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SURFACE WATER SUPPLY *of the* UNITED STATES 1930

PART 11 PACIFIC SLOPE BASINS IN CALIFORNIA

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ILLUSTRATION

FIGURE 1. Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car.

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SURFACE WATER SUPPLY OF PACIFIC SLOPE BASINS IN CALIFORNIA, 1930

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, 1930.

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, successive 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 well, and for the preparation of reports upon the best methods of utilizing the water resources.

Annual appropriations for the fiscal years ending June 30, 1895-1931

1895.....	\$12,500.00	1919.....	\$148,244.10
1896.....	24,500.00	1920.....	175,000.00
1897-1899.....	50,000.00	1921-1923.....	180,000.00
1900.....	70,000.00	1924-25.....	170,000.00
1901-2.....	100,000.00	1926.....	165,000.00
1903-1906.....	200,000.00	1927.....	151,000.00
1907.....	150,000.00	1928.....	147,000.00
1908-1910.....	100,000.00	1929.....	270,500.00
1911-1917.....	150,000.00	1930.....	275,000.00
1918.....	175,000.00	1931.....	585,000.00

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 6,070 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1930, 2,430 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were

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-foot” 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, 1929, and ending September 30, 1930. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored in the form of snow or ice, or in ponds, lakes, and swamps, or as underground water, 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

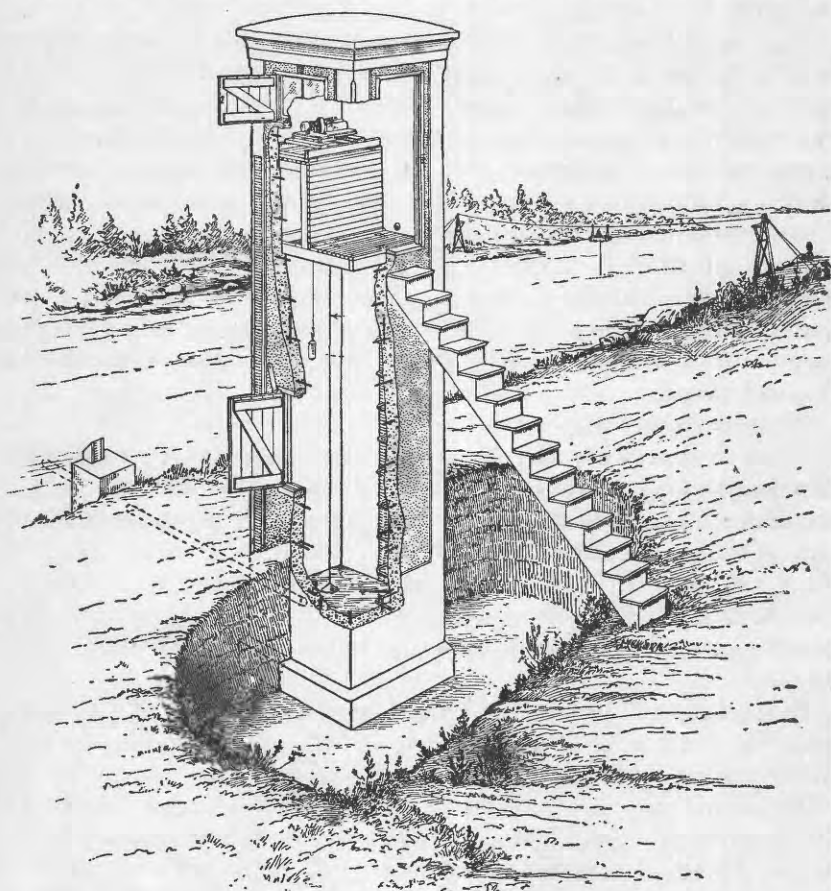


FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

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 or chain gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods 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 computed.

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 discharge, 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 nonrecording 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," within 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 run-off in inches may be subject to gross errors caused by the inclusion of large noncontributing 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 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

Investigations 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, underground 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 bulletins, professional papers, monographs, 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 1. North Atlantic slope basins (St. John to York River).
- 2. South Atlantic slope and eastern Gulf of Mexico basins (James River to the Mississippi).
- 3. Ohio River Basin.
- 4. St. Lawrence River Basin.
- 5. Hudson Bay and upper Mississippi River Basins.
- 6. Missouri River Basin.
- 7. Lower Mississippi River Basin.
- 8. Western Gulf of Mexico basins.

Part 9. Colorado River Basin.

10. The Great Basin.
11. Pacific slope basins in California.
12. North Pacific slope drainage basins, in three volumes:
 - 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., 318 State Office Building.
 Albany, N. Y., 506 Broadway-Arcade Building.
 Trenton, N. J., 710 Trenton Trust Building.
 Harrisburg, Pa., 366 State Capitol.
 Charlottesville, Va., Brooks Museum, University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 220 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., 319 Federal Building.
 Chicago, Ill., 1503 Consumers Building.
 Madison, Wis., 337 N. 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.
 Santa Fe, N. Mex., 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 6,070 points in the United States, and the data obtained have been published in the reports tabulated below.

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	
11th A, pt. 2	Monthly discharge and descriptive information	1884 to Sept. 1890
12th A, pt. 2	do	1884 to June 30, 1891
13th A, pt. 3	Mean discharge in second-feet	1884 to Dec. 31, 1892
14th A, pt. 2	Monthly discharge (long-time records, 1871 to 1893)	1888 to Dec. 31, 1893
B 131	Descriptions, measurements, gage heights, and ratings	1893 and 1894
16th A, pt. 2	Descriptive information only	
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)	1896
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 178	do	1905
W 201 to 214	do	1906
W 241 to 252	do	1907-8
W 261 to 272	do	1909
W 281 to 292	do	1910
W 301 to 312	do	1911
W 321 to 332	do	1912
W 351 to 362	do	1913
W 381 to 394	do	1914
W 401 to 414	do	1915
W 431 to 444	do	1916
W 451 to 464	do	1917
W 471 to 484	do	1918
W 501 to 514	do	1919-20
W 521 to 534	do	1921
W 541 to 554	do	1922
W 561 to 574	do	1923
W 581 to 594	do	1924
W 601 to 614	do	1925
W 621 to 634	do	1926
W 641 to 654	do	1927
W 661 to 674	do	1928
W 681 to 694	do	1929
W 696 to 709	do	1930

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 1930. 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 3 are published in Water-Supply Papers 287, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

Numbers of water-supply papers containing results of stream measurements, 1899-1930

[For basins included see p. 5]

Year	1	2	3	4	5	6	7	8	9	10	11	12-A	12-B	12-C
1899	35	35, 36	36	36	36	36, 37	37	37	37, 38	38, 39	38, 39	38	38	38
1900	47, 48	48	48, 49	49	49	49, 50	50	50	50	51	51	51	51	51
1901	66, 75	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
1902	82	82	82	82	82	82	82	82	82	85	85	85	85	85
1903	97	97	97	97	97	97	97	97	97	100	100	100	100	100
1904	124, 125	126, 127	126, 127	126, 127	126, 127	126, 127	126, 127	126, 127	126, 127	133, 134	133, 134	133, 134	133, 134	133, 134
1905	165, 166	167, 168	168	170	171	172	169, 173	174	175, 177	176, 177	177	178	178	177, 178
1906	201, 202	203, 204	205	205	207	208	205, 209	210	211, 213	212, 213	213	214	214	214
1907-8	241	242	243	244	245	246	247	248	249	250, 251	251	252	252	252
1909	261	262	263	264	265	266	267	268	269	270, 271	271	272	272	272
1910	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B	332-C
1913	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B	362-C
1914	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1915	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1916	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919-20	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1930	696	697	698	699	700	701	702	703	704	705	706	707	708	709

- * Rating tables and Index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1999 in Twenty-first Annual Report, Part 4.
- * James River only.
- * Green and Gunnison Rivers and Grand River above junction with Gunnison.
- * Molave River only.
- * Kings and Kern Rivers and South Pacific slope basins.
- * 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 4.
- * Wisconsin and Schuykill Rivers to James River.
- * Scloto River.
- * Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte.
- * Tributaries of Mississippi from east.
- * Lake Ontario and tributaries to St. Lawrence River proper.
- * Hudson Bay only.
- * New England rivers only.
- * Hudson River to Delaware River, inclusive.
- * Susquehanna River to Yackin River, inclusive.
- * Platte and Kansas Rivers.
- * Great Basin in California except Truckee and Carson River Basins.
- * Below junction with Gila.
- * 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 1930 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 the 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 E. W. Framer, district engineer, and by 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 the 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., Merced Irrigation District, Southern Sierras Power Co., East Bay Municipal Utility District, and other permittees and licensees of the Federal Power Commission.

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

Acknowledgment is due also to the Corps of Engineers, United States Army, for financial assistance in collecting records published herein.

DIVISION OF WORK

The data for stations in California, except for the stations on Klamath River and Fall Creek near Copco, Calif., were collected and prepared for publication under the direction of H. D. McGlashan,

district engineer, assisted by F. C. Ebert, R. C. Briggs, Charles Leidl, C. J. Emerson, Jesse Arnold, Jarrett Oliver, H. C. Troxell, A. C. Swanson, Conrad D. Bue, C. R. Reed, F. A. Johnson, H. C. McCreery, L. E. Bossen, B. C. Colby, R. S. Lord, K. R. Melin, and H. J. Tompkins.

The data for stations in Oregon, except for stations in Goose Lake, Fourmile Lake, and Keene Creek basins, and for stations on Klamath River and Fall Creek near Copco, Calif., were collected and prepared for publication under the direction of G. H. Canfield, district engineer, assisted by K. N. Phillips, B. S. Barnes, A. H. Williams, H. M. Orem, and W. T. Miller, and by H. K. Smith and A. L. Crawford, hydrographers of the United States Bureau of Reclamation. Data for stations in Goose Lake, Fourmile Lake, and Keene Creek basins were collected and computed by the State of Oregon under supervision of Rhea Luper, State engineer, and were reviewed, checked, and prepared for publication by G. H. Canfield, district engineer, assisted by K. N. Phillips and A. H. Williams.

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, $1\frac{1}{2}$ miles upstream.

RECORDS AVAILABLE.—May, 1912, to September, 1930 (incomplete).

EXTREMES.—Maximum discharge during year, 760 second-feet Mar. 16 (gage height, 2.35 feet); no flow during summer.

1912-1930: Maximum discharge, 70,200 second-feet Jan. 27, 1916 (gage height, 25.1 feet); practically no flow for several months each year except for a small amount of underground water being forced to surface.

REMARKS.—Records good. Discharge estimated Dec. 1-4 and June 25 to July 31. 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 and by city of San Diego.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0.1	0.2	0.2	0.1	4.7	33	2.0	
2.....	.1	.1	.2	.1	2.8	83	1.8	
3.....	.1	.1	.2	.1	2.5	56	2.3	
4.....	.1	.1	.2	.1	1.9	75	2.3	
5.....	.2	.6	.1	1.9	1.6	430	1.8	
6.....	.2	.6	.1	5	1.9	269	1.4	
7.....	.2	2.1	.2	.7	1.9	128	1.4	
8.....	.2	.6	.1	.3	1.8	119	1.2	
9.....	.2	1.2	.1	.3	1.9	169	1.2	
10.....	.2	2.8	.4	.2	1.6	103	1.6	
11.....	.2	5.5	.2	.1	1.4	83	1.6	
12.....	.2	1.1	.1	.1	1.1	64	1.6	
13.....	.2	1.8	.1	.1	1.8	33	1.6	
14.....	.2	.9	.1	.2	1.6	19	1.6	
15.....	.2	.4	.2	37	1.4	17	1.2	
16.....	.2	.3	.1	337	1.4	18	.9	0.1
17.....	.2	.2	.1	103	1.4	36	.9	
18.....	.2	.4	.1	103	1.1	52	.9	
19.....	.2	.3	.1	59	.9	30	1.4	
20.....	.2	.3	.3	26	.9	11	1.2	
21.....	.2	.3	.2	12	.9	7.5	.7	
22.....	.2	.2	.2	12	.9	6	.5	
23.....	.2	.2	.4	10	.9	4.4	.5	
24.....	.1	.2	.2	6	.7	3.9	.5	
25.....	.1	.2	.2	5	.9	2.7	.4	
26.....	.1	.2	.1	4.3	.7	2.3	.4	
27.....	.1	.4	.2	4.3	.7	2.5	.3	
28.....	.1	.2	.2	4.3	.7	2.3	.3	
29.....	.1	.2	-----	2.8	.7	2.3	.2	
30.....	.1	.2	-----	3.2	2.8	2.3	.2	
31.....	.2	.2	-----	5.5	-----	2.0	-----	
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
December.....	0.2		0.1		0.16		9.8	
January.....	5.5		.1		.71		43.7	
February.....	.4		.1		.18		10.0	
March.....	337		.1		2.40		1,480	
April.....	4.7		.7		1.52		90.4	
May.....	430		2.0		60.2		3,700	
June.....	2.3		.2		1.13		67.2	
July.....	-----		-----		.10		6.1	
The year.....	430		-----		7.46		5,410	

NOTE.—No flow during months for which no record is shown.

SAN DIEGUITO RIVER BASIN

SAN DIEGUITO RIVER AT LAKE HODGES, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 18, T. 13 S., R. 2 W., at Lake Hodges Dam, $\frac{5}{8}$ miles southwest of Escondido.

DRAINAGE AREA.—299 square miles.

RECORDS AVAILABLE.—January, 1916, to September, 1930.

REMARKS.—Irrigation diversions in San Pasqual Valley above Lake Hodges; also pumping from wells along the 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., 1929-30

Month	Storage in acre-feet		Decrease during month in acre-feet			Inflow in acre-feet ^b
	End of month	Increase or decrease	Draft	Net evaporation ^a	Leakage or spill	
September.....	26,256					
October.....	24,852	-1,404	846	-433	2	0
November.....	23,626	-1,226	780	-347	2	0
December.....	22,760	-866	594	-296	2	26
January.....	23,500	+740	616	+338	3	1,021
February.....	23,771	+271	389	-87	2	749
March.....	28,840	+5,069	8	+26	3	5,054
April.....	29,062	+222	366	-246	3	837
May.....	35,667	+6,605	841	-255	3	7,704
June.....	34,211	-1,456	837	-692	?	76
July.....	32,350	-1,861	983	-810	?	0
August.....	30,543	-1,807	1,053	-716	?	0
September.....	28,729	-1,814	1,082	-644	3	0
The year.....						15,467

^a Net evaporation equals gross evaporation minus rainfall.

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

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 mile north of Mesa Grande.

DRAINAGE AREA.—209 square miles at former gaging station 1 mile below dam. RECORDS AVAILABLE.—October, 1911, to September, 1930.

REMARKS.—Lake Henshaw Reservoir was completed in 1927 and the gaging station formerly maintained 1 mile below the dam was abandoned. The following table gives the inflow of San Luis Rey River to Lake Henshaw as computed from storage data on the lake. No diversions above station. Complete record except inflow furnished by San Diego County Water Co.

Inflow of San Luis Rey River to Lake Henshaw, near Mesa Grande, Calif., 1929-30

Month	Storage in acre-feet		Decrease during month in acre-feet		Inflow in acre-feet
	End of month	Increase or decrease	Draft	Net evaporation ^a	
September.....	63,970				
October.....	62,796	-1,174	9.3	+1,277.7	113
November.....	61,004	-1,792	765	+1,145.3	118
December.....	59,011	-1,993	1,443.4	+647.7	98
January.....	63,518	+4,507	190.1	-1,158.6	3,538
February.....	64,549	+1,031	452.3	+120.2	1,603
March.....	69,108	+4,559	280.4	-384.4	4,455
April.....	66,932	-2,176	2,828.5	+633.1	1,285
May.....	71,062	+4,130	0	+125.3	4,255
June.....	69,506	-1,556	522.5	+1,660.5	627
July.....	66,157	-3,349	1,743.2	+2,228.0	622
August.....	61,785	-4,372	2,760.1	+2,011.2	399
September.....	59,750	-2,035	728.3	+1,687.0	380
The year.....		-4,220	+11,723.1	+9,993.0	17,496

^a Net evaporation equals gross evaporation minus rainfall.^b Inflow equals increase or decrease in storage plus draft and net evaporation; computed by engineers of U. S. Geological 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.

SAN LUIS REY RIVER BASIN

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SAN LUIS REY RIVER NEAR BONSAI, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 1, T. 11 S., R. 4 W., three-fourths mile below highway bridge on Fallbrook-Escondido Road 3 miles southwest of Bonsai.

RECORDS AVAILABLE.—April, 1912, to September, 1918; December, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 486 second-feet May 5 (gage height, 3.83 feet); no flow during part of year.

1912-1918; 1929-30: Maximum discharge, 9,000 second-feet Feb. 11, 1915; maximum stage for flood of January, 1916, not known; no flow during part of each year.

REMARKS.—Records good. Flow regulated at Lake Henshaw. Numerous diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	20	15	31	28	14	0.2
2.....	0	20	14	32	110	14	.2
3.....	0	19	17	25	65	12	.2
4.....	0	16	17	23	139	10	.2
5.....	0	17	21	18	339	9.5	.2
6.....	0	17	28	14	239	8.5	.2
7.....	0	17	25	14	144	7	.2
8.....	0	16	20	14	110	6	.2
9.....	0	16	19	12	100	4.8	.2
10.....	0	17	16	9.5	92	4.8	.2
11.....	0	17	14	9.5	83	4.4	.1
12.....	2.0	16	13	8.5	70	4.1	.1
13.....	0	15	13	8	61	4.1	.1
14.....	.3	15	17	8.5	65	3.8	.1
15.....	0	15	48	8	60	3.8	0
16.....	8	13	57	7.5	47	3.8	0
17.....	6.5	11	50	6.5	48	3.0	0
18.....	6.5	10	53	6	55	3.0	0
19.....	6	11	53	4.3	45	3.0	0
20.....	7	13	44	4.0	42	3.0	0
21.....	6.5	14	42	3.7	38	2.4	0
22.....	7	12	42	3.4	31	2.0	0
23.....	8	20	39	3.4	27	1.7	0
24.....	8	21	35	2.5	24	1.7	0
25.....	8	18	30	2.5	22	1.2	0
26.....	8	15	27	2.5	19	1.0	0
27.....	20	17	23	2.2	19	.7	0
28.....	49	16	20	2.2	19	.4	0
29.....	39	-----	15	2.8	16	.4	0
30.....	25	-----	15	9	14	.2	0
31.....	21	-----	21	-----	14	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	49	0	7.61	468
February.....	21	10	15.9	883
March.....	57	13	27.8	1,710
April.....	32	2.2	9.92	590
May.....	339	14	69.8	4,290
June.....	14	.2	4.61	274
July.....	.2	0	.08	4.9
The year.....	339	0	11.4	8,220

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

SAN LUIS REY RIVER AT OCEANSIDE, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 23, T. 11 S., R. 5 W., three-eighths mile above State highway bridge at Oceanside.

RECORDS AVAILABLE.—April, 1912, to September, 1914; January, 1916; December, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 330 second-feet May 6 (gage height, 4.62 feet); no flow during parts of year.

1912-1914, 1916, 1929-30: Maximum discharge, 95,670 second-feet Jan. 12, 1916; no flow for several months.

REMARKS.—Record good. Discharge estimated May 25-27. Flow regulated at Lake Henshaw. Numerous diversions above station.

Daily and monthly discharge, in second-feet, 1912-30

Day	May	June	Day	May	June	Day	May	June
1.....	0	1.9	11.....	66	0	21.....	27	0
2.....	0	.7	12.....	56	0	22.....	24	0
3.....	0	.6	13.....	43	0	23.....	19	0
4.....	28	2	14.....	41	0	24.....	15	0
5.....	191	.1	15.....	38	0	25.....	12	0
6.....	263	0	16.....	35	0	26.....	10	0
7.....	148	0	17.....	33	0	27.....	8	0
8.....	108	0	18.....	33	0	28.....	6	0
9.....	84	0	19.....	35	0	29.....	5	0
10.....	75	0	20.....	31	0	30.....	4.2	0
						31.....	3.1	-----
Month				Maximum	Minimum	Mean	Run-off in acre-feet	
May.....				263	0	46.7	2,370	
June.....				1.9	0	.12	7.1	
The period.....				263	0	3.96	2,380	

NOTE.—No flow during December to April and July to September.

SANTA MARGARITA RIVER BASIN

TEMECULA CREEK AT NIGGER CANYON, NEAR TEMECULA, CALIF.

LOCATION.—Water-stage recorder on the Pauba land grant, at upper end of Nigger Canyon, 10 miles east of Temecula. Arroyo Seco enters on left above gage.

DRAINAGE AREA.—319 square miles.

RECORDS AVAILABLE.—January, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year not determined; minimum, 1.2 second-feet Aug. 28 (gage height, 8.54 feet).

1923-1930: Maximum discharge, 17,100 second-feet Feb. 16, 1927 (gage height, 19.5 feet); minimum, 0.8 second-foot Sept. 30, 1924.

REMARKS.—Records good. No diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	2.1	2.2	2.6	4.2	5	16	66	6.5	2.3	1.9	1.9
2	1.8	2.0	2.2	2.6	3.8	4.7	13	49	6	2.4	1.9	1.9
3	1.9	2.0	2.2	2.6	2.8	4.7	11	49	5.5	2.3	1.8	1.9
4	2.1	2.1	2.4	2.7	2.6	4.7	10	266	5	2.4	1.8	1.8
5	2.2	2.1	2.3	2.9	2.6	22	9	196	4.7	2.4	1.8	1.7
6	2.4	2.2	2.3	2.9	2.4	15	8	90	4.0	2.0	1.9	1.8
7	2.4	2.2	2.4	6	2.8	10	7.5	66	4.0	2.1	2.1	1.8
8	2.3	2.3	2.4	3.0	3.3	7.5	7.5	62	3.8	2.1	1.9	1.8
9	2.4	2.4	2.4	3.7	3.3	7.5	6.5	55	3.5	2.1	1.8	1.9
10	2.4	2.6	2.6	14	3.3	6.5	6	48	3.5	2.0	1.8	1.8
11	2.4	2.7	2.6	25	3.8	6.5	5.5	39	3.5	1.9	1.8	1.8
12	2.4	2.7	2.6	11	4.2	7	5.5	28	3.5	1.8	1.7	1.8
13	2.3	2.9	2.6	12	4.2	7	5.5	21	3.5	1.8	1.6	1.8
14	2.3	2.9	2.4	7	3.3	10	5.5	18	3.5	1.8	1.7	1.8
15	2.3	2.8	2.3	10	2.8	102	5	18	3.3	1.7	1.8	1.8
16	2.4	2.6	2.2	9	3.3	72	5	18	3.2	1.8	1.9	1.7
17	2.4	2.6	2.2	8	3.3	74	4.7	17	3.0	1.7	1.9	1.7
18	2.4	2.6	2.2	7	3.8	55	4.7	16	3.0	1.7	1.9	1.6
19	2.4	2.6	2.2	6	3.8	44	4.5	15	3.2	1.7	1.9	1.7
20	2.3	2.3	2.2	4.5	3.8	35	4.5	12	3.0	1.7	1.9	1.7
21	2.2	2.3	2.3	4.0	4.7	26	4.5	9.5	2.6	1.8	1.8	1.8
22	2.2	2.3	2.3	3.5	4.0	21	4.0	9	2.5	1.8	2.4	1.8
23	2.1	2.3	2.3	2.9	6.5	16	3.8	8.5	2.4	1.8	2.1	1.8
24	2.1	2.3	2.4	3.0	3.8	14	4.0	8	2.3	1.8	1.3	1.8
25	2.2	2.3	2.4	3.0	3.3	14	4.0	8	2.3	1.7	1.3	1.8
26	2.3	2.2	2.4	3.0	5	12	4.3	7.5	2.1	1.7	1.3	1.7
27	2.3	2.1	2.4	80	7.5	9.5	4.7	7.5	2.1	1.7	1.3	1.8
28	2.3	2.1	2.4	92	5	9.5	4.5	7.5	2.1	1.7	1.2	1.9
29	2.2	2.0	2.3	12	—	9.5	5	7.5	2.3	1.7	1.3	2.0
30	2.2	2.0	2.3	6	—	9.5	12	7.5	2.3	1.9	1.4	2.0
31	2.1	—	2.4	5	—	18	—	6.5	—	1.9	1.8	—

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.4	1.8	2.25	128
November	2.9	2.0	2.35	140
December	2.6	2.2	2.35	144
January	92	2.6	11.5	707
February	7.5	2.4	3.85	213
March	102	4.7	21.3	1,510
April	16	3.8	6.5	388
May	266	6.5	39.8	2,450
June	6.5	2.1	3.41	203
July	2.4	1.7	1.91	117
August	2.4	1.2	1.74	107
September	2.0	1.6	1.80	107
The year	266	1.2	8.32	6,020

• Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, about 1,900 second-feet Jan. 27 (gage height, 3.20 feet); minimum, 1.5 second-feet Oct. 15.

1923-1930: Maximum discharge, about 27,600 second-feet Feb. 16, 1927 (gage height, 15.0 feet); minimum, 0.4 second-foot July 16, 1925.

REMARKS.—Records good. Pumping diversions regulate flow to a considerable extent during irrigation season.

Daily and monthly discharge, in second-feet, 1923-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.1	4.3	6	5.5	12	10	12	19	8	5.5	4.5	4.3
2	4.1	4.1	4.1	5.5	10	10	11	17	8.5	5.5	4.5	4.3
3	4.1	4.1	2.5	5.5	10	12	10	18	8	5.5	4.5	4.3
4	4.1	3.7	2.9	5.5	13	11	8.5	39	7.5	4.7	4.5	4.1
5	4.5	3.4	3.4	6	15	15	7.5	59	7.5	4.5	4.5	3.9
6	4.5	2.5	3.6	7	14	13	7.5	27	6.5	4.7	4.9	4.3
7	4.3	2.5	3.7	12	14	11	7	16	6	4.5	6	4.5
8	4.3	2.7	4.5	9	12	10	7.5	17	6	5.5	6	4.7
9	4.1	2.7	4.5	13	11	10	7.5	21	6	6.5	6	4.5
10	2.3	3.7	6.5	24	13	9.5	8	15	7	6	5.5	4.5
11	2.9	2.9	4.1	97	11	9.5	9.5	12	7	6	5	4.5
12	3.9	3.6	2.9	55	10	9	9	10	7	5.5	4.5	4.7
13	3.9	1.7	4.9	45	10	9.5	10	10	6.5	4.9	4.3	4.7
14	3.9	1.7	5.5	27	11	14	10	10	7	4.7	4.3	4.7
15	1.5	1.8	5.5	23	10	151	9.5	10	7	4.5	4.7	4.5
16	3.4	2.3	6.5	19	9	113	9.5	11	6	4.5	4.7	4.7
17	4.7	2.5	4.9	16	9	75	7.5	9.5	6.5	4.7	4.3	4.7
18	4.3	2.7	4.9	14	10	34	6	9	7.5	4.7	3.7	4.7
19	4.1	2.7	3.7	14	9	20	5.5	8	7.5	4.9	4.5	4.7
20	4.1	2.6	3.7	13	10	14	8	7.5	7	5	4.3	4.9
21	3.7	2.7	5.5	12	10	12	8	7.5	6	5.5	4.3	4.9
22	3.6	2.6	5.5	11	10	12	6.5	7.5	6	5.5	4.1	5
23	3.6	3.3	5.5	11	13	11	4.9	7	6	5	4.1	5
24	3.4	4.3	6	11	9.5	10	3.9	7.5	5.5	5	4.3	4.9
25	4.1	2.6	7.5	10	9.5	12	3.1	7.5	6	5	3.9	4.7
26	5	3.1	6.5	11	9.5	11	2.9	8	4.9	5	3.9	5
27	5	3.1	4.1	561	14	10	2.5	8	4.3	4.9	3.9	5.5
28	5	5	4.7	133	12	10	3.1	8	4.3	4.9	3.7	5.5
29	5	4.5	6.5	22	-----	10	4.7	8	4.7	4.7	3.6	5.5
30	4.9	3.9	7.5	18	-----	12	14	8	5.5	5.5	3.9	6
31	4.7	-----	6.5	15	-----	16	-----	8	-----	4.9	4.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	5	1.5	4.04	248
November	4.5	1.7	3.11	185
December	7.5	2.5	4.97	306
January	561	5.5	39.7	2,440
February	15	9	11.1	615
March	151	9	22.1	1,560
April	14	2.5	7.49	446
May	59	7	13.9	855
June	8.5	4.3	6.44	383
July	6.5	4.5	5.10	314
August	6	3.6	4.49	276
September	6	3.6	4.74	282
The year	561	1.5	10.7	7,711

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.

DRAINAGE AREA.—645 square miles.

RECORDS AVAILABLE.—November, 1924, to September, 1930.

EXTREMES.—Maximum gage height during year, 5.50 feet Dec. 27 (discharge not determined); minimum discharge, 1.7 second-feet Oct. 4, 11, and Nov. 16.

1924-1930: Maximum discharge, about 33,100 second-feet Feb. 16, 1927 (gage height, 15.6 feet); minimum, 0.1 second-foot Aug. 30, 1925, Sept. 4, 1926, Sept. 6, 1928, and July 22-26, Aug. 4, 5, and 8-14, 1929.

REMARKS.—Records fair. Considerable diversions from streams in Temecula Valley and pumping above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.5	4.2	3.9	5.5	20	13	14	37	7.5	4.7	3.7	3.4
2.....	2.3	3.9	5	5	18	12	13	34	7.5	4.7	3.3	3.4
3.....	2.1	3.5	3.8	5.5	18	12	12	29	* 7	4.8	3.3	2.8
4.....	1.7	3.1	3.2	5.5	15	13	11	82	* 6.5	4.5	3.3	2.7
5.....	1.8	3.1	3.4	6	14	21	9	90	* 6	4.2	3.3	2.4
6.....	1.8	3.0	3.9	7.5	15	18	8	58	6	4.0	3.4	2.7
7.....	2.0	2.3	3.9	13	14	14	7	34	5.5	4.2	3.9	3.1
8.....	2.5	2.2	3.9	11	14	12	8	32	5.5	4.5	5	3.3
9.....	2.9	2.3	4.4	11	14	12	* 9	36	5.5	5	4.8	3.4
10.....	3.1	2.3	4.4	44	15	11	* 9	31	6	5	4.8	3.6
11.....	1.7	2.8	5.5	67	13	10	9.5	30	6.5	4.8	4.8	3.7
12.....	2.3	2.6	3.6	61	12	9	9	17	6.5	4.5	4.7	3.7
13.....	2.7	2.7	3.3	61	12	9	9	15	6	4.2	3.9	3.7
14.....	2.9	1.9	4.4	46	12	12	* 9	15	6	3.7	3.6	3.7
15.....	2.9	1.8	4.9	38	12	158	* 9	15	6	3.4	3.7	3.6
16.....	2.1	1.7	5	26	12	113	9.5	14	5.5	3.6	3.9	3.9
17.....	2.7	1.8	5	22	12	94	9.5	14	5	3.7	3.7	4.0
18.....	3.3	1.9	4.6	19	12	46	7	12	5.5	3.3	3.3	3.9
19.....	3.1	1.9	4.9	16	12	30	6	12	6	3.4	3.0	3.6
20.....	2.9	2.3	3.6	16	12	28	6.5	11	6.5	4.0	3.1	3.7
21.....	2.9	2.3	4.4	15	12	20	7	10	5.5	4.2	3.0	4.0
22.....	2.9	2.3	5	14	12	17	7.5	10	5	4.2	2.8	4.0
23.....	3.1	2.3	5	12	15	17	5.5	9.5	4.8	4.2	2.7	4.0
24.....	2.9	2.6	5	12	13	16	* 5	9.5	4.7	3.9	2.6	4.0
25.....	2.5	3.0	5	12	12	15	* 4.5	9	5	3.7	2.4	4.0
26.....	2.9	2.4	6.5	13	12	14	* 4.0	8	5	3.6	2.4	4.2
27.....	3.3	3.6	4.9	*500	15	15	* 3.5	7.5	4.8	3.4	2.6	4.2
28.....	3.7	3.0	3.9	250	13	15	3.0	* 8	4.2	3.1	2.7	4.4
29.....	4.2	3.9	4.1	*40	-----	15	* 5	8	4.4	3.1	2.6	4.5
30.....	5.1	3.9	5.5	20	-----	16	* 8	8	4.5	3.6	2.8	4.8
31.....	4.2	-----	6.5	*20	-----	18	-----	8	-----	4.5	3.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5.1	1.7	2.81	173
November.....	4.2	1.7	2.65	158
December.....	6.5	3.2	4.53	279
January.....	500	5	45.0	2,770
February.....	20	12	13.7	761
March.....	158	9	26.6	1,640
April.....	14	3	7.90	470
May.....	90	7.5	23.0	1,410
June.....	7.5	4.2	5.68	338
July.....	5	3.1	4.05	249
August.....	5	2.4	3.43	211
September.....	4.8	2.4	3.68	219
The year.....	500	1.7	12.0	8,680

* Estimated.

SAN JUAN CREEK BASIN

SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 12, T. 8 S., R. 8 W., 300 feet upstream from State highway bridge half a mile south of San Juan Capistrano.

DRAINAGE AREA.—117 square miles.

RECORDS AVAILABLE.—January, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, about 1,230 second-feet Mar. 16 (gage height, 2.90 feet); no flow for several months.

1929-30: Maximum discharge, that of Mar. 16, 1930; no flow during each summer.

REMARKS.—Record fair. Discharge estimated Jan. 27 to Mar. 14 and May 25-30. Irrigation diversion above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1-----	0	0.7	1.1	12	10	16-----	0	0.9	362	5.5	4.6
2-----	0	.7	1.2	11	9	17-----	0	.9	172	4.6	3.9
3-----	0	.8	1.3	9.5	9.5	18-----	0	.8	108	4.3	2.8
4-----	0	.8	1.3	9	18	19-----	0	.8	83	3.5	2.4
5-----	0	.9	1.4	8	22	20-----	0	.8	48	2.8	1.7
6-----	0	.9	1.6	8	21	21-----	0	.9	27	2.4	2.0
7-----	0	.9	1.8	8	16	22-----	0	.9	18	1.7	1.3
8-----	0	1.0	1.9	7.5	14	23-----	0	.9	17	1.3	1.7
9-----	0	1.0	1.7	7	13	24-----	0	1.0	13	1.0	2.0
10-----	0	1.0	1.5	6.5	11	25-----	0	1.0	11	.4	1.6
11-----	0	1.0	1.3	6.5	9	26-----	0	1.0	11	.4	1.2
12-----	0	1.0	1.1	6.5	7.5	27-----	100	1.0	10	.2	.8
13-----	0	1.0	1.1	6.5	6.5	28-----	10	1.1	9.5	.4	.4
14-----	0	1.0	2.0	6.5	7	29-----	3.5	-----	9.5	.2	.3
15-----	0	.9	203	6.5	5	30-----	2.0	-----	11	3.2	.2
						31-----	1.0	-----	11	-----	.1
Month						Maximum	Minimum	Mean	Run-off in acre-feet		
January-----						100	0	3.76	231		
February-----						1.1	.7	.91	50.5		
March-----						362	1.1	36.9	2,270		
April-----						12	.2	5.03	299		
May-----						22	.1	6.63	408		
The year-----						362	0	4.50	3,260		

NOTE.—No flow during months for which no discharge is shown.

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, 1930.

EXTREMES.—Maximum gage height during year, 2.50 feet May 3 (discharge not determined); minimum discharge, 0.2 second-foot Aug. 5, 6, Sept. 12–21, and 26–28.

1896–1930: Maximum discharge, 29,100 second-feet Jan. 27, 1916; minimum, 0.1 second-foot Oct. 12, 1919.

REMARKS.—Records good except those for estimated periods, which are fair. Diversions and regulation above station. The sum of the discharge in the river, the Mentone power plant's tail race, and the Greenspot pipe line is given in the table on page 22.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.9	*0.5	*0.6	0.5	*4.0	8	18	31	3.0	0.6	*.4	0.3
2.....	.8	.5	.6	.5	*3.5	7	15	18	2.7	.6	.3	.3
3.....	.8	.5	.6	.6	*3.0	6	14	115	2.3	.6	.3	.3
4.....	.8	.5	.6	.6	2.4	6	*12	167	2.1	.6	.3	.3
5.....	.8	.5	.6	.6	2.8	62	*10	139	1.9	.6	.2	.3
6.....	.8	.5	.6	.8	2.0	32	*8	80	1.9	.7	.2	.3
7.....	.8	.6	.6	2.1	1.7	15	*5	58	1.9	.6	.3	.3
8.....	.8	.5	.6	1.9	1.9	13	3.2	42	2.0	.6	.3	.3
9.....	.9	.5	.6	1.9	1.9	12	2.8	44	2.0	.6	.3	.3
10.....	.9	.5	.6	4.7	2.0	11	2.6	33	2.0	.6	.3	.3
11.....	.9	.5	.6	8	1.9	9	2.3	25	2.0	.6	.4	.3
12.....	.9	.8	.6	7.5	1.8	8.5	2.1	26	2.1	.5	.3	.2
13.....	.9	.8	.6	6.5	1.7	6	2.0	19	2.1	.5	.3	.2
14.....	1.0	.8	.5	7.5	1.8	15	1.9	15	2.1	.6	.4	.2
15.....	1.0	.7	.5	19	1.7	108	1.9	21	2.0	.6	.4	.2
16.....	1.0	.7	.5	16	1.6	82	1.9	21	1.9	.5	.4	.2
17.....	.9	.6	.5	11	1.6	71	1.8	19	1.9	.5	.4	.2
18.....	.9	.6	.5	17	1.5	46	1.8	16	1.9	.5	.4	.2
19.....	.8	.6	.6	*13	1.7	35	1.8	15	2.0	.5	.4	.2
20.....	*.8	.6	.6	*13	2.0	33	1.8	15	2.1	.5	.3	.2
21.....	*.8	.5	.6	10	2.7	31	1.9	11	2.0	.5	.3	.2
22.....	*.7	.6	.6	8.5	3.4	24	1.9	8.5	1.6	.5	.3	.3
23.....	*.7	.6	.6	5.5	20	20	2.0	7	1.3	.5	.3	.3
24.....	*.7	*.6	.6	2.7	9	15	2.0	5.5	1.1	.5	.3	.3
25.....	*.6	*.6	.6	2.0	7.5	9.5	2.0	4.5	1.0	.4	.3	.3
26.....	*.6	*.6	.6	1.7	8.5	7.5	2.0	4.3	1.0	.4	.4	.2
27.....	*.6	*.6	.5	6.5	10	5.5	2.0	*4.5	.8	.4	.4	.2
28.....	*.6	*.6	.5	7.5	9	7.5	2.0	4.7	.8	.4	.3	.2
29.....	*.5	*.6	.6	6	-----	9	2.0	4.3	.6	.4	.3	.3
30.....	*.5	*.6	.6	*5	-----	11	10.0	3.6	.6	.4	.3	.3
31.....	*.5	-----	.5	*4.5	-----	18	-----	3.1	-----	.4	.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1.0	0.5	0.78	48
November.....	.8	.5	.59	35.1
December.....	.6	.5	.57	35
January.....	19	.5	6.21	382
February.....	20	1.5	4.02	223
March.....	108	5.5	24	1,480
April.....	18	1.8	4.59	273
May.....	167	3.1	31.6	1,940
June.....	3.0	.6	1.76	105
July.....	.7	.4	.52	32
August.....	.4	.2	.33	20.3
September.....	.3	.2	.26	15.5
The year.....	167	.2	6.34	4,590

* Estimated.

*Daily and monthly discharge, in second-feet, of Santa Ana River and canals near
Mentone, Calif., 1929-30*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	35	26	19.8	22	28	36	64	81	57	39	40	38
2.....	33	19.7	16.1	22	28	34	59	66	57	38	42	38
3.....	35	19.7	18.6	22	32	34	58	169	56	37	38	38
4.....	35	22	19.1	22	29	36	56	242	52	37	40	38
5.....	38	18	19.9	24	29	114	53	200	52	37	40	38
6.....	38	18	21	22	28	65	52	150	44	41	43	40
7.....	36	19.8	18.6	24	28	56	51	128	51	41	45	40
8.....	41	19.7	18.6	23	26	50	55	107	52	42	43	40
9.....	41	18	18.6	23	28	47	64	105	52	43	42	40
10.....	41	19.7	18.6	26	28	44	55	94	52	43	39	40
11.....	39	19.7	18.6	28	28	40	52	95	52	43	37	41
12.....	40	20	18.6	27	26	40	46	101	50	43	37	41
13.....	40	18.3	18.6	26	26	37	50	98	50	43	39	40
14.....	40	18.3	18.5	24	26	45	48	94	50	43	39	38
15.....	38	18.2	20	45	26	149	46	100	50	43	39	38
16.....	38	19.9	20	49	26	123	45	100	47	43	39	38
17.....	35	19.8	20	43	28	115	45	89	47	43	41	38
18.....	35	19.8	20	46	28	87	43	86	47	42	41	40
19.....	35	18.1	21	45	27	78	43	85	46	44	41	40
20.....	35	18.1	21	39	27	76	45	85	46	44	39	40
21.....	35	18	21	36	28	75	45	96	48	44	41	40
22.....	32	18.1	21	33	27	72	45	88	47	44	41	42
23.....	32	19.8	21	30	66	68	44	77	45	43	41	40
24.....	34	19.8	20	32	44	69	45	76	45	42	41	39
25.....	34	19.8	20	30	36	84	43	66	44	42	41	39
26.....	32	19.8	20	31	37	68	41	65	44	42	40	37
27.....	35	18.1	22	34	40	64	43	60	41	38	40	33
28.....	37	18.1	22	36	39	60	43	59	41	38	38	33
29.....	34	18.1	22	34	-----	61	41	58	41	38	40	33
30.....	34	19.8	22	33	-----	63	67	58	39	38	38	33
31.....	40	-----	22	31	-----	83	-----	57	-----	38	38	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	41	32	36.4	2,240
November.....	26	18	19.3	1,150
December.....	22	16.1	19.9	1,220
January.....	49	22	31.0	1,910
February.....	66	26	31.0	1,720
March.....	149	34	66.9	4,110
April.....	67	41	49.6	2,950
May.....	242	57	97.9	6,020
June.....	57	39	48.2	2,870
July.....	44	37	41.2	2,580
August.....	45	37	40.1	2,470
September.....	42	33	38.4	2,280
The year.....	242	16.1	43.5	31,500

SANTA ANA RIVER NEAR SAN BERNARDINO, CALIF.

LOCATION.—Water-stage recorder in the San Bernardino grant, a quarter of a mile upstream from the Tippecanoe Street Bridge and 2½ miles southeast of San Bernardino, San Bernardino County.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 160 second-feet May 3 (gage height, 3.03 feet); no flow during most of the year.

1928-1930: Maximum discharge, 555 second-feet Apr. 4, 1929 (gage height, 3.61 feet); no flow during most of each year.

REMARKS.—Records fair. Numerous water companies divert water from main river and tributaries above station. Flow partly regulated by storage at Bear Valley Reservoir on Bear Creek.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	May	Day	Jan.	Feb.	Mar.	May
1.....	0	0	0	0	16.....	0.5	0	19	0
2.....	0	0	0	0.2	17.....	0.1	0	0.1	0
3.....	0	0	0	71	18.....	0.1	0	0.1	0
4.....	0	0	0	46	19.....	0	0	0.1	0
5.....	0	0	29	19	20.....	0	0	0.1	0
6.....	0	0	4.6	1	21.....	0	0	0	0
7.....	0	0	0.5	0.1	22.....	0	0	0	0
8.....	0	0	0.2	0.1	23.....	0	13	0	0
9.....	0	0	0.1	0.1	24.....	0	0.1	0	0
10.....	0	0	0.1	0.1	25.....	0	0.1	0	0
11.....	6	0	0	0	26.....	0	0	0	0
12.....	0.5	0	0	0	27.....	0.4	0	0	0
13.....	0.1	0	0	0	28.....	0.1	0	0	0
14.....	0.1	0	0	0	29.....	0	0	0	0
15.....	0.1	0	35	0	30.....	0	0	0	0
					31.....	0	0	0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	6	0	0.37	22.8
February.....	13	0	0.50	27.8
March.....	35	0	2.90	178
May.....	71	0	4.44	273
The year.....	71	0	0.69	502

* Estimated. No flow during months for which no record is shown.

SANTA ANA RIVER AT RIVERSIDE NARROWS, NEAR ARLINGTON, CALIF.

LOCATION.—Water-stage recorder in the Jurupa grant, half a mile below Union Pacific Railroad bridge and 3 miles north of Arlington.

DRAINAGE AREA.—839 square miles.

RECORDS AVAILABLE.—January, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 457 second-feet Mar. 15 (gage height, 1.60 feet); minimum, 28 second-feet July 18, 19, 23, 24, and Sept. 20–28.

1929–30: Maximum discharge, 659 second-feet Apr. 5. 1929 (gage height, 1.60 feet); minimum, that of 1930.

REMARKS.—Records good. Numerous diversions. Regulation at Bear Valley Reservoir. Discharge estimated Dec. 22 to Jan. 9, Jan. 29 to Mar. 13, Mar. 18 to Apr. 29, May 6–15, 29, and June 26 to July 2.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	40	42	47	44	66	54	56	83	39	34	31	30
2.....	37	41	46	44	67	57	56	66	38	34	31	31
3.....	37	42	46	43	68	60	54	65	39	34	31	31
4.....	39	41	43	43	69	64	53	158	40	34	31	31
5.....	41	41	42	43	81	91	52	128	39	34	31	31
6.....	39	44	43	44	66	83	53	65	39	34	31	30
7.....	39	42	43	44	58	76	53	58	43	33	31	30
8.....	41	40	46	45	53	68	54	56	41	33	31	30
9.....	41	39	46	55	54	66	54	64	40	32	31	30
10.....	40	39	46	70	55	64	52	60	40	32	31	30
11.....	43	38	47	122	56	62	51	56	40	32	30	30
12.....	43	37	42	87	57	61	49	52	38	32	30	30
13.....	44	37	42	91	59	62	48	51	36	30	30	30
14.....	43	37	42	77	61	63	46	50	35	30	30	30
15.....	43	38	43	107	63	245	45	50	34	29	29	30
16.....	43	38	44	76	61	100	45	50	34	29	29	29
17.....	43	38	44	66	60	71	44	50	33	29	29	29
18.....	44	40	47	71	58	63	42	49	33	28	29	29
19.....	44	41	48	64	57	60	43	48	33	28	29	29
20.....	42	41	46	62	57	57	42	48	33	29	29	28
21.....	44	41	45	58	56	53	42	48	33	29	29	28
22.....	42	42	45	58	56	53	41	47	33	29	29	28
23.....	42	41	45	53	60	53	41	46	34	28	29	28
24.....	44	41	45	52	54	54	40	45	34	28	29	28
25.....	42	41	45	52	53	54	40	46	34	29	29	28
26.....	46	41	45	53	53	54	40	44	34	29	29	28
27.....	42	42	45	70	53	54	39	43	34	29	29	28
28.....	42	41	45	59	54	54	38	42	35	30	29	28
29.....	41	41	44	57	-----	54	44	41	35	30	29	29
30.....	42	42	44	61	-----	55	74	40	35	30	29	29
31.....	42	-----	44	65	-----	55	-----	38	-----	32	29	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	46	37	41.8	2,570
November.....	44	37	40.3	2,400
December.....	48	42	44.7	2,750
January.....	122	43	62.5	3,840
February.....	81	53	59.5	3,300
March.....	245	53	68.4	4,210
April.....	74	38	47.7	2,840
May.....	158	38	57.6	3,540
June.....	43	33	36.3	2,160
July.....	34	28	30.7	1,890
August.....	31	29	29.8	1,830
September.....	31	28	29.3	1,740
The year.....	245	28	45.7	33,100

SANTA ANA RIVER AT HAMNER AVENUE, NEAR CORONA, CALIF.

LOCATION.—Water-stage recorder in the Jurupa land grant, half a mile above Hamner Avenue and 5 miles north of Corona.

RECORDS AVAILABLE.—May to November, 1930.

REMARKS.—Record good. Discharge estimated May 1 and 4 and Oct. 14-16. See list of miscellaneous measurements for measurements made October, 1929, to April, 1930.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Oct.	Nov.
1	120	45	28	22	23	32	35
2	102	45	31	20	23	31	34
3	87	46	29	21	24	35	35
4	185	44	28	21	25	28	36
5	201	43	27	21	23	28	33
6	82	41	26	20	23	31	33
7	66	39	26	23	25	34	36
8	67	44	26	24	28	35	39
9	84	43	25	24	29	36	41
10	79	41	25	23	31	40	41
11	76	42	25	25	31	37	39
12	72	42	25	26	31	38	39
13	69	37	26	25	31	39	42
14	68	37	29	25	31	41	44
15	70	37	27	25	27	42	42
16	71	37	26	27	29	43	46
17	73	35	26	30	29	42	52
18	67	34	25	28	29	40	50
19	63	37	27	26	25	41	42
20	62	36	27	27	26	42	41
21	57	35	24	25	25	40	40
22	55	33	24	24	25	39	38
23	53	33	23	24	25	33	40
24	53	34	23	25	27	3	39
25	54	33	23	24	28	36	36
26	50	31	23	23	28	35	35
27	50	30	24	23	28	33	41
28	51	33	25	21	33	29	47
29	49	33	23	20	32	3	50
30	47	32	23	20	32	36	49
31	45		23	23		37	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May	230	45	75.1	4,620
June	46	30	37.7	2,240
July	31	23	25.5	1,570
August	30	20	23.7	1,460
September	33	23	27.5	1,640
October	43	28	36.0	2,210
November	52	33	40.5	2,410
The period				16,200

SANTA ANA RIVER AT AUBURNDALE BRIDGE, NEAR CORONA, CALIF.

LOCATION.—Water-stage recorder in the Jurupa land grant, at Auburndale Bridge, 4 miles northwest of Corona.

RECORDS AVAILABLE.—May to November, 1930.

REMARKS.—Records good. Discharge estimated May 1-3, 29, 30, Sept. 9-20, and Nov. 17 and 18. See list of miscellaneous measurements for measurements made October, 1929, to April, 1930.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Oct.	Nov.
1	135	58	41	26	29	44	45
2	120	56	45	24	29	40	45
3	115	58	44	24	29	41	43
4	224	54	42	24	29	37	45
5	208	54	42	25	29	33	45
6	118	49	40	24	30	36	45
7	89	45	39	27	31	36	44
8	85	52	40	30	35	36	50
9	94	55	38	31	36	43	50
10	86	52	40	30	38	51	48
11	81	55	37	30	39	44	47
12	78	55	34	30	39	43	48
13	74	52	33	32	39	43	55
14	75	48	34	31	39	42	55
15	80	49	31	33	35	44	54
16	82	46	30	35	39	45	60
17	90	45	30	39	39	50	64
18	84	45	28	36	39	50	60
19	77	48	31	33	35	47	56
20	75	52	30	33	34	52	54
21	71	50	32	32	33	54	54
22	67	49	33	30	32	53	50
23	64	49	34	28	32	48	50
24	66	52	33	31	33	44	54
25	67	51	30	30	35	49	50
26	65	46	28	30	34	50	48
27	67	41	29	28	34	48	59
28	68	43	31	25	38	41	64
29	66	44	30	24	41	45	68
30	62	44	30	27	44	45	62
31	61	---	29	29	---	48	---
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
May	224	61	90.1	5,540			
June	58	41	49.9	2,970			
July	45	28	34.5	2,120			
August	39	24	29.4	1,810			
September	44	29	34.9	2,080			
October	54	33	44.6	2,740			
November	68	43	52.4	3,120			
The period	---	---	---	20,400			

SANTA ANA RIVER AT SANTA FE RAILWAY BRIDGE NEAR PRADO, CALIF.

LOCATION.—Water-stage recorder in the La Sierra land grant, half mile below Santa Fe Railway bridge and $1\frac{1}{2}$ miles southwest of Prado.

RECORDS AVAILABLE.—May to November, 1930.

REMARKS.—Records good. Discharge estimated May 13–15, 21–30, and June 27 to July 2. See list of miscellaneous measurements for measurements made October, 1929, to April, 1930.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Oct.	Nov.
1.....	198	83	71	45	50	67	72
2.....	187	82	71	43	50	65	71
3.....	158	82	67	42	51	63	72
4.....	244	81	68	41	48	52	70
5.....	256	74	68	39	49	52	74
6.....	217	72	62	37	47	57	72
7.....	133	67	56	40	50	63	74
8.....	123	70	58	42	52	72	76
9.....	125	74	53	45	52	72	76
10.....	117	73	52	44	55	72	78
11.....	111	75	50	42	56	71	78
12.....	104	75	48	48	57	71	82
13.....	100	74	51	50	60	71	84
14.....	100	70	51	49	58	71	92
15.....	100	68	47	50	59	71	84
16.....	102	66	46	53	58	72	88
17.....	110	66	47	53	58	74	99
18.....	112	63	46	53	60	72	92
19.....	108	65	47	51	61	71	80
20.....	106	69	47	49	59	77	72
21.....	103	65	50	47	59	72	70
22.....	99	69	51	46	57	72	67
23.....	93	67	51	44	56	74	68
24.....	95	68	51	45	59	67	68
25.....	94	69	45	46	58	69	68
26.....	88	70	45	44	61	73	68
27.....	93	69	44	45	62	69	80
28.....	92	67	45	40	66	69	86
29.....	83	66	47	40	67	64	86
30.....	82	69	47	46	67	69	86
31.....	85	-----	48	49	-----	72	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	256	82	123	7,560
June.....	83	63	70.9	4,220
July.....	71	44	52.6	3,230
August.....	53	37	45.4	2,790
September.....	67	47	56.7	3,370
October.....	79	56	69.9	4,300
November.....	99	68	77.8	4,680
The period.....	-----	-----	-----	30,100

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.

DRAINAGE AREA.—2,235 square miles.

RECORDS AVAILABLE.—January, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 735 second-feet Mar. 15 (gage height, 3.96 feet); minimum, 29 second-feet Aug. 6.

1919-1930: Maximum discharge, about 18,000 second-feet Feb. 16, 1927 (gage height, 11.5 feet); minimum, 25 second-feet Aug. 18, 1929.

REMARKS.—Records good. Diversions and regulation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	74	71	88	142	114	116	212	78	66	38	44
2	57	73	73	94	130	112	119	188	75	64	36	47
3	53	69	71	94	130	114	114	160	73	61	39	45
4	51	71	71	92	130	123	105	262	74	62	36	41
5	50	71	69	96	154	144	110	260	75	63	30	41
6	56	73	68	106	157	157	110	228	68	59	29	43
7	60	74	71	116	154	152	106	139	64	59	35	46
8	57	74	69	121	157	152	104	119	70	51	39	45
9	62	71	73	130	149	147	106	118	68	50	40	47
10	64	73	73	234	139	139	104	120	69	50	44	45
11	71	71	73	389	142	128	100	115	73	46	44	49
12	73	71	74	311	139	128	96	113	69	43	45	47
13	73	66	76	228	137	121	92	112	71	44	47	53
14	71	66	84	198	130	142	96	111	70	53	47	54
15	74	69	88	274	132	436	98	109	71	49	45	53
16	71	69	88	237	130	351	90	112	64	47	48	56
17	74	68	92	184	128	258	84	117	65	48	50	53
18	73	69	96	165	128	187	86	109	69	50	46	56
19	69	71	98	152	125	165	84	111	73	51	47	59
20	69	69	100	144	123	147	82	108	75	51	45	56
21	60	73	98	142	125	135	78	97	67	50	42	60
22	62	66	96	128	125	132	74	98	71	49	39	58
23	59	68	96	121	154	132	76	96	72	49	36	58
24	54	69	94	119	142	128	78	96	67	48	35	63
25	57	71	92	130	132	128	73	91	64	42	39	59
26	56	74	92	132	132	123	69	82	65	41	38	57
27	59	74	90	147	123	114	71	87	64	40	34	58
28	64	68	88	173	116	106	69	86	61	40	36	64
29	69	68	86	164	-----	104	73	77	61	41	34	63
30	68	68	86	149	-----	108	88	76	65	40	40	66
31	73	-----	88	149	-----	110	-----	76	-----	40	41	-----
Month							Maximum	Minimum		Mean	Run-off in acre-feet	
October							74	50		63.6	3,910	
November							74	66		70.4	4,190	
December							100	68		83.4	5,130	
January							389	88		161	9,900	
February							157	116		136	7,550	
March							436	104		153	9,410	
April							119	69		91.8	5,480	
May							262	76		125	7,690	
June							78	61		69.0	4,110	
July							66	40		49.6	3,050	
August							50	29		40.1	2,470	
September							66	41		52.9	3,150	
The year							436	29		91.2	66,000	

SANTA ANA RIVER AT SANTA ANA, CALIF.

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

RECORDS AVAILABLE.—January, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 226 second-feet Mar. 15 (gage height, 2.72 feet); no flow for several months.

1923-1930: Maximum discharge, about 25,000 second-feet Feb. 16, 1927 (gage height, 8.2 feet); no flow for several months of each year.

REMARKS.—Records fair. Considerable diversion for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	May	Day	Jan.	Feb.	Mar.	May
1.....	0	0	0	0	16.....	* 2	0	104	0
2.....	0	0	0	0	17.....	* 5	0	54	0
3.....	0	0	0	0	18.....	* 1	0	13	0
4.....	0	0	0	12	19.....	* 1	0	13	0
5.....	0	0	0	34	20.....	0	0	* 2	0
6.....	0	0	0	* 2	21.....	0	0	* 1	0
7.....	0	0	0	* 1	22.....	0	0	* 1	0
8.....	0	0	0	0	23.....	0	* 1	* 1	0
9.....	0	0	0	0	24.....	0	* 1	0	0
10.....	0	0	0	0	25.....	0	. 1	0	0
11.....	0	0	0	0	26.....	0	* 1	0	0
12.....	0	0	0	0	27.....	0	0	0	0
13.....	0	0	0	0	28.....	0	0	0	0
14.....	0	0	0	0	29.....	0	0	0	0
15.....	21	0	125	0	30.....	0	-----	0	0
					31.....	0	-----	0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	21	0	0.76	46.7
February.....	1	0	.01	.56
March.....	125	0	9.98	614
May.....	34	0	1.58	97.2
The year.....	125	0	1.05	758

* Estimated.

NOTE.—No flow during months for which no record is shown.

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 power plant at mouth of canyon, 3 miles northeast of Mentone.

RECORDS AVAILABLE.—1896, to September, 1930.

EXTREMES.—1896-1930: Maximum mean daily canal discharge, 97 second-feet Mar. 16, 1905; no flow during short periods nearly every year.

REMARKS.—The intake of this 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 Greenspot pipe line. Canal discharge below forebay is computed from record of kilowatt output of power plant. Pipe-line discharge is computed from weir record at forebay. The sum of the records of discharge of canal and pipe line in the following tables gives the 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., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	28	26	19.2	17.5	17.5	19.2	37	43	45	32	32	32
2.....	28	19.2	15.5	17.5	17.5	17.5	35	39	45	32	34	32
3.....	30	19.2	17.5	17.5	22	19.2	35	45	45	30	30	32
4.....	28	21	17.5	17.5	19.2	21	35	66	41	30	32	32
5.....	30	17.5	17.5	19.2	19.2	43	34	52	41	30	32	32
6.....	30	17.5	17.5	17.5	19.2	24	35	61	35	34	35	34
7.....	30	19.2	15.5	17.5	19.2	32	37	61	43	34	37	34
8.....	34	19.2	15.5	17.5	17.5	28	43	56	43	34	35	34
9.....	34	17.5	15.5	17.5	19.2	26	52	52	43	35	35	34
10.....	34	19.2	15.5	17.5	19.2	24	43	52	43	35	32	34
11.....	32	19.2	15.5	15.5	19.2	22	41	61	43	35	30	35
12.....	34	19.2	15.5	15.5	17.5	22	35	66	41	35	30	35
13.....	34	17.5	15.5	15.5	17.5	22	39	70	41	35	32	32
14.....	34	17.5	15.5	11.5	17.5	21	37	70	41	35	32	30
15.....	32	17.5	17.5	21	17.5	32	35	70	41	35	32	30
16.....	32	19.2	17.5	28	17.5	32	34	70	39	35	32	30
17.....	28	19.2	17.5	27	19.2	35	34	61	39	35	34	30
18.....	28	19.2	17.5	24	24	32	32	61	39	34	34	32
19.....	28	17.5	17.5	27	22	34	32	61	37	34	34	32
20.....	28	17.5	17.5	18.7	22	34	34	61	37	34	32	32
21.....	28	17.5	17.5	19.2	22	35	34	76	39	34	34	32
22.....	26	17.5	17.5	17.5	21	39	34	70	39	34	34	34
23.....	26	19.2	17.5	17.5	43	39	35	61	37	34	34	32
24.....	28	19.2	16.5	22	32	45	35	61	37	34	34	34
25.....	28	19.2	15.5	21	22	66	34	52	37	34	34	34
26.....	26	19.2	15.5	22	19.2	52	32	52	37	34	34	32
27.....	28	17.5	17.5	21	21	50	34	47	34	30	34	28
28.....	30	17.5	17.5	21	21	43	34	45	34	30	32	28
29.....	28	17.5	17.5	21	21	43	32	45	34	30	34	28
30.....	28	19.2	17.5	21	21	43	50	45	32	30	32	28
31.....	34	-----	17.5	19.2	-----	56	-----	45	-----	30	32	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	34	26	29.9	1,840
November.....	26	17.5	18.8	1,120
December.....	19.2	15.5	16.8	1,080
January.....	28	11.5	19.4	1,190
February.....	43	17.5	20.9	1,160
March.....	66	17.5	33.9	2,080
April.....	52	32	36.4	2,170
May.....	76	39	57.3	3,520
June.....	45	32	39.4	2,340
July.....	35	30	33.1	2,040
August.....	37	30	33.0	2,080
September.....	35	28	31.9	1,900
The year.....	76	11.5	31.0	22,400

Daily and monthly discharge, in second-feet, of Greenspot pipe line near Mentone, Calif., 1929-30

Day	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	0	4.0	7	9	9	7	9	6.5	8	6
2	4.5	0	4.0	7	9	9	9	9	6.5	8	6
3	4.5	.5	4.0	7	9	9	9	9	6.5	8	6
4	6	1.0	4.0	7	9	9	9	9	6.5	8	6
5	7	1.8	4.0	7	9	9	9	9	6.5	8	6
6	7	2.5	4.0	7	9	9	9	7.4	6.5	8	6
7	5	2.5	4.0	7	9	9	9	6.5	6.5	8	6
8	6	2.5	4.0	7	9	9	9	6.5	7.5	8	6
9	6	2.5	4.0	7	9	9	9	6.5	7.5	7	6
10	6	2.5	4.0	7	9	9	9	6.5	7.5	7	6
11	6	2.5	4.0	7	9	9	9	6.5	7.5	7	6
12	5	2.5	4.0	7	9	9	9	6.5	7.5	7	6
13	5	2.5	4.0	7	9	9	9	6.5	7.5	7	7.5
14	5	2.5	5.0	7	9	9	9	6.5	7.5	7	7.5
15	5	2.5	5	7	9	9	9	6.5	7.5	7	7.5
16	5	2.5	5	7	9	9	9	6.5	7.5	7	7.5
17	6	2.5	5	7	9	9	9	6.5	7.5	7	7.5
18	6	2.5	5	3.0	9	9	9	6.5	7.5	7	7.5
19	6	2.5	5	3.0	9	9	9	6.5	9	7	7.5
20	6	2.5	7	3.0	9	9	9	6.5	9	7	7.5
21	6	2.5	7	3.0	9	9	9	6.5	9	7	7.5
22	5	2.5	7	3.0	9	9	9	6.5	9	7	7.5
23	5	2.5	7	3.0	9	7	9	6.5	8.5	7	7.5
24	5	3.2	7	3.0	9	8	9	6.5	8	7	5
25	5	4.0	7	6	9	7	9	6.5	8	7	5
26	5.5	4.0	7	9	9	7	9	6.5	8	6	5
27	7	4.0	7	9	9	7	9	6.5	8	6	5
28	6	4.0	7	9	9	7	9	6.5	8	6	5
29	6	4.0	7	-----	9	7	9	6.5	8	6	5
30	6	4.0	7	-----	9	7	9	6.5	8	6	5
31	6	4.0	7	-----	9	-----	9	-----	8	6	-----
Month					Maximum	Minimum	Mean	Run-off in acre-feet			
October					7	4.5	5.63	346			
December					4	0	2.56	157			
January					7	4	5.35	329			
February					9	3	6.18	343			
March					9	9	9.00	553			
April					9	7	8.50	506			
May					9	7	8.94	550			
June					9	6.5	6.95	414			
July					9	6.5	7.63	469			
August					8	6	7.06	434			
September					7.5	5	6.32	376			
The year					9	0	6.18	4,480			

NOTE.—No flow during November.

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, $\frac{5}{8}$ miles northeast of Craftonville.

DRAINAGE AREA.—42.9 square miles.

RECORDS AVAILABLE.—January, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, about 55 second-feet May 13; practically no flow for several months.

1919-1930: Maximum discharge, about 4,500 second-feet Feb. 16, 1927 (gage height, 5.5 feet); practically no flow at times.

REMARKS.—Records fair. Discharge estimated Oct. 1 to Nov. 30, Jan. 11-14, Jan. 17 to Mar. 4, Mar. 8-10, 12, 13, 17, 19, 21-28, Mar. 30 to Apr. 30, May 30, 31, June 15-30, and July 1 to Sept. 30. Mill Creek power canals Nos. 1, 2, and 3 divert water from points just above, 3 miles above, and 6 miles above station, respectively. The table on page 33 gives the sum of discharge of creek and the three canals.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0.7	1.0	1.6	29	23			
2			0	.9	1.3	1.4	22	22			
3			0	1.0	1.3	.1	35	23			
4			0	.8	1.5	.5	36	24			
5			0	.6	29	.4	25	23			
6			0	.8	5.5	.4	19	22			
7			0	1.0	6	.1	16	22			
8			0	.6	5	1.5	18	20			
9			0	.5	4.0	2.5	15	20			
10			0	.4	3.0	2.5	16	19			
11			.1	.1	3.0	2.5	24	15			
12			.1	.1	2.0	2.5	34	12			
13			.1	.1	1.3	2.5	36	10			
14			.1	.1	2.5	1.9	44	4.8			
15			.1	.1	13	1.1	40	.1			
16	0.02	0.03	4.0	.1	13	2.5	37	.1	0.05	0.03	0.02
17			2.0	0	10	1.9	33	.1			
18			.7	0	5.5	1.1	30	.1			
19			.7	0	3.0	.7	26	.1			
20			.8	0	1.7	.1	27	.1			
21			1.2	0	3.0	.1	26	.1			
22			1.0	0	2.5	2.0	28	.1			
23			.8	6	3.0	1.8	27	.1			
24			.8	3.1	2.0	2.0	27	.1			
25			1.2	1.0	3.0	2.0	27	.1			
26			1.2	.1	4.0	1.4	25	.1			
27			1.2	1.8	4.7	.8	24	.1			
28			1.2	1.0	2.0	1.0	22	.1			
29			.8		1.5	.5	22	.1			
30			1.7		.5	3.0	16	.1			
31			.6		.8		21				
Month	Maximum		Minimum		Mean		Run-off in acre-feet				
October							0.02		1.2		
November							.03		1.8		
January		4.0	0				.66		40.6		
February		6	0				.75		41.6		
March		29	.5				4.50		277		
April		3.0	.1				1.41		83.9		
May		44	15				26.7		1,640		
June		24	.1				8.75		521		
July							.05		3.1		
August							.03		1.8		
September							.02		1.2		
The year		44	0				3.61		2,610		

NOTE.—No flow during December.

Daily and monthly discharge, in second-feet, of Mill Creek and canals near Craftonville, Calif., 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	13.6	14.3	13.7	16.9	27	58	55
2	13.5	14.3	13.8	16.5	26	50	54
3	14.0	14.8	14.0	17.5	25	63	54
4	14.0	14.8	14.8	17.7	25	66	55
5	14.1	14.3	15.1	46	27	55	54
6	14.1	14.3	14.5	29	27	47	53
7	14.1	14.6	14.6	23	30	45	53
8	14.1	14.5	15.3	23	32	49	51
9	13.9	14.6	15.3	22	26	46	51
10	14.0	11.0	15.3	19.9	28	47	50
11	14.6	10.4	14.8	19.9	28	56	46
12	14.6	10.0	14.5	20	30	61	43
13	14.0	10.0	14.5	20	30	62	41
14	14.5	10.8	14.5	22	28	72	38
15	14.5	14.3	14.1	26	28	69	39
16	14.5	20	14.5	28	26	66	39
17	14.0	17.6	14.9	25	28	64	38
18	13.9	14.9	15.0	24	28	61	37
19	14.5	15.1	15.2	22	29	56	37
20	14.5	13.8	18.6	23	29	56	36
21	14.6	13.0	18.0	23	32	56	35
22	14.4	13.0	18.1	23	25	58	34
23	14.2	13.8	23	28	25	58	33
24	14.2	14.1	20	28	26	58	34
25	14.8	13.9	18.7	27	27	57	33
26	14.8	13.6	17.7	27	28	56	33
27	14.8	16.2	17.8	27	30	56	33
28	14.8	16.2	17.7	26	30	54	36
29	14.3	14.8	-----	25	28	52	36
30	14.3	16.0	-----	26	31	53	35
31	14.3	14.2	-----	28	-----	55	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	-----	-----	14.0	861
November	-----	-----	14.6	869
December	14.8	13.5	14.3	879
January	20	10.0	14.1	867
February	23	13.7	16.0	889
March	46	16.5	24.2	1,490
April	32	25	28.1	1,670
May	72	45	56.8	3,490
June	55	33	42.2	2,510
July	-----	-----	30.9	1,900
August	-----	-----	25.7	1,580
September	-----	-----	20.7	1,230
The year	72	-----	25.2	18,200

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

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

RECORDS AVAILABLE.—October, 1922, to September, 1930 (discontinued).

REMARKS.—Records fair. Discharge estimated Oct. 28 to Nov. 4, and Jan. 14 and 15. Daily discharge ascertained only for days during which weir was not affected by backwater and entire flow of creek was being diverted, maximum, about 22 second-feet. Discharge greater than this amount Apr. 6-13 and Apr. 18 to July 8.

Daily and monthly discharge, in second-feet, 1922-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	July	Aug.	Sept.
1	9.7	9	9	8.3	9.7	9.4	20		18.5	15.1
2	9.7	9.4	9	8.3	10	10	19.5		18.5	15.1
3	10	9.4	9.4	8.7	10.3	10	19		18	14.7
4	9.4	9.4	9.4	8.7	10.3	13.1	19.5		17.5	14.7
5	9.4	9.7	9.4	9	10.7	13.5	21		17.5	14.3
6	9.4	9.7	9.4	8.7	11.1	12.3			17.1	13.9
7	9.4	9.7	9.4	8.3	11.5	11.5			17.1	14.3
8	9.4	9.7	9.4	8.7	11.1	11.1			17.1	14.3
9	9.4	10	9.4	8.7	11.1	11.5		21	17.1	14.3
10	9.4	9.7	9.4	8.3	10.7	11.1		21	16.7	14.3
11	9	10	9	8.3	10.7	11.9		21	16.7	14.3
12	9	9.7	9	8.7	10.7	12.7		21	16.7	13.9
13	9	10	9	9	10.7	12.7		21	16.7	13.9
14	8.7	10	9	10	11.1	13.9	21	21	16.3	13.5
15	9	10	9	11	10.7	12.7	20	21	16.3	13.5
16	8.3	10	9	12.7	11.1	13.9	20	21	16.3	13.5
17	8.3	9.7	9	11.5	11.1	12.7	20	21	16.3	13.5
18	8.7	10	9	10.3	11.1	12.7		21	15.9	13.5
19	8.7	9.7	9	10	11.1	12.7		21	15.9	13.5
20	8.3	9.7	8.7	10	11.1	14.3		21	15.9	13.5
21	8.7	9.7	8.7	9.7	10.7	15.5		21	15.9	13.5
22	8.3	9.7	8.7	9.7	9.4	17.1		21	15.5	13.9
23	8.7	9.4	8.7	9.7	9.1	17.5		21	15.5	13.5
24	8.7	9.4	8.7	9.7	11.1	20		20	15.5	13.5
25	8.7	9	8.7	10	9.7	22		20	15.5	13.5
26	8.7	9	8.7	9.7	10.7	22		20	15.1	13.5
27	8.7	9	8.7	12.7	10.3	20		20	15.1	13.5
28	9	9	8.3	10.3	9.7	20		19.5	15.1	13.5
29	9	9	8.3	9.7		21		19	15.1	13.5
30	9	9	8.3	9.7		21		19	15.1	13.5
31	9		8.3	9.7		21		18.5	15.1	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	10	8.3	8.99	553
November	10	9	9.55	508
December	9.4	8.3	8.94	550
January	12.7	8.3	9.61	591
February	11.5	9.1	10.6	589
March	22	9.4	14.9	916
July 9-31	21	18.5	20.5	834
August	18.5	15.1	16.3	1,000
September	15.1	13.5	13.9	827

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 near Redlands-Bear Valley highway, 5 miles northeast of Craftonville.

RECORDS AVAILABLE.—January, 1919, to September, 1930.

EXTREMES.—1919-1930: Maximum mean daily discharge, 36 second-feet Nov. 19, 1923, and June 7, 1924; no flow May 27, 1923.

REMARKS.—Discharge computed from weir records at tailrace of power plant. Mill Creek power canal No. 2 diverts from Mill Creek in sec. 8, T. 1 S., R. 1 W. The headworks of canal No. 3 are in sec. 13, T. 1 S., R. 1 W., about 3 miles above the 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Avg.	Sept.
1	13.1	13.8	13.3	14.1	12.4	15.6	24	28	32	31	27	23
2	13.1	13.8	13.3	14.1	12.4	15.2	23	27	31	30	26	23
3	13.1	13.8	13.8	14.6	12.6	16.2	22	28	31	29	26	23
4	13.1	13.7	13.8	14.6	13.4	16.2	22	30	31	29	26	22
5	14.2	13.4	13.8	14.1	13.7	16.7	23	30	31	28	25	21
6	14.6	13.8	13.8	14.1	13.1	15.6	23	28	31	29	25	22
7	14.2	14.8	13.8	14.4	13.3	16	27	29	31	27	25	22
8	14	15.8	13.8	14.3	13.9	16.5	29	29	31	28	26	22
9	14	15.2	13.7	14.4	13.9	16.5	24	31	31	30	25	22
10	14	14.6	13.7	10.8	13.9	15.5	25	31	31	30	24	19.7
11	14	14.4	14.3	9.9	13.5	15.9	25	32	31	28	24	18
12	14.2	14.2	14.3	9.5	13.1	15.9	27	27	31	27	24	18.7
13	13.8	14.2	13.7	9.5	13.1	16.4	27	26	31	27	24	18.7
14	11.8	14.2	14.2	10.2	13.1	17.4	26	28	30	28	23	17.8
15	12.4	14.2	14.2	12.7	12.7	13.1	26	29	31	27	23	16.8
16	12.2	14.2	14.2	15.8	13.1	15.1	24	29	31	27	24	17.9
17	13	14.2	13.7	15.6	13.5	15.4	25	31	31	24	23	19.4
18	12.9	14.2	13.7	13.5	13.5	18.3	25	31	31	28	24	18.9
19	13.7	14.2	14.3	13.8	13.7	17.8	27	30	31	30	24	17.3
20	13.2	14.2	14.2	12.5	16.8	18.9	27	29	31	31	24	17
21	12.9	13.9	14.4	11.7	16.2	18.4	28	30	31	30	24	16.3
22	13	13.6	14.2	11.8	16.2	18	25	30	31	30	24	17
23	13.2	13.6	14	12.4	16.8	22	23	31	31	30	24	19.8
24	13.4	13.6	14	12.7	16.9	22	24	31	32	28	24	21
25	13.4	13.6	14.6	12.6	16.8	22	25	30	32	27	24	21
26	13.4	13.7	14.6	12.4	15.8	21	26	31	32	28	24	21
27	13.4	13.8	14.6	15	16	21	27	32	31	27	24	21
28	13.4	13.8	14.6	15	16.2	21	28	32	31	27	23	21
29	13.8	13.8	14.1	13.4	-----	22	26	30	31	26	22	21
30	13.8	13.8	14.1	12.6	-----	22	28	31	31	27	22	21
31	13.8	-----	14.1	12.6	-----	24	-----	32	-----	27	23	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	14.6	11.8	13.4	824
November	15.8	13.4	14.1	839
December	14.6	13.3	14.0	861
January	15.8	9.5	13.1	806
February	16.9	12.4	14.3	794
March	24	13.1	18.0	1,110
April	29	22	25.4	1,510
May	32	26	29.8	1,890
June	32	30	31.1	1,850
July	31	24	28.2	1,730
August	27	22	24.2	1,490
September	23	16.3	20.0	1,200
The year	32	9.5	20.5	14,800

MILL CREEK POWER CANAL NO. 1 NEAR CRAFTONVILLE, C ALII.

LOCATION.—Water-stage recorder just above weir in NE. $\frac{1}{4}$ sec. 13, T. 1 S., R. 2 W., one-fourth mile below intake on Mill Creek, on Redlands-Bear Valley highway, and 5 miles northeast of Craftonville.

RECORDS AVAILABLE.—January, 1919, to September, 1930.

REMARKS.—Records good. Discharge estimated July 1-15. This canal diverts from Mill Creek in NE. $\frac{1}{4}$ sec. 13, T. 1 S., R. 2 W., 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.5	0.8	0.3	0.2	0.6	0.3	1.4	0.9	0	4.7	1.5	0.8
2.....	.5	.8	.2	.2	.5	0	1.1	1.0	0	5.1	1.3	.8
3.....	.5	.7	.2	.2	.4	0	2.8	0	0	4.8	1.5	.8
4.....	.5	.6	.2	.2	.6	0	2.6	0	0	4.5	1.5	.7
5.....	.5	.7	.3	.2	.8	0	3.3	0	0	4.3	1.4	.7
6.....	.6	.8	.3	.2	.6	.8	3.6	0	0	4.1	1.4	.7
7.....	.6	.7	.3	.2	.3	.8	3.3	0	0	3.8	1.5	.7
8.....	.6	.6	.3	.2	.8	1.2	1.0	1.8	0	3.6	1.5	.8
9.....	.6	.5	.2	.2	.9	1.5	0	0	0	3.3	1.5	.8
10.....	.5	.5	.3	.2	1.0	1.4	0	0	0	3.1	1.5	.8
11.....	.6	.5	.3	.4	1.2	1.0	0	0	0	2.8	1.5	.5
12.....	.6	.5	.3	.4	1.3	2.3	0	0	0	2.5	1.5	.5
13.....	.6	.4	.3	.4	1.3	2.5	0	0	0	2.2	1.5	.5
14.....	.7	.4	.3	.5	1.3	1.6	.6	0	3.5	1.9	1.4	.5
15.....	.6	.4	.3	1.5	1.3	0	1.4	0	8.1	1.6	1.4	.5
16.....	.6	.4	.3	.2	1.3	0	0	0	7.7	1.4	2.2	.5
17.....	.6	.4	.3	0	1.4	0	.6	0	6.6	2.2	2.6	.5
18.....	.7	.3	.2	.7	1.5	0	1.7	0	5.8	1.8	2.2	.5
19.....	.6	.3	.2	.6	1.5	1.2	1.6	0	5.8	1.7	1.8	.5
20.....	.6	.2	.3	.5	1.8	2.5	2.3	0	4.9	2.2	1.8	.5
21.....	.6	.2	.2	.1	1.8	1.3	4.1	0	4.1	2.3	1.5	.5
22.....	.5	.3	.2	.2	1.9	2.6	.7	0	3.3	2.2	1.4	.5
23.....	.5	.4	.2	.6	0	2.8	.4	0	2.3	2.2	1.3	.6
24.....	.5	.5	.2	.6	0	4.2	0	9	1.5	2.1	1.2	.7
25.....	.5	.4	.2	.1	.9	2.3	0	0	1.2	1.9	1.0	.7
26.....	.5	.3	.2	0	1.8	2.0	.3	0	.6	1.9	1.0	.6
27.....	.4	.3	.2	0	0	1.3	2.1	0	2.0	1.8	.9	.7
28.....	.5	.3	.2	0	.5	2.8	1.2	0	5.4	1.8	.9	.6
29.....	.6	.2	.2	.6	-----	1.6	1.8	0	4.9	1.7	.8	.7
30.....	.5	.3	.2	1.7	-----	3.3	.4	5.7	4.3	1.7	.8	.8
31.....	.6	-----	.2	1.0	-----	3.0	-----	1.6	-----	1.5	.8	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	0.7		0.4		0.56		34.4					
November.....	.8		.2		.46		27.4					
December.....	.3		.2		.24		14.8					
January.....	1.7		0		.39		24.0					
February.....	1.9		0		.98		54.4					
March.....	4.2		0		1.43		87.9					
April.....	4.1		0		1.28		76.2					
May.....	5.7		0		.35		21.5					
June.....	8.1		0		2.40		143					
July.....	5.1		1.4		2.67		164					
August.....	2.6		.8		1.44		88.5					
September.....	.8		.5		.63		37.5					
The year.....	8.1		0		1.07		774					

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 at crossing of North Fork ditch siphon, 2 miles northeast of East Highlands.

DRAINAGE AREA.—16.9 square miles.

RECORDS AVAILABLE.—January, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 143 second-feet May 3 (gage height, 2.18 feet); no flow for several months during year.

1919-1930: Maximum discharge, 1,420 second-feet Feb. 16, 1927 (gage height, 3.80 feet); no flow for several months during each year.

REMARKS.—Records good. Discharge estimated May 31 to June 4. Irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1-----	0	1.8	2.1	9	6.5	0.1	16-----	12	.6	30	3.1	13	0
2-----	0	1.8	1.8	8	4.7	.1	17-----	9	.5	28	2.4	14	0
3-----	0	1.8	2.1	7	59	.1	18-----	10	.5	21	2.1	11	0
4-----	0	1.8	2.5	6.5	73	.1	19-----	6.5	.5	14	1.5	9.5	0
5-----	0	1.8	30	5	58	0	20-----	2.9	.6	12	1.0	8.5	0
6-----	0	1.6	11	4.7	40	0	21-----	2.7	1.0	11	.2	7	0
7-----	0	1.6	7	4.4	38	0	22-----	2.5	1.0	12	0	4.4	0
8-----	0	1.4	13	4.4	34	0	23-----	2.5	7	18	0	3.4	0
9-----	0	.8	14	4.4	27	0	24-----	2.1	4.3	10	0	3.9	0
10-----	0.1	.7	11	4.4	26	0	25-----	1.4	2.7	14	0	4.1	0
11-----	3.3	.6	10	4.0	27	0	26-----	1.8	3.4	11	0	4.1	0
12-----	1.2	.6	9	3.7	24	0	27-----	3.4	2.9	9	0	3.9	0
13-----	1.2	.6	8	3.4	21	0	28-----	2.7	2.5	8	0	3.1	0
14-----	.4	.6	11	3.4	18	0	29-----	2.1	-----	6.5	0	2.8	0
15-----	16	.6	29	3.4	15	0	30-----	1.2	-----	6.5	6	.6	0
							31-----	1.4	-----	16	-----	.2	-----
Month						Maximum	Minimum	Mean		Run-off in acre-feet			
January-----						16	0	2.79		172			
February-----						7	.5	1.63		90.5			
March-----						30	1.8	12.7		781			
April-----						9	0	3.07		183			
May-----						73	.2	18.2		1,120			
June-----						.1	0	.01		.6			
The year-----						73	0	3.24		2,350			

NOTE.—No flow during months for which no record is shown.

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.

DRAINAGE AREA.—118 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 87 second-feet Mar. 15 (gage height, 2.10 feet); no flow during several months.

1926-1930: Maximum discharge, about 3,000 second-feet Feb. 16, 1927; no flow during several months of each year.

REMARKS.—Records fair. The entire flow is diverted above station except during high water.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1.....	0	0	1.2	* 0.1	* 0.1	16.....	* 1.5	0	12	0	0
2.....	0	0	1.2	0	* 1	17.....	* 1.0	0	5.5	0	0
3.....	0	0	* 1.0	0	1.0	18.....	* 1.0	0	4.6	0	0
4.....	0	0	* 1.0	0	6.5	19.....	* 5	0	3.0	0	0
5.....	0	0	7	0	6.5	20.....	* 5	0	1.5	0	0
6.....	0	0	.9	0	1.3	21.....	0	0	* 5	0	0
7.....	0	0	.6	0	* 1.0	22.....	0	0	.1	0	0
8.....	0	.6	.5	0	2.2	23.....	0	* 3	0	0	0
9.....	0	* 2	.3	0	4.2	24.....	0	.2	0	0	0
10.....	0	* 1	.3	0	1.3	25.....	0	.4	0	0	0
11.....	10	0	.3	0	.3	26.....	0	.7	0	0	0
12.....	* 8	0	0	0	.1	27.....	* 5	1.3	0	0	0
13.....	* 4	0	0	0	.1	28.....	* 5	1.5	0	0	0
14.....	2.4	0	.5	0	0	29.....	0	0	0	0	0
15.....	* 2.0	0	23	0	0	30.....	0	0	0	* 1	0
						31.....	0	0	* 7	0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	10	0	1.17	71.9
February.....	1.5	0	.19	10.6
March.....	23	0	2.12	130
April.....	.1	0	.01	.60
May.....	6.5	0	.80	49.2
The year.....	23	0	.36	262

* Estimated.

NOTE.—No flow during months for which no record is shown.

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, $1\frac{1}{4}$ miles east of Colton.

RECORDS AVAILABLE.—August, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 286 second-feet Mar. 15 (gage height, 3.40 feet); minimum, 13 second-feet Aug. 23 (gage height, 0.74 foot).
1920-1929: Maximum discharge, 2,780 second-feet Dec. 21, 1922; minimum, that of Aug. 23, 1930.

REMARKS.—Records good. Discharge estimated Nov. 17 and 18, and Sept. 17 and 18. Meeks & Daley Canal diverts half a mile above station. City of San Bernardino sewage disposal plant discharged 3,260 acre-feet into Warm Creek above the station during the year.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	26	28	32	48	50	57	48	31	22	15	16
2	24	26	28	32	49	49	54	40	31	20	16	16
3	24	26	29	24	50	49	54	60	30	21	16	16
4	23	25	28	20	50	51	52	71	30	21	17	16
5	22	25	27	20	49	58	52	57	30	20	18	16
6	22	26	26	21	52	50	52	48	28	20	17	16
7	23	26	26	32	50	49	52	46	27	20	16	15
8	24	26	27	30	48	49	50	45	26	20	17	16
9	24	26	28	36	47	49	52	46	27	19	17	16
10	26	26	27	46	48	47	50	46	27	19	16	17
11	26	26	28	72	47	46	48	44	27	18	17	17
12	26	26	28	54	46	45	46	40	27	18	19	17
13	26	26	28	48	46	44	44	40	26	18	18	18
14	26	26	28	56	44	61	43	40	26	24	18	18
15	26	26	28	66	44	124	46	40	25	21	19	17
16	24	24	28	48	44	78	45	41	26	18	19	17
17	24	24	28	46	44	60	44	42	25	17	18	18
18	24	24	28	48	44	56	48	41	24	17	18	18
19	24	24	28	46	44	56	46	39	24	17	18	18
20	22	24	29	46	45	54	44	38	24	17	17	18
21	22	25	28	46	46	54	38	38	24	18	17	18
22	21	26	28	45	48	56	34	36	23	19	16	19
23	20	26	29	44	58	54	32	33	23	18	15	20
24	22	26	29	45	49	54	33	29	23	18	15	19
25	22	26	30	48	45	54	31	31	23	17	16	19
26	22	26	30	48	46	52	30	34	23	17	16	18
27	22	26	30	60	45	50	30	36	22	16	15	18
28	23	27	30	50	46	51	30	34	22	16	16	18
29	22	28	31	50	—	52	30	32	21	17	17	19
30	24	28	32	49	—	51	56	32	22	17	16	19
31	26	—	32	48	—	77	—	33	—	16	16	—

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	26	20	23.6	1,450
November	28	24	25.7	1,530
December	32	26	28.5	1,750
January	72	20	43.7	2,690
February	58	44	47.2	2,620
March	124	44	55.8	3,430
April	57	30	44.1	2,620
May	71	29	41.3	2,540
June	31	21	25.6	1,520
July	24	16	18.6	1,140
August	19	15	16.8	1,030
September	20	15	17.4	1,040
The year	124	15	32.3	23,400

Daily and monthly discharge, in second-feet, of Warm Creek and Meeks & Daley Canal near Colton, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	43	46	49	48	50	57	53	48	38	32	32
2	40	43	46	48	49	49	54	46	48	36	33	32
3	40	43	47	39	50	49	54	65	47	37	32	32
4	40	42	46	38	50	51	52	72	47	37	34	33
5	38	42	45	36	49	58	52	57	46	37	34	33
6	39	43	44	35	52	50	52	48	44	36	33	33
7	41	43	44	41	50	50	52	47	42	36	33	32
8	42	44	45	35	48	51	50	48	42	36	34	33
9	40	45	45	42	47	52	52	48	42	35	33	33
10	42	45	45	50	48	53	50	48	42	35	32	33
11	42	44	46	73	47	52	48	46	42	35	34	32
12	43	44	46	54	47	51	46	44	42	35	35	33
13	42	42	46	48	48	50	44	45	41	35	34	34
14	43	43	46	56	48	66	45	44	41	35	34	35
15	43	43	46	46	47	124	49	45	41	37	34	34
16	41	41	46	48	47	78	48	46	40	34	36	33
17	42	41	45	46	48	60	50	47	36	34	34	34
18	41	41	46	48	49	56	55	46	40	34	34	34
19	41	41	45	46	49	56	53	45	40	34	34	35
20	38	42	46	46	53	54	51	44	40	34	33	35
21	37	43	46	46	51	54	48	44	40	36	33	35
22	38	43	46	45	54	56	44	43	39	37	32	36
23	37	43	47	44	64	54	46	43	40	36	31	36
24	38	44	47	45	54	54	46	46	40	34	31	35
25	38	44	47	48	49	54	43	47	40	33	32	35
26	38	44	47	48	50	52	43	51	36	33	32	34
27	39	44	47	60	49	50	45	51	36	32	31	34
28	40	46	47	50	49	51	45	50	35	33	32	35
29	40	47	48	50	-----	52	45	49	37	33	33	36
30	41	47	50	49	-----	51	69	49	38	33	31	36
31	43	-----	49	48	-----	77	-----	50	-----	33	32	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	43	37	40.3	2,480
November	47	41	43.3	2,580
December	50	44	46.2	2,840
January	73	35	47.6	2,930
February	64	47	49.8	2,770
March	124	49	56.9	3,500
April	69	43	49.6	2,950
May	72	43	48.6	2,990
June	49	37	41.6	2,480
July	38	32	34.9	2,150
August	36	31	33.0	2,030
September	36	32	33.9	2,020
The year	124	31	43.8	31,700

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.

DRAINAGE AREA.—8.6 square miles.

RECORDS AVAILABLE.—December, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 34 second-feet May 3 (gage height, 2.37 feet); minimum, 0.2 second-foot Sept. 4.

1919-1930: Maximum discharge, 408 second-feet Jan. 2, 1922; practically no flow at times during August and September, 1929.

REMARKS.—Records good. Small diversion for domestic use above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.5	0.5	1.0	1.0	2.5	3.2	^a 7	5	3.1	1.4	0.3	0.5
2.....	.5	.5	1.0	1.0	2.5	3.0	5	4.8	3.3	1.4	.2	.4
3.....	.5	.5	.9	1.0	2.4	2.9	5	16	3.2	1.4	.3	.3
4.....	.5	.6	.9	1.0	2.4	2.9	4.7	22	2.8	1.2	.3	.2
5.....	.4	.5	1.0	1.3	2.4	^a 6	4.1	24	2.4	1.2	.3	.3
6.....	.5	.5	1.0	1.3	2.6	5	3.7	19	2.2	1.2	.3	.3
7.....	.5	.6	1.1	1.2	2.3	4.3	3.5	22	2.3	1.2	.4	.5
8.....	.5	.6	1.0	1.2	2.3	3.9	3.2	18	2.3	1.2	.5	.6
9.....	.5	.6	1.2	1.8	2.3	3.8	3.2	15	2.2	1.2	.5	.5
10.....	.5	.7	1.3	2.6	2.3	3.5	3.6	11	2.2	1.0	.8	.5
11.....	.5	.7	1.2	2.8	2.3	3.1	3.2	8	2.1	.9	.7	.6
12.....	.5	.6	1.2	2.7	2.3	2.9	2.9	6	2.2	.8	.5	.6
13.....	.5	.6	1.2	2.8	2.3	2.7	3.2	^a 6	2.3	.8	.5	.6
14.....	.5	.6	1.1	2.9	2.1	3.9	3.4	^a 6	2.4	1.0	.5	.8
15.....	.4	.7	1.2	13	2.1	24	3.4	^a 6	2.4	.6	.6	.7
16.....	.5	.6	1.0	9.5	2.1	18	2.9	^a 6	2.0	.6	.6	.6
17.....	.5	.7	1.0	5	2.0	20	2.8	6	1.8	.5	.8	.6
18.....	.6	.7	1.0	6	1.8	16	2.6	5.5	2.0	.5	.7	.5
19.....	.5	.6	1.2	4.2	1.8	16	2.4	5	2.3	.5	.5	.5
20.....	.5	.7	.8	4.7	2.2	14	2.4	4.8	2.2	.6	.5	.4
21.....	.5	.7	.8	4.2	2.4	9	2.4	4	2.0	.6	.4	.5
22.....	.3	.7	1.0	3.0	2.6	^a 6	2.3	3.7	2.0	.6	.3	.6
23.....	.3	.8	.9	3.0	3.3	^a 5.5	2.3	3.4	1.9	.6	.3	.6
24.....	.3	.8	1.0	2.8	3.6	^a 5.5	2.6	3.1	1.8	.6	.3	.6
25.....	.4	1.0	1.1	2.8	3.6	^a 5	2.6	3.3	1.7	.4	.3	.6
26.....	.4	.6	1.0	2.7	3.5	4.4	2.7	3.1	1.6	.3	.3	.5
27.....	.5	.7	.8	2.6	3.4	4.4	2.9	3.0	1.6	.5	.3	.4
28.....	.6	.8	.8	2.6	3.3	^a 4.2	2.7	3.2	1.6	.5	.4	.6
29.....	.6	.8	1.0	2.6	-----	^a 4.2	2.9	3.2	2.0	.3	.3	.6
30.....	.6	.7	1.0	2.6	-----	^a 6	5	3.1	1.8	.3	.3	.7
31.....	.5	-----	1.0	2.6	-----	^a 8	-----	3.0	-----	.?	.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.6	0.3	0.48	29.5
November.....	1.0	.5	.66	39.3
December.....	1.3	.8	1.02	62.7
January.....	13	1	3.18	196
February.....	3.6	1.8	2.52	140
March.....	24	2.7	7.14	439
April.....	7	2.3	3.35	199
May.....	24	3	8.14	501
June.....	3.3	1.6	2.19	130
July.....	1.4	.3	.78	48
August.....	.6	.2	.44	27.1
September.....	.8	.2	.52	30.9
The year.....	24	.2	2.54	1,840

^a Estimated.

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 tollhouse and 1 mile northwest of Arrowhead Springs.

DRAINAGE AREA.—4.55 square miles.

RECORDS AVAILABLE.—November, 1911, to October, 1914; December, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 17 second-feet May 3; minimum, 0.1 second-foot Oct. 1-5, Aug. 29, Sept. 6, and 17-21.

1911-1914, 1919-1930: Maximum discharge, 164 second-feet Jan. 2, 1922; no flow at times during summer in 1924, 1925, 1926, 1928, and 1929.

REMARKS.—Records fair. Small diversion for domestic use above station. Slight regulation. Discharge estimated Oct. 1 to Jan. 9, Jan. 28, 29, Feb. 1, Feb. 27 to Mar. 2, Mar. 6, 7, 11-15, 20-25, Apr. 2 to May 2, May 6, and 10-16.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.1	0.2	0.6	0.4	1.5	1.8	3.6	3.0	3.0	1.2	0.3	0.2
2.....	.1	.2	.6	.4	1.4	1.6	3.2	3.0	3.0	1.2	.3	.2
3.....	.1	.3	.6	.4	1.2	1.4	3.0	11	2.8	1.1	.3	.2
4.....	.1	.3	.6	.4	1.2	1.6	2.8	11	2.6	1.0	.3	.2
5.....	.1	.3	.6	.5	1.2	2.9	2.6	11	2.2	.9	.2	.2
6.....	.2	.3	.7	.5	1.2	2.4	2.5	7	2.1	.9	.3	.1
7.....	.2	.3	.7	.6	1.1	1.8	2.2	10	2.1	.9	.4	.2
8.....	.2	.4	.7	.6	1.0	1.5	2.0	9.5	2.1	.9	.4	.2
9.....	.2	.4	.7	.8	1.0	1.5	2.0	7	2.1	.9	.4	.2
10.....	.2	.4	.8	1.1	1.0	1.4	2.1	5.5	2.1	.9	.3	.2
11.....	.2	.5	.8	1.7	1.0	1.3	2.2	5.5	1.9	.8	.3	.2
12.....	.3	.5	.8	1.7	.9	1.2	2.4	5	2.1	.6	.3	.2
13.....	.3	.5	.7	1.5	.8	1.2	2.4	5	2.1	.7	.2	.2
14.....	.3	.5	.7	4.1	.8	5	2.5	5	2.1	.7	.3	.2
15.....	.3	.5	.7	11	.8	12	2.5	4.5	1.9	.6	.3	.2
16.....	.3	.5	.6	8	.9	10	2.5	4.5	1.7	.5	.3	.2
17.....	.8	.5	.6	5.5	.9	8	2.4	4.5	1.7	.5	.3	.1
18.....	.3	.6	.6	4.1	.8	7	2.4	4.5	1.7	.5	.3	.1
19.....	.2	.6	.6	3.2	.8	6.5	2.3	4.5	2.1	.5	.2	.1
20.....	.2	.6	.7	2.5	1.2	6	2.2	4.1	2.1	.5	.2	.1
21.....	.2	.6	.7	2.2	1.1	5	2.2	3.9	1.9	.6	.2	.1
22.....	.2	.6	.8	2.2	1.4	4.5	2.0	3.7	1.7	.6	.2	.2
23.....	.2	.7	.8	1.8	3.2	4.0	2.0	3.4	1.7	.6	.2	.2
24.....	.2	.7	.7	1.7	2.3	3.8	1.9	3.2	1.5	.6	.2	.2
25.....	.2	.7	.6	1.7	2.2	3.7	1.8	3.4	1.5	.4	.2	.2
26.....	.2	.7	.5	1.5	2.3	3.6	1.8	3.4	1.3	.3	.2	.2
27.....	.2	.7	.4	1.5	2.1	3.6	1.7	3.4	1.3	.3	.2	.2
28.....	.2	.6	.4	1.4	1.9	3.4	1.7	3.2	1.2	.3	.2	.2
29.....	.2	.6	.4	1.4	-----	3.4	1.6	3.4	1.2	.3	.1	.2
30.....	.2	.6	.4	1.4	-----	4.9	3.0	3.4	1.2	.3	.2	.3
31.....	.2	-----	.4	1.5	-----	7	-----	3.2	-----	.3	.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.3	0.1	0.21	12.9
November.....	.7	.2	.50	20.8
December.....	.8	.4	.63	38.7
January.....	11	.4	2.17	133
February.....	3.2	.8	1.33	73.9
March.....	12	1.2	3.97	244
April.....	3.6	1.6	2.32	138
May.....	11	3	5.25	323
June.....	3	1.2	1.93	115
July.....	1.2	.3	.66	40.6
August.....	.4	.1	.26	16.0
September.....	.3	.1	.18	10.7
The year.....	12	.1	1.62	1,180

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.

DRAINAGE AREA.—19.8 square miles.

RECORDS AVAILABLE.—October, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 78 second-feet May 3 (gage height, 6.36 feet); no flow for several months.

1919-1930: Maximum discharge, 2,360 second-feet Apr. 5, 1926; maximum gage height, 9.8 feet Feb. 16, 1927; no flow for several months during each year except 1923.

REMARKS.—Records good. Discharge estimated May 29 to June 3. Diversion of City Creek Water Co. above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1-----	0	3.5	6.5	8	14	0.4	16-----	17	1.1	37	1.1	13	0.1
2-----	0	3.2	6	6.5	10	.3	17-----	12	.9	31	1.2	13	0
3-----	0	3.0	6	6	33	.3	18-----	18	.7	24	1.1	12	0
4-----	0	3.0	6.5	5.5	67	.2	19-----	13	.4	19	1.0	7	0
5-----	0	3.0	20	5	48	.2	20-----	9.5	.3	18	.9	5.5	0
6-----	0	3.0	12	4.7	39	.2	21-----	9	.3	15	.9	5.5	0
7-----	.2	3.0	9	4.7	41	.1	22-----	7.5	.3	13	.9	5.5	0
8-----	.5	3.0	7.5	2.5	38	.1	23-----	4.7	6.5	12	1.2	5.5	0
9-----	.6	3.0	6.5	1.4	28	.1	24-----	3.2	6.5	10	.9	5.5	0
10-----	3.8	2.9	6	1.3	22	.1	25-----	3.2	6	9	.9	3.5	0
11-----	7	2.7	4.7	1.2	19	.1	26-----	4.1	6	6.5	.9	2.0	0
12-----	6.5	2.7	3.5	1.0	16	.1	27-----	6.5	6.5	5.5	.9	1.8	0
13-----	5.5	2.7	3.8	1.0	15	.1	28-----	6	7	5.5	.8	1.5	0
14-----	6	2.9	9	.9	14	.1	29-----	5.5	-----	5.5	.7	1.2	0
15-----	17	2.0	48	.9	13	.1	30-----	4.7	-----	5.5	9	1.0	0
							31-----	3.8	-----	11	-----	.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January-----	18	0	5.64	347
February-----	7	.3	3.06	171
March-----	48	3.5	12.3	756
April-----	9	.7	2.43	145
May-----	57	.5	15.8	972
June-----	.4	0	.06	5.4
The year-----	57	0	3.3	2,400

NOTE.—No flow during months for which no discharge is shown.

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

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

RECORDS AVAILABLE.—May, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 6.4 second-feet, May 30 (gage height, 8.42 feet); no flow for several periods.

1924-1930: Maximum discharge, 10 second-feet May 30, 1927; no flow at times.

REMARKS.—Records good. This canal diverts from City Creek one-fourth mile above gage.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.8	1.3	1.5	0	0	2.5	2.6	5.9	2.3	*1.0	0.4
2	.5	.8	1.3	1.5	0	0	2.5	1.6	6.2	2.2	*1.0	.4
3	.5	.7	1.3	*1.6	0	0	2.5	.1	6	2.2	1.0	.3
4	.5	.7	1.2	*1.8	0	0	2.5	0	5.6	2.1	.8	.4
5	.5	.7	1.2	*1.9	.1	0	2.4	0	5.3	1.9	*.8	.3
6	.5	.8	1.2	2.0	0	0	2.3	0	5	1.8	*.9	.4
7	.5	.8	1.2	2.2	0	0	2.2	0	5	1.9	1.0	.6
8	.5	.8	1.3	1.8	0	0	3.7	0	4.9	2.1	1.5	.8
9	.7	.8	1.4	2.0	0	0	4.9	0	4.9	2.1	1.3	.9
10	.8	.9	1.5	1.3	.2	0	4.9	0	4.8	2.0	1.2	1.0
11	.7	1.0	1.5	0	.4	.5	4.9	.4	4.6	1.8	1.1	1.0
12	.6	1.0	1.5	0	.4	1.3	4.8	.8	4.6	1.6	1.0	1.0
13	.5	1.0	1.4	0	.4	.4	4.8	.3	4.7	1.3	.8	1.0
14	.7	1.0	1.4	0	.3	*.1	4.8	0	4.6	1.3	.8	.9
15	.7	1.0	1.3	0	1.0	*.1	4.8	0	4.5	1.3	1.0	.7
16	.9	1.0	1.3	0	1.8	0	4.5	0	4.2	1.3	*1.0	.6
17	1.0	1.0	1.3	0	1.8	0	4.3	0	4.1	1.3	*.9	.5
18	1.0	1.0	1.3	0	1.9	0	4.1	0	4.3	1.2	.9	.5
19	.8	1.0	1.3	0	2.4	0	4.0	1.0	4.3	1.3	.8	.5
20	.7	1.0	*1.3	0	2.6	0	3.9	2.1	4.3	*1.3	.7	.5
21	.6	1.1	*1.3	0	2.4	0	3.8	2.1	4.0	*1.4	.6	.7
22	.5	1.1	*1.3	0	2.4	0	3.8	2.3	3.8	1.4	.5	1.0
23	.5	1.2	*1.3	0	.1	0	4.8	2.3	3.7	1.3	.5	1.2
24	.5	1.1	*1.4	.4	0	0	5.2	2.3	3.5	1.2	.5	1.2
25	.5	1.1	*1.4	.5	0	0	5.1	3.4	3.3	1.1	.5	1.2
26	.6	1.2	*1.4	0	0	0	5.1	4.3	3.1	1.0	.5	1.0
27	.7	1.2	*1.4	0	0	.1	5	4.1	3.0	1.0	.5	.8
28	.8	1.2	*1.4	0	0	.8	5.2	4.0	2.9	.9	.5	.8
29	.8	1.2	*1.4	0	---	2.5	5.3	5.6	2.7	.8	*.5	1.
30	.8	1.2	1.4	0	---	2.5	4.1	6.4	2.5	.8	*.5	1.4
31	.8	---	1.5	0	---	2.6	---	6.2	---	1.0	*.4	---
Month												
	Maximum	Minimum	Mean	Run-off in acre-feet								
October	1.0	0.5	0.65	40								
November	1.2	.7	.98	58.3								
December	1.5	1.2	1.35	83								
January	2.2	0	.60	36.9								
February	2.6	0	.65	36.1								
March	2.6	0	.35	21.5								
April	5.3	2.2	4.09	243								
May	6.4	0	1.67	103								
June	6.2	2.5	4.34	258								
July	2.3	.8	1.49	91.6								
August	1.5	.4	.81	49.8								
September	1.4	.3	.77	45.8								
The year	6.4	0	1.47	1,067								

* Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 26 second-feet May 3 (gage height, 2.42 feet); no flow during October, November, December, August, and September.

1919-1930: Maximum discharge, 220 second-feet Apr. 7, 1926 (gage height, 3.75 feet); no flow for several months during summers of 1924 to 1930.

REMARKS.—Records good. Discharge estimated Jan. 10-15 and May 11-13. Water diverted above gage by city of San Bernardino for spreading over canyon floor to increase absorption and for city water supply.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	0	0.7	0.5	3.8	2.6	0.2	0.1
2	0	.7	.5	3.6	2.0	.2	.1
3	0	.7	.5	2.8	10	.2	.1
4	0	.8	.5	1.7	12	.1	.1
5	0	.8	1.1	1.5	10	.1	.1
6	0	.7	1.0	1.4	6.5	.1	.1
7	0	.8	1.0	1.4	10	.1	.1
8	0	.8	1.0	1.1	6.5	.1	.1
9	0	.8	.8	.8	4.7	.1	.1
10	.1	.8	.8	.8	3.3	.1	.1
11	.1	.8	.7	.7	3.3	.1	.1
12	.1	.8	.7	.7	3.0	.1	.1
13	.1	1.0	.7	.7	3.0	.1	.1
14	.1	1.0	2.0	.7	3.3	.1	.1
15	2.0	1.0	9.5	.5	2.8	.1	.1
16	2.1	1.1	9	.5	2.6	.1	.1
17	1.6	1.2	8	.5	2.3	.1	.1
18	2.5	1.2	9	.4	1.7	.1	.1
19	1.7	1.2	8	.4	1.2	.1	.1
20	1.0	1.2	6.5	.4	.8	.1	.1
21	.8	1.4	6	.4	.4	.1	.1
22	.8	1.4	6	.4	.5	.1	.1
23	.6	1.7	6	.4	.3	.1	.1
24	.1	1.8	4.7	.4	.3	.1	.1
25	.1	1.2	4	.3	.2	.1	.1
26	.1	.7	3.6	.3	.2	.1	0
27	.6	.7	2.6	.3	.2	.1	0
28	.6	.5	1.7	.3	.2	.1	0
29	.5	-----	1.8	.2	.2	.1	0
30	.5	-----	1.7	.8	.2	.1	0
31	.6	-----	5	-----	.2	-----	0
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
January	2.5	0	0.54	33.2			
February	1.8	.5	.98	54.4			
March	9.5	.5	3.38	208			
April	3.8	.2	.94	55.9			
May	12	.2	3.05	188			
June	.2	.1	.11	6.6			
July	.1	.0	.08	4.9			
The year	12	0	.76	551			

NOTE.—No flow during months for which no discharge is shown.

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.

DRAINAGE AREA.—47.9 square miles.

RECORDS AVAILABLE.—October, 1918, to September, 1930.

EXTREMES.—No flow past the Lytle Creek gaging station during the year except for parts of several days.

1918-1930: Maximum discharge, about 5,300 second-feet Feb. 16, 1927 (gage height, 5.40 feet); no flow in creek during greater part of each year.

REMARKS.—Practically entire flow of creek is diverted about 3 miles above gage for Lytle Creek power plant and is carried across creek to headworks of Fontana pipe line, which serves Fontana power plant $4\frac{1}{2}$ miles downstream. Records of daily discharge of Fontana pipe line, determined from kilowatt output of power plant, furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, of Lytle Creek and Fontana pipe line near Fontana, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.8	12.9	13.2	15	15	16	38	37	28	25	17.7	17
2	11.8	12.6	13.4	15	14.6	16	36	35	30	26	17.1	16.2
3	11.8	12.9	13.6	14.8	13.9	15.7	36	46	28	26	17.8	15.9
4	11.5	12	13.6	15.2	14.4	15.8	35	57	28	26	17.6	16.2
5	11.5	12	13.9	16.2	14.4	37	34	48	28	26	18	15.5
6	11.6	11.5	14.2	17.2	14	26	34	42	28	25	17.6	15.5
7	11.5	11.8	13.9	18.5	14.3	26	34	40	27	25	18.1	16
8	12.4	12.4	13.9	16.9	14.2	25	33	41	28	26	17.7	16.4
9	11.8	12.4	14.2	17.2	14.4	25	33	41	28	25	17.8	16.4
10	12.9	12.9	13.8	11.4	14.2	25	33	40	28	25	17.5	15.7
11	12.4	12.9	13.8	10	13.9	23	32	37	28	24	17.7	15.2
12	12	12.6	14.2	9.1	13.6	23	32	36	28	23	17	15.5
13	12.6	12.1	14.4	9.1	13.4	23	32	35	28	22	17.8	15.8
14	11.4	12	13.3	9.2	13.2	34	31	34	31	21	18.1	16
15	10.9	12.3	12.4	15	13.2	44	30	32	32	21	17.7	16
16	11.2	11.5	12.4	22	12.9	51	30	31	31	24	18.1	15.5
17	10.9	11.5	12.4	19.9	12.4	51	28	31	28	26	18.3	15.5
18	11.5	10.6	12.4	19.8	12.4	43	28	30	31	27	17.7	15.5
19	11.5	12.1	12.1	16.8	12.1	36	27	29	31	28	17.4	15.7
20	10.6	11.2	12.4	16.6	12.9	35	29	31	31	28	16.7	15.4
21	10.6	11.8	12.9	15.2	12.6	35	30	31	30	27	16.7	15.5
22	10.6	11.8	13.4	15.5	12.9	37	33	29	28	26	16.6	16.2
23	10.6	12.4	13.4	15	13.4	41	33	29	28	27	16.7	16
24	10	12.1	14.2	14.6	13.4	44	34	29	28	26	16.7	16.2
25	11.2	12.1	14.8	15.2	15.2	46	32	29	28	22	17.1	16
26	11	12.4	14	15.5	15.9	44	31	27	27	19	16.7	15.8
27	12	12.1	14.4	16.2	16	42	33	27	27	18	16.2	15.7
28	12.2	12.9	14.2	14.6	16	39	32	28	28	19	16.8	16.1
29	12.9	13.2	14.4	14.8	-----	40	33	30	27	18.2	15.7	16.8
30	12.6	13.2	14.8	14.6	-----	41	40	31	24	18.8	15.9	17.2
31	12.9	-----	15	14.2	-----	40	-----	31	-----	18.5	16.7	-----
Month							Maximum	Minimum	Mean		Run-off in acre-feet	
October							12.9	10	11.6		713	
November							13.2	10.6	12.2		726	
December							15	12.1	13.6		836	
January							22	9.1	15.2		935	
February							16	12.1	13.9		772	
March							51	15.7	33.5		2,060	
April							40	27	32.5		1,930	
May							57	27	34.6		2,130	
June							32	24	28.2		1,680	
July							28	18	23.8		1,460	
August							18.3	15.7	17.3		1,060	
September							17.2	15.2	15.9		946	
The year							57	9.1	21.1		15,200	

LYTLE CREEK (EAST CHANNEL) AT SAN BERNARDINO, CALIF.

LOCATION.—Water-stage recorder in the San Bernardino grant, near the Santa Fe Railroad bridge, a quarter of a mile upstream from Mount Vernon Street Bridge, San Bernardino, San Bernardino County.

RECORDS AVAILABLE.—January, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year not determined; no flow for greater part of year.

REMARKS.—Records fair. Water diverted above station by Fontana pipe line and for spreading on the gravel cone.

Daily discharge, in second-feet of Lytle Creek (east channel) at San Bernardino, Calif., 1929-30

Date	Discharge	Date	Discharge
Mar. 15.....	6	Mar. 18.....	0.1
Mar. 16.....	5	Mar. 19.....	.1
Mar. 17.....	0.2		

NOTE.—No flow except Mar. 15-19. Total run-off for the year, 23 acre-feet.

LYTLE CREEK (WEST CHANNEL) AT COLTON, CALIF.

LOCATION.—Water-stage recorder in San Bernardino grant, at F Street near Colton Avenue at Colton.

RECORDS AVAILABLE.—January, 1929, to September, 1930.

EXTREMES.—1929-30: No flow during entire period of record.

REMARKS.—No flow at station during year. Water diverted above station by Fontana pipe line and for spreading on the gravel cone above Foothill Boulevard.

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.

DRAINAGE AREA.—40.9 square miles.

RECORDS AVAILABLE.—December, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 432 second-feet Mar. 14 (gage height, 6.77 feet); minimum, 1.4 second-feet Oct. 1 to Nov. 10.

1919-1930: Maximum discharge, about 5,000 second-feet Dec. 20, 1921 (gage height, 9.0 feet); minimum, 0.05 second-foot June 25, 1920.

REMARKS.—Records fair. No diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	• 1.4	1.6	1.8	3.6	3.1	12	16	4.6	3.5	2.1	1.6
2	1.4	• 1.4	1.6	1.7	3.9	3.0	11	10	4.6	3.5	• 2.1	1.6
3	1.4	• 1.4	1.6	1.7	4.1	3.0	10	31	5	3.5	• 2.1	1.6
4	• 1.4	• 1.4	1.6	1.7	4.4	5.5	9	35	5	3.3	• 2.2	1.6
5	• 1.4	• 1.4	1.6	1.7	4.2	8	8.5	25	5	3.0	• 2.2	1.7
6	• 1.4	• 1.4	1.6	1.9	4.2	5.5	9	18	4.9	2.8	2.2	1.7
7	• 1.4	• 1.4	1.6	1.9	4.0	5.5	9	14	4.8	2.7	2.3	1.9
8	• 1.4	1.4	1.6	1.8	4.0	5.5	8.5	14	4.5	2.8	2.4	2.0
9	• 1.4	1.4	1.6	2.0	3.9	4.7	8	13	4.2	2.5	2.2	2.0
10	• 1.4	1.4	1.6	2.4	3.9	3.7	8	12	4.1	2.5	2.1	2.0
11	1.4	1.5	1.6	2.4	3.8	3.7	7.5	11	4.4	2.3	2.1	2.0
12	1.4	1.5	1.6	2.4	3.8	3.6	7.5	10	4.4	2.2	2.1	2.0
13	1.4	1.5	1.6	• 2.4	3.8	3.9	7.5	10	4.4	1.9	2.2	1.9
14	1.4	1.5	1.6	• 5	3.6	68	7	10	4.4	1.8	2.1	1.9
15	1.4	1.5	1.6	• 130	3.5	95	6	10	3.9	1.8	2.2	1.8
16	1.4	1.5	1.6	• 90	3.4	82	6	10	4.0	2.0	2.0	1.8
17	1.4	1.5	1.6	• 60	3.3	84	5.5	10	4.0	1.9	1.8	1.9
18	1.4	1.5	1.6	• 18	3.4	58	4.9	9	4.0	1.9	1.9	1.8
19	1.4	1.5	1.6	• 18	3.4	41	4.9	9	4.2	2.0	1.7	1.9
20	1.4	1.5	1.7	• 9	3.4	39	4.9	8.5	4.1	2.0	1.7	1.9
21	1.4	1.6	1.7	• 7	3.4	32	4.9	7.5	4.0	2.1	1.8	2.2
22	1.4	1.6	1.8	• 6	3.7	25	4.9	7	3.9	2.1	1.8	2.3
23	1.4	1.6	1.8	4.8	4.6	20	5	6.5	3.9	2.0	1.8	2.3
24	1.4	1.6	1.8	4.8	3.4	18	5	6	3.6	1.9	• 1.8	2.3
25	1.4	1.6	1.8	4.8	3.3	16	5	5.5	3.5	1.9	• 1.7	2.2
26	1.4	1.6	1.8	4.8	3.4	15	5	5	3.5	1.9	1.7	2.2
27	1.4	1.6	1.8	6.1	3.6	12	4.9	4.9	3.5	2.0	1.7	2.1
28	1.4	1.6	1.8	4.1	3.4	11	4.9	4.5	3.5	2.1	1.7	2.2
29	1.4	1.6	1.8	3.9	-----	10	5	4.5	3.5	2.1	1.6	2.5
30	• 1.4	1.6	1.8	3.6	-----	9.5	27	4.6	3.5	2.1	1.6	2.5
31	• 1.4	-----	1.8	3.5	-----	13	-----	4.6	-----	2.0	1.6	-----
Month						Maximum		Minimum		Mean		Run-off in acre-feet
October						1.4		1.4		1.40		86.1
November						1.6		1.4		1.50		89.3
December						1.8		1.6		1.67		103
January						130		1.7		13.2		812
February						4.4		3.3		3.73		207
March						95		3.0		22.8		1,400
April						27		4.9		7.54		449
May						35		4.5		11.2		689
June						5		3.5		4.16		248
July						3.5		1.8		2.33		143
August						2.4		1.6		1.95		120
September						2.5		1.6		1.98		118
The year						130		1.4		6.17		4,460

• Estimated.

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 Feenbrook.

DRAINAGE AREA.—15.3 square miles.

RECORDS AVAILABLE.—December, 1919, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 21 second-feet Jan. 15; minimum, 0.1 second-foot for several months.

1919-1930: Maximum discharge, about 810 second-feet Dec. 19, 1922 (gage height, 4.1 feet); minimum, 0.1 second-foot at times during 1926, 1927, 1928, and 1929.

