	140	108
17.....	190	527	316	264	300	336	627	1,306	770	290	169	108
18.....	195	517	308	257	301	345	633	1,181	760	293	170	109
19.....	198	518	295	225	306	357	623	1,108	743	284	157	109
20.....	202	509	296	262	295	366	596	1,048	714	271	147	105
21.....	200	497	292	278	295	379	591	1,032	707	261	142	105
22.....	203	474	292	267	286	391	585	971	696	245	159	108
23.....	202	449	284	251	288	443	568	922	660	231	132	108
24.....	208	403	273	277	297	527	573	938	648	226	131	109
25.....	214	392	267	259	294	1,447	581	1,157	637	222	131	109
26.....	227	390	278	266	311	1,675	587	1,322	643	214	131	110
27.....	294	379	277	287	287	1,339	571	1,369	660	204	134	112
28.....	323	377	270	306	279	1,225	596	1,543	663	196	146	112
29.....	352	374	268	321	332	987	628	1,751	605	196	151	117
30.....	320	359	347	336	-----	872	731	1,921	534	195	144	119
31.....	363	-----	324	345	-----	796	-----	1,925	-----	188	130	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	391	188	228	14, 000
November.....	705	345	457	27, 200
December.....	375	256	311	19, 100
January.....	345	191	300	18, 400
February.....	386	163	310	17, 800
March.....	1, 814	284	531	32, 600
April.....	826	566	635	37, 800
May.....	2, 058	822	1, 250	76, 900
June.....	1, 874	504	1, 014	60, 300
July.....	504	184	304	18, 700
August.....	190	126	149	9, 160
September.....	128	101	111	6, 600
The year.....	2, 058	101	467	339, 000

NOTE.—Maximum and minimum are absolute values determined from water-stage recorder graph.

KERN RIVER NO. 3 CANAL NEAR KERNVILLE, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 25, T. 23 S., R. 32 E., opposite gaging station on Kern River, 1 mile below intake, and 16 miles north of Kernville.

RECORDS AVAILABLE.—March, 1921, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 606 second-feet May 21 to June 9; no flow parts of February 25, 26, 27, May 19 and 20.

1921-1928: Maximum mean daily discharge, 648 second-feet July 16, 1921.

REMARKS.—Records excellent except those for estimated periods January 17, 18 and May 9-15, which are fair. Canal diverts from left bank of Kern River in sec. 12, T. 23 S., R. 32 E. The water is used for power and returned to river 8 miles below point of diversion. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	220	391	281	245	228	232	541	560	606	425	200	124
2.....	220	326	290	250	228	236	504	560	606	398	196	120
3.....	220	344	290	245	254	263	513	560	606	380	188	120
4.....	212	353	281	240	290	254	504	560	606	370	180	120
5.....	216	344	272	240	250	245	513	560	606	370	176	120
6.....	212	429	263	236	254	245	532	560	606	370	171	120
7.....	212	429	263	232	263	245	541	560	606	370	163	120
8.....	212	391	250	236	263	245	541	560	606	352	159	120
9.....	208	363	240	236	254	250	541	560	606	352	155	120
10.....	208	550	228	240	236	263	541	570	596	343	155	120
11.....	208	504	254	236	245	272	560	570	596	334	155	120
12.....	200	448	240	240	245	290	580	577	596	316	151	120
13.....	200	504	250	245	245	290	570	577	596	298	147	120
14.....	200	457	272	245	240	290	560	577	596	307	151	117
15.....	196	457	263	232	240	290	560	577	596	298	159	114
16.....	196	438	263	208	216	245	560	577	596	298	188	114
17.....	196	429	254	200	228	299	560	577	596	289	171	111
18.....	192	419	228	180	236	317	532	577	596	280	163	111
19.....	192	409	240	220	236	326	522	531	596	263	155	111
20.....	192	391	240	232	236	335	504	448	596	246	151	114
21.....	192	381	232	228	236	344	485	606	596	238	147	111
22.....	192	344	240	208	232	363	504	606	596	224	143	111
23.....	192	308	224	232	232	372	522	606	596	220	139	111
24.....	192	317	220	220	220	590	550	606	596	212	136	111
25.....	208	317	236	228	31	600	541	606	596	208	136	111
26.....	299	317	228	224	0	600	541	606	596	212	136	111
27.....	335	308	224	224	22	590	560	606	586	208	136	117
28.....	299	299	224	228	228	590	560	606	519	208	136	117
29.....	281	299	250	245	236	590	560	606	487	208	132	117
30.....	272	290	236	245	-----	590	560	606	443	208	128	117
31.....	400	-----	240	232	-----	570	-----	606	-----	208	128	-----
Month						Maximum	Minimum		Mean		Run-off in acre-feet	
October.....						400	192		225		13,800	
November.....						550	290		385		22,900	
December.....						290	220		249		15,300	
January.....						250	180		231		14,200	
February.....						290	0		218		12,500	
March.....						600	232		362		22,300	
April.....						580	485		539		32,100	
May.....						606	448		576		35,400	
June.....						606	443		587		34,900	
July.....						425	208		291		17,900	
August.....						200	128		156		9,590	
September.....						124	111		116		6,900	
The year.....						606	0		328		238,000	

BOREL CANAL AT TILLEY CREEK, CALIF.

LOCATION.—Water-stage recorder in sec. 4, T. 26 S., R. 33 E., where canal crosses Tilley Creek, three-fourths mile south of Kernville.

RECORDS AVAILABLE.—January, 1910, to September, 1914; October, 1925, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 574 second-feet March 31 and April 1; minimum, 92 second-feet September 22 and 23. 1925-1928: Maximum mean daily discharge, 605 second-feet June 3-5, 1927; canal practically dry April 8 to May 19, 1927.

REMARKS.—Records excellent. Canal diverts water from Kern River half a mile below Kernville. It supplies the Borel hydroelectric plant of the Southern California Edison Co. 10 miles below, and the water then returns to Kern River. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	210	420	312	273	245	254	574	563	563	420	188	113
2.....	210	341	312	273	245	254	563	563	563	400	180	109
3.....	210	341	312	273	264	273	563	563	563	380	176	105
4.....	210	351	312	273	312	283	563	563	574	370	172	105
5.....	206	341	292	264	292	264	563	563	574	360	164	105
6.....	206	410	302	264	283	264	563	563	574	360	160	104
7.....	206	440	283	254	283	264	563	563	574	360	152	103
8.....	206	400	273	254	283	264	563	563	574	351	148	103
9.....	206	370	264	264	283	264	563	563	574	351	144	104
10.....	206	500	264	264	264	273	563	563	574	341	144	105
11.....	201	563	273	264	264	283	563	563	574	331	144	102
12.....	197	480	273	264	264	302	563	563	574	321	140	105
13.....	193	490	264	264	264	312	563	563	574	292	136	105
14.....	193	511	292	264	264	321	563	563	574	283	136	102
15.....	193	480	292	254	264	312	563	563	574	292	144	99
16.....	188	470	283	227	245	302	563	563	574	292	168	98
17.....	188	450	273	222	245	321	553	563	563	292	164	96
18.....	193	450	254	193	264	331	563	563	574	283	152	96
19.....	188	440	254	236	264	341	553	563	574	264	144	95
20.....	188	420	254	245	264	351	532	553	574	245	140	95
21.....	188	410	254	245	264	360	521	563	574	236	136	93
22.....	188	380	254	222	254	370	521	563	574	222	132	92
23.....	193	331	245	264	254	380	542	563	574	214	132	92
24.....	193	341	236	245	245	470	563	563	574	201	129	93
25.....	201	341	254	245	156	532	563	563	574	197	125	94
26.....	264	341	254	245	245	563	553	563	574	193	125	97
27.....	273	341	254	245	245	563	563	563	574	197	129	96
28.....	214	331	254	245	312	563	563	563	542	193	125	100
29.....	283	331	273	254	273	563	563	563	490	193	125	102
30.....	273	321	283	264	-----	563	563	563	440	193	118	105
31.....	351	-----	264	254	-----	574	-----	563	-----	193	118	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						351	188	214	13, 200			
November.....						563	321	405	24, 100			
December.....						312	236	273	16, 800			
January.....						273	193	252	15, 500			
February.....						312	156	262	15, 100			
March.....						574	254	366	22, 500			
April.....						563	521	558	33, 200			
May.....						563	553	563	34, 600			
June.....						574	440	564	33, 600			
July.....						420	193	285	17, 500			
August.....						188	118	145	8, 920			
September.....						113	92	100	5, 950			
The year.....						574	92	332	241, 000			

SOUTH FORK OF KERN RIVER NEAR ONYX, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 24, T. 25 S., R. 35 E. on Rankin ranch, 5 miles northeast of Onyx.

RECORDS AVAILABLE.—September, 1911, to August, 1914; January, 1919, to June, 1928.

EXTREMES.—1911-1914, 1919-1928: Maximum discharge, 2,360 second-feet January 25, 1914 (gage height, 7.1 feet); minimum, about 1 second-foot May 28 to October 1, 1924.

REMARKS.—Diversions for irrigation above station. Daily-discharge record furnished by city of Los Angeles.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	26		38	28	37	64		45	18
2	26	51	36	32	44	63		41	17
3	26	42	37	31	50	65		39	16
4	26	39	36	30	57	59		39	15
5	25	36	31	32	41	53	88	40	14
6		39	28	32	41	51	100	38	13
7		42	31	33	45	50	108	37	12
8		46	26	34	45	48	102	38	11
9		42	24	35	42	51	92	45	
10		70	24	35	40	60	83	51	
11		92	26	36	40	69	80	59	
12		64	24	37	41	77	84	69	
13		58	24	40	41	90	86	64	
14		57	28	40	40	92	80	53	
15		44	31	38	41	86	76	43	
16		46	27	30	35	73	74	42	
17		53	28	30	39	69	69	48	
18		55	24	28	40	74	63	53	
19		53	27	28	39	76	59	52	
20		53	28	31	40	77	57	50	
21		48	25	32	40		58	51	
22		43	25	30	40		62	50	
23		33	28	34	41		49	48	
24		28	23	29	42		42	41	
25		28	31	29	44		45	36	
26		37	31	30	46		47	34	
27		43	27	31	50		46	30	
28		40	31	33	58		47	28	
29		40	32	39	63		53	24	
30		40	30	36			50	22	
31			26	36				21	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-5	26	25	25.8	256
November 1-30	92	28	47.0	2,700
December	38	23	28.6	1,760
January	40	28	32.9	2,020
February	63	35	48.5	2,500
March 1-20	92	48	67.4	2,670
April 5-30	108	42	69.2	3,570
May	69	21	42.9	2,640
June 1-8	18	11	14.5	230

TULARE LAKE BASIN

DEER CREEK AT HOT SPRINGS, CALIF.

LOCATION.—Staff gage in sec. 31, T. 23 S., R. 31 E., at forest supervisor's headquarters, 1 mile west of Hot Springs.

RECORDS AVAILABLE.—October, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 190 second-feet March 25 (gage height, 2.20 feet); minimum, 0.7 second-foot several days in August (gage height, 0.34 foot).

1910-1928: Maximum discharge, about 420 second-feet January 24, 1914 (gage height, 2.9 feet); minimum, 0.6 second-foot August 5-12, 1920.

REMARKS.—Records fair. Flow is regulated to some extent by swimming tank at Hot Springs. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	13	2.7	5.5	10	3.7	16	11	4.4	2.2	0.9	1.1
2	1.4	13	2.7	5	11	3.8	16	10	4.1	2.2	.9	1.3
3	1.2	12	2.9	5	7	4.8	16	9.5	3.9	2.1	1.0	1.1
4	1.2	12	3.1	5	6	4.6	16	9.5	3.7	2.1	1.0	1.1
5	1.2	12	3.1	5.5	5.5	4.6	15	9	3.9	2.1	.9	1.3
6	1.4	12	3.1	5	4.6	4.4	16	8.5	3.7	1.9	.9	1.3
7	1.4	12	3.4	4.7	4.8	4.4	15	8	3.7	1.9	.9	1.3
8	1.5	12	3.6	4.4	4.4	4.2	14	7.5	3.7	1.9	.7	1.5
9	1.5	11	3.6	4.2	4.4	4.4	14	15	3.2	1.9	.7	1.7
10	1.5	11	3.9	4.4	4.2	4.4	13	14	3.2	1.9	.8	1.7
11	1.5	11	4.2	4.4	4.0	4.6	13	12	3.2	1.9	.7	1.7
12	1.4	10	3.9	4.2	4.2	4.4	12	12	3.0	1.9	.7	1.7
13	1.4	11	4.4	3.9	4.4	4.4	12	11	3.0	1.7	.8	1.7
14	1.2	10	5.5	4.2	4.0	4.2	12	10	3.0	1.7	.7	1.9
15	1.4	9.5	6.5	4.4	4.4	4.4	12	9.5	3.0	1.7	.7	2.1
16	1.5	9.5	7	5.5	4.0	4.4	12	8.5	2.8	1.7	.7	1.7
17	1.5	9	8	5	4.0	4.2	12	8	2.8	1.3	.7	1.9
18	1.5	8.5	8	4.4	4.0	4.4	12	7.5	2.6	1.3	.7	2.1
19	1.5	8	7.5	4.2	3.8	4.2	11	6.5	2.6	1.3	.7	2.1
20	1.5	7.5	6.5	3.9	3.8	4.4	12	6.5	2.6	1.3	.8	1.7
21	1.4	7.5	6	3.9	4.0	4.6	16	6	2.6	1.1	.9	2.1
22	1.5	6.5	6	4.2	4.0	4.2	17	6	2.6	1.1	.8	2.1
23	1.4	6	6.5	4.2	4.0	5.5	16	6	2.6	1.1	.9	2.1
24	1.2	4.6	7	3.9	4.0	180	16	5.5	2.4	1.1	.9	2.1
25	1.2	4.0	7	3.9	4.0	190	16	5	2.4	1.1	.9	2.1
26	1.4	3.3	7	3.6	3.8	49	15	4.8	2.4	1.1	1.1	2.1
27	1.4	2.9	7.5	3.6	3.7	66	14	4.8	2.2	1.1	1.1	2.1
28	1.4	2.7	8	3.4	3.7	28	12	4.8	2.2	1.0	.9	1.9
29	1.5	2.4	16	3.6	3.7	24	12	4.6	2.2	1.1	1.0	2.1
30	1.5	2.6	12	3.4	---	20	12	4.6	2.2	1.0	1.1	2.1
31	12	---	6	3.6	---	17	---	4.4	---	.9	1.1	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	12	1.2	1.74	107
November	13	2.4	8.55	509
December	16	2.7	5.89	362
January	5.5	3.4	4.33	266
February	11	3.7	4.70	270
March	190	3.7	21.8	1,340
April	17	11	13.9	827
May	15	4.4	8.06	496
June	4.4	2.2	3.00	179
July	2.2	.9	1.54	94.7
August	1.1	.7	1.86	52.9
September	2.1	1.1	1.76	105
The year	190	.7	6.35	4,610

TULE RIVER NEAR PORTERVILLE, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 25, T. 21 S., R. 28 E., below highway bridge, 1 mile above mouth of South Fork and 6 miles east of Porterville.

DRAINAGE AREA.—266 square miles.

RECORDS AVAILABLE.—May, 1901, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,430 second-feet March 25 (gage height, 6.0 feet); minimum 0.1 second-foot September 24–27 (gage height, –0.24 foot).

1901–1928: Maximum discharge, about 6,780 second-feet January 17, 1916 (gage height, 11.0 feet); no flow September 27–30, October 1 and 5, 1926.

REMARKS.—Records good. Several small irrigation ditches divert water above station. Power is developed on Middle Fork and on North and South Forks of Middle Fork.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	156	41	57	43	49	200	84	24	0.7	0.3	0.2
2	1.6	47	39	55	44	48	181	83	22	.6	.3	.2
3	2.3	35	38	59	47	48	334	82	20	.6	.3	.2
4	3.2	38	38	59	116	52	181	76	18	.6	.3	.1
5	4.4	40	37	49	104	48	172	68	17	.6	.3	.1
6	4.4	100	36	50	76	48	200	64	15	.6	.3	.1
7	4.4	57	36	50	68	51	200	62	11	.6	.3	.1
8	4.2	44	35	48	65	49	190	61	7	.6	.3	.1
9	3.2	36	35	48	64	48	172	66	4.8	.6	.3	.1
10	3.0	334	37	47	61	48	164	80	3.8	.6	.3	.1
11	2.9	209	36	45	59	48	148	75	4.0	.5	.3	.1
12	2.4	190	37	44	55	46	140	68	3.4	.5	.3	.1
13	2.2	148	39	44	51	44	140	66	3.2	.5	.3	.1
14	2.3	101	46	44	53	43	132	62	3.2	.5	.3	.1
15	2.2	73	51	47	52	42	121	62	2.6	.5	.2	.1
16	2.4	64	47	47	50	41	116	62	2.7	.5	.2	.1
17	2.3	62	44	43	48	40	109	58	2.7	.5	.2	.1
18	2.2	59	43	42	47	38	104	54	2.6	.4	.2	.1
19	2.2	58	44	42	46	37	104	55	2.6	.4	.2	.1
20	1.9	55	42	41	44	42	100	52	2.3	.4	.2	.1
21	1.7	56	40	41	44	39	100	49	2.0	.4	.2	.1
22	1.6	60	39	41	44	39	86	44	1.6	.4	.2	.1
23	1.9	57	38	51	45	48	81	39	1.7	.4	.2	.1
24	1.9	51	37	48	44	820	84	35	1.5	.4	.2	.1
25	2.2	45	38	46	44	1,190	83	34	1.5	.4	.2	.1
26	7	43	37	42	43	556	80	32	1.7	.4	.2	.1
27	11	42	37	42	42	556	80	30	1.1	.4	.2	.1
28	14	42	36	41	46	645	83	29	1.0	.4	.2	.1
29	12	42	49	46	49	428	83	28	1.0	.4	.2	.1
30	11	42	85	46	209	84	26	.8	.4	.2	.1	
31	63	70	47	219	25	25	25	25	.3	.2	.2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	63	1.6	5.89	362
November	334	35	79.5	4,730
December	85	35	42.2	2,590
January	59	41	46.8	2,880
February	116	42	55.0	3,160
March	1,190	37	183	11,300
April	334	80	135	8,030
May	84	25	55.2	3,390
June	24	.8	6.19	368
July	.7	.3	.49	30.1
August	.3	.2	.25	15.4
September	.2	.1	.11	6.5
The year	1,190	.1	50.7	36,900

SOUTH FORK OF TULE RIVER NEAR PORTERVILLE, CALIF.

LOCATION.—Staff gage in Tule Indian Reservation, 2 miles below Rocky Creek and 14 miles southeast of Porterville, Tulare County.

RECORDS AVAILABLE.—October, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 630 second-feet March 24 and 25 (gage height, 4.10 feet); minimum, 0.2 second-foot September 1 (gage height, 0.28 foot).

1910-1928: Maximum discharge, about 2,750 second-feet January 26, 1914 (gage height, 8.0 feet); no flow about June 27 to October 6, 1924.

REMARKS.—Records fair. Discharge estimated July 1, 2, 8, 13, 14, 16, and July 19 to September 30. Diversions for irrigation above station. Gage-height record furnished by United States Indian Service.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.	5	26	8.5	16	13	13	53	21	10	-----
2.	5	14	8.5	15	13	13	50	20	10	-----
3.	5.5	10	8.5	16	13	15	74	20	9	1.8
4.	4.8	9	8.5	16	33	18	58	19	8	3.2
5.	5.5	8.5	8.5	15	24	15	52	19	7	4.0
6.	6	29	8.5	14	22	15	48	18	6	3.5
7.	6	17	9.5	14	20	20	47	18	6	3.0
8.	6	13	9.5	13	19	16	46	19	5	-----
9.	5.5	11	9.5	13	18	16	45	28	5	1.3
10.	4.8	76	11	14	16	15	43	23	6	1.3
11.	4.8	16	12	14	16	15	41	21	7	1.4
12.	4.8	11	12	13	16	15	40	20	8	1.5
13.	4.6	22	11	13	16	15	37	18	7.5	-----
14.	4.1	21	16	13	16	15	36	18	7	-----
15.	3.9	14	15	14	15	14	34	18	6.5	1.1
16.	4.6	13	13	14	14	13	33	18	6.5	-----
17.	4.8	12	13	13	16	12	31	17	6	.9
18.	5.5	11	12	12	14	12	30	16	6	.8
19.	6	10	11	11	14	12	29	16	5.5	-----
20.	5.5	9.5	11	9.5	14	12	28	16	5	-----
21.	4.6	11	11	11	14	12	27	15	5	-----
22.	6	12	11	11	14	12	26	15	4.5	-----
23.	6	10	11	16	14	17	25	14	4.0	-----
24.	6	9.5	11	13	14	304	29	13	3.8	-----
25.	7.5	9.5	11	13	14	445	26	12	3.5	-----
26.	12	9	10	12	13	178	25	12	3.2	-----
27.	11	9	11	12	13	273	24	11	3.0	-----
28.	12	9	11	13	13	120	23	11	2.8	-----
29.	10	9	30	14	13	88	22	11	2.6	-----
30.	10	9	33	16	-----	76	22	11	2.4	-----
31.	36	-----	21	13	-----	63	-----	10	-----	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet			
October	36		3.9		7.22		444			
November	76		8.5		15.0		893			
December	33		8.5		12.5		769			
January	16		9.5		13.4		824			
February	33		13		16.0		920			
March	445		12		60.6		3,730			
April	74		22		36.8		2,190			
May	28		10		16.7		1,030			
June	10		2.4		5.73		341			
July	-----		-----		1.5		92.2			
August	-----		-----		.4		24.6			
September	-----		-----		.2		11.9			
The year	445		-----		15.5		11,300			

KAWEAH RIVER NEAR THREE RIVERS, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 27, T. 17 S., R. 28 E., $\frac{1}{4}$ miles southwest of Three Rivers and three-fourths mile below South Fork.

DRAINAGE AREA.—520 square miles.

RECORDS AVAILABLE.—April, 1903, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,140 second-feet March 27 (gage height, 8.80 feet); minimum, 14 second-feet September 6–30 (gage height, 4.55 feet).

1903–1928: Maximum discharge, about 14,700 second-feet January 17, 1916 (gage height, 13.5 feet); minimum, 9.5 second-feet August 29 to September 1, 1924.

REMARKS.—Records good. Discharge interpolated May 20–22, June 27 and 28. Several small ditches divert water for irrigation and domestic use above station. Slight regulation due to power developments on Middle and East Forks.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	36	285	166	145	154	160	650	1,160	650	130	39	18
2.....	36	217	160	145	166	160	590	1,030	650	116	39	18
3.....	36	203	170	145	176	176	620	950	685	116	39	18
4.....	44	192	176	136	420	192	560	950	650	116	31	18
5.....	44	192	166	136	265	192	590	910	590	116	39	16
6.....	44	305	154	145	265	192	650	950	590	111	39	14
7.....	44	265	145	136	235	192	685	910	530	90	39	14
8.....	44	210	136	145	227	186	650	950	470	90	39	14
9.....	36	175	145	145	210	186	650	790	420	90	39	14
10.....	36	1,770	176	145	192	199	650	720	370	90	39	14
11.....	36	445	154	145	192	220	685	720	370	78	39	14
12.....	36	305	130	145	186	227	685	830	285	71	39	14
13.....	36	620	130	145	176	235	720	910	245	66	39	14
14.....	36	445	154	136	176	235	650	910	265	66	39	14
15.....	36	350	160	145	145	235	650	1,030	285	56	34	14
16.....	36	305	145	136	160	235	650	910	285	56	31	14
17.....	36	305	145	136	176	246	620	950	265	56	31	14
18.....	36	305	130	136	166	285	590	720	245	56	31	14
19.....	36	305	130	125	176	305	590	870	228	56	31	14
20.....	36	265	128	118	176	328	530	830	228	51	31	14
21.....	36	265	118	145	176	328	500	790	217	47	31	14
22.....	36	265	125	154	176	305	530	750	217	47	31	14
23.....	36	257	130	154	160	328	530	720	210	47	28	14
24.....	36	246	118	136	154	1,430	685	790	210	47	24	14
25.....	44	235	118	136	160	1,900	590	790	182	47	24	14
26.....	100	227	118	145	160	2,000	590	755	182	44	24	14
27.....	132	220	118	145	160	2,430	650	755	170	47	24	14
28.....	95	210	118	145	160	1,200	790	790	157	39	24	14
29.....	77	199	186	145	160	870	1,030	790	145	44	24	14
30.....	77	186	166	154	-----	720	1,160	870	130	34	24	14
31.....	238	-----	154	154	-----	720	-----	685	-----	34	24	-----
Month	Maximum						Minimum		Mean		Run-off in acre-feet	
October.....	238						36		53.8		3,310	
November.....	1,770						175		326		19,400	
December.....	186						118		144		8,850	
January.....	154						118		142		8,730	
February.....	420						145		190		10,900	
March.....	2,430						160		536		33,000	
April.....	1,160						500		657		39,100	
May.....	1,160						685		854		52,500	
June.....	685						130		338		20,100	
July.....	130						34		69.5		4,270	
August.....	39						24		32.5		2,000	
September.....	18						14		14.6		869	
The year.....	2,430						14		280		203,000	

NORTH FORK OF KAWEAH RIVER AT KAWEAH, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 2, T. 17 S., R. 28 E., in Sequoia National Forest, one-fourth mile above Manikin Creek and half a mile north of Kaweah.

RECORDS AVAILABLE.—October, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 915 second-feet March 27 (gage height, 3.70 feet); minimum, 0.1 second-foot August 15 to September 22.

1910-1928: Maximum discharge, about 7,400 second-feet January 25, 1914 (gage height, 10.2 feet); no flow many days during July to October, 1924.

REMARKS.—Records good. Discharge estimated August 15-31 and September 25-30. Small diversions above station for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.5	45	29	29	36	55	135	91	30	9	0.6	0.1
2.....	2.5	14	28	28	35	34	135	91	27	8.5	.7	.1
3.....	2.5	14	27	28	45	66	166	87	24	8.5	1.0	.1
4.....	2.8	12	28	28	132	55	155	84	23	8	1.0	.1
5.....	2.8	12	27	27	86	43	135	78	21	6.5	1.1	.1
6.....	2.9	45	25	27	91	45	166	78	21	6	1.0	.1
7.....	3.1	24	23	28	84	43	135	78	18	5.5	1.1	.1
8.....	3.1	16	24	27	78	42	166	78	18	5	1.3	.1
9.....	3.3	15	25	26	58	41	166	104	17	4.8	1.2	.1
10.....	2.9	420	27	26	53	47	145	84	17	5	1.3	.1
11.....	3.3	78	26	26	51	45	145	76	18	5	1.3	.1
12.....	3.5	47	27	25	49	50	145	68	20	5	1.3	.1
13.....	3.1	267	27	24	48	54	135	66	20	3.2	1.3	.1
14.....	3.3	104	31	25	47	54	130	63	18	3.2	1.1	.1
15.....	3.5	66	31	29	42	53	118	60	17	3.0		.1
16.....	3.5	66	28	28	41	51	118	59	16	2.8		.1
17.....	3.3	66	27	26	43	51	111	68	16	2.8		.1
18.....	3.3	60	26	28	40	50	104	63	16	2.8		.1
19.....	2.8	56	25	28	40	54	104	62	15	2.7		.1
20.....	2.8	50	23	27	39	53	101	55	14	1.5		.1
21.....	2.9	45	23	26	38	51	91	57	14	1.5		.1
22.....	2.9	55	21	26	39	52	91	47	14	1.4		.1
23.....	2.8	45	21	32	39	62	91	49	12	1.6		.2
24.....	2.9	45	21	28	37	369	104	43	12	1.5		.2
25.....	3.3	37	21	27	35	487	98	43	12	1.5		.2
26.....	18	37	21	26	37	347	91	39	11	1.6		.2
27.....	13	34	21	26	37	655	91	36	11	1.5		.2
28.....	14	34	21	26	35	267	91	32	9.5	1.6		.2
29.....	10	31	39	33	34	203	91	31	9.5	1.6		.2
30.....	8.5	29	37	55	-----	177	91	29	9	1.5		.2
31.....	21	-----	31	37	-----	177	-----	31	-----	.6		-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	21	2.5	5.16	317
November.....	420	12	62.3	3,710
December.....	39	21	26.2	1,610
January.....	55	24	28.5	1,750
February.....	132	34	50.7	2,920
March.....	655	34	123	7,560
April.....	166	91	122	7,260
May.....	104	29	62.3	3,830
June.....	30	9	16.7	994
July.....	9	.6	3.70	228
August.....	1.3	.1	.55	33.8
September.....	.2	.1	.13	7.7
The year.....	655	.1	41.6	30,200

KINGS RIVER NEAR HUME, CALIF.

LOCATION.—Water-stage recorder near west line of sec. 35, T. 12 S., R. 28 E., $1\frac{1}{2}$ miles below junction of South and Middle Forks of Kings River, and $3\frac{3}{4}$ miles north of Hume.

RECORDS AVAILABLE.—August, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,940 second-feet May 29 (gage height, 6.47 feet); minimum, 114 second-feet September 24 (gage height, 1.02 feet).

1921-1928: Maximum discharge, 11,700 second-feet June 4, 1922 (gage height, 8.67 feet); minimum, 63 second-feet September 29 to October 4, 1924.

REMARKS.—Records good. No diversions. Gage-height record and results of discharge measurements furnished by city of Los Angeles.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	226	445	455	305	282	268	1,070	3,400	3,560	936	352	156
2	223	440	460	309	278	271	998	2,880	3,740	882	343	152
3	218	532	470	309	325	321	953	2,540	4,000	842	321	148
4	215	505	445	305	379	297	992	2,670	3,910	842	305	146
5	212	480	435	297	343	297	962	3,020	3,820	849	289	146
6	210	702	415	293	343	289	1,040	3,020	3,320	856	271	146
7	208	684	384	285	334	289	1,100	3,020	3,170	830	260	144
8	205	582	366	289	325	293	1,140	3,100	2,810	810	254	142
9	200	694	361	293	321	297	1,140	2,470	2,400	804	244	140
10	198	1,440	343	293	301	317	1,180	2,160	2,160	786	241	140
11	195	888	361	293	297	338	1,260	2,600	1,720	744	232	138
12	192	762	343	297	297	392	1,440	3,100	1,570	684	229	138
13	190	1,070	343	301	289	420	1,300	3,560	1,480	654	226	138
14	188	875	370	293	289	440	1,260	3,820	1,520	648	226	134
15	188	823	348	285	282	435	1,300	4,090	1,570	624	244	130
16	185	798	356	260	260	435	1,340	3,020	1,570	600	257	130
17	185	792	321	257	289	465	1,300	2,600	1,570	570	244	128
18	182	768	309	226	278	505	1,220	2,740	1,620	548	229	126
19	180	750	317	260	278	537	1,180	2,470	1,520	515	220	124
20	180	714	309	264	274	594	1,100	2,670	1,440	480	215	122
21	178	702	297	260	274	660	1,070	2,810	1,440	450	212	120
22	178	612	293	260	271	714	1,220	2,470	1,480	420	208	118
23	175	564	268	282	271	786	1,340	2,950	1,480	402	202	116
24	175	548	282	264	254	1,390	1,440	3,650	1,520	388	198	116
25	220	542	282	268	274	2,400	1,260	3,910	1,520	384	192	116
26	440	532	268	260	278	1,890	1,480	3,820	1,520	384	188	118
27	552	510	264	268	274	1,840	1,780	4,360	1,340	384	182	122
28	297	500	260	271	278	1,390	2,110	4,650	1,180	379	178	122
29	278	490	313	352	268	1,260	2,540	4,750	1,070	374	170	122
30	278	475	278	309	-----	1,180	3,170	4,270	998	374	164	122
31	537	-----	305	289	-----	1,140	-----	3,820	-----	366	162	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	537	175	229	14,100
November	1,440	440	674	40,100
December	470	260	343	21,100
January	352	226	284	17,500
February	379	254	293	16,900
March	2,400	268	715	44,000
April	3,170	953	1,360	80,900
May	4,750	2,160	3,240	199,000
June	4,000	998	2,070	123,000
July	936	366	607	37,300
August	352	162	234	14,400
September	156	116	132	7,860
The year	4,750	116	848	616,000

KINGS RIVER ABOVE NORTH FORK, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 22, T. 12 S., R. 26 E., 1,500 feet above mouth of North Fork of Kings River.

RECORDS AVAILABLE.—March, 1927, to December, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, 6,260 second-feet May 29 (gage height, 8.15 feet); minimum, 99 second-feet parts of September 23, 24, and 25 (gage height, 1.95 feet).

1927-28: Maximum discharge, 11,200 second-feet May 17, 1927 (gage height, 10.30 feet); minimum, that of September 23, 24, and 25, 1928.

REMARKS.—Records excellent. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1927-28												
1.....	230	455	460	336	320	293	1,170	3,750	3,840	925	344	160
2.....	230	440	455	340	312	293	1,100	3,190	3,920	855	332	154
3.....	212	505	460	340	362	349	1,100	2,720	4,260	820	316	149
4.....	212	505	445	336	520	344	1,100	2,800	4,220	790	304	146
5.....	195	465	440	328	421	328	1,060	3,240	4,140	790	293	143
6.....	195	634	416	324	408	320	1,140	3,370	3,680	820	282	143
7.....	195	670	394	320	394	316	1,200	3,240	3,600	790	272	141
8.....	180	574	376	316	380	320	1,240	3,480	3,110	760	262	138
9.....	180	536	362	320	367	320	1,240	2,810	2,660	760	254	135
10.....	180	1,650	340	324	349	340	1,280	2,300	2,360	748	248	133
11.....	165	925	362	324	332	354	1,320	2,730	1,920	712	244	130
12.....	165	760	354	320	332	398	1,520	3,280	1,700	658	240	130
13.....	165	1,200	349	328	332	421	1,440	3,760	1,540	618	234	130
14.....	165	925	380	328	332	445	1,320	4,090	1,540	612	234	128
15.....	165	820	354	320	320	445	1,360	4,480	1,590	590	240	125
16.....	165	790	362	293	293	445	1,440	3,440	1,640	574	265	120
17.....	165	790	340	286	308	465	1,360	2,820	1,630	546	258	117
18.....	165	760	320	244	304	505	1,280	3,020	1,680	525	244	105
19.....	152	736	324	272	300	536	1,240	2,700	1,580	505	234	112
20.....	152	706	320	282	300	574	1,170	2,860	1,480	475	226	112
21.....	152	694	312	282	300	629	1,100	3,080	1,490	450	223	109
22.....	138	624	308	276	293	682	1,240	2,700	1,490	426	220	107
23.....	138	546	282	300	293	718	1,400	3,040	1,500	403	212	104
24.....	138	546	290	293	282	1,480	1,560	3,880	1,540	390	206	104
25.....	152	536	296	293	293	2,800	1,320	4,180	1,580	385	198	102
26.....	385	530	282	282	300	2,270	1,480	4,010	1,560	380	189	102
27.....	320	505	279	293	293	2,420	1,780	4,600	1,370	376	186	112
28.....	282	490	276	296	300	1,700	2,130	4,860	1,200	376	183	125
29.....	248	490	349	376	293	1,440	2,570	5,140	1,060	362	174	125
30.....	248	465	312	362	-----	1,360	3,260	4,630	995	362	171	125
31.....	480	-----	320	328	-----	1,280	-----	4,140	-----	349	165	-----

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1928											
1.....	125	117	143	11.....	109	141	216	21.....	115	177	202
2.....	125	117	138	12.....	120	138	195	22.....	115	177	198
3.....	122	122	195	13.....	125	154	258	23.....	112	171	198
4.....	120	162	186	14.....	135	209	220	24.....	112	162	202
5.....	122	149	165	15.....	135	195	180	25.....	107	157	230
6.....	120	149	160	16.....	133	183	180	26.....	107	152	276
7.....	117	165	165	17.....	125	198	180	27.....	109	149	248
8.....	115	154	165	18.....	120	186	198	28.....	109	146	251
9.....	115	141	165	19.....	117	183	195	29.....	109	135	244
10.....	112	138	171	20.....	115	180	202	30.....	115	135	226
								31.....	117	-----	220

Monthly discharge, in second-feet, of King River above North Fork, Calif., 1927-28

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1927-28				
October.....	480	138	204	12, 500
November.....	1, 650	440	676	40, 200
December.....	460	276	352	21, 600
January.....	376	244	312	19, 200
February.....	520	282	332	19, 100
March.....	2, 800	293	793	48, 800
April.....	3, 260	1, 060	1, 430	85, 100
May.....	5, 140	2, 300	3, 490	215, 000
June.....	4, 260	995	2, 190	130, 000
July.....	925	349	585	36, 000
August.....	344	165	240	14, 800
September.....	160	102	126	7, 500
The year.....	5, 140	102	896	650, 000
1928				
October.....	135	107	118	7, 260
November.....	209	117	158	9, 400
December.....	276	138	199	12, 200

KINGS RIVER AT PIEDRA, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 8, T. 13 S., R. 24 E., half a mile below highway bridge at Piedra and 12 miles northeast of Sanger.

DRAINAGE AREA.—1,700 square miles (revised).

RECORDS AVAILABLE.—September, 1895, to September, 1928.

EXTREMES.—Maximum discharge during year, 10,200 second-feet March 27 (gage height, 11.42 feet); minimum, 109 second-feet September 21–25 (gage height, 3.76 feet).

1895–1928: Maximum discharge, about 59,700 second-feet January 25, 1914 (gage height, 21.8 feet); minimum, 67 second-feet October 30 1924.

REMARKS.—Records excellent. Discharge interpolated August 29, 30, September 1, 3, 5–10, 12–17, 19, 20, 23, 24, and 26–30. No diversions.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	251	935	642	479	515	485	2,150	6,720	4,760	1,040	353	152
2.....	245	604	636	479	533	485	2,030	5,660	4,630	968	347	147
3.....	228	662	656	491	597	597	2,220	4,770	5,020	935	341	142
4.....	223	727	649	491	642	714	2,080	4,760	4,950	902	329	138
5.....	218	675	610	479	1,040	616	1,930	5,280	4,800	870	311	136
6.....	206	760	578	467	746	578	2,140	5,640	4,400	870	293	134
7.....	206	1,070	521	455	766	623	2,330	5,260	4,130	870	287	133
8.....	206	838	485	449	708	545	2,420	5,780	3,650	870	281	131
9.....	206	740	461	443	656	610	2,460	4,780	3,110	838	269	130
10.....	201	3,530	443	455	642	649	2,460	3,970	2,720	798	263	128
11.....	201	1,700	449	467	590	727	2,560	4,500	2,380	766	257	126
12.....	196	1,220	473	455	584	792	2,940	5,130	2,080	720	257	125
13.....	196	2,020	473	473	545	870	2,740	5,760	1,880	668	251	124
14.....	196	1,660	503	497	527	902	2,500	6,080	1,830	656	234	123
15.....	196	1,360	497	533	558	870	2,600	6,750	1,830	636	228	122
16.....	196	1,290	485	437	485	870	2,710	5,480	1,880	604	245	121
17.....	190	1,250	473	455	473	902	2,640	4,420	1,880	578	257	120
18.....	186	1,220	437	425	473	1,040	2,420	4,460	1,930	558	245	120
19.....	182	1,140	413	395	479	1,100	2,320	4,300	1,880	521	228	116
20.....	182	1,100	437	431	479	1,180	2,220	4,460	1,780	491	223	113
21.....	182	1,070	455	431	479	1,250	2,020	4,660	1,700	467	212	109
22.....	182	1,040	437	437	479	1,330	2,360	4,100	1,700	443	206	109
23.....	182	870	437	443	473	1,400	2,560	4,360	1,650	425	206	109
24.....	182	792	407	485	455	3,140	2,920	5,290	1,650	413	201	109
25.....	178	772	413	449	431	6,580	2,520	5,680	1,700	407	190	109
26.....	549	746	395	425	485	5,060	2,790	5,390	1,700	395	182	111
27.....	792	740	389	449	461	5,760	3,300	6,080	1,530	395	178	113
28.....	584	714	401	431	491	3,450	3,960	6,240	1,380	389	178	114
29.....	425	694	449	515	497	2,770	4,650	6,660	1,240	371	171	115
30.....	371	701	564	714	2,530	5,840	5,840	1,100	359	165	117	117
31.....	579	467	623	623	2,460	5,160	5,160	359	359	158	158	117

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	792	178	268	16,500
November.....	3,530	604	1,090	64,900
December.....	656	389	48 ^a	30,000
January.....	714	395	473	29,100
February.....	1,040	431	562	32,300
March.....	6,580	485	1,640	101,000
April.....	5,840	1,930	2,66 ^a	160,000
May.....	6,750	3,970	5,270	324,000
June.....	5,020	1,100	2,56 ^a	152,000
July.....	1,040	359	632	38,900
August.....	353	158	243	14,900
September.....	152	109	123	7,320
The year.....	6,750	109	1,340	971,000

NORTH FORK OF KINGS RIVER BELOW MEADOW BROOK, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 1, T. 10 S., R. 28 E., half a mile below Meadow Brook and half a mile above Fleming Creek. Altitude, about 8,150 feet.

DRAINAGE AREA.—35 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 621 second-foot May 28 (gage height, 4.33 feet); minimum, 0.6 second-foot several days in September (gage height, 1.48 feet).

1921-1928: Maximum discharge, 970 second-feet May 16, 1927; maximum gage height, 5.02 feet June 4, 1922; minimum discharge, 0.3 second-foot part of September 12-14, 1924.

REMARKS.—Daily records excellent. Discharge estimated November 11-23 and August 26 to September 19. Observations discontinued during winter. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	25	21			38	347	299	21	3.1	
2	1.6	37	23			24	286	330	19	3.0	
3	1.6	41	23			35	264	334	17	2.8	
4	1.6	35	20			29	297	314	16	2.6	
5	1.6	33	19			32	351	301	15	2.3	
6	1.6	53	17			38	353	256	15	2.0	
7	1.6	35	15			34	350	230	14	1.9	
8	1.6	27	14			22	326	187	14	1.6	
9	1.6	26	12			50	268	154	13	1.6	
10	1.6	42	12			63	232	126	13	1.5	
11	1.6	40		10		84	286	98	12	1.4	
12	1.6	40		11		89	331	82	12	1.2	
13	1.5	50				72	366	75	11	1.2	
14	1.5	40				74	376	73	11	1.2	
15	1.5	35				88	408	74	11	1.2	
16	1.5	35				86	278	74	10	1.2	
17	1.5	35				76	296	73	9.5	1.1	
18	1.4	34				68	334	75	8.5	1.0	
19	1.4	33			39	67	302	67	8	1.0	
20	1.4	32			44	62	325	58	7	1.0	.7
21	1.4	31			50	79	294	55	6.5	1.0	.7
22	1.4	30			44	101	244	53	6	1.0	.7
23	1.4	29			36	114	318	49	5	1.0	.7
24	1.4	28			43	104	409	48	4.3	1.0	.7
25	1.4	23			84	104	415	47	3.6	1.0	.7
26	42	24			98	146	394	42	4.1		.8
27	14	23			64	183	412	36	3.8		.8
28	9	23			52	222	450	31	4.1	1.0	.8
29	8	21			40	299	418	27	3.8		.9
30	10	20			46	370	354	23	3.5		1.0
31	17				46		320		3.3		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	42	1.4	4.86	299
November	50	20	32.7	1,950
December 1-10	23	12	17.6	349
March 19-31	98	36	52.8	1,360
April	370	22	95.1	5,660
May	450	232	336	20,700
June	384	23	123	7,320
July	21	3.3	9.84	605
August	3.1	1.0	1.45	80.2
September	1.0	.7	.79	47.0

NOTE.—No record Dec. 11 to Mar. 18.

NORTH FORK OF KINGS RIVER NEAR CLIFF CAMP, CALIF.

LOCATION.—Water-stage recorder in north $\frac{1}{2}$ sec. 12, T. 11 S., R. 27 E., at Cliff Camp bridge, 1 mile west of Cliff Camp. Altitude, about 6,150 feet.

DRAINAGE AREA.—174 square miles.

RECORDS AVAILABLE.—November, 1922, to September, 1928. August, 1921, to November, 1922, at a site 1 mile upstream.

EXTREMES.—Maximum discharge during year, 2,960 second-feet April 30 (gauge height, 9.90 feet); minimum, 3.0 second-feet parts of September 23–26 (gauge height, 2.35 feet).

1921–1928: Maximum discharge, 6,030 second-feet June 4, 1922; maximum gauge height, 12.20 feet May 16, 1927; minimum discharge, 1.3 second-feet September 9 and 10, 1924.

REMARKS.—Records excellent. No diversions. Gauge-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8.5	88	90	57	70	72	362	1,920	760	55	10	3.6
2.....	8.5	109	104	62	69	76	280	1,600	780	50	9.5	3.3
3.....	8.5	141	112	62	82	98	278	1,420	785	45	9	3.2
4.....	8.5	125	95	62	82	100	304	1,560	700	42	9	3.2
5.....	8.5	123	92	60	88	93	352	1,720	644	39	9	3.2
6.....	8.5	215	84	58	96	90	439	1,720	560	38	8.5	3.2
7.....	8.5	162	72	58	98	88	497	1,720	467	36	7.5	3.2
8.....	8.5	110	68	62	96	94	516	1,630	381	34	7	3.2
9.....	8.5	276	64	68	94	109	537	1,250	318	32	6.5	3.2
10.....	8	573	64	71	86	133	554	1,200	278	30	6	3.2
11.....	8	200	70	72	82	163	662	1,450	244	28	5.5	3.3
12.....	8	152	66	74	81	204	747	1,510	219	27	5	3.5
13.....	7.5	254	62	80	80	202	632	1,600	192	25	4.8	3.9
14.....	7.5	188	66	76	82	183	640	1,580	177	25	4.7	3.9
15.....	7.5	192	65	66	74	179	720	1,870	168	24	4.7	3.8
16.....	7	202	65	63	72	192	712	1,240	161	24	4.5	3.8
17.....	7	206	58	56	70	237	651	1,180	152	22	4.4	3.8
18.....	7	194	57	54	70	273	592	1,220	154	20	4.2	3.6
19.....	7	188	55	56	72	302	577	1,160	142	18	4.0	3.3
20.....	7	165	55	52	76	328	534	1,270	130	17	3.9	3.2
21.....	7	163	50	50	77	368	584	1,220	117	16	3.9	3.2
22.....	7	133	50	50	75	354	737	1,040	107	16	3.9	3.2
23.....	7	113	47	55	72	381	820	1,230	101	14	3.9	3.1
24.....	7	110	47	56	66	784	808	1,340	98	14	3.8	3.1
25.....	61	109	47	57	76	1,320	714	1,240	94	13	3.8	3.1
26.....	249	113	44	56	77	870	956	1,210	89	12	3.9	3.2
27.....	92	106	42	57	78	764	1,200	1,260	81	12	4.0	3.3
28.....	48	102	43	62	78	474	1,420	1,280	74	12	4.3	3.6
29.....	38	104	46	89	74	426	1,760	1,160	66	12	4.2	3.9
30.....	41	89	47	84	-----	428	2,110	960	60	11	4.0	4.2
31.....	120	-----	55	74	-----	423	-----	845	-----	10	3.9	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	249					7			26.9		1,650	
November.....	573					88			166		9,880	
December.....	112					42			63.9		3,930	
January.....	89					50			63.2		3,890	
February.....	98					66			79.1		4,550	
March.....	1,320					72			316		19,400	
April.....	2,110					278			723		43,000	
May.....	1,920					845			1,370		84,200	
June.....	785					60			277		16,500	
July.....	55					10			24.9		1,530	
August.....	10					3.8			5.53		340	
September.....	4.2					3.1			3.42		204	
The year.....	2,110					3.1			261		189,000	

NORTH FORK OF KINGS RIVER BELOW RANCHERIA CREEK, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 34, T. 11 S., R. 27 E., just above backwater from forebay of Balch power house and 1 mile below mouth of Rancheria Creek. Altitude, about 4,150 feet.

DRAINAGE AREA.—225 square miles.

RECORDS AVAILABLE.—March, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,990 second-feet April 30 (gage height, 9.66 feet); minimum, 6.5 second-feet September 25 (gage height, 1.04 feet).

1927-28: Maximum discharge, 5,910 second-feet May 16, 1927 (gage height, 12.6 feet); minimum, that of September 25, 1928.

REMARKS.—Records good. Discharge estimated November 7-17, 25-27, December 5-21, July 28 and 29. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	120	118	80	94	95	484	1,980	826	70	20	9
2	20	145	126	85	91	99	410	1,650	841	66	20	8
3	20	170	136	86	126	154	387	1,450	858	62	19	8
4	20	146	119	80	131	141	428	1,540	786	60	19	8
5	20	148	116	86	120	134	466	1,730	706	56	19	8
6	20	265	107	80	138	122	565	1,730	650	54	18	8
7	20	210	95	78	136	122	622	1,710	543	53	17	7.5
8	21	170	90	81	132	124	650	1,650	452	51	16	7.5
9	21	380	86	85	126	140	667	1,320	380	48	15	7.5
10	20	750	86	89	114	176	685	1,230	340	47	14	7.5
11	20	250	92	90	108	210	771	1,470	302	45	14	8
12	20	210	88	92	106	263	880	1,500	274	43	13	8
13	20	300	84	96	106	266	755	1,630	247	40	12	9
14	19	240	88	94	105	242	742	1,580	214	39	12	9
15	19	243	87	84	98	234	838	1,820	199	40	12	9
16	19	250	87	82	94	248	840	1,300	192	38	11	8.5
17	19	252	86	81	92	292	776	1,210	178	36	11	8
18	19	247	79	84	92	338	700	1,300	178	35	10	8
19	19	247	78	76	98	364	686	1,220	166	33	10	8
20	18	214	76	72	101	400	642	1,300	150	32	10	7.5
21	18	222	70	71	101	428	642	1,300	138	31	11	7.5
22	18	178	70	68	99	434	842	1,090	127	30	10	7
23	18	149	66	73	96	486	897	1,240	119	28	10	7
24	18	146	66	72	88	962	954	1,350	112	27	10	7
25	82	145	67	74	98	1,720	783	1,280	107	26	10	7
26	322	147	64	74	102	1,030	1,030	1,200	102	25	10	7
27	112	141	64	76	103	1,170	1,250	1,270	95	24	10	7.5
28	71	137	63	82	105	661	1,420	1,280	86	23	10	8
29	56	134	71	140	98	566	1,730	1,200	80	23	10	8
30	60	130	69	118	-----	561	2,060	1,040	74	22	10	9
31	160	-----	76	98	-----	546	-----	913	-----	21	9	-----
Month	Maximum						Minimum		Mean		Run-off in acre-feet	
October	322						13		42.9		2,640	
November	750						127		216		12,900	
December	136						63		86.1		5,290	
January	140						68		84.7		5,210	
February	138						88		107		6,160	
March	1,720						95		411		25,300	
April	2,060						387		819		48,700	
May	1,980						913		1400		86,100	
June	858						74		317		18,900	
July	70						21		39.6		2,430	
August	20						9		13.0		799	
September	9						7		7.90		470	
The year	2,060						7		296		215,000	

NORTH FORK OF KINGS RIVER ABOVE DINKEY CREEK, CALIF.

LOCATION.—Water-stage recorder in sec. 10, T. 12 S., R. 26 E., 200 feet above mouth of Dinkey Creek. Altitude, about 1,240 feet.

DRAINAGE AREA.—246 square miles.

RECORDS AVAILABLE.—December, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,140 second-feet April 30 (gage height, 10.10 feet); minimum, 6 second-feet September 21 (gage height, 3.70 feet).

1919-1928: Maximum discharge, 6,080 second-feet June 4, 1922 (gage height, 12.18 feet); minimum, about 4 second-feet August 29 to September 1, 1924.

REMARKS.—Records good. Discharge estimated November 24 to December 5, December 17-22, January 9-14, May 19-21, August 15-20, 28, and 29. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	144	123	69	106	56	486	2,100	830	71	16	8.5
2	17	102		97	103	94	432	1,720	830	68	18	8
3	17	159		97	138	136	429	1,530	855	69	15	9.5
4	16	165		81	172	152	429	1,640	755	55	18	9.5
5	16	154		72	116	123	454	1,800	682	48	18	9
6	17	134	98	55	170	98	570	1,800	615	54	16	8.5
7	17	232	88	76	163	108	638	1,800	510	62	16	8
8	17	146	98	68	122	97	660	1,760	443	57	16	8
9	14	185	70	144	148	682	1,460	348	348	48	15	7
10	17	1,050	71	136	154	682	1,320	298	298	43	14	7
11	18	307	70	91	136	188	780	1,600	271	43	14	7.5
12	15	232	85	92	178	882	1,600	253	253	37	12	9
13	18	484	88	70	256	780	1,760	229	229	37	11	9
14	14	283	66	108	247	730	1,680	211	211	37	11	9
15	17	262	82	61	113	229	830	1,880	205	38	11	10
16	12	268	82	86	68	223	855	1,390	175	38	10	11
17	18	262	86	138	262	805	1,290	154	154	35	9	11
18	15	256	74	78	304	705	1,420	188	188	26	9	10
19	15	138	77	89	345	705	1,290	159	159	24	8	7.5
20	15	211	76	81	384	660	1,370	154	154	21	7	7
21	15	220	74	103	418	638	1,370	157	157	17	7	7
22	15	205	53	91	440	855	1,110	134	134	18	7.5	9
23	16	163	82	79	510	910	1,290	125	125	30	8	9
24	15	62	91	67	1,080	992	1,420	118	118	22	8.5	7.5
25	28	48	68	102	1,920	780	1,360	118	118	20	9	8
26	309	64	89	108	1,230	1,050	1,230	106	106	20	9.5	9
27	172	62	75	116	1,390	1,290	1,320	105	105	18	10	8.5
28	103	32	86	70	730	1,530	1,320	105	105	12	11	9
29	60	105	98	118	615	1,840	1,260	86	86	10	11	8.5
30	51	69	157	592	2,190	1,080	81	10	10	12	8	8
31	159	82	62	570	570	938	938	11	11	11	11	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	309	12	40.8	2,510
November	1,050	225	225	13,400
December	157	82.1	82.1	5,060
January	172	67	82.6	5,080
February	172	67	110	6,330
March	1,920	56	428	26,300
April	2,190	429	842	50,100
May	2,100	938	1,450	91,000
June	855	81	310	18,400
July	71	10	35.5	2,180
August	18	7	11.9	732
September	11	7	8.58	511
The year	2,190	7	305	222,000

HELMS CREEK AT SAND MEADOW, CALIF.

LOCATION.—Water-stage recorder in sec. 1, T. 10 S., R. 27 E., at lower end of Sand Meadow, half a mile below trail crossing, Deer Meadow to Long Meadow. Altitude, about 8,000 feet.

DRAINAGE AREA.—34 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 670 second-feet April 30 (gage height, 4.78 feet); minimum, 1.9 second-feet August 19–26 and September 1–6.

1922–1928: Maximum discharge, 1,140 second-feet May 16, 1927; minimum, 1.1 second-feet August 1 and 27, 1924.

REMARKS.—Records good. Discharge estimated December 10–18, March 21, 22, and May 14–16. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	14	15			61	416	81	7	2.6	1.9
2	3.2	19	16			52	346	78	6.5	2.6	1.9
3	3.2	24	17			66	326	76	6.5	2.6	1.9
4	3.2	21	17			60	336	62	6	2.6	1.9
5	3.2	21	14			56	355	55	6	2.8	1.9
6	3.2	35	14			63	346	49	5.5	2.8	1.9
7	3.4	24	13			73	350	42	5.5	2.6	2.1
8	3.4	19	12			80	306	35	5	2.6	2.1
9	3.4	34	11			86	246	30	4.7	2.6	2.2
10	3.4	65	11			102	276	28	4.4	2.4	2.2
11	3.4	34	11			131	316	28	4.4	2.4	2.2
12	3.2	20	11			142	300	26	4.4	2.4	2.2
13	3.2	19	10	8.5		131	322	24	4.4	2.4	2.4
14	3.2	21	10			151	300	22	5	2.2	2.4
15	3.2	20	10			174	340	20	4.4	2.2	2.2
16	3.0	22	9			166	210	19	4.2	2.2	2.4
17	3.0	23	9			148	198	18	3.8	2.2	2.4
18	3.0	24	9			138	184	17	3.8	2.1	2.2
19	3.0	24				138	228	16	3.6	1.9	2.2
20	3.0	21				130	216	15	3.4	1.9	2.2
21	3.0	19			80	162	192	13	3.4	1.9	2.2
22	3.0	16			63	182	232	13	3.2	1.9	2.2
23	3.0	16			50	207	222	12	3.0	1.9	2.2
24	3.0	15			66	182	181	11	3.0	1.9	2.2
25	16	17			142	190	162	9.5	3.0	1.9	2.2
26	67	17			145	250	167	9	3.0	1.9	2.2
27	22	17			99	302	154	9	3.2	2.1	2.2
28	14	17			78	344	141	8	3.0	2.1	2.4
29	12	16			72	421	118	8	2.8	2.1	2.4
30	10	15			70	468	95	7.5	2.8	2.1	2.4
31	14				68		86		2.6	2.1	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	67	3.0	7.45	458
November	65	14	22.3	1,330
December 1–18	17	9	12.2	436
March 21–31	145	50	84.8	1,850
April	468	52	162	9,640
May	416	86	247	15,200
June	81	7.5	27.8	1,650
July	7	2.6	4.24	261
August	2.8	1.9	2.26	139
September	2.4	1.9	2.18	130

RANCHERIA CREEK NEAR SMITH MEADOW, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 19, T. 11 S., R. 28 E., at trail crossing (Cliff Camp to Smith Meadow), half a mile below North Fork of Rancheria Creek and half a mile north of Smith Meadow. Altitude, about 6,400 feet.

DRAINAGE AREA.—22 square miles.

RECORDS AVAILABLE.—October, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 290 second-feet November 10 (gage height, 4.65 feet); minimum, 3.8 second-feet September 23 (gage height, 2.56 feet).

1924-1928: Maximum discharge, 426 second-feet May 16, 1927 (gage height, 5.45 feet); practically no flow part of November 25-27, 1924.

REMARKS.—Records good. Discharge estimated December 13 to March 15. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	6	12	11				39	147	40	11	6	4.7
2.	6	13	13				37	126	37	10	6	4.7
3.	6	14	13				59	120	35	10	6	4.4
4.	6	13	13				38	125	31	10	6	4.4
5.	6	13	13	10			36	131	29	10	6	4.4
6.	6	24	16				38	128	26	9.5	6	4.4
7.	6	16	19				44	139	25	9	5.5	4.4
8.	6	13	17			18	51	126	24	9	5.5	4.4
9.	6	66	17				56	105	22	8.5	5	4.4
10.	6	100	17				59	110	23	8	5	4.4
11.	6	60	16	9.5			70	121	25	8	5	4.4
12.	6	40	16				69	123	24	8	5	4.7
13.	6	35					61	123	22	8	5	4.7
14.	6	30	11				62	118	19	8	5	4.7
15.	6	30					67	118	18	8	5	4.4
16.	6	30				22	67	97	18	8	5	4.4
17.	6	30				24	65	99	16	8	5	4.4
18.	6	25	12			26	62	105	16	8	5	4.4
19.	6	25				30	59	105	15	7.5	5	4.4
20.	6	25				32	56	99	15	7.5	5	4.4
21.	6	22				34	56	102	14	7	5	4.1
22.	6	22				33	64	89	13	7	5	4.1
23.	6	20				33	75	85	12	6.5	5	4.1
24.	6	17		10		64	72	81	12	6.5	5	4.1
25.	34	12				128	67	78	12	6.5	5	4.1
26.	36	13				96	83	70	12	6	5	4.1
27.	14	12				75	99	67	12	6	5	4.1
28.	10	12			12	54	115	62	12	6	5	4.1
29.	8.5	12				47	141	58	12	6	5	4.1
30.	10	11				43	160	52	11	6	4.7	4.1
31.	16					42		46		6	4.7	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	36	6	8.79	540
November.....	100	11	25.6	1,520
December.....			14	861
January.....			10	615
February.....			12	690
March.....	128		33.8	2,080
April.....	160	36	67.6	4,020
May.....	147	46	102	6,270
June.....	40	11	20.1	1,200
July.....	11	6	7.85	483
August.....	6	4.7	5.21	320
September.....	4.7	4.1	4.35	259
The year.....			26.0	18,900

DINKY CREEK AT DINKY MEADOW, CALIF.

LOCATION.—Water-stage recorder in sec. 21, T. 10 S., R. 26 E., at lower end of Dinky Meadow, half a mile above Bear Creek and 11 miles above mouth. Altitude, about 5,440 feet.

DRAINAGE AREA.—51 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,780 second-feet November 10 (gage height, 6.55 feet); minimum, 1.0 second-foot several times during September (gage height, 0.68 foot).

1921-1928: Maximum discharge, 2,660 second-feet November 26, 1926 (gage height, 7.62 feet); minimum, 0.4 second-foot August 30, 1924.

REMARKS.—Records good. Discharge interpolated October 13-22. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.4	47	38	27	42	40	180	352	93	13	2.5	1.2
2.....	2.4	40	39	31	40	47	154	294	87	12	2.5	1.2
3.....	2.3	40	40	29	54	62	156	271	83	12	2.5	1.1
4.....	2.3	33	35	29	50	59	152	278	77	11	2.4	1.1
5.....	2.3	28	33	28	57	52	173	283	69	11	2.5	1.0
6.....	2.3	62	30	28	57	54	204	281	63	9.5	2.5	1.0
7.....	2.3	44	27	28	57	51	223	290	57	9	2.4	1.0
8.....	2.3	30	25	29	58	54	227	277	49	8	2.3	1.0
9.....	2.2	401	24	32	55	67	228	232	44	8	2.1	1.0
10.....	2.2	490	27	34	51	83	224	252	40	7.5	2.0	1.1
11.....	2.2	111	30	33	51	90	248	288	43	7	1.9	1.1
12.....	2.1	82	27	35	51	100	258	277	40	6.5	1.9	1.2
13.....	2.1	184	26	35	52	98	211	268	30	6	1.8	1.2
14.....	2.1	114	28	32	50	90	207	248	32	5.5	2.0	1.2
15.....	2.1	109	28	36	45	97	216	278	30	5.5	2.0	1.2
16.....	2.1	106	28	39	43	104	208	205	27	5	1.9	1.2
17.....	2.1	99	26	36	45	117	208	186	20	4.9	1.9	1.2
18.....	2.1	89	26	39	46	126	178	176	25	4.6	1.8	1.1
19.....	2.1	80	25	37	48	134	169	196	2	4.4	1.7	1.1
20.....	2.1	69	26	34	49	138	154	188	23	4.2	1.6	1.1
21.....	2.1	78	26	30	48	142	157	172	22	4.1	1.6	1.1
22.....	2.1	62	23	29	45	136	172	156	20	3.9	1.6	1.0
23.....	2.1	53	23	29	44	236	186	159	19	3.8	1.4	1.0
24.....	2.1	50	25	33	39	595	197	158	18	3.5	1.4	1.0
25.....	2.3	50	24	27	47	1,060	178	176	17	3.4	1.4	1.0
26.....	108	50	23	23	45	477	212	164	15	3.1	1.4	1.1
27.....	74	48	22	33	47	353	245	152	15	3.1	1.4	1.2
28.....	30	46	21	40	44	266	282	139	14	3.1	1.4	1.2
29.....	20	45	22	91	42	230	337	126	14	2.8	1.4	1.2
30.....	20	39	27	76	-----	228	382	113	13	2.7	1.3	1.3
31.....	113	-----	24	48	-----	206	-----	102	-----	2.6	1.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	113	2.1	14.2	873
November.....	490	28	92.6	5,510
December.....	40	21	27.4	1,680
January.....	91	23	35.8	2,200
February.....	58	39	48.3	2,780
March.....	1,060	40	180	11,100
April.....	382	152	271	12,600
May.....	352	192	217	13,300
June.....	92	13	37.8	2,250
July.....	13	2.6	6.15	378
August.....	2.5	1.3	1.86	114
September.....	1.3	1.0	1.11	66
The year.....	1,060	1.0	72.8	52,900

DINKEY CREEK AT MOUTH, CALIF.

LOCATION.—Water-stage recorder in sec. 3, T. 12 S., R. 26 E., half a mile above mouth. Altitude, about 1,310 feet.

DRAINAGE AREA.—136 square miles.

RECORDS AVAILABLE.—January, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,550 second-feet November 10 (gage height, 9.78 feet); minimum, 2.6 second-feet September 24 (gage height, 3.27 feet).

1920-1928: Maximum discharge, 3,360 second-feet November 9, 1924 (gage height, 10.57 feet); minimum, 1.6 second-feet August 31, 1924.

REMARKS.—Records good. Discharge estimated August 15-19. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	8	105	76	50	85	82	362	630	147	27	7	3.6
2-----	8	71	76	57	81	82	348	535	136	26	6.5	3.4
3-----	8	84	82	61	111	126	317	482	132	25	6.5	3.2
4-----	7.5	63	72	60	141	117	310	482	123	24	6.5	3.0
5-----	7.5	53	67	58	110	108	375	482	110	24	7	3.0
6-----	7.5	50	62	55	117	102	390	482	102	22	7	2.8
7-----	7.5	92	56	56	114	95	420	482	93	22	6.5	2.8
8-----	7.5	59	52	56	111	102	435	500	84	20	6.5	2.7
9-----	8	337	50	58	111	102	435	420	75	18	6	2.7
10-----	7.5	957	51	64	101	134	420	420	70	18	5.5	2.7
11-----	7.5	217	57	64	100	154	465	465	75	17	5.5	2.8
12-----	7.5	141	49	65	101	163	482	450	71	16	5	3.2
13-----	7	374	56	68	101	179	405	435	71	15	5	3.6
14-----	7	217	58	67	99	163	390	420	64	14	5	3.8
15-----	7	191	58	57	90	163	405	450	58	13	4.8	3.6
16-----	7	193	58	54	84	179	405	362	53	13	4.5	3.2
17-----	7	187	54	56	88	191	405	322	51	13	4.3	3.0
18-----	7	168	58	50	87	219	348	317	48	12	4.0	2.8
19-----	6.5	165	49	56	91	229	335	335	46	12	3.8	2.8
20-----	6.5	135	51	53	94	242	312	322	44	11	3.6	2.7
21-----	6.5	144	45	51	94	251	312	314	42	11	3.8	2.7
22-----	6.5	120	48	51	92	251	335	268	40	11	3.8	2.7
23-----	6.5	95	40	58	90	304	362	271	37	10	3.8	2.7
24-----	6.5	96	45	54	78	780	375	263	35	9.5	3.6	2.6
25-----	11	91	45	55	88	1,730	348	261	33	9.5	3.6	2.7
26-----	163	95	40	53	88	905	390	278	31	9	3.8	2.7
27-----	135	93	42	57	90	1,000	435	245	30	9	3.8	2.8
28-----	72	90	42	61	91	552	500	226	30	9	4.0	3.2
29-----	39	88	58	108	84	420	570	207	29	9	4.0	3.4
30-----	32	80	49	130	-----	450	650	181	28	8	3.8	3.4
31-----	150	-----	54	94	-----	420	-----	163	-----	7	3.8	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	163	6.5	25.0	1,540
November-----	957	50	161	9,580
December-----	82	40	54.8	3,370
January-----	130	50	62.5	3,840
February-----	141	78	97.0	5,580
March-----	1,730	82	323	19,900
April-----	650	310	401	23,900
May-----	630	163	370	22,800
June-----	147	28	66.3	3,950
July-----	27	7	15.0	922
August-----	7	3.6	4.91	302
September-----	3.8	2.6	3.01	179
The year-----	1,730	2.6	132	95,900

DEER CREEK BELOW EAST FORK, CALIF.

LOCATION.—Water-stage recorder in sec. 6, T. 11 S., R. 27 E., 100 feet above proposed dam and 200 feet below mouth of East Fork. Altitude, about 6,700 feet.

DRAINAGE AREA.—21 square miles.

RECORDS AVAILABLE.—October, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 486 second-feet November 9 (gage height, 6.19 feet); minimum, 0.3 second-foot September 10 and 14–26 (gage height, 3.95 feet).

1923–1928: Maximum discharge, 650 second-feet November 9, 1924 (gage height, 6.54 feet); minimum, 0.2 second-foot October 3, 1924.

REMARKS.—Records good. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	1.1	17	14				59	129	17	4.0	0.9	0.4
2.	1.1	23	19				49	112	17	4.0	.9	.4
3.	.9	17	19				57	106	15	4.0	.9	.4
4.	.9	13	15				48	102	14	4.0	.7	.4
5.	.9	12	13				53	108	13	3.0	.7	.4
6.	.9	33	13				63	102	13	2.5	.7	.4
7.	.9	16	13				73	104	11	2.0	.7	.4
8.	.9	10	11				81	87	10	2.0	.7	.4
9.	.9	104	11	11			87	77	10	1.7	.6	.4
10.	.9	101	11				89	83	10	1.7	.6	.3
11.	.9	28	11				100	89	12	1.5	.6	.4
12.	.9	22	11				98	80	11	1.5	.6	.4
13.	.9	32	11				81	77	10	1.3	.6	.4
14.	.9	28	11				87	69	9.5	1.3	.6	.3
15.	.9	28	11				94	80	9	1.3	.6	.3
16.	.9	31					87	60	8.5	1.3	.6	.3
17.	.9	31					83	53	8.5	1.3	.6	.3
18.	.9	29					73	56	8.5	1.3	.6	.3
19.	.9	28					70	56	8	1.3	.6	.3
20.	.9	23					63	53	8	1.3	.6	.3
21.	.9	23					63	48	7	1.3	.6	.4
22.	.9	19					72	41	6.5	1.1	.6	.4
23.	.9	20					80	40	6	1.1	.4	.4
24.	.9	18					81	38	6	.9	.4	.4
25.	8	18					73	36	5	.9	.4	.4
26.	47	17				152	91	32	4.5	.9	.5	.5
27.	21	17			20	118	104	29	4.5	.9	.5	.5
28.	8	17				80	118	26	4.5	1.1	.5	.5
29.	6	18				75	140	24	4.5	.9	.5	.5
30.	8	15				77	147	21	4.0	.9	.4	.5
31.	49					70		19		.9		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.	49	0.9	5.45	335
November.	104	10	26.9	1,600
December 1–15.	19	11	12.9	384
March 26–31.	152	70	95.3	1,130
April.	147	48	82.1	4,890
May.	129	19	65.7	4,040
June.	17	4.0	9.18	546
July.	4.0	.9	1.72	108
August.	.9	.4	.60	36.9
September.	.5	.3	.39	23.2

SAN JOAQUIN RIVER BASIN

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER

SOUTH FORK OF SAN JOAQUIN RIVER NEAR FLORENCE LAKE, CALIF.

LOCATION.—Water-stage recorder in sec. 36, T. 7 S., R. 27 E., just below spillway of Florence Lake dam and 6 miles above mouth of Bear Creek. Altitude, about 7,200 feet.

RECORDS AVAILABLE.—December, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,820 second-feet June 4 (gage height, 12.63 feet); minimum, 0.1 second-foot May 13 and 14 (gage height, 7.79 feet).

1921-1928: Maximum discharge, 3,460 second-feet June 4, 1922 (gage height, 13.75 feet); practically no flow August 30, September 2-7, 1924, and December 16 and 17, 1925.

REMARKS.—Most of the flow is diverted above gage by Florence Lake tunnel to Huntington Lake on Big Creek. Storage in Florence Lake was 29,500 acre-feet on September 30, 1927, and 560 acre-feet on September 30, 1928. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	7	5.5	97	2.5	2.0	1.5	0.3	0.2	1.7	69	0.9	0.3
2-----	7	5.5	91	2.5	1.7	2.0	.3	.2	86	44	.9	.3
3-----	6.5	5.5	58	2.5	2.0	2.0	.4	.2	1,060	9	.9	.3
4-----	7	5.5	.3	2.2	1.7	1.7	.4	.2	1,480	3.8	.8	.3
5-----	7	6	.1	2.2	1.7	1.3	.5	.2	513	2.0	.5	.3
6-----	7	6.5	.1	2.0	1.7	1.3	.4	.2	3.8	2.0	.5	.3
7-----	7	6	8	2.0	1.7	1.3	.3	.2	3.8	2.0	.4	.2
8-----	6.5	6.5	.1	2.0	1.7	1.3	.2	.2	4.4	2.0	.4	.2
9-----	6.5	7	.1	2.2	1.7	1.3	.1	.2	38	2.0	.4	.2
10-----	6	7	5.5	2.0	1.7	1.3	.1	.1	159	2.0	.4	.2
11-----	6	6.5	.2	2.0	1.7	1.3	.1	.2	7	2.0	.4	.3
12-----	6	7	.1	2.0	1.7	1.3	.1	.1	5.5	1.7	.5	.3
13-----	6	7	.1	1.7	1.7	1.3	.1	.1	3.8	1.7	.5	.3
14-----	6	6.5	.6	1.7	1.7	1.2	.1	.1	9	1.7	.5	.2
15-----	6	6.5	1.3	2.0	1.7	1.2	.1	.6	16	1.7	.5	.2
16-----	6	6.5	1.5	2.0	1.7	1.2	.1	.1	4.4	1.7	.4	.1
17-----	6	6.5	1.5	2.0	1.7	1.2	.1	.1	21	1.5	.4	.1
18-----	6	6.5	1.5	2.0	2.0	1.2	.1	.1	87	1.5	.3	.1
19-----	6	6	1.3	2.0	2.0	1.2	.1	.2	66	1.5	.3	.1
20-----	6	6.5	1.3	1.7	2.0	1.2	.1	.3	63	1.5	.3	.1
21-----	6	6.5	1.5	1.7	2.0	1.0	.1	.4	48	1.5	.3	.1
22-----	6	6	1.5	1.7	1.7	1.2	.2	.3	37	1.5	.3	.1
23-----	6	5.5	1.5	1.7	1.7	1.5	.2	.4	27	1.5	.3	.1
24-----	6	5.5	2.2	1.7	1.7	1.7	.2	.4	54	1.5	.3	.1
25-----	7	5.5	3.1	1.7	2.0	1.0	.2	.4	114	1.5	.3	.1
26-----	7	4.8	4.1	1.7	2.0	.3	.2	.4	74	1.5	.3	.1
27-----	6	4.4	4.8	1.7	1.7	.8	.2	.4	31	1.5	.3	.2
28-----	5.5	4.4	2.8	2.0	1.7	.4	.2	.5	7	1.3	.3	.1
29-----	5.5	4.5	2.5	2.0	1.7	.3	.2	.7	49	1.0	.3	8.5
30-----	6.5	174	2.5	1.7	-----	.3	.2	1.7	76	1.0	.3	8.5
31-----	7.5	-----	2.5	2.0	-----	.3	-----	1.7	-----	1.0	.3	-----

Month	Maximum	Minimum	Mean	Run-off in Acre-feet
October-----	7.5	5.5	6.34	390
November-----	174	4.4	12.9	768
December-----	97	.1	9.63	592
January-----	2.5	1.7	1.96	121
February-----	2.0	1.7	1.78	102
March-----	2.0	.3	1.16	71.3
April-----	.5	.1	.20	11.9
May-----	1.7	.1	.36	22.1
June-----	1,480	1.7	138	8,210
July-----	69	1.0	5.45	335
August-----	.9	.3	.44	27.1
September-----	8.5	.1	.74	44.0
The year-----	1,480	.1	14.8	10,700

SOUTH FORK OF SAN JOAQUIN RIVER NEAR HOFFMAN MEADOW, CALIF.

LOCATION.—Water-stage recorder in sec. 8, T. 6 S., R. 26 E., unsurveyed, 2 miles above Hoffman Creek and 3 miles east of Hoffman Meadow. Altitude, about 5,100 feet.

RECORDS AVAILABLE.—November, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,370 second-feet June 4 (gage height, 12.32 feet); minimum, 11 second-feet September 2 (gage height, 4.82 feet).

1921-1928: Maximum discharge, 5,930 second-feet June 5, 1922 (gage height, 1,521 feet); minimum, that of September 2, 1928.

REMARKS.—Records excellent. Discharge estimated August 21-30. A large part of the flow was stored in Florence Lake and diverted by Florence Lake tunnel into Huntington Lake on Big Creek. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	64	103	198	31	31	34	138	326	1,130	107	15	11
2.....	63	128	152	30	31	38	140	228	670	97	15	11
3.....	62	158	148	29	36	59	145	151	1,680	66	15	11
4.....	60	95	65	33	41	57	145	152	2,130	43	15	11
5.....	58	101	34	29	40	49	162	211	1,440	34	15	11
6.....	58	130	30	27	40	46	197	294	57	32	15	11
7.....	57	169	52	25	40	47	190	294	560	31	14	11
8.....	56	102	38	26	37	50	165	391	412	29	14	11
9.....	55	151	30	27	36	52	150	224	255	27	14	11
10.....	53	206	26	27	35	61	140	160	317	27	13	11
11.....	53	156	28	27	34	67	134	190	615	25	13	11
12.....	53	167	31	28	34	79	141	314	533	25	13	12
13.....	52	167	28	28	33	82	130	436	458	24	13	12
14.....	52	156	29	27	33	83	119	543	458	23	13	12
15.....	51	188	26	25	30	75	117	870	488	23	13	12
16.....	50	192	29	24	32	67	115	544	508	22	13	12
17.....	50	160	24	24	32	69	112	365	518	21	12	12
18.....	49	163	26	24	31	72	104	376	598	21	12	11
19.....	48	158	27	25	32	71	100	322	564	20	12	11
20.....	48	107	27	24	33	71	96	379	518	20	12	11
21.....	48	58	24	24	33	71	93	477	518	20	12	11
22.....	48	47	25	24	33	69	94	320	518	19	12	11
23.....	48	40	22	24	33	98	96	406	518	19	12	11
24.....	46	40	25	24	32	335	105	642	548	18	12	11
25.....	49	42	25	24	34	446	100	672	632	18	12	11
26.....	135	76	25	24	35	228	100	732	564	18	11	11
27.....	124	46	26	24	35	351	109	848	458	19	11	12
28.....	96	70	27	25	36	234	119	919	297	18	11	12
29.....	81	114	27	29	35	184	133	948	60	18	11	12
30.....	82	153	25	38	-----	169	186	1,050	106	17	11	12
31.....	126	-----	33	31	-----	151	-----	1,340	-----	16	11	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	135	46	63.7	3,920
November.....	206	40	121	7,200
December.....	198	22	43.0	2,640
January.....	38	24	26.8	1,650
February.....	41	30	34.4	1,980
March.....	446	34	115	7,070
April.....	197	93	129	7,680
May.....	1,340	151	488	30,000
June.....	2,130	60	621	37,000
July.....	107	16	29.6	1,820
August.....	15	11	12.8	787
September.....	12	11	11.3	672
The year.....	2,130	11	141	102,000

SAN JOAQUIN RIVER ABOVE BIG CREEK, CALIF.

LOCATION.—Water-stage recorder in sec. 11, T. 8 S., R. 24 E., 3 miles above mouth of Big Creek and 7 miles below mouth of Chiquito Creek. Altitude, about 2,500 feet.

RECORDS AVAILABLE.—March, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 10,700 second-feet March 25 (gauge height, 15.3 feet); minimum, 69 second-feet September 23 (gauge height, 6.60 feet).

1922-1928: Maximum discharge, 18,000 second-feet June 5, 1922 (gauge height, 17.34 feet); minimum, that of September 23, 1928.

REMARKS.—Records excellent. Discharge estimated February 4-10. A large part of the flow of South Fork of San Joaquin River is diverted by Florence Lake Tunnel to Huntington Lake on Big Creek. Gauge-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	177	606	558	316	380	366	1,580	4,010	3,480	606	212	94
2	175	518	534	329	376	366	1,550	3,290	3,140	562	202	90
3	172	830	530	329	478	518	1,440	2,670	3,730	538	188	89
4	170	660	490	335	485	518	1,520	2,760	4,280	502	179	89
5	170	574	404	329	480	482	1,520	3,110	3,880	490	172	89
6	168	602	370	316	500	458	1,660	3,410	2,810	482	166	89
7	168	638	345	310	490	440	1,820	3,350	2,560	470	159	90
8	166	534	339	310	470	462	1,780	3,770	2,200	458	155	90
9	164	655	316	329	445	486	1,780	2,960	1,740	454	155	89
10	161	2,380	301	345	425	538	1,720	2,580	1,540	443	155	86
11	159	992	301	348	422	597	1,770	3,300	1,600	426	153	83
12	157	805	310	345	422	682	2,050	3,740	1,590	404	151	83
13	155	1,540	313	356	418	705	1,950	3,890	1,380	387	146	83
14	153	1,050	335	359	418	705	1,730	3,950	1,340	373	142	82
15	151	882	329	332	408	682	1,840	4,570	1,330	370	140	79
16	149	910	326	286	359	660	1,840	3,550	1,380	359	142	77
17	149	855	316	268	384	730	1,770	2,890	1,400	348	140	76
18	146	805	283	254	373	805	1,520	3,060	1,500	332	136	76
19	144	780	295	280	384	855	1,460	2,850	1,460	313	132	76
20	144	730	289	283	390	965	1,380	2,960	1,340	289	126	76
21	142	660	280	271	398	1,050	1,330	3,500	1,350	271	124	75
22	142	584	271	268	394	1,080	1,540	2,940	1,330	254	120	73
23	140	490	257	295	380	1,250	1,680	3,120	1,340	243	120	70
24	140	478	246	289	366	3,110	1,860	3,600	1,360	240	118	70
25	198	470	263	286	387	8,880	1,520	3,710	1,440	243	114	70
26	874	474	257	283	387	4,780	1,870	3,780	1,420	238	111	72
27	638	482	251	295	380	4,760	2,200	4,000	1,200	238	109	75
28	602	443	254	301	387	2,700	2,570	3,950	1,020	240	107	76
29	440	486	319	422	380	2,120	2,860	4,080	730	240	102	76
30	408	466	323	490	-----	1,920	3,620	3,760	588	224	98	75
31	768	-----	310	412	-----	1,800	-----	3,760	-----	220	95	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	938	140	258	15,900
November	2,380	443	746	44,400
December	558	246	332	20,400
January	490	254	322	19,800
February	500	359	413	23,800
March	8,880	366	1,470	90,400
April	3,620	1,330	1,820	108,000
May	4,570	2,580	3,450	212,000
June	4,280	588	1,850	110,000
July	606	220	363	22,300
August	212	95	141	8,670
September	94	70	80.6	4,800
The year	8,880	70	938	680,000

SAN JOAQUIN RIVER NEAR FRIANT, CALIF.

LOCATION.—Water-stage recorder in NE. ¼ sec. 5, T. 11 S., R. 21 E., 1½ miles northeast of Friant.

DRAINAGE AREA.—1,640 square miles at old location 2 miles upstream.

RECORDS AVAILABLE.—October, 1907, to September, 1928.

EXTREMES.—Maximum discharge during year, 13,100 second-feet March 25 (gage height, 12.35 feet); minimum, 119 second-feet March 2 (gage height, 2.80 feet).

1907-1928: Maximum discharge, about 46,200 second-feet January 25, 1914 (gage height, 21.72 feet); minimum, 44 second-feet September 15, 1924.

REMARKS.—Records excellent. Flow regulated by storage in Florence Lake, Huntington Lake, Shaver Lake, and Crane Valley Reservoir.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	845	1,270	730	815	900	685	2,100	4,640	4,270	1,000	950	925
2	610	905	1,450	550	1,040	625	2,160	4,140	3,970	1,160	865	710
3	805	1,200	1,240	835	1,170	885	2,780	3,480	3,970	1,080	830	675
4	800	1,170	1,080	1,070	2,210	645	2,290	3,400	5,270	910	995	900
5	790	1,200	1,240	930	1,880	830	2,080	3,640	5,140	1,040	835	955
6	815	855	1,090	955	1,320	590	2,140	3,780	3,670	1,290	1,030	1,080
7	800	1,090	1,060	1,150	1,240	785	2,500	3,930	3,130	1,240	960	1,120
8	730	1,260	1,010	645	1,100	690	2,500	4,320	2,890	1,020	980	945
9	700	1,190	1,060	1,030	1,070	610	2,360	3,880	2,570	930	985	795
10	765	2,300	1,070	955	1,080	745	2,440	3,240	2,380	1,120	1,040	830
11	810	2,020	780	910	1,180	860	2,620	3,680	2,670	1,020	965	945
12	785	1,790	1,020	950	1,030	760	2,820	4,220	2,440	1,040	975	1,060
13	720	1,210	1,080	855	915	1,040	2,920	4,230	2,120	1,060	1,080	965
14	820	2,200	1,040	975	965	1,040	2,680	4,430	1,980	970	1,020	905
15	765	1,600	1,080	755	785	1,050	2,440	4,840	1,980	960	915	895
16	715	1,400	1,140	990	1,020	1,100	2,680	4,780	2,040	970	952	765
17	935	1,560	1,110	1,020	950	1,080	2,600	3,580	2,040	1,030	998	875
18	750	1,540	805	830	1,000	980	2,530	3,480	1,960	960	868	900
19	720	1,020	1,060	845	835	1,180	2,260	3,380	2,130	1,030	775	990
20	730	930	1,090	1,140	915	1,560	2,210	3,420	2,030	1,040	855	970
21	760	1,420	1,140	925	965	1,530	2,100	3,880	1,840	1,020	978	930
22	875	1,340	940	780	985	1,550	2,060	3,740	1,690	950	985	755
23	825	1,380	980	855	940	1,600	2,220	3,520	1,670	1,010	1,130	755
24	785	890	970	1,140	970	3,000	2,490	4,000	1,890	1,000	988	775
25	695	1,040	770	975	970	9,600	2,450	4,230	1,870	970	890	795
26	1,060	1,160	650	985	750	7,100	2,440	4,310	1,870	800	805	860
27	1,660	940	885	915	815	7,560	2,780	4,500	1,640	730	885	860
28	1,300	1,240	970	965	775	4,480	3,080	4,360	1,720	890	1,000	825
29	1,040	1,060	1,040	820	620	3,240	3,310	4,650	1,520	875	905	800
30	1,020	1,330	1,340	1,240	-----	2,700	3,900	4,340	1,480	1,000	990	775
31	1,220	-----	1,040	1,240	-----	2,480	-----	4,220	-----	870	950	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,660	610	860	52,900
November	2,300	855	1,320	78,600
December	1,450	650	1,030	63,300
January	1,240	550	937	57,600
February	2,210	620	1,040	50,800
March	9,600	590	2,020	124,000
April	3,900	2,060	2,530	151,000
May	4,840	3,240	4,010	247,000
June	5,200	1,480	2,560	152,000
July	1,290	730	999	61,400
August	1,130	775	948	58,300
September	1,120	675	878	52,200
The year	9,600	550	1,590	1,160,000

SAN JOAQUIN RIVER NEAR NEWMAN, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 3, T. 7 S., R. 9 E., at drawbridge on Hill's Ferry road, 300 feet below mouth of Merced River and $3\frac{1}{2}$ miles northeast of Newman.

