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SURFACE WATER SUPPLY *of the* UNITED STATES 1926

PART XI PACIFIC SLOPE BASINS IN CALIFORNIA

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SURFACE WATER SUPPLY OF PACIFIC SLOPE BASINS IN CALIFORNIA, 1926

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, 1926.

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

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

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

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

Annual appropriations for the fiscal years ending June 30, 1895-1927

1895-----	\$12, 500. 00	1911-1917-----	\$150, 000. 00
1896-----	24, 500. 00	1918-----	175, 000. 00
1897-1899-----	50, 000. 00	1919-----	148, 244. 10
1900-----	70, 000. 00	1920-----	175, 000. 00
1901-2-----	100, 000. 00	1921-1923-----	180, 000. 00
1903-1906-----	200, 000. 00	1924-25-----	170, 000. 00
1907-----	150, 000. 00	1926-----	165, 000. 00
1908-1910-----	100, 000. 00	1927-----	151, 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 pages 10 and 11.

Measurements of stream flow have been made at about 5,250 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1926, 1,730 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements are made at other points. In connection with this work data were also collected in regard to precipitation, evaporation, storage reservoirs, river pro-

files, 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-foot, 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 section or sections of the stream below the gage which determines the stage-discharge relation at the gage. It should be noted that the control may not be the same section or sections at all stages.

The “point of zero flow” for a gaging station is that point on the gage—the gage height—at which water ceases to flow over the control.

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1925, and ending September 30, 1926. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored as ground water, in the form of snow

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

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

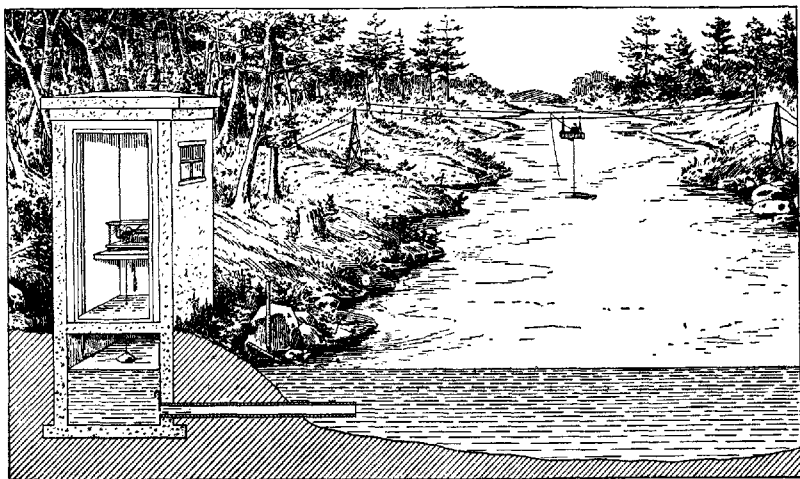


FIGURE 1.—Typical gaging station

charge are made with a current meter. The general methods are outlined in standard textbooks on the measurement of river discharge. A typical gaging station, equipped with water-stage recorder and measuring cable and car, is shown in Figure 1.

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

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

If the base data are insufficient to determine the daily discharge, tables giving daily gage heights and results of discharge measurements are published.

The description of the station gives, in addition to statements regarding location and equipment, information in regard to any condition that may affect the permanence of the stage-discharge relation, covering such subjects as the occurrence of ice, the use of the stream for log driving, shifting of control, and the cause and effect of back-water; it gives also information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded stages, and the accuracy of the records.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the mean of the gage heights read each day. At stations on streams subject to sudden or rapid diurnal fluctuations 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 operating on the principle of the planimeter and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Maximum" gives the mean flow for the day when the mean gage height was highest. As the gage height is the mean for the day it does not indicate correctly the stage when the water surface was at crest height and the corresponding discharge was consequently larger than given in the maximum column. Likewise, in the column headed "Minimum" the quantity given is the mean flow for the day when the mean gage height was lowest. The column headed "Mean" is the average flow in cubic feet for each second during the month. On this average flow, computations recorded in the remaining columns, which are defined on page 2, are based.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

A paragraph in the description of the station gives information regarding (1) the permanence of the stage-discharge relation, (2) precision with which the discharge rating curve is defined, (3) refinement of gage readings, (4) frequency of gage readings, and (5) methods of applying daily gage heights to the rating table to obtain the daily discharge.

For the rating tables "well defined" indicates, in general, that the rating is probably accurate within 5 per cent; "fairly well defined," within 10 per cent; "poorly defined," within 15 to 25 per cent. These notes are very general and are based on the plotting of the individual measurements with reference to the mean rating curve

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth of run-off in inches may be subject to gross errors caused by the inclusion of large non-contributing districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches: All figures representing "second-feet per square mile" and "run-off in inches" published in earlier reports by the Geological Survey should be used with caution because of possible inherent but unknown sources of error.

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 be satisfied first. To give an idea of the amount of prior appropriations, a paragraph on diversions is presented in each station description. Where figures are given they can not be considered exact but as being the best information available.

The table of monthly discharge gives only a general idea of the flow at the station and should not be used for other than preliminary estimates; the tables of daily discharge allow 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.

PUBLICATIONS

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

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

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

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

III. Ohio River Basin.

IV. St. Lawrence River Basin.

Part V. Upper Mississippi River and Hudson Bay Basins.

VI. Missouri River Basin.

VII. Lower Mississippi River Basin.

VIII. Western Gulf of Mexico basins.

IX. Colorado River Basin.

X. Great Basin.

XI. Pacific slope basins in California.

XII. North Pacific slope basins in three parts:

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

B, Snake River Basin.

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

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., 64 State Capitol.

Albany, N. Y., 904 Home Savings Bank Building.

Trenton, N. J., 423 Statehouse Annex.

Charlottesville, Va., Brooks Museum, University of Virginia.

South Charleston, W. Va., Naval Ordnance Plant.

Asheville, N. C., 608 City Hall.

Chattanooga, Tenn., 630 Power Building.

Tuscaloosa, Ala., Post Office Building.

Columbus, Ohio, Engineering Experiment Station, Ohio State University.

Chicago, Ill., 1540 Consumers Building.

Madison, Wis., 337N State Capitol.

Thief River Falls, Minn., 618 Knight Avenue north.

Topeka, Kansas, 23 Federal Building.

Rolla, Mo., Rolla Building, School of Mines and Metallurgy.

Fort Smith, Ark., Post Office Building.

Austin, Tex., State Capitol.

Tucson, Ariz., 104 Agricultural Building, University of Arizona.

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., 45-46 Federal Building.

Tacoma, Wash., 404 Federal Building.

Portland, Oreg., 606 Post Office Building.

San Francisco, Calif., 303 Customhouse.

Los Angeles, Calif., 600 Federal Building.

Honolulu, Hawaii, Territorial Office Building.

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

Stream-flow records have been obtained at about 5,250 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.....	1884 to Sept., 1890.
11th A, pt. 2.....	Monthly discharge and descriptive information.....	1884 to June 30, 1891.
12th A, pt. 2.....	do.....	1884 to Dec. 31, 1892.
13th A, pt. 3.....	Mean discharge in second-feet.....	1888 to Dec. 31, 1893.
14th A, pt. 2.....	Monthly discharge (long-time records, 1871 to 1893).....	1893 and 1894.
B 131.....	Descriptions, measurements, gage heights, and ratings.....	1895.
16th A, pt. 2.....	Descriptive information only.....	1896.
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).....	1895 and 1896.
W 11.....	Gage heights (also gage heights for earlier years).....	1897.
18th A, pt. 4.....	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).....	1897.
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).....	1898.
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.

The records at most of the stations discussed in these reports extend over a series of years, and miscellaneous measurements at many points other than regular gaging stations have been made each

year. 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 papers on surface-water supply published from 1899 to 1926. The data for any particular station will be found in the reports covering the years during which the station was maintained. For example, data for Machias River at Whitneyville, Me., 1903 to 1921, are published in Water-Supply Papers 97, 124, 165, 201, 241, 261, 281, 301, 321, 351, 381, 401, 431, 451, 471, 501, and 521, which contain records for the New England streams from 1903 to 1921. Results of miscellaneous measurements are published by drainage basins.

Numbers of water-supply papers containing results of stream measurements, 1899-1926

[For basins included see pp. 5 and 6]

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII		
												A	B	C
1899 ^a	35	35, 36	36	36	36	36, 37	37	37	37, 38	38, 39	38, 39	38	38	38
1900 ^a	47, 48	48	48, 49	49	49	49, 50	50	50	50	51	51	51	51	51
1901.....	65, 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, 83	83	82, 83	83, 85	84	84	84	85	85	85	85	85	85
1903.....	97	97, 98	98	97	98, 99, 100	99	99	99	100	100	100	100	100	100
1904.....	124, 125, 126	126, 127	128	129	128, 130	130, 131	128, 131	132	133	133, 134	134	135	135	135
1905.....	165, 166, 167	167, 168	169	170	171	172	169, 173	174	175, 177	176, 177	177	178	178	177, 178
1906.....	201, 202, 203	203, 204	205	206	207	208	205, 209	210	211	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

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

^b James River only.

^c Gallatin River.

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

^e Mohave River only.

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

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

^h Wissahickon and Schuylkill Rivers to James River.

ⁱ Scioto River.

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

^k Tributaries of Mississippi from east.

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

^m Hudson Bay only.

ⁿ New England rivers only.

^o Hudson River to Delaware River, inclusive.

^p Susquehanna River to Yadkin River, inclusive.

^q Platte and Kansas Rivers.

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

^s Below junction with Gila.

^t Rogue, Umpqua, and Siletz Rivers only.

COOPERATION

Investigation of the water resources of California is being carried on by the United States Geological Survey in cooperation with the State in accordance with acts of the State legislature, approved March 16, 1903, March 20, 1905, March 11, 1907, and April 22, 1909, empowering the State authorities to enter into contracts with the Director of the United States Geological Survey for the purpose of making topographic maps, gaging streams, and surveying reservoir sites and canal locations for the conservation and utilization of the flood and storm waters of the State. The work for the year 1926 was maintained in accordance with the contract signed by W. F. McClure, State engineer. Additional funds were provided by the division of engineering and irrigation to maintain certain stations in the lower Sacramento and San Joaquin River Basins during the irrigating season. Additional funds for the maintenance of river-measurement stations were provided by a special act of the State legislature, chapter 190, statutes of 1925, and disbursed by the division of water rights, Department of Public Works of the State of California, through Edward Hyatt, jr., chief of the division.

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 F. E. Bonner, district engineer, and the Weather Bureau through H. B. Hersey, meteorologist. The Forest Service pays the salary and expenses of one 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 river-measurement stations was furnished by the Southern California Edison Co., San Joaquin Light & Power Corporation, Pacific Gas & Electric Co., Byllesby Engineering & Management Corporation, Snow Mountain Water & Power Co., Merced Irrigation District, Yosemite Power Co., Southern Sierras Power Co., and East Bay Municipal Utility District.

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

The work in Oregon was carried on under a cooperative agreement with the State through Rhea Luper, State engineer. Financial cooperation was furnished by the Medford Irrigation District, Talent Irrigation District, California Oregon Power Co., Fort Klamath Meadows Co., and Jackson County.

DIVISION OF WORK

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

The data for stations in Oregon were collected and prepared for publication under the direction of F. F. Henshaw, district engineer, assisted by G. H. Canfield, Wendell Dawson, K. N. Phillips, and E. O. Hokanson, and by H. K. Smith, hydrographer of the United States Bureau of Reclamation.

The records were reviewed and the manuscript assembled by G. C. Stevens.

GAGING-STATION RECORDS

SWEETWATER RIVER BASIN

SWEETWATER RIVER NEAR DESCANSO, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ sec. 25, T. 15 S., R. 3 E., at Ellis ranch, 2 miles below mouth of Guatay Creek and $1\frac{1}{2}$ miles below Descanso, San Diego County.

DRAINAGE AREA.—43.7 square miles (measured on topographic maps).

RECORDS AVAILABLE.—November 21, 1905, to September 30, 1926.

GAGE.—Staff in three sections on left bank at the concrete and boulder control built in 1918, a short distance below intake of Ellis ditch; read by W. E. Ellis.

DISCHARGE MEASUREMENTS.—Made from cable 125 feet above gage or by wading.

CHANNEL AND CONTROL.—Channel is sand and fine gravel. Banks are high and not likely to be overflowed. A control of boulders and concrete was built in November, 1918.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 5.10 feet in forenoon April 6 (discharge, 498 second-foot); minimum stage, 1.34 feet in afternoon October 1 and 3 (discharge, 0.1 second-foot).

1905-1926: Maximum stage not known, occurred January 27, 1916 (discharge, about 9,870 second-foot); stream dry during a part of the years 1910, 1911, 1913, 1916, and 1925.

DIVERSIONS.—About 0.5 second-foot is diverted above gage for irrigation on Ellis ranch.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed slightly April 5. Rating curves well defined. Gage read to hundredths twice a day, except January 1 to March 31 when it was not read. Daily discharge ascertained by applying mean daily gage height to rating table. Monthly discharge for January to March estimated. Records good except those for January to March, which are fair.

Discharge measurements of Sweetwater River near Descanso, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 3.....	1.37	0.15	Feb. 18.....	1.86	5.8	June 12.....	1.55	1.4
Oct. 25.....	1.46	.39	Feb. 21.....	1.76	4.0	June 15.....	1.68	3.2
Nov. 20.....	1.46	.45	Mar. 21.....	1.58	1.2	Aug. 27.....	1.41	.19
Dec. 26.....	1.47	.40	Apr. 15.....	2.24	22	Sept. 24.....	1.39	.16
Jan. 30.....	1.50	.6	Apr. 24.....	2.03	11			
Feb. 8.....	1.59	1.7	May 8.....	1.91	8.4			

Daily discharge, in second-feet, of Sweetwater River near Descanso, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Apr.	May	June	July	Aug.	Sept.
1.....	0.1	0.2	0.7	2.4	9.5	1.8	0.6	0.2	0.2
2.....	.1	.3	.6	2.8	9.5	2.2	.6	.2	.2
3.....	.1	.4	.7	2.8	10	1.6	.4	.2	.2
4.....	2.4	.4	.6	3.2	9.5	1.8	.5	.2	.2
5.....	.2	.4	.7	432	10	1.8	.4	.2	.2
6.....	.4	.4	.7	388	9.5	1.5	.4	.2	.2
7.....	.4	.3	.7	127	9	1.4	.6	.2	.2
8.....	.6	.4	.7	346	8	1.6	.4	.2	.2
9.....	.6	.4	.6	150	8	1.3	.4	.2	.2
10.....	.6	.4	.6	99	6.5	1.5	.4	.2	.2
11.....	.8	.6	.6	66	6.5	1.3	.4	.2	.2
12.....	.9	.4	.6	55	5	1.0	.3	.2	.2
13.....	.8	.4	.6	35	4.6	1.0	.4	.2	.2
14.....	.7	.4	.6	26	4.6	1.0	.4	.2	.2
15.....	.9	.5	.6	23	4.0	1.0	.4	.2	.2
16.....	.7	.5	.5	18	3.8	1.1	.3	.2	.2
17.....	.7	.4	.5	14	3.6	.9	.3	.2	.2
18.....	.6	.5	.5	17	3.2	.7	.4	.2	.2
19.....	.6	.5	.6	31	3.0	.7	.4	.2	.2
20.....	.6	.6	.6	23	2.8	.7	.4	.2	.2
21.....	.6	.6	.5	18	2.8	.9	.4	.2	.2
22.....	.4	.7	.5	15	2.4	.7	.4	.2	.2
23.....	.4	.7	.5	16	2.4	.8	.4	.2	.2
24.....	.4	1.0	.5	15	2.4	.8	.4	.2	.2
25.....	.4	.8	.6	13	2.2	.8	.4	.2	.2
26.....	.4	.8	.6	13	2.2	.7	.4	.2	.2
27.....	.4	.8	.6	12	2.4	.6	.4	.2	.2
28.....	.4	.8	.6	12	2.2	.7	.3	.2	.2
29.....	.3	.7	.6	12	2.0	.6	.2	.2	.2
30.....	.3	.7	.7	10	2.2	.6	.2	.2	.2
31.....	.2	-----	.8	-----	2.2	-----	.2	.2	-----

Monthly discharge of Sweetwater River near Descanso, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2.4	0.1	0.55	33.8
November.....	1.0	.2	.53	31.5
December.....	.8	.5	.61	37.5
January.....	-----	-----	.7	43.0
February.....	-----	-----	4.8	267
March.....	-----	-----	1.7	105
April.....	432	2.4	66.6	3,960
May.....	10	2.0	5.03	309
June.....	2.2	.6	1.10	65.5
July.....	.6	.2	.39	24.0
August.....	.2	.2	.20	12.3
September.....	.2	.2	.20	11.9
The year.....	432	.1	6.77	4,900

NOTE.—Mean discharge for January to March estimated on basis of discharge measurements, records for Santa Ysabel Creek, and rainfall records.

SAN DIEGO RIVER BASIN

SAN DIEGO RIVER NEAR SANTEE, CALIF.

LOCATION.—At Loop dam site, 1½ miles below Oak Canyon and old Mission Dam and 6 miles west of Santee, San Diego County.

DRAINAGE AREA.—375 square miles (measured on topographic maps) at station at old Mission Dam.

RECORDS AVAILABLE.—May 25, 1912, to September 30, 1926 (record not complete).

GAGE.—Water-stage recorder on right bank. Previous to November 20, 1920, station was at old Mission Dam.

DISCHARGE MEASUREMENTS.—Made from cable just above gage or by wading.

CHANNEL AND CONTROL.—Solid rock formation forces ground water to surface above dam. The old Loop Dam serves as incomplete control.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.3 feet at noon April 6 (discharge, 5,780 second-feet); no surface run-off at station except during April and May.

1912-1926: Maximum stage recorded, 25.1 feet January 27, 1916 (discharge, 70,200 second-feet); stream practically dry for several months each year except for a small amount of ground water forced to surface by rock formation.

DIVERSIONS.—Cuyamaca Water Co.'s flume diverts from San Diego River below Boulder Creek and also from the South Fork of San Diego River. Water for irrigation is pumped from wells along the river above and below Lakeside.

REGULATION.—Water is stored at Cuyamaca Reservoir on Boulder Creek.

ACCURACY.—Stage-discharge relation did not change during period of surface run-off, April and May. Rating curve well defined for low and medium stages. Water-stage recorder record satisfactory. Daily discharge for April and May ascertained by applying mean daily gage height to rating table, except April 4-8, for which hourly discharge was averaged. Records good.

COOPERATION.—Gage-height record and results of several discharge measurements furnished by Cuyamaca Water Co., Ed Fletcher, manager.

Discharge measurements of San Diego River near Santee, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Apr. 6.....	5.25	4,390	Apr. 12.....	1.43	245	May 8.....	0.50	9.2
Apr. 7.....	2.75	1,200	Apr. 15.....	1.16	141	June 16.....	.23	.3
Apr. 9.....	2.80	1,270	Apr. 15.....	1.10	116			
Apr. 10.....	2.17	528	Apr. 24.....	.71	37			

Daily discharge, in second-feet, of San Diego River near Santee, Calif., for the year ending September 30, 1926

Day	Apr.	May	Day	Apr.	May	Day	Apr.	May
1.....	0.1	24	11.....	325	6	21.....	74	0.8
2.....	.1	20	12.....	285	2.5	22.....	55	.6
3.....	.1	17	13.....	228	2.1	23.....	44	.6
4.....	.8	16	14.....	228	1.9	24.....	36	.6
5.....	255	11	15.....	140	1.7	25.....	34	.4
6.....	4,240	8.5	16.....	96	1.4	26.....	33	.4
7.....	1,620	10	17.....	74	1.2	27.....	28	.4
8.....	2,540	9	18.....	68	1.0	28.....	24	.4
9.....	1,450	9	19.....	177	.8	29.....	24	.4
10.....	610	8.5	20.....	113	.8	30.....	27	.4
						31.....		.3

Monthly discharge of San Diego River near Santee, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....			* 0.1	6.1
November.....			*.3	17.9
December.....			*.4	24.6
January.....			*.2	12.3
February.....			*.3	16.7
March.....			*.2	12.3
April.....	4,240	0.1	428	25,500
May.....	24	.3	5.09	313
June.....			*.3	17.9
July.....			*.1	6.1
August.....			*.1	6.1
September.....			*.1	6.0
The year.....	4,240		35.8	25,900

* Estimated.

BOULDER CREEK NEAR JULIAN, CALIF.

LOCATION.—At outlet of Cuyamaca Reservoir, in Cuyamaca grant, 7 miles south of Julian, San Diego County, and 12 miles above mouth of creek.

DRAINAGE AREA.—12.0 square miles (measured on topographic map).

RECORDS AVAILABLE.—June 19, 1912, to September 30, 1926, when station was discontinued.

GAGE.—Vertical staff on right side of weir box, 3½ feet above weir. Zero at elevation of crest of the 6-foot Cippoletti weir, which is 100 feet below outlet gates of reservoir. Gage read by watchman at dam.

DISCHARGE MEASUREMENTS.—Made by wading near weir. On account of velocity of approach it has been necessary to rate weir.

CONTROL.—Cippoletti weir acts as control.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during year, 17.2 second-feet October 1 and 2; stream dry several months during year.

1912-1926: Maximum mean daily discharge, 1,877 second-feet January 28, 1916. No water is released from reservoir except when needed for Cuyamaca Water Co.'s flume.

DIVERSIONS.—None.

REGULATION.—Flow completely regulated by operation of outlet gate of reservoir.

Cuyamaca Reservoir, completed in 1886, and enlarged in 1894, has a capacity of 11,400 acre-feet. From the reservoir the water flows 12½ miles down the natural channel of Boulder Creek and San Diego River to the intake of Cuyamaca Water Co.'s flume.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Gage read to hundredths once daily. Records excellent.

COOPERATION.—Record of daily gage heights and results of one discharge measurement furnished by La Mesa, Lemon Grove, and Spring Valley Irrigation District.

The following discharge measurement was made:

July 29, 1926: Gage height, 0.48 foot; discharge, 8.1 second-feet.

Daily discharge, in second-feet, of Boulder Creek near Julian, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	June	July	Aug.	Sept.	Day	Oct.	Nov.	June	July	Aug.	Sept.
1.....	17.2	13.4	-----	11.6	7.8	7.5	16.....	-----	-----	-----	5.5	7.8	7.3
2.....	17.2	13.4	-----	6.2	7.8	7.5	17.....	-----	-----	-----	5.5	7.8	7.3
3.....	-----	-----	-----	5.3	7.8	7.5	18.....	-----	-----	-----	5.5	7.8	7.3
4.....	-----	-----	-----	5.3	7.8	7.5	19.....	14.0	-----	-----	5.5	7.8	7.3
5.....	-----	-----	-----	5.3	7.8	7.5	20.....	14.0	-----	-----	5.5	7.8	7.3
6.....	-----	-----	-----	5.3	7.8	7.5	21.....	-----	-----	-----	8.0	7.8	7.3
7.....	-----	-----	-----	5.1	7.8	7.5	22.....	14.0	-----	-----	8.0	7.8	7.3
8.....	-----	-----	-----	5.1	7.8	7.5	23.....	-----	-----	-----	8.0	7.8	7.3
9.....	-----	-----	-----	5.1	7.8	7.5	24.....	-----	-----	1.5	8.0	7.8	7.3
10.....	-----	-----	-----	5.5	7.8	7.5	25.....	-----	-----	12.8	8.0	7.8	5.7
11.....	-----	-----	-----	5.5	7.8	7.5	26.....	14.0	-----	12.2	8.0	7.8	5.7
12.....	12.2	-----	-----	5.5	7.8	7.5	27.....	14.0	-----	11.0	8.0	7.8	3.0
13.....	12.2	-----	-----	5.5	7.8	7.5	28.....	-----	-----	-----	8.0	7.8	3.0
14.....	12.2	-----	-----	5.5	7.8	7.3	29.....	-----	-----	-----	8.0	7.8	3.0
15.....	-----	-----	-----	5.5	7.8	7.3	30.....	-----	-----	-----	7.8	7.8	5.7
							31.....	-----	-----	-----	7.8	7.5	-----

NOTE.—No water released from reservoir on days for which discharge is not given.

Monthly discharge of Boulder Creek near Julian, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	17.2	0	4.55	280
November.....	13.4	0	1.89	53.0
June.....	12.8	0	1.25	74.4
July.....	11.6	5.1	6.53	402
August.....	7.8	7.5	7.79	479
September.....	7.5	3.0	6.80	405
The year.....	17.2	0	2.34	1,690

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

BOULDER CREEK NEAR LAKESIDE, CALIF.

LOCATION.—In NW $\frac{1}{4}$ sec. 12, T. 14 S., R. 2 E., just above junction with San Diego River and 14 miles northeast of Lakeside, San Diego County.

DRAINAGE AREA.—33.5 square miles (measured on topographic maps).

RECORDS AVAILABLE.—August 12, 1912, to January 26, 1916, and October 1, 1919, to September 30, 1926, when station was discontinued.

GAGE.—Vertical staff on right wing wall of a short lined section of channel. Datum lowered 0.15 foot January 22, 1924.

DISCHARGE MEASUREMENTS.—Made by wading or from foot plank.

CHANNEL AND CONTROL.—Sand and gravel, shifting. Control consists of short lined section of channel. At times gravel collects at ford just below and causes backwater at the gage. This gravel is removed frequently.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 4.10 feet in afternoon April 6 (discharge, 350 second-feet); minimum discharge less than 2 second-feet at times.

1912–1916, 1919–1926: Maximum stage recorded, 9.5 feet January 27, 1916 (discharge, about 3,000 second-feet); no flow July 2–8, 1914, and October 10–14, 1919.

DIVERSIONS.—None.

REGULATION.—Water is stored at Cuyamaca Reservoir and released during low-water period. See "Boulder Creek near Julian."

ACCURACY.—Stage-discharge relation did not change during the year. Rating curve well defined below 50 second-feet and extended above. Staff gage read to hundredths twice daily except when water was below gage. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge for periods when water was below bottom of gage not determined. Records fair.

COOPERATION.—Results of discharge measurements and gage-height record furnished by La Mesa, Lemon Grove, and Spring Valley Irrigation District.

Discharge measurements of Boulder Creek near Lakeside, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 6.....	0.14	4.1	May 28.....	0.05	2.8	Sept. 23.....	0.22	5.3
Apr. 14.....	.94	31	June 15.....	-.12	.8			
Apr. 19.....	.85	26	July 29.....	.18	5.7			

Daily discharge, in second-feet, of Boulder Creek near Lakeside, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	13			16	16	3.7	2.8	9	2.3		5	5
2.....	15	7	3.5	8	13	3.2	3.0	9	2.3	5.5	5.5	5.5
3.....	2.9	14	9	3.2	10	3.2	2.9	8.5		5.5	5.5	5
4.....	2.9	2.9	6.5	4.7	8.5	3.2	2.9	8		3.2	4.9	5.5
5.....	14			3.4	5	3.4	87	8		3.2	6	5.5
6.....	6			2.3	3.2	3.5	332	9		3.2	6	5.5
7.....						3.4	196	8		2.9	6	5.5
8.....						3.2	166	8		3.2	6	5
9.....					2.2	4.7	112	7		3.2	5.5	3.2
10.....					2.3	5.5	83	6.6		3.4	5.5	5
11.....					2.3	4.9	46	6		3.5	5.5	5.5
12.....					26	3.9	46	5.5		3.9	5.5	5
13.....	9				60	3.2	37	4.5		3.9	5.5	4.9
14.....	24				43	3.2	33	3.7		3.9	5.5	5
15.....	10				34	2.9	26	3.5	.8	3.7	5.5	5.5
16.....	2.8				28	2.6	20	3.5		3.5	5.5	5.5
17.....					22	2.3	16	3.5		3.5	5.5	5.5
18.....					12	2.4	15	3.4		3.5	5	6.5
19.....			2.9		9.5	2.3	23	3.2		3.7	5.5	5.5
20.....	14				8	2.6	18	2.9		3.5	5.5	5.5
21.....	9				6.5	3.5	14	2.8		4.3	5.5	5.5
22.....					5	2.9	13	2.6		6	5.5	5.5
23.....					4.9	2.4	12	2.6		5.5	5.5	5.5
24.....					4.7	2.3	12	2.9		5.5	5	5
25.....		5			4.7	2.3	11	3.2		5	5	5
26.....		2.4			4.3	2.3	10	3.2	10	5	5	5
27.....					3.9		8.5	2.9	10	5.5	5.5	5
28.....	10				3.9			2.9	8	5.5	5.5	2.4
29.....	2.8					2.4	9	2.6		6	5.5	2.3
30.....						2.6	9	2.4		6	5.5	2.4
31.....			20			2.6		2.3		6	5.5	

NOTE.—Water below bottom of gage on days for which discharge is not given. Discharge 2 second-feet or less during these periods.

Monthly discharge of Boulder Creek near Lakeside, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
April.....	332	2.8	45.9	2,730
May.....	9	2.3	4.87	299
August.....	6	4.9	5.46	336
September.....	6.5	2.3	4.96	295

NOTE.—See footnote to daily-discharge table.

SAN DIEGUITO RIVER BASIN

SANTA YSABEL CREEK NEAR MESA GRANDE, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 21, T. 12 S., R. 2 E., at Sutherland dam site, 1 mile below Sutherland, $1\frac{1}{2}$ miles above mouth of Black Canyon Creek, and $4\frac{1}{2}$ miles southwest of Mesa Grande, San Diego County.

DRAINAGE AREA.—53.4 square miles (measured on topographic map).

RECORDS AVAILABLE.—December 29, 1912, to September 20, 1926.

GAGE.—Water-stage recorder on right bank just above Sutherland dam site.

Previous gages have been at same site but original datum has not been maintained.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Bed is shifting sand. A concrete control has been constructed at an outcropping of bedrock 20 feet below gage. Banks are high, covered with brush, and not subject to overflow.

EXTREMES OF DISCHARGE.—No information for this year.

1912-1924: Maximum stage recorded, 11.0 feet January 27, 1916 (discharge, 21,100 second-feet); stream dry during periods in 1913, 1914, 1921, and 1924.

DIVERSIONS.—No large diversions above station.

REGULATION.—None.

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

Discharge measurements of Santa Ysabel Creek near Mesa Grande, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
May 16.....	1.72	19	July 3.....	1.15	2.4	Aug. 20.....	0.92	0.3
May 23.....	1.68	16	July 10.....	1.13	2.1	Aug. 27.....	.87	.2
May 30.....	1.51	9.7	July 17.....	.98	.8	Sept. 3.....	.82	.04
June 6.....	1.45	8.5	July 23.....	.96	.6	Sept. 10.....	.78	.005
June 13.....	1.39	6.9	July 30.....	.96	.6	Sept. 17.....	.87	.2
June 20.....	1.27	4.9	Aug. 6.....	1.00	.8	Sept. 24.....	.83	.07
June 27.....	1.18	3.2	Aug. 13.....	.90	.3			

* Discharge estimated.

Monthly run-off, in acre-feet, of Santa Ysabel Creek near Mesa Grande, Calif., for the year ending September 30, 1926

Month	Run-off in acre-feet	Month	Run-off in acre-feet	Month	Run-off in acre-feet
October.....	163	March.....	402	August.....	12.0
November.....	178	April.....	11,300	September.....	2.7
December.....	201	May.....	1,280	The year.....	15,300
January.....	167	June.....	361		
February.....	1,190	July.....	74.4		

SAN LUIS REY RIVER BASIN

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

LOCATION.—At Henshaw Dam, 5 miles north of Mesa Grande, San Diego County.

DRAINAGE AREA.—209 square miles (measured on topographic maps) at gaging station 1 mile below dam.

RECORDS AVAILABLE.—October 3, 1911, to September 30, 1926.

DIVERSIONS.—None.

COOPERATION.—Complete record, except computation of inflow, furnished by San Diego County Water Co.

Lake Henshaw Reservoir was completed in 1923, 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.

Inflow of San Luis Rey River to Lake Henshaw near Mesa Grande, Calif., for the year ending September 30, 1926

	Storage		Decrease during month			Inflow ^b
	End of month	Increase or decrease	Draft	Net evaporation ^a	Leakage	
	<i>Acre-feet</i>	<i>Acre-feet</i>	<i>Acre-feet</i>	<i>Acre-feet</i>	<i>Acre-feet</i>	<i>Acre-feet</i>
September.....	1,523					
October.....	1,868	+345	0	-28.3	+3.9	320.6
November.....	2,001	+133	0	+24.1	+1.5	158.6
December.....	2,185	+184	0	+6.6	0	190.6
January.....	2,434	+249	0	-3.5	0	245.5
February.....	4,812	+2,378	0	-111.4	0	2,266.6
March.....	5,038	+226	0	+131.1	0	367.1
April.....	19,089	+14,051	59.6	-396.5	0	13,714.1
May.....	18,466	-623	\$22.3	+808.0	0	1,007.3
June.....	17,758	-708	108.7	+922.1	0	322.8
July.....	16,037	-1,721	900.7	+1,126.0	0	305.7
August.....	14,515	-1,522	870.1	+1,031.1	0	379.2
September.....	13,925	-590	1.9	+747.6	0	159.5
The year.....		+12,402	2,763.3	+4,256.9	+5.4	19,427.6

^a Net evaporation equals gross evaporation minus rainfall.

^b Inflow 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.

NOTE.—Inflow equals increase or decrease in storage plus draft, net evaporation, and leakage.

SANTA MARGARITA RIVER BASIN

TEMECULA CREEK AT NIGGER CANYON, NEAR TEMECULA, CALIF.

LOCATION.—On Pauba land grant, at upper end of Nigger Canyon, about 10 miles east of Temecula, Riverside County. Arroyo Seco enters from left above gage.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 31, 1923, to September 30, 1926.

GAGE.—Water-stage recorder in pipe well and wooden shelter on right bank at upper end of Nigger Canyon. Datum lowered an unknown amount, May 20, 1924.

DISCHARGE MEASUREMENTS.—Made from cable 25 feet below gage or by wading.

CHANNEL AND CONTROL.—Small gravel and sand; shifting.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 11.20 feet at 4 a. m. April 6 (discharge, 940 second-feet); minimum discharge, 1.4 second-feet September 5-9.

1923-1926: Maximum stage, from water-stage recorder, 11.20 feet at 4 a. m. April 6, 1926 (discharge, 940 second-feet); minimum discharge, 0.8 second-foot at 6 p. m. September 30, 1924.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curves fairly well defined. Water-stage recorder record good. Daily discharge ascertained by shifting-control method or by interpolating between frequent discharge measurements. Records good. During the year 145 discharge measurements were made at the station.

COOPERATION.—Gage-height record and results of most of the discharge measurements furnished by Vail & O'Neil.

Daily discharge, in second-feet, of Temecula Creek at Nigger Canyon, near Temecula, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.1	3.9	4.1	4.9	13	6.5	5	18	3.6	3.5	2.5	1.6
2.....	2.1	3.9	4.5	4.8	8	6.5	5	17	3.6	3.7	2.4	1.5
3.....	2.1	4.0	4.9	4.6	9	6.5	5.5	16	3.7	3.4	2.2	1.5
4.....	5.5	4.1	4.6	4.4	10	6.5	5.5	14	3.7	3.0	2.1	1.5
5.....	16	4.2	4.4	4.3	8	6.5	218	12	3.6	2.7	2.6	1.4
6.....	5	4.1	4.3	4.2	7	6.5	482	12	3.6	2.6	2.4	1.4
7.....	4.4	4.1	4.2	4.7	6	6.5	411	12	3.5	2.4	2.2	1.4
8.....	4.0	4.0	4.3	4.5	5.5	6.5	461	12	3.6	2.7	2.0	1.4
9.....	3.8	4.0	4.4	4.3	5.5	6.5	196	11	3.7	3.0	1.9	1.4
10.....	3.4	4.0	4.5	4.1	5.5	6	107	11	3.8	2.8	2.0	1.5
11.....	3.2	4.0	4.6	3.9	5.5	6	68	11	3.6	2.5	2.0	1.5
12.....	3.3	4.1	4.7	3.9	13	6	84	7.5	3.6	2.2	2.1	1.5
13.....	4.1	4.2	4.6	3.9	110	6	141	7	3.6	2.2	2.1	1.6
14.....	6.5	4.2	4.5	4.3	82	5.5	70	7	3.6	2.2	1.6	1.6
15.....	7	4.2	4.3	4.2	42	5.5	53	7	3.4	2.3	1.7	1.9
16.....	6.5	4.1	4.1	4.1	40	5.5	44	6.5	3.1	2.3	1.8	2.2
17.....	5.5	4.1	4.6	4.0	28	5.5	35	6.5	3.2	2.3	1.9	2.2
18.....	5	4.0	5	4.0	19	5.5	38	6	3.2	2.4	2.0	2.2
19.....	4.3	4.0	4.8	4.0	14	5.5	42	6	3.2	2.4	2.1	2.2
20.....	3.6	4.0	4.6	4.0	12	7	38	5.5	3.1	2.4	2.0	2.2
21.....	3.7	4.0	4.4	4.0	11	6	34	5.5	3.1	2.3	1.8	2.2
22.....	3.7	4.0	4.2	3.9	10	4.8	30	5.5	3.5	2.2	1.7	2.2
23.....	3.8	4.1	4.7	3.9	9.5	4.8	26	5	3.6	2.2	1.6	2.2
24.....	3.7	5.5	4.6	3.8	8.5	4.8	22	5	3.6	2.3	1.5	2.1
25.....	3.7	5.1	4.5	3.8	7.5	4.7	18	5.5	3.7	2.4	1.6	2.1
26.....	3.6	4.5	4.4	3.8	7.5	4.7	16	6	3.5	2.5	1.6	2.1
27.....	3.8	4.4	4.3	3.7	7.5	4.7	18	5.5	3.3	2.6	1.7	2.0
28.....	4.0	4.2	4.2	3.7	7	4.8	18	5	3.1	2.8	1.7	2.0
29.....	4.1	4.0	4.3	4.2	-----	4.9	18	4.5	3.2	2.9	1.7	2.2
30.....	4.0	3.8	4.4	4.3	-----	4.9	18	4.2	3.3	2.8	1.6	2.3
31.....	4.0	-----	4.5	5.5	-----	5	-----	3.9	-----	2.7	1.6	-----

Monthly discharge of Temecula Creek at Nigger Canyon near Temecula, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	16	2.1	4.50	277
November.....	5.5	3.8	4.16	248
December.....	5	4.1	4.47	275
January.....	5.5	3.7	4.18	257
February.....	110	5.5	18.3	1,020
March.....	7	4.7	5.70	350
April.....	482	5	90.6	5,390
May.....	18	3.9	8.41	517
June.....	3.8	3.1	3.46	206
July.....	3.7	2.2	2.60	160
August.....	2.6	1.5	1.93	119
September.....	2.3	1.4	1.84	109
The year.....	482	1.4	12.3	8,930

TEMECULA CREEK AT RAILROAD CANYON, NEAR TEMECULA, CALIF.

LOCATION.—On Temecula land grant, at upper end of Temecula or Railroad Canyon, 1½ miles south of Temecula, Riverside County. Murrieta Creek enters from right above station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 30, 1923, to September 30, 1926.

GAGE.—Water-stage recorder on left bank about 300 feet below Murrieta Creek.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Shifting sand. A weir acts as a partial control. Weir was destroyed and rebuilt several times during 1926. Pool above weir fills with sand.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.08 feet at 7 p. m. April 7 (discharge, about 2,300 second-feet); minimum stage, from water-stage recorder, 1.33 feet at 4 p. m. August 15 (discharge, 1.0 second-feet).

1923-1926: Maximum stage recorded, 6.08 feet at 7 p. m. April 7, 1926 (discharge, about 2,300 second-feet); minimum stage recorded, 1.12 feet from 3 to 5 p. m. July 16, 1925 (discharge, 0.4 second-foot).

DIVERSIONS.—See "Regulation."

REGULATION.—Pumping diversions regulate flow to a considerable extent during irrigation season.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curve for low water well defined and standard rating curve for high water fairly well defined. Water-stage recorder record excellent. Daily discharge ascertained by shifting-control method, except for the following periods: January 31, February 12, April 5-8, hourly discharge averaged; April 9, May 31, June 4, 10, August 24, discharge estimated; June 2, 3, 5, 6, 8, and 9 discharge interpolated. Records good. During the year 171 discharge measurements were made at the station.

COOPERATION.—Gage-height record and results of most of the discharge measurements furnished by Vail & O'Neil.

Daily discharge, in second-feet, of Temecula Creek at Railroad Canyon, near Temecula, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	5	9	9.5	18	8.5	7.5	12	3.6	4.3	2.0	1.8
2	2.1	6.5	13	10	14	8.5	7.5	12	3.6	3.9	1.8	1.8
3	2.0	7.5	12	10	16	9	8	12	3.7	3.9	1.8	2.0
4	5	8	9	9	13	9	7.5	12	3.7	4.4	2.1	2.0
5	14	6.5	9	8.5	12	9	189	11	3.8	3.9	2.2	2.0
6	6.5	7.5	9	8.5	12	7.5	592	11	3.8	2.5	2.4	1.7
7	2.8	7	8.5	8.5	12	9.5	426	12	3.8	1.8	2.4	1.5
8	3.3	8	8.5	9	12	9.5	811	11	3.8	2.0	2.2	1.6
9	3.9	7.5	8.5	8.5	11	9	170	9.5	3.8	2.5	2.1	1.7
10	4.1	7.5	9	8.5	11	9	54	9	5.5	2.0	1.8	1.7
11	4.3	7	9.5	8	11	7.5	40	9	7.5	1.8	1.7	1.7
12	4.4	7	9.5	8	27	7.5	39	8.5	6.5	1.6	1.8	1.6
13	4.8	8	9.5	8.5	38	8.5	28	9	5	1.5	1.7	1.7
14	4.6	8	9	8	27	8.5	40	9.5	3.6	1.6	1.2	1.6
15	6.5	7.5	9	7.5	23	8.5	22	9	3.6	2.1	1.2	1.8
16	5.5	7.5	9.5	6	16	8.5	16	8.5	4.8	2.8	1.5	1.6
17	5.5	7.5	9	10	14	7.5	14	7.5	5	2.2	1.5	1.6
18	5	7.5	10	9.5	13	7.5	14	6.5	3.6	1.7	1.6	1.5
19	5	7.5	12	6	13	6.5	15	4.1	4.1	1.3	1.7	1.6
20	4.8	6.5	11	8.5	14	6.5	14	2.8	5.5	1.8	1.7	1.7
21	4.6	6.5	10	6.5	13	6.5	14	3.5	5.5	3.1	1.7	1.7
22	5	8	9	8.5	13	8	14	3.9	4.6	2.4	2.4	2.1
23	6	7	8	7.5	13	8	13	5	4.6	1.7	3.1	2.1
24	5.5	14	8.5	7.5	12	8	12	6.5	4.6	1.2	2.3	2.5
25	5	12	8.5	6.5	11	8	11	6	5	1.5	1.7	2.8
26	4.8	10	10	6.5	10	8	10	5.5	4.6	1.7	1.7	3.6
27	4.8	9.5	11	6.5	9	7.5	12	5	4.6	1.7	1.7	4.1
28	5	9.5	11	6.5	8.5	7.5	12	5.5	4.1	1.7	2.2	5.5
29	6	9	11	6.5	-----	7.5	13	5.5	4.3	1.7	1.8	6.5
30	5.5	9	10	7	-----	7.5	12	6	4.6	2.0	2.2	4.3
31	5	-----	11	16	-----	7.5	-----	5.5	-----	1.8	1.8	-----

Monthly discharge of Temecula Creek at Railroad Canyon, near Temecula, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	14	2.0	4.95	304
November	14	5	7.98	475
December	13	8	9.73	598
January	16	6	8.24	507
February	38	8.5	14.9	828
March	9.5	6.5	8.05	495
April	811	7.5	87.9	5,230
May	12	2.8	7.86	483
June	7.5	3.6	4.49	267
July	4.4	1.2	2.25	139
August	3.1	1.2	1.90	117
September	6.5	1.5	2.31	137
The year	811	1.2	13.2	9,580

SANTA MARGARITA RIVER NEAR FALL BROOK, CALIF.

LOCATION.—In sec. 12, T. 9 S., R. 4 W., 2 miles north of Fall Brook, San Diego County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 25, 1924, to September 30, 1926.

GAGE.—Water-stage recorder in culvert pipe well and wooden shelter on left bank just above artificial control.

DISCHARGE MEASUREMENTS.—Made from cable 200 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed of stream is sand and gravel; shifting. Control is a boulder roll dam with a 7-foot pine flume at one end. Dam will be overtopped and may settle when flow exceeds 150 second-feet.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.65 feet at 9 p. m. April 7 (discharge, 2,900 second-feet); minimum discharge, 0.1 second-foot at 2 a. m. September 4.

1924-1926: Maximum stage occurred in 1926; minimum discharge, 0.1 second-foot August 30, 1925, and September 4, 1926.

DIVERSIONS.—Considerable water diverted from streams in Temecula Valley and by pumping above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curves well defined for low and medium stages and fairly well defined for high stages. Water-stage recorder record good except May 15-16, June 12-14, 20-21, when clock was not running. Daily discharge ascertained by shifting-control method, except December 2, February 3, 12, April 5 and 14, for which hourly discharge was averaged. Discharge estimated for periods of no gage-height record. Records good. During the year 172 discharge measurements were made at the station.

Daily discharge, in second-feet, of Santa Margarita River near Fall Brook, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.3	4.8	8	10	24	10	8	14	5	3.8	0.6	1.1
2.....	1.1	4.8	22	9.5	16	9	8	13	4.5	2.5	.6	.8
3.....	.9	6.5	14	10	31	9.5	8.5	11	3.8	2.9	.6	.5
4.....	4.3	7	11	9.5	16	9.5	9	12	6	3.3	.6	.4
5.....	15	7	9	9	14	9	292	12	4.2	3.6	.8	.6
6.....	11	6.5	8.5	8.5	13	9	865	12	4.7	2.4	1.0	.8
7.....	6.5	7.5	8.5	8.5	12	8	691	11	6	1.4	.8	.8
8.....	3.5	7	8	8.5	12	9.5	1,340	11	5	1.6	1.0	.6
9.....	3.9	8	8.5	9.5	12	9.5	253	11	7	1.6	.8	.6
10.....	3.7	8	9.5	9	12	8.5	99	11	7	2.0	.6	.6
11.....	3.9	8	9	9	11	8.5	54	11	7	1.4	.6	.5
12.....	4.1	7	9.5	8	57	8	56	10	6	2.0	.5	.5
13.....	4.6	7	9	8	40	8.5	48	9	5	1.4	.2	.4
14.....	5	8	8.5	8	33	9	92	9	4.0	2.2	.4	.6
15.....	5	7.5	8	8	26	9.5	36	8.5	3.6	2.2	.4	.5
16.....	6	7.5	8.5	7.5	24	9	27	8	3.8	2.4	.4	1.0
17.....	5	7.5	8.5	7.5	17	8.5	19	7	4.7	2.9	.8	.8
18.....	5	7.5	9.5	11	15	7.5	21	6.5	4.9	1.1	.6	1.0
19.....	4.8	7	12	9	14	8	20	7	3.6	.6	1.0	.8
20.....	4.8	7	11	7.5	14	7.5	18	6.5	4.0	.5	1.0	.8
21.....	5	6	10	8	15	6.5	18	5	4.5	.8	1.0	.8
22.....	4.8	6	9.5	8	15	7	17	5	5	13	.8	.8
23.....	4.8	7.5	9	8	12	7.5	15	4.8	4.2	.6	1.6	1.0
24.....	4.8	9.5	8	8	11	7.5	14	6	3.6	.6	2.0	.8
25.....	4.3	14	9	8	11	8	14	6.5	3.3	.5	1.1	1.0
26.....	4.3	9.5	8.5	7	11	8	14	6	3.1	.6	.5	1.1
27.....	4.6	8.5	10	7	11	8	14	6	3.6	.8	.4	1.5
28.....	4.3	8.5	11	6.5	10	7.5	14	4.1	2.5	.8	.6	2.0
29.....	4.3	8.5	11	6.5	-----	7.5	17	5	2.4	.8	.4	2.5
30.....	5	8.5	11	6	-----	8	15	6	3.3	.6	1.1	3.8
31.....	4.6	-----	11	11	-----	8.5	-----	7	-----	.8	1.3	-----

Monthly discharge of Santa Margarita River near Fall Brook, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	15	0.9	4.85	298
November.....	14	4.8	7.59	452
December.....	22	8	9.89	608
January.....	11	6	8.34	513
February.....	57	10	18.2	1,010
March.....	10	6.5	8.37	515
April.....	1,340	8	137	8,150
May.....	14	4.1	8.45	520
June.....	7	2.4	4.51	268
July.....	3.8	.5	1.61	99.0
August.....	2.0	.2	.78	48.0
September.....	3.8	.4	.98	58.3
The year.....	1,340	.2	17.3	12,500

SANTA MARGARITA RIVER NEAR DELUZ STATION, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 32, T. 9 S., R. 4 W., on Santa Margarita y Las Flores land grant, about 1 mile southwest of Deluz Station, San Diego County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 15, 1924, to September 30, 1926, not complete. Station discontinued.

GAGE.—Water-stage recorder on left bank installed June 4, 1925.

DISCHARGE MEASUREMENTS.—Made by wading.

CHANNEL AND CONTROL.—Channel is deep sand; stream meanders through a wide flat valley. Control was a boulder roll dam 3 feet high with a pine flume in the middle until April 5, 1926, when it was washed out.

EXTREMES OF DISCHARGE.—Maximum discharge during year, from water-stage recorder, 3.10 feet at 10.30 p. m. April 7 (discharge, 3,130 second-feet); minimum stage, from water-stage recorder, 0.14 foot at 4 p. m. October 1 (discharge, 0.5 second-foot).

DIVERSIONS.—Considerable water is diverted from streams in Temecula Valley and by pumping above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation not permanent. Three well-defined curves used for low and medium stages; one fairly well-defined curve for high stages. Water-stage recorder record good until April 13. Daily discharge ascertained by applying mean daily gage height to rating table, except December 2, January 31, February 3, 12, April 5 and 7-9, for which hourly discharge was averaged. Daily discharge not computed April 14 to September 30, as water was not reaching water-stage recorder. Records good. During the year 167 discharge measurements were made at the station.

COOPERATION.—Gage-height record and discharge measurements furnished by Vail & O'Neil.

Daily discharge, in second-feet, of Santa Margarita River near Deluz Station, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.6	3.8	9	11	29	10	8	17		2.5		
2.....	.6	4.2	28	10	24	10	9			2.6	1.2	
3.....	.6	5	16	10	36	9.5	9					
4.....	2.0	6	13	9.5	20	10	9.5	13				
5.....	3.4	6.5	11	9.5	17	10	479			3.0		
6.....	10	6	9.5	9	16	10	918	13				
7.....	6.5	6	9	8.5	15	9	951	11	5.3	1.3	1.2	.8
8.....	3.6	6	8.5	8.5	14	9	1,780					
9.....	2.7	6.5	8.5	9	13	10	488		6.3	1.7	1.1	
10.....	2.9	7	9	9	13	9.5	186		7.4			
11.....	3.2	7	9	9	13	9	105	10	7.5			
12.....	3.6	7	9	8.5	30	9	98			1.2		
13.....	4.1	6.5	9.5	8	72	7.5	98	8.6				
14.....	3.6	6.5	9.5	8.5	48	8.5	120				1.1	1.0
15.....	4.0	6.5	9	9	33	9			4.7	1.2		
16.....	4.2	6.5	9	8.5	28	9	38					
17.....	4.3	6.5	9	7.5	22	8.5			4.2			1.0
18.....	4.1	6.5	10	9	18	7.5	33	9.0				
19.....	3.8	6.5	12	11	17	9				1.2		
20.....	3.6	6.5	12	8	16	8.5		6.3			1.0	
21.....	3.5	6	11	8	16	7		4.5	3.3			
22.....	3.1	5.5	11	8	15	7	21			1.1		1.0
23.....	3.1	6.5	10	8.5	14	7.5			4.9			
24.....	3.5	12	9.5	8.5	14	7.5	19	4.6	3.2		.8	
25.....	3.6	13	9	8.5	13	7.5		7.5	3.6			
26.....	3.5	14	9	8	13	8	15		2.7	.9		.9
27.....	3.8	10	9	7.5	12	8		7.3				
28.....	3.8	9.5	11	7	10	7.5	16		2.1			
29.....	3.8	9	11	7		7.5	19					1.0
30.....	4.1	9	11	7		7.5	17					1.2
31.....	4.2		12	15		8		5.2				

NOTE.—Figures given for April 14 to September 30 are results of discharge measurements for the respective days and may not be mean daily discharge.

Monthly discharge of Santa Margarita River near Deluz Station, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	10	0.6	3.59	221
November.....	14	3.8	7.25	431
December.....	28	8.5	10.7	658
January.....	15	7	8.84	544
February.....	72	10	21.5	1,190
March.....	10	7	8.56	526
The period.....				3,570

SANTA MARGARITA RIVER AT YSIDORA, CALIF.

LOCATION.—On Santa Margarita y Las Flores land grant, about 3 miles above mouth of river, 4 miles north of Oceanside, at Ysidora, San Diego County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—February 19, 1923, to September 30, 1926.

GAGE.—Water-stage recorder in wooden well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 25 feet below gage or by wading.

CHANNEL AND CONTROL.—Shifting sand.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 13.82 feet at 2 a. m. April 8 (discharge, 4,000 second-feet); no flow October 1 to November 30 and June 28 to September 30.

1923-1926: Maximum stage occurred in 1926. No flow during part of each year.

DIVERSIONS.—Pauba and Santa Margarita ranches divert considerable water for irrigation.

REGULATION.—See "Diversions."

ACCURACY.—Stage-discharge relation not permanent. Standard rating curves fairly well defined. Water-stage recorder gave excellent record. Daily discharge ascertained by applying mean daily gage height to rating table, using shifting-control method, except April 5, 7, and 9, for which hourly discharge was averaged. During the year 97 discharge measurements were made at the station.

COOPERATION.—Gage-height record and most of discharge measurements furnished by Vail & O'Neil.

Daily discharge, in second-feet, of Santa Margarita River at Ysidora, Calif., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	0.1	0.3	2.6	7	0.6	7	0.
2	1.2	.2	1.8	6	.8	6.5	.5
3	.8	.1	32	6	1.2	6	.5
4	.4	.1	20	7	1.4	5.5	.5
5	.3	.0	15	7	245.0	6	.5
6	.3	.0	10	7	1,130	5.5	.5
7	.2	.1	7	5	826	3.6	.6
8	.2	.2	6.5	6	2,650	3.6	.8
9	.2	.2	5.5	7.5	910	3.1	.8
10	.2	.2	6	10	311	2.8	.8
11	.2	.2	6	5	161	2.6	.8
12	.2	.2	17	4.5	144	2.2	.8
13	.2	.1	75	4.0	118	1.9	.8
14	.2	.0	68	3.0	134	2.1	.5
15	.2	.1	53	3.0	88	1.7	.4
16	.2	.1	49	3.0	61	1.4	.3
17	.2	.1	34	1.8	49	1.3	.3
18	.3	.1	25	1.3	46	1.2	.2
19	.5	.1	21	1.3	42	1.2	.2
20	.5	.1	20	1.3	37	1.2	.2
21	.4	.0	18	1.4	34	1.1	.2
22	.4	.0	16	1.1	31	1.0	.2
23	.4	.1	15	.7	29	1.0	.1
24	.3	.0	13	.6	24	1.0	.1
25	.2	.1	12	.5	24	1.0	.1
26	.2	.2	9	.6	23	.8	.1
27	.2	.1	9	.6	15	.6	.1
28	.2	.1	8	.6	9.5	.5	-----
29	.2	.2	-----	.7	9.5	.5	-----
30	.1	.3	-----	.7	7.5	.5	-----
31	.2	1.4	-----	.7	-----	.4	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Santa Margarita River at Ysidora, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
December.....	1.2	0.1	0.30	18.4
January.....	1.4	0	.16	9.8
February.....	75	1.8	20.5	1,140
March.....	10	.5	3.38	208
April.....	2,650	.6	239	14,200
May.....	7	.4	2.41	148
June.....	.8	0	.38	22.6
The year.....	2,650	0	21.8	15,700

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

SANTA ANA RIVER BASIN

SANTA ANA RIVER NEAR MENTONE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 4, T. 1 S., R. 2 W., near mouth of canyon, one-fourth mile above Southern California Edison Co.'s Mentone power plant, half a mile above mouth of Deep Creek, and $3\frac{1}{2}$ miles northeast of Mentone, San Bernardino County.

DRAINAGE AREA.—189 square miles (measured on topographic map).

RECORDS AVAILABLE.—July 1, 1896, to September 30, 1926.

GAGE.—Water-stage recorder, in concrete well and shelter, installed September 7, 1917, on left bank at rock ledge one-fourth mile above power house.

DISCHARGE MEASUREMENTS.—Made from cable just above gage or by wading.

CHANNEL AND CONTROL.—Gravel and boulders; shifting.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.03 feet at 6 a. m. April 6 (discharge, 1,850 second-feet); minimum stage, from water-stage recorder, 0.54 foot December 26–28 (discharge, about 0.6 second-foot).

1896–1926: Maximum discharge (stage not known, gage washed out), 29,100 second-feet January 27, 1916; minimum discharge, 0.1 second-foot October 12, 1919.

DIVERSIONS.—Water is diverted at Southern California Edison Co.'s plant No. 2, $2\frac{1}{2}$ miles above gage, for use at Mentone power house. The Green-spot pipe line diverts water for irrigation from the forebay at the Mentone power house. From the tailrace the water is carried across Santa Ana River and used for irrigation.

REGULATION.—Water is stored on Bear Creek at Bear Valley Reservoir. Southern California Edison Co.'s power plants Nos. 1 and 2 are $5\frac{1}{4}$ and $2\frac{1}{4}$ miles, respectively, above the Mentone plant, at the mouth of the canyon. Capacity of Bear Valley Reservoir is 65,100 acre-feet.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curve well defined. Water-stage recorder record satisfactory, except November 29 to December 4, December 20–21, 25, January 1–2, 6–16, February 7–11, March 28, March 30 to April 3, May 1–3, August 3–6, and 19–20. Daily discharge ascertained by shifting-control method. Discharge estimated during periods of no gage-height record; hourly discharge averaged October 4. Records good.

Discharge measurements of Santa Ana River near Mentone, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 1.	0.55	0.55	Feb. 15.	1.01	12	May 26.	0.70	3.4
Oct. 13. ....	.67	1.0	Mar. 1. ....	.71	2.0	June 21. ....	.68	1.6
Oct. 28. ....	.58	.65	Mar. 15. ....	.81	3.9	July 5. ....	.65	1.7
Nov. 10. ....	.63	.8	Mar. 29.	1.27	36	July 6. ....	.66	1.6
Nov. 24. ....	.66	1.1	Apr. 8.	3.15	485	July 19. ....	.66	1.3
Dec. 8. ....	.64	.85	Apr. 13.	1.92	165	Aug. 2. ....	.64	1.1
Dec. 22. ....	.59	.8	Apr. 19.	1.72	135	Aug. 21. ....	.67	1.5
Jan. 5. ....	.58	.75	Apr. 27.	1.49	84	Sept. 4. ....	.66	1.3
Jan. 19. ....	.58	.7	May 4.	1.51	97	Sept. 15. ....	.65	1.3
Feb. 2. ....	.60	.95	May 11. ....	.89	15			

Daily discharge, in second-feet, of Santa Ana River near Mentone, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	0.7	0.7	0.9	0.7	2.2	2.7	36	96	2.2	1.8	1.2	1.3
2. ....	.7	.7	.9	.8	1.2	2.2	36	96	2.0	1.8	1.2	1.3
3. ....	.7	.8	.9	.8	4.0	1.9	36	95	1.9	1.9	1.2	1.3
4.	7.5	1.4	.9	.8	1.8	1.8	36	94	1.9	1.9	1.2	1.2
5.	23	.9	.9	.8	1.7	1.8	646	97	1.9	1.8	1.3	1.1
6.	5.5	.8	.9	.8	1.5	2.0	1,130	92	2.0	1.6	1.3	1.2
7.	1.7	.8	.9	.8	1.5	5.5	472	82	2.0	1.6	1.3	1.2
8.	1.4	.8	.8	.8	1.5	6	476	74	1.9	1.7	1.3	1.2
9.	1.1	.8	.8	.8	1.5	4.6	391	70	1.8	1.8	1.3	1.3
10.	1.0	.8	.7	.8	1.5	4.9	224	24	1.8	1.8	1.2	1.4
11.	1.1	.8	.7	.8	1.5	4.9	218	15	1.7	1.7	1.3	1.4
12.	1.0	.8	.7	.8	26	4.9	200	14	1.7	1.6	1.2	1.3
13. ....	.9	.7	.7	.7	76	4.2	165	13	1.8	1.4	1.2	1.3
14. ....	.9	.7	.7	.7	30	4.2	151	12	1.7	1.4	1.2	1.3
15. ....	.9	.7	.8	.7	14	4.0	148	12	1.8	1.4	1.3	1.3
16. ....	.8	.7	.8	.7	12	4.0	141	12	1.8	1.3	1.4	1.3
17. ....	.8	.7	.8	.7	9.5	4.2	108	10	1.7	1.3	1.4	1.3
18. ....	.8	.7	.9	.8	7	4.2	134	10	1.7	1.3	1.4	1.3
19. ....	.7	.7	1.2	.7	5.5	4.6	139	9	1.6	1.3	1.5	1.3
20. ....	.7	.7	1.1	.8	4.0	5.5	120	8.5	1.6	1.3	1.5	1.3
21. ....	.7	.7	.9	.8	3.3	5.5	112	8	1.6	1.3	1.6	1.3
22. ....	.7	.7	.8	.8	2.4	5.5	108	8	1.4	1.3	1.6	1.2
23. ....	.7	.7	.8	.8	3.3	21	102	7	1.4	1.3	1.4	1.2
24. ....	.7	.9	.8	.8	3.3	27	90	6.5	1.6	1.3	1.4	1.2
25. ....	.7	.9	.7	.8	3.5	28	95	6	1.6	1.2	1.4	1.2
26. ....	.7	.9	.6	.8	3.5	31	90	4.0	1.6	1.2	1.3	1.2
27. ....	.7	.9	.6	.8	3.5	30	84	3.3	1.7	1.2	1.3	1.2
28. ....	.7	.9	.6	.8	2.9	33	90	2.9	1.7	1.3	1.2	1.2
29. ....	.7	.9	.7	.9	---	36	95	2.9	1.7	1.2	1.2	1.2
30. ....	.7	.9	.7	.9	---	36	97	2.9	1.8	1.2	1.2	1.2
31. ....	.7	---	.7	2.0	---	36	---	2.7	---	1.2	1.2	---

*Monthly discharge of Santa Ana River near Mentone, Calif., for the year ending
September 30, 1926*

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	23	0.7	1.92	118
November.....	1.4	.7	.80	47.6
December.....	1.2	.6	.80	49.2
January.....	2.0	.7	.82	50.4
February.....	76	1.2	8.20	455
March.....	36	1.8	11.8	726
April.....	1,130	36	199	11,800
May.....	97	2.7	31.9	1,960
June.....	2.2	1.4	1.75	104
July.....	1.9	1.2	1.46	89.8
August.....	1.6	1.2	1.31	80.6
September.....	1.4	1.1	1.26	75.0
The year.....	1,130	.6	21.6	15,600

*Combined daily discharge, in second-feet, of Santa Ana River and canals near
Mentone, Calif., for the year ending September 30, 1926*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	76	48	26	23	41	38	36	96	69	75	75	75
2.....	71	48	30	26	29	37	36	96	66	72	77	72
3.....	71	56	42	24	67	37	36	95	66	77	77	74
4.....	74	51	34	26	43	37	36	94	66	75	77	72
5.....	87	46	29	24	35	40	646	97	66	73	77	72
6.....	52	46	29	24	34	37	1,130	92	66	70	80	72
7.....	42	43	26	24	32	36	472	82	66	67	77	72
8.....	33	41	26	26	30	36	476	74	66	70	80	72
9.....	27	41	26	24	30	35	391	104	64	71	74	74
10.....	30	41	26	24	30	40	224	101	58	71	74	74
11.....	43	39	23	29	30	38	218	92	58	68	75	74
12.....	35	39	26	26	103	32	200	86	58	71	75	74
13.....	35	36	21	26	158	34	165	87	66	69	70	74
14.....	32	31	23	23	112	31	151	86	66	69	75	75
15.....	27	31	24	23	75	35	148	75	66	72	78	77
16.....	30	31	26	23	78	35	141	83	66	74	78	77
17.....	27	31	26	26	70	35	108	78	66	77	78	77
18.....	27	31	26	26	62	35	134	78	66	77	75	79
19.....	24	31	26	26	56	36	139	78	64	74	74	76
20.....	24	33	24	21	51	36	120	78	66	73	74	74
21.....	24	31	26	21	48	26	112	77	66	73	75	68
22.....	24	34	26	21	45	28	108	77	73	71	75	71
23.....	24	31	26	24	44	22	102	74	73	71	75	71
24.....	21	44	29	24	41	27	90	76	71	73	75	68
25.....	24	37	26	26	42	28	95	75	71	73	78	74
26.....	24	32	26	21	42	31	90	73	71	74	74	74
27.....	38	29	26	21	38	30	84	70	71	77	77	73
28.....	41	24	26	21	20	33	90	72	68	77	80	73
29.....	45	29	23	26		36	95	70	68	71	77	73
30.....	45	24	26	21		36	97	64	69	69	77	73
31.....	48		29	25		36		63		72	77	

Combined monthly discharge of Santa Ana River and canals near Mentone, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	87	21	39.5	2,420
November.....	56	24	37.0	2,200
December.....	42	21	26.7	1,640
January.....	29	21	24.0	1,480
February.....	158	20	53.1	2,950
March.....	40	22	34.0	2,090
April.....	1,130	36	199	11,800
May.....	104	63	82.0	5,040
June.....	73	58	66.5	3,960
July.....	77	67	72.5	4,460
August.....	80	70	76.1	4,680
September.....	79	68	73.5	4,370
The year.....	1,130	20	65.1	47,100

SANTA ANA RIVER NEAR PRADO, CALIF.

LOCATION.—At Riverside-Orange County line in lower Santa Ana Canyon, 3 miles by river below Rincon Bridge, and 3 miles southwest of Prado, Riverside County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 31, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 500 feet above gage. At low stages measurements are made from temporary footbridge at cable or by wading.

CHANNEL AND CONTROL.—Bed is shifting sand. Banks are low and subject to overflow at high stages; extreme flood channel about 800 feet wide at extreme flood stages. Right bank covered with trees and brush; left bank has trees and brush along bank of low-water channel.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.40 feet at 4 a. m. April 6 (discharge, 5,850 second-feet); minimum discharge, 41 second-feet at 1 a. m. August 15 at gage height —0.08 foot.

1919-1926: Maximum discharge, 7,560 second-feet at 3 a. m. February 23, 1920, at gage height of 5.45 feet; minimum discharge, 41 second-feet at 8 p. m. July 15, 1919; at gage height of 1.21 feet.

DIVERSIONS.—Numerous water companies divert water from main river and its tributaries above and below station. Large quantities of water are taken out of underground storage by flowing wells and pumping plants.

REGULATION.—Storage has been developed at Bear Valley Reservoir in upper Santa Ana Basin and Hemet Reservoir in San Jacinto Basin. Lake Elsinore receives the run-off from San Jacinto Basin and discharges into Temescal Creek only during seasons of very high run-off. (See Lake Elsinore at Elsinore, pp. 65.)

ACCURACY.—Stage-discharge relation continuously changing. Standard rating curves fairly well defined. Water-stage recorder record excellent. Daily discharge ascertained by shifting-control method. Records good.

Discharge measurements of Santa Ana River near Prado, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 8.....	1.10	113	Feb. 17.....	1.28	333	May 21.....	0.28	91
Oct. 19.....	1.20	109	Feb. 26.....	1.03	140	June 3.....	.10	76
Nov. 2.....	1.16	98	Mar. 12.....	.98	154	June 19.....	.15	70
Nov. 12.....	1.16	86	Mar. 26.....	.79	101	July 2.....	.04	63
Nov. 25.....	1.26	110	Apr. 7.....	2.18	1,150	July 12.....	.11	71
Dec. 7.....	1.36	142	Apr. 10.....	1.44	660	July 23.....	-.04	44
Dec. 19.....	1.38	171	Apr. 15.....	.66	346	July 31.....	.00	56
Jan. 2.....	1.14	127	Apr. 20.....	.86	269	Aug. 13.....	-.06	42
Jan. 13.....	1.02	128	Apr. 28.....	.74	250	Aug. 25.....	.02	58
Jan. 24.....	.98	123	May 8.....	.52	146	Sept. 8.....	.08	52
Feb. 3.....	1.13	163	May 15.....	.28	107	Sept. 17.....	.11	62

Daily discharge, in second-feet, of Santa Ana River near Prado, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	68	98	114	130	206	144	102	210	84	72	54	56
2.....	66	98	265	133	181	148	102	224	84	63	58	55
3.....	69	93	232	127	170	164	102	220	80	62	51	56
4.....	84	93	138	127	195	151	107	196	84	66	51	51
5.....	148	91	119	122	164	144	648	182	89	68	53	50
6.....	151	87	124	116	160	151	5,050	224	84	64	50	53
7.....	111	91	141	114	160	170	1,340	178	81	69	53	47
8.....	109	93	144	107	164	188	1,880	146	80	69	50	51
9.....	114	98	151	102	160	164	1,670	165	83	70	48	56
10.....	116	89	151	107	164	160	755	152	83	72	49	51
11.....	122	86	151	107	170	167	630	139	78	70	48	50
12.....	151	87	148	104	265	154	769	116	71	68	44	54
13.....	144	87	151	100	578	151	384	108	74	68	44	55
14.....	138	80	135	102	613	144	321	103	74	59	46	55
15.....	127	80	138	111	241	138	341	108	70	51	45	63
16.....	122	80	135	111	280	133	464	114	69	51	53	66
17.....	116	86	144	114	328	133	464	105	65	50	51	63
18.....	114	86	157	116	322	127	508	98	65	51	54	63
19.....	111	84	177	122	280	122	508	87	68	48	55	66
20.....	109	82	164	124	260	188	273	89	69	48	54	62
21.....	96	86	157	124	260	160	268	87	70	47	56	62
22.....	93	84	160	116	275	141	268	86	69	44	59	59
23.....	100	89	160	122	260	119	255	84	70	45	58	62
24.....	102	114	164	124	199	116	239	87	74	47	60	59
25.....	91	114	154	122	174	114	273	86	70	51	54	64
26.....	98	104	157	116	151	102	259	79	69	50	54	66
27.....	102	111	160	109	141	104	235	79	70	49	58	64
28.....	102	114	170	109	138	111	243	80	66	51	56	68
29.....	98	111	174	111	-----	107	250	80	62	58	55	64
30.....	96	111	144	114	-----	114	228	79	68	58	56	64
31.....	98	-----	130	148	-----	107	-----	79	-----	54	59	-----

Monthly discharge of Santa Ana River near Prado, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	151	66	109	6,700
November.....	114	80	98.6	5,570
December.....	265	114	155	9,530
January.....	148	100	116	7,130
February.....	613	138	237	13,200
March.....	188	102	140	8,610
April.....	5,050	102	631	37,500
May.....	224	79	125	7,090
June.....	89	62	74.1	4,410
July.....	72	44	57.8	3,550
August.....	60	44	52.8	3,250
September.....	68	47	58.5	3,480
The year.....	5,050	44	151	111,000

SANTA ANA RIVER AT HEADING OF ANAHEIM UNION AND SANTA ANA CANALS, NEAR PRADO, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 35, T. 3 S., R. 8 W., at the division box of Anaheim Union and Santa Ana canals, three-fourths of a mile below gaging station near Prado, $3\frac{3}{4}$ miles southwest of Prado, Riverside County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—July 9 to November 8, 1924, and July 16 to November 26, 1926.

GAGE.—Water-stage recorder in wooden well and shelter on left side of division box 40 feet above the weirs.

DISCHARGE MEASUREMENTS.—Made by wading just below gage.

CHANNEL AND CONTROL.—Division box is built in bed of Santa Ana River. It is 80 feet long, 20 feet wide, and 2.8 feet high and is built of redwood planks.

Weirs at lower end are each 10 feet long, 2 inches wide, beveled on lower side, and contractions suppressed. Shifting sand is always present in the division box.

DIVERSIONS.—Anaheim Union and Santa Ana Canals divert water at lower end of division box. For other diversions see Santa Ana River near Prado, page 29.

REGULATION.—See Santa Ana River near Prado, page 29.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Santa Ana River at heading of Anaheim Union and Santa Ana Canals, near Prado, Calif., during the period July 16 to November 26, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
July 2.....	0.86	60	Aug. 25.....	0.77	53	Oct. 21.....	0.96	72
July 12.....	.92	71	Sept. 8.....	.77	50	Nov. 4.....	.98	78
July 23.....	.75	49	Sept. 17.....	.86	59	Nov. 12.....	1.08	88
July 31.....	.75	48	Oct. 6.....	.84	64	Nov. 26.....	1.36	122
Aug. 13.....	.67	45	Oct. 14.....	.97	76			

Daily discharge, in second-feet, of Santa Ana River at heading of Anaheim Union and Santa Ana Canals, near Prado, Calif., for the period July 16 to November 26, 1926

Day	July	Aug.	Sept.	Oct.	Nov.	Day	July	Aug.	Sept.	Oct.	Nov.
1.....		51	54	60	72	16.....	55	55	62	80	99
2.....		51	54	67	71	17.....	53	53	60	77	98
3.....		49	53	68	71	18.....	52	53	64	78	97
4.....		49	54	66	77	19.....	53	52	63	80	96
5.....		50	57	59	82	20.....	54	53	62	79	95
6.....			50	57	59	21.....	54	55	62	79	95
7.....			51	56	58	22.....	53	56	60	79	96
8.....			53	57	60	23.....	52	54	59	77	96
9.....			52	60	70	24.....	51	52	60	80	112
10.....			50	57	71	25.....	54	48	60	82	157
11.....						26.....	54	49	62	80	128
12.....			49	52	73	27.....	54	53	62	80	
13.....			47	55	72	28.....	55	50	62	77	
14.....			46	60	74	29.....	55	55	62	78	
15.....			48	58	77	30.....	53	55	62	78	
			50	60	78	31.....	50	54		70	

Monthly discharge of Santa Ana River at heading of Anaheim Union and Santa Ana Canals, near Prado, Calif., for the period July 16 to November 26, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
July 16-31.....	55	50	53.2	1,690
August.....	56	46	51.4	3,160
September.....	64	52	58.9	3,500
October.....	82	58	73.1	4,490
November 1-26.....	157	71	94.3	4,860
The period.....				17,700

LOWER SANTA ANA RIVER

For comparative purposes, discharge measurements were made on the same day during the irrigating season at different points in lower Santa Ana River Basin. Measurements were also made at some of these points during the irrigating season, 1916 to 1925.

Results of the measurements for the 1926 season are given in the following table:

Discharge measurements, in second-feet, of lower Santa Ana River for the year ending September 30, 1926

Date	Rubidoux Bridge near Riverside *		Los Angeles & Salt Lake Railroad bridge near Arlington (Riverside Narrows)		Hamner Avenue Bridge near Corona	
	Time	Discharge	Time	Discharge	Time	Discharge
Oct. 8.....			2.45 p. m.	83	1.15 p. m.	68
July 2.....	9.20 a. m.	11	10.00 a. m.	49	11.15 a. m.	38
July 12.....	3.15 p. m.	10	2.30 p. m.	46		
July 23.....	9.35 a. m.	9.6	10.15 a. m.	37	11.55 a. m.	33
July 31.....	9.50 a. m.	9.5	10.35 a. m.	31		
Aug. 13.....	10.30 a. m.	8.9	11.30 a. m.	36	1.50 p. m.	27
Aug. 25.....	6.20 a. m.	9.5	7.30 a. m.	38		
Sept. 8.....	9.25 a. m.	16	10.20 a. m.	46	5.15 p. m.	38
Sept. 17.....	1.45 p. m.	6.8	1.05 p. m.	36		

Date	Atchison, Topeka & Santa Fe Railway bridge near Prado		Riverside - Orange County line (Prado gaging station)		Just above intake of Anaheim Union and Santa Ana Canals	
	Time	Discharge	Time	Discharge	Time	Discharge
Oct. 8.....			12.00 m.	113	11.10 a. m.	96
July 2.....	12.15 p. m.	68	1.00 p. m.	63	2.00 p. m.	60
July 12.....	1.20 p. m.	71	12.30 p. m.	71	11.45 a. m.	71
July 23.....	12.40 p. m.	52	1.00 p. m.	44	2.00 p. m.	49
July 31.....	1.20 p. m.	55	1.50 p. m.	56	2.40 p. m.	48
Aug. 13.....	3.10 p. m.	44	3.50 p. m.	42	4.50 p. m.	45
Aug. 25.....	8.30 a. m.	62	9.00 a. m.	58	9.45 a. m.	53
Sept. 8.....	4.10 p. m.	55	3.35 p. m.	52	3.05 p. m.	50
Sept. 17.....	11.40 a. m.	75	10.55 a. m.	62	10.20 a. m.	59

* Includes Spring Brook.

NOTE.—See also daily-discharge tables for Warm Creek near Colton and Meeks & Daley Canal near Colton, and list of miscellaneous measurements for Spring Brook at Riverside.

SANTA ANA RIVER AT SANTA ANA, CALIF.

LOCATION.—At Fifth Street Bridge, Santa Ana, Orange County, 2 miles below junction with Santiago Creek, and about 10 miles above mouth.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 8, 1923, to September 30, 1926.

GAGE.—Water-stage recorder at the east pier of bridge. Staff gage on pier.

DISCHARGE MEASUREMENTS.—Made from cable under bridge or by wading.

CHANNEL AND CONTROL.—Shifting sand.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks, 4.20 feet April 6 (discharge, about 5,300 second-feet); stream dry several months each year.

1923-1926: Maximum stage recorded, 4.20 feet April 6, 1926 (discharge 5,300 second-feet); stream dry several months each year.

DIVERSIONS.—Ordinary low-water flow of river is diverted above station for irrigation, and flow past station is either return water or waste water.

REGULATION.—See paragraph above.

ACCURACY.—Stage-discharge relation not permanent. Rating curves not developed. Water-stage recorder record fair except April 5-7, when drum became loose. No record April 15 to May 11 as intake was above water surface. Daily discharge ascertained by applying mean daily gage height to rating table February 14-15 and 21-22 and estimated from flow of Santa Ana River at Prado and Santiago Creek April 5-15 and from observer's notes for all other days. Records fair.

Discharge measurements of Santa Ana River at Santa Ana, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Apr. 7.....	0.20	772	Apr. 15.....	-0.20	41	May 8.....	-0.20	12
Apr. 10.....	.08	388	Apr. 28.....	-.15	14			

Daily discharge, in second-feet, of Santa Ana River at Santa Ana, Calif., for the year ending September 30, 1926

Day	Feb.	Mar.	Apr.	May	Day	Feb.	Mar.	Apr.	May
1.....		0.3		4	16.....	0.2		34	
2.....		.2		2	17.....	.1		16	
3.....		.1		1	18.....	.1		8	
4.....		.1			19.....			20	
5.....		.5	500		20.....			8	
6.....		1.0	4,000	12	21.....	25		2	
7.....		.5	1,200	12	22.....	12		1	
8.....		.2	1,700	12	23.....	2		1	
9.....		.1	1,500	12	24.....	2		1	
10.....		.1	540	1	25.....	1		1	
11.....			350	1	26.....	1		14	
12.....			500		27.....	.5		14	
13.....			200		28.....	.4		14	
14.....	68		70		29.....			10	
15.....	.3		41		30.....			7	
					31.....				

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Santa Ana River at Santa Ana, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
February.....	68	0	4.02	223
March.....	1.0	0	.10	6.1
April.....	4,000	0	358	21,300
May.....	12	0	1.84	113
The year.....	4,000	0	29.9	21,600

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

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

LOCATION.—At Southern California Edison Co.'s power plant at mouth of canyon, $2\frac{3}{4}$ miles below intake on Santa Ana River and 3 miles northeast of Mentone, San Bernardino County.

RECORDS AVAILABLE.—1896 to September 30, 1926.

DISCHARGE.—Discharge of canal computed from records showing kilowatt output of power plant. Pipe-line discharge computed from weir record at forebay.

EXTREMES OF DISCHARGE.—1896–1926: Maximum mean daily discharge of canal, 97 second-feet March 16, 1905; no flow during short periods nearly every year.

DIVERSIONS.—Water diverted from the forebay by the Greenspot pipe line must be added to give total flow of canal above forebay. From 1903 to 1911 pipe line diverted from canal above forebay, but no discharge was reported. The present pipe line was put in operation September 7, 1911.

ACCURACY.—The record for power canal is computed on the assumption that 1 second-foot develops 18.9 kilowatts. The weir record for the pipe line is considered good.

COOPERATION.—Record furnished by Southern California Edison Co. through H. W. Dennis, chief civil engineer.

The intake of this canal is at Southern California Edison Co.'s power plant No. 2, $2\frac{3}{4}$ miles above the Mentone plant at the mouth of the canyon. All the water, except that taken by the Greenspot line, is first used for development of power. After it leaves the Mentone power house it is carried across Santa Ana River in a flume and discharged into a lined canal from which it is distributed for irrigation. Before it enters the irrigation canal it has passed through three power plants.

Daily discharge, in second-feet, of Southern California Edison Co.'s canal near Mentone, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.
1.....	72	40	21	18.7	35	29	-----	64	67	67	72
2.....	67	40	25	21	24	29	-----	61	64	69	69
3.....	67	48	37	18.7	59	29	-----	61	69	69	69
4.....	64	45	29	21	37	29	-----	61	69	69	67
5.....	61	40	24	18.7	29	32	-----	61	67	69	67
6.....	43	40	24	18.7	29	29	-----	61	64	75	67
7.....	37	37	21	18.7	27	24	-----	61	61	72	67
8.....	29	37	21	21	27	24	-----	61	64	75	67
9.....	24	37	21	18.7	27	24	32	59	67	69	69
10.....	27	37	21	18.7	27	29	72	53	67	69	69

Daily discharge, in second-feet, of Southern California Edison Co.'s canal near Mentone, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.
11-----	40	35	18.7	24	27	27	72	53	64	72	69
12-----	32	35	21	21	75	21	67	53	67	72	69
13-----	32	32	16	21	80	24	67	61	64	67	69
14-----	29	27	18.7	18.7	80	21	67	61	64	72	67
15-----	24	27	18.7	18.7	59	27	56	61	67	75	69
16-----	27	27	21	18.7	64	27	64	61	69	75	69
17-----	24	27	21	21	59	27	61	61	72	75	69
18-----	24	27	21	21	53	27	61	61	72	72	72
19-----	21	27	21	21	48	27	61	59	69	69	69
20-----	21	29	18.7	16	45	27	61	61	69	69	67
21-----	21	27	21	16	40	16	61	61	69	69	64
22-----	21	27	21	16	37	18.7	61	67	67	69	67
23-----	21	24	21	18.7	35	-----	59	67	67	72	67
24-----	18.7	37	24	18.7	32	-----	61	64	69	72	64
25-----	21	32	21	21	32	-----	61	64	69	75	69
26-----	21	27	21	16	32	-----	61	64	72	69	69
27-----	32	24	21	16	29	-----	59	64	75	72	67
28-----	35	18.7	21	16	10.7	-----	61	61	75	75	67
29-----	37	24	18.7	21	-----	-----	59	61	69	72	67
30-----	37	18.7	21	16	-----	-----	53	61	67	72	67
31-----	40	-----	24	18.7	-----	-----	56	-----	64	72	-----

NOTE.—No flow Mar. 22 to May 8.

Monthly discharge of Southern California Edison Co.'s canal near Mentone, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	72	18.7	34.5	2,120
November-----	48	18.7	31.8	1,890
December-----	37	16	21.8	1,340
January-----	24	16	19.0	1,170
February-----	80	10.7	41.4	2,300
March-----	32	0	18.3	1,130
May-----	72	0	44.9	2,760
June-----	67	53	61.0	3,630
July-----	75	61	67.7	4,160
August-----	75	67	71.3	4,380
September-----	72	64	68.0	4,050
The year-----	80	0	40.0	28,900

NOTE.—No flow during April.

Daily discharge, in second-feet, of Greenspot pipe line near Mentone, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.
1-----	3	7	4	4	4	6	-----	3	6.5	7	2
2-----	3	7	4	4	4	6	-----	3	6.5	7	2
3-----	3	7	4	4	4	6	-----	3	6.5	7	4
4-----	3	5	4	4	4	6	-----	3	4	7	4
5-----	3	5	4	4	4	6	-----	3	4	7	4
6-----	3	5	4	4	4	6	-----	3	4	4	4
7-----	3	5	4	4	4	6	-----	3	4	4	4
8-----	3	3	4	4	2	6	-----	3	4	4	4
9-----	2	3	4	4	2	6	2.5	3	2	4	4
10-----	2	3	4	4	2	6	5	3	2	4	4
11-----	2	3	4	4	2	6	5	3	2	2	4
12-----	2	3	4	4	2	6	5	3	2	2	4
13-----	2	3	4	4	2	6	7	3	4	2	4
14-----	2	3	4	4	2	6	7	3	4	2	7
15-----	2	2	4	4	2	4	7	3	4	2	7

Daily discharge, in second-feet, of Greenspot pipe line near Mentone, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.
16.....	2	3	4	4	2	4	7	3	4	2	7
17.....	2	3	4	4	2	4	7	3	4	2	7
18.....	2	3	4	4	2	4	7.5	3	4	2	5.5
19.....	2	3	4	4	2	4	8	3	4	4	5.5
20.....	2	3	4	4	2	4	8	3	3	4	5.5
21.....	2	3	4	4	5	4	8	3.9	3	4	3
22.....	2	6	4	4	6	4	8	5	3	4	3
23.....	2	6	4	4	6	.8	8	5	3	2	3
24.....	2	6	4	4	6		8	5	3	2	3
25.....	2	4	4	4	6		8	5	3	2	3.8
26.....	2	4	4	4	6		8	5	1	4	3.8
27.....	5	4	4	4	6		8	5	1	4	5
28.....	5	4	4	4	6		8	5	1	4	5
29.....	7	4	4	4			8	5	1	4	5
30.....	7	4	4	4			8	6	1	4	5
31.....	7		4	4			4		7	4	

NOTE.—No flow Mar. 24 to May 8.

Monthly discharge of Greenspot pipe line near Mentone, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	7	2	2.94	181
November.....	7	3	4.17	248
December.....	4	4	4.00	246
January.....	4	4	4.00	246
February.....	6	2	3.61	200
March.....	6	0	3.77	232
May.....	8	0	5.16	317
June.....	6	3	3.66	218
July.....	7	1	3.40	209
August.....	7	2	3.77	232
September.....	7	2	4.40	282
The year.....	8	0	3.58	2,590

NOTE.—No flow during April.

MILL CREEK NEAR CRAFTONVILLE, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 13, T. 1 S., R. 2 W., at mouth of canyon on Redlands-Bear Valley highway, $5\frac{1}{4}$ miles northeast of Craftonville, San Bernardino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 21, 1919, to September 30, 1926.

GAGE.—Water-stage recorder on left bank just above Southern California Edison Co.'s concrete diversion dam. Datum lowered 1 foot November 21, 1922.

DISCHARGE MEASUREMENTS.—Made from highway bridge 75 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed consists of gravel and boulders; shifts during high stages. Control is concrete diversion dam but is not very satisfactory on account of the gravel which collects at the dam.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks, 5.2 feet about noon April 5 (discharge, about 900 second-feet). No flow over dam most of the year.

1919-1926: Maximum stage recorded, 5.2 feet, from floodmarks, about noon April 5, 1926 (discharge, about 900 second-feet); all water diverted into Mill Creek power canal No. 1 at various times.

DIVERSIONS.—Mill Creek power canal No. 1 heads at the diversion dam at the station. Power canal No. 2 heads about 3 miles farther up the canyon and canal No. 3 about 3 miles above the headworks of canal No. 2. Canals Nos. 2 and 3 lead to power plants Nos. 2 and 3 which are located in a combined power house near the intake of canal No. 1. The tailrace of the combined power house discharges into canal No. 1, and the water is used in power plant No. 1. Water is diverted from Mill Creek by canal No. 1 only when the water discharged from the combined power house is insufficient to operate power plant No. 1 to capacity. Ordinarily when canal No. 1 can not take all the flow in the creek it is not operated as the diversions by canals Nos. 2 and 3 furnish sufficient water for plant No. 1.

ACCURACY.—Stage-discharge relation not permanent owing to sand and gravel above control and to operation of head gate of canal No. 1. Rating curve for period April 18 to May 10 fairly well defined. No curve developed for other periods. Daily discharge ascertained by applying mean daily gage height to rating table for period April 18 to May 10. Discharge for other days estimated from discharge measurements, from records of Southern California Edison Co., and by comparison with Santa Ana River near Mentone. Records fair. Combined daily discharge is the sum of flow in creek, power canals Nos. 2 and 3, and canal No. 1.

COOPERATION.—Water-stage recorder attended by employee of Southern California Edison Co.

Discharge measurements of Mill Creek near Craftonville, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Apr. 9.....	1.33	79	May 10.....	1.35	49	June 2.....	0.98	21
Apr. 14.....	1.22	23	May 17.....	.94	40	June 8.....	1.15	25
Apr. 23.....	1.31	44	May 19.....	.97	39	June 17.....	.98	8.8
Apr. 30.....	1.37	52						

Daily discharge, in second-feet, of Mill Creek near Craftonville, Calif., for the year ending September 30, 1926

Day	Feb.	Apr.	May	June	Day	Feb.	Apr.	May	June
1.....	8		54	22	16.....		25	41	10
2.....			53	21	17.....		25	40	9
3.....			52	20	18.....		47	40	8.5
4.....			52	20	19.....		42	39	8.5
5.....		150	57	20	20.....		40	38	8.5
6.....		300	53	24	21.....		40	37	8.5
7.....		125	52	27	22.....		42	35	8
8.....		100	51	25	23.....		45	34	8
9.....		79	49	19	24.....		47	33	8
10.....		68	48	17	25.....		47	31	8
11.....		57	46	15	26.....		49	30	8
12.....	35	46	58	14	27.....		51	29	
13.....	70	35	66	13	28.....		52	27	
14.....		23	43	12	29.....		54	26	
15.....		25	42	11	30.....		52	25	
					31.....			23	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Mill Creek near Craftonville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
February.....	70	0	4.04	224
April.....	300	0	55.5	3,300
May.....	66	23	42.1	2,590
June.....	27	0	12.4	738
The year.....	300	0	9.47	6,850

NOTE.—No flow in months for which discharge is not given.

Daily discharge, in second-feet, of Mill Creek and canals near Craftonville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12.0	11.9	10.7	11.9	22	17.2	18.4	85	53	39	27	22
2.....	11.7	12.1	29	12.1	14.1	17.2	18.2	84	52	39	27	22
3.....	11.3	12.4	16.0	12.1	19.3	17.0	18.4	83	51	38	28	22
4.....	17.4	11.6	12.2	11.9	15.7	16.8	17.9	83	52	38	28	21
5.....	22	13.1	10.4	12.1	14.2	16.8	152	88	51	37	28	21
6.....	10.6	12.7	10.2	11.9	14.4	16.7	307	84	51	35	36	21
7.....	8.8	13.3	10.2	11.9	13.9	17.9	140	83	51	36	34	21
8.....	9.0	13.4	10.2	11.9	13.3	17.6	126	82	52	36	32	19.9
9.....	8.7	12.7	10.0	11.7	13.7	16.7	107	80	51	35	30	18.9
10.....	8.8	12.8	9.8	12.0	13.5	17.6	97	79	48	35	29	19.7
11.....	8.7	12.8	10.2	12.1	13.3	17.6	86	77	46	33	29	20
12.....	8.1	12.6	10.6	12.1	56	17.0	75	76	45	32	29	19.2
13.....	9.6	12.9	10.2	12.1	85	16.7	67	74	44	32	27	20
14.....	9.4	12.6	11.1	12.1	26	16.8	55	73	43	32	28	19.4
15.....	9.4	12.8	10.4	12.1	24	16.6	57	71	42	32	27	19.0
16.....	9.2	13.0	10.8	12.2	24	16.8	56	72	42	32	28	19.4
17.....	10.8	11.4	11.1	12.2	21	16.9	58	71	41	31	28	19.4
18.....	10.4	12.6	12.3	12.5	20	17.4	79	71	40	32	27	18.6
19.....	10.8	11.8	12.8	12.0	18.6	18.4	73	70	40	29	27	18.4
20.....	10.4	11.1	12.8	11.5	17.9	18.3	71	69	40	30	27	18.6
21.....	10.4	10.8	12.5	11.7	16.2	17.9	72	68	40	30	27	17.8
22.....	11.6	12.5	12.1	12.1	17.0	16.9	73	66	39	29	26	18.4
23.....	10.7	12.8	11.8	12.7	17.5	16.9	76	65	39	29	26	18.0
24.....	9.8	14.8	12.4	12.2	16.2	17.5	79	64	39	28	23	19.0
25.....	10.2	15.2	12.0	12.2	17.2	17.7	78	62	39	28	24	19.1
26.....	10.3	13.6	12.2	12.1	18.1	18.6	80	61	39	27	25	18.8
27.....	9.8	11.5	12.2	12.0	17.7	17.6	83	60	40	29	24	18.9
28.....	10.6	10.8	12.6	12.2	17.9	18.0	83	58	39	30	23	18.9
29.....	11.8	10.6	12.2	12.2	-----	17.5	86	57	38	28	24	19.4
30.....	11.7	10.1	11.9	11.8	-----	16.7	83	56	39	27	23	19.4
31.....	11.8	-----	12.0	15.6	-----	17.8	-----	54	-----	27	22	-----

Monthly discharge of Mill Creek and canals near Craftonville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	22	8.1	10.8	664
November.....	15.2	10.1	12.4	738
December.....	29	9.8	12.1	744
January.....	15.6	11.5	12.2	750
February.....	85	13.3	21.3	1,180
March.....	18.6	16.6	17.3	1,060
April.....	307	17.9	82.4	4,900
May.....	85	54	71.8	4,410
June.....	53	38	44.2	2,630
July.....	39	27	32.1	1,970
August.....	36	22	27.2	1,670
September.....	22	17.8	19.6	1,170
The year.....	307	8.1	30.3	21,900

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

LOCATION.—In SE. $\frac{1}{4}$ sec. 12, T. 1 S., R. 1 W., at sand box 200 feet below diversion dam on Mill Creek, half a mile west of Forest Home, San Bernardino County.

RECORDS AVAILABLE.—October 1, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter in the sand box just above the outlet weir.

DISCHARGE MEASUREMENTS.—Made from a plank across a rectangular concrete canal leading to the sand box.

CHANNEL AND CONTROL.—Sand box is 100 feet long and 50 feet wide. Control is a sharp-crested weir 10.85 feet long without end contractions. Crest of weir at gage height, 0.00 foot.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during year, 25 second-feet or more April 5 to July 5; minimum mean daily discharge, 6.9 second-feet October 24–30.

ACCURACY.—Stage-discharge relation permanent only at times when there is a free fall over the weir. Rating curve well defined. Water-stage recorder record good, except October 4–10, December 4–7, 16–17, January 22, February 19, 26, July 14, July 27 to August 2, August 9 to September 6, September 9–15, and 21–28. Daily discharge ascertained by applying mean daily gage height to rating table, except April 5 to July 5 when water was wasted over top of sand box, and discharge was not computed. Discharge interpolated for periods of no gage-height record, except during July to September when it was determined by Southern California Edison Co. from staff gage readings at the gage. The record shows the flow of the canal only on those days when the flow of Mill Creek was all diverted. Records good.

Discharge measurements of Mill Creek power canal No. 3 at intake, near Forest Home, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 27.....	0.32	7.7	Feb. 25.....	0.40	10.8	Aug. 3.....	0.62	19
Nov. 20.....	.34	8.0	June 30.....	1.30	28	Sept. 7.....	.52	14
Dec. 8.....	.34	8.9	July 9.....	1.14	24	Sept. 29.....	.49	14
Jan. 5.....	.34	7.6	July 13.....	.68	22			
Jan. 19.....	.34	7.3	July 26.....	.62	18			

* Water spilling over sand box. Gage height of no value.

Daily discharge, in second-feet, of Mill Creek power canal No. 3 at intake, near Forest Home, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	July	Aug.	Sept.
1.....	7.7	7.3	8.8	8.4	10.1	9.2	11.7	-----	18.3	17.8
2.....	7.7	7.3	19.2	8.1	10.9	10.9	11.7	-----	17.0	17.6
3.....	7.7	7.3	10.9	7.7	10.4	10.1	11.7	-----	20	16.6
4.....	7.7	7.3	8.4	7.7	8.8	10.1	13.0	-----	20	16.8
5.....	7.7	7.7	8.4	7.7	8.8	8.4	-----	-----	22	16.1
6.....	7.7	7.7	8.3	8.4	9.2	8.4	-----	24	21	16.5
7.....	7.7	7.3	8.2	8.8	9.6	9.6	-----	24	22	15.3
8.....	7.7	7.3	8.1	8.1	10.1	9.6	-----	24	22	16.3
9.....	7.7	7.3	8.4	8.4	9.2	10.9	-----	24	19.7	15.4
10.....	7.7	7.3	8.1	8.4	9.2	11.3	-----	23	19.7	15.4
11.....	7.7	7.3	8.1	8.1	10.9	11.3	-----	23	19	15.6
12.....	8.1	7.3	8.1	8.1	11.3	10.9	-----	23	18.8	15.2
13.....	8.1	7.3	8.4	8.1	10.9	10.1	-----	23	18.4	15.2
14.....	8.1	7.7	8.4	8.1	10.9	9.6	-----	-----	18.1	15.4
15.....	8.1	7.7	8.4	8.4	12.1	10.9	-----	23	17.4	15.5

Daily discharge, in second-feet, of Mill Creek power canal No. 3 at intake, near Forest Home, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	July	Aug.	Sept.
16.....	7.7	7.7	8.7	8.4	10.9	11.3	-----	23	17.6	15.8
17.....	8.1	7.7	9.0	8.4	10.1	11.3	-----	23	17.6	15.8
18.....	8.1	7.7	9.2	8.4	10.1	11.7	-----	23	17.4	15.8
19.....	8.1	7.7	8.4	8.1	11.0	11.7	-----	23	17.4	15.8
20.....	8.1	7.7	8.4	7.7	12.1	11.7	-----	23	17.9	15.8
21.....	8.4	7.7	8.4	8.8	12.6	12.1	-----	22	17.9	14.4
22.....	8.4	7.7	8.1	8.4	13.0	11.7	-----	22	17.2	14.3
23.....	8.4	7.7	8.1	8.1	11.3	11.7	-----	22	16.4	14.4
24.....	6.9	7.7	8.1	8.4	12.1	11.7	-----	22	17	14.4
25.....	6.9	7.7	8.1	8.1	13.0	11.7	-----	21	17	14.4
26.....	6.9	7.7	8.1	7.7	12.8	11.7	-----	22	16.8	14.2
27.....	6.9	7.7	8.4	7.3	12.6	11.7	-----	19.7	16.6	14.2
28.....	6.9	8.4	9.6	7.3	12.6	11.7	-----	18.5	16.8	14.4
29.....	6.9	8.4	9.2	7.3	-----	11.7	-----	18.5	16.4	13.9
30.....	6.9	8.1	8.8	7.7	-----	11.7	-----	18.5	17.8	14.3
31.....	7.3	-----	8.4	9.2	-----	11.7	-----	18.0	17.4	-----

NOTE.—Water wasted over sand box in addition to that diverted from April 5 to July 5.

Monthly discharge of Mill Creek power canal No. 3 at intake, near Forest Home, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	8.4	6.9	7.68	472
November.....	8.4	7.3	7.61	453
December.....	19.2	8.1	8.88	546
January.....	9.2	7.3	8.12	499
February.....	13.0	8.8	11.0	611
March.....	12.1	8.4	10.9	670
April 1-4.....	13.0	11.7	12.0	95.2
August.....	22	16.4	18.3	1,130
September.....	17.8	13.9	15.4	916

NOTE.—No record Apr. 5 to July 5.

MILL CREEK POWER CANALS NO. 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, San Bernardino County.

RECORDS AVAILABLE.—January 1, 1919, to September 30, 1926.

DISCHARGE.—Computed from weir records in common tailrace of power plants.

EXTREMES OF DISCHARGE.—1919-1926: Maximum mean daily discharge recorded, 36 second-feet November 19, 1923, and June 7, 1924; no flow May 27, 1923.

ACCURACY.—Records good.

COOPERATION.—Records furnished by Southern California Edison Co.

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 canal No. 2. The canals serve power plants Nos. 2 and 3, which discharge into a common tailrace. The water then passes into Mill Creek power canal No. 1 and is used again at power plant No. 1.

Daily discharge, in second-feet, of Mill Creek power canals Nos. 2 and 3, near Craftonville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11.3	10.9	10.0	10.5	10.6	15.5	16.7	31	31	32	25	21
2	11.0	11.1	21	10.7	11.3	15.4	16.4	31	31	32	25	21
3	10.7	11.4	11.0	10.7	16.2	15.2	16.6	31	31	32	26	21
4	15.2	10.6	7.0	10.5	12.7	15.0	16.0	31	32	32	26	20
5	18.6	12.1	6.8	10.7	11.6	15.0	2.4	31	31	32	22	19.9
6	8.6	11.7	6.6	10.5	12.1	14.9	7.4	31	27	31	28	20
7	7.8	12.3	6.6	10.5	11.7	15.7	15.5	31	24	32	29	19.9
8	8.0	12.4	6.6	10.5	11.5	15.4	26	31	27	32	27	19.0
9	7.7	11.7	6.4	10.3	11.9	14.8	28	31	32	31	26	19.0
10	7.8	11.8	6.2	10.5	11.7	15.7	29	31	31	31	26	18.8
11	7.7	12.0	6.6	10.7	11.5	15.8	29	31	31	30	26	19.2
12	7.1	11.6	7.0	10.7	21	15.2	29	17.6	31	29	26	18.4
13	8.6	11.9	7.0	10.7	15.4	15.0	32	8.1	31	29	24	19.5
14	8.4	11.6	7.5	10.7	18.9	15.0	32	30	31	30	25	18.6
15	7.4	11.8	6.8	10.7	17.8	14.8	32	29	31	30	24	18.2
16	8.0	12.0	7.2	10.8	18.0	15.0	31	31	32	30	25	18.6
17	9.8	10.4	7.5	10.8	15.8	15.1	33	31	32	29	25	18.6
18	9.4	11.6	9.5	11.0	15.1	15.6	32	31	32	30	24	17.8
19	9.8	10.8	11.3	10.6	14.6	16.6	31	31	32	27	25	17.6
20	9.4	10.1	11.0	10.0	15.6	16.4	31	31	31	28	25	17.8
21	9.4	10.0	11.0	10.2	14.3	15.8	32	31	31	28	25	17.0
22	10.6	11.8	10.6	10.6	15.1	15.1	31	31	31	27	24	17.6
23	9.7	12.2	10.4	11.3	15.6	15.2	31	31	31	27	24	17.2
24	8.8	13.9	11.0	10.8	14.4	15.8	32	31	31	26	21	18.2
25	9.2	14.0	10.6	10.8	15.4	16.0	31	31	31	26	22	18.3
26	9.3	12.9	10.8	10.7	16.3	17.1	31	31	31	25	23	17.9
27	8.8	10.8	10.8	10.6	16.0	16.1	32	31	31	27	23	18.0
28	9.6	10.2	10.9	10.8	16.2	16.3	31	31	31	28	22	18.1
29	10.8	10.0	10.7	10.8	-----	15.8	32	31	31	26	23	18.6
30	10.7	9.5	10.5	10.4	-----	15.0	31	31	32	25	22	18.6
31	10.8	-----	10.5	12.8	-----	16.0	-----	31	-----	25	21	-----

Monthly discharge of Mill Creek power canals Nos. 2 and 3 near Craftonville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	18.6	7.1	9.68	595
November	14.0	9.5	11.5	684
December	21	6.2	9.27	570
January	12.8	10.0	10.7	658
February	21	10.6	14.6	811
March	17.1	14.8	15.5	953
April	33	2.4	26.7	1,590
May	31	8.1	29.7	1,830
June	32	24	30.7	1,830
July	32	25	29.0	1,780
August	29	21	24.5	1,510
September	21	17.0	18.8	1,120
The year	33	2.4	19.2	13,900

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

LOCATION.—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, 5 miles northeast of Craftonville, San Bernardino County.

RECORDS AVAILABLE.—January 21, 1919, to September 30, 1926.

GAGE.—Water-stage recorder just above weir.

DISCHARGE.—Computed from gage-height record showing head over 6-foot, sharp-crested, rectangular weir without end contractions.

ACCURACY.—Stage-discharge relation permanent. Daily discharge ascertained by applying mean daily gage height to weir table; estimated discharge February 15–20, July 6–7, and August 21–23, no gage-height record. Records good.

COOPERATION.—Water-stage recorder attended by electrician of Southern California Edison Co.

Canal diverts water from Mill Creek in NE. $\frac{1}{4}$ sec. 13, T. 1 S., R. 2 W., at gaging station on Mill Creek near Craftonville. Below the weir it receives the discharge from the tailrace of the combined power house of canals Nos. 2 and 3. After going through Mill Creek power house No. 1 the water is distributed for irrigation. (See "Diversions," Mill Creek near Craftonville, p. 37.)

Daily discharge, in second-feet, of Mill Creek power canal No. 1 near Craftonville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	June	July	Aug.	Sept.
1.....	0.7	1.0	0.7	1.4	3.1	1.7	1.7	-----	7.1	1.7	1.2
2.....	.7	1.0	8.0	1.4	2.8	1.8	1.8	-----	6.6	1.7	1.4
3.....	.6	1.0	5.0	1.4	3.1	1.8	1.8	-----	6.0	1.8	1.2
4.....	2.2	1.0	5.2	1.4	3.0	1.8	1.9	-----	6.2	1.8	1.2
5.....	3.8	1.0	3.6	1.4	2.6	1.8	-----	-----	5.1	5.6	1.0
6.....	2.0	1.0	3.6	1.4	2.3	1.8	-----	-----	4.0	7.5	1.0
7.....	1.0	1.0	3.6	1.4	2.2	2.2	-----	-----	3.8	5.1	1.0
8.....	1.0	1.0	3.6	1.4	1.8	2.2	-----	-----	4.1	4.9	.9
9.....	1.0	1.0	3.6	1.4	1.8	1.9	-----	-----	4.0	4.3	.9
10.....	1.0	1.0	3.6	1.5	1.8	1.9	-----	-----	4.0	3.4	.9
11.....	1.0	.8	3.6	1.4	1.8	1.8	-----	-----	3.0	3.0	.9
12.....	1.0	1.0	3.6	1.4	0	1.8	-----	-----	2.8	3.0	.8
13.....	1.0	1.0	3.2	1.4	0	1.7	-----	-----	2.6	2.6	.8
14.....	1.0	1.0	3.6	1.4	6.9	1.8	-----	-----	2.5	3.0	.8
15.....	2.0	1.0	3.6	1.4	5.8	1.8	-----	-----	2.5	3.1	.8
16.....	1.2	1.0	3.6	1.4	6.0	1.8	-----	-----	2.3	2.8	.8
17.....	1.0	1.0	3.6	1.4	5.0	1.8	-----	-----	2.3	2.8	.8
18.....	1.0	1.0	2.8	1.5	5.0	1.8	-----	-----	2.2	2.6	.8
19.....	1.0	1.0	1.5	1.4	4.0	1.8	-----	-----	2.2	2.3	.8
20.....	1.0	1.0	1.8	1.5	2.3	1.9	-----	-----	2.1	2.1	.8
21.....	1.0	.8	1.5	1.5	1.9	2.1	-----	-----	2.1	2.2	.8
22.....	1.0	.7	1.5	1.5	1.9	1.8	-----	-----	1.9	1.9	.8
23.....	1.0	.6	1.4	1.4	1.9	1.7	-----	-----	1.9	1.7	.8
24.....	1.0	.9	1.4	1.4	1.8	1.7	-----	-----	1.9	1.8	.8
25.....	1.0	1.2	1.4	1.4	1.8	1.7	-----	-----	1.9	1.8	.8
26.....	1.0	.7	1.4	1.4	1.8	1.5	-----	-----	1.9	1.7	.9
27.....	1.0	.7	1.4	1.4	1.7	1.5	-----	9.1	1.9	1.4	.9
28.....	1.0	.6	1.7	1.4	1.7	1.7	-----	7.7	1.8	1.4	.8
29.....	1.0	.6	1.5	1.4	-----	1.7	-----	7.5	1.8	1.4	.8
30.....	1.0	.6	1.4	1.4	-----	1.7	-----	7.1	1.7	1.4	.8
31.....	1.0	-----	1.5	2.8	-----	1.8	-----	-----	1.7	1.3	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Mill Creek power canal No. 1 near Craftonville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	3.8	0.6	1.17	71.9
November.....	1.2	.6	.91	54.2
December.....	.8	.7	2.82	173
January.....	2.8	1.4	1.46	89.8
February.....	6.9	0	2.71	151
March.....	2.2	1.5	1.80	111
April.....	1.9	0	.24	14.3
June.....	9.1	0	1.05	62.5
July.....	7.1	1.7	3.10	191
August.....	7.5	1.3	2.68	165
September.....	1.4	.8	.90	53.6
The year.....	9.1	0	1.57	1,140

NOTE.—No flow during May.

PLUNGE CREEK NEAR EAST HIGHLANDS, CALIF.

LOCATION.—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, San Bernardino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 26, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on left bank 10 feet above siphon.

DISCHARGE MEASUREMENTS.—Made by wading.

CHANNEL AND CONTROL.—Bed composed of gravel and boulders. Concrete control built during October, 1923. Right bank high; left bank subject to overflow during extreme floods.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks, 2.95 feet about noon April 5 (discharge, 840 second-feet); no flow for several months during year.

1919-1926: Maximum stage, from water-stage recorder, 3.15 feet at 4 a. m. March 14, 1921 (discharge, 1,100 second-feet); no flow for several months during each year.

DIVERSIONS.—The East Highlands Orange Co. controls water of Plunge Creek and diverts at several points from 2 to 5 miles above station. A small quantity of water is diverted about 200 feet above gage, which is wasted back into creek just below control when not needed for irrigation.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changes slightly owing to sand in pool above control. Rating curve well defined below 60 second-feet. Water-stage recorder record satisfactory except April 5-8, when record paper was torn. Daily discharge ascertained by shifting-control method. Records good.

Discharge measurements of Plunge Creek near East Highlands, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 28.....	0.20	*0.1	Jan. 19.....	0.19	*0.05	Apr. 19.....	1.42	63
Nov. 5.....	.22	*.1	Feb. 2.....	.21	*.05	Apr. 27.....	.74	7.5
Nov. 10.....	.23	*.1	Feb. 15.....	.89	12	May 4.....	.74	8.0
Nov. 24.....	.28	*.2	Mar. 1.....	.36	.4	May 11.....	.64	5.1
Dec. 8.....	.30	.4	Mar. 15.....	.18	*.03	May 26.....	.19	*.05
Dec. 22.....	.18	*.02	Apr. 8.....	1.86	292			
Jan. 5.....	.20	*.03	Apr. 13.....	1.08	25			

* Estimated.

Daily discharge, in second-feet, of Plunge Creek near East Highlands, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1.....		0.1	0.2	0.1	0.6	0.2	-----	7
2.....		.1	1.9	.1	.1	.2	-----	21
3.....		.2	2.3	.1	2.6	.2	-----	14
4.....		.3	.9	.2	.5	.1	-----	8
5.....		.2	.5	.1	.1	.1	287	15
6.....		.1	.6	.1	-----	.1	344	21
7.....		.1	.6	.1	-----	.1	287	11
8.....		.1	.4	.1	-----	.1	381	8
9.....		.1	-----	1	-----	.1	226	6.5
10.....		.1	-----	.1	-----	-----	100	6.6

Daily discharge, in second-feet, of Plunge Creek near East Highlands, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
11.....		0.1		0.1			62	4.8
12.....		.1		.1	21		42	3.9
13.....		.1		.1	111		24	3.3
14.....	0.1	.1		.1	42		14	2.6
15.....	.1	.1		.1	16		9.5	2.1
16.....	.1	.1		.1	13		8.5	1.9
17.....	.1	.1		.1	8.5		6.5	1.6
18.....	.1	.1		.1	5.5		67	1.2
19.....	.1	.1		.1	3.6		65	1.1
20.....	.1	.1			2.6		37	1.0
21.....	.1	.1			1.7		24	.8
22.....	.1	.1			1.2		14	.5
23.....	.1	.1			1.1		12	.4
24.....	.1	.1			.7		9.5	.5
25.....	.1	.1			.3		8	.4
26.....	.1	.1			.1		8	.1
27.....	.1	.1			.2		7.5	.1
28.....	.1	.1	.1		.1		8.5	.1
29.....	.1	.1	.1				8.5	
30.....	.1	.2	.1				8	
31.....	.1		.1	.5				

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Plunge Creek near East Highlands, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0.1	0.0	0.06	3.7
November.....	.3	.1	.12	7.1
December.....	2.3	.0	.25	15.4
January.....	.5	.0	.08	4.9
February.....	111	.0	8.30	461
March.....	.2	.0	.04	2.5
April.....	381	.0	69.0	4,110
May.....	21	.0	4.63	285
The year.....	381	.0	6.74	4,890

NOTE.—No flow June to September.

WARM CREEK NEAR COLTON, CALIF.

LOCATION.—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, San Bernardino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August 7, 1920, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank just above highway bridge. A temporary well was used from May 7, 1925, to February 13, 1926 with gage datum 2.5 feet lower than permanent datum.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading, 50 feet below bridge.

CHANNEL AND CONTROL.—Continually shifting sand.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks, 6.65 feet at 4 p. m. April 5 (discharge, about 1,300 second-feet); minimum discharge, 36 second-feet September 3.

1920-1926: Maximum stage recorded, 6.58 feet at 1 a. m. December 21, 1922 (discharge, 2,780 second-feet); minimum discharge, 32 second-feet September 11, 1925.

DIVERSIONS.—Meeks & Daley Canal diverts water half a mile above the gage.
(See p. 46.)

REGULATION.—Slightly regulated by diversion into Meeks & Daley Canal.

ACCURACY.—Stage-discharge relation changes continually. Standard rating curves fairly well defined. Water-stage recorder gave satisfactory record except February 13 and April 5-7; graph estimated. Daily discharge ascertained by shifting-control method. Discharge interpolated August 5-12 and September 19-30. Records good except for high water of April 5-8, for which they are fair.

Discharge measurements of Warm Creek near Colton, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 4.....	2.59	43	Feb. 3.....	2.87	83	May 7.....	0.70	70
Oct. 7.....	2.57	42	Feb. 9.....	2.69	62	May 14.....	.87	85
Oct. 10.....	2.56	44	Feb. 13.....	.89	131	May 19.....	.79	68
Oct. 17.....	2.61	52	Feb. 20.....	.65	70	May 24.....	.72	67
Oct. 24.....	2.61	50	Feb. 24.....	.62	67	June 7.....	.66	48
Oct. 30.....	2.55	46	Feb. 27.....	.66	63	June 21.....	.63	49
Nov. 6.....	2.56	48	Mar. 4.....	.62	62	June 28.....	.62	50
Nov. 14.....	2.63	52	Mar. 6.....	.58	60	July 3.....	.58	44
Nov. 21.....	2.63	54	Mar. 10.....	.48	55	July 10.....	.57	41
Nov. 28.....	2.61	53	Mar. 13.....	.38	52	July 17.....	.50	42
Dec. 5.....	2.69	61	Mar. 17.....	.31	46	July 24.....	.48	39
Dec. 10.....	2.69	63	Mar. 27.....	.19	48	July 31.....	.50	36
Dec. 12.....	2.69	62	Mar. 31.....	.16	50	Aug. 13.....	.44	39
Dec. 19.....	2.73	69	Apr. 9.....	1.14	269	July 19.....	.43	39
Dec. 26.....	2.70	63	Apr. 13.....	.36	97	July 27.....	.43	36
Jan. 2.....	2.67	59	Apr. 17.....	.56	83	Sept. 2.....	.40	36
Jan. 8.....	2.67	59	Apr. 24.....	.46	80	Sept. 9.....	.44	40
Jan. 15.....	2.67	62	Apr. 28.....	.58	77	Sept. 11.....	.46	42
Jan. 23.....	2.55	48	May 1.....	.61	70	Sept. 20.....	.45	40
Jan. 28.....	2.58	50	May 4.....	.65	69	Sept. 25.....	.43	38

NOTE.—Gage heights Oct. 4 to Feb. 9 refer to datum 2.5 feet below permanent datum.

Daily discharge, in second-feet, of Warm Creek near Colton, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	43	46	53	59	70	64	52	73	56	45	38	38
2.....	43	47	83	59	66	63	51	76	54	44	38	37
3.....	43	52	63	59	79	63	51	73	54	43	38	36
4.....	60	57	62	57	67	62	50	70	50	43	38	36
5.....	67	51	61	56	66	62	1,010	91	48	44	38	38
6.....	52	48	61	56	64	60	1,080	77	47	45	38	39
7.....	47	48	62	57	63	64	358	71	48	44	38	40
8.....	43	48	62	59	62	62	497	70	49	44	38	41
9.....	43	48	63	61	62	62	237	72	49	42	38	41
10.....	44	48	63	62	62	56	136	73	48	41	38	40
11.....	45	52	63	61	62	54	144	73	49	43	38	40
12.....	49	52	62	62	104	53	138	76	48	42	38	40
13.....	55	52	61	61	237	52	103	80	49	42	38	40
14.....	51	52	61	62	75	52	90	80	49	42	38	40
15.....	51	52	62	62	62	52	92	76	51	41	38	40
16.....	51	52	62	62	60	49	94	73	51	42	38	40
17.....	52	53	63	60	58	47	83	73	50	43	39	40
18.....	52	53	72	64	57	49	156	70	50	42	39	39
19.....	52	54	69	62	56	58	87	67	50	42	39	39
20.....	51	54	64	58	54	58	82	66	50	42	38	40
21.....	51	54	66	56	58	50	81	66	49	41	38	40
22.....	50	54	64	50	60	49	80	67	49	42	38	39
23.....	50	54	64	48	62	48	79	68	48	40	38	39
24.....	50	62	63	48	65	47	79	67	49	39	37	38
25.....	48	59	63	49	64	47	79	65	49	38	36	38
26.....	46	57	63	50	64	47	77	64	49	38	37	39
27.....	47	55	63	50	63	48	77	63	48	38	37	39
28.....	46	53	63	50	63	49	77	61	48	38	37	40
29.....	46	53	63	50	-----	50	75	60	46	37	38	40
30.....	46	53	61	51	-----	50	74	59	45	36	38	41
31.....	47	-----	60	79	-----	50	-----	58	-----	36	38	-----

Monthly discharge of Warm Creek near Colton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	67	43	49.1	3,020
November.....	62	46	52.4	3,120
December.....	83	53	63.4	3,900
January.....	79	48	57.4	3,530
February.....	237	54	70.9	3,940
March.....	64	47	54.1	3,330
April.....	1,080	50	179	10,700
May.....	91	58	70.3	4,320
June.....	56	45	49.4	2,940
July.....	45	36	41.3	2,540
August.....	39	36	37.9	2,330
September.....	41	36	39.2	2,330
The year.....	1,080	36	63.5	46,000

Combined daily discharge, in second-feet, of Warm Creek and Meeks & Daley Canal near Colton, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	56	54	60	65	72	64	64	78	66	64	55	55
2.....	58	55	87	64	66	63	63	81	64	63	56	55
3.....	58	58	64	64	79	63	63	78	64	61	56	54
4.....	68	63	63	65	67	62	62	75	63	60	56	54
5.....	75	57	62	65	66	62	1,020	95	64	63	54	55
6.....	61	55	61	63	64	62	1,100	80	62	65	55	55
7.....	56	55	63	64	63	69	368	76	64	62	55	56
8.....	52	55	66	67	62	67	514	75	65	62	55	58
9.....	52	56	68	69	62	63	248	74	64	60	55	58
10.....	54	55	67	70	62	61	140	73	64	60	56	58
11.....	55	60	67	68	62	62	147	73	66	60	56	58
12.....	56	60	66	70	104	61	142	76	65	59	57	58
13.....	58	60	65	68	237	60	104	81	67	60	57	58
14.....	55	60	65	70	75	61	90	83	66	59	56	58
15.....	55	60	66	70	62	63	92	85	69	57	57	56
16.....	55	61	66	70	60	60	94	85	72	59	57	57
17.....	56	61	68	67	58	58	83	84	69	61	57	56
18.....	56	61	75	70	57	60	160	81	66	60	56	56
19.....	56	62	71	68	56	65	87	78	67	61	56	56
20.....	55	62	67	64	54	63	82	78	66	58	56	56
21.....	55	62	68	62	58	60	81	78	66	59	54	56
22.....	54	62	66	55	60	58	80	78	66	59	54	55
23.....	54	62	66	53	62	57	79	79	66	58	56	53
24.....	53	68	65	53	65	56	79	78	66	58	55	54
25.....	54	60	65	54	64	56	79	76	65	57	54	55
26.....	54	58	65	55	64	55	77	75	65	56	54	55
27.....	54	58	65	55	63	55	77	75	66	56	54	55
28.....	53	60	65	56	63	57	79	72	67	54	54	56
29.....	53	61	65	56	-----	57	80	70	64	55	54	56
30.....	54	61	63	57	-----	60	78	69	63	53	54	58
31.....	55	-----	64	83	-----	62	-----	68	-----	53	54	-----

Combined monthly discharge of Warm Creek and Meeks & Daley Canal near Colton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	75	52	56.1	3,450
November	68	54	59.4	3,530
December	87	60	66.3	4,080
January	83	53	63.9	3,930
February	237	54	71.0	3,940
March	69	55	60.7	3,730
April	1,100	62	184	10,900
May	95	68	77.6	4,770
June	72	62	65.6	3,900
July	65	53	59.1	3,630
August	57	54	55.4	3,410
September	58	53	56.0	3,330
The year	1,100	52	72.7	52,600

STRAWBERRY CREEK NEAR ARROWHEAD SPRINGS, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ sec. 11, T. 1 N., R. 4 W., at the Del Rosa Water Co.'s diversion dam, half a mile south of Arrowhead Springs, San Bernardino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 27, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank 100 feet above diversion dam.

DISCHARGE MEASUREMENTS.—Made from footbridge 200 feet above gage or by wading.

CHANNEL AND CONTROL.—Bed consists of large boulders. Control is of boulders concreted together. Sand fills in pool above control during high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.5 feet at 7 p. m. April 7 (discharge, about 228 second-feet); minimum discharge, 0.2 second-foot October 1-4.

1919-1926: Maximum stage, from water-stage recorder, 3.87 feet at 5 a. m. January 2, 1922 (discharge, 408 second-feet); minimum discharge, 0.2 second-foot several days during August, September, and October, 1925.

DIVERSIONS.—Arrowhead Hotel Co. diverts water from East Twin Creek 1 mile above gage through a 3-inch pipe line, for domestic use.

REGULATION.—Slight regulation at low water from diversion of Arrowhead Hotel Co.

ACCURACY.—Stage-discharge relation changed frequently owing to sand above the boulder control. Water-stage recorder record satisfactory except October 1-4, March 20-28, April 5-7, and August 23 to September 15 when recorder did not operate. Daily discharge ascertained by applying mean daily gage height to rating tables and by shifting-control method. Discharge for days of no gage-height record was estimated by comparison with record for Waterman Canyon Creek. Records fair.

Discharge measurements of Strawberry Creek near Arrowhead Springs, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 5.....	1.23	5.0	Feb. 17.....	1.55	5.8	June 3.....	0.87	2.9
Oct. 19.....	.80	1.3	Feb. 24.....	1.24	2.3	June 18.....	.70	1.8
Nov. 2.....	.85	1.3	Mar. 9.....	1.21	2.0	July 1.....	.57	1.1
Nov. 16.....	.83	1.2	Mar. 29.....	1.17	1.7	July 14.....	.63	1.3
Nov. 30.....	.87	1.4	Apr. 8.....	2.90	110	July 28.....	.62	1.2
Dec. 11.....	.85	1.3	Apr. 12.....	2.40	16	Aug. 2.....	.56	.6
Dec. 26.....	.85	1.3	Apr. 16.....	2.19	9.2	Aug. 20.....	.58	1.1
Jan. 7.....	.89	1.6	Apr. 21.....	2.09	8.7	Sept. 3.....	.50	.6
Jan. 14.....	.90	1.7	Apr. 29.....	2.04	5.0	Sept. 16.....	.52	.8
Jan. 27.....	.86	1.4	May 6.....	2.06	5.7	Sept. 18.....	.58	1.1
Feb. 1.....	1.00	2.5	May 12.....	2.02	4.2			
Feb. 9.....	.94	2.0	May 27.....	1.96	2.8			

Daily discharge, in second-feet, of Strawberry Creek near Arrowhead Springs, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.2	1.1	1.5	1.6	3.2	2.0	1.7	4.8	2.9	1.3	0.9	0.6
2.....	.2	1.3	3.1	1.6	2.5	1.8	1.8	5	2.7	1.3	.9	.6
3.....	.2	1.8	2.0	1.8	7	1.7	4.8	2.6	1.3	.8	.6	.6
4.....	.2	1.5	1.8	1.6	3.2	1.8	1.8	4.5	2.4	1.3	.8	.6
5.....	3.2	1.4	1.7	1.9	2.5	1.8	57	6.5	2.2	1.6	.9	.6
6.....	1.7	1.4	1.6	1.6	2.3	1.8	127	6	2.2	1.4	1.1	.6
7.....	1.2	1.4	1.6	1.6	2.3	1.8	127	5	2.6	1.2	1.0	.6
8.....	1.0	1.3	1.6	1.6	2.0	1.7	102	5	2.8	1.5	1.0	.6
9.....	1.0	1.3	1.6	1.6	2.0	2.4	24	5	2.4	1.8	.9	.6
10.....	1.0	1.3	1.6	1.8	1.9	1.8	13	4.5	2.1	1.8	1.0	.7
11.....	1.2	1.3	1.5	1.7	1.9	1.8	10	4.5	2.0	1.5	.9	.7
12.....	1.4	1.4	1.6	1.7	9	1.6	20	4.0	2.0	1.5	.8	.7
13.....	1.5	1.2	1.6	1.7	34	1.5	13	4.0	2.1	1.3	.8	.7
14.....	1.4	1.1	1.6	1.7	9.5	1.5	12	3.8	2.4	1.0	.8	.7
15.....	1.2	1.1	1.6	1.7	6.5	1.5	11	4.0	2.3	1.1	.8	.7
16.....	1.2	1.1	1.6	1.6	6	1.5	9	3.8	2.0	1.0	.7	.7
17.....	1.2	1.4	1.6	1.6	5	1.5	9	3.8	2.2	1.0	.8	.7
18.....	1.2	1.3	2.0	1.5	4.8	1.6	14	3.6	2.0	1.1	.9	1.0
19.....	1.2	1.1	1.9	1.6	3.9	1.6	9.5	3.6	2.0	1.0	.9	1.0
20.....	1.1	1.1	1.8	1.6	3.3	1.6	8.5	3.6	2.2	1.0	1.0	.8
21.....	1.1	1.2	1.7	1.6	3.1	1.6	8.5	3.6	1.8	1.0	1.0	1.0
22.....	1.2	1.2	1.8	1.6	3	1.6	8	3.6	1.5	1.0	1.0	.8
23.....	1.2	1.2	1.7	1.6	2.8	1.6	7	4.0	1.6	1.0	.9	.7
24.....	1.1	1.5	1.6	1.6	2.3	1.6	6.5	4.0	1.6	1.0	.9	.7
25.....	1.0	1.4	1.6	1.6	2.2	1.6	6	3.8	1.5	.9	.9	.7
26.....	1.0	1.5	1.4	1.7	2.0	1.6	5	3.8	1.3	1.0	.8	.8
27.....	1.0	1.4	1.5	1.4	1.8	1.6	5	3.4	1.3	1.0	.8	.8
28.....	1.1	1.5	1.6	1.6	1.8	1.6	5	3.4	1.3	1.0	.8	1.0
29.....	1.1	1.5	1.6	1.6	1.6	1.6	5	3.2	1.2	1.0	.7	.9
30.....	1.0	1.4	1.5	1.6	1.6	1.6	4.8	3.2	1.2	1.0	.7	.9
31.....	1.0		1.6	3.0		1.6		3.0		.9	.7	

Monthly discharge of Strawberry Creek near Arrowhead Springs, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	3.2	0.2	1.11	68.2
November.....	1.8	1.1	1.32	78.6
December.....	3.1	1.4	1.69	104
January.....	3.0	1.4	1.68	103
February.....	34	1.8	4.71	262
March.....	2.4	1.5	1.68	103
April.....	127	1.7	21.1	1,260
May.....	6.5	3.0	4.15	255
June.....	2.9	1.2	2.01	120
July.....	1.8	.9	1.19	73.2
August.....	1.1	.7	.87	53.5
September.....	1.0	.6	.74	44.0
The year.....	127	.2	3.48	2,520

WATERMAN CANYON CREEK NEAR ARROWHEAD SPRINGS, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 2, T. 1 N., R. 4 W., 600 feet above old toll house 1 mile northwest of Arrowhead Springs, San Bernardino County.

DRAINAGE AREA.—4.55 square miles (measured on topographic map).

RECORDS AVAILABLE.—November 2, 1911, to October 30, 1914, and December 31, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from highway bridge 500 feet below gage or by wading 300 feet below gage.

CHANNEL AND CONTROL.—Bed consists of boulders. Control is concrete weir constructed November 6–9, 1923.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.40 feet at 9 p. m. April 7 (discharge, 44 second-feet); no flow for several days in August and September.

1920–1926: Maximum discharge recorded, 164 second-feet at 6 a. m. January 2, 1922; no flow part of July to October, 1924, August and September, 1925, and August and September, 1926.

DIVERSIONS.—Huley Poppet diverts water through a 2-inch pipe line at the control for domestic use.

REGULATION.—One small private power plant above the gage may affect the record slightly.

ACCURACY.—Stage-discharge relation changed when pool filled with sand on April 6 and when it was cleaned out June 3. Standard rating curve well defined below 15 second-feet and extended above. Water-stage recorder record good. Daily discharge ascertained by shifting-control method. Records good.

Discharge measurements of Waterman Canyon Creek near Arrowhead Springs, Calif., during the year ending September 30, 1926.

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 14.....	1.67	0.5	Feb. 17.....	2.02	2.5	May 12.....	2.39	3.1
Oct. 26.....	1.63	.4	Mar. 3.....	1.81	.8	May 27.....	2.30	1.5
Nov. 9.....	1.65	.3	Mar. 17.....	1.78	.6	June 3.....	2.29	1.3
Nov. 23.....	1.65	.4	Mar. 31.....	1.79	.6	June 18.....	1.70	.4
Dec. 7.....	1.68	.6	Apr. 8.....	3.24	38	July 1.....	1.62	.3
Dec. 21.....	1.69	.6	Apr. 12.....	2.64	10	July 14.....	1.68	.5
Jan. 4.....	1.71	.8	Apr. 16.....	2.55	6.3	July 28.....	1.66	.4
Jan. 14.....	1.68	.6	Apr. 21.....	2.54	5.7	Aug. 2.....	1.59	.2
Jan. 27.....	1.68	.7	Apr. 29.....	2.46	4.2	Aug. 20.....	1.58	.1
Feb. 9.....	1.72	.8	May 6.....	2.46	3.9	Sept. 16.....	1.54	.2

*Estimated.