REMARKS.—Records good. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2.....	.1	.2	.2	.1	.1	.2	.2	.3	.2	.2	.2	.2
3.....	.1	.1	.2	.1	.1	.2	.2	.4	.2	.2	.2	.2
4.....	.1	.1	.2	.1	.1	.2	.2	.4	.2	.2	.2	.2
5.....	.1	.1	.2	.1	.1	.3	.2	.2	.2	.2	.2	.2
6.....	.1	.1	.2	.1	.1	.2	.1	.2	.2	.2	.2	.2
7.....	.1	.1	.2	.2	.1	.2	.1	.2	.2	.2	.2	.2
8.....	.1	.1	.2	.2	.1	.2	.1	.2	.2	.2	.2	.2
9.....	.1	.1	.2	.2	.1	.2	.1	.2	.2	.2	.2	.2
10.....	.1	.1	.2	.2	.1	.2	.1	.2	.2	.2	.2	.2
11.....	.1	.1	.2	.2	.1	.2	.1	.2	.2	.2	.2	.2
12.....	.1	.1	.2	.3	.1	.2	.2	.2	.2	.2	.2	.2
13.....	.1	.1	.2	.2	.1	.2	.2	.2	.2	.2	.2	.2
14.....	.1	.1	.2	.7	.1	10	.2	.2	.2	.2	.2	.2
15.....	.1	.1	.2	21	.1	16	.2	.2	.2	.2	.2	.2
16.....	.1	.1	.1	18	.1	16	.2	.2	.2	.1	.2	.2
17.....	.1	.1	.1	4.0	.1	11	.2	.2	.2	.1	.2	.2
18.....	.1	.1	.1	.3	.1	2.7	.2	.2	.2	.1	.2	.2
19.....	.1	.1	.1	.2	.1	.6	.2	.2	.2	.1	.2	.2
20.....	.2	.1	.1	.2	.1	.2	.2	.2	.2	.2	.2	.2
21.....	.2	.1	.1	.2	.1	.2	.2	.2	.2	.2	.2	.2
22.....	.2	.1	.1	.2	.1	.2	.2	.2	.2	.2	.2	.2
23.....	.2	.1	.1	.2	.1	.2	.2	.2	.2	.2	.2	.2
24.....	.2	.1	.1	.1	.1	.2	.2	.2	.2	.2	.2	.2
25.....	.2	.2	.1	.1	.1	.2	.2	.2	.2	.2	.2	.2
26.....	.2	.2	.1	.2	.1	.2	.2	.2	.2	.2	.2	.2
27.....	.2	.2	.1	.2	.2	.2	.2	.2	.2	.2	.2	.2
28.....	.2	.2	.1	.1	.2	.2	.2	.2	.2	.2	.2	.2
29.....	.2	.2	.1	.1		.2	.2	.2	.2	.2	.2	.2
30.....	.2	.2	.1	.1		.2	.8	.2	.2	.2	.2	.2
31.....	.2		.1	.1		.2		.2		.2	.2	
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	0.2		0.1		0.14		8.6					
November.....	.2		.1		.15		7.7					
December.....	.2		.1		.15		9.2					
January.....	21		.1		1.55		95.3					
February.....	.2		.1		.11		6.1					
March.....	16		.2		1.98		122					
April.....	.8		.1		.20		11.9					
May.....	.4		.2		.22		13.5					
June.....	.2		.2		.20		11.9					
July.....	.2		.1		.15		11.7					
August.....	.2		.2		.20		12.3					
September.....	.2		.2		.20		11.9					
The year.....	21		.1		.44		322					

° Estimated.

MEEKS & 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 point of diversion from Warm Creek and 1 mile east of Colton.

RECORDS AVAILABLE.—September, 1920, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 19.2 second-feet Nov. 30; no flow Jan. 14–24, Feb. 6–9, and Mar. 1–3.

1920–1930: Maximum mean daily discharge, 21 second-feet June 16 and July 6, 1926; no flow at numerous times.

REMARKS.—Records good except those for estimated periods, Dec. 21–25, Jan. 26–29, and June 10–17, which are fair. Canal diverts from right bank of Warm Creek $1\frac{1}{2}$ miles northeast of Colton. Water is used for irrigation in vicinity of Colton, Riverside, and Corona.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.8	16.8	18.4	17.2	0.3	0	0.2	5.0	18	16.1	16.7	16.4
2	16.2	17.2	18.5	15.9	.3	0	.2	6.3	17.2	16.4	16.8	16.3
3	16.1	17	18	14.6	.3	0	.1	5.1	17	16.3	16.4	16.2
4	16.6	17.4	17.6	17.6	.3	.1	.1	.5	17	16.1	16.6	16.7
5	15.9	17.5	17.8	15.9	.2	.4	.1	.4	15.7	16.8	16.2	16.6
6	16.6	17.4	17.6	14.4	0	.2	.4	.3	15.8	16.2	16.4	16.8
7	17.6	17.2	18	8.7	0	1.3	.2	1.0	16.3	16.3	16.8	17
8	17.6	17.8	17.6	4.9	0	2.1	.1	2.6	16.4	15.5	16.8	17
9	16.4	19.2	16.6	5.5	0	3.3	.1	2.5	16.2	16.3	15.7	16.7
10	16.2	18.9	18.1	4.0	.1	6	.2	2.4	16	16.1	16.3	16.2
11	16.4	17.8	18.4	1.0	.4	5.7	.2	2.2	15	16.7	17	15.3
12	16.6	17.5	18.3	.4	.6	5.8	.2	3.8	15	17	16.2	16.4
13	16.2	16.3	18.4	.1	1.7	6.1	.2	4.7	15	17.1	15.9	16.2
14	16.8	16.6	18	0	4.4	5.0	1.7	4.4	15	11.3	16.4	16.6
15	16.8	16.8	17.9	0	3.0	.4	3.4	4.7	16	16.2	15.5	16.7
16	17.2	16.7	18	0	3.4	.2	2.8	5.0	14	15.9	16.6	16.3
17	17.5	16.7	17	0	4.1	.2	5.6	5.0	14	17.5	15.9	16.4
18	17.2	16.7	17.5	0	5.1	.2	7.1	4.5	15.8	17.1	16.1	16.3
19	17.1	17	17.4	0	5.4	.2	7.3	5.6	16.1	16.7	15.9	16.6
20	16.4	17.6	17	0	8	.2	7.5	6.4	16.3	17.1	15.8	17.1
21	15.4	17.6	18	0	5.2	.2	10.1	6.3	15.9	17.5	16.3	17.1
22	16.6	17.4	18	0	6.4	.2	10.6	6.8	15.9	18	15.7	16.8
23	16.8	17	18	0	5.9	.3	13.7	10.2	16.8	17.5	16.2	16.4
24	16.1	18.3	18	0	4.5	.3	12.5	17.2	16.8	15.5	15.8	16.3
25	16.2	17.9	17	.3	4.1	.2	12.4	16.1	16.7	16.3	15.5	16.3
26	16.4	18	17.4	.3	4.2	.2	13.3	16.6	16.4	16.2	15.7	16.4
27	17.1	18.1	17.1	.3	4.4	.2	14.8	15.4	16.6	16.2	16.3	16.2
28	17.4	18.9	17.4	.3	3.1	.2	14.6	16.1	16.8	16.7	15.9	16.6
29	17.5	18.9	17	.3	-----	.1	14.8	17	16.4	16.4	15.7	17
30	16.8	19.2	17.5	.3	-----	.1	12.7	16.8	15.5	15.9	15.4	17
31	16.7	-----	17.2	.2	-----	.4	-----	17.5	-----	17	16.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	17.6	15.4	16.7	1,030
November	19.2	16.3	17.6	1,050
December	18.5	16.6	17.7	1,090
January	17.6	0	3.94	242
February	8	0	2.69	149
March	6.1	0	1.28	78.7
April	14.8	.1	5.57	331
May	17.5	.3	7.37	453
June	18	14	16.1	958
July	18	11.3	16.4	1,010
August	17	15.4	16.1	990
September	17.1	15.3	16.5	982
The year	19.2	0	11.5	8,360

DAY CREEK NEAR ETIWANDA, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 8, T. 1 N., R. 6 W., one-fourth mile below junction of two main forks and 6 miles north of Etiwanda.

DRAINAGE AREA.—4.8 square miles.

RECORDS AVAILABLE.—January, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 29 second-feet May 3 (gauge height, 0.94 foot); minimum, 0.5 second-foot Apr. 19-27.

1929-30: Maximum discharge, 60 second-feet Mar. 10, 1929 (gauge height, 1.46 feet); minimum, that of Apr. 19-27, 1930.

REMARKS.—Records good. The Etiwanda Water Co. diverted about 440 acre-feet for spreading above the station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.0	1.3	1.8	1.6	1.1	1.2	5.5	2.7	1.0	2.8	1.6	1.5
2.....	.8	1.3	1.8	1.6	1.2	1.1	4.6	2.8	1.0	2.7	1.5	1.5
3.....	.6	1.3	1.8	1.6	1.3	1.1	4.2	9	.8	2.6	1.4	1.5
4.....	.7	1.3	1.8	1.5	1.4	2.4	3.7	18	.8	2.4	1.4	1.5
5.....	.7	1.3	1.8	1.6	1.4	12	3.5	14	1.0	2.1	1.4	1.5
6.....	.7	1.3	2.0	1.5	1.4	5.5	3.2	12	1.0	2.0	1.5	1.5
7.....	.7	1.5	2.0	1.4	1.4	3.0	1.9	10	1.1	2.0	1.6	1.6
8.....	.8	1.5	2.0	1.4	1.4	1.2	1.0	4.9	1.1	2.0	1.6	1.6
9.....	.8	1.5	2.2	1.4	1.4	1.3	.8	3.0	1.2	2.0	1.6	1.8
10.....	.8	1.5	2.2	1.4	1.4	1.4	.7	2.7	1.4	2.0	1.5	2.0
11.....	.8	1.5	2.2	1.5	1.3	2.6	.7	1.8	1.8	2.0	1.5	2.0
12.....	.7	1.5	2.2	1.5	1.3	2.6	.7	1.3	2.0	2.0	1.5	1.9
13.....	.7	1.6	2.0	1.6	1.2	2.2	.7	1.2	2.1	2.0	1.5	1.8
14.....	.7	1.5	2.0	1.4	1.2	4.6	.8	1.2	2.1	2.0	1.5	1.8
15.....	.7	1.5	1.8	.8	1.2	6	.8	1.3	1.8	2.0	1.5	1.7
16.....	.8	1.4	1.8	3.8	1.1	6	.8	1.5	1.6	2.1	1.4	1.6
17.....	.8	1.4	1.8	3.3	1.1	4.5	.8	1.5	1.6	2.1	1.4	1.5
18.....	.8	1.4	1.8	3.3	1.1	3.2	.6	1.4	1.6	2.1	1.4	1.4
19.....	.8	1.4	1.8	3.0	1.1	3.5	.5	1.4	1.6	2.1	1.4	1.4
20.....	.8	1.4	1.8	3.0	1.1	3.2	.5	1.3	1.6	2.0	1.5	1.4
21.....	.8	1.4	1.6	3.3	1.1	3.0	.5	1.1	1.5	1.8	1.5	1.4
22.....	.8	1.5	1.6	3.3	1.2	2.7	.5	1.5	1.4	1.6	1.6	1.5
23.....	.7	1.6	1.6	1.2	1.3	2.4	.5	1.5	1.4	1.6	1.6	1.6
24.....	1.0	1.6	1.6	.8	1.2	7	.5	1.5	1.5	1.6	1.6	2.0
25.....	1.0	1.6	1.6	.9	1.2	8.5	.5	1.5	1.8	1.6	1.6	2.0
26.....	1.1	1.6	1.8	1.0	1.2	8.5	.5	1.5	2.0	1.6	1.6	1.8
27.....	1.2	1.6	1.8	1.1	1.2	8	.5	1.5	2.0	1.6	1.5	1.8
28.....	1.4	1.6	1.8	1.2	1.2	7	.9	1.4	2.0	1.6	1.5	2.0
29.....	1.4	1.6	1.8	1.2	-----	6.5	1.2	1.3	2.0	1.6	1.4	1.8
30.....	1.4	1.8	1.8	1.1	-----	6	7	1.2	2.4	1.6	1.4	1.8
31.....	1.3	-----	1.8	1.1	-----	5.5	-----	1.1	-----	1.6	1.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1.4	0.6	0.88	54.1
November.....	1.8	1.3	1.49	88.1
December.....	2.2	1.6	1.85	114
January.....	8	.8	2.07	127
February.....	1.4	1.1	1.24	68.9
March.....	12	1.1	4.31	265
April.....	7	.5	1.63	96.4
May.....	18	.8	3.42	210
June.....	2.4	.8	1.54	91.6
July.....	2.8	1.6	1.96	121
August.....	1.6	1.4	1.51	92.2
September.....	2.0	1.4	1.67	99.4
The year.....	18	.5	1.97	1,430

* Estimated.

CUCAMONGA CREEK NEAR UPLAND, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 17, T. 1 N., R. 7 W., 6 miles north of Upland.

DRAINAGE AREA.—10.1 square miles.

RECORDS AVAILABLE.—December, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, about 83 second-feet Mar. 4 (gage height, 1.80 feet); minimum, 1.1 second-feet Oct. 19–23.

1928–1930: Maximum discharge, 118 second-feet Mar. 10, 1929 (gage height, 1.88 feet); minimum, 1.0 second-foot July 22–27, 1929.

REMARKS.—Records good. Entire flow of creek was diverted around gage from Oct. 1 to Jan. 9 and July 2 to Sept. 30. Daily discharge for these periods included in tables by interpolating between measurements made in flume. Discharge estimated Jan. 15 and 22.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.3	1.3	1.4	1.5	3.2	2.3	8	8.5	5.5	3.2	2.3	1.7
2.....	1.3	1.3	1.4	1.5	3.0	2.6	6.5	9	5.5	3.1	2.3	1.7
3.....	1.3	1.2	1.4	1.6	3.0	2.3	6.5	20	5.5	3.1	2.3	1.7
4.....	1.3	1.2	1.4	1.6	2.9	3.5	6	32	5.5	3.0	2.3	1.7
5.....	1.3	1.2	1.4	2.3	2.8	16	5	23	4.8	3.0	2.3	1.7
6.....	1.2	1.2	1.4	2.3	2.7	6.5	5	18	4.6	2.9	2.3	1.7
7.....	1.2	1.2	1.5	2.3	2.6	6	4.9	15	4.4	2.8	2.3	1.7
8.....	1.2	1.2	1.5	2.4	2.4	5.5	4.9	13	4.4	2.6	2.3	1.7
9.....	1.2	1.2	1.5	2.5	2.3	5	4.8	12	4.4	2.5	2.3	1.8
10.....	1.2	1.2	1.5	2.8	2.2	4.7	4.6	10	4.4	2.3	2.3	1.8
11.....	1.2	1.2	1.5	3.5	2.2	4.0	4.4	9.5	4.4	2.2	2.3	1.8
12.....	1.2	1.2	1.5	3.0	2.1	3.5	4.4	9	4.4	2.1	2.3	1.8
13.....	1.2	1.2	1.5	4.0	2.1	3.0	4.4	9	4.6	2.1	2.4	1.7
14.....	1.2	1.2	1.5	5.5	2.0	8.5	4.4	9	4.2	2.2	2.4	1.7
15.....	1.2	1.2	1.4	8	2.0	18	4.4	9.5	4.0	2.2	2.4	1.7
16.....	1.2	1.2	1.4	7	2.0	17	4.0	10	3.8	2.3	2.4	1.7
17.....	1.2	1.2	1.4	5.5	2.0	16	4.0	11	3.8	2.3	2.3	1.7
18.....	1.2	1.2	1.4	5	2.0	12	3.8	10	3.8	2.4	2.2	1.7
19.....	1.1	1.2	1.5	4.2	2.0	12	3.7	9.5	3.8	2.5	2.1	1.7
20.....	1.1	1.2	1.6	3.3	2.0	11	3.6	9	3.8	2.5	2.0	1.8
21.....	1.1	1.3	1.6	3.0	2.0	11	3.6	8	3.7	2.4	2.0	1.8
22.....	1.1	1.3	1.7	2.9	2.4	11	3.3	7.5	3.4	2.4	1.9	1.9
23.....	1.1	1.3	1.8	2.8	3.0	12	3.3	7.5	3.3	2.3	1.9	2.0
24.....	1.2	1.4	1.8	2.8	2.7	13	3.3	7.5	3.3	2.2	1.8	2.0
25.....	1.2	1.4	1.8	2.8	2.6	12	3.3	7	3.3	3.1	1.8	2.0
26.....	1.3	1.4	1.7	2.8	2.4	12	3.3	7	3.3	2.1	1.8	2.0
27.....	1.3	1.4	1.7	3.8	2.6	11	3.3	6.5	3.4	2.1	1.7	2.1
28.....	1.4	1.4	1.6	4.2	2.4	11	3.2	6	3.3	2.1	1.7	2.1
29.....	1.4	1.4	1.6	3.5	-----	9.5	3.2	6	3.3	2.2	1.7	2.1
30.....	1.4	1.4	1.5	3.3	-----	8	8	6	3.2	2.2	1.7	2.1
31.....	1.3	-----	1.5	3.3	-----	8.5	-----	5.5	-----	2.2	1.7	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	1.4					1.1			1.23		75.6	
November.....	1.4					1.2			1.26		75	
December.....	1.8					1.4			1.53		94.1	
January.....	8					1.5			3.39		208	
February.....	3.2					2.0			2.41		134	
March.....	18					2.3			9.01		554	
April.....	8					3.2			4.50		268	
May.....	32					5.5			10.7		668	
June.....	5.5					3.2			4.10		244	
July.....	3.2					2.1			2.47		152	
August.....	2.4					1.7			2.11		130	
September.....	2.1					1.7			1.82		108	
The year.....	32					1.1			3.73		2,700	

SAN JACINTO RIVER NEAR SAN JACINTO, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 13, T. 5 S., R. 1 E., at highway bridge $8\frac{3}{4}$ miles southeast of San Jacinto.

DRAINAGE AREA.—140 square miles.

RECORDS AVAILABLE.—October, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 203 second-feet May 5 (gage height, 2.52 feet); no flow during summer.

1920-1930: Maximum discharge, about 45,000 second-feet Feb. 16, 1927; usually no flow for several months each year.

REMARKS.—Records fair. Several diversions above gage. Flow regulated by storage at Lake Hemet.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1-----	0	*5	0	73	25	*5	16-----	37	0	5	1.6	77	0
2-----	0	*4	0	52	50	3.2	17-----	27	0	4.7	*5	79	0
3-----	0	*3	0	43	111	2.3	18-----	*15	0	*4	.1	69	0
4-----	0	*2.0	11	41	176	1.8	19-----	*12	0	*4.5	*1	56	0
5-----	0	*2	*80	41	189	*.1	20-----	*10	0	*4.5	0	54	0
6-----	0	*1	90	37	160	*.1	21-----	*9	0	*32	0	43	0
7-----	0	*.5	*73	33	144	0	22-----	*9	0	*30	0	33	0
8-----	0	*.3	37	35	113	0	23-----	9	9.5	*23	0	35	0
9-----	0	*.1	*10	33	96	.7	24-----	4.1	2.9	*22	*1	35	0
10-----	0	.1	*5	33	83	0	25-----	*3	.1	*20	9	33	0
11-----	0	.1	*2	23	79	0	26-----	*2	0	*18	1.8	29	0
12-----	0	.1	*1	17	79	0	27-----	*5	0	17	0	29	0
13-----	1.8	0	0	3.8	81	0	28-----	21	0	*15	0	21	0
14-----	4.1	0	0	2.3	79	0	29-----	5	-----	*15	0	19	0
15-----	9	0	*2	2.9	71	0	30-----	*5	-----	*15	8.5	19	0
							31-----	6	-----	96	-----	13	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January-----	37	0	6.26	385
February-----	9.5	0	1.11	61.6
March-----	96	0	20.5	1,260
April-----	73	0	16.4	976
May-----	189	13	70.3	4,320
June-----	5	0	.44	26.2
The year-----	189	0	9.72	7,030

* Estimated.

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

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 junction with Elsinore Lake (low-water stage), and 2 miles southeast of Elsinore.

DRAINAGE AREA.—717 square miles.

RECORDS AVAILABLE.—January, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 8.5 second-feet Mar. 16 (gage height, 3.07 feet); no flow during greater part of year.

1916-1930: Maximum discharge, about 16,000 second-feet Feb. 17, 1927 (gage height, 11.8 feet); no flow for several months each year.

REMARKS.—Records good. Discharge estimated Mar. 11-13. Storage and diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1.....	0	0.2	0.1	0.1	1.0	16.....	0	0.2	1.8	0.1	0.1
2.....	0	.2	.1	.1	.6	17.....	0	.2	1.1	.1	.2
3.....	0	.2	.1	.1	.4	18.....	0	.2	.8	.1	.1
4.....	0	.1	.1	.1	.5	19.....	0	.2	.5	0	.1
5.....	0	.1	.1	.1	.5	20.....	0	.2	.4	0	.1
6.....	0	.1	.1	.1	.4	21.....	0	.2	.4	0	0
7.....	0	.1	.1	.1	.3	22.....	0	.2	.3	0	0
8.....	0	.1	.1	.1	.3	23.....	0	.2	.3	0	0
9.....	0	.1	.1	.1	.3	24.....	0	.1	.2	0	0
10.....	0	.1	.1	.1	.3	25.....	0	.1	.1	0	0
11.....	.5	.1	*.1	.1	.2	26.....	0	.1	.1	0	0
12.....	0	.1	*.1	.1	.2	27.....	.4	.1	.1	0	0
13.....	0	.1	*.1	.1	.1	28.....	.8	.1	.1	0	0
14.....	0	.1	.1	.1	.1	29.....	.4	-----	.1	0	0
15.....	0	.1	1.5	.1	.1	30.....	.3	-----	.1	.5	0
						31.....	.2	-----	.1	-----	0
Month					Maximum	Minimum	Mean	Run-off in acre-feet			
January.....					0.8	0	0.08	4.9			
February.....					.2	.1	.14	7.8			
March.....					1.8	.1	.30	18.4			
April.....					.5	0	.08	4.8			
May.....					1.0	0	.19	11.7			
The year.....					1.8	0	.066	47.6			

* Estimated.

NOTE.—No flow during months for which no discharge is shown.

ELSINORE LAKE AT ELSINORE, CALIF.

LOCATION.—Staff gage on northeast shore near outlet at Elsinore, Riverside County.

RECORDS AVAILABLE.—December, 1915, to September, 1930.

REMARKS.—Elsinore Lake overflows only during and after years of heavy rainfall. Temescal Creek is the high-water outlet. The heavy rains during 1916 filled the lake, and there was flow in Temescal Creek during 1916 and until July, 1917. The surface of the lake has been below the outlet since the later date.

Daily gage height, in feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47.8				47.5					46.4		
2		47.4									45.7	45.1
3			47.0					47.4	47.1			
4				46.8	47.5							
5	47.8	47.3					47.5			46.4	45.6	
6												45.0
7			46.9						46.9			
8	47.7				47.4		47.5			46.3		
9		47.3									45.6	44.9
10			46.8						46.9			
11					47.4							
12	47.7	47.2					47.5			46.2	45.5	
13												44.8
14			46.8						46.8			
15	47.6				47.4		47.4			46.2		
16		47.2									45.4	44.7
17			46.8						46.7			
18				47.3	47.4	47.6						
19	47.6	47.1					47.4			46.1	45.4	
20								47.3				
21			46.8	47.3					46.7			
22	47.5				47.3	47.6	47.4			46.0		
23		47.1									45.3	44.7
24			46.8					47.2	46.6			
25				47.3		47.6						
26	47.5	47.0					47.3			45.9	45.2	
27								47.2				44.6
28			46.8	47.5					46.5			
29	47.4			47.5		47.6				45.8		
30		47.0									45.2	44.6
31			46.8					47.2				

NOTE.—Add 1,200 feet to obtain sea-level elevation.

TEMESCAL CREEK NEAR CORONA, CALIF.

LOCATION.—Water-stage recorder in the Sobrante de San Jacinto grant, half a mile upstream from Blue Diamond Quarry and 4 miles southeast of Corona, Riverside County.

DRAINAGE AREA.—926 square miles.

RECORDS AVAILABLE.—January, 1929, to September, 1930.

EXTREMES.—1929-30: Maximum mean daily discharge, 1.2 second-feet Apr. 4, 1929; no flow for greater part of each year.

REMARKS.—No flow during entire year. Numerous diversions above station. Flow regulated by three storage reservoirs.

CHINO CREEK NEAR PRADO, CALIF.

LOCATION.—Water-stage recorder in the El Rincon grant, on the Chino-Rincon road, 1 mile west of Prado, Riverside County.

RECORDS AVAILABLE.—January, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 181 second-feet Jan. 11 (gage height, 4.52 feet); minimum, 0.7 second-foot Nov. 15.

1929-30: Maximum discharge, that of Jan. 11, 1930; minimum, that of Nov. 15, 1929.

REMARKS.—Records good except those for discharge of less than 5 second-feet, which are fair. Discharge Oct. 7-11, Mar. 19 to Apr. 4, May 31 to June 16, June 25 to Aug. 1, Aug. 4-7, and Aug. 21 to Sept. 30 interpolated. Numerous diversions for irrigation above station. Waste water from Durkee ditch discharged into Chino Creek above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.				
1.....	2.8	2.1	1.0	8.5	14	11	12	22	6	1.6	2.6	2.3				
2.....	2.8	1.6	1.2	10	13	10	11	28	5	1.6	2.7	2.4				
3.....	3.1	1.4	1.0	9	12	11	12	19	6	1.6	3.1	2.5				
4.....	2.8	1.6	.9	9.5	12	12	11	28	6	1.4	2.0	2.5				
5.....	2.6	1.8	1.3	10	12	14	11	32	5.5	1.4	2.0	2.6				
6.....	2.5	1.9	3.7	12	13	19	10	53	5	1.4	2.0	2.6				
7.....	2.3	2.0	2.4	16	13	16	9.5	16	4.5	1.4	2.3	2.7				
8.....	2.2	2.1	2.1	17	13	16	9.5	13	4.0	1.6	2.5	2.7				
9.....	2.0	1.8	3.5	18	13	13	10	13	3.0	2.0	2.7	2.7				
10.....	1.9	1.5	2.8	38	12	10	11	11	2.5	1.9	3.2	2.7				
11.....	1.7	1.4	2.9	73	12	10	10	11	1.8	1.8	2.8	2.8				
12.....	1.4	1.3	4.7	48	12	10	10	10	2.7	1.5	3.0	2.8				
13.....	1.4	.9	6.5	46	12	9.5	9	9.5	2.4	1.5	3.1	2.7				
14.....	1.5	.8	7.0	32	12	16	9	9.5	2.3	1.5	3.0	2.6				
15.....	1.4	.7	6.0	76	11	74	9	9.5	2.2	1.5	3.2	2.6				
16.....	1.4	.8	6.5	42	11	60	9	8.5	2.2	1.5	3.4	2.4				
17.....	1.5	1.1	8	31	10	36	9.5	10	2.6	1.6	3.4	2.3				
18.....	1.4	.9	7	26	10	28	9	12	2.8	1.8	2.9	2.1				
19.....	1.7	1.5	8	22	10	24	9	11	3.5	1.8	2.9	2.0				
20.....	1.7	1.2	24	21	10	21	8.5	9.5	3.7	2.2	2.8	1.9				
21.....	1.7	1.0	8.5	20	10	18	8.5	9	3.6	1.8	2.7	1.9				
22.....	1.6	1.2	9.5	18	11	17	6.5	8	3.6	1.8	2.6	1.9				
23.....	1.6	1.3	8.5	17	16	16	6	7.5	3.0	1.8	2.4	1.8				
24.....	1.7	1.8	5.5	18	14	16	5.5	7.5	3.1	1.8	2.3	1.8				
25.....	1.8	1.3	8.5	18	12	15	6	7.5	1.8	1.8	2.2	1.7				
26.....	2.1	1.0	9.5	18	12	15	6.5	7	1.8	2.0	2.2	1.7				
27.....	2.5	.9	9	24	11	14	7.5	6	1.8	2.4	2.1	1.7				
28.....	2.4	.9	7.5	24	11	13	8.5	6	1.8	2.4	2.0	1.7				
29.....	2.5	1.0	6	21	-----	13	7.5	6	1.9	2.6	2.0	1.7				
30.....	2.4	1.0	4.1	18	-----	13	11	5	1.9	2.8	2.1	1.7				
31.....	2.1	-----	4.7	17	-----	12	-----	5	-----	2.9	2.1	-----				
Month													Maximum	Minimum	Mean	Run-off in acre-feet
October.....													3.1	1.4	2.02	124
November.....													2.1	.7	1.33	79.1
December.....													24	.9	5.86	365
January.....													76	8.5	25.1	1,540
February.....													14	10	11.9	661
March.....													74	9.5	18.8	1,160
April.....													12	5.5	90.8	540
May.....													53	5	13.2	812
June.....													6	1.8	32.7	195
July.....													2.9	1.4	1.83	113
August.....													3.4	2.0	2.59	159
September.....													2.8	1.7	2.25	134
The year.....													76	.7	8.12	5,880

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., at highway bridge 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, 1930.

EXTREMES.—Maximum discharge during year, 31 second-feet Mar. 26 (gauge height, 3.92 feet); minimum, 0.3 second-foot during numerous periods.

1917-1930: Maximum discharge, 1,020 second-feet Dec. 19, 1921 (gauge height, 8.20 feet); minimum (estimated), 0.1 second-foot in August and September, 1919, and September and October, 1925.

REMARKS.—Records good. The Southern California Edison Co. diverts water for power development above station. (See p. 59.)

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.3	0.5	0.3	1.0	0.6	2.9	2.8	9	1.3	0.7	0.5
2	.3	.3	.4	.3	1.0	.6	2.6	2.8	7	1.3	.6	.5
3	.3	.3	.4	.3	1.0	.6	7	5	6.5	1.3	.6	.6
4	.3	.3	.4	.4	1.0	1.2	2.5	6	5	1.3	.6	.6
5	.3	.3	.4	.4	1.0	2.6	7	4.5	3.9	1.3	.6	.5
6	.3	.3	.4	.4	1.0	2.3	2.5	4.1	2.2	1.3	.6	.5
7	.3	.3	.4	.4	1.0	2.1	1.8	3.9	1.9	1.3	.6	.5
8	.3	.3	.4	.4	1.0	1.6	2.0	3.7	1.8	1.3	.6	.7
9	.3	.3	.4	.4	.9	1.4	2.2	3.4	1.8	1.3	.7	.7
10	.3	.3	.4	.4	.9	1.3	2.5	3.3	1.8	1.3	.6	.6
11	.3	.3	.4	.5	.8	1.2	2.5	3.1	1.8	1.3	.5	.5
12	.3	.3	.4	.4	.8	1.1	1.9	3.1	1.8	1.1	.5	.5
13	.3	.4	.4	1.2	.8	1.0	1.8	2.9	1.8	1.0	.5	.5
14	.3	.4	.4	1.3	.8	2.2	1.9	2.8	1.6	1.0	.5	.5
15	.3	.4	.4	1.4	.8	3.3	2.0	2.8	1.6	.9	.5	.5
16	.3	.4	.4	1.4	.8	3.4	1.8	2.8	1.5	.7	.5	.5
17	.3	.4	.4	1.4	.9	3.3	1.6	3.4	1.5	.6	.5	.5
18	.3	.4	.4	1.7	.8	3.0	1.5	4.1	1.5	.7	.5	.5
19	.3	.4	.4	1.6	.8	2.5	1.4	5	1.5	.7	.6	.5
20	.3	.3	.3	1.4	.8	2.3	1.3	6.5	1.6	.7	.5	.4
21	.3	.3	.3	1.3	.8	2.3	1.3	7.5	1.5	.7	.5	.5
22	.3	.4	.3	1.3	.8	2.7	1.1	9.5	1.5	.7	.6	.6
23	.3	.4	.3	1.1	.9	2.8	1.1	11	1.4	.8	.5	.5
24	.3	.4	.3	.9	.9	3.3	1.1	12	1.4	.8	.5	.6
25	.3	.4	.3	.8	.9	4.2	1.1	13	1.3	.8	.5	.6
26	.3	.4	.3	.9	.8	22	1.1	12	1.1	.8	.5	.5
27	.3	.4	.3	.9	.8	16	1.3	11	1.1	.8	.5	.5
28	.3	.4	.3	.9	.7	3.7	1.4	11	1.3	.8	.5	.5
29	.3	.4	.3	.9	-----	3.1	1.5	10	1.1	.8	.5	.6
30	.3	.4	.3	1.0	-----	3.9	3.7	11	1.3	.8	.5	.7
31	.3	-----	.3	1.0	-----	5.3	-----	10	-----	.8	.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.3	0.3	0.30	18.4
November	.4	.3	.35	20.8
December	.5	.3	.36	22.1
January	1.7	.3	.87	53.5
February	1.0	.7	.88	48.9
March	22	.6	3.45	212
April	7	1.1	2.18	130
May	13	2.8	6.26	385
June	9	1.1	2.34	139
July	1.3	.6	.98	60.3
August	.7	.5	.54	33.2
September	.7	.4	.54	32.1
The year	22	.3	1.60	1,160

• Estimated.

Daily and monthly discharge, in second-feet, of San Antonio Creek and Southern California Edison Co.'s canal near Claremont, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	6.5	5.9	5.7	5.1	7.4	7.4	19.7	25	33	18.9	13.9	11.4
2.....	6.5	5.9	5.5	5.3	7.4	7.6	19.4	25	31	19.3	13.4	11
3.....	6.3	5.5	5.6	5.2	7.3	7.4	24	28	30	18.5	13.2	11
4.....	6.3	5.7	5.4	5.6	7.3	8.3	19.5	30	28	18.8	13.2	10.9
5.....	6.3	5.6	5.5	5.5	7.1	11.4	25	28	28	18.2	12.8	10.9
6.....	6.3	5.9	5.6	5.4	7	10.6	21	27	28	18.3	13.2	10.9
7.....	6.2	5.5	5.6	5.8	7.4	10.2	20	27	28	18.3	13.3	11.3
8.....	6.5	5.6	5.6	5.5	7	10.1	19.8	26	28	17.7	13	11.5
9.....	6.4	5.5	5.6	5.8	7.1	9.5	20	25	28	17.7	12.9	11.4
10.....	6.3	5.5	5.7	5.5	6.9	9.3	21	25	28	17.5	12.3	11.2
11.....	6.1	5.9	5.6	5.8	6.9	9.6	21	25	28	17.8	12.2	11.3
12.....	6.1	5.7	5.6	5.5	6.8	9.3	23	25	28	16.8	11.9	11.1
13.....	5.9	5.6	5.6	6.4	7.2	9.2	22	25	28	16.6	11.9	11
14.....	5.9	5.8	5.5	7.1	6.6	12.9	22	25	28	15.8	11.9	10.5
15.....	6.1	5.7	5.5	8	6.9	14.1	22	26	28	15.7	11.9	10.5
16.....	6	5.7	5.7	7.5	7	16.1	22	27	28	15.5	11.6	10.2
17.....	5.9	5.6	5.6	7.4	7.2	13.7	22	27	28	15.2	11.7	10.3
18.....	6	5.8	5.6	8.1	7.2	13.9	22	28	28	15.5	11.6	10.3
19.....	6.1	5.8	5.3	7.6	7	13.3	21	29	28	15.4	12.2	10.1
20.....	6.1	5.7	5.9	7.5	6.9	13	21	30	28	15.1	11.9	10
21.....	5.8	5.5	5.2	6.9	6.9	13.1	21	32	23	14.9	11.8	10.1
22.....	5.5	5.6	5.3	7.5	7.6	13.7	21	34	28	15.1	11.7	9.9
23.....	5.6	5.6	5.5	7	7.9	14	21	35	28	15	11.7	10.1
24.....	5.8	5.9	5.5	7.1	7.3	14.5	21	36	28	15	11.8	10.2
25.....	5.9	5.6	5.3	7.1	7.3	16.4	21	37	28	14.5	11.6	9.9
26.....	6.3	5.8	5.4	7.3	7.5	34	21	36	28	14.5	11.4	9.7
27.....	5.7	5.6	5.9	9	7.4	28	21	35	28	13.6	11.7	9.7
28.....	5.9	5.6	5.1	7.3	7.7	16.1	21	35	19.9	13.4	11.3	9.7
29.....	5.9	5.6	5.1	7.7	-----	15.5	21	34	19.5	14	11.1	10.2
30.....	5.9	5.4	5.1	7.2	-----	16.3	25	35	19.1	14.2	11	10.3
31.....	5.9	-----	5.3	7.2	-----	19.9	-----	34	-----	13.9	11.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	6.5	5.5	6.06	373
November.....	5.9	5.4	5.67	337
December.....	5.9	5.1	5.50	338
January.....	9	5.1	6.67	410
February.....	7.9	6.6	7.19	399
March.....	34	7.4	13.5	830
April.....	25	19.4	21.4	1,270
May.....	37	25	29.5	1,810
June.....	33	19.1	24.1	1,430
July.....	19.3	13.4	16.2	966
August.....	13.9	11	12.1	744
September.....	11.5	9.7	10.6	631
The year.....	37	5.1	13.2	9,570

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., at weir in tailrace of Sierra power house on San Antonio Creek, $1\frac{1}{2}$ miles below intake and 8 miles northeast of Claremont.

RECORDS AVAILABLE.—January, 1917, to September, 1930.

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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Ave.	Sept.
1.....	6.2	5.6	5.2	4.8	6.4	6.8	16.8	22	24	17.6	13.2	10.9
2.....	6.2	5.6	5.1	5	6.4	7	16.8	22	24	18	12.8	10.5
3.....	6	5.2	5.2	4.9	6.3	6.8	17.4	34	24	17.2	12.6	10.4
4.....	6	5.4	5	5.2	6.3	7.1	17	24	24	17.5	12.6	10.3
5.....	6	5.3	5.1	5.1	6.1	8.8	17.8	24	24	16.9	12.2	10.4
6.....	6	5.6	5.2	5	6	8.3	18.6	23	24	17	12.6	10.4
7.....	5.9	5.2	5.2	5.4	6.4	8.1	18.4	23	23	17	12.7	10.8
8.....	6.2	5.3	5.2	5.1	6	8.5	17.8	22	23	16.4	12.4	10.8
9.....	6.1	5.2	5.2	5.4	6.2	8.1	18.2	22	23	16.4	12.2	10.7
10.....	6	5.2	5.3	5.1	6	8	18.3	22	23	16.2	11.7	10.6
11.....	5.8	5.6	5.2	5.3	6.1	8.4	18.6	22	23	16.5	11.7	10.8
12.....	5.8	5.4	5.2	5.1	6	8.2	21	22	22	15.7	11.4	10.6
13.....	5.6	5.2	5.2	5.2	6.4	8.2	20	22	23	15.6	11.4	10.5
14.....	5.6	5.4	5.1	5.8	5.8	10.7	20	22	22	14.8	11.4	10
15.....	5.8	5.3	5.1	6.6	6.1	10.8	20	23	22	14.8	11.4	10
16.....	5.7	5.3	5.3	6.1	6.2	12.7	20	24	22	14.8	11.1	9.7
17.....	5.6	5.2	5.2	6	6.3	10.4	20	24	22	14.6	11.2	9.8
18.....	5.7	5.4	5.2	6.4	6.4	10.9	20	24	22	14.8	11.1	9.8
19.....	5.8	5.4	5	6	6.2	10.8	19.8	24	22	14.7	11.6	9.6
20.....	5.8	5.4	5.6	6.1	6.1	10.7	19.8	24	21	14.4	11.4	9.6
21.....	5.5	5.2	4.9	5.6	6.1	10.8	19.6	24	21	14.2	11.3	9.6
22.....	5.2	5.2	5	6.2	6.8	11	19.6	24	21	14.4	11.2	9.4
23.....	5.3	5.2	5.2	5.9	7	11.2	19.7	24	20	14.2	11.2	9.6
24.....	5.5	5.5	5.2	6.2	6.4	11.2	19.6	24	19.7	14.2	11.3	9.6
25.....	5.6	5.2	5	6.3	6.4	12.2	19.8	24	19.6	13.7	11.1	9.3
26.....	6	5.4	5.1	6.4	6.7	12.5	19.6	24	19	13.7	10.9	9.2
27.....	5.4	5.2	5.6	8.1	6.6	12.5	19.8	24	19	12.8	11.2	9.2
28.....	5.6	5.2	4.8	6.4	7	12.4	19.4	24	18.6	12.6	10.8	9.2
29.....	5.6	5.2	4.8	6.8	-----	12.4	19.8	24	18.4	13.2	10.6	9.6
30.....	5.6	5	4.8	6.2	-----	12.4	21	24	17.8	13.4	10.5	9.6
31.....	5.6	-----	5	6.2	-----	14.6	-----	24	-----	13.1	10.6	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	6.2	5.2	5.76	354
November.....	5.6	5.0	5.32	317
December.....	5.6	4.8	5.14	316
January.....	8.1	4.8	5.80	357
February.....	7.0	5.8	6.31	350
March.....	14.6	6.8	10.1	621
April.....	21	16.8	19.1	1,140
May.....	24	22	23.3	1,430
June.....	24	17.8	21.7	1,290
July.....	18	12.6	15.2	935
August.....	13.2	10.5	11.6	713
September.....	10.9	9.2	10.0	595
The year.....	24	4.8	11.6	8,430

SANTIAGO CREEK NEAR VILLA PARK, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 13, T. 4 S., R. 9 W., $1\frac{1}{4}$ miles northeast of Villa Park, and five-eighths mile below Serrano and Carpenter Water Companies' diversion dam.

DRAINAGE AREA.—83.8 square miles.

RECORDS AVAILABLE.—June, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 379 second-feet Mar. 15 (gage height, 2.00 feet); no flow for greater part of year.

1920-1930: Maximum discharge, about 11,000 second-feet Feb. 16, 1927 (gage height, 8.4 feet); no flow for several months each year.

REMARKS.—Records good. Discharge estimated Jan. 9, Jan. 18 to Feb. 12, Mar. 21 to Apr. 21, May 7-10, June 10-21. Serrano & Carpenter Canal diverts above gage. (See p. 63.) The Irvine Co. also diverts water above the gage at times.

Daily and monthly discharge, in second-feet, 1927-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1-----	0	0.3	0	0.2	14	1.0	16-----	3.5	0	12 ⁸	0.3	5	0.1
2-----	0	.4	0	.1	21	1.4	17-----	2.6	0	68	0.6	5	0.1
3-----	0	.4	0	.1	18	1.0	18-----	2.3	0	2 ⁶	1.0	5	.1
4-----	0	.4	0	.2	32	.8	19-----	1.2	0	13	1.2	4.4	.1
5-----	0	.5	0	.2	41	.6	20-----	.5	0	4.0	1.6	4.4	.1
6-----	0	.5	0	.4	17	.4	21-----	.5	0	4.0	1.0	4.4	.1
7-----	0	.5	0	.4	10	.4	22-----	.4	0	2.6	0	4.1	0
8-----	0	.5	0	.4	9.5	.4	23-----	.4	0	4.0	0	3.5	0
9-----	.9	.5	0	.5	9.5	.4	24-----	.4	0	4.0	0	3.8	0
10-----	2.0	.5	0	.6	7	.4	25-----	.3	0	2.0	0	3.8	0
11-----	12	.5	0	.8	5	.4	26-----	.2	0	.4	0	3.8	0
12-----	4.4	.1	0	.5	5	.4	27-----	.2	0	.4	0	4.1	0
13-----	3.5	0	0	0	5	.4	28-----	.2	0	.3	0	4.1	0
14-----	4.1	0	32	.2	5	.2	29-----	.2	-----	.2	0	3.5	0
15-----	10	0	212	.2	5	.1	30-----	.2	-----	.2	5.5	2.0	0
							31-----	.3	-----	.4	-----	1.6	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January-----	12	0	1.62	99.6
February-----	.5	0	.18	10
March-----	212	0	15.9	978
April-----	1.6	0	.53	31.5
May-----	41	1.6	8.60	529
June-----	1.4	0	.30	17.9
The year-----	212	0	2.3	1,670

NOTE.—No flow during 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., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	1.6	1.3	1.2	1.6	1.5	3.9	14.0	10.6	10	8.8	6.1
2	2.3	1.6	1.3	1.2	1.6	1.5	3.9	21.0	11	10	8.3	5.8
3	2.1	1.6	1.3	1.2	1.6	1.5	3.9	18	11.6	10.6	7.9	5.6
4	2.0	1.5	1.3	1.2	1.7	1.6	3.9	32	11.6	10.3	8.1	5.6
5	2.0	1.5	1.2	1.3	1.7	1.9	3.9	41	11.2	10.6	8.1	5.2
6	2.0	1.5	1.2	1.3	1.6	1.6	3.9	17	10.7	11	7.6	5.2
7	2.0	1.5	1.2	1.3	1.6	1.5	3.9	10.6	10.7	11	7.6	5.4
8	2.1	1.5	1.2	1.2	1.6	1.5	3.9	10.6	10.4	10.6	7.9	5.4
9	2.2	1.5	1.2	1.8	1.6	1.5	3.9	10.9	10.7	9.1	8.1	5.4
10	2.2	1.5	1.2	2.0	1.7	1.5	4.0	10.9	11.4	8.6	8.1	5.2
11	2.2	1.4	1.2	12	1.7	1.4	4.0	12.4	11.4	8.3	8.1	5.2
12	2.2	1.3	1.2	4.4	1.7	1.4	4.0	12.4	10.7	9.1	7.6	5.2
13	2.2	1.3	1.2	3.5	1.7	1.4	4.0	12.4	11.4	8.8	7.4	5.2
14	2.2	1.3	1.2	4.1	1.7	33	4.2	12.6	12	9.3	7.4	5
15	2.2	1.3	1.2	10	1.6	212	4.4	12.4	11.1	8.1	7.6	5
16	2.2	1.3	1.2	3.5	1.6	125	4.6	12.1	10.9	7.9	7.4	5
17	2.2	1.3	1.2	2.6	1.6	68	4.9	11.9	11.7	8.6	7.6	5
18	2.2	1.3	1.2	2.3	1.6	20	5.3	11.7	11.1	9.3	7.6	5
19	2.2	1.3	1.2	2.0	1.6	13	5.4	10.9	11.7	9.3	7.6	4.8
20	2.1	1.3	1.2	2.0	1.6	4.0	5.6	10.5	11.7	9.3	7.4	4.8
21	2.0	1.3	1.2	2.0	1.6	4.0	5.6	9.8	11.9	9.1	7.4	4.8
22	1.8	1.3	1.2	1.9	1.7	4.2	5.8	9.7	11.6	9.3	7.1	4.8
23	1.8	1.3	1.2	1.9	1.7	4.0	6.1	9.6	11.3	9.1	7.4	4.8
24	1.7	1.2	1.2	1.9	1.6	4.0	6.3	10.3	11.3	9.3	6.9	4.6
25	1.7	1.2	1.2	1.8	1.6	3.9	6.1	9.8	11	10	6.7	4.6
26	1.7	1.2	1.2	1.7	1.6	3.8	5.6	10.3	11	10	6.3	4.6
27	1.6	1.2	1.1	1.7	1.6	3.8	5.6	10.6	10.8	10	6.3	4.5
28	1.6	1.2	1.1	1.7	1.5	3.8	5.6	10.1	10.8	9.8	6.1	4.6
29	1.6	1.3	1.1	1.7	-----	3.7	7.4	10	10.6	9.6	5.8	4.8
30	1.6	1.3	1.1	1.7	-----	3.7	10.5	10.5	10.3	9.3	6.1	5
31	1.6	-----	1.2	1.7	-----	3.8	-----	10.9	-----	9.1	6.5	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	2.4					1.6			2.00		123	
November	1.6					1.2			1.36		80.9	
December	1.3					1.1			1.20		73.8	
January	12					1.2			2.57		158	
February	1.7					1.5			1.63		90.5	
March	212					1.4			17.3		1,060	
April	10.5					3.9			5.00		298	
May	41					9.6			13.4		824	
June	12					10.3			11.1		660	
July	11					7.9			9.46		582	
August	8.8					5.8			7.38		454	
September	6.1					4.5			5.07		302	
The year	212					1.1			6.52		4,710	

SANTIAGO CREEK AT SANTA ANA, CALIF.

LOCATION.—Water-stage recorder in the Santiago de Santa Ana grant at the end of Baker Street in Santa Ana.

RECORDS AVAILABLE.—January, 1929, to September, 1930.

EXTREMES.—Maximum stage during year, 3.02 feet Mar. 15 (discharge not determined); no flow for greater part of year.

1929-30: Maximum stage, that of Mar. 15, 1930; no flow for greater part of each year.

REMARKS.—Records good. Discharge estimated Mar. 20. The Serrano & Carpenter Canal and Irvine Co. divert above gage.

Daily and monthly discharge, in second-feet, 1929-30

Date	Discharge	Date	Discharge	Date	Discharge
Jan. 31.....	7.5	Mar. 20.....	0.5	May 9.....	28
Mar. 15.....	177	May 4.....	20	May 12.....	1.4
Mar. 16.....	109	May 5.....	32	May 13.....	3.3
Mar. 17.....	54	May 6.....	4.5	May 14.....	6.8
Mar. 18.....	18	May 7.....	2.2	May 15.....	1.8
Mar. 19.....	10	May 8.....	14		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	7.5	0	0.24	14.8
March.....	177	0	11.9	732
May.....	32	0	3.68	226
The year.....	177	0	1.34	973

NOTE.—No flow on days for which no discharge is given.

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, 1930.

EXTREMES.—1920-1930: Maximum mean daily discharge, 16.8 second-feet May 20, 1922; no flow at times.

REMARKS.—Records good. Canal diverts from Santiago Creek at a submerged dam 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	1.6	1.3	1.2	1.3	1.5	3.7	0	9.6	10	8.8	6.1
2	2.3	1.6	1.3	1.2	1.2	1.5	3.8	0	9.6	10	8.3	5.8
3	2.1	1.6	1.3	1.2	1.2	1.5	3.8	0	10.6	10.6	7.9	5.6
4	2.0	1.5	1.3	1.2	1.3	1.6	3.7	0	10.8	10.3	8.1	5.6
5	2.0	1.5	1.2	1.3	1.2	1.9	3.7	0	10.6	10.6	8.1	5.2
6	2.0	1.5	1.2	1.3	1.1	1.6	3.5	0	10.3	11	7.6	5.2
7	2.0	1.5	1.2	1.3	1.1	1.5	3.5	.6	10.3	11	7.6	5.4
8	2.1	1.5	1.2	1.2	1.1	1.5	3.5	1.1	10	10.6	7.9	5.4
9	2.2	1.5	1.2	.9	1.1	1.5	3.4	1.4	10.3	9.1	8.1	5.4
10	2.2	1.5	1.2	0	1.2	1.5	3.4	3.9	11	8.6	8.1	5.2
11	2.2	1.4	1.2	0	1.2	1.4	3.2	7.4	11	8.3	8.1	5.2
12	2.2	1.3	1.2	0	1.6	1.4	3.5	7.4	10.3	9.1	7.6	5.2
13	2.2	1.3	1.2	0	1.7	1.4	4.0	7.4	11	8.8	7.4	5.2
14	2.2	1.3	1.2	0	1.7	1.1	4.0	7.6	11.8	8.3	7.4	5
15	2.2	1.3	1.2	0	1.6	0	4.2	7.4	11	8.1	7.6	5
16	2.2	1.3	1.2	0	1.6	0	4.3	7.1	10.8	7.9	7.4	5
17	2.2	1.3	1.2	0	1.6	0	4.3	6.9	11.6	8.6	7.6	5
18	2.2	1.3	1.2	0	1.6	0	4.3	6.7	11	9.3	7.6	5
19	2.2	1.3	1.2	.8	1.6	0	4.2	6.5	11.6	9.3	7.6	4.8
20	2.1	1.3	1.2	1.5	1.6	0	4.0	6.1	11.6	9.3	7.4	4.8
21	2.0	1.3	1.2	1.5	1.6	0	4.6	5.4	11.8	9.1	7.4	4.8
22	1.8	1.3	1.2	1.5	1.7	1.6	5.8	5.6	11.6	9.3	7.1	4.8
23	1.8	1.3	1.2	1.5	1.7	0	6.1	6.1	11.3	9.1	7.4	4.8
24	1.7	1.2	1.2	1.5	1.6	0	6.3	*6.5	11.3	9.3	6.9	4.6
25	1.7	1.2	1.2	1.5	1.6	1.9	6.1	*6	11	10	6.7	4.6
26	1.7	1.2	1.2	1.5	1.6	3.4	5.6	*6.5	11	10	6.3	4.6
27	1.6	1.2	1.1	1.5	1.6	3.4	5.6	*6.5	10.8	10	6.3	4.5
28	1.6	1.2	1.1	1.5	1.5	3.5	5.6	*6	10.8	9.8	6.1	4.6
29	1.6	1.3	1.1	1.5	-----	3.5	7.4	*6.5	10.6	9.6	5.8	4.8
30	1.6	1.3	1.1	1.5	-----	3.5	5	*8.5	10.3	9.3	6.1	5
31	1.6	-----	1.2	1.4	-----	3.4	-----	9.3	-----	9.1	6.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.4	1.6	2.00	123
November	1.6	1.2	1.36	80.9
December	1.3	1.1	1.20	73.8
January	1.5	0	.95	58.4
February	1.7	1.1	1.45	80.5
March	3.5	0	1.45	89.2
April	7.4	3.2	4.47	266
May	9.3	0	4.85	298
June	11.8	9.6	10.8	643
July	11	7.9	9.46	582
August	8.8	5.8	7.38	454
September	6.1	4.5	5.07	302
The year	11.8	0	4.22	3,050

* Estimated.

SAN GABRIEL RIVER BASIN

SAN GABRIEL RIVER NEAR AZUSA, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 23, T. 1 N., R. 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.—May, 1894, to September, 1930.

EXTREMES.—Maximum discharge during year, 586 second-feet Mar. 15 (gage height, 3.82 feet); no flow for long periods.

1894-1930: Maximum discharge, 40,000 second-feet Jan. 18, 1916 (gage height, 12.0 feet); no flow for several months each year.

REMARKS.—Records good. Discharge estimated Apr. 17, 18, 20, and June 9. Power canal of Southern California Edison Co. diverts about 5 miles above station. (See p. 66.) Some discharge measurements furnished by Los Angeles County Flood Control District and city of Pasadena.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Mar.	Apr.	May	June	Day	Jan.	Mar.	Apr.	May	June
1.....	0	0	105	42	29	16.....	13	341	20	124	0
2.....	0	0	81	42	28	17.....	5	257	15	113	0
3.....	0	0	69	92	25	18.....	.2	217	10	105	0
4.....	0	0	118	341	21	19.....	0	177	10	92	0
5.....	0	25	139	236	18	20.....	0	165	5	85	0
6.....	0	12	55	189	16	21.....	0	177	4.2	79	0
7.....	0	1.4	43	184	6.5	22.....	0	165	3.8	74	0
8.....	0	0	41	165	6	23.....	0	176	3.0	72	0
9.....	0	0	42	144	4	24.....	0	201	2.6	66	0
10.....	0	0	41	122	1.9	25.....	0	214	2.3	60	0
11.....	0	0	36	109	2.6	26.....	0	195	1.5	54	0
12.....	0	0	31	115	1.9	27.....	0	165	.7	49	0
13.....	0	0	29	124	.6	28.....	0	136	.5	44	0
14.....	0	22	27	120	0	29.....	0	122	.4	42	0
15.....	0	296	25	120	0	30.....	0	120	9.5	39	0
						31.....	0	122		37	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	13	0	0.59	36.3
March.....	396	0	110	6,760
April.....	139	.4	32.4	1,930
May.....	341	37	106	6,520
June.....	29	0	5.25	318
The year.....	396	0	21.5	15,600

NOTE.—No flow during months for which no discharge is shown.

SAN GABRIEL RIVER BASIN

65

Daily and monthly discharge, in second-feet, of San Gabriel River and Southern California Edison Co.'s canal near Azusa, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	11.6	11.6	14.1	15	56	45	185	122	109	52	27	16.3
2.....	11.8	11.4	14.6	15	54	45	158	122	108	49	25	15.2
3.....	12.2	11	14.6	14.8	54	43	149	172	105	48	25	15.4
4.....	11.8	11	14.8	15	53	43	118	421	101	48	24	14.6
5.....	11.2	11.4	14.6	17.2	53	105	139	316	98	46	24	14.6
6.....	11	11.6	14.6	18.5	51	92	134	269	95	46	24	15.9
7.....	10.6	12	14.8	28	50	78	123	264	86	45	24	17.6
8.....	10.6	11.8	15.2	23	51	69	121	245	86	43	25	18
9.....	11.8	11.8	15.5	22	50	65	122	224	84	45	24	18.7
10.....	13.2	12.2	15.7	36	49	62	121	202	82	44	26	17.8
11.....	12	12.6	15.7	49	49	60	116	189	83	42	24	18.9
12.....	10.6	12.4	15.9	47	48	58	111	195	82	40	23	18
13.....	10.8	12	15.9	43	47	57	109	204	81	39	23	19.2
14.....	11.2	12	16.3	43	46	91	107	200	78	38	22	18.4
15.....	10.8	12	16.1	68	44	476	105	200	76	35	22	17.2
16.....	12.4	12.2	15.9	92	45	421	100	204	74	35	21	16.8
17.....	11.4	12	15.9	85	44	337	95	193	67	34	21	14.6
18.....	11.4	12	15.2	80	44	297	90	185	69	34	20	15.2
19.....	11.4	12.4	15.2	76	43	258	90	172	71	32	19.4	16
20.....	10.8	13	14.4	66	43	245	85	165	70	33	19.4	15.9
21.....	10.6	12.4	14.4	65	43	253	84	159	68	33	18.2	16.7
22.....	10.6	13	14.6	62	43	245	84	154	68	33	18	15.6
23.....	10.1	14.1	14.8	59	65	250	83	152	65	31	18.5	17.1
24.....	10.1	14.7	14.8	54	63	281	83	146	63	31	18	17.1
25.....	9.9	14.1	14.6	53	55	294	82	140	62	32	17.2	19.2
26.....	10.2	13.4	14.6	54	52	275	82	134	61	29	17.6	18
27.....	11.2	14.1	14.8	58	50	245	81	129	59	29	17.6	18.5
28.....	11.8	14.1	14.8	72	48	219	78	124	58	29	16.1	18.5
29.....	11.8	14.1	14.6	66	-----	202	77	122	57	27	17.2	19.2
30.....	11.6	12.8	14.4	60	-----	200	90	119	54	28	17.1	23
31.....	12	-----	14.8	57	-----	202	-----	117	-----	25	16.7	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	13.2	9.9	11.2	689
November.....	14.7	11	12.5	744
December.....	16.3	14.1	15.0	922
January.....	92	14.8	48.8	3,000
February.....	65	43	49.8	2,770
March.....	476	43	181	11,100
April.....	185	77	107	6,370
May.....	421	117	196	11,400
June.....	109	54	77.3	4,600
July.....	52	25	37.3	2,290
August.....	27	16.1	21.1	1,300
September.....	23	14.6	17.2	1,020
The year.....	476	9.9	63.9	46,200

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., 1½ miles north of Azusa.

RECORDS AVAILABLE.—1896, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 80 second-feet several times; no flow Apr. 4 and 5.

1896-1930: Maximum mean daily discharge, 97 second-feet Nov. 27, 1906; usually no flow for a few days each year.

REMARKS.—Intake on San Gabriel River in SE. ¼ SE. ¼ sec. 31, T. 2 N., R. 9 W., 5 miles above gage. Water is used for power development and irrigation. During rainy season part of water from power plant is wasted back into San Gabriel River below station. Record furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.6	11.6	14.1	15	56	45	80	80	80	52	27	16.3
2	11.8	11.4	14.6	15	54	45	77	80	80	49	25	15.2
3	12.2	11	14.6	14.8	54	43	80	80	80	48	25	15.4
4	11.8	11	14.8	15	53	43	0	80	80	48	24	14.6
5	11.2	11.4	14.6	17.2	53	80	0	80	80	46	24	14.6
6	11	11.6	14.6	18.5	51	80	79	80	79	46	24	15.9
7	10.6	12	14.8	28	50	77	80	80	80	45	24	17.6
8	10.6	11.8	15.2	23	51	69	80	80	80	43	25	18
9	11.8	11.8	15.5	22	50	65	80	80	80	45	24	18.7
10	13.2	12.2	15.7	36	49	62	80	80	80	44	26	17.8
11	12	12.6	15.7	49	49	60	80	80	80	42	24	18.9
12	10.6	12.4	15.9	47	48	58	80	80	80	40	23	18
13	10.8	12	15.9	43	47	57	80	80	80	39	23	19.2
14	11.2	12	16.3	43	46	69	80	80	78	38	22	18.4
15	10.8	12	16.1	68	44	80	80	80	76	35	22	17.2
16	12.4	12.2	15.9	79	45	80	80	80	74	35	21	16.8
17	11.4	12	15.9	80	44	80	80	80	67	34	21	14.6
18	11.4	12	15.2	80	44	80	80	80	69	34	20	15.2
19	11.4	12.4	15.2	76	43	80	80	80	71	32	19.4	16
20	10.8	13	14.4	66	43	80	80	80	70	33	19.4	15.9
21	10.6	12.4	14.4	65	43	80	80	80	68	33	18.2	16.7
22	10.6	13	14.6	62	43	80	80	80	68	33	18	15.6
23	10.1	14.1	14.8	59	65	80	80	80	65	31	18.5	17.1
24	10.1	14.7	14.8	54	63	80	80	80	63	31	18	17.1
25	9.9	14.1	14.6	53	55	80	80	80	62	32	17.2	19.2
26	10.2	13.4	14.6	54	52	80	80	80	61	29	17.6	18
27	11.2	14.1	14.8	58	50	80	80	80	59	29	17.6	18.5
28	11.8	14.1	14.8	72	43	80	78	80	58	29	16.1	18.5
29	11.8	14.1	14.6	66	-----	80	77	80	57	27	17.2	19.2
30	11.6	12.8	14.4	60	-----	80	80	80	54	28	17.1	23
31	12	-----	14.8	57	-----	80	-----	80	-----	25	16.7	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	13.2	9.9	11.2	689
November	14.7	11	12.5	744
December	16.3	14.1	15.0	922
January	80	14.8	48.2	2,960
February	65	43	49.8	2,770
March	80	43	71.4	4,390
April	80	0	74.4	4,430
May	80	80	80	4,920
June	80	54	72	4,280
July	52	25	37.3	2,290
August	27	16.1	21.1	1,300
September	23	14.6	17.2	1,020
The year	80	0	42.4	30,700

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, 1930. Discharge measurements only, May, 1916, to June, 1917.

EXTREMES.—Maximum discharge during year, 60 second-feet Mar. 15 (gage height, 3.84 feet); no flow for large part of year.

1917-1930: Maximum discharge, about 2,600 second-feet Apr. 7, 1926; no flow for several months each year.

REMARKS.—Records good except those for estimated periods which are fair. Two small diversions above the station diverted entire flow at times. Part of the measurements made during the year furnished by the Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1.....	0	0.1	0.3	*1.7	0.8	0.2	16.....	7.5	0.1	26	0.3	1.3	0
2.....	0	.1	.2	1.5	1.3	.2	17.....	4.1	.1	16	.2	1.2	0
3.....	0	.1	.2	1.3	3.6	*.2	18.....	2.4	.1	12	.2	1.1	0
4.....	0	.1	.7	1.2	8.5	*.1	19.....	1.4	.2	9	.1	.8	0
5.....	0	.1	4.1	.9	6.5	*.1	20.....	1.1	.2	7	*.1	*.7	0
6.....	0	*.1	1.3	.7	3.9	0	21.....	.8	.2	5.5	*.1	*.5	0
7.....	0	.2	1.0	.6	*3.5	0	22.....	.6	.2	3.7	*.1	.3	0
8.....	0	.1	.9	.2	*3.0	0	23.....	.5	.4	3.2	0	.4	0
9.....	.2	.1	*.8	*.3	*2.6	0	24.....	.4	.3	2.8	0	.4	0
10.....	1.1	.1	*.7	*.4	2.0	0	25.....	.4	.2	2.6	0	*.4	0
11.....	2.8	.1	*.6	.5	1.9	0	26.....	.4	.2	2.3	0	*.4	0
12.....	2.6	.1	*.6	.4	1.7	0	27.....	.6	.3	2.2	0	*.4	0
13.....	2.0	.1	*.5	.4	1.3	0	28.....	.4	.3	2.2	0	*.4	0
14.....	2.4	.1	2.8	.3	1.3	0	29.....	.4	-----	1.8	0	.4	0
15.....	20	.1	30	.3	1.2	0	30.....	.3	-----	1.6	.6	.3	0
							31.....	.2	-----	*1.9	-----	.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	20	0	1.70	105
February.....	.4	.1	.16	8.9
March.....	30	.2	4.66	287
April.....	1.7	0	.41	24.4
May.....	8.5	.3	1.69	104
June.....	.2	0	.03	1.8
The year.....	30	0	.73	531

* Estimated.

NOTE.—No flow during months for which no discharge 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 mile above mouth of canyon and 4 miles northeast of Duarte.

DRAINAGE AREA.—6.5 square miles.

RECORDS AVAILABLE.—July, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 72 second-feet Jan. 15 (gage height, 3.82 feet); no flow during parts of July, August, and September.

1916-1930: Maximum discharge, about 2,180 second-feet Apr. 4, 1925 (gage height, 8.0 feet); no flow during periods in 1919, 1920, 1921, 1924, 1929, and 1930.

REMARKS.—Records good. Discharge estimated May 30 and June 20 and 27. No diversions or regulation above station. Los Angeles County Flood Control District furnished some measurements.

Daily and monthly discharge, in second-feet, 1925-26 and 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1925-26												
1.....	0.1	0.3	0.8	0.5	3.5	3.4	1.0	6	2.0	1.3	0.7	0.4
2.....	.1	.3	20	.5	40	3.3	1.0	6	2.0	1.0	.7	.4
3.....	.1	.3	1.0	.5	8	3.3	1.0	5.5	2.0	.9	.6	.4
4.....	.2	.3	.8	.5	4.3	3.2	1.5	5.5	2.0	.7	.6	.4
5.....	.2	.3	.7	.5	3.3	3.1	330	7.5	2.0	.6	.6	.4
6.....	.2	.3	.7	.5	2.7	2.9	225	5	1.8	.6	.6	.4
7.....	.2	.2	.6	.4	2.1	2.5	410	4.8	1.8	.7	.6	.4
8.....	.2	.2	.6	.4	1.7	2.3	289	4.5	2.0	1.0	.6	.4
9.....	.2	.2	.6	.4	1.3	1.8	124	4.3	2.0	1.0	.5	.4
10.....	.2	.3	.5	.4	1.2	1.3	62	4.2	1.8	1.0	.6	.4
11.....	.2	.3	.5	.4	3.4	8	142	3.8	1.6	.9	.5	.4
12.....	.2	.3	.5	.3	56	7	66	3.6	1.6	.9	.5	.4
13.....	.3	.3	.5	.3	89	9	43	3.6	1.6	.8	.5	.4
14.....	.5	.4	.5	.3	26	1.1	29	3.5	1.6	.7	.5	.4
15.....	.4	.4	.4	.3	19	1.2	22	3.3	1.6	.7	.5	.4
16.....	.4	.4	.4	.3	14	1.2	17	3.3	1.4	.7	.6	.4
17.....	.4	.4	.4	.3	11	1.1	14	3.2	1.4	.7	.5	.4
18.....	.4	.4	4.9	.6	8.5	1.0	13	3.1	1.4	.6	.5	.5
19.....	.3	.4	1.1	.4	6.5	1.0	12	3	1.8	.6	.5	.4
20.....	.3	.4	.7	.3	5.5	1.0	11	2.8	1.6	.5	.6	.3
21.....	.3	.4	.6	.3	5	1.0	11	2.8	1.6	.5	.6	.3
22.....	.3	.4	.6	.3	4.8	1.0	9	2.5	1.6	.6	.5	.3
23.....	.3	.4	.6	.3	4.5	.9	8.5	2.8	1.6	.5	.5	.4
24.....	.3	.8	.6	.3	4.3	.9	8.5	2.5	1.6	.5	.4	.4
25.....	.3	.7	.6	.3	4.0	.9	7.5	2.3	1.6	.6	.4	.4
26.....	.3	.5	.6	.3	3.8	.9	6.5	2.0	1.6	.7	.4	.4
27.....	.3	.4	.6	.3	3.6	.8	6	1.8	1.4	.7	.5	.5
28.....	.3	.4	.5	.3	3.5	.8	6	2.0	1.4	.7	.5	.5
29.....	.3	.4	.5	.4	-----	.8	6	2.0	1.3	.7	.5	.5
30.....	.3	.4	.5	.4	-----	.8	6	1.8	1.3	.6	.5	.5
31.....	.3	-----	.5	17	-----	.9	-----	1.8	-----	.7	.4	-----

Daily and monthly discharge, in second-feet, of Fish Creek near Duarte, Calif.,
1925-26 and 1929-30—Continued

Day	Oct.	Nov	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1929-30												
1	0.1	0.1	0.2	0.2	1.3	0.8	2.9	2.0	1.4	0.4	0	0
2	.1	.2	.2	.2	1.2	.8	2.6	2.0	1.4	.4	0	0
3	.1	.2	.2	.2	1.1	.8	2.5	5.5	1.4	.3	0	0
4	.1	.2	.2	.2	.9	2.4	2.3	11	1.3	.3	0	0
5	.1	.2	.2	.4	.9	6	2.2	9	1.2	.3	0	0
6	.1	.2	.2	.6	.8	2.9	1.9	6	1.1	.3	0	0
7	.1	.2	.2	1.8	.8	1.8	1.7	5	1.0	.3	0	0
8	.1	.2	.2	.6	.8	1.8	1.6	4.1	.9	.3	0	0
9	.1	.2	.2	1.4	.8	1.4	1.6	3.7	.8	.3	0	0
10	.1	.2	.2	2.3	.7	1.3	1.6	3.4	.8	.3	.1	0
11	.1	.2	.3	4.2	.7	1.1	1.6	2.9	.8	.3	.1	0
12	.1	.2	.3	3.5	.7	1.1	1.5	2.5	.8	.2	.1	0
13	.1	.2	.3	2.1	.7	1.0	1.4	2.4	.8	.1	.1	0
14	.1	.2	.3	3.8	.6	4.7	1.4	2.2	.9	.1	.1	0
15	.1	.2	.3	42	.6	39	1.3	2.1	.8	.1	.1	0
16	.1	.2	.3	11	.7	33	1.1	2.5	.8	.1	.1	0
17	.2	.2	.2	.7	.7	22	1.1	2.5	.8	.1	.1	0
18	.2	.2	.2	6	.8	19	1.1	2.4	.8	.1	.1	0
19	.1	.2	.2	4.6	.8	14	1.1	2.1	.8	.1	.1	0
20	.1	.2	.2	3.5	.8	11	1.1	1.9	.8	.1	.1	.1
21	.1	.1	.2	2.9	.7	8.5	1.0	1.9	.8	.1	0	.1
22	.1	.1	.2	2.3	.9	7	.9	1.8	.8	.1	0	.1
23	.1	.1	.2	1.9	1.3	6.5	.9	1.8	.8	.1	0	.1
24	.1	.1	.2	1.6	.8	5	.9	1.8	.7	.1	0	.1
25	.1	.1	.2	1.4	.7	4.4	.9	1.7	.7	.1	0	.2
26	.1	.1	.2	1.4	.7	4.0	.9	1.6	.7	.1	0	.2
27	.1	.1	.2	1.8	.6	3.5	.9	1.5	.6	0	0	.2
28	.1	.2	.2	1.5	.7	3.1	.9	1.5	.5	0	0	.2
29	.1	.2	.2	1.4	---	3.0	1.0	1.5	.5	0	0	.2
30	.1	.2	.2	1.3	---	3.0	2.1	1.5	.5	0	0	.2
31	.1	---	.2	1.2	---	3.2	---	1.5	---	0	0	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1925-26				
October	0.5	0.1	0.27	16.6
November	.8	.2	.37	22.0
December	20	.4	1.37	84.2
January	17	.3	.91	56.0
February	89	1.2	12.2	678
March	9	.8	2.21	136
April	410	1.0	63.2	3,760
May	7.5	1.8	3.57	220
June	2.0	1.3	1.67	99.4
July	1.3	.5	.73	44.9
August	.7	.4	.53	32.6
September	.5	.3	.41	24.4
The year	410	.1	7.15	5,170
1929-30				
October	0.2	0.1	0.11	6.8
November	.2	.1	.17	10.1
December	.3	.2	.22	13.5
January	42	.2	36.9	227
February	1.3	.6	.81	45.0
March	39	.8	7.00	430
April	2.9	.9	1.47	87.5
May	11	1.5	3.01	185
June	1.4	.5	.87	51.8
July	.4	0	.16	9.8
August	.1	0	.04	2.5
September	.2	0	.06	3.6
The year	42	0	1.48	1,070

NOTE.—The above tables for 1925-26 are revised data and supersede those published in Water-Supply Paper 631.

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 junction of two main branches of creek and 2 miles north of Monrovia.

DRAINAGE AREA.—5.3 square miles at old location three-eighths mile upstream.

RECORDS AVAILABLE.—November, 1916, to September, 1930.

EXTREMES.—Maximum gage height during year, 1.86 feet Mar. 17 (discharge not determined); no flow at gage for several months.

1916-1930: Maximum discharge, about 2,000 second-feet Apr. 7, 1926; no flow for several months each year.

REMARKS.—Records fair. Mean monthly discharge for February estimated. Flow regulated at flood control dam above gage. Diversions by city of Monrovia upstream. (See record for Monrovia pipe line p. 72.) Los Angeles County Flood Control District furnished some discharge measurements.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Jan.	Mar.	May	June	July	Aug.	Sept.
1.....	0.3	0	0	0	0	0	0.4	0.5
2.....	.2	0	0	.1	.1	0	.4	.5
3.....	.1	0	0	.2	.1	0	.4	.6
4.....	0	0	0	.1	.1	0	.4	.6
5.....	0	0	.2	.3	.1	0	.3	.5
6.....	0	0	.2	.2	.1	0	.3	.5
7.....	0	0	.1	.2	0	0	.3	.5
8.....	0	0	.1	.2	0	0	.3	.5
9.....	0	0	.1	.2	0	0	.4	.5
10.....	0	0	.1	.2	0	.1	.4	.4
11.....	0	.1	.1	.2	0	.2	.4	.4
12.....	0	0	.1	.1	0	.2	.5	.4
13.....	0	.1	.1	.1	0	.2	.5	.3
14.....	0	.6	.1	.1	0	.2	.5	.3
15.....	0	1.0	1.5	.1	0	.2	.5	.3
16.....	0	.4	1.4	.1	0	.2	.5	.3
17.....	0	.4	1.0	.1	0	.2	.4	.6
18.....	0	1.0	.6	.1	0	.2	.4	1.4
19.....	0	.9	.2	.1	0	.3	.4	1.5
20.....	0	.8	.2	.1	0	.4	.5	2.1
21.....	0	.7	.2	.1	0	.4	.5	1.5
22.....	0	.6	.2	.1	0	.4	.5	1.0
23.....	0	.5	.2	0	0	.4	.6	.8
24.....	0	.3	.2	0	0	.4	.5	.9
25.....	0	.1	.2	0	0	.6	.6	.9
26.....	0	.1	.2	0	0	.5	.5	.9
27.....	0	.1	.2	0	0	.5	.5	.9
28.....	0	.1	.2	0	0	.5	.5	.9
29.....	0	.1	.1	0	0	.5	.5	.8
30.....	0	0	.1	0	0	.4	.5	.6
31.....	0	0	.1	0	-----	.4	.5	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
October.....	0.3		0		0.02		1.2	
January.....	1.0		0		.25		15.4	
February.....	-----		-----		.014		.8	
March.....	1.5		0		.26		16	
May.....	.3		0		.10		6.1	
June.....	-----		0		.017		1.0	
July.....	.6		0		.24		14.8	
August.....	.6		.3		.45		27.7	
September.....	2.1		.3		.73		43.4	
The year.....	2.1		0		.17		126	

NOTE.—No flow during months for which no discharge is shown.

Daily and monthly discharge, in second-feet, of Sawpit Creek and Monrovia pipe line near Monrovia, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	0.6	0.6	0.6	0.9	0.8	0.4	1.0	0.9	0.9	0.9	0.9
2	.8	.6	.6	.6	.9	.8	.4	1.2	.9	.9	.9	.9
3	.7	.6	.6	.6	.9	.4	.4	1.3	.9	.9	.9	1.0
4	.6	.6	.6	.6	.9	.3	.4	.9	.9	.9	.9	1.0
5	.6	.6	.6	.6	.9	.6	.4	1.1	.9	.9	.8	.9
6	.6	.6	.6	.6	.9	.8	.4	1.1	.9	.8	.8	.9
7	.6	.6	.6	.6	.9	.7	.6	1.1	.8	.6	.7	.9
8	.6	.6	.6	.6	.9	.7	.8	1.1	.8	.6	.7	.9
9	.6	.6	.6	.6	.8	.7	.8	1.1	.8	.6	.8	.9
10	.6	.6	.6	.8	.8	.5	.8	1.1	.8	.7	.8	.8
11	.6	.6	.6	1.0	.8	.5	.8	1.1	.8	.8	.8	.8
12	.6	.6	.6	.9	.8	.5	.8	1.0	.8	.8	.9	.8
13	.6	.6	.6	1.0	.8	.5	.8	1.0	.8	.8	.9	.7
14	.6	.6	.6	1.2	.8	.5	.8	1.0	.8	.8	.9	.7
15	.6	.6	.6	1.9	.8	1.9	.8	1.0	.8	.8	.9	.7
16	.6	.6	.6	1.5	.8	1.8	.8	1.0	.8	.8	.9	.7
17	.6	.6	.6	1.7	.8	1.5	.8	1.0	.9	.8	.9	1.0
18	.6	.6	.6	2.3	.8	1.2	.8	1.0	.9	.8	.8	1.8
19	.6	.6	.6	2.2	.8	.6	.8	1.0	.9	.9	.8	1.9
20	.6	.6	.6	2.0	.8	.6	.8	1.0	.9	1.0	.9	2.5
21	.6	.6	.6	1.9	.8	.6	.9	1.0	.9	1.0	.9	2.1
22	.6	.6	.6	1.7	.8	.6	.9	1.0	.9	1.0	.9	1.6
23	.6	.6	.6	1.6	.6	.6	.9	.9	.9	1.0	1.0	1.4
24	.6	.6	.6	1.4	.8	.6	.9	.9	.9	1.0	.9	1.5
25	.6	.6	.6	1.2	.8	.6	.9	.9	.9	1.2	1.0	1.5
26	.6	.6	.6	1.2	.8	.8	.9	.8	.9	1.1	.9	1.5
27	.6	.6	.6	1.0	.8	.8	.9	.8	.9	1.1	.9	1.5
28	.6	.6	.6	1.0	.6	.8	.9	.8	.9	1.1	.9	1.5
29	.6	.6	.6	1.0		.7	.9	.8	.9	1.1	.9	1.4
30	.6	.6	.6	.9		.7	1.1	.9	.9	1.0	.9	1.2
31	.6		.6	.9		.7		.8		1.0	.9	
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October	0.9		0.6		0.62		38.1					
November	.6		.6		.60		35.7					
December	.6		.6		.60		36.9					
January	2.3		.6		1.15		70.7					
February	.9		.6		.81		45.0					
March	1.9		.3		.75		46.1					
April	1.1		.4		.75		44.6					
May	1.3		.8		.99		60.9					
June	.9		.8		.87		51.8					
July	1.2		.6		.89		54.7					
August	1.0		.7		.87		53.5					
September	2.5		.7		1.20		71.4					
The year	2.5		.3		.84		609					

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 1½ miles north of Monrovia.

RECORDS AVAILABLE.—May, 1916, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 1.3 second-feet Jan. 17-19; minimum mean daily discharge, 0.3 second-foot Mar. 4.

1916-1930: Maximum mean daily discharge, 6.1 second-feet May 9, 1922; no flow Nov. 11, 1924, Apr. 8 and 16, 1926, and Feb. 16, 1927.

REMARKS.—Records good. Discharge estimated Aug. 3-9. The Monrovia pipe line furnishes part of the water supply of Monrovia. It diverts 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.6	0.6	0.6	0.6	0.9	0.8	0.4	1.0	0.9	0.9	0.5	0.4
2.....	.6	.6	.6	.6	.9	.8	.4	1.1	.8	.9	.5	.4
3.....	.6	.6	.6	.6	.9	.4	.4	1.1	.8	.9	.5	.4
4.....	.6	.6	.6	.6	.9	.3	.4	.8	.8	.9	.5	.4
5.....	.6	.6	.6	.6	.9	.4	.4	.8	.8	.9	.5	.4
6.....	.6	.6	.6	.6	.9	.6	.4	.9	.8	.8	.5	.4
7.....	.6	.6	.6	.6	.9	.6	.6	.9	.8	.6	.4	.4
8.....	.6	.6	.6	.6	.9	.6	.8	.9	.8	.6	.4	.4
9.....	.6	.6	.6	.6	.8	.6	.8	.9	.8	.6	.4	.4
10.....	.6	.6	.6	.8	.8	.4	.8	.9	.8	.6	.4	.4
11.....	.6	.6	.6	.9	.8	.4	.8	.9	.8	.6	.4	.4
12.....	.6	.6	.6	.9	.8	.4	.8	.9	.8	.6	.4	.4
13.....	.6	.6	.6	.9	.8	.4	.8	.9	.8	.6	.4	.4
14.....	.6	.6	.6	.6	.8	.4	.8	.9	.8	.6	.4	.4
15.....	.6	.6	.6	.9	.8	.4	.8	.9	.8	.6	.4	.4
16.....	.6	.6	.6	1.1	.8	.4	.8	.9	.8	.6	.4	.4
17.....	.6	.6	.6	1.3	.8	.5	.8	.9	.9	.6	.4	.4
18.....	.6	.6	.6	1.3	.8	.6	.8	.9	.9	.6	.4	.4
19.....	.6	.6	.6	1.3	.8	.4	.8	.9	.9	.6	.4	.4
20.....	.6	.6	.6	1.2	.8	.4	.8	.9	.9	.6	.4	.4
21.....	.6	.6	.6	1.2	.8	.4	.9	.9	.9	.6	.4	.6
22.....	.6	.6	.6	1.1	.8	.4	.9	.9	.9	.6	.4	.6
23.....	.6	.6	.6	1.1	.6	.4	.9	.9	.9	.6	.4	.6
24.....	.6	.6	.6	1.1	.8	.4	.9	.9	.9	.6	.4	.6
25.....	.6	.6	.6	1.1	.8	.4	.9	.9	.9	.6	.4	.6
26.....	.6	.6	.6	1.1	.8	.6	.9	.8	.9	.6	.4	.6
27.....	.6	.6	.6	.9	.8	.6	.9	.8	.9	.6	.4	.6
28.....	.6	.6	.6	.9	.6	.6	.9	.8	.9	.6	.4	.6
29.....	.6	.6	.6	.9	-----	.6	.9	.8	.9	.6	.4	.6
30.....	.6	.6	.6	.9	-----	.6	1.1	.9	.9	.6	.4	.6
31.....	.6	-----	.6	.9	-----	.6	-----	.8	-----	.6	.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.6	0.6	0.60	36.9
November.....	.6	.6	.60	35.7
December.....	.6	.6	.60	36.9
January.....	1.3	.6	.90	55.3
February.....	.9	.6	.81	45.0
March.....	.8	.3	.50	30.7
April.....	1.1	.4	.75	44.6
May.....	1.1	.8	.89	54.7
June.....	.9	.8	.85	50.6
July.....	.9	.6	.65	40.0
August.....	.5	.4	.42	25.8
September.....	.6	.4	.47	28.0
The year.....	1.3	.3	.67	484

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., P. 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, 1930. Discharge measurements only, April to September, 1916.

EXTREMES.—Maximum discharge during year, 28 second-feet Mar. 5 (gage height, 1.64 feet); practically no flow Oct. 12–14, 19–24, Nov. 23–25, and Dec. 21–28.

1916–1930: Maximum discharge, 1,140 second-feet Feb. 9, 1927; no flow for several months during several years.

REMARKS.—Records good. Discharge estimated May 31 and June 1. Flood control dam above gage regulates flow. San Dimas Water Co. diverts for irrigation just below gage. Some measurements furnished by Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1.....	0.1	0.1	0.1	0.1	1.2	0.9	0.4	0.6	0.6	3.2	2.0	0.2
2.....	.1	.1	.1	.1	1.2	.8	.4	.6	1.4	4.1	2.4	.2
3.....	.1	.1	.1	.1	1.2	.7	.4	.8	2.2	4.1	2.4	.2
4.....	.1	.1	.1	.1	1.1	1.1	.4	1.2	1.8	4.1	2.4	.2
5.....	.1	.1	.1	.1	1.0	6	.4	1.0	2.9	3.8	2.7	.2
6.....	.1	.1	.1	.2	1.0	.4	.4	.8	2.9	2.7	2.9	.2
7.....	.1	.1	.1	.1	1.0	.3	.4	.8	3.0	3.1	3.0	.2
8.....	.1	.1	.1	.1	.9	.3	.4	.9	3.5	3.0	3.0	.2
9.....	.1	.1	.1	.2	.9	.3	.4	.8	3.4	2.9	2.9	.2
10.....	.1	.1	.1	.3	.9	.2	.4	.7	2.4	2.9	2.9	.2
11.....	.1	.1	.1	2.0	.8	.2	.4	.6	2.6	2.9	2.9	.2
12.....	0	.1	.1	2.4	.8	.2	.4	.6	3.0	2.9	2.8	.2
13.....	0	.1	.1	2.4	.8	.2	.4	.6	3.0	2.9	2.8	.2
14.....	0	.1	.1	2.2	.8	.5	.4	.6	3.0	2.9	2.8	.1
15.....	.1	.1	.1	7	.8	1.9	.4	.6	2.7	3.0	2.8	.1
16.....	.1	.1	.1	5	.7	2.2	.4	.6	2.6	3.0	2.8	.2
17.....	.1	.1	.1	3.0	.7	1.2	.4	.6	3.2	3.0	3.0	.2
18.....	.1	.1	.1	2.4	.7	.9	.4	.6	3.5	3.4	3.9	.2
19.....	0	.1	.1	2.0	.7	.7	.4	.6	3.6	3.4	3.8	.2
20.....	0	.1	.1	1.8	.9	.6	.4	.6	3.5	3.4	3.4	.2
21.....	0	.1	0	1.6	.9	.6	.4	.6	3.5	3.4	2.9	.2
22.....	0	.1	0	1.4	1.1	.6	.7	.6	3.6	3.4	2.8	.2
23.....	0	0	0	1.4	1.7	.6	1.1	.6	3.6	3.6	2.7	.2
24.....	0	0	0	1.3	1.3	.5	1.1	.5	3.6	4.4	2.7	.2
25.....	.1	0	0	1.2	1.0	.4	1.2	.5	3.7	4.4	2.7	.2
26.....	.1	.1	0	1.2	.9	.4	1.2	.5	3.2	3.9	2.7	.1
27.....	.1	.1	0	1.8	.9	.4	1.2	.5	2.1	2.7	2.7	.1
28.....	.1	.1	0	1.5	1.0	.4	1.3	.5	2.4	2.9	2.6	.1
29.....	.1	.1	.1	1.2	-----	.4	1.7	.5	2.4	2.4	1.9	.1
30.....	.1	.1	.1	1.2	-----	.4	1.0	.6	2.4	1.8	.3	.2
31.....	.1	-----	.1	1.2	-----	.4	-----	.6	-----	1.8	.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.1	0	0.07	4.3
November.....	.1	0	.09	5.4
December.....	.1	0	.07	4.3
January.....	7	.1	1.50	92.2
February.....	1.7	.7	.96	53.3
March.....	6	.2	.80	49.2
April.....	1.7	.4	.63	37.5
May.....	1.2	.5	.65	40.0
June.....	3.7	.6	2.84	169
July.....	4.4	1.8	3.21	197
August.....	3.9	.2	2.64	162
September.....	.2	.1	.18	10.7
The year.....	6	0	1.14	825

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 2½ miles north-east of Glendora.

DRAINAGE AREA.—7.5 square miles.

RECORDS AVAILABLE.—December, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 3.1 second-feet Mar. 15 (gage height, 1.17 feet); no flow for several months.

1919-1930: Maximum discharge, 660 second-feet Feb. 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 1½ miles above the gage through a 10-inch pipe line. A 12-inch pipe line diverts water just below gage. Flow regulated by flood-control dam about 1 mile upstream. Discharge Jan. 19-22, Jan. 30 to Mar. 11, Apr. 4-28, and May 25 to July 16 determined by interpolating between measurements. Some measurements furnished by Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	0	0.1	0	0.3	0.4	0.1	0.1
2	0	.1	0	.2	.3	.1	.1
3	0	.1	0	.2	.7	.1	.1
4	0	.1	.1	.1	1.3	.1	.1
5	0	.1	.2	.1	1.1	.1	.1
6	0	.1	.1	.1	.7	.1	.1
7	0	.1	.1	.1	.5	.1	.1
8	0	.1	.1	.1	.7	.1	.1
9	0	.1	.1	.1	.5	.1	.1
10	0	.1	.1	.1	.5	.1	.1
11	0	0	.1	.1	.4	.1	.1
12	0	0	.1	.1	.4	.2	.1
13	0	0	.2	.1	.3	.1	.1
14	0	0	.3	.1	.3	.4	.1
15	.6	0	1.8	.1	.2	.2	.1
16	.5	0	2.0	.1	.2	.1	.1
17	.3	0	1.1	.1	.2	.2	0
18	.2	0	.8	.1	.2	.1	0
19	.1	0	.7	.1	.2	.1	0
20	.1	0	.7	.1	.2	.2	0
21	.1	0	.7	.1	.2	.1	0
22	.2	0	.7	.1	.1	.1	0
23	.2	0	.6	.1	.1	.1	0
24	.2	0	.4	.1	.1	.1	0
25	.2	0	.4	.1	.1	.1	0
26	.2	0	.4	.1	.1	.1	0
27	.3	0	.3	.1	.1	.1	0
28	.2	0	.4	.1	.1	.1	0
29	.2	-----	.4	.4	.2	.1	0
30	.2	-----	.4	.6	.2	.1	0
31	.2	-----	.4	-----	.2	-----	0
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
January	0.6	0	0.13	8.0			
February	.1	0	.04	2.2			
March	2.0	0	.44	27.0			
April	.6	.1	.14	8.3			
May	1.3	.1	.35	21.5			
June	.4	.1	.12	7.1			
July	.1	0	.05	3.1			
The year	2.0	0	.11	77.2			

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

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, 1930.

EXTREMES.—Maximum discharge during year not determined; no flow many days.

1916-1930: Maximum discharge, about 1,860 second-feet Feb. 16, 1927 (gage height, 15.4 feet); usually no flow for several months each year.

REMARKS.—Records good. Flow regulated by flood-control dam above gage. Record furnished by the Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.0	0	0.7	0	5	1.0	1.0	1.0	2.0	2.0
2.....	3.0	0	.7	0	5	1.0	1.0	1.0	2.0	2.0
3.....	3.0	0	.7	0	5	1.0	1.0	1.0	2.0	2.0
4.....	3.0	0	.4	0	5	1.0	1.0	1.0	2.0	2.0
5.....	2.4	0	.4	0	4.5	1.0	1.0	1.0	2.0	2.0
6.....	2.4	0	.4	0	4	1.0	1.0	2.0	2.0	2.0
7.....	2.4	0	.3	0	3.5	1.0	1.0	2.0	2.0	2.0
8.....	3.0	0	.3	0	3.0	0	1.0	2.0	2.0	2.0
9.....	3.0	0	.3	0	2.5	0	1.0	2.0	2.0	2.0
10.....	3.0	0	0	0	2.2	1.0	1.0	2.0	2.0	2.0
11.....	3.0	0	0	0	2.0	1.0	1.0	2.0	2.0	2.0
12.....	3.0	0	0	0	1.8	1.0	1.0	2.0	2.0	2.0
13.....	3.0	0	0	0	1.5	1.0	1.0	2.0	2.0	2.0
14.....	3.0	0	0	0	1.5	1.0	1.0	2.0	2.0	2.0
15.....	3.0	0	0	0	1.5	1.0	1.0	2.0	2.0	2.0
16.....	3.0	3.3	0	0	1.5	1.0	1.0	2.0	2.0	2.0
17.....	2.4	3.3	0	0	1.5	1.0	1.0	2.0	2.0	2.0
18.....	3.0	7	0	0	1.5	1.0	1.0	2.0	2.0	2.0
19.....	3.0	7.5	0	0	1.5	1.0	1.0	2.0	2.0	2.0
20.....	3.0	8	0	0	1.5	1.0	1.0	2.0	2.0	2.0
21.....	2.8	0	0	4.1	1.5	1.0	1.0	2.0	2.0	2.0
22.....	1.9	0	0	5	1.5	1.0	1.0	2.0	2.0	2.0
23.....	1.9	.7	0	5	1.5	1.0	1.0	2.0	2.0	2.0
24.....	1.0	.4	0	5	1.5	1.0	1.0	2.0	2.0	2.0
25.....	.2	.4	0	5	1.0	1.0	1.0	2.0	2.0	2.0
26.....	0	.4	0	5	1.0	1.0	1.0	2.0	2.0	2.0
27.....	0	.7	0	5	1.0	1.0	1.0	2.0	2.0	3.0
28.....	0	.7	0	5	1.0	1.0	1.0	2.0	2.0	4.2
29.....	0	.7	5	5	1.0	1.0	1.0	2.0	2.0	9.5
30.....	0	.7	5	5	1.0	1.0	1.0	2.0	2.0	9.5
31.....	0	.7	5	5	1.0	1.0	1.0	2.0	2.0	9.5
Month	Maximum				Minimum		Mean		Run-off in acre-feet	
October.....	3.0				0		2.13		131	
January.....	8.0				0		1.11		68.2	
February.....	.7				0		.15		8.3	
March.....	5.0				0		1.75		108	
April.....	5.0				1.0		2.25		134	
May.....	1.0				0		.94		57.8	
June.....	1.0				1.0		1.00		59.5	
July.....	2.0				1.0		1.84		113	
August.....	2.0				2.0		2.00		123	
September.....	9.5				2.0		2.61		155	
The year.....	9.5				0		1.32		958	

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

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, 1930.

EXTREMES.—Maximum discharge during year, 260 second-feet May 3 (gage height, 2.07 feet); minimum, 0.1 second-foot Oct. 1 to Nov. 21 and Dec. 5-24.

1916-1930: Maximum discharge, 8,600 second-feet Dec. 19, 1921 (gage height, 6.20 feet); minimum, 0.1 second-foot during summers of 1919, 1924, 1928, and 1929.

REMARKS.—Records good. Discharge interpolated between frequent measurements, Oct. 1 to Jan. 6 and July 26 to Sept. 30. There are two or three small irrigation diversions above gage. Some measurements furnished by Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	0.2	0.2	4.1	4.3	19	15	5.5	0.6	0.3	0.2
2	.1	.1	.2	.2	4.3	4.3	16	16	5.5	.6	.3	.2
3	.1	.1	.2	.2	4.3	4.3	14	37	5.5	.6	.3	.2
4	.1	.1	.2	.2	4.1	7	11	58	5.5	.7	.3	.2
5	.1	.1	.1	.2	3.9	19	9.5	44	4.8	.6	.3	.2
6	.1	.1	.1	.2	3.6	12	10	41	3.6	.5	.3	.2
7	.1	.1	.1	2.5	3.4	8.5	11	35	3.2	.5	.2	.2
8	.1	.1	.1	2.0	3.4	7	10	28	3.0	.5	.2	.2
9	.1	.1	.1	3.0	3.6	6.5	9.5	25	2.8	.5	.2	.2
10	.1	.1	.1	6.5	3.6	6	9.5	19	2.8	.5	.2	.2
11	.1	.1	.1	13	3.6	5.5	8.5	17	2.4	.5	.2	.2
12	.1	.1	.1	12	3.4	5	8	15	1.8	.5	.2	.2
13	.1	.1	.1	9.5	3.4	5.5	8.5	15	1.6	.5	.2	.2
14	.1	.1	.1	9.5	3.4	34	8.5	13	1.3	.5	.2	.2
15	.1	.1	.1	34	3.6	128	9	11	2.0	.5	.2	.2
16	.1	.1	.1	20	3.9	82	8.5	12	2.0	.5	.2	.2
17	.1	.1	.1	11	4.1	56	7.5	12	1.5	.5	.2	.2
18	.1	.1	.1	9	3.9	52	6.5	11	1.5	.5	.2	.2
19	.1	.1	.1	7.5	3.6	46	5.5	10	2.4	.5	.2	.2
20	.1	.1	.1	7	3.9	51	5	10	2.0	.4	.2	.2
21	.1	.1	.1	6	3.9	55	5	9	2.0	.3	.2	.2
22	.1	.2	.1	5	4.3	62	4.5	7.5	2.2	.3	.2	.2
23	.1	.2	.1	4.6	5	62	4.5	6.5	1.8	.3	.2	.2
24	.1	.2	.1	4.3	5.5	68	4.8	6.5	1.0	.2	.2	.3
25	.1	.2	.2	4.1	4.6	55	5	6	1.4	.2	.2	.3
26	.1	.2	.2	3.6	4.3	41	5	5.5	1.1	.2	.2	.4
27	.1	.2	.2	6	4.3	32	5	5.5	.8	.2	.2	.4
28	.1	.2	.2	6.5	4.3	22	5.5	6.5	.0	.2	.2	.4
29	.1	.2	.2	6	-----	19	6.5	7	.0	.2	.2	.4
30	.1	.2	.2	5	-----	18	10	8	.0	.3	.2	.4
31	.1	-----	.2	4.3	-----	20	-----	6.5	-----	.3	.2	-----
Month	Maximum		Minimum		Mean		Run-off in		acre-feet			
October	0.1		0.1		0.1		6.1					
November	.2		.1		.13		7.7					
December	.2		.1		.14		8.6					
January	34		.2		6.55		403					
February	5.5		3.4		3.98		221					
March	128		4.3		32.2		1,980					
April	19		4.5		8.36		497					
May	58		5.5		16.7		1,030					
June	5.5		.6		2.47		147					
July	.7		.2		.43		26.4					
August	.3		.2		.22		13.5					
September	.4		.2		.24		14.3					
The year	128		.1		6.01		4,350					

HAINES CREEK NEAR TUJUNGA, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 18, T. 2 N., R. 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, 1930.

EXTREMES.—Maximum discharge during year not determined; no flow during part of September.

1917–1930: Maximum discharge, 15 second-feet Jan. 2, 1922 (gage height, 1.74 feet); no flow July 18 to Aug. 1, 1921, Aug. 29 to Oct. 12, 1925, Dec. 19, 1925, to Jan. 10, 1926, and for part of September, 1930.

REMARKS.—Records fair. Daily discharge not ascertained. Mean monthly discharge estimated from volumetric measurements. Diversions above and below station. There are several small check dams above station.

Monthly discharge, 1929–30

Month	Mean discharge in second-feet	Run-off in acre-feet	Month	Mean discharge in second-feet	Run-off in acre-feet
October.....	0.001	0.06	May.....	0.001	0.06
November.....	.001	.06	June.....	.001	.06
December.....	.001	.06	July.....	.0005	.03
January.....	.003	.18	August.....	.0005	.03
February.....	.003	.17	September.....	0	0
March.....	.002	.12			
April.....	.001	.06	The year.....	.0012	.89

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, 1930.

EXTREMES.—Maximum discharge during year, 143 second-feet May 3 (gage height, 2.65 feet); practically no flow during October, November, August, and September.

1910-1930: Maximum discharge, about 5,630 second-feet Feb. 20, 1914 (gage height, 12.5 feet); practically no flow for months during 1925, 1926, 1929, and 1930.

REMARKS.—Records good. Mean monthly discharge for October, November, August, and September and daily discharge May 21, 22, June 8-12, July 13-17 and 19-27 estimated. No diversions. Some measurements furnished by Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0.1	0.2	1.3	1.2	3.8	2.5	1.9	0.7
2.....	.1	.2	1.3	1.1	4.6	6.5	1.9	.6
3.....	.1	.2	1.3	1.2	3.0	9.5	1.8	.5
4.....	.1	.2	1.3	1.5	2.8	42	1.9	.3
5.....	.1	.3	1.1	4.2	2.5	27	1.9	.3
6.....	.1	.3	1.0	3.0	2.4	19	1.9	.3
7.....	.1	.5	1.0	2.7	2.2	14	1.8	.2
8.....	.1	.3	.9	2.6	2.2	12	1.8	.2
9.....	.1	.4	.9	2.5	2.2	11	1.8	.2
10.....	.1	.7	.9	2.3	2.3	9	1.7	.1
11.....	.2	1.5	.9	2.3	2.2	8.5	1.7	.1
12.....	.2	1.3	.9	1.9	2.1	7.5	1.7	.1
13.....	.2	2.4	.9	2.1	1.9	6.5	1.6	.1
14.....	.1	2.7	.9	8	1.9	5.5	1.7	.1
15.....	.1	31	.9	60	1.9	4.9	1.6	.1
16.....	.1	14	.9	46	1.8	4.9	1.5	.1
17.....	.1	7.5	.8	32	1.8	4.5	1.3	.1
18.....	.1	5.5	.8	28	1.7	4.1	1.3	.1
19.....	.1	3.3	.7	21	1.5	3.6	1.3	.1
20.....	.1	2.5	.7	18	1.4	3.3	1.3	.1
21.....	.1	2.1	.7	17	1.3	3.0	1.2	.1
22.....	.1	1.9	.8	15	1.3	2.8	1.0	.1
23.....	.2	1.8	1.1	13	1.3	2.7	.9	.1
24.....	.2	1.7	.9	10	1.3	2.3	.8	.1
25.....	.2	1.5	.9	9	1.3	2.4	.8	.1
26.....	.2	1.5	1.0	7.5	1.4	2.4	.8	.1
27.....	.2	1.8	1.1	6.5	1.1	2.3	.7	.1
28.....	.2	1.7	1.1	5.5	.9	2.2	.7	0
29.....	.2	1.7	-----	4.9	1.0	2.2	.7	0
30.....	.2	1.7	-----	4.6	1.9	2.3	.7	0
31.....	.2	1.5	-----	5	-----	2.2	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	-----	-----	0.05	3.1
November.....	-----	-----	.07	4.2
December.....	0.2	0.1	.14	8.6
January.....	31	.2	3.03	186
February.....	1.3	.7	.96	53
March.....	60	1.1	11.0	676
April.....	4.6	.9	1.97	117
May.....	42	2.2	7.50	461
June.....	1.9	.7	1.39	82.7
July.....	.7	0	.16	9.8
August.....	-----	-----	.02	1.2
September.....	-----	-----	.02	1.2
The year.....	60	0	2.21	1,600

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 Hermits Falls, 4 miles northeast of Sierra Madre.

DRAINAGE AREA.—10.5 square miles.

RECORDS AVAILABLE.—July, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 39 second-feet Jan. 15 (gage height, 2.04 feet); minimum, 0.1 second-foot during part of October, November, August, and September.

1916-1930: Maximum discharge, about 1,400 second-feet Apr. 7, 1926 (gage height, 10.7 feet); practically no flow Aug. 18 to Sept. 14, 1929.

REMARKS.—Records good. Discharge estimated Feb. 9-11, 14-18, and Mar. 11. No diversions. Some measurements furnished by Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.2	0.1	0.2	0.3	2.2	1.2	4.9	3.1	1.8	0.7	0.2	0.1
2.....	.2	.1	.2	.3	2.1	1.2	4.4	3.7	2.0	.7	.2	.1
3.....	.2	.1	.2	.2	2.0	1.2	4.0	7.5	1.8	.7	.1	.1
4.....	.1	.1	.2	.3	1.8	3.1	3.7	12	1.7	.6	.1	.1
5.....	.1	.1	.2	.5	1.7	6	3.5	10	1.6	.6	.1	.1
6.....	.1	.1	.2	.6	1.8	3.9	3.3	8.5	1.4	.6	.1	.1
7.....	.1	.1	.2	1.2	1.6	3.1	3.0	7	1.6	.6	.1	.1
8.....	.1	.1	.2	.6	1.4	2.3	2.8	6.5	1.4	.7	.2	.1
9.....	.1	.1	.2	.9	1.4	2.1	2.8	6	1.6	.7	.2	.1
10.....	.1	.1	.2	1.7	1.3	2.1	2.8	5.5	1.6	.6	.2	.1
11.....	.1	.2	.3	2.3	1.2	2.0	2.6	5	1.7	.6	.2	.1
12.....	.1	.2	.3	2.0	1.2	2.0	2.5	4.4	1.7	.4	.3	.1
13.....	.1	.2	.3	2.0	1.2	2.0	2.6	4.0	1.7	.3	.2	.1
14.....	.1	.2	.3	2.3	1.1	9	2.5	4.0	1.7	.3	.2	.1
15.....	.1	.2	.3	20	1.1	25	2.3	4.0	1.4	.3	.2	.1
16.....	.1	.2	.2	9.5	1.0	22	2.2	4.4	1.3	.2	.2	.1
17.....	.1	.2	.3	6.5	1.0	17	2.1	4.0	1.3	.2	.2	.1
18.....	.1	.2	.3	6	.9	14	2.0	3.9	1.4	.2	.2	.1
19.....	.1	.2	.2	4.4	.9	12	1.8	3.1	1.4	.3	.2	.1
20.....	.1	.2	.2	3.5	1.1	11	1.7	2.8	1.4	.3	.2	.1
21.....	.1	.2	.3	3.0	1.1	11	1.6	2.8	1.3	.3	.2	.1
22.....	.1	.2	.5	2.6	1.3	10	1.4	2.5	1.2	.3	.1	.1
23.....	.1	.2	.5	2.5	2.1	9.5	1.4	2.3	1.2	.3	.1	.2
24.....	.1	.2	.5	2.3	1.7	8.5	1.4	2.2	1.1	.2	.1	.2
25.....	.1	.2	.5	2.5	1.4	7	1.6	2.1	1.0	.2	.1	.2
26.....	.1	.2	.5	2.3	1.3	6.5	1.6	2.1	1.0	.2	.1	.2
27.....	.1	.2	.4	2.8	1.4	6	1.6	2.1	1.0	.2	.1	.2
28.....	.1	.2	.3	2.8	1.4	5.5	1.7	2.1	.9	.2	.1	.2
29.....	.1	.2	.3	2.6	-----	5	1.8	2.1	.9	.2	.1	.2
30.....	.1	.2	.3	2.5	-----	4.9	3.1	2.0	.8	.2	.1	.3
31.....	.1	-----	.3	2.3	-----	5.5	-----	2.0	-----	.2	.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.2	0.1	0.11	6.8
November.....	.2	.1	.17	10.1
December.....	.5	.2	.29	17.8
January.....	20	.2	3.01	185
February.....	2.2	.9	1.42	78.9
March.....	25	1.2	7.15	440
April.....	4.9	1.4	2.49	148
May.....	12	2.0	4.31	265
June.....	2.0	.8	1.40	83.3
July.....	.7	.2	.39	24.0
August.....	.3	.1	.16	9.8
September.....	.3	.1	.13	7.7
The year.....	25	.1	1.76	1,280

SURFACE WATER SUPPLY, 1930, PART 11

LITTLE SANTA ANITA CREEK NEAR SIERRA MADRE, CALIF.

LOCATION.—Water-stage recorder near center of W. $\frac{1}{2}$ 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, 1930.

EXTREMES.—Maximum discharge during year, 5 second-feet Jan. 15 (gage height, 1.34 feet); minimum, 0.01 second-foot at numerous times during October.

1916-1930: Maximum stage, 11.75 feet Apr. 7, 1926 (discharge not determined); no flow during periods in 1919, 1924, and 1925.

REMARKS.—Records good. Discharge estimated Nov. 27-31, Jan. 22, and May 1-6. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....		0.2	0.1	0.5	0.3	0.2	0.1
2.....		.2	.1	.4	.3	.2	.1
3.....		.2	.1	.4	.5	.2	.1
4.....		.2	.2	.4	1.7	.2	.1
5.....		.2	.3	.3	1.4	.2	.1
6.....		.2	.2	.3	1.0	.2	
7.....		.2	.2	.3	.9	.2	
8.....		.2	.2	.3	1.0	.2	
9.....		.1	.2	.3	.9	.2	
10.....	0.1	.1	.2	.3	.9	.2	
11.....	.2	.1	.2	.3	.7	.2	
12.....	.2	.1	.2	.2	.7	.2	
13.....	.2	.1	.2	.2	.7	.2	
14.....	.2	.1	.9	.2	.7	.2	
15.....	.2	.1	2.8	.2	.6	.2	
16.....	1.2	.1	2.5	.2	.7	.2	
17.....	.9	.1	2.1	.2	.7	.2	
18.....	.8	.1	1.7	.2	.6	.2	
19.....	.6	.1	1.4	.2	.5	.2	
20.....	.6	.1	1.4	.2	.5	.2	
21.....	.5	.1	1.2	.2	.4	.2	
22.....	.5	.1	1.2	.2	.4	.2	
23.....	.4	.1	.9	.2	.4	.2	
24.....	.3	.1	.8	.2	.3	.2	
25.....	.3	.1	.7	.2	.3	.1	
26.....	.2	.1	.6	.2	.3	.1	
27.....	.3	.1	.5	.2	.3	.1	
28.....	.2	.1	.5	.2	.3	.1	
29.....	.2		.5	.2	.2	.1	
30.....	.2		.5	.3	.2	.1	
31.....	.2		.6		.2		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.03	0.01	0.019	1.17
November.....	.04	.02	.024	1.43
December.....	.04	.03	.031	1.91
January.....	2.1	.03	.344	21.2
February.....	.2	.1	.137	7.61
March.....	2.8	.1	.744	45.7
April.....	.5	.2	.242	14.4
May.....	1.7	.2	.609	37.4
June.....	.2	.1	.161	9.58
July.....	.1	.04	.072	4.43
August.....	.04	.02	.039	2.40
September.....	.04	.02	.028	1.67
The year.....	2.8	.01	.206	149

NOTE.—Discharge less than 0.1 second-foot on days for which no discharge is given.

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, 1930.

EXTREMES.—Maximum discharge during year, 81 second-feet May 3 (gage height, 2.37 feet); no flow for several months.

1918-1930: Maximum discharge, about 1,360 second-feet Apr. 7, 1926 (gage height, 5.0 feet); no flow for periods each year.

REMARKS.—Records good. Discharge estimated Mar. 15. City of Pasadena diverts water above station; record of diversion furnished by city.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Mar.	May	Day	Jan.	Mar.	May	Day	Jan.	Mar.	May
1.....	0	0	0.8	11.....	0	0	0	21.....	0	2.7	0
2.....	0	0	2.5	12.....	0	0	0	22.....	0	2.9	0
3.....	0	0	11	13.....	0	0	0	23.....	0	1.2	0
4.....	0	0	12	14.....	0	0	0	24.....	0	0	0
5.....	0	0	6	15.....	9	18	0	25.....	0	0	0
6.....	0	0	2.4	16.....	2.2	14	0	26.....	0	0	0
7.....	0	0	1.3	17.....	0	9.5	0	27.....	0	0	0
8.....	0	0	1.3	18.....	0	8	0	28.....	0	0	0
9.....	0	0	.2	19.....	0	4.8	0	29.....	0	0	0
10.....	0	0	0	20.....	0	3.1	0	30.....	0	0	0
								31.....	0	0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	9.0	0	0.36	22.1
March.....	18	0	2.07	127
May.....	12	0	1.21	74.4
The year.....	18	0	.31	224

NOTE.—No flow during months for which no discharge is shown.

Monthly diversion by city of Pasadena from Eaton Creek, 1929-30

Month	Run-off in acre- feet	Month	Run-off in acre- feet	Month	Run-off in acre- feet
October.....	9.8	March.....	167	August.....	17.2
November.....	10.1	April.....	94	September.....	11.9
December.....	13.5	May.....	167		
January.....	104	June.....	59.5	The year.....	741
February.....	62.2	July.....	24.6		

SANTA YNEZ RIVER BASIN

SANTA YNEZ RIVER NEAR SANTA BARBARA, CALIF.

LOCATION.—About on section line between secs. 10 and 11, T. 5 N., R. 27 W., at Gibraltar Dam, 7 miles north of Santa Barbara.

DRAINAGE AREA.—219 square miles (revised).

RECORDS AVAILABLE.—November, 1903, to January, 1908; February, 1910, to November, 1918; April, 1920, to September, 1930.

REMARKS.—Beginning April, 1920, the discharge at the station compiled from reservoir records. This record gives total run-off at Gibraltar Dam, including diversions to Santa Barbara for municipal use. Entire record April, 1920, to September, 1930, furnished by the city of Santa Barbara through R. A. Hill, consulting engineer for the water department.

Monthly discharge of Santa Ynez River near Santa Barbara, Calif., 1920-1930

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1920				
April.....	89	22	44.8	2,680
May.....	26	5	15.0	924
June.....	6	2	3.00	179
July.....	1.5	.6	.98	60.3
August.....	.9	.4	.44	27.2
September.....	.5	.3	.35	21.0
The period.....				3,890
1920-21				
October.....	.3	.3	.30	18.4
November.....	.4	.3	.35	21.0
December.....	.4	.4	.40	24.6
January.....	123	.4	18.6	1,146
February.....	78	15	27.3	1,517
March.....	256	14	34.7	2,136
April.....	15	5	11.0	657
May.....	41	3	10.3	631
June.....	9	1.5	3.23	192
July.....	1.5	.9	1.20	73.8
August.....	.9	.7	.77	47.2
September.....	.7	.6	.61	36.5
The year.....	256	.3	8.98	6,500
1921-22				
October.....	.6	.5	.53	32.7
November.....	.5	.4	.45	26.8
December.....	2,523	.4	184	11,310
January.....	840	28	123	7,561
February.....	2,485	90	508	28,205
March.....	467	109	200	12,306
April.....	140	51	89	5,294
May.....	75	22	40.3	2,477
June.....	28	7	15.1	899
July.....	7	1	4.20	258
August.....	1.1	.5	.78	48
September.....	.49	.25	.32	19
The year.....	2,523	.25	94.5	68,400

Monthly discharge of Santa Ynez River near Santa Barbara, Calif., 1920-1930—
Continued

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1922-23				
October.....	0.68	0.29	0.39	23.8
November.....	8.5	.2	1.62	96.4
December.....	495	2	55.6	3,424
January.....	57	7	16.7	1,025
February.....	54	14	26.8	1,488
March.....	22	10	14.9	914
April.....	25	5	13.0	776
May.....	17	4	9.71	597
June.....	8.2	1.0	3.66	218
July.....	1.8	.6	1.10	67.4
August.....	.9	.5	.60	37.1
September.....	.5	.4	.47	28.2
The year.....	495	.2	12.0	8,690
1923-24				
October.....	.4	.3	.33	20.4
November.....	3.0	.1	.94	55.9
December.....	4.1	1.5	3.29	202
January.....	5.7	1.3	2.89	178
February.....	8.0	1.0	2.44	140
March.....	163	3	19.2	1,178
April.....	29	1	6.40	381
May.....	7	1	1.90	117
June.....	.9	.5	.74	44
July.....	.6	.5	.56	34.7
August.....	.6	.5	.50	31
September.....	.9	.6	.76	45
The year.....	163	.1	3.35	2,430
1924-25				
October.....	1.0	.7	.84	53
November.....	.8	.6	.72	43
December.....	2.5	.6	1.32	80.9
January.....	3.0	1.0	1.50	92
February.....	3.0	1.0	1.71	95
March.....	123	1.2	10.6	653
April.....	318	3	27.3	1,626
May.....	41	1	4.94	303
June.....	5	.6	1.66	99
July.....	.6	.2	.33	20
August.....	.3	.2	.21	12.9
September.....	.4	.2	.34	20
The year.....	318	.2	4.28	3,100
1925-26				
October.....	.4	.2	.29	18
November.....	8	.2	1.43	85
December.....	20	2	4.32	266
January.....	22	2	3.32	204
February.....	895	13	151	8,402
March.....	22	10	15.9	976
April.....	7,245	13	609	36,215
May.....	43	11	17.2	1,057
June.....	13	3	6.20	369
July.....	3	.9	1.62	100
August.....	.9	.7	.81	50
September.....	.7	.5	.59	35.1
The year.....	7,245	.2	66.0	47,800
1926-27				
October.....	.5	.2	.33	20
November.....	1,581	.3	76.7	4,566
December.....	91	10	20.0	1,230
January.....	24	11	15.1	926
February.....	6,600	15	570	31,633
March.....	400	63	153	9,435
April.....	130	21	58.7	3,493
May.....	24	5	8.20	504
June.....	8	2	4.07	242
July.....	3	2	2.22	137
August.....	2	1	1.03	63.4
September.....	2	1	1.13	67.4
The year.....	6,600	.2	72.3	52,300

Monthly discharge of Santa Ynez River near Santa Barbara, Calif., 1920-1930—
Continued

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1927-28				
October.....	1.0	0.9	0.97	59.5
November.....	5	1	2.60	155
December.....	60	3	5.77	355
January.....	29	3	4.71	290
February.....	850	6	81.6	4,691
March.....	120	11	30.9	1,902
April.....	17	5	11.3	670
May.....	7	2	4.32	266
June.....	2	1	1.68	100
July.....	1	.4	.65	40
August.....	.4	.3	.33	20.4
September.....	.4	.2	.34	20
The year.....	850	.2	11.8	8,570
1928-29				
October.....	.4	.2	.28	17
November.....	7.0	.4	1.71	102
December.....	50	1.0	5.00	307
January.....	11	2.0	3.13	192
February.....	80	2.0	12.7	780
March.....	232	5	22.4	1,375
April.....	62	3.0	13.4	799
May.....	2.0	.7	1.11	68
June.....	1.1	.3	.76	46.6
July.....	.3	.03	.17	10.7
August.....	.02	0	.06	.4
September.....	0	0	0	0
The year.....	232	0	5.11	3,700
1929-30				
October.....	0	0	0	0
November.....	0	0	0	0
December.....	0	0	0	0
January.....	50	0	3.04	187
February.....	3	.8	1.15	64
March.....	234	1.0	35.6	2,186
April.....	8	4.5	5.93	353
May.....	6	1.4	3.65	224
June.....	1.4	.5	.92	54.7
July.....	.5	.02	.21	12.9
August.....	.05	.02	.086	2.22
September.....	.05	.04	.042	2.56
The year.....	234	0	4.26	3,080

NOTE.—The discharge equals the increase in storage, plus the discharge to the city, plus the discharge to the river, plus waste over spillway, plus evaporation, and minus precipitation. Records from October, 1920, to September, 1922, supersede those published in Water-Supply Papers 531 and 551.

SANTA YNEZ RIVER BELOW GIBRALTAR DAM, NEAR SANTA BARBARA, CALIF.

LOCATION.—About on section line between secs. 10 and 11, T. 5 N., R. 27 W., below Gibraltar Dam, 7 miles north of Santa Barbara.

RECORDS AVAILABLE.—April, 1920, to September, 1930.

REMARKS.—This record shows water wasted from Gibraltar Reservoir and does not include diversion to city of Santa Barbara.

COOPERATION.—Entire record April, 1920, to September, 1930, furnished by the city of Santa Barbara through R. A. Hill, consulting engineer for the water department.