RECORDS AVAILABLE.—April, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,500 second-feet March 31 (gage height, 8.95 feet); minimum, 205 second-feet August 18 (gage height, 2.08 feet).

1912-1928: Maximum discharge, 20,700 second-feet January 27, 1914 (gage height, 18.0 feet); minimum, 15 second-feet August 9 and 10, 1924.

REMARKS.—Records good. Practically the entire low-water flow of main river and tributaries is diverted for irrigation, hence the low-water records show mainly the amount of return water.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	585	515	1,620	1,930	1,140	990	4,200	940	2,180	485	315	340
2	700	620	1,620	1,860	1,140	990	3,390	890	2,030	520	328	352
3	745	660	1,620	1,800	1,190	990	2,990	790	1,900	520	315	390
4	700	700	1,620	1,800	1,440	990	2,830	1,500	1,780	520	290	405
5	760	700	1,620	1,740	2,750	1,040	2,750	2,750	1,780	485	302	405
6	660	700	1,620	1,620	2,520	1,090	2,750	2,910	1,660	450	302	405
7	660	745	1,620	1,500	2,750	1,080	2,600	3,070	1,560	420	302	390
8	700	790	1,680	1,560	2,440	1,040	2,520	3,070	1,410	420	278	390
9	745	790	1,620	1,560	2,210	940	2,410	3,310	1,360	420	278	365
10	790	840	1,680	1,560	1,860	890	2,440	3,390	1,310	390	265	378
11	790	790	1,620	1,560	1,560	890	2,440	2,750	1,260	365	245	378
12	840	790	1,620	1,620	1,500	890	2,440	2,750	1,110	340	255	390
13	790	840	1,620	1,500	1,440	890	2,140	3,390	1,010	340	278	405
14	700	990	1,620	1,560	1,390	890	2,000	3,750	910	340	265	405
15	660	1,390	1,620	1,500	1,340	890	1,860	3,750	790	328	255	390
16	620	1,620	1,560	1,560	1,340	890	1,860	3,400	710	328	245	405
17	660	1,560	1,620	1,560	1,340	840	1,740	3,200	710	302	225	405
18	660	1,680	1,620	1,560	1,290	700	1,680	2,820	710	290	205	378
19	515	1,800	1,620	1,620	1,190	620	1,680	2,420	710	290	215	378
20	480	1,740	1,560	1,620	1,090	585	1,620	2,500	670	290	245	352
21	450	1,680	1,560	1,500	1,140	550	1,500	2,820	670	278	255	328
22	465	1,680	1,500	1,440	1,090	515	1,440	2,820	670	290	245	328
23	435	1,620	1,440	1,390	1,090	515	1,440	2,740	630	328	245	328
24	435	1,620	1,500	1,240	1,090	620	1,390	2,340	630	315	225	352
25	420	1,680	1,560	1,190	1,040	840	1,240	1,840	590	290	235	340
26	405	1,740	1,500	1,140	990	1,040	1,140	1,900	590	278	245	340
27	390	1,740	1,560	1,190	990	1,680	1,040	2,060	555	290	290	315
28	390	1,740	1,620	1,190	990	2,830	990	2,030	555	290	315	302
29	390	1,620	1,620	1,190	990	3,150	990	2,030	555	328	328	315
30	390	1,620	1,930	1,190	-----	3,750	940	2,060	485	328	352	315
31	435	-----	1,930	1,190	-----	4,300	-----	2,030	-----	315	352	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October						840	390	590	36,300			
November						1,800	515	1,230	73,200			
December						1,930	1,440	1,620	99,600			
January						1,930	1,140	1,500	92,200			
February						2,750	990	1,460	84,000			
March						4,300	515	1,220	75,000			
April						4,200	940	2,020	120,000			
May						3,750	790	2,510	154,000			
June						2,180	485	1,050	62,500			
July						520	278	360	22,100			
August						352	205	274	16,800			
September						405	302	366	21,800			
The year						4,300	205	1,180	858,000			

SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.

LOCATION.—Water-stage recorder in El Pescadero Grant at Durham Ferry highway bridge, $3\frac{1}{2}$ miles northeast of Vernalis, San Joaquin County.

RECORDS AVAILABLE.—July, 1922, to September, 1928 (low-water records only).

REMARKS.—Records good. Discharge was not ascertained for high-water period November 18 to May 25. Practically all water is diverted from tributaries and main river above station during irrigation season; flow at station is largely return water.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	May	Jun.	July	Aug.	Sept.
1.....	1,600	2,410	-----	8,300	1,390	980	1,090
2.....	1,660	2,340	-----	6,660	1,390	960	1,120
3.....	1,840	2,410	-----	5,300	1,390	980	1,120
4.....	1,960	2,760	-----	6,000	1,440	960	1,140
5.....	2,020	2,970	-----	6,660	1,490	980	1,140
6.....	2,270	3,180	-----	6,550	1,440	1,040	1,240
7.....	2,270	3,250	-----	5,400	1,340	1,040	1,340
8.....	2,080	3,250	-----	4,140	1,240	1,000	1,340
9.....	2,080	3,250	-----	3,900	1,190	960	1,340
10.....	2,140	3,180	-----	3,670	1,190	920	1,340
11.....	2,200	3,320	-----	3,250	1,160	900	1,340
12.....	2,270	2,970	-----	2,970	1,140	880	1,340
13.....	2,340	2,760	-----	2,690	1,140	880	1,340
14.....	2,410	2,690	-----	2,520	1,160	880	1,340
15.....	2,410	2,690	-----	2,340	1,160	880	1,390
16.....	2,410	2,900	-----	2,140	1,160	880	1,340
17.....	2,410	3,040	-----	2,080	1,090	900	1,440
18.....	2,340	-----	-----	2,020	1,020	880	1,440
19.....	2,410	-----	-----	1,900	980	880	1,440
20.....	2,550	-----	-----	1,780	940	860	1,390
21.....	2,480	-----	-----	1,720	920	880	1,390
22.....	2,340	-----	-----	1,720	940	880	1,390
23.....	2,340	-----	-----	1,660	960	880	1,390
24.....	2,200	-----	-----	1,660	980	860	1,390
25.....	1,840	-----	-----	1,660	960	840	1,340
26.....	2,020	-----	9,730	1,600	960	840	1,390
27.....	2,140	-----	10,100	1,540	960	860	1,390
28.....	2,200	-----	10,400	1,490	980	920	1,340
29.....	2,200	-----	9,730	1,440	1,000	940	1,340
30.....	2,270	-----	8,560	1,390	1,020	940	1,390
31.....	2,340	-----	8,180	-----	1,020	1,020	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,550	1,600	2,190	135,000
November 1-17.....	3,320	2,340	2,900	97,800
May 26-31.....	10,400	8,180	9,450	112,000
June.....	8,300	1,390	3,200	190,000
July.....	1,490	920	1,130	69,500
August.....	1,040	840	919	56,500
September.....	1,440	1,090	1,330	79,100

FLORENCE LAKE TUNNEL AT INTAKE, CALIF.

LOCATION.—Water-stage recorders and Venturi meter in NW. $\frac{1}{4}$ sec. 1, T. 8 S., R. 27 E., at entrance of tunnel. Altitude, about 7,250 feet.

RECORDS AVAILABLE.—April, 1925, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 1,790 second-feet November 20; no flow December 1-3.

1925-1928: Maximum mean daily discharge, 1,990 second-feet April 30, 1926; no flow at times.

REMARKS.—Records good. Discharge estimated May 22-24 and 29-31. Florence Lake Tunnel diverts water from Florence Lake, a storage reservoir on South Fork of San Joaquin River, to Huntington Lake for use in Big Creek power plants of Southern California Edison Co. On September 30, 1927, the storage in Florence Lake was 29,500 acre-feet; on September 30, 1928, it was 560 acre-feet. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	606	1.5	0	52	40	42	155	781	244	237	470	526
2	604	1.4	0	50	44	44	130	718	2.2	316	470	524
3	602	1.4	0	51	43	54	134	628	1.3	353	476	526
4	604	1.3	22	51	53	52	153	562	1.3	259	474	522
5	604	1.3	61	45	56	51	158	129	1.3	261	470	520
6	604	1.4	30	44	72	49	176	.4	233	291	467	526
7	604	1.5	65	49	66	48	183	.5	419	286	463	528
8	604	1.5	78	47	57	51	182	.6	525	283	465	528
9	604	1.4	64	42	56	52	183	.7	257	281	465	524
10	602	1.4	58	47	49	57	181	148	842	275	463	520
11	412	43	58	45	47	69	196	.9	664	284	472	526
12	1.3	100	55	46	43	76	289	.9	579	286	472	530
13	1.3	98	56	46	50	75	247	1.0	468	312	501	534
14	1.2	137	59	41	48	75	208	1.0	436	378	518	528
15	1.1	197	56	46	37	73	202	1.1	517	414	520	464
16	1.1	98	59	42	46	76	208	1.3	547	414	522	522
17	1.2	1.4	55	33	42	83	198	1.3	406	414	522	532
18	1.2	1,030	50	37	44	98	182	1.3	466	419	524	512
19	1.2	696	50	41	41	100	171	1.3	490	421	212	524
20	1.2	1,790	50	40	40	106	161	1.4	462	450	693	518
21	1.2	1,750	48	37	44	135	158	590	518	472	754	522
22	1.2	1,740	26	38	40	127	181	962	475	468	518	463
23	1.3	1,710	.3	39	41	142	215	963	530	472	512	370
24	1.3	1,440	.3	37	38	224	243	704	347	465	516	269
25	1.4	976	.4	43	43	350	224	436	479	465	522	236
26	1.4	381	.3	40	42	268	354	219	527	484	524	156
27	1.5	183	.4	39	46	240	321	1.4	527	476	528	119
28	1.5	36	15	40	43	191	401	1.5	320	476	526	115
29	1.5	100	42	44	42	194	491	537	195	474	522	84
30	1.5	75	38	47	-----	183	650	1,540	240	470	518	40
31	1.6	-----	56	43	-----	175	-----	891	-----	474	522	-----
Month							Maximum	Minimum	Mean	Run-off in acre-feet		
October							606	1.1	209	12,900		
November							1,790	1.3	420	25,000		
December							78	0	37.2	2,290		
January							52	33	43.3	2,660		
February							72	37	46.7	2,690		
March							350	42	115	7,070		
April							650	130	228	13,600		
May							1,540	.4	317	19,500		
June							842	1.3	391	23,300		
July							484	237	382	23,500		
August							754	212	495	30,400		
September							534	40	428	25,500		
The year							1,790	0	259	188,000		

BEAR CREEK NEAR VERMILION VALLEY, CALIF.

LOCATION.—Water-stage recorder in sec. 12, T. 7 S., R. 27 E., 2 miles above mouth and 4 miles by trail south of Vermilion Valley, from which it is separated by Bear Ridge. Altitude, about 7,400 feet.

RECORDS AVAILABLE.—November, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 673 second-feet May 28 (gage height, 5.66 feet); minimum, 3.8 second-feet September 21-30 (gage height, 2.99 feet).

1921-1928: Maximum discharge, 857 second-feet June 4, 1922 (gage height, 5.97 feet); minimum, 1.2 second-feet September 29 to October 5, 1924.

REMARKS.—Records good except those for November 13-15, December 10 to February 16, and March 3-7, which were estimated because of ice. No diversions. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	31	23			14	44	253	406	90	28	6.5
2	14	45	22			15	36	188	448	83	26	6.5
3	13	46	23			15	42	170	471	77	25	6
4	13	35	23			15	42	202	441	77	23	6
5	12	35	23			15	42	260	447	81	22	6.5
6	11	44	22			15	46	274	414	83	20	7.5
7	11	40	21		20	18	52	288	404	81	20	7
8	10	35	21			17	55	262	336	80	19	6.5
9	10	33	21	16		18	52	197	280	78	19	6
10	10	42				20	48	176	231	77	18	6
11	10	50				23	51	246	166	73	18	6
12	10	42				25	62	282	146	66	17	5.5
13	10	40				25	52	330	133	60	16	5
14	10	44				24	50	360	136	59	16	5
15	10	46				24	56	442	143	56	16	4.9
16	9.5	46				24	60	339	154	54	16	4.6
17	9.5	46			13	30	59	282	165	51	15	4.6
18	9	44	18		15	32	54	282	178	49	15	4.6
19	9	42			12	35	50	278	158	44	14	4.3
20	8.5	37			13	41	48	324	148	41	13	4.0
21	8.5	33			14	46	50	304	150	37	13	3.8
22	8	32			13	43	69	261	160	35	12	3.8
23	8	33			13	40	81	327	166	33	11	3.8
24	8	31			11	55	77	408	175	32	11	3.8
25	10	29			14	81	70	432	178	32	10	3.8
26	33	28			11	77	100	463	160	32	9.5	3.8
27	25	26			15	63	126	504	132	33	9.5	3.8
28	18	25			15	55	151	590	119	35	9	3.8
29	20	25			13	60	206	507	103	33	8	3.8
30	19	23				57	269	447	97	33	8	3.8
31	23					54		424		30	7.5	
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October						33	8	12.7	781			
November						50	23	36.9	2,200			
December								18	1,110			
January								15	922			
February								15	863			
March						81	14	34.7	2,130			
April						269	36	73.3	4,360			
May						530	170	325	20,000			
June						471	97	228	13,600			
July						90	30	55.6	3,420			
August						28	7.5	15.6	959			
September						7.5	3.8	5.03	299			
The year						530	3.8	69.7	50,600			

MONO CREEK NEAR VERMILION VALLEY, CALIF.

LOCATION.—Water-stage recorder in sec. 35, T. 6 S., R. 27 E., unsurveyed, 1 mile below lower end of Vermilion Valley and 6 miles below mouth of North Fork. Altitude about 7,400 feet.

RECORDS AVAILABLE.—November, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,110 second-feet May 28 (gage height, 7.62 feet); minimum, 13 second-feet September 22 (gage height, 4.63 feet).

1921-1928: Maximum discharge, 1,420 second-feet June 16, 1927; maximum gage height, 8.18 feet June 6, 1922; minimum discharge, 8 second-feet September 29 to October 4, 1924.

REMARKS.—Records excellent except those for periods of ice effect, November 10-15 and November 28 to March 7, which are fair. No diversions. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	28	42				29	107	456	685	164	59	20
2.....	28	57				29	84	400	721	159	54	20
3.....	27	65				30	94	364	748	154	52	20
4.....	26	57				28	105	384	695	159	48	20
5.....	25	57				28	99	442	695	170	45	20
6.....	25	62				30	103	474	650	170	43	20
7.....	25	54				38	107	483	630	159	42	20
8.....	25	50			35	37	112	496	540	159	42	19
9.....	24	50				40	112	412	474	156	43	18
10.....	24	56		37		42	114	372	412	151	42	18
11.....	23	60				45	119	438	332	138	42	17
12.....	23	52				50	141	520	284	131	42	17
13.....	23	50				50	131	570	256	124	40	16
14.....	23	60				50	131	610	260	119	40	15
15.....	22	68				53	141	680	272	114	40	15
16.....	22	67				53	146	535	292	110	40	15
17.....	22	65				62	141	488	300	105	37	15
18.....	21	63				65	133	501	312	101	35	15
19.....	21	62	34			70	133	483	260	92	33	14
20.....	20	57				77	126	550	260	84	32	14
21.....	20	52				84	128	570	268	79	31	13
22.....	20	47				84	146	501	272	73	31	13
23.....	20	65				81	161	610	276	73	29	13
24.....	20	67				92	164	690	288	73	28	13
25.....	26	59				156	151	700	296	73	28	13
26.....	56	52				159	189	754	264	73	26	13
27.....	44	48				124	224	820	228	70	25	14
28.....	34	43				116	264	875	211	68	23	14
29.....	34	37				116	340	875	184	65	22	14
30.....	34	35				119	429	765	181	65	22	14
31.....	36					119		710		63	21	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	56	20	26.5	1,630
November.....	68	35	55.3	3,290
December.....			35	2,150
January.....			30	1,840
February.....			30	1,730
March.....	159	28	69.5	4,270
April.....	429	84	152	9,040
May.....	875	364	565	34,700
June.....	748	181	385	22,900
July.....	170	63	113	6,950
August.....	59	21	36.7	2,260
September.....	20	13	16.1	958
The year.....	875	13	126	91,700

MIDDLE FORK OF SAN JOAQUIN RIVER AT MILLER BRIDGE, CALIF.

LOCATION.—Water-stage recorder in sec. 11, T. 5 S., R. 25 E., one-fourth mile above site of the old Miller Bridge, and 2 miles below mouth of North Fork of San Joaquin River. Altitude, about 4,600 feet.

RECORDS AVAILABLE.—October, 1921, to July, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, 2,900 second-feet March 25 (gage height, 15.50 feet); minimum, 62 second-feet October 24 (gage height, 9.57 feet).

1921-1928: Maximum discharge, 6,200 second-feet June 4, 1922 (gage height, 17.68 feet); minimum, 27 second-feet December 3, 1921.

REMARKS.—Records excellent. No diversions. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.	84	180	170	120	132	126	475	1,580	1,620	375
2.	83	341	188	125	132	133	412	1,520	1,740	362
3.	81	322	194	129	170	183	457	1,330	1,760	338
4.	79	262	164	128	180	166	457	1,480	1,600	362
5.	78	258	163	121	175	164	467	1,700	1,640	375
6.	77	269	156	119	178	156	527	1,760	1,530	375
7.	75	228	138	118	175	156	557	1,860	1,420	362
8.	74	206	126	126	166	172	537	1,800	1,210	362
9.	71	325	126	137	156	188	537	1,500	1,060	362
10.	71	463	118	141	146	206	537	1,520	910	350
11.	70	291	130	137	142	237	599	1,900	735	338
12.	69	255	126	142	145	265	725	2,090	630	315
13.	68	390	132	146	145	272	639	2,120	590	305
14.	68	293	133	136	146	259	617	2,100	590	305
15.	67	296	136	111	126	249	657	2,340	610	295
16.	66	308	137	97	125	245	657	1,700	630	295
17.	66	306	124	84	128	292	617	1,560	650	275
18.	65	294	123	89	130	324	527	1,680	675	265
19.	64	284	118	109	133	359	505	1,510	570	-----
20.	63	251	117	90	138	411	475	1,660	570	-----
21.	63	256	110	90	141	442	505	1,820	590	-----
22.	63	228	109	88	133	432	567	1,640	610	-----
23.	63	194	101	97	129	542	675	1,890	610	-----
24.	63	200	107	104	123	1,130	777	2,060	630	-----
25.	110	201	105	108	136	2,530	630	2,060	650	-----
26.	354	198	100	109	129	1,500	852	2,150	590	-----
27.	258	188	100	111	133	1,200	1,060	2,200	505	-----
28.	178	183	101	114	134	750	1,220	2,200	462	-----
29.	166	188	111	154	126	630	1,460	2,180	412	-----
30.	172	175	108	142	-----	590	1,920	1,920	400	-----
31.	270	-----	114	136	-----	535	-----	1,690	-----	-----
Month	Maximum			Minimum			Mean		Run-off in acre-feet	
October.	354			63			103		6,330	
November.	463			175			261		15,500	
December.	194			100			129		7,930	
January.	154			84			118		7,260	
February.	180			123			143		8,220	
March.	2,530			126			479		29,500	
April.	1,930			412			684		40,700	
May.	2,340			1,330			1,830		113,000	
June.	1,760			400			873		61,900	
July 1-18.	375			265			334		11,900	
The period.	-----			-----			-----		292,000	

NORTH FORK OF SAN JOAQUIN RIVER BELOW IRON CREEK, CALIF.

LOCATION.—Water-stage recorder in sec. 4, T. 4 S., R. 25 E., unsurveyed, three-fourths mile below mouth of Iron Creek. Altitude, about 6,800 feet.

RECORDS AVAILABLE.—October, 1920, to July, 1928 (discontinued). Record fragmentary prior to June, 1921.

EXTREMES.—Maximum discharge during year, 856 second-feet May 26 (gage height, 6.47 feet); minimum, 5.5 second-feet October 25 (gage height, 3.55 feet).

1920-1928: Maximum discharge, 2,000 second-feet June 27, 1922 (gage height, 7.24 feet); minimum, 1.4 second-feet November 18, 1921.

REMARKS.—Records excellent. Discharge estimated because of ice, January 15-31 and February 11-15. No diversions. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	10	59	36	14	16	16	58	403	384	80
2	9.5	192	43	16	16	17	48	304	430	84
3	9	124	43	18	17	22	82	280	415	83
4	9	98	34	18	18	26	60	338	404	98
5	8.5	94	30	18	28	24	57	400	431	106
6	8	90	30	18	28	22	74	390	390	104
7	7.5	71	26	19	26	22	86	439	340	102
8	7	64	23	24	24	26	86	402	268	106
9	6.5	63	20	29	22	32	88	318	228	101
10	6.5	100	20	29	19	41	94	350	165	97
11	6	73	20	27	20	49	115	480	136	88
12	6	59	20	31	21	52	136	519	116	82
13	6	61	19	31	22	51	110	519	116	82
14	6.5	61	20	24	21	45	108	484	122	85
15	6.5	71	21	18	20	44	120	450	141	82
16	6.5	82	21	16	18	49	112	287	163	-----
17	6	83	19	15	18	68	95	314	186	-----
18	6	80	18	15	19	79	76	354	170	-----
19	6	71	17	14	22	93	71	318	129	-----
20	6	59	16	13	24	110	72	384	147	-----
21	6	55	15	12	23	114	92	390	163	-----
22	6	43	14	12	20	100	121	386	172	-----
23	5.5	41	14	12	19	90	137	494	182	-----
24	5.5	39	13	12	17	110	122	489	194	-----
25	20	37	12	12	18	276	136	463	391	-----
26	139	37	12	12	19	177	198	542	150	-----
27	83	34	12	13	20	110	248	496	121	-----
28	61	36	12	13	19	80	279	507	108	-----
29	57	37	14	15	17	72	354	506	94	-----
30	51	33	14	18	-----	79	489	414	98	-----
31	62	-----	13	18	-----	73	-----	374	-----	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	139	5.5	20.6	1,220
November	192	33	68.2	4,060
December	43	12	20.7	1,270
January	31	12	17.9	1,100
February	28	16	20.4	1,170
March	276	16	70.0	4,300
April	489	48	131	7,800
May	542	280	413	25,400
June	431	94	212	12,600
July 1-15	106	80	92.0	2,740
The period	-----	-----	-----	61,700

GRANITE CREEK NEAR CATTLE MOUNTAIN, CALIF.

LOCATION.—Water-stage recorder in sec. 8, T. 5 S., R. 25 E., $1\frac{1}{2}$ miles below junction of East Fork and West Fork of Granite Creek, and 2 miles west of Cattle Mountain. Altitude, about 6,700 feet.

RECORDS AVAILABLE.—December, 1921, to July, 1928.

EXTREMES.—Maximum discharge during year, 980 second-feet April 30 (gage height, 8.01 feet); minimum, 0.1 second-foot October 23 and 24 (gage height, 3.36 feet).

1921-1928: Maximum discharge, 2,210 second-feet June 27, 1922 (gage height, 8.83 feet); practically no flow July 24 to October 5, 1924.

REMARKS.—Records excellent except for periods of ice effect November 23 to March 2, which are fair. No diversions. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0.2	45				29	100	551	288	21
2.....	.2	80		16		29	73	419	322	18
3.....	.2	96			22	29	75	410	314	16
4.....	.2	91				29	82	473	297	14
5.....	.2	94	27			29	83	528	284	14
6.....	.2	97				28	170	504	236	13
7.....	.2	73				27	182	552	190	
8.....	.2	68				30	162	503	148	
9.....	.2	77				37	173	382	118	
10.....	.2	142				48	180	454	100	
11.....	.2	76				58	200	608	89	
12.....	.2	57				65	200	608	83	
13.....	.2	58				64	181	576	86	
14.....	.2	54				59	182	546	82	
15.....	.2	60				61	203	484	77	
16.....	.2	72	21			72	168	310	75	
17.....	.2	80				93	175	375	76	
18.....	.2	77				110	150	390	85	
19.....	.2	71				126	147	390	78	
20.....	.2	58				152	180	464	67	
21.....	.2	52			31	163	174	434	62	
22.....	.2	43				141	200	397	57	
23.....	.1	38				115	203	436	54	
24.....	.1	35				202	210	454	51	
25.....	4.1	33		16		527	208	461	49	
26.....	108	32				295	320	496	40	
27.....	60	31				194	300	422	32	
28.....	38	30				123	424	447	28	
29.....	35	29				107	520	431	25	
30.....	37	28				118	640	341	22	
31.....	46					114		302		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	108	0.1	10.7	658
November.....	142	28	62.6	3,720
December.....			* 20	1,280
January.....			* 18	1,110
February.....			* 26	1,500
March.....	527	27	106	6,520
April.....	640	73	215	12,860
May.....	608	302	456	28,060
June.....	322	22	117	6,960
July 1-6.....	21	13	16.0	190
The period.....				62,700

* Estimated.

JACKASS CREEK NEAR JACKASS MEADOW, CALIF.

LOCATION.—Water-stage recorder in sec. 23, T. 5 S., R. 24 E., half a mile below lower end of Jackass Meadow and 10 miles above mouth of West Fork. Altitude, about 7,000 feet.

RECORDS AVAILABLE.—December, 1921, to July, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, 426 second-feet March 25 (gage height, 9.92 feet); no flow October 1–24.

1921–1928: Maximum discharge, that of March 25, 1928; no flow during a portion of the summers of 1924, 1926, and 1927.

REMARKS.—Records excellent except those for ice-affected periods October 31, November 1, 12–14, November 21 to March 4, March 13–18, and 27–31, which are fair. No diversions. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Mar.	Apr.	May	June	July
1.....	0	9.5	7	46	87	2'	0.8
2.....	0	11	7	22	71	19	.6
3.....	0	12	8	30	65	18	.5
4.....	0	8.5	9	42	66	16	.4
5.....	0	7.5	9	45	67	14	.3
6.....	0	7.5	8.5	53	65	12	.3
7.....	0	6	8.5	57	65	10	-----
8.....	0	5	9	57	62	8	-----
9.....	0	14	11	61	53	7	-----
10.....	0	39	13	60	55	6.5	-----
11.....	0	15	17	68	62	7.5	-----
12.....	0	9	20	82	59	7	-----
13.....	0	10	20	70	55	6	-----
14.....	0	12	19	68	51	5	-----
15.....	0	12	22	71	64	4.7	-----
16.....	0	13	25	66	46	4.3	-----
17.....	0	12	29	60	43	4.0	-----
18.....	0	12	31	53	44	3.8	-----
19.....	0	11	32	50	42	3.6	-----
20.....	0	9	35	48	46	3.3	-----
21.....	0	8	36	53	45	3.0	-----
22.....	0	7	34	60	39	2.5	-----
23.....	0	6	38	63	38	2.5	-----
24.....	0	6	101	58	38	1.9	-----
25.....	10	6	320	59	52	1.7	-----
26.....	12	6	149	70	46	1.4	-----
27.....	10	5.5	92	78	38	1.1	-----
28.....	7	5	66	80	34	1.0	-----
29.....	5.5	5	63	88	32	.9	-----
30.....	5	5	60	98	28	.9	-----
31.....	9.5	-----	53	-----	24	-----	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	12	0	1.90	117			
November.....	39	5	9.82	584			
December.....	-----	-----	* 4.0	246			
January.....	-----	-----	* 4.5	277			
February.....	-----	-----	* 7.0	403			
March.....	320	7	43.6	2,680			
April.....	98	22	60.5	3,600			
May.....	87	24	51.0	3,140			
June.....	21	.9	6.59	392			
July 1-6.....	.8	.3	.48	5.7			
The period.....	-----	-----	-----	11,400			

* Estimated.

CHQUITTO CREEK NEAR ARNOLD MEADOW, CALIF.

LOCATION.—Water-stage recorder in sec. 18, T. 6 S., R. 24 E., half a mile below Beasore Creek and half a mile southwest of Arnold Meadow. Altitude, about 4,800 feet.

RECORDS AVAILABLE.—September, 1921, to July, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, 1,080 second-feet March 25 (gage height, 8.53 feet); minimum, 4.9 second-feet October 18–24 (gage height, 4.68 feet).

1921–1928: Maximum discharge, 1,100 second-feet May 24, 1922 (gage height, 8.63 feet); minimum, 1.4 second-feet August 27–31, 1924.

REMARKS.—Records excellent. No diversions. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	5.5	45	37	29	42	44	177	247	87	19
2.....	5.5	48	40	31	41	45	146	218	84	18
3.....	5.5	54	40	32	49	57	157	201	82	18
4.....	5.5	45	35	33	44	53	159	204	77	17
5.....	5.5	42	34	32	45	50	168	211	72	16
6.....	5.5	46	33	31	52	50	184	208	64	15
7.....	6	37	30	31	50	48	194	211	58	15
8.....	6	33	29	33	49	53	196	208	53	-----
9.....	5.5	80	28	34	46	58	204	184	48	-----
10.....	5.5	215	28	36	45	66	201	189	45	-----
11.....	5.5	74	32	35	46	74	213	208	48	-----
12.....	5.5	61	30	36	48	79	228	206	48	-----
13.....	5.5	106	30	38	48	79	211	199	43	-----
14.....	5	76	31	34	48	77	206	187	42	-----
15.....	5	69	31	32	45	77	211	206	38	-----
16.....	5	69	32	30	43	82	206	175	36	-----
17.....	5	68	30	30	45	92	199	159	35	-----
18.....	4.9	66	32	30	45	101	180	157	34	-----
19.....	4.9	61	31	31	48	104	175	148	32	-----
20.....	4.9	55	29	31	49	112	163	157	31	-----
21.....	4.9	55	27	30	49	116	163	166	30	-----
22.....	4.9	48	26	29	46	114	177	152	28	-----
23.....	4.9	43	27	29	45	142	184	146	27	-----
24.....	4.9	43	27	30	43	293	189	136	25	-----
25.....	33	43	26	30	46	890	172	144	24	-----
26.....	148	44	26	30	46	468	196	138	22	-----
27.....	106	43	25	31	46	380	208	128	22	-----
28.....	48	42	25	33	46	244	218	124	22	-----
29.....	36	41	27	49	44	213	244	112	21	-----
30.....	38	40	29	50	-----	206	269	101	20	-----
31.....	79	-----	29	45	-----	196	-----	92	-----	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	148	4.9	19.8	1,229
November.....	215	33	59.7	3,550
December.....	40	25	30.2	1,860
January.....	50	29	33.4	2,050
February.....	52	41	46.2	2,660
March.....	890	44	150	9,220
April.....	269	146	193	11,500
May.....	247	92	172	10,600
June.....	87	20	43.3	2,580
July 1–7.....	19	15	16.9	235
The period.....	-----	-----	-----	45,500

BIG CREEK BELOW HUNTINGTON LAKE, CALIF.

LOCATION.—Water-stage recorder in sec. 23, T. 8 S., R. 25 E., one-fourth mile above Grouse Creek and 1 mile below Huntington Lake. Altitude, about 3,600 feet.

RECORDS AVAILABLE.—June, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 398 second-feet June 10 (gage height, 6.19 feet).

1925-1928: Maximum discharge, 2,040 second-feet June 23, 1925 (gage height, 10.3 feet).

REMARKS.—Natural flow of Big Creek is completely regulated at Huntington Lake storage reservoir. Purpose of this record is to show spill from lake. Record of daily discharge furnished by Southern California Edison Co.

Daily discharge, in second-feet, 1927-28

Date	Discharge	Date	Discharge	Date	Discharge
June 4.....	8.5	June 9.....	131	June 11.....	180
June 5.....	12	June 10.....	380		

NOTE.—No spill during year ending Sept. 30, 1928, except on days given in above table. Total spill during year, 1,420 acre-feet. Small natural run-off below dam not included.

BIG CREEK NEAR MOUTH, NEAR BIG CREEK, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 26, T. 8 S., R. 24 E., half a mile above mouth and 5 miles west of Big Creek. Altitude, about 2,600 feet.

RECORDS AVAILABLE.—May, 1923, to September, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, 920 second-feet September 13 (gauge height, 4.52 feet); minimum, 0.1 second-foot October 23 (gauge height, 0.42 foot).

1923-1928: Maximum discharge, 2,100 second-feet June 23, 1925 (gauge height, 6.25 feet); no flow September 4 and 21, 1925.

REMARKS.—Records good. Discharge estimated December 24-31, January 17-21, 25-28, February 2-9, June 2-16, and September 10-14. Complicated diversions and storage system makes it impossible to identify the source of water passing the station. Gauge-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.2	65	8.5	70	0.4	4.3	2.7	65	76	82	282
2	.2	.2	88	13	65	.3	7	2.7	68	82	81	208
3	.2	.2	49	32	69	.8	6	2.8	115	88	85	198
4	.4	.2	2	68	52	.4	4.4	2.8	125	23	84	259
5	.6	.2	49	55	.5	.4	4.0	2.7	80	72	82	253
6	.6	.3	59	58	.5	.4	3.8	2.7	3	79	120	255
7	.6	.2	58	78	.5	.4	3.5	2.7	3	138	252	268
8	.4	.2	56	12	.5	.4	3.4	2.7	20	104	250	268
9	.4	.6	72	50	.5	.4	3.3	2.8	260	58	258	116
10	.4	6.5	55	42	19	.4	3.2	2.7	490	81	244	255
11	.5	.4	21	48	13	.3	3.2	2.7	280	78	248	265
12	.5	.3	57	50	.5	.3	3.2	2.7	125	81	62	760
13	.2	1.4	66	50	.5	.3	3.2	2.6	120	81	249	830
14	.2	.6	56	46	.5	.3	3.2	2.6	105	81	208	815
15	.2	.4	72	12	.6	.3	3.2	2.6	130	81	204	826
16	.2	.3	79	50	.4	.3	3.3	2.5	130	75	254	662
17	.2	.3	65	55	.5	.3	3.4	2.9	18	81	244	838
18	.2	.2	28	54	77	.4	3.3	2.7	75	81	250	848
19	.2	.2	50	61	13	.4	3.2	2.7	84	81	76	828
20	.2	.2	58	80	16	.3	3.0	2.7	82	81	253	701
21	.2	19	48	84	.5	.2	3.0	2.7	85	81	261	180
22	.2	13	55	11	.5	.3	3.0	2.7	85	81	262	174
23	.2	4.9	75	49	.6	1.1	2.9	2.7	82	81	260	50
24	.2	1.0	75	71	1.0	246	3.0	2.7	15	81	259	155
25	.6	.5	1	78	1.0	100	2.8	2.9	80	81	306	152
26	.7	27	1	79	.4	6.5	2.8	2.7	84	81	107	171
27	.5	.8	33	86	.4	11	2.7	2.7	75	72	278	170
28	.2	36	64	78	.4	6.5	2.7	2.7	84	85	272	169
29	.2	55	73	29	.4	4.6	2.7	2.6	90	72	260	168
30	.3	60	47	54	-----	4.0	2.7	2.6	74	72	268	52
31	.6	-----	25	68	-----	3.3	-----	72	-----	70	268	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.7	0.2	0.34	20.9
November	60	.2	7.68	457
December	88	.2	51.6	3,170
January	86	8.5	51.9	3,190
February	77	.4	14.0	805
March	246	.2	12.6	775
April	7	2.7	3.45	205
May	72	2.5	4.94	304
June	490	3	105	6,250
July	138	25	79.3	4,880
August	306	62	206	12,700
September	848	50	373	22,200
The year	848	.2	75.6	55,000

PITMAN CREEK BELOW TAMARACK CREEK, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 35, T. 8 S., R. 25 E., 500 feet below Tamarack Creek and 3 miles southeast of Big Creek. Altitude, about 7,100 feet.

RECORDS AVAILABLE.—December, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 270 second-feet March 25 (gauge height, 5.43 feet); minimum, 0.1 second-foot August 24 to September 30.

REMARKS.—Records fair December to March and good April to September. Discharge estimated December 1 to March 21, March 28, 29, 31, and April 1-8. Much flow is diverted into Huntington-Shaver Tunnel just below station. Gauge-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13			60	166	34	4.1	0.4	0.1
2				50	148	31	4.1	.4	.1
3		7		70	134	29	3.8	.3	.1
4				75	125	26	3.5	.3	.1
5	15			75	125	24	3.3	.3	.1
6				80	125	22	3.1	.3	.1
7			15	85	120	20	2.7	.3	.1
8				95	120	17	2.5	.3	.1
9				101	116	15	2.3	.3	.1
10				105	109	14	2.1	.3	.1
11				122	112	12	1.9	.3	.1
12				131	113	12	1.7	.3	.1
13				117	108	11	1.5	.2	.1
14			23	115	101	10	1.4	.2	.1
15				123	107	9.5	1.3	.2	.1
16				123	105	9	1.2	.2	.1
17				114	89	8.5	1.0	.2	.1
18			40	102	83	8	.9	.2	.1
19				99	80	7.5	.9	.2	.1
20				88	79	7	.8	.2	.1
21				84	76	7	.7	.2	.1
22				50	96	6.5	.7	.2	.1
23				51	102	6.5	.6	.2	.1
24				113	108	61	.6	.1	.1
25				238	89	58	.6	.1	.1
26				163	107	55	.5	.1	.1
27				109	120	51	.5	.1	.1
28				80	138	47	.5	.1	.1
29				70	152	45	4.7	.5	.1
30				75	166	40	4.4	.5	.1
31				70		36	.5	.1	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December			7	430
January			6	369
February			7	403
March	238		48.9	3,010
April	166	50	103	6,130
May	166	36	92.5	5,690
June	34	4.4	12.8	762
July	4.1	.5	1.62	99.6
August	.4	.1	.22	13.5
September	.1	.1	.10	6.0
The period				16,900

PITMAN CREEK AT BIG CREEK, CALIF.

LOCATION.—Water-stage recorder in sec. 28, T. 8-S., R. 25 E., one-fourth mile above mouth and half a mile southeast of Big Creek. Altitude, about 5,000 feet.

DRAINAGE AREA.—27 square miles.

RECORDS AVAILABLE.—January, 1910, to September, 1915; January, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 290 second-feet November 10 (gage height, 1.44 feet); no flow September 1-8.

1922-1928: Maximum discharge, 1,110 second-feet June 1, 1922 (gage height, 3.53 feet); no flow September 1-8, 1928.

REMARKS.—Records excellent. Discharge estimated November 27, December 8, 9, 11, January 11-13, 15-18, and August 23 to September 8. Diversions above station for power and municipal purposes, and since February 22 practically entire flow is diverted into Huntington-Shaver conduit. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	11	17	7	9.5	1.6	2.2	4.2	1.6	1.6	0.3	0
2	.3	9.5	15	7.5	10	1.6	3.4	4.2	1.6	1.6	.3	0
3	.3	10	17	8.5	12	2.8	2.8	4.2	1.6	1.6	.3	0
4	.3	9.5	13	12	11	2.8	2.2	4.2	1.6	1.6	.3	0
5	.3	8.5	12	11	11	2.2	2.8	3.4	1.6	1.6	.3	0
6	.3	12	9.5	9.5	11	1.6	2.8	3.4	1.6	1.6	.3	0
7	.3	12	9.5	8.5	11	1.6	2.8	3.4	1.6	1.6	.3	0
8	.3	9.5	9.5	8.5	10	1.1	2.8	4.2	1.6	1.6	.3	0
9	.3	31	9.5	9.5	10	1.1	2.8	3.4	1.6	1.6	.3	.1
10	.3	106	10	9.5	11	1.1	2.8	2.8	1.6	2.2	.3	.1
11	.3	35	10	9	10	1.1	2.2	2.8	2.2	2.2	.3	.1
12	.3	26	9.5	9	10	1.1	2.2	2.8	2.2	2.2	.1	.1
13	.3	27	8.5	8.5	10	1.1	2.2	2.2	2.2	2.2	.1	.1
14	.3	26	8.5	8.5	10	1.1	2.2	2.2	1.6	2.2	.1	.1
15	.3	26	8.5	8.5	12	1.1	2.2	3.4	1.6	2.2	.1	.1
16	.3	27	9.5	8.5	14	.6	2.2	2.8	1.6	2.2	.1	.1
17	.3	26	9.5	15	13	.6	2.2	2.8	1.6	2.2	.1	.1
18	.3	24	9.5	34	12	.6	1.6	2.8	1.6	2.2	.1	.1
19	.3	24	9.5	34	12	.6	1.6	2.8	1.6	1.6	.1	.1
20	.3	23	9.5	27	12	.6	1.6	2.8	1.6	1.6	.1	.1
21	.3	22	8.5	23	12	.6	1.6	2.8	1.6	1.6	.1	.1
22	.3	14	7.5	18	9.5	1.1	1.6	2.8	1.6	1.6	.1	.1
23	.3	14	7	10	5	1.6	2.2	1.6	1.6	1.6	.1	.1
24	.3	14	7	9.5	3.4	7	1.1	2.2	1.6	1.6	.1	.1
25	5.5	17	7	8.5	1.6	12	1.1	2.2	1.6	1.6	.1	.1
26	28	17	7	8.5	1.6	7	1.1	2.2	1.6	1.1	.1	.1
27	17	17	7	7.5	1.6	12	2.2	2.2	1.6	1.1	.1	.3
28	10	17	7	7.5	1.6	5	3.4	2.2	1.6	.6	.1	.3
29	6	20	7	11	1.6	2.8	4.2	2.2	1.6	.6	.1	.3
30	6	18	7	11	1.6	2.8	4.2	1.6	1.6	.3	.1	.3
31	15	7	7	9.5	1.6	2.2	1.6	1.6	1.6	.3	.1	.3
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	28					0.3			3.05		188	
November	106					8.5			21.8		1,300	
December	17					7			9.47		582	
January	34					7			12.2		750	
February	14					1.6			8.94		514	
March	12					.6			2.69		165	
April	4.2					1.1			2.32		138	
May	4.2					1.6			2.87		176	
June	2.2					1.6			1.66		98.8	
July	2.2					.3			1.59		97.8	
August	.3					.1			.17		10.5	
September	.3					0			.10		6.0	
The year	106					0			5.54		4,030	

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LOCATION.—Water-stage recorder in sec. 13, T. 9 S., R. 24 E., three-quarters of a mile west of Shaver. Recorder moved 100 feet downstream September 5, 1927. Altitude, about 5,000 feet.

RECORDS AVAILABLE.—October, 1916, to September, 1920; April, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 64 second-foot October 11 (gage height, 3.01 feet); minimum, 0.1 second-foot several times during year.

1916-1920, 1922-1928: Maximum discharge, 1,390 second-feet November 27, 1926; practically no flow June 11-15, June 20 to about October 14, 1924, and January 27 to February 1, 1927.

REMARKS.—Records good. Discharge estimated January 29–31 and May 20–27. Most of the flow is stored in Shaver Lake above station and diverted into Big Creek at mouth for power purposes. There was 3,450 acre-feet of water in Shaver Lake on September 30, 1927, and 41,000 acre-feet on September 30, 1928. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.3	0.2	0.2	0.2	0.2	0.6	0.3	0.3	0.2	0.1	0.2
2	.2	.2	.2	.2	.2	.2	.6	.2	.3	.2	.1	.2
3	.2	.2	.2	.2	.2	.6	.6	.2	.4	.2	.1	.2
4	.2	.2	.1	.2	1.2	.4	.6	.2	.3	.2	.1	.1
5	.2	.2	.1	.2	.4	.3	.8	.2	.2	.2	.1	.1
6	.1	.4	.1	.2	.4	.3	.7	.2	.2	.2	.1	.1
7	.1	.2	.1	.2	.3	.3	.6	.2	.2	.2	.1	.1
8	.1	.1	.1	.2	.2	.3	.6	.2	.2	.2	.1	.1
9	.1	.8	.1	.2	.2	.3	.5	.3	.2	.2	.1	.1
10	2.6	1.2	.1	.2	.2	.4	.5	.3	.2	.1	.1	.1
11	38	.3	.1	.2	.2	.4	.5	.2	.2	.1	.1	.1
12	8	.3	.1	.2	.2	.3	.5	.2	.2	.1	.1	.1
13	7.5	.7	.1	.2	.2	.3	.5	.2	.2	.1	.1	.1
14	7.5	.5	.2	.2	.2	.3	.4	.2	.2	.1	.1	.1
15	7.5	.4	.2	.2	.2	.3	.4	.2	.2	.1	.1	.1
16	7.5	.3	.2	.2	.2	.3	.4	.2	.2	.1	.1	.1
17	7.5	.3	.1	.1	.2	.2	.4	.2	.2	.1	.1	.1
18	7	.2	.1	.1	.1	.2	.4	.2	.2	.1	.1	.1
19	7	.2	.1	.1	.1	.2	.4	.9	.2	.1	.1	.1
20	7	.2	.1	.1	.1	.2	.4	.4	.2	.1	.1	.1
21	7	.3	.1	.1	.1	.2	.4	.3	.2	.1	.2	.1
22	7	.3	.1	.1	.1	.2	.3	.3	.2	.1	.2	.1
23	7	.2	.1	.1	.1	.6	.3	.3	.2	.1	.2	.1
24	7	.2	.1	.1	.1	1.0	.5	.3	.2	.1	.2	.1
25	8.5	.2	.1	.1	.2	1.2	.4	.3	.2	.1	.2	.1
26	11	.2	.1	.1	.2	.8	.3	.3	.2	.1	.2	.1
27	10	.2	.1	.1	.2	2.1	.3	.3	.2	.1	.2	.1
28	9	.1	.1	.1	.2	.8	.3	.3	.2	.1	.2	.1
29	8.5	.1	.2	.1	.2	.7	.3	.3	.2	.1	.2	.1
30	9	.1	.2	.1	-----	.6	.3	.3	.2	.1	.2	.1
31	5.5	-----	.2	.1	-----	.6	-----	.3	-----	.1	.2	-----

Month	Maximum	Minimum	Mean	Furn-off in acre-feet
October.....	38	0.1	6.39	393
November.....	1.2	.1	.30	17.9
December.....	.2	.1	.13	8.0
January.....	.2	.1	.15	9.2
February.....	1.2	.1	.25	14.4
March.....	2.1	.2	.48	29.5
April.....	.8	.3	.46	27.4
May.....	.9	.2	.27	16.6
June.....	.4	.2	.22	13.1
July.....	.2	.1	.13	8.0
August.....	.2	.1	.14	8.6
September.....	.2	.1	.11	6.5
The year.....	38	.1	.76	552

FRESNO RIVER BASIN

FRESNO RIVER NEAR KNOWLES, CALIF.

LOCATION.—Staff gage in N. ½ sec. 15, T. 8 S., R. 20 E., at Fresno Crossing, 6 miles northeast of Knowles.

RECORDS AVAILABLE.—September, 1911, to January, 1914; November, 1915, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,600 second-feet March 27 (gage height, 4.0 feet); no flow August 12 to September 30.

1911–1914, 1915–1928: Maximum discharge, about 4,500 second-feet February 21, 1917 (gage height, 6.0 feet); no flow during periods in 1919, 1924, 1926, and 1928.

REMARKS.—Records good. Water is diverted above station for irrigation and lumbering.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.5	57	31	57	77	46	202	99	57	12	0.8	0
2.....	2.5	57	31	53	72	46	217	99	57	11	.7	0
3.....	2.5	82	28	53	72	43	340	94	57	8.5	.7	0
4.....	2.5	82	28	53	77	43	255	94	25	7	.4	0
5.....	2.9	77	28	57	850	43	217	99	25	6	.2	0
6.....	2.9	67	31	57	77	43	209	99	25	4.5	.2	0
7.....	2.5	57	31	57	118	46	209	94	36	4.5	.1	0
8.....	2.5	53	31	57	111	46	202	94	36	4.1	.1	0
9.....	2.9	53	33	57	111	46	194	94	25	4.1	.1	0
10.....	2.9	162	36	57	105	43	194	94	25	3.7	.1	0
11.....	2.9	111	36	62	99	43	187	77	23	3.3	.1	0
12.....	3.3	82	36	62	99	46	187	72	23	3.3	0	0
13.....	2.9	82	36	57	94	46	187	67	21	2.9	0	0
14.....	2.9	77	39	57	94	46	179	62	21	2.5	0	0
15.....	2.5	72	39	62	88	46	172	62	19	2.5	0	0
16.....	2.5	72	43	62	82	50	172	57	17	2.2	0	0
17.....	2.9	67	53	62	82	50	165	57	23	1.9	0	0
18.....	2.9	62	53	62	77	50	168	57	23	1.9	0	0
19.....	3.7	62	57	57	77	50	144	57	21	1.6	0	0
20.....	3.3	57	57	57	77	46	131	62	19	1.6	0	0
21.....	2.9	62	53	57	72	46	111	62	17	1.3	0	0
22.....	2.9	57	50	57	72	50	111	57	14	1.3	0	0
23.....	2.9	53	50	72	62	50	111	57	12	1.3	0	0
24.....	2.9	50	50	72	62	385	118	57	10	1.3	0	0
25.....	3.3	50	53	67	57	648	118	62	10	1.6	0	0
26.....	3.7	46	53	67	57	520	111	62	11	1.6	0	0
27.....	39	43	57	62	53	1,600	111	62	11	1.3	0	0
28.....	82	36	57	57	53	430	111	67	11	1.3	0	0
29.....	33	33	62	62	50	255	105	62	12	1.3	0	0
30.....	111	31	57	144	-----	217	105	62	11	1.0	0	0
31.....	111	-----	57	105	-----	209	-----	57	-----	1.0	0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	111	2.5	14.5	892
November.....	162	31	65.1	3,870
December.....	62	28	43.7	2,690
January.....	144	53	63.9	3,980
February.....	850	50	106	6,100
March.....	1,600	43	172	10,600
April.....	340	105	168	10,000
May.....	99	57	72.8	4,480
June.....	57	10	23.2	1,380
July.....	12	1.0	3.34	205
August.....	.8	0	.11	6.8
September.....	0	0	0	0
The year.....	1,600	0	60.8	44,200

MERCED RIVER BASIN

MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.

LOCATION.—Water-stage recorder at Happy Isles Bridge, 1½ miles southeast of Yosemite, Mariposa County.

DRAINAGE AREA.—181 square miles.

RECORDS AVAILABLE.—August, 1915, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,050 second-feet May 13 (gage height, 5.42 feet); minimum, 2.8 second-feet September 27 (gage height 0.44 foot).

1915-1928: Maximum discharge, 3,800 second-feet May 28, 1919 (gage height, 7.10 feet); minimum, 1.5 second-feet September 30, 1926.

REMARKS.—Records good. Discharge estimated because of ice January 17-25. No diversions. Gage-height record furnished by officials of Yosemite National Park.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	134	84	56	62	62	340	1,500	1,280	228	72	12
2	14	164	83	57	61	64	295	1,240	1,350	205	64	11
3	12	217	87	57	67	74	271	1,060	1,500	194	57	10
4	12	196	83	57	70	73	274	1,140	1,420	191	52	9.5
5	12	200	82	57	74	73	289	1,310	1,420	215	48	8
6	11	217	76	55	77	72	331	1,420	1,380	228	43	7.5
7	11	189	66	57	80	69	364	1,460	1,200	222	40	7
8	10	164	63	59	77	75	388	1,580	998	225	36	7
9	10	192	64	63	76	78	405	1,350	785	220	35	7
10	10	356	53	67	68	91	405	1,240	680	210	35	6.5
11	9	203	57	67	66	104	417	1,620	585	200	35	6.5
12	8	164	57	69	69	120	485	1,780	526	180	35	6
13	7.5	172	58	75	68	132	481	1,780	453	164	34	6
14	6.5	164	59	68	69	129	503	1,700	429	160	32	6
15	6.5	170	59	66	57	131	469	1,740	409	160	31	5
16	6	180	59	54	62	138	441	1,280	417	156	31	4.6
17	6	185	55	54	61	168	413	1,170	441	148	30	4.0
18	5	185	51	54	62	200	374	1,310	441	136	28	3.6
19	5	176	50	53	64	236	361	1,240	417	123	28	3.2
20	4.6	158	50	53	65	280	346	1,280	364	108	26	3.6
21	4.6	144	48	53	66	307	340	1,380	377	98	25	3.4
22	3.8	118	45	52	63	304	445	1,170	405	88	24	3.2
23	3.8	107	41	52	63	328	521	1,280	425	82	23	3.0
24	3.6	107	42	52	60	533	570	1,580	445	81	22	3.0
25	6	107	42	51	64	1,310	473	1,660	461	83	20	3.0
26	148	105	41	51	62	923	590	1,660	398	83	20	3.0
27	196	101	41	53	63	670	758	1,740	334	89	18	2.8
28	131	95	42	56	63	485	923	1,660	301	96	18	3.0
29	116	94	44	73	60	409	1,060	1,700	271	102	17	3.2
30	122	88	45	70	-----	388	1,420	1,540	244	84	14	3.2
31	180	-----	51	64	-----	370	-----	1,380	-----	77	13	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	196	3.6	35.3	2,170
November	356	88	162	9,640
December	87	41	57.4	3,530
January	75	51	58.9	3,620
February	80	57	66.2	3,810
March	1,310	62	271	14,700
April	1,420	271	492	28,300
May	1,780	1,060	1,450	89,200
June	1,500	244	672	40,000
July	228	77	150	9,220
August	72	13	32.5	2,000
September	12	2.8	5.49	327
The year	1,780	2.8	288	210,000

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	344	2'	67.4	4,140
November.....	800	192	310	18,400
December.....	176	80	110	6,780
January.....	152	9'	112	6,890
February.....	170	132	149	8,570
March.....	3,980	130	713	43,800
April.....	2,720	645	1,090	64,900
May.....	2,960	1,880	2,390	147,000
June.....	1,930	330	913	54,300
July.....	325	97	196	12,100
August.....	91	25	45.9	2,820
September.....	24	11	16.3	970
The year.....	3,980	11	511	371,000

MERCED RIVER AT HORSESHOE BEND, CALIF.

LOCATION.—Water-stage recorder in sec. 22, T. 3 S., R. 16 E., 600 feet above Yosemite Valley Railroad bridge, just above Horseshoe Bend, and 1½ miles below Kittridge.

RECORDS AVAILABLE.—November, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 20,900 second-feet March 25 (gage height, 19.20 feet); minimum, 53 second-feet October 2.

1922-1928: Maximum discharge, that of March 25, 1928; minimum, 13 second-feet October 5, 1925.

REMARKS.—Records good. Discharge interpolated December 8-19. Daily discharge not determined April 2 to September 30. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1.....	67	620	362	375	480	375	16.....	60	840	280	325	438	660
2.....	70	425	350	350	438	375	17.....	60	720	277	280	425	720
3.....	73	525	338	350	1,060	438	18.....	60	700	274	264	425	820
4.....	81	540	362	350	5,010	620	19.....	62	660	271	260	425	930
5.....	65	480	338	338	1,820	540	20.....	77	600	268	274	438	1,030
6.....	65	495	325	325	1,110	495	21.....	60	640	264	266	425	1,170
7.....	63	540	305	312	860	465	22.....	54	570	248	260	425	1,200
8.....	66	450	302	300	740	465	23.....	56	480	236	300	412	1,440
9.....	69	400	299	305	680	480	24.....	56	450	226	308	412	4,410
10.....	64	2,420	296	325	600	495	25.....	54	425	228	290	412	15,400
11.....	63	1,260	293	338	570	540	26.....	149	425	228	280	425	9,780
12.....	65	780	290	338	540	600	27.....	930	412	222	280	400	10,200
13.....	65	1,080	288	350	525	640	28.....	620	400	220	284	400	5,090
14.....	62	1,170	285	375	510	680	29.....	375	388	1,160	350	388	3,330
15.....	60	840	282	350	480	660	30.....	338	388	640	760	-----	2,750
							31.....	585	-----	438	555	-----	2,410

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	930	54	14 ³	9,100
November.....	2,420	388	67 ¹	39,900
December.....	1,160	220	32 ⁰	20,200
January.....	1,760	260	33 ³	20,700
February.....	5,010	388	73 ¹	42,200
March.....	15,400	375	2,28 ¹	137,000
The period.....	-----	-----	-----	269,000

LAKE McCLURE AT EXCHEQUER, CALIF.

LOCATION.—Staff gage at Exchequer Dam and indicator in power house in SW. $\frac{1}{4}$ sec. 13, T. 4 S., R. 15 E., 5 miles northeast of Merced Falls.

DRAINAGE AREA.—1,020 square miles.

RECORDS AVAILABLE.—April, 1926, to September, 1928.

REMARKS.—Lake McClure, formed by the construction of Exchequer Dam on Merced River, is used as a storage reservoir by the Merced Irrigation District. Power is also developed at the dam. Small diversions above the lake. Zero of gage is mean sea level, U. S. G. S. datum. Elevation of spillway crest is 693.0 feet and top of spillway gate, 707.0 feet. There was 90,200 acre-feet of storage on September 30, 1927, and 35,200 acre-feet on September 30, 1928.

Daily elevation, in feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	606.1	588.0	613.5	607.8	600.8	615.1	680.3	704.9	707.5	692.4	656.3	608.4
2.....	604.4	589.0	613.2	607.8	600.8	614.9	681.3	707.0	707.6	691.4	655.0	606.7
3.....	602.5	590.0	612.9	607.5	600.8	614.8	683.2	708.0	707.7	690.4	653.6	605.1
4.....	600.6	590.8	612.6	607.3	605.9	614.8	684.5	707.6	707.8	689.4	652.2	603.3
5.....	598.7	591.9	612.4	607.0	612.6	614.9	685.5	707.7	707.8	688.4	650.7	601.6
6.....	596.8	592.8	612.1	606.8	614.4	615.0	686.4	707.9	707.7	687.5	649.2	599.9
7.....	594.9	593.6	611.9	606.5	615.1	615.0	687.3	708.0	707.7	686.5	647.8	598.0
8.....	593.0	594.3	611.6	606.2	615.9	615.0	688.2	708.1	707.6	685.5	646.4	596.2
9.....	591.0	595.2	611.3	606.0	616.3	614.9	689.1	707.6	707.3	684.5	645.0	594.4
10.....	589.1	596.5	610.9	605.7	616.6	614.9	690.0	707.5	707.0	683.4	643.6	592.7
11.....	587.2	600.7	610.5	605.3	616.7	614.9	690.7	707.6	706.8	682.3	642.1	591.0
12.....	585.4	602.2	610.1	605.1	616.8	615.0	691.4	707.8	706.3	681.2	640.6	589.2
13.....	584.1	603.4	609.8	605.0	616.9	615.2	692.3	707.9	705.8	680.1	639.1	587.4
14.....	583.0	605.6	609.6	604.8	617.0	615.5	693.0	707.9	705.2	679.0	637.5	585.5
15.....	581.5	607.0	609.6	604.6	617.0	615.9	693.6	707.8	704.6	678.0	636.0	583.9
16.....	581.1	608.2	609.4	604.4	616.9	616.0	694.2	707.7	703.9	677.0	634.5	582.3
17.....	581.0	609.4	609.2	604.1	616.8	616.2	694.8	707.3	703.1	675.9	632.9	580.4
18.....	581.1	610.5	608.9	603.8	616.7	616.7	695.3	707.3	702.3	674.7	631.3	578.6
19.....	581.1	611.5	608.5	603.3	616.5	617.1	695.7	707.5	701.5	673.5	629.7	576.7
20.....	581.1	612.6	608.1	602.9	616.4	617.6	695.9	707.6	700.9	672.2	628.1	574.9
21.....	581.1	613.5	607.7	602.5	616.3	618.4	696.0	707.8	700.2	671.0	626.6	573.1
22.....	581.1	614.4	607.6	602.1	616.3	619.2	696.2	708.0	699.4	669.8	625.0	571.2
23.....	581.2	614.4	607.6	601.8	616.1	619.9	696.5	707.8	698.6	668.5	623.4	569.3
24.....	581.3	614.3	607.5	601.5	616.0	623.1	697.0	707.7	697.8	667.1	621.6	567.3
25.....	581.3	614.2	607.2	601.4	615.9	633.3	697.7	708.0	697.1	665.9	620.0	565.2
26.....	581.3	614.1	606.8	601.1	615.8	654.0	698.1	708.0	696.4	664.7	618.4	563.2
27.....	581.9	614.0	606.3	600.8	615.7	664.8	698.7	708.0	695.7	663.4	616.8	561.1
28.....	588.9	613.9	605.8	600.4	615.5	672.4	699.7	708.0	694.9	662.0	615.1	559.0
29.....	584.9	613.8	605.9	600.0	615.3	675.5	701.1	707.9	694.0	660.6	613.5	557.0
30.....	585.5	613.7	607.7	600.3	-----	677.7	702.7	707.8	693.1	659.1	611.9	554.9
31.....	586.5	-----	607.7	600.6	-----	679.0	-----	707.7	-----	657.6	610.1	-----

MERCED RIVER AT EXCHEQUER, CALIF.

LOCATION.—Water-stage recorder about on line between secs. 14 and 23, T. 4 S., R. 15 E., half a mile below Exchequer Dam at Exchequer and 8 miles above Merced Falls.

DRAINAGE AREA.—1,020 square miles at old site.

RECORDS AVAILABLE.—November, 1915, to September, 1928. Prior to October 25, 1922, at remains of old dam at Exchequer.

EXTREMES.—Maximum discharge during year, 5,120 second-feet May 8 (gage height, 7.08 feet); minimum, 20 second-feet October 31 (gage height, 0.00 foot).

1915-1928: Maximum discharge, about 22,000 second-feet January 17, 1916 (gage height, 20.0 feet); minimum, 13 second-feet November 9-11, 1926.

REMARKS.—Records fair. Discharge estimated January 25 to February 7. No diversions. Flow is completely regulated in Lake McClure by Exchequer Dam; capacity of lake, 286,000 acre-feet. There was 90,300 acre-feet of storage in lake September 30, 1927, and 35,200 acre-feet on September 30, 1928.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,180	41	519	500	500	550	1,230	1,510	2,220	1,500	1,430	1,130
2	1,160	41	527	497		539	1,240	1,820	2,020	1,460	1,430	1,130
3	1,150	43	519	490		540	1,270	2,870	2,020	1,460	1,400	1,100
4	1,120	44	511	502		529	1,240	3,600	2,140	1,460	1,400	1,070
5	1,120	44	519	488		542	1,260	3,490	2,140	1,460	1,400	1,040
6	1,120	44	511	508	526	526	1,270	3,720	2,140	1,500	1,400	1,040
7	1,100	44	519	502		536	1,240	3,970	2,020	1,430	1,360	1,040
8	1,100	44	511	500		547	1,280	4,510	1,960	1,500	1,290	1,010
9	1,070	43	519	498		552	1,270	4,230	1,660	1,500	1,290	1,010
10	1,070	41	511	496		519	1,260	3,380	1,620	1,500	1,290	1,010
11	1,060	41	511	494	510	541	1,360	3,600	1,660	1,460	1,290	980
12	745	41	511	498	532	521	1,390	4,230	1,740	1,500	1,290	980
13	705	43	519	490	513	532	1,390	4,370	1,780	1,500	1,290	980
14	705	187	511	488	530	534	1,380	4,230	1,700	1,500	1,320	920
15	460	99	514	485	510	541	1,380	4,100	1,700	1,460	1,260	892
16	70	41	511	498	508	534	1,390	3,840	1,740	1,500	1,260	892
17	49	41	483	488	507	552	1,370	3,070	1,740	1,500	1,260	892
18	41	41	486	483	518	546	1,400	2,490	1,700	1,500	1,220	892
19	41	43	488	476	521	609	1,390	2,580	1,740	1,500	1,220	920
20	41	44	490	491	514	625	1,430	2,670	1,700	1,460	1,220	892
21	41	51	386	489	522	640	1,450	2,770	1,660	1,460	1,220	892
22	37	507	306	487	516	736	1,440	2,970	1,660	1,500	1,220	892
23	37	507	334	486	514	734	1,480	2,670	1,580	1,500	1,190	892
24	40	523	368	499	529	554	1,490	2,580	1,580	1,500	1,190	892
25	43	515	496	500	520	614	1,500	2,970	1,580	1,460	1,160	865
26	41	526	486		516	1,020	1,530	3,070	1,580	1,460	1,160	865
27	41	518	495		521	1,170	1,520	3,070	1,580	1,460	1,160	838
28	41	531	490		522	1,190	1,540	2,970	1,580	1,430	1,130	838
29	41	519	498		520	1,230	1,570	2,970	1,540	1,460	1,100	838
30	41	511	499	501	500	1,260	1,570	2,870	1,540	1,430	1,100	838
31	39		501			1,230		2,580		1,430	1,100	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,180	37	502	30,900
November	531	41	192	11,400
December	527	306	485	29,800
January			495	30,400
February			514	29,600
March	1,260	521	687	42,200
April	1,570	1,230	1,380	82,100
May	4,510	1,510	3,220	198,000
June	2,220	1,540	1,770	105,000
July	1,500	1,430	1,470	90,400
August	1,430	1,100	1,260	77,500
September	1,130	838	949	56,500
The year	4,510	37	1,080	784,000

MERCED RIVER NEAR LIVINGSTON, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ sec. 20, T. 6 S., R. 11 E., 3½ miles west of Livingston.

RECORDS AVAILABLE.—March, 1922, to September, 1924; October, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,270 second-feet May 9 (gage height, 8.87 feet); minimum, 94 second-feet August 18 (gage height, 1.38 feet).

1922–1924, 1925–1928: Maximum discharge, 8,100 second-feet June 5, 1922 (gage height, 15.8 feet, present datum); minimum, 18 second-feet August 30, 1924.

REMARKS.—Records fair. Discharge interpolated January 11–19. Practically the entire flow is diverted above station during the irrigating season; the return water enters above station. Flow regulated by storage at Lake McClure; capacity, 286,000 acre-feet. Gage-height record furnished by Merced Irrigation District.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	400	141	545	620	515	608	1,070	344	1,260	181	156	145
2	417	141	560	590	515	625	1,090	289	870	200	164	168
3	417	137	560	575	530	642	1,280	404	755	186	150	173
4	417	123	560	575	1,560	660	1,140	1,870	702	181	154	142
5	382	118	560	560	1,400	642	1,140	2,040	728	183	172	132
6	400	115	560	560	870	642	1,090	2,040	702	242	186	121
7	410	115	560	560	770	625	1,070	2,200	675	332	172	128
8	412	112	515	560	712	625	1,050	2,430	620	368	159	184
9	407	108	545	560	695	575	1,010	3,090	472	380	145	136
10	417	110	560	545	678	545	1,010	2,490	366	368	139	147
11	444	115	560	545	678	590	930	1,980	372	368	132	130
12	444	120	560	545	660	608	970	2,310	272	332	138	128
13	384	123	560	545	660	608	950	2,730	247	356	159	147
14	269	137	575	545	660	608	950	2,850	240	249	132	145
15	242	128	590	545	660	608	950	2,730	240	149	128	142
16	290	175	575	530	642	625	930	2,610	272	154	114	144
17	299	180	560	530	642	500	910	2,260	272	136	108	161
18	249	146	560	530	642	395	870	1,600	272	134	112	162
19	188	134	560	530	625	365	850	1,180	272	132	121	126
20	161	127	560	530	625	350	790	1,200	247	128	142	138
21	139	134	560	560	642	308	755	1,280	247	130	120	132
22	127	134	472	545	642	250	685	1,480	244	163	121	126
23	122	239	444	545	642	295	635	1,520	258	183	110	130
24	116	430	407	530	625	445	605	1,250	211	159	109	144
25	110	486	430	515	625	445	500	1,160	215	149	127	127
26	110	500	500	515	625	712	458	1,520	170	157	134	122
27	113	545	545	515	625	1,230	430	1,620	172	154	173	127
28	112	530	545	500	625	1,600	417	1,650	270	159	175	136
29	112	545	500	515	625	1,180	392	1,550	270	190	192	154
30	113	560	1,030	500	-----	1,090	380	1,520	173	154	181	164
31	127	-----	685	500	-----	1,070	-----	1,420	-----	147	154	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	444	110	269	16,500
November	560	108	224	13,300
December	1,030	407	561	34,500
January	620	500	543	33,400
February	1,560	515	704	40,500
March	1,600	250	647	39,800
April	1,280	380	844	50,200
May	3,090	289	1,760	108,000
June	1,200	173	392	23,300
July	380	128	210	12,900
August	192	103	144	8,850
September	173	121	140	8,330
The year	3,090	103	537	390,000

TENAYA CREEK NEAR YOSEMITE, CALIF.

LOCATION.—Water-stage recorder at Tenaya Bridge in Yosemite National Park, five-eighths mile above mouth and $1\frac{1}{8}$ miles east of Yosemite, Mariposa County.

DRAINAGE AREA.—47 square miles.

RECORDS AVAILABLE.—July, 1904, to June, 1909; January, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year not recorded; minimum, 1.6 second-feet August 12–18 (gage height, 1.23 feet).

1904–1909, 1912–1928: Maximum discharge, 1,730 second-feet May 28, 1919 (gage height, 7.05 feet); minimum, 0.5 second-foot September 12 and most of October, 1906.

REMARKS.—Records fair. Discharge estimated April 28 to June 18. No diversions. Gage-height record furnished by officials of Yosemite National Park.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	June	July	Aug.	Sept.
1.....	2.6	56	33	30	34	38	155	-----	15	2.3	1.7
2.....	2.6	95	39	34	36	38	132	-----	14	2.3	1.7
3.....	2.6	102	42	35	46	50	118	-----	12	2.3	1.7
4.....	2.6	76	35	35	50	49	120	-----	11	2.3	1.7
5.....	2.4	70	29	34	58	50	122	-----	10	2.3	1.8
6.....	2.4	86	23	34	63	41	134	-----	9.5	2.3	1.8
7.....	2.4	68	19	33	60	39	148	-----	8.5	2.3	1.8
8.....	2.2	58	18	34	58	51	159	-----	8	2.3	1.9
9.....	2.0	73	17	40	53	57	173	-----	7	2.3	1.9
10.....	2.0	114	18	44	48	66	173	-----	7	2.3	1.9
11.....	2.0	64	24	44	46	75	175	-----	6	1.9	1.9
12.....	2.0	50	29	47	47	82	198	-----	6	1.6	1.9
13.....	2.0	55	30	53	48	94	177	-----	5.5	1.6	1.9
14.....	2.0	53	32	49	49	90	177	-----	5	1.6	1.8
15.....	2.0	54	34	44	41	97	198	-----	5	1.6	1.8
16.....	2.0	59	36	35	40	99	198	-----	4.8	1.6	1.8
17.....	2.0	61	35	31	44	118	186	-----	4.6	1.6	1.8
18.....	2.2	58	32	30	44	139	163	-----	4.5	1.6	1.7
19.....	2.2	55	29	30	46	155	154	49	4.1	1.7	1.7
20.....	2.2	48	26	29	48	172	142	43	4.0	1.8	1.8
21.....	2.2	46	24	29	48	186	147	40	3.7	1.8	1.8
22.....	2.3	39	23	29	43	179	198	37	3.4	1.8	1.8
23.....	2.4	32	20	29	38	186	230	34	3.2	1.8	1.8
24.....	2.4	30	20	30	36	353	238	31	3.0	1.9	1.9
25.....	2.6	30	20	30	41	820	206	28	2.7	1.9	1.9
26.....	6.5	30	20	30	41	554	270	26	2.5	1.9	1.9
27.....	68	32	20	29	41	376	318	23	2.4	1.9	1.9
28.....	40	37	20	31	41	270	400	20	2.3	1.9	1.9
29.....	36	39	21	43	39	222	450	18	2.2	1.8	1.9
30.....	40	35	21	42	-----	198	600	16	2.2	1.7	1.9
31.....	85	-----	25	37	-----	179	-----	-----	2.2	1.7	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	85	2.0	10.7	658
November.....	114	30	56.8	3,380
December.....	42	17	26.3	1,020
January.....	53	29	35.6	2,190
February.....	63	34	45.8	2,050
March.....	820	38	165	10,100
April.....	600	118	209	12,400
May.....	-----	-----	370	22,800
June.....	-----	16	78.0	4,040
July.....	15	2.2	5.85	360
August.....	2.3	1.6	1.93	119
September.....	1.9	-----	1.82	108
The year.....	-----	-----	1.6	84.1
				61,000

TUOLUMNE RIVER BASIN

HETCH HETCHY RESERVOIR AT HETCH HETCHY, CALIF.

LOCATION.—Staff gage at O'Shaughnessy Dam at Hetch Hetchy, Tuolumne County. Zero of gage at sea-level elevation.

RECORDS AVAILABLE.—May, 1923, to September, 1928.

EXTREMES.—Maximum elevation during year, 3,721.1 feet May 27; minimum, 3,536.4 feet March 19.

1923-1928: Maximum elevation, 3,721.3 feet June 8-11, 1923; minimum, 3,530.5 feet February 15 and 16, 1927.

REMARKS.—Record furnished by city of San Francisco.

Daily gage height, in feet, 1927-28.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	179.6	153.7	145.0	114.0	81.4	47.2	89.5	133.0	220.9	219.2	203.2	174.7
2	178.8	153.1	144.2	113.1	80.1	46.0	90.4	139.5	221.0	218.8	202.5	173.7
3	178.0	152.9	143.5	112.3	78.9	44.9	91.1	143.7	220.8	218.5	201.6	172.6
4	177.2	152.6	142.8	111.4	78.2	44.0	91.8	147.5	221.0	218.2	200.8	171.5
5	176.2	152.0	142.0	110.5	77.5	43.3	92.4	152.0	220.8	217.8	200.1	170.5
6	175.4	151.5	141.3	109.6	76.9	42.7	93.3	157.1	220.9	217.6	199.4	169.4
7	174.5	151.3	140.4	108.6	76.2	42.0	94.1	162.7	220.6	217.4	198.6	168.3
8	173.5	150.9	139.5	107.5	75.1	41.0	95.0	169.0	220.6	217.2	197.8	167.3
9	172.6	150.4	138.5	106.6	74.2	40.2	95.9	173.7	220.6	216.9	197.0	166.1
10	171.8	151.1	137.5	105.9	73.0	39.2	96.8	178.1	220.6	216.6	196.1	165.0
11	171.0	151.2	136.5	105.0	71.5	38.3	97.7	183.6	220.5	216.3	195.1	163.9
12	170.0	151.0	135.5	104.0	70.3	37.7	99.0	189.5	220.5	215.8	194.2	162.8
13	169.1	151.1	134.5	103.1	69.0	37.7	100.5	196.0	220.5	215.3	193.3	161.7
14	168.2	151.3	133.5	102.1	67.9	37.8	101.4	201.6	220.5	214.8	192.4	160.5
15	167.3	151.3	132.5	101.3	66.6	37.6	102.4	207.0	220.5	214.3	191.5	159.4
16	166.4	151.2	131.5	100.2	65.5	37.2	103.4	211.3	220.5	213.7	190.5	158.3
17	165.4	151.1	130.5	99.0	64.0	36.7	104.3	214.6	220.6	213.2	189.5	157.3
18	164.4	151.0	129.5	98.0	62.9	36.4	105.1	218.0	220.6	212.7	188.5	156.1
19	163.5	150.7	128.4	96.9	61.5	36.4	105.5	220.7	220.6	212.1	187.6	155.0
20	162.3	150.3	127.3	95.7	60.5	37.0	105.7	220.7	220.5	211.5	186.6	153.7
21	161.4	150.1	126.2	94.9	58.9	37.7	105.9	220.6	220.5	210.8	185.7	152.5
22	160.4	149.7	125.0	93.5	57.6	38.5	106.3	220.5	220.4	210.2	184.7	151.3
23	159.3	149.3	123.8	92.1	56.4	39.6	107.4	221.0	220.4	209.5	183.7	150.0
24	158.4	148.7	122.5	91.0	55.3	44.0	109.0	221.0	220.4	208.9	182.8	148.9
25	157.4	148.2	121.3	89.6	54.0	53.6	110.4	221.0	220.4	208.3	181.8	147.5
26	156.6	147.8	120.2	88.3	52.7	72.6	111.9	221.9	220.3	207.6	180.7	146.3
27	155.8	147.4	119.0	87.0	51.4	80.1	114.0	221.1	220.1	206.9	179.7	145.0
28	155.9	146.8	118.0	85.5	50.0	83.5	117.6	220.9	219.9	206.2	178.8	143.7
29	155.1	146.3	117.1	84.1	48.6	85.8	121.0	221.0	219.6	205.5	177.9	142.4
30	154.4	145.6	116.2	83.5	-----	87.4	126.0	220.8	219.4	204.7	176.9	141.1
31	154.0	-----	115.1	82.5	-----	88.8	-----	220.6	-----	204.0	176.0	-----

NOTE.—Add 3,500 feet to readings to obtain mean sea level elevations.

TUOLUMNE RIVER NEAR HETCH HETCHY, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 17, T. 1 N., R. 20 E., in Yosemite National Park, three-fourths of a mile below O'Shaughnessy Dam at Hetch Hetchy.

RECORDS AVAILABLE.—December, 1914, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,910 second-feet May 23 (gauge height, 11.34 feet); minimum, 215 second-feet January 7 (gauge height, 3.46 feet).

1914-1928: Maximum discharge, 11,400 second-feet May 29, 1919 (gauge height, 13.4 feet); minimum, 1.3 second-feet November 2-3, 1923.

REMARKS.—Records excellent. No diversions. Flow regulated by gates in O'Shaughnessy Dam.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	655	590	700	730	790	655	640	825	3,170	715	685	760
2.....	602	590	715	670	790	615	590	790	3,430	715	700	745
3.....	590	615	715	670	775	602	590	760	3,430	700	700	775
4.....	628	628	700	670	730	578	602	790	3,710	670	685	775
5.....	640	655	700	685	685	565	615	790	3,290	655	628	775
6.....	655	628	700	700	685	565	615	808	3,430	615	602	760
7.....	655	615	715	715	730	602	628	760	2,930	602	628	760
8.....	685	628	730	730	760	628	640	775	2,300	602	715	760
9.....	628	628	745	715	760	628	655	790	1,890	602	745	760
10.....	590	730	745	700	775	615	640	775	1,740	602	760	760
11.....	628	745	730	730	775	615	655	775	1,510	640	775	700
12.....	640	685	730	730	745	615	670	790	1,540	655	730	715
13.....	640	615	745	730	715	615	685	790	1,360	670	745	730
14.....	640	602	745	730	730	615	700	775	1,280	670	745	745
15.....	670	640	745	730	745	615	715	745	1,280	670	775	775
16.....	628	685	760	730	760	628	715	730	1,050	670	775	700
17.....	640	715	775	730	760	640	730	745	1,110	655	775	655
18.....	640	730	760	730	745	602	745	760	1,180	655	760	730
19.....	685	730	745	730	715	578	775	2,900	1,110	655	730	745
20.....	670	715	730	730	715	590	790	4,190	1,030	655	745	775
21.....	640	670	730	745	715	615	790	4,190	1,010	655	730	775
22.....	685	685	760	745	715	615	790	3,340	990	640	730	775
23.....	640	685	790	745	730	615	745	4,190	990	615	745	730
24.....	602	655	775	745	745	578	730	5,290	1,010	628	760	730
25.....	615	640	745	760	745	655	775	5,490	1,030	655	760	760
26.....	628	628	700	790	715	640	775	5,290	970	685	760	775
27.....	628	628	685	808	700	615	790	5,490	860	685	730	775
28.....	655	615	670	808	715	615	775	4,530	790	700	715	775
29.....	670	640	640	745	700	615	745	5,090	745	655	730	775
30.....	615	685	655	730	-----	615	790	4,190	730	685	760	745
31.....	540	-----	790	790	-----	670	-----	3,430	-----	685	760	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	685	540	636	39,100
November.....	745	590	657	39,100
December.....	790	640	728	44,800
January.....	808	670	732	45,000
February.....	790	685	737	42,400
March.....	670	565	613	37,700
April.....	790	590	703	41,800
May.....	5,490	730	2,310	142,000
June.....	3,710	730	1,700	101,000
July.....	715	602	657	40,400
August.....	775	602	728	44,800
September.....	775	655	750	44,600
The year.....	5,490	540	913	663,000

TUOLUMNE RIVER NEAR BUCK MEADOWS, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 24, T. 1 S., R. 17 E., 1 mile below junction with South Fork of Tuolumne River and 2 miles north of Buck Meadows.

RECORDS AVAILABLE.—September, 1907, to September, 1928.

EXTREMES.—Maximum discharge during year, 21,200 second-feet June 7 (gage height, 12.05 feet); minimum, 12 second-feet September 2⁷ (gage height, 0.61 foot).

1907–1928: Maximum discharge, 27,200 second-feet January 14, 1909 (gage height, 14.00 feet); minimum, that of September 25, 1928.

REMARKS.—Records excellent. City of San Francisco diverts water from Tuolumne River and Cherry Creek at Early intake and uses it to develop power after which it is returned to the river through Moccasin Creek. Flow partly regulated by storage in Hetch Hetchy Reservoir and Lake Eleanor.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	256	214	386	456	276	1,740	3,380	3,520	199	78	16
2	43	153	212	383	470	229	1,880	2,710	3,830	228	76	16
3	42	287	242	383	862	332	1,620	2,110	4,950	210	93	15
4	44	229	229	335	1,420	398	1,380	2,010	3,990	177	94	14
5	41	159	207	317	735	359	1,460	2,360	3,910	179	70	25
6	44	222	220	289	645	314	1,660	2,650	3,600	170	89	22
7	42	303	212	279	560	300	1,620	2,770	3,100	103	62	16
8	42	201	189	326	560	395	1,500	2,900	2,530	81	48	14
9	48	321	195	374	520	434	1,680	2,310	1,700	98	27	14
10	49	2,210	222	365	466	488	1,460	2,770	1,580	78	24	14
11	42	668	216	332	452	540	1,420	3,030	1,460	67	24	62
12	45	356	244	356	456	580	1,660	3,100	1,580	75	27	32
13	47	890	238	389	431	622	1,660	2,840	1,380	70	26	21
14	43	540	269	371	417	622	1,740	2,710	1,140	86	41	20
15	42	424	249	332	410	580	1,420	2,590	980	107	29	20
16	43	462	261	298	374	560	1,700	2,210	785	166	28	21
17	43	452	212	266	362	622	1,700	1,740	785	154	26	34
18	48	424	224	244	353	690	1,460	1,960	890	116	27	16
19	43	377	247	247	359	785	1,040	2,840	920	81	24	16
20	72	344	231	238	386	835	1,040	5,150	712	63	26	18
21	47	431	222	227	377	890	1,300	5,750	645	57	40	16
22	42	371	207	222	359	980	1,420	5,350	622	62	35	18
23	46	298	224	256	353	1,660	1,620	4,410	600	84	25	17
24	45	252	227	242	329	4,770	1,700	6,150	600	62	18	14
25	44	261	238	231	362	15,200	1,700	6,570	645	67	17	14
26	604	247	229	254	380	9,110	1,580	6,350	600	65	16	15
27	1,240	256	231	256	356	7,250	2,010	6,350	448	79	36	18
28	401	220	227	303	347	3,680	2,360	5,750	323	63	32	19
29	189	220	398	438	335	2,590	2,530	5,550	260	113	18	17
30	157	214	309	645	508	2,160	2,900	5,150	215	86	17	22
31	448	-----	326	508	-----	1,920	-----	4,070	-----	93	16	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,240	41	135	8,300
November	2,210	153	402	23,900
December	398	189	238	14,600
January	645	222	326	20,000
February	1,420	329	479	27,600
March	15,200	229	1,940	119,000
April	2,900	1,040	1,660	98,800
May	6,570	1,740	3,730	229,000
June	4,950	215	1,610	95,800
July	228	57	108	6,640
August	94	16	39.0	2,400
September	62	14	19.9	1,180
The year	15,200	14	892	647,000

TUOLUMNE RIVER NEAR JACKSONVILLE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 18, T. 1 S., R. 15 E., three-fourths mile east of Jacksonville and 1 mile west of highway bridge on Big Oak Flat Road.

RECORDS AVAILABLE.—July, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 35,300 second-feet March 25 (gage height, 12.38 feet); minimum, 98 second-feet October 9 (gage height, 0.89 foot).

1923-1928: Maximum discharge, that of March 25, 1928; minimum, 37 second-feet October 18, 1926 (gage height, 0.61 foot).

REMARKS.—Records good. For diversions and regulations see Tuolumne River near Buck Meadows.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	836	1,360	1,150	978	1,540	1,340	3,780	5,380	4,880	680	835	795
2.....	504	1,100	1,100	970	1,620	1,300	4,960	4,830	5,040	985	855	670
3.....	888	1,190	1,110	1,390	2,460	1,400	4,700	3,570	5,980	1,020	835	755
4.....	913	1,260	835	1,370	5,780	1,260	3,880	3,740	5,270	630	850	785
5.....	852	1,170	1,100	1,340	2,480	1,520	3,700	3,700	5,300	850	335	780
6.....	880	665	1,130	1,280	2,200	1,480	3,840	4,040	4,820	995	780	765
7.....	892	1,280	1,160	1,240	1,940	1,460	3,920	4,560	4,580	935	905	760
8.....	880	1,180	1,110	865	1,900	1,540	3,220	4,580	3,760	590	910	735
9.....	271	1,050	1,110	1,320	1,820	1,660	3,660	3,880	2,840	865	835	585
10.....	926	3,960	1,160	1,360	1,700	1,710	3,500	4,350	2,200	1,010	850	465
11.....	944	2,080	805	1,330	1,560	1,370	3,290	4,720	2,400	945	775	740
12.....	885	1,450	1,150	1,340	1,200	1,860	3,600	4,820	2,480	935	360	820
13.....	880	1,830	1,170	1,440	1,560	1,880	3,590	4,040	2,370	875	900	815
14.....	865	2,040	1,260	1,440	1,520	1,960	3,590	4,380	2,110	855	865	840
15.....	902	1,600	1,220	1,040	1,540	1,860	2,920	3,990	1,880	440	865	735
16.....	492	1,640	1,200	1,280	1,460	1,850	3,480	3,780	1,740	840	785	295
17.....	915	1,550	1,190	1,220	1,460	1,940	3,650	3,110	1,300	970	775	720
18.....	942	1,470	748	1,190	1,420	1,620	3,170	3,140	1,680	1,000	755	935
19.....	855	1,440	1,080	1,200	1,040	2,120	2,660	3,660	1,800	975	395	925
20.....	828	925	1,120	1,200	1,440	2,210	2,470	6,320	1,600	860	830	800
21.....	888	1,450	1,120	1,180	1,460	2,240	2,720	7,040	1,500	860	685	770
22.....	915	1,300	1,120	915	1,470	2,460	2,740	6,780	1,460	375	815	780
23.....	392	1,320	1,120	1,220	1,450	3,280	3,160	5,840	1,430	905	910	475
24.....	868	835	1,140	1,270	1,440	8,780	3,200	7,300	1,120	940	835	845
25.....	842	1,200	742	1,240	1,420	27,100	3,380	7,860	1,420	910	780	890
26.....	1,140	1,200	722	1,240	1,080	17,600	3,070	7,860	1,430	905	420	745
27.....	2,580	840	1,120	1,220	1,420	16,300	3,350	7,580	1,300	830	710	780
28.....	1,710	1,180	1,110	1,220	1,420	8,460	4,080	7,300	1,150	910	885	765
29.....	1,250	1,200	1,960	1,090	1,360	6,340	4,100	6,780	1,020	565	885	770
30.....	648	1,200	1,500	1,890	-----	5,250	4,480	6,640	960	910	775	715
31.....	1,230	-----	1,280	1,600	-----	4,660	-----	5,430	-----	965	760	-----
Month												
					Maximum	Minimum	Mean	Run-off in acre-feet				
October.....					2,580	271	929	57,100				
November.....					3,960	665	1,400	83,300				
December.....					1,960	722	1,120	68,900				
January.....					1,890	865	1,250	76,900				
February.....					5,780	1,040	1,730	99,500				
March.....					27,100	1,260	4,380	269,000				
April.....					4,960	2,470	3,530	210,000				
May.....					7,880	3,110	5,190	319,000				
June.....					5,980	960	2,550	152,000				
July.....					1,020	375	849	52,200				
August.....					910	335	766	47,100				
September.....					935	295	742	44,200				
The year.....					27,100	271	2,040	1,480,000				

DON PEDRO RESERVOIR NEAR LA GRANGE, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 35, T. 2 S., R. 14 E., at Don Pedro Dam, $5\frac{1}{2}$ miles above La Grange. Zero of gage is at mean sea level.