Daily discharge, in second-feet, of Waterman Canyon Creek near Arrowhead Springs, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1.....		0.5	0.4	0.6	1.3	1.1	0.8	4.1	1.1	0.5	0.1	-----
2.....		.5	1.6	.6	1.1	1	.8	5.5	1.1	.5	.1	-----
3.....		.5	.8	.9	2.9	.8	.7	5	1.3	.5	.1	-----
4.....		.5	.6	.7	1.4	.9	.9	4.7	1.3	.4	.1	-----
5.....	1.4	.5	.6	.6	1.1	.8	26	4.4	1.2	.5	.1	-----
6.....	.6	.4	.6	.6	1.0	.8	35	3.8	1.2	.4	.1	-----
7.....	.4	.4	.6	.6	.9	.8	31	3.6	1.1	.5	.1	-----
8.....	.3	.4	.6	.6	.8	.8	37	3.4	1.0	.6	.2	-----
9.....	.3	.3	.6	.6	.8	1.1	24	3.4	1.0	.7	.1	-----
10.....	.4	.3	.6	.6	.8	.9	17	3.2	.9	.6	.1	-----

Daily discharge, in second-feet, of Waterman Canyon Creek near Arrowhead Springs, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11.	0.4	0.3	0.5	0.6	0.8	0.8	13	3.2	0.8	0.5	0.1	-----
12.	.6	.3	.5	.6	4.3	.7	10	3.0	.8	.4	.1	-----
13.	.6	.4	.5	.6	18	.7	9.5	2.8	.7	.4	.1	-----
14.	.4	.4	.6	.7	8	.7	8	2.7	.6	.3	.1	-----
15.	.4	.4	.7	.7	5.5	.7	7	2.6	.6	.3	.1	0.1
16.	.4	.4	.6	.7	5.5	.7	6.5	2.5	.5	.3	-----	.1
17.	.4	.4	.6	.7	3.3	.7	6.5	2.1	.5	.3	-----	.1
18.	.3	.4	1.0	1.0	3.2	.9	7	1.8	.5	.3	-----	.1
19.	.2	.5	.8	.7	2.7	1.0	6.5	1.7	.5	.2	.1	.1
20.	.2	.4	.7	.7	2.4	1.0	6	1.7	.5	.2	.1	.1
21.	.3	.4	.6	.8	2.5	.8	5.5	1.5	.5	.2	.1	.1
22.	.3	.4	.5	.8	2.1	.7	5.5	1.6	.5	.2	.1	.1
23.	.4	.4	.5	.7	1.8	.7	5	2.0	.5	.2	-----	.1
24.	.4	.5	.5	.7	1.6	.6	4.8	1.8	.5	.2	-----	.1
25.	.3	.5	.5	.7	1.4	.7	4.6	1.7	.5	.1	-----	.1
26.	.3	.4	.5	.7	1.2	.7	4.4	1.3	.5	.2	-----	.1
27.	.3	.4	.5	.7	1.1	.7	4.4	1.6	.5	.2	-----	.1
28.	.4	.5	.5	.7	1.1	.6	4.3	1.6	.5	.2	-----	.1
29.	.5	.4	.5	.7	-----	.5	4.2	1.3	.5	.2	-----	.1
30.	.5	.4	.6	.7	-----	.6	4.1	1.3	.5	.1	-----	.1
31.	.5	-----	.6	1.6	-----	.6	-----	1.2	-----	.1	-----	-----

NOTE.—No flow Aug. 16-18 and Aug. 23 to Sept. 14.

Monthly discharge of Waterman Canyon Creek near Arrowhead Springs, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	1.4	0	0.37	22.8
November	.5	.3	.42	25.0
December	1.6	.4	.62	38.1
January	1.6	.6	.72	44.3
February	18	.8	2.81	156
March	1.1	.5	.78	48.0
April	37	.7	10.0	595
May	5.5	1.2	2.65	163
June	1.3	.5	.74	44.0
July	.7	.1	.33	20.3
August	.2	.0	.06	3.7
September	.1	.0	.05	3.0
The year	37	.0	1.61	1,160

CITY CREEK NEAR HIGHLAND, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 27, T. 1 N., R. 3 W., $1\frac{1}{4}$ miles northeast of Highland, San Bernardino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on left bank 300 feet above North Fork Ditch Co.'s trestle.

DISCHARGE MEASUREMENTS.—Made from cable 400 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed consists of shifting boulders and sand above and below a concrete control.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 9.75 feet at noon April 5 (discharge, 2,360 second-feet); no flow for several months.

1919-1926: Maximum stage, from water-stage recorder, 9.75 feet at noon April 5, 1926 (discharge, 2,360 second-feet); no flow for several months during each year except 1923.

DIVERIONS.—City Creek Water Co. diverts water three-fourths mile above gage.

REGULATION. None.

ACCURACY.—Stage-discharge relation changes frequently, owing to sand collecting at control. Two standard rating curves, each fairly well defined, were used during year. Water-stage recorder record excellent. Daily discharge ascertained by shifting-control method. Records good.

Discharge measurements of City Creek near Highland, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 5.....	2.82	14	Jan. 29.....	1.88	0.03	Apr. 12.....	4.30	63
Oct. 19.....	2.28	2.6	Feb. 2.....	2.45	5.9	Apr. 16.....	4.07	33
Nov. 2.....	1.91	0.05	Feb. 11.....	1.98	2	Apr. 19.....	4.41	50
Nov. 16.....	1.88	0.03	Feb. 15.....	2.89	25	Apr. 27.....	3.96	18
Nov. 30.....	1.95	0.2	Feb. 19.....	2.55	12	May 4.....	3.96	22
Dec. 4.....	2.29	3.1	Feb. 24.....	2.27	2.4	May 11.....	3.78	12
Dec. 21.....	2.03	3	Mar. 10.....	2.13	0.2	May 25.....	3.42	2.2
Jan. 4.....	1.90	0.1	Mar. 29.....	2.06	0.1	June 10.....	3.18	0.5
Jan. 16.....	1.88	0.1	Apr. 8.....	7.50	1,180	June 24.....	3.01	0.05

* Estimated.

Daily discharge, in second-feet, of City Creek near Highland, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1.....			3.3	0.1	9	0.8	0.1	24	4.6
2.....			9.5	.1	7	.5	.1	29	4.9
3.....		0.5	6.5	.1	25	.4	.1	25	4.6
4.....		3.4	3.6	.1	9	.6	.1	22	4.6
5.....	4.8	.5	3.1	.1	6.5	.6	620	34	4.0
6.....	2.7	.1	3.1	.1	5	.4	1,040	30	3.6
7.....	1.6	.1	2.8	.1	4.0	.2	725	26	3.0
8.....	1.2	.1	3.6	.1	2.5	.1	840	24	2.4
9.....	1.2	.1	4.1	.1	1.2	.1	330	22	1.2
10.....	2.8	.1	4.0	.1	.2	.1	157	17	.6
11.....	5.5	.1	4.0	.1	.2	.1	92	13	.5
12.....	4.3	.1	1.4	.1	44	.1	59	12	.5
13.....	4.6		.4	.1	106	.1	49	13	.4
14.....	3.4		.3	.1	44		45	9.5	.4
15.....	2.8		.3	.1	26		36	5.5	.4
16.....	2.5		.2	.1	24	.1	35	5	.4
17.....	2.4	.1	.1	.1	18	.1	26	4.6	.3
18.....	2.4	.1	1.0	.1	15	.1	66	4.4	.2
19.....	2.1	.1	3.4	.1	15	.1	52	3.4	.1
20.....	2.1	.1	2.0	.1	9.5	.1	38	2.4	.1
21.....	.8	.1	.6	.1	7.5	.1	31	2.2	.1
22.....	.1	.1	.2	.1	6.5	.1	28	2.0	.1
23.....	.1	.1	.1	.1	4.8	.1	24	2.6	
24.....	.1	1.7	.1	.1	2.4	.1	22	3.0	.1
25.....		1.8	.1	.1	1.7	.1	21	2.7	.2
26.....		.5	.1		1.5	.1	21	2.6	.4
27.....		.4	.1		1.3	.1	19	1.6	.1
28.....		.3	.1		1.2	.1	22	1.4	.1
29.....		.2	.1			.1	20	1.2	.1
30.....		.6	.1			.1	18	1.1	
31.....			.1	6.5		.1		2.1	

NOTE.—No flow on days for which discharge is not given.

*Monthly discharge of City Creek near Highland, Calif., for the year ending
September 30, 1926*

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	5.5	0	1.53	94.1
November.....	3.4	0	.38	22.6
December.....	9.5	.1	1.88	116
January.....	6.5	0	.29	17.8
February.....	106	.2	14.2	789
March.....	8	0	.18	11.1
April.....	1,040	.1	148	8,810
May.....	34	1.1	11.2	689
June.....	4.9	0	1.27	75.6
The year.....	1,040	0	14.7	10,600

NOTE.—No flow July to September.

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

LOCATION.—In SE. $\frac{1}{4}$ sec. 28, T-1 N., R. 3 W., 1 mile northeast of Highland, San Bernardino County.

RECORDS AVAILABLE.—May 27, 1924, to September 30, 1926.

GAGE.—Water-stage recorder at division box on right bank, 200 yards north of the George Thompson barns.

DISCHARGE MEASUREMENTS.—Made from plank 25 feet above gage, in concrete-lined canal.

CHANNEL AND CONTROL.—Concrete-lined canal with division box leading into two concrete-lined canals through two weirs with adjustable lengths. Permanence of rating depends upon manipulation of these weir lengths.

EXTREMES OF DISCHARGE.—Maximum discharge during year, from water-stage recorder, 9.3 second-feet during afternoon of June 15; canal dry for several periods at various times.

1924-1926: Maximum discharge, from water-stage recorder, 9.3 second-feet during afternoon of June 15, 1926.

DIVERSIONS.—The canal diverts from City Creek half a mile above gage. During summer entire flow of City Creek is ordinarily diverted. At times water is pumped from canal above gage.

REGULATION.—Flow controlled by gates at head of canal.

ACCURACY.—Stage-discharge relation changed frequently. Rating curves fairly well defined. Water-stage recorder record satisfactory except for several two or three day periods and August 1-20. Daily discharge ascertained by applying mean daily gage reading to rating table, except for days of no gage-height record, for which it was estimated. Records fair.

*Discharge measurements of City Creek Water Co.'s canal near Highland, Calif.,
during the year ending September 30, 1926*

Date	Gage height	Dis- charge	Date	Gage height	Dis- charge	Date	Gage height	Dis- charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 2.....	0.39	3.3	Jan. 19.....	0.42	3.4	June 24.....	0.61	5.9
Nov. 10.....	.38	2.8	Jan. 29.....	.42	2.7	July 8.....	.57	5.8
Nov. 18.....	.36	2.2	Feb. 11.....	.42	1.6	July 21.....	.39	2.9
Nov. 23.....	.37	2.8	Feb. 24.....	.48	2.1	Aug. 2.....	.37	2.7
Dec. 4.....	.34	1.1	Mar. 10.....	.50	4.4	Aug. 20.....	.36	2.0
Dec. 21.....	.35	2.6	Mar. 29.....	.53	5.3	Aug. 21.....	.38	2.8
Jan. 4.....	.38	2.6	May 25.....	.74	8.0	Sept. 4.....	.32	1.9
Jan. 16.....	.40	2.9	June 10.....	.75	8.4	Sept. 16.....	.33	2.1

Daily discharge, in second-feet, of City Creek Water Co.'s canal near Highland, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	2.9		3.4		3.1	4.1		6.2	6.2		2.0
2	1.0	2.9		3.0		3.1	4.6		6.6	5.8		1.8
3	1.0	3.6		2.8		3.4	4.9		7.0	5.8		1.9
4	.8	3.4	0.8	2.8		3.7	2.1		6.5	5.8		1.9
5		3.3	1.2	2.8		4.1			6.5	5.8		1.8
6		3.2	1.2	2.7		4.1			6.6	5.2		1.9
7		3.1	1.1	2.7	0.8	4.1			7.0	4.7		1.9
8		3.0	.4	2.7	1.5	4.7			7.6	5.2		1.9
9		2.9		2.7	1.5	5.2			8.6	5.5		1.9
10		2.8		2.8	1.5	4.1			8.6	6.0		1.9
11		2.8		2.9	1.5	3.1			8.8	5.2	3.0	1.9
12		2.8	1.0	3.0		2.9			8.9	5.2		1.8
13		2.7	1.6	3.0		3.1			9.0	4.9		1.8
14		2.6	1.7	3.0		4.3		5.2	9.0	4.7		1.9
15		2.7	1.7	3.0		4.4		7.6	9.1	4.7		1.9
16		2.7	1.5	3.0		4.4		6.8	8.8	4.7		2.0
17		2.7	1.4	3.0		4.4		6.8	8.8	4.4		2.1
18		2.7	.8	3.1		4.6		6.8	8.4	3.9		2.0
19		2.7	.9	3.3		4.3		6.8	8.1	3.4		2.1
20		2.7	1.7	2.9		4.0		7.6	7.8	3.1		2.0
21	1.4	2.7	2.5	3.0	.7	3.6		7.8	7.6	3.1	2.6	2.0
22	2.9	2.7	2.7	3.1	.5	3.3		7.8	7.3	3.0	2.6	2.0
23	2.9	2.7	2.7	3.0	.7	3.1		7.9	6.2	3.0	2.2	2.0
24	2.9	1.5	2.7	3.1	1.2	3.1		7.6	5.8	2.9	2.0	2.0
25	2.9	1.9	2.7	3.1	2.6	3.6		7.9	5.8	3.4	1.8	2.0
26	2.9	2.6	2.7	3.1	1.9	4.3		8.1	5.8	3.5	1.9	1.9
27	2.9	2.4	3.1	3.1	1.8	3.3		7.9	5.8	3.6	1.9	1.9
28	2.9	1.2	3.4	2.6	3.1	4.3		7.8	5.8	3.7	1.9	2.0
29	2.9	.7	3.0	2.8		4.6		7.8	5.7	3.6	2.2	2.3
30	2.9	.4	3.1	2.6		3.4		8.1	5.5	3.4	2.2	3.4
31	2.9		3.1	1.2		3.4		6.2		3.3	2.1	

NOTE.—No flow on days for which discharge is not given. Braced figure represents estimated mean discharge for period indicated.

Monthly discharge of City Creek Water Co.'s canal near Highland, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	2.9	0	1.10	67.6
November	3.6	.4	2.57	153
December	3.4	0	1.57	96.5
January	3.4	1.2	2.88	177
February	3.1	0	.67	37.2
March	5.2	2.9	3.84	236
April	4.9	0	.52	30.9
May	8.1	0	4.27	263
June	9.1	5.5	7.31	435
July	6.2	2.9	4.41	271
August		1.8	2.69	165
September	3.4	1.8	2.00	119
The year	9.1	0	2.83	2,050

DEVIL CANYON CREEK NEAR SAN BERNARDINO, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 6, T. 1 N., R. 4 W., 7.3 miles northwest of San Bernardino, San Bernardino County.

DRAINAGE AREA.—6.16 square miles (measured on topographic maps).

RECORDS AVAILABLE.—December 27, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank, 300 feet above road fork at mouth.

DISCHARGE MEASUREMENTS.—Made from timber footbridge at gage or by wading.
CHANNEL AND CONTROL.—Bed consists of gravel and boulders. Artificial control is a concrete trapezoidal weir 3.0 feet long on bottom with 1.1 side slopes, built in July, 1925. Channel not permanent on account of alternate filling and scouring just above artificial control.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks about 3.75 feet about 6 p. m. April 7 (discharge, 220 second-feet); practically dry October 1 to February 11 and July 1 to September 30.

1919-1926: Maximum stage, from floodmarks, about 3.75 feet about 6 p. m. April 7 (discharge, 220 second-feet); stream practically dry September 27-28, 1921, and several months during summers of 1924, 1925, and 1926.

DIVERSIONS.—Water diverted above gage by city of San Bernardino and spread over canyon floor to increase absorption.

REGULATION.—See preceding paragraph.

ACCURACY.—Stage-discharge relation changed April 6. Rating curves fairly well defined below 60 second-feet. Water-stage recorder record good, except for portion of April 7. Daily discharge ascertained by applying mean daily gage height to rating table except April 5 and 7, for which hourly discharge was averaged; discharge estimated May 11 to 23 and June 8-30. Records good.

Discharge measurements of Devil Canyon Creek near San Bernardino, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 14.....	1.29	*0.05	Feb. 11.....	1.27	*0.03	May 6.....	2.05	3.0
Oct. 26.....	1.31	*.05	Feb. 15.....	1.97	6.8	May 24.....	1.78	*.1
Nov. 9.....	1.31	*.02	Feb. 24.....	1.49	.3	June 18.....	.....	.2
Nov. 23.....	1.32	*.03	Mar. 9.....	1.48	.2	July 14.....	1.26	*.02
Dec. 7.....	1.28	*.02	Mar. 24.....	1.46	*.2	July 27.....	1.27	*.02
Dec. 21.....	1.30	*.03	Apr. 7.....	2.66	42	Aug. 2.....	1.27	*.02
Jan. 4.....	1.33	*.02	Apr. 12.....	2.36	13	Aug. 23.....	1.26	*.02
Jan. 16.....	1.34	*.02	Apr. 16.....	2.13	4.0	Sept. 16.....	1.27	*.02
Jan. 28.....	1.32	*.03	Apr. 21.....	2.06	2.7	Sept. 24.....	1.25	*.02
Feb. 1.....	1.31	*.03	Apr. 29.....	1.97	1.6			

* Estimated.

Daily discharge, in second-feet, of Devil Canyon Creek near San Bernardino, Calif., for the year ending September 30, 1926

Day	Feb.	Mar.	Apr.	May	June	Day	Feb.	Mar.	Apr.	May	June
1.....		0.3	0.2	1.6	0.6	16.....	4.9	0.2	4.6	0.2	0.2
2.....		.3	.2	3.1	.7	17.....	3.6	.2	4.4	.1	.2
3.....		.3	.2	1.9	.4	18.....	2.4	.2	6	.1	.2
4.....		.3	.3	1.4	.2	19.....	1.7	.2	5	.1	.2
5.....		.3	49	2.6	.2	20.....	1.4	.2	3.6	.1	.2
6.....		.3	54	2.8	.2	21.....	1.1	.2	2.9	.1	.2
7.....		.3	65	1.7	.2	22.....	.8	.2	2.6	.1	.2
8.....		.3	71	1.2	.2	23.....	.5	.2	2.2	.1	.2
9.....		.3	52	1.2	.2	24.....	.4	.2	1.8	.1	.2
10.....		.3	37	.5	.2	25.....	.3	.2	1.6	.1	.2
11.....		.3	24	.2	.2	26.....	.3	.2	1.6	.1	.1
12.....	4.7	.3	13	.2	.2	27.....	.3	.2	1.6	.3	.1
13.....	39	.2	10	.2	.2	28.....	.3	.2	1.6	.7	.1
14.....	21	.2	8	.2	.2	29.....	.....	.2	1.6	.7	.1
15.....	7	.2	6	.2	.2	30.....	.....	.2	1.6	.6	.1
						31.....	.....	.2	.....	.6	.....

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

Monthly discharge of Devil Canyon Creek near San Bernardino, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
February.....	39	0	3.20	1.78
March.....	.3	.2	.24	14.8
April.....	71	.2	14.4	857
May.....	3.1	.1	.75	46.1
June.....	.7	.1	.22	13.1
The year.....	71	.0	1.53	1,110

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

LYTLE CREEK AND FONTANA PIPE LINE NEAR FONTANA, CALIF.

LOCATION.—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., $4\frac{1}{2}$ miles above Fontana power plant, and $7\frac{1}{2}$ miles north of Fontana, San Bernardino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1918, to September 30, 1926.

GAGE.—Water-stage recorder in wooden well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cable at gage of by wading.

CHANNEL AND CONTROL.—Gravel and boulders; shifts at high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, 4.55 feet April 6 (discharge, about 500 second-feet); no flow except February 13, 14, April 6, 7, and 9.

DIVERSIONS.—Water is diverted about 3 miles above gage in sec. 26, T. 2 N., R. 6 W., by Southern California Edison Co. for the Lytle Creek power plant. This water is then carried directly across the creek by a siphon to the headworks of the Fontana pipe line, which serves the plant of the Fontana Power Co., situated in sec. 22, T. 1 N., R. 5 W., about $4\frac{1}{2}$ miles downstream. The Fontana Union Water Co. diverts ground water into the Fontana pipe line by means of a tunnel above the headworks; it also diverts water into the Fontana pipe line, by means of a temporary diversion dam on Lytle Creek above Lytle Creek power plant in order to operate the Fontana plant at capacity when water is available. During low-water period water is pumped from gravels into the Lytle Creek power plant canal by Fontana Union Water Co.

ACCURACY.—Discharge of Lytle Creek estimated from discharge measurements; record fair. Amount of water used at the power house is recorded twice daily at 6 a. m. and 6 p. m. Kilowatt output equivalent used to compute discharge. Records considered reliable.

COOPERATION.—Records of daily discharge of Fontana pipe line furnished by Southern California Edison Co.

Discharge measurements of Lytle Creek near Fontana, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Feb. 13.....		* 25	Apr. 7.....	3.11	53	Apr. 9.....	3.68	95
Feb. 14.....	2.15	* 1	Apr. 7.....		* 55			
Apr. 6.....		* 330	Apr. 9.....		* 87			

* Record furnished by Fontana Co.

* Discharge estimated.

Daily discharge, in second-feet, of Lytle Creek near Fontana, Calif., for the year ending September 30, 1926

Day	Discharge	Day	Discharge	Day	Discharge
Feb. 13.....	25	Apr. 6.....	330	Apr. 9.....	91
Feb. 14.....	.1	Apr. 7.....	54		

NOTE.—No natural flow except on days for which discharge is given. There was some flow at other times during the year when the sand trap at the pipe line was flushed out. This water is included in flow of pipe line.

Daily discharge, in second-feet, of Fontana pipe line near Fontana, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	10.9	10.0	13.2	14.6	14.6	16.0	17.5	42	25	22	22	15.2
2.....	11.2	10.3	15.6	13.9	12.9	15.5	17.5	41	26	22	21	15.5
3.....	11.2	10.0	12.8	13.9	37	15.0	17.5	45	26	22	21	16.7
4.....	13.3	12.0	12.4	13.9	15.2	15.0	17.8	44	26	22	21	16.0
5.....	11.4	13.2	11.5	14.4	14.7	14.6	49	45	26	22	21	16.4
6.....	12.4	12.9	11.5	13.6	14.8	14.4	24	42	26	22	21	16.7
7.....	12.4	13.2	11.2	12.8	14.4	15.0	25	40	26	22	21	16.7
8.....	12.3	12.6	11.2	11.5	13.9	14.6	59	38	26	22	21	17.0
9.....	10.9	12.6	11.5	11.8	13.9	14.4	59	38	25	22	20	17.2
10.....	11.5	12.9	11.8	11.5	13.6	14.4	59	39	25	21	20	17.0
11.....	11.8	12.6	11.5	11.8	13.4	10.9	59	39	25	21	20	17.5
12.....	11.8	13.4	11.8	11.5	43	10.0	49	38	25	22	20	17.8
13.....	11.8	12.6	11.8	11.5	47	9.8	44	37	24	22	19.3	17.8
14.....	10.6	12.9	12.4	12.1	39	9.1	36	36	24	21	18.8	18.2
15.....	10.3	12.6	12.1	12.1	36	9.4	34	35	24	21	19.3	19.2
16.....	10.6	12.6	12.1	13.6	33	9.4	35	33	23	20	19.5	20
17.....	10.6	12.9	11.8	14.2	29	9.3	36	32	22	19.9	19.3	21
18.....	10.3	12.6	15.4	14.4	27	12.6	53	30	23	19.0	19.5	21
19.....	10.0	12.9	13.2	13.9	26	17.8	47	30	23	19.3	19.4	21
20.....	9.8	13.6	12.4	13.6	25	18.0	41	29	22	19.3	18.6	22
21.....	9.7	12.0	12.6	13.9	24	17.2	40	30	22	20	18.8	22
22.....	9.7	11.5	12.4	13.6	22	16.1	39	29	22	22	19.0	23
23.....	9.7	11.2	12.6	13.4	21	17.5	39	30	23	23	18.8	21
24.....	9.7	13.4	11.8	13.6	20	17.8	39	29	22	23	17.8	22
25.....	9.7	12.9	12.3	13.9	19.0	18.0	39	28	23	22	18.6	21
26.....	12.0	12.9	11.8	13.6	18.5	17.8	40	27	22	22	18.0	23
27.....	13.9	13.2	12.6	13.9	17.0	17.8	40	27	22	23	17.0	23
28.....	13.9	13.2	12.9	13.9	16.2	17.0	41	26	23	23	17.0	24
29.....	12.2	13.4	12.4	13.6	-----	16.6	41	24	23	22	16.4	25
30.....	10.0	13.2	13.6	13.4	-----	16.9	41	25	23	22	16.2	25
31.....	10.0	-----	14.6	18.6	-----	17.5	-----	25	-----	22	15.7	-----

Monthly discharge of Fontana pipe line near Fontana, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	13.9	9.7	11.1	682
November.....	13.6	10.0	12.5	744
December.....	15.6	11.2	12.5	769
January.....	18.6	11.5	13.4	824
February.....	47	12.9	22.9	1,270
March.....	18.0	9.1	14.7	904
April.....	59	17.5	39.3	2,340
May.....	45	25	34.0	2,090
June.....	26	22	23.9	1,420
July.....	23	19.0	21.4	1,320
August.....	22	15.7	19.2	1,180
September.....	25	15.2	19.6	1,170
The year.....	59	9.1	20.3	14,700

CAJON CREEK NEAR KEENBROOK, CALIF.

LOCATION.—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, San Bernardino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 26, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 150 feet below gage or by wading.

CHANNEL AND CONTROL.—Gravel; not permanent. Artificial control built of boulders and concrete. Sharp-crested concrete weir installed October 1–14, 1923; sand fills in above weir. Control lowered about 1.6 feet May 28, 1926.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks, 5.5 feet at 2.30 p. m. May 2 (discharge, 335 second-feet); minimum stage, 1.37 feet at 5 p. m. August 25 (discharge, 1.2 second-feet).

1919–1926: Maximum stage recorded, 9.0 feet, estimated from floodmarks, December 20, 1921 (discharge, estimated about 5,000 second-feet); minimum stage, 1.05 feet at 7.30 p. m. June 25, 1920 (discharge, 0.05 second-foot).

DIVERSIONS.—None above gage. Muscupiabe Land & Water Co. diverts all water during irrigating season, below the gage.

REGULATION.—None.

ACCURACY.—Stage-discharge relation not permanent. Water-stage recorder record excellent. Daily discharge ascertained by shifting-control method October 1 to May 27, and by applying mean daily gage height to rating table May 28 to September 30. Hourly discharge averaged April 5. Records good.

Discharge measurements of Cajon Creek near Keenbrook, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 13.....	2.94	2.4	Mar. 1.....	3.07	3.8	May 29.....	1.47	2.8
Oct. 27.....	2.93	2.5	Mar. 15.....	3.04	2.9	June 28.....	1.40	1.6
Nov. 10.....	2.92	2.3	Mar. 29.....	3.02	2.7	July 6.....	1.39	1.4
Nov. 24.....	2.93	2.7	Apr. 7.....	4.09	56	July 19.....	1.38	1.3
Dec. 7.....	2.93	2.7	Apr. 12.....	3.64	17	Aug. 2.....	1.43	1.8
Dec. 21.....	2.94	2.4	Apr. 19.....	3.37	9.7	Aug. 23.....	1.41	1.8
Jan. 4.....	2.94	2.4	Apr. 29.....	3.14	6.3	Sept. 7.....	1.40	1.5
Jan. 15.....	2.93	2.6	May 6.....	3.20	6.0	Sept. 16.....	1.42	1.9
Feb. 1.....	3.06	4.5	May 20.....	3.03	3.7	Sept. 24.....	1.39	1.3
Feb. 15.....	3.48	11	May 26.....	3.07	3.3			

Daily discharge, in second-feet, of Cajon Creek near Keenbrook, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.4	2.8	2.6	2.2	5	4.2	3.2	7.5	3.2	2.0	1.8	1.5
2.....	1.5	2.8	3.1	2.4	6	4.1	3.2	9.5	3.2	2.0	1.8	1.5
3.....	1.4	2.8	2.8	2.4	20	4.2	3.2	9	3.2	2.0	1.8	1.5
4.....	1.9	2.6	2.6	2.4	6	4.1	4.6	7	3.2	1.9	1.8	1.5
5.....	2.0	2.5	2.6	2.4	5	4.1	124	6	3.2	1.9	1.8	1.5
6.....	1.9	2.5	2.6	2.4	4.4	3.9	85	5.5	3.0	1.8	1.8	1.5
7.....	2.0	2.5	2.6	2.5	4.2	4.1	65	5.5	3.4	1.8	1.8	1.5
8.....	1.9	2.4	2.6	2.4	4.1	4.1	96	5.5	3.6	2.0	1.8	1.5
9.....	1.9	2.4	2.6	2.5	3.9	3.9	47	5	3.2	2.0	1.8	1.5
10.....	2.0	2.4	2.8	2.6	4.1	3.7	31	5	2.9	2.0	1.8	1.5
11.....	2.1	2.2	2.8	2.6	4.6	3.4	23	5	2.9	1.8	1.8	1.7
12.....	2.1	2.2	2.8	2.5	48	3.2	16	4.8	3.2	1.8	1.8	1.5
13.....	2.2	2.2	2.8	2.6	65	3.1	12	4.6	3.2	1.8	1.8	1.5
14.....	2.4	2.2	2.8	2.6	18	3.2	10	4.6	3.2	1.8	1.8	1.7
15.....	2.2	2.4	2.8	2.6	11	3.2	8.5	4.4	3.2	1.7	1.8	1.7

Daily discharge, in second-feet, of Cajon Creek near Keenbrook, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
16.....	2.2	2.4	2.8	2.6	8	3.2	8	4.4	3.0	1.7	1.8	1.7
17.....	2.4	2.4	2.8	2.8	6.5	3.2	7.5	4.4	3.0	1.7	1.8	1.8
18.....	2.2	2.4	3.1	3.0	5.5	3.2	16	4.2	2.9	1.7	1.8	1.8
19.....	2.2	2.4	2.8	2.8	5	3.2	11	4.4	2.9	1.5	1.8	1.7
20.....	2.4	2.5	2.8	3.0	5	4.2	7.5	4.4	2.9	1.7	2.0	1.5
21.....	2.4	2.5	2.6	2.8	4.8	3.6	6.5	4.1	2.7	1.7	2.0	1.7
22.....	2.5	2.5	2.6	2.8	4.8	3.2	6.5	3.9	2.5	1.7	2.0	1.7
23.....	2.5	2.5	2.6	2.8	4.6	3.0	6	3.9	2.5	1.7	1.8	1.7
24.....	2.6	2.6	2.5	2.8	4.2	3.0	6	3.7	2.5	1.7	1.7	1.7
25.....	2.5	2.6	2.5	2.8	4.2	3.0	5.5	3.4	2.5	1.5	1.7	1.7
26.....	2.5	2.6	2.4	2.6	4.1	3.0	5	3.1	2.4	1.7	1.5	1.7
27.....	2.8	2.6	2.4	2.6	4.1	2.8	6	3.2	2.4	1.7	1.5	1.7
28.....	2.8	2.6	2.4	2.6	4.1	2.8	6	3.0	2.4	2.0	1.5	1.7
29.....	2.8	2.6	2.4	2.6	-----	2.8	7	2.9	2.2	1.8	1.5	1.8
30.....	2.8	2.6	2.4	2.6	-----	2.8	7	2.9	2.0	1.8	1.5	1.8
31.....	2.8	-----	2.2	15	-----	3.0	-----	3.2	-----	1.8	1.5	-----

Monthly discharge of Cajon Creek near Keenbrook, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2.8	1.4	2.24	138
November.....	2.8	2.2	2.49	148
December.....	3.1	2.2	2.65	163
January.....	15	2.2	3.01	185
February.....	65	3.9	9.79	544
March.....	4.2	2.8	3.44	212
April.....	124	3.2	21.5	1,280
May.....	9.5	2.9	4.77	293
June.....	3.6	2.0	2.89	172
July.....	2.0	1.5	1.80	111
August.....	2.0	1.5	1.75	108
September.....	1.8	1.5	1.63	97.0
The year.....	124	1.4	4.76	3,450

LONE PINE CREEK NEAR KEENBROOK, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 12, T. 2 N., R. 6 W., 50 feet above Atchison, Topeka & Santa Fe Railway bridge 1 mile north of Keenbrook, San Bernardino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 26, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on left bank.

DISCHARGE MEASUREMENTS.—Made from timber footbridge at gage or by wading.

CHANNEL AND CONTROL.—Bed consists of gravel and small boulders; not permanent. Artificial control for high stages is built of boulders and concrete at site of natural waterfall. A weir was installed October 1-16, 1923, but is affected by gravel and sand collecting above it. April 21, 1926, a rock slide covered control. On May 29 débris was removed from pool above control and normal conditions for low flows prevailed.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.10 feet at 6 a. m. April 5 (discharge, 47 second-feet); minimum discharge, 0.1 second-foot several times during year.

1919-1926: Maximum stage, from water-stage recorder, 4.1 feet at 1 p. m. December 19, 1922 (discharge, about 810 second-feet); minimum discharge, 0.1 second-foot several times during 1926.

DIVERSIONS.—None above gage. All water diverted by Muscupiabe Land & Water Co. through a pipe line, 100 feet below gage, during irrigating season.

REGULATION.—None.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curve fairly well defined except April 7 to May 28. Water-stage recorder record satisfactory except February 13–14, April 5–7, May 1–28, July 5, and August 19–22. Daily discharge ascertained by shifting-control method; estimated during periods of no gage-height record by comparison with records for Cajon Creek. Records good.

Discharge measurements of Lone Pine Creek near Keenbrook, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 13.....	1.01	0.4	Mar. 1.....	0.98	0.1	May 29.....	1.00	0.3
Oct. 27.....	.99	.3	Mar. 15.....	.98	.2	June 28.....	.98	.2
Nov. 10.....	.99	.3	Mar. 29.....	.98	.3	July 6.....	.99	.2
Nov. 24.....	.99	.3	Apr. 7.....	1.40	1.3	July 19.....	.99	.2
Dec. 7.....	.99	.3	Apr. 12.....	1.15	.4	Aug. 2.....	.99	.2
Dec. 21.....	.99	.3	Apr. 19.....	1.18	.2	Aug. 23.....	.97	.2
Jan. 4.....	.99	.2	Apr. 29.....	2.37	.2	Sept. 7.....	.97	.1
Jan. 15.....	.99	.2	May 6.....	2.48	.3	Sept. 16.....	.98	.1
Feb. 1.....	1.03	.5	May 20.....	2.29	.3	Sept. 24.....	.96	.1
Feb. 15.....	1.08	.5	May 26.....	2.29	.2			

Daily discharge, in second-feet, of Lone Pine Creek near Keenbrook, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.3	0.3	0.3	0.2	0.5	0.1	0.4	0.5	0.3	0.2	0.2	0.1
2.....	.3	.3	.5	.2	.6	.2	.4	.3	.3	.2	.2	.1
3.....	.3	.3	.3	.2	1.7	.2	.4	.3	.3	.2	.2	.2
4.....	.3	.3	.3	.2	.6	.2	.5	.3	.3	.2	.2	.2
5.....	.4	.3	.3	.2	.5	.2	22	.3	.3	.2	.2	.1
6.....	.3	.3	.3	.2	.4	.2	5.3	.3	.3	.2	.2	.1
7.....	.4	.3	.3	.2	.4	.2	2.9	.3	.3	.2	.2	.1
8.....	.4	.3	.3	.2	.3	.2	8.5	.3	.3	.2	.2	.1
9.....	.4	.3	.3	.2	.3	.2	1.5	.3	.3	.2	.2	.1
10.....	.4	.3	.3	.2	.3	.2	.5	.3	.3	.2	.2	.1
11.....	.4	.3	.3	.2	.3	.2	.4	.3	.3	.2	.1	.1
12.....	.4	.3	.3	.2	7.5	.2	.3	.3	.3	.2	.1	.1
13.....	.4	.3	.3	.2	10	.2	.2	.3	.3	.2	.1	.1
14.....	.4	.3	.3	.2	1.0	.2	.2	.3	.3	.2	.1	.1
15.....	.3	.3	.3	.2	.5	.2	.1	.3	.3	.2	.1	.1
16.....	.3	.3	.3	.2	.5	.3	.1	.3	.3	.2	.2	.1
17.....	.3	.3	.3	.2	.3	.3	.1	.3	.2	.2	.2	.1
18.....	.3	.3	.3	.2	.3	.3	.2	.3	.2	.2	.2	.1
19.....	.3	.2	.3	.2	.2	.3	.2	.3	.2	.2	.2	.1
20.....	.3	.2	.3	.2	.2	.3	.1	.3	.2	.2	.2	.1
21.....	.2	.2	.3	.2	.2	.3	.1	.3	.3	.2	.2	.1
22.....	.3	.2	.3	.2	.2	.3	.1	.3	.2	.2	.2	.2
23.....	.3	.2	.3	.2	.2	.3	.1	.3	.2	.2	.2	.1
24.....	.2	.3	.3	.2	.2	.3	.1	.3	.2	.2	.2	.1
25.....	.2	.3	.3	.2	.2	.3	.2	.3	.2	.2	.2	.1
26.....	.2	.3	.2	.3	.1	.3	.2	.3	.2	.2	.2	.1
27.....	.3	.2	.2	.3	.1	.3	.2	.3	.2	.2	.2	.1
28.....	.3	.3	.2	.3	.1	.3	.2	.3	.2	.2	.2	.1
29.....	.3	.3	.2	.3	-----	.3	.2	.3	.2	.2	.2	.1
30.....	.2	.3	-----	.3	-----	.4	.2	.3	.2	.2	.2	.1
31.....	.2	-----	.2	2.9	-----	.4	-----	.3	-----	.2	.2	-----

Monthly discharge of Lone Pine Creek near Keenbrook, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0.4	0.2	0.31	19.1
November.....	.3	.2	.28	16.7
December.....	.5	.2	.29	17.8
January.....	2.9	.2	.30	18.4
February.....	10	.1	.99	55.0
March.....	.4	.1	.25	15.4
April.....	22	.1	1.53	91.0
May.....	.5	.3	.31	19.1
June.....	.3	.2	.26	15.5
July.....	.2	.2	.20	12.3
August.....	.2	.1	.18	11.1
September.....	.2	.1	.11	6.5
The year.....	22	.1	.41	298

MEEKS & DALEY CANAL NEAR COLTON, CALIF.

LOCATION.—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, San Bernardino County.

RECORDS AVAILABLE.—September 18, 1920, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on south side of Colton Avenue.

DISCHARGE MEASUREMENTS.—Made from footbridge at gage.

CHANNEL AND CONTROL.—Concrete-lined canal. Sand and moss cause slight changes in stage-discharge relation. Flashboards are placed in canal below gage to divert water into irrigation ditches, at times.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during year, 21 second-feet June 16; no flow at times.

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

ACCURACY.—Stage-discharge relation shifts continuously between narrow limits. Water-stage recorder gave satisfactory record except October 5-6, August 8-13, and 16-18. Daily discharge ascertained by shifting-control method, except for days of no gage-height record, for which it was estimated. Records good.

Canal diverts from right bank of Warm Creek about $1\frac{1}{2}$ miles northeast of Colton. Water is used for irrigation in vicinity of Colton.

Discharge measurements of Meeks & Daley Canal near Colton, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 3.....	1.99	15.4	Jan. 23.....	1.27	4.9	May 19.....	1.32	9.5
Oct. 7.....	1.53	9.6	Jan. 28.....	1.21	5.5	May 24.....	1.44	11
Oct. 10.....	1.50	9.6	Feb. 3.....	.36	.4	June 7.....	2.08	16.4
Oct. 17.....	1.00	4.5	Feb. 9.....	.27	.2	June 21.....	2.04	16.7
Oct. 24.....	1.00	3.9	Feb. 13.....	.38	.4	June 28.....	2.05	17.7
Oct. 30.....	1.36	7.5	Mar. 4.....	.28	.2	July 3.....	2.11	18.9
Nov. 6.....	1.46	8.0	Mar. 6.....	.67	2.9	July 10.....	2.18	19.0
Nov. 13.....	1.49	8.3	Mar. 10.....	1.19	7.8	July 17.....	2.25	19.2
Nov. 21.....	1.49	8.2	Mar. 13.....	1.18	7.9	July 24.....	2.10	19.2
Nov. 28.....	1.48	7.2	Mar. 17.....	1.44	11.2	July 31.....	1.99	16.3
Dec. 5.....	.67	1.2	Mar. 27.....	1.07	6.2	Aug. 13.....	2.06	19.0
Dec. 10.....	1.19	4.2	Mar. 31.....	1.52	11.7	Aug. 19.....	2.05	17.0
Dec. 12.....	1.12	4.2	Apr. 9.....	1.41	12	Aug. 27.....	2.05	16.8
Dec. 19.....	.68	1.5	Apr. 28.....	1.31	6.7	Sept. 2.....	2.10	17.7
Dec. 26.....	.77	2.3	May 1.....	.98	4.5	Sept. 9.....	2.06	17.1
Jan. 2.....	1.10	4.7	May 4.....	1.00	4.9	Sept. 11.....	2.08	18.2
Jan. 8.....	1.44	7.4	May 7.....	1.04	5.2	Sept. 20.....	2.02	16.4
Jan. 15.....	1.48	7.6	May 14.....	.25	*.2	Sept. 25.....	2.03	17.1

* Estimated.

Daily discharge, in second-feet, of Meeks & Daley Canal near Colton, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	13.2	8.0	7.2	6.1	1.9	-----	12.2	4.7	10.3	18.7	17.2	17.0
2.....	15.2	7.6	4.3	5.1	.3	-----	12.2	5.1	10.4	18.8	18.0	17.9
3.....	15.2	5.8	1.3	4.5	.4	-----	11.9	5.1	9.8	17.8	18.1	17.8
4.....	7.8	6.1	1.3	8.1	.3	0.3	11.6	4.8	12.8	17.4	17.6	17.5
5.....	8.3	5.7	1.2	9.2	.3	.5	13.6	3.8	15.7	19.3	16.1	17.4
6.....	8.8	7.3	1.2	7.1	.2	2.4	17.2	3.4	15.7	20	17.1	16.2
7.....	9.3	7.3	1.2	7.2	.2	4.9	10.3	5.5	16.4	18.4	17.1	15.5
8.....	9.3	7.4	3.8	7.6	.2	5.1	16.7	5.1	16.3	17.6	17.0	16.7
9.....	9.4	7.5	5.3	7.7	.2	.8	11.2	1.7	15.3	18.1	17.0	17.2
10.....	9.6	7.4	3.9	7.7	.2	4.7	3.7	.3	16.4	18.5	18.0	18.3
11.....	10.2	8.1	3.8	7.5	1	8.0	2.7	.1	17.1	17.5	18.0	18.3
12.....	7.4	8.1	4.1	7.5	.3	8.0	4.4	.1	17.2	16.6	19.0	18.0
13.....	2.6	8.3	3.8	7.5	.4	7.8	1.3	.6	17.6	18.3	19.0	17.9
14.....	4.2	8.5	3.8	7.5	.3	8.7	-----	3.2	17.2	17.4	18.3	17.5
15.....	4.2	8.5	3.6	7.6	.2	10.6	-----	9.4	17.9	16.4	19.2	16.1
16.....	4.4	8.7	3.7	7.6	.1	10.9	-----	11.8	21	17.4	19.0	17.0
17.....	4.4	8.2	4.7	7.2	-----	11.2	-----	11.2	19.4	17.9	18.0	16.4
18.....	4.2	8.2	3.4	6.4	-----	11.5	3.7	10.7	16.3	18.3	17.0	16.6
19.....	4.1	8.1	2.1	6.4	-----	7.2	.4	10.8	16.8	18.7	17.1	16.7
20.....	3.9	8.2	2.7	6.1	-----	4.6	-----	11.8	16.2	16.3	17.5	16.3
21.....	3.7	8.2	2.5	6.0	-----	9.7	-----	11.5	16.7	17.6	16.3	16.2
22.....	3.6	8.1	2.3	5.2	-----	9.4	-----	11.4	17.0	17.2	16.4	16.2
23.....	3.8	8.0	2.3	5.0	-----	9.0	-----	11.3	17.8	17.6	17.9	14.0
24.....	3.0	6.3	2.3	5.1	-----	8.7	-----	10.6	17.4	19.0	17.8	16.1
25.....	5.9	1.0	2.3	4.9	-----	8.8	.1	10.6	15.9	19.0	18.0	16.7
26.....	8.4	.8	2.3	5.2	-----	8.3	.2	11.0	16.2	18.1	17.5	16.3
27.....	7.5	3.4	2.4	5.4	-----	7.2	.2	11.8	17.8	18.0	17.1	15.7
28.....	7.3	7.5	2.4	5.5	-----	7.8	2.4	10.9	17.6	15.7	17.0	15.5
29.....	7.3	8.2	2.4	5.5	-----	7.3	4.9	10.2	17.5	17.6	16.2	16.2
30.....	7.5	7.6	2.3	5.8	-----	10.2	4.2	10.2	17.6	17.1	16.1	16.6
31.....	7.7	-----	4.4	4.3	-----	12.0	-----	10.0	-----	17.2	17.4	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Meeks & Daley Canal near Colton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	15.2	2.6	7.14	439
November.....	8.7	.8	7.07	421
December.....	7.2	1.2	3.04	187
January.....	9.2	4.3	6.44	396
February.....	1.9	.0	.20	11.1
March.....	12.0	.0	6.63	408
April.....	17.2	.0	4.84	288
May.....	11.8	.1	7.38	454
June.....	21	9.8	16.2	964
July.....	20	15.7	17.9	1,100
August.....	19.2	16.1	17.5	1,080
September.....	18.3	14.0	16.7	994
The year.....	21	0	9.31	6,740

SAN JACINTO RIVER NEAR SAN JACINTO, CALIF.

LOCATION.—In SE. ¼ sec. 13, T. 5 S., R. 1 E., at highway bridge 8¼ miles southeast of San Jacinto, Riverside County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 25, 1920, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on left bank, 100 feet below highway bridge.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Sand, gravel, and boulders; shifts during floods. Channel straight 100 feet above and below gage. Banks high, gravel, not subject to overflow except during extreme stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.75 feet at 6 a. m. April 6 (discharge, 2,700 second-feet); stream dry at various times during summer.

1920-1926: Maximum stage, from water-stage recorder, 6.75 feet at 6 a. m. April 6, 1926 (discharge, 2,700 second-feet); stream usually dry several months each year.

DIVERSIONS.—Water is diverted from Lake Hemet on South Fork of San Jacinto River, $3\frac{1}{4}$ miles above station, from Strawberry Creek $3\frac{1}{4}$ miles above, and from North Fork of San Jacinto River 1 mile above station.

REGULATION.—Lake Hemet Water Co. stores water on South Fork of San Jacinto River at Lake Hemet. At times during period July 13 to September 30 water from storage flowed past gaging station and was picked up about 200 feet below station.

ACCURACY.—Stage-discharge relation not permanent. Rating curves fairly well defined. Water-stage recorder record good. Daily readings from staff gage available when recorder did not operate. Daily discharge ascertained by applying mean daily gage height to rating table, except October 4-6, October 9 to December 2, February 23 to March 1, and May 12, for which it was estimated. Hourly discharge averaged when daily fluctuation was large. Records good.

Discharge measurements of San Jacinto River near San Jacinto, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 6.....	2.16	5.8	Feb. 5.....	1.91	0.7	Apr. 17.....	3.46	124
Oct. 20.....	1.74	" 1	Feb. 14.....	2.98	45	Apr. 24.....	3.15	81
Nov. 3.....	1.76	" 1	Feb. 17.....	2.88	31	May 3.....	3.20	85
Nov. 18.....	1.75	" 1	Feb. 19.....	2.59	11	May 13.....	3.24	33
Dec. 2.....	1.85	" 2	Mar. 2.....	2.25	2.4	May 31.....	2.76	2.5
Dec. 13.....	1.80	" 2	Mar. 16.....	2.01	.9	June 22.....	2.34	" 2
Dec. 27.....	1.82	" 1	Mar. 30.....	1.92	.8	July 27.....	2.51	^b 15
Jan. 11.....	1.91	.6	Apr. 9.....	4.28	412	Aug. 1.....	1.93	" 2
Jan. 25.....	1.83	" 2	Apr. 14.....	3.66	192			

^a Estimated.

^b Measurement of water being released from storage.

Daily discharge, in second-feet, of San Jacinto River near San Jacinto, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....		0.1	0.1	0.3	2.7	4.0	0.8	74	1.2	0.1	-----
2.....		.1	2.5	.3	.7	2.8	1.2	82	1.0	.1	-----
3.....		.1	10	.3	3.1	2.1	2.1	88	1.0	-----	20
4.....	9	.1	2.5	.7	2.0	2.1	1.5	88	.6	-----	18
5.....	12	.1	1.3	.9	.6	2.9	689	83	.6	-----	-----
6.....	6	.1	.8	.7	.6	2.0	1,530	83	.5	-----	-----
7.....	1.7	.1	.5	.7	.5	1.3	590	76	.5	-----	-----
8.....	.9	.1	.2	.7	.5	2.0	960	71	.5	-----	-----
9.....	.8	.1	.2	.7	.4	5.5	475	64	.4	-----	-----
10.....	.7	.1	.2	.6	.3	5.5	290	58	.4	-----	-----
11.....		.1	.2	.6	.3	3.3	231	53	.4	-----	-----
12.....	.5	.1	.2	.6	7.5	2.5	322	42	.4	-----	-----
13.....	.4	.1	.2	.6	54	1.6	216	31	.4	-----	-----
14.....	.3	.1	.2	.6	57	1.2	201	37	.4	-----	-----
15.....	.2	.1	.2	.6	44	1.0	173	37	.4	-----	-----

Daily discharge, in second-feet, of San Jacinto River near San Jacinto, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
16.....	0.1	0.1	0.3	0.6	64	1.0	152	36	0.4	-----	-----
17.....	.1	.1	.3	.6	30	1.0	134	33	.4	-----	-----
18.....	.1	.1	.3	.6	17	.9	143	29	.4	-----	-----
19.....	.1	.1	.4	.6	11	1.0	137	25	.3	-----	-----
20.....	.1	.1	.6	.6	9	1.2	112	22	.3	-----	-----
21.....	.1	.1	.4	.4	11	1.1	95	20	.3	-----	-----
22.....	.1	.1	.4	.3	12	1.6	86	19	.1	-----	-----
23.....	.1	.1	.3	.2	11	7.5	84	17	.1	-----	-----
24.....	.1	.5	.3	.3	9	9	80	15	.1	-----	-----
25.....	.1	.2	.3	.3	8	8.5	77	9.5	.1	-----	-----
26.....	.1	.1	.3	.3	7	9	72	6.5	-----	-----	-----
27.....	.1	.1	.3	.4	6	3.7	72	6.5	-----	-----	-----
28.....	.1	.1	.3	.3	5	.8	80	4.6	-----	-----	-----
29.....	.1	.1	.3	.3	-----	.8	74	3.1	.1	-----	-----
30.....	.1	.1	.3	.2	-----	.7	68	2.8	.1	-----	-----
31.....	.1	-----	.3	.5	-----	.7	-----	2.4	-----	-----	-----

NOTE.—No flow on days for which discharge is not given, except that at times during the period July 13 to September 30 water from storage flowed past the station and was picked up 200 feet below. The flow on August 3 and 4 was due to rainfall above station.

Monthly discharge of San Jacinto River near San Jacinto, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	12	0.0	1.12	68.9
November.....	.5	.1	.12	7.1
December.....	10	.1	.79	48.6
January.....	.9	.2	.50	30.7
February.....	64	.3	13.4	744
March.....	9	.7	2.85	175
April.....	1,530	.8	238	14,200
May.....	88	2.4	39.3	2,420
June.....	1.2	.0	.38	22.6
July 1-2.....	.1	.0	.02	.5
The period.....	-----	-----	-----	17,700

NOTE.—See footnote to daily-discharge table.

SAN JACINTO RIVER NEAR ELSINORE, CALIF.

LOCATION.—Near east line sec. 9, T. 6 S., R. 4 W., $2\frac{1}{4}$ miles above junction with Elsinore Lake (low-water stage), one-fourth mile above highway crossing, and 2 miles southeast of Elsinore, Riverside County.

DRAINAGE AREA.—717 square miles (measured on topographic maps).

RECORDS AVAILABLE.—January 1, 1916, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 100 feet below gage or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; practically permanent. One channel at all stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.60 feet at 5 a. m. April 8 (discharge, 2,200 second-feet); stream dry for several months.

1916-1926: Maximum stage recorded, 19.0 feet at 11 a. m. January 28, 1916 (discharge, 14,000 second-feet); stream dry for several months each year.

DIVERSIONS.—During the year the Temescal Water Co. diverted 563 acre-feet of water above station for irrigation. Water is also diverted above San Jacinto for irrigation.

REGULATION.—Water is stored for irrigation at Hemet Reservoir on South Fork of San Jacinto River.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve fairly well defined. Recorder record good. Daily discharge ascertained by applying mean daily gage height to rating table, except for days with large changes of stage, for which hourly discharge was averaged. Records good.

Discharge measurements of San Jacinto River near Elsinore, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 13.....	3.35	62	Mar. 30.....	2.10	a.1	Apr. 21.....	2.90	24
Feb. 17.....	2.32	1.8	Apr. 11.....	5.15	571	May 7.....	2.38	2.8
Mar. 2.....	2.12	a.1	Apr. 14.....	4.27	205	May 13.....	2.14	a.2
Mar. 16.....	2.13	a.1	Apr. 17.....	3.73	113			

* Estimated.

Daily discharge, in second-feet, of San Jacinto River near Elsinore, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1.....		0.6	0.2	0.1	1.3	-----	16.....		7	0.2	136	0.1	-----
2.....		.8	.1	.1	.9	-----	17.....		1.7	.2	94	.1	-----
3.....		28	.1	.2	.6	-----	18.....		1.0	.2	43		2.2
4.....		2.4	.1	.2	.5	-----	19.....		.7	.2	31		1.2
5.....		2.8	.1	60	11	-----	20.....	0.3	.6	1.7	41		.1
6.....		1.1	.1	253	7.5	-----	21.....	.2	.5	.5	26		.1
7.....		.8	.2	611	2.8	-----	22.....	.1	.4	.3	14		.2
8.....		.4	.6	1,080	1.3	-----	23.....	.1	.3	.2	8.5		.1
9.....		.3	.8	714	.9	-----	24.....	.1	.3	.2	6.5		.1
10.....		.2	.3	676	.6	-----	25.....	.1	.2	.2	4.9		.2
11.....		.2	.2	605	.3	-----	26.....	.1	.2	.2	1.9		-----
12.....		36	.2	342	.2	-----	27.....	.1	.2	.2	1.2		-----
13.....		60	.2	310	.2	-----	28.....	.1	.2	.1	1.1		-----
14.....		60	.2	262	.2	1.6	29.....	.1	-----	.1	15		-----
15.....		47	.2	131	.1	-----	30.....	.1	-----	.1	4.6		-----
							31.....	.2	-----	.1	-----		-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of San Jacinto River near Elsinore, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	0.3	0.0	0.05	3.1
February.....	60	.2	9.07	504
March.....	1.7	.1	.27	16.6
April.....	1,080	.1	182	10,800
May.....	11	.0	.92	56.6
June.....	2.2	.0	.19	11.3
The year.....	1,080	.0	15.8	11,400

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

ELSINORE LAKE AT ELSINORE, CALIF.

LOCATION.—On northeast shore near outlet at Elsinore, Riverside County.

RECORDS AVAILABLE.—December 1, 1915, to September 30, 1926.

GAGE.—Vertical staff on northeast shore near outlet; read by Hardy Lusk.

Several gages at slightly different datums have been used but all have been referred to mean sea level. The location has been changed frequently in order to accommodate the rising or receding of the lake. The published elevations may be reduced to mean sea level by adding 1,200 feet.

Elsinore Lake overflows only during and after years of heavy rainfall. Temescal Creek is the high-water outlet for the lake. The heavy rains during the winter and spring of 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 latter date. A history of the lake is published in United States Geological Survey Water-Supply Papers 426, 429, and 441.

Daily elevation, in feet, of Elsinore Lake at Elsinore, Calif., for the year ending September 30, 1926

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

SAN ANTONIO CREEK NEAR CLAREMONT, CALIF.

LOCATION.—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 power house (Sierra plant), 4 miles above mouth of canyon, and 8 miles northeast of Claremont, Los Angeles County.

DRAINAGE AREA.—16.9 square miles (measured on topographic maps).

RECORDS AVAILABLE.—January 25, 1917, to September 30, 1926. Also records for March 11, 1901, to September 30, 1917, obtained at weir in tailrace of power plant and published as San Antonio Creek near Upland.

GAGE.—Water-stage recorder, in concrete well and house, on right bank at north end of highway bridge.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading near gage.

CHANNEL AND CONTROL.—Coarse gravel and small boulders; shifts during high stages. One channel except at extreme floods when left bank is overflowed. A concrete control, 30 feet below gage, was completed July 23, 1919. Moss and weeds grow in the channel.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.93 feet 12.30 p. m. April 5 (discharge, 348 second-feet); minimum stage, from water-stage recorder, 1.32 feet October 1-3 (discharge, 0.1 second-foot).

1917-1926: Maximum stage, from water-stage recorder, 8.20 feet at 4 p. m. December 19, 1921 (discharge, 1,020 second-feet); minimum stage not known (estimated discharge, 0.1 second-foot) for periods during August and September, 1919, and September and October, 1925.

DIVERSIONS.—The Southern California Edison Co. diverts water for power development above the station. (See p. 68.)

REGULATION.—None except as indicated above.

ACCURACY.—Stage-discharge relation changed slightly during the year owing to growth of moss and weeds in the channel and collection of leaves on control. Rating curves fairly well defined. Water-stage recorder gave good record. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of San Antonio Creek near Claremont, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 7.....	1.38	0.2	Apr. 6.....	3.36	168	June 5.....	1.86	4.8
Oct. 23.....	1.58	.2	Apr. 9.....	3.10	111	June 19.....	1.70	1.1
Nov. 29.....	1.50	.3	Apr. 14.....	2.83	69	July 5.....	1.68	.8
Dec. 22.....	1.50	.3	Apr. 20.....	2.63	54	July 28.....	1.66	.6
Jan. 12.....	1.46	.3	Apr. 27.....	2.70	58	Aug. 3.....	1.67	.5
Feb. 18.....	1.68	1.3	May 5.....	2.62	46	Aug. 11.....	1.62	.5
Feb. 27.....	1.54	.8	May 13.....	2.27	23	Aug. 30.....	1.62	.4
Mar. 13.....	1.52	.7	May 19.....	2.16	17	Sept. 18.....	1.62	.6
Mar. 27.....	1.54	.5	May 29.....	1.96	8	Sept. 22.....	1.62	.6

Daily discharge, in second-feet, of San Antonio Creek near Claremont, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.1	0.2	0.3	0.3	1.3	0.7	0.7	54		0.9	0.7	0.6
2.....	.1	.2	.4	.3	.8	.7	.8	54	7	.9	.6	.6
3.....	.1	.2	.4	.3	3.0	.7	.8	54	6.5	.9	.6	.6
4.....	.2	.3	.4	.3	.9	.7	.9	47	6	.9	.6	.7
5.....	.2	.3	.4	.3	.8	.7	191	50	5	.9	.6	.7
6.....	.2	.3	.4	.3	.7	.7	201	49	4.2	.9	.6	.7
7.....	.3	.3	.4	.3	.6	.7	147	47	4.5	1.0	.6	.7
8.....	.3	.3	.4	.3	.5	.7	144	45	4.2	1.1	.6	.7
9.....	.3	.3	.4	.3	.5	.7	113	34	3.3	1.0	.6	.7
10.....	.3	.3	.4	.3	.4	.7	106	30	2.8	1.0	.6	.7
11.....	.3	.3	.4	.3	.5	.7	102	28	2.2	1.0	.6	.7
12.....	.3	.3	.4	.3	11	.7	89	25	2.0	.9	.6	.7
13.....	.3	.2	.4	.2	38	.7	78	23	1.9	.9	.6	.7
14.....	.3	.3	.4	.2	15	.7	72	23	1.9	.9	.6	.7
15.....	.3	.3	.4	.3	4.4	.6	66	21	1.7	.9	.6	.7
16.....	.3	.3	.4	.3	1.6	.6	60	21	1.5	.9	.6	.7
17.....	.3	.3	.4	.3	1.5	.6	58	20	1.5	.9	.6	.6
18.....	.3	.3	.4	.3	1.3	.6	60	18	1.5	.9	.7	.5
19.....	.3	.3	.4	.3	1.2	.7	54	18	1.3	.8	.7	.5
20.....	.3	.3	.3	.3	1	.7	51	17	1.1	.8	.7	.5

Daily discharge, in second-feet, of San Antonio Creek near Claremont, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
21	0.2	0.3	0.3	0.3	0.9	0.7	50	16	1.1	0.8	0.7	0.5
22	.2	.3	.3	.3	.8	.7	47	15	1.0	.8	.7	.5
23	.2	.3	.3	.3	.8	.7	46	15	1.0	.8	.6	.5
24	.2	.3	.3	.3	.8	.7	46	14	.9	.8	.6	.5
25	.2	.3	.3	.3	.8	.7	46	14	.9	.8	.6	.5
26	.2	.3	.3	.3	.8	.7	46	12	.9	.8	.5	.5
27	.2	.3	.3	.3	.7	.7	52	12	.9	.8	.5	.5
28	.2	.3	.3	.3	.7	.7	61	10	.9	.8	.6	.5
29	.2	.3	.3	.3	-----	.7	58	9	.9	.8	.5	.5
30	.2	.3	.3	.3	-----	.7	57	8.5	.9	.7	.5	.5
31	.2	-----	.3	7	-----	.7	-----	8	-----	.7	.6	-----

Monthly discharge of San Antonio Creek near Claremont, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	0.3	0.1	0.24	14.8
November	.3	.2	.29	17.3
December	.4	.3	.36	22.1
January	7	.2	.51	31.4
February	38	.4	3.26	181
March	.7	.6	.69	42.4
April	201	.7	70.1	4,170
May	54	8	26.1	1,600
June	7	.9	2.55	152
July	1.1	.7	.87	53.5
August	.7	.5	.61	37.5
September	.7	.5	.60	35.7
The year	201	.1	8.80	6,360

Combined daily discharge, in second-feet, of San Antonio Creek and Southern California Edison Co.'s canal near Claremont, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	5.4	5.5	5.4	7.1	8.5	10.1	69	31	21	15.9	12.2
2	5.0	5.2	6.2	5.3	6.3	8.5	10.3	69	31	20.7	15.6	11.8
3	4.9	5.4	5.6	5.3	9.4	8.5	10.3	65	30	20.5	15.6	11.8
4	5.0	5.4	5.6	5.6	6.6	8.7	10.4	66	30	20.6	15.3	11.9
5	5.8	5.6	5.6	5.3	6.6	8.6	204	63	29	20.4	15.2	11.9
6	5.4	5.5	5.6	5.4	6.2	8.7	221	62	28	20.3	15.3	11.9
7	5.5	5.6	5.6	5.5	6.0	8.7	169	60	28	20.2	15.3	11.7
8	5.5	5.5	5.4	5.3	5.7	8.9	167	64	28	20.1	15.3	11.6
9	5.3	5.4	5.5	5.3	5.7	8.9	136	58	27	19.8	15.1	11.3
10	5.4	6.4	5.5	5.3	5.6	8.7	130	54	27	19.3	15.2	11.5
11	5.6	5.5	5.6	5.3	5.7	8.8	125	52	26	19.2	15.2	11.5
12	5.7	5.3	5.5	5.3	20	9.7	111	49	26	18.6	15.0	11.4
13	6.2	6.4	5.4	5.2	52	8.0	103	47	26	18.6	14.7	11.3
14	5.7	5.3	5.4	5.3	25	8.9	97	47	26	17.9	14.4	11.3
15	5.6	5.3	5.4	5.4	13.4	8.9	91	45	26	18.3	14.4	11.2
16	5.5	5.2	5.5	5.1	10.1	8.9	85	45	26	18.3	14.1	11.1
17	5.5	5.3	5.5	5.3	9.4	9.1	84	44	26	18.5	14.1	11.0
18	5.5	5.3	6.0	5.3	9.1	9.1	86	42	26	17.4	13.9	11.0
19	5.7	5.4	5.6	5.3	8.6	9.4	80	42	24	16.1	13.7	11.0
20	5.3	5.4	5.5	5.3	8.4	9.4	77	41	24	16.1	13.6	10.9
21	5.3	5.5	5.4	5.3	8.1	9.4	76	40	24	16.1	13.5	10.8
22	5.4	5.2	5.5	5.3	8.0	9.4	73	39	23	16.3	13.0	10.8
23	5.4	5.2	5.5	5.2	8.1	9.5	72	39	23	16.2	13.0	10.7
24	5.0	5.7	5.3	5.2	8.1	9.7	72	38	23	16.1	12.6	10.7
25	5.4	5.5	5.5	5.3	8.1	9.7	72	38	22	16.2	12.6	10.5
26	5.0	5.5	5.5	5.3	8.4	9.7	71	36	22	16.8	12.2	10.4
27	5.1	5.5	5.5	5.1	8.5	9.7	72	36	22	17	12.1	10.3
28	5.0	5.5	5.5	5.2	8.2	9.9	74	34	21	17	12.3	10.4
29	5.4	5.3	5.4	5.3	-----	10.1	70	33	21	16.6	12.2	10.5
30	5.2	5.5	5.3	5.2	-----	-----	69	32	21	16.6	12.1	10.4
31	5.2	-----	5.3	15	-----	10.1	-----	32	-----	16.1	12.2	-----

Combined monthly discharge of San Antonio Creek and Southern California Edison Co.'s canal near Claremont, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	6.2	4.9	5.37	330
November.....	5.7	5.2	5.41	322
December.....	6.2	5.3	5.52	339
January.....	15	5.1	5.61	345
February.....	52	5.6	10.4	578
March.....	10.1	8.5	9.16	563
April.....	221	10.1	90.9	5,410
May.....	69	32	47.8	2,940
June.....	31	21	25.6	1,520
July.....	21	16.1	18.2	1,120
August.....	15.9	12.1	14.0	861
September.....	12.2	10.3	11.2	666
The year.....	221	4.9	20.7	15,000

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

LOCATION.—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, Los Angeles County.

RECORDS AVAILABLE.—January 1, 1917, to September 30, 1926.

Gage.—Hook gage which indicates head on weir; read by B. F. Campbell, operator at power house.

DISCHARGE.—Computed from head on 10-foot rectangular weir.

ACCURACY.—Gage is read at 6 a. m. and 6 p. m. Discharge computed from weir table by observer. Records good.

COOPERATION.—Daily-discharge records furnished by Southern California Edison Co.

This 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 directly to creek.

Daily discharge, in second-feet, of Southern California Edison Co.'s canal near Claremont, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	4.9	5.2	5.2	5.1	5.8	7.8	9.4	15	24	20.0	15.2	11.6
2.....	4.9	5.0	5.8	5.0	5.5	7.8	9.5	15	24	19.8	15.0	11.2
3.....	4.8	5.2	5.2	5.0	6.4	7.8	9.5	12	24	19.6	15.0	11.2
4.....	4.8	5.1	5.2	5.2	5.7	8.0	9.5	18.5	24	19.7	14.7	11.2
5.....	5.6	5.3	5.2	5.0	5.8	7.9	13.4	13	24	19.5	14.6	11.2
6.....	5.2	5.2	5.2	5.1	5.5	8.0	19.6	13	24	19.4	14.7	11.2
7.....	5.2	5.3	5.2	5.2	5.4	8.0	22	13	24	19.2	14.7	11.0
8.....	5.2	5.2	5.0	5.0	5.2	8.2	23	18.5	24	19.0	14.7	10.9
9.....	5.0	5.1	5.1	5.0	5.2	8.2	23	24	24	18.8	14.5	10.6
10.....	5.1	5.1	5.1	5.0	5.2	8.0	24	24	24	18.3	14.6	10.8
11.....	5.3	5.2	5.2	5.0	5.2	8.1	23	24	24	18.2	14.6	10.8
12.....	5.4	5.0	5.1	5.0	9.0	8.0	22	24	24	17.7	14.4	10.7
13.....	5.9	5.2	5.0	5.0	13.5	8.3	25	24	24	17.7	14.1	10.6
14.....	5.4	5.0	5.0	5.1	9.6	8.2	25	24	24	17.0	13.8	10.6
15.....	5.3	5.0	5.0	5.1	9.0	8.3	25	24	24	17.4	13.8	10.5
16.....	5.2	4.9	5.1	4.8	8.5	8.3	25	24	24	17.4	13.5	10.4
17.....	5.2	5.0	5.1	5.0	7.9	8.5	26	24	24	17.6	13.5	10.4
18.....	5.2	5.0	5.6	5.0	7.8	8.5	26	24	24	16.5	13.2	10.5
19.....	5.4	5.1	5.2	5.0	7.4	8.7	26	24	23	15.3	13.0	10.5
20.....	5.0	5.1	5.2	5.0	7.4	8.7	26	24	23	15.3	12.9	10.4

Daily discharge, in second-feet, of Southern California Edison Co.'s canal near Claremont, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
21-----	5.1	5.2	5.1	5.0	7.2	8.7	26	24	23	15.3	12.8	10.3
22-----	5.2	4.9	5.2	5.0	7.2	8.7	26	24	22	15.5	12.3	10.3
23-----	5.2	4.9	5.2	4.9	7.3	8.8	26	24	22	15.4	12.4	10.2
24-----	4.8	5.4	5.0	4.9	7.3	9.0	26	24	22	15.3	12.0	10.2
25-----	5.2	5.2	5.2	5.0	7.3	9.0	26	24	21	15.4	12.0	10.0
26-----	4.8	5.2	5.2	5.0	7.6	9.0	25	24	21	16.0	11.7	9.9
27-----	4.9	5.2	5.2	4.8	7.8	9.0	19.5	24	21	16.2	11.6	9.8
28-----	4.8	5.2	5.2	4.9	7.5	9.2	13	24	20	16.2	11.7	9.9
29-----	5.2	5.0	5.1	5.0	-----	9.4	12.5	24	20	15.8	11.7	10.0
30-----	5.0	5.2	5.0	4.9	-----	9.1	12	24	20	15.9	11.6	9.9
31-----	5.0	-----	5.0	8.2	-----	9.4	-----	24	-----	15.4	11.6	-----

Monthly discharge of Southern California Edison Co.'s canal near Claremont, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	5.9	4.8	5.14	316
November-----	5.4	4.9	5.12	305
December-----	5.8	5.0	5.16	317
January-----	8.2	4.8	5.10	314
February-----	13.5	5.2	7.15	397
March-----	9.4	7.8	8.47	521
April-----	26	9.4	20.8	1,240
May-----	24	12	21.6	1,330
June-----	24	20	23.0	1,370
July-----	20	15.3	17.3	1,060
August-----	15.2	11.6	13.4	824
September-----	11.6	9.8	10.6	631
The year-----	26	4.8	11.9	8,620

SANTIAGO CREEK NEAR VILLA PARK, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 13, T. 4 S., R. 9 W., at mouth of canyon, $1\frac{1}{4}$ miles northeast of Villa Park, Orange County, five-eighths mile below diversion dam of Serrano and Carpenter water companies.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—June 30, 1920, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from cable half a mile above gage or by wading.

CHANNEL AND CONTROL.—Sand, gravel, and boulders; shifting at high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.25 feet at 5 a. m. April 6 (discharge, about 2,000 second-feet); no flow most of year.

1920-1926: Maximum stage, from water-stage recorder, 6.25 feet at 5 a. m. April 6, 1926 (discharge, about 2,000 second-feet); no flow several months each year.

DIVERSIONS.—The Serrano and Carpenter water companies divert at the dam above gage by a common canal. See record of canal, page 71. The Irvine Co. also diverts water above gage at times.

REGULATION.—All water diverted at times by Serrano & Carpenter Canal.

ACCURACY.—Stage-discharge relation changed April 6. Rating curves not well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating tables, except February 16-19, which was estimated from discharge measurement. Records fair, except those for April 6-9, which are poor.

Discharge measurements of Santiago Creek near Villa Park, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 18.....	1.55	* 0.1	Apr. 15.....	2.12	70	Apr. 28.....	1.78	17
Apr. 10.....	2.50	191	Apr. 23.....	1.83	20	May 8.....	1.69	10

* Estimated.

Daily discharge, in second-feet, of Santiago Creek near Villa Park, Calif., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Apr.	May	Day	Dec.	Jan.	Feb.	Apr.	May
1.....			3.5		15	16.....			3.0	62	
2.....	2.6		.8		16	17.....			.6	44	
3.....	2.8		8		12	18.....			.4	36	
4.....			3.0		10	19.....			.3	46	
5.....				212	11	20.....				31	
6.....				826	12	21.....				25	
7.....				286	10	22.....				20	
8.....				686	10	23.....				21	
9.....				394	8	24.....				21	
10.....				208	6.5	25.....				20	
11.....				198	5.5	26.....				20	
12.....			11	145	3.3	27.....				18	
13.....			90	100	2.5	28.....				16	
14.....			25	91	3.3	29.....				17	
15.....			9	69	.8	30.....				17	
						31.....		1.7			

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Santiago Creek near Villa Park, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
December.....	2.8	0	0.17	10.5
January.....	1.7	0	.05	3.1
February.....	90	0	5.52	307
April.....	826	0	121	7,200
May.....	15	0	4.03	248
The year.....	826	0	10.7	7,770

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

Combined daily discharge, in second-feet, of Santiago Creek and Serrano & Carpenter Canal near Villa Park, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.1	1.2	1.2	1.1	4.0	2.3	2.1	20	7	7.5	7.5	6
2.....	1.1	1.3	3.7	1.1	1.5	2.3	2.1	22	7	7.5	7.5	6
3.....	1.3	1.3	3.5	1.1	8	2.3	2.1	20	7	7.5	7	6
4.....	1.6	1.3	1.2	1.1	3.5	2.3	2.2	18	7	7	7	6
5.....	1.6	1.3	1.2	1.0	.8	2.3	213	13	6.5	7	7.5	6
6.....	1.4	1.3	1.1	1.0	.9	2.2	826	19	6.5	7	7.5	6
7.....	1.3	1.3	1.1	1.0	.9	2.2	286	16	6.5	7	7	5.5
8.....	1.3	1.3	1.1	1.0	.9	2.1	686	16	6.5	7.5	7	5.5
9.....	1.2	1.3	1.1	1.0	.8	2.1	394	14	6.5	7.5	7	5.5
10.....	1.2	1.3	1.1	1.0	.8	2	208	14	6.5	7.5	7	5.5
11.....	1.2	1.3	1.1	1.0	.8	1.9	198	14	6.5	7.5	7	5.5
12.....	1.2	1.3	1.1	1.0	11	1.8	145	13	6.5	7.5	7	5.5
13.....	1.1	1.3	1.2	1.0	90	1.7	100	12	6.5	7.5	7	5.5
14.....	1.1	1.3	1.2	1.0	27	1.7	91	11	6.5	7.5	6.5	5.5
15.....	1.1	1.2	1.2	1.0	11	1.7	69	9	6.5	7.5	6.5	5.5
16.....	1.1	1.2	1.2	1.0	5	1.7	62	9	6.5	7.5	6.5	5.5
17.....	1.1	1.2	1.1	1.0	2.7	1.7	44	9	6	7.5	7	5
18.....	1.1	1.1	1.1	1.0	2.5	1.7	36	8.5	6	7.5	7	5
19.....	1.2	1.0	1.1	1.0	2.4	1.7	48	8	6	7.5	6.5	5
20.....	1.2	1.1	1.1	1.0	2.2	1.7	36	8	6	7.5	6.5	5
21.....	1.2	1.1	1.1	1.0	2.2	1.7	30	8	6	7.5	6.5	5
22.....	1.3	1.1	1.1	1.0	2.2	1.7	24	8	6	7.5	6.5	5
23.....	1.3	1.1	1.1	.9	2.2	1.7	25	8	6	7.5	6	5
24.....	1.3	1.2	1.1	.9	2.2	1.7	25	8	6	7.5	6	5
25.....	1.3	1.2	1.1	.9	2.2	1.8	24	8	6.5	7.5	6	5
26.....	1.3	1.2	1.1	.9	2.3	1.8	23	8	6.5	7.5	6	5
27.....	1.2	1.2	1.1	1.0	2.3	1.9	22	8	7	7	6	5
28.....	1.2	1.2	1.1	1.0	2.3	2.0	22	7.5	7	7.5	6	5
29.....	1.2	1.2	1.1	1.0	-----	2.0	24	7.5	7.5	7.5	6	5
30.....	1.2	1.2	1.1	1.0	-----	2.0	24	7.5	7.5	7.5	6	5
31.....	1.2	-----	1.1	2.8	-----	2.0	-----	7	-----	7.5	6	-----

Combined monthly discharge of Santiago Creek and Serrano & Carpenter Canal near Villa Park, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1.6	1.1	1.23	75.6
November.....	1.3	1.0	1.22	72.6
December.....	3.7	1.1	1.28	78.7
January.....	2.8	.9	1.06	65.2
February.....	90	.8	6.95	386
March.....	2.3	1.7	1.93	119
April.....	826	2.1	123	7,320
May.....	22	7	11.7	719
June.....	7.5	6	6.53	389
July.....	7.5	7	7.42	456
August.....	7.5	6	6.66	410
September.....	6	5	5.37	320
The year.....	826	.8	14.4	10,400

SERRANO & CARPENTER CANAL NEAR VILLA PARK, CALIF.

LOCATION.—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 northeast of Villa Park, Orange County.

RECORDS AVAILABLE.—August 11, 1920, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and wooden shelter in division box above the weirs.

DISCHARGE MEASUREMENTS.—Made from footbridge in tunnel 1,000 feet above gage, or at a section 10 feet above diversion dam.

CHANNEL AND CONTROL.—Control formed by two weirs with flashboards. Weirs are 1.6 feet long. Control is changed by placing flashboards of various heights on the weirs.

EXTREMES OF DISCHARGE.—1920-1926: Maximum mean daily discharge recorded, 16.8 second-feet May 20, 1922. No water is diverted at times.

ACCURACY.—Stage-discharge relation permanent for normal conditions of the weirs. Rating curve well defined. Good record from water-stage recorder except January 8-12, February 10-18, June 9-29, July 9-14, and September 15-30. Daily discharge ascertained by applying mean daily gage height to rating table; interpolated for days of no gage-height record. Records good.

Discharge measurements of Serrano & Carpenter Canal near Villa Park, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 9.....	0.21	1.3	Jan. 26.....	0.17	0.8	July 7.....	0.70	7.5
Nov. 5.....	.22	1.0	Feb. 6.....	.17	.8	July 20.....	.70	7.3
Nov. 19.....	.19	.9	Feb. 18.....	.29	1.5	Aug. 6.....	.71	7.4
Dec. 3.....	.21	1.0	Mar. 4.....	.32	1.7	Aug. 18.....	.66	6.4
Dec. 17.....	.20	.9	Mar. 26.....	.27	2.1	Sept. 1.....	.62	5.8
Dec. 30.....	.20	1.0	May 25.....	.74	8.0	Sept. 14.....	.60	5.3
Jan. 12.....	.18	.8	June 30.....	.71	7.8			

Daily discharge, in second-feet, of Serrano & Carpenter Canal near Villa Park, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.1	1.2	1.2	1.1	0.5	2.3	2.1	5.5	7	7.5	7.5	6
2.....	1.1	1.3	1.1	1.1	.7	2.3	2.1	6.5	7	7.5	7.5	6
3.....	1.3	1.3	.7	1.1	-----	2.3	2.1	7.5	7	7.5	7	6
4.....	1.6	1.3	1.2	1.1	.5	2.8	2.2	7.5	7	7	7	6
5.....	1.6	1.3	1.2	1.0	.8	2.3	.9	7.5	6.5	7	7.5	6
6.....	1.4	1.3	1.1	1.0	.9	2.2	-----	7	6.5	7	7.5	6
7.....	1.3	1.3	1.1	1.0	.9	2.2	-----	6.5	6.5	7	7	5.5
8.....	1.3	1.3	1.1	1.0	.9	2.1	-----	6	6.5	7.5	7	5.5
9.....	1.2	1.3	1.1	1.0	.8	2.1	-----	6.5	6.5	7.5	7	5.5
10.....	1.2	1.3	1.1	1.0	.8	2.0	-----	7.5	6.5	7.5	7	5.5
11.....	1.2	1.3	1.1	1.0	.8	1.9	-----	9	6.5	7.5	7	5.5
12.....	1.2	1.3	1.1	1.0	-----	1.8	-----	10	6.5	7.5	7	5.5
13.....	1.1	1.3	1.2	1.0	-----	1.7	-----	9	6.5	7.5	7	5.5
14.....	1.1	1.3	1.2	1.0	2.1	1.7	-----	8	6.5	7.5	6.5	5.5
15.....	1.1	1.2	1.2	1.0	2.1	1.7	-----	8	6.5	7.5	6.5	5.5
16.....	1.1	1.2	1.2	1.0	2.1	1.7	-----	9	6.5	7.5	6.5	5.5
17.....	1.1	1.2	1.1	1.0	2.1	1.7	-----	9	6	7.5	7	5
18.....	1.1	1.1	1.1	1.0	2.1	1.7	-----	8.5	6	7.5	7	5
19.....	1.2	1.0	1.1	1.0	2.1	1.7	2.5	8	6	7.5	6.5	5
20.....	1.2	1.1	1.1	1.0	2.2	1.7	5.5	8	6	7.5	6.5	5
21.....	1.2	1.1	1.1	1.0	2.2	1.7	4.7	8	6	7.5	6.5	5
22.....	1.3	1.1	1.1	1.0	2.2	1.7	4.1	8	6	7.5	6.5	5
23.....	1.3	1.1	1.1	.9	2.2	1.7	4.0	8	6	7.5	6	5
24.....	1.3	1.2	1.1	.9	2.2	1.7	3.7	8	6	7.5	6	5
25.....	1.3	1.2	1.1	.9	2.2	1.8	3.6	8	6.5	7.5	6	5
26.....	1.3	1.2	1.1	.9	2.3	1.8	3.4	8	6.5	7.5	6	5
27.....	1.2	1.2	1.1	1.0	2.3	1.9	3.7	8	7	7	6	5
28.....	1.2	1.2	1.1	1.0	2.3	2.0	6	7.5	7	7.5	6	5
29.....	1.2	1.2	1.1	1.0	-----	2.0	7	7.5	7.5	7.5	6	5
30.....	1.2	1.2	1.1	1.0	-----	2.0	6.5	7.5	7.5	7.5	6	5
31.....	1.2	-----	1.1	1.1	-----	2.0	-----	7	-----	7.5	6	-----

NOTE.—No flow Feb. 3, 12-13, and Apr. 6-18.

Monthly discharge of Serrano & Carpenter Canal near Villa Park, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1.6	1.1	1.23	75.6
November.....	1.3	1.0	1.22	72.6
December.....	1.2	.7	1.11	68.2
January.....	1.1	.9	1.00	61.5
February.....	2.3	0	1.44	80.0
March.....	2.3	1.7	1.93	119
April.....	7	0	2.14	127
May.....	10	5.5	7.74	476
June.....	7.5	6	6.53	389
July.....	7.5	7	7.42	456
August.....	7.5	6	6.66	410
September.....	6	5	5.37	320
The year.....	10	0	3.67	2,650

SAN GABRIEL RIVER BASIN

SAN GABRIEL RIVER NEAR AZUSA, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 23, T. 1 N., R. 10 W., near road crossing at mouth of canyon, half a mile above Southern California Edison Co.'s power house, and 2 miles north of Azusa, Los Angeles County.

DRAINAGE AREA.—214 square miles (revised).

RECORDS AVAILABLE.—1894 to September 30, 1926.

GAGE.—Water-stage recorder on right bank at cable, 1,000 feet above ford at at mouth of canyon, and 500 feet above tunnel diversion; installed November 18, 1922. On account of frequent changes in channel it has been necessary to install numerous staff gages and three recorder wells in vicinity of the ford. These have been at independent datums.

DISCHARGE MEASUREMENTS.—Made from cable 1,000 feet above ford or by wading near gage.

CHANNEL AND CONTROL.—Gravel and boulders; shifts during high water.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 9.4 feet at 6.30 p. m. April 7 (discharge, 14,900 second-feet); no flow October 1 to January 27, March 4–27, and June 27 to September 30.

1894–1926: Maximum stage recorded, 12.0 feet January 18, 1916 (discharge, 40,000 second-feet); stream dry for several months each year.

DIVERSIONS.—The power canal of the Southern California Edison Co. heads about 5 miles above station. (For daily discharge of this canal see p. 76.)

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed from that of last year and also during high water of April 8. Rating curves fairly well defined below 4,000 second-feet and extended above. Water-stage recorder record poor owing to debris from burned-over area clogging inlet to well. Graph partly estimated from numerous staff gage readings and measurements and estimates of flow. Daily discharge ascertained by applying mean daily gage height to rating table for days for which graph was available and by estimating and interpolating between measurements for other days. Records good.

COOPERATION.—The results of 75 discharge measurements made during the year were furnished by the State division of water rights.

Discharge measurements of San Gabriel River near Azusa, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Jan. 31	3.35	215	Apr. 11	4.55	1,060	May 6	3.30	205
Do.	3.30	216	Apr. 12	4.42	1,200	Do.	3.30	194
Feb. 1	2.34	53	Do.	4.35	945	Do.	3.29	194
Do.	2.25	35	Apr. 13	4.15	834	Do.	3.28	183
Feb. 2		6.8	Do.	4.12	836	Do.	3.30	204
Feb. 3	3.16	260	Do.	4.20	963	Do.	3.29	195
Do.	2.97	189	Apr. 14	4.05	745	May 10	3.07	158
Do.		92	Do.	4.00	688	Do.	3.08	155
Feb. 4		37	Apr. 15	3.92	602	May 13	3.00	121
Do.	2.10	24	Do.	3.92	556	Do.	2.93	122
Feb. 6		1.1	Apr. 16	3.85	589	May 14	2.93	116
Do.		.5	Do.	3.88	584	May 16	2.94	128
Feb. 12	2.83	136	Apr. 17	3.85	562	May 18	2.88	100
Feb. 13	4.35	1,000	Do.	3.78	548	Do.	2.87	98
Do.	3.98	717	Apr. 18	3.77	575	May 19	2.83	88
Feb. 14	3.26	323	Do.	4.36	826	Do.	2.86	88
Feb. 15	2.92	174	Do.	4.30	798	May 20	2.86	98
Feb. 16	2.69	108	Apr. 19	4.02	656	May 21	2.86	92
Feb. 17	2.54	79	Do.	3.84	573	May 23	2.80	98
Feb. 19	2.21	36	Do.	3.90	576	May 25	2.74	75
Feb. 20	2.19	28	Apr. 20	3.91	547	Do.	2.65	68
Feb. 25		7.4	Apr. 21	3.85	495	May 28	2.58	62
Mar. 29	2.36	43	Do.	3.78	458	Do.	2.54	54
Apr. 1	2.36	46	Apr. 22	3.80	458	May 29	2.60	56
Do.	2.36	46	Do.	3.75	436	May 30	2.61	57
Apr. 2	2.39	52	Apr. 23	3.78	439	May 31	2.58	48
Apr. 5	6.45	4,660	Apr. 24	3.75	409	June 1	2.50	44
Apr. 6	6.07	3,440	Apr. 25	3.63	356	Do.	2.46	39
Apr. 7	5.12	1,890	Apr. 26	3.52	298	June 4	2.44	32
Do.	9.40	14,900	Apr. 27	3.45	274	June 7	2.36	27
Apr. 8	7.65	5,630	Apr. 28	3.45	273	June 8	2.41	34
Do.	7.10	4,070	Apr. 29	3.45	259	Do.	2.41	37
Apr. 9	5.68	2,640	Do.	3.43	261	June 11	2.20	17
Do.	5.45	2,180	Apr. 30	3.42	254	June 21		2.9
Apr. 10	5.08	1,660	Do.	3.41	256	June 26		2.2
Do.	4.85	1,450	Do.	3.40	235			

* Estimated.

Daily discharge, in second-feet, of San Gabriel River near Azusa, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1		38	0.5	48	244	40	16		110		580	108	8
2		5	.5	51	267	37	17		75		564	104	7
3		221	.5	50	230	35	18		60		710	102	6
4		30		51	218	33	19		40		604	100	5
5		15		4,570	218	30	20		29		508	98	4
6			1	4,150	202	29	21		25		476	93	2.9
7			1	4,900	190	29	22		19		445	87	2.0
8			1	5,530	173	34	23		14		445	84	1.0
9			1	2,480	162	30	24		10		407	80	.5
10			1	1,680	147	25	25		7.5		319	70	.5
11			1	1,180	142	17	26		2		278	64	.2
12			216	1,100	133	15	27		1		259	56	
13			742	900	121	13	28		.5	18	259	51	
14			303	737	113	11	29		.3	48	255	46	
15			156	612	110	9	30		.3	48	240	48	
							31		82		48	43	

NOTE.—No flow Oct. 1 to Jan. 27, Mar. 4-27, and June 27 to Sept. 30.

Monthly discharge of San Gabriel River near Azusa, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	82	0	2. 67	164
February.....	742	0. 5	75. 9	4, 220
March.....	48	0	5. 27	324
April.....	5, 530	48	1, 150	68, 400
May.....	267	43	126	7, 750
June.....	40	0	14. 1	839
The year.....	5, 530	0	113	81, 700

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

Combined daily discharge, in second-feet, of San Gabriel River and Southern California Edison Co.'s canal near Azusa, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8. 2	15. 6	21	22	103	78	48	331	123	64	39	28
2.....	8. 2	15. 3	47	22	66	74	51	352	119	64	39	28
3.....	10. 2	15. 3	40	22	286	72	50	317	116	64	38	27
4.....	10. 6	16. 9	32	22	95	72	51	305	114	61	39	27
5.....	14. 0	17. 3	28	22	80	72	4, 670	305	111	61	38	28
6.....	14. 7	16. 9	28	22	65	70	4, 150	289	110	61	41	28
7.....	14. 9	15. 1	26	22	55	69	4, 900	276	110	56	40	28
8.....	14. 5	16. 0	25	21	49	68	5, 530	259	114	61	39	27
9.....	13. 8	16. 0	25	21	46	70	2, 480	248	111	64	38	27
10.....	13. 6	15. 1	25	22	44	67	1, 680	233	104	62	37	27
11.....	14. 3	15. 3	25	22	44	63	1, 180	228	97	58	36	27
12.....	16. 0	15. 3	24	21	279	59	1, 100	219	98	53	36	26
13.....	17. 3	15. 8	24	21	806	57	900	207	96	52	34	26
14.....	21	15. 1	24	22	370	56	737	199	95	52	34	26
15.....	17. 7	15. 1	23	21	227	56	612	196	92	51	32	26
16.....	16. 4	15. 3	23	22	187	55	580	194	90	50	33	26
17.....	15. 1	15. 8	23	21	152	55	564	190	90	50	33	26
18.....	14. 9	15. 8	45	25	137	55	710	188	88	50	33	27
19.....	14. 9	15. 3	33	24	117	57	604	184	86	46	34	28
20.....	14. 7	15. 5	28	22	106	60	508	182	85	46	34	26
21.....	14. 0	15. 1	27	22	102	55	476	177	83	44	34	25
22.....	13. 2	15. 1	26	22	96	52	445	171	80	43	32	25
23.....	13. 0	15. 3	25	20	91	50	445	168	76	42	31	26
24.....	14. 2	18. 6	24	20	87	52	407	164	74	41	29	26
25.....	13. 6	26	24	21	84	51	381	153	74	40	29	25
26.....	13. 4	22	24	21	79	51	355	148	70	40	28	26
27.....	14. 2	20	24	21	78	50	340	140	68	41	24	26
28.....	14. 2	21	24	22	78	48	341	135	68	40	26	25
29.....	14. 5	21	24	21	-----	48	338	129	66	40	28	26
30.....	15. 4	20	22	21	-----	48	326	131	65	39	28	27
31.....	15. 3	-----	22	125	-----	48	-----	127	-----	38	28	-----

Combined monthly discharge of San Gabriel River and Southern California Edison Co.'s canal near Azusa, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	21	8. 2	14. 2	873
November.....	26	15. 1	16. 9	1, 010
December.....	47	21	26. 9	1, 650
January.....	125	20	25. 0	1, 540
February.....	806	44	143	7, 940
March.....	78	48	59. 3	3, 650
April.....	5, 530	48	1, 160	69, 000
May.....	352	127	211	13, 000
June.....	123	65	92. 4	5, 500
July.....	64	38	50. 8	3, 120
August.....	41	24	33. 7	2, 070
September.....	28	25	26. 5	1, 580
The year.....	5, 530	8. 2	153	111, 000

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

LOCATION.—At Southern California Edison Co.'s power house 5 miles southwest of intake on San Gabriel River and $1\frac{1}{2}$ miles north of Azusa, Los Angeles County.

RECORDS AVAILABLE.—1896 to September 30, 1926.

GAGE.—Hook gage in division box in tailrace of power plant. Read by employee of power company.

CHANNEL AND CONTROL.—Control formed by two weirs with end contractions. A movable steel plate forms the left end of one weir and right end of the other weir. Total length of weir crest is 44 feet $9\frac{1}{4}$ inches. A supplementary plate $1\frac{1}{2}$ feet long is placed on crest of Duarte Weir to shorten it when necessary to divide the water.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during year, 87 second-feet May 1 and 3-6.

1896-1926: Maximum mean daily discharge recorded, 97 second-feet November 27, 1906; canal usually dry for a few days each year.

ACCURACY.—Records good.

Diversion dam for canal is on San Gabriel River in SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 31, T. 2 N., R. 9 W., 5 miles above gaging station on San Gabriel River at the mouth of the canyon near Azusa. The water is used for power development at a point about $1\frac{1}{2}$ miles north of Azusa and after leaving the power plant is divided and used for irrigation—part is discharged into Azusa-Covina Canal and the remainder into Duarte Canal. During the rainy season part of the water from the power plant is wasted back into San Gabriel River below the gaging station.

Daily discharge, in second-feet, of Southern California Edison Co.'s canal near Azusa, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8.2	15.6	21	22	65	78	-----	87	83	64	39	28
2.....	8.2	15.3	47	22	61	74	-----	85	82	64	39	28
3.....	10.2	15.3	40	22	65	72	-----	87	81	64	38	27
4.....	10.6	16.9	32	22	65	72	-----	87	81	61	39	27
5.....	14.0	17.3	28	22	65	72	-----	87	81	61	38	28
6.....	14.7	16.9	28	22	64	70	-----	87	81	61	41	28
7.....	14.9	15.1	26	22	54	69	-----	86	81	56	40	28
8.....	14.5	16.0	25	21	48	68	-----	86	80	61	39	27
9.....	13.8	16.0	25	21	45	70	-----	86	81	64	38	27
10.....	13.6	15.1	25	22	43	67	-----	86	79	62	37	27
11.....	14.3	15.3	25	22	43	63	-----	86	80	58	36	27
12.....	16.0	15.3	24	21	63	59	-----	86	83	53	36	26
13.....	17.3	15.8	24	21	64	57	-----	86	83	52	34	26
14.....	21	15.1	24	22	67	56	-----	86	84	52	34	26
15.....	17.7	15.1	23	21	71	56	-----	86	83	51	32	26
16.....	16.4	15.3	23	22	77	55	-----	86	82	50	33	26
17.....	15.1	15.8	23	21	77	55	-----	86	83	50	33	26
18.....	14.9	15.8	45	25	77	56	-----	86	82	50	33	27
19.....	14.9	15.3	33	24	77	57	-----	84	81	46	34	28
20.....	14.7	15.5	28	22	77	60	-----	84	81	46	34	26
21.....	14.0	15.1	27	22	77	55	-----	84	80	44	34	25
22.....	13.2	15.1	26	22	77	52	-----	84	78	43	32	25
23.....	13.0	15.3	25	20	77	50	-----	84	75	42	31	26
24.....	14.2	18.6	24	20	77	52	-----	84	74	41	29	26
25.....	13.6	26	24	21	77	51	62	83	73	40	29	25
26.....	13.4	22	24	21	77	51	77	84	70	40	28	26
27.....	14.2	20	24	21	77	50	81	84	68	41	24	26
28.....	14.2	21	24	22	78	30	82	84	68	40	26	25
29.....	14.5	21	24	21	-----	-----	83	83	66	40	28	26
30.....	15.4	20	22	21	-----	-----	86	83	65	39	28	27
31.....	15.3	-----	22	43	-----	-----	-----	84	-----	38	28	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Southern California Edison Co.'s canal near Azusa, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	21	8.2	14.2	873
November.....	26	15.1	16.9	1,010
December.....	47	21	26.9	1,650
January.....	43	20	22.4	1,380
February.....	78	43	67.3	3,740
March.....	78	0	54.1	3,330
April.....	86	0	15.7	934
May.....	87	83	85.2	5,240
June.....	84	65	78.3	4,660
July.....	64	38	50.8	3,120
August.....	41	24	33.7	2,070
September.....	28	25	26.5	1,580
The year.....	87	0	40.9	29,600

ROGERS CREEK NEAR AZUSA, CALIF.

LOCATION.—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, Los Angeles County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1917, to September 30, 1926. (Discharge measurements only, May 8, 1916, to June 11, 1917.)

GAGE.—Water-stage recorder on left bank at mouth of canyon.

DISCHARGE MEASUREMENTS.—Made by wading or from cable about 150 feet below gage.

CHANNEL AND CONTROL.—Boulders, gravel, and solid rock; not permanent. Artificial controls were built during 1920 and 1923, but the pools above them filled with silt. During fall of 1924 the drainage area was burned over, causing sand and débris to be deposited in the channel when the rainy season started in 1924.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.4 feet at 4.45 p. m. (April 7 discharge, about 2,600 second-feet); no flow October 1 to November 23.

1917–1926: Maximum discharge recorded, about 2,600 second-feet at 4.45 p. m. April 7, 1926; stream dry several months each year.

DIVERSIONS.—Two small diversions above station diverted all the water at times during year.

REGULATION.—None.

ACCURACY.—Stage-discharge relation continually changing, as channel of stream has been filled with sand and débris owing to burning over of the drainage area in 1924. Water-stage recorder record of little value as the intake clogged with débris frequently. Daily discharge ascertained by interpolating between discharge measurements and by comparison with records for Fish and Sawpit Creeks. Records fair.

Discharge measurements of Rogers Creek near Azusa, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Dec. 2.....	4.10	7.2	Apr. 10.....	7.15	46	May 8.....	5.95	3.6
Jan. 31.....	3.95	68	Apr. 11.....	7.32	31	May 9.....	5.88	3.0
Do.....	4.03	31	Do.....	6.65	129	May 10.....	5.87	2.9
Feb. 1.....	4.20	2.6	Apr. 12.....	6.57	46	May 11.....	5.87	3.1
Feb. 2.....	4.44	1.8	Apr. 13.....	7.28	37	May 12.....	5.86	2.6
Feb. 3.....	3.65	9.6	Do.....	7.28	40	May 13.....	5.85	2.6
Do.....	3.65	6.3	Apr. 14.....	7.13	29	May 14.....	5.85	2.4
Feb. 4.....	3.86	2.4	Apr. 19.....	6.88	11	Do.....	5.84	1.9
Feb. 12.....	6.15	1,270	Apr. 20.....	6.90	13	May 16.....	5.83	2.0
Feb. 13.....	5.01	111	Apr. 21.....	6.96	12	May 18.....	5.80	1.2
Do.....	4.95	52	Apr. 22.....	6.85	11	May 21.....	5.80	1.5
Feb. 14.....	3.90	15	Apr. 23.....	6.80	8.3	May 23.....	5.82	1.6
Feb. 16.....	4.48	7.8	Apr. 24.....	6.55	7.5	May 30.....	5.77	1.2
Feb. 20.....	4.90	2.8	Apr. 25.....	6.57	6.3	June 4.....	5.77	1.0
Mar. 12.....	4.80	3	Apr. 27.....	6.48	4.7	June 6.....	5.77	1.3
Mar. 18.....	4.76	4	Apr. 28.....	6.50	4.7	June 8.....	5.78	1.3
Mar. 24.....	4.71	4	Apr. 29.....	6.47	4.5	June 13.....	5.75	1.1
Apr. 5.....	5.52	170	Apr. 30.....	6.46	4.8	June 21.....	5.75	.6
Do.....	5.52	176	Do.....	6.45	4.2	July 5.....	5.70	.4
Do.....	5.60	194	May 1.....	6.4	6.4	July 13.....	5.85	.4
Apr. 6.....	6.80	117	May 2.....	6.4	4.6	Aug. 13.....	5.65	.1
Do.....	7.36	115	May 3.....	6.4	4.2	Aug. 31.....	5.6	.12
Apr. 7.....	8.01	134	May 4.....	6.4	3.6	Sept. 3.....	5.6	.08
Do.....	7.92	617	May 5.....	6.4	3.8	Sept. 10.....	5.6	.13
Do.....	9.05	1,400	Do.....	6.34	39	Sept. 16.....	5.6	.11
Apr. 8.....	6.65	176	Do.....	5.90	4.6	Sept. 22.....	5.6	.12
Apr. 9.....	7.52	91	May 6.....	5.88	3.9	Sept. 28.....	5.6	.10
Do.....	7.15	87	Do.....	5.90	4.8			
Apr. 10.....	7.12	54	May 7.....	5.90	3.8			

* Estimated.

° Volumetric measurement.

Daily discharge, in second-feet, of Rogers Creek near Azusa, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		0.8	0.2	2.6	0.6	0.2	6	1.0	0.5	0.3	0.1
2.....		19	.2	40	.6	.2	4.4	1.0	.4	.3	.1
3.....		.6	.2	8	.6	.3	4.1	1.0	.4	.3	.1
4.....		.3	.2	3	.5	1.0	3.6	1.0	.4	.3	.1
5.....		.1	.1	1.8	.5	290	7	1.1	.4	.3	.1
6.....		.1	.1	1.4	.5	170	4.6	1.2	.4	.2	.1
7.....		.1	.1	1.3	.5	310	3.8	1.0	.4	.2	.1
8.....		.1	.1	1.3	.4	220	3.5	1.2	.4	.2	.1
9.....		.1	.1	1.2	.4	90	3.0	1.3	.4	.2	.1
10.....		.1	.1	1.2	.4	48	3.0	1.3	.4	.2	.1
11.....		.1	.1	3.4	.3	114	3.0	1.2	.4	.2	.1
12.....		.1	.1	55	.3	51	2.6	1.2	.4	.1	.1
13.....		.1	.1	87	.4	39	2.5	1.1	.4	.1	.1
14.....		.1	.1	15	.4	29	2.2	1.1	.4	.1	.1
15.....		.1	.1	11	.4	22	1.9	1.0	.4	.1	.1
16.....		.1	.1	8	.4	18	1.9	1.0	.4	.1	.1
17.....		.1	.1	6	.4	16	1.8	.9	.4	.1	.1
18.....		.4	.4	4.4	.4	14	1.5	.8	.3	.1	.1
19.....		.8	.1	3.4	.4	12	1.3	.8	.3	.1	.1
20.....		.4	.1	2.8	.4	12	1.5	.7	.3	.1	.1
21.....		.3	.1	2.4	.4	12	1.6	.6	.3	.1	.1
22.....		.3	.1	2.0	.4	10	1.4	.6	.3	.1	.1
23.....		.3	.1	1.7	.4	18	1.6	.6	.3	.1	.1
24.....	0.1	.3	.1	1.5	.4	7.5	1.5	.6	.3	.1	.1
25.....	.1	.3	.1	1.2	.3	6	1.5	.6	.3	.1	.1
26.....	.1	.2	.1	1.0	.3	6	1.4	.6	.3	.1	.1
27.....	.1	.2		.8	.3	4.7	1.4	.5	.3	.1	.1
28.....	.2	.2		.6	.3	4.6	1.4	.5	.3	.1	.1
29.....	.2	.2			.3	4.4	1.3	.5	.3	.1	.1
30.....	.2	.2			.3	4.4	1.2	.5	.3	.1	.1
31.....		.2	17		.2		1.1		.3	.1	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Rogers Creek near Azusa, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
November.....	0.2	0	0.03	1.8
December.....	19	.1	.98	60.3
January.....	17	0	.65	40.0
February.....	87	.6	9.61	534
March.....	.6	.2	.40	24.6
April.....	310	.2	50.8	3,020
May.....	7	1.1	2.54	156
June.....	1.3	.5	.88	62.4
July.....	.5	.3	.36	22.1
August.....	.3	.1	.15	9.2
September.....	.1	.1	.10	6.0
The year.....	310	0	5.43	3,930

NOTE.—No flow during October.

FISH CREEK NEAR DUARTE, CALIF.

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

DRAINAGE AREA.—6.5 square miles (measured on topographic map).

RECORDS AVAILABLE.—July 23 to September 30, 1916; and July 28, 1917, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on left bank.

DISCHARGE MEASUREMENTS.—Made by wading near gage.

CHANNEL AND CONTROL.—Gravel, sand, and boulders; shifting. Banks are high and not subject to overflow. In 1918 a concrete control was built at an outcrop of bedrock a short distance below gage. During summer of 1924 drainage area was burned over and considerable sand and gravel is deposited in channel and on control during storms.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.75 feet at 4 p. m. April 7 (discharge, about 1,900 second-feet); minimum discharge, 0.1 second-foot October 1–3.

1916–1926: Maximum stage, from water-stage recorder, 8.0 feet at 9.30 a. m. April 4, 1925 (discharge, about 2,180 second-feet); no flow during periods in 1919, 1920, 1921, and 1924.

DIVERSIONS.—None above.

REGULATION.—None.

ACCURACY.—Stage-discharge relation continually changing as sand and gravel are brought down by each storm. Recorder record of no value October 1 to April 19. Rating curves for period April 20 to September 30 well defined. Discharge for period October 1 to April 19 determined by comparison with Rogers and Sawpit Creeks and from the discharge measurements. Records fair October 1 to April 19 and good April 20 to September 30.

*Discharge measurements of Fish Creek near Duarte, Calif., during the year ending
September 30, 1926*

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 8.....		0.31	Jan. 31.....		108	Apr. 19.....	3.08	12
Do.....		0.21	Feb. 2.....		2.4	Apr. 20.....	2.80	11
Do.....		0.11	Feb. 3.....		27	Apr. 23.....	2.75	9.2
Oct. 13.....		.3	Feb. 6.....		2.7	Apr. 27.....	2.69	6.2
Oct. 17.....		0.35	Feb. 9.....	3.34	1.3	May 4.....	2.66	4.9
Oct. 26.....		0.30	Feb. 12.....		11	May 15.....	2.52	3.1
Nov. 5.....		.3	Feb. 14.....		26	May 20.....	2.96	2.9
Nov. 9.....		.2	Feb. 17.....		11	May 28.....	2.98	2.1
Nov. 14.....		.4	Feb. 23.....		4.5	June 4.....	2.95	2.0
Nov. 24.....		.8	Mar. 4.....		3.3	June 11.....	2.95	1.7
Nov. 25.....		.7	Mar. 10.....	3.14	1.3	June 21.....	2.91	1.7
Dec. 2.....	25		Mar. 12.....	3.14	.6	July 8.....	2.90	1.0
Dec. 5.....		.7	Mar. 16.....	3.14	1.2	July 13.....	2.88	.8
Dec. 11.....		.5	Mar. 18.....	3.14	1.0	July 26.....	2.86	.7
Dec. 18.....		9.3	Mar. 24.....	3.10	.9	Aug. 6.....	2.84	.6
Dec. 22.....		.6	Mar. 29.....	3.08	.8	Aug. 16.....	2.82	.6
Jan. 6.....		.5	Apr. 1.....	3.10	1.0	Aug. 28.....	2.80	.5
Jan. 11.....		.4	Apr. 5.....		94	Sept. 3.....	2.75	.4
Jan. 18.....		.6	Apr. 10.....	4.50	62	Sept. 13.....	2.76	.4
Jan. 21.....		.3	Do.....	4.55	44	Sept. 21.....	2.76	.3
Jan. 23.....		.3	Apr. 12.....		45	Sept. 28.....	2.80	.5
Jan. 27.....		.3	Apr. 13.....	3.74	44			
Jan. 31.....	4.40	172	Apr. 17.....	3.16	15			

* Volumetric measurement.

*Daily discharge, in second-feet, of Fish Creek near Duarte, Calif., for the year ending
September 30, 1926*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
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	296	7.5	2.0	.6	.6	.4
6.....	.2	.3	.7	.5	2.7	2.9	173	5	1.8	.6	.6	.4
7.....	.2	.2	.6	.4	2.1	2.5	316	4.8	1.8	.7	.6	.4
8.....	.2	.2	.6	.4	1.7	2.3	224	4.5	2.0	1.0	.6	.4
9.....	.2	.2	.6	.4	1.3	1.8	96	4.3	2.0	1.0	.5	.4
10.....	.2	.3	.5	.4	1.2	1.3	58	4.2	1.8	1.0	.6	.4
11.....	.2	.3	.5	.4	3.4	8.0	116	3.8	1.6	.9	.5	.4
12.....	.2	.3	.5	.3	56	7	53	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	3.0	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	

Monthly discharge of Fish Creek, near Duarte, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
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.....	316	1.0	52.4	3,120
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.....	316	.1	6.26	4,530

SAWPIT CREEK NEAR MONROVIA, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 13, T. 1 N., R. 11 W., three-eighths mile below highway bridge below junction of two main branches, 2 miles north of Monrovia, Los Angeles County.

DRAINAGE AREA.—5.3 square miles at old location (measured on topographic maps).

RECORDS AVAILABLE.—November 8, 1916, to September 30, 1926.

GAGE.—Water-stage recorder installed November 20, 1925, in masonry well and shelter, three-eighths mile below original gage, which was a water-stage recorder in a concrete well on left bank at east end of highway bridge.

DISCHARGE MEASUREMENTS.—Made from plank or by wading near gage.

CHANNEL AND CONTROL.—Bed consists of coarse gravel and boulders. Channel is straight for 40 feet above gage; banks are high. An artificial control of concrete and boulders was built across channel just below gage. There is a free fall of 10 feet. During summer of 1924 drainage area was burned over. The storm of April 4, 1925, brought down large quantities of sand and debris and deposited it in channel and on control.

EXTREMES OF DISCHARGE.—Maximum discharge during year, about 2,000 second-feet April 7, estimated from flow of Rogers Creek; stream dry at gage for several months.

1916-1926: Maximum discharge recorded, about 2,000 second-feet April 7, 1926, estimated from flow of Rogers Creek; stream dry several months each year.

DIVERSIONS.—Part of the water supply for Monrovia is obtained from the two branches of Sawpit Creek above gage. See record for Monrovia pipe line (p. 83).

REGULATION.—None.

ACCURACY.—Stage-discharge relation not permanent as sand, ashes, and debris brought down during storms changed conditions in the channel. Area had been burned over during summer of 1924. Water-stage recorder record of no value except February 12-17. Daily discharge ascertained from discharge measurements, record of rainfall, and by comparison with flow of Rogers Creek and Fish Creek. Records fair.

COOPERATION.—City of Monrovia furnished observer for water-stage recorder.

Discharge measurements of Sawpit Creek near Monrovia, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Dec. 2.....	1.92	16	Feb. 4.....	1.58	1.6	Apr. 10.....	0.70	25
Dec. 18.....	1.68	1.4	Feb. 9.....	1.80	1.2	Do.....	.75	23
Jan. 31.....	1.90	19	Feb. 12.....	1.90	32	Feb. 11.....	4.30	11
Do.....	2.45	74	Do.....	2.55	109	Feb. 13.....	4.64	11
Do.....	2.25	42	Feb. 14.....	1.79	6.9	Do.....	4.46	8.4
Do.....	2.60	145	Do.....	1.72	10	Apr. 17.....	4.25	3.6
Feb. 1.....	1.65	.8	Feb. 15.....	1.74	6.6	Apr. 18.....	4.31	5.3
Feb. 2.....	1.67	3.6	Feb. 17.....	1.64	2.7	Apr. 19.....	4.28	4.8
Feb. 3.....	1.67	5.8	Feb. 19.....	1.64	.5	Apr. 21.....	4.20	2.9
Do.....	1.76	3.7	Feb. 23.....	1.40	.1	Apr. 23.....	4.53	2.0

Daily discharge, in second-feet, of Sawpit Creek near Monrovia, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1.....		0.7		1.2	0.1		
2.....		16		33	.1		
3.....		.5		4.8	.1		
4.....		.3		1.6	.1		
5.....		.2		1.3	.1	240	5
6.....		.2		1.2		140	3.1
7.....		.2		1.2		260	2.8
8.....		.1		1.2		200	1.7
9.....		.1		1.2		75	1.1
10.....		.1		1.2		27	
11.....		.1		2.8		95	
12.....		.1		41		42	
13.....				68		10	
14.....				9		7	
15.....				7		5	
16.....				4.6		4.0	
17.....				2.3		3.7	
18.....		3.7		1.4		5	
19.....		.5	.1	.5		5	
20.....		.5	.1	.4		3.5	
21.....		.5	.1	.3		2.9	
22.....		.1	.1	.2		2.4	
23.....		.3		.1		2.0	
24.....	1.3			.1		1.5	
25.....				.1		1.0	
26.....				.1		.5	
27.....				.1			
28.....				.1			
29.....							
30.....							
31.....			14				

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Sawpit Creek near Monrovia, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
November.....	1.3	0	0.04	2.4
December.....	16	0	.79	48.6
January.....	14	0	.46	28.3
February.....	68	.1	6.64	369
March.....	1	0	.02	1.2
April.....	260	0	37.8	2,250
May.....	5	0	.44	27.1
The year.....	260	0	3.76	2,730

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

Combined daily discharge, in second-feet, of Sawpit Creek and Monrovia pipe line near Monrovia, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.6	0.8	1.5	1.0	1.6	1.4	1.1	2.8	1.5	1.1	0.9	0.8
2.....	.6	.8	16	.9	33	1.4	1.0	3.0	1.5	1.1	.9	.8
3.....	.6	.8	.9	1.0	5.2	1.4	1.0	2.8	1.5	1.1	.9	.8
4.....	.6	.4	.7	.9	2.0	1.4	1.1	2.6	1.5	1.1	.9	.8
5.....	.5	.5	.7	.9	1.7	1.4	240	5.6	1.5	1.1	.9	.8
6.....	.6	.6	.8	.9	1.6	1.3	140	3.5	1.5	1.1	.9	.8
7.....	.6	.8	1.0	.9	1.6	1.3	260	3.2	1.5	1.1	.9	.8
8.....	.8	.8	.9	.9	1.8	1.2	200	3.0	1.5	1.1	.9	.8
9.....	.8	.8	.9	.9	2.0	1.3	75	2.5	1.5	1.1	.9	.8
10.....	.8	.8	.9	.9	2.1	1.3	27	2.4	1.5	1.1	.9	.8
11.....	.8	.8	.9	.9	3.9	1.3	95	2.0	1.5	1.1	.8	.8
12.....	.6	.8	.9	.9	41	1.2	42	2.1	1.5	.9	.8	.8
13.....	.5	.8	1.1	.9	68	1.1	10	2.0	1.5	.9	.8	.8
14.....	.4	.8	1.1	.9	9.4	1.1	7.4	1.9	1.3	.9	.8	.8
15.....	.4	.8	1.1	.9	7.4	1.1	5.6	1.5	1.3	.9	.8	.8
16.....	.4	.8	1.1	.9	5.4	1.1	4.0	1.9	1.3	.9	.8	.8
17.....	.4	.8	1.1	.8	3.2	1.1	5.7	1.7	1.4	.9	.8	.8
18.....	.4	.8	4.3	.4	2.6	1.1	5.9	1.7	1.4	.9	.8	.8
19.....	.4	.8	.9	.5	2.2	1.2	5.6	1.8	1.3	.9	.8	.8
20.....	.6	.8	.9	.5	2.1	1.2	4.8	1.3	1.3	.8	.9	.8
21.....	.6	.8	1.0	.6	1.8	1.2	3.7	1.7	1.3	.9	.8	.8
22.....	.8	.8	1.3	.7	1.7	1.1	3.4	1.0	1.3	.9	.8	.8
23.....	.8	.8	1.2	.6	1.6	1.1	3.3	.9	1.3	.9	.8	.8
24.....	.8	1.8	.9	.8	1.4	.9	4.2	1.6	1.3	.9	.8	.8
25.....	.6	.4	1.0	.8	1.4	1.1	3.4	1.9	1.3	.9	.8	.8
26.....	.8	.4	1.0	.8	1.4	1.0	3.2	1.7	1.3	.9	.8	.8
27.....	.8	.5	.9	.8	1.4	1.1	3.1	1.7	1.1	.9	.8	.8
28.....	.8	.6	.9	.8	1.4	1.1	3.1	1.7	1.1	.9	.8	.8
29.....	.8	.8	1.0	.8	-----	1.1	3.1	1.6	1.1	.9	.8	.8
30.....	.8	.8	.9	.8	-----	1.1	2.8	1.5	1.1	.9	.8	.8
31.....	.8	-----	.9	14	-----	1.1	-----	1.5	-----	.9	.8	-----

Combined monthly discharge of Sawpit Creek and Monrovia pipe line near Monrovia, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0.8	0.4	0.64	39.4
November.....	1.8	.4	.76	45.2
December.....	16	.7	1.57	96.5
January.....	14	.4	1.24	76.2
February.....	68	1.4	7.50	417
March.....	1.4	.9	1.19	73.2
April.....	260	1.0	33.8	2,310
May.....	5.6	.9	2.13	131
June.....	1.5	1.1	1.37	81.5
July.....	1.1	.8	.97	59.6
August.....	.9	.8	.84	51.6
September.....	.8	.8	.80	47.6
The year.....	260	.4	4.73	3,430

MONROVIA PIPE LINE NEAR MONROVIA, CALIF.

LOCATION.—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, Los Angeles County.

RECORDS AVAILABLE.—May 18, 1916, to September 30, 1926.

GAGE.—Vertical staff in weir box; read by Peter Perschke, canyon guard.

DISCHARGE.—Determined by two rectangular weirs, with end contractions; left weir, 2.25 feet long; right weir, 2.26 feet long. Crest of left weir is at zero gage height; crest of right weir is 0.02 foot lower at one end. Rating table has been checked by current-meter measurements made at mouth of intake pipe in weir box.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during year, 3.1 second-feet April 27–29; no flow April 8 and 16.

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

ACCURACY.—Stage-discharge relation permanent. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

COOPERATION.—Gage-height record furnished by city of Monrovia.

The Monrovia pipe line furnishes part of the water supply of Monrovia. It obtains its water from two branches of Sawpit Creek. Most of this water is collected by tunnels driven into the side of the canyon.

Daily discharge, in second-feet, of Monrovia pipe line near Monrovia, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.6	0.8	0.8	1.0	0.4	1.3	1.1	2.8	1.5	1.1	0.9	0.8
2.....	.6	.8	.4	.9	.4	1.3	1.0	3.0	1.5	1.1	.9	.8
3.....	.6	.8	.4	1.0	.4	1.3	1.0	2.8	1.5	1.1	.9	.8
4.....	.6	.4	.4	.9	.4	1.3	1.1	2.6	1.5	1.1	.9	.8
5.....	.5	.5	.5	.9	.4	1.3	.2	.6	1.5	1.1	.9	.8
6.....	.6	.6	.6	.9	.4	1.3	.2	.4	1.5	1.1	.9	.8
7.....	.6	.8	.8	.9	.4	1.3	.2	.4	1.5	1.1	.9	.8
8.....	.8	.8	.8	.9	.6	1.2	-----	1.3	1.5	1.1	.9	.8
9.....	.8	.8	.8	.9	.8	1.3	.2	1.4	1.5	1.1	.9	.8
10.....	.8	.8	.8	.9	.9	1.3	.4	2.4	1.5	1.1	.9	.8
11.....	.8	.8	.8	.9	1.1	1.3	.4	2.0	1.5	1.1	.8	.8
12.....	.6	.8	.8	.9	.4	1.2	.4	2.1	1.5	.9	.8	.8
13.....	.5	.8	1.1	.9	.4	1.1	.4	2.0	1.5	.9	.8	.8
14.....	.4	.8	1.1	.9	.4	1.1	.4	1.9	1.3	.9	.8	.8
15.....	.4	.8	1.1	.9	.4	1.1	.6	1.5	1.3	.9	.8	.8
16.....	.4	.8	1.1	.9	.8	1.1	-----	1.9	1.3	.9	.8	.8
17.....	.4	.8	1.1	.8	.9	1.1	2.0	1.7	1.4	.9	.8	.8
18.....	.4	.8	.6	.4	1.2	1.1	.9	1.7	1.4	.9	.8	.8
19.....	.4	.8	.4	.4	1.7	1.2	.6	1.8	1.3	.9	.8	.8
20.....	.6	.8	.4	.4	1.7	1.2	.8	1.3	1.3	.8	.9	.8
21.....	.6	.8	.5	.5	1.5	1.2	.8	1.7	1.3	.9	.8	.8
22.....	.8	.8	.8	.6	1.5	1.1	1.0	1.0	1.3	.9	.8	.8
23.....	.8	.8	.9	.6	1.5	1.1	1.3	.9	1.3	.9	.8	.8
24.....	.8	.5	.9	.8	1.3	.9	2.7	1.5	1.3	.9	.8	.8
25.....	.6	.4	1.0	.8	1.3	1.1	2.4	1.9	1.3	.9	.8	.8
26.....	.8	.4	1.0	.8	1.3	1.0	2.7	1.7	1.3	.9	.8	.8
27.....	.8	.5	.9	.8	1.3	1.1	3.1	1.7	1.1	.9	.8	.8
28.....	.8	.6	.9	.8	1.3	1.1	3.1	1.7	1.1	.9	.8	.8
29.....	.8	.8	1.0	.8	-----	1.1	3.1	1.5	1.1	.9	.8	.8
30.....	.8	.8	.9	.8	-----	1.1	2.8	1.5	1.1	.9	.8	.8
31.....	.8	-----	.9	.4	-----	1.1	-----	1.5	-----	.9	.8	-----

NOTE.—No flow April 8 and 16.

Monthly discharge of Monrovia pipe line near Monrovia, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0.8	0.4	0.64	39.4
November.....	.8	.4	.72	42.8
December.....	1.1	.4	.79	48.6
January.....	1.0	.4	.78	48.0
February.....	1.7	.4	.90	50.0
March.....	1.3	.9	1.17	71.9
April.....	3.1	0	1.16	69.0
May.....	3.0	.4	1.68	103
June.....	1.5	1.1	1.37	81.5
July.....	1.1	.8	.97	59.6
August.....	.9	.8	.84	51.6
September.....	.8	.8	.80	47.6
The year.....	3.1	0	.98	713

SAN DIMAS CREEK NEAR SAN DIMAS, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 25, T. 1 N., R. 9 W., at mouth of San Dimas Canyon, 3 miles northeast of San Dimas, Los Angeles County.

DRAINAGE AREA.—18.3 square miles (measured on topographic map).

RECORDS AVAILABLE.—December 3, 1916, to September 30, 1926. (Discharge measurements only, April 14 to September 4, 1916.)

GAGE.—Water-stage recorder, in concrete well and house, on left bank.

DISCHARGE MEASUREMENTS.—Made from cable about 50 feet above gage or by wading.

CHANNEL AND CONTROL.—Bed consists of sand, gravel, and boulders; shifting. Control is low concrete dam built across channel just below gage. During 1921 a wooden dam about 2½ feet high was built on the control. There is a notch in it, in which are placed one or more planks to raise water so it can be diverted through a 12-inch pipe. This dam is removed at times. Gravel fills in above and below dam affecting stage-discharge relation. Left bank is steep and not subject to overflow; right bank is brushy and is overflowed during high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.82 feet at 6.30 a. m. April 5 (discharge, 65 second-feet); practically no flow October 1-3.

1916-1926: Maximum stage, from water-stage recorder, 5.95 feet at 2 p. m. February 9, 1922 (discharge, about 1,140 second-feet); stream often dry for several months during year.

DIVERSIONS.—The San Dimas Water Co. diverts water for irrigation through a pipe line at the dam.

REGULATION.—Los Angeles County flood-control reservoir about three-fourths mile above station regulates the flow during storms.

ACCURACY.—Stage-discharge relation depends on presence of temporary wooden diversion dam on top of concrete control and a plank in the control notch. Channel above dam also shifts causing changes in stage-discharge relation. The wooden diversion dam was caulked on December 30 and was in good repair until July 17. From October 1 to December 29 and July 18 to September 30 water leaked through the dam. Rating curve well defined. Water-stage recorder record good, except June 28 to July 12, July 31 to August 3, and August 21-26. Daily discharge ascertained by applying mean daily gage height to rating table except October 1 to December 29, for which it was estimated from discharge measurements, and July 18 to September 30, for which shifting-control method was used. Records fair.

Discharge measurements of San Dimas Creek near San Dimas, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 20.....	3.73	0.6	Mar. 13.....	4.02	1.6	July 13.....	4.38	5.0
Dec. 2.....	4.05	.6	Mar. 27.....	4.16	2.6	July 28.....	4.35	4.9
Dec. 22.....	4.07	.8	Apr. 6.....	5.00	13	Aug. 3.....	4.35	4.8
Dec. 30.....	3.90	.8	Apr. 13.....	4.39	4.6	Aug. 11.....	4.36	5.5
Jan. 29.....	3.90	.4	Apr. 20.....	4.84	10	Aug. 27.....	4.46	5.8
Feb. 3.....	3.88	.5	May 5.....	4.65	7.8	Aug. 31.....	4.33	4.4
Feb. 6.....	3.85	.4	May 13.....	4.14	2.2	Sept. 10.....	4.52	7.4
Feb. 13.....	4.42	5.8	May 29.....	4.36	4.8	Sept. 16.....	4.57	7.8
Feb. 18.....	3.94	.8	June 5.....	4.41	4.9	Sept. 22.....	4.57	7.9

Daily discharge, in second-feet, of San Dimas Creek near San Dimas, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	0.0	0.1	0.6	0.7	0.6	0.8	2.8	4.4	4.6	5	4.9	5
2-----	.0	.1	.8	.7	.6	.8	3.1	4.4	4.6	5	4.8	6
3-----	.0	.1	.7	.7	.7	.8	3.3	4.4	4.6	5	4.8	7
4-----	.2	.2	.7	.7	.5	.8	2.8	4.4	4.9	4.9	4.8	7
5-----	.2	.1	.7	.7	.4	.8	19	5	5	4.9	5	7
6-----	.2	.1	.7	.7	.4	.8	23	4.5	5	4.9	5	7.5
7-----	.1	.1	.7	.7	.4	.9	11	3.8	5	4.9	5.5	7.5
8-----	.1	.1	.8	.6	.5	.9	20	3.2	5	4.9	5.5	7.5
9-----	.1	.1	.8	.6	1.0	.9	14	3.1	4.7	4.8	5.5	7.5
10-----	.1	.1	.8	.6	1.1	.9	16	2.8	4.8	4.8	5.5	7.5
11-----	.1	.1	.8	.6	.7	.9	8.5	2.6	5	4.8	5.5	7.5
12-----	.2	.1	.7	.6	1.3	.9	18	2.6	5	4.8	6	7.5
13-----	.2	.1	.7	.6	5.5	1.3	19	2.6	5	4.8	6.5	7.5
14-----	.2	.1	.7	.6	2.1	1.6	12	2.6	4.7	4.7	6.5	7.5
15-----	.1	.1	.7	.7	1.6	1.6	12	2.5	3.8	4.7	6.5	8
16-----	.1	.1	.7	.7	1.3	1.6	10	2.5	3.8	4.7	6.5	7.5
17-----	.1	.1	.7	.7	1.1	1.6	10	2.6	4.4	4.7	6.5	6.5
18-----	.1	.1	.8	.7	1.0	1.6	12	2.5	4.9	4.7	6.5	7.5
19-----	.1	.1	.8	.8	1.0	1.7	11	2.6	5	4.7	6.5	7.5
20-----	.1	.1	.8	.7	1.0	1.7	10	3.6	5	4.7	7	8
21-----	.1	.1	.8	.6	1.0	1.7	10	4	4.9	4.7	7	8
22-----	.1	.1	.8	.6	1.0	2.0	9	4.3	5	4.7	6.5	8
23-----	.1	.1	.8	.6	.9	2.7	7.5	4.7	5.5	4.8	6.5	8
24-----	.1	.3	.8	.6	.9	2.7	7	4.7	5.5	4.8	6.5	8
25-----	.1	.3	.8	.6	.9	2.7	7	4.7	5	4.8	6	8.5
26-----	.1	.3	.8	.6	.9	2.7	6.5	4.7	5	4.9	6	8.5
27-----	.1	.4	.8	.7	.9	2.7	5.5	4.7	5	5	6	8
28-----	.1	.4	.8	.7	.8	2.7	4.5	4.7	5	5	6	8
29-----	.1	.5	.8	.7	-----	2.8	4.5	4.6	5	4.9	6	7.5
30-----	.1	.6	.7	.7	-----	2.8	4.5	4.6	5	4.9	5.5	7.5
31-----	.1	-----	.7	1.3	-----	2.8	-----	4.6	-----	4.9	4.6	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of San Dimas Creek near San Dimas, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	0.2	0.0	0.11	6.8
November-----	.6	.1	.17	10.1
December-----	.8	.6	.75	46.1
January-----	1.3	.6	.68	41.8
February-----	5.5	.4	1.08	60.0
March-----	2.8	.8	1.65	101
April-----	23	2.8	10.1	601
May-----	5	2.5	3.77	232
June-----	5.5	3.8	4.86	289
July-----	5	4.7	4.83	297
August-----	7	4.6	5.87	361
September-----	8.5	5	7.48	445
The year-----	23	0	3.44	2,490

DALTON CREEK NEAR GLENDORA, CALIF.

LOCATION.—Center of sec. 21, T. 1 N., R. 9 W., at the Glendora Irrigation Co.'s dam one-fourth mile above mouth and 2½ miles northeast of Glendora, Los Angeles County.

DRAINAGE AREA.—7.5 square miles.

RECORDS AVAILABLE.—December 1, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 50 feet above gage or by wading.
CHANNEL AND CONTROL.—Control is the rubble masonry dam. Crest of dam slopes from wings to center being 5 feet lower at the center. Pool above dam has been filled with silt and control is not entirely effective.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 2.60 feet at 7 p. m. April 5 (discharge, 270 second-feet); no flow October 1 to February 11, March 22 to April 4, and May 26 to September 30.

1919-1926: Maximum stage, from water-stage recorder, 4.03 feet at 12.45 a. m. March 2, 1920 (discharge, 525 second-feet); no flow for several months during each year.