Monthly discharge of Santa Ynez River below Gibraltar Dam, near Santa Barbara, Calif., 1920-1930

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1920				
April.....	0	0	0	0
May.....	0	0	0	0
June.....	2.7	.8	1.32	78.3
July.....	1.5	.5	.77	47.8
August.....	2.3	1.1	1.19	73.2
September.....	1.5	1.1	1.37	81.9
The period.....				283
1920-21				
October.....	4.8	0	1.93	115
November.....	1.4	0	.09	5.4
December.....	2.1	0	1.26	77.5
January.....	2.1	1.1	1.36	83.5
February.....	2.1	0	1.34	74.2
March.....	.5	.5	.5	30.7
April.....	.5	.5	.5	29.7
May.....	1.1	.5	.56	34.3
June.....	8.8	.5	4.50	268
July.....	1.6	1.6	1.60	98.4
August.....	1.6	.8	.99	60.7
September.....	.8	.8	.80	47.6
The year.....	8.8	0	1.28	925
1921-22				
October.....	.8	.8	.8	49.2
November.....	2.1	.8	.96	57.3
December.....	2,547	1.3	132	8,130
January.....	960	0	123	7,555
February.....	2,208	88	512	28,500
March.....	445	103	201	12,400
April.....	149	0	91.5	5,450
May.....	137	0	50.5	3,110
June.....	1.0	0	.16	9.9
July.....	1.3	.5	.73	45.2
August.....	1.1	.9	.93	57.3
September.....	.9	.2	.55	32.5
The year.....	2,547	0	90.2	65,400
1922-23				
October.....	.5	.5	.5	30.7
November.....	1.5	.5	.71	42.4
December.....	387	.5	31.7	1,950
January.....	52.5	6.5	13.3	818
February.....	48.5	11.5	22.6	1,250
March.....	11.5	7.5	8.34	513
April.....	14.5	7.5	9.10	541
May.....	8.5	.5	2.69	166
June.....	2.0	.5	.93	55.5
July.....	3.6	1.7	2.24	138
August.....	.8	.8	.80	49.2
September.....	.8	.8	.80	47.6
The year.....	387	.5	7.74	5,600

Monthly discharge of Santa Ynez River below Gibraltar Dam, near Santa Barbara, Calif., 1920-1930—Continued

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1923-24				
October.....	1.3	1.3	1.30	79.9
November.....	1.3	1.3	1.30	77.4
December.....	1.3	1.3	1.30	79.9
January.....	1.3	1.3	1.30	79.9
February.....	1.3	0	.98	57.0
March.....	1.3	1.3	1.30	79.9
April.....	1.3	1.0	1.05	62.5
May.....	1.0	1.0	1.00	61.5
June.....	1.0	.5	.97	57.5
July.....	.5	.5	.50	30.7
August.....	.5	.5	.50	30.7
September.....	.5	.5	.50	29.7
The year.....	1.3	0	1.00	727
1924-25				
October.....	.5	.5	.50	30.7
November.....	.5	.5	.50	29.7
December.....	.5	0	.45	27.7
January.....	.5	.5	.50	30.7
February.....	.5	0	.25	13.9
March.....	0	0	0	0
April.....	0	0	0	0
May.....	0	0	0	0
June.....	1.0	0	.97	57.5
July.....	1.0	.5	.84	51.6
August.....	.5	.5	.50	30.7
September.....	.5	.5	.50	29.7
The year.....	1.0	0	.418	302
1925-26				
October.....	.5	.5	.50	30.7
November.....	.5	.5	.50	29.7
December.....	.5	.5	.50	30.7
January.....	.5	.5	.50	30.7
February.....	23.5	.5	6.37	354
March.....	17	6	10.6	654
April.....	6,655	7	609	36,200
May.....	34	6	11.1	682
June.....	6.0	0	1.33	79.3
July.....	1.0	1.0	1.00	61.5
August.....	1.0	1.0	1.00	61.5
September.....	1.0	1.0	1.00	59.5
The year.....	6,655	0	52.9	38,300
1926-27				
October.....	1.0	1.0	1.00	61.5
November.....	360	1.0	26.2	1,560
December.....	92.2	6.2	15.3	946
January.....	18.2	8.2	10.5	649
February.....	5,900	9.2	570	31,600
March.....	444	62	149.5	9,190
April.....	123	17	53.2	3,170
May.....	17	0	2.23	133
June.....	1.0	1.0	1.00	59.5
July.....	1.0	1.0	1.00	61.5
August.....	1.0	1.0	1.00	61.5
September.....	1.0	1.0	1.00	59.5
The year.....	5,900	0	65.7	47,550
1927-28				
October.....	1.0	0	.94	57.5
November.....	0	0	0	0
December.....	0	0	0	0
January.....	0	0	0	0
February.....	91	0	27	1,660
March.....	162	7	26.4	1,626
April.....	8	1.1	4.73	282
May.....	1.1	1.1	1.10	67.6
June.....	1.1	1.1	1.10	65.5
July.....	1.1	1.1	1.10	67.6
August.....	1.1	1.1	1.10	67.6
September.....	1.1	1.1	1.10	65.5
The year.....	162	0	5.47	3,960

Monthly discharge of Santa Ynez River below Gibraltar Dam, near Santa Barbara,
Calif., 1920-1930—Continued

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1928-29				
October	1.1	1.1	1.10	67.6
November	1.1	0	.67	39.9
December	.3	.3	.30	18.4
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	1.5	0	1.40	86.3
June	1.5	.8	1.18	72.6
July	.9	.8	.88	54.1
August	.9	.9	.90	55.3
September	.9	.9	.90	53.6
The year	1.5	0	.621	448
1929-30				
October	.9	.9	.90	55.3
November	.9	.9	.90	53.6
December	.9	.4	.44	27.6
January	.4	0	.08	4.8
February	0	0	0	0
March	0	0	0	0
April	1.0	1.0	.20	11.9
May	1.0	1.0	1.00	61.5
June	1.0	1.0	1.00	59.5
July	1.0	1.0	1.00	61.5
August	1.0	.4	.76	47.2
September	.4	.4	.40	23.8
The year	1.0	0	.562	407

NOTE.—The discharge equals the waste over the spillway, plus the release to the river. Records from October, 1920, to September, 1922, supersede those published in Water-Supply Papers 531 and 551.

SANTA YNEZ RIVER NEAR LOMPOC, CALIF.

LOCATION.—Water-stage recorder near east boundary of La Mision Vieja la Purisima grant at highway bridge $1\frac{1}{2}$ miles east of Lompoc, Santa Barbara County.

DRAINAGE AREA.—790 square miles.

RECORDS AVAILABLE.—November, 1906, to September, 1918; April, 1925, to September, 1930 (discharge not computed for 1909).

EXTREMES.—Maximum discharge during year, 396 second-feet Mar. 15 (gage height, 4.37 feet); no flow during parts of the year.

1906-1918, 1925-1930: Maximum discharge, 41,800 second-feet Jan. 25, 1914 (gage height, 13.0 feet); no flow for several months in 1929 and 1930.

REMARKS.—Records good. Discharge estimated Jan. 26, 27, and July 25-31. Water diverted by 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, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	9	12	26	5.5	1.2	0.4
2.....	0	9.5	11	25	5	1.2	.4
3.....	0	10	11	25	6	1.2	.4
4.....	0	10	14	23	9.5	.9	.3
5.....	0	10	25	22	7.5	.8	.3
6.....	.8	10	16	20	7	.6	.4
7.....	.6	10	15	19	5	.7	.4
8.....	.8	10	14	18	4.7	1.0	.4
9.....	1.2	10	13	18	4.2	1.6	.4
10.....	11	9.5	12	18	5	1.8	.3
11.....	33	9	11	16	4.7	1.8	.3
12.....	20	10	9.5	16	4.7	1.7	.3
13.....	19	10	10	16	4.0	1.6	.3
14.....	13	9.5	33	18	4.0	1.5	.3
15.....	24	9.5	85	15	4.0	1.3	.2
16.....	30	9.5	171	15	4.2	1.2	.1
17.....	14	9.5	260	14	4.7	1.1	.1
18.....	13	9	174	13	4.7	.9	.1
19.....	13	8.5	124	12	3.7	1.0	.1
20.....	12	9.5	92	12	3.3	1.1	.1
21.....	10	10	82	11	3.0	.9	.1
22.....	10	16	82	11	2.6	.9	.1
23.....	9.5	20	67	10	2.4	.8	.1
24.....	9.5	13	57	10	2.1	.7	.1
25.....	9.5	11	52	9	2.1	.7	.1
26.....	10	12	47	8	2.1	.6	.1
27.....	11	12	47	7	2.1	.5	.1
28.....	10	12	41	6.5	1.9	.5	.1
29.....	9.5	-----	40	5.5	1.8	.5	.1
30.....	9	-----	37	5.5	1.6	.4	.1
31.....	8.5	-----	34	-----	1.4	-----	.1
Month	Maximum		Minimum		Mean		Run-off in acre-feet
January.....	33		0.6		10.1		621
February.....	20		8.5		10.6		589
March.....	260		9.5		54.8		3,370
April.....	26		5.5		14.8		881
May.....	9.5		1.4		4.02		247
June.....	1.8		.4		1.02		60.7
July.....	.4		.1		.22		13.5
The year.....	260		0		7.99		5,780

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

SANTA MARIA RIVER BASIN

CUYAMA RIVER NEAR SANTA MARIA, CALIF.

LOCATION.—Water-stage recorder in the Suey land grant, at highway bridge $1\frac{1}{4}$ miles above mouth of Alamos Creek and 10 miles northeast of Santa Maria.

DRAINAGE AREA.—576 square miles.

RECORDS AVAILABLE.—December, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 101 second-feet Mar. 14 (gage height, 1.52 feet); no flow July 30 to September 30.

REMARKS.—Records good. Discharge estimated Dec. 27 and May 15.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....		6	9.5	11	6	4.1	0.2	0.1
2.....		5.5	9.5	10	6	5.5	.4	.1
3.....		5.5	8	10	5.5	11	.5	.1
4.....		6	7	21	5.5	11	.3	.1
5.....		9	6	24	5	10	.2	.1
6.....		11	5.5	21	4.6	9	.2	.1
7.....		14	5.5	24	4.1	9.5	.2	.1
8.....		10	5	12	4.1	8	.2	.1
9.....		21	5	11	4.1	7	.1	.1
10.....		24	5	10	3.2	5	.1	.1
11.....		22	5	11	2.7	3.6	.1	.1
12.....		26	5	7.5	2.7	2.7	.1	.1
13.....		25	5.5	6	3.6	2.2	.1	.1
14.....		22	5.5	24	5.5	1.7	.1	.1
15.....		20	5	47	5.5	2.0	.1	.1
16.....		14	5	60	4.1	2.2	.1	.1
17.....		21	5	47	3.6	2.7	.1	.1
18.....		29	4.6	57	3.2	2.2	.1	.1
19.....		20	4.6	41	2.7	2.2	.2	.1
20.....	3.8	13	5.5	22	1.7	1.7	.2	.1
21.....	5	11	5.5	18	1.7	1.4	.1	.1
22.....	5	11	9.5	17	1.7	.7	.1	.1
23.....	4.7	11	18	15	1.7	.4	.1	.1
24.....	6	9.5	17	14	1.7	.3	.1	.1
25.....	6.5	9.5	16	10	1.3	.4	.1	.1
26.....	5	9.5	14	9	1.7	.3	.1	.1
27.....	5	9.5	13	9	1.7	.3	.1	.1
28.....	4.7	9.5	11	9	1.3	.3	.1	.1
29.....	5.5	9.5	-----	8.5	1.7	.3	.1	.1
30.....	5.5	9.5	-----	5	2.7	.3	.1	0
31.....	5.5	9	-----	5.5	-----	.3	-----	0
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
December 20-31.....					5.18		127	
January.....	29		5.5		13.9		855	
February.....	18		4.6		7.88		438	
March.....	60		5		19.2		1,180	
April.....	6		1.3		3.35		199	
May.....	11		.3		3.49		215	
June.....	.5		.1		.15		8.9	
July.....	.1		0		.09		5.5	
The period.....							3,030	

NOTE.—No flow during August and September.

HUASNA RIVER NEAR SANTA MARIA, CALIF.

LOCATION.—Water-stage recorder in the Suey land grant, half a mile above junction with Cuyama River and 8 miles northeast of Santa Maria.

DRAINAGE AREA.—119 square miles.

RECORDS AVAILABLE.—December, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 10 second-feet Mar. 14 (gage height, 1.92 feet); no flow May 29 to Sept. 30.

REMARKS.—Records good. Discharge estimated Jan. 12.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1-----		0.8	1.4	0.8	0.7	0.6	16-----	1.4	2.7	0.8	6	0.3	0.5
2-----		.8	1.3	.8	.7	.5	17-----	1.4	2.4	.7	3.2	.3	.6
3-----		.7	1.2	.8	.7	.6	18-----	1.2	2.1	.8	2.9	.4	.5
4-----		.8	1.0	1.7	.6	1.1	19-----	1.1	2.1	.9	2.3	.3	.3
5-----	1.4	2.1	.8	3.4	.5	.9	20-----	1.0	1.9	1.3	2.1	.3	.2
6-----	1.4	1.7	1.0	3.1	.4	.6	21-----	1.2	1.6	1.0	2.1	.2	.2
7-----	1.4	2.3	1.2	1.8	.4	.5	22-----	1.2	1.6	1.8	1.7	.2	.1
8-----	1.5	1.4	1.2	1.6	.3	.5	23-----	1.0	1.7	1.8	1.5	.2	.1
9-----	1.5	5.5	1.2	1.4	.3	.5	24-----	1.0	1.7	1.6	1.2	.2	.1
10-----	1.5	4.4	.9	1.1	.3	.5	25-----	1.0	1.6	1.4	1.1	.2	.1
11-----	1.5	1.9	.9	1.1	.4	.5	26-----	.9	1.6	1.2	.9	.2	.1
12-----	1.7	5.5	.9	1.0	.4	.4	27-----	1.0	1.7	1.1	.9	.2	.1
13-----	1.5	4.2	.9	1.0	.6	.4	28-----	1.0	1.6	.9	.8	.2	.1
14-----	1.5	4.4	.9	5.5	.6	.3	29-----	1.1	1.6		.7	.2	0
15-----	1.4	3.5	.9	7	.5	.3	30-----	1.1	1.4		.7	.4	0
							31-----	1.4	1.6		.7		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December 5-31-----			1.27	68.0
January-----	5.5	0.7	2.22	136
February-----	1.8	.7	1.11	61.6
March-----	7	.7	1.96	121
April-----	.7	.2	.37	22.0
May-----	1.1	0	.36	22.1
The period-----				431

NOTE.—No flow during June, July, August, and September.

SISQUOC RIVER NEAR SISQUOC, CALIF.

LOCATION.—Water-stage recorder in the Siquoc land grant 2 miles above junction with Labrea Creek and 7 miles east of Siquoc.

DRAINAGE AREA.—282 square miles.

RECORDS AVAILABLE.—December, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 126 second-feet Mar. 17 (gage height, 2.14 feet); no flow for several months.

REMARKS.—Records good. Low-water flow diverted by Siquoc ranch above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1	0	0.4	1.2	15	6.5		16	.2	0.4	95	8	5	
2	0	.4	1.1	14	8		17	.4	.4	95	7.5	5.5	
3	0	.4	1.2	14	11	1.0	18	4.0	.4	78	7	5	
4	0	.4	1.8	12	16		19	4.0	.4	56	6.5	4	
5	0	.4	56	10	18		20	3.2	.4	57	6	3.7	
6	0	.4	28	9	15		21	2.1	.5	64	5.5	3.4	
7	0	.4	14	9	11		22	1.6	.6	74	5	3.1	
8	0	.4	6	9	11		23	2.0	20	66	4.5	2.8	
9	.3	.5	2.8	8.5	10		24	1.4	11	60	4.5	2.2	
10	.2	.5	1.9	8	8		25	1.1	5.5	50	4.5	1.9	
11	.4	.5	1.6	7.5	7		26	.9	3.5	41	4.0	1.6	
12	.5	.4	1.4	7	5.5		27	.7	2.8	30	4.0	1.6	
13	.4	.4	1.4	8	5		28	.7	2.0	24	4.0	1.3	
14	.5	.5	6	10	4.5		29	.7		19	4.0	.9	
15	.4	.5	102	9	4.5		30	.7		18	4.5	0	
							31	.6		17		0	
Month						Maximum	Minimum	Mean	Run-off in acre-feet				
January						4.0	0	0.87	53.5				
February						20	.4	1.94	108				
March						102	1.1	34.5	2,120				
April						15	4.0	7.65	455				
May						18	0	5.90	363				
June						1.0	0	.03	1.8				
The period									3,100				

NOTE.—No flow during December, July, August, and September.

SALINAS RIVER BASIN

SAN ANTONIO RIVER AT PLEYTO, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 3, T. 24 S., R. 9 E., at abandoned town site of Pleyto, 15 miles west of Bradley.

RECORDS AVAILABLE.—December, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,110 second-feet Feb. 22 (gage height, 3.04 feet); no flow several months.

REMARKS.—Records good. No large diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1-----	0	12	102	44	6.5	0.4	16-----	277	6.5	167	24	5.5	0
2-----	0	11	86	37	6	.4	17-----	206	6	138	18	5	0
3-----	0	9.5	81	37	6.5	.4	18-----	122	6	123	15	2.9	0
4-----	0	9.5	188	37	6.5	.2	19-----	92	5	119	14	2.2	0
5-----	1.8	9	526	37	8	.1	20-----	86	6.5	112	13	1.6	0
6-----	.8	8	532	34	9	0	21-----	78	7.5	109	12	1.1	0
7-----	2.2	9	345	32	8	0	22-----	67	252	95	12	.7	0
8-----	.6	7.5	264	29	8	0	23-----	60	579	92	9	.6	0
9-----	11	7.5	215	24	7	0	24-----	49	319	79	8	.6	0
10-----	6	8	192	24	7	0	25-----	44	227	76	8	.5	0
11-----	5	7.5	167	18	7	0	26-----	40	170	73	6.5	.4	0
12-----	14	7.5	158	18	6.5	0	27-----	32	147	68	6.5	.4	0
13-----	9	7.5	142	22	6.5	0	28-----	30	126	62	7	.4	0
14-----	10	7.5	142	22	6.5	0	29-----	24	-----	56	7	.4	0
15-----	12	6.5	188	30	6	0	30-----	20	-----	46	6.5	.5	0
							31-----	17	-----	46	-----	.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January-----	277	0	42.5	2,610
February-----	579	5	70.9	3,940
March-----	532	46	154	9,470
April-----	44	6.5	20.4	1,210
May-----	9	.4	4.14	255
June-----	.4	0	.05	3.0
The period-----	-----	-----	-----	17,500

NOTE.—No flow during December and from July to September.

ARROYO SECO NEAR SOLEDAD, CALIF.

LOCATION.—Water-stage recorder in sec. 21, T. 19 S., R. 6 E., half a mile downstream from Vaquero Creek and 11 miles south of Soledad.

DRAINAGE AREA.—215 square miles.

RECORDS AVAILABLE.—January, 1901, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,300 second-feet Mar. 4 (gage height, 9.03 feet); minimum, less than 0.05 second-foot Oct. 1 to Nov. 20. 1901–1930: Maximum discharge, about 22,000 second-feet Feb. 21, 1917, and Nov. 27, 1926 (gage height, 16.5 feet); no flow during periods in 1902, 1903, 1904, 1906, 1913, 1914, 1919, 1921, 1924, and 1926.

REMARKS.—Records fair. Mean monthly discharge for January and September, and daily discharge July 30 and 31 estimated. No large diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	Jul	Aug.
1.....	0	1.3	44	161	89	43	22	3.5	0.2
2.....	0	1.4	42	143	87	42	22	3.1	.2
3.....	0	1.5	40	272	84	43	21	2.7	.2
4.....	0	1.5	38	1,590	80	51	19	2.3	.2
5.....	0	1.5	36	2,640	77	55	17	1.9	.2
6.....	0	1.5	35	1,590	72	47	16	3.1	.2
7.....	0	1.9	34	840	70	43	19	2.7	.2
8.....	0	1.9	33	565	66	42	19	2.3	.2
9.....	0	1.9	32	424	63	41	19	1.5	.2
10.....	0	2.3	30	340	60	40	18	1.4	.2
11.....	0	3.1	29	279	59	40	16	1.3	.1
12.....	0	10	28	244	56	39	15	1.1	.1
13.....	0	43	28	217	60	38	13	.8	.1
14.....	0	44	27	322	118	38	12	.5	.1
15.....	0	25	26	324	96	36	12	.5	.1
16.....	0	19	26	268	75	36	12	.5	.1
17.....	0	18	25	244	67	36	12	.4	.1
18.....	0	15	25	226	63	36	11	.4	.1
19.....	0	14	25	208	60	35	9	.4	.1
20.....	0	12	51	197	56	33	9	.4	.1
21.....	.1	11	57	180	53	31	11	.4	.1
22.....	.3	11	936	167	52	30	12	.4	.1
23.....	.4	11	634	157	50	29	11	.3	.1
24.....	.5	10	290	145	50	28	10	.3	.1
25.....	.5	9.5	236	135	48	26	8.5	.3	.1
26.....	.6	9.5	239	126	47	25	8	.3	.1
27.....	.7	9.5	212	115	46	23	7	.3	.1
28.....	.8	9	184	110	44	22	5	.3	.1
29.....	.9	9	---	102	43	22	4.7	.2	.1
30.....	1.1	9	---	96	43	23	4.3	.2	.1
31.....	---	9	---	93	---	23	---	.2	.1

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November.....	1.1	0	0.20	11.9
December.....	44	1.3	10.6	652
January.....	---	---	125	7,690
February.....	936	25	123	6,830
March.....	2,640	93	402	24,700
April.....	118	43	64.5	3,840
May.....	55	22	35.4	2,180
June.....	22	4.3	13.2	786
July.....	3.5	.2	1.10	67.6
August.....	.2	.1	.13	8.0
September.....	---	---	.1	6.0
The year.....	2,640	0	64.6	46,800

NOTE.—Discharge less than 0.05 second-foot Oct. 1 to Nov. 20.

STEVENS CREEK BASIN

STEVENS CREEK NEAR CUPERTINO, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 22, T. 7 S., R. 2 W.. at county highway bridge 4 miles west of Cupertino.

DRAINAGE AREA.—18.1 square miles.

RECORDS AVAILABLE.—January to September, 1930..

EXTREMES.—Maximum discharge during year, 675 second-feet Mar. 4 (gage height, 3.75 feet); no flow Aug. 22 to Sept. 30.

REMARKS.—Records good. Daily discharge Jan. 1-6, June 15-30, and Aug. 1-21, and mean monthly discharge for July are estimated. Small diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	2.0	2.9	12	7	3.4	1.4		
2.....	2.0	2.9	11	6.5	3.7	2.4		
3.....	2.0	2.7	17	6.5	4.0	2.1		
4.....	4.0	2.7	187	6	4.6	1.4		
5.....	18	2.5	320	6	4.6	1.2		
6.....	16	2.5	97	5.5	4.3	1.2		
7.....	12	2.5	50	5.5	4.3	1.2		
8.....	5.5	2.5	33	4.6	4.3	1.1		
9.....	5.5	2.2	23	5	4.3	1.0		
10.....	4.6	2.2	20	5	3.7	1.0		
11.....	4.3	2.0	16	4.6	3.7	.8		0.1
12.....	12	2.0	15	4.0	3.7	.8		
13.....	9	2.0	13	5	3.7	.7		
14.....	26	2.0	48	8.5	3.7	.6		
15.....	16	2.0	40	6	3.7	.5		
16.....	24	2.0	25	5	3.7			
17.....	12	1.9	20	4.6	3.7			
18.....	14	1.9	17	4.6	3.0			
19.....	11	2.2	15	4.6	3.0			
20.....	9	4.3	13	4.3	2.7			
21.....	11	2.7	13	4.3	2.7			
22.....	9	29	13	4	2.4			0
23.....	8.5	18	12	3.4	2.1	.5		0
24.....	4.6	18	11	3.7	1.5			0
25.....	4.6	44	10	3.7	1.5			0
26.....	4.1	26	9.5	3.7	2.4			0
27.....	3.8	18	9	3.4	3.0			0
28.....	3.6	14	8.5	3.7	2.1			0
29.....	3.4		7.5	3.7	1.8			0
30.....	3.2		7.5	3.7	2.1			0
31.....	3.2		7.5		1.8		0.2	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	26	2.0	8.64	531
February.....	44	1.9	7.77	432
March.....	320	7.5	35.5	2,180
April.....	8.5	3.4	4.87	290
May.....	4.6	1.5	3.20	197
June.....	2.4		.88	49.4
July.....			.3	18.4
August.....			.07	4.3
The period.....				3,700

NOTE.—No flow during September.

GUADALUPE CREEK BASIN

GUADALUPE CREEK AT GUADALUPE, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 19, T. 8 S., R. 1 E., half a mile northwest of Guadalupe and $3\frac{1}{2}$ miles upstream from junction with Alamitos Creek.

DRAINAGE AREA.—12.6 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum discharge during year, 962 second-feet Mar. 5 (gage height, 3.55 feet); no flow during August and September.

REMARKS.—Records good. Discharge estimated Jan. 1-5 and June 16 to July 31. Small diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1	1.0	5	14	8	3.6	2.5	16	37	3.4	25	.5	3.3	
2	1.0	5	12	7.5	3.6	2.5	17	26	3.2	22	4.7	3.3	
3	1.0	4.9	30	7.5	4.4	2.5	18	19	3.2	20	4.7	3.1	
4	2.0	4.5	249	7	6.5	2.3	19	15	3.5	18	4.4	2.8	
5	20	4.2	540	6.5	4.7	2.2	20	13	5.5	16	4.4	2.8	
6	26	4.0	180	6.5	4.4	1.8	21	11	3.9	15	4.2	2.8	
7	23	4.0	88	6.5	4.2	1.7	22	10	29	14	4.2	2.6	
8	13	3.9	57	6	4.2	1.7	23	9	19	13	3.9	2.6	
9	17	3.7	40	5.5	3.9	1.5	24	8	16	12	3.9	2.6	
10	12	3.7	32	5	3.9	1.4	25	7	25	12	3.9	2.6	
11	10	3.7	26	5	3.6	1.2	26	7	22	11	3.9	2.6	
12	51	3.5	22	5	3.6	1.1	27	6.5	19	10	3.9	2.8	
13	20	3.5	19	6	3.3	1.0	28	6	16	9.5	3.9	2.6	
14	36	3.4	33	11	3.3	1.0	29	6		8.5	3.9	3.1	
15	21	3.4	30	6	3.3	1.0	30	6		8.5	3.9	3.8	
							31	5.5		8.5		2.8	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January	51	1.0	14.4	885
February	29	3.2	8.18	454
March	540	8.5	61.5	3,170
April	11	3.9	5.39	321
May	6.5	2.6	3.43	211
June	2.5		1.25	74.4
July			.2	12.3
The period				5,130

NOTE.—No flow during August and September.

GUADALUPE CREEK AT SAN JOSE, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 7, T. 7 S., R. 1 E., at San Jose, 100 feet downstream from junction with Los Gatos Creek.

DRAINAGE AREA.—130.6 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum discharge during year, 4,330 second-feet Mar. 5 (gage height, 7.64 feet); no flow during several periods.

REMARKS.—Records good. Discharge estimated Jan. 5, 9, and 10. Small diversions above station.

Daily and monthly discharge, in second-feet, of Guadalupe Creek at San Jose, Calif., 1929-30

Day	Jan.	Mar.	Day	Jan.	Mar.	Day	Jan.	Mar.
1.....	0	0	11.....	0	21	21.....	0	0
2.....	0	0	12.....	10	4.6	22.....	0	0
3.....	0	0	13.....	1.0	.4	23.....	0	0
4.....	0	1,110	14.....	0	66	24.....	0	0
5.....	15	3,030	15.....	0	84	25.....	0	0
6.....	0	1,290	16.....	9.5	39	26.....	0	0
7.....	0	461	17.....	0	14	27.....	0	0
8.....	0	199	18.....	0	1.8	28.....	0	0
9.....	0	107	19.....	0	0	29.....	0	0
10.....	0	43	20.....	0	0	30.....	0	0
						31.....	0	0
Month			Maximum		Minimum	Mean		Run-off in acre-feet
January.....			15		0	1.15		70.7
March.....			3,030		0	209		12,900
The period.....								13,000

NOTE.—No flow on days for which no discharge is given subsequent to beginning of record on Jan. 1.

ALAMITOS CREEK NEAR EDENVALE, CALIF.

LOCATION.—Water-stage recorder in W. $\frac{1}{2}$ sec. 16, T. 8 S., R. 1 E., $7\frac{1}{4}$ miles south of San Jose and 4 miles southwest of Edenvale.

DRAINAGE AREA.—35.0 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum discharge during year, 1,480 second-feet Mar. 5 (gage height, 6.04 feet); no flow at times in January and February, and from May 7 to Sept. 30.

REMARKS.—Records good. Small diversions above gage.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1.....	0	3.8	18	12	2.8	16.....	55	0.0	47	8	0.0
2.....	0	3.5	15	12	2.0	17.....	36	.0	43	7	.0
3.....	0	3.2	22	11	1.7	18.....	24	.0	41	7.5	.0
4.....	0	2.8	388	11	2.4	19.....	20	.0	38	7.5	.0
5.....	0	2.5	1,030	9.5	2.2	20.....	15	.0	33	8	.0
6.....	0	2.2	373	9.5	.4	21.....	12	.0	31	6.5	.0
7.....	0	1.6	182	9	.0	22.....	10	18	27	5.5	.0
8.....	0	1.4	113	7	.0	23.....	9	22	26	5	.0
9.....	0	.8	81	6.5	.0	24.....	8	16	24	5	.0
10.....	0	.2	62	6.5	.0	25.....	7.5	25	23	4.6	.0
11.....	0	.0	50	9	.0	26.....	6.5	29	22	4.2	.0
12.....	0	.0	45	8	.0	27.....	6.5	25	19	4.6	.0
13.....	7	.0	40	11	.0	28.....	5.5	22	17	4.2	.0
14.....	33	.0	64	18	.0	29.....	5		16	3.8	.0
15.....	22	.0	60	10		30.....	4.5		16	3.5	.0
						31.....	4.2		14		.0
Month					Maximum	Minimum	Mean		Run-off in acre-feet		
January.....					55	0	9.38		577		
February.....					29	0	6.39		355		
March.....					1,030	14	96.1		5,910		
April.....					18	3.5	7.83		466		
May.....					2.8	0	.37		22.8		
The period.....									7,330		

NOTE.—No flow June to September.

LOS GATOS CREEK AT LOS GATOS, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 21, T. 8 S., R. 1 W., about 700 feet upstream from highway bridge, at Los Gatos.

DRAINAGE AREA.—40.0 square miles.

RECORDS AVAILABLE.—January to September, 1930.

EXTREMES.—Maximum discharge during year, 2,160 second-feet Mar. 5 (gage height, 8.33 feet); no flow July 15 to Sept. 30.

REMARKS.—Records good. Discharge estimated Jan. 1–11. Several small storage reservoirs and diversions above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	0.5	8	45	19	7.5	1.6	0.1
2	.5	7.5	39	17	7.5	1.7	.1
3	.5	7.5	122	16	7.5	1.6	.1
4	75	6.5	891	16	11	1.3	.1
5	186	6	1,450	15	9.5	1.2	.1
6	95	6	588	14	8	1.0	.2
7	63	6	295	14	7.5	.8	.2
8	34	6.5	199	13	6.5	.6	.2
9	42	5	138	12	6	.4	.1
10	25	5	113	12	5.5	.4	.1
11	16	4.7	94	11	5.5	.4	.1
12	95	4.7	78	11	5.5	.3	.1
13	39	4.5	71	18	5	.3	.1
14	107	4.1	156	33	4.4	.2	.1
15	93	3.5	117	21	4.4	.3	.0
16	174	3.2	91	18	4.6	.3	.0
17	81	2.9	80	16	4.4	.3	.0
18	57	2.9	72	15	3.6	.3	.0
19	43	4.6	64	14	3.1	.4	.0
20	35	21	58	12	2.9	.4	.0
21	31	10	52	14	2.6	.4	.0
22	30	192	47	16	2.2	.4	.0
23	25	74	45	15	2.2	.3	.0
24	21	55	42	14	1.8	.3	.6
25	17	108	39	10	2.0	.2	.0
26	14	84	37	10	1.9	.2	.0
27	13	66	34	10	2.2	.2	.0
28	11	53	30	9.5	2.4	.2	.0
29	10	-----	29	9	3.1	.1	.0
30	9.5	-----	29	8.5	3.1	.1	.0
31	3.5	-----	26	-----	2.8	-----	.6

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January	186	0.5	46.8	2,890
February	192	2.9	27.2	1,510
March	1,450	26	167	10,300
April	33	8.5	14.4	857
May	11	1.8	4.72	290
June	1.7	.1	.54	32.1
July	.2	0	.05	3.1
The period	-----	-----	-----	15,900

NOTE.—No flow during August and September.

COYOTE CREEK BASIN

COYOTE CREEK NEAR MADRONE, CALIF.

LOCATION.—Water-stage recorder in northwest corner of San Jose grant, above highway bridge at mouth of canyon, one-fourth mile below mouth of Las Animas Creek, and $2\frac{3}{4}$ miles northeast of Madrone, Santa Clara County.

DRAINAGE AREA.—193 square miles.

RECORDS AVAILABLE.—October, 1902, to September, 1912; December, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,500 second-feet Mar. 5 (gage height, 12.1 feet); practically no flow Oct. 1 to Dec. 9.

1902-1912, 1916-1930: Maximum discharge, 25,000 second-feet, probably occurred Mar. 7, 1911; no flow during several short periods from 1902-1911, also during 1920, 1924, and 1929.

REMARKS.—Records good. Discharge estimated Dec. 10, 11, Sept. 29 and 30. No large diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0	0.3	9.5	54	14	8	4.0	1.2	0.6	0.3
2.....	0	.3	9	41	13	7.5	3.9	1.3	.6	.3
3.....	0	.3	8	34	13	8	3.8	1.3	.6	.3
4.....	0	.4	7.5	714	13	8	3.4	1.2	.6	.3
5.....	0	2.7	7	3,820	12	7	3.3	1.2	.6	.3
6.....	0	2.0	7	1,300	12	6.5	3.3	1.3	.5	.3
7.....	0	3.1	6.5	443	12	6	3.2	1.2	.5	.3
8.....	0	1.8	6.5	213	11	5.5	3.2	1.2	.5	.3
9.....	0	2.1	6	116	11	5.5	3.1	1.2	.5	.3
10.....	.1	1.5	6	84	11	5.5	2.9	1.1	.5	.3
11.....	.1	1.2	5.5	63	10	5	2.7	1.0	.4	.2
12.....	.4	3.2	5.5	49	10	5.5	2.8	1.1	.4	.2
13.....	1.2	3.3	5	42	12	5	2.4	1.1	.4	.2
14.....	.9	3.4	5	53	15	4.8	2.4	1.0	.4	.2
15.....	.8	44	4.8	69	12	5	2.3	.9	.4	.2
16.....	.8	365	4.6	45	14	5	2.3	1.0	.3	.2
17.....	.6	138	4.5	36	14	4.8	2.1	.9	.3	.2
18.....	.5	98	4.3	31	14	4.6	1.9	.9	.4	.2
19.....	.4	70	4.4	28	13	4.1	2.6	.9	.3	.2
20.....	.4	41	4.8	26	12	4.1	2.2	.9	.3	.2
21.....	.3	32	4.6	23	12	4.3	1.9	.9	.3	.3
22.....	.3	24	73	21	11	4.1	2.1	.9	.3	.3
23.....	.3	19	50	20	11	3.9	2.1	.9	.3	.3
24.....	.3	16	49	19	10	3.8	2.0	.9	.3	.3
25.....	.3	14	350	18	10	4.0	1.9	.7	.4	.3
26.....	.3	13	192	18	10	4.1	1.9	.6	.4	.2
27.....	.3	13	149	16	9	4.1	1.8	.7	.3	.2
28.....	.3	12	79	16	9	4.1	1.6	.8	.3	.2
29.....	.3	11	-----	15	9	4.3	1.7	.7	.3	.2
30.....	.3	11	-----	15	8.5	4.2	1.5	.6	.3	.2
31.....	.3	10	-----	14	-----	3.9	-----	.6	.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	1.2	0	0.31	19.1
January.....	365	.3	30.9	1,900
February.....	350	4.3	38.1	2,120
March.....	3,820	14	241	14,800
April.....	15	8.5	11.6	690
May.....	8	3.8	5.17	318
June.....	4	1.5	2.54	151
July.....	1.3	.6	.97	59.6
August.....	.6	.3	.41	25.2
September.....	.3	.2	.25	14.9
The year.....	3,820	0	27.7	20,100

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

COYOTE CREEK NEAR EDENVALE, CALIF.

LOCATION.—Staff gage at east boundary of Santa Teresa grant at "The Narrows," 7 miles south of San Jose and $1\frac{1}{2}$ miles northeast of Edenvale, Santa Clara County.

DRAINAGE AREA.—229 square miles.

RECORDS AVAILABLE.—October, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,200 second-feet Mar. 5 (gage height, 8.5 feet); no flow for greater part of year.

1916-1930: Maximum discharge, 10,000 second-feet Feb. 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, 1929-30

Date	Discharge	Date	Discharge	Date	Discharge
Jan. 16.....	48	Feb. 28.....	0.8	Mar. 8.....	144
Jan. 17.....	24	Mar. 5.....	2,460	Mar. 9.....	57
Feb. 26.....	10	Mar. 6.....	1,410	Mar. 10.....	15
Feb. 27.....	7	Mar. 7.....	370		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	48	0	2.32	143
February.....	10	0	.64	35.5
March.....	2,460	0	144	8,850
The year.....	2,460	0	12.5	9,030

NOTE.—No flow on days for which no discharge is given.

ALAMEDA CREEK BASIN

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 1¼ miles northeast of Niles.

DRAINAGE AREA.—633 square miles.

RECORDS AVAILABLE.—October, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,720 second-feet Mar. 5 (gage height, 8.45 feet); no flow during greater part of summer.

1916-1930: Maximum discharge, 13,900 second-feet Feb. 10, 1922 (gage height, 12.44 feet); no flow during summer of 1918, possibly 1920, and 1924-1930.

REMARKS.—Records excellent. Diversions above station. Flow regulated at Calaveras Reservoir. Water released from Calaveras Reservoir Apr. 21 to May 7.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0	0	1.2	24	1.3	66	0.6
2	0	0	1.2	8.5	1.2	46	.6
3	0	0	1.1	6	1.1	16	.6
4	0	.2	1.0	607	.9	8.5	.5
5	0	.9	.9	3,560	1.0	7.5	.5
6	0	.7	.9	2,030	1.0	2.2	.4
7	0	.4	.9	603	1.0	1.1	.2
8	0	.4	.9	238	1.0	1.0	.3
9	0	.4	.9	162	1.1	.9	0
10	0	.4	1.1	91	1.0	.9	0
11	0	.3	1.0	49	.9	1.0	0
12	0	.4	.9	24	.9	1.1	0
13	0	.4	.8	11	.9	1.2	0
14	0	2.4	.8	9	2.1	1.7	0
15	.4	3.2	.7	28	1.6	1.6	0
16	.7	244	.6	18	1.8	1.8	0
17	.4	76	.8	9	2.2	1.8	0
18	0	78	.8	4.4	2.0	1.8	0
19	0	49	.8	8.5	1.4	1.3	0
20	0	12	1.1	9	1.1	1.2	0
21	0	5	1.1	7	10	1.2	0
22	0	3.9	2.0	5.5	70	1.1	0
23	0	3.1	2.5	5	90	.9	0
24	0	2.5	3.9	4.7	103	.8	0
25	0	2.2	155	4.4	113	.9	0
26	0	2.0	180	4.2	103	.8	0
27	0	1.7	118	3.9	86	.8	0
28	0	1.4	56	3.4	80	.8	0
29	0	1.2	---	2.9	78	.8	0
30	0	1.2	---	2.2	82	.9	0
31	0	1.2	---	1.7	---	.6	---
Month	Maximum		Minimum		Mean		Run-off in acre-feet
December	0.7		0		0.05		3.1
January	244		0		16.0		984
February	180		.6		19.2		1,070
March	3,560		1.7		245		15,100
April	113		.9		28.0		1,670
May	66		.6		5.62		346
June	.6		0		0.12		7.1
The year	3,560		0		26.4		19,200

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

KERN RIVER BASIN

KERN RIVER NEAR KERNVILLE, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ 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, 1930.

EXTREMES.—Maximum discharge during year, 1,730 second-feet June 13 (gage height, 8.01 feet); minimum, 1.3 second-feet Jan. 3.

1912-1930: Maximum discharge, 9,690 second-feet Jan. 17, 1916 (gage height, 8.8 feet, old datum); no flow at intervals from July 31, 1924, to Feb. 7, 1925.

REMARKS.—Records excellent. Kern River No. 3 Canal diverts about 1 mile above station. (See p. 106.) Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	5.5	5.5	4.6	4.6	3.9	5	33	134	466	163	4.4	5.5
2.	6	5.5	4.6	4.8	3.9	5	8	148	389	142	4.4	5.5
3.	6	5.5	4.8	4.6	4.1	5	10	193	378	116	4.4	5
4.	6	5	5.5	4.6	3.9	5	12	131	439	102	4.2	5
5.	6.5	5	5	5.5	3.9	5	64	66	615	80	4.4	5
6.	6	5.5	5	4.6	3.9	5.5	139	38	905	42	4.6	5
7.	6	5.5	4.8	5	3.9	5.5	174	45	1,120	22	4.6	5
8.	6	5.5	4.1	5	3.9	5	262	11	1,050	15	4.8	5.5
9.	5.5	4.8	3.9	4.8	3.9	5.5	317	7	1,050	6	4.8	5.5
10.	4.8	5.5	4.1	5.5	3.9	5	279	6.5	1,100	6	4.6	5.5
11.	5.5	5.5	4.1	5	4.1	5.5	239	6.5	1,130	5	4.8	5.5
12.	5.5	5.5	3.9	5.5	3.9	5.5	241	9	1,330	5	4.8	5.5
13.	6	5.5	3.9	6.5	4.1	5	241	36	1,530	5	5	5.5
14.	5.5	5.5	3.7	6	3.9	6	156	84	1,420	5.5	5	5.5
15.	5.5	5.5	3.9	5.5	3.9	5.5	69	124	1,320	5	5.5	5.5
16.	6	5.5	4.1	5.5	3.7	5.5	22	89	1,180	5.5	6	5.5
17.	6	5.5	3.9	4.8	3.7	5.5	9.5	62	966	4.6	6	5
18.	6	5	3.7	5	4.1	6	6.5	65	810	4.8	6	5
19.	6	5	3.5	4.8	3.9	5.5	54	164	670	4.8	6	5
20.	6	5	4.2	4.6	4.1	5.5	145	354	530	4.4	6	5.5
21.	5.5	5	4.2	4.8	3.9	5.5	260	569	445	4.6	5.5	5.5
22.	5.5	5	4.2	4.6	182	5.5	302	557	379	4.6	5.5	6
23.	5.5	5	4.1	4.6	146	5.5	418	608	301	4.8	5.5	5.5
24.	5.5	5	4.2	4.4	6.5	6	458	706	257	4.4	5.5	5.5
25.	5.5	5	4.2	4.4	5.5	6	367	752	218	4.6	6	5
26.	5.5	5	4.4	4.4	5.5	70	343	844	206	4.1	6	4.8
27.	5.5	4.6	4.6	4.4	5.5	114	267	993	183	4.4	5.5	4.8
28.	5	4.6	4.2	4.2	4.8	150	237	1,110	155	4.2	5.5	4.6
29.	5.5	4.6	4.2	4.2	-----	182	197	1,070	142	4.4	5.5	4.6
30.	5.5	5	4.2	4.2	-----	214	153	814	148	4.4	5.5	5
31.	5	-----	4.4	4.2	-----	136	-----	615	-----	4.4	5.5	-----
Month	Maximum		Minimum		Mean		Run-off in		acre-feet			
October.	6.5		4.8		5.67		349					
November.	5.5		4.6		5.19		309					
December.	5.5		3.5		4.26		262					
January.	6.5		4.2		4.86		299					
February.	182		3.7		15.7		872					
March.	214		5		32.3		1,990					
April.	458		6.5		183		10,900					
May.	1,110		6.5		336		20,700					
June.	1,530		142		694		41,300					
July.	163		4.1		25.6		1,570					
August.	6		4.2		5.22		321					
September.	6		4.6		5.24		312					
The year.	1,530		3.5		109		79,200					

Daily and monthly discharge, in second-feet, of Kern River and Kern River No. 3 Canal near Kernville, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	138	134	133	119	167	260	629	720	1,050	730	212	138
2.....	138	138	129	119	175	268	585	734	975	709	212	138
3.....	134	138	129	119	184	268	596	778	964	683	216	141
4.....	142	137	130	122	184	294	608	717	1,020	669	208	137
5.....	142	135	133	160	188	339	650	662	1,200	637	200	137
6.....	138	134	129	119	200	312	716	624	1,490	• 609	205	133
7.....	138	134	129	125	200	304	700	631	1,710	• 586	218	133
8.....	142	134	128	113	204	303	858	588	1,640	553	243	134
9.....	142	135	132	113	200	304	923	564	1,640	515	277	134
10.....	141	134	136	144	196	303	894	564	1,690	• 510	251	138
11.....	138	134	140	137	196	322	845	574	1,720	505	229	138
12.....	138	130	136	134	204	340	847	586	1,920	476	243	138
13.....	134	126	136	142	206	357	847	622	2,120	448	251	138
14.....	134	130	136	153	212	367	762	670	2,010	430	234	138
15.....	138	142	132	156	216	366	675	701	1,910	412	222	134
16.....	134	134	136	190	220	340	628	666	1,770	• 412	210	130
17.....	138	134	143	197	220	330	606	639	1,650	• 402	202	125
18.....	134	129	140	209	220	331	592	642	1,400	• 372	190	122
19.....	134	129	140	185	220	312	660	750	1,260	• 354	186	122
20.....	134	129	136	176	250	330	751	940	1,110	• 326	177	130
21.....	130	129	124	181	242	358	866	1,160	1,020	• 308	164	134
22.....	130	129	121	176	564	404	908	1,140	956	• 298	160	138
23.....	130	125	121	172	681	448	1,010	1,190	878	• 280	156	138
24.....	130	133	121	171	358	515	1,050	1,290	834	• 262	152	134
25.....	130	129	124	175	304	592	963	1,340	795	• 254	157	133
26.....	134	129	124	180	222	666	939	1,430	773	• 245	169	133
27.....	134	120	122	171	204	700	863	1,580	750	• 240	160	129
28.....	133	133	124	167	251	736	833	1,700	722	• 232	162	129
29.....	134	137	121	163	-----	768	793	1,660	709	• 224	148	133
30.....	134	133	121	167	-----	800	739	1,400	715	220	144	141
31.....	133	-----	124	167	-----	722	-----	1,200	-----	216	144	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	142					130			136		8,360	
November.....	142					125			132		7,860	
December.....	143					121			130		7,990	
January.....	209					113			156		9,590	
February.....	681					167			253		14,100	
March.....	800					260			421		25,900	
April.....	1,050					585			780		46,400	
May.....	1,700					564			918		56,400	
June.....	2,120					709			1,280		76,200	
July.....	730					216			423		26,000	
August.....	277					144			196		12,100	
September.....	141					122			134		7,970	
The year.....	2,120					113			412		299,000	

• Estimated.

KERN RIVER BASIN

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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, 1930.

EXTREMES.—Maximum discharge during year, 1,850 second-feet June 13 (gage height, 9.92 feet); minimum, 0.8 second-foot Sept. 2.
1925-1930: Maximum discharge, 4,500 second-feet Nov. 27, 1926 (gage height, 12.73 feet); minimum, that of Sept. 2, 1930.

REMARKS.—Records good. Irrigation and power diversions and regulation above station. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.6	2.4	2.4	2.1	2.8	8.5	202	280	632	250	4.7	1.0
2.....	1.6	2.4	2.4	2.1	2.8	7.5	126	280	530	270	4.7	.8
3.....	1.6	2.4	2.4	2.1	2.8	7	120	344	488	224	4.7	1.0
4.....	1.6	2.1	2.4	2.4	2.8	7	132	332	518	202	4.7	1.0
5.....	1.6	2.1	2.4	2.4	2.8	14	160	242	660	182	5	1.0
6.....	1.6	2.1	2.4	2.4	2.8	13	214	182	944	152	4.7	1.2
7.....	1.6	2.1	2.4	2.8	2.8	11	300	174	1,210	123	3.2	1.4
8.....	1.8	2.1	2.4	2.4	2.8	11	393	152	1,220	105	2.8	1.6
9.....	1.8	2.1	2.1	2.4	2.8	10	458	120	1,180	80	2.8	1.8
10.....	2.1	2.4	2.1	2.4	2.8	9	494	98	1,220	58	2.8	2.1
11.....	2.1	2.4	2.1	2.4	3.2	8.5	432	105	1,250	50	2.8	2.4
12.....	2.1	2.4	2.1	2.4	3.2	8.5	398	117	1,380	31	2.8	2.1
13.....	2.1	2.8	1.8	2.8	3.2	8.5	404	123	1,620	14	2.8	2.1
14.....	2.1	2.8	1.8	3.2	3.7	10	354	156	1,620	11	2.4	2.1
15.....	2.1	2.8	1.8	2.8	3.7	12	250	206	1,460	11	2.4	2.1
16.....	2.1	3.2	1.8	2.8	3.7	13	182	232	1,380	11	2.4	1.8
17.....	1.8	3.2	1.8	3.2	4.2	13	146	194	1,180	11	2.4	1.8
18.....	1.8	3.2	1.8	3.7	4.7	13	120	178	984	10	2.4	2.1
19.....	1.8	3.2	1.8	4.7	4.7	12	138	198	872	7.5	2.4	2.4
20.....	1.8	3.2	1.8	4.2	4.7	12	210	360	688	7	1.8	2.8
21.....	1.8	3.2	1.8	3.2	4.7	12	327	625	584	6	1.8	2.4
22.....	1.8	2.8	1.8	3.7	92	13	415	702	518	6	1.8	2.8
23.....	1.8	2.8	1.8	3.2	909	14	488	695	448	5	1.6	2.8
24.....	1.8	2.8	1.8	3.2	92	34	578	793	382	4.7	1.6	2.8
25.....	1.8	2.8	1.8	3.2	15	101	524	864	344	4.2	1.6	2.4
26.....	2.1	2.8	1.8	3.2	11	163	464	936	316	4.2	1.6	2.4
27.....	2.1	2.8	1.8	3.2	11	206	420	1,080	300	4.2	1.4	2.8
28.....	2.1	2.8	1.8	3.2	9	246	366	1,220	265	5	1.4	2.8
29.....	2.1	2.8	1.8	2.8	-----	275	322	1,250	246	4.7	1.0	2.8
30.....	2.4	2.4	2.1	2.8	-----	344	280	1,040	237	4.7	1.0	2.4
31.....	2.4	-----	2.1	2.8	-----	310	-----	824	-----	4.7	1.0	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	2.4					1.6			1.90		117	
November.....	3.2					2.1			2.65		158	
December.....	2.4					1.8			2.01		124	
January.....	4.7					2.1			2.91		179	
February.....	909					2.8			43.2		2,400	
March.....	344					7			62.1		3,820	
April.....	578					120			315		18,700	
May.....	1,250					98			454		27,900	
June.....	1,620					237			823		49,000	
July.....	270					4.2			60.1		3,700	
August.....	5					1.0			2.60		160	
September.....	2.8					.8			2.03		121	
The year.....	1,620					.8			147		106,000	

Daily and monthly discharge, in second-feet, of Kern River and Borel Canal at Isabella, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	132	135	135	118	196	322	750	778	1,157	718	206	155
2.....	132	135	135	118	200	322	674	778	1,057	738	202	120
3.....	128	135	132	118	212	321	668	862	1,017	692	206	123
4.....	132	135	132	121	212	339	670	850	1,047	670	198	127
5.....	135	132	138	146	216	413	698	760	1,187	650	190	123
6.....	132	135	138	142	224	390	752	700	1,467	620	186	120
7.....	128	135	135	129	236	379	838	692	1,737	591	184	123
8.....	128	135	135	114	236	370	931	670	1,730	573	200	124
9.....	135	135	138	118	236	369	1,030	638	1,697	548	236	124
10.....	135	135	142	142	228	368	1,030	626	1,730	526	254	124
11.....	135	135	146	146	224	368	970	633	1,760	518	220	128
12.....	132	132	146	146	228	386	936	645	1,887	499	208	128
13.....	132	125	146	150	236	412	942	651	2,117	463	220	128
14.....	132	129	146	157	237	423	882	684	2,117	442	227	124
15.....	132	136	138	161	246	452	778	724	1,957	424	211	121
16.....	128	136	142	192	255	426	710	750	1,860	415	199	118
17.....	128	136	149	220	255	408	674	712	1,660	415	187	114
18.....	132	133	146	237	256	408	648	696	1,460	396	175	110
19.....	132	133	146	227	256	398	666	726	1,357	366	167	110
20.....	128	133	146	201	265	398	738	888	1,170	348	160	111
21.....	128	133	135	200	292	425	855	1,150	1,060	320	149	118
22.....	128	133	128	201	410	471	943	1,220	994	302	142	125
23.....	128	129	128	192	1,340	512	1,020	1,210	924	292	138	129
24.....	128	133	124	192	550	572	1,110	1,310	854	274	138	125
25.....	128	133	128	196	410	649	1,060	1,330	812	255	135	124
26.....	132	133	132	204	397	711	992	1,450	784	246	146	124
27.....	132	133	124	200	379	764	948	1,600	768	237	148	125
28.....	132	136	132	188	332	794	884	1,740	733	230	137	122
29.....	132	136	128	188	-----	823	840	1,770	714	222	131	125
30.....	132	138	121	192	-----	892	798	1,560	705	214	127	128
31.....	132	-----	124	192	-----	858	-----	1,340	-----	210	123	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	135	128	131	8,060
November.....	138	125	134	7,970
December.....	149	121	136	8,360
January.....	237	114	169	10,400
February.....	1,340	196	313	17,400
March.....	892	321	488	30,000
April.....	1,110	648	848	50,500
May.....	1,770	626	974	59,900
June.....	2,110	705	1,310	78,000
July.....	738	210	433	26,600
August.....	254	123	179	11,000
September.....	155	110	123	7,320
The year.....	2,110	110	436	316,000

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 September, 1930.

EXTREMES.—1896-1930: Maximum discharge, 18,287 second-feet Jan. 2^d 1914; minimum, 57 second-feet in November, 1924.

REMARKS.—Several small diversions from 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	135	148	164	150	213	417	920	880	1,314	716	213	133
2.....	134	145	164	141	223	389	816	864	1,196	727	206	127
3.....	132	144	166	140	239	385	734	917	1,115	734	195	121
4.....	132	149	166	142	247	391	718	1,082	1,090	717	201	123
5.....	132	146	163	145	239	430	731	1,122	1,152	701	204	128
6.....	141	145	163	173	238	498	751	1,041	1,317	682	192	134
7.....	141	146	164	186	251	505	811	964	1,623	654	192	131
8.....	141	146	164	157	261	484	869	946	1,832	615	194	127
9.....	140	143	163	149	255	457	953	930	1,743	590	203	122
10.....	149	145	156	151	248	440	1,048	905	1,748	554	229	130
11.....	153	146	160	168	242	417	1,054	884	1,799	531	260	130
12.....	152	145	159	191	244	411	1,032	896	1,832	527	254	131
13.....	152	143	157	193	251	422	1,017	873	2,066	508	249	142
14.....	151	143	160	184	256	469	1,024	827	2,239	480	262	136
15.....	154	141	162	200	259	518	971	813	2,097	457	261	129
16.....	142	144	166	203	266	549	884	834	2,013	432	246	130
17.....	144	152	162	228	270	540	821	829	1,897	413	222	126
18.....	144	152	168	259	280	537	769	794	1,668	419	198	125
19.....	141	147	165	283	282	539	744	772	1,478	404	186	127
20.....	139	146	164	258	281	530	748	821	1,354	387	174	126
21.....	141	149	157	231	310	509	802	992	1,194	364	171	126
22.....	138	159	152	229	350	524	887	1,250	1,101	341	160	125
23.....	137	162	149	227	1,047	575	934	1,313	1,038	318	150	126
24.....	139	164	152	217	1,110	619	1,012	1,365	946	296	144	133
25.....	138	166	157	217	725	672	1,089	1,461	905	281	146	132
26.....	150	168	161	225	563	749	1,037	1,534	860	268	142	130
27.....	150	167	168	236	506	812	1,011	1,631	833	260	145	139
28.....	148	167	173	230	477	852	967	1,682	809	247	151	140
29.....	147	169	170	222	-----	888	925	1,757	760	240	142	138
30.....	149	167	168	217	-----	918	897	1,740	741	231	135	137
31.....	149	-----	160	215	-----	971	-----	1,489	-----	226	132	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	187					131			143		8,790	
November.....	184					139			152		9,040	
December.....	178					147			162		9,960	
January.....	302					138			199		12,200	
February.....	1,821					212			362		20,100	
March.....	990					382			562		34,600	
April.....	1,112					712			899		53,500	
May.....	1,860					660			1,103		67,800	
June.....	2,423					708			1,392		82,800	
July.....	759					216			462		28,400	
August.....	275					132			192		11,800	
September.....	144					118			130		7,740	
The year.....	2,423					118			479		347,000	

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., 4 miles below the intake and about 12 miles north of Kernville.

RECORDS AVAILABLE.—March, 1921, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 615 second-feet Apr. 10, 1921–1930; Maximum mean daily discharge, 648 second-feet July 16, 1921; no flow at times.

REMARKS.—Records excellent except those for July 6, 7, 10, and 16–29, which were estimated. 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 the river 8 miles below. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929–30.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	132	128	128	114	163	255	596	586	586	567	208	132
2.....	132	132	124	114	171	263	577	586	586	567	208	132
3.....	128	132	124	114	180	263	586	586	586	567	212	136
4.....	136	132	124	117	180	289	596	586	586	557	204	132
5.....	136	128	128	155	184	334	586	586	586	557	196	132
6.....	132	128	124	114	196	307	577	586	586	567	200	128
7.....	132	128	124	120	196	298	586	586	586	564	208	128
8.....	136	128	124	108	200	298	586	577	586	538	238	128
9.....	136	128	128	108	196	298	606	557	586	509	272	128
10.....	136	128	132	139	192	298	615	557	586	504	246	132
11.....	132	128	136	132	192	316	606	567	586	500	224	132
12.....	132	124	132	128	200	334	606	577	586	471	238	132
13.....	128	120	132	136	204	352	606	586	586	443	246	132
14.....	128	124	132	147	208	361	606	586	586	425	229	132
15.....	132	136	128	151	212	361	606	577	586	407	216	128
16.....	128	128	132	184	216	334	606	577	586	406	204	124
17.....	132	128	139	192	216	325	596	577	586	397	196	120
18.....	128	124	136	204	216	325	586	577	586	367	184	117
19.....	128	124	136	180	216	307	606	586	577	349	180	117
20.....	128	124	132	171	246	325	606	586	577	322	171	124
21.....	124	124	120	176	238	352	606	586	577	303	159	128
22.....	124	124	117	171	352	398	606	586	577	293	155	132
23.....	124	120	117	167	535	443	596	586	577	275	151	132
24.....	124	128	117	167	352	509	596	586	577	258	147	128
25.....	124	124	120	171	298	586	596	586	577	249	151	128
26.....	128	124	120	176	316	596	596	586	567	241	163	128
27.....	128	124	117	167	289	586	596	586	567	236	155	124
28.....	128	128	120	163	246	586	596	586	567	228	147	124
29.....	128	132	117	159	-----	586	596	586	567	220	143	128
30.....	128	128	117	163	-----	586	586	586	567	216	139	136
31.....	128	-----	120	163	-----	586	-----	586	-----	212	139	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	136	124	130	7,990
November.....	136	120	127	7,560
December.....	139	117	126	7,750
January.....	204	108	151	9,280
February.....	535	163	237	13,200
March.....	596	255	389	23,900
April.....	615	577	597	35,500
May.....	586	557	582	35,800
June.....	586	567	581	34,600
July.....	567	212	397	24,400
August.....	272	139	191	11,700
September.....	136	117	128	7,620
The year.....	615	108	303	219,000

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 of a mile south of Kernville.

RECORDS AVAILABLE.—January, 1910, to September, 1914; October, 1925, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 558 second-feet Mar. 27.

1925-1930: Maximum mean daily discharge, 605 second-feet June 3-5, 1927; no flow at times.

REMARKS.—Records excellent. Canal diverts 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 is then returned to Kern River. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	130	133	123	116	193	314	548	518	518	468	201	154
2.....	130	133	133	116	197	314	548	518	518	468	197	119
3.....	126	133	120	116	209	314	548	518	518	468	201	122
4.....	130	133	120	119	209	332	538	518	518	468	193	126
5.....	133	130	136	144	213	399	538	518	518	468	185	122
6.....	130	133	136	140	221	377	538	518	518	468	181	119
7.....	126	133	133	126	233	368	538	518	518	468	181	122
8.....	126	133	133	112	233	359	538	518	508	468	197	122
9.....	133	133	136	116	233	359	538	518	508	468	233	122
10.....	133	133	140	140	225	359	538	528	508	468	251	122
11.....	133	133	144	144	221	359	538	528	508	468	217	126
12.....	130	130	144	144	225	377	538	528	498	468	205	126
13.....	130	122	144	147	233	404	538	528	488	449	217	126
14.....	130	126	144	154	233	413	528	528	488	431	225	122
15.....	130	133	136	168	242	440	528	518	488	413	209	119
16.....	126	133	140	189	251	413	528	518	478	404	197	116
17.....	126	133	147	217	251	395	528	518	478	404	185	112
18.....	130	130	144	233	251	395	528	518	478	386	173	106
19.....	130	130	144	217	251	386	528	528	478	359	165	108
20.....	126	130	144	197	260	386	528	528	478	341	168	108
21.....	126	130	133	197	287	413	528	528	478	314	147	116
22.....	126	130	126	197	318	458	528	518	478	296	140	122
23.....	126	126	126	189	431	498	528	518	478	287	136	126
24.....	126	130	122	189	458	538	528	518	468	269	136	122
25.....	126	130	126	193	395	548	528	518	468	251	133	122
26.....	130	130	130	201	386	548	528	518	468	242	144	122
27.....	130	130	122	197	368	558	528	518	468	233	147	122
28.....	130	133	130	185	323	548	518	518	468	225	136	119
29.....	130	133	126	185	-----	548	518	518	468	217	130	122
30.....	130	136	119	189	-----	548	518	518	468	209	126	126
31.....	130	-----	122	189	-----	548	-----	518	-----	205	122	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	133	126	129	7,930
November.....	136	122	131	7,800
December.....	147	119	134	8,240
January.....	233	112	166	10,200
February.....	458	193	270	15,000
March.....	558	314	426	26,200
April.....	548	518	532	31,700
May.....	528	518	521	32,000
June.....	518	468	491	29,200
July.....	468	205	373	22,900
August.....	261	122	176	10,800
September.....	154	108	121	7,200
The year.....	558	108	289	209,000

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., three-fourths mile north of Kernville-Walker Pass road and 5 miles northeast of Onyx.

DRAINAGE AREA.—531 square miles.

RECORDS AVAILABLE.—September, 1911, to August, 1914; January, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 532 second-feet Feb. 22; minimum, 0.9 second-foot Sept. 2-5.

1911-1914, 1919-1930: Maximum discharge, 2,360 second-feet Jan. 25, 1914 (gage height, 7.1 feet); no flow several days in July and August, 1929.

REMARKS.—Records good. Discharge estimated Jan. 1-6, 14-17, Aug. 24 and 25. Lowell and Thomas irrigation ditches divert above station. Mean daily discharge record furnished by State of California, Division of Water Resources, Oct. 1 to Dec. 31.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	7	11	14	23	35	158	151	135	18	3.4	2.1
2	4.3	7	11	13	23	36	136	234	125	16	3.4	1.3
3	4.3	7.5	11	13	26	36	132	262	114	16	3.4	.9
4	4.6	8	10	13	26	36	142	238	109	15	3.4	.9
5	4.8	8	11	14	28	47	161	203	105	14	3.2	1.5
6	4.8	8.5	11	15	29	41	212	194	96	13	3.0	1.8
7	5	8.5	11	16	28	39	262	214	92	12	3.0	1.8
8	5	9	10	12	28	37	303	203	89	12	3.4	1.8
9	5	9	11	13	29	36	328	182	85	11	4.8	1.8
10	5.5	9	12	15	28	36	347	188	87	12	5	1.8
11	5.5	9.5	13	13	28	36	328	186	87	12	6	2.0
12	5.5	9	14	15	28	37	312	182	77	12	6	2.1
13	5.5	8.5	13	15	29	40	294	184	77	12	7.5	2.3
14	5.5	8	12	14	29	46	238	184	77	11	10	3.2
15	5.5	8	11	13	30	50	190	182	65	10	9	3.6
16	5.5	8.5	13	16	30	56	174	184	60	9.5	6.5	3.6
17	5.5	9	18	20	32	56	172	184	58	8.5	5.5	3.6
18	5.5	9.5	20	33	33	56	176	186	56	8.5	4.6	3.6
19	6	9.5	20	27	31	56	203	176	57	8.5	4.1	3.6
20	6	9.5	20	26	33	63	223	176	57	8	3.9	3.6
21	6	9.5	17	29	35	72	225	180	47	7.5	3.6	3.6
22	6	9.5	15	24	165	82	209	170	43	6.5	3.2	4.3
23	6	9	13	22	194	86	203	161	41	5.5	3.0	5.5
24	5.5	9.5	12	23	80	91	196	158	38	5.5	2.6	5.5
25	5	9.5	13	27	56	101	174	154	33	5.5	2.4	5.5
26	5	9.5	15	26	49	112	158	151	33	5	2.1	6
27	4.8	9	14	24	44	114	143	140	27	4.8	2.1	6.5
28	5	9.5	15	23	36	118	133	135	27	4.8	2.1	6.5
29	5.5	11	15	23	-----	140	127	128	27	4.8	2.1	6.5
30	6.5	11	15	23	-----	167	122	125	27	4.8	2.1	7
31	7	-----	14	24	-----	180	-----	132	-----	4.4	2.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	7	4.3	5.35	329
November	11	7	8.92	531
December	20	10	13.6	836
January	33	12	19.3	1,190
February	194	23	43.9	2,440
March	180	35	69.0	4,240
April	347	122	206	12,300
May	262	125	178	10,900
June	135	20	66.5	3,960
July	18	4.4	9.62	592
August	10	2.1	4.03	251
September	7	.9	3.46	206
The year	347	.9	52.2	37,800

SOUTH FORK OF KERN RIVER AT ISABELLA, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 20, T. 26 S., R. 33 E., one-fourth mile above junction with Kern River, at Isabella.

DRAINAGE AREA.—985 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1913; January, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 229 second-feet May 5 (gage height, 1.97 feet); minimum, 4.4 second-feet July 31.

1929-30: Maximum discharge, that of May 5, 1930; minimum, 3.9 second-feet July 28 and 31, 1929.

REMARKS.—Records fair. Mean monthly discharge estimated for January and February; mean discharge estimated for Mar. 1-15. Twenty-seven irrigation ditches divert above station; considerable return flow from many of them. Daily discharge record furnished by State of California, Division of Water Resources, Oct. 1 to Dec. 31, 1929.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	10	9.5	14	24	22	80	11	4.8	10
2	9	9.5	9.5		22	23	94	10	4.8	11
3	9	10	9.5		21	135	88	10	8.5	10
4	9	10	9.5		18	214	84	13	8	11
5	9	10	9.5		11	206	84	13	6	11
6	9	10	9.5		9	162	72	13	6	10
7	9	10	9.5		11	154	67	10	5	10
8	9	9.5	9.5		10	168	64	10	4.8	11
9	8.5	9.5	9.5		18	156	57	10	4.5	11
10	6	9.5	9.5		29	128	50	10	7.5	11
11	6.5	9.5	9	35	45	130	54	12	7.5	10
12	6.5	9.5	9		37	118	54	11	6.5	10
13	6	9.5	9		43	82	49	11	10	10
14	6	10	9		51	77	47	11	9	10
15	6	9.5	9		39	82	42	11	9.5	9
16	6	9.5	7.5		34	69	36	12	10	8
17	6.5	9.5	6		29	61	27	12	10	7.5
18	6.5	9.5	6		47	58	22	12	10	8
19	6.5	9.5	6		45	22	63	16	12	8
20	6.5	9.5	6		37	21	51	18	10	8
21	6.5	9	6	40	18	43	15	11	10	8.5
22	9	8.5	6		16	37	16	11	9.5	9
23	9	9	6		17	35	12	12	10	9
24	9	9	7		18	37	11	8.5	9.5	9
25	9	9	6		18	45	11	5.5	9.5	9
26	9	9.5	6.5		18	50	11	8.5	9.5	9.5
27	9	9.5	6		17	70	10	11	9	9
28	9	9.5	6		18	67	9	7	9.5	8.5
29	9.5	9.5	6		19	68	13	9	10	9
30	9.5	9.5	6.5		22	72	10	4.5	10	9
31	9.5	-----	6.5	25	-----	65	-----	4.4	10	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	9.5	6	7.98	491
November	10	8.5	9.52	566
December	9.5	6	7.74	476
January	-----	-----	15	922
February	-----	-----	20	1,110
March	61	-----	28.8	1,770
April	51	9	23.4	1,300
May	214	22	88.6	5,450
June	94	9	40.8	2,430
July	13	4.4	10.2	627
August	10	4.5	8.35	513
September	11	7.5	9.47	564
The year	214	4.4	22.5	16,300

LOWELL DITCH NEAR ONYX, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 24, T. 25 S., R. 35 E., three-fourths mile below intake and 5 miles northeast of Onyx.

RECORDS AVAILABLE.—April, 1929, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 5.5 second-feet Apr 22-26; no flow at times.

1929-30: Maximum mean daily discharge, that of Apr. 22-26, 1930.

REMARKS.—This ditch diverts from South Fork of Kern River 1 mile above gaging station near Onyx, and the water is used for irrigation on the Lowell ranch. Its flow, together with that of Thomas ditch, should be added to flow at Onyx station to obtain total flow of South Fork. Record of daily discharge Oct. 1 to Dec. 31 furnished by State of California, Division of Water Resources.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	1.9	1.4	0.4	0.4	1.0	0	0	3.9	3.4	2.9	1.8
2	.9	1.9	1.4	.4	.4	1.1	0	0	3.7	3.4	2.8	1.7
3	.9	2.0	1.2	.4	.4	1.1	0	0	3.6	2.8	2.8	1.8
4	1.1	2.2	1.3	.4	.4	.9	0	0	3.5	2.4	2.9	1.8
5	1.0	2.0	1.4	.4	.4	.9	0	0	3.3	1.9	3.0	1.7
6	1.1	1.8	1.4	.4	1.4	.8	0	0	2.3	2.1	3.0	1.8
7	1.2	.9	1.5	.3	3.4	.8	0	0	2.2	3.6	2.8	2.0
8	1.1	.5	1.5	.1	3.4	.8	1.0	0	1.5	3.4	2.9	2.0
9	1.2	.5	1.5	.4	4.2	.7	4.0	0	1.4	3.4	2.8	2.1
10	1.2	.5	1.5	.3	4.8	.7	4.3	0	1.4	3.5	3.3	2.2
11	1.2	.6	1.5	.2	4.9	.7	4.3	0	1.3	3.8	3.7	2.3
12	1.1	.6	1.6	.4	4.9	.7	4.4	0	1.3	4.0	4.0	2.5
13	1.1	.7	1.5	.4	4.9	.7	4.5	.5	1.3	3.6	4.8	2.6
14	1.2	.6	1.4	.4	4.9	.8	4.6	3.6	1.3	2.6	5	2.3
15	1.1	.6	1.4	.4	4.9	.7	4.9	4.8	4.5	3.1	5	1.0
16	1.2	.8	1.4	.4	4.9	.7	5	5	5	2.8	5	1.0
17	1.2	.9	1.4	.2	2.5	.6	5	5	5	2.5	4.7	1.0
18	1.2	1.0	1.4	.4	1.1	.7	5	5	5	2.2	4.4	1.0
19	1.2	1.0	1.4	.4	2.4	.9	5	5	5	2.0	3.4	.9
20	1.2	1.0	1.4	.4	2.4	1.0	5	5	4.9	1.7	3.9	.9
21	1.1	1.0	1.4	.4	2.6	1.0	5	5	4.8	1.5	3.2	.9
22	1.1	1.0	1.1	.3	2.2	1.0	5.5	5	4.2	2.4	2.6	1.0
23	1.2	1.0	1.1	.2	0	1.0	5.5	5	4.1	3.4	2.2	1.2
24	2.3	1.1	.9	.2	.4	1.0	5.5	5	4.1	3.4	2.1	1.2
25	3.8	1.2	.9	.3	1.1	1.1	5.5	5	3.9	3.4	2.0	1.3
26	3.8	1.2	1.1	.3	1.3	.5	5.5	4.8	2.4	3.1	1.9	1.3
27	3.8	1.2	1.0	.3	1.1	0	5	4.6	2.8	3.0	1.9	1.3
28	4.1	1.4	1.1	.4	1.0	0	5	4.2	2.5	2.8	2.0	1.3
29	3.6	1.4	1.1	.4	0	0	5	3.8	2.0	2.8	2.2	1.3
30	1.9	1.4	1.2	.3	0	0	3.8	3.8	2.2	2.8	2.0	1.3
31	1.9	0	1.2	.4	0	0	0	3.9	0	2.8	1.9	0
Month	Maximum		Minimum		Mean		Run-off in		acre-feet			
October	4.1		0.8		1.64		101					
November	2.2		.5		1.13		67.2					
December	1.6		.9		1.31		80.6					
January	.4		.1		.34		20.9					
February	4.9		0		2.38		132					
March	1.1		0		.71		43.7					
April	5.5		0		3.61		215					
May	5		0		2.71		167					
June	5		1.3		3.25		193					
July	4		1.5		2.89		178					
August	5		1.9		3.13		192					
September	2.6		.9		1.55		92.2					
The year	5.5		0		2.05		1,480					

THOMAS DITCH NEAR ONYX, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 24, T. 25 S., R. 35 E., 200 feet below intake and 5 miles northeast of Onyx.

RECORDS AVAILABLE.—April, 1929, to September, 1930.

EXTREMES.—1929-30: Maximum mean daily discharge, 11 second-feet many days; no flow at times.

REMARKS.—Discharge estimated May 8 and 9. This ditch diverts from South Fork of Kern River 1,000 feet above gaging station near Onyx, and the water is used for irrigation on the Thomas ranch. Its flow, together with that of Lowell ditch, should be added to flow at Onyx station to obtain total flow of South Fork. Record of daily discharge furnished by State of California, Division of Water Resources.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5	5.5	10	3.7	7	7	7.5	7.5	7	3.6	.5
2.....	5	5.5	10	9	7.5	4.6	9.5	7	7	3.4	1.3
3.....	5	5.5	10	9	7.5	8	10	6.5	6.5	3.7	2.0
4.....	5	5.5	10	8.5	7.5	8.5	9	6	6.5	3.4	2.0
5.....	5	6	10	9	8.5	9.5	7.5	7.5	6	1.8	2.0
6.....	5	6	10	9	8	10	7	8	6	1.6	2.0
7.....	5	6.5	10	9	8	9.5	6.5	7.5	5.5	1.6	2.2
8.....	5.5	6.5	10	9	7.5	7.5	6.5	7.5	5.5	1.9	2.0
9.....	5.5	6.5	10	9	7.5	8	6	6.5	5.5	2.9	2.0
10.....	5.5	6.5	11	9	7.5	8	6	4.9	5.5	3.1	2.3
11.....	5.5	6.5	11	8	7.5	7	5.5	4.4	5.5	3.5	2.9
12.....	5.5	6.5	11	7	7.5	6.5	5.5	4.3	5.5	3.1	2.9
13.....	5.5	10	11	7	7.5	5.5	5.5	4.2	5.5	2.5	2.9
14.....	5.5	11	11	7	8	4.5	5.5	4.7	4.9	3.1	2.9
15.....	5.5	11	10	7	8	7.5	5.5	4.7	4.5	3.6	2.9
16.....	5.5	11	6.5	7	9	10	6	4.3	4.3	3.9	2.8
17.....	6	11	0	7	9	10	6	3.9	4.0	3.5	2.6
18.....	6	11	0	7	9	10	6	3.8	3.8	3.0	2.5
19.....	6	11	0	7	9	10	6	3.8	3.5	2.4	2.5
20.....	6	11	0	7	9.5	11	5.5	3.8	3.4	2.2	2.5
21.....	6	11	0	7	9.5	11	5.5	3.6	3.2	2.0	2.6
22.....	6	11	0	8	10	10	5.5	3.4	1.6	1.7	2.9
23.....	6	11	0	8	11	10	5	3.1	.4	1.2	3.2
24.....	5.5	11	0	3.8	11	10	5	2.9	.3	1.0	3.2
25.....	5.5	11	0	4.0	8	9.5	4.9	2.8	.2	.8	3.3
26.....	5.5	11	0	7.5	7	8.5	4.8	2.6	.2	.8	3.3
27.....	5.5	10	0	7.5	7	8	6	4.5	.2	.7	3.2
28.....	5.5	10	0	7.5	7	7.5	7.5	6.5	.2	1.4	3.2
29.....	5.5	10	0	-----	8	6.5	7	8	.7	1.8	3.2
30.....	5.5	10	0	-----	9.5	6	7	8	1.0	1.2	3.7
31.....	5.5	-----	0	-----	10	-----	7	-----	1.6	.6	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet				
October.....	6		5		5.50		338				
November.....	11		5.5		8.87		528				
December.....	11		0		5.21		320				
January.....	9		3.7		7.45		414				
February.....	11		7		8.34		513				
March.....	11		4.5		8.32		495				
April.....	10		4.8		6.38		392				
May.....	8		2.6		5.21		310				
June.....	7		.2		3.73		229				
July.....	3.9		.6		2.29		141				
August.....	3.7		.5		2.59		154				
September.....	11		0		5.29		3,830				
The year.....	11		0		5.29		3,830				

NOTE.—No flow during January.

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, 1930.

EXTREMES.—Maximum discharge during year, 53 second-feet Feb. 22 (gage height, 1.40 feet); minimum, 1.1 second-feet several days in July and September.

1910-1930: Maximum discharge, about 420 second-feet Jan. 24, 1914 (gage height, 2.9 feet); minimum, 0.6 second-foot Aug. 5-12, 1920.

REMARKS.—Records fair. Discharge estimated Jan. 8 and 9. Flow is regulated at times by filling and emptying swimming tank at Hot Springs. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1925-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.5	1.5	1.5	1.7	3.2	6.5	7	6.5	9.0	3.2	1.3	1.3
2	1.5	1.5	1.5	1.7	3.7	6.5	7	6.5	9	2.8	1.3	1.1
3	1.5	1.5	1.9	1.7	3.7	5.5	7	15	8	2.8	1.3	1.1
4	1.5	1.5	1.9	1.7	3.7	9	7	15	7.5	2.8	1.3	1.1
5	1.5	1.5	1.9	5	4.1	13	7	11	7.5	2.8	1.3	1.3
6	1.5	1.5	1.9	2.1	4.1	11	7.5	11	7	2.8	1.7	1.3
7	1.9	1.5	1.9	2.1	3.7	9	8	12	6.5	2.4	1.7	1.3
8	1.5	1.5	1.9	2.1	3.7	7.5	8	11	6.5	2.4	1.7	1.3
9	1.5	1.5	1.7	2.1	3.7	6.5	8	10	6	2.4	1.7	1.3
10	1.5	1.5	1.7	2.1	3.7	6	9	10	6	2.4	1.7	1.3
11	1.9	1.5	2.4	2.4	3.7	6	9	10	6	2.4	1.7	1.3
12	1.9	1.3	2.4	2.4	3.7	6	9	12	6	2.1	1.7	1.3
13	1.9	1.3	2.4	2.4	3.7	6	9	12	5.5	1.7	1.7	1.3
14	1.9	1.3	2.4	2.4	3.7	5.5	8	12	5.5	1.7	1.7	1.3
15	1.9	1.3	2.1	2.8	3.7	9	7.5	12	5.5	1.7	1.7	1.3
16	1.7	1.3	2.8	4.6	3.7	8	7	12	4.6	1.7	1.7	1.3
17	1.7	1.3	2.1	4.6	3.7	7	6.5	11	4.1	1.3	1.7	1.3
18	1.7	1.3	1.7	2.2	3.7	6.5	6.5	11	4.1	1.3	1.3	1.3
19	1.7	1.3	1.7	5.5	3.7	6	6	11	4.6	1.3	1.3	1.5
20	1.7	1.3	2.1	4.1	17	6	6	10	4.6	1.3	1.3	1.5
21	1.7	1.3	2.1	3.7	5	7	6	10	4.6	1.3	1.3	1.5
22	1.7	1.3	1.7	3.2	23	6.5	6	10	4.8	1.1	1.3	1.9
23	1.7	1.3	1.7	3.2	23	6.5	6	9.5	4.6	1.1	1.7	1.9
24	1.7	1.3	1.7	3.2	11	6	7	9.5	4.6	1.1	1.7	1.9
25	1.7	1.3	1.7	3.7	9.5	10	6.5	9.5	4.1	1.1	1.7	1.9
26	1.7	1.2	1.7	4.6	7.5	10	6.5	9.5	3.9	1.1	1.7	1.9
27	1.7	1.2	1.7	3.7	6.5	10	6.5	8.5	3.7	1.1	1.7	1.9
28	1.7	1.2	1.7	3.2	3.9	10	6	8	3.7	1.3	1.7	1.9
29	1.7	1.2	1.7	3.2	-----	9.5	6	8	3.4	1.3	1.7	1.9
30	1.5	1.5	1.7	3.2	-----	9	6	9.5	3.2	1.3	1.3	2.2
31	1.5	-----	1.7	3.2	-----	9	-----	9	-----	1.3	1.3	-----
Month	Maximum						Minimum		Mean		Run-off in acre-feet	
October	1.9						1.5		1.67		103	
November	1.5						1.2		1.37		81.5	
December	2.8						1.5		1.90		117	
January	22						1.7		3.66		225	
February	23						3.2		6.32		351	
March	13						5.5		7.74		476	
April	9						6		7.08		421	
May	15						6.5		10.4		640	
June	9						3.2		5.47		325	
July	3.2						1.1		1.82		112	
August	1.7						1.3		1.55		95.3	
September	2.2						1.1		1.49		88.7	
The year	23						1.1		4.19		3,040	

TULE RIVER NEAR PORTERVILLE, CALIF.

LOCATION.—Staff gage in 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, 1930.

EXTREMES.—Maximum discharge during year, 604 second-feet Feb. 23 (gage height, 4.30 feet); minimum, 0.1 second-foot Sept. 12–18 and 25–27.

1901–1930: Maximum discharge, about 6,780 second-feet Jan. 17, 1916 (gage height, 11.0 feet); practically no flow for a few days in September and October, 1926, and Oct. 1–18, 1929.

REMARKS.—Records good. Several small diversions above station. Power is developed on Middle Fork and tributaries.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.3	0.3	1.7	10	24	68	153	102	123	10	0.4	0.2
2.....	.3	.3	2.0	10	25	68	138	97	109	9	.4	.2
3.....	.3	.3	1.7	10	26	74	123	268	98	8	.4	.2
4.....	.4	.3	1.7	10	26	98	123	217	98	7	.4	.2
5.....	.4	.4	1.7	14	28	247	138	207	90	7	.4	.2
6.....	.5	.5	2.0	24	29	247	161	217	98	6.5	.4	.2
7.....	.5	.6	3.2	32	28	138	188	161	97	6.5	.4	.2
8.....	.6	.7	6	17	29	116	188	153	96	5.5	.3	.2
9.....	.5	.8	6.5	17	28	102	197	153	88	4.5	.3	.2
10.....	.5	.8	7	33	28	96	179	145	78	3.8	.3	.2
11.....	.6	.8	7.5	23	26	93	153	153	73	2.0	.3	.2
12.....	.5	.8	8	22	26	83	145	170	69	2.1	.3	.1
13.....	.4	.8	7.5	27	23	99	138	161	66	1.2	.3	.1
14.....	.3	.8	7.5	24	22	138	130	179	63	1.2	.3	.1
15.....	.3	.8	7.5	24	22	300	109	179	60	1.1	.3	.1
16.....	.3	.7	6	30	22	138	93	170	52	1.0	.3	.1
17.....	.2	.7	5.5	42	21	109	92	179	44	.9	.3	.1
18.....	.2	.7	5.5	62	21	109	87	161	36	.8	.3	.1
19.....	.2	.8	5.5	50	20	94	102	161	32	.7	.3	.2
20.....	.2	.9	6.5	32	23	88	98	179	30	.6	.3	.2
21.....	.2	.9	7.5	28	48	98	116	207	28	.6	.2	.2
22.....	.2	.9	10	27	51	109	116	197	26	.6	.2	.2
23.....	.2	1.3	10	26	468	116	130	179	26	.5	.2	.2
24.....	.2	1.7	10	24	188	145	138	188	26	.5	.2	.2
25.....	.1	1.5	11	26	123	188	130	170	23	.4	.2	.1
26.....	.1	1.4	10	26	179	247	116	161	19	.4	.2	.1
27.....	.1	1.4	10	26	138	247	102	161	16	.4	.2	.1
28.....	.2	1.8	10	25	93	237	97	161	14	.4	.2	.1
29.....	.2	1.8	11	24	-----	217	90	161	12	.4	.2	.1
30.....	.2	1.7	11	23	-----	207	116	153	10	.4	.2	.2
31.....	.3	-----	11	24	-----	188	-----	145	-----	.4	.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.6	0.1	0.30	18.4
November.....	1.8	.3	.91	54.1
December.....	11	1.7	6.84	421
January.....	62	10	25.5	1,570
February.....	468	20	63.8	3,540
March.....	300	68	146	8,980
April.....	197	87	130	7,740
May.....	268	97	171	10,500
June.....	123	10	56.3	3,350
July.....	10	.4	2.75	169
August.....	.4	.2	.29	17.8
September.....	.2	.1	.16	9.5
The year.....	468	.1	50.2	36,400

SOUTH FORK OF TULE RIVER NEAR PORTERVILLE, CALIF.

LOCATION.—Staff gage opposite Indian school in Tule Indian Reservation, 2 miles below mouth of Rocky Creek, 8 miles above junction with Tule River, and 14 miles southeast of Porterville.

RECORDS AVAILABLE.—October, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 180 second-feet Feb. 23 (gage height, 2.76 feet); minimum, 0.6 second-foot Aug. 31 and Sept. 1.

1911-1930: Maximum discharge, about 2,750 second-feet Jan. 26, 1914 (gage height, 8.0 feet); no flow about June 27 to Oct. 6, 1914, and Oct. 1-6, 1929.

REMARKS.—Records good except those for estimated period, July 8-17, which are fair. Diversions for irrigation above station. Gage-height record furnished by United States Indian Service.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	2.6	3.6	4.3	8.5	25	36	28	27	6	2.0	0.6
2	1.5	2.6	3.9	4.3	8.5	24	33	27	25	6	2.1	.7
3	1.5	2.6	3.9	4.3	10	22	31	83	24	5.5	1.9	1.0
4	1.7	2.5	3.9	4.3	10	33	30	53	22	5	2.0	1.0
5	1.8	2.6	3.9	5.5	10	52	33	42	21	5	1.8	.9
6	1.5	2.5	3.9	6	11	72	33	84	20	5	1.8	1.1
7	1.5	2.5	3.9	7.5	12	44	34	38	20	5	1.4	1.1
8	1.6	2.5	3.9	6.5	15	40	33	36	20	4.8	1.3	1.2
9	1.8	2.5	3.9	6	13	35	34	33	18	4.7	1.3	.4
10	2.3	2.6	4.3	8	11	30	33	31	17	4.5	1.7	1.3
11	2.3	2.8	4.3	7.5	10	30	34	38	17	4.4	1.4	1.6
12	2.2	2.9	4.3	7	10	30	33	44	17	4.2	1.2	1.8
13	2.0	3.8	4.5	7.5	10	31	35	42	16	4.1	1.2	1.8
14	1.9	3.3	4.5	9	11	42	34	44	16	3.9	.8	1.8
15	1.9	3.4	4.7	9.5	11	41	27	40	14	3.8	.9	1.8
16	2.1	3.6	5	15	13	33	25	40	12	3.6	1.1	1.7
17	2.1	3.3	5	22	11	30	22	41	11	3.5	1.6	1.3
18	2.0	3.1	5.5	48	11	29	22	40	12	3.3	1.8	1.2
19	2.2	3.1	5.5	18	10	29	21	35	11	2.6	1.6	1.3
20	2.1	3.3	5	18	11	27	22	34	12	3.1	1.4	1.4
21	1.9	3.1	5	11	16	30	22	36	12	3.1	1.2	1.4
22	1.8	3.3	5	10	33	87	22	34	12	2.9	1.1	2.6
23	1.8	3.3	5	9	135	40	23	34	12	3.1	1.2	2.9
24	1.9	3.4	4.7	9.5	44	42	22	31	12	2.9	1.2	2.5
25	1.9	3.8	4.7	9.5	30	51	22	31	11	2.9	1.0	2.3
26	1.8	3.6	4.5	18	39	53	21	28	11	2.8	.9	2.5
27	2.0	3.6	4.7	12	32	56	21	28	9.5	2.6	.9	2.1
28	2.1	3.6	4.7	10	27	56	22	28	8.5	2.3	.9	2.3
29	2.3	3.4	4.3	9	-----	53	21	27	8	2.1	1.0	2.1
30	2.5	3.6	4.5	8.5	-----	53	27	28	7.5	2.1	.9	3.3
31	2.6	-----	4.7	9	-----	52	-----	32	-----	1.9	.8	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.6	1.5	1.95	120
November	3.6	2.5	3.06	182
December	5.5	3.6	4.49	276
January	48	4.3	10.6	652
February	135	8.5	20.5	1,140
March	72	22	39.4	2,420
April	36	21	27.6	1,640
May	83	27	36.8	2,280
June	27	7.5	15.2	904
July	6	1.9	3.76	231
August	2.1	.8	1.34	82.4
September	3.3	.6	1.67	99.4
The year	135	.6	13.8	10,000

KAWEAH RIVER NEAR THREE RIVERS, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 27, T. 17 S., R. 28 N., $1\frac{1}{4}$ miles southwest of Three Rivers. South Fork enters three-fourths mile and North Fork 3 miles above station.

DRAINAGE AREA.—520 square miles.

RECORDS AVAILABLE.—April, 1903, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,060 second-feet Feb 22 (gage height, 8.80 feet); minimum, 13 second-feet Sept. 29.

1903-1930: Maximum discharge, about 14,700 second-feet Jan. 17, 1916 (gage height, 13.5 feet); minimum, 9.5 second-feet Aug. 29 to Sept. 1, 1924.

REMARKS.—Records good. Irrigation diversions above station. Power is developed on Middle and East Forks.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	27	25	30	31	81	244	496	604	895	288	46	26
2.....	29	24	30	32	90	240	445	698	871	268	44	25
3.....	26	25	31	32	108	248	484	975	887	256	42	25
4.....	26	24	31	33	108	366	501	823	1,050	240	42	24
5.....	26	24	32	57	114	439	604	670	1,280	222	40	24
6.....	25	24	31	69	126	328	755	604	1,420	202	39	23
7.....	26	24	31	65	138	276	800	650	1,420	194	39	23
8.....	27	24	32	54	141	256	959	579	1,330	183	41	23
9.....	28	24	32	54	138	252	967	530	1,280	168	47	23
10.....	29	24	34	67	132	225	919	507	1,280	157	41	23
11.....	28	26	44	60	126	283	855	592	1,280	144	36	24
12.....	27	26	44	62	129	256	871	726	1,420	133	35	24
13.....	25	26	42	65	135	288	792	903	1,280	121	36	24
14.....	26	27	40	71	144	319	684	1,020	1,150	113	36	24
15.....	25	28	38	71	151	338	567	959	1,050	107	37	22
16.....	25	28	41	154	154	284	501	808	951	104	39	20
17.....	25	28	42	177	154	268	494	740	800	96	36	19
18.....	26	27	43	280	157	248	519	855	740	91	35	19
19.....	25	27	42	164	151	236	650	1,120	644	88	33	19
20.....	24	27	41	120	104	236	863	1,380	579	84	30	18
21.....	24	26	38	206	192	264	1,020	1,520	525	78	29	19
22.....	24	27	37	100	986	315	1,040	1,520	473	72	28	22
23.....	23	28	35	90	1,070	333	1,140	1,570	434	68	29	21
24.....	22	29	34	90	407	450	1,150	1,570	407	66	29	21
25.....	23	29	34	90	288	573	919	1,570	386	62	29	21
26.....	24	29	34	96	342	698	895	1,620	371	58	29	18
27.....	24	29	33	96	315	726	740	1,670	352	53	28	19
28.....	24	30	33	86	264	733	705	1,720	319	52	28	18
29.....	24	30	33	81	-----	705	670	1,520	306	48	27	18
30.....	25	31	33	79	-----	740	677	1,200	297	48	26	24
31.....	25	-----	33	79	-----	604	-----	1,010	-----	46	26	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	29	22	25.3	1,560
November.....	31	24	26.7	1,590
December.....	44	30	35.7	2,200
January.....	280	31	87.5	5,380
February.....	1,070	81	232	12,900
March.....	740	225	378	23,200
April.....	1,150	445	756	45,000
May.....	1,720	507	1,040	64,000
June.....	1,420	297	849	50,500
July.....	288	46	126	7,750
August.....	47	26	34.9	2,150
September.....	26	18	21.8	1,300
The year.....	1,720	18	300	218,000

NORTH FORK OF KAWEAH RIVER AT KAWEAH, CALIF.

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

DRAINAGE AREA.—128 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 326 second-feet May 3 (gage height, 2.67 feet); minimum, 0.1 second-foot Sept. 18–21.

1910–1930: Maximum discharge, about 7,400 second-feet Jan. 25, 1914 (gage height, 10.2 feet); no flow for many days during July to October, 1924.

REMARKS.—Records good. Several small irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	1.5	2.8	3.4	15	54	108	108	107	19	2.5	0.4
2	.6	1.6	2.9	3.3	17	62	102	121	104	17	1.5	.4
3	.6	1.8	3.1	3.6	28	62	125	267	91	16	1.8	.2
4	.6	1.8	2.9	3.6	23	93	123	203	91	14	1.4	.2
5	.6	1.8	2.9	8.5	25	128	145	155	89	13	1.5	.2
6	.6	1.8	3.1	10	32	90	145	135	89	13	1.4	.2
7	.7	1.9	3.3	8.5	38	74	177	155	85	13	1.7	.2
8	.6	1.9	3.3	7.5	32	70	190	132	81	13	1.8	.2
9	.7	1.9	3.4	8.5	30	66	190	120	76	13	1.8	.2
10	.8	2.0	3.8	7.5	27	55	166	108	71	12	1.8	.2
11	1.0	2.0	5	8.5	26	63	145	128	62	12	1.8	.2
12	.9	2.1	6.5	9	27	74	145	155	56	11	2.0	.2
13	.9	2.1	4.7	10	32	83	135	166	54	11	1.8	.5
14	.8	2.1	4.7	10	35	72	125	166	57	9.5	1.7	.6
15	.8	2.2	4.3	10	38	80	115	162	45	9	1.8	.2
16	.8	2.4	4.1	44	36	75	104	152	41	9	1.8	.2
17	.8	2.5	4.7	36	33	75	104	141	36	8.5	1.8	.2
18	.9	2.4	4.7	166	31	67	104	152	36	6	1.8	.1
19	1.1	2.1	4.3	39	26	67	118	152	36	5.5	2.0	.1
20	1.1	2.2	4.1	26	29	67	128	162	34	5.5	1.3	.1
21	1.1	2.5	4.0	23	44	79	135	162	36	5	1.4	.1
22	1.0	2.5	4.0	19	40	90	135	162	31	4.4	1.4	.5
23	1.0	2.5	3.6	18	267	93	145	152	36	4.2	1.3	1.2
24	1.0	2.5	3.6	17	113	125	132	141	28	4.2	1.3	1.4
25	1.1	2.9	3.6	17	72	145	135	141	26	4.2	1.5	.2
26	.5	3.1	3.6	17	82	190	128	141	24	3.9	.2	.2
27	.5	3.3	3.6	21	77	190	115	134	26	4.4	.2	.2
28	.6	3.4	3.6	17	62	177	105	124	26	3.9	.2	.2
29	.6	3.4	3.6	16	---	177	99	131	21	3.9	.2	.2
30	.6	3.1	3.6	15	---	190	116	127	26	2.8	.2	1.6
31	.8	---	3.3	16	---	135	---	134	---	2.6	.2	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1.1	0.5	0.78	48.0
November	3.4	1.5	2.31	137
December	6.5	2.8	3.83	236
January	166	3.3	20.0	1,230
February	267	15	47.7	2,650
March	190	54	96.0	6,090
April	190	99	131	7,800
May	267	108	148	9,100
June	107	20	53.3	3,170
July	19	2.6	8.82	542
August	2.5	.2	1.39	85.5
September	1.6	.1	.35	20.8
The year	267	.1	43.0	31,100

KINGS RIVER NEAR HUME, CALIF.

LOCATION.—Water-stage recorder near west line of sec. 35, T. 12 S., R. 28 E., 1½ miles below junction of South and Middle Forks of Kings River and ¾ miles north of Hume.

DRAINAGE AREA.—836 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,780 second-feet June 13 (gage height, 6.80 feet); minimum, 102 second-feet Jan. 6.

1921-1930: Maximum discharge, 11,700 second-feet June 4, 1921 (gage height, 8.67 feet); minimum, 63 second-feet Sept. 29 to Oct. 4, 1924.

REMARKS.—Records good. Discharge measurements and gage-height record furnished by city of Los Angeles.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	138	126	114	114	190	413	953	1,300	2,110	1,620	321	172
2	134	128	114	113	203	431	927	1,390	2,160	1,520	332	167
3	132	128	113	111	214	490	966	1,520	2,280	1,480	332	165
4	132	126	116	120	220	542	1,040	1,390	2,600	1,440	317	163
5	130	124	118	158	231	542	1,140	1,220	3,240	1,340	300	161
6	130	124	114	121	250	495	1,390	1,180	4,180	1,260	300	158
7	132	123	113	130	256	470	1,520	1,220	4,460	1,260	305	156
8	134	121	118	125	262	460	1,840	1,140	4,090	1,140	325	154
9	136	123	121	130	253	460	1,940	1,100	4,090	1,070	345	154
10	136	121	150	152	250	455	1,840	1,070	4,180	1,000	350	152
11	134	121	167	146	250	480	1,670	1,140	4,460	946	345	150
12	132	120	148	148	250	505	1,670	1,260	5,280	882	365	150
13	130	116	150	150	256	526	1,620	1,480	5,390	836	344	148
14	130	121	142	158	262	542	1,390	1,670	4,750	804	324	144
15	128	121	140	169	270	526	1,180	1,720	4,550	774	313	138
16	128	121	172	294	273	490	1,100	1,520	4,180	750	302	134
17	130	118	161	253	276	475	1,070	1,480	3,560	732	284	132
18	130	114	156	302	280	460	1,100	1,620	3,240	702	266	130
19	128	114	152	228	284	451	1,340	2,160	2,810	654	250	127
20	126	116	148	220	332	460	1,670	2,740	2,400	606	237	132
21	124	113	138	211	298	500	2,060	3,320	2,220	559	222	134
22	124	111	138	208	733	559	2,160	3,240	1,840	520	211	136
23	124	111	127	203	690	624	2,540	3,400	1,780	485	203	134
24	124	113	130	200	526	762	2,470	3,650	1,720	455	198	134
25	124	113	132	200	470	920	2,060	3,650	1,670	431	208	134
26	124	114	129	203	480	1,000	1,940	4,000	1,670	408	206	130
27	122	114	127	198	451	1,070	1,670	4,270	1,620	386	200	129
28	122	116	130	190	408	1,140	1,570	4,550	1,520	365	198	127
29	124	113	121	190	-----	1,220	1,480	4,090	1,520	348	190	134
30	124	118	125	190	-----	1,300	1,440	2,950	1,620	332	183	152
31	124	-----	121	188	-----	1,100	-----	2,400	-----	317	176	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	138	122	129	7,930
November	128	111	119	7,080
December	172	113	134	8,240
January	302	111	178	10,900
February	733	190	326	18,100
March	1,300	413	641	39,400
April	2,540	927	1,560	92,800
May	4,550	1,070	2,220	136,000
June	5,390	1,520	3,040	181,000
July	1,620	317	820	50,400
August	365	176	273	16,800
September	172	127	144	8,570
The year	5,390	111	798	577,000

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.—1,740 square miles.

RECORDS AVAILABLE.—September, 1895, to September, 1930.

EXTREMES.—Maximum discharge during year, 8,430 second-feet May 28 (gauge height, 10.68 feet); minimum, 109 second-feet Oct. 28 and Nov. 28-30.

1895-1930: Maximum discharge, about 59,700 second-feet Jan. 25, 1914 (gauge height, 21.8 feet); minimum, 67 second-feet Oct. 3, 1924.

REMARKS.—Records good; daily discharge estimated many days in October, November, and September on basis of weekly staff-gage readings. One hydroelectric plant on North Fork of Kings River. No unreturned diversions.

Daily and monthly discharge, in second-feet, 1895-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	132	* 113	* 110	115	218	636	1,650	2,430	3,330	1,830	317	154	
2	129	* 114	* 110	117	218	636	1,530	2,430	3,330	1,740	311	150	
3	123	* 115	* 111	115	263	656	1,610	3,090	3,450	1,700	317	* 146	
4	* 122	115	* 111	112	299	935	1,780	2,730	3,870	1,610	311	* 142	
5	* 121	* 115	* 112	135	305	1,360	2,080	2,330	4,570	1,490	299	138	
6		* 120	* 115	112	201	317	1,070	2,530	2,130	5,570	1,420	298	* 136
7		120	* 115	* 112	170	359	870	2,790	2,330	6,450	1,350	299	* 135
8		* 120	115	* 112	154	377	786	3,450	1,980	5,870	1,280	305	* 133
9		* 119	* 115	* 112	162	371	772	3,870	1,930	5,690	1,210	341	* 132
10		* 119	* 114	* 112	150	365	746	3,590	1,830	5,690	1,140	359	* 131
11		* 118	* 114	* 132	158	341	766	2,970	1,980	6,070	1,070	353	* 130
12		* 118	* 113	201	158	347	838	3,090	2,330	6,670	968	329	129
13		* 117	* 113	158	166	359	902	3,090	2,630	6,850	902	353	* 127
14		117	* 112	150	170	377	935	2,630	2,910	6,070	838	347	* 125
15		* 117	112	147	178	389	1,180	2,280	3,090	5,870	838	329	* 123
16		* 117	* 112	144	335	401	968	2,030	2,730	5,330	772	317	* 121
17		* 117	* 112	178	558	407	870	1,930	2,630	4,770	734	305	* 119
18		* 117	* 112	178	649	413	838	1,980	2,850	4,150	714	281	* 117
19		* 117	* 112	162	533	419	786	2,280	3,590	3,780	675	257	115
20		* 117	* 112	154	371	443	753	3,090	4,710	3,070	630	240	* 115
21		117	* 112	147	323	564	838	3,870	5,690	2,790	578	228	* 115
22		* 116	112	141	275	1,110	1,000	4,010	5,510	2,480	533	212	* 116
23		* 114	* 112	138	263	2,820	1,070	4,570	5,690	2,270	503	196	* 116
24		* 113	* 111	138	263	1,210	1,320	4,710	6,050	2,180	485	186	* 116
25		* 112	* 111	135	263	902	1,650	4,010	5,870	2,070	455	182	* 117
26		* 111	* 110	135	263	838	1,880	3,590	6,250	2,070	437	182	117
27		* 110	* 110	129	269	805	2,030	2,970	6,450	1,970	413	182	* 120
28		109	* 109	126	251	708	2,180	2,910	7,070	1,830	383	182	* 125
29		* 110	109	123	234	-----	2,330	2,680	6,450	1,780	365	174	* 130
30		* 111	* 109	120	238	-----	2,530	2,630	4,850	1,780	341	166	* 14
31		* 112	-----	120	234	-----	2,080	-----	3,870	-----	329	158	-----
Month							Maximum	Minimum	Mean	Run-off in acre-feet			
October	-----						132	109	117	7,190			
November	-----						115	109	112	6,660			
December	-----						201	110	135	8,300			
January	-----						649	112	244	15,000			
February	-----						2,820	218	569	31,600			
March	-----						2,530	636	1,170	71,900			
April	-----						4,710	1,530	2,870	171,000			
May	-----						7,070	1,830	3,760	231,000			
June	-----						6,850	1,780	4,050	241,000			
July	-----						1,830	329	895	55,000			
August	-----						359	158	268	16,500			
September	-----						154	115	128	7,620			
The year							7,070	109	1,190	863,000			

* Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 621 second-feet May 27 (gage height, 4.33 feet); minimum, 0.8 second-foot Oct. 29.

1921-1930: 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 Sept. 12-14, 1924.

REMARKS.—Records excellent except those for Oct. 29 to Mar. 26, which were estimated because of ice, and June 16-24 and July 16 to Aug. 8, which were estimated because of missing gage-height record. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.2						42	84	159	58	6	1.2
2.....	1.2						45	92	177	53	6	1.2
3.....	1.2						55	95	201	48	5	1.2
4.....	1.2						70	83	249	44	5	1.2
5.....	1.2	1.3					97	78	339	40	5	1.1
6.....	1.2						118	82	412	35	4.5	1.2
7.....	1.4						133	71	412	33	4.5	1.1
8.....	1.3						151	60	380	31	5	1.1
9.....	1.2						149	56	372	29	4.4	1.1
10.....	1.2						126	60	389	28	4.4	1.2
11.....	1.2						120	67	416	26	6	1.2
12.....	1.2						116	80	440	21	6.5	1.2
13.....	1.1						100	103	393	19	6.5	1.2
14.....	1.1		3.8				82	111	359	18	6	1.2
15.....	1.1						70	102	324	17	5.5	1.1
16.....	1.1				6.3		62	95	280	16	4.1	1.0
17.....	1.1						66	103	240	16	3.6	1.0
18.....	1.1						82	142	230	14	3.1	1.0
19.....	1.1						120	195	200	14	2.8	1.0
20.....	1.0						166	262	150	12	2.1	1.0
21.....	1.0						182	299	130	12	1.8	1.0
22.....	1.0			4.0			207	313	120	11	1.6	1.1
23.....	1.0						215	350	100	10	1.5	1.2
24.....	1.0						190	376	95	9	1.6	1.2
25.....	1.0						156	367	86	8	2.1	1.2
26.....	1.0					79	133	393	79	8	2.0	1.2
27.....	1.0					74	111	421	70	8	1.8	1.2
28.....	1.0					83	102	416	66	8	1.6	1.2
29.....	1.0					100	94	317	62	7	1.5	1.6
30.....	1.0					88	95	221	61	7	1.3	2.4
31.....	1.0					54		166		6	1.2	
Month	Maximum						Minimum		Mean		Run-off in acre-feet	
October.....	1.4						1.0		1.11		68.2	
November.....									2.0		119	
December.....									3.5		215	
January.....									4.0		248	
February.....									8.0		444	
March.....									30		1,840	
April.....							215		115		6,840	
May.....							421		56		11,300	
June.....							440		61		13,900	
July.....							58		6		1,320	
August.....							6.5		1.2		226	
September.....							2.4		1.0		70.8	
The year.....							440		1.0		50.4	

NORTH FORK OF KINGS RIVER NEAR CLIFF CAMP, CALIF.

LOCATION.—Water-stage recorder in N. ½ sec. 12, T. 11 S., E. 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, 1930. August, 1921, to November, 1922, at a site 1 mile upstream.

EXTREMES.—Maximum discharge during year, 2,440 second-feet May 27 (gage height, 9.17 feet); minimum, 1.0 second-foot Dec. 26.

1921-1930: Maximum discharge, 6,030 second-feet June 4, 1922 (gage height, 10.6 feet, at old site); minimum that of Dec. 26, 1929.

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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	6.5	6.5	6	* 30	* 58	271	560	655	108	11	5
2	5.5	7	6	6	30	57	297	635	735	101	11	4.8
3	5.5	7	6	5.5	34	60	368	675	795	96	11	4.8
4	6	6.5	7.5	6.5	34	59	428	578	885	87	10	4.6
5	6	6.5	7.5	5.5	41	57	542	455	1,140	80	9.5	4.6
6	6	6.5	6.5		49	62	675	490	1,300	72	9	4.5
7	6	6.5	6.5		53	67	795	490	1,270	67	8.5	4.4
8	6.5	6	6.5		50	71	975	410	1,100	63	9.5	4.6
9	6.5	6	* 10		45	75	975	368	1,020	58	15	4.6
10	6.5	6.5	16		41	81	795	389	998	60	13	4.8
11	6.5	6	15		45	103	735	490	1,070	58	12	5
12	6	5	16		50	122	775	578	1,040	48	13	5.5
13	6	5	14		55	126	695	675	885	41	13	5.5
14	6	6.5	11		59	105	578	735	775	38	13	5.5
15	6	6.5	11		64	87	455	695	675	36	12	5
16	6	7	21		65	79	431	595	560	34	11	4.9
17	6	6	14		65	66	452	655	472	31	10	4.6
18	6	5.5	13	21	67	68	525	862	455	28	9.5	4.5
19	6	6.5	12		64	74	755	1,220	377	26	8.5	4.3
20	6	6	10		79	99	1,070	1,500	287	24	8	4.3
21	6	6	9.5		60	146	1,170	1,590	251	23	7.5	4.6
22	6	4.9	9		84	184	1,320	1,500	238	21	6.5	5
23	6	6	8		74	228	1,410	1,590	198	20	6	5.5
24	6	6.5	8		63	305	1,270	1,620	185	18	6	5.5
25	5.5	6.5	7.5		* 62	359	975	1,560	167	16	7.5	5.5
26	5.5	6	7		* 61	411	862	1,620	155	16	8.5	5.5
27	6	6	7		* 60	449	735	1,680	138	15	7.5	5.5
28	6	6.5	7		* 59	482	715	1,620	128	14	7	5
29	6	7	6.5			537	675	1,240	121	13	6.5	8.5
30	5.5	7	6.5			493	655	840	112	13	5.5	14
31	5.5		6			330		675		12	5.5	
Month						Maximum		Minimum		Mean		Run-off in acre-feet
October						6.5		5.5		5.97		367
November						7		4.9		6.25		372
December						21		6		9.61		591
January										* 20		1,230
February						84		30		55.1		3,060
March						537		57		178		10,900
April						1,410		271		746		44,400
May						1,680		368		922		56,700
June						1,300		112		606		36,100
July						108		12		43.1		2,650
August						15		5.5		9.40		578
September						14		4.3		5.35		318
The year						1,680		4.3		217		157,000

* Estimated.

TULARE LAKE BASIN

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NORTH FORK OF KINGS RIVER BELOW RANCHERIA CREEK, CALIF.

LOCATION.—Water-stage recorder in 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, 1930.

EXTREMES.—Maximum discharge during year, 2,400 second-feet May 27 (gauge height, 8.97 feet); minimum, 5.5 second-feet Jan. 3.

1927-1930: Maximum discharge, 5,910 second-feet May 16, 1927 (gauge height, 12.6 feet); minimum, that of Jan. 3, 1930.

REMARKS.—Records good. Discharge estimated Oct. 29 and 30. No diversions. Gauge-height record and discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	11	11	13	10	40	78	366	689	802	127	23	10
2.....	11	12	12	10	49	84	398	786	890	118	22	10
3.....	11	12	12	10	54	118	472	892	942	110	22	9.5
4.....	11	13	12	11	55	138	552	747	1,010	101	21	9
5.....	12	12	14	20	60	106	660	592	1,230	90	20	9
6.....	11	12	13	14	68	92	830	619	1,380	84	19	9
7.....	11	12	12	17	72	99	933	648	1,340	79	19	9
8.....	11	12	13	17	70	102	1,100	530	1,200	76	19	9
9.....	12	12	16	18	64	106	1,090	485	1,120	72	24	9.5
10.....	12	12	31	20	60	114	942	509	1,090	72	27	10
11.....	12	11	29	21	61	138	864	614	1,120	70	23	10
12.....	11	11	27	21	64	170	907	725	1,120	62	23	10
13.....	11	10	26	22	70	184	847	831	1,020	56	23	11
14.....	11	11	22	24	74	160	726	888	902	51	24	11
15.....	11	13	19	30	78	127	578	851	800	49	23	10
16.....	11	12	31	66	81	117	537	734	691	47	22	9.5
17.....	11	12	27	51	80	112	556	769	558	44	20	9
18.....	11	11	24	68	82	110	628	988	540	42	19	9
19.....	11	11	22	39	81	114	859	1,300	466	40	17	8.5
20.....	10	12	20	36	116	136	1,140	1,550	380	38	16	8.5
21.....	10	12	16	34	83	198	1,230	1,620	312	36	15	9
22.....	10	10	15	35	327	260	1,340	1,540	302	33	14	10
23.....	10	11	14	35	179	326	1,400	1,630	256	32	13	11
24.....	10	10	14	37	102	414	1,340	1,640	230	30	13	11
25.....	10	12	14	37	95	486	1,080	1,600	206	29	14	12
26.....	10	12	14	38	91	540	1,010	1,650	192	28	15	11
27.....	10	11	13	34	83	590	850	1,680	171	27	15	11
28.....	10	12	13	34	76	624	839	1,620	156	26	14	10
29.....	10	12	12	34	-----	676	794	1,350	146	25	12	16
30.....	10	13	12	36	-----	648	777	993	133	24	11	25
31.....	10	-----	11	36	-----	440	-----	837	-----	23	10	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	12	10	10.7	658
November.....	13	10	11.6	690
December.....	31	11	17.5	1,080
January.....	68	10	29.5	1,810
February.....	327	40	86.2	4,790
March.....	676	78	245	15,100
April.....	1,400	366	855	50,900
May.....	1,680	485	1,030	63,300
June.....	1,380	133	690	41,100
July.....	127	23	56.2	3,460
August.....	27	10	18.5	1,140
September.....	25	8.5	10.6	631
The year.....	1,680	8.5	255	185,000

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, 1930.

EXTREMES.—Maximum discharge during year, 2,380 second-feet May 23 (gage height, 9.39 feet); minimum, 7.5 second-feet Jan. 21.

1919-1930: Maximum discharge, 6,080 second-feet June 4, 1922 (gage height, 12.18 feet); minimum, about 4 second-feet Aug. 29 to Sept. 1, 1924.

REMARKS.—Records good. Discharge estimated Dec. 12-15, Jan. 6, 7, 9, 10, and Apr. 2 and 3. Diversion for Balch power house is returned to river above station. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	13	13	12	29	93	360	708	820	142	18	11
2	12	12	13	12	43	102	429	800	942	134	18	10
3	11	12	12	12	62	130	482	1,010	1,006	127	18	9.5
4	11	12	11	12	63	158	555	792	1,066	116	17	8.5
5	11	12	12	18	64	176	655	625	1,346	110	17	9
6	10	12	13	22	72	152	852	607	1,506	91	15	9
7	10	12	13	18	82	123	975	705	1,486	92	16	9
8	10	11	13	17	88	124	1,200	548	1,326	82	16	9
9	11	11	14	18	83	135	1,200	500	1,226	79	16	10
10	12	12	21	18	72	133	1,020	495	1,176	72	18	10
11	12	11	38	19	66	148	890	618	1,216	71	20	10
12	12	11	36	17	67	178	960	722	1,226	70	18	10
13	10	11	34	17	74	206	910	864	1,116	53	20	10
14	10	11	30	17	88	192	758	940	942	63	20	10
15	9.5	10	28	22	85	156	595	910	842	55	19	10
16	10	11	25	87	86	150	555	740	705	38	18	11
17	10	11	35	90	98	144	568	770	568	41	16	10
18	11	11	25	106	88	145	614	1,040	538	34	16	9
19	11	12	22	80	94	136	878	1,370	480	36	15	9
20	11	12	17	51	114	145	1,220	1,680	370	33	16	9.5
21	11	12	16	26	128	185	1,360	1,760	312	30	14	9
22	11	12	16	33	332	235	1,450	1,680	292	29	12	9
23	10	11	16	36	294	290	1,560	1,750	245	30	11	10
24	10	11	15	36	209	410	1,520	1,800	230	30	12	11
25	10	11	14	40	110	490	1,190	1,740	220	26	11	10
26	9.5	11	13	36	108	555	1,120	1,790	196	24	12	11
27	10	12	14	38	102	608	903	1,820	180	20	12	11
28	10	12	14	39	101	640	895	1,790	168	20	12	11
29	10	12	13	32	-----	692	825	1,550	163	20	12	13
30	11	13	12	45	-----	688	805	1,110	152	18	12	20
31	11	12	12	30	-----	465	-----	883	-----	20	11	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	12	9.5	10.6	652
November	13	10	11.6	690
December	38	11	18.7	1,150
January	106	12	34.1	2,100
February	332	29	104	5,780
March	692	93	264	16,200
April	1,560	360	910	54,100
May	1,820	495	1,100	67,600
June	1,500	152	733	43,600
July	142	18	58.3	3,580
August	20	11	15.4	947
September	20	8.5	10.3	613
The year	1,820	8.5	272	197,000

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, 1930.

EXTREMES.—Maximum discharge during year, 438 second-feet May 19 (gage height, 4.27 feet); minimum, 1.6 second-feet Aug. 23.

1922-1930: Maximum discharge, 1,140 second-feet May 16, 1927 (gage height, 5.58 feet); minimum, 1.1 second-feet Aug. 1 and 27, 1924.

REMARKS.—Records excellent except those for Oct. 28 to Dec. 8 and Dec. 20 to Apr. 10, which were estimated because of ice. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.
1	2.6					45	130	118	9	2.8	1.9
2	2.6					50	132	127	8.5	2.6	1.9
3	2.6					60	118	136	7.5	2.6	1.8
4	2.6					80	104	144	7	2.4	1.8
5	2.4					110	88	157	6.5	2.2	1.9
6	2.4	2.7				140	98	157	6	2.2	1.9
7	2.6					160	93	136	6	2.2	1.9
8	2.6					175	78	114	6	3.4	2.1
9	2.4		3.2			170	72	104	5.5	4.0	2.1
10	2.4		3.0			150	75	100	5.5	3.2	2.2
11	2.2		4.0			146	93	104	5	2.8	2.2
12	2.4		4.0			159	118	93	4.7	2.8	2.1
13	2.4		3.4			136	146	78	4.4	2.6	2.1
14	2.4		3.0			100	159	68	4.2	2.8	2.1
15	2.4		3.0		5.1	75	134	56	4.0	2.8	2.1
16	2.6		4.0			76	125	49	3.8	2.4	1.9
17	2.6		3.4			88	146	42	3.6	2.4	1.9
18	2.6		3.4			114	213	39	3.4	2.2	1.9
19	2.6		3.2			181	288	33	3.2	2.1	1.9
20	2.6					250	302	27	3.2	1.9	2.1
21	2.6					267	295	24	3.2	1.9	2.1
22	2.6					295	270	23	3.0	1.9	2.2
23	2.4			4.2		302	274	20	3.0	1.9	2.2
24	2.4					274	260	18	2.8	2.2	2.2
25	2.2					242	250	16	2.8	2.6	2.2
26	2.2					201	250	15	2.8	2.2	2.2
27	2.2					178	246	14	2.6	2.1	2.2
28	2.2					178	222	12	2.6	1.9	2.2
29	2.2					159	175	11	2.4	1.9	3.2
30	2.2					139	130	10	2.4	1.9	3.4
31	2.2						116		2.6	1.9	
Month						Maximum	Minimum	Mean	Run-off in acre-feet		
October						2.6	2.2	2.43	149		
November								2.5	149		
December								3.5	215		
January								4.0	246		
February								10	555		
March								30	1,840		
April						302	45	157	9,340		
May						302	72	168	10,300		
June						157	10	68.2	4,060		
July						9	2.4	4.43	272		
August						4.0	1.9	2.41	148		
September						3.4	1.8	2.13	127		
The year						302	1.8	37.8	27,400		

RANCHERIA CREEK NEAR SMITH MEADOW, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 19, T. 11 S., R. 28 E., 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, 1930.

EXTREMES.—Maximum discharge during year, 198 second-feet May 27 (gage height, 4.06 feet); minimum, 3.9 second-feet Sept. 18.

1924-1930: Maximum discharge, 426 second-feet May 16, 1927 (gage height, 5.45 feet); practically no flow part of Nov. 25, 26 and 27, 1924.

REMARKS.—Records good except those for Oct. 28 to Apr. 2, which are estimated because of ice. No diversions. Gage-height record and discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8						20	50	83	14	6	4.3
2	4.6						25	56	87	13	5.5	4.3
3	4.6						28	52	94	13	5.5	4.3
4	4.6						37	43	102	12	5.5	4.2
5	4.6						44	38	114	11	5.5	4.3
6	4.4						49	38	120	11	5	4.4
7	4.6		4.8				56	38	112	10	5.5	4.3
8	4.6		4.6				67	37	98	10	6	4.3
9	4.6		5				68	33	91	10	6.5	4.3
10	4.6		5.5			6.2	60	37	85	10	5.5	4.6
11	4.6		5.5				61	45	85	9	5.5	4.6
12	4.6		5				62	57	81	8.5	5.5	4.6
13	4.6		5		5.8		55	67	72	8.5	5	4.6
14	4.6	4.9	5				44	74	61	7.5	5.5	4.4
15	4.6		5				37	68	55	7.5	5	4.3
16	4.6		7				35	57	49	7.5	5	4.2
17	4.6		5.5				37	63	43	7	5	4.2
18	4.6		5.5				43	85	40	7	4.8	4.2
19	4.6		5	6.0			56	120	36	7	4.8	4.2
20	4.6						72	133	31	7	4.8	4.2
21	4.6						81	138	30	6.5	4.6	4.3
22	4.6						94	133	27	6.5	4.4	4.6
23	4.6						98	136	25	6.5	4.4	4.6
24	4.6						94	136	23	6.5	4.8	4.6
25	4.6						78	136	21	6	5	4.4
26	4.6						73	138	20	6	4.6	4.4
27	4.6						64	144	18	6	4.6	4.4
28	4.6						62	138	17	6	4.4	4.4
29	4.6						57	116	16	5.5	4.4	6
30	4.6						51	88	14	5.5	4.3	5.5
31	4.6							80		5.5	4.2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4.8	4.6	4.60	283
November			4.5	268
December			5.0	307
January			6.0	369
February			6.0	333
March			10	615
April	98	20	56.9	3,390
May	144	33	83.0	5,100
June	120	14	58.3	3,470
July	14	5.5	8.29	510
August	6.5	4.2	5.07	312
September	6	4.2	4.47	266
The year	144		21.0	15,200

DINKEY CREEK AT DINKEY MEADOW, CALIF.

LOCATION.—Water-stage recorder in sec. 21, T. 10 S., R. 26 E., at lower end of Dinkey 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, 1930.

EXTREMES.—Maximum discharge during year, 445 second-feet Apr. 9 (gage height, 4.25 feet); minimum, 0.7 second-foot Nov. 27.