RECORDS AVAILABLE.—October, 1924, to September, 1928.

EXTREMES.—Maximum elevation during year, 605.9 feet June 8; minimum, 562.3 feet September 30.

REMARKS.—Record of daily elevations furnished by Turlock Irrigation District. Reservoir contained 223,000 acre-feet storage on September 30, 1927, and 165,000 acre-feet storage on September 30, 1928.

Daily gage height, in feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	583.0	580.5	582.0	569.5	576.8	590.0	598.1	592.3	604.8	604.1	594.0	578.7
2	582.5	580.8	581.6	569.9	577.3	590.1	598.0	593.5	605.3	604.0	593.6	578.2
3	582.0	581.0	581.3	568.5	578.2	590.3	598.6	594.0	605.7	603.7	593.3	577.7
4	581.7	581.3	581.0	567.4	582.2	590.5	598.3	594.2	605.3	603.4	592.9	577.3
5	581.3	581.5	580.3	568.0	585.8	598.1	594.3	605.0	603.0	592.6	576.7	
6	580.9	581.8	580.1	567.9	587.0	591.1	598.0	594.5	605.0	602.8	591.7	576.2
7	580.5	581.8	579.9	567.3	588.0	591.5	598.0	595.0	605.7	602.5	591.4	575.7
8	580.3	582.1	579.6	566.0	588.8	590.4	597.9	595.7	605.9	602.2	591.1	575.2
9	580.0	582.3	579.3	566.2	589.6	590.3	597.5	596.4	605.6	601.7	590.7	574.6
10	579.2	583.0	579.0	566.8	590.3	590.2	597.5	596.9	605.4	601.4	590.3	574.1
11	578.8	585.0	578.6	567.2	591.1	590.1	597.0	597.6	604.9	601.2	589.8	573.8
12	578.4	585.7	578.0	567.6	591.8	589.9	596.9	598.7	604.7	600.9	589.0	572.7
13	578.0	586.2	577.7	568.2	592.1	589.9	596.4	599.5	604.6	600.6	588.2	572.8
14	577.5	587.2	577.4	568.7	591.9	589.8	596.2	600.0	604.3	600.3	587.8	571.7
15	577.2	587.8	577.3	569.3	591.6	589.8	595.4	600.4	604.0	599.9	587.4	571.8
16	577.1	588.4	577.0	569.4	591.3	589.7	594.4	600.9	603.8	599.4	587.1	570.6
17	576.9	588.9	576.9	569.9	591.0	589.6	594.0	601.3	604.0	599.0	586.8	569.9
18	576.8	587.7	576.6	570.3	591.7	589.5	593.3	601.5	604.1	598.8	586.3	569.4
19	576.8	586.5	576.1	570.5	590.3	589.4	592.3	601.9	604.5	598.6	585.8	568.9
20	577.0	585.5	575.3	571.0	590.0	589.4	590.9	603.3	604.4	598.3	585.0	568.4
21	577.1	584.1	575.4	571.3	589.7	589.6	590.0	605.3	604.3	598.0	584.3	567.7
22	577.2	583.1	575.8	571.8	589.4	589.8	589.2	605.7	604.2	597.6	583.8	567.2
23	577.2	581.8	574.9	571.9	589.1	590.1	588.7	605.2	604.1	597.0	583.3	566.6
24	577.2	580.5	575.0	572.4	588.8	592.6	587.9	605.8	604.0	596.8	582.8	565.8
25	577.3	580.6	574.2	572.9	588.4	601.3	588.0	606.6	603.7	596.4	582.4	565.3
26	577.3	580.9	573.1	573.3	588.1	602.1	587.8	605.6	603.9	596.2	581.9	564.7
27	577.3	581.1	573.1	573.8	588.4	602.1	587.9	605.6	604.1	595.9	581.1	564.1
28	579.3	581.3	572.3	574.2	588.8	599.9	588.7	605.6	604.2	595.5	580.6	563.4
29	579.9	581.5	572.2	574.5	589.7	599.0	589.8	605.2	604.8	595.2	580.2	562.8
30	580.1	581.8	571.8	575.2	598.5	591.1	605.8	604.2	604.2	594.7	579.7	562.3
31	580.1	570.6	576.1	598.4	605.4	604.4	579.2	562.3				

TUOLUMNE RIVER ABOVE LA GRANGE DAM, NEAR LA GRANGE, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 3, T. 3 S., R. 14 E., half a mile below Don Pedro Dam, $3\frac{1}{2}$ miles above La Grange Dam and 5 miles above La Grange.

RECORDS AVAILABLE.—March, 1915, to September, 1928. From 1895 to 1917 at La Grange Dam.

EXTREMES.—Maximum discharge during year, 38,100 second-feet March 25 (gage height, 29.6 feet); minimum, 46 second-feet October 15.

1915-1928: Maximum discharge, that of March 25, 1928; minimum, 1.4 second-feet November 26 to December 1, 1922.

REMARKS.—Records good except those for October 14 to November 18, which are fair. Small amount of water is diverted for irrigation. Flow completely regulated by storage in Don Pedro Dam, Hetch Hetchy Reservoir, and Lake Eleanor.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,380	690	1,180	1,600	738	1,000	4,330	3,060	4,440	1,050	1,420	1,480
2	1,240	690	1,570	1,990	720	1,030	5,170	3,420	3,800	1,330	1,420	1,420
3	1,380	670	1,570	2,870	755	1,030	6,400	3,150	5,700	1,390	1,420	1,420
4	1,430	670	1,510	1,680	815	1,000	4,910	3,240	6,400	1,330	1,420	1,480
5	1,540	670	1,540	1,970	685	1,030	4,220	3,330	5,430	1,390	1,420	1,480
6	1,380	650	1,570	1,810	835	1,000	4,110	3,330	3,700	1,390	1,390	1,480
7	1,330	670	1,540	1,890	720	1,700	4,220	3,510	3,800	1,420	1,390	1,480
8	1,330	670	1,570	1,780	702	2,840	4,110	3,510	3,900	1,390	1,420	1,480
9	1,280	690	1,540	795	702	2,060	4,110	3,330	3,330	1,390	1,420	1,420
10	1,430	690	1,540	795	702	2,060	4,220	3,330	3,060	1,390	1,420	1,480
11	1,540	670	1,510	775	702	2,060	4,110	3,420	2,970	1,390	1,600	1,540
12	1,600	690	1,540	795	650	2,060	4,330	2,790	2,880	1,390	1,420	1,480
13	1,600	650	1,540	795	1,360	2,130	4,670	3,330	2,880	1,390	1,420	1,480
14	1,300	670	1,570	755	1,920	2,130	4,670	3,420	2,700	1,390	1,420	1,420
15	947	690	1,540	720	1,920	2,130	4,670	3,330	2,360	1,360	1,420	1,420
16	667	670	1,570	795	1,920	2,200	4,670	3,060	1,720	1,390	1,480	1,480
17	693	2,080	1,540	775	1,850	2,200	4,670	2,880	1,200	1,390	1,480	1,420
18	687	2,900	1,510	795	1,850	2,060	4,670	2,790	1,150	1,360	1,480	1,480
19	685	3,250	2,040	775	1,850	2,060	4,670	2,700	1,660	1,360	1,480	1,540
20	685	3,100	1,450	755	1,850	2,130	4,670	2,790	1,850	1,360	1,480	1,540
21	688	3,660	875	755	1,920	2,130	3,600	4,790	1,540	1,360	1,540	1,540
22	699	3,070	1,710	685	1,920	2,130	3,800	7,110	1,660	1,300	1,540	1,540
23	92	3,090	1,420	755	1,920	2,130	4,550	5,980	1,660	1,360	1,540	1,480
24	657	1,940	1,750	738	1,920	2,060	4,000	7,260	1,600	1,360	1,540	1,540
25	710	875	2,210	755	1,850	24,200	3,240	8,160	1,300	1,360	1,540	1,540
26	690	875	1,460	702	1,000	24,300	3,240	8,160	1,080	1,360	1,420	1,540
27	690	835	1,740	702	632	20,800	2,490	7,710	1,100	1,360	1,540	1,540
28	690	875	2,410	720	632	11,000	2,520	7,710	1,080	1,360	1,540	1,540
29	670	875	3,460	650	738	7,110	2,520	6,820	1,100	1,330	1,540	1,540
30	670	875	3,040	702	-----	5,980	2,790	6,400	1,100	1,360	1,540	1,480
31	690	-----	3,020	720	-----	5,170	-----	5,430	-----	1,390	1,540	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,600	92	1,000	61,500
November	3,660	650	1,300	77,400
December	3,450	875	1,740	107,000
January	2,870	650	1,060	65,200
February	1,920	632	1,230	70,800
March	24,300	1,000	4,610	283,000
April	6,400	2,520	4,160	248,000
May	8,160	2,700	4,490	276,000
June	6,400	1,080	2,600	155,000
July	1,420	1,050	1,360	83,600
August	1,600	1,390	1,470	90,400
September	1,540	1,420	1,490	88,700
The year	24,300	92	2,210	1,610,000

FALLS CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 3, T. 1 N., R. 20 E., in Yosemite National Park, 300 feet above branch to Tueulala Falls and 2 miles north-east of Hetch Hetchy.

RECORDS AVAILABLE.—November, 1915, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,740 second-feet March 25 (gage height, 6.45 feet); no flow August 30 to September 30.

1915-1928: Maximum discharge, that of March 25, 1928; no flow October 4 to November 30, 1921, September 3 to October 4, 1924, August 26 to November 12, 1926, and August 30 to September 30, 1928.

REMARKS.—Records excellent. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	0.6	42	44	37	43	31	138	75 ⁴	416	38	3.7
2.....	.6	35	46	45	43	34	121	56 ³	429	34	3.3
3.....	.6	71	49	47	56	63	114	42 ³	467	31	2.9
4.....	.6	64	44	46	54	52	117	44 ⁰	426	30	2.9
5.....	.6	58	41	43	52	47	138	54 ⁰	426	31	2.4
6.....	.6	90	37	39	52	44	159	62 ³	426	31	2.4
7.....	.6	91	34	41	51	44	166	64 ⁷	372	29	2.0
8.....	.5	72	31	47	50	70	155	73 ²	315	27	2.0
9.....	.5	144	31	58	44	80	164	60 ³	250	26	1.6
10.....	.5	384	30	58	38	84	166	62 ³	211	25	1.2
11.....	.5	185	31	51	39	90	173	75 ⁴	173	24	.9
12.....	.5	129	28	55	38	104	227	79 ²	185	22	.9
13.....	.5	173	27	58	40	123	195	77 ³	148	19	.6
14.....	.5	129	31	57	39	110	183	73 ²	144	18	.6
15.....	.5	125	35	48	37	93	185	71 ⁰	148	17	.4
16.....	.5	127	36	54	36	90	195	54 ⁰	138	17	.4
17.....	.5	123	32	49	31	106	195	54 ⁰	134	16	.2
18.....	.5	115	29	45	34	123	148	56 ³	140	15	.2
19.....	.5	104	27	36	36	142	127	53 ⁰	115	13	.2
20.....	.5	91	25	33	38	157	115	58 ⁷	106	12	.2
21.....	.5	99	25	29	37	176	110	64 ⁷	108	9	.2
22.....	.5	84	25	29	37	206	159	54 ⁰	104	7.5	.2
23.....	.5	68	24	33	34	321	216	54 ⁰	100	6.5	.1
24.....	.6	62	20	32	31	710	258	68 ⁰	100	6	.1
25.....	.6	59	18	31	37	1,530	213	75 ⁴	100	5.5	.1
26.....	20	61	18	32	38	1,180	255	68 ⁰	83	5.5	.1
27.....	80	58	17	34	37	549	340	73 ²	67	5	.1
28.....	41	54	20	35	35	275	440	54 ⁰	56	4.8	.1
29.....	31	56	37	90	32	200	484	58 ⁷	48	4.6	.1
30.....	33	51	31	68	-----	168	626	512	42	4.3	0
31.....	91	-----	31	50	-----	153	-----	410	-----	4.0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	91	0.5	9.98	614
November.....	384	35	100	5,950
December.....	49	17	30.8	1,890
January.....	90	29	45.5	2,800
February.....	56	31	40.3	2,320
March.....	1,530	31	231	14,200
April.....	626	110	209	12,400
May.....	798	410	619	38,100
June.....	467	42	199	11,800
July.....	38	4.0	17.8	1,060
August.....	3.7	0	.97	59.6
The year.....	1,530	0	126	91,200

NOTE.—No flow in September.

CHERRY CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 28, T. 2 N., R. 19 E., in Stanislaus National Forest, 3 miles by trail from Lake Eleanor and $7\frac{1}{2}$ miles northwest of Hetch Hetchy.

DRAINAGE AREA.—114 square miles (above dam site in sec. 5, T. 1 N., R. 19 E.).

RECORDS AVAILABLE.—April, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 7,000 second-feet March 25 (gage height, 12.57 feet); minimum, 0.5 second-foot October 17, 22–24, and September 25–28 (gage height, 0.73 foot).

1910–1928: Maximum discharge, 7,000 second-feet January 30, 1911, and March 25, 1928 (gage height, 12.57 feet); no flow September 6–12, 1910.

REMARKS.—Records excellent. No diversions.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.0	188	119	104	117	89	406	1,330	734	74	4.7	0.8
2.....	.9	261	134	164	131	94	312	1,100	755	68	4.2	.8
3.....	.9	330	142	150	207	207	306	980	800	61	3.7	.8
4.....	.8	236	112	142	164	150	340	1,080	734	56	3.3	.7
5.....	.8	200	102	124	147	139	394	1,220	712	53	2.9	.7
6.....	.8	373	92	112	150	119	478	1,360	692	50	2.7	.7
7.....	.8	275	80	119	147	112	508	1,500	632	48	2.6	.7
8.....	.7	216	75	144	144	170	485	1,410	552	44	2.3	.6
9.....	.7	1,130	78	188	134	194	520	1,280	436	41	2.0	.6
10.....	.6	1,500	75	170	119	239	504	1,620	380	37	1.9	.6
11.....	.6	406	75	142	124	252	508	1,680	417	36	1.8	.6
12.....	.6	319	75	164	122	258	672	1,750	362	33	1.7	.6
13.....	.6	632	71	176	126	295	532	1,560	278	30	1.7	.6
14.....	.6	366	85	139	126	239	512	1,380	261	27	1.6	.6
15.....	.6	358	100	106	102	236	548	1,470	261	26	1.5	.6
16.....	.6	376	110	85	92	252	572	1,080	252	25	1.4	.6
17.....	.5	384	94	80	96	316	512	1,080	242	23	1.4	.6
18.....	.6	326	75	74	112	362	369	1,020	278	21	1.3	.6
19.....	.6	285	74	72	124	409	355	980	236	20	1.2	.6
20.....	.6	248	69	65	126	432	323	1,100	200	18	1.0	.6
21.....	.6	302	61	64	131	451	376	1,200	197	16	1.0	.6
22.....	.5	239	55	60	110	548	552	1,180	188	15	1.0	.6
23.....	.5	188	51	67	102	868	672	1,080	173	14	1.0	.6
24.....	.5	179	51	72	90	1,040	692	1,280	167	12	1.0	.6
25.....	10	185	51	72	126	5,800	544	1,330	161	12	.9	.5
26.....	912	204	48	74	112	3,480	755	1,220	144	10	.9	.5
27.....	800	185	48	85	108	1,760	1,080	1,220	122	9.5	.9	.5
28.....	275	156	51	92	104	890	1,080	1,050	104	8	.9	.5
29.....	197	170	65	265	92	672	1,220	1,000	92	7.5	.8	.6
30.....	226	134	71	173	-----	572	1,560	868	82	6.5	.8	.6
31.....	440	-----	84	124	-----	482	-----	734	-----	5.5	.8	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	912	0.5	92.8	5,710
November.....	1,500	134	345	20,500
December.....	142	48	79.8	4,910
January.....	265	60	118	7,260
February.....	207	90	124	7,130
March.....	5,800	89	711	43,700
April.....	1,560	306	590	35,100
May.....	1,750	734	1,230	75,600
June.....	800	82	355	21,100
July.....	74	5.5	29.3	1,800
August.....	4.7	.8	1.77	109
September.....	.8	.5	.62	36.9
The year.....	5,800	.5	307	223,000

LAKE ELEANOR NEAR HETCH HETCHY, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 3, T. 1 N., R. 19 E., at dam at Lake Eleanor, $5\frac{1}{2}$ miles northwest of Hetch Hetchy. Crest of dam is at gage height 61.00 feet. Zero of gage is 4,600 feet above mean sea level.

RECORDS AVAILABLE.—October, 1919, to September, 1928.

EXTREMES.—Maximum stage during year, 62.0 feet March 25; minimum, 37.4 feet October 26,

1919-1928: Maximum stage, that of March 25, 1928; no storage November 28 to December 21, 1921.

REMARKS.—Storage is drawn through gates near gage and flows down natural channel of Eleanor Creek. There was 14,000 acre-feet of storage in lake September 30, 1927, and 18,300 acre-feet September 30, 1928.

Daily gage height, in feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45.6	41.1	57.1	56.4	57.9	57.6	58.1	60.9	60.9	60.9	54.5	51.9
2	45.3	41.5	57.3	56.5	58.0	57.6	58.1	60.5	60.9	60.8	54.2	51.9
3	45.0	42.0	57.4	56.6	58.0	57.7	58.1	60.5	60.5	60.8	53.9	51.9
4	44.7	42.3	57.5	56.7	58.1	57.8	58.1	60.5	59.9	60.7	53.7	51.9
5	44.3	42.4	57.6	56.8	58.1	57.8	58.2	60.9	59.4	60.6	53.2	51.9
6	44.0	42.7	57.6	56.9	58.1	57.8	58.4	60.8	59.6	60.5	53.0	51.8
7	43.6	43.1	57.6	57.0	58.1	57.8	58.6	60.8	60.0	60.4	52.8	51.8
8	43.5	43.4	57.6	57.1	58.0	58.0	59.1	60.8	60.3	60.2	52.7	51.7
9	43.2	43.6	57.6	57.2	58.0	58.0	59.4	60.7	60.6	60.0	52.7	51.6
10	42.7	46.7	57.6	57.4	58.0	58.1	59.8	60.8	60.7	59.9	52.7	51.6
11	42.4	48.2	57.5	57.5	57.9	58.2	60.2	60.9	60.8	59.7	52.6	51.5
12	42.1	48.7	57.5	57.6	57.8	58.3	60.6	60.8	61.0	59.6	52.6	51.5
13	41.8	49.8	57.5	57.7	57.8	58.4	60.9	61.0	60.8	59.4	52.5	51.5
14	41.5	50.6	57.5	57.7	57.8	58.4	60.7	60.8	60.8	59.1	52.4	51.5
15	41.2	51.3	57.5	57.8	57.8	58.5	60.9	60.9	60.8	58.9	52.4	51.5
16	40.8	51.9	57.4	57.8	57.7	58.4	60.9	60.9	60.9	58.6	52.4	51.5
17	40.5	52.5	57.5	57.8	57.7	58.5	60.7	60.7	60.9	58.4	52.3	51.4
18	40.1	53.0	57.5	57.7	57.7	58.6	60.5	61.2	60.9	58.2	52.3	51.4
19	39.8	53.4	57.5	57.7	57.7	58.7	60.6	60.9	61.0	58.0	52.2	51.4
20	39.4	53.7	57.4	57.6	57.7	58.7	60.8	61.2	61.0	57.8	52.2	51.4
21	39.1	54.4	57.4	57.6	57.6	58.8	60.8	61.2	61.0	57.5	52.2	51.3
22	38.7	54.8	57.3	57.5	57.7	58.8	60.6	61.0	61.1	57.2	52.2	51.3
23	38.3	55.1	57.2	57.5	57.6	59.3	60.7	60.7	61.1	57.0	52.1	51.3
24	37.9	55.4	57.1	57.5	57.6	60.5	60.8	60.9	61.1	56.6	52.1	51.3
25	37.6	55.6	56.9	57.5	57.7	61.7	60.5	61.0	61.1	56.4	52.1	51.3
26	37.4	56.0	56.8	57.5	57.7	61.1	60.6	60.9	61.0	56.2	52.1	51.2
27	38.3	56.2	56.7	57.5	57.7	60.5	60.8	60.9	61.0	55.9	52.0	51.2
28	39.0	56.4	56.6	57.4	57.7	59.3	60.9	60.8	61.0	55.6	52.0	51.1
29	39.4	56.7	56.6	57.6	57.6	58.6	60.7	60.9	61.0	55.3	52.0	51.1
30	39.7	56.9	56.6	58.0	-----	58.4	60.9	61.0	61.0	55.1	52.0	51.1
31	40.5	-----	56.5	58.0	-----	58.2	-----	61.0	-----	54.8	52.0	-----

ELEANOR CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 3, T. 1 N., R. 19 E., in Yosemite National Park, one-third mile below Lake Eleanor Dam and $5\frac{1}{2}$ miles northwest of Hetch Hetchy.

DRAINAGE AREA.—79 square miles (above dam site in sec. 3, T. 1 N., R. 19 E.).

RECORDS AVAILABLE.—November, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 6,400 second-feet March 25 (gage height, 11.0 feet); minimum, 0.1 second-foot November 3 (gage height, 1.03 feet).

1909-1928: Maximum discharge, that of March 25, 1928; no flow September 8-14, 1910.

REMARKS.—Records good. Discharge estimated May 16, 17, 19, and 22-24. No diversions. Flow regulated by operation of gates in Lake Eleanor.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	152	0.3	8	107	170	116	442	1,140	268	64	142	3.8
2.....	154	.2	23	74	174	113	438	737	281	80	142	3.8
3.....	154	.2	25	57	205	141	364	714	570	80	142	3.8
4.....	152	.2	25	57	239	160	274	340	602	82	142	3.8
5.....	154	.2	46	57	226	168	310	631	216	94	142	3.8
6.....	154	.2	59	57	214	166	367	748	11	101	142	3.8
7.....	156	.2	59	57	200	162	297	702	10	101	84	3.8
8.....	152	.2	59	57	192	181	268	682	11	101	.5	3.8
9.....	149	1.3	74	58	181	198	295	546	11	104	.4	5
10.....	147	3.3	84	59	166	226	235	637	12	107	18	7
11.....	145	1.0	83	66	156	247	295	741	42	118	7.5	7
12.....	143	2.3	83	84	150	276	283	712	174	120	8	7
13.....	145	6.5	82	96	141	309	490	675	202	128	8.5	7
14.....	143	3.1	82	105	138	339	548	688	118	141	9	7
15.....	141	1.9	82	109	136	333	268	612	62	139	9	7
16.....	145	1.3	48	106	117	318	539	600	59	138	9	7.5
17.....	147	1.2	40	99	117	321	541	600	59	136	9	7.5
18.....	147	1.2	64	93	117	342	459	479	63	134	8.5	7.5
19.....	145	1.0	84	88	116	378	125	275	64	133	6	7.5
20.....	145	1.2	92	84	117	409	206	265	69	131	3.8	7.5
21.....	145	3.1	92	79	119	444	457	564	70	130	3.8	7.5
22.....	145	1.9	91	77	125	481	405	425	70	128	3.8	7.5
23.....	143	1.5	96	80	123	675	402	425	71	131	3.8	7.5
24.....	143	1.5	109	78	119	2,390	496	150	71	138	3.8	8
25.....	145	2.3	107	75	125	5,230	502	430	71	136	3.8	8
26.....	80	2.7	107	73	126	2,840	343	481	58	136	3.8	8
27.....	2.1	2.9	107	73	126	1,950	506	407	34	136	3.8	7.5
28.....	.2	2.1	107	73	123	1,110	642	367	34	136	3.8	7
29.....	.2	2.1	107	132	120	770	726	248	67	139	3.8	6.5
30.....	.2	2.3	107	181	-----	635	748	301	57	144	3.8	6.5
31.....	1.3	-----	107	172	-----	506	-----	307	-----	144	3.8	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	156	0.2	122	7,500
November.....	6.5	.2	1.65	98.2
December.....	109	8	75.5	4,640
January.....	181	57	85.9	5,280
February.....	239	116	151	8,690
March.....	5,230	113	708	43,500
April.....	748	125	409	24,300
May.....	1,140	150	537	33,000
June.....	602	10	117	6,960
July.....	144	64	120	7,380
August.....	142	.4	34.7	2,130
September.....	8	3.8	6.30	375
The year.....	5,230	.2	198	144,000

SOUTH FORK OF TUOLUMNE RIVER AT ITALIAN FLAT, NEAR SEQUOIA, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 29, T. 1 S., R. 19 E., at Italian Flat, $1\frac{1}{2}$ miles northwest of Sequoia.

RECORDS AVAILABLE.—October, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 695 second-feet March 27 (gage height, 4.45 feet); minimum, 0.5 second-foot August 20 (gage height, 0.10 foot).

1924-1928: Maximum discharge, that of March 27, 1928; minimum, that of August 20, 1928.

REMARKS.—Records good. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	36	31	26	44	41	201	234	51	14	8	3.6
2	7	26	31	28	44	42	194	200	48	14	8	3.6
3	7	32	32	30	122	59	178	178	46	14	8	3.6
4	7	26	30	30	162	54	173	189	43	13	8	3.6
5	7	24	26	28	83	51	180	194	39	12	7.5	3.0
6	7	27	26	27	66	48	191	193	37	12	7.5	3.0
7	7	26	24	27	61	48	200	191	34	12	7.5	3.0
8	7	22	24	28	57	55	200	180	33	12	7	3.0
9	7	43	26	30	52	52	201	157	32	11	6.5	3.6
10	6.5	196	22	32	48	55	186	175	33	11	6	3.6
11	6.5	64	27	31	47	57	180	181	39	12	6	3.6
12	6.5	47	26	31	46	59	200	169	43	11	6	4.1
13	6	101	28	33	44	62	178	156	37	11	5	6
14	6	66	27	32	43	64	170	143	33	11	4.6	4.6
15	6.5	57	26	32	41	61	172	132	31	12	5	3.6
16	6.5	57	26	23	41	62	172	117	30	12	5	3.0
17	6.5	51	25	26	39	66	172	109	27	12	4.6	3.0
18	6.5	50	24	27	39	71	153	105	27	12	3.6	3.0
19	7	46	25	32	39	76	148	111	26	12	3.0	3.0
20	7	42	26	32	39	80	140	117	26	12	2.2	3.0
21	7	52	25	32	38	86	133	105	25	12	3.6	2.8
22	7.5	41	24	31	38	89	149	95	23	11	3.6	2.8
23	7.5	38	23	31	39	138	161	90	21	11	4.1	2.8
24	7.5	37	25	27	38	327	172	89	20	10	4.1	2.8
25	11	37	24	26	39	595	146	82	19	10	4.1	2.8
26	51	37	23	27	39	478	169	76	18	10	4.1	3.0
27	83	37	22	27	41	496	193	70	17	10	4.1	3.0
28	38	34	24	28	41	327	205	66	16	9	4.6	3.0
29	25	33	36	54	41	268	223	62	15	9	4.1	3.0
30	24	32	31	65	-----	242	245	59	14	8.5	4.1	3.0
31	54	-----	26	47	-----	220	-----	55	-----	8	4.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	83	6	14.5	892
November	196	22	47.2	2,810
December	36	22	26.3	1,620
January	65	23	31.6	1,940
February	162	38	52.1	3,000
March	595	41	143	8,790
April	245	133	180	10,700
May	234	55	132	8,120
June	51	14	30.1	1,790
July	14	8	11.3	695
August	8	2.2	5.28	325
September	6	2.8	3.32	198
The year	595	2.2	56.2	40,900

SOUTH FORK OF TUOLUMNE RIVER NEAR OAKLAND RECREATION CAMP, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 28, T. 1 S., R. 18 E., 20 feet below highway bridge on Big Oak Flat Road and half a mile southwest of Oakland Recreation Camp.

RECORDS AVAILABLE.—March, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,300 second-feet March 25 (gage height, 6.50 feet); minimum, 3.6 second-feet August 21 (gage height, 0.56 foot).

1923-1928: Maximum discharge, about 1,500 second-feet, revised, April 16, 1923 (gage height, 7.03 feet); minimum, 1.9 second-feet September 6-10, 1924 (gage height, 0.36 foot).

REMARKS.—Records excellent except those for estimated periods, November 10-25 and December 6-11, which are fair. No diversion.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	38	36	37	48	42	236	234	56	27	11	6
2	10	28	35	37	46	43	254	199	53	26	12	6
3	10	27	34	38	165	62	234	179	50	26	12	5.5
4	10	22	32	39	292	62	214	188	47	26	12	5.5
5	10	21	32	37	135	55	212	194	46	24	12	5.5
6	10	22	32	35	94	51	224	192	43	24	11	5.5
7	10	22	32	35	76	52	230	194	42	23	11	5
8	10	20	31	35	67	58	230	188	40	22	10	5
9	10	27	31	35	63	56	226	161	39	22	10	5
10	10	300	30	37	56	58	210	174	39	21	9	5.5
11	10	65	30	37	55	58	205	183	45	21	8.5	6
12	10	50	30	36	54	59	218	174	47	20	8	6
13	9	100	32	38	51	62	203	161	39	19	8	6.5
14	9	70	37	38	50	64	192	145	37	19	7.5	8.5
15	9	60	33	37	47	61	192	139	36	18	7	6
16	9	60	32	28	46	62	190	125	35	18	8	5.5
17	9	55	28	28	46	66	188	120	34	17	7.5	5.5
18	9	50	28	30	46	72	166	112	34	17	7	5.5
19	9	50	30	34	45	77	161	114	34	17	6	5.5
20	9	45	31	35	45	83	155	131	34	16	6	5.5
21	8.5	55	29	32	45	89	142	114	33	16	6	5.5
22	9	45	28	32	44	90	158	105	32	16	6	5.5
23	9	40	27	32	45	162	169	96	31	15	6	5
24	9	40	28	32	42	400	185	92	30	15	7	5
25	11	40	28	30	45	960	155	87	30	14	7	5
26	50	40	28	30	44	680	172	83	28	14	7	5
27	101	39	28	31	43	768	192	78	28	14	7	5.5
28	39	39	30	32	42	427	203	72	28	13	7	6
29	26	38	56	50	42	328	214	67	28	13	7	6
30	26	37	46	81	-----	288	238	62	27	12	7	6
31	59	-----	38	52	-----	264	-----	59	-----	12	6.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	101	8.5	17.4	1,070
November	300	20	51.5	3,000
December	56	27	32.3	1,990
January	81	28	36.8	2,260
February	292	42	66.2	3,810
March	960	42	183	11,300
April	254	142	199	11,800
May	234	59	136	8,360
June	56	27	37.5	2,230
July	27	12	18.6	1,140
August	12	6	8.29	510
September	8.5	5	5.65	336
The year	960	5	65.9	47,900

MIDDLE FORK OF TUOLUMNE RIVER NEAR MATHER, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 15, T. 1 S., R. 19 E., at highway bridge 3 miles south of Mather.

RECORDS AVAILABLE.—October, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 810 second-feet March 25 (gage height, 4.00 feet); minimum, 0.4 second-foot September 25 (gage height, 0.07 foot).

1924-1928: Maximum discharge, that of March 25, 1928; minimum, 0.1 second-foot August 17, 1926.

REMARKS.—Records good. Discharge estimated because of ice December 7-13, 17-28, January 5, 14-28, and February 15-23. No important diversion for irrigation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	20	18	18	20	21	140	320	81	18	1.3	0.5
2	1.2	15	18	17	20	22	125	298	75	17	1.3	.5
3	1.2	17	18	18	41	29	123	235	70	16	1.3	.5
4	1.2	16	16	18	36	26	127	262	62	15	1.2	.4
5	1.1	15	17	18	27	26	125	288	57	15	1.2	.4
6	1.1	20	15	17	26	26	131	292	54	15	1.2	.4
7	1.1	20	15	17	26	25	135	300	50	14	1.2	.4
8	1.1	15	15	16	25	27	138	288	45	13	1.2	.4
9	1.1	19	15	17	24	28	145	238	42	12	1.1	.4
10	1.1	89	15	18	25	30	142	295	42	11	1.0	.4
11	1.1	35	15	18	23	32	145	312	62	10	1.0	.5
12	1.1	26	15	18	24	36	168	295	73	10	.9	.5
13	1.1	41	15	18	23	40	160	270	57	8.5	.9	.5
14	1.1	27	19	18	22	41	152	242	46	8	.9	.5
15	1.1	27	18	18	20	40	160	230	41	7	.8	.6
16	1.0	27	18	15	21	41	162	198	36	7	.8	.5
17	1.0	26	15	15	21	45	162	180	34	6	.8	.4
18	1.0	26	15	15	21	50	148	180	32	5.5	.7	.4
19	1.0	25	15	18	21	54	142	198	32	5	.7	.4
20	1.0	24	15	18	21	59	135	198	29	4.8	.7	.4
21	1.0	25	15	18	21	66	133	185	28	4.4	.6	.4
22	1.0	19	15	18	21	70	155	168	26	4.0	.6	.4
23	1.0	21	15	15	21	89	170	165	25	3.8	.6	.4
24	1.0	24	15	15	21	190	182	160	24	3.2	.6	.4
25	1.5	20	15	15	21	622	155	152	22	3.0	.6	.4
26	27	21	15	15	22	460	185	140	21	2.8	.6	.4
27	51	21	15	15	22	350	215	129	20	2.5	.6	.5
28	24	20	18	15	22	210	235	119	20	2.0	.6	.5
29	15	20	22	36	21	175	268	113	20	1.8	.6	.5
30	15	19	18	29	-----	162	322	99	18	1.4	.5	.5
31	34	-----	18	21	-----	152	-----	91	-----	1.3	.5	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	51					1.0			6.24		384	
November	89					15			24.7		1,470	
December	22					15			16.2		996	
January	36					15			18.0		1,110	
February	41					20			23.4		1,350	
March	622					21			105		6,460	
April	322					123			163		9,700	
May	320					91			213		13,100	
June	81					18			41.5		2,470	
July	18					1.3			8.00		492	
August	1.3					.5			.86		52.9	
September	.5					.4			.44		26.2	
The year	622					.4			51.8		37,600	

MIDDLE FORK OF TUOLUMNE RIVER NEAR BUCK MEADOWS, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 28, T. 1 S., R. 18 E., half a mile above junction with South Fork of Tuolumne River, and 4 miles east of Buck Meadows.

RECORDS AVAILABLE.—November, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 960 second-feet March 27 (gage height, 6.80 feet); minimum, 0.3 second-foot September 7 (gage height, 0.75 foot).

1916-1928: Maximum discharge, 1,330 second-feet May 28, 1918 (gage height, 8.15 feet); no flow September 4-14, 1924.

REMARKS.—Records good. Discharge interpolated November 21-25 and estimated March 28-30. No large diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	25	16	20	30	28	186	360	84	19	1.4	0.6
2	1.6	14	17	21	28	28	233	318	77	19	1.5	.4
3	1.8	13	16	21	120	36	170	272	70	18	1.5	.3
4	1.7	16	16	21	108	37	175	288	62	17	1.5	.3
5	1.7	14	16	19	71	33	168	312	56	16	1.5	.3
6	1.7	16	15	19	52	33	173	322	52	15	1.5	.3
7	1.8	20	14	19	45	32	172	328	46	14	1.4	.3
8	1.8	16	13	21	40	39	170	347	42	14	1.2	.3
9	1.8	24	15	21	37	36	175	272	39	12	1.2	.3
10	1.8	120	15	21	33	39	173	316	88	12	1.1	.3
11	1.8	47	14	21	32	41	172	338	54	11	1.0	.4
12	1.8	30	16	21	31	43	196	338	79	9.5	.9	.4
13	1.8	72	17	21	30	48	188	308	63	8.5	.9	.4
14	1.8	40	19	22	30	52	178	278	49	8	.8	.4
15	1.7	32	17	22	26	49	184	270	41	7.5	.8	.4
16	1.8	30	17	16	28	49	188	240	37	7	.7	.5
17	1.9	28	16	16	28	52	192	224	35	6.5	.7	.7
18	2.0	26	16	17	27	57	170	200	34	6.5	.7	.6
19	1.9	25	16	20	28	60	165	196	34	6	.6	.4
20	2.0	25	16	20	28	65	166	238	32	5	.6	.4
21	2.0	25	16	20	28	70	148	204	31	4.7	.6	.4
22	2.0	24	14	20	28	75	170	188	29	4.7	.6	.4
23	2.0	24	15	19	28	101	192	186	27	4.4	.7	.4
24	2.1	23	14	18	26	218	197	170	26	4.1	.7	.4
25	3.1	22	14	18	30	662	176	173	25	3.9	.6	.4
26	15	21	14	18	28	564	206	154	23	3.8	.7	.4
27	66	20	14	18	28	564	238	141	22	3.2	.7	.4
28	28	19	15	18	28	342	272	124	21	2.9	.7	.4
29	16	19	44	26	28	262	288	114	21	2.6	.6	.4
30	13	17	26	40	-----	230	338	100	20	2.1	.6	.5
31	36	-----	21	33	-----	194	-----	92	-----	1.6	.6	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	66					1.6			7.13		438	
November	120					13			28.2		1,680	
December	44					13			16.9		1,040	
January	40					16			20.9		1,290	
February	168					26			40.1		2,310	
March	662					28			134		8,240	
April	338					148			194		11,500	
May	360					92			239		14,700	
June	84					20			42.3		2,520	
July	19					1.6			8.69		534	
August	1.5					.6			.92		56.6	
September	.6					.3			.40		23.8	
The year	662					.3			61.0		44,300	

WOODS CREEK NEAR JACKSONVILLE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 12, T. 1 S., R. 14 E., $1\frac{1}{2}$ miles above mouth and $1\frac{1}{2}$ miles northwest of Jacksonville.

RECORDS AVAILABLE.—October, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,600 second-feet March 25 (gage height, 7.00 feet); minimum, 0.5 second-foot July 25 to September 30 (gage height, -0.20 foot).

1925-1928: Maximum discharge, that of March 25, 1928; minimum, 0.2 second-foot July 16-26, 1926.

REMARKS.—Records good. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.5	39	21	71	37	27	225	24	14	4.5	0.5	0.5
2.....	2.5	26	20	51	39	27	769	23	11	4.5	.5	.5
3.....	2.5	22	20	42	781	57	540	22	11	4.5	.5	.5
4.....	4.5	19	19	37	1,440	54	270	21	11	4.5	.5	.5
5.....	4.5	18	18	33	245	50	220	21	11	2.5	.5	.5
6.....	4.5	16	20	34	128	40	161	20	9	2.5	.5	.5
7.....	6.5	14	21	33	94	39	161	20	9	2.5	.5	.5
8.....	6.5	16	20	29	74	39	142	22	9	2.5	.5	.5
9.....	6.5	20	24	29	65	37	126	24	9	2.5	.5	.5
10.....	6.5	92	42	29	56	36	106	24	9	2.5	.5	.5
11.....	6.5	39	40	27	52	32	99	24	9	2.5	.5	.5
12.....	6.5	32	31	26	50	29	84	21	9	2.5	.5	.5
13.....	4.5	114	30	26	44	29	74	27	6.5	2.5	.5	.5
14.....	4.5	99	110	27	44	28	66	26	6.5	2.5	.5	.5
15.....	4.5	43	59	24	40	32	63	24	6.5	2.5	.5	.5
16.....	4.5	28	40	23	34	29	61	23	6.5	2.5	.5	.5
17.....	4.5	25	31	22	32	26	57	22	6.5	1.5	.5	.5
18.....	2.5	22	25	21	32	28	56	20	6.5	1.5	.5	.5
19.....	2.5	27	24	43	30	28	54	20	6.5	1.5	.5	.5
20.....	2.5	27	22	34	29	29	52	20	4.5	1.5	.5	.5
21.....	2.5	55	21	22	30	31	50	19	4.5	1.5	.5	1.5
22.....	2.5	35	20	23	30	31	48	18	4.5	1.5	.5	1.5
23.....	4.5	29	20	55	32	245	45	18	4.5	1.5	.5	1.5
24.....	4.5	32	22	42	33	1,390	40	18	4.5	1.5	.5	1.5
25.....	6.5	35	22	32	34	2,750	34	18	4.5	.5	.5	1.5
26.....	9	32	21	29	33	839	30	16	4.5	.5	.5	1.5
27.....	43	28	22	24	30	1,810	28	16	4.5	.5	.5	1.5
28.....	20	26	28	22	29	400	27	16	4.5	.5	.5	2.5
29.....	14	22	867	45	28	228	26	14	4.5	.5	.5	2.5
30.....	14	21	190	55	-----	168	25	14	4.5	.5	.5	2.5
31.....	113	-----	94	40	-----	142	-----	14	-----	.5	.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	113	2.5	10.4	640
November.....	114	14	35.1	2,090
December.....	867	18	63.4	3,900
January.....	71	21	33.9	2,080
February.....	1,440	28	125	7,190
March.....	2,750	26	282	17,300
April.....	769	25	125	7,440
May.....	27	14	20.3	1,250
June.....	14	4.5	7.20	428
July.....	4.5	.5	2.05	126
August.....	.5	.5	.50	30.7
September.....	2.5	.5	.93	55.3
The year.....	2,750	.5	58.6	42,500

MODESTO CANAL NEAR LA GRANGE, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 17, T. 3 S., R. 14 E., below waste gates and $1\frac{1}{2}$ miles northeast of La Grange.

RECORDS AVAILABLE.—April, 1903, to September, 1928.

EXTREMES.—1903-1928: Maximum discharge, 1,750 second-feet May 7, 1928.

REMARKS.—Records good. Canal diverts from right bank of Tuolumne River at La Grange Dam. Water is used for irrigation in the Modesto Irrigation district. Gage-height record furnished by Modesto Irrigation District.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	456	0	222	613	0	1,220	1,060	400	664	356
2	456	0	350	758	0	1,390	1,060	500	664	336
3	456	0	356	758	0	1,450	1,060	518	620	330
4	456	0	356	758	0	1,510	1,060	500	620	330
5	456	0	350	758	0	1,660	1,110	500	598	330
6	456	0	350	358	0	1,570	1,160	416	620	330
7	456	0	350	52	0	1,480	1,250	363	664	330
8	456	0	350	297	0	1,510	1,280	363	664	330
9	448	0	356	758	170	1,330	1,250	363	664	330
10	456	0	356	758	363	1,300	1,140	356	642	330
11	456	0	356	758	356	1,390	1,060	356	620	330
12	303	0	356	686	356	1,420	930	356	620	330
13	204	0	356	641	356	1,390	930	363	620	330
14	194	0	133	329	356	1,390	904	363	620	330
15	346	0	0	188	356	1,360	664	356	620	330
16	518	0	0	188	356	966	599	363	578	330
17	162	0	0	188	356	806	370	563	558	330
18	0	208	0	300	356	782	370	363	578	330
19	0	356	32	356	356	710	514	363	558	330
20	0	356	52	616	356	710	598	392	538	330
21	0	356	52	758	356	854	620	464	538	330
22	0	121	53	639	356	904	620	482	538	330
23	0	0	53	236	356	904	598	500	538	330
24	0	0	53	101	356	904	598	558	538	330
25	0	0	52	101	356	904	474	558	538	330
26	0	0	261	101	356	1,010	400	558	518	330
27	0	0	350	74	356	1,060	408	558	538	330
28	0	0	293	26	632	1,060	400	558	500	330
29	0	0	281	9	930	1,060	400	620	350	330
30	0	0	0	0	1,110	1,060	400	642	356	330
31	0	0	0	0	0	1,060	0	664	356	0
Month	Maximum			Minimum			Mean	Run-off in acre-feet		
October	518			0			217	13,300		
November	356			0			46.6	2,770		
December	356			0			211	12,100		
January	758			0			392	24,100		
February	1,110			0			309	18,400		
March	1,660			710			1,170	71,900		
April	1,280			370			777	46,200		
May	664			356			454	27,900		
June	664			350			569	35,000		
July	356			330			331	19,700		
August										
September										
The year	1,660			0			374	271,000		

NOTE.—No flow in December and January.

TURLOCK CANAL NEAR LA GRANGE, CALIF.

LOCATION.—Water-stage recorder near north line of NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 21, T. 3 S., R. 14 E., 2,400 feet below intake and $1\frac{1}{4}$ miles northeast of La Grange.

RECORDS AVAILABLE.—July, 1899, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,960 second-feet May 16 (gage height, 9.00 feet); practically no flow for several periods.

1907-1928: Maximum discharge, 2,040 second-feet July 5, 1927 (gage height, 9.30 feet); no flow during periods each year.

REMARKS.—Records good. Canal diverts from left bank of Tule River at La Grange Dam. Water is used for irrigation in the Turlock irrigation district and to supply town of La Grange. Gage-height record furnished by Turlock Irrigation District through R. V. Meikle, chief engineer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	452		524		298	218	1,020	1,510	1,570	657	796	943
2.	456		673		76	119	1,120	1,650	1,620	840	816	902
3.	521		672		76	146	730	1,740	1,680	864	838	896
4.	405		652		197	178	1,010	1,820	1,680	912	898	816
5.	418		670		190	134	1,300	1,880	1,680	848	880	714
6.		556		677	70	260	1,300	1,790	1,740	996	848	763
7.		509		678	104	344	1,320	1,820	1,750	1,040	809	745
8.		481		679	226	554	1,300	1,890	1,750	1,020	836	746
9.		464		689	126	594	1,320	1,890	1,820	1,050	845	710
10.		583		674	49	581	1,320	1,900	1,880	1,060	924	740
11.		648		654	44	620	1,190	1,900	1,880	1,060	1,090	795
12.		911		676	49	592	1,120	1,380	1,880	1,060	870	750
13.		1,040		454	54	602	1,120	1,900	1,880	1,040	874	730
14.		928			49	666	1,120	1,900	1,750	1,060	906	748
15.		529			54	707	1,120	1,900	1,710	1,010	893	762
16.					49	714	1,120	1,900	1,140	1,030	934	748
17.					49	694	1,120	1,900	750	1,060	962	716
18.					49	794	1,120	1,900	740	1,040	973	771
19.					48	842	1,120	1,900	1,140	1,040	933	805
20.					49	914	1,120	1,880	1,280	968	992	793
21.					50	908	1,120	1,880	980	958	1,020	790
22.					50	948	1,120	1,570	1,070	887	1,060	786
23.			158		51	951	1,120	1,400	1,070	868	1,070	735
24.			478	248	52	975	1,090	1,480	1,050	870	1,060	802
25.			410	406	52	1,070	1,090	1,600	950	864	1,070	826
26.			410	362	52	900	1,170	1,570	654	851	957	826
27.			384	132	20	900	1,240	1,400	674	831	1,060	806
28.			450		0	948	1,300	1,400	718	847	1,100	806
29.			446		54	239	1,350	1,400	674	755	1,020	807
30.			455		250	79	1,400	1,510	674	807	1,020	758
31.				266		900		1,570		796	1,010	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,040		287	17,600
November.....	478		106	6,310
December.....	689		307	18,900
January.....	298		33.8	2,080
February.....	298		78.9	4,540
March.....	1,070	79	616	37,900
April.....	1,400	730	1,170	69,600
May.....	1,900	1,380	1,710	105,000
June.....	1,880	654	1,320	79,100
July.....	1,060	657	936	57,600
August.....	1,100	796	947	58,200
September.....	943	710	784	46,700
The year.....	1,900		694	504,000

NOTE.—A small flow passes station to supply town of La Grange on days for which no discharge is shown.

STANISLAUS RIVER BASIN

MIDDLE FORK OF STANISLAUS RIVER AT SAND BAR FLAT, NEAR AVERY, CALIF.

LOCATION.—Water-stage recorder in sec. 19, T. 4 N., R. 17 E., half a mile upstream from Pacific Gas & Electric Co.'s diversion dam at Sand Bar Flat, 11 miles southeast of Avery. Prior to March 18, 1928, record was obtained from staff gage at diversion dam.

DRAINAGE AREA.—329 square miles, above diversion dam.

RECORDS AVAILABLE.—September, 1905, to September, 1928.

EXTREMES.—Maximum discharge during year, 8,430 second-feet March 25; minimum, 61 second-feet September 23.

1905-1928: Maximum mean daily discharge, 9,760 second-feet, March 19, 1907; minimum, 30 second-feet, August 24, 1924.

REMARKS.—Regulation and diversion into Middle Fork from South Fork above the station. Record of daily discharge furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	130	170	155	157	171	198	1,220	2,410	1,320	320	291	233
2.....	137	118	152	164	175	191	1,110	2,080	1,320	304	295	114
3.....	136	144	155	171	232	265	1,000	1,890	1,470	300	298	164
4.....	202	152	152	174	328	284	960	1,960	1,300	300	280	144
5.....	204	134	146	168	278	283	960	2,080	1,330	298	300	100
6.....	207	129	149	161	271	198	1,060	2,240	1,320	291	298	92
7.....	180	140	144	177	235	272	1,160	2,440	1,240	280	298	91
8.....	136	138	132	158	186	305	1,160	2,570	1,060	278	290	91
9.....	135	141	138	174	243	315	1,200	2,330	880	285	298	87
10.....	134	464	171	188	183	316	1,210	2,510	829	298	298	87
11.....	133	279	147	171	179	345	1,200	2,560	753	300	292	87
12.....	132	179	144	165	178	351	1,370	2,510	728	295	294	89
13.....	131	297	140	178	168	401	1,260	2,440	647	289	290	89
14.....	129	256	164	200	178	411	1,220	2,380	643	300	298	87
15.....	115	219	156	166	171	395	1,230	2,270	643	313	290	87
16.....	128	274	172	140	173	384	1,260	1,920	640	329	296	84
17.....	155	276	152	130	170	426	1,200	1,880	633	293	290	84
18.....	157	284	135	199	175	421	1,070	1,680	654	291	291	84
19.....	202	280	145	174	178	426	1,020	1,600	577	313	295	84
20.....	261	280	137	129	172	477	971	1,990	558	304	298	83
21.....	256	274	136	162	135	492	958	2,060	558	306	290	82
22.....	210	218	132	130	175	549	1,060	1,970	549	320	295	82
23.....	133	161	126	159	163	682	1,220	1,880	540	328	289	79
24.....	128	167	149	159	164	2,120	1,260	2,060	546	318	293	79
25.....	127	158	160	122	170	* 6,740	1,050	2,410	546	315	278	79
26.....	151	194	137	142	181	* 4,670	1,240	2,200	483	313	219	79
27.....	200	201	139	136	184	* 3,530	1,450	2,160	423	304	293	79
28.....	222	193	146	155	188	2,140	1,680	1,840	396	295	291	81
29.....	188	360	159	151	178	1,680	1,890	1,850	* 348	313	* 289	81
30.....	152	192	139	265	-----	1,520	2,330	1,620	* 346	298	289	79
31.....	167	-----	132	160	-----	1,390	-----	1,380	-----	289	285	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	261	115	164	10,100
November.....	464	118	216	12,900
December.....	172	126	146	8,980
January.....	265	122	164	10,100
February.....	328	135	194	11,200
March.....	6,740	191	1,040	64,000
April.....	2,330	958	1,230	73,200
May.....	2,570	1,330	2,100	120,000
June.....	1,470	346	776	46,200
July.....	329	278	302	18,600
August.....	306	219	292	18,000
September.....	233	79	95.4	5,680
The year.....	6,470	79	562	468,600

* Estimated.

STANISLAUS RIVER NEAR KNIGHTS FERRY, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 1, T. 1 S., R. 12 E., 300 feet above old Tulloch Dam, 2 miles above Goodwin Dam, and 6 miles above Knights Ferry.

RECORDS AVAILABLE.—December, 1915, to September, 1928. Also at Knights Ferry, May, 1903, to April, 1916.

EXTREMES.—Maximum discharge during year, about 40,000 second-feet March 25 (gage height, 17.0 feet, from floodmarks); minimum, 12 second-feet December 25.

1915-1928: Maximum discharge, that of March 25, 1928; minimum, 1 second-foot parts of August and November, 1926.

REMARKS.—Records good except those for November 7-13, 18-21, and February 18 to March 27, which were estimated. Numerous diversions and several storage reservoirs above dam, largest storage being Melones Reservoir.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	737	38	241	104	180	180	3,880	5,120	1,750	1,100	964	379
2	726	560	52	99	220	275	4,970	5,100	1,920	1,100	976	372
3	726	752	52	94	860	500	4,740	4,880	1,950	1,090	976	501
4	737	870	52	109	1,220	900	3,940	3,000	1,920	1,090	964	715
5	726	1,180	124	145	299	850	3,460	3,640	1,900	1,090	976	726
6	715	1,180	69	145	227	800	3,280	5,420	1,890	1,090	940	715
7	726	800	28	120	174	800	3,080	4,020	1,850	1,080	847	726
8	726	600	24	114	156	800	2,980	5,040	1,790	1,080	858	737
9	693	400	24	140	151	800	3,180	4,860	1,600	1,080	858	737
10	693	1,200	31	125	145	950	3,280	4,440	1,390	1,060	858	737
11	704	700	45	145	145	1,200	3,300	4,700	1,370	1,050	880	737
12	693	400	45	145	135	1,200	3,310	5,080	1,270	964	880	671
13	693	100	31	156	140	1,200	3,100	5,450	1,270	928	825	590
14	610	45	140	145	140	1,200	2,580	4,920	1,270	916	726	554
15	323	87	52	114	135	1,200	2,820	3,460	1,220	904	620	518
16	323	60	42	685	140	1,150	3,020	3,040	1,270	904	526	445
17	323	109	24	710	145	1,000	3,100	2,850	1,170	904	475	393
18	464	102	17	240	140	800	2,940	2,700	1,160	916	408	344
19	671	96	17	350	120	850	2,790	2,870	1,140	904	365	284
20	337	90	17	210	1,200	1,000	2,560	2,980	1,160	916	365	284
21	258	83	17	280	2,000	1,300	1,400	3,080	1,140	916	379	277
22	42	77	17	130	400	1,500	1,320	3,460	1,160	904	358	277
23	31	91	17	255	800	2,500	1,400	3,320	1,160	880	365	304
24	31	52	14	545	1,500	8,500	1,500	3,140	1,140	858	365	304
25	34	52	12	365	700	27,000	2,080	3,280	1,140	916	372	304
26	38	123	14	340	120	19,500	2,120	3,880	1,140	940	365	297
27	93	69	60	330	450	15,000	2,920	4,220	1,130	952	372	284
28	193	204	115	355	400	8,460	3,860	2,640	1,130	952	365	271
29	167	106	1,280	190	300	6,160	4,760	2,400	1,130	940	365	264
30	48	69	227	760	-----	5,240	4,440	2,260	1,120	952	386	271
31	48	-----	145	200	-----	4,580	-----	2,390	-----	940	-----	-----
Month						Maximum	Minimum	Mean		Run-off in acre-feet		
October						737	31	430		26,400		
November						1,200	38	343		20,400		
December						1,280	12	98.2		6,040		
January						760	94	253		15,600		
February						2,000	120	439		25,300		
March						27,000	180	3,790		263,000		
April						4,970	1,320	3,070		133,000		
May						5,450	2,260	3,790		223,000		
June						1,950	1,120	1,390		82,700		
July						1,100	858	978		60,100		
August						976	358	625		38,400		
September						737	264	467		27,800		
The year						27,000	12	1,310		952,000		

SOUTH SAN JOAQUIN CANAL NEAR KNIGHTS FERRY, CALIF.

LOCATION.—Water-stage recorder in sec. 15, T. 1 S., R. 12 E., three-fourths mile below head gate and 4 miles above Knights Ferry.

RECORDS AVAILABLE.—May, 1914, to September, 1928. Miscellaneous measurements and rough estimates for 1913.

EXTREMES.—Maximum discharge during year, 966 second-feet May 2^d (gage height, 8.07 feet); practically no flow for short periods during winter.

1914-1928: Maximum discharge, 1,080 second-feet May 18, 192^d (gage height, 8.43 feet); no flow several months each year.

REMARKS.—Records excellent. Canal diverts from right bank of Stanislaus River at Goodwin Dam. Water is used for irrigation in Oakdale and South San Joaquin irrigation districts. Of the 15 to 20 second-feet, estimated flow October 30 to March 2 and March 24 to April 10, about 5 second-feet was wasted back into river and the remainder used by town of Knight's Ferry and for stock watering. Gage-height record furnished by South San Joaquin Irrigation District.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	613	15		921	921	891	756	179
2	597	15		921	921	861	756	179
3	582	80		921	921	876	771	329
4	582	515		921	921	876	771	539
5	582	711	20	921	921	876	771	539
6	582	726		921	921	876	756	539
7	582	726		921	921	891	637	539
8	582	741		921	921	861	623	525
9	552	726		891	921	861	651	539
10	492	756		831	921	816	637	539
11	477	756	212	861	921	801	651	539
12	403	756	357	891	921	741	651	469
13	354	756	399	891	921	726	623	385
14	278	756	483	891	921	741	539	331
15	220	756	497	876	921	756	427	331
16	200	636	525	876	921	741	344	286
17	108	385	539	861	906	741	286	240
18	4	142	483	891	891	726	234	197
19	17	7	455	921	891	726	185	129
20	17	48	483	921	891	726	179	124
21	18	66	586	921	891	726	179	129
22	18	66	711	906	891	726	179	124
23	18	36	801	921	891	711	179	140
24	27		831	921	891	681	179	150
25	31		861	921	891	696	173	156
26	24		891	921	891	726	173	156
27	0	20	831	921	876	741	173	156
28	0		801	921	876	741	167	156
29	7		891	921	891	741	162	156
30	15		921	921	876	741	167	162
31	15			921		741	173	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	613	0	258	15,900
November			* 15	893
December			* 15	922
January			* 15	922
February			* 15	863
March	756	7	333	20,500
April	921	20	425	25,300
May	921	831	906	55,700
June	921	876	906	53,900
July	891	681	777	47,800
August	771	162	424	26,100
September	539	124	299	17,900
The year	921	0	367	267,000

* Estimated.

OAKDALE CANAL NEAR KNIGHTS FERRY, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 10, T. 1 S., R. 12 E., 1,700 feet below head gate at Goodwin Dam and 4 miles above Knights Ferry.

RECORDS AVAILABLE.—May, 1914, to September, 1928. Miscellaneous measurements and rough estimates for 1913.

EXTREMES.—1914-1928: Maximum discharge, 254 second-feet June 26, 1928; no flow during periods of each year.

REMARKS.—Records good. Canal diverts from left bank of Stanislaus River at Goodwin Dam. Water is used for irrigation in the Oakdale irrigation district. Gage-height record furnished by Oakdale Irrigation District.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1.....	190	0	220	238	244	232	220
2.....	190	0	208	238	244	232	220
3.....	196	0	208	238	244	226	214
4.....	190	0	214	238	244	220	202
5.....	184	0	208	238	244	214	202
6.....	184	0	214	244	244	214	202
7.....	184	0	220	244	244	220	202
8.....	54	0	220	250	238	220	196
9.....	0	0	232	244	238	214	190
10.....	0	0	232	250	238	214	184
11.....	0	31	226	250	232	220	184
12.....	0	46	220	244	238	214	184
13.....	0	70	214	250	232	214	184
14.....	0	75	220	250	226	214	184
15.....	0	78	226	250	226	214	178
16.....	0	95	226	250	226	214	166
17.....	0	112	226	238	226	208	156
18.....	0	125	226	244	226	202	150
19.....	0	134	232	244	232	206	156
20.....	0	134	226	244	232	202	156
21.....	0	139	232	244	238	202	150
22.....	0	150	244	244	232	196	144
23.....	0	161	244	244	232	188	150
24.....	0	156	244	244	232	202	150
25.....	0	161	244	244	238	202	150
26.....	0	172	238	244	232	196	150
27.....	0	196	238	244	226	202	150
28.....	0	208	244	250	226	196	150
29.....	0	208	238	244	220	178	156
30.....	0	220	232	244	220	202	156
31.....	0	226	226	-----	220	214	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	196	0	44.3	2,720
April.....	220	0	89.0	5,300
May.....	244	208	227	14,000
June.....	250	214	244	14,500
July.....	244	214	233	14,300
August.....	232	178	209	12,900
September.....	220	144	175	10,400
The year.....	250	0	102	74,100

NOTE.—No flow in months for which no record is given.

CALAVERAS RIVER BASIN

CALAVERAS RIVER AT JENNY LIND, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 22, T. 3 N., R. 10 E., at highway bridge a quarter of a mile southeast of Jenny Lind and 15 miles below confluence of North and South Forks.

DRAINAGE AREA.—395 square miles.

RECORDS AVAILABLE.—January, 1907, to September, 1928.

EXTREMES.—Maximum discharge during year, 17,300 second-feet March 25 (gage height, 9.97 feet); no flow October 1–27 and July 21 to September 30. 1907–1928: Maximum discharge, about 69,600 second-feet January 31, 1911; no flow during fall of 1913–1915, 1917–1922, and 1924–1928.

REMARKS.—Records good. Slight regulation due to storage at Salt Springs Valley on Duck Creek. Gage-height record furnished by city of Stockton.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	*50	34	134	97	72	695	*93	25	7
2.....	0	*34	33	106	90	71	735	*89	24	7
3.....	0	*24	32	91	1,100	86	1,700	*85	23	6.5
4.....	0	*20	31	82	4,780	130	940	*82	22	6
5.....	0	*17	30	76	1,110	119	635	*78	21	6
6.....	0	*15	30	73	486	106	590	*74	19	5.5
7.....	0	*15	29	65	312	108	510	*71	17	5
8.....	0	*16	28	61	233	152	435	*68	14	4.2
9.....	0	*20	28	58	196	187	382	*66	13	3.0
10.....	0	*40	32	57	168	*178	354	*63	12	2.6
11.....	0	58	41	55	145	*170	322	*62	12	2.4
12.....	0	43	44	52	130	*162	318	*60	20	2.1
13.....	0	72	41	52	119	*154	298	*58	26	1.5
14.....	0	183	78	52	114	*146	278	*57	23	1.3
15.....	0	92	124	53	106	*138	240	*56	21	.9
16.....	0	62	88	53	99	*130	226	55	18	.8
17.....	0	49	69	49	93	*120	226	54	16	.2
18.....	0	41	58	46	90	*112	209	51	14	0
19.....	0	37	61	45	83	*104	194	48	14	0
20.....	0	35	50	44	78	*96	185	43	12	0
21.....	0	134	47	43	75	88	173	43	11	0
22.....	0	120	44	44	75	88	161	43	10	0
23.....	0	74	43	211	77	150	150	45	9 5	0
24.....	0	58	38	192	86	6,300	142	42	9	0
25.....	0	51	38	124	88	10,700	132	37	8	0
26.....	0	46	38	100	88	3,260	125	34	7	0
27.....	0	45	37	90	82	6,150	115	32	7	0
28.....	*50	42	38	82	75	2,296	*110	29	7	0
29.....	*36	41	2,000	96	74	970	*104	28	7	0
30.....	*24	35	544	160	-----	838	*98	27	7	0
31.....	*24	-----	206	116	-----	710	-----	25	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	50	0	4.32	266
November.....	183	15	52.3	3,110
December.....	2,000	28	130	7,990
January.....	211	43	82.6	5,080
February.....	4,780	74	357	20,500
March.....	10,700	71	1,100	67,600
April.....	1,700	98	359	21,400
May.....	93	25	54.8	3,370
June.....	26	7	15.0	893
July.....	7	0	2.00	123
The year.....	10,700	0	180	130,000

* Estimated or interpolated.

NOTE.—No flow in months for which no record is given.

BEAR CREEK BASIN

BEAR CREEK NEAR LOCKEFORD, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 14, T. 3 N., R. 7 E., at highway bridge 3 miles south of Lockeford.

DRAINAGE AREA.—52 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 825 second-feet February 4 (gage height, 10.29 feet); no flow except December 30 to January 1, January 24, 25, 30, 31, February 3–12, and March 24 to May 4.

1926–1928: Maximum discharge, 916 second feet February 4, 1927; maximum gage height, that of February 4, 1928; no flow for long periods each year.

REMARKS.—Records fair. No diversions.

Daily and monthly discharge, in second-feet, 1927–28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1-----	0	0.6	0	0	12	0.4	16-----	0	0	0	0	1.9	0
2-----	0	0	0	0	107	.2	17-----	0	0	0	0	1.6	0
3-----	0	0	35	0	256	.1	18-----	0	0	0	0	1.4	0
4-----	0	0	671	0	67	0	19-----	0	0	0	0	1.3	0
5-----	0	0	91	0	31	0	20-----	0	0	0	0	1.2	0
6-----	0	0	25	0	19	0	21-----	0	0	0	0	1.1	0
7-----	0	0	11	0	13	0	22-----	0	0	0	0	1.0	0
8-----	0	0	6	0	9	0	23-----	0	0	0	0	1.0	0
9-----	0	0	3	0	6	0	24-----	0	5.5	0	36	.9	0
10-----	0	0	2	0	4.6	0	25-----	0	.8	0	324	.8	0
11-----	0	0	1	0	4.0	0	26-----	0	0	0	234	.8	0
12-----	0	0	.5	0	3.8	0	27-----	0	0	0	462	.7	0
13-----	0	0	0	0	3.0	0	28-----	0	0	0	176	.7	0
14-----	0	0	0	0	2.5	0	29-----	0	0	0	46	.6	0
15-----	0	0	0	0	2.2	0	30-----	36	.5	-----	26	.5	0
							31-----	3	.4	-----	18	-----	0
Month							Maximum		Minimum		Mean		Run-off in acre-feet
December-----							36		0		1.26		77.5
January-----							5.5		0		.25		15.4
February-----							671		0		29.2		1,680
March-----							462		0		42.6		2,620
April-----							256		.5		18.5		1,100
May-----							.4		0		.02		1.2
The year-----							671		0		7.57		5,490

NOTE.—No flow October, November, and June to September.

MOKELUMNE RIVER BASIN

NORTH FORK OF MOKELUMNE RIVER ABOVE MOORE CREEK, CALIF.

LOCATION.—Water-stage recorder in sec. 33, T. 8 N., R. 16 E., one-fourth mile below Salt Springs dam site and $3\frac{1}{2}$ miles above Moore Creek. Altitude, about 3,600 feet.

DRAINAGE AREA.—160 square miles.

RECORDS AVAILABLE.—September, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, about 8,740 second-feet March 25 (gage height, 13.62 feet); minimum, 3.9 second-feet August 15 (gage height, 0.09 foot).

1926-1928: Maximum discharge, that of March 25, 1928; minimum, that of August 15, 1928.

REMARKS.—Records good. Discharge estimated January 30 to February 2. Slight regulation due to storage at Blue Lakes. Gage-height record and results of discharge measurements furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	88	115	160	94	212	137	805	2,240	745	85	19	132
2.....	88	97	156	156	215	139	690	1,710	725	81	19	135
3.....	88	193	164	184	218	179	638	1,530	708	77	18	132
4.....	87	136	142	181	262	181	620	1,710	620	78	18	136
5.....	87	112	131	164	212	172	638	1,890	590	70	17	134
6.....	87	128	125	149	192	172	725	2,100	545	64	17	141
7.....	87	163	106	146	184	169	765	2,320	492	60	17	141
8.....	87	275	102	149	181	199	725	2,170	430	55	16	151
9.....	87	367	103	176	178	232	745	2,030	370	53	16	148
10.....	86	1,080	100	179	162	262	765	2,320	330	50	15	142
11.....	85	270	98	168	164	290	785	2,240	330	49	14	150
12.....	85	206	92	169	163	310	1,000	2,240	320	48	14	151
13.....	85	328	94	192	160	300	890	2,030	262	45	13	139
14.....	86	240	92	174	164	280	868	1,960	240	42	13	126
15.....	86	218	92	152	146	262	890	1,890	225	40	9	122
16.....	87	255	98	186	142	248	912	1,710	206	38	11	148
17.....	86	255	93	142	142	320	785	1,650	199	37	12	149
18.....	87	262	85	129	141	370	655	1,650	192	34	25	121
19.....	101	248	87	120	143	430	620	1,590	174	32	61	100
20.....	129	225	83	121	150	480	575	1,650	164	31	87	104
21.....	136	248	79	107	155	518	575	1,590	160	29	88	164
22.....	115	218	74	105	144	575	708	1,470	152	28	107	103
23.....	115	182	79	115	140	655	980	1,530	143	27	110	104
24.....	115	176	76	101	132	1,720	980	1,590	140	27	109	103
25.....	77	181	71	100	147	7,800	805	1,590	134	25	109	103
26.....	176	206	67	100	147	5,980	1,160	1,590	120	24	110	104
27.....	372	199	66	108	144	2,960	1,470	1,440	108	24	125	105
28.....	151	179	70	120	146	1,590	1,590	1,200	101	23	122	104
29.....	131	212	75	206	139	1,180	1,830	1,130	95	22	117	103
30.....	166	185	78	208	-----	1,030	2,400	935	91	21	136	103
31.....	213	-----	84	210	-----	912	-----	805	-----	20	135	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	372	85	115	7,070
November.....	1,080	97	239	14,200
December.....	164	66	97.6	6,000
January.....	210	94	149	9,160
February.....	262	132	166	9,550
March.....	7,800	137	969	59,600
April.....	2,400	575	920	54,700
May.....	2,320	805	1,730	106,000
June.....	745	91	304	18,100
July.....	85	20	43.2	2,660
August.....	136	9	54.8	3,370
September.....	151	100	125	7,440
The year.....	7,800	9	410	298,000

NORTH FORK OF MOKELUMNE RIVER NEAR WEST POINT, CALIF.

LOCATION.—Water-stage recorder in NW. ¼ sec. 17, T. 7 N., R. 15 E., 9½ miles northeast of West Point and 1 mile above Blue Creek.

RECORDS AVAILABLE.—April, 1917, to September, 1918 (incomplete); February, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 15,500 second-feet March 25 (gage height, 17.2 feet); minimum, 56 second-feet July 16 (gage height, 4.11 feet). 1917-18, 1924-1928: Maximum discharge, that of March 25, 1928; minimum, 2.5 second-feet October 22 and 25-28, 1924.

REMARKS.—Records fair. Storage in Blue Lakes and on Bear River is used during periods of low water to augment natural flow. Gage-height record and results of discharge measurements furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.
1	92	168	283	204	262	-----	3,310	898	-----	105	134
2	90	95	275	278	283	-----	2,500	898	-----	110	136
3	90	232	299	347	394	-----	2,170	845	-----	117	134
4	90	193	260	352	443	-----	2,380	748	-----	106	142
5	90	144	231	308	347	-----	2,750	702	-----	111	146
6	90	142	219	286	332	-----	3,040	630	-----	108	140
7	90	204	226	-----	320	1,290	3,310	600	-----	110	149
8	92	410	212	-----	314	1,220	3,180	540	-----	108	153
9	92	378	219	-----	302	1,260	2,730	460	72	105	158
10	90	1,700	209	-----	275	1,290	3,590	460	69	110	144
11	90	512	206	-----	278	1,290	3,300	478	71	100	155
12	90	326	200	-----	275	1,740	3,190	-----	68	108	158
13	90	478	207	-----	272	1,520	2,840	-----	75	105	151
14	90	378	212	-----	278	1,440	2,590	-----	79	108	146
15	92	347	204	-----	260	1,440	2,540	-----	88	124	126
16	92	426	212	-----	240	1,520	2,190	-----	72	110	149
17	92	443	207	231	243	1,320	2,060	-----	85	116	155
18	90	460	193	243	240	1,130	2,150	-----	92	105	146
19	96	426	198	291	250	1,070	2,000	-----	98	124	117
20	120	394	191	308	260	952	2,120	-----	100	156	114
21	139	426	187	216	270	952	1,940	-----	98	162	108
22	120	362	180	212	255	1,190	1,820	-----	98	168	108
23	116	297	178	216	248	1,620	1,820	-----	98	172	108
24	117	286	178	209	236	1,660	1,960	-----	102	166	108
25	104	297	176	204	-----	1,210	1,900	-----	95	162	108
26	135	347	174	202	-----	1,780	1,900	-----	96	153	106
27	433	362	170	209	-----	2,280	1,760	-----	99	164	106
28	215	314	182	221	-----	2,440	1,420	-----	102	146	106
29	132	394	200	352	-----	2,690	1,380	-----	104	123	105
30	180	347	182	329	-----	3,460	1,160	-----	102	146	105
31	262	-----	193	278	-----	-----	952	-----	106	136	-----
Month	Maximum					Minimum		Mean		Run-off in acre-feet	
October	433					90		123		7,560	
November	1,700					95		376		22,400	
December	299					170		209		12,900	
May	3,590					952		2,320		143,000	
August	172					100		127		7,810	
September	168					105		131		7,800	

MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.

LOCATION.—Water-stage recorder in sec. 1, T. 5 N., R. 11 E., at highway bridge 1¼ miles northwest of Mokelumne Hill.

RECORDS AVAILABLE.—November, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 23,300 second-feet March 25 (gage height, 16.10 feet); minimum, 18 second-feet August 13 (gage height, 0.97 foot).

REMARKS.—Records good. Several small diversions for mining and irrigation above station. Some water is diverted out of the drainage basin through Amador Canal. Flow is partly regulated by storage in Blue Lakes. Bear River and by Electra power plant.

Daily and monthly discharge, in second-feet, 1927-28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.		333	294	424	335	2,880	3,990	1,190	102	93	95
2.		316	304	429	392	2,980	3,090	1,060	148	60	78
3.		326	393	861	434	2,560	2,620	980	168	112	64
4.		322	384	1,560	464	2,260	2,700	970	84	110	155
5.		260	402	835	499	2,160	3,060	880	108	174	242
6.		255	364	677	455	2,260	3,360	900	173	90	204
7.		272	337	625	522	2,340	3,690	779	114	142	112
8.		255	320	607	624	2,200	3,920	668	70	113	115
9.		291	428	515	627	2,180	3,100	483	93	171	55
10.		272	408	456	707	2,260	4,020	382	132	132	87
11.	784	204	375	466	728	2,080	3,780	543	89	83	140
12.	446	236	339	425	814	2,480	3,620	553	82	26	140
13.	760	272	433	440	765	2,320	3,260	805	90	74	105
14.	712	342	448	422	726	2,200	3,120	394	75	145	142
15.	480	302	400	359	742	2,060	2,930	381	60	178	114
16.	500	253	340	370	712	2,180	2,680	296	72	116	88
17.	520	256	290	363	723	2,060	2,430	228	142	107	114
18.	581	280	352	372	729	1,720	2,460	316	115	99	176
19.	560	275	312	312	955	1,690	2,280	328	78	60	166
20.	462	246	324	414	984	1,520	2,440	258	100	91	167
21.	626	220	289	376	1,070	1,460	2,130	231	150	134	187
22.	512	230	228	350	1,150	1,560	2,210	263	52	154	111
23.	418	209	392	371	1,930	2,040	2,090	210	142	198	68
24.	284	259	351	393	5,380	2,230	2,300	135	152	141	123
25.	325	164	329	366	20,300	1,700	2,220	217	122	148	88
26.	386	174	365	372	16,900	2,010	2,180	222	102	142	92
27.	432	230	311	431	12,300	2,620	2,060	203	136	128	100
28.	458	254	257	374	6,280	2,870	1,760	215	129	83	97
29.	369	740	340	382	4,470	2,740	1,690	168	40	120	91
30.	444	436	540	-----	3,660	3,580	1,420	155	86	160	57
31.	-----	376	442	-----	3,090	-----	1,270	-----	95	136	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November 11-30.	784	284	503	20,000
December.	740	164	285	17,500
January.	540	228	357	22,000
February.	1,560	312	496	28,500
March.	20,300	335	2,890	178,000
April.	3,580	1,460	2,240	183,000
May.	4,020	1,270	2,710	167,000
June.	1,190	135	471	28,000
July.	173	40	106	6,520
August.	198	26	114	7,610
September.	242	54	119	7,080
The period.	-----	-----	-----	615,000

MOKELUMNE RIVER AT LANCHA PLANA, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 4, T. 4 N., R. 10 E., above old Westmoreland Suspension Bridge, 1 mile east of Lancha Plana.

DRAINAGE AREA.—584 square miles.

RECORDS AVAILABLE.—June, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 27,300 second-feet March 25 (gage height, 19.65 feet); minimum, 28 second-feet August 13 (gage height, 0.71 foot).

1926-1928: Maximum discharge, that of March 25, 1928; minimum, 21 second-feet November 2 and 7, 1926.

REMARKS.—Records good. Several small diversions for mining and irrigation above station. Some water is diverted out of drainage basin through Amador Canal. Flow is partly regulated by storage in Blue Lakes, Bear River and by Electra power plant.

Daily and monthly discharge, in second-feet, 1927-28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	333	328	320	430	356	2,900	4,260	1,100	147	92	104
2	193	307	303	440	375	3,200	3,170	1,020	96	89	97
3	142	307	338	903	420	2,700	2,640	932	173	90	54
4	254	328	405	1,900	498	2,320	2,700	834	147	121	84
5	230	254	410	995	493	2,320	3,020	832	74	107	237
6	157	250	380	714	482	2,230	3,320	828	144	94	244
7	106	247	342	672	526	2,140	3,610	770	154	118	138
8	272	247	328	648	618	2,280	3,950	630	92	123	116
9	488	268	356	542	636	2,230	2,990	511	64	114	92
10	1,650	272	430	476	732	2,180	3,840	334	104	104	59
11	890	236	395	476	738	2,230	3,840	433	128	118	120
12	466	196	342	482	824	2,500	3,570	512	80	59	138
13	738	247	400	405	726	2,460	3,370	500	72	30	108
14	785	333	450	450	744	2,260	3,150	490	83	108	114
15	520	295	390	415	720	2,160	2,850	336	77	134	139
16	476	247	333	351	730	2,230	2,730	373	66	107	124
17	526	247	291	360	696	2,190	2,480	257	96	121	70
18	559	247	303	360	732	1,820	2,450	283	144	96	151
19	559	268	299	356	918	1,750	2,330	347	100	82	162
20	476	247	287	435	967	1,560	2,420	304	84	57	169
21	648	184	283	380	1,060	1,490	2,130	264	151	124	194
22	510	199	254	390	1,090	1,500	2,210	256	93	156	160
23	445	193	410	380	1,750	2,060	2,080	233	80	162	97
24	291	219	360	405	4,500	2,290	2,270	133	158	188	91
25	311	199	324	375	21,400	1,800	2,220	136	134	132	110
26	375	140	360	380	18,500	2,080	2,180	222	142	124	93
27	445	208	311	410	13,300	2,700	2,040	222	118	163	98
28	455	216	261	400	6,380	2,960	1,720	206	124	104	96
29	342	857	338	390	4,470	2,880	1,640	179	94	84	81
30	466	498	537	-----	3,600	3,610	1,390	166	42	141	89
31	-----	390	455	-----	3,100	-----	1,220	-----	110	158	-----
Month	Maximum					Minimum		Mean		Run-off in acre-feet	
November	1,650					103		470		28,000	
December	857					141		280		17,200	
January	537					254		355		21,800	
February	1,900					351		528		30,400	
March	21,400					351		2,970		183,000	
April	3,610					1,490		2,300		137,000	
May	4,260					1,220		2,700		166,000	
June	1,100					133		456		27,100	
July	173					42		109		6,700	
August	188					30		113		6,950	
September	244					54		121		7,200	
The period	-----					-----		-----		631,000	

MOKELUMNE RIVER NEAR CLEMENTS, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 15, T. 4 N., R. 8 E., at highway bridge 1 mile north of Clements.

DRAINAGE AREA.—631 square miles.

RECORDS AVAILABLE.—October, 1904, to September, 1928.

EXTREMES.—Maximum discharge during year, 25,600 second-feet March 25 (gage height, 22.45 feet); minimum, 35 second-feet August 14 (gage height, 1.84 feet).

1904-1928: Maximum discharge, that of March 25, 1928; no flow July 9, August 15, and 20-23, 1924.

REMARKS.—Records good below and fair above 500 second-feet. Discharge estimated June 8-25. See Mokelumne River near Lancha Plana for diversions and regulation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	142	336	364	350	403	360	2,800	4,060	1,180	162	86	120
2	78	224	325	318	395	332	3,220	3,130	1,060	106	82	90
3	52	165	339	332	758	395	2,870	2,620	935	156	72	74
4	88	222	360	399	2,590	475	2,380	2,640	855	174	100	52
5	142	257	287	395	1,120	435	2,170	2,920	820	90	98	163
6	86	194	269	392	685	471	2,240	3,250	825	106	97	218
7	90	115	266	353	660	451	2,310	3,510	765	174	81	167
8	142	233	284	339	610	542	2,240	3,810	675	111	125	110
9	80	467	272	346	556	588	2,170	2,960	530	68	106	108
10	63	1,480	300	415	493	660	2,240	3,710	400	84	97	64
11	90	1,030	272	403	450	685	2,170	3,840	505	123	123	72
12	124	506	205	356	484	760	2,360	3,560	520	91	83	118
13	138	638	248	378	388	685	2,440	3,350	515	72	44	119
14	114	810	336	443	459	710	2,220	3,150	440	80	54	96
15	90	547	339	403	431	660	2,150	2,860	405	72	133	122
16	78	455	287	360	350	660	2,180	2,780	350	56	103	106
17	54	520	263	308	374	660	2,190	2,540	285	61	116	82
18	104	534	248	278	370	710	1,840	2,480	305	125	100	102
19	96	547	284	325	378	810	1,720	2,420	360	112	96	148
20	120	511	257	300	364	910	1,560	2,440	315	76	58	144
21	94	610	245	300	388	940	1,480	2,220	275	106	87	159
22	105	524	219	281	388	1,000	1,520	2,300	260	132	129	166
23	106	459	230	395	378	1,630	1,940	2,180	240	58	160	108
24	74	356	216	388	395	4,370	2,230	2,300	140	134	182	71
25	114	314	263	314	370	18,900	1,830	2,260	190	147	128	102
26	119	350	162	325	378	20,300	1,960	2,280	209	122	130	82
27	264	443	219	342	360	14,200	2,540	2,140	225	104	136	83
28	552	431	219	290	411	6,580	2,840	1,800	208	123	116	90
29	325	384	930	290	370	4,540	2,810	1,700	210	120	80	90
30	213	447	565	455	-----	3,600	3,390	1,630	171	50	106	81
31	202	-----	403	467	-----	3,080	-----	1,300	-----	67	146	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	552	52	134	8,240
November	1,480	115	470	28,000
December	930	162	306	18,800
January	467	278	356	21,900
February	2,590	350	544	31,300
March	20,300	332	2,940	181,000
April	3,390	1,480	2,270	135,000
May	4,060	1,300	2,710	167,000
June	1,180	140	472	28,100
July	174	50	105	6,460
August	182	44	105	6,460
September	218	52	110	6,550
The year	20,300	44	879	639,000

MOKELUMNE RIVER NEAR VICTOR, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 34, T. 4 N., R. 7 E., 1 mile northeast of Victor.

RECORDS AVAILABLE.—July, 1927, to September, 1928.

REMARKS.—Records fair. Between Victor and Clements there are diversions for irrigation. Flow is partly regulated by storage developed on headwaters of North Fork.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	June	July	Aug.	Sept.	Day	Oct.	June	July	Aug.	Sept.
1.....	105	-----	155	84	122	16.....	72	-----	64	94	104
2.....	89	-----	114	76	92	17.....	61	-----	58	94	92
3.....	53	-----	132	75	80	18.....	70	-----	106	95	71
4.....	59	-----	166	86	52	19.....	87	-----	118	85	142
5.....	120	-----	102	99	113	20.....	95	-----	85	69	146
6.....	77	-----	85	88	218	21.....	95	-----	81	56	154
7.....	74	-----	154	76	189	22.....	80	-----	130	116	171
8.....	111	-----	120	112	113	23.....	102	-----	68	133	124
9.....	95	-----	80	98	104	24.....	74	163	94	180	84
10.....	59	-----	67	93	81	25.....	81	13	133	137	92
11.....	68	-----	98	104	58	26.....	119	197	104	126	89
12.....	105	-----	90	94	107	27.....	120	20	96	122	81
13.....	119	-----	68	56	124	28.....	-----	19	102	124	89
14.....	107	-----	69	37	90	29.....	-----	20	111	84	88
15.....	82	-----	76	112	114	30.....	-----	15	74	78	76
						31.....	-----	-----	54	129	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-27.....	120	53	88.1	4,720
June 24-30.....	208	134	179	2,490
July.....	155	54	98.5	6,060
August.....	180	37	97.2	5,980
September.....	218	52	109	6,490

MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION.—Water-stage recorder in NE. ¼ NE. ¼ sec. 34, T. 4 N., R. 6 E., at highway bridge, a quarter of a mile northeast of Woodbridge.

DRAINAGE AREA.—648 square miles.

RECORDS AVAILABLE.—May, 1924, to September, 1928 (low-water records only, for 1924 and 1925).

EXTREMES.—Maximum stage during year, 26.58 feet March 26 (discharge indeterminate); minimum discharge, 2.2 second-feet July 21 (gage height, 2.20 feet).

1924-1928: Maximum stage, that of March 26, 1928; minimum discharge, 0.9 second-foot September 3, 1924.