DIVERSIONS.—The Glendora Irrigation Co. diverts water half a mile and $1\frac{1}{2}$ miles above the gage through a 10-inch pipe line. A 12-inch pipe line diverts water at the control. No record of amount diverted was kept for this year.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed slightly April 18. Rating curves fairly well defined. Good record from water-stage recorder. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Dalton Creek near Glendora, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 13-----	1.25	6.8	Apr. 10-----	1.43	14	Apr. 27-----	1.24	4.2
Feb. 15-----	1.09	1.6	Apr. 13-----	1.34	9.4	May 5-----	1.25	4.8
Feb. 20-----	1.00	.9	Apr. 17-----	1.21	5.3	May 13-----	1.12	1.2
Apr. 6-----	1.68	39	Apr. 20-----	1.38	9.2	May 20-----	.98	.1

Daily discharge, in second-feet, of Dalton Creek near Glendora, Calif., for the year ending September 30, 1926

Day	Feb.	Mar.	Apr.	May	Day	Feb.	Mar.	Apr.	May
1-----		0.4		2.6	16-----	1.3	0.2	7	0.4
2-----		.4		2.4	17-----	.7	.1	4.8	.4
3-----		.4		2.0	18-----	.6	.1	14	.3
4-----		.4		2.0	19-----	.6	.1	13	.3
5-----		.4	59	3.0	20-----	.6	.1	9.5	.2
6-----		.4	60	2.4	21-----	.6	.1	8	.2
7-----		.4	32	2.2	22-----	.6		6.5	.2
8-----		.4	48	2.0	23-----	.6		6.5	.2
9-----		.4	22	2.0	24-----	.6		4.8	.2
10-----		.3	13	1.6	25-----	.5		3.0	.1
11-----		.2	15	1.4	26-----	.5		2.6	
12-----	2.5	.2	13	1.2	27-----	.4		2.8	
13-----	6.5	.2	10	1.4	28-----	.4		3.0	
14-----	3.1	.2	10	.7	29-----			3.0	
15-----	1.8	.2	8	.3	30-----			2.8	

NOTE.—No flow Oct. 1 to Feb. 11, Mar. 22 to Apr. 4, and May 26 to Sept. 30.

Monthly discharge of Dalton Creek near Glendora, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
February.....	6.5	0.0	0.78	43.3
March.....	.4	.0	.18	11.1
April.....	60	.0	12.7	756
May.....	2.6	.0	.96	59.0
The year.....	60	.0	1.20	869

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

LOS ANGELES RIVER BASIN

PACOIMA CREEK NEAR SAN FERNANDO, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 24, T. 3 N., R. 15 W., about 600 feet above mouth of canyon and 4 miles northeast of San Fernando, Los Angeles County.

DRAINAGE AREA.—27.9 square miles.

RECORDS AVAILABLE.—March 31, 1916, to September 30, 1926.

GAGE.—Water-stage recorder, in concrete well and house, on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 20 feet above gage or by wading at gage.

CHANNEL AND CONTROL.—Bed consists of sand, gravel, and boulders; not permanent. Left bank is steep rock cliff; right bank is gently sloping and covered with brush and trees. Control is a low boulder and concrete dam built across channel about 7 feet below gage well. On April 8, 1926, the channel at the gage was filled with boulders, gravel, and sand to a depth of about 7.5 feet on gage.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks, about 10 feet on April 8, discharge not computed.

1916-1926: Maximum stage recorded, 6.00 feet December 19, 1921 (discharge, 1,810 second-feet); usually no flow for several months each year.

DIVERSIONS.—None above station. There is a diversion just below control.

REGULATION.—Construction has been started on a flood-control dam above station and during April, 1926, excavated material in channel temporarily impounded part of the flow.

ACCURACY.—Stage-discharge relation not permanent. Rating curve fairly well defined to April 5, no rating thereafter for remainder of year. Recorder record good to April 5. Daily discharge ascertained by applying mean daily gage height to rating table, using shifting-control method, until April 4. Monthly discharge, April, June, and July, estimated by comparison with records for Arroyo Seco and Tujunga Creek. Daily discharge estimated in the same way from April 15 to June 2. Records fair.

Discharge measurements of Pacoima Creek near San Fernando, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Dec. 23.....	1.47	0.1	Mar. 11.....	1.72	3.9	Apr. 19.....	7.15	35
Jan. 16.....	1.45	.1	Mar. 17.....	1.66	3.0	Apr. 22.....	6.95	27
Jan. 28.....	1.44	.1	Mar. 20.....	1.70	3.3	Apr. 29.....	6.95	24
Feb. 1.....	1.64	2.4	Mar. 25.....	1.64	2.5	May 8.....	6.93	16
Feb. 4.....	1.80	5.5	Apr. 3.....	1.64	2.0	May 14.....	-----	9
Feb. 14.....	2.42	83	Apr. 7.....	-----	263	May 21.....	-----	7.4
Mar. 2.....	1.76	4.7	Apr. 15.....	-----	54	June 2.....	-----	3.1

Daily discharge, in second-feet, of Pacoima Creek near San Fernando, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1.....		0.1	0.1	2.8	5.5	2.0	23	3.5
2.....		.1	.1	1.3	5.5	2.0	22	3.1
3.....		.1	.1	14.0	4.8	2.0	21	
4.....		.1	.1	7	5.5	2.8	20	
5.....		.1	.1	2.3	6.5		19	
6.....	0.1	.1	.1	1.3	5.5		18	
7.....	.1	.1	.1	.9	5.5	263	17	
8.....	.1	.1	.1	.8	4.8		16	
9.....	.1	.1	.1	.7	4.8		15	
10.....	.1	.1	.1	.8	4.4		12	
11.....	.1	.1	.1	.8	3.9		11	
12.....	.1	.1	.1	18	3.3		10	
13.....	.1	.1	.1	128	3.3		9	
14.....	.1	.1	.1	88	2.8		9	
15.....	.1	.1	.1	66	3	54	9	
16.....	.1	.1	.1	38	3.5	45	8.5	
17.....	.1	.1	.1	30	3	40	8.5	
18.....	.5	.1	.1	26	2.8	40	8	
19.....	.3	.1	.1	23	3.5	35	8	
20.....	.2	.1	.1	21	3.3	32	7.5	
21.....	.2	.1	.1	17	2.5	30	7.5	
22.....	.2	.1	.1	16	2.3	27	7	
23.....	.2	.1	.1	13	2.3	26	7	
24.....	.2	.1	.1	9	2.3	25	6.5	
25.....	.2	.1	.1	7.5	2.5	25	6.5	
26.....	.1	.1	.1	7.5	2.8	24	6	
27.....	.1	.1	.1	7	2.5	24	6	
28.....	.1	.1	.1	6.5	2.2	24	5.5	
29.....	.1	.1	.1		2.2	24	5	
30.....	.1	.1	.1		2	24	4.5	
31.....		.1	2.2		2		4.0	

NOTE.—No flow Oct. 1 to Nov. 5 and July 28 to Sept. 30. See table of monthly discharge for estimated mean discharge for April, June, and July.

Monthly discharge of Pacoima Creek near San Fernando, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
November.....	0.5	0	0.12	7.1
December.....	.1	.1	.10	6.1
January.....	2.2	.1	.17	10.5
February.....	128	.7	19.4	1,080
March.....	6.5	2.0	3.57	220
April.....		2.0	* 95	5,650
May.....	23	4.0	10.9	670
June.....			* 2.0	119
July.....		0	* .5	30.7
The year.....		0	10.8	7,790

* Estimated.

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

TUJUNGA CREEK NEAR SUNLAND, CALIF.

LOCATION.—Near center of sec. 32, T. 3 N., R. 13 W. (unsurveyed), at a partly constructed and abandoned dam, about 2 miles above mouth of canyon, and 4 miles northeast of Sunland, Los Angeles County.

DRAINAGE AREA.—106 square miles (measured on topographic maps).

RECORDS AVAILABLE.—October 28, 1916, to September 30, 1926. (Discharge measurements only, April 1 to August 27, 1916.)

GAGE.—Water-stage recorder on right bank above dam.

DISCHARGE MEASUREMENTS.—Made from cable about 1,000 feet below gage or by wading at various sections near dam.

CHANNEL AND CONTROL.—Bed consists of gravel and boulders. Control is concrete dam, which has a notch in center about 20 feet long and 1 foot deep. Stage-discharge relation affected by deposits of sand, gravel, and boulders above dam.

EXTREMES OF DISCHARGE.—Maximum discharge during year, estimated at 4,000 second-feet April 7. Minimum discharge, 0.2 second-feet several days in October.

1916-1926: Maximum stage recorded, 6.20 feet at 5 p. m. December 19, 1921 (discharge, 8,600 second-feet). Minimum discharge, estimated at 0.1 second-foot September 20-23, 1919, and several days in August, September, and October, 1924.

DIVERSIONS.—Two or three ranches divert a part of low-water flow for irrigation above station. There are two small diversions between gage and mouth of canyon.

REGULATION.—None.

ACCURACY.—Stage-discharge relation not permanent. Water-stage recorder record good, except during very low stages when water did not reach well and January 31 when recorder did not operate; record not complete April 5-8. Daily discharge ascertained by shifting-control method, by interpolating between measurements during lowest water, and partly estimated April 5-8 by comparison with record for Arroyo Seco near Pasadena. Records fair.

Discharge measurements of Tujunga Creek near Sunland, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 5.....		0.3	Feb. 8.....	0.46	12	Apr. 24.....	1.14	50
Oct. 12.....		.3	Feb. 10.....	.45	10	Apr. 29.....	1.14	56
Oct. 14.....		.2	Feb. 13.....	2.41	519	May 7.....	.87	34
Nov. 4.....		.3	Feb. 16.....	1.16	65	May 14.....	.71	26
Nov. 11.....		.3	Feb. 23.....	.68	19	May 21.....	.62	18
Nov. 24.....		.6	Mar. 2.....	.54	13	May 26.....	.59	14
Dec. 2.....	0.77	29	Mar. 5.....	.54	11	June 2.....	.52	13
Dec. 4.....	.40	4.9	Mar. 11.....	.50	8.5	June 12.....	.50	8.9
Dec. 12.....		2.9	Mar. 17.....	.48	7.6	July 7.....		2.3
Dec. 19.....		6.0	Mar. 20.....	.50	10	July 14.....		1.3
Jan. 2.....		3.1	Mar. 25.....	.46	8.5	July 27.....		1.0
Jan. 8.....		3.4	Apr. 3.....	.48	8.3	Aug. 5.....		.8
Jan. 14.....		2.9	Apr. 6.....	2.39	606	Aug. 12.....		.6
Jan. 23.....		3.1	Apr. 11.....	1.58	228	Sept. 2.....		.8
Jan. 28.....		3.1	Apr. 15.....	1.48	109	Sept. 11.....		.6
Jan. 31.....		163	Apr. 19.....	1.50	106	Sept. 15.....		.7
Feb. 1.....	.70	29	Apr. 22.....	1.26	68	Sept. 24.....	.48	.4
Feb. 3.....	1.08	52	Do.....	1.25	67			

Daily discharge, in second-feet, of Tujunga Creek near Sunland, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	0.2	0.3	2	3.1	29	12	8.5	49	13	3.5	0.9	0.7
2.	.2	.3	24	3.1	39	11	8.5	52	13	3.3	.9	.8
3.	.2	.3	8.5	3.1	125	12	8.5	47	12	3.1	.8	.8
4.	.2	.3	5	3.2	34	12	12	40	11	2.9	.8	.8
5.	.3	.8	4	3.2	21	11	780	38	11	2.7	.8	.7
6.	.3	.3	4	3.3	16	11	710	36	11	2.5	.8	.7
7.	.3	.3	3.5	3.3	15	11	885	34	11	2.3	.8	.7
8.	.3	.3	3.5	3.4	13	11	1040	34	11	2.1	.7	.6
9.	.3	.3	3	3.3	11	11	550	34	11	1.9	.7	.6
10.	.3	.3	3	3.2	9.5	11	330	33	10	1.7	.7	.6
11.	.3	.3	3	3.1	10	9	228	29	9.5	1.6	.6	.6
12.	.3	.3	2.9	3.0	276	8.5	132	26	9	1.5	.6	.7
13.	.3	.3	2.9	3.0	478	8.5	82	25	8.5	1.4	.6	.7
14.	.2	.3	2.9	2.9	248	8	123	25	8	1.3	.6	.7
15.	.2	.3	2.9	2.9	100	8.5	108	24	7.5	1.3	.6	.7
16.	.2	.3	2.9	2.9	70	8.5	100	21	7	1.2	.6	.6
17.	.2	.3	2.9	3.0	54	8.5	86	20	6.5	1.2	.6	.6
18.	.2	.3	5	3.0	44	8.5	196	19	6.5	1.2	.6	.6
19.	.2	.3	6	3.0	36	9.5	120	18	6	1.2	.6	.6
20.	.2	.3	4	3.1	31	9	98	17	6	1.1	.6	.5
21.	.2	.3	4	3.1	27	8.5	84	18	5.5	1.1	.6	.5
22.	.3	.3	3.5	3.1	24	7.5	71	18	5.5	1.1	.6	.5
23.	.3	.3	3.5	3.1	22	7	65	17	5	1.1	.6	.4
24.	.3	3.4	3.4	3.1	21	7	53	16	4.8	1.0	.7	.4
25.	.3	6	3.4	3.1	18	7.5	47	15	4.6	1.0	.7	.4
26.	.3	4	3.3	3.1	16	7.5	44	14	4.4	1.0	.7	.4
27.	.3	3	3.3	3.1	14	7	44	15	4.2	1.0	.7	.4
28.	.3	2.5	3.2	3.1	14	7	58	14	4.0	1.0	.7	.4
29.	.3	2	3.2	3.1	-----	7	62	13	3.8	.9	.7	.4
30.	.3	2	3.2	3.1	-----	7	56	13	3.6	.9	.7	.5
31.	.3	-----	3.1	163	-----	7	-----	13	-----	.9	.7	-----

Monthly discharge of Tujunga Creek near Sunland, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	0.3	0.2	0.26	16.0
November	6	.3	.99	58.9
December	24	2	4.29	264
January	163	2.9	8.26	508
February	478	9.5	64.8	3,600
March	12	7	9.02	555
April	1,040	8.5	206	12,300
May	52	13	25.4	1,560
June	13	3.6	7.80	464
July	3.5	.9	1.61	99.0
August	.9	.6	.69	42.4
September	.8	.4	.59	35.1
The year	1,040	.2	26.9	19,500

HAINES CREEK NEAR TUJUNGA, CALIF.

LOCATION.—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, Los Angeles County.

DRAINAGE AREA.—1.2 square miles.

RECORDS AVAILABLE.—February 7, 1917, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house, on right bank.

DISCHARGE MEASUREMENTS.—Made by wading near gage, or by volumetric method when discharge is very small. A gaging bridge, for use during high water, is located just above gage.

CHANNEL AND CONTROL.—Bed consists of boulders and gravel overlying solid rock, permanent; banks are high and fairly clean. A concrete dam, having a maximum height of about 5 feet above bedrock, was built across the channel at downstream face of gage well. A 12-foot concrete wing wall was constructed at left end of dam. Crest of dam has a trapezoidal notch 6 inches wide on bottom and 1 foot deep, which makes control more sensitive for low stages. Control point was temporarily raised about 0.25 foot on August 5, 1926.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 1.59 foot at 8 p. m. April 5 (discharge, 11 second-feet). Practically dry October 1–12 and December 19 to January 10.

1917–1926: Maximum stage recorded, 1.74 feet January 2, 1922 (discharge, 15 second-feet); stream practically dry July 18 to August 1, 1921, August 29 to October 12, 1925, and December 19, 1925, to January 10, 1926.

DIVERSIONS.—About a mile above station a tunnel has been driven into stream bed and a 4-inch pipe carries the water past gage. This water is used for domestic supply at Tujunga. A similar tunnel, a short distance below station, obtains a small supply during greater part of year.

REGULATION.—A large number of small check dams, constructed of brush and boulders, have been built across the stream channel in the upper part of the drainage basin.

ACCURACY.—Stage-discharge relation fairly permanent October 15 to May 21, and rating curve is fairly well defined. Stage-discharge relation affected by debris on control October 1–14 and May 22 to September 30. Operation of water-stage recorder satisfactory, except October 11–14, January 2, and July 31 to August 4. Daily discharge ascertained by applying mean daily gage height to rating table, except October 1–14 and May 22 to September 30, for which it was estimated or interpolated between discharge measurements. Records good.

Discharge measurements of Haines Creek near Tujunga, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 15.....	0.28	* 0.005	Mar. 5.....	0.34	* 0.04	Aug. 5.....		* 0.01
Nov. 3.....	.28	* .006	Apr. 8.....	1.38	8.2	Aug. 23.....	0.55	* .007
Jan. 14.....	.30	* .011	Apr. 29.....	.56	.24	Sept. 2.....	.54	* .006
Feb. 8.....	.30	* .015	May 21.....	.44	.14			
Feb. 13.....	.83	.7	July 7.....	.22	* .027			

* Volumetric measurement.

Daily discharge, in second-feet, of Haines Creek near Tujunga, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		0.01	0.03		0.01	0.05	0.05	0.26	0.10	0.04	0.01	0.01
2.....		.01	.03		.02	.05	.05	.28	.10	.04	.01	.01
3.....		.01	.01		.02	.04	.05	.24	.10	.04	.01	.01
4.....		.01	.01		.02	.04	.08	.24	.10	.04	.01	.01
5.....		.01	.01		.01	.04	3.1	.24	.10	.04	.01	.01
6.....		.01	.01		.01	.04	2.3	.24	.09	.03	.01	.01
7.....		.01	.01		.01	.04	3.3	.23	.09	.03	.01	.01
8.....		.01	.01		.01	.04	7.0	.22	.09	.03	.01	.01
9.....		.01	.01		.01	.04	5.5	.20	.09	.04	.01	.01
10.....		.01	.01		.01	.04	3.8	.19	.09	.05	.01	.01

Daily discharge, in second-feet, of Haines Creek near Tujunga, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11.....		0.01	0.01	0.01	0.02	0.04	02.4	0.18	0.08	0.06	0.01	0.01
12.....		.01	.01	.01	.03	.03	2.0	.16	.08	.06	.01	.01
13.....	0.01	.01	.01	.01	.85	.03	1.8	.16	.08	.07	.01	.01
14.....	.01	.01	.01	.01	.15	.03	1.6	.15	.08	.07	.01	.01
15.....	.01	.01	.01	.01	.09	.03	1.2	.15	.08	.07	.01	.01
16.....	.01	.01	.01	.01	.08	.03	.80	.14	.07	.07	.01	.01
17.....	.01	.01	.01	.01	.08	.03	.75	.14	.07	.06	.01	.01
18.....	.02	.01	.01	.01	.08	.03	2.0	.13	.07	.06	.01	.01
19.....	.02	.01		.01	.07	.04	1.1	.13	.07	.06	.01	.01
20.....	.03	.01		.01	.07	.03	.85	.13	.07	.06	.01	.01
21.....	.03	.01		.01	.06	.03	.70	.12	.06	.06	.01	.01
22.....	.03	.01		.01	.06	.03	.60	.12	.06	.06	.01	.01
23.....	.03	.01		.01	.06	.03	.47	.12	.06	.05	.01	.01
24.....	.02	.01		.01	.05	.03	.43	.12	.06	.04	.01	.01
25.....	.02	.01		.01	.05	.03	.39	.12	.06	.04	.01	.01
26.....	.02	.01		.01	.05	.03	.35	.11	.05	.03	.01	.01
27.....	.02	.01		.01	.05	.03	.29	.11	.05	.03	.01	.01
28.....	.01	.01		.01	.05	.03	.28	.11	.05	.02	.01	.01
29.....	.01	.01		.01		.03	.28	.11	.05	.02	.01	.01
30.....	.01	.02		.01		.03	.26	.11	.05	.02	.01	.01
31.....	.01			.02		.04		.11		.02	.01	

NOTE.—Stream practically dry October 1-12 and December 19 to January 10. See monthly table for estimated mean discharge for October, December, and January.

Monthly discharge of Haines Creek near Tujunga, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0.03		* 0.012	0.74
November.....	.02	0.01	.010	.60
December.....	.03		* .009	.55
January.....	.02		* .008	.49
February.....	.85	.01	.074	4.11
March.....	.05	.03	.035	2.15
April.....	7	.05	1.46	86.9
May.....	.28	.11	.164	10.1
June.....	.10	.05	.075	4.46
July.....	.07	.02	.045	2.77
August.....	.01	.01	.010	.61
September.....	.01	.01	.010	.60
The year.....	7		.157	114

* Estimated.

ARROYO SECO NEAR PASADENA, CALIF.

LOCATION.—Near south line of sec. 30, T. 2 N., R. 12 W. (unsurveyed), just below trail crossing at forest ranger's station, in Angeles National Forest, 1½ miles above mouth of Millard Canyon, 3 miles above Devil's Gate Dam, and 5½ miles northwest of Pasadena, Los Angeles County.

DRAINAGE AREA.—16.4 square miles (measured on topographic map).

RECORDS AVAILABLE.—December 1, 1910, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 150 feet above gage or by wading.

CHANNEL AND CONTROL.—Bed consists of solid rock, gravel, and boulders. A concrete dam, extending to bedrock, was built across channel 15 feet below gage well. There is a notch in the crest 2 feet wide and 1 foot deep. In July, 1919, a concrete intake box was built from gage house down to control.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.95 feet at 5 p. m. April 7 (discharge, 1,450 second-feet); stream practically dry October 1-4 and August 12 to September 30.

1910-1926: Maximum stage recorded, 12.5 feet February 20, 1914 (discharge, from extension of rating curve, about 5,630 second-feet); stream practically dry July 20 to October 4, 1925, and August 12 to September 30, 1926.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed frequently during year. Rating curves fairly well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except February 26 to April 8, for which shifting-control method was used or discharge was estimated from measurements. Records good.

Discharge measurements of Arroyo Seco near Pasadena, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Nov. 2.....	0.82	0.2	Feb. 10.....	1.18	1.9	Apr. 20.....	1.96	19
Nov. 5.....	.80	.1	Feb. 12.....	2.60	126	Apr. 23.....	1.93	16
Nov. 24.....	1.00	.7	Feb. 15.....	2.06	26	Apr. 27.....	1.88	13
Dec. 4.....	1.18	2.1	Feb. 16.....	1.90	17	May 3.....	1.85	9.7
Dec. 12.....	.96	.5	Feb. 23.....	1.51	4.4	May 9.....	1.80	7.3
Dec. 17.....	.94	.8	Mar. 2.....	1.30	2.2	May 17.....	1.66	4.2
Dec. 19.....	1.00	.8	Mar. 11.....	1.28	1.3	May 22.....	1.64	4.2
Jan. 6.....	.94	.7	Mar. 16.....	1.26	1.4	June 2.....	1.55	3.8
Jan. 15.....	.94	.8	Mar. 20.....	1.30	1.9	July 2.....	1.42	1.0
Jan. 26.....	.94	.6	Mar. 25.....	1.30	1.5	July 14.....	1.40	.8
Feb. 1.....	1.80	7.8	Apr. 3.....	1.26	1.5	July 29.....	1.32	.2
Feb. 3.....	2.00	22	Apr. 11.....	2.46	79	Aug. 9.....	1.12	*.1
Feb. 4.....	1.79	7.3	Apr. 15.....	2.06	30			

* Estimated.

Daily discharge, in second-feet, of Arroyo Seco near Pasadena, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....		0.2	0.3	0.6	9.5	3.1	1.5	11	2.5	0.9	0.5
2.....		.2	4.1	.6	4.9	2.9	1.5	11	2.5	.8	.4
3.....		.2	3.9	.6	31	2.8	1.5	10	2.5	.7	.2
4.....		.2	2.0	.6	8.5	2.6	1.7	9.5	2.3	.7	.2
5.....	0.1	.2	1.5	.6	4.5	2.3	272	11	2.2	.7	.2
6.....	.1	.2	1.3	.6	3.3	2.1	250	10	2.2	.7	.2
7.....	.1	.2	1.0	.6	2.7	1.9	376	9.5	2.3	.7	.2
8.....	.1	.2	.9	.6	2.2	1.7	484	9.5	2.5	.7	.2
9.....	.1	.2	.9	.6	2.0	1.5	210	8	2.7	.8	.1
10.....	.1	.2	.8	.6	1.8	1.4	136	7	2.3	.9	.1
11.....	.2	.2	.7	.6	2.3	1.3	86	7	2.0	1.0	.1
12.....	.2	.2	.6	.6	61	1.4	72	6.5	2.0	1.2	.....
13.....	.2	.2	.6	.6	150	1.4	52	6	1.9	1.2	.....
14.....	.2	.2	.5	.6	41	1.4	44	5.5	1.7	.9	.....
15.....	.2	.2	.5	.6	27	1.4	37	5	1.7	.9	.....
16.....	.2	.2	.5	.6	15	1.4	32	4.8	1.7	.9	.....
17.....	.2	.2	.6	.5	9.5	1.4	28	4.5	1.7	.9	.....
18.....	.2	.2	.9	.5	9	1.5	28	4.3	1.7	.9	.....
19.....	.1	.2	.8	.6	8	2.1	25	4.2	1.7	.8	.....
20.....	.2	.2	.8	.5	7.5	1.9	18	4.0	1.6	.8	.....
21.....	.2	.2	.8	.4	6.5	1.8	17	3.8	1.5	.8	.....
22.....	.3	.2	.8	.5	5.5	1.8	15	3.8	1.4	.7	.....
23.....	.3	.2	.8	.5	4.8	1.7	15	3.8	1.3	.6	.....
24.....	.3	.6	.8	.5	4.3	1.6	13	4.0	1.2	.6	.....
25.....	.2	.5	.8	.6	4.2	1.5	12	3.6	1.2	.5	.....
26.....	.2	.4	.8	.6	3.9	1.5	12	3.3	1.1	.5	.....
27.....	.2	.4	.8	.5	3.6	1.5	12	3.1	.9	.5	.....
28.....	.2	.4	.7	.5	3.4	1.5	12	3.0	.8	.4	.....
29.....	.3	.4	.7	.6	.....	1.5	12	2.8	.8	.4	.....
30.....	.3	.3	.7	.6	.....	1.5	12	2.7	.8	.5	.....
31.....	.3	.....	.7	7.5	.....	1.5	.....	2.5	.....	.5	.....

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Arroyo Seco near Pasadena, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0.3	0.0	0.17	10.5
November.....	.6	.2	.25	14.9
December.....	4.1	.3	1.02	62.7
January.....	7.5	.4	.79	48.6
February.....	150	1.8	15.6	866
March.....	3.1	1.3	1.77	109
April.....	484	1.5	76.3	4,640
May.....	11	2.5	5.96	366
June.....	2.7	.8	1.76	105
July.....	1.2	.4	.75	46.1
August.....	.5	.0	.08	4.9
The year.....	484	.0	8.53	6,170

NOTE.—Practically dry in September.

SANTA ANITA CREEK NEAR SIERRA MADRE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 10, T. 1 N., R. 11 W., at the head of Hermits Falls, 4 miles northeast of Sierra Madre, Los Angeles County.

DRAINAGE AREA.—10.5 square miles (measured on topographic map).

RECORDS AVAILABLE.—July 31, 1916, to September 30, 1926.

GAGE.—Water-stage recorder on right bank of pool at head of Hermits Falls.

DISCHARGE MEASUREMENTS.—Made from cable 300 feet below gage or by wading.

CHANNEL AND CONTROL.—Channel at gage is pool in bedrock; bed is rough and steep above and below pool. Banks are high, clean, and not subject to overflow. Control is bedrock, the same for all stages, and is permanent. Zero flow, gage height 0.41 foot.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.7 feet at 4.30 p. m. April 7 (discharge, about 1,400 second-feet); minimum stage, from water-stage recorder, 0.56 foot October 1 and 2 (discharge, 0.1 second-foot).

1916–1926: Maximum stage recorded, 10.7 feet at 4.30 p. m. April 7, 1926 (discharge, about 1,400 second-feet); minimum stage, 0.55 foot September 30, 1925 (discharge, 0.1 second-foot).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined below 300 second-feet and extended above. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records good below 300 second-feet and poor above.

Discharge measurements of Santa Anita Creek near Sierra Madre, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 1.....	0.56	0.03	Feb. 1.....	1.08	4.3	May 12.....	1.20	5.9
Oct. 14.....	.80	.6	Feb. 4.....	1.12	4.3	May 27.....	1.10	3.9
Nov. 2.....	.74	.4	Feb. 15.....	1.38	12	June 8.....	1.04	3.6
Nov. 27.....	.80	.6	Mar. 3.....	.93	2.0	July 8.....	.88	1.6
Dec. 1.....	.77	.5	Mar. 15.....	.88	1.3	July 30.....	.83	.7
Dec. 15.....	.80	.6	Apr. 2.....	.87	1.2	Aug. 28.....	.72	.3
Dec. 29.....	.80	.6	Apr. 9.....	2.85	106	Sept. 21.....	.72	.3
Jan. 6.....	.80	.6	Apr. 14.....	1.90	33			
Jan. 15.....	.80	.6	Apr. 28.....	1.34	10			

Daily discharge, in second-feet, of Santa Anita Creek near Sierra Madre, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.1	0.4	0.5	1.0	3.7	1.7	1.1	9.5	3.0	1.2	0.6	0.3
2.....	.1	.4	3.1	.6	4.5	1.6	1.0	9.5	3.0	1.2	.6	.3
3.....	.1	.3	1.7	.6	19	1.6	1.0	8.5	3.0	1.2	.6	.3
4.....	.1	.4	1.2	.6	4.8	1.6	1.1	8.5	2.8	1.0	.5	.4
5.....	.1	.4	1.0	.6	3.4	1.6	179	9.5	2.5	1.1	.6	.4
6.....	.1	.4	.9	.6	2.8	1.6	190	8.0	2.7	1.0	.6	.4
7.....	.1	.5	.8	.6	2.3	1.5	313	8.0	3.0	1.0	.6	.4
8.....	.1	.5	.7	.6	2.1	1.5	233	7.5	3.0	1.2	.6	.3
9.....	.1	.4	.7	.6	1.8	1.4	108	7.0	2.8	1.3	.5	.3
10.....	.1	.4	.7	.6	1.7	1.4	70	6.5	2.4	1.3	.5	.3
11.....	.1	.4	.7	.6	1.7	1.3	117	5.5	2.4	1.2	.5	.3
12.....	.1	.4	.6	.6	17	1.2	70	5.5	2.4	1.1	.4	.3
13.....	.4	.4	.6	.6	46	1.1	46	5.5	2.4	1.0	.4	.3
14.....	.6	.4	.6	.6	19	1.1	32	5	2.4	.9	.4	.3
15.....	.3	.4	.6	.6	11	1.1	28	5	2.4	.9	.4	.3
16.....	.3	.4	.6	.6	8	1.1	24	4.8	2.3	.9	.4	.4
17.....	.3	.4	.6	.6	5.5	1.1	22	4.6	2.3	.9	.4	.4
18.....	.3	.4	1.0	.7	4.6	1.1	23	4.6	2.2	.8	.4	.4
19.....	.2	.4	1.1	.7	3.8	1.2	19	4.4	2.2	.7	.5	.3
20.....	.2	.4	.8	.7	3.5	1.2	17	4.4	2.0	.7	.5	.2
21.....	.2	.3	.8	.7	3.2	1.1	15	4.2	1.8	.7	.6	.2
22.....	.2	.3	.7	.7	3.0	1.0	14	4.4	1.7	.7	.5	.2
23.....	.2	.3	.7	.7	2.7	1.0	12	4.4	1.6	.6	.3	.2
24.....	.2	1.2	.7	.7	2.5	1.0	11	4.4	1.6	.6	.3	.2
25.....	.2	.9	.6	.7	2.3	1.0	10	4.2	1.6	.5	.2	.2
26.....	.2	.6	.6	.7	2.2	1.1	10	4	1.4	.6	.2	.2
27.....	.2	.6	.6	.7	2.1	1.0	10	3.7	1.3	.7	.2	.2
28.....	.2	.5	.6	.6	1.8	1.0	10	3.5	1.2	.7	.3	.2
29.....	.2	.5	.6	.6	1.7	1.0	10	3.4	1.2	.6	.3	.3
30.....	.3	.5	.6	-----	-----	9.5	3.2	1.2	-----	.6	.4	.4
31.....	.3	-----	.6	5.5	-----	1.0	-----	3.1	-----	.6	.4	-----

Monthly discharge of Santa Anita Creek near Sierra Madre, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0.6	0.1	0.20	12.3
November.....	1.2	.3	.46	27.4
December.....	3.1	.5	.83	51.0
January.....	5.5	.6	.81	49.8
February.....	46	1.7	6.64	369
March.....	1.7	1.0	1.23	75.6
April.....	313	1.0	53.6	3,190
May.....	9.5	3.1	5.62	346
June.....	3.0	1.2	2.19	130
July.....	1.3	.5	.89	54.7
August.....	.6	.2	.44	27.1
September.....	.4	.2	.30	17.9
The year.....	313	.1	6.00	4,350

LITTLE SANTA ANITA CREEK NEAR SIERRA MADRE, CALIF.

LOCATION.—Near center of W. ½ sec. 9, T. 1 N., R. 11 W., 2 miles northeast of Sierra Madre, Los Angeles County.

DRAINAGE AREA.—1.9 square miles (measured on topographic maps).

RECORDS AVAILABLE.—April 15, 1916, to September 30, 1926.

GAGE.—Water-stage recorder on left bank about 150 feet below Scherer's cabin. Station destroyed during flood of April 7, 1926, and rebuilt August 4, 1926, at same site.

DISCHARGE MEASUREMENTS.—Made from wooden bridge near gage or by wading.

CHANNEL AND CONTROL.—Bed consists of gravel and boulders; one channel at all stages; straight for 75 feet above control. Right bank is rock cliff; left bank is stone wall 5 feet high which is probably above maximum stage. Control is small concrete dam, with triangular notch at left end, just below gage. Control is not permanent for high stages on account of varying amounts of gravel deposited in pool just above dam. Zero flow, gage height 0.70 foot, and top of dam, gage height 1.50 feet. Concrete control destroyed during flood of April 7, 1926, and rebuilt August 4, 1926.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks, 11.75 feet about 4 p. m. April 7 (discharge, not computed); no flow October 1 to November 4.

1916-1926: Maximum stage recorded, 11.75 feet about 4 p. m. April 7, 1926 (discharge, not computed); no flow during part of each day September 16 and 17, 1919, July 1 to October 28, November 3-4, 1924, and July 1 to November 4, 1925.

DIVERSIONS.—None above.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent until April 7. Rating curve well defined below 25 second-feet and extended above. Water-stage recorder record excellent October 1 to March 15. Record March 15 to April 7 lost in flood of April 7. No record April 7 to August 4. Record poor August 4 to September 30 as control was blocked by debris. Daily discharge ascertained by applying mean daily gage height to rating table October 1 to March 15. Mean monthly discharge estimated from discharge measurements and by comparison with Santa Anita Creek March 15-30 and May to September. Records good October to March and fair May to September.

Discharge measurements of Little Santa Anita Creek near Sierra Madre, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Dec. 1.....	0.94	0.04	Mar. 15.....	1.04	0.2	May 15.....	.....	0.6
Dec. 16.....	.96	.06	Mar. 26.....	1.05	.2	May 27.....	.....	.5
Jan. 2.....	.96	.1	Apr. 2.....	1.04	.2	June 9.....	.....	.3
Jan. 22.....	.96	.1	Apr. 9.....	.....	15	June 21.....	.....	.2
Feb. 2.....	1.08	.3	Apr. 14.....	.....	4.8	July 6.....	.....	.2
Feb. 5.....	1.20	.6	Apr. 20.....	.....	2.3	Aug. 19.....	0.56	.02
Feb. 15.....	1.50	1.6	Apr. 26.....	.....	1.4	Sept. 7.....	.....	.04
Mar. 3.....	1.10	.3	May 7.....	.....	1.0	Sept. 8.....	.54	.06

Daily discharge, in second-feet, of Little Santa Anita Creek near Sierra Madre, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Day	Nov.	Dec.	Jan.	Feb.	Mar.
1.....	.....	0.1	0.1	0.3	0.2	16.....	0.1	0.1	0.1	1.2	.....
2.....	.....	.4	.1	.4	.2	17.....	.1	.1	.1	.9	.....
3.....	.....	.2	.1	1.7	.2	18.....	.1	.2	.1	.8	.....
4.....	.....	.1	.1	.7	.2	19.....	.1	.1	.1	.6	.....
5.....	0.1	.1	.1	.4	.2	20.....	.1	.1	.1	.6	.....
6.....	.1	.1	.1	.3	.2	21.....	.1	.1	.1	.5	.....
7.....	.1	.1	.1	.3	.2	22.....	.1	.1	.1	.4	.....
8.....	.1	.1	.1	.2	.2	23.....	.1	.1	.1	.4	.....
9.....	.1	.1	.1	.2	.2	24.....	.3	.1	.1	.3	.....
10.....	.1	.1	.1	.2	.2	25.....	.1	.1	.1	.3	.....
11.....	.1	.1	.1	.2	.2	26.....	.1	.1	.1	.3	.....
12.....	.1	.1	.1	1.8	.2	27.....	.1	.1	.1	.3	.....
13.....	.1	.1	.1	4.4	.2	28.....	.1	.1	.1	.2	.....
14.....	.1	.1	.1	2.6	.2	29.....	.1	.1	.1	.....	.....
15.....	.1	.1	.1	1.7	.2	30.....	.1	.1	.1	.....	.....
						31.....	.....	.1	.7	.....	.....

NOTE.—No flow Oct. 1 to Nov. 4. Discharge estimated at 0.2 second-foot Mar. 16-31. See monthly discharge table for estimated mean discharge for May to September.

Monthly discharge of Little Santa Anita Creek near Sierra Madre, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0	0	0	0
November.....	.3	0	.09	5.4
December.....	.4	.1	.12	7.4
January.....	.7	.1	.12	7.4
February.....	4.4	.2	.79	43.9
March.....	.2	.2	.20	12.3
May.....			° .75	46.1
June.....			° .25	14.9
July.....			° .10	6.1
August.....			° .05	3.1
September.....			° .05	3.0

° Estimated.

NOTE.—No record during April.

EATON CREEK NEAR PASADENA, CALIF.

LOCATION.—Near line between secs. 2 and 11, T. 1 N., R. 12 W., at mouth of canyon just above Mount Wilson toll bridge and about 4 miles northeast of Pasadena, Los Angeles County.

DRAINAGE AREA.—6.5 square miles (measured on topographic map).

RECORDS AVAILABLE.—March 1, 1918, to September 30, 1926.

GAGE.—Water-stage recorder on left bank just above toll bridge.

DISCHARGE MEASUREMENTS.—Made by wading near gage.

CHANNEL AND CONTROL.—Gravel and boulders, fairly permanent; concrete control.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.0 feet at 4 p. m. April 7 (discharge, 1,360 second-feet); no flow for several months.

1918-1926: Maximum stage recorded, 5.0 feet at 4 p. m. April 7, 1926 (discharge, 1,360 second-feet); no flow for periods each year.

DIVERSIONS.—City of Pasadena diverts water above station. (See p. 99 for record of this diversion.)

REGULATION.—None.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve well defined below 50 second-feet and extended above. Water-stage recorder gave good record. Daily discharge ascertained by applying mean daily gage height to rating table. Records good for low and medium stages and poor for high stages.

COOPERATION.—Results of five discharge measurements and record of diversion from Eaton Creek furnished by city of Pasadena.

Discharge measurements of Eaton Creek near Pasadena, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 3.....	1.48	9.8	Apr. 7.....	3.50	331	Apr. 21.....	1.26	3.6
Do.....	1.38	6.7	Apr. 9.....	2.13	57	Apr. 23.....	1.23	3.4
Feb. 4.....	.76	° .2	Apr. 10.....	1.92	34	Apr. 24.....	1.12	3.4
Feb. 12.....	1.72	20	Apr. 12.....	1.91	34	Apr. 27.....	1.18	2.6
Feb. 14.....	1.60	13	Apr. 13.....	1.72	18	May 3.....	1.20	3.1
Feb. 15.....	1.34	6.2	Apr. 15.....	1.53	10			
Apr. 5.....	2.10	70	Apr. 17.....	1.52	9			

° Estimated.

Daily discharge, in second-feet, of Eaton Creek near Pasadena, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Apr.	May	Day	Jan.	Feb.	Apr.	May	Day	Jan.	Feb.	Apr.	May
1				1.5	11			40		21			3.9	
2		0.4		2.3	12		7.5	25		22			3.9	
3		8.5		1.3	13		40	19		23			3.2	
4		1.2		.8	14		17	15		24			2.7	
5			139	4.0	15		6	10		25			2.0	
6				1.8	16		2.4	9.5		26			1.8	
7			273	.1	17		.8	9.5		27			1.8	
8			291	.9	18			8		28			2.0	
9			74	.6	19			7		29			2.0	
10			38	.3	20			5.5		30			2.0	
										31	2.9			

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Eaton Creek near Pasadena, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January	2.9	0	0.09	5.5
February	40	0	2.99	166
April	291	0	37.0	2,200
May	4.0	0	.44	27.1
The year	291	0	3.32	2,400

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

Monthly diversion by city of Pasadena from Eaton Creek for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	0.34	0.04	0.19	11.7
November	.58	.14	.23	13.7
December	1.10	.42	.72	44.3
January	.60	.26	.44	27.1
February	5.6	.72	2.65	147
March	1.62	.81	1.07	65.8
April	6.0	.25	3.12	186
May	5.5	1.59	3.44	212
June	2.24	1.02	1.70	101
July	1.27	.51	.81	49.8
August	.55	.34	.42	25.8
September	.36	.28	.31	18.4
The year	6.0	.04	1.26	903

NOTE.—Record furnished by Water Department of Pasadena, Calif.

SANTA CLARA RIVER BASIN

SESPE CREEK NEAR SESPE, CALIF.

LOCATION.—In Santa Barbara National Forest, three-fourths of a mile below mouth of West Fork of Sespe Creek, $4\frac{1}{2}$ miles above intake of Fillmore Canal and $6\frac{1}{2}$ miles northwest of Sespe, Ventura County.

DRAINAGE AREA.—216 square miles (measured by Ralph Bennett, consulting engineer).

RECORDS AVAILABLE.—October 1, 1915, to September 30, 1926 (not complete).

GAGE.—Water-stage recorder on right bank at Bradfields camp.

DISCHARGE MEASUREMENTS.—Made from cable 450 feet above gage or by wading.

CHANNEL AND CONTROL.—Gravel and large boulders; shifting.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 16.0 feet at 4 p. m. April 7 (discharge, about 27,000 second-feet); minimum discharge, 2.1 second-feet November 7, 10, 12, 13, 22.

1915-1926: Maximum stage recorded, 16.0 feet at 4 p. m. April 7, 1926 (discharge, about 27,000 second-feet); minimum stage recorded, 4.05 feet July 30 to August 1, 1924 (discharge, 0.8 second-foot).

ACCURACY.—Stage-discharge relation not permanent. Rating curves fairly well defined. Recorder record good except April 7-8. Daily discharge ascertained by applying mean daily gage height to rating table. Records fair except those for high stages, which are poor.

COOPERATION.—Gage-height record and results of some discharge measurements furnished by Ventura Power Co.

Discharge measurements of Sespe Creek near Sespe, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 2.....	4.36	1.7	Jan. 17.....	4.42	4.8	May 31.....	4.96	28
Oct. 5.....	4.51	4.4	Jan. 24.....	4.44	5.0	June 7.....	4.63	19
Oct. 11.....	4.39	2.5	Jan. 31.....	6.32	114	Do.....	4.91	15
Oct. 18.....	4.37	2.5	Feb. 3.....	7.40	576	June 9.....	4.65	21
Oct. 25.....	4.34	1.9	Feb. 10.....	4.92	22	June 17.....	4.51	20
Nov. 1.....	4.31	2.0	Feb. 13.....	8.40	1,220	June 30.....	4.35	11
Nov. 9.....	4.31	2.2	Feb. 22.....	5.27	25	July 9.....	4.30	8.1
Nov. 14.....	4.31	2.2	Mar. 3.....	5.04	33	July 19.....	4.22	5.9
Nov. 22.....	4.30	2.3	Mar. 11.....	4.95	21	July 28.....	4.15	4.8
Nov. 30.....	4.33	2.5	Mar. 21.....	4.90	16	July 31.....	4.13	4.6
Dec. 2.....	4.93	17	Mar. 30.....	4.81	21	Aug. 10.....	4.07	4.0
Dec. 10.....	4.38	4.2	Apr. 9.....	9.00	1,070	Aug. 21.....	4.11	4.0
Dec. 18.....	4.61	8.4	Apr. 19.....	6.15	229	Aug. 30.....	4.10	4.1
Dec. 27.....	4.41	4.9	Apr. 29.....	5.48	141	Sept. 9.....	4.09	3.6
Jan. 3.....	4.42	4.8	May 11.....	5.24	48	Sept. 20.....	4.10	3.5
Jan. 11.....	4.42	4.7	May 18.....	5.11	38	Sept. 30.....	4.10	3.5

Daily discharge, in second-feet, of Sespe Creek near Sespe, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.0	2.2	3.2	4.0	131	31	16	78	24	9	4.8	3.9
2.....	3.2	2.4	11	4.0	87	28	16	80	24	8.5	4.6	3.9
3.....	3.3	2.2	5.5	4.0	505	26	16	71	23	8.5	4.4	3.9
4.....	3.3	2.2	6.5	4.0	92	29	51	65	22	8	4.4	3.9
5.....	5.5	2.2	5.5	4.0	54	31	7,200	64	21	7.5	4.6	3.9
6.....	4.3	2.6	4.7	3.8	39	30	2,400	60	22	7.5	4.6	3.9
7.....	3.6	2.1	4.0	3.8	32	28	5,760	58	22	7.5	4.4	3.9
8.....	3.4	2.2	3.6	3.8	25	27	8,150	55	27	7.5	4.4	3.9
9.....	3.3	2.2	3.4	3.8	22	25	1,200	54	26	8	4.4	4.0
10.....	3.4	2.1	3.3	4.0	20	24	751	51	22	8	4.4	4.0
11.....	3.4	2.2	3.3	4.0	22	24	641	48	19	8	4.2	3.9
12.....	3.4	2.1	3.3	4.0	178	22	484	44	19	7.5	4.2	3.9
13.....	3.4	2.1	3.3	4.0	1,080	21	358	42	18	7	4.0	3.9
14.....	3.3	2.2	3.2	4.0	420	20	279	40	17	6.5	4.0	3.9
15.....	3.2	2.2	3.2	4.0	220	20	242	40	16	6.5	4.2	4.0
16.....	3.2	2.2	3.2	4.0	169	20	229	40	16	6.5	4.2	4.2
17.....	3.2	2.2	3.2	4.0	109	21	208	39	16	6.5	4.2	4.2
18.....	3.2	2.2	5.5	4.0	80	20	206	37	16	6.5	4.2	4.2
19.....	2.8	2.2	6.5	4.0	67	22	229	35	16	6.5	4.4	4.0
20.....	2.7	2.2	7	4.0	57	20	190	33	15	6	4.4	4.0
21.....	2.7	2.2	6.5	4.1	50	20	154	32	14	6	4.2	4.0
22.....	2.7	2.1	5	4.3	43	18	131	32	14	6	4.0	4.0
23.....	2.7	2.2	4.9	4.3	39	18	120	33	14	5.5	3.9	4.0
24.....	2.6	4.9	4.5	4.5	36	17	110	32	13	5	3.8	4.0
25.....	2.2	3.8	4.0	4.5	34	17	101	33	13	4.8	3.8	4.0
26.....	2.2	3.2	3.8	4.5	34	17	94	32	11	4.8	3.8	4.0
27.....	2.2	2.8	3.8	4.5	34	17	87	31	10	4.8	3.9	3.9
28.....	2.2	2.8	4.0	4.7	33	17	83	29	10	4.8	4.0	4.0
29.....	2.4	2.7	4.0	4.9		16	80	29	10	4.8	4.0	4.0
30.....	2.2	2.6	4.0	5		16	80	27	10	4.8	4.0	3.9
31.....	2.4		4.0	61		16		25		4.6	4.0	

Monthly discharge of Sespe Creek near Sespe, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	5.5	2.2	3.05	188
November.....	4.9	2.1	2.45	146
December.....	11	3.2	4.55	280
January.....	61	3.8	5.98	368
February.....	1,080	20	133	7,390
March.....	31	16	21.9	1,350
April.....	8,150	16	980	58,800
May.....	80	25	44.2	2,720
June.....	27	10	17.3	1,030
July.....	9	4.6	6.56	403
August.....	4.8	3.8	4.21	259
September.....	4.2	3.9	3.97	236
The year.....	8,150	2.1	101	73,200

SANTA YNEZ RIVER BASIN

SANTA YNEZ RIVER NEAR LOMPOC, CALIF.

LOCATION.—Near east boundary of La Misión Vieja de la Purísima grant, at highway bridge, about $1\frac{1}{2}$ miles east of Lompoc, Santa Barbara County.

DRAINAGE AREA.—790 square miles (revised; measured on topographic maps).

RECORDS AVAILABLE.—November 10, 1906, to January 9, 1907, September 25, 1907, to September 30, 1918, and April 24, 1925, to September 30, 1926. (Discharge not computed for 1909.)

GAGE.—Vertical staff fastened to downstream end of pier at right end of center span of bridge; read by D. McDonald. Datum lowered 1.00 foot June 27, 1917, 2.00 feet April 24, 1925, and 2.60 feet May 28, 1926. Gage used in 1918 was read April 8 to May 27, 1926.

DISCHARGE MEASUREMENTS.—Made from bridge at gage or by wading.

CHANNEL AND CONTROL.—Sand; shifting. Banks are high and not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year 8.90 feet April 8 (discharge, 9,870 second-feet); minimum discharge, 0.1 second-foot October 8, 9, and 10.

1906–1918 and 1925–1926: Maximum stage recorded, 13.0 feet January 25, 1914 (discharge, 41,800 second-feet); on account of changes in channel minimum stage varies greatly from year to year. Minimum discharge, 0.1 second-foot October 8, 9, and 10, 1925.

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

REGULATION.—See “Diversions.”

ACCURACY.—Stage-discharge relation not permanent. Rating curves fairly well defined for low and medium stages. Gage read to hundredths once daily. Daily discharge ascertained by applying gage height to rating table except November 21–26, January 21–22, March 13–18, and August 28–29, for which it was interpolated. Records poor.

Discharge measurements of Santa Ynez River near Lompoc, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 2.....	0.58	0.014	Jan. 29.....	1.16	17	June 4.....	2.06	29
Oct. 9.....	.54	.11	Feb. 4.....	3.02	359	June 11.....	2.00	18
Oct. 16.....	.58	.11	Feb. 12.....	1.68	136	June 18.....	1.98	19
Oct. 23.....	.88	2.5	Feb. 26.....	1.50	99	June 25.....	1.96	20
Oct. 30.....	.90	2.7	Mar. 5.....	1.46	93	July 2.....	1.88	7.4
Nov. 6.....	.96	4.8	Mar. 12.....	1.44	80	July 9.....	1.86	6.6
Nov. 13.....	1.00	5.4	Mar. 19.....	1.28	42	July 17.....	1.84	4.6
Nov. 20.....	1.04	6.9	Mar. 26.....	1.26	43	July 23.....	1.78	3.7
Nov. 27.....	.96	7.4	Apr. 2.....	1.18	32	July 30.....	1.78	2.9
Dec. 4.....	1.00	14	Apr. 8.....	8.70	7,110	Aug. 6.....	1.74	2.1
Dec. 11.....	1.00	10	Apr. 16.....	— .50	458	Aug. 13.....	1.74	1.9
Dec. 18.....	1.12	18	Apr. 23.....	—1.18	299	Aug. 20.....	1.76	1.4
Dec. 26.....	1.02	11	Apr. 30.....	—1.72	230	Aug. 27.....	1.70	1.2
Jan. 2.....	1.02	14	May 7.....	—1.86	159	Sept. 3.....	1.66	1.0
Jan. 8.....	1.04	12	May 14.....	—2.10	90	Sept. 10.....	1.70	.9
Jan. 15.....	1.06	14	May 21.....	—2.40	56	Sept. 17.....	1.70	.85
Jan. 23.....	1.06	13	May 28.....	2.16	40	Sept. 24.....	1.70	.7

Daily discharge, in second-feet, of Santa Ynez River near Lompoc, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.2	3.8	8.5	11	44	100	32	172	34	13	2.8	0.8
2.....	.2	4.4	49	11	49	96	32	182	28	8	2.8	.8
3.....	.2	4.4	14	14	205	92	30	182	26	9	2.2	.8
4.....	.2	4.4	10	14	367	96	30	172	28	11	2.2	1.0
5.....	.2	4.4	10	12	240	92	1,000	172	28	9	2.2	1.2
6.....	.2	4.4	10	12	165	88	4,640	162	26	9	2.2	1.2
7.....	.2	4.4	10	12	190	88	2,180	152	26	8	2.2	1.2
8.....	.1	4.4	10	12	140	88	8,340	142	26	7	2.2	1.2
9.....	.1	4.9	10	14	124	88	4,640	142	23	7	2.2	1.2
10.....	.1	4.9	10	14	116	100	2,360	133	23	8	2.2	1.2
11.....	.2	4.9	10	14	68	92	2,180	124	20	8	2.2	1.2
12.....	.2	5.5	10	14	128	88	1,000	106	20	8	2.2	1.2
13.....	.2	5.5	10	14	468	82	830	99	18	8	2.2	1.2
14.....	.2	5.5	10	14	850	75	545	106	18	7	2.8	1.2
15.....	.2	6.5	10	14	435	69	510	88	18	8	2.8	1.2
16.....	.2	6.5	10	12	315	62	480	88	18	6	2.8	1.2
17.....	.4	7.5	10	12	240	56	396	88	18	6	2.8	1.2
18.....	.9	7.5	17	16	180	49	396	88	18	6	2.8	1.2
19.....	1.2	7.5	20	16	136	43	370	88	18	4.8	2.8	1.2
20.....	1.8	7.5	14	15	145	43	344	78	23	3.8	2.8	1.2
21.....	1.5	7.5	12	15	150	45	332	56	23	3.3	2.8	1.2
22.....	1.5	7.5	11	14	140	45	320	56	20	3.3	2.8	1.2
23.....	2.4	8	11	14	128	43	296	56	13	3.3	2.2	1.2
24.....	2.4	8	11	14	124	43	296	56	11	3.3	1.7	1.2
25.....	2.4	8	11	14	120	43	226	53	16	2.8	1.2	1.2
26.....	2.4	8.5	11	12	100	41	215	53	16	2.8	1.2	1.2
27.....	2.4	8.5	11	14	108	41	193	50	13	2.8	1.2	1.2
28.....	2.7	7.5	12	14	104	38	182	44	13	2.8	1.1	1.2
29.....	2.7	7.5	12	20	—	38	182	44	13	3.3	1.1	1.2
30.....	2.7	8.5	11	17	—	38	182	40	13	3.3	1.0	1.2
31.....	2.7	—	11	54	—	36	—	37	—	2.8	1.0	—

Monthly discharge of Santa Ynez River near Lompoc, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2.7	0.1	1.06	65.2
November.....	8.5	3.8	6.28	374
December.....	49	8.5	12.5	769
January.....	54	11	15.1	928
February.....	850	44	199	11,100
March.....	100	38	65.7	4,040
April.....	8,340	30	1,090	64,900
May.....	182	37	100	6,150
June.....	34	11	20.3	1,210
July.....	13	2.8	6.08	374
August.....	2.8	1.0	2.15	132
September.....	1.2	.8	1.15	68.4
The year.....	8,340	.1	125	90,100

SALINAS RIVER BASIN

ARROYO SECO NEAR SOLEDAD, CALIF.

LOCATION.—In sec. 21, T. 19 S., R. 6 E., at Pettitt ranch, 15 miles south of Soledad, Monterey County.

DRAINAGE AREA.—215 square miles.

RECORDS AVAILABLE.—January 1, 1901, to September 30, 1926.

GAGE.—Staff in two sections on right bank; lower section fastened to an alder tree at edge of low-water channel, upper section fastened to sycamore tree near pump house and windmill. Gage read by Mrs. Una G. Pettitt Evans.

DISCHARGE MEASUREMENTS.—Made from cable 400 feet below gage or by wading.

CHANNEL AND CONTROL.—Gravel and solid rock; shifts.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.0 feet 5 p. m. February 13 (discharge, 11,500 second-feet); no flow August 16 to September 30.

1901–1926: Maximum stage recorded, 16.5 feet at 4.30 p. m. February 21, 1917 (discharge, from extension of rating curve, about 22,000 second-feet); stream dry during periods in 1902, 1903, 1904, 1906, 1913, 1914, 1919, 1921, 1924, and 1926.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve fairly well defined. Staff gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records fair.

The following discharge measurements were made:

May 31, 1926: Gage height, 2.64 feet; discharge, 33 second-feet.

July 13, 1926: Gage height, 2.23 feet; discharge, 3.4 second-feet.

Daily discharge, in second-feet, of Arroyo Seco near Soledad, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	3.6	9	11	14	320	210	136	165	24	7	1.0
2.....	3.6	9	11	14	1,230	210	136	155	24	7	1.0
3.....	4.4	10	11	14	3,370	210	136	150	23	6	1.0
4.....	4.4	10	11	14	990	198	141	141	23	5	1.0
5.....	5	10	11	14	880	198	3,190	131	21	4.4	1.0
6.....	5	10	11	14	630	198	385	122	20	4.4	.8
7.....	5	10	11	14	290	198	2,100	113	20	4.4	.8
8.....	5	10	11	14	235	198	9,180	113	18	4.4	.6
9.....	5	10	11	14	180	198	2,210	100	18	3.6	.6
10.....	5	10	11	14	122	198	1,410	100	18	3.6	.4
11.....	5	10	11	14	131	198	990	92	18	2	.4
12.....	5	10	11	14	1,170	185	830	88	17	2	.4
13.....	6	10	12	14	8,360	180	682	81	17	2	.4
14.....	6	10	12	14	6,360	180	535	74	15	2	.4
15.....	6	10	12	15	5,210	180	385	105	15	1.8	.2
16.....	8	11	12	15	2,440	180	320	92	15	1.8	-----
17.....	8	11	12	15	2,710	175	320	74	15	1.8	-----
18.....	7.	11	23	15	1,890	175	350	57	14	1.8	-----
19.....	7.	11	23	15	1,170	170	260	54	14	1.8	-----
20.....	7	11	23	15	990	165	275	52	14	1.8	-----
21.....	8	11	21	15	880	160	235	47	14	1.6	-----
22.....	8	11	21	15	780	160	235	45	14	1.6	-----
23.....	8	11	20	15	1,170	155	222	40	14	1.6	-----
24.....	8	11	18	17	630	155	210	38	14	1.6	-----
25.....	9	11	17	17	350	150	235	38	12	1.4	-----
26.....	9	11	17	17	320	150	210	36	11	1.4	-----
27.....	9	11	15	18	131	146	198	34	10	1.4	-----
28.....	9	11	15	18	160	141	198	32	10	1.2	-----
29.....	9	11	15	1,290	-----	141	185	30	9	1.2	-----
30.....	9	11	15	136	-----	141	175	28	8	1.2	-----
31.....	9	-----	15	180	-----	136	-----	26	-----	1.0	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Arroyo Seco near Soledad, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	9	3.6	6.65	409
November.....	11	9	10.4	619
December.....	23	11	14.5	892
January.....	1,200	14	65.3	4,020
February.....	8,360	122	1,540	85,500
March.....	210	136	175	10,800
April.....	9,180	136	869	51,700
May.....	165	26	79.1	4,880
June.....	24	8	16.0	952
July.....	7	1.0	2.70	166
August.....	1.0	0	.32	19.7
The year.....	9,180	0	221	160,000

NOTE.—No flow during September.

COYOTE RIVER BASIN

COYOTE RIVER NEAR MADRONE, CALIF.

LOCATION.—In northwest corner of San Jose grant, above highway bridge at mouth of canyon, one-fourth mile below mouth of Las Animas Creek, and 2½ miles northeast of Madrone, Santa Clara County.

DRAINAGE AREA.—193 square miles (reported by Duryea, Haehl, and Gilman.)

RECORDS AVAILABLE.—October, 1902, to September 30, 1912; December 8, 1916, to September 30, 1926.

GAGE.—Inclined staff in three sections on left bank about 1,000 feet above highway bridge; read by Lee Dixon.

DISCHARGE MEASUREMENTS.—Made from cable 800 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed consists of gravel, boulders, and solid rock. Banks high, one channel at all stages. Control, boulders and solid rock.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.5 feet at 5 p. m. February 13 (discharge, 7,180 second-feet); minimum stage recorded, 1.74 feet October 29 (discharge, 0.1 second-foot).

1902–1912, 1917–1926; Maximum discharge, 25,000 second-feet, probably occurred March 7, 1911; no flow during several short periods from 1902–1911; from August 8 to November 15, 1920, and from July 16 to September 15, 1924.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed slightly February 20. Rating curves well defined. Staff gage read to quarter-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:

February 18, 1926: Gage height, 4.39 feet; discharge, 116 second-feet.

April 6, 1926: Gage height, 5.25 feet; discharge, 232 second-feet.

July 13, 1926: Gage height, 2.14 feet; discharge, 1.6 second feet.

Daily discharge, in second-feet, of Coyote River near Madrone, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	0.7	0.5	79	38	9.5	21	6	2.4	0.8	0.5
2	.1	.1	1.3	.5	18	33	9.5	20	5.5	2.2	.7	.4
3	.1	.1	.8	.5	920	30	10	19	5.5	2.1	.7	.4
4	.1	.1	.6	.5	1,310	28	18	18	5	2.0	.7	.4
5	.1	.1	.6	.5	1,130	26	365	18	5	2.0	.7	.4
6	.2	.1	.6	.5	160	24	245	18	4.9	1.9	.7	.4
7	.2	.2	.5	.5	79	24	150	18	4.8	1.8	.7	.4
8	.2	.2	.5	.5	44	22	1,820	17	4.6	1.8	.7	.4
9	.2	.2	.5	.6	30	22	775	16	4.6	1.7	.7	.4
10	.1	.2	.4	.6	23	20	330	16	4.4	1.7	.7	.4
11	.1	.2	.4	.6	24	19	182	15	4.3	1.7	.7	.4
12	.1	.3	.5	.6	1,370	18	120	15	4.3	1.6	.7	.4
13	.1	.3	.5	.6	5,570	18	93	14	4.3	1.5	.7	.4
14	.1	.3	.5	.6	1,130	18	76	14	4.3	1.4	.7	.4
15	.1	.3	.5	.7	470	18	62	14	4.2	1.3	.7	.4
16	.1	.3	.5	.8	300	17	51	13	4.0	1.2	.7	.4
17	.1	.3	.5	1.1	160	17	45	12	4.0	1.1	.7	.4
18	.1	.4	3.1	.9	119	17	45	11	3.9	1.1	.6	.4
19	.1	.4	2.0	.8	103	16	45	11	3.7	1.0	.6	.4
20	.1	.4	1.2	.8	535	16	38	10	3.7	1.0	.6	.4
21	.1	.4	.9	.7	285	16	32	9.5	3.6	1.0	.6	.4
22	.1	.4	.8	.6	114	15	29	9.5	3.5	1.0	.6	.4
23	.1	.4	.8	.6	95	15	26	9	3.4	1.0	.6	.4
24	.1	.4	.7	.6	76	14	26	8.5	3.2	1.0	.5	.4
25	.1	.4	.7	.6	65	14	26	8.5	3.2	1.0	.5	.3
26	.1	.4	.7	.6	51	13	26	8.5	3.0	.9	.5	.3
27	.1	.4	.7	.6	45	12	24	8	2.8	.9	.5	.3
28	.1	.4	.6	.8	40	11	23	7.5	2.7	.9	.5	.3
29	.1	.4	.6	8	-----	10	22	7.5	2.6	.8	.5	.3
30	.1	.8	.6	3.6	-----	10	22	7	2.5	.8	.5	.4
31	.1	-----	.6	9	-----	10	-----	6.5	-----	.8	.5	-----

Monthly discharge of Coyote River near Madrone, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	0.2	0.1	0.11	6.8
November	.8	.1	.30	17.9
December	3.1	.4	.77	47.3
January	9	.5	1.24	76.2
February	5,570	18	512	28,400
March	38	10	18.7	1,150
April	1,820	9.5	158	9,400
May	21	6.5	12.9	793
June	2	2.5	4.05	241
July	2.4	.8	1.37	84.2
August	.8	.5	.63	38.7
September	.5	.3	.39	23.2
The year	5,570	.1	55.7	40,300

COYOTE RIVER NEAR EDENVALE, CALIF.

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

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1916, to September 30, 1926.

GAGE.—Inclined staff in two sections fastened to solid rock on left bank at "The Narrows"; read by Mrs. J. H. Swickard.

DISCHARGE MEASUREMENTS.—Made from cable 1,000 feet above gage or by wading.

CHANNEL AND CONTROL.—Fine packed gravel overlying solid rock; practically permanent. Channel is clean and straight for several hundred feet above and below gage. Banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.3 feet at 5 p. m. February 13 (discharge, 5,010 second-feet); no flow except during parts of February and April.

1916–1926: Maximum stage recorded 12.8 feet at 9.30 p. m. February 10, 1922 (discharge, 10,000 second-feet); no flow during most of each year.

DIVERSIONS.—None. Water is pumped from wells along the river above station for irrigation.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed slightly. Rating curve well defined. Staff gage read to half-tenths twice daily when water is flowing. Daily discharge ascertained by shifting-control method. Records fair.

Discharge measurements of Coyote River near Edenvale, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
Feb. 18.....	Feet 3.40	Sec.-ft. 54	Feb. 24.....	Feet 2.93	Sec.-ft. 8.6	Apr. 6.....	Feet 4.18	Sec.-ft. 269
Do.....	3.38	53	Do.....	2.93	8.1	Do.....	3.96	269

Daily discharge, in second-feet, of Coyote River near Edenvale, Calif., for the year ending September 30, 1926

Day	Feb.	Apr.	Day	Feb.	Apr.	Day	Feb.	Apr.
1.....			11.....		129	21.....		127
2.....			12.....	780	69	22.....		71
3.....	412		13.....	3,450	28	23.....		37
4.....	402		14.....	1,300	8.5	24.....		12
5.....	690	5	15.....	360		25.....		
6.....	124	217	16.....	232		26.....		
7.....	34	88	17.....	101		27.....		
8.....	2.0	1,340	18.....	56		28.....		
9.....		860	19.....	28		29.....		
10.....		248	20.....	217		30.....		
						31.....		

NOTE.—No flow except during February and April.

Monthly discharge of Coyote River near Edenvale, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
February.....	3,450	0	301	16,700
April.....	1,340	0	99.8	5,940
The year.....	3,450	0	31.3	22,600

NOTE.—No flow except during February and April.

ALAMEDA CREEK BASIN

ALAMEDA CREEK NEAR SUNOL, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 7, T. 5 S., R. 2 E., 1 mile above junction with Calaveras Creek and $7\frac{1}{2}$ miles southeast of Sunol, Alameda County, Calif.

DRAINAGE AREA.—33.1 square miles (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—May 22, 1911, to September 30, 1926. Records for 1911-1924 were published in Water-Supply Paper 591.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from suspension gaging bridge 10 feet above gage or by wading.

CHANNEL AND CONTROL.—Channel is fine gravel; not permanent. A concrete control was built across the channel in 1915, a short distance below gage.

EXTREMES OF DISCHARGE.—1911-1926: Maximum mean daily discharge, 1,660 second-feet February 21, 1917; stream dry during a part of most years.

DIVERSIONS.—None.

REGULATION.—None.

COOPERATION.—Station maintained and daily discharge and monthly totals in million gallons furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily discharge, in second-feet, of Alameda Creek near Sunol, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1		45	16	2.9	5	0.2	16		104	13	22	2.2	
2		147	16	2.6	5		17		72	12	19	1.9	
3		325	15	2.6	4.5		18		53	11	18	1.5	
4		736	13	2.5	4.0		19		51	11	16	1.1	
5		231	13	75	4.0		20		62	11	15	1.1	
6		56	13	56	4.5		21		40	9.5	13	1.1	
7		30	13	49	4.5		22		33	7.5	10	1.1	
8		23	13	430	6.5		23		28	6.5	9	.9	
9		19	14	155	6.5		24		23	5.5	8	.9	
10		17	13	72	6		25		20	5	7.5	.8	
11		57	13	42	5.5		26		17	5	6.5	.6	
12		477	13	40	4.5		27		16	4.6	6	.5	
13		1,090	13	36	3.2		28		16	4.0	6	.5	
14		330	13	30	2.6		29	45		3.6	6	.3	
15		113	13	25	2.5		30	16		2.9	5.5	.3	
							31	176		2.9		.2	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Alameda Creek near Sunol, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January	176	0	7.68	472
February	1,090	16	151	8,390
March	16	2.9	10.3	633
April	430	2.5	39.6	2,360
May	6.5	.2	2.68	165
June	.2	0	.0067	.4
The year	1,090	0	16.6	12,000

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

ALAMEDA CREEK AT SUNOL, CALIF.

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

DRAINAGE AREA.—620 square miles. (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—October 4, 1900, to September 30, 1926.

GAGE.—Water-stage recorder on upstream face of dam on left bank.

DISCHARGE MEASUREMENTS.—Made from suspension footbridge about 400 feet above dam.

CHANNEL AND CONTROL.—The concrete dam acts as a control for the station. Bed above and below dam consists of gravel and boulders; shifts during high water.

EXTREMES OF DISCHARGE.—1901-1926: Maximum mean daily discharge, 14,700 second-feet March 7, 1911; no flow for part of nearly every year.

DIVERSIONS.—See Spring Valley Water Co.'s aqueduct near Niles, page 118.

REGULATION.—Spring Valley Water Co. completed a large earth-fill dam on Calaveras Creek in 1924. Water was released from Calaveras Reservoir after periods of natural flow.

ACCURACY.—Sunol Dam has been rated in accordance with the cooperative agreement between the Spring Valley Water Co. and the city of San Francisco. Current-meter measurements have been obtained by both parties and a rating curve developed, which has been accepted by both.

COOPERATION.—Records showing millions of gallons per day furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer. Daily discharge converted into second-feet and monthly discharge computed by United States Geological Survey.

Daily discharge, in second-feet, of Alameda Creek at Sunol, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		50	0.5	0.2	0.5	0.5	0.5	0.5	0.3
2		46	.2	.2	.5	.5	.5	.5	.3
3		408	.2	.2	.5	.5	.5	.5	.3
4		492	.2	21	.5	.5	.5	.5	.3
5		533	.3	353	.5	.5	.5	.5	.3
6		170	.3	203	.5	.5	.5	.5	.3
7		48	.5	81	.5	.5	.5	.5	.3
8		12	.3	692	.5	.5	.5	.5	.3
9		1.2	.3	905	.5	.5	.5	.5	.3
10		.8	.3	296	.5	.5	.5	.5	.3
11		.8	.3	105	.5	.5	.5	.5	.3
12		738	.3	33	.5	.5	.5	.5	.2
13		3,610	.3	22	.5	.5	.5	.5	.2
14		2,080	.3	27	.5	.5	.5	.5	.2
15		702	.2	25	.5	.5	.5	.5	.2
16		490	.2	4.8	.5	.5	.5	.5	.2
17		265	.2	1.4	.5	.5	.5	.5	.2
18		166	.2	.8	.5	.5	.5	.5	.2
19		112	.2	.5	.5	.5	.5	.5	.2
20		154	.5	.5	.5	.5	.5	.5	.2
21		86	.5	.5	.5	.5	.5	.5	.2
22		86	.5	.5	.5	.5	.5	.5	.2
23		32	.5	.5	.5	.5	.5	.5	.2
24		22	.5	.5	.5	.5	.5	.5	.2
25		11	.3	.5	.5	.5	.5	.5	.2
26		5.5	.2	.5	.5	.5	.5	.5	.2
27		4.0	.2	.5	.5	.5	.5	.5	.2
28		1.2	.3	.5	.5	.5	.5	.5	.2
29			.2	.5	.5	.5	.5	.5	
30			.2	.5	.5	.5	.5	.5	
31		88	.2		.5		.5	.5	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Alameda Creek at Sunol, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	88	0	2.84	175
February.....	3,610	.8	370	20,500
March.....	.5	.2	.28	17.2
April.....	905	.2	92.5	5,500
May.....	.5	.5	.46	28.3
June.....	.5	.5	.46	27.4
July.....	.5	.5	.46	28.3
August.....	.5	.3	.39	24.0
September.....	.3	0	.20	11.9
The year.....	3,610	0	36.4	26,300

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

ALAMEDA CREEK NEAR NILES, CALIF.

LOCATION.—In Niles Canyon, one-eighth of a mile above highway bridge and $1\frac{1}{4}$ miles northeast of Niles, Alameda County.

DRAINAGE AREA.—633 square miles (measured on topographic map by State Water Commission).

RECORDS AVAILABLE.—October 1, 1916, to September 30, 1926.

GAGE.—Water-stage recorder on right bank installed December 18, 1924.

Previous gage was water-stage recorder on right bank at the water tank one-fourth of a mile above highway bridge, 800 feet above present gage.

DISCHARGE MEASUREMENTS.—Made from suspension footbridge at gage or by wading.

CHANNEL AND CONTROL.—Gravel; not permanent. Banks are high; channel straight. Control is a concrete wall with slight dip at low-water channel.

DIVERSIONS.—Spring Valley Water Co. obtains water from the gravels at lower end of Livermore Valley, above station.

REGULATION.—Spring Valley Water Co. has a large storage reservoir on Calaveras Creek. Water was released from Calaveras Reservoir after periods of natural flow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 9.65 feet at 6 p. m. February 13 (discharge, 6,630 second-feet); no flow October 1 to November 30, December 6–17, and July 16 to September 30.

1916–1926: Maximum stage recorded, 12.44 feet at 10 p. m. February 10, 1922 (discharge, 13,900 second-feet); minimum stage, no flow in summers of 1918, possibly 1920, and 1924 to 1926.

ACCURACY.—Stage-discharge relation changed owing to growth of weeds during March. Rating curves well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except January 31, February 1, 3–5, 11–13, April 5, 8, May 8, 9, and 21, for which hourly discharge was averaged. Records excellent.

Discharge measurements of Alameda Creek near Niles, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Jan. 31.....	1.93	2.7	Feb. 14.....	6.06	1,820	Apr. 6.....	3.82	211
Feb. 3.....	4.20	422	Do.....	5.92	1,670	May 11.....	3.19	65
Do.....	3.98	310	Feb. 24.....	2.89	34	May 12.....	3.22	71
Feb. 6.....	3.78	230	Do.....	2.89	34	Do.....	3.22	70
Feb. 13.....	8.52	5,220	Apr. 5.....	2.08	5.1			
Do.....	9.37	6,460	Apr. 6.....	3.86	222			

Daily discharge, in second-feet, of Alameda Creek near Niles, Calif., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	0.2	0.1	93	7	1.2	2.1	2.2	0.5
2.....	.3	.1	14	5.5	1.2	2.3	2.2	.5
3.....	.2	.1	311	4.6	1.2	2.8	2.1	.3
4.....	.1	.1	584	4.3	2.1	2.6	2.1	.3
5.....	.1	.1	656	3.9	17	2.8	2.0	.2
6.....		.1	229	3.7	223	2.6	1.9	.2
7.....		.1	72	3.7	107	2.6	2.0	.3
8.....		.1	23	3.3	883	14	2.2	.4
9.....		.2	8	3.1	855	37	2.6	.4
10.....		.2	6.5	2.6	372	41	2.5	.3
11.....		.2	6.5	2.5	204	62	2.2	.2
12.....		.1	795	2.3	120	75	2.1	.2
13.....		.1	4,170	2.1	66	64	1.8	.2
14.....		.2	2,340	2.0	38	45	1.6	.1
15.....		.2	694	2.0	26	45	1.5	.1
16.....		.2	535	2.0	14	60	1.3	-----
17.....		.2	318	1.9	8	57	1.2	-----
18.....	.2	.2	188	2.0	7.5	57	1.1	-----
19.....	.3	.2	128	1.9	6.5	51	1.1	-----
20.....	.2	.1	178	1.8	6	52	1.1	-----
21.....	.2	.2	122	1.8	5	37	1.1	-----
22.....	.1	.2	76	1.6	4.3	20	1.1	-----
23.....	.1	.2	51	1.5	3.7	9	1.1	-----
24.....	.1	.2	33	1.5	3.4	7	1.1	-----
25.....		.2	24	1.5	2.9	5	1.0	-----
26.....		.2	16	1.4	2.8	3.6	1.0	-----
27.....	.1	.2	12	1.4	2.5	2.6	.8	-----
28.....	.1	.3	8	1.4	2.5	2.2	.7	-----
29.....	.1	1.1	-----	1.3	2.3	1.9	.5	-----
30.....	.1	.6	-----	1.2	2.1	2.0	.4	-----
31.....	.1	38	-----	1.1	-----	2.3	-----	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Alameda Creek near Niles, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
December.....	0.3	0	0.08	4.9
January.....	38	.1	1.43	87.9
February.....	4,170	6.5	418	23,200
March.....	7	1.1	2.51	154
April.....	883	1.2	99.7	5,930
May.....	75	1.9	24.9	1,530
June.....	2.6	.4	1.52	90.4
July.....	.5	0	.14	8.6
The year.....	4,170	0	42.8	31,000

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

CALAVERAS CREEK NEAR SUNOL, CALIF.

LOCATION.—In sec. 13, T. 5 S., R. 1 E., about 500 feet below Calaveras Dam, 1 mile above junction with Alameda Creek, and 8 miles southeast of Sunol, Alameda County.

DRAINAGE AREA.—100 square miles (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—June 15, 1910, to September 30, 1926.

Records 1910–1924 were published in Water-Supply Paper 591.

GAGE.—Water-stage recorder on right bank just above concrete weir.

DISCHARGE MEASUREMENTS.—Made from suspension gaging bridge half a mile below the gage or by wading.

CHANNEL AND CONTROL.—Concrete weir a short distance below gage.

EXTREMES OF DISCHARGE.—1910–1926: Maximum mean daily discharge, 3,830 second-feet on March 7, 1911; stream dry for short periods nearly every year since construction of Calaveras Dam was begun.

DIVERSIONS.—None.

REGULATION.—Water is stored in Calaveras Reservoir and when released flows down the natural channel of Calaveras Creek past the gaging station. No regulation prior to July 1, 1915, when construction of dam was begun.

COOPERATION.—Station maintained and daily discharge and monthly totals in million gallons furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer.

Daily discharge, in second-feet, of Calaveras Creek near Sunol, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	29	34	33		10		18	57	66	63	65
2	61	29	34	25		12		18	57	66	63	65
3	64	29	33	25		18	24	18	57	66	66	65
4	69	29	31	22		15	24	18	57	66	66	65
5	61	29	32	24		19	13	18	57	66	65	65
6		23	29	32	24		19	18	57	66	65	65
7		35	29	32	24		19	18	57	66	65	65
8		39	29	31	24		19	63	57	66	65	65
9		39	29	31	24	18	19	63	57	66	65	65
10		37	29	31	24	21	22	103	57	66	65	65
11		34	29	31	24	10	26	122	57	66	65	65
12		34	29	33	24		26	100	57	66	65	65
13		33	29	33	24		26	70	57	66	65	65
14		33	29	33	24		24	56	58	66	65	65
15		33	29	33	24		24	91	60	66	65	65
16		33	29	33	24		24	78	60	66	65	65
17		32	29	33	24		26	10	77	60	66	64
18		31	29	33	24		35	10	77	60	66	64
19		31	29	32	24		31	14	77	60	66	63
20		31	30	32	24		26	22	77	60	66	63
21		31	31	32	23		26	22	63	60	66	63
22		31	33	33	23		27	19	63	60	66	63
23		31	37	33	24		33	15	63	60	66	63
24		31	40	33	28		33	15	59	60	66	63
25		32	39	33	28		33	15	60	60	66	63
26		27	35	33	28		35	15	57	64	66	63
27		28	35	33	28			15	57	74	65	63
28		30	35	33	28			15	57	66	63	62
29		29	35	33	3, 4			18	57	66	63	62
30		29	35	33	28			18	57	66	63	62
31		29		33					57		63	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Calaveras Creek near Sunol, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	69	23	36.4	2,240
November.....	40	29	31.0	1,840
December.....	34	31	32.6	2,000
January.....	33	0	23.5	1,440
February.....	21	0	1.74	96.6
March.....	35	0	20.3	1,260
April.....	24	0	9.40	559
May.....	122	18	58.9	3,620
June.....	74	57	59.7	3,550
July.....	66	63	65.9	4,050
August.....	65	63	65.2	4,010
September.....	65	62	64.1	3,810
The year.....	122	0	39.3	28,500

SAN ANTONIO CREEK NEAR SUNOL, CALIF.

LOCATION.—At San Antonio Creek dam site on Valle de San Jose grant, 1½ miles above junction with Alameda Creek and 2½ miles southeast of Sunol, Alameda County.

DRAINAGE AREA.—38.7 square miles (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—January 1, 1912, to September 30, 1926. Records for 1912-1924 were published in Water-Supply Paper 591.

GAGE.—Water-stage recorder on left bank at dam site.

DISCHARGE MEASUREMENTS.—Made from suspension gaging bridge a short distance below gage or by wading

CHANNEL AND CONTROL.—Channel is gravel; not permanent. In 1915 a concrete control was built across channel a short distance below gaging bridge.

EXTREMES OF DISCHARGE.—1912-1926: Maximum mean daily discharge, 1,460 second-feet on January 3, 1916; stream dry for a part of the time during most years.

DIVERSIONS.—None.

REGULATION.—None.

COOPERATION.—Station maintained and daily discharge and monthly totals in million gallons furnished by Spring Valley Water Co., through G. A. M. Elliott, chief engineer.

Daily discharge, in second-feet, of San Antonio Creek near Sunol, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1.....		12	7	1.7	0.9	16.....		94	4.8	6	0.3
2.....		60	2.9	1.4	.9	17.....		55	3.6	10	.3
3.....		89	3.2	1.5	.9	18.....		38	3.2	13	.3
4.....		104	3.2	2.9	.9	19.....		27	2.8	15	.2
5.....		67	3.6	11	.9	20.....		29	2.3	14	.2
6.....		30	4.0	24	.9	21.....		26	1.5	13	.2
7.....		17	6	17	.9	22.....		23	2.2	8	.2
8.....		9.5	8.5	149	.9	23.....		14	2.2	5.5	.2
9.....		5.5	8.5	75	.8	24.....		13	1.9	3.2	-----
10.....		3.6	8	46	.8	25.....		15	.8	4.0	-----
11.....		3.6	6.5	29	.6	26.....		15	1.2	4.3	-----
12.....		196	5.5	18	.6	27.....		16	1.4	4.0	-----
13.....		532	5.5	14	.5	28.....		8.5	1.5	4.3	-----
14.....		166	4.8	14	.5	29.....			1.2	2.5	-----
15.....		111	5.5	16	.3	30.....			.9	1.9	-----
						31.....	3.7	-----	1.4	-----	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of San Antonio Creek near Sunol, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	3.7	0	0.12	7.4
February.....	532	3.6	63.5	3,530
March.....	8.5	.8	3.75	231
April.....	149	1.4	17.6	1,050
May.....	.9	0	.43	26.4
The year.....	532	0	6.69	4,840

ARROYO DE LA LAGUNA NEAR PLEASANTON, CALIF.

LOCATION.—At Laguna Dam on Valle de San Jose grant, between the Western Pacific and Southern Pacific Co.'s railroad bridges, about 3¾ miles south of Pleasanton, Alameda County.

DRAINAGE AREA.—401 square miles (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—January 1, 1912, to September 30, 1926. Records 1912–1924 were published in Water-Supply Paper 591.

GAGE.—Water-stage recorder on left bank about 300 feet above Laguna Dam.

DISCHARGE MEASUREMENTS.—Made from bridge three-fourths mile above gage or by wading.

CHANNEL AND CONTROL.—Gravel and sand; fairly permanent.

EXTREMES OF DISCHARGE.—1912–1926: Maximum mean daily discharge, 9,810 second-feet January 25, 1914; stream dry during a part of some years.

DIVERSIONS.—None.

REGULATION.—None.

COOPERATION.—Station maintained and daily discharge and monthly totals in million gallons furnished by Spring Valley Water Co., through G. A. M. Elliott, chief engineer.

Daily discharge, in second-feet, of Arroyo de la Laguna near Pleasanton, Calif., for the year ending September 30, 1926

Day	Feb.	Mar.	Apr.	May	June	Day	Feb.	Mar.	Apr.	May	June
1.....	-----	0.9	0.6	0.9	0.3	16.....	235	0.6	.6	0.5	0.2
2.....	-----	.8	.6	.9	.3	17.....	123	.6	4.6	.5	.2
3.....	8.5	.8	.6	.8	.3	18.....	65	.6	3.1	.5	.2
4.....	181	.8	.6	.8	.3	19.....	44	.6	1.5	.5	.2
5.....	401	.8	.9	.8	.3	20.....	30	.6	1.5	.5	.2
6.....	95	.8	140	.8	.3	21.....	16	.6	1.4	.5	.2
7.....	22	.8	74	.8	.2	22.....	9	.6	1.4	.5	.2
8.....	4.2	.8	537	.6	.2	23.....	8.5	.6	1.4	.3	.2
9.....	1.2	.8	588	.6	.2	24.....	8.5	.6	1.2	.3	.2
10.....	.9	.8	203	.6	.2	25.....	5.5	.6	1.2	.3	.2
11.....	.9	.6	94	.6	.2	26.....	1.5	.6	1.2	.3	-----
12.....	1,030	.6	65	.6	.2	27.....	1.1	.6	1.1	.3	-----
13.....	3,030	.6	35	.6	.2	28.....	.9	.6	1.1	.3	-----
14.....	1,500	.6	16	.5	.2	29.....	-----	.6	1.1	.3	-----
15.....	365	.6	9.5	.5	.2	30.....	-----	.6	.9	.3	-----
						31.....	-----	.6	-----	.3	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Arroyo de la Laguna near Pleasanton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
February.....	3,030	0	259	14,400
March.....	.9	.6	.67	41.2
April.....	588	.6	59.8	3,560
May.....	.9	.3	.53	32.6
June.....	.3	.0	.16	9.5
The year.....	3,030	0	24.9	18,000

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

TASSAJERO CREEK NEAR PLEASANTON, CALIF.

LOCATION.—Just below Santa Rita highway bridge on Santa Rita grant, about 3 miles north of Pleasanton, Alameda County.

DRAINAGE AREA.—27.9 square miles (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—December 1, 1914, to May 31, 1919, and October 1, 1921, to September 30, 1926. Records 1914–1924 published in Water-Supply Paper 591.

GAGE.—Water-stage recorder on left bank about 300 feet below highway bridge.

DISCHARGE MEASUREMENTS.—Made from gaging bridge at gage or by wading.

CHANNEL AND CONTROL.—Fine gravel and sand; fairly permanent.

EXTREMES OF DISCHARGE.—1914–1926: Maximum mean daily discharge, 372 second-feet on January 14, 1916; stream dry during a part of each year.

DIVERSIONS.—In 1916 water was diverted one-fourth mile above station for irrigation. No information for other years.

REGULATION.—None.

COOPERATION.—Station maintained and daily discharge and monthly totals in million gallons furnished by Spring Valley Water Co., through G. A. M. Elliott, chief engineer.

Daily discharge, in second-feet, of Tassajero Creek near Pleasanton, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	Day	Jan.	Feb.	Mar.	Apr.
1.....		1.2	0.2	0.2	16.....		0.9	0.3	0.2
2.....		1.1	.3	.2	17.....		.9	.2	.2
3.....		2.9	.5	.2	18.....		.8	.2	.3
4.....		2.9	.8	.5	19.....		.5	.2	.2
5.....		2.6	.8	2.3	20.....		.5	.2	.2
6.....		.6	.5	2.8	21.....		.8	.2	.2
7.....		.5	.5	.9	22.....		.8	.2	.2
8.....		.3	.8	2.3	23.....		.5	.2	
9.....		.2	.6	6	24.....		.5	.2	
10.....		.2	.5	2.3	25.....		.5	.2	
11.....		.2	.5	.9	26.....		.3	.2	
12.....		.6	.5	.3	27.....		.2	.2	
13.....		32	.2	.5	28.....		.2	.2	
14.....		3.7	.2	.5	29.....	0.5		.2	
15.....		.9	.2	.3	30.....	.8		.2	
					31.....	2.8		.2	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Tassajero Creek near Pleasanton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	2.8	0	0.13	8.0
February.....	32	.2	2.03	113
March.....	.8	.2	.30	18.4
April.....	6	0	.71	42.2
The year.....	32	0	.25	182

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

ARROYO MOCHO NEAR LIVERMORE, CALIF.

LOCATION.—In sec. 6, T. 4 S., R. 3 E., 4 miles above junction with Dry Creek and 5 miles southeast of Livermore, Alameda County.

DRAINAGE AREA.—38.3 square miles (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—January 1, 1912, to September 30, 1926. Records 1912–1924 were published in Water-Supply Paper 591.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from suspension gaging bridge at gage or by wading.

CHANNEL AND CONTROL.—Cobblestone and gravel; fairly permanent.

EXTREMES OF DISCHARGE.—1912–1926: Maximum mean daily discharge 700 second-feet February 20, 1914 (no record for flood in January, 1914); stream dry during a part of each year.

DIVERSIONS.—None.

REGULATION.—None.

COOPERATION.—Station maintained and daily discharge and monthly totals in million gallons furnished by Spring Valley Water Co., through G. A. M. Elliott, chief engineer.

Daily discharge, in second-feet, of Arroyo Mocho near Livermore, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	Day	Jan.	Feb.	Mar.	Apr.	May	June
1.....		2.9	1.5	0.8	1.2	0.2	16.....		17	1.4	2.9	0.8	-----
2.....		19	1.5	.9	1.4	.2	17.....		11	1.2	2.5	.8	-----
3.....		50	1.7	.8	1.2	.2	18.....		7.5	.9	2.9	.8	-----
4.....		35	1.7	1.4	1.2		19.....		5.5	.9	2.8	.6	-----
5.....		21	1.9	31	1.1		20.....		5.5	1.2	2.2	.6	-----
6.....		10	1.7	15	.9		21.....		4.0	1.5	2.0	.6	-----
7.....		6	2.3	13	.9		22.....		3.4	1.9	1.7	.6	-----
8.....		4.8	2.6	104	.9		23.....		3.2	1.9	1.7	.5	-----
9.....		4.0	3.2	37	.9		24.....		3.4	1.5	1.4	.5	-----
10.....		4.3	2.3	17	.9		25.....		3.2	1.4	1.5	.5	-----
11.....		3.9	1.7	9.5	.9		26.....		2.6	.9	1.4	.3	-----
12.....		111	1.4	7	.9		27.....		2.3	.8	1.4	.3	-----
13.....		422	1.2	5.5	.9		28.....		1.9	.9	1.4	.2	-----
14.....		51	1.2	4.0	.8		29.....	0.6		1.1	1.1	.2	-----
15.....		27	1.1	3.2	.8		30.....	1.2		1.1	1.1	.2	-----
							31.....	2.8		1.2		.2	-----

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Arroyo Mocho near Livermore, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	2.3	0	0.14	8.6
February.....	422	1.9	31.2	1,730
March.....	3.2	.8	1.52	93.5
April.....	104	.8	9.32	555
May.....	1.4	.2	.73	44.9
June.....	.2	0	.017	1.0
The year.....	422	0	3.36	2,430

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

ARROYO LAS POSITAS NEAR LIVERMORE, CALIF.

LOCATION.—At concrete bridge on Hayward-Tracy highway on Valle de San Jose grant, 2 miles northwest of Livermore, Alameda County.

DRAINAGE AREA.—69.5 square miles (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—January 1, 1912, to September 30, 1919, October 1, 1921, to September 30, 1922, and October 1, 1923, to September 30, 1926. Records for 1912–1924 were published in Water-Supply Paper 591.

GAGE.—Water-stage recorder on right bank just below highway bridge.

DISCHARGE MEASUREMENTS.—Made from highway bridge at gage or by wading.

CHANNEL AND CONTROL.—Gravel and sand; not permanent.

EXTREMES OF DISCHARGE.—1912–1926: Maximum mean daily discharge, 499 second-foot on January 17, 1916; stream dry during a part of most years.

DIVERSIONS.—None.

REGULATION.—None.

COOPERATION.—Station maintained and daily discharge and monthly totals in million gallons furnished by Spring Valley Water Co., through G. A. M. Elliott, chief engineer.

Daily discharge, in second-feet, of Arroyo Las Positas near Livermore, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....		0.8	0.8	0.8	0.3	0.2	0.2
2.....		2.0	.9	.5	.3	.2	.2
3.....		7.5	.8	.5	.3	.2	.2
4.....		3.4	.6	.8	.3	.2	.2
5.....		4.5	.6	2.5	.3	.2	.2
6.....		.8	.5	5	.3	.2	.2
7.....		.5	.8	3.9	.3	.2	.2
8.....		.5	.9	8.5	.3	.2	
9.....		.5	.9	5.5	.3	.2	
10.....		.6	.8	2.8	.3	.2	
11.....		.8	.8	2.0	.3	.2	
12.....		8	.6	1.1	.3	.2	
13.....		35	.5	.9	.3	.2	
14.....		7.5	.5	.8	.3	.2	
15.....		1.9	.5	.5	.3	.2	
16.....		4.3	.6	.5	.3	.2	
17.....		2.0	.5	.5	.3	.2	
18.....		.8	.5	.6	.3	.2	
19.....		.6	.5	.6	.3	.2	
20.....		.5	.5	.5	.3	.2	
21.....		.5	.5	.5	.3	.2	
22.....		.6	.6	.5	.3	.2	
23.....		.8	.5	.5	.3	.2	
24.....		.8	.6	.5	.3	.2	
25.....		.8	.5	.5	.2	.2	
26.....		.6	.3	.5	.2	.2	
27.....		.5	.5	.5	.2	.2	
28.....		.5	.6	.5	.2	.2	
29.....			.8	.3	.2	.2	
30.....	0.3		.6	.3	.2	.2	
31.....	1.5		.6		.2		

NOTE.—No flow on days for which discharge is not given. Discharge estimated for Mar. 31.

Monthly discharge of Arroyo Las Positas near Livermore, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	1.5	0	0.090	5.5
February.....	35	.5	3.13	174
March.....	.9	.3	.61	37.5
April.....	8.5	.3	1.43	85.1
May.....	.3	.2	.27	16.6
June.....	.2	.2	.15	8.9
July.....	.2	0	.035	2.2
The year.....	35	0	.46	390

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

ARROYO DEL VALLE NEAR LIVERMORE, CALIF.

LOCATION.—At Cresta Blanca winery, 600 feet below highway bridge on Valle de San Jose grant and 4½ miles south of Livermore, Alameda County.

DRAINAGE AREA.—149 square miles (measured by Spring Valley Water Co.).

RECORDS AVAILABLE.—January 1, 1912, to September 30, 1926. Records 1912–1924 were published in Water-Supply Paper 591.

GAGE.—Water-stage recorder on right bank 600 feet below highway bridge.

DISCHARGE MEASUREMENTS.—Made from suspension gaging bridge just below gage or by wading.

CHANNEL AND CONTROL.—Gravel; not permanent.

EXTREMES OF DISCHARGE.—1912–1926: Maximum mean daily discharge, 5,930 second-feet on January 25, 1914; stream dry during a part of each year.

DIVERSIONS.—None.

REGULATIONS.—None.

COOPERATION.—Station maintained and daily discharge and monthly totals in millions gallons furnished by Spring Valley Water Co., through G. A. M. Elliott, chief engineer.

Daily discharge, in second-feet, of Arroyo Del Valle near Livermore, Calif., for the year ending September 30, 1926

Day	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	1.9	16	2.3	5	0.6	0.5	0.2
2.....	3.6	13	2.3	5	.6	.5	.2
3.....	234	11	1.4	5	.6	.5	.2
4.....	429	10	1.5	6	.6	.5	.2
5.....	410	9	192	5	.6	.3	.2
6.....	126	11	195	5.5	.6	.3	.2
7.....	62	12	105	4.6	.6	.3	.2
8.....	40	30	942	3.9	.6	.3	.2
9.....	23	28	467	3.1	.6	.3	.2
10.....	15	17	159	2.3	.6	.3	.2
11.....	14	13	116	1.9	.5	.3	.2
12.....	551	10	100	1.5	.5	.3	.2
13.....	3,150	8	58	1.2	.5	.3	.2
14.....	925	7.5	43	.8	.5	.3	.2
15.....	272	7.5	32	.8	.5	.3	.2
16.....	170	7.5	25	.8	.5	.3	-----
17.....	100	6	21	.8	.5	.3	-----
18.....	69	6	18	.8	.5	.3	-----
19.....	58	7	20	.8	.5	.3	-----
20.....	69	6	17	.8	.5	.3	-----

Daily discharge, in second-feet, of Arroyo Del Valle near Livermore, Calif., for the year ending September 30, 1926—Continued

Day	Feb.	Mar.	Apr.	May	June	July	Aug.
21.....	54	4.5	14	0.8	0.5	0.3	-----
22.....	47	3.9	11	.8	.5	.3	-----
23.....	37	3.2	10	.8	.5	.3	-----
24.....	26	3.9	10	.8	.5	.2	-----
25.....	25	3.6	10	.8	.5	.2	-----
26.....	24	3.6	9	.8	.5	.2	-----
27.....	22	2.9	8.5	.8	.5	.2	-----
28.....	18	1.9	8.5	.8	.5	.2	-----
29.....	-----	1.4	5.5	.8	.5	.2	-----
30.....	-----	1.4	5.5	.8	.5	.2	-----
31.....	-----	2.0	-----	.6	-----	.2	-----

NOTE.—No flow on days for which discharge is not given. Discharge estimated May 7 to June 30.

Monthly discharge of Arroyo Del Valle near Livermore, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
February.....	3,150	1.9	249	13,800
March.....	30	1.4	8.58	528
April.....	942	1.4	87.0	5,180
May.....	6	.6	2.07	127
June.....	.6	.5	.52	30.9
July.....	.5	.2	.29	17.8
August.....	.2	0	.074	4.6
The year.....	3,150	0	27.2	19,700

NOTE.—No flow during months for which record is not given.

SPRING VALLEY WATER CO.'S AQUEDUCT NEAR NILES,¹ CALIF.

LOCATION.—At the Venturi meter, half a mile northeast of Niles, Alameda County.

RECORDS AVAILABLE.—April 6, 1903, to September 30, 1926.

DISCHARGE.—Computed from readings at the 44-inch Venturi meter.

EXTREMES OF DISCHARGE.—1903-1926: Maximum mean daily discharge, 87 second-feet June 29, 1926.

DIVERSIONS.—Water is occasionally wasted a short distance above the Venturi meter. This waste is included in the published discharge.

ACCURACY.—Records good.

COOPERATION.—Records showing million gallons per day furnished by Spring Valley Water Co. through G. A. M. Elliott, chief engineer. Daily discharge converted into second-feet and monthly discharge computed by United States Geological Survey.

This aqueduct diverts water from Alameda Creek at Sunol for storage in San Mateo County reservoirs which supply San Francisco and vicinity with water for domestic use.

¹ Previously called "near Sunol."

KERN RIVER BASIN

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Daily discharge, in second-feet, of Spring Valley Water Co.'s aqueduct near Niles, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	44	44	45	45	45	41	44	32	77	80	78	77
2.....	43	45	45	45	48	43	44	31	78	81	78	77
3.....	43	45	45	45	48	44	44	31	78	80	78	78
4.....	45	45	45	45	49	44	44	31	71	80	78	77
5.....	45	44	45	45	53	44	47	31	81	79	78	76
6.....	44	44	45	45	48	44	46	31	81	80	78	78
7.....	44	44	45	45	48	45	43	29	78	80	76	77
8.....	45	45	45	45	49	43	48	29	79	79	77	78
9.....	44	44	45	45	43	44	48	31	79	80	77	77
10.....	44	45	45	45	47	44	48	32	79	80	76	77
11.....	45	45	45	45	49	44	48	32	79	79	77	77
12.....	44	45	45	45	47	44	47	33	78	80	78	77
13.....	44	44	45	45	48	44	48	33	79	78	77	78
14.....	44	44	45	45	47	40	48	33	79	78	76	78
15.....	45	44	45	45	46	44	47	33	80	80	77	78
16.....	44	44	45	45	46	44	47	33	79	79	77	78
17.....	45	45	45	45	47	44	44	33	76	80	76	78
18.....	44	44	45	45	46	43	44	40	80	80	77	78
19.....	44	44	45	45	46	44	44	42	80	79	76	78
20.....	45	45	45	45	47	44	44	35	79	80	77	78
21.....	45	44	45	44	47	44	43	71	80	80	77	77
22.....	45	44	45	44	47	43	33	77	80	80	75	78
23.....	45	44	45	45	47	43	31	78	79	80	77	77
24.....	44	44	45	45	43	44	30	77	79	79	76	78
25.....	44	44	45	45	43	43	31	79	79	79	76	78
26.....	44	44	45	45	43	43	31	77	84	80	77	77
27.....	44	44	45	45	46	44	31	78	85	80	77	72
28.....	44	44	45	44	40	44	31	78	85	80	77	61
29.....	44	45	45	47	-----	44	31	78	87	79	76	79
30.....	45	44	45	45	-----	44	31	77	83	77	77	78
31.....	45	-----	45	45	-----	44	-----	77	-----	72	77	-----

Monthly discharge of Spring Valley Water Co.'s aqueduct near Niles, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	45	43	44.4	2,730
November.....	45	44	44.5	2,650
December.....	45	45	45.0	2,770
January.....	47	44	44.8	2,750
February.....	53	40	46.5	2,590
March.....	45	40	43.5	2,670
April.....	48	39	41.4	2,460
May.....	29	79	48.4	2,390
June.....	87	76	79.7	4,740
July.....	81	72	79.3	4,890
August.....	78	75	76.9	4,730
September.....	79	61	76.8	4,570
The year.....	87	29	56.0	40,500

KERN RIVER BASIN

KERN RIVER NEAR KERNVILLE, CALIF.

LOCATION.—In SE. ¼ sec. 14, T. 23 S., R. 32 E., at base of Fairview Mountain, 1 mile below intake of Kern River No. 3 Canal in Tulare County, in Kern National Forest, 1 mile above Tobias Creek, and 15 miles north of Kernville, Kern County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 1, 1912, to September 30, 1926.

GAGE.—Water-stage recorder on left bank 1 mile above mouth of Tobias Creek.

DISCHARGE MEASUREMENTS.—Made from cable 90 feet below gage or by wading.

CHANNEL AND CONTROL.—Coarse gravel and boulders; permanent except as temporarily affected by débris on control.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 8.17 feet at 8 a. m. May 20 (discharge, 1,960 second-feet); minimum stage, from water-stage recorder, 2.53 feet at 9 a. m. September 6 (discharge, 0.8 second-foot).

1912–1926: Maximum stage recorded, 8.8 feet (old datum), from water-stage recorder, at 4 p. m. January 17, 1916 (discharge, 9,690 second-feet); no flow at intervals July 31, 1924, to February 7, 1925.

DIVERSIONS.—Kern River No. 3 Canal diverts water about 1 mile above station. The water is returned to river at the power house about 8 miles below station.

REGULATION.—Complete regulation by the canal at stages below capacity of canal.

ACCURACY.—Stage-discharge relation practically permanent except during low-stages when it was affected at times by débris on control. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, using shifting-control method November 8 to April 4 and June 22 to September 30. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Kern River near Kernville, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 23.....	2.66	3.4	Feb. 21.....	2.72	3.7	June 25.....	2.72	4.4
Nov. 21.....	2.68	3.2	Mar. 19.....	2.72	3.5	July 21.....	2.82	6.6
Dec. 15.....	2.73	3.9	Apr. 25.....	7.16	1,120	Aug. 20.....	2.63	1.8
Jan. 27.....	2.57	1.6	May 21.....	7.82	1,600	Sept. 21.....	2.64	1.4

Daily discharge, in second-feet, of Kern River near Kernville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	6.5	4.1	3.9	3.7	3.7	3.6	3.9	855	680	4.7	6	1.4
2.....	7	4.1	3.9	3.7	3.4	3.4	4.1	755	730	6	6	1.4
3.....	6.5	4.7	3.9	3.9	3.6	3.6	4.1	830	510	5.5	5.5	1.2
4.....	7.5	3.7	3.9	3.7	3.4	3.6	4.2	1,160	430	6	5.5	1.2
5.....	8	3.6	3.9	3.9	3.2	3.0	185	1,360	385	6.5	5.5	1.3
6.....	7.5	4.9	3.9	3.7	3.4	3.0	190	940	400	6	6	1.1
7.....	4.1	3.7	3.9	3.6	3.2	3.7	124	630	349	6	5.5	1.2
8.....	3.7	3.9	3.9	3.9	3.6	3.4	161	460	346	6	5.5	1.2
9.....	3.7	4.7	3.9	3.9	3.2	3.6	58	367	262	6.5	5	1.2
10.....	3.7	4.4	3.9	3.9	3.7	3.6	20	306	197	6.5	5.5	1.2
11.....	4.2	4.4	3.9	3.9	3.4	3.2	38	312	155	5.5	5	1.0
12.....	4.2	4.2	3.9	3.9	3.9	3.2	35	385	153	5.5	4.9	1.2
13.....	4.2	4.2	4.1	3.0	4.7	3.2	60	510	143	5.5	4.2	1.2
14.....	4.1	4.1	3.9	3.6	4.7	3.2	150	705	118	4.9	2.1	1.0
15.....	3.7	3.7	3.9	3.9	3.9	3.4	284	1,000	69	6	1.7	1.1
16.....	3.9	3.6	3.7	3.7	3.7	3.4	385	1,220	18	6	2.2	1.1
17.....	4.1	4.2	3.7	3.6	4.1	2.9	430	1,400	7.5	5.5	1.9	.9
18.....	3.6	3.9	3.9	3.7	3.7	3.2	382	1,400	6	5.5	2.0	1.0
19.....	3.6	3.6	3.7	3.7	3.7	3.2	262	1,650	6	6	1.9	1.1
20.....	4.2	3.9	3.9	3.4	3.7	3.2	252	1,700	5	5.5	1.7	1.1

Daily discharge, in second-feet, of Kern River near Kernville, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
21	4.1	3.7	3.9	2.1	3.7	3.2	352	1,560	4.9	6	1.4	1.2
22	3.9	4.1	3.7	2.7	3.7	3.0	510	1,400	4.9	6	1.5	1.3
23	3.4	4.1	3.7	2.6	3.7	3.0	655	1,300	4.9	6	1.4	1.3
24	3.0	4.2	3.9	3.2	3.7	3.0	910	1,030	4.7	6	1.4	1.3
25	3.4	3.9	3.9	2.2	3.7	3.2	1,090	730	4.7	5.5	1.4	1.3
26	3.4	1.1	3.7	2.9	3.6	3.9	1,060	572	4.9	6	1.4	1.2
27	3.7	4.1	3.9	2.9	3.6	4.1	1,000	446	6	6	1.3	1.3
28	3.4	4.1	3.7	4.0	3.6	3.9	830	355	6	6	1.4	1.4
29	3.4	3.9	3.7	3.0	-----	3.9	830	460	6.5	5.5	1.4	1.4
30	3.6	3.9	3.9	3.0	-----	3.7	880	570	6.5	6	1.4	1.4
31	3.9	-----	3.9	3.6	-----	3.9	-----	655	-----	6	1.5	-----

Monthly discharge of Kern River near Kernville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	8	3.0	4.43	272
November	4.9	3.6	4.06	242
December	4.1	3.7	3.85	237
January	4.0	2.1	3.44	212
February	4.7	3.2	3.69	205
March	4.1	2.9	3.40	209
April	1,090	3.9	372	22,100
May	1,700	306	872	53,600
June	730	4.7	167	9,940
July	6.5	4.7	5.83	358
August	6	1.3	3.20	197
September	1.4	.9	1.21	72.0
The year	1,700	.9	121	87,600

Combined daily discharge, in second-feet, of Kern River and Kern River No. 3 Canal near Kernville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	170	192	200	171	182	288	388	1,410	1,310	464	182	131
2	167	196	272	171	173	279	388	1,310	1,370	420	182	127
3	166	205	232	168	200	288	397	1,380	1,150	392	198	127
4	168	188	208	157	199	304	415	1,720	1,070	375	190	127
5	186	185	204	154	199	335	722	1,920	1,020	376	190	127
6	236	201	204	164	191	319	745	1,500	1,040	384	214	123
7	220	212	196	160	187	320	688	1,180	988	366	222	127
8	212	212	192	157	188	311	725	1,020	985	350	230	127
9	204	209	185	157	187	304	622	922	901	350	213	123
10	204	204	182	157	200	288	584	861	818	394	206	123
11	224	196	182	154	199	279	602	867	767	358	197	123
12	232	208	185	150	224	287	599	940	765	326	185	123
13	232	200	171	149	233	295	624	1,060	755	318	176	120
14	224	188	154	154	241	311	714	1,260	730	301	170	120
15	224	182	154	154	232	335	848	1,560	681	286	166	120
16	224	188	171	150	256	335	949	1,780	621	286	160	120
17	224	185	174	164	240	351	994	1,960	566	278	156	120
18	224	178	185	157	232	335	946	1,960	555	278	156	123
19	216	178	168	136	240	327	826	2,200	537	270	152	120
20	212	171	171	135	240	311	816	2,260	527	262	149	120
21	208	171	182	138	224	311	916	2,120	518	246	145	123
22	204	174	185	153	212	303	1,070	1,960	509	238	145	123
23	208	178	185	153	216	319	1,220	1,860	509	230	145	123
24	207	192	182	156	216	351	1,470	1,580	491	222	137	120
25	203	196	178	148	232	396	1,650	1,280	473	214	137	120
26	199	188	178	142	248	397	1,620	1,040	446	214	137	117
27	200	185	178	139	264	370	1,560	939	447	206	137	117
28	195	182	178	143	280	379	1,390	976	456	206	134	117
29	195	182	171	191	-----	379	1,390	1,090	492	198	134	117
30	196	192	171	184	-----	379	1,440	1,200	528	190	134	120
31	196	-----	171	178	-----	388	-----	1,280	-----	190	134	-----

Combined monthly discharge of Kern River and Kern River No. 3 Canal near Kernville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	236	166	206	12,700
November.....	212	171	191	11,400
December.....	272	154	185	11,400
January.....	191	135	156	9,590
February.....	280	173	219	12,200
March.....	397	279	328	20,200
April.....	1,650	388	911	54,200
May.....	2,260	861	1,430	87,900
June.....	1,370	446	734	43,700
July.....	464	190	296	18,200
August.....	230	134	168	10,300
September.....	131	117	122	7,260
The year.....	2,260	117	413	299,000

KERN RIVER AT ISABELLA, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 17, T. 26 S., R. 3 E., half a mile above South Fork of Kern River and half a mile north of Isabella, Kern County.

DRAINAGE AREA.—1,220 square miles.

RECORDS AVAILABLE.—October 5, 1910, to September 30, 1912 (fragmentary), and October 1, 1925, to September 30, 1926.

GAGE.—Water-stage recorder in timber house over pipe well on right bank about 500 feet below highway bridge. October 1, 1925, to January 25, 1926, a staff gage 50 feet below highway bridge was used.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Gravel and sand. Control is riffle over gravel bar about 200 feet below gage; will shift somewhat.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.02 feet at 1 p. m. May 20 (discharge, 1,600 second-feet); minimum stage, from water-stage recorder, 6.50 feet at 1 a. m. August 14 (discharge, 0.9 second-foot).

DIVERSIONS.—Borel Canal of the Southern California Edison Co. diverts from Kern River about $3\frac{1}{2}$ miles above the station, see page 127. Ranger ditch and several other smaller ditches in the vicinity of Kernville divert a small amount of water for irrigation.

REGULATION.—Flow is regulated to some extent by Kern River No. 3 power plant of Southern California Edison Co. and Borel Canal diversions as noted above.

ACCURACY.—Stage-discharge relation slightly shifting. Rating curves fairly well defined. Staff gage read twice daily October 1 to January 25. Water-stage recorder record good for rest of year, except June 18–19 and August 22 to September 21. Daily discharge ascertained by applying mean daily gage height to rating table except for April 5 and May 27, for which hourly discharge was averaged, and October 1 to January 25, for which it was interpolated between discharge measurements; discharge estimated during periods of no gage-height record. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Kern River at Isabella, Calif., during the years ending September 30, 1925 and 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
1925	<i>Feet</i>	<i>Sec.-ft.</i>	1926	<i>Feet</i>	<i>Sec.-ft.</i>	1926	<i>Feet</i>	<i>Sec.-ft.</i>
July 2.....	3.16	537	Jan. 28.....	6.50	2.3	June 21.....	6.76	10
July 3.....	3.42	706	Feb. 20.....	6.53	2.6	July 20.....	6.63	2.6
Aug. 11.....	1.86	51	Apr. 27.....	9.24	1,020	Aug. 21.....	6.54	1.1
Sept. 19.....	1.08	2.6	May 26.....	8.46	567	Sept. 22.....	6.62	1.2
Oct. 22.....	1.10	2.0						
Nov. 20.....	1.11	2.4						
Dec. 14.....	1.12	2.4						

Daily discharge, in second-feet, of Kern River at Isabella, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.4	2.1	2.4	2.4	2.8	2.8	4.0	910	710	7.5	1.1	1.7
2.....	2.4	2.1	2.4	2.4	2.6	2.8	4.0	832	744	7	1.1	
3.....	2.4	2.1	2.4	2.4	3.2	3.0	4.0	826	634	7	1.1	
4.....	2.4	2.2	2.4	2.4	3.2	3.3	4.8	1,040	505	7	1.1	
5.....	2.4	2.2	2.4	2.4	3.2	3.7	288	1,210	470	7	1.0	
6.....	2.3	2.2	2.4	2.3	3.0	3.5	460	1,000	460	7.5	1.0	1.7
7.....	2.3	2.2	2.4	2.3	3.0	3.7	386	744	445	7	1.1	
8.....	2.3	2.2	2.4	2.3	3.0	4.0	368	568	415	6	1.1	
9.....	2.3	2.3	2.4	2.3	3.0	3.8	327	455	376	6	1.0	
10.....	2.3	2.3	2.4	2.3	3.0	3.8	211	376	284	5	1.0	
11.....	2.2	2.3	2.4	2.3	3.2	3.7	180	345	222	5	1.0	1.7
12.....	2.2	2.3	2.4	2.3	3.7	3.5	200	390	204	4.6	1.0	
13.....	2.2	2.3	2.4	2.3	4.4	3.3	194	490	208	4.3	1.0	
14.....	2.2	2.3	2.4	2.3	4.4	3.3	253	656	190	3.6	1.0	
15.....	2.2	2.4	2.4	2.3	3.7	3.5	376	856	150	3.6	1.0	
16.....	2.1	2.4	2.4	2.3	3.5	3.7	490	1,040	100	3.6	1.0	1.7
17.....	2.1	2.4	2.4	2.3	3.2	3.7	562	1,210	31	2.9	1.1	
18.....	2.1	2.4	2.4	2.3	2.8	3.7	535	1,210	23	2.9	1.1	
19.....	2.1	2.4	2.4	2.3	2.8	3.7	440	1,360	16	2.6	1.2	
20.....	2.1	2.4	2.4	2.3	2.8	3.7	372	1,440	8.5	2.6	1.2	
21.....	2.0	2.4	2.4	2.3	2.6	3.7	430	1,320	8	2.6	1.2	2.2
22.....	2.0	2.4	2.4	2.3	2.6	3.8	568	1,240	7	1.5		
23.....	2.0	2.4	2.4	2.3	2.6	3.8	688	1,140	4.6	1.5		
24.....	2.0	2.4	2.4	2.3	2.6	3.8	868	1,000	4.6	1.4		
25.....	2.0	2.4	2.4	2.3	2.6	3.7	1,040	778	4.6	1.4		
26.....	2.0	2.4	2.4	2.3	2.6	3.7	1,040	562	4.6	1.4	1.2	2.2
27.....	2.0	2.4	2.4	2.3	2.6	3.8	1,000	432	5	1.4		2.2
28.....	2.0	2.4	2.4	2.3	2.8	3.8	880	420	5	1.4		2.2
29.....	2.1	2.4	2.4	2.6		4.0	850	475	5.5	1.4		2.2
30.....	2.1	2.4	2.4	2.5		4.0	880	595	6	1.3		2.2
31.....	2.1		2.4	2.6		4.0		661		1.2		

NOTE.—Braced figures represent estimated mean discharge for the periods indicated.

Monthly discharge of Kern River at Isabella, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2.4	2.0	2.17	133
November.....	2.4	2.1	2.32	138
December.....	2.4	2.4	2.40	148
January.....	2.6	2.3	2.34	144
February.....	4.4	2.6	3.05	169
March.....	4.0	2.8	3.62	223
April.....	1,040	4.0	463	27,600
May.....	1,440	345	825	50,700
June.....	744	4.6	208	12,400
July.....	7.5	1.2	3.85	237
August.....	1.2	1.0	1.11	68.2
September.....	2.2		1.85	110
The year.....	1,440	1.0	127	92,100

Combined daily discharge, in second-feet, of Kern River and Borel Canal at Isabella, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	154	178	186	182	208	308	435	1,460	1,260	466	162	121
2	154	182	257	182	192	308	426	1,380	1,290	420	162	118
3	154	190	257	182	220	308	426	1,370	1,180	384	170	118
4	150	186	216	182	220	317	445	1,590	1,050	366	174	114
5	162	178	208	166	228	363	816	1,760	1,020	357	166	114
6	212	186	208	178	216	354	1,010	1,550	1,010	366	182	114
7	216	203	208	178	208	354	934	1,290	993	366	190	114
8	203	203	194	170	208	354	906	1,120	963	347	194	114
9	190	203	186	166	208	345	865	1,000	924	329	186	114
10	186	198	186	170	212	327	749	924	832	373	178	110
11	203	194	182	170	212	309	728	893	770	355	170	107
12	212	198	190	166	246	308	748	938	752	328	166	107
13	212	198	186	162	264	317	742	1,040	756	300	155	110
14	208	194	162	166	291	335	801	1,200	738	291	151	110
15	212	174	162	170	273	362	924	1,400	698	282	145	107
16	208	178	178	166	290	381	1,040	1,590	648	264	141	107
17	208	182	186	162	272	390	1,110	1,760	579	263	137	110
18	208	170	190	170	254	381	1,080	1,760	561	254	137	110
19	198	170	190	154	263	363	988	1,910	544	254	137	110
20	194	162	178	146	263	354	920	1,990	526	236	137	107
21	190	162	190	146	254	345	978	1,870	496	228	134	107
22	186	166	194	158	236	345	1,120	1,790	495	222	134	110
23	190	170	194	170	236	345	1,240	1,690	493	214	134	107
24	186	186	190	170	236	381	1,410	1,550	483	206	127	107
25	186	198	186	166	245	426	1,580	1,330	463	198	123	107
26	186	190	190	150	272	444	1,580	1,110	436	190	123	107
27	182	182	190	146	281	426	1,540	980	418	186	127	107
28	182	178	190	150	299	426	1,430	968	427	182	120	107
29	178	174	186	196	-----	417	1,400	1,020	446	178	120	107
30	178	182	182	220	-----	417	1,430	1,140	504	174	120	110
31	178	-----	178	196	-----	426	-----	1,210	-----	166	120	-----

Combined monthly discharge of Kern River and Borel Canal at Isabella, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	216	150	189	11,600
November	203	162	184	10,900
December	257	162	193	11,900
January	220	146	170	10,500
February	299	192	243	13,500
March	444	308	362	22,300
April	1,580	426	993	59,100
May	1,990	893	1,370	84,200
June	1,290	418	725	43,100
July	466	166	282	17,300
August	194	120	149	9,160
September	121	107	110	6,550
The year	1,990	107	415	300,000

KERN RIVER NEAR BAKERSFIELD, CALIF.

LOCATION.—In sec. 2, T. 29 S., R. 28 E., at mouth of lower canyon, 5 miles north-east of Bakersfield, Kern County.

DRAINAGE AREA.—2,345 square miles.

RECORDS AVAILABLE.—January 1, 1894, to June 30, 1907, and March 1, 1908, to September 30, 1926.

GAGE.—Water-stage recorder at footbridge.

DISCHARGE MEASUREMENTS.—Made from footbridge at gage.

CHANNEL AND CONTROL.—Shifting sand.

EXTREMES OF DISCHARGE.—1896-1926: Maximum discharge, 18,287 second-feet January 26, 1914; minimum discharge, 57 second-feet in November, 1924.

DIVERSIONS.—Several small diversions on main river and South Fork for irrigation. Water diverted near Kernville for power development is returned to river above station.

REGULATION.—There are four hydroelectric plants on Kern River above station.

COOPERATION.—Complete record, except run-off in acre-feet, furnished by Kern County Land Co., through A. K. Warren, engineer.

Daily discharge, in second-feet, of Kern River near Bakersfield, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	182	194	224	202	223	331	449	1,688	1,355	540	172	126
2	180	196	254	209	239	352	463	1,639	1,388	496	176	127
3	161	201	332	213	232	352	465	1,551	1,397	445	182	123
4	170	215	313	209	257	366	469	1,650	1,223	408	193	121
5	180	214	282	203	255	381	615	1,989	1,143	380	191	125
6	187	207	268	188	261	395	1,086	2,142	1,094	370	178	125
7	245	211	260	193	249	408	1,210	1,751	1,071	362	189	123
8	242	227	249	198	243	420	1,122	1,475	1,087	353	195	118
9	220	227	231	196	244	415	1,070	1,280	1,118	343	197	120
10	213	217	218	193	247	388	973	1,144	1,067	340	193	121
11	206	203	224	204	259	360	876	1,066	981	369	182	119
12	219	199	228	206	268	343	842	1,053	895	356	172	116
13	229	205	235	204	296	346	857	1,102	870	324	167	115
14	229	210	229	199	310	361	850	1,219	861	306	155	116
15	221	209	206	197	337	378	868	1,383	844	290	150	116
16	226	193	199	197	325	402	998	1,665	803	282	147	115
17	235	199	207	198	343	411	1,108	1,903	752	281	140	114
18	240	206	228	190	327	413	1,175	2,042	696	280	187	116
19	241	199	231	191	315	417	1,175	2,125	643	271	139	120
20	236	194	228	190	316	423	1,085	2,303	613	261	141	125
21	222	188	212	185	316	421	1,047	2,309	580	252	141	122
22	208	189	232	187	308	421	1,122	2,202	545	246	134	130
23	207	198	243	184	285	407	1,285	2,074	517	240	129	119
24	207	208	246	192	272	405	1,425	1,975	526	231	127	105
25	204	220	247	191	267	420	1,684	1,747	528	227	124	112
26	203	230	239	191	283	447	1,843	1,473	515	209	119	109
27	203	220	232	179	302	482	1,847	1,183	477	187	122	106
28	201	214	231	163	319	459	1,827	1,118	457	178	130	115
29	196	205	227	163	-----	451	1,811	1,042	460	181	130	113
30	197	206	215	212	-----	453	1,669	1,139	476	178	124	111
31	195	-----	204	235	-----	443	-----	1,276	-----	178	124	-----

Monthly discharge of Kern River near Bakersfield, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	270	156	210	12,900
November	236	178	207	12,300
December	347	184	238	14,600
January	256	136	196	12,100
February	357	212	282	15,700
March	517	319	402	24,700
April	3,461	443	1,110	66,000
May	2,547	908	1,604	98,600
June	1,491	424	832	49,500
July	553	172	302	18,600
August	207	116	155	9,530
September	172	73.6	118	7,020
The year	3,461	73.6	472	342,000

NOTE.—Maximum and minimum are absolute values determined from water-stage recorder graph. Run-off in acre-feet computed by U. S. Geological Survey.

KERN RIVER NO. 3 CANAL NEAR KERNVILLE, CALIF.

LOCATION.—In sec. 14, T. 23 S., R. 32 E., opposite the gaging station on Kern River about 16 miles above Kernville, Kern County.

RECORDS AVAILABLE.—March 7, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in a stilling well on canal bank between tunnels 1 and 4, installed February 22, 1922.

DISCHARGE MEASUREMENTS.—Made from concrete canal top about 500 feet below the intake.

CHANNEL AND CONTROL.—Canal consists of concrete-lined covered canal, tunnels, and siphons. Control is slope and cross section of covered concrete canal.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during year, 639 second-feet June 2-9. No flow part of May 26 and 27.

ACCURACY.—Stage-discharge relation changed May 27 when canal was cleaned. Rating curves well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except May 26 and 27, for which hourly discharge was averaged. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Kern River No. 3 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.

Discharge measurements of Kern River No. 3 Canal near Kernville, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Dec. 15.....	Feet 2.95	Sec.-ft. 140	May 23.....	Feet 7.87	Sec.-ft. 551	Aug. 20.....	Feet 2.88	Sec.-ft. 152
Jan. 27.....	2.92	145	June 24.....	6.88	483	Sept. 21.....	2.42	117
Feb. 22.....	3.72	203	July 21.....	4.06	252			

Daily discharge, in second-feet, of Kern River No. 3 Canal near Kernville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	164	188	196	167	178	284	384	555	630	459	176	130
2.....	160	192	268	167	170	276	384	555	639	414	176	126
3.....	160	200	228	164	196	284	393	555	639	387	192	126
4.....	160	184	204	153	196	300	411	555	639	369	184	126
5.....	178	181	200	150	196	332	537	555	639	369	184	126
6.....	228	196	200	160	188	316	555	555	639	378	208	122
7.....	216	208	192	156	184	316	564	555	639	360	216	126
8.....	208	208	188	153	184	308	564	555	639	344	224	126
9.....	200	204	181	153	184	300	564	555	639	344	208	122
10.....	200	200	178	153	196	284	564	555	621	387	200	122
11.....	220	192	178	150	196	276	564	555	612	352	192	122
12.....	228	204	181	146	220	284	564	555	612	320	180	122
13.....	228	196	167	146	228	292	564	555	612	312	172	119
14.....	220	184	160	150	236	308	564	555	612	296	168	119
15.....	220	178	160	150	228	332	564	555	612	280	164	119
16.....	220	184	167	146	252	332	564	555	603	280	158	119
17.....	220	181	170	150	236	348	564	555	558	272	164	119
18.....	220	174	181	153	228	332	564	555	549	272	154	122
19.....	212	174	164	132	236	324	564	555	531	264	160	119
20.....	208	167	167	132	236	308	564	555	522	256	147	119
21.....	204	167	178	136	220	308	564	555	513	240	144	122
22.....	200	170	181	150	208	300	564	555	504	232	147	122
23.....	204	174	181	150	212	316	564	555	504	224	144	122
24.....	204	188	178	153	212	348	564	555	486	216	136	119
25.....	200	192	174	146	228	393	564	555	468	208	136	119
26.....	196	184	174	139	244	393	564	468	441	208	136	116
27.....	196	181	174	136	260	366	564	493	441	200	136	116
28.....	192	178	174	139	276	375	564	621	450	200	133	116
29.....	192	178	167	188		375	564	630	486	192	133	116
30.....	192	188	167	181		375	564	630	522	184	133	119
31.....	192		167	174		384		630		184	133	

Monthly discharge of Kern River No. 3 Canal near Kernville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	228	160	201	12,400
November.....	208	167	186	11,100
December.....	268	150	181	11,100
January.....	188	152	152	9,850
February.....	276	170	215	11,900
March.....	393	276	325	20,000
April.....	564	384	540	32,100
May.....	630	468	560	34,400
June.....	639	441	567	33,700
July.....	459	184	290	17,800
August.....	224	133	165	10,100
September.....	130	116	121	7,200
The year.....	639	116	292	211,006

BOREL CANAL AT TILLEY CREEK, CALIF.²

LOCATION.—In sec. 4, T. 26 S., R. 33 R., where the canal crosses Tilley Creek three-fourths mile south of Kernville, Kern County.

RECORDS AVAILABLE.—January 1, 1910, to September 30, 1914, and October 1, 1925, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank just above the short flume section bridging Tilley Creek, and about 1,000 feet below canal intake. Previous to January 26, 1926, the recorder was in a timber well and house at lower end of short flume section.

DISCHARGE MEASUREMENTS.—Made from footbridges—one about 50 feet below recorder, the other about 1,000 feet below.

CHANNEL AND CONTROL.—Canal is concrete lined, flume section of wood. The contracted flume section just below present recorder site probably acts as a control to some extent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.22 feet at 11 a. m. May 4 (discharge, 568 second-feet); minimum stage, from water-stage recorder, 4.84 feet at 1 a. m. September 26 (discharge, 102 second-feet).

ACCURACY.—Stage-discharge relation did not change during the period of record at either gage. Rating curves very well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Borel Canal diverts water from Kern River about half a mile below Kernville. It supplies the Borel hydroelectric plant of the Southern California Edison Co. about 10 miles below. The water is then returned to Kern River.

² Published 1910-1914 as "Kern River Power Co.'s canal near Kernville, Calif."

Discharge measurements of Borel Canal at Tilley Creek, Calif., during the period ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
1925	<i>Feet</i>	<i>Sec.-ft.</i>	1925	<i>Feet</i>	<i>Sec.-ft.</i>	1926	<i>Feet</i>	<i>Sec.-ft.</i>
July 2.....	7.38	574	Nov. 13.....	3.62	179	May 19.....	10.00	552
Do.....	7.37	574	Dec. 14.....	3.33	153	Do.....	10.00	557
July 3.....	7.38	566				June 22.....	9.27	478
Aug. 11.....	7.40	552	1926			July 20.....	6.70	245
Sept. 3.....	3.88	201	Jan. 28.....	5.21	124	Aug. 19.....	5.40	143
Sept. 19.....	3.41	158	Feb. 20.....	6.92	259	Sept. 22.....	4.92	107
Sept. 22.....	3.42	165	Apr. 22.....	9.93	537			
Oct. 18.....	3.89	203	Apr. 23.....	9.94	524			

Daily discharge, in second-feet, of Borel Canal at Tilley Creek, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	152	176	184	180	205	305	431	548	548	458	161	119
2.....	152	180	255	180	189	305	422	548	548	413	161	116
3.....	152	188	255	180	217	305	422	548	548	377	169	116
4.....	148	184	214	180	217	314	440	548	548	359	173	112
5.....	160	176	206	164	225	359	528	548	548	350	165	112
6.....	210	184	206	176	213	350	548	548	548	359	181	112
7.....	214	201	206	178	205	350	548	548	548	359	189	112
8.....	201	201	192	168	205	350	538	548	548	341	193	112
9.....	188	201	184	164	205	341	538	548	548	323	185	112
10.....	184	196	184	168	209	323	538	548	548	368	177	108
11.....	201	192	180	168	209	305	548	548	548	350	169	105
12.....	210	196	188	164	242	305	548	548	548	323	165	105
13.....	210	196	184	160	260	314	548	548	548	296	154	108
14.....	206	192	160	164	287	332	548	548	548	287	150	108
15.....	210	172	160	168	269	359	548	548	548	278	144	105
16.....	206	176	176	164	287	377	548	548	548	260	140	105
17.....	206	180	184	160	269	386	548	548	548	260	136	108
18.....	206	168	188	168	251	377	548	548	538	251	136	108
19.....	196	168	188	152	260	359	548	548	528	251	136	108
20.....	192	160	176	144	260	350	548	548	518	233	136	105
21.....	188	160	188	144	251	341	548	548	488	225	133	105
22.....	184	164	192	156	233	341	548	548	488	221	133	108
23.....	188	168	192	168	233	341	548	548	488	213	133	105
24.....	184	184	188	168	233	377	538	548	478	205	126	105
25.....	184	196	184	164	242	422	538	548	458	197	122	105
26.....	184	188	188	148	269	440	538	548	431	189	122	105
27.....	180	180	188	144	278	422	538	548	413	185	126	105
28.....	180	176	188	148	296	422	548	548	422	181	119	105
29.....	176	172	184	193	-----	413	548	548	440	177	119	105
30.....	176	180	180	217	-----	413	548	548	498	173	119	108
31.....	176	-----	176	193	-----	422	-----	548	-----	165	119	-----

Monthly discharge of Borel Canal at Tilley Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	214	148	187	11,500
November.....	201	160	182	10,800
December.....	255	160	191	11,700
January.....	217	144	167	10,300
February.....	296	189	240	13,300
March.....	440	305	359	22,100
April.....	548	422	529	31,500
May.....	548	548	548	33,700
June.....	548	413	517	30,800
July.....	458	165	278	17,100
August.....	193	119	148	9,100
September.....	119	105	108	6,430
The year.....	548	105	288	208,000

SOUTH FORK OF KERN RIVER NEAR ONYX, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 24, T. 25 S., R. 35 E., three-fourths mile north of Kernville-Walker Pass road on Rankin ranch and about 5 miles northeast of Onyx, Kern County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 12, 1911, to August 31, 1914, and January 23, 1919, to September 30, 1926.