1921-1930: Maximum discharge, 2,660 second-feet Nov. 26, 1926 (gage height, 7.62 feet); minimum, 0.4 second-foot Aug. 30, 1924.

REMARKS.—Records good except those for Dec. 22 to Feb. 3, which were estimated because of ice. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	1.9	1.7	15	26	112	155	135	17	2.4	1.0
2	1.7	1.9	1.7	20	29	120	169	138	16	2.4	1.0
3	1.7	1.8	1.7	20	36	152	185	144	15	2.3	1.0
4	1.7	1.7	1.7	22	36	178	158	161	14	2.2	1.0
5	1.7	1.7	1.8	25	32	213	131	187	13	2.0	1.0
6	1.7	1.7	1.8	29	30	243	154	194	12	2.0	1.0
7	1.7	1.7	1.8	30	33	272	144	184	11	1.9	1.1
8	1.8	1.7	2.0	28	37	315	120	158	11	2.0	1.2
9	1.8	1.7	2.9	25	40	285	112	147	10	2.2	1.2
10	1.8	1.7	8	23	46	232	126	138	9.5	2.1	1.3
11	1.7	1.7	7	23	57	220	160	140	9	1.8	1.3
12	1.7	1.7	3.6	27	69	220	175	130	8	1.7	1.4
13	1.7	1.6	3.4	30	67	196	191	113	7	1.6	1.3
14	1.6	1.7	3.1	32	54	176	189	100	6	1.7	1.2
15	1.6	1.7	2.9	33	50	154	168	84	6	2.0	1.1
16	1.6	1.7	6	32	42	147	155	72	5.5	1.7	1.1
17	1.7	1.7	4.2	30	40	152	158	63	5	1.7	1.0
18	1.7	1.7	3.8	30	39	165	207	57	4.9	1.7	1.0
19	1.7	1.7	3.4	29	40	215	266	52	4.6	1.6	.9
20	1.7	1.7	2.8	44	52	270	300	45	4.4	1.6	.9
21	1.7	1.7	2.6	30	83	272	305	41	4.1	1.5	1.0
22	1.7	1.7		60	95	282	288	38	3.8	1.4	1.1
23	1.7	1.6		55	121	280	285	40	3.6	1.3	1.3
24	1.6	1.7		34	166	290	278	37	3.5	1.3	1.4
25	1.6	1.7		30	198	238	275	28	3.2	1.4	1.4
26	1.7	1.7	2.5	26	220	207	272	26	3.1	1.5	1.4
27	1.6	1.7		26	228	173	270	24	2.9	1.4	1.3
28	1.6	1.7		28	236	161	260	22	2.7	1.3	1.2
29	1.7	1.7			245	157	226	20	2.7	1.3	6
30	1.7	1.7			203	165	169	19	2.6	1.2	4.6
31	1.7				140	142			2.5	1.1	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1.8	1.6	1.69	104
November	1.9	1.6	1.71	102
December	8	1.7	3.00	184
January			6.0	369
February	60	15	29.9	1,660
March	245	26	90.0	5,530
April	315	112	209	12,400
May	305	112	200	12,300
June	194	19	91.2	5,430
July	17	2.5	7.21	443
August	2.4	1.1	1.72	106
September	6	.9	1.42	84.5
The year	315	.9	53.5	38,700

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, 1930.

EXTREMES.—Maximum discharge during year, 755 second-feet Apr. 8 (gage height, 7.25 feet); minimum, 2.6 second-feet several days in September.

1920-1930: Maximum discharge, 3,360 second-feet Nov. 9, 1924 (gage height, 10.57 feet); minimum, 1.6 second-feet Aug. 31, 1924.

REMARKS.—Records good. Discharge estimated Dec. 17, 18, Jan. 10, 19-25, July 10-31, and Sept. 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	4.8	5.5	6	6	22	51	211	278	256	34	7.5	2.8
2-----	4.6	5.5	6	6	30	59	209	320	255	32	7	2.8
3-----	4.6	5.5	5.5	6	38	74	275	390	251	30	7	2.8
4-----	4.6	5.5	5.5	6	40	110	314	317	271	28	7	2.7
5-----	4.6	5.5	6	17	42	107	375	263	287	26	6.5	2.7
6-----	4.4	5	6	9.5	49	75	420	268	302	24	6.5	2.6
7-----	4.4	5	5.5	12	55	73	450	287	292	24	6	2.6
8-----	4.6	5	6	11	55	73	535	238	263	22	6	2.7
9-----	4.8	5	6	11	50	75	500	219	235	23	6.5	3.0
10-----	5	5	11	11	45	75	420	219	222	22	6.5	3.2
11-----	5.5	5	24	11	44	95	375	287	215	21	6	3.4
12-----	5	5	14	11	48	114	390	335	207	20	5.5	3.8
13-----	4.8	5	11	12	56	129	362	362	185	19	5	3.8
14-----	4.6	5.5	9.5	12	58	120	322	362	155	18	5	3.8
15-----	4.4	5.5	9	16	63	100	278	335	141	17	7	3.8
16-----	4.2	6	11	63	65	87	259	307	125	16	6	3.3
17-----	4.2	6	17	65	61	80	273	297	107	15	5.5	2.8
18-----	4.4	5.5	12	95	59	80	292	362	97	14	5	2.7
19-----	4.6	5	10	50	57	75	362	450	92	13	5	2.7
20-----	4.6	5.5	9.5	30	84	84	450	500	82	12	4.6	2.6
21-----	4.4	5.5	8	25	67	128	465	518	75	11	4.4	2.6
22-----	4.2	5.5	7.5	25	236	168	482	482	75	10	4.0	2.8
23-----	4.2	5	7	25	205	193	465	465	65	10	3.6	3.8
24-----	4.2	5.5	6.5	25	94	268	518	465	55	9	3.6	4.2
25-----	4.2	5.5	6.5	25	78	322	405	450	54	9	3.8	4.4
26-----	4.2	5.5	6.5	24	72	375	375	435	50	9	4.4	4.4
27-----	4.4	5.5	6.5	21	60	390	312	435	46	8	4.0	4.0
28-----	4.6	6	6.5	19	49	390	304	420	43	8	3.8	3.6
29-----	4.8	6	6.5	19	-----	405	297	390	40	8	3.4	5.5
30-----	4.8	6	6	21	-----	390	310	322	37	8	3.2	18
31-----	5	-----	6	21	-----	268	-----	280	-----	8	2.8	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	5.5	4.2	4.57	281
November-----	6	5	5.42	323
December-----	24	5.5	8.52	524
January-----	95	6	22.9	1,410
February-----	236	22	67.2	3,730
March-----	405	51	162	9,960
April-----	535	209	367	21,800
May-----	518	219	357	22,000
June-----	302	37	153	9,100
July-----	34	8	17.0	1,050
August-----	7.5	2.8	5.23	322
September-----	18	2.6	3.80	226
The year-----	535	2.6	97.7	70,700

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 about 200 feet below mouth of East Fork. Altitude, about 6,700 feet.

DRAINAGE AREA.—21 square miles.

RECORDS AVAILABLE.—October, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 173 second-feet about May 19 (gage height, 5.22 feet); minimum, 0.3 second-foot Sept. 6.

1923-1930: Maximum discharge, 860 second-feet June 16, 1929 (gage height, 7.00 feet); minimum, 0.2 second-foot Oct. 3, 1924.

REMARKS.—Records good except those for Dec. 5 to Mar. 31, which were estimated because of ice, and Apr. 1-26, May 4 to June 12, and July 31 to Aug. 26, which were estimated because of no gage-height record. No diversions. Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	0.5	1.1				31	57	50	4.0	1.4	0.6
2	.9	.5	1.1				35	69	55	4.0	1.3	.5
3	.9	.5	1.0				40	70	60	4.0	1.2	.5
4	.9	.6	.9				45	65	65	3.5	1.2	.5
5	.9	.6					55	60	70	3.5	1.2	.4
6	.9	.6					60	55	70	3.5	1.2	.4
7	.9	.6					70	50	70	3.5	1.3	.4
8	.9	.7					85	45	65	3.5	1.7	.5
9	.9	.7					80	45	60	3.5	1.8	.5
10	.9	.7					80	50	55	3.5	1.6	.6
11	.9	.7				18	80	60	40	3.0	1.4	.6
12	.9	.7					70	70	25	2.5	1.2	.6
13	.9	.9					65	80	21	2.5	1.0	.6
14	.9	.9			11		60	85	18	2.5	1.0	.6
15	.9	.9					50	80	17	2.0	1.2	.6
16	.7	.9					45	70	14	2.0	1.0	.6
17	.9	.7					50	70	13	2.0	1.0	.6
18	.9	.7					60	85	13	1.7	.9	.6
19	.7	.7					65	105	12	1.7	.9	.6
20	.7	.7					80	110	10	1.7	.9	.6
21	.7	.6					90	105	10	1.7	.8	.7
22	.7	.7					95	100	10	1.7	.7	.9
23	.6	.9					100	100	9	1.7	.8	.9
24	.6	.9					95	100	8.5	1.7	.9	.9
25	.5	.9		3.5			85	100	8	1.7	1.0	.7
26	.5	1.1					65	100	7	1.7	.9	.7
27	.5	1.1					63	95	6.5	1.7	.9	.7
28	.5	1.3					60	80	6.5	1.7	.9	.7
29	.4	1.3					60	65	6	1.5	.7	1.5
30	.4	1.1					59	55	4.5	1.5	.6	.9
31	.6						50			1.5	.6	
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	0.9					0.4			0.75		46.1	
November	1.3					.5			.79		47.0	
December									1.0		61.5	
January									3.0		184	
February									10		555	
March									25		1,540	
April	100					31			65.9		3,920	
May	110					45			75.2		4,620	
June	70					4.5			29.3		1,740	
July	4.0					1.5			2.46		151	
August	1.8					.6			1.07		65.8	
September	1.5					.4			.65		38.7	
The year	110					.4			17.9		13,000	

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.

DRAINAGE AREA.—171 square miles.

RECORDS AVAILABLE.—December, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 100 second-feet Nov. 7 (gage height, 9.21 feet); minimum, 0.8 second-foot Apr. 9.

1921-1930: Maximum discharge, 3,460 second-feet June 4, 1922 (gage height, 13.75 feet); practically no flow Aug. 30 and Sept. 2-7, 1924, and Dec. 16 and 17, 1925:

REMARKS.—Records excellent. Discharge estimated Jan. 17-30, Feb. 4-7, 15-25, 27, 28, Mar. 2-8, and 22-27. Storage in Florence Lake, above the station, was 7,850 acre-feet on Sept. 30, 1929, and 1,720 acre-feet on Sept. 30, 1930. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	2.8	2.5	1.5	1.3	1.5	1.7	1.7	1.3	1.2	3.1	3.4	3.1
2-----	2.8	2.2	1.5	1.3	2.2	1.7	1.7	1.7	1.2	3.1	3.1	3.1
3-----	2.8	2.2	1.5	1.3	2.2	1.8	2.0	2.0	1.2	3.1	3.1	3.1
4-----	2.8	2.2	1.5	1.3	2.4	1.8	2.0	1.7	1.2	3.1	3.1	3.1
5-----	2.8	2.5	1.5	1.3	2.6	1.8	1.7	1.7	1.2	3.1	3.1	3.1
6-----	2.8	2.8	1.5	1.3	2.8	1.9	1.7	1.7	1.2	3.4	2.8	3.1
7-----	2.8	6.0	1.5	1.3	3.0	1.9	1.5	1.7	1.3	3.4	2.8	3.1
8-----	2.8	3.8	1.5	1.3	2.2	2.0	1.5	1.7	1.5	3.8	2.8	3.1
9-----	2.8	2.8	1.7	1.3	1.7	2.0	1.2	1.7	1.5	3.8	2.5	3.1
10-----	2.8	2.5	1.7	1.3	1.7	2.0	1.0	2.0	1.5	3.4	2.5	2.8
11-----	2.8	2.5	1.5	1.3	2.2	2.2	1.2	2.2	1.5	3.4	2.5	2.8
12-----	2.5	2.5	1.5	1.3	2.2	2.2	1.2	2.2	2.2	3.1	2.5	2.8
13-----	2.5	2.5	1.5	1.3	2.0	2.2	1.3	2.0	2.5	3.1	2.5	2.8
14-----	2.5	2.0	1.5	1.3	2.0	2.2	1.5	1.7	2.5	3.1	2.5	2.8
15-----	2.5	1.5	1.5	1.3	2.0	2.0	1.5	1.5	2.8	3.1	2.5	2.5
16-----	2.8	1.5	1.5	1.3	2.0	1.7	1.5	1.5	2.8	3.1	2.5	2.2
17-----	2.8	1.5	1.3	1.3	2.0	1.7	1.5	1.2	2.8	3.1	2.5	2.2
18-----	2.8	1.5	1.3	1.3	1.9	1.7	1.5	1.2	3.4	2.8	2.5	2.0
19-----	2.8	1.5	1.3	1.3	1.9	1.7	1.5	1.3	3.1	2.5	2.5	2.0
20-----	2.8	1.5	1.3	1.3	1.9	2.0	1.5	2.2	3.1	2.5	2.5	2.0
21-----	2.8	1.5	1.5	1.3	1.8	2.2	1.5	1.5	3.1	2.5	2.5	2.2
22-----	2.8	1.5	1.5	1.3	1.8	2.2	1.5	1.2	3.1	2.5	2.5	3.1
23-----	2.8	1.5	1.5	1.3	1.8	2.2	1.7	1.2	3.1	2.5	3.1	3.1
24-----	2.8	1.5	1.5	1.3	1.7	2.2	2.0	1.0	3.1	2.5	3.8	3.1
25-----	2.8	1.5	1.5	1.3	1.7	2.0	1.5	1.0	3.1	2.5	3.8	3.4
26-----	2.8	1.5	1.5	1.3	1.7	2.0	1.3	1.0	3.1	2.5	3.1	3.8
27-----	2.5	1.5	1.5	1.3	1.7	2.0	1.3	1.0	3.1	2.5	3.1	3.8
28-----	2.5	1.5	1.5	1.3	1.7	2.0	1.3	1.0	3.1	3.1	3.1	3.8
29-----	2.5	1.5	1.5	1.3	-----	2.0	1.3	1.2	3.1	3.8	3.1	3.1
30-----	2.5	1.5	1.5	1.3	-----	2.0	1.3	1.2	3.1	3.8	3.1	2.8
31-----	2.5	-----	1.5	1.3	-----	1.7	-----	1.2	-----	3.8	3.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	2.8	2.5	2.71	167
November-----	6	1.5	2.10	125
December-----	1.7	1.3	1.49	91.6
January-----	1.3	1.3	1.30	79.9
February-----	3.0	1.5	2.01	112
March-----	2.2	1.7	1.96	121
April-----	2.0	1.0	1.50	89.3
May-----	2.2	1.0	1.51	92.8
June-----	3.4	1.2	2.36	140
July-----	3.8	2.5	3.07	189
August-----	3.8	2.5	2.85	175
September-----	3.8	2.0	2.90	173
The year-----	6	1.0	2.15	1,560

SAN JOAQUIN RIVER BASIN

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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. Altitude, about 2,500 feet.

DRAINAGE AREA.—942 square miles.

RECORDS AVAILABLE.—March, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,520 second-feet June 7 (gauge height, 12.84 feet); minimum, 61 second-feet Nov. 14.

1922-1930: Maximum discharge, 18,000 second-feet June 5, 1922 (gauge height, 17.34 feet); minimum, that of Nov. 14, 1929.

REMARKS.—Records excellent. Large diversions and storage on South Fork of San Joaquin River and tributaries. Gauge-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	75	71	74	82	169	346	1,060	1,320	1,560	1,020	174	91
2.....	74	72	74	82	185	370	1,090	1,360	1,620	965	178	87
3.....	72	72	71	82	228	416	1,250	1,650	1,830	910	183	85
4.....	72	72	71	81	238	688	1,380	1,480	2,120	828	180	85
5.....	71	70	71	145	253	802	1,590	1,300	2,610	800	174	85
6.....	71	69	72	132	274	557	1,930	1,210	3,330	750	163	86
7.....	71	70	71	96	286	515	1,960	1,280	3,770	725	159	86
8.....	72	70	69	108	289	488	2,290	1,110	3,580	675	159	86
9.....	76	69	75	106	283	479	2,320	1,060	3,290	605	167	85
10.....	77	72	118	118	268	446	2,060	1,010	3,440	564	172	83
11.....	76	74	210	123	259	462	1,640	1,060	3,710	524	165	82
12.....	75	72	139	128	271	528	1,740	1,200	3,920	492	180	81
13.....	74	67	128	130	289	587	1,700	1,460	3,750	474	196	80
14.....	72	66	136	132	310	605	1,550	1,650	3,420	458	198	78
15.....	71	71	121	151	328	596	1,340	1,650	3,380	446	172	76
16.....	71	74	134	372	346	533	1,260	1,490	3,060	434	153	74
17.....	71	72	149	381	350	497	1,290	1,530	2,620	430	145	72
18.....	71	71	123	420	360	470	1,350	1,760	2,280	412	137	71
19.....	71	70	121	283	360	462	1,550	2,320	1,980	378	128	70
20.....	71	70	116	218	412	492	2,100	2,950	1,660	336	121	69
21.....	71	70	108	208	374	574	2,460	3,280	1,440	310	112	69
22.....	70	69	96	194	938	738	2,450	2,930	1,320	292	106	70
23.....	69	68	94	187	915	820	2,490	2,790	1,250	277	105	74
24.....	69	67	86	183	530	1,090	2,570	2,950	1,180	262	101	76
25.....	68	71	88	187	450	1,360	2,050	2,950	1,110	247	99	76
26.....	68	70	91	192	450	1,470	1,990	3,130	1,070	232	102	76
27.....	68	74	90	192	406	1,470	1,560	3,460	1,030	215	103	75
28.....	69	72	87	176	367	1,450	1,520	3,670	1,030	201	106	71
29.....	68	72	88	165	-----	1,640	1,440	3,230	1,020	192	103	82
30.....	68	74	82	167	-----	1,800	1,410	2,200	1,040	180	99	101
31.....	68	-----	81	169	-----	1,310	-----	1,740	-----	174	95	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	77	68	71.3	4,380
November.....	74	66	70.7	4,210
December.....	210	69	101	6,210
January.....	420	81	174	10,700
February.....	938	169	364	20,200
March.....	1,800	346	776	47,700
April.....	2,570	1,060	1,750	104,000
May.....	3,670	1,010	2,010	124,000
June.....	3,920	1,020	2,280	136,000
July.....	1,020	174	478	29,400
August.....	198	95	143	8,790
September.....	101	69	79.4	4,720
The year.....	3,920	66	690	500,000

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.—1,650 square miles since 1913.

RECORDS AVAILABLE.—October, 1907, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,290 second-feet May 21 (gage height, 9.20 feet); minimum, 77 second-feet Dec. 30.

1907-1930: Maximum discharge, about 46,200 second-feet Jan. 25, 1914 (gage height, 21.72 feet); minimum, 44 second-feet Sept. 15, 1924.

REMARKS.—Records excellent. Discharge estimated Jan. 1-15. Flow regulated by storage in Florence Lake, Huntington Lake, Shaver Lake, and Crane Valley Reservoir. On Sept. 30, 1929, the storage in Shaver Lake was 14,900 acre-feet, on Sept. 30, 1930, it was 18,500 acre-feet. Storage in Crane Valley Reservoir was 12,800 acre-feet and 14,000 acre-feet on the same dates. See also South Fork of San Joaquin River near Florence Lake and Big Creek below Huntington Lake.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	518	458	334	292	373	650	1,460	1,750	1,730	1,710	1,380	1,010
2.....	548	392	412	341	416	637	1,630	1,570	1,790	1,710	1,420	925
3.....	554	350	530	378	444	782	1,530	1,530	1,900	1,690	1,220	998
4.....	623	373	570	385	444	940	1,820	1,830	2,200	1,690	1,420	1,040
5.....	624	368	582	490	601	1,670	1,580	1,760	2,000	1,730	1,490	1,070
6.....	470	445	626	460	735	1,100	1,660	1,630	3,200	1,640	1,420	1,050
7.....	494	386	636	380	675	686	2,310	1,660	3,900	1,650	1,300	1,070
8.....	606	593	394	385	672	836	2,480	1,590	3,760	1,620	1,400	960
9.....	517	368	512	420	672	944	2,590	1,480	3,500	1,810	1,340	1,070
10.....	496	310	640	630	524	825	2,330	1,430	3,580	1,800	1,260	1,120
11.....	450	408	768	440	720	899	2,220	1,380	3,850	1,700	1,350	1,080
12.....	506	441	794	295	667	931	1,850	1,280	4,110	1,680	1,270	1,060
13.....	442	400	505	380	623	888	1,890	1,640	4,140	1,600	1,350	1,010
14.....	311	500	612	530	830	1,180	1,990	1,710	3,670	1,550	1,390	882
15.....	580	392	434	480	642	1,610	2,070	1,730	3,640	1,540	1,370	916
16.....	461	376	485	896	360	1,010	1,510	1,690	3,320	1,450	1,330	900
17.....	537	358	532	614	548	792	1,840	1,690	3,110	1,580	1,320	705
18.....	475	412	686	713	566	909	1,740	1,620	2,540	1,610	1,180	829
19.....	467	427	468	894	461	851	1,710	2,320	2,390	1,500	1,340	824
20.....	428	452	557	586	591	748	1,670	3,070	2,200	1,470	1,280	755
21.....	354	446	524	378	928	932	2,600	3,500	1,790	1,450	1,380	658
22.....	440	486	462	385	492	1,020	2,700	3,290	1,800	1,440	1,220	786
23.....	510	440	472	484	2,280	1,140	2,780	2,900	1,660	1,510	1,250	790
24.....	532	300	529	519	1,000	1,320	2,850	3,070	1,780	1,610	1,150	585
25.....	524	483	442	438	1,090	1,820	2,610	3,040	1,720	1,550	1,170	649
26.....	372	586	360	506	1,020	1,720	2,230	3,360	1,700	1,560	1,400	676
27.....	392	467	491	464	721	1,690	2,050	3,540	1,630	1,370	1,260	675
28.....	465	298	410	423	660	1,710	2,060	3,870	1,650	1,240	1,280	653
29.....	373	374	351	540	-----	1,650	1,800	3,690	1,630	1,400	1,160	746
30.....	472	498	260	542	-----	1,660	1,560	2,830	1,640	1,410	1,230	564
31.....	492	-----	570	573	-----	1,990	-----	1,940	-----	1,360	1,080	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	624					311			485		29,800	
November.....	593					298			418		24,900	
December.....	794					260			514		31,600	
January.....	896					292			492		30,300	
February.....	2,280					360			706		39,200	
March.....	1,990					637			1,150		70,700	
April.....	2,850					1,460			2,040		121,000	
May.....	3,870					1,280			2,240		138,000	
June.....	4,140					1,630			2,600		155,000	
July.....	1,810					1,240			1,570		96,500	
August.....	1,490					1,080			1,300		79,900	
September.....	1,120					564			869		51,700	
The year.....	4,140					260			1,200		869,000	

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 Hills Ferry road, 300 feet below mouth of Merced River and $3\frac{1}{2}$ miles northeast of Newman.

RECORDS AVAILABLE.—April, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 870 second-feet Mar. 7 (gage height, 4.20 feet); minimum, 134 second-feet Oct. 28.

1912-1930: Maximum discharge, 20,700 second-feet Jan. 27, 1914 (gage height, 18.0 feet); minimum, 15 second-feet Aug. 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	150	142	142	235	485	415	295	345	245	270	210	210
2.....	142	142	142	245	485	400	295	332	370	258	220	200
3.....	142	142	142	235	485	385	282	345	482	245	190	180
4.....	150	142	142	235	485	370	282	385	430	232	190	180
5.....	142	142	142	235	485	400	270	415	448	220	180	180
6.....	142	142	142	235	415	465	258	415	415	210	170	180
7.....	142	142	142	278	385	825	270	385	345	210	180	190
8.....	142	142	142	378	385	825	270	370	270	200	190	220
9.....	142	142	142	315	385	780	282	358	270	220	180	200
10.....	150	142	142	328	345	650	308	370	270	200	180	200
11.....	142	142	142	315	332	535	308	400	232	190	210	200
12.....	142	142	142	302	332	518	295	400	220	200	200	210
13.....	150	142	150	315	332	518	295	385	210	210	200	220
14.....	150	142	150	328	332	535	345	370	210	210	180	220
15.....	150	142	150	328	320	552	345	332	210	200	180	220
16.....	150	142	150	378	308	535	345	320	295	180	190	220
17.....	158	142	150	420	295	535	385	308	332	180	200	210
18.....	158	142	150	485	295	570	385	295	430	180	210	210
19.....	150	142	150	485	282	552	370	308	430	180	210	210
20.....	150	142	150	555	282	535	370	308	400	170	200	210
21.....	142	142	150	555	270	482	358	295	385	190	190	210
22.....	142	142	150	590	295	448	358	308	358	190	200	220
23.....	142	142	158	590	295	430	332	295	332	180	210	232
24.....	142	150	158	630	308	430	308	295	320	190	232	232
25.....	142	142	158	630	308	385	320	270	282	200	245	210
26.....	142	142	167	670	308	358	320	282	270	210	258	200
27.....	142	142	176	630	332	345	320	295	282	210	220	200
28.....	134	142	185	630	385	332	345	258	270	220	210	200
29.....	142	142	205	590	-----	320	320	232	258	220	200	200
30.....	142	142	215	555	-----	308	332	232	282	210	210	200
31.....	142	-----	235	555	-----	308	-----	232	-----	200	190	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	158	134	145	8,920
November.....	150	142	142	8,450
December.....	235	142	157	9,650
January.....	670	235	428	26,300
February.....	485	270	355	19,700
March.....	825	308	485	29,800
April.....	385	258	319	19,000
May.....	415	232	327	20,100
June.....	482	210	318	18,900
July.....	270	206	238	12,700
August.....	258	170	201	12,400
September.....	232	180	206	12,300
The year.....	825	134	274	198,000

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, 1930 (low-water records only except 1924 and 1930).

EXTREMES.—Maximum discharge during year, 5,050 second-feet June 17 (gage height, 10.56 feet); minimum, 645 second-feet Aug. 8.

1922-1930: Maximum gage height and discharge not determined; minimum, 384 second-feet Sept. 30, 1924.

REMARKS.—Records good. Discharge estimated Dec. 10-12, 24, and 25. Practically all water is diverted from tributaries and main river above the station during irrigation season and flow at station is largely return water during late summer.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,390	1,190	1,240	1,290	2,080	2,020	3,260	2,220	2,560	1,630	768	1,240
2.....	1,490	1,190	1,240	1,290	2,020	1,960	2,940	2,080	1,900	1,570	725	1,210
3.....	1,540	1,190	1,240	1,290	1,900	1,900	2,700	2,020	1,720	1,570	725	1,210
4.....	1,490	1,160	1,240	1,290	1,780	1,900	2,350	2,210	1,780	1,570	745	1,240
5.....	1,540	1,140	1,240	1,340	1,780	2,410	2,350	2,280	1,780	1,600	725	1,240
6.....	1,540	1,140	1,240	1,390	1,780	3,390	2,210	2,350	2,560	1,540	705	1,240
7.....	1,540	1,140	1,190	1,340	1,720	4,060	2,020	2,280	2,560	1,510	665	1,270
8.....	1,490	1,140	1,240	1,540	1,600	3,430	2,280	2,080	2,700	1,450	645	1,300
9.....	1,440	1,140	1,240	1,840	1,600	3,180	3,020	1,960	3,020	1,390	835	1,300
10.....	1,440	1,190	1,240	2,020	1,600	2,630	2,940	1,840	3,180	1,360	955	1,330
11.....	1,340	1,290	1,240	2,080	1,540	2,490	2,630	1,840	3,020	1,390	980	1,360
12.....	1,290	1,240	1,290	2,140	1,600	2,420	2,490	1,780	2,780	1,330	980	1,420
13.....	1,290	1,290	1,290	1,900	1,600	2,210	2,140	1,660	2,420	1,360	955	1,420
14.....	1,340	1,290	1,290	1,720	1,540	2,280	3,020	1,540	3,430	1,390	980	1,450
15.....	1,440	1,240	1,290	1,900	1,540	2,350	2,860	1,450	4,250	1,330	955	1,540
16.....	1,490	1,240	1,290	1,840	1,540	2,350	2,280	1,390	4,350	1,270	955	1,540
17.....	1,540	1,240	1,290	1,780	1,540	2,280	2,140	1,360	4,850	1,210	980	1,540
18.....	1,540	1,240	1,290	1,780	1,490	2,280	2,080	1,420	4,750	1,210	1,030	1,480
19.....	1,490	1,240	1,240	1,780	1,490	2,280	2,140	1,420	4,150	1,180	1,060	1,420
20.....	1,440	1,240	1,290	1,720	1,490	2,280	2,140	1,840	3,100	1,180	1,060	1,630
21.....	1,440	1,290	1,290	1,720	1,440	1,900	2,350	3,020	2,860	1,130	930	1,630
22.....	1,340	1,290	1,340	1,720	1,440	1,840	2,560	2,780	2,560	1,000	790	1,480
23.....	1,340	1,290	1,340	1,780	1,490	1,780	2,860	3,020	2,350	980	745	1,510
24.....	1,340	1,290	1,340	2,020	1,660	1,960	3,020	2,940	2,420	955	812	1,510
25.....	1,340	1,290	1,390	2,200	1,780	2,210	3,180	2,700	2,280	930	930	1,540
26.....	1,340	1,290	1,440	2,340	1,900	1,840	3,180	3,180	2,080	955	1,080	1,540
27.....	1,390	1,290	1,390	2,270	2,340	2,350	2,780	2,780	1,960	955	1,100	1,540
28.....	1,290	1,290	1,290	2,020	2,340	2,860	2,640	2,700	1,840	880	1,080	1,540
29.....	1,240	1,290	1,290	2,270	-----	3,020	2,500	2,780	1,720	858	1,160	1,630
30.....	1,240	1,240	1,290	2,140	-----	3,020	2,360	2,860	1,690	858	1,240	1,690
31.....	1,240	-----	1,290	2,020	-----	3,180	-----	2,860	-----	812	1,210	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,540	1,240	1,410	86,700
November.....	1,290	1,140	1,230	73,200
December.....	1,440	1,190	1,290	79,300
January.....	2,340	1,290	1,800	111,000
February.....	2,340	1,440	1,700	94,400
March.....	4,060	1,780	2,450	151,000
April.....	3,260	2,020	2,580	154,000
May.....	3,180	1,360	2,210	136,000
June.....	4,850	1,690	2,750	164,000
July.....	1,630	812	1,240	76,200
August.....	1,240	645	920	56,600
September.....	1,690	1,210	1,430	85,100
The year.....	4,850	645	1,750	1,270,000

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, 1930.

EXTREMES.—Maximum mean daily discharge during year, 1,040 second-feet Aug. 20; minimum mean daily discharge (estimated), 0.3 second-foot Oct. 23 to Nov. 7.

1925-1930: Maximum mean daily discharge, 1,990 second-feet Apr. 30, 1926; practically no flow at times.

REMARKS.—Records good. Leakage estimated Oct. 23 to Nov. 7. 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 Sept. 30, 1929, the storage in Florence Lake was 7,850 acre-feet; on Sept. 30, 1930, it was 1,720 acre-feet. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	391	0.3	6.5	8	20	50	115	241	1.0	546	472	493
2.....	385	.3	6.5	8	20	50	104	247	1.0	466	514	391
3.....	389	.3	6	7.5	20	50	129	329	1.0	524	510	389
4.....	391	.3	6	7.5	19	50	181	310	.9	485	506	389
5.....	389	.3	6	7.5	19	50	182	208	.9	425	506	486
6.....	378	.3	6	7.5	19	51	250	214	.9	413	505	542
7.....	380	.3	6	7.5	41	51	289	254	.9	396	510	538
8.....	378	.3	6	7.5	56	71	310	183	1.0	386	528	540
9.....	378	14	18	7.5	40	86	355	170	1.0	354	528	546
10.....	304	18	28	16	30	72	294	197	1.1	285	528	542
11.....	54	16	27	22	24	62	224	190	1.1	248	510	544
12.....	14	13	20	21	23	63	230	189	1.2	268	454	540
13.....	13	12	15	22	22	69	247	221	1.2	236	367	534
14.....	17	12	14	22	21	78	204	261	1.2	233	376	540
15.....	19	12	14	25	40	77	177	288	1.2	199	239	553
16.....	19	12	16	47	43	77	150	292	1.3	256	1.3	546
17.....	23	11	21	40	25	69	151	258	291	240	1.2	540
18.....	27	11	20	30	24	63	169	297	467	266	1.2	540
19.....	26	10	19	28	23	63	239	434	470	273	101	540
20.....	32	9	19	20	23	63	319	256	474	324	1,040	493
21.....	150	7	15	18	24	73	367	.4	474	458	550	454
22.....	41	7	12	18	40	107	398	.5	467	499	502	445
23.....	.3	7	12	21	60	111	459	.6	474	499	655	445
24.....	.3	7	11	28	43	147	465	.6	428	593	660	472
25.....	.3	7	11	28	51	222	414	.7	382	643	742	461
26.....	.3	7	11	28	76	188	369	.7	459	653	794	445
27.....	.3	7	11	29	73	170	275	.8	511	574	797	452
28.....	.3	7	11	28	58	170	255	.8	522	446	199	445
29.....	.3	7	10	28	-----	206	229	.9	575	427	443	436
30.....	.3	6.5	10	25	-----	224	228	1.0	540	439	606	430
31.....	.3	-----	9	20	-----	174	-----	1.0	-----	445	618	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	391	0.3	136	8,360
November.....	18	.3	7.62	453
December.....	28	6	13.0	799
January.....	47	7.5	20.4	1,250
February.....	76	19	34.9	1,940
March.....	224	50	98.6	6,060
April.....	465	104	259	15,400
May.....	432	.4	163	10,000
June.....	575	.9	218	13,000
July.....	653	199	403	24,800
August.....	1,040	1.2	478	29,400
September.....	553	389	490	29,200
The year.....	1,040	.3	194	141,000

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.

DRAINAGE AREA.—53.5 square miles.

RECORDS AVAILABLE.—November, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 520 second-feet June 11 (gage height, 5.37 feet); minimum probably occurred during period affected by ice. 1921-1930: Maximum discharge, 857 second-feet June 4, 1922 (gage height, 5.97 feet); minimum, 1.2 second-feet Sept. 29 to Oct. 5, 1924.

REMARKS.—Records good except those for Nov. 6 to Dec. 2 and Dec. 20 to Mar. 21, 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.6	3.5	3.0				35	63	120	154	21	9
2	4.3	3.8	3.0				35	73	113	148	21	8.5
3	4.0	3.8	3.2				38	81	134	136	20	8
4	4.0	3.5	3.2				45	74	172	128	20	8
5	4.0	3.5	3.0				60	66	252	125	18	7.5
6	4.0		3.2				73	69	332	115	18	6.5
7	4.3		2.8				76	63	359	112	19	6.5
8	4.6		3.2				83	54	351	101	28	6
9	4.6		4.6				77	54	359	91	26	5.5
10	4.3		4.9				67	54	375	90	24	5
11	4.0		4.6			20	59	59	404	80	29	5.5
12	4.0		5				59	67	431	73	40	5.5
13	4.0		6				52	84	413	70	48	5
14	4.0		5.5				48	88	404	67	42	4.9
15	3.8		6.5				43	76	396	63	37	4.6
16	4.0		6.5				43	78	363	59	32	4.3
17	4.0		7				46	87	328	57	28	4.3
18	4.0	3.0	8		14		54	104	347	55	25	4.6
19	4.0		7.5				71	142	306	50	22	4.3
20	4.0						95	181	232	45	19	4.6
21	4.0						102	190	208	42	17	4.9
22	3.8			11		32	115	179	168	38	15	4.9
23	3.8					37	122	212	159	36	13	4.9
24	3.8					50	106	240	154	33	13	5
25	3.8					57	92	249	157	31	16	4.9
26	3.5					57	88	289	154	29	16	4.9
27	3.8					54	73	325	150	28	14	4.6
28	3.5					55	67	325	150	25	13	4.6
29	3.0					63	64	256	154	23	12	5
30	2.8					59	67	177	163	22	11	6.5
31	3.0					41		140		21	10	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4.6	2.8	3.91	240
November			3.10	184
December			4.86	299
January			8.0	492
February			13.0	722
March	63		29.8	1,830
April	122	35	68.5	4,080
May	325	54	135	8,300
June	431	113	260	15,500
July	184	21	69.3	4,260
August	48	10	22.2	1,360
September	9	4.3	5.61	334
The year	431		52.0	37,600

MONO CREEK NEAR VERMILION VALLEY, CALIF.

LOCATION.—Water-stage recorder in sec. 35, T. 6 S., R. 27 E., unsurveyed, 1 mile below the lower end of Vermilion Valley and about 6 miles below mouth of North Fork. Altitude, about 7,400 feet.

DRAINAGE AREA.—92.0 square miles.

RECORDS AVAILABLE.—November, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 848 second-feet June 11 (gage height, 7.17 feet); minimum probably occurred during frozen period.

1921-1930: Maximum discharge, 1,420 second-feet June 16, 1927 (gage height, 8.09 feet); minimum, 8 second-feet Sept. 29 to Oct. 4, 1924.

REMARKS.—Records excellent except those for Oct. 30 to Nov. 1 and Nov. 11 to Mar. 21, which were estimated because of ice, and those for Apr. 24-30 and Sept. 12-23, which were estimated because of missing record. No diversions. Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	11					86	141	256	256	48	20
2	13	12					88	143	260	253	52	20
3	13	12					96	148	272	231	49	20
4	13	11					107	141	320	221	44	20
5	13	11					126	128	404	218	41	20
6	13	11					148	133	510	202	41	20
7	13	11					154	134	580	198	40	19
8	14	11					170	121	565	181	47	18
9	13	11					175	116	570	161	48	18
10	13	11					161	116	605	161	45	18
11	13	10				35	148	121	660	151	60	18
12	13	10					148	124	700	136	71	18
13	12	9					143	141	670	133	62	18
14	12	10					128	151	650	126	52	17
15	12	10					114	151	640	124	47	17
16	12	10					112	159	605	116	42	17
17	12	10	16		31		112	159	520	116	37	17
18	12	10					119	167	488	112	34	16
19	12	10					136	202	424	101	31	16
20	12	10					164	253	348	90	29	16
21	12	10		22			184	296	328	84	28	16
22	11	10				48	202	300	284	77	26	15
23	11	10				54	224	328	288	71	23	15
24	11	11				67	195	364	280	70	23	15
25	11	11				75	170	384	272	65	26	15
26	11	11				81	160	434	272	62	28	15
27	11	10				82	145	488	264	57	26	14
28	11	10				86	140	510	256	53	26	14
29	10	10				101	140	452	249	50	24	16
30	10	10				105	140	356	256	47	23	20
31	10					92		300		45	22	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	14	10	12.0	738
November	12	9	10.5	625
December			14	861
January			20	1,230
February			30	1,670
March	105		49.2	3,030
April	224	86	144	8,570
May	510	116	231	14,200
June	700	249	427	25,400
July	256	45	128	7,870
August	71	22	38.5	2,370
September	20	14	17.3	1,030
The year	700		93.4	67,600

BIG CREEK BELOW HUNTINGTON LAKE, CALIF.

LOCATION.—Water-stage recorder in sec. 23, T. 8 S., R. 25 E., 800 feet above Grouse Creek and 1 mile below Huntington Lake. Altitude, about 6,600 feet.

RECORDS AVAILABLE.—June, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 525 second-feet July 7 (gauge height, 6.59 feet); minimum, 0.2 second-foot many days November to January.

1925-1930: Maximum discharge, 2,040 second-feet June 23, 1925 (gauge height, 10.3 feet).

REMARKS.—Natural flow of Big Creek is completely regulated at Huntington Lake storage reservoir and during most of the year is diverted for use in Big Creek Power House No. 1. On Sept. 30, 1929, the storage in Huntington Lake was 88,000 acre-feet and on Sept. 30, 1930, it was 88,400 acre-feet. Gauge-height record and results of discharge measurement furnished by Southern California Edison Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.6	0.4	0.2	.2	0.3	0.3	1.3	1.2	1.2	2.2	0.4	0.4
2.....	.6	.4	.2	.2	.4	.4	1.4	1.4	1.0	.8	.4	.4
3.....	.6	.4	.2	.2	.3	.4	1.4	1.6	1.0	.6	.4	.4
4.....	.7	.3	.2	.2	.3	.3	1.5	1.2	1.0	.6	.4	.4
5.....	.7	.3	.2	.2	.4	.3	1.5	1.2	1.0	1.1	.4	.4
6.....	.7	.3	.2	.2	.4	.3	1.5	1.2	.9	.8	.4	.4
7.....	.7	.3	.2	.2	.4	.3	1.6	1.2	.8	100	.4	.4
8.....	.7	.3	.2	.2	.4	.4	1.7	1.1	.8	268	.4	.5
9.....	.6	.3	.3	.2	.4	.4	1.6	1.1	.8	.8	.4	.5
10.....	.4	.3	.6	.2	.3	.4	1.4	1.2	.8	.6	.4	.5
11.....	.4	.3	.6	.2	.3	.6	1.2	1.5	.8	.5	.4	.5
12.....	.4	.3	.5	.2	.3	.6	1.2	1.6	.8	.5	.6	.5
13.....	.4	.3	.4	.2	.4	.6	1.4	1.5	.8	.5	1.8	.5
14.....	.4	.3	.4	.2	.4	.7	1.4	1.5	.7	.5	.9	.4
15.....	.3	.3	.4	.3	.4	.6	1.2	1.4	.7	.5	.4	.4
16.....	.3	.3	.6	1.1	.4	.6	1.2	1.5	.6	.5	.4	.4
17.....	.3	.3	.5	.5	.4	.5	1.2	1.4	.6	.4	.4	.4
18.....	.3	.3	.4	.4	.4	.5	1.2	1.4	.7	.4	.4	.4
19.....	.3	.3	.4	.4	.4	.6	1.2	1.4	.7	.4	.4	.4
20.....	.3	.3	.3	.3	.4	.6	1.2	1.4	.7	.4	.4	.5
21.....	.3	.3	.3	.3	.4	.9	1.2	1.4	.7	.4	.4	.5
22.....	.3	.3	.3	.3	.7	1.0	1.2	1.4	.7	.4	.4	.5
23.....	.3	.2	.3	.3	.8	1.2	1.2	1.3	.7	.4	.4	.5
24.....	.3	.2	.3	.3	.5	1.6	1.3	1.2	.6	.4	.4	.5
25.....	.3	.2	.3	.3	.4	1.8	1.2	1.2	.8	.4	.4	.5
26.....	.4	.2	.3	.3	.4	1.9	1.2	1.2	.8	.4	.4	.5
27.....	.4	.2	.3	.3	.4	1.9	1.2	1.1	.7	.4	.4	.5
28.....	.4	.2	.3	.3	.3	2.0	1.1	1.1	1.8	.4	.4	.5
29.....	.4	.2	.3	.3	-----	2.0	1.2	1.2	.8	.4	.4	.8
30.....	.4	.2	.2	.3	-----	1.9	1.3	1.3	.8	.4	.4	.7
31.....	.4	-----	.2	.3	-----	1.4	-----	1.2	-----	.4	.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.7	0.3	0.44	27.1
November.....	.4	.2	.28	16.7
December.....	.6	.2	.33	20.3
January.....	1.1	.2	.29	17.8
February.....	.8	.3	.40	22.2
March.....	2.0	.3	.87	53.5
April.....	1.7	1.1	1.31	78.0
May.....	1.6	1.1	1.31	80.6
June.....	1.8	.6	.83	49.4
July.....	263	.4	12.4	762
August.....	1.8	.4	.47	28.9
September.....	.8	.4	.47	28.0
The year.....	263	.2	1.64	1,180

PITMAN CREEK BELOW TAMARACK CREEK, CALIF.

LOCATION.—Water-stage recorder in 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.

DRAINAGE AREA.—22 square miles.

RECORDS AVAILABLE.—December, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 195 second-feet May 19 (gage height, 4.43 feet); no flow part of Nov. 24.

1927-1930: Maximum discharge, 330 second-feet June 16, 1929 (gage height, 5.83 feet); no flow part of Nov. 24, 1930.

REMARKS.—Records good except those for January to March, 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.3	0.2	0.1			1.1	0.52	54	71	6.5	0.5	0.1
2.....	.3	.2	.1		0.6		.44	63	71	6	.5	.2
3.....	.3	.2	.1	0.1			.36	61	71	5	.6	.2
4.....	.2	.2	.1				.44	56	75	4.8	.4	.1
5.....	.2	.2	.1				.52	49	82	4.4	.4	.1
6.....	.2	.2	.1				.60	48	83	4.0	.4	.1
7.....	.2	.2	.1				.67	46	75	4.0	.3	.1
8.....	.2	.2	.2				.77	42	67	3.7	.3	.1
9.....	.2	.1	.6				.74	40	62	4.0	.4	.1
10.....	.2	.1	.6				.62	40	59	3.3	.4	.1
11.....	.2	.2	.4				.67	53	56	3.0	.4	.1
12.....	.2	.2	.4				.67	69	52	2.7	.3	.1
13.....	.2	.1	.4				.59	88	46	2.1	.3	.2
14.....	.2	.2	.4				.45	95	40	1.9	.3	.2
15.....	.2	.2	.3				.40	80	34	1.9	.3	.2
16.....	.2	.2	.5				.39	71	30	1.9	.3	.2
17.....	.2	.2	.5				.44	84	26	1.5	.3	.2
18.....	.2	.2	.4				.51	112	24	1.3	.2	.2
19.....	.2	.2	.3				.76	140	22	1.5	.2	.1
20.....	.2	.2	.3				102	150	20	1.3	.2	.1
21.....	.2	.2	.2				106	150	19	.9	.2	.1
22.....	.2	.2	.2				115	135	18	.9	.1	.1
23.....	.2	.2	.2				116	134	16	.9	.2	.1
24.....	.2	.1	.2				126	129	15	.9	.2	.1
25.....	.2	.3	.1				107	124	14	.8	.2	.1
26.....	.2	.3	.1				.90	124	12	.9	.2	.1
27.....	.2	.1	.1				.76	121	12	.8	.2	.1
28.....	.2	.1	.1				.71	115	10	.6	.2	.1
29.....	.2	.1	.1				.63	101	9	.6	.1	.4
30.....	.2	.1	.1				.57	80	7.5	.6	.1	.5
31.....	.2		.1					72		.6		
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	0.3		0.2		0.21		12.9					
November.....	.3		.1		.18		10.7					
December.....	.6		.1		.24		14.8					
January.....					.2		12.3					
February.....					.8		44.4					
March.....					8.0		492					
April.....	126		36		69.5		4,140					
May.....	150		40		87.9		5,400					
June.....	83		7.5		40.0		2,380					
July.....	6.5		.6		2.36		145					
August.....	.6		.1		.28		17.2					
September.....	.5		.1		.15		8.9					
The year.....	150		.1		17.5		12,700					

• Estimated.

FRESNO RIVER BASIN

FRESNO RIVER NEAR KNOWLES, CALIF.

LOCATION.—Staff gage in N. $\frac{1}{2}$ sec. 15, T. 8 S., R. 20 E., at Fresno Crossing, 6 miles northeast of Knowles.

DRAINAGE AREA.—132 square miles.

RECORDS AVAILABLE.—September, 1911, to January, 1914; November, 1915, to September, 1930.

EXTREMES.—Maximum discharge during year, 255 second-feet Feb. 23 and 24 (gage height, 1.80 feet); no flow parts of October, November, August, and September.

1911-1914, 1915-1930: Maximum discharge, about 4,500 second-feet Feb. 21, 1917 (gage height, 6.0 feet); no flow during dry seasons in 1919, 1924, 1926, and 1928-1930.

REMARKS.—Records fair. Discharge estimated Mar. 27 to June 12, July 1-5, and 22-31. Water is diverted above station for irrigation and lumbering.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	2.9	19	124	65	51	43	11
2.....	0	2.9	17	124	63	51	43	10
3.....	0	3.3	17	137	61	51	43	8.5
4.....	.1	3.3	15	144	58	51	42	7
5.....	.1	3.3	17	217	56	51	42	6.5
6.....	.1	3.3	17	179	54	51	42	5.5
7.....	.1	3.7	17	144	52	50	41	6
8.....	.2	3.7	19	77	50	50	41	6
9.....	.2	4.5	19	57	48	50	40	5.5
10.....	.7	8.5	21	57	45	50	40	5.5
11.....	.4	12	21	62	45	50	40	4.5
12.....	.4	25	19	62	45	50	39	4.5
13.....	.4	57	19	62	50	50	39	4.1
14.....	.5	77	19	158	60	50	36	3.1
15.....	.7	82	21	144	100	50	31	3.3
16.....	.8	105	21	111	80	49	28	2.5
17.....	1.0	105	19	105	60	49	25	2.0
18.....	1.0	94	19	94	53	48	25	1.8
19.....	1.3	72	17	94	53	48	23	1.6
20.....	2.5	39	21	94	53	48	23	1.2
21.....	8.5	39	25	94	53	47	25	.8
22.....	7	36	38	88	53	47	25	.8
23.....	4.5	36	255	82	53	47	25	.7
24.....	4.1	33	255	82	53	46	23	.6
25.....	3.7	31	179	77	52	46	23	.6
26.....	3.7	28	131	77	52	46	21	.5
27.....	3.3	25	131	75	52	45	19	.4
28.....	3.3	25	124	75	52	45	17	.3
29.....	3.3	23	-----	70	52	44	14	.2
30.....	2.9	21	-----	70	52	44	12	.1
31.....	2.9	21	-----	65	-----	44	-----	.1
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
December.....	8.5		0.0		1.86		114	
January.....	105		2.9		33.1		2,040	
February.....	255		15		54.0		3,000	
March.....	217		57		100		6,150	
April.....	100		45		55.8		3,320	
May.....	51		44		48.4		2,980	
June.....	43		12		31.0		1,840	
July.....	11		.1		3.39		208	
The year.....	255		0		27.1		19,700	

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

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, in Yosemite National Park, Mariposa County.

DRAINAGE AREA.—181 square miles.

RECORDS AVAILABLE.—August, 1915, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,870 second-feet June 7 (gage height, 5.15 feet); minimum, 3.2 second-feet Nov. 13.

1915-1930: Maximum discharge, 3,800 second-feet May 28, 1919 (gage height, 7.10 feet); minimum, 1.5 second-feet Sept. 30, 1926.

REMARKS.—Records good. Discharge slightly affected by ice Jan. 6-15. No diversions. Gage-height record furnished by officials of Yosemite National Park.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.5	4.8	5.5	9	25	66	283	352	530	437	38	12
2	8.5	4.8	5.5	8.5	31	69	286	380	575	405	38	11
3	8.5	5	5.5	8	38	71	304	413	730	367	38	10
4	8.5	4.6	6	8.5	43	71	346	361	917	343	38	10
5	8	4.6	5.5	9	50	76	433	337	1,200	337	38	10
6	7.5	4.6	5.5	8	52	75	562	322	1,500	301	34	9.5
7	7.5	4.5	5.5	8	55	76	620	325	1,620	292	32	9
8	7.5	4.6	6	8	55	78	730	292	1,500	268	36	9
9	7.5	4.6	12	8	57	77	730	271	1,420	230	48	9
10	7	4.8	26	8	55	78	640	274	1,500	212	51	9
11	7	4.3	23	8	54	88	539	292	1,620	191	65	9
12	6.5	4.3	17	8	56	104	521	322	1,620	183	54	8.5
13	6.5	4.6	31	8	61	112	503	417	1,540	180	51	8.5
14	6.5	5	20	9	64	108	421	494	1,500	180	55	8
15	6	5	18	11	69	104	367	481	1,460	172	49	7.5
16	6	5	28	24	72	95	355	441	1,310	160	42	7.5
17	5.5	4.8	22	38	76	88	364	457	1,100	152	37	7
18	5.5	5.5	23	34	81	86	405	620	1,080	148	32	6.5
19	5.5	5	22	28	81	86	521	923	815	134	29	6.5
20	5.5	5.5	20	28	78	95	741	1,200	686	116	26	6
21	5.5	5	18	26	68	116	863	1,280	595	101	23	6
22	5	5	16	27	78	144	911	1,170	635	92	20	6
23	5	5.5	15	27	82	166	953	1,280	521	84	18	6
24	5	5	15	27	70	236	821	1,280	469	78	16	6
25	4.8	5.5	14	27	75	295	635	1,310	441	72	15	6
26	4.8	5.5	12	27	75	334	580	1,420	421	66	15	6
27	4.8	5.5	12	24	74	340	473	1,460	402	60	15	5.5
28	4.8	5.5	11	23	74	370	425	1,500	405	54	14	5.5
29	4.6	5.5	10	22	-----	437	405	1,200	405	49	14	7.5
30	4.5	5.5	10	24	-----	465	384	763	429	43	13	15
31	4.8	-----	9	24	-----	349	-----	585	-----	40	12	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October	9.5		4.5		6.26		385					
November	5.5		4.3		4.98		296					
December	31		5.5		14.5		892					
January	38		-----		18.0		1,110					
February	82		25		62.5		3,470					
March	465		66		160		9,840					
April	953		283		537		32,000					
May	1,500		271		717		44,100					
June	1,620		402		963		57,300					
July	437		40		179		11,000					
August	65		12		32.5		2,000					
September	15		5.5		8.10		482					
The year	1,620		4.3		225		163,000					

MERCED RIVER AT POHONO BRIDGE, NEAR YOSEMITE, CALIF.

LOCATION.—Water-stage recorder at Pohono Bridge in Yosemite National Park 5 miles below Yosemite, Mariposa County.

DRAINAGE AREA.—321 square miles.

RECORDS AVAILABLE.—November, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,780 second-feet May 28 (gauge height, 7.23 feet); minimum, 13 second-feet Nov. 28 to Dec. 1.

1916-1930: Maximum discharge, 6,370 second-feet June 5, 1922 (gauge height, 10.0 feet); minimum, 3.3 second-feet Sept. 29 and Oct. 1, 1924.

REMARKS.—Records good. Discharge estimated May 4-6. No diversions. Gauge-height record furnished by officials of Yosemite National Park.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	22	14	13	21	57	122	677	780	1,020	569	61	26
2.....	21	14	14	21	64	134	658	892	1,040	535	60	24
3.....	21	14	14	20	77	144	716	965	1,180	484	59	24
4.....	20	14	14	19	87	153	758	800	1,390	444	59	23
5.....	19	14	14	29	98	149	915	750	1,760	424	58	22
6.....	19	14	14	24	106	149	1,120	700	2,160	386	57	21
7.....	19	14	14	24	112	151	1,210	696	2,330	353	56	20
8.....	19	14	14	23	119	156	1,300	622	2,160	335	55	20
9.....	19	14	19	23	119	155	1,360	604	1,960	290	60	19
10.....	18	14	38	24	116	151	1,210	622	2,080	267	62	19
11.....	18	14	42	22	116	168	1,070	658	2,160	241	72	19
12.....	18	14	34	22	119	198	1,070	696	2,160	227	69	18
13.....	18	14	49	23	128	222	1,020	915	2,000	218	64	18
14.....	17	14	47	24	139	232	870	1,070	1,840	215	67	17
15.....	17	14	35	28	147	202	758	1,020	1,840	209	66	16
16.....	16	14	50	60	156	190	736	940	1,620	194	60	16
17.....	16	14	46	69	170	180	758	965	1,390	184	55	16
18.....	16	14	43	81	176	172	825	1,210	1,270	176	52	15
19.....	16	14	43	68	178	172	990	1,620	1,070	164	48	15
20.....	16	14	39	68	176	194	1,360	2,080	915	146	44	14
21.....	16	14	36	64	146	241	1,580	2,240	802	132	42	14
22.....	16	14	32	63	182	304	1,660	2,040	862	120	39	14
23.....	15	14	30	63	184	362	1,690	2,120	736	115	36	14
24.....	14	14	29	62	140	518	1,800	2,160	658	105	34	14
25.....	14	14	29	62	149	622	1,390	2,160	622	98	33	14
26.....	14	14	27	64	140	677	1,300	2,240	604	92	32	14
27.....	14	14	25	60	134	696	1,020	2,420	569	86	31	14
28.....	14	13	25	58	129	780	940	2,420	552	80	30	14
29.....	14	13	23	57	-----	892	892	2,160	552	74	29	16
30.....	14	13	22	57	-----	940	848	1,450	552	69	28	21
31.....	14	-----	21	57	-----	780	-----	1,150	-----	65	26	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	22	14	16.9	1,040
November.....	14	13	13.9	827
December.....	50	13	28.9	1,780
January.....	81	19	43.9	2,700
February.....	184	57	131	7,280
March.....	940	122	329	20,200
April.....	1,800	658	1,090	64,900
May.....	2,420	604	1,330	81,800
June.....	2,330	552	1,330	79,100
July.....	569	65	229	14,100
August.....	72	26	49.8	3,060
September.....	26	14	17.7	1,050
The year.....	2,420	13	383	278,000

MERCED RIVER AT HORSESHOE BEND, CALIF.

LOCATION.—Water-stage recorder in sec. 26, T. 3 S., R. 16 E., 1 mile above Horseshoe Bend of Merced River and one-fourth mile below Kittridge.

DRAINAGE AREA.—935 square miles.

RECORDS AVAILABLE.—November, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,480 second-feet May 28 (gage height, 8.35 feet); minimum, 30 second-feet Oct. 25.

1922-1930: Maximum discharge, 20,900 second-feet Mar. 25, 1928 (gage height, 19.20 feet at former location 1 mile downstream); minimum, 13 second-feet Oct. 5, 1925.

REMARKS.—Records good; discharge estimated Sept. 20-30. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	34	39	58	169	509	1,350	1,420	1,700	692	90	40
2	41	34	39	57	167	467	1,170	1,460	1,700	672	86	40
3	39	34	39	55	185	486	1,290	1,770	1,840	632	84	39
4	38	34	39	54	210	1,160	1,350	1,660	2,160	576	82	38
5	37	34	39	78	218	2,620	1,600	1,460	2,610	532	81	39
6	37	34	40	156	234	1,930	2,000	1,290	3,200	509	80	38
7	36	34	38	132	242	1,050	2,080	1,320	3,400	456	79	38
8	36	34	38	102	255	812	2,430	1,200	3,200	434	76	38
9	36	34	41	92	262	692	2,520	1,120	2,900	396	74	38
10	36	34	50	89	255	616	2,250	1,100	2,900	353	78	39
11	35	34	74	89	246	572	1,170	1,700	3,000	323	86	39
12	35	34	108	83	242	576	1,920	1,230	3,000	293	90	40
13	39	35	106	82	258	612	1,920	1,560	2,800	272	94	40
14	40	35	101	85	272	859	2,080	1,920	2,430	260	86	39
15	36	35	108	99	290	1,050	1,630	1,880	2,430	250	86	38
16	34	36	101	724	306	1,140	1,420	1,660	2,160	244	86	38
17	33	36	100	632	320	980	1,420	1,660	1,880	228	81	37
18	34	37	108	752	335	854	1,490	1,920	1,660	214	74	37
19	34	37	104	502	350	752	1,630	2,610	1,490	206	70	37
20	33	37	95	312	434	712	2,250	3,400	1,260	192	66	36
21	34	38	88	270	475	732	2,800	3,820	1,070	176	61	36
22	34	38	81	232	832	792	3,000	3,400	1,140	161	58	36
23	32	39	76	214	1,570	833	2,900	3,500	1,020	155	53	36
24	32	38	72	199	812	938	3,200	3,500	917	145	51	36
25	32	38	68	194	644	1,170	2,520	3,500	833	136	48	36
26	32	38	66	201	772	1,380	2,340	3,600	792	127	48	36
27	32	39	65	234	648	1,490	1,960	3,710	752	120	47	36
28	33	39	63	210	576	1,560	1,700	3,820	712	114	45	36
29	33	39	61	188	-----	1,770	1,600	3,600	692	104	44	38
30	34	39	61	177	-----	1,960	1,560	2,610	692	99	42	42
31	34	-----	59	172	-----	1,630	-----	1,960	-----	92	41	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	42	32	35.3	2,170
November	39	34	36.0	2,140
December	108	38	69.9	4,300
January	752	54	210	12,900
February	1,570	167	414	23,000
March	2,620	467	1,050	64,600
April	3,200	1,170	1,980	118,000
May	3,820	1,100	2,250	138,000
June	3,400	692	1,880	112,000
July	692	92	295	18,100
August	94	41	69.9	4,300
September	42	36	37.9	2,260
The year	3,820	32	693	502,000

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, 1930.

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 at mean sea level. Elevation of spillway crest is 693.0 feet, and of spillway gate, 707.0 feet. There was 1,750 acre-feet of storage Sept. 30, 1929, and no available storage Sept. 30, 1930.

Daily elevation, in feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	463.1	464.1	464.9	480.4	520.0	557.8	619.6	644.7	670.0	674.6	629.2	556.3
2	463.3	464.1	464.9	480.6	520.5	558.9	620.2	644.8	670.1	673.6	627.4	553.1
3	463.6	464.1	464.9	480.9	521.1	559.8	620.3	644.8	670.3	672.6	625.5	549.6
4	463.9	464.2	465.1	481.3	521.7	561.0	620.7	645.2	670.8	671.6	623.7	545.9
5	464.3	464.2	465.3	481.6	522.6	566.0	621.0	645.2	671.6	670.6	621.8	542.2
6	464.7	464.2	465.4	482.2	523.4	572.8	621.6	645.2	672.8	669.4	619.8	538.2
7	465.1	464.3	465.6	483.0	524.2	576.8	622.8	645.1	674.4	668.3	617.8	533.8
8	465.2	464.3	465.9	483.9	525.1	578.6	624.3	645.1	676.0	667.1	615.8	529.0
9	465.3	464.4	466.2	484.3	526.0	580.0	626.0	644.8	677.3	665.9	613.8	523.9
10	465.4	464.4	466.4	484.8	526.9	581.3	627.5	644.5	678.3	664.7	611.7	518.1
11	465.5	464.4	466.8	485.3	527.9	582.3	628.6	644.1	679.3	663.4	609.6	512.0
12	465.6	464.4	467.8	485.7	528.8	583.4	629.1	643.9	680.4	662.0	607.4	504.7
13	465.7	464.4	468.7	486.0	529.6	584.5	629.7	643.8	681.4	660.6	605.3	496.0
14	465.9	464.4	469.9	486.4	530.4	585.8	630.5	644.0	682.2	659.2	603.2	484.8
15	466.0	464.4	470.9	486.9	531.3	587.7	631.4	644.6	682.7	657.8	601.0	468.6
16	466.0	464.4	472.4	489.1	532.4	590.4	631.6	645.1	683.2	656.4	598.7	450.0
17	465.8	464.5	473.6	496.6	533.2	592.6	631.7	645.4	683.4	655.0	596.3	447.0
18	465.8	464.5	474.8	501.3	534.3	594.4	631.8	645.7	683.5	653.5	594.0	444.9
19	465.7	464.5	475.9	505.5	535.3	595.9	632.0	646.4	683.5	651.9	591.6	443.2
20	465.6	464.6	477.0	508.9	536.5	597.3	632.6	647.9	683.1	650.3	589.1	442.5
21	465.5	464.6	477.9	510.5	538.1	598.3	634.0	650.4	682.6	648.7	586.6	-----
22	465.1	464.6	478.3	511.8	539.4	599.7	635.9	652.6	682.0	647.1	584.1	-----
23	464.8	464.7	478.5	512.8	544.1	601.0	637.7	654.7	681.5	645.4	581.5	-----
24	464.6	464.7	478.8	513.8	547.8	602.3	639.4	656.9	680.8	643.7	579.0	-----
25	464.3	464.7	478.9	514.6	550.0	604.1	641.6	658.8	680.0	642.0	576.4	-----
26	464.0	464.8	479.2	515.4	552.4	606.0	642.6	660.7	679.1	640.2	573.6	-----
27	464.0	464.8	479.5	516.3	554.4	608.3	643.7	662.9	678.2	638.4	571.1	-----
28	464.0	464.8	479.8	517.2	556.3	610.5	644.0	665.4	677.3	636.6	568.3	-----
29	464.0	464.8	479.9	518.0	-----	612.9	644.4	667.3	676.4	634.8	565.5	-----
30	464.0	464.8	480.1	518.7	-----	615.7	644.6	669.1	675.5	633.0	562.6	-----
31	464.0	-----	480.3	519.3	-----	618.4	-----	669.7	-----	631.1	559.4	-----

MERCED RIVER AT EXCHEQUER, CALIF.

LOCATION.—Water-stage recorder about on section line between secs. 14 and 23, T. 4 S., R. 15 E., half a mile below Lake McClure at Exchequer and 5 miles northeast of Merced Falls.

DRAINAGE AREA.—1,020 square miles at old site 1 mile upstream.

RECORDS AVAILABLE.—November, 1915, to September, 1930. Prior to Oct. 25, 1922, station at remains of old dam at Exchequer.

EXTREMES.—Maximum discharge during year, 1,980 second-feet June 19 (gage height, 4.30 feet); minimum, 13 second-feet Oct. 17 and 18.

1915-1930: Maximum discharge, about 22,000 second-feet Jan. 17, 1916 (gage height, 20.0 feet); minimum, 13 second-feet Nov. 9-11, 1927, and Oct. 17 and 18, 1930.

REMARKS.—Records fair. No diversions. Flow is completely regulated at Lake McClure. There was 1,750 acre-feet of storage in the lake Sept. 30, 1929, and no available storage on Sept. 30, 1930.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	38	44	55	58	86	685	1,430	1,500	1,700	1,500	1,220
2	36	38	43	55	60	103	1,000	1,460	1,500	1,700	1,460	1,220
3	35	37	43	56	56	103	1,190	1,460	1,500	1,700	1,430	1,260
4	34	37	44	58	54	103	1,190	1,430	1,540	1,660	1,430	1,220
5	34	37	46	58	54	103	1,190	1,400	1,580	1,660	1,430	1,220
6	37	39	47	59	58	103	1,160	1,400	1,580	1,660	1,430	1,260
7	37	37	46	58	58	103	1,160	1,360	1,580	1,660	1,430	1,260
8	37	36	49	58	58	103	1,160	1,400	1,620	1,660	1,430	1,260
9	37	37	49	60	58	106	1,260	1,400	1,620	1,660	1,430	1,260
10	37	38	49	54	55	103	1,360	1,430	1,660	1,660	1,460	1,260
11	37	36	49	63	55	77	1,400	1,400	1,700	1,660	1,430	1,220
12	37	35	28	63	55	41	1,430	1,400	1,740	1,660	1,400	1,220
13	34	35	27	60	55	41	1,460	1,400	1,780	1,620	1,400	1,220
14	33	35	28	59	55	45	1,430	1,400	1,820	1,620	1,430	1,220
15	34	36	30	59	55	41	1,360	1,430	1,820	1,620	1,430	920
16	27	38	19	59	55	40	1,360	1,400	1,820	1,620	1,430	226
17	14	36	43	60	55	40	1,360	1,400	1,820	1,620	1,400	95
18	13	36	43	60	56	40	1,360	1,400	1,820	1,620	1,400	98
19	51	37	40	58	58	40	1,360	1,430	1,820	1,660	1,400	94
20	43	36	39	58	58	41	1,360	1,430	1,820	1,660	1,400	91
21	30	34	39	54	56	40	1,360	1,430	1,780	1,660	1,360	64
22	33	35	40	55	56	40	1,360	1,430	1,780	1,660	1,320	45
23	33	35	52	56	56	40	1,400	1,430	1,780	1,620	1,290	40
24	81	36	58	56	56	40	1,400	1,460	1,780	1,620	1,290	39
25	37	36	56	55	56	40	1,430	1,500	1,780	1,620	1,260	38
26	106	37	56	54	56	40	1,430	1,500	1,780	1,620	1,260	36
27	84	37	55	58	56	40	1,430	1,460	1,740	1,580	1,260	37
28	43	51	55	60	56	40	1,430	1,460	1,700	1,540	1,260	39
29	46	40	56	58	58	40	1,430	1,500	1,700	1,540	1,260	39
30	46	45	56	59	58	40	1,430	1,500	1,700	1,540	1,260	39
31	42	55	58	58	58	645	1,500	1,500	1,500	1,500	1,260	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	106	13	40.8	2,510
November	51	34	37.3	2,220
December	58	19	44.6	2,740
January	63	54	57.8	3,550
February	60	54	56.2	3,120
March	645	40	80.9	4,970
April	1,460	685	1,310	78,000
May	1,500	1,360	1,430	87,900
June	1,820	1,500	1,710	102,000
July	1,700	1,500	1,630	100,000
August	1,500	1,260	1,380	84,800
September	1,260	36	642	38,200
The year	1,820	13	704	510,000

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, 1930.

EXTREMES.—Maximum discharge during year, 605 second-feet Mar. 6 (gage height, 3.64 feet); minimum, 73 second-feet Oct. 26.

1922-1924, 1925-1930: Maximum discharge, 8,100 second-feet June 5, 1922 (gage height, 15.80 feet); minimum, 18 second-feet Aug. 30, 1924.

REMARKS.—Records fair. Practically entire flow is diverted above station during irrigating season; return water enters above station. Storage at Lake McClure. Gage-height record furnished by Merced Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	77	86	90	98	109	• 150	• 110	146	130	167	140	142
2.....	83	86	92	100	109	• 140	• 113	147	133	150	108	131
3.....	83	86	93	100	110	• 120	• 116	167	104	132	93	132
4.....	83	86	91	101	110	• 111	• 120	• 169	96	146	97	124
5.....	83	85	89	103	112	• 140	123	• 171	89	163	84	122
6.....	81	85	88	109	111	• 450	131	• 173	99	174	100	129
7.....	83	85	90	112	112	380	147	• 175	86	174	110	149
8.....	84	86	93	113	111	• 300	147	• 177	108	151	119	148
9.....	84	86	96	112	111	206	• 144	• 180	128	146	119	141
10.....	83	86	96	115	110	• 198	• 141	182	98	144	137	156
11.....	84	87	99	113	110	• 190	• 138	181	91	136	147	151
12.....	83	88	100	112	110	• 182	136	179	90	131	140	164
13.....	80	88	101	113	109	• 174	167	142	86	142	112	173
14.....	80	88	100	116	109	• 166	219	136	94	161	111	187
15.....	80	88	99	116	109	• 158	211	128	101	136	116	168
16.....	80	88	99	116	109	• 150	202	127	137	140	130	156
17.....	80	88	97	118	107	• 142	200	131	127	128	131	128
18.....	80	89	93	118	106	• 134	207	137	126	123	143	138
19.....	80	89	91	116	104	126	173	128	122	132	127	126
20.....	81	87	90	113	106	126	191	121	128	132	123	117
21.....	80	88	89	112	106	121	193	122	126	163	122	112
22.....	78	93	89	110	107	118	173	136	154	135	130	112
23.....	77	97	89	109	111	115	156	131	178	133	151	106
24.....	76	96	89	109	112	112	160	126	166	147	158	102
25.....	74	94	90	109	111	111	149	128	164	147	150	102
26.....	74	93	90	108	112	110	150	143	173	156	136	97
27.....	75	92	91	110	124	109	174	121	181	182	131	91
28.....	77	91	92	109	130	108	150	111	178	161	121	85
29.....	79	91	94	109	-----	107	153	109	196	147	124	88
30.....	84	91	96	111	-----	106	153	121	186	136	118	89
31.....	88	-----	98	110	-----	107	-----	118	-----	143	143	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	88	74	80.5	4,950
November.....	97	85	88.8	5,280
December.....	101	88	93.4	5,740
January.....	118	98	110	6,760
February.....	130	104	111	6,160
March.....	450	106	160	9,840
April.....	219	110	158	9,400
May.....	182	109	144	8,850
June.....	196	86	129	7,680
July.....	182	123	147	9,040
August.....	158	84	125	7,690
September.....	187	85	129	7,680
The year.....	450	74	123	89,100

• Estimated.

TENAYA CREEK NEAR YOSEMITE, CALIF.

LOCATION.—Water-stage recorder at Tenaya Bridge in Yosemite National Park, five-eighths mile above junction with Merced River and 1½ miles east of Yosemite, Mariposa County.

DRAINAGE AREA.—47 square miles.

RECORDS AVAILABLE.—July, 1904, to June, 1909; January, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 633 second-feet May 27 (gage height, 4.73 feet); minimum, 0.6 second-foot Dec. 18–22.

1904–1909, 1912–1930: Maximum discharge, 1,730 second-feet May 28, 1919 (gage height, 7.05 feet); minimum, 0.5 second-foot Sept. 12 and greater part of October, 1906.

REMARKS.—Records good. No diversions. Gage-height record furnished by officials of Yosemite National Park.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.3	1.2	0.8	1.1	10	29	236	170	216	42	3.0	2.2
2.....	1.3	1.2	.8	1.1	12	30	211	206	225	38	3.0	2.2
3.....	1.3	1.3	.8	1.1	16	30	211	218	247	35	2.7	2.1
4.....	1.3	1.3	.7	1.2	18	34	214	185	279	31	2.7	2.1
5.....	1.3	1.2	.7	1.4	20	34	253	159	338	26	2.5	2.1
6.....	1.3	1.3	.8	1.5	22	35	281	154	387	24	2.5	2.1
7.....	1.3	1.2	.7	1.6	23	33	307	152	392	22	2.5	2.1
8.....	1.3	1.2	.7	1.6	26	32	343	137	364	19	2.5	2.1
9.....	1.4	1.2	.8	1.8	27	32	325	130	341	19	2.5	2.1
10.....	1.3	1.2	.7	1.9	26	31	274	138	335	19	2.5	2.2
11.....	1.3	1.1	.8	2.0	26	36	255	146	325	17	2.2	2.2
12.....	1.3	1.2	.8	2.0	28	45	253	170	307	15	2.2	2.2
13.....	1.3	1.2	.8	2.1	32	50	231	236	279	14	2.2	2.2
14.....	1.3	1.2	.7	2.2	36	49	209	264	255	12	2.2	2.1
15.....	1.3	1.2	.7	2.5	40	42	176	240	233	12	2.2	2.1
16.....	1.3	1.2	.7	4.1	43	39	166	220	206	10	2.2	2.1
17.....	1.3	1.1	.7	5.5	48	35	176	242	177	10	2.5	2.2
18.....	1.3	1.1	.6	8.5	51	32	190	302	159	8	2.2	2.2
19.....	1.3	1.1	.6	8.5	49	33	238	378	137	6	2.2	2.2
20.....	1.2	1.0	.6	8.5	44	40	294	484	120	6	2.5	2.1
21.....	1.2	1.0	.6	8.5	35	57	364	500	116	6	2.5	2.1
22.....	1.2	1.0	.6	8	42	74	369	484	113	5.5	2.5	2.2
23.....	1.2	1.0	.8	7.5	41	88	407	484	96	5	2.5	2.2
24.....	1.2	1.0	.9	8	35	130	407	484	84	5	2.5	2.2
25.....	1.2	.9	.9	8	34	158	317	484	74	4.8	2.5	2.2
26.....	1.2	.9	.9	8.5	31	172	299	484	66	4.5	2.5	2.2
27.....	1.2	.9	1.0	8.5	30	176	227	500	59	4.3	2.5	2.2
28.....	1.2	.9	1.0	8.5	29	207	194	484	55	4.0	2.5	2.2
29.....	1.2	.8	1.0	9	-----	255	187	437	49	3.8	2.2	2.7
30.....	1.2	.8	1.0	9	-----	281	183	320	45	3.5	2.5	3.0
31.....	1.2	-----	1.1	9.5	-----	289	-----	255	-----	3.2	2.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1.4	1.2	1.26	77.5
November.....	1.3	.8	1.1	65.5
December.....	1.1	.6	.78	48.0
January.....	9.5	1.1	4.94	304
February.....	51	10	31.2	1,730
March.....	289	29	84.1	5,170
April.....	407	166	260	15,500
May.....	500	130	298	18,300
June.....	392	45	203	12,100
July.....	42	3.2	14.0	861
August.....	3.0	2.2	2.45	151
September.....	3.0	2.1	2.20	131
The year.....	500	.6	75.2	54,400

TUOLUMNE RIVER BASIN

HETCH HETCHY RESERVOIR AT HETCH HETCHY, CALIF.

LOCATION.—Water-stage recorder at O'Shaughnessy Dam in sec. 16, T. 1 N., R. 20 E., at Hetch Hetchy.

RECORDS AVAILABLE.—May, 1923, to September, 1930.

EXTREMES.—Maximum elevation during year, 3,720.9 feet June 14; no storage Jan. 5-18 and Jan. 21 to Feb. 13.

1923-1930: Maximum elevation, 3,721.3 feet June 8-11, 1923; no storage Jan. 5 to Mar. 9, 1929, and Jan. 5-18 and Jan. 21 to Feb. 13, 1930.

Daily gage height, in feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	159.3	119.5	72.2	28.5	-----	25.7	47.1	111.2	191.0	220.1	209.5	187.5
2.	158.3	118.0	70.5	26.2	-----	25.8	47.8	112.0	192.3	220.0	208.8	186.7
3.	157.4	116.5	68.7	24.2	-----	26.3	48.8	113.1	194.2	219.9	208.2	186.0
4.	156.5	115.0	67.0	21.4	-----	26.6	50.0	114.5	197.0	220.1	207.5	185.1
5.	155.2	113.6	65.1	-----	-----	27.1	51.2	115.4	200.0	220.3	206.9	184.3
6.	154.0	112.3	63.2	-----	-----	27.6	53.2	116.3	205.0	220.2	206.2	183.5
7.	152.8	110.8	61.5	-----	-----	27.9	55.6	116.8	217.8	220.2	205.5	182.7
8.	151.6	109.0	60.0	-----	-----	28.4	58.7	117.5	217.2	220.0	204.9	181.9
9.	150.4	107.5	58.4	-----	-----	28.8	62.0	117.8	220.4	219.8	204.2	181.0
10.	149.1	106.0	57.0	-----	-----	29.0	64.9	118.1	220.8	219.6	203.5	180.2
11.	148.0	104.4	57.5	-----	-----	29.1	66.9	118.5	220.7	219.4	202.9	179.5
12.	146.6	102.9	57.0	-----	-----	29.6	68.8	119.2	220.6	219.1	202.3	178.5
13.	145.4	101.4	56.0	-----	-----	30.3	70.4	120.5	220.5	218.9	201.6	177.8
14.	144.2	99.8	55.0	-----	20.2	30.5	72.5	122.6	220.9	218.7	201.0	176.9
15.	142.9	98.3	53.7	-----	20.6	31.1	74.4	124.4	220.7	218.3	200.3	176.0
16.	141.6	96.7	52.8	-----	21.2	31.6	76.0	126.1	220.7	218.0	199.6	175.2
17.	140.3	95.1	51.8	-----	21.6	31.6	77.4	128.1	220.4	217.6	199.0	174.3
18.	139.0	93.6	51.0	-----	22.0	31.5	78.9	130.3	220.8	217.3	198.3	173.4
19.	137.6	92.0	50.0	21.3	22.4	31.4	80.3	133.2	220.3	216.9	197.6	172.5
20.	136.4	90.4	49.0	21.3	22.5	31.3	82.6	138.2	220.3	216.5	196.8	171.8
21.	135.0	88.9	47.6	-----	23.0	31.3	86.4	144.2	220.3	216.0	196.0	170.8
22.	133.7	87.3	46.0	-----	23.5	32.1	90.2	149.1	220.3	215.4	195.4	169.9
23.	132.4	85.7	44.5	-----	24.1	32.8	94.2	153.6	220.3	214.9	194.5	169.0
24.	130.9	83.9	42.9	-----	24.6	34.0	99.2	158.5	220.3	214.4	193.8	168.2
25.	129.5	82.4	41.2	-----	25.6	35.6	102.5	163.5	220.3	213.8	193.0	167.3
26.	128.2	80.8	39.6	-----	25.7	37.6	104.8	168.3	227.3	213.2	192.2	166.5
27.	126.8	79.1	38.0	-----	25.7	39.3	107.0	173.7	220.3	212.6	191.5	165.5
28.	125.3	77.4	36.2	-----	25.7	40.6	108.4	179.6	220.3	212.0	190.7	164.5
29.	123.9	75.6	34.5	-----	-----	42.4	109.4	184.8	220.2	211.4	189.8	163.5
30.	122.4	73.9	32.5	-----	-----	44.5	110.4	187.8	227.1	210.8	189.0	162.0
31.	121.0	-----	30.5	-----	-----	46.2	-----	189.6	-----	210.1	188.3	-----

NOTE.—Add 3,500 feet to obtain elevations above sea level.

TUOLUMNE RIVER NEAR HETCH HETCHY, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 17, T. 1 N., R. 20 E., in Yosemite National Park, three-fourths mile below O'Shaughnessy Dam at Hetch Hetchy.

DRAINAGE AREA.—462 square miles.

RECORDS AVAILABLE.—December, 1914, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,690 second-feet June 10 (gage height, 11.25 feet); minimum, 4.5 second-feet Jan. 19.

1914-1930: Maximum discharge, 12,000 second-feet June 16, 1927 (gage height, 13.58 feet); minimum, 1.3 second-feet Nov. 2-3, 1923.

REMARKS.—Records good. No diversions. Flow regulated in Hetch Hetchy Reservoir. There was 120,000 acre-feet in reservoir Sept. 30, 1929, and 124,000 acre-feet Sept. 30, 1930.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	655	760	745	530	148	328	615	760	790	1,360	602	602
2	655	760	745	500	188	320	615	760	790	1,300	615	602
3	640	775	760	470	250	328	628	790	790	990	615	615
4	715	760	775	391	257	373	640	760	808	860	615	615
5	775	745	775	257	257	480	685	730	808	930	615	602
6	760	745	760	112	272	400	685	730	790	912	602	602
7	760	760	730	88	288	391	670	730	790	860	602	602
8	760	760	700	78	296	382	700	730	808	825	602	615
9	775	760	670	74	296	382	715	730	2,400	775	615	615
10	760	760	264	74	304	373	730	730	5,290	745	615	602
11	760	760	119	70	296	373	730	730	5,290	715	615	602
12	760	760	460	68	288	382	730	730	5,290	685	615	615
13	760	760	615	69	288	373	685	730	4,350	640	602	602
14	760	760	602	71	296	420	615	745	4,530	640	602	613
15	775	760	540	82	272	382	615	745	4,530	640	602	602
16	760	760	520	296	288	382	640	745	4,350	628	602	615
17	760	730	500	355	296	382	640	730	3,430	615	615	615
18	660	715	500	167	304	420	670	730	3,170	615	615	615
19	760	730	530	150	312	410	700	745	2,930	615	615	602
20	760	730	602	430	337	410	685	745	2,530	615	602	615
21	760	730	628	373	337	410	655	745	2,220	615	602	615
22	760	745	628	288	382	450	700	730	2,130	615	602	615
23	760	745	615	194	440	470	745	730	1,930	615	615	602
24	760	730	602	182	382	480	775	745	1,540	602	615	615
25	760	700	578	182	364	490	790	745	1,390	615	615	615
26	760	730	565	178	364	510	790	760	1,450	615	602	602
27	760	745	565	170	364	530	760	775	1,420	615	602	615
28	760	775	602	158	346	540	760	775	1,360	615	602	615
29	760	775	602	151	-----	578	760	775	1,330	615	615	602
30	760	745	578	150	-----	602	760	790	1,300	602	602	615
31	775	-----	552	150	-----	602	-----	790	-----	602	602	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	775	640	750	46,100
November	775	700	749	44,600
December	775	119	594	36,500
January	530	68	210	12,900
February	440	148	304	16,900
March	602	320	431	26,500
April	790	615	696	41,400
May	790	730	748	46,000
June	5,290	790	2,350	140,000
July	1,360	602	732	45,000
August	615	602	608	37,400
September	615	602	609	36,200
The year	5,290	68	731	530,000

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.

DRAINAGE AREA.—934 square miles.

RECORDS AVAILABLE.—September, 1907, to September, 1930.

EXTREMES.—Maximum discharge during year, 7,010 second-feet June 12 (gage height, 8.40 feet); minimum, 7 second-feet Dec. 3.

1907-1930: Maximum discharge, 27,200 second-feet Jan. 14, 1909 (gage height, 14.0 feet); minimum, that of Dec. 3, 1929.

REMARKS.—Records excellent. City of San Francisco diverts water from Tuolumne River and Cherry Creek 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	45	17	34	69	125	1,160	990	1,120	1,060	33	24
2	32	35	9.5	31	104	134	1,090	1,260	1,230	1,020	33	24
3	35	33	8.5	31	136	158	1,260	1,540	1,430	790	33	29
4	33	33	9	36	99	474	1,260	1,380	1,430	430	31	37
5	39	36	9	95	105	740	1,420	1,120	1,760	474	37	34
6	33	32	17	52	117	446	1,710	990	2,200	462	34	29
7	29	29	10	45	125	354	1,950	990	2,590	384	34	27
8	28	32	9.5	39	139	815	2,100	870	2,300	324	28	28
9	32	31	11	41	134	276	2,150	790	2,800	255	28	37
10	38	31	698	41	107	225	1,800	790	6,570	185	29	34
11	28	34	300	34	85	246	1,540	815	6,570	139	32	35
12	28	39	95	39	88	285	1,540	990	6,790	96	46	49
13	33	35	582	40	118	390	1,800	1,380	6,350	55	32	42
14	28	32	252	40	141	412	1,900	1,710	5,350	44	31	28
15	32	32	64	47	160	396	1,460	1,540	5,750	63	29	69
16	40	33	215	374	164	270	1,260	1,380	5,750	56	28	40
17	34	32	122	273	166	252	1,260	1,420	4,860	56	26	34
18	31	32	172	360	166	230	1,260	1,850	3,750	44	26	39
19	29	31	110	145	179	230	1,340	2,310	3,600	41	36	35
20	32	32	51	98	297	270	1,760	2,940	3,000	39	34	32
21	28	34	47	86	252	348	2,200	2,840	2,450	41	31	28
22	28	17	38	82	804	420	2,310	2,310	2,450	47	29	38
23	34	11	69	72	676	442	2,650	2,360	2,000	42	33	38
24	36	29	47	65	336	640	2,960	2,360	1,700	37	30	34
25	32	18	41	72	264	930	2,150	2,420	1,300	34	34	37
26	28	12	63	78	218	1,340	2,050	2,310	1,300	34	38	35
27	31	9.5	48	107	172	1,420	1,620	2,100	1,230	34	32	30
28	28	9	41	72	148	1,300	1,260	2,420	1,100	32	28	28
29	31	12	54	64	-----	1,500	1,160	2,480	1,000	34	34	58
30	29	26	58	69	-----	1,710	1,060	1,800	1,020	37	34	129
31	36	-----	44	70	-----	1,460	-----	1,420	-----	35	28	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet		
October	40			28			31.9			1,960		
November	45			9			28.2			1,680		
December	698			8.5			107			6,580		
January	374			31			86.2			5,300		
February	804			69			199			11,100		
March	1,710			125			568			34,900		
April	2,960			1,060			1,680			100,000		
May	2,840			790			1,670			103,000		
June	6,790			1,020			3,040			181,000		
July	1,060			32			207			12,700		
August	38			26			31.6			1,940		
September	129			24			38.4			2,280		
The year	6,790			8.5			638			462,000		

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.

DRAINAGE AREA.—1,350 square miles.

RECORDS AVAILABLE.—July, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 8,460 second-feet June 10 (gage height, 6.40 feet); minimum, 88 second-feet Dec. 8.

1923-1930: Maximum discharge, 35,300 second-feet Mar. 25, 1928 (gage height, 12.38 feet); minimum, 37 second-feet Oct. 18, 1926.

REMARKS.—Records good. Discharge estimated Jan. 2-7, 16, and 17. In addition to storage and regulation as given under Tuolumne River near Buck Meadows, diversions began Mar. 6, 1930, above the station through San Francisco aqueduct. This water was returned to Tuolumne River about 5 miles downstream.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	759	828	780	416	434	790	2,610	2,220	2,160	1,650	670	683
2-----	787	800	764	720	213	438	2,550	2,380	2,180	1,650	700	612
3-----	792	776	764	550	646	768	2,640	2,740	2,460	1,650	718	615
4-----	779	742	734	550	788	1,620	2,700	2,620	2,460	1,200	675	626
5-----	805	804	761	600	649	2,990	2,860	2,440	2,740	1,040	672	630
6-----	787	809	792	500	873	2,240	2,990	2,230	3,150	1,040	668	672
7-----	780	770	758	200	976	1,800	3,430	2,190	3,600	1,120	668	684
8-----	730	772	422	282	922	1,540	3,820	2,060	3,310	1,030	658	626
9-----	807	802	498	214	404	855	3,820	1,980	3,260	935	690	658
10-----	816	662	638	338	694	1,060	3,300	1,910	7,680	872	718	637
11-----	782	821	1,300	239	673	1,060	2,890	1,760	7,720	830	675	630
12-----	796	812	1,090	181	688	1,140	2,820	2,260	7,830	795	670	649
13-----	754	827	1,260	320	866	1,200	2,510	2,600	7,440	790	675	668
14-----	794	826	1,150	158	812	1,520	3,700	2,920	6,280	702	668	452
15-----	784	800	330	242	892	1,640	2,950	2,800	6,720	702	665	758
16-----	771	807	845	900	544	1,130	2,770	2,580	6,400	695	675	770
17-----	804	464	938	900	876	1,250	2,720	2,640	5,760	690	702	648
18-----	784	813	1,080	1,270	908	1,210	2,670	2,990	4,460	690	658	610
19-----	798	821	1,180	840	856	1,250	2,700	3,600	4,420	722	665	627
20-----	784	813	1,120	1,030	1,100	1,340	2,740	4,200	3,900	692	678	630
21-----	782	794	949	854	1,300	1,420	3,680	4,400	3,170	670	678	644
22-----	770	808	624	827	1,440	1,520	4,120	3,800	3,180	670	668	602
23-----	788	802	909	747	2,500	1,250	4,140	3,680	2,680	665	685	606
24-----	787	513	930	726	1,600	1,910	4,830	3,680	2,510	652	702	625
25-----	784	810	434	540	1,650	2,360	3,760	3,680	1,960	660	650	607
26-----	796	860	784	262	1,600	2,900	3,480	3,640	1,950	685	658	603
27-----	784	846	992	644	1,200	3,060	3,150	3,280	1,890	692	655	630
28-----	726	712	979	522	1,040	2,980	2,650	3,660	1,860	658	660	640
29-----	801	788	654	495	-----	2,920	2,410	3,700	1,790	668	640	591
30-----	785	806	859	742	-----	2,710	2,260	3,020	1,670	640	655	640
31-----	716	-----	916	464	-----	2,800	-----	2,560	-----	685	702	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	816	716	781	48,000
November-----	860	464	777	46,200
December-----	1,300	330	846	52,000
January-----	1,270	158	557	34,200
February-----	2,500	213	969	53,800
March-----	3,060	438	1,700	105,000
April-----	4,830	2,260	3,120	186,000
May-----	4,400	1,760	2,910	179,000
June-----	7,830	1,670	3,890	281,000
July-----	1,650	640	865	53,200
August-----	718	640	675	41,500
September-----	770	452	636	37,800
The year-----	7,830	158	1,470	1,070,000

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, 1930.

EXTREMES.—Maximum elevation during year, 605.9 feet June 15, 20, 22; minimum, 497.0 feet Jan. 15.

REMARKS.—Record of daily elevations furnished by Turlock Irrigation District.

Daily elevation, in feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	520.0	510.0	499.0	500.3	508.4	524.9	554.3	584.2	600.2	604.9	587.0	556.8
2	519.8	509.6	499.0	500.2	508.2	524.9	555.3	584.5	599.8	604.9	586.4	555.8
3	519.3	509.3	499.0	500.2	508.0	524.6	556.2	585.1	599.5	604.8	585.5	554.8
4	519.0	509.0	499.0	500.1	507.9	524.9	557.1	585.9	599.1	604.7	584.7	553.8
5	518.8	508.5	499.0	500.5	508.0	527.6	558.1	586.2	599.0	604.3	583.9	552.8
6	518.5	508.1	498.9	500.5	508.0	532.9	559.1	586.7	599.0	603.9	583.0	551.8
7	518.2	507.8	498.9	500.9	508.5	535.0	560.1	587.0	599.4	603.5	582.3	550.8
8	518.0	507.3	498.9	500.3	509.2	536.4	561.9	587.2	599.8	603.1	581.4	549.8
9	517.5	507.0	498.2	499.9	509.8	537.4	563.2	587.3	599.8	602.7	580.4	548.8
10	517.2	506.7	497.8	499.2	509.5	537.7	564.5	587.2	600.5	602.2	579.6	547.8
11	516.7	506.2	498.0	498.8	509.5	538.3	565.5	587.0	603.2	601.7	578.7	546.7
12	516.2	505.9	499.0	498.0	509.7	539.0	566.2	587.0	605.0	601.1	577.8	545.6
13	515.8	505.5	499.2	497.6	509.8	539.4	566.7	587.3	605.7	600.5	576.9	544.6
14	515.5	505.1	500.7	497.5	510.0	540.3	567.6	587.8	605.5	599.9	576.0	543.6
15	515.3	504.6	501.0	497.0	510.4	541.5	568.9	588.3	605.9	599.2	575.0	542.4
16	515.0	504.2	500.5	497.4	510.8	543.1	569.4	589.0	605.8	598.6	574.1	541.2
17	514.8	503.8	501.0	499.8	510.8	543.9	570.1	589.5	605.8	598.0	573.1	540.2
18	514.5	503.0	501.2	501.4	511.2	544.6	570.6	590.2	605.6	597.3	572.1	539.0
19	514.3	502.4	501.9	503.8	511.6	545.3	571.2	591.0	605.8	596.7	571.1	537.8
20	514.1	502.0	502.7	504.1	511.9	545.4	572.1	592.2	605.9	596.0	570.1	536.6
21	513.8	501.8	503.0	505.2	512.9	545.7	573.0	593.8	605.8	595.3	569.1	535.3
22	513.6	501.4	503.0	506.0	513.5	545.7	574.4	595.0	605.9	594.5	568.1	534.2
23	513.4	501.0	502.8	507.0	516.4	545.6	575.2	596.0	605.8	593.8	567.0	533.0
24	513.2	500.7	502.8	507.5	518.4	545.6	578.0	596.9	605.8	593.1	566.0	531.6
25	512.9	500.0	502.5	508.0	519.7	546.0	579.9	597.8	605.7	592.5	564.9	530.4
26	512.3	499.5	501.7	508.2	522.1	547.0	581.2	598.5	605.5	591.9	563.9	529.2
27	512.0	499.5	501.7	508.2	523.5	548.4	582.2	599.1	605.4	590.9	562.8	528.0
28	511.8	499.5	501.0	508.4	524.3	549.9	583.0	599.7	605.3	590.3	561.6	526.8
29	511.5	499.3	501.0	508.4	-----	551.1	583.4	600.1	605.1	589.4	560.4	525.5
30	510.9	499.1	500.5	508.2	-----	552.2	583.9	600.5	604.9	588.5	559.2	524.0
31	510.4	-----	500.3	508.5	-----	553.3	-----	600.5	-----	587.8	558.0	-----

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.

DRAINAGE AREA.—1,509 square miles.

RECORDS AVAILABLE.—March, 1915, to September, 1930. From 1895 to 1917 at La Grange Dam.

EXTREMES.—Maximum discharge during year, 7,410 second-feet June 13 (gauge height, 12.75 feet); minimum, 4 second-feet Jan. 23.

1915-1930: Maximum discharge, 38,100 second-feet Mar. 25, 1928 (gauge height, 29.6 feet); minimum, 1.4 second-feet Nov. 26 to Dec. 1, 1922.

REMARKS.—Records good. A small amount of water is diverted for irrigation. Flow completely regulated by gates in Don Pedro Dam. There was 79,900 acre-feet of stored water in Don Pedro Reservoir Sept. 30, 1929, and 84,200 acre-feet Sept. 30, 1930. Water is also stored in Hetch Hetchy Reservoir and Lake Eleanor.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,090	1,040	690	450	590	822	1,670	1,780	2,970	1,840	1,980	1,920
2	1,090	1,050	816	565	588	734	1,490	1,780	2,880	1,800	1,990	1,900
3	1,040	956	837	524	662	776	1,560	1,780	2,880	1,870	1,940	1,940
4	1,010	1,020	796	488	672	820	1,540	1,780	2,970	1,840	2,000	1,900
5	1,010	1,020	804	395	646	840	1,780	1,780	2,970	1,870	2,000	1,930
6	939	1,040	788	544	591	784	1,780	1,780	2,880	1,820	1,990	1,910
7	960	1,030	792	524	586	711	1,780	1,780	3,060	1,890	2,110	1,840
8	986	1,040	670	536	613	743	1,920	1,920	3,060	1,890	2,080	1,920
9	1,010	1,010	780	571	530	696	1,920	2,060	3,150	1,890	2,080	1,830
10	1,090	888	789	541	676	734	2,060	2,060	3,240	1,890	2,010	1,840
11	1,110	938	764	540	668	747	1,980	2,060	3,900	1,880	2,070	1,900
12	1,080	1,060	734	536	652	756	1,980	2,060	5,560	1,910	2,120	1,880
13	917	1,070	692	530	654	772	2,060	2,060	7,110	1,860	2,120	1,880
14	954	1,050	697	483	636	846	2,060	1,980	5,980	1,890	2,140	1,840
15	974	1,020	676	466	640	796	2,060	1,780	6,680	1,920	2,140	1,860
16	990	1,060	734	446	550	696	2,060	1,780	6,540	1,900	2,110	1,920
17	961	974	748	443	625	754	2,060	1,780	6,260	1,910	2,080	1,920
18	949	1,020	766	439	670	762	1,920	1,780	4,440	1,910	2,180	1,950
19	964	1,000	752	359	720	1,040	1,850	1,920	4,330	1,860	2,170	1,910
20	864	996	820	423	709	1,080	1,780	2,060	4,110	1,900	2,170	1,860
21	964	994	866	370	750	1,470	1,850	2,060	3,420	1,920	2,140	1,820
22	956	996	794	357	739	1,600	1,780	2,060	3,420	1,930	2,160	1,890
23	978	984	1,020	412	672	1,570	1,780	2,200	3,060	1,940	2,170	1,920
24	994	858	1,010	418	781	1,600	1,780	2,280	2,790	1,970	2,090	1,860
25	1,020	895	852	400	708	1,570	1,780	2,280	2,520	1,950	2,110	1,860
26	1,020	906	934	345	720	1,600	1,780	2,360	2,360	1,980	2,180	1,840
27	914	900	966	515	690	1,570	1,780	2,520	2,280	1,920	2,220	1,800
28	998	794	1,000	589	670	1,600	1,780	2,790	2,280	1,950	2,220	1,820
29	1,040	862	890	607	-----	1,570	1,780	2,970	2,280	1,980	2,200	1,900
30	1,100	866	1,040	634	-----	1,600	1,780	2,970	2,120	1,970	2,240	1,900
31	1,070	-----	1,020	596	-----	1,600	-----	2,970	-----	1,970	2,200	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,110	864	1,000	61,500
November	1,070	794	978	58,200
December	1,040	670	824	50,700
January	694	345	485	28,800
February	781	530	657	36,500
March	1,600	696	1,070	65,800
April	2,060	1,490	1,840	108,000
May	2,970	1,780	2,100	123,000
June	7,110	2,120	3,720	221,000
July	1,980	1,800	1,900	117,000
August	2,240	1,940	2,110	130,000
September	1,950	1,800	1,880	112,000
The year	7,110	345	1,550	1,120,000

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, one-fourth mile above Wapama Falls and 2 miles northeast of Hetch Hetchy.

DRAINAGE AREA.—45.2 square miles.

RECORDS AVAILABLE.—November, 1915, to September, 1930.

EXTREMES.—Maximum discharge during year, 867 second-feet June 7 (gage height, 4.89 feet); no flow Oct. 1 to Dec. 9.

1915-1930: Maximum discharge, 1,740 second-feet Mar. 25, 1928 (gage height, 6.45 feet); no flow at times during summers of 1921, 1924, 1926, and 1928 to 1930.

REMARKS.—Records excellent except those for Jan. 1 to Feb. 11, Mar. 27 to Apr. 7, and Sept. 29 and 30, which were estimated. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	30	56	200	146	233	159	6	0.5
2	0	40	54	210	185	264	155	5.5	.5
3	0	60	58	225	233	349	181	5.5	.4
4	0	70	58	285	195	446	115	5.5	.4
5	0	70	54	250	155	549	115	5.5	.4
6	0	70	58	280	146	710	99	4.9	.4
7	0	70	64	325	148	754	88	4.5	.4
8	0	75	67	362	129	732	77	4.0	.2
9	0	70	64	394	125	626	64	3.9	.2
10	19	65	64	327	127	647	54	3.8	.2
11	27	60	74	272	136	689	48	3.9	.1
12	29	61	86	278	183	699	46	4.1	.2
13	77	64	91	292	278	647	43	4.5	.2
14	41	68	84	258	333	606	41	4.0	.1
15	29	74	70	233	297	606	37	3.6	.1
16	50	76	62	219	258	626	35	3.2	.1
17	32	74	55	206	252	612	32	2.8	.1
18	35	76	52	200	315	457	30	2.4	.1
19	32	76	58	203	433	423	27	2.2	.1
20	25	86	76	294	668	349	23	1.9	.1
21	21	80	99	404	710	315	19	1.7	.1
22	17	115	112	440	549	309	17	1.5	.1
23	15	74	138	494	530	266	15	1.3	.1
24	13	74	195	580	568	236	15	1.1	.1
25	12	72	216	333	587	208	13	1.1	.2
26	11	63	224	327	606	200	12	1.0	.2
27	9	61	205	247	668	190	11	.8	.2
28	8.5	56	210	190	710	176	9	.7	.2
29	7.5	-----	240	176	668	162	8	.6	3.0
30	7	-----	250	167	378	157	7	.6	4.5
31	6.5	-----	215	-----	264	-----	6	.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	77	0	16.9	1,040
January	-----	-----	30.0	1,840
February	115	30	68.9	3,530
March	250	62	110	6,760
April	530	157	285	17,000
May	710	125	354	21,800
June	754	157	438	26,100
July	169	6	50.0	3,070
August	6	.5	2.99	184
September	4.5	.1	.45	26.8
The year	754	0	113	81,700

NOTE.—No flow during October and November.

CHERRY CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 28, T. 2 N., R. 19 E., 3 miles by trail from Lake Eleanor and $7\frac{1}{2}$ miles northwest of Hetch Hetchy.

DRAINAGE AREA.—111 square miles at present site.

RECORDS AVAILABLE.—April, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, about 2,150 second-feet May 19 (gage height, 6.50 feet); minimum, 0.4 second-foot Oct. 30.

1910-1930: Maximum discharge, about 7,750 second-feet June 16, 1929 (gage height, 13.57 feet); no flow Sept. 6-12, 1910.

REMARKS.—Records good except those for Jan. 6-15, Mar. 8-21 and May 5-9, which were estimated. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	0.5	0.5	24	110	156	463	425	485	282	14	1.4
2	.8	.6	.5	24	176	161	520	612	652	265	14	1.3
3	.8	.6	.5	23	197	182	612	672	845	236	12	1.3
4	.9	.6	.5	24	194	223	612	552	1,000	204	11	1.2
5	.9	.6	.5	28	210	170	734	510	1,180	188	10	1.2
6	.9	.6	.5	28	210	179	868	470	1,440	173	9	1.1
7	.9	.6	.5	28	213	164	958	430	1,500	153	8	1.0
8	.9	.6	.6	27	223	170	1,050	400	1,360	139	7.5	1.0
9	.9	.6	269	27	197	164	1,000	350	1,220	119	7	1.0
10	.9	.6	652	27	173	164	800	309	1,300	102	6.5	1.0
11	.9	.6	200	27	170	180	692	337	1,360	89	6	.9
12	.9	.6	340	27	197	200	734	512	1,300	82	6	.9
13	.9	.5	672	27	223	210	868	755	1,200	75	6.5	.8
14	.9	.5	194	28	236	200	692	822	1,150	71	9.5	.8
15	.8	.6	188	35	245	175	572	652	1,120	65	6.5	.8
16	.7	.6	248	528	245	170	520	632	1,120	61	3.9	.7
17	.7	.6	182	220	242	170	532	734	980	55	3.5	.7
18	.7	.6	282	232	252	165	544	1,000	845	50	3.1	.7
19	.7	.6	150	147	245	190	632	1,330	800	47	2.9	.6
20	.7	.6	92	117	299	250	868	1,560	692	43	2.7	.6
21	.6	.6	68	102	242	300	1,050	1,440	652	39	2.6	.6
22	.6	.6	51	98	362	362	1,120	1,220	612	35	2.3	.7
23	.6	.6	44	94	255	406	1,440	1,220	497	31	2.2	.7
24	.6	.6	37	104	210	572	1,250	1,256	440	29	2.0	.7
25	.6	.6	37	100	182	652	822	1,250	384	27	1.9	.7
26	.6	.6	33	102	161	692	845	1,330	366	25	1.9	.7
27	.6	.6	30	96	164	612	572	1,380	344	24	1.8	.6
28	.6	.5	28	92	156	632	455	1,470	323	22	1.8	.6
29	.5	.5	25	90	-----	734	436	1,380	289	19	1.7	70
30	.4	.5	26	94	-----	755	373	822	285	16	1.6	110
31	.5	-----	26	94	-----	552	-----	552	-----	15	1.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.9	0.4	0.74	45.5
November	.6	.5	.58	34.5
December	672	.5	125	7,690
January	528	23	87.5	5,380
February	362	110	214	11,900
March	755	156	320	19,700
April	1,440	373	754	44,900
May	1,560	309	851	52,300
June	1,500	285	858	51,100
July	282	15	89.7	5,520
August	14	1.5	5.51	339
September	110	.6	6.81	405
The year	1,560	.4	275	199,000

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, 1930.

EXTREMES.—Maximum stage during year, 61.2 feet several days in June and July; no storage Nov. 24 to Dec. 9.

1919-1930: Maximum stage, 62.0 feet Mar. 25, 1928 (water 1 foot deep over crest of dam); no storage Nov. 28 to Dec. 26, 1922, and Nov. 24 to Dec. 9, 1929.

REMARKS.—When reservoir is full waste gates on left end of dam are left open.

Daily gage heights, in feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	31.4	26.8	4.6	28.2	33.2	47.1	58.0	57.8	59.8	61.1	56.3	45.4
2.....	30.8	26.7	4.6	27.7	33.4	47.4	57.9	57.9	59.7	61.1	55.9	45.0
3.....	30.2	26.6	4.6	27.3	33.8	47.7	58.0	58.0	59.7	61.1	55.6	44.7
4.....	29.8	26.5	4.6	27.6	34.3	48.1	58.0	58.0	60.1	61.1	55.3	44.2
5.....	29.7	26.4	4.6	27.6	34.8	48.7	58.1	57.9	60.6	61.1	55.0	43.8
6.....	29.6	26.3	4.6	27.8	35.4	49.1	58.3	57.8	61.1	61.1	54.7	43.4
7.....	29.5	26.2	4.6	27.8	35.9	49.4	58.4	57.8	61.1	61.1	54.3	43.0
8.....	29.4	26.1	4.6	27.6	36.5	49.8	58.4	57.8	61.1	61.1	54.0	42.7
9.....	29.3	26.0	4.6	27.6	37.0	50.2	58.4	57.7	61.0	61.1	53.6	42.3
10.....	29.2	25.9	10.6	27.6	37.6	50.5	58.3	57.7	61.1	61.1	53.3	41.8
11.....	29.1	25.8	25.1	27.6	38.0	50.9	58.2	57.7	61.1	61.1	53.0	41.4
12.....	29.0	25.6	26.8	27.6	38.4	51.3	58.1	57.8	61.1	61.1	52.6	41.0
13.....	28.9	25.5	27.9	27.6	38.9	51.7	58.1	57.9	61.0	61.1	52.3	40.7
14.....	28.8	25.4	29.2	27.7	39.4	52.2	58.2	58.0	61.1	61.0	51.9	40.3
15.....	28.7	25.2	29.9	27.8	39.9	52.7	58.1	58.0	61.1	60.8	51.6	39.9
16.....	28.6	24.9	30.8	28.8	40.4	53.0	58.1	58.0	61.0	60.7	51.2	39.5
17.....	28.5	24.8	31.4	30.1	40.8	53.4	58.1	58.0	61.0	60.5	50.8	39.1
18.....	28.4	24.5	32.0	31.1	41.3	53.7	58.1	58.1	61.0	60.3	50.5	38.6
19.....	28.2	23.8	32.6	31.8	41.7	54.0	58.2	58.2	61.0	60.0	50.1	38.2
20.....	28.2	21.1	32.9	32.2	42.7	54.4	58.3	58.4	60.9	59.8	49.7	37.7
21.....	28.1	20.2	33.0	32.4	43.2	54.8	58.4	58.5	60.8	59.5	49.4	37.1
22.....	28.0	19.3	32.9	32.6	44.1	55.4	58.5	58.4	60.8	59.3	49.1	36.6
23.....	27.8	8.7	32.6	32.7	44.9	56.0	58.5	58.4	60.9	59.0	48.7	36.1
24.....	27.7	4.7	32.4	32.7	45.3	56.9	58.7	58.4	61.0	58.7	48.3	35.6
25.....	27.6	4.7	31.9	32.8	45.8	58.0	58.5	58.3	61.0	58.4	48.0	35.0
26.....	27.5	4.9	31.6	33.0	46.2	58.2	58.3	58.5	61.0	58.1	47.6	34.5
27.....	27.4	4.6	31.1	33.1	46.5	58.2	58.2	59.3	61.0	57.8	47.2	34.0
28.....	27.2	4.6	30.6	33.2	46.8	58.2	58.1	59.9	61.0	57.5	46.9	33.4
29.....	27.1	4.6	30.0	33.2	-----	58.2	57.9	59.9	61.0	57.2	46.5	32.9
30.....	27.0	4.6	29.4	33.2	-----	58.3	57.9	60.0	61.1	56.9	46.2	32.5
31.....	26.9	-----	28.7	33.2	-----	58.1	-----	59.9	-----	56.6	45.8	-----

NOTE: Add 4,600 feet to obtain elevations above sea-level.

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., P. 19 E. **RECORDS AVAILABLE.**—November, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 885 second-feet Apr. 24 (gage height, 5.24 feet); minimum, 0.1 second-foot Dec. 11, caused by regulation. 1909-1930: Maximum discharge, 6,400 second-feet Mar. 25, 192² (gage height, 11.0 feet); no flow Sept. 8-14, 1910.

REMARKS.—Records good. No diversions. Flow regulated by gates in Eleanor Dam. There was 3,850 acre-feet of stored water in the lake Sept. 30, 1929, and 5,520 acre-feet Sept. 30, 1930.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	146	23	2.5	139	78	2.7	406	292	310	86	165	175
2	146	23	2.5	137	65	2.5	378	319	268	84	165	175
3	146	23	2.4	65	1.6	2.3	412	406	183	78	165	175
4	80	23	2.3	23	1.5	2.0	438	426	39	72	165	172
5	25	22	2.3	23	1.5	2.0	470	364	127	44	170	178
6	25	20	2.3	23	1.4	2.0	530	313	346	36	172	175
7	25	20	2.3	35	1.3	2.0	590	301	510	42	170	175
8	25	20	2.3	56	1.2	2.0	635	277	442	42	170	175
9	25	20	2.6	56	1.1	2.0	658	244	426	39	172	178
10	25	20	2.3	56	1.0	2.0	570	241	395	36	172	175
11	24	20	.5	70	1.0	2.0	498	250	454	32	172	175
12	24	20	.8	39	1.0	2.0	474	283	470	31	172	175
13	24	20	.9	25	.9	1.9	518	353	402	49	172	175
14	25	20	.2	25	.8	2.4	590	416	395	82	175	175
15	25	20	18	25	.8	2.5	498	430	381	90	175	172
16	25	20	31	11	.8	2.5	450	409	381	105	175	172
17	25	20	34	2.5	.8	2.4	438	395	328	108	175	172
18	25	20	23	3.0	.8	2.3	438	438	250	123	175	175
19	24	20	13	18	.8	2.2	450	494	259	121	175	175
20	24	16	57	30	2.1	2.0	530	590	244	131	175	175
21	24	1.5	72	56	1.6	2.0	612	635	232	137	175	175
22	24	13	103	66	4.8	2.0	635	570	133	137	175	175
23	24	10	119	66	2.3	2.2	680	530	142	139	178	172
24	24	3.0	129	66	2.0	3.0	838	518	160	148	175	172
25	24	3.0	135	58	2.5	201	680	506	144	146	178	172
26	24	2.6	133	65	3.4	458	590	277	102	148	178	172
27	24	2.7	142	65	3.0	534	526	106	80	148	178	172
28	24	2.6	155	68	2.9	522	416	342	91	158	175	172
29	25	2.6	165	80	-----	550	353	470	91	160	175	153
30	25	2.5	153	78	-----	590	310	462	88	162	175	80
31	23	-----	144	78	-----	510	-----	384	-----	165	175	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	146	23	38.0	2,340
November	23	1.5	15.1	898
December	165	.2	53.3	3,280
January	139	2.5	51.9	3,190
February	78	.8	6.64	369
March	590	1.9	110	6,760
April	838	310	520	30,900
May	635	106	388	23,800
June	510	39	262	15,600
July	165	31	99.3	6,110
August	178	165	173	10,600
September	178	80	170	10,100
The year	838	.2	138	114,000

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.

DRAINAGE AREA.—87.6 square miles.

RECORDS AVAILABLE.—March, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 565 second-feet Feb. 22 (gage height, 4.45 feet); minimum, 2.0 second-feet Sept. 4.

1923-1930: Maximum discharge, about 1,500 second-feet Apr. 16, 1923 (gage height, 7.03 feet); minimum, 1.9 second-feet Sept. 6-10, 1924.

REMARKS.—Records good except those for ice-affected periods (Nov. 13-30, Dec. 1-7, 24-31, Jan. 1-3 and 9-15), which are estimated. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	4.0		5.5	18	33	90	103	9'	19	5	2.2
2	3.3	3.9		5.5	20	36	84	116	9'	18	5	2.2
3	3.2	3.9		5.5	23	60	96	148	9'	17	4.5	2.2
4	3.2	3.8		9	23	128	95	128	9'	16	4.4	2.1
5	3.1	3.6	3.6	32	24	183	113	113	10'	16	4.2	2.2
6	3.0	3.6		15	25	117	131	106	111	15	3.9	2.2
7	3.1	3.6		10	26	81	141	116	10'	14	3.7	2.2
8	3.3	3.6	4.6	10	28	64	152	100	9'	14	3.7	2.2
9	3.6	3.7	7.5	8	28	58	144	92	8'	13	4.0	2.5
10	3.7	3.7	23	7.5	26	52	128	90	7'	13	4.0	2.8
11	3.7	3.8	27	7.5	25	52	121	94	73	12	3.6	3.0
12	3.6	3.7	12	8	25	53	124	110	6'	11	3.3	3.0
13	3.4		15	8	26	56	146	135	5'	10	3.1	2.9
14	3.2		14	8	26	76	185	151	5'	9	3.0	2.8
15	3.1		11	9.5	28	69	134	134	4'	9	3.0	2.6
16	3.0		17	65	28	62	117	123	4'	8.5	2.9	2.4
17	3.0		14	48	28	59	116	123	3'	8	2.9	2.3
18	3.1		10	59	29	60	120	148	3'	7.5	3.1	2.2
19	3.4		10	35	28	59	131	168	3'	7	3.0	2.2
20	3.4		9	28	58	62	168	194	3'	7	3.0	2.3
21	3.2	3.6	8	24	40	68	181	183	3'	6.5	2.9	2.3
22	3.0		7.5	21	234	73	177	165	3'	6	2.8	2.6
23	3.0		6	19	131	74	153	168	3'	6	2.7	3.1
24	3.0		6	19	63	59	214	165	2'	5.5	2.6	3.3
25	3.0		6	19	58	107	161	163	2'	5.5	2.7	3.4
26	3.1		6	25	50	118	167	158	2'	5	2.8	3.3
27	3.3		6	25	44	121	135	154	2'	5	2.9	2.9
28	3.4		6	21	38	121	120	149	2'	4.9	2.6	2.7
29	3.3		5.5	19		131	116	146	2'	4.8	2.5	8
30	3.5		5.5	18		134	110	117	2'	4.7	2.4	16
31	3.8		5.5	18		111		102		4.6	2.3	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3.8	3.0	3.27	201
November	4.0		3.66	218
December	27		8.62	530
January	65	5.5	19.8	1,220
February	234	18	42.9	2,380
March	183	33	82.5	5,070
April	214	84	137	8,150
May	194	90	134	8,240
June	111	21	56.5	3,360
July	19	4.6	9.76	600
August	5	2.3	3.31	204
September	16	2.1	3.20	190
The year	234	2.1	41.9	30,400

MIDDLE FORK OF TUOLUMNE RIVER NEAR BUCK MEADOWS, CALIF.

LOCATION.—Water-stage recorder in 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.

DRAINAGE AREA.—71.0 square miles.

RECORDS AVAILABLE.—November, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 360 second-feet May 28 (gage height, 4.40 feet); minimum, 0.2 second-foot Sept. 5.

1917-1930: Maximum discharge, 1,330 second-feet May 28, 1919 (gage height, 8.15 feet); no flow Sept. 4-14, 1924.

REMARKS.—Records good except those for estimated periods (Dec. 26-31, Jan. 1-4, 9-18 and July 17-23), which are fair. Small irrigation diversion above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.8	0.7	1.5	6.5	14	68	113	140	19	1.5	0.2
2	.6	.8	.7	1.4	7.5	16	59	125	153	18	1.6	.2
3	.6	.8	.8	1.4	8	22	66	140	157	17	1.6	.2
4	.6	.8	.8	2.0	8.5	90	68	120	175	16	1.3	.2
5	.6	.8	.8	8	8.5	124	76	108	189	15	1.2	.2
6	.5	.8	.8	4.2	8.5	57	94	103	202	14	.9	.2
7	.6	.8	.8	2.9	8.5	38	101	113	194	14	.8	.2
8	.6	.8	.8	2.6	9	32	114	100	170	12	.8	.2
9	.6	.8	.9	2.6	9	28	115	94	148	12	.8	.2
10	.6	.8	4.2	2.6	9	23	109	92	147	12	.8	.2
11	.6	.8	12	2.5	10	23	102	95	141	11	.8	.2
12	.7	.8	6	2.5	9.5	23	106	101	127	9	.9	.3
13	.7	.8	4.7	2.5	10	23	114	126	109	8.5	.8	.3
14	.7	.8	7	2.6	11	44	124	154	99	8	.7	.3
15	.7	.8	4.7	2.7	11	35	93	140	88	7	.7	.3
16	.6	.9	5.5	14	12	31	85	126	76	7	.7	.3
17	.6	.9	6.5	11	12	28	87	132	63	6.5	.7	.2
18	.6	.9	4.2	23	12	29	92	178	52	6	.5	.2
19	.6	.8	3.6	17	13	29	99	211	48	6	.4	.2
20	.6	.8	3.2	15	26	30	136	262	44	5.5	.4	.2
21	.6	.8	2.8	11	20	31	167	262	40	5	.4	.2
22	.6	.9	2.5	10	121	32	176	236	53	4.5	.4	.2
23	.6	.8	2.2	8	63	32	194	252	41	4.0	.3	.3
24	.6	.8	1.7	8	29	38	222	258	35	3.9	.3	.3
25	.5	.8	1.7	7.5	30	46	172	258	32	3.6	.3	.3
26	.5	.8	1.7	10	24	52	180	264	30	3.5	.4	.4
27	.6	.8	1.6	12	20	55	143	262	26	3.3	.4	.4
28	.6	.7	1.6	8	17	55	126	260	24	3.1	.4	.4
29	.6	.7	1.6	7	-----	65	121	250	23	2.6	.3	.9
30	.7	.7	1.5	7	-----	76	115	181	21	1.6	.3	4.2
31	.7	-----	1.5	7	-----	76	-----	151	-----	1.5	.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.7	0.5	0.61	37.5
November	.9	.7	.80	47.6
December	12	.7	2.87	176
January	23	1.4	7.02	432
February	121	6.5	19.1	1,060
March	124	14	41.8	2,570
April	222	59	117	6,960
May	264	92	170	10,500
June	202	21	94.9	5,650
July	19	1.5	8.89	516
August	1.6	.3	.70	43.0
September	4.2	.2	.40	23.8
The year	264	.2	38.7	28,000

WOODS CREEK NEAR JACKSONVILLE, CALIF.

LOCATION.—Water-stage recorder in 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.

DRAINAGE AREA.—98.4 square miles.

RECORDS AVAILABLE.—October, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,820 second-feet Mar. 5 (gage height, 5.25 feet); no flow at times in October, and July to September.