REMARKS.—Records good. Discharge estimated June 2-15. Water is diverted by the Woodbridge Canal at dam just above station for irrigation. There are many other diversions and several storage reservoirs farther upstream.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	3.8	264	405	396	405	368	3,600	2,700	1,070	3.0	2.8	2.4
2.	5	268	332	332	386	341	3,180	3,120	1,040	3.2	2.6	2.4
3.	6	208	306	315	414	386	3,200	2,960	1,010	3.0	2.6	2.5
4.	5.5	172	315	368	1,370	443	3,080	2,640	820	3.0	2.6	2.6
5.	5.5	256	315	377	1,440	462	2,700	2,600	750	3.0	2.6	2.4
6.	7.5	215	264	396	870	481	2,460	2,780	700	2.8	2.6	2.4
7.	7.5	164	256	368	682	462	2,500	3,040	650	2.6	2.5	3.2
8.	6.5	138	264	341	617	519	2,430	3,360	610	3.0	2.5	3.4
9.	8	298	264	332	597	577	2,360	3,640	480	3.4	2.6	3.0
10.	8	481	281	396	519	597	2,280	3,360	360	2.4	2.6	2.8
11.	6	1,300	290	405	462	682	2,250	3,480	390	2.6	2.6	2.6
12.	5	682	239	386	462	682	2,190	3,760	500	2.4	2.4	2.5
13.	6	481	223	359	434	748	2,300	3,600	400	2.8	2.5	2.5
14.	6	748	272	414	424	682	2,420	3,360	280	2.8	2.5	2.4
15.	6	698	341	434	424	660	2,300	3,080	220	2.8	2.4	2.4
16.	4.8	481	324	377	215	682	2,190	2,840	170	3.0	2.3	2.6
17.	4.0	481	272	341	188	660	2,190	2,670	128	2.6	2.3	2.6
18.	3.0	481	264	298	231	660	2,080	2,500	71	2.8	2.3	2.6
19.	3.0	519	264	324	281	682	1,980	2,320	68	2.4	2.4	3.6
20.	3.0	519	281	306	264	870	1,980	2,250	95	2.4	3.0	3.1
21.	4.0	481	264	298	332	895	1,820	2,250	83	2.2	2.4	3.8
22.	4.2	538	215	290	298	945	1,670	2,130	61	2.4	2.3	3.7
23.	5	462	223	272	306	1,120	1,670	1,980	52	2.6	2.3	3.8
24.	8	405	215	414	519	1,740	1,670	1,950	46	3.2	2.6	4.2
25.	2.8	306	231	341	405	2,780	2,040	2,010	26	3.0	2.5	4.0
26.	2.5	315	208	315	359	-----	1,800	2,010	11	3.1	2.3	4.0
27.	390	359	160	341	350	-----	1,950	1,950	5	3.0	2.3	3.8
28.	452	396	208	306	396	-----	2,250	1,800	5	3.0	2.3	3.8
29.	434	414	359	264	377	5,870	2,600	1,600	5	3.1	2.4	3.8
30.	290	359	770	324	-----	4,970	2,600	1,500	3.6	3.1	2.4	3.8
31.	223	-----	462	452	-----	4,240	-----	1,200	-----	3.0	2.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	452	3.0	62.1	3,820
November.....	1,300	138	429	25,500
December.....	770	160	293	18,000
January.....	452	264	351	21,600
February.....	1,440	188	484	27,800
March.....	341	-----	-----	-----
April.....	3,600	1,670	2,320	138,000
May.....	3,760	1,200	2,590	159,000
June.....	1,070	3.6	337	20,100
July.....	3.4	2.2	2.83	174
August.....	3.0	2.3	2.48	152
September.....	4.2	2.4	3.09	184
The period.....	-----	2.2	-----	-----

MOKELUMNE RIVER NEAR THORNTON, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 12, T. 4 N., R. 5 E., $2\frac{1}{2}$ miles southeast of Thornton and just above tidewater.

DRAINAGE AREA.—690 square miles.

RECORDS AVAILABLE.—July, 1926, to September, 1928 (low-water records only).

EXTREMES.—Minimum discharge during year, 7.5 second-feet September 7, 13, and 14.

1926-1928: Minimum discharge, 7.5 second-feet August 14 and September 25, 1926, and September 7, 13, and 14, 1928.

REMARKS.—Records good; discharge estimated November 2 and 3. Water is diverted by the Woodbridge Canal at Woodbridge and many others. Flow regulated by storage reservoirs.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	June	July	Aug.	Sept.	Day	Oct.	June	July	Aug.	Sept.
1.....	13	-----	30	11	9.5	16.....	14	-----	14	9	8.5
2.....	13	-----	29	11	9.5	17.....	14	-----	14	9	8.5
3.....	15	-----	28	11	9.5	18.....	14	-----	14	9	8.5
4.....	15	-----	28	11	8.5	19.....	13	-----	14	10	8.5
5.....	14	-----	25	11	8.5	20.....	13	-----	14	12	8.5
6.....	-----	-----	-----	-----	-----	21.....	13	-----	14	11	8
7.....	15	-----	20	11	7.5	22.....	14	-----	13	10	8.5
8.....	15	-----	21	11	8	23.....	15	83	13	9.5	8.5
9.....	15	-----	22	10	8	24.....	16	95	13	9	8.5
10.....	15	-----	21	11	8	25.....	18	74	13	9.5	8.5
11.....	15	-----	21	11	8	26.....	17	62	12	9.5	8.5
12.....	14	-----	21	11	8	27.....	-----	47	12	9	8.5
13.....	13	-----	17	10	7.5	28.....	-----	33	12	9.5	8.5
14.....	13	-----	13	10	7.5	29.....	-----	28	12	9	9
15.....	14	-----	14	9.5	8.5	30.....	-----	29	12	9	8.5
						31.....	-----	-----	11	8.5	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet		
October 1-26.....						18	13	14.4	743		
June 23-30.....						95	23	56.4	895		
July.....						30	11	17.3	1,060		
August.....						12	8.5	10.1	621		
September.....						9.5	7.5	8.40	500		

COLD CREEK NEAR MOKELUMNE PEAK, CALIF.

LOCATION.—Water-stage recorder in sec. 28, T. 8 N., R. 16 E., 1½ miles north of Salt Springs and 5 miles southwest of Mokelumne Peak.

DRAINAGE AREA.—23 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1928.

EXTREMES.—Maximum discharge during period, 2,330 second-feet March 25 (gage height, 7.79 feet); minimum, 0.3 second-foot October 20.

REMARKS.—Records good except for estimated periods, for which they are fair. Gage-height record and results of discharge measurements furnished by Pacific Gas & Electric Co.

Daily discharge, in second-feet, 1927-28

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.			
1927														
1		1.7	0.5	11		0.8	0.5	21		0.7	0.4			
2		1.6	.4	12		.8	.5	22		.6	.4			
3		1.5	.4	13		.8	.5	23	3.6	.6	.4			
4		1.4	.5	14		.8	.5	24	3.4	.6	.4			
5		1.3	.5	15		.8	.5	25	3.2	.5	.4			
6		1.2	.5	16		.8	.4	26	2.9	.5	.4			
7		1.1	.5	17		.8	.4	27	2.6	.5	.4			
8		1.0	.5	18		.8	.4	28	2.4	.5	.4			
9		1.0	.5	19		.7	.4	29	2.2	.5	.4			
10		.9	.5	20		.7	.4	30	2.0	.5	.4			
								31	1.9	.5				
Day				Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1927-28														
1				0.4	6.5		12	109	332	60	3.3	1.1	0.8	
2				.4	22		12	85	242	58	3.1	1.1	.7	
3				.4	24		12	89	230	53	3.0	1.1	.7	
4				.4	14		12	82	270	45	2.9	1.1	.7	
5				.4	10		12	88	316	41	2.8	1.1	.7	
6				.4	13		12	120	347	36	2.7	1.1	.7	
7				.4	37	15	12	129	334	30	2.4	1.2	.7	
8				.4	47		15	124	261	23	2.0	1.1	.7	
9				.4	91			39	134	289	18	1.9	1.1	.7
10				.4	162			53	142	17	1.9	1.1	.7	
11				.4	34		55	153	366	25	1.9	1.0	.8	
12				.4	20		48	217	334	23	1.8	1.0	.8	
13				.4	22		48	162	286	16	1.7	1.0	.8	
14				.4	28		39	159	252	14	1.7	1.0	.8	
15				.4	29		45	172	239	12	2.0	1.1	.8	
16				.4			48	175	194	11	2.0	1.0	.8	
17				.4			67	143	193	10	1.9	1.0	.8	
18				.4			80	121	210	9.5	1.7	1.1	.8	
19				.4			96	116	215	8.5	1.5	1.0	.8	
20				.4			101	109	196	7.5	1.5	1.0	.7	
21				.4		12	104	125	164	7	1.4	.9	.7	
22				.4		10	98	184	178	6.5	1.4	1.0	.7	
23				.4		10	86	204	180	5.5	1.4	1.0	.7	
24				.4		10	508	180	167	5	1.4	.9	.8	
25				1.4		9	2,010	150	162	4.8	1.4	.9	.8	
26				6		8	1,180	239	156	4.4	1.4	.9	.8	
27				10		8	432	297	125	3.9	1.3	.9	.7	
28				7.5			217	291	106	3.7	1.2	.9	.8	
29				13			162	336	96	3.6	1.2	.8	.8	
30				18			142	413	78	3.4	1.2	.8	.8	
31				9.5			131		68		1.2	.8		

Monthly discharge, in second-feet, of Cold Creek near Mokelumne Peak, Calif.,
1927-28.

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1927				
July 23-31	3.6	1.9	2.69	48.0
August	1.7	.5	.85	52.3
September .....	.5	.4	.44	26.2
1927-28				
October	18	.4	2.42	149
November	162		* 30	1,790
December			* 14	861
January			* 12	788
February			* 11	683
March	2,010		190	11,700
April	418	82	168	10,000
May	418	68	228	13,900
June	60	3.4	15.8	1,120
July	3.3	1.2	1.88	116
August	1.2	.8	1.00	61.5
September .....	.8	.7	1.09	64.9
The year	2,010	.4	56.6	41,100

*Estimated.

BEAR RIVER AT PARDOE CAMP, CALIF.

LOCATION.—Water-stage recorder in sec. 18, T. 8 N., R. 16 E., 2 miles below Bear River Reservoir of the Pacific Gas & Electric Co. Altitude about 5,650 feet.

DRAINAGE AREA.—33 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,350 second-feet March 25 (gage height, 9.75 feet); no flow September 8–30.

REMARKS.—Records good. Discharge estimated February 11–13. About 6,000 acre-feet is stored each year at the reservoir above station and usually released between July and October. Gage-height record and results of discharge measurements furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	7	7	50	58	56	50	221	609	74	10	79	2.6
2.....	7	6	55	58	56	51	183	435	76	10	81	2.3
3.....	7	26	62	58	55	57	149	396	84	9.5	82	2.1
4.....	7	34	43	57	55	56	142	464	63	9.5	84	1.9
5.....	7	23	38	57	54	56	152	527	54	9.5	84	1.4
6.....	7	24	47	57	53	56	193	577	50	9.5	82	.6
7.....	7	62	61	59	53	56	221	602	46	9.5	82	.2
8.....	7	106	60	59	53	60	230	498	39	9	84	0
9.....	6.5	219	61	59	53	74	245	432	28	9	84	0
10.....	6.5	509	60	59	53	68	191	732	19	9	82	0
11.....	6.5	90	59	61	54	69	243	598	17	9	84	0
12.....	6.5	50	59	60	54	71	347	555	36	9	86	0
13.....	6.5	81	60	58	55	71	296	479	31	9	86	0
14.....	6.5	56	59	57	55	68	274	336	26	9	90	0
15.....	6	62	59	56	52	66	280	369	18	9.5	97	0
16.....	6	86	59	54	50	68	298	320	12	35	94	0
17.....	6.5	92	58	53	50	70	258	256	12	40	90	0
18.....	6.5	93	58	54	50	74	249	322	11	47	86	0
19.....	6	85	58	53	50	77	187	250	10	54	82	0
20.....	6	77	57	52	51	79	154	264	10	56	77	0
21.....	6	71	57	52	51	81	184	236	10	59	72	0
22.....	6	60	56	51	50	106	291	218	10	59	68	0
23.....	6	49	56	51	50	190	374	214	10	60	61	0
24.....	6	46	55	52	50	459	332	242	10	62	55	0
25.....	6	52	54	65	50	2,900	242	215	10	62	49.	0
26.....	9	70	55	59	50	2,110	398	214	10	63	40	0
27.....	14	65	63	56	50	1,050	496	175	10	66	29	0
28.....	8	55	55	58	50	845	494	128	10	70	13	0
29.....	7	92	54	61	50	328	524	138	9.5	71	6.5	0
30.....	8.5	65	55	62	-----	278	674	117	9.5	72	3.2	0
31.....	12	-----	56	58	-----	250	-----	90	-----	76	3.4	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						14	6	7.11	437			
November.....						509	6	80.4	4,780			
December.....						63	38	58.1	3,450			
January.....						65	51	56.9	3,500			
February.....						56	50	52.2	3,000			
March.....						2,900	50	219	19,600			
April.....						674	142	284	16,900			
May.....						732	90	355	21,800			
June.....						84	9.5	27.2	1,620			
July.....						76	9	35.2	2,160			
August.....						97	3.2	67.6	4,160			
September.....						2.6	0	.37	22.0			
The year.....						2,900	0	112	81,400			

MIDDLE FORK OF MOKELUMNE RIVER AT WEST POINT, CALIF.

LOCATION.—Staff gage in sec. 10, T. 6 N., R. 13 E., below highway bridge, 1 mile south of West Point, and 3½ miles above junction with South Fork.

RECORDS AVAILABLE.—October, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,900 second-feet March 25 (gage height, 6.82 feet); minimum, 0.9 second-foot August 26 (gage height, 0.17 foot).

1911-1928: Maximum discharge, 2,550 second-feet January 23, 1914, (gage height, 10.0 feet); minimum, 0.2 second-foot August 18-23, 1924.

REMARKS.—Records good. Discharge estimated October 1-15, July 8-14, and August 12-17. Several diversions above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		14	16	20	30	27	368	89	22	11	1.9	1.2
2		11	15	20	29	36	368	82	22	11	1.9	1.3
3		8.5	14	17	125	41	299	82	2	10	1.9	1.8
4		8.5	13	15	218	43	262	76	19	9	1.9	1.6
5		8.5	12	13	140	41	240	70	18	9	1.9	1.4
6		9	12	20	82	43	218	70	17	9	1.9	1.3
7		10	12	20	60	45	197	70	16	8.5	1.8	1.3
8	3.5	9	13	18	56	70	208	70	16	8	1.8	1.3
9		18	14	19	48	65	197	65	16	7	1.8	1.2
10		26	16	19	43	60	197	65	17	6.5	1.8	1.4
11		17	15	19	39	60	197	60	19	6	1.8	1.4
12		23	13	18	36	60	208	58	18	5.5	1.7	1.5
13		132	13	17	36	58	197	54	17	4.5	1.7	1.6
14		44	19	16	35	56	176	50	16	4.0	1.7	1.5
15		21	19	15	35	54	157	52	15	3.5	1.7	1.3
16	3.5	23	19	14	33	54	140	50	14	3.5	1.6	1.3
17	3.5	20	18	16	30	52	140	48	13	7	1.6	1.2
18	3.5	17	18	19	29	52	140	45	12	7	1.6	1.2
19	3.5	15	18	20	22	50	132	43	12	3.5	1.5	1.3
20	3.5	14	16	21	26	50	125	41	14	3.5	1.4	1.2
21	3.5	39	15	22	29	50	125	39	11	3.5	1.3	1.2
22	3.5	19	14	22	32	70	118	39	11	2.8	1.2	1.2
23	3.9	17	14	20	30	148	118	38	12	2.8	1.2	1.2
24	4.7	16	14	20	27	526	110	36	11	2.4	1.2	1.2
25	5	16	13	21	33	1,460	110	35	11	2.0	1.2	1.3
26	5.5	19	12	21	32	1,100	103	35	11	1.9	1.0	1.3
27	82	17	12	22	30	1,010	103	33	11	1.9	1.1	1.3
28	16	16	16	23	29	666	96	33	11	1.9	1.2	1.5
29	8.5	19	103	54	29	460	96	32	11	1.9	1.2	1.5
30	96	18	43	39		368	96	32	11	1.9	1.1	1.5
31	21		33	33		299		30		1.9	1.0	
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October						96	3.5	10.3	633			
November						132	8.5	21.5	1,280			
December						103	12	19.2	1,180			
January						54	13	21.1	1,300			
February						218	22	49.1	2,820			
March						1,460	27	231	14,200			
April						368	96	175	10,400			
May						89	30	52.3	3,229			
June						22	11	14.8	881			
July						11	1.9	5.22	321			
August						1.9	1.0	1.54	94.7			
September						1.8	1.2	1.35	80.3			
The year						1,460	1.0	50.2	36,400			

SOUTH FORK OF MOKELUMNE RIVER NEAR RAILROAD FLAT, CALIF.

LOCATION.—Staff gage in sec. 34, T. 6 N., R. 14 E., at Laidet ranch, 5 miles above mouth of Licking Fork and 5 miles east of Railroad Flat.

RECORDS AVAILABLE.—October, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,440 second-feet March 25 (gage height, 6.1 feet); minimum, 3.8 second-feet September 24 and 25 (gage height, 0.51 foot).

1911-1928: Maximum discharge, 3,330 second-feet January 25, 1914 (gage height, 6.9 feet); minimum, 1.4 second-feet several days in July, August, and September, 1924.

REMARKS.—Records good. Small diversion for irrigation at Laidet ranch.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	14	17	24	24	33	295	64	26	15	8	4.9
2	6.5	13	17	25	26	32	295	62	26	15	8	4.7
3	6.5	11	16	26	66	31	255	59	26	15	7.5	4.5
4	6.5	11	16	25	152	30	200	56	25	14	7.5	4.5
5	6.5	11	16	24	118	33	200	54	24	14	7.5	4.2
6	6.5	11	14	24	77	36	192	52	23	14	7	4.0
7	6.5	11	14	22	59	39	192	50	23	13	7	4.0
8	6.5	11	16	20	48	52	183	52	22	13	7	4.0
9	6.5	16	17	18	46	53	166	51	21	13	6.5	4.2
10	6.5	38	16	18	46	56	158	49	20	12	6	4.2
11	6.5	35	16	18	44	52	150	47	28	12	6	4.5
12	6.5	36	17	19	39	55	166	45	26	12	5.5	4.7
13	6.5	38	18	20	40	55	158	44	26	12	5.5	4.7
14	6.5	39	17	17	38	58	143	43	24	11	5.5	4.7
15	6.5	41	17	16	36	55	140	41	23	12	5.5	4.2
16	6.5	42	16	14	34	53	136	40	20	11	5.5	4.0
17	6.5	44	16	13	32	51	115	40	20	11	5.5	4.0
18	6.5	44	16	13	30	51	108	38	20	11	5	4.0
19	6.5	55	16	13	29	52	102	38	19	10	5	4.0
20	6.5	56	16	16	28	55	96	36	18	10	4.9	4.2
21	6.5	44	17	16	28	55	90	35	18	10	4.9	4.2
22	6.5	36	16	16	29	63	90	35	17	10	4.9	4.0
23	6.5	31	17	14	28	185	85	34	17	9.5	4.9	4.2
24	6.5	24	17	13	31	510	85	32	16	9	4.9	3.8
25	7	18	17	14	29	1,810	85	32	16	8.5	4.7	3.8
26	32	23	17	16	29	890	80	30	15	8.5	5	4.0
27	77	18	18	15	30	970	74	30	15	8.5	5.5	4.2
28	40	17	18	13	39	560	71	29	15	8.5	5.5	4.5
29	19	17	18	37	34	365	68	28	15	8.5	5	4.5
30	11	17	18	24		298	66	28	15	8.5	4.9	4.7
31	22		18	23		272		27		8.5	4.9	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	77	6.5	11.8	726
November	56	11	27.4	1,630
December	18	14	16.6	1,020
January	37	13	18.9	1,160
February	152	24	44.4	2,550
March	1,810	30	223	13,700
April	295	66	141	8,890
May	64	27	42.0	2,580
June	29	15	20.4	1,240
July	15	8.5	11.2	689
August	8	4.7	5.84	359
September	4.9	3.8	4.27	254
The year	1,810	3.8	47.3	34,300

* Estimated or interpolated.

WOODBIDGE CANAL AT WOODBRIDGE, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 34, T. 4 N., R. 6 E., at Woodbridge, a quarter of a mile below point of diversion.

RECORDS AVAILABLE.—April, 1926, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 200 second-feet June '16 and 20; no flow October 27 to April 23.

REMARKS.—Records fair. Canal diverts from reservoir on Mokelumne River in sec. 34, T. 4 N., R. 6 E., in Woodbridge. Water used for irrigation in territory south and west of Woodbridge.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1.....	50	0	116	146	158	62	92
2.....	64	0	120	138	150	63	92
3.....	60	0	95	12 ^a	120	62	85
4.....	52	0	85	126	112	60	75
5.....	56	0	88	138	109	61	62
6.....	72	0	102	154	109	63	82
7.....	75	0	112	170	102	63	116
8.....	76	0	142	142	112	61	123
9.....	92	0	162	146	102	69	109
10.....	88	0	146	170	85	69	95
11.....	75	0	146	150	76	66	82
12.....	69	0	123	39	79	72	76
13.....	79	0	116	116	74	66	82
14.....	88	0	102	1 ^b	57	55	88
15.....	88	0	95	1 ^c	52	49	85
16.....	82	0	95	2 ^d	48	60	92
17.....	75	0	92	1 ^e	43	63	92
18.....	63	0	85	1 ^f	50	65	85
19.....	62	0	85	1 ^g	73	63	82
20.....	70	0	88	2 ^h	74	58	98
21.....	73	0	88	1 ⁱ	65	52	109
22.....	62	0	82	178	69	54	120
23.....	76	0	88	174	75	65	123
24.....	79	35	116	170	64	79	106
25.....	76	65	106	146	76	95	88
26.....	79	52	102	142	85	98	88
27.....	0	62	106	1 ^j	85	98	82
28.....	0	82	116	178	79	98	76
29.....	0	98	120	174	76	88	74
30.....	0	106	112	170	74	79	71
31.....	0	-----	126	-----	65	76	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	92	0	60.7	3,730			
April.....	106	0	16.7	994			
May.....	162	82	106	6,640			
June.....	200	39	160	9,520			
July.....	158	43	83.8	5,150			
August.....	98	49	68.8	4,230			
September.....	123	62	91.0	5,410			
The period.....	200	0	49.2	35,700			

NOTE.—No flow in months for which no record is given.

DRY CREEK NEAR IONE, CALIF.

LOCATION.—Water-stage recorder near Sacramento-San Joaquin County line, at highway bridge at Forni ranch in Arroyo Seco grant, 7 miles southwest of Ione.

DRAINAGE AREA.—279 square miles.

RECORDS AVAILABLE.—October, 1911, to June, 1912; December, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,450 second-feet March 25 (gage height, 11.9 feet); no flow October 1 to November 12, November 16–20, December 4–10, and June 5 to September 30.

1925–1928: Maximum discharge, that of March 25, 1928; no flow part of each year.

REMARKS.—Records good. Small diversions for local irrigation and mining above station. There is a small diversion from North Fork of Mokelumne River into the drainage basin of Dry Creek.

Daily and monthly discharge, in second-feet, 1927–28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1.....	0	4.8	93	64	44	442	46	2.2
2.....	0	4.0	64	62	42	1,100	42	2.6
3.....	0	2.0	55	327	59	1,270	37	2.0
4.....	0	0	45	2,030	72	780	34	.2
5.....	0	0	36	585	63	545	34	0
6.....	0	0	32	301	60	398	34	0
7.....	0	0	30	211	55	329	33	0
8.....	0	0	29	164	72	264	32	0
9.....	0	0	30	138	92	225	37	0
10.....	0	0	27	117	83	200	37	0
11.....	0	3.0	25	103	72	187	32	0
12.....	0	4.4	26	93	67	187	28	0
13.....	3	3.2	26	81	67	169	27	0
14.....	26	26	25	74	64	152	23	0
15.....	4	57	26	67	53	106	27	0
16.....	0	40	24	66	49	132	26	0
17.....	0	24	21	58	44	145	23	0
18.....	0	17	22	55	43	126	22	0
19.....	0	15	21	54	42	109	20	0
20.....	0	12	20	50	38	99	17	0
21.....	40	11	19	49	35	96	15	0
22.....	26	8	24	55	36	87	13	0
23.....	11	8	292	52	360	82	13	0
24.....	7.5	7	150	60	1,600	89	10	0
25.....	6	6.5	90	57	3,830	81	8.5	0
26.....	6	6	66	49	3,070	73	7	0
27.....	6	6.5	57	49	3,830	68	4.5	0
28.....	6.5	7	48	47	1,780	61	4.0	0
29.....	6	763	81	48	995	57	2.8	0
30.....	12	308	93	-----	702	57	1.8	0
31.....	-----	142	89	-----	505	-----	1.4	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
November.....	40		0		5.33		317	
December.....	763		0		47.9		2,950	
January.....	292		19		54.4		3,340	
February.....	2,030		47		178		10,200	
March.....	3,830		35		578		35,500	
April.....	1,270		57		259		15,400	
May.....	46		1.4		22.3		1,370	
June.....	2.6		0		.23		13.7	
The year.....	3,830		0		95.3		69,100	

NOTE.—No flow in months for which no discharge is given.

DRY CREEK NEAR GALT, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ sec. 34, T. 5 N., R. 6 E., at railroad trestle 1 mile south of Galt.

RECORDS AVAILABLE.—December, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,250 second-feet March 26 (gage height, 10.20 feet); dry several months during year.

1926-1928: Maximum discharge, that of March 26, 1928; dry several months each year.

REMARKS.—Records good except when discharge was estimated. Several small diversions for irrigation above gage.

Daily and monthly discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1	0	93	64	34	570	51	16	2.2	8.5	59	42	154	32
2	0	62	58	32	600	43	17	10	6	54	38	138	29
3	0	46	62	33	1,440	40	18	2.3	4.0	50	35	138	26
4	0	36	906	55	1,140	37	19	2	4.2	48	35	116	24
5	0	26	1,330	53	810	36	20	0	3.4	46	33	102	21
6	0	21	570	51	635	36	21	0	2.0	42	30	93	18
7	0	16	340	50	540	34	22	0	1.4	41	27	88	16
8	0	13	210	48	480	33	23	0	34	46	40	83	13
9	0	13	162	68	340	36	24	0	183	43	554	78	10
10	0	16	130	76	270	37	25	0	108	48	1,040	83	7
11	0	10	108	65	210	36	26	0	68	41	4,520	73	4
12	0	9	96	60	190	32	27	0	54	39	3,720	67	2
13	0	9.5	83	59	183	30	28	0	48	37	3,070	62	.5
14	0	9	72	57	166	27	29	112	52	35	1,400	56	.3
15	0	9	64	51	154	22	30	240	96		880	56	.2
							31	178	78		670		.1
Month						Maximum	Minimum	Mean	Run-off in acre-feet				
December						240	0	17.6	1,080				
January						183	1.4	36.7	2,260				
February						1,330	35	168	9,660				
March						4,520	27	575	35,400				
April						1,440	56	304	18,100				
May						51	.1	23.6	1,450				
The year						4,520	0	93.6	68,000				

* Estimated.

NOTE.—No flow October, November, and June to September.

GOOSE CREEK NEAR ELLIOTT, CALIF.

LOCATION.—Water-stage recorder in SW. ¼ sec. 29, T. 5 N., R. 8 E., 1½ miles above mouth and 4½ miles northeast of Elliott.

DRAINAGE AREA.—8.5 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 271 second-feet March 25 (gage height, 5.36 feet); no flow several months during year.

REMARKS.—Records good. No diversions.

Daily discharge, in second-feet, 1927-28

Day	Dec.	Jan.	Feb.	Mar.	Apr.	Day	Dec.	Jan.	Feb.	Mar.	Apr.
1.....	0	4.0	1.8	0.4	2.5	16.....	0.1	0.4	0.7	0.2	0.1
2.....	0	3.2	2.0	.4	38	17.....	.1	.4	.6	.1	.1
3.....	0	2.3	55	.7	22	18.....	0	.4	.6	.1	.1
4.....	0	2.0	137	.8	10	19.....	0	.3	.6	.1	.1
5.....	0	1.6	21	.6	4.5	20.....	0	.3	.5	.1	0
6.....	0	1.5	12	.4	2.8	21.....	0	.2	.4	.1	0
7.....	0	1.3	6	.3	1.6	22.....	0	.3	.4	.1	0
8.....	0	1.1	5	.4	1.0	23.....	0	24	.3	3.8	0
9.....	0	1.0	3.8	.7	.6	24.....	0	5.5	.3	21	0
10.....	0	.8	3.0	.7	.5	25.....	0	2.3	.4	159	0
11.....	0	.7	2.5	.5	.2	26.....	0	1.3	.4	64	0
12.....	0	.7	2.2	.4	.3	27.....	0	.8	.4	78	0
13.....	0	.7	2.0	.4	.2	28.....	0	.8	.4	26	0
14.....	0	.7	1.6	.3	.1	29.....	65	7	.4	7.5	0
15.....	0	.6	1.1	.2	.1	30.....	11	4.0	-----	4.0	0
						31.....	5	2.2	-----	3.0	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet		
December.....						65	0	2.62	161		
January.....						24	.2	2.34	144		
February.....						137	.3	9.05	521		
March.....						159	.1	12.1	744		
April.....						38	0	2.83	168		
The year.....						159	0	2.39	1,740		

NOTE.—No flow October, November, and May to September.

SUTTER CREEK AT SUTTER CREEK, CALIF.

LOCATION.—Staff gage in northwest corner of T. 6 N., R. 11 E., three-eighths of a mile west of Sutter Creek.

RECORDS AVAILABLE.—February, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, about 3,360 second-feet March 25 (gage height, 6.27 feet); minimum, 1.3 second-feet August 20 and September 1 and 27.

1922-1928: Maximum stage, 7.5 feet February 6, 1925 (discharge not determined); stream practically dry, except for town waste, during summer of 1924.

REMARKS.—Records good except those for high stages, which are fair. Stream is regulated to some extent during dry season by a small dam above town of Sutter Creek, and by release of mine water.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1.8	8	12	32	19	13	131	18	8	5.0	1.7	1.3
2-----	1.9	14	11	28	19	13	280	18	7.5	4.7	1.6	1.4
3-----	1.9	7.5	10	26	47	25	425	19	7.5	4.8	1.7	1.4
4-----	1.9	6	10	23	425	28	280	18	7.5	4.7	1.6	1.4
5-----	2.0	6	11	19	109	27	190	18	7	4.4	1.6	1.5
6-----	4.6	5.5	10	18	94	26	143	18	7	4.1	1.6	1.6
7-----	1.9	6.5	10	16	72	26	120	19	7	3.8	1.5	1.4
8-----	1.9	6	10	16	60	39	106	19	4.2	3.8	1.4	1.4
9-----	1.7	8.5	10	15	51	35	94	19	6	3.8	1.4	1.4
10-----	1.9	20	18	15	35	26	83	19	9.5	3.5	1.4	1.4
11-----	1.9	13	14	14	27	24	72	18	12	3.5	1.4	1.4
12-----	1.8	15	14	13	24	22	62	18	8.5	3.4	1.4	1.4
13-----	1.9	129	21	13	24	21	58	18	7.5	3.4	1.4	1.4
14-----	1.9	65	21	12	22	21	53	18	7.5	3.1	1.4	1.4
15-----	1.9	30	20	12	21	19	48	18	7.5	3.2	1.4	1.4
16-----	2.0	25	21	12	20	19	47	16	7	3.0	1.4	1.4
17-----	2.2	20	20	12	19	18	47	16	6.5	2.8	1.4	1.4
18-----	2.2	14	19	12	18	16	45	15	6	2.0	1.4	1.4
19-----	2.2	11	16	12	16	16	43	15	5	2.7	1.4	1.4
20-----	2.5	13	14	12	15	15	41	15	5	3.0	1.4	1.4
21-----	2.7	15	13	11	14	15	39	14	5	2.7	1.4	1.4
22-----	2.6	14	12	15	14	14	37	14	4.7	2.7	1.4	1.4
23-----	2.5	14	11	33	14	233	35	13	4.6	2.6	1.4	1.4
24-----	2.7	14	10	27	14	500	32	13	4.7	2.5	1.4	1.4
25-----	3.0	14	9.5	25	15	2,640	29	12	4.7	2.2	1.4	1.4
26-----	4.1	14	9.5	23	14	940	25	12	4.4	2.2	1.4	1.4
27-----	9.5	13	9.5	22	14	1,810	19	12	4.6	2.0	1.4	1.4
28-----	6.5	13	14	21	14	675	19	12	4.4	2.0	1.6	1.4
29-----	6	12	525	37	13	300	18	10	4.1	1.9	1.4	1.4
30-----	6.5	13	165	30	-----	165	16	9.5	4.0	1.9	1.4	1.4
31-----	9.5	-----	38	24	-----	131	-----	9	-----	1.9	1.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	9.5	1.7	3.15	194
November-----	129	5.5	18.6	1,110
December-----	525	9.5	35.8	2,200
January-----	37	11	19.4	1,190
February-----	425	13	43.6	2,510
March-----	2,640	13	254	15,600
April-----	425	16	87.9	5,230
May-----	19	9	15.6	959
June-----	12	4.0	6.30	375
July-----	5	1.9	3.14	193
August-----	1.7	1.4	1.45	89.2
September-----	1.6	1.3	1.41	83.9
The year-----	2,640	1.3	41.0	29,700

NORTH FORK OF COSUMNES RIVER NEAR EL DORADO, CALIF.

LOCATION.—Staff gage in sec. 23, T. 9 N., R. 10 E., at Celio ranch, 5 miles south of El Dorado and 1½ miles below Martinez Creek.

DRAINAGE AREA.—197 square miles.

RECORDS AVAILABLE.—August, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, about 7,600 second-feet March 25 (gage height, 15.2 feet); minimum, 1.4 second-feet September 10.

1911–1928: Maximum discharge, that of March 25, 1928; no flow July 17 to October 7, 1924, and July 23 to September 29, 1926.

REMARKS.—Records good. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	• 50	• 64	125	• 140	125	1,200	304	74	19	4.0	1.8
2	2.6	• 30	• 64	• 110	125	• 125	1,620	• 278	68	19	3.7	• 1.8
3	2.6	19	• 60	94	304	161	1,050	252	62	19	3.3	1.8
4	• 2.6	13	• 53	88	770	181	805	• 246	• 44	19	3.3	1.8
5	• 2.6	13	• 48	81	490	• 170	840	240	44	19	• 3.3	1.8
6	2.6	13	• 42	• 81	363	• 170	770	252	• 44	19	3.3	1.6
7	3.3	13	• 36	• 81	• 283	• 350	735	264	44	19	3.3	1.6
8	3.3	34	34	81	203	490	735	• 258	• 39	• 14	3.3	1.6
9	4.0	26	34	• 78	181	252	735	252	34	10	3.3	• 1.5
10	4.0	81	68	74	• 166	• 252	700	• 252	34	9	3.3	1.4
11	4.0	94	55	• 78	152	252	665	• 252	44	9	3.3	1.8
12	4.0	125	• 55	81	143	252	665	252	• 39	9	• 3.3	2.6
13	4.0	277	55	81	• 134	240	630	240	34	7.5	3.3	3.3
14	• 4.0	• 130	109	109	125	227	560	• 234	34	7.5	3.3	3.3
15	4.0	94	81	81	• 122	• 211	560	227	34	• 7	3.3	3.7
16	• 4.0	94	• 68	• 74	• 120	• 196	• 530	• 210	34	6	3.3	• 3.2
17	4.0	81	55	68	117	181	• 510	192	• 30	6	2.9	2.6
18	4.0	81	• 44	• 66	109	181	490	• 176	26	5.5	2.9	2.6
19	4.0	74	34	• 64	109	• 162	455	161	• 26	5	• 2.8	2.6
20	4.0	68	44	62	• 115	143	408	143	26	4.4	2.7	2.6
21	4.0	304	• 39	68	• 120	• 143	393	• 143	• 26	4.0	2.6	2.4
22	4.0	125	34	94	125	203	363	143	26	• 4.0	2.6	2.4
23	• 4.0	81	• 30	181	• 117	920	• 378	• 134	26	4.0	2.6	• 2.5
24	4.0	• 74	26	• 100	109	1,830	393	125	• 22	4.0	2.6	2.6
25	4.0	68	• 26	81	125	6,530	• 363	• 110	19	4.0	2.6	2.6
26	4.0	68	34	• 77	109	5,540	333	94	• 19	4.0	• 2.6	2.9
27	55	• 68	34	• 72	• 102	4,010	• 333	94	19	4.0	2.6	2.9
28	62	• 68	• 34	68	94	2,250	333	94	19	4.0	2.4	3.7
29	44	• 68	1,310	109	• 94	1,550	333	• 88	19	• 4.0	2.2	3.7
30	44	• 64	423	203	-----	1,200	• 318	81	19	4.0	2.2	• 3.5
31	39	-----	181	161	-----	1,100	-----	• 78	-----	4.0	2.0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	62	2.6	10.9	670
November	304	13	79.9	4,750
December	1,310	26	106	6,520
January	203	62	92.6	5,690
February	770	94	182	10,500
March	6,530	125	955	58,700
April	1,620	318	607	36,100
May	304	78	189	11,600
June	74	19	34.3	2,040
July	19	4.0	8.93	549
August	4.0	2.0	2.97	183
September	3.7	1.4	2.47	147
The year	6,530	1.4	189	137,000

• Estimated or interpolated.

COSUMNES RIVER AT MICHIGAN BAR, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 36, T. 8 N., R. 8 E., at highway bridge at Michigan Bar and 12 miles below confluence of North and Middle Forks.

DRAINAGE AREA.—524 square miles.

RECORDS AVAILABLE.—October, 1907, to September, 1928.

EXTREMES.—Maximum discharge during year, 22,900 second-feet March 25 (gage height, 11.0 feet); minimum 2.0 second-feet September 10-12.

1907-1928: Maximum discharge, 23,800 second-feet February 6, 1925 (gage height, 11.2 feet); no flow part of 1908, 1918, 1919, and 1924-1926.

REMARKS.—Records good. Douglas, Enterprise, and Slug Gulch ditches and Michigan Bar Canal divert above station. Water is used for power, domestic supply, and irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	7	130	126	263	271	210	2,800	650	145	38	8.5	5.5
2.....	7	88	115	229	271	210	3,870	575	145	38	7	4.0
3.....	7	63	126	210	640	250	3,000	540	120	38	7	4.0
4.....	7	50	128	192	3,380	320	2,410	540	120	38	7	4.0
5.....	7	44	106	162	1,060	345	2,060	470	109	36	7	4.0
6.....	7	38	106	162	720	320	1,820	484	98	34	7	4.0
7.....	7	38	96	162	600	320	1,660	470	98	29	7	4.0
8.....	8.5	43	88	162	370	442	1,590	470	89	29	7	4.0
9.....	9.5	56	88	162	370	460	1,590	438	80	29	7	3.0
10.....	9.5	104	96	162	370	460	1,520	438	80	28	7	2.0
11.....	9.5	229	115	162	360	430	1,520	407	80	26	7	2.0
12.....	9.5	126	96	162	330	430	1,450	438	89	23	5.5	2.0
13.....	9.5	174	96	162	296	430	1,320	407	98	22	5.5	4.0
14.....	8.5	442	149	186	296	430	1,190	407	80	22	5.5	4.0
15.....	9.5	237	177	192	271	418	1,070	360	80	22	5.5	5.5
16.....	9.5	162	141	162	250	382	1,070	348	66	16	5.5	6.5
17.....	9.5	141	115	126	229	370	1,130	348	63	15	5.5	6.5
18.....	9.5	136	111	126	229	370	960	306	63	15	5.5	6.5
19.....	9.5	115	96	136	229	370	860	295	56	15	5.5	6.5
20.....	10	115	96	149	222	370	860	295	56	15	5.5	5.5
21.....	10	370	88	149	222	370	770	295	50	14	4.0	5.5
22.....	10	250	79	162	229	370	690	295	50	14	4.0	4.0
23.....	10	162	79	400	229	1,300	690	272	50	12	4.0	4.0
24.....	10	154	96	281	229	4,360	730	248	50	11	4.0	4.0
25.....	10	136	96	222	229	17,400	690	248	50	10	4.0	4.0
26.....	10	136	96	192	229	13,100	690	207	44	10	4.0	4.0
27.....	14	136	96	168	229	13,400	650	207	44	10	5.5	5.5
28.....	162	134	96	162	229	6,390	610	181	38	10	5.5	5.5
29.....	96	126	2,740	296	222	4,110	610	174	38	10	6.5	6.5
30.....	63	132	624	370	-----	3,210	650	174	38	9.5	6.5	6.5
31.....	65	-----	345	320	-----	2,320	-----	168	-----	9.5	5.5	-----
Month	Maximum				Minimum				Mean		Run-off in acre-feet	
October.....	162				7				20.4		1,250	
November.....	442				38				142		8,450	
December.....	2,740				79				216		13,300	
January.....	400				126				198		12,200	
February.....	3,380				222				442		25,400	
March.....	17,400				210				2,380		146,000	
April.....	3,870				610				1,350		80,300	
May.....	650				168				360		22,100	
June.....	145				38				75.6		4,500	
July.....	38				9.5				20.9		1,290	
August.....	8.5				4.0				5.85		360	
September.....	6.5				2.0				4.57		272	
The year.....	17,400				2.0				435		315,000	

GOOSE LAKE BASIN

DREW CREEK NEAR LAKEVIEW, OREG.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 4, T. 40 S., R. 18 E., at highway bridge half a mile below mouth of Willow Creek, 1 mile below Drew Creek dam, and 18 miles southwest of Lakeview.

DRAINAGE AREA.—211 square miles.

RECORDS AVAILABLE.—January, 1909, to September, 1919; February to September, 1921; and October, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 428 second-feet March 27 (gage height, 3.16 feet); minimum, 11 second-feet August 29 to September 3 (gage height, 0.46 foot).

1909-1919, 1921, 1925-1928: Maximum discharge (estimated), 3,000 second-feet March 1 and 2, 1910; no flow at times.

REMARKS.—Records good except those for period of backwater effect from aquatic growth, July 1 to September 30, which are fair. Considerable regulation caused by operation of Drew Creek Reservoir. (See table for contents of Drew Creek Reservoir.) The North Drew Canal of the Goose Lake Valley Irrigation Co. diverts water past gage. (See table for run-off of North Drew Canal.) Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	13				19	18	a 408	a 312	a 55	52	64	11
2.	13			14		a 18	408	a 291	56	a 50	64	11
3.	13	13	13		19	18	a 415	269	60	48	64	11
4.	13			14		a 18	a 421	a 23	a 67	a 48	64	a 16
5.	13	13	13			19	428	23	74	48	52	21
6.				14	19	a 20	a 418	a 23	a 74	a 48	52	a 21
7.	13	13	13			20	408	23	74	48	52	21
8.	13					a 20	a 408	a 23	74	48	52	a 21
9.	13	13		14	19	21	408	23	74	a 48	52	21
10.			13			a 21	280	a 23	a 74	a 48	52	a 21
11.	13	13			18	a 21	a 23	a 23	74	48	48	21
12.			13	14		21	23	23	a 74	a 46	48	a 22
13.	13	13			18	a 21	a 23	a 23	74	45	48	22
14.				14		21	23	23	74	52	48	22
15.	13	13	13	14		a 21	a 23	a 28	a 74	56	48	22
16.					17	21	106	a 32	74	56	28	a 22
17.	13		13			a 22	352	37	a 74	74	28	21
18.		13			17	a 22	a 352	a 40	74	74	28	a 21
19.	13		13	14		23	a 352	44	a 74	69	28	21
20.					17	a 24	352	a 46	74	69	27	a 21
21.	13	13		14		24	a 352	48	a 74	69	21	21
22.			13		17	a 24	352	a 48	74	69	21	a 21
23.	13			14		25	a 346	48	a 74	69	21	21
24.		13	13		17	a 25	a 340	a 48	74	69	20	a 20
25.	13					25	334	a 48	a 74	69	20	19
26.		13	13	14		260	a 310	48	a 74	69	20	a 19
27.	13				17	428	a 286	74	74	69	20	19
28.		13	13	15		a 421	262		52	69	12	a 19
29.	13					a 415	a 298	a 52	52	64	11	19
30.		13	13			408	334		a 52	64	11	19
31.	13			17		408				64	11	19

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			13.0	799
November			13.0	774
December			13.0	799
January			14.3	879
February			17.8	1,020
March	428	18	92.7	5,700
April	428	23	295	17,600
May	74	23	61.3	3,770
June	74	52	69.9	4,160
July	64	45	58.7	3,610
August	64	11	36.6	2,250
September	22	11	19.6	1,170
The year				42,600

a Estimated or interpolated.

Monthly contents of Drew Creek Reservoir near Lakeview, Oreg., 1927-28

Date	Gage height in feet	Contents in acre-feet	Gain or loss during month in acre-feet	Date	Gage height in feet	Contents in acre-feet	Gain or loss during month in acre-feet
Sept. 30.....	43.5	23,550	-----	Apr. 30.....	53.4	55,550	-420
Oct. 31.....	43.3	23,050	-500	May 31.....	53.0	53,870	-1,680
Nov. 30.....	44.7	26,620	+3,570	June 30.....	49.7	41,780	-12,090
Dec. 31.....	45.0	27,400	+780	July 31.....	46.1	30,490	-11,290
Jan. 31.....	45.6	29,080	+1,680	Aug. 31.....	42.7	21,610	-8,880
Feb. 29.....	47.2	33,720	+4,640	Sept. 30.....	41.8	19,560	-2,050
Mar. 31.....	53.5	55,970	+22,250				
Apr. 18-21.....	54.0	58,070	-----	The year.....			-3,990

Monthly run-off, in acre-feet, of North Drew Canal near Lakeview, Oreg., 1927-28

Month	Run-off
May.....	1,300
June.....	5,180
July.....	5,270
August.....	4,620
September.....	167
The year.....	16,500

NOTE.—No flow in months for which no record is given.

COTTONWOOD CREEK NEAR LAKEVIEW, OREG.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 29, T. 38 S., R. 19 E., 200 feet below Cottonwood Reservoir and 10 miles northwest of Lakeview.

DRAINAGE AREA.—30 square miles.

RECORDS AVAILABLE.—November, 1908, to September, 1919; October, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year (estimated), 430 second-feet during period March 26–29 (gage height, 3.84 feet); no flow November 3 and 4.

1908–1919, 1925–1928: Maximum discharge, 500 to 1,000 second-feet during April 26 to May 1, 1927, when natural mean flow estimated at 170 second-feet was augmented by water escaping from reservoir through break in outlet conduit above control gage; no flow at times.

REMARKS.—Records fair except those affected by ice, January 15 and 16, those when water was above gage, March 26–29, and those when discharge was below 5 second-feet, which are poor. Considerable regulation caused by operation of Cottonwood Reservoir. (See table for contents of Cottonwood Reservoir.) Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1	3.4	0.8	48	7.1	2.2	2.6	45	125	62	5.0	15	2.2
2	3.4	.2	17	8.4	2.2	2.6	45	125	62	5.0	12	2.2
3	3.4	0	12	8	2.3	2.3	58	125	62	4.5	1 ²	2.2
4	3.4	0	12	13	2.3	2.3	58	45	62	4.5	1 ²	2.0
5	3.4	1.8	5.0	12	2.3	2.3	58	78	62	4.5	9.4	2.0
6	3.6	1.8	3.9	10	2.3	2.3	52	88	48	3.9	9.4	2.0
7	3.9	1.8	6.2	11	2.3	2.3	42	88	48	3.9	9.4	2.0
8	3.9	1.8	4.5	11	2.3	2.2	42	88	48	4.2	3.9	2.0
9	3.9	1.8	6.2	12	2.3	2.2	34	146	45	4.5	3.4	2.0
10	3.9	1.8	6.8	10	2.3	2.2	34	146	45	4.5	2.8	2.0
11	.8	37	6.8	10	2.3	2.3	42	112	45	19	2.8	2.0
12	.8	37	7.4	9.4	2.3	2.2	42	88	40	19	2.6	2.0
13	.8	37	5.0	13	2.3	2.2	42	88	27	19	2.6	2.0
14	.8	37	8.0	12	2.3	2.2	42	42	15	25	2.6	2.0
15	.8	37	7.4	11	2.3	2.2	42	42	15	25	2.6	2.0
16	.8	37	7.4	10	2.3	2.2	125	55	15	25	2.6	2.0
17	.8	37	7.4	9.4	2.6	2.2	125	58	15	25	2.6	2.0
18	.8	37	7.4	9.4	2.6	2.3	125	74	15	25	2.6	2.0
19	.8	34	7.4	9.4	2.6	2.3	29	74	14	25	2.6	2.0
20	.8	37	8.0	8.7	2.6	2.3	29	74	14	19	2.6	2.0
21	.8	62	8.0	8.7	2.6	2.3	55	74	14	19	2.6	2.0
22	.8	37	8.0	10	2.6	2.3	118	74	14	19	2.6	2.0
23	.8	12	7.4	9.4	2.6	48	74	74	12	19	2.6	2.0
24	.8	12	6.8	8.0	2.6	52	74	74	12	19	2.6	2.0
25	.8	12	7.4	8.0	2.6	70	58	88	12	15	2.6	2.0
26	.8	23	7.1	8.7	2.6		30	88	12	15	2.6	2.0
27	.8	27	7.1	9.4	2.6		78	88	12	15	2.3	2.0
28	.8	55	6.8	9.4	2.6	300	78	88	12	15	2.2	2.0
29	.8	88	6.8	70	2.6		78	88	12	15	2.2	2.0
30	.8	66	6.8	2.2		106	125	88	5	15	2.2	2.0
31	.8		6.2	2.2		78		88		15	2.2	
Month	Maximum		Minimum		Mean		Run-off in		acre-feet			
October	3.9		0.8		1.71		105					
November	88		0		25.8		1,540					
December	48		3.9		8.8		541					
January	70		2.2		11.3		695					
February	2.6		2.2		2.43		140					
March			2.2		51.8		3,190					
April	125		34		62.6		3,720					
May	146		42		86.2		5,300					
June	62		5		29.2		1,740					
July	25		3.9		14.6		898					
August	15		2.2		4.59		282					
September	2.2		2.0		2.02		120					
The year			0		25.2		18,300					

Monthly contents of Cottonwood Reservoir near Lakeview, Oreg., 1927-28

Date	Gage height in feet	Contents in acre-feet	Gain or loss during month in acre-feet	Date	Gage height in feet	Contents in acre-feet	Gain or loss during month in acre-feet
Sept. 30.....	670.0	0	-----	Apr. 30.....	698.0	3,024	+154
Oct. 31.....	678.1	183	+183	May 31.....	694.2	2,118	-906
Nov. 30.....	672.0	4	-179	June 30.....	688.0	1,053	-1,065
Dec. 31.....	671.0	0	-4	July 31.....	679.2	244	-809
Jan. 31.....	680.0	293	+293	Aug. 31.....	670.0	0	-244
Feb. 29.....	688.0	1,053	+760	Sept. 30.....	670.0	0	0
Mar. 26.....	700.4	3,685	-----				
Mar. 31.....	697.4	2,870	+1,817	The year.....	-----	-----	0

SACRAMENTO RIVER BASIN

MAIN STREAM

SACRAMENTO RIVER AT ANTLER, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 13, T. 35 N., R. 5 W., at highway bridge at Antler. Gregory Creek enters 200 feet below gage and Pit River 14 miles below.

DRAINAGE AREA.—461 square miles.

RECORDS AVAILABLE.—November, 1910, to December, 1911; April, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, about 34,000 second-feet March 26 (gage height, 19.4 feet); minimum, 176 second-feet July 5 to September 30, 1910-11, 1919-1928: Maximum discharge, that of March 23, 1928; minimum, 110 second-feet July 3 to September 23, except August 19, 1924.

REMARKS.—Records good below 12,000 second-feet and fair above. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	195	250	550	1,420	3,020	815	4,180	1,750	570	328	176	176
2.....	195	250	525	1,780	2,890	955	3,860	1,650	570	290	176	176
3.....	195	250	525	1,600	7,100	1,100	3,540	1,650	515	273	176	176
4.....	195	250	525	1,420	12,900	1,250	3,260	1,650	515	256	176	176
5.....	195	280	525	1,250	5,660	1,330	2,980	1,650	465	256	176	176
6.....	195	280	475	1,100	4,220	1,250	2,840	1,650	465	256	176	176
7.....	195	280	475	1,020	3,020	1,600	2,720	1,650	465	256	176	176
8.....	195	370	430	1,020	2,640	1,690	2,480	1,560	465	256	176	176
9.....	195	2,180	430	955	2,180	2,080	2,360	1,470	465	256	176	176
10.....	195	2,640	430	955	1,780	1,980	2,250	1,380	465	256	176	176
11.....	195	1,780	430	885	1,600	1,780	2,150	1,290	440	241	176	176
12.....	195	1,600	430	815	1,420	1,690	2,060	1,290	415	226	176	176
13.....	195	1,170	430	815	1,250	1,600	2,050	1,290	415	226	176	176
14.....	195	1,100	430	750	1,100	1,420	1,850	1,200	370	226	176	176
15.....	195	1,330	430	750	1,100	1,420	1,850	1,120	370	226	176	176
16.....	195	1,100	430	690	1,020	1,330	2,480	1,120	370	213	176	176
17.....	195	1,170	430	690	955	1,330	2,720	1,040	370	200	176	176
18.....	195	1,250	430	690	955	1,330	2,250	960	370	200	176	176
19.....	195	1,780	430	690	885	1,420	2,050	960	370	200	176	176
20.....	195	1,600	500	690	885	1,780	2,050	1,120	370	200	176	176
21.....	195	955	550	690	815	2,760	1,850	1,120	328	200	176	176
22.....	195	955	602	690	815	3,940	1,850	1,120	328	200	176	176
23.....	195	815	630	690	815	3,670	2,050	1,470	328	200	176	176
24.....	195	815	630	690	750	4,220	1,930	1,300	328	200	176	176
25.....	195	750	630	690	750	4,500	1,850	1,120	328	176	176	176
26.....	195	690	630	885	750	18,500	1,850	1,040	328	176	176	176
27.....	220	690	690	1,250	750	13,400	1,850	960	328	176	176	176
28.....	250	660	750	1,780	750	6,560	1,750	925	328	176	176	176
29.....	250	630	955	2,400	815	4,980	1,750	855	328	176	176	176
30.....	250	575	1,170	3,150	-----	4,500	1,750	718	328	176	176	176
31.....	250	-----	1,420	3,670	-----	4,340	-----	625	-----	176	176	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	250	195	203	12,500
November.....	2,640	250	948	56,400
December.....	1,420	430	578	35,500
January.....	3,670	690	1,180	72,600
February.....	12,900	750	2,190	126,000
March.....	18,500	815	3,240	199,000
April.....	4,180	1,750	2,350	140,000
May.....	1,750	625	1,250	76,900
June.....	570	328	403	24,000
July.....	328	176	222	13,600
August.....	176	176	176	10,800
September.....	176	176	176	10,500
The year.....	18,500	176	1,070	778,000

SACRAMENTO RIVER AT KENNETT, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 2, T. 33 N., R. 5 W., at highway bridge at Kennett.

DRAINAGE AREA.—6,600 square miles (not including area of Goose Lake).

RECORDS AVAILABLE.—November, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 94,900 second-feet March 26 (gage height, 25.1 feet); minimum, 2,990 second-feet September 6 and 7.

1925-1928: Maximum discharge, that of March 26, 1928; minimum, 2,430 second-feet August 11, 1926.

REMARKS.—Records excellent. Flow regulated by storage. Many diversions above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3,450	3,580	5,990	6,760	15,100	6,560	22,600	8,360	4,56 ^a	3,710	3,330	3,210
2.....	3,330	3,580	5,800	7,360	17,200	6,560	25,100	8,160	4,77 ^a	3,850	3,330	3,210
3.....	3,330	3,580	5,800	7,760	26,100	6,560	21,000	7,960	4,56 ^a	3,850	3,210	3,100
4.....	3,210	3,450	5,620	8,560	30,200	7,360	18,600	7,560	4,42 ^a	3,850	3,210	3,100
5.....	3,330	3,450	5,440	7,960	22,000	7,760	17,500	7,560	4,42 ^a	3,710	3,210	3,100
6.....	3,330	3,580	5,440	7,560	17,800	7,560	17,200	7,560	4,42 ^a	3,710	3,210	3,100
7.....	3,330	4,280	5,090	6,960	15,600	8,160	15,900	7,160	4,28 ^a	3,710	3,210	3,100
8.....	3,330	4,280	4,750	6,760	13,500	8,560	15,100	7,760	4,28 ^a	3,710	3,100	3,100
9.....	3,210	19,600	4,750	6,560	12,000	12,800	14,600	7,560	4,12 ^a	3,710	3,210	3,100
10.....	3,330	16,000	5,090	6,560	11,100	12,000	13,800	7,560	4,28 ^a	3,710	3,100	3,100
11.....	3,330	7,330	4,750	6,560	9,880	11,100	12,800	7,560	4,42 ^a	3,710	3,100	3,210
12.....	3,330	6,430	4,590	6,370	9,220	10,800	12,300	7,160	4,42 ^a	3,580	3,100	3,210
13.....	3,330	11,100	5,930	6,370	8,780	10,100	11,500	6,560	4,28 ^a	3,580	3,100	3,210
14.....	3,330	8,780	6,560	6,370	8,360	9,440	10,800	6,180	4,12 ^a	3,580	3,210	3,210
15.....	3,210	9,440	5,620	6,180	7,960	9,000	10,600	6,180	4,12 ^a	3,450	3,210	3,210
16.....	3,210	8,160	5,260	5,800	7,760	8,560	12,300	5,990	4,12 ^a	3,450	3,210	3,210
17.....	3,210	7,160	5,090	5,440	7,160	8,360	13,000	5,990	4,12 ^a	3,450	3,210	3,100
18.....	3,210	6,180	4,920	5,260	6,960	7,960	12,000	5,800	3,96 ^a	3,450	3,100	3,100
19.....	3,330	5,800	4,590	5,260	6,960	7,760	11,500	5,620	3,96 ^a	3,450	3,100	3,210
20.....	3,330	12,800	4,590	5,260	6,760	7,560	10,800	5,620	3,96 ^a	3,580	3,100	3,210
21.....	3,210	12,500	4,430	5,090	6,560	7,560	10,300	5,620	4,12 ^a	3,580	3,100	3,210
22.....	3,210	9,660	4,430	5,800	6,370	9,220	9,880	5,990	3,96 ^a	3,580	3,100	3,210
23.....	3,210	8,360	4,430	6,370	6,370	19,700	9,660	5,620	3,96 ^a	3,580	3,100	3,100
24.....	3,330	7,360	4,920	6,960	6,180	20,700	10,100	5,440	3,96 ^a	3,580	3,210	3,100
25.....	3,330	6,960	5,800	6,760	6,560	20,100	9,660	5,260	3,96 ^a	3,580	3,210	3,210
26.....	3,580	6,760	5,800	6,370	6,180	56,000	9,220	5,090	3,86 ^a	3,450	3,210	3,210
27.....	3,850	5,990	5,620	5,990	5,990	62,400	9,000	5,090	3,86 ^a	3,450	3,210	3,210
28.....	3,580	5,990	7,560	5,990	5,990	38,700	9,000	5,090	3,86 ^a	3,450	3,210	3,210
29.....	3,580	6,370	7,960	10,100	6,760	31,400	8,560	4,920	3,86 ^a	3,330	3,210	3,210
30.....	3,580	6,180	6,760	23,700	-----	24,700	8,360	4,750	3,86 ^a	3,330	3,210	3,210
31.....	3,710	-----	6,370	17,000	-----	20,700	-----	4,590	-----	3,330	3,210	-----
Month							Maximum	Minimum	Mean		Run-off in acre-feet	
October	-----						3,850	3,210	3,360		207,000	
November	-----						19,600	3,450	7,490		446,000	
December	-----						7,960	4,430	5,480		337,000	
January	-----						23,700	5,090	7,480		460,000	
February	-----						30,200	5,990	10,900		627,000	
March	-----						62,400	6,560	15,700		965,000	
April	-----						25,100	8,360	13,100		780,000	
May	-----						8,360	4,590	6,370		392,000	
June	-----						4,750	3,850	4,170		248,000	
July	-----						3,850	3,330	3,580		220,000	
August	-----						3,330	3,100	3,180		196,000	
September	-----						3,210	3,100	3,170		182,000	
The year							62,400	3,100	6,980		5,070,000	

SACRAMENTO RIVER NEAR RED BLUFF, CALIF.

LOCATION.—Water-stage recorder in lot 4, sec. 34, T. 28 N., R. 3 W., at lower end of Iron Canyon and 4 miles northeast of Red Bluff.

DRAINAGE AREA.—9,300 square miles (not including area of Goose Lake).

RECORDS AVAILABLE.—January, 1902, to September, 1928. April, 1895, to June, 1902, at Jellys Ferry, 12 miles above Red Bluff.

EXTREMES.—Maximum discharge during year, 166,000 second-feet March 27 (gage height, 26.1 feet); minimum, 3,400 second-feet September 7.

1902-1928: Maximum discharge, 278,000 second-feet February 3, 1909 (gage height, 35.2 feet); minimum, 2,640 second-feet July 22, 1926.

REMARKS.—Records good. Discharge estimated or interpolated November 6-13, December 3-6, January 20-24, and June 26 to July 31. Flow regulated by storage. Diversions above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,830	4,490	7,430	17,000	21,900	8,910	37,000	10,900	5,320	4,300	3,740	3,660
2	3,920	4,390	7,430	17,800	27,800	8,600	38,400	10,900	5,320	4,300	3,740	3,580
3	3,830	4,300	7,210	16,200	44,200	8,600	41,100	10,200	5,430	4,300	3,740	3,580
4	3,740	4,200	7,000	16,600	69,800	9,540	31,800	10,200	5,210	4,300	3,740	3,490
5	3,740	4,010	6,790	14,400	46,100	10,900	28,000	9,540	5,000	4,200	3,660	3,490
6	3,830	4,200	6,570	12,600	34,400	10,900	26,200	9,540	5,000	4,200	3,660	3,400
7	3,830	4,590	6,370	11,500	27,200	10,500	24,900	8,910	4,900	4,200	3,660	3,400
8	3,830	5,320	6,120	10,500	22,700	15,100	23,600	8,910	4,900	4,200	3,580	3,400
9	3,830	10,700	5,880	10,200	19,400	19,800	21,400	9,220	4,790	4,200	3,580	3,490
10	3,740	33,700	7,710	9,540	17,400	19,400	21,000	9,220	4,690	4,200	3,490	3,490
11	3,740	13,700	6,890	9,540	15,500	17,000	19,400	9,220	4,900	4,100	3,490	3,580
12	3,740	9,540	6,120	9,220	14,000	16,200	18,600	9,910	5,000	4,100	3,490	3,600
13	3,740	18,200	6,120	8,910	12,900	15,100	17,000	8,900	5,000	4,100	3,490	3,740
14	3,740	13,700	10,200	9,220	12,200	14,400	15,900	7,710	4,790	4,100	3,490	3,740
15	3,660	13,700	8,300	8,910	11,500	12,900	15,500	7,430	4,690	4,100	3,490	3,660
16	3,660	12,200	7,160	8,300	10,900	12,200	15,500	7,160	4,690	4,010	3,490	3,660
17	3,660	9,860	6,630	7,430	10,500	11,900	18,600	7,160	4,590	4,010	3,490	3,660
18	3,660	8,600	6,370	7,430	9,860	11,200	17,000	7,160	4,590	4,010	3,490	3,580
19	3,660	7,430	6,120	6,890	9,540	10,900	15,900	6,630	4,490	4,010	3,490	3,580
20	3,740	17,100	6,120	6,890	9,220	10,500	15,100	6,630	4,490	4,010	3,490	3,580
21	3,740	22,300	5,880	6,630	8,910	10,500	14,000	6,630	4,590	3,920	3,490	3,580
22	3,660	14,800	5,650	7,710	8,600	10,900	13,700	7,160	4,590	3,920	3,490	3,660
23	3,660	11,500	5,650	9,220	8,300	21,700	12,900	7,160	4,490	3,920	3,490	3,580
24	3,740	10,200	11,700	10,200	8,300	37,500	13,700	6,630	4,390	3,920	3,490	3,580
25	3,830	9,220	28,500	9,540	9,540	44,600	13,300	6,630	4,390	3,830	3,580	3,580
26	3,920	9,540	13,700	8,910	8,910	61,400	12,600	6,120	4,390	3,830	3,660	3,580
27	4,590	8,910	10,900	8,300	8,300	140,000	12,200	6,120	4,390	3,830	3,660	3,660
28	4,490	7,710	12,900	7,710	8,000	77,300	11,500	5,880	4,390	3,830	3,660	3,660
29	4,300	8,000	17,000	12,300	8,300	53,200	11,200	5,880	4,300	3,830	3,580	3,660
30	4,490	8,000	11,900	27,800	-----	43,700	10,900	5,650	4,300	3,740	3,580	3,660
31	4,790	-----	10,900	29,000	-----	34,600	-----	5,430	-----	3,740	3,580	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,790	3,660	3,880	239,000
November	33,700	4,010	10,500	625,000
December	28,500	5,650	8,810	542,000
January	29,000	6,630	11,500	707,000
February	69,800	8,000	18,100	1,040,000
March	140,000	8,600	25,500	1,570,000
April	41,100	10,900	19,600	1,170,000
May	10,900	5,430	7,840	482,000
June	5,430	4,300	4,730	281,000
July	4,300	3,740	4,040	248,000
August	3,740	3,490	3,570	220,000
September	3,740	3,400	3,580	213,000
The year	140,000	3,400	10,100	7,340,000

SACRAMENTO RIVER AT BUTTE CITY, CALIF.

LOCATION.—Water-stage recorder in sec. 32, T. 19 N., R. 1 W., at highway bridge at Butte City.

RECORDS AVAILABLE.—April, 1921, to September, 1928, low-water records only.

REMARKS.—Records good. Discharge interpolated June 11, 24–26, July 10, August 12–14, September 16–18, and 20–25. Many diversions from main stream and tributaries above station for irrigation.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	3,440	4,940	-----	5,050	3,270	2,340	2,340
2	3,440	4,840	-----	4,840	3,270	2,280	2,400
3	3,520	4,740	-----	4,740	3,190	2,280	2,340
4	3,350	4,640	-----	4,640	3,270	2,220	2,340
5	3,270	4,640	-----	4,540	3,270	2,220	2,280
6	3,270	4,740	-----	4,340	3,190	2,220	2,340
7	3,350	4,840	-----	4,340	3,030	2,220	2,340
8	3,440	5,260	-----	4,160	3,030	2,220	2,400
9	3,440	6,230	-----	4,060	2,960	2,220	2,400
10	3,520	-----	-----	3,960	2,920	2,220	2,460
11	3,520	-----	-----	4,010	2,880	2,160	2,520
12	3,520	-----	-----	4,060	2,880	2,150	2,660
13	3,520	-----	-----	4,060	2,800	2,130	2,800
14	3,520	-----	-----	4,060	2,730	2,120	2,960
15	3,520	-----	7,660	3,870	2,730	2,110	3,030
16	3,520	-----	7,220	3,780	2,660	2,160	3,030
17	3,440	-----	7,220	3,780	2,590	2,160	3,030
18	3,440	-----	6,780	3,690	2,590	2,220	3,030
19	3,520	-----	6,780	3,600	2,520	2,220	3,030
20	3,600	-----	6,560	3,520	2,520	2,160	3,030
21	3,690	-----	6,340	3,520	2,520	2,160	3,030
22	3,690	-----	6,340	3,600	2,590	2,110	3,030
23	3,690	-----	6,780	3,780	2,660	2,110	3,030
24	3,780	-----	6,560	3,650	2,730	2,160	3,030
25	3,780	-----	6,340	3,530	2,730	2,160	3,030
26	3,960	-----	6,010	3,400	2,730	2,220	3,030
27	4,060	-----	5,790	3,270	2,660	2,280	3,110
28	4,540	-----	5,680	3,270	2,590	2,340	3,110
29	4,640	-----	5,470	3,270	2,520	2,340	3,190
30	4,540	-----	5,360	3,270	2,520	2,280	3,190
31	4,840	-----	5,260	-----	2,400	2,280	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,840	3,270	3,690	227,000
November 1–9	6,230	4,640	4,990	89,100
May 15–31	7,660	5,260	6,360	214,000
June	5,050	3,270	3,920	233,000
July	3,270	2,400	2,800	172,000
August	2,340	2,110	2,210	136,000
September	3,190	2,280	2,780	165,000

SACRAMENTO RIVER AT COLUSA, CALIF.

LOCATION.—Water-stage recorder in sec. 29, T. 16 N., R. 1 W., at highway bridge at Colusa.

RECORDS AVAILABLE.—April, 1921, to September, 1928, low-water records only.

REMARKS.—Records good. Considerable water is diverted from main stream and tributaries above station for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	3,400	4,820	-----	5,020	3,040	2,180	2,100
2	3,490	4,920	-----	4,820	3,040	2,100	2,180
3	3,490	4,720	-----	4,720	2,950	2,100	2,260
4	3,580	4,620	-----	4,620	2,950	2,030	2,180
5	3,400	4,520	-----	4,620	2,950	2,030	2,180
6	3,400	4,520	-----	4,420	2,950	2,030	2,180
7	3,400	4,520	-----	4,220	2,860	2,030	2,260
8	3,490	4,720	-----	4,120	2,770	2,030	2,260
9	3,580	5,320	-----	3,940	2,770	2,030	2,260
10	3,580	-----	-----	3,850	2,770	2,000	2,340
11	3,670	-----	-----	3,760	2,680	2,000	2,420
12	3,580	-----	-----	3,760	2,680	2,000	2,500
13	3,580	-----	-----	3,850	2,630	2,000	2,590
14	3,580	-----	-----	3,760	2,580	1,960	2,770
15	3,580	-----	7,830	3,670	2,530	1,960	2,860
16	3,580	-----	7,500	3,580	2,470	2,000	2,950
17	3,580	-----	7,280	3,670	2,420	2,030	2,950
18	3,580	-----	7,060	3,490	2,420	2,030	3,040
19	3,580	-----	6,840	3,490	2,340	2,030	3,040
20	3,580	-----	6,620	3,400	2,340	2,030	2,950
21	3,670	-----	6,420	3,310	2,340	2,030	2,950
22	3,670	-----	6,420	3,400	2,340	2,030	3,040
23	3,670	-----	6,420	3,400	2,420	2,000	3,040
24	3,670	-----	6,620	3,400	2,420	2,000	3,130
25	3,670	-----	6,320	3,310	2,420	1,960	3,130
26	3,670	-----	6,020	3,310	2,420	2,030	3,130
27	3,850	-----	5,820	3,130	2,420	2,100	3,130
28	4,030	-----	5,620	3,130	2,340	2,180	3,220
29	4,420	-----	5,420	3,040	2,260	2,180	3,220
30	4,420	-----	5,320	3,040	2,260	2,100	3,310
31	4,620	-----	5,220	-----	2,260	2,100	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
October	4,620	3,400	3,680	226,000			
November 1-9	5,320	4,520	4,740	84,600			
May 15-31	7,830	5,220	6,400	216,000			
June	5,020	3,040	3,780	225,000			
July	3,040	2,260	2,590	159,000			
August	2,180	1,960	2,040	125,000			
September	3,310	2,100	2,720	162,000			

SACRAMENTO RIVER AT KNIGHTS LANDING, CALIF.

LOCATION.—Water-stage recorder in sec. 14, T. 11 N., R. 2 E., at Southern Pacific Railroad bridge at Knights Landing.

RECORDS AVAILABLE.—April, 1921, to September, 1928, low-water records only.

REMARKS.—Records good; discharge interpolated July 17-23. Considerable water is diverted from main stream and tributaries above station for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1.....	3,900	5,100	-----	5,500	3,080	2,300	2,350
2.....	4,020	5,220	-----	5,300	3,140	2,300	2,400
3.....	4,020	5,100	-----	5,200	3,020	2,250	2,510
4.....	4,020	5,040	-----	4,900	2,960	2,200	2,620
5.....	4,020	4,920	-----	4,740	3,020	2,100	2,680
6.....	4,020	4,860	-----	4,600	2,960	2,050	2,780
7.....	3,960	4,800	-----	4,390	2,900	2,000	2,840
8.....	3,960	4,800	-----	4,180	2,840	2,000	2,840
9.....	4,020	5,040	-----	4,000	2,780	2,050	2,840
10.....	4,020	-----	-----	3,900	2,730	2,000	2,900
11.....	4,020	-----	-----	3,830	2,620	2,000	2,960
12.....	4,140	-----	-----	3,700	2,620	1,910	3,140
13.....	4,140	-----	-----	3,700	2,620	1,910	3,320
14.....	4,080	-----	9,140	3,900	2,620	1,910	3,440
15.....	4,080	-----	8,600	3,900	2,560	1,860	3,640
16.....	4,080	-----	8,100	3,900	2,560	1,860	3,760
17.....	4,020	-----	7,780	3,700	2,540	1,860	3,830
18.....	3,960	-----	7,460	3,700	2,520	1,910	3,830
19.....	4,020	-----	7,220	3,500	2,500	1,960	3,830
20.....	4,080	-----	7,140	3,440	2,480	2,000	3,760
21.....	4,080	-----	6,980	3,380	2,460	2,000	3,700
22.....	4,080	-----	6,980	3,320	2,440	2,000	3,640
23.....	4,080	-----	6,980	3,320	2,420	2,000	3,570
24.....	4,080	-----	6,980	3,380	2,400	2,000	3,640
25.....	4,020	-----	6,980	3,380	2,400	2,000	3,570
26.....	4,140	-----	6,660	3,320	2,460	2,000	3,570
27.....	4,260	-----	6,500	3,140	2,460	2,100	3,870
28.....	4,440	-----	6,260	3,000	2,510	2,150	3,800
29.....	4,680	-----	5,940	3,000	2,460	2,250	3,800
30.....	4,860	-----	5,800	3,000	2,460	2,300	3,440
31.....	4,980	-----	5,640	-----	2,400	2,350	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	4,980	3,900	4,140	255,000
November 1-9.....	5,220	4,800	4,990	89,100
May 14-31.....	9,140	5,640	7,080	253,000
June.....	5,500	3,020	3,890	231,000
July.....	3,140	2,400	2,640	162,000
August.....	2,350	1,860	2,050	126,000
September.....	3,830	2,350	3,270	195,000

SACRAMENTO RIVER AT VERONA, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 23, T. 11 N., R. 3 E., 1 mile below mouth of Feather River and three-fourths mile southeast of Verona.
 RECORDS AVAILABLE.—May, 1926, to September, 1928, low-water records only.
 REMARKS.—Records good. Large diversions for irrigation above station. Flow regulated by storage and power developments above gage.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	6,010	7,500	-----	8,960	4,500	3,280	3,280
2	6,170	7,860	-----	8,790	4,500	3,280	3,380
3	6,010	7,680	-----	8,400	4,260	3,280	3,590
4	5,850	7,500	-----	8,010	4,260	3,280	3,700
5	6,170	7,150	-----	7,620	4,890	3,080	3,810
6	6,170	6,980	-----	7,230	4,140	2,980	3,920
7	6,170	6,650	-----	6,840	4,030	2,880	4,030
8	6,170	6,650	-----	6,540	4,030	2,780	4,030
9	6,330	-----	-----	6,240	4,030	2,880	4,140
10	6,330	-----	-----	5,960	3,810	2,880	4,140
11	6,170	-----	-----	5,680	3,700	2,780	4,260
12	6,490	-----	-----	5,540	3,700	2,780	4,380
13	6,650	-----	-----	5,680	3,700	2,780	4,620
14	6,650	-----	-----	5,680	3,700	2,780	4,870
15	6,650	-----	-----	5,680	3,700	2,680	5,130
16	6,490	-----	-----	5,680	3,700	2,680	5,400
17	6,330	-----	16,400	5,540	3,380	2,680	5,400
18	6,010	-----	15,600	5,260	3,280	2,780	5,400
19	6,330	-----	14,800	5,130	3,280	2,780	5,400
20	6,330	-----	14,400	5,000	3,480	2,880	5,400
21	6,330	-----	14,000	4,740	3,590	2,980	5,260
22	6,490	-----	14,000	4,620	3,590	2,880	5,260
23	6,490	-----	13,600	4,620	3,700	2,990	5,260
24	6,330	-----	13,400	4,740	3,590	2,990	5,400
25	6,010	-----	13,000	4,620	3,480	2,980	5,260
26	6,330	-----	12,400	4,500	3,700	2,880	5,260
27	6,650	-----	11,800	4,140	3,700	2,980	5,260
28	6,980	-----	11,000	4,140	3,700	2,980	5,260
29	7,150	-----	10,200	4,140	3,590	3,080	5,260
30	7,320	-----	9,660	4,260	3,480	3,180	5,260
31	7,500	-----	9,300	-----	3,380	3,280	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	7,500	5,850	6,420	395,000			
November 1-8.....	7,860	6,650	7,250	115,000			
May 17-31.....	16,400	9,300	12,900	384,000			
June.....	8,960	4,140	5,800	345,000			
July.....	4,500	3,280	3,780	232,000			
August.....	3,280	2,680	2,950	181,000			
September.....	5,400	3,280	4,700	280,000			

PIT RIVER BASIN

PIT RIVER AT FALL RIVER MILLS, CALIF.

LOCATION.—Water-stage recorder in sec. 6, T. 36 N., R. 5 E., three-fourths mile below mouth of Fall River and town of Fall River Mills.

RECORDS AVAILABLE.—March, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 10,800 second-feet March 28 (gage height, 7.89 feet); minimum, 38 second-feet August 11 (gage height, 0.25 foot).

1921-1928: Maximum discharge, that of March 28, 1928; minimum, 12 second-feet August 5, 1926.

REMARKS.—Records good. Discharge estimated October 9-15, 23, 24, November 25-28, December 7-9, 11-16, 30, and January 20. Many diversions above gage for irrigation and power. Some water from the McArthur and Knoch irrigation diversions reenters above station. Gage-height record and results of discharge measurements furnished by Mount Shasta Power Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	112	515	213	1,190	370	3,410	352	114	95	75	57
2	124	120	530	213	1,320	398	3,060	312	174	94	71	71
3	124	128	536	224	1,530	404	2,810	325	114	95	68	80
4	124	134	554	283	1,500	408	2,870	327	117	98	79	71
5	124	147	515	311	1,330	444	2,810	279	104	110	79	71
6	132	147	450	348	1,120	443	2,780	295	98	112	72	77
7	132	142	376	400	950	413	2,500	386	112	109	71	76
8	128	144	319	465	767	414	2,010	268	120	107	79	68
9	128	179	327	572	611	467	1,660	213	109	107	71	65
10	128	210	319	604	536	543	1,390	220	95	95	62	74
11	130	216	259	590	485	558	1,240	184	97	82	46	65
12	71	255	230	590	465	566	1,120	180	88	100	57	75
13	57	344	275	590	425	632	1,050	154	83	86	71	86
14	59	410	216	572	405	633	966	121	92	76	66	77
15	60	400	199	485	371	614	887	85	100	83	74	75
16	60	415	199	410	335	587	836	94	107	76	71	75
17	66	376	179	395	331	541	857	91	116	84	71	77
18	171	358	174	344	315	510	890	129	97	74	71	79
19	199	323	210	323	303	475	849	150	94	71	67	76
20	157	460	202	323	295	442	827	116	105	76	65	76
21	126	716	182	295	201	427	803	111	120	72	71	76
22	157	848	179	299	287	422	749	111	105	79	74	76
23	137	676	179	263	287	452	670	111	92	77	71	76
24	112	554	182	259	291	653	627	126	89	66	71	75
25	82	505	179	255	307	1,500	587	117	84	86	79	71
26	70	536	174	263	315	3,720	548	101	90	89	82	68
27	71	485	179	271	327	7,870	514	102	94	92	77	75
28	74	460	196	303	331	9,840	470	100	90	79	77	79
29	76	445	213	425	335	8,300	450	95	84	67	76	79
30	97	475	192	632	-----	5,770	383	115	84	74	67	79
31	109	-----	213	950	-----	4,180	-----	117	-----	75	55	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	199	57	110	6,760
November	848	112	357	21,200
December	554	174	279	17,200
January	950	213	402	24,700
February	1,530	287	598	34,400
March	9,840	370	1,730	106,000
April	3,410	383	1,350	80,300
May	386	85	177	10,900
June	120	80	99.6	5,930
July	112	66	86.6	5,320
August	82	55	70.5	4,330
September	86	57	74.2	4,420
The year	9,840	55	443	321,000

PIT RIVER BELOW PIT NO. 4 DAM, CALIF.

LOCATION.—Water-stage recorder in sec. 17, T. 36 N., R. 2 E., 1 mile below Pit No. 4 Dam and 3 miles below Screwdriver Creek and Pit No. 3 power house.

RECORDS AVAILABLE.—July, 1927, to September, 1928. This station replaces station at Lindsay Flat and records are comparable with those at that point plus flow through Pit No. 3 power house.

EXTREMES.—Maximum discharge during year, 14,800 second-feet March 29 (gauge height, 14.20 feet); minimum, 715 second-feet March 21.

REMARKS.—Records excellent. Discharge estimated April 29 to May 2, August 18 and 19. Numerous diversions above station for irrigation. Considerable regulation is caused by operations at power plants and dams above station. Gauge-height record and results of discharge measurements furnished by Mount Shasta Power Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,900	1,950	2,510	2,000	2,810	2,280	6,900	2,660	2,110	1,990	1,870	1,930
2	1,760	1,900	2,570	2,000	3,280	2,220	7,030	2,600	2,170	2,110	1,870	1,870
3	1,760	1,900	2,570	2,000	3,950	2,250	5,980	2,600	2,110	2,050	1,870	1,870
4	1,760	1,900	2,570	2,110	3,800	2,330	6,230	2,600	1,990	2,050	1,820	1,870
5	1,800	1,900	2,570	2,220	3,800	2,330	6,060	2,410	2,050	1,990	1,760	1,820
6	1,800	1,850	2,450	2,220	3,800	2,450	5,820	2,290	2,050	1,990	1,760	1,820
7	1,800	1,800	2,160	2,280	3,580	2,390	5,130	2,410	2,050	2,050	1,700	1,870
8	1,800	1,900	2,160	2,330	3,210	2,390	4,760	2,600	1,870	1,990	1,760	1,870
9	1,800	2,280	2,280	2,330	2,940	2,510	5,040	2,660	1,930	1,990	1,760	1,870
10	1,800	2,110	2,220	2,510	2,750	2,450	4,370	2,660	2,110	2,050	1,700	1,870
11	1,800	1,660	2,110	2,570	2,510	2,510	4,340	2,600	2,170	2,050	1,700	1,930
12	1,800	1,800	2,060	2,570	2,390	2,750	3,660	2,350	2,170	1,990	1,760	1,930
13	1,800	1,900	2,060	2,510	2,450	2,810	3,560	2,170	2,050	1,930	1,820	1,930
14	1,800	2,160	2,110	2,510	2,450	2,810	3,270	2,230	2,050	1,930	1,820	1,930
15	1,760	2,330	2,060	2,450	2,450	2,880	3,400	2,290	2,110	1,930	1,870	1,870
16	1,710	2,390	2,060	2,220	2,390	2,810	3,710	2,170	2,050	1,870	1,870	1,820
17	1,760	2,280	2,060	2,110	2,280	2,750	3,600	2,170	1,990	1,870	1,870	1,820
18	1,760	2,110	2,000	2,160	2,280	2,630	3,720	2,110	1,990	1,870	1,820	1,870
19	1,800	2,160	1,950	2,160	2,280	2,510	3,700	2,170	2,050	1,990	1,820	1,870
20	1,800	2,570	1,950	2,110	2,220	2,450	3,360	2,170	2,170	2,050	1,820	1,870
21	1,760	3,070	1,900	2,110	2,220	2,390	3,350	2,170	2,050	2,110	1,820	1,870
22	1,710	3,210	1,950	2,110	2,220	2,390	3,060	2,290	2,050	2,170	1,870	1,870
23	1,760	3,070	1,950	2,160	2,220	2,750	3,230	2,230	2,050	2,110	1,930	1,870
24	1,800	2,940	2,000	2,160	2,220	3,000	3,520	2,170	1,990	2,110	1,930	1,870
25	1,800	2,880	2,000	2,110	2,220	3,860	3,280	2,110	1,990	2,110	1,930	1,870
26	1,850	2,510	2,000	2,110	2,280	6,980	3,070	2,110	1,930	1,990	1,930	1,870
27	1,850	2,280	2,000	2,110	2,220	12,200	3,040	2,110	1,930	1,990	1,870	1,930
28	1,800	2,390	2,060	2,110	2,220	12,800	2,890	2,170	1,930	1,930	1,870	1,930
29	1,800	2,570	2,160	2,160	2,280	13,100	2,600	2,110	1,990	1,870	1,870	1,930
30	1,850	2,570	2,110	2,330	-----	9,980	2,540	1,990	1,930	1,870	1,930	1,930
31	1,900	-----	2,060	2,570	-----	7,720	-----	1,990	-----	1,870	1,990	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,900	1,710	1,800	111,000
November	3,210	1,660	2,280	136,000
December	2,570	1,900	2,150	132,000
January	2,570	2,000	2,240	138,000
February	3,950	2,220	2,680	154,000
March	13,100	2,220	4,120	253,000
April	7,030	2,540	4,140	246,000
May	2,660	1,990	2,300	141,000
June	2,170	1,870	2,040	121,000
July	2,170	1,870	2,000	123,000
August	1,990	1,700	1,840	113,000
September	1,930	1,820	1,880	112,000
The year	13,100	1,660	2,450	1,780,000

PIT RIVER AT BIG BEND, CALIF.

LOCATION.—Water-stage recorder in sec. 36, T. 37 N., R. 1 W., one-fourth mile above Big Bend and half a mile below Nelson Creek.

DRAINAGE AREA.—4,920 square miles (not including area of Goose Lake).

RECORDS AVAILABLE.—September, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 14,400 second-feet March 29 (gage height, 13.40 feet); minimum, 909 second-feet March 21 (gage height, 6.97 feet).

1910-1928: Maximum discharge, that of March 29, 1928; minimum, 664 second-feet July 9 and 10, 1925.