GAGE.—Water-stage recorder at same site as United States Geological Survey gage used in 1914.

DISCHARGE MEASUREMENTS.—Made from cable 60 feet below gage or by wading.

CHANNEL AND CONTROL.—Sand and fine gravel; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during year, 307 second-feet April 5; minimum mean daily discharge, 10 second-feet or less from June to August.

1911-1914, 1919-1926: Maximum stage recorded, 7.1 feet January 25, 1914 (discharge, 2,360 second-feet); minimum mean daily discharge, about 1 second-foot May 28 to October 1, 1924.

DIVERSIONS.—Three small irrigation ditches head above station.

ACCURACY.—Records good.

COOPERATION.—Mean daily discharge record and results of discharge measurements furnished by city of Los Angeles.

The following discharge measurements were made:

November 18, 1925: Gage height, 1.30 feet; discharge, 19 second-feet.

June 16, 1926: Gage height, 1.00 foot; discharge, 13 second-feet.

Daily discharge, in second-feet, of South Fork of Kern River near Onyx, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1.....	22	16	29	22	21	26	130	176	30
2.....	22	38	41	21	21	26	132	191	28
3.....	22	60	39	21	21	27	142	176	28
4.....	21	83	32	21	21	34	148	166	27
5.....	21	105	28	20	20	55	307	164	22
6.....	21	89	30	21	20	45	301	148	18
7.....	21	73	32	21	19	44	295	128	17
8.....	21	58	31	21	19	45	289	114	18
9.....	21	42	29	21	18	42	283	106	18
10.....	20	26	27	21	19	37	277	102	17
11.....	20	26	26	21	20	35	271	96	15
12.....	20	26	27	21	22	34	265	90	15
13.....	20	26	27	21	26	37	259	89	10
14.....	20	26	23	21	26	43	253	88	10
15.....	20	26	22	21	23	51	247	82	10
16.....	19	26	23	21	22	55	242	76	10
17.....	19	26	26	21	21	59	237	74	10
18.....	19	26	27	21	21	68	232	70	10
19.....	19	26	24	20	21	68	227	66	10
20.....	19	26	22	20	21	66	222	61	10
21.....	18	25	23	20	21	62	216	58	10
22.....	18	25	23	20	21	61	216	57	10
23.....	18	26	22	20	21	68	218	56	10
24.....	18	28	21	20	21	106	211	55	10
25.....	18	31	21	20	21	144	198	55	10
26.....	18	29	22	19	22	138	187	54	10
27.....	17	29	22	19	23	116	179	51	10
28.....	17	29	21	19	24	116	191	48	10
29.....	17	29	21	27	-----	114	198	43	10
30.....	17	29	21	24	-----	102	176	37	10
31.....	17	-----	22	21	-----	105	-----	32	-----

NOTE.—No record June 17 to Sept. 30, water below intake pipe. Discharge estimated for June 17-30.

Monthly discharge of South Fork of Kern River near Onyx, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	22	17	19.4	1,190
November.....	105	16	37.7	2,240
December.....	41	21	25.9	1,590
January.....	27	19	20.9	1,290
February.....	26	18	21.3	1,180
March.....	144	26	65.4	4,020
April.....	307	130	225	13,400
May.....	191	32	90.6	5,570
June.....	30	10	14.4	857
The period.....				31,300

NOTE.—No record July to September.

TULARE LAKE BASIN

DEER CREEK AT HOT SPRINGS, CALIF.

LOCATION.—At forest supervisor's headquarters in Sequoia National Forest, half a mile below Hot Springs, Tulare County. Tyler Creek enters 2½ miles below station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 7, 1910, to September 30, 1926.

GAGE.—Vertical staff fastened to an alder tree on left bank, 30 feet below foot-bridge; read by employees of United States Forest Service.

DISCHARGE MEASUREMENTS.—Made from wagon bridge, 100 feet below gage or by wading.

CHANNEL AND CONTROL.—Sand, gravel, and boulders; fairly permanent for medium and high stages.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 1.20 feet April 5 (discharge, 35 second-feet); minimum stage recorded, 0.28 foot August 17 (discharge, 1.1 second-feet).

1910-1926: Maximum stage recorded, 2.9 feet at 10.30 a. m. January 24, 1914 (revised discharge, determined from extension of rating curve, about 420 second-feet); minimum stage recorded, 0.30 foot August 5-12, 1920 (discharge, 0.6 second-foot).

DIVERSIONS.—Water is diverted for irrigation above station.

REGULATION.—Flow is regulated to some extent by swimming tank at Hot Springs.

ACCURACY.—Stage-discharge relation not changed during the year except as temporarily affected by debris on control. Rating curves fairly well defined. Staff gage read to hundredths once a day except October 9-25, November 2-10, 12-14, December 20-29, July 10-12, and 31. Daily discharge ascertained by applying daily gage height to rating table; estimated by comparison with near-by streams for periods during which gage was not read. Records fair.

COOPERATION.—Gage-height record furnished by United States Forest Service.

Discharge measurements of Deer Creek at Hot Springs, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Mar. 27.....	0.60	5.8	Apr. 10.....	0.80	13	June 21.....	0.37	1.1
Apr. 10.....	.80	13	June 21.....	.38	14	Sept. 22.....	.35	1.5

Daily discharge, in second-feet, of Deer Creek at Hot Springs, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3	4.2	6	4.7	6	9.5	5.5	8.5	2.6	1.5	1.4	1.4
2.....	3	4.4	14	4.7	4.7	5.5	5.5	8	2.4	1.6	1.4	1.4
3.....	3.1	6	9.5	4.7	6	5.5	6.5	8	2.4	1.6	1.4	1.2
4.....	3.1	8	7.5	4.7	8	7	6	7.5	2.4	1.6	1.4	1.2
5.....	3.4	7	6.5	4.4	9.5	7.5	35	9.5	2.4	1.3	1.2	1.2
6.....	3.4	6	6.5	4.4	6.5	8.5	19	7.5	2.2	1.7	1.4	1.2
7.....	3.4	5	6.5	4.2	5.5	8	15	7.5	2.5	1.6	1.2	1.4
8.....	3.4	5	6.5	4.2	5	9.5	19	7.5	2.2	1.4	1.2	1.4
9.....	4	5	6.5	4.2	5	9.5	17	7	2.5	1.3	1.4	1.4
10.....	4.5	5	6	4.2	5	9.5	12	7	2.2	1.3	1.6	1.6
11.....	5	5	6	4	5	8.5	11	6	1.9	1.3	1.6	1.4
12.....	5.5	5	6	4	7.5	8	10	5.5	1.7	1.3	1.2	1.4
13.....	6	5	6	3.8	10	7.5	10	5.5	1.7	1.2	1.2	1.4
14.....	5.5	5	6	3.8	11	7	9.5	5.5	1.9	1.4	1.2	1.4
15.....	5	4.7	6	3.8	12	6.5	8.5	5	1.7	1.4	1.2	1.5
16.....	5	4.7	5.5	3.4	16	6	9.5	5	1.6	1.4	1.4	1.5
17.....	4.7	4.7	5.5	3.4	8	7	8.5	5	1.6	1.4	1.1	1.5
18.....	4.7	4.7	5.5	3.8	7.5	6.5	8.5	4.2	1.6	1.2	1.4	1.5
19.....	4.7	4.7	6.5	3.8	6.5	6	9.5	4.2	1.5	1.2	1.4	1.5
20.....	4.7	5	6	3.4	8	5.5	9.5	3.8	1.5	1.6	1.6	1.5
21.....	4.4	5	5.5	3.1	6.5	6	8.5	3.8	1.4	1.4	1.7	1.5
22.....	4.4	5.5	5	3.4	6	6	8.5	3.8	1.4	1.6	1.6	1.5
23.....	4.4	5.5	5	3.4	5.5	6	8	3.8	1.4	1.6	1.7	1.5
24.....	4.4	5.5	5	3.8	5.5	6.5	8	5.5	1.4	1.6	1.4	1.5
25.....	4.4	7.5	5	3.4	5.5	6.5	7.5	3.6	1.2	1.6	1.2	1.5
26.....	4.2	6.5	4.7	3.4	6	6	7.5	3.3	1.4	1.2	1.2	1.5
27.....	4.2	6	4.7	3.4	6.5	6	6.5	3	1.4	1.2	1.4	1.5
28.....	4.2	6	4.7	3.4	6.5	5.5	6.5	3	1.7	1.4	1.4	1.5
29.....	4.2	6	4.7	11	-----	5.5	6.5	3	1.4	1.6	1.7	1.5
30.....	4.2	6	4.7	4.7	-----	5	10	2.8	1.4	1.6	1.6	1.5
31.....	4.2	-----	4.7	3.8	-----	5	-----	3	-----	1.5	1.4	-----

Monthly discharge of Deer Creek at Hot Springs, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	6	3.0	4.27	263
November.....	8	4.2	5.45	324
December.....	14	4.7	6.07	373
January.....	11	3.1	4.14	255
February.....	16	4.7	7.17	398
March.....	9.5	5	6.85	421
April.....	35	5.5	10.4	619
May.....	9.5	2.8	5.36	330
June.....	2.6	1.2	1.82	108
July.....	1.7	1.2	1.44	88.5
August.....	1.7	1.1	1.39	85.5
September.....	1.6	1.2	1.43	85.1
The year.....	35	1.1	4.63	3,350

TULE RIVER NEAR PORTERVILLE, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 25, T. 21 S., R. 28 E., below highway bridge, 1 mile above mouth of South Fork and 6 miles east of Porterville, Tulare County. North and Middle Forks of Tule River unite 9 miles above station.

DRAINAGE AREA.—266 square miles.

RECORDS AVAILABLE.—May 1, 1901, to September 30, 1926.

GAGE.—Vertical staff in four sections on right bank 75 feet below highway bridge. Gage read by G. B. Kieffer.

DISCHARGE MEASUREMENTS.—Made from bridge above gage or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; shift slightly. Left bank low and wooded; subject to overflow above a stage of about 6 feet.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 4.36 feet at 5.30 p. m. April 8 (discharge, 750 second-feet); minimum stage recorded, -0.12 foot September 28, practically dry.

1901-1926: Maximum stage recorded, 11.0 feet at 11.30 a. m. January 17, 1916 (discharge, determined from extension of rating curve, about 6,780 second-feet); practically dry September 27-30, 1926.

DIVERSIONS.—Several small irrigation ditches divert water above the station.

REGULATION.—Power is developed on the Middle Fork and on the North and South Forks of the Middle Fork.

ACCURACY.—Stage-discharge relation changed April 9. Rating curves well defined. Staff gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except August 14 to September 20, for which it was estimated. Records good.

Discharge measurements of Tule River near Porterville, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Mar. 26.....	1.74	84	Apr. 9.....	3.36	419	Sept. 21.....	-0.07	* 0.1
Mar. 27.....	1.69	76	June 22.....	.38	3.1			

* Estimated.

Daily discharge, in second-feet, of Tule River near Porterville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.2	18	31	32	52	103	68	196	43	1.1	0.3	0.1
2.....	3.2	20	42	31	46	98	73	187	38	.9	.3	.1
3.....	3.0	23	61	31	83	98	73	170	36	.8	.3	.1
4.....	3.4	25	42	31	63	93	73	170	32	.7	.3	.1
5.....	5	26	40	31	62	108	132	178	29	.6	.3	.1
6.....	22	25	36	30	58	103	380	178	28	.6	.3	.1
7.....	21	26	32	29	54	98	272	161	25	.6	.3	.1
8.....	15	26	31	28	53	93	580	145	24	.6	.2	.1
9.....	13	26	31	28	51	114	400	123	24	.6	.2	.1
10.....	11	28	31	28	52	108	298	110	23	.6	.2	.1
11.....	12	28	29	28	51	93	272	103	21	.5	.2	.1
12.....	25	29	29	27	78	88	249	103	18	.5	.2	.1
13.....	26	29	29	27	108	98	238	98	18	.5	.2	.1
14.....	22	29	26	26	380	88	260	98	16	.4	.2	.1
15.....	22	29	29	26	108	88	260	93	15	.4	.2	.1
16.....	17	28	29	26	98	98	238	93	13	.4	.2	.1
17.....	19	26	29	25	98	93	227	96	8.5	.4	.2	.1
18.....	16	26	29	29	78	88	238	98	8	.4	.2	.1
19.....	22	25	35	29	68	88	216	110	7	.4	.2	.1
20.....	20	24	33	28	68	88	196	110	5.5	.4	.2	.1
21.....	17	26	32	28	98	78	206	103	4.3	.4	.2	.1
22.....	14	26	32	26	73	78	206	98	2.9	.4	.2	.1
23.....	15	26	32	26	64	83	196	98	2.2	.3	.2	.1
24.....	16	26	32	25	62	83	238	93	2.2	.3	.2	.1
25.....	17	28	32	24	64	88	249	88	2.2	.3	.2	.1
26.....	16	27	32	23	73	83	249	68	2.2	.3	.2	.1
27.....	15	28	32	22	83	83	206	64	2.0	.3	.2	-----
28.....	14	29	32	22	93	73	206	59	1.5	.3	.2	-----
29.....	14	30	32	22	-----	73	196	54	1.2	.3	.2	-----
30.....	13	29	32	28	-----	73	206	50	1.2	.3	.2	-----
31.....	15	-----	31	32	-----	73	-----	47	-----	.3	.2	-----

NOTE.—Practically dry Sept. 27-30.

Monthly discharge of Tule River near Porterville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	26	3.0	15.1	928
November.....	30	18	26.4	1,570
December.....	61	29	33.2	2,040
January.....	32	22	27.4	1,680
February.....	380	46	82.8	4,600
March.....	114	73	90.1	5,540
April.....	580	68	230	13,700
May.....	196	47	111	6,820
June.....	43	1.2	15.1	808
July.....	1.1	.3	.48	29.5
August.....	.3	.2	.22	13.5
September.....	.1	.0	.09	5.4
The year.....	580	.0	52.2	37,800

KAWEAH RIVER NEAR THREE RIVERS, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ sec. 27, T. 17 S., R. 28 N., at ranch of Dr. H. C. Nice, $\frac{1}{4}$ miles southwest of Threerivers, Tulare County. South Fork enters three-fourths mile and North Fork 3 miles above station.

DRAINAGE AREA.—520 square miles.

RECORDS AVAILABLE.—April 29, 1903, to September 30, 1926.

GAGE.—Vertical staff gage in four sections on left bank; read by H. C. Nice.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Gravel and boulders; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 8.0 feet at 7.15 a. m. May 5 (discharge, 2,210 second-feet); minimum stage recorded, 4.55 feet September 5, 28, and 29 (discharge, 18 second-feet).

1903-1926: Maximum stage recorded, 13.5 feet at 11 a. m. January 17, 1916 (discharge, from extension of rating curve, about 14,700 second-feet); minimum stage recorded, 4.45 feet August 29 to September 1, 1924 (discharge 9.5 second-feet).

DIVERSIONS.—Several small ditches divert water above station for local irrigation and domestic use.

REGULATION.—Power is developed on the Middle and East Forks but effect on distribution of flow is probably small.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve well defined. Staff gage read to half-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Kaweah River near Threerivers, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Mar. 28.....	Feet 5.80	Sec.-ft. 386	Apr. 8.....	Feet 7.14	Sec.-ft. 1,330	June 23.....	Feet 5.40	Sec.-ft. 220
Do.....	5.79	379	Apr. 10.....	6.36	723	Sept. 23.....	4.57	19

Daily discharge, in second-feet, of Kaweah River near Threerivers, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	84	108	72	169	285	325	1,380	950	151	44	23
2	44	77	228	72	120	285	325	1,200	790	140	39	23
3	39	95	160	72	175	245	325	1,200	650	125	36	21
4	36	95	145	72	140	265	370	1,200	590	115	36	21
5	52	95	132	72	132	285	1,290	1,990	620	115	36	18
6	100	84	125	72	120	265	1,110	1,380	650	115	36	23
7	90	84	115	72	120	285	870	990	560	115	36	23
8	72	95	108	72	115	305	1,380	950	530	100	44	23
9	79	95	108	72	125	285	870	870	530	100	39	23
10	108	95	95	72	125	238	790	870	470	100	36	23
11	120	95	90	72	151	238	790	990	420	115	33	23
12	120	95	84	72	285	285	720	1,030	395	100	30	23
13	120	90	84	72	755	285	830	1,070	395	77	30	23
14	108	77	84	72	650	325	1,030	1,160	395	84	30	23
15	108	72	84	72	238	348	1,200	1,200	348	77	30	23
16	95	72	84	72	370	370	1,200	1,380	305	68	30	23
17	115	72	84	72	228	325	1,160	1,470	285	62	36	23
18	108	72	84	72	203	305	1,200	1,570	265	56	39	23
19	108	72	100	72	203	265	1,030	1,570	245	56	39	23
20	100	72	115	72	203	285	870	1,570	245	52	39	23
21	84	72	95	72	228	245	1,030	1,570	245	49	39	23
22	72	72	95	72	182	245	1,290	1,380	238	49	36	23
23	72	72	95	72	169	285	1,470	1,200	182	49	23	23
24	72	72	95	72	160	370	1,880	1,200	182	44	23	23
25	77	72	95	72	175	470	1,770	870	182	49	23	23
26	77	72	95	72	182	420	1,670	720	182	39	23	23
27	77	72	95	72	210	395	1,380	720	175	39	36	21
28	77	84	90	72	285	370	1,380	720	160	39	36	18
29	84	90	77	145	-----	370	1,290	790	210	39	33	18
30	90	90	72	132	-----	370	1,380	790	169	44	26	23
31	72	-----	72	108	-----	370	-----	870	-----	49	23	-----

Monthly discharge of Kaweah River near Threerivers, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	120	36	84.8	5,210
November	95	72	81.9	4,870
December	228	72	103	6,330
January	145	72	77.5	4,770
February	755	115	222	12,300
March	470	238	312	19,200
April	1,880	325	1,070	63,700
May	1,990	720	1,160	71,300
June	950	160	385	22,900
July	151	39	77.8	4,780
August	44	23	33.5	2,060
September	23	18	22.3	1,330
The year	1,990	18	302	219,000

NORTH FORK OF KAWEAH RIVER AT KAWEAH, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 2, T. 17 S., R. 28 E., at highway bridge in Sequoia National Forest, half a mile north of Kaweah, Tulare County, and 2 miles above junction with Kaweah River, Manikin Creek enters one-fourth mile below and Sheep Creek $2\frac{1}{2}$ miles above gage.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 12, 1910, to September 30, 1926.

GAGE.—Staff gage in two sections on right bank; low-water section is inclined and fastened to abutment of bridge; upper section is vertical and fastened to sycamore tree 20 feet below bridge. Gage read by G. H. Purdy.

DISCHARGE MEASUREMENTS.—Made from bridge at gage or by wading.

CHANNEL AND CONTROL.—Solid rock and sand; fairly permanent. One channel at all stages.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 3.45 feet at 7 a. m. April 8 (discharge, 730 second-feet); minimum stage recorded, 0.05 foot at 6 p. m. August 2 (discharge, 0.4 second-foot).

1910-1926: Maximum stage recorded, 10.2 feet at 7 p. m. January 25, 1914 (discharge, from extension of rating curve, about 7,400 second-feet); no flow many days during July to October, 1924.

DIVERSIONS.—About 20 second-feet can be diverted by several small ditches above the station for irrigation.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed during high water of February 14.

Rating curves well defined. Staff gage read to hundredths once daily with extra readings during high stages and storms. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of North Fork of Kaweah River at Kaweah, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Mar. 28.....	<i>Feet</i> 1.70	<i>Sec.-ft.</i> 106	Apr. 8.....	<i>Feet</i> 3.20	<i>Sec.-ft.</i> 586	June 23.....	<i>Feet</i> 0.81	<i>Sec.-ft.</i> 18
Do.....	1.69	107	Apr. 10.....	2.35	248	Sept. 23.....	.20	1.0

Daily discharge, in second-feet, of North Fork of Kaweah River at Kaweah, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.8	6.5	9	8	32	76	100	250	51	11	0.6	0.8
2.....	3.7	7.5	12	8.5	21	66	84	237	48	10	.4	.9
3.....	3.8	10	21	8.5	22	61	83	237	48	10	.5	.6
4.....	3.8	12	14	8.5	27	68	89	237	44	9.5	.5	.6
5.....	4.0	9.5	14	8.5	20	69	400	307	42	9.5	.6	.5
6.....	4.5	9	10	8	17	69	468	224	39	10	.6	.4
7.....	10	9	10	8.5	16	82	307	200	38	7	.7	.5
8.....	8	9.5	9.5	8	16	78	730	188	38	6.5	.8	.5
9.....	7	9	9.5	8	16	82	342	162	38	6.5	.8	.6
10.....	7.5	9	9	8	19	70	276	160	36	6.5	.7	.8
11.....	7	8.5	9	8	22	61	262	156	32	6.5	.8	.8
12.....	12	8.5	9	8	77	69	250	156	31	6	.8	.8
13.....	13	10	9	8	52	93	262	145	30	6	.8	1.0
14.....	11	9.5	8.5	8	237	102	276	145	28	3.5	.8	2.0
15.....	9.5	9	8	8	69	114	291	149	26	3.8	.4	2.1
16.....	9	9	8	8	72	93	291	153	26	3.7	.6	2.4
17.....	8	9	8	8	55	129	307	151	26	3.5	.5	2.9
18.....	7.5	8.5	8	8	56	86	291	149	24	3.5	.6	3.3
19.....	7	8	11	8	55	72	262	145	22	2.9	.8	3.3
20.....	6	8	8.5	8	56	65	224	141	20	2.9	.8	4.0
21.....	7.5	9	9.5	7.5	65	63	250	135	20	3.3	.8	4.0
22.....	7.5	8	9.5	7.5	44	82	262	121	20	1.6	.9	4.0
23.....	7.5	8	10	7.5	39	96	262	109	18	1.5	.9	1.0
24.....	7.5	8	9.5	8	38	131	276	111	16	1.4	.9	1.0
25.....	7.5	8	9.5	8	38	145	307	96	15	1.3	1.0	1.0
26.....	7.5	8.5	9.5	7.5	53	133	276	89	14	1.3	.8	1.1
27.....	6.5	8	9.5	7.5	63	116	262	74	13	1.0	.8	.8
28.....	6.5	8	8.5	7	70	111	276	72	12	.9	.6	.8
29.....	6.5	8	8.5	8.5	-----	103	262	65	11	.8	.6	.8
30.....	6.5	8	8.5	22	-----	111	262	61	11	.6	.7	.8
31.....	6.5	-----	8.5	16	-----	112	-----	57	-----	.6	.8	-----

Monthly discharge of North Fork of Kaweah River at Kaweah, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	13	3.7	7.21	443
November.....	12	6.5	8.68	516
December.....	21	8	9.87	607
January.....	22	7	8.69	534
February.....	237	16	48.8	2,710
March.....	145	61	90.4	5,560
April.....	730	83	276	16,400
May.....	307	57	151	9,280
June.....	51	11	27.9	1,660
July.....	11	.6	4.68	288
August.....	1.0	.4	.71	43.7
September.....	4.0	.4	1.47	87.5
The year.....	730	.4	52.7	38,100

KINGS RIVER NEAR HUME, CALIF.

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

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August 28, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in masonry well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 50 feet below gage or by wading.

CHANNEL AND CONTROL.—Control, large boulders and gravel; shifts during high stages. Channel, boulders and gravel; rough, steep, and shifts at high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.13 feet at 3 p. m. May 19 (discharge, 7,380 second-feet); minimum stage, from water-stage recorder, 1.02 feet September 29 (discharge, 100 second-feet).

1921-1926: Maximum stage, from water-stage recorder, 8.67 feet at midnight June 4, 1922 (discharge, 11,700 second-feet); minimum stage, from water-stage recorder, 0.82 foot September 29 to October 4, 1924 (discharge, 63 second-feet).

REGULATION.—A small storage at Lake Hume on 10-Mile Creek.

DIVERSIONS.—Hume Lumber Co. diverts a small amount of water at Lake Hume to float lumber to Sanger.

ACCURACY.—Stage-discharge relation not changed. Rating curve well defined.

Water-stage recorder excellent when operating, but clock stopped October 1 to November 13, February 16 to March 3, June 6-11, and July 16 to September 7. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge June 6-11 estimated by comparison with records for other streams. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by city of Los Angeles.

Discharge measurements of Kings River near Hume, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
Nov. 14.....	Feet 1.39	Sec.-ft. 214	June 13.....	Feet 3.98	Sec.-ft. 1,890	Sept. 9.....	Feet 1.14	Sec.-ft. 136
Mar. 5.....	2.10	527	June 14.....	4.02	1,930			
June 13.....	4.15	2,350	Sept. 8.....	1.15	140			

Daily discharge, in second-feet, of Kings River near Hume, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.
1		270	210	234		860	3,410	3,410	980	
2		425	200	282		890	3,740	2,940	920	
3		322	200	299		920	4,540	2,590	830	
4		304	175	299	530	1,010	5,100	2,520	800	
5		299	200	304	530	1,410	4,360	2,590	800	
6		290	189	299	550	1,330	3,020	2,590	860	
7		270	186	299	565	1,370	2,400	2,300	772	
8		266	175	312	570	1,450	2,040	2,400	723	132
9		254	186	317	555	1,250	1,870	2,300	830	130
10		242	178	362	520	1,370	1,920	2,200	830	128
11		238	172	380	510	1,490	2,210	2,050	890	122
12		246	160	400	520	1,490	2,520	1,980	860	122
13		200	166	505	550	1,820	3,100	1,920	772	120
14	203	186	163	500	602	2,270	3,920	1,770	690	115
15	234	200	169	490	662	2,800	4,630	1,620	630	110
16	234	222	148		701	3,100	5,100	1,450		118
17	214	214	175		718	2,870	5,100	1,370		118
18	206	234	154		657	2,400	5,720	1,330		120
19	203	203	125		639	2,090	6,180	1,330		118
20	192	226	125		608	2,270	5,720	1,290		110
21	189	242	135		608	2,800	5,100	1,290		110
22	189	238	148		608	3,330	4,900	1,290		110
23	196	234	151		662	4,000	4,090	1,290		108
24	196	226	151		800	4,630	3,170	1,250		108
25	200	230	148		890	4,630	2,330	1,180		105
26	196	230	140		860	4,540	2,090	1,140		102
27	192	222	135		830	4,450	2,400	1,080		102
28	189	222	192		860	4,090	2,660	1,080		102
29	192	210	270		860	4,090	3,020	1,220		100
30	234	206	192		800	3,740	3,250	1,080		105
31		203	286		920		3,490			

NOTE.—No record for days for which discharge is not given.

Monthly discharge of Kings River near Hume, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
November 14-30	234	189	203	6,840
December	425	186	244	15,000
January	286	125	174	10,700
February 1-15	505	234	352	10,500
March 4-31	920	510	669	37,200
April	4,630	860	2,490	148,000
May	6,180	1,870	3,650	224,000
June	3,410	1,080	1,790	107,000
July 1-15	980	630	812	24,200
September 8-30	132	100	114	5,200

NOTE.—No record obtained for October and August.

KINGS RIVER AT PIEDRA, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 8, T. 13 S., R. 24 E., half a mile below highway bridge at Piedra, Fresno County, near mouth of canyon, and 12 miles north-east of Sanger.

DRAINAGE AREA.—1,740 square miles.

RECORDS AVAILABLE.—September 3, 1895, to September 30, 1926.

GAGE.—Water-stage recorder in wooden well at the U. S. Weather Bureau staff on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 500 feet below gage.

CHANNEL AND CONTROL.—Gravel and small boulders; shifts during high water. Banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 11.97 feet at 6 a. m. May 5 (discharge, 11,600 second-feet); minimum stage recorded, 3.74 feet September 29 (discharge, 104 second-feet).

1895-1926: Maximum stage recorded, 21.8 feet during night January 25, 1914, determined by leveling from floodmarks (discharge, from extension of rating curve, about 59,700 second-feet); minimum stage recorded, 3.57 feet October 3, 1924 (discharge, 67 second-feet).

DIVERSIONS.—There is a small diversion from the reservoir on Tenmile Creek at Hume, through a flume which is used to float lumber to Sanger.

REGULATION.—None.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve very well defined. Water-stage recorder record excellent except August 18 to September 30 when water was below intake pipe. Staff gage read to hundredths once or twice a week during this period. Daily discharge ascertained by applying mean daily gage height to rating table and interpolating for days on which gage was not read. Records excellent.

Discharge measurements of Kings River at Piedra, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 20.....	4.25	339	May 13.....	9.37	5,770	June 20.....	5.82	*1,440
Mar. 25.....	6.49	2,050	May 14.....	10.05	6,900	June 25.....	5.73	1,380
Mar. 26.....	6.32	1,890	May 16.....	11.12	9,340	Aug. 7.....	4.13	255
Mar. 29.....	6.18	1,730	June 3.....	8.38	4,200	Sept. 1.....	3.86	132
Apr. 11.....	7.80	3,680	June 5.....	8.08	3,830	Sept. 21.....	3.77	110
Apr. 23.....	10.36	7,310	June 12.....	7.10	2,650			

Daily discharge, in second-feet, of Kings River at Piedra, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	174	245	245	228	610	805	1,610	6,610	4,910	1,040	269	138
2.....	170	245	485	223	359	792	1,480	6,610	4,770	935	269	135
3.....	166	275	545	212	431	760	1,480	7,830	3,930	870	263	133
4.....	162	281	407	218	479	740	1,610	8,990	3,530	785	257	130
5.....	178	269	377	201	395	746	3,790	9,490	3,410	753	251	127
6.....	251	263	356	206	377	785	3,930	6,410	3,410	805	257	125
7.....	341	281	353	206	365	838	3,410	4,770	3,170	779	269	122
8.....	305	281	317	196	359	935	5,600	3,930	3,290	708	323	120
9.....	275	287	293	190	365	902	3,370	3,530	3,170	708	311	118
10.....	257	269	293	190	389	805	3,170	3,410	3,000	838	287	117
11.....	272	275	281	190	437	740	3,410	3,930	2,720	838	269	116
12.....	413	269	275	182	597	766	3,170	4,630	2,560	902	257	115
13.....	401	287	275	178	1,540	838	3,930	5,050	2,450	792	234	114
14.....	365	269	234	174	2,980	935	4,630	6,050	2,300	694	223	113
15.....	365	234	201	178	935	1,100	5,690	7,210	2,100	623	206	112
16.....	359	228	212	178	1,140	1,220	6,050	8,050	1,850	578	196	112
17.....	365	240	234	170	805	1,330	6,230	8,510	1,610	558	182	112
18.....	365	218	257	186	682	1,140	5,370	8,280	1,520	527	177	112
19.....	353	212	275	182	675	1,000	4,350	8,990	1,480	515	172	112
20.....	341	212	234	158	805	935	4,070	9,240	1,440	479	167	112
21.....	329	206	245	144	805	935	5,050	8,510	1,440	455	163	112
22.....	317	196	275	147	675	1,000	6,410	7,620	1,400	425	159	109
23.....	299	196	281	162	616	1,100	7,010	7,210	1,400	401	155	109
24.....	299	201	275	166	578	1,400	8,280	6,050	1,360	383	151	108
25.....	293	201	263	166	571	1,750	8,750	4,630	1,290	365	147	107
26.....	281	206	263	170	616	1,700	8,280	3,650	1,220	347	145	106
27.....	275	206	257	158	688	1,660	7,830	3,410	1,140	335	143	105
28.....	269	201	257	154	753	1,660	7,410	3,930	1,100	323	142	104
29.....	263	201	251	223	-----	1,660	7,410	4,210	1,180	311	141	104
30.....	251	212	245	413	-----	1,660	7,410	4,630	1,220	299	140	104
31.....	245	-----	234	287	-----	1,660	-----	4,770	-----	281	139	-----

Monthly discharge of Kings River at Piedra, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	413	162	290	17,800
November.....	287	196	239	14,200
December.....	545	201	280	17,800
January.....	413	144	195	12,000
February.....	2,980	359	715	39,700
March.....	1,730	740	1,090	67,000
April.....	8,750	1,480	5,010	298,000
May.....	9,490	3,410	6,130	377,000
June.....	4,910	1,100	2,310	137,000
July.....	1,040	281	602	37,000
August.....	323	139	209	12,900
September.....	138	104	115	6,840
The year.....	9,490	104	1,430	1,040,000

NORTH FORK OF KINGS RIVER BELOW MEADOW BROOK, CALIF.

LOCATION.—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, Fresno County. Altitude, about 8,150 feet.

DRAINAGE AREA.—35 square miles.

RECORDS AVAILABLE.—October 3, 1921, to September 30, 1926.

GAGE.—Water-stage recorder on left bank above series of rapids and falls between Fleming Creek and Meadow Brook.

DISCHARGE MEASUREMENTS.—Made from cable above gage or by wading.

CHANNEL AND CONTROL.—Bed and control are solid rock. Control is solid rock at head of a series of rapids and falls.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.58 feet at 8 p. m. May 19 (discharge, 680 second-feet); minimum stage, from water-stage recorder, 1.50 feet at 11 p. m. September 14 (discharge, 0.7 second-foot).

1921-1926: Maximum stage recorded, 5.02 feet at 8 p. m. June 4, 1922 (discharge, 870 second-feet); minimum stage recorded, 1.38 feet part of September 12-14, 1924 (discharge, 0.3 second-foot).

DIVERSIONS.—None.

REGULATION.—None.

ICE.—Well frozen and recorder not operated December 16 to March 11.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent for open-water periods. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge not estimated December 16 to March 11 because of ice. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Discharge measurements of North Fork of Kings River below Meadow Brook, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 10	1.94	8.2	Apr. 13	3.25	164	May 23	3.65	298
Oct. 24	2.01	11.6	Apr. 14	3.26	166	Do	3.79	362
Oct. 25	2.02	12.0	Do	3.54	253	May 24	3.54	265
Nov. 11	1.88	6.0	Apr. 15	3.62	282	Do	3.47	250
Do	1.90	7.3	Apr. 21	3.47	229	May 25	3.35	196
Nov. 12	1.96	9.1	Apr. 22	3.46	234	June 6	3.18	148
Nov. 13	1.78	3.6	Do	3.82	358	June 7	3.22	161
Dec. 12	1.92	7.4	Apr. 23	3.72	409	June 8	3.16	142
Dec. 13	1.96	8.7	Do	4.09	466	June 18	2.47	47
Dec. 14	1.90	6.7	Apr. 24	3.86	394	June 28	2.28	33
Dec. 15	1.80	4.1	Apr. 25	3.78	352	July 15	2.10	18
Mar. 12	2.08	14.7	Do	3.93	435	July 25	1.77	3.9
Mar. 13	2.15	19.5	May 8	4.10	495	July 29	1.78	4.0
Mar. 20	2.15	20.3	May 9	3.21	160	Aug. 6	1.70	2.3
Mar. 21	2.18	21	May 10	3.09	132	Aug. 20	1.59	1.2
Mar. 22	2.22	23	Do	2.98	109	Do	1.50	1.0
Mar. 23	2.37	35	Do	3.14	150	Aug. 26	1.54	1.0
Mar. 24	2.65	64	May 11	3.08	130	Aug. 27	1.55	1.1
Mar. 25	2.51	47	Do	3.30	186	Sept. 15	1.52	.8
Mar. 26	2.47	45	May 21	4.10	496	Sept. 16	1.52	.7
Mar. 27	2.44	41	May 22	3.70	332	Sept. 30	1.67	1.
Mar. 28	2.47	41	Do	4.10	482			

Daily discharge, in second-feet, of North Fork of Kings River below Meadow Brook, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	2.2	9	10	-----	43	322	292	25	2.5	0.9
2.	2.1	8	11	-----	44	383	253	21	2.3	.9
3.	2.0	8	14	-----	45	440	195	19	2.3	1.0
4.	2.0	8	13	-----	42	464	179	18	2.2	1.0
5.	3.7	8	12	-----	40	394	182	22	2.3	1.0
6.	12	8	11	-----	46	253	177	24	2.5	1.0
7.	10	7	10	-----	39	179	169	21	2.7	1.0
8.	8.5	7	8.5	-----	40	142	164	22	2.7	1.0
9.	8	6.5	8	-----	44	126	137	29	2.5	1.0
10.	8	6.5	6.5	-----	64	137	112	33	2.3	1.0
11.	14	7	7	-----	67	177	103	29	2.1	.9
12.	16	6.5	7	15	83	215	95	27	1.9	.9
13.	16	6.5	7	20	149	269	88	23	1.7	.8
14.	14	6	7	20	209	336	78	20	1.6	.8
15.	12	6	4.1	20	266	402	66	17	1.5	.8
16.	14	6.5	-----	20	286	448	54	16	1.3	.8
17.	13	4.7	-----	19	224	437	47	16	1.2	.9
18.	12	5	-----	19	164	464	46	14	1.2	.9
19.	12	4.7	-----	19	133	480	45	12	1.2	.9
20.	12	4.1	-----	19	164	460	43	10	1.2	.9
21.	12	4.1	-----	22	230	413	41	8.5	1.1	.9
22.	12	4.1	-----	23	279	391	39	8	1.1	.9
23.	12	5.5	-----	33	336	340	38	6.5	1.0	.9
24.	12	5.5	-----	52	391	259	37	6	.9	.9
25.	12	6	-----	50	410	182	35	5	.9	.9
26.	11	5	-----	43	387	144	31	4.4	1.0	.9
27.	11	5.5	-----	42	354	179	31	3.7	.9	1.0
28.	11	5	-----	46	365	218	29	3.4	.9	1.0
29.	11	5.5	-----	46	391	243	33	3.2	.9	1.1
30.	10	7	-----	53	351	269	29	2.8	.9	1.1
31.	9.5	-----	-----	53	-----	286	-----	2.7	1.0	-----

NOTE.—No record Dec. 16 to Mar. 11.

Monthly discharge of North Fork of Kings River below Meadow Brook, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	16	2.0	10.2	627
November.....	9	4.1	6.21	370
December 1-15.....	14	4.1	9.07	270
March 12-31.....	53	15	31.7	1,260
April.....	410	39	190	11,300
May.....	480	126	305	18,800
June.....	202	29	95.6	5,690
July.....	33	2.7	15.2	935
August.....	2.7	.9	1.61	99.0
September.....	1.1	.8	.93	55.3

NORTH FORK OF KINGS RIVER NEAR CLIFF CAMP, CALIF.

LOCATION.—In N. $\frac{1}{2}$ sec. 12, T. 11 S., R. 27 E., at Cliff Camp Bridge, 1 mile west of Cliff Camp, Fresno County. Altitude, about 6,150 feet.

DRAINAGE AREA.—174 square miles.

RECORDS AVAILABLE.—August 25, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in masonry well and sheet metal shelter on right bank just below bridge.

DISCHARGE MEASUREMENTS.—Made from cable 500 feet below gage or by wading.

CHANNEL AND CONTROL.—Channel is solid rock, very steep and rough. Gage is in a deep pool. Control is solid rock and permanent. A series of rapids and falls just below control.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.45 feet at 8.30 p. m. May 3 (discharge, 3,380 second-feet); minimum stage, from water-stage recorder, 2.37 feet at 11 a. m. September 15 (discharge, 3.2 second-feet).

1921-1926: Maximum stage recorded, 10.6 feet at 8 p. m. June 4, 1922 (discharge, 6,030 second-feet); minimum stage recorded, 2.14 feet September 9-10, 1924 (discharge, 1.3 second-feet).

DIVERSIONS.—None.

REGULATION.—None.

ICE.—Stage-discharge relation affected slightly by ice February 8-10 and 14-21.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent except October 20-21 and October 31 to November 6, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table except February 8-10 and 14-21, for which it was estimated because of ice. Discharge interpolated for days of no gage-height record. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

*Discharge measurements of North Fork of Kings River near Cliff Camp, Calif.,
during the year ending September 30, 1926*

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 11	3.58	73	Jan. 19	2.98	18	Apr. 17	7.64	1,480
Oct. 22	3.40	48	Jan. 20	2.93	14	Apr. 19	6.34	797
Oct. 27	3.33	42	Jan. 21	2.69	8.9	Do	6.58	874
Nov. 7	3.14	29	Feb. 7	3.18	28	Apr. 23	9.68	2,830
Nov. 17	2.96	17	Feb. 8	3.28	* 29	Apr. 24	9.67	2,650
Nov. 18	2.76	9.9	Feb. 9	3.41	* 42	Apr. 25	9.12	2,350
Nov. 19		19	Mar. 6	3.94	111	Apr. 26	8.43	1,790
Dec. 7	3.28	35	Mar. 8	4.04	116	May 6	7.41	1,340
Dec. 9	3.13	25	Mar. 18	4.36	175	May 11	8.07	1,760
Dec. 10	3.01	18	Mar. 19	4.27	160	May 23	7.30	1,320
Dec. 17	3.13	23	Mar. 20	4.26	156	May 24	6.94	1,220
Dec. 19	3.08	22	Mar. 26	5.24	401	June 9	5.28	451
Dec. 22	3.22	30	Mar. 27	5.25	455	June 24	3.72	85
Dec. 23	3.22	31	Mar. 28	5.32	441	July 24	2.99	18
Jan. 7	3.10	31	Mar. 29	5.30	445	July 26	2.93	15
Jan. 8	3.07	25	Mar. 30	5.39	465	July 30	2.80	11
Jan. 9	2.69	8.2	Apr. 9	5.75	527	Aug. 13	2.58	5.0
Jan. 15	2.98	1 ^c	Apr. 11	6.20	717	Aug. 18	2.50	5.0
Jan. 16	2.94	16	Apr. 12	5.57	513	Aug. 31	2.46	4.7
Jan. 17	3.02	20	Do	6.85	1,030	Sept. 9	2.42	3.7
Jan. 18	2.91	14	Apr. 16	8.35	1,930	Sept. 23	2.43	3.9

* Stage-discharge relation affected by ice.

*Daily discharge, in second-feet, of North Fork of Kings River near Cliff Camp, Calif.,
for the year ending September 30, 1926*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	35	52	22	20	104	381	1,780	870	59	10	4.2
2	10	34	94	20	20	98	368	2,090	740	51	10	4.0
3	10	32	56	20	20	102	396	2,510	600	46	9.5	3.9
4	9.5	31	52	17	22	107	455	2,650	540	42	9.5	3.8
5	17	30	47	18	23	125	488	2,230	505	46	9	3.8
6	47	28	49	17	26	138	522	1,390	470	64	9	3.8
7	41	27	41	17	30	139	455	1,050	440	52	8.5	3.6
8	29	28	38	15	32	139	341	892	455	45	8.5	3.8
9	26	23	35	16	45	120	396	848	410	72	8	3.9
10	29	26	29	16	44	110	580	982	328	107	7.5	3.9
11	52	29	29	14	41	116	640	1,220	283	78	7	3.6
12	62	27	27	13	36	139	740	1,420	252	72	6.5	3.6
13	49	28	18	13	34	166	1,050	1,570	219	60	6	3.5
14	47	20	20	12	37	208	1,330	1,780	198	52	5.5	3.4
15	42	24	22	15	40	259	1,600	2,090	172	42	5.5	3.3
16	48	24	23	13	43	271	1,720	2,160	152	38	5	3.4
17	52	17	23	16	45	232	1,480	2,090	138	36	4.8	3.6
18	49	18	22	14	47	181	1,120	2,160	126	33	4.7	3.9
19	47	17	20	13	50	163	915	2,230	117	28	4.8	3.9
20	46	16	26	13	53	165	1,180	2,160	110	25	4.8	3.8
21		15	30	13	55	183	1,600	1,900	104	22	4.7	3.8
22	46	16	33	13	57	208	1,840	1,660	96	20	4.4	3.9
23	44	18	32	13	55	276	2,090	1,390	92	18	4.2	3.9
24	44	20	28	13	55	396	2,370	1,150	87	18	3.9	3.9
25	43	19	28	12	60	440	2,300	848	81	17	3.6	3.6
26	42	18	28	12	76	368	2,090	740	76	15	3.6	3.5
27	41	19	28	10	92	381	1,960	825	72	14	3.9	3.5
28	40	16	26	12	102	396	1,900	938	71	13	3.6	3.6
29	40	20	25	16		410	2,020	938	78	12	3.6	3.5
30	38	27	24	17		425	1,960	960	69	12	3.8	3.6
31	37		22	16		440		938		11	4.2	

Monthly discharge of North Fork of Kings River near Cliff Camp, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	62	9.5	38.2	2,350
November.....	35	15	23.4	1,390
December.....	94	18	33.1	2,040
January.....	22	10	14.9	916
February.....	102	20	45.0	2,500
March.....	440	98	226	13,900
April.....	2,370	341	1,210	72,000
May.....	2,650	740	1,540	94,700
June.....	870	69	265	15,800
July.....	107	11	39.5	2,430
August.....	10	3.6	6.05	372
September.....	4.2	3.3	3.72	221
The year.....	2,650	3.3	288	209,000

NORTH FORK OF KINGS RIVER ABOVE DINKEY CREEK, CALIF.

LOCATION.—In sec. 10, T. 12 S., R. 26 E., 200 feet above mouth of Dinkey Creek, Madera County. Altitude, about 1,240 feet.

DRAINAGE AREA.—246 square miles.

RECORDS AVAILABLE.—December 26, 1919, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and metal shelter on left bank at the road crossing about 200 feet above mouth of Dinkey Creek.

DISCHARGE MEASUREMENTS.—Made from cable about 2 miles below gage or by wading 1 mile above gage. Measurements made below gage are reduced by amount of flow of Dinkey Creek.

CHANNEL AND CONTROL.—Channel is solid rock, boulders, and gravel and is permanent. Control is a rapid over boulders and solid rock. Channel is very steep with numerous falls and rapids.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.67 feet at 1 a. m. May 5 (discharge, 4,070 second-feet); minimum stage, from water-stage recorder, 3.70 feet September 23 (discharge, 6 second-feet).

1919-1926: Maximum stage recorded, 12.18 feet at 9.30 p. m. June 4, 1922 (discharge, 6,080 second-feet); minimum discharge recorded, about 4 second-feet August 29 to September 1, 1924.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined below 4,000 second-feet and extended above. Water-stage recorder record excellent except February 14-17 when clock was not running. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge interpolated February 14-17. Records good.

Discharge measurements of North Fork of Kings River above Dinkey Creek, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 11.....	4.79	56	Apr. 24.....	10.34	3,480	June 27.....	5.03	83
Oct. 20.....	4.69	46	May 4.....	9.39	2,480	July 18.....	4.60	44
Feb. 19.....	5.07	91	May 7.....	7.89	1,190	Aug. 1.....	4.14	16
Feb. 28.....	5.33	127	June 3.....	6.89	628	Sept. 6.....	3.88	9.7
Apr. 22.....	9.65	2,770	June 13.....	5.79	273			
Apr. 23.....	10.30	3,360	June 22.....	5.24	113			

* Measurements made below Dinkey Creek and corrected for flow of that stream.

Daily discharge, in second-feet, of North Fork of Kings River above Dinkey Creek year Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	16	38	45	29	45	146	454	1,920	970	75	16	10
2.....	15	40	149	28	42	131	420	2,270	870	64	16	10
3.....	15	43	88	28	64	131	430	2,750	670	57	15	10
4.....	14	36	68	25	48	134	550	2,920	610	52	15	10
5.....	21	34	62	26	46	146	1,020	2,700	550	51	15	10
6.....	51	37	59	25	43	164	845	1,610	510	61	14	10
7.....	55	38	54	24	44	183	795	1,200	462	63	14	9.5
8.....	43	36	49	23	46	183	795	995	510	55	14	10
9.....	37	36	45	23	55	166	590	945	454	63	14	10
10.....	34	34	40	22	69	138	770	1,020	374	101	13	10
11.....	49	34	39	22	70	138	870	1,270	307	92	13	10
12.....	81	42	39	21	92	159	895	1,530	268	79	13	9.5
13.....	67	41	32	20	79	186	1,170	1,650	238	69	12	9.5
14.....	57	33	23	20	80	244	1,450	2,020	216	60	12	9.5
15.....	54	29	26	21	82	301	1,780	2,270	193	51	12	9
16.....	52	34	29	20	84	322	1,920	2,420	178	45	11	9
17.....	55	31	29	20	86	316	1,740	2,370	157	43	11	9.5
18.....	55	25	39	21	88	227	1,450	2,420	146	41	11	10
19.....	51	25	31	19	90	208	1,050	2,580	136	37	11	10
20.....	50	24	31	17	110	196	1,200	2,370	129	33	11	10
21.....	49	23	39	20	92	219	1,700	2,020	122	29	11	10
22.....	48	22	43	20	79	247	2,070	1,830	114	27	11	10
23.....	48	23	41	19	76	319	2,320	1,570	106	25	11	9
24.....	47	26	38	19	76	462	2,750	1,300	99	23	10	10
25.....	46	27	38	19	83	570	2,700	970	94	22	10	9.5
26.....	46	27	38	18	101	466	2,420	845	88	20	10	9.5
27.....	43	26	37	18	120	454	2,170	895	83	19	10	9.5
28.....	42	26	36	17	136	470	2,120	1,020	81	19	10	9.5
29.....	41	24	34	54	-----	490	2,370	995	83	18	10	9.5
30.....	41	31	33	35	-----	490	2,220	1,020	82	17	10	10
31.....	39	-----	31	54	-----	530	-----	1,020	-----	17	10	-----

Monthly discharge of North Fork of Kings River above Dinkey Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	81	14	43.9	2,700
November.....	43	23	31.5	1,870
December.....	149	23	44.7	2,750
January.....	54	17	24.1	1,480
February.....	136	42	75.9	4,220
March.....	570	131	275	16,900
April.....	2,750	420	1,430	85,100
May.....	2,920	845	1,700	105,000
June.....	970	81	297	17,700
July.....	101	17	46.1	2,830
August.....	16	10	12.1	744
September.....	10	9	9.73	579
The year.....	2,920	9	334	242,000

HELM CREEK AT SAND MEADOW, CALIF.

LOCATION.—In sec. 1, T. 10 S., R. 27 E., at lower end of Sand Meadow half a mile below trail from Deer Meadow to Long Meadow, Fresno County. Altitude, about 8,020 feet.

DRAINAGE AREA.—34 square miles.

RECORDS AVAILABLE.—October 1, 1922, to September 30, 1926.

GAGE.—Water-stage recorder on right bank in masonry well and sheet metal shelter.

DISCHARGE MEASUREMENTS.—Made from cable at the gage or by wading.

CHANNEL AND CONTROL.—One channel at all stages; bed of stream sand and gravel; banks low and are overflowed at high stages. Control is a solid rock outcrop 50 feet below gage; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.12 feet at 6.30 p. m. May 3 (discharge, 852 second-feet); minimum stage, from water-stage recorder, 1.78 feet at 5 a. m. September 5 (discharge, 1.9 second-feet).

1922-1926: Maximum stage recorded, 5.40 feet at 6 p. m. May 15, 1923 (discharge, 990 second-feet); minimum stage recorded, 1.72 feet, August 1 and 27, 1924 (discharge, 1.1 second-feet).

DIVERSIONS.—None.

REGULATION.—None.

ICE.—Ice forms in gage pool and on control seriously affecting stage-discharge relation.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent. No record December 19 to April 7 when well was frozen or control blocked with ice. Daily discharge ascertained by applying mean daily gage height to rating table. Mean discharge estimated because of ice on control April 1-7. Discharge not estimated for December 19 to March 31. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Discharge measurements of Helm Creek at Sand Meadow, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 10	2.00	7.0	Apr. 27	4.24	413	May 26	3.47	159
Oct. 23	2.09	10	Do	4.30	440	May 27	3.32	129
Oct. 25	2.09	9.6	Apr. 28	3.98	312	Do	3.56	179
Nov. 9	2.11	11	Do	4.11	373	May 28	3.42	146
Nov. 14	2.25	16	May 5	4.39	473	June 4	3.02	78
Nov. 15	2.09	10	May 6	3.97	312	June 5	2.96	63
Nov. 16	2.00	5.4	May 7	3.75	239	June 9	2.98	65
Dec. 10	2.20	14	May 12	3.83	268	June 17	2.34	19
Dec. 11	2.16	12	Do	4.44	510	June 19	2.37	20
Dec. 16	1.96	4.6	May 13	3.95	303	July 13	2.04	7.1
Apr. 11	3.15	89	Do	4.54	560	July 16	2.06	5.9
Apr. 12	3.08	73	May 14	3.94	310	July 26	1.89	3.6
Do	3.20	89	May 18	4.71	643	July 29	1.88	4.3
Apr. 17	3.88	261	May 19	3.86	271	Aug. 6	1.97	3.5
Apr. 18	3.72	225	Do	4.61	597	Aug. 20	1.82	2.4
Apr. 19	3.54	185	May 20	3.97	310	Aug. 21	1.81	2.4
Do	3.73	244	Do	4.45	495	Aug. 27	1.81	2.4
Apr. 20	3.67	212	May 21	3.83	288	Sept. 15	1.80	2.1
Do	4.04	344	May 25	3.39	146	Sept. 16	1.82	2.4
Apr. 27	4.05	328	May 26	3.33	125	Sept. 29	1.82	2.7

Daily discharge, in second-feet, of Helm Creek at Sand Meadow, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Apr.	May	June	July	Aug.	Sept.
1	3.6	7.5	8		390	106	8	3.2	2.2
2	3.6	7.5	9.5		474	90	7.5	3.2	2.2
3	3.6	6.5	9		570	78	6.5	3.2	2.2
4	3.6	6.5	7.5		580	74	6.5	3.2	2.2
5	6	6	8		478	62	9.5	3.2	2.2
6	8.5	6.5	9.5		306	56	12	3.2	2.2
7	7	6.5	10		232	68	9	3.2	2.2
8	7	7	8	43	195	64	7.5	3.2	2.2
9	7	6.5	7.5	50	201	55	9	3.2	2.2
10	7.5	6	7.5	68	256	44	12	3.0	2.2
11	9.5	6	6.5	86	330	38	9	3.0	2.2
12	9.5	6	6	93	366	34	8.5	2.8	2.2
13	9	6.5	6	149	378	30	8.5	2.8	2.2
14	8	6.5	6	232	418	27	7.5	2.6	2.2
15	8.5	6.5	6	288	438	24	6	2.6	2.2

Daily discharge, in second-feet, of Helm Creek at Sand Meadow, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Apr.	May	June	July	Aug.	Sept.
16.....	10	6.5	6.5	320	442	22	6.5	2.6	2.2
17.....	11	5.5	6.5	302	410	20	6.5	2.6	2.2
18.....	11	5	5	232	426	19	5.5	2.6	2.2
19.....	11	5		195	410	18	5.5	2.6	2.2
20.....	11	5		274	374	17	5	2.6	2.4
21.....	11	4.2		382	323	15	4.7	2.4	2.4
22.....	10	4.2		446	284	14	4.7	2.4	2.4
23.....	9.5	4.7		490	232	13	4.4	2.4	2.4
24.....	9.5	5		514	204	12	4.2	2.2	2.4
25.....	9.5	5		478	151	11	4.0	2.2	2.4
26.....	9.5	5		434	141	10	3.8	2.2	2.4
27.....	9	5		410	149	10	3.8	2.2	2.4
28.....	9	5		398	157	11	3.6	2.2	2.4
29.....	9	5.5		402	149	9.5	3.6	2.2	2.4
30.....	8	6		398	132	8.5	3.4	2.2	2.4
31.....	7.5				125		3.4	2.2	

NOTE.—No record Dec. 19 to Apr. 7, well frozen and control blocked by ice and snow. Mean discharge Apr. 1-7 estimated at 40 second-feet.

Monthly discharge of Helm Creek at Sand Meadow, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	11	3.6	8.30	510
November.....	7.5	4.2	5.82	346
December 1-18.....	10	5	7.39	264
April.....	514		232	13,800
May.....	580	125	314	19,300
June.....	106	8.5	35.3	2,100
July.....	12	3.4	6.44	396
August.....	3.2	2.2	2.69	165
September.....	2.4	2.2	2.27	135

NOTE.—No record Dec. 19 to Mar. 31.

RANCHERIA CREEK NEAR SMITH MEADOW, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 19, T. 11 S., R. 28 E., at Cliff Camp-Smith Meadow trail crossing, half a mile below North Fork of Rancheria Creek, half a mile north of Smith Meadow, and 3 miles south of Cliff Camp, Fresno County. Altitude, about 6,400 feet.

DRAINAGE AREA.—22 square miles.

RECORDS AVAILABLE.—October 1, 1924, to September 30, 1926.

GAGE.—Water-stage recorder in masonry well and sheet metal shelter on left bank 200 feet below trail crossing.

DISCHARGE MEASUREMENTS.—Made from cable 200 feet above gage at trail crossing or by wading.

CHANNEL AND CONTROL.—Channel solid rock, very steep and rough below gage and fairly flat and meandering in several channels above gage. Gage is in a deep pool. Control is formed by cementing boulders together with small rubble masonry dams between the boulders. Rapids and falls above and below gage.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.56 feet at 11.30 p. m. May 4 (discharge, 335 second-feet); minimum stage, from water-stage recorder, 1.66 feet part of November 7 (discharge, 2 second-feet).

1924-1926: Maximum stage recorded, that of May 4, 1926; minimum discharge, practically no flow part of November 25, 26, and 27, 1924.

DIVERSIONS.—None.

REGULATION.—None.

ICE.—Stage-discharge relation seriously affected by ice and well freezes solid.

ACCURACY.—Stage-discharge relation changed at low water, owing to undermining of artificial control. Rating curve fairly well defined. Water-stage recorder record excellent, except November 8 to March 19, when well was frozen and control blocked by ice. Daily discharge ascertained by applying mean daily gage height to rating table, except February 24 to March 19, for which it was estimated because of ice. Discharge not determined November 9 to February 23. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Discharge measurements of Rancheria Creek near Smith Meadow, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 22	2.44	7.5	Mar. 30	2.90	30	June 9	3.06	42
Oct. 27	2.41	6.7	Apr. 11	2.99	35	June 10	3.03	40
Nov. 8	2.42	7.1	Apr. 17	3.39	85	June 22	2.77	17
Nov. 17	2.18	3.2	Apr. 24	3.64	130	June 23	2.76	18
Dec. 7	2.12	4.9	May 7	3.50	113	June 24	2.72	17
Dec. 21	2.43	8.5	Do	3.51	108	July 21	2.77	6.9
Jan. 8	2.70	3.2	May 13	3.58	136	July 23	2.48	6.8
Jan. 17	2.45	5.1	May 22	3.60	130	July 30	2.47	6.0
Feb. 9	2.47	6.3	Do	3.69	146	Aug. 11	2.41	5.3
Feb. 24	2.60	6.1	May 25	3.46	97	Aug. 8	2.40	4.9
Mar. 7	2.60	9.7	June 4	3.19	60	Sept. 8	2.33	4.5
Mar. 19	2.71	14	June 8	3.10	44	Sept. 23	2.26	4.3

• Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of Rancheria Creek near Smith Meadow, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5	5		8	27	148	77	11	7.5	5
2	7.5	5		8	24	162	70	11	7	5
3	7	4.5		8	24	210	64	9.5	7	5
4	7	3.5		8	29	228	59	9	7	5
5	9	4.8		8.5	36	223	53	9	7	5
6	9.5	5		9	33	142	49	9	7	5
7	9	3.4		9.5	30	107	47	9	7	5
8	8.5	7		9.5	34	93	46	8.5	7	5
9	8			9.5	27	97	43	8.5	7	5
10	8.5			9	34	113	37	8	7	5
11	9.5			10	36	136	34	8	7	5
12	8.5			11	38	156	32	8.5	7	5
13	7			13	59	166	30	9	7	4.8
14	7			15	82	184	29	8.5	6.5	4.8
15	7			17	102	192	27	8	6.5	4.8
16	7			18	107	206	27	8	6	4.8
17	7			18	93	203	25	8	6	4.6
18	7			16	77	214	24	8.5	6	4.6
19	7			16	68	217	23	8	6	4.4
20	7			15	77	203	22	9	5.5	4.3
21	7			16	102	177	21	8	5.5	4.3
22	7			18	124	152	20	8	5.5	4.2
23	6.5			22	154	134	18	8	5.5	4.2
24	6.5		6	27	188	122	17	8	5.5	4.1
25	6		6	30	188	95	13	8	5.5	4.1
26	6		7	28	175	87	13	8	5.5	4.0
27	6		7.5	28	170	90	13	8	5.5	4.0
28	5.5		8	28	175	92	13	8	5.5	3.9
29	5.5			30	162	92	12	8	5.5	3.9
30	5.5			31	162	85	11	8	5.5	3.9
31	5.5			30		82		7.5	5.5	

NOTE.—No record Nov. 9 to Feb. 23 except for days on which a discharge measurement was made.

Monthly discharge of Rancheria Creek near Smith Meadow, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	9.5	5.5	7.18	441
November 1-8.....	7	3.4	4.78	75.8
February 24-28.....	8	6	6.90	68.4
March.....	31	8	16.9	1,040
April.....	188	24	87.9	5,230
May.....	228	82	149	9,160
June.....	77	11	32.3	1,920
July.....	11	7.5	8.47	521
August.....	7.5	5.5	6.27	386
September.....	5	3.9	4.59	273

NOTE.—No record Nov. 9 to Feb. 23.

DINKEY CREEK AT DINKEY MEADOW, CALIF.

LOCATION.—In sec. 21, T. 10 S., R. 26 E., at lower end of Dinkey Meadow, half a mile above Bear Creek, 10 miles southeast of Ockenden, Fresno County. Altitude, about 5,440 feet.

DRAINAGE AREA.—51 square miles.

RECORDS AVAILABLE.—October 27, 1921, to September 30, 1926.

GAGE.—Water-stage recorder on left bank 600 feet below old concrete weir at cattle trail at lower end of Dinkey Meadow.

DISCHARGE MEASUREMENTS.—Made from cable 100 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed of stream is solid rock, boulders, and gravel.

Control is a solid rock outcrop with two small natural crevices having a free fall on downstream side of several feet; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.38 feet at 7 p. m. April 24 (discharge, 830 second-feet); minimum stage, from water-stage recorder, 0.72 foot from 3 to 6 p. m. September 14 (discharge, 1.2 second-feet).

1921-1926: Maximum stage recorded, 6.38 feet at 1 p. m. November 9, 1924 (discharge, 1,230 second-feet); minimum discharge, 0.4 second-foot, August 30, 1924.

DIVERSIONS.—None.

REGULATION.—None.

ICE.—Stage-discharge relation affected slightly by ice during part of February.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent except December 13-15, January 19-21, 27, February 18-25, and May 19-27, when clock was not running. Daily discharge ascertained by applying mean daily gage height to rating table and interpolating for days on which clock was stopped. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Discharge measurements of Dinkey Creek at Dinkey Meadow, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 7.....	1.19	8.3	Jan. 28.....	1.18	8.9	Apr. 21.....	4.95	721
Oct. 16.....	1.40	14	Feb. 4.....	1.43	15	Apr. 22.....	4.62	586
Oct. 20.....	1.36	12	Feb. 5.....	1.48	15	Apr. 27.....	4.10	383
Oct. 30.....	1.21	8.9	Feb. 26.....	1.90	38	Apr. 28.....	4.83	671
Nov. 4.....	1.35	12	Mar. 3.....	2.07	47	May 4.....	4.60	550
Nov. 5.....	1.28	12	Mar. 4.....	2.04	50	May 9.....	3.35	213
Nov. 24.....	1.16	8.0	Mar. 10.....	2.13	57	May 17.....	3.75	311
Nov. 26.....	1.16	7.9	Mar. 11.....	2.15	57	May 27.....	2.97	145
Nov. 27.....	1.15	7.6	Mar. 12.....	2.25	55	June 3.....	2.78	125
Dec. 4.....	1.52	19	Mar. 13.....	2.48	83	June 6.....	2.45	89
Dec. 5.....	1.50	19	Mar. 14.....	2.64	103	June 21.....	1.71	29
Dec. 28.....	1.30	12	Mar. 21.....	2.63	108	June 26.....	1.51	17
Dec. 29.....	1.33	13	Mar. 22.....	2.65	111	July 5.....	1.30	11
Dec. 30.....	1.22	8.1	Mar. 24.....	3.43	228	July 19.....	1.05	5.0
Jan. 4.....	1.36	14	Mar. 31.....	3.11	173	Aug. 5.....	.87	2.2
Jan. 5.....	1.33	13	Apr. 6.....	4.08	400	Aug. 16.....	.81	1.5
Jan. 22.....	1.40	14	Apr. 7.....	3.55	281	Aug. 21.....	.81	1.8
Jan. 23.....	1.32	13	Apr. 13.....	5.13	729	Do.....	.80	1.8
Jan. 24.....	1.29	11	Apr. 14.....	5.20	732	Aug. 30.....	.76	1.6
Jan. 25.....	1.27	11	Apr. 15.....	4.79	631	Sept. 13.....	.74	1.1
Jan. 26.....	1.28	11	Apr. 20.....	4.27	439	Sept. 21.....	.75	1.2

* Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of Dinkey Creek at Dinkey Meadow, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.5	8	23	10	15	64	158	447	155	14	2.9	1.7
2.....	2.5	11	69	9.5	14	55	147	477	135	13	2.8	1.6
3.....	2.4	11	32	9	14	53	140	526	111	12	2.7	1.5
4.....	2.3	12	24	8	16	53	221	543	109	11	2.6	1.4
5.....	7	11	21	10	17	57	462	494	96	12	2.5	1.4
6.....	14	11	21	10	17	74	337	311	90	12	2.5	1.4
7.....	9.5	10	19	9.5	18	78	303	250	84	11	2.4	1.4
8.....	7	12	16	9	19	78	241	210	83	10	2.3	1.4
9.....	6	11	14	9	23	63	231	199	73	10	2.3	1.4
10.....	7	11	13	8.5	23	55	331	225	63	11	2.1	1.4
11.....	23	14	13	7.5	21	64	321	274	56	9.5	2.0	1.4
12.....	24	16	12	8	20	80	374	303	51	9	2.0	1.4
13.....	18	14	11	8	24	101	477	329	47	8	1.9	1.4
14.....	16	10	11	8	36	123	543	374	43	8	1.9	1.3
15.....	16	10	10	7	42	144	526	404	39	7	1.9	1.3
16.....	16	10	9.5	7	34	154	526	404	36	6.5	1.8	1.3
17.....	16	8	9	7	35	138	494	389	34	6	1.7	1.4
18.....	14	8	8.5	6.5	37	104	389	404	31	5.5	1.8	1.4
19.....	13	8	11	6.5	38	93	292	400	28	5	1.8	1.4
20.....	13	7	12	6	40	91	355	370	27	4.9	1.8	1.4
21.....	13	6.5	14	5.5	41	108	477	330	25	4.6	1.8	1.4
22.....	12	7	14	5.5	43	134	510	300	24	4.4	1.8	1.4
23.....	11	7	14	5.5	44	172	560	260	22	4.2	1.7	1.5
24.....	11	7.5	14	5.5	46	213	610	250	20	4.1	1.7	1.4
25.....	11	7.5	13	4.9	48	227	560	200	19	3.9	1.6	1.4
26.....	10	7	14	4.6	50	202	477	185	18	3.8	1.6	1.4
27.....	9.5	7	13	7	63	194	477	175	17	3.6	1.6	1.4
28.....	9	6.5	12	9.5	68	188	477	185	17	3.5	1.6	1.4
29.....	8.5	8	12	16	-----	182	462	187	16	3.4	1.6	1.4
30.....	8.5	10	11	12	-----	188	462	176	14	3.2	1.6	1.5
31.....	8	-----	10	15	-----	180	-----	167	-----	3.1	1.7	-----

*Monthly discharge of Dinkey Creek at Dinkey Meadow, Calif., for the year ending
September 30, 1926*

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	24	2.3	11.0	676
November.....	16	6.5	9.57	569
December.....	69	8.5	16.1	990
January.....	16	4.6	8.23	506
February.....	68	14	32.4	1,800
March.....	227	53	120	7,380
April.....	610	140	398	23,700
May.....	543	167	314	19,300
June.....	155	14	52.8	3,140
July.....	14	3.1	7.33	451
August.....	2.9	1.6	2.00	123
September.....	1.7	1.3	1.42	84.5
The year.....	610	1.3	81.1	58,700

DINKEY CREEK AT MOUTH, CALIFORNIA

LOCATION.—In sec. 3, T. 12 S., R. 26 E., half a mile above mouth of creek, Fresno County. Altitude, about 1,310 feet.

DRAINAGE AREA.—136 square miles.

RECORDS AVAILABLE.—January 6, 1920, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from a cable 1,500 feet below gage or by wading.

CHANNEL AND CONTROL.—Channel is solid rock, large boulders, and sand. Control formed by large boulders in the channel.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 8.58 feet at 9 p. m. April 24 (discharge, 1,510 second-feet); minimum stage, from water-stage recorder, 3.33 feet at 11 p. m. September 15 (discharge, 3.3 second-feet).

1920-1926: Maximum stage, from water-stage recorder, 10.57 feet at 4.30 p. m. November 9, 1924 (discharge, 3,360 second-feet); minimum stage, from water-stage recorder, 3.16 feet August 31, 1924 (discharge, 1.6 second-feet).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve fairly well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except January 29, 31, February 13-14, April 4-5, and 12-16, for which hourly discharge was averaged. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

*Discharge measurements of Dinkey Creek at mouth, California, during the year
ending September 30, 1926*

Date	Gage height	Dis- charge	Date	Gage height	Dis- charge	Date	Gage height	Dis- charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 1.....	4.14	37	Apr. 15.....	7.39	819	June 23.....	4.29	46
Feb. 28.....	4.95	111	Apr. 27.....	7.71	932	June 27.....	4.13	33
Apr. 13.....	8.20	1,240	May 7.....	6.59	496	July 18.....	3.73	14
Apr. 14.....	7.14	685	May 24.....	7.54	863	Sept. 4.....	3.36	3.8
Do.....	8.39	1,320	May 27.....	5.81	286			

Daily discharge, in second-feet, of Dinkey Creek at mouth, California, for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	16	26	21	39	112	272	750	237	29	8	3.9
2	7.5	18	132	20	35	102	239	770	210	28	7.5	3.8
3	7	25	68	21	55	100	228	895	183	26	7.5	3.6
4	7	22	48	16	41	96	311	895	170	26	7.5	3.5
5	10	21	40	19	39	96	906	895	158	25	7	3.5
6	37	22	40	19	38	105	630	592	142	26	6.5	3.5
7	28	22	35	18	37	130	558	475	133	25	6.5	3.5
8	20	22	32	17	37	136	650	415	140	23	6	3.4
9	17	22	29	18	40	120	445	335	125	23	6	3.4
10	15	21	26	17	45	99	540	440	111	24	6	3.4
11	31	21	25	16	48	100	558	475	99	23	5.5	3.4
12	58	32	25	15	70	120	598	522	91	22	5	3.4
13	44	28	21	15	115	154	788	540	85	20	5	3.4
14	33	22	16	16	92	192	918	575	78	19	4.9	3.4
15	34	20	18	17	65	228	917	610	73	17	4.6	3.4
16	34	20	20	14	79	250	901	630	69	15	4.3	3.4
17	33	18	20	18	52	250	820	592	66	16	4.0	3.5
18	31	17	25	16	51	176	690	592	61	14	4.0	3.6
19	26	17	20	14	52	156	505	592	59	13	4.3	3.7
20	25	17	22	11	70	143	558	558	56	12	4.6	3.7
21	24	16	26	14	59	167	770	505	53	12	4.9	3.6
22	23	16	27	14	53	204	845	460	50	12	4.3	3.7
23	22	16	27	14	51	268	895	400	46	11	4.0	3.7
24	21	17	25	14	52	342	980	385	42	11	3.8	3.6
25	20	18	27	14	58	385	980	305	40	11	3.7	3.5
26	20	18	27	13	72	342	845	280	37	10	3.7	3.4
27	18	17	26	12	90	318	770	265	35	9.5	3.7	3.4
28	18	16	26	14	102	305	795	280	35	9.5	3.7	3.4
29	17	16	23	51	-----	295	795	285	33	9.5	3.6	3.4
30	17	18	22	31	-----	302	770	270	31	9	3.6	3.4
31	17	-----	22	60	-----	305	-----	253	-----	8.5	3.8	-----

Monthly discharge of Dinkey Creek at mouth, California, for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	58	7	23.3	1,430
November	32	15	19.7	1,170
December	132	16	31.2	1,920
January	60	11	19.0	1,170
February	115	35	58.5	3,250
March	385	96	197	12,100
April	980	228	683	40,600
May	895	253	511	31,400
June	237	31	91.6	5,450
July	29	8.5	17.4	1,070
August	8	3.6	5.08	312
September	3.9	3.4	3.52	209
The year	980	3.4	138	100,000

DEER CREEK BELOW EAST FORK, CALIF.

LOCATION.—In sec. 6, T. 11 S., R. 27 E., about 200 feet below mouth of East Fork, Fresno County. Altitude, about 6,700 feet.

DRAINAGE AREA.—21 square miles.

RECORDS AVAILABLE.—October 1, 1923, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Channel is solid rock. Control is solid rock with a few crevices at the head of a series of rapids and falls. Gage is in a long deep pool. Banks are high and rocky; channel straight.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.89 feet at 5.30 p. m. May 3 (discharge, 396 second-feet); minimum stage, from water-stage recorder, 3.95 feet September 2-11 (discharge, 0.3 second-foot).

1923-1926: Maximum stage recorded, 6.54 feet at 1 p. m. November 9, 1924 (discharge, 650 second-feet); minimum stage recorded, 3.93 feet from 1 to 5 p. m. October 3, 1924 (discharge, 0.2 second-foot).

DIVERSIONS.—None.

REGULATION.—None.

ICE.—Stage-discharge relation seriously affected by ice November 5 to March 20.

ACCURACY.—Stage-discharge relation permanent except as affected by ice. Rating curve fairly well defined. Water-stage recorder record excellent. No record obtained December 13 to March 20. Daily discharge ascertained by applying mean daily gage height to rating table, except November 5-30, for which it was estimated from discharge measurements. Discharge not determined December 13 to March 20. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by San Joaquin Light & Power Corporation.

Discharge measurements of Deer Creek below East Fork, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 12.....	4.14	5.3	May 5.....	5.19	189	June 4.....	4.34	22
Oct. 21.....	4.11	5.1	May 8.....	4.82	73	June 7.....	4.30	20
Oct. 28.....	4.06	2.7	May 10.....	4.82	91	June 21.....	4.17	8.3
Nov. 6.....	4.13	3.6	Do.....	5.08	153	June 24.....	4.15	7.6
Nov. 18.....	4.13	2.7	May 11.....	4.81	88	July 21.....	4.05	2.0
Dec. 6.....	4.19	8.9	May 14.....	5.32	223	July 24.....	4.04	1.8
Mar. 25.....	4.68	65	May 15.....	4.89	99	July 31.....	4.02	1.4
Mar. 31.....	4.61	56	May 19.....	4.80	83	Aug. 9.....	3.99	.8
Apr. 13.....	4.84	87	Do.....	5.12	158	Aug. 16.....	3.98	.7
Apr. 16.....	5.06	130	May 20.....	4.76	82	Aug. 21.....	3.99	.8
Apr. 20.....	4.83	87	Do.....	5.07	140	Aug. 30.....	3.98	.6
Apr. 23.....	5.08	140	May 21.....	4.73	73	Sept. 10.....	3.97	.6
Apr. 26.....	5.34	221	May 26.....	4.59	51	Sept. 24.....	3.97	.6
May 5.....	5.18	159	June 3.....	4.37	27	Do.....	3.97	.5

* Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of Deer Creek below East Fork, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.1	1.7	13	-----	47	188	31	5	0.9	0.4
2.....	1.1	2.5	19	-----	41	190	28	5	.9	.4
3.....	1.1	3.0	12	-----	44	222	25	5	.9	.4
4.....	1.1	4.0	10	-----	54	216	24	4.5	.9	.4
5.....	3.0	5	10	-----	72	195	20	4.5	.9	.4
6.....	6	5	10	-----	67	116	19	4.5	.9	.4
7.....	5	4.5	10	-----	58	91	19	4.5	.7	.4
8.....	4.5	3.0	8.5	-----	45	77	20	4.5	.7	.4
9.....	3.0	2.0	7	-----	51	75	17	4.5	.7	.4
10.....	3.0	1.3	6.5	-----	77	89	15	4.5	.7	.4
11.....	8.5	2.0	6.5	-----	77	106	14	4.0	.7	.4
12.....	8.5	2.0	6.5	-----	91	112	13	3.5	.7	.4
13.....	6.5	1.5	-----	-----	142	116	12	3.5	.7	.4
14.....	6.5	1.7	-----	-----	176	125	11	3.5	.6	.5
15.....	8	2.0	-----	-----	190	123	11	3.5	.6	.5

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER 153

Daily discharge, in second-feet, of Deer Creek below East Fork, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
16.....	9	1.5	-----	-----	190	123	11	3.0	0.6	0.5
17.....	9	1.1	-----	-----	150	112	10	2.5	.6	.5
18.....	7	1.5	-----	-----	112	114	10	2.5	.6	.6
19.....	6	1.7	-----	-----	89	108	10	2.0	.7	.6
20.....	6	1.7	-----	-----	120	96	9.5	2.0	.7	.6
21.....	4.5	2.0	-----	39	182	84	9.5	2.0	.7	.6
22.....	4.0	2.0	-----	37	190	75	9	1.7	.6	.6
23.....	3.5	1.5	-----	49	216	66	8.5	1.7	.5	.6
24.....	3.0	1.1	-----	67	228	69	8	1.7	.5	.5
25.....	3.0	1.1	-----	75	219	58	7	1.5	.6	.5
26.....	3.0	1.1	-----	69	182	51	6.5	1.5	.6	.5
27.....	2.5	1.1	-----	59	176	49	6.5	1.3	.6	.5
28.....	2.0	1.1	-----	55	196	47	6.5	1.3	.5	.5
29.....	2.0	1.1	-----	55	182	43	6	1.1	.5	.4
30.....	2.0	1.7	-----	58	185	39	6	1.1	.6	.4
31.....	1.7	-----	-----	55	-----	36	-----	1.1	.5	-----

NOTE.—No record Dec. 13 to Mar. 20, because of ice and snow.

Monthly discharge of Deer Creek below East Fork, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	9	1.1	4.36	268
November.....	5	1.1	2.08	124
December 1-12.....	19	6.5	9.52	236
March 21-31.....	75	37	56.2	1,230
April.....	228	41	128	7,620
May.....	222	36	104	6,400
June.....	31	6	13.4	797
July.....	5	1.1	2.58	183
August.....	.9	.5	.67	41.2
September.....	.6	.4	.47	28.0

SAN JOAQUIN RIVER BASIN

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER

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

LOCATION.—In sec. 36, T. 7 S., R. 27 E., Fresno County, just below spillway of Florence Lake Dam, about 1 mile below intake of Florence Lake Tunnel and 6 miles above mouth of Bear Creek. Altitude, about 7,200 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 29, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on left bank.

DISCHARGE MEASUREMENTS.—Made from cable one-third mile below gage or by wading.

CHANNEL AND CONTROL.—Solid granite and boulders at gage. Control is a low concrete dam, subject to slight erosion; one channel; banks not subject to overflow. Earth banks and smooth gravel bottom at cable.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.99 feet at 4 a. m. May 22 (discharge, 764 second-feet); minimum stage, 7.80 feet December 16-17 (stream practically dry, owing to diversion above).

1921-1926: Maximum stage, from water-stage recorder, 13.75 feet at 10 p. m. June 4, 1922 (discharge, 3,460 second-feet); minimum stage August 30 and September 2-7, 1924, and December 16-17, 1925 (stream practically dry).

ICE.—Stage-discharge relation not seriously affected by ice.

DIVERIONS.—Beginning April 13, 1925, most of the flow of South Fork of San Joaquin River has been diverted half a mile above the gage by Florence Lake Tunnel (see p. 163) to Huntington Lake on Big Creek.

REGULATION.—Flow regulated by storage in Florence Lake. Storage in Florence Lake was 78.9 acre-feet at midnight of September 30, 1926.

ACCURACY.—Stage-discharge relation changed in May, when part of spillway flow from new Florence Lake Dam passed around station. Rating curves well defined. Water-stage recorder record excellent except April 1, 7-8, and September 14, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table except April 10-16 and 23-25, for which integrator was used, and May 17-25, for which hourly discharge was averaged. Discharge estimated for June 4-7 and August 9-30, when control was partly obstructed, and for periods of no gage-height record. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of South Fork of San Joaquin River near Florence Lake, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 15.....	7.85	0.1	May 22.....	10.87	673	June 29.....	7.95	0.9
Jan. 30.....	7.90	.4	Do.....	10.60	530	July 29.....	7.94	1.1
Feb. 7.....	7.95	1.5	May 23.....	10.81	681	Aug. 31.....	7.93	.8
May 20.....	9.76	222	Do.....	10.21	382	Sept. 13.....	8.20	10
May 21.....	10.48	503	Do.....	10.18	377			
Do.....	10.56	531	May 25.....	8.85	57			

Daily discharge, in second-feet, of South Fork of San Joaquin River near Florence Lake, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.1	0.2	0.7	0.2	2.1	0.4	4.4	0.7	1.4	1.4	1.2	1.0
2.....	.1	.2	.4	.3	2.4	.4	4.0	.7	1.7	1.4	1.2	1.0
2.....	.1	.2	.3	.2	2.4	.4	3.6	.7	1.9	1.2	1.0	1.0
4.....	.1	.2	.2	.2	2.6	1.0	3.6	.7	1.9	1.2	1.2	1.0
5.....	.3	.1	.3	.2	3.6	1.5	4.7	.7	1.8	1.2	1.2	1.0
6.....	.4	.2	.2	.2	4.7	1.0	3.2	.7	1.8	1.2	1.2	1.0
7.....	.2	.2	.2	.2	2.1	.4	2.7	1.0	1.7	1.2	1.2	1.0
8.....	.3	.2	.2	.2	.4	.4	2.2	1.0	1.7	1.2	1.2	1.0
9.....	.3	.2	.2	.2	.3	.4	1.8	1.0	1.4	1.4	1.2	1.2
10.....	.4	.2	.2	.2	.3	.4	46	1.0	1.4	1.0	1.2	1.2
11.....	.4	.2	.2	.3	.3	.4	334	1.2	1.4	.8	1.1	1.2
12.....	.3	.3	.2	.3	.3	.4	230	1.5	1.4	.8	1.1	1.2
13.....	.3	.3	.2	.3	.4	.7	263	1.5	1.4	.8	1.1	6.5
14.....	.2	.3	.1	.3	3.2	.4	294	1.5	1.4	.8	1.1	8
15.....	.2	.3	.0	.3	10	.4	52	1.5	1.4	.8	1.1	2.3
16.....	.2	.3	.0	.3	16	.7	32	1.8	1.4	1.0	1.0	2.3
17.....	.3	.7	.0	.3	4.3	.4	5	7.5	1.4	1.0	1.0	2.3
18.....	.3	1.5	.0	.3	.4	.4	2.6	8	1.4	1.0	1.0	2.1
19.....	.4	1.5	.1	.3	.4	.4	1.0	90	1.4	1.0	1.0	1.9
20.....	.4	.3	.1	.3	.4	.4	.3	216	1.4	1.0	1.0	1.9
21.....	.7	.2	.1	.3	1.2	.4	.3	490	1.4	1.0	.9	2.1
22.....	.3	.2	.2	.3	2.6	.7	1.0	643	1.4	1.0	.9	1.7
23.....	.2	.1	.1	.3	.7	2.4	19	469	1.4	1.0	.9	1.4
24.....	.2	.1	.1	.3	.4	9	242	314	1.7	1.2	.9	1.4
25.....	.2	.1	.1	.3	.7	17	138	93	1.7	1.2	.9	1.4
26.....	.2	.1	.2	.3	2.1	11	2.1	1.7	1.4	1.2	.8	1.7
27.....	.2	.1	.2	.3	2.1	6.5	1.8	1.0	1.4	1.2	.8	1.7
28.....	.2	.1	.2	.4	.4	7	1.2	1.2	1.4	1.2	.8	1.7
29.....	.2	.2	.2	1.0	7.5	1.2	1.2	1.2	1.4	1.2	.8	1.8
30.....	.2	.3	.2	.7	5.5	1.0	1.2	1.2	1.4	1.2	.8	1.8
31.....	.1		.4	1.5		4.7		1.2		1.2	.8	

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER 155

Monthly discharge of South Fork of San Joaquin River near Florence Lake, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	0.7	0.1	0.26	16.0
November.....	1.5	.1	.30	17.9
December.....	.7	0	.19	11.7
January.....	1.5	.2	.35	21.5
February.....	16	.3	2.39	133
March.....	17	.4	2.66	164
April.....	334	.3	56.6	3,370
May.....	643	.7	76.0	4,670
June.....	1.9	1.4	1.51	89.8
July.....	1.4	.8	1.10	67.6
August.....	1.2	.8	1.02	62.7
September.....	8	1.0	1.90	113
The year.....	643	0	12.1	8,740

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

LOCATION.—In sec. 8, T. 6 S., R. 26 E., unsurveyed, about 2 miles above Hoffman Creek and 3 miles east of Hoffman Meadow, Fresno County. Altitude, about 5,100 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 17, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in masonry well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cables 100 feet and 150 feet respectively below gage.

CHANNEL AND CONTROL.—Rough; boulders on bedrock; practically permanent; one channel at bottom of 2,000-foot canyon.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 12.36 feet at 1 a. m. May 22 (discharge, 2,450 second-feet); minimum stage, from water-stage recorder, 5.24 feet at 9 a. m. December 14 (discharge, 21 second-feet).

1921-1926: Maximum stage, from water-stage recorder, 15.21 feet at 2 a. m. June 5, 1922 (discharge, 5,930 second feet); minimum stage recorded, 5.24 feet at 9 a. m. December 14, 1925 (discharge, 21 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—Beginning April 13, 1925, most of the flow of South Fork of San Joaquin River has been diverted by Florence Lake Tunnel (see p. 163) into Huntington Lake on Big Creek.

REGULATION.—Flow regulated at Florence Lake diversion dam.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except April 9, July 10, and September 15, for which hourly discharge was averaged. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of South Fork of San Joaquin River near Hoffman Meadow, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 5.....	6.07	49	Mar. 11.....	7.02	123	July 18.....	7.32	187
Nov. 2.....	6.09	61	Apr. 9.....	8.40	315	Aug. 12.....	6.20	48
Dec. 1.....	6.19	67	May 15.....	9.86	781	Sept. 4.....	5.67	35
Jan. 13.....	5.44	25	June 4.....	9.68	750			
Feb. 16.....	6.63	95	June 24.....	8.48	373			

Daily discharge, in second-feet, of South Fork of San Joaquin River near Hoffman Meadow, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	52	64	50	51	146	250	975	1,080	250	80	35
2	48	55	100	49	52	141	253	1,050	1,060	234	78	33
3	46	52	72	52	53	136	266	1,280	1,050	218	78	32
4	44	46	67	39	55	140	223	1,430	790	211	74	31
5	51	42	80	51	62	164	593	1,470	875	211	77	31
6	73	58	78	46	71	184	564	975	850	242	78	30
7	74	60	67	46	84	184	518	750	750	204	83	29
8	68	62	62	43	102	175	473	615	830	187	86	29
9	64	55	58	49	96	168	501	548	925	182	81	29
10	64	53	55	44	93	146	632	533	750	323	74	29
11	69	55	60	42	84	147	900	548	690	302	70	29
12	83	60	62	39	80	162	850	632	615	311	64	28
13	74	53	41	41	77	176	810	770	580	250	60	28
14	71	40	38	44	81	211	1,130	900	548	218	55	28
15	72	57	53	45	84	242	1,000	1,130	473	190	53	48
16	71	63	60	36	96	242	1,050	1,370	417	180	50	31
17	69	48	57	46	100	242	950	1,430	392	174	49	28
18	67	47	55	35	107	197	810	1,470	380	165	48	28
19	65	52	42	31	103	197	670	1,750	380	154	48	28
20	64	50	54	46	101	211	670	1,890	369	141	47	27
21	62	48	64	44	90	218	770	1,970	369	129	47	26
22	60	49	64	43	92	211	900	2,130	380	121	46	27
23	60	55	62	38	90	242	1,000	1,820	380	114	45	29
24	60	53	55	39	92	302	1,340	1,370	358	107	43	28
25	58	52	61	35	99	320	1,400	975	338	102	41	25
26	56	50	58	36	113	302	1,100	710	329	97	40	25
27	55	49	56	36	128	275	1,160	710	320	94	40	25
28	54	48	55	38	141	275	1,100	790	302	91	38	25
29	54	48	52	76	-----	266	1,220	790	293	87	38	25
30	53	54	52	58	-----	258	1,130	875	296	83	38	25
31	53	-----	49	50	-----	284	-----	1,000	-----	81	37	-----

Monthly discharge of South Fork of San Joaquin River near Hoffman Meadow, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	83	44	61.6	3,790
November	63	40	52.2	3,110
December	100	38	59.8	3,680
January	76	31	44.1	2,710
February	141	51	88.5	4,920
March	320	136	212	13,000
April	1,400	250	810	48,200
May	2,130	533	1,120	68,900
June	1,080	266	572	34,000
July	323	81	176	10,800
August	86	37	57.6	3,540
September	48	25	29.0	1,730
The year	2,130	25	274	198,000

SAN JOAQUIN RIVER ABOVE BIG CREEK, CALIF.

LOCATION.—In sec. 11, T. 8 S., R. 24 E., Fresno County, 3 miles above mouth of Big Creek and 7 miles below mouth of Chiquito Creek. Altitude, about 2,500 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—March 25, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 200 feet below gage.

CHANNEL AND CONTROL.—Rough; boulder, gravel, and sand bottom; practically permanent. One channel at all stages; banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 14.74 feet at 3 a. m. May 5 (discharge, 8,700 second-feet); minimum stage, from water-stage recorder, 6.68 feet at 3 p. m. September 28 (discharge, 82 second-feet).

1922–1926: Maximum stage, from water-stage recorder, 17.34 feet at 1 a. m. June 5, 1922 (discharge, 18,000 second-feet); minimum stage, from water-stage recorder, 6.68 feet at 3 p. m. September 28, 1926 (discharge, 82 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—Beginning April 13, 1925, a large part of the flow of South Fork of San Joaquin River has been diverted by Florence Lake Tunnel (see p. 163) to Huntington Lake on Big Creek.

REGULATION.—Flow of South Fork of San Joaquin River is regulated at Florence Lake.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Water-stage recorder record good, except January 3–7, March 24–31, April 1–6, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table. During periods of no gage-height record discharge estimated by comparison with flow of tributaries. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of San Joaquin River above Big Creek, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 10.....	7.28	186	Feb. 24.....	8.20	463	June 8.....	11.02	2,120
Oct. 24.....	7.61	272	Mar. 6.....	9.16	925	July 9.....	8.21	459
Nov. 7.....	7.38	204	Mar. 20.....	9.36	1,000	Aug. 3.....	7.42	228
Nov. 21.....	7.18	161	Apr. 9.....	10.79	1,880	Aug. 18.....	7.05	152
Dec. 5.....	7.72	204	Apr. 15.....	13.28	5,170	Aug. 31.....	6.91	120
Dec. 24.....	7.45	224	Apr. 21.....	12.68	4,160	Sept. 2.....	6.87	110
Jan. 8.....	7.13	154	Apr. 30.....	13.17	4,970	Sept. 28.....	6.68	81
Jan. 20.....	6.84	104	May 12.....	11.70	2,760			
Feb. 10.....	8.02	394	May 21.....	13.33	5,270			

Daily discharge, in second-feet, of San Joaquin River above Big Creek, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	151	203	215	181	334	720	1,790	4,560	3,240	645	208	115
2.....	144	205	478	183	286	695	1,420	5,100	3,000	698	210	112
3.....	139	212	412	185	466	645	1,450	6,140	2,390	562	210	107
4.....	134	203	310	149	462	645	1,480	6,580	2,240	522	203	105
5.....	144	195	295	178	443	720	1,640	6,580	2,290	506	197	105
6.....	205	193	310	163	387	845	2,860	4,080	2,290	557	199	105
7.....	215	210	295	164	337	870	2,640	3,000	2,020	518	201	105
8.....	203	205	265	155	387	895	3,240	2,390	2,240	478	201	104
9.....	193	212	250	155	398	845	2,190	2,140	2,580	466	199	104
10.....	183	199	240	159	394	720	2,760	2,100	2,140	645	189	104
11.....	201	205	218	153	432	695	3,380	2,390	1,820	720	181	102
12.....	289	235	225	149	522	720	3,120	2,760	1,640	970	173	102
13.....	283	235	208	140	510	795	3,940	3,240	1,500	695	163	99
14.....	272	208	159	142	566	945	4,740	3,800	1,400	598	158	98
15.....	275	189	155	147	518	1,110	5,500	4,400	1,260	510	151	94

Daily discharge, in second-feet, of San Joaquin River above Big Creek, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
16.....	286	208	185	153	645	1,280	5,500	5,100	1,140	458	145	109
17.....	317	205	193	140	490	1,290	5,100	5,300	1,050	440	142	102
18.....	328	181	203	159	494	1,050	3,800	5,100	1,020	422	139	96
19.....	314	181	205	136	494	945	3,000	5,700	995	401	139	94
20.....	304	179	187	120	598	970	3,520	5,920	970	366	141	93
21.....	298	179	205	138	526	1,020	4,400	5,500	945	338	141	90
22.....	283	173	228	155	466	995	5,100	5,500	945	314	141	90
23.....	272	173	228	159	454	1,110	5,500	4,740	945	298	137	88
24.....	262	187	225	147	446	1,370	6,360	3,660	920	283	133	90
25.....	252	183	212	145	506	1,860	6,580	2,760	870	270	131	90
26.....	240	177	218	140	598	1,830	5,920	2,240	820	262	128	86
27.....	232	177	215	136	645	1,710	6,140	2,290	795	250	125	83
28.....	228	175	212	151	670	1,620	5,700	2,640	770	240	123	83
29.....	220	169	203	518	-----	1,680	5,920	2,640	745	230	121	83
30.....	220	177	193	298	-----	1,640	5,100	2,760	695	220	118	83
31.....	210	-----	187	359	-----	1,610	-----	3,000	-----	210	118	-----

Monthly discharge of San Joaquin River above Big Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	328	134	235	14,400
November.....	235	169	194	11,500
December.....	478	155	237	14,600
January.....	518	120	176	10,800
February.....	670	286	483	26,800
March.....	1,860	645	1,090	67,000
April.....	6,580	1,420	3,990	237,000
May.....	6,580	2,100	4,000	246,000
June.....	3,240	695	1,530	91,000
July.....	970	210	451	27,700
August.....	210	118	160	9,840
September.....	115	83	97.4	5,800
The year.....	6,580	83	1,050	762,000

SAN JOAQUIN RIVER NEAR FRIANT, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 5, T. 11 S., R. 21 E., $1\frac{1}{2}$ miles northeast of Friant, Fresno County.

DRAINAGE AREA.—1,640 square miles at old site 2 miles upstream.

RECORDS AVAILABLE.—October 18, 1907, to September 30, 1926.

GAGE.—Water-stage recorder on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 300 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed consists of sand and gravel. Control is a rock outcrop about 500 feet below gage.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.90 feet at 1 p. m. May 5 (discharge, 9,150 second-feet); minimum stage, from water-stage recorder, about 2.30 feet at 4 a. m. January 18 (discharge, 52 second-feet).

1907-1926: Maximum stage recorded, 21.72 feet at 11.30 p. m. January 25, 1914 (discharge, from extension of rating curve, about 46,200 second-feet); minimum stage recorded, 2.20 feet from 9 a. m. to 2 p. m. September 15, 1924 (discharge, 44 second-feet).

DIVERSIONS.—None.

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER 159

REGULATION.—Storage is developed for power at Huntington Lake on Big Creek, at Crane Valley Reservoir on North Fork Creek, a small amount on Stevenson Creek at Shaver and at Florence Lake. Operation of power plant at Kerekhoff causes considerable diurnal fluctuation.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined between 40 and 16,000 second-feet and extended above. Water-stage recorder record excellent except November 7–17, when clock stopped. Daily discharge ascertained with a discharge integrator. Mean discharge estimated for November 7–17. Records excellent.

Discharge measurements of San Joaquin River near Friant, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Mar. 25.....	6.22		June 19.....	6.20	1,640	Sept. 20.....	3.62	311
Mar. 30.....	6.60	2,030						

Daily discharge, in second-feet, of San Joaquin River near Friant, Calif., for the year ending September, 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	605	528	676	720	880	790	2,110	5,440	4,770	1,340	440	518
2.....	592	740	710	447	760	1,100	1,970	5,590	4,360	1,520	385	742
3.....	614	573	950	279	555	1,160	1,880	6,520	3,740	1,060	855	690
4.....	418	682	721	338	680	865	1,890	7,080	3,080	830	755	636
5.....	598	662	642	409	940	995	3,510	7,640	3,060	1,000	785	524
6.....	669	904	479	832	760	1,120	4,980	5,260	3,310	1,380	745	608
7.....	534		714	667	590	1,220	3,810	3,860	3,520	1,200	620	649
8.....	516		661	578	580	1,300	6,140	3,240	3,340	1,200	570	498
9.....	568		690	500	630	1,400	4,020	2,720	3,910	1,040	340	390
10.....	671		769	329	690	1,480	3,450	2,580	3,600	950	920	620
11.....	630		677	376	575	1,280	3,820	3,220	2,910	1,060	735	616
12.....	599		642	478	765	1,010	4,080	3,240	2,790	930	740	457
13.....	490		440	504	1,620	1,080	4,430	3,830	2,340	1,400	765	516
14.....	462		586	426	3,460	1,260	5,440	4,270	2,410	1,180	760	698
15.....	719		673	384	1,760	1,250	5,990	4,790	2,260	895	525	654
16.....	685		700	252	1,540	1,470	6,340	5,540	2,060	1,100	705	562
17.....	663		680	144	1,540	1,660	6,420	5,880	1,900	1,060	890	601
18.....	465	612	858	112	880	1,720	4,380	5,650	1,690	840	650	602
19.....	668	620	839	238	835	1,700	4,020	6,430	1,680	650	610	490
20.....	652	648	654	280	1,340	1,360	3,820	6,700	1,680	930	600	602
21.....	626	635	666	314	1,420	1,300	4,860	6,560	1,420	885	570	612
22.....	813	445	576	307	1,040	1,480	5,580	6,900	1,600	860	480	588
23.....	829	691	768	224	785	1,640	5,760	6,900	1,660	815	495	612
24.....	793	714	630	344	1,180	1,570	6,700	5,720	1,600	735	655	656
25.....	582	740	462	241	950	1,720	7,040	4,580	1,470	540	650	550
26.....	716	507	638	327	885	2,070	6,910	4,040	1,500	460	600	426
27.....	756	850	576	279	855	2,110	6,500	3,820	1,220	750	790	570
28.....	749	726	608	348	1,060	2,020	6,700	4,060	1,260	920	645	623
29.....	752	556	527	550	-----	1,880	6,680	4,170	1,280	780	610	580
30.....	652	666	668	809	-----	2,040	5,950	4,160	1,420	775	450	710
31.....	669	-----	706	470	-----	1,930	4,570	-----	-----	580	510	-----

NOTE.—No gage-height record Nov. 7–17. Braced figures represent estimated mean discharge for the period indicated.

*Monthly discharge of San Joaquin River near Friant, Calif., for the year ending
September 30, 1926*

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	829	418	637	39, 200
November.....			654	38, 900
December.....	950	440	664	40, 800
January.....	832	122	403	24, 800
February.....	3, 480	555	1, 050	53, 300
March.....	2, 110	790	1, 450	89, 200
April.....	7, 040	1, 880	4, 840	288, 000
May.....	7, 640	2, 580	5, 000	307, 000
June.....	4, 770	1, 220	2, 430	145, 000
July.....	1, 520	460	957	58, 800
August.....	920	340	639	39, 300
September.....	742	390	586	34, 900
The year.....	7, 640	112	1, 610	1, 160, 000

SAN JOAQUIN RIVER NEAR NEWMAN, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 3, T. 7 S., R. 9 E., at drawbridge on Hill's Ferry road, 300 feet below mouth of Merced River and $3\frac{1}{2}$ miles northeast of Newman, Stanislaus County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—April 29, 1912, to September 30, 1926.

GAGE.—Vertical staff fastened to upstream side of downstream support of draw span, 60 feet below bridge, in middle of stream. Gage read by Rasmus Lorenson.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Sand and small gravel; shifting. Banks subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 10.60 feet at 5 p. m. April 9 (discharge, 7,300 second-feet); minimum stage recorded, 1.42 feet at 7 a. m. August 21 (discharge, 57 second-feet).

1912-1926: Maximum stage recorded, 18.0 feet at 9 a. m. January 27, 1914 (discharge, 20,700 second-feet); minimum stage recorded, 0.88 foot August 9 and 10, 1924 (discharge, 15 second-feet).

DIVERSIONS.—Practically 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.

REGULATION.—Storage is developed for power at Huntington Lake on Big Creek, at Crane Valley Reservoir on North Fork Creek, a small amount on Stevenson Creek at Shaver and on South Fork of San Joaquin River at Florence Lake; also at Lake McClure on Merced River.

ACCURACY.—Stage-discharge relation not permanent. Rating curve well defined. Staff gage read to hundredths twice daily. Daily discharge ascertained by shifting-control method. Records good.

*Discharge measurements of San Joaquin River near Newman, Calif., during the
year ending September 30, 1926*

Date	Gage height	Dis- charge	Date	Gage height	Dis- charge	Date	Gage height	Dis- charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 2.....	2.12	126	Mar. 23.....	3.70	701	June 18.....	4.05	764
Nov. 11.....	2.95	343	Mar. 31.....	3.31	567	Sept. 25.....	1.49	86
Jan. 30.....	3.03	430	Apr. 14.....	9.13	4, 710			

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER 161

Daily discharge, in second-feet, of San Joaquin River near Newman, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	120	282	500	690	840	990	540	3,230	2,250	395	97	98
2.....	124	295	560	690	1,620	990	580	3,050	2,170	380	108	89
3.....	150	308	560	690	1,090	1,040	520	2,960	2,170	350	102	87
4.....	142	320	790	690	1,620	1,040	560	2,870	2,170	335	90	98
5.....	146	320	890	690	1,620	1,040	790	2,870	2,010	308	87	100
6.....	148	320	665	790	1,620	990	2,420	2,780	1,930	282	87	98
7.....	148	335	665	790	1,340	990	5,740	2,690	1,850	258	89	102
8.....	148	335	690	740	1,150	1,040	5,010	2,780	1,690	258	87	77
9.....	142	335	740	690	1,040	1,090	6,780	3,050	1,340	245	86	81
10.....	146	350	740	640	940	1,210	6,000	3,050	1,090	232	90	92
11.....	160	350	740	620	940	1,090	5,370	2,690	1,090	232	87	94
12.....	180	365	665	640	1,270	990	5,370	2,250	990	232	98	98
13.....	196	395	640	665	3,320	940	4,890	1,690	990	210	89	87
14.....	182	425	620	640	5,010	890	4,770	1,550	990	198	92	80
15.....	174	440	620	620	6,520	890	4,660	1,340	940	186	92	66
16.....	198	460	620	600	4,220	840	4,770	1,270	890	178	90	67
17.....	245	460	620	560	3,500	790	5,130	1,270	790	170	86	77
18.....	245	460	690	540	2,960	790	5,490	1,340	740	168	80	69
19.....	258	480	740	520	2,870	840	5,250	1,480	740	160	74	74
20.....	258	440	740	480	2,330	840	4,770	1,770	690	154	64	80
21.....	270	425	790	480	2,090	740	4,330	2,010	690	152	62	83
22.....	282	410	790	460	1,660	690	3,700	2,170	640	136	83	84
23.....	282	425	790	440	1,340	690	4,440	2,420	580	134	84	87
24.....	270	440	790	410	1,210	620	4,220	2,690	520	138	83	77
25.....	270	460	790	395	1,150	600	4,110	2,780	520	138	89	83
26.....	270	480	790	365	1,090	665	4,440	2,960	480	138	92	83
27.....	270	480	740	365	1,040	740	4,770	3,050	460	140	100	84
28.....	270	480	740	350	990	790	4,660	3,050	440	116	100	100
29.....	258	480	740	395	-----	665	4,110	2,870	425	95	112	92
30.....	270	460	740	425	-----	580	3,600	2,510	395	95	124	92
31.....	270	-----	740	1,040	-----	560	-----	2,380	-----	95	118	-----

Monthly discharge of San Joaquin River near Newman, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	282	120	209	12,900
November.....	480	282	400	23,800
December.....	890	500	708	43,500
January.....	1,040	350	584	35,900
February.....	6,520	840	2,020	112,000
March.....	1,210	560	860	52,900
April.....	6,780	520	4,060	242,000
May.....	3,230	1,270	2,410	148,000
June.....	2,250	395	1,090	64,900
July.....	395	95	203	12,500
August.....	124	62	91.0	5,600
September.....	102	66	86.0	5,120
The year.....	6,780	62	1,050	759,000

SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.

LOCATION.—At Durham Ferry highway bridge, about 3½ miles northeast of Vernalis, San Joaquin County.

RECORDS AVAILABLE.—July 29, 1922, to September 30, 1926 (low-water records only).

GAGE.—Water-stage recorder on right bank attached to bridge piling.

DISCHARGE MEASUREMENTS.—Made from bridge or boat 500 feet below bridge.

CHANNEL AND CONTROL.—Shifting sand; control is cross section and slope of channel.

DIVERSIONS.—Practically all water is diverted from tributaries and main river above station during low water. This record shows amount of return water at low stages.

REGULATION.—See preceding paragraph.

ACCURACY.—Stage-discharge relation not permanent. Water-stage recorder record excellent except November 1-5, 21-28, December 7-10, and January 22. Daily discharge ascertained by shifting-control method in connection with two standard rating curves. Daily discharge not ascertained for high-water period January 29 to May 27. Records good.

Discharge measurements of San Joaquin River near Vernalis, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 2.....	5.42	1,420	Dec. 30.....	7.06	2,140	July 17.....	4.36	706
Oct. 9.....	5.52	1,390	Jan. 8.....	6.82	2,080	July 25.....	4.18	616
Oct. 17.....	5.85	1,600	Jan. 15.....	6.61	1,970	July 30.....	4.12	634
Oct. 25.....	6.43	1,840	Jan. 23.....	6.14	1,660	Aug. 6.....	3.92	575
Oct. 31.....	6.55	1,950	Jan. 30.....	6.04	1,660	Aug. 13.....	4.04	638
Nov. 5.....	6.72	2,070	Mar. 31.....	6.08	1,880	Aug. 20.....	3.96	581
Nov. 15.....	6.81	2,330	June 5.....	8.19	2,890	Aug. 27.....	4.03	606
Nov. 21.....	6.72	2,260	June 12.....	7.53	2,350	Sept. 3.....	4.22	645
Nov. 28.....	6.61	2,150	June 19.....	6.24	1,570	Sept. 10.....	4.52	806
Dec. 4.....	7.02	2,560	June 26.....	5.48	1,180	Sept. 17.....	4.72	930
Dec. 13.....	7.70	3,570	July 3.....	5.05	1,030	Sept. 25.....	4.05	560
Dec. 22.....	7.03	2,700	July 10.....	4.62	809			

Daily discharge, in second-feet, of San Joaquin River near Vernalis, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	May	June	July	Aug.	Sept.
1.....	1,320	1,910	2,260	2,400	-----	3,250	1,020	595	612
2.....	1,420	1,930	2,330	2,470	-----	3,180	1,000	595	612
3.....	1,420	1,960	2,400	2,540	-----	3,110	980	595	630
4.....	1,380	1,990	2,540	2,510	-----	2,900	980	595	665
5.....	1,350	2,020	2,610	2,470	-----	2,830	960	595	700
6.....	1,350	2,050	2,610	2,190	-----	2,690	920	580	718
7.....	1,350	2,050	2,610	2,120	-----	2,550	840	580	735
8.....	1,350	2,050	2,610	2,050	-----	2,480	805	595	752
9.....	1,380	2,120	2,610	2,020	-----	2,410	805	612	752
10.....	1,350	2,120	2,610	1,980	-----	2,270	805	630	788
11.....	1,350	2,190	3,660	1,940	-----	3,040	822	612	822
12.....	1,420	2,190	3,590	1,910	-----	2,340	822	612	900
13.....	1,460	2,190	3,590	1,880	-----	2,140	805	630	920
14.....	1,490	2,260	3,520	1,940	-----	2,020	788	630	920
15.....	1,520	2,330	3,380	1,980	-----	1,900	770	612	900
16.....	1,560	2,330	3,310	1,880	-----	1,780	735	612	900
17.....	1,560	2,330	3,310	1,800	-----	1,720	718	595	920
18.....	1,520	2,290	3,240	1,800	-----	1,600	700	595	920
19.....	1,690	2,260	3,100	1,800	-----	1,600	700	580	920
20.....	1,630	2,260	3,030	1,800	-----	1,540	682	580	920
21.....	1,740	2,250	2,960	1,770	-----	1,490	665	580	900
22.....	1,840	2,240	2,680	1,700	-----	1,490	648	580	880
23.....	1,910	2,230	2,470	1,530	-----	1,390	648	580	700
24.....	1,910	2,220	2,470	1,630	-----	1,340	648	595	612
25.....	1,840	2,220	2,610	1,600	-----	1,240	665	595	565
26.....	1,700	2,210	2,540	1,600	-----	1,190	665	580	580
27.....	1,800	2,200	2,470	1,560	-----	1,160	648	612	580
28.....	1,880	2,190	2,610	1,560	4,140	1,160	648	595	580
29.....	1,910	2,190	2,680	-----	3,740	1,120	648	595	580
30.....	1,910	2,260	2,190	-----	3,600	1,040	648	612	595
31.....	1,880	-----	2,260	-----	3,460	-----	630	648	-----

Monthly discharge of San Joaquin River near Vernalis, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1,910	1,320	1,580	97,200
November.....	2,330	1,910	2,176	129,000
December.....	3,660	2,190	2,800	172,009
January 1-28.....	2,540	1,560	1,950	108,000
May 28-31.....	4,140	3,460	3,740	29,700
June.....	3,250	1,040	2,000	119,000
July.....	1,020	630	768	47,200
August.....	665	580	601	37,000
September.....	920	565	753	44,800

FLORENCE LAKE TUNNEL AT INTAKE, CALIFORNIA

LOCATION.—In NW. $\frac{1}{4}$ sec. 1, T. 8 S., R. 27 E., Fresno County, at entrance of tunnel. Altitude about 7,250 feet.

RECORDS AVAILABLE.—April 13, 1925, to September 30, 1926.

EQUIPMENT.—A Venturi meter with entrance diameter of 13 feet $1\frac{1}{2}$ inches and throat diameter of 5 feet 3 inches is installed in the tunnel above the cylindrical intake gate. The indicator and graphical recording device are installed in gate house. For obtaining a record of flow when the Venturi meter is not running full a water-stage recorder registers the head on a concrete control constructed in the tunnel about 1,000 feet below intake gates. Before October 7, 1925, the artificial control was about 75 feet below gate shaft. From October 1 to November 18, 1925, and September 11-30, 1926, a water-stage recorder was located temporarily outside the tunnel entrance. Discharge measurements made by wading or from cable at the ditch leading to the tunnel intake.

CHANNEL AND CONTROL.—Control is a concrete wall built across rectangular-lined section of tunnel, with an iron rail embedded in top of wall; situated about 1,000 feet below intake gate. A Venturi meter above the intake gate is used for obtaining discharge at high stages.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during 1925 and 1926, 1,990 second-feet April 30, 1926.

COOPERATION.—Record of daily discharge furnished by Southern California Edison Co. and reduced to three significant figures by the United States Geological Survey.

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 the Southern California Edison Co.

Daily discharge, in second-feet, of Florence Lake Tunnel at Intake, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	32		60	1.7	17	62	43	818	790	363	91	423
2.....	30	120	60	16	17	91	180	305	836	498	91	418
3.....	22	46	65	38	17	82	212	51	630	454	91	465
4.....	17	13	65	29	17	76	135	615	52	404	88	462
5.....	18		49	22	21	100	254	1,080	789	255	87	471
6.....	10		49	18	27	111	426	736	1,030	457	82	255
7.....			47	13	32	100	227	34	846	455	66	414
8.....			45	12	32	91	192	26	993	541	64	413
9.....			46	14	32	84	125	27	909	35	71	269
10.....	112		45	16	32	77	194	27	736	35	460	313

Daily discharge, in second-feet, of Florence Lake Tunnel at Intake, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11.....	57		25	17	22	69	81	27	733	35	505	145
12.....			17	17	14	81	228	27	689	336	500	80
13.....	110		118	17	15	110	216	27	665	332	510	54
14.....	86		67	17	16	121	405	28	610	288	606	38
15.....			42	17	16	126	677	29	539	236	997	35
16.....			35	17	24	138	777	30	462	183	1,020	33
17.....			32	17	32	163	844	1,100	442	189	1,020	31
18.....			30	17	86	143	717	1,730	421	188	1,040	28
19.....		107	26	17	62	83	590	1,700	420	188	1,040	26
20.....		373	28	17	9	86	537	1,710	413	161	1,020	22
21.....	173	109	32	17	48	.5	589	1,040	414	159	1,030	17
22.....	180	52	35	16	102	.4	715	1,040	461	137	502	17
23.....		32	23	16	89	.5	841	1,040	433	136	422	17
24.....			1.4	15	79	49	972	1,030	393	111	437	25
25.....			1.5	16	59	44	398	1,000	377	112	420	25
26.....			1.5	16	55	249	17	1,000	360	91	421	22
27.....			1.5	16	131	151	401	968	366	90	412	20
28.....			1.6	16	146	14	1,090	939	341	91	424	19
29.....	264	15	1.7	17		128	1,280	958	334	91	428	18
30.....	79	52	1.5	17		181	1,990	1,140	297	35	430	17
31.....			1.6	17		216		1,090		82	429	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Florence Lake Tunnel at Intake, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	264	0	38.4	2,360
November.....	373	0	30.6	1,820
December.....	118	1.4	34.0	2,090
January.....	38	1.7	17.1	1,050
February.....	146	9	44.6	2,480
March.....	249	.4	97.7	6,010
April.....	1,990	17	512	30,500
May.....	1,730	26	689	42,400
June.....	1,030	52	559	33,300
July.....	541	35	218	13,400
August.....	1,040	64	478	29,400
September.....	471	17	153	9,100
The year.....	1,990	0	240	174,000

BEAR CREEK, NEAR VERMILION VALLEY, CALIF.

LOCATION.—In sec. 12, T. 7 S., R. 27 E., Fresno County, 2 miles above mouth and 4 miles by trail south of Vermilion Valley, from which it is separated by Bear Ridge. Altitude, about 7,300 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 29, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank, one-fourth mile below trail crossing.

DISCHARGE MEASUREMENTS.—Made from cable 400 feet above gage or by wading.

CHANNEL AND CONTROL.—Solid rock at gage and control; rough; permanent. One channel at all stages; banks not subject to overflow. Stage of zero flow about 2.7 feet.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.78 feet at 10 p. m. May 19 (discharge, 743 second-feet; minimum stage, from water-stage recorder, 2.98 feet September 28–30 (discharge, 3.5 second-feet).

1921-1926: Maximum stage, from water-stage recorder, 5.97 feet at 8.30 p. m. June 4, 1922 (discharge, 857 second-feet revised); minimum stage recorded, 2.87 feet September 29 to October 5, 1924 (discharge, 1.2 second-feet).

ICE.—Stage-discharge relation seriously affected by ice or float frozen in well, November 4-6 and December 13 to March 18.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent except when stage-discharge relation was affected by ice. No record obtained for December 13 to March 18. Daily discharge ascertained by applying mean daily gage height to rating table except during ice-affected period. Mean monthly discharge for December to March estimated from discharge measurements and comparison with records for near-by stations. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Bear Creek near Vermilion Valley, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 2.....	3.16	10	Feb. 8.....	(*)	25	June 21.....	4.17	115
Nov. 7.....	3.20	14	Mar. 19.....	3.39	23	July 21.....	3.59	40
Dec. 5.....	3.37	23	Apr. 12.....	3.86	80	Aug. 14.....	3.24	14
Jan. 7.....	(*)	9.7	May 11.....	3.90	84	Sept. 6.....	3.03	4.5

* Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of Bear Creek near Vermilion Valley, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	10	11	11	-----	35	266	392	80	20	6.5
2.....	9.5	10	14	-----	37	296	366	74	20	6
3.....	8.5	9.5	15	-----	38	362	283	70	20	5.5
4.....	8.5	8	18	-----	41	396	301	67	19	5.5
5.....	10	8	19	-----	44	366	338	72	20	5
6.....	16	10	18	-----	49	230	320	84	20	4.9
7.....	16	11	16	-----	49	159	272	74	22	5
8.....	15	9.5	15	-----	48	121	310	66	22	5
9.....	15	8	14	-----	62	103	307	78	22	5
10.....	14	8.5	13	-----	91	95	244	137	20	5
11.....	16	9.5	13	-----	99	104	241	135	19	5
12.....	16	8.5	11	-----	104	139	215	128	17	5
13.....	14	9.5	-----	-----	139	182	210	103	16	4.9
14.....	16	12	-----	-----	179	241	188	88	13	4.9
15.....	15	12	-----	-----	225	345	164	76	13	4.9
16.....	16	8.5	-----	-----	249	424	141	66	13	4.9
17.....	15	8	-----	-----	220	424	137	62	12	4.6
18.....	15	8	-----	-----	166	452	131	56	12	4.6
19.....	14	6.5	-----	24	139	496	130	52	12	4.3
20.....	13	6.5	-----	25	163	505	131	48	11	4.0
21.....	13	7.5	-----	27	195	468	133	41	11	3.8
22.....	13	7.5	-----	28	230	436	139	37	11	3.8
23.....	13	6.5	-----	35	274	380	139	34	10	2.8
24.....	12	7	-----	49	324	304	131	32	10	3.8
25.....	12	8.5	-----	49	334	236	121	29	9	3.8
26.....	12	8.5	-----	41	320	184	115	28	8.5	3.8
27.....	11	8.5	-----	38	334	218	111	27	8	3.8
28.....	11	8	-----	40	320	252	104	25	8	3.5
29.....	11	8	-----	37	345	258	98	23	7.5	3.5
30.....	11	9	-----	38	307	310	90	23	7	3.5
31.....	11	-----	-----	41	-----	362	-----	21	6.5	-----

Monthly discharge of Bear Creek near Vermilion Valley, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	16	8.5	13.0	799
November.....	12	6.5	8.72	519
December.....	19		• 13	799
January.....			• 8	492
February.....			• 18	1,000
March.....	49		• 35	2,150
April.....	345	35	172	10,200
May.....	505	95	294	18,100
June.....	392	90	200	11,900
July.....	137	21	62.5	3,840
August.....	22	6.5	14.2	873
September.....	6.5	3.5	4.59	273
The year.....	505	3.5	70.3	50,900

• Estimated.

MONO CREEK NEAR VERMILION VALLEY, CALIF.

LOCATION.—In sec. 35, T. 6 S., R. 27 E. (unsurveyed), Fresno County, 1 mile below lower end of Vermilion Valley and 6 miles below mouth of North Fork. Altitude about 7,400 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 25, 1921, to September 30, 1926

GAGE.—Water-stage recorder in concrete well and house on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 25 feet above gage or by wading.

CHANNEL AND CONTROL.—Rocky and rough; small boulders on bottom; may shift slightly. One channel at all stages; banks not subject to overflow. Stage of zero flow about 2.7 feet.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.55 feet at 10 p. m. May 19 (discharge, 1,030 second-feet); minimum stage recorded, 4.60 feet September 24–30 (discharge, 13 second-feet).

1921–1926: Maximum stage, from water-stage recorder, 8.18 feet at 11 p. m. June 6, 1922 (discharge, 1,390 second-feet); minimum stage recorded, 4.47 feet September 30 to October 4, 1924 (discharge, 8 second-feet).

ICE.—Stage-discharge relation seriously affected by ice or float frozen in well, December 13 to March 17.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Water-stage recorder record excellent except for ice-affected period, and October 1–2, 5–9, 22–31, November 1–5, and 8–26, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table. For periods of no gage-height record and when stage-discharge relation was affected by ice, discharge was estimated from discharge measurements and by comparison with records for near-by streams. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER. 167

Discharge measurements of Mono Creek near Vermilion Valley, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 3.....	4.76	22	Feb. 10.....	(*)	37	July 22.....	5.18	66
Nov. 6.....	4.88	32	Mar. 18.....	5.12	62	Aug. 11.....	4.95	38
Dec. 4.....	5.15	60	Apr. 11.....	5.62	148	Aug. 13.....	4.90	31
Jan. 9.....	(*)	14	May 30.....	6.16	386	Sept. 3.....	4.71	18
Jan. 10.....	(*)	20	June 22.....	5.69	184			

* Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of Mono Creek near Vermilion Valley, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	23		29		99	432	500	132	48	19
2.....	22		31		108	480	480	127	47	19
3.....	22		34		110	575	392	122	44	19
4.....	22		46		110	645	380	115	43	18
5.....	25		41		110	620	408	117	46	18
6.....	32	32	36		117	436	396	120	48	18
7.....	33	29	37		110	344	368	104	54	18
8.....	31		37		102	286	432	97	50	18
9.....	32		34		124	262	480	102	44	18
10.....	31		35		159	254	384	156	40	18
11.....	34		36		173	268	356	148	37	18
12.....	33		28		182	308	324	130	34	17
13.....	31				230	372	300	113	32	16
14.....	34				296	436	279	102	31	16
15.....	32				364	528	248	97	30	16
16.....	32				409	620	221	95	28	16
17.....	32				364	630	215	91	27	16
18.....	31			68	286	685	212	87	27	15
19.....	30			66	261	765	209	82	27	15
20.....	29			68	265	765	206	74	27	14
21.....	29			69	328	705	212	69	27	14
22.....	29			71	392	665	212	66	27	14
23.....	29			84	444	580	212	62	25	14
24.....	29			104	488	464	197	59	24	13
25.....	29			113	452	388	188	58	24	13
26.....	28			106	444	324	182	56	24	13
27.....	28	25		102	480	340	173	54	23	13
28.....	28	23		102	484	368	162	52	23	13
29.....	28	24		102	516	380	159	48	22	13
30.....	28	26		104	472	420	142	47	22	13
31.....	28			110		472		47	21	

NOTE.—See monthly-discharge table for estimated flow November to March.

Monthly discharge of Mono Creek near Vermilion Valley, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	34	22	29.2	1,800
November.....			* 24.0	1,430
December.....			* 30.0	1,840
January.....			* 20.0	1,230
February.....			* 33.0	1,830
March.....	113		* 85.0	5,230
April.....	516	99	282	16,800
May.....	765	254	478	29,400
June.....	500	142	288	17,100
July.....	132	47	91.3	5,619
August.....	54	21	33.1	2,040
September.....	19	13	15.8	940
The year.....	765	13	118	85,200

* Estimated.

MIDDLE FORK OF SAN JOAQUIN RIVER AT MILLER BRIDGE, CALIF.

LOCATION.—In sec. 11, T. 5 S., R. 25 E., Madera County, one-fourth mile above site of old Miller Bridge and 2 miles below mouth of North Fork of San Joaquin River. Altitude, about 4,600 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 12, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 560 feet below gage.

CHANNEL AND CONTROL.—Rough; bedrock overlain with boulders and broken rock; permanent. One channel at all stages; banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 16.08 feet at 9 p. m. May 4 (discharge, 3,640 second-feet); minimum stage, from water-stage recorder, 9.07 feet at 11 a. m. January 19 (discharge, 33 second-feet).

1921–1926: Maximum stage, from water-stage recorder, 17.68 feet at 8 p. m. June 4, 1922 (discharge, 6,200 second-feet); minimum stage recorded, 8.82 feet at 1.45 p. m. December 3, 1921 (discharge, 27 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent except July 25 to August 2 and August 23 to September 4, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table except December 1, for which hourly discharge was averaged. For periods of no gage-height record, discharge was estimated by comparison with records for near-by streams. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Middle Fork of San Joaquin River at Miller Bridge, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 4.....	9.61	66	Mar. 7.....	11.23	279	June 24.....	11.84	420
Nov. 5.....	9.77	76	Mar. 31.....	12.17	519	July 1.....	11.45	350
Dec. 6.....	10.33	139	Apr. 7.....	12.59	688	Aug. 3.....	10.24	131
Jan. 5.....	9.64	62	Apr. 30.....	14.42	1,890	Aug. 12.....	9.92	93
Jan. 25.....	9.33	45	May 1.....	13.98	1,470	Sept. 5.....	9.55	65
Feb. 8.....	10.39	136	May 28.....	13.44	1,110			
Feb. 25.....	10.83	216	June 2.....	13.58	1,290			

Daily discharge, in second-feet, of Middle Fork of San Joaquin River at Miller Bridge, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	76	108	137	78	94	266	475	1,880	1,560	338	132	63
2.....	71	104	210	75	102	248	505	2,240	1,360	315	130	61
3.....	68	94	150	81	120	246	505	2,580	1,170	295	128	59
4.....	66	103	135	65	154	257	552	2,740	1,140	285	127	58
5.....	83	103	147	77	159	285	750	2,280	1,170	295	126	58
6.....	115	109	153	70	170	315	675	1,420	1,110	285	126	57
7.....	112	105	127	71	168	315	700	1,110	1,080	266	123	56
8.....	105	112	121	64	164	315	675	900	1,230	248	117	56
9.....	98	101	114	70	170	285	630	825	1,320	276	111	57
10.....	97	104	105	66	170	243	930	875	1,020	412	105	58

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Daily discharge, in second-feet, of Middle Fork of San Joaquin River at Miller Bridge, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11.....	118	111	106	63	153	243	1,080	990	900	425	102	57
12.....	140	115	101	60	143	276	1,140	1,200	825	438	94	55
13.....	146	111	69	60	144	315	1,420	1,460	750	325	90	52
14.....	148	95	71	58	162	388	1,760	1,720	675	305	86	49
15.....	153	106	86	65	187	438	2,050	2,010	610	276	83	48
16.....	170	104	90	57	189	475	2,050	2,280	535	257	81	47
17.....	182	84	87	66	186	450	1,600	2,280	520	257	78	47
18.....	181	90	83	54	192	350	1,200	2,430	505	248	79	46
19.....	178	85	86	52	189	338	1,110	2,580	505	226	80	45
20.....	174	85	93	63	189	362	1,390	2,580	475	210	83	44
21.....	168	78	102	69	170	362	1,760	2,330	490	197	84	43
22.....	160	80	103	70	170	338	1,960	2,140	490	187	83	42
23.....	153	88	104	64	175	450	2,190	1,760	475	176	81	42
24.....	146	87	97	63	198	570	2,480	1,290	462	168	79	41
25.....	135	78	98	59	234	570	2,530	1,050	450	160	77	41
26.....	133	83	101	57	235	552	2,480	990	425	152	75	41
27.....	132	83	100	58	248	520	2,630	1,140	425	144	73	41
28.....	124	74	94	63	266	535	2,530	1,290	375	140	71	40
29.....	127	81	85	77	-----	520	2,330	1,360	388	138	69	40
30.....	118	97	82	76	-----	505	1,960	1,420	362	136	67	40
31.....	112	-----	78	95	-----	552	-----	1,560	-----	134	65	-----

Monthly discharge of Middle Fork of San Joaquin River at Miller Bridge, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	182	66	129	7,990
November.....	115	74	95.3	5,670
December.....	210	69	107	6,580
January.....	95	52	66.6	4,100
February.....	266	94	175	9,720
March.....	570	243	383	23,600
April.....	2,630	475	1,470	87,500
May.....	2,740	825	1,700	105,000
June.....	1,560	362	760	45,200
July.....	438	134	249	15,300
August.....	132	65	93.7	5,760
September.....	63	40	49.5	2,950
The year.....	2,740	40	440	319,000

NORTH FORK OF SAN JOAQUIN RIVER BELOW IRON CREEK, CALIF.

LOCATION.—In sec. 4, T. 4 S., R. 25 E. (unsurveyed), Madera County, three-fourths mile below mouth of Iron Creek. Altitude, about 6,800 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1920, to September 30, 1926. Record fragmentary October 1, 1920, to June 30, 1921.

GAGE.—Water-stage recorder in concrete well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 25 feet above or from footbridge 750 feet below gage.

CHANNEL AND CONTROL.—Cut through solid rock; rough; strewn with boulders and broken rock; permanent. One channel at all stages; banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.72 feet at 6 p. m. May 19 (discharge, 1,090 second-feet); minimum stage, from water-stage recorder, 3.49 feet at 11 p. m. September 30 (discharge, 4.3 second-feet).

1920-1926: Maximum stage, from water-stage recorder, 7.24 feet at 6 p. m. June 27, 1922 (discharge, 2,000 second-feet); minimum stage recorded, 3.37 feet at 10.30 a. m. November 18, 1921 (discharge, 1.4 second-feet).

ICE.—Stage-discharge relation affected by ice January 12, 17–20, 31; February 1–17.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent except during ice-affected periods, and June 24–28 and July 3–10, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table, except April 10 to June 8, for which discharge integrator was used and July 11–12, for which hourly discharge was averaged. For period of no gage-height record and when stage-discharge relation was affected by ice, discharge was estimated from discharge measurements and by comparison with records for near-by streams. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of North Fork of San Joaquin River below Iron Creek, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 6.....	4.08	20	Mar. 5.....	4.36	53	June 20.....	4.68	88
Nov. 3.....	4.00	25	Mar. 29.....	4.85	122	July 1.....	4.55	73
Dec. 5.....	4.10	31	Apr. 5.....	4.73	103	Aug. 2.....	4.10	30
Jan. 6.....	3.84	14	Apr. 28.....	5.75	409	Aug. 10.....	3.92	21
Jan. 23.....	3.66	7.6	May 5.....	5.73	395	Sept. 4.....	3.76	12
Feb. 6.....	4.05	20	May 30.....	6.10	606			
Feb. 22.....	3.88	18	June 1.....	5.44	255			

* Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of North Fork of San Joaquin River below Iron Creek, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12	27	39	12	20	45	104	367	405	85	37	13
2.....	9.5	22	57	13	25	38	105	525	301	82	36	13
3.....	8.5	23	41	12	24	35	105	610	286	80	32	13
4.....	8	25	35	12	25	38	102	557	289	78	31	13
5.....	16	25	44	12	23	46	97	364	366	80	29	13
6.....	25	24	39	12	20	54	90	194	273	78	28	13
7.....	25	24	31	11	20	53	84	132	300	76	27	12
8.....	23	24	29	10	20	48	77	104	375	70	25	12
9.....	20	22	27	11	21	39	97	101	288	80	23	13
10.....	20	20	25	10	21	34	198	138	213	130	23	14
11.....	24	26	23	10	19	42	224	196	197	183	21	13
12.....	36	26	20	10	18	51	293	288	184	162	20	12
13.....	41	26	14	9	18	61	401	374	175	102	20	10
14.....	44	28	16	9	20	81	482	448	160	91	19	9.5
15.....	50	22	16	9	22	90	540	518	138	79	18	8.5
16.....	61	20	16	9	22	93	493	568	124	74	18	8
17.....	67	17	14	8.5	22	79	308	519	128	73	18	8
18.....	66	17	12	8.5	23	57	200	632	126	69	19	7
19.....	63	16	17	9	22	58	198	639	126	57	20	6.5
20.....	63	16	18	9	21	70	303	608	124	51	23	6
21.....	59	14	19	9.5	19	67	432	536	131	46	21	5.5
22.....	55	14	21	9	18	64	476	496	131	44	20	5.5
23.....	52	14	22	9	18	100	552	312	131	41	20	5
24.....	48	14	21	8.5	20	133	620	183	125	40	20	5.5
25.....	44	14	21	8	22	138	630	156	115	39	18	5.5
26.....	44	14	21	8	28	131	596	198	105	37	16	5
27.....	41	13	21	8	39	124	604	286	95	35	17	5
28.....	40	13	18	8	46	137	558	323	86	31	16	5
29.....	38	13	16	14	-----	128	462	341	89	31	14	4.8
30.....	34	25	14	14	-----	133	352	367	88	32	14	4.5
31.....	31	-----	14	16	-----	128	-----	418	-----	34	13	-----

*Monthly discharge of North Fork of San Joaquin River below Iron Creek, Calif.,
for the year ending September 30, 1926*

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	67	8	37.7	2,320
November.....	28	13	19.9	1,180
December.....	57	12	23.9	1,470
January.....	16	8	10.3	633
February.....	46	18	22.7	1,260
March.....	138	34	77.3	4,750
April.....	630	77	326	19,400
May.....	639	101	371	22,800
June.....	405	86	187	11,100
July.....	183	31	70.6	4,340
August.....	37	13	21.8	1,340
September.....	14	4.5	8.96	533
The year.....	639	4.5	98.3	71,100

GRANITE CREEK NEAR CATTLE MOUNTAIN, CALIF.