1925-1930: Maximum discharge, 5,600 second-feet Mar. 25, 1928 (gage height, 7.00 feet); no flow at times during summers of 1929 and 1930.

REMARKS.—Records good. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.
1	0	1.2	3.4	6.5	36	71	28	17	68	0.9	0
2	0	1.3	3.6	6.5	33	54	28	14	96	.8	0
3	0	1.3	3.4	6.5	29	51	27	26	90	.6	0
4	0	1.3	3.0	7	28	435	23	40	44	.9	0
5	0	1.3	3.0	45	28	1,200	21	33	22	.7	0
6	0	1.3	3.0	33	28	430	21	30	14	.6	0
7	.1	1.3	3.2	33	28	159	20	30	13	.5	0
8	.4	1.3	3.4	27	25	104	18	32	12	.4	0
9	.6	1.3	4.3	22	20	80	18	30	12	.7	0
10	.9	1.4	14	24	20	65	17	28	12	.9	0
11	1.1	1.5	25	24	23	59	15	26	11	.7	0
12	1.1	1.5	14	23	21	52	13	23	11	.5	0
13	1.1	1.7	14	25	17	50	32	23	10	.7	0
14	1.0	1.9	13	26	20	160	106	26	9.5	.5	0
15	.8	2.1	11	36	23	270	59	22	8	.4	0
16	.7	2.3	26	493	21	322	40	23	6.5	.3	0
17	.7	3.2	17	146	21	126	38	24	5	.2	0
18	.9	2.6	13	295	26	90	29	23	3.6	.1	0
19	1.0	2.1	12	114	35	75	25	20	2.8	0	.1
20	1.0	2.1	11	66	67	70	22	20	1.9	0	.2
21	.9	2.3	50	56	55	66	20	17	1.9	0	.4
22	.8	2.3	17	46	203	60	21	17	2.1	0	.5
23	.7	2.6	12	42	219	55	19	17	1.9	0	.7
24	.6	2.6	11	42	130	45	16	17	1.4	0	.9
25	.6	3.9	11	35	377	45	16	16	1.2	0	.7
26	.7	3.4	9.5	45	322	41	20	17	.9	0	.5
27	.8	3.0	9	88	140	39	22	17	.8	0	.5
28	.9	3.6	8	50	96	36	20	69	.8	0	.4
29	.9	3.6	7	45	-----	24	17	36	.9	0	.9
30	1.0	3.2	7	40	-----	32	17	22	.9	0	2.3
31	1.1	-----	6.5	39	-----	30	-----	22	-----	0	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet	
October	1.1			0			0.66			40.6	
November	3.9			1.2			2.15			128	
December	50			3.0			11.2			689	
January	493			6.5			64.1			3,940	
February	377			17			74.7			4,150	
March	1,200			30			142			8,730	
April	106			13			26.3			1,560	
May	69			14			25.1			1,540	
June	96			.8			15.5			922	
July	.9			0			.34			20.9	
September	2.3			0			.27			16.1	
The year	1,200			0			30.0			21,700	

NOTE.—No flow during August.

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, 500 feet below intake at La Grange Dam on Tuolumne River, and $1\frac{1}{2}$ miles northeast of La Grange.

RECORDS AVAILABLE.—April, 1903, to September, 1930.

EXTREMES.—1903-1930: Maximum discharge, 1,750 second-feet May 17, 1928.

REMARKS.—Records good. This canal diverts from right bank of Tuolumne River at La Grange Dam. Water used for irrigation in the Modesto and Waterford irrigation districts. Gage-height record furnished by Modesto Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	326	277	136	14	0	228	467	605	993	549	801	593
2.....	286	277	142	38	0	162	403	605	971	611	821	538
3.....	258	271	188	31	0	196	411	605	1,020	421	842	530
4.....	247	271	167	0	0	252	403	605	1,060	412	842	542
5.....	248	272	164	0	0	278	411	605	1,060	414	842	554
6.....	251	274	158	0	0	206	411	605	1,080	415	863	557
7.....	268	274	159	0	0	155	411	605	1,210	425	821	536
8.....	269	280	154	0	0	162	411	641	1,210	430	800	480
9.....	271	282	156	0	0	114	411	679	1,260	429	800	319
10.....	270	277	160	0	0	146	419	679	1,330	430	800	319
11.....	270	277	156	0	0	156	411	679	1,490	430	800	319
12.....	270	270	170	0	0	161	411	698	1,630	426	780	319
13.....	262	271	152	0	0	175	411	698	1,700	423	758	319
14.....	245	238	153	0	0	256	403	679	1,700	427	758	319
15.....	237	229	152	0	0	214	403	679	1,700	428	758	319
16.....	238	237	152	0	0	133	535	698	1,650	428	718	626
17.....	237	233	156	0	60	162	605	698	1,460	632	718	660
18.....	238	238	156	0	112	176	605	698	1,420	872	718	18
19.....	249	240	154	0	177	224	605	698	1,440	864	718	130
20.....	277	250	157	0	158	307	605	718	1,440	750	718	647
21.....	291	244	161	0	184	332	605	718	1,420	718	718	552
22.....	296	246	164	0	210	338	605	718	1,140	718	718	644
23.....	314	247	207	0	118	338	605	718	467	718	718	670
24.....	314	236	239	0	216	373	605	718	467	718	718	650
25.....	314	235	209	0	212	403	605	718	623	800	718	589
26.....	314	185	218	0	204	403	605	718	740	842	718	608
27.....	296	195	224	0	189	403	605	758	641	842	718	522
28.....	218	184	232	0	166	403	605	905	641	842	698	559
29.....	74	180	76	0	-----	403	605	1,020	641	842	605	646
30.....	277	195	119	0	-----	403	605	1,020	641	863	718	676
31.....	274	-----	106	0	-----	403	-----	1,020	-----	842	718	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	326	74	264	16,200
November.....	288	180	248	14,800
December.....	239	76	164	10,100
January.....	38	0	2.68	165
February.....	216	0	71.6	3,980
March.....	403	114	260	16,000
April.....	605	403	507	30,200
May.....	1,020	605	716	44,000
June.....	1,700	467	1,140	67,800
July.....	872	412	612	37,609
August.....	863	605	756	46,500
September.....	676	18	492	29,300
The year.....	1,700	0	438	317,000

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 at La Grange Dam and $1\frac{1}{4}$ miles northeast of La Grange.

RECORDS AVAILABLE.—July, 1899, to September, 1930.

EXTREMES.—1907-1930: Maximum mean daily discharge, 1,900 second-feet several days in May, 1928; no irrigation flow during periods each year, but a small flow is carried at all times for town of La Grange.

REMARKS.—Records good. This canal diverts from left bank of Tuolumne 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	278	10	6	6	6	1,130	1,100	1,850	684	1,140	941
2	7.5	238	126	27	6	6	998	1,100	1,880	567	1,140	878
3	4	248	144	10	6	6	1,070	1,100	1,820	816	1,090	870
4	4	260	117	6	6	6	1,060	1,100	1,820	801	1,110	867
5	4	256	127	6	6	6	1,250	1,100	1,820	836	1,150	864
6	4	264	122	8.5	6	6	1,310	1,100	1,820	800	1,150	858
7	4	266	126	40	6	6	1,360	1,070	1,500	835	764	806
8	144	156	16	44	6	6	1,420	1,150	1,420	856	780	872
9	296	22	125	59	6	6	1,440	1,280	1,420	846	888	946
10	455	6	141	37	6	6	1,560	1,280	1,420	854	840	947
11	499	6	106	29	6	6	1,560	1,280	1,420	846	876	898
12	343	168	84	70	6	6	1,560	1,310	1,530	853	911	900
13	30	239	38	48	6	6	1,580	1,280	1,580	804	924	818
14	42	275	36	18	6	6	1,580	1,250	1,550	852	930	824
15	9.5	245	32	6	6	6	1,580	1,020	1,550	868	922	814
16	6	266	72	6	6	6	1,420	1,020	1,580	868	924	776
17	6	178	94	6	6	6	1,360	1,020	1,580	655	890	701
18	6	180	114	6	6	6	1,310	996	1,440	456	945	932
19	6	182	108	6	6	826	1,150	1,120	1,520	544	1,260	937
20	6	178	158	6	6	687	1,100	1,280	1,520	786	1,300	712
21	6	169	210	6	6	1,040	1,120	1,280	1,380	856	1,290	704
22	6	170	128	6	6	1,200	1,120	1,310	1,400	874	1,260	736
23	6	161	288	6	6	1,200	1,100	1,470	1,530	869	1,170	753
24	6	66	254	6	6	1,150	1,070	1,500	1,480	891	1,130	680
25	6	100	141	6	6	1,120	1,100	1,500	1,340	824	1,140	722
26	78	162	232	6	6	1,120	1,070	1,580	1,060	1,110	1,220	718
27	120	148	271	6	6	1,120	1,100	1,700	1,110	1,040	1,120	726
28	230	60	250	77	6	1,120	1,100	1,820	1,120	1,080	1,000	698
29	502	116	340	82	-----	1,100	1,100	1,850	1,120	1,100	1,100	719
30	322	124	441	6	-----	1,120	1,100	1,880	1,060	1,100	1,140	708
31	305	-----	435	6	-----	1,120	-----	1,850	-----	1,100	1,080	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	502	4.0	114	7,010
November	288	6	175	10,400
December	441	10	158	9,729
January	82	6	21.2	1,309
February	6	6	6.00	333
March	1,200	6	453	27,909
April	1,580	998	1,260	75,009
May	1,880	996	1,310	80,609
June	1,880	1,060	1,490	88,709
July	1,110	456	847	52,109
August	1,300	764	1,050	64,600
September	947	680	811	48,300
The year	1,880	4	643	466,000

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.

DRAINAGE AREA.—329 square miles, above diversion dam.

RECORDS AVAILABLE.—September, 1905, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,690 second-feet on June 12; minimum, 43 second-feet on Nov. 23.

1905-1930: Maximum mean daily discharge, 9,760 second-feet, Mar. 19, 1907; minimum, 30 second-feet, Aug. 24, 1924.

REMARKS.—Discharge estimated Dec. 31 to Jan. 4 and Jan. 8-15. 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	150	100	47	63	108	221	807	833	1,010	753	259	212
2.....	150	75	47	63	134	259	837	905	1,010	735	264	210
3.....	150	53	47	64	192	285	936	927	1,160	643	264	210
4.....	152	50	47	65	199	341	931	811	1,400	574	262	210
5.....	129	50	58	74	185	353	1,080	742	1,650	587	255	210
6.....	89	49	60	56	201	332	1,280	746	1,910	507	264	206
7.....	87	49	60	64	214	338	1,340	742	2,210	501	259	208
8.....	89	48	62	78	225	332	1,540	689	1,650	495	259	208
9.....	87	48	100	91	227	332	1,330	658	1,920	454	235	215
10.....	87	48	283	93	215	322	1,150	647	2,040	415	197	217
11.....	87	48	206	93	210	346	1,050	665	2,210	396	203	221
12.....	63	47	150	96	217	389	1,030	742	2,200	396	206	221
13.....	50	46	363	101	231	420	1,130	872	2,020	386	201	221
14.....	50	47	227	103	241	434	1,010	962	1,940	373	197	219
15.....	50	51	136	104	259	391	864	880	1,940	356	197	217
16.....	50	50	197	203	270	359	860	880	1,880	336	203	215
17.....	56	49	194	259	272	353	893	953	1,690	326	203	214
18.....	89	49	245	280	283	343	931	1,090	1,540	311	205	214
19.....	75	50	235	215	295	348	985	1,280	1,380	289	208	214
20.....	50	48	210	199	329	381	1,230	1,670	1,180	272	210	214
21.....	48	48	185	174	272	429	1,430	1,740	1,120	259	208	214
22.....	48	48	210	153	329	498	1,510	1,440	1,070	259	212	214
23.....	48	46	91	160	366	540	1,620	1,460	949	270	212	214
24.....	48	49	78	169	293	707	1,620	1,540	872	268	214	214
25.....	48	47	76	168	291	860	1,280	1,550	811	262	214	210
26.....	61	49	75	172	270	944	1,270	1,590	778	264	219	206
27.....	96	49	68	169	255	940	1,060	1,650	768	270	221	206
28.....	97	48	69	161	245	940	962	1,700	760	266	217	208
29.....	97	48	65	160	-----	1,070	897	1,620	742	262	214	237
30.....	95	48	61	161	-----	1,160	833	1,290	746	264	214	253
31.....	97	-----	62	160	-----	905	-----	1,110	-----	259	214	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	152	48	83.0	5,100
November.....	100	46	51.2	3,050
December.....	363	47	129	7,930
January.....	280	56	135	8,300
February.....	366	108	244	13,600
March.....	1,160	221	512	31,500
April.....	1,620	807	1,120	66,600
May.....	1,740	647	1,110	68,200
June.....	2,210	742	1,420	84,500
July.....	753	259	387	23,800
August.....	264	197	223	13,700
September.....	253	206	215	12,800
The year.....	2,210	46	468	339,000

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.

DRAINAGE AREA.—972 square miles.

RECORDS AVAILABLE.—December, 1915, to September, 1930. At Knights Ferry, May, 1903, to April, 1916.

EXTREMES.—Maximum discharge during year, 5,330 second-feet May 19 (gauge height, 4.46 feet); minimum, 5 second-feet Oct. 14.

1915-1930: Maximum discharge, about 40,000 second-feet Mar. 25, 1928 (gauge height, 17.0 feet); minimum, 1 second-foot during part of August and November, 1926.

REMARKS.—Records good. Discharge estimated Oct. 21-31. Numerous diversions and several storage reservoirs above gauge; largest reservoir is Melones Reservoir.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	281	9.5	20	28	271	239	1,920	1,760	1,350	1,200	869	781
2	271	11	31	28	101	94	1,620	1,880	1,530	1,180	869	781
3	276	12	38	246	122	437	1,460	2,080	1,660	1,010	858	781
4	265	14	31	64	135	740	1,880	1,530	2,240	892	858	770
5	151	14	26	90	145	1,640	1,900	2,050	3,150	892	847	770
6	121	16	25	478	120	475	1,720	1,670	3,090	916	847	770
7	183	16	18	735	94	922	3,570	1,420	3,280	892	836	781
8	254	16	12	820	94	496	3,760	1,440	3,630	892	836	770
9	250	16	18	903	67	341	3,240	1,420	3,240	892	825	770
10	250	17	37	911	73	600	3,190	1,440	3,290	892	825	770
11	243	17	35	571	151	289	2,580	1,280	2,560	892	825	770
12	125	17	19	191	99	601	2,390	1,330	1,680	892	825	759
13	14	17	43	680	99	530	4,250	1,340	1,680	892	825	759
14	6.5	17	22	450	511	500	2,020	1,340	1,840	892	814	759
15	6.5	17	39	257	904	307	2,410	1,320	2,850	892	814	759
16	6.5	16	53	729	892	277	1,980	1,360	2,260	892	814	759
17	17	16	62	258	892	185	2,020	1,330	2,240	880	814	759
18	9.5	14	100	304	858	425	2,160	1,290	2,100	880	803	770
19	16	16	155	151	847	151	2,190	3,460	1,710	880	803	770
20	17	48	151	517	836	297	2,740	3,910	1,710	880	803	759
21		39	168	815	814	393	3,120	2,640	1,680	880	803	759
22		33	68	809	1,040	293	3,540	4,340	1,680	880	792	759
23		28	678	794	1,000	1,160	3,560	2,660	1,320	880	792	759
24		14	262	805	904	752	3,800	3,800	1,300	880	792	759
25		14	64	795	1,310	617	3,260	3,830	1,270	880	792	748
26		25	24	251	976	1,830	2,760	2,580	1,250	880	792	748
27		17	24	766	322	2,300	2,100	3,130	1,230	880	792	748
28		17	28	546	284	2,330	2,790	3,450	1,200	880	792	748
29		14	24	168		2,360	2,070	3,560	1,200	880	781	748
30		14	24	196		2,450	1,880	3,210	1,210	880	781	748
31			24	675		2,380		2,450		880	781	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	281	6.5	94.5	5,810
November	48	9.5	18.4	1,090
December	678	12	74.9	4,610
January	911	28	485	29,800
February	1,310	67	499	27,700
March	2,450	94	852	52,400
April	4,250	1,460	2,600	155,000
May	4,340	1,280	2,270	140,000
June	3,630	1,200	2,010	120,000
July	1,200	880	910	56,000
August	869	781	816	50,200
September	781	748	763	45,400
The year	4,340	6.5	949	688,000

REMARKS.—Records good. Discharge estimated Mar. 25-27. Diversions and regulation above station. Gage-height record furnished by Utica Gold Mining Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	18	10	42	116	188	645	820	555	83	52	57
2	43	18	10	54	145	201	745	955	555	84	49	57
3	42	18	9	52	181	221	928	982	578	99	45	57
4	42	18	9	60	181	275	900	820	645	95	47	57
5	42	18	6.5	69	197	260	1,040	670	720	74	54	57
6	42	18	5.5	57	215	242	1,200	695	820	61	40	57
7	47	18	5.5	70	226	252	1,240	720	872	56	18	57
8	45	18	6	61	242	260	1,340	578	795	85	9	58
9	42	17	16	67	242	258	1,240	495	670	109	52	58
10	42	17	353	68	226	250	1,070	535	670	95	63	58
11	42	17	226	60	219	275	982	555	695	85	82	58
12	42	17	388	66	228	315	1,130	695	670	82	80	57
13	41	17	565	72	242	349	1,380	928	578	80	82	57
14	39	17	284	74	258	343	1,130	1,010	515	78	67	56
15	38	17	228	78	284	295	872	900	475	76	62	53
16	37	16	361	242	295	266	900	872	440	74	61	53
17	41	16	250	242	288	254	955	982	388	73	60	52
18	40	16	266	266	300	248	1,010	1,160	323	71	59	56
19	38	16	217	177	310	258	1,100	1,340	293	69	58	58
20	37	16	177	153	349	305	1,420	1,500	256	68	59	63
21	36	16	137	129	284	370	1,580	1,460	242	67	58	85
22	35	16	97	122	382	436	1,670	1,160	186	66	58	84
23	35	16	78	112	329	475	1,720	1,130	199	65	58	76
24	32	15	70	116	266	670	1,760	1,160	206	64	58	52
25	26	15	66	115	250	700	1,300	1,130	185	63	60	32
26	25	15	60	119	230	730	1,300	1,130	133	61	61	45
27	25	13	55	112	215	760	1,040	1,130	109	60	60	44
28	25	11	53	108	203	795	900	1,130	129	58	59	44
29	22	10	47	109	-----	900	795	1,070	143	56	58	62
30	22	10	45	112	-----	928	745	770	125	54	58	64
31	19	-----	44	115	-----	695	-----	622	-----	53	58	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	48	19	36.5	2,240
November	18	10	16.0	952
December	565	5.5	134	8,240
January	266	42	106	6,520
February	382	116	247	13,700
March	928	188	412	25,300
April	1,760	645	1,130	67,200
May	1,500	495	939	57,700
June	872	109	439	26,100
July	109	53	73.0	4,490
August	82	9	56.3	3,460
September	85	32	57.5	3,420
The year	1,760	5.5	303	219,000

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 at Goodwin Dam on Stanislaus River and 4 miles above Knights Ferry.

RECORDS AVAILABLE.—May, 1914, to September, 1930. Also, miscellaneous measurements and rough estimates for 1913.

EXTREMES.—Maximum mean daily discharge during year, 958 second-feet June 29 to July 2; no flow during parts of several months.

1914-1930: Maximum discharge, 1,080 second-feet May 18, 1922 (gage height, 8.43 feet); no flow for several months each year.

REMARKS.—Records excellent. This canal diverts from right bank of Stanislaus River at Goodwin Dam; water used for irrigation in the Oakdale and South San Joaquin irrigation districts. Gage-height record furnished by South San Joaquin Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.
1	111	0	270	0	677	839	958	613	549
2	111	0	161	0	693	839	958	613	549
3	111	0	88	60	677	856	799	613	549
4	111	0	103	376	613	873	629	613	549
5	107	0	97	668	613	856	629	613	533
6	79	0	88	725	613	839	661	597	533
7	75	0	81	839	613	856	661	597	549
8	94	0	68	907	613	873	645	581	533
9	99	0	56	907	629	856	661	581	549
10	101	0	58	924	645	856	741	581	549
11	102	0	142	907	677	890	661	597	549
12	97	0	95	924	789	924	645	597	549
13	38	0	92	924	822	941	645	581	549
14	16	0	326	907	839	941	645	597	549
15	8	140	725	924	805	941	645	581	549
16	7	529	741	839	789	941	645	581	549
17	14	306	789	839	789	941	629	581	549
18	10	275	773	890	741	941	629	581	549
19	9	159	773	907	741	958	629	581	549
20	10	279	757	907	725	958	629	581	549
21	21	565	725	907	725	958	629	565	549
22	75	398	693	907	773	958	629	565	533
23	84	0	677	907	839	941	629	565	533
24	87	0	645	907	890	941	629	565	533
25	86	0	470	907	890	941	629	565	533
26	0	0	276	907	873	941	629	565	533
27	0	0	62	907	890	941	629	565	533
28	0	0	0	873	890	941	629	565	533
29	0	0		865	873	958	629	565	533
30	0	0		709	839	958	613	549	517
31	0	0			822		613	549	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	111	0	53.6	3,300
January	565	0	85.5	5,280
February	789	0	351	19,500
April	924	0	770	45,800
May	890	613	755	46,400
June	958	839	913	54,300
July	958	613	666	41,000
August	613	549	582	35,800
September	549	517	542	32,300
The year	958	0	392	284,000

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

OAKDALE CANAL NEAR KNIGHTS FERRY, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 10, T. 1 S., R. 12 E., 1,700 feet below head gate at Goodwin Dam on Stanislaus River and 4 miles above Knights Ferry.

RECORDS AVAILABLE.—May, 1914, to September, 1930. Miscellaneous measurements and rough estimates for 1913.

EXTREMES.—1914-1930: Maximum mean daily discharge, 263 second-feet many days in June and July, 1930; no flow during periods of each year.

REMARKS.—Records good. This canal diverts from left bank of river at Goodwin Dam. The 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, 1929-30

Day	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	154	0	66	227	257	251	257	233
2.....	154	0	66	227	257	251	251	233
3.....	154	0	81	221	257	257	251	227
4.....	148	0	122	215	263	263	257	233
5.....	138	0	152	215	257	263	257	233
6.....	63	0	158	203	257	263	257	233
7.....	62	0	164	197	257	257	257	227
8.....	129	0	173	197	263	257	257	227
9.....	143	0	185	197	263	257	257	209
10.....	143	0	185	197	257	144	251	209
11.....	143	0	197	197	257	257	251	209
12.....	128	0	203	227	257	257	245	197
13.....	0	0	209	227	257	257	251	197
14.....	0	0	197	239	257	257	245	197
15.....	0	0	191	251	257	263	245	197
16.....	0	0	191	251	263	263	239	197
17.....	0	0	191	251	257	263	233	191
18.....	0	0	191	251	257	263	233	185
19.....	0	0	203	251	263	257	233	179
20.....	0	0	203	251	263	263	233	179
21.....	8.5	0	203	251	263	263	233	179
22.....	89	0	209	257	263	263	233	179
23.....	112	0	203	245	257	263	233	173
24.....	115	0	203	239	263	263	227	173
25.....	108	0	203	233	263	263	227	173
26.....	99	0	203	239	263	257	227	170
27.....	0	0	209	239	251	257	221	167
28.....	0	0	209	239	251	257	233	164
29.....	0	30	203	245	251	251	227	164
30.....	0	66	221	251	251	251	227	161
31.....	0	66	-----	257	-----	251	227	-----
Month			Maximum	Minimum	Mean	Run-off in acre-feet		
October.....			154	0	67.4	4,140		
March.....			66	0	5.23	322		
April.....			221	66	180	10,700		
May.....			257	197	232	14,300		
June.....			263	251	258	15,400		
July.....			263	144	255	15,700		
August.....			257	221	241	14,800		
September.....			233	161	196	11,700		
The year.....			263	0	120	87,100		

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

CALAVERAS RIVER BASIN

CALAVERAS RIVER AT JENNY LIND, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ sec. 22, T. 3 N., R. 17 E., at highway bridge on Milton road 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, 1930.

EXTREMES.—Maximum discharge during year, 3,920 second-feet Mar. 6 (gage height, 7.73 feet); no flow Oct. 1 to Dec. 19 and June 28 to July 10.

1907-1930: Maximum discharge, about 69,600 second-feet Jan. 31, 1911; no flow during fall of 1913-1915, 1917-1922, and 1924-1930.

REMARKS.—Records good. Discharge estimated June 25-27, Aug. 4-7 and 12. Small amount of storage above station. Stockton flood control dam under construction during the year.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	9.5	81	317	114	40	10	0	2.1	0.7
2	0	9	67	240	110	40	10	0	1.3	.7
3	0	9	59	198	108	43	10	0	.8	.7
4	0	9.5	51	1,380	102	43	10	0	.5	.7
5	0	16	50	3,250	96	44	10	0	.5	.7
6	0	61	49	3,600	90	45	9.5	0	.5	.7
7	0	89	47	2,680	85	46	8.5	0	.5	.7
8	0	94	44	1,060	76	46	8.5	0	1.7	.7
9	0	96	43	491	68	46	8	0	1.9	.7
10	0	94	41	346	59	45	7.5	0	1.5	.7
11	0	90	40	271	54	45	6	10	1.1	.7
12	0	92	38	230	44	46	5.5	6.5	.8	.7
13	0	92	36	198	6.5	45	4.8	3.9	.7	.7
14	0	106	34	198	3.7	45	3.9	2.8	.9	.7
15	0	108	32	481	3.4	44	3.1	1.8	1.3	.6
16	0	1,010	31	570	3.7	43	3.1	1.3	.8	.6
17	0	942	30	498	3.2	43	2.8	.9	.6	.6
18	0	708	29	355	2.2	41	1.8	2.1	2.6	3.0
19	0	588	27	278	2.5	41	1.4	7.5	2.5	1.7
20	3.9	360	40	230	6.5	39	2.9	8.5	2.2	2.7
21	11	308	68	201	13	38	1.8	12	1.9	3.9
22	11	220	131	174	25	37	1.5	10	1.7	3.9
23	9.5	163	982	160	37	35	.9	7.5	1.4	4.1
24	10	142	772	152	39	32	.8	4.8	1.0	4.1
25	9	135	684	142	39	30	.6	3.1	.8	4.1
26	9	131	1,100	135	39	28	.4	2.4	.8	4.1
27	8.5	127	752	131	39	24	.2	11	.9	4.1
28	8.5	120	465	124	39	17	0	10	.7	4.1
29	9	114	-----	122	39	11	0	6	.7	3.9
30	9	106	-----	118	39	11	0	4.1	.6	4.1
31	9	98	-----	116	-----	11	-----	2.9	.7	-----
Month					Maximum	Minimum	Mean	Run-off in acre-feet		
December					11	0	3.46	213		
January					1,010	9	202	12,400		
February					1,100	27	208	11,600		
March					3,600	116	595	36,600		
April					114	2.2	46.2	2,750		
May					46	11	36.9	2,270		
June					10	0	4.45	265		
July					12	0	3.84	236		
August					2.6	.5	1.16	71.3		
September					4.1	.6	1.98	118		
The year					3,600	0	91.8	66,500		

COSGROVE CREEK NEAR VALLEY SPRINGS, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 35, T. 4 N., R. 10 E., $2\frac{1}{2}$ miles south of Valley Springs.

DRAINAGE AREA.—20.6 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 185 second-feet Mar. 5; no flow during parts of the year.

REMARKS.—Records fair Mar. 17 to Sept. 30. Discharge estimated Mar. 18-24 and May 4-7. Records furnished by the city of Stockton Oct. 1 to Mar. 16.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1	0	0	1.0	9	0.9	0.2	16	0.1	79	0.5	9	1.1	0.2
2	0	0	.8	5	.8	.2	17	0	12	.4	10	.8	.1
3	0	0	.7	8	.7	.6	18	0	19	.5	9	.7	.1
4	0	0	.6	125	.7	.5	19	0	16	.4	8	.6	.2
5	0	1.0	.5	185	.6	.4	20	0	38	8	7	.5	.1
6	0	2.0	.4	81	.6	.3	21	0	10	3.6	6	.4	.1
7	0	4.0	.4	26	.6	.2	22	0	2.0	52	5	.4	.1
8	0	2.0	.4	16	.6	.2	23	0	.9	92	4.0	.3	.1
9	0	2.0	.4	13	.5	.2	24	0	.5	41	3.0	.3	0
10	0	3.0	.4	8	.5	.2	25	0	.4	87	2.0	.3	0
11	.1	2.0	.4	5	.4	.2	26	0	1.0	59	1.7	.3	0
12	.1	5	.3	5	.4	.2	27	0	.3	29	1.2	.3	0
13	.1	13	.4	4	.6	.2	28	0	.3	15	.9	.2	0
14	.1	16	.5	8	1.6	.1	29	0	1.0	—	.8	.3	0
15	.1	19	.5	8	1.4	.1	30	0	1.6	—	.9	.3	0
							31	0	2.0	—	.9	—	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	0.1	0	0.02	1.2
January	79	0	8.16	502
February	92	.3	14.1	783
March	185	.8	18.6	1,140
April	1.6	.3	.59	35.1
May	.6	0	.15	9.2
The year	185	0	3.42	2,470

NOTE.—No flow during months for which no discharge 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, 1930.

EXTREMES.—Maximum discharge during year, 590 second-feet Mar. 6 (gage height, 9.90 feet); no flow during a part of every month except March. 1926-1930: Maximum discharge, 916 second-feet Feb. 4, 1927 (gage height, 10.22 feet); no flow for several months each year.

REMARKS.—Records fair. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	Day	Jan.	Feb.	Mar.	Apr.
1	0	0.4	6	0.8	16	213	0	17	0.1
2	0	.3	4.0	.7	17	28	0	12	.2
3	0	.2	3.3	.7	18	37	0	6.5	.3
4	0	.3	73	.6	19	14	0	4.2	.2
5	0	.4	243	.5	20	7.5	0	3.0	.1
6	0	.9	336	.5	21	7	0	2.5	0
7	9	.5	51	.4	22	4.2	23	2.0	0
8	0	.2	25	.3	23	2.3	66	1.6	0
9	0	.1	16	.2	24	1.7	27	1.4	0
10	0	.1	10	.2	25	1.3	64	1.4	0
11	0	0	7	.1	26	1.1	57	1.2	0
12	0	0	5.5	.1	27	1.5	21	1.2	0
13	8	0	4.2	.1	28	1.8	11	1.0	0
14	32	0	3.6	.1	29	1.1	-----	.9	0
15	14	0	12	.1	30	.7	-----	.9	0
					31	.5	-----	.8	-----
Month					Maximum	Minimum	Mean	Run-off in acre-feet	
January					213	0	12.2	750	
February					66	0	9.73	540	
March					336	.8	27.7	1,700	
April					.8	0	.21	12.5	
The year					336	0	4.14	3,000	

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

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 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, 1930.

EXTREMES.—Maximum discharge during year, 3,400 second-feet May 20 (gage height, 9.27 feet); minimum, 6 second-feet Dec. 5.

1926-1930: Maximum discharge, 8,740 second-feet Mar. 25, 1928 (gage height, 13.62 feet); minimum, 3.9 second-feet Aug. 15, 1928.

REMARKS.—Records good. Small amount of storage at Blue Lakes. Salt Springs Dam has been under construction since 1927. Gage-height record and results of discharge measurements furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	26	9.5	38	107	* 186	462	625	315	150	80	* 69
2	56	26	9.5	36	* 146	182	525	830	1,150	120	81	68
3	56	26	9	34	186	218	625	870	788	68	83	68
4	57	26	9	37	161	292	610	640	912	48	80	69
5	50	24	8	46	183	270	770	565	1,430	46	81	70
6	44	19	8.5	37	190	248	938	595	1,820	40	81	68
7	46	18	8.5	47	195	225	1,040	610	1,820	37	80	68
8	48	17	9	46	210	240	1,190	525	1,580	37	80	65
9	45	18	69	46	* 202	240	1,140	488	1,400	38	80	64
10	44	18	458	46	195	225	938	462	1,550	40	79	63
11	44	18	148	44	182	240	830	512	1,580	40	80	65
12	44	18	307	47	188	285	915	692	1,490	40	80	65
13	46	16	512	46	195	310	1,060	938	1,340	44	80	65
14	44	17	231	46	210	292	850	1,040	1,250	57	79	65
15	43	18	180	48	232	255	675	850	1,190	52	80	62
16	43	18	302	279	248	225	675	790	1,190	52	78	59
17	43	13	192	240	240	218	710	915	1,140	63	80	59
18	42	12	285	290	255	210	750	1,340	1,040	74	77	58
19	42	11	210	170	255	218	850	1,720	1,460	77	77	56
20	42	10	139	147	292	255	1,190	2,300	340	79	75	54
21	40	11	99	122	240	300	1,430	2,000	638	77	75	52
22	25	9.5	83	108	354	350	1,620	1,580	389	78	75	50
23	25	9	70	101	292	370	1,760	1,650	133	80	76	48
24	25	9	62	107	* 251	538	1,580	1,760	141	80	74	46
25	24	9.5	* 61	* 107	210	610	1,160	1,790	146	79	74	44
26	25	9	60	* 107	202	675	1,110	1,900	148	80	73	41
27	26	9.5	54	107	192	658	830	1,930	150	80	72	39
28	25	9	48	102	* 189	640	750	1,930	152	80	72	37
29	25	9.5	46	102	-----	750	710	1,520	152	80	72	32
30	25	10	42	105	-----	810	625	915	154	81	* 71	31
31	27	-----	39	105	-----	538	-----	710	-----	81	* 70	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	57					24			39.6		2,430	
November	26					9			15.5		922	
December	512					8			122		7,500	
January	290					34			94.9		5,840	
February	354					107			214		11,900	
March	810					182			357		22,000	
April	1,760					462			944		56,200	
May	2,300					462			1,130		69,500	
June	1,820					133			902		53,700	
July	150					37			67.0		4,120	
August	83					70			77.3		4,750	
September	70					31			56.7		3,370	
The year	2,300					8			334		242,000	

* Estimated.

NORTH FORK OF MOKELUMNE RIVER NEAR WEST POINT, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 17, T. 7 N., R. 15 E., $9\frac{1}{2}$ miles northeast of West Point and 1 mile above Blue Creek.

DRAINAGE AREA.—272 square miles.

RECORDS AVAILABLE.—April, 1917, to September, 1918; February, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, about 4,560 second-feet probably on May 21 (gage height, 10.62 feet); minimum, 9.5 second-feet Dec. 6. 1917-18, 1924-1930: Maximum discharge, 15,500 second-feet Mar. 25, 1928 (gage height, 17.2 feet); minimum, 2.5 second-feet October 22 and 25-28, 1924.

REMARKS.—Records good except those for Oct. 1 to Nov. 21 and May 16 to June 5, which are estimated; storage in Blue Lakes and on Bear River; Salt Springs Dam under construction since 1927. Gage-height record and results of discharge measurements furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			12	59	147	280	800	990	1,000	242	88	73
2			11	57	188	294	878	1,370	700	221	88	70
3		62	11	102	255	344	1,020	1,450	1,500	159	88	70
4			11	108	231	470	1,050	990	1,300	78	87	72
5			11	119	263	463	1,370	825	1,800	74	87	73
6			10	97	283	404	1,700	878	2,320	94	87	72
7			11	105	329	390	1,840	905	2,320	96	87	70
8			12	106	365	404	2,070	778	2,020	94	87	70
9			53	116	359	387	1,970	710	1,790	106	87	69
10			621	111	329	359	1,610	688	1,920	106	86	69
11			234	126	308	384	1,370	755	1,970	106	85	69
12			320	170	332	466	1,530	1,080	1,880	106	85	70
13			688	128	353	525	1,790	1,570	1,660	106	85	69
14		62	314	119	381	505	1,410	1,700	1,530	119	85	69
15			200	123	432	428	1,080	1,370	1,410	118	84	66
16			397	448	446	365	1,080	1,300	1,370	96	84	63
17			239	407	428	350	1,180	1,250	1,290	106	85	62
18			449	466	460	338	1,260	1,500	1,150	119	82	60
19			384	286	463	347	1,410	2,100	1,580	105	82	58
20			226	252	525	410	2,070	2,500	1,170	105	82	57
21			157	218	407	525	2,370	3,100	560	104	82	57
22			131	198	545	585	2,640	2,650	560	104	81	54
23			113	152	505	645	2,740	2,200	180	96	81	52
24			11	101	152	384	878	2,470	2,300	180	91	50
25			12	93	159	356	1,080	1,790	2,350	180	88	48
26		12	86	161	332	1,180	1,840	2,350	230	88	80	57
27		12	78	154	308	1,180	1,290	2,400	240	88	79	62
28		12	70	145	300	1,080	1,150	2,500	244	88	78	59
29		12	64	142		1,370	1,080	2,500	244	88	76	68
30		11	61	147		1,490	932	2,000	240	88	75	68
31			61	147		960		1,300		88	75	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			58	3,570
November			22	1,310
December	688	10	169	10,400
January	466	57	170	10,500
February	545	147	358	19,900
March	1,490	280	609	37,400
April	2,740	800	1,560	92,800
May	3,100	688	1,620	99,600
June	2,320	184	1,150	68,400
July	242	74	109	6,700
August	88	75	83.2	5,120
September	78	48	64.2	3,820
The year	3,100		497	360,000

MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.

LOCATION.—Water-stage recorder in sec. 1, T. 5 N., R. 11 E., at highway bridge $1\frac{1}{4}$ miles northwest of Mokelumne Hill.

RECORDS AVAILABLE.—November, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,690 second-feet May 21 (gage height, 6.15 feet); minimum, 14 second-feet Oct. 27.

1927-1930: Maximum discharge, 23,300 second-feet Mar. 25, 1928 (gage height, 16.10 feet); minimum, that of Oct. 27, 1929.

REMARKS.—Records good. Discharge estimated Dec. 27-30, Mar. 1-12, and Sept. 21-25. Storage and diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	40	21	45	261	552	1,280	1,230	954	255	92	55
2	58	38	19	68	185	411	1,250	1,550	978	290	80	76
3	62	28	33	104	287	556	1,410	1,780	1,800	236	59	84
4	88	44	24	157	360	1,500	1,400	1,310	1,080	112	77	84
5	72	50	23	172	356	1,890	1,610	1,130	1,870	58	94	90
6	20	51	21	214	378	1,360	1,880	1,120	2,300	50	106	78
7	68	54	18	196	404	1,010	2,130	1,200	2,330	120	68	57
8	66	19	18	196	493	883	2,420	1,090	2,160	112	66	76
9	66	16	46	185	498	755	2,400	968	1,910	92	61	55
10	62	16	564	192	451	707	2,010	890	2,000	95	57	67
11	80	16	580	174	450	707	1,740	850	2,070	134	105	72
12	84	32	286	117	445	707	1,860	1,200	2,060	130	91	82
13	26	34	906	174	454	786	1,990	1,740	1,830	66	92	70
14	66	26	569	170	486	890	2,080	1,920	1,620	121	70	62
15	73	32	268	170	459	908	1,620	1,670	1,460	150	53	86
16	74	18	459	564	450	650	1,520	1,430	1,450	118	64	78
17	65	17	388	792	572	693	1,510	1,620	1,430	84	56	81
18	64	18	424	986	558	620	1,660	1,980	1,300	124	76	79
19	83	17	572	572	580	600	1,650	2,540	1,580	100	94	68
20	24	18	418	466	746	654	2,190	2,970	1,020	58	92	76
21	56	18	255	414	676	727	2,600	3,240	211	102	97	66
22	64	17	126	372	807	808	2,840	2,410	958	108	68	57
23	65	17	218	321	1,090	873	2,900	2,390	286	114	63	61
24	46	16	198	269	756	1,160	2,860	2,480	264	133	56	60
25	34	17	63	286	676	1,480	2,160	2,420	274	116	79	59
26	30	16	98	249	708	1,640	2,110	2,580	270	82	95	34
27	18	17	155	273	609	1,780	1,640	2,620	303	54	102	42
28	31	16	136	286	558	1,540	1,470	2,740	289	74	86	30
29	34	16	107	256	-----	1,770	1,400	2,500	214	76	70	63
30	18	26	126	263	-----	1,920	1,260	1,540	287	88	79	82
31	41	-----	95	263	-----	1,540	-----	1,260	-----	94	56	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	88	18	54.3	3,340
November	54	16	25.3	1,510
December	906	18	233	14,300
January	986	45	289	17,800
February	1,090	185	627	29,300
March	1,920	411	1,030	63,300
April	2,900	1,250	1,900	113,000
May	3,240	850	1,820	112,000
June	2,330	211	1,220	72,600
July	290	50	114	7,010
August	108	53	77.5	4,770
September	90	30	67.7	4,030
The year	3,240	16	612	443,000

PARDEE RESERVOIR NEAR VALLEY SPRINGS, CALIF.

LOCATION.—Water-stage recorder at Pardee Dam on Mokelumne River in SW. ¼ sec. 26, T. 5 N., R. 10 E., 5 miles north of Valley Springs, since Dec. 26, 1929. Staff gage or measurement from reference point used prior to that date. Elevation of south spillway is 567.5 feet and of crest, 580.0 feet, mean sea level datum.

RECORDS AVAILABLE.—March, 1929, to September, 1930.

REMARKS.—Pardee Reservoir provides storage for water supply and power development project of East Bay Municipal Utility District, which furnishes this record.

Daily elevation, in feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	421.5	410.7	280.5	381.8	427.6	468.1	516.6	565.0	567.7	567.2	554.5	539.2
2.....	421.1	408.2	261.8	382.2	428.4	468.9	517.8	566.1	567.9	567.1	554.0	538.6
3.....	420.7	402.5	260.0	382.8	429.3	469.7	519.1	567.4	568.1	566.9	553.8	538.0
4.....	420.4	393.0	260.5	383.8	430.3	473.6	520.1	568.0	567.9	566.7	553.2	537.4
5.....	420.0	383.5	258.5	385.0	431.4	477.5	520.0	568.0	568.2	566.3	552.8	536.7
6.....	419.7	372.5	258.5	386.5	432.6	480.2	520.2	568.1	568.3	566.0	552.2	536.1
7.....	419.2	358.5	258.0	388.2	433.8	481.9	521.4	568.1	567.8	565.5	551.6	535.8
8.....	418.8	347.0	258.0	389.7	435.4	483.4	524.2	568.0	567.3	565.2	551.1	535.2
9.....	-----	332.0	258.0	390.8	437.0	484.6	527.0	567.9	567.4	564.7	550.5	534.5
10.....	418.5	315.0	259.3	391.8	438.4	485.8	529.3	567.9	568.1	564.2	550.3	533.8
11.....	418.2	299.0	289.8	392.7	439.8	486.9	531.0	567.8	568.2	563.7	549.8	533.1
12.....	417.9	286.0	305.3	393.6	441.1	487.9	532.8	568.0	568.2	563.2	549.3	532.5
13.....	417.7	276.0	315.0	394.5	442.3	489.2	534.8	568.2	568.2	563.1	548.7	531.8
14.....	417.2	274.5	334.0	395.4	443.6	490.6	536.9	568.3	568.1	562.6	548.1	531.5
15.....	416.9	273.8	341.0	396.8	445.0	492.0	538.5	568.2	568.0	562.1	547.5	530.8
16.....	416.7	273.8	345.0	400.0	446.2	493.0	539.9	568.2	568.0	561.6	547.2	530.2
17.....	416.4	269.5	351.0	404.4	447.7	494.0	541.3	568.2	568.1	561.0	557.0	529.5
18.....	416.2	265.3	355.0	409.8	449.1	494.8	542.8	568.4	568.0	560.6	546.4	528.8
19.....	415.9	258.5	360.0	412.8	450.6	495.7	544.2	568.5	568.3	560.1	545.9	528.1
20.....	-----	258.5	366.5	414.8	452.2	496.6	546.1	568.4	568.0	560.0	545.4	527.4
21.....	415.2	259.3	369.5	416.4	454.3	497.6	548.6	568.1	567.7	559.4	544.8	527.2
22.....	414.8	260.0	371.5	418.0	456.6	498.7	551.2	568.0	568.0	559.0	544.2	526.4
23.....	414.6	260.0	372.5	419.4	459.4	499.8	553.9	568.2	567.8	558.5	543.8	525.8
24.....	414.3	260.0	374.5	420.6	461.4	501.4	556.5	568.4	567.8	558.0	543.6	525.1
25.....	413.8	260.0	376.0	421.6	462.6	503.4	558.3	568.6	567.8	557.6	543.0	524.4
26.....	413.4	259.8	376.8	422.4	464.4	505.1	560.0	568.5	567.8	557.1	542.4	523.6
27.....	412.9	260.0	377.8	423.4	465.9	508.0	561.2	568.4	567.7	556.9	541.9	522.8
28.....	412.5	260.0	378.7	424.5	467.1	510.0	562.3	568.3	567.6	556.4	541.2	522.5
29.....	412.0	260.5	379.8	425.3	-----	512.0	563.3	568.3	567.4	555.9	540.6	521.8
30.....	411.6	260.5	380.6	426.2	-----	513.9	564.2	568.0	567.3	555.5	540.0	521.2
31.....	411.1	-----	381.3	427.0	-----	515.5	-----	567.9	-----	555.0	539.6	-----

MOKELUMNE RIVER AT LANCHA PLANA, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 4, T. 4 N., R. 10 E., above the old Westmoreland suspension bridge, 1 mile east of Lancha Plana.

DRAINAGE AREA.—584 square miles.

RECORDS AVAILABLE.—June, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,240 second-feet June 7 (gage height, 7.40 feet); minimum, 5.5 second-feet Nov. 21.

1926-1930: Maximum discharge, 27,300 second-feet Mar. 25, 1928 (gage height, 19.65 feet); minimum, that of Nov. 21, 1929.

REMARKS.—Records good. Pardee Reservoir, several smaller reservoirs and two hydroelectric plants above the station regulate flow. Diversion to the East Bay Municipal Utility District started June 19, 1929. On Sept. 30, 1929, there was 26,953 acre-feet of storage in Pardee Reservoir and on Sept. 30, 1930, there was 122,332 acre-feet.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	66	281	16	14	17	31	428	224	1,120	252	494	224
2.....	53	991	27	14	16	36	304	217	714	285	509	531
3.....	52	1,400	27	14	16	34	383	189	1,520	310	125	499
4.....	53	1,500	37	20	22	60	431	448	1,170	279	486	535
5.....	54	1,500	27	19	14	74	1,680	1,060	1,510	328	485	532
6.....	48	1,420	25	28	15	57	1,680	946	2,200	297	488	550
7.....	53	995	20	20	14	39	1,120	2,900	462	532	152	
8.....	53	935	18	16	13	36	87	1,080	2,690	390	496	510
9.....	52	858	19	17	13	36	84	965	1,820	462	473	537
10.....	52	645	167	16	13	36	94	875	1,140	486	130	546
11.....	52	407	33	14	14	41	168	853	1,910	596	493	566
12.....	52	267	35	18	14	54	202	890	2,000	588	496	558
13.....	53	144	28	16	14	54	202	1,310	1,800	130	512	536
14.....	53	36	27	19	14	58	207	1,740	1,640	468	525	166
15.....	53	36	30	19	14	57	197	1,640	1,420	570	516	516
16.....	53	74	23	38	14	57	200	1,390	1,360	605	292	554
17.....	52	82	22	19	14	56	174	1,420	1,250	536	134	552
18.....	51	109	23	19	25	58	229	1,790	1,220	486	480	542
19.....	52	35	22	16	28	61	188	2,390	1,160	500	477	535
20.....	51	17	22	18	44	66	195	3,160	1,300	122	492	538
21.....	52	7	23	16	32	67	195	3,540	415	465	522	140
22.....	48	14	23	16	37	68	195	2,770	504	494	532	498
23.....	51	16	23	16	32	68	195	2,530	382	492	351	516
24.....	72	16	21	15	24	67	197	2,380	195	464	124	516
25.....	52	16	14	15	26	67	197	2,130	168	458	482	517
26.....	51	16	14	16	22	68	202	2,470	158	478	514	549
27.....	51	16	14	16	19	69	202	2,620	270	116	527	559
28.....	50	12	14	16	19	69	207	2,800	267	475	536	151
29.....	50	11	14	16	-----	250	219	2,580	255	458	536	454
30.....	50	16	14	16	-----	403	219	1,790	252	450	476	445
31.....	50	-----	14	16	-----	302	-----	1,320	-----	470	349	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	72	48	52.7	3,240
November.....	1,500	7	396	23,600
December.....	167	14	27.0	1,680
January.....	38	14	17.7	1,090
February.....	44	31	20.0	1,110
March.....	403	81	80.6	4,960
April.....	1,080	84	345	20,500
May.....	3,540	189	1,630	100,000
June.....	2,900	158	1,160	69,000
July.....	605	116	418	25,700
August.....	536	124	438	26,900
September.....	566	140	467	27,800
The year.....	3,540	7	422	306,000

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, 1930.

EXTREMES.—Maximum discharge during year, 4,060 second-feet May 21 (gage height, 9.35 feet); minimum, 13 second-feet Nov. 21 and 22.

1904-1930: Maximum discharge, 25,600 second-feet Mar. 25, 1928 (gage height, 22.45 feet); no flow July 6, Aug. 15 and 20-23, 1924.

REMARKS.—Records good except those for Oct. 2-31 and Nov. 20 to Dec. 10, for which discharge was estimated. Diversions and storage above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	82	99	14	16	20	30	352	218	1,000	228	483	252
2.....	58	799	20	16	21	38	352	221	649	228	509	454
3.....	53	1,350	36	16	18	40	810	212	1,160	266	281	489
4.....	54	1,510	30	18	20	125	186	225	1,150	272	308	522
5.....	53	1,510	36	28	24	238	1,590	1,030	1,210	263	476	520
6.....	54	1,480	27	24	17	245	1,660	923	2,030	304	483	516
7.....	51	1,120	26	53	17	74	1,510	1,150	2,730	296	520	328
8.....	54	1,000	22	26	17	54	142	1,090	2,580	307	506	326
9.....	54	930	20	27	17	45	99	940	2,230	371	468	512
10.....	53	730	50	34	17	43	86	860	858	447	300	518
11.....	53	482	131	23	16	42	120	810	1,720	498	331	526
12.....	53	283	48	28	17	48	176	835	1,590	500	479	544
13.....	52	199	38	38	17	53	194	1,200	1,750	263	490	519
14.....	52	59	31	44	17	58	200	1,720	1,570	314	506	844
15.....	53	48	82	36	17	71	191	1,750	1,390	594	516	346
16.....	55	42	34	171	17	67	194	1,480	1,270	641	378	528
17.....	56	100	26	56	15	64	194	1,450	1,210	556	198	581
18.....	58	76	25	58	17	62	184	1,750	1,150	490	299	524
19.....	59	87	25	35	26	65	203	2,310	1,600	526	450	512
20.....	56	20	24	28	43	64	191	3,080	1,300	290	466	516
21.....	54	13	24	31	42	69	194	3,500	590	322	506	300
22.....	51	13	24	24	59	69	194	2,800	348	476	520	517
23.....	50	14	24	23	93	71	194	2,450	447	515	455	494
24.....	54	14	24	19	56	73	197	2,380	218	408	178	503
25.....	60	14	23	18	71	73	197	2,030	16	470	278	495
26.....	51	14	20	18	60	74	197	2,310	141	484	493	528
27.....	48	14	17	20	48	69	194	2,590	19	247	502	553
28.....	48	13	16	18	33	71	194	2,730	250	323	512	336
29.....	53	13	16	18	-----	137	209	2,520	237	462	510	300
30.....	55	14	16	18	-----	371	215	1,820	23	422	491	402
31.....	54	-----	16	19	-----	368	-----	1,240	-----	452	344	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	82	48	54.5	3,350
November.....	1,510	13	401	23,900
December.....	131	14	29.4	1,810
January.....	171	16	32.3	1,990
February.....	93	15	30.2	1,680
March.....	371	30	95.8	5,890
April.....	1,660	86	337	20,100
May.....	3,500	212	1,600	98,400
June.....	2,730	141	1,090	64,900
July.....	641	228	399	24,500
August.....	520	178	427	26,300
September.....	544	252	452	26,900
The year.....	3,500	13	414	296,000

MOKELUMNE RIVER NEAR VICTOR, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 34, T. 4 N., R. 7 E., 1 mile north-east of Victor.

RECORDS AVAILABLE.—July, 1927, to September, 1930 (discontinued). Records not complete.

REMARKS.—Records good. Diversions and storage above station. Daily discharge not computed Nov. 2-14, Dec. 11, Jan. 16, Mar. 5, 6, and May 14 to June 20.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	39	13	12	17	25	301	207		229	451	301
2	56		15	13	18	31	351	205		233	484	339
3	49		17	13	18	33	208	200		277	388	492
4	48		26	14	17	50	218	143		285	173	488
5	47		28	19	19		1,070	775		269	428	525
6	46		30	22	18		1,470	862		318	445	518
7	43		24	37	15	98	1,530	1,020		293	480	433
8	44		22	30	14	71	499	1,020		379	469	221
9	45		20	23	13	62	152	945		379	438	486
10	44		22	29	12	57	114	845		468	373	507
11	45			22	12	56	118	845		468	193	533
12	45		56	20	12	55	173	795		554	425	525
13	45		46	34	12	59	200	1,030		350	436	520
14	46		33	33	13	62	203			185	465	438
15	45	55	31	39	13	71	191			478	479	244
16	45	50	34		14	71	190			532	452	515
17	46	82	26	79	12	66	187			447	231	514
18	46	78	24	71	12	63	147			427	111	511
19	45	93	22	43	17	65	236			447	427	510
20	44	47	21	32	29	66	191			398	429	521
21	44	32	20	30	42	67	187		827	184	462	432
22	44	24	20	27	41	68	189		351	407	478	206
23	41	20	21	24	100	69	189		516	437	456	476
24	45	20	20	22	67	68	187		272	407	256	481
25	53	19	19	19	57	66	186		193	407	162	478
26	43	17	16	19	82	65	187		171	417	436	506
27	40	16	14	19	44	65	189		188	345	464	512
28	39	16	13	18	30	65	187		254	177	476	420
29	39	16	13	17		65	197		246	388	504	190
30	39	14	13	18		302	204		233	379	487	398
31	39		12	18		379				407	393	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	69	39	45.5	2,800
February	100	12	27.5	1,530
April	1,530	114	322	19,200
May 1-13			684	17,600
June 21-30			325	6,450
July	554	177	366	22,680
August	504	111	398	24,500
September	533	190	441	26,200

MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION.—Water-stage recorder in 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, 1930 (low-water records only for 1924 and 1925).

EXTREMES.—Maximum discharge during year, 2,710 second-feet May 22 (gage height, 17.63 feet); minimum, 2.7 second-feet July 2 and 3.

1924-1930: Maximum stage, 26.58 feet Mar. 26, 1928 (discharge not determined); minimum discharge, 0.9 second-foot Sept. 3 1924.

REMARKS.—Records good. Woodbridge Canal diverts just above station. There are many other diversions and several storage reservoirs upstream.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5.5	4.0	32	15	19	26	275	48	1,120	3.6	190	184
2.....	5.5	123	29	15	19	23	340	43	898	2.7	158	94
3.....	5.5	801	27	15	18	27	188	53	581	2.7	221	328
4.....	5	1,080	27	16	18	29	38	98	1,160	3.6	41	331
5.....	5	1,180	31	19	17	120	327	391	955	4.2	118	350
6.....	5	1,200	35	22	17	315	1,220	746	1,220	5.5	196	357
7.....	5	1,080	35	26	18	189	1,330	723	1,610	5.5	221	350
8.....	4.9	830	32	38	16	92	591	838	2,100	67	235	68
9.....	4.8	770	31	32	15	64	61	769	2,310	102	214	213
10.....	4.8	694	29	27	15	50	17	680	1,450	146	232	291
11.....	4.8	508	67	29	14	40	9	620	1,140	180	45	312
12.....	4.8	334	103	25	11	38	6.5	580	1,450	268	120	327
13.....	4.6	135	60	24	9	39	25	680	1,510	233	209	327
14.....	4.8	73	48	33	9.5	44	70	1,080	1,390	24	228	327
15.....	5	44	42	35	9.5	51	82	1,330	1,240	102	249	73
16.....	5	34	40	63	9.5	61	79	1,300	1,100	253	256	221
17.....	5	22	37	137	11	60	84	1,130	1,030	260	106	312
18.....	5	26	31	74	10	52	79	1,180	930	223	31	305
19.....	5	27	28	67	10	46	114	1,480	884	201	103	305
20.....	5	27	26	44	14	49	112	1,740	896	208	196	312
21.....	5	17	25	36	21	48	115	2,060	795	33	228	298
22.....	5	16	24	32	29	49	110	2,480	174	77	256	81
23.....	5	12	23	29	44	50	71	2,520	326	138	271	211
24.....	5	7.5	21	26	76	54	56	2,240	102	177	164	359
25.....	5	5	20	24	51	51	61	2,140	20	162	36	327
26.....	5.5	4.0	19	22	70	53	60	1,930	8	155	114	320
27.....	5.5	269	17	21	55	53	54	2,000	5.5	201	303	334
28.....	4.6	93	16	20	36	50	62	2,140	5	26	301	334
29.....	3.9	51	16	20		48	59	2,280	5	153	301	89
30.....	3.9	40	15	19		138	79	2,200	4.2	174	316	185
31.....	3.9		15	19		318		1,670		162	286	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5.5	3.9	4.91	302
November.....	1,200	4.0	317	18,900
December.....	103	14	32.3	1,990
January.....	137	15	35.0	2,080
February.....	76	9	23.6	1,310
March.....	318	23	75.1	4,620
April.....	1,330	6.5	192	11,400
May.....	2,520	43	1,260	77,500
June.....	2,810	4.2	881	52,400
July.....	268	2.7	121	7,440
August.....	316	31	192	11,800
September.....	359	68	264	15,700
The year.....	2,520	2.7	284	205,000

MOKELUMNE RIVER NEAR THORNTON, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 12, T. 4 N., R. 5 E., $2\frac{1}{2}$ miles southeast of Thornton.

DRAINAGE AREA.—690 square miles.

RECORDS AVAILABLE.—July, 1926, to September, 1930 (low-water records only).

EXTREMES.—Minimum discharge during year, 6.0 second-foot Oct. 24.

1926-1930: Minimum discharge, 6.0 second-foot Sept. 13 and Oct. 24, 1929.

REMARKS.—Records good. Many diversions and several storage reservoirs above station. Discharge not computed during high stages or when affected by tide or backwater.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	7.5	45	23	23	36	299	73	1,250	27	194	238
2	7.5	7.5	38	22	23	29	308	49	1,040	25	193	158
3			34	21	23	29	288	50		24	222	236
4	9		32		22	30	82	58		23	137	378
5	9		35		21		91	178		23	101	358
6	9		36		22		962	652	1,120	23	191	378
7	9		40		22		1,170	668	1,450	24	226	378
8	8.5		38		21		833	780		26	250	193
9	8.5		36		20		191	780		32	238	171
10	8		35	33	20		89	728		122	234	299
11	8		34		19		54	656		172	139	318
12	8		36				39	632		228	89	338
13	8		75				37	680		200	191	328
14	8		57		14		65	988	1,340	152	236	328
15	8		52		14		92	1,230	1,140	78	272	188
16	8		47		14		94			217	261	165
17	8.5	52	44		14		94			290	177	290
18	8.5	45	41		15		98		936	263	80	308
19	8.5	43	38		14		98		910	223	79	308
20	8.5	41	34		17	48	132		884	240	171	318
21	8.5	36	34		18	50	132		780	130	217	318
22	8.5	30	32	39		52	131		263	82	247	174
23	8.5	29	31	36			110		308	161	261	169
24	7	26	30	34	53		85		148	171	236	330
25	7.5	23	30	31	63	50	72		74	212	110	348
26	8.5	19	30	29	57	50	74		58	185	83	318
27	8.5		28	28	65	51	63		42	111	235	338
28	8.5		28	26	45	51	67		36	78	308	348
29	8	77	26	26			60		32	209	308	191
30	7.5	52	24	24			70		39	228	318	161
31	7.5		24	24		254				180	308	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	9	7	8.29	510
December	86	24	38.5	2,370
April	1,170	37	199	11,800
May 1-15			547	16,300
July	290	23	137	8,420
August	318	79	205	12,600
September	378	158	279	16,600

COLD CREEK NEAR MOKELUMNE PEAK, CALIF.

LOCATION.—Water-stage recorder in sec. 28, T. 8 N., R. 16 E., $1\frac{1}{2}$ miles north of Salt Springs Dam and 6 miles southwest of Mokelumne Peak.

DRAINAGE AREA.—23 square miles.

RECORDS AVAILABLE.—July, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 532 second-feet May 20 (gage height, 4.45 feet); minimum not determined.

1927-1930: Maximum discharge, 2,330 second-feet Mar. 25, 1928 (gage height, 7.79 feet); minimum, 0.3 second-foot Oct. 20, 1928.

REMARKS.—Records good except those for estimated periods (Oct. 1, Jan. 1 to Mar. 31, and Aug. 26 to Sept. 30), which are fair. Gage-light record and results of discharge measurements furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.
1	0.5	0.6	0.6	4.8		87	103	94	5.5	0.4
2	.5	.6	.6	4.7		109	138	111	5	.4
3	.5	.7	.6	4.7		118	127	135	4.4	.4
4	.5	.7	.6	5		128	82	162	3.9	.3
5	.5	.7	.6			171	72	185	3.6	.3
6	.5	.7	.6			193	87	192	3.1	.3
7	.6	.6	.6			217	81	169	2.8	.3
8	.6	.6	.9			222	64	134	2.5	.3
9	.6	.6	12			185	58	128	2.2	.3
10	.6	.6	73			150	60	132	2.0	.3
11	.6	.6	24		35	148	81	120	1.7	.3
12	.5	.6	63			153	137	100	1.4	.3
13	.5	.6	118			156	162	84	1.2	.3
14	.5	.6	33			106	144	76	1.0	.3
15	.5	.6	30			96	112	68	.9	.3
16	.5	.6	56			107	114	58	.8	.3
17	.5	.6	46			122	161	46	.7	.3
18	.5	.6	71			124	224	39	.6	.3
19	.5	.6	39			168	242	32	.6	.3
20	.5	.6	22		32	221	271	26	.6	.3
21	.5	.6	14		46	238	244	23	.5	.3
22	.5	.6	11		51	252	208	18	.5	.3
23	.5	.6	12		65	237	231	15	.5	.3
24	.5	.6	10		101	190	233	13	.5	.3
25	.5	.6	8.5		116	148	224	11	.5	.3
26	.5	.6	8		129	148	226	10	.5	.3
27	.5	.6	8		113	107	234	8.5	.5	.3
28	.6	.6	6		120	97	218	7.5	.5	.3
29	.6	.6	8		157	90	160	6.5	.4	.3
30	.6	.6	7.5		143	77	102	6	.4	.3
31	.6		5.5		88		86		.4	.3

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.6	0.5	0.53	32.6
November	.7	.6	.61	36.3
December	118	.6	22.3	1,370
January			5.0	307
February			10.0	555
March	157		58.9	3,620
April	252	77	152	9,040
May	271	58	151	9,280
June	192	6	73.6	4,380
July	5.5	.4	1.60	98.4
August	.4	.3	.31	19.1
September			.3	17.9
The year	271	.3	39.8	28,800

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.—32.5 square miles (revised).

RECORDS AVAILABLE.—July, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 705 second-feet May 20 (gage height, 4.54 feet); minimum, 3.2 second-feet part of each day Sept. 14–19. 1927–1930: Maximum discharge, 3,350 second-feet Mar. 25, 1928 (gage height, 9.75 feet); no flow Sept. 8–30, 1928, Oct. 1–4 and 7–29, 1929.

REMARKS.—Records good. Discharge estimated Jan. 11–16. 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, 1929–30

Day	Oct	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5	4.8	4.1	11	17	51	185	225	152	82	4.6	4.4
2	8	4.8	4.0	28	21	51	205	315	149	81	4.6	4.4
3	8	4.8	4.0	69	24	57	238	295	151	56	4.6	4.4
4	8	4.8	4.0	63	24	69	240	183	219	11	4.6	4.6
5	16	4.8	4.0	57	25	69	328	149	270	22	4.6	4.6
6	24	4.8	4.0	54	45	57	400	167	288	46	4.4	4.0
7	24	4.7	4.0	54	82	58	430	169	262	50	4.4	3.5
8	24	4.7	4.8	54	96	61	439	137	225	54	4.4	3.5
9	24	4.7	12	53	94	60	388	122	191	65	4.4	3.7
10	24	4.7	35	52	84	59	312	119	201	64	4.4	3.7
11	24	4.7	12	52	79	70	278	160	205	63	4.2	3.7
12	24	4.6	22	52	86	92	318	285	181	63	4.2	3.5
13	24	4.6	33	52	96	105	364	346	152	63	4.1	3.4
14	24	4.6	18	52	106	98	245	325	131	63	4.1	3.3
15	24	4.6	25	74	118	76	195	250	122	56	4.1	3.3
16	25	4.6	31	74	120	60	211	225	106	42	4.1	3.3
17	26	4.4	25	74	120	56	242	322	88	43	4.4	3.3
18	26	4.4	144	72	131	56	260	439	66	36	4.4	3.3
19	26	4.4	124	59	130	62	320	469	61	24	4.2	3.3
20	26	4.4	51	57	134	88	442	506	52	24	4.2	3.5
21	26	4.2	39	54	98	119	463	430	43	24	4.1	3.8
22	16	4.2	33	46	110	136	492	352	36	20	4.1	3.8
23	6	4.2	28	18	98	156	475	385	35	9	4.1	3.8
24	5.5	4.2	24	17	74	221	406	348	28	5.5	4.1	4.0
25	5.5	4.2	22	17	70	275	305	325	42	5	4.4	6.5
26	5.5	4.2	19	16	64	300	334	326	77	4.8	4.4	24
27	5.5	4.2	16	16	56	288	225	361	82	4.7	4.2	24
28	5.5	4.1	14	16	55	265	199	358	84	4.7	4.2	26
29	5	4.1	12	16	-----	334	191	288	82	4.7	4.2	33
30	4.8	4.1	12	16	-----	346	161	191	82	4.7	4.2	33
31	4.8	-----	12	16	-----	213	-----	123	-----	4.6	4.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	26	4.8	16.3	1,000
November	4.8	4.1	4.49	267
December	144	4.0	25.7	1,580.
January	74	11	43.9	2,700
February	134	17	50.6	4,486
March	346	51	129	7,980
April	492	161	310	18,400
May	506	119	280	17,200
June	288	28	129	7,680
July	82	4.6	35.5	2,180
August	4.6	4.1	4.30	264
September	33	3.3	7.89	469
The year	506	3.3	88.7	64,200

MIDDLE FORK OF MOKELUMNE RIVER AT WEST POINT, CALIF.

LOCATION.—Water-stage recorder 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.

DRAINAGE AREA.—67.2 square miles.

RECORDS AVAILABLE.—October, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 460 second-foot Mar. 4 (gage height, 3.40 feet); minimum, 0.3 second-foot Aug. 23.

1911-1930: Maximum discharge, 2,550 second-foot Jan. 23, 1914 (gage height, 10.0 feet at old site, 1,000 feet upstream); minimum, 0.2 second-foot Aug. 18-23, 1924.

REMARKS.—Records good. Discharge estimated Nov. 25 to Dec. 1. Several diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	2.3	3.0	4.5	18	45	82	55	24	3.2	0.7	0.7
2	1.0	2.6	3.0	4.5	18	43	75	52	24	3.4	.7	.6
3	1.0	2.8	3.0	4.5	18	118	75	70	22	3.4	.8	.6
4	1.0	2.6	3.4	7	19	292	71	63	20	2.9	.7	.8
5	1.0	2.4	3.2	23	19	321	71	55	19	2.4	.7	.8
6	1.0	2.4	3.2	13	20	197	75	52	17	1.8	.7	.6
7	1.2	2.3	3.2	12	20	131	78	56	16	1.7	.6	.5
8	1.4	2.3	3.5	9	20	102	81	53	16	1.8	.6	.7
9	1.5	2.3	10	9.5	20	85	78	49	16	1.8	.5	.7
10	1.6	2.3	42	10	20	72	72	47	15	1.6	.5	.8
11	1.6	2.4	22	7.5	19	68	67	45	14	1.5	.4	.9
12	1.6	2.6	16	11	18	66	65	45	13	1.3	.4	.8
13	1.6	2.6	27	11	18	66	85	44	12	1.3	.4	.8
14	1.6	2.6	15	11	18	95	130	43	12	1.1	.4	.8
15	1.5	2.9	12	14	19	90	109	42	11	.9	.4	.9
16	1.5	2.9	19	81	20	80	96	43	10	1.0	.5	.8
17	1.6	2.9	14	58	20	71	88	44	8.5	.9	.6	.8
18	1.8	2.9	11	126	20	66	85	43	8	.9	.6	.8
19	1.9	2.8	9	57	20	60	83	42	7.5	1.1	.5	.8
20	1.9	2.8	8	45	55	59	85	42	7.5	1.0	.5	.7
21	1.9	2.8	7	35	40	60	85	41	7.5	.8	.5	.7
22	1.9	2.8	6	28	133	61	85	38	7	.9	.5	.9
23	1.8	2.6	5.5	24	119	63	83	36	6.5	.9	.4	.9
24	1.8	2.6	5	22	75	69	82	33	5.5	.9	.4	1.2
25	1.6	2.7	4.9	20	76	80	75	30	4.9	.8	.6	1.4
26	1.6	2.7	4.9	23	67	88	76	29	4.5	.8	.8	1.3
27	1.6	2.8	4.9	25	55	92	71	27	3.9	.8	.8	1.2
28	1.8	2.8	4.7	22	52	90	65	27	3.7	.8	.7	1.1
29	1.6	2.9	4.7	20		93	62	26	6	.8	.7	1.0
30	1.7	2.9	4.7	19		99	59	28	3.5	.7	.6	1.3
31	2.0		4.7	18		92		26		.7	.6	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.0	1.0	1.54	94.7
November	2.9	2.3	2.64	157
December	42	3.0	9.27	570
January	126	4.5	25.0	1,540
February	133	18	37.0	2,050
March	321	43	97.2	5,980
April	130	59	79.8	4,750
May	70	26	42.8	2,620
June	24	3.5	11.5	684
July	3.4	.7	1.42	87.3
August	.8	.4	.57	35.0
September	1.4	.5	.86	51.2
The year	321	.4	25.7	18,600

SOUTH FORK OF MOKELUMNE RIVER NEAR RAILROAD FLAT, CALIF.

LOCATION.—Water-stage recorder 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.

DRAINAGE AREA.—36.9 square miles.

RECORDS AVAILABLE.—October, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 214 second-feet Mar. 4 (gage height, 2.48 feet); minimum, 2.0 second-feet Sept. 1.

1911-1930: Maximum discharge, 3,330 second-feet Jan. 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 above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	3.0	3.4	6	15	33	76	50	23	9	4.4	2.4
2	2.6	2.8	3.2	5.5	16	33	71	49	21	8	4.2	2.4
3	2.6	2.7	3.2	5.5	17	68	70	57	21	8	4.0	2.6
4	2.6	2.7	3.4	7.5	17	152	69	51	19	8	3.8	2.6
5	2.6	2.7	3.4	21	18	174	70	48	19	8	3.8	2.6
6	2.7	2.7	3.4	10	18	117	74	47	19	7.5	3.6	2.6
7	2.7	2.7	3.6	9	18	85	76	49	18	7.5	3.6	2.4
8	2.8	2.7	4.2	7	18	70	79	47	17	7.5	3.6	2.2
9	3.0	2.7	9	7.5	18	62	75	45	17	7	3.6	2.6
10	3.2	2.7	26	7.5	17	57	68	44	16	7.5	3.4	2.8
11	3.0	2.8	13	4.6	17	55	65	43	15	7	3.2	2.8
12	3.0	3.0	13	6.5	17	56	63	40	14	7	3.2	2.8
13	2.8	3.0	21	7.5	16	57	90	38	14	7	3.0	2.7
14	2.7	3.2	11	7.5	16	70	111	38	13	6.5	3.2	2.6
15	2.6	3.4	9.5	15	16	64	93	37	13	6	3.2	2.6
16	2.7	3.2	19	56	17	59	85	38	12	6	3.4	2.2
17	2.7	3.0	11	44	16	55	82	37	12	6	3.2	2.2
18	3.0	3.0	9.5	64	16	52	80	35	11	6	3.0	2.1
19	3.0	3.0	8	37	17	50	80	33	12	5.5	3.2	2.1
20	3.0	3.0	7	29	39	51	80	31	13	5.5	3.0	2.1
21	2.8	3.0	6.5	24	27	54	78	31	13	5	2.8	2.2
22	2.6	3.2	6.5	19	80	55	76	30	12	5	2.8	2.8
23	2.6	3.0	6	18	73	57	74	30	12	4.8	2.8	3.2
24	2.6	3.0	6	17	52	64	71	28	11	5	3.0	3.4
25	2.6	3.0	6	17	54	72	66	27	11	5	3.4	3.4
26	2.7	3.4	6	19	48	80	66	26	9.5	5	4.4	3.0
27	3.0	3.2	6	19	41	83	61	25	10	5	3.8	2.8
28	3.0	3.2	6	18	37	83	57	24	9.5	4.8	3.2	2.7
29	2.8	3.2	6	16	---	88	55	25	9.5	4.8	3.0	4.0
30	3.0	3.4	5.5	16	---	93	53	26	9	4.6	2.8	5
31	3.0	---	6	16	---	83	---	26	---	4.2	2.7	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3.2	2.6	2.79	172
November	3.4	2.7	2.99	178
December	26	3.2	8.11	499
January	64	4.6	18.0	1,110
February	80	15	27.5	1,530
March	174	33	72.0	4,450
April	111	53	73.8	4,390
May	57	24	37.3	2,290
June	23	9	14.2	845
July	9	4.2	6.25	384
August	4.4	2.7	3.36	207
September	5	2.1	2.73	162
The year	174	2.1	22.4	16,200

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, 1930.

EXTREMES.—Maximum mean daily discharge during year, 263 second-feet June 13; no flow Nov. 28 to Apr. 3.

1926-1930: Maximum mean daily discharge, 263 second-feet May 6, 1929, and June 13, 1930; no flow during part of each year.

REMARKS.—Records fair. This canal diverts from a reservoir on Mokelumne River in sec. 34, T. 4 N., R. 6 E., in Woodbridge. The water is used for irrigation in the territory south and west of Woodbridge.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1.....	48	15	0	112	150	220	196	138
2.....	46	35	0	120	158	208	202	126
3.....	35	109	0	116	166	220	196	146
4.....	31	122	5	109	170	244	170	130
5.....	30	129	60	95	173	244	182	134
6.....	29	124	70	116	191	256	187	142
7.....	28	115	102	116	191	250	187	150
8.....	25	106	88	116	197	250	196	134
9.....	20	107	112	116	197	232	205	158
10.....	17	108	85	120	191	238	200	170
11.....	15	92	69	120	229	226	182	170
12.....	14	79	74	123	229	238	200	166
13.....	13	86	82	126	263	220	192	170
14.....	13	109	85	130	249	196	187	170
15.....	18	77	82	138	256	208	174	150
16.....	22	49	76	138	249	214	174	170
17.....	22	40	72	138	242	208	182	178
18.....	23	46	59	146	249	208	166	187
19.....	23	48	46	150	242	220	178	182
20.....	22	45	46	154	249	214	178	174
21.....	21	34	37	150	249	196	178	170
22.....	18	23	52	154	222	232	182	142
23.....	17	15	75	150	256	250	174	154
24.....	15	12	98	150	242	262	166	146
25.....	16	8.5	85	154	236	232	166	142
26.....	17	7.5	95	150	210	208	174	150
27.....	13	2.1	95	158	179	196	170	154
28.....	11	0	98	162	203	180	154	154
29.....	12	0	102	166	229	196	150	126
30.....	14	0	106	162	229	196	150	146
31.....	15	-----	-----	150	-----	190	150	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	48	11	21.4	1,320
November.....	129	0	53.1	3,460
April.....	112	0	68.5	4,080
May.....	166	95	136	8,360
June.....	263	150	217	12,900
July.....	262	180	221	13,600
August.....	205	150	179	11,000
September.....	187	126	154	9,160
The year.....	263	0	88.2	63,900

NOTE.—No flow during months for which no discharge 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 south west of Ione.

DRAINAGE AREA.—279 square miles.

RECORDS AVAILABLE.—October, 1911, to June, 1912; December, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,120 second-feet Mar. 5 (gage height, 10.56 feet); no flow Oct. 1 to Jan. 5 and May 22 to Sept. 30.

1925-1930: Maximum discharge, 5,450 second-feet Mar. 25, 1928 (gage height, 11.90 feet); no flow during part of each year.

REMARKS.—Records good. Small diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1-----	0	34	174	48	17	16-----	592	9.5	219	56	2.4
2-----	0	28	138	44	17	17-----	277	9	160	45	1.3
3-----	0	26	130	40	17	18-----	557	7	133	39	.4
4-----	0	24	699	40	32	19-----	245	6.5	121	30	.2
5-----	0	21	1,970	37	28	20-----	156	33	107	25	.6
6-----	20	19	1,600	34	23	21-----	136	67	94	22	.4
7-----	75	17	617	32	23	22-----	102	91	84	22	0
8-----	36	17	379	29	28	23-----	78	378	77	22	0
9-----	25	16	254	26	26	24-----	64	253	70	23	0
10-----	44	13	206	23	23	25-----	58	318	66	21	0
11-----	27	13	166	21	20	26-----	57	375	64	17	0
12-----	24	14	146	19	19	27-----	65	253	57	20	0
13-----	56	14	129	25	10	28-----	53	213	48	21	0
14-----	67	13	140	88	9.5	29-----	42	-----	44	24	0
15-----	82	10	212	85	6.5	30-----	38	-----	41	18	0
						31-----	36	-----	51	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January-----	592	0	97.2	5,980
February-----	378	6.5	81.9	4,550
March-----	1,970	41	271	16,700
April-----	88	17	33.2	1,980
May-----	32	0	9.82	604
The year-----	1,970	0	41.1	29,800

NOTE.—No flow during 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 Southern Pacific Co.'s railway trestle 1 mile south of Galt.

DRAINAGE AREA.—346 square miles.

RECORDS AVAILABLE.—December, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,480 second-feet Mar. 6 (gage height, 8.80 feet); no flow Oct. 1 to Jan. 10 and May 18 to Sept. 30.

1926-1930: Maximum discharge, 5,250 second-feet Mar. 26, 1928 (gage height, 10.2 feet); no flow several months each year.

REMARKS.—Records good. Small irrigation diversions above station.

Daily and monthly discharge, in second-feet, of Dry Creek near Galt, Calif., 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1.....	0	21	170	50	9.5	16.....	93	.4	185	68	0.8
2.....	0	17	144	41	10	17.....	341	.2	192	48	.2
3.....	0	14	117	36	10	18.....	391	.1	151	40	0
4.....	0	12	166	33	11	19.....	467	.1	123	31	0
5.....	0	10	1,140	32	19	20.....	192	.2	111	22	0
6.....	0	8.5	2,230	27	15	21.....	165	30	99	17	0
7.....	0	7.5	1,080	24	12	22.....	123	39	85	14	0
8.....	0	6	645	22	13	23.....	84	130	76	13	0
9.....	0	4.6	380	19	14	24.....	60	235	70	14	0
10.....	0	3.0	235	16	13	25.....	46	192	65	14	0
11.....	9.5	1.4	180	14	12	26.....	40	325	63	12	0
12.....	4.8	1.7	154	13	9.5	27.....	47	275	58	11	0
13.....	14	1.7	137	13	8.5	28.....	46	185	51	12	0
14.....	38	1.3	120	32	4.3	29.....	30	-----	42	14	0
15.....	59	.7	160	94	2.3	30.....	23	-----	39	13	0
						31.....	20	-----	36	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	467	0	74.0	4,550
February.....	325	.1	54.4	3,020
March.....	2,230	36	274	10,800
April.....	94	11	27.0	1,610
May.....	19	0	5.29	325
The year.....	2,230	0	36.4	26,300

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

GOOSE CREEK NEAR ELLIOTT, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 29, T. 5 N., R. 8 E., $1\frac{1}{2}$ miles above mouth and $4\frac{1}{2}$ miles northeast of Elliott.

DRAINAGE AREA.—8.5 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 263 second-feet Mar. 4 (gage height, 5.30 feet); no flow for several months during year.

1927-1930: Maximum discharge, 271 second-feet Mar. 25, 1928 (gage height, 5.36 feet); no flow for several months each year.

REMARKS.—Records good. No diversions.

Daily and monthly discharge, in second-feet, 1927-30

Day	Jan.	Feb.	Mar.	Day	Jan.	Feb.	Mar.	Day	Jan.	Feb.	Mar.
1.....	0	0.7	2.3	11.....	0.7	0.1	2.8	21.....	7	0.2	0.5
2.....	0	.7	1.6	12.....	5.5	.1	2.1	22.....	4.8	5.5	.4
3.....	0	.5	2.5	13.....	8	.1	1.5	23.....	3.8	30	.3
4.....	0	.4	70	14.....	17	0	2.8	24.....	2.8	11	.2
5.....	0	.4	97	15.....	15	0	4.1	25.....	2.3	25	.2
6.....	0	.4	55	16.....	94	0	3.6	26.....	2.8	10	.2
7.....	2.7	.2	11	17.....	28	0	2.8	27.....	2.8	6	.1
8.....	.5	.1	7	18.....	25	0	1.4	28.....	1.8	3.5	0
9.....	3.6	.1	4.6	19.....	9	0	1.0	29.....	1.3	-----	0
10.....	4.2	.1	3.6	20.....	7.5	.4	.9	30.....	1.1	-----	0
								31.....	1.1	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January.....	94	0	8.14	501
February.....	30	0	3.41	189
March.....	97	0	9.02	555
The year.....	97	0	1.72	1,240

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

SUTTER CREEK AT SUTTER CREEK, CALIF.

LOCATION.—Staff gage in sec. 7, T. 6 N., R. 11 E., three-eighths of a mile west of Sutter Creek.

DRAINAGE AREA.—53.2 square miles.

RECORDS AVAILABLE.—February, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,080 second-feet Mar. 5 (gage height, 4.00 feet); minimum, 0.8 second-foot June 26-28, July 2, 4-6, 28 and 31.

1922-1930: Maximum stage, 7.5 feet Feb. 6, 1925 (discharge not determined); practically no flow except for town waste during summer of 1924.

REMARKS.—Records good. Discharge estimated Feb. 21 and Apr. 27 to May 2. Stream regulated to some extent by a small dam above town of Sutter Creek and by release of mine water.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	1.0	1.1	2.3	3.8	20	45	19	12	4.4	0.9	0.9	1.2
2.	.9	1.2	2.3	3.8	19	40	18	12	3.8	.8	1.1	1.3
3.	.9	1.2	2.6	3.4	18	103	16	26	3.4	.9	1.1	1.4
4.	.9	1.1	2.3	9	19	320	15	21	3.3	.8	1.2	1.3
5.	1.0	1.1	2.3	25	18	600	14	19	3.1	.8	1.1	1.3
6.	1.0	1.1	2.1	35	16	320	14	17	2.8	.8	1.4	1.3
7.	1.0	1.1	2.3	30	15	86	13	16	3.0	.9	1.2	1.4
8.	1.1	1.1	8.5	33	12	43	14	14	3.0	1.0	1.2	1.5
9.	1.1	1.0	16	30	9	37	12	14	2.8	1.0	1.2	1.4
10.	1.2	1.1	23	24	8.5	35	11	13	2.6	1.0	1.1	1.4
11.	1.2	1.1	16	20	8.5	32	11	12	2.3	.9	1.1	1.4
12.	1.2	1.2	18	21	8.5	28	9	12	2.0	1.0	1.3	1.4
13.	1.2	1.2	32	24	8.5	27	27	11	1.8	1.0	1.2	1.4
14.	1.2	1.2	30	21	8.5	25	30	11	1.5	1.0	1.2	1.4
15.	1.2	1.4	38	22	8	43	25	10	1.5	1.0	1.3	1.4
16.	1.2	1.4	26	18	8	53	21	10	1.4	1.0	1.3	1.4
17.	1.2	1.4	11	24	9	36	20	9.5	1.2	1.0	1.2	1.4
18.	1.1	1.5	8	22	9.5	35	18	10	1.2	1.0	1.1	1.4
19.	1.1	1.6	6.5	18	8	32	16	9	1.2	1.0	1.2	1.4
20.	1.0	1.7	6	96	9	30	14	8	1.1	1.0	1.3	1.4
21.	1.0	1.8	5.5	178	9	29	14	7	1.0	1.0	1.1	1.4
22.	1.1	2.1	5	120	25	27	12	5.5	1.0	1.3	1.2	1.5
23.	1.1	2.1	5	62	27	27	12	6	.9	2.1	1.2	1.5
24.	1.1	2.1	5	32	68	25	12	5	.9	1.0	1.2	1.4
25.	1.1	2.3	5	22	103	25	10	4.8	.9	1.0	1.5	1.4
26.	1.1	2.3	4.8	25	165	24	15	5	.8	.9	1.3	1.4
27.	1.1	2.3	4.8	21	99	22	14	5	.8	.9	1.3	1.4
28.	1.1	2.3	4.4	20	55	21	14	4.4	.8	.8	1.3	1.3
29.	1.1	2.4	4.4	19	-----	20	13	4.8	.9	1.0	1.5	1.5
30.	1.0	2.6	4.1	19	-----	20	13	4.2	.9	.9	1.4	1.6
31.	1.0	-----	4.1	20	-----	19	-----	4.1	-----	.8	1.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1.2	0.9	1.08	66.4
November	2.6	1.0	1.57	93.4
December	38	2.1	9.91	609
January	178	3.4	32.9	2,020
February	165	8	28.2	1,570
March	600	19	71.9	4,420
April	30	9	15.5	922
May	26	4.1	10.4	640
June	4.4	.8	1.88	112
July	2.1	.8	.98	60.3
August	1.5	.9	1.23	75.6
September	1.6	1.2	1.40	83.3
The year	600	.8	14.8	10,700

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, 1930.

EXTREMES.—Maximum discharge during year, 1,550 second-feet Mar. 5 (gage height, 8.00 feet); minimum, 0.7 second-foot Aug. 20–27 and Sept. 8–10.

1911–1930: Maximum discharge, about 7,600 second-feet Mar. 25, 1928 (gage height, 15.2 feet); no flow July 17 to Oct. 7, 1924, and July 23 to Sept. 29, 1926.

REMARKS.—Records fair. Irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	2.8	4.4	19	86	182	360	182	92	7	1.6	1.0
2	1.3	2.8	4.4	18	86	182	336	182	90	7	1.6	1.0
3	1.3	3.0	4.4	17	90	182	300	182	88	7	1.6	.8
4	1.3	3.1	4.4	16	93	1,100	280	204	86	7	1.6	.8
5	1.0	3.1	4.4	142	96	1,550	280	200	80	6.5	1.6	.8
6	1.3	3.1	4.4	80	99	960	280	200	74	6	1.6	.8
7	1.6	3.1	4.4	70	102	500	300	193	68	5.5	1.6	.8
8	1.6	2.8	4.4	60	106	366	336	190	68	5.5	1.3	.7
9	2.2	2.8	16	50	114	308	320	185	64	4.4	1.3	.7
10	2.8	2.8	172	42	112	300	308	182	60	4.4	1.2	.7
11	2.8	2.8	182	37	109	250	280	182	56	3.6	1.1	1.0
12	2.8	2.8	122	33	106	250	280	175	52	3.6	1.1	1.0
13	2.5	3.1	114	32	104	254	322	172	47	3.2	1.0	1.0
14	2.2	3.1	106	30	102	366	500	170	42	2.8	1.0	1.3
15	2.2	3.1	56	29	99	308	366	168	40	2.8	1.0	1.6
16	2.2	3.1	193	382	99	280	320	165	37	2.8	1.0	1.6
17	2.2	3.8	122	300	99	250	308	162	37	2.2	.9	1.3
18	2.2	4.4	90	684	99	228	308	160	37	2.2	.8	1.3
19	2.2	4.4	56	350	99	230	308	160	42	2.2	.8	1.3
20	2.2	4.4	42	204	228	230	308	155	33	2.0	.7	1.3
21	2.2	4.4	29	180	182	230	336	155	29	1.8	.7	1.2
22	2.2	4.4	29	142	200	241	320	155	28	1.8	.7	1.0
23	2.2	4.4	26	132	430	250	308	155	26	2.2	.7	1.0
24	2.2	4.4	25	122	300	254	300	152	22	2.2	.7	1.6
25	1.6	4.4	24	106	300	300	267	142	22	2.2	.7	1.6
26	1.6	4.4	23	106	250	320	280	130	19	2.8	.7	2.8
27	1.6	4.4	22	102	200	366	300	120	16	2.2	.7	2.8
28	1.6	4.4	21	97	182	366	241	106	14	1.6	1.0	2.8
29	1.6	4.4	20	92	---	382	210	105	12	1.6	1.0	2.8
30	1.6	4.4	19	90	---	398	182	100	11	1.6	1.3	2.8
31	2.8	---	19	88	---	380	---	92	---	1.6	1.2	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.8	1.0	1.94	119
November	4.4	2.8	3.61	215
December	193	4.4	50.4	3,100
January	684	16	124	7,620
February	430	86	149	8,280
March	1,550	182	379	23,300
April	500	182	305	18,100
May	204	92	161	9,900
June	92	11	46.4	2,760
July	7	1.6	3.53	217
August	1.6	.7	1.09	67.0
September	2.8	.7	1.37	81.5
The year	1,550	.7	102	73,800

* Estimated.

COSUMNES RIVER AT MICHIGAN BAR CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 36, T. 8 N., R. 8 E., at highway bridge at Michigan Bar, $5\frac{1}{2}$ miles southwest of Latrobe since July 10. Prior to that date a staff gage at same site was used.

DRAINAGE AREA.—524 square miles.

RECORDS AVAILABLE.—October, 1907, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,090 second-feet Mar. 5 (gage height, 6.80 feet); minimum, 0.9 second-foot Aug. 20.

1907–1930: Maximum discharge, 23,800 second-feet Feb. 6, 1925 (gage height, 11.2 feet); no flow part of 1908, 1918, 1919, and 1924–1926.

REMARKS.—Records good. Diversions above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.0	5	10	39	193	430	640	370	193	29	4.2	2.0
2.....	1.0	5	10	39	200	370	640	370	193	28	4.0	2.0
3.....	1.0	5	10	39	200	400	560	370	187	28	3.8	1.8
4.....	1.6	5	10	39	212	2,080	560	460	168	26	3.8	2.0
5.....	2.5	5	10	430	212	4,360	560	370	162	22	3.5	2.2
6.....	2.5	5	10	212	212	3,380	600	370	157	22	3.2	2.0
7.....	2.5	5	10	262	223	1,510	640	430	136	22	3.0	2.2
8.....	2.5	5	10	178	230	1,060	560	370	130	22	3.0	2.2
9.....	2.5	7	18	178	230	810	560	370	119	18	2.8	2.2
10.....	5	7.5	136	149	230	720	490	320	115	19	2.5	2.2
11.....	5	7.5	370	162	230	720	490	320	115	18	2.4	2.2
12.....	5	7.5	162	200	223	640	490	320	115	16	2.4	2.5
13.....	5	7.5	295	178	223	640	560	320	104	14	2.4	3.0
14.....	5	7.5	193	162	212	680	1,010	320	96	14	2.0	4.2
15.....	5	7.5	157	168	193	810	810	320	96	14	1.6	4.8
16.....	5	7.5	295	1,370	193	720	680	320	96	13	1.4	4.2
17.....	5	7.5	193	810	193	640	640	345	86	11	1.2	3.8
18.....	5	10	136	1,510	193	560	560	370	79	11	1.0	4.2
19.....	5	10	115	720	193	490	600	345	64	10	1.2	4.0
20.....	5	10	107	525	310	490	640	345	64	8.5	1.0	3.8
21.....	5	10	88	430	400	490	640	345	61	8	1.0	3.5
22.....	5	10	76	320	430	490	640	320	58	7.5	1.2	3.2
23.....	5	10	67	270	1,300	560	640	320	51	7	1.2	3.2
24.....	5	10	64	230	720	560	640	310	51	7	1.2	3.5
25.....	5	10	51	230	720	640	560	270	51	6.5	1.2	4.8
26.....	5	10	51	230	640	680	490	262	41	6	1.6	5
27.....	5	10	51	280	560	765	525	250	39	5.5	1.9	5
28.....	5	10	50	230	490	765	490	230	39	5	1.8	5.5
29.....	4.5	10	49	193	-----	810	430	230	37	5	2.4	6
30.....	3.8	10	39	193	-----	810	430	250	29	5	3.2	6
31.....	4.8	-----	39	193	-----	720	-----	230	-----	4.5	2.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5	1.0	4.04	248
November.....	10	5	7.9	470
December.....	370	10	93	5,720
January.....	1,510	39	328	20,200
February.....	1,300	193	342	19,000
March.....	4,360	370	929	57,100
April.....	1,010	430	592	35,200
May.....	460	230	327	20,100
June.....	193	29	97.7	5,810
July.....	29	4.5	14	861
August.....	4.2	1.0	2.24	138
September.....	6	1.8	3.44	205
The year.....	4,360	1.0	228	165,000

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 and 18 miles southwest of Lakeview.

DRAINAGE AREA.—211 square miles.

RECORDS AVAILABLE.—January, 1909, to September, 1919; February to September, 1921; October, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 57 second-feet June 18, 21, 23, 26, and 28 (gage height, 1.44 feet); no flow Aug. 31 to Sept. 30.

1909-1919, 1921, 1925-1930: Maximum discharge (estimated), 3,000 second-feet Mar. 1 and 2, 1910; no flow at times.

REMARKS.—Records fair, October to January; poor, February to August. Considerable regulation caused by operation of Drew Creek Reservoir, 1 mile above station. The North Drew Canal of the Goose Lake Valley Irrigation Co. diverts water around station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1				1	1	7					
2		2	1						38	44	49
3	2				2	8	16	11			
4		2	1	1					38		47
5	2				4	9	16	11		44	
6		2		1			12				41
7	2		1		14				41	44	
8			2	1	25	10		12			
9	2	2					12		46	44	34
10						10		12			
11		2		1					46		35
12	2		3				9	16		35	
13				1	16	11					31
14	2	2	6				9		46	35	
15					12	12		12			
16		2	8	1					49	40	22
17	2				9	13	9	22			
18		2	13	1					57		17
19	2				6		9	20		47	
20				1		18		20			12
21	2	2	13				9	20	57	47	
22	2		8		5	14					
23		2		1			8		57		9
24	2				4	15	9	24		53	
25		2	6	1							6
26	2	0			5	15	9	24	57	53	
27				1							3
28	2	1	3				10		57	49	
29			2	1		15		38			
30		1					10		46	49	3
31	2					15		38		49	

Month	Mean	Run-off in acre-feet	Month	Mean	Run-off in acre-feet
October	2.0	123	May	20.7	1,270
November	1.7	101	June	48.8	2,900
December	5.2	320	July	45.2	2,780
January	1.0	61	August	22.1	1,360
February	8.6	478			
March	12.3	756	The year	14.9	10,800
April	10.5	625			

NOTE.—No record on days for which no discharge is shown. Monthly mean discharge is mean for days for which records are published. No flow during September.

Monthly stage and contents of Drew Creek Reservoir near Lakeview, Oreg., 1929-30

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.....	20.5	861	-----	May 5-7.....	* 41.8	* 19,560	-----
Oct. 31.....	18.3	628	-233	May 31.....	40.8	17,400	-1,940
Nov. 30.....	18.1	610	-18	June 30.....	36.0	9,310	-8,090
Dec. 31.....	26.0	1,890	+1,280	July 31.....	29.4	3,164	-6,146
Jan. 31.....	26.2	1,948	+58	Aug. 31.....	-----	408	-2,756
Feb. 28.....	37.2	11,050	+9,102	Sept. 30.....	-----	408	0
Mar. 31.....	40.6	17,000	+5,950	The year.....	-----	-----	-453
Apr. 30.....	41.7	19,340	+2,340				

* Maximum for year.

Monthly run-off, in acre-feet, of North Drew Canal near Lakeview, Oreg., 1929-30

Month	Run-off
May.....	1,400
June.....	4,370
July.....	4,600
August.....	2,860
The year.....	13,200

NOTE.—No flow during 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, 1930.

EXTREMES.—Maximum discharge during year, 204 second-feet Dec. 1st (gage height, 3.10 feet); minimum, 0.3 second-foot Feb. 13.

1908-1919, 1925-1930: 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 gate; no flow at times.

REMARKS.—Records good except those for estimated period (Jan. 7-27), which are poor. Considerable regulation caused by operation of Cottonwood Reservoir, 200 feet above gage. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, of Cottonwood Creek near Lakeview, Oreg., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.9	1.9	5.4	2.4	7.0	4.3	18	33	17	0.9	0.9
2	.6	.9	1.9	4.3	2.4	7.0	9.8	17	33	17	.9	.9
3	.6	.9	2.4	4.3	2.4	7.0	9.8	17	33	17	.9	.9
4	.6	.9	1.9	4.3	7.7	21	9.8	17	33	17	.9	.9
5	.6	.9	1.9	2.9	7.7	21	9.1	13	33	14	.9	.9
6	.9	.9	2.9	2.9	60	21	9.1	13	33	14	.9	.9
7	1.3	.9	3.3		69	21	9.1	13	24	17	.8	.9
8	1.3	.9	3.3		60	10	9.1	13	25	13	.8	.9
9	1.3	.6	15		53	3.8	14	13	25	13	.8	.9
10	1.3	.6	12		34	3.8	14	13	29	13	.8	.9
11	.9	.6	7.0		53	40	14	13	29	13	1.4	.9
12	.9	.6	13		53	40	14	13	32	13	1.1	.9
13	.9	.6	18		.3	40	14	13	29	13	.9	.9
14	.9	.6	12		1.3	40	14	13	29	13	.9	.9
15	.9	.6	69		1.6	3.8	30	13	29	13	.9	.9
16	.9	.6	204		1.6	3.8	25	13	28	12	.9	.9
17	.9	1.3	21	2.2	1.6	3.8	25	13	32	15	.9	.9
18	.9	1.3	88		1.9	43	21	13	32	15	.9	.9
19	.9	.9	125		1.9	43	21	13	31	21	.9	.9
20	.9	.9	32		1.9	7.0	21	13	31	21	.9	.9
21	.9	.9	17		1.9	4.3	21	13	31	20	.9	.9
22	.9	.9	17		1.9	3.8	20	14	31	18	.9	.9
23	.9	.9	14		29	2.9	20	16	27	17	.9	.9
24	.9	.9	13		29	2.9	20	19	23	17	.9	.9
25	.9	.9	13		29	2.9	20	19	23	3.8	.9	.9
26	.9	.9	6.5		29	2.9	20	29	23	3.8	.9	.9
27	.9	1.4	5.9		10	2.9	20	34	23	3.3	.9	.9
28	.9	1.9	5.4	2.4	8.4	2.9	20	34	19	2.4	.9	1.1
29	.9	1.9	5.4	2.4		1.9	20	40	19	1.6	.9	1.3
30	.9	1.9	4.8	2.4		1.9	19	40	17	1.3	.9	1.3
31	.9		4.3	2.4		1.9		40		.9		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1.3	0.6	0.90	55
November	1.9	.6	.96	57
December	204	1.9	23.9	1,470
January	5.4		2.58	159
February	69	.3	19.8	1,100
March	43	1.9	13.5	830
April	30	4.3	16.6	988
May	40	13	18.5	1,140
June	33	17	28.0	1,670
July	21	.9	12.6	775
August	1.4	.8	.91	56
September	1.3	.9	.93	55
The year	204	.3	11.5	8,360

Monthly stage and contents of Cottonwood Reservoir near Lakeview, Oreg., 1929-30

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	670.0	0		May 22 and 23	698.7	3,210	
Oct. 31	670.0	0	0	May 31	698.8	2,719	-305
Nov. 30	670.0	0	0	June 30	687.8	1,026	-1,693
Dec. 31	670.0	0	0	July 31	670.0	0	-1,026
Jan. 31	670.0	0	0	Aug. 31	670.0	0	0
Feb. 28	690.0	1,340	+1,340	Sept. 30	670.0	0	0
Mar. 31	695.0	2,295	+955				
Apr. 30	698.0	3,024	+729	The year			0

• Maximum for year.

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, 200 feet above Gregory Creek.

DRAINAGE AREA.—461 square miles.

RECORDS AVAILABLE.—November, 1910, to December, 1911; April, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 19,800 second-feet Dec. 14 (gage height, 14.0 feet); minimum, 133 second-feet Aug. 24 to Sept. 7.

1910-1911, 1919-1930: Maximum discharge, 34,000 second-feet Mar. 26, 1928 (gage height, 19.4 feet); minimum, 110 second-feet July 3 to Aug. 18 and Aug. 20 to Sept. 23, 1924.

REMARKS.—Records good. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	144	168	168	640	1,220	1,390	1,780	1,390	610	223	168	133
2.....	144	168	168	640	1,220	1,300	1,680	1,300	610	223	168	133
3.....	144	168	168	640	1,220	2,180	1,580	1,300	555	223	168	133
4.....	144	168	168	1,070	1,220	4,220	1,580	1,300	528	223	144	133
5.....	144	168	168	1,070	1,300	7,700	1,390	1,220	450	223	144	133
6.....	144	168	168	1,030	1,680	5,140	1,390	1,220	450	223	144	133
7.....	144	168	168	1,030	1,680	3,670	1,390	1,140	405	209	144	133
8.....	355	168	179	1,030	1,390	3,410	1,390	1,070	405	195	144	182
9.....	302	168	440	1,030	1,220	3,020	1,390	995	385	195	144	239
10.....	255	168	2,110	1,030	1,070	2,640	1,390	925	365	195	144	217
11.....	216	168	882	1,030	960	2,400	1,390	925	345	195	144	190
12.....	203	168	3,860	1,030	890	2,180	1,390	890	325	195	144	168
13.....	179	168	6,380	1,030	890	2,080	1,390	855	325	195	144	168
14.....	168	168	17,200	1,030	925	1,980	2,400	855	308	195	144	168
15.....	168	168	10,600	1,030	960	1,780	1,980	822	308	168	144	168
16.....	168	168	5,840	1,030	925	1,680	1,980	822	308	168	144	168
17.....	168	168	3,940	1,030	925	1,580	1,880	822	290	168	144	168
18.....	168	168	2,180	1,030	890	1,480	1,980	790	290	168	144	168
19.....	168	168	1,780	1,030	925	1,580	1,980	730	290	168	144	168
20.....	168	168	1,580	1,030	3,670	1,580	1,980	730	290	168	144	168
21.....	168	168	1,390	1,030	2,400	1,580	1,980	670	290	168	144	168
22.....	168	168	1,070	1,030	2,890	1,580	2,080	670	290	168	144	168
23.....	168	168	610	995	2,640	1,580	1,980	640	255	168	144	168
24.....	168	168	610	995	2,180	1,580	1,880	640	255	168	140	168
25.....	168	168	610	995	1,980	1,580	1,980	640	255	168	133	168
26.....	168	168	610	1,030	1,780	1,580	2,180	610	255	168	133	168
27.....	168	168	610	1,070	2,080	1,680	1,980	610	255	168	133	168
28.....	168	168	610	1,070	1,480	1,780	1,980	610	255	168	133	168
29.....	168	168	610	1,140	-----	1,880	1,790	610	255	168	133	168
30.....	168	168	610	1,140	-----	1,980	1,580	610	255	168	133	168
31.....	168	-----	610	1,220	-----	1,880	-----	610	-----	168	133	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	355					144			179		11,000	
November.....	168					168			168		10,000	
December.....	17,200					168			2,130		131,000	
January.....	1,220					640			1,010		62,100	
February.....	3,670					890			1,520		84,400	
March.....	7,700					1,300			2,310		142,000	
April.....	2,400					1,390			1,760		105,000	
May.....	610					872			53,600			
June.....	610					255			340		20,800	
July.....	223					168			186		11,400	
August.....	168					133			144		8,850	
September.....	239					133			165		9,820	
The year.....	17,200					133			897		650,000	

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, 1930.

EXTREMES.—Maximum discharge during year, 64,000 second-feet Dec. 15 (gage height, 19.07 feet); minimum, 2,670 second-feet Sept. 2.

1925-1930: Maximum discharge, 94,900 second-feet Mar. 26, 1928 (gage height, 25.1 feet); minimum, 2,430 second-feet Aug. 11, 1926.

REMARKS.—Records excellent. Discharge estimated Jan. 13, 14, May 7-9 and 21-23. Storage and many diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2,880	2,940	2,990	4,750	7,360	9,660	7,160	6,370	4,130	3,210	2,940	2,820
2.....	2,880	2,990	2,990	4,750	7,360	9,220	6,960	6,370	4,130	3,210	2,940	2,720
3.....	2,880	2,990	2,990	4,590	7,360	9,660	6,960	6,760	4,130	3,210	2,940	2,770
4.....	2,880	2,940	2,990	5,840	8,360	14,700	6,760	6,180	3,990	3,210	2,940	2,770
5.....	2,880	2,940	2,990	6,960	7,960	30,600	6,560	5,990	3,990	3,210	2,940	2,770
6.....	2,880	2,940	2,990	6,560	9,220	23,300	6,370	5,990	3,850	3,210	2,940	2,820
7.....	2,940	2,990	2,990	5,990	9,440	17,000	6,370	5,800	3,850	3,210	2,880	2,880
8.....	3,210	2,990	2,990	5,620	9,440	14,600	6,370	5,800	3,850	3,210	2,880	3,100
9.....	3,100	2,990	4,130	5,440	9,660	13,000	6,180	5,620	3,850	3,210	2,880	3,450
10.....	2,990	2,990	11,100	5,090	9,880	12,000	6,180	5,620	3,710	3,210	2,880	3,100
11.....	2,990	2,990	15,100	4,920	9,880	11,300	5,990	5,440	3,710	3,210	2,880	2,990
12.....	2,940	2,990	29,800	5,090	9,440	11,100	5,800	5,260	3,710	3,210	2,880	3,100
13.....	2,940	2,990	28,000	4,920	8,780	11,100	5,990	5,090	3,710	3,100	2,880	3,100
14.....	2,940	2,940	38,000	4,920	8,160	10,800	8,780	5,090	3,680	3,100	2,820	3,100
15.....	2,880	2,940	48,500	4,920	7,960	10,100	8,360	4,920	3,580	2,990	2,820	2,990
16.....	2,880	2,940	35,200	5,440	7,560	9,660	7,960	5,260	3,580	2,990	2,820	2,940
17.....	2,880	2,940	17,500	6,370	7,360	9,000	7,760	5,260	3,450	3,100	2,820	2,880
18.....	2,940	2,940	13,500	9,000	6,960	9,000	7,560	5,090	3,450	3,100	2,820	2,880
19.....	2,880	2,940	11,100	8,360	7,530	8,780	7,360	4,920	3,330	2,990	2,820	2,940
20.....	2,880	2,940	9,220	9,220	13,000	8,560	7,160	4,750	3,330	3,100	2,880	2,940
21.....	2,880	2,940	8,160	8,360	11,100	8,360	7,160	4,750	3,330	2,990	2,880	2,940
22.....	2,880	2,940	7,160	7,560	17,200	7,960	7,560	4,750	3,330	2,940	2,880	2,990
23.....	2,880	2,940	6,960	6,960	15,400	7,960	7,360	4,590	3,450	2,940	2,820	3,100
24.....	2,880	2,940	6,560	6,560	12,300	7,960	7,560	4,430	3,450	2,990	2,820	3,210
25.....	2,880	2,940	6,180	6,370	13,500	8,160	7,160	4,280	3,330	2,990	2,820	3,100
26.....	2,940	2,940	5,800	6,560	12,500	8,160	7,560	4,280	3,330	2,990	2,820	2,990
27.....	2,990	2,940	5,440	6,760	11,300	8,160	7,560	4,130	3,330	2,940	2,820	2,990
28.....	2,990	2,940	5,260	6,560	10,300	7,960	7,360	4,280	3,330	2,940	2,820	2,990
29.....	2,990	2,940	5,090	6,760	-----	8,160	6,960	4,430	3,330	2,940	2,820	2,990
30.....	2,990	2,940	4,750	6,960	-----	7,960	6,760	4,430	3,330	2,990	2,820	2,990
31.....	2,990	-----	4,750	7,360	-----	7,360	-----	4,280	-----	2,990	2,820	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,210	2,880	2,930	180,000
November.....	2,990	2,940	2,960	176,000
December.....	48,500	2,990	11,300	695,000
January.....	9,220	4,590	6,310	388,000
February.....	17,200	6,960	9,870	548,000
March.....	30,600	7,360	11,000	676,000
April.....	8,780	6,180	7,050	420,000
May.....	6,760	4,130	5,170	318,000
June.....	4,130	3,330	3,620	215,000
July.....	3,210	2,940	3,080	189,000
August.....	2,940	2,820	2,860	176,000
September.....	3,450	2,720	2,980	177,000
The year.....	48,500	2,720	5,750	4,160,000

SACRAMENTO RIVER NEAR RED BLUFF, CALIF.

LOCATION.—Water-stage recorder in lot 4, sec. 34, T. 28 N., R. 3 W., at the lower end of Iron Canyon, 4 miles northeast of Red Bluff.

DRAINAGE AREA.—9,300 square miles (not including drainage area of Goose Lake).

RECORDS AVAILABLE.—January, 1902, to September, 1930. April, 1895, to June, 1902, at Jelleys Ferry, 12 miles above Red Bluff.

EXTREMES.—Maximum discharge during year, 93,600 second-feet Dec. 16 (gauge height, 18.48 feet); minimum, 2,900 second-feet Sept. 2.

1902-1930: Maximum discharge, 278,000 second-feet Feb. 3, 1919 (gauge height, 35.2 feet); minimum, 2,640 second-feet July 22, 1926.

REMARKS.—Records excellent. Discharge estimated Apr. 8-14 and May 2-29. Storage and many diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,320	3,320	3,580	5,880	10,500	15,100	9,860	8,600	5,100	3,660	3,240	2,980
2	3,320	3,400	3,580	5,880	9,860	13,700	9,540	8,600	5,000	3,660	3,240	2,980
3	3,320	3,400	3,660	5,650	10,500	15,900	9,220	8,900	5,000	3,580	3,150	2,980
4	3,320	3,490	3,660	6,630	10,500	25,900	9,220	9,300	5,000	3,580	3,150	2,980
5	3,320	3,490	3,660	10,200	10,900	55,700	8,910	9,100	4,790	3,580	3,150	2,980
6	3,580	3,580	3,660	9,860	11,900	55,700	8,600	8,900	4,690	3,580	3,060	2,980
7	3,660	3,580	3,660	10,500	12,600	32,700	8,300	8,600	4,590	3,490	3,060	3,060
8	3,660	3,580	3,660	8,300	12,600	25,400	8,000	8,400	4,490	3,660	3,060	3,150
9	3,580	3,580	4,200	7,710	12,600	21,900	7,710	8,200	4,390	3,490	3,060	4,010
10	3,490	3,580	9,540	7,430	12,200	18,600	7,710	8,000	4,390	3,490	3,060	4,010
11	3,490	3,580	20,200	6,890	12,200	17,000	7,710	7,800	4,300	3,490	3,060	3,740
12	3,400	3,580	29,000	6,890	11,900	15,900	7,160	7,600	4,200	3,490	3,060	3,400
13	3,400	3,580	43,200	7,160	11,200	15,500	7,160	7,400	4,100	3,490	3,060	3,400
14	3,400	3,580	38,400	6,890	10,500	17,400	10,900	7,100	4,100	3,400	3,060	3,580
15	3,490	3,490	68,900	7,430	9,860	19,400	13,300	6,800	4,100	3,320	3,060	3,490
16	3,490	3,490	73,900	12,600	9,540	15,900	10,500	6,600	4,010	3,240	3,060	3,400
17	3,490	3,490	31,300	17,800	9,220	13,700	9,860	6,500	4,010	3,240	3,060	3,320
18	3,490	3,490	21,400	27,200	8,910	12,900	9,540	6,400	3,920	3,320	3,060	3,320
19	3,490	3,490	16,600	18,600	8,600	12,200	9,540	6,300	3,920	3,320	3,060	3,320
20	3,400	3,490	13,700	16,600	18,400	11,900	9,220	6,200	3,920	3,320	3,060	3,320
21	3,490	3,490	11,200	14,400	17,400	11,500	8,910	6,100	3,920	3,320	3,060	3,400
22	3,400	3,580	9,860	11,900	42,600	11,200	9,220	6,000	3,830	3,240	3,060	3,400
23	3,490	3,580	8,910	10,500	35,500	10,900	9,220	5,980	3,920	3,150	2,980	3,490
24	3,490	3,580	8,600	10,200	23,200	10,900	9,540	5,900	3,920	3,240	2,980	3,660
25	3,490	3,580	8,000	11,200	29,900	10,900	9,860	5,800	3,830	3,320	2,980	3,740
26	3,490	3,580	7,430	10,200	23,200	10,900	9,220	5,700	3,830	3,240	2,980	3,660
27	3,400	3,580	6,890	10,200	19,400	10,900	10,200	5,600	3,830	3,240	2,980	3,490
28	3,400	3,660	6,630	9,860	17,000	10,900	9,860	5,600	3,830	3,240	2,980	3,490
29	3,400	3,580	6,370	9,540	-----	10,900	9,540	5,650	3,740	3,240	2,980	3,660
30	3,400	3,580	6,120	9,540	-----	10,900	8,910	5,430	3,740	3,150	2,980	3,660
31	3,320	-----	6,120	10,500	-----	10,500	-----	5,320	-----	3,240	2,980	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,660	3,320	3,450	212,000
November	3,660	3,320	3,540	211,000
December	73,900	3,580	15,700	965,000
January	27,200	5,650	10,500	646,000
February	42,600	8,600	15,500	861,000
March	55,700	10,500	17,800	1,090,000
April	13,300	7,160	9,210	548,000
May	9,300	5,320	7,040	433,000
June	5,100	3,740	4,210	251,000
July	3,660	3,150	3,390	208,000
August	3,240	2,980	3,060	188,000
September	4,010	2,980	3,400	202,000
The year	73,900	2,980	8,080	5,820,000

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 October, 1930, low-water records only.

EXTREMES.—Minimum discharge during year, 1,840 second-feet Aug. 19.

1921-1930: Minimum discharge, 1,260 second-feet Aug. 13, 1926.

REMARKS.—Records good; discharge estimated June 1-3, Aug. 27-31, and Sept.

5-8. Storage and many diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	2,700	3,080	-----	7,650	4,360	2,550	2,050	2,020	3,480
2	2,860	3,080	-----	7,460	4,250	2,490	2,050	2,020	3,560
3	2,780	3,080	-----	7,460	4,140	2,430	2,050	2,050	3,560
4	2,780	3,000	-----	8,420	4,040	2,430	2,020	2,020	3,480
5	2,860	3,160	-----	8,420	3,960	2,380	2,020	2,020	3,320
6	2,780	3,240	-----	7,840	3,880	2,430	1,980	2,020	3,320
7	2,860	3,320	-----	7,460	3,720	2,380	1,980	2,100	3,320
8	2,980	3,320	-----	7,080	3,640	2,320	1,980	2,180	3,320
9	3,160	3,240	-----	6,880	3,560	2,380	1,940	2,270	3,160
10	3,240	3,240	-----	6,700	3,400	2,320	1,940	2,740	3,160
11	3,240	3,160	-----	6,510	3,320	2,320	1,980	3,090	3,240
12	3,160	3,160	-----	6,320	3,240	2,270	1,980	3,020	3,240
13	3,160	3,160	-----	5,950	3,090	2,270	1,940	2,740	3,240
14	3,080	3,160	-----	5,950	3,090	2,270	1,940	2,800	3,480
15	3,080	3,160	-----	5,770	3,020	2,220	1,910	2,870	3,400
16	3,080	3,160	-----	5,590	2,940	2,180	1,880	2,870	3,400
17	3,080	3,240	-----	5,590	2,940	2,130	1,880	2,800	3,400
18	3,080	3,240	-----	5,590	2,870	2,090	1,880	2,800	3,400
19	3,000	3,240	-----	5,590	2,740	2,090	1,840	2,740	3,400
20	3,080	3,320	-----	5,410	2,740	2,090	1,840	2,740	3,480
21	3,080	3,320	-----	5,230	2,740	2,090	1,880	2,740	3,480
22	3,080	3,320	-----	5,060	2,670	2,090	1,880	2,870	3,560
23	3,000	3,320	-----	5,060	2,670	2,050	1,880	3,020	3,640
24	3,000	3,320	-----	4,890	2,670	2,050	1,910	3,090	3,560
25	3,000	3,320	-----	4,720	2,670	2,090	1,940	3,240	3,480
26	2,930	3,400	-----	4,460	2,670	2,050	1,940	3,400	3,480
27	2,930	3,480	8,220	4,300	2,610	2,090	1,940	3,400	3,480
28	2,860	3,480	8,620	4,210	2,610	2,050	1,940	3,320	3,480
29	2,860	3,480	8,220	4,210	2,610	2,050	1,940	3,320	3,400
30	2,860	3,480	8,030	4,460	2,550	2,050	1,980	3,400	3,400
31	3,000	-----	-----	4,460	-----	2,050	1,980	-----	3,400

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929				
October	3,240	2,700	2,990	184,000
November	3,480	3,000	3,260	194,000
1930				
May	8,420	4,210	5,960	366,000
June	4,360	2,550	3,180	189,000
July	2,550	2,050	2,220	126,000
August	2,050	1,840	1,940	119,000
September	3,400	2,620	2,720	152,000
October	3,640	3,160	3,410	214,000
The period	-----	-----	-----	1,180,000

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 October, 1930, low-water records only.

EXTREMES.—Minimum discharge during year, 1,620 second-feet Aug. 23, 1930.

1921-1930: Minimum, 1,010 second-feet Aug. 14, 1926.

REMARKS.—Records good. Storage and many diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	May	June	July	Aug.	Sept.	Oct.
1.....	2,790	3,120	7,600	4,370	2,420	1,800	1,800	3,570
2.....	2,870	3,120	7,600	4,280	2,420	1,740	1,800	3,570
3.....	2,870	3,210	7,600	4,100	2,280	1,740	1,860	3,660
4.....	2,870	3,210	8,030	3,920	2,280	1,740	1,860	3,570
5.....	2,870	3,120	8,910	3,920	2,280	1,740	1,860	3,480
6.....	2,870	3,210	8,360	3,830	2,280	1,740	1,920	3,480
7.....	2,790	3,300	7,500	3,740	2,220	1,740	1,980	3,390
8.....	2,870	3,300	7,200	3,650	2,160	1,680	1,980	3,390
9.....	3,120	3,300	7,000	3,470	2,100	1,680	2,100	3,390
10.....	3,210	3,300	6,800	3,470	2,160	1,680	2,350	3,300
11.....	3,210	3,300	6,600	3,290	2,100	1,680	2,950	3,390
12.....	3,210	3,300	6,400	3,290	2,040	1,680	3,030	3,390
13.....	3,210	3,300	6,100	3,200	2,040	1,740	2,870	3,480
14.....	3,210	3,300	5,810	3,110	2,040	1,740	2,870	3,570
15.....	3,120	3,300	5,720	3,030	1,980	1,740	2,950	3,570
16.....	3,120	3,300	5,630	2,950	1,980	1,680	2,950	3,570
17.....	3,030	3,300	5,540	2,870	1,860	1,680	2,950	3,570
18.....	3,030	3,300	5,540	2,870	1,860	1,680	2,870	3,570
19.....	3,030	3,300	5,540	2,710	1,860	1,680	2,870	3,570
20.....	3,030	3,300	5,360	2,630	1,860	1,680	2,870	3,570
21.....	3,030	3,390	5,270	2,630	1,860	1,680	2,870	3,570
22.....	3,030	3,390	5,090	2,630	1,860	1,680	2,950	3,570
23.....	2,950	3,390	5,090	2,630	1,860	1,680	3,110	3,660
24.....	2,950	3,390	5,000	2,560	1,800	1,740	3,110	3,660
25.....	3,030	3,480	4,820	2,630	1,800	1,740	3,200	3,570
26.....	3,030	3,480	4,640	2,560	1,800	1,740	3,380	3,570
27.....	3,030	3,480	4,460	2,490	1,800	1,740	3,470	3,570
28.....	3,030	3,480	4,280	2,490	1,800	1,740	3,290	3,570
29.....	3,030	3,480	4,190	2,490	1,740	1,740	3,290	3,480
30.....	2,950	3,480	4,370	2,420	1,740	1,800	3,290	3,480
31.....	3,030	-----	4,460	-----	1,740	1,800	-----	3,480

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929				
October.....	3,210	2,790	3,010	185,000
November.....	3,480	3,120	3,320	198,000
1930				
May.....	8,910	4,190	6,020	370,000
June.....	4,370	2,420	3,140	187,000
July.....	2,420	1,740	2,000	123,000
August.....	1,800	1,680	1,720	106,000
September.....	3,470	1,800	2,600	160,000
October.....	3,660	3,300	3,520	216,000
The period.....	-----	-----	-----	1,160,000

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 October, 1930, low-water records only.