REMARKS.—Records excellent. Discharge estimated February 8-14. Considerable water is diverted for irrigation in Fall River and Hat Creek Valleys and upper Pit River Basin. Operations at Mount Shastah Power Corporation's plants affect flow considerably.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,080	2,080	2,840	2,300	3,440	2,680	8,090	3,080	2,370	2,080	1,940	2,010
2	2,010	2,080	2,920	2,300	4,010	2,680	8,090	3,080	2,440	2,220	1,940	1,940
3	1,940	2,010	2,920	2,300	4,730	2,680	6,720	3,000	2,370	2,220	1,940	1,880
4	2,010	2,080	2,920	2,440	4,620	2,760	6,960	3,000	2,220	2,150	1,880	1,880
5	2,080	2,010	2,920	2,520	4,520	2,760	6,760	2,760	2,220	2,150	1,880	1,880
6	2,010	2,010	2,840	2,520	4,420	2,840	6,650	2,600	2,300	2,150	1,810	1,880
7	2,010	2,010	2,520	2,600	4,310	2,840	6,140	2,680	2,300	2,150	1,810	1,880
8	2,010	2,220	2,440	2,600	4,010	2,840	5,480	3,000	2,080	2,080	1,810	1,940
9	2,010	3,000	2,600	2,600	3,720	3,000	5,840	2,920	2,080	2,030	1,810	1,940
10	2,010	2,520	2,520	2,840	3,530	3,000	5,130	3,000	2,220	2,150	1,750	1,940
11	2,010	1,940	2,440	2,920	3,170	3,000	4,930	2,920	2,370	2,080	1,750	1,940
12	2,010	2,150	2,370	2,840	2,920	3,260	4,300	2,600	2,300	2,080	1,750	1,940
13	2,010	2,300	2,370	2,840	2,920	3,260	4,120	2,440	2,220	2,010	1,810	1,940
14	1,940	2,600	2,370	2,840	3,000	3,260	3,890	2,370	2,150	2,010	1,880	1,940
15	1,880	2,760	2,300	2,760	3,000	3,350	3,980	2,520	2,220	2,010	1,940	1,940
16	1,810	2,840	2,300	2,440	2,840	3,260	4,340	2,370	2,150	1,940	1,940	1,940
17	1,810	2,600	2,300	2,300	2,680	3,170	4,180	2,370	2,150	1,940	1,880	1,880
18	1,880	2,440	2,300	2,370	2,680	3,080	4,200	2,300	2,150	1,940	1,880	1,880
19	1,940	2,600	2,220	2,370	2,680	2,920	4,240	2,370	2,150	2,030	1,810	1,940
20	1,940	3,260	2,220	2,370	2,600	2,820	3,890	2,440	2,220	2,150	1,810	1,940
21	1,880	3,620	2,150	2,300	2,600	2,750	3,850	2,440	2,220	2,150	1,810	1,940
22	1,880	3,720	2,220	2,370	2,600	2,840	3,520	2,520	2,150	2,220	1,880	1,940
23	1,880	3,530	2,220	2,440	2,600	3,500	3,730	2,520	2,150	2,150	1,880	1,940
24	1,940	3,440	2,220	2,440	2,520	3,880	4,000	2,370	2,150	2,220	1,940	1,940
25	2,010	3,260	2,220	2,440	2,600	5,360	3,830	2,300	2,150	2,220	1,940	1,940
26	2,010	2,840	2,220	2,370	2,600	9,120	3,590	2,300	2,080	2,080	2,010	1,940
27	2,010	2,600	2,220	2,370	2,600	13,400	3,450	2,370	2,080	2,080	1,940	1,940
28	2,010	2,760	2,300	2,370	2,600	13,400	8,290	2,370	2,080	2,010	1,880	1,940
29	2,010	3,000	2,440	2,680	2,760	13,400	3,080	2,370	2,150	1,940	1,940	1,940
30	2,010	2,920	2,370	2,920	-----	10,700	2,920	2,220	2,080	1,940	1,940	1,940
31	2,010	-----	2,300	3,080	-----	8,600	-----	2,220	-----	1,940	2,010	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,080	1,810	1,970	121,000
November	3,720	1,940	2,640	157,000
December	2,920	2,150	2,440	150,000
January	3,080	2,300	2,540	156,000
February	4,730	2,520	3,220	185,000
March	13,400	2,680	4,720	290,000
April	8,090	2,920	4,770	284,000
May	3,080	2,220	2,570	158,000
June	2,440	2,080	2,200	131,000
July	2,220	1,940	2,080	128,000
August	2,010	1,750	1,870	115,000
September	2,010	1,880	1,930	115,000
The year	13,400	1,750	2,740	1,990,000

PIT RIVER NEAR YDALPOM, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 32, T. 34 N., R. 3 W., at Silverthorne Ferry, $\frac{1}{4}$ miles southwest of Ydalpom and half a mile below Squaw Creek.

DRAINAGE AREA.—5,260 square miles (not including area of Goose Lake).

RECORDS AVAILABLE.—November, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 37,800 second-feet March 26 (gage height, 18.5 feet); minimum, 1,840 second-feet August 12 (gage height, 4.59 feet).

1910-1928: Maximum discharge, about 47,000 second-feet December 31, 1913 (gage height, about 20.7 feet, present datum); minimum, 1,000 second-feet July 10, 1925.

REMARKS.—Records excellent except those for estimated periods, March 4, 7-10, 12-17, 19-22, and 24-26, which are good. Flow regulated by storage. Diversions above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,120	2,300	3,660	3,980	7,700	3,900	14,400	4,220	2,680	2,300	2,070	2,120
2	2,070	2,240	3,660	4,220	9,100	3,820	14,400	4,140	2,820	2,360	2,070	2,070
3	2,020	2,240	3,580	4,140	10,700	3,740	12,400	4,060	2,620	2,360	2,070	2,020
4	2,020	2,240	3,580	4,140	10,400	3,940	11,200	3,980	2,550	2,300	1,960	2,070
5	2,070	2,240	3,500	4,060	9,100	4,140	10,200	3,740	2,480	2,300	1,960	2,020
6	2,070	2,240	3,420	3,980	8,100	4,060	10,200	3,580	2,550	2,300	1,960	2,060
7	2,070	2,680	3,110	3,820	7,500	4,900	9,320	3,340	2,550	2,240	1,900	2,020
8	2,120	2,750	2,820	3,820	6,740	5,000	8,700	3,820	2,480	2,300	1,900	2,020
9	2,070	9,460	3,040	3,660	6,030	5,700	9,540	3,740	2,300	2,240	1,900	2,070
10	2,070	6,980	3,110	3,820	5,520	5,600	9,100	3,820	2,480	2,300	1,900	2,070
11	2,070	3,290	2,960	3,900	5,180	5,350	7,900	3,740	2,620	2,300	1,900	2,070
12	2,070	3,440	2,820	3,820	4,700	5,300	6,030	3,500	2,620	2,240	1,960	2,120
13	2,070	6,000	3,820	3,740	4,540	5,200	6,380	3,260	2,480	2,240	1,960	2,120
14	2,070	4,700	4,060	3,820	4,540	5,000	5,860	3,040	2,360	2,180	2,020	2,070
15	2,020	5,020	3,340	3,660	4,380	4,800	5,860	3,280	2,420	2,180	2,020	2,070
16	1,900	4,380	3,110	3,340	4,300	4,700	6,560	3,040	2,420	2,120	2,070	2,070
17	1,900	3,900	3,040	3,040	4,060	4,500	6,380	3,040	2,420	2,120	2,020	2,020
18	1,960	3,420	3,110	3,040	3,900	4,380	6,030	2,960	2,360	2,070	1,960	2,020
19	2,020	3,340	2,820	3,110	3,820	3,800	6,030	2,880	2,360	2,180	1,960	2,020
20	2,020	7,500	2,750	3,110	3,660	3,200	5,690	3,040	2,420	2,240	1,960	2,070
21	2,020	6,380	2,680	2,960	3,660	3,000	5,690	2,960	2,480	2,300	1,960	2,020
22	1,960	5,350	2,680	3,500	3,580	3,200	5,180	3,110	2,360	2,300	2,020	2,070
23	1,960	4,860	2,680	3,980	3,580	11,400	5,180	3,040	2,360	2,300	2,020	2,070
24	2,070	4,460	2,820	4,460	3,580	11,100	5,520	2,880	2,360	2,300	2,070	2,070
25	2,070	4,300	3,280	4,220	3,740	10,900	5,350	2,820	2,360	2,300	2,070	2,070
26	2,240	4,060	3,040	3,900	3,580	24,500	5,020	2,750	2,300	2,240	2,070	2,020
27	2,240	3,500	3,110	3,740	3,500	30,200	4,860	2,750	2,300	2,180	2,120	2,070
28	2,180	3,500	4,540	3,660	3,500	24,800	4,700	2,750	2,300	2,240	2,020	2,020
29	2,180	3,900	4,460	5,350	4,060	22,000	4,380	2,820	2,300	2,070	2,020	2,020
30	2,300	3,740	3,820	10,400	-----	16,600	4,060	2,680	2,300	2,070	2,070	2,020
31	2,300	-----	3,580	7,900	-----	13,400	-----	2,550	-----	2,070	2,120	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,300	1,900	2,070	127,000
November	9,460	2,240	4,150	247,000
December	4,540	2,680	3,290	202,000
January	10,400	2,960	4,140	255,000
February	10,700	3,500	5,410	311,000
March	30,200	3,000	8,440	519,000
April	14,400	4,060	7,400	440,000
May	4,220	2,550	3,270	201,000
June	2,820	2,300	2,450	146,000
July	2,360	2,070	2,230	137,000
August	2,120	1,900	2,000	123,000
September	2,120	1,960	2,050	122,000
The year	30,200	1,900	3,900	2,830,000

PINE CREEK NEAR ALTURAS, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 35, T. 42 N., R. 13 E., at Alturas Electric Light & Power Co.'s power house, 6 miles above mouth of creek and 9 miles southeast of Alturas.

DRAINAGE AREA.—31 square miles.

RECORDS AVAILABLE.—May, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, 97 second-feet March 25 (gage height, 2.60 feet); minimum, 6.5 second-feet October 9 and March 4 (gage height, 1.02 feet).

1918-1928: Maximum discharge, 147 second-feet March 29, 1919, and December 30, 1920 (gage height, 3.20 feet); minimum, 2.3 second-feet January 5 and 26, 1919.

REMARKS.—Records good. The Alturas Electric Light & Power Co.'s canal diverts water above gage and returns it to the creek 37 feet above gage. Diurnal fluctuation caused by operation of power plant. Gage-height record furnished by Peoples California Hydroelectric Corporation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	16	14	16	12	16	12	18	34	52	16	15	13
2-----	10	15	16	16	17	13	21	30	48	24	14	12
3-----	14	14	15	26	16	12	19	28	43	19	13	12
4-----	14	14	11	22	14	8	18	32	42	17	14	13
5-----	15	15	16	17	11	13	22	35	43	21	12	12
6-----	14	15	13	18	13	14	18	35	42	19	15	12
7-----	14	16	16	16	12	14	18	48	39	19	13	13
8-----	14	14	14	16	12	13	16	52	35	20	13	12
9-----	9	15	14	17	11	14	19	60	38	20	12	11
10-----	15	17	15	15	12	15	19	64	36	20	14	11
11-----	13	13	12	17	12	12	20	74	39	16	13	10
12-----	15	15	16	15	10	15	20	78	36	15	13	11
13-----	15	14	17	16	12	14	20	74	34	16	13	9.5
14-----	15	18	16	13	10	14	18	74	32	16	14	9.5
15-----	15	17	12	12	11	13	21	69	28	14	13	10
16-----	14	16	14	10	10	12	23	64	30	16	13	10
17-----	18	15	13	10	10	12	21	69	29	17	13	11
18-----	16	16	11	10	11	12	21	64	30	16	13	11
19-----	16	15	13	12	10	16	21	60	28	17	12	9.5
20-----	16	16	14	14	13	15	22	52	28	17	13	10
21-----	16	20	16	12	14	14	18	60	26	14	14	12
22-----	16	14	16	9	12	16	17	64	26	14	14	11
23-----	12	15	15	15	9.5	17	20	60	26	15	12	10
24-----	15	12	15	15	12	19	23	60	22	15	12	10
25-----	15	21	12	16	13	69	21	56	24	14	11	11
26-----	16	34	12	14	9.5	61	22	60	23	14	12	11
27-----	16	22	14	15	13	62	24	56	21	14	14	12
28-----	16	33	13	16	12	32	26	64	23	16	12	12
29-----	15	30	13	28	14	29	30	56	23	12	13	13
30-----	15	19	11	21	-----	20	33	56	22	14	13	10
31-----	17	-----	12	18	-----	19	-----	56	-----	15	12	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet		
October-----	18			9			14.7			904		
November-----	34			12			17.5			1,040		
December-----	17			11			14.0			861		
January-----	28			9			15.6			959		
February-----	17			9.5			12.1			696		
March-----	69			8			20.0			1,230		
April-----	33			16			21.0			1,260		
May-----	78			28			56.3			3,466		
June-----	52			21			32.3			1,920		
July-----	24			12			16.5			1,010		
August-----	15			11			13.0			799		
September-----	13			9.5			11.2			666		
The year-----	78			8			20.4			14,800		

McARTHUR DRAINAGE CANAL AT McARTHUR, CALIF.

LOCATION.—Staff gage in sec. 4, T. 37 N., R. 5 E., $1\frac{1}{4}$ miles north of McArthur.
 RECORDS AVAILABLE.—December, 1923, to September, 1928.

REMARKS.—Records fair. Daily discharge is result of daily current-meter measurement and may not be mean for day. Canal diverts from headwaters of Fall River, and its lower end spills into Pit River. It is used for power development and for irrigation and drainage of lands on north side of Pit River and for irrigation on south side. Records furnished by Mount Shasta Power Corporation.

Daily discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	82	40	56		60	62		53	50		50	47
2		42	53	49	85	59		49	49	50	49	
3	83	42	50	49	73	57	133			49	48	
4	82	42	50	53	62		127	48	50		47	49
5	81	41		50		54	122	49	53	50		48
6	84	43	47	51	57	54	115		47	49		49
7	84	42	51	48	56	54	107	45	48	48	47	46
8	83	41	49			56		44	48		51	49
9	83	44	48	50	54	58	91	44	45	49	48	
10	83	44	50		54	58	87	46		48	50	49
11	28	45	50	48	53			43	50	49	50	49
12	15		49	48		58	78	44	45	47		50
13	13	46	49	50	54	57	75	55	44	46	49	44
14	11	45	49	49	53	56	75	57	46	46	46	45
15	12				51			53			45	46
16			47	46	50	55			49	44	47	
17	24	45	47	47	51	53	71	55		46	48	49
18	112	71		48	52		71	49	49	48	47	50
19	159	70	48	47		52	69	53		47		54
20	147		50	46	52		69		46	45	47	54
21	99	73	49	48		53	65	53	48	46	48	50
22	98		48		54	51		54	46		49	50
23	98	67	48	47	53	54	59	52	45	56	45	
24	87		48	47	54	61	58	56		53	48	50
25	24	63		48	52		55	56	44	55	44	51
26	22	62	46	48			55	51	45	54		49
27	22	63	51	48	51		51			52	45	52
28	22	56	47	48	52		48	55	45	51	44	49
29	23	53	47		63	162		50	48		47	50
30	43	55	47	53			53	50	50	52	46	
31	42		49	54				49		49	47	

HAT CREEK NEAR HAT CREEK, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 28, T. 33 N., R. 5 E., 5 miles below the Big Springs and 11 miles southwest of Hat Creek. Prior to April 10, at site half a mile upstream.

RECORDS AVAILABLE.—July, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 419 second-feet March 26 (gage height, 4.0 feet); minimum, 94 second-feet July 28.

1926-1928: Maximum discharge, that of March 26, 1928; minimum, 79 second-feet September 4-6, 1926.

REMARKS.—Records fair. Discharge estimated or interpolated October 12-14, November 13-17, March 18-23, and September 3-7. Five ranches divert water for irrigation and domestic use above gage.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	105	127	137	121	109	114	146	174	170	120	104	100
2.....	105	127	137	121	114	115	129	158	172	118	104	100
3.....	105	127	134	121	119	117	132	153	170	118	104	101
4.....	105	127	134	121	119	117	137	155	166	116	104	102
5.....	105	127	134	121	116	116	132	165	166	117	105	104
6.....	105	127	132	121	114	116	134	174	165	118	104	106
7.....	105	129	127	121	116	119	134	175	165	119	104	108
8.....	107	137	124	121	119	119	134	190	156	118	104	110
9.....	107	202	129	121	119	119	137	202	142	118	100	110
10.....	107	225	132	121	116	120	137	209	136	122	98	110
11.....	107	187	127	119	116	124	140	212	135	125	97	109
12.....	108	149	127	119	116	121	142	202	132	126	97	111
13.....	110	145	127	119	116	120	141	196	131	125	97	111
14.....	112	141	127	119	114	121	142	192	131	125	97	112
15.....	114	137	127	119	111	121	144	185	126	125	97	112
16.....	116	133	127	119	111	122	148	183	132	124	97	112
17.....	116	130	127	119	111	122	141	183	133	122	99	113
18.....	116	127	127	119	111	122	137	187	182	121	99	113
19.....	116	140	127	119	109	122	136	190	132	119	101	108
20.....	116	149	127	119	111	126	132	179	133	113	104	108
21.....	116	143	124	116	111	128	130	181	132	108	104	108
22.....	116	137	124	116	111	130	133	198	132	104	104	108
23.....	116	134	124	116	111	134	140	190	132	103	104	108
24.....	116	137	124	116	114	138	140	190	132	102	104	108
25.....	119	143	124	116	114	188	137	200	131	100	104	108
26.....	119	146	124	116	114	268	145	212	132	97	105	107
27.....	124	140	124	116	114	213	153	205	132	96	105	107
28.....	124	143	124	116	114	162	153	192	132	95	107	111
29.....	124	146	124	114	114	146	156	183	136	96	103	112
30.....	124	143	124	111	-----	140	175	175	125	100	99	112
31.....	124	-----	124	109	-----	140	-----	170	-----	103	99	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	124	105	113	6,950
November.....	225	127	144	8,570
December.....	157	124	128	7,870
January.....	121	109	113	7,260
February.....	119	109	114	6,560
March.....	268	114	135	8,300
April.....	175	129	141	8,390
May.....	212	153	186	11,400
June.....	172	122	141	8,390
July.....	126	95	113	6,950
August.....	107	97	102	6,270
September.....	113	100	108	6,430
The year.....	268	95	129	93,300

McCLOUD RIVER AT BAIRD, CALIF.

LOCATION.—Staff gage in NW. ¼ sec. 23, T. 34 N., R. 4 W., at United States fishery at Baird, 2 miles above junction with Pit River.

DRAINAGE AREA.—665 square miles.

RECORDS AVAILABLE.—December, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 21,700 second-feet March 26 (gage height, 12.8 feet); minimum, 845 second-feet October 1.

1910-1928: Maximum discharge, 27,600 second-feet February 2, 1917 (gage height, 14.3 feet); minimum, 740 second-feet August 29 to September 11, 1924.

REMARKS.—Records good. No diversions. Gage-height record furnished by W. K. Hancock, superintendent of the United States fishery.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	980	870	1,310	1,380	4,250	1,640	4,790	1,980	1,240	1,050	995	940
2.....	980	870	1,240	1,460	4,650	1,560	5,210	1,890	1,240	1,050	968	940
3.....	980	870	1,240	1,620	6,600	1,640	4,650	1,890	1,240	1,050	968	940
4.....	980	870	1,240	1,800	7,470	1,810	3,860	1,800	1,240	1,050	968	940
5.....	980	870	1,170	1,710	5,520	1,900	3,390	1,800	1,240	1,050	968	940
6.....	980	870	1,170	1,620	4,480	1,810	3,380	1,710	1,240	1,050	968	940
7.....	980	1,030	1,110	1,540	4,000	1,810	3,270	1,710	1,240	1,050	968	940
8.....	980	1,030	1,110	1,460	3,530	2,870	3,160	1,800	1,240	1,050	968	940
9.....	980	4,790	1,170	1,380	2,980	3,200	3,160	1,800	1,240	1,050	968	940
10.....	950	3,860	1,110	1,380	2,760	3,090	2,940	1,800	1,170	1,050	968	940
11.....	980	1,980	1,110	1,380	2,760	2,870	2,720	1,710	1,170	1,050	968	940
12.....	980	1,620	1,110	1,310	2,360	2,660	2,720	1,710	1,170	1,050	968	940
13.....	980	2,610	1,240	1,310	2,170	2,460	2,500	1,620	1,170	1,050	968	940
14.....	980	3,160	1,310	1,310	2,170	2,260	2,500	1,620	1,170	1,050	940	940
15.....	980	2,280	1,240	1,240	2,170	2,170	2,390	1,540	1,110	1,020	940	940
16.....	1,030	1,890	1,170	1,240	1,900	1,990	2,830	1,540	1,110	1,020	940	940
17.....	920	1,620	1,170	1,170	1,900	1,990	2,940	1,540	1,110	1,020	940	940
18.....	870	1,460	1,110	1,170	1,810	1,900	2,830	1,460	1,110	1,020	940	940
19.....	845	1,540	1,110	1,110	1,720	1,900	2,720	1,460	1,110	1,020	940	940
20.....	845	3,380	1,110	1,110	1,720	2,260	2,610	1,460	1,110	1,020	940	940
21.....	845	2,940	1,110	1,170	1,720	1,810	2,610	1,460	1,110	1,020	940	940
22.....	870	2,180	1,110	1,380	1,640	1,900	2,390	1,540	1,110	1,020	940	940
23.....	870	1,800	1,050	1,380	1,640	4,360	2,280	1,460	1,110	995	940	940
24.....	870	1,620	1,110	1,380	1,640	4,990	2,280	1,460	1,110	995	940	940
25.....	870	1,460	1,240	1,380	1,640	4,480	2,180	1,460	1,110	995	940	940
26.....	870	1,460	1,170	1,310	1,560	12,900	2,080	1,380	1,110	995	968	940
27.....	920	1,380	1,240	1,310	1,560	14,100	2,080	1,380	1,110	995	940	940
28.....	920	1,380	1,240	1,310	1,480	7,470	2,080	1,380	1,110	995	940	940
29.....	895	1,380	1,240	1,980	1,640	5,350	1,980	1,310	1,110	995	940	940
30.....	845	1,310	1,310	7,660	-----	4,380	2,080	1,310	1,110	995	940	940
31.....	895	-----	1,380	4,650	-----	3,860	-----	1,310	-----	995	940	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,030	845	931	57,200
November.....	4,790	870	1,810	108,000
December.....	1,380	1,050	1,190	73,200
January.....	7,660	1,110	1,700	106,000
February.....	7,470	1,480	2,810	162,000
March.....	14,100	1,560	3,580	217,000
April.....	5,210	1,980	2,890	172,000
May.....	1,980	1,310	1,560	97,800
June.....	1,240	1,110	1,160	69,000
July.....	1,050	995	1,030	63,300
August.....	995	940	964	58,700
September.....	940	940	940	55,900
The year.....	14,100	845	1,700	1,240,000

ELK CREEK NEAR McCLOUD, CALIF.

LOCATION.—In sec. 3, T. 39 N., R. 2 W., half a mile upstream from McCloud-Bartel road crossing and 4 miles east of McCloud.

RECORDS AVAILABLE.—March, 1927, to September, 1928.

EXTREMES.—1927-28: Maximum mean daily discharge, 38 second-feet May 10, 1928.

REMARKS.—Mud Creek, which is notable for its large load of glacial silt from Mount Shasta, is diverted into Elk Creek above the station, and the record is practically the flow of Mud Creek. Tributary springs add about 10 second-feet to Elk Creek below the gaging station. Record of daily discharge furnished by H. L. Haehl.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	9.5	-----	-----	8.0	22	24	19	20	17
2.....	9.5	-----	-----	8	17	26	20	19	17
3.....	10	-----	-----	8.5	16	26	20	18	18
4.....	9	-----	-----	8	18	30	20	17	16
5.....	8.5	-----	-----	6.5	22	32	22	16	18
6.....	8.5	-----	-----	6.5	28	33	22	17	16
7.....	8.5	-----	-----	7	28	27	22	17	16
8.....	9	-----	-----	7	31	26	24	18	14
9.....	10	-----	-----	7	34	23	25	20	14
10.....	10	-----	-----	6	38	20	25	23	13
11.....	10	-----	-----	6	29	16	25	23	13
12.....	13	-----	-----	5.5	25	18	23	22	13
13.....	13	-----	-----	6	28	16	22	18	11
14.....	11	-----	-----	5.5	28	18	19	16	12
15.....	11	-----	5.5	8	27	20	19	16	16
16.....	10	-----	-----	9	27	22	19	16	16
17.....	10	-----	-----	8.5	24	22	18	15	16
18.....	10	-----	-----	7	27	22	19	15	17
19.....	11	6	-----	7	28	21	19	15	16
20.....	11	-----	-----	6.5	29	22	22	16	15
21.....	11	-----	-----	6.5	35	21	25	17	14
22.....	11	-----	-----	9	30	22	28	18	13
23.....	10	-----	-----	8.5	29	26	30	18	13
24.....	10	-----	-----	7.5	30	26	33	19	12
25.....	9	-----	-----	7.5	33	28	32	17	12
26.....	18	6	-----	8	31	26	31	16	10
27.....	9.5	-----	-----	10	35	24	28	16	10
28.....	8.5	-----	-----	12	28	21	25	16	10
29.....	12	-----	9.5	14	24	20	24	15	9.5
30.....	10	-----	-----	28	22	19	25	15	9.5
31.....	7.5	-----	5.5	-----	23	-----	20	16	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	18	7.5	10.3	633
April.....	28	5.5	8.42	501
May.....	38	16	27.3	1,680
June.....	33	16	23.2	1,380
July.....	33	18	23.4	1,440
August.....	23	15	17.4	1,070
September.....	18	9.5	13.9	827

THOMAS CREEK BASIN

THOMAS CREEK AT PASKENTA, CALIF.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 4, T. 23 N., R. 6 W., at highway bridge at Paskenta.

RECORDS AVAILABLE.—January, 1921, to September, 1928. Gage heights October, 1920, to January, 1921.

EXTREMES.—Maximum discharge during year, about 16,600 second-feet March 26 (gage height, 10.5 feet); minimum, 0.1 second-foot August 15-19.

1921-1928: Maximum discharge, that of March 26, 1928; no flow September 9 and 10, 1921, September 7 to October 3, 1922, June 25 to October 21, 1924, and August 20 to September 15, 1926.

REMARKS.—Records good. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	12	550	740	1,040	237	1,060	270	109	56	2.0	0.5
2	6	9	390	1,090	1,600	292	3,020	245	104	42	1.7	.5
3	6	6	208	890	5,700	328	1,000	220	96	34	1.2	.3
4	5	12	150	690	5,440	1,020	1,000	230	83	25	.5	.5
5	5	12	106	690	2,040	1,130	900	260	83	25	.5	.5
6	5.5	12	92	890	1,300	1,020	900	270	72	25	.5	.5
7	6	11	98	690	820	920	810	318	72	25	.5	.5
8	6	12	120	550	640	870	725	344	60	25	.5	.5
9	6	260	135	425	576	820	725	386	60	23	.5	.5
10	6	505	157	355	520	775	810	400	65	19	.5	.5
11	6	230	144	441	410	685	810	365	83	15	.5	.5
12	6	260	120	369	340	560	725	260	72	13	.3	.5
13	9	290	106	290	340	544	640	230	65	13	.3	.5
14	9	322	92	290	328	466	572	220	60	13	.2	.5
15	9	221	79	290	310	410	555	199	51	9.5	.1	.5
16	9	208	66	278	310	354	555	220	51	9.5	.1	.5
17	7	150	66	221	280	340	565	220	42	9.5	.1	.5
18	6	135	66	178	280	340	555	199	42	6	.1	.5
19	6	120	66	144	269	354	555	199	42	6	.1	.5
20	6	1,040	71	126	263	354	475	199	42	6	.3	.5
21	6	1,090	98	98	226	354	475	230	115	6	.3	.5
22	6	840	126	92	253	480	460	220	245	6.5	.5	.5
23	6	740	194	98	269	920	415	171	245	6	.5	.5
24	6	690	425	106	237	970	365	160	230	6	.5	1.2
25	6	840	790	106	204	3,890	300	141	220	6	.5	1.2
26	9	1,090	157	106	165	8,100	300	141	212	6	.5	1.2
27	11	1,140	168	106	147	5,210	270	125	186	6	.5	1.2
28	11	1,040	369	106	165	3,020	270	125	171	6	.5	1.2
29	12	940	740	1,530	192	1,770	270	125	135	5	.5	1.2
30	6	740	642	1,600	-----	1,110	270	125	96	4.0	.5	1.2
31	9	-----	355	1,470	-----	1,000	-----	109	-----	2.8	.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	12	5	7.05	433
November	1,140	6	433	25,800
December	790	66	224	13,800
January	1,600	92	479	29,500
February	5,700	147	850	48,900
March	8,100	237	1,250	76,900
April	3,020	270	678	40,300
May	400	109	223	13,700
June	245	42	107	6,370
July	56	2.8	14.8	910
August	2.0	.1	.51	31.4
September	1.2	.3	.66	39.3
The year	8,100	.1	353	257,000

DEER CREEK BASIN

DEER CREEK NEAR VINA, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 23, T. 25 N., R. 1 W., $2\frac{1}{2}$ miles northeast of Roberts ranch house and $8\frac{1}{2}$ miles northeast of Vina.

RECORDS AVAILABLE.—October, 1911, to December, 1915; March, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 12,200 second-feet March 26 (gage height, 15.0 feet); minimum, 80 second-feet October 1.

1911–1915, 1920–1928: Maximum discharge, that of March 26, 1928; minimum, 60 second-feet June 29 to July^a 1, 1924 (gage height, 1.62 feet).

REMARKS.—Records fair. No diversions. Gage-height record furnished by Stanford-Vina Ranch Irrigation Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	July	Sept.
1	80	• 115	• 202	302	390	171	94 ^c	• 315	-----	-----
2	• 81	• 117	180	• 320	1, 110	195	1, 24 ^c	• 310	-----	-----
3	82	• 118	165	338	1, 970	• 218	• 97 ^c	305	-----	-----
4	• 82	• 120	152	320	1, 550	240	705	• 310	-----	-----
5	-----	• 122	• 146	• 302	• 1, 140	• 232	• 56 ^c	• 315	-----	-----
6	-----	• 125	• 142	285	740	225	415	320	-----	-----
7	-----	• 128	• 138	• 262	590	• 282	45 ^c	• 320	-----	-----
8	-----	132	135	240	• 490	338	• 47 ^c	320	-----	-----
9	-----	1, 020	• 180	• 218	390	• 373	49 ^c	• 320	-----	-----
10	-----	790	225	195	• 355	408	• 48 ^c	• 320	-----	-----
11	-----	• 820	• 240	177	320	• 399	• 47 ^c	320	-----	-----
12	-----	• 850	• 255	• 173	270	390	• 46 ^c	290	-----	-----
13	-----	• 750	270	• 169	• 255	390	• 45 ^c	• 282	-----	-----
14	-----	• 535	285	165	• 240	• 372	• 44 ^a	275	90	-----
15	-----	320	• 255	160	225	• 355	• 43 ^a	• 265	90	-----
16	-----	• 288	225	• 158	• 202	338	432	• 255	• 90	-----
17	-----	255	• 205	• 155	180	• 338	• 441	• 246	90	-----
18	-----	• 219	• 185	152	• 184	338	45 ^c	• 237	• 90	-----
19	-----	183	165	• 146	189	• 338	• 415	• 228	90	-----
20	-----	183	• 158	140	• 177	338	380	• 219	• 90	-----
21	-----	• 182	152	• 136	165	• 460	• 380	• 210	• 90	-----
22	-----	180	• 141	• 133	• 168	• 582	• 380	• 202	90	-----
23	-----	• 185	130	130	171	715	380	• 194	-----	-----
24	-----	• 190	240	• 142	• 183	2, 580	39 ^c	186	-----	-----
25	-----	195	• 225	155	195	5, 110	35 ^c	• 186	-----	-----
26	-----	• 210	210	• 155	171	8, 150	32 ^c	186	-----	81
27	-----	225	• 218	155	• 171	5, 350	• 32 ^c	• 186	-----	• 81
28	-----	240	225	• 272	171	2, 760	• 32 ^c	186	-----	• 81
29	-----	• 232	• 218	390	• 171	1, 970	32 ^c	178	-----	81
30	-----	225	210	• 355	-----	1, 440	32 ^c	• 172	-----	81
31	-----	-----	• 300	320	-----	940	-----	• 166	-----	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	-----	-----	• 90	5, 530
November	1, 020	115	308	18, 300
December	300	130	199	12, 200
January	390	130	217	13, 300
February	1, 970	165	432	24, 800
March	8, 150	171	1, 170	71, 000
April	1, 240	320	486	28, 900
May	320	166	252	15, 500
June	-----	-----	• 140	8, 330
July	-----	-----	• 90	5, 530
August	-----	-----	• 86	5, 290
September	-----	-----	• 81	4, 820
The year	8, 150	-----	296	214, 000

• Estimated

STONY CREEK BASIN

STONY CREEK NEAR STONYFORD, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 35, T. 18 N., R. 7 W., at East Park feed canal diversion dam, $3\frac{1}{2}$ miles west of Stonyford.

DRAINAGE AREA.—97 square miles.

RECORDS AVAILABLE.—April, 1913, to December, 1914; November, 1918, to September, 1928.

REMARKS.—East Park feed canal diverts at dam and empties into East Park Reservoir; flow is included in discharge records. Daily-discharge record furnished by United States Bureau of Reclamation through R. C. E. Weber, project manager.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	37	65	400	430	179	610	188	91	58	43	34
2	40	31	59	880	840	179	685	184	91	58	43	34
3	40	31	55	580	1,740	179	535	184	91	55	43	34
4	40	31	53	380	1,700	188	500	184	91	55	43	34
5	40	31	51	290	900	225	485	184	91	55	43	34
6	37	31	50	270	600	220	540	179	88	55	43	32
7	37	36	48	218	430	209	535	179	84	51	43	32
8	37	40	46	184	390	220	500	179	80	51	43	32
9	34	158	56	175	320	233	465	179	76	51	43	32
10	34	134	54	167	280	270	425	184	76	51	43	32
11	34	75	50	156	247	230	415	179	76	51	43	32
12	34	49	46	141	220	225	385	168	72	51	43	32
13	34	248	46	141	207	225	350	163	72	51	43	32
14	34	108	86	150	200	188	325	159	68	51	43	32
15	34	105	59	133	187	188	310	154	68	48	43	32
16	34	92	57	117	173	179	285	145	64	48	43	32
17	34	75	53	114	165	174	270	141	64	48	43	32
18	34	65	50	100	156	168	265	127	61	48	43	32
19	34	60	49	99	151	166	250	119	58	48	40	32
20	32	69	47	98	143	166	235	119	58	48	40	32
21	32	106	46	96	136	166	225	136	58	48	40	32
22	32	79	45	104	134	335	208	154	58	48	40	29
23	32	71	44	105	127	465	197	136	58	48	40	29
24	32	60	85	99	119	500	201	123	58	48	40	29
25	30	61	123	99	114	1,650	197	123	58	48	40	29
26	34	89	100	104	119	4,800	190	111	58	46	37	29
27	38	65	119	105	127	2,700	179	103	58	46	37	29
28	33	64	326	178	145	1,280	184	99	58	46	37	29
29	33	75	380	880	160	800	188	95	58	43	34	29
30	33	66	181	700	-----	740	188	95	58	43	34	29
31	40	-----	137	600	-----	610	-----	95	-----	43	34	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	40	30	35.0	2,150
November	248	31	74.7	4,440
December	380	44	86.0	5,290
January	880	96	254	15,600
February	1,740	114	368	21,200
March	4,800	166	585	36,000
April	685	179	344	20,500
May	188	95	147	9,040
June	91	58	70.0	4,170
July	58	43	49.6	3,050
August	43	34	40.9	2,510
September	34	29	31.4	1,870
The year	4,800	29	173	126,000

STONY CREEK NEAR ELK CREEK, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 27, T. 20 N., R. 6 W., at county road bridge $2\frac{1}{2}$ miles south of Elk Creek.

DRAINAGE AREA.—298 square miles.

RECORDS AVAILABLE.—May, 1919, to September, 1928.

EXTREMES.—1919–1928: Maximum discharge, about 10,200 second-feet January 31, 1921 (gage height, 7.80 feet); no flow parts of July to October, 1924.

REMARKS.—Water is stored in East Park Reservoir on Little Stony Creek and released during irrigating season. Daily-discharge record furnished by United States Bureau of Reclamation through R. C. E. Weber, project manager.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	181	23	23	315	350	244	900	205	221	255	255	165
2	186	23	23	840	1,220	247	1,300	198	227	252	259	161
3	186	21	23	840	2,840	258	890	178	227	245	259	158
4	62	21	23	700	4,800	273	720	184	227	245	259	155
5	27	21	22	292	1,310	364	658	184	227	250	259	148
6	26	21	22	122	720	339	708	184	232	252	259	148
7	25	21	22	60	360	324	658	178	252	250	255	144
8	24	21	22	52	295	310	708	172	298	271	251	148
9	24	34	22	52	240	410	720	169	298	273	251	151
10	23	162	22	55	205	382	695	194	302	275	247	148
11	23	96	22	50	165	331	647	201	300	275	247	148
12	22	72	22	43	140	328	642	169	252	273	243	120
13	22	198	22	42	110	317	642	160	247	271	239	120
14	21	54	44	41	90	273	605	154	242	278	210	120
15	21	40	26	40	67	258	593	151	238	278	192	117
16	21	31	23	39	43	244	532	145	252	278	192	117
17	21	28	22	39	43	228	496	140	273	271	189	117
18	21	26	22	38	43	216	480	140	258	252	185	117
19	21	28	21	37	43	140	350	140	263	250	182	117
20	21	28	21	33	43	138	285	140	263	247	182	120
21	21	62	21	32	43	138	250	140	263	247	182	158
22	23	40	21	32	38	244	205	138	263	261	178	165
23	28	27	21	32	32	780	163	138	263	263	178	172
24	28	26	240	32	160	2,400	132	138	263	259	178	126
25	24	23	1,130	32	200	2,200	117	143	263	266	175	123
26	22	23	295	31	206	5,500	102	227	258	268	175	120
27	21	23	152	30	195	6,800	95	224	273	263	175	120
28	20	23	204	30	190	2,800	130	218	271	261	175	82
29	20	23	430	1,020	206	2,060	163	211	266	263	168	41
30	20	23	152	650	-----	1,400	194	206	261	266	165	26
31	23	-----	117	340	-----	950	-----	206	-----	258	165	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	186	20	30.6	2,430
November	198	21	42.1	2,510
December	1,130	21	105	6,460
January	1,020	30	193	11,900
February	4,800	32	496	28,500
March	6,800	138	997	61,300
April	1,300	95	493	29,300
May	227	138	173	10,600
June	302	221	258	15,400
July	278	245	262	16,100
August	259	165	211	13,000
September	172	26	129	7,680
The year	6,800	20	283	205,000

STONY CREEK NEAR ORLAND, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 7, T. 22 N., R. 4 W., at county road bridge near Simpson ranch, 10 miles northwest of Orland.

DRAINAGE AREA.—636 square miles.

RECORDS AVAILABLE.—January, 1920, to September, 1928.

EXTREMES.—1920-1928: Maximum discharge, 19,500 second-feet January 30, 1921 (gage height, 10.3 feet); no flow November 11, 1920, and August 24 to September 30, 1924.

REMARKS.—Water is stored in East Park Reservoir on Little Stony Creek and released during irrigating season. Daily-discharge record furnished by United States Bureau of Reclamation through R. C. E. Weber, project manager.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	150	14	50	2,100	700	280	1,700	382	204	232	199	125
2.....	146	12	50	1,700	2,300	350	2,140	370	214	230	199	122
3.....	130	10	50	1,300	6,300	363	1,800	365	214	204	195	121
4.....	100	10	48	725	7,600	465	1,640	357	206	200	195	120
5.....	60	10	46	650	3,900	435	1,460	355	202	200	195	119
6.....	39	9	41	460	2,050	420	1,460	353	220	197	191	119
7.....	36	9	38	300	1,160	405	1,360	330	221	191	191	118
8.....	30	9	36	306	810	435	1,460	330	234	204	191	118
9.....	30	202	33	302	615	453	1,560	330	251	212	191	118
10.....	28	240	32	300	465	453	1,500	307	253	216	183	118
11.....	24	230	31	240	390	460	1,280	307	257	214	183	114
12.....	20	150	32	225	350	450	1,140	301	253	214	183	112
13.....	16	130	32	175	320	420	990	297	228	220	183	108
14.....	11	115	40	155	305	390	920	274	220	221	158	107
15.....	8	96	40	140	295	365	895	274	212	223	156	105
16.....	8	92	45	125	280	335	865	274	210	223	154	103
17.....	8	52	46	125	265	305	840	253	230	218	152	102
18.....	5	52	33	118	257	295	745	237	228	208	150	99
19.....	6	150	36	113	248	257	760	236	218	204	146	103
20.....	6	130	38	110	229	248	725	228	216	200	145	95
21.....	6	112	38	110	220	239	530	237	220	208	141	72
22.....	4	96	40	109	210	229	515	253	218	216	136	75
23.....	7	72	40	109	200	305	485	230	218	212	127	83
24.....	10	52	450	108	186	1,280	400	214	220	212	130	85
25.....	10	47	2,300	105	237	3,500	380	221	220	212	130	99
26.....	13	45	1,100	100	239	8,500	360	234	216	210	129	105
27.....	15	45	500	100	229	12,000	330	234	220	208	127	107
28.....	15	52	260	230	223	4,600	360	230	221	206	125	96
29.....	16	52	240	1,500	257	2,640	370	221	234	202	122	93
30.....	17	51	380	1,700	-----	2,000	375	220	234	204	123	67
31.....	15	-----	1,080	670	-----	1,840	-----	210	-----	202	123	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	150	4	31.9	1,960
November.....	240	9	78.2	4,650
December.....	2,300	31	233	14,300
January.....	2,100	100	468	28,800
February.....	7,600	186	1,060	61,000
March.....	12,000	229	1,440	88,500
April.....	2,140	330	978	58,200
May.....	382	210	279	17,200
June.....	257	202	224	13,300
July.....	232	191	210	12,900
August.....	199	122	160	9,840
September.....	125	67	104	6,190
The year.....	12,000	4	437	317,000

LITTLE STONY CREEK NEAR LODOGA, CALIF.

LOCATION.—Staff gage at East Park Reservoir Dam, 4 miles above junction with Stony Creek, and 3½ miles northwest of Lodoga, Colusa County, and staff gage and weir at head of reservoir, 3 miles above dam, for low water.

DRAINAGE AREA.—102 square miles.

RECORDS AVAILABLE.—January, 1908, to September, 1928.

EXTREMES.—1908–1928: Maximum discharge, 7,060 second-feet February 2, 1909 (gage height, 11.8 feet); no flow during parts of nearly every year.

REMARKS.—East Park Reservoir is used for storage for the Orland project of the United States Bureau of Reclamation. Water from Stony Creek is diverted to the reservoir by the East Park feed canal. Daily-discharge record furnished by United States Bureau of Reclamation through R. C. E. Weber, project manager.

Daily and monthly discharge, in second-feet, 1927–28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	12	210	130	40	110	44	16	3
2.....	0	12	385	290	42	35 ^a	43	16	3
3.....	0	12	485	775	45	25 ^a	42	15	3
4.....	0	12	180	1,400	47	165	42	15	3
5.....	0	12	125	725	49	115	41	14	2
6.....	0	12	115	300	51	13 ^a	40	13	2
7.....	0	12	110	250	53	135	39	13	2
8.....	0	11	80	200	54	125	38	12	2
9.....	0	12	70	175	54	12 ^a	36	12	2
10.....	30	12	60	150	55	115	34	11	1
11.....	15	12	50	125	55	11 ^a	32	10	1
12.....	25	12	45	110	55	105	31	10	1
13.....	145	12	45	105	56	10 ^a	30	9	1
14.....	50	12	40	100	56	95	29	8	0
15.....	40	12	40	95	57	9 ^a	28	7	0
16.....	30	11	35	90	57	85	27	6	0
17.....	25	11	34	85	58	8 ^a	25	5	0
18.....	20	10	33	80	59	8 ^a	24	5	0
19.....	15	10	32	75	60	75	23	5	0
20.....	15	10	31	70	60	70	21	5	0
21.....	15	9	31	60	60	65	80	4	0
22.....	25	9	30	55	60	60	40	4	0
23.....	30	9	30	50	75	55	31	4	0
24.....	25	64	29	44	170	55	24	4	0
25.....	20	228	28	44	385	55	22	4	0
26.....	15	332	27	43	1,150	50	20	4	0
27.....	25	136	26	42	1,750	50	20	3	0
28.....	19	137	25	41	500	50	19	3	0
29.....	15	207	245	40	350	45	19	3	0
30.....	10	160	190	-----	200	45	18	3	0
31.....	-----	109	165	-----	108	-----	17	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November.....	145	0	20.3	1,210
December.....	332	9	52.6	3,230
January.....	485	25	97.8	6,010
February.....	1,400	40	198	11,400
March.....	1,750	40	189	11,600
April.....	330	45	100	5,950
May.....	80	17	31.6	1,940
June.....	16	3	8.10	482
July.....	3	0	.84	51.6
The year.....	1,750	0	57.8	41,900

NOTE.—No flow in months for which no discharge is given.

FEATHER RIVER BASIN

NORTH FORK OF FEATHER RIVER NEAR PRATTVILLE, CALIF.

LOCATION.—In sec. 28, T. 27 N., R. 8 E., at dam at Lake Almanor, 4 miles above Butt Creek and 5 miles southeast of Prattville.

DRAINAGE AREA.—506 square miles (above dam).

RECORDS AVAILABLE.—June, 1905, to September, 1928.

EXTREMES.—1905-1928: Maximum discharge, 10,000 second-feet March 19, 1907 (gage height, 16.2 feet); no flow April 15 and 16, 1914, parts of January to April, 1919, and April 21, 1923.

REMARKS.—Water is diverted from Lake Almanor for power and returned to North Fork at Caribou; records include diversion. Flow regulated by storage in Lake Almanor. Available storage in reservoir on September 30, 1927, 483,741 acre-feet, and on September 30, 1928, 662,403 acre-feet. Record of daily discharge furnished by Great Western Power Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,100	236	51	54	54	891	50	56	57	1,290	1,679	1,070
2.....	1,220	239	50	54	54	891	50	56	57	1,320	1,379	1,190
3.....	1,240	126	49	54	54	890	50	56	57	1,010	1,079	1,060
4.....	1,260	418	48	54	54	497	50	56	57	1,360	979	885
5.....	1,260	924	47	54	54	65	50	56	57	1,360	1,079	883
6.....	1,260	924	47	54	54	56	50	56	57	1,250	975	880
7.....	1,150	991	47	54	54	56	50	56	57	1,010	975	891
8.....	889	761	47	54	54	56	50	56	57	1,250	971	1,130
9.....	1,330	220	54	54	54	56	50	57	788	1,180	979	1,040
10.....	1,270	115	54	54	54	56	50	57	1,040	1,290	977	892
11.....	1,260	59	54	54	54	56	50	57	1,040	1,290	1,079	874
12.....	1,270	59	54	753	54	56	50	57	1,040	1,290	974	880
13.....	1,420	54	54	867	54	56	38	57	1,040	1,200	974	879
14.....	1,370	54	54	874	640	56	67	57	1,040	998	1,079	878
15.....	892	54	54	874	880	56	56	57	1,040	1,260	1,079	397
16.....	1,350	54	243	887	880	56	56	57	1,030	1,240	1,079	70
17.....	1,430	54	432	909	880	56	56	57	1,030	1,280	1,079	65
18.....	1,430	54	435	912	880	56	56	57	1,030	1,280	719	65
19.....	1,420	54	876	910	880	56	56	57	1,030	1,340	479	65
20.....	1,420	54	916	896	880	56	56	57	1,260	1,330	333	65
21.....	1,370	54	916	890	880	56	56	57	1,260	983	727	65
22.....	888	54	916	212	880	56	56	57	1,150	1,290	979	65
23.....	1,410	54	916	54	880	56	56	57	1,030	1,330	977	65
24.....	1,410	54	916	54	885	58	56	57	1,160	1,330	973	65
25.....	1,560	54	916	54	885	51	56	57	1,160	1,350	1,079	65
26.....	1,330	54	916	54	885	25	56	57	1,170	1,410	1,120	65
27.....	1,160	54	913	54	887	25	56	57	1,170	1,410	1,079	65
28.....	1,090	54	304	54	889	26	56	57	1,280	1,200	1,079	65
29.....	887	54	64	54	889	26	56	57	1,160	1,410	1,079	65
30.....	921	54	59	54	-----	26	56	57	1,020	1,500	1,079	65
31.....	76	-----	54	54	-----	26	-----	57	-----	1,500	1,079	-----

Month	Maximum	Minimum	Observed mean	Gain or loss in storage	Mean (corrected for storage)	Run-off in acre-feet		
						Observed	Gain or loss in storage	Corrected first storage
October.....	1,560	76	1,200	-745	460	73,800	-45,500	28,300
November.....	991	54	201	+639	1,040	12,000	+40,900	61,900
December.....	916	47	341	+268	599	21,000	+15,800	36,800
January.....	912	54	325	+391	716	20,000	+24,000	44,000
February.....	889	54	503	+258	761	28,900	+14,900	43,800
March.....	891	25	145	+1,540	1,680	8,920	+94,100	103,000
April.....	67	38	53.4	+1,390	1,440	3,180	+82,500	85,700
May.....	57	56	56.7	+1,220	1,280	3,490	+75,200	78,700
June.....	1,280	57	814	-379	435	48,400	-22,560	25,900
July.....	1,500	983	1,280	-918	358	78,700	-56,700	22,000
August.....	1,650	333	972	-679	293	59,800	-41,800	18,000
September.....	1,190	65	494	-134	360	29,400	-8,000	21,400
The year.....	1,650	25	534	-----	785	388,000	+182,000	570,000

NORTH FORK OF FEATHER RIVER AT BIG BAR, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 32, T. 23 N., R. 5 E., one-fourth mile above Big Bar and 7 miles above intake of Great Western Power Co.'s power plant at Big Bend. Zero of gage is 1,348.96 feet above mean sea level.

RECORDS AVAILABLE.—February, 1911, to September, 1928.

EXTREMES.—1911-1928: Maximum mean daily discharge, 35,000 second-feet January 1, 1914; minimum, 423 second-feet June 8, 1924.

REMARKS.—See North Fork of Feather River near Prattville for diversions and regulation. In addition, there was 25,483 acre-feet of storage in Butt Valley Reservoir on September 30, 1928. Daily-discharge record furnished by Great Western Power Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,000	1,420	1,970	1,800	2,910	2,440	6,600	2,930	1,600	1,340	2,020	1,640
2	1,720	1,660	1,790	1,970	4,470	2,550	6,300	3,120	1,500	1,700	2,110	1,500
3	1,910	1,670	1,610	2,300	5,910	2,590	5,640	3,050	1,200	1,730	1,990	1,500
4	2,140	1,480	1,420	2,370	7,420	2,430	4,920	2,750	1,330	1,310	1,790	1,480
5	2,170	1,430	1,250	2,330	5,420	2,380	4,540	2,620	1,500	1,790	1,380	1,420
6	2,160	1,250	1,480	2,090	4,310	2,710	4,530	2,620	1,430	1,800	1,360	1,380
7	2,140	1,430	1,530	1,980	3,730	2,590	4,620	2,580	1,470	1,650	1,400	1,280
8	1,980	1,660	1,570	1,810	3,380	3,110	4,750	2,750	1,490	1,370	1,400	1,308
9	1,520	5,400	1,530	1,690	3,130	3,460	4,780	2,930	1,200	1,750	1,400	1,350
10	1,760	7,520	1,540	2,000	2,880	3,410	4,620	2,850	1,200	1,710	1,390	1,370
11	1,800	2,460	1,420	2,230	2,670	2,960	4,430	2,780	1,180	1,780	1,380	1,300
12	2,120	1,790	1,360	2,000	2,450	2,960	4,230	2,760	1,300	1,740	1,670	1,290
13	2,110	3,510	1,680	2,030	2,310	2,900	4,100	2,680	1,390	1,830	1,340	1,300
14	2,250	3,160	1,480	2,040	2,520	2,780	3,910	2,340	1,300	1,850	1,420	1,320
15	2,140	2,460	1,590	1,900	2,610	2,670	3,690	2,240	1,300	1,380	1,490	1,360
16	1,580	2,170	1,540	1,660	2,500	2,670	3,510	2,110	1,270	1,730	1,520	1,180
17	1,810	1,970	1,500	1,840	2,470	2,540	3,730	2,050	1,200	1,760	1,520	1,320
18	2,190	1,790	1,320	1,830	2,430	2,400	3,460	1,990	1,200	1,860	1,530	1,320
19	2,140	1,970	1,200	1,850	2,200	2,540	3,280	1,900	1,300	1,880	1,490	1,360
20	2,140	2,430	1,460	1,870	2,120	2,960	3,000	1,810	1,200	1,830	1,620	1,320
21	2,360	3,730	1,570	1,820	2,310	2,950	2,820	1,760	1,430	1,750	1,620	1,280
22	2,010	2,670	1,600	1,750	2,180	3,400	2,700	1,760	1,500	1,340	1,490	1,320
23	1,600	2,160	1,630	1,660	2,080	6,150	2,660	1,800	1,300	1,760	1,620	1,210
24	1,930	1,890	1,550	1,870	2,240	10,000	2,710	1,960	1,150	1,840	1,500	1,220
25	2,150	1,610	1,370	1,850	2,340	18,000	2,690	1,940	1,200	1,790	1,400	1,300
26	1,970	2,130	1,070	1,910	2,120	22,000	2,610	1,730	1,500	1,860	1,400	1,350
27	1,980	1,820	1,210	1,920	1,970	30,000	2,590	1,650	1,400	1,890	1,450	1,310
28	1,640	1,660	1,650	1,870	2,300	18,000	2,660	1,680	1,500	1,900	1,520	1,320
29	1,550	2,460	2,220	2,250	2,400	12,900	2,670	1,730	1,720	1,380	1,520	1,320
30	1,280	1,790	1,900	3,100	-----	9,730	2,820	1,480	1,530	1,890	1,480	1,120
31	1,280	-----	1,770	3,080	-----	7,590	-----	1,580	-----	1,900	1,500	-----
Month												
	Maximum						Minimum		Mean		Run-off in acre-feet	
October	2,360						1,280		1,920		118,000	
November	7,520						1,250		2,350		140,000	
December	2,220						1,070		1,540		94,700	
January	3,100						1,660		2,020		124,000	
February	7,420						1,970		3,030		174,000	
March	30,000						2,380		6,320		389,000	
April	6,600						2,590		3,850		229,000	
May	3,120						1,480		2,260		139,000	
June	1,720						1,150		1,390		82,700	
July	1,900						1,310		1,710		105,000	
August	2,110						1,340		1,540		94,700	
September	1,640						1,120		1,330		79,100	
The year	30,000						1,070		2,440		1,770,000	

FEATHER RIVER AT OROVILLE, CALIF.

LOCATION.—Water-stage recorder in sec. 8, T. 19 N., R. 4 E., at highway bridge at Oroville, 6 miles below junction of North and Middle Forks.

DRAINAGE AREA.—3,640 square miles.

RECORDS AVAILABLE.—January, 1902, to September, 1928.

EXTREMES.—Maximum discharge during year, 211,000 second-feet March 26 (gage height, 26.08 feet); minimum, 600 second-feet September 17 and 24 (gage height, -0.48 foot).

1902-1928: Maximum discharge, that of March 26, 1928; minimum, 402 second-feet June 30, 1924.

REMARKS.—Records excellent except those for March 23-31, which are fair. Minor diversions from tributaries above station. The operation of the Big Bend plant of the Great Western Power Co. causes diurnal fluctuations in stage, especially during extremely low water. Also see North Fork of Feather River near Prattville. Attendant for water-stage recorder furnished by Sutter Butte Canal Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,710	1,500	2,820	2,970	5,180	3,770	17,200	7,760	2,820	1,860	2,080	1,630
2	1,430	1,620	2,550	3,580	9,000	3,780	16,800	7,520	2,600	2,040	2,200	1,580
3	1,750	1,610	2,340	4,080	16,200	4,400	14,800	6,800	2,440	2,110	1,950	1,610
4	1,890	1,460	2,070	3,990	18,800	4,920	13,200	6,360	2,250	1,740	1,600	1,660
5	1,860	1,420	2,040	3,580	12,200	4,900	12,800	6,360	2,420	2,080	1,480	1,540
6	1,880	1,280	2,160	3,380	9,250	4,900	12,800	6,360	2,360	2,110	1,590	1,540
7	1,900	1,600	2,100	3,020	7,700	4,750	12,800	6,360	2,380	2,030	1,630	1,380
8	1,760	2,610	2,100	2,890	6,750	5,760	12,800	6,580	2,380	1,680	1,600	1,370
9	1,340	11,400	2,140	2,920	6,060	7,960	12,400	6,580	2,200	2,030	1,590	1,460
10	1,770	13,500	2,400	3,060	5,470	7,460	12,000	6,580	2,130	1,980	1,580	1,460
11	1,960	4,260	2,000	3,040	4,880	6,560	11,300	6,580	2,040	2,050	1,510	1,510
12	1,870	2,940	1,600	3,000	4,420	6,360	11,000	6,360	2,230	1,980	1,480	1,400
13	1,900	7,880	4,000	3,070	4,160	6,190	10,700	5,740	2,190	2,040	1,590	1,500
14	1,960	5,540	7,000	3,120	4,200	5,780	10,000	5,350	2,140	2,020	1,580	1,400
15	1,860	4,120	4,200	2,820	4,110	5,400	9,440	5,160	2,080	1,620	1,660	1,510
16	1,400	3,340	2,500	2,580	3,890	5,060	9,440	4,800	2,000	1,900	1,680	1,270
17	1,776	3,000	2,040	2,690	3,690	4,900	10,000	4,470	1,950	2,020	1,670	1,280
18	1,940	2,640	1,880	2,620	3,600	4,900	9,140	4,240	1,820	2,070	1,690	1,350
19	1,950	2,660	1,720	2,600	3,400	4,900	8,280	4,210	1,920	2,040	1,560	1,460
20	1,976	3,920	1,900	2,590	3,360	5,580	7,760	3,940	1,860	2,060	1,860	1,400
21	1,960	6,780	1,920	2,460	3,470	5,580	7,280	4,000	1,980	2,050	1,820	1,300
22	1,840	4,480	1,960	2,680	3,200	6,990	7,040	4,000	2,080	1,600	1,620	1,300
23	1,450	3,190	1,940	2,790	3,330	26,200	7,280	3,900	1,900	1,940	1,600	1,300
24	1,860	2,820	1,780	2,940	3,400	47,800	7,520	3,860	1,700	2,040	1,600	1,300
25	2,010	2,690	1,930	2,810	3,700	103,000	7,040	3,700	1,740	2,020	1,600	1,390
26	2,030	3,180	1,540	2,720	3,310	143,000	6,800	3,470	1,920	2,070	1,470	1,440
27	2,280	2,850	1,840	2,680	3,110	128,000	7,040	3,160	1,960	2,140	1,700	1,410
28	1,990	2,780	2,560	2,640	3,300	65,300	7,040	3,100	2,040	2,160	1,680	1,390
29	1,620	3,360	5,440	4,240	3,760	36,800	7,040	3,080	2,060	1,670	1,660	1,380
30	1,880	2,820	3,460	6,100	-----	23,400	7,280	2,850	2,020	1,980	1,600	1,210
31	1,840	-----	2,980	5,410	-----	18,600	-----	2,760	-----	2,140	1,660	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,280	1,340	1,810	111,000
November	13,500	1,280	3,780	225,000
December	7,000	1,540	2,550	157,000
January	6,100	2,460	3,200	197,000
February	18,800	3,110	5,760	331,000
March	143,000	3,770	23,000	1,410,000
April	17,200	6,800	10,200	607,000
May	7,760	2,760	5,030	309,000
June	2,820	1,700	2,120	126,000
July	2,160	1,600	1,980	122,000
August	2,200	1,470	1,670	103,000
September	1,660	1,210	1,420	84,500
The year	143,000	1,210	5,210	3,780,000

FEATHER RIVER AT NICOLAUS, CALIF.

LOCATION.—Water-stage recorder at highway bridge at Nicolaus, Sutter County.
 RECORDS AVAILABLE.—June, 1921, to September, 1928, low-water records only.
 REMARKS.—Records good. Discharge interpolated May 25–31, July 18, 24, 25, August, 1, 8, and 9. Considerable water is diverted for irrigation above station. Flow is partly regulated by diversions above and by operation of power plants of Great Western Power Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	1,740	2,380	-----	3,240	1,080	785	615
2	1,800	2,300	-----	2,840	910	910	570
3	1,510	1,930	-----	2,640	710	860	615
4	1,410	2,000	-----	2,240	960	810	615
5	1,860	1,860	-----	2,150	1,020	710	660
6	1,930	1,680	-----	2,240	760	530	660
7	2,070	1,560	-----	2,060	910	432	660
8	2,140	1,620	-----	2,150	960	415	615
9	2,140	-----	-----	1,880	910	397	615
10	1,860	-----	-----	1,470	660	380	615
11	1,680	-----	-----	1,550	810	362	710
12	2,220	-----	-----	1,550	810	362	810
13	2,300	-----	-----	1,030	910	380	910
14	2,220	-----	-----	1,550	1,140	328	960
15	2,300	-----	-----	1,400	860	310	1,140
16	2,300	-----	7,540	1,240	810	328	1,260
17	1,930	-----	7,060	1,140	490	380	1,260
18	1,680	-----	6,820	1,020	600	415	1,140
19	2,220	-----	6,460	910	710	450	1,260
20	2,300	-----	6,340	1,020	910	490	1,330
21	2,220	-----	6,340	1,020	1,020	450	1,330
22	2,460	-----	6,220	860	1,080	570	1,260
23	2,380	-----	6,100	910	1,020	570	1,330
24	2,000	-----	5,430	1,020	1,020	530	1,330
25	1,800	-----	5,150	1,020	1,020	490	1,260
26	2,460	-----	4,870	860	1,020	432	1,330
27	2,710	-----	4,590	710	1,020	432	1,400
28	2,980	-----	4,320	710	1,020	380	1,400
29	2,620	-----	4,050	860	960	470	1,470
30	2,380	-----	3,780	1,020	860	530	1,470
31	2,300	-----	3,510	-----	660	570	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2,980	1,410	2,130	131,000
November 1–8	2,380	1,660	1,920	30,600
May 16–31	7,540	3,510	5,540	176,000
June	3,240	710	1,500	89,300
July	1,140	490	891	54,800
August	910	310	499	30,700
September	1,470	570	1,020	60,700

SPANISH CREEK AT KEDDIE, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 22, T. 25 N., R. 9 E., at highway bridge at Keddle, 2 miles above junction with Indian Creek.

RECORDS AVAILABLE.—October, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, about 11,000 second-feet March 26 (gage height, 15.5 feet); minimum, 15 second-feet August 7.

1911–1928: Maximum discharge, that of March 26, 1928; minimum (estimated), 9 second-feet parts of June to September, 1924.

REMARKS.—Records good except those for high stages, which are fair. Water is diverted above station for irrigation in American Valley.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	39	62	125	116	330	120	830	336	93	46	17	17
2.....	39	57	116	183	720	130	1,070	317	89	46	17	17
3.....	39	54	106	221	1,160	146	950	298	86	45	16	17
4.....	39	53	106	218	1,100	199	720	281	82	45	16	17
5.....	39	53	100	199	720	235	640	281	79	44	16	17
6.....	39	54	94	186	431	232	640	264	76	43	16	17
7.....	39	79	86	171	387	218	640	264	70	43	15	18
8.....	38	120	90	162	358	342	640	264	67	41	16	18
9.....	39	552	90	151	326	408	614	264	64	41	16	19
10.....	39	478	86	143	292	366	588	264	67	39	17	1
11.....	40	192	84	130	249	334	562	264	70	39	17	20
12.....	40	408	82	120	215	318	537	264	73	38	17	20
13.....	42	606	90	120	192	303	537	249	79	37	17	21
14.....	42	408	102	125	171	281	512	234	76	35	17	22
15.....	43	259	111	102	162	252	489	223	76	34	18	22
16.....	43	205	111	84	156	232	444	217	73	33	18	22
17.....	42	180	108	79	146	212	422	206	70	32	18	21
18.....	42	156	102	75	140	225	422	201	67	32	19	20
19.....	41	130	94	73	135	238	378	198	66	29	19	18
20.....	40	156	86	72	130	252	357	190	64	29	19	18
21.....	40	408	79	68	125	259	336	185	61	28	18	17
22.....	40	307	70	75	120	288	317	190	61	28	18	16
23.....	40	225	61	180	120	870	317	178	59	28	17	17
24.....	40	189	53	218	116	1,960	298	156	58	28	17	17
25.....	40	162	46	162	125	4,920	317	138	56	27	17	18
26.....	52	180	40	118	130	4,570	317	124	54	27	17	19
27.....	86	174	40	102	130	4,920	317	114	51	25	18	21
28.....	98	153	41	98	125	2,200	298	109	50	24	18	22
29.....	84	156	94	354	130	1,250	317	107	49	22	18	23
30.....	73	140	135	552	-----	890	317	103	46	20	17	24
31.....	73	-----	94	387	-----	720	-----	96	-----	18	17	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	98	38	47.4	2,910
November.....	606	53	212	12,600
December.....	135	40	87.8	5,400
January.....	552	68	163	10,000
February.....	1,160	116	298	17,100
March.....	4,920	120	900	55,300
April.....	1,070	298	505	30,000
May.....	356	96	212	13,000
June.....	93	46	67.7	4,030
July.....	46	18	33.7	2,070
August.....	19	15	17.2	1,060
September.....	24	16	19.1	1,140
The year.....	4,920	15	213	155,000

CONCOW CREEK NEAR YANKEE HILL, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 16, T. 22 N., R. 4 E., 300 feet below Lake Wilenor Dam and about 3 miles north of Yankee Hill.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,840 second-feet March 26 (gage height, 5.9 feet); no flow for several months.

REMARKS.—Records good. Water is diverted into Spring Valley ditch at station. Flow regulated by Lake Wilenor Reservoir.

Daily and monthly discharge, in second-feet, 1927-28

Day	Feb.	Mar.	Apr.	Day	Feb.	Mar.	Apr.	Day	Feb.	Mar.	Apr.
1.....	0	4.6	73	11.....	10	32	35	21.....	3.4	0	19
2.....	28	4.2	74	12.....	10	18	33	22.....	3.4	11	16
3.....	200	10	24	13.....	7.5	3.4	32	23.....	4.2	292	5
4.....	222	20	177	14.....	6.5	1.8	28	24.....	4.2	340	2
5.....	97	19	109	15.....	6	.6	26	25.....	9	426	0
6.....	57	13	68	16.....	5	0	32	26.....	6.5	629	0
7.....	37	13	59	17.....	4.2	0	32	27.....	4.2	349	0
8.....	26	24	53	18.....	4.2	0	26	28.....	4.2	117	0
9.....	19	64	44	19.....	3.8	0	24	29.....	5	71	0
10.....	12	50	39	20.....	3.8	0	20	30.....		69	0
								31.....		68	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February.....	222	0	27.7	1,590
March.....	629	0	85.5	5,290
April.....	177	0	34.9	2,080
The year.....	629	0	12.3	8,960

NOTE.—No flow October to January and May to September.

Daily and monthly discharge, in second-feet, of Concow Creek and Spring Valley ditch near Yankee Hill, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	5.5	1.0	1.2	0.9	4.9	73	1.2	1.4	11	28	25
2	10	5.5	1.0	1.3	29	4.5	74	1.2	1.4	4.8	27	25
3	13	5.5	1.0	1.2	201	10	24	1.2	1.4	2.4	27	25
4	13	5.5	1.0	1.2	223	20	177	1.2	1.4	2.4	27	43
5	11	5.5	.9	1.2	98	19	109	1.2	1.4	9.5	24	43
6	11	5.5	.9	1.2	58	13	68	1.2	8.5	16	20	43
7	11	5.5	.9	1.2	38	13	59	1.2	30	16	20	42
8	8.5	5.5	.9	1.2	27	24	53	1.2	20	9.5	20	42
9	8.5	1.4	.9	1.2	20	64	44	1.2	20	9.5	23	36
10	8	.5	1.0	1.2	13	50	39	1.3	20	14	23	36
11	8.5	.5	1.0	1.2	11	32	35	1.4	20	10	23	40
12	8.5	1.2	1.0	1.2	11	26	33	1.4	20	10	23	40
13	8.5	1.0	1.2	1.2	8	21	32	1.4	20	10	23	40
14	8.5	1.0	1.2	1.2	7	20	28	1.4	20	11	23	35
15	8.5	1.0	1.0	1.2	6.5	18	26	1.4	15	13	23	35
16	8.5	1.0	1.0	1.2	5.5	16	32	1.4	8	13	23	42
17	8.5	1.0	1.0	1.2	4.8	16	32	1.5	8	16	23	43
18	8.5	1.0	1.0	1.2	4.7	15	26	1.5	7	16	23	43
19	8.5	1.0	1.0	1.2	4.2	14	24	1.5	5	16	23	43
20	7	6.5	1.0	1.2	4.2	13	20	1.5	5	26	26	43
21	7	6.5	1.0	1.2	3.7	13	19	1.5	5	34	26	43
22	5.5	1.0	1.0	1.2	3.7	18	16	1.5	3.6	24	26	43
23	5.5	1.0	1.0	1.2	4.5	292	5.5	1.5	3.6	27	26	43
24	5.5	1.0	1.0	1.2	4.5	340	1.6	1.5	2.4	27	23	43
25	5.5	1.0	1.0	1.2	9.5	426	1.2	1.5	2.6	22	23	43
26	5.5	1.0	1.0	1.2	7	629	1.2	1.5	4.2	22	21	43
27	5.5	1.0	1.0	1.2	4.5	349	1.2	1.5	7.5	22	21	43
28	5.5	1.0	1.1	1.2	4.5	117	1.2	1.4	15	22	21	22
29	5.5	1.0	1.2	1.2	5.5	71	1.2	1.4	23	22	21	22
30	5.5	1.0	1.0	1.2	-----	69	1.2	1.4	21	22	21	14
31	5.5	-----	1.0	1.2	-----	68	-----	1.4	-----	25	25	-----
Month					Maximum	Minimum	Mean	Run-off in acre-feet				
October					13	5.5	8.15	501				
November					6.5	.5	2.56	152				
December					1.2	.9	1.00	61.5				
January					1.3	1.2	1.20	73.8				
February					223	.9	28.4	1,630				
March					629	4.5	90.5	5,560				
April					177	1.2	35.2	2,090				
May					1.5	1.2	1.37	84.2				
June					30	1.4	10.7	637				
July					34	2.4	16.3	1,000				
August					28	20	23.4	1,440				
September					43	14	37.4	2,230				
The year					629	.5	21.3	15,500				

SPRING VALLEY DITCH NEAR YANKEE HILL, CALIF.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 16, T. 22 N., R. 4 E., at diversion dam 300 feet below Lake Wilenor Reservoir and 3 miles north of Yankee Hill.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 43 second-feet September 17-26.

REMARKS.—Records good. Canal diverts from left bank of Concow Creek about 300 feet below Lake Wilenor Reservoir. Water is used for power and irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	5.5	1.0	1.2	0.9	0.3	0.3	1.2	1.4	11	28	25
2	10	5.5	1.0	1.3	.9	.3	.3	1.2	1.4	4.8	27	25
3	13	5.5	1.0	1.2	.9	.3	.3	1.2	1.4	2.4	27	25
4	13	5.5	1.0	1.2	.9	.3	.3	1.2	1.4	2.4	27	43
5	11	5.5	.9	1.2	.9	.3	.3	1.2	1.4	9.5	24	43
6	11	5.5	.9	1.2	.9	.3	.3	1.2	8.5	16	20	43
7	11	5.5	.9	1.2	.9	.3	.3	1.2	30	16	20	42
8	8.5	5.5	.9	1.2	.8	.3	.3	1.2	20	9.5	20	42
9	8.5	1.4	.9	1.2	.8	.3	.3	1.2	20	9.5	23	36
10	8	.5	1.0	1.2	.8	.3	.3	1.3	20	14	23	36
11	8.5	.5	1.0	1.2	.7	.3	.3	1.4	2 ¹	10	23	40
12	8.5	1.2	1.0	1.2	.7	8.5	.3	1.4	2 ¹	10	23	40
13	8.5	1.2	1.0	1.2	.7	18	.3	1.4	2 ¹	10	23	40
14	8.5	1.0	1.2	1.2	.7	18	.3	1.4	20	11	23	35
15	8.5	1.0	1.0	1.2	.6	17	.3	1.4	15	13	23	35
16	8.5	1.0	1.0	1.2	.6	16	.3	1.4	8	13	23	42
17	8.5	1.0	1.0	1.2	.6	16	.3	1.5	8	16	23	43
18	8.5	1.0	1.0	1.2	.5	15	.3	1.5	7	16	23	43
19	8.5	1.0	1.0	1.2	.4	14	.3	1.5	5	16	23	43
20	7	6.5	1.0	1.2	.4	13	.3	1.5	5	26	26	43
21	7	6.5	1.0	1.2	.3	13	.3	1.5	5	34	26	43
22	5.5	1.0	1.0	1.2	.3	7	.3	1.5	3.6	24	26	43
23	5.5	1.0	1.0	1.2	.3	.3	.3	1.5	3.6	27	26	43
24	5.5	1.0	1.0	1.2	.3	.3	1.4	1.5	2.4	27	23	43
25	5.5	1.0	1.0	1.2	.3	.3	1.2	1.5	2.6	22	23	43
26	5.5	1.0	1.0	1.2	.3	.3	1.2	1.5	4.2	22	21	43
27	5.5	1.0	1.0	1.2	.3	.3	1.2	1.5	7.5	22	21	43
28	5.5	1.0	1.1	1.2	.3	.3	1.2	1.4	15	22	21	22
29	5.5	1.0	1.2	1.2	.3	.3	1.2	1.4	2 ³	22	21	22
30	5.5	1.0	1.0	1.2		.3	1.2	1.4	2 ¹	22	21	14
31	5.5		1.0	1.2		.3		1.4		25	25	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	13	5.5	8.15	501
November	6.5	.5	2.56	152
December	1.2	.9	1.00	61.5
January	1.3	1.2	1.20	73.8
February	.9	.3	.60	34.5
March	18	.3	5.21	320
April	1.4	.3	.52	30.9
May	1.5	1.2	1.37	84.2
June	30	1.4	10.7	637
July	34	2.4	16.3	1,000
August	28	20	23.4	1,440
September	43	14	37.4	2,230
The year	43	.3	9.04	6,560

MIDDLE FORK OF FEATHER RIVER NEAR CLIO, CALIF.

LOCATION.—Water-stage recorder in center of sec. 23, T. 22 N., R. 12 E., half a mile above Frazier Creek and 1½ miles northwest of Clio.

RECORDS AVAILABLE.—October, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 11,000 second-feet March 26 (gage height, 12.0 feet); minimum, 12 second-feet August 18 (gage height, 1.21 feet).

1925-1928: Maximum discharge, that of March 26, 1928; minimum, 6 second-feet August 8, 1926.

REMARKS.—Records good. Discharge estimated January 16-18, September 15-27, 29, and 30. Numerous small diversions for irrigation above station. No regulation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	28	50	152	63	188	143	1,160	289	72	32	22	16
2.....	28	40	137	78	390	161	1,100	250	89	31	19	16
3.....	28	37	126	79	630	198	878	242	70	28	19	16
4.....	27	37	126	120	630	217	1,160	210	58	27	19	16
5.....	28	38	112	174	630	251	1,250	200	64	26	19	15
6.....	28	47	101	174	570	251	1,470	212	58	24	19	16
7.....	29	68	92	170	549	248	1,640	244	54	24	20	16
8.....	29	87	83	165	465	291	1,540	263	50	24	20	16
9.....	34	279	85	163	367	335	1,400	286	48	24	19	17
10.....	33	182	83	165	269	380	1,250	297	45	25	18	17
11.....	32	114	74	159	253	367	1,100	308	48	25	19	17
12.....	32	105	71	156	235	370	1,020	289	51	25	18	18
13.....	32	212	69	161	203	335	900	247	48	25	16	20
14.....	32	172	69	148	184	280	810	222	43	25	16	21
15.....	32	165	66	118	163	261	720	215	39	25	16	21
16.....	33	161	57	107	132	243	698	198	38	25	16	21
17.....	33	156	51	96	130	240	698	184	37	26	14	21
18.....	33	161	54	85	130	243	630	182	37	25	14	21
19.....	36	148	51	74	132	232	570	182	36	25	15	21
20.....	34	211	50	66	130	230	530	177	36	24	15	21
21.....	33	188	48	63	132	210	478	186	34	23	15	20
22.....	32	161	47	61	134	222	428	193	34	23	15	20
23.....	32	174	47	61	134	476	394	166	34	22	16	20
24.....	32	184	47	60	134	1,200	366	164	36	22	16	20
25.....	34	203	47	60	137	3,820	322	148	34	22	16	20
26.....	55	222	45	60	128	6,190	303	134	34	24	16	20
27.....	64	203	45	61	132	8,220	294	110	34	27	17	20
28.....	43	179	58	64	130	5,300	283	102	34	24	16	20
29.....	38	200	114	186	134	3,160	276	114	34	23	16	20
30.....	37	179	71	186	-----	2,060	281	94	33	23	16	20
31.....	45	-----	61	141	-----	1,440	-----	77	-----	23	16	-----
Month							Maximum	Minimum	Mean	Run-off in acre-feet		
October.....							64	27	34.4	2,120		
November.....							279	37	145	8,630		
December.....							152	45	75.5	4,640		
January.....							186	60	114	7,010		
February.....							630	128	261	15,000		
March.....							8,220	143	1,210	74,400		
April.....							1,640	276	798	47,500		
May.....							308	77	200	12,300		
June.....							89	33	45.4	2,700		
July.....							32	22	24.9	1,530		
August.....							22	14	17.0	1,050		
September.....							21	15	18.8	1,120		
The year.....							8,220	14	245	178,000		

MIDDLE FORK OF FEATHER RIVER AT SLOAT, CALIF.

LOCATION.—Water-stage recorder half a mile above Sloat, Plumas County, three-fourths mile above mouth of Poplar Creek, and 1½ miles below Cromberg.

RECORDS AVAILABLE.—November, 1910, to February, 1928 (discontinued).

EXTREMES.—1910-1928: Maximum discharge, 11,700 second-feet February 22, 1927 (gauge height, 10.1 feet); minimum, 22 second-feet August 8-13, 1924.

REMARKS.—Records good. There are small diversions above station for irrigation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Day	Oct.	Nov.	Dec.	Jan.	Feb.
1	60	80				16	62			192	242
2	62	74				17	62		58	186	
3	62					18	62			160	
4	62		224			19	62		58	155	227
5	60				675	20	60	214		145	
6	58	152				21	60			150	
7	58	152				22	60			142	
8	60			251		23	60			150	
9	60					24	58			150	
10	65					25	62			145	
11	65					26	94			135	
12	63		98	242	341	27	155	338		130	
13		355		233	327	28	89			130	
14	62				294	29	78			282	
15	62			165	279	30	74				
						31	80		120		
Month						Maximum	Minimum	Mean	Run-off in acre-feet		
October						155	57	67.7	4,160		
November								265	15,800		
December								115	7,070		
January								200	12,300		
February 1-19								395	14,900		

• Estimated.

MIDDLE FORK OF FEATHER RIVER NEAR NELSON POINT, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 16, T. 23 N., R. 10 E., $\frac{1}{2}$ mile below mouth of Nelson Creek and 2 miles below Nelson Point.

RECORDS AVAILABLE.—December, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, about 22,000 second-feet March 27 (gage height, 16.0 feet); minimum, 66 second-feet August 23 (gage height, 0.53 foot).

1923-1928: Maximum discharge, that of March 27, 1928; minimum, 36 second-feet August 12-14, 1924.

REMARKS.—Records good. Discharge estimated October 1-9 and March 27 to May 1. Numerous small diversions for irrigation above station. No regulation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	148	393	213	446	316		1,120	365	142	87	74
2	111	140	357	257	780	350		1,120	365	140	86	74
3	111	132	335	289	1,260	405		1,030	353	138	84	73
4	111	126	310	289	1,300	460		970	315	134	82	73
5	110	125	306	316	1,160	500		1,000	305	130	82	73
6	110	132	276	350	1,050	510		1,060	289	128	82	73
7	110	206	252	346	945	520		1,120	276	124	82	74
8	110	289	238	331	840	600	2,700	1,180	264	122	81	73
9	109	1,110	249	327	732	738		1,150	249	118	79	72
10	109	1,280	246	324	580	810		1,250	238	116	76	73
11	109	505	222	324	505	780		1,220	241	114	74	76
12	107	365	227	324	500	810		1,150	243	114	73	79
13	107	660	227	307	450	750		1,030	230	112	72	79
14	106	540	230	290	405	672		940	220	108	70	79
15	106	432	227	273	381	600		882	210	105	68	79
16	106	414	222	260	335	570		824	206	105	68	79
17	106	389	198	254	316	570		796	198	105	68	79
18	107	373	198	225	316	600		796	191	103	68	78
19	109	361	198	222	316	618		796	184	103	68	78
20	109	460	203	220	320	648		768	174	105	68	76
21	107	648	201	215	320	648		796	170	105	68	78
22	107	450	194	213	316	768		796	168	103	68	72
23	107	397	189	211	316	1,410	1,440	712	161	99	68	74
24	107	385	189	210	310	3,650		685	154	96	68	74
25	112	393	186	209	313	10,100		648	148	96	70	73
26	163	495	182	208	302	12,100		622	144	97	72	74
27	228	480	182	208	302	15,500		575	142	99	73	78
28	161	450	189	208	302	11,900		501	142	97	73	79
29	144	515	270	465	310	8,600		488	142	92	72	79
30	138	470	249	590		6,100		443	142	89	73	79
31	152		220	450		4,710		395		87	73	
Month												
	Maximum					Minimum		Mean		Run-off in acre-feet		
October	228					106		119		7,320		
November	1,280					125		429		25,500		
December	393					182		238		14,600		
January	590					208		288		17,700		
February	1,300					302		642		31,200		
March	15,500					316		2,820		173,000		
April								2,070		123,000		
May	1,250					395		867		53,300		
June	365					142		221		13,200		
July	142					87		111		6,820		
August	87					68		74.1		4,560		
September	79					72		75.6		4,500		
The year	15,500					68		654		475,000		

MIDDLE FORK OF FEATHER RIVER AT BIDWELL BAR, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 32, T. 20 N., R. 5 E., at highway bridge at Bidwell Bar, 2 miles above junction with North Fork, and 7 miles north-east of Oroville.

RECORDS AVAILABLE.—October, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, about 100,000 second-feet March 26 (gage height, 22.8 feet); minimum, 185 second-feet August 13 to September 30 (gage height, 2.00 feet).

1911-1928: Maximum discharge, that of March 26, 1928; minimum, 100 second-feet August 30 to September 15, 1924.

REMARKS.—Records good. The Palermo Land & Water Co.'s canal and South Feather Land & Water Co.'s canal divert from South Fork of Feather River and tributaries.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	220	345	1,030	1,030	1,880	1,320	8,300	3,800	950	370	230	185
2	220	285	960	1,320	3,240	1,320	7,300	3,380	890	370	230	185
3	220	285	900	1,560	5,220	1,480	6,510	2,960	890	370	218	185
4	220	285	840	1,400	6,700	1,960	5,570	2,700	890	370	218	185
5	220	270	780	1,320	4,400	2,050	5,570	2,700	770	355	205	185
6	210	258	750	1,240	3,660	1,880	5,750	2,700	770	355	205	185
7	210	330	690	1,170	2,960	1,880	6,130	2,700	710	340	205	185
8	210	900	635	1,170	2,700	2,460	6,130	2,830	710	340	205	185
9	210	3,660	690	1,170	2,350	3,520	5,750	2,700	660	325	205	185
10	210	5,390	780	1,170	2,140	3,240	5,390	2,830	660	310	205	185
11	210	960	660	1,170	1,960	2,960	4,880	2,830	660	340	195	185
12	210	1,030	610	1,100	1,880	2,960	4,880	2,700	660	310	195	185
13	210	3,800	660	1,100	1,720	2,700	4,880	2,460	660	310	185	185
14	210	2,050	1,240	1,240	1,640	2,460	4,560	2,250	610	280	185	185
15	210	1,480	840	1,100	1,560	2,350	4,250	2,060	560	280	185	185
16	210	1,320	720	960	1,400	2,140	3,950	1,980	560	280	185	185
17	210	1,170	690	960	1,400	2,140	4,560	1,900	520	268	185	185
18	210	1,100	635	900	1,320	2,240	4,100	1,820	520	268	185	185
19	210	960	588	870	1,240	2,350	3,520	1,820	500	268	185	185
20	210	960	542	870	1,240	2,460	3,520	1,740	480	268	185	185
21	210	2,240	588	840	1,240	2,460	3,380	1,740	480	255	185	185
22	210	1,640	542	1,100	1,240	2,700	3,100	1,820	480	255	185	185
23	210	1,320	498	1,030	1,240	10,900	3,100	1,660	480	255	185	185
24	210	1,170	475	1,100	1,240	20,000	3,520	1,500	440	255	185	185
25	232	1,100	588	930	1,400	43,000	3,100	1,430	420	255	185	185
26	232	1,170	542	900	1,240	58,000	2,960	1,360	400	255	185	185
27	475	1,240	520	870	1,170	51,000	3,100	1,290	400	255	185	185
28	435	1,170	720	840	1,170	22,000	3,240	1,220	385	242	185	185
29	315	1,320	2,580	1,720	1,320	14,600	3,240	1,150	385	242	185	185
30	270	1,170	1,400	2,580	-----	10,600	3,380	1,080	385	230	185	185
31	455	-----	1,030	1,960	-----	8,700	-----	1,010	-----	230	185	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	475	210	242	14,900
November	5,390	258	1,350	80,300
December	2,580	475	798	49,100
January	2,580	840	1,180	72,600
February	6,700	1,170	2,130	123,000
March	58,000	1,320	9,350	575,000
April	8,300	2,960	4,590	273,000
May	3,800	1,010	2,130	131,000
June	950	385	596	35,500
July	370	290	294	18,100
August	230	185	195	12,000
September	185	185	185	11,000
The year	58,000	185	1,920	1,400,000

GRIZZLY CREEK NEAR PORTOLA, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 12, T. 23 N., R. 13 E., $1\frac{1}{2}$ miles below proposed Grizzly Valley Reservoir dam site and 6 miles northeast of Portola.

RECORDS AVAILABLE.—October, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, about 2,680 second-feet March 26 (gage height, 7.50 feet); minimum, about 0.5 second-foot September 6-8.

1925-1928: Maximum discharge, that of March 26, 1928; minimum, 0.3 second-foot August 2-5, 1926.