LOCATION.—In sec. 8, T. 5 S., R. 25 E., $1\frac{1}{2}$ miles below junction of East Fork and West Fork of Granite Creek and 2 miles west of Cattle Mountain, Madera County. Altitude, about 6,700 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 2, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 150 feet above or from footbridge 500 feet above gage.

CHANNEL AND CONTROL.—Cut through solid granite; smooth polished bottom, overlain with broken rock and sand in pools; permanent. One channel at all stages; banks not subject to overflow. Stage of zero flow 3.23 feet.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 8.37 feet at 8 p. m. May 3 (discharge, 1,390 second-feet); minimum stage, from water-stage recorder, 3.28 feet September 5–8 and 15–30 (discharge, less than 0.05 second-foot).

1921–1926: Maximum stage, from water-stage recorder, 8.83 feet at 7 p. m. June 27, 1922 (discharge, 2,210 second-feet); minimum stage, from water-stage recorder, 3.24 feet September 3–5, 1924 (discharge, less than 0.05 second-foot).

ICE.—Stage-discharge relation seriously affected by ice or float frozen in well, November 5 to March 18.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent except for periods affected by ice. Daily discharge ascertained by applying mean daily gage height to rating table except April 14 to June 2, for which discharge integrator was used; April 12–13 and June 7–9, for which hourly discharge was averaged; and periods affected by ice, for which discharge was estimated from discharge measurements and by comparison with records for near-by streams. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Granite Creek near Cattle Mountain, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 4.....	3.54	0.6	Mar. 4.....	5.46	28	June 3.....	5.86	132
Nov. 2.....	4.50	15	Mar. 16.....	7.22	110	June 23.....	4.66	22
Dec. 3.....	4.98	46	Mar. 18.....	6.00	79	July 2.....	4.20	6.5
Jan. 11.....	5.00	6	Apr. 2.....	5.81	146	Aug. 4.....	3.42	.3
Jan. 21.....	4.60	5.5	Apr. 26.....	7.30	553	Aug. 9.....	3.40	.2
Feb. 4.....	4.93	8.4	May 8.....	6.15	211	Do.....	3.40	.2
Feb. 18.....	5.50	19	May 26.....	6.01	171	Sept. 5.....	3.28	.08

* Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of Granite Creek near Cattle Mountain, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.
1.....	1.1	16	30	150	544	240	8.5	0.3
2.....	.9	14	28	152	740	198	7	.3
3.....	.8	13	27	159	848	156	6	.3
4.....	.7	13	28	152	780	159	6	.3
5.....	1.6		30	131	584	147	9	.2
6.....	3.9		32	129	318	139	18	.2
7.....	3.7		35	128	218	164	11	.2
8.....	3.2		30	99	188	217	9	.2
9.....	3.6		28	115	192	267	22	.2
10.....	3.9		25	192	248	115	40	.2
11.....	6.5		40	227	374	86	66	.2
12.....	10		55	266	453	70	69	.2
13.....	20		70	430	521	59	31	.2
14.....	20		85	566	564	51	23	.2
15.....	24		100	680	620	43	14	.1
16.....	35		110	746	664	38	10	.1
17.....	46		100	564	618	34	7.5	.1
18.....	46		79	334	688	31	6	.1
19.....	45		102	307	658	28	4.8	.1
20.....	44		102	466	594	26	3.7	.1
21.....	42		112	624	526	24	2.8	.1
22.....	38		118	664	480	22	2.2	.1
23.....	34		156	766	344	20	1.8	.1
24.....	33		203	813	230	18	1.4	.1
25.....	29		174	875	196	17	1.1	.1
26.....	28		176	796	218	14	.9	.1
27.....	26		170	723	272	13	.7	.1
28.....	23		190	702	284	12	.6	.1
29.....	22		182	642	275	11	.5	.1
30.....	20		184	534	263	10	.4	.1
31.....	18		194		277		.4	.1

NOTE.—See monthly-discharge table for estimated flow November to March.

Monthly discharge of Granite Creek near Cattle Mountain, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	46	0.7	20.4	1,250
November.....			13.0	774
December.....			20.0	1,230
January.....			8.0	492
February.....			16.0	889
March.....	203	25	96.6	5,940
April.....	875	99	439	26,100
May.....	848	188	444	27,300
June.....	267	10	80.6	4,800
July.....	69	.4	12.4	762
August.....	.3	.1	.16	9.8
The year.....	875	0	96.1	69,500

* Estimated.

NOTE.—Flow less than 0.05 second-foot during September

JACKASS CREEK NEAR JACKASS MEADOW, CALIF.

LOCATION.—In sec. 23, T. 5 S., R. 24 E., Madera County, half a mile below lower end of Jackass Meadow and 10 miles above mouth of West Fork. Altitude, about 7,000 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 1, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on left bank.

DISCHARGE MEASUREMENTS.—Made from footbridge 150 feet above gage or by wading.

CHANNEL AND CONTROL.—Rough; boulders and sand on bedrock at gage and below; one channel, cut through granite. An artificial masonry control about 25 feet below gage was completed on September 30, 1923. Right bank subject to overflow at extreme high water.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 8.50 feet at 7 p. m. April 24 (discharge, 220 second-feet); no flow August 10 to September 30.

1921-1926: Maximum stage, from water-stage recorder, 9.58 feet at 7 p. m. May 24 1922 (discharge, 418 second-feet); stream dry during part of summer in 1924 and 1926.

ICE.—Stage-discharge relation seriously affected by ice or float frozen in well, January 15 to March 5, March 8-12, and 26-29.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed during high water when a piece of masonry broke out of control dam. Rating curves well defined. Water-stage recorder record excellent except for periods affected by ice. Daily discharge ascertained by applying mean daily gage height to rating table, except April 12 to May 5 for which discharge integrator was used. For periods affected by ice, discharge was estimated from discharge measurements and comparison with records for near-by streams. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Jackass Creek near Jackass Meadow, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 2.....	5.00	^a 0.01	Jan. 18.....	5.20	0.8	May 23.....	6.41	39
Nov. 1.....	5.22	1.4	Feb. 10.....	5.23	1.0	June 4.....	5.85	17
Dec. 3.....	5.63	8.4	Mar. 3.....	^b 5.43	4.8	June 21.....	5.21	2.2
Dec. 9.....	5.53	6.2	Mar. 21.....	^b 6.33	26	July 3.....	4.98	.3
Jan. 3.....	5.26	1.2	Apr. 3.....	6.44	37	Aug. 1.....	4.88	^a 0.1
Jan. 12.....	5.20	.7	May 9.....	6.65	52			

^a Float measurement.

^b Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of Jackass Creek near Jackass Meadow, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.
1		0.9	3.3	1.4	4.0	44	120	23	0.6	0.1
2		1.1	8.5	1.4	4.0	42	130	20	.4	
3		1.3	9	1.2	3.7	43	136	17	.3	
4		1.4	6	1.1	4.0	39	136	15	.3	
5	0.2	1.1	7	1.1	5	53	129	14	.4	
6	.2	1.1	5	1.1	5.5	62	81	12	.4	
7	.1	1.1	3.9	1.1	7	63	65	12	.2	
8	.1	1.5	3.5	1.1	7	38	58	14	.9	
9	.1	1.6	4.2	1.1	6	50	53	12	2.6	
10	.1	1.7	3.1	1.0	6	50	56	10	1.9	
11	.3	2.8	2.7	.9	12	50	60	8.5	1.7	
12	1.0	3.0	2.3	.8	18	90	64	7	2.5	
13	2.5	2.4	1.5	.7	21	119	66	6	1.6	
14	3.0	2.0	1.3	.7	26	136	68	5.5	1.5	
15	3.9	1.8	1.3	.7	34	148	70	5	.6	
16	5	1.7	1.3	.7	37	154	73	4.9	.3	
17	5.5	1.4	1.3	.7	34	132	68	4.3	.2	
18	4.6	1.3	.7	.7	26	98	66	4.0	.2	
19	4.4	1.3	1.6		23	100	64	3.4	.1	
20	3.9	1.2	1.8		28	127	58	3.3	.1	
21	3.3	1.1	2.0		32	150	52	2.8	.1	
22	2.8	1.0	2.1		33	146	48	2.3	.1	
23	2.5	1.2	2.3		43	156	42	2.0	.1	
24	2.3	1.3	2.1		53	165	36	1.8	.1	
25	2.0	1.2	2.1		49	163	33	1.5	.1	
26										
27	1.7	1.2	2.1		49	134	31	1.2	.1	
28	1.5	1.1	2.1		51	123	30	1.2	.1	
29	1.4	1.1	2.1		51	133	30	1.2	.1	
30	1.3	1.4	1.8		51	127	29	.9	.1	
31	1.2	2.0	1.8		51	117	27	.7	.1	
	1.1		1.5		52		25		.1	

NOTE.—See monthly table for estimated flow for January and February. Flow less than 0.05 second-foot Oct. 1-4 and Aug. 2-10; water standing in pools Aug. 11 to Sept. 30.

Monthly discharge of Jackass Creek near Jackass Meadow, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	5.5	0.0	1.81	111
November	3.0	.9	1.47	87.5
December	9	.7	2.95	181
January			^a 1.00	61.5
February			^a 2.00	111
March	53		26.5	1,630
April	165	38	102	6,070
May	136	25	64.6	3,970
June	23	.7	7.22	430
July	2.6	.1	.58	35.7
August	.1	.0	.003	.2
The year	165	.0	17.5	12,700

^a Estimated.

NOTE.—See footnote to daily-discharge table.

CHQUITO CREEK NEAR ARNOLD MEADOW, CALIF.

LOCATION.—In sec. 18, T. 6 S., R. 24 E., half a mile below Beasore Creek and half a mile southwest of Arnold Meadow, Madera County. Altitude, about 4,800 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 12, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank about 200 feet above mouth of a small creek flowing out of Arnold Meadow.

DISCHARGE MEASUREMENTS.—Made from cable one-fourth mile above or from footbridge 200 feet below gage.

CHANNEL AND CONTROL.—Rough; bedrock at gage and control; practically permanent. One channel at all stages; banks not subject to overflow; right bank subject to erosion during extremely high water. Stage of zero flow, 4.22 feet.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.15 feet at 11 p. m. April 16 (discharge, 608 second-feet); minimum stage, 4.59 feet at 11 p. m. September 7 (discharge, 2.4 second-feet).

1921-1926: Maximum stage, from water-stage recorder, 8.63 feet at 9 p. m. May 24, 1922 (discharge, 1,100 second-feet); minimum stage recorded, 4.53 feet August 27-31, 1924 (discharge, 1.4 second-feet).

ICE.—Stage-discharge relation affected slightly by ice December 15-16, January 13-14, and 19-27.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except for ice-affected periods, for which it was estimated. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Chiquito Creek near Arnold Meadow, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 1.....	4.68	5.6	Feb. 2.....	4.91	16	May 20.....	5.96	185
Nov. 1.....	4.79	10	Feb. 17.....	5.01	25	June 6.....	5.33	61
Nov. 29.....	4.80	10	Feb. 22.....	5.00	25	June 17.....	5.11	34
Dec. 1.....	4.88	17	Mar. 5.....	5.22	50	July 5.....	4.88	15
Dec. 17.....	4.84	12	Mar. 31.....	5.81	155	Aug. 4.....	4.66	4.4
Jan. 1.....	4.84	14	Apr. 4.....	5.69	129	Aug. 7.....	4.67	4.3
Jan. 17.....	4.80	11	Apr. 23.....	6.46	326	Sept. 9.....	4.60	2.4
Jan. 28.....	4.83	10	May 10.....	5.95	163			

Daily discharge, in second-feet, of Chiquito Creek near Arnold Meadow, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5	9.5	19	12	19	50	132	372	93	17	5	3.1
2.....	5	11	44	12	18	48	120	388	83	16	5	2.8
3.....	4.9	12	28	12	21	46	122	420	73	15	4.9	2.5
4.....	4.9	12	22	11	26	48	138	412	70	15	4.6	2.5
5.....	8	12	22	11	25	54	258	388	67	15	4.6	2.5
6.....	14	13	23	11	24	57	280	274	63	15	4.6	2.5
7.....	11	12	20	11	24	62	235	230	59	14	4.3	2.5
8.....	9	13	18	11	23	67	222	209	62	14	4.3	2.5
9.....	8.5	13	17	12	25	62	193	196	69	18	4.3	2.5
10.....	8.5	13	15	11	27	56	240	196	56	18	4.0	2.5
11.....	12	16	15	11	26	57	235	209	49	15	4.0	2.5
12.....	20	21	14	10	23	64	246	222	45	21	4.0	2.5
13.....	21	15	11	10	21	73	316	230	43	15	4.0	2.5
14.....	19	13	12	10	24	88	364	232	41	14	3.7	2.5
15.....	20	14	12	11	24	100	432	240	38	12	3.7	2.5

Daily discharge, in second-feet, of Chiquito Creek near Arnold Meadow, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
16.....	25	14	12	9.5	24	108	448	246	37	11	3.4	2.5
17.....	28	11	12	11	24	109	424	235	36	10	3.4	2.8
18.....	24	11	12	9.5	24	88	316	235	32	9.5	3.7	3.1
19.....	23	11	12	9	25	83	274	232	31	9	3.7	3.1
20.....	21	12	14	9	27	90	326	217	29	8.5	3.7	3.1
21.....	19	11	15	9	26	95	396	198	28	8	3.7	3.1
22.....	16	11	15	9	26	99	408	181	27	8	3.4	3.4
23.....	15	11	15	9	27	122	428	153	25	8	3.1	3.1
24.....	14	11	15	9	28	155	440	134	23	7.5	2.8	3.1
25.....	14	11	15	9	31	153	440	124	22	7.5	2.8	2.8
26.....	12	11	15	9	37	142	416	120	20	7	2.8	2.8
27.....	12	11	15	9	37	144	384	113	20	6.5	3.1	2.8
28.....	11	10	14	11	48	153	400	111	21	6.5	2.8	2.8
29.....	11	10	14	28	-----	151	396	106	19	6.5	2.8	3.1
30.....	11	12	13	17	-----	155	376	104	18	6	3.1	3.1
31.....	10	-----	12	20	-----	153	-----	102	-----	5.5	3.1	-----

Monthly discharge of Chiquito Creek near Arnold Meadow, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	28	4.9	14.1	867
November.....	21	0.5	12.2	726
December.....	44	11	16.5	1,010
January.....	28	9	11.4	701
February.....	48	18	26.2	1,460
March.....	155	46	94.6	5,820
April.....	448	120	312	18,600
May.....	420	102	220	13,500
June.....	93	18	43.3	2,580
July.....	21	5.5	11.6	713
August.....	5	2.8	3.75	231
September.....	3.4	2.5	2.77	165
The year.....	448	2.5	64.0	46,400

BIG CREEK BELOW HUNTINGTON LAKE, CALIF.

LOCATION.—In sec. 23, T. 8 S., R. 25 E., Fresno County, one-fourth mile above Grouse Creek and 1 mile below Huntington Lake. Altitude about 6,600 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—June 18 to August 11, 1925, and May 21 to June 25, 1926.

GAGE.—Water-stage recorder in timber house with steel pipe well; anchored to rock in channel near right bank.

DISCHARGE MEASUREMENTS.—Made by wading or from cable 150 feet below gage.

CHANNEL AND CONTROL.—Rough; boulders, gravel, and sand; control largely bedrock, practically permanent. One channel, banks not overflowed.

EXTREMES OF DISCHARGE.—Maximum stage during 1925 from water-stage recorder, 10.3 feet at 11 a. m. June 23 (discharge, 2,040 second-feet).

Maximum stage during 1926, 8.60 feet at 9 a. m. May 31 (discharge, 1,290 second-feet).

DIVERSION AND REGULATION.—Natural flow of Big Creek is completely regulated at Huntington Lake storage reservoir. This record shows only water spilled from lake.

COOPERATION.—Daily-discharge record furnished by Southern California Edison Co. and reduced to three significant figures by the United States Geological Survey.

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER 177

Daily discharge, in second-feet, of Big Creek below Huntington Lake, Calif., for the years ending September 30, 1925 and 1926

Day	June	July	Aug.	Day	May	June
1925				1926		
1.....		557	0	1.....		755
2.....		594	0	2.....		385
3.....		961	0	3.....		608
4.....		839	1.7	4.....		54
5.....		750	0	5.....		111
6.....		334	0	6.....		770
7.....		336	0	7.....		601
8.....		303	0	8.....		661
9.....		304	0	9.....		628
10.....		270	186	10.....		488
11.....		267	15	11.....		380
12.....		375		12.....		336
13.....		267		13.....		368
14.....		152		14.....		329
15.....		163		15.....		202
16.....		190		16.....		142
17.....		191		17.....		104
18.....	296	183		18.....		76
19.....	1,050	346		19.....		56
20.....	759	658		20.....		101
21.....	1,040	567		21.....	137	122
22.....	954	307		22.....	940	49
23.....	888	122		23.....	1,160	24
24.....	706	36		24.....	1,050	12
25.....	1,040	9		25.....	883	3.1
26.....	889	0		26.....	819	
27.....	846	0		27.....	714	
28.....	919	0		28.....	748	
29.....	870	0		29.....	696	
30.....	758	0		30.....	961	
31.....		0		31.....	1,070	

NOTE.—Record shows only the spill from Huntington Lake and does not include natural run-off from drainage area below lake.

Monthly discharge of Big Creek below Huntington Lake, Calif., for the years ending September 30, 1925 and 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1925				
June 18-30.....	1,050	296	847	21,800
July.....	961	0	293	18,000
August 1-11.....	186	0	18.4	401
1926				
May 21-31.....	1,160	137	834	18,200
June 1-25.....	770	3.1	291	14,400

BIG CREEK NEAR MOUTH, NEAR BIG CREEK, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 26, T. 8 S., R. 24 E., about half a mile above mouth and Southern California Edison Co.'s power house No. 8 and 5 miles west of Big Creek, Fresno County. Altitude, about 2,600 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—May 10, 1923, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading on control

CHANNEL AND CONTROL.—Channel is series of pools, rapids, and falls; bottom of bedrock, overlain with gravel and boulders. Control is solid granite lip about 15 feet below gage house; permanent unless affected by debris from tunnel collecting in pool. One channel at all stages; banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.38 feet at 1 p. m. May 30 (discharge, 1,520 second-feet); minimum stage, from water-stage recorder, 0.40 foot August 21 and 24–26 (discharge, 0.1 second-foot).

1923–1926: Maximum stage, from water-stage recorder, 6.25 feet at noon June 23, 1925 (discharge, 2,100 second-feet); minimum stage, from water-stage recorder, 0.40 foot afternoon September 21, 1925, and August 21 and 24–26, 1926 (discharge, 0.1 second-foot).

ICE.—Stage-discharge relation not affected by ice.

DIVERSION.—See paragraph on "Regulation." Big Creek receives from Stevenson Creek drainage area water that is diverted from Shaver Lake and Camp 22 Creek through Southern California Edison Co.'s flume at Shaver (see page 183) by way of power houses Nos. 2 and 8. Beginning April 13, 1925, a large part of the flow of South Fork of San Joaquin River has been diverted by Florence Lake Tunnel (see page 163) to Huntington Lake on Big Creek. During most of the year practically entire flow of Big Creek, including water brought from the other drainage areas, is diverted above station for use at power house No. 8.

REGULATION.—Huntington Lake and Shaver Lake storage reservoirs and power houses Nos. 1 and 2 control practically the entire flow of Big Creek above station.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent, except November 30 to December 6, April 12–16, and June 14–21, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table, except October 6–12, 18–19, February 18 to March 12, and April 5 to July 8, for which discharge integrator was used, and November 15–16, February 11, 13–14, August 3, and 16, for which hourly discharge was averaged. For periods of no gage-height record discharge was estimated from spillway record at Dam No. 5 of Southern California Edison Co.

COOPERATION.—Gage-height record and results of discharge measurement furnished by Southern California Edison Co.

Discharge measurements of Big Creek near mouth, near Big Creek, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 14.....	0.76	1.5	Mar. 11.....	3.53	411	June 4.....	3.04	234
Nov. 16.....	.61	.6	Apr. 10.....	.82	2.3	June 7.....	4.25	771
Dec. 7.....	.48	.2	Apr. 16.....	2.43	116	Do.....	4.30	867
Dec. 29.....	.48	.2	Apr. 21.....	2.76	192	June 8.....	4.50	988
Jan. 9.....	.50	.2	Apr. 23.....	2.62	142	June 10.....	4.05	673
Jan. 23.....	.47	.2	May 14.....	2.33	95	June 14.....	3.95	578
Feb. 22.....	3.65	498	May 27.....	4.43	1,030	June 21.....	3.18	264
Feb. 23.....	3.65	485	May 28.....	4.40	921	June 28.....	.48	.2
Mar. 3.....	3.43	379	Do.....	4.65	1,120	July 13.....	.42	.1
Mar. 8.....	3.70	492	June 2.....	3.83	476	Aug. 3.....	.49	.2
Mar. 11.....	3.40	343	Do.....	3.92	476	Sept. 28.....	.42	.1
Do.....	3.38	415	June 3.....	4.35	817			

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER 179

Daily discharge, in second-feet, of Big Creek near mouth, near Big Creek, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.2	1.0	0.1	0.6	210	0.5	217	880	31	0.3	0.1
2	.1	.3	2.0	.1	.6	224	.5	452	456	36	.2	.2
3	.1	.4	1.0	.1	.8	279	.6	232	574	22	4.4	.1
4	.1	.3	.8	.2	.6	309	1.2	293	84	.4	.3	.2
5	.2	.4	.5	.2	.4	280	233	268	126	.1	.3	.2
6	96	.3	.2	.1	.3	232	398	154	729	30	.2	.1
7	244	.3	.2	.2	.2	60	456	112	692	51	.2	.1
8	279	.2	.2	.2	.2	256	306	45	656	29	.2	.1
9	268	.3	.2	.2	.2	298	123	13	647	.5	.2	.1
10	234	.3	.2	.2	.3	329	108	175	508	.4	.2	.1
11	91	.3	.2	.2	1.2	396	82	322	413	.2	.2	.3
12	9.5	.3	.2	.2	3.3	372	100	91	363	.2	.2	.2
13	.2	.2	.2	.1	16	1.8	115	120	291	.1	.2	.2
14	.5	.1	.2	.1	9.5	.9	90	126	360	.2	.2	.2
15	.6	132	.3	.1	2.3	.9	150	141	205	.2	.2	.2
16	.6	22	.2	.1	2.0	.9	155	32	120	.3	.7	.3
17	.4	.2	.2	.1	1.0	1.0	109	159	110	.2	.2	.2
18	24	.2	.4	.1	244	.9	110	151	90	.1	.1	.2
19	18	.2	.2	.1	376	.8	56	150	45	.3	.1	.2
20	.5	.3	.3	.1	365	.8	58	160	1.0	.2	.1	.2
21	.4	.3	.2	.1	226	.8	124	489	110	.2	.1	.2
22	.2	.2	.2	.1	377	.7	136	1,110	74	.2	.1	.2
23	.4	.1	.2	.1	405	.6	104	1,090	59	.2	.1	.2
24	.3	.2	.2	.1	418	.6	136	1,180	56	.3	.1	.2
25	.1	.1	.1	.1	396	.6	140	1,030	38	.2	.1	.2
26	.2	.2	.1	.1	273	.6	140	920	30	.2	.1	.2
27	.1	.1	.1	.1	218	.6	194	874	.4	.2	.1	.2
28	.1	.2	.1	.4	80	.5	214	925	31	.3	.1	.1
29	.1	.1	.2	1.6	-----	.5	220	834	23	.3	.1	.2
30	.1	.2	.2	.3	-----	.5	219	1,110	30	.3	.1	.2
31	.1	-----	.1	2.9	-----	.5	-----	1,130	-----	.4	.1	-----

Monthly discharge of Big Creek near mouth, near Big Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	279	0.1	40.9	2,510
November	132	.1	5.35	318
December	2.0	.1	.34	20.9
January	2.9	.1	.28	17.2
February	418	.2	122	6,780
March	396	.5	105	6,460
April	456	.5	143	8,510
May	1,180	13	455	28,000
June	880	.4	260	15,500
July	51	.1	6.62	407
August	4.4	.1	.32	19.7
September	.3	.1	.18	10.7
The year	1,180	.1	94.6	68,600

PITMAN CREEK AT BIG CREEK, CALIF.

LOCATION.—In sec. 28, T. 8 S., R. 25 E., one-fourth mile above junction with Big Creek and half a mile southeast of Big Creek post office, Fresno County. Altitude, about 5,000 feet.

DRAINAGE AREA.—27 square miles (measured on topographic map by Pacific Light & Power Co.).

RECORDS AVAILABLE.—January 1, 1910, to September 30, 1915, and January 26, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in wooden well and house at right side of weir pool, about 50 feet above highway bridge. Zero of gage is at elevation of weir crest.

DISCHARGE MEASUREMENTS.—Made from footbridge about 15 feet above weir or by wading.

CHANNEL AND CONTROL.—Sharp-edged 38-foot rectangular weir with partial end contractions, at lower end of natural pool in solid rock. Considerable velocity of approach at high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 2.17 feet at 11 p. m. May 4 (discharge, 548 second-feet); minimum stage, from water-stage recorder, 0.01 foot August 15-16 and September 17-30 (discharge, 0.1 second-foot).

1910-1915: Extremes of discharge occurring in 1910, 1911, and 1913 were based on computations from formula, without discharge measurements and are considered not so reliable as later records.

1921-1926: Maximum stage, from water-stage recorder, 3.53 feet at 6 p. m. June 1, 1922 (discharge, 1,110 second-feet); minimum stage, from water-stage recorder, 0.01 foot August 15-16 and September 17-30, 1926 (discharge, 0.1 second-foot).

ICE.—Water-stage recorder float operated in oil container. Ice formed on weir crest occasionally and caused slight backwater, for which allowance was made before application of open-water rating.

DIVERSIONS.—Southern California Edison Co. diverts water above gate for powerhouse No. 1 hydraulic valves, and for cooling transformers; beginning January 14, 1926, water has been diverted for town of Big Creek.

REGULATION.—None.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Gage heights affected slightly by ice during winter and proper corrections made. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except December 1, and April 13, 15, 20-22, for which hourly discharge was averaged, and May 6-24, for which discharge integrator was used. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Pitman Creek at Big Creek, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 17.....	0.08	3.5	Mar. 4.....	0.10	4.6	May 11.....	1.14	181
Nov. 10.....	.07	2.5	Mar. 24.....	.39	36	May 18.....	1.22	194
Dec. 4.....	.12	7.1	Mar. 31.....	.57	61	June 5.....	.44	44
Dec. 29.....	.07	2.4	Apr. 14.....	1.05	160	July 15.....	.05	1
Jan. 28.....	.04	1.0	Apr. 22.....	1.32	278	Aug. 11.....	.02	.3
Feb. 4.....	.07	2.0	Apr. 27.....	1.42	276	Sept. 14.....	.02	.2

SAN JOAQUIN RIVER AND TRIBUTARIES ABOVE FRESNO RIVER 181

Daily discharge, in second-feet, of Pitman Creek at Big Creek, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	3.4	7.5	3.4	1.6	6	61	273	68	3.4	0.6	0.3
2	1.6	3.4	11	3.4	2.2	5	55	296	60	3.4	.6	.3
3	1.6	3.4	8.5	2.8	2.8	5	54	324	52	3.4	.6	.3
4	2.2	3.4	6	2.2	2.8	5	61	331	52	3.4	.6	.3
5	3.4	2.8	6	2.2	2.8	5	93	310	49	3.4	.3	.3
6	2.8	2.8	5	2.2	3.4	6	82	199	44	3.4	.3	.3
7	2.2	2.8	4.2	2.2	3.4	7	80	162	38	3.4	.3	.3
8	1.6	2.8	4.2	2.2	2.8	7.5	66	140	42	3.4	.3	.3
9	1.6	2.8	4.2	2.2	2.8	7.5	61	137	40	3.4	.3	.3
10	2.2	2.8	4.2	2.2	3.4	7.5	77	155	34	3.4	.3	.3
11	5	3.4	4.2	2.2	3.4	8.5	87	175	28	3.4	.3	.3
12	4.2	5	4.2	2.2	4.2	8.5	89	185	26	3.4	.3	.3
13	3.4	4.2	4.2	2.2	4.2	10	142	190	23	2.8	.3	.3
14	2.8	3.5	3.4	2.2	3.4	12	192	207	22	2.2	.3	.3
15	2.8	2.8	3.4	2.2	3.4	14	210	211	19	1.6	.1	.3
16	2.8	2.8	2.8	2.2	4.2	17	201	212	18	1.6	.1	.3
17	3.4	2.2	2.8	2.2	4.2	20	201	200	14	1.6	.3	.1
18	3.4	2.2	2.8	1.6	4.2	20	152	202	13	1.1	.3	.1
19	3.4	2.2	2.8	1.1	4.2	20	128	195	12	1.1	.3	.1
20	3.4	2.2	2.8	1.6	5	18	173	179	11	1.1	.3	.1
21	3.4	2.2	2.8	1.6	5	20	232	160	10	.6	.3	.1
22	3.4	2.2	2.8	1.6	4.2	24	242	142	8.5	.6	.3	.1
23	2.8	2.2	2.8	1.6	4.2	31	276	126	7.5	.6	.3	.1
24	2.8	2.8	4.2	1.6	4.2	42	296	118	7	.6	.3	.1
25	2.8	2.8	6	1.1	6	52	286	98	6	.6	.3	.1
26	2.8	2.8	3.4	1.1	8.5	61	269	87	5	.6	.3	.1
27	2.8	2.8	3.4	1.1	6	61	252	89	5	.6	.3	.1
28	2.8	2.8	3.4	2.2	6	62	256	89	5	.6	.3	.1
29	2.8	2.8	3.4	4.2	-----	62	259	85	4.2	.6	.3	.1
30	2.8	2.8	3.4	1.6	-----	64	256	80	3.4	.6	.3	.1
31	3.4	-----	3.4	2.8	-----	68	-----	75	-----	.6	.3	-----

Monthly discharge of Pitman Creek at Big Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	5	1.6	2.84	175
November	5	2.2	2.90	173
December	11	2.8	4.30	264
January	4.2	1.1	2.10	129
February	8.5	1.6	4.02	223
March	68	5	24.4	1,500
April	296	54	163	9,700
May	331	75	175	10,800
June	68	3.4	24.2	1,440
July	3.4	.6	1.95	120
August	.6	.1	.33	20.3
September	.3	.1	.21	12.5
The year	331	.1	33.9	24,600

STEVENSON CREEK AT SHAVER, CALIF.

LOCATION.—In sec. 13, T. 9 S., R. 24 E., three-quarters of a mile west of Shaver, Fresno County. Altitude, about 5,000 feet.

DRAINAGE AREA.—30.2 square miles (measured on topographic map).

RECORDS AVAILABLE.—October 1, 1916, to September 30, 1920, and April 9, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in wooden well and house on right bank about 20 feet above compound weir. Zero of gage set at elevation of crest of lower weir.

DISCHARGE MEASUREMENTS.—Made from cable a quarter of a mile above gage or by wading.

CHANNEL AND CONTROL.—Bed composed of boulders and bedrock. Control is a compound weir consisting of a 64-foot rectangular sharp-crested weir with partial end contractions and an 8-foot rectangular sharp-crested weir 1 foot deep in middle of the larger weir. Velocity of approach is considerable at high stages. During 1926 construction work above the station caused the creek to carry a heavy silt load and by July it had completely filled the weir pool.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.04 feet at 10 a. m. March 17 (discharge, 872 second-feet); minimum stage, from water-stage recorder, 0.04 foot October 4 (discharge, 0.2 second-foot).

1916-1920, 1922-1926: Maximum mean daily discharge, from water-stage recorder, 712 second-feet on April 7, 1920; practically no flow July to about October 15, 1924.

ICE.—Stage-discharge relation not seriously affected by ice during year.

DIVERSIONS.—Southern California Edison Co.'s flume at Shaver diverts water at Shaver Lake Dam and from Camp 22 Creek, a tributary of Stevenson Creek. This water is used at power houses 2 and 8, then spills into Big Creek near mouth. See page 184 for daily discharge of the flume. Part of the time during May to August, 1926, the flow at this station included water pumped from Southern California Edison Co.'s flume at Shaver below the gaging station on the flume.

REGULATION.—Flow is regulated at Shaver Lake Dam. There were 3,070 acre-feet of water in Shaver Lake on September 30, 1925, and 1,760 acre-feet on September 30, 1926.

ACCURACY.—Stage-discharge relation changed July 17 on account of accumulation of mud in pool above weir. Rating curves well defined. Water-stage recorder record excellent except July 17 to August 5, when mud closed communication between well and stream. Daily discharge ascertained by applying mean daily gage height to rating table except November 19, February 10, March 17, and April 5, for which hourly discharge was averaged, discharge estimated July 17 to August 5. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

Discharge measurements of Stevenson Creek at Shaver, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 15.-----	0.06	0.4	Feb. 8.-----	0.44	6.8	May 19.-----	0.77	17
Nov. 9.-----	.05	.2	Feb. 19.-----	.11	7	June 23.-----	.64	13
Nov. 27.-----	.28	3.5	Mar. 17.-----	2.56	608	June 29.-----	.32	3.9
Dec. 4.-----	.30	3.7	Do.-----	2.93	848	July 8.-----	.28	3.0
Dec. 22.-----	.29	4.1	Apr. 10.-----	.81	18	Aug. 5.-----	-----	.2
Jan. 11.-----	.30	4.0	Apr. 20.-----	.81	17	Sept. 8.-----	.30	2.7
Jan. 22.-----	.29	3.7	May 13.-----	.70	14	Sept. 27.-----	.25	1.7

Daily discharge, in second-feet, of Stevenson Creek at Shaver, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1.2	0.3	3.8	3.6	6	1.4	1.5	16	16	4.5	2.0	2.1
2-----	1.0	.4	4.7	3.8	6	1.2	1.6	16	17	4.5	2.0	2.1
3-----	.2	.3	3.8	3.8	7	1.1	2.2	15	16	4.3	1.0	2.1
4-----	.2	.3	3.8	3.8	7.5	1.1	2.4	15	16	4.3	.6	2.2
5-----	.6	.3	3.6	3.8	7.5	1.4	36	15	16	4.5	.2	2.2
6-----	.6	.3	3.6	3.8	7.5	1.4	35	14	16	6	1.8	2.4
7-----	.5	.3	3.6	3.8	7.5	1.6	26	14	16	3.1	2.2	2.7
8-----	.4	.3	3.6	3.8	7.5	2.2	39	14	16	3.8	2.5	2.7
9-----	.4	.2	3.6	3.8	7.5	1.9	21	13	15	3.4	2.7	2.9
10-----	.7	.2	3.6	3.8	5	1.9	19	14	16	3.1	2.7	2.9
11-----	1.0	.3	3.6	3.8	1.4	1.4	25	14	15	4.3	2.2	2.9
12-----	1.0	.4	3.6	3.8	1.7	1.4	23	15	14	3.4	2.1	2.9
13-----	.7	.7	3.6	3.8	2.2	1.4	20	15	13	3.4	2.2	2.9
14-----	.5	.8	3.6	3.8	5	1.5	20	15	13	4.3	2.7	2.9
15-----	.3	.8	3.6	3.8	5	1.4	20	16	13	5	2.7	2.5
16-----	.2	.8	3.6	3.8	4.0	1.6	20	16	14	4.0	3.1	2.5
17-----	.2	.8	3.6	3.6	1.2	76	19	17	13		2.1	2.9
18-----	.4	.7	3.6	3.6	1.1	2.4	20	17	13		2.2	2.9
19-----	.4	2.1	3.6	3.6	.8	2.4	21	17	13		2.4	2.9
20-----	.5	3.4	3.6	3.6	1.0	1.9	18	17	14		2.5	2.9
21-----	.4	3.4	3.6	3.6	.8	2.0	16	17	13		2.2	2.7
22-----	.3	3.4	3.6	3.6	.8	2.0	15	16	13		2.4	2.5
23-----	.3	3.4	3.6	3.6	.8	2.4	15	17	13		2.5	2.7
24-----	.3	3.4	3.6	3.6	1.0	2.9	14	18	13	3.0	2.2	2.9
25-----	.3	3.4	3.6	3.6	1.1	2.2	14	18	13		2.4	2.7
26-----	.3	3.4	3.6	3.6	1.2	2.9	15	18	13		2.5	2.5
27-----	.3	3.4	3.6	3.6	1.7	1.4	16	17	12		2.4	2.4
28-----	.3	3.4	3.6	4.3	1.5	1.7	18	17	10		2.1	2.1
29-----	.5	3.4	3.6	8.5		1.5	16	18	6		2.4	2.4
30-----	.5	3.4	3.6	5.5		1.2	16	17	4.7		2.4	2.2
31-----	.3		3.6	7.5		1.2		16			2.4	

NOTE.—Braced figures represent estimated mean discharge for period indicated.

Monthly discharge of Stevenson Creek at Shaver, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	1.2	0.2	0.48	29.5
November-----	3.4	.2	1.59	94.6
December-----	4.7	3.6	3.65	224
January-----	8.5	3.6	4.06	250
February-----	7.5	.8	3.62	201
March-----	76	1.1	4.13	254
April-----	39	1.5	18.1	1,080
May-----	18	13	15.9	978
June-----	17	4.7	13.5	803
July-----	6		3.58	220
August-----	3.1	.2	2.19	135
September-----	2.9	2.1	2.59	154
The year-----	76	.2	6.11	4,420

SOUTHERN CALIFORNIA EDISON CO.'S FLUME AT SHAVER, CALIF.

LOCATION.—In sec. 13, T. 9 S., R. 24 E., one-eighth mile below Shaver Lake Dam and one-fourth mile west of Shaver, Fresno County. Altitude, about 5,200 feet.

RECORDS AVAILABLE.—February 16, 1922, to September 5, 1926, when flume was torn down and station discontinued.

GAGE.—Water-stage recorder in wooden well and house on right side.

DISCHARGE MEASUREMENTS.—Made from plank about 200 feet above gage.

CHANNEL AND CONTROL.—Timber flume 6.67 feet wide and 6 feet deep lined with matched planed vertical sheeting. Control is indefinite.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 4.10 feet at 2 p. m. March 23 (discharge, 366 second-feet); no flow at various times.

1922-1926: Maximum stage, from water-stage recorder, 4.17 feet at 8 a. m. November 28, 1924 (discharge, 377 second-feet); flume dry at times during each year except 1925.

ICE.—Stage-discharge relation not seriously affected by ice.

ACCURACY.—Stage-discharge relation changed May 30. Rating curves well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table or, on days of considerable fluctuation, by averaging hourly discharge. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Southern California Edison Co.

The flume receives water from Stevenson Creek Basin as follows: (1) 36-inch gate valve at base of Shaver Lake Dam, (2) gates Nos. 3 and 4 of spillway No. 1 of Shaver Lake Dam, (3) pumps lifting leakage at toe of Shaver Lake Dam, and (4) small feeder flume from Camp 22 Creek. The water flows into Big Creek after passing through Southern California Edison Co.'s power houses Nos. 2 and 8.

Discharge measurements of Southern California Edison Co.'s flume at Shaver, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 15.....	0.26	5.9	Apr. 13.....	2.03	141	July 8.....	0.36	13
Nov. 9.....	.27	5.7	Apr. 20.....	2.94	240	July 16.....	1.61	108
Mar. 15.....	.30	11	May 15.....	.78	37	Aug. 5.....	.13	3.6
Mar. 19.....	3.01	246	June 29.....	.38	15			

Daily discharge, in second-feet, of Southern California Edison Co.'s flume at Shaver, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	5.5	7		3.2	48	107	9.5	15	1.4	0.5
2.....	5.5	7		2.9	47	115	9.0	15	1.4	.3
3.....	6	7		2.9	40	84	8.5	14	2.7	.8
4.....	6	7		2.9	12	72	8.5	14	3.7	.3
5.....	6	7		3.7	202	93	8.5	13	3.7	.3
6.....	6	7		4.4	322	110	8.5	12	1.4	
7.....	6	7	0.7	4.8	300	100	8.5	14	1.4	
8.....	6	7	.9	6	322	124	8.5	14	1.4	
9.....	6	7	1.1	5.5	160	14	8.5	14	1.1	
10.....	6.5	7	3.5	5.5	6.5	4.0	8.5	14	1.1	
11.....	6	7	7	6	121	4.4	8.5	12	1.1	
12.....	6.5	79	133	6.5	174	4.8	8.5	14	1.1	
13.....	6.5	151	219	7	139	10	8.5	14	1.1	
14.....	6.5	126	196	7	142	27	8.5	133	1.1	
15.....	6.5	4.4	229	8.5	136	36	8.5	135	1.1	
16.....	6.5	39	219	9	160	34	8.5	136	1.1	
17.....	6.5	170	112	11	140	33	8.5	137	1.1	
18.....	6	219	1.3	10	59	31	8.0	103	1.1	
19.....	6.5	28	1.6	125	203	13	8	143	1.1	
20.....	6.5		1.6	165	170	5	8	145	1.1	

Daily discharge, in second-feet, of Southern California Edison Co.'s flume at Shaver, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
21.....	6.5	-----	1.6	209	119	8.5	8	135	1.1	-----
22.....	6.5	-----	1.6	135	99	18	8	108	1.1	-----
23.....	6.5	-----	1.6	285	75	17	8	3.7	.8	-----
24.....	6.5	-----	1.8	88	52	18	8	2.4	.8	-----
25.....	6.5	-----	2.1	4.0	3.7	14	8	1.4	.8	-----
26.....	6.5	-----	2.9	4.8	17	12	8	1.6	.8	-----
27.....	6.5	-----	2.6	6	56	12	8	3.0	.8	-----
28.....	6.5	-----	3.2	6	76	12	10	2.7	.8	-----
29.....	6	-----	-----	7	70	12	13	1.4	.8	-----
30.....	7	-----	-----	8	70	11	15	1.4	.8	-----
31.....	7	-----	-----	38	-----	10	-----	2.7	.5	-----

NOTE.—No flow Nov. 20 to Feb. 6.

Monthly discharge of Southern California Edison Co.'s flume at Shaver, Calif. for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	7	5.5	6.31	388
November.....	219	.0	30.4	1,810
February.....	229	.0	40.8	2,270
March.....	285	2.9	38.3	2,360
April.....	322	3.7	118	7,020
May.....	124	4.0	37.6	2,310
June.....	15	8	8.80	524
July.....	145	1.4	44.3	2,720
August.....	3.7	.5	1.27	78.1
September 1-5.....	.5	.0	.28	3.3
The period.....	-----	-----	-----	19,500

NOTE.—No flow during December and January.

FRESNO RIVER BASIN

FRESNO RIVER NEAR KNOWLES, CALIF.

LOCATION.—In N. $\frac{1}{2}$ sec. 15, T. 8 S., R. 20 E., at Fresno Crossing 6 miles northeast of Knowles, Madera County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 16, 1911, to January 1, 1914, and November 13, 1915, to September 30, 1926.

GAGE.—Vertical staff in two sections; low-water section on left bank about 60 feet above bridge; high-water section on right bank about 100 feet above bridge. Gage read by J. E. Gayman.

DISCHARGE MEASUREMENTS.—Made by wading.

CHANNEL AND CONTROL.—Bed consists of small boulders, gravel, sand, and outcroppings of bed rock; shifting. A concrete control was installed November 4, 1916.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 3.50 feet at 9 a. m. February 14 (discharge, 1,640 second-feet); no flow August 5 to September 30.

1911-1914, 1916-1926: Maximum stage recorded, 6.0 feet at 5 p. m. February 21, 1917 (discharge, determined from extension of rating curve, about 4,500 second-feet); no flow part of August and September, 1919, July to October, 1924, and August 5 to September 30, 1926.

DIVERSIONS.—Water is diverted above station for irrigation and lumbering.

REGULATION.—Diurnal fluctuation at low stages due to diversions above.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Staff gage read to hundredths once daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records fair.

Discharge measurements of Fresno River near Knowles, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Mar. 25.....	Feet 1.11	Sec.-ft. 44	Apr. 12.....	Feet 1.60	Sec.-ft. 175	Sept. 24.....	Feet 0.44	Sec.-ft. 0.4
Do.....	1.11	44	June 19.....	.92	16			

Daily discharge, in second-feet, of Fresno River near Knowles, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	2.9	7	25	12	97	0.1	39	126	67	7.5	0.5
2.....	3.3	7	21	12	78	.1	50	126	67	7.5	.4
3.....	3.3	10	15	12	118	.1	57	118	62	7	.2
4.....	3.3	14	14	14	240	.1	73	118	62	7	.1
5.....	4.1	12	14	14	197	.1	390	118	57	7	-----
6.....	7	11	12	14	118	.0	300	111	25	6	-----
7.....	7.5	10	12	12	57	4.1	262	104	25	6	-----
8.....	7	10	11	12	57	118	985	104	25	5.5	-----
9.....	5.5	8.5	11	12	62	118	420	97	25	4.5	-----
10.....	4.5	8.5	10	11	62	118	285	90	23	4.5	-----
11.....	4.5	10	10	11	67	111	267	90	21	4.1	-----
12.....	5.5	8.5	8.5	12	67	111	258	90	19	4.1	-----
13.....	5.5	8.5	8.5	12	73	104	240	83	17	4.1	-----
14.....	6	7.5	8.5	12	985	104	231	83	17	3.7	-----
15.....	6	8.5	7.5	11	100	97	197	83	15	3.7	-----
16.....	7.5	8.5	7.5	11	25	97	172	90	14	8.8	-----
17.....	7.5	7.5	7	10	2.5	83	164	90	14	3.3	-----
18.....	7.5	7.5	7	10	.2	78	172	90	12	2.9	-----
19.....	8.5	7	8.5	10	.7	67	172	83	15	2.9	-----
20.....	8.5	7	10	8.5	.5	57	164	83	14	2.5	-----
21.....	8.5	7.5	12	8.5	.5	57	156	83	14	2.5	-----
22.....	7.5	7	11	7.5	.2	53	156	90	12	2.5	-----
23.....	7.5	7	11	7.5	.2	50	148	90	12	2.2	-----
24.....	7	7	10	7.5	.2	43	148	83	11	2.2	-----
25.....	6	7	10	7	.1	39	141	83	11	1.9	-----
26.....	6	7.5	10	7	.1	39	141	83	10	1.9	-----
27.....	5.5	7.5	10	7	.1	36	141	90	8.5	1.6	-----
28.....	5.5	7.5	11	6	.1	36	133	83	8.5	1.3	-----
29.....	6	8.5	11	57	-----	36	133	78	7.5	1.3	-----
30.....	6	39	11	118	-----	36	133	78	7.5	1.0	-----
31.....	6	-----	11	126	-----	33	-----	73	-----	.8	-----

NOTE.—No flow Aug. 5 to Sept. 30.

Monthly discharge of Fresno River near Knowles, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	8.5	2.9	6.03	371
November.....	39	7	9.47	564
December.....	25	7	11.2	689
January.....	126	6	19.1	1,170
February.....	985	.1	86.0	4,780
March.....	118	.0	55.7	3,420
April.....	985	39	211	12,600
May.....	126	73	93.3	5,740
June.....	67	7.5	23.3	1,390
July.....	7.5	.8	3.75	231
August.....	.5	.0	.04	2.5
The year.....	985	.0	42.7	31,000

NOTE.—No flow during September.

MERCED RIVER BASIN

MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.

LOCATION.—At Happy Isles Bridge, 1½ miles southeast of Yosemite, Mariposa County.

DRAINAGE AREA.—181 square miles (measured on topographic maps).

RECORDS AVAILABLE.—August 23, 1915, to September 30, 1926.

GAGE.—Water-stage recorder on right bank about 20 feet below bridge.

DISCHARGE MEASUREMENTS.—Made from Clark Bridge about half a mile below gage or by wading just below Clark Bridge.

CHANNEL AND CONTROL.—Boulders; practically permanent. Banks high; not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.58 feet at 1.30 a. m. May 5 (discharge, 2,240 second-feet); minimum stage, from water-stage recorder, 0.35 foot at 10.30 a. m. September 30 (discharge, 1.5 second-feet).

1915-1926: Maximum stage, from water-stage recorder, 7.10 feet at 10 p. m. May 28, 1919 (discharge, 3,800 second-feet); minimum discharge, from water-stage recorder, 1.5 second-feet at 10.30 a. m. September 30, 1926 (gage height, 0.35 foot).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation not changed during year. Rating curve well defined. Water-stage recorder record good except March 21-25 when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge March 21-25 estimated from records of flow at Pohono Bridge. Records good.

COOPERATION.—Gage-height record furnished by officials of Yosemite National Park.

Discharge measurements of Merced River at Happy Isles Bridge, near Yosemite, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 25.....	1.33	61	May 27.....	3.45	662
May 26.....	3.24	565	Aug. 12.....	.84	19

Daily discharge, in second-feet, of Merced River at Happy Isles Bridge, near Yosemite, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	13	42	57	28	30	113	322	1,420	1,030	154	33	6
2.....	12	42	99	26	32	110	307	1,540	947	138	31	5.5
3.....	12	41	77	27	34	107	292	1,830	714	125	31	5
4.....	11	40	68	21	38	104	325	1,960	670	118	29	4.9
5.....	15	39	67	26	42	107	437	1,780	670	122	29	4.6
6.....	28	42	70	23	43	122	394	1,060	697	150	28	4.3
7.....	24	40	65	23	48	125	377	746	610	129	27	4.3
8.....	23	39	59	21	50	125	365	585	899	108	25	4.0
9.....	22	37	53	23	58	115	340	521	1,310	148	23	4.0
10.....	23	36	49	22	56	102	421	539	686	189	22	4.0
11.....	35	44	48	21	50	101	508	566	512	228	20	3.6
12.....	48	46	46	20	49	113	530	833	445	469	18	3.8
13.....	51	42	31	20	51	132	774	998	417	313	16	3.8
14.....	53	33	32	20	53	168	998	1,200	384	225	14	3.6
15.....	52	40	35	20	54	196	1,350	1,380	340	176	14	3.4

Daily discharge, in second-feet, of Merced River at Happy Isles Bridge, near Yosemite, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
16.....	53	41	35	17	54	208	1,540	1,580	301	136	12	3.4
17.....	57	35	34	20	54	217	1,500	1,620	283	115	11	3.4
18.....	58	35	33	17	55	183	998	1,580	274	101	10	3.4
19.....	58	34	32	16	59	164	785	1,740	268	88	10	3.4
20.....	58	33	31	16	61	150	929	1,740	259	78	9.5	3.2
21.....	58	31	37	17	56	170	1,280	1,540	256	72	9	3.0
22.....	56	31	36	18	58	195	1,500	1,420	262	65	8.5	2.8
23.....	55	31	35	18	50	220	1,540	1,240	259	60	8	2.8
24.....	53	31	35	17	57	305	1,780	827	244	56	8	2.6
25.....	51	29	35	17	61	355	1,960	590	225	52	7.5	2.2
26.....	50	29	35	17	75	355	1,920	552	208	48	7.5	2.2
27.....	49	30	35	16	94	328	1,780	650	200	46	7	1.9
28.....	48	28	34	17	105	325	1,700	857	187	43	6.5	1.8
29.....	46	28	31	48	-----	322	1,780	911	180	40	6.5	1.8
30.....	46	35	30	37	-----	331	1,500	911	176	37	6.5	1.7
31.....	44	-----	28	31	-----	355	-----	998	-----	35	6	-----

Monthly discharge of Merced River at Happy Isles Bridge, near Yosemite, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	58	11	40.7	2,500
November.....	46	28	36.3	2,160
December.....	99	28	44.9	2,760
January.....	48	16	21.9	1,350
February.....	105	30	54.5	3,030
March.....	355	101	194	11,900
April.....	1,960	292	1,010	60,100
May.....	1,960	521	1,150	70,700
June.....	1,310	176	464	27,600
July.....	469	35	125	7,690
August.....	33	6	15.9	978
September.....	6	1.7	3.48	207
The year.....	1,960	1.7	264	191,000

MERCED RIVER AT POHONO BRIDGE, NEAR YOSEMITE, CALIF.

LOCATION.—At Pohono Bridge 5 miles below Yosemite, Mariposa County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 2, 1916, to September 30, 1926.

GAGE.—Water-stage recorder on left bank 150 feet above bridge. Datum lowered 0.8 foot September 4, 1918.

DISCHARGE MEASUREMENTS.—Made by wading or from cable 1,000 feet above gage.

CHANNEL AND CONTROL.—Bed consists of sand and gravel above gage and boulders below gage. Control formed by boulders; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.77 feet at 2 a. m. May 5 (discharge, 3,950 second-feet); minimum stage, from water-stage recorder, 0.87 foot from 4 a. m. to 1 p. m. September 30 (discharge, 14 second-feet).

1916-1926: Maximum stage, from water-stage recorder, 10.00 feet at 1 a. m. June 5, 1922 (discharge, 6,370 second-feet); minimum stage, from water-stage recorder, 0.61 foot at 2 p. m. September 29 and October 1, 1924 (discharge, 3.3 second-feet).

ICE.—No ice forms at control because of rapids.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record good, except parts of December to February when blasting on the road caused paper to slip. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

COOPERATION.—Gage-height record furnished by officials of Yosemite National Park.

Discharge measurements of Merced River at Pohono Bridge near Yosemite, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 25.....	2.00	132	May 25.....	4.46	1,020
May 25.....	4.51	1,070	Aug. 12.....	1.24	39

Daily discharge, in second-feet, of Merced River at Pohono Bridge, near Yosemite, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	32	82	131	68	90	230	770	2,620	1,360	224	60	22
2.....	32	82	230	66	86	244	734	2,820	1,270	204	58	21
3.....	31	88	191	66	101	244	689	3,120	1,030	191	55	20
4.....	31	88	164	58	108	237	756	3,320	945	178	54	20
5.....	39	88	159	62	120	246	1,090	3,220	945	177	52	19
6.....	55	90	166	58	116	270	1,090	1,960	945	195	52	19
7.....	57	90	146	58	120	295	970	1,470	870	188	50	18
8.....	55	88	133	55	125	292	895	1,210	1,210	164	49	18
9.....	51	86	123	55	129	268	810	1,090	1,840	184	48	18
10.....	52	85	111	52	136	230	1,000	1,090	1,090	230	46	17
11.....	71	89	105	52	131	226	1,150	1,270	820	268	43	17
12.....	102	117	101	51	139	253	1,210	1,500	738	540	40	17
13.....	123	107	84	49	134	301	1,640	1,680	680	423	37	17
14.....	114	97	77	47	139	403	2,040	1,920	622	295	35	17
15.....	111	94	79	49	139	486	2,580	2,170	554	232	33	17
16.....	110	95	79	46	146	536	2,820	2,400	482	189	32	16
17.....	116	89	79	50	136	645	2,820	2,480	439	164	31	16
18.....	118	82	80	44	141	411	1,960	2,400	415	146	30	16
19.....	116	81	79	42	146	368	1,610	2,620	407	133	29	16
20.....	111	79	79	45	154	361	1,760	2,530	387	120	27	16
21.....	108	76	84	47	144	407	2,480	2,300	371	110	27	16
22.....	105	73	81	51	144	435	2,720	2,060	364	100	27	16
23.....	104	71	81	52	133	558	2,820	1,880	357	93	26	15
24.....	100	71	80	55	139	738	3,320	1,400	343	86	25	15
25.....	98	71	81	52	141	845	3,520	1,090	317	81	24	14
26.....	95	69	82	52	158	845	3,420	1,000	290	79	24	14
27.....	91	68	82	49	184	770	3,220	1,030	276	76	24	14
28.....	89	67	80	52	209	790	3,120	1,210	268	73	23	14
29.....	86	66	76	134	-----	785	3,120	1,300	248	69	22	14
30.....	85	73	73	107	-----	785	2,720	1,270	246	66	22	14
31.....	85	-----	69	95	-----	845	-----	1,300	-----	62	22	-----

Monthly discharge of Merced River at Pohono Bridge, near Yosemite, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	123	31	83.0	5,100
November.....	117	66	83.4	4,960
December.....	230	69	105	6,480
January.....	134	42	58.7	3,610
February.....	209	86	135	7,500
March.....	845	226	460	28,300
April.....	3,520	689	1,960	117,000
May.....	3,320	1,000	1,900	117,000
June.....	1,840	671	945	39,900
July.....	540	62	172	10,600
August.....	60	22	36.4	2,240
September.....	22	14	16.8	1,000
The year.....	3,520	14	474	344,000

MERCED RIVER AT HORSESHOE BEND, CALIF.

LOCATION.—In sec. 22, T. 3 S., R. 16 E., 600 feet above Yosemite Valley Railroad bridge No. 43-A, just above Horseshoe Bend of Merced River, and 1½ miles below Kittredge, Mariposa County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 17, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on left bank of river.

DISCHARGE MEASUREMENTS.—Made from cable 1 mile above gage.

CHANNEL AND CONTROL.—Solid rock, large boulders, and gravel; permanent. Gage is in a pool of deep water.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 12.05 feet at 11.30 p. m. February 13 (discharge, 8,750 second-feet); minimum stage, from water-stage recorder, 0.06 foot at 9 p. m. October 5 (discharge, 13 second-feet).

1922-1926: Maximum stage recorded, 15.48 feet at 11.30 a. m. February 6, 1925 (discharge, 14,000 second-feet); minimum stage recorded, 0.06 foot at 9 p. m. October 5, 1925 (discharge, 13 second-feet).

DIVERSIONS.—None.

REGULATION.—No large storage above gage. The power plant at Kittredge above gage causes diurnal fluctuation at low water when it alternately stores water and develops power twice daily.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent, except December 15-19 and February 28 to March 16 when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table, by use of discharge integrator, or by averaging hourly discharge. Records excellent.

The following discharge measurements were made:

February 27, 1926: Gage height, 3.17 feet; discharge, 535 second-feet.

May 24, 1926: Gage height, 6.11 feet; discharge, 2,180 second-feet.

May 24, 1926: Gage height, 6.11 feet; discharge, 2,210 second-feet.

Daily discharge, in second-feet, of Merced River at Horseshoe Bend, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	56	129	134	140	1,110	600	1,260	4,080	1,620	274	79	39
2.....	60	98	325	139	465	600	1,170	4,080	1,530	250	75	41
3.....	72	140	425	139	1,320	590	1,080	4,630	1,380	230	76	40
4.....	60	142	304	136	820	580	1,110	4,970	1,170	209	53	40
5.....	53	132	256	134	880	570	3,010	5,210	1,140	198	51	39
6.....	98	133	241	117	555	570	4,970	3,230	1,110	199	66	39
7.....	96	133	244	134	438	600	2,760	2,330	1,060	216	55	38
8.....	117	136	226	112	388	650	4,740	1,880	1,170	201	62	37
9.....	105	136	214	110	362	700	3,330	1,740	1,880	184	61	36
10.....	93	136	206	132	425	620	2,670	1,680	1,560	210	62	35
11.....	82	137	179	114	580	540	2,490	1,880	1,060	260	55	33
12.....	118	160	174	108	1,810	460	2,250	2,250	860	312	54	28
13.....	171	198	172	106	3,100	520	2,660	2,490	780	555	54	29
14.....	196	166	150	106	4,100	630	3,230	2,750	700	388	55	30
15.....	168	157	160	102	1,350	720	4,080	3,030	660	305	55	31
16.....	163	150	160	107	1,320	820	4,520	3,330	585	246	39	32
17.....	164	152	160	107	880	980	4,630	3,430	540	216	59	33
18.....	173	139	160	118	700	860	3,330	3,130	495	191	37	34
19.....	168	137	160	129	600	740	2,570	3,630	480	166	48	33
20.....	166	134	146	94	680	700	2,570	3,430	465	138	48	33
21.....	170	131	165	76	640	740	3,430	3,130	438	133	38	34
22.....	164	134	164	104	540	760	4,190	2,750	425	133	39	34
23.....	159	132	148	107	495	840	4,080	2,490	425	140	40	54
24.....	152	130	158	104	450	1,080	4,850	1,950	412	84	45	48
25.....	141	124	160	105	440	1,380	5,210	1,620	388	104	39	35
26.....	142	124	164	102	450	1,440	4,970	1,470	362	105	48	34
27.....	142	116	156	100	495	1,320	4,630	1,380	338	92	38	32
28.....	142	130	148	110	550	1,320	4,410	1,500	325	96	42	32
29.....	139	104	157	858	-----	1,320	4,630	1,680	298	93	42	33
30.....	136	134	156	480	-----	1,290	3,970	1,620	282	67	41	32
31.....	133	-----	139	581	-----	1,320	-----	1,590	-----	86	41	-----

Monthly discharge of Merced River at Horseshoe Bend, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	196	56	129	7,980
November.....	198	98	137	8,150
December.....	425	134	191	11,700
January.....	858	76	165	10,100
February.....	4,100	362	927	51,500
March.....	1,440	460	834	51,800
April.....	5,210	1,080	3,420	294,000
May.....	5,210	1,380	2,720	167,000
June.....	1,880	282	798	47,600
July.....	555	67	196	12,100
August.....	79	37	51.5	3,170
September.....	54	28	35.6	2,120
The year.....	5,210	28	796	577,000

MERCED RIVER AT EXCHEQUER, CALIF.

LOCATION.—About on section line between secs. 14 and 23, T. 4 S., R. 15 E., half a mile below Exchequer Dam at Exchequer, Mariposa County, 8 miles above Merced Falls. Prior to October 25, 1922, station was maintained at remains of old dam at Exchequer, 1 mile above present site.

DRAINAGE AREA.—1,020 square miles at old site (measured on topographic maps).

RECORDS AVAILABLE.—November 28, 1915, to September 30, 1926.

GAGE.—Water-stage recorder on right bank, in concrete well and shelter.

DISCHARGE MEASUREMENTS.—Made from cable 1 mile below gage or by wading.

CHANNEL AND CONTROL.—Channel is solid rock, overlain with gravel. Channel and control permanent. Banks high, clean, are not overflowed.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.34 feet at 3 a. m. February 14 (discharge, 11,100 second-feet); minimum stage, from water-stage recorder, about 0.10 foot September 13–18 and 20–23 (discharge, 29 second-feet).

1915–1926: Maximum stage recorded, 20.0 feet at 4 p. m. January 17, 1916 (discharge, determined from extension of rating curve, about 22,000 second-feet); minimum stage recorded, 4.0 feet at old site in August, 1921, and September, 1919 and 1921 (discharge, 14 second-feet).

DIVERSIONS.—None.

REGULATION.—Completely regulated after April 20, 1926, by gates in the new Exchequer Dam. Capacity of Exchequer Reservoir is 286,000 acre-feet. There was no stored water in reservoir September 30, 1926.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Recorder record excellent, except September 7–30 when float was resting on mud in well. Staff gage read once daily during this period. Daily discharge ascertained by applying mean daily-gage height to rating table, except January 29–31, February 3, 13, April 5–6, 20–21, 27–28, and May 2, for which hourly discharge was averaged. Records excellent.

COOPERATION.—Gage-height record furnished by Merced Irrigation District.

The following discharge measurements were made:

February 26, 1926: Gage height, 1.94 feet; discharge, 484 second-feet.

May 28, 1926: Gage height, 3.71 feet; discharge, 1,550 second-feet.

Daily discharge, in second-feet, of Merced River at Exchequer, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	60	128	166	133	1,360	640	1,400	1,100	1,500	1,160	1,040	37
2.....	60	125	325	133	537	645	1,260	933	1,500	1,190	1,040	35
3.....	60	116	500	133	1,430	630	1,190	1,100	1,290	1,220	1,010	37
4.....	58	139	298	132	950	620	1,160	1,100	1,220	1,220	1,040	37
5.....	64	144	275	126	1,070	610	2,680	1,160	1,460	1,220	1,010	37
6.....	70	139	242	121	675	620	5,620	1,130	1,500	1,220	1,010	35
7.....	87	135	242	126	519	675	3,070	1,130	1,540	1,190	1,010	35
8.....	98	132	229	106	449	750	4,650	1,160	1,540	1,160	1,010	35
9.....	100	128	208	128	405	782	3,970	1,220	1,500	1,130	1,010	35
10.....	96	130	202	112	496	695	2,870	1,290	1,500	1,260	1,010	33
11.....	96	133	170	106	755	600	2,670	1,260	1,540	1,190	1,040	33
12.....	96	139	166	108	2,400	532	2,400	1,260	1,540	1,220	1,040	33
13.....	135	168	168	116	3,130	625	2,670	1,260	1,620	1,220	972	29
14.....	177	183	159	104	6,360	720	3,270	1,320	1,580	1,220	607	29
15.....	183	172	132	106	1,700	838	4,100	1,400	1,500	1,220	501	29
16.....	180	168	128	95	1,460	920	4,510	1,400	1,480	1,260	474	29
17.....	177	163	133	99	1,040	1,010	4,800	1,400	1,500	1,260	470	29
18.....	172	159	150	93	810	1,010	3,600	1,400	1,540	1,220	488	29
19.....	180	143	238	104	700	838	2,870	1,430	1,540	1,160	519	31
20.....	183	141	163	95	810	782	1,560	1,460	1,430	1,160	492	29
21.....	183	137	170	93	782	782	1,700	1,460	1,460	1,160	369	29
22.....	172	133	135	93	655	838	3,070	1,460	1,430	1,190	354	29
23.....	161	130	152	93	585	892	3,270	1,460	1,430	1,190	474	29
24.....	163	128	156	96	514	1,100	3,380	1,460	1,320	1,190	465	49
25.....	163	125	150	95	492	1,360	3,600	1,580	1,290	1,190	365	46
26.....	146	121	146	95	488	1,460	3,600	1,580	1,320	1,190	205	37
27.....	139	121	143	93	537	1,400	2,880	1,580	1,400	1,130	95	33
28.....	137	118	148	102	605	1,320	1,870	1,500	1,430	1,040	56	34
29.....	137	116	156	640	-----	1,360	1,280	1,580	1,360	1,040	41	35
30.....	135	108	135	692	-----	1,290	1,100	1,500	1,290	1,040	38	33
31.....	132	-----	146	431	-----	1,400	-----	1,430	-----	1,040	37	-----

Monthly discharge of Merced River at Exchequer, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	183	58	129	7,930
November.....	183	108	137	8,150
December.....	500	128	191	11,700
January.....	692	93	155	9,530
February.....	6,360	405	1,130	62,800
March.....	1,480	532	895	55,000
April.....	5,620	1,100	2,870	171,000
May.....	1,580	933	1,340	82,400
June.....	1,620	1,220	1,450	86,300
July.....	1,260	1,040	1,180	72,600
August.....	1,040	37	622	38,200
September.....	49	29	33.7	2,010
The year.....	6,360	29	839	608,000

MERCED RIVER NEAR MERCED FALLS, CALIF.

LOCATION.—In sec. 11, T. 5 S., R. 15 E., 1,500 feet above Yosemite Valley Railroad trestle 26-B about 2½ miles above Merced Falls, Mariposa County.

DRAINAGE AREA.—1,090 square miles at old site.

RECORDS AVAILABLE.—April 6, 1901, to November 30, 1913, and April 1, 1923, to April 20, 1926, when station was discontinued.

GAGE.—Water-stage recorder in a 24-inch steel pipe well and shelter on right bank. Gage used in 1913 was about half a mile downstream.

DISCHARGE MEASUREMENTS.—Made from cable at gage.

CHANNEL AND CONTROL.—Channel is gravel and sand. Control is a rock and gravel riffle 500 feet below gage. One channel at low and two at high stages. Channel straight above and below gage. Water is swift and smooth. Right bank high and wooded, left bank low and will be overflowed.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.65 feet at 4 a. m. February 14 (discharge, 11,500 second-feet); minimum stage from water-stage recorder, -0.55 foot at midnight April 20, gate in Exchequer Dam closed (discharge, 26 second-feet).

1901-1913, 1923-1926: Maximum stage recorded, 21.05 feet January 30, 1911 (discharge, 37,200 second-feet); no flow November 21, 1901.

DIVERSIONS.—None.

REGULATION.—No large storage above station. Power plants above station and at Merced Falls alternated in storing water and developing power twice daily during low-water period. This caused a small diurnal fluctuation. A small amount of storage at Exchequer Dam affects flow. Exchequer Dam completed and waste gate in dam closed April 20.

ACCURACY.—Stage-discharge relation changed February 13 and April 6. Rating curves fairly well defined below 3,000 second-feet. Water-stage recorder record excellent, except December 20-23 when chart was not changed and January 21-30 when chart was lost. Daily discharge ascertained by applying mean daily gage height to rating table except February 1, 3, April 5, 6, 8, 9, and 20, for which hourly discharge was averaged. Discharge for December 20-23 and January 21-30 estimated from records of flow at Exchequer. Records good.

Discharge measurements of Merced River near Merced Falls, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 10.....	0.04	133	Mar. 24.....	1.60	935
Feb. 28.....	1.01	514	Apr. 13.....	3.74	2,980

Daily discharge, in second-feet, of Merced River near Merced Falls, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1.....	56	122	165	140	1,300	564	1,330
2.....	56	122	277	140	490	576	1,200
3.....	56	108	470	140	1,260	576	1,140
4.....	56	132	309	140	831	564	1,130
5.....	59	138	260	140	922	552	2,930
6.....	69	138	232	115	575	552	6,330
7.....	82	132	229	135	445	594	3,080
8.....	94	132	223	112	385	693	5,130
9.....	98	135	208	135	345	735	4,320
10.....	94	135	199	112	403	637	2,860
11.....	90	135	168	115	620	552	2,640
12.....	92	140	165	120	2,470	522	2,370
13.....	122	155	160	122	3,180	554	2,640
14.....	160	168	160	110	7,230	612	3,400
15.....	168	175	130	108	1,900	742	4,280
16.....	168	160	130	100	1,580	858	4,950
17.....	170	158	132	102	1,070	930	5,250
18.....	168	148	148	100	770	930	3,920
19.....	172	140	202	100	637	756	2,930
20.....	172	140	170	92	735	728	1,600
21.....	168	135	175	90	735	714	-----
22.....	165	132	140	90	588	756	-----
23.....	155	130	160	90	522	826	-----
24.....	155	130	162	93	470	1,070	-----
25.....	155	128	158	92	440	1,430	-----
26.....	142	120	152	92	430	1,530	-----
27.....	138	118	150	90	460	1,430	-----
28.....	135	115	160	100	528	1,380	-----
29.....	132	118	160	600	-----	1,380	-----
30.....	132	108	138	650	-----	1,330	-----
31.....	130	-----	152	349	-----	1,380	-----

Monthly discharge of Merced River near Merced Falls, Calif., for the year ending September 30, 1926.

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	172	56	123	7,560
November.....	175	108	135	8,030
December.....	470	130	189	11,600
January.....	650	90	152	9,350
February.....	7,230	345	1,120	62,200
March.....	1,530	522	853	52,400
April 1-20.....	6,330	1,130	3,170	126,000
The period.....				277,000

MERCED RIVER NEAR LIVINGSTON, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ sec. 20, T. 6 S., R. 11 E., $3\frac{1}{2}$ miles west of Livingston, Merced County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—March 10, 1922, to September 30, 1924, and October 1, 1925, to September 30, 1926.

GAGE.—Water-stage recorder on left bank.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Shifting sand. One channel at low water and three at high water. Flow is sluggish and smooth. Banks are wooded and overflowed at extremely high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 15.90 feet at 5 p. m. February 14 (discharge, 7,000 second-feet); minimum stage, from water-stage recorder, 2.54 feet September 25-26 (discharge, 50 second-feet).

DIVERSIONS.—Merced Irrigation District diverts practically all the water above the station during irrigating season since completion of Exchequer Dam in April, 1926. Most of the return water enters the river above station. There are several small diversions below station.

REGULATION.—Exchequer Dam, completed in April, 1926. Capacity of reservoir, 286,000 acre-feet.

ACCURACY.—Stage-discharge relation changed February 13. Rating curves fairly well defined below 2,500 second-feet and extended above. Water-stage recorder record good except January 16 to February 2, August 27 to September 18, and September 27-30, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table except January 29, February 1, 2, 12, 14, 15, April 6, 7, 21, and 22, for which hourly discharge was averaged. Discharge January 16 to February 2 estimated from records of flow at Exchequer. Records good.

COOPERATION.—Gage-height record furnished by Merced Irrigation District.

Discharge measurements of Merced River near Livingston, Calif., during the years ending September 30, 1925 and 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1924	Feet	Sec.-ft.	1925	Feet	Sec.-ft.	1926	Feet	Sec.-ft.
Oct. 2.....	2.54	31	Nov. 10.....	3.75	174	Apr. 13.....	8.61	2,220
1925			1926			June 18.....	3.43	165
Aug. 5.....	3.08	82	Mar. 23.....	3.74	242	June 24.....	3.17	130
						Sept. 19.....	2.60	54

Daily discharge, in second-feet, of Merced River near Livingston, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	149	136	216	782	286	222	486	156	113	63	
2	68	149	146	206	1,180	297	236	410	152	95	63	
3	66	153	270	200	680	304	196	360	148	97	65	
4	64	156	535	184	1,350	276	201	315	108	94	62	
5	68	155	408	204	980	258	343	311	98	102	61	
6	70	161	344	188	1,000	249	3,270	269	100	92	62	
7	71	171	314	198	680	256	3,980	247	139	90	65	
8	72	171	304	179	535	297	3,150	269	130	89	69	
9	72	173	301	194	468	390	4,740	244	125	93	68	
10	73	171	278	182	423	472	3,210	283	139	93	65	60
11	75	170	268	170	570	392	2,790	288	122	84	72	
12	80	179	260	188	1,680	343	2,610	269	139	81	63	
13	90	179	244	175	2,490	320	2,370	267	130	79	65	
14	95	179	237	170	5,090	297	2,790	288	139	83	65	
15	104	200	228	175	3,380	286	3,030	260	148	79	68	
16	164	204	208	175	1,760	279	3,450	262	135	72	68	
17	173	194	202	175	1,550	269	3,700	242	130	72	60	
18	179	200	218	175	1,160	262	3,630	227	154	75	65	
19	171	190	239	175	950	297	2,790	201	146	73	62	54
20	171	184	275	175	890	251	2,200	190	180	69	57	54
21	175	177	265	175	890	214	1,170	186	152	67	59	54
22	161	173	228	175	560	203	1,820	175	115	61	62	55
23	156	177	231	175	402	225	2,610	178	122	70	60	62
24	155	175	222	175	355	201	2,790	203	112	68	63	51
25	149	166	222	175	308	240	2,910	203	122	70	68	59
26	156	150	235	175	274	377	2,970	231	98	73	69	50
27	146	143	224	175	272	444	2,910	236	130	68		51
28	146	140	208	175	276	380	1,870	242	161	68		54
29	146	136	237	175		320	1,070	214	141	67	65	53
30	140	135	216	875		260	635	196	128	63		53
31	137		214	680		229		201		66		

NOTE.—Braced figures show estimated mean discharge for periods indicated.

Monthly discharge of Merced River near Livingston, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	179	64	118	7,260
November	204	135	169	10,100
December	535	136	255	15,700
January	875	170	220	13,500
February	5,090	272	1,100	61,100
March	472	201	296	18,200
April	4,740	196	2,320	138,000
May	486	175	257	15,800
June	180	98	133	7,910
July	113	61	79.5	4,890
August	72	57	64.2	3,950
September		50	57.0	3,390
The year	5,090	50	415	300,000

TENAYA CREEK NEAR YOSEMITE, CALIF.

LOCATION.—At Tenaya Bridge in Yosemite National Park, five-eighths mile below outlet of Mirror Lake, 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 5, 1912, to September 30, 1926.

GAGE.—Water-stage recorder on left bank 50 feet above bridge.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Small boulders and gravel; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.03 feet at 9 p. m. April 25 (discharge, 885 second-feet); minimum stage, from water-stage recorder, 0.94 foot at 8 p. m. October 3 (discharge, 1.9 second-feet).

1904-1909, 1912-1926: Maximum stage, from water-stage recorder, 7.05 feet at 9 p. m. May 28, 1919 (discharge, 1,730 second-feet); minimum discharge, 0.5 second-foot, occurred September 12 and most of October, 1906.

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed April 26. Rating curves fairly well defined. Water-stage recorder record good. Clock stopped February 7-23. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge February 7-23 estimated from records of flow of Merced River at Happy Isles at 29 second-feet. Records good.

COOPERATION.—Gage-height record furnished by officials of Yosemite National Park.

Discharge measurements of Tenaya Creek near Yosemite, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 25.....	1.60	30	May 27.....	2.51	138
May 26.....	2.52	150	Aug. 12.....	.96	2.3

Daily discharge, in second-feet, of Tenaya Creek near Yosemite, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.3	7.5	51	14	16	50	143	472	118	11	2.4	2.2
2.....	2.3	7.5	71	13	19	51	135	522	108	9.5	2.4	2.2
3.....	2.2	12	55	13	22	50	125	558	97	9	2.4	2.2
4.....	2.0	16	46	11	26	49	143	558	89	8	2.4	2.2
5.....	2.2	18	46	12	27	51	181	540	81	7.5	2.4	2.2
6.....	2.3	19	48	10	27	55	167	372	72	7.5	2.4	2.2
7.....	2.3	17	40	11	19	59	154	283	78	7	2.4	2.2
8.....	2.3	18	34	9.5	58	151	236	135	6.5	2.2	2.2	2.2
9.....	2.3	18	31	10	55	141	214	224	8	2.2	2.2	2.2
10.....	2.3	17	29	9	51	177	214	138	9	2.2	2.2	2.2
11.....	14	20	26	8.5	50	196	238	106	10	2.2	2.2	2.2
12.....	27	25	24	8.5	55	240	269	85	37	2.2	2.2	2.2
13.....	29	26	18	8	63	349	290	70	18	2.2	2.2	2.2
14.....	22	23	18	7.5	76	459	312	60	14	2.2	2.2	2.2
15.....	21	22	17	7.5	29	90	530	332	51	12	2.2	2.3
16.....	21	22	17	7	99	548	348	45	10	2.2	2.2	2.3
17.....	21	18	16	7.5	103	460	340	40	8.5	2.2	2.2	2.2
18.....	20	18	16	7	79	349	348	34	7.5	2.2	2.2	2.2
19.....	17	16	16	7	73	290	348	31	6.5	2.2	2.2	2.2
20.....	16	16	17	7	70	358	328	27	5.5	2.2	2.2	2.2
21.....	14	14	19	7	76	488	290	25	5	2.2	2.2	2.2
22.....	13	14	19	7	82	512	262	23	4.8	2.2	2.2	2.0
23.....	12	14	19	7	111	565	234	21	4.5	2.2	2.2	2.0
24.....	12	14	19	7	151	618	208	19	3.8	2.2	2.2	2.0
25.....	11	13	19	7	31	168	688	178	17	3.4	2.2	2.0
26.....	10	12	19	7	35	163	645	158	16	2.9	2.2	2.0
27.....	8	12	19	7	39	149	628	143	14	2.7	2.2	2.0
28.....	8	12	18	9.5	43	154	610	143	14	2.6	2.2	2.0
29.....	7.5	12	17	22	-----	154	540	141	13	2.4	2.2	2.0
30.....	7.5	23	16	16	-----	154	484	132	12	2.4	2.2	2.0
31.....	7.5	-----	14	18	-----	161	-----	124	-----	2.4	2.2	-----

NOTE.—Braced figures show estimated mean discharge for periods indicated.

Monthly discharge of Tenaya Creek near Yosemite, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	29	2.0	11.0	676
November.....	26	7.5	16.5	982
December.....	71	14	26.9	1,650
January.....	22	7	9.76	600
February.....	43	16	28.9	1,600
March.....	168	49	90.6	5,570
April.....	688	125	368	21,900
May.....	558	124	295	18,100
June.....	224	12	62.1	3,700
July.....	37	2.4	8.08	494
August.....	2.4	2.2	2.25	138
September.....	2.3	2.0	2.15	128
The year.....	688	2.0	76.8	55,500

YOSEMITE CREEK AT YOSEMITE, CALIF.

LOCATION.—At highway bridge in Yosemite National Park, half a mile above junction with Merced River and one-fourth mile northwest of Yosemite, Mariposa County.

DRAINAGE AREA.—43.2 square miles (measured on topographic map).

RECORDS AVAILABLE.—July, 1904, to June, 1909; January 4, 1912, to September 30, 1926 (incomplete).

GAGE.—Staff in two sections; upper, vertical, fastened to rock wall 25 feet above new stone bridge; lower, inclined, fastened to boulder in front of upper section; read by an employee of Yosemite National Park.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Fine gravel and sand; fairly permanent. Control is a 6-inch water pipe across stream bed, covered with rock.

EXTREMES OF DISCHARGE.—1904–1909, 1912–1926: Maximum stage recorded, 10.0 feet at 7.50 p. m. June 8, 1917 (discharge not determined because of backwater); no flow part of 1915, 1921, 1924, and 1926.

ICE.—Stage-discharge relation not affected by ice during year.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed during high water of April. Rating curves fairly well defined. Staff gage read to half-tenths once a week. Daily discharge ascertained by applying gage height to rating table, except for July and August for which it was estimated from discharge measurement made August 12. Records fair.

COOPERATION.—Gage-height record furnished by officials of Yosemite National Park.

The following discharge measurements were made:

February 25, 1926: Gage height, 3.01 feet; discharge, 12 second-feet.

May 27, 1926: Gage height, 3.80 feet; discharge, 98 second-feet.

August 12, 1926: Gage height, 2.69 feet; discharge, 0.2 second-foot.

Daily discharge, in second-feet, of Yosemite Creek at Yosemite, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.								443				
2.												
3.	0.4						15					
4.												0
5.			51									
6.					12	13	146					
7.		65										
8.								388				
9.												
10.	4.2						146					
11.												0
12.			12								0.2	
13.					13	13						
14.		65										
15.								362			.2	
16.												
17.	34						415					
18.												
19.			6						8			
20.					13	13						
21.		28										
22.												
23.				1.4						0.2		
24.	12						658					
25.					13							
26.			4.2						8			
27.				1.4	12	15		103		.2		
28.		12										
29.				12				139				
30.				12								
31.	12		1.4									

NOTE.—No record on days for which discharge is not given. Probably dry during September.

TUOLUMNE RIVER BASIN

HETCH HETCHY RESERVOIR AT HETCH HETCHY, CALIF.

LOCATION.—At O'Shaughnessy Dam at Hetch Hetchy, Tuolumne County.

RECORDS AVAILABLE.—May 7, 1923, to September 30, 1926.

GAGE.—Staff gage at dam. Zero of gage at mean sea level.

EXTREMES OF STAGE.—Maximum elevation recorded during year, 3,721.0 feet May 13-22 and May 29 to June 2; minimum elevation recorded, 3,555.1 feet March 14-15.

1923-1926: Maximum stage recorded, 3,721.3 feet June 8-11, 1923; minimum stage recorded, 3,555.1 feet March 14-15, 1926.

COOPERATION.—Record of daily elevations furnished by city of San Francisco.

Daily elevation, in feet, of Hetch Hetchy Reservoir at Hetch Hetchy, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	683.2	657.4	632.0	607.8	575.2	558.2	564.4	639.0	721.0	718.3	699.6	675.2
2.	682.2	656.2	631.8	607.6	574.5	558.0	565.0	693.5	721.0	715.7	699.0	674.3
3.	681.2	655.4	631.8	606.6	573.8	558.0	565.8	698.5	720.8	715.1	698.2	673.4
4.	680.1	654.4	631.6	605.8	573.0	557.7	566.5	704.2	720.6	714.6	697.5	672.4
5.	679.1	653.3	631.0	604.9	572.2	557.5	568.0	710.0	720.9	714.6	696.8	671.5
6.	678.4	652.4	630.2	604.0	572.0	557.2	571.0	714.0	721.0	714.4	696.0	670.6
7.	677.5	651.5	629.6	602.9	571.3	557.0	574.5	716.0	720.2	713.8	695.3	669.7
8.	676.5	650.6	629.0	601.8	570.5	557.0	576.5	717.4	720.6	713.2	694.5	668.9
9.	675.9	649.7	628.0	600.5	569.8	557.2	579.0	718.4	720.8	712.6	693.8	667.9
10.	675.1	648.8	627.2	599.3	569.0	557.0	580.3	719.0	720.7	712.0	693.1	667.0

Daily elevation, in feet, of Hetch Hetchy Reservoir at Hetch Hetchy, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11.....	674.3	647.9	626.5	598.1	568.5	556.7	581.0	720.0	720.7	712.0	692.5	666.3
12.....	673.5	647.1	625.7	596.9	567.8	556.0	582.0	720.6	720.4	711.9	691.7	665.6
13.....	672.8	646.3	624.7	595.5	567.5	555.5	585.0	721.0	720.4	711.9	690.9	664.8
14.....	672.1	645.8	623.7	594.3	567.8	555.1	589.0	721.0	720.4	711.5	690.2	663.9
15.....	671.5	645.1	623.0	593.2	567.4	555.1	593.0	721.0	720.2	711.1	689.5	663.0
16.....	670.6	644.2	622.2	591.9	567.5	555.6	602.0	721.0	720.0	710.7	689.2	662.1
17.....	669.9	643.5	621.2	591.1	566.9	556.3	609.0	721.0	719.7	710.1	688.4	661.1
18.....	669.5	642.6	620.0	590.2	566.1	557.0	614.0	721.0	719.5	709.6	687.5	660.1
19.....	669.0	641.8	619.2	589.2	565.4	557.1	617.5	721.0	719.3	709.0	686.6	659.2
20.....	668.0	641.0	618.6	588.2	564.6	557.1	620.5	721.0	719.2	708.4	685.7	758.2
21.....	667.3	640.2	617.8	587.0	564.0	557.0	625.5	721.0	718.9	707.8	684.8	657.2
22.....	666.4	639.3	616.8	585.9	563.3	557.2	631.0	721.0	718.8	707.0	684.2	656.3
23.....	665.4	638.9	615.8	584.7	562.5	557.3	637.0	720.7	718.6	706.3	683.5	655.4
24.....	664.5	638.0	615.0	583.6	561.7	557.3	643.5	720.7	718.3	705.5	682.6	654.4
25.....	664.3	637.3	614.2	582.4	560.7	558.1	651.5	720.4	718.1	704.8	681.7	653.5
26.....	663.5	636.4	613.5	581.0	559.8	559.2	659.0	720.4	717.8	704.0	680.8	653.1
27.....	662.6	635.3	612.4	579.7	559.0	560.3	666.6	720.4	617.5	703.2	679.8	652.4
28.....	661.5	634.4	611.3	578.3	558.8	561.2	673.5	720.6	717.2	702.6	678.9	651.5
29.....	660.5	633.8	610.3	577.0	-----	561.9	680.0	721.0	717.0	701.9	677.9	650.5
30.....	659.5	632.8	609.2	577.0	-----	562.7	685.0	721.0	716.7	701.1	677.0	649.6
31.....	658.5	-----	608.5	576.2	-----	563.4	-----	721.0	-----	700.4	676.1	-----

NOTE.—Add 3,000 feet to obtain elevation above mean sea level.

TUOLUMNE RIVER NEAR HETCH HETCHY, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 17, T. 1 N., R. 20 E., in Yosemite National Park, three-fourths of a mile below O'Shaughnessy Dam at Hetch Hetchy, Tuolumne County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 20, 1914, to September 30, 1926.

GAGE.—Water-stage recorder on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 30 feet below gage or by wading.

CHANNEL AND CONTROL.—Boulders and solid rock; permanent. Bed at measuring section has been smoothed by removing some boulders. Banks high and not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 11.10 feet at 7 p. m. June 8 (discharge, 5,490 second-feet); minimum stage, from water-stage recorder, 0.63 foot at 10.30 p. m. January 1 (discharge, 2.4 second-feet).

1915-1926: Maximum stage, from water-stage recorder, 13.4 feet at 3 a. m. May 29, 1919 (discharge, 11,400 second-feet); minimum stage, from water-stage recorder, 0.53 foot November 2-3, 1923 (discharge, 1.3 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—Regulated by gates in O'Shaughnessy Dam at Hetch Hetchy Reservoir since completion of dam in 1923. There was 151,880 acre-feet of water in Hetch Hetchy Reservoir September 30, 1925, and 107,560 acre-feet September 30, 1926.

ACCURACY.—Stage-discharge relation permanent. Rating curve very well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except on days of large fluctuation for which hourly discharge was averaged. Records excellent.

Discharge measurements of Tuolumne River near Hetch Hetchy Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 30.....	6.14	830	Nov. 18.....	5.54	624
Nov. 5.....	5.96	722	May 21.....	10.62	4,420

Daily discharge, in second-feet, of Tuolumne River near Hetch Hetchy, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	775	745	670	198	590	602	640	520	2,300	655	615	640
2.....	760	745	628	480	602	590	640	510	2,090	670	602	655
3.....	760	730	615	500	602	590	615	670	1,820	640	602	685
4.....	745	730	628	602	565	615	615	533	1,440	378	628	740
5.....	730	715	640	557	552	602	565	541	842	262	640	628
6.....	700	700	640	594	565	615	530	670	1,820	640	628	590
7.....	655	685	640	632	602	590	476	670	1,260	670	615	628
8.....	700	665	628	670	578	602	530	685	2,220	655	578	578
9.....	715	640	615	640	578	602	655	628	2,830	585	565	590
10.....	670	628	615	640	565	615	655	640	2,010	430	602	578
11.....	655	590	615	700	530	628	670	842	1,480	272	602	565
12.....	700	628	590	640	500	640	615	1,420	990	602	615	540
13.....	655	590	590	590	402	640	655	2,730	990	590	602	565
14.....	670	590	615	628	238	432	745	2,830	912	602	552	565
15.....	685	590	565	628	382	628	715	4,190	842	602	257	565
16.....	670	590	602	420	565	640	730	4,190	775	628	590	615
17.....	610	602	590	304	590	628	670	4,190	730	615	655	628
18.....	365	590	590	615	602	628	640	4,190	655	628	700	640
19.....	700	590	490	494	602	640	520	4,710	655	615	685	615
20.....	685	590	517	615	590	615	420	4,710	550	628	685	602
21.....	670	578	615	615	578	450	510	4,030	602	655	640	602
22.....	670	400	615	602	590	628	578	3,430	602	715	460	602
23.....	670	444	615	602	628	640	615	2,830	602	715	685	590
24.....	601	602	590	602	628	640	505	2,260	602	670	685	578
25.....	465	628	590	615	615	640	500	1,570	602	640	685	329
26.....	715	628	640	615	602	640	520	1,450	602	628	685	320
27.....	760	540	628	628	602	628	615	1,230	380	628	700	378
28.....	790	520	640	640	578	590	640	1,640	590	655	715	378
29.....	775	470	665	578	-----	640	516	2,440	590	628	685	378
30.....	775	655	640	655	-----	640	578	2,260	730	628	640	565
31.....	775	-----	490	565	-----	640	-----	2,170	-----	640	628	-----

Monthly discharge of Tuolumne River near Hetch Hetchy, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	790	365	686	42,200
November.....	745	400	614	36,500
December.....	670	490	600	36,900
January.....	700	198	576	35,400
February.....	628	238	558	31,000
March.....	640	450	612	37,600
April.....	745	420	596	35,500
May.....	4,710	510	2,110	130,000
June.....	2,830	380	1,100	65,500
July.....	715	262	599	36,800
August.....	715	257	620	38,100
September.....	685	320	581	34,600
The year.....	4,710	198	774	560,000

TUOLUMNE RIVER NEAR BUCK MEADOWS, CALIF.

LOCATION.—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, Mariposa County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 2, 1907, to September 30, 1926 (not complete).

GAGE.—Water-stage recorder on left bank.

DISCHARGE MEASUREMENTS.—Made from cable one-third mile above gage.

CHANNEL AND CONTROL.—Boulders and solid rock; probably permanent. Banks high and not subject to overflow. Considerable muck from tunnels above is being deposited in the channel.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 8.20 feet at 7 a. m. May 20 (discharge, 6,570 second-feet); minimum stage, from water-stage recorder, 0.42 foot at 1 p. m. August 29 (discharge, 20 second-feet).

1907-1926: Maximum stage recorded, 14.00 feet January 14, 1909 (discharge, 27,200 second-feet); minimum stage recorded, 0.42 foot at 1 p. m. August 29, 1926 (discharge, 20 second-feet).

DIVERSIONS.—A small amount of water is diverted from South Fork of Tuolumne River at Harden ranch, 7 miles above the mouth, and is used in vicinity of Groveland.

REGULATION.—Partly regulated by storage in Hetch Hetchy Reservoir and Lake Eleanor. (See pp. 198 and 208.)

ACCURACY.—Stage-discharge relation fairly permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

The following discharge measurement was made:

August 25, 1926: Gage height, 0.75 foot; discharge, 40 second-feet.

Daily discharge, in second-feet, of Tuolumne River near Buck Meadows, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	81	580	90	309	347	1,010	2,310	2,480	62	43	39
2	76	97	760	78	222	367	920	2,480	2,210	67	50	44
3	62	106	368	78	520	344	835	2,650	1,880	62	44	39
4	73	142	212	71	496	368	920	2,840	1,580	58	42	38
5	148	117	167	67	404	404	3,380	3,450	735	55	48	37
6	309	90	218	68	210	434	3,170	2,110	1,140	109	36	37
7	240	82	185	65	193	445	2,420	1,460	1,580	171	32	42
8	109	67	146	71	169	476	2,650	1,070	1,380	171	30	45
9	140	119	108	72	167	452	1,780	920	4,410	181	27	39
10	119	84	97	68	181	356	1,580	862	1,740	189	32	41
11	102	126	103	67	249	329	1,700	950	1,540	135	38	36
12	269	244	97	72	386	362	1,740	1,620	645	74	39	36
13	326	122	87	70	428	401	2,210	3,310	785	61	38	36
14	240	109	63	64	560	512	2,650	3,680	504	54	39	37
15	187	81	108	88	359	580	3,030	5,350	386	55	39	36
16	183	88	109	79	374	668	3,310	5,750	314	53	34	36
17	103	91	108	77	233	1,010	3,100	5,750	264	51	37	44
18	175	79	124	74	193	810	2,810	5,550	197	44	42	37
19	88	90	126	71	187	668	1,880	6,350	114	45	32	35
20	120	90	138	72	247	590	1,960	6,150	129	46	26	62
21	126	88	159	97	205	580	2,480	5,550	135	43	39	53
22	106	92	165	90	179	622	2,710	4,590	108	47	42	41
23	88	78	165	76	159	668	2,710	3,990	103	67	40	38
24	83	87	150	74	169	950	3,170	2,900	79	64	40	38
25	185	96	136	73	185	1,200	3,600	1,920	81	47	41	44
26	77	91	135	73	254	1,170	3,380	1,620	71	45	35	40
27	79	82	133	64	309	1,100	3,100	1,540	63	49	33	33
28	91	87	122	94	347	1,070	3,100	1,420	78	44	38	42
29	102	86	129	712	1,010	2,980	2,980	2,580	72	50	104	48
30	88	84	96	197	890	2,710	2,710	2,580	98	55	98	48
31	73	-----	86	312	1,040	-----	2,420	-----	-----	39	55	-----

Monthly discharge of Tuolumne River near Buck Meadows, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	326	62	136	8,360
November.....	244	67	99.5	5,920
December.....	760	63	174	10,700
January.....	712	64	107	6,580
February.....	560	159	282	15,700
March.....	1,200	329	651	40,000
April.....	3,600	835	2,420	144,000
May.....	6,350	862	3,090	190,000
June.....	4,410	63	830	49,400
July.....	189	39	74.0	4,560
August.....	104	26	42.4	2,610
September.....	62	33	40.7	2,420
The year.....	6,350	26	663	480,000

TUOLUMNE RIVER NEAR JACKSONVILLE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 18, T. 1 S., R. 15 E., near milepost No. 11 on Hetch Hetchy Railroad, 1 mile west of highway bridge on Big Oak Flat Road, and three-fourths of a mile east of Jacksonville, Tuolumne County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—July 31, 1923, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 25 feet above gage or by wading.

CHANNEL AND CONTROL.—Rock and gravel, clear, fairly permanent. Banks high; channel straight above and below gage; one channel at all stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.34 feet at noon May 19 (discharge, 8,160 second-feet) minimum stage, from water-stage recorder, 0.90 foot at 8 a. m. July 5 (discharge, 100 second-feet).

1923-1926: Maximum stage, from floodmarks, 11.2 feet at 9.30 a. m. February 6, 1925 (discharge, 26,500 second-feet); minimum stage, from water-stage recorder, 0.89 foot October 4, 1925 (discharge, 98 second-feet).

DIVERSIONS.—See Tuolumne River near Buck Meadows.

REGULATION.—See Tuolumne River near Buck Meadows.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record good, except November 29 to December 5 and January 12-14. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge for periods of no record estimated from records of flow at Buck Meadows. Records good.

The following discharge measurements were made:

March 30, 1926: Gage height, 3.58 feet; discharge, 2,430 second-feet.

April 28, 1926: Gage height, 5.13 feet; discharge, 5,120 second-feet.

May 27, 1926: Gage height, 3.80 feet; discharge, 2,740 second-feet.

Daily discharge, in second-feet, of Tuolumne River near Jacksonville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	985	752	1,400	455	1,650	1,480	2,280	4,000	3,440	922	462	922
2-----	985	1,020		967	1,190	1,510	2,220	3,530	3,350	895	752	940
3-----	994	1,000		600	1,960	1,550	2,150	4,200	3,020	760	877	940
4-----	532	1,030		823	1,770	1,520	1,890	4,520	2,710	351	868	769
5-----	718	958		994	2,080	1,600	5,500	5,060	1,960	302	868	497
6-----	976	949	1,030	1,020	1,330	1,710	6,300	3,900	1,650	622	904	555
7-----	1,110	868	1,060	1,040	868	1,360	4,840	2,940	3,020	823	696	712
8-----	994	455	949	1,040	1,160	1,710	5,610	2,420	1,650	787	511	769
9-----	949	758	949	1,030	1,080	1,830	4,420	1,890	6,070	841	648	728
10-----	940	940	931	895	1,190	1,650	3,800	2,020	2,860	859	744	728
11-----	728	805	922	940	1,420	1,540	3,440	2,060	2,860	616	744	736
12-----	868	967	913	830	2,350	1,570	3,620	2,710	1,710	773	752	490
13-----	1,120	958	696		2,420	1,610	4,200	4,520	1,110	913	712	796
14-----	1,060	868	832		3,800	1,320	4,620	4,950	1,520	913	600	805
15-----	994	769	841	841	1,960	1,770	5,060	6,300	1,240	904	346	835
16-----	1,010	859	931	868	1,960	1,960	5,390	6,780	1,120	913	664	958
17-----	913	769	985	416	1,540	2,280	5,170	6,780	1,140	922	696	949
18-----	608	769	1,020	729	1,380	2,220	3,900	6,780	1,130	525	751	850
19-----	778	814	1,030	758	1,330	1,960	3,440	7,580	994	828	760	413
20-----	850	877	868	922	1,650	1,830	3,440	7,580	868	922	744	768
21-----	949	805	967	841	1,330	1,550	4,000	6,780	841	949	752	859
22-----	1,000	696	1,060	922	1,320	1,770	4,420	5,720	967	949	334	760
23-----	994	823	1,080	967	1,270	1,890	4,200	4,950	940	913	751	648
24-----	994	850	1,090	736	1,200	2,220	4,840	4,100	895	886	832	648
25-----	859	868	680	922	1,220	2,560	5,060	3,100	895	504	814	502
26-----	940	832	913	1,060	1,250	2,560	5,170	2,560	931	781	931	346
27-----	958	805	814	985	1,340	2,490	4,840	2,560	340	886	904	740
28-----	967	895	922	1,010	1,160	2,220	4,840	2,280	868	859	895	760
29-----	1,040	825	922	2,020	-----	2,350	4,620	3,620	1,010	736	395	774
30-----	1,040		877	1,320	-----	2,280	4,620	3,440	1,080	895	873	779
31-----	1,010		895	1,260	-----	2,220	-----	3,530	-----	744	1,100	-----

NOTE.—No gage-height record Nov. 29 to Dec. 5 and Jan. 12-14. Braced figures represent estimated mean discharge for the periods indicated.

Monthly discharge of Tuolumne River near Jacksonville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	1,120	532	931	57,200
November-----	1,030	455	847	50,400
December-----	-----	680	1,010	62,100
January-----	2,020	416	981	57,200
February-----	3,800	868	1,580	87,800
March-----	2,560	1,320	1,870	115,000
April-----	6,300	1,890	4,260	253,000
May-----	7,580	1,890	4,300	264,000
June-----	6,070	340	1,740	104,000
July-----	949	302	790	48,600
August-----	1,100	334	732	45,000
September-----	958	346	733	43,600
The year-----	7,580	302	1,640	1,190,000

DON PEDRO RESERVOIR NEAR LA GRANGE, CALIF.

LOCATION.—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, Stanislaus County.

RECORDS AVAILABLE.—October 1, 1924, to September 30, 1926.

GAGE.—Staff gage at dam. Zero at mean sea level.

EXTREMES OF STAGE.—Maximum elevation recorded during year, 605.6 feet June 11; minimum elevation recorded, 555.9 feet September 30.

COOPERATION.—Record of daily elevations furnished by Turlock Irrigation District.

Daily elevation, in feet, of Don Pedro Reservoir near La Grange, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	575.5	571.2	571.6	567.5	566.0	587.9	594.8	598.2	599.2	604.8	585.5	565.8
2.	575.1	571.2	572.2	566.8	566.4	588.1	594.2	598.1	600.1	604.6	584.5	565.4
3.	574.8	571.3	572.9	566.2	567.4	588.5	593.5	598.1	600.9	604.2	584.0	565.0
4.	574.5	571.4	572.9	565.5	568.4	589.0	592.9	598.2	601.2	603.8	583.4	564.5
5.	573.9	571.5	572.6	565.4	569.9	589.3	592.7	598.3	601.9	603.1	582.6	563.8
6.	573.5	571.6	572.3	565.6	570.0	589.9	595.6	598.2	602.3	602.4	582.1	563.1
7.	573.1	571.7	572.1	565.6	570.9	590.4	597.1	598.0	603.0	602.0	581.5	562.5
8.	572.9	571.7	571.9	565.6	570.9	590.8	598.1	597.6	604.0	601.7	580.7	562.0
9.	572.6	571.4	571.6	565.6	571.0	591.4	598.1	597.4	605.3	601.2	579.9	561.4
10.	572.3	571.4	571.4	565.6	571.4	592.0	597.5	597.2	605.4	600.8	579.3	560.7
11.	571.9	571.4	571.1	565.4	571.8	592.5	597.3	597.2	605.6	600.4	578.7	560.1
12.	571.3	571.4	570.7	565.3	573.2	593.0	597.2	597.4	605.1	599.8	578.1	559.8
13.	571.0	571.6	570.4	565.1	575.0	593.1	597.2	598.0	604.5	599.3	577.4	559.4
14.	570.7	571.6	570.0	565.0	578.8	593.5	597.4	598.5	604.8	598.9	576.8	559.2
15.	570.4	571.7	569.6	564.9	580.2	594.0	597.7	599.0	605.0	598.3	576.1	558.9
16.	570.4	571.8	569.3	564.9	581.5	594.4	597.9	599.2	605.2	597.8	575.2	558.9
17.	570.5	571.8	569.0	564.8	582.5	595.0	597.9	599.4	605.0	597.1	574.5	558.9
18.	570.5	571.7	569.1	564.3	583.1	596.2	597.5	599.7	604.9	596.5	573.9	558.9
19.	570.3	571.7	569.2	564.0	583.5	596.9	597.2	599.9	605.0	595.6	573.3	558.7
20.	570.1	571.7	569.4	564.0	584.1	597.1	597.1	599.7	604.9	595.0	572.6	558.2
21.	570.1	571.7	569.4	563.9	585.1	597.1	597.1	599.7	604.7	594.4	572.0	558.1
22.	570.2	571.7	569.5	563.8	585.5	597.1	597.3	599.3	604.7	593.6	571.3	557.9
23.	570.2	571.6	569.6	563.8	585.9	597.1	597.0	599.3	604.8	593.0	570.5	557.8
24.	570.4	571.5	569.8	563.8	586.2	597.1	597.0	599.7	604.9	592.2	570.0	557.5
25.	570.5	571.5	570.0	563.6	586.5	597.3	597.3	599.4	604.9	591.3	569.3	557.2
26.	570.5	571.6	569.9	563.6	586.7	597.3	597.4	599.0	604.9	590.3	568.8	556.9
27.	570.6	571.6	569.6	563.6	587.0	597.3	597.4	598.9	604.8	589.5	568.2	556.3
28.	570.7	571.6	569.1	563.7	587.8	597.1	597.6	598.7	604.6	588.8	567.8	556.1
29.	570.9	571.7	569.0	563.9	-----	596.7	598.0	598.5	604.6	588.0	567.3	556.0
30.	571.0	571.6	568.7	565.0	-----	596.1	598.2	598.9	604.8	587.0	566.4	555.9
31.	571.1	-----	568.1	565.2	-----	595.3	-----	599.1	-----	586.2	566.1	-----

TUOLUMNE RIVER ABOVE LA GRANGE DAM, NEAR LA GRANGE, CALIF.

LOCATION.—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, Stanislaus County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—March 19, 1915, to September 30, 1926, also 1895 to 1917 at La Grange Dam.

GAGE.—Water-stage recorder on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 80 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed consists of solid rock and boulders. Banks are high, one channel at all stages. Control is solid rock dike, which extends entirely across the stream and over which at low water there is a drop of about 5 feet. Point of zero flow, gage height 0.06 foot.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 12.65 feet at 8 p. m. May 19 (discharge, 7,110 second-feet); minimum stage, from water-stage recorder, 3.30 feet at 3 a. m. November 7 (discharge, 224 second-feet).

1915-1926: Maximum stage recorded, 27.58 feet at 5.15 p. m. February 21, 1917 (discharge, 36,500 second-feet); minimum stage recorded, 0.54 foot November 26 to December 1, 1922 (discharge, 1.4 second-feet).

DIVERSIONS.—Sierra & San Francisco Power Co.'s canal diverts at Don Pedro Dam since the dam was completed. It originally diverted at Indian Bar $7\frac{1}{2}$ miles above Don Pedro Dam. Water was used for power and returned to river half a mile above bridge at La Grange until May 22, 1923; after that date the water was used to supply the town of La Grange. Canal was abandoned January 25, 1926. See page 218 for record of this canal. There is also a diversion from South Fork of Tuolumne River at Harden ranch for irrigation in vicinity of Groveland.

REGULATION.—Flow is completely regulated by gates in Don Pedro Dam. There was 201,540 acre-feet of water in Don Pedro Reservoir September 30, 1925, and 149,860 acre-feet September 30, 1926. Water is also stored in Hetch Hetchy Reservoir and Lake Eleanor. See pages 198 and 208.

ACCURACY.—Stage-discharge relation permanent. Rating curve very well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

The following discharge measurement was made:

May 8, 1926: Gage height, 8.70 feet; discharge, 2,620 second-feet.

Daily discharge, in second-feet, of Tuolumne River above La Grange Dam, near La Grange, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,330	727	780	1,380	892	892	3,240	4,000	2,060	932	1,660	1,380
2.....	1,330	762	780	1,430	952	892	3,240	3,600	1,920	1,380	1,720	1,430
3.....	1,330	762	1,060	1,380	912	892	3,150	3,800	2,200	1,380	1,720	1,430
4.....	1,170	780	1,280	1,080	912	892	2,970	4,220	1,720	1,330	1,720	1,430
5.....	1,280	780	1,280	932	892	892	2,610	4,550	780	1,330	1,720	1,380
6.....	1,330	780	1,240	932	873	892	2,360	4,220	798	1,380	1,720	1,380
7.....	1,330	762	1,240	932	854	854	3,700	3,240	854	1,380	1,720	1,430
8.....	1,330	744	1,240	932	892	744	5,980	2,610	854	1,480	1,660	1,430
9.....	1,330	762	1,240	932	892	892	5,430	2,060	2,700	1,430	1,540	1,430
10.....	1,330	762	1,240	892	892	892	4,220	1,850	2,520	1,430	1,540	1,430
11.....	1,330	762	1,240	932	892	892	3,700	1,850	3,060	1,430	1,540	1,170
12.....	1,330	762	1,240	912	873	1,100	3,600	2,060	2,790	1,480	1,540	993
13.....	1,330	780	1,100	952	710	993	3,900	3,240	1,100	1,480	1,540	1,010
14.....	1,330	762	1,240	952	478	854	4,220	4,330	816	1,780	1,540	1,040
15.....	1,100	744	1,240	932	762	873	4,670	5,300	816	1,850	1,480	1,010
16.....	762	780	1,240	912	616	892	5,040	5,980	1,170	1,850	1,540	932
17.....	780	780	972	892	727	816	5,040	6,260	1,430	1,780	1,540	952
18.....	932	780	798	932	854	816	4,220	6,540	1,010	1,780	1,540	952
19.....	972	780	780	932	835	1,240	3,800	6,820	952	1,780	1,540	932
20.....	873	780	762	932	710	1,600	3,420	6,960	854	1,850	1,540	952
21.....	762	780	780	932	710	1,600	3,600	6,820	816	1,920	1,480	952
22.....	762	762	780	932	816	1,600	4,440	5,700	835	1,920	1,480	952
23.....	762	780	798	932	835	1,720	4,440	4,330	816	1,920	1,540	952
24.....	762	780	798	892	835	1,920	4,110	3,900	816	1,980	1,540	952
25.....	727	780	780	932	873	2,280	4,440	3,600	816	2,060	1,540	932
26.....	762	762	972	932	816	2,520	4,910	3,150	816	2,060	1,540	932
27.....	762	780	1,330	912	816	2,790	4,440	2,880	798	2,060	1,540	952
28.....	762	798	1,150	932	798	2,880	4,000	2,880	816	2,060	1,430	952
29.....	762	762	1,040	912	-----	2,970	3,800	3,060	780	2,060	1,380	952
30.....	762	780	1,330	912	-----	3,240	4,220	-----	816	2,060	1,380	952
31.....	762	-----	1,330	873	-----	3,240	-----	2,970	-----	1,850	1,380	-----

Monthly discharge of Tuolumne River above La Grange Dam, near La Grange, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1,330	727	1,040	64,000
November.....	798	727	770	45,800
December.....	1,330	762	1,070	65,800
January.....	1,430	873	974	59,900
February.....	952	478	819	45,500
March.....	3,240	744	1,470	90,400
April.....	5,980	2,360	4,030	240,000
May.....	6,960	1,850	4,060	250,000
June.....	3,060	780	1,280	76,200
July.....	2,060	932	1,690	104,000
August.....	1,720	1,380	1,560	95,900
September.....	1,430	932	1,120	66,600
The year.....	6,960	478	1,660	1,200,000

FALLS CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 3, T. 1 N., R. 20 E., in Yosemite National Park, 300 feet above branch to Tueculala Falls, one-fourth mile above Wapama Falls and 2 miles northeast of Hetch Hetchy, Tuolumne County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 22, 1915, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 400 feet above gage or by wading.

CHANNEL AND CONTROL.—Bed consists of broken boulders; rough; straight above and below station. Banks not subject to overflow. Control is ledge of rock 75 feet below gage. Point of zero flow, gage height about 0.5 foot.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.85 feet at 6 a. m. April 26 (discharge, 844 second-feet); no flow August 26 to September 30.

1916–1926: Maximum stage, from water-stage recorder, 5.6 feet at 8 a. m. June 10, 1917 (discharge, 1,240 second-feet); no flow October 4 to November 30, 1921, September 3 to October 4, 1924, and August 26 to September 30, 1926.

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Record excellent.

The following discharge measurement was made:

May 18, 1926: Gage height, 3.91 feet; discharge, 459 second-feet.

Daily discharge, in second-feet, of Falls Creek near Hetch Hetchy, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.	2.0	12	99	18	36	86	188	433	264	17	1.2
2.	1.9	13	164	17	36	88	168	512	230	16	1.1
3.	1.6	18	106	16	41	90	151	626	195	15	.9
4.	1.3	21	71	15	59	97	185	710	159	13	.8
5.	3.8	21	61	15	52	104	330	689	187	12	.7
6.	16	21	61	14	54	114	300	365	155	12	.6
7.	15	19	50	13	49	112	219	224	144	12	.6
8.	13	19	42	13	49	104	190	157	269	11	.6
9.	13	19	35	13	51	88	155	129	375	10	.6
10.	15	19	31	12	49	72	185	138	211	9	.6
11.	25	33	29	12	44	76	230	180	136	8	.5
12.	42	36	27	11	44	86	258	255	100	9	.5
13.	48	35	22	11	39	104	368	343	80	22	.5
14.	39	30	19	10	43	136	457	416	66	18	.4
15.	31	27	18	9.5	41	153	568	477	56	15	.4
16.	29	25	17	9	42	162	647	512	46	12	.4
17.	29	21	16	10	52	166	647	530	39	9	.2
18.	31	19	18	12	44	125	433	494	36	7.5	.2
19.	30	18	21	14	43	119	289	606	34	7	.2
20.	29	18	26	13	42	129	318	568	32	5.5	.2
21.	28	17	29	13	41	131	467	512	29	4.8	.2
22.	27	15	30	12	36	134	568	433	28	4.1	.1
23.	25	15	31	10	38	159	568	397	27	3.8	.1
24.	24	15	30	9.5	35	208	710	258	27	3.3	.1
25.	21	15	29	10	47	227	775	178	25	2.9	.1
26.	18	14	29	9.5	58	216	754	151	24	2.5	-----
27.	17	14	28	9.5	71	206	689	171	23	2.4	-----
28.	15	13	26	15	80	206	710	236	22	2.1	-----
29.	14	13	24	117	-----	195	647	289	19	2.0	-----
30.	13	24	21	42	-----	180	494	289	19	1.8	-----
31.	12	-----	19	40	-----	206	-----	258	-----	1.6	-----

NOTE.—No flow Aug. 26 to Sept. 30.

Monthly discharge of Falls Creek near Hetch Hetchy, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	48	1.3	20.3	1,250
November.....	36	12	20.0	1,190
December.....	164	16	39.6	2,430
January.....	117	9	17.6	1,080
February.....	80	35	47.0	2,610
March.....	227	72	138	8,480
April.....	775	151	422	25,100
May.....	710	129	372	22,900
June.....	375	19	101	6,010
July.....	22	1.6	8.75	538
August.....	1.2	0	.38	23.4
The year.....	775	0	98.9	71,600

NOTE.—No flow during September.

CHERRY CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 28, T. 2 N., R. 19 E., in Stanislaus National Forest, at abandoned sawmill camp, 3 miles by trail from Lake Eleanor and $7\frac{1}{2}$ miles northwest of Hetch Hetchy, Tuolumne County.

DRAINAGE AREA.—114 square miles³ (above dam site in sec. 5, T. 1 N., R. 19 E.).

RECORDS AVAILABLE.—April 1, 1910, to September 30, 1926; May 26 to October 15, 1901, at Eleanor trail crossing.

GAGE.—Water-stage recorder on right bank 800 feet above site of old suspension bridge.

DISCHARGE MEASUREMENTS.—Made from cable 800 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed consists of fine gravel and sand which shifts slightly. Control is a solid rock dike except at right bank, where it is gravel and small boulders. Channel is straight above and curved to right below. Left bank is high; right bank fairly high and probably not subject to overflow. Zero flow, gage height 0.4 foot.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.35 feet at 11 p. m. May 4 (discharge, 2,790 second-feet); minimum stage, from water-stage recorder, 0.68 foot September 29–30 (discharge, 0.3 second-foot).

1910–1926: Maximum mean daily discharge, 7,000 second-feet January 31, 1911 (gage height unknown); no flow September 6–12, 1910.

ICE.—Stream freezes over at gage but not at control. Stage-discharge relation probably not affected by ice.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

The following discharge measurement was made:

May 19, 1926: Gage height, 4.94 feet; discharge, 1,220 second-feet.

³ Freeman, John R., The Hetch Hetchy water supply for San Francisco, p. 24, 1912.

Daily discharge, in second-feet, of Cherry Creek near Hetch Hetchy, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	36	552	46	110	258	508	1,120	548	24	2.6	0.4
2	3.5	40	552	43	104	258	444	1,300	474	23	2.3	.4
3	3.3	78	272	45	124	268	413	1,470	402	22	2.2	.4
4	2.9	104	194	35	232	299	572	1,620	326	20	2.0	.4
5	74	80	200	41	167	326	1,360	1,560	302	18	1.9	.4
6	170	82	194	36	158	340	755	778	319	18	1.8	.4
7	94	65	139	36	153	333	712	512	278	16	1.7	.4
8	62	72	114	33	153	312	632	373	380	16	1.6	.4
9	53	64	98	33	156	265	459	319	632	22	1.5	.4
10	59	67	85	30	153	213	502	355	358	50	1.4	.4
11	92	153	80	29	126	232	672	512	242	41	1.4	.4
12	226	139	74	28	114	278	822	692	185	24	1.3	.4
13	207	129	55	27	110	330	1,080	845	147	24	1.2	.4
14	136	92	54	25	122	413	1,220	1,000	122	29	1.1	.4
15	117	82	55	26	134	447	1,000	1,100	106	30	1.0	.4
16	108	75	51	24	134	478	1,680	1,150	90	27	1.0	.4
17	102	59	48	27	126	504	1,440	1,150	80	23	.9	.4
18	94	59	53	28	126	312	980	1,150	72	20	.8	.4
19	85	56	71	31	124	306	800	1,300	67	18	.8	.4
20	80	53	85	29	124	376	1,020	1,200	61	15	.7	.4
21	75	47	98	28	114	391	1,330	1,080	56	13	.7	.4
22	72	45	102	29	112	391	1,380	935	51	11	.6	.4
23	68	46	106	27	104	512	1,440	822	47	9	.6	.4
24	65	44	94	27	110	632	1,680	572	44	8	.6	.4
25	59	42	89	24	144	612	2,020	436	41	6.5	.5	.4
26	54	42	90	23	197	552	1,750	406	37	5.5	.5	.4
27	50	40	80	22	229	544	1,680	421	34	4.7	.5	.4
28	47	38	68	50	252	544	1,680	528	32	4.2	.5	.4
29	44	37	60	459	489	1,620	632	29	3.7	.5	.3	
30	42	282	55	102	466	1,330	612	27	3.3	.4	.3	
31	38	49	153	552	572	572	572	572	2.9	.4		

Monthly discharge of Cherry Creek near Hetch Hetchy, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	226	2.9	77.0	4,730
November	282	36	74.9	4,460
December	552	48	126	7,750
January	459	22	51.2	3,170
February	252	104	143	7,940
March	632	213	395	24,300
April	2,010	413	1,120	66,600
May	1,620	319	856	52,600
June	632	27	186	11,100
July	50	2.9	17.8	1,090
August	2.6	.4	1.13	69.5
September	.4	.3	.39	23.2
The year	2,010	.3	254	184,000

LAKE ELEANOR NEAR HETCH HETCHY, CALIF.

LOCATION.—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, Tuolumne County.

RECORDS AVAILABLE.—October 1, 1919, to September 30, 1926.

GAGE.—Inclined staff gage on upstream face of tenth arch of dam, from left end. Crest of dam at gage, elevation 61.00 feet. Zero of gage 4,600 feet above sea level.

REGULATION.—When reservoir is full, waste gates on left end of dam are left open. Stored water is drawn through gates near gage. Water flows down natural channel of Eleanor Creek.

EXTREMES OF STAGE.—Maximum stage recorded during year, 61.0 feet May 14-24 and June 9-10; minimum stage recorded, 31.5 feet September 30.

1919-1926: Maximum stage recorded, 61.0 feet; reservoir full part of each year, 1922 to 1926; no storage November 28 to December 21, 1921.

ACCURACY.—Gage read to tenths once daily.

Daily elevation, in feet, of Lake Eleanor near Hetch Hetchy, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	51.2	48.2	45.2	45.4	41.0	49.2	60.3	60.6	60.9	58.8	50.9	44.2
2.....	51.0	48.0	45.5	45.3	41.1	49.7	60.3	60.5	60.9	58.7	50.6	43.8
3.....	50.7	47.9	46.4	45.1	41.3	50.2	60.8;	60.5	60.9	58.4	50.3	43.4
4.....	50.4	47.7	46.9	45.0	41.6	50.6	60.3;	60.5;	60.9	58.1	50.0	42.9
5.....	50.1	47.6	47.3	44.8	42.0	51.1	60.7	60.5	60.9	57.9	49.7	42.5
6.....	49.9	47.6	47.4	44.6	42.5	51.7	61.0	60.9	60.8	57.7	49.4	42.0
7.....	49.7	47.5	47.7	44.4	43.0	52.4	60.8	60.6	60.9	57.4	49.1	41.6
8.....	49.6	47.4	47.9	44.2	43.4	53.0	60.6	60.4	60.9	57.1	48.8	41.3
9.....	49.5	47.4	47.9	44.0	43.6	53.6	60.4	60.3	61.0	56.9	48.5	40.9
10.....	49.4	47.3	48.0	43.8	44.0	54.1	60.1	60.2	61.0	56.7	48.2	40.5
11.....	49.3	47.2	48.0	43.5	44.4	54.6	60.1	60.2	60.9	56.5	47.9	40.2
12.....	49.3	47.2	47.9	43.3	44.7	54.9	60.1	60.5	60.9	56.2	47.6	39.8
13.....	49.4	47.3	47.8	43.1	45.0	55.3	60.6	60.6	60.9	55.9	47.3	39.4
14.....	49.5	47.4	47.7	42.9	45.4	55.9	60.6	61.0	60.8	55.7	47.0	39.0
15.....	49.5	47.5	47.6	42.6	45.8	56.5	61.0	61.0	60.8	55.5	46.7	38.6
16.....	49.5	47.5	47.5	42.4	46.2	57.2	60.8	61.0	60.9	55.2	46.4	38.2
17.....	49.6	47.5	47.3	42.1	46.5	57.7	60.9	61.0	60.8	54.9	46.1	37.8
18.....	49.6	47.4	47.1	41.9	46.7	58.1	60.9	61.0	60.8	54.7	45.9	37.4
19.....	49.6	47.3	47.0	41.6	46.9	58.1	60.7	61.0	60.7	54.5	45.9	37.0
20.....	49.6	47.2	46.9	41.4	47.1	58.1	60.5	61.0	60.6	54.2	45.8	36.5
21.....	49.5	47.0	46.7	41.0	47.5	58.4	60.4	61.0	60.5	54.0	45.7	36.0
22.....	49.5	46.9	46.6	40.7	47.7	59.0	60.5	61.0	60.3	53.7	45.6	35.6
23.....	49.4	46.7	46.5	40.5	48.0	59.2	60.6	61.0	60.1	53.5	45.6	35.2
24.....	49.3	46.5	46.4	40.3	48.1	59.8	60.6	61.0	60.1	53.2	45.5	34.8
25.....	49.3	46.4	46.3	40.0	48.3	60.2	60.7	60.8	59.8	52.9	45.4	34.2
26.....	49.2	46.2	46.1	39.7	48.4	60.4	60.9	60.7	59.6	52.6	45.3	33.7
27.....	49.0	46.0	46.0	39.4	48.6	60.5	60.9	60.8	59.5	52.3	45.2	33.2
28.....	48.9	45.8	46.0	39.1	49.0	60.4	60.7	60.8	59.3	52.0	45.0	32.6
29.....	48.7	45.6	45.7	38.8	-----	60.4	60.7	60.8	59.1	51.8	44.9	32.1
30.....	48.5	45.4	45.8	40.0	-----	60.4	60.7	60.8	58.8	51.5	44.7	31.6
31.....	48.4	-----	45.6	40.6	-----	60.3	-----	60.8	-----	51.2	44.5	-----

NOTE.—Add 4,600 feet to obtain sea-level elevation.

ELEANOR CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.—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, Tuolumne County.

DRAINAGE AREA.—79 square miles ⁴ (above dam site in sec. 3, T. 1 N., R. 19 E.).

RECORDS AVAILABLE.—November 20, 1909, to September 30, 1926.

GAGE.—Water-stage recorder in wooden house on reinforced concrete well on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 75 feet above gage or by wading.

CHANNEL AND CONTROL.—Bed consists of small boulders. Control of large boulders, ledge, and concrete wall for low water. Channel straight above and below. Banks not subject to overflow. Zero flow, gage height 0.9 foot.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.63 feet at 1 a. m. April 6 (discharge, 1,180 second-foot); minimum stage, from water-stage recorder, 1.05 feet at 6 p. m. August 18 (discharge, 0.2 second-foot, regulated by gates in dam).

1909-1926: Maximum stage recorded, 13.1 feet January 30, 1911 (discharge, 5,000 second-foot); no flow September 8-14, 1910.

⁴ Freeman, J. R., The Hetch Hetchy water supply for San Francisco, p. 24, 1912.

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—None.

REGULATION.—Flow regulated by operation of gates in Eleanor Dam. There was 18,700 acre-feet in Lake Eleanor September 30, 1925, and 3,650 acre-feet September 30, 1926.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except January 29 and August 17 and 19 for which hourly discharge was averaged. Records good.

The following discharge measurement was made:

May 20, 1926: Gage height, 4.42 feet; discharge, 573 second-feet.

Daily discharge, in second-feet, of Eleanor Creek near Hetch Hetchy, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	125	96	62	109	65	3.5	388	608	207	67	136	141
2.....	126	96	18	110	66	3.5	348	585	203	125	141	150
3.....	136	92	7.5	112	68	3.5	330	585	192	123	141	150
4.....	145	64	7.5	113	35	3.5	423	630	176	122	141	149
5.....	145	55	17	113	3.3	3.5	980	820	126	122	141	149
6.....	113	55	43	114	2.7	3.5	1,040	675	77	122	141	149
7.....	87	55	42	120	3.5	3.5	820	458	91	123	140	149
8.....	80	67	42	128	2.1	3.7	745	321	125	123	138	160
9.....	80	74	38	128	2.1	3.7	577	244	209	123	138	164
10.....	79	84	72	128	2.5	3.5	509	176	162	140	136	152
11.....	79	87	71	126	2.5	3.5	537	114	92	125	136	152
12.....	79	40	71	125	2.1	3.5	545	112	81	125	135	156
13.....	79	25	70	123	2.1	7	698	147	75	126	134	160
14.....	64	31	96	134	2.1	6.5	820	265	37	128	133	160
15.....	44	64	113	138	2.5	24	898	402	31	122	131	158
16.....	38	64	113	136	2.3	192	952	423	47	107	133	158
17.....	38	69	112	134	1.9	367	925	412	68	104	52	156
18.....	38	85	112	133	2.1	364	820	416	70	110	3	154
19.....	43	99	112	131	2.1	174	675	437	79	119	17	158
20.....	62	99	110	130	3.3	80	585	497	117	119	24	158
21.....	60	99	110	130	3.5	93	630	465	110	117	28	156
22.....	59	99	110	128	3.5	134	720	392	106	123	28	154
23.....	59	107	110	128	10	122	720	309	104	136	28	150
24.....	59	113	110	126	42	279	770	270	105	136	28	154
25.....	69	113	110	125	43	437	870	231	104	136	28	152
26.....	81	112	110	123	43	468	870	166	101	134	38	147
27.....	88	112	109	136	43	434	795	168	100	134	71	145
28.....	88	112	109	145	16	423	770	170	120	134	114	150
29.....	88	110	109	47	-----	402	720	185	94	134	119	154
30.....	88	101	109	24	-----	364	675	203	2.3	134	119	150
31.....	92	-----	110	65	-----	374	-----	207	-----	133	117	-----

Monthly discharge of Eleanor Creek near Hetch Hetchy, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	145	38	81.0	4,980
November.....	113	25	82.6	4,820
December.....	113	7.5	81.8	5,030
January.....	145	24	118	7,260
February.....	68	1.9	17.0	944
March.....	468	3.5	154	9,470
April.....	1,040	330	705	42,030
May.....	820	112	358	22,000
June.....	209	2.3	107	6,370
July.....	140	67	123	7,560
August.....	141	3	97.0	5,960
September.....	164	141	153	9,100
The year.....	1,040	3	174	126,000

SOUTH FORK OF TUOLUMNE RIVER AT ITALIAN FLAT, NEAR SEQUOIA, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 29, T. 1 S., R. 19 E., at Italian Flat, $1\frac{1}{4}$ miles north-east of highway bridge on Big Oak Flat road, and $1\frac{1}{2}$ miles northwest of Sequoia, Tuolumne County. Ackerson Creek enters $2\frac{1}{2}$ miles above gage

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 26, 1924, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 15 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed of channel is bedrock, permanent. One channel at all stages, straight 100 feet above and below gage, current swift, banks high, right bank clear, left bank wooded. Control is a rock ledge, 50 feet below gage.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.72 feet at 3 a. m. April 6 (discharge, 559 second-feet); minimum stage, from water-stage recorder, 0.17 foot August 16–17 (discharge, 2.2 second-feet).

1924–1926: Maximum stage recorded, 4.22 feet at 8 a. m. February 6, 1925 (discharge, 663 second-feet); minimum stage recorded, 0.14 foot at 4 p. m. October 1, 1924 (discharge, 1.5 second-feet).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve fairly well defined below 300 second-feet and extended above. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:

October 20, 1926: Gage height, 0.30 foot; discharge, 8.7 second-feet.

March 4, 1926: Gage height, 0.65 foot; discharge, 45 second-feet.

April 22, 1926: Gage height, 1.68 feet; discharge, 200 second-feet.