EXTREMES.—Minimum discharge during year, 1,350 second-feet Aug. 21.

1921-1930: Minimum discharge, 934 second-feet July 17, 1924.

REMARKS.—Records good except those for May 1-4, 16-18, July 1-7, and July 29 to Aug. 4, which are estimated. Storage, many diversions, and considerable return water affect the flow.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	May	June	July	Aug.	Sept.	Oct.
1.....	2,820	3,100	8,200	4,630	2,020	1,500	1,780	3,700
2.....	2,820	3,000	8,200	4,630	2,020	1,500	1,780	3,920
3.....	2,890	3,100	8,200	4,450	1,900	1,500	1,740	4,000
4.....	2,960	3,100	8,670	4,270	1,900	1,500	1,870	4,000
5.....	2,960	3,000	9,620	4,150	1,900	1,500	1,920	3,920
6.....	2,960	3,100	9,020	4,030	1,900	1,500	1,920	3,780
7.....	2,960	3,240	8,100	3,970	1,850	1,540	1,960	3,620
8.....	2,960	3,310	7,770	3,850	1,820	1,540	2,050	3,620
9.....	3,100	3,380	7,560	3,740	1,780	1,500	2,140	3,620
10.....	3,170	3,450	7,340	3,580	1,740	1,540	2,290	3,620
11.....	3,240	3,520	7,120	3,410	1,780	1,540	2,540	3,480
12.....	3,240	3,380	6,910	3,300	1,780	1,500	2,970	3,550
13.....	3,240	3,380	6,580	3,080	1,780	1,500	3,190	3,620
14.....	3,240	3,450	6,270	2,860	1,820	1,500	3,240	3,550
15.....	3,170	3,450	6,180	2,700	1,780	1,500	3,300	3,780
16.....	3,170	3,520	6,080	2,590	1,700	1,500	3,300	3,780
17.....	3,170	3,590	5,980	2,390	1,660	1,500	3,300	3,780
18.....	3,170	3,520	5,980	2,390	1,620	1,500	3,300	3,700
19.....	3,100	3,450	5,980	2,290	1,580	1,420	3,300	3,700
20.....	3,100	3,520	5,790	2,240	1,540	1,420	3,300	3,700
21.....	3,100	3,660	5,690	2,190	1,540	1,380	3,240	3,620
22.....	3,100	3,660	5,500	2,290	1,500	1,420	3,240	3,620
23.....	3,170	3,660	5,500	2,340	1,500	1,420	3,140	3,700
24.....	3,170	3,660	5,460	2,290	1,500	1,500	3,240	3,780
25.....	3,170	3,660	5,210	2,290	1,500	1,540	3,360	3,850
26.....	3,170	3,660	5,010	2,190	1,500	1,540	3,410	3,850
27.....	3,170	3,730	4,810	2,140	1,500	1,580	3,460	3,850
28.....	3,380	3,730	4,620	2,100	1,500	1,620	3,460	3,780
29.....	3,240	3,800	4,520	2,100	1,450	1,660	3,460	3,780
30.....	3,100	3,800	4,720	2,100	1,450	1,700	3,410	3,780
31.....	3,170	-----	4,810	-----	1,450	1,740	-----	3,780

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929				
October.....	3,380	2,820	3,110	191,000
November.....	3,800	3,000	3,450	205,000
1930				
May.....	9,620	4,520	6,500	400,000
June.....	4,630	2,100	3,020	180,000
July.....	2,020	1,450	1,690	104,000
August.....	1,740	1,380	1,520	93,500
September.....	3,460	1,740	2,820	168,000
October.....	4,000	3,480	3,740	230,000
The period.....	-----	-----	-----	1,180,000

SACRAMENTO RIVER AT VERONA, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ 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, 1930; low-water records only, 1926 to 1929.

EXTREMES.—Maximum discharge during year, 57,400 second-feet Dec. 17 (gage height, 34.79 feet); minimum, 2,320 second-feet Aug. 6.

1926-1930: Maximum discharge not determined; minimum, mean daily discharge, 1,510 second-feet July 29, 1926.

REMARKS.—Records good. Storage, many diversions, and considerable return water affect the flow.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5,020	5,410	5,410	15,100	*21,000	46,400	31,200	20,900	12,200	*3,780	2,750	3,600
2.....	5,020	5,540	5,410	14,500	*21,000	43,800	30,300	20,000	12,000	3,640	2,640	3,360
3.....	5,020	5,540	5,410	13,800	*21,000	40,200	23,900	19,800	11,400	*3,560	2,750	3,240
4.....	5,150	5,540	5,410	13,000	21,800	38,600	27,800	20,500	10,800	*3,480	2,750	3,600
5.....	5,280	5,410	5,540	15,700	22,000	45,700	26,600	21,600	10,200	*3,400	2,630	3,730
6.....	5,410	5,410	5,540	20,500	22,000	54,700	*26,400	21,400	10,000	*3,320	2,530	3,730
7.....	5,410	5,410	5,670	23,600	22,300	56,000	*26,200	20,300	9,800	*3,240	2,750	3,730
8.....	5,410	5,410	5,800	25,500	23,200	55,700	*26,000	19,600	9,600	*3,160	2,640	3,990
9.....	5,670	5,540	5,800	24,800	24,100	55,200	25,900	18,900	*9,200	*3,080	2,640	3,990
10.....	5,800	5,540	8,600	23,400	24,300	54,000	26,200	18,100	*8,800	*3,060	2,750	4,250
11.....	5,670	5,540	20,500	21,800	24,100	52,400	25,200	17,400	8,400	*3,040	2,750	4,520
12.....	5,670	5,410	26,600	20,500	*24,000	51,000	23,900	16,800	8,000	*3,020	2,640	5,220
13.....	5,670	5,410	37,200	20,300	*24,000	49,100	22,700	16,100	7,400	*3,000	2,640	5,640
14.....	5,540	5,540	48,800	20,700	*23,800	46,900	24,100	16,100	6,800	*2,980	2,640	5,780
15.....	5,540	5,670	53,700	21,800	*23,000	44,800	27,300	15,900	6,600	*2,980	2,640	5,780
16.....	5,540	5,800	56,000	24,100	*22,500	43,600	28,900	15,500	*6,200	2,970	2,750	5,780
17.....	5,540	5,930	57,200	31,700	*22,000	42,400	30,300	15,300	*5,800	*2,800	2,640	5,780
18.....	5,540	5,900	56,700	37,900	*22,000	40,900	29,800	15,900	*5,400	2,640	2,750	5,780
19.....	5,410	5,670	55,200	43,100	21,600	38,600	28,500	16,400	5,020	2,640	2,640	5,920
20.....	5,410	5,800	53,400	44,500	21,600	36,100	27,600	16,400	4,890	2,640	2,540	5,920
21.....	5,410	5,930	*51,000	44,300	23,200	33,800	27,300	16,400	4,760	2,640	2,540	5,920
22.....	5,410	5,800	*47,500	42,800	26,900	31,700	26,900	15,900	*4,760	2,530	2,650	5,780
23.....	5,410	5,670	*42,200	40,000	32,200	30,100	26,900	14,900	*4,760	2,530	2,760	5,360
24.....	5,410	5,410	35,800	36,100	38,800	29,200	27,100	14,200	*4,760	2,640	3,000	5,780
25.....	5,410	5,410	28,700	31,900	42,800	28,700	26,900	13,800	4,760	2,750	3,120	6,070
26.....	5,410	5,280	24,100	28,700	46,200	29,200	25,900	13,400	4,500	2,640	3,120	6,220
27.....	5,410	5,410	20,000	26,200	48,100	29,600	24,800	13,000	4,370	2,750	3,240	6,220
28.....	5,540	5,410	17,600	24,600	47,900	30,500	23,600	12,600	*4,220	2,750	3,240	6,370
29.....	5,280	5,410	16,100	*23,000	-----	31,000	22,300	12,400	*4,070	2,530	3,360	6,370
30.....	5,280	5,280	*15,700	*22,200	-----	31,500	21,600	12,400	*3,920	2,640	3,360	6,070
31.....	5,410	-----	*15,400	*21,400	-----	31,700	-----	12,600	-----	2,640	3,480	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,800	5,020	5,420	333,000
November.....	5,930	5,280	5,540	330,000
December.....	57,200	5,410	27,000	1,660,000
January.....	44,500	13,600	26,400	1,620,000
February.....	48,100	21,000	27,000	1,500,000
March.....	56,000	28,700	41,100	2,530,000
April.....	31,200	21,600	26,600	1,580,000
May.....	21,600	12,400	16,600	1,020,000
June.....	12,200	3,920	7,110	423,000
July.....	3,780	2,530	2,950	181,000
August.....	3,480	2,530	2,810	173,000
September.....	6,370	3,240	5,120	305,000
The year.....	57,200	2,530	16,100	11,700,000

* Estimated.

PIT RIVER BASIN

PIT RIVER AT FALL RIVER MILLS, CALIF.

LOCATION.—Water-stage recorder in sec. 6, T. 36 N., R. 5 E., three-quarters of a mile below mouth of Fall River and town of Fall River Mills.

RECORDS AVAILABLE.—March, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,540 second-feet Feb. 10 (gage height, 4.33 feet); minimum, 47 second-feet Oct. 30.

1921-1930: Maximum discharge, 10,800 second-feet Mar. 28, 1928 (gage height, 7.89 feet); minimum, 12 second-feet Aug. 5, 1926.

REMARKS.—Records good. Discharge estimated Jan. 9 and 10. Many irrigation diversions above station. Some return water from McArthur and Knoch 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	77	51	84	164	304	794	360	135	117	90	86	74
2.....	82	51	88	155	702	702	375	118	109	87	81	64
3.....	86	51	88	148	834	732	355	126	108	86	65	71
4.....	86	51	90	182	975	1,050	308	132	109	84	80	95
5.....	82	53	93	148	1,250	1,140	286	124	93	81	78	93
6.....	87	53	93	118	1,730	1,290	254	128	92	80	102	84
7.....	100	52	92	150	2,050	1,280	274	145	102	80	92	75
8.....	98	60	93	126	2,790	1,150	258	179	117	78	86	75
9.....	90	57	108	114	2,950	1,070	236	176	95	78	84	90
10.....	84	54	126	110	3,380	984	222	152	89	70	87	107
11.....	93	52	142	107	2,950	914	206	138	88	71	82	102
12.....	80	52	145	112	2,480	850	203	118	78	75	81	95
13.....	108	51	167	126	2,050	810	203	112	88	71	64	88
14.....	90	50	215	126	1,730	794	274	135	82	77	82	87
15.....	68	49	290	124	1,530	826	299	185	81	72	67	84
16.....	63	49	592	122	1,320	890	262	194	83	75	86	86
17.....	62	49	725	122	1,110	858	286	222	102	77	100	86
18.....	63	49	674	128	930	866	270	243	82	71	80	86
19.....	64	49	599	140	810	882	236	218	81	65	80	86
20.....	65	50	592	170	842	858	240	206	88	78	80	84
21.....	65	51	506	145	1,010	842	243	209	89	77	80	82
22.....	64	51	434	140	1,290	818	262	194	92	64	81	72
23.....	63	51	380	135	1,550	834	232	152	96	92	77	63
24.....	60	50	345	135	1,670	826	182	130	86	78	77	90
25.....	62	51	322	155	1,380	748	170	126	84	70	82	92
26.....	67	52	299	179	1,250	646	161	126	77	64	86	87
27.....	59	57	262	194	1,120	580	150	107	77	70	90	82
28.....	51	59	232	176	939	506	142	118	74	67	90	84
29.....	50	63	215	170	-----	390	158	98	82	59	87	87
30.....	49	77	197	191	-----	375	155	102	96	70	87	93
31.....	50	-----	182	286	-----	365	-----	110	-----	82	86	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	108		49		73.2		4,500					
November.....	77		49		53.2		3,170					
December.....	725		84		273		16,800					
January.....	286		107		148		9,100					
February.....	3,380		304		1,530		85,000					
March.....	1,290		365		828		50,900					
April.....	375		142		242		14,400					
May.....	243		98		150		9,220					
June.....	110		74		91.2		5,430					
July.....	92		59		75.5		4,640					
August.....	102		64		82.8		5,090					
September.....	107		63		84.8		5,050					
The year.....	3,380		49		295		213,000					

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, 1930.

EXTREMES.—Maximum discharge during year, 7,060 second-feet Mar. 13 (gage height, 10.41 feet); minimum, 1,080 second-feet Jan. 25, due to power regulation.

1927-1930: Maximum discharge, 14,800 second-feet Mar. 29, 1928 (gage height, 14.20 feet); minimum, 715 second-feet Mar. 21, 1928, due to power regulation.

REMARKS.—Records excellent. Storage and many diversions above station. Gage-height record and results of discharge measurements furnished by Mount Shasta Power Corporation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,760	1,820	1,870	2,110	2,050	3,220	2,350	2,170	1,870	1,820	1,760	1,700
2	1,760	1,820	1,870	2,110	2,050	3,150	2,470	2,170	1,930	1,820	1,760	1,700
3	1,760	1,820	1,930	2,050	2,540	3,150	2,540	2,110	1,990	1,820	1,760	1,700
4	1,760	1,820	1,930	2,110	3,300	3,080	2,470	2,110	1,930	1,820	1,760	1,700
5	1,760	1,820	1,870	2,350	3,080	3,150	2,410	2,050	1,930	1,820	1,760	1,760
6	1,760	1,870	1,930	2,110	3,380	2,730	2,290	2,110	1,870	1,870	1,700	1,760
7	1,760	1,870	1,930	2,110	3,540	2,860	2,230	2,110	1,870	1,870	1,700	1,820
8	1,820	1,870	1,870	2,050	4,020	3,150	2,290	2,110	1,870	1,870	1,700	1,760
9	1,820	1,870	1,930	1,870	4,270	3,150	2,290	2,110	1,870	1,820	1,760	1,700
10	1,870	1,870	2,230	1,870	4,970	3,300	2,350	2,110	1,870	1,820	1,760	1,700
11	1,870	1,870	2,410	1,930	4,970	3,150	2,230	2,050	1,870	1,820	1,760	1,760
12	1,820	1,870	2,290	2,110	4,610	3,150	2,110	2,050	1,870	1,820	1,760	1,870
13	1,820	1,870	2,230	1,990	4,180	3,380	1,990	1,990	1,870	1,820	1,760	1,930
14	1,820	1,820	2,410	1,990	3,860	3,000	2,110	1,870	1,870	1,760	1,760	1,870
15	1,820	1,820	2,600	1,990	3,780	2,860	2,350	1,930	1,820	1,700	1,760	1,760
16	1,820	1,820	2,730	2,050	3,620	2,860	2,600	2,110	1,820	1,760	1,760	1,760
17	1,870	1,820	3,620	2,050	3,380	3,150	2,470	2,230	1,820	1,820	1,700	1,760
18	1,870	1,820	3,220	2,050	3,150	3,150	2,410	2,230	1,760	1,760	1,760	1,760
19	1,820	1,820	2,800	2,050	3,150	3,080	2,230	2,110	1,700	1,820	1,700	1,760
20	1,820	1,820	2,660	2,110	3,220	2,930	2,110	2,050	1,700	1,820	1,700	1,760
21	1,870	1,820	2,470	2,110	3,300	2,800	2,110	2,110	1,760	1,700	1,700	1,820
22	1,870	1,820	2,410	2,110	3,300	2,730	2,170	2,110	1,760	1,700	1,700	1,820
23	1,870	1,820	2,470	2,050	2,930	3,000	2,290	1,990	1,820	1,760	1,700	1,870
24	1,870	1,820	2,470	1,990	3,380	2,860	2,350	1,930	1,820	1,760	1,700	1,870
25	1,870	1,870	2,290	1,990	3,540	2,930	2,170	1,930	1,820	1,760	1,700	1,820
26	1,870	1,870	2,110	2,110	3,540	2,730	2,170	1,870	1,820	1,700	1,700	1,820
27	1,820	1,820	2,110	2,110	3,460	2,660	2,170	1,870	1,820	1,700	1,700	1,760
28	1,870	1,870	2,110	2,110	3,460	2,600	2,110	1,870	1,820	1,700	1,700	1,760
29	1,870	1,870	1,990	2,110	-----	2,600	2,170	1,930	1,820	1,760	1,760	1,700
30	1,870	1,870	1,990	2,110	-----	2,410	2,170	1,870	1,820	1,760	1,760	1,760
31	1,820	-----	1,990	2,110	-----	2,350	-----	1,930	-----	1,760	1,760	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	1,870					1,760			1,830		113,000	
November	1,870					1,820			1,840		109,000	
December	3,620					1,870			2,280		140,000	
January	2,350					1,870			2,060		127,000	
February	4,970					2,050			3,500		194,000	
March	3,380					2,350			2,950		181,000	
April	2,600					1,990			2,270		135,000	
May	2,230					1,870			2,040		125,000	
June	1,990					1,700			1,840		109,000	
July	1,870					1,700			1,780		109,000	
August	1,760					1,700			1,730		106,000	
September	1,930					1,700			1,780		106,000	
The year	4,970					1,700			2,150		1,550,000	

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, 1930.

EXTREMES.—Maximum discharge during year, 5,860 second-feet Dec. 17 (gauge height, 10.07 feet); minimum, 1,360 second-feet Oct. 9, caused by regulation. 1910-1930: Maximum discharge, 14,400 second-feet Mar. 29, 1928 (gauge height, 13.40 feet); minimum, 664 second-feet July 9 and 10, 1925, owing to regulation.

REMARKS.—Records excellent. Discharge estimated Jan. 5-12. Storage, regulation, and many diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,750	1,810	1,810	2,080	2,150	3,720	2,680	2,370	2,010	1,880	1,810	1,750
2	1,750	1,810	1,880	2,150	2,220	3,620	2,680	2,370	2,080	1,880	1,810	1,750
3	1,750	1,810	1,880	2,150	2,600	3,620	2,780	2,300	2,080	1,880	1,810	1,750
4	1,750	1,810	1,880	2,150	3,620	3,530	2,780	2,300	2,080	1,880	1,750	1,750
5	1,750	1,810	1,880	2,450	3,260	3,720	2,600	2,300	2,010	1,880	1,750	1,750
6	1,750	1,880	1,880	2,300	3,620	3,260	2,520	2,300	1,940	1,880	1,750	1,810
7	1,810	1,880	1,880	2,250	3,820	3,350	2,440	2,300	1,940	1,880	1,690	1,810
8	1,810	1,880	1,880	2,200	4,310	3,720	2,520	2,300	1,940	1,880	1,690	1,810
9	1,810	1,880	2,010	2,100	4,730	3,720	2,520	2,300	1,940	1,810	1,750	1,750
10	1,810	1,880	2,520	2,050	5,390	3,820	2,600	2,300	1,940	1,810	1,690	1,750
11	1,810	1,880	2,840	2,100	5,500	3,620	2,520	2,220	1,940	1,810	1,750	1,750
12	1,810	1,880	2,840	2,200	5,050	3,620	2,300	2,150	1,940	1,810	1,750	1,810
13	1,810	1,880	2,520	2,080	4,620	3,910	2,220	2,150	1,940	1,750	1,750	1,940
14	1,810	1,810	2,920	2,080	4,210	3,620	2,370	2,080	1,940	1,690	1,750	1,810
15	1,810	1,810	3,260	2,080	4,110	3,260	2,520	2,150	1,940	1,690	1,750	1,750
16	1,810	1,810	3,000	2,080	4,010	3,260	2,760	2,370	1,940	1,750	1,750	1,690
17	1,880	1,810	4,010	2,150	3,820	3,530	2,680	2,440	1,880	1,810	1,750	1,690
18	1,880	1,810	3,530	2,150	3,530	3,530	2,600	2,370	1,880	1,810	1,750	1,690
19	1,810	1,810	3,080	2,150	3,530	3,530	2,440	2,220	1,810	1,810	1,750	1,750
20	1,810	1,810	2,760	2,220	3,720	3,350	2,370	2,150	1,750	1,880	1,750	1,750
21	1,810	1,810	2,680	2,220	3,820	3,260	2,300	2,220	1,810	1,750	1,750	1,750
22	1,810	1,810	2,520	2,220	3,820	3,000	2,440	2,300	1,880	1,750	1,750	1,810
23	1,810	1,810	2,600	2,150	3,350	3,260	2,520	2,220	1,940	1,750	1,690	1,880
24	1,810	1,810	2,600	2,080	3,820	3,260	2,600	2,080	1,880	1,810	1,690	1,940
25	1,810	1,810	2,440	2,080	4,010	3,350	2,440	2,080	1,940	1,810	1,690	1,880
26	1,810	1,810	2,300	2,220	4,010	3,170	2,370	2,010	1,940	1,750	1,750	1,810
27	1,750	1,810	2,150	2,220	3,910	3,000	2,370	2,010	1,940	1,750	1,750	1,810
28	1,810	1,810	2,150	2,220	3,910	2,920	2,370	2,080	1,940	1,810	1,750	1,750
29	1,810	1,810	2,080	2,220	-----	3,000	2,370	2,080	1,940	1,810	1,750	1,750
30	1,810	1,810	2,010	2,220	-----	2,760	2,370	2,080	1,940	1,810	1,810	1,810
31	1,810	-----	2,010	2,220	-----	2,680	-----	2,010	-----	1,810	1,750	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,880	1,750	1,800	111,000
November	1,880	1,810	1,830	109,000
December	4,010	1,810	2,450	151,000
January	2,450	2,050	2,170	133,000
February	5,500	2,150	3,870	215,000
March	3,910	2,680	3,390	208,000
April	2,760	2,220	2,500	149,000
May	2,440	2,010	2,210	136,000
June	2,080	1,750	1,940	115,000
July	1,880	1,690	1,810	111,000
August	1,810	1,690	1,750	108,000
September	1,940	1,750	1,780	106,000
The year	5,500	1,690	2,280	1,650,000

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, $1\frac{1}{2}$ 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, 1930.

EXTREMES.—Maximum discharge during year, 26,500 second-feet Dec. 15 (gage height, 15.20 feet); minimum, 1,790 second-feet Sept. 2.

1910-1930: Maximum discharge, about 47,000 second-feet Dec. 31, 1913 (gage height, 20.7 feet, present datum); minimum, 1,000 second-feet July 10, 1925, owing to regulation.

REMARKS.—Records excellent. Discharge estimated April 22-29. Storage, regulation, and diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1,900	1,900	1,900	2,710	3,780	5,560	3,700	3,230	2,370	2,070	1,900	1,840
2-----	1,900	1,900	1,960	2,780	3,860	5,200	3,700	3,230	2,440	2,010	1,900	1,790
3-----	1,900	1,900	1,960	2,710	4,020	5,560	3,780	3,460	2,440	2,070	1,900	1,790
4-----	1,900	1,900	2,020	3,080	5,020	6,280	3,700	3,230	2,440	2,070	1,900	1,840
5-----	1,900	1,900	2,020	3,540	4,680	10,300	3,540	3,080	2,370	2,070	1,900	1,840
6-----	1,900	1,900	2,020	3,380	5,380	9,500	3,380	3,080	2,310	2,070	1,840	1,900
7-----	1,960	1,960	2,020	3,080	5,380	7,420	3,300	3,080	2,310	2,010	1,790	1,960
8-----	2,020	1,960	2,020	3,000	5,560	6,840	3,300	3,080	2,310	2,070	1,840	2,010
9-----	1,960	1,960	2,620	2,930	6,100	6,460	3,300	3,000	2,310	2,010	1,840	2,130
10-----	1,960	2,020	6,080	2,640	6,460	6,100	3,300	3,000	2,250	2,010	1,840	1,960
11-----	1,960	2,020	9,080	2,640	6,650	5,920	3,300	2,930	2,250	2,010	1,840	1,960
12-----	1,960	2,020	16,000	2,860	6,280	5,740	3,080	2,860	2,250	2,010	1,900	2,010
13-----	1,960	2,020	12,200	2,860	5,740	5,920	3,000	2,780	2,250	2,010	1,900	2,130
14-----	1,960	1,960	13,200	2,710	5,380	5,740	3,620	2,710	2,250	1,900	1,900	2,070
15-----	1,960	2,020	18,500	2,780	5,200	5,200	3,300	2,710	2,190	1,840	1,900	2,010
16-----	1,900	1,960	12,300	3,080	4,850	5,200	3,700	2,930	2,190	1,900	1,900	1,960
17-----	1,960	1,960	8,020	3,700	4,680	5,020	3,700	3,000	2,130	1,960	1,900	1,960
18-----	1,960	1,960	6,650	5,020	4,420	5,020	3,460	3,000	2,130	1,960	1,900	1,960
19-----	1,900	1,960	5,560	4,420	4,340	4,850	3,380	2,860	2,070	1,960	1,900	1,960
20-----	1,900	2,020	4,650	5,020	5,740	4,850	3,230	2,710	2,010	2,010	1,900	1,960
21-----	1,900	1,960	4,260	4,420	5,200	4,680	3,080	2,710	2,010	1,960	1,900	1,960
22-----	1,900	2,020	3,860	3,940	8,940	4,260	3,160	2,780	2,070	1,840	1,900	2,010
23-----	1,900	1,960	3,780	3,700	7,030	4,420	3,230	2,710	2,130	1,900	1,840	2,070
24-----	1,900	1,960	3,700	3,540	6,100	4,510	3,540	2,570	2,130	1,960	1,840	2,250
25-----	1,900	1,960	3,540	3,540	7,820	4,510	3,300	2,500	2,130	1,900	1,840	2,130
26-----	1,900	1,960	3,230	3,700	7,030	4,510	3,300	2,440	2,130	1,900	1,840	2,010
27-----	1,900	1,960	3,000	3,860	6,280	4,340	3,380	2,370	2,130	1,900	1,900	2,010
28-----	1,900	1,960	2,930	3,700	5,920	4,100	3,380	2,440	2,070	1,900	1,900	1,960
29-----	1,900	1,900	2,860	3,700	-----	4,180	3,300	2,570	2,070	1,900	1,840	1,960
30-----	1,900	1,900	2,710	3,860	-----	4,020	3,300	2,500	2,070	1,900	1,840	1,960
31-----	1,900	-----	2,640	3,940	-----	3,780	-----	2,440	-----	1,900	1,900	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	2,020	1,900	1,920	118,000
November-----	2,020	1,900	1,960	117,000
December-----	18,500	1,900	5,410	333,000
January-----	5,020	2,640	3,450	212,000
February-----	8,940	3,780	5,640	313,000
March-----	10,300	3,780	5,480	337,000
April-----	3,780	3,000	3,400	202,000
May-----	3,460	2,370	2,840	175,000
June-----	2,440	2,010	2,210	132,000
July-----	2,070	1,840	1,970	121,000
August-----	1,900	1,790	1,880	116,000
September-----	2,250	1,790	1,980	118,000
The year-----	18,500	1,790	3,170	2,290,000

PINE CREEK NEAR ALTURAS, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 35, T. 42 N., R. 13 E., at hydro-electric plant 6 miles above mouth of creek and 9 miles southeast of Alturas.

DRAINAGE AREA.—31 square miles.

RECORDS AVAILABLE.—May, 1918, to September, 1930.

EXTREMES.—Maximum discharge during year, 88 second-feet Feb. 5 (gage height, 2.22 feet); minimum, 2.9 second-feet Dec. 30.

1918-1930: Maximum discharge, 147 second-feet Mar. 29, 1919, and Dec. 30, 1920 (gage height, 3.20 feet); minimum, 2.3 second-feet Jan. 5 and 26, 1919.

REMARKS.—Records fair. Diversion for and regulation by power plant above station. Water-stage recorder record and results of discharge measurements furnished by State Division of Water Resources in cooperation with Modoc County.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	6	4.8	4.1	17	* 11	14	26	39	22	12	9
2	5.5	7	6	5	47	* 13	14	28	40	21	13	9
3	5.5	5.5	6.5	5	32	19	13	31	35	21	10	8.5
4	5.5	7	7.5	4.8	20	29	13	28	33	18	10	9
5	5.5	6.5	4.7	4.9	43	25	14	29	31	14	9	9
6												
7	4.6	7	5.5		37	22	15	29	29	17	10	9
8	5.5	7	5.5		14	14	20	28	27	19	11	7.5
9	5.5	6.5	5		11	14	20	28	29	20	10	8.5
10	5	6.5	5		9	13	18	28	31	21	8.5	8.5
11	6.5	4.6	6		5.5	13	18	29	32	18	12	6.5
12												
13	8	7	5.5		5.5	14	20	29	32	17	10	7
14	7	7	4.7		13	13	18	* 29	34	16	12	7
15	5.5	6.5	5.5		13	14	18	* 29	35	7.5	10	7
16	7	6	9		9	* 15	18	* 29	36	14	9.5	6
17	8.5	5.5	8.5		15	* 15	18	* 29	32	17	10	6.5
18												
19	9	6	9.5	* 5	13	* 16	17	29	36	11	9.5	7
20	7.5	5	6.5		8.5	* 17	16	29	34	11	8	6.5
21	7	6	8.5		11	* 18	16	31	34	13	9.5	7
22	7	6	7		19	* 19	16	33	32	16	14	7
23	6	6	7		13	20	16	31	30	13	11	7.5
24												
25	7.5	6	6.5		8.5	14	22	38	29	12	10	6.5
26	7	5.5	6		* 9.5	12	22	38	28	10	10	* 7
27	7	7	6.5		11	13	22	42	31	11	11	* 7.5
28	7	4.4	6		14	14	20	42	28	12	10	8
29	7	6	7		11	12	20	42	28	10	7.5	8
30												
31	7	7	6.5		7	11	20	43	24	9.5	8	7
	5	7	4.4	8.5	* 8	13	22	42	23	16	7.5	7.5
	7	5	5	12	* 9	14	28	42	22	14	7.5	7
	6.5	6.5	5	10		14	27	43	22	11	9.5	10
	7	5.5	4.7	10		13	25	42	23	14	9	10
	6		5	16		16		42		8.5	7.5	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	9	4.6	6.49	399
November	7	4.4	6.15	366
December	9.5	4.4	6.15	378
January	16	4.1	5.98	368
February	47	5.5	15.5	861
March	29	11	15.5	953
April	28	13	18.7	1,110
May	43	26	33.5	2,060
June	40	22	30.6	1,820
July	22	7.5	14.7	904
August	14	7.5	9.89	608
September	10	6.5	7.75	461
The year	47	4.1	14.2	10,300

* Estimated.

LOCATION.—Staff gage in sec. 4, T. 37 N., R. 5 E., 1¼ miles north of McArthur.
RECORDS AVAILABLE.—December, 1923, to September, 1930.

REMARKS.—Records fair. Daily discharge is result of daily current meter measurement and may not be mean for day. The canal diverts from the headwaters of Fall River, and its lower end spills into Pit River. It is used for power development and irrigation and drainage of lands on the north side of Pit River and for irrigation on the south side. No discharge measurement made on days for which discharge is not given. Records furnished by Mount Shasta Power Corporation.

[illegible]

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 Big Springs and 11 miles southeast of Hat Creek.

RECORDS AVAILABLE.—July, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 177 second-feet June 7 (gage height, 3.04 feet); minimum, 84 second-feet Sept. 25.

1926-1930: Maximum discharge, 419 second-feet Mar. 26, 1928 (gage height, 4.00 feet); minimum, 79 second-feet Sept. 4-6, 1926.

REMARKS.—Records good. Discharge estimated Apr. 14-17. Small irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1		111	145	107	94	86	16	125	132	143	103	87	92
2		118	150	106	93	86	17	120	145	137	104	87	92
3		134	149	105	93	86	18	115	147	131	104	88	89
4		122	150	103	93	86	19	118	153	126	104	93	86
5		115	155	101	93	86	20	125	163	132	99	99	86
6		118	163	100	93	88	21	129	149	132	97	99	86
7		118	166	95	93	89	22	134	131	134	97	99	86
8		115	163	98	93	91	23	137	132	126	93	99	86
9		111	160	97	91	94	24	137	137	128	92	98	86
10		111	155	101	88	100	25	128	137	125	89	98	86
11		114	152	103	88	98	26	122	137	122	86	97	86
12		122	152	103	87	97	27	117	137	125	86	97	86
13	140	128	147	101	86	94	28	115	142	116	86	97	89
14	135	131	143	101	86	94	29	112	142	116	85	92	93
15	130	132	142	101	86	92	30	109	135	111	90	88	95
							31	137			93	86	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 13-30	140	109	125	4,460
May	163	111	131	8,060
June	166	111	140	8,330
July	107	85	97.7	6,010
August	99	86	92.3	5,680
September	100	86	89.7	5,340
The period				37,900

LOST CREEK NEAR BALD MOUNTAIN, CALIF.

LOCATION.—Water-stage recorder in sec. 34, T. 34 N., R. 5 E., 6 miles east of Hat Creek post office and 10 miles south of Bald Mountain.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 87 second-feet Dec. 15 (gage height, 1.41 feet); minimum, 52 second-feet several days in December, January, and August.

REMARKS.—Records excellent. This stream heads about 3 miles upstream from the station; flows west and then north and disappears in a small lake about 4 miles below station. Gage-height record furnished by Red River Lumber Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	56	55	54	53	53	53	57	54	54	54	53	54
2.....	56	55	54	53	53	53	56	54	53	54	53	54
3.....	56	56	54	53	53	53	55	54	53	54	53	53
4.....	56	56	54	53	58	57	55	54	53	54	53	53
5.....	56	56	54	52	59	59	55	54	53	54	53	53
6.....	56	56	54	52	71	60	55	54	54	54	53	53
7.....	56	56	54	52	72	61	55	54	54	54	52	53
8.....	56	56	54	52	65	62	55	53	54	54	52	53
9.....	55	55	54	52	63	60	54	54	53	54	52	53
10.....	55	55	53	52	61	66	54	53	54	54	52	53
11.....	55	55	52	52	62	71	54	53	54	54	52	53
12.....	55	55	52	52	58	65	53	53	54	54	52	53
13.....	56	55	52	53	57	60	54	53	54	54	52	53
14.....	56	55	54	53	60	61	58	53	54	54	52	53
15.....	56	55	70	53	57	60	60	53	54	54	53	53
16.....	56	55	65	53	56	56	58	53	54	54	53	53
17.....	56	55	54	53	55	54	56	53	54	54	53	53
18.....	56	55	54	53	54	53	54	53	54	54	53	53
19.....	55	54	54	53	54	53	53	53	54	54	53	53
20.....	55	54	53	53	55	53	53	53	54	54	53	53
21.....	55	54	53	53	57	54	53	53	54	54	53	53
22.....	56	54	53	53	57	54	53	53	54	54	53	53
23.....	56	54	53	53	58	55	53	53	53	54	53	53
24.....	55	54	53	53	57	60	53	54	53	54	53	53
25.....	55	54	53	53	55	72	54	54	53	53	53	53
26.....	55	54	53	53	53	73	54	54	53	53	53	53
27.....	55	54	53	53	53	68	54	54	54	53	54	53
28.....	55	54	53	53	53	64	54	54	54	53	54	53
29.....	55	54	53	53	-----	60	54	54	54	53	54	53
30.....	55	54	53	53	-----	59	54	54	54	53	54	53
31.....	55	-----	53	53	-----	58	-----	54	-----	53	54	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	56					55			55.5		3,410	
November.....	56					54			54.8		3,280	
December.....	70					52			54.3		3,340	
January.....	53					52			52.7		3,240	
February.....	72					63			57.8		3,210	
March.....	73					53			59.6		3,660	
April.....	60					53			54.7		3,250	
May.....	54					53			53.5		3,290	
June.....	54					53			53.7		3,200	
July.....	54					53			53.8		3,310	
August.....	54					52			52.9		3,250	
September.....	54					53			53.1		3,160	
The year.....	73					52			54.7		39,600	

McCLOUD RIVER AT BAIRD, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ 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, 1930.

EXTREMES.—Maximum discharge during year, 21,000 second-feet Dec. 15 (gage height, 12.5 feet); minimum, 765 second-feet for many days.

1910-1930: Maximum discharge, 27,600 second-feet Feb. 2, 1917 (gage height, 14.3 feet); minimum, 740 second-feet Aug. 29 to Sept. 11, 1924.

Maximum stage known, 26 feet above low water occurred on Feb. 2, 1881.

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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	815	765	765	1,110	1,620	1,800	1,540	1,620	1,050	890	840	790
2	815	765	765	1,050	1,620	1,800	1,460	1,540	1,050	890	840	790
3	815	765	765	1,050	1,620	1,890	1,460	1,540	1,050	890	840	790
4	815	765	765	1,800	1,620	2,280	1,460	1,540	1,050	890	840	790
5	815	765	765	1,540	1,620	9,060	1,380	1,460	1,050	890	840	790
6	815	765	765	1,540	1,710	5,800	1,380	1,460	1,020	865	840	790
7	890	765	765	1,380	1,800	4,120	1,380	1,380	1,020	865	840	790
8	890	765	765	1,310	1,800	3,380	1,380	1,380	995	865	840	940
9	840	765	1,110	1,310	1,710	2,830	1,380	1,380	995	865	815	1,020
10	840	765	3,050	1,240	2,720	2,720	1,380	1,310	995	865	815	890
11	840	765	2,720	1,240	1,540	2,500	1,380	1,310	968	865	815	840
12	840	765	9,900	1,110	1,540	2,280	1,380	1,240	968	865	815	840
13	840	765	7,850	1,110	1,460	2,280	1,460	1,240	968	865	815	840
14	840	765	9,270	1,110	1,540	1,540	2,280	1,240	940	865	815	840
15	840	765	19,600	1,110	1,380	2,180	1,890	1,240	940	865	815	815
16	840	765	7,850	1,170	1,380	1,980	1,800	1,240	940	865	815	815
17	840	765	4,650	1,240	1,310	1,890	1,800	1,240	940	840	815	815
18	840	765	3,270	1,710	1,310	1,800	1,800	1,170	940	840	815	815
19	840	765	2,610	1,710	1,380	1,710	1,800	1,170	940	840	815	815
20	815	765	2,180	1,890	2,500	1,710	1,800	1,170	968	840	815	815
21	840	765	1,890	1,800	2,280	1,710	1,800	1,110	940	840	815	815
22	815	765	1,710	1,620	3,980	1,620	1,710	1,110	940	840	815	840
23	790	765	1,710	1,540	3,160	1,620	1,710	1,110	940	840	815	840
24	765	765	1,460	1,460	2,610	1,620	1,710	1,110	940	840	815	865
25	765	765	1,380	1,460	2,500	1,620	1,710	1,110	915	840	815	840
26	765	765	1,310	1,540	2,280	1,620	1,710	1,110	915	840	815	840
27	765	765	1,240	1,540	2,180	1,620	1,710	1,110	915	840	815	840
28	765	765	1,240	1,540	1,980	1,620	1,710	1,110	915	840	815	840
29	765	765	1,170	1,620	-----	1,620	1,710	1,110	890	840	790	840
30	765	765	1,110	1,620	-----	1,620	1,620	1,110	890	840	790	840
31	765	-----	1,110	1,540	-----	1,540	-----	1,110	-----	840	790	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	890	765	816	50,200
November	765	765	765	45,600
December	19,600	765	3,080	189,000
January	1,890	1,050	1,420	87,300
February	3,990	1,310	1,900	106,000
March	9,060	1,540	2,370	146,000
April	2,280	1,380	1,620	96,400
May	1,620	1,110	1,260	77,500
June	1,050	890	966	57,500
July	890	840	857	52,700
August	840	790	819	50,400
September	1,020	790	834	49,600
The year	19,600	765	1,390	1,010,000

ELK CREEK NEAR McCLOUD, CALIF.

LOCATION.—In sec. 3, T. 39 N., R. 2 W., half a mile upstream from McCloud-Bartle road crossing and 4 miles east of McCloud.

RECORDS AVAILABLE.—March, 1927, to September, 1930.

EXTREMES.—1927-1930: 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 station, and record is practically the flow of Mud Creek. Natural run-off of Elk Creek is very small. Record of daily discharge furnished by H. L. Haehl.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	3.2	4.1	0	0	6	5.5	6.5	15	16	9.5
2	5.5	3.7	4.2	0	2.0	8	7.5	6.5	16	16	9.5
3	5	3.7	4.0	0	4.7	8.5	7	7	15	14	9.
4	7.5	3.4	4.1	0	8	5.5	5.5	8	15	13	10
5	8	4.0	4.3	0	9	5.5	5	10	15	13	8.5
6	8.5	3.8	4.1	8	11	5.5	5.5	13	16	13	8
7	13	3.9	4.1	6.5	9	6	4.2	14	17	12	7.5
8	15	5.5	5	4.8	2.5	6	4.8	13	15	14	8.5
9	12	9	12	2.8	1.6	7.5	5.5	15	13	14	7
10	8	6	6.5	3.2	1.8	7.5	5	16	11	13	6
11	8	4.2	7	3.0	1.7	7.5	6	16	13	14	5.5
12	7.5	8.5	13	3.3	1.7	7	6.5	17	15	13	5
13	8	8.5	15	3.3	3.9	9.5	6.5	19	15	12	5.5
14	5	7	80	3.2	3.0	1	7	17	15	12	5.5
15	4.2	4.5	15	3.8	2.0	13	7	20	16	14	6.5
16	4.3	4.6	13	3.6	1.8	7.5	8.5	22	18	13	6.5
17	4.2	4.3	13	4.5	1.6	7.5	9	23	16	11	6
18	4.2	5	9	4.6	1.8	8	10	20	16	9.5	6
19	3.5	4.9	6	4.6	2.9	8	12	18	17	9	7
20	3.6	4.7	5.5	4.7	2.9	9	11	15	17	10	7.5
21	3.3	4.9	5	4.7	2.8	11	7.5	11	14	9.5	7
22	3.5	5	4.5	0	3.2	14	8.5	11	15	10	7
23	3.3	4.9	4.0	0	2.7	12	9.5	13	14	10	6
24	3.7	4.9	3.0	0	3.2	12	11	13	15	8	6.5
25	3.9	4.7	2.0	0	4.9	7.5	11	12	16	7.5	5
26	4.1	4.5	1.0	.6	6.5	7.5	12	11	16	11	6
27	4.2	4.1	.5	0	7.5	6.5	12	12	15	11	6
28	3.2	3.9	0	0	9	5.5	11	11	15	9.5	6.5
29	2.9	3.9	0	-----	8.5	5	9	13	14	9	6
30	3.1	4.3	0	-----	7.5	4.8	8	14	14	10	5
31	3.8	-----	0	-----	4.9	-----	7.5	-----	15	10	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	15	2.9	5.77	355
November	9	3.2	4.92	293
December	80	0	8.08	404
February	8	0	2.47	137
March	11	0	4.31	265
April	14	.1	7.63	454
May	12	4.2	7.94	488
June	23	6.5	13.6	827
July	18	11	15.1	928
August	16	7.5	11.6	713
September	10	5	6.87	409
The year	80	0	7.41	5,360

* Estimated.

NOTE.—No flow during January.

MILL CREEK BASIN

MILL CREEK NEAR MINERAL, CALIF.

LOCATION.—Staff gage in sec. 23, T. 29 N., R. 4 E., on the Morgan Springs ranch, 8 miles east of Mineral.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum gage height during year, 5.0 feet Dec. 13 or 14 (discharge not determined); minimum, 24 second-feet several days in August and September.

1928-1930: Maximum gage height, that of Dec. 13 or 14, 1929; minimum discharge, 22 second-feet Sept. 29-30, 1929.

REMARKS.—Records fair. Small irrigation diversion above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			54	47	69	138	138	165	85	30	24
2			47	69	69	125	180	180	85	30	24
3			47	62	69	125	196	180	69	30	24
4			40	54	77	125	150	196	69	24	24
5			47	54	77	125	150	212	69	24	24
6			54	62	62	150	138	248	69	24	24
7			54	77	62	150	125	230	69	24	24
8			47	85	54	150	114	212	62	24	24
9			47	77	54	165	114	212	54	24	24
10		* 250	47	77	47	165	104	196	54	30	30
11			* 47	77	47	165	104	196	47	30	30
12			* 47	77	47	165	180	212	47	30	30
13			* 47	77	54	248	150	212	40	30	30
14			* 47	77	62	267	150	212	40	30	24
15			* 47	77	62	248	150	196	40	27	24
16			54	77	62	165	196	180	40	27	24
17			47	77	62	138	165	180	40	24	24
18	25	248	47	77	62	125	267	165	30	24	24
19		212	40	77	54	125	286	150	30	24	24
20		150	40	77	47	125	196	138	30	24	24
21		114	47	85	47	138	165	125	30	24	30
22		104	40	125	47	150	230	114	30	24	30
23		94	40	104	47	150	248	104	30	24	24
24		77	40	85	47	165	230	104	30	24	24
25		77	40	85	62	150	230	104	30	24	24
26		69	40	85	77	150	230	94	30	24	24
27		62	40	77	94	165	230	85	30	24	24
28		62	40	77	114	138	248	85	30	24	24
29		54	40		138	125	196	85	30	24	27
30		54	47		150	125	150	85	30	24	30
31		54	47		165		150		30	24	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			* 25	1,540
November			* 25	1,490
December			183	11,300
January	54	40	45.4	2,790
February	125	47	77.0	4,280
March	165	47	70.5	4,330
April	267	125	155	9,220
May	286	104	179	11,000
June	248	85	162	9,640
July	85	30	45.1	2,770
August	30	24	25.7	1,580
September	30	24	25.5	1,520
The year			84.9	61,500

* Estimated.

MILL CREEK NEAR LOS MOLINOS, CALIF.

LOCATION.—Water-stage recorder in sec. 6, T. 25 N., R. 1 W., 5 miles northeast of Los Molinos.

DRAINAGE AREA.—173 square miles.

RECORDS AVAILABLE.—September, 1909, to September, 1913, fragmentary; October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,000 second-feet Dec. 15 (gage height, 10.05 feet); minimum, 70 second-feet Oct. 23-24.

1928-1930: Maximum discharge, 6,000 second-feet Dec. 15, 1929 (gage height, 10.05 feet); minimum, 70 second-feet Sept. 11 and Oct. 23-24, 1929.

REMARKS.—Records excellent. No large diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	78	75	78	144	218	339	338	312	240	152	98	87
2.....	78	75	78	142	266	300	330	350	240	150	97	87
3.....	78	73	78	140	205	548	318	545	242	146	97	86
4.....	78	73	78	599	266	1,180	298	500	240	144	97	86
5.....	77	76	77	461	266	1,300	300	412	250	138	97	86
6.....	78	75	77	375	338	884	318	388	262	136	95	86
7.....	85	75	77	322	350	592	330	350	269	134	94	86
8.....	91	73	80	245	332	435	342	320	269	130	94	90
9.....	85	76	142	257	305	400	362	300	257	130	94	94
10.....	82	77	602	226	283	342	332	288	264	128	95	126
11.....	80	75	637	199	269	320	315	274	269	126	94	126
12.....	78	75	1,300	209	257	318	308	271	276	122	94	104
13.....	77	73	1,040	199	250	335	412	288	264	120	92	100
14.....	76	75	1,560	211	252	440	668	293	250	116	92	95
15.....	73	76	4,080	323	252	485	756	276	245	114	90	94
16.....	73	75	1,570	1,340	252	350	425	274	245	114	90	92
17.....	73	76	750	897	252	310	412	312	242	114	92	92
18.....	76	76	645	1,100	250	281	400	310	233	113	92	90
19.....	73	75	530	730	274	209	375	325	223	111	90	90
20.....	73	75	338	485	500	271	400	338	211	111	90	90
21.....	72	73	310	400	362	274	388	302	199	109	90	90
22.....	72	73	266	325	1,140	274	400	278	190	109	87	92
23.....	70	76	238	274	375	276	400	283	185	109	87	98
24.....	70	75	216	259	500	293	425	290	176	107	87	102
25.....	72	77	199	242	610	310	400	283	169	104	87	105
26.....	72	77	190	233	470	340	388	286	167	102	87	97
27.....	73	77	176	223	388	375	362	281	160	102	86	92
28.....	73	77	167	211	388	375	362	288	158	102	86	92
29.....	73	77	160	204	-----	388	332	310	156	102	86	92
30.....	73	77	156	211	-----	412	310	286	154	100	86	97
31.....	75	-----	150	230	-----	362	-----	250	-----	100	86	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	91	70	76.0	4,670
November.....	77	73	75.1	4,470
December.....	4,080	77	519	31,900
January.....	1,340	140	368	22,600
February.....	1,140	218	356	19,800
March.....	1,300	269	433	26,600
April.....	756	298	384	22,800
May.....	545	250	318	19,600
June.....	276	154	224	13,300
July.....	152	100	119	7,320
August.....	98	86	91.3	5,610
September.....	126	86	94.8	5,640
The year.....	4,080	70	255	184,000

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, 1930.

EXTREMES.—Maximum discharge during year, 4,750 second-feet Dec. 14 (gage height, 6.0 feet); no flow during part of year.

1921–1930: Maximum discharge, about 16,600 second-feet Mar. 26, 1928 (gage height, 10.5 feet); no flow for short periods in 1921, 1923, 1924, 1926, 1929, and 1930.

REMARKS.—Records good except those for July 26 to Aug. 15 and Sept. 23–30, which are estimated. No diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.-----	0	5	69	424	65	396	217	69	15	0.1	0
2.-----	0	5	69	920	51	396	182	65	13	.1	0
3.-----	0	7	87	640	328	328	182	65	18	.1	0
4.-----	0	7	121	600	1,020	328	164	60	13	.1	0
5.-----	0	9.5	140	970	1,130	269	164	55	9	.1	0
6.-----	0	12	115	1,020	520	237	146	51	7	.1	0
7.-----	0	12	115	600	340	204	130	55	4.6	.1	0
8.-----	0	13	103	520	226	175	115	51	4.6	.1	0
9.-----	0	17	103	520	328	153	115	36	5.5	.1	0
10.-----	0	1,040	96	544	375	153	115	44	9	.1	0
11.-----	0	600	91	520	410	182	115	51	9	.1	0
12.-----	0	1,680	91	424	445	164	115	51	9	.1	0
13.-----	.1	1,820	91	328	600	175	115	39	9	.1	0
14.-----	.3	3,680	121	269	775	217	130	33	7	.1	
15.-----	.8	2,630	182	237	410	253	121	36	5.5	.1	
16.-----	3.0	1,750	920	237	480	375	115	36	5.5	0	0
17.-----	9.5	667	920	217	375	730	103	30	3.2	0	0
18.-----	12	775	600	226	375	1,020	130	30	3.2	0	0
19.-----	9.5	685	410	480	375	920	121	33	3.2	0	0
20.-----	9.5	600	280	445	375	560	110	26	1.9	0	0
21.-----	12	520	253	480	445	375	103	23	1.0	0	0
22.-----	8	375	237	1,360	445	340	103	26	1.9	0	0
23.-----	3.8	280	280	1,080	520	310	103	26	1.9	0	.1
24.-----	3.8	204	340	1,020	576	280	91	26	.8	0	.2
25.-----	3.0	130	328	640	600	269	91	26	.5	0	.2
26.-----	3.0	91	280	280	640	253	80	26	.4	0	.2
27.-----	3.0	73	237	130	640	280	87	23	.3	0	.2
28.-----	3.0	69	237	91	640	237	87	18	.2	0	.2
29.-----	3.0	69	226	-----	624	237	87	15	.1	0	.2
30.-----	5	69	466	-----	576	237	73	13	.1	0	.2
31.-----	-----	69	520	-----	576	-----	69	-----	.1	0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	12	0	3.08	183
December	3,680	5	579	35,600
January	920	69	262	16,100
February	1,360	91	544	30,200
March	1,130	51	493	30,300
April	1,020	153	335	19,900
May	217	69	119	7,320
June	69	13	37.9	2,260
July	18	0.1	5.24	322
August	0.1	0	.05	3.1
September	0.2	0	.05	3.0
The year	3,680	0	197	142,000

NOTE.—No flow during October.

DEER CREEK BASIN

DEER CREEK NEAR VINA, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 23, T. 25 N.; R. 1 W., three-fourths mile above concrete diversion dam and about 9 miles northeast of Vina.

RECORDS AVAILABLE.—October, 1911, to December, 1915; March, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,380 second-feet Dec. 15 (gage height, 8.60 feet); minimum, 62 second-feet on Oct. 23 and 24.

1911–1915, 1920–1930: Maximum discharge, 12,200 second-feet Mar. 26, 1928 (gage height, 15.0 feet at location three-fourths mile downstream); minimum, 60 second-feet June 29 to July 1, 1924, and several days in August and September, 1929.

REMARKS.—Records excellent for low stages, good for medium and high stages. No diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	64	66	139	247	464	424	298	164	96	73	70
2	66	65	66	135	274	410	402	290	159	96	73	70
3	66	64	66	131	322	719	386	486	152	96	75	70
4	65	64	66	656	302	1,750	366	555	148	95	75	68
5	65	64	66	505	290	2,110	354	500	144	93	75	70
6	65	64	66	419	338	1,320	358	442	141	91	75	70
7	72	64	67	338	378	938	362	406	137	90	75	70
8	74	64	70	247	366	750	374	370	133	90	75	71
9	69	65	110	242	342	615	374	342	131	88	75	75
10	69	65	601	218	314	505	350	310	126	88	75	93
11	67	65	822	196	284	455	330	287	122	84	75	105
12	66	65	1,700	206	274	437	314	271	120	84	75	81
13	65	65	1,380	192	261	446	424	258	116	83	75	75
14	65	65	1,420	192	255	520	775	247	112	81	75	74
15	65	65	4,800	226	253	535	725	242	112	78	74	73
16	64	66	2,290	1,110	255	455	595	242	111	78	74	74
17	65	66	1,020	968	253	402	520	247	109	78	74	74
18	66	66	775	1,280	250	374	473	226	107	80	74	74
19	65	66	565	828	271	350	455	216	107	78	73	73
20	64	66	428	620	635	350	428	214	109	78	73	73
21	64	65	334	482	460	350	410	206	107	75	71	71
22	64	65	280	386	1,820	358	402	199	105	75	71	74
23	62	65	247	326	1,140	362	390	192	103	75	71	83
24	62	66	224	298	775	382	428	187	102	77	70	83
25	64	66	206	280	965	298	424	182	102	77	70	86
26	64	66	194	264	775	428	410	175	102	75	70	78
27	64	66	177	250	610	486	390	173	102	75	70	75
28	64	66	166	236	535	478	382	170	102	75	70	75
29	64	66	159	226	-----	486	346	187	100	74	70	77
30	64	66	152	236	-----	516	322	180	98	74	70	81
31	64	-----	146	255	-----	464	-----	170	-----	74	70	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	74	62	65.4	4,020
November	66	64	65.2	3,880
December	4,800	66	604	37,100
January	1,280	131	390	24,000
February	1,820	247	473	26,300
March	2,110	350	600	36,900
April	775	314	428	25,200
May	555	170	273	16,800
June	164	98	119	7,080
July	96	74	82.8	5,060
August	75	70	72.6	4,480
September	105	68	76.2	4,530
The year	4,800	62	270	195,000

STONY CREEK BASIN

STONY CREEK NEAR STONYFORD, CALIF.

LOCATION.—Water-stage recorder in 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, 1930.

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, 1929-'30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	24	24	24	78	231	206	282	168	95	48	34	29
2.....	24	24	24	75	263	205	294	168	91	48	34	29
3.....	24	24	24	73	240	332	245	168	91	48	34	29
4.....	24	24	24	76	221	843	220	174	88	46	34	29
5.....	24	24	24	150	223	705	210	179	88	46	34	29
6.....	24	24	24	120	223	554	208	184	84	46	34	29
7.....	24	24	24	117	223	428	204	188	80	46	34	29
8.....	24	24	27	95	196	386	209	174	76	46	34	29
9.....	24	24	84	92	173	344	209	163	76	46	34	29
10.....	24	24	330	88	157	313	209	154	72	43	34	29
11.....	24	24	212	85	160	319	209	145	72	43	34	29
12.....	24	24	862	85	152	344	198	136	72	43	34	29
13.....	24	24	567	80	136	372	193	136	72	43	34	29
14.....	24	24	1,460	82	133	386	219	136	68	43	34	29
15.....	24	24	2,160	126	127	414	235	136	64	43	33	29
16.....	24	24	1,070	548	123	365	230	132	64	40	33	29
17.....	24	24	559	552	111	294	225	132	64	40	32	29
18.....	24	24	473	551	113	276	225	132	61	40	32	29
19.....	24	24	443	406	117	276	235	132	58	40	32	30
20.....	24	24	262	334	305	282	247	127	58	40	32	31
21.....	24	24	224	321	300	282	247	123	58	37	32	32
22.....	24	24	194	290	1,100	276	247	123	58	37	33	33
23.....	24	24	171	273	476	276	241	119	58	37	33	34
24.....	24	24	153	273	341	294	209	114	55	37	34	34
25.....	24	24	129	248	308	313	188	111	55	37	34	34
26.....	24	24	110	225	303	326	188	107	51	37	34	34
27.....	24	24	106	194	267	351	184	103	51	37	34	34
28.....	24	24	102	187	227	344	179	95	51	37	34	34
29.....	24	24	96	172	-----	338	174	95	48	37	32	34
30.....	24	24	83	212	-----	326	168	95	48	37	32	34
31.....	24	-----	81	250	-----	282	-----	99	-----	37	32	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	24	24	24.0	1,480
November.....	24	24	24.0	1,430
December.....	2,160	24	327	20,100
January.....	552	73	208	12,800
February.....	1,100	111	248	13,800
March.....	843	205	357	22,000
April.....	294	168	218	13,000
May.....	188	95	137	8,420
June.....	95	48	67.6	4,020
July.....	48	37	41.5	2,550
August.....	34	32	33.4	2,050
September.....	34	29	30.7	1,830
The year.....	2,160	24	143	103,000

STONY CREEK NEAR ELK CREEK, CALIF.

LOCATION.—Staff gage in sec. 16, T. 20 N., R. 6 W., at Stony Gorge Dam, 1½ miles south of Elk Creek.

DRAINAGE AREA.—301 square miles.

RECORDS AVAILABLE.—May, 1919, to September, 1930.

EXTREMES.—1919–1930: Maximum discharge, about 10,200 second-feet Jan. 31, 1921 (gage height, 7.80 feet); no flow during part of July to October, 1924.

REMARKS.—Water is stored in East Park Reservoir on Little Stony Creek and in Stony Gorge Reservoir and is 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, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3	5	13	40	90	22	280	100	100	17	5	6
2.....	3	5	13	38	50	25	175	95	94	17	5	206
3.....	4	5	13	37	40	30	75	85	90	16	4	211
4.....	4	5	13	35	35	320	55	125	80	16	4	212
5.....	4	5	13	95	30	1,560	47	130	76	15	4	213
6.....	5	5	13	75	30	1,020	42	150	72	15	3	214
7.....	5	6	13	40	30	580	40	160	70	14	3	215
8.....	5	6	13	35	25	495	245	170	64	14	3	219
9.....	5	7	20	32	25	465	250	200	58	14	2.5	221
10.....	5	7	85	30	25	400	235	180	56	13	2.5	222
11.....	6	7	275	30	20	360	230	175	53	13	2.5	223
12.....	6	8	300	30	20	360	225	170	50	13	2.5	222
13.....	6	8	1,050	30	20	375	205	160	48	12	2.5	222
14.....	6	9	525	30	18	400	320	155	46	12	2.5	222
15.....	6	9	1,880	30	17	1,000	360	150	43	12	5	222
16.....	6	10	2,060	270	15	740	340	150	40	12	5	220
17.....	6	10	860	650	13	645	295	145	38	11	5	215
18.....	6	11	600	410	12	410	295	145	37	11	6	217
19.....	5	12	450	375	15	325	295	140	136	11	8	217
20.....	5	12	350	215	40	510	300	135	184	10	8	223
21.....	5	11	300	140	135	500	320	130	182	10	10	221
22.....	4	11	200	100	575	495	290	125	180	9	10	218
23.....	4	11	175	60	1,450	445	225	120	178	9	8	172
24.....	4	11	150	45	350	440	220	110	177	8	8	14
25.....	4	11	135	40	190	435	215	107	176	8	8	15
26.....	4	11	120	35	175	430	215	106	174	7	7	15
27.....	36	12	100	30	110	520	210	105	172	7	7	15
28.....	16	12	90	26	60	475	205	104	61	6	7	15
29.....	10	12	75	24	-----	450	180	104	20	6	7	15
30.....	6	13	60	35	-----	420	150	103	17	5	6	15
31.....	5	-----	45	70	-----	340	-----	102	-----	5	6	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	36	3	6.42	395
November.....	13	5	8.90	530
December.....	2,060	13	323	19,960
January.....	650	24	101	6,210
February.....	1,450	12	129	7,160
March.....	1,560	22	484	29,800
April.....	360	40	218	13,000
May.....	200	85	133	8,180
June.....	184	17	92.4	5,500
July.....	17	5	11.2	689
August.....	10	2.5	5.39	331
September.....	223	6	162	9,640
The year.....	2,060	2.5	140	101,000

STONY CREEK NEAR ORLAND, CALIF

LOCATION.—Water-stage recorder 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, 1930.

EXTREMES.—1920-1930: Maximum discharge, 19,500 second-feet Jan. 30, 1921 (gage height, 10.3 feet); no flow Nov. 11, 1920, and Aug. 24 to Sept. 30, 1924.

REMARKS.—Water is stored in East Park Reservoir on Little Stony Creek and in Stony Gorge Reservoir and is 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	5	4	29	280	229	1,080	271	224	258	236	187
2	65	5	3	29	331	210	1,240	242	222	254	240	187
3	33	5	3	28	335	325	525	225	220	254	243	189
4	20	5	3	28	282	1,170	248	255	218	264	241	189
5	16	5	2	39	282	1,390	205	242	215	264	240	185
6	12	4	1	39	326	900	185	238	214	280	238	189
7	8	4	.5	44	300	540	175	245	211	272	237	189
8	8	4	.5	39	257	455	170	249	215	270	236	185
9	8	4	.5	37	218	400	165	245	215	268	224	197
10	8	4	.5	33	188	350	158	242	214	266	222	185
11	8	4	43	30	171	330	165	234	244	256	222	184
12	8	4	86	30	160	350	193	220	256	259	221	152
13	9	4	168	30	148	375	232	210	256	259	221	152
14	10	4	138	30	140	960	325	198	256	257	227	149
15	16	4	375	33	135	840	403	195	254	256	229	144
16	16	5	640	295	128	470	423	238	254	257	230	144
17	16	5	208	380	125	600	425	234	253	254	236	144
18	16	5	226	500	123	696	433	230	249	244	235	144
19	16	6	164	370	122	600	431	238	277	240	229	142
20	17	5	115	274	251	510	433	238	280	241	227	144
21	17	4	80	262	272	600	433	264	267	249	231	142
22	16	4	60	235	1,330	632	424	257	251	262	229	144
23	16	4	52	213	620	672	409	249	249	260	231	144
24	15	4	49	210	425	688	389	242	247	249	236	142
25	13	4	44	215	364	692	367	230	237	244	231	130
26	9	4	41	205	327	712	350	191	237	254	215	130
27	8	4	36	177	280	700	325	185	234	249	197	133
28	7	4	33	160	247	684	352	224	225	241	189	137
29	6	4	31	148	-----	672	332	235	205	240	185	142
30	5	4	30	173	-----	668	302	239	231	238	182	139
31	5	-----	29	345	-----	620	-----	241	-----	241	185	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	85	5	16.5	1,010
November	6	4	4.37	260
December	640	.5	86.0	5,290
January	500	28	150	9,220
February	1,330	122	292	16,200
March	1,390	210	614	87,800
April	1,240	158	377	22,400
May	271	185	234	14,400
June	280	205	238	14,200
July	280	238	255	15,700
August	243	182	224	13,800
September	197	130	159	9,460
The year	1,390	.5	220	160,000

LITTLE STONY CREEK NEAR LODOGA, CALIF.

LOCATION.—Staff gage at East Park Reservoir Dam, 4 miles above junction with Stony Creek and $3\frac{1}{2}$ miles northwest of Lodi, Colusa County, and a staff gage and weir at head of reservoir, 3 miles above dam.

DRAINAGE AREA.—102 square miles.

RECORDS AVAILABLE.—January, 1908, to September, 1930.

EXTREMES.—1908-1930: Maximum discharge, 7,060 second-feet Feb. 2, 1909 (gage height, 11.8 feet); no flow during parts of nearly every year.

REMARKS.—Water is stored in East Park Reservoir. Daily-discharge record furnished by United States Bureau of Reclamation, through R. C. E. Weber, project manager.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	25	80	100	64	25	9	2.5
2.....	0	23	50	100	54	24	8	2.5
3.....	0	19	60	95	49	23	7	2.5
4.....	0	16	58	165	45	22	7	2
5.....	0	68	56	860	44	50	6	2
6.....	0	90	55	360	40	45	5	1.5
7.....	0	150	55	255	38	40	5	1.5
8.....	0	75	53	200	35	35	4	1.5
9.....	0	45	52	175	33	32	4	1.5
10.....	2	35	50	155	31	26	4	1.5
11.....	3	32	50	135	25	24	3.5	1
12.....	96	30	49	115	22	24	3.5	1
13.....	130	27	47	95	19	23	3.5	1
14.....	55	26	43	150	15	23	3.5	1
15.....	600	25	40	340	35	23	3.5	.5
16.....	500	370	37	155	30	22	3.5	.4
17.....	140	280	35	115	25	22	3	.4
18.....	134	325	32	125	25	22	3	.3
19.....	110	225	30	160	35	21	3	.3
20.....	75	165	120	135	35	21	3	.2
21.....	55	150	130	109	30	21	3	.2
22.....	50	135	960	100	25	20	3	.1
23.....	46	125	955	90	20	20	3	.1
24.....	40	105	230	75	25	20	3	.1
25.....	33	95	200	105	45	19	3	.1
26.....	30	80	150	95	40	18	3	.1
27.....	30	70	120	85	35	17	3	.1
28.....	28	60	105	84	30	17	2.5	.1
29.....	27	55	-----	83	28	15	2.5	0
30.....	25	50	-----	82	25	12	2.5	0
31.....	25	64	-----	74	-----	10	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	600	0	72.1	4,430
January.....	370	16	98.1	6,030
February.....	960	30	139	7,720
March.....	860	74	160	9,840
April.....	64	15	33.4	1,990
May.....	50	10	23.7	1,460
June.....	9	2.5	4.02	239
July.....	2.5	0	.84	51.6
The year.....	960	0	43.9	31,800

NOTE.—No flow during 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 Great Western Power Co.'s dam at Lake Almanor, 4 miles above mouth of Butt Creek and 5 miles southeast of Prattville.

DRAINAGE AREA.—506 square miles.

RECORDS AVAILABLE.—June, 1905, to September, 1930.

EXTREMES.—1905-1930: Maximum discharge, 10,000 second-feet Mar. 19, 1907 (gage height, 16.2 feet); no flow Apr. 15 and 16, 1914, parts of January to April, 1919, and Apr. 21, 1923.

REMARKS.—Water is diverted from Lake Almanor for power and is returned to North Fork at Caribou; records include this diversion. Flow regulated by storage in Lake Almanor. Available storage on Sept. 30, 1929, was 266,000 acre-feet and on Sept. 30, 1930, was 341,000 acre-feet. Daily-discharge record furnished by Great Western Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,730	1,620	905	66	95	443	84	67	73	974	1,270	1,630
2	1,730	1,440	902	66	95	62	84	67	72	982	975	1,520
3	1,720	1,640	875	67	95	80	84	67	77	982	1,180	1,580
4	1,720	1,610	901	68	95	80	84	67	77	963	1,220	1,430
5	1,720	1,550	902	71	95	79	84	67	75	963	1,220	1,040
6	1,720	1,550	902	69	95	78	84	67	77	972	1,220	644
7	1,710	1,520	902	74	95	79	84	67	77	962	1,220	890
8	1,710	1,350	902	73	57	44	84	67	74	970	1,220	605
9	1,700	1,150	904	73	73	73	84	67	80	965	964	779
10	943	1,100	902	73	95	81	84	67	80	972	1,220	749
11	830	1,300	903	74	95	81	96	67	80	963	1,320	635
12	905	1,410	51	98	95	96	97	67	970	992	1,240	835
13	1,080	1,420	49	77	95	84	84	53	956	1,010	1,280	771
14	850	1,420	49	79	95	84	84	68	970	970	1,280	718
15	850	1,360	49	78	95	84	74	68	973	980	1,280	758
16	747	1,140	49	72	786	84	73	68	977	980	1,060	691
17	789	1,370	49	79	989	84	74	68	1,000	980	1,160	901
18	789	1,420	52	88	989	84	74	68	975	970	1,270	859
19	691	1,380	52	91	970	84	41	68	972	980	1,270	1,410
20	1,040	1,030	52	89	970	84	78	68	970	1,170	1,340	968
21	877	957	52	91	970	84	75	68	973	1,240	1,320	1,370
22	1,460	956	62	96	970	84	78	68	973	1,200	1,360	1,710
23	1,720	956	62	99	970	84	97	68	973	1,240	1,150	1,710
24	1,640	956	62	99	970	84	90	64	973	1,240	1,200	1,600
25	1,610	953	62	99	970	84	90	79	973	1,180	1,360	1,660
26	1,390	953	62	99	970	84	90	79	971	972	1,400	1,690
27	1,600	951	62	99	970	84	90	79	971	1,220	1,540	958
28	1,600	951	62	99	970	84	60	79	973	1,240	1,570	1,890
29	1,600	951	62	101	-----	84	58	79	988	1,240	1,690	1,690
30	1,600	905	62	99	-----	84	59	84	975	1,230	1,450	1,600
31	1,600	-----	62	95	-----	84	-----	84	-----	1,230	1,440	-----

Month	Discharge in second-feet					Run-off in acre-feet		
	Maximum	Minimum	Observed mean	Gain or loss in storage	Mean corrected for storage	Observed	Gain or loss in storage	Corrected for storage
October	1,730	691	1,340	-977	367	82,400	-60,100	22,600
November	1,620	905	1,240	-842	396	73,800	-50,100	23,600
December	905	49	356	+1,100	1,460	21,900	+67,900	89,800
January	101	66	83.9	+663	747	5,160	+40,800	45,900
February	959	57	494	+497	991	27,400	+27,600	55,100
March	443	44	92.6	+967	1,060	5,690	+59,500	65,100
April	97	41	80.1	+1,290	1,370	4,770	+76,800	81,500
May	84	53	69.8	+1,010	1,080	4,290	+62,100	66,400
June	1,000	72	651	-113	538	35,700	-6,720	32,000
July	1,240	962	1,060	-707	355	65,200	-43,500	21,800
August	1,690	904	1,280	-878	403	78,700	-54,000	24,800
September	1,710	605	1,160	-704	456	69,000	-41,900	27,100
The year	1,730	41	659	-----	768	477,000	+78,400	556,000

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 August, 1930.

EXTREMES.—1911-1930: Maximum mean daily discharge, 35,000 second-feet Jan. 1, 1914; minimum, 423 second-feet June 8, 1924.

REMARKS.—No record Aug. 26 to Sept. 30. Storage and diversions above station. There was 45,963 acre-feet of water in Butt Valley Reservoir on Sept. 30, 1929, and 26,058 acre-feet on Sept. 30, 1930. Daily-discharge record furnished by Great Western Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.-----	2,040	1,910	1,870	1,500	2,080	2,320	4,200	2,820	1,660	1,460	1,720
2.-----	2,060	1,880	1,650	1,320	1,880	2,550	3,810	2,900	1,730	1,38 ^a	1,660
3.-----	2,060	1,670	1,470	1,340	2,080	8,430	3,620	3,540	1,830	1,410	1,420
4.-----	2,060	1,810	1,120	1,570	2,220	9,220	2,690	3,170	1,780	1,360	1,550
5.-----	2,040	1,900	1,190	1,840	2,160	7,050	2,660	3,060	1,740	1,18 ^a	1,680
6.-----	1,920	1,870	1,200	1,600	2,220	7,700	2,620	2,680	1,740	1,270	1,700
7.-----	1,970	1,870	1,120	1,560	2,400	6,660	2,650	3,100	1,700	1,30 ^a	1,700
8.-----	2,000	1,830	1,130	2,110	2,520	6,200	3,740	3,060	1,690	1,420	1,700
9.-----	2,070	1,710	1,420	1,850	2,560	4,040	3,560	2,970	1,460	1,520	1,700
10.-----	2,060	1,470	5,930	1,880	2,480	3,600	3,380	2,840	1,690	1,520	1,460
11.-----	1,900	1,430	8,300	2,020	2,600	3,260	3,400	2,660	1,640	1,570	1,480
12.-----	2,050	1,780	14,400	1,800	2,620	2,940	3,490	2,660	1,580	1,520	1,740
13.-----	1,800	1,920	22,300	1,590	2,560	2,950	2,610	2,710	1,520	1,470	1,760
14.-----	2,100	1,970	19,800	1,700	2,480	3,010	2,420	2,660	1,470	1,460	1,770
15.-----	2,090	1,920	24,500	1,460	2,420	3,260	3,390	2,540	1,330	1,420	1,770
16.-----	2,040	1,820	21,300	1,530	2,350	3,140	4,040	2,520	1,280	1,540	1,760
17.-----	1,950	1,550	14,700	1,530	2,280	2,860	3,700	2,680	1,480	1,520	1,590
18.-----	2,020	1,810	9,760	1,540	2,340	2,780	3,580	2,600	1,620	1,520	1,570
19.-----	2,000	1,890	4,280	1,540	2,320	2,780	3,440	2,540	1,460	1,520	1,700
20.-----	1,830	2,080	3,490	1,540	2,940	2,770	3,660	2,680	1,490	1,410	1,640
21.-----	2,130	2,060	2,980	2,220	3,020	2,700	3,640	2,580	1,460	1,500	1,680
22.-----	2,070	2,040	2,540	2,460	3,620	2,480	3,210	2,380	1,310	1,700	1,660
23.-----	2,080	2,020	2,120	2,180	4,880	2,620	3,130	2,330	1,220	1,680	1,720
24.-----	2,070	1,920	2,060	2,120	4,380	2,750	3,580	2,300	1,430	1,710	1,560
25.-----	1,980	1,990	1,920	2,100	4,040	3,300	3,080	2,000	1,390	1,680	1,420
26.-----	1,960	2,170	1,680	2,200	3,600	4,090	3,050	1,980	1,400	1,680	-----
27.-----	1,720	1,970	1,800	2,180	3,600	4,420	3,220	1,940	1,320	1,460	-----
28.-----	1,880	2,120	1,870	2,200	3,600	4,560	3,080	2,240	1,410	1,560	-----
29.-----	1,920	2,200	1,760	2,160	-----	4,520	3,650	2,300	1,280	1,700	-----
30.-----	1,900	2,000	1,580	2,140	-----	4,480	3,920	1,940	1,360	1,700	-----
31.-----	1,900	-----	1,620	2,180	-----	4,420	-----	1,920	-----	1,680	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	2,130	1,720	1,990	122,000
November-----	2,200	1,430	1,890	112,000
December-----	24,500	1,120	5,900	363,000
January-----	2,460	1,320	1,840	113,000
February-----	4,880	1,880	2,790	155,000
March-----	9,220	2,320	4,120	253,000
April-----	4,200	2,420	3,340	196,000
May-----	3,540	1,920	2,590	159,000
June-----	1,830	1,220	1,520	90,400
July-----	1,710	1,180	1,510	92,800
August 1-25.-----	1,770	1,420	1,640	81,300
The period-----	-----	-----	-----	1,740,000

FEATHER RIVER AT OROVILLE, CALIF.

LOCATION.—Water-stage recorder in sec. 8, T. 19 N., R. 4 E., at highway bridge at Oroville.

DRAINAGE AREA.—3,640 square miles.

RECORDS AVAILABLE.—January, 1902, to September, 1930.

EXTREMES.—Maximum discharge during year, 80,100 second-feet Dec. 15 (gage height, 15.82 feet); minimum, 645 second-feet Dec. 7.

1902-1930: Maximum discharge, 211,000 second-feet Mar. 26, 1928 (gage height, 26.08 feet); minimum, 402 second-feet June 30, 1924.

REMARKS.—Records excellent. Lake Almanor, Bucks, and other storage reservoirs above station. Small diversions upstream. The operation of the Big Bend plant of the Great Western Power Co. causes diurnal fluctuations in stage, especially during extreme low water.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	2,180	2,080	1,370	2,750	3,960	5,920	9,000	6,300	4,430	1,980	1,940	1,670
2-----	2,200	2,050	1,400	2,660	4,430	5,560	8,440	6,520	4,550	1,890	1,890	2,020
3-----	2,180	1,740	1,340	2,570	4,800	5,920	8,180	8,440	3,380	1,980	1,640	2,110
4-----	2,200	2,080	1,320	3,890	4,800	12,800	7,920	7,660	3,290	1,800	1,890	2,170
5-----	2,160	2,060	1,380	5,240	4,670	19,100	7,920	7,180	3,170	1,730	1,920	2,170
6-----	2,050	2,030	1,390	4,430	4,940	15,800	8,180	6,960	3,100	1,700	1,900	2,260
7-----	2,170	2,020	1,220	4,310	5,560	12,400	8,180	6,740	3,020	1,840	1,940	2,160
8-----	2,200	1,990	1,200	3,630	5,740	10,200	9,000	6,520	2,820	1,880	1,890	2,160
9-----	2,160	1,860	3,140	3,520	5,740	8,700	9,000	6,100	2,750	1,950	1,860	2,160
10-----	2,220	1,540	19,000	3,420	5,560	8,180	8,180	5,920	2,990	1,930	1,640	2,300
11-----	2,180	1,680	17,700	3,120	5,560	7,920	7,660	5,920	2,840	1,960	1,800	2,320
12-----	2,100	1,840	42,900	3,120	5,560	7,920	7,180	5,560	2,770	1,890	1,880	2,250
13-----	1,920	1,860	62,200	3,020	5,560	8,180	9,300	5,560	2,660	1,720	1,940	2,310
14-----	2,200	1,880	36,200	3,120	5,400	8,440	12,000	5,560	2,510	1,910	1,650	2,220
15-----	2,160	1,890	73,400	3,220	5,560	8,180	11,200	5,400	2,300	1,900	1,980	2,140
16-----	2,180	1,790	38,400	8,180	5,560	7,400	10,900	5,400	2,340	1,860	1,920	2,220
17-----	2,160	1,500	17,100	8,180	5,400	6,960	10,200	5,920	2,400	1,860	1,630	2,320
18-----	2,130	1,800	12,000	9,900	5,560	6,520	9,600	5,740	2,260	1,860	1,820	2,380
19-----	2,210	1,860	9,300	7,660	5,560	6,520	9,300	5,560	2,300	1,820	1,900	2,400
20-----	2,040	1,820	7,400	6,960	8,180	6,520	9,900	5,740	2,300	1,670	1,920	2,320
21-----	2,200	1,540	6,300	6,520	7,660	6,520	9,600	5,400	2,200	1,940	1,940	1,580
22-----	2,220	1,420	5,740	5,560	10,200	6,520	9,600	4,940	1,940	2,000	1,980	1,990
23-----	2,200	1,400	4,670	4,940	12,400	6,740	9,900	4,800	2,020	2,000	1,930	2,370
24-----	2,180	1,300	4,550	4,670	9,600	7,400	9,600	4,670	2,120	2,000	1,680	2,420
25-----	2,130	1,490	3,740	4,550	9,300	8,180	8,700	4,190	2,040	2,000	1,700	2,420
26-----	2,080	1,460	3,520	4,190	8,180	8,700	8,700	4,070	2,020	1,920	1,960	2,280
27-----	1,810	1,440	3,420	4,310	7,180	9,900	7,660	4,190	1,970	1,660	1,960	2,290
28-----	2,100	1,320	3,320	4,190	6,740	9,900	7,400	4,190	1,930	1,930	2,100	1,560
29-----	2,070	1,400	3,220	4,070	-----	9,900	7,180	4,550	1,730	1,980	2,130	2,090
30-----	2,040	1,440	3,020	4,190	-----	10,200	6,520	4,070	1,820	1,980	2,180	2,500
31-----	2,060	-----	2,930	4,310	-----	9,900	-----	3,850	-----	1,960	1,870	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	2,220	1,810	2,130	131,000
November-----	2,080	1,300	1,720	102,000
December-----	73,400	1,200	12,700	781,000
January-----	9,900	2,570	4,660	287,000
February-----	12,400	3,960	6,410	356,000
March-----	19,100	5,560	8,810	542,000
April-----	12,000	6,520	8,870	528,000
May-----	8,440	3,850	5,600	344,000
June-----	4,550	1,730	2,600	155,000
July-----	2,000	1,660	1,890	116,000
August-----	2,180	1,630	1,890	116,000
September-----	2,500	1,560	2,190	130,000
The year-----	73,400	1,200	4,960	3,590,000

FEATHER RIVER AT NICOLAUS, CALIF.

LOCATION.—Water-stage recorder at highway bridge at Nicolaus, Sutter County.

RECORDS AVAILABLE.—June, 1921, to October, 1930; low-water records only.

EXTREMES.—Minimum discharge during year, 574 second-feet on July 23.

1921-1930: No flow Aug. 2-18, 1924.

REMARKS.—Records good. Considerable water diverted for irrigation above station. Flow partly regulated by power plants of Great Western Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	May	June	July	Aug.	Sept.	Oct.
1	1,830	1,990	10,500	6,130	1,010	849	1,310	2,950
2	1,910	1,990	10,100	5,690	1,080	835	1,070	3,050
3	1,990	1,950	10,500	5,410	1,120	842	1,070	3,050
4	2,070	1,830	12,500	4,870	1,150	793	1,310	2,950
5	2,190	1,790	12,300	4,610	1,230	658	1,370	2,950
6	2,230	1,870	10,900	4,610	989	793	1,350	2,550
7	2,190	1,870	10,300	4,350	919	821	1,470	2,350
8	2,230	1,910	10,100	4,090	828	814	1,550	2,650
9	2,360	1,910	9,720	3,850	856	828	1,470	2,700
10	2,360	1,870	9,160	3,490	884	863	1,570	2,700
11	2,270	1,710	8,620	3,610	891	821	1,630	2,750
12	2,270	1,670	8,260	3,380	870	676	1,830	2,750
13	2,230	1,710	7,920	3,160	863	814	1,970	2,500
14	2,150	1,830	8,090	2,850	807	849	1,990	2,260
15	2,070	1,870	8,090	2,850	664	898	2,070	2,600
16	2,150	1,990	7,920	2,700	718	898	1,970	2,650
17	2,270	1,910	7,920	2,170	712	884	1,990	2,650
18	2,270	1,710	8,800	2,260	670	828	2,120	2,600
19	2,150	1,670	8,980	2,220	664	658	2,220	2,600
20	2,230	1,910	8,980	2,080	694	765	2,370	2,600
21	2,150	1,910	9,160	2,260	676	842	2,370	2,400
22	2,110	1,830	8,440	2,450	586	884	2,070	2,500
23	2,190	1,630	7,750	2,300	744	1,010	1,720	2,600
24	2,150	1,620	7,240	2,040	856	1,270	2,220	2,550
25	2,150	1,480	7,240	1,940	856	1,270	2,350	2,650
26	2,190	1,440	6,920	1,680	856	1,080	2,500	2,700
27	2,070	1,550	6,600	1,470	891	1,230	2,400	2,550
28	1,990	1,590	6,600	1,390	835	1,270	2,450	2,500
29	1,950	1,550	6,440	1,350	652	1,270	2,450	2,600
30	2,030	1,440	7,080	1,270	807	1,230	2,400	2,600
31	1,990	-----	6,760	-----	849	1,350	-----	2,650

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929				
October	2,360	1,830	2,140	132,000
November	1,990	1,440	1,760	105,000
1930				
May	12,500	6,440	8,710	536,000
June	6,130	1,270	3,080	183,000
July	1,230	586	846	52,000
August	1,350	658	932	57,300
September	2,500	1,010	1,880	112,000
October	3,050	2,260	2,650	163,000
The period	-----	-----	-----	1,100,000

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.

DRAINAGE AREA.—196 square miles.

RECORDS AVAILABLE.—October, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,920 second-feet Dec. 13 (gage height, 10.2 feet); minimum, 14 second-feet Sept. 9, 10, 13, and 18.

1911–1930: Maximum discharge, about 11,000 second-feet Mar. 26, 1928 (gage height, 15.5 feet); minimum, 6 second-feet parts of August and September, 1929.

REMARKS.—Records fair. Water is diverted above station for irrigation in American Valley.

Daily and monthly discharge, in second-feet, 1928–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	42	30	120	249	466	588	336	235	30	30	19
2	20	42	30	120	281	562	537	378	154	30	32	20
3	20	42	30	110	317	666	512	422	178	30	32	20
4	20	42	30	281	336	1,190	512	466	178	30	30	20
5	20	42	30	264	378	1,580	512	378	142	30	30	19
6	20	42	30	234	400	1,250	537	336	120	30	30	19
7	20	42	30	234	466	1,130	537	378	110	30	28	19
8	20	42	31	205	444	1,010	562	336	110	25	22	20
9	20	42	100	178	422	775	562	336	110	20	20	14
10	30	42	1,190	192	400	588	562	336	100	20	20	14
11	30	42	890	192	357	588	588	298	90	20	19	20
12	30	42	2,280	178	317	588	588	264	90	20	17	20
13	30	42	3,920	166	336	588	830	264	90	20	20	14
14	30	36	950	142	336	588	775	264	90	30	20	20
15	30	36	3,150	166	336	562	720	264	90	32	19	20
16	30	36	1,800	234	336	562	614	264	81	36	20	19
17	30	36	666	378	317	562	614	336	72	30	20	20
18	30	36	537	512	317	537	640	298	72	45	20	14
19	30	36	466	537	298	537	666	298	64	45	25	20
20	30	36	336	466	890	512	666	298	56	42	22	20
21	30	30	298	422	562	512	614	298	56	30	20	20
22	30	30	264	378	466	489	588	298	56	30	19	20
23	30	30	249	336	890	466	562	264	56	32	20	27
24	36	30	234	336	666	489	512	264	49	30	20	27
25	36	30	205	317	588	512	537	234	42	30	19	32
26	36	30	178	281	537	562	537	205	42	30	19	27
27	36	30	154	264	512	562	537	192	36	30	20	18
28	36	30	142	234	466	562	562	178	30	30	19	17
29	36	30	142	205	-----	588	588	178	30	32	19	104
30	36	30	130	220	-----	588	562	166	30	36	19	197
31	42	-----	130	234	-----	666	-----	178	-----	36	19	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet		
October	42			20			28.8			1,770		
November	42			30			36.6			2,180		
December	3,920			30			602			37,000		
January	537			110			262			16,100		
February	890			249			436			24,200		
March	1,580			466			672			41,300		
April	830			512			591			35,200		
May	466			166			290			17,800		
June	205			30			87.6			5,210		
July	45			20			30.4			1,870		
August	32			17			22.2			1,360		
September	197			14			28.7			1,710		
The year	3,920			14			257			186,000		

GRIZZLY CREEK NEAR STORRIE, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 5, T. 23 N., R. 7 E., about 2,000 feet above the outlet of tunnel from Bucks Creek and 7 miles south-east of Storrie.

DRAINAGE AREA.—4.57 square miles.

RECORDS AVAILABLE.—December, 1929, to September, 1930.

EXTREMES.—Maximum gage height during the year, 4.85 feet December 12 (discharge not determined); minimum discharge, 0.8 second-foot during parts of August and September.

REMARKS.—Records good. No diversions or regulation above station. Gage-height record and some discharge measurements furnished by Feather River Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		12	16	23	48	90	31	4.4	0.8	0.9
2		12	24	21	51	113	27	4.4	.9	.8
3		12	23	81	51	152	25	4.0	.8	.9
4		16	21	25	56	79	24	3.5	.9	.8
5		29	22	25	65	72	23	3.3	.9	.8
6		32	27	22	72	66	21	3.0	.9	1.0
7		30	28	21	83	55	19	2.5	.8	1.0
8		26	27	21	101	43	17	2.3	.8	1.0
9		23	25	21	83	37	15	2.2	.8	1.0
10		17	23	20	71	45	13	2.1	.8	1.2
11		15	23	21	67	59	12	1.7	.8	1.2
12		21	23	21	70	71	11	1.4	.8	1.2
13		19	24	22	137	75	11	1.4	.8	1.0
14		36	25	22	79	72	10	1.2	.8	1.0
15		16	30	21	61	80	10	1.2	.8	1.0
16		51	30	19	59	82	9.5	1.0	.8	1.0
17		34	30	18	57	86	9.5	1.0	.8	1.0
18		33	31	19	61	88	9.5	1.0	.8	1.0
19		26	40	20	77	90	9.5	1.0	.8	1.0
20	23	23	50	22	97	75	9.5	1.0	.8	1.0
21	21	22	33	24	98	61	9	1.0	.8	1.0
22	19	20	45	24	111	56	8.5	1.0	.8	1.1
23	18	19	39	28	109	60	7.5	1.0	.8	1.3
24	17	18	32	32	98	55	7.5	1.0	.8	2.3
25	17	17	28	36	86	51	7.5	1.0	.8	1.7
26	15	17	25	45	103	47	6.5	1.0	.8	1.3
27	15	17	24	54	77	45	6	1.0	.8	1.2
28	15	16	24	56	82	56	5.5	1.0	.8	3.1
29	14	16		62	68	53	5.5	1.0	.8	2.8
30	13	16		62	66	43	4.9	1.0	.8	4.2
31	13	16		51		34		.9	.8	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December 20-31	23	13	16.7	397
January	51	12	21.8	1,340
February	50	16	28.3	1,570
March	62	18	29.0	1,780
April	137	48	78.1	4,650
May	152	34	67.5	4,150
June	31	4.9	12.8	762
July	4.4	.9	1.76	108
August	.9	.8	.81	49.8
September	4.2	.8	1.33	79.1
The period				14,900

CONCOW CREEK NEAR YANKEE HILL, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 16, T. 22 N., R. 4 E., at diverting dam of Spring Valley ditch, 300 feet below Lake Wilenor Dam and 3 miles north of Yankee Hill post office.

RECORDS AVAILABLE.—October, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 195 second-feet Mar. 5 (gage height, 1.32 feet); no flow during several months.

1927-1930: Maximum discharge, 1,840 second-feet Mar. 26, 1928 (gage height, 5.9 feet); no flow during several months each year.

REMARKS.—Records good. Water is diverted into Spring Valley ditch at station and regulated by storage in Lake Wilenor Reservoir.

Daily and monthly discharge, in second-feet, 1928-30

Day	Dec.	Jan.	Mar.	Apr.	May	Day	Dec.	Jan.	Mar.	Apr.	May
1	0	0	0	7	0	16	150	150	44	5.5	0
2	0	0	0	0	0	17	152	150	113	4.6	0
3	0	0	0	0	18	18	152	150	52	1.0	0
4	0	0	97	0	71	19	152	150	2.6	1.8	0
5	0	21	187	0	62	20	148	150	2.6	.2	2.7
6	0	109	170	0	33	21	148	150	3.0	0	4.6
7	0	150	150	0	28	22	148	150	3.0	0	4.6
8	0	62	51	0	9	23	49	150	3.8	0	4.2
9	0	50	2.6	0	0	24	0	150	6	3.0	3.8
10	0	140	2.6	0	0	25	0	50	6.5	0	1.3
11	0	53	9	0	0	26	0	0	12	0	0
12	0	.8	19	0	0	27	0	0	13	0	0
13	0	.7	30	0	0	28	0	0	14	0	0
14	0	.7	39	0	0	29	0	0	14	0	0
15	50	25	48	0	0	30	0	0	16	0	0
						31	0	0	18		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	152	0	37.1	2,280
January	150	0	64.9	3,990
March	187	0	36.4	2,240
April	7	0	7.77	45.8
May	71	0	7.81	480
The year	187	0	12.5	9,040

NOTE.—No flow past station during months for which no discharge is shown.

Daily and monthly discharge, in second-feet, of Concow Creek and Spring Valley ditch near Yankee Hill, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12	18	8.5	1.0	1.0	1.0	11	16	6	19	23	43
2.....	12	18	8.5	1.0	1.0	1.0	5.5	15	6	16	25	43
3.....	12	13	8	1.0	1.0	1.0	5.5	28	6	12	25	43
4.....	12	9	8	1.0	1.0	98	5.5	73	11	12	25	43
5.....	11	9	8	22	1.0	188	5.5	75	15	12	25	43
6.....	11	9	3.3	110	1.0	171	5.5	51	15	12	25	43
7.....	11	9	1.0	151	1.0	151	5.5	46	15	12	23	43
8.....	11	9	1.0	63	1.0	52	2.8	18	12	12	23	43
9.....	11	9	1.0	51	1.0	3.6	1.6	4.5	12	11	23	43
10.....	9	9	1.3	141	1.0	3.6	1.6	4.5	12	11	23	43
11.....	9	9	1.4	54	1.0	10	1.6	4.6	12	11	25	43
12.....	9	9	1.4	1.8	1.0	20	1.5	4.6	15	11	25	43
13.....	9	9	1.4	1.7	1.0	31	5.5	12	16	14	28	43
14.....	9	9.5	1.5	1.0	1.0	40	7.5	15	19	14	27	43
15.....	3.9	9.5	52	26	1.0	49	7.5	16	19	17	27	29
16.....	1.0	9	151	151	1.0	45	13	16	19	18	27	22
17.....	1.0	9	153	151	1.0	114	18	15	19	18	27	29
18.....	9.5	9	153	151	1.0	53	16	15	19	18	29	27
19.....	10	9	153	151	1.0	3.6	17	15	19	18	30	27
20.....	1.0	9	149	151	1.0	3.6	15	18	18	18	30	27
21.....	1.0	9	149	151	1.0	4.0	15	19	18	18	30	27
22.....	3.0	8.5	149	151	1.0	4.0	18	18	15	21	30	27
23.....	4.8	8.5	50	151	1.0	4.8	18	9.5	15	21	30	26
24.....	10	8.5	1.0	151	1.0	7	18	6.5	15	20	31	24
25.....	9	8.5	1.0	51	1.0	7.5	18	3.9	15	18	31	24
26.....	8.5	8.5	1.0	1.0	1.0	13	18	2.4	18	18	34	24
27.....	13	8.5	1.0	1.0	1.0	14	18	2.4	18	18	43	24
28.....	16	8.5	1.0	1.0	1.0	15	18	3.8	18	18	47	23
29.....	17	8.5	1.0	1.0	-----	15	18	4.3	21	20	47	23
30.....	17	8.5	1.0	1.0	-----	17	18	5	21	21	43	23
31.....	17	-----	1.0	1.0	-----	19	-----	6	-----	21	43	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	17		1.0		9.38		577					
November.....	18		8.5		9.62		572					
December.....	153		1.0		39.4		2,420					
January.....	151		1.0		65.9		4,050					
February.....	1.0		1.0		1.00		55.5					
March.....	188		1.0		37.4		2,300					
April.....	18		1.5		11.0		655					
May.....	75		2.4		17.5		1,089					
June.....	21		6		15.3		910					
July.....	21		11		16.1		990					
August.....	47		23		29.8		1,830					
September.....	43		22		33.6		2,000					
The year.....	188		1.0		24.1		17,400					

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.

DRAINAGE AREA.—699 square miles.

RECORDS AVAILABLE.—October, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,500 second-feet Dec. 12 (gage height, 5.46 feet); minimum, 8.5 second-feet Aug. 31.

1925-1930: Maximum discharge, 11,000 second-feet Mar. 26, 1928 (gage height, 12.0 feet); minimum, 6 second-feet Aug. 8, 1926, and Aug. 24, 1929.

REMARKS.—Records good except those for estimated periods (Oct. 1-4 and Jan. 8-20), which are fair. Numerous small irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	18	26	22	74	186	485	832	398	119	25	16	9
2.....	18	27	23	76	222	449	855	398	100	23	15	9
3.....	17	28	31	67	247	474	810	421	109	21	16	9
4.....	17	28	26	102	273	698	810	449	91	19	16	9
5.....	16	28	25	82	300	925	765	474	80	18	15	10
6.....	16	29	24	69	348	1,000	788	438	81	18	15	10
7.....	19	29	25	64	391	1,050	765	510	81	18	15	10
8.....	18	29	38	55	467	1,020	810	550	81	17	15	10
9.....	17	30	328	50	503	1,050	720	530	80	17	16	11
10.....	17	30	746	45	590	1,130	652	530	77	16	16	14
11.....	17	31	398	40	720	1,130	590	488	76	16	16	14
12.....	17	31	981	40	788	1,160	590	456	74	16	16	14
13.....	17	30	683	45	810	1,160	855	418	69	16	17	14
14.....	17	28	1,130	50	810	1,130	925	375	64	15	18	14
15.....	17	27	1,020	55	810	1,000	1,160	339	62	14	17	14
16.....	17	26	1,000	60	810	925	1,400	328	54	13	16	14
17.....	17	26	590	65	765	832	1,310	357	51	13	15	14
18.....	17	26	530	70	698	742	1,080	317	48	14	10	15
19.....	18	25	421	75	742	675	878	278	45	16	10	15
20.....	19	25	328	80	950	652	832	273	45	16	11	16
21.....	20	24	250	85	975	675	720	263	42	16	10	16
22.....	20	22	208	80	1,250	698	675	250	40	28	10	16
23.....	20	22	173	77	1,310	765	675	222	40	29	11	28
24.....	21	23	149	88	1,280	832	630	205	41	24	11	22
25.....	21	23	134	95	975	878	570	191	43	21	14	22
26.....	22	23	132	97	742	950	550	184	35	19	14	22
27.....	23	23	113	100	742	1,000	506	168	30	19	11	21
28.....	23	22	101	114	590	950	463	158	30	18	10	21
29.....	24	22	89	156	-----	975	445	145	28	17	9	22
30.....	24	22	82	188	-----	1,020	438	134	26	16	9	26
31.....	25	-----	78	198	-----	855	-----	132	-----	16	9	-----
Month						Maximum		Minimum		Mean		Run-off in acre-feet
October.....						25		16		19.0		1,170
November.....						31		22		26.2		1,560
December.....						1,130		22		319		19,600
January.....						198		40		82.0		5,040
February.....						1,310		186		689		38,300
March.....						1,160		449		880		54,100
April.....						1,400		438		770		45,800
May.....						550		132		335		20,600
June.....						119		26		61.7		3,670
July.....						29		13		18.2		1,120
August.....						18		9		13.5		830
September.....						28		9		15.4		916
The year.....						1,400		9		266		193,000

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., at Rocky Bar, three-fourths mile below mouth of Nelson Creek and 2 miles below Nelson point.

DRAINAGE AREA.—898 square miles.

RECORDS AVAILABLE.—December, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 7,580 second-feet Dec. 13 (gage height, 8.20 feet); minimum, 58 second-feet Oct. 6.

1923-1930: Maximum discharge, about 22,000 second-feet Mar. 27, 1928 (gage height, 16.0 feet); minimum, 36 second-feet Aug. 12-14, 1924.

REMARKS.—Records excellent except those for estimated periods (Dec. 20-31 and June 15 to July 17). Numerous small irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	61	64	70	261	406	825	1,520	1,080	610		90	65
2.....	61	66	68	252	487	798	1,520	1,110	575		88	65
3.....	61	67	70	237	595	825	1,470	1,200	555		87	63
4.....	60	67	79	284	600	1,170	1,470	1,140	540		87	63
5.....	60	67	74	343	630	1,470	1,470	1,080	526		86	63
6.....	58	67	73	293	728	1,470	1,560	1,050	530		84	63
7.....	64	68	72	280	852	1,470	1,600	1,080	535		82	63
8.....	66	68	81	249	908	1,430	1,750	1,110	516		82	63
9.....	64	68	517	258	908	1,430	1,600	1,020	487		84	71
10.....	62	68	2,580	240	936	1,470	1,430	1,020	474	180	84	74
11.....	62	70	1,230	217	1,020	1,520	1,290	992	464		82	79
12.....	62	68	4,640	217	1,110	1,560	1,290	992	455		82	77
13.....	62	67	5,790	222	1,110	1,650	1,850	992	428		84	76
14.....	61	68	3,160	220	1,110	1,600	2,050	964	398		84	74
15.....	61	70	3,290	231	1,140	1,430	2,050	936			82	71
16.....	61	70	2,520	374	1,140	1,290	2,250	936			79	69
17.....	62	70	1,430	424	1,110	1,230	2,200	1,170			77	68
18.....	62	70	1,230	464	1,050	1,110	2,000	1,110		105	76	68
19.....	62	70	1,080	437	1,110	1,050	1,850	1,110		100	72	71
20.....	62	68	880	415	1,430	1,080	1,850	1,110		98	71	72
21.....	62	68	771	390	1,360	1,110	1,800	1,050		98	69	72
22.....	62	70	670	358	1,900	1,200	1,800	936	300	98	68	72
23.....	62	70	605	343	2,000	1,260	1,900	908		114	68	90
24.....	62	70	555	347	1,800	1,390	1,800	880		112	68	92
25.....	62	70	516	362	1,430	1,470	1,520	852		103	68	87
26.....	62	70	483	366	1,170	1,650	1,430	825		96	74	84
27.....	64	70	455	366	1,080	1,800	1,290	798		95	72	82
28.....	64	70	415	362	964	1,750	1,200	798		93	69	88
29.....	64	70	390	398	-----	1,750	1,140	798		93	68	100
30.....	64	70	370	455	-----	1,950	1,080	717		92	66	111
31.....	64	-----	320	433	-----	1,650	-----	665		90	66	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	66	58	62.1	3,820
November.....	70	64	68.6	4,080
December.....	5,790	68	1,110	68,200
January.....	464	217	326	20,000
February.....	2,000	406	1,070	59,400
March.....	1,950	798	1,380	84,800
April.....	2,250	1,080	1,630	97,000
May.....	1,200	665	932	60,400
June.....	610	-----	366	23,000
July.....	-----	90	143	8,790
August.....	90	66	77.4	4,760
September.....	111	63	75.2	4,470
The year.....	5,790	58	608	439,000

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 northeast of Oroville.

DRAINAGE AREA.—1,353 square miles.

RECORDS AVAILABLE.—October, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 25,500 second-feet Dec. 13 (gage height, 14.2 feet); minimum, 130 second-feet Oct. 1.

1911–1930: Maximum discharge, about 100,000 second-feet Mar. 26, 1928 (gage height, 22.8 feet); minimum, 100 second-feet Aug. 30 to Sept. 15, 1924.

REMARKS.—Records fair. Diversions above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	147	147	1,500	2,060	3,950	4,100	2,960	1,430	400	255	185
2	147	147	147	1,430	2,250	3,660	3,800	2,960	1,290	400	255	185
3	147	147	147	1,360	2,250	4,100	3,660	3,520	1,290	370	255	185
4	147	147	147	1,740	2,150	7,700	3,520	3,660	1,290	370	255	185
5	147	147	147	2,960	2,060	7,900	3,520	3,520	1,220	340	255	185
6	147	147	147	2,060	2,150	6,130	3,950	3,240	1,150	340	230	185
7	147	147	147	2,460	2,250	5,050	4,560	2,960	1,150	340	230	185
8	147	147	147	1,900	2,460	4,720	2,830	1,150	340	230	185	185
9	147	147	480	1,430	2,460	4,100	4,560	2,580	1,150	340	230	185
10	147	147	8,500	1,360	2,250	3,800	4,100	2,460	1,080	310	185	185
11	147	147	5,750	1,290	2,250	3,800	3,800	2,460	1,010	310	185	185
12	165	147	17,000	1,010	2,580	3,520	3,520	2,460	950	310	185	185
13	147	147	21,400	1,580	2,460	3,950	5,050	2,350	890	310	185	185
14	147	147	8,910	1,430	2,460	4,100	6,510	2,350	830	310	185	185
15	147	147	14,600	1,500	2,700	3,520	7,100	2,250	770	310	185	185
16	147	147	10,600	4,720	2,830	3,520	5,390	2,250	710	310	185	185
17	147	147	5,940	2,580	2,830	3,240	5,220	2,960	660	295	185	185
18	147	147	4,400	5,390	2,460	2,700	4,720	2,700	660	280	185	185
19	147	147	3,660	3,520	2,460	2,700	4,560	2,700	660	280	185	185
20	147	147	2,700	3,240	3,950	2,250	4,720	2,700	610	280	185	185
21	147	147	3,240	3,520	3,240	2,700	4,880	2,460	610	280	185	187
22	147	147	3,800	2,960	5,050	2,960	5,050	2,250	610	265	185	191
23	147	147	2,960	2,060	5,050	3,240	5,050	2,150	560	255	185	225
24	147	147	2,250	2,350	4,720	3,380	4,720	2,060	560	255	185	240
25	147	147	2,150	2,350	4,560	3,520	4,400	1,740	520	255	185	265
26	147	147	2,060	2,350	5,050	3,800	3,800	1,580	480	255	185	222
27	147	147	2,060	2,250	3,950	4,720	3,520	1,430	440	255	185	208
28	147	147	2,060	2,150	5,390	4,720	3,520	1,430	400	255	185	212
29	147	147	1,900	2,150	-----	4,880	3,520	1,580	400	255	185	301
30	147	147	1,740	2,060	-----	5,050	3,100	1,430	385	255	185	301
31	147	-----	1,580	2,060	-----	4,720	-----	1,290	-----	255	185	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	165	130	147	9,040
November	147	147	147	8,750
December	21,400	147	4,220	259,000
January	5,390	1,010	2,280	140,000
February	5,390	2,060	3,080	171,000
March	7,900	2,250	4,130	254,000
April	7,100	3,100	4,420	263,000
May	3,660	1,290	2,430	149,000
June	1,430	385	830	49,400
July	400	255	303	18,600
August	255	185	202	12,400
September	301	185	202	12,000
The year	21,400	130	1,860	1,350,000

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, 2 miles above Clover Valley Ice Co.'s dam, and 6 miles northeast of Portola.

DRAINAGE AREA.—45.0 square miles.

RECORDS AVAILABLE.—October, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 616 second-feet Dec. 12 (gauge height, 4.30 feet); minimum, 0.4 second-foot Oct. 6–19 and Sept. 12–29.

1925–1930: Maximum discharge, 2,680 second-feet Mar. 26, 1928 (gauge height, 7.50 feet); minimum, 0.2 second-foot July 22 to Sept. 2 and Sept. 10–14, 1929.

REMARKS.—Records good except those for Jan. 9 to Feb. 4, which were estimated because of ice. No diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.5	0.7	9.5	16	48	239	75	29	3.5	0.6	0.6
2	.6	.5	.7	8.5	14	46	264	77	28	3.3	.6	.6
3	.6	.5	.7	8	18	39	279	92	27	3.1	.6	.7
4	.5	.5	.7	7	18	36	277	100	24	2.7	.6	.7
5	.5	.5	.7	5.5	20	33	294	114	23	2.5	.6	.7
6	.4	.5	.8	5	22	35	264	77	21	2.3	.6	.7
7	.4	.5	.8	5	29	40	294	117	19	1.9	.6	.6
8	.4	.5	.8	4.7	37	36	283	112	17	1.7	.6	.6
9	.4	.5	1.4	5	45	37	224	84	15	1.6	.6	.5
10	.4	.5	142	4.5	46	38	180	73	14	1.5	.6	.5
11	.4	.5	91	4	45	38	164	59	13	1.3	.5	.5
12	.4	.5	321	4	47	47	159	55	12	1.2	.5	.4
13	.4	.5	491	4	51	57	317	51	12	1.1	.5	.4
14	.4	.5	173	4	53	58	192	50	11	1.0	.5	.4
15	.4	.5	192	4	63	59	244	50	10	.9	.5	.4
16	.4	.6	187	5	64	52	233	52	9	.7	.5	.4
17	.4	.6	70	6	65	52	253	78	8.5	.7	.6	.4
18	.4	.6	72	6.5	75	53	226	57	8	.7	.6	.4
19	.4	.6	47	7	102	59	202	54	7	.7	.6	.4
20	.5	.6	32	7	84	73	202	52	6.5	.7	.7	.4
21	.5	.6	29	8	83	92	190	54	6	.7	.7	.4
22	.5	.6	26	8.5	72	121	188	40	6	.9	.7	.4
23	.5	.6	22	8.5	66	150	180	42	5.5	1.0	.7	.4
24	.5	.6	18	8.5	72	190	166	39	5.5	1.0	.6	.4
25	.5	.6	16	8.5	55	216	144	36	5	1.0	.6	.4
26	.5	.6	15	8.5	50	259	146	34	5	1.0	.6	.4
27	.5	.6	13	9	54	288	115	32	4.7	.9	.6	.4
28	.5	.6	12	10	46	283	105	32	4.2	.9	.6	.4
29	.5	.7	11	10	—	294	102	30	3.7	.7	.6	.4
30	.5	.7	10	12	—	310	96	29	3.5	.7	.6	.5
31	.5	—	10	12	—	233	—	29	—	.6	.6	—

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.6	0.4	0.46	28.3
November	.7	.5	.59	35.1
December	491	.7	64.8	3,980
January	12	4	7.02	432
February	102	14	50.4	2,800
March	310	33	109	6,700
April	317	96	207	12,300
May	117	29	60.8	3,740
June	29	3.5	12.1	720
July	3.5	.6	1.37	84.2
August	.7	.5	.59	36.3
September	.7	.4	.28	28.6
The year	491	.4	42.7	30,900

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, 800 feet below old log crib dam, and 3 miles northwest of La Porte.

DRAINAGE AREA.—27.3 square miles.

RECORDS AVAILABLE.—October, 1927, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,280 second-feet Dec. 13 (gage height, 5.73 feet); minimum, 0.6 second-foot Nov. 12.

1927-1930: Maximum discharge, 2,600 second-feet Mar. 26, 1928 (gage height, 7.00 feet); minimum, that of Nov. 12, 1929.

REMARKS.—Records excellent except those for Jan. 7-20, which were estimated because of snow and ice. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1.6	1.5	1.8	42	44	84	237	244	98	11	2.2	1.4
2-----	1.6	1.6	1.8	40	50	77	237	260	91	10	2.0	1.3
3-----	1.6	1.6	1.7	38	53	77	234	322	84	9.5	2.0	1.3
4-----	1.6	1.6	1.8	36	53	86	237	269	78	8.5	2.0	1.3
5-----	1.5	1.6	1.8	39	56	87	257	234	74	8	2.0	1.3
6-----	1.6	1.6	1.8	39	60	80	284	221	72	7.5	1.9	1.3
7-----	1.7	1.6	1.9	38	67	74	306	208	68	7	1.9	1.3
8-----	1.7	1.6	2.2	37	70	70	342	182	62	7	1.9	1.4
9-----	1.6	1.7	66	38	74	68	342	168	57	6.5	1.9	1.5
10-----	1.5	1.7	408	37	75	66	316	156	54	6	1.8	1.6
11-----	1.5	1.7	353	40	77	68	300	156	50	5.5	1.7	1.8
12-----	1.4	1.6	690	42	78	71	296	164	46	5.5	1.7	1.6
13-----	1.4	1.6	898	42	80	75	414	178	42	5	1.7	1.5
14-----	1.4	1.7	568	42	85	76	360	182	39	4.8	1.7	1.4
15-----	1.4	1.7	965	44	92	71	319	180	36	4.5	1.7	1.4
16-----	1.4	1.7	525	50	101	69	293	199	33	4.2	1.7	1.3
17-----	1.4	1.7	378	60	105	67	272	244	30	3.9	1.6	1.3
18-----	1.5	1.7	290	70	114	67	263	229	29	3.8	1.6	1.3
19-----	1.5	1.7	229	68	128	69	284	226	27	3.4	1.6	1.3
20-----	1.4	1.7	176	66	162	72	322	226	26	3.3	1.6	1.4
21-----	1.5	1.7	137	64	137	78	339	201	24	3.3	1.6	1.4
22-----	1.4	1.6	115	60	174	86	370	180	22	3.1	1.6	1.7
23-----	1.4	1.7	94	57	162	98	374	170	21	2.9	1.5	2.6
24-----	1.4	1.7	83	56	135	117	349	160	19	2.8	1.5	2.3
25-----	1.4	1.7	73	54	125	137	322	148	18	2.6	1.6	2.1
26-----	1.4	1.7	65	53	108	172	322	139	16	2.5	1.6	1.9
27-----	1.5	1.8	60	50	96	204	284	130	15	2.4	1.5	1.7
28-----	1.5	1.8	55	48	90	224	281	128	14	2.4	1.4	2.9
29-----	1.4	1.7	51	47	---	247	255	144	13	2.3	1.4	3.3
30-----	1.5	1.7	48	46	---	263	234	132	12	2.2	1.4	3.8
31-----	1.5	---	46	46	---	247	---	117	---	2.2	1.4	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	1.7	1.4	1.49	91.6
November-----	1.8	1.5	1.67	99.4
December-----	965	1.7	206	12,700
January-----	70	36	48.0	2,950
February-----	174	44	94.7	5,260
March-----	263	66	108	6,640
April-----	414	234	302	13,000
May-----	322	117	194	11,700
June-----	98	12	42.3	2,520
July-----	11	2.2	4.95	304
August-----	2.2	1.4	1.70	105
September-----	3.8	1.3	1.72	102
The year-----	965	1.3	83.4	60,500

SOUTH FORK OF FEATHER RIVER AT ENTERPRISE, CALIF.

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.

DRAINAGE AREA.—141 square miles.

RECORDS AVAILABLE.—October, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 5,070 second-feet Dec. 13 (gage height, 9.2 feet); minimum, 0.8 second-foot Oct. 14 to Nov. 4.

1911-1930: Maximum discharge, about 15,200 second-feet Mar. 26, 1928 (gage height, 16.0 feet); minimum, 0.2 second-foot Aug. 11, 1917.

REMARKS.—Records fair. Irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun	July	Aug.	Sept.
1.....	1.0	.8	1.0	160	280	450	628	505	20 ⁷	26	2.8	2.2
2.....	1.0	.8	1.0	160	300	400	628	475	175	19	2.8	2.2
3.....	1.0	.8	1.0	140	325	450	628	565	175	19	2.8	2.2
4.....	1.0	.8	1.0	140	325	1,570	595	595	148	17	2.8	2.2
5.....	1.0	1.0	1.0	400	325	2,780	595	595	14 ⁸	15	2.8	2.2
6.....	1.0	1.0	1.0	350	350	1,570	660	535	14 ⁸	13	2.8	2.2
7.....	1.0	1.0	1.0	300	350	1,060	695	535	125	12	2.8	2.2
8.....	1.0	1.0	1.0	260	350	885	730	475	108	8.5	2.8	2.2
9.....	1.0	1.0	1.07	225	350	805	768	420	9 ⁵	7.5	2.8	2.2
10.....	1.0	1.0	1,870	225	350	805	768	420	9 ⁵	6.0	2.8	2.8
11.....	1.0	1.0	832	175	350	660	628	410	8 ⁵	4.2	2.8	2.8
12.....	1.0	1.0	3,180	190	350	660	695	400	77	4.2	2.8	2.8
13.....	1.0	1.0	5,070	190	350	628	1,060	390	69	4.2	2.8	2.8
14.....	.8	1.0	1,620	225	350	628	1,060	380	61	4.2	2.8	2.8
15.....	.8	1.0	1,730	190	350	595	885	370	61	3.5	2.8	2.8
16.....	.8	1.0	2,540	630	350	565	805	370	54	3.5	2.8	2.8
17.....	.8	1.0	1,220	700	400	535	695	420	47	3.5	2.2	2.8
18.....	.8	1.0	850	1,030	400	505	695	420	47	2.8	2.2	2.8
19.....	.8	1.0	700	570	400	535	695	420	47	2.8	2.2	2.8
20.....	.8	1.0	450	570	770	505	730	370	47	2.8	2.2	2.8
21.....	.8	1.0	400	510	350	505	730	370	47	2.8	2.2	2.8
22.....	.8	1.0	350	450	850	505	730	348	40	2.8	2.2	2.8
23.....	.8	1.0	300	400	850	475	730	325	37	2.8	2.2	2.8
24.....	.8	1.0	260	350	700	505	695	304	37	2.8	2.2	8.5
25.....	.8	1.0	225	325	700	535	660	282	28	2.8	2.2	6
26.....	.8	1.0	208	325	630	628	628	262	28	2.8	2.2	6
27.....	.8	1.0	208	325	510	660	628	208	28	2.8	2.2	6
28.....	.8	1.0	190	300	480	660	595	175	23	2.8	2.2	6
29.....	.8	1.0	160	280	-----	595	565	242	31	2.8	2.2	8.5
30.....	.8	1.0	160	300	-----	606	535	208	26	2.8	2.2	28
31.....	.8	-----	160	290	-----	617	-----	208	-----	2.8	2.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1.0	0.8	0.88	54.1
November.....	1.0	.8	.97	57.7
December.....	5,070	1.0	735	45,200
January.....	1,030	140	345	21,200
February.....	850	280	444	24,700
March.....	2,780	400	738	45,400
April.....	1,060	535	705	42,000
May.....	595	175	387	23,800
June.....	208	23	78.2	4,650
July.....	26	2.8	6.76	416
August.....	2.8	2.2	2.51	154
September.....	28	2.2	4.27	254
The year.....	5,070	.8	287	208,000

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, 1930.

EXTREMES.—Maximum discharge during year, 840 second-feet Dec. 16 (gage height, 3.8 feet); minimum, 0.2 second-foot for several periods during year. 1927-1930: Maximum discharge, 2,900 second-feet Mar. 26, 1928 (gage height, 6.1 feet); minimum, 0.2 second-foot several days in 1929 and 1930.

REMARKS.—Records excellent except those for Oct. 9 to Dec. 8, Dec. 13-19, and June 27 to July 20, which were estimated. Forbestown ditch diverts from Lost Creek Reservoir 1,000 feet above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	7	0.2	41	76	122	169	91	20	0.2	3.6	8
2-----	7		39	87	117	148	91	19		3.4	8.5
3-----	7		39	93	147	140	92	18		3.6	9
4-----	7		103	95	305	137	95	16		3.4	9.5
5-----	7.5		104	100	426	137	95	16		2.4	11
6-----	7.5	2.1	70	108	296	142	95	14	0.2	1.7	11
7-----	6.5		62	111	236	142	96	12		1.7	10
8-----	1.4		50	112	204	145	95	12		1.9	8.5
9-----			51	112	183	142	92	11		1.9	8.5
10-----		4.4	47	111	169	129	88	10		3.0	8.5
11-----		4.0	41	108	166	118	83	9		4.0	8.5
12-----		6	46	110	168	114	45	8		4.3	9.5
13-----		6	49	110	169	108	7	6.5		4.3	9.5
14-----		350	45	111	181	108	7	6	4.3	8	
15-----		300	51	117	164	108	6.5	5	4.3	7	
16-----		320	129	123	150	108	36	4.0	4.6	7	
17-----		200	126	128	142	106	58	2.0	4.3	7.5	
18-----		130	169	128	137	108	51	1.7	4.3	7.5	
19-----	.2	110	124	129	134	106	49	1.4	7	7	
20-----		92	122	139	137	124	44	1.3	9.5	7.5	
21-----			78	104	139	139	148	42	1.0	4.3	8
22-----			69	90	323	145	142	39	.6	4.3	8
23-----			63	84	282	150	131	36	.5	1.4	4.3
24-----		58	80	212	156	120	34	.4	2.4	5	7.5
25-----		54	78	192	164	112	29	.4	3.4	6	6.5
26-----		50	79	164	171	106	23	.3	3.1	6	6.5
27-----		48	76	142	172	102	22	.3	1.6	6	6.5
28-----		46	73	136	172	99	23	.3	1.6	8	6.5
29-----		45	71	-----	171	98	18	.3	4.0	8	6.5
30-----		43	74	-----	172	96	25	.3	3.6	8	6.5
31-----		42	76	-----	172	-----	23	-----	3.6	8.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	7.5	-----	1.79	110
November-----	-----	-----	.2	11.9
December-----	350	-----	68.5	4,210
January-----	169	39	77.2	4,750
February-----	323	76	136	7,550
March-----	426	117	179	11,000
April-----	169	96	123	7,320
May-----	96	6.5	52.6	3,230
June-----	20	.3	6.58	392
July-----	4.0	-----	.96	59.0
August-----	9.5	1.7	4.7	290
September-----	11	6.5	8.0	480
The year-----	426	-----	54.4	39,400

Daily and monthly discharge, in second-feet, of Lost Creek and Forbestown Ditch near Clipper Mills, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	42	12	10	41	76	122	191	113	52	35	39	43
2.....	42	12	10	39	87	117	170	113	51	35	38	44
3.....	42	12	10	39	93	147	162	114	50	35	39	44
4.....	42	12	10	103	95	305	159	117	48	35	39	44
5.....	42	13	10	104	100	426	159	117	48	35	39	46
6.....	42	12	10	70	108	296	164	117	46	35	39	46
7.....	40	12	10	62	111	236	164	118	44	35	39	45
8.....	33	12	10	50	112	204	167	117	44	35	39	44
9.....	31	11	20	51	112	183	164	114	43	35	39	44
10.....	31	12	7	47	111	169	151	110	42	35	40	44
11.....	31	14	4.0	41	108	166	140	105	41	35	42	44
12.....	30	13	6	46	110	168	136	67	40	35	42	44
13.....	26	13	6	49	110	169	130	29	38	35	42	44
14.....	26	13	350	45	111	181	130	30	39	35	42	43
15.....	26	13	300	51	117	164	130	30	38	35	42	42
16.....	26	12	320	129	123	150	130	58	38	35	43	42
17.....	26	12	200	126	128	142	128	82	37	35	42	42
18.....	26	12	130	169	128	137	130	75	37	35	42	42
19.....	26	11	110	124	129	134	128	73	36	35	45	42
20.....	26	11	92	122	139	137	146	68	36	35	48	42
21.....	26	11	78	104	139	139	170	67	36	35	42	43
22.....	25	15	69	90	323	145	164	64	36	36	42	43
23.....	26	14	63	84	282	150	153	62	36	36	42	42
24.....	26	12	58	80	212	156	142	61	35	37	43	42
25.....	26	11	54	78	192	164	134	61	35	38	44	42
26.....	26	11	50	79	164	171	128	55	35	38	44	42
27.....	18	11	48	76	142	172	124	54	35	27	42	40
28.....	17	11	46	73	136	172	121	55	35	14	43	40
29.....	16	11	45	71	-----	171	120	50	35	22	43	40
30.....	13	11	43	74	-----	172	118	57	35	39	43	40
31.....	12	-----	42	76	-----	172	-----	55	-----	39	44	-----
Month						Maximum		Minimum		Mean		Run-off in acre-feet
October.....						42		12		28.6		1,760
November.....						15		11		12.1		720
December.....						350		4.0		71.6		4,400
January.....						169		39		77.2		4,750
February.....						323		76		136		7,550
March.....						426		117		179		11,000
April.....						191		118		145		8,630
May.....						118		29		77.7		4,780
June.....						52		35		40.0		2,380
July.....						39		14		34.2		2,100
August.....						48		38		41.7		2,560
September.....						46		40		42.8		2,550
The year.....						426		4.0		73.4		53,200

FORBESTOWN DITCH NEAR CLIPPER MILLS, CALIF.