REMARKS.—Records good except those for October 1-12, December 15-22, January 15-24, and February 18-21, which were estimated. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		3.1	14	3.8	11	25	112	57	8	1.1	0.8	0.6
2		2.3	12	4.5	18	37	35	53	7	1.1	.8	.6
3		2.0	11	5	25	49	89	48	6	1.2	.8	.6
4		1.9	7.5	6.5	20	58	139	44	5.5	1.2	.8	.6
5		1.9	7	7	21	64	159	41	4.6	1.1	.7	.6
6		1.9	5.5	6.5	20	59	194	40	4.0	1.0	.7	.5
7	1.0	3.3	4.9	6.5	20	59	212	40	3.4	1.0	.7	.5
8		5.5	4.3	6.5	18	66	208	39	3.2	1.0	.7	.5
9		15	3.6	6.5	16	112	218	39	3.0	1.0	.6	.6
10		22	4.3	6	15	108	220	53	3.0	1.0	.6	.6
11		8	4.3	6	14	115	198	57	3.0	.9	.6	.6
12		6	4.7	5.5	13	112	180	41	3.6	.9	.6	.6
13	1.1	12	4.3	5.5	13	82	144	34	3.8	.9	.6	.7
14	1.1	13	3.3	5.5	12	63	121	30	3.6	.9	.6	.7
15	1.1	10	3.3	5	11	64	105	28	3.2	.8	.6	.7
16	1.1	12	3.2	4.9	9	66	121	26	2.4	.8	.6	.7
17	1.1	8	3.2	4.6	9	84	128	23	2.2	.8	.6	.7
18	1.1	6.5	3.1	4.4	9	92	96	23	2.1	.8	.6	.7
19	1.1	5.5	3.0	4.2	9	94	78	21	1.8	.8	.6	.7
20	1.1	4.9	3.0	4.0	9	86	68	20	1.7	.8	.6	.7
21	1.1	7.5	2.9	3.8	9	78	58	23	1.5	.8	.6	.7
22	1.1	10	2.8	3.6	9	112	57	23	1.5	.8	.6	.7
23	1.1	11	2.8	3.4	10	182	58	20	1.4	.8	.6	.7
24	1.1	8.5	2.6	3.2	11	358	68	16	1.2	.8	.6	.7
25	1.5	9	2.6	3.0	8.5	825	53	14	1.2	.8	.6	.7
26	3.3	15	2.5	3.1	7.5	837	50	13	1.1	.8	.6	.7
27	9	20	2.5	3.1	9	484	51	12	1.0	.8	.6	.7
28	5	34	2.5	3.3	10	301	52	11	1.0	.8	.6	.7
29	2.8	46	2.5	4.3	16	239	52	10	1.0	.8	.6	.7
30	2.3	22	4.0	8	-----	235	53	9	1.0	.8	.6	.7
31	3.1	-----	3.4	11	-----	172	-----	8.5	-----	.8	.6	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	9	1.0	1.68	103
November	46	1.9	10.9	649
December	14	2.5	4.54	279
January	11	3.0	5.10	314
February	25	7.5	13.2	759
March	837	25	172	10,600
April	220	35	113	6,720
May	57	8.5	29.6	1,820
June	8	1.0	2.90	173
July	1.2	.8	.90	55.3
August	.8	.6	.64	39.4
September	.7	.5	.65	38.7
The year	837	.5	29.6	21,600

SOUTH FORK OF FEATHER RIVER NEAR LA PORTE, CALIF.

LOCATION.—Water-stage recorder in sec. 32, T. 22 N., R. 9 E., at lower end of Little Grass Valley, about 800 feet below old log crik dam, and 3 miles northwest of La Porte.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,600 second-feet March 26 (gage height, 7.00 feet); minimum, 1.1 second-feet parts of August and September (gage height, 0.77 foot).

REMARKS.—Records good. Discharge estimated January 16 to February 8. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	4.6	78	32	80	69	291	260	34	5	1.6	1.1
2	1.3	3.6	73	47	110	76	235	232	32	5	1.6	1.1
3	1.3	3.3	67	53	200	82	228	208	30	4.9	1.6	1.1
4	1.4	3.1	60	48	100	101	200	200	28	4.9	1.6	1.1
5	1.4	3.0	56	47	160	106	186	200	26	4.8	1.5	1.1
6	1.4	4.0	51	45	140	104	176	202	24	4.5	1.5	1.1
7	1.4	28	46	44	130	113	170	202	22	4.2	1.4	1.1
8	1.4	61	44	44	120	132	168	200	20	3.8	1.4	1.1
9	1.4	353	43	46	112	213	172	192	18	3.7	1.4	1.1
10	1.4	226	43	47	105	202	178	190	18	3.6	1.3	1.2
11	1.4	79	40	48	99	202	182	178	19	3.4	1.3	1.3
12	1.4	75	40	49	93	204	225	164	18	3.3	1.3	1.4
13	1.3	239	34	53	89	194	220	146	15	3.1	1.3	1.3
14	1.4	126	47	54	85	182	220	138	13	2.8	1.3	1.2
15	1.4	110	39	50	81	174	218	124	12	2.6	1.2	1.2
16	1.4	93	39	50	76	170	247	112	11	2.5	1.2	1.3
17	1.3	84	37	50	73	174	228	106	10	2.4	1.2	1.2
18	1.3	77	33	51	70	188	206	104	9.5	2.4	1.2	1.2
19	1.3	72	34	51	70	206	192	102	8.5	2.3	1.1	1.1
20	1.3	186	33	52	69	225	174	100	8.5	2.2	1.1	1.1
21	1.3	157	33	50	68	223	166	130	7.5	2.1	1.1	1.1
22	1.2	113	33	48	66	407	168	122	7	2.0	1.1	1.1
23	1.2	94	33	52	64	898	186	94	6.5	2.0	1.1	1.1
24	1.3	84	33	52	62	1,320	194	81	6	1.9	1.1	1.1
25	1.4	80	33	48	62	1,800	182	73	6	1.8	1.1	1.1
26	5	105	32	46	59	1,700	194	65	6	1.8	1.1	1.1
27	6.5	91	32	46	57	800	211	58	5.5	1.7	1.1	1.2
28	3.3	94	32	48	58	552	220	51	5.5	1.7	1.1	1.2
29	3.1	101	32	90	69	441	230	46	5.5	1.7	1.1	1.2
30	5	86	32	80	-----	371	252	41	5.5	1.6	1.1	1.2
31	7.5	-----	32	70	-----	325	-----	37	-----	1.6	1.1	-----
Month							Maximum	Minimum	Mean	Run-off in acre-feet		
October							7.5	1.2	2.06	127		
November							353	3.0	94.5	5,620		
December							78	32	41.7	2,560		
January							90	32	51.3	3,150		
February							200	57	90.6	5,210		
March							1,800	68	386	23,700		
April							291	166	204	12,100		
May							260	37	134	8,240		
June							34	5.5	14.6	869		
July							5	1.6	2.95	181		
August							1.6	1.1	1.26	77.5		
September							1.4	1.1	1.16	69.0		
The year							1,800	1.1	85.4	61,900		

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 1, T. 19 N., R. 5 E., 800 feet above mouth of Powell Creek and half a mile above highway bridge at Enterprise.

EXTREMES.—Maximum discharge during year, about 15,200 second-feet March 26 (gage height, 16.0 feet); minimum, 0.7 second-foot parts of August and September (gage height, 2.5 feet).

1911-1928: Maximum discharge, that of March 26, 1928; minimum, 0.2 second-foot August 11, 1917.

REMARKS.—Records fair. Diversions for irrigation above station.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	38	163	204	304	253	1,380	500	76	15	1.2	0.7
2	14	35	163	342	518	253	1,380	500	76	15	.7	.7
3	9.5	35	150	270	1,050	270	1,030	430	112	15	.7	.7
4	9.5	42	112	253	1,610	323	950	395	112	15	.7	.7
5	9.5	38	100	253	870	448	950	395	68	15	.7	.7
6	9.5	42	100	204	662	362	875	395	68	15	.7	.7
7	9	42	100	204	518	362	875	395	61	15	.7	.7
8	9	56	100	204	448	470	875	360	61	10	.7	.7
9	9	870	100	204	404	566	875	360	54	10	.7	.7
10	8	518	112	204	362	710	875	304	54	10	.7	.7
11	8	518	100	204	304	662	800	304	61	6	.7	.7
12	8	132	100	204	304	566	800	304	61	6	.7	1.2
13	8	566	150	220	287	566	800	262	61	4.6	.7	6
14	8	270	204	204	270	494	800	262	54	3.2	.7	.7
15	8	220	137	204	253	448	800	245	48	3.2	.7	.7
16	8	190	112	176	253	448	800	245	42	3.2	.7	.7
17	8	163	100	176	236	404	800	245	42	2.4	.7	.7
18	8	145	100	163	236	426	725	213	37	2.4	.7	.7
19	14	129	100	163	236	426	650	213	37	1.6	.7	.7
20	14	163	90	150	236	448	575	228	32	1.6	.7	.7
21	14	304	90	150	220	448	575	228	32	1.6	.7	.7
22	14	220	90	204	220	494	500	213	28	1.6	.7	.7
23	14	190	80	190	220	2,900	500	198	28	1.6	.7	.7
24	47	163	80	190	204	5,700	575	186	21	1.6	.7	.7
25	47	150	80	176	253	10,800	538	152	21	1.2	.7	.7
26	47	150	80	176	204	11,200	500	152	21	1.2	.7	.7
27	42	163	236	163	204	6,800	500	132	18	1.2	.7	.7
28	28	163	304	150	204	3,070	500	122	15	1.2	.7	.7
29	24	163	566	470	253	2,080	500	102	15	1.2	3.2	.7
30	24	163	304	518		1,570	500	93	15	1.2	1.6	.7
31	38		204	304		1,200		93		1.2	.7	.7

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	47	2.0	16.8	1,030
November.....	870	35	201	12,000
December.....	566	80	145	8,920
January.....	518	150	222	13,600
February.....	1,610	204	391	22,500
March.....	11,200	253	1,780	109,000
April.....	1,380	500	760	45,200
May.....	500	93	265	16,300
June.....	112	15	47.7	2,840
July.....	15	1.2	5.94	365
August.....	3.2	.7	.83	51.0
September.....	6	.7	.89	53.0
The year.....	11,200	.7	320	232,000

LOST CREEK NEAR CLIPPER MILLS, CALIF.

LOCATION.—Water-stage recorder in sec. 24, T. 20 N., R. 7 E., 1,000 feet below Lost Creek Dam and 2 miles north of Clipper Mills.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 2,900 second-feet March 26 (gage height, 6.10 feet); minimum, 0.9 second-foot June 28–29 (gage height, 0.28 foot).

REMARKS.—Records good. Discharge estimated December 28 to January 7, January 9, 10, 13–17, and February 27 to March 11; interpolated May 24–26 and June 17–20. Forbestown ditch diverts from Lost Creek Reservoir. Flow partly regulated by Lost Creek Reservoir.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	13	3.5	1.0	74	108	85	362	94	17	1.0	5.5	12
2.....	13	3.0	1.0	84	188	85	327	88	18	1.0	6.5	12
3.....	12	3.0	1.0	79	340	100	276	84	16	1.0	6.5	12
4.....	12	3.0	1.0	74	291	155	246	80	15	1.0	6	12
5.....	12	3.0	1.0	66	202	130	236	83	14	1.0	6.5	12
6.....	12	3.0	1.0	63	160	115	231	73	12	1.0	6.5	12
7.....	12	3.0	1.0	63	137	110	231	35	12	1.0	7.5	12
8.....	12	76	1.0	63	124	155	231	12	11	1.0	8.5	12
9.....	12	39	1.0	63	116	240	236	4.6	11	1.0	8.5	13
10.....	12	1.0	4.4	63	102	200	236	6	10	1.0	8.5	13
11.....	12	.4	7.5	63	96	160	229	35	12	1.0	8.5	14
12.....	12	.8	8	63	90	162	257	54	12	1.0	8.5	11
13.....	12	1.7	8.5	63	84	150	246	42	10	1.0	9	1.8
14.....	12	1.0	9	63	81	141	224	53	8	1.0	10	1.8
15.....	12	1.0	9	62	75	132	203	32	7	1.0	10	1.8
16.....	12	1.0	9	62	74	128	212	35	6.5	1.2	11	1.8
17.....	12	1.0	9	60	70	128	205	33	6	2.4	11	1.8
18.....	12	1.0	9	59	70	128	184	31	5	3.2	11	1.8
19.....	12	1.0	9	52	70	132	161	29	4	3.4	11	1.8
20.....	12	1.1	9	49	70	132	152	35	4	3.2	10	1.8
21.....	12	1.0	9	49	70	130	150	38	3.0	3.6	10	1.8
22.....	13	1.0	9	59	68	218	138	33	2.8	4.2	10	1.8
23.....	38	1.0	9	59	68	662	123	25	2.6	4.2	10	1.8
24.....	47	1.0	9	56	72	951	135	25	2.1	4.2	10	1.8
25.....	32	1.0	9	50	72	1,810	120	24	1.8	4.8	10	1.8
26.....	9.5	1.0	9	49	66	1,960	112	24	1.1	4.6	10	1.8
27.....	7.5	1.0	33	49	66	1,380	108	23	1.0	4.6	11	1.8
28.....	3.5	1.0	56	49	66	750	105	23	.9	4.8	11	1.8
29.....	3.5	1.0	163	136	75	515	102	27	.9	5	12	1.8
30.....	3.5	1.0	74	128	-----	390	98	21	1.0	5.5	12	1.8
31.....	3.5	-----	60	102	-----	355	-----	17	-----	5.5	12	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	47	3.5	13.4	824
November.....	76	.4	5.25	312
December.....	163	1.0	17.4	1,070
January.....	136	49	66.9	4,110
February.....	340	66	109	6,270
March.....	1,960	85	383	23,600
April.....	362	98	196	11,700
May.....	94	4.6	39.3	2,420
June.....	18	.9	7.59	462
July.....	5.5	1.0	2.66	157
August.....	12	5.5	9.21	572
September.....	14	1.8	5.98	356
The year.....	1,960	.4	71.3	51,800

Daily and monthly discharge, in second-feet, of Lost Creek and Forbestown ditch near Clipper Mills, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	45	32	1.0	74	108	85	362	111	48	37	42	47
2.....	45	29	1.0	84	188	85	327	105	49	37	42	47
3.....	45	25	1.0	79	340	100	276	101	47	37	42	47
4.....	44	23	1.0	74	291	155	246	97	46	37	41	47
5.....	44	22	1.0	66	202	130	236	103	46	38	42	47
6.....	44	22	1.0	63	160	115	231	93	44	38	42	47
7.....	44	31	1.0	63	137	110	231	55	44	38	42	47
8.....	44	107	1.0	63	124	155	231	34	43	38	44	47
9.....	44	55	1.0	63	116	240	236	27	43	38	44	48
10.....	44	1.0	4.4	63	102	200	236	28	42	38	44	48
11.....	44	.4	7.5	63	96	160	229	57	44	38	44	49
12.....	44	.8	8	63	90	152	257	76	44	38	44	46
13.....	44	1.7	8.5	63	84	150	246	64	42	38	44	37
14.....	44	1.0	9	63	81	141	224	75	40	38	45	37
15.....	44	1.0	9	62	75	132	203	57	39	38	45	37
16.....	44	1.0	9	62	74	128	212	62	38	38	46	37
17.....	44	1.0	9	60	70	128	205	60	38	39	46	37
18.....	44	1.0	9	59	70	128	184	60	38	40	46	37
19.....	44	1.0	9	52	70	132	161	58	37	40	46	37
20.....	44	1.1	9	49	70	132	152	64	37	40	45	37
21.....	44	1.0	9	49	70	130	150	67	36	41	44	37
22.....	45	1.0	9	59	68	218	155	62	36	41	44	37
23.....	70	1.0	9	59	68	662	140	54	37	40	44	37
24.....	67	1.0	9	56	72	951	152	54	36	40	45	37
25.....	40	1.0	9	50	72	1,810	137	53	36	41	45	37
26.....	26	1.0	9	49	66	1,960	129	53	35	41	45	37
27.....	30	1.0	33	49	66	1,380	125	52	35	41	46	37
28.....	28	1.0	56	49	66	750	122	52	35	41	46	37
29.....	28	1.0	163	136	75	515	119	56	35	41	47	37
30.....	28	1.0	74	128	-----	390	115	52	35	42	47	37
31.....	32	-----	60	102	-----	355	-----	48	-----	42	47	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	70	26	42.6	2,620
November.....	107	.4	12.2	726
December.....	163	1.0	17.4	1,070
January.....	136	49	66.9	4,110
February.....	340	66	109	6,270
March.....	1,960	85	383	23,600
April.....	362	115	201	12,000
May.....	111	27	64.2	3,950
June.....	49	35	40.2	2,390
July.....	42	37	39.2	2,410
August.....	47	41	44.4	2,730
September.....	49	37	41.1	2,450
The year.....	1,960	.4	88.5	64,300

FORBESTOWN DITCH NEAR CLIPPER MILLS, CALIF.

LOCATION.—Staff gage in sec. 24, T. 20 N., R. 7 E., 1,000 feet below Lost Creek Dam at mouth of tunnel outlet, and about 2 miles north of Clipper Mills.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 37 second-feet July 5-22, 1928.

REMARKS.—Records good. Canal diverts from Lost Creek Reservoir on Lost Creek. Water is used for irrigation in the Oroville-Wyandotte irrigation district.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1.....	32	28	0	17	31	36	36	35
2.....	32	26	0	17	31	36	35	35
3.....	33	22	0	17	31	36	35	35
4.....	32	20	0	17	31	36	35	35
5.....	32	19	0	20	32	37	35	35
6.....	32	19	0	20	32	37	35	35
7.....	32	28	0	20	32	37	35	35
8.....	32	31	0	22	32	37	35	35
9.....	32	16	0	22	32	37	35	35
10.....	32	0	0	22	32	37	35	35
11.....	32	0	0	22	32	37	35	35
12.....	32	0	0	22	32	37	35	35
13.....	32	0	0	22	32	37	35	35
14.....	32	0	0	22	32	37	35	35
15.....	32	0	0	25	32	37	35	35
16.....	32	0	0	27	32	37	35	35
17.....	32	0	0	27	32	37	35	35
18.....	32	0	0	29	33	37	35	35
19.....	32	0	0	29	33	37	35	35
20.....	32	0	0	29	33	37	35	35
21.....	32	0	0	29	33	37	34	35
22.....	32	0	17	29	33	37	34	35
23.....	32	0	17	29	34	36	34	35
24.....	20	0	17	29	34	36	35	35
25.....	8.5	0	17	29	34	36	35	35
26.....	17	0	17	29	34	36	35	35
27.....	22	0	17	29	34	36	35	35
28.....	25	0	17	29	34	36	35	35
29.....	25	0	17	29	34	36	35	35
30.....	25	0	17	31	34	36	35	35
31.....	29			31		36	35	
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Month	Maximum			Minimum		Mean	Run-off in acre-feet	
October.....	33			8.5		29.3	1,800	
November.....	31			0		6.97	415	
April.....	17			0		5.10	303	
May.....	31			17		24.9	1,530	
June.....	34			31		32.6	1,940	
July.....	37			36		36.6	2,250	
August.....	36			34		34.9	2,150	
September.....	35			35		35.0	2,080	
The year.....	37			0		17.2	12,500	

NOTE.—No flow in months for which no record is given.

PALERMO CANAL AT ENTERPRISE, CALIF.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 1, T. 19 N., R. 6 E., 1,000 feet above Alm's residence at Enterprise and 1 mile below intake.

RECORDS AVAILABLE.—October, 1911, to September, 1928.

EXTREMES.—1911-1928: Maximum discharge, 43 second-feet July 25, 1927; no flow during periods of every year.

REMARKS.—Records good. Canal diverts from left bank of South Fork of Feather River 1 mile above Enterprise. Water is used for irrigation below Oroville.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	22	9.5	9.5	10	2.8	14	20	34	35	32	34
2	28	22	9.5	9.5	10	0	14	20	34	35	35	34
3	28	14	9.5	9.5	10	0	9.5	27	6.5	35	35	34
4	28	14	9.5	9.5	10	0	14	27	10	35	35	34
5	28	14	9.5	9.5	10	0	13	27	35	35	34	34
6	28	14	9.5	10	10	0	13	27	35	35	34	34
7	28	14	9.5	10	10	0	17	27	35	35	34	34
8	28	14	9.5	10	10	0	17	27	35	35	33	34
9	28	10	9.5	10	10	0	17	27	35	35	33	34
10	28	11	9.5	10	10	0	17	26	35	35	33	34
11	28	10	9.5	10	10	0	17	26	35	35	32	34
12	28	10	9.5	10	10	0	16	26	35	35	32	37
13	28	10	10	10	10	0	16	26	35	35	32	32
14	28	10	11	10	10	0	16	26	35	35	32	25
15	28	10	10	10	10	5.5	16	26	35	35	32	25
16	28	9.5	10	10	10	14	16	26	35	35	34	20
17	28	9.5	10	10	10	14	16	26	35	35	33	22
18	28	9.5	10	10	10	15	16	26	35	35	33	22
19	24	9.5	10	10	10	15	16	34	35	35	34	22
20	24	9.5	10	9.5	10	15	16	34	35	35	33	22
21	24	9.5	10	9.5	10	15	16	34	35	35	34	22
22	24	9.5	10	10	10	15	16	34	35	35	34	22
23	24	9.5	10	10	10	18	16	34	35	35	34	22
24	24	9.5	10	10	10	16	16	34	35	35	34	22
25	22	9.5	10	10	10	16	16	34	35	35	34	22
26	22	9.5	10	10	10	17	16	34	35	35	36	23
27	22	9.5	9.5	10	10	4.5	16	34	35	34	36	24
28	22	9.5	9.5	10	9.5	4.5	16	34	35	33	36	24
29	22	9.5	9.5	10	9.5	4.5	16	34	35	32	37	24
30	22	9.5	9.5	10		13	20	34	35	32	34	24
31	22		9.5	10		13		34		32	34	
Month							Maximum	Minimum	Mean	Run-off in acre-feet		
October							34	22	26.2	1,610		
November							22	9.5	11.4	678		
December							11	9.5	9.76	600		
January							10	9.5	9.89	608		
February							10	9.5	9.97	573		
March							18	0	7.03	432.2		
April							20	9.5	15.7	934		
May							34	20	29.2	1,800		
June							35	6.5	33.2	1,980		
July							35	32	34.6	2,130		
August							37	32	33.6	2,070		
September							37	20	27.7	1,650		
The year							37	0	20.7	15,100		

MIDDLE FORK OF YUBA RIVER AT MILTON, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 12, T. 19 N., R. 12 E., one-fourth mile below diversion dam at Milton and 8 miles above South Fork of Middle Fork of Yuba River. Altitude, about 5,700 feet.

DRAINAGE AREA.—41 square miles.

RECORDS AVAILABLE.—December, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,070 second-feet March 25 (gage height, 9.45 feet); no flow June 8 to September 30.

1925-1928: Maximum discharge, that of March 25, 1927; no flow June 8 to September 30, 1928.

REMARKS.—Records good. Discharge estimated December 11, 12, 14-16, 19-23, 26, 30, January 14-21, 26, 27, 31, February 9-13, 15-20, 22, 26, and 27 because of ice. Subsequent to May 21 practically entire flow was diverted at Milton-Bowman Tunnel. Flow regulated by storage at dam at Milton. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District through Fred H. Tibbetts.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	3.4	8.5	50	18	27	41	231	632	21
2	3.4	7.5	49	22	34	57	177	468	95
3	3.4	7.5	48	23	37	46	193	412	88
4	3.4	7	42	24	35	36	195	444	80
5	3.4	6	39	24	32	36	185	507	75
6	3.4	6	39	22	31	36	190	586	70
7	3.4	26	34	21	30	32	196	645	44
8	3.4	75	36	24	30	35	195	610	1
9	3.4	190	33	22	28	55	207	643	0
10	3.4	218	33	23	26	57	212	617	0
11	3.4	61	33	24	26	60	215	570	0
12	3.4	45	30	23	27	61	256	534	0
13	3.4	51	26	24	27	62	258	450	0
14	3.4	43	27	24	27	56	256	441	0
15	3.4	42	26	24	24	50	248	431	0
16	3.4	46	14	24	27	60	254	362	0
17	3.2	45	22	24	25	62	222	347	0
18	3.2	44	33	24	24	66	186	328	0
19	3.2	43	22	23	24	53	172	312	0
20	3.2	47	22	22	25	52	154	347	0
21	3.2	44	21	22	26	114	153	294	0
22	3.2	45	21	24	25	142	190	109	0
23	3.4	42	20	28	26	177	256	50	0
24	3.4	38	18	24	25	706	258	1	0
25	3.8	39	17	22	26	3,360	222	1	0
26	7.5	48	15	21	24	2,830	303	1	0
27	14	46	16	20	17	1,550	400	1	0
28	11	48	16	21	3.0	758	440	1	0
29	8	74	18	31	3.2	466	524	1	0
30	8.5	57	19	32	-----	360	631	1	0
31	12	-----	18	26	-----	300	-----	1	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet		
October	14		3.2		4.68		288		
November	218		6		50.0		2,990		
December	50		14		27.7		1,700		
January	32		18		23.5		1,440		
February	37		3.0		25.6		1,470		
March	3,360		32		380		23,400		
April	631		153		253		15,100		
May	645		1		327		20,100		
June	95		0		15.8		940		
The year	3,360		0		92.8		67,400		

NOTE.—No flow in months for which no record is given.

MIDDLE FORK OF YUBA RIVER NEAR NORTH SAN JUAN, CALIF.

LOCATION.—Staff gage in N. $\frac{1}{2}$ NW. $\frac{1}{4}$ sec. 23, T. 18 N., R. 8 E., below highway bridge at Freemans Crossing, $1\frac{1}{2}$ miles northeast of North San Juan, and three-fourths mile below Oregon Creek.

RECORDS AVAILABLE.—July to October, 1900; October, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 26,000 second-feet March 25 (gage height, 15.3 feet); minimum, 30 second-feet September 5, 6, 20, and 24.

1910-1928: Maximum discharge, that of March 25, 1928; minimum, 21 second-feet August 12 and 14, 1924.

REMARKS.—Records good. Diversions above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	41	90	282	509	456	230	1,840	1,290	176	69	40	33
2.....	41	72	225	370	607	328	1,970	1,110	169	67	40	33
3.....	41	64	189	400	1,200	346	1,490	960	267	67	39	33
4.....	41	57	177	388	930	516	1,290	990	244	64	39	33
5.....	41	57	169	352	775	482	1,200	1,030	226	64	41	30
6.....	41	55	165	310	691	443	1,290	1,070	210	62	41	30
7.....	41	84	154	288	593	430	1,390	990	194	60	40	32
8.....	41	600	148	299	551	572	1,290	1,200	176	59	41	31
9.....	41	980	177	310	488	930	1,290	1,070	124	56	39	31
10.....	43	1,320	181	299	430	812	1,290	1,200	122	59	38	33
11.....	41	370	173	288	418	698	1,200	1,200	135	56	36	32
12.....	41	412	158	288	376	607	1,290	1,070	138	57	35	38
13.....	43	740	144	294	358	551	1,200	875	124	56	35	35
14.....	43	443	277	334	346	593	1,200	875	117	56	34	34
15.....	43	328	205	288	334	537	1,070	838	112	56	35	34
16.....	43	255	185	260	319	495	1,110	838	107	57	34	34
17.....	41	205	151	240	304	488	1,070	762	102	57	34	33
18.....	43	235	154	260	282	476	950	725	100	57	34	33
19.....	41	225	158	272	282	523	875	725	98	49	34	31
20.....	43	509	148	235	277	456	800	688	96	48	34	30
21.....	41	450	140	205	260	572	800	650	94	48	34	31
22.....	41	346	137	210	255	775	800	505	94	46	34	30
23.....	41	277	134	230	277	4,310	762	410	82	44	34	31
24.....	41	245	140	235	245	11,400	990	303	78	45	34	30
25.....	41	220	130	220	316	22,200	800	282	80	42	34	31
26.....	60	288	130	215	288	15,900	912	254	75	44	34	31
27.....	173	277	130	225	235	13,000	990	240	75	44	34	33
28.....	97	260	185	235	245	6,300	1,030	226	73	42	33	34
29.....	74	340	1,510	775	235	3,360	1,070	210	73	41	33	33
30.....	67	352	388	635	-----	2,240	1,110	198	73	40	33	33
31.....	151	-----	340	537	-----	1,970	-----	186	-----	39	33	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	173					41			53.6		3,300	
November.....	1,320					55			339		20,200	
December.....	1,510					130			225		13,800	
January.....	775					205			322		19,800	
February.....	1,200					235			427		24,600	
March.....	22,200					230			2,990		184,000	
April.....	1,970					762			1,150		68,400	
May.....	1,290					186			741		45,600	
June.....	267					73			128		7,620	
July.....	69					39			53.3		3,280	
August.....	41					33			35.9		2,210	
September.....	38					30			32.3		1,920	
The year.....	22,200					30			543		395,000	

YUBA RIVER AT SMARTVILLE, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 22, T. 16 N., R. 6 E., at Narrows, 1 mile below mouth of Deer Creek, and 1 mile north of Smartville.

DRAINAGE AREA.—1,220 square miles.

RECORDS AVAILABLE.—June, 1903, to September, 1928.

EXTREMES.—Maximum discharge during year, 120,000 second-feet March 26 (gage height, 26.0 feet); minimum, 130 second-feet November 5 (gage height, 1.22 feet).

1903-1928: Maximum discharge, that of March 26, 1928; minimum, 71 second-feet July 30, 1924.

REMARKS.—Records fair. Discharge interpolated June 6 to July 16. Water is diverted for power and irrigation above station. Bullards Bar Reservoir has a capacity of 15,000 acre-feet and Bowman Lake 67,000 acre-feet. Most of the Bowman Lake storage is diverted to Bear River Basin.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	275	240	1,810	5,060	2,360	1,390	11,900	7,600	1,970	809	410	300
2.....	275	195	1,630	5,060	2,960	1,580	10,500	7,400	1,830	775	390	300
3.....	258	150	1,630	4,880	4,880	1,580	9,580	7,400	1,700	742	370	300
4.....	258	138	1,540	4,700	7,060	1,880	8,480	6,800	1,670	708	370	282
5.....	275	130	1,540	4,380	4,880	2,000	8,040	6,200	1,670	675	370	265
6.....	258	195	1,540	4,060	3,760	2,120	7,820	6,000	1,670	641	370	265
7.....	240	370	1,450	3,760	3,200	2,840	7,820	5,800	1,670	608	390	265
8.....	240	520	1,450	3,480	3,080	3,200	8,260	6,200	1,570	574	370	250
9.....	240	4,600	1,450	3,200	2,960	3,340	8,480	6,800	1,550	541	370	250
10.....	240	11,400	1,910	3,200	2,480	3,200	8,040	8,260	1,570	508	355	235
11.....	240	5,110	1,720	3,080	2,120	3,080	7,820	10,000	1,470	475	335	235
12.....	275	1,810	1,630	2,840	2,000	3,080	7,820	8,700	1,440	442	335	235
13.....	258	2,460	2,010	2,720	2,000	3,080	7,600	7,400	1,410	410	335	235
14.....	240	2,980	1,810	2,600	1,880	3,080	7,400	6,800	1,370	421	335	235
15.....	240	2,120	1,630	2,240	1,780	2,960	7,820	6,000	1,340	432	335	235
16.....	240	1,810	1,450	2,000	1,680	2,960	7,820	5,440	1,310	444	335	235
17.....	240	1,450	1,290	1,780	1,580	2,960	6,800	4,720	1,280	455	318	235
18.....	240	1,450	1,290	1,780	1,580	2,960	6,200	4,200	1,240	432	318	235
19.....	240	1,370	1,290	1,680	1,580	2,840	5,440	4,040	1,210	550	300	235
20.....	240	2,460	1,210	1,580	1,480	2,840	4,900	3,880	1,180	605	300	220
21.....	240	3,700	1,210	1,580	1,480	2,960	4,720	3,420	1,140	605	300	220
22.....	240	2,010	1,210	1,780	1,480	4,540	4,360	3,280	1,110	578	300	220
23.....	240	1,810	1,210	1,780	1,480	13,000	4,360	3,140	1,080	578	300	235
24.....	240	1,630	1,210	1,880	1,480	27,000	4,200	3,020	1,040	632	300	235
25.....	275	1,540	1,290	1,780	1,580	75,000	4,720	2,780	1,070	550	300	180
26.....	330	1,450	1,290	1,780	1,480	79,000	5,260	2,660	976	550	300	192
27.....	452	1,810	3,400	1,680	1,480	49,000	5,800	2,480	943	432	300	205
28.....	390	1,630	5,500	1,680	1,480	27,000	6,000	2,220	909	410	282	205
29.....	370	1,720	7,020	2,120	1,480	15,800	6,200	2,120	876	410	300	205
30.....	430	1,810	6,200	2,000	-----	12,600	7,400	2,030	842	370	300	235
31.....	350	-----	5,420	2,000	-----	10,900	-----	2,030	-----	550	300	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	452		240		276		17,000					
November.....	11,400		130		2,000		119,000					
December.....	7,020		1,210		2,140		132,000					
January.....	5,060		1,580		2,710		167,000					
February.....	7,060		1,480		2,370		136,000					
March.....	79,000		1,360		11,900		732,000					
April.....	11,900		4,200		7,050		420,000					
May.....	10,000		2,030		5,120		315,000					
June.....	1,940		842		1,330		79,100					
July.....	809		370		548		33,600					
August.....	410		282		332		20,400					
September.....	300		180		239		14,200					
The year.....	79,000		180		3,010		2,190,000					

MILTON-BOWMAN TUNNEL AT OUTLET, CALIF.

LOCATION.—Water-stage recorder in sec. 4, T. 18 N., R. 12 E., near the upper end of Bowman Lake, Nevada County.

RECORDS AVAILABLE.—May to September, 1928.

EXTREMES.—Maximum discharge at outlet during year, about 294 second-feet.

REMARKS.—Records fair. Monthly mean discharge figures estimated. It includes 3 to 6 second-feet inflow contributed by tunnel. Gage-height record and discharge measurements furnished by Nevada Irrigation District. Tunnel diverts water from Middle Fork of Yuba River at Milton in sec. 12, T. 19 N., R. 12 E., and discharges into Bowman Lake. Water used for power and irrigation in Nevada and Placer Counties.

Monthly discharge, 1927-28

Month	Mean discharge in second-feet	Run-off in acre-feet	Month	Mean discharge in second-feet	Run-off in acre-feet
May 21-31.....	200	4,360	September.....	4.0	238
June.....	50.0	2,980			
July.....	10.0	615	The period.....		8,650
August.....	7.5	461			

OREGON CREEK NEAR NORTH SAN JUAN, CALIF.

LOCATION.—Staff gage in N. $\frac{1}{2}$ SE. $\frac{1}{4}$ sec. 28, T. 18 N., R. 8 E., 500 feet above junction with Middle Fork of Yuba River and 2 miles northeast of North San Juan.

RECORDS AVAILABLE.—October, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, about 5,200 second-feet March 25 (gage height, 9.5 feet); minimum, 2.0 second-feet several days during August and September.

1910-1928: Maximum discharge, that of March 25, 1928; minimum, 1.0 second-foot August 7-10, 1921.

REMARKS.—Records fair. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.5	12	20	154	98	59	380	56	15	6	2.8	2.2
2.....	2.5	8	19	100	118	58	358	54	15	5.5	2.8	2.0
3.....	2.5	8.5	15	98	240	64	358	54	14	5	2.6	2.0
4.....	2.5	7.5	15	94	240	118	255	47	13	5	2.4	2.2
5.....	2.5	7	15	82	168	111	220	45	13	4.8	3.0	2.2
6.....	2.5	7.5	14	74	149	96	238	44	13	4.5	2.8	2.0
7.....	2.5	10	12	68	123	92	238	35	13	4.5	2.8	2.2
8.....	2.7	119	12	64	107	118	220	35	12	4.2	2.8	2.2
9.....	2.7	191	15	61	98	220	220	37	12	4.5	2.8	2.2
10.....	2.7	94	15	61	92	171	205	43	12	4.2	2.6	2.4
11.....	2.7	31	14	59	78	142	190	42	12	4.5	2.4	2.2
12.....	2.5	52	16	59	76	132	190	42	13	4.8	2.2	3.0
13.....	2.7	142	17	58	71	118	165	29	13	4.5	2.2	2.6
14.....	2.9	62	56	73	68	111	165	29	12	4.2	2.4	2.4
15.....	2.9	44	30	59	64	103	152	29	10	3.8	2.2	2.4
16.....	2.9	31	21	52	61	96	136	28	9.5	3.6	2.0	2.4
17.....	3.1	24	17	50	58	92	140	27	9	3.4	2.2	2.2
18.....	3.3	14	15	54	52	80	126	27	9	3.4	2.0	2.6
19.....	3.5	12	15	44	47	78	120	27	9	3.6	2.2	2.4
20.....	3.3	168	14	44	48	76	106	26	9	3.8	2.2	2.2
21.....	3.1	100	14	41	46	78	100	26	8.5	3.8	2.0	2.0
22.....	3.1	59	12	44	44	132	98	23	8.5	3.6	2.0	2.0
23.....	3.5	44	13	36	47	800	84	23	8.5	3.4	2.0	2.0
24.....	3.7	32	14	41	44	1,380	102	22	8	3.2	2.0	2.2
25.....	3.9	30	15	43	59	5,200	87	22	7.5	3.0	2.0	2.6
26.....	7.5	39	15	43	52	2,500	80	20	7	3.8	2.2	2.8
27.....	16	23	15	44	46	1,520	76	19	7	3.2	2.2	2.6
28.....	9.5	25	23	44	53	620	68	17	7	3.0	2.0	2.6
29.....	8	22	425	166	58	520	65	17	7	3.2	2.0	2.8
30.....	11	21	142	123	-----	380	66	17	7	3.2	2.2	2.8
31.....	20	-----	92	111	-----	295	-----	16	-----	3.0	2.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	20	2.5	4.67	287
November.....	191	7	48.0	2,860
December.....	425	12	37.0	2,280
January.....	166	36	69.2	4,250
February.....	240	44	86.4	4,970
March.....	5,200	58	502	30,800
April.....	380	65	167	9,940
May.....	56	16	31.5	1,940
June.....	15	7	10.4	619
July.....	6	3.0	4.01	247
August.....	3.0	2.0	2.33	143
September.....	3.0	2.0	2.35	140
The year.....	5,200	2.0	80.6	58,600

NORTH FORK OF YUBA RIVER NEAR SIERRA CITY, CALIF.

LOCATION.—Water-stage recorder in S. $\frac{1}{2}$ sec. 29, T. 20 N., R. 12 E., $2\frac{1}{2}$ miles below mouth of South Fork of North Fork of Yuba River and $1\frac{1}{2}$ miles west of Sierra City.

DRAINAGE AREA.—93.6 square miles.

RECORDS AVAILABLE.—1911-1913 (fragmentary) and December, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, about 5,920 second-feet March 25 (gage height, 8.50 feet); minimum, 31 second-feet September 7.

1923-1928: Maximum discharge, that of March 25, 1928; minimum, 28 second-feet September 15, 1926.

REMARKS.—Records good except those for which discharge was estimated. Small diversions above station for mining.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	56	85	-----	100	132	109	635	940	307	91	54	36
2.....	57	77	-----		172	114	* 620	825	286	90	54	35
3.....	56	76	-----		192	126	* 600	770	262	88	54	33
4.....	56	72	-----		182	130	* 580	781	240	88	56	33
5.....	56	68	-----		163	128	* 550	852	222	86	56	33
6.....	58	68	-----	111	151	126	* 530	910	205	84	56	33
7.....	59	105	-----		* 150	130	515	940	194	82	54	33
8.....	59	203	-----		* 145	140	502	1,000	180	79	53	34
9.....	59	293	-----		* 145	180	506	1,120	170	79	52	46
10.....	60	762	-----		* 140	187	520	1,120	166	78	50	57
11.....	60	260	-----	114	* 135	190	520	1,030	176	75	49	51
12.....	60	180	-----	114	* 130	190	600	1,000	168	72	48	49
13.....	60	-----	-----	120	* 125	182	585	940	154	70	46	41
14.....	60	-----	-----	116	* 120	170	575	852	146	68	46	38
15.....	61	-----	-----	102	* 120	168	565	792	138	68	46	37
16.....	61	-----	-----	102	* 115	168	570	754	134	66	46	37
17.....	62	-----	-----	105	* 115	187	510	742	129	66	47	37
18.....	62	-----	-----	98	112	208	461	726	122	66	47	36
19.....	62	-----	93	100	111	242	425	737	116	65	47	35
20.....	62	-----	93	96	111	266	393	759	113	64	46	33
21.....	62	220	92	95	112	286	377	742	110	62	45	33
22.....	62		-----	102	111	358	421	732	106	61	44	33
23.....	62		-----	98	111	485	497	671	103	60	41	33
24.....	63		-----	98	109	1,270	492	630	100	60	41	34
25.....	64		-----	95	111	4,530	461	610	97	60	41	35
26.....	78	-----	-----	93	105	4,340	556	570	95	60	41	36
27.....	175	-----	-----	92	105	2,330	666	520	94	58	41	37
28.....	114	-----	-----	93	107	1,240	720	470	94	57	40	37
29.....	90	-----	-----	149	109	970	798	425	94	56	38	38
30.....	87	-----	-----	138	-----	825	910	385	92	55	38	38
31.....	102	-----	-----	124	-----	726	-----	334	-----	53	37	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	175	56	69.2	4,260
November.....	762	68	207	12,300
December.....	-----	-----	* 110	6,760
January.....	-----	-----	106	6,520
February.....	192	105	129	7,420
March.....	4,530	109	668	41,100
April.....	910	377	555	33,000
May.....	1,120	334	764	47,000
June.....	307	92	154	9,160
July.....	91	53	69.9	4,300
August.....	56	37	46.9	2,880
September.....	57	33	37.4	2,230
The year.....	4,530	33	244	177,000

* Estimated.

NORTH FORK OF YUBA RIVER AT GOODYEAR BAR, CALIF.

LOCATION.—Staff gage in E. $\frac{1}{2}$ SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., in Tahoe National Forest at highway bridge at Goodyear Bar and one-eighth of a mile above Rock Creek.

DRAINAGE AREA.—214 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, 24,000 second-feet March 26 (gage height, 15.6 feet); minimum, 119 second-feet September 1-7 (gage height, 2.96 feet).

1910-1928: Maximum discharge, that of March 26, 1928; minimum, 80 second-feet August 10 to October 4, 1924.

REMARKS.—Records good. Discharge estimated December 12-31 and interpolated November 5, March 12-14, May 31, June 4-9, 12-14, 16-18, July 8, 9, and 23-26. Several small diversions for mining purposes above station. Gage-height record furnished by United States Forest Service

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	153	227	445	316	445	342	2,100	2,100	650	250	147	119
2.....	153	190	395	395	600	350	1,740	2,100	618	250	147	119
3.....	153	183	386	395	795	420	1,630	2,100	586	250	147	119
4.....	153	160	368	386	725	445	1,520	1,980	562	242	147	119
5.....	153	164	350	359	600	420	1,410	1,980	538	235	147	119
6.....	153	168	308	350	545	420	1,520	2,340	514	231	147	119
7.....	153	395	300	359	495	445	1,520	2,340	491	231	142	119
8.....	153	795	300	368	470	495	1,520	2,220	468	224	142	124
9.....	153	2,040	300	368	445	660	1,520	2,220	445	218	138	124
10.....	153	660	308	368	420	600	1,520	2,220	422	212	138	128
11.....	153	495	267	359	395	600	1,520	2,340	398	206	133	133
12.....	153	545	260	350	395	573	1,630	2,340	376	199	133	128
13.....	153	660	255	377	395	547	1,630	2,100	374	199	133	128
14.....	160	495	255	386	386	521	1,630	1,980	363	193	133	128
15.....	160	445	255	342	377	495	1,630	1,860	352	186	128	128
16.....	160	445	250	333	359	495	1,630	1,740	346	186	128	128
17.....	160	395	250	333	359	545	1,630	1,740	310	180	128	124
18.....	160	395	250	333	350	600	1,520	1,740	335	180	128	124
19.....	160	395	247	333	350	660	1,410	1,740	330	174	128	124
20.....	168	545	250	325	350	660	1,300	1,740	330	174	128	124
21.....	168	495	250	325	350	660	1,200	1,630	322	169	128	128
22.....	168	395	250	325	350	1,030	1,200	1,520	310	169	128	128
23.....	168	350	250	333	350	2,810	1,200	1,410	218	166	128	128
24.....	168	308	245	316	350	6,320	1,300	1,360	210	164	128	128
25.....	190	308	250	316	342	18,600	1,100	1,300	210	162	128	128
26.....	308	395	260	325	342	21,000	1,200	1,200	274	160	128	128
27.....	267	445	270	325	342	11,200	1,520	1,100	218	158	128	124
28.....	197	495	310	333	350	3,950	1,740	1,000	210	152	128	124
29.....	190	520	260	660	350	2,840	1,980	810	210	152	124	124
30.....	308	520	260	495	-----	2,580	1,980	810	210	152	124	124
31.....	227	-----	260	445	-----	2,220	-----	730	-----	152	124	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	308	153	177	10,900
November.....	2,040	160	468	27,800
December.....	445	247	286	17,600
January.....	660	316	366	22,500
February.....	795	347	427	24,600
March.....	21,000	342	2,690	165,000
April.....	2,100	1,100	1,530	91,000
May.....	2,340	730	1,740	107,000
June.....	650	250	388	23,100
July.....	250	162	193	11,900
August.....	147	124	133	8,180
September.....	133	110	125	7,440
The year.....	21,000	110	713	517,000

ROCK CREEK AT GOODYEAR BAR, CALIF.

LOCATION.—Staff gage in W. $\frac{1}{2}$ SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., 600 feet above mouth at Goodyear Bar in Tahoe National Forest and 350 feet below Woodruff Creek.

DRAINAGE AREA.—10.8 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, about 1,600 second-feet March 25 (gage height, 10.0 feet); minimum, 0.5 second-foot September 18–20. 1910–1928: Maximum discharge, that of March 25, 1928; minimum, 0.2 second-foot August 10–14, 1924.

REMARKS.—Records fair. Discharge estimated or interpolated December 12–31, March 12–14, 23–29, June 4–8, July 8, 9, and 23–26. Three small ditches divert above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.8	1.4	10	20	27	15	135	34	4.4	1.5	0.7	0.6
2.....	.8	1.4	9.5	25	41	16	135	33	4.0	1.4	.8	.6
3.....	.8	1.2	8.5	25	92	20	113	32	4.0	1.4	.8	.6
4.....	.8	1.0	8	21	70	33	103	21	4.0	1.4	.8	.6
5.....	.8	1.6	7	20	50	26	93	20	3.9	1.4	.8	.6
6.....	.8	2.3	7	15	41	25	93	18	3.8	1.4	.8	.6
7.....	.8	9.5	7	15	33	27	89	17	3.8	1.4	.7	.6
8.....	.8	24	6.5	15	32	33	86	16	3.7	1.4	.7	.6
9.....	.8	97	8.5	15	20	70	75	15	3.6	1.4	.7	.6
10.....	1.0	26	6.5	15	21	15	75	13	3.6	1.4	.7	.6
11.....	1.0	11	6.5	14	21	12	75	12	3.5	1.4	.7	.6
12.....	1.0	11	6.5	13	20	17	79	12	3.4	1.4	.7	.6
13.....	1.0	15	6.5	16	20	22	75	12	3.2	1.4	.7	.6
14.....	1.0	11	6.5	15	18	28	82	11	3.1	1.4	.7	.6
15.....	1.0	9.5	6	12	16	33	86	11	3.0	1.4	.7	.6
16.....	1.0	8.5	6	12	16	33	89	10	2.6	1.3	.7	.6
17.....	1.0	8	6	12	16	33	75	9	2.2	1.2	.7	.6
18.....	1.0	8	6	12	15	33	59	9	1.8	1.0	.7	.5
19.....	1.0	7	6	12	15	33	51	8.5	1.5	1.0	.6	.5
20.....	1.0	46	6	11	15	33	46	6.5	1.5	1.0	.6	.5
21.....	1.2	26	6	11	15	33	44	6	1.5	.9	.6	.6
22.....	1.2	15	6	10	15	81	41	6	1.5	.9	.6	.6
23.....	1.2	13	6	8.5	14	320	44	5.5	1.4	.9	.6	.6
24.....	1.2	11	6	8	13	650	44	5.5	1.4	.8	.6	.6
25.....	1.6	11	6	8.5	13	1,400	40	5.5	1.4	.8	.6	.6
26.....	9.5	11	7	8.5	12	1,250	40	5.5	1.5	.7	.6	.6
27.....	1.6	11	8	9.5	12	400	36	5.5	1.5	.7	.6	.6
28.....	1.4	11	12	11	13	250	34	5.5	1.5	.7	.6	.6
29.....	1.0	11	8	70	15	190	34	5	1.5	.7	.6	.6
30.....	9.5	11	8	35	-----	160	34	4.9	1.5	.7	.6	.6
31.....	1.4	-----	8	26	-----	135	-----	4.6	-----	.7	.6	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						9.5	0.8	1.58	97.2			
November.....						97	1.0	14.4	857			
December.....						12	6	7.15	440			
January.....						70	8	16.8	1,030			
February.....						92	12	24.9	1,430			
March.....						1,400	12	175	10,800			
April.....						135	34	70.2	4,180			
May.....						34	4.6	12.2	750			
June.....						4.4	1.4	2.6	157			
July.....						1.5	.7	1.13	69.5			
August.....						.8	.6	.67	41.2			
September.....						.6	.5	.59	35.1			
The year.....						1,400	.5	27.3	19,900			

GOODYEAR CREEK AT GOODYEAR BAR, CALIF.

LOCATION.—Staff gage in W. $\frac{1}{2}$ SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., at trail bridge in Tahoe National Forest, 300 feet above mouth and half a mile north of Goodyear Bar.

DRAINAGE AREA.—12.2 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1928.

EXTREMES.—Maximum discharge during year, about 1,800 second-feet March 25 (gage height, 9.5 feet); minimum, 1.1 second-feet October 1–6 (gage height, 1.08 feet).

1910–1928: Maximum discharge, that of March 25, 1928; minimum, that of October 1–6, 1927.

REMARKS.—Records fair. Three small irrigation ditches head above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.1	8.5	26	30	58	29	174	64	14	7	4.4	2.0
2.....	1.1	8.5	24	44	71	30	133	62	13	7	4.4	2.0
3.....	1.1	8	22	44	105	48	115	62	12	7	4.4	2.0
4.....	1.1	7	21	41	94	61	98	54	12	7	4.4	2.0
5.....	1.1	8	19	30	75	54	98	51	12	6	4.4	2.0
6.....	1.1	9	16	31	66	52	106	51	12	6	4.4	2.0
7.....	1.2	14	14	31	58	58	108	51	12	6	4.4	2.0
8.....	1.2	34	12	32	52	64	112	51	12	6	4.4	2.0
9.....	1.6	127	15	33	47	116	115	30	12	5.5	4.4	2.0
10.....	1.6	31	14	35	44	84	115	29	12	5	4.4	2.0
11.....	1.6	23	12	35	41	79	115	30	12	6	4.4	2.0
12.....	1.9	24	12	33	38	73	119	30	11	5	4.4	2.0
13.....	1.9	30	12	36	37	68	115	30	10	5	4.4	2.0
14.....	1.9	29	12	37	32	63	119	30	9	5	4.4	2.0
15.....	1.9	27	12	32	33	58	122	30	8.5	5	4.4	2.0
16.....	1.9	26	12	31	31	58	126	30	8.5	5	4.4	2.0
17.....	1.9	26	12	31	30	60	119	30	8	5	4.4	2.0
18.....	1.9	25	12	31	30	58	95	27	8	5	4.4	2.0
19.....	1.9	25	12	31	29	58	98	25	7.5	5	3.8	2.0
20.....	2.3	82	12	29	27	58	82	24	7.5	4.4	3.8	2.0
21.....	2.3	60	12	27	27	58	76	24	7.5	4.4	3.2	2.0
22.....	2.3	31	12	25	27	116	67	22	7.5	4.4	2.6	2.0
23.....	2.3	27	12	23	26	422	70	21	7	4.4	2.6	2.0
24.....	2.3	25	12	22	26	770	70	19	7	4.4	2.0	2.6
25.....	5.5	25	12	23	25	1,550	67	18	7	4.4	2.0	2.6
26.....	18	26	13	24	24	1,400	67	16	7	4.4	2.0	3.2
27.....	8	26	15	25	24	524	67	15	7	4.4	2.0	3.2
28.....	5.5	27	20	26	27	291	64	15	7	4.4	2.0	3.8
29.....	5	27	14	89	29	217	64	15	7	4.4	2.0	3.8
30.....	18	27	13	64		174	64	14	7	4.4	2.0	3.8
31.....	8.5		13	57		153		14		4.4	2.0	
Month							Maximum	Minimum	Mean	Run-off in acre-feet		
October.....							18	1.1	3.52	216		
November.....							127	7	29.1	1,730		
December.....							26	12	14.5	892		
January.....							89	22	34.9	2,150		
February.....							105	24	42.5	2,440		
March.....							1,550	29	223	13,700		
April.....							174	64	98.7	5,870		
May.....							64	14	31.7	1,950		
June.....							14	7	9.47	564		
July.....							7	4.4	5.20	320		
August.....							4.4	2.0	3.59	221		
September.....							3.8	2.0	2.30	137		
The year.....							1,550	1.1	41.6	30,200		

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 3, T. 18 N., R. 12 E., one-fourth mile above Jackson Creek and 3 miles above Bowman Dam. Altitude, about 5,600 feet.

EXTREMES.—Maximum discharge during year, 3,200 second-feet March 25 (gage height, 8.35 feet); minimum, 0.2 second-foot October 14 (gage height, 1.42 feet).

REMARKS.—Records good. Discharge estimated December 23–27, February 13–20, March 1–7, 27, April 20–24, June 20, and 22–27. Flow regulated by storage at French, Faucherie, and Sawmill Lakes. On September 30, 1927, available storage was about 10,000 acre-feet, and on September 30, 1928, about 11,000 acre-feet. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District through Fred H. Tibbetts.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	67	124	77	67	26	104	287	54	15	12	10
2	58	68	115	76	67	27	104	231	50	15	12	10
3	57	68	112	76	66	28	101	188	48	14	12	10
4	55	63	107	75	66	29	97	178	46	14	12	10
5	51	70	102	75	66	30	98	198	43	14	12	10
6	47	72	101	74	65	31	98	236	40	13	12	10
7	31	73	97	74	65	32	98	250	37	13	12	10
8	20	81	95	74	64	32	98	262	34	13	12	10
9	18	106	94	74	64	39	98	234	32	13	12	10
10	18	497	94	74	63	44	98	274	26	13	12	10
11	18	228	94	74	60	47	97	255	24	13	12	10
12	10	155	93	49	59	47	98	229	24	13	12	10
13	7	140	98	3. 2'	57	45	100	210	23	13	12	10
14	19	131	87	3. 2	55	41	101	155	22	13	12	10
15	27	118	89	54	53	38	104	188	22	13	12	10
16	8. 5	115	89	77	51	37	106	176	21	12	12	10
17	16	113	89	76	42	41	104	166	19	12	12	10
18	21	107	88	75	33	46	103	157	18	12	12	10
19	18	112	88	74	28	50	101	153	17	12	12	10
20	25	113	88	74	28	54	100	157	16	12	12	10
21	35	113	86	74	28	56	99	148	16	12	12	10
22	42	115	86	73	28	60	97	138	16	12	12	10
23	47	112	85	72	27	64	96	129	16	12	11	10
24	50	106	84	71	27	84	95	127	16	12	11	10
25	54	100	83	71	27	1,510	94	120	15	12	11	10
26	56	102	82	70	27	1,310	97	117	15	12	10	10
27	59	106	81	70	27	600	103	101	15	12	10	10
28	62	108	80	68	26	227	176	88	15	12	10	10
29	64	131	78	70	25	166	214	75	15	12	10	10
30	65	134	78	67	-----	129	252	66	15	12	10	10
31	66	-----	77	67	-----	112	-----	61	-----	12	10	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	66	0.7	37.8	2,320
November.....	497	63	121	7,200
December.....	124	77	91.6	5,630
January.....	77	3.2	67.1	4,130
February.....	67	25	47.0	2,700
March.....	1,510	26	164	10,100
April.....	252	94	111	6,600
May.....	287	61	173	10,600
June.....	54	15	25.7	1,530
July.....	15	12	12.7	781
August.....	12	10	11.5	707
September.....	10	10	10.0	596
The year.....	1,510	.7	72.9	52,900

CANYON CREEK BELOW BOWMAN LAKE, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ sec. 7, T. 18 N., R. 12 E., 1 mile below Bowman Lake and 3 miles above Texas Creek. Altitude, about 5,100 feet.

RECORDS AVAILABLE.—January, 1927, to September, 1928.

EXTREMES.—Maximum discharge during year, 108 second-feet June 2-8 (gage height, 2.05 feet); minimum, 0.6 second-foot at times.

1927-28: Maximum discharge, 793 second-feet May 13-16, 1927 (gage height, 3.92 feet); minimum, that of 1928.

REMARKS.—Records good for medium and high stages, fair for low stages. Discharge estimated February 5-7 and 14-20. Flow is completely regulated by storage in Bowman Lake. Water is diverted into North Bloomfield ditch and Bowman-Spaulding Canal. On September, 30, 1927, the storage in Bowman Lake was about 31,500 acre-feet, and on September 30, 1928, about 23,500 acre-feet. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District through Fred H. Tibbetts.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	0.7	1.0	0.9	8.5	1.2	2.8	22	107	1.1	1.1	4.2
2	.7	.7	1.0	2.0	3.9	1.6	4.7	22	108	1.0	1.2	3.6
3	.7	.6	.9	2.0	3.6	1.8	2.3	22	108	1.0	1.2	3.2
4	.7	.6	.8	1.5	2.2	3.0	2.0	24	108	1.0	1.3	2.3
5	.7	.6	.8	1.2	1.9	2.0	2.3	25	108	1.0	1.2	2.8
6	.7	.6	.7	1.1	1.6	1.8	2.2	26	108	1.0	1.2	3.8
7	.7	5	.7	1.0	1.3	2.3	3.0	27	108	1.0	1.3	2.2
8	.7	7	.7	1.2	1.0	3.0	3.4	28	108	1.0	1.2	1.8
9	.7	19	.7	1.5	1.0	8	4.5	28	107	1.0	1.5	1.8
10	.7	6	.7	1.2	.9	3.2	3.4	28	90	1.0	1.2	1.6
11	.7	1.2	.7	6.5	3.7	3.0	3.4	29	79	1.0	1.2	1.6
12	.7	1.3	1.9	3.9	1.0	2.6	3.6	30	68	1.0	2.5	1.8
13	.8	6	1.0	1.6	.9	2.2	2.6	33	67	1.0	2.0	15
14	.8	2.2	.8	1.2	1.0	2.0	2.2	26	42	1.0	2.0	28
15	.8	2.5	.7	1.0	1.0	1.8	2.0	32	9	1.0	1.5	25
16	6	2.3	.8	1.0	1.0	1.9	2.6	31	1.6	1.0	11	22
17	3.0	1.8	.7	1.0	1.0	2.2	2.5	31	33	1.0	2.0	19
18	2.6	1.5	.7	.9	1.0	2.5	2.5	19	39	1.0	1.2	20
19	1.6	1.5	.7	.8	1.0	2.3	2.2	33	24	1.0	1.0	20
20	.7	1.9	.7	.8	1.0	2.0	1.9	34	24	1.0	1.8	3.9
21	.7	1.8	.7	.8	1.0	1.8	2.6	35	26	1.2	2.6	.7
22	.6	1.8	.6	1.5	.9	8.5	1.8	36	1.8	1.6	1.9	2.8
23	.6	1.2	.6	1.9	.9	20	1.6	37	1.3	1.1	2.0	5.5
24	.6	1.2	.6	.8	.8	22	2.5	38	1.1	1.0	2.3	4.6
25	.7	1.5	.6	.7	.8	25	2.0	52	1.2	1.0	2.5	3.6
26	3.6	4.1	.6	.7	.8	27	1.9	66	1.2	1.0	2.5	3.6
27	1.8	1.8	.6	.8	.8	6.5	1.6	66	1.2	1.0	2.5	3.6
28	.8	1.5	1.0	.8	1.0	3.6	12	75	1.2	1.0	2.3	3.6
29	1.2	1.8	.9	8.5	1.0	3.4	17	97	1.2	1.0	13	3.0
30	1.8	1.2	1.0	21	-----	3.2	22	100	1.2	1.0	13	.8
31	.8	-----	.8	7	-----	3.0	-----	102	-----	1.0	18	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October	6		0.6		1.22		75.0					
November	19		.6		2.70		161					
December	9		.6		1.06		65.2					
January	21		.7		2.48		152					
February	8.5		.8		1.60		92.0					
March	27		1.2		5.63		346					
April	22		1.6		4.04		240					
May	102		19		40.5		2,490					
June	108		1.1		49.5		2,950					
July	1.6		1.0		1.03		63.3					
August	18		1.1		3.26		200					
September	28		.7		7.18		427					
The year	108		.6		9.99		7,260					

JACKSON CREEK AT MOUTH, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 2, T. 18 N., R. 12 E., 3 miles above Bowman Dam. Altitude, about 5,600 feet.

DRAINAGE AREA.—5.5 square miles.

RECORDS AVAILABLE.—January, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,270 second-feet March 25 (gage height, 5.3 feet); minimum, 1.8 second-feet September 23–30 (gage height, 0.60 foot).

1926–1928: Maximum discharge, that of March 25, 1928; minimum, 1.0 second-foot September 14 and October 8, 1926.

REMARKS.—Records fair. No diversions. Flow is controlled to some extent by Jackson Lake storage. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District through Fred H. Tibbetts.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	3.4	8.5	6	9	8	38	73	8.5	3.2	2.2	
2	3.0	3.2	^a 8.5	7.5	13	8.5	^a 35	56	8.5	3.2	2.2	
3	3.0	3.2	8.5	^a 7.5	12	9	^a 32	50	8	3.1	2.2	
4	3.0	3.1	^a 8	7.5	10	9.5	29	51	7	3.0	2.2	
5	2.9	3.0	7.5	7	9.5	10	27	55	7	3.0	2.2	
6	2.9	3.2	7.5	7	9.5	10	32	59	6.5	3.0	2.2	
7	2.9	4.3	^a 7	7	9.5	10	34	62	6	3.0	2.2	
8	2.9	6	7	7	9.5	11	36	56	6	2.9	2.2	
9	2.9	37	^a 7	7.5	9	18	38	62	5.5	2.8	2.2	
10	2.9	19	7	8	9	18	38	55	5.5	2.7	2.2	
11	2.9	8	^a 7	7.5	9	17	38	50	6.5	2.6	2.2	
12	2.9	7	^a 6.5	8	9	16	45	45	6	2.6	2.2	
13	2.9	9	6.5	8.5	8.5	15	43	38	5.5	2.6	2.2	
14	2.9	7.5	^a 6.5	8	8.5	13	42	38	5	2.6	2.2	
15	2.9	8	6	7.5	8.5	14	41	37	4.7	2.6	2.2	
16	2.9	8.5	^a 6	7.5	8.5	16	42	30	4.6	2.6	2.2	^a 2.0
17	2.9	8.5	6	7.5	8	20	36	28	4.6	2.6	2.1	
18	2.9	9	^a 5.5	7	8	24	32	26	4.4	2.5	2.0	
19	2.9	^a 9	5.5	7	8.5	27	29	23	4.1	2.4	2.0	
20	2.9	^a 9.5	5.5	7	8.5	29	26	36	4.0	2.4	2.0	
21	2.9	^a 9.5	5.5	6.5	8.5	30	27	36	4.0	2.4	2.0	
22	2.9	^a 10	5.5	6.5	8	35	36	27	3.9	2.4	2.0	
23	2.9	10	5.5	6.5	8	46	44	22	3.8	2.4	2.1	
24	2.9	^a 10	5.5	6.5	8	249	40	20	3.7	2.4	2.1	
25	3.0	9.5	5.5	6.5	8	825	38	18	3.5	2.4	2.1	
26	4.2	^a 9	5.5	6.5	8	558	47	16	3.5	2.4	2.1	
27	4.1	^a 9	5.5	6.5	7.5	188	56	15	3.5	2.3	2.1	
28	3.6	8.5	5	7	7.5	79	59	12	3.4	2.2	2.1	
29	3.4	^a 8.5	5	12	7.5	56	68	12	3.3	2.2	2.1	
30	3.4	^a 8.5	5.5	10	-----	50	76	11	3.2	2.2	2.1	
31	3.7	-----	5.5	9.5	-----	43	-----	9.5	-----	2.2	2.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4.2	2.9	3.08	189
November	37	3.0	8.73	519
December	8.5	5	6.35	390
January	12	6	7.47	459
February	13	7.5	8.83	508
March	825	8	79.4	4,880
April	76	26	40.1	2,390
May	73	9.5	36.4	2,240
June	8.5	3.2	5.12	305
July	3.2	2.2	2.61	160
August	2.2	2.0	2.14	132
September	-----	-----	2.00	119
The year	825	-----	16.9	12,300

^a Estimated.

BOWMAN-SPAULDING CANAL AT INTAKE, CALIF.

LOCATION.—Water-stage recorder in sec. 8, T. 18 N., R. 12 E., 150 feet below intake and one-fourth mile below Bowman rock-fill dam. Altitude, about 5,400 feet.

RECORDS AVAILABLE.—October, 1927, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 262 second-feet August 2-9 and 29; practically no flow in April and May.

REMARKS.—Records good. Discharge estimated February 28 to June 13 and September 14-19. Gage-height record and discharge measurements furnished by Nevada Irrigation District through Fred H. Tibbetts. Canal diverts at Bowman Lake in sec. 8, T. 18 N., R. 12 E. Water is transported to Fuller Lake and thence to Lake Spaulding and is used for power and for irrigation in the Nevada irrigation district.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	June	July	Aug.	Sept.
1.....	219	219	199	199	45	-----	254	254	254
2.....	219	219	199	196	21	-----	254	262	254
3.....	219	219	199	196	42	-----	254	262	254
4.....	219	211	199	192	56	-----	254	262	254
5.....	219	211	199	192	36	-----	254	262	254
6.....	219	219	199	192	33	-----	254	262	254
7.....	219	219	199	192	51	-----	254	262	254
8.....	219	191	199	192	28	-----	254	262	254
9.....	219	95	199	192	32	-----	254	262	254
10.....	219	19	199	192	18	-----	254	254	262
11.....	219	22	199	135	7	-----	254	254	262
12.....	219	22	199	188	10	-----	254	229	262
13.....	219	44	199	185	10	-----	254	246	262
14.....	219	56	199	185	10	1 ⁹	254	246	-----
15.....	219	121	199	185	10	9 ⁹	254	246	-----
16.....	128	206	199	185	10	147	254	246	-----
17.....	162	206	199	151	11	12	254	171	-----
18.....	131	206	199	56	11	1 ⁹	254	246	-----
19.....	143	206	199	69	11	27	254	246	-----
20.....	219	185	199	49	10	28	254	246	21
21.....	219	185	199	58	10	41	254	246	238
22.....	219	196	199	68	10	20 ⁹	254	246	246
23.....	219	196	199	85	10	238	254	246	246
24.....	219	196	199	85	10	24 ⁹	254	254	129
25.....	219	196	199	85	10	24 ⁹	254	254	246
26.....	211	196	199	85	10	24 ⁹	254	254	246
27.....	211	196	199	85	10	24 ⁹	254	254	254
28.....	219	196	199	85	10	246	254	246	254
29.....	219	196	199	88	10	254	254	262	254
30.....	211	196	199	43	-----	254	254	145	254
31.....	211	-----	199	44	-----	-----	254	246	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	219	128	208	12,800
November.....	219	19	168	10,000
December.....	199	199	199	12,200
January.....	199	43	133	8,180
February.....	56	7	19.0	1,090
March.....	-----	-----	15.0	922
June.....	254	0	85.6	5,090
July.....	254	-----	2.54	15,600
August.....	262	145	246	15,100
September.....	262	0	191	11,400
The year.....	262	0	127	92,400

BEAR RIVER AT VAN TRENT, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 21, T. 14 N., R. 6 E., below highway bridge at McCourtney crossing, three-fourths mile above Rock Creek, and 1 mile below Van Trent.

DRAINAGE AREA.—263 square miles.

RECORDS AVAILABLE.—October, 1904, to January, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, about 4,250 second-feet December 29 (gage height, 8.2 feet); minimum, 13 second-feet November 6 (gage height, 1.3 feet).

1904-1928: Maximum discharge, about 29,600 second-feet January 14, 1909 (gage height, 18.9 feet); minimum, 0.7 second-foot October 2, 1924.

REMARKS.—Records poor. Water is diverted and regulated above station for power and irrigation. Stored water from South Fork of Yuba River is diverted into drainage basin above Colfax.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Day	Oct.	Nov.	Dec.	Jan.
1.....	140	79	48	448	16.....	122	405	131	114
2.....	140	42	48	448	17.....	140	328	99	75
3.....	106	32	48	492	18.....	106	258	87	75
4.....	92	22	48	405	19.....	140	72	74	328
5.....	122	22	37	328	20.....	140	198	74	448
6.....	122	13	37	292	21.....	140	715	74	405
7.....	160	22	37	225	22.....	140	405	74	405
8.....	140	42	37	225	23.....	160	258	61	-----
9.....	140	185	37	258	24.....	140	258	61	-----
10.....	140	820	60	150	25.....	140	198	258	-----
11.....	140	198	292	114	26.....	160	225	198	-----
12.....	140	99	99	75	27.....	240	150	292	-----
13.....	160	345	86	75	28.....	70	72	198	-----
14.....	140	328	1,050	88	29.....	54	60	4,250	-----
15.....	140	365	225	131	30.....	42	60	1,050	-----
					31.....	92	-----	615	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	240	42	131	8,060
November.....	820	13	209	12,400
December.....	4,250	37	316	19,400
January 1-22.....	492	75	255	11,100
The period.....				51,000

BEAR RIVER CANAL NEAR COLFAX, CALIF.

LOCATION.—Float gage in sec. 28, T. 15 N., R. 9 E., just below lower spillway gates 1 mile below diversion dam and 2 miles northwest of Colfax.

RECORDS AVAILABLE.—January, 1912, to September, 1928.

EXTREMES.—1912-1928: Maximum mean daily discharge, 302 second-feet September 16 and October 31, 1923, and January 21, 1925.

REMARKS.—Canal diverts from left bank of Bear River in sec. 22, T. 15 N., R. 9 E. Water is used to develop power at Halsey and at Wise power plants and is then distributed for irrigation in the Placerville district. At times of excess supply of water some is wasted into American River in sec. 4, T. 11 N., R. 8 E. Discharge record furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	300	292	265	0	200	255	274	208	276	300	300	300
2.....	300	235	265	0	200	214	0	210	249	294	300	300
3.....	300	129	268	0	200	287	0	197	255	300	300	300
4.....	300	114	252	0	200	289	0	163	214	290	300	300
5.....	300	118	258	0	200	282	0	233	224	276	300	300
6.....	300	133	236	0	200	260	0	166	270	261	300	300
7.....	300	175	259	0	227	300	0	198	256	273	300	300
8.....	300	300	247	0	287	300	0	201	255	265	300	300
9.....	262	232	89	33	300	257	0	201	247	294	300	294
10.....	300	155	158	177	276	300	0	201	259	300	300	290
11.....	300	92	240	223	262	300	138	278	283	300	300	300
12.....	300	207	280	180	246	300	252	278	287	300	300	300
13.....	300	207	270	182	220	287	279	286	300	300	300	300
14.....	300	238	250	268	279	300	300	294	293	300	300	300
15.....	300	288	298	196	285	300	300	294	300	300	300	300
16.....	300	290	257	223	282	300	300	294	300	300	300	300
17.....	300	300	176	290	300	300	300	294	298	300	300	300
18.....	300	300	184	194	300	300	300	283	298	300	300	300
19.....	300	300	198	0	251	300	294	283	300	300	300	300
20.....	300	262	262	0	171	300	293	270	300	300	300	300
21.....	300	230	289	0	148	300	278	274	300	300	300	300
22.....	300	300	256	0	206	300	255	288	300	300	300	300
23.....	300	300	280	0	171	250	230	300	300	300	300	300
24.....	300	300	293	0	198	191	284	300	299	300	300	300
25.....	300	300	200	0	222	0	250	300	291	300	300	300
26.....	300	300	200	0	134	0	260	300	297	300	300	300
27.....	300	239	0	0	158	51	240	300	294	300	300	300
28.....	226	242	0	0	147	127	246	300	297	300	300	300
29.....	297	255	0	50	225	207	196	300	300	300	300	300
30.....	262	294	0	155	-----	232	225	300	300	300	300	300
31.....	300	-----	0	200	-----	284	-----	300	-----	300	300	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	300	226	295	18,100
November.....	300	92	238	14,200
December.....	300	0	201	12,400
January.....	290	0	76.5	4,700
February.....	300	134	224	12,900
March.....	300	0	248	15,200
April.....	300	0	183	10,900
May.....	300	163	261	16,000
June.....	300	214	281	16,700
July.....	300	261	295	18,100
August.....	300	300	300	18,400
September.....	300	290	299	17,800
The year.....	300	0	242	175,000

AMERICAN RIVER BASIN

NORTH FORK OF AMERICAN RIVER NEAR COLFAX, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 30, T. 14 N., R. 10 E., at bridge on Colfax-Forest Hill Road, 150 feet below mouth of Shirttail Canyon Creek and 5 miles southeast of Colfax.

RECORDS AVAILABLE.—August, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, about 55,000 second-feet March 25 (gage height, 20.2 feet); minimum, 35 second-feet several days in September.

1911-1928: Maximum discharge, that of March 25, 1928; minimum, 15 second-feet July 22 to August 7 and August 12-15, 1924.

REMARKS.—Records good. Small storage and diversion above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	50	100	310	330	492	310	2,700	1,360	370	105	53	40
2.....	50	90	330	415	700	290	2,960	1,440	300	105	50	40
3.....	50	80	350	440	1,120	440	2,700	1,280	280	105	50	40
4.....	50	90	310	440	1,520	580	2,230	1,280	240	105	53	38
5.....	50	80	255	415	1,080	550	1,800	1,440	240	105	53	35
6.....	50	80	255	370	770	492	2,120	1,440	240	105	53	35
7.....	50	110	210	330	670	415	2,010	1,440	240	98	53	35
8.....	38	570	180	330	610	805	2,010	1,440	205	90	53	35
9.....	50	485	225	370	550	960	1,800	1,440	205	85	53	35
10.....	38	1,500	240	350	465	700	1,800	1,440	222	80	60	35
11.....	38	440	210	370	415	920	1,800	1,440	205	80	56	35
12.....	38	255	210	330	440	805	2,010	1,440	205	75	53	40
13.....	38	700	210	350	415	770	1,800	1,360	205	75	50	40
14.....	38	580	350	370	415	700	1,700	1,280	175	80	46	40
15.....	50	392	310	330	370	640	1,600	1,120	175	75	46	40
16.....	50	415	272	310	370	610	1,600	1,080	150	75	46	40
17.....	50	392	255	290	370	670	1,600	1,000	150	75	46	40
18.....	50	392	225	255	370	735	1,280	960	150	70	46	40
19.....	50	330	195	255	330	805	1,200	925	138	70	46	35
20.....	50	392	195	255	330	880	1,120	1,000	138	70	46	35
21.....	53	640	201	255	330	880	1,120	1,000	125	53	46	35
22.....	50	440	180	310	330	1,080	1,120	925	125	56	60	35
23.....	50	350	165	330	330	3,140	1,280	890	125	60	56	35
24.....	50	310	180	330	330	9,060	1,440	760	115	56	53	35
25.....	50	330	165	310	415	31,700	1,200	700	115	60	53	35
26.....	72	492	165	255	350	23,000	1,280	670	105	60	53	35
27.....	278	465	180	255	330	14,000	1,440	640	105	60	53	35
28.....	100	392	225	290	330	6,160	1,440	580	125	60	50	35
29.....	90	640	1,250	805	330	4,420	1,440	550	105	60	46	40
30.....	90	415	492	840	-----	3,230	1,440	495	105	60	43	40
31.....	120	-----	370	610	-----	2,700	-----	445	-----	53	40	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	278					38			62.7		3,830	
November.....	1,500					80			398		23,700	
December.....	1,250					165			280		17,200	
January.....	840					255			371		22,800	
February.....	1,520					330			513		29,500	
March.....	31,700					290			3,630		223,000	
April.....	2,960					1,120			1,700		101,000	
May.....	1,440					445			1,070		65,800	
June.....	370					105			179		10,700	
July.....	105					53			76.2		4,690	
August.....	60					40			50.5		3,110	
September.....	40					35			37.1		2,210	
The year.....	31,700					35			700		508,000	

AMERICAN RIVER AT FAIROAKS, CALIF.

LOCATION.—Water-stage recorders and staff gage at highway bridge half a mile southeast of Fair Oaks, Sacramento County, and 10 miles below mouth of South Fork.

DRAINAGE AREA.—1,910 square miles.

RECORDS AVAILABLE.—November, 1904, to September, 1928.

EXTREMES.—Maximum discharge during year, 182,000 second-feet March 25 (gage height, 30.45 feet); minimum, 40 second-feet September 30.

1904-1928: Maximum discharge, that of March 25, 1928; maximum stage, 30.4 feet March 19, 1907; minimum discharge, 3.6 second-feet August 16, 1924.

REMARKS.—Records good. Water is diverted for irrigation above station, and there is considerable storage and regulation in connection with power development.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	424	1,040	1,560	* 1,750	2,340	1,440	13,000	11,800	2,510	* 672	273	223
2.....	326	900	1,560	1,620	2,470	1,440	11,800	10,200	2,370	650	250	167
3.....	308	048	1,560	1,620	4,460	1,620	15,300	7,600	* 2,180	695	280	100
4.....	308	056	* 1,500	1,690	9,790	* 2,040	12,600	6,500	2,000	605	294	160
5.....	350	704	1,440	1,620	* 6,480	2,470	10,600	7,900	2,120	605	227	270
6.....	344	584	1,440	1,620	3,170	2,600	10,200	* 8,380	2,120	524	205	243
7.....	392	496	1,320	1,690	2,740	2,740	10,200	8,850	1,890	472	277	184
8.....	362	1,180	1,260	* 1,660	2,470	2,880	* 10,200	10,200	1,780	492	298	199
9.....	386	2,880	1,160	1,620	2,340	3,170	10,200	7,300	1,780	420	267	214
10.....	308	9,230	1,100	1,620	2,340	4,120	10,200	9,550	* 1,500	448	236	190
11.....	314	3,470	* 1,210	1,620	1,950	* 3,800	10,200	10,200	1,330	432	316	163
12.....	380	1,820	1,320	1,690	* 1,820	3,470	10,200	8,500	1,100	392	240	199
13.....	398	* 1,950	1,560	1,690	1,690	3,470	9,900	* 7,120	1,100	436	193	217
14.....	424	2,080	1,950	1,690	1,620	3,320	9,550	5,750	1,260	416	181	208
15.....	410	2,080	1,690	* 1,620	1,440	3,170	* 8,720	5,000	1,100	342	230	250
16.....	380	1,820	1,320	1,560	1,440	2,880	7,900	6,250	1,100	334	196	253
17.....	332	1,820	1,210	1,620	1,560	3,020	8,500	5,000	* 1,100	349	223	217
18.....	386	1,690	* 1,100	1,620	1,620	* 3,100	7,000	5,000	1,020	392	236	223
19.....	438	1,820	1,000	1,560	1,530	3,170	6,500	5,000	1,020	338	196	263
20.....	452	* 2,640	1,000	1,320	1,440	3,020	5,750	* 4,880	970	298	166	263
21.....	392	3,470	900	1,380	1,440	3,740	5,750	4,750	970	309	142	211
22.....	424	2,080	1,000	* 1,410	1,380	3,470	* 5,750	4,500	920	298	148	217
23.....	424	1,820	900	1,440	1,380	10,400	5,750	4,500	875	294	178	109
24.....	368	1,690	900	1,440	1,440	35,000	6,000	4,280	* 852	364	270	185
25.....	398	1,690	* 900	1,320	1,440	119,000	6,500	4,280	830	360	193	205
26.....	459	1,690	900	1,380	* 1,530	103,000	6,500	4,060	830	356	190	166
27.....	624	* 1,690	810	1,560	1,620	72,500	7,000	* 3,670	785	342	199	233
28.....	1,250	1,690	1,160	1,620	1,620	37,200	8,850	3,280	785	327	199	246
29.....	940	1,690	12,200	2,540	1,440	25,300	* 9,520	2,800	785	349	187	323
30.....	696	2,210	2,880	3,470	-----	18,800	10,200	2,510	695	253	175	342
31.....	738	-----	1,880	2,600	-----	15,000	-----	2,370	-----	267	284	-----
Month	Maximum					Minimum		Mean		Run-off in acre-feet		
October.....	1,250					308		453		28,200		
November.....	9,230					496		1,970		117,000		
December.....	12,200					810		1,670		103,000		
January.....	8,470					1,320		1,700		105,000		
February.....	9,790					1,380		2,340		135,000		
March.....	119,000					1,440		16,100		990,000		
April.....	15,300					5,750		9,010		536,000		
May.....	11,800					2,370		6,190		381,000		
June.....	2,510					695		1,340		79,700		
July.....	695					253		414		25,500		
August.....	316					142		224		13,800		
September.....	342					109		218		13,000		
The year.....	119,000					109		3,480		2,530,000		

* Estimated or interpolated.

MIDDLE FORK OF AMERICAN RIVER NEAR EAST AUBURN, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 6, T. 12 N., R. 9 E., at Mountain Quarry Co.'s plant $1\frac{1}{2}$ miles above junction with North Fork of American River and $3\frac{1}{2}$ miles northeast of East Auburn.

RECORDS AVAILABLE.—October, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, about 100,000 second-feet March 25 (gage height, 35.6 feet); minimum, 35 second-feet many days in September.

1911–1928: Maximum discharge, that of March 25, 1928; minimum, 23 second-feet September 26 to October 3, 1924.

REMARKS.—Records good. Pilot Creek ditch and Little South Fork ditch divert from tributaries above station. Storage is developed in Loon Lake at head of Gerle Creek.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	73	462	660	* 601	900	600	3,730	2,940	890	218	91	57
2.....	73	277	572	630	1,040	600	3,730	2,810	855	218	91	52
3.....	73	209	545	720	1,410	780	3,730	2,550	855	218	91	52
4.....	73	224	490	780	2,430	1,180	2,310	2,430	855	* 209	91	52
5.....	73	224	462	660	1,840	1,040	1,850	2,680	820	200	* 91	52
6.....	73	202	425	630	1,330	970	1,750	3,870	785	185	91	52
6.....	73	224	385	572	1,110	900	1,750	4,010	750	185	88	52
8.....	73	780	326	* 572	1,040	1,490	3,870	4,150	680	* 185	84	52
9.....	73	1,570	355	572	900	1,490	3,730	2,940	650	185	79	* 52
10.....	73	4,740	385	630	900	1,930	4,010	4,150	530	176	76	52
11.....	73	1,330	385	660	840	1,570	3,460	4,010	560	170	76	52
12.....	71	660	335	630	780	1,660	4,300	3,730	530	155	* 76	52
13.....	68	720	340	660	720	1,570	4,150	3,460	500	155	76	52
14.....	64	1,410	660	780	690	1,490	4,600	2,940	450	146	74	57
15.....	64	1,180	490	660	690	1,330	* 4,030	2,680	405	140	69	57
16.....	* 64	630	435	572	630	1,180	3,460	2,680	396	140	69	* 54
17.....	64	630	385	308	630	1,180	2,940	2,430	369	140	69	52
18.....	64	630	375	518	600	1,330	2,680	2,430	382	134	66	52
19.....	64	630	335	435	600	1,490	2,190	2,310	360	* 129	* 64	52
20.....	73	660	335	462	600	1,660	1,850	2,430	369	* 125	63	52
21.....	73	1,110	317	435	600	1,750	1,750	2,430	338	* 120	63	52
22.....	73	720	299	* 490	600	1,750	1,750	2,190	324	* 116	63	52
23.....	* 73	600	281	545	600	5,160	2,430	1,850	315	* 111	63	52
24.....	73	490	281	518	572	16,600	2,680	1,850	283	107	63	52
25.....	73	490	* 277	490	720	75,000	2,680	1,850	275	107	63	52
26.....	84	600	273	462	660	48,000	2,430	1,750	275	104	* 63	52
27.....	179	840	281	435	600	30,000	2,430	1,650	255	99	63	52
28.....	420	690	322	462	572	11,700	2,680	1,470	255	99	63	52
29.....	268	970	1,840	720	600	7,060	2,430	1,290	235	* 95	63	52
30.....	236	900	900	1,570	-----	5,650	2,550	1,210	235	91	53	52
31.....	290	-----	572	1,040	-----	4,010	-----	1,050	-----	91	63	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	420					64			105		6,460	
November.....	4,740					202			827		49,200	
December.....	1,840					273			462		28,400	
January.....	1,570					308			620		38,100	
February.....	2,430					572			869		50,000	
March.....	75,000					600			7,490		461,000	
April.....	4,600					1,750			2,930		174,000	
May.....	4,150					1,050			2,590		159,000	
June.....	890					235			493		29,300	
July.....	218					91			147		9,040	
August.....	91					63			73.2		4,500	
September.....	57					52			52.6		3,130	
The year.....	75,000					52			1,390		1,010,000	

* Estimated or interpolated.

SOUTH FORK OF AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.—Water-stage recorder in S. ½ sec. 29, T. 11 N., R. 15 E., on Lincoln Highway, half a mile below intake of El Dorado Canal and 2 miles west of Kyburz.

RECORDS AVAILABLE.—August to December, 1907; October, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 5,020 second-feet March 25 (gage height, 7.60 feet); minimum, 0.5 second-foot November 2.

1922-1928: Maximum discharge, that of March 25, 1928; minimum, 0.4 second-foot part of October, 1924, September, 1925, and August and October, 1926.