Daily discharge, in second-feet, of South Fork of Tuolumne River at Italian Flat, near Sequoia, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	6	7.5	13	12	43	50	77	218	43	10	5	4.1
2.....	6	8.5	37	12	44	47	71	215	39	10	4.6	3.0
3.....	5	12	20	12	84	47	68	223	38	10	4.6	3.0
4.....	5	11	14	9	72	46	100	220	37	9	4.1	3.0
5.....	7.5	9	14	13	62	50	379	249	44	10	4.1	3.0
6.....	16	10	14	12	44	54	442	164	37	10	4.1	2.8
7.....	10	10	14	13	38	55	302	133	34	10	3.6	2.8
8.....	8.5	10	13	12	36	58	379	116	37	9	3.0	3.0
9.....	7.5	10	12	12	33	55	242	106	55	12	3.0	3.0
10.....	8	10	11	11	43	48	211	106	38	12	3.0	3.0
11.....	10	14	12	10	46	44	198	122	32	11	2.8	3.0
12.....	14	16	12	10	58	47	175	133	30	10	2.8	2.8
13.....	12	15	8.5	10	78	52	200	130	28	9	2.5	2.8
14.....	11	11	9	10	83	58	230	132	27	9	2.5	2.8
15.....	10	10	11	11	65	61	257	130	26	9	2.5	2.8
16.....	9	11	12	9	68	65	268	125	25	8.5	2.2	2.8
17.....	9	9	12	12	48	68	257	119	24	8.5	2.2	2.8
18.....	8.5	8.5	13	11	43	61	208	114	23	8	2.5	3.0
19.....	8.5	8.5	13	8.5	43	57	178	108	21	8	2.5	3.0
20.....	8.5	8.5	11	10	58	55	175	98	20	8	2.8	3.0
21.....	8.5	8	12	9	47	57	220	88	20	8	2.8	2.8
22.....	8.5	8.5	12	9	42	59	234	82	19	7.5	3.0	2.8
23.....	8.5	8.5	12	9	39	68	244	74	18	7	3.0	2.5
24.....	8	8.5	12	10	38	83	259	70	15	7	2.8	2.5
25.....	8	8.5	13	10	38	95	276	65	14	7	2.8	2.5
26.....	8	8	12	10	41	92	268	64	14	6.5	3.0	2.5
27.....	7.5	8	13	11	43	80	242	61	13	6.5	3.0	2.5
28.....	7.5	8	13	11	47	83	218	57	12	6.5	3.0	2.5
29.....	7.5	8	12	11	-----	82	228	55	12	6.5	3.0	2.5
30.....	7.5	9	12	12	-----	80	225	51	12	6	3.6	2.5
31.....	7.5	-----	12	17	-----	82	-----	46	-----	6	4.1	-----

Monthly discharge of South Fork of Tuolumne River at Italian Flat, near Sequoia, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	16	5	8.61	529
November.....	16	7.5	9.75	580
December.....	37	8.5	13.2	812
January.....	17	8.5	10.9	670
February.....	84	33	50.9	2,830
March.....	95	44	62.5	3,840
April.....	442	68	228	13,600
May.....	249	46	119	7,320
June.....	55	12	26.9	1,600
July.....	12	6	8.56	526
August.....	5	2.2	3.18	196
September.....	4.1	2.5	2.84	169
The year.....	442	2.2	45.0	32,700

SOUTH FORK OF TUOLUMNE RIVER NEAR OAKLAND RECREATION CAMP, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 29, T. 1 S., R. 18 E., 20 feet below highway bridge on Big Oak Flat road, a quarter of a mile south of South Fork Camp on Hetch Hetchy Railroad, half a mile southwest of Oakland Recreation Camp, Tuolumne County, and 3 miles east of Buck Meadows.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—March 19, 1923, to September 30, 1926.

GAGE.—Water-stage recorder in wooden well and shelter on right bank 50 feet above a 20-foot falls.

DISCHARGE MEASUREMENTS.—Made from cable 75 feet above gage or by wading.
CHANNEL AND CONTROL.—Channel is rock, clear and permanent. Control is rock, permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.05 feet at 3 a. m. April 6 (discharge, 592 second-feet); minimum stage, from water-stage recorder, 0.64 foot at 2 a. m. September 11 (discharge, 4.4 second-feet).

1923-1926: Maximum stage recorded, 7.03 feet at 1.30 a. m. April 16, 1923 (discharge, about 1,080 second-feet); minimum stage recorded, 0.36 foot September 6-10, 1924 (discharge, 1.9 second-feet).

DIVERSIONS.—A small amount of water is diverted at Harden ranch, 4 miles above station, for irrigation.

REGULATION.—A small amount of storage at Harden ranch.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined below 500 second-feet and extended above. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

Discharge measurements of South Fork of Tuolumne River near Oakland Recreation Camp., Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Mar. 22.....	2.03	56	May 14.....	2.64	136
May 3.....	2.98	191	Aug. 17.....	.70	4.7

Daily discharge, in second-feet, of South Fork of Tuolumne River near Oakland Recreation Camp, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	13	22	18	58	55	73	218	50	18	7	5.5
2	9.5	14	48	18	55	55	67	214	46	18	7	5
3	9	20	29	20	138	55	67	222	43	18	7	4.8
4	9.5	19	24	16	103	54	97	218	42	17	7	4.8
5	13	17	22	20	83	57	390	249	48	16	6.5	4.8
6	25	16	22	17	53	60	460	182	42	16	6.5	4.7
7	19	17	22	17	45	62	320	151	40	16	6.5	4.6
8	16	16	20	18	40	70	430	132	40	15	6.5	4.7
9	14	16	19	19	38	66	290	122	58	16	6	4.8
10	14	16	19	17	44	59	249	118	43	18	6	4.6
11	17	20	19	16	56	54	229	133	38	16	6	4.6
12	23	23	20	16	99	53	207	144	35	15	6	4.6
13	20	23	16	15	118	56	220	142	33	14	6	4.7
14	19	20	14	16	166	61	233	139	32	13	6	4.7
15	17	17	18	18	92	65	258	140	31	12	5.5	4.7
16	16	17	18	14	105	70	261	138	30	11	5	4.8
17	15	17	19	19	64	73	256	132	29	11	5	5
18	15	16	22	16	53	65	222	124	28	11	5.5	5.5
19	15	16	23	13	51	58	199	122	26	10	5.5	5.5
20	15	16	21	15	65	56	192	110	26	10	6	5.5
21	14	16	21	18	56	57	227	99	25	9.5	5.5	5.5
22	14	15	20	18	50	58	236	90	24	9.5	5.5	5.5
23	14	16	20	17	47	66	234	83	23	9	5	5.5
24	14	16	19	17	45	83	252	79	22	9	4.9	5.5
25	14	16	21	17	44	96	259	72	22	8.5	4.7	5
26	14	16	20	17	45	92	256	70	21	8.5	4.9	5
27	13	16	20	17	50	78	245	65	20	8	5	4.9
28	13	16	21	20	52	81	216	62	20	8.5	5	4.8
29	13	16	20	124	-----	78	225	60	19	8.5	5	4.8
30	13	17	20	43	-----	77	220	56	19	8	5	4.9
31	13	-----	19	87	-----	78	-----	53	-----	7.5	5	-----

Monthly discharge of South Fork of Tuolumne River near Oakland Recreation Camp, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	25	9	14.8	910
November	23	13	17.0	1,010
December	48	14	21.2	1,300
January	124	13	23.6	1,450
February	166	38	68.4	3,800
March	96	53	66.1	4,080
April	460	67	236	14,090
May	249	53	127	7,810
June	58	19	32.5	1,930
July	18	7.5	12.4	762
August	7	4.7	5.74	353
September	5.5	4.6	4.98	296
The year	480	4.6	52.2	37,700

MIDDLE FORK OF TUOLUMNE RIVER NEAR MATHER, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 15, T. 1 S., R. 19 E., at highway bridge 3 miles south of Mather, Tuolumne County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1924, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well on left bank 600 feet below highway bridge.

DISCHARGE MEASUREMENTS.—Made from cable 25 feet above gage or by wading.

CHANNEL AND CONTROL.—Bed of stream rock and gravel, clean and permanent.

One channel at all stages. Channel straight for 150 feet above and below gage. Banks high and clean. Control is a rock ledge 25 feet below gage.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 2.38 feet at 11.30 p. m. May 4 (discharge, 482 second-feet); minimum stage, from water-stage recorder, 0.02 foot August 17 (discharge, 0.1 second-foot).

1924-1926: Maximum stage recorded, 2.85 feet at 9.30 p. m. May 5, 1925 (discharge, 670 second-feet); minimum stage recorded, 0.02 foot August 17, 1926 (discharge, 0.1 second-foot).

ICE.—None.

DIVERSIONS.—About 3 second-feet diverted about 3½ miles above gage and used for irrigation at Ackerson Meadow.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined below 250 second-feet and extended above. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:

April 30, 1926: Gage height, 1.62 feet; discharge, 213 second-feet.

May 18, 1926: Gage height, 1.46 feet; discharge, 176 second-feet.

Daily discharge, in second-feet, of Middle Fork of Tuolumne River near Mather, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	1.8	2.8	13	8	8.5	21	64	250	57	10	0.7	0.4
2-----	1.8	3.2	22	7	8.5	21	61	271	52	8.5	.6	.4
3-----	1.5	4.4	14	5	20	22	57	297	50	8	.5	.4
4-----	1.5	4.0	11	6.5	23	22	75	304	48	7.5	.5	.4
5-----	3.5	3.8	11	7.5	19	24	182	304	51	7.5	.4	.4
6-----	8.5	4.0	10	6.5	17	26	188	204	42	7.5	.4	.4
7-----	7	4.4	8	9	16	26	142	170	41	7	.4	.4
8-----	5	4.4	7.5	7	15	28	140	151	56	6.5	.4	.4
9-----	4.4	4.0	7	7	14	26	111	144	99	7	.3	.4
10-----	4.8	4.8	7	8	18	23	109	151	51	7.5	.3	.4
11-----	7	7	7	9	16	22	113	172	40	7.5	.2	.4
12-----	10	9	7	5.5	17	23	107	190	34	7.5	.2	.4
13-----	8.5	7	4.0	8	19	26	129	196	30	6	.2	.4
14-----	7.5	4.4	4.0	6.5	21	30	149	199	27	4.8	.2	.4
15-----	6.5	5.5	6.5	5	20	35	180	204	26	4.0	.2	.4
16-----	6	6	7	4.8	18	36	204	204	25	3.5	.2	.4
17-----	5	4.4	6	4.4	15	38	210	196	24	3.0	.1	.4
18-----	6.5	6	6	5.5	15	32	177	193	22	2.5	.2	.4
19-----	6.5	6	6	5	15	31	151	185	20	2.2	.2	.5
20-----	5.5	6	6.5	6	18	35	165	170	19	1.8	.2	.5
21-----	5	6	6.5	8	15	38	210	149	18	1.5	.2	.5
22-----	4.8	5.5	7	8.5	14	40	221	135	18	1.5	.2	.5
23-----	4.4	4.8	6.5	8.5	13	44	238	121	17	1.5	.3	.4
24-----	4.0	4.4	8	8	14	52	268	113	15	1.4	.3	.4
25-----	3.8	4.0	7	8	15	62	300	99	15	1.3	.3	.4
26-----	3.5	3.8	7	8	16	66	281	97	14	1.2	.3	.4
27-----	3.2	4.4	7	8	18	66	268	89	13	1.1	.4	.4
28-----	3.0	3.8	7	8	19	64	253	85	12	1.1	.4	.4
29-----	3.0	4.4	7	8	-----	64	253	79	12	1.0	.4	.4
30-----	3.0	6.5	8	8	-----	62	250	73	11	.9	.4	.4
31-----	2.8	-----	8	8.5	-----	66	-----	64	-----	.8	.4	-----

Monthly discharge of Middle Fork of Tuolumne River near Mather, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	10	1.5	4.85	298
November.....	9	2.8	4.96	295
December.....	22	4.0	8.05	495
January.....	9	4.4	7.12	438
February.....	23	8.5	16.3	905
March.....	66	21	37.8	2,320
April.....	300	57	175	10,400
May.....	304	64	170	10,500
June.....	99	11	32.0	1,900
July.....	.7	.8	4.29	264
August.....	.5	.1	.32	19.7
September.....	.5	.4	.41	24.4
The year.....	304	.1	38.4	27,900

MIDDLE FORK OF TUOLUMNE RIVER NEAR BUCK MEADOWS, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 28, T. 1 S., R. 18 E., 800 feet below bridge on Hog ranch road, half a mile above junction with South Fork of Tuolumne River, and 4 miles east of Buck Meadows, Mariposa County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 23, 1916, to September 30, 1926.

GAGE.—Water-stage recorder on left bank.

DISCHARGE MEASUREMENTS.—Made from Hog ranch road bridge or by wading.

CHANNEL AND CONTROL.—Bed consists of gravel. Control is granite ledge across channel 100 feet below gage and is permanent except when affected by lodged debris. One channel at all stages, straight for 100 feet above and 200 feet below gage; banks clear.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.25 feet at 2 a. m. May 5 (discharge, 545 second-feet); minimum stage, from water-stage recorder, 0.70 foot at 1 a. m. September 3 (discharge, 0.2 second-foot).

1917–1926: Maximum stage recorded, 8.15 feet at 10.30 p. m. May 28, 1919 (discharge, 1,330 second-feet); no flow September 4–14, 1924.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed October 5 when a raft lodged on control. Rating curves well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

Discharge measurements of Middle Fork of Tuolumne River near Buck Meadows, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Mar. 22.....	Feet 2.31	Sec.-ft. 37	May 14.....	Feet 3.83	Sec.-ft. 211	June 18.....	Feet 2.14	Sec.-ft. 16
Apr. 27.....	4.26	303	May 28.....	3.08	101	July 7.....	1.54	7.5
May 3.....	4.18	280	June 9.....	3.02	97			

Daily discharge, in second-feet, of Middle Fork of Tuolumne River near Buck Meadows, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.6	4.8	14	10	30	28	65	280	70	10	0.8	0.3
2.....	2.7	5	28	10	26	28	62	306	64	9.5	.9	.3
3.....	2.7	8.5	19	12	80	28	60	342	60	9	.8	.3
4.....	2.8	8.5	15	9	44	28	68	354	57	8	.6	.3
5.....	5.5	7.5	14	10	41	28	213	390	62	8	.6	.3
6.....	6.5	7	13	10	28	29	295	247	51	8	.6	.3
7.....	6	8.5	13	10	24	31	196	197	47	8	.7	.3
8.....	6	8.5	12	10	22	34	273	175	51	7	.4	.3
9.....	5	9	11	10	21	32	187	163	106	7	.4	.3
10.....	4.2	8.5	10	9.5	23	28	139	164	65	8	.4	.3
11.....	5.5	10	10	9.5	30	27	138	188	50	8	.4	.3
12.....	8	14	10	9	76	28	124	213	44	8	.4	.3
13.....	7.5	13	8.5	9	67	29	149	218	39	7.5	.4	.3
14.....	7	10	6	9	102	32	172	218	36	6	.4	.3
15.....	6.5	8	7	11	51	35	202	228	34	5.5	.4	.3
16.....	6	10	9	8.5	58	37	224	230	32	4.5	.4	.3
17.....	6	9.5	9.5	12	34	40	236	220	30	4.1	.3	.3
18.....	6	8.5	12	9	30	36	202	211	28	3.8	.3	.3
19.....	6	8.5	11	7	28	34	173	209	25	3.0	.3	.3
20.....	6	8.5	10	9	35	34	178	192	23	2.8	.4	.4
21.....	5.5	8.5	12	10	30	37	220	172	21	2.4	.3	.4
22.....	6.5	8	11	11	28	39	247	156	20	2.4	.3	.4
23.....	6.5	9	12	10	25	42	249	138	18	2.6	.3	.4
24.....	5	9	10	10	25	51	299	124	17	2.4	.3	.4
25.....	5	9	12	9.5	24	60	330	114	15	2.1	.3	.4
26.....	4.7	9	12	9	25	66	320	111	14	2.0	.3	.4
27.....	4.7	9	12	9	26	66	306	104	13	1.5	.3	.3
28.....	4.8	9	12	11	27	64	286	100	13	1.0	.3	.3
29.....	4.7	8.5	11	44	-----	64	288	94	12	1.2	.3	.3
30.....	4.7	10	11	32	-----	62	282	88	12	1.1	.3	.3
31.....	4.8	-----	10	52	-----	65	-----	79	-----	1.0	.3	-----

Monthly discharge of Middle Fork of Tuolumne River near Buck Meadows, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	8	2.6	5.27	324
November.....	14	4.8	8.83	525
December.....	28	6	11.8	726
January.....	52	7	12.9	793
February.....	102	21	37.9	2,100
March.....	66	27	40.1	2,470
April.....	330	60	205	12,200
May.....	390	79	194	11,900
June.....	106	12	37.6	2,240
July.....	10	1.0	5.01	308
August.....	.9	.3	.43	26.4
September.....	.4	.3	.32	19.0
The year.....	390	.3	46.5	33,600

WOODS CREEK NEAR JACKSONVILLE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 12, T. 1 S., R. 14 E., 500 feet below Big Oak Flat highway bridge, $1\frac{1}{2}$ miles above mouth, and $1\frac{1}{2}$ miles northwest of Jacksonville, Tuolumne County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1925, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 25 feet below gage or by wading.

CHANNEL AND CONTROL.—Gravel and silt, shifting; no well-defined control. Banks high, gravel and rock.

DIVERSIONS.—None.

REGULATION.—None.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.85 feet at 1 a. m. February 14 and 2 a. m. April 8 (discharge, 1,940 second-feet); minimum stage, from water-stage recorder, -0.20 foot July 16-26 (discharge, 0.2 second-foot).

ACCURACY.—Stage-discharge relation fairly permanent after discontinuance of mining operations above station. Rating curves well defined. Water-stage recorder record excellent except April 8-12, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table, except January 31, February 2, 11, 13, 14, and April 5 and 7, for which hourly discharge was averaged. Records good.

Discharge measurements of Woods Creek near Jacksonville, Calif., during the years ending September 30, 1924 to 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1924	Feet	Sec.-ft.	1925	Feet	Sec.-ft.	1926	Feet	Sec.-ft.
Aug. 5.....	1.69	0.6	June 25.....	0.70	13	Feb. 16.....	1.58	229
Dec. 2.....	2.62	13	July 29.....	.60	.8	Mar. 1.....	.65	48
1925			Aug. 14.....	.65	1.4	Mar. 23.....	.30	21
Jan. 9.....	1.52	49	Oct. 27.....	1.15	9.1	Apr. 13.....	.72	70
Feb. 7.....	1.78	281	Dec. 21.....	1.30	15	Apr. 28.....	.23	12
Mar. 20.....	.67	45	1926			May 10.....	.32	25
Apr. 16.....	.82	73	Feb. 3.....	2.18	390	June 16.....	.05	3.7
May 27.....	.50	33	Feb. 5.....	1.28	147			
June 12.....	.52	20	Feb. 14.....	2.65	617			

Daily discharge, in second-feet, of Woods Creek near Jacksonville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8	11	10	16	271	55	16	9.5	5.5	0.5	0.4	1.0
2.....	6.5	11	25	16	262	55	13	9	5	.5	.4	1.0
3.....	6.5	13	16	18	530	49	13	6.5	4.0	.5	.5	1.0
4.....	6.5	15	15	18	302	49	13	11	3.5	.5	.5	1.0
5.....	6.5	13	14	19	190	49	173	23	3.5	.5	.5	1.0
6.....	7	15	14	18	102	44	146	24	3.5	.5	.5	1.0
7.....	7	14	14	18	102	44	199	24	3.5	.4	.5	1.0
8.....	7	14	13	18	102	44	700	23	5	.4	.5	1.0
9.....	7	14	13	18	102	44	200	22	6.5	.4	.8	1.0
10.....	7	15	13	18	157	38	150	21	5	.4	.8	1.0
11.....	6.5	16	14	19	200	38	100	21	3.5	.4	.8	1.0
12.....	7	16	14	20	800	38	75	16	3.5	.4	.8	1.0
13.....	7	16	16	21	516	38	63	14	3.5	.4	.8	1.0
14.....	8	15	16	21	840	38	61	13	3.5	.4	.8	1.0
15.....	8	16	15	20	205	38	55	12	3.5	.4	.8	1.0
16.....	8.5	16	15	20	265	38	49	8	3.5	.2	.8	1.0
17.....	8.5	16	14	20	132	28	38	6.5	3.0	.2	.8	3.5
18.....	8.5	16	22	20	122	28	33	6.5	3.0	.2	.8	3.5
19.....	8.5	16	21	20	118	28	28	6	2.5	.2	.8	3.5
20.....	8.5	24	16	20	225	28	24	6	2.0	.2	.8	3.5
21.....	8.5	13	16	18	120	28	20	6	1.5	.2	1.0	3.5
22.....	8.5	8	16	18	102	20	20	6	1.0	.2	1.0	3.5
23.....	9	7.5	16	18	94	20	20	6	1.0	.2	1.0	3.5
24.....	10	8	16	18	87	20	20	6.5	1.0	.2	1.0	3.5
25.....	10	8	16	18	80	20	16	9	.8	.2	1.0	3.5
26.....	10	8.5	15	18	73	20	16	9	.8	.2	1.0	3.5
27.....	10	8	15	19	67	20	16	8	.8	.4	1.0	3.5
28.....	10	8	15	21	61	16	15	6.5	.8	.4	1.0	3.5
29.....	10	8.5	15	45	-----	16	13	6.5	.8	.4	1.0	3.5
30.....	10	8	15	34	-----	16	12	6.5	.5	.4	1.0	3.5
31.....	11	-----	15	366	-----	16	-----	6	-----	.4	1.0	-----

Monthly discharge of Woods Creek near Jacksonville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	11	6	8.16	502
November.....	24	7.5	12.9	768
December.....	25	10	15.5	953
January.....	366	16	31.3	1,920
February.....	840	61	222	12,300
March.....	55	16	33.0	2,030
April.....	700	12	77.2	4,590
May.....	24	6	11.5	707
June.....	6.5	.5	2.85	170
July.....	.5	.2	.35	21.5
August.....	1.0	.4	.79	48.6
September.....	3.5	1.0	2.17	129
The year.....	840	.2	33.4	24,100

SIERRA & SAN FRANCISCO POWER CO.'S CANAL NEAR LA GRANGE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 16, T. 3 S., R. 14 E., at the short flume opposite La Grange dam, just above waste gate, $\frac{1}{4}$ miles northeast of La Grange, Stanislaus County.

RECORDS AVAILABLE.—1908 to January 25, 1926, when the canal was abandoned (not complete).

GAGE.—Enameled vertical staff on right side of flume near upper end; read by J. L. Beltz.

DISCHARGE MEASUREMENTS.—Made in flume just below gage.

CHANNEL AND CONTROL.—Rectangular ditch excavated mostly in shale rock.

EXTREMES OF DISCHARGE.—1908–1926: Maximum discharge recorded, 72 second-feet November 28, 1921.

ACCURACY.—Stage-discharge relation not changed during year. Rating curve well defined. Gage read to hundredths once daily. Daily discharge ascertained by applying gage height to rating table. Records good.

COOPERATION.—Gage-height record furnished by Turlock Irrigation District, through R. V. Meikle, chief engineer.

The Sierra & San Francisco Power Co.'s canal takes water from the south side of Tuolumne River at Don Pedro Dam. It originally diverted water at Indian Bar, in SW. $\frac{1}{4}$ sec. 6, T. 2 S., R. 15 E., 15 miles above the town of La Grange. This canal was built in the early days to supply water for hydraulic mining in the vicinity of La Grange and is now locally known as the "La Grange mining ditch." Having been thoroughly repaired, it was used as a supply canal for the hydro-electric plant which was installed in 1907 on the left bank of the river about half a mile above La Grange and below La Grange Dam. Water diverted by canal was returned to river at power house. The power plant was discontinued May 23, 1923, and the record now shows the amount of water diverted to supply the town of La Grange. Considerable more water is diverted at Don Pedro Dam than passes the gaging station on the canal. Most of this water is wasted back into the river above La Grange Dam as the canal is in bad repair. Canal was abandoned on January 25, 1926.

No discharge measurements were made during the period.

Daily discharge, in second-feet, of Sierra & San Francisco Power Co.'s canal near La Grange, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Day	Oct.	Nov.	Dec.	Jan.	Day	Oct.	Nov.	Dec.	Jan.
1-----	2.0	2.3	2.0	0.6	11-----	2.8	2.0	1.7	0.6	21-----	2.8	2.8	2.0	1.3
2-----	2.0	2.2	2.0	.6	12-----	2.8	1.3	1.7	.6	22-----	2.5	2.5	2.0	1.3
3-----	2.0	2.2	2.0	.6	13-----	2.8	1.3	1.6	.6	23-----	2.5	2.5	2.0	2.0
4-----	2.0	2.2	2.0	.6	14-----	2.8	1.3	1.6	.6	24-----	2.3	2.5	2.0	2.0
5-----	2.0	2.2	2.0	.6	15-----	2.8	1.3	1.6	.6	25-----	2.3	2.0	1.3	.6
6-----	2.3	2.2	2.0	.6	16-----	2.8	1.3	1.6	.6	26-----	2.3	2.0	1.3	-----
7-----	2.8	2.2	2.0	.4	17-----	2.8	.9	1.6	1.3	27-----	2.3	2.0	.6	-----
8-----	2.8	2.0	2.0	.4	18-----	2.8	.6	2.8	1.3	28-----	2.3	2.0	.6	-----
9-----	2.8	2.0	2.0	.1	19-----	2.8	2.8	2.8	1.3	29-----	2.3	2.0	.6	-----
10-----	2.8	2.0	2.0	.6	20-----	2.8	2.8	2.8	1.3	30-----	2.3	2.0	.4	-----
										31-----	2.3	-----	.4	-----

Monthly discharge of Sierra & San Francisco Power Co.'s canal near La Grange, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October-----	2.8	2.0	2.51	154
November-----	2.8	.6	1.98	118
December-----	2.8	.4	1.71	105
January 1-25-----	2.0	.1	.84	41.7
The period-----				419

MODESTO CANAL NEAR LA GRANGE, CALIF.

LOCATION.—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, Stanislaus County.

RECORDS AVAILABLE.—April 26, 1903, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well on left bank 500 feet below head gates and below waste gates, installed February 19, 1924.

DISCHARGE MEASUREMENTS.—Made from footbridge 550 feet below gage.

CHANNEL AND CONTROL.—Canal is concrete lined and control is slope and cross section of canal.

EXTREMES OF DISCHARGE.—1903-1926: Maximum discharge, 1,540 second-feet 7.30 to 9.30 a. m. June 12, 1926.

ACCURACY.—Stage-discharge relation permanent, except as affected by small slides into the canal. Rating curve well defined. Water-stage recorder record good. Daily discharge ascertained by applying mean daily gage height to rating table except for days of large fluctuation, for which hourly discharge was averaged, and for October 1-20, for which shifting-control method was used. Records good.

COOPERATION.—Gage-height record furnished by Modesto Irrigation District.

Canal diverts from right bank of Tuolumne River at the La Grange Dam. Water is used for irrigation in the Modesto irrigation district.

Discharge measurements of Modesto Canal near La Grange, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Oct. 9-----	Feet 4.33	Sec.-ft. 390	May 7-----	Feet 7.74	Sec.-ft. 1,110	Aug. 2-----	Feet 5.78	Sec.-ft. 578
Apr. 3-----	8.45	1,280	June 22-----	2.71	172			

Daily discharge, in second-feet, of Modesto Canal near La Grange, Calif., for the year ending September 30, 1926

Day	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	438		295	177	45	1,250	1,200	990	250	716	526
2	404		295	177		1,250	1,200	880	636	676	526
3	396		295	177		1,250	1,200	776	696	676	526
4	404		295	177	34	1,250	1,130	598	696	676	544
5	404		364	177	165	1,230	1,080	325	716	696	544
6	396		396	165	165	880	1,080	260	736	716	544
7	388		396	146	165	676	1,080	260	796	736	562
8	388		412	149	165	508	1,010	253	816	736	562
9	388		380	125	165	285	858	801	836	736	598
10	388		388	148	165	295	858	806	736	736	598
11	388		388	129	138	90	736	1,300	736	716	598
12	412		364	183	350	7	676	1,160	716	696	598
13	412		301	177	284	7.5	676	451	716	696	598
14	404		404	171	165	189	776	310	656	676	598
15	396		358	163	165	404	858	332	656	676	445
16	396		195	177	140	404	1,010	430	656	656	227
17	404		143	165	171	404	1,080	508	656	636	220
18	404		146	154	165	404	1,080	396	696	616	227
19	421		144	154	405	404	1,080	388	716	616	234
20	210	219	144	154	598	404	1,080	356	776	616	227
21		396	144	154	598	490	1,080	340	767	616	227
22		303	208	154	636	526	1,080	246	836	616	214
23		12	253	154	676	526	968	171	836	598	214
24		5.5	253	154	597	526	880	171	836	580	214
25		5.5	253	154	756	636	990	165	858	580	214
26		5.5	246	154	816	716	1,080	165	880	544	214
27		3.0	201	154	880	924	1,080	165	858	526	214
28		233	177	154	968	1,160	1,080	165	858	526	214
29		396	177		1,130	1,200	1,080	160	836	526	214
30		307	177		1,250	1,200	1,080	165	796	526	214
31		295	177		1,250		1,080		756	526	

NOTE.—No flow Oct. 20 to Dec. 19.

Monthly discharge of Modesto Canal near La Grange, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	438	0	253	15,600
December	396	0	70.3	4,320
January	412	143	270	16,600
February	183	125	160	8,890
March	1,260	0	426	26,200
April	1,250	7	650	38,700
May	1,200	676	1,010	62,100
June	1,300	160	450	26,800
July	880	250	743	45,700
August	736	526	641	39,400
September	598	214	388	23,100
The year	1,300	0	424	307,000

NOTE.—No flow during November.

TURLOCK CANAL NEAR LA GRANGE, CALIF.

LOCATION.—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, Stanislaus County.

RECORDS AVAILABLE.—July, 1899, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from foot plank across lined section of canal at gage.

CHANNEL AND CONTROL.—Cut partly lined and fill completely lined. Control is cross section and slope of canal.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 8.96 feet at 3.30 p. m. June 11 (discharge, 1,960 second-feet); no flow October 16 to January 14.

1907-1926: Maximum discharge, from water-stage recorder, 2,000 second-feet from 12.15 to 2 a. m. June 15, 1925; no flow during periods each year.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Recorder record excellent. Daily discharge ascertained by use of discharge integrator. Records good.

COOPERATION.—Gage-height record furnished by Turlock Irrigation District, through R. V. Meikle, chief engineer.

Canal diverts from left bank of Tuolumne River at La Grange Dam. Water is used for irrigation in the Turlock irrigation district. A small amount is used to supply the town of La Grange.

Discharge measurements of Turlock Canal near La Grange, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Oct. 8.....	Feet 3.82	Sec.-ft. 633	May 7.....	Feet 6.28	Sec.-ft. 1,210	Aug. 3.....	Feet 6.06	Sec.-ft. 1,160
Apr. 3.....	8.10	1,680	June 22.....	4.30	734			

Daily discharge, in second-feet, of Turlock Canal near La Grange, Calif., for the year ending September 30, 1926

Day	Oct.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	526		714	232	1,710	1,430	1,160	736	1,110	810
2.....	570		724	320	1,700	1,370	1,030	816	1,170	852
3.....	598		724	321	1,700	1,340	1,530	743	1,190	850
4.....	516		702	302	1,710	1,450	1,550	744	1,180	874
5.....	626		686	173	1,420	1,470	418	710	1,160	841
6.....	611		692	168	1,400	1,470	584	720	1,140	830
7.....	615		688	164	1,630	1,370	616	668	1,130	850
8.....	614		685	256	1,650	1,240	678	726	1,090	717
9.....	612		764	228	1,660	1,030	1,180	708	962	673
10.....	614		730	236	1,630	774	1,440	826	914	564
11.....	569		750	249	1,520	841	1,790	796	944	379
12.....	584		716	268	1,430	1,020	1,800	830	988	114
13.....	598		646	281	1,440	1,320	762	842	975	137
14.....	594		316	212	1,160	1,430	564	1,190	1,110	221
15.....	484	49	230	215	1,020	1,600	574	1,280	998	279
16.....		217	357	240	1,020	1,580	752	1,270	1,020	378
17.....		230	122	288	1,040	1,490	1,020	1,290	1,050	336
18.....		252	140	248	1,030	1,640	690	1,240	1,050	327
19.....		263	133	472	1,030	1,660	622	1,200	1,060	315
20.....		258	354	600	891	1,630	503	1,180	1,050	320
21.....		258	360	590	778	1,630	533	1,250	1,070	684
22.....		201	355	532	802	1,570	636	1,150	1,050	740
23.....		151	396	574	780	1,570	688	1,170	1,060	759
24.....		132	345	754	823	1,590	684	1,260	1,100	750
25.....		143	152	1,020	793	1,620	682	1,280	1,110	751
26.....		118	125	1,230	800	1,550	697	1,270	1,120	734
27.....		141	122	1,400	795	1,700	674	1,290	1,150	746
28.....		186	184	1,600	1,000	1,790	672	1,300	1,070	754
29.....		246		1,610	1,190	1,850	675	1,330	990	756
30.....		312		1,700	1,430	1,850	654	1,360	999	750
31.....		287		1,720		1,850		1,220	985	

NOTE.—No flow Oct. 16 to Jan. 14, except a small amount to supply the town of La Grange.

Monthly discharge of Turlock Canal near La Grange, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	626	-----	282	17,300
January.....	312	-----	111	6,820
February.....	764	122	461	25,600
March.....	1,720	164	587	36,100
April.....	1,710	778	1,230	73,200
May.....	1,850	774	1,470	90,400
June.....	1,800	418	862	51,300
July.....	1,360	668	1,040	64,000
August.....	1,190	914	1,060	65,200
September.....	874	114	603	35,900
The year.....	1,850	-----	644	466,000

NOTE.—See footnote to table of daily discharge.

STANISLAUS RIVER BASIN

MIDDLE FORK OF STANISLAUS RIVER AT SAND BAR FLAT, NEAR AVERY, CALIF.

LOCATION.—At diversion dam of Sierra & San Francisco Power Co. at Sand Bar Flat, in Tuolumne County, 3 miles below Bakers Crossing, 11 miles above junction with North Fork of Stanislaus River, and 11 miles southeast of Avery, Calaveras County.

DRAINAGE AREA.—329 square miles (measured on topographic maps by Pacific Gas & Electric Co.).

RECORDS AVAILABLE.—September 1, 1905, to September 30, 1926.

GAGE.—Staff showing depth of water over crest of dam. There is also a staff in flume below dam.

DISCHARGE.—Flow over dam is computed from formula developed by Sierra & San Francisco Power Co. Current-meter measurements are made in flume. Discharge, as published, is combined flow of river over dam and discharge of flume.

EXTREMES OF DISCHARGE.—1905-1926: Maximum mean daily discharge, 9,760 second-feet, March 19, 1907; minimum mean daily discharge, 30 second-feet, August 24, 1924.

DIVERSIONS.—Philadelphia ditch diverts water from South Fork of Stanislaus River below Strawberry and empties into Middle Fork above station.

REGULATION.—Relief Reservoir (capacity, 16,000 acre-feet) on Relief Creek, about 1 mile above mouth of creek, is used to store water.

COOPERATION.—Daily-discharge record and table showing natural run-off in acre-feet and discharge in second-feet furnished by Pacific Gas & Electric Co., through A. H. Markwart, vice president, in charge of engineering.

Daily discharge, in second-feet, of Middle Fork of Stanislaus River at Sand Bar Flat, near Avery, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	257	216	203	223	161	288	700	1,540	1,180	283	246	227
2.....	242	216	285	257	148	330	643	1,510	1,130	272	260	227
3.....	240	225	235	134	182	341	616	1,640	1,050	262	249	224
4.....	240	216	174	142	184	355	629	1,720	903	249	246	227
5.....	242	185	168	89	229	396	1,460	2,040	936	243	247	224
6.....	288	212	181	160	223	419	1,120	1,620	932	264	250	224
7.....	261	182	180	205	189	429	1,150	1,310	786	258	249	220
8.....	231	141	164	263	165	440	1,110	1,080	943	240	246	222
9.....	216	149	116	150	161	422	946	1,080	1,240	248	245	220
10.....	212	172	141	106	165	399	990	964	728	263	243	209

Daily discharge, in second-feet, of Middle Fork of Stanislaus River at Sand Bar Flat, near Avery, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11.....	208	253	146	163	189	370	1,050	960	642	263	242	204
12.....	231	203	142	87	190	391	971	1,040	566	267	240	202
13.....	227	203	146	84	272	419	1,260	1,150	516	278	239	202
14.....	231	149	111	79	255	475	1,420	1,340	482	249	154	193
15.....	225	124	147	82	201	545	1,670	1,500	453	222	247	191
16.....	223	141	170	100	225	555	1,820	1,690	420	223	249	219
17.....	223	144	210	87	187	589	1,700	1,680	402	240	234	197
18.....	223	137	182	108	172	492	1,370	1,730	400	238	234	219
19.....	223	141	156	87	184	462	1,210	1,910	393	287	234	151
20.....	223	134	155	82	210	475	1,370	1,940	379	285	236	118
21.....	225	134	231	90	192	509	1,560	1,770	360	281	234	104
22.....	223	97	244	105	165	510	1,680	1,650	357	274	234	105
23.....	222	129	160	103	166	579	1,630	1,540	352	275	234	102
24.....	205	231	153	95	149	674	1,830	1,450	337	273	234	98
25.....	194	185	147	87	161	825	1,910	941	319	271	233	98
26.....	194	142	111	84	199	744	1,890	865	308	268	235	99
27.....	190	122	155	81	220	721	1,810	889	289	272	234	98
28.....	190	165	111	82	268	687	1,890	1,050	280	280	232	102
29.....	216	97	149	374	-----	697	1,790	1,170	271	294	235	98
30.....	216	108	167	267	-----	613	1,700	1,220	254	289	235	102
31.....	216	-----	205	198	-----	770	-----	1,300	-----	290	235	-----

Monthly discharge of Middle Fork of Stanislaus River at Sand Bar Flat near Avery, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet				Run-off in acre-feet	
	Maximum	Minimum	Mean observed	Mean natural	Natural	Observed
October.....	288	190	224	113	6,950	13,800
November.....	253	97	165	95	5,650	9,520
December.....	285	111	169	112	6,890	10,400
January.....	374	79	137	124	7,680	8,420
February.....	272	148	193	189	10,500	10,700
March.....	325	288	514	487	30,000	31,600
April.....	1,910	616	1,360	1,520	90,400	80,900
May.....	2,040	965	1,390	1,390	84,800	85,600
June.....	1,240	254	587	538	32,000	34,900
July.....	294	222	265	160	9,840	16,200
August.....	250	154	237	65	4,000	14,600
September.....	227	98	171	60	3,570	10,200
The year.....	2,040	79	452	404	292,000	327,000

STANISLAUS RIVER NEAR KNIGHTS FERRY, CALIF.

LOCATION.—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, Stanislaus County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 18, 1915, to September 30, 1926. Also at Knights Ferry, May 19, 1903, to April 30, 1916.

GAGE.—Water-stage recorder on right bank in reinforced concrete well and house.

DISCHARGE MEASUREMENTS.—Made from cable 20 feet above gage or by wading half a mile above gage.

CHANNEL AND CONTROL.—Bed consists of solid rock and shifting sand. Channel straight for 250 feet above and 300 feet below; one channel at all stages. Control is Tulloch Dam. Point of zero flow, gage height 0.87 foot. Control is completely drowned out above stage of 5 feet. About 1 second-foot leaks through sluice boards at all times.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.45 feet at 10 p. m. April 5 (discharge, 5,330 second-feet); minimum stage, from water-stage recorder, 0.72 foot at 9 p. m. August 27, water being stored at Melones Dam (discharge, 1 second-foot).

1903-1914: Maximum stage recorded, 26.0 feet at 4 a. m. January 31, 1911 (discharge, 60,000 second-feet); minimum stage recorded, no flow December 3-5, 1912.

1915-1926: Maximum stage recorded, 12.63 feet at 10.30 a. m. February 6, 1925 (discharge, determined from extension of rating curve, 25,200 second-feet); minimum stage recorded, 0.72 foot at 9 p. m. August 27, 1926 (discharge, 1 second-foot).

DIVERSIONS.—Numerous ditches divert water for mining above station. Water is also diverted from South Fork into Tuolumne Basin and from North Fork through Utica Gold Mining Co.'s canal for use in the vicinity of Murphy and Angels. The water diverted for power development on Middle Fork at Sand Bar Flat near Avery is returned to river above this station.

REGULATION.—Flow is partly regulated by storage in the drainage basins of the Middle Fork, North Fork, and South Fork and at Melones Dam after August 21, 1926.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve well defined below 1,500 second-feet, fairly well defined between 1,500 and 5,000 second-feet, and extended above. Water-stage recorder record excellent except December 5-29 and January 29 to March 16 when recorder was out of order. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge for periods December 5-29 and February 1 to March 16 estimated from records of flow of Middle Fork of Stanislaus River at Sand Bar Flat or Mokelumne River near Clements. Records good except those for estimated periods, which are fair.

Discharge measurements of Stanislaus River near Knights Ferry, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Mar. 21.....	2.30	1,150	Apr. 14.....	3.59	3,440
Mar. 22.....	2.22	984	Sept. 18.....	1.38	240

Daily discharge, in second-feet, of Stanislaus River near Knights Ferry, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	304	239	227	233	-----	1,460	3,320	1,420	323	271	227
2.....	304	227	438	168	-----	1,360	3,020	1,370	271	202	221
3.....	304	304	543	185	-----	1,300	3,120	1,260	264	252	227
4.....	264	310	400	145	-----	1,320	3,320	1,220	245	264	258
5.....	264	297	-----	208	-----	3,430	3,540	1,030	191	258	264
6.....	304	258	-----	196	-----	4,070	3,430	1,000	185	271	233
7.....	297	264	-----	174	-----	3,320	2,520	892	233	271	214
8.....	284	245	-----	174	-----	4,750	1,910	869	233	290	239
9.....	277	208	-----	185	-----	3,320	1,710	1,330	239	258	239
10.....	239	290	-----	214	-----	2,720	1,540	1,080	252	277	221
11.....	258	277	-----	185	-----	2,620	1,480	803	252	252	214
12.....	245	264	-----	162	-----	2,420	1,540	759	174	252	214
13.....	264	297	-----	162	-----	2,920	1,680	620	227	258	214
14.....	284	310	-----	174	-----	3,120	1,980	509	227	214	214
15.....	290	264	-----	151	-----	3,430	2,230	543	264	245	221

Daily discharge, in second-feet, of Stanislaus River near Knights Ferry, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
16.....	277	208	-----	151	-----	3,740	2,320	492	174	227	258
17.....	277	252	-----	145	1,480	3,850	2,520	475	208	264	284
18.....	284	245	-----	145	1,330	3,120	2,420	408	233	258	252
19.....	245	239	-----	168	1,060	2,520	2,620	408	168	239	239
20.....	264	221	-----	151	1,160	2,620	2,320	393	271	245	202
21.....	258	221	-----	140	1,180	3,020	2,620	323	233	156	168
22.....	258	202	-----	145	1,250	3,220	2,320	372	227	3	151
23.....	264	179	-----	156	1,330	3,220	2,100	323	258	1	145
24.....	252	208	-----	233	1,630	3,320	1,780	330	264	1	114
25.....	233	214	-----	174	1,680	3,540	1,360	330	264	1	77
26.....	202	227	-----	179	1,540	3,540	1,180	317	202	1	90
27.....	233	179	-----	174	1,490	3,320	1,100	330	252	1	14
28.....	264	221	-----	174	1,440	3,320	1,170	271	245	114	84
29.....	252	202	-----	350	1,400	3,430	1,270	297	245	191	5
30.....	245	174	233	800	1,300	3,740	1,370	297	264	202	1
31.....	264	-----	227	1,000	1,370	-----	1,370	-----	245	221	-----

NOTE.—No record Dec. 5-29 and Feb. 1 to Mar. 16.

Monthly discharge of Stanislaus River near Knights Ferry, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	304	202	266	16,400
November.....	310	174	242	14,400
December.....	-----	-----	* 250	15,400
January.....	1,000	140	226	13,900
February.....	-----	-----	* 1,300	72,200
March.....	-----	-----	* 1,200	73,800
April.....	4,750	1,300	3,040	181,000
May.....	3,540	1,100	2,150	132,000
June.....	1,420	271	669	39,800
July.....	323	168	237	14,600
August.....	290	1	192	11,800
September.....	284	1	183	10,900
The year.....	4,750	1	823	596,000

* Estimated.

SOUTH SAN JOAQUIN CANAL^a NEAR KNIGHTS FERRY, CALIF.

LOCATION.—At footbridge three-fourths mile below head gate at Goodwin Dam on Stanislaus River, 4 miles above Knights Ferry, Stanislaus County.

RECORDS AVAILABLE.—May 1, 1914, to September 30, 1926. Also miscellaneous measurements and rough estimates of flow for 1913.

GAGE.—Water-stage recorder in concrete well on left bank; attended by G. H. Hill.

DISCHARGE MEASUREMENTS.—Made from footbridge at gage.

CHANNEL AND CONTROL.—Canal has trapezoidal section and is concrete lined.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 8.17 feet at 4 a. m. May 29 (discharge, 1,010 second-feet); no flow several months during winter.

1914-1926: Maximum stage recorded, 8.43 feet at 4 a. m. May 18, 1922 (discharge, 1,080 second-feet); no flow several months each year.

ACCURACY.—Stage-discharge relation changed slightly from previous year. Rating curve very well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records excellent.

^a Also known as Joint Supply Canal.

COOPERATION.—Daily gage-height record furnished by South San Joaquin Irrigation District.

Water is diverted from Stanislaus River at the Goodwin Dam and used for irrigation in the Oakdale and South San Joaquin irrigation districts.

Discharge measurements of South San Joaquin Canal near Knights Ferry, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Mar. 21.....	Feet 4.76	Sec.-ft. 496	Apr. 15.....	Feet 7.96	Sec.-ft. 960	Sept. 18.....	Feet 2.68	Sec.-ft. 187
Mar. 22.....	6.12	687	June 17.....	4.43	437			

Daily discharge, in second-feet, of South San Joaquin Canal near Knights Ferry, Calif., for the year ending September 30, 1926

Day	Oct.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	181		298	124	980	948	980	239	258	169
2.....	194		305	194	980	964	980	239	151	175
3.....	70		312	194	980	980	964	200	163	175
4.....			312	175	980	980	948	194	206	206
5.....			312	163	948	964	852	129	220	206
6.....			361	169	900	900	852	140	213	181
7.....			403	169	868	852	700	151	213	157
8.....			475	169	820	852	700	187	226	175
9.....			535	169	790	852	884	200	213	187
10.....			520	169	775	884	884	200	200	181
11.....			595	169	805	948	625	194	200	169
12.....			610	169	820	964	580	163	200	169
13.....			610	169	836	964	460	163	200	163
14.....			610	152	916	932	326	175	200	163
15.....			610	316	980	884	417	194	187	169
16.....			640	550	980	852	389	157	194	169
17.....			565	565	980	852	375	151	194	226
18.....			535	520	852	868	326	169	200	213
19.....			475	490	760	884	312	163	206	194
20.....			354	490	745	884	305	163	187	163
21.....			84	490	745	868	272	232	182	124
22.....				625	760	852	298	187	14	114
23.....				790	760	852	291	181	9	99
24.....				900	760	836	246	194	10	93
25.....				932	790	836	265	200	11	34
26.....				932	916	820	265	187	12	31
27.....			9	932	932	868	252	187	14	10
28.....			104	932	948	932	232	194	53	
29.....				932	964	964	232	187	146	
30.....				964	948	980	232	226	157	
31.....		179		980		980		187	163	

NOTE.—No flow Oct. 4 to Jan. 30, Feb. 22-26, and Sept. 28-30.

Monthly discharge of South San Joaquin Canal near Knights Ferry, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	194	0	14.4	885
January.....	179	0	5.77	355
February.....	640	0	344	19,100
March.....	980	124	474	29,100
April.....	980	745	874	52,000
May.....	980	820	903	55,500
June.....	980	232	615	30,600
July.....	239	129	185	11,400
August.....	258	9	155	9,530
September.....	226	0	137	8,150
The year.....	980	0	299	217,000

NOTE.—No flow during November and December.

OAKDALE CANAL • NEAR KNIGHTS FERRY, CALIF.

LOCATION.—In lot No. 2 near the northwest corner of SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 10, T. 1 S., R. 12 E., 1,700 feet below head gate at Goodwin Dam on Stanislaus River, 4 miles above Knights Ferry, Stanislaus County.

RECORDS AVAILABLE.—May 3, 1914, to September 30, 1926. Also miscellaneous measurements and rough estimates of flow for 1913.

GAGE.—Water-stage recorder on left bank about 1,700 feet below head gate installed July 4, 1925.

DISCHARGE MEASUREMENTS.—Made from footbridge 100 feet above gage.

CHANNEL AND CONTROL.—Canal has trapezoidal section and concrete sidewalls.

EXTREME OF DISCHARGE.—1914–1926: Maximum stage recorded, 5.17 feet at 7 p. m. June 6, 1926 (discharge, 238 second-feet); no flow during periods of each year.

ACCURACY.—Stage-discharge relation changed slightly during period of no flow when canal was cleaned and repaired. Rating curves well defined. Recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

COOPERATION.—Gage-height record furnished by Oakdale Irrigation District.

Oakdale Canal diverts water from left bank of Stanislaus River at Goodwin Dam. The water is used for irrigation in the Oakdale irrigation district.

Discharge measurements of Oakdale Canal near Knights Ferry, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Mar. 21.....	2.78	100	Apr. 15.....	2.68	93	Sept. 18.....	1.83	50
Mar. 22.....	3.33	128	June 17.....	3.42	138			

Daily discharge, in second-feet, of Oakdale Canal near Knights Ferry, Calif., for the year ending September 30, 1926

Day	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	56	-----	202	196	232	72	54	44
2.....	57	-----	202	196	232	72	52	46
3.....	57	-----	202	208	232	72	48	47
4.....	56	-----	190	181	232	70	44	52
5.....	58	-----	130	226	232	60	48	58
6.....	70	13	90	220	232	55	56	50
7.....	70	19	92	220	226	50	58	43
8.....	72	19	92	220	226	50	59	43
9.....	75	19	63	220	232	54	60	44
10.....	85	19	-----	226	232	62	63	43
11.....	95	19	-----	232	226	65	60	43
12.....	95	34	-----	232	220	64	55	43
13.....	98	41	62	232	202	62	51	42
14.....	95	42	92	232	178	53	48	42
15.....	95	42	92	232	144	54	48	43
16.....	95	42	92	232	136	53	47	44
17.....	51	56	90	232	128	54	47	50
18.....	-----	66	90	232	125	54	49	50
19.....	-----	84	92	232	122	53	48	52
20.....	-----	100	92	232	112	54	44	50
21.....	-----	109	95	232	95	62	38	38
22.....	-----	128	112	232	87	63	-----	29
23.....	-----	136	131	232	87	58	-----	26
24.....	-----	150	144	232	87	53	-----	19
25.....	-----	166	161	232	77	53	-----	6.5
26.....	-----	190	166	232	77	53	-----	12
27.....	-----	190	178	232	77	54	-----	1.5
28.....	-----	190	184	232	77	52	15	-----
29.....	-----	190	196	232	78	54	32	-----
30.....	-----	190	202	232	77	58	32	-----
31.....	-----	196	-----	232	-----	56	36	-----

NOTE.—No flow Oct. 18 to Mar. 5, Apr. 10–12, Aug. 22–27, and Sept. 28–30.

⁶ Also known as South Main Canal.

Monthly discharge of Oakdale Canal near Knights Ferry, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	98	0	41.3	2,540
March.....	196	0	79.0	4,890
April.....	202	0	118	7,020
May.....	232	181	225	13,800
June.....	232	77	157	9,340
July.....	72	50	58.0	3,570
August.....	63	0	38.5	2,370
September.....	58	0	35.4	2,110
The year.....	232	0	63.1	45,600

NOTE.—No flow November to February.

CALAVERAS RIVER BASIN

CALAVERAS RIVER AT JENNY LIND, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ sec. 22, T. 3 N., R. 10 E., at highway bridge on Milton Road, a quarter of a mile southeast of Jenny Lind, Calaveras County, and 27 miles above junction with San Joaquin River. North and South Forks unite 15 miles above station.

DRAINAGE AREA.—395 square miles.

RECORDS AVAILABLE.—January 1 to June 30, 1907; December 1, 1907, to June 30, 1908; and November 1, 1908, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank, 50 feet below bridge, installed December 3, 1925. Previous gage was a vertical staff in two sections on downstream end of middle pier of bridge.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; shifts during high water. Banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.60 feet at 8.30 p. m. February 13 (discharge, 12,700 second-feet); no flow October 1–19 and June 24 to September 30.

1907–1926: Maximum recorded discharge, from extension of rating curve, about 69,600 second-feet at 7 a. m. January 31, 1911; stage was higher about midnight; no flow during falls of 1913 to 1915, 1917 to 1922, and 1924 to 1926.

DIVERSIONS.—A small quantity of water is stored at Salt Springs Valley on Duck Creek for use in connection with gold dredging operations below Jenny Lind.

ACCURACY.—Stage-discharge relation changed February 3, 14, and April 9. Rating curves fairly well defined. Water-stage recorder record good. Daily discharge ascertained by applying mean daily gage height to rating table, except February 1–5, 12–14, April 5, 6, 8, and 9, for which hourly discharge was averaged. Records good.

COOPERATION.—Gage-height record and results of one discharge measurement furnished by city of Stockton.

Discharge measurements of Calaveras River at Jenny Lind, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Dec. 3.....	3.22	63	Feb. 4.....	4.46	546	Mar. 20.....	3.12	58
Jan. 7.....	3.00	32	Feb. 5.....	4.92	853	Apr. 16.....	3.60	131
Do.....	3.00	32	Feb. 13.....	6.65	3,070	June 16.....	2.46	2.0

Daily discharge, in second-feet, of Calaveras River at Jenny Lind, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1		7	19	28	577	128	36	42	8.5
2		7	36	32	204	120	36	39	8.5
3		7	60	34	1,810	117	36	38	7.5
4		11	46	31	939	110	41	34	6
5		15	37	36	921	104	390	36	5.5
6		19	28	32	338	102	732	39	4.5
7		15	28	32	210	97	345	38	3.6
8		16	27	27	149	104	1,760	37	3.0
9		17	25	28	110	112	965	34	3.3
10		18	23	26	102	107	501	34	3.6
11		19	23	22	175	92	360	29	3.9
12		20	22	21	1,770	86	290	27	4.2
13		21	22	21	3,000	82	229	23	3.6
14		21	23	21	3,060	72	189	22	3.3
15		21	23	21	882	69	160	20	2.6
16		21	23	21	1,260	67	136	19	2.2
17		21	23	21	540	64	121	18	2.2
18		21	29	22	368	62	115	17	2.4
19		21	66	23	291	60	106	14	2.2
20	3.6	21	70	22	908	58	96	14	2.0
21	4.0	20	58	21	485	58	85	13	1.0
22	5	20	46	18	350	58	78	12	.6
23	5	20	38	17	300	55	74	12	.1
24	6	20	34	16	235	52	68	13	
25	6	20	31	16	196	50	60	14	
26	5.5	19	30	16	171	47	55	15	
27	5.5	19	30	16	152	45	50	14	
28	5.5	19	29	17	139	43	47	14	
29	6	19	29	131		42	46	12	
30	6	19	28	197		40	43	11	
31	6.5		28	214		37		10	

NOTE.—No flow Oct. 1-19 and June 24 to Sept. 30.

Monthly discharge of Calaveras River at Jenny Lind, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	6.5	0	2.08	128
November	21	7	17.8	1,060
December	70	19	33.4	2,050
January	214	16	38.7	2,380
February	3,060	102	702	39,000
March	128	37	75.5	4,640
April	1,760	36	243	14,500
May	42	10	28.0	1,410
June	8.5	0	2.81	167
The year	3,060	0	90.2	65,300

NOTE.—No flow July to September.

CALAVERAS RIVER NEAR STOCKTON, CALIF.

LOCATION.—On west boundary of sec. 6, T. 1 N., R. 8 E., at Jack Tone road bridge, 7 miles east of Stockton, Calif.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1925, to September 30, 1926, when station was discontinued.

GAGE.—Vertical staff in three sections fastened to posts under bridge.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading under bridge.

CHANNEL AND CONTROL.—Channel is an artificial channel in hardpan, straight above and below bridge. Banks are high and clean and are not overflowed. One channel at all stages. Control is a hardpan riffle about 300 feet below bridge.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 16.2 feet about 2 a. m. February 14 (discharge, 6,120 second-feet); no flow October 1 to December 18 and May 24 to September 30.

DIVERSIONS.—No information.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Staff gage read to half-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

COOPERATION.—Gage-height record and results of several discharge measurements furnished by city of Stockton.

Discharge measurements of Calaveras River near Stockton, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 1.....	6.03	696	Feb. 5.....	7.85	1,280	Apr. 16.....	3.70	155
Feb. 3.....	10.7	2,820	Feb. 14.....	12.19	3,430			
Do.....	8.90	1,800	Mar. 20.....		47			

Daily discharge, in second-feet, of Calaveras River near Stockton, Calif., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1.....		23	400	162	21	29	16.....		19	1,450	64	152	15
2.....		25	270	143	19	28	17.....		18	965	54	140	12
3.....		32	1,370	137	19	29	18.....		16	630	47	132	12
4.....		40	1,530	114	18	28	19.....	22	18	462	45	128	6.5
5.....		29	1,250	97	21	29	20.....	73	18	488	45	122	5.5
6.....		32	330	88	870	25	21.....	54	23	500	40	122	3.4
7.....		28	270	86	575	28	22.....	52	21	450	39	109	2.0
8.....		29	210	90	1,070	29	23.....	48	20	400	35	109	.4
9.....		30	148	109	1,530	28	24.....	34	18	388	30	99	-----
10.....		25	125	97	870	28	25.....	43	19	400	26	90	-----
11.....		25	200	90	550	24	26.....	34	20	425	25	83	-----
12.....		23	1,370	80	512	21	27.....	29	20	362	24	64	-----
13.....		19	1,750	76	450	19	28.....	24	21	350	23	50	-----
14.....		20	3,450	70	350	17	29.....	25	26	-----	23	37	-----
15.....		18	1,140	73	240	15	30.....	22	190	-----	21	30	-----
							31.....	21	148	-----	21	-----	-----

NOTE.—No flow Oct. 1 to Dec. 18 and May 24 to Sept. 30.

Monthly discharge of Calaveras River near Stockton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
December.....	73	0	15.4	947
January.....	190	16	32.7	2,010
February.....	3,450	125	753	41,800
March.....	162	21	66.9	4,110
April.....	1,530	18	286	17,000
May.....	29	0	14.0	861
The year.....	3,450	0	92.2	66,700

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

LITTLEJOHNS CREEK (SOUTH CHANNEL) AT FARMINGTON, CALIF.

LOCATION.—At highway bridge just south of Farmington, San Joaquin County.

DRAINAGE AREA.—193 square miles (measured by city of Stockton).

RECORDS AVAILABLE.—October 1, 1925, to September 30, 1926, when station was discontinued.

GAGE.—Staff gage in two sections on left bank 50 feet above bridge.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Bed of stream is sand and gravel. Banks are high, one channel at all stages. Control is a sand and gravel riffle 200 feet below gage.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 19.6 feet at 1 a. m. February 14 (discharge, 2,280 second-feet); no flow most of year.

DIVERSIONS.—No information.

REGULATION.—None except that water can be spilled from the South San Joaquin Canal into creek above gage.

ACCURACY.—Stage-discharge relation permanent. Rating curve fairly well defined. Staff gage read to hundredths twice daily. Gage not read March 1 to April 5 and April 13 to 19. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge estimated for days of no record in April and for month of March. Records fair.

COOPERATION.—Gage-height record and results of one discharge measurement furnished by city of Stockton.

Discharge measurements of Littlejohns Creek (South Channel) at Farmington, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 4.....	8.03	255	Mar. 20.....	5.70	0.7
Feb. 14.....	12.56	1,010	Apr. 15.....	6.65	55

• Waste water from South San Joaquin Canal.

Daily discharge, in second-feet, of Littlejohns Creek (South Channel) at Farmington, Calif., for the year ending September 30, 1926

Day	Feb.	Mar.	Apr.	Day	Feb.	Mar.	Apr.	Day	Feb.	Mar.	Apr.
1.....				11.....	75		1.5	21.....	159		
2.....				12.....	502		1.5	22.....	131		
3.....	502			13.....	639		1.5	23.....	117		
4.....	263			14.....	1,230		1.5	24.....	103		
5.....	372			15.....	452		55	25.....	35		
6.....	152		103	16.....	570		1.0	26.....	20		
7.....	75		45	17.....	263		.5	27.....	5		
8.....	62		40	18.....	159		.5	28.....	5		
9.....	50		25	19.....	103		.2	29.....			
10.....	50		5	20.....	166	0.7		30.....			
								31.....			

NOTE.—No flow Oct. 1 to Feb. 2, Apr. 1-5, and Apr. 20 to Sept. 30, and probably part of March. Mean discharge for March estimated at 0.7 second-foot. Discharge estimated Apr. 13-19. Discharge Apr. 15 is result of current-meter measurement and is water spilled from South San Joaquin Canal.

Monthly discharge of Littlejohns Creek (South Channel) at Farmington, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
February.....	1,230	0	225	12,500
March.....			.7	43
April.....	103	0	9.37	558
The year.....	1,230	0	18.1	13,100

NOTE.—See footnote to daily-discharge table.

MOKELUMNE RIVER BASIN

NORTH FORK OF MOKELUMNE RIVER NEAR WEST POINT, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 17, T. 7 N., R. 15 E., at Bruce's camp, $9\frac{1}{2}$ miles northeast of West Point, on county line between Calaveras and Amador Counties. Blue Creek enters 1 mile below and Bear Creek 4 miles above station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—April 28, 1917, to September 30, 1918 (incomplete) and February 1, 1924, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from cable at gage.

CHANNEL AND CONTROL.—Channel wide; bed solid rock, boulders, and gravel; fairly smooth at gage; rough and steep above and below; permanent. Banks high; not subject to overflow. Zero flow, gage height 2.4 feet.

EXTREMES OF DISCHARGE.—Maximum stage during year, from floodmarks, about 10.0 feet probably April 15 (discharge, 3,750 second-feet); minimum stage from water-stage recorder, 4.01 feet September 30 (discharge, 4.4 second-feet).

1917–1918, 1924–1926: Maximum stage, from floodmarks, 14.2 feet about 4 a. m. February 6, 1925 (discharge, 10,200 second-feet); minimum stage, from water-stage recorder, 3.50 feet October 22, 25–28, 1924 (discharge, 2.5 second-feet).

DIVERSIONS.—None.

REGULATION.—Some storage in Blue Lakes and on Bear River is used by Pacific Gas & Electric Co. during periods of low water to augment natural flow.

ACCURACY.—Stage-discharge relation permanent. Rating curve fairly well defined below 80 second-feet, well defined above. Water-stage recorder record poor as clock stopped frequently owing to negligence of observer. Daily discharge ascertained by applying mean daily gage height to rating table, except November 30, December 1, 2, January 28, 29, February 4, May 12, and 13, for which hourly discharge was averaged. Daily discharge estimated October 1–14, December 14–16, February 16–20, and March 7–13. Records fair.

The following discharge measurements were made:

October 14, 1925: Gage height, 4.36 feet; discharge, 91 second-feet.

May 11, 1926: Gage height, 6.89 feet; discharge, 814 second-feet.

Daily discharge, in second-feet, of North Fork of Mokelumne River near West Point, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Aug.	Sept.
1.....	75	53	534	131	243	443	845	-----	630	-----	114
2.....	75	56	551	128	236	426	748	-----	620	-----	114
3.....	75	74	302	129	283	426	702	-----	565	-----	112
4.....	75	93	202	123	441	460	795	-----	512	-----	112
5.....	120	89	180	124	362	548	-----	-----	480	-----	114
6.....	135	90	198	122	275	565	-----	-----	-----	-----	114
7.....	120	90	156	120	255	585	-----	-----	-----	-----	116
8.....	100	89	140	117	250	575	-----	-----	-----	-----	114
9.....	90	90	128	117	262	520	-----	-----	-----	-----	114
10.....	90	98	114	114	275	440	-----	-----	-----	-----	114
11.....	89	117	118	112	260	430	-----	-----	-----	-----	114
12.....	88	160	124	110	280	450	-----	1,130	226	-----	114
13.....	87	160	111	106	280	500	-----	1,290	207	-----	114
14.....	85	126	90	105	302	640	-----	1,450	189	-----	112
15.....	83	118	100	104	280	702	-----	-----	174	-----	105

Daily discharge, in second-feet, of North Fork of Mokelumne River near West Point, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Aug.	Sept.
16.....	79	116	110	100	280	725			162		106
17.....	78	110	146	106	280	748					112
18.....	78	105	151	104	280	600					117
19.....	75	110	155	99	370	530				116	106
20.....	72	108	147	102	300	582				112	106
21.....	62	106	153	104	243	620				114	118
22.....	62	102	151	102	240	620		1,200		114	120
23.....	62	102	147	99	226	770		1,130		114	117
24.....	60	104	151	100	224	870		898		112	114
25.....	58	99	149	96	258	795		702		116	114
26.....	56	110	153	93	314	770		702		116	111
27.....	55	105	156	93	378	748		725		114	96
28.....	54	98	151	136	410	748		795		114	48
29.....	51	93	146	685		725		820		116	47
30.....	51	193	139	272		680		770		116	44
31.....	51		134	302		898		702		116	

NOTE.—No record on days for which discharge is not given. See monthly table for estimated mean monthly discharge.

Monthly discharge of North Fork of Mokelumne River near West Point, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	135	51	77.1	4,740
November.....	193	53	105	6,250
December.....	551	90	174	10,700
January.....	685	93	140	8,610
February.....	441	224	289	16,000
March.....	898	426	617	37,900
April.....			* 1,800	107,000
May.....			* 1,150	70,700
June.....			* 265	15,800
July.....			* 110	6,760
August.....			* 110	6,760
September.....	120	44	106	6,310
The year.....		44	411	298,000

* Estimated.

MOKELUMNE RIVER NEAR LANCHA PLANA, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 4, T. 4 N., R. 10 E., above old Westmoreland suspension bridge, 1 mile east of Lancha Plana, Calaveras County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—June 23 to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on left bank 250 feet above suspension bridge.

DISCHARGE MEASUREMENTS.—Made from cable 130 feet above gage or by wading.

CHANNEL AND CONTROL.—Coarse gravel; remains of old dam acts as high-water control.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 2.59 feet at 12.30 a. m. July 9 (discharge, 272 second-feet); minimum stage, 1.66 feet at 6 p. m. July 6 (discharge, 34 second-feet).

DIVERSIONS.—Several small ditches divert water above station for mining and irrigation. Power is developed on the North Fork and part of the water is diverted out of the basin through the Amador Canal.

REGULATION.—Storage in Blue Lakes on North Fork of Mokelumne River and operation of power plant at Electra affects flow.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve fairly well defined. Water-stage recorder record excellent. Daily discharge ascertained by use of discharge integrator, except September 23–30, for which gage heights were applied to rating table. Records good.

Discharge measurements of Mokelumne River near Lancha Plana, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Apr. 21-----	6.13	2,910	June 8-----	2.66	313	July 23-----	1.87	60
Apr. 26-----	6.59	3,460	June 15-----	2.71	302	July 29-----	1.90	66
Apr. 30-----	6.44	3,170	June 16-----	2.05	98	Aug. 4-----	1.94	74
May 4-----	6.44	3,320	June 22-----	2.03	106	Aug. 9-----	1.82	54
May 11-----	4.15	1,180	June 29-----	1.87	62	Aug. 25-----	1.98	84
May 18-----	5.49	2,460	July 2-----	1.70	48	Sept. 4-----	1.99	84
May 25-----	3.67	820	July 8-----	1.76	49	Do-----	1.93	69
June 4-----	3.13	640	July 15-----	1.88	67	Sept. 23-----	1.97	76

Daily discharge, in second-feet, of Mokelumne River near Lancha Plana, Calif., for the year ending September 30, 1926

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1-----		126	103	114	11-----		76	112	108	21-----		111	110	90
2-----		134	55	144	12-----		57	124	78	22-----		128	92	112
3-----		126	115	144	13-----		80	133	61	23-----		106	99	60
4-----		82	107	124	14-----		68	107	104	24-----		117	126	150
5-----		43	92	118	15-----		102	68	110	25-----		114	88	154
6-----		86	96	40	16-----		124	64	109	26-----		122	56	86
7-----		126	114	74	17-----		86	90	84	27-----		91	92	69
8-----		142	72	170	18-----		92	133	113	28-----		49	92	104
9-----		136	62	150	19-----		51	104	96	29-----		80	95	91
10-----		117	138	80	20-----		112	126	50	30-----		118	96	64
										31-----		115	94	44

Monthly discharge of Mokelumne River near Lancha Plana, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
June 23-30-----	122	49	99.6	1,580
July-----	142	43	98.2	6,040
August-----	154	55	99.6	6,120
September-----	170	38	96.8	5,760
The period-----				19,500

MOKELUMNE RIVER NEAR CLEMENTS, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 15, T. 4 N., R. 8 E., at highway bridge 1 mile north of Clements, San Joaquin County. Cosumnes River enters $19\frac{1}{2}$ miles below station.

DRAINAGE AREA.—631 square miles.

RECORDS AVAILABLE.—October 28, 1904, to September 30, 1926.

GAGE.—Water-stage recorder installed in culvert pipe well on left bank 75 feet below bridge April 19, 1926, at a datum 2 feet lower than gage at bridge, which was a vertical staff gage in three sections.

DISCHARGE MEASUREMENTS.—Made from bridge at gage or by wading.

CHANNEL AND CONTROL.—Sand and gravel; shifting. Right bank is high and not subject to overflow; left bank is overflowed above stage 15 feet (old datum) for a distance of 200 feet.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 9.34 feet at 12.30 p. m. April 30 (discharge, 3,740 second-feet); minimum stage, from water-stage recorder, 2.28 feet at 7 p. m. September 30 (discharge, 31 second-feet).

1904-1926: Maximum stage recorded, 22.0 feet March 19, 1907 (discharge, 25,500 second-feet); no flow July 9, August 15, and 20-23, 1924.

DIVERSIONS.—Several small ditches divert water for mining and irrigation above station. Power is developed on North Fork and part of the water is diverted out of basin through Amador Canal.

REGULATION.—Flow partly regulated by storage developed on the headwaters of the North Fork and by the power plant at Electra.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curves well defined. Staff gage read to half-tenths twice daily October 1 to April 18 and June 4-22. Water-stage recorder record excellent April 19 to June 3 and June 23 to September 30. Daily discharge ascertained by shifting-control method using discharge integrator for April 20 to June 3 and June 23 to August 18. Records good.

Discharge measurements of Mokelumne River near Clements, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 16.....	1.15	188	Apr. 16.....	9.00	3,600	July 10.....	2.82	133
Do.....	1.03	153	Apr. 22.....	8.32	2,970	July 20.....	2.77	121
Jan. 9.....	1.28	226	Apr. 26.....	8.72	3,100	July 26.....	2.42	52
Jan. 19.....	1.06	139	May 7.....	5.77	1,280	July 31.....	2.66	100
Jan. 30.....	2.18	630	May 15.....	6.84	1,980	Aug. 2.....	2.27	38
Feb. 15.....	2.78	947	May 21.....	6.40	1,830	Aug. 6.....	2.56	84
Feb. 20.....	2.73	820	May 27.....	4.26	620	Aug. 12.....	2.82	121
Feb. 24.....	1.93	409	June 7.....	3.68	369	Aug. 16.....	2.47	56
Feb. 27.....	2.08	459	June 14.....	2.86	131	Aug. 19.....	2.77	111
Mar. 4.....	2.09	474	June 22.....	3.03	166	Aug. 23.....	2.37	52
Mar. 11.....	2.02	455	June 28.....	2.46	54	Sept. 2.....	3.10	215
Mar. 19.....	2.40	640	July 3.....	2.92	164	Sept. 9.....	3.14	224
Mar. 27.....	2.64	764	July 8.....	2.77	131	Sept. 14.....	2.82	128
Apr. 9.....	7.51	2,340	July 10.....	2.86	142	Sept. 27.....	2.39	47

Daily discharge, in second-feet, of Mokelumne River near Clements, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	54	110	352	248	790	510	1,020	2,150	693	102	124	85
2.....	47	80	530	248	835	450	1,060	2,190	658	128	50	141
3.....	54	80	370	212	970	530	1,020	2,490	584	125	74	136
4.....	54	54	212	230	925	490	1,520	2,720	548	116	121	125
5.....	54	62	248	248	835	510	1,520	2,640	528	68	90	139
6.....	47	47	212	248	925	530	2,470	1,680	669	54	86	57
7.....	180	62	282	248	925	678	2,330	1,240	369	106	95	42
8.....	180	90	300	248	470	678	3,100	1,050	444	122	88	130
9.....	100	80	195	248	410	700	2,330	940	271	146	46	158
10.....	165	135	195	248	430	610	1,770	925	239	110	96	89
11.....	135	150	230	150	570	510	1,700	935	239	100	105	98
12.....	54	150	212	180	925	490	1,580	1,090	213	50	100	85
13.....	100	212	180	195	880	610	2,330	1,170	184	80	93	49
14.....	110	248	150	180	880	790	2,680	1,380	125	70	110	83
15.....	122	265	135	122	925	1,200	2,750	1,580	172	68	80	81

Daily discharge, in second-feet, of Mokelumne River near Clements, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
16.....	122	165	150	110	1,150	1,200	2,890	1,540	184	130	60	87
17.....	165	150	135	110	790	745	3,100	1,620	184	79	68	73
18.....	80	135	135	110	632	745	1,770	1,600	184	104	113	81
19.....	71	100	230	100	745	745	1,480	1,900	160	50	87	92
20.....	80	150	248	110	925	610	1,700	1,800	125	82	116	42
21.....	80	90	265	100	530	610	2,220	1,460	72	112	111	68
22.....	62	90	230	165	490	678	2,400	1,270	127	104	94	81
23.....	62	100	248	150	410	835	2,300	1,110	98	100	64	100
24.....	80	110	248	195	370	1,200	2,630	925	72	93	120	102
25.....	90	122	230	150	282	1,060	2,860	766	86	103	141	109
26.....	47	135	150	150	296	1,200	2,940	697	92	56	114	100
27.....	62	122	212	165	490	790	2,600	734	106	64	79	48
28.....	80	150	248	212	450	745	2,960	763	56	84	79	45
29.....	90	90	248	410	-----	880	2,750	792	62	91	125	35
30.....	90	300	248	700	-----	1,060	2,860	721	96	78	56	33
31.....	90	-----	212	790	-----	1,060	-----	662	-----	79	100	-----

Monthly discharge of Mokelumne River near Clements, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	180	47	90.5	5,560
November.....	300	47	128	7,620
December.....	530	135	234	14,400
January.....	790	100	225	13,800
February.....	1,150	282	688	38,200
March.....	1,200	450	758	46,500
April.....	3,100	1,020	2,220	132,000
May.....	2,720	662	1,370	84,200
June.....	693	56	255	15,200
July.....	146	50	92.1	5,660
August.....	141	46	93.1	5,720
September.....	158	33	86.5	5,150
The year.....	3,100	33	517	374,000

MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 34, T. 4 N., R. 6 E., at highway bridge, a quarter of a mile northeast of Woodbridge, San Joaquin County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—May 27, 1924, to September 30, 1926 (low-water records only for 1925).

GAGE.—Water-stage recorder in wooden well and shelter on left bank 100 feet below bridge used to March 2, 1926. A corrugated culvert pipe well was built April 12, 1926, 130 feet below bridge. Datum not changed.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Channel is shifting sand. Stream meanders through a deep sluggish channel. Control indefinite.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 15.32 feet at 10.30 a. m. May 1 (discharge, 3,200 second-feet); minimum stage, from water-stage recorder, 2.63 feet August 7–15, 18, 19, and 24 (discharge, 2.7 second-feet).

DIVERSIONS.—Water is diverted by the Woodridge Canal at dam just above bridge for irrigation. (See p. 242 for record of this canal.)

REGULATION.—Low-water flow controlled by amount of water diverted at dam.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curves well defined. Water-stage recorder used except February 2-7, 13-23, March 3-27, and April 9-10, when staff gage was read. No record obtained October 9-15, January 15-21, and March 28 to April 8. Daily discharge ascertained by shifting-control method, except January 29, 30, March 2, May 2, and June 15, for which hourly discharge was averaged. Records good.

Discharge measurements of Mokelumne River at Woodbridge, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 1	2.96	5.0	Jan. 22	4.33	112	May 19	11.38	1,730
Oct. 8	2.96	5.1	Do	4.16	92	May 26	7.17	583
Oct. 16	4.66	136	Jan. 29	4.54	145	June 6	6.30	462
Oct. 24	4.30	96	Feb. 9	6.41	554	June 12	4.68	189
Oct. 30	4.10	81	Feb. 19	6.53	591	June 19	2.76	5.4
Nov. 6	4.34	114	Feb. 25	6.30	480	June 26	2.66	3.3
Nov. 13	4.43	106	Mar. 9	7.96	831	July 7	2.72	3.7
Nov. 20	4.71	150	Mar. 18	8.56	967	July 8	2.71	3.4
Nov. 27	4.49	121	Mar. 24	8.86	1,090	Do	2.70	3.0
Dec. 12	4.68	156	Apr. 9	15.11	3,140	July 14	2.67	3.2
Dec. 21	4.70	160	Apr. 14	12.59	2,230	July 22	2.67	3.3
Dec. 30	4.99	191	Apr. 19	12.33	2,060	Aug. 7	2.63	2.9
Jan. 7	4.66	149	Apr. 23	13.86	2,620	Aug. 21	2.65	3.3
Jan. 11	4.32	110	May 7	12.29	2,030	Sept. 13	2.69	4.1
Jan. 14	4.21	96	May 10	9.05	967	Sept. 29	2.72	4.1

Daily discharge, in second-feet, of Mokelumne River at Woodbridge, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	95	107	188	552	514	-----	3,040	576	4.2	3.0	3.0
2	5	106	340	206	574	868	-----	2,440	620	4.5	3.2	3.0
3	4.8	102	525	136	810	664	-----	2,420	598	4.5	3.2	3.2
4	4.8	106	370	143	834	642	-----	2,600	494	4.2	3.0	3.3
5	4.8	110	236	106	1,050	686	-----	2,880	444	4.2	2.8	3.6
6	4.8	115	170	155	972	818	-----	2,840	406	4.2	2.8	3.8
7	4.8	116	121	167	642	818	-----	2,110	378	4.2	2.7	3.2
8	4.8	101	167	175	598	818	-----	1,580	351	4.0	2.7	3.0
9	-----	91	164	179	554	840	3,120	1,370	300	3.8	2.7	3.2
10	-----	89	147	164	504	796	2,800	1,140	300	3.6	2.7	3.2
11	-----	122	139	130	494	752	2,400	1,140	232	3.8	2.7	3.5
12	-----	142	170	96	752	686	2,000	1,140	184	3.8	2.7	3.6
13	-----	107	186	132	1,060	642	1,970	1,210	161	3.6	2.7	3.8
14	-----	184	154	119	1,310	708	2,220	1,260	123	3.3	2.7	3.6
15	-----	185	119	-----	1,040	774	2,460	1,430	503	3.2	2.7	3.5
16	147	178	158	-----	994	928	2,720	1,550	20	3.0	3.0	3.6
17	168	146	165	-----	840	994	2,960	1,580	12	3.3	2.8	3.8
18	159	184	192	-----	686	1,020	2,920	1,660	8	3.3	2.7	4.0
19	139	179	179	-----	598	906	2,140	1,720	5	3.5	2.7	4.5
20	113	156	220	-----	796	840	1,830	1,830	4.7	3.0	2.8	4.5
21	95	121	168	-----	719	752	2,040	1,800	4.2	3.0	3.0	4.5
22	95	110	175	115	642	730	2,360	1,550	3.6	3.5	3.2	4.5
23	94	101	192	118	554	818	2,560	1,400	3.3	3.6	2.8	4.5
24	94	92	199	114	510	1,080	2,560	1,260	3.2	3.5	2.7	4.7
25	92	143	175	119	454	1,180	2,840	994	3.2	3.2	2.8	5
26	92	165	165	79	426	1,180	3,040	642	3.5	3.3	3.0	5.5
27	88	144	164	124	464	1,040	3,080	708	3.8	3.3	3.3	6
28	86	82	174	161	504	-----	2,960	730	4.0	3.2	3.2	4.9
29	84	148	184	138	-----	-----	3,080	708	4.2	3.2	3.0	4.5
30	81	142	199	617	-----	-----	3,040	730	4.0	3.2	3.0	4.2
31	83	-----	182	508	-----	-----	-----	664	-----	3.0	3.0	-----

NOTE.—Water overtopped gage Oct. 9-15, clock stopped Jan. 15-21, no recorder installed Mar. 28 to Apr. 8; no record obtained during these periods.

Monthly discharge of Mokelumne River at Woodbridge, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....				
November.....	185	82	129	7,680
December.....	525	107	193	11,900
January.....				
February.....	1,310	426	712	39,500
March 1-27.....	1,180	514	833	44,600
April 9-30.....	3,120	1,830	2,600	113,000
May.....	3,040	664	1,550	95,300
June.....	620	3.2	192	11,400
July.....	4.5	3.0	3.59	221
August.....	3.3	2.7	2.88	177
September.....	6	3.0	3.97	236

MOKELUMNE RIVER NEAR THORNTON, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 12, T. 4 N., R. 5 E., just above tidewater and $2\frac{1}{2}$ miles southeast of Thornton, San Joaquin County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—July 6 to September 30, 1926.

GAGE.—Water-stage recorder in wooden well and shelter on left bank.

DISCHARGE MEASUREMENTS.—Made by wading.

CHANNEL AND CONTROL.—Mud and fine sand; no well-defined control.

EXTREMES OF DISCHARGE.—Minimum discharge during year, from water-stage recorder, 4.4 second-feet at 9 p. m. September 25.

DIVERSIONS.—Water is diverted by the Woodridge Canal at the dam at Woodbridge for irrigation. (See p. 242 for record of this canal.)

REGULATION.—Low-water flow controlled by amount of water diverted at Woodbridge.

ACCURACY.—Stage-discharge relation continuously changing. Standard rating curve well defined. Water-stage recorder record good. Daily discharge ascertained by shifting-control method. Records good.

Discharge measurements of Mokelumne River near Thornton, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
July 6.....	2.27	15.1	Aug. 3.....	2.05	9.9	Sept. 7.....	2.02	9.1
July 8.....	2.24	12.9	Aug. 10.....	2.02	9.7	Sept. 14.....	2.03	8.7
July 13.....	2.21	13.6	Aug. 17.....	1.99	8.3	Sept. 21.....	2.01	8.7
July 20.....	2.14	12.1	Aug. 24.....	2.00	8.5	Sept. 28.....	2.09	9.6
July 28.....	2.08	11.0	Aug. 31.....	1.99	8.6			

Daily discharge, in second-feet, of Mokelumne River near Thornton, Calif., for the year ending September 30, 1926

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....		10	8.5	11.....	14	9.5	8.5	21.....	12	8.5	8.5
2.....		10	8.5	12.....	12	9	8.5	22.....	12	8.5	9.5
3.....		10	8.5	13.....	13	9	8.5	23.....	9.5	8.5	9
4.....		9.5	8.5	14.....	13	7.5	9	24.....	11	8.5	9
5.....		9.5	8.5	15.....	13	8.5	9	25.....	11	8	7.5
6.....	15	10	9	16.....	12	8.5	9	26.....	11	8	8.5
7.....	14	10	9.5	17.....	12	8.5	9	27.....	11	8.5	9.5
8.....	13	9.5	9	18.....	12	8.5	9	28.....	11	8.5	9.5
9.....	13	9.5	9	19.....	12	8.5	9	29.....	11	8.5	9.5
10.....	14	9.5	8.5	20.....	12	8.5	8	30.....	11	8.5	9
								31.....	10	8.5	

Monthly discharge of Mokelumne River near Thornton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
July 6-31.....	15	9.5	12.1	624
August.....	10	7.5	8.90	547
September.....	9.5	7.5	8.82	525
The period.....				1,700

MIDDLE FORK OF MOKELUMNE RIVER AT WEST POINT, CALIF.

LOCATION.—In sec. 10, T. 6 N., R. 13 E., above highway bridge 1 mile south of West Point, Calaveras County, 1¼ miles below mouth of Bear Creek, and 3½ miles above junction with South Fork.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 9, 1911, to September 30, 1926.

GAGE.—Vertical staff in two sections, fastened to trees on right bank, 1,000 feet above bridge; read by Mrs. M. A. Spink.

DISCHARGE MEASUREMENTS.—Made from cable half a mile above gage or by wading.

CHANNEL AND CONTROL.—Boulders and gravel; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 5.80 feet April 8 (discharge, 484 second-feet); minimum stage recorded, 2.26 feet July 18-19 (discharge, 0.4 second-foot).

1911-1926: Maximum stage recorded, 10.0 feet at 4 p. m. January 23, 1914 (discharge, 2,550 second-feet); minimum stage recorded, 2.16 feet August 18-23, 1924 (discharge, 0.2 second-foot).

DIVERSIONS.—Mokelumne Hill and Valley Springs ditch (capacity about 6 second-feet) diverts water about 2 miles above station. There are also several small diversions for local irrigation.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed September 17 owing to construction of a diversion dam below station. Rating curve well defined. Staff gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table except September 17-30, for which it was estimated. Records good.

The following discharge measurements were made:

October 15, 1925: Gage height, 2.70 feet; discharge, 5.5 second-feet.

October 15, 1925: Gage height, 2.70 feet; discharge, 5.6 second-feet.

May 11, 1926: Gage height, 3.18 feet; discharge, 22 second-feet.

Daily discharge, in second-feet, of Middle Fork of Mokelumne River at West Point, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.6	5	11	7	42	46	27	36	8.5	1.4	0.4	0.5
2.....	2.6	6.5	29	6.5	34	46	29	35	8	1.2	.4	.5
3.....	3.0	11	14	6.5	144	46	32	34	7	1.0	.5	.5
4.....	3.0	8.5	12	6.5	264	42	58	32	7	1.2	.5	.5
5.....	3.6	7.5	11	6.5	84	42	220	32	7.5	1.4	.4	.5
6.....	14	7	9.5	6.5	50	38	188	35	7.5	1.2	.4	.5
7.....	8	7	8	6.5	38	38	276	32	7.5	1.2	.4	.5
8.....	5.5	7	7.5	6.5	32	42	484	32	7	1.0	.4	.5
9.....	4.4	7	7.5	6.5	27	50	264	29	7	1.0	.4	.7
10.....	4.8	10	7	6.5	42	46	198	26	7	1.0	.4	.5

Daily discharge, in second-feet, of Middle Fork of Mokelumne River at West Point, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11.....	5	13	7	6.5	35	42	169	23	7	0.9	0.4	0.5
12.....	5	13	6.5	6.5	89	38	136	20	5.5	.9	.4	.5
13.....	5.5	18	6.5	6.5	108	38	122	20	4.6	.8	.4	.5
14.....	5.5	11	6.5	6.5	136	38	108	20	4.0	.7	.4	.5
15.....	6.5	8	6.5	6.5	84	38	95	20	3.6	.6	.4	.5
16.....	5	8.5	6.5	6.5	122	37	84	18	3.3	.5	.4	.5
17.....	5	8	6.5	6.5	73	37	78	18	2.6	.4	.4	.5
18.....	5	7.5	13	7	63	38	78	16	2.6	.4	.4	.5
19.....	5	7.5	18	8	84	38	73	16	3.0	.4	.4	.5
20.....	4.8	7.5	13	9	73	38	68	14	3.0	.4	.4	.5
21.....	4.8	7.5	10	10	63	35	63	14	3.3	.4	.4	.5
22.....	4.8	7.5	9	10	54	35	58	12	3.3	.4	.5	.5
23.....	4.8	7.5	8.5	8.5	50	35	54	12	3.0	.4	.5	.5
24.....	4.8	7	8	8	46	35	50	13	2.6	.4	.5	.5
25.....	4.8	7	8	8	46	32	50	13	2.6	.4	.6	.5
26.....	4.8	7	7.5	7.5	46	32	50	12	2.3	.4	.7	.5
27.....	4.8	7	7.5	7.5	46	32	50	11	2.3	.4	.7	.5
28.....	4.8	6.5	7.5	8.5	46	29	46	10	2.0	.5	.4	.5
29.....	4.8	6.5	7	84	28	28	42	10	1.8	.5	.4	.5
30.....	4.8	7	7	28	27	27	38	10	1.6	.5	.4	.5
31.....	4.8	7	7	152	25	25	9	9	.5	.4	.4	.5

Monthly discharge of Middle Fork of Mokelumne River at West Point, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	14	2.6	5.02	309
November.....	18	5	8.30	494
December.....	29	6.5	9.47	582
January.....	152	6.5	15.1	928
February.....	264	27	72.2	4,010
March.....	50	25	37.5	2,310
April.....	484	27	110	6,550
May.....	36	9	20.5	1,260
June.....	8.5	1.6	4.60	274
July.....	1.4	.4	.72	44.3
August.....	.7	.4	.44	27.1
September.....	.7	.5	.51	30.3
The year.....	484	.4	23.2	16,800

SOUTH FORK OF MOKELUMNE RIVER NEAR RAILROAD FLAT, CALIF.

LOCATION.—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, Calaveras County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 23, 1911, to September 30, 1926.

GAGE.—Vertical staff fastened to alder tree on right bank 100 feet above suspension footbridge; read by Rose Laidet.

DISCHARGE MEASUREMENTS.—Made from cable 150 feet below gage or by wading.

CHANNEL AND CONTROL.—Gravel; shifts slightly.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 3.40 feet at 5.40 p. m. April 5 (discharge, 580 second-feet); minimum stage recorded, 1.08 feet September 6, 11, and 12 (discharge, 2.7 second-feet).

1911-1926: Maximum stage recorded, 6.9 feet at 4.20 p. m. January 25, 1914 (discharge, 3,330 second-feet); minimum stage, 1.22 feet several days July, August, and September, 1924 (discharge, 1.4 second-feet).

DIVERSIONS.—A small amount of water is used for irrigation at Laidet ranch.

REGULATION.—None.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve well defined. Staff gage read to hundredths twice daily, except during short periods when observer was absent. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge estimated from record for Middle Fork of Mokelumne River at West Point for days on which gage was not read. Records good.

The following discharge measurements were made:

October 15, 1925: Gage height, 1.27 feet; discharge, 7.9 second-feet.

May 12, 1926: Gage height, 1.63 feet; discharge, 29 second-feet.

Daily discharge, in second-feet, of South Fork of Mokelumne River near Railroad Flat, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5	7.5	20	9.5	77	40	37	41	18	7.5	4.8	3.4
2	6	10	25	8.5	77	40	40	38	18	7.5	4.5	3.3
3	6.5	10	16	9	72	42	45	36	17	7.5	4.2	3.6
4	6.5	10	11	8.5	83	42	75	34	16	7.5	4.5	3.3
5	9.5	9.5	9.5	8.5	86	42	450	34	15	7	4.8	3.3
6	16	9.5	9.5	9	77	44	450	37	15	7.5	4.5	2.8
7	17	9	9.5	9.5	58	44	317	33	14	7.5	4.5	3.0
8	9	10	9.5	9	40	47	366	33	13	8	3.9	3.0
9	8.5	10	9.5	9	29	52	330	32	13	7.5	3.9	3.0
10	8	12	9.5	8.5	35	47	215	32	12	7.5	3.6	3.0
11	8.5	12	9.5	9	40	47	187	32	12	7.5	3.7	2.8
12	8.5	11	10	8.5	67	47	160	32	13	7.5	3.8	2.8
13	8.5	11	9.5	8.5	80	49	134	30	13	7	3.9	3.0
14	9	10	10	8	125	47	117	30	12	7	4.2	3.3
15	9	9.5	10	8	123	48	110	30	11	7	3.9	3.3
16	9.5	10	10	9	105	49	104	30	10	7	4.2	3.3
17	8.5	12	14	11	75	49	89	30	11	6.5	4.5	3.6
18	8	11	18	10	52	46	83	30	10	6.5	4.5	3.3
19	8.5	10	23	9.5	49	42	77	26	10	6.5	4.8	3.3
20	8	9.5	18	8.5	42	41	72	26	10	6	4.5	3.3
21	8	9	13	8	36	42	68	26	10	6.5	4.2	3.6
22	7.5	9.5	11	7.5	46	41	64	25	10	5.5	3.9	3.9
23	8	9.5	10	7.5	44	41	61	25	10	5.5	4.2	3.3
24	7.5	10	10	7.5	42	42	58	24	9.5	5	3.9	3.3
25	7.5	9	9.5	7.5	42	42	52	25	9.5	5	3.3	3.6
26	7.5	10	9.5	7.5	37	41	49	23	9.5	5	3.3	3.3
27	7.5	10	9.5	8	36	41	47	22	9.5	5.5	3.6	3.3
28	7.5	10	10	10	36	42	47	21	9	4.5	3.3	3.3
29	7.5	11	10	107	---	40	46	21	8.5	4.5	3.3	3.6
30	7.5	14	9.5	105	---	37	44	20	8.5	4.2	3.3	3.9
31	7	---	9.5	89	---	37	---	20	---	4.5	3.6	---

Monthly discharge of South Fork of Mokelumne River near Railroad Flat, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	17	6	8.47	521
November	14	7.5	10.2	607
December	25	9.5	12.0	738
January	107	7.5	17.5	1,080
February	125	29	61.1	3,390
March	52	37	43.6	2,680
April	450	37	133	7,910
May	41	20	29.0	1,780
June	18	8.5	11.9	708
July	8	4.2	6.43	395
August	4.8	3.3	4.04	248
September	3.9	2.8	3.29	196
The year	450	2.8	28.0	20,300

WOODBIDGE CANAL AT WOODBRIDGE, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 34, T. 4 N., R. 6 E., at Woodbridge, San Joaquin County, one-fourth mile below point of diversion.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—April 28 to September 30, 1926.

GAGE.—Water-stage recorder in corrugated culvert pipe well on left bank 20 feet above Southern Pacific Co.'s trestle.

DISCHARGE MEASUREMENTS.—Made from trestle or by wading.

CHANNEL AND CONTROL.—Canal cut in earth, partly overgrown with tules. Five gates below gage affect flow at gage.

EXTREMES OF DISCHARGE.—Maximum discharge during period, 124 second-feet at 1 a. m. June 20; minimum discharge, practically no flow at 5 p. m. June 15.

REGULATION.—Regulated by head gates at diversion dam.

ACCURACY.—Stage-discharge relation depends on operation of gates below gage and is not permanent. Standard rating curve fairly well defined. Water-stage recorder record excellent. Daily discharge ascertained by shifting-control method. Records fair.

Woodbridge Canal diverts from a reservoir on the Mokelumne River in sec. 24, T. 4 N., R. 6 E., in the town of Woodbridge. The water is used for irrigation south and west of Woodbridge.

Discharge measurements of Woodbridge Canal at Woodbridge, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 28.....	3.90	3.8	July 22.....	6.05	56	Aug. 30.....	5.97	78
May 10.....	6.45	77	July 28.....	6.03	54	Sept. 3.....	5.88	75
June 16.....	5.28	57	Aug. 3.....	5.76	60	Sept. 8.....	5.68	57
June 26.....	5.71	98	Aug. 7.....	5.56	58	Sept. 13.....	6.27	70
June 30.....	5.32	69	Aug. 12.....	5.80	70	Sept. 17.....	6.16	57
July 7.....	5.16	61	Aug. 18.....	5.79	58	Sept. 20.....	6.21	66
Do.....	5.14	57	Aug. 21.....	6.23	75	Sept. 24.....	6.17	59
July 14.....	5.68	54	Aug. 26.....	6.34	79	Sept. 28.....	5.98	76

Daily discharge, in second-feet, of Woodbridge Canal at Woodbridge, Calif., for the year ending September 30, 1926

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.....		69	99	71	60	66	16.....		99	44	51	69	56
2.....		69	102	74	71	66	17.....		99	88	58	62	58
3.....		83	99	82	64	74	18.....		99	102	57	57	57
4.....		88	102	80	56	78	19.....		102	110	58	66	60
5.....		92	113	76	58	80	20.....		106	116	51	68	66
6.....		83	110	68	58	83	21.....		102	113	50	74	57
7.....		66	102	58	57	69	22.....		96	102	56	76	54
8.....		57	102	60	60	56	23.....		88	102	60	74	54
9.....		54	102	68	62	62	24.....		82	99	64	66	58
10.....		66	110	74	57	74	25.....		88	99	66	69	71
11.....		76	106	74	62	73	26.....		99	99	69	78	82
12.....		80	102	74	69	71	27.....		110	96	60	80	88
13.....		85	99	60	71	69	28.....	52	102	92	54	74	76
14.....		88	88	54	69	60	29.....	52	102	80	57	71	64
15.....		96	30	52	71	57	30.....	57	106	69	60	76	52
							31.....		102		58	66	

Monthly discharge of Woodbridge Canal at Woodbridge, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
April 28-30.....	57	52	53.7	320
May.....	110	54	88.2	5,420
June.....	116	30	95.9	5,710
July.....	82	50	63.0	3,870
August.....	80	56	66.8	4,110
September.....	88	52	66.4	3,950
The period.....				23,400

DRY CREEK NEAR IONE, CALIF.

LOCATION.—In T. 5 N., R. 8 E., at old burned highway bridge at Forni's ranch, in Arroyo Seco grant, 2½ miles below mouth of Jackson Creek, and 7 miles southwest of Ione, Amador County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 7, 1911, to June 30, 1912, and December 20, 1925, to September 30, 1926.

GAGE.—Staff gage on left bank of left channel, about 25 feet above gage used in 1912.

DISCHARGE MEASUREMENTS.—Made by wading in 1926 and from footbridges at gage in 1927.

CHANNEL AND CONTROL.—One main channel and three overflow channels above stage of 9 feet. Bed of channels is sand and gravel, shifting. Flow swift at high stages, sluggish at low stages. Meadow land between channels will be overflowed above gage height of 11 feet.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 10.2 feet at 8.30 a. m. February 20 (discharge, 3,180 second-feet); no flow December 23-28, January 1-4, and May 20 to September 30.

DIVERSIONS.—Small diversions for local irrigation and mining above station. There is a small diversion from North Fork of Mokelumne River into the drainage basin of Dry Creek.

REGULATION.—None.

ACCURACY.—Stage-discharge relation slightly shifting. Standard rating curve well defined; based principally on measurements made in 1927. Staff gage read to hundredths twice daily. Daily discharge ascertained by shifting-control method. Records fair.

Discharge measurements of Dry Creek near Ione, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Jan. 9.....	Feet 2.40	Sec.-ft. 0.2	Mar. 15.....	Feet 3.45	Sec.-ft. 58	Apr. 27.....	Feet 3.42	Sec.-ft. 30
Jan. 21.....	2.50	3.2	Apr. 13.....	3.78	85	Do.....	3.41	30

• Estimated.

Daily discharge, in second-feet, of Dry Creek near Ione, Calif., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1			389	93	29	18	16		0.2	353	40	80	6
2			67	86	21	16	17		.5	222	40	75	4
3			555	86	21	15	18		1.0	214	40	75	2
4			231	79	94	18	19		1.9	214	40	70	1
5		1.2	317	72	630	20	20	11	2.8	2,220	40	65	
6		.7	158	62	453	25	21	2.0	2.7	282	40	60	
7		.2	80	62	308	30	22	.5	2.2	198	40	55	
8		.2	42	75	282	25	23		2.2	206	40	50	
9		.2	36	75	265	22	24		2.7	198	40	45	
10		.2	26	68	256	19	25		1.7	185	40	40	
11		.2	214	64	200	16	26		2.2	177	40	35	
12		.1	1,060	64	125	14	27		1.7	146	29	30	
13		.1	732	58	85	12	28		2.2	111	40	25	
14		.1	1,190	52	80	10	29	1.0	115		40	22	
15		.1	398	52	80	8	30	1.5	87		29	20	
							31	2.0	108		29		

NOTE.—No flow on days between Dec. 20 and Sept. 30 for which record is not given.

Monthly discharge of Dry Creek near Ione, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
December 20-31	11	0	1.50	35.7
January	115	0	10.9	670
February	2,220	26	365	20,300
March	93	29	53.4	3,280
April	630	20	123	7,320
May	30	0	9.06	557
The period				32,200

NOTE.—No flow June to September.

SUTTER CREEK NEAR VOLCANO, CALIF.

LOCATION.—In sec. 22, T. 7 N., R. 12 E., 1 mile southwest of Volcano, Amador County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—February 12, 1924, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 50 feet below gage or by wading.

CHANNEL AND CONTROL.—Sand, gravel, and small boulders; may shift somewhat.

Banks high and not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.10 feet at 1 a. m. February 20 (discharge, 299 second-feet); minimum discharge, 0.8 second-foot part of July, August, and September.

1924-1926: Maximum stage recorded, 5.3 feet at 1 a. m. February 6, 1925 (discharge, 1,560 second-feet); minimum discharge recorded, 0.1 second-foot September 11-15, 1924.

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—There are several small diversions above station.

REGULATION.—Flow regulated at times by storage in settling basin of water diverted for hydraulic mining.

ACCURACY.—Stage-discharge relation changed February 4. Rating curves fairly well defined. Water-stage recorder record excellent except October 1-2, November 8-14, April 13, 14, and May 31 to June 3. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge interpolated for days of no gage-height record. Records good.

Discharge measurements of Sutter Creek near Volcano, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 14.....	1.05	3.5	Mar. 19.....	1.40	16	May 11.....	1.28	10
Do.....	1.05	3.9	Do.....	1.41	17			

Daily discharge, in second-feet, of Sutter Creek near Volcano, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.0	4.5	9	4.2	32	26	6.5	12	2.9	1.5	0.8	0.8
2.....	2.0	5	20	4.2	28	25	7	14	2.8	1.4	.8	.8
3.....	2.0	7	11	4.2	92	26	8.5	14	2.8	1.4	.8	.8
4.....	2.0	7.5	8	4.2	99	25	17	16	2.7	1.3	.8	.8
5.....	2.5	6	6.5	4.2	61	24	94	17	2.7	1.3	.8	.8
6.....	7	6	5.5	4.2	35	24	92	16	2.6	1.3	.8	.8
7.....	4.5	6	5.5	4.2	25	24	66	17	2.6	1.3	.8	.8
8.....	3.5	6	5.5	4.2	22	22	102	17	2.5	1.3	.8	.8
9.....	2.8	5.5	5.5	4.2	19	22	74	15	2.5	1.2	.8	.8
10.....	3.0	5.5	5.5	4.2	25	22	55	12	2.4	1.2	.8	.8
11.....	3.5	5.5	5.5	4.2	39	20	46	10	2.4	1.2	.8	.8
12.....	4.2	5	5.5	4.2	116	18	39	9.5	2.3	1.2	.8	.9
13.....	4.2	5	5.5	4.2	99	17	36	8	2.2	1.2	.8	.9
14.....	3.8	5	5.5	4.2	120	16	32	8	2.1	1.1	.8	.9
15.....	3.5	4.2	5.5	4.2	99	16	29	8	2.1	1.1	.8	.9
16.....	3.2	4.8	5	4.2	99	15	28	8	2.5	1.0	.8	.9
17.....	3.0	5	4.8	4.2	70	14	27	8.5	3.0	1.0	.8	.9
18.....	3.0	5	16	4.2	54	14	27	8	3.0	.9	.8	.8
19.....	3.0	5	18	4.2	66	16	25	8	3.0	.9	.8	.8
20.....	3.0	5	12	4.2	159	14	22	7.5	2.8	.9	.8	.8
21.....	3.0	4.8	9	4.2	78	14	19	7	2.8	.9	.8	.8
22.....	3.0	4.8	7.5	4.2	72	14	17	7	2.8	.9	.8	.8
23.....	3.0	4.8	7	4.2	48	12	17	6.5	1.7	.8	.8	.8
24.....	3.0	5	7	4.2	40	11	16	6	1.5	.8	.8	.8
25.....	3.2	5.5	6.5	4.2	35	9	15	5.5	1.5	.8	.8	.9
26.....	3.2	5.5	6	4.2	31	9	14	5.5	1.5	.8	.8	.9
27.....	3.8	6	5.5	4.2	29	9	12	5	1.5	.8	.8	.9
28.....	3.5	6	5.5	10	28	8	14	3.8	1.5	.8	.8	.9
29.....	3.8	6.5	4.8	17	8	12	12	3.4	1.5	.8	.8	1.0
30.....	4.0	7.5	4.5	17	7	12	12	3.0	1.5	.8	.8	1.1
31.....	4.2		4.2	56		6.5		3.0		.8	.8	

*Monthly discharge of Sutter Creek near Volcano, Calif., for the year ending
September 30, 1926*

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	7	2.0	3.34	205
November.....	7.5	4.2	5.50	327
December.....	20	4.2	7.51	462
January.....	56	4.2	7.88	485
February.....	159	19	61.5	3,420
March.....	26	6.5	16.4	1,010
April.....	102	6.5	32.7	1,950
May.....	17	3.0	9.33	574
June.....	3.0	1.5	2.32	138
July.....	1.5	.8	1.05	64.6
August.....	.8	.8	.80	49.2
September.....	1.1	.8	.85	50.6
The year.....	159	.8	12.0	8,740

SUTTER CREEK AT SUTTER CREEK, CALIF.

LOCATION.—In northwest corner of T. 6 N., R. 11 E., three-eighths of a mile west of Sutter Creek, Amador County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—February 5, 1922, to September 30, 1926.

GAGE.—Staff gage in two sections on right bank 200 feet below footbridge. First section inclined, second section vertical. Read by Alden Tyler.

DISCHARGE MEASUREMENTS.—Made from footbridge or by wading.

CHANNEL AND CONTROL.—Large boulders and gravel. Willows on banks obstruct flow at high stages. Banks high and are not overflowed. One channel at all stages. Current swift.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 2.80 feet at 4 p. m. February 4 (discharge, 400 second-feet); minimum discharge, 0.5 second-foot on August 24.

1922-1926: Maximum stage recorded, 7.5 feet (from floodmarks) about 6 a. m. February 6, 1925 (discharge, not determined); stream practically dry, except for waste water from town of Sutter Creek, during summer of 1924.

DIVERSIONS.—No information.

REGULATION.—No information.

ACCURACY.—Stage-discharge relation changed in August. Rating curves well defined below 400 second-feet and extended above. Staff gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Sutter Creek at Sutter Creek, Calif., during the year ending September 30, 1926.

Date	Gage height	Dis- charge	Date	Gage height	Dis- charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 13.....	0.70	6.6	Mar. 18.....	1.01	21
Do.....	.70	7.0	Sept. 14.....	.50	1.0

Daily discharge, in second-feet, of Sutter Creek at Sutter Creek, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	6.5	16	9.5	74	55	12	14	6.5	1.0	0.8	0.8
2	1.8	7	39	9	37	51	12	13	6	1.0	.6	.8
3	1.8	10	18	8.5	190	49	14	12	5.5	.9	.7	.8
4	1.8	15	12	8.5	218	45	19	14	5.5	1.0	.9	.9
5	2.2	14	11	8.5	181	39	143	18	1.8	1.0	.8	1.0
6	4.0	12	11	8	82	31	143	18	5.5	.9	.7	.9
7	5	8.5	10	8	46	26	53	24	5	1.0	1.0	1.0
8	5	8	10	8.5	40	51	118	21	5	1.0	.9	1.0
9	5	8.5	10	8	36	46	109	19	5	.9	1.3	.9
10	5	8.5	10	8	43	37	86	18	4.8	.9	1.0	.9
11	5.5	10	10	8.5	46	32	74	16	4.4	.9	.9	.9
12	6	11	10	8	264	30	66	14	3.6	.9	1.1	.9
13	6	13	10	8.5	201	35	60	13	4.6	.9	.9	.9
14	6	14	10	8	360	36	60	12	4.4	.9	1.0	1.3
15	6	13	10	8	248	32	58	11	4.4	.9	1.0	1.5
16	6	12	9.5	8	178	28	58	11	4.0	.8	1.0	1.8
17	5.5	11	9	10	131	25	60	9.5	4.0	.8	1.1	1.5
18	5.5	11	27	10	101	21	60	9	3.6	.9	1.1	1.5
19	5.5	10	26	8.5	108	19	55	4.4	3.2	.9	1.3	1.5
20	6	10	25	8	320	19	52	2.4	3.2	.9	1.0	1.5
21	5.5	9	18	8	135	19	45	8	2.8	.8	1.0	1.5
22	5.5	9	14	8	123	18	38	8.5	2.8	.9	.9	1.8
23	5.5	9	13	8	96	18	34	8.5	2.8	.8	.6	1.6
24	5.5	9	12	8	82	17	32	8.5	2.8	.8	.5	1.5
25	5.5	9	11	7.5	75	16	28	8.5	1.2	.8	.6	1.0
26	5.5	9	10	7.5	65	16	25	8	2.6	.8	.6	1.8
27	5.5	8.5	10	7.5	59	15	22	8	2.0	.9	.9	1.6
28	6	8.5	9	11	58	14	19	8	2.0	.8	1.1	1.6
29	6	8.5	9	116	-----	14	17	3.6	1.6	.8	1.1	1.5
30	6	11	9	32	-----	13	15	7	1.2	.8	.9	1.8
31	6	-----	8.5	75	-----	12	-----	6.5	-----	.8	.9	-----

Monthly discharge of Sutter Creek at Sutter Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	6	1.8	4.96	305
November	15	6.5	10.1	601
December	39	8.5	13.5	830
January	116	7.5	14.8	910
February	360	36	127	7,050
March	55	12	28.4	1,750
April	143	12	52.9	3,150
May	24	2.4	11.5	707
June	6.5	1.2	3.73	222
July	1.0	.8	.88	54.1
August	1.3	.5	.91	56.0
September	1.8	.8	1.27	75.6
The year	360	.5	21.7	15,700

NORTH FORK OF COSUMNES RIVER NEAR EL DORADO, CALIF.

LOCATION.—In sec. 23, T. 9 N., R. 10 E., at suspension footbridge at Celio ranch,⁷ 4 miles above junction with Middle Fork and 5 miles south of El Dorado, Eldorado County. Martinez Creek enters 1½ miles above station.

DRAINAGE AREA.—197 square miles (measured on topographic maps).

RECORDS AVAILABLE.—August 13, 1911, to September 30, 1926.

⁷ Called "Kings Store" on U. S. Geol. Survey topographic map of Placerville quadrangle.

GAGE.—Staff in three sections on right bank at bridge; read by James Yates.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Gravel and solid rock; practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 7.3 feet at 7 a. m. April 8 (discharge, 1,150 second-feet); no flow July 23 to September 29.

1911-1926: Maximum stage recorded, 14.5 feet at 8 a. m. February 6, 1925 (discharge, from extension of rating curve, about 6,950 second-feet); no flow July 17 to October 7, 1924, and July 23 to September 29, 1926.

DIVERSIONS.—The J. J. Crawford ditch (about 2 feet wide) diverts water from Camp Creek above station. The water is used for irrigation below Placerville.

REGULATION.—None.

ACCURACY.—Stage-discharge relation not changed during year. Rating curve well defined. Staff gage read to half-tenths once daily except for a few scattered days. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge interpolated for days on which gage was not read. Records good.

The following discharge measurement was made:

March 18, 1926: Gage height, 4.60 feet; discharge, 206 second-feet.

Daily discharge, in second-feet, of North Fork of Cosumnes River near El Dorado, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.....	4.5	5.5	19	13	252	161	125	161	13	1.0
2.....	4.5	5.5	81	13	125	161	125	161	13	1.0
3.....	4.5	6.5	55	13	560	181	125	161	9.5	1.0
4.....	4.5	9.5	34	13	304	181	203	143	8	1.0
5.....	4.5	9.5	26	13	525	203	960	181	6.5	1.0
6.....	6.5	6.5	22	13	252	203	1,000	143	6.5	.8
7.....	19	6.5	19	13	181	203	840	143	6.5	.8
8.....	13	6.5	19	13	181	227	1,100	143	6.5	.8
9.....	9.5	6.5	19	13	181	277	920	125	6.5	.5
10.....	9.5	8	16	12	204	227	770	109	6.5	.5
11.....	9.5	9.5	13	11	227	227	700	94	6.5	.5
12.....	9.5	9.5	13	11	805	203	595	81	5.5	.5
13.....	13	44	12	13	560	203	525	81	5.5	.5
14.....	11	26	11	13	1,000	203	474	81	5.5	.5
15.....	9.5	19	9.5	13	560	227	423	74	4.5	.4
16.....	9.5	16	9.5	13	805	227	363	74	4.5	.2
17.....	9.5	13	11	13	304	227	333	68	4.5	.2
18.....	9.5	13	19	19	252	203	304	68	4.5	.2
19.....	9.5	11	44	19	304	203	277	62	3.8	.2
20.....	8	9.5	34	19	770	181	252	55	3.4	.2
21.....	6.5	9.5	30	19	304	181	227	44	3.0	.1
22.....	6.5	9.5	26	19	252	181	227	39	3.0	.1
23.....	6.5	9.5	22	19	227	181	203	34	3.0	-----
24.....	6.5	9.5	19	18	203	181	203	34	3.0	-----
25.....	6.5	9.5	13	16	181	181	192	30	3.0	-----
26.....	6.5	9.5	13	13	161	161	203	28	1.8	-----
27.....	6.5	9.5	13	13	161	161	203	26	1.8	-----
28.....	6.5	9.5	13	13	161	143	203	26	1.4	-----
29.....	6.5	9.5	13	304	-----	143	181	19	1.0	-----
30.....	5.5	13	13	161	-----	143	181	16	1.0	-----
31.....	5.5	-----	13	125	-----	125	-----	13	-----	-----

NOTE.—No flow July 23 to Sept. 29.

Monthly discharge of North Fork of Cosumnes River near El Dorado, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	19	4.5	8.00	492
November.....	44	5.5	11.3	672
December.....	81	9.5	21.7	1,330
January.....	304	11	32.0	1,970
February.....	1,000	125	357	19,800
March.....	277	125	191	11,700
April.....	1,100	125	415	24,700
May.....	181	13	81.2	4,990
June.....	13	1.0	5.09	303
July.....	1.0	0	.39	24.0
September.....	3.0	0	.10	6.0
The year.....	1,100	0	91.2	66,000

NOTE.—No flow during August.

COSUMNES RIVER AT MICHIGAN BAR, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 36, T. 8 N., R. 8 E., at highway bridge at Michigan Bar, Sacramento County, $5\frac{1}{2}$ miles southwest of Latrobe. North and Middle Forks unite 12 miles about station.

DRAINAGE AREA.—525 square miles.

RECORDS AVAILABLE.—October 20, 1907, to September 30, 1926.

GAGE.—Vertical staff on downstream end of bridge pier, near left bank; read by C. B. Ruman.

DISCHARGE MEASUREMENTS.—Made from bridge at gage or by wading.

CHANNEL AND CONTROL.—Sand, gravel, and small boulders; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 6.0 feet at 12.30 p. m. February 12 (discharge, 3,850 second-feet); no flow August 4-18 and August 21 to September 16.

1907-1926: Maximum stage recorded, 11.2 feet a 5 a. m. February 6, 1925 (discharge, 23,800 second-feet); no flow part of 1908, 1918, 1919, 1924, and 1926.

DIVERSIONS.—Douglas and Enterprise ditches divert from Middle and South Forks and have a combined capacity of about 50 second-feet. The water is used for power, domestic supply, and irrigation at and near Plymouth. Slug Gulch ditch, having a capacity of 6 or 8 second-feet, also diverts water from the Middle Fork when prior appropriations permit. Michigan Bar Canal, which has a capacity of about 50 second-feet, heads on the main Cosumnes at Muscisdale Creek. No record is available showing the quantity of water that is diverted.

REGULATION.—Flow is partly regulated by diversions.

ACCURACY.—Stage-discharge relation not changed during year. Rating curve well defined. Staff gage read to half-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:

February 15, 1926: Gage height, 4.39 feet; discharge, 1,030 second-feet.

March 18, 1926: Gage height, 3.64 feet; discharge, 408 second-feet.

September 14, 1926: Gage height, 1.50 feet; discharge, 0 second-foot.

Daily discharge, in second-feet, of Cosumnes River at Michigan Bar, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	19	48	42	720	376	286	320	65	8	1.0	-----
2	11	21	150	42	1,010	400	252	320	54	8	.5	-----
3	11	22	172	42	1,120	400	266	310	54	8	.5	-----
4	11	26	110	42	910	400	295	295	52	8	-----	-----
5	12	38	93	42	1,010	406	1,240	345	42	7	-----	-----
6	14	31	64	42	576	430	2,350	320	42	6	-----	-----
7	36	27	54	42	418	430	1,660	320	42	6	-----	-----
8	44	26	54	42	330	466	2,440	270	42	5.5	-----	-----
9	31	22	44	42	290	490	2,170	261	42	5.5	-----	-----
10	27	24	42	42	345	460	1,580	225	42	5.5	-----	-----
11	26	31	42	42	490	430	1,300	206	38	5.5	-----	-----
12	31	36	42	42	2,950	382	1,120	192	31	5.5	-----	-----
13	31	54	42	38	1,820	370	910	188	31	6	-----	-----
14	31	95	42	36	2,740	370	810	188	31	5.5	-----	-----
15	31	61	42	36	1,010	382	720	185	24	4.8	-----	-----
16	26	44	31	41	1,510	400	720	172	22	3.0	-----	-----
17	22	42	36	42	2,240	394	640	155	22	2.8	-----	0.5
18	22	42	54	48	624	376	600	155	22	1.8	-----	1.0
19	22	42	116	48	525	370	560	155	22	1.5	.2	1.0
20	22	31	116	42	2,170	360	497	155	20	1.5	.2	1.0
21	22	31	85	33	1,010	330	460	139	19	1.5	-----	1.0
22	22	31	68	41	640	320	460	128	19	1.0	-----	1.0
23	22	31	54	42	560	320	430	116	15	1.0	-----	1.5
24	22	31	54	42	478	320	418	116	14	.5	-----	1.5
25	22	31	54	42	430	320	400	116	14	.5	-----	1.5
26	22	31	52	42	382	320	382	105	12	.5	-----	1.5
27	19	31	48	40	370	290	370	105	12	.5	-----	1.5
28	18	31	48	42	370	270	382	85	11	.5	-----	1.5
29	19	31	48	188	-----	270	376	71	10	1.0	-----	1.5
30	19	31	44	430	-----	266	350	68	8	1.0	-----	1.5
31	19	-----	42	320	-----	248	-----	68	-----	1.0	-----	-----

NOTE.—No flow Aug. 4-18 and Aug. 21 to Sept. 16.

Monthly discharge of Cosumnes River at Michigan Bar, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	44	10	22.5	1,380
November	95	19	34.8	2,070
December	172	31	64.2	3,950
January	430	33	67.6	4,160
February	2,950	290	930	51,600
March	490	248	367	22,600
April	2,440	252	814	48,400
May	345	68	189	11,600
June	65	8	29.1	1,730
July	8	.5	3.69	227
August	1.0	0	.08	4.9
September	1.5	0	.58	34.5
The year	2,950	0	204	148,000

SACRAMENTO RIVER BASIN

MAIN STREAM

SACRAMENTO RIVER AT ANTLER, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ sec. 13, T. 35 N., R. 5 W., at highway bridge at Antler, Shasta County. Gregory Creek enters 200 feet below gage and Pit River 14 miles below.

DRAINAGE AREA.—461 square miles.

RECORDS AVAILABLE.—November 19, 1910, to December 31, 1911; April 18, 1919, to September 30, 1926.

GAGE.—Vertical staff on downstream end of wooden pier at right end of highway bridge; temporary staff at left pier foundation, July 8 to September 30, 1926. Gage heights January 31 to July 7, 1926, not referred to original datum.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; shift slightly during high stages.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 15.0 feet about 3 p. m. April 8 (discharge, 18,900 second-feet); minimum stage recorded, 1.98 feet August 5-7 (discharge, 170 second-feet).

1910-1911, 1919-1926: Maximum stage recorded, 15.0 feet April 8, 1926 (discharge, 18,900 second-feet); minimum stage recorded, 1.8 feet July 3 to September 23 except August 19, 1924 (discharge, 110 second-feet).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed January 31 because of settling of bridge and gage and probably changes in control due to high water. Rating curves well defined below 7,000 second-feet and extended above. Gage read to half-tenths twice daily except March 28 to April 10; peak stage was observed on April 8. Daily discharge ascertained by applying mean daily gage height to rating table; estimated for March 28 to April 10 by comparison with records for near-by streams. Records good except for stages above 7,000 second-feet, for which they are fair.

Discharge measurements of Sacramento River at Antler, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Jan. 31	7.16	3,840	Apr. 11	6.96	3,610	Apr. 28	4.90	1,360
Feb. 7	8.52	6,260	Apr. 13	6.25	2,830	May 22	3.70	577
Do	8.50	6,120	Do	6.12	2,690	July 7	2.21	226
Apr. 11	7.12	3,900	Apr. 28	4.96	1,420			

Daily discharge, in second-feet, of Sacramento River at Antler, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	410	365	1,440	540	1,850	1,450	1,030	1,280	485	255	175	188
2	410	388	2,600	510	1,450	1,450	1,030	1,200	485	255	175	188
3	410	435	1,350	510	5,000	1,450	1,030	1,200	485	255	175	188
4	365	388	1,030	510	15,100	1,450	1,060	1,280	485	255	172	188
5	388	410	820	510	6,490	1,450	1,300	1,200	485	255	170	188
6	510	410	785	510	6,320	1,450	1,600	1,130	440	255	170	188
7	485	410	750	510	6,320	1,450	4,000	1,130	400	225	170	188
8	460	410	690	460	4,690	1,550	16,000	1,030	400	225	172	188
9	460	410	660	460	3,280	1,360	10,000	962	400	225	175	188
10	410	600	630	460	3,280	1,280	5,500	835	400	225	175	188
11	410	820	570	460	2,660	1,280	3,820	745	400	212	175	188
12	410	855	600	460	2,540	1,130	3,280	745	400	212	175	200
13	460	690	570	460	2,070	1,130	2,780	745	400	212	175	200
14	410	570	570	460	1,850	1,130	2,540	685	400	200	175	200
15	410	510	510	460	2,540	1,450	2,420	685	360	200	175	200
16	410	630	485	630	2,900	1,450	2,300	630	340	200	175	200
17	410	660	460	600	2,300	1,130	2,300	630	320	200	175	200
18	410	600	630	600	1,850	1,130	2,070	630	320	200	188	200
19	410	570	820	510	2,180	1,060	1,960	605	285	200	188	200
20	410	510	690	460	2,540	1,130	1,750	580	285	188	188	200
21	410	485	630	460	2,070	1,060	1,650	580	285	188	188	200
22	410	460	690	460	1,850	1,060	1,650	580	285	188	188	200
23	410	485	660	460	1,650	1,130	1,450	580	285	188	188	200
24	388	510	630	460	1,450	1,130	1,450	605	285	188	188	200
25	365	460	600	460	1,360	1,130	1,450	580	285	188	200	200
26	365	460	570	460	1,450	1,060	1,450	555	285	188	200	200
27	365	460	600	460	1,450	1,060	1,450	530	255	188	200	200
28	365	460	570	660	1,450	1,030	1,450	530	255	175	200	200
29	365	510	570	1,530	-----	1,030	1,450	530	255	175	200	200
30	365	690	570	1,270	-----	1,030	1,280	530	255	175	200	200
31	365	-----	570	3,540	-----	1,030	-----	530	-----	175	200	-----

Monthly discharge of Sacramento River at Antler, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	510	365	407	25,000
November.....	855	365	521	31,000
December.....	2,600	460	752	46,200
January.....	3,540	460	655	40,300
February.....	15,100	1,380	3,210	178,000
March.....	1,550	1,030	1,230	75,600
April.....	16,000	1,030	2,750	164,000
May.....	1,280	530	776	47,700
June.....	485	255	357	21,200
July.....	255	175	209	12,900
August.....	200	170	183	11,300
September.....	200	188	196	11,700
The year.....	16,000	170	918	665,000

SACRAMENTO RIVER AT KENNETT, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 2, T. 33 N., R. 5 W., at highway bridge at Kennett, Shasta County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 19, 1925, to September 30, 1926.

GAGE.—Water-stage recorder in galvanized iron well attached to downstream side of right concrete bridge pier. The datum is 2.00 feet lower than that of the Weather Bureau staff gage attached to the same pier.

DISCHARGE MEASUREMENTS.—Made from highway bridge.

CHANNEL AND CONTROL.—Boulders and bedrock; fairly permanent; one channel at all stages.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 19.50 feet at 4 p. m. February 4 (discharge, 66,000 second-feet); minimum stage, from water-stage recorder, 0.40 foot at 9 p. m. August 11 (discharge, 2,430 second-feet).

DIVERSIONS.—See Pit River at Big Bend.

REGULATION.—Mount Shasta Power Corporation's Pit No. 3, plant regulates flow of Pit River at low stages, causing a daily range of stage of about 1.5 feet.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by use of discharge integrator November 19 to December 30 and by applying mean daily gage height to rating table December 31 to September 30. Records excellent.

Discharge measurements of Sacramento River at Kennett, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Nov. 3.....	1.66	3,770	Feb. 2.....	4.31	8,700	Feb. 6.....	10.64	26,300
Do.....	.88	2,820	Feb. 3.....	8.33	18,500	Apr. 12.....	5.52	11,100
Nov. 20.....	1.01	3,070	Feb. 4.....	19.35	65,300	Do.....	5.36	10,500
Jan. 29.....	3.14	6,000	Do.....	19.48	65,800	Apr. 13.....	5.09	9,990
Jan. 30.....	3.05	5,840	Feb. 5.....	12.02	31,800	Apr. 30.....	3.08	6,240
Feb. 1.....	5.77	11,600	Do.....	11.00	27,300	July 8.....	.78	2,800
Do.....	5.22	10,300	Feb. 6.....	10.43	26,000			

Daily discharge, in second-feet, of Sacramento River at Kennett, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		5,470	3,460	11,200	8,150	5,150	5,850	3,360	2,920	2,780	2,730
2		8,550	3,350	9,170	7,950	5,150	5,670	3,480	3,020	2,730	2,780
3		5,390	3,370	19,400	7,750	4,980	5,320	3,480	3,020	2,690	2,780
4		4,570	3,370	49,800	7,550	5,490	5,150	3,480	3,020	2,730	2,730
5		4,380	3,240	31,400	7,350	6,030	5,490	3,480	2,920	2,780	2,730
6		4,080	3,310	26,500	7,340	6,400	5,150	3,480	2,920	2,730	2,730
7		3,850	3,400	24,700	6,590	10,500	5,150	3,240	2,920	2,780	2,690
8		3,880	3,310	19,400	7,750	28,400	5,150	3,240	2,920	2,730	2,730
9		3,800	3,480	15,600	7,750	20,700	4,980	3,130	2,920	2,690	2,730
10		3,790	3,450	13,800	7,160	14,500	4,810	3,360	2,920	2,690	2,730
11		3,690	3,320	12,500	6,970	12,700	4,650	3,360	2,920	2,650	2,780
12		3,600	3,210	11,500	6,590	11,000	4,490	3,240	2,920	2,650	2,730
13		3,730	3,180	10,500	6,590	9,820	4,330	3,360	2,920	2,690	2,730
14		3,640	3,040	9,590	6,590	9,170	4,180	3,130	2,870	2,780	2,730
15		3,560	3,120	13,500	6,590	8,550	4,030	3,130	2,920	2,730	2,730
16		3,440	3,100	17,300	6,590	8,350	4,030	3,130	2,870	2,730	2,690
17		3,480	3,500	13,200	6,400	8,150	3,890	3,130	2,870	2,780	2,690
18		3,770	3,420	11,200	6,210	7,950	3,890	3,240	2,870	2,780	2,690
19	3,730	4,530	3,430	12,700	6,210	7,350	3,890	3,130	2,870	2,780	2,730
20	3,590	4,060	3,390	14,800	5,850	6,970	3,750	3,020	2,820	2,730	2,690
21	3,490	3,530	3,400	13,000	5,850	6,780	3,750	3,130	2,730	2,780	2,730
22	3,570	3,840	3,330	11,700	5,490	6,590	3,750	3,240	2,820	2,650	2,730
23	3,410	3,760	3,360	10,300	5,670	6,400	3,890	3,130	2,820	2,690	2,780
24	3,360	3,760	3,440	9,590	5,850	6,400	3,890	3,020	2,820	2,690	2,780
25	3,350	3,680	3,370	9,170	5,670	6,210	3,610	3,020	2,820	2,690	2,730
26	3,350	3,700	3,500	8,750	5,490	6,210	3,750	3,020	2,780	2,730	2,780
27	3,280	3,610	3,560	8,550	5,490	6,210	3,750	3,020	2,780	2,730	2,780
28	3,290	3,760	4,170	8,350	5,320	6,030	3,890	3,020	2,780	2,730	2,780
29	3,510	3,700	6,910		5,320	5,850	3,750	3,130	2,870	2,690	2,780
30	3,700	3,580	5,800		5,320	5,850	3,750	3,020	2,820	2,730	2,780
31		3,510	12,200		5,150		3,610		2,820	2,730	

Monthly discharge of Sacramento River at Kennett, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October				
November 19-30	3,730	3,290	3,480	82,800
December	8,550	3,440	4,050	249,000
January	12,200	3,040	3,850	237,000
February	49,800	8,350	15,300	850,000
March	8,150	5,150	6,470	398,000
April	28,400	4,980	8,660	515,000
May	5,850	3,610	4,360	268,000
June	3,480	3,020	3,210	191,000
July	3,020	2,730	2,880	177,000
August	2,780	2,650	2,720	167,000
September	2,780	2,690	2,740	163,000
The period				3,300,000

SACRAMENTO RIVER NEAR RED BLUFF, CALIF.

LOCATION.—In lot 4, sec. 34, T. 28 N., R. 3 W., at lower end of Iron Canyon, 4 miles northeast of Red Bluff, Tehama County. Paines Creek enters 3 miles above and Antelope Creek 7 miles below station.

DRAINAGE AREA.—9,300 square miles, not including drainage area of Goose Lake—1,090 square miles—which belongs naturally in Pit River Basin but has contributed no water except for a short time in 1869 and for more than two hours during a severe storm from the north in 1881, when the lake overflowed to North Fork of Pit River. Previously published figures of discharge in second-feet per square mile and run-off in inches, based on drainage area, including Goose Lake, should be used with caution because of the large non-contributing area.

RECORDS AVAILABLE.—January 28, 1902, to September 30, 1926. In 1879 the State engineer and in 1893 and 1894 the commissioner of public works made measurements at this point. From April 30, 1895, to June 30, 1902, a gaging station was maintained at Jellys Ferry, 12 miles above Red Bluff.

GAGE.—Water-stage recorder in concrete well and shelter on left bank.

DISCHARGE MEASUREMENTS.—Made from cable at gage.

CHANNEL AND CONTROL.—Coarse gravel and small boulders; practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 20.52 feet at 2 a. m. February 5 (discharge, 110,000 second-feet); minimum stage, from water-stage recorder, 0.02 foot at noon July 22 (discharge, 2,640 second-feet).

1902-1926: Maximum stage recorded, 35.2 feet February 3, 1909 (discharge, 278,000 second-feet); minimum stage, from water-stage recorder, 0.02 foot at noon July 22, 1926 (discharge, 2,640 second-feet).

DIVERSIONS.—The Anderson-Cottonwood Canal has diverted water from Sacramento River at Redding since 1918. A small amount of water is diverted from some of the tributaries for irrigation.

REGULATION.—A small diurnal fluctuation at low water is caused by operation of power plants of Mount Shasta Power Corporation on Pit River.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except January 28, 29, 31, February 1-5, April 8-9, and May 4, for which hourly discharge was averaged, and May 31 to June 2, for which discharge was interpolated. Records excellent.

The following discharge measurements were made:

May 2, 1926: Gage height, 2.35 feet; discharge, 7,320 second-feet.

August 21, 1926: Gage height, 0.14 foot; discharge, 2,800 second-feet.