LOCATION.—Staff gage in sec. 24, T. 20 N., R. 7 E., about 1,000 feet below Lost Creek Dam at mouth of tunnel outlet and 2 miles north of Clipper Mills. RECORDS AVAILABLE.—October, 1927, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 38 second-feet Aug. 11–26.

1927–1930: Maximum mean daily discharge, 38 second-feet Aug. 11–26, 1930.

REMARKS.—Records good. Canal diverts from Lost Creek Reservoir on left bank of Lost Creek. The water is used for irrigation in the Oroville-Wyandotte irrigation district in Butte County.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Apr.	May	June	July	Aug.	Sept.
1	35.0	12	10	22	22	32	35	35	35
2	35	12	10	22	22	32	35	35	35
3	35	12	10	22	22	32	35	35	35
4	35	12	10	22	22	32	35	36	35
5	35	13	10	22	22	32	35	37	35
6	35	12	10	22	22	32	35	37	35
7	33	12	10	22	22	32	35	37	35
8	32	12	10	22	22	32	35	37	35
9	31	11	18	22	22	32	35	37	35
10	31	12	2.5	22	22	32	35	37	35
11	31	14	0	22	22	32	35	38	35
12	30	13	0	22	22	32	35	38	35
13	26	13	0	22	22	32	35	38	35
14	26	13	0	22	23	33	35	38	35
15	26	13	0	22	24	33	35	38	35
16	26	12	0	22	22	34	35	38	35
17	26	12	0	22	24	35	35	38	35
18	26	12	0	22	24	35	35	38	35
19	26	11	0	22	24	35	35	38	35
20	26	11	0	22	24	35	35	38	35
21	26	11	0	22	25	35	35	38	35
22	25	15	0	22	25	35	35	38	35
23	26	14	0	22	26	35	35	38	34
24	26	12	0	22	27	35	35	38	34
25	26	11	0	22	32	35	35	38	35
26	26	11	0	22	32	35	35	38	35
27	18	11	0	22	32	35	25	36	34
28	17	11	0	22	32	35	12	35	34
29	16	11	0	22	32	35	18	35	34
30	13	11	0	22	32	35	35	35	34
31	12	-----	0	-----	32	-----	35	35	-----
Month	Maximum			Minimum			Mean		Run-off in acre-feet
October	35			12			27.0		1,660
November	15			11			12.1		720
December	13			0			3.24		199
April	22			22			22.0		1,310
May	32			22			25.1		1,540
June	35			32			33.5		1,990
July	35			12			33.4		2,050
August	38			35			37.0		2,280
September	35			34			34.8		2,070
The year	38			0			19.1		13,800

NOTE.—No flow during months for which no discharge 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 the Alm residence at Enterprise, and 1 mile below intake.

RECORDS AVAILABLE.—October, 1911, to September, 1930.

EXTREMES.—1911–1930: Maximum discharge recorded, 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, 1929–30

Day	Oct.	Nov.	Dec.	May	June	July	Aug.	Sept.
1.....	24	16	16	0	30	36	29	25
2.....	24	16	16	0	30	38	29	25
3.....	24	16	16	0	33	38	29	24
4.....	24	16	16	0	33	38	29	24
5.....	24	16	16	0	34	36	29	23
6.....	24	16	16	0	34	38	28	23
7.....	26	16	16	0	34	38	28	26
8.....	27	16	16	0	36	36	28	28
9.....	20	16	10	0	34	38	28	28
10.....	18	16	0	0	36	38	28	30
11.....	18	16	0	0	36	38	28	32
12.....	18	16	0	0	36	36	29	32
13.....	16	16	0	0	36	36	29	32
14.....	16	16	0	0	38	36	28	30
15.....	16	16	0	0	38	34	28	26
16.....	16	17	0	0	38	34	28	26
17.....	16	17	0	0	38	33	28	26
18.....	16	17	0	0	38	33	28	26
19.....	17	17	0	14	38	33	28	26
20.....	16	17	0	14	38	33	28	26
21.....	17	17	0	14	38	33	28	26
22.....	16	19	0	16	38	32	28	26
23.....	16	19	0	16	38	32	28	30
24.....	16	18	0	14	36	33	28	30
25.....	16	18	0	0	38	33	28	30
26.....	16	16	0	18	38	33	28	28
27.....	16	16	0	26	36	30	28	26
28.....	16	16	0	29	38	28	26	25
29.....	16	16	0	28	38	30	26	25
30.....	16	16	0	29	36	33	25	25
31.....	16		0	30		29	25	
Month			Maximum	Minimum	Mean		Run-off in acre-feet	
October.....			27	16	18.6		1,140	
November.....			19	16	16.5		982	
December.....			16	0	4.45		274	
May.....			30	0	8.00		492	
June.....			38	30	36.1		2,150	
July.....			38	29	34.4		2,120	
August.....			29	25	27.9		1,720	
September.....			32	23	27.0		1,610	
The year.....			38	0	14.5		10,500	

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

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., at diversion dam of Nevada Irrigation District, at old town site of 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, 1930.

EXTREMES.—Maximum discharge during year, 550 second-feet Dec. 13 (gage height, 0.83 foot); no flow for most of year.

1926-1930: Maximum discharge, 4,070 second-feet Mar. 25, 1928 (gage height, 9.45 feet, old datum); practically all flow diverted since May 23, 1928, except during very high stages.

REMARKS.—Records good. Practically all the flow is diverted through Milton-Bowman Tunnel above station to Bowman Lake. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Date	Dis-charge	Date	Dis-charge
Dec. 12.....	22	Apr. 24.....	77
Dec. 13.....	193	Apr. 25.....	1.3
Dec. 14.....	1.7	May 18.....	9.5
Apr. 21.....	12	May 19.....	53
Apr. 22.....	87	May 20.....	72
Apr. 23.....	137	May 21.....	22

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	193	0	6.99	430
April.....	137	0	10.5	625
May.....	72	0	5.05	311
The year.....	193	0	1.88	1,370

NOTE.—No flow on days for which no discharge is given.

MIDDLE FORK OF YUBA RIVER NEAR NORTH SAN JUAN, CALIF.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 33, 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.

DRAINAGE AREA.—207 square miles.

RECORDS AVAILABLE.—July to October, 1900; October, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,080 second-feet Dec. 12 (gage height, 7.70 feet); minimum, 23 second-feet Sept. 6.

1910-1930: Maximum discharge, 26,000 second-feet Mar. 25, 1928 (gage height, 15.3 feet); minimum, 21 second-feet Aug. 12 and 14, 1924.

REMARKS.—Records good. Diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	27	26	113	375	455	602	482	239	70	36	26
2	24	25	26	118	400	482	602	455	235	65	36	26
3	25	26	26	111	540	455	570	570	223	64	36	25
4	24	26	27	106	510	1,870	540	455	215	64	35	25
5	24	25	26	315	510	2,430	540	455	215	61	34	24
6	29	25	26	264	455	1,330	510	428	215	61	33	23
7	29	26	26	197	510	958	540	455	208	58	33	24
8	27	26	602	180	482	808	510	428	204	55	32	26
9	28	25	995	160	455	700	540	400	190	55	33	29
10	28	26	2,140	139	455	635	540	375	179	56	32	36
11	28	27	700	120	428	668	482	375	179	54	30	33
12	29	26	3,080	147	428	635	455	375	176	52	32	30
13	28	25	2,430	163	400	668	920	375	166	49	30	26
14	26	25	1,640	150	375	700	770	400	150	47	30	29
15	26	25	1,530	400	400	668	882	375	142	46	30	29
16	26	26	1,240	958	400	570	735	375	136	43	29	27
17	25	26	735	1,870	400	540	700	482	125	43	29	26
18	25	27	570	882	400	482	668	455	118	42	29	26
19	26	27	455	958	400	482	668	400	113	42	30	26
20	25	27	340	1,150	635	482	700	540	115	42	30	26
21	26	27	247	570	510	510	735	400	108	42	30	26
22	25	26	223	510	808	510	700	400	102	44	28	30
23	26	27	208	400	882	540	845	350	97	42	27	33
24	26	26	190	330	700	570	735	325	93	42	29	35
25	255	26	176	268	770	635	635	330	88	42	30	35
26	62	25	153	428	668	668	602	335	88	41	32	34
27	30	26	139	400	540	770	570	320	80	40	30	30
28	30	26	125	375	540	735	510	305	76	38	29	30
29	26	26	113	350	-----	735	510	325	73	37	28	37
30	26	26	118	375	-----	668	482	320	72	36	27	43
31	27	-----	111	375	-----	700	-----	278	-----	36	27	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	255	24	41.5	2,550
November	27	25	26.0	1,550
December	3,080	26	595	36,600
January	1,870	106	416	25,600
February	882	375	513	28,500
March	2,430	455	744	45,700
April	920	455	627	37,300
May	570	278	398	24,500
June	239	72	147	8,750
July	70	36	48.7	2,990
August	36	27	30.8	1,890
September	43	23	29.2	1,740
The year	3,080	23	301	218,000

YUBA RIVER AT SMARTVILLE, CALIF.

LOCATION.—Water-stage recorder in 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. Datum of gage was lowered 5 feet on Aug. 12.

DRAINAGE AREA.—1,220 square miles.

RECORDS AVAILABLE.—June, 1903, to September, 1930.

EXTREMES.—Maximum discharge during year, 21,100 second-feet Dec. 12 (gage height, 12.00 feet); minimum, 135 second-feet Dec. 3 and 4.

1903-1930: Maximum discharge, 120,000 second-feet Mar. 26, 1928 (gage height, 26.0 feet); minimum, 71 second-feet, regulated flow, July 30, 1924.

REMARKS.—Records good. Discharge estimated Jan. 3, 5-7, and Feb. 10-14. Water is diverted for power and irrigation above the 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	142	148	140	870	2,200	2,960	4,000	3,070	2,740	456	285	272
2.....	179	148	140	822	2,240	2,740	3,760	3,520	2,640	460	282	272
3.....	195	150	135	822	3,070	3,180	3,760	4,120	2,290	452	280	272
4.....	207	150	135	2,900	2,690	10,200	3,520	4,000	2,060	448	282	272
5.....	207	145	138	3,400	2,740	14,200	3,640	3,520	2,100	444	280	272
6.....	212	145	140	2,600	2,850	9,580	3,880	3,180	2,150	408	280	272
7.....	212	145	150	2,000	3,070	6,380	4,120	3,180	1,970	388	282	272
8.....	209	145	168	1,500	2,960	5,210	4,240	2,960	1,920	371	280	272
9.....	207	145	750	1,380	2,960	4,500	4,240	2,740	1,740	371	282	272
10.....	204	148	7,050	1,300	2,920	4,000	3,880	2,640	1,700	374	285	275
11.....	201	145	6,200	1,150	2,870	3,760	3,520	2,540	1,580	368	285	282
12.....	171	145	15,800	1,180	2,830	3,760	3,400	2,540	1,500	362	282	285
13.....	193	145	17,800	1,220	2,780	3,880	4,780	2,590	1,340	350	282	278
14.....	195	148	8,920	1,300	2,740	4,000	6,020	2,640	1,460	329	285	275
15.....	193	150	10,300	1,580	2,690	3,760	5,210	2,640	1,380	320	282	272
16.....	193	150	10,200	5,520	2,690	3,400	4,640	2,640	1,340	320	282	270
17.....	190	152	5,520	5,990	2,740	3,180	4,370	3,180	1,260	320	282	262
18.....	187	150	4,000	6,940	2,690	3,070	4,240	3,290	1,220	317	288	245
19.....	176	152	3,290	4,780	2,590	2,850	4,240	3,640	1,010	317	280	225
20.....	171	150	2,850	4,240	3,640	2,850	4,500	3,760	1,040	317	278	220
21.....	160	148	2,290	3,640	3,520	2,960	4,640	3,070	996	317	275	222
22.....	160	145	1,970	3,070	4,970	3,070	5,060	2,850	852	311	275	225
23.....	158	145	1,740	2,640	6,020	3,070	5,360	2,640	816	308	275	228
24.....	158	145	1,540	2,440	4,640	3,400	5,360	2,960	804	308	275	238
25.....	226	145	1,300	2,490	4,920	3,760	4,640	2,960	708	296	275	245
26.....	266	145	1,380	2,540	4,240	4,000	4,240	2,850	660	290	278	250
27.....	184	145	1,180	2,590	3,760	4,500	3,760	2,850	605	290	280	252
28.....	160	148	1,040	2,440	3,290	4,500	3,400	2,850	560	290	278	260
29.....	158	145	989	2,290	-----	4,500	3,290	2,960	528	290	275	272
30.....	148	142	982	2,240	-----	4,780	3,180	2,960	492	288	272	268
31.....	148	-----	912	2,240	-----	4,370	-----	2,740	-----	288	272	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	266	142	186	11,400
November.....	152	142	147	8,750
December.....	17,800	135	3,520	216,000
January.....	6,940	822	2,590	159,000
February.....	6,020	2,200	3,200	181,000
March.....	14,200	2,740	4,530	279,000
April.....	6,020	3,180	4,230	252,000
May.....	4,120	2,540	3,030	186,000
June.....	2,740	492	1,380	82,100
July.....	460	288	347	21,300
August.....	288	272	280	17,200
September.....	285	220	260	15,500
The year.....	17,800	135	1,970	1,430,000

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.

RECORDS AVAILABLE.—May, 1928, to September, 1930 (discontinued).

EXTREMES.—Maximum discharge during year, 456 second-feet May 20 (gage height, 6.09 feet); minimum, 1.8 second-feet several days in November and December.

1928-1930: Maximum discharge, that of May 20, 1930; minimum, that of November and December, 1929.

REMARKS.—Records fair. This 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 storage reservoir. From there it is conveyed to Lake Spaulding. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	4.6	2.2	2.0	40	54	81	193	304	240	45	10	4.0
2.....	4.2	2.2	2.0	36	56	83	205	368	226	42	10	4.0
3.....	3.8	2.2	1.9	34	58	84	211	398	226	40	9.5	4.0
4.....	3.5	2.2	2.0	33	61	90	211	312	240	38	9.5	4.0
5.....	3.1	2.2	1.8	34	64	85	245	256	256	35	9	4.0
6.....	3.4	2.2	1.8	32	69	89	280	248	288	32	9	4.0
7.....	3.5	2.2	1.9	32	75	88	300	233	296	30	8.5	-----
8.....	3.4	2.2	1.9	34	81	90	310	205	272	28	8.5	-----
9.....	3.4	2.0	64	38	84	87	300	184	248	26	8.5	-----
10.....	3.6	1.9	269	36	98	84	280	172	248	24	8.5	-----
11.....	3.6	1.9	220	35	88	87	260	178	264	22	8	-----
12.....	3.5	2.0	298	34	88	94	270	205	248	21	4.9	-----
13.....	3.4	2.0	350	34	94	102	310	280	212	19	4.9	-----
14.....	3.3	1.9	265	34	94	106	270	312	198	18	4.9	-----
15.....	3.2	1.8	211	34	102	98	230	304	191	17	4.9	-----
16.....	3.2	1.8	235	64	110	102	220	296	184	15	6	-----
17.....	3.3	1.8	157	76	114	102	225	402	166	14	6	-----
18.....	3.1	1.8	148	59	118	102	245	420	136	13	6.5	-----
19.....	2.3	1.8	148	58	126	102	270	429	125	13	6.5	-----
20.....	2.2	1.8	118	57	126	110	330	438	114	13	6.5	-----
21.....	2.2	1.8	90	58	118	122	340	429	102	12	6.5	-----
22.....	2.2	1.8	74	56	114	130	340	394	93	12	6.5	-----
23.....	2.2	2.0	62	57	114	139	350	376	68	12	6.5	-----
24.....	2.2	1.9	57	55	102	170	350	393	31	11	6.5	-----
25.....	2.3	1.9	56	55	98	188	340	384	51	11	6.5	-----
26.....	2.3	1.9	50	55	94	206	320	384	57	11	6	-----
27.....	2.2	1.9	46	55	87	230	290	384	57	11	4.6	-----
28.....	2.2	1.8	45	55	89	230	270	376	54	11	4.3	-----
29.....	2.2	1.8	45	55	-----	265	265	368	51	11	4.0	-----
30.....	2.2	1.9	44	54	-----	265	264	304	48	11	4.0	-----
31.....	2.2	-----	44	54	-----	211	-----	256	-----	11	4.0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	4.6	2.2	2.97	183
November.....	2.2	1.8	1.96	117
December.....	350	1.8	100	6,150
January.....	76	32	46.5	2,860
February.....	126	54	92.0	5,110
March.....	265	81	130	7,990
April.....	350	193	276	16,400
May.....	438	172	322	19,800
June.....	296	31	166	9,880
July.....	45	11	20.3	1,250
August.....	10	4.0	6.76	416
September.....	-----	-----	3.0	179
The year.....	438	1.8	97.2	70,300

* Estimated.

OREGON CREEK NEAR NORTH SAN JUAN, CALIF.

LOCATION.—Staff gage in 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.

DRAINAGE AREA.—36.1 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 820 second-feet Mar. 5 (gage height, 6.31 feet); minimum, 1.3 second-feet Oct. 10, 11, and 14–16.

1910–1930: Maximum discharge, about 5,200 second-feet Mar. 25, 1928 (gage height, 9.5 feet); minimum, 1.0 second-foot Aug. 7–10, 1921.

REMARKS.—Records fair. No diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.8	2.6	3.6	19	94	104	120	66	26	6	1.7	2.0
2.....	1.7	2.6	3.8	18	112	112	110	64	26	5.5	1.9	2.2
3.....	1.7	2.4	3.8	17	140	122	100	65	25	4.9	1.8	2.1
4.....	1.8	2.2	4.0	15	132	490	100	66	24	4.2	1.8	2.0
5.....	1.6	2.2	4.0	63	125	820	93	68	22	4.2	1.7	1.9
6.....	1.4	2.0	4.0	51	122	405	93	65	20	4.0	2.0	1.9
7.....	1.9	2.0	4.0	40	138	355	90	70	18	3.8	1.9	2.0
8.....	1.5	2.0	58	36	138	252	92	67	18	3.8	1.8	2.1
9.....	1.4	2.0	136	32	125	218	86	65	16	3.6	1.9	2.2
10.....	1.3	2.4	490	25	120	200	81	64	14	3.4	1.8	2.2
11.....	1.3	2.4	124	22	108	185	74	62	14	3.2	1.7	2.4
12.....	1.4	2.8	700	21	108	170	68	61	14	2.8	1.6	2.1
13.....	1.4	3.2	405	20	100	185	170	54	13	3.8	1.7	1.7
14.....	1.3	3.0	405	20	96	200	145	52	13	3.4	1.6	2.1
15.....	1.3	2.8	380	79	97	170	185	50	12	2.8	1.6	1.9
16.....	1.3	2.8	332	252	97	158	170	50	11	2.6	1.6	1.8
17.....	1.4	3.0	170	170	96	145	145	58	11	2.4	1.7	1.5
18.....	1.4	3.2	118	218	89	140	140	58	8.5	2.4	1.7	1.4
19.....	1.5	3.4	64	200	87	128	130	42	7.5	2.6	1.7	1.6
20.....	1.9	3.4	60	108	170	122	125	41	10	2.4	1.7	2.0
21.....	1.9	3.6	54	170	140	120	120	40	7.5	2.4	1.7	2.1
22.....	2.0	3.6	50	128	170	122	108	35	8	2.2	1.8	1.9
23.....	1.9	3.6	46	102	235	125	100	37	8.5	2.2	1.8	2.0
24.....	2.0	3.4	39	99	200	128	92	33	7.5	2.1	1.5	2.0
25.....	2.0	3.4	31	90	235	138	86	31	7.5	2.1	1.6	2.6
26.....	2.0	3.6	28	106	185	145	93	30	7.5	2.0	1.8	3.0
27.....	2.0	3.6	26	102	145	158	85	28	7	2.0	1.7	2.6
28.....	2.0	3.6	23	102	120	158	74	25	7	1.9	1.6	2.8
29.....	2.2	3.6	19	87	---	145	76	28	7	1.9	1.7	4.5
30.....	2.2	3.6	18	92	---	140	74	38	7	1.8	1.7	6
31.....	2.4	---	17	97	---	135	---	32	---	1.7	1.8	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2.4	1.3	1.71	105
November.....	3.6	2.0	2.93	174
December.....	700	3.6	123	7,560
January.....	252	15	83.9	5,160
February.....	235	87	133	7,390
March.....	820	104	200	12,300
April.....	185	68	108	6,430
May.....	70	25	49.8	3,060
June.....	26	7	13.2	786
July.....	6	1.7	3.04	187
August.....	2.0	1.5	1.73	106
September.....	6	1.4	2.29	136
The year.....	820	1.3	59.9	43,400

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.—93.4 square miles (revised).

RECORDS AVAILABLE.—1911–1913 (fragmentary); December, 1923, to September, 1930.

EXTREMES.—Maximum and minimum discharge during year not determined.

1923–1930: Maximum discharge, about 5,920 second-feet Mar. 25, 1928 (gage height, 8.50 feet); minimum, 28 second-feet Sept. 15 1926.

REMARKS.—Records good except those for estimated periods, Oct. 10 to Jan. 9, Jan. 11–19, and Sept. 12–30. Small diversions for mining above station. Gage-height record furnished by Pacific Gas and Electric Co.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35		112	158	389	528	438	101	61	52
2	35		140	154	401	575	417	100	60	52
3	35		152	164	401	605	405	97	60	52
4	34		150	182	401	506	405	94	60	53
5	34		164	182	470	461	413	90	59	52
6	34		176	172	510	456	443	88	59	52
7	37		196	166	551	443	466	86	58	52
8	36		196	162	600	393	452	85	58	52
9	35		194	158	585	365	425	84	59	53
10		102	186	157	538	345	421	83	58	54
11			182	166	520	334	421	82	58	55
12			184	180	533	377	413	81	58	
13			186	194	635	448	381	80	59	
14			190	196	524	497	345	79	59	
15			202	184	466	484	320	78	57	
16			207	172	443	492	307	77	56	
17			210	166	448	676	283	76	56	
18			219	164	479	682	240	75	56	
19			232	168	551	726	214	74	55	
20		134	242	180	650	732	194	73	55	
21		126	212	194	688	704	172	72	55	
22		122	256	210	754	640	160	72	54	
23		119	232	232	820	635	149	71	53	
24		122	207	277	786	640	136	70	52	
25		119	198	314	682	630	129	68	53	
26		117	186	369	645	630	119	67	55	
27		115	174	405	551	625	109	66	54	
28		112	166	417	524	620	103	65	53	
29		110		466	506	605	100	64	52	
30		110		497	474	515	101	63	52	
31		110		413		470		62		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			• 36	2,210
November			• 33	1,960
December			• 320	19,700
January			• 110	6,760
February	256	112	191	10,600
March	497	154	233	14,300
April	820	389	551	32,800
May	732	334	543	33,400
June	466	100	289	17,200
July	101	62	78.2	4,810
August	61	52	56.3	3,460
September			53	3,150
The year	820		208	150,000

• Estimated.

NORTH FORK OF YUBA RIVER AT GOODYEAR BAR, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., at highway bridge at Goodyear Bar, one-eighth mile above Rock Creek.

DRAINAGE AREA.—214 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,100 second-feet Dec. 12 (gage height, 8.5 feet); minimum, 90 second-feet Nov. 12 to Dec. 7.

1910-1930: Maximum discharge, about 24,000 second-feet Mar. 26, 1928 (gage height, 15.6 feet); minimum, 80 second-feet Aug. 10 to Oct. 4, 1924.

REMARKS.—Records good except those for estimated periods, which are fair. Several mining diversions above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	106	110	90	242	398	492	975	1,090	828	* 282	163	134
2.....	106	110	90	242	492	492	1,010	1,130	792	274	158	134
3.....	106	110	90	242	492	552	975	1,210	828	274	158	134
4.....	106	110	90	328	522	1,050	1,010	1,130	828	258	158	134
5.....	106	110	90	292	492	1,050	1,050	1,050	792	258	158	134
6.....	106	110	90	274	585	828	1,130	1,010	828	242	158	134
7.....	110	110	90	274	585	756	1,210	975	* 804	242	158	134
8.....	106	110	100	261	552	686	1,390	938	* 781	236	158	134
9.....	106	110	900	261	552	618	1,300	900	* 757	227	158	134
10.....	106	110	3,480	255	552	585	1,130	864	* 733	* 224	158	139
11.....	106	110	1,050	242	552	618	1,300	828	* 710	* 220	153	139
12.....	106	90	6,100	242	552	686	1,390	864	686	* 216	163	139
13.....	106	90	3,330	236	552	721	1,670	938	686	212	134	134
14.....	106	90	1,670	236	552	756	1,390	* 1,010	652	206	134	134
15.....	106	90	1,670	242	585	686	1,300	* 1,070	* 620	206	134	134
16.....	106	90	1,480	618	618	618	1,130	* 1,140	* 588	198	134	134
17.....	106	90	1,210	686	618	585	1,130	1,210	* 556	195	134	134
18.....	106	90	1,130	756	618	552	1,170	1,670	* 524	190	134	134
19.....	106	90	900	522	618	552	1,210	* 1,480	492	184	134	134
20.....	106	90	* 700	481	792	585	1,300	* 1,280	438	184	134	134
21.....	106	90	* 580	438	686	618	1,390	1,090	408	184	134	134
22.....	106	90	* 440	388	1,210	686	1,670	1,130	388	179	134	134
23.....	106	90	* 410	380	900	756	* 1,520	* 1,130	367	179	134	134
24.....	106	90	* 380	367	756	828	* 1,480	1,130	346	179	134	134
25.....	106	90	* 350	* 374	756	900	* 1,430	1,090	328	171	134	134
26.....	110	90	* 310	* 381	686	1,010	1,390	1,090	320	171	134	134
27.....	110	90	* 280	388	585	1,130	1,170	1,050	312	171	134	134
28.....	110	90	* 260	367	552	1,170	1,130	1,050	305	171	134	143
29.....	110	90	* 250	354	-----	1,210	1,170	975	297	163	134	145
30.....	110	90	* 245	346	-----	1,210	1,050	900	290	163	134	147
31.....	110	-----	* 240	354	-----	1,050	-----	864	-----	163	134	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	110	106	107	6,580
November.....	110	90	97.3	5,790
December.....	6,100	90	903	55,500
January.....	756	236	357	22,000
February.....	1,210	398	622	34,500
March.....	1,210	492	775	47,700
April.....	1,670	975	1,250	74,400
May.....	1,670	828	1,070	65,800
June.....	828	290	576	34,300
July.....	282	163	207	12,700
August.....	163	134	143	8,790
September.....	147	134	136	8,090
The year.....	6,100	90	520	376,000

* Estimated.

ROCK CREEK AT GOODYEAR BAR, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., 600 feet above mouth at Goodyear Bar and 350 feet below Woodruff Creek.

DRAINAGE AREA.—10.8 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 455 second-feet Dec. 12 (gage height, 6.5 feet); minimum, 0.6 second-foot Oct. 1-6 and 8-26.

1910-1930: Maximum discharge, about 1,600 second-feet Mar. 25, 1928 (gage height, 10.0 feet); minimum, 0.2 second-foot Aug. 10-14, 1924.

REMARKS.—Records fair. Discharge estimated Aug. 11 to Sept. 30. Diversions above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	0.6	1.5	1.5	8	28	36	52	34	9	2.8	1.5	1.5
2-----	.6	1.5	1.5	8	34	31	49	34	9	2.8	1.5	1.5
3-----	.6	1.5	1.5	8	36	46	46	36	9	2.8	1.5	1.5
4-----	.6	1.5	1.5	28	38	185	46	36	8.5	2.4	1.5	1.5
5-----	.6	1.5	1.5	17	40	160	46	34	8	2.4	1.5	1.5
6-----	.6	1.5	1.5	14	40	103	46	34	7	2.1	1.5	1.5
7-----	1.5	1.5	1.5	14	36	75	46	33	7.5	2.1	1.5	1.6
8-----	.6	1.5	2.3	11	34	59	49	28	* 7	2.1	1.5	1.6
9-----	.6	1.5	5.5	10	34	49	49	27	* 6.5	2.1	1.5	1.6
10-----	.6	1.5	245	10	33	46	46	25	* 6	* 2.1	1.5	1.8
11-----	.6	1.5	62	10	33	46	46	22	* 5.5	* 2.1	1.5	1.6
12-----	.6	1.5	455	10	31	49	46	22	5	* 2.1	1.5	1.6
13-----	.6	1.5	215	9	30	49	93	22	5	2.1	1.5	1.6
14-----	.6	1.5	93	8.5	30	49	75	* 21	5	2.1	1.5	1.6
15-----	.6	1.5	185	9	28	46	93	* 21	* 4.6	2.1	1.5	1.6
16-----	.6	1.5	113	46	28	41	75	* 20	* 4.3	2.1	1.5	1.6
17-----	.6	1.5	36	46	28	36	67	20	* 4.0	2.1	1.5	1.6
18-----	.6	1.5	17	46	28	34	67	20	* 3.7	2.1	1.5	1.7
19-----	.6	1.5	14	46	28	34	67	* 18	3.4	2.1	1.5	1.7
20-----	.6	1.5	* 13	40	59	34	59	* 16	3.4	2.1	1.5	1.7
21-----	.6	1.5	* 13	34	46	34	59	14	3.4	1.9	1.5	1.7
22-----	.6	1.5	* 12	28	185	36	59	14	3.4	1.9	1.5	1.7
23-----	.6	1.5	* 12	25	89	46	* 55	* 13	3.4	1.5	1.5	1.7
24-----	.6	1.5	* 11	22	75	52	* 52	13	3.4	1.5	1.5	1.7
25-----	.6	1.5	* 11	* 24	62	59	* 49	12	3.1	1.5	1.5	1.7
26-----	.6	1.5	* 10	* 26	52	59	46	10	* 3.0	1.5	1.5	1.7
27-----	1.0	1.5	* 10	28	46	59	38	10	* 3.0	1.5	1.5	1.7
28-----	1.0	1.5	* 9	26	46	69	36	10	* 2.9	1.5	1.5	2.0
29-----	1.0	1.5	* 9	23		72	41	10	* 2.9	1.5	1.5	1.7
30-----	1.5	1.5	* 8	23		67	36	10	* 2.8	1.5	1.5	2.0
31-----	1.5		* 8	24		59		10		1.5	1.5	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	1.5	0.6	0.73	44.9
November-----	1.5	1.5	1.50	89.3
December-----	455	1.5	50.9	3,130
January-----	46	8	22.0	1,350
February-----	185	28	45.6	2,530
March-----	185	31	58.7	3,610
April-----	93	36	54.5	3,240
May-----	36	10	20.9	1,290
June-----	9	2.8	5.09	303
July-----	2.8	1.5	2.00	123
August-----	1.5	1.5	1.50	92.2
September-----	2.0	1.5	1.65	98.2
The year-----	455	.6	22.0	15,900

* Estimated.

GOODYEAR CREEK AT GOODYEAR BAR, CALIF.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., 300 feet above junction with North Fork of Yuba River and half a mile north of Goodyear Bar.

DRAINAGE AREA.—12.2 square miles.

RECORDS AVAILABLE.—October, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 760 second-feet Dec. 12 (gage height, 5.70 feet); minimum, 3.0 second-feet Aug. 29–31.

1910–1930: Maximum discharge, about 1,800 second-feet Mar. 25, 1928 (gage height, 9.5 feet); minimum, 1.0 second-foot Oct. 1–6, 1927, and Aug. 23–28, 1929.

REMARKS.—Records fair. Several small irrigation ditches head above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.5	4.2	4.9	15	45	47	87	59	26	* 6.5	3.9	3.6
2.....	3.5	4.2	4.9	14	56	45	84	61	23	6.5	3.9	3.6
3.....	3.5	4.2	4.9	13	59	64	77	69	20	6.5	3.9	3.6
4.....	3.5	4.2	4.9	27	64	120	77	64	18	6.5	3.9	3.6
5.....	3.5	4.2	4.9	24	64	120	77	64	17	6	3.9	3.9
6.....	3.5	4.2	4.9	18	64	90	84	61	16	6	3.9	3.9
7.....	4.2	4.2	4.9	17	64	82	84	61	17	6	3.9	4.3
8.....	3.5	4.2	12	15	64	77	90	54	* 16	6	3.9	4.3
9.....	3.5	4.2	148	14	61	69	93	47	* 15	5.5	3.9	4.3
10.....	3.5	4.2	432	14	56	64	90	41	* 14	* 5.5	3.9	4.7
11.....	3.5	4.2	110	14	56	64	90	41	* 13	* 5	3.9	4.7
12.....	3.5	7	760	14	56	70	87	39	13	* 4.9	3.9	3.6
13.....	3.5	7	265	13	54	77	104	43	12	4.7	3.2	3.6
14.....	3.5	6.5	120	13	56	80	90	* 42	11	4.7	3.2	3.6
15.....	3.5	6.5	154	13	59	64	90	* 42	* 11	4.7	3.2	3.6
16.....	3.5	6.5	136	77	61	58	84	* 41	* 11	4.7	3.9	3.6
17.....	3.5	5.5	104	84	61	51	84	41	* 11	4.7	3.9	3.6
18.....	3.5	5.5	77	96	61	51	90	41	* 11	4.7	3.9	3.9
19.....	3.5	5.5	64	64	61	51	90	* 39	11	4.7	3.9	3.9
20.....	3.5	5.5	* 59	59	77	56	90	* 37	11	4.7	3.9	3.9
21.....	3.5	5.5	* 55	51	64	59	90	36	11	4.7	3.9	3.9
22.....	3.5	4.9	* 51	43	136	61	90	36	11	4.7	3.9	3.9
23.....	3.5	4.9	* 47	37	96	64	* 84	* 34	11	4.3	3.9	3.9
24.....	3.5	4.9	* 43	32	82	77	* 79	32	11	4.3	3.9	3.9
25.....	3.5	4.9	* 39	* 35	82	90	* 74	29	11	4.3	3.9	3.9
26.....	4.2	4.9	* 35	* 38	64	104	69	26	* 10	4.3	3.6	3.9
27.....	4.2	4.9	* 31	41	59	104	64	26	* 9	4.3	3.6	3.9
28.....	4.2	4.9	* 27	36	56	104	61	26	* 8	3.9	3.3	6
29.....	4.2	4.9	* 23	37	-----	112	64	26	* 7	3.9	3.0	5.5
30.....	4.2	4.9	* 19	36	-----	104	56	26	* 7	3.9	3.0	5.5
31.....	4.2	-----	15	37	-----	77	-----	26	-----	3.9	3.0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	4.2	3.5	3.66	225
November.....	7	4.2	5.04	300
December.....	760	4.9	92.3	5,680
January.....	96	13	33.6	2,070
February.....	136	45	65.6	3,640
March.....	120	45	76.0	4,670
April.....	104	56	82.4	4,900
May.....	69	26	42.3	2,600
June.....	26	7	13.1	780
July.....	6.5	3.9	5.00	307
August.....	3.9	3.0	3.71	228
September.....	6	3.6	4.07	242
The year.....	760	3.0	35.4	25,600

* Estimated.

CANYON CREEK ABOVE JACKSON CREEK, CALIF.

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.

DRAINAGE AREA.—18.6 square miles.

RECORDS AVAILABLE.—January, 1926, to September, 1930 (discontinued).

EXTREMES.—Maximum discharge during year, 1,080 second-feet Dec. 13 (gage height, 6.15 feet); minimum, 1.6 second-feet June 10.

1926-1930: Maximum discharge, about 3,200 second-feet Mar. 25, 1928 (gage height, 8.35 feet); minimum, 0.2 second-foot Oct. 14, 1927.

REMARKS.—Records good except those estimated, which are fair. Flow is regulated by storage at French, Faucherie, and Sawmill Lakes. On Sept. 30, 1929, there was no available storage in these lakes, and on Sept. 30, 1930, there was about 3,500 acre-feet. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	28	4.8	2.7	83	22	28	75	97	89	15	49	43
2.....	26	5	2.7	83	24	28	76	120	* 89	14	50	43
3.....	* 26	5	2.6	78	25	28	76	161	* 89	14	51	43
4.....	* 25	4.8	2.6	78	26	29	77	136	* 89	13	51	43
5.....	24	4.4	2.6	72	35	28	78	124	* 89	13	52	43
6.....	* 23	4.4	2.5	64	46	41	79	117	89	12	52	43
7.....	* 22	4.6	2.4	56	48	36	82	110	88	12	52	43
8.....	* 20	4.4	3.7	69	44	* 32	85	106	86	11	52	43
9.....	* 19	3.7	32	74	47	* 28	88	96	59	11	52	43
10.....	* 18	3.6	77	69	47	* 25	89	93	2.5	50	52	42
11.....	* 17	3.5	98	63	46	* 28	89	91	* 26	93	52	42
12.....	16	3.4	400	61	44	* 32	90	91	* 62	91	52	42
13.....	12	3.2	870	61	42	* 36	91	93	62	89	52	42
14.....	10	3.5	305	59	42	41	98	94	58	88	51	42
15.....	8	3.5	260	58	46	36	103	98	* 56	85	52	42
16.....	7	3.6	257	53	49	33	94	112	55	83	52	41
17.....	6.5	3.5	149	62	49	32	91	163	51	80	52	30
18.....	6.5	3.5	138	63	50	32	96	196	45	79	52	12
19.....	6	3.5	138	63	52	36	110	* 210	40	76	51	7.5
20.....	5.5	3.5	131	62	53	38	174	* 180	36	74	50	6.5
21.....	5	3.4	124	67	52	40	202	* 160	34	70	49	6
22.....	4.8	3.4	117	70	51	44	212	* 145	30	68	48	6
23.....	4.8	3.4	98	57	50	49	238	133	28	66	47	5
24.....	5	3.1	90	53	51	53	245	134	26	63	46	5
25.....	5	3.1	90	48	51	59	174	133	24	* 59	46	5
26.....	5	3.0	90	40	50	63	146	131	22	57	46	5
27.....	5	3.0	84	35	39	67	124	129	21	55	46	5
28.....	4.8	3.0	82	32	30	69	107	127	19	50	45	4.8
29.....	4.4	3.0	82	25	-----	71	100	124	18	42	43	4.6
30.....	4.4	2.7	82	23	-----	72	94	117	16	32	43	4.4
31.....	4.6	-----	82	22	-----	74	-----	98	-----	42	43	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	28	4.4	12.2	750
November.....	5	2.7	3.68	219
December.....	870	2.4	126	7,750
January.....	83	22	58.2	3,580
February.....	53	22	43.2	2,400
March.....	74	25	42.2	2,590
April.....	245	75	116	6,900
May.....	210	91	126	7,750
June.....	89	2.5	50.0	2,980
July.....	93	11	51.8	3,190
August.....	52	43	49.4	3,040
September.....	43	4.4	26.2	1,560
The year.....	870	2.4	59.0	42,700

* Estimated.

CANYON CREEK BELOW BOWMAN LAKE, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ 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, 1930.

EXTREMES.—Maximum discharge during year, 960 second-feet May 31 (gage height, 4.13 feet); minimum, 0.2 second-foot Nov. 22 to Dec. 7.

1927-1930: Maximum discharge, that of May 31, 1930 (gage height, 4.13 feet); practically no flow at times during which there is little or no leakage from dams upstream.

REMARKS.—Records good except those estimated, which are fair. Flow completely regulated by storage in Bowman Lake and diversion into Bowman-Spaulding Canal. On Sept. 30, 1929, storage in Bowman Lake was about 30,500 acre-feet, and on Sept. 30, 1930, it was about 31,600 acre-feet. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.5	0.5	0.2	0.5	2.2	2.2	4.5	4.5	886	0.5	0.5	0.4
2.....	.6	.5	.2	.5	-----	2.2	4.3	4.5	697	.5	.5	.4
3.....	.6	.5	.2	.5	-----	2.5	4.3	5.5	363	.5	.5	.4
4.....	.6	.4	.2	.8	-----	2.5	4.5	6	315	.5	.5	.5
5.....	.6	.4	.2	1.1	-----	2.5	4.5	6	315	.5	.4	.5
6.....	.6	.4	.2	.7	-----	2.8	4.5	6	315	.5	.4	.5
7.....	.7	.4	.2	.7	-----	2.8	4.5	5	315	.5	.4	.5
8.....	.7	.4	.4	.7	-----	2.8	4.5	4.3	277	.5	.4	.5
9.....	.7	.4	17	.7	-----	3.0	4.3	5.5	245	.5	.4	.6
10.....	.7	.4	29	.7	-----	3.4	4.1	7.5	198	.5	.4	.6
11.....	.7	.4	7.5	.7	-----	4.1	4.3	7.5	113	.5	.4	.6
12.....	.7	.4	21	.7	-----	4.1	5	7.5	6	.5	.5	.6
13.....	.6	.5	13	.7	-----	3.9	9	7.5	105	.5	.5	.6
14.....	.6	.4	2.8	.7	-----	3.4	6.5	7.5	230	.5	.5	.6
15.....	.6	.5	11	1.0	-----	3.2	6.5	7	228	.5	.5	.6
16.....	.5	.4	3.4	15	2.3	3.0	6.5	9	230	.5	.5	.5
17.....	.5	.4	1.8	4.1	-----	3.2	6	10	230	.5	.5	.5
18.....	.6	.4	1.6	4.3	-----	3.2	7.5	9.5	145	.5	.5	.5
19.....	.5	.4	1.2	2.8	-----	4.1	7	9.5	172	.5	.5	.5
20.....	.5	.4	1.0	2.6	-----	4.5	6.5	9	174	.5	.5	.5
21.....	.4	.3	.8	2.6	-----	4.7	5.5	9	86	.5	.5	.5
22.....	.4	.2	.8	2.6	-----	4.7	5.5	9	85	.5	.5	.5
23.....	.4	.2	.7	2.6	-----	5	6	8.5	95	.5	.5	.6
24.....	.5	.2	.7	2.2	-----	6	5.5	8.5	1.2	.5	.4	.6
25.....	.5	.2	.7	2.2	-----	6.5	5.5	9	.5	.5	.4	.6
26.....	.5	.2	.7	2.2	-----	10	6	9	.5	.5	.4	.6
27.....	.5	.2	.5	2.0	-----	7.5	6	11	.5	.5	.3	.6
28.....	.5	.2	.5	2.0	-----	6	5.5	24	.5	.5	.3	.6
29.....	.6	.2	.5	2.0	-----	6	4.7	382	.5	.5	.3	.6
30.....	.5	.2	.5	2.2	-----	5.5	4.7	555	.5	.5	.3	.6
31.....	.5	-----	.5	2.2	-----	4.3	-----	720	-----	.5	.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.7	0.4	0.56	34.4
November.....	.5	.2	.35	20.8
December.....	29	.2	3.84	236
January.....	15	.5	2.07	127
February.....	-----	-----	2.2	122
March.....	10	2.2	4.18	257
April.....	9	4.1	5.46	325
May.....	720	4.3	60.8	3,740
June.....	886	.5	194	11,500
July.....	.5	.5	.50	30.7
August.....	.5	.3	.44	27.1
September.....	.6	.4	.54	32.1
The year.....	886	.2	22.8	16,500

* Estimated.

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, 1930 (discontinued).

EXTREMES.—Maximum discharge during year, 200 second-feet⁺ Dec. 10 (gage height, 3.02 feet); minimum (estimated), 0.2 second-foot several days in August and September.

1926-1930: Maximum discharge, 1,270 second-feet Mar. 25, 1928 (gage height, 5.30 feet); minimum, that of August and September, 1930.

REMARKS.—Records fair. Mean monthly discharge estimated for September. Flow is controlled to slight extent by Jackson Lake storage, usually released during July to September. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	0.5	0.5	0.3	5.5	8.5	12	34	41	19	2.6	0.9
2.....	.5	.4	.3	4.9	14	12	34	47	18	2.5	.9
3.....	.5	.4	.3	4.8	14	12	33	44	17	2.4	.8
4.....	.5	.4	.3	3.9	14	13	36	36	17	2.2	.8
5.....	.5	.4	.3	2.5	14	13	43	33	18	2.1	.7
6.....	.5	.4	.3	5.5	15	14	46	32	17	2.1	.7
7.....	.5	.4	.3	7	16	13	50	32	17	2	.7
8.....	.5	.4	.4	7	17	12	52	27	12	2	.6
9.....	.5	.4	8.5	7	16	11	44	26	12	2.1	.6
10.....	.5	.4	75	7	16	11	39	26	12	2	.6
11.....	.5	.4	21	7	15	12	40	28	12	1.9	.6
12.....	.5	.4	116	6.5	16	14	41	30	12	1.9	.5
13.....	.5	.4	78	7	17	15	55	35	12	1.8	.5
14.....	.5	.4	27	7	18	14	39	36	12	1.8	.5
15.....	.5	.4	40	7	20	13	34	35	11	1.7	.5
16.....	.5	.4	29	20	21	12	34	44	10	1.6	.4
17.....	.5	.4	21	18	20	12	36	64	9.5	1.7	.4
18.....	.5	.4	22	14	21	12	44	51	8.5	1.8	.4
19.....	.5	.4	21	12	21	13	64	52	7.5	1.8	.4
20.....	.5	.4	18	10	21	15	71	47	7	1.8	.3
21.....	.4	.4	14	10	18	17	68	40	6.5	1.8	.3
22.....	.4	.4	12	9.5	21	19	71	36	5.5	1.7	.3
23.....	.4	.4	11	9	19	22	76	34	5	1.7	.3
24.....	.4	.4	10	9.5	16	27	68	32	4.5	1.6	.2
25.....	.5	.4	9.5	9.5	15	31	54	31	4	1.5	.2
26.....	.5	.4	8.5	9	15	38	49	29	3.7	1.4	.2
27.....	.5	.4	8	8.5	14	37	40	29	3.2	1.3	.2
28.....	.5	.4	7	8.5	13	42	38	28	2.9	1.2	.2
29.....	.5	.4	6.5	8	-----	45	36	29	2.7	1.1	.2
30.....	.5	.3	6	8	-----	44	36	25	2.6	1.0	.2
31.....	.5	-----	5.5	8	-----	34	-----	21	-----	1.0	.2

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0.5	0.4	0.49	30.1
November.....	.5	.3	.40	23.8
December.....	116	.3	18.6	1,140
January.....	20	2.5	8.42	518
February.....	21	8.5	16.6	922
March.....	45	11	19.7	1,210
April.....	76	33	46.8	2,780
May.....	54	21	35.2	2,160
June.....	19	2.6	10.0	595
July.....	2.6	1.0	1.78	109
August.....	.9	.2	.46	28.3
September.....	-----	-----	.2	11.9
The year.....	116	.2	13.2	9,530

BOWMAN-SPAULDING CANAL AT INTAKE, CALIF.

LOCATION.—Water-stage recorder in sec. 8, T. 18 N., R. 12 E., one-fourth mile below Bowman rock-fill dam and 150 feet below intake. Altitude, about 5,400 feet.

RECORDS AVAILABLE.—October, 1927, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 252 second-feet June 30 to Sept. 30; practically no flow Mar. 29 to June 11 and June 18-24.

1927-1930: Maximum mean daily discharge, 262 second-feet Aug. 2-9 and 29 and Sept. 10-13, 1928; no flow at times each year.

REMARKS.—Records good. Discharge estimated Jan. 6-8. Bowman-Spaulling Canal diverts the controlled discharge of Bowman Lake from the left bank of Canyon Creek in sec. 8, T. 18 N., R. 12 E., transporting it to Fuller Lake and then to Lake Spaulding. After passing through several Pacific Gas & Electric Co. power plants it is used for irrigation in the Nevada irrigation district. Gage-height record and results of discharge measurements furnished by Nevada Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	June	July	Aug.	Sept.
1-----	247	247	105	235	228	206	0	252	252	252
2-----	247	247	21	235	228	206	0	252	252	252
3-----	247	247	3.4	235	220	206	0	252	252	252
4-----	247	247	2.1	231	220	199	0	252	252	252
5-----	247	239	2.5	231	220	199	0	252	252	252
6-----	251	231	2.7	228	220	199	0	252	252	252
7-----	247	231	2.6	225	228	199	0	252	252	252
8-----	247	227	4.2	222	220	206	0	252	252	252
9-----	247	231	7	220	220	206	0	252	252	252
10-----	247	227	10	213	220	213	0	252	252	252
11-----	251	227	90	220	220	213	0	252	252	252
12-----	247	227	140	220	220	213	15	252	252	252
13-----	251	227	127	220	220	199	96	252	252	252
14-----	251	227	157	220	220	192	2.8	252	252	252
15-----	247	227	178	213	213	196	3.0	252	252	252
16-----	247	227	178	168	206	199	3.0	252	252	252
17-----	251	227	192	188	199	199	1.3	252	252	252
18-----	251	227	188	188	199	206	0	252	252	252
19-----	251	227	185	199	199	199	0	252	252	252
20-----	251	227	192	206	192	192	0	252	252	252
21-----	251	231	199	213	206	185	0	252	252	252
22-----	251	231	199	220	174	81	0	252	252	252
23-----	251	227	211	220	174	3.9	0	252	252	252
24-----	251	231	227	220	199	4.2	0	252	252	252
25-----	251	231	227	220	206	4.0	35	252	252	252
26-----	251	227	227	220	206	4.4	151	252	252	252
27-----	247	227	227	220	213	4.0	230	252	252	252
28-----	247	227	227	228	213	3.0	244	252	252	252
29-----	247	227	231	228	-----	0	244	252	252	252
30-----	247	227	231	228	-----	0	252	252	252	252
31-----	247	-----	235	228	-----	0	-----	252	252	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet
October-----	251			247			249			15,300
November-----	247			227			231			13,700
December-----	235			2.1			136			8,360
January-----	235			168			218			13,400
February-----	228			174			211			11,700
March-----	213			0			140			8,610
June-----	252			0			42.6			2,530
July-----	252			252			252			15,500
August-----	252			252			252			15,500
September-----	252			252			252			15,000
The year-----	252			0			165			120,000

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

BEAR RIVER CANAL NEAR COLFAX, CALIF.

LOCATION.—Float gage in sec. 28, T. 15 N., R. 9 E., just below lower spillway gates, $1\frac{1}{2}$ miles below diversion dam on Bear River, and 2 miles northwest of Colfax.

RECORDS AVAILABLE.—January, 1912, to September, 1930.

EXTREMES.—1912-1930: Maximum mean daily discharge recorded, 302 second-feet Sept. 16 and Oct. 31, 1923, and Jan. 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 power house and Wise power house and is then distributed for irrigation. Discharge record furnished by Pacific Gas & Electric Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.....	0	278	288	298	256	81	16.....	156	278	262	288	286	268
2.....	0	267	292	298	256	298	17.....	169	254	298	298	286	268
3.....	0	278	292	298	81	298	18.....	183	140	298	298	286	268
4.....	0	278	292	85	286	298	19.....	158	278	298	251	286	268
5.....	28	278	292	264	286	298	20.....	196	278	298	50	286	268
6.....	28	278	292	150	256	298	21.....	196	278	298	286	286	268
7.....	28	278	292	283	271	268	22.....	223	181	115	286	292	268
8.....	28	278	292	298	256	298	23.....	223	278	298	268	286	268
9.....	28	250	296	298	256	298	24.....	223	278	284	258	286	268
10.....	28	257	296	272	144	298	25.....	223	278	298	265	286	268
11.....	28	124	296	298	286	298	26.....	233	278	298	265	286	268
12.....	48	278	296	256	286	298	27.....	278	278	298	144	286	268
13.....	94	278	296	170	292	298	28.....	278	278	282	260	286	268
14.....	144	278	298	187	298	294	29.....	278	283	86	240	292	268
15.....	144	278	269	298	298	298	30.....	278	288	258	273	298	268
							31.....		288		256	293	
Month						Maximum	Minimum	Mean	Run-off in acre-feet				
April.....						278	0	131	7,800				
May.....						288	124	264	16,200				
June.....						299	86	278	16,500				
July.....						298	50	252	15,500				
August.....						298	81	271	16,700				
September.....						298	81	290	17,300				
The year.....						299	0	124	90,000				

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

AMERICAN RIVER BASIN

NORTH FORK OF AMERICAN RIVER NEAR COLFAX, CALIF.

LOCATION.—Water-stage recorder installed Nov. 10, 1929, in SW. $\frac{1}{4}$ sec 30, T. 14 N., R. 10 E., 50 feet downstream from bridge on Colfax-Forest Hill road, 200 feet below mouth of Shirttail Canyon Creek, and 5 miles southeast of Colfax. Staff gage at bridge used prior to Nov. 10, 1929.

DRAINAGE AREA.—308 square miles.

RECORDS AVAILABLE.—August, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,700 second-feet Dec. 12 (gage height, 8.48 feet); minimum, 31 second-feet Sept. 18.

1911–1930: Maximum discharge, about 55,000 second-feet Mar. 25, 1928 (gage height, 20.2 feet); minimum, 15 second-feet July 22 to Aug. 7 and Aug. 12–15, 1924.

REMARKS.—Records fair for October, August, and September; good for remainder of year. Daily discharge estimated Oct. 3–23, Oct. 25 to Nov. 1, and Aug. 5 to Sept. 17. Small storage and diversion above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	42	40	36	175	510	717	1,120	912	525	114	51	38
2.....	42	40	36	168	604	699	1,120	1,010	498	110	50	38
3.....	42	39	37	166	787	897	1,080	1,120	481	105	40	38
4.....	42	38	39	205	699	2,690	1,010	932	503	101	49	37
5.....	42	38	38	500	754	3,930	1,150	815	519	96	49	37
6.....	42	38	38	322	748	2,500	1,260	803	546	93	48	37
7.....	50	38	38	314	768	1,710	1,300	809	546	88	48	36
8.....	47	38	42	284	761	1,380	1,470	743	487	85	48	36
9.....	44	38	336	271	742	1,220	1,300	673	432	83	47	36
10.....	42	38	4,000	257	699	1,080	1,120	629	432	80	47	35
11.....	42	38	1,590	234	651	1,040	1,010	646	437	79	46	35
12.....	42	38	4,690	245	663	1,080	1,040	695	418	74	46	35
13.....	42	38	4,080	240	669	1,120	1,560	803	371	73	46	34
14.....	42	39	1,450	245	669	1,080	1,660	860	325	72	45	34
15.....	42	39	1,020	259	729	978	1,340	809	298	69	45	34
16.....	42	39	1,700	1,360	774	880	1,260	761	288	66	44	33
17.....	42	39	905	1,440	735	828	1,220	1,010	264	63	44	33
18.....	42	39	856	1,980	735	785	1,260	1,040	226	62	44	33
19.....	42	38	729	1,280	742	767	1,340	1,040	215	61	43	34
20.....	42	38	566	1,120	1,010	815	1,560	1,080	204	60	43	34
21.....	42	38	431	912	787	867	1,520	1,010	186	58	42	34
22.....	42	37	362	748	1,260	919	1,560	893	173	58	42	34
23.....	42	37	325	657	1,360	919	1,560	854	161	57	42	38
24.....	42	37	291	633	1,040	1,120	1,560	874	152	56	41	40
25.....	42	86	268	633	1,080	1,260	1,260	848	144	54	41	42
26.....	42	36	251	615	1,010	1,380	1,180	834	137	54	40	41
27.....	42	37	232	610	891	1,520	1,040	803	131	53	40	39
28.....	41	37	215	555	800	1,340	945	791	127	53	40	38
29.....	41	37	202	525	-----	1,420	912	767	122	52	39	39
30.....	40	37	194	515	-----	1,560	828	629	120	51	39	42
31.....	40	-----	184	515	-----	1,220	-----	558	-----	51	39	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	50	40	42.3	2,600
November.....	40	36	38.0	2,260
December.....	4,690	36	812	49,900
January.....	1,980	166	580	35,700
February.....	1,360	510	810	45,000
March.....	3,930	699	1,280	78,700
April.....	1,660	828	1,250	74,400
May.....	1,120	558	840	51,600
June.....	546	120	316	18,800
July.....	114	51	72.0	4,430
August.....	51	39	44.5	2,740
September.....	42	33	36.5	2,170
The year.....	4,690	33	509	368,000

AMERICAN RIVER AT FAIROAKS, CALIF.

LOCATION.—Water-stage recorder at highway bridge half a mile southeast of Fair Oaks, Sacramento County, and 10 miles below South Fork.

DRAINAGE AREA.—1,910 square miles.

RECORDS AVAILABLE.—November, 1904, to September, 1930.

EXTREMES.—Maximum discharge during year, 24,400 second-feet Mar. 5 (gauge height, 11.33 feet); minimum probably occurred during period of no record, Oct. 1 to Nov. 30.

1904-1930: Maximum discharge, 182,000 second-feet Mar. 25, 1928 (gauge height, 30.45 feet); minimum, 3.6 second-feet Aug. 16, 1924.

REMARKS.—Records good except those estimated, which are fair. Storage, regulation, and diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	99	588	1,660	2,440	4,970	4,010	2,940	774	170	142
2	90	576	1,700	2,190	4,770	4,480	2,710	762	299	107
3	104	570	1,980	2,250	4,770	5,070	2,710	781	205	118
4	95	655	2,250	8,610	4,680	4,770	2,940	774	147	105
5	105	1,800	2,250	18,800	4,970	4,010	3,410	642	139	212
6	* 100	1,520	2,380	13,700	5,780	3,740	3,920	636	138	268
7	* 100	1,440	2,310	7,580	5,990	3,920	4,010	594	181	182
8	91	1,200	2,380	5,570	6,640	* 4,000	3,740	548	142	138
9	129	1,090	2,440	4,770	6,640	* 3,700	3,410	514	176	208
10	6,500	1,060	2,380	4,200	5,570	* 3,400	3,490	472	214	180
11	9,070	1,040	2,250	3,830	4,970	* 3,200	3,580	472	172	304
12	7,670	992	2,140	3,830	4,970	* 3,400	3,410	488	206	288
13	14,800	1,020	2,140	3,920	5,570	* 4,100	3,250	414	163	302
14	7,140	1,200	2,190	4,100	7,580	* 4,400	3,010	388	270	210
15	3,580	1,200	2,250	3,920	5,990	* 4,400	2,640	375	200	164
16	5,570	4,430	2,380	3,490	5,370	* 4,100	2,500	374	162	257
17	4,010	5,780	2,440	3,170	5,370	* 4,600	2,640	324	154	248
18	2,780	8,080	2,440	2,940	5,570	* 5,200	2,500	346	120	265
19	2,780	6,200	2,500	2,780	5,780	* 5,700	2,190	338	158	194
20	2,380	4,390	2,940	2,780	6,860	6,200	1,660	* 330	172	228
21	1,790	3,830	3,170	3,170	7,100	5,990	1,560	* 300	182	238
22	1,440	2,940	2,940	3,410	7,580	5,070	1,480	* 260	194	180
23	1,200	2,440	4,970	3,660	7,580	4,680	1,400	* 240	226	256
24	1,040	2,080	3,660	4,100	7,580	4,770	1,320	* 240	172	281
25	939	2,080	3,170	5,170	6,200	4,770	1,280	217	116	310
26	883	1,980	3,660	5,570	5,570	4,770	1,200	238	173	266
27	848	2,030	3,170	6,420	5,570	4,870	1,060	223	176	357
28	794	1,880	2,710	5,990	4,680	5,170	992	* 210	224	300
29	705	1,700	-----	6,200	4,390	4,680	925	* 195	190	208
30	655	1,610	-----	6,640	4,010	3,830	834	* 180	223	396
31	630	1,610	-----	5,990	-----	3,330	-----	* 180	256	-----
Month	Maximum			Minimum			Mean			Run-off in acre-feet
October							* 100			6,150
November							* 85			5,060
December	14,800			90			2,520			155,000
January	8,080			570			2,250			137,000
February	4,970			1,660			2,600			144,000
March	18,800			2,190			5,200			320,000
April	7,580			4,010			5,770			848,000
May	6,200			3,200			4,460			274,000
June	4,010			834			2,420			144,000
July	781			180			414			25,500
August	270			116			181			11,100
September	396			105			230			13,700
The year	18,800			-----			2,180			1,580,000

* Estimated.

AMERICAN RIVER AT SACRAMENTO, CALIF.

LOCATION.—Water-stage recorder at H Street Bridge in city of Sacramento, Sacramento County.

RECORDS AVAILABLE.—July to October, 1921; and October, 1929, to October, 1930; low-water records only.

EXTREMES.—Minimum discharge during period, 52 second-feet Oct. 31, 1929.

REMARKS.—Records good. Many diversions, storage reservoirs, and power plants affect the flow.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	May	June	July	Aug.	Sept.	Oct.
1	56	81	4,020	2,820	750	184	205	388
2	90	81	4,400	2,520	721	180	151	436
3	69	99	4,720	2,520	750	184	130	469
4	73	109	4,720	2,680	760	172	142	478
5	86		4,020	3,050	640	180	148	436
6	86		3,720	3,350	622	168	210	359
7	65		3,800	3,650	586	164	184	420
8	69		3,880	3,420	541	154	154	380
9	112		3,500	3,050	505	164	168	352
10	156		3,200	2,980	478	184	151	317
11	134		3,050	3,200	487	184	225	331
12	173		3,200	3,200	487	172	230	345
13	144		3,800	3,050	428	184	268	210
14	119		4,180	2,820	373	225	215	331
15	134		4,180	2,450	359	205	184	373
16	104		3,800	2,220	373	188	225	352
17	99		4,250	2,380	331	151	245	352
18	104		4,880	2,220	317	142	262	262
19	94		5,200	2,000	317	142	230	235
20	104		5,520	1,790	298	168	235	172
21	114		5,680	1,550	262	164	262	151
22	104		5,040	1,480	220	164	220	120
23	86		4,560	1,360	192	176	256	136
24	86		4,560	1,250	245	192	274	125
25	77		4,560	1,190	210	157	292	142
26	94		4,400	1,050	205	160	304	139
27	86		4,560	1,010	200	176	338	133
28	94		4,560	952	184	215	345	139
29	90		4,250	890	176	225	268	130
30	73		3,720	800	154	200	359	133
31	52		3,200		176	225		130

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929				
October	173	52	97.6	6,000
1930				
May	5,680	3,050	4,230	280,000
June	3,650	800	2,230	133,000
July	760	154	398	24,500
August	225	142	179	11,000
September	359	130	229	13,600
October	478	125	274	16,800
The period				459,000

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.

DRAINAGE AREA.—622 square miles.

RECORDS AVAILABLE.—October, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 10,200 second-feet Dec. 10 (gage height, 9.8 feet); minimum, 34 second-feet Nov. 1-6.

1911-1930: Maximum discharge, about 100,000 second-feet Mar. 25, 1928 (gage height, 35.6 feet at old gage upstream); minimum, 2 $\frac{1}{2}$ second-feet Sept. 26 to Oct. 3, 1924.

REMARKS.—Records good. Storage and diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	46	34	46	510	840	1,050	2,320	1,880	* 1,100	325	83	43
2.....	46	34	46	510	910	1,050	2,320	1,880	980	325	88	43
3.....	46	34	46	482	1,300	980	2,320	2,100	980	300	* 86	43
4.....	46	34	46	522	1,300	2,780	2,320	* 1,700	980	* 286	83	43
5.....	46	34	46	1,130	1,300	5,640	2,540	1,480	1,300	* 272	83	36
6.....	46	34	46	805	1,300	3,550	* 2,800	1,480	1,480	258	83	43
7.....	46	40	46	770	1,300	2,430	3,030	1,670	1,670	238	69	43
8.....	46	40	46	600	1,300	1,480	3,550	1,480	1,670	238	64	43
9.....	46	46	80	428	1,300	1,670	2,540	1,300	1,210	218	64	43
10.....	62	46	5,980	510	1,300	1,670	2,430	1,300	1,130	199	* 64	43
11.....	62	46	3,290	600	1,130	1,480	2,320	* 1,300	1,300	180	64	43
12.....	54	46	4,400	455	1,130	1,570	2,430	1,300	1,300	162	64	43
13.....	54	46	8,000	540	1,130	1,770	3,290	1,670	1,130	* 162	64	43
14.....	46	46	2,540	665	1,210	1,770	3,290	1,880	980	162	64	54
15.....	46	46	1,880	735	1,300	1,880	2,540	1,570	* 1,000	162	64	47
16.....	46	46	3,290	2,100	1,480	1,390	2,540	1,480	1,050	145	60	43
17.....	46	46	1,670	2,780	1,480	1,300	2,540	2,100	980	130	* 62	43
18.....	46	46	1,050	4,110	1,390	1,300	2,540	2,320	80	115	64	43
19.....	46	46	980	2,320	1,480	1,300	2,540	2,320	700	115	60	43
20.....	46	46	980	2,100	1,770	1,390	4,250	2,780	700	* 115	47	43
21.....	46	46	665	1,670	1,570	1,390	3,420	2,780	570	115	43	43
22.....	46	46	910	1,300	1,880	1,570	3,830	1,990	* 55	115	43	43
23.....	46	46	840	1,210	2,540	* 1,890	3,690	1,880	540	115	43	43
24.....	46	46	770	1,130	2,100	2,210	3,830	1,880	570	115	* 45	43
25.....	46	46	700	1,130	1,990	2,900	2,780	* 1,880	510	102	47	47
26.....	46	46	630	1,130	1,480	3,420	2,430	1,880	400	88	60	54
27.....	46	46	570	1,210	1,300	3,830	* 2,200	1,880	37	* 90	64	47
28.....	40	46	570	1,050	1,130	3,030	1,990	2,100	32	93	60	43
29.....	40	46	570	980	-----	3,290	1,880	1,880	* 300	88	54	43
30.....	40	46	570	1,050	-----	* 3,400	1,670	1,480	279	88	43	43
31.....	40	-----	510	980	-----	2,780	-----	1,210	-----	83	54	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	62	40	46.8	2,880
November.....	46	34	43.2	2,570
December.....	8,000	46	1,350	83,000
January.....	4,110	428	1,150	70,700
February.....	2,540	840	1,420	78,900
March.....	5,640	980	2,170	133,000
April.....	4,250	1,670	2,740	163,000
May.....	2,780	1,210	1,800	111,000
June.....	1,670	279	892	53,100
July.....	325	83	168	10,300
August.....	88	43	62.5	3,840
September.....	54	36	43.9	2,610
The year.....	8,000	34	987	715,000

* Estimated.

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.

DRAINAGE AREA.—196 square miles.

RECORDS AVAILABLE.—August to December, 1907; October, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,440 second-feet May 20 (gauge height, 5.06 feet); minimum, 0.4 second-foot Oct. 15-17.

1922-1930: Maximum discharge, 5,020 second-feet Mar. 25, 1928 (gauge height, 7.60 feet); minimum, 0.3 second-foot Nov. 9-11, 1929.

REMARKS.—Records good except those for estimated periods, Oct. 1-23, Dec. 8-15, 23-26, and Jan. 8-11. El Dorado Canal diverts water around station. Storage, regulation, and other diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1	1.2	1.2	0.7	0.8	0.7	13	354	525	490	142	1.9	1.0
2	1.0	1.1	.7	1.1	.7	7	404	641	505	148	3.5	1.2
3	1.0	1.2	.7	.9	.8	14	466	641	580	128	2.8	1.1
4	.9	.6	.9	1.2	.7	38	430	505	689	122	.5	1.2
5	.8	9.5	.8	.9	.8	38	510	417	848	104	7	.5
6												
7	.8	1.2	.7	.8	.8	37	635	408	965	79	.5	1.8
8	.8	1.2	.7	.9	1.6	28	695	440	890	80	2.9	1.6
9	.7	1.3	.9	.7	4.9	57	781	370	743	65	2.0	1.6
10	.7	1.3		.7	11	27	713	336	755	48	1.9	1.6
11	.6	1.3	349	.7	11	23	586	332	920	34	1.9	1.6
12												
13	.6	1.8	48	.7	5	38	515	374	855	14	13	1.4
14	.5	1.3	3.3	.7	11	75	613	471	898	37	2.5	1.0
15	.5	1.5	336	.8	20	104	665	608	855	20	4.0	1.3
16	.5	3.3	63	.7	32	96	530	653	737	19	1.6	1.5
17	.4	1.2	5.5	.7	53	71	453	565	580	23	1.5	1.2
18												
19	.4	.9	120	128	61	51	480	596	701	6.5	1.5	1.8
20	.4	.9	9	112	55	44	530	731	701	1.1	3.8	2.5
21	.5	.8	108	36	67	40	591	890	630	.9	3.5	1.5
22	.5	.8	42	.8	72	52	701	1,000	412	.9	1.8	1.1
23	.5	1.0	1.5	.7	84	82	890	1,160	358	.9	1.8	1.1
24												
25	.5	1.3	1.0	.6	55	122	1,000	1,040	399	1.4	1.8	1.4
26	.6	1.2	.8	.7	74	160	1,120	905	366	2.8	1.7	1.3
27	.6	.8	.8	.6	68	188	1,080	965	315	1.9	1.5	1.3
28	3.6	.8	.8	.7	38	304	1,000	1,040	271	1.8	.5	
29	13	.8	.7	.6	28	386	834	1,000	218	1.5	9	6
30												
31	13	.8	.7	.6	19	448	827	1,040	208	1.5	7.5	2.2
1	12	.7	.7	.7	17	453	647	1,080	195	1.3	2.4	1.9
2	12	.8	.9	.6	6.5	435	565	1,080	182	1.3	1.5	1.9
3	9	.7	.8	.7		535	520	935	126	.7	1.1	1.2
4	1.3	.7	.7	.7		580	471	695	110	.5	1.2	10
5	1.0		.7	.7		370		570		1.2	1.2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	13	0.4	2.58	159
November	9.5	.7	1.58	94.0
December	349	.7	36.3	2,230
January	128	.6	9.79	602
February	84	.7	28.5	1,580
March	580	.7	159	9,780
April	1,120	354	654	38,900
May	1,160	332	710	43,700
June	965	110	550	32,700
July	148	.5	35.1	2,180
August	13	1.1	3.20	197
September	12	1.0	3.19	190
The year	1,160	.4	183	132,000

Daily and monthly discharge in second-feet, of South Fork of American River and El Dorado Canal near Kyburz, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	19	14	15	47	69	122	439	652	63	293	158	140
2.....	14	12	14	91	87	124	471	767	64	298	160	145
3.....	35	12	12	93	91	133	534	767	72	277	158	159
4.....	37	12	15	91	107	157	525	630	83	271	138	161
5.....	16	16	13	63	122	156	629	542	99	254	156	154
6.....	13	11	13	71	124	156	755	535	1, 110	229	154	150
7.....	12	39	12	96	130	147	799	567	1, 030	231	152	147
8.....	13	39	15	106	139	151	899	498	88	215	150	146
9.....	13	37	114	106	136	146	827	467	89	196	150	147
10.....	13	31	474	106	130	142	705	465	1, 060	184	149	145
11.....	12	25	168	106	124	157	634	507	1, 000	164	162	140
12.....	12	15	125	112	130	194	687	605	1, 040	189	150	130
13.....	62	12	471	106	139	223	785	743	1, 000	173	152	142
14.....	66	17	197	106	151	215	649	788	88	173	145	146
15.....	18	76	132	106	172	190	552	699	72	179	142	143
16.....	13	56	255	243	180	170	579	730	847	160	146	149
17.....	10	21	138	236	174	163	629	866	848	149	153	152
18.....	12	16	241	163	184	159	686	1, 020	77	152	152	150
19.....	10	15	175	105	191	171	785	1, 130	559	149	150	146
20.....	12	29	116	95	203	201	1, 020	1, 290	50	147	148	146
21.....	66	71	89	81	173	241	1, 130	1, 170	547	155	149	145
22.....	59	33	75	102	192	279	1, 250	1, 040	513	157	147	144
23.....	18	23	67	83	186	307	1, 210	1, 100	461	158	142	140
24.....	13	19	64	77	156	423	1, 130	1, 180	417	155	144	152
25.....	16	20	63	74	146	505	960	1, 140	365	150	157	155
26.....	16	19	53	73	137	567	963	1, 180	355	152	156	151
27.....	16	17	45	69	133	572	773	1, 220	342	147	150	148
28.....	16	17	43	64	124	554	691	1, 220	32	153	148	146
29.....	30	15	40	66	---	654	645	1, 080	27	149	143	161
30.....	87	15	39	69	---	699	597	836	258	148	145	159
31.....	27	---	35	69	---	489	---	712	---	154	144	---
Month						Maximum	Minimum	Mean		Run-off in acre-feet		
October.....						87	10	25. 0		1, 540		
November.....						76	11	25. 1		1, 490		
December.....						474	12	107		6, 580		
January.....						243	47	99. 2		6, 100		
February.....						208	69	144		8, 000		
March.....						699	122	276		17, 000		
April.....						1, 250	439	764		45, 500		
May.....						1, 290	465	843		51, 800		
June.....						1, 110	258	695		41, 400		
July.....						298	147	186		11, 400		
August.....						162	138	150		9, 220		
September.....						161	130	148		8, 810		
The year.....						1, 290	10	289		209, 000		

SOUTH FORK OF AMERICAN RIVER NEAR CAMINO, CALIF.

LOCATION.—Water-stage recorder in 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.

DRAINAGE AREA.—497 square miles.

RECORDS AVAILABLE.—October, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,100 second-feet Apr. 8 (gage height, 9.70 feet); minimum, 2.8 second-feet Nov. 2.

1922-1930; Maximum discharge, 31,500 second-feet Mar. 25, 1928 (gage height, 24.4 feet); minimum, that of Nov. 2, 1929.

REMARKS.—Records excellent. There are 4 storage reservoirs and 3 diversions above station; flow completely regulated at low water. See records for South Fork of American River flume, El Dorado Canal, and Finnon Reservoir outlet.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.1	4.8	5.5	40	239	438	1,210	1,150	915	196	47	16
2.....	3.1	2.9	3.6	51	201	472	1,220	1,480	990	236	42	13
3.....	3.2	4.2	4.7	59	322	538	1,310	1,630	1,000	224	32	20
4.....	3.1	4.1	3.5	121	312	995	1,310	1,280	1,200	176	43	28
5.....	3.2	4.0	3.4	131	386	1,380	1,440	1,090	1,380	185	23	40
6.....	4.0	3.6	3.4	66	340	1,140	1,700	1,080	1,640	156	32	26
7.....	4.6	4.6	3.8	74	375	948	1,950	1,160	1,450	146	44	17
8.....	4.8	4.6	4.4	68	406	810	2,140	1,050	1,370	132	40	13
9.....	4.6	7	214	92	414	770	2,020	955	1,260	110	34	22
10.....	4.6	5	1,490	113	400	720	1,680	990	1,460	112	23	17
11.....	4.4	3.8	793	55	352	698	1,430	955	1,420	101	18	25
12.....	4.2	7	611	98	340	755	1,610	1,160	1,440	94	28	24
13.....	4.0	6	1,620	121	375	858	1,780	1,390	1,380	80	26	14
14.....	3.5	8	707	124	395	938	1,820	1,600	1,240	91	30	14
15.....	4.6	7	358	122	405	792	1,410	1,380	958	81	28	12
16.....	4.6	6.5	714	404	468	722	1,420	1,300	1,120	77	19	22
17.....	5.5	7.5	423	693	472	665	1,470	1,840	1,110	67	20	32
18.....	4.6	6	424	1,020	505	608	1,590	1,960	990	71	14	20
19.....	4.7	7	446	586	500	555	1,660	2,150	748	60	20	19
20.....	4.7	7	304	474	648	612	2,220	2,440	600	37	25	20
21.....	4.4	4.6	220	372	578	675	2,410	2,300	624	51	32	16
22.....	5	6.5	150	310	850	845	2,620	1,840	515	49	23	14
23.....	10	7.5	157	272	1,020	942	2,540	1,880	468	56	20	32
24.....	5	6	126	260	738	1,210	2,420	1,940	406	58	15	34
25.....	4.2	4.6	84	258	678	1,510	1,880	1,970	338	62	12	42
26.....	2.9	6	86	231	645	1,630	1,860	2,020	312	49	26	50
27.....	2.6	6	90	264	575	1,720	1,600	1,980	308	25	45	54
28.....	3.2	4.2	48	231	525	1,660	1,380	2,040	285	37	34	60
29.....	3.8	3.6	54	210	-----	1,790	1,260	1,860	232	46	35	30
30.....	5	4.1	36	214	-----	1,940	1,180	1,340	206	46	21	75
31.....	8	-----	27	225	-----	1,430	-----	1,140	-----	41	22	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	10	2.6	4.43	272
November.....	8	2.9	5.46	325
December.....	1,620	3.4	297	18,300
January.....	1,020	40	237	14,600
February.....	1,020	201	481	28,700
March.....	1,940	438	989	60,800
April.....	2,620	1,180	1,720	102,000
May.....	2,440	955	1,560	95,900
June.....	1,640	206	912	54,300
July.....	236	25	95.2	5,850
August.....	47	12	28.5	1,750
September.....	75	12	27.4	1,630
The year.....	2,620	2.6	528	382,000

Daily and monthly discharge, in second-feet, of South Fork of American River and South Fork of American River flume near Camino, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	49	50	136	347	438	1,310	1,250	1,010	299	154	120
2	62	40	40	155	308	472	1,320	1,690	1,060	342	148	109
3	32	44	49	166	432	538	1,410	1,730	1,100	339	116	131
4	31	44	38	229	422	995	1,420	1,380	1,300	279	125	138
5	40	42	38	240	496	1,380	1,540	1,190	1,480	289	117	161
6	45	40	38	172	449	1,140	1,810	1,180	1,740	260	143	137
7	51	47	40	183	484	948	2,050	1,260	1,550	248	155	122
8	47	51	43	176	515	810	2,230	1,150	1,470	234	153	116
9	47	54	269	203	523	770	2,120	1,060	1,360	212	146	134
10	47	48	1,550	224	509	720	1,780	1,060	1,560	214	136	125
11	44	43	869	162	460	698	1,530	1,060	1,520	199	121	137
12	44	54	699	208	440	755	1,710	1,260	1,540	190	143	134
13	43	51	1,720	231	485	858	1,880	1,490	1,480	177	141	121
14	36	57	806	233	505	938	1,920	1,700	1,340	188	142	114
15	41	53	457	230	513	792	1,510	1,480	1,060	176	138	103
16	44	52	815	512	575	722	1,520	1,410	1,220	173	123	133
17	48	60	524	800	579	665	1,570	1,940	1,210	167	125	142
18	44	57	526	1,130	604	642	1,690	2,060	1,090	169	119	128
19	45	61	550	694	593	623	1,760	2,250	849	160	132	126
20	44	59	406	582	741	692	2,320	2,540	702	135	138	127
21	42	43	318	480	613	757	2,510	2,400	728	147	146	112
22	45	60	248	419	850	876	2,720	1,940	617	149	142	110
23	61	60	258	380	1,020	942	2,640	1,980	572	158	130	140
24	45	53	223	368	738	1,210	2,520	2,040	506	162	120	145
25	40	47	174	368	678	1,510	1,980	2,070	442	167	102	152
26	35	53	185	341	645	1,640	1,960	2,120	416	153	138	159
27	35	52	190	374	575	1,780	1,700	2,080	412	124	158	162
28	39	40	145	340	525	1,640	1,480	2,140	388	127	145	167
29	41	39	149	318	-----	1,880	1,360	1,960	335	149	143	131
30	49	45	135	321	-----	2,040	1,280	1,440	310	167	125	176
31	59	-----	127	333	-----	1,530	-----	1,230	-----	149	119	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	61	31	44.2	2,720
November	61	39	49.9	2,970
December	1,720	38	377	23,200
January	1,130	136	345	21,200
February	1,020	308	558	31,000
March	2,040	435	1,010	62,100
April	2,720	1,280	1,820	108,000
May	2,540	1,060	1,660	102,000
June	1,740	310	1,010	60,100
July	342	124	196	12,100
August	158	102	135	8,800
September	176	103	133	7,910
The year	2,720	31	611	442,000

SOUTH FORK OF AMERICAN RIVER AT COLOMA, CALIF.

LOCATION.—Water-stage recorder in sec. 17, T. 11 N., R. 10 E., at highway bridge at Coloma.

DRAINAGE AREA.—635 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,380 second-feet Mar. 5 (gage height, 11.95 feet); minimum, 35 second-feet Dec. 7.

REMARKS.—Records good. Flow partly regulated by four storage reservoirs and two power plants above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		58	52	157	412	600	1,380	1,330	1,060	372	139	111
2.....		49	47	120	380	586	1,330	1,600	1,060	412	136	108
3.....		44	53	187	482	765	1,380	1,780	1,100	438	120	104
4.....		48	49	275	513	1,870	1,420	1,460	1,290	356	84	116
5.....		49	42	522	554	3,030	1,560	1,260	1,510	360	125	130
6.....		44	40	293	526	1,870	1,780	1,210	1,740	340	102	130
7.....		48	40	286	554	1,290	2,120	1,290	1,740	300	128	123
8.....		46	42	268	559	995	2,270	1,170	1,510	293	136	108
9.....		55	140	275	554	930	2,220	1,100	1,380	282	139	123
10.....		56	1,460	293	591	872	1,780	1,060	1,560	268	133	128
11.....		52	1,060	268	531	818	1,600	1,060	1,600	253	118	128
12.....		53	711	242	564	872	1,740	1,250	1,600	228	133	136
13.....		55	1,870	300	526	900	1,870	1,510	1,510	235	145	123
14.....		58	960	324	568	995	2,170	1,740	1,420	194	145	116
15.....		62	628	336	559	900	1,690	1,510	1,100	201	139	99
16.....		60	930	960	614	818	1,600	1,380	1,210	204	136	106
17.....		60	674	1,100	641	765	1,640	1,970	1,250	180	130	136
18.....		59	572	1,740	651	765	1,740	2,070	1,140	180	113	130
19.....		59	646	930	632	726	1,820	2,270	900	194	118	120
20.....		58	508	790	765	765	2,320	2,600	765	160	130	118
21.....		52	404	664	711	845	2,540	2,490	740	120	142	116
22.....		47	308	554	845	930	2,780	2,020	716	145	139	99
23.....		58	316	508	1,100	960	2,720	1,970	674	154	128	113
24.....	58	59	257	455	845	1,170	2,600	2,070	614	154	120	145
25.....	56	52	208	451	790	1,460	2,070	2,070	540	157	108	133
26.....	46	52	201	438	818	1,690	1,970	2,120	508	157	118	142
27.....	52	52	208	490	726	1,780	1,780	2,120	499	142	157	157
28.....	49	51	187	429	702	1,640	1,510	2,170	486	102	157	174
29.....	48	40	194	396	-----	1,870	1,380	1,970	438	145	136	130
30.....	43	47	136	400	-----	2,020	1,290	1,460	400	145	113	154
31.....	51	-----	157	404	-----	1,600	-----	1,250	-----	139	120	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 24-31.....	58	43	50.4	800
November.....	62	40	52.8	3,140
December.....	1,870	40	423	26,000
January.....	1,740	120	479	29,500
February.....	1,100	380	632	35,100
March.....	3,030	586	1,200	73,800
April.....	2,780	1,290	1,870	111,000
May.....	2,600	1,060	1,690	104,000
June.....	1,740	400	1,070	63,700
July.....	438	120	226	13,900
August.....	157	84	129	7,930
September.....	174	99	125	7,440
The period.....	-----	-----	-----	476,000

ECHO LAKE FLUME NEAR VADE, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 6, T. 11 N., R. 18 E., half a mile below intake and 5 miles northeast of Phillips (Vade post office). Altitude, about 7,500 feet.

RECORDS AVAILABLE.—August, 1923, to September, 1930.

EXTREMES.—1923-1930: Maximum mean daily discharge, 25 second-feet Sept. 16-18, 1930.

REMARKS.—Records good. This flume diverts water from Echo Lake in Truckee River Basin into South Fork of American River Basin. Flow completely regulated at Echo Lake, storage about 100 acre-feet on Sept. 30, 1929, and about 100 acre-feet on Sept. 30, 1930.

Daily and monthly discharge, in second-feet, 1929-30

Day	Nov.	Sept.	Day	Nov.	Sept.	Day	Nov.	Sept.
1.....	0	0	11.....	3.0	20	21.....	7	23
2.....	0	10	12.....	0	20	22.....	6.5	21
3.....	0	20	13.....	0	21	23.....	6	20
4.....	0	20	14.....	0	21	24.....	6	18
5.....	0	20	15.....	0	24	25.....	5.5	18
6.....	0	20	16.....	0	25	26.....	0	17
7.....	0	20	17.....	0	25	27.....	0	16
8.....	0	20	18.....	1.8	25	28.....	0	13
9.....	0	20	19.....	5.5	24	29.....	0	14
10.....	4.9	20	20.....	8	24	30.....	0	14

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November.....	8	0	1.81	108
September.....	25	0	19.1	1,140
The year.....	25	0	1.72	1,250

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

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.

DRAINAGE AREA.—6.25 square miles.

RECORDS AVAILABLE.—September, 1922, to September, 1930; summer records only.

EXTREMES.—Maximum discharge during year, 107 second-feet June 11 (gage height, 2.42 feet); practically no flow at times.

1922-1930: Maximum discharge, 202 second-feet June 15 and 16, 1929 (gage height, 3.42 feet); no flow at times.

REMARKS.—Records good except those for May 1-9, which are estimated, and those for extreme low stages, which are fair. Mean monthly discharge for October and November estimated. Observations discontinued Dec. 20 to Apr. 30. No diversions. Flow partly regulated by gates at Medley Lakes Dam. No available storage in Medley Lakes on Sept. 30, 1929, or on Sept. 30, 1930.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	May	June	July	Aug.	Sept.	Day	Dec.	May	June	July	Aug.	Sept.
1.....	0.1	1.0	21	44	0.8	52	16.....	10	3.7	92	16	82	2.6
2.....	.1	1.0	23	42	.7	51	17.....	11	5	81	15	82	2.2
3.....	.1	1.0	32	39	27	49	18.....	11	9	72	12	80	1.9
4.....	.1	1.0	43	39	90	48	19.....	10	11	68	10	78	1.6
5.....	.1	1.0	63	41	90	46	20.....		14	60	9.5	77	1.4
6.....	.1	1.0	84	38	90	44	21.....		9.5	55	8.5	75	1.3
7.....	.1	1.0	92	34	89	41	22.....		6.5	53	8	74	1.2
8.....	.1	1.0	80	30	89	37	23.....		8	46	7	73	.9
9.....	.1	1.0	75	26	88	34	24.....		8.5	40	6	71	.9
10.....	1.2	1.0	82	24	88	28	25.....		9	36	5	71	.9
11.....	.7	1.3	90	22	86	16	26.....		10	36	3.7	70	.8
12.....	.6	2.8	60	21	86	9.5	27.....		12	35	2.6	68	.8
13.....	4.8	5	83	21	85	6	28.....		14	34	1.9	66	.7
14.....	10	4.6	74	20	84	4.2	29.....		20	35	1.4	65	1.4
15.....	8.6	3.2	80	19	83	3.2	30.....		24	39	1.2	63	1.8
							31.....		22		.9	60	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....			0.1	6.1
November.....			.1	6.9
December 1-19.....	11	.1	3.62	136
May.....	24	1.0	6.87	422
June.....	92	21	59.8	3,560
July.....	44	.9	18.3	1,130
August.....	90	.7	72.0	4,430
September.....	52	.7	16.3	970

SILVER LAKE OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 32, T. 10 N., R. 17 E., 1,000 feet below Silver Lake Dam and 4 miles southwest of Kirkwood. Altitude, about 7,200 feet.

DRAINAGE AREA.—14.9 square miles.

RECORDS AVAILABLE.—September, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 265 second-foot June 11 (gate height, 3.59 feet); minimum, 0.1 second-foot at times when gate was closed.

1922-1930: Maximum discharge, 323 second-feet June 16, 1929 (gate height, 4.00 feet); minimum, 0.1 second-foot during parts of 1926 and 1928-1930 when Silver Lake outlet gate was closed.

REMARKS.—Records good. No available storage in Silver Lake on Sept. 30, 1929, or on Sept. 30, 1930. In addition to water released from controlled outlet some water escapes from Silver Lake through the porous rock formation. Regular measurement of the only important one of these seepages was begun in April, 1930, and is published under the head of "Seepage from Silver Lake near Kirkwood, Calif."

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	0.1	0.1	0.6	28	0.3	0.4	0.8	50	24	8	88	23
2.	.1	.1	.6	26	.3	.4	.9	68	37	6.5	88	23
3.	.1	.1	.6	24	.3	.4	1.0	86	55	6	70	22
4.	.1	.1	.5	10	.3	.4	1.0	71	84	6	40	22
5.	.1	.1	.4	.9	.3	.4	1.8	53	161	6	39	22
6.	.1	.1	.4	.5	.3	.4	2.6	42	122	6	40	21
7.	.1	.2	.3	.5	.3	.4	3.9	43	37	5.5	40	21
8.	.1	.2	.4	.5	.3	.4	4.8	35	16	5.5	40	20
9.	.1	.2	2.0	.5	.3	.4	5.5	29	124	5.5	40	20
10.	.1	1.8	3.6	.5	.2	.3	5.5	26	176	5.5	38	19
11.	.1	2.0	5.5	.5	.2	.3	5.5	28	146	25	37	19
12.	.1	1.4	6	.5	.3	.4	5.5	44	200	42	36	19
13.	.1	.7	9	.5	.3	.3	5.5	74	215	40	35	18
14.	.1	1.8	6.5	.5	.2	.4	5.5	94	117	40	34	18
15.	.1	2.2	.2	.5	.2	.3	5.5	88	10	40	33	17
16.	.1	2.2	.2	.4	.3	.3	5	80	13	40	33	17
17.	.1	2.0	.2	.3	.3	.3	6	84	83	46	32	17
18.	.1	2.0	.2	.4	.3	.3	12	114	50	53	32	16
19.	.1	1.8	.2	.4	.3	.4	33	151	40	57	32	16
20.	.1	1.6	.1	.4	.4	.4	80	127	37	68	31	16
21.	.1	.9	.1	.4	.4	.4	118	116	45	80	30	14
22.	.1	1.2	.1	.4	.5	.4	146	130	22	88	26	14
23.	.1	1.0	.1	.3	.5	.4	161	146	11	88	26	14
24.	.1	1.0	.1	.3	.4	.4	156	161	12	88	26	14
25.	.1	1.0	.1	.3	.4	.5	127	166	11	88	26	13
26.	.1	.9	.1	.3	.5	.5	107	172	9.5	93	26	12
27.	.1	.9	.1	.3	.4	.5	84	178	9	96	25	11
28.	.2	.8	.1	.3	.4	.5	66	178	9	101	25	11
29.	.2	.8	.1	.3	-----	.7	55	161	8.5	99	24	11
30.	.2	.7	.1	.3	-----	.8	46	116	8	94	24	11
31.	.2	-----	15	.3	-----	.8	-----	60	-----	90	23	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October	0.2		0.1		0.11		6.8					
November	2.2		.1		1.00		59.5					
December	15		.1		1.73		106					
January	28		.3		3.20		197					
February	.5		.2		.33		18.3					
March	.8		.3		.43		26.4					
April	161		.8		41.9		2,490					
May	178		26		95.8		5,890					
June	215		8		63.1		3,750					
July	101		5.5		48.9		3,010					
August	88		23		36.7		2,290					
September	23		11		17.0		1,010					
The year	215		.1		26.0		18,800					

Daily and monthly discharge, in second-feet, of Silver Lake outlet and Silver Lake seepage near Kirkwood, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul.	Aug.	Sept.
1.....	0.1	0.1	0.6	28	0.3	0.4	1.8	65	42	29	89	23
2.....	.1	.1	.6	26	.3	.4	2.4	83	55	28	83	23
3.....	.1	.1	.6	24	.3	.4	3.0	101	73	27	70	22
4.....	.1	.1	.5	10	.3	.4	3.5	86	103	27	40	22
5.....	.1	.1	.4	.9	.3	.4	4.8	68	181	27	39	22
6.....	.1	.1	.4	.5	.3	.4	6.6	57	142	27	40	21
7.....	.1	.2	.3	.5	.3	.4	8.9	58	58	28	40	21
8.....	.1	.2	.4	.5	.3	.4	11	49	39	26	40	20
9.....	.1	.2	2.0	.5	.3	.4	12	43	149	24	40	20
10.....	.1	1.8	3.6	.5	.2	.3	14	40	200	24	38	19
11.....	.1	2.0	5.5	.5	.2	.3	14	42	168	44	37	19
12.....	.1	1.4	6	.5	.3	.4	15	58	222	69	36	19
13.....	.1	.7	9	.5	.3	.3	16	88	236	57	35	18
14.....	.1	1.8	6.5	.5	.2	.4	16	108	138	57	34	18
15.....	.1	2.2	.2	.5	.2	.3	16	103	31	57	33	17
16.....	.1	2.2	.2	.4	.3	.3	17	95	36	57	33	17
17.....	.1	2.0	.2	.3	.3	.3	19	99	107	61	32	17
18.....	.1	2.0	.2	.4	.3	.3	25	130	74	67	32	16
19.....	.1	1.8	.2	.4	.3	.4	47	167	64	77	32	16
20.....	.1	1.6	.1	.4	.4	.4	95	143	61	87	31	16
21.....	.1	.9	.1	.4	.4	.4	133	132	68	97	30	14
22.....	.1	1.2	.1	.4	.5	.4	162	147	45	97	26	14
23.....	.1	1.0	.1	.3	.6	.4	178	164	34	97	26	14
24.....	.1	1.0	.1	.3	.4	.4	174	179	35	97	26	14
25.....	.1	1.0	.1	.3	.4	.5	145	185	34	97	26	18
26.....	.1	.9	.1	.3	.5	.5	125	191	32	107	26	12
27.....	.1	.9	.1	.8	.4	.5	101	197	31	107	25	11
28.....	.2	.8	.1	.3	.4	.5	83	197	31	107	25	11
29.....	.2	.8	.1	.3		.7	71	180	30	107	24	11
30.....	.2	.7	.1	.3		.8	62	135	29	97	24	11
31.....	.2		15	.3		.8		78		97	23	
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						0.2	0.1	0.11	6.8			
November.....						2.2	.1	1.00	59.5			
December.....						15	.1	1.73	106			
January.....						28	.3	3.20	197			
February.....						.5	.2	.33	18.3			
March.....						.8	.3	.43	26.4			
April.....						178	1.8	52.7	3,140			
May.....						197	40	112	6,890			
June.....						236	29	84.9	5,050			
July.....						104	24	62.9	3,870			
August.....						89	23	36.8	2,260			
September.....						23	11	17.0	1,010			
The year.....						236	.1	31.3	22,700			

SEEPAGE FROM SILVER LAKE NEAR KIRKWOOD, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 32, T. 10 N., R. 17 E., just above the road crossing half a mile northeast of Silver Lake Dam.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 25 second-feet June 9 (gage height, 1.90 feet); no flow during greater part of year.

REMARKS.—Records good. No flow when water surface of Silver Lake is below 14.0 feet gage height. This record shows the amount of the largest and only important seepage from Silver Lake through the porous rock formation.

Daily and monthly discharge, in second-feet, of seepage from Silver Lake near Kirkwood, Calif., 1929-30

Day	Apr.	May	June	July	Aug.	Day	Apr.	May	June	July	Aug.
1	* 1.0	* 15	18	21	1.0	16	* 12	* 15	23	15	0
2	* 1.5	* 15	18	21	.3	17	* 13	* 15	24	15	0
3	* 2.0	* 15	18	21	.1	18	* 13	* 16	24	15	0
4	* 2.5	* 15	19	21	0	19	* 14	* 16	24	14	0
5	* 3	* 15	20	21	0	20	* 15	16	24	13	0
6	* 4	* 15	20	21	0	21	* 15	* 16	23	12	0
7	* 5	* 15	21	20	0	22	* 16	* 17	23	11	0
8	* 6	* 14	23	20	0	23	* 17	18	23	10	0
9	* 7	* 14	25	19	0	24	* 18	* 18	23	9	0
10	* 8	* 14	24	19	0	25	18	19	23	8.5	0
11	9	* 14	22	19	0	26	18	19	22	6.5	0
12	* 9.5	* 14	22	18	0	27	* 17	* 19	22	4.0	0
13	* 10	14	21	18	0	28	* 17	19	22	2.8	0
14	* 11	* 14	21	17	0	29	* 16	19	22	2.4	0
15	* 11	* 15	21	16	0	30	* 16	19	21	2.0	0
						31		18		1.4	0
Month						Maximum	Minimum	Mean	Run-off in acre-feet		
April						18	1.0	10.8	643		
May						19	14	16.0	984		
June						25	18	21.9	1,300		
July						21	1.4	14.0	861		
August						1.0	0	0.05	3.1		
The year						25	0	5.24	3,790		

* Estimated.

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

SILVER FORK OF SOUTH FORK OF AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.—Water stage recorder in sec. 34, T. 11 N., R. 15 E., 2 miles above mouth and 2 miles southeast of Kyburz. Altitude, about 5,000 feet.

DRAINAGE AREA.—108 square miles.

RECORDS AVAILABLE.—August, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 880 second-feet Apr. 22 (gauge height, 4.07 feet); minimum, 1.4 second-foot Dec. 6.

1924-1930: Maximum discharge, 3,620 second-feet Mar. 25, 1928 (gauge height, 6.54 feet); minimum, that of Dec. 6, 1930.

REMARKS.—Records good except those for Dec. 30 to Jan. 15 and Jan. 18 to Feb. 10, which were estimated because of ice. No diversions. Flow regulated by storage at Twin and Silver Lakes.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	7	3.9	30	33	63	234	336	241	139	137	81
2	12	4.4	4.2	70	40	67	241	397	249	146	139	91
3	40	3.3	4.4	70	44	69	275	410	264	142	137	96
4	17	2.8	4.1	70	54	74	275	332	306	139	91	87
5	6.5	2.7	3.8	29	62	71	329	286	397	128	62	94
6	4.1	2.4	3.6	40	64	72	402	283	434	112	60	82
7	3.6	36	4.1	65	70	74	439	289	329	121	57	81
8	3.3	35	4.6	80	80	77	480	256	275	116	57	84
9	3.0	34	50	80	80	77	429	241	316	110	57	87
10	3.0	26	256	80	78	77	354	244	444	104	56	88
11	2.8	12	84	85	77	82	319	269	368	92	57	88
12	2.6	7	207	85	78	104	350	316	439	120	56	91
13	78	5.5	282	85	82	121	397	389	429	110	55	113
14	48	5	112	85	85	118	326	406	345	112	63	116
15	9	79	71	90	98	102	278	368	241	123	53	116
16	4.8	58	158	156	104	92	300	381	336	110	60	121
17	3.4	14	74	132	98	89	329	458	376	104	68	123
18	3.1	8	137	85	104	84	361	537	357	110	69	123
19	2.7	6.5	98	60	104	87	429	602	194	112	68	121
20	2.6	23	62	45	112	110	581	660	194	113	68	121
21	70	58	41	40	96	134	675	549	239	126	71	121
22	54	29	32	62	101	153	731	507	229	128	72	120
23	9.5	9.5	26	52	98	170	722	537	204	129	68	118
24	5	7	28	38	82	229	682	562	190	129	72	128
25	3.6	6	24	36	77	272	549	555	164	126	81	131
26	3.1	5	22	36	72	300	543	562	162	128	78	129
27	2.7	5	20	35	71	300	420	574	162	128	77	128
28	2.4	5	20	34	66	289	364	568	155	131	76	126
29	23	4.6	18	33	-----	350	339	512	115	131	74	134
30	85	4.4	18	32	-----	368	303	397	107	129	80	126
31	21	-----	18	32	-----	259	-----	306	-----	132	80	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	85	2.4	17.3	1,060
November	79	2.4	16.8	1,009
December	282	3.6	60.9	3,749
January	156	29	63.0	3,879
February	112	33	78.9	4,380
March	368	63	146	8,089
April	731	234	415	24,706
May	660	241	422	25,900
June	444	107	275	16,406
July	146	92	122	7,508
August	139	63	73.8	4,540
September	134	81	108	6,430
The year	731	2.4	150	108,000

TWIN LAKES OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 18, T. 10 N., P. 18 E., 500 feet below main dam and outlet gate of Twin Lakes and 2 miles east of Kirkwood. Altitude, about 7,900 feet.

DRAINAGE AREA.—12.4 square miles.

RECORDS AVAILABLE.—September, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 104 second-feet Jan. 5 (gage height, 1.49 feet); minimum, 0.2 second-foot leakage during many days.

1922-1930: Maximum discharge, 176 second-feet May 25-28, 1928 (gage height, 1.95 feet); minimum, 0.2 second-foot leakage.

REMARKS.—Records excellent. No diversions. Flow regulated at Twin Lakes Dam. There was 6,200 acre-feet of water in Twin Lakes on Sept. 30, 1929, and 15,200 acre-feet on Sept. 30, 1930.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	0.2	0.5	31	0.3	0.2	0.4	0.5	0.3	16	38	51
2	34	.2	.5	35	.3	.2	.4	.6	.3	17	40	60
3	12	.2	.5	35	.3	.2	.4	.5	.4	17	31	57
4	.2	.2	.4	20	.3	.2	.5	.4	.4	17	4.4	51
5	.3	.2	.2	29	.3	.2	.7	.4	.4	17	4.4	50
6	.3	33	.2	53	.3	.2	.6	.4	.4	18	4.4	50
7	.3	42	.2	70	.3	.2	1.1	.3	.5	18	4.4	51
8	.3	28	.2	70	.3	.2	.8	.3	.5	17	4.0	55
9	.4	18	.4	70	.3	.2	.6	.3	.5	17	4.0	56
10	.4	.2	.4	70	.3	.2	.5	.3	.5	16	4.0	55
11	.4	.2	.3	70	.2	.2	.5	.4	.4	16	4.0	56
12	60	.3	.3	69	.2	.3	.5	.5	.5	14	4.0	63
13	65	10	.4	70	.2	.3	.4	.6	.6	12	3.8	86
14	.3	51	.3	70	.2	.3	.4	.5	.6	12	4.8	82
15	.2	58	.3	70	.2	.3	.4	.4	.6	12	10	83
16	.2	.6	.3	40	.2	.3	.4	.4	.6	12	21	89
17	.2	.4	.3	.4	.2	.4	.4	.7	.6	12	23	89
18	.2	9.5	.3	.2	.2	.3	.6	.7	2.8	12	22	89
19	.3	16	.3	.2	.3	.2	1.1	.7	7.5	11	22	88
20	54	37	.2	.2	.3	.2	1.2	.7	7.5	11	24	88
21	66	27	.2	22	.2	.3	1.5	.6	8.5	10	28	88
22	.3	.5	.2	14	.2	.3	1.1	.6	7	8.5	27	88
23	.3	.5	.2	.2	.2	.3	.8	.6	7	8.5	29	89
24	.4	.5	.2	.2	.2	.4	.6	.6	6.5	8.5	37	100
25	.5	.5	.2	.3	.2	.4	.5	.5	7	8.5	38	100
26	.3	.5	.2	.3	.2	.4	.4	.5	10	8.5	36	100
27	.3	.5	.2	.4	.2	.4	.4	.5	12	8.5	36	99
28	14	.5	.2	.3	.2	.5	.4	.4	13	8.5	36	100
29	80	.5	.2	.3	-----	.8	.4	.4	14	11	40	99
30	25	.5	.2	.3	-----	.6	.4	.4	16	22	43	88
31	.3	-----	.2	.3	-----	.4	-----	.3	-----	34	45	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	80	0.2	13.9	855
November	58	.2	11.2	606
December	.5	.2	.28	17.2
January	70	.2	20.4	1,810
February	.3	.2	.24	13.3
March	.8	.2	.31	19.1
April	1.5	.4	.61	36.3
May	.7	.3	.48	29.5
June	16	.3	4.23	252
July	34	8.5	13.9	855
August	45	3.8	21.7	1,330
September	100	60	76.7	4,560
The year	100	.2	14.4	10,400

Daily and monthly discharge, in second-feet, of Twin Lakes outlet and Twin Lakes spillway near Kirkwood, Calif., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	0.2	0.5	31	0.3	0.2	0.4	0.5	0.3	58	38	51
2	34	.2	.5	35	.3	.2	.4	.6	.3	59	40	60
3	12	.2	.5	35	.3	.2	.4	.5	.4	59	31	57
4	.2	.2	.4	20	.3	.2	.5	.4	.4	54	4.6	51
5	.3	.2	.2	29	.3	.2	.7	.4	.4	38	4.6	50
6	.3	33	.2	53	.3	.2	.6	.4	.4	55	4.6	50
7	.3	42	.2	70	.3	.2	1.1	.3	.5	52	4.6	51
8	.3	28	.2	70	.3	.2	.8	.3	.5	51	4.2	55
9	.4	18	.4	70	.3	.2	.6	.3	.5	46	4.2	56
10	.4	.2	.4	70	.3	.2	.5	.3	.5	24	4.2	55
11	.4	.2	.3	70	.2	.2	.5	.4	.4	17	4.2	56
12	60	.3	.3	69	.2	.3	.5	.5	.5	16	4.2	63
13	65	10	.4	70	.2	.3	.4	.6	.6	24	4.0	86
14	.3	51	.3	70	.2	.3	.4	.5	.6	34	5	82
15	.2	58	.3	70	.2	.3	.4	.4	125	20	10	83
16	.2	.6	.3	40	.2	.3	.4	.4	200	20	21	89
17	.2	.4	.3	.4	.2	.4	.4	.7	95	20	23	89
18	.2	9.5	.3	.2	.2	.3	.6	.7	6.5	19	22	89
19	.3	16	.3	.2	.3	.2	1.1	.7	14	15	22	88
20	54	37	.2	.2	.3	.2	1.2	.7	68	13	24	88
21	66	27	.2	22	.2	.3	1.5	.6	88	14	28	88
22	.3	.5	.2	14	.2	.3	.6	.6	86	10	27	88
23	.3	.5	.2	.2	.2	.3	.8	.6	84	13	29	89
24	.4	.5	.2	.2	.2	.4	.6	.6	72	12	37	100
25	.5	.5	.2	.3	.2	.4	.5	.5	53	12	38	100
26	.3	.5	.2	.3	.2	.4	.4	.5	65	10	36	100
27	.3	.5	.2	.4	.2	.4	.4	.5	67	9.5	36	99
28	14	.5	.2	.3	.2	.5	.4	.4	27	12	36	100
29	80	.5	.2	.3		.8	.4	.4	14	11	40	99
30	25	.5	.2	.3		.6	.4	.4	20	22	43	88
31	.3		.2	.3		.4		.3		34	45	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	80	0.2	13.6	855
November	58	.2	11.2	666
December	.5	.2	.2	17.2
January	70	.2	29.4	1,810
February	.3	.2	.2	13.3
March	.8	.2	.31	19.1
April	1.5	.4	.61	36.3
May	.7	.3	.48	29.5
June	200	.3	36.4	2,170
July	59	9.5	27.5	1,690
August	45	4.0	21.8	1,340
September	100	50	76.7	4,560
The year	200	.2	18.7	13,200

TWIN LAKES SPILLWAY NEAR KIRKWOOD, CALIF.

LOCATION.—Staff gage in 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, 1930.

EXTREMES.—Maximum discharge during year, 199 second-feet June 16 (gage height, 2.70 feet); no flow for greater part of year.

1926-1930: Maximum discharge, that of June 16, 1930 (gage height, 2.70 feet); no flow for greater part of each year.

REMARKS.—Flow at this station plus Twin Lakes outlet gives total flow from Twin Lakes Reservoir.

Daily and monthly discharge, in second-feet, 1929-31

Day	June	July	Aug.	Day	June	July	Aug.	Day	June	July	Aug.
1.....		42		11.....		.6		21.....	79	4.2	
2.....		42		12.....		1.8		22.....	79	1.5	
3.....		42		13.....		12		23.....	77	4.4	
4.....		37		14.....		22		24.....	66	3.6	
5.....		21		15.....	124	7.5		25.....	46	3.0	
6.....		37		16.....	199	8.5		26.....	55	1.8	
7.....		34		17.....	94	8		27.....	55	.9	
8.....		34		18.....	3.6	7	0.2	28.....	14	3.0	
9.....		29		19.....	7	3.8		29.....	.4	.4	
10.....		7.5		20.....	60	1.8		30.....	3.8	.4	
								31.....		.4	
Month				Maximum		Minimum		Mean		Run-off in acre-feet	
June.....				199		0		32.1		1,910	
July.....				42		.4		13.6		836	
August.....								4.2		12.3	
The year.....				199		0		3.81		2,760	

* Estimated.

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

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, 1930.

EXTREMES.—1922-1930: Maximum mean daily discharge, 157 second-feet June 16 and July 2, 1926; no flow at times.

REMARKS.—Records excellent except those for period affected by ice, Jan. 2-15, which are fair. Canal diverts from left bank of South Fork of American River about 2 miles below Kyburz; water is used for power and irrigation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	13	14	46	68	100	85	127	141	151	156	139
2	13	11	13	90	86	117	67	126	141	150	156	144
3	34	11	11	92	90	119	68	126	143	149	155	148
4	36	5.5	14	90	106	119	95	125	145	149	133	149
5	15	7	12	62	121	118	119	125	144	150	149	149
6	12	9.5	12	70	123	119	120	127	144	150	149	148
7	11	38	11	95	128	119	104	127	144	151	149	145
8	12	38	14	105	134	94	118	128	143	150	148	144
9	12	36	90	105	125	119	114	131	144	150	148	145
10	12	30	125	105	119	119	119	133	144	150	147	143
11	11	23	120	105	119	119	119	133	145	150	149	139
12	11	14	122	105	119	119	74	134	144	152	148	129
13	61	11	135	105	119	119	120	135	145	153	148	141
14	65	14	134	105	119	119	119	135	144	154	143	144
15	18	75	126	105	119	119	99	134	145	156	141	142
16	13	55	135	115	119	119	99	134	146	153	144	147
17	10	20	129	124	119	119	99	135	147	148	149	149
18	11	15	133	127	117	119	95	135	147	151	149	148
19	10	14	133	104	119	119	84	134	147	148	148	145
20	11	28	114	94	119	119	126	134	148	146	146	145
21	66	70	88	80	118	119	126	134	148	154	147	144
22	58	32	74	101	118	119	126	135	147	154	145	143
23	17	22	66	82	118	119	126	135	146	156	141	139
24	9	18	63	76	118	119	126	135	146	153	143	147
25	2.8	19	62	73	118	119	126	135	147	149	148	149
26	3.2	18	52	72	118	119	126	135	147	151	148	149
27	3.6	16	47	68	116	119	126	137	147	146	148	146
28	3.6	16	42	63	118	119	126	140	147	152	147	144
29	21	14	39	65	-----	119	125	140	146	148	142	149
30	86	14	38	68	-----	119	126	141	148	147	144	149
31	26	-----	34	68	-----	119	-----	142	-----	153	143	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	86	2.8	22.3	1,370
November	75	5.5	23.6	1,400
December	135	11	71.0	4,370
January	127	46	89.2	5,450
February	134	68	115	6,390
March	119	94	118	7,260
April	126	67	110	6,550
May	142	125	133	8,150
June	148	141	145	8,630
July	156	146	151	8,280
August	156	133	147	9,040
September	149	129	145	8,630
The year	156	2.8	106	76,600

ALDER CREEK NEAR WHITEHALL, CALIF.

LOCATION.—Water-stage recorder in 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, 1930.

EXTREMES.—Maximum discharge during year, 148 second-feet Mar. 30 (gage height, 2.30 feet); minimum, 0.2 second-foot throughout October, November, and parts of August and September.

1922-1930: Maximum discharge, about 2,060 second-feet Mar. 25, 1928 (gage height, 7.1 feet); minimum, 0.1 second-foot Aug. 28 to Sept. 2, 1924, and Sept. 10-14, 1926.

REMARKS.—Records good except those for Oct. 1 to Dec. 8, which are mostly estimated, and Jan. 1-3, 7-16, and 21-22, during which water is diverted past gage and combined discharge estimated.

Daily and monthly discharge, in second-feet, 1929-'30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.2	0.2	0.3	4.0	16	27	116	73	25	3.8	0.6	0.2
2.....	.2	.2	.3	4.0	19	27	110	73	24	3.5	.6	.2
3.....	.2	.2	.3	4.0	24	31	110	77	21	3.3	.6	.2
4.....	.2	.2	.3	4.4	26	47	106	69	19	3.3	.5	.2
5.....	.2	.2	.3	4.7	28	47	108	67	18	3.0	.4	.2
6.....	.2	.2	.3	4.0	28	43	120	64	17	2.0	.4	.2
7.....	.2	.2	.3	4.0	30	42	130	66	16	2.8	.4	.2
8.....	.2	.2	.4	4.0	34	40	134	61	15	2.8	.4	.2
9.....	.2	.2	.8	4.0	34	40	130	59	14	2.6	.4	.2
10.....	.2	.2	53	3.5	32	40	118	61	12	2.6	.3	.3
11.....	.2	.2	23	3.5	30	43	106	63	12	2.3	.3	.3
12.....	.2	.2	31	3.5	30	50	104	61	10	2.1	.3	.3
13.....	.2	.2	53	3.5	30	56	120	63	10	2.1	.3	.3
14.....	.2	.2	24	3.5	30	58	132	61	9.5	1.8	.2	.3
15.....	.2	.2	20	4.0	32	52	116	59	8.5	1.8	.2	.3
16.....	.2	.2	45	70	34	46	120	64	8	1.6	.2	.3
17.....	.2	.2	24	49	34	42	124	69	7.5	1.6	.2	.3
18.....	.2	.2	19	46	34	39	128	67	7	1.5	.2	.3
19.....	.2	.2	16	31	35	42	126	66	7	1.4	.2	.3
20.....	.2	.2	12	25	50	47	134	66	7	1.4	.2	.4
21.....	.2	.2	10	20	39	59	134	63	6.5	1.3	.2	.5
22.....	.2	.2	9	18	61	67	134	55	6.5	1.2	.2	.5
23.....	.2	.2	7.5	17	64	77	132	50	6	1.2	.2	.6
24.....	.2	.2	7	16	50	94	128	46	5.5	1.2	.2	.6
25.....	.2	.2	6.5	16	45	114	116	43	5.5	1.1	.2	.6
26.....	.2	.2	6	16	38	128	116	39	5	1.1	.4	.6
27.....	.2	.2	5.5	14	34	136	104	37	4.7	1.0	.4	.5
28.....	.2	.2	5	14	30	132	92	35	4.4	1.0	.3	.5
29.....	.2	.2	4.4	13	-----	132	82	32	4.4	1.0	.3	.6
30.....	.2	.2	4.4	14	-----	142	77	31	4.0	.9	.2	1.1
31.....	.2	-----	4.0	14	-----	126	-----	28	-----	.7	.2	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	0.2	0.2	0.2	0.2	0.2	0.2	12.3					
November.....	.2	.2	.2	.2	.2	.2	11.9					
December.....	58	.3	13.1	806								
January.....	70	3.5	14.6	898								
February.....	64	16	34.7	1,930								
March.....	142	27	66.8	4,110								
April.....	134	77	117	6,960								
May.....	77	28	57.0	3,500								
June.....	25	4.0	10.7	637								
July.....	3.8	.7	1.94	119								
August.....	.6	.2	.31	19.1								
September.....	1.1	.2	.38	22.6								
The year.....	142	.2	26.3	19,000								

PLUM CREEK NEAR RIVERTON, CALIF.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 33, T. 11 N., R. 14 E., $1\frac{1}{4}$ miles above mouth and 4 miles southeast of Riverton. Altitude, about 4,100 feet.

DRAINAGE AREA.—6.56 square miles (revised).

RECORDS AVAILABLE.—November, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 108 second-feet Jan. 16 (gage height, 2.08 feet); minimum, 0.1 second-foot Oct. 1-31.

1922-1930: Maximum discharge, 635 second-feet Mar. 25, 1928 (gage height, 4.10 feet); minimum, 0.1 second-foot at times during 1924, 1925, 1926, and 1930.

REMARKS.—Records good. Discharge estimated for October and November and for Dec. 1-8, Jan. 10-15, and Sept. 25-30. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0.2	0.5	7	10	16	7	2.1	0.4	0.2	0.2
2		.2	.5	9.5	10	15	6.5	2.0	.4	.2	.2
3		.2	.5	11	25	14	8	2.0	.4	.2	.2
4		.2	.6	10	69	13	8.5	1.8	.4	.2	.2
5		.2	1.5	10	71	12	8.5	1.8	.4	.2	.2
6		.2	1.4	9.5	50	12	8	1.6	.4	.2	.2
7		.2	1.4	9	41	12	9	1.4	.4	.2	.2
8		.3	1.2	8.5	36	11	10	1.4	.4	.2	.2
9		4.9	1.0	7.5	31	11	10	1.2	.4	.2	.2
10		20	.9	6.5	27	10	10	1.2	.4	.2	.2
11		4.3	.9	6	26	9	9.5	1.1	.4	.2	.2
12		8	.9	5.5	27	8	9	1.1	.4	.2	.2
13		11	.9	5	26	10	8	.9	.3	.2	.2
14		3.8	.9	4.9	26	21	7	.7	.3	.2	.2
15		7	1.2	4.9	24	20	7	.7	.3	.2	.2
16	0.1	9	50	4.9	22	19	6	.7	.3	.2	.2
17		4.1	19	4.6	21	18	5.5	.6	.2	.2	.2
18		3.0	37	4.1	20	16	5.5	.6	.2	.2	.2
19		2.2	15	4.1	19	15	5	.6	.2	.2	.2
20		1.7	9.5	9.5	19	14	4.5	.6	.2	.2	.2
21		1.4	8	8	20	13	4.0	.6	.2	.2	.2
22		1.3	7	49	20	12	4.0	.6	.2	.2	.2
23		1.0	5.5	39	20	11	3.5	.6	.2	.2	.2
24		.9	5.5	23	21	11	3.2	.6	.2	.2	.2
25		.8	6.5	18	23	10	3.0	.6	.2	.2	.2
26		.6	7.5	14	24	9.5	2.8	.6	.2	.2	.2
27		.5	8	12	24	9.5	2.5	.6	.2	.2	.2
28		.5	7	11	22	8.5	2.5	.5	.2	.2	.2
29		.5	6		22	8	2.3	.5	.2	.2	.2
30		.5	6		22	7	2.5	.5	.2	.2	.3
31		.5	7		19		2.3		.2	.2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October		0.1	0.1	6.1
November		.2	.2	11.9
December	20	.2	2.88	177
January	50	.5	7.06	434
February	49	4.1	11.3	628
March	71	10	27.0	1,660
April	21	7	12.5	744
May	10	2.3	5.97	367
June	2.1	.5	.99	58.9
July	.4	.2	.29	17.8
August	.2	.2	.20	12.3
September	.3	.2	.20	11.9
The year	71	.1	5.70	4,130

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 the North and Middle Forks of Silver Creek, near the lower end of Union Valley. Altitude, about 4,600 feet.