REMARKS.—Records excellent, except those for December 18 to January 25, which were estimated because of ice. El Dorado Canal diverts half a mile above station and water is returned to river below gage. Echo Lake flume diverts water from Echo Lake into the drainage above station. Flow partly regulated by four storage reservoirs above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	1.0	54	40	12	1.4	855	1,200	490	1.7	1.5	2.4
2	5	.6	56	70	15	1.5	731	1,080	550	1.2	1.6	1.8
3	6	10	60	65	32	27	695	1,000	565	1.2	1.5	2.2
4	3.4	7	35	55	35	30	647	1,080	525	1.2	1.4	2.9
5	2.2	1.7	25	26	20	18	624	1,200	490	1.3	1.1	1.3
6	1.2	9.5	14	19	9	10	671	1,340	490	12	1.0	3.8
7	3.1	62	7	16	6	12	719	1,490	471	1.8	1.0	1.7
8	4.2	146	39	16	8	24	707	1,390	412	1.2	1.0	3.2
9	4.8	173	35	33	5	53	725	1,290	350	1.3	1.0	1.4
10	3.8	480	6	29	2.4	92	737	1,760	394	1.1	1.1	5
11	2.3	138	11	8	3.2	95	755	1,590	235	1.0	1.1	2.6
12	1.2	100	16	2	2.3	98	890	1,540	275	1.0	1.5	1.9
13	4.5	128	25	8	1.6	100	820	1,490	175	1.0	1.4	1.3
14	2.4	100	25	6	1.6	80	774	1,440	140	1.2	1.1	1.2
15	3.8	90	24	2	1.2	158	762	1,440	124	1.8	29	2.2
16	3.2	102	22	4	4.7	208	781	1,200	126	2.8	10	2.0
17	1.8	101	12	27	1.6	247	719	1,160	128	1.3	1.6	1.4
18	1.0	106	8.5	53	1.6	271	608	1,200	130	1.3	1.2	1.1
19	1.1	101	9	42	2.1	308	580	1,200	112	1.1	9.5	1.6
20	2.9	98	9	25	1.8	336	520	1,200	101	1.0	6.5	1.4
21	4.0	92	8	11	1.9	274	520	1,120	89	3.4	3.5	1.2
22	1.8	71	6	4	2.3	284	618	1,080	88	26	1.5	1.6
23	5.5	49	8	6	2.9	378	755	1,120	74	29	1.8	1.4
24	5	44	26	30	1.3	1,290	737	1,160	76	25	1.3	1.6
25	9	46	22	21	1.8	3,910	608	1,120	67	9	1.4	7.5
26	47	146	20	9	1.7	3,430	788	1,120	38	4.8	1.2	7
27	52	172	19	9	2.3	2,380	965	1,080	29	2.4	1.2	3.5
28	1.6	89	23	10	1.3	1,540	1,000	942	16	1.9	1.1	4.0
29	1.4	131	34	53	1.3	1,200	1,120	869	4.2	1.8	1.1	3.2
30	1.7	83	30	39	-----	1,080	1,390	695	1.7	1.7	1.1	2.3
31	4.7	-----	44	15	-----	965	-----	530	-----	1.6	1.1	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet		
October	52			1.0			6.34			390°		
November	480			.6			95.9			5,710		
December	60			6			23.6			1,450		
January	70			2			24.3			1,490		
February	35			1.2			6.31			363		
March	3,910			1.4			610			37,500		
April	1,390			520			761			45,300		
May	1,760			530			1,200			73,800		
June	565			1.7			221			13,200		
July	29			1.0			4.65			286		
August	29			1.0			2.95			181		
September	7.5			1.1			2.52			150		
The year	3,910			.6			248			180,000		

Daily and monthly discharge, in second-feet, of South Fork of American River and El Dorado Canal near Kyburz, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	154	87	149	141	113	106	964	1,440	637	149	142	148
2.....	154	89	152	171	117	110	840	1,230	697	144	144	147
3.....	155	149	156	166	134	137	804	1,150	712	144	142	148
4.....	152	115	131	156	136	140	756	1,230	672	149	143	148
5.....	151	100	121	128	125	136	733	1,350	637	149	142	145
6.....	146	114	110	120	120	134	787	1,490	627	163	141	150
7.....	152	193	95	117	117	136	841	1,640	618	150	141	148
8.....	153	290	133	118	119	148	831	1,540	559	143	139	150
9.....	154	317	130	135	114	179	850	1,440	498	145	144	147
10.....	153	593	99	137	100	215	862	1,910	452	143	141	153
11.....	151	234	105	126	102	222	880	1,740	413	143	140	152
12.....	149	196	112	120	102	225	1,020	1,690	363	140	142	151
13.....	154	224	121	127	102	227	948	1,640	323	133	139	149
14.....	151	196	121	123	104	207	904	1,590	288	137	133	147
15.....	153	186	120	103	82	201	892	1,590	272	147	177	151
16.....	152	198	118	126	112	210	911	1,350	274	155	158	150
17.....	150	197	108	144	100	249	849	1,310	276	149	137	146
18.....	149	202	102	138	101	273	738	1,350	279	148	134	96
19.....	149	197	105	132	103	310	702	1,350	262	146	160	116
20.....	152	194	105	127	106	338	665	1,350	251	149	152	113
21.....	152	188	104	112	111	334	668	1,270	239	152	150	110
22.....	150	167	102	121	104	403	766	1,230	238	169	146	136
23.....	154	145	104	128	107	488	902	1,270	224	175	149	135
24.....	154	140	122	130	101	1,390	883	1,310	226	171	144	144
25.....	159	142	121	122	107	4,000	755	1,270	217	155	145	156
26.....	196	181	121	109	101	3,470	935	1,270	190	150	146	156
27.....	198	175	120	110	106	2,400	1,110	1,230	182	146	144	152
28.....	100	151	124	111	107	1,580	1,150	1,090	169	143	147	153
29.....	77	227	136	154	106	1,270	1,270	1,020	152	145	144	152
30.....	95	178	132	140	-----	1,150	1,540	842	145	142	145	151
31.....	125	-----	145	116	-----	1,060	-----	677	-----	143	142	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	198	77	148	9,100
November.....	593	87	192	11,400
December.....	156	95	120	7,380
January.....	171	103	129	7,930
February.....	136	82	109	6,270
March.....	4,000	106	692	42,500
April.....	1,540	665	892	53,100
May.....	1,910	677	1,350	83,000
June.....	712	145	370	22,000
July.....	175	133	149	9,160
August.....	177	133	145	8,920
September.....	156	96	143	8,510
The year.....	4,000	77	371	269,000

SOUTH FORK OF AMERICAN RIVER NEAR CAMINO, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 25, T. 11 N., R. 11 E., 1 mile below intake of Western States Gas & Electric Co.'s flume, 300 feet above mouth of Iowa Canyon Creek, and 3 miles northwest of Camino.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 31,500 second-feet March 25 (gage height, 24.4 feet); minimum, 3.4 second-feet September 21.

1922-1928: Maximum discharge, that of March 25, 1928; minimum, that of September 21, 1928.

REMARKS.—Records excellent. Several diversions and four storage reservoirs above station; complete regulation at low water. See records for Western States Gas & Electric Co.'s flume, El Dorado Canal, and Fannon Reservoir outlet.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	82	203	319	289	355	285	2,680	3,270	900	108	46	44
2.....	102	108	308	326	392	285	2,600	2,600	800	153	48	45
3.....	78	224	325	396	628	380	2,460	2,320	800	124	50	32
4.....	84	242	280	384	880	485	2,390	2,390	800	89	52	44
5.....	81	142	234	333	622	470	2,320	2,680	780	109	53	40
6.....	84	92	210	305	545	442	2,460	2,680	700	106	50	36
7.....	79	224	164	274	455	455	2,600	3,000	600	114	47	36
8.....	80	686	134	260	442	645	2,460	3,000	562	73	48	48
9.....	58	642	238	288	380	720	2,600	2,460	550	94	50	28
10.....	64	1,590	177	354	342	840	2,600	3,450	515	81	53	35
11.....	86	573	156	338	330	800	2,320	3,090	465	74	48	41
12.....	89	370	164	300	318	800	2,920	3,000	465	73	23	38
13.....	66	755	212	322	305	800	2,600	2,760	355	64	44	48
14.....	58	516	246	355	305	780	2,530	2,600	268	65	40	42
15.....	64	383	218	224	255	700	2,320	2,760	330	68	39	47
16.....	74	373	198	192	255	680	2,390	2,250	296	73	53	37
17.....	94	377	178	246	265	760	2,320	2,110	280	76	50	36
18.....	96	410	156	260	255	840	1,900	1,760	293	72	48	22
19.....	110	374	152	292	265	945	1,320	2,040	276	71	32	10
20.....	88	430	151	260	285	1,020	1,690	2,390	262	54	46	24
21.....	75	532	170	191	275	995	1,620	1,970	234	62	55	10
22.....	84	372	156	236	265	1,270	1,620	1,900	242	65	54	25
23.....	54	300	146	275	265	2,920	2,460	1,900	234	71	50	37
24.....	66	278	180	275	255	6,460	2,180	1,970	196	82	50	45
25.....	89	264	160	275	285	23,600	1,690	1,970	213	78	52	50
26.....	130	350	166	235	265	13,100	2,040	1,830	193	77	41	59
27.....	415	406	182	210	275	7,100	2,460	1,620	172	60	47	66
28.....	246	345	264	215	285	5,980	2,600	1,370	162	64	50	74
29.....	100	439	570	368	275	4,950	2,600	1,170	153	36	51	73
30.....	98	402	324	500	-----	3,720	3,090	970	143	54	46	56
31.....	242	-----	298	405	-----	3,450	-----	840	-----	52	48	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	415	54	104	6,400
November.....	1,590	92	413	24,600
December.....	570	134	221	13,600
January.....	500	191	296	18,200
February.....	880	255	356	20,500
March.....	23,600	285	2,800	172,000
April.....	3,090	1,320	2,330	139,000
May.....	3,450	840	2,260	139,000
June.....	900	148	417	24,800
July.....	153	36	78.8	4,850
August.....	55	23	47.2	2,900
September.....	74	10	40.9	2,430
The year.....	23,600	10	782	568,000

Daily and monthly discharge, in second-feet, of South Fork of American River and Western States Gas & Electric Co.'s flume near Camino, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	190	311	426	395	461	393	2,790	3,380	1,010	218	146	135
2	211	215	415	432	498	393	2,700	2,710	988	264	146	148
3	186	332	453	502	734	488	2,560	2,430	969	236	145	125
4	185	350	387	490	987	598	2,490	2,500	929	200	149	142
5	182	249	341	407	729	577	2,430	2,790	880	219	150	135
6	191	199	317	410	652	549	2,570	2,790	868	217	149	124
7	181	332	272	379	562	562	2,710	3,110	789	224	146	137
8	190	796	242	366	550	753	2,570	3,110	701	185	146	155
9	167	750	346	393	488	827	2,710	2,570	639	206	147	126
10	172	1,700	284	460	450	947	2,710	3,560	623	193	149	139
11	196	680	263	445	438	907	2,430	3,200	594	185	143	145
12	199	476	271	406	426	907	3,030	3,110	515	184	116	142
13	173	862	319	429	413	907	2,700	2,870	465	174	141	153
14	161	622	353	462	413	887	2,640	2,710	378	175	135	144
15	173	490	324	330	363	807	2,430	2,870	440	175	132	150
16	182	480	304	298	362	788	2,500	2,860	406	185	147	134
17	196	484	284	352	372	868	2,430	2,220	390	187	148	138
18	205	518	262	365	362	948	2,010	1,870	404	183	145	116
19	219	481	258	398	372	1,050	1,430	2,150	388	181	122	87
20	197	537	257	366	392	1,130	1,800	2,500	373	160	139	116
21	181	640	276	293	382	1,100	1,730	2,080	347	169	149	92
22	182	479	262	340	373	1,380	1,730	2,010	352	171	150	120
23	162	407	252	379	373	3,030	2,570	2,010	348	178	145	133
24	165	386	286	379	362	6,570	2,290	2,080	308	192	143	139
25	194	371	266	380	393	23,700	1,800	2,080	328	188	145	147
26	238	458	272	341	372	13,200	2,150	1,940	305	184	138	163
27	525	514	289	316	382	7,200	2,570	1,730	284	165	143	173
28	355	452	371	321	392	6,080	2,710	1,480	274	168	145	183
29	207	546	677	475	383	5,050	2,710	1,280	263	136	145	182
30	205	510	450	607	512	3,520	3,200	1,080	259	157	138	167
31	350	-----	404	512	-----	3,560	-----	950	-----	153	141	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October						525	161	210	12,900			
November						1,700	199	521	31,000			
December						6,777	242	327	20,100			
January						607	293	401	24,700			
February						987	362	463	26,600			
March						23,700	393	2,900	178,000			
April						3,200	1,430	2,440	145,000			
May						3,560	950	2,370	146,000			
June						1,010	259	528	31,400			
July						264	136	187	11,500			
August						150	116	143	8,790			
September						183	92	140	8,330			
The year						23,700	92	888	644,000			

ECHO LAKE FLUME NEAR VADE, CALIF.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 1, T. 11 N., R. 17 E., 407 feet below outlet gate of Echo Lake and 5 miles northeast of Phillips, Vade post office. Altitude, about 7,500 feet.

RECORDS AVAILABLE.—August, 1923, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 18 second-feet August 1-13.

REMARKS.—Records good. No record, except July 12 to August 22; probably no flow as reservoir was empty. Flow completely regulated by outlet gate in Echo Lake Dam. No water stored in Echo Lake on September 30, 1927, and none on September 30, 1928. This flume diverts water from Echo Lake in Truckee River Basin into South Fork of American River Basin.

Daily and monthly discharge, in second-feet, 1927-28

Day	July	Aug.	Day	July	Aug.	Day	July	Aug.
1	0	18	11	0	18	21	15	5
2	0	18	12	15	18	22	15	8
3	0	18	13	15	18	23	14	0
4	0	18	14	15	15	24	13	0
5	0	18	15	15	12	25	11	0
6	0	18	16	15	11	26	13	0
7	0	18	17	15	10	27	15	0
8	0	18	18	15	8	28	13	0
9	0	18	19	15	6	29	15	0
10	0	18	20	15	5	30	16	0
						31	16	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
July	16	0	9.39	577
August	18	0	10.1	621
The year				1,200

NOTE.—No flow during year ending Sept. 30, 1928, except as given in the above table.

MEDLEY LAKES OUTLET NEAR VADE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 29, T. 12 N., R. 17 E., 1 mile below main dam at Medley Lakes, and 5 miles northwest of Phillips, Vade post office. Altitude, about 8,100 feet.

RECORDS AVAILABLE.—September, 1922, to September, 1928, summer record only.

EXTREMES.—Maximum discharge during year, 131 second-feet July 21 (gage height, 2.69 feet); minimum, 0.2 second-foot September 30.

1922-1928: Maximum discharge, 146 second-feet June 21, 1925 (gage height, 2.86 feet); no flow later part of September to October 27, 1924, and September 1 to October 10, 1926.

REMARKS.—Records fair. Discharge estimated because of snow April 27 to May 29 and interpolated September 16-30. No diversions. Flow partly regulated by gates in dam at Medley Lakes. No water in Medley Lakes on September 30, 1927, and none on September 30, 1928.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1.....	5.5	17	-----	4	26	17	106	1.4
2.....	4.8	17	-----	4	43	17	106	1.2
3.....	4.0	17	-----	5	59	18	106	1.1
4.....	3.2	16	-----	6	58	18	108	.9
5.....	2.8	15	-----	6	58	18	105	.8
6.....	2.5	17	-----	7	70	18	103	.7
7.....	2.2	34	-----	8	74	17	105	.6
8.....	2.0	58	-----	8	60	17	107	.6
9.....	1.8	59	-----	9	48	17	109	.5
10.....	1.6	58	-----	10	41	18	104	.5
11.....	1.4	52	-----	10	34	18	100	.5
12.....	1.4	48	-----	10	27	18	94	.4
13.....	1.2	44	-----	9	26	16	89	.4
14.....	1.1	32	-----	8	27	15	78	.4
15.....	.8	23	-----	10	28	18	68	.4
16.....	.6	18	-----	24	28	18	48	.4
17.....	.5	16	-----	44	30	16	27	.4
18.....	.4	15	-----	51	32	14	16	.4
19.....	.4	14	-----	62	29	11	12	.4
20.....	.4	14	-----	59	28	9.5	9.5	.4
21.....	.4	15	-----	49	28	54	7	.3
22.....	.4	14	-----	50	28	128	5.5	.3
23.....	.4	12	-----	84	32	127	4.8	.3
24.....	.4	-----	-----	109	38	121	3.8	.3
25.....	.4	-----	-----	100	36	113	3.4	.3
26.....	.8	-----	-----	99	30	112	2.8	.3
27.....	6.5	-----	3	95	24	111	2.4	.3
28.....	12	-----	3	87	22	110	2.2	.3
29.....	14	-----	4	84	20	109	1.9	.3
30.....	15	-----	7	49	18	107	1.7	.2
31.....	18	-----	-----	14	-----	106	1.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	18	0.4	3.45	212
November 1-23.....	59	12	27.2	1,240
April 27-30.....	7	3	4.2	33.3
May.....	109	4	37.9	2,330
June.....	74	18	36.7	2,180
July.....	128	9.5	49.2	3,030
August.....	109	1.5	52.8	3,250
September.....	1.4	.2	.51	30.3

SILVER LAKE OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 32, T. 10 N., E. 17 E., 1,000 feet below Silver Lake Dam and 4 miles southwest of Kirkwood. Altitude, about 7,200 feet.

RECORDS AVAILABLE.—September, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 261 second-feet May 12 (gauge height, 3.57 feet); minimum, 0.1 second-foot several days July to September. 1922-1928: Maximum discharge, 313 second-feet May 16, 1927 (gauge height, 3.94 feet); minimum, 0.1 second-foot part of each year.

REMARKS.—Records excellent. Discharge estimated April 25, 28, and August 18. No diversions. No water stored in Silver Lake Reservoir on September 30, 1927, and none on September 30, 1928; all storage released during summer.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	10	6.5	20	11	9	9.5	100	106	61	4.5	0.1	35
2.....	9	6.5	20	11	9	9.5	99	124	55	4.5	.1	32
3.....	8.5	8.5	20	10	9.5	9	98	136	59	4.2	.1	30
4.....	8	8.5	19	10	10	9	97	147	56	5.5	.2	26
5.....	8	8.5	18	10	10	9	91	168	62	12	.2	22
6.....	8	9	18	10	10	9	89	192	76	32	.2	19
7.....	3.4	10	17	10	9.5	9	93	212	75	31	.1	16
8.....	3.3	12	16	10	9	9.5	92	224	70	34	1.0	14
9.....	4.8	16	16	10	.4	9.5	91	195	45	38	1.4	12
10.....	6.5	33	16	10	.2	9.5	91	218	24	38	3.9	11
11.....	5.5	34	16	10	.2	9.5	89	255	19	37	10	10
12.....	5.5	33	14	10	.5	10	90	253	17	36	14	9.5
13.....	5.5	33	14	11	.9	10	89	218	18	42	16	8.5
14.....	4.8	31	14	11	1.8	10	80	192	14	54	44	8
15.....	3.6	30	14	11	3.9	10	74	155	12	60	75	8
16.....	3.3	29	14	11	6.5	10	75	152	7	63	72	7.5
17.....	2.2	28	4.8	11	11	5.5	75	150	8	68	76	6.5
18.....	1.6	28	.8	11	14	.3	74	162	12	70	69	6.5
19.....	1.4	28	6.5	11	14	.3	74	184	12	75	66	5.5
20.....	1.0	28	13	11	11	.3	73	172	11	87	63	2.4
21.....	1.0	28	12	11	10	.3	74	142	10	75	62	.1
22.....	.9	26	12	11	10	.2	74	138	8	.2	60	.1
23.....	.8	25	11	11	10	.2	74	145	6.5	.2	57	.1
24.....	.7	23	11	11	10	.8	75	162	5	.2	55	.1
25.....	.6	23	10	11	10	3.3	76	171	4.8	.2	52	.1
26.....	1.4	23	10	11	10	50	77	172	4.5	.2	49	.1
27.....	5.5	22	9.5	11	10	103	80	165	4.5	.1	47	1.9
28.....	6	22	10	10	10	103	88	94	4.2	.1	46	2.6
29.....	6.5	22	12	10	9.5	103	95	72	4.2	.1	43	2.0
30.....	6.5	21	11	9.5	-----	102	98	75	4.2	.1	40	1.6
31.....	7.5	-----	10	9.5	-----	101	-----	75	-----	.1	38	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	10	0.6	4.56	280
November.....	34	6.5	21.8	1,300
December.....	20	.8	13.2	812
January.....	11	9.5	10.5	646
February.....	14	.2	7.93	456
March.....	103	.2	23.4	1,440
April.....	100	73	84.8	5,050
May.....	255	72	162	9,960
June.....	76	4.2	25.6	1,520
July.....	87	.1	28.1	1,730
August.....	75	.1	34.0	2,090
September.....	35	.1	9.94	591
The year.....	255	.1	35.7	25,900

SILVER FORK OF SOUTH FORK OF AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.—Water-stage recorder in sec. 34, T. 11 N., R. 15 E., half a mile below China Flat Reservoir site, 2 miles above mouth, and 2 miles southeast of Kyburz. Altitude, about 5,000 feet.

RECORDS AVAILABLE.—August, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,620 second-feet March 25 (gage height, 6.54 feet); minimum, 13 second-feet August 9.

1924-1928: Maximum discharge, that of March 25, 1928; minimum, 7.5 second-feet October 4, 1926.

REMARKS.—Records good. Discharge estimated December 19 to January 28. No diversions. Flow regulated by storage at Twin and Silver Lakes.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	136	34	85	74	63	66	496	714	254	78	17	137
2	137	33	84	86	67	68	420	581	289	74	16	136
3	137	64	87	88	76	84	406	537	300	80	16	138
4	137	46	76	76	78	89	376	568	283	84	15	138
5	137	44	68	70	73	88	376	637	264	87	15	136
6	132	50	64	66	72	87	420	691	262	91	15	142
7	139	51	55	64	69	88	463	775	264	76	15	140
8	142	54	99	64	71	92	463	731	251	73	14	142
9	142	148	85	72	67	110	485	644	234	74	13	140
10	144	257	56	72	54	129	490	890	207	72	14	146
11	142	98	74	60	55	136	501	840	166	71	19	146
12	140	80	84	58	55	136	568	792	146	68	26	144
13	144	98	81	56	55	137	537	801	134	66	27	142
14	144	88	77	53	56	123	501	330	106	76	38	140
15	144	89	80	50	50	131	496	784	100	82	87	142
16	144	101	78	82	64	132	501	602	113	87	85	140
17	142	102	73	104	60	155	469	519	116	88	87	138
18	140	107	66	102	62	162	397	588	126	94	108	90
19	140	107	65	100	64	184	376	630	124	95	134	110
20	142	106	66	96	66	194	354	595	118	104	134	106
21	144	102	66	88	68	198	350	562	113	115	134	103
22	144	92	66	84	66	229	402	549	118	37	134	120
23	147	81	70	80	67	278	485	574	107	22	132	122
24	147	81	74	88	62	775	463	555	102	21	129	136
25	149	78	72	90	64	3, 140	389	574	96	20	131	150
26	156	98	72	90	63	2, 360	501	568	87	20	131	150
27	115	95	72	85	66	1, 650	574	549	91	19	130	148
28	45	87	72	80	67	900	551	485	85	19	133	146
29	29	116	72	89	66	683	652	434	73	18	132	146
30	34	100	72	78	-----	595	792	339	69	17	132	146
31	56	-----	76	63	-----	555	-----	278	-----	17	131	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	156	29	128	7, 870
November	257	33	89.6	5, 330
December	99	55	73.8	4, 540
January	104	50	77.7	4, 780
February	78	50	64.3	3, 700
March	3, 140	66	444	27, 300
April	792	350	476	28, 300
May	890	278	621	38, 200
June	300	69	160	9, 520
July	115	17	62.7	3, 860
August	134	13	75.6	4, 650
September	150	90	135	8, 030
The year	3, 140	13	201	146, 000

TWIN LAKES OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 18, T. 10 N., R. 18 E., 500 feet below main dam and outlet gate of Twin Lakes and 2 miles east of Kirkwood. Altitude, 7,900 feet.

RECORDS AVAILABLE.—September, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 176 second-feet May 25-28 (gauge height, 1.95 feet); minimum, about 0.4 second-foot several long periods.

1922-1928: Maximum discharge, that of May 25-28, 1928; minimum, about 0.2 second-foot during part of each winter from 1922 to 1925.

REMARKS.—Records excellent. Discharge estimated February 1 to March 19. No diversions. Flow regulated by gate in dam at Twin Lakes. There was 18,900 acre-feet of stored water in Twin Lakes on September 30, 1927, and 11,500 acre-feet on September 30, 1928.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	22	0.4	0.4			4.9	1.1	82	19	3.9	89
2	84	22	.4	.4			4.9	1.0	131	20	3.6	91
3	86	22	.4	.4			4.9	1.0	130	31	3.3	95
4	84	22	.4	.4			4.9	1.1	120	35	3.3	100
5	83	1.3	.4	.4			4.9	1.1	105	43	3.3	104
6	86	.4	.4	.4			5	1.2	105	4.6	3.1	111
7	87	.4	40	6			5	1.1	105	3.3	3.1	112
8	88	.4	75	10			5	1.0	105	3.3	2.9	116
9	88	.4	19	7.5			6	1.2	105	3.3	2.8	118
10	87	.4	17	3.2			7	1.3	65	3.9	2.6	124
11	87	.4	26	.5			8	1.4	42	4.6	2.4	124
12	89	.4	27	.4		0.4	9	1.5	36	4.9	2.4	120
13	91	.4	27	.5			8.5	1.5	13	4.9	2.4	119
14	91	.4	28	.5			9.5		7.5	4.9	2.2	119
15	91	.4	28	28	0.4		10	165	8.5	5	2.0	120
16	89	.4	27	58			8.5	136	8.5	5.5	2.0	120
17	89	.4	27	59			7	131	8.5	5.5	1.5	122
18	88	.4	27	58			6.5	137	8.5	6	33	78
19	89	.4	28	58			6.5	164	8	5.5	58	93
20	91	.4	28	39			6.5	171	7.5	5	58	92
21	91	.4	29	31			8.5	172	8	5	57	92
22	92	.4	29	30			13	172	7.5	5	60	109
23	93	.4	29	46			14	174	7.5	5	63	112
24	92	.4	40	58			8.5	174	8	5	65	128
25	89	.4	56	58		20	8.5	176	8	5	68	142
26	92	.4	56	28		13	15	176	8	5	68	142
27	67	.4	26	4.1		5.5	3.1	176	7.5	4.9	70	136
28	.4	.4	10	.4		4.9	1.2	176	7.5	4.9	74	134
29	.4	.4	6	.4		4.9	1.5	160	7.5	4.9	76	134
30	.4	.4	.4	.4		4.6	1.5	91	14	4.9	79	134
31	20		.4	.4		4.6		65		4.6	80	
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October	93		0.4		76.9		4,730					
November	22		.4		3.31		197					
December	75		.4		22.8		1,400					
January	59		.4		19.0		1,170					
February	4		.4		.40		23.0					
March	20		.4		2.16		133					
April	15		1.2		6.91		411					
May	176		1.0		88.8		5,460					
June	131		7.5		42.8		2,550					
July	43		3.3		8.79		540					
August	80		2.0		31.3		1,920					
September	142		78		114		6,780					
The year	176		.4		34.9		25,300					

Daily and monthly discharge, in second-feet, of Twin Lakes outlet and Twin Lakes spillway near Kirkwood, Calif., 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	80	22	0.4	0.4			4.9	1.1	86	37	3.9	89
2.	84	22	.4	.4			4.9	1.0	140	34	3.6	91
3.	86	22	.4	.4			4.9	1.0	133	42	3.3	95
4.	84	22	.4	.4			4.9	1.1	120	44	3.3	100
5.	83	1.3	.4	.4			4.9	1.1	105	50	3.3	104
6.	86	.4	.4	.4			5	1.2	105	4.6	3.1	111
7.	87	.4	40	6			5	1.1	107	3.3	3.1	112
8.	88	.4	75	10			5	1.0	106	3.3	2.9	116
9.	88	.4	19	7.5			6	1.2	105	3.3	2.8	118
10.	87	.4	17	3.2			7	1.3	65	3.9	2.6	124
11.	87	.4	26	.5			8	1.4	42	4.6	2.4	124
12.	89	.4	27	.4		0.4	9	1.5	36	4.9	2.4	120
13.	91	.4	27	.5			8.5	92	13	4.9	2.4	119
14.	91	.4	23	.5			9.5	292	7.5	4.9	2.2	119
15.	91	.4	28	28	0.4		10	234	14	5	2.0	120
16.	89	.4	27	58			8.5	155	36	5.5	2.0	120
17.	89	.4	27	59			7	134	48	5.5	15	122
18.	88	.4	27	58			6.5	140	48	6	33	78
19.	89	.4	28	58			6.5	166	47	5.5	58	93
20.	91	.4	28	39			6.5	172	46	5	58	92
21.	91	.4	29	31			8.5	172	49	5	57	92
22.	92	.4	29	30			13	172	44	5	60	109
23.	93	.4	29	46			14	180	46	5	63	112
24.	92	.4	40	58			8.5	180	45	5	65	128
25.	89	.4	56	58		20	8.5	176	56	5	68	142
26.	92	.4	56	28		13	15	176	39	5	68	142
27.	67	.4	26	4.1		5.5	3.1	186	38	4.9	70	136
28.	.4	.4	10	.4		4.9	1.2	225	38	4.9	74	134
29.	.4	.4	6	.4		4.9	1.5	218	30	4.9	76	134
30.	.4	.4	.4	.4		4.6	1.5	110	34	4.9	76	134
31.	20		.4	.4		4.6		65		4.6	80	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	93	0.4	76.9	4,730
November	22	.4	3.31	197
December	75	.4	22.8	1,400
January	59	.4	19.0	1,170
February	.4	.4	.40	23.0
March	20	.4	2.16	133
April	15	1.2	6.91	411
May	292	1.0	105	6,460
June	140	7.5	61.0	3,630
July	50	3.3	10.7	658
August	80	2.0	31.3	1,920
September	142	78	114	6,780
The year	292	.4	37.9	27,500

TWIN LAKES SPILLWAY NEAR KIRKWOOD, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 22, T. 10 N., R. 17 E., 300 feet below Twin Lakes Reservoir auxiliary dam, 1 mile southwest of Twin Lakes Reservoir main dam, and half a mile southeast of Kirkwood.

RECORDS AVAILABLE.—June, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 172 second-feet May 14 (gage height, 2.50 feet); no flow most of year.

1925-1928: Maximum discharge, that of May 14, 1928; no flow greater part of each year.

REMARKS.—Records good.

Daily and monthly discharge, in second-feet, 1927-28

Day	May	June	July	Day	May	June	July	Day	May	June	July
1-----	0	4.4	18	11-----	0	0	0	21-----	0.1	41	0
2-----	0	8.5	14	12-----	0	0	0	22-----	.1	37	0
3-----	0	2.8	11	13-----	90	0	0	23-----	6.5	39	0
4-----	0	0	8.5	14-----	172	0	0	24-----	5.5	37	0
5-----	0	0	6.5	15-----	69	6	0	25-----	0	48	0
6-----	0	0	0	16-----	19	28	0	26-----	0	31	0
7-----	0	2.2	0	17-----	2.8	39	0	27-----	9.5	31	0
8-----	0	1.1	0	18-----	2.8	39	0	28-----	49	31	0
9-----	0	0	0	19-----	2.4	39	0	29-----	58	22	0
10-----	0	0	0	20-----	.5	39	0	30-----	19	20	0
								31-----	0	-----	0
Month					Maximum	Minimum	Mean	Run-off in acre-feet			
May-----					172	0	16.3	1,000			
June-----					48	0	18.2	1,080			
July-----					18	0	1.87	115			
The year-----					172	0	3.03	2,200			

NOTE.—No flow during year ending Sept. 30, 1928, except May 13 to July 5.

EL DORADO CANAL NEAR KYBURZ, CALIF.

LOCATION.—Water-stage recorder in sec. 29, T. 11 N., R. 15 E., 400 feet below intake, and 2 miles west of Kyburz.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—1922-1928: Maximum mean daily discharge, 157 second-feet, June 16 and July 2, 1926; canal dry at times.

REMARKS.—Records excellent. Discharge estimated January 15-23 because of ice. Canal diverts from left bank of South Fork of American River 2 miles below Kyburz. Water is divided at the forebay, 20 miles below intake. Not more than 40 second-feet is sold to the El Dorado irrigation district from May 24 to September 24 and not more than 7 second-feet during remainder of year. This water is used for irrigation and public use at Placer-ville. The rest of the water is used for power by the Western States Gas & Electric Co. and returned to the river in sec. 22, T. 11 N., R. 12 E.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	149	86	95	101	101	105	109	146	147	147	140	146
2.....	149	88	96	101	102	109	109	146	147	143	142	145
3.....	149	139	96	101	102	110	109	147	147	143	140	146
4.....	149	108	96	101	101	110	109	147	147	148	142	145
5.....	149	98	96	102	105	118	109	146	147	148	141	144
6.....	145	105	96	101	111	124	116	146	147	151	140	146
7.....	149	131	88	101	111	124	122	146	147	148	140	146
8.....	149	144	94	102	111	124	124	146	147	142	138	147
9.....	149	144	95	102	109	126	125	147	148	144	143	146
10.....	149	113	93	108	98	123	125	146	148	142	140	148
11.....	149	96	94	118	99	127	125	146	148	142	139	149
12.....	148	96	96	118	100	127	125	147	148	139	141	149
13.....	149	96	96	119	100	127	128	147	148	132	138	148
14.....	149	96	96	117	102	127	130	147	148	136	132	146
15.....	149	96	96	101	81	43	130	147	148	145	148	149
16.....	149	96	96	122	107	2.2	130	147	148	152	148	148
17.....	148	96	96	117	98	2.2	130	147	148	148	135	145
18.....	148	96	94	85	99	2.2	130	147	149	147	133	95
19.....	148	95	96	90	101	2.2	122	147	150	145	150	114
20.....	149	96	96	102	104	2.2	145	147	150	148	146	112
21.....	148	96	96	101	109	60	148	147	150	149	146	109
22.....	148	96	96	117	102	119	148	147	150	143	145	134
23.....	149	96	96	122	104	110	147	147	150	146	147	134
24.....	149	96	96	100	100	104	146	147	150	146	143	142
25.....	150	96	99	101	105	86	147	147	150	146	144	148
26.....	149	35	101	100	99	44	147	147	152	145	145	149
27.....	146	2.6	101	101	104	16	146	147	153	144	143	149
28.....	98	62	101	101	106	37	146	147	153	141	146	149
29.....	76	96	102	101	105	72	146	147	148	143	143	149
30.....	93	95	102	101	-----	72	146	147	143	140	144	149
31.....	120	-----	101	101	-----	95	-----	147	-----	141	141	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	150	76	142	8,730
November.....	144	2.6	96.2	5,720
December.....	102	88	96.5	5,930
January.....	122	85	105	6,460
February.....	111	81	103	5,920
March.....	127	2.2	82.3	5,060
April.....	148	109	131	7,800
May.....	147	146	147	9,040
June.....	153	143	149	8,870
July.....	152	132	144	8,850
August.....	150	132	142	8,730
September.....	149	95	141	8,390
The year.....	153	2.2	123	89,500

ALDER CREEK NEAR WHITEHALL, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 36, T. 11 N., R. 14 E., three-fourths mile above mouth and 2 miles southeast of Whitehall.

DRAINAGE AREA.—22.8 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, about 2,060 second-feet March 25 (gage height, 7.1 feet); minimum, 0.2 second-foot September 16–30.

1922–1928: Maximum discharge, that of March 25, 1928; minimum, 0.1 second-foot August 28 to September 2, 1924, and September 10–14, 1926.

REMARKS.—Records fair. Discharge estimated December 22 to January 31 because of ice and February 1 to April 5 because of missing record. No diversions.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Apr.	May	June	July	Aug.	Sept.
1	0.5	4.5	13	5	165	71	9	2.8	0.8	0.8
2	.5	3.0	12	5.5	140	71	9	3.3	.8	.3
3	.5	2.6	11	6	120	64	9	3.1	.8	.3
4	.5	2.2	10	6	115	57	9	3.1	.8	.3
5	.5	2.2	9	5.5	120	57	6.5	3.1	.8	.3
6	.5	2.4	8.5	5.5	130	57	6.5	3.1	.8	.3
7	.5	2.6	7	5	140	51	6.5	2.8	.8	.3
8	.6	2.8	6	5	140	51	6.5	2.6	.7	.3
9	.6	7	6.5	5.5	140	51	6.5	2.6	.7	.3
10	.5	27	6	5.5	140	51	6.5	2.6	.6	.3
11	.5	10	5.5	5	130	45	6.5	2.4	.6	.3
12	.5	9	5	5	150	45	6.5	2.4	.6	.3
13	.5	28	5.5	5	140	45	6.5	2.2	.6	.3
14	.5	21	5.5	5	120	40	6.5	1.9	.5	.3
15	.5	17	5.5	5	120	35	6.5	1.7	.5	.3
16	.5	17	5.5	5	110	35	6.5	1.7	.5	.2
17	.5	17	5.5	4.5	120	30	4.0	1.7	.4	.2
18	.5	14	5.5	4.5	110	30	4.0	1.6	.4	.2
19	.5	13	5	4.5	110	25	4.0	1.6	.4	.2
20	.5	13	4.5	4.5	110	25	4.0	1.6	.4	.2
21	.5	19	4.5	4.5	100	25	2.8	1.5	.4	.2
22	.5	15	4.5	4.5	90	25	2.8	1.5	.4	.2
23	.5	13	4.5	4.0	80	21	2.8	1.5	.4	.2
24	.5	11	4.0	4.0	80	21	2.8	1.4	.4	.2
25	.5	11	4.0	4.0	80	17	2.8	1.4	.4	.2
26	1.9	14	4.0	4.0	71	17	2.8	1.4	.4	.2
27	11	16	3.5	4.0	80	17	2.8	1.3	.4	.2
28	4.5	16	3.5	4.5	80	13	2.8	1.1	.4	.2
29	2.6	17	3.5	25	80	13	2.8	1.0	.4	.2
30	2.4	16	4.5	22	80	13	2.8	1.0	.4	.2
31	5.5		5	19		9		.9	.4	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	11	0.5	1.31	80.6
November	28	2.2	12.1	720
December	13	3.5	6.05	372
January	25	4.0	6.52	401
February			12	690
March			200	12,300
April	165	71	113	6,720
May	71	9	36.4	2,240
June	9	2.8	5.27	314
July	3.3	.9	2.00	123
August	.8	.4	.55	33.8
September	.3	.2	.25	14.9
The year		.2	33.1	24,000

PLUM CREEK NEAR RIVERTON, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 33, T. 11 N., R. 14 E., $1\frac{1}{2}$ miles above mouth and 4 miles southeast of Riverton. Altitude, 4,100 feet.

DRAINAGE AREA.—7.0 square miles.

RECORDS AVAILABLE.—November, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 635 second-feet March 25 (gage height, 4.10 feet); minimum, 0.2 second-foot July 18 to September 30.

1922–1928: Maximum discharge, that of March 25, 1928; minimum, 0.1 second-foot July 3 to August 14, 1924, September 11, 13, and 14, 1925, July 28 to August 5, August 24 and 25, 1926.

REMARKS.—Records excellent. Discharge estimated January 19–23 and interpolated August 26–30. No diversions.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	2.3	3.2	5	11	5.5	54	5.5	1.1	0.6	0.2	0.2
2	.3	1.4	2.9	8.5	12	6	51	5	1.1	.6	.2	.2
3	.3	.9	2.4	10	28	7	41	4.8	1.1	.6	.2	.2
4	.3	.8	2.2	9.5	35	8	37	4.2	1.0	.6	.2	.2
5	.3	.8	1.9	8	24	8	42	3.9	.9	.6	.2	.2
6	.3	.9	1.8	7	18	8	49	3.6	.9	.6	.2	.2
7	.3	1.4	1.7	6.5	16	8.5	49	3.3	.9	.5	.2	.2
8	.3	1.4	1.5	6	13	13	43	3.0	.8	.5	.2	.2
9	.3	4.5	1.6	7	12	14	38	3.0	.8	.5	.2	.2
10	.3	8.5	1.6	7	10	13	34	3.0	.9	.3	.2	.2
11	.3	3.7	1.5	6	9.5	12	29	3.0	1.0	.3	.2	.2
12	.3	3.9	1.5	6	8.5	12	28	2.8	.9	.3	.2	.2
13	.3	26	1.5	6	8	12	25	2.7	.9	.3	.2	.2
14	.3	11	1.9	6	7	12	23	2.5	.8	.3	.2	.2
15	.3	7	1.8	5.5	7	11	20	2.3	.8	.3	.2	.2
16	.3	5.5	1.8	5	6	10	20	2.3	.7	.3	.2	.2
17	.3	4.3	1.8	4.3	6	9.5	19	2.3	.6	.3	.2	.2
18	.3	3.5	1.7	3.5	5	9	17	2.2	.5	.2	.2	.2
19	.4	2.9	1.7	3.4	4.9	8	15	2.0	.5	.2	.2	.2
20	.4	4.9	1.5	3.2	4.7	8	14	2.0	.6	.2	.2	.2
21	.3	12	1.5	3.0	4.5	7	12	2.0	.6	.2	.2	.2
22	.3	8	1.5	2.9	4.5	10	12	1.8	.6	.2	.2	.2
23	.3	6	1.3	2.8	4.3	56	11	1.6	.6	.2	.2	.2
24	.4	4.7	1.2	2.6	4.5	127	10	1.6	.6	.2	.2	.2
25	.4	4.1	1.1	2.6	6	420	10	1.6	.6	.2	.2	.2
26	1.8	4.9	1.2	2.4	5.5	258	9.5	1.6	.6	.2	.2	.2
27	5.5	4.7	1.1	2.8	5.5	211	8	1.5	.6	.2	.2	.2
28	1.5	4.5	1.8	3.2	5.5	112	6.5	1.3	.6	.2	.2	.2
29	.9	4.5	21	16	5.5	79	6	1.2	.6	.2	.2	.2
30	1.2	3.9	6.5	15	---	63	5.5	1.2	.6	.2	.2	.2
31	4.3	---	4.5	12	---	51	---	1.2	---	.2	.2	---
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	5.5					0.3			0.75		46.1	
November	26					.8			5.10		303	
December	21					1.1			2.59		159	
January	16					2.4			6.09		374	
February	35					4.3			10.0		575	
March	420					5.5			51.2		3,150	
April	54					6.5			24.6		1,460	
May	5.5					1.2			2.58		159	
June	1.1					.5			.76		45.2	
July	.6					.2			.33		20.3	
August	.2					.2			.20		12.3	
September	.2					.2			.20		11.9	
The year	420					.2			8.71		6,320	

SILVER CREEK AT UNION VALLEY, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 20, T. 12 N., R. 14 E., 1 mile below junction of North and Middle Forks of Silver Creek, near lower end of Union Valley. Altitude, about 4,600 feet.

RECORDS AVAILABLE.—October, 1924, to January, 1928 (washed away by flood of March, 1928).

EXTREMES.—Maximum discharge during year, about 9,600 second-feet March 25 (gage height, 14.7 feet).

1924-1928: Maximum discharge, that of March 25, 1928; minimum, 2.5 second-feet August 24-26 and September 9-16, 1926.

REMARKS.—Records good. Discharge interpolated October 1-21 and estimated December 17-26. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Day	Oct.	Nov.	Dec.	Jan.
1.....	5.5	48	103	72	16.....	5.5	122	61	72
2.....	5.5	57	125	96	17.....	5.5	126	60	72
3.....	5.5	103	128	136	18.....	5.5	139	55	72
4.....	5.5	53	96	122	19.....	5.5	137	55	74
5.....	5.5	40	82	103	20.....	5.5	126	55	74
6.....	5.5	48	76	93	21.....	5.5	118	53	74
7.....	5.5	142	63	89	22.....	5.5	98	48	76
8.....	5.5	320	66	89	23.....	5.5	85	49	76
9.....	5.5	250	63	134	24.....	5.5	87	51	76
10.....	5.5	527	59	131	25.....	6.5	87	50	78
11.....	5.5	130	58	109	26.....	27	133	48	78
12.....	5.5	94	55	108	27.....	87	128	49	-----
13.....	5.5	145	56	125	28.....	50	105	50	-----
14.....	5.5	109	57	110	29.....	33	223	45	-----
15.....	5.5	105	60	84	30.....	47	137	62	-----
					31.....	83	-----	69	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	87	5.5	15.0	922
November.....	527	40	134	7,970
December.....	128	45	64.7	3,980
January.....	-----	-----	99.5	6,120
The period.....	-----	-----	-----	18,992

SILVER CREEK NEAR PLACERVILLE, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 13, T. 11 N., R. 12 E., one-fourth mile above mouth and 12 miles northeast of Placerville.

RECORDS AVAILABLE.—December, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, about 16,900 second-feet March 25 (gage height, 18.0 feet); minimum, 21 second-feet September 30.

1921-1928: Maximum discharge, that of March 25, 1928; minimum, 10 second-feet September 9, 1924.

REMARKS.—Records good. Discharge estimated February 27 to May 15. No diversions.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.
1.....	34	146	236	170	254	-----	1,450	310	98	44	36
2.....	34	99	236	202	292	-----	-----	290	92	43	37
3.....	34	202	254	245	397	-----	-----	290	90	42	37
4.....	34	150	218	254	423	-----	-----	272	88	42	38
5.....	34	116	181	218	360	-----	-----	264	87	42	38
6.....	34	108	166	202	314	-----	-----	256	85	42	39
7.....	35	206	134	188	282	1,080	-----	256	81	40	39
8.....	35	522	132	188	272	-----	-----	240	78	40	39
9.....	35	450	150	236	263	-----	1,200	210	76	38	39
10.....	35	920	127	263	236	-----	-----	186	75	36	40
11.....	34	360	127	236	236	-----	-----	207	75	36	40
12.....	34	236	126	227	227	-----	-----	221	74	35	40
13.....	33	423	138	254	227	-----	-----	189	71	34	44
14.....	33	292	152	254	236	-----	-----	174	69	34	42
15.....	33	254	141	199	198	-----	-----	172	69	33	40
16.....	33	254	139	152	210	-----	748	166	69	33	40
17.....	33	254	130	164	201	1,000	716	165	68	33	38
18.....	33	272	121	160	201	920	656	164	65	32	37
19.....	33	272	125	168	210	-----	671	152	63	32	36
20.....	33	272	124	164	218	-----	656	146	60	32	34
21.....	32	325	119	156	236	-----	581	146	59	32	32
22.....	32	236	109	164	210	-----	566	142	57	32	31
23.....	32	196	106	164	218	-----	506	136	56	32	29
24.....	32	188	116	163	202	-----	566	132	54	32	28
25.....	34	189	118	157	227	-----	551	129	53	32	26
26.....	59	236	110	148	227	-----	506	124	52	34	26
27.....	236	272	109	151	225	-----	506	118	51	35	26
28.....	130	236	142	158	225	-----	437	110	49	35	26
29.....	95	336	165	254	225	1,250	412	106	46	35	24
30.....	102	314	147	336	-----	1,400	376	101	45	35	23
31.....	199	-----	152	272	-----	-----	330	-----	44	36	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	236	32	53.5	3,290
November.....	920	99	278	16,500
December.....	254	106	147	9,040
January.....	336	148	202	12,400
February.....	423	198	250	14,400
March.....	-----	-----	1,400	86,100
April.....	-----	-----	1,100	65,500
May.....	-----	330	872	58,600
June.....	310	101	186	11,100
July.....	98	44	67.7	4,160
August.....	44	32	35.9	2,210
September.....	44	23	34.8	2,070
The year.....	-----	23	386	280,000

SOUTH FORK OF SILVER CREEK AT ICE HOUSE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{2}$ sec. 1, T. 11 N., R. 14 E., 8 miles northeast of Riverton and 1 mile north of Ice House. Altitude, about 5,300 feet.

RECORDS AVAILABLE.—July to October, 1922; October, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,620 second-feet March 25 (gauge height, 5.35 feet); minimum, 0.8 second-foot October 13-20 and September 10-30.

1924-1928: Maximum discharge, that of March 25, 1928; minimum, 0.5 second-foot several days during August and September, 1926.

REMARKS.—Records good. Discharge estimated December 16 to February 27 because of ice; interpolated October 14-20. No diversions

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	25	36	20	17	25	176	404	100	20	2.1	1.0
2	1.0	29	39	19	20	25	137	312	100	18	2.1	1.0
3	1.0	56	43	22	26	29	134	279	100	18	1.8	1.0
4	1.0	40	34	21	27	30	141	303	92	18	1.8	1.0
5	1.0	31	30	17	23	30	126	341	92	18	1.8	1.0
6	1.0	29	25	15	20	28	139	362	93	17	1.8	1.0
7	1.0	56	24	14	19	28	150	387	90	16	1.8	.9
8	1.0	118	22	12	19	30	152	350	81	14	1.8	.9
9	1.0	100	19	15	19	38	162	326	68	13	1.5	.9
10	.9	166	20	22	19	46	168	436	64	13	1.5	.8
11	.9	82	23	20	19	52	170	394	64	12	1.5	.8
12	.9	50	19	18	18	52	220	371	59	12	1.5	.8
13	.8	46	17	20	18	51	209	326	49	10	1.4	.8
14	.8	45	17	20	17	48	202	295	47	9	1.4	.8
15	.8	38	16	19	17	49	202	303	45	9	1.4	.8
16	.8	41	16	19	17	49	205	254	45	14	1.4	.8
17	.8	42	15	19	17	59	172	231	46	11	1.4	.8
18	.8	46	15	18	17	70	147	227	44	10	1.4	.8
19	.8	47	14	18	18	89	135	222	40	8.5	1.4	.8
20	.8	44	14	18	18	97	123	220	39	7.5	1.4	.8
21	.8	40	13	17	19	104	123	198	40	6	1.3	.8
22	.8	40	13	17	19	121	170	184	39	5	1.2	.8
23	.8	35	12	16	20	126	222	180	37	4.8	1.1	.8
24	1.0	33	12	16	21	274	209	196	39	4.5	1.0	.8
25	1.0	30	11	16	22	1,200	176	188	39	3.9	1.0	.8
26	5	36	11	15	23	1,200	242	186	34	3.9	1.0	.8
27	27	37	10	15	24	638	303	178	39	3.3	1.0	.8
28	22	34	10	12	25	350	317	152	27	3.0	1.0	.8
29	21	55	9	22	25	247	344	139	24	3.0	1.0	.8
30	28	46	15	23	23	213	401	125	21	2.7	1.0	.8
31	34	---	18	20	---	196	---	108	---	2.4	1.0	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	34	0.8	5.15	317
November	166	25	50.6	3,010
December	43	9	19.1	1,170
January	23	12	17.9	1,100
February	27	17	20.1	1,160
March	1,200	25	180	11,100
April	401	123	193	11,500
May	436	108	264	16,200
June	100	21	56.3	3,350
July	20	2.4	10.0	615
August	2.1	1.0	1.41	86.7
September	1.0	.8	.85	50.6
The year	1,200	.8	68.4	49,700

FINNON RESERVOIR OUTLET NEAR PLACERVILLE, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 16, T. 11 N., R. 11 E., at weir 400 feet below Finnon Reservoir, 10 miles northeast of Placerville.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 55 second-feet March 27 (gage height, 1.56 feet); water is usually turned out of canal part of each day.

1922-1928: Maximum discharge, 106 second-feet for 3 hours March 21, 1925 (gage height, 2.60 feet); water is usually turned out of canal part of each day.

REMARKS.—Records excellent. Water is diverted into Finnon Reservoir from One Eye Creek and Slab Creek. Water flows down an unnamed creek to the Western States Gas & Electric Co.'s flume, half a mile above power house, where it is used to develop power. Flow completely regulated by gates in dam at Finnon Reservoir.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	0	0	4.5	1.2	4.0	8	0.6	2.2	6.5
2	0	0	4.5	1.2	4.0	8	.3	2.2	0
3	0	0	2.7	20	8	16	.3	0	3.4
4	0	3.5	2.7	15	4.8	8.5	.3	4.5	3.4
5	0	3.5	2.7	6	4.0	5.5	.3	3.7	3.4
6	0	3.5	2.7	2.6	2.0	4.0	.3	0	3.4
7	0	3.5	2.7	2.1	2.0	4.0	.3	0	3.4
8	0	3.5	2.7	2.1	5.5	4.0	.3	0	0
9	0	3.5	2.7	1.5	5.5	4.0	1.8	0	3.4
10	0	3.5	2.7	1.2	4.8	4.0	0	0	3.4
11	0	3.5	2.7	1.2	4.0	3.0	0	0	3.4
12	0	3.0	2.7	.9	4.0	3.0	0	0	3.4
13	0	3.5	2.7	.9	4.0	3.0	0	0	3.4
14	0	7.5	5	.9	4.0	3.0	.2	0	3.4
15	0	7.5	2.7	.9	4.0	3.0	0	0	0
16	0	5.5	2.7	.9	4.0	3.0	6	0	3.4
17	0	3.5	2.7	.9	4.0	3.0	4.0	1.4	3.4
18	16	3.5	2.7	.9	4.0	3.0	4.0	2.2	16
19	30	3.5	2.7	1.5	4.0	3.0	4.0	4.0	23
20	20	3.5	2.7	1.2	4.0	2.7	4.0	4.0	23
21	0	3.5	.9	1.5	4.0	2.7	4.0	4.0	23
22	0	3.5	3.5	4.0	4.0	2.7	4.0	4.0	23
23	0	3.5	3.5	4.0	15	.9	2.2	4.0	26
24	0	3.5	0	4.0	30	.9	1.9	0	34
25	0	3.5	0	8.5	40	.9	2.2	3.6	32
26	0	3.5	0	4.0	20	.9	2.2	4.0	32
27	0	3.5	0	4.0	27	.9	0	4.0	28
28	0	5.5	1.0	4.0	5	.6	2.2	4.0	0
29	0	18	2.7	4.0	8	.6	2.2	3.4	0
30	0	4.5	2.8	-----	5.5	.6	2.2	3.4	6.5
31	0	4.5	1.2	-----	5.5	-----	2.2	-----	25

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	30	0	2.13	131
November	0	0	0	0
December	18	0	4.06	250
January	5	0	2.44	150
February	20	.9	3.49	201
March	40	2.0	8.02	493
April	16	.6	3.58	213
May	6	0	1.68	103
June	4.5	0	1.95	116
July	34	0	11.0	676
August	0	0	0	0
September	0	0	0	0
The year	40	0	3.22	2,330

NOTE.—No flow in months for which no records are given.

WESTERN STATES GAS & ELECTRIC CO.'S FLUME NEAR CAMINO, CALIF.

LOCATION.—Float gage in NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 25, T. 11 N., R. 11 E., 1 mile below diversion dam and 3 miles northwest of Camino.

RECORDS AVAILABLE.—November, 1922, to September, 1928.

EXTREMES.—1922-1928: Maximum mean daily discharge, 118 second-feet July 5-7, 10, 11, 13-15, and 17, 1925.

REMARKS.—Records good. Water is diverted from South Fork of American River in NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 24, T. 11 N., R. 11 E., and is used to develop power in SW. $\frac{1}{4}$ sec. 20, T. 11 N., R. 11 E., just above mouth of Rock Creek where it is returned to river.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	108	108	107	106	106	108	106	108	108	110	100	91
2-----	109	107	107	106	106	108	102	108	108	111	98	103
3-----	108	108	108	106	106	108	102	108	106	112	98	93
4-----	101	108	107	106	107	108	104	107	106	111	97	98
5-----	101	107	107	74	107	107	106	108	106	110	97	95
6-----	107	107	107	105	107	107	107	108	108	111	99	98
7-----	102	108	108	105	107	107	108	110	106	110	99	101
8-----	110	110	108	106	108	108	109	110	106	112	98	107
9-----	109	108	108	105	108	107	108	110	106	112	97	98
10-----	108	109	107	106	108	107	107	110	108	112	96	104
11-----	110	107	107	107	108	107	107	109	106	111	95	104
12-----	110	106	107	106	108	107	107	110	110	111	93	104
13-----	107	107	107	107	108	107	99	110	110	110	97	105
14-----	103	106	107	107	108	107	106	110	110	110	95	102
15-----	109	107	106	106	108	107	107	110	110	107	93	103
16-----	108	107	106	106	107	108	108	110	110	112	94	97
17-----	102	107	106	106	107	108	107	110	110	111	98	102
18-----	106	108	106	105	107	108	106	110	111	111	97	94
19-----	109	107	106	106	107	108	106	109	112	110	90	77
20-----	109	107	106	106	107	108	108	110	111	106	93	92
21-----	106	108	106	102	107	108	107	110	111	107	94	82
22-----	98	107	106	104	108	108	107	110	110	106	96	95
23-----	108	107	106	104	108	108	107	110	112	107	95	96
24-----	97	108	106	104	107	108	106	110	112	110	93	94
25-----	105	107	106	105	108	113	106	110	112	110	93	97
26-----	108	108	106	106	107	106	107	110	112	107	97	104
27-----	110	108	107	106	107	96	107	110	112	105	96	107
28-----	109	107	107	106	107	95	107	110	112	104	95	109
29-----	107	107	107	107	108	100	107	110	111	100	94	109
30-----	107	108	106	107	-----	103	108	110	111	103	92	111
31-----	108	-----	106	107	-----	105	-----	110	-----	101	93	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	110	97	107	6,580
November-----	110	106	107	6,370
December-----	108	106	107	6,580
January-----	107	74	105	6,460
February-----	108	106	107	6,160
March-----	113	95	106	6,520
April-----	109	99	106	6,310
May-----	110	107	110	6,760
June-----	112	108	110	6,550
July-----	112	101	109	6,700
August-----	100	90	95.5	5,870
September-----	111	77	99.1	5,900
The year-----	113	74	106	76,800

CACHE CREEK BASIN

CLEAR LAKE AT LAKEPORT, CALIF.

LOCATION.—Staff gage at municipal wharf on north side of Third Street at Lakeport, Lake County.

RECORDS AVAILABLE.—February, 1913, to September, 1928.

EXTREMES.—Maximum stage during year, 7.35 feet April 3 and 4; minimum, 1.30 feet several days during October and November.

1913-1928: Maximum stage, 11.12 feet January 28, 1914; minimum, -3.50 feet September 24-27, 1920.

REMARKS.—Gage-height record furnished by Yolo Water & Power Co.

Daily gage height, in feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.60	1.35	1.70	2.40	3.40	5.08	7.20	6.95	6.28	5.15	3.90	2.85
2	1.58	1.35	1.72	2.45	3.60	5.10	7.25	6.95	6.25	5.10	3.85	2.80
3	1.58	1.35	1.72	2.52	3.90	5.12	7.35	6.95	6.25	5.05	3.80	2.75
4	1.55	1.35	1.70	2.55	4.20	5.15	7.35	6.95	6.22	5.00	3.75	2.72
5	1.55	1.35	1.70	2.60	4.40	5.20	7.32	6.92	6.20	4.98	3.72	2.70
6	1.52	1.30	1.70	2.60	4.60	5.20	7.30	6.92	6.15	4.95	3.70	2.68
7	1.52	1.30	1.70	2.62	4.60	5.20	7.28	6.90	6.05	4.90	3.70	2.65
8	1.50	1.30	1.70	2.65	4.60	5.20	7.25	6.88	6.02	4.88	3.68	2.62
9	1.48	1.35	1.70	2.70	4.65	5.20	7.25	6.88	6.00	4.85	3.65	2.60
10	1.45	1.45	1.70	2.70	4.65	5.25	7.25	6.85	5.95	4.82	3.62	2.58
11	1.42	1.45	1.70	2.70	4.70	5.25	7.25	6.82	5.90	4.82	3.60	2.56
12	1.40	1.45	1.70	2.70	4.75	5.28	7.25	6.82	5.85	4.80	3.50	2.45
13	1.40	1.35	1.70	2.75	4.80	5.30	7.25	6.82	5.80	4.75	3.45	2.45
14	1.40	1.50	1.85	2.80	4.85	5.30	7.25	6.82	5.75	4.70	3.40	2.35
15	1.40	1.55	1.85	2.80	4.90	5.30	7.25	6.80	5.72	4.65	3.38	2.34
16	1.40	1.65	1.85	2.80	4.90	5.30	7.25	6.80	5.70	4.60	3.38	2.35
17	1.40	1.70	1.85	2.80	4.92	5.30	7.25	6.80	5.68	4.55	3.35	2.32
18	1.38	1.75	1.85	2.80	4.95	5.30	7.25	6.80	5.65	4.52	3.30	2.32
19	1.35	1.85	1.85	2.80	4.95	5.32	7.20	6.78	5.62	4.50	3.28	2.32
20	1.35	1.80	1.85	2.80	4.95	5.35	7.18	6.75	5.60	4.45	3.25	2.30
21	1.32	1.80	1.85	2.80	4.95	5.35	7.12	6.72	5.55	4.42	3.22	2.28
22	1.32	1.75	1.85	2.85	4.95	5.35	7.10	6.70	5.50	4.40	3.20	2.25
23	1.30	1.75	1.85	2.90	4.95	5.60	7.08	6.70	5.48	4.38	3.18	2.22
24	1.30	1.70	1.95	3.00	4.98	5.70	7.00	6.65	5.45	4.35	3.15	2.20
25	1.30	1.70	1.95	3.00	5.00	5.85	6.98	6.60	5.42	4.32	3.12	2.15
26	1.35	1.70	1.95	3.00	5.00	6.10	6.95	6.50	5.40	4.30	3.10	2.12
27	1.35	1.70	2.20	3.00	5.00	6.90	6.95	6.45	5.38	4.25	3.08	2.10
28	1.30	1.70	2.20	3.00	5.00	7.10	6.95	6.40	5.30	4.15	3.05	2.10
29	1.30	1.70	2.20	3.20	5.05	7.22	6.95	6.35	5.25	4.05	3.00	2.08
30	1.30	1.70	2.30	3.30	-----	7.28	6.95	6.30	5.20	4.00	2.95	2.08
31	1.30	-----	2.35	3.35	-----	7.30	-----	6.30	-----	3.95	2.88	-----

CACHE CREEK AT YOLO, CALIF.

LOCATION.—Staff gage and water-stage recorder 800 feet above highway bridge, 1,000 feet above Southern Pacific Co.'s railroad bridge, and half a mile south of Yolo, Yolo County.

DRAINAGE AREA.—1,230 square miles.

RECORDS AVAILABLE.—January, 1903, to September, 1928.

EXTREMES.—Maximum discharge during year, 15,100 second-feet March 27 (gage height, 20.3 feet); no flow for several months.

1903-1928: Maximum discharge, 21,100 second-feet February 2, 1915 (gage height, 27.8 feet); no flow for periods in nearly every year.

REMARKS.—Records good. Discharge estimated May 13-26. Numerous ditches divert water for irrigation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0	32	275	465	145	3,180	40	28
2	0	32	615	418	145	3,490	14	0
3	0	29	565	2,310	145	4,740	8	0
4	0	26	465	4,940	145	3,700	7	0
5	0	26	350	2,820	145	3,230	7	0
6	0	23	289	1,450	115	3,100	8	0
7	0	23	244	1,040	145	2,260	10	0
8	0	23	222	800	145	2,120	8	0
9	0	23	195	675	145	1,980	6	0
10	0	23	183	530	196	1,450	5	0
11	0	23	159	485	230	725	5	0
12	0	23	144	420	202	625	5	0
13	0	23	129	380	190	552		0
14	350	23	120	316	169	508		0
15	192	26	120	284	142	420		0
16	132	32	118	268	128	348		0
17	91	43	108	236	112	800		0
18	71	43	100	216	102	825		0
19	51	39	95	202	89	875		0
20	39	35	89	190	77	875	3	0
21	35	35	83	175	59	1,210		0
22	61	35	83	172	57	1,270		0
23	75	35	83	169	85	1,330		0
24	65	32	89	169	1,270	1,270		0
25	53	540	105	163	1,040	700		0
26	39	1,190	100	160	2,050	205		0
27	35	418	95	151	10,900	157	12	0
28	35	289	95	145	6,350	118	28	0
29	35	640	118	145	4,170	81	20	0
30	35	565	750	-----	3,550	61	53	0
31	-----	330	720	-----	3,100	-----	50	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
November	350		0		46.5		2,770	
December	1,190		23		151		9,280	
January	750		83		223		13,700	
February	4,940		145		686		39,500	
March	10,900		57		1,150		70,700	
April	4,740		61		1,410		83,900	
May	53		-----		10.6		652	
June	28		0		.93		55.3	
The year	10,900		0		303		221,000	

NOTE.—No flow in months for which no record is given.

PUTAH CREEK BASIN

PUTAH CREEK AT WINTERS, CALIF.

LOCATION.—Staff gage and water-stage recorder just below Southern Pacific Co.'s railroad bridge at Winters, Yolo County, in Rio de los Puntos grant.

DRAINAGE AREA.—654 square miles.

RECORDS AVAILABLE.—September, 1905, to September, 1928.

EXTREMES.—Maximum discharge during year, about 34,700 second-feet March 27 (gage height, 31.0 feet); no flow October 1 to November 5 and August 12 to September 30.

1905-1928: Maximum discharge, about 60,000 second-feet December 31, 1913 (gage height, 39.0 feet); no flow during parts of 1912-1914 and 1918-1928.

REMARKS.—Records good. Discharge estimated August 8-11. Several small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	0	100	1,000	855	225	1,510	192	50	6	0.6
2.....	0	93	805	2,160	225	3,030	181	47	6	.5
3.....	0	90	905	5,150	225	5,050	170	43	5.5	.5
4.....	0	86	665	8,880	225	2,210	170	40	5.5	.5
5.....	0	84	545	3,960	238	1,440	160	36	5.5	.5
6.....	12	80	412	2,020	238	1,120	151	34	5.5	.5
7.....	16	77	365	2,020	225	910	142	31	5.0	.5
8.....	16	75	305	1,060	238	815	151	27	4.0	.4
9.....	33	75	275	855	335	725	151	24	3.0	.3
10.....	2,020	74	238	710	365	635	142	21	2.6	.2
11.....	465	71	225	585	365	550	134	20	2.4	.1
12.....	190	74	180	505	335	510	134	19	2.0	0
13.....	5,360	86	180	465	290	475	125	18	1.7	0
14.....	905	275	160	430	262	435	117	14	1.6	0
15.....	465	262	150	395	250	398	117	12	1.5	0
16.....	335	170	140	365	238	398	109	9	1.4	0
17.....	238	140	132	350	225	435	102	6.5	1.3	0
18.....	190	124	124	320	212	380	95	6.5	1.2	0
19.....	160	116	124	290	275	330	95	6.5	1.1	0
20.....	140	108	116	275	200	285	95	6.5	1.1	0
21.....	710	100	116	262	190	270	82	6	1.1	0
22.....	320	93	116	250	190	270	78	6	1.1	0
23.....	238	93	180	250	545	255	77	6	1.0	0
24.....	190	100	335	238	5,050	255	76	6	1.0	0
25.....	160	4,050	250	225	4,150	242	70	6	1.0	0
26.....	140	1,290	212	225	6,540	242	67	5.5	1.0	0
27.....	132	625	180	225	18,300	242	64	5.5	.7	0
28.....	124	335	160	225	4,450	228	60	5.5	.6	0
29.....	116	1,740	1,670	225	2,530	216	58	5.5	.6	0
30.....	108	1,120	2,930	-----	1,790	204	56	5.5	.6	0
31.....	-----	545	1,230	-----	1,300	-----	53	-----	.6	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November.....	5,360	0	426	25,300
December.....	4,050	71	398	24,500
January.....	2,930	116	465	28,600
February.....	8,880	225	1,160	66,700
March.....	18,300	190	1,620	99,600
April.....	5,050	204	802	47,700
May.....	192	53	112	6,890
June.....	50	5.5	17.6	1,050
July.....	6	.6	2.36	145
August.....	0.6	0	.15	9.2
The year.....	18,300	0	414	300,000

NOTE.—No flow in October and September.

EEL RIVER BASIN

LAKE PILLSBURY AT HULLVILLE, CALIF.

LOCATION.—Staff gage on line between secs. 14 and 23, T. 18 N., R. 10 W., at Scott Dam on South Eel River, at Hullville.

RECORDS AVAILABLE.—October, 1922, to September, 1928; discontinued.

EXTREMES.—Maximum elevation during year, 1,911.2 feet March 26; minimum 1,863.6 feet November 8.

1922-1928: Maximum elevation, that of March 26 1928; minimum, 1,829.0 feet December 28, 1923, to January 7, 1924.

REMARKS.—Lake Pillsbury is a storage reservoir of Snow Mountain Water & Power Co. Water is released to operate the power plant at Potter Valley and then wasted into a tributary of Russian River. Spillway gates, 10 feet high on dam, are used to increase storage. Elevation of crest of dam, 1,900 feet; elevation of needle valve, 1,815 feet.

Daily gage height, in feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79.7	66.8	71.5	74.2	100.7	110.3	108.8	110.1	106.4	102.4	94.2	83.5
2	79.6	66.2	71.3	77.9	103.0	110.3	108.7	110.1	108.2	102.2	93.8	83.1
3	79.0	65.7	71.1	81.0	107.6	110.3	108.8	110.0	106.0	102.0	93.4	82.8
4	78.4	65.2	70.9	82.6	110.6	110.3	108.4	110.0	107.9	101.8	93.2	82.4
5	77.9	64.8	70.6	83.7	109.8	110.3	107.8	110.0	107.8	101.6	92.9	82.0
6	77.6	64.4	70.3	84.4	109.2	110.3	107.5	110.0	107.6	101.2	92.6	81.6
7	77.3	64.0	70.0	85.0	109.8	110.3	107.2	110.0	107.4	101.0	92.2	81.2
8	76.8	63.6	69.8	85.4	110.2	110.4	107.7	110.0	107.2	100.8	92.0	80.8
9	76.3	64.7	69.6	85.6	110.3	110.2	109.0	110.0	107.0	100.6	91.6	80.4
10	76.0	67.4	69.4	86.0	110.3	110.2	109.7	110.0	106.8	100.2	91.4	80.0
11	75.6	67.5	69.1	86.2	110.2	110.1	109.8	110.0	106.7	100.0	91.0	79.6
12	75.1	67.5	68.6	86.4	110.2	110.4	109.8	110.0	106.5	99.8	90.7	79.1
13	74.7	69.6	68.4	86.6	110.1	110.4	110.2	110.0	106.4	99.6	90.4	78.7
14	74.3	70.5	68.6	86.8	110.2	110.4	110.4	109.9	106.2	99.2	90.0	78.2
15	73.9	71.2	68.4	86.9	110.2	110.4	110.4	109.8	105.8	99.0	89.7	77.8
16	73.5	71.6	68.0	87.0	110.2	110.4	110.4	109.8	105.6	98.8	89.4	77.4
17	73.1	71.8	67.7	87.0	110.2	110.4	110.0	109.7	105.4	98.4	89.0	77.0
18	72.7	71.7	67.4	87.0	110.2	110.3	109.7	109.7	105.2	98.2	88.6	76.6
19	72.3	71.5	67.0	87.0	110.1	110.3	109.8	109.6	105.0	97.8	88.3	76.1
20	71.8	71.6	66.8	87.0	110.1	110.3	109.8	109.6	104.8	97.6	87.9	75.7
21	71.4	72.2	66.4	87.0	110.0	110.3	110.0	109.5	104.6	97.4	87.5	75.2
22	71.0	72.2	66.2	87.2	110.0	110.4	110.0	109.5	104.4	97.0	87.2	74.8
23	70.6	72.2	65.9	87.8	110.2	110.0	110.0	109.4	104.2	96.8	86.8	74.4
24	70.2	72.0	66.2	88.3	110.2	109.8	110.0	109.4	104.0	96.6	86.4	74.0
25	69.8	71.8	67.8	88.6	110.3	110.1	110.0	109.2	103.8	96.2	86.0	73.6
26	69.4	71.7	68.2	89.0	110.2	110.4	110.0	109.1	103.6	96.0	85.7	73.1
27	69.0	71.8	68.4	89.4	110.2	108.5	110.0	109.0	103.4	95.6	85.4	72.6
28	68.6	71.6	68.8	89.7	110.2	110.6	109.9	108.9	103.2	95.4	84.9	72.2
29	68.2	71.8	70.8	92.6	110.2	110.2	110.0	108.8	102.8	95.0	84.6	72.2
30	68.1	71.6	71.8	96.8	-----	109.8	110.1	108.6	102.6	94.8	84.2	72.2
31	67.6	-----	72.4	99.0	-----	109.0	-----	108.5	-----	94.4	83.8	-----

NOTE.—Add 1,800 feet to obtain elevation above mean sea level.

SOUTH EEL RIVER AT HULLVILLE, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 22, T. 18 N., R. 10 W., half a mile below Scott Dam and half a mile west of Hullville. Soda Creek enters half a mile below gage.

RECORDS AVAILABLE.—November, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 32,600 second-feet March 26 (gage height, about 18.0 feet); minimum, less than 10 second-feet several days during year.

1922-1923: Maximum discharge, that of March 26, 1923; minimum, 0.1 second-foot September 9, 1924, regulated by valve in Scott Dam.

REMARKS.—Records excellent. No diversions. Flow completely regulated by gates in Scott Dam. There was 54,800 acre-feet of water in Lake Pillsbury on September 30, 1927, and 29,500 acre-feet on September 30, 1928.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	249	436	272	117	21	385	2,530	420	294	304	264	287
2.....	225	354	294	125	22	282	2,530	410	301	315	264	287
3.....	456	294	263	123	22	392	2,530	364	298	315	264	294
4.....	480	294	280	72	3,320	420	2,440	343	301	312	271	301
5.....	263	262	267	125	3,280	436	2,530	343	301	318	274	301
6.....	280	241	308	127	1,710	440	2,350	343	301	318	270	301
7.....	290	241	243	162	635	452	1,900	340	301	318	272	301
8.....	318	241	233	229	755	809	160	343	301	315	277	301
9.....	315	238	231	232	880	1,400	395	343	301	312	277	304
10.....	301	182	233	232	855	910	522	340	301	308	277	315
11.....	290	182	349	180	780	714	1,740	332	304	304	277	315
12.....	290	188	312	247	730	424	727	322	280	301	264	315
13.....	290	192	388	326	545	554	676	318	74	298	308	315
14.....	287	128	392	304	440	558	830	315	590	294	308	312
15.....	287	80	392	259	464	527	855	304	456	294	308	312
16.....	287	200	378	259	456	492	1,160	256	343	290	312	284
17.....	287	253	354	259	440	468	1,390	253	343	290	326	308
18.....	284	284	350	220	420	444	820	244	297	287	376	308
19.....	284	284	290	259	402	428	518	290	315	287	376	308
20.....	280	284	244	259	382	410	518	259	266	287	376	304
21.....	277	280	244	231	368	392	522	250	304	287	372	277
22.....	268	246	244	87	218	527	527	250	308	287	372	210
23.....	268	281	241	94	279	3,120	536	250	312	298	326	232
24.....	265	295	247	188	326	1,340	554	250	315	308	277	265
25.....	265	286	253	125	360	8,050	554	250	332	304	276	256
26.....	265	269	250	117	350	17,600	536	250	332	304	315	354
27.....	265	275	212	117	326	8,420	532	250	322	304	315	322
28.....	265	199	185	119	315	3,420	455	250	304	304	277	154
29.....	140	306	190	69	360	3,300	322	253	304	301	274	15
30.....	245	283	145	21	-----	2,890	385	259	304	251	376	130
31.....	436	-----	113	21	-----	2,620	-----	284	-----	294	274	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	480	140	290	17,800
November.....	436	80	253	15,100
December.....	392	113	271	16,700
January.....	326	21	171	10,500
February.....	3,320	21	671	38,600
March.....	17,600	382	2,020	124,000
April.....	2,530	160	1,070	63,700
May.....	420	244	299	18,400
June.....	590	74	314	18,700
July.....	318	251	300	18,400
August.....	336	231	299	18,400
September.....	315	15	276	16,400
The year.....	17,600	15	519	377,000

SOUTH EEL RIVER AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CALIF.

LOCATION.—Staff gage in SE. ¼ sec. 30, T. 18 N., R. 11 W., 500 feet below Van Arsdale Dam of Snow Mountain Water & Power Co., 5 miles north of Potter Valley.

RECORDS AVAILABLE.—November, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, about 40,000 second-feet March 26 (gage height, 27.0 feet); minimum discharge not known but 2 second-feet is required to be wasted through fish ladder at all times.

1909-1928: Maximum discharge, that of March 26, 1928; minimum, 2 second-feet at times.

REMARKS.—Records fair. Water is diverted from Van Arsdale Reservoir to power plant in Potter Valley and wasted into Russian River. Record shows only flow down South Eel River. Discharge estimated December 24.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	388	2.0	30	182	132	132	3,340	274	16	11	11	11
2	388	6	30	750	193	142	3,700	238	16	11	11	11
3	2.0	6	25	204	750	142	3,460	215	17	11	11	11
4	4.2	9.5	7.5	137	3,870	204	3,220	27	16	11	11	11
5	44	9.5	9.5	14	4,420	182	3,220	11	15	11	11	11
6	7	9.5	79	19	1,900	182	2,860	104	15	11	11	11
7	7	8	132	18	555	182	2,660	99	15	11	11	11
8	7	8	7	18	630	287	328	94	15	11	11	11
9	7	25	7	18	750	1,500	226	96	6	11	11	11
10	7	44	8.5	18	670	880	388	101	7	11	11	11
11	7	9.5	9	18	670	710	1,660	94	6.5	11	11	11
12	7	9.5	27	18	590	172	123	79	6.5	11	11	11
13	7	12	112	18	388	328	452	92	15	11	11	11
14	7	19	204	30	182	314	555	64	6.5	11	9	11
15	7	12	142	49	182	287	830	64	6.5	11	9	11
16	7	12	114	26	204	238	830	38	15	11	9	9
17	7	9.5	90	20	204	215	1,120	36	16	11	9	9
18	7.5	6.5	94	40	43	112	750	20	11	11	11	9
19	7.5	7	50	12	162	182	314	17	16	11	11	9
20	7.5	18	10	12	132	182	287	36	16	11	11	9
21	7.5	71	7	18	101	142	287	23	6	11	11	9
22	7.5	24	7	31	108	215	287	18	6	11	11	9
23	7.5	71	7	9	13	4,420	314	18	7.5	11	11	9
24	7.5	38	7	14	94	1,500	328	17	11	11	11	9
25	7	44	388	23	123	10,100	314	17	11	11	11	11
26	7	27	226	9.5	108	19,900	274	17	6	11	11	11
27	7	54	17	9.5	61	11,600	262	17	6.5	11	14	11
28	6.5	20	119	9	47	5,020	250	16	11	11	14	11
29	6	22	172	452	112	4,900	132	16	12	11	11	130
30	411	22	101	670	-----	3,820	162	16	9	11	11	80
31	2.0	-----	7	114	-----	3,460	-----	16	-----	11	11	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	411	2.0	45.5	2,800
November	71	2.0	21.2	1,260
December	388	7	72.4	4,450
January	750	9	96.1	5,910
February	4,420	13	600	34,500
March	19,900	112	2,310	142,000
April	3,700	123	1,100	65,500
May	274	11	64.2	3,950
June	155	6.5	15.6	928
July	11	11	11.0	876
August	14	9	10.9	670
September	130	9	15.0	893
The year	19,900	2.0	363	264,000

EEL RIVER AT SCOTIA, CALIF.

LOCATION.—Staff gage in sec. 18, T. 1 N., R. 1 E., at Wildwood Bridge, half a mile northeast of Scotia.

RECORDS AVAILABLE.—December, 1910, to February, 1915; October, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 205,000 second-feet March 27 (gage height, 46.3 feet); minimum, 52 second-feet September 7.

1910-1915, 1916-1928: Maximum discharge, about 290,000 second-feet February 2, 1915 (gage height, 55.5 feet); minimum, 10 second-feet August 12-14, 1924.

REMARKS.—Records good. Water is diverted from South Fork of Eel River for power development and then wasted down a branch of Russian River at Potter Valley. About 6 second-feet is pumped intermittently from the river above station at Scotia for local use and for lumbering.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	92	186	4,970	13,100	24,300	4,630	30,800	5,150	1,390	348	123	60
2.....	92	189	4,230	18,400	21,100	4,630	44,800	4,890	1,320	348	117	60
3.....	90	264	3,530	27,800	37,100	4,370	59,000	4,370	1,250	348	114	60
4.....	90	238	2,900	17,500	40,400	5,150	36,000	4,120	990	360	105	58
5.....	95	210	2,530	13,500	29,800	5,150	27,800	3,620	870	336	105	58
6.....	100	192	2,180	10,400	24,300	4,630	23,800	3,390	815	330	100	54
7.....	105	192	1,860	8,600	18,000	4,378	22,000	3,160	815	306	95	52
8.....	105	196	1,780	7,720	15,000	5,700	18,400	3,390	760	295	95	56
9.....	105	3,310	1,860	6,590	12,400	12,100	15,000	3,390	710	290	95	60
10.....	105	17,500	2,020	5,770	10,300	15,800	13,500	3,160	710	270	98	58
11.....	100	6,040	2,180	5,500	8,700	12,400	11,400	3,160	710	250	95	58
12.....	95	3,100	2,350	4,970	7,460	10,000	11,700	2,940	760	242	95	64
13.....	90	7,720	3,760	4,720	6,860	8,700	10,300	2,740	760	234	90	68
14.....	90	13,100	13,500	6,040	5,980	7,460	8,700	2,640	760	222	82	64
15.....	90	12,800	9,800	9,200	5,420	6,270	8,060	2,460	710	206	80	68
16.....	85	8,300	6,590	7,150	5,150	5,700	8,060	2,360	760	202	80	68
17.....	85	5,770	4,970	5,770	4,370	5,150	10,300	2,460	760	202	78	68
18.....	88	3,990	3,990	4,970	4,120	4,890	11,400	2,360	660	190	80	64
19.....	90	3,100	3,530	4,470	3,870	4,370	10,000	2,190	660	194	80	64
20.....	90	9,800	3,100	4,720	3,620	4,120	8,700	2,100	554	186	72	60
21.....	92	20,600	2,710	4,470	3,160	4,120	8,060	2,100	506	190	72	60
22.....	95	10,800	2,530	6,310	3,160	4,120	7,460	2,020	462	186	70	58
23.....	90	6,590	2,100	14,200	3,160	13,100	7,460	2,020	434	178	72	60
24.....	92	4,970	2,180	14,200	3,160	22,900	7,760	2,020	420	166	72	58
25.....	105	4,230	8,300	13,100	4,630	22,400	7,460	1,940	390	162	68	58
26.....	134	6,040	7,720	10,800	4,120	93,500	6,860	1,860	360	156	68	60
27.....	134	7,430	8,010	9,800	3,870	166,000	6,270	1,860	360	146	64	60
28.....	134	6,040	7,150	8,900	3,870	77,200	5,980	1,700	330	135	64	56
29.....	140	6,870	15,000	19,300	3,870	41,500	5,420	1,620	336	135	62	56
30.....	168	6,590	13,900	45,900	-----	28,800	5,150	1,540	360	129	64	56
31.....	178	-----	10,100	34,400	-----	22,900	-----	1,460	-----	126	60	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	178	85	105	6,460
November.....	20,600	186	5,880	350,000
December.....	15,000	1,780	5,200	320,000
January.....	45,900	4,470	11,900	732,000
February.....	40,400	3,160	11,100	638,000
March.....	166,000	4,120	20,400	1,250,000
April.....	59,000	5,150	15,300	910,000
May.....	5,150	1,460	2,720	167,000
June.....	1,390	330	689	41,000
July.....	360	126	228	14,000
August.....	123	60	84.4	5,190
September.....	68	52	60.0	3,570
The year.....	166,000	52	6,110	4,440,000

SNOW MOUNTAIN WATER & POWER CO.'S TAILRACE NEAR POTTER VALLEY, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 6, T. 17 N., R. 11 W., at power house of Snow Mountain Water & Power Co., 3 miles northwest of Potter Valley.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 315 second-feet August 21.

1922-1928: Maximum mean daily discharge, 317 second-feet October 10-13, 1922, and January 14, 1925.

REMARKS.—Records good except those for October 17-20, February 17, and February 19 to March 1, which were estimated. Water was diverted from tailrace above gage through two small ditches at times during year for irrigation in Potter Valley. Amount diverted is included in tables of daily and monthly discharge. Flow completely regulated by operation at power plant. See record for South Eel River at Van Arsdale Dam, near Potter Valley, Calif.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	272	238	258	242	252	255	260	202	272	272	282	304
2.....	84	248	246	236	258	242	262	260	272	286	305	293
3.....	248	245	260	246	253	244	258	264	275	294	258	293
4.....	256	238	238	248	250	226	264	264	276	272	289	299
5.....	253	240	251	251	240	250	261	244	274	286	277	297
6.....	250	232	190	257	252	244	256	256	274	289	282	294
7.....	252	240	212	252	250	248	257	266	274	287	283	294
8.....	256	243	259	237	246	247	244	270	286	260	276	296
9.....	244	245	262	256	244	241	256	270	287	279	286	281
10.....	258	240	260	258	246	239	256	263	270	277	292	295
11.....	256	235	238	211	244	236	261	272	278	283	295	294
12.....	259	250	262	266	198	246	260	255	278	284	282	293
13.....	256	284	258	266	250	240	260	242	281	279	294	290
14.....	252	245	254	270	250	246	256	268	277	274	298	290
15.....	250	243	255	241	244	244	172	262	278	262	308	289
16.....	238	244	256	266	246	244	262	268	277	274	302	277
17.....	250	242	249	262	244	249	264	254	252	274	304	272
18.....	250	248	235	238	242	262	262	266	270	277	308	288
19.....	250	256	253	260	240	246	264	266	272	280	285	284
20.....	250	234	256	258	255	248	260	248	273	280	302	290
21.....	244	246	252	244	250	239	262	267	278	280	315	290
22.....	254	251	254	242	250	258	250	264	274	266	304	226
23.....	232	250	254	264	255	254	262	264	274	282	306	253
24.....	248	231	257	262	255	253	250	266	277	279	300	272
25.....	220	244	243	260	250	244	250	268	278	284	289	273
26.....	253	242	234	254	240	246	256	270	274	286	246	282
27.....	250	232	256	243	265	266	258	262	270	285	296	280
28.....	242	246	251	252	260	274	260	268	278	280	296	256
29.....	248	246	250	240	255	256	192	273	278	264	251	153
30.....	113	249	248	246	-----	249	254	272	275	286	296	8
31.....	242	-----	253	252	-----	266	-----	272	-----	272	294	-----
Month	Maximum						Minimum		Mean		Run-off in acre-feet	
October.....	272						84		240		14,800	
November.....	256						231		243		14,500	
December.....	262						190		249		15,300	
January.....	270						211		251		15,400	
February.....	265						198		248		14,300	
March.....	274						226		248		15,200	
April.....	264						172		253		15,100	
May.....	273						202		261		16,000	
June.....	304						237		276		16,400	
July.....	294						260		278		17,100	
August.....	315						246		290		17,800	
September.....	304						8		270		16,100	
The year.....	315						8		259		188,000	

KLAMATH RIVER BASIN

WILLIAMSON RIVER BELOW SPRAGUE RIVER NEAR CHILOQUIN, OREG.