Daily discharge, in second-feet, of Sacramento River near Red Bluff, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.
1-----	3,830	4,010	5,430	4,490	36,600	11,500	6,370	7,710	4,440	3,240	3,150	3,060
2-----	3,920	4,100	15,500	4,390	20,600	11,500	6,370	7,710	4,370	3,240	3,150	3,150
3-----	4,010	4,200	8,910	4,390	40,000	11,200	6,120	7,160	4,300	3,320	3,060	3,150
4-----	3,830	4,100	6,370	4,490	68,600	10,900	6,370	7,660	4,200	3,320	3,060	3,150
5-----	3,830	4,100	5,650	4,300	82,900	10,500	8,600	8,300	4,100	3,320	3,060	3,060
6-----	4,010	4,100	5,320	4,300	48,600	10,200	10,900	8,000	4,100	3,240	3,150	3,060
7-----	4,300	4,100	5,000	4,300	40,600	9,860	12,200	8,300	4,010	3,240	3,150	3,150
8-----	4,100	4,100	5,000	4,300	34,600	9,540	36,600	8,000	3,920	3,320	3,150	3,060
9-----	4,100	4,100	4,900	4,300	27,200	11,900	48,200	7,160	3,920	3,320	3,150	3,060
10-----	4,010	4,390	4,900	4,390	24,500	10,200	29,000	6,890	3,830	3,240	3,150	3,150
11-----	4,010	4,590	4,790	4,390	21,900	9,540	25,400	6,630	3,920	3,240	3,150	3,150
12-----	4,010	5,320	4,790	4,200	22,300	8,910	19,800	6,120	3,830	3,320	3,060	3,150
13-----	4,100	5,430	4,690	4,100	23,200	8,600	16,600	6,120	3,740	3,240	3,060	3,150
14-----	4,100	5,000	4,690	4,100	19,800	8,600	14,800	5,650	3,740	3,240	3,150	3,150
15-----	4,100	4,590	4,590	4,010	22,300	8,600	13,700	5,650	3,660	3,240	3,150	3,060
16-----	4,100	4,590	4,590	4,100	38,000	8,600	12,600	5,430	3,580	3,150	3,150	2,980
17-----	4,200	5,320	4,590	4,490	25,400	8,600	11,900	5,210	3,660	3,150	3,150	3,060
18-----	4,100	5,210	5,000	4,690	19,800	8,300	12,600	5,100	3,660	3,150	3,150	2,980
19-----	4,010	4,790	5,650	4,390	21,000	8,000	11,200	5,100	3,660	3,150	3,150	2,980
20-----	4,010	4,590	5,880	4,390	30,300	7,710	10,200	4,900	3,490	3,150	3,150	3,060
21-----	4,100	4,490	5,000	4,390	23,200	7,710	9,540	4,900	3,490	2,980	3,150	3,060
22-----	4,010	4,390	5,000	4,300	19,800	7,160	9,220	4,790	3,580	2,980	3,060	3,060
23-----	4,010	4,390	5,000	4,300	17,400	7,110	8,910	4,790	3,740	3,060	3,060	3,060
24-----	4,010	4,300	4,900	4,390	15,500	7,050	8,600	5,000	3,580	3,150	3,060	3,060
25-----	3,920	4,300	4,900	4,300	14,400	7,000	8,300	4,900	3,490	3,150	3,060	2,980
26-----	3,920	4,300	4,900	4,390	13,300	6,940	8,300	4,790	3,400	3,150	3,060	3,060
27-----	3,920	4,300	4,690	4,490	12,600	6,890	8,000	4,790	3,400	3,060	3,150	3,150
28-----	4,010	4,300	4,900	7,140	12,200	6,630	8,300	4,790	3,400	3,060	3,150	3,150
29-----	4,010	4,300	4,790	29,100	-----	6,630	8,000	4,690	3,400	3,150	3,060	3,150
30-----	4,100	4,490	4,690	16,200	-----	6,370	7,710	4,590	3,320	3,150	3,150	3,150
31-----	4,010	-----	4,490	43,200	-----	6,370	-----	4,520	-----	3,150	3,150	-----

Monthly discharge of Sacramento River near Red Bluff, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	4, 300	3, 830	4, 020	247, 000
November.....	5, 430	4, 010	4, 480	267, 000
December.....	15, 500	4, 490	5, 470	336, 000
January.....	43, 200	4, 010	6, 860	422, 000
February.....	82, 900	12, 200	28, 400	1, 580, 000
March.....	11, 900	6, 370	8, 670	533, 000
April.....	48, 200	6, 120	13, 500	803, 000
May.....	8, 300	4, 520	5, 980	368, 000
June.....	4, 440	3, 320	3, 760	224, 000
July.....	3, 320	2, 980	3, 190	196, 000
August.....	3, 150	3, 060	3, 120	192, 000
September.....	3, 150	2, 980	3, 090	184, 000
The year.....	82, 900	2, 980	7, 390	5, 350, 000

SACRAMENTO RIVER AT BUTTE CITY, CALIF.

LOCATION.—At highway bridge at Butte City, Glenn County.

RECORDS AVAILABLE.—April 21, 1921, to September 30, 1926, low-water records only.

GAGE.—Water-stage recorder on fender pier of highway bridge about 100 feet above bridge.

CHANNEL AND CONTROL.—Well-defined channel, earth banks with gravel bottom. Riffle about half a mile below gage acts as control.

DIVERSIONS.—Considerable diversion from main stream and tributaries above station for irrigation.

REGULATION.—See preceding paragraph.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curve well defined. Water-stage recorder record good. Daily discharge ascertained by shifting-control method, except June 4–16, for which it was estimated from records of flow at Red Bluff and Colusa. Records excellent.

Discharge measurements of Sacramento River at Butte City, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 6.....	69. 04	3, 690	Jan. 5.....	69. 50	4, 560	July 22.....	67. 50	1, 490
Oct. 14.....	69. 20	4, 170	Jan. 13.....	69. 42	4, 260	July 28.....	67. 41	1, 440
Oct. 22.....	69. 14	4, 080	Jan. 21.....	69. 46	4, 240	Aug. 4.....	67. 40	1, 400
Oct. 29.....	69. 06	3, 990	Jan. 28.....	69. 48	4, 320	Aug. 11.....	67. 38	1, 400
Nov. 4.....	69. 22	4, 180	June 3.....	68. 68	3, 020	Aug. 18.....	67. 57	1, 680
Nov. 11.....	69. 45	4, 470	June 10.....	68. 32	2, 580	Aug. 25.....	67. 70	1, 730
Nov. 18.....	70. 02	5, 970	June 17.....	68. 04	2, 260	Sept. 1.....	67. 90	1, 950
Nov. 25.....	69. 55	5, 100	June 24.....	67. 99	2, 080	Sept. 8.....	68. 15	2, 310
Dec. 10.....	69. 78	5, 520	July 1.....	67. 82	1, 890	Sept. 15.....	68. 28	2, 500
Dec. 19.....	69. 86	5, 680	July 8.....	67. 74	1, 810	Sept. 24.....	68. 42	2, 690
Dec. 28.....	69. 69	4, 620	July 15.....	67. 85	1, 900			

Daily discharge, in second-feet, of Sacramento River at Butte City, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	May	June	July	Aug.	Sept.
1.....	3, 600	4, 080	5, 390	4, 880	-----	3, 260	1, 880	1, 460	1, 940
2.....	3, 510	4, 080	6, 680	4, 780	-----	3, 180	1, 880	1, 460	1, 820
3.....	3, 510	4, 180	12, 400	4, 780	-----	3, 100	1, 820	1, 410	1, 940
4.....	3, 700	4, 280	10, 200	4, 680	-----	3, 100	1, 880	1, 360	2, 010
5.....	3, 600	4, 280	8, 000	4, 580	-----	3, 000	1, 880	1, 520	2, 080
6.....	3, 790	4, 180	6, 900	4, 580	-----	2, 900	1, 880	1, 310	2, 010
7.....	3, 880	4, 180	6, 460	4, 480	-----	2, 800	1, 820	1, 360	2, 160
8.....	4, 280	4, 180	6, 020	4, 380	-----	2, 700	1, 820	1, 360	2, 240
9.....	4, 280	4, 180	5, 810	4, 380	-----	2, 600	1, 820	1, 360	2, 240
10.....	4, 280	4, 280	5, 700	4, 380	-----	2, 500	1, 760	1, 410	2, 240
11.....	4, 180	4, 480	5, 600	4, 480	-----	2, 500	1, 820	1, 360	2, 240
12.....	4, 280	4, 980	5, 600	4, 380	-----	2, 500	1, 820	1, 310	2, 310
13.....	4, 280	5, 600	5, 500	4, 280	-----	2, 450	2, 080	1, 310	2, 310
14.....	4, 280	6, 020	5, 500	4, 180	-----	2, 400	2, 620	1, 360	2, 460
15.....	4, 280	5, 700	5, 390	4, 080	-----	2, 350	1, 940	1, 360	2, 540
16.....	4, 280	5, 390	5, 280	3, 980	-----	2, 300	1, 880	1, 410	2, 540
17.....	4, 280	5, 390	5, 180	4, 080	-----	2, 240	1, 880	1, 410	2, 540
18.....	4, 380	6, 020	5, 280	4, 080	-----	2, 310	1, 640	1, 520	2, 460
19.....	4, 380	6, 020	5, 700	4, 480	-----	2, 240	1, 580	1, 460	2, 540
20.....	4, 280	5, 600	6, 460	4, 380	-----	2, 240	1, 580	1, 460	2, 540
21.....	4, 180	5, 390	6, 680	4, 280	-----	2, 160	1, 520	1, 520	2, 620
22.....	4, 080	5, 280	6, 240	4, 280	-----	2, 160	1, 460	1, 520	2, 620
23.....	4, 080	5, 180	5, 810	4, 280	-----	2, 160	1, 410	1, 580	2, 660
24.....	4, 080	5, 080	5, 810	4, 180	-----	2, 160	1, 460	1, 580	2, 700
25.....	4, 080	4, 980	5, 700	4, 180	-----	2, 080	1, 460	1, 700	2, 620
26.....	4, 080	4, 880	5, 600	4, 280	-----	2, 010	1, 460	1, 760	2, 700
27.....	4, 080	4, 980	5, 600	4, 280	3, 600	2, 010	1, 410	1, 880	2, 780
28.....	3, 980	4, 980	5, 180	-----	3, 600	1, 880	1, 360	1, 940	2, 860
29.....	4, 080	4, 980	5, 080	-----	3, 600	1, 880	1, 360	1, 940	2, 940
30.....	4, 080	4, 780	5, 080	-----	3, 600	1, 880	1, 410	1, 940	2, 940
31.....	4, 080	-----	5, 080	-----	3, 340	-----	1, 410	2, 160	-----

NOTE.—Station not operated Jan. 28 to May 28.

Monthly discharge of Sacramento River at Butte City, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	4, 380	3, 510	4, 070	250, 000
November.....	6, 020	4, 080	4, 920	293, 000
December.....	12, 400	5, 080	6, 160	379, 000
January 1-27.....	4, 880	3, 980	4, 370	234, 000
May 27-31.....	3, 600	3, 340	3, 550	35, 200
June.....	3, 260	1, 880	2, 440	145, 000
July.....	2, 620	1, 360	1, 710	105, 000
August.....	2, 160	1, 310	1, 530	94, 100
September.....	2, 940	1, 820	2, 420	144, 000

SACRAMENTO RIVER AT COLUSA, CALIF.

LOCATION.—At highway bridge at Colusa, Colusa County.

RECORDS AVAILABLE.—April 11, 1921, to September 30, 1926, low-water records only.

GAGE.—Water-stage recorder on highway bridge fender pier in middle of river about 50 feet above bridge.

DISCHARGE MEASUREMENTS.—Made from boat.

CHANNEL AND CONTROL.—Shifting sand; control is cross section and slope of channel.

DIVERSIONS.—Considerable water is diverted above station from main stream and tributaries for irrigation.

REGULATION.—See preceding paragraph.

ACCURACY.—Stage-discharge relation not permanent. Standard rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by shifting-control method. Records good.

Discharge measurements of Sacramento River at Colusa, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 6.-----	39.12	3,730	Jan. 4.-----	39.82	4,610	July 27.-----	35.94	1,110
Oct. 14.-----	39.48	4,180	Jan. 12.-----	39.76	4,760	Aug. 3.-----	35.79	1,100
Oct. 22.-----	39.42	4,090	Jan. 20.-----	39.82	4,710	Aug. 10.-----	35.76	1,100
Oct. 29.-----	39.20	4,090	Jan. 27.-----	39.50	4,410	Aug. 17.-----	35.76	1,080
Nov. 4.-----	39.42	4,140	June 2.-----	38.54	2,850	Aug. 24.-----	36.01	1,320
Nov. 11.-----	39.60	4,390	June 9.-----	37.88	2,260	Aug. 31.-----	36.69	1,780
Nov. 18.-----	40.25	5,160	June 16.-----	37.30	1,880	Sept. 7.-----	36.97	1,980
Nov. 25.-----	39.80	4,630	June 23.-----	37.02	1,690	Sept. 14.-----	37.30	2,300
Dec. 1.-----	39.85	4,830	June 30.-----	36.72	1,580	Sept. 22.-----	37.69	2,380
Dec. 10.-----	40.68	5,740	July 7.-----	36.53	1,480	Sept. 30.-----	38.03	2,990
Dec. 19.-----	40.20	5,130	July 14.-----	37.24	2,070			
Dec. 27.-----	40.21	5,210	July 21.-----	36.04	1,300			

Daily discharge, in second-feet, of Sacramento River at Colusa, Calif., for the year ending September 30, 1926.

Day	Oct.	Nov.	Dec.	Jan.	May	June	July	Aug.	Sept.
1.-----	3,600	4,080	4,860	4,860	-----	3,140	1,560	1,130	1,910
2.-----	3,480	3,960	5,510	4,860	-----	2,920	1,580	1,130	1,730
3.-----	3,480	3,960	11,600	4,730	-----	2,810	1,500	1,100	1,700
4.-----	3,600	4,080	12,000	4,600	-----	2,700	1,540	1,090	1,730
5.-----	3,720	4,210	8,890	4,600	-----	2,700	1,540	1,090	1,840
6.-----	3,720	4,080	7,330	4,600	-----	2,600	1,540	1,120	1,840
7.-----	3,840	4,080	6,550	4,470	-----	2,400	1,480	1,040	1,910
8.-----	4,080	4,080	6,160	4,600	-----	2,400	1,470	1,060	2,030
9.-----	4,210	4,080	5,770	4,600	-----	2,300	1,440	1,060	2,120
10.-----	4,210	4,080	5,640	4,600	-----	2,210	1,420	1,080	2,160
11.-----	4,080	4,340	5,510	4,600	-----	2,160	1,470	1,090	2,120
12.-----	4,080	4,600	5,380	4,730	-----	2,120	1,490	1,050	2,210
13.-----	4,080	4,990	5,250	4,600	-----	2,210	1,480	1,030	2,260
14.-----	4,210	5,640	5,120	4,470	-----	2,080	2,080	1,040	2,300
15.-----	4,210	5,640	5,120	4,340	-----	1,990	1,800	1,070	2,350
16.-----	4,210	5,120	4,990	4,340	-----	1,910	1,500	1,070	2,400
17.-----	4,210	4,860	4,990	4,340	-----	1,840	1,640	1,080	2,350
18.-----	4,210	5,120	4,990	4,340	-----	1,840	1,400	1,110	2,350
19.-----	4,210	5,640	5,120	4,600	-----	1,800	1,350	1,170	2,350
20.-----	4,210	5,380	5,510	4,730	-----	1,840	1,330	1,180	2,350
21.-----	4,210	5,120	6,290	4,600	-----	1,800	1,300	1,220	2,400
22.-----	4,080	4,990	6,080	4,600	-----	1,700	1,210	1,270	2,350
23.-----	4,080	4,860	5,380	4,470	-----	1,660	1,150	1,300	2,400
24.-----	3,960	4,730	5,380	4,470	-----	1,730	1,130	1,310	2,450
25.-----	3,960	4,600	5,380	4,470	-----	1,730	1,160	1,380	2,500
26.-----	4,080	4,600	5,250	4,470	-----	1,640	1,150	1,460	2,500
27.-----	4,080	4,600	5,250	4,340	3,600	1,660	1,100	1,540	2,600
28.-----	4,080	4,470	5,120	4,730	3,480	1,620	1,070	1,610	2,600
29.-----	4,080	4,470	5,120	-----	3,360	1,560	1,060	1,660	2,700
30.-----	4,080	4,600	5,120	-----	3,360	1,570	1,080	1,700	2,920
31.-----	4,080	-----	5,120	-----	3,250	-----	1,130	1,800	-----

NOTE.—Station not operated Jan. 28 to May 26.

Monthly discharge of Sacramento River at Colusa, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	4, 210	3, 480	4, 010	247, 000
November.....	5, 640	3, 960	4, 640	276, 000
December.....	12, 000	4, 860	5, 990	368, 000
January 1-28.....	4, 860	4, 340	4, 560	253, 000
May 27-31.....	3, 600	3, 250	3, 410	33, 800
June.....	3, 140	1, 560	2, 090	124, 000
July.....	2, 080	1, 060	1, 390	85, 500
August.....	1, 800	1, 030	1, 230	75, 600
September.....	2, 920	1, 700	2, 250	134, 000

SACRAMENTO RIVER AT KNIGHTS LANDING, CALIF.

LOCATION.—At Southern Pacific Co.'s railroad bridge at Knights Landing, Yolo County.

RECORDS AVAILABLE.—April 1, 1921, to September 30, 1926, low-water records only.

GAGE.—Water-stage recorder on middle pier of bridge.

DISCHARGE MEASUREMENTS.—Made from boat about 500 feet above gage.

CHANNEL AND CONTROL.—Shifting sand; control is cross section and slope of channel.

DIVERSIONS.—Considerable water is diverted for irrigation from main stream and tributaries above station.

REGULATION.—See preceding paragraph.

ACCURACY.—Stage-discharge relation not permanent. Rating curves fairly well defined. Water-stage recorder record excellent, except July 19-20, 24-26, August 23, 29-30, and September 23-29 when clock stopped. Daily discharge ascertained by shifting-control method and interpolation for days on which clock stopped. Records good.

Discharge measurements of Sacramento River at Knights Landing, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 5.....	15.34	4,380	Jan. 4.....	16.47	5,140	July 27.....	10.40	1,170
Oct. 13.....	15.70	4,760	Jan. 12.....	16.23	4,920	Aug. 3.....	10.50	1,190
Oct. 21.....	15.37	4,470	Jan. 20.....	16.49	5,020	Aug. 10.....	10.48	1,180
Oct. 28.....	15.00	4,130	Jan. 27.....	16.10	4,740	Aug. 17.....	10.90	1,440
Nov. 3.....	14.97	4,120	June 2.....	14.38	3,240	Aug. 24.....	11.48	1,760
Nov. 10.....	15.39	4,460	June 9.....	13.00	2,480	Aug. 31.....	12.41	2,350
Nov. 17.....	16.50	5,280	June 16.....	12.43	2,260	Sept. 7.....	12.85	2,640
Nov. 24.....	16.24	5,080	June 23.....	11.96	1,940	Sept. 14.....	13.64	3,280
Nov. 30.....	15.91	4,940	June 30.....	11.32	1,630	Sept. 22.....	14.41	3,390
Dec. 9.....	17.60	6,310	July 7.....	11.39	1,660	Sept. 30.....	14.52	3,700
Dec. 18.....	16.72	5,550	July 14.....	10.97	1,390			
Dec. 27.....	16.95	5,510	July 21.....	10.42	1,190			

Daily discharge, in second-feet, of Sacramento River at Knights Landing, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	May	June	July	Aug.	Sept.
1	4,070	4,150	4,950	5,350	-----	3,430	1,600	1,100	2,280
2	4,150	4,150	5,270	5,270	-----	3,190	1,660	1,130	2,350
3	4,230	4,070	6,830	5,190	-----	2,980	1,660	1,180	2,350
4	4,230	4,230	9,710	5,110	-----	2,910	1,600	1,150	2,350
5	4,390	4,310	9,530	5,110	-----	2,840	1,600	1,150	2,490
6	4,390	4,390	8,270	5,110	-----	2,770	1,600	1,130	2,630
7	4,470	4,390	7,280	5,030	-----	2,770	1,600	1,150	2,630
8	4,630	4,470	6,650	4,950	-----	2,630	1,500	1,130	2,630
9	4,870	4,470	6,290	4,950	-----	2,490	1,450	1,150	2,770
10	4,950	4,470	6,110	4,950	-----	2,490	1,400	1,180	2,980
11	4,870	4,550	5,930	4,950	-----	2,490	1,400	1,150	3,050
12	4,790	4,790	5,840	4,950	-----	2,490	1,450	1,220	3,120
13	4,790	4,870	5,750	4,950	-----	2,420	1,450	1,250	3,190
14	4,870	5,110	5,670	4,870	-----	2,420	1,400	1,250	3,270
15	4,790	5,270	5,590	4,790	-----	2,350	1,600	1,300	3,270
16	4,710	5,270	5,590	4,790	-----	2,210	1,720	1,400	3,350
17	4,630	5,270	5,590	4,790	-----	2,210	1,500	1,450	3,430
18	4,630	5,270	5,590	4,790	-----	2,080	1,500	1,450	3,430
19	4,550	5,430	5,590	4,870	-----	2,080	1,400	1,550	3,430
20	4,470	5,430	5,670	5,030	-----	2,080	1,300	1,550	3,430
21	4,470	5,430	5,930	5,030	-----	2,080	1,200	1,600	3,350
22	4,470	5,350	6,200	4,950	-----	2,080	1,200	1,660	3,350
23	4,470	5,350	6,110	4,950	-----	1,960	1,150	1,690	3,430
24	4,390	5,110	5,750	4,870	-----	1,900	1,160	1,720	3,430
25	4,310	5,030	5,670	4,870	-----	1,900	1,170	1,720	3,510
26	4,230	5,030	5,590	4,710	-----	1,840	1,180	1,840	3,510
27	4,150	5,030	5,510	4,790	4,150	1,780	1,180	1,960	3,510
28	4,150	4,950	5,430	4,790	3,990	1,780	1,130	2,020	3,590
29	4,150	4,950	5,350	5,110	3,830	1,720	1,050	2,130	3,590
30	4,150	4,950	5,430	-----	3,750	1,600	1,080	2,240	3,670
31	4,150	-----	5,430	-----	3,670	-----	1,080	2,350	-----

NOTE.—Station not operated Jan. 30 to May 26.

Monthly discharge of Sacramento River at Knights Landing, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	4,950	4,070	4,470	275,000
November	5,430	4,070	4,850	289,000
December	9,710	4,950	6,130	377,000
January 1-29	5,350	4,710	4,960	285,000
May 27-31	4,150	3,670	3,880	38,500
June	3,430	1,600	2,330	139,000
July	1,720	1,050	1,390	85,500
August	2,350	1,100	1,480	91,000
September	3,670	2,280	3,110	185,000

SACRAMENTO RIVER AT VERONA, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 23, T. 11 N., R. 3 E., three-fourths mile below mouth of Feather River, and three-fourths mile south of Verona, Sutter County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—May 1, 1926, to September 30, 1926, low-water records only.

GAGE.—Water-stage recorder fastened to pile near left bank.

DISCHARGE MEASUREMENTS.—Made from a boat.

CHANNEL AND CONTROL.—Shifting sandy channel controlled by levees. Control is cross section and slope of channel.

DIVERSIONS AND REGULATION.—There are large irrigation diversions above station as well as storage and power regulation on tributaries.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve well defined by 11 discharge measurements made during year. Records furnished by State department of public works.

Daily discharge, in second-feet, of Sacramento River at Verona, Calif., for the year ending September 30, 1926

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1-----	20,800	5,940	2,240	1,600	3,020	18-----	11,300	3,320	2,440	2,000	4,740
2-----	19,800	5,660	2,340	1,640	3,170	17-----	10,500	3,320	2,180	2,020	4,910
3-----	18,600	5,360	2,340	1,760	3,240	18-----	9,920	3,170	2,120	2,000	5,060
4-----	17,600	5,150	2,300	1,680	3,300	19-----	9,600	3,080	2,020	2,120	5,180
5-----	17,300	4,940	2,290	1,700	3,460	20-----	9,440	3,100	1,780	2,180	5,330
6-----	19,900	4,880	2,300	1,680	3,640	21-----	9,300	3,140	1,720	2,250	5,240
7-----	20,600	4,700	2,220	1,720	3,600	22-----	8,940	3,080	1,720	2,340	5,400
8-----	20,100	4,350	2,110	1,700	3,450	23-----	8,560	2,940	1,660	2,410	5,690
9-----	19,100	4,110	2,080	1,730	3,660	24-----	8,270	2,890	1,610	2,450	5,700
10-----	17,700	4,200	2,090	1,780	3,950	25-----	7,960	2,800	1,690	2,400	5,570
11-----	16,000	4,220	2,080	1,660	4,030	26-----	7,670	2,730	1,780	2,460	5,510
12-----	14,700	4,060	2,150	1,700	4,130	27-----	7,460	2,610	1,740	2,650	5,450
13-----	13,700	3,870	2,180	1,790	4,220	28-----	7,040	2,570	1,580	2,770	5,240
14-----	12,700	3,800	2,080	1,810	4,290	29-----	6,740	2,470	1,510	2,970	5,450
15-----	12,000	3,560	2,370	1,870	4,500	30-----	6,480	2,330	1,530	3,130	5,560
						31-----	6,290		1,560	3,160	

Monthly discharge of Sacramento River at Verona, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
May-----	20,800	6,290	12,780	785,000
June-----	5,940	2,330	3,745	223,000
July-----	2,440	1,510	1,904	123,000
August-----	3,160	1,600	2,101	123,000
September-----	5,700	3,020	4,523	269,000
The period-----				1,530,000

PIT RIVER BASIN

PIT RIVER NEAR BIEBER, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 34, T. 37 N., R. 7 E., 1 mile below dam site of proposed Big Valley Reservoir, at head of Muck Valley, and 8 miles south of Bieber, Lassen County.

DRAINAGE AREA.—2,950 square miles, not including drainage area of Goose Lake.

RECORDS AVAILABLE.—1904–1908, 1913–1914, and September 12, 1921, to September 30, 1926.

GAGE.—Inclined staff gage in three sections on right bank.

DISCHARGE MEASUREMENTS.—Made from cable or by wading.

CHANNEL AND CONTROL.—Boulders and solid rock; permanent except as affected by moss during low water in summer.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 5.6 feet February 5–7 (discharge, 1,700 second-feet); no flow September 6–30.

1904–1908, 1913–1914, and 1921–1926: Maximum stage recorded, 16.4 feet March 19, 1907 (discharge, 27,500 second-feet); no flow September 9–24, 1923, June 28 to October 12, 1924, and September 6–30, 1926.

DIVERSIONS.—There are numerous irrigation diversions above station.

ACCURACY.—Stage-discharge relation changed in November when moss was washed out. Rating curves fairly well defined. Staff gage read to half-tenths once daily. Daily discharge ascertained by applying gage height to rating table, except November 13-14 for which it was estimated. Records poor.

The following discharge measurement was made:

April 29, 1926: Gage height, 2.53 feet; discharge, 51 second-feet.

Daily discharge, in second-feet, of Pit River near Bieber, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8.5	54	215	155	1,000	675	142	55	18	10	5	1.0
2.....	7	54	250	155	1,000	640	120	37	18	10	5	1.0
3.....	7	50	285	155	1,160	640	110	37	16	10	5	.5
4.....	8.5	50	285	155	1,610	580	77	37	16	10	5	.5
5.....	10	45	285	155	1,700	550	65	45	16	10	5	.2
6.....	12	45	285	155	1,700	520	50	45	16	8.5	5	-----
7.....	14	41	285	130	1,700	520	50	55	16	8.5	5	-----
8.....	16	37	285	130	1,600	470	45	55	16	8.5	5	-----
9.....	22	45	285	130	1,420	420	45	60	16	8.5	5	-----
10.....	34	54	305	130	1,330	370	45	45	16	7	5	-----
11.....	34	78	305	130	1,000	370	77	41	16	7	5	-----
12.....	37	112	305	130	1,000	370	110	37	18	7	5	-----
13.....	37	127	232	130	850	370	155	29	18	7	5	-----
14.....	41	141	185	130	780	370	155	26	18	7	5	-----
15.....	41	155	185	130	640	348	155	23	18	6	5	-----
16.....	45	142	170	130	640	325	155	23	18	6	5	-----
17.....	41	142	170	130	640	325	155	23	16	6	5	-----
18.....	41	142	170	130	640	305	155	20	16	6	5	-----
19.....	50	130	155	130	640	285	155	23	16	6	5	-----
20.....	54	130	155	130	640	285	110	23	16	5	5	-----
21.....	54	130	185	130	640	285	77	26	16	5	5	-----
22.....	54	130	200	130	640	285	45	26	16	5	4	-----
23.....	60	130	215	130	710	285	45	29	16	5	4	-----
24.....	60	130	215	130	780	250	55	26	16	5	4	-----
25.....	65	130	243	130	780	232	55	26	14	5	3	-----
26.....	65	130	215	130	780	215	55	23	14	5	3	-----
27.....	72	130	185	130	780	215	84	20	12	5	2.2	-----
28.....	78	130	185	155	710	185	84	20	12	5	2.2	-----
29.....	78	130	185	370	-----	170	48	18	10	5	1.5	-----
30.....	78	155	185	470	-----	155	55	18	10	5	1.5	-----
31.....	65	-----	155	1,000	-----	155	-----	18	-----	5	1.5	-----

NOTE.—No flow Sept. 6-30.

Monthly discharge of Pit River near Bieber, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	78	7	41.6	2,560
November.....	155	37	103	6,130
December.....	305	155	225	13,800
January.....	1,000	130	182	11,200
February.....	1,700	640	979	54,400
March.....	675	155	360	22,100
April.....	155	45	91.1	5,420
May.....	55	18	31.6	1,940
June.....	18	10	15.7	934
July.....	10	5	6.74	414
August.....	5	1.5	4.25	261
September.....	1.0	.0	.11	6.5
The year.....	1,700	.0	165	119,000

PIT RIVER AT FALL RIVER MILLS, CALIF.

LOCATION.—In sec. 6, T. 36 N., R. 5 E., about three-fourths mile below mouth of Fall River, at Fall River Mills, Shasta County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—March 12, 1921, to September 30, 1926, not complete for 1923.

GAGE.—Water-stage recorder on right bank. From March 12, 1921, to October 22, 1922, gage was three-fourths mile upstream, 300 feet below junction of Fall and Pit Rivers.

DISCHARGE MEASUREMENTS.—Made from cables 300 feet and three-fourths mile, respectively, above gage or from footbridge 500 feet below gage.

CHANNEL AND CONTROL.—Lava rock and boulders; control partly overgrown with willows.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.26 feet at 11 a. m. February 6 (discharge, 1,860 second-feet); minimum stage, from water-stage recorder, -0.05 foot in afternoon of August 5 (discharge, 12 second-feet).

1921-1926: Maximum stage, from water-stage recorder, 5.96 feet at 8 a. m. April 4, 1922 (discharge, 7,330 second-feet); minimum stage, from water-stage recorder, -0.05 foot in afternoon of August 5, 1926 (discharge, 12 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—There are many irrigation diversions above gage. Since October 23, 1922, the Mount Shasta Power Corporation has diverted practically entire flow of Fall River for power development.

REGULATION.—The Mount Shasta Power Corporation, McArthur, and other diversions affect flow considerably.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve well defined. Daily discharge ascertained by applying mean daily gage height to rating table except August 10-16, for which it was estimated. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Mount Shasta Power Corporation.

Discharge measurements of Pit River at Fall River Mills, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 1.....	2.52	1,050	Aug. 18.....	0.45	51	Sept. 24.....	0.51	67
Aug. 5.....	-.05	11	Aug. 25.....	.45	57			
Aug. 6.....	-.02	15	Sept. 17.....	.53	70			

Daily discharge, in second-feet, of Pit River at Fall River Mills, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	79	150	248	202	1,000	684	185	110	86	89	34	67
2.....	77	157	307	185	1,070	660	160	116	97	95	28	65
3.....	76	160	362	202	930	625	160	137	95	102	24	65
4.....	76	160	323	213	950	590	150	116	82	86	20	71
5.....	79	157	291	199	1,440	578	150	130	104	80	15	67
6.....	88	154	323	202	1,790	554	163	144	94	80	15	61
7.....	83	154	335	210	1,610	530	196	137	97	77	32	51
8.....	83	154	335	199	1,610	510	248	132	83	61	179	54
9.....	83	140	315	192	1,520	536	291	132	88	53	192	63
10.....	83	132	291	192	1,290	542	291	126	107	57	70	53
11.....	94	142	279	188	1,110	520	291	110	110	78	65	56
12.....	112	174	267	210	1,000	495	385	112	105	75	38	66
13.....	118	202	250	210	920	465	376	112	100	75	54	65
14.....	116	244	244	202	821	440	295	102	104	73	57	60
15.....	114	220	227	196	794	420	252	97	92	69	52	47
16.....	140	196	248	216	821	405	241	95	82	88	54	75
17.....	128	196	248	224	839	390	241	104	100	74	66	75
18.....	124	216	263	227	758	376	227	98	105	74	63	71
19.....	120	224	248	210	767	371	230	107	105	60	60	70
20.....	122	220	362	196	1,060	371	224	105	95	68	68	68
21.....	128	220	216	192	1,180	366	196	104	74	60	55	68
22.....	132	196	252	224	990	358	168	90	60	51	44	68
23.....	132	210	244	216	1,010	344	140	94	50	65	68	68
24.....	132	199	244	224	911	315	140	109	80	65	63	70
25.....	130	192	275	234	830	279	174	84	88	57	63	67
26.....	130	192	267	227	776	295	160	86	84	57	65	67
27.....	134	199	241	230	785	283	163	112	94	62	65	68
28.....	152	202	234	248	758	267	154	90	88	63	61	63
29.....	154	210	230	420	-----	241	140	79	98	61	45	59
30.....	150	220	227	692	-----	192	124	86	94	47	48	70
31.....	154	-----	216	732	-----	188	-----	84	-----	41	80	-----

Monthly discharge of Pit River at Fall River Mills, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	154	76	114	7,010
November.....	244	132	186	11,100
December.....	362	216	272	16,700
January.....	732	185	249	15,300
February.....	1,790	758	1,050	58,300
March.....	684	188	425	26,100
April.....	385	124	210	12,500
May.....	144	79	108	6,640
June.....	110	50	91.4	5,440
July.....	102	41	69.2	4,250
August.....	192	15	59.5	3,660
September.....	75	47	64.6	3,840
The year.....	1,790	15	236	171,000

PIT RIVER AT LINDSAY FLAT, CALIF.

LOCATION.—In sec. 9, T. 36 N., R. 2 E., one-fourth mile above Pit No. 3 power house of the Mount Shasta Power Corporation, half a mile above Lindsay Flat, Shasta County, and 3 miles below mouth of Rock Creek.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 3, 1922, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from cable about 250 feet below gage or by wading.

CHANNEL AND CONTROL.—Rough, rocky, strewn with boulders; practically permanent. One channel at all stages; banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.78 feet at 7.30 a. m. March 14 (discharge, 2,380 second-feet); minimum stage, 0.74 foot September 1–25 (discharge, 42 second-feet).

1923–1926: Maximum stage from water-stage recorder, 8.64 feet 7 to 10 p. m. February 6, 1925 (discharge, 6,460 second-feet); minimum stage from water-stage recorder, 0.74 foot September 1–25, 1926 (discharge, 42 second-feet), owing to diversion for Pit No. 3 power house.

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—There are numerous irrigation diversions from Pit River and tributaries above gage, and beginning June 18, 1925, varying amounts have been stored and diverted for Pit No. 3 development. Flow through Pit No. 3 power house is given on page 266 and must be added to give total flow of the river.

REGULATION.—The flow is completely regulated at Pit No. 3 dam during low and medium stages.

ACCURACY.—Stage-discharge relation changed slightly during April. Rating curves fairly well defined. Water-stage recorder gave satisfactory record except May 9–10, June 6, August 8–9. Daily discharge ascertained by applying mean daily gage height to rating table, except for days of no gage-height record, for which it was estimated. Records excellent.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Mount Shasta Power Corporation.

Discharge measurements of Pit River at Lindsay Flat, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Apr. 15.....	4.59	1,310	Sept. 15.....	0.74	46
Apr. 28.....	1.23	73	Sept. 19.....	.74	38

Daily discharge, in second-feet, of Pit River at Lindsay Flat, Calif., for the year ending September, 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	93	117	127	1,000	750	965	75	64	58	47	42
2	83	96	134	127	1,070	700	965	75	63	58	47	42
3	84	93	115	127	1,000	650	930	74	63	58	47	42
4	85	93	109	127	1,140	650	930	76	63	57	47	42
5	86	92	108	127	1,620	600	1,040	76	63	57	47	42
6	87	92	108	126	2,150	568	1,100	75	62	57	47	42
7	86	94	108	126	2,100	1,420	1,220	72	62	57	47	42
8	86	93	108	125	1,960	914	1,300	71	61	52	47	42
9	87	95	108	125	1,870	875	1,420	71	61	50	47	42
10	88	96	108	123	1,700	675	1,460	71	61	50	47	42
11	88	101	108	123	1,500	596	1,460	71	61	50	47	42
12	88	111	108	123	1,260	564	1,460	71	61	50	46	42
13	88	102	109	123	1,140	547	1,460	71	61	49	46	42
14	89	102	109	123	1,340	690	1,380	71	61	49	46	42
15	90	102	109	123	1,040	450	1,300	71	61	49	45	42
16	90	103	109	123	1,070	428	1,220	71	61	50	44	42
17	91	103	110	125	1,040	425	1,180	71	60	49	44	42
18	92	102	112	123	870	398	1,140	71	60	48	44	42
19	93	102	115	122	965	389	1,140	71	61	48	44	42
20	93	102	737	121	1,340	431	1,140	71	62	48	44	42
21	95	102	142	120	1,420	652	1,100	71	62	48	44	42
22	95	102	131	120	1,260	1,140	725	71	63	48	44	42
23	96	103	130	120	1,180	1,220	450	71	63	48	44	42
24	96	104	130	120	1,100	1,180	153	71	64	48	44	42
25	298	105	130	118	965	1,140	88	67	64	47	44	42
26	95	106	130	117	900	1,140	82	63	65	47	44	42
27	93	107	130	116	840	1,100	76	64	65	47	44	42
28	93	108	128	120	780	1,100	75	64	64	47	44	43
29	93	109	127	125	-----	1,070	75	64	64	47	44	44
30	93	111	127	121	-----	1,040	75	64	59	47	43	44
31	93	-----	127	325	-----	1,000	-----	64	-----	47	-----	-----

Monthly discharge of Pit River at Lindsay Flat, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	298	83	96.7	5,950
November	111	92	101	6,010
December	737	108	138	8,480
January	325	116	129	7,930
February	2,150	780	1,270	70,500
March	1,420	389	784	48,200
April	1,460	75	904	53,800
May	76	63	70.3	4,320
June	65	59	62.2	3,700
July	58	47	50.5	3,110
August	47	42	45.2	2,780
September	44	42	42.2	2,510
The year	2,150	42	300	217,000

Daily discharge, in second-feet, through Pit No. 3 power house at Lindsay Flat, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,729	1,800	1,988	1,773	1,947	1,947	1,155	2,335	1,701	1,737	1,701	1,755
2	1,738	1,885	2,021	1,673	1,947	1,967	1,133	2,293	1,849	1,737	1,613	1,755
3	1,756	1,798	1,888	1,781	2,004	1,988	1,133	2,005	1,792	1,792	1,613	1,737
4	1,779	1,701	2,021	1,562	1,947	1,988	1,133	1,891	1,737	1,650	1,665	1,755
5	1,830	1,882	1,990	1,774	1,988	1,967	1,133	1,868	1,792	1,648	1,683	1,755
6	1,830	1,927	1,828	1,798	1,947	1,967	1,133	1,849	1,685	1,664	1,683	1,737
7	1,832	1,947	2,015	1,760	1,967	556	1,133	1,792	1,630	1,664	1,648	1,683
8	1,853	1,834	2,021	1,809	1,967	1,927	1,112	1,792	1,630	1,701	1,648	1,719
9	1,865	1,797	1,988	1,916	1,967	1,947	1,133	1,830	1,630	1,755	1,596	1,701
10	1,825	1,622	2,044	1,766	1,947	1,967	1,133	1,849	1,773	1,721	1,562	1,737
11	1,818	1,811	2,005	1,755	1,988	1,947	1,133	1,811	1,737	1,773	1,585	1,737
12	1,800	2,000	2,005	1,737	1,967	1,967	1,133	1,701	1,792	1,708	1,630	1,719
13	1,877	1,931	2,021	1,447	1,907	1,947	1,133	1,579	1,701	1,719	1,665	1,685
14	1,902	1,873	1,894	1,615	1,744	1,875	1,112	1,579	1,630	1,721	1,701	1,665
15	1,907	1,852	1,883	1,715	1,947	1,927	1,133	1,529	1,648	1,701	1,648	1,596
16	1,843	2,112	1,845	1,849	1,967	1,967	1,133	1,512	1,719	1,701	1,665	1,631
17	1,763	2,039	1,711	1,830	1,947	1,967	1,133	1,512	1,737	1,701	1,701	1,648
18	1,755	1,957	1,965	1,907	1,947	1,947	1,133	1,529	1,683	1,701	1,701	1,683
19	1,811	1,948	1,933	1,888	1,947	1,947	1,112	1,496	1,685	1,701	1,701	1,613
20	1,811	1,858	1,533	1,907	1,967	1,988	1,133	1,579	1,630	1,755	1,719	1,648
21	1,783	2,043	1,874	1,849	1,967	1,537	1,230	1,545	1,701	1,664	1,701	1,648
22	1,776	1,896	1,915	1,811	1,967	1,133	1,529	1,630	1,773	1,683	1,683	1,690
23	1,762	1,779	1,864	1,888	1,967	1,155	1,849	1,773	1,630	1,683	1,701	1,683
24	1,801	1,888	2,052	1,792	1,947	1,133	2,293	1,613	1,685	1,701	1,701	1,683
25	1,142	1,907	1,958	1,888	1,988	1,155	2,270	1,701	1,596	1,648	1,683	1,701
26	1,737	1,748	1,886	2,004	1,967	1,133	2,293	1,755	1,665	1,630	1,683	1,719
27	1,799	1,849	1,956	2,043	1,988	1,155	2,354	1,967	1,683	1,630	1,701	1,683
28	1,806	1,947	1,999	2,021	1,967	1,133	2,354	1,888	1,755	1,701	1,683	1,701
29	1,888	1,769	1,833	1,664	-----	1,133	2,342	1,907	1,701	1,719	1,701	1,719
30	1,825	1,952	1,605	1,849	-----	1,133	2,293	1,707	1,685	1,701	1,719	1,719
31	1,954	-----	1,888	1,562	-----	1,133	-----	1,633	-----	1,683	1,665	-----

NOTE.—Discharge computed by Mount Shasta Power Corporation from kilowatt-hour output and discharge through relief valve.

Monthly discharge through Pit No. 3 power house at Lindsay Flat, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	1,954	1,142	1,793	110,000
November	2,112	1,622	1,878	112,000
December	2,052	1,533	1,917	118,000
January	2,043	1,447	1,795	110,000
February	2,004	1,744	1,954	109,000
March	1,988	556	1,633	100,000
April	2,354	1,112	1,448	86,200
May	2,335	1,496	1,756	108,000
June	1,849	1,596	1,702	101,000
July	1,792	1,630	1,700	105,000
August	1,719	1,562	1,669	103,000
September	1,755	1,596	1,697	101,000
The year	2,354	556	1,744	1,260,000

PIT RIVER AT BIG BEND, CALIF.

LOCATION.—In sec. 36, T. 37 N., R. 1. W., at site of former Big Bend Ferry, one-fourth mile above Big Bend post office, Shasta County. Nelson Creek enters half a mile above and Kosk Creek 1 mile below station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 28, 1910, to September 30, 1926.

GAGE.—Water-stage recorder on left bank about 300 feet below highway bridge.

DISCHARGE MEASUREMENTS.—Made from cable 25 feet downstream from water-stage recorder.

CHANNEL AND CONTROL.—Rough; boulders and coarse gravel; practically permanent. One channel at all stages; banks not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 9.72 feet at 11 a. m. February 6 (discharge, 4,940 second-feet); minimum stage from water-stage recorder, 6.87 feet at 9 a. m. March 7 (discharge, 839 second-feet), owing to operation of Pit No. 3 power plant.

1910-1926. Maximum stage from water-stage recorder, 5.39 feet at 8 p. m. April 25, 1917 (discharge, 13,600 second-feet); minimum stage from water-stage recorder, 6.62 feet from 10 p. m. on July 9 to 2 a. m. on July 10, 1925 (discharge, 664 second-feet), owing to storage at Pit No. 3 reservoir.

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—Considerable water is diverted for irrigation in Fall River and Hat Creek Valleys.

REGULATION.—The plants of the Mount Shasta Power Corporation affect flow considerably.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table for period February 1 to May 2 and October 1 and 2, except February 14, March 7, 21, April 25 and 26, for which hourly discharge was averaged. Discharge determined October 3 to January 31 and May 3 to September 30 by using discharge integrator, except for December 6 and 18-22, for which discharge was estimated by comparison with record for Pit River near Ydalpom. Records excellent.

The following discharge measurement was made:

April 26, 1926; Gage height, 8.47 feet; discharge, 2,540 second-feet.

Daily discharge, in second-feet, of Pit River at Big Bend, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,810	2,040	2,340	2,040	3,170	3,000	2,220	2,600	1,850	1,850	1,760	1,860
2	1,880	2,100	2,420	2,130	3,350	3,000	2,220	2,600	1,980	1,870	1,740	1,860
3	1,920	2,040	2,170	2,000	3,350	2,920	2,150	2,340	1,940	1,900	1,740	1,890
4	1,930	2,140	2,300	1,940	3,820	2,920	2,220	2,220	1,700	1,780	1,780	1,840
5	1,980	2,100	2,180	1,970	4,310	2,920	2,220	2,160	1,890	1,750	1,820	1,840
6	2,040	2,140	2,260	2,000	4,940	2,840	2,370	2,130	1,820	1,740	1,780	1,840
7	2,020	2,110	2,350	2,040	4,840	2,060	2,600	2,090	1,700	1,780	1,800	1,780
8	2,040	2,090	2,320	2,120	4,620	3,440	2,680	2,060	1,730	1,790	1,760	1,790
9	2,030	2,060	2,270	2,240	4,420	3,000	2,760	2,040	1,720	1,800	1,740	1,800
10	2,000	2,030	2,260	2,170	4,210	2,920	2,760	2,040	1,880	1,830	1,680	1,800
11	1,980	2,080	2,380	2,050	3,910	2,840	2,760	2,020	1,820	1,800	1,660	1,790
12	2,040	2,320	2,300	2,000	3,620	2,840	2,760	1,930	1,840	1,780	1,720	1,780
13	2,130	2,200	2,260	1,860	3,440	2,760	2,760	1,780	1,770	1,780	1,760	1,770
14	2,110	2,280	2,200	1,730	3,190	2,680	2,680	1,700	1,660	1,800	1,800	1,720
15	2,120	2,100	2,190	1,880	3,440	2,680	2,600	1,680	1,690	1,790	1,740	1,680
16	2,080	2,440	2,160	1,970	3,440	2,680	2,520	1,640	1,760	1,780	1,780	1,680
17	2,010	2,470	2,180	2,000	3,350	2,600	2,440	1,600	1,820	1,810	1,820	1,650
18	1,960	2,310	2,400	2,040	3,260	2,600	2,440	1,680	1,800	1,740	1,780	1,680
19	1,970	2,260	2,400	2,080	3,440	2,600	2,370	1,670	1,680	1,760	1,780	1,670
20	2,020	2,180	2,200	2,100	3,720	2,600	2,370	1,660	1,720	1,660	1,790	1,650
21	1,980	2,210	2,040	2,120	3,820	2,180	2,440	1,650	1,810	1,680	1,800	1,680
22	1,980	2,210	2,280	2,010	3,720	2,370	2,520	1,730	1,910	1,710	1,760	1,700
23	1,980	2,020	2,170	2,260	3,530	2,440	2,520	1,880	1,740	1,730	1,780	1,720
24	2,000	2,120	2,220	2,000	3,440	2,440	2,980	1,780	1,730	1,720	1,770	1,710
25	1,870	2,580	2,300	2,240	3,350	2,370	2,580	1,770	1,720	1,640	1,770	1,740
26	1,940	2,240	2,180	2,220	3,170	2,370	2,600	1,860	1,740	1,680	1,780	1,770
27	2,000	2,040	2,280	2,270	3,170	2,370	2,600	2,040	1,760	1,620	1,770	1,810
28	2,080	2,140	2,280	2,320	3,080	2,370	2,600	2,050	1,840	1,700	1,780	1,780
29	2,100	2,180	2,200	2,080	-----	2,370	2,600	2,100	1,880	1,690	1,760	1,760
30	2,010	2,180	2,120	2,050	-----	2,300	2,600	1,980	1,750	1,700	1,780	1,780
31	2,110	-----	2,060	2,130	-----	2,300	-----	1,780	-----	1,730	1,750	-----

Monthly discharge of Pit River at Big Bend, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2,130	1,810	2,000	123,000
November.....	2,580	2,020	2,180	130,000
December.....	2,420	2,040	2,250	138,000
January.....	2,320	1,730	2,070	127,000
February.....	4,940	3,080	3,680	204,000
March.....	3,440	2,060	2,640	162,000
April.....	2,760	2,150	2,520	150,000
May.....	2,600	1,600	1,940	119,000
June.....	1,980	1,660	1,790	107,000
July.....	1,900	1,620	1,750	108,000
August.....	1,820	1,660	1,770	109,000
September.....	1,890	1,650	1,760	105,000
The year.....	4,940	1,600	2,190	1,580,000

PIT RIVER NEAR YDALPOM, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 32, T. 34 N., R. 3 W., at Silverthorne Ferry, $1\frac{1}{2}$ miles southwest of Ydalpom, Shasta County, and $7\frac{1}{2}$ miles above junction with Sacramento River. Squaw Creek enters half a mile above and McCloud River 4 miles below station.

DRAINAGE AREA.^a—5,260 square miles not including drainage area of Goose Lake.

RECORDS AVAILABLE.—November 16, 1910, to September 30, 1923; May 1, 1924, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on left bank about 100 feet above ferry.

DISCHARGE MEASUREMENTS.—Made from cable 15 feet below gage.

CHANNEL AND CONTROL.—Boulders and gravel, practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage, from water-stage recorder, 14.75 feet at 1 p. m. February 4 (discharge, 26,000 second-feet); minimum stage, from water-stage recorder, 4.17 feet at 4 p. m. August 11 (discharge, 1,370 second-feet), regulated by operation of Pit No. 3 power plant.

1910–1926: Maximum stage recorded, 18.2 feet December 31, 1913 (discharge, from extension of rating curve, about 47,000 second-feet); minimum stage, 3.54 feet 10 a. m. to 2 p. m. July 10, 1925 (discharge, 1,000 second-feet), owing to storage at Pit No. 3 reservoir.

DIVERSIONS.—See Pit River at Big Bend.

REGULATION.—See Pit River at Big Bend.

ACCURACY.—Stage-discharge relation changed slightly February 4. Rating curves well defined. Recorder record excellent. Daily discharge ascertained by discharge integrator October 1 to January 30, May 3 to September 30, and by applying mean daily gage height to rating table January 31 to May 2, except February 4, for which hourly discharge was averaged, and September 4, for which discharge was interpolated. Records excellent.

Discharge measurements of Pit River near Ydalpom, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 19.....	4.43	1,740	Apr. 29.....	5.67	3,170
Apr. 29.....	5.66	3,200	Sept. 23.....	4.32	1,510

^a See drainage area of Sacramento River near Red Bluff.

Daily discharge, in second-feet, of Pit River near Ydalpom, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2,060	2,340	3,830	2,360	5,920	4,520	2,860	3,160	1,980	1,890	1,900	1,900
2.....	2,080	2,290	4,230	2,290	5,200	4,440	2,780	3,080	2,220	1,940	1,820	1,920
3.....	2,090	2,280	3,050	2,310	8,220	4,260	2,780	2,840	2,200	1,980	1,800	1,920
4.....	2,120	2,300	2,730	2,250	20,100	4,180	2,860	2,870	2,140	1,940	1,810	1,920
5.....	2,160	2,340	2,760	2,220	13,600	4,100	3,160	2,880	2,210	1,880	1,840	1,910
6.....	2,360	2,300	2,660	2,210	12,500	4,020	3,540	2,820	2,120	1,840	1,860	1,870
7.....	2,260	2,320	2,460	2,340	10,900	3,160	4,180	2,820	1,930	1,880	1,860	1,860
8.....	2,240	2,330	2,640	2,300	8,840	4,860	6,160	2,740	2,040	1,920	1,830	1,860
9.....	2,250	2,240	2,570	2,440	7,740	4,440	5,400	2,660	1,920	1,920	1,810	1,840
10.....	2,240	2,360	2,600	2,480	6,920	4,180	4,860	2,610	2,120	1,940	1,770	1,880
11.....	2,220	2,520	2,560	2,260	6,350	4,020	5,040	2,540	2,100	1,950	1,740	1,880
12.....	2,160	2,960	2,560	2,240	5,970	3,860	4,520	2,470	2,060	1,950	1,750	1,870
13.....	2,320	2,860	2,620	2,220	5,400	3,780	4,350	2,310	2,130	1,930	1,800	1,860
14.....	2,300	2,420	2,520	2,090	5,040	3,700	4,100	2,200	1,860	1,910	1,880	1,840
15.....	2,330	2,420	2,480	2,140	8,180	3,620	3,860	2,180	1,970	1,930	1,860	1,790
16.....	2,310	2,760	2,420	2,160	8,620	3,620	3,700	2,100	2,020	1,910	1,820	1,790
17.....	2,240	2,890	2,450	2,440	6,730	3,540	3,620	2,040	2,040	1,940	1,880	1,800
18.....	2,160	2,680	2,670	2,380	5,970	3,460	3,620	2,090	2,060	1,920	1,870	1,820
19.....	2,170	2,520	3,150	2,370	7,120	3,480	3,460	2,110	1,940	1,900	1,880	1,820
20.....	2,220	2,580	2,780	2,380	8,180	3,380	3,300	2,050	1,930	1,850	1,860	1,780
21.....	2,180	2,440	2,320	2,400	7,120	3,160	3,300	2,030	1,940	1,780	1,860	1,820
22.....	2,190	2,540	2,660	2,300	6,540	3,000	3,380	2,020	2,020	1,880	1,860	1,820
23.....	2,140	2,420	2,580	2,300	5,970	3,230	3,300	2,280	1,940	1,900	1,840	1,780
24.....	2,150	2,340	2,580	2,380	5,590	3,230	3,380	2,140	1,890	1,890	1,860	1,820
25.....	2,150	2,350	2,520	2,360	5,220	3,160	3,300	2,060	1,860	1,880	1,860	1,820
26.....	2,050	2,360	2,570	2,520	5,040	3,080	3,300	2,160	1,880	1,810	1,860	1,840
27.....	2,140	2,330	2,540	2,540	4,860	3,000	3,230	2,230	1,920	1,820	1,840	1,840
28.....	2,190	2,280	2,660	3,080	4,690	3,000	3,230	2,340	1,940	1,850	1,860	1,840
29.....	2,260	2,420	2,580	4,580	-----	2,930	3,160	2,320	1,980	1,910	1,860	1,830
30.....	2,290	2,520	2,440	3,460	-----	2,930	3,160	2,280	1,890	1,920	1,880	1,830
31.....	2,200	-----	2,400	7,090	-----	2,860	-----	2,080	-----	1,910	1,860	-----

Monthly discharge of Pit River near Ydalpom, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2,360	2,060	2,200	135,000
November.....	2,980	2,240	2,460	146,000
December.....	4,230	2,320	2,700	166,000
January.....	7,030	2,090	2,610	160,000
February.....	20,100	4,690	7,590	422,000
March.....	4,860	2,860	3,620	223,000
April.....	6,160	2,780	3,700	220,000
May.....	3,160	2,020	2,400	148,000
June.....	2,220	1,860	2,010	120,000
July.....	1,980	1,780	1,900	117,000
August.....	1,900	1,740	1,840	113,000
September.....	1,920	1,780	1,850	110,000
The year.....	20,100	1,740	2,870	2,080,000

PINE CREEK NEAR ALTURAS, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 35, T. 42'N., R. 13 E., at Alturas Electric Light & Power Co.'s power house, 6 miles above mouth of creek and 9 miles south-east of Alturas, Modoc County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—May 27, 1918, to September 30, 1926.

GAGE.—Vertical staff fastened to wall of machine shop on left bank, 30 feet below discharge pipe of power plant; read by power-house operator.

DISCHARGE MEASUREMENTS.—Made by wading or from footbridge above gage.

CHANNEL AND CONTROL.—Large irregular boulders and gravel; rough; may shift somewhat. Left bank is a sloping stone wall; right bank slopes gradually. Channel straight above and below gage.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 2.16 feet at 5 p. m. February 7 (discharge, 54 second-feet); minimum stage recorded, 0.70 foot at 10 a. m. August 11 (discharge, 3.5 second-feet).

1918-1926: Maximum stage recorded, 3.20 feet at 5 p. m. March 29, 1919, and 5 p. m. December 30, 1920 (discharge, 147 second-feet); minimum stage, 0.8 foot at 10.30 a. m. January 5 and 7.30 a. m. January 26, 1919 (discharge, 2.3 second-feet).

DIVERIONS.—The Alturas Electric Light & Power Co.'s canal diverts water above gage and returns it to the creek 30 feet above gage.

REGULATION.—Diurnal fluctuation caused by operation of power plant just above gage.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve fairly well defined. Gage read to hundredths twice daily, except May 25. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

COOPERATION.—Gage-height record furnished by I. W. Gibbins.

The following discharge measurements were made:

April 30, 1926: Gage height, 1.94 feet; discharge, 39 second-feet.

April 30, 1926: Gage height, 1.95 feet; discharge, 39 second-feet.

Daily discharge, in second-feet, of Pine Creek near Alturas, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12	14	37	14	26	13	18	40	33	15	11	11
2.....	12	14	38	15	20	12	19	37	32	14	10	11
3.....	12	14	22	14	20	13	18	40	30	14	11	11
4.....	10	12	20	18	26	12	17	44	28	12	14	11
5.....	13	12	18	16	20	12	24	45	30	12	15	8.5
6.....	16	13	15	15	20	12	24	45	26	14	12	9.5
7.....	13	12	16	13	36	12	34	45	25	13	14	10
8.....	12	15	16	13	24	12	28	44	27	13	10	14
9.....	14	15	16	14	16	15	27	40	28	12	14	13
10.....	13	14	18	13	14	13	31	38	25	14	12	12
11.....	12	14	20	14	13	12	39	38	24	13	6.5	12
12.....	14	17	18	14	16	12	30	36	27	13	12	7.5
13.....	15	15	13	14	14	15	28	35	21	13	12	10
14.....	13	13	14	15	14	16	26	34	22	12	13	10
15.....	14	15	16	16	16	20	24	37	22	12	10	10
16.....	14	16	14	15	14	19	29	30	22	12	11	9
17.....	13	16	17	12	13	19	34	32	26	12	11	9
18.....	12	15	17	16	12	18	28	32	24	9	11	10
19.....	14	13	16	14	13	17	29	33	24	12	11	9
20.....	13	12	15	12	14	16	30	32	18	12	10	9.5
21.....	16	15	18	14	14	15	26	32	24	12	10	10
22.....	16	12	17	15	15	16	30	36	24	12	8	10
23.....	14	16	16	13	20	18	32	34	24	12	10	10
24.....	16	17	16	12	28	18	32	44	22	12	11	10
25.....	14	16	14	11	20	17	34	42	18	11	12	11
26.....	13	14	14	14	18	16	36	39	14	12	11	9.5
27.....	16	16	14	14	14	16	35	38	14	14	11	10
28.....	15	14	12	15	14	20	38	37	8.5	11	11	12
29.....	15	14	16	28	-----	20	37	37	16	12	8	15
30.....	17	12	18	20	-----	18	40	33	17	14	8	13
31.....	17	-----	15	22	-----	17	-----	34	-----	14	9	-----

Monthly discharge of Pine Creek near Alturas, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	17	10	13.9	855
November.....	17	12	14.2	845
December.....	38	12	17.6	1,080
January.....	28	11	15.0	922
February.....	36	12	18.0	1,000
March.....	20	12	15.5	953
April.....	40	17	29.2	1,740
May.....	45	30	37.5	2,310
June.....	33	8.5	23.2	1,380
July.....	15	9	12.5	769
August.....	15	6.5	11.0	676
September.....	15	7.5	10.6	631
The year.....	45	6.5	18.2	13,200

BEAR CREEK NEAR DANA, CALIF.

LOCATION.—In sec. 1, T. 38 N., R. 3 E., 2 miles north of Dana, Shasta County, and above all large springs supplying lower Bear Creek and Fall River.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—March 31, 1921, to May 31, 1926, when station was discontinued.

AGE.—Inclined and vertical staffs on right bank about 500 feet below C. A. Erickson ranch house.

DISCHARGE MEASUREMENTS.—Made from cable 50 feet below gage or by wading.

CHANNEL AND CONTROL.—One straight channel with high banks; rough, rocky, and practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 4.0 feet on February 7 (discharge, 192 second-feet); creek dry for several months.

1921-1926: Maximum stage recorded, 6.0 feet February 6, 1925 (discharge, 562 second-feet); creek dry several months in 1923, 1924, 1925, and 1926.

ICE.—Stage-discharge relation affected by ice December 24 to January 23.

DIVERSIONS.—Two small irrigation ditches divert above gage, but probably do not aggregate more than 5 second-feet.

REGULATION.—None.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve fairly well defined. Gage read to hundredths once daily except during ice period. Daily discharge ascertained by applying daily gage reading to rating table; mean monthly discharge estimated for January. Records fair.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Mount Shasta Power Corporation.

The following discharge measurements were made:

April 12, 1926: Gage height, 3.24 feet; discharge, 86 second-feet.

April 28, 1926: Gage height, 1.95 feet; discharge, 17 second-feet.

Daily discharge, in second-feet, of Bear Creek near Dana, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Feb.	Mar.	Apr.	May	Day	Nov.	Dec.	Feb.	Mar.	Apr.	May
1.....		1.2		28	47	11.0	16.....	1.3	11	23	83	58	4.6
2.....		41		29	48	9	17.....	1.5	9	24	85	50	3.2
3.....		32	2.8	29	75	8	18.....	1.2	8	32	87	50	2.8
4.....		16	47	31	86	8	19.....	1.1	8	29	86	46	2.5
5.....		15	118	32	93	26	20.....	1.0	7.5	27	84	42	2.3
6.....		15	121	40	105	29	21.....	1.0	5.5	25	82	40	2.1
7.....		14	192	45	126	31	22.....	.9	5.5	23	80	36	1.8
8.....		14	161	56	172	30	23.....	.8	5	23	73	31	1.7
9.....		14	131	106	146	27	24.....	.8		25	66	30	1.6
10.....		14	116	75	115	15	25.....	.7		27	58	29	1.4
11.....	0.4	13	75	77	116	14	26.....	.7		27	51	27	1.3
12.....	1.2	13	68	78	94	11	27.....	1.0	4.5	28	50	23	1.2
13.....	8.5	12	61	80	92	7.5	28.....	1.2		28	49	19	1.1
14.....	1.9	11	51	80	75	5.5	29.....	1.2			48	15	1.1
15.....	.4	11	41	82	69	5	30.....	1.1			46	22	1.0
							31.....				45		1.0

NOTE.—Braced figures show estimated mean discharge for period indicated. No flow Oct. 1 to Nov. 10 and Jan. 24 to Feb. 2.

Monthly discharge of Bear Creek near Dana, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean.	
November.....	8.5	0	0.93	55.3
December.....	41	1.2	10.7	658
January.....		0	2.0	123
February.....	192	0	54.5	3,030
March.....	106	28	62.6	3,850
April.....	172	15	65.9	3,920
May.....	31	1.0	8.64	531
The period.....				12,200

* Estimated.

McARTHUR DRAINAGE CANAL AT McARTHUR, CALIF.

LOCATION.—At county bridge at McArthur, Shasta County.

RECORDS AVAILABLE.—December 1, 1923, to September 30, 1926.

GAGE.—Staff gage attached to downstream side of right abutment of bridge, about 200 feet above gates controlling the canal spillway to Pit River.

DISCHARGE MEASUREMENTS.—Made from the county bridge, by wading, or at check gate $1\frac{1}{4}$ miles upstream.

CHANNEL AND CONTROL.—Channel has been cut through fine soil. Spillway gates 200 feet below gage control stage-discharge relation.

ACCURACY.—On account of regulation below gage and moss in the channel the stage-discharge relation changes continually. The daily discharge given is the result of the current-meter measurement for the day and may not be the mean discharge for the day.

COOPERATION.—Records furnished by Mount Shasta Power Corporation.

McArthur Canal diverts from the headwaters of Fall River, one heading at Tule Lake and another at Tule River. It is used both for irrigation and drainage of lands on the north side of Pit River near McArthur. At McArthur a pipe having a capacity of about 33 second-feet diverts from the canal for irrigation on the south side of Pit River; a second pipe diverts from 3 to 6 second-feet for the local hydroelectric plant; the remainder is spilled into Pit River and is included in the discharge of Pit River at Fall River Mills.

Daily discharge, in second-feet, of McArthur Drainage Canal at McArthur, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	39	43	46	43	80	70	63	53	58	82	-----	41
2.....	40	45	-----	42	78	76	63	-----	57	83	-----	41
3.....	39	44	46	43	71	75	61	52	50	68	-----	41
4.....	41	43	45	43	92	74	63	54	54	62	-----	40
5.....	40	42	44	44	87	73	68	55	64	56	-----	39
6.....	41	40	44	44	82	73	67	58	62	52	-----	40
7.....	40	43	46	45	-----	68	57	71	44	169	-----	40
8.....	40	44	44	44	81	76	69	57	75	51	186	41
9.....	41	44	44	44	78	85	69	-----	74	46	185	41
10.....	41	44	42	44	81	78	67	54	75	53	5	40
11.....	-----	44	43	36	80	76	-----	54	77	47	96	40
12.....	42	48	44	70	77	72	69	54	79	49	48	42
13.....	45	46	43	68	72	71	-----	53	72	39	43	41
14.....	44	46	43	64	-----	65	51	74	41	40	41	41
15.....	43	45	44	60	72	65	62	54	75	43	41	41
16.....	42	45	44	59	82	71	64	51	74	43	39	40
17.....	44	45	43	60	78	73	60	52	76	44	40	39
18.....	42	45	45	59	74	67	-----	54	78	45	41	40
19.....	42	45	44	59	96	67	62	52	77	46	42	40
20.....	42	44	-----	59	112	66	61	51	51	45	42	40
21.....	43	45	46	59	98	-----	59	51	33	43	39	41
22.....	43	45	45	60	99	65	62	54	21	47	40	41
23.....	43	44	45	60	92	66	57	66	13	48	39	40
24.....	42	44	44	-----	91	65	56	58	91	46	40	40
25.....	43	45	45	57	78	66	54	55	79	48	39	41
26.....	43	-----	45	60	77	65	56	54	79	44	43	40
27.....	43	45	44	60	76	65	57	55	79	47	42	41
28.....	42	45	44	61	-----	-----	55	53	87	45	40	40
29.....	42	45	44	68	-----	64	53	43	84	30	40	41
30.....	42	45	43	73	-----	64	52	56	85	8	40	42
31.....	42	-----	43	-----	-----	63	-----	50	-----	4	40	-----

NOTE.—No discharge measurement made on days for which discharge is not given.

HAT CREEK NEAR HAT CREEK, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 28, T. 33 N., R. 5 E., at Cave Camp of United States Forest Service, 5 miles below Big Springs and 11 miles southeast of Hat Creek, Shasta County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—July 7 to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from suspension footbridge at gage or by wading.

CHANNEL AND CONTROL.—Sand, gravel, and boulders; shifts continuously. Channel straight for 300 feet above gage. One channel at all stages. Banks are low and wooded; will not be overflowed.

DIVERSIONS.—Five ranches divert water for irrigation and domestic use above gage.

REGULATION.—None.

EXTREMES OF DISCHARGE.—Maximum discharge, 108 second-feet August 8; minimum discharge, 79 second-feet September 4-6.

ACCURACY.—Stage-discharge relation changing continuously. Standard rating curve fairly well defined. Water-stage recorder record good. Daily discharge ascertained by shifting-control method. Records fair.

Discharge measurements of Hat Creek near Hat Creek, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
June 15.....	1.12	107	July 19.....	1.01	98	Aug. 18.....	0.86	92
June 16.....	1.09	105	Aug. 8.....	.93	108	Aug. 25.....	.91	92
June 23.....	1.14	108	Aug. 10.....	.88	83	Sept. 6.....	.82	81
June 29.....	1.11	108	Aug. 13.....	.86	82	Sept. 12.....	.89	96

Daily discharge, in second-feet, of Hat Creek near Hat Creek, Calif., for the year ending September 30, 1926

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....		95	87	11.....	96	84	94	21.....	91	93	94
2.....		94	84	12.....	95	83	95	22.....	91	93	94
3.....		95	80	13.....	95	82	94	23.....	91	92	94
4.....		98	79	14.....	95	83	94	24.....	91	91	94
5.....		100	79	15.....	94	84	95	25.....	91	91	93
6.....		103	79	16.....	94	86	95	26.....	91	92	93
7.....	95	105	81	17.....	94	89	95	27.....	91	91	92
8.....	96	108	86	18.....	95	91	95	28.....	91	90	92
9.....	95	95	90	19.....	96	93	94	29.....	91	88	93
10.....	96	85	91	20.....	92	95	94	30.....	94	88	94
								31.....	96	87	

Monthly discharge of Hat Creek near Hat Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
July 7-31.....	96	91	93.5	4,640
August.....	108	82	91.7	5,640
September.....	95	79	90.5	5,390
The period.....				15,700

HAT CREEK AT BROWN'S RANCH, NEAR HAT CREEK, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 8, T. 33 N., R. 5 E., at Brown's ranch, $6\frac{1}{2}$ miles southeast of Hat Creek, Shasta County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—June 10 to October 16, 1926, when station was discontinued.

GAGE.—Water-stage recorder in concrete well and shelter on left bank.

DISCHARGE MEASUREMENTS.—Made from suspension footbridge at gage or by wading.

CHANNEL AND CONTROL.—Sand, gravel, and boulders; will shift slightly.

DIVERSIONS.—Six ranches above gage divert water for irrigation and domestic use. For estimated amount of water diverted past gage see page 276.

REGULATION.—None.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 2.92 feet June 27–28 (discharge, 114 second-feet); minimum stage, from water-stage recorder, 2.77 feet September 7 (discharge, 80 second-feet).

ACCURACY.—Stage-discharge relation did not change during period. Rating curve fairly well defined. Water-stage recorder record good. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Hat Creek at Brown's ranch, near Hat Creek, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
May 10.....	2. 98	135	June 29.....	2. 92	118	Sept. 5.....	2. 78	81
May 21.....	3. 05	144	Aug. 10.....	2. 81	90	Sept. 12.....	2. 86	96
June 10.....	2. 89	107	Aug. 14.....	2. 79	86			

Daily discharge, in second-feet, of Hat Creek at Brown's ranch, near Hat Creek, Calif., for the period June 10 to October 16, 1926

Day	June	July	Aug.	Sept.	Oct.	Day	June	July	Aug.	Sept.	Oct.
1.....		100	100	93	95	16.....	102	104	84	100	93
2.....		93	100	88	95	17.....	97	104	84	100	
3.....		93	100	82	95	18.....	95	104	84	100	
4.....		93	100	82	93	19.....	95	104	91	95	
5.....		91	100	82	93	20.....	109	102	97	95	
6.....		91	100	82	93	21.....	109	91	97	95	
7.....		93	97	80	93	22.....	109	88	97	95	
8.....		95	97	88	88	23.....	112	88	97	95	
9.....		93	93	97	91	24.....	112	88	97	95	
10.....	109	95	86	100	100	25.....	112	88	95	95	
11.....	104	104	84	100	93	26.....	112	88	95	93	
12.....	107	109	82	97	93	27.....	114	86	95	88	
13.....	107	104	82	97	93	28.....	114	86	95	91	
14.....	104	104	84	97	93	29.....	112	86	95	91	
15.....	104	104	84	100	93	30.....	102	95	93	93	
						31.....		97	93		

Monthly discharge of Hat Creek at Brown's ranch, near Hat Creek, Calif., for the period June 10 to October 16, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
June 10-30.....	114	95	107	4,466
July.....	109	86	95.5	5,870
August.....	100	82	92.8	5,710
September.....	100	80	92.9	5,530
October 1-16.....	100	88	93.4	2,960
The period.....				24,500

Daily diversion, in second-feet, from Hat Creek near Hat Creek, Calif., for the period May 1 to October 8, 1926

Day	May	June	July	Aug.	Sept.	Oct.	Day	May	June	July	Aug.	Sept.	Oct.
1	4	2	2	1	0.5	1	16	3.5	1	2	1	0.5	
2	4	3.5	1	1.5	.5	1	17	3.5	1	2	1	.5	
3	6	4	1	2	.5	1	18	4	1	2	1	.5	
4	10	4	1	1.5	.5	1	19	4.5	1	2	1	.5	
5	8	4	1	1	.5	1	20	5	1	2	1	.5	
6	6	3.5	1	1	.5	1	21	4.5	1	2	1	.5	
7	5	3	1	1	.5	1	22	4	1.5	2	1	.5	
8	4	2.5	1	1	.5	1	23	3	2	2	1	.5	
9	3.5	2	1	1	.5		24	2	2.5	1.5	1	.5	
10	3	2	1	1	.5		25	1.5	3.5	1.5	1	.5	
11	3	1.5	1	1	.5		26	1	3.5	1	1	.5	
12	2.5	1.5	1.5	1	.5		27	1	4	1	1	.5	
13	2.5	1	1.5	1	.5		28	1	4	1	1	.5	
14	2.5	1	2	1	.5		29	1	3.5	1	1	1	
15	3	1	2	1	.5		30	1	3	1	.5	1	
							31	1.5		1	.5		

Monthly diversion from Hat Creek near Hat Creek, Calif., for the period May 1 to October 8, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
May	10	1	3.52	216
June	4	1	2.33	139
July	2	1	1.42	87.3
August	2	.5	1.03	68.3
September	1	.5	.53	31.5
October 1-8	1	1	1.00	15.9
The period				553

MCCLOUD RIVER AT BAIRD, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 23, T. 34 N., R. 4 W., at United States fishery at Baird, Shasta County, 2 miles above junction with Pit River. Bailey Creek enters 2,000 feet above and John Creek 2,000 feet below station.

DRAINAGE AREA.—665 square miles.

RECORDS AVAILABLE.—December 22, 1910, to September 30, 1926.

GAGE.—Staff gage in four sections, two inclined and two vertical, on right bank 600 feet above hatchery; read by employees of United States fishery

DISCHARGE MEASUREMENTS.—Made from cable 20 feet above gage.

CHANNEL AND CONTROL.—Bedrock reefs overlain with small boulders and gravel; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 11.3 feet February 4 (discharge, 18,600 second-feet); minimum stage recorded, 1.00 foot January 20 and 21 (discharge, 790 second-feet).

1910-1926: Maximum stage recorded, 14.3 feet at noon February 2, 1917 (discharge, 27,600 second-feet); minimum stage recorded, 0.82 foot August 29 to September 11, 1924 (discharge, 740 second-feet).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Staff gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records good.

COOPERATION.—Gage-height record furnished by W. K. Hancock, superintendent of the United States fishery.

The following discharge measurements were made:

April 28, 1926: Gage height, 2.06 feet; discharge, 1,380 second-feet.

April 29, 1926: Gage height, 2.01 feet; discharge, 1,380 second-feet.

July 8, 1926: Gage height, 1.17 feet; discharge, 892 second-feet.

Daily discharge, in second-feet, of McCloud River at Baird, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,020	840	1,050	865	2,100	1,720	1,170	1,350	1,050	915	840	840
2.....	1,020	890	1,720	865	1,810	1,640	1,110	1,290	1,050	915	840	840
3.....	1,020	865	1,230	865	4,380	1,640	1,170	1,290	1,050	915	840	840
4.....	995	840	1,110	865	18,600	1,640	1,230	1,350	1,050	915	840	840
5.....	1,020	840	1,020	865	6,970	1,560	1,420	1,350	1,020	890	840	840
6.....	1,110	840	1,020	840	6,790	1,560	6,610	1,350	1,020	890	840	840
7.....	1,020	840	968	840	6,790	1,490	4,790	1,350	1,020	890	840	840
8.....	995	840	968	840	4,930	1,560	3,470	1,350	995	865	840	840
9.....	968	865	940	840	3,860	1,490	2,870	1,290	995	865	840	840
10.....	968	890	915	840	3,350	1,490	2,410	1,230	968	865	840	840
11.....	968	1,170	915	840	2,870	1,420	2,300	1,230	968	865	840	840
12.....	968	1,050	915	840	2,630	1,350	2,200	1,230	968	865	840	840
13.....	995	1,020	890	840	2,410	1,350	2,000	1,170	968	865	840	840
14.....	968	915	890	840	2,410	1,350	2,000	1,170	940	865	840	840
15.....	840	915	890	840	3,990	1,350	2,000	1,170	940	865	840	815
16.....	840	968	890	840	3,860	1,350	1,900	1,170	940	865	840	840
17.....	840	968	890	840	2,870	1,350	1,810	1,110	940	865	865	840
18.....	840	940	865	840	2,410	1,350	1,810	1,110	940	865	865	840
19.....	840	915	995	840	2,630	1,350	1,720	1,110	940	865	890	840
20.....	840	890	968	790	3,350	1,350	1,640	1,110	940	865	865	840
21.....	840	890	940	790	2,750	1,290	1,640	1,110	940	865	865	840
22.....	840	865	915	840	2,520	1,230	1,560	1,110	940	840	865	840
23.....	840	865	915	840	2,200	1,230	1,560	1,110	940	840	865	840
24.....	840	865	915	840	2,000	1,230	1,490	1,110	940	840	865	840
25.....	840	865	915	840	1,900	1,230	1,490	1,110	940	840	865	840
26.....	840	840	915	840	1,810	1,230	1,420	1,110	940	840	865	840
27.....	840	840	915	840	1,720	1,170	1,420	1,050	915	840	840	840
28.....	840	840	890	940	1,720	1,230	1,420	1,050	915	840	840	840
29.....	840	865	890	940	-----	1,170	1,350	1,050	915	840	865	865
30.....	840	915	890	890	-----	1,170	1,350	1,050	915	840	840	890
31.....	840	-----	865	865	-----	1,170	-----	1,020	-----	840	840	-----

Monthly discharge of McCloud River at Baird, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1,110	840	913	56,100
November.....	1,170	840	898	53,400
December.....	1,720	865	968	59,500
January.....	940	790	850	52,300
February.....	18,600	1,720	3,770	209,000
March.....	1,720	1,170	1,380	84,800
April.....	6,610	1,110	2,010	120,000
May.....	1,350	1,020	1,180	72,600
June.....	1,050	915	967	57,500
July.....	915	840	866	63,200
August.....	890	840	850	52,300
September.....	890	815	842	50,100
The year.....	18,600	790	1,270	921,000

THOMAS CREEK BASIN
THOMAS CREEK AT PASKENTA, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 4, T. 23 N., R. 6 W., at highway bridge at Paskenta, Tehama County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 2, 1921, to September 30, 1926. Also gage heights October 10, 1920, to January 1, 1921.

GAGE.—Vertical staff attached to upstream end of center pier of highway bridge; read by L. H. Flood.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Gravel and sand; shifts at high water.

EXTREMES OF DISCHARGE.—Maximum stage during year, 8.50 feet at 2 p. m. February 4 (discharge, 10,300 second-feet); no flow August 20 to September 15, 1921–1926: Maximum stage from floodmarks, 9.0 feet, night of February 4, 1925 (discharge, about 11,400 second-feet); no flow September 9–10, 1921, September 7 to October 3, 1922, June 25 to October 21, 1924, and August 20 to September 15, 1926.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed February 4. Rating curves well defined. Staff gage read to half-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Thomas Creek at Paskenta, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Feb. 14.....	<i>Feet</i> 3.45	<i>Sec.-ft.</i> 468	May 2.....	<i>Feet</i> 2.88	<i>Sec.-ft.</i> 168	June 24.....	<i>Feet</i> 2.18	<i>Sec.-ft.</i> 12
Apr. 13.....	3.50	518	Do.....	2.88	158			

Daily discharge, in second-feet, of Thomas Creek at Paskenta, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	35	27	295	58	500	512	212	170	43	13	2.0	-----
2.....	30	27	369	52	1,530	512	212	163	38	13	2.0	-----
3.....	27	27	369	52	564	512	212	163	34	13	2.0	-----
4.....	27	27	355	52	9,200	496	235	141	34	13	2.0	-----
5.....	27	27	355	52	2,930	473	258	152	28	10	2.0	-----
6.....	35	27	295	52	2,060	473	300	178	28	10	2.0	-----
7.....	35	27	245	43	1,790	473	600	170	34	10	2.0	-----
8.....	35	27	182	43	1,540	512	2,440	163	34	8	2.0	-----
9.....	35	27	150	43	980	473	1,790	178	43	8	2.0	-----
10.....	35	30	121	35	755	434	1,170	163	38	8	2.0	-----
11.....	35	35	79	35	600	401	920	141	34	8	2.0	-----
12.....	35	35	62	35	865	381	755	134	34	8	2.0	-----
13.....	30	40	62	40	512	368	512	117	28	8	2.0	-----
14.....	27	47	52	40	496	368	473	107	28	6	2.0	-----
15.....	27	43	47	40	556	339	434	100	28	6	2.0	-----
16.....	35	43	43	40	450	339	450	100	28	4.5	1.7	0.1
17.....	35	35	35	35	434	339	512	100	28	4.5	.8	.2
18.....	35	35	35	35	401	339	496	87	24	4.5	.4	.5
19.....	27	47	35	35	473	339	434	79	24	4.5	.1	.8
20.....	27	52	35	35	512	339	368	74	21	4.5	-----	2.0
21.....	27	52	30	35	512	339	368	79	24	4.0	-----	1.2
22.....	27	58	27	35	473	310	339	95	24	3.2	-----	.8
23.....	27	62	27	35	473	310	310	100	21	2.0	-----	.5
24.....	27	62	27	35	434	310	310	87	19	2.0	-----	.5
25.....	27	52	27	35	401	300	284	79	17	2.0	-----	.5
26.....	27	52	27	35	421	268	284	74	17	2.0	-----	.5
27.....	27	52	27	47	450	258	258	74	17	2.0	-----	.5
28.....	27	58	35	79	512	258	268	56	13	2.0	-----	.6
29.....	27	62	47	1,050	-----	235	258	52	13	2.0	-----	.5
30.....	27	182	58	1,180	-----	235	235	52	13	2.0	-----	.5
31.....	27	-----	62	990	-----	221	-----	52	-----	2.0	-----	-----

NOTE.—No flow Aug. 20 to Sept. 15.

Monthly discharge of Thomas Creek at Paskenta, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	35	27	30.0	1,840
November.....	182	27	45.9	2,730
December.....	369	27	117	7,190
January.....	1,180	35	142	8,730
February.....	9,200	401	1,100	61,100
March.....	512	221	370	22,800
April.....	2,440	212	523	31,100
May.....	178	52	112	6,890
June.....	43	13	27.0	1,610
July.....	13	2.0	6.12	376
August.....	2.0	0	1.06	65.2
September.....	2.0	0	.32	16.0
The year.....	9,200	0	200	144,000

DEER CREEK BASIN

DEER CREEK NEAR VINA, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 23, T. 25 N., R. 1 W., $2\frac{1}{2}$ miles northeast of Roberts ranch house, $9\frac{1}{2}$ miles northeast of Vina, Tehama County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 17, 1911, to December 31, 1915, and March 9, 1920, to September 30, 1926.

GAGE.—Vertical staff fastened to a sycamore tree on left bank, one-fourth mile above site of old sheep bridge.

DISCHARGE MEASUREMENTS.—Made from cable 100 feet below gage or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; shifts slightly during extremely high water.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 7.90 feet at 3 p. m. April 8 (discharge, 3,700 second-feet); minimum discharge, 62 second-feet at times during July, August, and September.

1911–1915, 1920–1926: Maximum stage recorded, 11.0 feet at 3.30 p. m. December 31, 1913 (discharge, 6,920 second-feet); minimum stage recorded, 1.62 feet June 29, 30, and July 1, 1924 (discharge, 60 second-feet).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed February 4. Rating curves fairly well defined. Staff gage read to hundredths once daily February to May and on alternate days during rest of year. Daily discharge ascertained by applying daily gage height to rating table. Discharge interpolated for days of no gage reading, except November 2, 7, 30, December 4, 5, January 27, 28 and 30, for which discharge was estimated by comparison with records for other streams. Records fair.

COOPERATION.—Gage-height record furnished by Stanford-Vina Ranch Irrigation Co., through C. W. Wright, irrigation superintendent.

Discharge measurements of Deer Creek near Vina, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
Apr. 12.....	Feet 4.32	Sec.-ft. 832	May 3.....	Feet 2.56	Sec.-ft. 190	Aug. 22.....	Feet 1.82	Sec.-ft. 62
May 3.....	2.56	188	June 25.....	1.94	77			

Daily discharge, in second-feet, of Deer Creek near Vina, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	76	327	87	525	244	188	215	98	72	64	64
2	73	86	525	86	395	244	175	201	98	72	64	64
3	73	103	465	86	1,250	244	175	188	98	72	64	64
4	73	90	300	86	3,530	244	201	201	95	72	64	63
5	73	86	150	86	1,140	259	1,620	291	92	72	63	62
6	89	86	107	86	815	259	1,410	291	92	71	62	62
7	84	100	107	86	680	259	1,920	275	92	71	62	62
8	79	135	103	85	496	259	3,700	244	92	71	62	62
9	79	140	100	84	424	291	1,690	229	92	71	62	62
10	79	145	96	84	460	291	1,140	201	92	70	62	62
11	79	145	94	83	390	229	1,080	188	92	68	62	62
12	84	145	92	83	765	229	865	175	85	67	62	63
13	89	145	90	83	460	244	680	164	85	66	62	64
14	89	145	89	83	568	275	604	152	85	66	63	64
15	87	145	88	83	680	275	532	152	85	66	64	65
16	85	145	88	87	568	275	532	142	85	65	63	65
17	83	135	87	91	442	259	496	142	84	65	62	65
18	79	128	145	89	373	244	478	132	82	66	62	65
19	79	122	130	87	815	229	424	132	82	66	62	66
20	79	116	115	86	765	229	390	132	81	64	62	66
21	79	106	100	85	532	229	356	123	80	63	62	67
22	78	96	96	84	460	229	323	128	80	62	62	67
23	76	96	93	84	373	229	307	132	80	64	62	67
24	76	92	93	83	275	229	291	128	78	65	62	67
25	76	89	93	83	275	229	275	123	77	65	62	66
26	76	88	93	83	259	215	244	118	76	64	67	65
27	76	87	91	83	259	201	244	114	74	64	66	65
28	74	86	89	120	244	201	229	114	72	64	65	65
29	73	93	89	585	-----	188	229	114	72	63	64	65
30	73	110	89	500	-----	188	215	106	72	62	64	65
31	74	-----	89	2,540	-----	175	-----	102	-----	63	64	-----

Monthly discharge of Deer Creek near Vina, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	89	73	78.7	4,840
November	145	76	112	6,060
December	525	87	139	8,550
January	2,540	83	195	12,000
February	3,530	244	651	36,200
March	291	175	239	14,700
April	3,700	175	700	41,700
May	291	102	166	10,200
June	98	72	84.9	5,050
July	72	62	66.8	4,110
August	67	62	63.0	3,870
September	67	62	64.4	3,830
The year	3,700	62	209	152,000

STONY CREEK BASIN

STONY CREEK NEAR STONYFORD, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 35, T. 18 N., R. 7 W., at East Park feed canal diversion dam, $3\frac{1}{2}$ miles west of Stonyford, Colusa County.

DRAINAGE AREA.—97 square miles (measured by United States Bureau of Reclamation).

RECORDS AVAILABLE.—April 1, 1913, to December 31, 1914; November 26, 1918, to December 19, 1920; October 1, 1921, to September 30, 1926.

GAGE.—Water-stage recorder at the diversion dam.

DISCHARGE.—Discharge record is sum of flow over diversion dam, flow through fishway, flow diverted by feed canal, and flow over feed-canal spillway. Flow over dam and in feed canal computed from weir formulas.

CHANNEL AND CONTROL.—Diversion dam acts as control for the water-stage recorder. A 16-foot weir is control in feed canal. There is a fish ladder in dam and a spillway in feed canal below head gates.

DIVERIONS.—East Park feed canal diverts at the dam and empties into East Park Reservoir.

REGULATION.—None.

COOPERATION.—Daily-discharge record furnished by United States Bureau of Reclamation through R. C. E. Weber, project manager.

Daily discharge, in second-feet, of Stony Creek near Stonyford, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	43	33	75	36	451	266	106	160	68	43	29	27
2.....	43	33	91	36	658	254	106	137	64	43	29	27
3.....	43	33	135	36	1,160	242	101	128	64	40	29	24
4.....	43	33	72	36	3,580	231	166	120	61	40	29	24
5.....	43	33	55	36	2,260	221	407	120	58	40	29	24
6.....	43	33	55	34	1,050	210	455	115	58	40	29	24
7.....	43	33	44	34	772	205	1,180	115	55	40	29	24
8.....	43	34	43	34	531	192	1,600	112	51	40	29	24
9.....	43	33	32	34	387	185	1,030	108	51	40	29	24
10.....	43	31	40	33	323	172	670	108	51	37	29	24
11.....	43	31	40	33	284	166	485	104	51	37	29	24
12.....	43	38	40	32	225	149	420	96	51	37	29	24
13.....	43	43	40	32	544	142	320	96	51	37	29	24
14.....	43	51	35	31	335	142	308	96	51	37	29	24
15.....	38	46	34	31	310	144	283	96	51	37	29	24
16.....	38	36	35	31	346	144	260	95	48	37	29	22
17.....	38	41	35	31	286	140	215	95	48	34	29	22
18.....	38	59	35	34	393	135	210	95	46	34	29	22
19.....	38	38	52	34	727	130	199	95	46	32	29	22
20.....	38	38	84	33	627	129	185	88	43	32	27	22
21.....	38	35	41	33	449	123	169	88	43	32	27	22
22.....	38	35	41	33	381	120	160	84	43	32	27	22
23.....	38	35	41	33	321	117	160	80	43	32	27	22
24.....	41	35	46	31	284	120	160	80	43	32	27	22
25.....	41	35	42	32	278	117	160	80	43	32	27	22
26.....	41	35	38	32	278	115	160	80	43	32	27	22
27.....	41	35	36	32	267	112	164	76	43	32	27	22
28.....	41	35	36	31	267	109	164	72	43	32	27	22
29.....	41	35	36	134	-----	107	164	68	43	32	27	22
30.....	41	35	35	564	-----	106	164	68	43	32	27	22
31.....	41	-----	35	466	-----	105	-----	68	-----	32	27	-----

Monthly discharge of Stony Creek near Stonyford, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	43	38	41.0	2,520
November.....	59	31	36.7	2,180
December.....	135	32	48.4	2,980
January.....	564	31	67.5	4,150
February.....	3,580	225	635	35,300
March.....	266	105	156	9,590
April.....	1,600	101	344	20,500
May.....	150	68	97.2	5,980
June.....	68	43	49.9	2,970
July.....	43	32	35.8	2,200
August.....	29	27	28.2	1,730
September.....	27	22	23.2	1,380
The year.....	3,580	22	126	91,500

STONY CREEK NEAR ELK CREEK, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 27, T. 20 N., R. 6 W., at county road bridge, $2\frac{1}{2}$ miles south of Elk Creek, Glenn County.

DRAINAGE AREA.—298 square miles (measured by United States Bureau of Reclamation).

RECORDS AVAILABLE.—May 1, 1919, to September 30, 1926.

GAGE.—Vertical staff in two sections; read once daily to half-tenths by A. M. and L. W. Gollnick.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Channel, solid rock; permanent. Banks subject to overflow.

EXTREMES OF DISCHARGE.—1919–1926: Maximum stage, from floodmarks, 7.80 feet January 31, 1921 (discharge, about 10,200 second-feet); no flow part of July, August, September, and October, 1924.

DIVERSIONS.—No information.

REGULATION.—Water is stored in East Park Reservoir on Little Stony Creek and released during irrigating season.

COOPERATION.—Daily-discharge record furnished by the United States Bureau of Reclamation through R. C. E. Weber, project manager.

Daily discharge, in second-feet, of Stony Creek near Elk Creek, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	132	58	39	22	1,320	300	100	175	248	252	214	149
2.....	132	61	80	22	1,220	270	60	165	236	248	214	139
3.....	129	51	39	22	2,700	255	15	145	220	248	202	133
4.....	132	31	29	22	6,370	240	105	144	224	245	190	133
5.....	132	27	29	22	3,360	230	660	140	233	245	190	133
6.....	146	25	29	22	1,140	225	835	130	245	248	190	128
7.....	66	25	29	22	760	165	1,240	128	248	254	214	122
8.....	37	26	29	22	510	140	4,460	128	248	252	218	120
9.....	31	25	25	22	360	105	2,950	120	245	252	208	120
10.....	29	25	24	22	270	55	2,240	115	258	245	202	120
11.....	29	24	24	21	282	25	1,210	110	258	224	196	120
12.....	29	23	24	21	830	30	860	105	252	218	190	118
13.....	29	23	24	21	626	30	700	115	262	214	190	118
14.....	29	24	24	20	450	28	500	120	245	214	190	118
15.....	29	25	24	20	320	28	410	126	245	208	188	118
16.....	28	24	24	20	395	25	335	139	245	196	185	118
17.....	27	24	24	20	293	23	320	155	245	196	185	118
18.....	26	24	29	21	193	23	340	165	240	248	185	118
19.....	26	24	27	21	460	20	320	175	236	248	185	118
20.....	25	24	25	20	635	20	300	200	240	248	185	118
21.....	26	24	24	21	500	20	285	185	245	245	185	118
22.....	44	24	24	20	460	15	265	170	248	245	185	118
23.....	41	24	24	20	400	15	255	165	252	245	179	110
24.....	39	24	24	21	375	15	250	155	252	245	179	108
25.....	26	24	24	20	360	15	245	155	252	245	173	108
26.....	25	27	22	21	350	15	245	150	248	245	167	58
27.....	25	27	22	21	345	110	240	155	264	218	160	23
28.....	22	27	22	100	343	110	230	165	252	218	160	23
29.....	48	27	22	560	-----	116	200	175	252	214	158	23
30.....	48	29	22	400	-----	112	200	203	254	214	155	19
31.....	55	-----	22	1,000	-----	112	-----	233	-----	214	155	-----

Monthly discharge of Stony Creek near Elk Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	146	22	53.0	3,260
November.....	61	23	28.3	1,680
December.....	80	22	27.5	1,690
January.....	1,000	20	84.8	5,210
February.....	6,370	193	915	50,800
March.....	300	15	93.5	5,750
April.....	4,460	15	679	40,400
May.....	233	105	152	9,350
June.....	262	220	246	14,600
July.....	254	196	234	14,400
August.....	218	155	186	11,400
September.....	149	19	106	6,310
The year.....	6,370	15	228	165,000

STONY CREEK NEAR ORLAND, CALIF.

LOCATION.—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, Glenn County, Calif.

DRAINAGE AREA.—636 square miles (measured by United States Bureau of Reclamation).

RECORDS AVAILABLE.—January 1, 1920, to September 30, 1926.

GAGE.—Vertical staff in two sections at bridge; read once daily to hundredths by Leonora Simpson.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Channel consists of gravel; shifting. Banks subject to overflow at high water.

EXTREMES OF DISCHARGE.—1920–1926: Maximum stage recorded, 10.3 feet January 30, 1921 (discharge, 19,500 second-feet); no flow November 11, 1920, and August 24 to September 30, 1924.

DIVERSIONS.—No information.

REGULATION.—Water is stored in East Park Reservoir on Little Stony Creek and released during irrigating season.

COOPERATION.—Daily-discharge record furnished by the United States Bureau of Reclamation through R. C. E. Weber, project manager.

Daily discharge, in second-feet, of Stony Creek near Orland, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	118	38	167	25	2,100	620	150	325	240	220	183	120
2.....	120	38	157	24	2,390	620	140	300	236	220	185	115
3.....	110	37	113	24	4,750	570	130	300	230	217	168	112
4.....	110	31	110	23	6,370	535	137	280	218	217	165	106
5.....	110	28	49	21	5,900	535	394	260	218	215	163	106
6.....	128	28	29	21	3,780	500	1,060	260	220	213	190	110
7.....	91	28	27	21	2,450	500	1,820	250	225	220	155	111
8.....	74	25	29	21	1,750	500	6,560	240	230	220	148	112
9.....	49	20	30	21	1,200	420	4,900	230	233	217	142	108
10.....	38	17	29	21	980	320	3,110	218	230	220	145	106
11.....	38	21	29	21	780	260	2,250	205	247	220	148	106
12.....	38	28	29	20	1,850	260	1,710	200	239	210	151	90
13.....	35	30	29	20	2,620	230	1,160	215	233	185	151	90
14.....	33	29	29	20	1,670	220	920	198	236	182	151	89
15.....	35	29	27	21	1,200	220	915	189	236	170	153	87

Daily discharge, in second-feet, of Stony Creek near Orland, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
16.....	25	29	25	21	1,050	220	820	204	225	165	153	87
17.....	23	29	25	21	895	200	760	220	230	160	155	85
18.....	21	29	23	20	760	200	760	214	225	158	160	85
19.....	22	29	20	21	1,500	175	750	232	225	165	153	85
20.....	21	29	25	21	1,580	170	730	244	220	192	148	84
21.....	20	29	25	20	1,090	170	650	236	218	192	142	84
22.....	18	27	27	20	920	165	500	214	215	194	142	82
23.....	22	29	29	20	870	150	470	203	220	192	148	82
24.....	38	30	29	20	780	145	470	203	225	192	151	82
25.....	38	33	29	20	740	130	425	192	226	192	150	82
26.....	23	33	29	21	710	175	400	185	226	190	140	80
27.....	33	33	29	23	685	200	380	182	215	182	132	80
28.....	24	27	29	94	650	200	380	168	215	180	130	75
29.....	15	27	29	1,100	-----	200	340	181	225	170	128	30
30.....	35	28	27	1,060	-----	175	425	209	226	165	125	22
31.....	36	-----	26	4,860	-----	165	-----	228	-----	165	125	-----

Monthly discharge of Stony Creek near Orland, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	128	15	49.7	3,060
November.....	38	17	28.9	1,720
December.....	167	20	42.2	2,590
January.....	4,860	20	248	15,200
February.....	6,370	650	1,860	103,000
March.....	620	130	295	18,100
April.....	6,560	130	1,120	66,600
May.....	325	168	225	13,800
June.....	247	215	227	13,500
July.....	220	158	194	11,900
August.....	168	125	149	9,160
September.....	120	22	89.8	5,340
The year.....	6,560	15	365	264,000

LITTLE STONY CREEK NEAR LODOGA, CALIF.

LOCATION.—At East Park Reservoir, 4 miles above junction with Stony Creek and 3½ miles northwest of Lodoga, Colusa County.

DRAINAGE AREA.—102 square miles.

RECORDS AVAILABLE.—January 1, 1908, to September 30, 1926.

GAGE.—Gage at dam; read by J. J. Lea.

DISCHARGE.—Natural flow computed from gage readings at dam. Correction made for evaporation, which is measured by evaporation pan at reservoir, and for storage and release of water used on the Orland project. When discharge is 10 second-feet or less it is computed from weir and current-meter measurements taken at the head of the reservoir about 3 miles above dam.

EXTREMES OF DISCHARGE.—1907–1926: Maximum stage recorded, 11.8 feet February 2, 1909 (discharge, 7,060 second-feet); minimum stage, no flow during parts of nearly every year.

DIVERSIONS.—No information.

REGULATION.—East Park Reservoir is used for storage for the Orland project of the United States Bureau of Reclamation. Water from Stony Creek is diverted to the reservoir by the East Park feed canal.

COOPERATION.—Daily-discharge record furnished by United States Bureau of Reclamation, through R. C. E. Weber, project manager.

Daily discharge, in second-feet, of Little Stony Creek near Lodoga, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1		2	4	505	55	32	40	6
2		2	4	187	47	11	40	6
3		2	4	817	40	12	40	6
4		2	4	1,220	40	12	39	5
5		2	4	1,080	35	12	39	5
6		2	4	322	35	298	39	5
7		2	3	257	35	370	39	5
8	2	2	3	132	35	335	39	4
9	4	2	3	154	35	1,660	38	4
10	10	2	3	162	30	830	38	4
11	15	4	3	194	30	517	38	3
12	15	6	3	419	30	460	37	3
13	8	6	3	749	30	304	36	2
14	4	4	3	414	30	80	36	2
15	2	4	3	207	30	37	35	1
16	2	4	3	320	30	37	35	1
17	2	12	3	184	30	37	33	
18	2	15	2	194	30	37	32	
19	2	45	2	70	25	37	31	
20	2	28	2	252	25	41	30	
21	2	9	2	227	25	44	28	
22	2	8	2	150	25	44	25	
23	2	8	2	125	25	44	21	
24	2	7	2	100	25	44	18	
25	2	6	2	75	25	44	15	
26	2	5	2	100	20	41	14	
27	2	5	2	90	20	41	12	
28	2	5	8	76	20	41	10	
29	2	5	188		20	39	9	
30	7	5	125		20	39	7	
31		5	1,110		20		7	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Little Stony Creek near Lodoga, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
November	15	0	3.2	190
December	45	2	7.0	430
January	1,110	2	47.0	2,890
February	1,220	70	312	17,300
March	55	20	29.7	1,830
April	1,660	11	186	11,100
May	40	7	29.0	1,780
June	6	0	2.1	125
The year	1,660	0	49.2	35,600

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

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, Plumas County.

DRAINAGE AREA.—506 square miles above dam.

RECORDS AVAILABLE.—June 13, 1905, to September 30, 1926.

DISCHARGE.—The record of discharge from March 7, 1914, to May 7, 1921, is sum of flow through gates in dam and over dam, obtained from gate openings and head on reservoir. From May 7, 1921, the discharge is sum of flow over dam, through gates, and through tunnel diverting into Butt Creek for the Caribou plant of Great Western Power Co.

EXTREMES OF DISCHARGE.—1905–1926: Maximum stage recorded, 16.2 feet, crest of flood, March 19, 1907 (discharge, 10,000 second-feet); no flow April 15 and 16, 1914, parts of January to April, 1919, and April 21, 1923.

DIVERSIONS.—Water is diverted by a tunnel into Butt Creek and then diverted by another tunnel from Butt Creek to the Caribou plant of the Great Western Power Co. on North Fork of Feather River.

REGULATION.—Water is stored in Lake Almanor for benefit of Caribou and Big Bend power plants. There was 120,017 acre-feet of water in reservoir on September 30, 1925, and 87,301 acre-feet on September 30, 1926.

COOPERATION.—Record of daily discharge and monthly contents of reservoir furnished by Great Western Power Co.; monthly discharge and run-off computed by United States Geological Survey.

Daily discharge, in second-feet, of North Fork of Feather River near Prattville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,260	985	457	461	916	301	322	107	543	987	1,270	1,500
2	1,240	921	64	461	91	293	322	39	571	963	1,280	1,500
3	433	950	380	234	888	232	322	168	794	570	1,320	1,500
4	1,260	950	670	124	895	209	322	828	494	1,270	1,320	1,140
5	1,240	909	656	124	341	210	20	1,220	762	1,620	1,330	1,010
6	1,530	852	585	124	582	125	74	2,160	788	1,060	1,330	1,430
7	1,230	774	730	108	886	209	40	1,030	792	1,190	1,150	1,430
8	1,080	986	673	47	891	201	45	284	830	1,200	1,520	1,330
9	694	804	718	47	884	204	50	289	813	1,140	1,530	1,380
10	602	113	722	108	888	196	98	301	814	1,060	1,530	1,380
11	773	113	674	108	897	195	106	260	770	1,280	1,330	1,210
12	733	47	566	108	896	207	77	341	767	1,170	1,370	1,430
13	770	460	638	108	895	212	77	340	812	1,220	1,320	1,430
14	841	748	657	108	975	230	76	338	813	1,200	1,150	1,430
15	895	784	655	47	896	109	76	338	828	1,180	1,680	1,450
16	857	879	646	37	500	48	76	338	829	1,040	1,360	1,450
17	561	891	680	585	432	39	75	341	798	892	1,360	1,420
18	689	891	595	645	378	43	73	341	732	1,230	1,310	1,230
19	180	765	596	603	302	35	66	346	906	1,170	1,410	1,426
20	180	766	623	600	292	229	162	347	1,160	1,170	1,400	1,420
21	146	575	657	591	289	92	170	342	794	1,170	1,250	1,370
22	180	375	657	859	285	413	179	350	921	1,200	1,440	1,370
23	132	956	657	901	287	610	181	346	880	1,326	1,360	1,370
24	36	1,020	576	910	283	610	181	431	823	975	1,360	1,410
25	481	581	562	910	283	376	180	429	735	1,240	1,400	920
26	915	1,080	460	904	283	322	178	427	870	1,680	1,370	1,330
27	906	792	478	906	283	322	185	425	1,140	1,100	1,390	1,360
28	814	725	557	906	289	322	185	425	991	1,070	1,160	1,360
29	365	700	642	916	-----	322	291	425	1,100	1,190	1,500	1,520
30	865	700	642	916	-----	322	316	425	1,060	1,190	1,500	1,310
31	772	-----	576	916	-----	322	-----	509	-----	897	1,510	-----

Monthly discharge of North Fork of Feather River near Prattville, Calif., for the year ending September 30, 1926

Month	Discharge (second-feet)					Run-off (acre-feet)		
	Maximum	Minimum	Observed mean	Gain or loss in storage	Corrected for storage	Observed	Gain or loss in storage	Corrected for storage
October.....	1,530	36	731	-210	520	44,900	-12,900	32,000
November.....	1,086	47	743	-184	559	44,200	-11,000	33,200
December.....	730	64	595	-19	577	36,600	-1,150	35,500
January.....	916	37	465	+123	587	28,600	+7,550	36,100
February.....	991	283	604	+320	920	33,500	+17,800	51,100
March.....	610	35	244	+653	897	15,000	+40,100	55,200
April.....	322	20	151	+1,490	1,640	8,950	+88,400	97,600
May.....	2,160	39	461	+451	912	28,300	+27,800	56,100
June.....	1,160	494	831	-408	423	49,400	-24,300	25,200
July.....	1,520	570	1,130	-328	328	69,500	-49,100	20,200
August.....	1,680	1,150	1,370	-987	383	84,200	-60,700	23,600
September.....	1,520	920	1,360	-927	434	80,900	-55,200	25,800
The year.....	2,160	20	724	-----	679	524,000	-32,700	492,000

NOTE.—Records not corrected for evaporation from Lake Almanor.

NORTH FORK OF FEATHER RIVER AT BIG BAR, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 32, T. 23 N., R. 5 E., one-fourth mile above Big Bar station on Western Pacific Railway, Butte County, 7 miles above intake of Great Western Power Co.'s power plant at Big Bend.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—February 24, 1911, to September 30, 1926.

GAGE.—Water-stage recorder; gage datum 1,348.96 feet above sea level.

DISCHARGE MEASUREMENTS.—Made from cable 20 feet above gage.

CHANNEL AND CONTROL.—Solid rock, boulders, and gravel; practically permanent.

EXTREMES OF DISCHARGE.—1911-1926: Maximum mean daily discharge, 35,000 second-feet January 1, 1914; minimum mean daily discharge, 423 second-feet June 8, 1924.

DIVERSIONS.—No information.

REGULATION.—Flow partly regulated by Lake Almanor.

COOPERATION.—Daily-discharge record furnished by Great Western Power Co.

Daily discharge, in second-feet, of North Fork of Feather River at Big Bar, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,640	981	2,010	1,180	4,760	2,240	2,560	3,130	1,420	1,340	1,450	1,870
2.....	1,450	1,080	3,620	966	3,340	2,650	2,360	2,950	1,580	1,390	1,920	1,880
3.....	1,320	1,190	2,200	1,050	3,760	2,700	2,270	2,680	1,600	1,300	1,740	1,860
4.....	993	1,290	1,800	1,010	10,900	2,680	2,250	2,920	1,610	1,310	1,750	1,820
5.....	1,210	1,320	1,670	1,270	17,100	2,690	5,940	4,340	1,520	1,500	1,780	1,300
6.....	1,490	1,240	1,740	1,280	10,100	2,760	9,780	4,270	1,350	1,640	1,780	1,300
7.....	1,560	1,160	1,430	1,300	5,800	2,700	14,400	4,830	1,360	1,690	1,770	1,740
8.....	1,500	1,010	1,740	1,220	5,080	2,580	20,500	3,510	1,540	1,690	1,370	1,780
9.....	1,300	1,010	1,700	1,150	4,340	3,060	15,300	2,870	1,590	1,760	1,900	1,660
10.....	1,220	1,370	1,760	1,080	3,980	3,090	9,640	2,690	1,550	1,700	1,740	1,760
11.....	1,160	1,370	1,630	999	4,070	2,900	7,290	2,780	1,430	1,480	1,810	1,780
12.....	1,130	1,720	1,550	1,220	3,630	2,770	6,010	2,620	1,380	1,780	1,770	1,370
13.....	1,320	1,470	1,340	1,260	3,380	2,760	5,410	2,450	1,240	1,750	1,820	1,730
14.....	1,410	1,480	1,360	1,240	3,170	2,880	4,860	2,370	1,170	1,670	1,760	1,790
15.....	1,410	1,300	1,590	1,210	2,800	3,000	4,510	2,210	1,390	1,840	1,400	1,790
16.....	1,300	1,170	1,600	1,050	3,160	3,280	4,350	2,070	1,360	1,680	1,990	1,790
17.....	1,270	1,170	1,520	1,010	3,100	3,280	3,990	1,980	1,390	1,690	1,790	1,820
18.....	1,040	1,620	1,550	924	2,840	3,130	3,810	2,090	1,370	1,340	1,810	1,780
19.....	1,020	1,550	1,470	1,210	2,850	2,990	3,530	2,090	1,300	1,720	1,780	1,410
20.....	1,220	1,350	1,180	1,170	3,500	2,800	3,480	2,010	1,230	1,720	1,820	1,750

Daily discharge, in second-feet, of North Fork of Feather River at Big Bar, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
21.....	1,290	1,310	1,330	1,150	3,360	2,700	3,390	1,950	1,450	1,760	1,850	1,790
22.....	1,270	1,170	1,620	1,070	2,830	2,630	3,250	1,930	1,340	1,750	1,510	1,740
23.....	1,300	1,120	1,700	1,050	2,830	2,800	2,980	1,740	1,480	1,760	1,820	1,740
24.....	1,320	1,250	1,710	1,010	2,810	3,130	3,040	1,650	1,390	1,900	1,800	1,740
25.....	986	1,280	1,560	928	2,540	3,060	3,100	1,820	1,390	1,440	1,760	1,740
26.....	1,080	1,190	1,060	1,110	2,450	2,830	3,230	1,710	1,280	1,770	1,770	1,390
27.....	1,200	1,110	1,160	1,160	2,440	2,600	3,460	1,660	1,210	1,630	1,770	1,590
28.....	1,240	1,190	941	1,180	2,370	2,440	3,530	1,640	1,400	1,670	1,830	1,750
29.....	1,220	1,170	1,300	3,890	-----	2,250	3,540	1,630	1,530	1,640	1,400	1,710
30.....	1,180	1,110	1,370	3,600	-----	2,460	3,170	1,470	1,630	1,720	1,860	1,760
31.....	1,230	-----	1,360	3,960	-----	2,590	-----	1,360	-----	1,840	1,850	-----

Monthly discharge of North Fork of Feather River at Big Bar, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1,640	986	1,270	78,100
November.....	1,720	981	1,260	75,000
December.....	3,620	941	1,600	98,400
January.....	3,960	924	1,380	84,800
February.....	17,100	2,370	4,400	244,000
March.....	3,280	2,240	2,790	172,000
April.....	20,500	2,250	5,500	327,000
May.....	4,830	1,360	2,430	149,000
June.....	1,630	1,170	1,420	84,500
July.....	1,900	1,300	1,640	101,000
August.....	1,990	1,370	1,750	108,000
September.....	1,880	1,300	1,700	101,000
The year.....	20,500	924	2,240	1,620,000

FEATHER RIVER AT OROVILLE, CALIF.

LOCATION.—In sec. 8, T. 19 N., R. 4 E., at highway bridge at Oroville, Butte County, 6 miles below junction of North and Middle Forks.

DRAINAGE AREA.—3,640 square miles.

RECORDS AVAILABLE.—January 1, 1902, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and wooden shelter, on right bank 200 feet below bridge, at same datum as United States Weather Bureau vertical staff which is in two sections on bridge pier near right bank.

DISCHARGE MEASUREMENTS.—Made from cable, 1,000 feet above bridge. During extremely low water measurements have been made from a boat about 1,000 feet below bridge.

CHANNEL AND CONTROL.—Boulders and gravel. A sand and gravel bar partly covered with willows on left bank at control shifts at high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 13.20 feet at 4 p. m. April 8 (discharge, 62,200 second-feet); minimum stage estimated about —0.50 foot part of November 2, 9, January 10 and 25 (discharge, 770 second-feet).

1902–1926: Maximum stage recorded, 30.2 feet on Weather Bureau gage; 39.3 feet on gage 1,000 feet above, March 19, 1907 (discharge, 187,000 second-feet); minimum stage, from water-stage recorder, —1.16 feet at 6 a. m. June 30, 1924 (discharge, 402 second-feet).

DIVERSIONS.—Minor diversions from tributaries above station.

STORAGE.—See North Fork of Feather River near Prattville, Calif.

REGULATION.—The operation of the Big Bend plant of the Great Western Power Co. causes diurnal fluctuations in stage of about 1 foot during extremely low water.

ACCURACY.—Stage-discharge relation changed February 4. Rating curves well defined. Water-stage recorder stopped and no record January 16-19. Daily discharge ascertained with a discharge integrator October 1 to January 28 and May 17 to September 30 and by applying mean daily gage height to rating table January 29 to May 16, except January 29, 31, February 4, 5, 19, and April 4, for which hourly discharge was averaged. Discharge interpolated for days on which clock stopped. Records good.

COOPERATION.—Attendant for water-stage recorder furnished by Sutter Butte Canal Co.

Discharge measurements of Feather River at Oroville, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Feb. 9.....	<i>Feet</i> 5.77	<i>Sec.-ft.</i> 8,840	Apr. 11.....	<i>Feet</i> 7.94	<i>Sec.-ft.</i> 16,400	Aug. 19.....	<i>Feet</i> 0.36	<i>Sec.-ft.</i> 1,280
Feb. 11.....	5.68	8,970	May 5.....	5.58	8,520	Aug. 23.....	.26	1,210
Feb. 16.....	5.50	8,280	July 9.....	1.02	1,880			

Daily discharge, in second-feet, of Feather River at Oroville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,950	1,320	2,990	1,580	10,300	5,030	4,870	5,710	2,220	1,700	1,620	1,980
2.....	1,860	1,000	6,340	1,340	7,080	5,200	4,580	5,370	2,300	1,670	1,920	1,950
3.....	1,660	1,750	3,620	1,680	12,700	5,200	4,580	4,870	2,300	1,690	1,800	1,930
4.....	1,350	1,780	2,600	1,590	48,200	5,200	5,280	5,200	2,270	1,660	1,820	1,950
5.....	1,640	1,740	2,350	1,550	35,900	5,370	29,300	7,980	2,160	1,700	1,810	1,550
6.....	1,960	1,720	2,240	1,840	20,700	5,540	37,400	7,280	1,980	1,870	1,840	1,480
7.....	2,130	1,670	2,000	1,580	13,500	5,540	48,200	7,500	1,940	1,860	1,860	1,860
8.....	2,020	1,420	2,060	1,600	10,500	5,540	56,700	6,050	2,100	1,990	1,600	1,910
9.....	1,740	1,630	2,040	1,510	8,500	6,620	37,400	5,540	2,240	1,970	1,820	1,790
10.....	1,600	2,160	2,060	1,280	8,500	6,230	21,900	4,870	2,100	1,940	1,810	1,880
11.....	1,480	2,030	2,000	1,340	8,500	5,880	17,000	4,870	2,020	1,720	1,860	1,900
12.....	1,980	2,740	1,920	1,530	9,060	5,540	14,300	4,580	1,960	2,030	1,840	1,540
13.....	1,930	2,740	1,720	1,530	7,980	5,540	12,300	4,210	1,780	1,970	1,870	1,900
14.....	1,860	2,400	1,740	1,700	7,740	5,880	11,400	4,090	1,750	1,900	1,830	1,820
15.....	1,800	2,000	1,830	1,940	7,280	6,420	10,500	3,870	1,900	1,970	1,560	1,940
16.....	1,770	1,940	1,820	1,880	7,980	6,620	9,900	3,650	1,920	1,870	1,940	1,990
17.....	1,640	2,420	1,770	1,820	6,620	6,620	9,060	3,410	1,880	1,900	1,820	1,990
18.....	1,440	2,300	1,980	1,760	5,880	6,230	9,060	3,500	1,860	1,570	1,850	1,960
19.....	1,600	2,180	2,200	1,690	9,430	5,710	7,980	3,460	1,800	1,880	1,840	1,680
20.....	1,650	2,020	1,950	1,630	10,600	5,540	7,500	3,380	1,710	1,880	1,860	1,890
21.....	1,660	2,000	1,810	1,570	7,500	5,200	7,060	3,240	1,870	1,880	1,890	2,010
22.....	1,650	1,770	1,910	1,560	6,230	5,200	6,840	3,060	1,790	1,900	1,600	1,940
23.....	1,670	1,820	1,930	1,560	5,880	5,370	6,620	2,910	1,820	1,960	1,880	1,940
24.....	1,620	1,920	1,930	1,540	5,540	5,880	6,420	2,840	1,830	1,980	1,810	1,920
25.....	1,300	1,900	1,700	1,420	5,030	5,710	6,230	2,900	1,760	1,620	1,820	1,880
26.....	1,560	1,820	1,580	1,550	4,870	5,540	6,230	2,740	1,720	1,890	1,840	1,540
27.....	1,590	1,810	1,520	1,520	4,870	5,200	6,230	2,590	1,620	1,800	1,860	1,810
28.....	1,560	1,900	1,660	1,790	4,870	4,870	6,230	2,580	1,760	1,780	1,920	1,930
29.....	1,540	1,820	1,780	9,240	4,580	6,050	2,440	1,820	1,810	1,590	1,900	1,900
30.....	1,560	1,820	1,770	6,820	4,870	5,880	2,460	1,850	1,840	1,930	1,960	1,960
31.....	1,530	1,760	13,000	4,720	2,260	1,920	1,960					

Monthly discharge of Feather River at Oroville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2,130	1,300	1,690	104,000
November.....	2,740	1,320	1,940	115,000
December.....	6,340	1,520	2,150	132,000
January.....	13,000	1,280	2,390	147,000
February.....	48,200	4,870	10,800	600,000
March.....	6,620	4,580	5,570	342,000
April.....	56,700	4,580	14,100	839,000
May.....	7,980	2,260	4,170	256,000
June.....	2,300	1,620	1,930	115,000
July.....	2,030	1,570	1,840	113,000
August.....	1,960	1,560	1,820	112,000
September.....	2,010	1,480	1,860	111,000
The year.....	56,700	1,280	4,120	2,990,000

FEATHER RIVER AT NICOLAUS, CALIF.

LOCATION.—At highway bridge at Nicolaus, Sutter County.

RECORDS AVAILABLE.—June 13, 1921, to September 30, 1926, low-water records only.

GAGE.—Water-stage recorder on middle fender pier 50 feet above bridge.

DISCHARGE MEASUREMENTS.—Made from boat or by wading.

CHANNEL AND CONTROL. Shifting sand; control is cross section and slope of river.

DIVERSIONS.—Considerable water is diverted for irrigation above station.

REGULATION.—Partly regulated by diversions above and by operation of power plants of Great Western Power Co.

ACCURACY.—Stage-discharge relation practically permanent October 1 to January 28 and slightly shifting May 26 to September 30. Rating curve fairly well defined. Water-stage recorder operated satisfactorily. No record obtained January 29 to May 25. Daily discharge ascertained by applying mean daily gage height to rating table October 1 to January 28 and by shifting-control method May 26 to September 30. Records good.

Discharge measurements of Feather River at Nicolaus, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 7.....	24.17	1,630	Dec. 29.....	24.43	1,930	July 15.....	22.68	496
Oct. 15.....	24.54	2,070	Jan. 6.....	24.49	1,980	July 22.....	22.32	304
Oct. 23.....	24.16	1,600	Jan. 13.....	24.50	2,020	July 28.....	22.12	248
Oct. 30.....	24.03	1,470	Jan. 21.....	24.44	1,970	Aug. 4.....	22.46	393
Nov. 5.....	24.16	1,630	Jan. 28.....	24.31	1,910	Aug. 11.....	22.09	253
Nov. 12.....	24.73	2,180	June 3.....	24.29	1,690	Aug. 18.....	22.29	339
Nov. 19.....	25.06	2,800	June 10.....	23.83	1,200	Aug. 25.....	22.36	387
Nov. 26.....	24.69	2,280	June 17.....	23.30	775	Sept. 1.....	22.51	406
Dec. 2.....	25.15	3,060	June 24.....	22.95	574	Sept. 8.....	22.22	333
Dec. 11.....	24.89	2,550	July 1.....	22.66	429	Sept. 15.....	23.08	774
Dec. 20.....	25.45	3,720	July 8.....	22.48	370	Sept. 24.....	23.99	1,520

Daily discharge, in second-feet, of Feather River at Nicolaus, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	May	June	July	Aug.	Sept.
1	1,460	1,410	2,000	2,300	-----	1,860	449	359	426
2	1,620	1,310	3,660	2,300	-----	1,680	467	404	595
3	1,460	1,220	8,900	1,930	-----	1,620	454	341	640
4	1,560	1,560	7,060	2,000	-----	1,510	436	350	630
5	1,460	1,620	5,150	1,860	-----	1,510	440	372	665
6	-----	-----	-----	-----	-----	-----	-----	-----	-----
7	1,220	1,680	4,170	2,070	-----	1,510	408	341	665
8	1,740	1,620	3,560	2,140	-----	1,410	372	341	440
9	2,380	1,620	2,980	2,140	-----	1,140	386	364	359
10	2,300	1,510	2,980	2,070	-----	1,140	418	418	590
11	2,070	1,410	2,800	2,000	-----	1,260	476	368	698
12	-----	-----	-----	-----	-----	-----	-----	-----	-----
13	1,860	2,070	2,800	1,860	-----	1,220	555	278	670
14	1,680	2,380	2,800	1,740	-----	1,100	540	346	752
15	1,860	3,070	2,890	2,070	-----	990	449	382	812
16	2,220	4,060	2,620	2,000	-----	984	535	382	600
17	2,220	3,070	2,300	2,070	-----	782	516	436	806
18	-----	-----	-----	-----	-----	-----	-----	-----	-----
19	2,000	2,540	2,620	2,000	-----	782	458	426	920
20	1,930	2,300	2,620	2,070	-----	800	485	359	1,020
21	1,930	3,070	2,800	2,000	-----	752	472	336	1,100
22	1,680	3,260	2,890	2,070	-----	740	413	364	1,260
23	1,560	2,890	3,560	2,220	-----	734	305	400	1,410
24	-----	-----	-----	-----	-----	-----	-----	-----	-----
25	1,740	2,890	3,360	2,140	-----	710	264	408	1,180
26	1,740	2,620	2,800	2,070	-----	645	314	462	1,620
27	1,680	2,380	2,960	2,070	-----	630	328	494	1,620
28	1,680	2,140	2,890	1,930	-----	585	341	422	1,620
29	1,680	2,460	2,800	1,860	-----	530	418	386	1,620
30	-----	-----	-----	-----	-----	-----	-----	-----	-----
31	1,510	2,380	2,620	1,560	3,960	512	422	413	1,560
32	1,260	2,220	2,140	1,800	3,560	508	314	426	1,460
33	1,460	1,860	2,220	1,860	2,980	490	264	449	1,260
34	1,510	2,140	2,140	-----	2,620	454	260	472	1,560
35	1,460	2,000	2,380	-----	2,380	440	296	545	1,620
36	1,360	-----	2,380	-----	2,300	-----	300	444	-----

NOTE.—Station not operated Jan. 29 to May 25.

Monthly discharge of Feather River at Nicolaus, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	2,380	1,220	1,720	106,000
November	4,060	1,220	2,230	133,000
December	8,900	2,000	3,220	198,000
January 1-28	2,300	1,560	2,010	112,000
May 26-31	3,960	2,300	2,970	35,300
June	1,860	440	966	57,500
July	555	260	405	24,900
August	545	278	396	24,300
September	1,620	359	1,010	60,100

SPANISH CREEK AT KEDDIE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 22, T. 25 N., R. 9 E., at highway bridge at Keddle, Plumas County, 2 miles above junction with Indian Creek.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 22, 1911, to September 30, 1926.

GAGE.—Staff gage in two sections on left bank 250 feet below bridge; read by H. W. Hagen.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—A rock-filled crib dam was partly built on control August 19, 1919, and completed during summer of 1921.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 10.64 feet at 4 p. m. April 8 (discharge, from extension of rating curve, about 4,060 second-feet); minimum discharge recorded, 10 second-feet August 11–17.

1911–1926: Maximum stage recorded, 10.0 feet at 11 a. m. December 31, 1913, and at 1 p. m. January 2, 1914 (discharge, from extension of rating curve, about 9,450 second-feet); minimum discharge estimated at 9 second-feet parts of June to September, 1924.

DIVERSIONS.—Water is diverted from Spanish Creek for irrigation in American Valley.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed during high water of February and April and during construction of new bridge in August. Rating curves fairly well defined. Staff gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except August 2–31, for which shifting-control method was used. Records good.

Discharge measurements of Spanish Creek at Keddie, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Dec. 18.....	5.30	72	Mar. 22.....	5.55	257	Sept. 7.....	4.39	14
Feb. 9.....	6.00	457	Apr. 10.....	7.17	1,240			
Mar. 22.....	5.55	268	June 13.....	4.60	46			

Daily discharge, in second-feet, of Spanish Creek at Keddie, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	53	48	86	49	510	316	231	294	91	26	12	16
2.....	48	48	165	48	560	316	231	294	82	25	12	16
3.....	45	53	133	45	670	316	224	280	77	24	12	17
4.....	43	66	95	43	2,750	316	257	294	73	22	12	17
5.....	48	61	86	42	1,820	316	1,070	372	68	22	12	17
6.....	50	59	77	46	1,070	338	1,580	372	64	21	12	16
7.....	56	53	73	48	1,070	360	2,800	372	60	21	12	15
8.....	56	50	70	48	709	360	3,970	394	57	20	12	14
9.....	53	48	63	46	481	406	2,540	372	57	19	12	14
10.....	50	102	63	45	456	383	1,330	332	53	18	11	14
11.....	66	86	69	45	431	360	1,050	313	53	18	10	14
12.....	91	148	56	40	431	360	790	287	53	18	10	15
13.....	91	138	55	38	406	338	730	265	46	18	10	16
14.....	73	95	53	36	406	360	675	248	48	19	10	16
15.....	66	77	50	35	431	360	675	231	46	20	10	17
16.....	63	73	48	34	456	383	648	224	46	19	10	18
17.....	56	73	48	39	431	383	592	211	46	19	10	18
18.....	56	71	63	50	406	383	565	205	43	18	11	18
19.....	53	71	93	48	481	360	538	205	43	18	12	20
20.....	53	70	77	45	589	316	512	192	40	18	12	21
21.....	52	66	70	40	533	276	487	181	39	17	12	22
22.....	50	63	66	42	481	257	462	175	38	16	12	23
23.....	50	59	64	42	431	257	416	164	36	16	12	25
24.....	50	59	63	40	383	276	394	169	35	16	12	27
25.....	49	58	61	41	316	276	372	148	33	15	13	28
26.....	49	58	59	42	316	276	352	138	32	15	13	29
27.....	49	56	58	45	296	276	352	133	32	14	13	30
28.....	49	56	56	191	316	257	352	122	30	14	14	31
29.....	49	56	56	670	-----	257	332	112	30	13	14	30
30.....	48	58	56	370	-----	238	313	107	28	12	15	30
31.....	48	-----	50	790	-----	238	-----	96	-----	12	16	-----

Monthly discharge of Spanish Creek at Keddie, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	91	43	55.3	3,400
November.....	143	48	69.3	4,120
December.....	165	48	70.1	4,310
January.....	790	34	103	6,330
February.....	2,750	296	630	35,000
March.....	406	238	320	19,700
April.....	3,970	224	828	49,300
May.....	394	96	235	14,400
June.....	91	28	49.3	2,930
July.....	26	12	18.2	1,120
August.....	16	10	11.9	732
September.....	31	14	20.1	1,200
The year.....	3,970	10	197	143,000

MIDDLE FORK OF FEATHER RIVER NEAR CLIO, CALIF.

LOCATION.—In center of sec. 23, T. 22 N., R. 12 E., half a mile above Frazier Creek, 1 mile below Mohawk Creek, and 1½ miles northwest of Clio, Plumas County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1925, to September 30, 1926.

GAGE.—Water-stage recorder in corrugated pipe well and wooden shelter on left bank, installed October 23, 1925.

DISCHARGE MEASUREMENTS.—Made from cable 150 feet above gage or by wading.

CHANNEL AND CONTROL.—Bed of stream is gravel, fairly permanent. Left bank is high, slightly wooded, and is not overflowed, right bank is low and is overflowed at extremely high stages. Control is of gravel and medium-sized boulders and practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.20 feet at noon February 4 (discharge, 1,430 second-feet); minimum stage, from water-stage recorder, 1.10 feet August 8 (discharge, 6 second-feet).

ICE.—Not affected by ice during winter of 1925-26.

DIVERSIONS.—Numerous small diversions for irrigation above.

REGULATION.—None.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve is well defined. Recorder record excellent, except August 13-28, when clock stopped. Daily discharge ascertained by applying mean daily gage height to rating table, except January 28-29 and February 4, for which hourly discharge was averaged. Mean discharge October 1-22 and daily discharge August 13-28 estimated by comparison with record for Middle Fork of Feather River at Sloat. Records excellent.

Discharge measurements of Middle Fork of Feather River near Clio, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 24.....	1.31	22	Apr. 6.....	4.00	817	Apr. 12.....	3.44	563
Dec. 15.....	1.44	41	Do.....	4.00	813	May 8.....	2.24	187
Feb. 6.....	3.90	716	Apr. 8.....	4.88	1,220	June 8.....	1.34	26
Feb. 10.....	3.06	418	Do.....	4.76	1,200	Sept. 5.....	1.18	12
Mar. 20.....	2.61	275						

Daily discharge, in second-feet, of Middle Fork of Feather River near Clio, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		22	70	46	825	282	189	157	34	10	14	12
2		22	98	46	500	285	165	143	33	11	14	12
3		22	72	44	448	291	149	129	30	11	13	12
4		22	63	46	841	296	161	159	27	12	9.5	12
5		24	55	46	650	302	380	308	26	11	9.	12
6		27	54	46	735	317	802	238	21	11	9	12
7		27	54	44	802	311	1,220	193	21	11	6.5	12
8		29	57	46	542	314	1,170	191	24	12	6	12
9		29	55	48	390	380	900	176	24	13	6.5	12
10		40	52	48	380	354	670	153	19	16	6.5	12
11		33	51	49	329	345	610	135	17	16	7.5	12
12	22	59	48	48	314	323	535	126	16	15	7.5	12
13		55	46	48	294	308	472	120	15	14	7.5	13
14		44	44	46	288	342	408	111	14	13	8	14
15		36	40	48	308	383	317	105	15	13	8	14
16		36	40	48	288	380	296	98	15	13	8	14
17		43	40	48	248	367	282	91	14	14	8.5	14
18		46	44	48	241	296	264	84	12	15	8.5	14
19		46	16	46	216	265	245	77	13	15	8.5	15
20		46	44	46	269	269	222	72	13	15	9	16
21		46	44	55	246	280	210	60	13	15	9	17
22		44	44	43	258	280	189	57	12	13	9	18
23	22	44	46	42	236	274	170	54	12	15	9	19
24	22	44	43	40	217	302	153	57	12	16	9.5	18
25	22	44	42	40	226	256	133	57	11	16	9.5	18
26	22	43	44	42	243	229	133	52	11	15	9.5	18
27	22	42	44	46	261	205	139	51	9.5	15	10	18
28	22	40	46	78	277	191	137	48	10	14	10	18
29	22	40	44	690	-----	198	131	43	9.5	14	10	18
30	22	46	44	434	-----	174	153	40	10	14	12	18
31	22	-----	44	712	-----	187	-----	37	-----	14	-----	-----

NOTE.—Braced figure shows estimated mean discharge for period indicated.