DRAINAGE AREA.—82.7 square miles.

RECORDS AVAILABLE.—October, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 950 second-feet Apr. 21 (gage height, 4.72 feet); minimum, 2.4 second-feet Sept. 7.

1924-1930: Maximum discharge, about 9,600 second-feet Mar. 25, 1928 (gage height, 14.7 feet); minimum, that of Sept. 7, 1930.

REMARKS.—Records good except those for October, when mean monthly discharge is estimated. Discharge also estimated Jan. 1-4, 7-16, because of ice, and June 15-23, because of no gage-height record.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		3.8	5	33	82	122	356	394	233	50	6	3.3
2		4.0	6.5	32	102	120	381	460	243	47	5.5	2.9
3		4.2	7	31	137	130	407	446	263	43	6	2.9
4		4.0	7	31	131	163	394	326	318	40	6	2.9
5		4.0	7	30	147	149	516	287	345	37	6	2.8
6		4.0	7	30	142	147	575	323	363	33	5.5	2.6
7		4.0	7	30	147	145	625	336	333	30	5.5	2.6
8		4.0	13	30	165	145	660	277	291	29	5.5	2.9
9		4.0	216	29	161	139	590	258	270	27	5	2.9
10		4.2	608	29	149	137	488	265	291	24	5.5	3.5
11		4.2	180	28	141	152	446	328	280	24	5	3.8
12		4.5	470	28	152	178	488	407	240	21	5	3.8
13		4.5	582	28	165	206	575	460	228	17	5	3.5
14		4.5	184	29	184	194	474	446	214	17	5	3.8
15		4.8	189	32	221	163	407	368	203	16	4.8	3.7
16		4.8	270	182	221	142	420	502	190	14	4.5	3.7
17		4.8	163	358	212	142	460	608	173	12	4.5	3.7
18		5	238	282	240	137	502	608	163	12	4.5	3.5
19		5	156	184	225	145	575	625	154	12	4.5	3.5
20		4.8	102	145	208	180	700	642	141	11	4.5	3.5
21		4.8	77	116	167	227	680	510	123	10	4.5	3.8
22		5.5	62	102	229	249	720	460	115	9	4.8	3.8
23	3.8	4.8	56	94	194	275	680	488	103	8	4.8	4.2
24	3.7	4.8	54	92	152	407	590	488	83	7.5	4.2	4.8
25	3.7	4.8	50	88	137	474	474	474	73	7.5	4.8	5
26	3.8	5.5	45	85	136	530	502	488	67	7.5	5.5	5
27	3.8	5.5	44	82	131	530	394	488	63	7.5	5.5	5
28	3.7	5.5	44	77	118	502	348	446	53	7.5	4.8	5
29	3.5	5.5	39	77		590	320	368	53	7.5	4.2	5.5
30	3.8	5.5	39	78		590	294	265	53	7	3.8	7
31	4.0		34	79		394		229		7	3.5	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			4.0	246
November	5.5	3.8	4.64	276
December	608	5	128	7,870
January	358	28	82.9	5,100
February	240	82	164	9,110
March	590	120	252	15,500
April	720	294	501	29,800
May	642	229	422	25,900
June	368	52	192	11,400
July	50	7	19.4	1,190
August	6	3.5	4.97	306
September	7	2.6	3.83	228
The year	720	2.6	148	107,000

SILVER CREEK NEAR PLACERVILLE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 13, T. 11 N., R. 12 E., one-fourth mile above mouth and 12 miles northeast of Placerville.

DRAINAGE AREA.—176 square miles.

RECORDS AVAILABLE.—December, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,560 second-feet Apr. 22 (gage height, 5.95 feet); minimum, 14 second-feet Dec. 7.

1921–1930: Maximum discharge, about 16,900 second-feet Mar. 25, 1928 (gage height, 18.0 feet); minimum, 10 second-feet Sept. 9, 1924.

REMARKS.—Records good except for periods Nov. 17–24, Jan. 7–13, Feb. 3–13, and May 18 to June 24, when discharge is estimated. No diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	20	20	72	183	249	671	566	-----	132	28	17
2	20	20	20	72	204	274	686	716	-----	130	27	17
3	18	20	20	72	250	300	716	780	-----	122	26	17
4	19	20	20	85	260	444	716	581	-----	113	26	17
5	19	20	22	115	260	495	850	495	-----	108	26	17
6	19	20	20	75	270	430	1,000	508	-----	100	26	17
7	23	20	19	75	280	408	1,080	566	-----	91	25	17
8	22	19	21	74	290	397	1,160	495	-----	85	24	18
9	22	20	187	73	280	364	1,120	456	-----	82	24	18
10	22	20	778	72	290	344	920	432	-----	76	25	19
11	21	20	579	70	300	354	850	482	-----	70	24	20
12	21	19	365	71	300	386	920	581	-----	66	24	20
13	21	19	960	75	310	420	1,040	656	-----	62	24	20
14	20	20	482	93	326	444	1,000	748	-----	60	24	20
15	20	20	266	98	344	375	832	626	-----	55	24	19
16	20	20	456	266	364	335	832	566	-----	53	22	19
17	20	20	300	444	364	317	868	585	-----	49	22	19
18	20	20	326	581	386	308	920	930	-----	46	21	19
19	20	20	317	396	386	308	920	1,000	-----	43	20	19
20	20	20	227	317	420	335	1,200	1,050	-----	41	20	19
21	19	20	160	266	335	397	1,200	950	-----	38	20	19
22	19	20	129	235	456	432	1,250	850	-----	38	19	20
23	19	20	110	210	482	456	1,250	870	-----	36	18	21
24	19	20	99	203	375	596	1,120	860	-----	35	18	23
25	19	20	98	203	354	764	920	850	182	33	19	24
26	19	21	91	206	317	832	920	850	168	32	22	23
27	19	21	82	196	308	885	798	840	157	32	22	22
28	19	21	81	185	282	832	626	800	149	30	20	21
29	19	21	74	179	-----	960	566	700	142	30	19	21
30	19	21	74	179	-----	1,000	508	550	134	29	18	24
31	19	-----	75	186	-----	748	-----	444	-----	28	18	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	23	18	19.9	1,220
November	21	19	20.1	1,200
December	960	19	207	12,700
January	581	70	175	10,800
February	482	183	321	17,900
March	1,000	249	490	30,100
April	1,250	508	915	54,400
May	1,050	432	699	43,000
June	-----	134	380	22,600
July	132	28	62.7	3,960
August	28	18	22.4	1,380
September	24	17	19.5	1,160
The year	1,250	17	277	200,000

SOUTH FORK OF SILVER CREEK NEAR ICE HOUSE, CALIF.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 1, T. 11 N., R. 14 E., 8 miles northeast of Riverton and $1\frac{1}{2}$ miles north of Ice House. Altitude, about 5,300 feet.

DRAINAGE AREA.—28.4 square miles.

RECORDS AVAILABLE.—October, 1924, to September, 1930. July to October, 1922 at a site over a mile upstream.

EXTREMES.—Maximum discharge during year, 409 second-feet May 20 (gage height, 2.98 feet); minimum, 0.4 second-foot Aug. 23–25, 30, 31, Sept. 1–3 and 19–23.

1924–1930: Maximum discharge, 1,620 second-feet Mar. 25, 1928 (gage height, 5.35 feet); minimum, that of 1930.

REMARKS.—Records good except those for Dec. 24 to Jan. 4, Jan. 7–16, Jan. 30, 31, Feb. 27 and Mar. 1, when discharge was estimated because of ice. No diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.6	0.6	9	19	27	96	152	115	54	3.2	0.4
2	.5	.6	.6	8	21	27	101	192	115	53	2.9	.4
3	.5	.6	.6	7	26	26	110	180	12 ¹	48	2.6	.4
4	.5	.6	.6	7	27	26	112	129	153 ²	44	2.6	.5
5	.5	.6	.6	6.5	30	26	150	111	18 ¹	44	2.6	.5
6	.5	.6	.6	6.5	32	29	182	113	212	40	2.2	.5
7	.6	.6	.6	6	32	35	197	118	214	36	2.0	.5
8	.9	.7	1.5	6	33	31	234	101	19 ¹	33	2.0	.5
9	.9	.7	28	6	33	33	217	92	17 ²	29	1.8	.5
10	.9	.7	67	5	32	32	184	90	18 ¹	25	1.8	.5
11	.9	.7	48	5	30	31	166	101	190	23	1.5	.5
12	.9	.7	46	5	31	34	180	137	18 ²	22	1.5	.5
13	.9	.7	108	5	33	41	186	180	16 ²	22	2.0	.5
14	.9	.7	64	5	38	43	146	190	15 ¹	21	2.2	.5
15	.7	.7	44	15	44	37	116	156	15 ¹	20	1.8	.5
16	.7	.7	57	50	48	35	116	180	15 ¹	19	1.8	.5
17	.7	.7	40	89	48	31	122	234	13 ⁷	17	1.8	.5
18	.6	.7	64	112	53	30	139	263	11 ¹	16	1.5	.5
19	.6	.6	57	99	54	31	162	288	112	14	1.2	.4
20	.6	.6	36	66	48	36	236	328	9 ⁷	12	.9	.4
21	.6	.6	26	54	48	43	260	294	9 ²	12	.6	.4
22	.6	.6	20	40	46	51	277	250	8 ¹	10	.5	.4
23	.5	.6	19	30	39	56	280	255	7 ²	9.5	.4	.4
24	.5	.6	17	26	35	78	250	260	6 ²	8.5	.4	.5
25	.6	.6	14	24	30	101	203	258	6 ³	8.5	.4	.5
26	.6	.6	13	22	28	116	201	263	6 ¹	8	.5	.5
27	.6	.6	12	22	28	116	154	263	5 ⁷	7	.5	.5
28	.6	.6	11	20	27	116	136	255	55	6	.5	.5
29	.6	.6	10	20	-----	146	127	229	5 ²	5.5	.5	.5
30	.6	.6	9	20	-----	164	119	170	5 ²	4.3	.4	1.0
31	.6	-----	9	19	-----	110	-----	132	-----	3.6	.4	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	0.9	0.5	0.65	40.0
November	.7	.6	.64	38.1
December	108	.6	26.6	1,640
January	112	5	26.0	1,600
February	54	19	35.5	1,970
March	164	26	55.1	3,450
April	280	96	172	10,200
May	328	90	192	11,800
June	214	12	127	7,560
July	54	3.6	21.8	1,340
August	3.2	.4	1.45	89.2
September	1.0	.4	.49	29.2
The year	328	.4	55.0	39,800

FINNON RESERVOIR OUTLET NEAR PLACERVILLE, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 16, T. 11 N., R. 11 E., at weir 400 feet below Finnon Reservoir and 10 miles northeast of Placerville.

RECORDS AVAILABLE.—October, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 101 second-feet Mar. 10 (gage height, 2.50 feet); no flow for several months.

1922-1930: Maximum discharge, 106 second-feet Mar. 21, 1925 (gage height, 2.60 feet); water is usually turned out of canal for a part of each day.

REMARKS.—Records excellent. Water is diverted into Finnon Reservoir from One Eye and Slab Creeks. Outlet flow completely regulated by gates in dam. Water used for power development.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Feb.	Mar.	Apr.	May	June
1.....	0	0	0	0.2	0.9	4.0	0
2.....	0	0	0	.2	.9	4.0	0
3.....	0	0	0	.2	.9	4.0	0
4.....	0	0	0	0	.9	4.2	12
5.....	0	0	0	0	.9	4.2	11
6.....	0	0	0	0	3.0	4.2	15
7.....	0	0	0	0	3.0	4.2	10
8.....	0	0	0	0	3.0	4.2	0
9.....	0	0	0	0	3.0	4.2	12
10.....	0	0	0	32	4.0	4.2	21
11.....	0	0	0	2.2	4.0	4.2	30
12.....	0	0	0	4.5	4.0	4.2	30
13.....	0	0	0	1.5	4.0	4.2	23
14.....	7	2.5	0	3.0	8.5	4.2	0
15.....	0	0	0	3.0	5.5	4.2	0
16.....	0	0	0	1.8	5.5	4.2	15
17.....	0	0	0	1.6	5.5	4.2	30
18.....	0	0	0	1.5	4.0	4.2	30
19.....	0	0	0	.6	3.0	4.2	20
20.....	0	0	0	1.2	4.0	4.2	0
21.....	0	0	.1	1.2	4.0	4.2	0
22.....	0	0	.1	1.2	4.0	4.2	0
23.....	0	0	.2	1.2	4.0	4.2	0
24.....	0	0	.2	1.2	4.0	4.2	0
25.....	0	0	.2	1.2	4.0	4.2	0
26.....	0	0	.2	.9	4.0	13.0	0
27.....	0	0	.2	.9	4.0	15.0	0
28.....	0	0	.2	.9	4.0	20.0	0
29.....	0	0	-----	.9	4.0	0	0
30.....	0	0	-----	.9	4.0	0	0
31.....	0	-----	-----	.9	-----	0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	7	0	0.23	14.1
November.....	2.5	0	.08	4.8
February.....	.2	0	.05	2.8
March.....	32	0	2.09	129
April.....	8.5	.9	3.62	215
May.....	30	0	5.24	322
June.....	30	0	8.63	514
The year.....	32	0	1.66	1,200

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

SOUTH FORK OF AMERICAN RIVER FLUME NEAR CAMINO, CALIF.¹

LOCATION.—Water-stage recorder in 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, 1930.

EXTREMES.—1922-1930: Maximum mean daily discharge, 118 second-feet July 5-7, 10, 11, 13-15, and 17, 1925.

REMARKS.—Records good. Water is diverted by this flume 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	44	44	96	108	0	101	101	95	103	107	104
2	49	37	36	104	107	0	102	101	96	106	106	96
3	29	40	44	107	110	0	104	101	99	105	83	111
4	28	40	35	108	110	0	105	99	100	103	82	110
5	37	38	35	109	110	0	105	99	99	104	94	111
6	41	36	35	106	109	0	106	101	100	104	111	111
7	46	42	36	109	109	0	98	103	101	102	111	105
8	42	46	39	108	109	0	91	104	103	102	113	103
9	42	47	55	111	109	0	98	102	99	102	112	112
10	42	43	64	111	109	0	96	102	104	102	113	108
11	40	39	76	107	108	0	96	104	104	98	103	112
12	40	47	88	110	109	0	100	103	104	96	115	110
13	39	45	97	110	110	0	101	101	103	97	115	107
14	33	49	99	109	110	0	102	104	103	97	112	100
15	36	46	99	108	108	0	100	102	102	95	110	91
16	39	45	101	108	107	0	101	106	105	96	104	111
17	42	52	101	107	107	0	102	101	104	100	105	110
18	39	51	102	109	99	34	103	100	103	98	105	108
19	40	54	104	108	93	68	104	99	101	100	112	107
20	39	52	102	108	93	80	101	99	102	98	113	107
21	38	38	98	108	35	82	102	99	104	96	114	96
22	40	53	98	109	0	31	102	96	102	100	109	96
23	51	52	101	108	0	0	103	97	104	102	110	108
24	40	47	97	108	0	0	104	97	103	104	105	111
25	36	42	90	110	0	0	100	97	104	105	90	110
26	32	47	99	110	0	15	101	98	104	104	112	109
27	32	46	100	110	0	61	102	98	104	99	113	108
28	36	36	97	109	0	84	101	100	104	90	111	107
29	37	35	95	104	-----	93	99	100	103	103	108	101
30	44	41	99	107	-----	102	100	96	104	101	104	101
31	51	-----	100	108	-----	101	-----	94	-----	108	97	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	51					28			39.7		2,440	
November	54					35			44.3		2,640	
December	104					35			79.5		4,890	
January	111					96			108		6,640	
February	110					0			77.5		4,300	
March	102					0			24.2		1,480	
April	106					91			101		6,010	
May	106					94			100		6,150	
June	105					95			102		6,070	
July	108					90			101		6,210	
August	115					82			106		6,520	
September	112					91			106		6,810	
The year	115					0			82.4		59,700	

¹ Formerly published as Western States Gas & Electric Co.'s flume.

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, 1930.

EXTREMES.—Maximum gage height during year, 6.00 feet several days in April; minimum, -0.32 foot Dec. 1-5.

1913-1930: Maximum gage height, 11.12 feet Jan. 28, 1914; minimum, -3.50 feet Sept. 24-27, 1920.

REMARKS.—Gage-height record furnished by Yolo Water & Power Co.

Daily gage height, in feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.18	-0.12	-0.32	1.50	3.00	4.30	5.80	5.90	5.25	4.45	3.32	2.40
2	.15	-.15	-.32	1.50	3.00	4.50	5.80	5.90	5.30	4.40	3.30	2.35
3	.15	-.15	-.32	1.50	3.00	4.60	5.80	5.90	5.28	4.35	3.25	2.30
4	.12	-.15	-.32	1.60	3.00	4.70	5.80	5.92	5.25	4.30	3.20	2.25
5	.12	-.15	-.32	1.65	3.00	5.00	5.80	5.92	5.22	4.28	3.20	2.22
6	.15	-.15	-.30	1.70	3.00	5.20	5.80	5.95	5.20	4.25	3.20	2.20
7	.15	-.15	-.30	1.80	3.00	5.30	5.80	5.92	5.20	4.22	3.15	2.18
8	.10	-.15	-.25	1.85	3.00	5.40	4.80	5.90	5.15	4.20	3.10	2.15
9	.10	-.15	-.15	1.88	3.00	5.45	5.80	5.90	5.10	4.18	3.05	2.10
10	.10	-.18	-.10	1.90	3.00	5.50	5.80	5.90	5.08	4.15	3.02	2.10
11	.10	-.18	.00	1.95	3.00	5.50	5.80	5.92	5.05	4.10	3.00	2.05
12	.10	-.20	.30	2.00	3.00	5.50	5.80	5.92	5.00	4.05	2.95	2.02
13	.05	-.20	.35	2.02	3.00	5.50	5.80	5.80	5.00	4.00	2.90	2.00
14	.05	-.20	.50	2.08	3.00	5.50	5.90	5.75	5.00	3.98	2.85	1.90
15	.05	-.20	.95	2.15	3.00	5.50	6.00	5.72	4.98	3.95	2.82	1.90
16	.00	-.20	1.20	2.18	3.00	5.55	6.00	5.80	4.95	3.90	2.80	1.90
17	.02	-.25	1.30	2.35	3.05	5.60	5.95	5.78	4.90	3.85	2.78	1.90
18	.00	-.30	1.30	2.50	3.10	5.70	5.98	5.70	4.85	3.80	2.75	1.90
19	.00	-.30	1.48	2.60	3.10	5.75	5.98	5.65	4.90	3.75	2.72	1.90
20	.00	-.25	1.50	2.65	3.30	5.80	5.98	5.62	4.80	3.72	2.70	1.90
21	.00	-.25	1.50	2.75	3.50	5.80	5.98	5.60	4.70	3.70	2.68	1.89
22	.00	-.25	1.50	2.85	3.70	5.80	5.98	5.60	4.72	3.68	2.65	1.89
23	.00	-.25	1.50	2.90	3.80	5.80	5.98	5.65	4.70	3.65	2.60	1.85
24	-.02	-.28	1.50	2.90	3.92	5.80	5.98	5.55	4.65	3.62	2.55	1.85
25	-.05	-.30	1.50	2.90	4.05	5.80	5.98	5.52	4.60	3.60	2.52	1.85
26	-.08	-.30	1.50	2.90	4.10	5.80	6.00	5.50	4.55	3.55	2.50	1.85
27	-.10	-.30	1.50	3.00	4.15	5.80	6.00	5.45	4.52	3.50	2.48	1.85
28	-.10	-.30	1.50	3.00	4.25	5.80	5.98	5.45	4.50	3.48	2.45	1.85
29	-.10	-.30	1.50	3.00	-----	5.80	5.98	5.42	4.48	3.45	2.45	1.85
30	-.10	-.30	1.50	3.00	-----	5.80	5.98	5.40	4.45	3.40	2.45	1.85
31	-.10	-----	1.50	3.00	-----	5.80	-----	5.38	-----	3.35	2.42	-----

CACHE CREEK AT YOLO, CALIF.

LOCATION.—Staff gage 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, 1930.

EXTREMES.—Maximum discharge during year, 6,550 second-feet Feb. 23 (gage height, 9.85 feet); no flow for several months.

1903-1930: Maximum discharge, 21,100 second-feet Feb. 2, 1915 (gage height, 27.8 feet); no flow for periods in nearly every year.

REMARKS.—Records good. Numerous irrigation diversions above station. Flow regulated by storage at Clear Lake.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	Day	Dec.	Jan.	Feb.	Mar.	Apr.
1.....	0	16	198	440	166	16.....	4,260	730	25	840	364
2.....	0	14	176	364	149	17.....	1,060	1,620	18	580	238
3.....	0	12	149	326	143	18.....	485	1,300	7.5	485	172
4.....	0	12	140	876	137	19.....	359	1,120	6.5	418	140
5.....	0	125	125	3,520	131	20.....	262	785	7	359	92
6.....	0	330	112	2,100	125	21.....	198	630	125	322	50
7.....	0	508	105	1,420	118	22.....	152	508	1,760	302	3
8.....	0	334	96	1,120	115	23.....	118	462	3,460	282	0
9.....	0	202	90	895	110	24.....	96	382	1,180	270	0
10.....	0	166	84	730	110	25.....	78	334	1,000	258	0
11.....	0	137	74	580	108	26.....	52	302	950	238	0
12.....	419	122	66	508	102	27.....	34	274	680	222	0
13.....	1,890	112	60	440	98	28.....	27	238	508	206	0
14.....	580	146	56	440	128	29.....	26	202	-----	194	0
15.....	3,820	180	36	1,420	274	30.....	20	183	-----	214	0
						31.....	17	190	-----	162	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	4,260	0	450	27,700
January.....	1,620	12	377	23,200
February.....	3,460	6.5	403	22,400
March.....	3,520	162	662	40,700
April.....	364	0	102	6,070
The year.....	4,260	0	166	120,000

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

PUTAH CREEK BASIN

PUTAH CREEK AT WINTERS, CALIF.

LOCATION.—Staff gage just below Southern Pacific Co.'s railroad bridge at Winters, Yolo County, in Rio de los Putos grant.

DRAINAGE AREA.—654 square miles.

RECORDS AVAILABLE.—September, 1905, to September, 1930.

EXTREMES.—Maximum discharge during year, 22,700 second-feet Dec. 15 (gage height, 25.3 feet); no flow Oct. 1 to Dec. 9 and July 13 to Sept. 30.

1905-1930: Maximum discharge, about 60,000 second-feet Dec. 31, 1913 (gage height, 39.0 feet); no flow during parts of 1912-1914 and 1918-1930.

REMARKS.—Records good. Several small irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0	144	452	860	234	124	40	3.0
2.....	0	137	424	608	224	116	34	3.0
3.....	0	137	320	720	214	108	34	3.0
4.....	0	144	158	3,000	204	108	34	2.0
5.....	0	1,220	230	7,180	204	108	28	2.0
6.....	0	1,470	241	3,250	204	108	28	2.0
7.....	0	2,860	252	1,520	194	100	28	2.0
8.....	0	840	241	1,260	194	100	28	2.0
9.....	0	975	190	1,060	185	92	28	1.0
10.....	527	642	158	810	167	92	24	1.0
11.....	2,540	608	158	680	167	85	24	1.0
12.....	8,810	678	144	574	158	78	16	1.0
13.....	9,820	642	144	540	158	78	19	0
14.....	3,060	840	137	608	158	71	16	0
15.....	16,200	3,500	137	2,330	214	71	16	0
16.....	8,300	3,880	130	1,160	276	71	16	0
17.....	1,760	4,950	137	765	234	64	16	0
18.....	1,220	4,450	137	608	204	64	12	0
19.....	840	2,880	130	540	185	64	12	0
20.....	642	975	124	478	176	56	12	0
21.....	480	840	542	322	167	52	12	0
22.....	424	754	8,220	422	167	52	7	0
23.....	344	608	5,150	370	158	46	7	0
24.....	332	608	1,520	370	149	46	7	0
25.....	296	574	3,700	322	149	46	5	0
26.....	274	542	1,460	310	140	46	5	0
27.....	230	510	1,160	287	140	46	5	0
28.....	200	510	960	276	140	46	5	0
29.....	174	480	-----	265	140	40	5	0
30.....	151	480	-----	254	124	40	5	0
31.....	130	480	-----	244	-----	40	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	16,200	0	1,830	113,000
January.....	4,950	137	1,240	76,200
February.....	8,220	124	956	53,100
March.....	7,180	244	1,030	63,300
April.....	276	124	181	10,800
May.....	124	40	72.8	4,450
June.....	40	5	17.6	1,060
July.....	3.0	0	.74	45.5
The year.....	16,200	0	444	322,000

NOTE.—No flow during months for which no discharge is shown.

NAPA RIVER BASIN

NAPA RIVER NEAR ST. HELENA, CALIF.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 32, T. 8 N., R. 5 W., one-fourth mile upstream from highway bridge and $2\frac{1}{2}$ miles east of St. Helena.

RECORDS AVAILABLE.—November, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 4,480 second-foot Dec. 15 (gage height, 8.80 feet); minimum, 0.2 second-foot Aug. 8 and 23.

REMARKS.—Records good. Discharge estimated Nov. 16 and for month of September. Small diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....		0.9	26	55	150	30	18	7	3.0	0.6
2.....		.9	26	62	126	31	17	7	2.5	.5
3.....		.9	25	49	183	30	19	6	2.0	1.0
4.....		.9	154	45	779	27	19	4.8	2.2	1.0
5.....		.9	242	42	861	27	18	5	2.0	1.1
6.....		.9	551	41	498	27	18	5	2.0	.6
7.....		.9	383	37	340	26	18	5	1.7	.5
8.....		1.2	216	36	262	26	17	6	1.8	.3
9.....		2	168	34	204	24	16	5.5	1.8	.6
10.....		498	128	31	160	23	15	5.5	2.0	.5
11.....		323	102	30	130	26	15	6	2.0	.5
12.....		1,530	198	30	112	25	15	5.5	2.0	.6
13.....		919	187	28	105	29	15	4.8	2.2	.5
14.....		802	335	27	213	67	14	5	2.2	.5
15.....	0.4	3,610	375	27	199	43	13	5	2.2	.6
16.....	.6	902	627	26	140	32	13	5	2.0	.6
17.....	.7	344	464	25	111	27	13	4.4	1.7	.5
18.....	.9	216	409	24	97	25	12	4.4	1.8	.3
19.....	.9	152	288	30	86	25	12	3.7	1.8	.3
20.....	.9	106	229	108	78	23	12	5	1.8	.3
21.....	.9	85	185	68	73	22	12	5	1.8	.3
22.....	.9	71	154	1,590	68	20	12	4.4	1.8	.3
23.....	1.2	62	128	494	64	19	10	4.2	1.4	.2
24.....	.9	55	112	373	59	19	10	4.4	1.2	.4
25.....	.9	48	99	473	54	18	10	3.7	1.0	.3
26.....	.9	42	88	340	51	21	9	3.2	1.0	.3
27.....	.9	38	80	253	46	19	8.5	3.4	1.2	.3
28.....	.7	35	72	188	41	19	8.5	3.0	1.2	.4
29.....	.7	34	66		38	18	10	3.0	1.0	.5
30.....	.7	31	66		38	19	9	3.2	1.0	.5
31.....		28	64		34		7.5		.8	.5

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November 15-30.....	1.2	0.4	0.82	26.0
December.....	3,610	.9	321	19,700
January.....	627	25	202	12,400
February.....	1,590	24	163	9,950
March.....	861	34	174	10,700
April.....	67	18	26.2	1,560
May.....	19	7.5	13.4	824
June.....	7	3.0	4.77	284
July.....	3.0	.8	1.75	108
August.....	1.1	.2	.50	30.7
September.....			.4	23.8
The period.....				54,700

NAPA RIVER NEAR NAPA, CALIF.

LOCATION.—Water-stage recorder in sec. 16, T. 6 N., R. 4 W., at Oak Knoll Avenue Bridge, 5 miles north of Napa.

RECORDS AVAILABLE.—November, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 4,840 second-feet Dec. 15 (gage height, 19.06 feet); no flow at times during August and September.

REMARKS.—Records good. Mean monthly discharge for August and September estimated. Numerous irrigation diversions by pumping, above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1		1.1	60	119	302	85	37	14	0.5
2		1.2	57	112	273	81	34	11	1.0
3		1.1	56	105	427	78	35	9.5	.6
4		1.2	264	96	1,480	76	45	9	.8
5		1.5	686	89	2,560	73	39	8	2.0
6		1.6	1,140	85	1,460	71	37	8	3.2
7		1.8	1,160	80	744	68	32	7	3.3
8		2.1	448	75	672	66	32	7	2.8
9		3.3	322	71	536	61	30	7	2.6
10		334	255	65	437	60	26	5	2.0
11		306	206	64	382	58	25	6.5	1.8
12		1,410	322	63	342	56	25	6	1.4
13		1,460	292	60	322	64	24	5.5	1.1
14		610	614	58	505	155	23	6	.9
15	0.6	3,780	558	57	671	106	23	6.5	.2
16	.6	2,370	1,420	56	404	76	22	7.5	.2
17	.6	561	882	55	332	66	21	6	.2
18	.6	322	854	54	292	60	20	5.5	.8
19	.6	228	558	58	264	60	18	6	.9
20	.8	170	426	190	237	57	17	7	.8
21	.8	133	352	140	219	54	17	5	2.2
22	.7	114	292	2,340	194	49	17	4.8	.6
23	.7	102	264	1,310	181	48	16	3.4	.6
24	1.0	92	237	696	166	46	15	3.8	.9
25	1.3	85	215	826	141	42	15	4.2	.5
26	.8	79	194	624	137	51	14	3.4	.2
27	.8	74	178	451	123	45	13	4.0	.1
28	.7	70	162	372	109	44	14	2.6	.9
29	.9	66	147	-----	100	41	14	2.6	1.1
30	1.0	63	138	-----	100	42	14	1.2	.8
31	-----	62	140	-----	97	-----	14	-----	.3

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November 15-30	1.3	0.6	0.78	24.8
December	3,780	1.1	403	24,800
January	1,420	56	416	25,600
February	1,340	54	300	16,700
March	2,560	97	458	28,200
April	155	41	64.6	3,840
May	45	13	23.5	1,440
June	14	1.2	6.10	363
July	3.3	.1	1.14	70.1
August	-----	-----	.1	6.1
September	-----	-----	.1	6.0
The period	-----	-----	-----	101,000

CONN CREEK NEAR ST. HELENA, CALIF.

LOCATION.—Water-stage recorder in sec. 3, T. 7 N., R. 5 W., one-fourth mile upstream from highway bridge and 4 miles southeast of St. Helena.

RECORDS AVAILABLE.—November, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 2,000 second-feet Dec. 15 (gage height, 7.62 feet); no flow Nov. 25 to Dec. 9 and June 11 to Sept. 30.

REMARKS.—Records good. Small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1		0	26	15	46	15	7	1.5
2		0	26	14	39	13	6.5	1.3
3		0	25	13	77	13	7.5	1.2
4		0	109	12	412	13	11	.9
5		0	114	11	397	13	7.5	.8
6		0	273	11	222	13	6.5	.6
7		0	130	11	147	12	5.5	.3
8		0	56	11	108	11	5	.3
9		0	40	10	86	9.5	4.2	.2
10		27	32	8.5	68	8.5	3.2	.1
11		18	27	8	56	8.5	3.0	0
12		143	46	8	47	8	2.8	0
13		83	35	8	42	14	2.6	0
14		91	80	8	98	41	2.6	0
15		1,040	107	7.5	104	17	2.4	0
16		197	212	7.5	60	13	2.4	0
17		93	120	7	52	12	2.4	0
18		66	86	7	45	10	2.1	0
19		53	65	8.5	40	9.5	2.1	0
20		44	56	25	35	8.5	2.1	0
21		39	46	16	33	8	2.2	0
22		35	39	488	30	8	2.1	0
23		33	33	147	26	7.5	1.9	0
24		31	28	103	25	7.5	1.9	0
25	0	30	26	135	23	7	1.9	0
26	0	29	23	92	21	11	1.9	0
27	0	29	21	71	19	8.5	1.9	0
28	0	29	19	57	17	8	1.9	0
29	0	28	17	-----	16	8	2.1	0
30	0	27	17	-----	15	8.5	1.9	0
31		27	17	-----	15	-----	1.9	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
December	1,040		0		70.7		4,350	
January	273		17		62.9		3,370	
February	488		7		47.1		2,620	
March	412		15		78.1		4,800	
April	41		7		11.5		684	
May	11		1.9		3.55		218	
June	1.5		0		.24		14.3	
The period								16,600

NOTE.—No flow July to September.

EEL RIVER BASIN

EEL RIVER¹ AT HULLVILLE, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 22, T. 18 N., R. 10 W., half a mile downstream from Scott Dam and half a mile west of Hullville.

RECORDS AVAILABLE.—November, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,350 second-feet Mar. 4 (gauge height, 6.96 feet); minimum (estimated), 5 second-feet Dec. 11–21.

1922–1930: Maximum discharge, 32,600 second-feet Mar. 26, 1928 (gauge height, 18.0 feet); minimum, 0.1 second-foot Sept. 9, 1924.

REMARKS.—Records good. Flow completely regulated by Lake Pillsbury and gates in Scott Dam. There was 18,400 acre-feet of water in Lake Pillsbury on Sept. 30, 1929, and 50,430 acre-feet on Sept. 30, 1930.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	118	80	73	134	799	1,160	510	336	133	159	208	206
2.....	105	79	71	133	804	1,100	490	330	134	159	208	216
3.....	96	79	78	132	810	1,060	406	330	242	138	208	220
4.....	96	78	70	122	804	1,800	224	354	242	74	208	210
5.....	96	78	70	100	794	3,800	212	354	130	82	198	204
6.....	96	77	76	54	772	1,740	255	239	129	100	208	194
7.....	96	88	72	79	760	788	282	285	129	157	206	196
8.....	96	80	78	146	744	991	291	232	129	232	202	196
9.....	96	80	78	204	716	1,260	288	245	188	265	196	196
10.....	96	80	15	204	431	1,230	276	248	333	245	147	196
11.....	96	80	5	174	270	1,070	262	245	333	204	196	196
12.....	96	79	5	244	270	810	248	240	333	204	196	194
13.....	96	79	5	270	270	832	389	232	274	198	196	194
14.....	96	79	5	270	270	848	1,620	225	104	194	196	192
15.....	110	78	5	270	205	854	1,360	220	104	192	196	192
16.....	85	78	5	1,300	69	848	345	218	151	192	198	192
17.....	97	77	5	3,230	54	708	328	210	194	192	204	192
18.....	104	77	5	3,250	53	482	833	206	186	200	204	194
19.....	88	77	5	2,060	65	336	580	200	180	202	204	206
20.....	88	76	5	743	886	273	585	196	169	202	206	184
21.....	85	76	5	1,680	1,340	74	570	190	162	196	144	38
22.....	79	76	8	1,580	3,020	73	542	184	171	192	265	38
23.....	79	74	32	1,480	3,690	87	375	180	175	192	210	38
24.....	79	74	75	1,190	1,690	126	270	176	175	194	192	49
25.....	79	74	83	450	670	490	333	175	173	200	184	67
26.....	79	74	70	502	794	798	454	175	171	194	184	69
27.....	79	74	65	794	1,070	812	494	212	171	169	186	97
28.....	79	74	65	782	1,200	772	450	204	171	169	196	107
29.....	79	73	65	772	-----	622	367	249	169	167	198	99
30.....	79	73	87	772	-----	486	339	112	164	186	198	80
31.....	79	-----	122	794	-----	514	-----	162	-----	204	-----	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	118		79		91.0		5,600					
November.....	88		73		77.4		4,610					
December.....	122		5		45.4		2,790					
January.....	3,250		54		771		47,400					
February.....	3,690		53		833		46,300					
March.....	3,800		73		866		53,200					
April.....	1,620		212		466		27,700					
May.....	354		112		237		14,600					
June.....	333		104		184		10,900					
July.....	265		74		182		11,200					
August.....	265		144		198		12,200					
September.....	220		38		155		9,220					
The year.....	3,800		5		340		246,000					

¹ Formerly published as South Eel River at Hullville, Calif.

EEL RIVER: AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CALIF.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 30, T. 18 N., R. 11 W., 500 feet below Van Arsdale Dam of Snow Mountain Water & Power Co. and 5 miles north of Potter Valley.

RECORDS AVAILABLE.—November, 1909, to September, 1930 (monthly discharge only for 1909-1922).

EXTREMES.—Maximum discharge during year, 5,720 second-feet Mar. 5 (gage height, 11.8 feet); minimum, 2.5 second-feet Sept. 26 and 27.

1909-1930: Maximum discharge, about 40,000 second-feet Mar. 26, 1928 (gage height, 27.0 feet); minimum discharge not known, but 2 second-feet is required to be released at the dam.

REMARKS.—Records fair. Discharge estimated Nov. 24 to Dec. 8 and June 8-14. Water is diverted from Van Arsdale Reservoir to power plant in Potter Valley, after which part is used for irrigation and the remainder wasted into Russian River. Flow passing the dam and down Eel River is shown in the following record.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	6.5	6.5	6.5	11	590	1,070	358	48	6.5	5	5	3.1
2.....	6.5	6.5	6.5	11	590	1,070	250	45	6.5	5	5	3.1
3.....	6.5	6.5	6.5	11	590	1,020	314	53	6.5	4.4	5	2.9
4.....	6.5	6.5	6.5	17	590	1,580	119	152	6.5	3.8	5	2.9
5.....	6.5	6.5	6.5	17	555	5,300	60	82	6.5	4.4	5	3.1
6.....	6.5	6.5	6.5	31	590	2,760	182	57	6.5	4.7	4.4	3.1
7.....	6.5	6.5	6.5	19	520	875	125	37	6.5	5	4.4	2.9
8.....	6.5	6.5	6.5	17	520	875	95	7.5	6.5	5	5	3.1
9.....	6.5	6.5	30	11	520	1,300	76	6.5	6	5	4.7	3.1
10.....	6.5	6.5	108	11	204	1,120	42	6.5	6	4.4	4.7	3.1
11.....	6.5	6.5	388	11	92	1,070	27	6.5	5.5	5	4.7	3.1
12.....	6.5	6.5	25	11	76	750	26	6.5	5.5	4.1	5	3.1
13.....	6.5	6.5	21	11	85	790	6.5	6.5	5.5	4.7	5	3.1
14.....	6.5	6.5	710	11	81	750	1,660	6.5	5	4.4	4.1	3.1
15.....	6.5	6.5	1,360	36	152	790	1,300	6.5	5	4.4	5	3.5
16.....	6.5	6.5	238	750	14	830	226	6.5	5	5	5	3.5
17.....	6.5	6.5	41	4,660	12	750	193	6.5	5	5	4.4	3.5
18.....	6.5	6.5	47	4,900	17	238	750	6.5	5	5	3.5	3.5
19.....	6.5	6.5	41	3,700	17	226	555	9	5	5	3.1	4.1
20.....	6.5	6.5	13	830	875	132	452	6.5	5	5	3.1	4.1
21.....	6.5	6.5	11	2,080	1,360	13	388	6.5	5	5.5	3.1	6.5
22.....	6.5	6.5	11	1,660	4,300	3.5	388	6.5	5	5	3.1	5
23.....	6.5	6.5	11	1,430	5,440	6.5	182	6.5	5	5	3.5	4.1
24.....	6.5	6.5	11	1,300	2,660	6.5	79	6.5	5	5	4.1	3.5
25.....	6.5	6.5	11	204	970	182	117	6.5	5	5.5	4.1	3.1
26.....	6.5	6.5	11	182	920	830	152	6.5	5	5	3.5	2.5
27.....	6.5	6.5	11	590	1,070	679	420	6.5	5	5	3.5	2.5
28.....	6.5	6.5	11	555	1,180	630	420	6.5	5	5	3.5	3.1
29.....	6.5	6.5	11	555	-----	520	226	6.5	5	3.8	3.5	3.1
30.....	6.5	6.5	11	590	-----	388	99	6.5	5	4.4	3.5	3.1
31.....	6.5	-----	11	590	-----	300	-----	6.5	-----	4.4	3.1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	6.5	6.5	6.50	400
November.....	6.5	6.5	6.50	387
December.....	1,360	6.5	103	6,330
January.....	4,900	11	800	49,200
February.....	5,440	12	878	48,800
March.....	5,300	3.5	865	53,200
April.....	1,660	6.5	311	18,500
May.....	152	6.5	20.4	1,250
June.....	6.5	5	5.52	328
July.....	5.5	3.8	4.77	293
August.....	5	3.1	4.18	267
September.....	6.5	2.5	3.88	201
The year.....	5,440	2.5	247	179,000

* Formerly published as South Eel River at Van Arsdale Dam, near Potter Valley, Calif.

EEL RIVER AT SCOTIA, CALIF.

LOCATION.—Staff gage in sec. 7, 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, 1930.

EXTREMES.—Maximum discharge during year, 96,100 second-feet Dec. 15 (gage height, 30.4 feet); minimum, 42 second-feet Oct. 3.

1911–1930: Maximum discharge, about 290,000 second-feet Feb. 2, 1915 (gage height, 55.5 feet); minimum, 10 second-feet Aug. 12–14, 1924.

REMARKS.—Records good. Flow partly regulated by storage in Lake Pillsbury Reservoir. Diversions for power and irrigation near Potter Valley.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	56	68	2,330	7,720	13,500	3,730	3,500	1,130	311	110	68
2	45	56	66	2,160	9,500	11,400	3,500	3,070	1,010	302	110	65
3	42	56	68	2,160	10,400	10,800	3,280	3,070	1,010	280	110	63
4	45	56	68	2,680	8,900	13,900	3,070	3,070	900	271	105	65
5	45	54	68	7,150	8,300	30,800	2,870	3,070	900	267	105	63
6	45	52	68	11,400	11,400	24,800	2,680	2,870	900	251	96	61
7	45	52	72	11,400	10,800	20,200	2,500	2,680	800	243	92	65
8	45	56	81	9,200	8,900	15,800	2,500	2,500	800	228	96	67
9	45	56	196	7,720	7,720	13,900	2,500	2,330	710	224	92	88
10	45	56	8,010	6,870	7,150	12,100	2,500	2,330	710	214	92	110
11	49	56	15,000	6,040	6,590	10,400	2,330	2,330	710	204	88	112
12	49	56	15,000	5,500	5,500	9,500	2,000	2,160	670	200	88	107
13	52	56	42,000	5,500	4,970	8,900	2,160	2,000	630	194	86	92
14	49	56	71,000	5,770	4,460	8,300	3,730	2,000	670	194	84	88
15	49	56	81,800	14,200	4,210	7,720	12,100	1,920	550	187	86	90
16	52	58	57,200	16,200	3,970	6,870	6,870	2,000	480	181	84	84
17	52	60	23,800	53,800	3,500	6,310	6,040	1,840	450	168	84	82
18	52	56	24,800	53,600	3,070	5,500	4,970	1,840	450	162	82	80
19	56	56	18,400	43,700	3,500	4,970	4,970	1,840	420	162	80	80
20	58	58	14,200	28,800	17,100	4,460	4,710	1,690	420	160	80	84
21	56	60	10,800	21,100	20,600	3,970	4,710	1,690	420	148	76	84
22	56	64	8,010	17,500	28,300	3,970	4,710	1,690	400	146	70	88
23	52	68	6,870	14,200	39,300	4,210	3,970	1,540	400	140	72	88
24	52	64	5,500	13,900	30,800	4,460	3,970	1,470	390	140	72	92
25	56	68	4,970	13,900	26,800	4,970	3,070	1,400	375	137	68	92
26	56	68	4,460	11,100	27,800	4,210	3,500	1,400	360	130	68	90
27	56	68	3,730	9,800	21,100	4,710	4,210	1,400	355	132	68	90
28	56	68	3,500	8,300	15,400	3,970	4,460	1,400	340	124	68	88
29	54	66	3,070	7,430	-----	4,710	4,460	1,400	340	122	65	88
30	52	68	2,680	7,150	-----	4,460	3,970	1,400	330	119	65	84
31	54	-----	2,500	6,310	-----	3,970	-----	1,260	-----	114	68	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	58	42	50.5	3,110
November	68	52	59.3	3,530
December	81,800	66	13,800	848,000
January	53,600	2,160	12,900	793,000
February	39,300	3,070	12,800	711,000
March	30,800	3,970	9,280	571,000
April	12,100	2,000	4,000	238,000
May	3,500	1,260	2,070	127,000
June	1,130	330	601	35,800
July	311	114	189	11,600
August	110	65	84.2	5,180
September	112	61	83.3	4,960
The year	81,800	42	4,680	3,350,000

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., P. 11 W., at power house of Snow Mountain Water & Power Co., 3 miles northwest of Potter Valley.

RECORDS AVAILABLE.—October, 1922, to September, 1930.

EXTREMES.—Maximum mean daily discharge during year, 315 second-feet Jan. 15-18 and May 1.

1922-1930: Maximum mean daily discharge, 317 second-feet Oct. 10-13, 1922, and Jan. 14, 1925.

REMARKS.—Records good except those for June 1-3 and 8-9, which are estimated. This water is diverted from South Eel River above Van Arsdale Dam. After passing through the power plant a part is used for irrigation in Potter Valley and the remainder flows into Russian River. Irrigation water diverted from tailrace above gage is included in tables of daily and monthly discharge.

Daily and monthly discharge, in second-feet, 1925-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	92	82	76	148	286	308	160	315	97	169	208	211
2.....	98	83	77	151	292	248	237	308	149	169	210	210
3.....	86	81	84	150	282	246	210	300	275	164	189	209
4.....	93	82	63	152	216	228	194	238	224	91	209	213
5.....	100	81	68	150	300	220	198	299	169	102	212	212
6.....	92	82	81	152	234	220	122	308	201	98	212	212
7.....	100	90	90	154	238	226	210	308	128	159	211	208
8.....	98	74	77	225	238	222	200	305	126	215	211	208
9.....	99	80	80	300	299	214	240	271	274	212	212	206
10.....	98	78	192	300	238	232	296	253	300	202	166	207
11.....	98	78	108	260	242	238	293	266	300	214	212	208
12.....	99	79	225	308	246	249	298	262	300	208	214	205
13.....	90	78	300	308	236	163	308	260	274	208	210	207
14.....	79	78	300	308	220	224	302	247	196	212	213	206
15.....	100	80	292	315	228	196	225	240	64	216	212	206
16.....	98	79	285	315	105	120	192	224	162	219	211	206
17.....	100	80	285	315	106	196	194	214	169	212	211	206
18.....	100	78	285	315	105	188	216	133	172	210	209	206
19.....	100	80	209	308	104	194	180	208	167	209	210	207
20.....	98	75	208	274	204	178	174	198	165	208	209	169
21.....	98	76	216	270	218	183	224	198	169	211	210	62
22.....	76	82	72	274	212	188	248	182	166	211	212	62
23.....	75	78	103	308	101	105	240	166	168	206	209	59
24.....	77	77	106	308	218	198	300	178	169	207	206	56
25.....	75	78	103	308	226	176	278	120	167	206	208	54
26.....	77	79	103	300	308	174	286	184	166	211	210	54
27.....	77	80	106	300	308	185	152	242	166	188	208	38
28.....	80	76	106	300	308	181	262	292	170	186	210	50
29.....	84	78	108	300	-----	182	300	269	173	188	210	44
30.....	79	78	138	300	-----	130	290	92	166	205	210	45
31.....	80	-----	150	300	-----	208	-----	146	-----	208	212	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	100	75	90.2	5,550
November.....	90	74	79.3	4,720
December.....	300	63	151	9,280
January.....	315	148	264	16,200
February.....	308	101	226	12,600
March.....	308	105	201	12,400
April.....	308	122	234	13,900
May.....	315	92	233	14,300
June.....	300	64	183	10,900
July.....	219	91	191	11,700
August.....	214	166	208	12,800
September.....	213	38	155	9,220
The year.....	315	38	185	134,000

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 mouth of Sprague River and three-quarters of a mile southwest of Chiloquin.

DRAINAGE AREA.—3,000 square miles.

RECORDS AVAILABLE.—June, 1917, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,800 second-feet Feb. 13 (gage height, 3.92 feet); minimum, 381 second-feet July 13 (gage height, 2.19 feet).

1917-1930: Maximum discharge, about 7,000 second-feet Apr. 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 Oct. 14, 1921.

REMARKS.—Records good. Diversion for irrigation above station. Manipulation of gates at dams above causes considerable fluctuation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	542	548	618	636	636	904	896	808	561	485	505	509
2.....	537	542	612	636	656	880	936	856	567	465	505	490
3.....	542	570	606	636	650	880	922	872	561	465	505	475
4.....	548	582	606	643	656	872	936	896	561	485	495	470
5.....	548	594	600	636	676	880	904	880	561	490	490	480
6.....	570	600	600	600	737	896	944	832	555	430	495	485
7.....	576	594	594	515	779	928	944	816	567	397	500	490
8.....	576	594	606	476	891	952	944	808	549	393	500	505
9.....	570	600	650	559	1,160	969	952	816	549	510	505	531
10.....	564	600	656	600	1,300	996	969	778	543	505	500	543
11.....	548	600	662	582	1,580	1,000	996	762	537	475	475	525
12.....	570	594	709	600	1,700	987	1,010	770	435	405	430	525
13.....	559	594	730	570	1,800	960	1,020	755	405	381	440	531
14.....	554	600	807	564	1,740	928	1,020	740	409	389	435	531
15.....	576	594	800	788	1,560	912	1,000	732	417	401	450	543
16.....	643	582	772	612	1,400	920	987	725	460	417	455	537
17.....	612	594	779	630	1,220	912	936	718	460	445	465	537
18.....	588	606	835	618	1,110	912	1,000	704	470	460	475	555
19.....	588	606	891	636	1,070	904	944	543	505	455	485	531
20.....	582	600	915	618	1,050	872	944	495	599	648	495	531
21.....	582	582	932	582	1,030	864	978	599	567	697	495	537
22.....	582	576	983	606	1,010	904	936	620	505	592	515	520
23.....	588	600	1,030	606	1,020	987	872	620	495	543	561	531
24.....	588	600	1,030	594	1,030	1,050	864	662	495	505	543	543
25.....	588	606	891	606	1,030	978	778	690	500	531	515	537
26.....	582	612	793	606	1,010	920	613	711	490	543	510	561
27.....	588	612	744	618	969	880	704	690	490	525	500	579
28.....	630	612	709	612	928	848	718	620	490	510	500	567
29.....	606	606	688	624	-----	848	880	561	490	510	505	561
30.....	588	618	556	618	-----	848	792	561	490	510	505	555
31.....	588	-----	643	618	-----	872	-----	561	-----	505	500	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						643	537	578	35,500			
November.....						618	542	594	35,300			
December.....						1,030	594	747	55,900			
January.....						643	476	601	37,000			
February.....						1,800	636	1,090	60,500			
March.....						1,050	848	918	56,400			
April.....						1,020	613	910	54,100			
May.....						896	495	716	44,000			
June.....						599	405	509	30,300			
July.....						697	381	486	29,900			
August.....						561	430	492	30,300			
September.....						579	470	527	31,400			
The year.....						1,800	381	677	491,000			

UPPER KLAMATH LAKE NEAR KLAMATH FALLS, OREG.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ 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, 1930.

EXTREMES.—Maximum elevation during year, 4,141.97 feet May 2; minimum, 4,136.51 feet Dec. 10.

1904-1930: Maximum elevation, 4,144.98 feet about Apr. 20, 1904; minimum (estimated), 4,135.9 feet Nov. 2, 1928.

REMARKS.—Gage heights are 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, Upper Klamath Lake near Klamath Falls, Oreg., 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37.15	37.15	37.18	38.49	38.74	40.40	41.04	41.31	40.87	39.50	38.55	38.04
2	37.16	37.15	37.22	38.50	38.81	40.44	41.00	41.47	40.81	39.41	38.41	37.93
3	37.17	37.18	37.18	38.21	38.85	39.98	40.97	41.51	40.66	39.31	38.21	37.82
4	37.17	37.16	37.14	38.09	38.88	40.30	40.99	41.53	40.66	39.22	38.20	37.87
5	37.14	37.16	37.14	38.43	38.92	40.56	41.10	41.48	40.65	39.21	38.26	37.87
6	37.28	37.21	37.14	38.59	38.97	40.57	41.05	41.48	40.57	39.18	38.30	37.89
7	37.14	37.23	37.12	38.03	39.02	40.58	41.08	41.64	40.67	39.08	38.32	37.75
8	37.12	37.12	36.95	38.60	39.07	40.69	41.14	41.59	40.55	38.90	38.27	37.64
9	37.35	37.15	36.94	38.00	39.11	40.64	41.12	41.39	40.45	38.87	38.25	37.70
10	37.31	37.24	36.94	38.61	39.17	40.66	41.15	41.33	40.50	38.90	38.25	37.76
11	37.31	37.22	37.06	38.58	39.25	40.66	41.05	41.28	40.45	38.89	38.23	37.78
12	37.34	37.20	37.23	38.58	39.34	40.71	40.80	41.23	40.45	38.89	38.29	37.79
13	37.31	37.14	37.00	38.57	39.43	40.76	40.63	41.18	40.35	38.88	38.18	37.78
14	37.27	37.13	37.43	38.59	39.53	40.84	40.89	41.27	40.25	38.89	38.15	37.79
15	37.29	37.13	37.61	38.62	39.61	40.93	41.15	41.32	40.18	38.89	38.21	37.80
16	37.26	37.15	37.77	38.65	39.67	40.93	41.13	41.34	40.15	38.87	38.19	37.82
17	37.29	37.13	37.83	38.68	39.73	40.87	41.05	41.26	40.27	38.84	38.24	37.78
18	37.24	37.12	37.96	38.71	39.71	40.79	41.02	41.19	40.15	38.84	38.10	37.80
19	37.32	37.22	38.17	38.60	39.33	40.88	41.10	41.01	40.00	38.68	38.19	37.87
20	37.20	37.26	38.14	38.73	39.87	40.89	41.13	41.05	39.92	38.75	38.14	37.86
21	37.24	37.33	38.16	39.75	39.75	40.76	41.15	41.10	39.96	38.72	38.12	37.81
22	37.26	37.03	38.17	38.73	39.81	40.90	41.19	41.03	39.84	38.63	38.03	37.86
23	37.22	37.09	38.22	38.73	40.09	40.88	41.23	41.03	39.85	38.63	39.02	37.45
24	37.18	37.11	38.32	38.74	40.03	40.89	41.17	41.22	39.68	38.60	38.06	37.51
25	37.18	37.11	38.39	38.73	40.19	40.99	40.92	41.04	39.65	38.64	38.07	37.50
26	37.17	37.12	38.47	38.71	40.31	41.03	41.00	40.98	39.54	38.56	38.07	37.53
27	37.44	37.14	38.46	38.70	40.36	41.01	41.17	40.74	39.60	38.44	39.06	37.53
28	37.34	37.14	38.45	38.69	40.35	41.02	41.36	40.69	39.58	38.39	38.04	37.69
29	37.38	37.14	38.44	38.68	-----	41.19	41.44	40.94	39.40	38.40	38.04	37.84
30	37.21	37.14	38.53	38.69	-----	41.28	41.43	40.97	39.46	38.44	38.10	37.89
31	37.10	-----	38.55	38.73	-----	41.12	-----	40.82	-----	38.49	38.13	-----

NOTE.—Add 4,100 feet to obtain elevations above mean sea level.

Monthly elevation and contents of Upper Klamath Lake near Klamath Falls, Oreg., 1929-30

Date	Elevation in feet	Contents in acre-feet	Change in contents during month (acre-feet)	Date	Elevation in feet	Contents in acre-feet	Change in contents during month (acre-feet)
Sept. 30	4,137.19	130,000	-----	May 31	4,140.82	367,700	-46,900
Oct. 31	4,137.23	132,400	+2,400	June 30	4,139.48	299,000	-68,700
Nov. 30	4,137.16	128,200	-4,200	July 31	4,138.41	203,600	-95,400
Dec. 31	4,138.45	206,000	+77,800	Aug. 31	4,138.01	173,300	-24,300
Jan. 31	4,138.74	223,600	+17,600	Sept. 30	4,137.69	160,000	-19,300
Feb. 28	4,140.29	325,600	+102,000				
Mar. 31	4,141.09	390,200	+64,600	The year	-----	-----	+30,000
Apr. 30	4,141.38	414,600	+24,400				

NOTE.—To compensate for wind effect, elevation given for last day of month is mean of elevations for last four days of month and first three days of following month. Contents given are those above elevation 4,135.00 feet.

LINK RIVER AT KLAMATH FALLS, OREG.

LOCATION.—Water-stage recorder in 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, 1930.

EXTREMES.—Maximum combined discharge of Link River and Keno Canal, 1,750 second-feet Jan. 9; minimum, 234 second-feet Feb. 19.

1904-1930: Maximum discharge, 9,400 second-feet May 12, 1904 (gage height at bridge, 7.30 feet); minimum, 22 second-feet Aug. 30, 1918.

REMARKS.—Records good except those for April to June, which are fair. Regulation caused by storage of water in Upper Klamath Lake. Water diverted above station by the main or "A" Canal and Keno Canal. 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	732	1,120	1,210	1,330	481	293	300	589	1,090	1,620	370	778
2.....	731	1,150	1,210	1,170	327	298	308	555	1,060	1,500	363	1,000
3.....	731	1,150	1,210	1,020	329	291	298	336	1,110	1,310	375	1,000
4.....	730	1,190	1,200	1,000	333	363	311	463	1,180	1,180	363	1,000
5.....	719	1,220	1,210	1,010	333	312	611	655	1,170	1,190	373	1,000
6.....	717	1,220	1,150	803	335	458	883	735	1,210	1,200	378	1,010
7.....	854	1,220	1,100	814	338	674	883	812	1,330	1,200	378	1,020
8.....	836	1,200	1,070	1,430	335	832	890	810	1,330	1,200	378	981
9.....	711	1,200	964	1,750	326	880	973	871	1,350	1,200	377	952
10.....	828	1,210	605	1,750	326	890	1,030	1,000	1,360	1,100	404	954
11.....	997	1,210	555	1,750	298	898	1,080	1,100	1,360	780	430	966
12.....	1,190	1,230	325	1,750	284	859	1,020	1,100	1,360	577	427	968
13.....	1,380	1,260	261	1,740	278	756	1,000	1,100	1,360	550	434	993
14.....	1,380	1,280	277	1,040	279	775	920	1,260	1,370	596	434	1,070
15.....	1,370	1,050	293	1,480	290	759	760	1,380	1,320	602	434	1,230
16.....	1,380	1,150	293	1,160	298	654	763	1,200	1,210	603	431	1,200
17.....	1,400	1,240	274	661	302	655	601	1,020	1,120	595	429	1,150
18.....	1,460	1,270	271	967	291	754	467	967	1,060	589	428	1,180
19.....	1,610	1,290	289	972	234	754	733	996	1,010	564	436	1,180
20.....	1,570	1,260	284	981	277	752	887	1,100	1,010	460	434	1,200
21.....	1,580	1,260	299	1,150	270	641	1,080	1,020	1,180	475	434	1,150
22.....	1,600	1,200	542	1,330	260	652	850	950	1,280	473	427	1,210
23.....	1,520	1,030	539	1,330	260	575	763	952	1,370	376	428	1,174
24.....	1,540	967	307	1,500	284	663	754	1,010	1,400	279	424	1,210
25.....	1,460	1,010	303	1,670	261	446	736	1,250	1,470	280	431	1,240
26.....	1,380	1,070	536	1,670	295	317	730	1,180	1,550	316	436	1,250
27.....	1,410	1,110	584	1,500	296	313	723	1,240	1,600	334	436	1,250
28.....	1,290	1,100	991	1,560	297	318	520	1,130	1,590	337	433	1,200
29.....	1,060	1,150	1,070	1,490	-----	325	402	1,050	1,590	355	390	1,280
30.....	1,070	1,190	1,030	1,330	-----	325	582	1,150	1,600	362	402	1,280
31.....	1,070	-----	1,070	855	-----	301	-----	1,080	-----	370	402	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,610	711	1,170	71,900
November.....	1,260	967	1,180	70,200
December.....	1,210	261	685	42,400
January.....	1,750	661	1,200	79,300
February.....	481	234	308	17,000
March.....	898	291	574	35,300
April.....	1,030	298	725	43,100
May.....	1,380	336	970	59,600
June.....	1,600	1,010	1,300	77,400
July.....	1,620	279	725	44,800
August.....	436	363	410	25,200
September.....	1,280	778	1,110	66,000
The year.....	1,750	234	875	632,000

Monthly discharge of Link River and "A" Canal at Klamath Falls, Oreg., 1929-30

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1,610	711	1,170	71,900
November.....	1,290	967	1,180	70,200
December.....	1,210	261	689	42,400
January.....	1,750	661	1,290	79,300
February.....	481	234	306	17,000
March.....	898	291	574	35,300
April.....	1,100	298	773	46,000
May.....	2,000	575	1,450	89,200
June.....	2,320	1,740	2,060	124,000
July.....	2,270	1,060	1,400	86,100
August.....	1,040	800	919	56,500
September.....	1,380	1,070	1,280	76,200
The year.....	2,320	234	1,100	794,000

KLAMATH RIVER AT KENO, OREG.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 35, T. 39 S., R. 7 E., 5 miles above mouth of Spencer Creek and 2 miles west of Keno.

RECORDS AVAILABLE.—August, 1904, to December, 1913; January to September, 1930.

EXTREMES.—Maximum discharge during period, 1,700 second-feet Jan. 29 (gage height, 3.75 feet); minimum, 270 second-feet July 26.

1904-1913, 1930: Maximum discharge, 5,220 second-feet Apr. 19 and 20, 1907; minimum, that of July 26, 1930.

Maximum discharge known, 9,250 second-feet about May 10, 1904.

REMARKS.—Records good. Diversions for irrigation above station. Lost River Diversion Canal enters Klamath River above station. Flow regulated by storage in Upper Klamath Lake. Gage-height record furnished by the California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		990	478	442	622	1,020	1,380	374	685
2		712	470	434	622	1,020	1,380	362	962
3		600	462	417	560	1,020	1,320	356	990
4		540	480	434	480	1,070	1,210	347	962
5		540	473	434	540	1,100	1,130	308	962
6			508	645	645	1,100	1,130	314	962
7			645	760	760	1,150	1,100	323	990
8			810	810	785	1,180	1,070	320	1,020
9			962	885	835	1,210	1,020	329	990
10		630	1,020	962	935	1,210	962	332	990
11			1,040	990	1,020	1,210	735	341	990
12			1,040	990	1,040	1,210	469	347	960
13			990	1,020	1,040	1,240	374	350	990
14			990	1,020	1,100	1,240	368	356	1,020
15		622	962	910	1,210	1,210	347	344	1,150
16		622	910	860	1,180	1,150	344	338	1,180
17		600	860	835	1,130	1,130	332	332	1,180
18		580	885	822	1,040	1,040	325	329	1,180
19		580	910	668	1,020	962	320	326	1,180
20		560	910	785	990	985		317	1,180
21		580	835	935	1,020	935		329	1,150
22		540	860	990	990	1,020	300	344	1,150
23		520	835	885	935	1,070		347	1,180
24		520	860	860	885	1,150		353	1,180
25		504	810	835	990	1,180		350	1,210
26		504	645	810	1,040	1,260	270	347	1,210
27		492	540	785	1,020	1,200	325	356	1,240
28	1,610	488	500	760	1,070	1,320	330	377	1,210
29	1,670		448	600	990	1,380	335	374	1,240
30	1,550		508	600	1,020	1,380	365	374	1,240
31	1,400		473		1,040		377	383	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January 28-31	1,670	1,400	1,560	12,400
February	990		599	33,300
March	1,040	448	746	45,900
April	1,020	417	766	45,600
May	1,210	480	921	56,600
June	1,380	935	1,150	68,400
July	1,380		617	37,900
August	383	308	344	21,200
September	1,240	685	1,090	64,900
The period	1,670			386,060

KLAMATH RIVER AT SPENCER BRIDGE, NEAR KENO, OREG.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 31, T. 39 S., R. 7 E., at Spencer Bridge, 1 mile below Spencer Creek and 14 miles southwest of Klamath Falls.

DRAINAGE AREA.—4,000 square miles.

RECORDS AVAILABLE.—October, 1913, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,590 second-feet Jan. 27 (gage height, 5.30 feet); minimum, 276 second-feet July 25 and 28 (gage height, 0.69 foot).

1913-1930: Maximum discharge, 5,130 second-feet Apr. 21, 1914; minimum, that of July 25 and 26, 1930.

REMARKS.—Records good above and fair below 400 second-feet. Discharge estimated Jan. 10-17 and July 16-18. No diversions below Link River station. Practically all flow of Lost River during the nonirrigating season is diverted into Klamath River below Klamath Falls by the Lost River Diversion Canal. (See p. 297.) Flow regulated by storage in Upper Klamath Lake. Gage-height record furnished by the California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	680	1,150	1,170	1,190	1,060	480	436	620	1,010	1,380	372	582
2	680	1,150	1,190	1,240	780	480	436	620	1,040	1,380	368	948
3	680	1,150	1,190	1,190	640	480	428	580	1,010	1,330	368	990
4	660	1,150	1,190	1,080	560	480	448	480	1,060	1,240	372	990
5	660	1,170	1,190	1,120	540	500	432	520	1,080	1,160	336	990
6	660	1,170	1,190	1,150	560	500	640	620	1,080	1,150	340	970
7	720	1,190	1,150	1,060	580	620	760	720	1,120	1,100	352	990
8	820	1,190	1,120	1,430	640	800	820	780	1,150	1,060	348	1,010
9	760	1,190	1,170	1,640	660	970	860	800	1,170	1,010	352	1,010
10	720	1,170	1,100		700	1,010	948	902	1,190	970	348	1,010
11	820	1,220	902		700	1,040	970	970	1,190	760	352	1,010
12	925	1,190	880		720	1,040	948	1,010	1,190	480	364	1,010
13	1,100	1,220	720	1,500	720	990	970	990	1,240	380	368	1,010
14	1,190	1,240	560		740	990	990	1,040	1,240	376	372	1,010
15	1,220	1,240	540		720	970	902	1,150	1,220	360	368	1,170
16	1,220	1,100	500		680	925	860	1,120	1,150	355	360	1,220
17	1,240	1,170	480	972	660	860	820	1,080	1,100	350	344	1,220
18	1,280	1,220	480	1,240	640	902	620	1,040	1,060	345	344	1,220
19	1,330	1,240	476	1,190	640	902	640	990	948	340	340	1,220
20	1,380	1,240	448	1,280	620	925	760	970	925	328	336	1,220
21	1,430	1,280	408	1,430	620	840	902	1,010	902	324	336	1,170
22	1,480	1,240	380	1,640	560	840	970	990	990	316	348	1,150
23	1,480	1,190	560	1,530	520	840	860	925	1,040	308	360	1,190
24	1,480	1,100	480	1,480	540	860	840	860	1,100	292	364	1,190
25	1,480	1,060	404	1,640	520	820	820	970	1,150	284	364	1,240
26	1,430	1,060	428	2,000	520	660	780	1,040	1,220	292	360	1,240
27	1,380	1,100	520	2,060	500	560	800	990	1,240	324	368	1,240
28	1,430	1,100	620	1,880	500	500	780	1,060	1,330	332	388	1,240
29	1,330	1,120	1,010	1,580		460	620	990	1,380	336	384	1,280
30	1,220	1,170	970	1,530		480	600	990	1,380	356	384	1,280
31	1,170		1,060	1,380		464		1,040		368	384	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,480	660	1,100	67,600
November	1,280	1,060	1,170	69,600
December	1,190	380	790	48,600
January	2,060	972	1,430	87,900
February	1,080	500	687	36,400
March	1,040	400	745	46,000
April	990	428	755	44,900
May	1,150	480	899	55,500
June	1,380	902	1,130	67,200
July	1,380	284	625	38,400
August	388	393	359	22,100
September	1,280	582	1,100	65,500
The year	2,060	284	896	648,000

KLAMATH RIVER BELOW FALL CREEK, NEAR COPCO, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 36, T. 48 N., R. 5 W., 500 feet below mouth of Fall Creek, half a mile below the California Oregon Power Co.'s Copco No. 2 plant, and 1 mile south of Copco post office.

DRAINAGE AREA.—4,320 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930. At station above Fall Creek from October, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,110 second-feet Oct. 14 and Dec. 11 (gage height, 4.45 feet); minimum, 80 second-feet June 8 (gage height, 0.97 foot).

1923-1930: Maximum discharge, 6,950 second-feet above Fall Creek, Mar. 26, 1928; minimum, about 10 second-feet several times in 1925 and 1926.

REMARKS.—Records good. Diversions and regulation above station. Gage-height and electrical record furnished by the California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,020	1,590	* 610	1,020	1,380	940	778	942	338	2,100	668	326
2.....	1,340	1,320	1,630	1,230	642	235	855	1,100	1,400	1,460	555	1,300
3.....	1,320	492	1,470	1,410	695	1,180	1,150	520	1,660	1,390	285	1,260
4.....	981	1,460	1,400	1,360	922	940	1,240	255	1,540	330	645	1,260
5.....	702	1,580	1,160	832	1,040	1,160	1,370	1,190	1,640	310	632	1,270
6.....	312	1,560	1,220	1,600	1,100	1,260	812	1,410	1,630	290	580	1,320
7.....	1,040	1,730	930	1,960	1,090	1,290	1,350	1,360	1,340	1,420	472	330
8.....	1,190	1,240	262	2,160	348	1,200	1,340	1,360	233	1,480	520	1,300
9.....	1,200	800	1,500	1,430	820	862	1,370	1,450	1,340	1,800	390	1,410
10.....	1,200	448	1,480	* 1,660	1,300	1,260	1,400	870	1,620	1,140	278	1,300
11.....	1,220	* 1,010	2,000	* 2,070	1,150	1,300	1,260	232	1,590	972	660	1,300
12.....	722	1,580	1,480	* 637	1,180	1,320	645	1,300	1,580	700	645	1,430
13.....	508	1,570	702	1,700	1,140	1,220	238	1,600	1,380	260	610	1,380
14.....	1,880	1,560	298	1,440	1,080	1,180	1,100	1,660	1,310	525	590	325
15.....	1,610	1,220	817	1,930	1,060	1,220	1,170	1,200	235	328	630	1,630
16.....	1,760	1,260	1,070	1,680	530	768	1,140	1,020	1,220	365	312	1,580
17.....	1,590	860	802	1,610	1,050	1,220	1,300	630	1,460	625	356	1,530
18.....	1,660	1,000	1,350	1,200	1,010	1,320	1,330	248	1,620	872	485	1,460
19.....	1,500	1,420	935	305	965	1,300	1,130	1,520	1,630	412	715	1,460
20.....	660	1,750	768	1,790	838	905	245	1,760	1,570	310	635	1,370
21.....	1,820	1,870	875	1,930	985	748	1,190	1,610	1,660	730	570	348
22.....	1,750	1,820	482	2,120	970	735	1,130	1,630	288	530	600	1,510
23.....	1,850	1,040	725	2,170	805	328	1,310	1,640	1,610	495	290	1,450
24.....	1,840	585	1,130	2,140	1,080	878	1,260	1,570	2,130	658	300	1,600
25.....	1,760	1,780	275	2,020	1,020	870	1,260	325	2,300	500	628	1,490
26.....	1,250	* 1,350	1,240	795	1,010	1,060	1,310	1,680	1,960	388	632	1,650
27.....	645		1,350	2,030	1,090	912	245	1,330	1,640	285	700	1,460
28.....	1,580		1,520	2,210	952	660	940	1,740	1,560	488	665	352
29.....	1,710		1,230	1,910	-----	735	1,060	1,410	245	540	740	1,720
30.....	1,520		1,910	1,380	-----	782	1,080	255	1,500	555	498	1,650
31.....	1,670	-----	1,800	1,110	-----	820	-----	460	-----	682	330	-----
Month					Maximum	Minimum	Mean	Run-off in acre-feet				
October.....					1,880	312	1,320	81,200				
November.....					1,870	448	1,330	79,100				
December.....					2,000	262	1,110	68,200				
January.....					2,210	305	1,580	97,200				
February.....					1,380	348	974	54,100				
March.....					1,320	235	987	60,700				
April.....					1,400	238	1,070	63,700				
May.....					1,760	232	1,140	70,100				
June.....					2,300	233	1,370	81,500				
July.....					2,100	260	727	44,500				
August.....					740	278	536	33,000				
September.....					1,720	320	1,260	75,000				
The year.....					2,300	232	1,127	808,000				

* Estimated.

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. McCready's house, 2 miles below McCready Spring, and 13 miles above Chiloquin.

RECORDS AVAILABLE.—July, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,200 second-feet Feb. 12 (gage height, 5.72 feet); minimum (estimated), 90 second-feet July 6, 7, 12, and 13. 1920-1930: Maximum discharge, 3,920 second-feet Mar. 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. Discharge estimated from May 18 to July 29. Regulation and diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-80

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Sept.	
1-----	222	196	266	293	275	420	545	525	150	213	175	
2-----	222	230	266	293	284	400	525	525		213	175	
3-----	230	239	266	293	302	380	545	545		213	190	
4-----	230	239	257	284	320	380	505	565		213	198	
5-----	248	248	257	266	340	400	505	585		213	205	
6-----	239	239	248	204	380	400	525	525		213	205	
7-----	248	239	275	180	505	480	545	505		213	215	
8-----	239	230	257	222	658	505	545	480		213	215	
9-----	239	248	275	293	808	505	585	460		213	215	
10-----	239	257	302	293	985	525	604	440		120	215	
11-----	239	248	340	284	1,160	545	622	440	390	120	215	
12-----	239	248	380	266	1,200	505	622	420		135	205	
13-----	239	230	440	239	1,080	505	622	400		141	205	
14-----	248	222	380	257	910	460	622	400		158	205	
15-----	340	222	380	257	792	460	604	380		158	205	
16-----	275	222	400	257	693	440	622	380	287	165	205	
17-----	257	257	440	266	640	460	622	380		172	205	
18-----	248	257	505	275	604	420	622			172	205	
19-----	248	257	545	275	585	420	622			180	198	
20-----	248	248	585	266	565	420	604			230	205	
21-----	239	266	640	266	545	440	585	287	235	257	205	
22-----	239	230	658	266	565	545	480				257	205
23-----	248	222	585	239	565	604	440				257	205
24-----	248	230	480	248	565	480	196				248	205
25-----	248	230	440	257	565	460	248				248	215
26-----	248	257	380	275	505	440	320	222	213	239	215	
27-----	320	257	360	266	460	400	380				230	235
28-----	284	257	340	266	440	420	400				222	235
29-----	257	248	302	266	-----	440	420				213	235
30-----	248	257	302	257	-----	460	460				213	225
31-----	180	-----	293	266	-----	480	-----			-----	213	190

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	340	180	248	15,200
November-----	266	196	241	14,300
December-----	658	248	382	23,500
January-----	293	190	262	16,100
February-----	1,200	275	618	34,300
March-----	604	380	459	28,200
April-----	622	196	618	30,800
May-----	585	-----	386	23,700
June-----	-----	-----	198	11,800
July-----	-----	-----	186	11,400
August-----	257	120	201	12,400
September-----	235	175	208	12,400
The year-----	1,200	-----	324	234,000

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, 1930 (incomplete).

EXTREMES.—Maximum discharge during year, 420 second-feet Dec. 18 (gage height, 2.88 feet); minimum, 111 second-feet June 24 and 25 (gage height, 0.78 foot).

1911–1930: Maximum discharge (estimated), 600 second-feet Nov. 23–25, 1921 (gage height, 4.0 feet); minimum, that of June 24 and 25, 1930.

REMARKS.—Records fair. Considerable diversion for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	192	207	199	202	188	202	188	188	132	123	135	125
2.....	184	207	207	195	188	202	188	188	132	125	135	125
3.....	184	207	207	195	202	195	188	188	130	125	135	127
4.....	184	207	199	195	216	202	175	188	132	125	135	130
5.....	184	199	199	188	216	202	175	182	132	125	132	127
6.....	199	199	207	188	216	202	175	182	135	126	135	130
7.....	215	199	207	175	216	202	175	175	132	125	130	130
8.....	215	199	231	175	216	188	175	175	132	125	127	132
9.....	215	199	244	175	202	188	175	175	131	125	127	135
10.....	215	199	230	182	216	188	168	168	132	125	127	136
11.....	215	199	216	175	230	188	156	162	132	127	127	142
12.....	215	207	259	175	244	188	162	156	132	127	127	142
13.....	215	207	216	188	259	195	149	149	131	130	125	143
14.....	207	207	244	182	274	188	144	149	127	127	127	147
15.....	207	207	274	188	216	195	142	149	127	123	127	147
16.....	215	199	244	188	216	188	142	149	127	123	127	145
17.....	215	199	216	188	244	188	139	149	130	121	129	147
18.....	215	199	420	188	230	188	139	148	135	125	127	145
19.....	215	199	274	188	216	188	142	148	130	125	127	145
20.....	215	215	230	188	259	188	142	147	130	125	129	145
21.....	215	207	216	188	216	188	142	144	135	127	127	147
22.....	207	207	202	188	244	188	149	142	132	127	130	149
23.....	207	215	202	188	202	188	149	144	130	127	125	149
24.....	207	199	202	188	202	188	156	142	111	127	127	156
25.....	207	207	202	188	202	188	156	144	111	125	127	162
26.....	207	207	202	188	202	188	156	144	123	127	125	162
27.....	199	207	202	188	202	188	202	143	123	127	127	162
28.....	199	199	195	188	202	188	182	138	128	129	125	162
29.....	207	199	202	188	-----	202	188	135	123	131	125	162
30.....	207	199	202	188	-----	195	195	135	124	132	125	162
31.....	207	-----	202	188	-----	188	-----	132	-----	132	125	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	215	184	206	12,700
November.....	215	199	204	12,100
December.....	420	195	224	13,800
January.....	202	175	187	11,500
February.....	274	188	210	12,200
March.....	202	188	192	11,800
April.....	202	139	164	9,760
May.....	185	132	157	9,650
June.....	185	111	129	7,680
July.....	182	121	126	7,760
August.....	135	125	128	7,870
September.....	162	125	144	8,570
The year.....	420	111	173	125,000

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, 1930, occasional readings.

EXTREMES.—Maximum elevation recorded during year, 5,990.97 feet May 30 (contents, 6,456 acre-feet); minimum, 5,980.0 feet July 31 and Aug. 7 to Sept. 30 (no storage).

1923-1930: Maximum elevation, 6,001.40 feet May 18 and 23-25, 1928 (contents, 14,610 acre-feet); minimum, that of July 31 and Aug. 7 to Sept. 30, 1930.

REMARKS.—Records poor. 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 State engineer of Oregon.

Monthly elevation and contents of Fourmile Lake Reservoir near Odessa, Oreg., 1929-30

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		• 1,632		June 30	5,985.65	3,158	-3,220
Jan. 31		• 3,147	+1,515	July 31	5,980.0	0	-3,158
Feb. 28		• 4,352	+1,205	Aug. 31		0	0
Mar. 31	5,988.9	• 5,133	+781	Sept. 30		0	0
Apr. 30		• 5,795	+662				
May 31	5,990.85	6,378	+583	The year			-1,632

• 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, 1930; irrigation seasons only.

EXTREMES.—Maximum discharge during year, 32 second-feet July 4 (gage height 1.50 feet); no flow at times.

1924-1930: Maximum discharge, 42 second-feet Aug. 6, 7, 9, and 10, 1924 (gage height, 1.72 feet).

REMARKS.—Records good. Discharge estimated June 3 and 4. This canal diverts water from Fourmile Creek in the 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. Records furnished by State engineer of Oregon.

Daily discharge, in second-feet, 1929-30

Day	May	June	July	Day	May	June	July	Day	May	June	July
1	0	25	28	11		26	24	21		25	10
2		25	28	12		26	25	22		26	7
3		25	30	13		26	23	23		27	6
4		26	32	14		26	21	24		27	5
5		26	31	15		25	18	25		27	4
6		26	30	16		26	14	26		27	3
7		27	31	17		26	12	27		28	2
8		26	31	18		26	11	28	0	28	2
9		26	30	19		26	10	29	3	28	2
10		26	28	20		26	10	30	18	28	1
								31	21		0

Monthly discharge, in second-feet, of Cascade Canal near Fish Lake, Oreg., 1929-30

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	21	0	1.4	86
June.....	28	25	26.3	1,560
July.....	32	0	16.4	1,010
August.....			0	0
September.....		0	0	0
The period.....				2,660

NOTE.—Probably some flow in canal in April and early May, owing to melting of snow above canal; no flow during other periods for which no record is given.

"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 of canal and 1 mile northwest of Klamath Falls.

RECORDS AVAILABLE.—Irrigation seasons, 1911-1930.

EXTREMES.—Maximum discharge during year, 935 second-feet June 18 (gage height, 9.52 feet); no flow Oct. 1 to Apr. 6, and Sept. 30.

1911-1930: Maximum discharge, 941 second-feet May 24, 1929; maximum stage, 10.72 feet June 27, 1925.

REMARKS.—Records good. "A" Canal diverts water from 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, 1929-30

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.....		196	690	652	674	353	16.....	34	523	859	638	474	90
2.....		241	646	656	660	353	17.....	43	513	888	642	446	90
3.....		239	628	626	626	370	18.....	48	520	901	640	393	91
4.....		257	664	522	617	379	19.....	59	534	899	629	371	97
5.....		250	670	512	616	369	20.....	65	562	882	638	418	107
6.....		278	733	546	612	359	21.....	68	568	843	670	470	108
7.....	42	290	770	596	610	337	22.....	68	565	792	697	461	151
8.....	48	277	767	654	623	289	23.....	73	561	715	742	446	149
9.....	21	290	788	635	641	183	24.....	68	576	728	812	411	150
10.....	17	300	832	620	581	152	25.....	97	635	724	834	394	142
11.....	27	319	862	605	546	141	26.....	113	716	722	836	428	122
12.....	16	396	860	599	551	103	27.....	131	762	720	727	441	124
13.....	11	448	860	610	511	96	28.....	126	825	728	806	457	126
14.....	13	456	851	628	504	97	29.....	121	864	732	794	446	90
15.....	8	519	818	630	520	97	30.....	120	808	692	792	415	-----
							31.....	-----	734	-----	727	398	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April.....	131	0	47.9	2,350
May.....	864	196	485	29,300
June.....	901	628	775	46,100
July.....	836	512	668	41,100
August.....	674	371	508	31,200
September.....	379	0	177	10,500
The year.....	901	0	223	162,000

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

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., and a quarter of a mile above Link River bridge at Klamath Falls.

RECORDS AVAILABLE.—October, 1923, to September, 1930.

EXTREMES.—Maximum daily discharge during year, 266 second-feet Feb. 3-5, Mar. 8, and Apr. 6 and 7; no flow Aug. 30 to Sept. 6.

1923-1930: Maximum daily discharge, 281 second-feet June 30, 1927.

REMARKS.—Discharge determined from record of electrical output of power plant 200 feet below gage. Canal diverts water 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 SW. $\frac{1}{4}$ sec. 32. Flow is controlled by gates at head of canal. Gage-height and electrical record furnished by the California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1923-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	238	239	231	250	263	205	204	255	252	248	254	0
2	237	236	236	243	264	206	200	261	251	244	222	0
3	237	237	231	246	266	210	202	260	251	247	256	0
4	236	233	227	239	266	214	211	261	251	252	255	0
5	233	229	228	254	266	216	238	260	248	257	257	0
6	239	231	229	257	261	218	266	260	246	255	258	0
7	225	232	231	258	264	244	266	260	247	243	258	22
8	221	227	214	254	247	266	264	258	248	248	258	120
9	241	227	211	250	263	264	263	257	248	247	257	202
10	243	231	214	247	263	264	264	255	257	250	258	214
11	237	228	229	247	229	263	261	255	255	252	258	216
12	225	222	244	246	221	260	257	254	255	254	255	218
13	217	221	239	244	211	255	252	251	252	251	257	203
14	216	220	250	248	212	257	258	254	257	248	257	238
15	220	236	258	248	216	257	258	255	255	247	257	227
16	213	225	255	248	220	258	261	254	250	248	254	227
17	225	220	244	254	221	257	261	255	248	247	252	223
18	207	217	243	254	217	252	261	254	252	247	251	225
19	194	226	246	252	178	252	263	246	251	247	254	227
20	187	227	244	251	210	250	261	246	246	242	252	229
21	193	229	264	254	203	243	261	248	252	242	252	226
22	195	220	263	252	197	248	261	246	251	246	250	231
23	194	231	260	254	206	247	261	248	250	239	251	206
24	189	237	264	252	210	247	260	252	243	241	252	210
25	197	237	263	248	210	239	258	247	238	242	254	214
26	216	234	261	246	210	213	260	244	243	237	254	222
27	233	232	261	247	211	205	261	243	250	222	254	218
28	234	233	255	246	212	206	261	248	250	225	251	227
29	250	233	254	246	-----	208	257	254	251	243	110	236
30	244	193	253	251	-----	207	248	254	251	250	0	239
31	243	-----	251	257	-----	205	-----	254	-----	254	0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	250	187	222	13,600
November	239	193	228	13,600
December	264	211	244	15,000
January	258	239	250	15,400
February	266	178	229	12,700
March	261	205	237	14,600
April	266	200	232	15,000
May	261	243	253	15,600
June	257	233	250	14,900
July	257	222	246	15,100
August	258	0	232	14,800
September	239	0	167	9,940
The year	266	0	234	170,000

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, 1930.

EXTREMES.—Maximum daily discharge during year, 278 second-feet Feb. 13 and 14; no flow at times.

1912-1930: Maximum discharge, 508 second-feet Feb. 28, 1914.

REMARKS.—Records fair. Discharge estimated from daily gate openings and head at intake. 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, 1929-30

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1.....		76	95	147	137	91	16.....		91	270	134	89	81
2.....		92	97	140	132	86	17.....		94	262	134	91	59
3.....		98	99	136	123	91	18.....		96	248	138	99	55
4.....		97	100	129	94	91	19.....		96	235	140	103	29
5.....		97	101	129		90	20.....		96	225	147	94	19
6.....		97	103	134		88	21.....		96	210	157	87	39
7.....		96	108	137		87	22.....		96	194	167	87	32
8.....		86	142	136		87	23.....		94	186	167	87	
9.....		88	195	144		87	24.....		94	182	168	87	
10.....	25	91	240	147		86	25.....		93	171	167	87	
11.....	102	90	238	150		87	26.....	31	92	162	158	87	
12.....	120	90	269	140	57	92	27.....	65	92	157	159	86	
13.....		90	278	139	87	92	28.....	80	92	153	161	86	
14.....		90	278	134	87	91	29.....	80	92		161	87	
15.....		92	273	134	89	90	30.....	80	92		157	89	
							31.....	80	94		150		
Month						Maximum	Minimum	Mean		Run-off in acre-feet			
December.....						120	0	21.4		1,320			
January.....						98	76	92.6		5,690			
February.....						278	95	188		10,400			
March.....						168	129	146		8,980			
April.....						137	0	71.7		4,270			
May.....						92	0	53.2		3,270			
The year.....						278	0	47.6		33,900			

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

SPENCER CREEK NEAR KENO, OREG.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 20, T. 39 S., R. 7 E., half a mile above mouth of creek and 5 miles northwest of Keno.

RECORDS AVAILABLE.—July, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 117 second-feet Dec. 17 (gage height, 1.40 feet); no flow Aug. 10 and 11 because of storage back of temporary dam at outlet of Buck Lake.

1929-30: Maximum and minimum discharges, those of 1930.

REMARKS.—Records fair. Diversions for irrigation above station. Occasionally slight regulation is caused by temporary dams at Buck Lake.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.2	12	13	27	9.0	18	21	21	9.0	16	1.9	
2	7.2	12	13	28	9.0	17	21	21	8.5	12	1.9	
3	6.2	12	11	25	11	17	20	21	8.1	12	1.9	
4	6.2	11	9.0	25	17	17	19	20	8.1	12	1.9	
5	5.8	11	19	17	39	15	19	20	6.7	12	1.9	
6	7.2	11	17	5.3	47	18	19	19	6.2	12	2.1	
7	9.0	11	9.0		52	25	17	17	5.3	11	2.2	
8	19	11	27		85	26	17	17	5.3	9.0	1.5	
9	17	11	66		103	31	16	17	5.3	8.1	.8	4.0
10	12	12	117		104	33	15	17	5.3	6.2	0	
11	9.8	13	82	4.0	99	33	13	15	4.4	4.4	0	
12	9.0	15	82		99	38	11	14	2.6	3.7	.8	
13	7.6	19	89		101	34	15	13	2.2	3.7	2.4	
14	7.2	19	87		101	27	25	13	2.2	3.5	2.4	
15	7.2	19	92		101	25	37	12	2.2	2.6	2.4	
16	7.2	19	103	4.4	103	26	27	11	2.4	2.6		4.4
17	8.1	19	117	4.2	99	25	25	9.0	2.9	2.6		
18	7.6	17	79	2.2	82	25	22	9.0	2.9	2.6		
19	7.6	17	74	3.3	52	23	19	9.0	4.2	2.2		
20	7.6	82	53	4.0	52	23	20	7.6	7.2	2.2		
21	7.2	82	47	4.2	49	22	21	7.6	5.8	2.2		
22	7.2	82	44	4.2	49	22	21	6.7	4.4	2.6		
23	6.7	82	44	4.2	47	22	20	6.7	4.4	2.6		
24	6.2	66	39	4.4	47	23	20	6.2	4.0	2.4	3.0	4.5
25	6.2	21	38	4.2	44	23	20	5.3	4.0	2.4		
26	5.8	17	35	4.4	39	21	20	5.3	3.5	2.2		
27	7.2	15	35	4.4	34	21	22	4.4	3.5	2.2		
28	7.6	15	27	4.9	27	20	27	4.4	3.5	2.2		
29	11	15	49	5.8		20	27	6.2	3.5	2.2		
30	11	15	35	7.6		20	23	8.1	3.5	2.1		
31	12		27	8.5		21		9.0		2.1		
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	19					5.8			8.51		523	
November	82					11			25.4		1,510	
December	117					9.0			50.9		3,130	
January	25					2.2			7.68		472	
February	104					9.0			60.8		3,880	
March	33					15			23.6		1,450	
April	37					11			20.6		1,230	
May	21					4.4			12.0		738	
June	9.0					2.2			4.70		280	
July	16					2.1			5.34		328	
August						0			2.33		143	
September									4.23		252	
The year	117					0			18.6		13,400	

FALL CREEK AT 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, 1928, to September, 1930.

EXTREMES.—Maximum recorded discharge during year, 63 second-feet Feb. 2 (gage height, 0.96 foot); minimum, 27 second-feet Aug. 10 (gage height, 0.42 foot).

1928-1930: Maximum discharge, 105 second-feet Dec. 27, 1928; minimum, that of Aug. 10, 1930.

REMARKS.—Records fair. No diversions or regulation. Gage-height record furnished by the California Oregon Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.			37						31			
2.					63	38						
3.		31									29	
4.								31				
5.				38								
6.	32						32			30		
7.												32
8.			40						30			
9.			59		43	36						
10.											27	
11.		37						32				
12.			42	37								
13.	32						31	30		30		
14.												32
15.			52						30			
16.					38	37						
17.		37								31	29	31
18.								31				
19.												
20.	31			37			32			29		
21.												30
22.			38						30			
23.					38	34						
24.		31									29	
25.								32				
26.				37								
27.	31						32			29		
28.												32
29.			37						30			
30.						32						
31.											30	

Month	Mean	Run-off in acre-feet	Month	Mean	Run-off in acre-feet
October.....	31.5	1,940	May.....	31.2	1,920
November.....	34.0	2,020	June.....	30.2	1,800
December.....	43.6	2,680	July.....	29.8	1,830
January.....	37.2	2,290	August.....	28.8	1,770
February.....	45.5	2,530	September.....	31.4	1,870
March.....	35.4	2,180			
April.....	31.8	1,890	The year.....	34.4	24,700

NOTE.—No record on days for which no discharge is given. Monthly mean discharge is mean of days when gage was read.

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, 1930.

EXTREMES.—Maximum elevation during year, 5,001.0 feet May 12 to June 2 (contents, 5,270 acre-feet); no storage Sept. 16–30.

1922–1930: Maximum elevation, 5,015.70 feet May 15 and 16, 1928 (contents, 15,920 acre-feet); no storage Sept. 16–30, 1930.

REMARKS.—Records furnished by State engineer of Oregon.

Monthly stage and contents of Hyatt Prairie Reservoir near Ashland, Oreg., 1929–30

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.....	-----	1,590	-----	May 31.....	-----	* 5,270	+227
Oct. 31.....	-----	* 1,607	+17	June 30.....	-----	* 4,009	-1,261
Nov. 30.....	-----	* 1,617	+10	July 31.....	4,993.8 ^a	1,786	-2,223
Dec. 31.....	-----	* 2,091	+474	Aug. 31.....	-----	* 300	-1,486
Jan. 31.....	-----	* 2,665	+574	Sept. 30.....	-----	0	-300
Feb. 28.....	-----	* 4,057	+1,392				
Mar. 31.....	4,909.80	4,619	-562	The year.....	-----	-----	-1,590
Apr. 30.....	-----	* 5,043	+424				

^a Interpolated from weekly readings.

^b Estimated.

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, 1930.

EXTREMES.—Maximum discharge during year, 70 second-feet July 30 to Aug. 2 (gage height, 3.17 feet); no flow at times.

1923-1930: Maximum discharge, 78 second-feet August 18, 1928.

REMARKS.—Records fair except those estimated, which are poor. This 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. Probably some run-off October to March to Keene Creek below Hyatt Prairie Reservoir; stored water was released Apr. 11 to Sept. 15. Records furnished by State engineer of Oregon.

• Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	June	July	Aug.	Sept.
1.....	0	}	19	70	9
2.....	0		18	70	9
3.....	0		18	68	10
4.....	0		17	66	10
5.....	*.1		16	64	10
6.....	*.1	} • 13	15	47	9
7.....	.1		15	20	7
8.....	*.1		14	3	7
9.....	*.1		15	3	7
10.....	*.1		16	*.4	7
11.....	*.1.7	}	17	4	7
12.....	6.9		17	3	6
13.....	7.7		17	3	5
14.....	8.8		17	3	2
15.....	9.0		17	*.4	1
16.....	9.0	}	17	4	0
17.....	9.0		19	*.4	0
18.....	9.0		18	5	0
19.....	9.0		18	6	0
20.....	9.2		20	5	0
21.....	9.2	21	19	5	0
22.....	*.4.6	22	20	5	0
23.....	0	22	32	5	0
24.....	0	22	44	*.5	0
25.....	0	22	52	5	0
26.....	0	22	56	6	0
27.....	*.4	22	58	8	0
28.....	} •.9	21	58	9	0
29.....		20	62	9	0
30.....		20	70	9	0
31.....		20	70	9	0
Month	Maximum	Minimum	Mean	Run-off in acre-feet	
April.....	9.2	0	3.23	192	
May.....			*.4.40	270	
June.....			16.3	970	
July.....	70	14	28.4	1,750	
August.....	70		17.1	1,050	
September.....	10	0	3.5	208	
The year.....				4,440	

• Estimated.

SHASTA RIVER NEAR MONTAGUE, CALIF.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 33, T. 45 N., R. 6 W., at highway bridge $1\frac{1}{4}$ miles southwest of Montague and 1 mile below Little Shasta River.

DRAINAGE AREA.—667 square miles.

RECORDS AVAILABLE.—August, 1911, to September, 1913; September, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 594 second-feet Dec. 15 (gage height, 4.89 feet); minimum, 11 second-feet July 2.

1911-1930: Maximum discharge, 5,700 second-feet Feb. 11, 1925 (gage height, 14.9 feet); minimum, 1.0 second-foot July 11, 1925

REMARKS.—Records good. Several irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	95	93	97	170	231	166	139	92	37	13	20	30
2.....	95	95	97	170	331	163	136	115	32	12	21	30
3.....	90	97	99	170	244	172	139	175	32	12	24	30
4.....	95	97	99	181	208	244	139	219	31	15	21	28
5.....	95	99	97	192	202	256	130	178	31	15	25	29
6.....	99	99	95	184	223	202	106	144	31	13	29	25
7.....	99	99	95	172	220	190	80	119	31	14	32	21
8.....	104	99	104	167	223	178	57	99	27	13	40	26
9.....	108	97	192	167	211	166	57	78	25	13	40	29
10.....	101	97	268	164	196	160	52	69	23	17	28	37
11.....	99	97	268	164	193	160	58	49	32	20	19	44
12.....	95	95	234	164	181	160	64	41	37	20	18	50
13.....	95	95	195	164	175	160	64	33	32	14	29	69
14.....	95	97	181	164	172	166	86	35	31	14	14	96
15.....	95	97	449	175	166	178	175	36	30	15	16	107
16.....	93	97	421	186	163	184	130	44	33	15	22	121
17.....	95	95	387	189	163	178	82	48	37	13	39	124
18.....	93	95	353	189	160	166	60	57	45	14	45	121
19.....	95	97	319	195	163	160	47	37	62	14	44	119
20.....	99	97	287	204	196	151	43	33	48	15	46	116
21.....	99	97	262	192	226	148	47	32	49	18	45	119
22.....	99	97	240	184	202	148	51	35	48	28	44	121
23.....	99	97	222	184	208	142	57	36	44	25	47	121
24.....	99	97	213	186	202	142	72	34	37	22	46	116
25.....	99	97	207	195	184	142	88	35	22	35	42	116
26.....	97	97	201	194	175	133	88	32	17	26	45	119
27.....	97	97	186	192	172	139	84	29	23	20	45	121
28.....	99	97	175	189	166	142	92	27	20	19	34	126
29.....	97	97	172	201	-----	130	90	30	14	20	27	142
30.....	90	97	170	225	-----	124	88	36	17	20	24	144
31.....	90	-----	170	249	-----	133	-----	39	-----	19	25	-----
Month	Maximum					Minimum		Mean		Run-off in acre-feet		
October.....	108					90		96.8		5,950		
November.....	99					93		96.8		5,760		
December.....	449					95		211		13,000		
January.....	249					164		185		11,400		
February.....	331					160		198		11,000		
March.....	256					124		164		10,100		
April.....	175					43		86.7		5,160		
May.....	219					27		66.6		4,100		
June.....	62					14		32.9		1,960		
July.....	35					12		17.5		1,080		
August.....	47					14		32.1		1,970		
September.....	144					21		83.2		4,950		
The year.....	449					12		106		76,400		

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.

DRAINAGE AREA.—724 square miles.

RECORDS AVAILABLE.—August, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 24,800 second-feet Dec. 14 (gage height, 15.80 feet); minimum, 64 second-feet Sept. 6.

1911–1930: Maximum discharge, about 31,900 second-feet Nov. 30, 1926 (gage height, 18.3 feet); minimum, 23 second-feet July 30, 1924.

REMARKS.—Records good. Diversions for irrigation, power, and placer mining above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	138	120	582	1,180	1,450	2,550	2,310	1,020	366	130	76
2	84	148	120	555	1,750	1,360	2,550	2,430	1,020	345	120	72
3	88	133	120	530	1,860	1,450	2,550	2,550	1,020	324	116	70
4	88	128	120	582	1,650	3,540	2,310	2,310	940	324	111	70
5	88	120	120	670	2,080	5,350	2,190	1,970	905	304	111	68
6	88	118	120	640	3,800	3,930	2,310	1,970	980	284	106	66
7	99	116	120	610	3,540	3,150	2,310	1,860	1,100	284	104	68
8	148	116	138	530	3,030	2,670	2,430	1,650	1,020	266	102	72
9	229	116	388	555	2,670	2,310	2,190	1,550	940	248	104	99
10	186	116	2,910	504	2,310	2,190	2,080	1,550	940	248	104	130
11	165	116	1,450	480	2,080	2,190	2,080	1,450	980	235	104	146
12	128	118	2,310	504	1,860	2,550	1,860	1,450	940	222	104	143
13	140	120	4,690	530	1,650	2,790	2,190	1,650	800	216	106	138
14	133	120	20,000	555	1,650	2,550	2,790	1,650	735	210	104	133
15	130	120	11,000	555	1,650	2,310	2,310	1,550	768	201	104	118
16	125	120	7,300	555	1,550	1,970	2,190	1,550	768	195	102	104
17	120	120	3,800	582	1,450	1,750	2,310	1,650	702	186	99	104
18	120	120	4,690	870	1,450	1,650	2,550	1,650	640	174	93	91
19	123	120	3,800	800	1,650	1,650	2,550	1,860	582	162	93	102
20	125	120	2,550	800	4,070	1,750	3,030	1,970	640	162	93	104
21	125	120	1,970	735	3,030	1,860	3,800	1,650	582	153	93	102
22	125	120	1,550	702	3,150	1,860	4,690	1,360	530	153	93	99
23	123	116	1,270	670	2,790	1,970	3,930	1,270	504	153	91	99
24	123	120	1,100	670	2,310	2,080	3,540	1,360	480	156	84	102
25	120	120	1,020	702	2,190	2,310	3,280	1,360	456	151	84	111
26	116	120	905	702	1,860	2,550	3,280	1,360	433	148	84	116
27	116	120	735	702	1,650	2,910	3,030	1,450	410	146	82	113
28	113	120	735	702	1,550	3,030	2,910	1,550	388	146	82	116
29	113	120	702	800	-----	3,280	2,550	1,450	366	140	80	116
30	116	120	670	940	-----	3,540	2,310	1,270	366	135	80	120
31	120	-----	610	1,450	-----	2,790	-----	1,100	-----	133	78	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	229	84	123	7,560
November	148	116	121	7,200
December	20,000	120	2,490	155,000
January	1,450	480	670	41,200
February	4,070	1,180	2,200	122,000
March	5,350	1,360	2,480	152,000
April	4,690	1,860	2,690	160,000
May	2,550	1,100	1,670	102,000
June	1,100	366	732	43,600
July	366	133	212	13,000
August	130	78	98.1	6,030
September	146	66	102	6,070
The year	20,000	66	1,120	815,000

MISCELLANEOUS DISCHARGE MEASUREMENTS

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow were made at a number of other points, as shown by the following table:

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1930

Streams south of San Francisco Bay

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Jan. 16	Tia Juana River....	Pacific Ocean.....	Marron dam site near Dulzura, Calif.	-----	2.3
May 9	do.....	do.....	do.....	-----	11
9	do.....	do.....	Former station, Tia Juana River near Nestor, Calif.	-----	14
Jan. 16	Cottonwood Creek....	Tia Juana River.....	Above junction with Tecate Creek, near Dulzura, Calif.	-----	1.8
May 9	do.....	do.....	do.....	-----	8.4
Jan. 16	Campo Creek.....	Tecate Creek.....	Near Campo, Calif.	-----	1.7
Feb. 1	do.....	do.....	do.....	-----	.75
21	do.....	do.....	do.....	-----	1.2
Mar. 6	do.....	do.....	do.....	-----	1.7
20	do.....	do.....	do.....	-----	1.9
Apr. 24	do.....	do.....	do.....	-----	.37
May 9	do.....	do.....	do.....	-----	2.0
June 15	do.....	do.....	do.....	-----	.2
Dec. 5	San Diego River....	Pacific Ocean.....	El Capitan dam site near Lakeside, Calif.	-----	.31
Jan. 3	do.....	do.....	do.....	-----	.25
8	do.....	do.....	do.....	-----	.55
11	do.....	do.....	do.....	-----	296
14	do.....	do.....	do.....	-----	24
17	do.....	do.....	do.....	-----	58
20	do.....	do.....	do.....	-----	49
24	do.....	do.....	do.....	-----	11
29	do.....	do.....	do.....	-----	33
Feb. 1	do.....	do.....	do.....	-----	3.8
14	do.....	do.....	do.....	-----	1.8
Mar. 1	do.....	do.....	do.....	-----	17
6	do.....	do.....	do.....	-----	115
9	do.....	do.....	do.....	-----	16
14	do.....	do.....	do.....	-----	4.1
17	do.....	do.....	do.....	-----	123
20	do.....	do.....	do.....	-----	54
27	do.....	do.....	do.....	-----	13
Apr. 2	do.....	do.....	do.....	-----	40
5	do.....	do.....	do.....	-----	15
14	do.....	do.....	do.....	-----	12
19	do.....	do.....	do.....	-----	1.8
24	do.....	do.....	do.....	-----	1.6
May 3	do.....	do.....	do.....	-----	69
6	do.....	do.....	do.....	-----	153
8	do.....	do.....	do.....	-----	185
10	do.....	do.....	do.....	-----	104
14	do.....	do.....	do.....	-----	32
17	do.....	do.....	do.....	-----	71
21	do.....	do.....	do.....	-----	19
26	do.....	do.....	do.....	-----	3.8
June 4	do.....	do.....	do.....	-----	3.0
14	do.....	do.....	do.....	-----	.55
July 18	Boulder Creek.....	San Diego River.....	Near Julian, Calif.	0.44	7.1
Mar. 17	San Vicente Creek....	do.....	Former station San Vicente Creek at Foster, Calif.	-----	49
20	do.....	do.....	do.....	-----	11
27	do.....	do.....	do.....	-----	1.1
Apr. 2	do.....	do.....	do.....	-----	1.3
3	do.....	do.....	do.....	-----	14
6	do.....	do.....	do.....	-----	49
8	do.....	do.....	do.....	-----	197
10	do.....	do.....	do.....	-----	20
14	do.....	do.....	do.....	-----	5.1
17	do.....	do.....	do.....	-----	8.3
Dec. 19	Alvarado Canyon Creek.	do.....	Below Murray Dam near La Mesa, Calif.	-----	.19

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September, 30, 1930—Continued

Streams south of San Francisco Bay—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				<i>Feet</i>	<i>Sec.-ft.</i>
Dec. 2	Santa Ysabel Creek	San Dieguito River	1 mile below former gaging station near Mesa Grande, Calif.		0.9
18	do	do	do		1.0
Jan. 3	do	do	do		.75
8	do	do	do		3.8
11	do	do	do		56
14	do	do	do		26
17	do	do	do		20
24	do	do	do		8.1
29	do	do	do		25
Feb. 5	do	do	do		9
14	do	do	do		6.5
Mar. 1	do	do	do		14
6	do	do	do		31
9	do	do	do		20
14	do	do	do		18
17	do	do	do		61
20	do	do	do		48
27	do	do	do		20
Apr. 2	do	do	do		26
5	do	do	do		23
14	do	do	do		15
19	do	do	do		12
24	do	do	do		12
May 8	do	do	do		30
7	do	do	do		60
10	do	do	do		43
17	do	do	do		58
26	do	do	do		20
June 4	do	do	do		14
14	do	do	do		10
24	do	do	do		6
July 7	do	do	do		3.3
21	do	do	do		2.2
Aug. 6	do	do	do		1.0
26	do	do	do		.35
Oct. 18	San Luis Rey River	Pacific Ocean	Near Pala, Calif.		1.7
24	do	do	do		1.7
Dec. 7	do	do	do		3.7
July 18	do	do	do		2.2
Aug. 25	do	do	do		1.2
Sept. 27	do	do	do		1.9
Dec. 7	Moreno ditch	San Luis Rey River	do		0.6
Jan. 12	Murrieta Creek	Temecula Creek	Near Temecula, Calif.		17
13	do	do	do		25
15	do	do	do		6.2
27	do	do	do		294
28	do	do	do		53
Mar. 15	do	do	do		144
18	do	do	do		11
May 5	do	do	do		25
Oct. 4	Santa Ana River	Pacific Ocean	Hamner Avenue near Corona, Calif.		34
12	do	do	do		53
23	do	do	do		39
Nov. 1	do	do	do		50
8	do	do	do		40
8	do	do	do		41
15	do	do	do		48
22	do	do	do		37
30	do	do	do		45
30	do	do	do		48
Dec. 7	do	do	do		54
14	do	do	do		48
21	do	do	do		52
27	do	do	do		53
Jan. 4	do	do	do		57
Mar. 26	do	do	do		65
Apr. 2	do	do	do		69
9	do	do	do		64
15	do	do	do		54
Oct. 12	do	do	Auburndale Bridge near Corona, Calif.		65
23	do	do	do		56
Nov. 1	do	do	do		59
8	do	do	do		56
15	do	do	do		62
22	do	do	do		64

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1930—Continued

Streams south of San Francisco Bay—Continued

	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Nov. 30	Santa Ana River	Pacific Ocean	Auburndale Bridge near Corona, Calif.		57
Dec. 7	do	do	do		63
14	do	do	do		59
21	do	do	do		69
27	do	do	do		64
Jan. 4	do	do	do		60
Mar. 26	do	do	do		88
Apr. 2	do	do	do		83
9	do	do	do		96
15	do	do	do		72
Oct. 4	do	do	Santa Fe R. R. bridge near Prado, Calif.		55
12	do	do	do		79
23	do	do	do		66
Nov. 1	do	do	do		75
8	do	do	do		72
15	do	do	do		78
22	do	do	do		73
30	do	do	do		73
Dec. 7	do	do	do		81
7	do	do	do		70
14	do	do	do		87
21	do	do	do		92
27	do	do	do		89
Jan. 4	do	do	do		98
Mar. 26	do	do	do		135
Apr. 2	do	do	do		122
9	do	do	do		116
15	do	do	do		107
24	Durkee ditch	Santa Ana River	Auburndale Bridge near Corona, Calif.		4.1
May 3	do	do	do		8.3
16	do	do	do		5.6
22	do	do	do		4.6
30	do	do	do		3.7
June 5	do	do	do		2.7
12	do	do	do		2.8
19	do	do	do		2.3
26	do	do	do		4.0
July 3	do	do	do		3.6
31	do	do	do		6.6
Aug. 7	do	do	do		6.0
14	do	do	do		6.0
21	do	do	do		6.1
28	do	do	do		7.5
Sept. 4	do	do	do		6.7
11	do	do	do		6.5
18	do	do	do		7.1
25	do	do	do		6.1
Mar. 6	Pacoima Creek	Los Angeles River	Above Cougar Creek near San Fernando, Calif.		.90
10	do	do	do		.44
20	do	do	do		.23
24	do	do	do		.14
Apr. 2	do	do	do		.5
7	do	do	do		.4
17	do	do	do		1.9
21	do	do	do		.85
May 1	do	do	do		1.8
5	do	do	do		.14
12	do	do	do		5.3
19	do	do	do		3.9
27	do	do	do		1.6
June 3	do	do	do		1.2
9	do	do	do		.47
17	do	do	do		.42
23	do	do	do		.19
30	do	do	do		.06
July 8	do	do	do		.02
Dec. 19	do	do	Above flood control dam below Cougar Creek, near San Fernando, Calif.		.04
Jan. 7	do	do	do		.07
13	do	do	do		.7
20	do	do	do		.8
Jan. 27	do	do	do		.7

* Estimated.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1939—Continued

Streams south of San Francisco Bay—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Feb. 4	Pacoina Creek.....	Los Angeles River....	Above flood control dam below Cougar Creek, near San Fernando, Calif.		0.4
10	do.....	do.....	do.....		.4
17	do.....	do.....	do.....		.26
24	do.....	do.....	do.....		.45
Mar. 3	do.....	do.....	do.....		.38
17	do.....	do.....	do.....		27
Oct. 7	Haines Creek diversions.	Haines Creek.....	Upper sand box near Tujunga, Calif.		.02
26	do.....	do.....	do.....		.02
Nov. 5	do.....	do.....	do.....		.02
Dec. 19	do.....	do.....	do.....		.03
Jan. 20	do.....	do.....	do.....		.04
Feb. 1	do.....	do.....	do.....		.03
Mar. 20	do.....	do.....	do.....		.07
31	do.....	do.....	do.....		.07
Apr. 4	do.....	do.....	do.....		.05
20	do.....	do.....	do.....		.06
28	do.....	do.....	do.....		.06
May 15	do.....	do.....	do.....		.04
23	do.....	do.....	do.....		.07
July 3	do.....	do.....	do.....		.03
14	do.....	do.....	do.....		.02
25	do.....	do.....	do.....		.02
Aug. 4	do.....	do.....	do.....		.02
11	do.....	do.....	do.....		.02
28	do.....	do.....	do.....		.02
July 3	Haines Creek diversion No. 3.	do.....	Tunnel diversion near caretaker's house, near Tujunga, Calif.		.002
25	do.....	do.....	do.....		.001
Aug. 11	do.....	do.....	do.....		.001
July 3	Haines Creek diversion No. 4.	do.....	do.....		.002
July 14	do.....	do.....	do.....		.006
25	do.....	do.....	do.....		.006
Aug. 4	do.....	do.....	do.....		.004
11	do.....	do.....	do.....		.004
28	do.....	do.....	do.....		.002
Mar. 20	Haines Creek diversion No. 5.	do.....	Tunnel diversion near gaging station near Tujunga, Calif.		.006
31	do.....	do.....	do.....		.006
Apr. 4	do.....	do.....	do.....		.006
20	do.....	do.....	do.....		.005
28	do.....	do.....	do.....		.005
May 15	do.....	do.....	do.....		.005
23	do.....	do.....	do.....		.004
July 3	do.....	do.....	do.....		.002
14	do.....	do.....	do.....		.002
25	do.....	do.....	do.....		.001
Aug. 4	do.....	do.....	do.....		.002
11	do.....	do.....	do.....		.002
28	do.....	do.....	do.....		.001
Oct. 7	Haines Creek lower diversion.	do.....	Lower tunnel below gaging station near Tujunga, Calif.		.06
26	do.....	do.....	do.....		.06
Nov. 5	do.....	do.....	do.....		.06
Dec. 19	do.....	do.....	do.....		.05
Jan. 20	do.....	do.....	do.....		.06
Feb. 1	do.....	do.....	do.....		.06
Mar. 20	do.....	do.....	do.....		.07
31	do.....	do.....	do.....		.07
Apr. 4	do.....	do.....	do.....		.07
20	do.....	do.....	do.....		.07
28	do.....	do.....	do.....		.07
May 15	do.....	do.....	do.....		.07
23	do.....	do.....	do.....		.06
July 3	do.....	do.....	do.....		.06
14	do.....	do.....	do.....		.06
25	do.....	do.....	do.....		.06
Aug. 4	do.....	do.....	do.....		.06
11	do.....	do.....	do.....		.06
28	do.....	do.....	do.....		.05
Jan. 30	Santa Maria River.....	Pacific Ocean.....	Near Santa Maria, Calif.		2.2
7	Alamo Creek.....	Cuyama River.....	do.....	1.17	.32
14	do.....	do.....	do.....	1.27	.60
21	do.....	do.....	do.....	1.14	.25
30	do.....	do.....	do.....	1.17	.35

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1930—Continued

Streams south of San Francisco Bay—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Feb. 5	Alamo Creek	Cuyama River	Near Santa Maria, Calif.	1.16	0.31
20	do.	do.	do.	1.18	.28
24	do.	do.	do.	1.20	.37
Mar. 14	do.	do.	do.	1.23	.65
22	do.	do.	do.	1.21	.55
28	do.	do.	do.	1.20	.36
Apr. 9	do.	do.	do.	1.15	.12
18	do.	do.	do.	1.12	.12
21	do.	do.	do.	1.15	.18
May 5	do.	do.	do.	1.17	.26
16	do.	do.	do.	1.17	.21
23	do.	do.	do.	1.15	.11
Feb. 22	Foxen Creek	Sisquoc River	Near Sisquoc, Calif.	1.00	.21
Mar. 6	do.	do.	do.	.89	.06
22	do.	do.	do.	.89	.06
28	do.	do.	do.	.85	.02
May 2	San Benito River	Pajaro River	Hernandez, Calif.		(b)
2	Clear Creek	San Benito River	Mouth, near Hernandez, Calif.		• 1.0

San Joaquin River Basin

July 27	Stevenson Creek	San Joaquin River	Former gaging station at Shaver, Calif.	1.70	0.4
Aug. 11	do.	do.	do.	1.68	.3
Sept. 22	do.	do.	do.	1.60	.1
Oct. 21	do.	do.	do.	1.59	.1
Nov. 14	do.	do.	do.	1.58	.1
Dec. 2	do.	do.	do.	1.60	.1
Jan. 3	do.	do.	do.	1.60	.1
Feb. 3	do.	do.	do.	1.66	.3
Mar. 13	do.	do.	do.	1.70	.4
Apr. 26	do.	do.	do.	1.66	.2
May 17	do.	do.	do.	1.66	.3
June 27	do.	do.	do.	1.70	.4
Oct. 21	Big Creek	do.	Former gaging station near mouth, near Big Creek, Calif.	.89	2.9
Nov. 14	do.	do.	do.	.88	2.6
Dec. 5	do.	do.	do.	.82	2.2
Jan. 4	do.	do.	do.	.81	2.1
Feb. 3	do.	do.	do.	.82	2.0
Mar. 20	do.	do.	do.	.76	1.6
Apr. 26	do.	do.	do.	.68	1.0
May 23	do.	do.	do.	.64	.7
June 29	do.	do.	do.	.69	.9
July 29	do.	do.	do.	.76	1.6
Aug. 28	do.	do.	do.	.80	1.8
Sept. 22	do.	do.	do.	.78	1.7
Oct. 4	Yosemite Creek	Merced River	Former gaging station at Yosemite, Calif.	2.51	.1
Dec. 20	do.	do.	do.	2.80	4.6
Mar. 14	do.	do.	do.	3.24	37
May 6	do.	do.	do.	3.96	141
July 10	do.	do.	do.	2.96	14
Sept. 3	do.	do.	do.	2.50	.2
Jan. 17	Calaveras River	San Joaquin River	Former gaging station near Stockton, Calif.	6.40	1,130
May 20	do.	do.	do.	.76	19
Oct. 30	Pitman Creek	Big Creek	Former gaging station at Big Creek, Calif.	.01	.2
Nov. 7	do.	do.	do.	.01	.1
Dec. 29	do.	do.	do.	.01	.2
Jan. 7	do.	do.	do.	.02	.2
Feb. 27	do.	do.	do.	.02	.2
Mar. 25	do.	do.	do.	.05	1.4
Apr. 26	do.	do.	do.	.04	1.0
May 23	do.	do.	do.	.04	.9
June 27	do.	do.	do.	.02	.4
July 29	do.	do.	do.	.01	.2
Aug. 27	do.	do.	do.	.01	.1
Sept. 23	do.	do.	do.	.03	.4

* Estimated.

* No flow.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1930—Continued

Sacramento River Basin

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
June 10	Pit River.....	Sacramento River....	Pittville, Calif.....	<i>Feet</i> .83	<i>Sec. ft.</i> 80
July 8	do.....	do.....	do.....	.64	13
May 12	McCloud River.....	Pit River.....	Bigelow Meadows in Sec. 17, T. 39 N., R. 1 W., Calif.		114
14	do.....	do.....	Wheeler Bridge in S.E. ¼ sec. 33, T. 39 N., R. 2 W., Calif.		847
13	do.....	do.....	McCloud River Club in sec. 23, T. 37 N., R. 3 W., Calif.		1,040
12	Squaw Valley Creek	McCloud River.....	Above mouth of Cabin Creek, Calif.		42
13	do.....	do.....	Mouth in sec. 27, T. 37 N., R. 3 W., Calif.		95
Oct. 12	Cabin Creek.....	Squaw Valley Creek.....	Mouth, Calif.....		6.8
19	Mill Creek.....	Sacramento River.....	Near Big Bend camp site in sec. 29, T. 28 N., R. 4 E., Calif.		42
31	Middle Fork of Yuba River.	Feather River.....	Below mouth of Pass Creek, near Milton, Calif.		1.4

Klamath River Basin

July 23	Big Spring Creek....	Williamson River in Klamath Marsh.	Lenz ranch, sec. 22, T. 30, S., R. 8 E., Ore.		0
21	Spring Creek.....	Williamson River....	Above canal at mouth, near Chiloquin, Ore.		274
21	Modoc Point Canal.	Sprague River.....	Former gaging station at intake, S.E. ¼ sec. 3, T. 35 S., R. 7 E., Ore.	1.49	29.2
22	Fort Creek.....	Wood River.....	Above canal near highway crossing, near Fort Klamath, Ore.		74
22	Agency Spring.....	Crooked Creek.....	Above canal at Klamath Agency, Ore.		14.2
23	Sevenmile Creek....	Upper Klamath Lake	Above canal near bridge, sec. 36, T. 33 S., R. 6 E., Ore.		37.9
Apr. 3	Bluff Creek.....	Klamath River.....	Half a mile above mouth in sec. 30, T. 10 N., R. 5 E., Calif.		226
May 30	do.....	do.....	do.....		136
Aug. 25	do.....	do.....	do.....		45
30	do.....	do.....	do.....		39

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