LOCATION.—Water-stage recorder in sec. 3, T. 35 S., R. 7 E., a quarter of a mile below Sprague River and three-quarters of a mile southwest of Chiloquin.

DRAINAGE AREA.—3,000 square miles.

RECORDS AVAILABLE.—June, 1917, to September, 1922; August, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,490 second-feet March 29 (gage height, 5.85 feet); minimum, 450 second-feet September 10 (gage height, 2.42 feet, affected by logs on control).

1911-1928: Maximum discharge, about 7,000 second-feet April 27, 1917 (sum of discharges on that date at stations on Sprague River at Chiloquin, 4,490 second-feet, and Williamson River at Chiloquin, estimated 2,500 second-feet); minimum, 320 second-feet October 14, 1921.

REMARKS.—Records good except those for April 1 to September 30, which are fair. Diversions for irrigation above station. Manipulation of gates at dams above causes considerable fluctuation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	616	636	958	668	831	1,040	3,390	1,500	895	592	580	604
2.....	623	636	994	682	931	1,150	2,970	1,560	815	630	580	623
3.....	630	642	1,030	714	1,020	1,210	2,690	1,610	770	694	580	586
4.....	630	649	1,040	708	1,050	1,340	2,480	1,720	755	688	586	556
5.....	630	630	1,000	714	1,090	1,440	2,350	1,780	734	656	586	544
6.....	630	649	922	720	1,150	1,500	2,160	1,780	727	649	598	539
7.....	623	656	847	727	1,200	1,500	2,090	1,840	727	642	598	534
8.....	636	656	785	755	1,220	1,560	2,020	1,780	714	694	586	534
9.....	636	720	778	785	1,170	1,610	2,020	1,720	714	688	574	512
10.....	630	701	701	808	1,110	1,660	1,960	1,610	762	642	574	480
11.....	642	694	642	823	1,050	1,720	1,900	1,560	748	630	574	470
12.....	636	708	649	823	985	1,780	1,840	1,560	708	623	574	517
13.....	636	727	714	831	922	1,780	1,720	1,560	675	623	556	528
14.....	642	770	649	823	931	1,840	1,660	1,560	662	623	528	562
15.....	642	800	630	808	904	1,900	1,610	1,560	656	616	512	550
16.....	649	774	675	755	887	1,900	1,610	1,560	656	598	495	556
17.....	636	748	668	734	879	1,900	1,560	1,560	623	598	470	580
18.....	636	748	675	727	839	1,840	1,560	1,500	623	592	534	586
19.....	636	748	675	808	839	1,660	1,560	1,500	668	598	539	574
20.....	701	778	662	839	863	1,610	1,660	1,440	604	604	544	610
21.....	610	778	662	785	879	1,610	1,660	1,380	506	586	534	580
22.....	630	770	668	770	904	1,610	1,720	1,310	528	580	534	550
23.....	630	778	675	748	940	1,610	1,780	1,150	586	586	528	550
24.....	630	831	682	734	958	1,610	1,780	1,040	610	580	528	544
25.....	636	863	682	720	976	1,720	1,720	1,040	616	586	528	544
26.....	610	823	682	708	949	2,020	1,660	1,030	616	592	522	550
27.....	623	808	688	701	967	2,220	1,560	1,030	604	586	539	550
28.....	630	815	688	708	976	2,420	1,500	1,020	562	586	544	550
29.....	630	855	662	708	994	3,110	1,500	1,020	562	586	539	562
30.....	656	895	630	714	-----	4,340	1,500	976	586	580	539	562
31.....	636	-----	636	762	-----	4,040	-----	922	-----	580	556	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	701	610	634	39,000
November.....	895	630	743	44,200
December.....	1,040	630	744	45,700
January.....	839	668	752	46,200
February.....	1,220	831	980	56,400
March.....	4,340	1,040	1,880	116,000
April.....	3,390	1,500	1,910	114,000
May.....	1,840	922	1,430	87,900
June.....	895	506	667	39,700
July.....	694	580	616	37,900
August.....	598	470	550	33,800
September.....	623	470	553	32,900
The year.....	4,340	470	954	694,000

UPPER KLAMATH LAKE NEAR KLAMATH FALLS, OREG.

LOCATION.—Water-stage recorder in SW. ¼ sec. 19, T. 38 S., R. 9 E., 1 mile above outlet of Upper Klamath Lake, and 3 miles northwest of Klamath Falls. Zero of gage is 4,135.93 feet above mean sea level, United States Bureau of Reclamation datum.

RECORDS AVAILABLE.—May, 1904, to September, 1928.

EXTREMES.—Maximum elevation during year, 4,142.93 feet April 3; minimum, 4,136.98 feet September 29.

1904–1928: Maximum elevation recorded, 4,144.98 feet about April 20, 1904; minimum, 4,135.60 feet on staff gage at Buena Vista Landing October 9, 1926.

REMARKS.—Gage heights very much affected by wind. Considerable regulation caused by dam at outlet of lake. Gage-height record furnished by The California Oregon Power Co.

Daily elevation, in feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	38.71	38.59	39.23	39.70	40.36	41.28	42.03	42.25	42.07	41.31	39.94	38.63
2.....	38.81	38.61	39.35	39.73	40.38	41.29	41.68	42.23	42.10	41.25	39.95	38.58
3.....	38.84	38.64	39.43	39.76	40.39	41.31	42.25	42.14	42.02	41.23	39.88	38.57
4.....	38.84	38.64	39.40	39.78	40.42	41.29	42.20	42.09	41.99	41.32	39.77	38.56
5.....	38.89	38.66	39.55	39.79	40.44	41.33	42.24	41.97	42.00	41.33	39.69	38.49
6.....	38.81	38.56	39.46	39.81	40.49	41.31	42.27	42.11	42.05	41.26	39.62	38.46
7.....	38.79	38.62	39.39	39.81	40.53	41.27	42.37	42.22	42.00	41.24	39.57	38.52
8.....	38.78	38.59	39.34	39.83	40.57	41.25	42.24	42.29	41.90	41.26	39.53	38.43
9.....	38.78	38.56	39.46	39.83	40.59	41.37	42.33	42.26	41.90	41.25	39.53	38.34
10.....	38.81	38.79	39.65	39.84	40.62	41.33	42.31	42.16	42.00	41.20	39.56	38.30
11.....	38.75	38.78	39.50	39.85	40.68	41.53	42.17	42.27	42.02	41.21	39.48	38.14
12.....	38.72	38.21	39.47	39.85	40.71	41.56	42.31	42.24	41.80	41.14	39.51	38.17
13.....	38.74	38.65	39.51	39.90	40.75	41.65	42.29	42.21	41.75	41.07	39.42	38.13
14.....	38.69	38.62	39.51	39.93	40.78	41.65	42.18	42.23	41.83	41.05	39.39	38.16
15.....	38.67	38.72	39.53	39.96	40.79	41.66	42.15	42.35	41.77	41.03	39.31	38.20
16.....	38.37	38.79	39.49	39.97	40.80	41.67	41.94	42.29	41.75	40.95	39.21	38.24
17.....	38.56	38.86	39.53	40.00	40.81	41.70	42.11	42.28	41.73	40.90	39.16	38.11
18.....	38.64	38.82	39.53	40.01	40.83	41.70	42.21	42.21	41.66	40.81	39.19	38.23
19.....	38.60	38.68	39.51	40.04	40.84	41.62	42.17	42.19	41.61	40.78	39.11	38.22
20.....	38.59	38.70	39.53	40.08	40.85	41.65	42.27	42.15	41.60	40.70	39.11	38.13
21.....	38.62	38.97	39.48	40.10	40.89	41.61	42.22	42.12	41.51	40.65	39.07	38.03
22.....	38.62	38.91	39.49	40.12	40.85	41.54	42.21	42.13	41.50	40.59	38.99	38.05
23.....	38.58	38.65	39.50	40.15	40.95	41.63	41.93	42.14	41.54	40.52	38.93	38.00
24.....	38.60	38.81	39.50	40.19	40.98	41.73	42.27	42.13	41.45	40.41	38.93	37.95
25.....	38.64	38.89	39.50	40.22	41.07	41.74	42.18	42.02	41.42	40.35	38.95	37.97
26.....	38.56	38.97	39.51	40.24	41.09	41.71	42.12	42.13	41.35	40.23	38.85	37.87
27.....	38.62	38.95	39.53	40.26	41.09	41.91	42.25	42.13	41.35	40.23	38.73	37.79
28.....	38.54	39.18	39.57	40.30	41.07	42.01	42.24	41.99	41.35	40.15	38.76	37.73
29.....	38.66	39.15	39.61	40.34	41.19	41.92	42.18	42.30	41.35	40.13	38.73	37.73
30.....	38.69	39.29	39.63	40.35	-----	41.89	42.24	42.12	41.35	40.08	38.69	37.83
31.....	38.74	-----	39.67	40.35	-----	41.88	-----	42.10	-----	40.08	38.63	-----

NOTE.—Add 4,100 feet to obtain sea-level elevation.

Monthly elevation and contents, 1927–28

Date	Elevation in feet	Contents in acre-feet	Gain or loss during month in acre-feet	Date	Elevation in feet	Contents in acre-feet	Gain or loss during month in acre-feet
Sept. 30.....	4,138.86	231,000	-----	May 31.....	4,142.10	476,800	—10,500
Oct. 31.....	4,138.64	217,500	—13,500	June 30.....	4,411.33	410,400	—66,400
Nov. 30.....	4,139.23	253,500	+36,000	July 31.....	4,140.03	306,300	—104,000
Dec. 31.....	4,139.67	281,400	+27,900	Aug. 31.....	4,138.66	218,800	—87,500
Jan. 31.....	4,140.35	330,300	+48,900	Sept. 30.....	4,137.74	163,000	—55,800
Feb. 29.....	4,141.19	398,600	+68,300				
Mar. 31.....	4,141.95	463,600	+65,000	The year.....	-----	-----	—68,000
Apr. 30.....	4,142.22	487,300	+23,700				

NOTE.—To compensate for wind effect elevation given for last day of month is mean of elevations for last 4 days of month and first 3 days of following month. Contents is that above elevation 4,135.0 feet.

LINK RIVER AT KLAMATH FALLS, OREG.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 32, T. 38 S., R. 9 E., 200 yards above outlet of Keno Canal and three-eighths of a mile above Main Street Bridge at Klamath Falls.

DRAINAGE AREA.—3,800 square miles.

RECORDS AVAILABLE.—May, 1904, to September, 1928.

EXTREMES.—Maximum combined discharge of Link River and Keno Canal, 3,020 second-feet April 3; minimum combined discharge, 72 second-feet June 13.

1904-1928: Maximum discharge, 9,400 second-feet May 12, 1904 (gage height at bridge, 7.30 feet); minimum, 22 second-feet August 30, 1918 (gage height, 4.07 feet).

REMARKS.—Records good. Regulation caused by storage of water in Upper Klamath Lake. Water diverted above station by the main or "A" Canal of Klamath project of the United States Bureau of Reclamation. Keno Canal of The California Oregon Power Co. also diverts water around the gage. Other small diversions above lake. Discharge tables include flow of Keno Canal. Gage-height record furnished by The California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,420	1,420	959	473	1,330	525	2,760	2,520	800	831	1,700	1,030
2.....	1,100	1,420	972	954	1,020	904	2,750	2,280	873	1,160	1,800	983
3.....	1,430	1,430	1,200	1,350	1,040	1,020	2,850	1,970	757	675	1,840	1,510
4.....	1,430	1,420	1,330	1,350	820	1,380	2,840	1,960	802	1,150	1,840	1,790
5.....	1,500	1,430	1,320	1,350	790	1,370	2,850	1,960	911	1,160	1,860	1,870
6.....	1,560	1,490	1,330	1,350	982	1,380	2,850	1,970	1,150	908	1,860	1,870
7.....	1,470	1,520	1,330	1,340	1,080	1,370	2,850	1,980	1,220	890	1,840	1,900
8.....	1,410	1,520	1,320	1,320	913	1,380	2,850	1,990	1,190	1,130	1,760	2,030
9.....	1,430	1,440	1,330	1,320	824	1,380	2,850	1,990	1,280	1,180	1,680	2,000
10.....	1,430	1,400	1,310	1,350	525	1,380	2,850	1,710	1,240	1,800	1,570	2,000
11.....	1,430	1,380	1,220	1,350	928	1,600	2,760	1,540	1,350	1,990	1,550	1,940
12.....	1,430	1,300	1,440	1,090	793	2,080	2,680	1,530	1,240	1,830	1,660	1,980
13.....	1,430	1,290	1,470	811	810	2,090	2,600	1,540	1,120	1,450	1,660	1,830
14.....	1,490	1,300	1,470	822	1,050	2,180	2,520	1,560	1,250	1,450	1,650	1,720
15.....	1,530	1,300	1,530	1,090	1,090	2,440	2,520	1,570	1,250	1,630	1,630	1,720
16.....	1,470	1,020	1,610	982	864	2,520	2,430	1,460	1,310	1,790	1,620	1,620
17.....	1,630	746	1,610	656	813	2,530	2,440	1,470	1,490	1,990	1,480	1,560
18.....	1,760	1,300	1,610	722	572	2,530	2,520	1,470	1,490	2,170	1,540	1,410
19.....	1,760	1,280	1,630	762	510	2,520	2,440	1,470	1,490	2,160	1,660	1,300
20.....	1,620	1,230	1,630	503	955	2,530	2,520	1,490	1,500	2,160	1,650	1,300
21.....	1,530	830	1,630	545	425	2,530	2,520	1,500	1,500	2,160	1,610	1,480
22.....	1,520	1,140	1,630	319	648	2,280	2,520	1,500	1,500	2,130	1,590	1,600
23.....	1,530	1,310	1,630	765	990	1,990	2,430	1,200	1,500	2,130	1,590	1,580
24.....	1,410	1,310	1,460	622	562	2,020	2,520	1,120	1,490	2,120	1,590	1,780
25.....	1,350	1,090	1,140	857	520	2,000	2,520	1,100	1,260	2,110	1,570	1,740
26.....	1,360	766	400	774	515	2,310	2,520	764	1,290	2,100	1,540	1,700
27.....	1,360	1,240	986	1,100	513	2,530	2,520	768	1,240	2,090	1,600	1,860
28.....	1,360	1,230	1,160	642	695	2,670	2,520	1,080	1,280	2,110	1,660	1,810
29.....	1,370	1,050	816	952	693	2,770	2,440	1,000	1,170	1,990	1,470	1,790
30.....	1,420	1,020	540	1,350	-----	2,760	2,510	777	835	1,800	1,270	1,870
31.....	1,420	-----	451	1,350	-----	2,760	-----	797	-----	1,700	769	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,760	1,100	1,460	89,800
November.....	1,520	746	1,250	74,400
December.....	1,630	400	1,270	78,100
January.....	1,350	319	975	60,000
February.....	1,330	425	802	46,100
March.....	2,770	525	1,990	122,000
April.....	2,850	2,430	2,620	156,000
May.....	2,520	764	1,520	93,500
June.....	1,500	757	1,230	73,200
July.....	2,170	675	1,680	103,000
August.....	1,860	769	1,620	99,600
September.....	2,030	983	1,690	101,000
The year.....	2,850	319	1,510	1,100,000

Monthly discharge of Link River and "A" Canal at Klamath Falls, Oreg., 1927-28

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1,760	1,163	1,460	89,800
November.....	1,520	743	1,250	74,400
December.....	1,630	403	1,270	78,100
January.....	1,360	313	975	60,000
February.....	1,330	423	802	46,100
March.....	2,770	525	1,990	122,000
April.....	2,850	2,433	2,630	156,000
May.....	2,540	1,490	1,940	119,000
June.....	2,070	1,333	1,850	110,000
July.....	2,870	1,073	2,270	140,000
August.....	2,480	1,083	2,080	128,000
September.....	2,220	1,283	1,860	111,000
The year.....	2,870	303	1,710	1,230,000

KLAMATH RIVER AT SPENCER BRIDGE, NEAR KENO, OREG.

LOCATION.—Water-stage recorder in SE. ¼ sec. 31, T. 39 S., R. 7 E., 1 mile below Spencer Creek, and 6 miles below former station at Keno.

DRAINAGE AREA.—4,000 square miles.

RECORDS AVAILABLE.—October 1913, to September, 1928. Records at Keno from May, 1904, to December, 1913.

EXTREMES.—Maximum discharge during year, 3,320 second-feet April 2 (gage height, 6.27 feet); minimum, 592 second-feet June 4 (gage height, 1.57 feet).

1913-1928: Maximum discharge, 5,130 second-feet April 21, 1914; minimum, 371 second-feet June 14, 1924.

A stage of 15.3 feet (discharge, 9,250 second-feet) occurred about May 10, 1904.

REMARKS.—Records fair. No diversions below Link River station. Practically entire flow of Lost River during nonirrigating season is diverted into Klamath River below Klamath Falls by the Lost River Diversion Canal. Flow regulated by storage in Upper Klamath Lake.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,650	1,710	1,430	910	1,540	910	3,240	2,730	710	1,010	1,770	1,090
2.....	1,540	1,710	1,260	810	1,600	850	3,170	2,730	750	1,110	1,670	1,070
3.....	1,540	1,710	1,430	1,230	1,380	1,030	3,170	2,590	790	1,180	1,770	1,230
4.....	1,600	1,710	1,430	1,430	1,430	1,330	3,170	2,380	710	1,010	1,770	1,430
5.....	1,600	1,710	1,490	1,540	1,280	1,490	3,090	2,240	710	1,160	1,830	1,600
6.....	1,650	1,710	1,540	1,600	1,200	1,540	3,170	2,100	750	1,260	1,830	1,710
7.....	1,710	1,710	1,600	1,600	1,280	1,600	3,170	2,030	950	1,030	1,830	1,770
8.....	1,650	1,770	1,600	1,650	1,330	1,650	3,090	1,960	990	1,010	1,830	1,890
9.....	1,650	1,830	1,600	1,650	1,230	1,650	3,090	1,960	990	1,110	1,770	1,960
10.....	1,650	1,890	1,600	1,650	1,130	1,650	3,090	1,890	1,090	1,330	1,710	2,030
11.....	1,650	1,890	1,540	1,650	990	1,650	3,090	1,710	1,130	1,600	1,650	2,100
12.....	1,650	1,770	1,540	1,650	1,110	1,960	3,020	1,600	1,180	1,710	1,670	2,170
13.....	1,650	1,710	1,650	1,380	1,050	2,100	3,020	1,490	1,130	1,600	1,600	2,170
14.....	1,650	1,710	1,890	1,280	1,130	2,240	2,880	1,430	1,130	1,540	1,670	2,100
15.....	1,710	1,710	1,960	1,230	1,230	2,380	2,880	1,380	1,160	1,490	1,690	2,100
16.....	1,710	1,710	2,030	1,330	1,280	2,590	2,810	1,330	1,130	1,600	1,690	2,030
17.....	1,710	1,380	2,170	1,280	1,160	2,730	2,730	1,280	1,280	1,650	1,670	1,960
18.....	1,770	1,380	2,170	1,180	1,050	2,810	2,730	1,280	1,330	1,830	1,490	1,830
19.....	1,890	1,490	2,170	1,160	870	2,880	2,730	1,230	1,380	1,960	1,690	1,710
20.....	1,890	1,540	2,170	1,010	930	2,950	2,730	1,260	1,380	2,030	1,690	1,650
21.....	1,890	1,380	2,240	910	910	2,950	2,810	1,280	1,430	2,100	1,690	1,600
22.....	1,890	1,380	2,240	810	770	2,950	2,810	1,280	1,430	2,100	1,690	1,650
23.....	1,830	1,380	2,100	730	830	2,880	2,730	1,280	1,490	2,100	1,690	1,650
24.....	1,830	1,490	1,890	850	870	2,730	2,730	1,050	1,490	2,100	1,690	1,710
25.....	1,830	1,540	1,770	890	790	2,660	2,810	970	1,490	2,030	1,690	1,830
26.....	1,770	1,330	1,380	1,030	710	2,880	2,810	930	1,380	2,030	1,690	1,830
27.....	1,770	1,380	990	1,130	770	2,950	2,730	750	1,330	2,030	1,690	1,890
28.....	1,710	1,490	1,330	1,070	790	3,020	2,730	770	1,380	1,960	1,650	1,960
29.....	1,650	1,540	1,380	950	910	3,170	2,810	890	1,330	1,960	1,650	1,960
30.....	1,710	1,490	1,280	1,280	-----	3,170	2,660	850	1,380	1,990	1,540	2,030
31.....	1,710	-----	1,070	1,490	-----	3,170	-----	750	-----	1,710	1,330	-----
Month							Maximum	Minimum	Mean	Run-off in acre-feet		
October.....	1,890						1,890	1,540	1,710	105,000		
November.....	1,890						1,890	1,330	1,600	95,200		
December.....	2,240						2,240	990	1,680	103,000		
January.....	1,650						1,650	730	1,240	76,200		
February.....	1,600						1,600	710	1,090	62,700		
March.....	3,170						3,170	850	2,270	140,000		
April.....	3,240						3,240	2,660	2,920	174,000		
May.....	2,730						2,730	750	1,530	94,100		
June.....	1,490						1,490	710	1,160	69,000		
July.....	2,100						2,100	1,010	1,620	99,600		
August.....	1,830						1,830	1,330	1,640	101,000		
September.....	2,170						2,170	1,070	1,790	107,000		
The year.....							3,240	710	1,690	1,230,000		

KLAMATH RIVER NEAR COPCO, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 31, T. 48 N., R. 4 W., a quarter of a mile above mouth of Fall Creek, just below tailrace of Copco No. 2 plant, and half a mile south of Copco post office.

DRAINAGE AREA.—4,300 square miles.

RECORDS AVAILABLE.—October, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 6,950 second-feet March 26 (gage height, 7.05 feet); minimum, probably 108 second-feet August 8.

1923–1928: Maximum discharge, that of March 26, 1928; minimum, about 10 second-feet several times in 1925 and 1926.

REMARKS.—Discharge determined from electrical output of power plant, except for March 12 to May 31, June 4, and July 21 to September 30; discharge July 21 to September 30 determined by deducting flow of Fall Creek from that determined for new gage below Fall Creek installed July 21, for which location record will be computed for subsequent years. Diversions and regulation above station. Gage-height and electrical record furnished by The California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,890	2,270	1,930	883	1,820	1,360	3,190	3,090	4,420	422	2,480	1,820
2.....	688	2,300	1,890	1,200	1,960	1,460	3,210	2,510	727	1,550	2,490	266
3.....	1,870	2,350	1,880	1,620	886	1,070	2,910	2,730	280	1,630	2,310	497
4.....	2,320	1,520	637	2,080	1,020	343	3,210	2,560	1,480	263	1,050	2,480
5.....	1,880	1,480	1,860	2,080	378	1,860	3,450	2,000	1,840	1,490	233	2,340
6.....	1,680	1,250	1,900	2,070	1,820	1,930	3,210	2,310	2,020	1,720	1,570	2,300
7.....	2,000	2,080	1,860	2,060	1,890	1,890	3,030	2,520	1,760	1,650	2,260	2,290
8.....	1,450	1,870	1,970	737	1,910	1,900	3,450	2,150	1,960	881	2,110	2,120
9.....	1,160	2,060	2,140	2,080	1,800	1,770	2,730	2,030	1,070	2,230	2,370	1,620
10.....	2,010	2,300	2,140	2,080	1,540	1,370	3,090	2,160	480	2,760	2,300	1,960
11.....	2,110	1,520	829	1,880	1,040	438	3,570	2,030	1,160	2,210	1,800	2,030
12.....	2,260	1,690	2,100	1,630	368	2,080	2,790	2,100	1,860	2,220	242	1,870
13.....	2,400	1,090	2,090	2,050	1,750	1,920	2,970	1,440	2,210	2,040	1,760	1,850
14.....	2,260	2,130	2,120	1,880	1,860	2,100	2,850	2,000	2,320	1,480	1,120	1,990
15.....	2,150	2,100	2,120	467	1,910	2,570	3,450	1,760	1,960	896	2,130	1,430
16.....	1,300	1,700	2,070	1,320	1,460	1,920	2,730	1,760	1,100	2,350	1,820	565
17.....	1,390	1,870	2,000	1,410	1,210	2,380	2,620	2,080	238	2,120	1,950	2,070
18.....	1,650	2,130	654	1,670	896	2,510	2,910	1,670	805	1,760	1,740	1,960
19.....	1,750	1,160	1,970	1,380	371	2,680	2,910	533	1,830	1,880	233	2,250
20.....	2,110	778	1,990	1,320	1,700	2,640	2,910	1,560	2,040	2,330	1,810	2,490
21.....	1,920	1,890	2,040	1,060	1,630	2,790	2,510	1,730	1,570	2,200	2,760	2,550
22.....	1,130	2,230	1,850	460	339	2,850	3,210	1,590	1,640	640	2,250	2,110
23.....	472	2,070	1,890	1,510	1,360	2,600	2,510	1,970	843	1,950	2,070	233
24.....	2,160	888	969	1,540	1,520	2,490	2,850	1,580	184	2,280	2,310	1,150
25.....	2,340	2,410	422	1,620	1,050	2,730	2,850	1,380	1,140	2,310	1,160	2,560
26.....	2,260	1,770	464	1,980	301	4,190	2,910	1,240	2,120	2,430	293	2,620
27.....	2,180	748	1,850	1,990	1,610	3,690	2,560	840	1,940	2,280	2,010	2,250
28.....	2,030	2,070	1,610	1,640	1,820	3,030	2,850	1,610	1,810	1,010	1,830	2,050
29.....	1,420	1,990	1,650	485	1,400	3,090	2,620	1,340	1,790	242	2,190	1,600
30.....	957	1,750	1,690	1,180	-----	3,030	2,680	371	835	1,820	2,170	472
31.....	1,710	-----	898	1,840	-----	3,570	-----	1,400	-----	2,210	2,010	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						2,400	472	1,770	109,000			
November.....						2,410	748	1,780	106,000			
December.....						2,140	422	1,660	102,000			
January.....						2,080	430	1,520	93,500			
February.....						1,960	301	1,330	76,500			
March.....						4,190	343	2,270	140,000			
April.....						3,570	2,510	2,960	176,000			
May.....						3,090	371	1,810	111,000			
June.....						2,320	184	1,410	83,900			
July.....						2,760	242	1,710	105,000			
August.....						2,760	233	1,800	111,000			
September.....						2,620	233	1,830	109,000			
The year.....						4,190	184	1,820	1,320,000			

SPRAGUE RIVER AT MCCREADY RANCH, NEAR CHILOQUIN, OREG.

LOCATION.—Staff gage in sec. 30, T. 34 S., R. 9 E., 200 yards north of F. F. McCreedy's house, 2 miles below McCreedy Spring, and 13 miles above Chiloquin.

RECORDS AVAILABLE.—July, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,920 second-feet March 29 (gage height, 7.52 feet); minimum, 130 second-feet September 9 (gage height, 0.40 foot).

1920-1928: Maximum discharge, that of March 29, 1928; minimum, about 50 second-feet May 26 and 27, 1926.

Highest known discharge, 4,390 second-feet about May 15, 1904.

REMARKS.—Records fair except those for March 1 to May 30, which were estimated. Regulation and diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	245	285	590	285	470	470	2,440	920	565	365	245	285
2.....	265	285	630	285	590	545	2,100	1,010	520	325	245	245
3.....	245	285	650	285	610	610	1,810	1,140	470	305	245	235
4.....	245	285	610	305	630	725	1,640	1,240	445	285	245	215
5.....	265	305	545	345	670	740	1,640	1,360	445	285	245	215
6.....	265	305	470	345	725	710	1,490	1,360	425	305	245	215
7.....	285	305	385	385	725	755	1,360	1,360	445	385	235	205
8.....	265	305	365	405	690	790	1,300	1,240	405	305	235	190
9.....	265	305	285	425	630	810	1,240	1,300	405	285	235	130
10.....	285	345	405	425	565	790	1,090	1,300	425	265	235	168
11.....	285	345	265	425	495	770	1,050	1,300	365	265	235	182
12.....	285	345	345	425	470	770	945	1,300	345	285	205	198
13.....	285	385	345	425	445	830	895	1,300	345	265	182	215
14.....	265	445	265	405	425	870	870	1,360	345	265	198	225
15.....	265	385	345	405	405	870	830	1,360	345	245	215	245
16.....	265	385	325	365	385	850	830	1,360	285	245	205	305
17.....	265	385	325	345	365	790	830	1,300	345	245	205	285
18.....	265	385	325	405	345	710	830	1,140	325	265	225	245
19.....	265	425	305	445	345	690	870	1,050	215	265	205	235
20.....	265	405	285	385	345	670	920	1,010	168	245	205	235
21.....	285	405	305	365	365	670	975	920	245	245	205	225
22.....	285	405	285	345	385	690	1,010	810	265	245	198	225
23.....	285	470	285	325	385	725	1,010	740	285	245	198	225
24.....	285	495	285	325	385	770	975	725	285	245	205	225
25.....	285	425	305	325	385	830	920	740	285	245	215	225
26.....	285	425	305	325	385	1,050	870	725	225	245	215	235
27.....	285	425	305	325	385	1,360	870	710	225	245	205	235
28.....	285	445	305	325	385	2,000	850	690	235	245	205	235
29.....	285	520	305	325	385	3,710	870	670	265	245	205	235
30.....	285	545	265	365	-----	3,330	895	630	285	245	265	235
31.....	285	-----	265	425	-----	2,840	-----	590	-----	245	305	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	285					245			273		16,800	
November.....	545					285			382		22,700	
December.....	650					265			364		22,400	
January.....	445					285			364		22,400	
February.....	725					345			475		27,300	
March.....	3,710					470			1,060		65,200	
April.....	2,440					830			1,140		67,800	
May.....	1,360					590			1,050		64,600	
June.....	565					168			341		20,300	
July.....	365					245			270		16,600	
August.....	305					182			223		13,700	
September.....	305					130			226		13,400	
The year.....	3,710					130			514		373,000	

LONG CREEK NEAR SILVER LAKE, OREG.

LOCATION.—Water-stage recorder in sec. 6, T. 32 S., R. 13 E., 27 miles south of Silver Lake; above point where creek begins to divide and spread over Sycan Marsh.

RECORDS AVAILABLE.—May, 1918, to November, 1923; October, 1926, to September, 1928. Incomplete.

EXTREMES.—Maximum discharge during year, 124 second-feet March 26 (gage height, 2.13 feet); minimum, 12 second-feet February 18 and August 8 (gage height, 0.66 foot).

1918–1923, 1926–1928: Maximum discharge, 307 second-feet May 19, 1922 (gage height, 3.6 feet); minimum, 3.7 second-feet August 18, 1923.

REMARKS.—Records good except those for estimated period, which are fair. No record October 1 to February 17. Daily discharge not computed for July. No diversions or regulation above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928

Day	Feb.	Mar.	Apr.	May	June	Aug.	Sept.
1		23	62	95	49		15
2		23	59	89	46		15
3		25	54	86	44		15
4		24	57	82	41		15
5		24	52	82	38	• 14	15
6		26	53	92	35		16
7		22	53	98	34		16
8		24	56	102	33	12	16
9		26	63	107	31	13	16
10		35	66	110	32	14	14
11		38		112	34	14	13
12		38		113	32	14	13
13		33		107	30	14	13
14		33		100	28	14	15
15		35		93	28	14	15
16		37		88	26	14	16
17		38		87	26	14	17
18	13	40		87	24	14	
19	15	46		88	23	14	
20	17	52	• 80	89	26	14	
21	19	62		92	29	15	
22	20	69		104	26	15	
23	18	67		97	24	15	
24	20	62		91	22	15	• 15
25	21	69		91	20	15	
26	21	106		89	20	15	
27	22	86		82		15	
28	20	76		71	• 19	15	
29	20	71		65		15	
30		69		59		15	
31		67		54		15	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February 18–29	22	15	18.8	447
March	106	22	46.3	2,850
April		52	72.5	4,310
May	113	54	90.4	5,560
June	49		28.2	1,740
July			• 16.0	684
August			14.3	879
September			15.0	892
The period				17,700

• Estimated.

WOOD RIVER AT FORT KLAMATH, OREG.

LOCATION.—Staff gage in sec. 22, T. 33 S., R. 7½ E., at highway bridge one-fourth mile east of Fort Klamath.

RECORDS AVAILABLE.—August, 1911, to September, 1928 (incomplete).

EXTREMES.—Maximum discharge during year, 416 second-feet March 26 (gage height, 2.80 feet); minimum, 182 second-feet July 30 and August 2-7 (gage height, 1.26 feet).

1911-1928: Maximum discharge (estimated), 600 second-feet November 23-25, 1921 (gage height, 4.0 feet); minimum, 120 second-feet several days in June, July, and August, 1926.

REMARKS.—Records fair. Considerable diversion for irrigation above station.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	242	242	288	273	273	243	273	258	273	287	190	190
2.....	242	242	288	273	273	243	273	258	258	287	182	190
3.....	242	242	288	273	288	258	273	258	258	270	182	198
4.....	242	242	288	288	273	258	273	258	258	270	182	205
5.....	242	242	288	288	258	258	273	258	258	245	182	213
6.....	242	242	288	288	258	258	273	258	258	229	182	213
7.....	242	254	288	288	258	273	258	258	258	213	182	205
8.....	242	287	273	288	258	288	258	273	258	221	190	205
9.....	242	293	273	288	258	318	258	288	243	221	190	205
10.....	242	273	273	288	258	318	258	288	318	221	198	213
11.....	242	273	273	258	258	382	258	288	304	221	198	221
12.....	242	273	273	273	243	366	258	288	287	221	190	221
13.....	242	273	273	273	258	350	258	288	287	221	198	229
14.....	242	288	273	273	243	288	258	273	270	221	198	229
15.....	242	288	273	273	243	288	258	258	270	205	198	229
16.....	242	288	258	273	243	273	258	258	270	205	190	237
17.....	242	288	243	273	258	273	258	243	287	221	190	237
18.....	242	288	228	258	258	273	273	228	237	205	190	237
19.....	242	288	243	258	258	273	273	228	237	205	190	237
20.....	242	288	243	258	243	258	273	243	245	205	190	237
21.....	242	288	243	258	243	273	273	243	229	198	190	229
22.....	242	288	243	258	243	273	258	243	221	198	190	237
23.....	242	288	243	273	243	273	273	243	213	198	190	237
24.....	242	288	243	258	243	273	258	243	213	198	190	237
25.....	254	318	258	258	243	288	258	243	205	198	190	221
26.....	254	334	258	258	243	416	258	258	221	198	198	229
27.....	254	334	258	258	243	288	258	258	229	198	198	229
28.....	254	382	258	273	258	273	258	243	245	190	205	229
29.....	254	366	258	273	258	258	258	273	245	190	190	229
30.....	254	366	258	273	-----	273	258	273	253	182	190	237
31.....	242	-----	258	273	-----	273	-----	273	-----	182	198	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	254	242	244	15,000
November.....	382	242	288	17,100
December.....	288	228	264	16,200
January.....	288	258	272	16,700
February.....	288	243	254	14,600
March.....	416	243	287	17,600
April.....	273	258	264	15,700
May.....	288	228	259	15,900
June.....	318	205	254	15,100
July.....	287	182	217	13,300
August.....	206	182	191	11,700
September.....	237	190	222	13,200
The year.....	416	182	251	182,100

FOURMILE LAKE RESERVOIR NEAR ODESSA, OREG.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 9, T. 36 S., R. 5 E., at dam at outlet of Fourmile Lake, 15 miles northwest of Odessa. Gage readings are elevations above mean sea level.

RECORDS AVAILABLE.—June, 1923, to September, 1928, occasional readings.

EXTREMES.—Maximum elevation during year, 6,001.40 feet May 18 and 23-25 (contents, 14,610 acre-feet); minimum, 5,987.45 feet August 30 (contents, 4,240 acre-feet).

1923-1928: Maximum elevation, that of May 18 and 23-25, 1928; minimum contents, estimated 450 acre-feet September 15, 192³.

REMARKS.—Water turned out of reservoir is diverted a few hundred feet below dam into Cascade Canal, which conveys it over the divide into the drainage basin of Fish Lake in the Rogue River Basin. Gage-height record furnished by Public Water Co.

Monthly elevation and contents, 1927-28

Date	Elevation in feet	Contents in acre-feet	Change in con- tents during month (acre- feet)	Date	Elevation in feet	Contents in acre-feet	Change in con- tents during month (acre- feet)
Sept. 30.....	-----	* 8,450	-----	May 31.....	6,000.90	14,146	+246
Oct. 31.....	-----	* 8,540	+90	June 30.....	5,996.45	10,354	-3,792
Nov. 30.....	-----	* 10,700	+2,160	July 31.....	5,990.35	6,054	-4,300
Dec. 31.....	-----	* 11,640	+940	Aug. 31.....	-----	* 4,240	-1,814
Jan. 31.....	-----	* 12,200	+560	Sept. 30.....	-----	* 4,270	+30
Feb. 29.....	-----	* 12,710	+510				
Mar. 31.....	-----	* 13,470	+760				
Apr. 30.....	-----	* 13,900	+430	The year.....	-----	-----	-4,180

* Estimated from occasional readings during month.

CASCADE CANAL NEAR FISH LAKE, OREG.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 30, T. 36 S., R. 5 E., at divide between Rogue River and Klamath River Basins, 3 miles above Fish Lake.

RECORDS AVAILABLE.—June, 1924, to September, 1928; irrigation seasons only.

EXTREMES.—Maximum discharge during year, 38 second-feet June 10 (gage height, 1.61 feet); canal dry at times.

1924-1928: Maximum discharge, 42 second-feet August 6, 7, 9, and 10, 1924 (gage height, 1.72 feet).

REMARKS.—Records fair. Canal diverts from Fourmile Creek in Klamath River Basin and discharges into Fish Lake in the Rogue River Basin. The gaging station is 10 miles below the point of diversion. About $1\frac{1}{2}$ miles above Fish Lake is a lava bed into which the entire flow sinks, reappearing in the springs at the head of Fish Lake. Gage-height record furnished by Public Water Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	May	June	July	Aug.	Day	May	June	July	Aug.
1.....	12	32	35	34	16.....	15	34	33	0
2.....		30	34	34	17.....		35	34	0
3.....		29	34	35	18.....		34	34	0
4.....		28	34	36	19.....		34	34	0
5.....		28	34	36	20.....		34	34	0
6.....	15	28	34	36	21.....	15	34	34	0
7.....		30	34	36	22.....		34	33	0
8.....		32	33	36	23.....		34	34	0
9.....		34	33	36	24.....		34	33	0
10.....		37	32	36	25.....		34	33	0
11.....	15	36	33	32	26.....	30	34	34	0
12.....		36	33	0	27.....		34	33	0
13.....		35	32	0	28.....		34	34	0
14.....		34	32	0	29.....		35	34	0
15.....		34	32	0	30.....		34	34	0
					31.....	32		34	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	35	12	17.9	1,100
June.....	37	28	33.2	1,980
July.....	35	32	33.5	2,060
August.....	36	0	12.5	769
The period.....				5,910

NOTE.—No flow on days for which no discharge is shown, except a little during April and May due to melting snow. Discharge estimated May 1-9, 11-17, and interpolated May 19-22.

"A" CANAL AT KLAMATH FALLS, OREG.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 30, T. 38 S., R. 9 E., 300 feet below head gates and 1 mile northwest of Klamath Falls.

RECORDS AVAILABLE.—Irrigation seasons, 1911-1928.

EXTREMES.—Maximum discharge during year, 804 second-feet June 6 (gage height, 9.99 feet); canal dry October 1 to April 24.

1911-1928: Maximum discharge, that of June 6, 1928; maximum stage, 10.72 feet June 27, 1925.

REMARKS.—Records good. Canal diverts from Link River immediately below outlet of Upper Klamath Lake, in NE. $\frac{1}{4}$ sec. 30, T. 38 S., R. 9 E., for irrigating lands east of Klamath River on both sides of Lost River. Most of the return waters reach Lost River. Records furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	0	21	704	461	672	314	16	0	496	670	664	455	119
2	0	25	713	399	674	295	17	0	517	553	658	462	129
3	0	25	699	396	643	269	18	0	574	552	634	462	146
4	0	25	693	212	626	267	19	0	601	573	642	447	153
5	0	60	737	281	589	275	20	0	614	552	696	442	168
6	0	77	782	281	529	241	21	0	619	559	691	441	167
7	0	88	782	413	469	212	22	0	670	559	704	433	152
8	0	152	784	449	444	192	23	0	713	559	706	424	140
9	0	179	792	476	449	180	24	0	714	579	724	426	133
10	0	228	748	529	452	185	25	44	724	548	758	434	134
11	0	257	688	574	472	181	26	56	730	536	764	393	138
12	0	255	584	604	493	178	27	45	729	552	766	344	148
13	0	263	522	649	458	158	28	26	729	536	748	331	148
14	0	318	552	652	447	128	29	18	740	511	706	314	142
15	0	399	583	670	442	124	30	12	727	499	677	318	22
							31		711		680	315	
Month						Maximum	Minimum	Mean	Run-off in acre-feet				
April						56	0	6.7					399
May						740	27	419					25,800
June						792	499	620					36,900
July						766	212	589					36,200
August						674	314	461					28,300
September						314	22	175					10,400
The year						792	0	190					138,000

NOTE.—No flow October to March.

KENO CANAL AT KLAMATH FALLS, OREG.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 31, T. 38 S., R. 9 E., 200 feet above penstock to west side plant of The California Oregon Power Co., a quarter of a mile above Link River bridge at Klamath Falls.

RECORDS AVAILABLE.—October, 1923, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 261 second-feet October 2 and August 19-21; no flow June 12-15.

1923-1928: Maximum mean daily discharge, 281 second-feet June 30, 1927; no flow June 12-15, 1928.

REMARKS.—Discharge determined from record of electrical output of power plant below gage. Canal diverts from Upper Klamath Lake at the Link River storage dam in SW. $\frac{1}{4}$ sec. 30. Water is used for developing power and returned to Link River in NE. $\frac{1}{4}$ sec. 31. Flow is controlled by gates at head of canal. Gage-height record and electrical record furnished by The California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	254	249	243	254	249	249	245	238	245	236	241	241
2.....	261	254	249	249	249	247	228	243	247	236	241	239
3.....	256	251	254	249	249	245	238	249	245	198	241	233
4.....	256	249	258	254	251	247	235	243	243	254	204	228
5.....	256	251	256	247	251	243	236	245	256	245	235	227
6.....	254	247	256	249	251	247	236	249	256	247	234	230
7.....	254	245	256	245	254	243	238	249	258	254	234	227
8.....	256	245	254	245	249	245	238	251	256	249	234	212
9.....	256	230	256	243	249	245	236	249	258	251	233	215
10.....	256	245	249	249	249	245	236	251	256	249	239	224
11.....	256	249	249	251	249	245	236	256	93	251	236	212
12.....	258	222	249	256	247	243	236	254	0	249	235	216
13.....	258	233	251	247	245	243	238	231	0	254	235	216
14.....	254	236	249	258	245	243	236	254	0	251	234	224
15.....	247	245	247	254	245	239	239	256	0	251	233	228
16.....	212	245	249	254	245	236	234	256	67	249	232	232
17.....	211	247	247	256	243	254	236	258	239	243	239	233
18.....	238	241	247	256	245	254	236	256	249	247	258	233
19.....	241	233	249	254	247	245	239	258	247	249	261	232
20.....	243	234	249	256	245	251	239	249	247	249	261	234
21.....	247	239	249	254	245	251	238	249	245	249	261	225
22.....	245	238	247	256	247	251	238	251	249	247	258	214
23.....	247	247	247	251	245	254	232	256	249	247	258	215
24.....	243	247	249	251	247	256	236	256	249	249	258	212
25.....	241	247	254	247	247	258	236	251	243	232	254	208
26.....	245	247	256	251	247	251	235	251	241	235	230	203
27.....	245	243	254	249	247	251	236	251	239	234	219	185
28.....	245	245	256	251	249	249	236	249	232	233	239	177
29.....	247	241	254	251	219	249	236	251	236	234	247	186
30.....	251	236	254	251	-----	245	233	249	231	235	247	194
31.....	254	-----	251	249	-----	243	-----	249	-----	239	243	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	261	211	248	15, 200
November.....	254	222	243	14, 500
December.....	258	243	251	15, 400
January.....	258	243	251	15, 400
February.....	254	219	247	14, 200
March.....	258	236	247	15, 200
April.....	245	228	236	14, 000
May.....	258	238	251	15, 400
June.....	258	0	203	12, 100
July.....	254	198	243	14, 900
August.....	261	204	241	14, 800
September.....	241	177	218	13, 000
The year.....	261	0	240	174, 000

LOST RIVER DIVERSION CANAL NEAR OLENE, OREG.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 30, T. 39 S., R. 10 E., a quarter of a mile below intake of canal at Lost River Dam and 4 miles below Olene.

RECORDS AVAILABLE.—May, 1912, to September, 1928.

EXTREMES.—Maximum discharge during year, 305 second-feet February 3; maximum stage, 3.96 feet October 6; canal dry at times.

1912-1928: Maximum discharge, 508 second-feet February 28, 1914.

REMARKS.—Records fair. Discharge interpolated or estimated December 1, 7-9, 11-14, 16-18, 20, 22, 23, 25-30, January 1-3, 8, 13, 15, 22, February 12, March 13-18, May 20, 21, 30, 31, and July 23-26. Canal diverts water from Lost River and discharges into Klamath River to assist in the reclamation of bed of Tule Lake. Records furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119	168	231	203	299	184	284	178	C	168	133	168
2	115	181	230	205	301	190	278	219	C	169	137	167
3	147	190	230	207	305	198	272	194	C	169	139	164
4	153	195	228	208	297	201	271	179	C	165	142	168
5	158	197	226	215	296	203	269	155	C	164	150	152
6	163	199	223	220	293	204	267	52	C	162	156	117
7	158	201	221	226	292	204	263	0	C	159	149	116
8	162	206	220	232	287	204	261	0	C	156	146	114
9	162	210	218	241	283	205	260	0	C	153	141	114
10	162	212	216	244	281	206	258	0	C	151	137	114
11	161	213	216	248	275	210	257	0	71	150	125	112
12	162	214	216	253	273	208	254	0	145	150	126	113
13	161	215	215	268	270	211	248	0	177	146	145	116
14	159	213	215	278	260	212	241	0	165	140	147	157
15	158	212	215	280	250	212	235	0	144	131	152	199
16	157	211	213	282	236	212	230	0	131	122	157	207
17	157	210	211	278	221	213	224	0	137	114	157	206
18	159	210	208	274	206	213	226	0	145	106	157	202
19	159	208	206	264	191	213	239	0	156	100	161	200
20	159	215	204	259	182	212	244	0.95	165	87	161	202
21	160	215	203	255	174	210	251	0.92	171	78	164	194
22	160	218	202	248	166	208	261	0	175	22	167	183
23	161	220	202	243	161	206	263	0	176	7	177	174
24	161	220	202	241	158	205	261	0	178	7	177	168
25	162	218	202	236	162	213	258	0	177	7	179	162
26	163	217	202	238	170	250	254	0	174	5	183	156
27	163	216	202	232	174	283	249	0	171	0	181	152
28	163	226	202	230	177	289	241	0	176	0	182	148
29	165	232	202	234	180	292	233	0.20	171	0	179	148
30	166	232	202	249	-----	294	227	0.32	165	26	174	150
31	167	-----	202	273	-----	292	-----	-----	-----	123	169	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	167	115	157	9,650
November	232	168	210	12,500
December	231	202	212	13,000
January	282	203	244	15,000
February	305	158	235	13,500
March	294	184	221	13,600
April	284	224	253	15,100
May	219	0	39.2	2,410
June	178	0	106	6,310
July	169	0	101	6,210
August	183	125	156	9,590
September	207	112	158	9,400
The year	305	0	174	126,000

* Waste from "C" Canal.

FALL CREEK NEAR COPCO, CALIF.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 36, T. 48 N., R. 5 W., at railway crossing 500 feet above mouth and 1 mile south of Fall Creek power plant and Copco post office.

RECORDS AVAILABLE.—July to September, 1928.

EXTREMES.—Maximum discharge during period, 32 second-feet July 20 (gage height, 0.51 foot); minimum, 31 second-feet August 5 and 19 (gage height, 0.49 foot).

REMARKS.—Gage was read only eight times during period, but estimated monthly mean discharges are considered good because stream is fed by springs, resulting in very regular flow. No diversions. Gage-height record furnished by The California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1928

Date	Discharge	Date	Discharge	Date	Discharge
July 20.....	32	Aug. 19.....	31	Sept. 16.....	31
July 30.....	31	Sept. 2.....	31	Sept. 30.....	31
Aug. 5.....	31	Sept. 9.....	31		

Month	Mean	Run-off in acre-feet
July.....	32	1, 970
August.....	31	1, 910
September.....	31	1, 840
The period.....		5, 720

NOTE.—Gage read only on dates given in the above table.

JENNY CREEK NEAR COPEO, CALIF.

LOCATION.—Water-stage recorder in sec. 35, T. 48 N., R. 5 W., 200 yards above highway, half a mile above mouth, and 2½ miles west of Fall Creek power house and Copeo post office.

RECORDS AVAILABLE.—November, 1922, to September, 1928 (discontinued).

EXTREMES.—Maximum discharge during year, 1,430 second-feet March 26 (gage height, 7.10 feet); minimum, 3 second-feet July 22, 29, and August 5 (gage height, 0.50 foot).

1923-1928: Maximum discharge, 1,960 second-feet February 20, 1927; no flow August 13-15, 1926.

REMARKS.—Records fair. Water stored in Hyatt Prairie Reservoir is diverted into Bear Creek Basin for Talent Irrigation District. Two small irrigation ditches divert above gage. Gage-height record furnished by The California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	9.4	15	85	28	132	99	408	171	23	11	3.0	3.9
2.....		14	59	39	156	104	340	152	20	10	3.0	3.9
3.....		13	47	97	218	100	340	135	20	12	3.0	
4.....		13	38	108	194	127	330	124	20	12	3.0	
5.....	9.5	13	32	78	175	149	395	113	18	10	3.0	
6.....		13		115	134	127	375	104	17	9.6		3.9
7.....		14		98	123	140	330	99	16	7.8		
8.....		15		86	124	207	285	90	15	6.5		
9.....	9.6	67		77	124	255	275	87	15	6.1	3.3	3.9
10.....		132	32	73	108	198	265	81	16	5.9		
11.....		53		65	94	236	275	75		5.7		
12.....		34		60	87	265	265	68		5.1	3.6	3.9
13.....		27	32	97	75	218	237	65		4.5		
14.....		26	23	134	65	193	220	61	16	4.2		
15.....		95	22	80	59	175	239	58		4.2		
16.....			81	31	52	56	166	265	55	4.5	3.6	3.9
17.....			54	28	55	56	161	245	51	4.2		
18.....			40	23	51	58	157	226	48	4.1		
19.....			34	27	60	57	154	228	44	4.1	3.6	
20.....	13		47	26	57	56	156	255	41	4.0		5.2
21.....		61	24	49	61	166	265	58	11	3.5		
22.....		48	24	50	57	245	236	54	10	3.0		
23.....		37	25	49	58	265	220	43	9.6		3.8	6.5
24.....		35	26	47	60	234	243	36	9.6			7.0
25.....		44	26	47	72	295	216	32	8.5			
26.....		182	26	50	60	926	196	28	8.5	3.0		7.8
27.....		119	27	54	56	810	184	27	9.3		3.9	8.2
28.....		236	32	74	58	565	176	26	10		3.9	8.5
29.....		345	30	203	98	465	166	26	10	3.0	3.9	9.9
30.....		169	20	196		408	161	25	10	3.0	3.9	10
31.....	16		27	147		375		24		3.0	3.9	
Month				Maximum				Minimum		Mean		Run-off in acre-feet
October.....								345	13	12.2		750
November.....								85	22	31.7		4,120
December.....								203	28	79.9		1,950
January.....								218	56	94.2		4,910
February.....								926	99	263		5,420
March.....								408	161	262		16,200
April.....								171	24	67.8		15,600
May.....								23	8.5	14.2		4,170
June.....								12		5.45		845
July.....										3.54		335
August.....										5.19		218
September.....								10				309
The year.....								926		75.4		54,800

= Interpolated.

HYATT PRAIRIE RESERVOIR NEAR ASHLAND, OREG.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 16, T. 39 S., R. 3 E., at dam of Talent Irrigation District, 3 miles north of Ashland-Klamath Falls highway and 20 miles east of Ashland. Gage readings are elevations above mean sea level.

RECORDS AVAILABLE.—December, 1922, to September, 1928.

EXTREMES.—Maximum elevation during year, 5,015.70 feet May 15 and 16 (contents, 15,920 acre-feet); minimum, 5,003.00 feet September 28-30 (contents, 6,450 acre-feet).

1922-1928: Maximum elevation, that of May 15 and 16, 1928; minimum 4,981.90 feet August 4, 1926 (contents, 2 acre-feet).

REMARKS.—Gage-height record furnished by Talent Irrigation District.

Monthly stage and contents, 1927-28

Date	Gage height in feet	Contents in acre-feet	Change in contents during month (acre-feet)	Date	Gage height in feet	Contents in acre-feet	Change in contents during month (acre-feet)
Sept. 30.....	-----	* 9,055	-----	May 31.....	5,015.20	15,480	+350
Oct. 31.....	-----	* 9,125	+70	June 30.....	5,013.15	13,730	-1,750
Nov. 30.....	-----	* 9,723	+598	July 31.....	5,010.30	11,480	-2,250
Dec. 31.....	-----	* 10,298	+575	Aug. 31.....	5,004.80	7,598	-3,882
Jan. 31.....	-----	* 10,708	+410	Sept. 30.....	5,003.00	6,450	-1,148
Feb. 29.....	-----	* 11,094	+386	The year.....	-----	-----	-----
Mar. 31.....	-----	* 12,914	+1,820		-----	-----	-2,605
Apr. 30.....	5,014.80	15,130	+2,216		-----	-----	-----

* Interpolated from weekly readings.

KEENE CREEK CANAL NEAR ASHLAND, OREG.

LOCATION.—Water-stage recorder and staff gage in NW. $\frac{1}{4}$ sec. 29, T. 39 S., R. 3 E., 400 feet above short tunnel through Cascade divide, 2 miles north of Ashland-Klamath Falls highway, and 16 miles southeast of Ashland.

RECORDS AVAILABLE.—June, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 78 second-feet August 18 (gage height, 2.74 feet); no flow at times.

1923-1928: Maximum discharge, that of August 18, 1928.

REMARKS.—Records good except those for October to March, which are fair. Discharge estimated October 1 to March 31, April 2-4, 6-8, 10, 11, and 13. Canal diverts from Keene Creek in SE. $\frac{1}{4}$ sec. 20, T. 39 S., R. 3 E., water released from Hyatt Prairie Reservoir, into head of Emigrant Creek for irrigation of lands near Talent. Run-off October to May 9 was inflow to Keene Creek below Hyatt Prairie Reservoir, stored water being released May 10 to September 30.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0.6			5.4	0.5	16	26	48	14
2	3.6						4.4	.5	16	26	48	25
3							3.4	.5	16	26	48	26
4			1.1			5.0	2.4	.4	17	26	49	26
5					1.4		1.4	.4	2	26	49	26
6		0.5					1.3	.4	2	26	49	26
7							1.2	.5	2	26	49	26
8				2.1			1.0	.5	2	26	49	29
9	.6						.9	.5	2	26	49	30
10							.9	5.4	2	26	49	31
11						4.6	.8	4.6	2	26	49	31
12			.8		1.2		.8	5.2	2	26	49	26
13		.9					.8	4.6	2	26	49	24
14							.8	10	2	26	49	20
15				.9			.8	12	2	26	57	20
16	.4						.8	12	2	26	61	21
17							.8	16	2	26	70	20
18			.6			2.1	.8	16	2	26	70	9.1
19					.4		.8	14	2	26	61	7.3
20		.9					.8	14	2	27	63	6.2
21							.8	15	2	27	70	4.0
22				.6			.8	16	2	27	70	4.0
23	.3						.8	16	2	27	68	4.0
24							.8	16	2	30	68	4.2
25						3.6	.8	16	2	41	68	4.2
26			.6		.8		.8	16	2	46	61	4.2
27		3.6					.8	16	2	47	59	3.9
28							.8	16	2	47	53	2.0
29				.9			.6	16	2	47	42	2.0
30	.5						.5	17	2	47	34	2.0
31								16		48	17	
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October							1.08		66			
November							1.48		88			
December							.78		48			
January							1.02		63			
February							.95		55			
March							3.82		235			
April						5.4	0.5	1.26		75		
May						17	.4	9.48		583		
June						26	16	24.1		1,430		
July						48	26	30.8		1,890		
August						70	17	54.0		3,320		
September						31	2.0	15.9		946		
The year						70		12.1		8,800		

SHASTA RIVER NEAR MONTAGUE, CALIF.

LOCATION.—Water-stage recorder in N. $\frac{1}{2}$ NE. $\frac{1}{4}$ sec. 33, T. 45 N., R. 6 W., at highway bridge $1\frac{1}{4}$ miles southwest of Montague, 1 mile below Little Shasta River, and $5\frac{1}{2}$ miles above Yreka Creek.

RECORDS AVAILABLE.—August, 1911, to September, 1913; September, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,360 second-feet March 27 (gage height, 6.86 feet); minimum, 5 second-feet August 1.

1911–1928: Maximum discharge, 5,700 second-feet February 11, 1925 (gage height, 14.9 feet); minimum, 1.0 second-foot July 11, 1925.

REMARKS.—Records good. Discharge estimated October 4–6, November 13–15, 20–25, June 25, August 13, and September 13–16. Several diversions for irrigation above station,

Daily and monthly discharge, in second-feet, 1927–28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	132	228	246	194	249	203	440	74	15	23	5.5	14
2.....	132	218	235	205	239	203	446	71	15	23	18	20
3.....	135	211	225	225	249	203	462	60	23	23	14	32
4.....	131	201	222	250	654	197	427	57	20	20	11	35
5.....	127	198	215	264	738	194	424	66	27	28	14	42
6.....	123	191	211	291	494	191	437	55	37	18	13	45
7.....	120	188	201	291	390	180	405	58	55	18	13	45
8.....	120	194	194	260	298	200	376	71	35	18	11	49
9.....	118	242	205	256	275	203	363	84	36	16	11	47
10.....	135	490	205	252	240	197	344	76	42	18	13	58
11.....	132	530	201	242	240	200	310	99	50	18	12	80
12.....	132	368	198	232	237	200	268	82	54	22	11	78
13.....	135	336	215	235	237	197	265	63	16	22	18	
14.....	132	304	225	260	234	189	253	61	13	30	26	
15.....	135	273	201	249	226	180	208	52	9.5	32	25	86
16.....	132	242	191	225	223	175	223	47	6.5	33	19	
17.....	130	232	174	201	220	183	241	34	9	34	18	91
18.....	128	260	177	188	214	186	235	36	12	37	18	93
19.....	130	211	181	198	214	180	217	31	14	35	17	99
20.....	132	320	181	205	214	155	220	28	15	35	28	115
21.....	130	275	171	201	214	166	205	32	16	36	18	113
22.....	130	260	171	211	214	205	199	55	20	36	18	111
23.....	128	240	191	215	214	240	181	57	21	36	20	113
24.....	145	225	191	205	217	246	202	38	17	35	15	113
25.....	242	240	194	205	211	377	166	29	21	32	19	113
26.....	222	308	205	201	197	548	136	22	25	28	20	110
27.....	215	302	201	194	194	1,120	101	20	33	18	19	108
28.....	225	280	198	194	191	977	86	18	28	12	18	108
29.....	215	274	194	228	197	734	74	17	21	12	20	108
30.....	218	260	181	274	-----	573	74	18	20	9	16	111
31.....	228	-----	184	274	-----	458	-----	16	-----	8	13	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	242	118	151	9,280
November.....	530	138	270	16,100
December.....	246	171	199	12,200
January.....	294	188	232	14,300
February.....	738	191	274	15,800
March.....	1,120	155	306	18,800
April.....	462	74	267	15,900
May.....	99	16	49.3	3,030
June.....	55	6.5	24.2	1,440
July.....	37	8	24.7	1,520
August.....	28	5.5	16.5	1,010
September.....	115	14	79.8	4,750
The year.....	1,120	5.5	157	114,000

TRINITY RIVER AT LEWISTON, CALIF.

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 19, T. 33 N., R. 8 W., at highway bridge at Lewiston, 9 miles below Stewarts Fork and 6 miles above Indian Creek.

RECORDS AVAILABLE.—August, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, about 28,700 second-feet March 26 (gage height, 17.2 feet); minimum, 92 second-feet September 7.

1911-1928: Maximum discharge, 31,900 second-feet November 30, 1926 (gage height, 18.3 feet); minimum, 23 second-feet July 30, 1924.

REMARKS.—Records good. Water is diverted above station for irrigation, placer mining, and power development.

Daily and monthly discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	168	295	1,320	670	2,580	1,160	3,910	4,060	1,410	445	153	105
2.....	159	275	1,160	735	2,840	1,240	3,620	3,340	1,410	445	150	100
3.....	162	258	1,080	1,160	8,060	1,320	3,480	2,960	1,410	445	148	100
4.....	159	240	1,010	2,240	9,040	1,910	3,080	2,960	1,240	445	148	98
5.....	165	234	940	1,700	5,690	2,020	3,210	3,340	1,320	422	148	98
6.....	165	234	800	1,500	4,060	2,020	3,340	4,210	1,240	400	153	100
7.....	168	315	735	1,410	3,210	2,020	3,480	4,370	1,080	378	145	94
8.....	168	355	702	1,320	2,720	2,840	3,620	4,530	1,010	378	138	96
9.....	168	4,060	670	1,320	2,460	2,960	3,620	5,010	940	355	135	96
10.....	165	3,210	735	1,410	2,020	2,720	3,620	5,010	940	355	135	100
11.....	159	1,320	640	1,410	1,800	2,580	3,340	5,010	940	315	135	105
12.....	159	940	610	1,410	1,700	2,600	3,480	4,370	870	315	132	130
13.....	162	1,160	670	1,600	1,600	2,240	3,210	3,620	870	315	130	142
14.....	162	1,010	640	1,600	1,500	2,020	3,210	3,480	800	315	122	142
15.....	162	1,410	610	1,410	1,410	1,910	2,960	3,480	800	295	115	138
16.....	156	1,410	610	1,320	1,320	1,800	4,060	3,480	735	275	115	130
17.....	165	1,600	610	1,240	1,240	1,910	3,760	3,340	735	258	115	130
18.....	165	1,240	550	1,040	1,240	2,240	3,210	3,210	702	258	115	122
19.....	165	1,080	522	1,010	1,240	2,580	2,960	3,340	670	234	110	118
20.....	162	2,600	522	940	1,240	2,840	2,720	3,210	670	213	110	118
21.....	156	2,240	522	870	1,240	2,960	2,580	3,480	670	219	105	110
22.....	156	1,410	495	905	1,160	3,760	2,580	3,210	610	219	105	105
23.....	156	1,160	495	905	1,240	4,850	2,960	2,720	610	213	108	100
24.....	156	975	580	870	1,160	4,060	2,840	2,720	610	204	108	100
25.....	168	1,040	610	800	1,160	4,060	2,600	2,720	580	192	100	100
26.....	240	1,800	610	800	1,080	14,000	2,720	2,600	522	186	112	100
27.....	445	1,410	610	768	1,040	16,000	3,080	2,460	495	186	118	112
28.....	378	1,500	670	800	1,040	7,870	3,480	1,910	495	180	120	118
29.....	335	2,240	735	2,580	1,160	5,690	3,620	1,910	470	168	115	125
30.....	335	1,600	610	3,340	-----	4,530	4,210	1,600	445	168	110	120
31.....	335	-----	670	2,600	-----	4,060	-----	1,410	-----	165	-----	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	445	156	198	12,200
November.....	4,060	234	1,280	76,800
December.....	1,320	495	701	43,100
January.....	3,340	670	1,340	82,400
February.....	9,040	1,040	2,320	133,000
March.....	16,000	1,160	3,700	228,000
April.....	4,210	2,580	3,280	196,000
May.....	5,010	1,410	3,320	204,000
June.....	1,410	445	843	50,200
July.....	445	165	289	17,800
August.....	153	105	124	7,600
September.....	142	94	112	6,600
The year.....	16,000	94	1,460	1,060,000

NEW RIVER NEAR DENNY, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 5, T. 6 N., R. 7 E., 12 miles south of Denny.

RECORDS AVAILABLE.—October, 1927, to December, 1928 (discontinued).

EXTREMES.—Maximum discharge during period, 6,000 second-feet March 26, 1928 (gage height, 9.10 feet); minimum, 20 second-feet September 9 and 11, 1928 (gage height, 0.12 foot).

REMARKS.—Records good for low and medium stages and fair for high water and for March and April. Discharge interpolated January 19-22, July 26-29, 31, August 2-5, 7-12, 14-16, and September 5-7. Few small diversions for mining.

Daily discharge, in second-feet, 1927-28

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1927-28												
1.....	35	54	576	356	1,100	450	1,350	670	205	83	31	23
2.....	38	49	473	486	990	441	1,260	610	200	80	31	23
3.....	40	48	407	899	1,280	438	1,150	555	193	78	31	22
4.....	40	45	350	1,020	1,250	441	1,040	538	186	82	31	22
5.....	40	44	308	755	1,040	425	1,060	555	183	77	31	22
6.....	38	43	278	705	855	410	1,230	572	172	76	31	22
7.....	38	61	256	595	755	428	1,410	555	163	72	31	21
8.....	37	64	237	541	658	476	1,480	572	156	70	30	21
9.....	36	542	247	524	595	680	1,380	572	154	68	30	20
10.....	36	308	232	508	558	635	1,260	590	170	65	29	21
11.....	36	148	211	473	524	680	1,150	555	181	62	29	20
12.....	36	118	208	454	502	830	1,060	505	163	60	28	33
13.....	35	253	278	521	473	755	985	460	150	57	27	31
14.....	35	297	290	541	447	658	885	460	141	54	27	30
15.....	34	705	253	489	425	595	910	445	131	52	26	27
16.....	34	498	242	454	401	541	1,040	445	125	50	26	25
17.....	37	398	227	422	380	524	1,010	430	123	50	25	24
18.....	37	284	216	392	362	518	960	415	117	46	24	27
19.....	36	264	208	375	350	518	910	397	112	46	25	24
20.....	35	932	206	360	338	505	885	382	108	45	24	24
21.....	35	690	198	350	341	495	860	367	108	43	24	23
22.....	34	482	191	360	320	558	885	346	104	40	24	23
23.....	34	374	181	368	320	935	935	322	103	39	23	23
24.....	41	308	193	365	332	908	885	316	99	38	23	21
25.....	74	360	219	365	335	1,020	810	307	94	37	23	21
26.....	58	935	211	371	314	3,960	760	283	91	36	24	21
27.....	60	658	227	395	308	3,680	738	262	93	34	23	24
28.....	53	974	332	522	320	2,240	715	250	91	33	23	25
29.....	61	1,100	347	1,580	457	1,690	692	242	88	32	23	25
30.....	64	780	308	1,660	-----	1,380	715	228	86	31	21	24
31.....	58	-----	314	1,280	-----	1,350	-----	215	-----	31	23	-----

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1928				1928				1928			
1.....	24	101	85	11.....	27	141	272	21.....	25	145	108
2.....	24	65	83	12.....	27	179	222	22.....	25	156	106
3.....	24	258	80	13.....	27	193	183	23.....	25	148	104
4.....	61	127	76	14.....	27	325	160	24.....	25	131	-----
5.....	57	88	71	15.....	27	248	145	25.....	25	117	-----
6.....	36	117	68	16.....	28	188	135	26.....	25	108	-----
7.....	34	93	65	17.....	28	193	127	27.....	25	103	-----
8.....	31	72	64	18.....	27	163	119	28.....	25	94	-----
9.....	28	88	64	19.....	27	141	115	29.....	45	88	-----
10.....	27	137	254	20.....	25	133	112	30.....	52	86	-----
								31.....	55	-----	-----

Monthly discharge, in second-feet, of New River near Denny, Calif., 1927-28

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1927-28				
October.....	74	34	42.1	2,590
November.....	1,100	43	394	23,400
December.....	576	181	272	16,700
January.....	1,660	350	596	36,600
February.....	1,280	308	563	32,400
March.....	3,960	410	941	57,900
April.....	1,480	692	1,010	60,100
May.....	670	215	433	26,600
June.....	205	86	136	8,090
July.....	83	31	53.8	3,310
August.....	31	21	26.5	1,630
September.....	33	20	23.7	1,410
The year.....	3,960	20	373	271,000
1928				
October.....	61	25	31.2	1,920
November.....	325	65	141	8,390
December 1-23.....	272	64	123	5,610

MISCELLANEOUS DISCHARGE MEASUREMENTS

Measurements of stream flow in the Pacific slope basins in California at points other than gaging stations are listed in the following table:

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1928

Streams south of San Francisco Bay

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				<i>Feet</i>	<i>Sec.-ft.</i>
Dec. 27	Tia Juana River.....	Pacific Ocean.....	Bridge near Nestor, Calif.....	.....	^a 50
Jan. 1	do.....	do.....	do.....	.....	^a 20
8	do.....	do.....	do.....	.....	^a 4
15	do.....	do.....	do.....	.....	^a 50
21	do.....	do.....	do.....	.....	^a 5
29	do.....	do.....	do.....	.....	0
Feb. 4	do.....	do.....	do.....	.....	^a 61
8	do.....	do.....	do.....	.....	14
21	do.....	do.....	do.....	.....	^a 4
26	do.....	do.....	do.....	.....	^a 5
Mar. 4	do.....	do.....	do.....	.....	18
19	do.....	do.....	do.....	.....	0
Nov. 12	San Diego River.....	do.....	do.....	.....	^b 9.6
			El Capitan dam site near Lake-side, Calif.....	.....
Dec. 27	do.....	do.....	do.....	.....	5.3
Dec. 11	do.....	do.....	do.....	.....	^a 64
16	do.....	do.....	do.....	.....	13
26	do.....	do.....	do.....	.....	^a 77
Jan. 7	do.....	do.....	do.....	.....	15
15	do.....	do.....	do.....	.....	36
20	do.....	do.....	do.....	.....	11
Feb. 1	do.....	do.....	do.....	.....	5.0
4	do.....	do.....	do.....	.....	^a 120
8	do.....	do.....	do.....	.....	19
15	do.....	do.....	do.....	.....	^a 80
22	do.....	do.....	do.....	.....	6.9
Mar. 2	do.....	do.....	do.....	.....	^a 30
4	do.....	do.....	do.....	.....	23
20	do.....	do.....	do.....	.....	9.5
Apr. 7	do.....	do.....	do.....	.....	4.7
19	do.....	do.....	do.....	.....	3.1
May 1	do.....	do.....	do.....	.....	2.0
19	do.....	do.....	do.....	.....	1.7
June 17	do.....	do.....	do.....	.....	^a 1
Sept. 10	do.....	do.....	do.....	.....	^a 2
Nov. 1	San Luis Rey River.....	do.....	do.....	.....	1.0
Dec. 2	do.....	do.....	do.....	.....	^a 2.0
8	do.....	do.....	do.....	.....	^a 3.5
12	do.....	do.....	do.....	.....	^a 8
20	do.....	do.....	do.....	.....	^a 8
22	do.....	do.....	do.....	.....	^a 15
26	do.....	do.....	do.....	.....	^a 56
Jan. 5	do.....	do.....	do.....	.....	26
12	do.....	do.....	do.....	.....	^a 7
15	do.....	do.....	do.....	.....	^a 36
18	do.....	do.....	do.....	.....	26
27	do.....	do.....	do.....	.....	19
Feb. 4	do.....	do.....	do.....	.....	^a 150
6	do.....	do.....	do.....	.....	68
Mar. 5	do.....	do.....	do.....	.....	28
14	do.....	do.....	do.....	.....	28
21	do.....	do.....	do.....	.....	10
Apr. 11	do.....	do.....	do.....	.....	4.5
18	do.....	do.....	do.....	.....	2.9
28	do.....	do.....	do.....	.....	^a 2.0
May 3	do.....	do.....	do.....	.....	1.3
8	do.....	do.....	do.....	.....	^a 5
9	do.....	do.....	do.....	.....	^a 5.0
18	do.....	do.....	do.....	.....	^a 6
25	do.....	do.....	do.....	.....	^a 2
June 2	do.....	do.....	do.....	.....	^a 1
9	do.....	do.....	do.....	.....	^a 1
14	do.....	do.....	do.....	.....	0
28	do.....	do.....	do.....	.....	0
July 6	do.....	do.....	do.....	.....	0
Apr. 11	do.....	do.....	Bridge at San Luis Rey, Calif.....	.....	^a 2

^a Estimated.^b Float measurement.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1928—Continued

Streams south of San Francisco Bay—Continued

Date	Stream	Tributary to—	Locality	Gage height	Dis-charge
				Feet	Sec.-ft.
Jan. 18	San Luis Rey River.	Pacific Ocean.....	Half a mile west of South Coast pumping plant near Ocean-side, Calif.	-----	°15
Feb. 4	do.....	do.....	do.....	-----	°100
7	do.....	do.....	do.....	-----	51
Mar. 6	do.....	do.....	do.....	-----	°47
7	do.....	do.....	do.....	-----	42
22	do.....	do.....	1,500 feet above bridge at Ocean-side, Calif.	-----	5
Apr. 11	do.....	do.....	do.....	-----	0
Feb. 24	Arroyo Seco.....	Temecula Creek.....	Mouth near Temecula, Calif.	-----	.6
24	Murrieta Creek.....	do.....	do.....	-----	1.0
Dec. 10	San Juan Creek.....	Pacific Ocean.....	Bridge at Capistrano, Calif.	-----	6.3
24	do.....	do.....	do.....	-----	3.8
Feb. 26	do.....	do.....	do.....	-----	1.0
Mar. 19	do.....	do.....	do.....	-----	3.2
Aug. 8	San Gabriel River.....	do.....	100 feet above junction with Fish Fork, near Azusa, Calif.	-----	3.3
9	do.....	do.....	do.....	-----	4.2
20	do.....	do.....	do.....	-----	3.4
21	do.....	do.....	do.....	-----	4.3
8	Fish Fork of San Gabriel River.	San Gabriel River.....	100 feet above mouth near Azusa, Calif.	-----	1.2
9	do.....	do.....	do.....	-----	1.4
20	do.....	do.....	do.....	-----	.9
21	do.....	do.....	do.....	-----	1.3
8	Iron Fork of San Gabriel River.	do.....	Just above mouth near Azusa, Calif.	-----	1.4
9	do.....	do.....	do.....	-----	1.5
20	do.....	do.....	do.....	-----	1.1
21	do.....	do.....	do.....	-----	1.1
8	Cattle Canyon Creek	do.....	do.....	-----	1.3
9	do.....	do.....	do.....	-----	.8
20	do.....	do.....	do.....	-----	1.0
21	do.....	do.....	do.....	-----	.9
9	West Fork of San Gabriel River.	do.....	Just above junction with Bear Creek near Azusa, Calif.	-----	.2
9	Bear Creek.....	West Fork of San Gabriel River.	Just above mouth near Azusa, Calif.	-----	.2
9	North Fork of San Gabriel River.	do.....	Narrows, one-third mile above mouth, near Azusa, Calif.	-----	1.4
21	do.....	do.....	do.....	-----	1.7

Kern River Basin

Oct. 26	Salmon Creek.....	Kern River.....	Gaging station at mouth.....	1.50	3.5
Nov. 21	do.....	do.....	do.....	1.54	4.0
Dec. 17	do.....	do.....	do.....	1.35	1.4
Jan. 20	do.....	do.....	do.....	1.44	2.2
Feb. 18	do.....	do.....	do.....	1.37	1.5
Mar. 17	do.....	do.....	do.....	2.05	12
Apr. 24	do.....	do.....	do.....	1.69	6.4
May 15	do.....	do.....	do.....	1.43	3.7
June 18	do.....	do.....	do.....	-----	1.2
July 15	do.....	do.....	do.....	1.22	.2
Aug. 15	do.....	do.....	do.....	1.30	.8
Sept. 27	do.....	do.....	do.....	1.30	.9

San Joaquin River Basin

Dec. 6	Florence Lake Tunnel.	South Fork of San Joaquin River.	At outlet near Huntington Lake.	2.72	13
7	do.....	do.....	do.....	2.27	3.0
14	do.....	do.....	do.....	4.76	116
16	do.....	do.....	do.....	4.82	122
28	do.....	do.....	do.....	3.63	48
Jan. 5	do.....	do.....	do.....	4.62	103
Feb. 14	do.....	do.....	do.....	4.61	109
Mar. 8	do.....	do.....	do.....	4.68	105

° Estimated.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1928—Continued

San Joaquin River Basin—Continued

Date	Stream	Tributary to—	Locality	Gage height Feet	Dis-charge Sec.-ft.
Oct. 3	Iron Creek	North Fork of San Joaquin River.	Gaging station at mouth	5.34	1.3
Nov. 30	do	do	do	6.08	5.2
Nov. 6	do	do	do	6.26	12
Nov. 21	do	do	do	6.18	7.9
Dec. 3	do	do	do	6.10	6.0
Dec. 24	do	do	do	5.92	2.0
Jan. 23	do	do	do	5.90	2.1
Feb. 1	do	do	do	5.94	2.8
Feb. 16	do	do	do	6.00	2.8
Mar. 6	do	do	do	6.00	3.5
Mar. 29	do	do	do	6.32	13
Apr. 1	do	do	do	6.22	8.5
Apr. 25	do	do	do	6.35	16
May 4	do	do	do	6.9	36
May 29	do	do	do	6.8	53
June 1	do	do	do	6.7	41
July 1	do	do	do	6.15	8.0
Nov. 5	Cora Lakes Creek	do	At mouth.		1.9
Dec. 2	do	do	do		3.1
Jan. 17	do	do	do		1.4
Jan. 21	do	do	do		1.5
Feb. 18	do	do	do		2.6
Mar. 30	do	do	Gaging station at mouth		
Apr. 26	do	do	do		18
May 30	do	do	do		39
Oct. 5	West Fork of Granite Creek.	Granite Creek	Gaging station 1 mile above East Fork.	2.09	.2
Nov. 23	do	do	do	2.09	.1
Nov. 1	do	do	do	3.87	35
Nov. 19	do	do	do	4.21	47
Dec. 5	do	do	do	3.89	33
Dec. 23	do	do	do	3.15	11
Jan. 6	do	do	do	3.16	11
Jan. 28	do	do	do	3.13	9.6
Feb. 4	do	do	do	3.29	12
Apr. 9	do	do	do	4.92	91
May 23	do	do	do	5.31	127
May 21	do	do	do	5.9	203
May 25	do	do	do	6.15	240
June 5	do	do	do	6.8	366
Oct. 5	do	do	do	5.48	140
Nov. 23	do	do	Gaging station one-half mile above East Fork.	3.20	.2
Nov. 1	do	do	do	3.16	0.1
Nov. 19	do	do	do	4.64	41
Dec. 5	do	do	do	4.76	49
Dec. 23	do	do	do	4.58	36
Jan. 6	do	do	do	4.62	9.4
Jan. 28	do	do	do	4.18	14
Feb. 4	do	do	do	4.10	11
Feb. 25	do	do	do	4.2	14
Mar. 6	do	do	do	4.24	19
Mar. 25	do	do	do	4.25	19
Apr. 9	do	do	do	6.5	427
Apr. 23	do	do	do	5.18	92
May 2	do	do	do	5.48	143
May 21	do	do	do	5.82	226
June 5	do	do	do	5.88	232
July 17	do	do	do	5.42	140
July 2	do	do	do	4.76	51
Nov. 1	East Fork of Granite Creek.	do	Gaging station 1½ miles above mouth.	4.12	12
Dec. 19	do	do	do	4.35	4.1
Dec. 4	do	do	do	4.77	16
Dec. 16	do	do	do	4.84	18
Jan. 18	do	do	do	4.52	6.1
Feb. 2	do	do	do	4.40	5.1
Feb. 20	do	do	do	4.34	5.6
Mar. 2	do	do	do	4.40	5.3
Mar. 22	do	do	do	4.52	7.4
Apr. 5	do	do	do	4.44	5.9
Apr. 28	do	do	do	5.17	39
May 3	do	do	do	4.98	23
May 20	do	do	do	5.78	105
	do	do	do	5.76	99
	do	do	do	5.75	102

* Stage-discharge relation affected by ice.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1928—Continued

San Joaquin River Basin—Continued

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				<i>Feet</i>	<i>Sec.-ft.</i>
June 5	East Fork of Granite Creek.	Granite Creek.....	Gaging station 1½ miles above mouth.	5.56	74
16	do.	do.	do.	4.91	21
July 2	do.	do.	do.	4.36	4.2
Oct. 9	Jackass Creek.	San Joaquin River..	Gaging station one-half mile above West Fork.	1.12	1.2
Dec. 7	do.	do.	do.	1.78	5.3
Jan. 10	do.	do.	do.	1.99	9.3
15	do.	do.	do.	2.00	9.9
Feb. 9	do.	do.	do.	2.10	12
16	do.	do.	do.	2.16	15
Mar. 6	do.	do.	do.	2.25	18
16	do.	do.	do.	2.70	34
Apr. 11	do.	do.	do.	3.63	85
17	do.	do.	do.	3.62	96
May 8	do.	do.	do.	3.58	91
14	do.	do.	do.	3.12	57
June 12	do.	do.	do.	2.14	13
Oct. 9	West Fork of Jackass Creek.	Jackass Creek.....	Gaging station one-half mile above mouth.	1.94	1.8
Nov. 9	do.	do.	do.	2.03	3.2
Dec. 7	do.	do.	do.	2.08	2.8
Jan. 10	do.	do.	do.	2.12	3.9
15	do.	do.	do.	2.10	3.5
Feb. 9	do.	do.	do.	2.28	7.4
16	do.	do.	do.	2.20	5.8
Mar. 6	do.	do.	do.	2.22	6.3
16	do.	do.	do.	2.19	4.9
Apr. 11	do.	do.	do.	2.46	12
18	do.	do.	do.	2.38	9.9
May 7	do.	do.	do.	2.20	5.8
15	do.	do.	do.	2.38	9.8
June 12	do.	do.	do.	2.09	4.0
Oct. 11	Chiquito Creek.	San Joaquin River..	Gaging station one-half mile above Cabin Creek.	.54	2.1
Nov. 11	do.	do.	do.	1.55	31
Dec. 9	do.	do.	do.	1.06	10
Jan. 9	do.	do.	do.	1.19	15
13	do.	do.	do.	1.24	17
Feb. 12	do.	do.	do.	1.30	21
Mar. 8	do.	do.	do.	1.30	19
18	do.	do.	do.	1.70	40
Apr. 19	do.	do.	do.	2.12	74
May 16	do.	do.	do.	2.4	95
June 11	do.	do.	do.	1.44	25
Oct. 12	Mugler Creek.	Chiquito Creek.	At mouth.		.5
Dec. 10	do.	do.	do.		3.1
Jan. 16	do.	do.	do.		3.4
Feb. 13	do.	do.	do.		4.4
Mar. 19	do.	do.	do.		11
Apr. 20	do.	do.	do.		23
May 17	do.	do.	do.		16
Oct. 12	West Fork of Chiquito Creek.	do.	About 1½ miles above mouth.		.9
Dec. 11	do.	do.	do.		7.5
Feb. 10	do.	do.	do.		9.9
Mar. 14	Pitman Creek.	Big Creek.	Sec. 26, T. 8 S., R. 25 E., 400 feet below diversion.		.4
Apr. 27	do.	do.	do.	1.47	.2
30	do.	do.	do.	1.60	1.6
May 7	do.	do.	do.	1.60	1.5
10	do.	do.	do.	1.60	1.4
21	do.	do.	do.	1.59	1.4
25	do.	do.	do.	1.58	1.4
31	do.	do.	do.	1.58	1.4
June 14	do.	do.	do.	1.57	1.2
30	do.	do.	do.	1.63	1.7
July 14	do.	do.	do.	1.60	1.6
31	do.	do.	do.	1.50	.4
Aug. 15	do.	do.	do.	1.46	.2
Sept. 7	do.	do.	do.	1.45	.1
Dec. 10	Yosemite Creek.	Merced River.	Yosemite, Calif.	3.00	14
12	do.	do.	do.	2.90	7.6
Mar. 30	do.	do.	do.	4.64	260
Apr. 2	do.	do.	do.	3.93	118
June 20	do.	do.	do.	3.26	34
Aug. 30	do.	do.	do.	2.56	.5
Feb. 4	Bear Creek.	San Joaquin River..	1 mile south of Clements, Calif.	6.75	410

* Estimated.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1928—Continued

Sacramento River Basin

Date	Stream	Tributary to—	Locality	Gage height	Discharge
July 24	Pit River.....	Sacramento River...	Discontinued gaging station, near Bieber, Calif.	Feet 1.94	Sec.-ft. 8.6
May 17	do.....	do.....	Pittville, Calif.		51
24	do.....	do.....	do.....		58
31	do.....	do.....	do.....		56
June 7	do.....	do.....	do.....		59
14	do.....	do.....	do.....		35
21	do.....	do.....	do.....	1.39	54
28	do.....	do.....	do.....	.87	31
July 9	do.....	do.....	do.....	.95	35
20	do.....	do.....	do.....	.56	17
Aug. 2	do.....	do.....	do.....	.46	13
Sept. 6	do.....	do.....	do.....	.50	10
7	do.....	do.....	do.....	.47	11
Mar. 20	Rock Creek.....	Pit River.....	Near Cassel, Calif.		4.6
May 23	do.....	do.....	do.....		4.8
July 12	McCloud River.....	do.....	Hearst, Calif., sec. 34, T. 39 N., R. 2 W.		841
Sept. 28	do.....	do.....	do.....		745
July 11	do.....	do.....	Trail bridge below McCloud River Club, near La Moine, Calif.		905

Klamath River Basin, Oreg.

May 20	Scott Creek Canal...	Upper Klamath Marsh.	Junction of Sand Creek Canal and Scott Creek Canal.		6.3
20	Sand Creek Canal...	do.....	do.....		18.3
July 11	Spring Creek.....	Williamson River...	Mouth, 6 miles north of Chiloquin.		293
May 19	Modoc Point Canal...	Diversion from Sprague River.	Intake 1 mile southeast of Chiloquin. Former gaging station at Chiloquin.	1.78	20.5
July 10	do.....	do.....	do.....	1.40	19.6
Aug. 21	do.....	do.....	do.....	1.04	15.4
May 20	Fort Creek.....	Upper Klamath Lake.	The Dalles-California highway crossing.		* 80
20	Crooked Creek.....	do.....	Klamath Agency.....		* 80

* Includes Fort Creek Canal, U. S. Indian Service.

* Includes Agency Canal, U. S. Indian Service.

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