Monthly discharge of Middle Fork of Feather River near Clio, Calif.; for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	-----	-----	22.0	1,350
November	59	22	38.0	2,260
December	98	40	50.3	3,090
January	712	40	102	6,270
February	841	217	339	21,600
March	383	174	290	17,800
April	1,220	131	367	21,800
May	308	37	110	6,760
June	34	9.5	17.1	1,020
July	16	10	13.6	836
August	14	6	9.18	564
September	19	12	14.6	869
The year	1,220	6	116	84,200

MIDDLE FORK OF FEATHER RIVER AT SLOAT, CALIF.

LOCATION.—Half a mile above Sloat, Plumas County, three-fourths of a mile above mouth of Poplar Creek and 1½ miles below Cromberg.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 3, 1910, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 1 mile above gage or by wading.

CHANNEL AND CONTROL.—Boulders and gravel; may shift somewhat. Left bank, flat and timbered, will be submerged at extreme flood stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.63 feet at 3 a. m. April 7 (discharge, 3,630 second-feet); minimum stage from water-stage recorder, 2.52 feet at 6 p. m. August 7 (discharge, 35 second-feet).

1910-1926: Maximum stage recorded, 13.0 feet April 7, 1911 (discharge, 9,640 second-feet); minimum stage recorded, 2.36 feet August 8-13, 1924 (discharge, 22 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERIONS.—There are small diversions for irrigation above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Recorder record good. Daily discharge ascertained by applying mean daily gage height to rating table, except for periods October 25 to November 6, November 10-13, April 26-27, May 11-15, and July 29-31, for which it was estimated by comparison with record for Middle Fork of Feather River near Nelson Point, and January 29, for which hourly discharge was averaged. Records good.

Discharge measurements of Middle Fork of Feather River at Sloat, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 22.....	2.71	57	June 11.....	2.96	103
Apr. 11.....	5.08	1,240	June 12.....	2.91	94

Daily discharge, in second-feet, of Middle Fork of Feather River at Sloat, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	55	61	250	84	1,240	544	445	652	167	53	39	38
2.....	55	65	301	83	828	538	405	598	160	53	38	38
3.....	55	68	186	86	771	514	381	568	149	51	38	38
4.....	55	65	152	88	1,790	544	430	673	146	51	37	38
5.....	61	64	135	86	1,440	544	1,040	1,130	140	51	37	38
6.....	78	63	132	86	1,440	550	2,050	799	132	50	37	38
7.....	71	62	127	84	1,440	550	3,270	652	122	49	36	38
8.....	68	63	122	84	1,020	574	2,670	598	122	50	36	38
9.....	66	62	120	84	771	701	1,920	562	122	51	36	38
10.....	63	71	110	86	771	673	1,500	550	110	55	37	38
11.....	78	71	103	86	680	624	1,290	515	96	55	37	38
12.....	96	100	107	86	617	604	1,180	480	94	53	37	38
13.....	84	105	96	86	562	586	1,090	445	86	51	37	38
14.....	78	94	88	86	532	645	988	410	83	48	37	40
15.....	71	84	84	84	544	743	940	375	75	48	36	41
16.....	63	79	83	81	532	743	924	341	78	45	36	42
17.....	62	88	83	83	440	715	836	341	78	44	36	43
18.....	61	96	90	83	435	610	792	341	76	44	26	43
19.....	59	96	94	81	450	556	750	350	69	44	37	43
20.....	59	96	86	76	520	580	708	345	66	43	37	43
21.....	59	94	90	81	460	586	701	321	65	43	37	45
22.....	61	88	88	78	1,240	574	680	289	63	43	37	45
23.....	59	88	88	79	1,190	592	638	269	62	42	37	48
24.....	61	88	88	81	420	624	631	250	61	42	37	44
25.....	61	84	83	74	420	562	638	232	56	43	37	43
26.....	61	84	84	76	465	514	660	210	55	41	37	43
27.....	61	83	86	74	502	470	640	207	55	39	37	43
28.....	61	83	86	90	502	440	610	193	55	38	37	43
29.....	61	83	84	1,220	-----	450	624	190	55	38	37	43
30.....	61	101	84	708	-----	410	680	183	54	38	37	45
31.....	61	-----	84	1,110	-----	440	-----	180	-----	38	38	-----

Monthly discharge of Middle Fork of Feather River at Sloat, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	96	55	64.7	3,980
November.....	105	61	81.0	4,820
December.....	301	83	113	6,950
January.....	1,220	74	173	10,600
February.....	1,790	420	795	43,700
March.....	743	410	574	35,300
April.....	3,270	381	1,000	59,500
May.....	1,130	180	427	26,300
June.....	167	54	91.8	5,450
July.....	55	38	46.3	2,850
August.....	39	36	36.9	2,270
September.....	48	38	41.0	2,440
The year.....	3,270	36	282	204,000

MIDDLE FORK OF FEATHER RIVER NEAR NELSON POINT, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 13, T. 23 N., R. 10 E., three-fourths of a mile below mouth of Nelson Creek and 2 miles below Nelson Point, Plumas County.

RECORDS AVAILABLE.—December 13, 1923, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 300 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed of stream is gravel, fairly permanent; banks are steep, slightly wooded, and are not overflowed. Control is gravel and boulders, practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.56 feet at 5 a. m. April 7 (discharge, 5,170 second-feet); minimum stage during year, from water-stage recorder, 0.38 foot September 9–11 (discharge, 62 second-feet).

1923–1926: Maximum stage, from water-stage recorder, 9.20 feet at 6 a. m. February 6, 1925 (discharge, 9,340 second-feet); minimum stage, from water-stage recorder, 0.13 foot August 12–14, 1924 (discharge, 36 second-feet).

ICE.—Not affected by ice during the winter of 1925–26.

DIVERSIONS.—Numerous small diversions for irrigation above.

REGULATION.—None.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Recorder record excellent, except March 11–17 when clock stopped. Staff gage read March 12–13. Daily discharge ascertained by applying mean daily gage height to rating table, except January 29, February 4, and April 5–7, for which hourly discharge was averaged. Discharge March 11 and 14–17 estimated by comparison with record for Middle Fork of Feather River at Sloat. Records excellent.

Discharge measurements of Middle Fork of Feather River near Nelson Point, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Dec. 17.....	0.80	124	Mar. 19.....	2.46	776	Apr. 14.....	3.50	1,490
Feb. 8.....	3.04	1,140	Apr. 9.....	4.92	2,840	May 9.....	2.48	805
Feb. 12.....	2.50	783	Do.....	4.85	2,790	June 13.....	.99	162
Mar. 18.....	2.54	778	Apr. 10.....	4.32	2,250	Sept. 11.....	.38	57

Daily discharge, in second-feet, of Middle Fork of Feather River near Nelson Point, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	93	254	122	1,330	648	654	1,020	252	101	84	66
2	87	106	423	129	875	660	600	910	243	101	100	66
3	87	110	252	120	875	660	565	840	230	98	104	65
4	87	106	201	120	2,260	690	618	980	225	96	86	65
5	92	106	180	119	1,770	708	1,380	1,530	218	95	76	64
6	120	106	164	119	1,690	726	2,800	1,160	206	93	71	64
7	120	104	160	117	1,610	726	4,510	945	198	90	69	64
8	106	104	154	115	1,220	750	4,160	840	198	93	66	63
9	103	108	148	115	980	910	2,920	780	198	95	65	62
10	101	122	148	115	945	840	2,190	726	186	100	65	62
11	126	122	142	115	875	825	1,900	666	173	101	66	62
12	158	164	142	113	780	810	1,730	624	164	100	70	63
13	146	177	142	111	714	780	1,650	600	158	96	69	63
14	131	156	128	117	660	810	1,530	585	152	92	69	64
15	122	131	124	117	666	840	1,490	565	148	87	68	64
16	115	120	122	115	684	830	1,490	530	144	86	68	65
17	108	126	122	115	570	810	1,370	525	140	84	66	66
18	103	129	137	113	550	810	1,260	525	140	82	66	68
19	100	126	138	117	560	738	1,160	525	135	80	66	68
20	95	126	133	115	666	744	1,080	520	131	82	66	69
21	92	124	133	113	580	750	1,080	475	131	82	66	71
22	92	122	129	113	590	750	1,050	423	128	82	65	71
23	92	120	128	106	550	780	980	381	122	80	65	71
24	92	122	128	106	500	840	980	354	117	77	64	71
25	92	120	124	103	485	780	980	324	111	75	63	70
26	92	122	126	104	540	714	1,020	310	108	76	63	70
27	92	122	129	117	590	666	1,020	292	104	77	63	70
28	92	120	128	142	612	618	980	282	106	80	63	70
29	93	119	129	1,390	-----	636	1,020	276	106	80	64	70
30	93	129	124	875	-----	585	1,050	270	103	77	66	71
31	95	-----	126	1,260	-----	642	-----	260	-----	77	66	-----

Monthly discharge of Middle Fork of Feather River near Nelson Point, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	158	87	104	6,400
November	177	93	122	7,260
December	423	122	155	9,530
January	1,890	103	218	13,400
February	2,260	485	883	49,000
March	910	585	744	45,700
April	4,510	565	1,510	89,800
May	1,530	260	614	37,800
June	252	103	159	9,460
July	101	75	87.6	5,390
August	104	63	69.9	4,300
September	71	62	66.6	3,960
The year	4,510	62	390	282,000

MIDDLE FORK OF FEATHER RIVER AT BIDWELL BAR, CALIF.⁹

LOCATION.—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, Butte County. Canyon Creek enters three-fourths mile below and South Fork $1\frac{1}{4}$ miles above station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 7, 1911, to September 30, 1926.

GAGE.—Vertical staff in two sections; low-water section fastened to sycamore tree 100 feet above bridge; high-water section 150 feet above bridge; read by T. W. Curry.

⁹ Previously published as "near Oroville."

DISCHARGE MEASUREMENTS.—Made from cable 250 feet below bridge.

CHANNEL AND CONTROL.—Boulders and gravel; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.3 feet at 8 a. m. April 7 (discharge, 15,300 second-feet); minimum stage recorded, 2.02 feet September 13–15 (discharge, 150 second-feet).

1911–1926: Maximum stage recorded, 18.0 feet at 4 p. m. December 31, 1913 (discharge, from extension of rating curve, about 34,200 second-feet); minimum stage recorded, 1.50 feet August 30 to September 15, 1924 (discharge, 100 second-feet).

DIVERSIONS.—The Palermo Land & Water Co.'s canal and South Feather Land & Water Co.'s canal divert from South Fork of Feather River and tributaries.

REGULATIONS.—None.

ACCURACY.—Stage-discharge relation changed slightly April 7. Rating curves fairly well defined. Staff gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records good.

Discharge measurements of Middle Fork of Feather River at Bidwell Bar, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 9.....	6.68	3,310	May 4.....	5.48	2,020
Feb. 15.....	6.12	2,650	Aug. 23.....	2.06	161

Daily discharge, in second-feet, of Middle Fork of Feather River at Bidwell Bar, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	250	250	560	385	3,810	2,020	1,930	2,220	830	300	195	170
2.....	238	250	2,220	385	2,540	2,020	1,840	2,020	775	300	195	160
3.....	225	332	1,180	368	3,960	2,020	1,760	1,930	725	300	195	160
4.....	225	350	820	385	12,000	2,120	1,760	1,840	675	300	195	160
5.....	238	315	710	385	9,480	2,220	10,200	3,520	675	285	182	160
6.....	350	298	605	385	7,520	2,320	12,700	2,880	650	270	182	160
7.....	492	280	580	385	5,700	2,320	15,300	2,430	625	270	182	160
8.....	350	280	538	385	4,440	2,320	14,600	2,220	625	270	182	160
9.....	298	280	515	368	3,380	2,880	11,500	2,120	625	270	170	160
10.....	280	560	492	350	3,120	2,760	8,600	2,020	602	270	170	160
11.....	265	470	470	332	3,380	2,540	7,520	1,840	558	270	170	160
12.....	405	710	448	350	3,660	2,430	6,090	1,760	558	270	170	160
13.....	385	940	425	350	2,880	2,430	5,510	1,600	512	270	170	150
14.....	368	655	425	315	3,120	2,540	4,960	1,520	490	270	170	150
15.....	332	515	425	315	2,650	2,760	4,610	1,450	490	245	170	150
16.....	315	448	425	368	3,000	2,880	4,280	1,380	490	245	170	160
17.....	298	605	405	405	2,430	2,760	3,960	1,310	470	232	170	160
18.....	280	515	538	445	2,220	2,540	3,960	1,310	450	232	170	160
19.....	280	470	710	368	2,880	2,320	3,380	1,310	430	220	170	160
20.....	265	448	538	332	3,660	2,320	3,120	1,240	410	220	170	160
21.....	265	448	470	315	2,760	2,220	3,000	1,240	390	220	170	170
22.....	250	448	448	315	2,320	2,220	2,880	1,180	390	220	170	170
23.....	250	448	448	332	2,120	2,320	2,650	1,120	390	220	170	170
24.....	250	425	425	332	1,930	2,430	2,650	1,060	370	220	160	170
25.....	250	425	425	315	1,840	2,430	2,540	1,000	370	220	160	160
26.....	250	425	425	315	1,840	2,220	2,540	940	352	208	160	160
27.....	315	425	425	315	1,930	2,120	2,430	940	335	208	160	160
28.....	250	405	425	332	1,930	2,020	2,430	885	335	208	160	160
29.....	250	385	405	4,960	-----	2,020	2,320	885	318	208	160	160
30.....	250	385	405	2,650	-----	1,930	2,220	885	318	208	160	160
31.....	250	-----	385	5,890	-----	1,930	-----	880	-----	195	170	-----

Monthly discharge of Middle Fork of Feather River at Bidwell Bar, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	492	225	289	17,800
November.....	940	250	440	26,200
December.....	2,220	385	571	35,100
January.....	5,890	315	756	46,500
February.....	12,000	1,840	3,660	203,000
March.....	2,880	1,930	2,330	143,000
April.....	15,300	1,760	5,110	304,000
May.....	3,520	830	1,580	97,200
June.....	830	318	508	30,200
July.....	300	195	247	15,200
August.....	195	160	173	10,600
September.....	170	150	161	9,580
The year.....	15,300	150	1,300	938,000

GRIZZLY CREEK NEAR PORTOLA, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 12, T. 23 N., R. 13 E., about $1\frac{1}{2}$ miles below Grizzly Valley Reservoir dam site, 2 miles above Clover Valley Ice Co.'s dam, and 6 miles northeast of Portola, Plumas County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1925, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well on left bank, installed October 26, 1925.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Bed of stream is gravel and boulders, permanent. Banks steep and are not overflowed. Control is solid gravel and boulders and appears permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.85 feet at 11 p. m. April 6 (discharge, 468 second-feet); minimum stage, from water-stage recorder, 0.84 foot August 2-5 (discharge, 0.3 second-foot).

ICE.—Pool frozen over December 16, but control was open; during heavy snow-storm on February 11 control was partly blocked with ice and snow.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve very well defined. Recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table except January 28, 29, and April 5, for which hourly discharge was averaged, February 11, for which it was estimated because of ice on control, and September 16-30, for which it was estimated because of leaves on control. Mean discharge for October 1-25 estimated at 0.9 second-foot from observations during construction of recorder well. Records excellent.

Discharge measurements of Grizzly Creek near Portola, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 26.....	1.00	0.8	Mar. 21.....	2.44	88	May 7.....	2.26	64
Dec. 16.....	1.03	1.2	Apr. 7.....	3.43	321	Do.....	2.18	57
Feb. 7.....	2.76	139	Do.....	3.28	259	June 9.....	1.06	1.6
Feb. 11.....	1.96	31	Apr. 13.....	2.38	79	Sept. 6.....	.88	.2

Daily discharge, in second-feet, of Grizzly Creek near Portola, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		1.1	7	1.0	37	9	82	36	3.3	0.4	0.3	0.5
2.....		1.3	10	1.0	27	10	58	27	2.8	.4	.3	.5
3.....		1.9	6	1.0	8.5	11	49	24	2.5	.4	.3	.4
4.....		1.9	3.0	1.2	42	16	44	51	2.3	.4	.3	.4
5.....		1.8	2.5	1.2	106	25	125	168	2.0	.3	.3	.4
6.....		1.6	2.5	1.3	166	33	321	69	1.8	.3	.3	.4
7.....		1.4	2.2	1.4	137	36	360	69	1.7	.3	.3	.4
8.....		1.6	1.8	1.3	86	45	242	59	1.6	.4	.3	.4
9.....		2.0	1.6	1.2	48	48	146	47	1.6	.4	.3	.4
10.....		2.6	1.4	1.2	24	44	117	32	1.4	.4	.3	.4
11.....		2.8	1.4	1.2	24	39	108	24	1.2	.4	.3	.4
12.....		4.9	1.6	1.2	18	42	98	20	1.1	.4	.3	.4
13.....	0.9	6.0	1.4	1.2	14	69	93	18	1.0	.4	.3	.4
14.....		3.1	1.2	1.2	11	114	87	16	.8	.4	.3	.5
15.....		2.8	.9	1.2	9	146	82	14	.8	.3	.4	.5
16.....		2.6	.9	1.3	6.5	175	79	13	.8	.3	.4	.5
17.....		3.0	.9	1.3	7	141	67	12	.7	.3	.4	.6
18.....		2.5	1.1	1.3	7	94	60	11	.6	.3	.4	.6
19.....		2.0	1.1	1.3	4.7	87	54	11	.6	.3	.4	.6
20.....		1.9	1.3	1.6	3.1	112	46	9.5	.5	.3	.4	.6
21.....		1.7	1.3	1.8	8	120	43	8.5	.4	.3	.4	.6
22.....		1.6	1.2	1.4	7	122	39	8	.4	.3	.4	.7
23.....		1.6	1.4	1.4	6.5	142	36	7	.4	.3	.4	.7
24.....		1.6	1.4	1.3	6	139	34	7	.4	.3	.4	.6
25.....		1.8	1.3	1.3	5	104	32	7	.4	.3	.4	.7
26.....	.9	2.0	1.2	1.3	6	89	34	6.5	.3	.3	.4	.8
27.....	1.0	2.0	1.2	1.4	8	84	39	6.5	.3	.3	.4	.7
28.....	1.0	2.0	1.1	5.5	8	79	33	5.5	.4	.3	.4	.8
29.....	1.0	1.9	1.0	178	-----	76	36	4.9	.4	.3	.4	.8
30.....	1.0	2.6	1.0	48	-----	77	54	4.5	.4	.3	.4	.8
31.....	1.0	-----	1.0	18	-----	89	-----	3.8	-----	.3	.5	-----

Monthly discharge of Grizzly Creek near Portola, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1.0	-----	0.92	56.6
November.....	6	1.1	2.25	134
December.....	10	.9	2.03	125
January.....	178	1.0	9.16	563
February.....	166	3.1	29.9	1,660
March.....	175	9	78.0	4,800
April.....	360	32	89.6	5,330
May.....	168	3.8	25.8	1,590
June.....	3.3	.3	1.10	65.5
July.....	.4	.3	.34	20.9
August.....	.5	.3	.36	22.1
September.....	.8	.4	.55	32.7
The year.....	360	.3	19.9	14,400

SOUTH FORK OF FEATHER RIVER AT ENTERPRISE, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 1, T. 19 N., R. 6 E., 800 feet above mouth of Powell Creek and half a mile above highway bridge at Enterprise, Butte County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 8, 1911, to September 30, 1926.

GAGE.—Inclined staff bolted to ledge on right bank; read by Agnes Parks Alm.

DISCHARGE MEASUREMENTS.—Made from cable 90 feet below gage or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; shift during high water.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 9.7 feet at 4.15 p. m. February 4 (discharge, about 5,880 second-feet); minimum stage recorded, 4.0 feet August 8 to September 15 (discharge, 1.0 second-foot).

1911-1926: Maximum stage recorded, 12.05 feet February 25, 1917 (discharge, from extension of rating curve, 10,600 second-feet); minimum stage recorded, 2.45 feet August 11, 1917 (discharge, 0.2 second-foot).

DIVERSIONS.—Diversion dam of Palermo Land & Water Co.'s canal is 1 mile above station. South Feather Land & Water Co.'s canal diverts from Lost and Pinkard Creeks above station. This water is used for irrigation in the vicinity of Wyandotte and Bangor.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed February 4. Rating curves fairly well defined. Staff gage read to half-tenths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records fair.

Discharge measurements of South Fork of Feather River at Enterprise, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Feb. 10.....	Feet 6.28	Sec.-ft. 676	Apr. 11.....	Feet 7.34	Sec.-ft. 1,270	June 25.....	Feet 4.25	Sec.-ft. 4.7
Feb. 15.....	5.98	595	May 4.....	5.30	202			

Daily discharge, in second-feet, of South Fork of Feather River at Enterprise, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	7	7	38	26	545	268	165	290	50	2.0	1.5	1.0
2.....	7	10	322	24	390	268	148	268	50	2.0	1.5	1.0
3.....	7	17	183	24	1,180	245	130	245	43	2.0	1.5	1.0
4.....	7	13	52	24	5,320	245	205	205	37	2.0	1.5	1.0
5.....	7	13	46	24	1,960	245	2,570	340	34	2.0	2.5	1.0
6.....	26	13	38	24	1,620	245	2,800	315	31	2.0	2.5	1.0
7.....	21	13	35	24	990	245	3,760	290	43	1.5	2.5	1.0
8.....	19	13	32	24	810	245	3,460	290	37	1.5	1.0	1.0
9.....	19	13	32	24	640	390	2,050	290	31	1.5	1.0	1.0
10.....	17	32	26	24	690	290	1,620	290	26	1.5	1.0	1.0
11.....	17	32	26	24	590	245	1,290	268	21	1.5	1.0	1.0
12.....	21	46	26	26	750	245	990	268	17	1.5	1.0	1.0
13.....	21	46	26	26	540	245	930	245	17	1.5	1.0	1.0
14.....	17	46	26	26	590	245	810	205	13	1.5	1.0	1.0
15.....	17	42	26	24	515	205	665	165	13	1.5	1.0	1.0
16.....	15	32	26	26	540	205	690	148	13	1.5	1.0	1.5
17.....	15	38	26	26	440	205	615	130	10	1.5	1.0	1.5
18.....	13	26	38	26	365	165	590	115	7	1.5	1.0	2.5
19.....	13	26	46	24	540	130	540	100	7	1.5	1.0	2.5
20.....	13	26	42	24	810	100	515	89	7	1.5	1.0	2.5
21.....	13	38	38	24	490	130	440	89	7	1.5	1.0	2.5
22.....	10	38	35	21	365	165	415	78	7	1.5	1.0	2.5
23.....	10	52	32	21	290	205	390	78	7	1.5	1.0	2.5
24.....	8.5	52	32	21	245	245	390	78	7	1.5	1.0	2.5
25.....	8.5	52	32	21	268	245	390	78	5	1.5	1.0	2.5
26.....	8.5	58	26	21	268	268	340	78	5	1.5	1.0	2.5
27.....	8.5	58	26	21	268	245	340	78	2.5	1.5	1.0	2.5
28.....	7	46	26	32	268	225	290	68	2.5	1.5	1.0	2.5
29.....	7	38	26	1,080	-----	205	290	58	2.5	1.5	1.0	2.5
30.....	7	26	26	260	-----	205	290	58	2.5	1.5	1.0	2.5
31.....	7	-----	26	1,950	-----	185	-----	58	-----	1.5	1.0	-----

Monthly discharge of South Fork of Feather River at Enterprise, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	26	7	12.7	781
November.....	58	7	32.1	1,910
December.....	322	26	46.4	2,850
January.....	1,950	21	128	7,870
February.....	5,320	245	796	44,200
March.....	390	100	226	13,900
April.....	3,760	130	937	55,800
May.....	340	58	173	10,600
June.....	50	2.5	18.5	1,100
July.....	2.0	1.5	1.60	98.4
August.....	2.5	1.0	1.21	74.4
September.....	2.5	1.0	1.68	100
The year.....	5,320	1.0	192	139,000

PALERMO LAND & WATER CO.'S CANAL AT ENTERPRISE, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 1, T. 19 N., R. 6 E., 1,000 feet above Alm's residence at Enterprise, Butte County, and three-fourths of a mile below intake at diversion dam on South Fork of Feather River.

RECORDS AVAILABLE.—October 8, 1911, to September 30, 1926.

GAGE.—Vertical staff on right wall of concrete approach to sheet-iron flume; read by Agnes Parks Alm.

DISCHARGE MEASUREMENTS.—Made from foot plank at gage or by wading.

CHANNEL AND CONTROL.—Control is throat of concrete approach to metal flume.

EXTREMES OF DISCHARGE.—1911–1926: Maximum discharge recorded, 41 second-feet June 17, 1918, and July 10–30, 1922; no flow during periods of every year.

ACCURACY.—Stage-discharge relation did not change during the year. Rating curve well defined. Staff gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table or by averaging discharge for parts of a day when head gates were changed. Records good.

Canal diverts from left bank of South Fork of Feather River about 1 mile above Enterprise. Water is used for irrigation below Oroville.

The following discharge measurements were made:

February 10, 1926: Gage height, 1.28 feet; discharge, 11.2 second-feet.

April 11, 1926: Gage height, 0.53 foot; discharge, 1.7 second-feet.

May 4, 1926: Gage height, 1.85 feet; discharge, 22 second-feet.

Daily discharge, in second-feet, of Palermo Land & Water Co.'s canal at Enterprise, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	21	19.8	12.4	12.4	12.4	13.9	26	23	38	31	31	28
2.....	19.8	21	13.2	12.4	12.4	13.9	26	23	38	31	31	28
3.....	21	22	12.8	12.4	0	23	28	23	39	31	31	28
4.....	21	22	12.4	12.4	0	23	28	19.8	38	32	32	28
5.....	22	22	12.4	12.4	0	23	16.4	17.5	38	32	32	27
6.....	17.5	22	12.4	12.4	12.8	23	12.4	17.5	39	31	32	27
7.....	17.5	22	12.4	12.4	12.4	23	8.9	17.5	39	31	31	27
8.....	19.8	22	12.4	12.4	12.4	14.7	2.5	17.5	39	31	31	27
9.....	19.8	22	12.4	12.4	12.4	14.7	2.5	17.5	39	35	31	27
10.....	19.8	18.6	12.4	12.4	12.0	14.7	2.5	21	39	35	31	27

Daily discharge, in second-feet, of Palermo Land & Water Co's. canal at Enterprise, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11	19.8	14.7	12.4	12.4	12.0	14.7	2.2	23	39	35	31	27
12	19.8	14.7	12.4	12.4	12.4	14.7	14.3	26	39	34	31	27
13	19.8	14.7	12.8	12.4	12.4	14.7	14.3	26	39	32	31	27
14	18.6	14.3	12.8	12.4	12.4	14.7	14.3	26	39	32	31	27
15	18.6	14.3	12.4	12.4	11.7	14.7	13.9	30	39	31	31	27
16	19.8	15.1	12.4	12.4	12.4	14.7	3.8	31	39	31	30	27
17	19.8	15.1	12.4	12.4	12.4	14.7	0	31	39	31	30	27
18	19.8	14.7	12.4	12.4	12.4	14.7	9.0	31	39	31	30	28
19	19.8	12.8	12.8	12.4	13.0	14.7	8.3	35	39	31	31	26
20	21	12.4	12.4	12.4	12.0	14.7	9.0	35	39	31	30	26
21	21	12.4	12.4	12.4	12.0	16.0	9.0	35	36	31	30	26
22	21	12.4	12.4	12.4	12.0	16.0	12.1	38	36	31	30	27
23	19.8	12.4	12.4	12.4	12.0	16.0	12.1	38	36	31	28	27
24	19.8	12.4	12.4	12.4	12.0	16.0	12.1	39	35	31	28	26
25	21	12.4	12.4	12.4	6.0	16.0	18.6	39	34	31	28	25
26	21	12.4	12.4	12.4	6.0	16.0	18.6	39	34	32	28	25
27	21	12.4	12.4	12.4	6.0	16.0	23	39	34	32	28	25
28	21	12.4	12.4	12.8	13.9	19.8	23	39	32	31	28	25
29	19.8	12.4	12.4	13.9	-----	19.8	23	38	31	32	28	25
30	19.8	12.4	12.4	13.9	-----	19.8	23	38	30	31	28	26
31	19.8	-----	12.4	13.9	-----	19.8	-----	38	-----	31	28	-----

Monthly discharge of Palermo Land & Water Co's. canal at Enterprise, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	22	17.5	20.0	1,230
November	22	12.4	16.0	952
December	13.2	12.4	12.5	769
January	13.9	12.4	12.6	776
February	13.9	0	10.4	578
March	23	13.9	16.9	1,040
April	28	0	13.9	827
May	39	17.5	29.4	1,810
June	39	30	37.1	2,210
July	35	31	31.7	1,950
August	32	28	30.0	1,840
September	28	25	26.7	1,590
The year	39	0	21.5	15,600

MIDDLE FORK OF YUBA RIVER AT MILTON, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 12, T. 19 N., R. 12 E., one-fourth mile below dam site of Nevada Irrigation District at Milton, Sierra County, and about 8 miles above South Fork of Middle Fork of Yuba River, altitude, about 5,700 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 31, 1925, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 50 feet below gage or by wading.

CHANNEL AND CONTROL.—Channel is through earth with gravel bottom; control is a gravel bar, which will probably shift.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 5.36 feet at 7 p. m., May 4 (discharge, 603 second-feet); minimum stage, from water-stage recorder, 2.48 feet on August 25 (discharge, 1.1 second-feet).

ICE.—Stage-discharge relation affected by ice or float frozen in well January 25-28 and February 4-5.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation did not change during period. Rating curve fairly well defined. Water-stage recorder record excellent except during periods affected by ice. Daily discharge ascertained by applying mean daily gage height to rating table. During period affected by ice, discharge estimated by comparison with record for Canyon Creek above Jackson Creek. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Nevada Irrigation District, through Fred H. Tibbetts.

Discharge measurements of Middle Fork of Yuba River at Milton, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Jan. 5.....	3.01	13	Feb. 4.....	3.74	49	Apr. 9.....	4.39	282
Jan. 19.....	2.94	12	Feb. 6.....	3.74	104	Apr. 24.....	4.54	318
Do.....	2.94	12	Feb. 26.....	3.19	33	May 14.....	4.03	190
Jan. 30.....	3.50	60	Mar. 31.....	4.03	185	Aug. 9.....	2.54	1.8

* Stage-discharge relation affected by ice.

Daily discharge, in second-feet, of Middle Fork of Yuba River at Milton, Calif., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		15	49	39	191	373	81	6	2.0	1.7
2.....		15	37	42	163	347	74	5	2.0	1.6
3.....		13	32	47	147	344	66	4.5	1.9	1.4
4.....		14	45	49	194	414	61	4.3	1.7	1.3
5.....		14	80	58	408	386	56	4.1	1.7	1.3
6.....		15	112	71	430	281	49	4.1	1.7	1.3
7.....		15	98	78	504	233	45	4.1	1.7	1.3
8.....		15	81	83	389	222	42	4.0	1.7	1.2
9.....		14	71	76	312	214	36	4.0	1.7	1.2
10.....		14	61	69	293	197	31	4.1	1.9	1.2
11.....		13	58	72	287	197	27	4.1	1.9	1.2
12.....		13	47	83	322	200	24	4.1	1.7	1.2
13.....		13	43	109	357	202	22	3.8	1.6	1.3
14.....		13	38	144	366	208	20	3.4	1.6	1.3
15.....		12	36	177	405	208	18	3.2	1.4	1.4
16.....		12	35	188	411	205	17	3.1	1.4	1.6
17.....		11	48	174	354	214	15	2.9	1.3	1.6
18.....		11	35	147	306	222	13	2.9	1.4	1.7
19.....		12	29	136	306	233	13	2.9	1.6	1.7
20.....		12	36	155	331	216	12	3.2	1.4	1.9
21.....		12	37	163	354	191	11	3.2	1.3	2.0
22.....		12	28	180	344	169	10	3.1	1.3	2.0
23.....		12	31	214	347	142	8.5	3.1	1.2	1.9
24.....		12	27	228	360	114	8	2.9	1.2	1.9
25.....		12	27	214	402	100	7.5	2.7	1.1	1.7
26.....		12	28	200	414	94	7	2.4	1.3	1.7
27.....		12	32	197	411	92	7	2.4	1.3	1.7
28.....		15	36	186	430	96	6.5	2.4	1.3	1.7
29.....		114	-----	180	440	98	6	2.4	1.4	1.7
30.....		62	-----	186	430	92	6	2.3	2.0	1.7
31.....	15	64	-----	208	-----	85	-----	2.1	1.9	-----

Monthly discharge of Middle Fork of Yuba River at Milton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	114	11	19.5	1,200
February.....	112	27	47.0	2,610
March.....	228	39	134	8,240
April.....	504	147	347	20,600
May.....	414	85	206	12,700
June.....	81	6	26.6	1,580
July.....	6	2.1	3.45	212
August.....	2.0	1.1	1.57	96.5
September.....	2.0	1.2	1.55	92.2
The period.....				47,300

MIDDLE FORK OF YUBA RIVER NEAR NORTH SAN JUAN, CALIF.

LOCATION.—In N. $\frac{1}{2}$ NW. $\frac{1}{4}$ sec. 23, T. 18 N., R. 8 E., below highway bridge at Freemans Crossing, in Tahoe National Forest, $1\frac{1}{2}$ miles northeast of North San Juan, Nevada County. Moonshine Creek enters one-fourth of a mile below station, Oregon Creek three-fourths of a mile above, and North Fork of Yuba River 4 miles below.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—July 1 to October 20, 1900; October 27, 1910, to September 30, 1926.

GAGE.—Vertical staff wedged between two large boulders on right bank one-fourth of a mile below bridge; read by Henry Zurhorst.

DISCHARGE MEASUREMENTS.—Made from cable 200 feet above gage or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 8.35 feet at 10 a. m. February 4 (discharge, 4,550 second-feet; minimum stage recorded, 4.39 feet August 5, 24, 25, 27, and 29 (discharge, 28 second-feet).

1910-1926: Maximum stage recorded, 11.7 feet at 10 a. m. May 12, 1915 (discharge, 14,300 second-feet); minimum stage recorded, 4.10 feet August 12 and 14, 1924 (discharge, 21 second-feet).

DIVERSIONS.—No information.

REGULATION.—No information.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Staff gage read once a day to hundredths. Daily discharge ascertained by applying daily gage height to rating table. Discharge interpolated October 24 and estimated December 1 by comparison with records for other near-by streams. Records good.

Discharge measurements of Middle Fork of Yuba River near North San Juan, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
May 7.....	5.79	618	Aug. 13.....	4.40	29
May 11.....	5.58	495	Aug. 16.....	4.40	29

Daily discharge, in second-feet, of Middle Fork of Yuba River near North San Juan, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	51	51	150	79	695	495	423	802	221	61	31	29
2.....	55	53	528	77	495	495	393	695	213	59	31	29
3.....	51	70	261	84	1,280	495	375	660	193	55	29	29
4.....	53	72	168	82	4,550	495	417	660	185	55	29	29
5.....	57	61	140	77	1,740	495	2,030	1,010	174	51	28	29
6.....	109	57	127	77	1,810	495	2,350	695	178	49	29	29
7.....	92	55	117	75	1,060	495	2,350	625	168	47	29	29
8.....	70	55	109	75	840	495	4,080	592	157	49	31	29
9.....	61	51	87	70	730	560	3,450	592	157	55	29	29
10.....	61	127	92	72	880	465	2,190	560	147	55	29	29
11.....	87	95	89	70	765	465	1,540	495	134	55	29	29
12.....	84	193	89	70	880	423	1,060	495	124	55	29	29
13.....	70	213	87	77	802	435	1,060	495	120	55	29	29
14.....	63	111	77	67	840	495	1,060	495	114	51	29	29
15.....	59	95	75	70	730	560	965	495	114	45	29	29
16.....	65	89	75	72	765	560	965	435	111	45	29	29
17.....	63	117	77	82	625	528	880	435	109	43	29	29
18.....	63	95	106	89	528	495	880	429	100	42	29	29
19.....	61	82	178	77	495	465	840	495	95	42	29	29
20.....	59	79	127	67	840	495	802	465	92	40	29	29
21.....	57	75	106	79	625	435	840	435	89	40	29	31
22.....	57	70	95	70	592	429	802	375	87	39	29	31
23.....	53	65	109	75	495	495	730	320	84	39	29	31
24.....	53	67	106	70	435	495	840	290	77	37	28	32
25.....	53	65	100	75	405	495	840	270	70	37	28	32
26.....	51	65	100	65	435	465	840	248	67	35	29	31
27.....	53	67	97	75	495	465	840	243	67	35	28	34
28.....	53	70	95	77	465	435	765	248	65	35	29	32
29.....	57	65	89	1,670	-----	465	880	252	63	35	28	35
30.....	53	84	84	528	-----	393	840	243	63	34	29	34
31.....	51	-----	79	2,190	-----	435	-----	225	-----	32	29	-----

Monthly discharge of Middle Fork of Yuba River near North San Juan, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	109	51	62.1	3,820
November.....	213	51	83.8	4,990
December.....	528	75	123	7,560
January.....	2,190	65	209	12,900
February.....	4,550	405	903	50,200
March.....	560	393	481	29,600
April.....	4,080	375	1,210	72,000
May.....	1,010	225	477	29,300
June.....	221	63	121	7,200
July.....	61	32	45.4	2,790
August.....	31	28	29.0	1,780
September.....	35	29	30.1	1,790
The year.....	4,550	28	309	224,000

YUBA RIVER AT SMARTSVILLE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 22, T. 16 N., R. 6 E., at Narrows, 1 mile north of Smartsville, Yuba County, 1 mile below mouth of Deer Creek, $6\frac{1}{2}$ miles below mouth of South Fork, 7 miles above mouth of Dry Creek, and 18 miles above junction with Feather River.

DRAINAGE AREA.—1,220 square miles.

RECORDS AVAILABLE.—June 2, 1903, to September 30, 1926.

GAGE.—Staff in three sections, bolted to solid rock on left bank; read by Joseph French.

DISCHARGE MEASUREMENTS.—Made from cable at gage.

CHANNEL AND CONTROL.—Gravel and small boulders; shifts during high water.

As result of extensive hydraulic mining in the early days channel has been filled with an enormous quantity of tailings. At station depth of mining débris is estimated at more than 80 feet.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.7 feet at 4.10 p. m. February 4 (discharge, 23,200 second-feet); minimum stage recorded, 1.02 feet at 7 a. m. September 30 (discharge, 114 second-feet).

1903-1926: Maximum stage recorded, 28.3 feet January 15, 1909 (discharge, 111,000 second-feet); minimum stage recorded, 0.58 foot July 30, 1924 (discharge, 71 second-feet; regulated flow).

DIVERSIONS.—Water is diverted for power and irrigation above station.

REGULATION.—Several small glacial lakes near headwaters of South Fork of Yuba River are utilized as storage reservoirs. A part of this water is diverted into the Bear River Basin. Reservoir at Bullards Bar completed in March, 1924, has a capacity of 15,000 acre-feet.

ACCURACY.—Stage-discharge relation changed February 4. Rating curves well defined. Staff gage read to quarter-tenths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records good.

Discharge measurements of Yuba River at Smartsville, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Feb. 12.....	7.35	7,350	Feb. 18.....	6.05	4,430	July 9.....	1.72	317
Do.....	7.04	6,440	May 6.....	5.93	4,500	Aug. 17.....	1.53	245

Daily discharge, in second-feet, of Yuba River at Smartsville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	245	245	562	540	3,520	2,700	2,200	4,120	1,990	350	275	210
2.....	232	275	1,180	540	9,880	2,840	2,090	4,120	1,990	350	258	204
3.....	220	290	808	495	15,300	2,840	2,200	4,120	1,890	350	240	204
4.....	220	322	680	495	23,200	2,700	4,880	5,460	1,890	350	240	195
5.....	245	305	585	475	15,600	2,560	8,720	7,020	1,700	330	234	186
6.....	245	305	585	455	11,100	2,700	16,200	4,310	1,620	310	225	180
7.....	275	290	540	455	8,720	2,840	17,200	3,770	1,540	310	240	175
8.....	275	305	495	435	6,540	3,130	19,700	3,770	1,540	310	240	175
9.....	290	358	495	415	5,260	3,130	13,800	3,440	1,400	310	275	168
10.....	305	435	475	375	4,690	3,130	10,000	3,440	1,400	310	275	150
11.....	305	455	705	375	4,500	2,980	8,980	3,280	1,330	310	258	142
12.....	340	780	630	358	7,500	3,130	7,980	3,130	1,120	310	240	135
13.....	322	1,000	680	340	7,020	3,130	7,500	2,980	980	310	240	130
14.....	305	755	730	340	6,540	3,280	6,540	2,980	920	275	225	128
15.....	305	680	730	340	5,860	3,440	6,080	2,840	830	275	240	126
16.....	305	585	780	340	5,660	3,440	5,860	2,700	740	240	240	120
17.....	305	475	808	375	5,460	3,440	5,660	2,560	710	240	258	120
18.....	322	455	972	395	5,260	3,280	5,460	2,430	630	275	240	114
19.....	340	415	1,060	415	7,020	3,130	5,070	2,310	580	275	258	130
20.....	340	455	835	415	5,660	3,130	4,880	2,310	580	275	240	135
21.....	305	435	755	455	4,880	3,130	4,500	2,200	530	258	234	120
22.....	305	415	730	475	4,120	2,980	4,310	1,990	480	240	234	142
23.....	305	375	730	455	3,440	2,700	3,940	1,890	430	234	240	160
24.....	275	340	780	340	3,440	2,560	3,770	1,790	430	225	275	155
25.....	290	375	862	290	3,130	2,560	4,120	1,700	410	240	275	150
26.....	305	322	835	275	2,980	2,560	4,310	1,890	390	234	258	142
27.....	305	340	780	305	2,840	2,430	4,500	1,890	390	275	240	135
28.....	275	340	730	585	2,840	2,200	4,500	1,890	390	240	216	126
29.....	275	395	680	5,440		2,090	4,310	1,790	370	240	225	120
30.....	260	455	630	3,520		1,990	4,120	1,890	350	225	225	114
31.....	245		630	6,340		2,310		1,890		216	216	

Monthly discharge of Yuba River at Smartsville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	340	220	287	17,600
November.....	1,000	245	433	26,800
December.....	1,180	475	725	44,600
January.....	6,340	275	866	53,200
February.....	23,200	2,840	6,860	381,000
March.....	3,440	1,990	2,850	175,000
April.....	19,700	2,090	6,780	403,000
May.....	7,020	1,700	2,960	182,000
June.....	1,990	350	985	58,600
July.....	350	216	280	17,200
August.....	275	216	244	15,000
September.....	210	114	150	8,930
The year.....	23,200	114	1,910	1,380,000

OREGON CREEK NEAR NORTH SAN JUAN, CALIF.

LOCATION.—In N. $\frac{1}{2}$ SE. $\frac{1}{4}$ sec. 28, T. 18 N., R. 8 E., below highway bridge, in Tahoe National Forest, 500 feet above junction with Middle Fork of Yuba River, half a mile above Freemans Crossing, Yuba County, and 2 miles northeast of North San Juan, Nevada County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 28, 1910, to September 30, 1926.

GAGE.—Vertical staff fastened to an alder tree on right bank 150 feet below bridge; read by H. Zurhorst.

DISCHARGE MEASUREMENTS.—Made from cable 30 feet below gage or by wading.

CHANNEL AND CONTROL.—Small boulders and gravel; shifts during high water.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 6.4 feet at 10.30 a. m. February 4 (discharge, 1,130 second-feet); minimum stage recorded, 3.49 feet August 21 and 22 (discharge, 1.2 second-feet).

1910–1926: Maximum stage recorded, 8.5 feet at 5 p. m. December 31, 1913 (discharge, from extension of rating curve, about 4,080 second-feet); minimum discharge recorded, 1.0 second-foot August 7–10, 1921.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed February 5. Rating curves fairly well defined. Staff gage read to hundredths once a day, except October 24 and December 1. Daily discharge ascertained by applying gage height to rating table. Discharge estimated for October 24 and December 1. Records fair.

Discharge measurements of Oregon Creek near North San Juan, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
May 7.....	4.30	51	Aug. 16.....	3.52	1.4
May 11.....	4.20	36	Do.....	3.52	1.4

Daily discharge, in second-feet, of Oregon Creek near North San Juan, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	7	15	13	184	92	27	31	13	3.8	1.4	1.3
2	3.6	7.5	74	11	74	88	25	29	12	3.6	1.3	1.2
3	3.2	11	32	14	315	86	26	27	12	3.6	1.2	1.2
4	3.8	10	23	13	1,130	84	37	27	12	2.0	1.2	1.2
5	5	8.5	11	13	360	84	212	48	12	1.8	1.3	1.3
6	15	8	17	11	360	84	320	49	11	1.9	1.2	1.3
7	9	8	17	10	228	82	490	49	10	1.8	1.2	1.3
8	6	7.5	15	10	162	82	660	49	8	1.8	1.2	1.4
9	6.5	6.5	16	9.5	133	84	410	47	10	1.8	1.4	1.5
10	6	31	15	9	206	78	300	41	9	1.9	1.2	1.4
11	5.5	18	14	11	154	67	245	37	8.5	2.0	1.2	1.4
12	9.5	42	13	11	188	63	191	36	7.5	2.0	1.2	1.5
13	8.5	41	13	12	162	62	154	32	7	2.0	1.2	1.6
14	8	13	11	10	194	62	133	30	7	1.9	1.3	1.6
15	6.5	11	11	9.5	131	63	109	28	7	1.9	1.3	1.7
16	6	10	11	9	197	65	100	27	6.5	1.8	1.3	1.7
17	6.5	23	11	12	141	62	86	27	6.5	1.8	1.2	1.8
18	6.5	17	17	13	106	57	100	23	5.5	1.8	1.2	1.8
19	6	15	23	11	102	51	76	22	6	1.7	1.2	1.8
20	6	14	23	8.5	245	49	69	20	5.5	1.8	1.2	1.8
21	5.5	13	17	12	149	44	65	18	5.5	1.8	1.2	1.9
22	5.5	13	17	10	128	42	62	17	5	1.5	1.2	1.9
23	6	13	17	9	114	38	54	19	4.9	1.6	1.2	1.8
24	6	10	16	8	100	41	49	18	4.9	1.5	1.2	1.8
25	6	7	16	13	84	37	48	17	4.6	1.5	1.2	1.8
26	6.5	6	17	11	88	36	42	16	4.6	1.6	1.2	1.8
27	7	9	17	10	94	35	39	17	4.0	1.4	1.4	1.8
28	6	9	17	15	100	34	37	16	3.8	1.5	1.5	1.8
29	6.5	9	15	240	29	37	15	3.8	1.4	1.5	1.9	1.9
30	6	8.5	14	73	28	34	13	4.0	1.4	1.5	1.5	2.0
31	6.5	14	410	27	27	13	1.2	1.3	1.3	1.3	1.3	1.3

Monthly discharge of Oregon Creek near North San Juan, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	15	3.2	6.38	392
November	42	6.5	13.6	809
December	74	11	18.0	1,110
January	410	8	33.3	2,050
February	1,130	74	201	11,200
March	92	27	59.2	3,640
April	660	25	141	8,390
May	49	13	27.7	1,700
June	13	3.8	7.37	439
July	3.8	1.2	1.91	117
August	1.5	1.2	1.27	78.1
September	2.0	1.2	1.61	95.8
The year	1,130	1.2	41.4	30,000

NORTH FORK OF YUBA RIVER NEAR SIERRA CITY, CALIF.

LOCATION.—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, Sierra County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—1911-1913 (fragmentary) and December 21, 1923, to September 30, 1926.

GAGE.—Water-stage recorder on right bank, concrete well and house. Staff used in 1911-1913 was in same pool, on left bank.

DISCHARGE MEASUREMENTS.—Made from cable 20 feet below gage or by wading.
CHANNEL AND CONTROL.—Rocky and rough; control is drop over boulders, practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.32 feet at 4 a. m. April 7 (discharge, 1,040 second-feet); minimum stage, from water-stage recorder, 1.07 feet at 8 p. m. September 15 (discharge, 28 second-feet).

1923-1926: Maximum stage, from water-stage recorder, 6.87 feet at 9.15 p. m. February 6, 1925 (discharge, 2,420 second-feet); minimum stage, from water-stage recorder, 1.07 feet at 8 p. m. September 15, 1926 (discharge, 28 second-feet).

DIVERSIONS.—There are a few small diversions above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent, missing periods October 5-15, when clock stopped, and January 3-7, when paper was torn. Daily discharge ascertained by applying mean daily gage height to rating table, except October 5-15, for which discharge was estimated by comparison with records for North Fork of Yuba River at Goodyear Bar and maximum and minimum gage height from chart, and January 3-7, for which discharge was interpolated after comparison with records for North Fork of Yuba River at Goodyear Bar. Records excellent.

The following discharge measurements were made:

May 8, 1926: Gage height, 2.86 feet; discharge, 406 second-feet.

May 8, 1926: Gage height, 2.92 feet; discharge, 410 second-feet.

August 14, 1926: Gage height, 1.33 feet; discharge, 43 second-feet.

Daily discharge, in second-feet, of North Fork of Yuba River near Sierra City, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	60	65	217	58	149	131	283	630	184	59	48	31
2.....	61	68	192	58	131	137	254	608	175	59	48	30
3.....	60	70	108	57	135	139	237	587	161	58	48	29
4.....	60	69	90	56	345	145	279	720	153	58	48	29
5.....	65	64	85	55	364	156	566	675	147	57	48	28
6.....	75	67	80	54	406	170	720	524	141	56	48	29
7.....	75	65	77	53	319	175	945	454	139	56	48	28
8.....	70	65	75	52	251	187	810	425	137	57	48	28
9.....	70	66	72	53	217	190	652	421	129	58	48	28
10.....	70	71	70	52	224	170	566	406	117	58	48	28
11.....	80	80	71	52	198	163	524	394	110	58	48	28
12.....	75	103	70	52	178	165	524	394	103	56	48	28
13.....	70	83	64	54	163	190	566	398	99	53	46	28
14.....	65	74	62	54	151	224	587	402	98	51	45	28
15.....	60	72	66	56	143	272	630	402	93	50	43	28
16.....	58	72	66	56	135	290	675	410	90	50	41	29
17.....	59	70	66	59	127	279	587	413	85	51	41	30
18.....	59	69	67	59	120	244	503	421	82	53	41	30
19.....	58	68	66	58	124	224	503	442	80	53	40	30
20.....	57	67	66	56	126	230	545	429	76	51	38	32
21.....	59	63	66	57	115	240	545	394	72	51	37	34
22.....	60	64	65	57	113	258	566	360	71	50	36	33
23.....	60	64	64	56	104	308	566	319	71	50	35	33
24.....	60	64	62	56	103	330	608	296	70	49	34	33
25.....	62	64	62	56	104	301	652	262	67	49	33	33
26.....	63	64	62	56	110	283	652	237	64	49	33	33
27.....	63	64	63	56	117	276	675	224	62	48	33	34
28.....	64	63	62	72	122	268	675	217	61	48	33	34
29.....	64	63	60	326	-----	268	698	207	60	48	32	34
30.....	65	59	60	151	-----	268	698	198	59	48	33	35
31.....	65	-----	58	192	-----	290	-----	192	-----	48	32	-----

Monthly discharge of North Fork of Yuba River near Sierra City, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	80	57	64.3	3,950
November.....	103	63	69.7	4,150
December.....	217	58	77.9	4,790
January.....	326	52	72.2	4,440
February.....	406	103	175	9,720
March.....	330	131	225	13,800
April.....	945	237	576	34,300
May.....	720	192	402	24,700
June.....	184	59	102	6,070
July.....	59	48	52.9	3,250
August.....	48	32	41.4	2,550
September.....	35	28	30.5	1,810
The year.....	945	28	157	114,000

NORTH FORK OF YUBA RIVER AT GOODYEAR BAR, CALIF.

LOCATION.—In E. $\frac{1}{2}$ SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., in Tahoe National Forest, at highway bridge at Goodyear Bar, Sierra County. Rock Creek enters one-eighth mile and Goodyear Creek one-fourth mile below station.

DRAINAGE AREA.—214 square miles.

RECORDS AVAILABLE.—October 31, 1910, to September 30, 1926.

GAGE.—Vertical staff in two sections on left bank; low-water section fastened to old piling under bridge; upper section bolted to left abutment of bridge; read by G. E. King.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Solid rock, small boulders, and gravel; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 7.0 feet in afternoon of April 7 (discharge, 3,400 second-feet); minimum stage recorded, 3.18 feet September 1-17 and 23-26 (discharge, 98 second-feet).

1910-1926: Maximum stage recorded, 11.5 feet at 5.40 p. m. May 11, 1915, and 6 a. m. February 6, 1925 (discharge, 12,600 second-feet); minimum stage recorded, 2.9 feet August 10 to October 4, 1924 (discharge, 80 second-feet).

DIVERSIONS.—No important diversions.

REGULATION.—Practically none.

ACCURACY.—Stage-discharge relation not changed during the year. Rating curve well defined. Staff gage read to quarter-tenths once a day, except for several short periods. Daily discharge ascertained by applying daily gage height to rating table. Discharge for November 30 to December 2 and September 27-30 estimated by comparison with records for North Fork of Yuba River near Sierra City and North Fork of North Fork of Yuba River at Downieville; discharge for December 17-21, 28-31, January 16-17, March 1-3, May 11-14, June 7-12, June 28 to July 3, and August 24-31 interpolated after comparison with records for other streams. Records good.

COOPERATION.—Gage-height record furnished by United States Forest Service.

The following discharge measurements were made:

May 9, 1926: Gage height, 4.65 feet; discharge, 770 second-feet.

May 10, 1926: Gage height, 4.70 feet; discharge, 832 second-feet.

August 15, 1926: Gage height, 3.22 feet; discharge, 107 second-feet.

Daily discharge, in second-feet, of North Fork of Yuba River at Goodyear Bar, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	139	139	600	153	545	495	630	1,110	395	108	120	98
2.....	139	172	600	153	445	495	600	1,110	395	103	120	98
3.....	139	153	350	153	572	495	600	1,030	372	158	120	98
4.....	139	147	267	153	2,950	495	870	1,300	308	153	120	98
5.....	153	147	247	153	1,200	545	1,820	1,200	359	153	116	98
6.....	197	139	235	153	1,400	572	2,040	1,030	350	153	116	98
7.....	190	139	227	153	1,500	572	3,400	870	341	153	116	98
8.....	183	139	208	153	795	600	2,670	795	332	153	116	98
9.....	172	139	190	153	630	600	1,930	760	323	153	116	98
10.....	172	153	190	147	795	572	1,600	795	314	153	111	98
11.....	190	208	190	147	660	572	1,400	780	305	153	111	98
12.....	172	420	183	147	660	600	1,400	765	296	153	111	98
13.....	172	227	172	147	600	600	1,400	750	288	147	111	98
14.....	160	190	160	147	572	692	1,400	735	275	147	107	98
15.....	160	183	153	147	545	725	1,500	725	267	147	107	98
16.....	153	190	153	145	572	725	1,400	725	259	142	107	98
17.....	147	172	158	143	495	760	1,300	692	247	142	107	98
18.....	139	172	163	142	470	660	1,200	725	235	136	107	102
19.....	139	172	168	139	545	600	1,110	692	227	136	107	102
20.....	139	172	173	139	572	600	1,110	692	227	133	107	107
21.....	139	172	178	139	495	600	1,030	660	220	133	107	107
22.....	139	160	183	139	470	630	1,030	660	212	131	107	102
23.....	139	153	183	139	445	660	1,030	630	205	128	107	98
24.....	139	153	183	139	420	725	1,030	600	197	125	106	98
25.....	139	153	183	139	420	725	1,030	520	190	125	105	98
26.....	139	153	183	139	445	692	1,110	495	190	125	104	98
27.....	139	153	183	139	445	660	1,300	470	190	125	103	99
28.....	139	153	177	190	495	660	1,400	470	184	125	102	99
29.....	139	153	171	870	-----	660	1,400	470	178	125	101	99
30.....	139	200	165	445	-----	600	1,300	445	173	120	100	100
31.....	139	-----	159	1,110	-----	630	-----	445	-----	120	99	-----

Monthly discharge of North Fork of Yuba River at Goodyear Bar, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	197	139	152	9,350
November.....	420	139	173	10,300
December.....	600	153	217	13,300
January.....	1,110	139	211	12,000
February.....	2,950	420	720	40,000
March.....	760	495	622	38,200
April.....	3,400	600	1,370	81,500
May.....	1,300	445	747	45,900
June.....	395	173	270	16,100
July.....	168	120	141	8,670
August.....	120	99	109	6,700
September.....	107	98	99.2	5,900
The year.....	3,400	98	399	289,000

NORTH FORK OF NORTH FORK OF YUBA RIVER AT DOWNIEVILLE, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 35, T. 20 N., R. 10 E., at upper highway bridge in Downieville, Sierra County, 500 feet above dam and one-fourth mile above junction with North Fork of Yuba River. East Fork of North Fork enters one-eighth mile above, and Middle Fork of North Fork $1\frac{1}{4}$ miles above station.

DRAINAGE AREA.—71.2 square miles.

RECORDS AVAILABLE.—November 1, 1910, to September 30, 1926, when station was discontinued.

GAGE.—Vertical staff fastened to right abutment of bridge; read by J. T. Mason.

DISCHARGE MEASUREMENTS.—Made from bridge at gage or by wading.

CHANNEL AND CONTROL.—Bed consists of gravel and small boulders. Control is dam. A variable control is formed by adding flashboards of different heights to dam.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 5.4 feet (flashboards on dam) 9 a. m. April 7 (discharge, 1,680 second-feet); minimum discharge, about 37 second-feet September 5-30.

1910-1926: Maximum stage recorded, 8.0 feet at 5 p. m. May 11, 1915 (discharge, from extension of rating curve, about 6,760 second-feet); minimum stage recorded, 2.70 feet (flashboards on dam) November 28, 1919 (discharge, 10 second-feet).

ICE.—Stage-discharge relation slightly affected by ice for short periods in severe winters.

DIVERSIONS.—The intake of the municipal water system of Downieville is above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed April 7 and June 3. Rating curve fairly well defined. Staff gage read to half-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except May 14 to June 1, for which shifting-control method was used, and June 2 and 3, for which discharge was estimated. Records poor.

The following discharge measurements were made:

May 9, 1926: Gage height, 3.50 feet; discharge, 300 second-feet.

May 11, 1926: Gage height, 3.50 feet; discharge, 305 second-feet.

August 14, 1926: Gage height, 3.06 feet; discharge, 44 second-feet.

Daily discharge, in second-feet, of North Fork of North Fork of Yuba River at Downieville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	59	252	9	155	155	210	410	107	52	52	39
2	59	63	252	59	95	172	190	380	104	52	52	39
3	59	59	82	59	172	172	172	352	101	52	52	39
4	59	59	59	59	1,050	172	252	530	101	52	52	39
5	59	59	59	59	595	172	595	530	101	52	52	37
6	63	59	59	59	560	172	910	398	101	52	52	37
7	59	59	59	59	380	180	1,600	364	88	52	52	37
8	59	59	59	59	310	190	1,200	342	75	52	52	37
9	59	59	59	59	300	210	910	320	75	52	52	37
10	59	63	59	59	252	210	700	300	75	52	52	37
11	70	82	59	59	210	226	665	285	75	52	52	37
12	59	172	9	59	230	230	595	252	75	52	52	37
13	59	110	59	59	230	210	590	300	75	52	52	37
14	59	59	59	59	180	262	560	266	75	52	43	37
15	59	59	59	59	172	290	595	266	75	52	41	37
16	59	63	59	59	172	262	595	266	75	52	41	37
17	59	78	59	59	172	252	530	234	75	52	41	37
18	59	59	61	59	146	202	500	234	75	52	41	37
19	59	59	70	59	155	210	440	234	75	52	41	37
20	59	59	9	59	180	210	410	234	63	52	41	37
21	59	59	59	59	166	210	410	234	63	52	41	37
22	59	59	59	59	172	210	410	206	57	52	39	37
23	59	59	59	59	140	230	410	180	52	52	39	37
24	59	59	59	59	140	230	410	180	52	52	39	37
25	59	59	59	59	140	230	470	137	52	52	39	37
26	59	59	59	59	140	210	470	137	48	52	39	37
27	59	59	59	59	140	210	470	137	52	52	39	37
28	59	59	59	63	140	210	440	116	52	52	39	37
29	59	59	59	440	-----	210	410	116	52	52	39	37
30	59	95	59	172	-----	210	410	116	52	52	39	37
31	59	-----	59	380	-----	210	-----	125	-----	52	39	-----

Monthly discharge of North Fork of North Fork of Yuba River at Downieville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	70	59	59.5	3,660
November.....	172	59	67.5	4,020
December.....	252	59	72.6	4,460
January.....	440	59	85.4	5,250
February.....	1,050	95	246	13,700
March.....	290	155	211	13,000
April.....	1,600	172	550	32,700
May.....	530	116	264	16,200
June.....	107	48	73.3	4,360
July.....	52	52	52.0	3,200
August.....	52	39	45.0	2,770
September.....	39	37	37.3	2,220
The year.....	1,600	37	146	106,000

ROCK CREEK AT GOODYEAR BAR, CALIF.

LOCATION.—In W. $\frac{1}{2}$ SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., 600 feet above mouth at footbridge at Goodyear Bar, Sierra County, in Tahoe National Forest. Woodruff Creek enters 350 feet above station.

DRAINAGE AREA.—10.8 square miles.

RECORDS AVAILABLE.—October 30, 1910, to September 30, 1926.

GAGE.—Vertical staff fastened to an alder tree on right bank 40 feet below bridge; read by G. E. King.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Boulders and gravel; rough; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 4.8 feet in afternoon of February 4 (discharge, 325 second-feet); minimum stage recorded, 1.38 feet July 4–11 (discharge, 0.4 second-foot).

1910–1926: Maximum stage recorded, 7.0 feet at 3.30 p. m. December 31, 1913 (discharge, from extension of rating curve, about 820 second-feet); minimum stage recorded, 1.12 feet August 10–14, 1924 (discharge, 0.2 second-foot).

DIVERSIONS.—Three small ditches, having a total capacity of about 10 second-feet, head above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed February 5. Rating curves fairly well defined. Staff gage read to hundredths once a day, except December 1–2, 17–21, 28–31, January 16–17, March 1–3, May 11–14, June 7–12, 28–30, July 1–3, August 24–31, and September 27–30. Daily discharge ascertained by applying daily gage height to rating table. Discharge estimated for periods of no gage-height record. Records fair.

COOPERATION.—Gage-height record furnished by United States Forest Service.

The following discharge measurements were made:

May 9, 1926: Gage height, 2.00 feet; discharge, 13 second-feet.

May 9, 1926: Gage height, 2.00 feet; discharge, 14 second-feet.

August 15, 1926: Gage height, 1.40 feet; discharge, 0.5 second-foot.

Daily discharge, in second-feet, of Rock Creek at Goodyear Bar, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1.2	1.4	10	4.3	53	28	18	13	6	0.7	0.5	0.5
2.....	1.2	2.3	25	4.3	45	28	18	11	3.4	.6	.5	.5
3.....	1.2	2.3	14	4.3	71	28	18	10	3.0	.5	.5	.5
4.....	1.2	2.1	10	4.3	325	28	69	23	3.0	.4	.5	.5
5.....	1.8	2.1	10	4.3	112	28	135	13	3.0	.4	.5	.5
6.....	3.3	1.8	9.5	4.3	112	28	123	14	2.7	.4	.5	.5
7.....	2.3	1.4	9	4.3	79	28	171	14	2.6	.4	.5	.5
8.....	2.1	1.2	8	4.3	64	28	195	13	2.4	.4	.5	.5
9.....	2.1	1.2	7	4.3	54	28	135	12	2.2	.4	.5	.5
10.....	2.1	3.3	7	4.3	69	27	101	12	2.0	.4	.5	.5
11.....	4.9	10	6.5	4.3	50	27	79	11	1.8	.4	.5	.5
12.....	3.9	19	6	4.3	50	26	59	11	1.6	.5	.5	.5
13.....	3.3	10	6	4.3	45	26	52	10	1.5	.5	.5	.5
14.....	3.3	6	4.9	4.3	42	27	42	10	1.5	.5	.5	.5
15.....	2.7	6	4.9	3.9	46	28	39	9.5	1.5	.5	.5	.5
16.....	2.7	7	4.9	3.7	50	28	35	9.5	1.5	.5	.5	.5
17.....	2.3	6	5	3.5	42	28	32	9	1.5	.5	.5	.5
18.....	2.3	4.9	5.5	3.3	35	27	31	8	1.5	.5	.5	.5
19.....	2.3	4.3	6	3.3	42	24	28	8	1.5	.5	.5	.5
20.....	2.3	4.3	6.5	3.3	54	24	26	7.5	1.5	.5	.5	1.0
21.....	2.3	3.9	7	3.3	42	23	23	7	1.5	.5	.5	1.0
22.....	2.3	3.9	7	3.3	35	23	22	7	1.5	.5	.5	.7
23.....	2.3	3.3	7	3.3	29	23	20	7	1.5	.5	.5	.5
24.....	2.1	2.7	7	3.3	28	23	18	7	1.3	.5	.5	.5
25.....	1.9	2.3	7	3.3	28	23	18	6.5	1.3	.5	.5	.5
26.....	1.8	2.3	7	3.3	28	23	16	6	1.1	.5	.5	.5
27.....	1.4	2.3	7	3.3	28	22	14	5.5	1.1	.5	.5	.7
28.....	1.4	2.3	6.5	10	28	20	14	5	1.0	.5	.5	.7
29.....	1.4	2.3	6	71	-----	20	14	5	.9	.5	.5	.7
30.....	1.4	2.3	5.5	30	-----	18	14	5	.8	.5	.5	.7
31.....	1.4	-----	5	123	-----	18	-----	5	-----	.5	.5	-----

Monthly discharge of Rock Creek at Goodyear Bar, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	4.9	1.2	2.20	135
November.....	19	1.2	4.14	246
December.....	25	4.9	7.67	472
January.....	123	3.3	10.9	670
February.....	325	28	60.2	3,340
March.....	28	18	25.2	1,550
April.....	195	14	52.6	3,130
May.....	23	5	9.50	584
June.....	6	.8	1.92	114
July.....	.7	.4	.48	29.5
August.....	.5	.5	.50	30.7
September.....	1.0	.5	.57	33.9
The year.....	325	.4	14.3	10,300

GOODYEAR CREEK AT GOODYEAR BAR, CALIF.

LOCATION.—In W. $\frac{1}{2}$ SW. $\frac{1}{4}$ sec. 5, T. 19 N., R. 10 E., at trail bridge in Tahoe National Forest, 300 feet above junction with North Fork of Yuba River and half a mile north of Goodyear Bar, Sierra County.

DRAINAGE AREA.—12.2 square miles.

RECORDS AVAILABLE.—October 30, 1910, to September 30, 1926.

GAGE.—Vertical staff fastened to an alder tree on left bank 200 feet above bridge; read by G. E. King.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Solid rock and gravel; fairly permanent. A temporary road built on control in June, 1921, is scoured at high water.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 4.7 feet in afternoon of February 4 (discharge, 468 second-feet); minimum stage recorded, 1.60 feet in July, August, and September (discharge, 3.2 second-feet).

1910-1926: Maximum stage recorded, 7.0 feet at 3 p. m. December 31, 1913 (discharge, from extension of rating curve, about 1,460 second-feet); minimum stage recorded, 1.30 feet August 24-31, 1918 (discharge, 1.2 second-feet).

DIVERSIONS.—Three small irrigation ditches, having a total capacity of about $7\frac{1}{2}$ second-feet, head above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed February 4. Rating curves fairly well defined. Staff gage read once a day to quarter-tenths; not read for several short periods when observer was absent. Daily discharge ascertained by applying daily gage height to rating table and interpolated or estimated for periods of no gage-height record. Records fair.

COOPERATION.—Gage-height record furnished by United States Forest Service.

The following discharge measurements were made:

May 10, 1926: Gage height, 2.25 feet; discharge, 28 second-feet.

May 10, 1926: Gage height, 2.24 feet; discharge, 27 second-feet.

August 15, 1926: Gage height, 1.65 feet; discharge, 4.0 second-feet.

Daily discharge, in second-feet, of Goodyear Creek at Goodyear Bar, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	7	20	13	56	46	28	23	12	5	3.2	3.2
2	5	12	75	13	47	48	26	23	10	5	3.2	3.2
3	5	12	35	13	77	50	26	21	10	5	3.2	3.2
4	5	10	29	13	468	53	73	40	10	5	3.2	3.2
5	6.5	9	27	12	151	55	174	32	10	5	3.2	3.2
6	12	8	26	12	158	55	191	31	9.5	5	3.2	3.2
7	9	7.5	24	11	110	55	252	29	9.5	4.6	3.2	3.2
8	8	7.5	23	11	92	55	298	29	9	4.6	3.6	3.2
9	8	7.5	22	11	61	55	166	29	8.5	4.6	3.6	3.2
10	8	12	21	10	99	53	130	28	8.5	4.6	3.2	3.2
11	12	23	19	10	65	53	116	26	8	4.6	3.2	3.2
12	10	47	18	10	63	53	92	25	7.5	4.6	3.2	3.2
13	10	33	17	10	59	53	73	23	7.5	4.6	3.2	3.2
14	10	23	16	9.5	53	55	59	22	7.5	4.6	3.2	3.2
15	9.5	23	16	9.5	59	57	55	20	7.5	4.6	3.2	3.2
16	9.5	30	16	9.5	59	59	51	20	7	4.6	3.2	3.2
17	9	29	16	9.5	49	59	49	19	7	4.6	3.2	3.6
18	9	27	16	9.5	40	51	45	17	7	4.6	3.2	3.6
19	9	26	16	9.5	49	47	42	16	7	4.6	3.2	3.6
20	8	26	17	9.5	61	44	38	15	7	4.6	3.2	4.6
21	7.5	23	17	9.5	49	42	37	15	6.5	4.6	3.2	4.6
22	7.5	23	17	9.5	44	40	35	14	6.5	4.6	3.2	4.3
23	7	22	17	9.5	44	40	32	14	6.5	4.6	3.2	4.3
24	7	21	17	9.5	42	40	31	14	6	4.3	3.2	4.3
25	7	21	17	9	42	40	29	13	6	3.9	3.2	4.3
26	6.5	17	17	9	44	38	26	13	5.5	3.9	3.2	4.3
27	6.5	16	17	9	44	35	25	13	5.5	3.6	3.2	4.5
28	6.5	15	16	16	44	34	24	12	5.5	3.6	3.2	4.5
29	7	14	15	99	-----	32	24	12	5.5	3.2	3.2	4.5
30	7	14	14	47	-----	31	23	12	5.5	3.2	3.2	4.5
31	7	-----	13	135	-----	29	-----	12	-----	3.2	3.2	-----

Monthly discharge of Goodyear Creek at Goodyear Bar, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	12	5	7.87	484
November.....	47	7	18.8	1,120
December.....	75	13	20.8	1,280
January.....	135	9.5	18.6	1,140
February.....	468	40	79.6	4,420
March.....	59	29	47.0	2,890
April.....	298	23	75.7	4,500
May.....	40	12	20.4	1,250
June.....	12	5.5	7.63	454
July.....	5	3.2	4.42	272
August.....	3.6	3.2	3.23	199
September.....	4.6	3.2	3.69	220
The year.....	468	3.2	25.2	18,200

CANYON CREEK ABOVE JACKSON CREEK, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ sec. 3, T. 18 N., R. 12 E., one-fourth mile above Jackson Creek, Nevada County, and 3 miles above Bowman Dam. Altitude, about 5,700 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 1 to September 30, 1926.

GAGE.—Water-stage recorder in temporary timber well and house on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 500 feet below gage or by wading.

CHANNEL AND CONTROL.—Gage is in large pool at foot of waterfall; control is riffle over large boulders and bedrock, probably permanent.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 5.03 feet at 5 a. m. April 7 (discharge, 445 second-feet); minimum stage, from water-stage recorder, 2.20 feet August 27–29 (discharge, 12 second-feet).

ICE.—Stage-discharge relation affected by ice or float frozen in well January 23–27.

DIVERSIONS.—None.

REGULATION.—Summer flow is regulated by storage at French, Faucherie, and Sawmill Lakes.

ACCURACY.—Stage-discharge relation did not change during period. Rating curve fairly well defined. Water-stage recorder record good except January 1, 12, 13, April 8, 10, May 11, 14–17, June 21–25, July 4–8, and period affected by ice. Daily discharge ascertained by applying mean daily gage height to rating table, except January 28 and 29, for which hourly discharge was averaged. During periods of no record or when affected by ice, discharge was estimated by comparison with records for Jackson Creek and Middle Fork of Yuba River. Records fair.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Nevada Irrigation District, through Fred H. Tibbetts.

Discharge measurements of Canyon Creek above Jackson Creek, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Jan. 2.....	2.48	23	Feb. 11.....	3.20	62	Apr. 7.....	4.94	428
Jan. 20.....	2.38	17	Feb. 15.....	2.98	48	Apr. 28.....	4.56	296
Jan. 29.....	4.06	199	Feb. 22.....	2.77	32	May 13.....	3.67	119
Feb. 2.....	3.30	67	Mar. 8.....	3.18	62			
Feb. 4.....	3.52	102	Mar. 24.....	3.63	113			

Daily discharge, in second-feet, of Canyon Creek above Jackson Creek, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	20	73	38	107	297	66	16	14	13
2.....	20	60	40	92	256	64	16	14	13
3.....	20	56	43	81	249	61	15	14	13
4.....	20	82	45	96	280	56	15	14	13
5.....	19	109	51	292	349	53	15	14	13
6.....	19	132	58	310	237	50	15	14	14
7.....	19	128	60	403	186	48	14	14	14
8.....	19	106	61	278	156	44	14	14	14
9.....	19	83	61	178	136	41	14	14	13
10.....	19	75	56	136	126	38	14	14	13
11.....	19	68	52	131	122	35	14	14	13
12.....	18	61	53	148	118	31	14	14	13
13.....	18	55	59	190	123	29	14	14	13
14.....	17	50	74	196	125	27	14	14	13
15.....	17	46	92	212	130	24	14	14	13
16.....	17	44	106	226	125	23	14	14	13
17.....	18	42	104	196	140	22	14	14	13
18.....	19	37	88	162	148	21	14	14	13
19.....	18	36	75	137	166	20	14	14	13
20.....	18	37	74	142	170	19	14	14	13
21.....	17	35	78	170	160	19	14	14	13
22.....	17	32	84	178	140	18	14	14	13
23.....	16	32	99	184	121	18	14	14	13
24.....	16	30	116	216	109	18	14	14	13
25.....	16	30	110	261	92	17	14	13	14
26.....	16	30	99	280	76	17	14	13	14
27.....	16	32	92	290	71	17	14	12	14
28.....	20	35	86	310	70	16	14	12	14
29.....	156	-----	84	300	69	16	14	12	13
30.....	116	-----	82	326	70	16	14	13	13
31.....	95	-----	106	-----	69	-----	14	13	-----

Monthly discharge of Canyon Creek above Jackson Creek, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January.....	156	16	28.2	1,730
February.....	132	30	58.4	3,240
March.....	116	38	75.0	4,610
April.....	403	81	208	12,400
May.....	349	69	151	9,280
June.....	66	16	31.5	1,870
July.....	16	14	14.3	879
August.....	14	12	13.7	842
September.....	14	13	13.2	786
The period.....	-----	-----	-----	35,600

JACKSON CREEK AT MOUTH, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 2, T. 18 N., R. 12 E., just above junction with Canyon Creek and 3 miles above Bowman Dam, Nevada County. Altitude, about 5,600 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—January 21 to September 30, 1926.

GAGE.—Water-stage recorder in timber well and shelter on left bank, 100 feet below forks.

DISCHARGE MEASUREMENTS.—Made from footbridge 5 feet above gage or by wading.

CHANNEL AND CONTROL.—Channel is rough and rocky with steep grade. Control is small concrete dam with V notch in center.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 3.03 feet at 5 p. m. April 5 (discharge, 226 second-feet); minimum stage, from water-stage recorder, 0.39 foot at 7 p. m. September 14 (discharge, 1.0 second-foot).

ICE.—Stage-discharge relation affected by ice or float frozen in well, January 23–27 and February 17–21.

DIVERSIONS.—None.

REGULATION.—Flow is controlled to some extent by storage at Jackson Lake.

During current year water was released from lake during period July 5 to August 4.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record good, except April 17–20, June 20–25, July 5–8, and when affected by ice. Daily discharge ascertained by applying mean daily gage height to rating table except January 28, for which hourly discharge was averaged; discharge estimated by comparison with records for Canyon Creek during periods of no record and when affected by ice. Records good.

COOPERATION.—Gage-height record and results of discharge measurements furnished by Nevada Irrigation District, through Fred H. Tibbetts.

Discharge measurements of Jackson Creek at mouth, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Jan. 2.....		2.6	Feb. 14.....	1.61	13	Mar. 22.....	2.10	46
Jan. 20.....	0.67	2.4	Feb. 22.....	1.48	10	Apr. 5.....	2.52	116
Jan. 26.....	.61	2.3	Feb. 24.....	1.44	9.4	May 13.....	1.80	19
Jan. 29.....	1.98	49	Mar. 8.....	1.88	23	Do.....	1.77	19
Feb. 1.....	1.65	26	Mar. 9.....	1.86	24	May 18.....	1.71	16

Daily discharge, in second-feet, of Jackson Creek at mouth, Calif., for the year ending September 30, 1926

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		14	14	32	46	8	2.6	6.5	1.2
2.....		12	14	26	39	8	2.5	5.5	1.2
3.....		12	15	26	36	7	2.5	5.5	1.2
4.....		32	19	57	60	6.5	2.3	5	1.2
5.....		38	24	150	60	6	2.3	2.5	1.1
6.....		45	26	123	38	6	11	1.9	1.1
7.....		30	26	127	33	6	11	1.6	1.1
8.....		23	24	103	32	6	11	1.4	1.1
9.....		21	22	71	31	5.5	11	1.4	1.0
10.....		20	20	65	27	5.5	11	1.5	1.0
11.....		18	21	63	23	5	11	1.5	1.0
12.....		15	23	70	20	4.9	11	1.5	1.0
13.....		14	26	71	19	4.6	11	1.4	1.0
14.....		13	39	71	18	4.6	11	1.4	1.0
15.....		12	43	76	17	4.4	11	1.4	1.0
16.....		12	45	73	16	4.3	11	1.4	1.1
17.....		12	36	69	16	4.1	10	1.4	1.1
18.....		12	29	65	16	3.9	10	1.4	1.1
19.....		11	26	61	16	3.8	10	1.3	1.1
20.....		11	31	57	16	3.6	11	1.2	1.2
21.....	2.5	10	31	54	15	3.4	14	1.2	1.1
22.....	2.5	10	35	54	14	3.2	14	1.2	1.1
23.....	2.5	10	45	54	12	3.1	14	1.2	1.1
24.....	2.3	9.5	46	56	12	3	14	1.2	1.0
25.....	2.2	10	39	60	11	2.9	14	1.2	1.0
26.....	2.2	10	35	60	11	2.8	11	1.2	1.1
27.....	2.3	12	31	57	10	2.8	10	1.2	1.2
28.....	4.7	12	81	60	9.5	2.7	10	1.2	1.1
29.....	46		29	57	9.5	2.7	9.5	1.2	1.1
30.....	22		32	63	9	2.6	8.5	1.3	1.1
31.....	18		42		8.5		7.5	1.2	

Monthly discharge of Jackson Creek at mouth, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
January 21-31.....	46	2.2	9.75	213
February.....	45	9.5	18.4	911
March.....	46	14	29.6	1,820
April.....	150	26	67.7	4,030
May.....	60	8.5	22.6	1,300
June.....	8	2.6	4.56	271
July.....	14	2.3	9.70	596
August.....	6.5	1.2	1.94	119
September.....	1.2	1.0	1.09	64.9
The period.....				9,410

BEAR RIVER AT VAN TRENT, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ sec. 21, T. 14 N., R. 6 E., below highway bridge at McCourtney crossing, 1 mile below Van Trent, Placer County, and 8 miles above Wheatland.

DRAINAGE AREA.—263 square miles.

RECORDS AVAILABLE.—October 9, 1904, to September 30, 1926.

GAGE.—Staff in five sections on left bank 500 feet below bridge, read by Hughie Renolds. Datum lowered 1 foot August 19, 1926.

DISCHARGE MEASUREMENTS.—Made from cable half a mile below gage or by wading.

CHANNEL AND CONTROL.—Solid rock, boulders, and gravel; shifts during high water.

EXTREMES OF DISCHARGE.—Maximum stage during year, 9.6 feet at 5 p. m. February 4 (discharge, 8,080 second-feet); minimum discharge, 7 second-feet on June 8 and September 29 and 30.

1904-1926: Maximum stage recorded, 18.9 feet at 8 a. m. January 14, 1909 (discharge, from extension of rating curve, about 29,600 second-feet); minimum discharge, 0.7 second-foot 5 p. m. October 2, 1924.

DIVERSIONS.—Water is diverted above station for power and irrigation. Stored water from South Fork of Yuba River is diverted into the drainage basin above Colfax.

REGULATION.—A small amount of storage is developed on the headwaters of this stream. See also preceding paragraph.

ACCURACY.—Stage-discharge relation changed during high water of February 12. Rating curves fairly well defined for low and medium stages and extended above. Staff gage read to hundredths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records only fair on account of uncertainties in gage-height record.

Discharge measurements of Bear River at Van Trent, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 8.....	1.82	365	Apr. 10.....	2.95	1,200	Aug. 24.....	0.80	22
Feb. 11.....	2.36	655	May 5.....	1.03	251			
Feb. 17.....	2.66	960	June 26.....	— .24	17			

NOTE.—Gage datum lowered 1 foot August 18.

Daily discharge, in second-feet, of Bear River at Van Trent, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	23	73	28	3,420	452	452	452	150	20	84	20
2	14	28	395	28	1,000	494	412	338	109	20	60	68
3	14	23	117	28	5,000	452	412	161	53	20	84	84
4	18	28	61	34	5,240	338	338	242	60	20	92	20
5	14	28	61	34	2,260	412	2,140	374	41	20	76	47
6	67	23	41	34	1,290	304	2,960	338	20	12	84	20
7	61	18	34	28	1,360	187	5,000	374	20	20	30	68
8	34	28	34	28	395	304	3,800	374	7	12	76	92
9	28	23	34	34	240	272	2,210	161	30	20	30	68
10	28	34	28	34	275	214	1,200	242	20	12	20	53
11	28	34	28	34	760	374	1,650	100	30	20	100	20
12	34	34	34	34	5,000	374	1,320	272	30	20	92	68
13	28	155	34	34	2,820	338	1,720	374	20	20	92	20
14	34	41	28	34	2,900	374	1,320	338	20	20	41	53
15	28	34	28	28	1,720	338	538	272	30	20	30	84
16	28	34	34	34	2,420	338	584	242	30	20	84	53
17	34	34	28	34	1,010	338	632	242	20	20	92	53
18	28	34	28	61	780	304	1,520	412	20	12	68	20
19	28	34	102	41	1,520	304	538	494	20	12	68	76
20	23	34	117	41	1,860	242	452	494	12	20	68	20
21	23	28	73	34	1,460	242	608	494	20	20	20	60
22	28	23	61	34	780	214	730	374	20	20	60	76
23	28	28	41	34	680	161	632	100	30	12	60	68
24	28	34	41	34	584	187	632	41	20	20	60	84
25	23	28	34	28	538	214	272	138	30	20	76	30
26	23	34	34	41	494	452	138	338	17	20	60	76
27	23	28	34	41	494	412	304	53	20	12	76	20
28	23	34	28	50	494	272	214	41	20	20	20	12
29	23	34	23	1,800	-----	138	538	41	20	20	68	7
30	23	41	23	370	-----	304	584	76	12	30	20	7
31	23	-----	23	1,950	-----	338	-----	161	-----	30	84	-----

Monthly discharge of Bear River at Van Trent, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	67	14	28.0	1,720
November	155	18	34.5	2,050
December	395	23	56.6	3,480
January	1,950	28	164.	10,100
February	5,240	240	1,670	92,800
March	494	138	312	19,200
April	5,000	138	1,130	67,200
May	494	41	263	16,200
June	150	7	31.7	1,860
July	30	12	18.8	1,160
August	100	20	63.7	3,920
September	92	7	48.2	2,870
The year	5,240	7	307	223,000

BEAR RIVER CANAL NEAR COLFAX, CALIF.

LOCATION.—Just below lower spillway gates 1 mile below diversion dam on Bear River and 2 miles northwest of Colfax, Placer County.

RECORDS AVAILABLE.—January 1, 1912, to September 30, 1926.

GAGE.—Float gage in stilling box on left bank at flume $\frac{1}{8}$, about 800 feet below spillway gates; read twice daily.

DISCHARGE MEASUREMENTS.—Made from foot plank across flume at gage.

CHANNEL AND CONTROL.—Rectangular wooden flume. Control is slope and cross section below gage.

EXTREMES OF DISCHARGE.—1912-1926: Maximum mean daily discharge recorded, 302 second-feet September 16, October 31, 1923, and January 21, 1925.

COOPERATION.—Daily-discharge record furnished by Pacific Gas & Electric Co.

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, then at Wise power house, and is then distributed for irrigation in the Placerville district. At times of excess supply some water is wasted to American River in sec. 4, T. 11 N., R. 8 E.

Daily discharge, in second-feet, of Bear River Canal near Colfax, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	266	81	179	52	271	-----	89	278	275	298	300	300
2.....	178	211	260	117	252	-----	89	184	256	293	300	300
3.....	207	205	163	55	152	-----	89	204	223	297	300	300
4.....	171	205	70	119	152	-----	88	230	294	297	300	300
5.....	268	171	153	99	150	54	89	272	282	282	300	300
6.....	250	188	58	105	152	156	88	300	209	293	300	300
7.....	139	220	224	133	106	51	89	226	286	297	300	300
8.....	159	51	139	111	231	51	89	247	298	297	300	300
9.....	201	158	152	99	270	100	89	151	296	296	300	300
10.....	183	210	132	48	221	54	89	213	300	300	300	300
11.....	42	204	139	147	102	-----	89	291	300	296	300	300
12.....	177	259	119	210	102	-----	89	299	291	281	300	300
13.....	180	201	48	202	51	-----	197	275	290	287	300	300
14.....	170	95	127	192	-----	-----	198	298	300	290	300	300
15.....	158	144	113	171	-----	-----	197	300	291	297	300	300
16.....	152	177	108	102	-----	-----	197	300	294	296	300	300
17.....	199	154	108	50	-----	-----	197	300	291	294	300	300
18.....	81	135	166	145	-----	-----	197	300	284	296	300	300
19.....	174	135	211	187	-----	-----	197	300	291	294	300	300
20.....	244	183	184	177	-----	-----	212	300	290	296	300	300
21.....	149	91	137	180	-----	-----	227	300	287	293	300	300
22.....	184	92	135	152	-----	109	227	300	300	297	300	300
23.....	234	165	131	103	-----	151	227	202	293	300	300	300
24.....	227	139	118	50	-----	201	226	300	290	300	300	300
25.....	90	146	81	159	-----	77	202	300	290	300	300	300
26.....	209	86	192	119	-----	-----	222	300	296	300	300	300
27.....	200	193	84	105	-----	-----	238	215	290	300	300	274
28.....	205	122	115	133	-----	54	256	213	294	300	300	259
29.....	208	40	99	228	-----	100	284	237	296	300	300	251
30.....	220	182	93	264	-----	102	292	227	300	300	300	249
31.....	217	-----	93	211	-----	102	-----	251	-----	300	300	-----

NOTE.—No flow Feb. 14 to Mar. 4, Mar. 11-21, and 26-27.

Monthly discharge of Bear River Canal near Colfax, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	268	42	185	11,400
November.....	259	40	155	9,220
December.....	260	48	133	8,180
January.....	264	48	136	8,360
February.....	271	0	79.0	4,390
March.....	201	0	43.9	2,700
April.....	292	88	169	10,100
May.....	300	151	262	16,100
June.....	300	209	286	17,000
July.....	300	281	296	18,200
August.....	300	300	300	18,400
September.....	300	249	294	17,500
The year.....	300	0	196	142,000

AMERICAN RIVER BASIN

NORTH FORK OF AMERICAN RIVER NEAR COLFAX, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 30, T. 14 N., R. 10 E., at bridge on Colfax-Forest Hill Road, 150 feet below mouth of Shirttail Canyon Creek, 5 miles southeast of Colfax, Placer County, and 11 miles above junction with Middle Fork.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August 16, 1911, to September 30, 1926.

GAGE.—Vertical staff in two sections; section 1 bolted to ledge on left bank 30 feet below bridge; section 2 on right bank 35 feet below bridge; read by W. D. Finch.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders (tailings from placer mining) shifts during high water. Banks high, rocky, wooded, and not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 7.0 feet at 4 p. m. February 4 (discharge, 5,450 second-feet); minimum discharge 41 second-feet on several days in August and September.

1911-1926: Maximum stage recorded, 16.0 feet during morning of January 1, 1914, determined by high-water mark on gage in recorder well (discharge, from extension of rating curve, about 23,000 second-feet); minimum discharge, 15 second-feet, July 22 to August 7 and August 12-15, 1924.

DIVERSIONS.—Water stored in Lake Valley Reservoir, which is on a small tributary of North Fork of American River is carried by a small ditch to the Alta power plant, and is wasted to Bear River Basin.

STORAGE.—The capacity of Lake Valley Reservoir is 8,000 acre-feet.

ACCURACY.—Stage-discharge relation changed January 29 and April 5. Rating curves fairly well defined. Staff gage read to half-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records fair.

Discharge measurements of North Fork of American River near Colfax, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 8.....	3.26	1,000	Apr. 8.....	6.05	3,630	June 18.....	1.34	133
Feb. 13.....	3.61	1,320	Apr. 9.....	5.34	2,610	Aug. 12.....	.75	43
Feb. 14.....	3.86	1,490	Do.....	5.25	2,510			
Mar. 17.....	3.12	966	May 12.....	2.65	627			

Daily discharge, in second-feet, of North Fork of American River near Colfax, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	54	54	425	84	765	765	705	990	304	76	50	50
2.....	54	54	820	84	490	765	592	932	270	76	50	50
3.....	48	54	322	84	1,450	735	592	932	270	76	50	41
4.....	42	68	172	84	3,350	735	648	874	236	76	50	41
5.....	48	68	130	84	2,160	828	3,760	1,170	270	76	50	41
6.....	92	54	100	84	1,780	828	3,510	816	236	76	50	41
7.....	84	54	100	84	1,370	828	3,510	816	253	76	50	41
8.....	68	54	100	84	1,000	895	3,660	816	236	76	46	41
9.....	68	54	100	84	860	860	2,460	760	236	76	46	41
10.....	54	68	84	84	965	765	1,850	706	204	76	50	41

Daily discharge, in second-feet, of North Fork of American River near Colfax, Calif., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
11.....	68	68	84	68	860	705	1,560	680	204	76	50	41
12.....	84	120	84	68	1,290	675	1,420	653	204	76	46	41
13.....	68	225	84	68	1,450	765	1,560	653	174	69	41	50
14.....	54	110	84	68	1,450	895	1,420	628	174	62	41	50
15.....	54	84	84	68	1,100	930	1,420	628	148	62	41	46
16.....	54	76	84	92	1,180	965	1,420	578	148	62	41	41
17.....	54	84	84	92	895	930	1,350	578	148	62	41	41
18.....	54	84	120	100	765	765	1,170	602	125	62	41	50
19.....	54	68	172	84	765	735	1,050	602	125	62	41	50
20.....	54	68	140	68	1,290	735	1,050	602	125	50	50	50
21.....	54	68	110	68	895	765	1,170	602	116	50	50	50
22.....	54	68	100	68	795	765	1,170	506	106	50	46	50
23.....	54	68	100	68	705	828	1,050	440	98	50	41	50
24.....	54	68	100	68	620	895	1,050	418	90	50	41	50
25.....	54	68	100	68	565	828	1,110	340	98	50	41	41
26.....	54	68	100	68	675	765	1,110	340	90	50	50	41
27.....	54	68	100	68	735	765	1,110	340	83	50	50	41
28.....	54	68	100	76	735	675	1,110	340	76	50	41	50
29.....	54	68	100	3,350	-----	648	1,050	340	76	50	41	41
30.....	54	92	84	930	-----	620	1,110	340	76	50	50	50
31.....	54	-----	84	1,140	-----	705	-----	304	-----	50	50	-----

Monthly discharge of North Fork of American River near Colfax, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	92	42	58.2	3,580
November.....	225	54	75.8	4,510
December.....	820	84	144	8,850
January.....	3,350	68	245	15,100
February.....	3,350	499	1,110	61,600
March.....	965	620	786	48,300
April.....	3,760	592	1,520	90,400
May.....	1,170	304	623	38,300
June.....	304	76	167	9,940
July.....	76	50	63.0	3,870
August.....	50	41	46.0	2,830
September.....	50	41	45.1	2,680
The year.....	3,760	41	401	290,000

AMERICAN RIVER AT FAIROAKS, CALIF.

LOCATION.—At highway bridge 1,500 feet northwest of Southern Pacific Co.'s railroad station at Fair Oaks Bridge, half a mile southeast of Fair Oaks, Sacramento County, and 10 miles below mouth of South Fork.

DRAINAGE AREA.—1,910 square miles.

RECORDS AVAILABLE.—November 3, 1904, to September 30, 1926.

GAGE.—Vertical staff in two sections on right bank at highway bridge. A water-stage recorder in same pool as staff gage was used from October 1 to January 28 and June 5 to September 30.

DISCHARGE MEASUREMENTS.—Made from downstream side of bridge or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; shifting.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 11.6 feet at 9 a. m. on April 6 (discharge, 27,400 second-feet); minimum stage from water-stage recorder, 0.27 foot at 1 p. m. August 23 (discharge, 50 second-feet).

1907–1926: Maximum stage recorded, 30.4 feet March 19, 1907 (discharge, from extension of rating curve, about 119,000 second-feet); minimum stage from water-stage recorder, –0.97 foot at 5 p. m. August 16, 1924 (discharge, 3.6 second-feet).

DIVERSIONS.—Water is diverted for irrigation above station.

REGULATION.—See descriptions of Middle, North, and South Forks. Low-water flow partly regulated by power plant at Folsom.

ACCURACY.—Stage-discharge relation changed February 5 and almost continuously during low-water period from October 1 to January 28. Rating curves fairly well defined. Water-stage recorder operated satisfactorily while in use. Staff gage read to half-tenths twice daily January 29 to June 5. Daily discharge ascertained by applying mean daily gage height to rating table, except October 1 to January 28, for which shifting-control method was used, and January 29, for which hourly discharge was averaged. Records good.

Discharge measurements of American River at Fair Oaks, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 1.....	0.52	406	Jan. 22.....	0.46	372	July 16.....	0.50	132
Oct. 8.....	.60	452	Jan. 29.....	.90	627	July 23.....	.45	116
Oct. 16.....	.59	446	Feb. 7.....	4.50	4,830	July 29.....	.68	229
Oct. 24.....	.54	435	Feb. 14.....	6.58	8,870	Aug. 5.....	.82	322
Oct. 30.....	.48	393	Mar. 16.....	4.18	4,320	Aug. 12.....	.68	229
Nov. 5.....	.54	428	Apr. 10.....	6.56	8,740	Aug. 19.....	.78	288
Nov. 12.....	.56	446	May 12.....	3.02	2,690	Aug. 26.....	.32	67
Nov. 20.....	.61	490	June 4.....	2.02	1,490	Sept. 2.....	.48	141
Nov. 26.....	.48	423	June 11.....	1.58	952	Sept. 9.....	.80	290
Dec. 12.....	.75	632	June 18.....	1.21	568	Sept. 16.....	.56	182
Dec. 29.....	.86	603	June 25.....	.87	331	Sept. 25.....	.77	277
Jan. 6.....	.55	408	July 2.....	.92	360			
Jan. 14.....	.64	467	July 9.....	.71	241			

Daily discharge, in second-feet, of American River at Fair Oaks, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	270	408	1,130	590	4,980	2,600	3,170	4,980	1,500	350	170	185
2.....	327	322	3,320	474	2,610	2,740	2,740	4,980	1,560	392	135	175
3.....	384	402	2,480	456	6,740	2,740	2,600	4,980	1,560	398	205	210
4.....	316	462	1,680	468	6,520	2,600	2,600	5,520	1,440	302	170	235
5.....	305	493	1,170	493	10,900	2,740	13,400	7,190	1,330	290	160	230
6.....	300	462	994	474	5,900	3,170	22,700	4,980	1,140	210	160	170
7.....	474	450	827	486	4,980	3,170	16,900	4,120	1,140	257	155	145
8.....	564	402	757	462	3,470	3,320	15,800	3,630	1,130	290	200	210
9.....	500	366	764	486	3,320	3,320	13,400	3,260	1,140	284	135	220
10.....	438	456	715	444	2,880	3,170	9,790	2,880	1,060	308	185	195
11.....	450	532	652	432	3,950	2,880	8,430	2,740	940	268	185	220
12.....	538	500	680	444	7,920	2,470	6,960	2,600	846	257	175	225
13.....	564	1,020	610	468	9,790	2,740	8,430	2,740	756	290	155	145
14.....	538	1,010	571	480	9,790	3,630	8,960	2,600	704	350	205	195
15.....	538	701	578	571	5,340	3,790	7,430	2,740	640	326	210	230
16.....	552	564	558	468	5,900	3,950	8,170	2,880	640	267	135	235
17.....	500	673	590	450	4,120	3,950	7,670	3,020	592	235	205	220
18.....	426	652	638	474	3,170	3,630	6,100	3,020	592	195	185	225
19.....	396	610	583	526	2,740	3,170	5,190	3,320	664	160	200	205
20.....	408	538	914	519	4,460	2,880	4,930	3,470	664	175	181	145
21.....	462	532	785	456	3,950	3,170	5,520	3,170	560	200	185	220
22.....	474	564	708	500	3,020	3,170	5,710	2,880	528	215	126	230
23.....	420	526	771	545	2,880	3,170	5,340	2,680	459	205	122	220
24.....	506	562	652	462	2,210	4,120	6,100	2,470	410	195	190	279
25.....	408	545	590	444	2,080	3,470	6,200	2,080	410	185	175	235
26.....	360	456	564	558	1,950	3,320	6,310	1,880	404	135	155	252
27.....	468	432	564	414	2,340	3,170	9,230	1,820	362	155	160	175
28.....	456	571	645	480	2,470	3,170	6,740	1,690	386	200	190	126
29.....	432	538	694	3,710	-----	2,880	6,310	1,820	424	185	160	220
30.....	408	526	631	4,460	-----	2,740	6,520	1,710	374	190	109	205
31.....	408	-----	558	2,880	-----	2,600	-----	1,600	-----	190	190	-----

Monthly discharge of American River at Fair Oaks, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	564	270	438	26,900
November.....	1,020	322	542	32,300
December.....	3,320	558	893	54,900
January.....	4,460	414	793	48,800
February.....	10,900	1,950	4,660	259,000
March.....	4,120	2,470	3,150	194,000
April.....	22,700	2,600	7,980	475,000
May.....	7,190	1,600	3,210	197,000
June.....	1,560	362	812	48,300
July.....	398	135	247	15,200
August.....	210	109	168	10,300
September.....	279	126	206	12,300
The year.....	22,700	109	1,900	1,370,000

MIDDLE FORK OF AMERICAN RIVER NEAR EAST AUBURN, CALIF.

LOCATION.—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, Placer County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 22, 1911, to September 30, 1926.

GAGE.—Staff in four sections on left bank at pump house; read by J. A. Collins.

DISCHARGE MEASUREMENTS.—Made from cable 700 feet below gage or by wading.

CHANNEL AND CONTROL.—Gravel and small boulders; shifting during high water.

Banks high and not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 11.5 feet at 7 a. m. April 6 (discharge, about 9,920 second-feet); minimum stage, 2.12 feet September 7–13 (discharge, 35 second-feet).

1911–1926: Maximum stage recorded, 25.0 feet at 7.30 a. m. February 6, 1925 (discharge, from extension of rating curve, about 36,300 second-feet); minimum discharge, 23 second-feet September 26 to October 3, 1924, at gage height of 1.84 feet.

DIVERSIONS.—Pilot Creek ditch diverts from Pilot Creek for irrigation on Georgetown divide. Little South Fork ditch diverts from Gerle Creek and discharges the water into Pilot Creek drainage basin where it is used when necessary to supplement the flow in Pilot Creek ditch; maximum discharge is probably less than 20 second-feet.

REGULATION.—Storage is developed in Loon Lake at the head of Gerle Creek to serve the ditches mentioned in the preceding paragraph.

ACCURACY.—Stage-discharge relation changed January 29 and April 5. Rating curves fairly well defined to 7,000 second-feet and extended above. Staff gage read to quarter-tenths twice daily except on most Sundays, when it was not read. Daily discharge ascertained by applying mean daily gage height to rating table. Discharge estimated or interpolated for days on which gage was not read by comparison with records of North Fork of American River. Records good.

Discharge measurements of Middle Fork of American River near East Auburn, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 7.....	6.00	1,810	Apr. 7.....	8.75	5,460	Apr. 14.....	7.32	3,400
Feb. 13.....	6.42	2,220	Do.....	8.88	5,610	May 12.....	5.18	1,270
Mar. 17.....	6.25	2,040	Apr. 8.....	8.85	5,860	June 18.....	3.22	243
Apr. 6.....	9.50	6,230	Apr. 9.....	7.90	4,190	Aug. 12.....	2.20	43

Daily discharge, in second-feet, of Middle Fork of American River near East Auburn, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	84	92	900	185	1,470	1,310	1,550	1,950	710	138	53	41
2.....	84	92	1,520	172	1,030	1,310	4,240	1,860	710	144	53	39
3.....	81	102	900	172	1,900	1,310	1,470	1,860	625	124	51	39
4.....	84	124	500	172	2,890	1,310	1,700	1,950	600	119	48	37
5.....	87	130	368	172	3,630	1,390	7,200	3,040	625	114	48	37
6.....	124	114	344	160	1,900	1,630	8,220	1,860	625	109	48	37
7.....	160	111	320	160	1,810	1,680	6,120	1,440	600	104	50	35
8.....	160	114	290	160	1,470	1,720	5,800	1,440	575	104	48	35
9.....	150	116	248	160	1,310	1,630	4,610	1,440	525	104	46	35
10.....	136	132	235	160	1,310	1,470	3,540	1,360	480	106	46	35
11.....	173	160	222	150	1,470	1,310	3,280	1,290	440	106	43	35
12.....	210	198	210	140	2,100	1,310	3,160	1,150	400	101	43	35
13.....	210	460	185	140	2,100	1,310	3,540	1,290	365	104	43	35
14.....	190	260	172	140	1,960	1,700	3,540	1,290	330	113	43	37
15.....	172	229	160	136	1,810	2,100	3,280	1,440	282	98	43	37
16.....	160	198	150	132	1,810	2,100	3,670	1,360	282	89	43	37
17.....	150	185	160	140	1,390	2,000	2,300	1,360	253	92	41	37
18.....	141	198	185	172	1,170	1,720	2,350	1,440	239	82	41	37
19.....	132	172	260	160	1,170	1,550	2,050	1,520	239	72	41	37
20.....	132	172	235	140	1,630	1,470	2,050	1,520	239	75	41	39
21.....	124	160	210	134	1,310	1,510	2,250	1,360	225	72	43	39
22.....	117	155	210	150	1,170	1,550	2,250	1,220	211	66	42	41
23.....	114	150	210	150	1,030	1,720	2,150	1,080	198	66	41	40
24.....	111	140	210	145	960	2,000	2,250	940	186	62	41	39
25.....	108	140	210	140	890	1,810	2,460	770	186	59	38	39
26.....	105	140	210	140	960	1,630	2,460	710	182	59	37	38
27.....	102	136	210	136	1,170	1,470	2,460	710	173	59	37	37
28.....	99	140	210	138	1,170	1,430	2,460	710	164	59	37	37
29.....	96	150	210	2,200	-----	1,390	2,250	740	156	58	39	37
30.....	93	160	210	1,170	-----	1,310	2,350	755	146	56	39	37
31.....	93	-----	210	1,030	-----	1,390	-----	770	-----	56	39	-----

Monthly discharge of Middle Fork of American River near East Auburn, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	210	81	128	7,870
November.....	460	92	161	9,580
December.....	1,520	150	319	19,600
January.....	2,200	132	279	17,200
February.....	3,630	890	1,570	87,200
March.....	2,100	1,310	1,570	96,500
April.....	8,220	1,240	3,150	187,000
May.....	3,040	710	1,340	82,400
June.....	710	146	366	21,800
July.....	144	56	89.4	5,500
August.....	53	37	43.4	2,670
September.....	41	35	37.3	2,220
The year.....	8,220	35	746	540,000

SOUTH FORK OF AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.—In S. $\frac{1}{2}$ sec. 29, T. 11 N., R. 15 E., on the Lincoln Highway half a mile below intake of El Dorado Canal and about 2 miles west of Kyburz, Eldorado County. Perrin Creek enters just above gage.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August 31 to December 14, 1907, and October 1, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank inspected by ditch walker for Western States Gas & Electric Co.

DISCHARGE MEASUREMENTS.—Made from cable 80 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed of stream smooth well-packed gravel; permanent. Channel straight for 300 feet above and 150 feet below cable. Right bank low and will be overflowed at medium stages. Left bank high. Banks are wooded. Gage is in a large pool. Control is gravel and large boulders; practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.68 feet at 11.30 p. m. April 15 (discharge, 1,120 second-foot); minimum stage, from water-stage recorder, 0.85 foot at 7 p. m. August 14 (discharge, 0.4 second-foot).

1922-1926: Maximum stage, from water-stage recorder, 6.45 feet at 4.30 a. m. February 6, 1925 (discharge, 3,080 second-foot); minimum stage, from water-stage recorder, 0.85 foot October 15, 1924, September 14, 1925, and August 14, 1926 (discharge, 0.4 second-foot).

ICE.—Slightly affected by ice January 20-29.

DIVERSIONS.—El Dorado Canal diverts water half a mile above station and returns it to river at power house below gage.

REGULATION.—Western States Gas & Electric Co. has four storage reservoirs above station.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve very well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table except for days of large fluctuation, for which hourly discharge was averaged. Discharge January 20-29 estimated because of ice effect by correcting recorder record and by comparison with the record for El Dorado Canal. Records excellent.

Discharge measurements of South Fork of American River near Kyburz, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 4.....	0.96	0.6	Apr. 17.....	4.09	695
Jan. 30.....	1.90	31	July 11.....	1.42	6.8

Daily discharge, in second-feet, of South Fork of American River near Kyburz, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	2.2	256	3.5	3.0	76	253	965	404	3.4	1.6	0.5
2	.5	2.8	220	4.2	1.3	86	186	1,000	358	15	.6	.5
3	.5	2.0	100	2.8	2.3	82	188	1,080	322	1.3	.5	.5
4	.5	.7	48	1.0	32	90	234	1,160	268	1.4	.6	.6
5	4.8	.6	31	1.9	37	116	898	1,080	238	1.5	.6	.7
6	31	.6	29	1.0	32	134	641	794	215	1.3	.6	.6
7	34	.6	14	.9	26	148	641	608	229	1.2	.6	.7
8	11	.7	12	.8	13	138	580	476	235	54	.5	.7
9	28	.6	8.5	.8	17	114	444	435	208	18	.6	.7
10	2.8	.6	4.6	.7	22	83	426	408	164	8	.5	.6
11	.6	.7	7.5	.7	13	79	430	366	170	14	.5	.5
12	.5	11	1.5	.7	14	95	458	430	110	26	.5	.5
13	.5	8.5	.7	.7	12	124	608	490	51	11	.5	.5
14	4.9	.7	7.5	1.0	13	215	659	555	29	1.4	.4	.6
15	.7	.6	11	1.2	9	232	768	602	13	.6	.5	.6
16	.6	4.2	6.5	.7	7	250	307	624	9	.6	.4	.6
17	.8	1.6	1.2	1.2	8.5	250	719	580	8.5	.5	.5	.6
18	.6	.8	1.6	.8	2.4	160	586	630	8	.6	.6	.6
19	.7	.7	11	.8	39	126	550	695	11	.7	.6	.6
20	.7	21	14	20	20	152	665	695	7	1.3	.6	.6
21	.7	.7	33	20	7.5	195	307	613	3.0	2.2	.6	.5
22	.7	2.4	11	2	1.8	185	794	743	5	3.4	.6	.5
23	.7	.8	7	1.6	2.2	244	334	647	12	8.4	.6	.5
24	14	.7	7.5	.8	1.2	322	928	520	11	.7	.6	.5
25	3.1	.7	13	.7	1.4	277	965	366	11	7.5	.6	.5
26	.7	1.5	14	4.5	14	235	950	350	12	8.5	.6	.5
27	.7	.9	4.8	2.5	39	226	965	312	78	.9	.6	.5
28	.7	.8	1.1	3.4	61	212	1,000	315	2.8	.5	.6	.5
29	.8	.7	.9	188	-----	195	965	350	2.0	.5	.6	.5
30	.8	99	.8	53	-----	160	928	362	1.2	.5	.5	.5
31	.7	-----	1.5	28	-----	253	-----	390	-----	7	.5	-----

Monthly discharge of South Fork of American River near Kyburz, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	34	0.5	4.77	298
November	99	.6	5.65	336
December	256	.7	28.4	1,750
January	188	.7	11.3	695
February	61	1.2	16.1	894
March	322	76	169	10,400
April	1,000	158	662	39,400
May	1,160	312	601	37,000
June	404	1.2	107	6,370
July	26	.5	6.35	390
August	1.6	.4	.58	35.7
September	.7	.5	.56	33.3
The year	1,160	.4	135	97,600

Combined daily discharge, in second-feet, of South Fork of American River and El Dorado Canal near Kyburz, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	105	104	331	84	85	161	396	1,090	534	159	154	134
2.....	100	105	295	85	80	171	327	1,130	492	172	134	132
3.....	104	96	175	87	83	170	300	1,210	464	152	132	134
4.....	110	83	126	79	117	184	376	1,280	416	151	147	143
5.....	122	77	111	85	122	210	1,030	1,200	388	156	146	142
6.....	136	79	109	81	117	228	778	897	365	156	149	141
7.....	131	90	94	81	111	244	781	707	379	156	145	146
8.....	108	91	89	79	98	239	720	575	387	209	142	147
9.....	121	82	84	79	102	215	584	534	362	174	140	145
10.....	89	82	80	77	107	184	566	507	320	164	136	130
11.....	76	86	90	79	98	180	570	465	326	170	138	126
12.....	74	95	86	77	99	196	599	521	266	181	136	126
13.....	76	86	70	76	97	225	748	566	206	167	118	128
14.....	93	65	94	85	98	287	800	641	184	156	116	132
15.....	75	63	106	83	94	333	910	687	168	150	120	131
16.....	85	84	100	81	92	351	948	709	166	146	124	129
17.....	98	79	89	85	82	358	860	668	164	144	136	143
18.....	96	74	84	80	85	277	708	716	163	151	141	135
19.....	100	73	86	83	125	247	662	781	161	152	139	134
20.....	97	71	85	125	105	273	778	787	157	156	142	134
21.....	89	65	108	128	88	317	873	713	152	157	143	132
22.....	88	89	86	108	86	306	915	851	155	158	141	132
23.....	95	95	84	104	78	366	955	763	162	158	143	130
24.....	116	93	88	89	81	444	1,050	646	161	154	144	118
25.....	99	92	93	84	83	398	1,090	495	162	162	140	110
26.....	91	110	94	86	99	356	1,070	479	159	164	136	108
27.....	89	110	85	90	123	353	1,090	441	150	147	138	106
28.....	97	109	78	102	145	348	1,120	445	155	138	136	101
29.....	97	93	75	281	-----	336	1,090	480	157	140	137	98
30.....	94	181	73	138	-----	302	1,060	491	156	138	134	94
31.....	91	-----	76	113	-----	396	-----	520	-----	159	136	-----

Combined monthly discharge of South Fork of American River and El Dorado Canal near Kyburz, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	136	74	98.1	6,030
November.....	181	63	90.1	5,360
December.....	331	70	107	6,580
January.....	281	76	96.6	5,940
February.....	145	78	99.3	5,510
March.....	444	161	279	17,290
April.....	1,120	300	792	47,190
May.....	1,280	441	709	43,603
June.....	534	150	255	15,290
July.....	209	138	158	9,720
August.....	154	116	138	8,480
September.....	147	94	128	7,620
The year.....	1,280	63	246	178,000

SOUTH FORK OF AMERICAN RIVER NEAR CAMINO, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 25, T. 11 N., R. 11 E., 1 mile below intake of Western States Gas & Electric Co.'s flume, 300 feet above mouth of Iowa Canyon Creek, and 3 miles northwest of Camino, Eldorado County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 30, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENT.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Channel is solid rock and boulders, with large pool at gage. Control is solid rock and boulders; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.1 feet at 8 p. m. April 5 (discharge, 4,510 second-feet); minimum stage, from water-stage recorder, 0.68 foot at 3 p. m. August 30 (discharge, 3.7 second-feet).

1922-1926: Maximum stage, from water-stage recorder, 19.0 feet at 7 a. m. February 6, 1925 (discharge, 18,000 second-feet); minimum stage, from water-stage recorder, 0.68 foot at noon October 27, 1925, and at 3 p. m. August 30, 1926 (discharge, 3.7 second-feet).

DIVERSIONS.—Echo Lake flume diverts water from Echo Lake in Lake Tahoe Basin, South Fork of American River Basin. El Dorado Canal diverts water for power and irrigation from river above station. Water used for power is returned to river above station but about 40 second-feet is diverted for irrigation from about May to October. Summerfield ditch diverts about 10 second-feet from Slab Creek, which is used for power below station. Western States Gas & Electric Co.'s flume diverts water for power use about 1 mile above gage.

REGULATION.—Flow partly regulated by storage reservoirs above and by operation of Western States Gas & Electric Co.'s power plant about 3 miles above.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table January 28 to May 7 and July 9 to September 30 and by use of discharge integrator October 1 to January 27 and May 8 to July 8. Record excellent.

The following discharge measurements were made:

November 2, 1925: Gage height, 1.11 feet; discharge, 16 second-feet.

April 23, 1926: Gage height, 6.76 feet; discharge, 1,750 second-feet.

July 9, 1926: Gage height, 2.28 feet; discharge, 114 second-feet.

Daily discharge, in second-feet, of South Fork of American River near Camino, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	36	760	62	470	560	920	1,830	716	53	16	13
2	28	32	866	68	330	628	840	1,900	651	50	14	17
3	28	48	450	71	515	592	780	2,040	590	48	18	17
4	20	60	260	72	1,120	575	920	2,180	524	32	16	16
5	26	40	186	68	1,100	720	3,540	2,320	480	20	16	14
6	54	33	168	82	662	760	3,090	1,690	434	32	16	10
7	50	32	168	69	530	789	2,760	1,300	442	46	15	10
8	66	22	141	70	455	840	2,790	1,080	438	48	11	12
9	92	56	128	71	405	800	2,110	1,050	458	80	12	13
10	124	58	112	52	430	680	1,760	996	354	76	12	11
11	108	58	106	65	470	592	1,620	932	316	27	12	11
12	116	138	106	59	592	628	1,690	996	283	58	12	10
13	106	222	68	62	628	680	1,970	1,060	208	66	13	7.5
14	87	119	54	61	610	840	2,040	1,160	179	62	11	11
15	90	85	63	70	628	1,020	2,180	1,240	141	54	8.5	13
16	66	84	83	58	720	1,070	2,250	1,260	125	45	8.5	14
17	60	96	103	48	485	1,100	2,040	1,220	115	33	11	16
18	46	78	116	56	430	860	1,520	1,210	188	22	12	16
19	58	72	128	43	442	740	1,440	1,370	191	20	13	14
20	60	90	38	45	645	780	1,560	1,380	142	24	12	10
21	52	130	117	100	85	860	1,830	1,240	102	31	13	12
22	50	87	124	97	442	880	1,900	1,260	52	23	9.5	14
23	58	63	109	65	380	1,020	1,830	1,140	72	22	9	15
24	48	67	98	46	342	1,200	2,110	948	86	23	11	15
25	36	60	76	68	330	1,120	2,110	728	86	20	11	14
26	30	43	100	55	355	970	2,250	662	68	16	11	11
27	72	69	112	53	418	920	2,250	602	104	24	9	8
28	47	61	118	88	485	920	2,250	612	106	25	11	11
29	42	54	104	945	-----	900	2,110	656	58	22	9	11
30	38	108	99	610	-----	800	2,040	668	58	20	5.5	11
31	36	-----	88	515	-----	920	-----	674	-----	20	9	-----

Monthly discharge of South Fork of American River near Camino, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	124	20	59.5	3,660
November.....	222	22	73.4	4,370
December.....	866	54	171	10,500
January.....	945	43	126	7,750
February.....	1,120	330	532	29,500
March.....	1,200	560	831	51,100
April.....	3,540	780	1,950	116,000
May.....	2,320	602	1,210	74,400
June.....	716	52	259	15,400
July.....	80	16	37.2	2,290
August.....	18	5.5	11.8	726
September.....	17	7.5	12.6	750
The year.....	3,540	5.5	437	316,000

Combined daily discharge, in second-feet, of South Fork of American River and Western States Gas & Electric Co.'s flume near Camino, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	144	150	867	168	578	668	1,030	1,930	826	159	113	109
2.....	138	144	972	175	440	719	945	2,000	761	156	110	112
3.....	139	162	556	178	625	699	885	2,140	668	167	118	112
4.....	128	175	365	179	1,230	682	1,020	2,280	632	136	113	111
5.....	137	155	292	175	1,200	827	3,650	2,420	588	120	105	101
6.....	171	146	275	190	769	868	3,200	1,790	544	138	111	94
7.....	167	146	275	177	641	887	2,890	1,400	552	153	109	99
8.....	183	135	246	177	565	947	2,860	1,180	548	151	85	105
9.....	207	172	234	179	514	907	2,210	1,150	568	188	107	104
10.....	239	174	217	159	539	786	1,860	1,100	464	183	100	103
11.....	223	174	212	172	578	698	1,720	1,040	426	133	102	99
12.....	231	251	211	166	698	734	1,880	1,100	393	165	91	98
13.....	220	330	172	169	733	786	2,080	1,160	318	173	111	94
14.....	202	224	159	168	719	947	2,140	1,260	289	170	100	103
15.....	205	190	170	177	734	1,130	2,280	1,340	251	161	80	103
16.....	180	190	190	165	828	1,180	2,360	1,360	235	152	96	106
17.....	174	202	211	153	592	1,210	2,140	1,320	226	140	88	106
18.....	159	183	223	169	538	966	1,620	1,320	298	127	98	108
19.....	172	177	232	156	549	846	1,530	1,480	302	126	88	104
20.....	173	196	203	156	753	886	1,650	1,480	252	131	106	103
21.....	165	237	223	214	593	967	1,940	1,340	212	137	108	105
22.....	163	193	230	211	548	987	2,000	1,370	163	129	76	106
23.....	172	170	215	179	486	1,130	1,930	1,240	182	128	93	109
24.....	161	174	203	160	450	1,310	2,220	1,050	196	131	88	107
25.....	147	167	181	182	438	1,230	2,210	836	196	126	104	104
26.....	164	149	205	168	463	1,080	2,350	771	177	118	104	98
27.....	187	176	219	167	526	1,030	2,350	711	213	131	92	90
28.....	159	168	224	201	593	1,020	2,350	721	214	132	103	102
29.....	154	160	210	1,060	-----	1,000	2,210	765	167	127	94	102
30.....	148	215	205	712	-----	905	2,140	778	166	120	88	101
31.....	148	-----	194	622	-----	1,030	-----	784	-----	119	96	-----

Combined monthly discharge of South Fork of American River and Western States Gas & Electric Co.'s flume near Camino, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	239	129	173	10,600
November.....	330	135	183	10,900
December.....	972	159	277	17,000
January.....	1,060	153	235	14,400
February.....	1,230	438	640	35,500
March.....	1,310	668	937	57,600
April.....	3,650	885	2,050	122,000
May.....	2,420	711	1,310	80,600
June.....	826	163	369	22,000
July.....	188	118	143	8,790
August.....	118	76	99.3	6,110
September.....	112	90	103	6,130
The year.....	3,650	76	541	392,000

ECHO LAKE FLUME NEAR VADE, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 1, T. 11 N., R. 17 E., 400 feet below outlet gate of Echo Lake, 5 miles northeast of Phillips, Vade post office, Eldorado County. Altitude, about 7,500 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August, 1923, to September 30, 1926, fragmentary.

GAGE.—Vertical staff gage nailed to right side of flume.

DISCHARGE MEASUREMENTS.—Made from a plank across flume at gage.

CHANNEL AND CONTROL.—Control is cross section and slope of flume.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge recorded during year, 17 second-feet July 18 to August 10.

ICE.—No record during winter.

REGULATION.—Completely regulated by outlet gate in Echo Lake Dam. Lake is usually emptied during summer and fall to level of outlet gate. There was no stored water in Echo Lake on September 30, 1926.

ACCURACY.—Stage-discharge relation fairly permanent. Rating curve fairly well defined. Staff gage read once a day when water was being released. Daily discharge ascertained by applying daily gage height to rating table. Records good.

Canal diverts water from Echo Lake in Truckee River Basin into South Fork of American River Basin.

The following discharge measurements were made:

July 14, 1926: Gage height, 0.29 foot; discharge, 1.0 second-foot.

July 14, 1926: Gage height, 0.64 foot; discharge, 5.0 second-feet.

Daily discharge, in second-feet, of Echo Lake flume near Vade, Calif., for the year ending September 30, 1926

Day	Oct.	July	Aug.	Sept.	Day	Oct.	July	Aug.	Sept.
1.....	11	-----	17	0.4	16.....	-----	0.9	7	-----
2.....	11	-----	17	.2	17.....	-----	12	6	-----
3.....	11	-----	17	.0	18.....	-----	17	4.2	-----
4.....	11	-----	17	-----	19.....	-----	17	2.8	-----
5.....	11	-----	17	-----	20.....	-----	17	2.8	-----
6.....	11	-----	17	-----	21.....	-----	17	2.8	-----
7.....	11	-----	17	-----	22.....	-----	17	3.5	-----
8.....	11	-----	17	-----	23.....	-----	17	3.5	-----
9.....	11	-----	17	-----	24.....	-----	17	2.8	-----
10.....	11	-----	17	-----	25.....	-----	17	2.3	-----
11.....	-----	-----	15	-----	26.....	-----	17	1.8	-----
12.....	-----	-----	12	-----	27.....	-----	17	1.8	-----
13.....	-----	-----	10	-----	28.....	-----	17	1.4	-----
14.....	-----	1.0	8	-----	29.....	-----	17	1.1	-----
15.....	-----	1.0	8	-----	30.....	-----	17	.8	-----
					31.....	-----	17	.5	-----

NOTE.—No record Oct. 11 to July 13; probably no flow as reservoir was empty. No flow Sept. 3-30.

Monthly discharge of Echo Lake flume near Vade, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October 1-10.....	11	11	11.0	218
July 14-31.....	17	.9	14.0	500
August.....	17	.5	8.65	532
September.....	0.4	.0	.02	1.2

MEDLEY LAKES OUTLET NEAR VADE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 29, T. 12 N., R. 17 E., half a mile below auxiliary dams, 1 mile below main dam of Western States Gas & Electric Co. at Medley Lakes, and 5 miles northwest of Phillips, Vade post office, Eldorado County. Altitude, about 8,100 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 11, 1922, to September 30, 1926; summer records only.

GAGE.—Water-stage recorder in masonry well and shelter on left bank.

DISCHARGE MEASUREMENTS.—Made by wading just below gage.

CHANNEL AND CONTROL.—Bed of stream is smooth. Banks are solid granite, steep, and not subject to overflow. Control is solid rock; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 2.68 feet at 11 a. m. July 7 (discharge, 130 second-feet); stream dry September 1-30.

1922-1926: Maximum stage, from water-stage recorder, 2.86 feet at 7 p. m. June 21, 1925 (revised discharge, 146 second-feet); no flow from later part of September to October 27, 1924, and September 1-30, 1926.

ICE.—Stage-discharge relation affected by snow in channel April 22 to May 5.

DIVERSIONS.—None.

REGULATIONS.—Partly regulated by gates in dam at Medley Lakes. There was no water in Medley Lakes on September 30, 1924, 1925, and 1926.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Recorder record excellent except April 22 to May 5, when snow blocked the control, and August 26-31, when float rested on bottom of well. Daily discharge ascertained by applying mean daily gage height to rating table except July 7, for which hourly discharge was averaged, April 22 to May 5, for which discharge was estimated because of snow on control, and August 26-31, when float rested on bottom of well. Gates in Medley Lakes Dam were closed in December and opened on July 7. No record obtained November 16 to April 21. Records excellent.

Discharge measurements of Medley Lakes outlet near Vade, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 5.....	0.47	2.2	May 13.....	0.60	4.1
Apr. 22.....	.58	3.0	July 14.....	2.58	121

Daily discharge, in second-feet, of Medley Lakes outlet near Vade, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Apr.	May	June	July	Aug.
1.....	4.8	1.6	-----	5	62	15	36
2.....	3.7	1.8	-----	6.5	57	13	18
3.....	3.1	2.1	-----	9.5	53	12	13
4.....	2.5	2.2	-----	10	55	11	9.5
5.....	3.2	2.2	-----	5	67	9.5	7.5
6.....	5	2.2	-----	1.9	70	7.5	6
7.....	6.5	2.2	-----	1.3	76	62	4.8
8.....	7	2.2	-----	1.1	70	128	3.8
9.....	9.5	2.1	-----	.9	52	125	3.1
10.....	10	2.5	-----	1.2	46	128	2.4
11.....	10	3.4	-----	2.3	38	123	2.0
12.....	10	5	-----	3.8	33	121	1.7
13.....	10	9	-----	5.5	28	119	1.4
14.....	9	9	-----	8	25	118	1.2
15.....	8	7.5	-----	8.5	23	118	1.1
16.....	7	-----	-----	9	21	115	.9
17.....	6	-----	-----	9	20	114	.8
18.....	5.5	-----	-----	10	22	112	.7
19.....	5	-----	-----	14	22	110	.6
20.....	4.8	-----	-----	13	20	109	.6
21.....	4.2	-----	-----	10	19	106	.5
22.....	3.8	-----	3.8	9.5	20	110	.5
23.....	3.6	-----	3.8	8.5	20	115	.4
24.....	3.2	-----	4.4	10	23	112	.4
25.....	2.8	-----	4.4	12	24	109	.4
26.....	2.6	-----	4.4	17	24	105	.3
27.....	2.4	-----	4.8	25	22	100	.3
28.....	2.3	-----	5	39	20	94	.2
29.....	2.1	-----	5.5	50	18	85	.2
30.....	2.0	-----	4.8	59	17	74	.1
31.....	1.8	-----	-----	59	-----	58	.1

NOTE.—No record Nov. 16 to Apr. 21. No flow in September.

Monthly discharge of Medley Lakes outlet near Vade, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	10	1.8	5.21	320
November 1-15.....	9	1.6	3.67	109
April 22-30.....	5.5	3.8	4.54	81.0
May.....	59	.9	13.7	842
June.....	76	17	35.6	2,120
July.....	128	7.5	88.2	5,420
August.....	36	.1	3.82	235

NOTE.—No record Nov. 16 to Apr. 21. No flow during September.

SILVER LAKE OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 32, T. 10 N., R. 17 E., in Eldorado County, 1,000 feet below Silver Lake Dam and 4 miles southwest of Kirkwood, Amador County. Altitude, about 7,200 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 19, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 70 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed of stream is smooth, solid granite. Control is solid granite, permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.00 feet at 1 a. m. April 30 (discharge, 194 second-feet); minimum stage, from water-stage recorder, 0.37 foot September 4 (discharge, 0.1 second-foot).

1922-1926: Maximum stage, from water-stage recorder, 3.82 feet at midnight May 16, 1923 (discharge, 273 second-feet); minimum stage, from water-stage recorder, 0.37 foot September 4, 1926 (discharge, 0.1 second-foot).

ICE.—Pool froze over, but control remained open during year.

DIVERSIONS.—None.

REGULATION.—Silver Lake is used as a storage reservoir. There was 3,700 acre-feet of water in reservoir on September 30, 1925, and none on September 30, 1926.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except for days of large fluctuation, for which hourly discharge was averaged. Records excellent.

Discharge measurements of Silver Lake outlet near Kirkwood, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Jan. 14.....	0.61	1.4	May 16.....	2.90	188
May 16.....	2.00	88	Do.....	1.22	27

Daily discharge, in second-feet, of Silver Lake outlet near Kirkwood, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	61	24	9.5	4.2	0.2	0.2	0.1	168	37	84	70	5
2.....	63	22	15	3.9	.2	.2	1	162	38	83	68	2.4
3.....	69	20	16	3.6	.2	.2	1	169	38	35	65	.1
4.....	70	17	14	3.3	.2	.2	18	175	36	.2	63	.1
5.....	69	14	13	3.0	.2	.2	26	172	32	.2	61	.1
6.....	66	12	12	3.0	.2	.2	26	149	29	.2	60	2.9
7.....	52	10	12	2.8	.2	.2	26	125	29	.2	57	9.5
8.....	37	9	11	2.6	.2	.2	26	108	29	.2	55	10
9.....	17	8	10	2.6	.2	.2	26	98	28	.2	53	9.5
10.....	.1	8	9	2.6	.2	.2	37	37	28	.2	52	8.5
11.....	.1	7.5	9	2.4	.2	.2	46	3.0	25	.2	50	8
12.....	9.5	7.5	8	2.4	.2	.2	46	13	16	.2	48	7
13.....	29	8	8	2.4	.2	.2	48	32	7.5	.2	46	6.5
14.....	27	7	6.5	.8	.2	.2	50	57	3.2	.1	43	8
15.....	28	6.5	6	.2	.2	.2	51	80	.2	.1	42	6.5
16.....	41	5.5	5.5	.2	.2	.2	59	70	.2	.1	39	5.5
17.....	47	5	4.2	.2	.2	.2	100	48	.2	.1	37	5
18.....	50	4.8	2.2	.2	.2	.2	106	70	.2	3.1	34	4.8
19.....	52	4.2	4.5	.2	.2	.2	100	90	.2	11	32	4.2
20.....	46	3.9	8	.2	.2	.2	103	101	.2	14	32	3.9
21.....	43	3.3	7	.2	.2	.2	114	113	.2	16	30	3.3
22.....	46	3.0	6.5	.2	.2	.2	125	116	.2	11	27	2.8
23.....	45	3.0	6	.2	.2	.2	134	102	.2	5.5	24	1.8
24.....	42	2.8	5.5	.2	.2	.2	161	88	.2	16	22	.4
25.....	40	2.6	5	.2	.2	.2	179	70	33	24	19	.1
26.....	37	2.4	4.8	.2	.2	.2	181	62	66	13	16	.1
27.....	34	2.4	4.8	.2	.2	.1	180	44	66	7	11	.1
28.....	32	2.6	4.8	.2	.2	.1	185	29	64	14	11	.1
29.....	29	2.6	4.5	.2	-----	.1	185	30	64	21	9.5	.2
30.....	26	3.6	4.5	.2	-----	.1	185	31	70	38	8	.2
31.....	26	-----	4.2	.2	-----	.1	-----	34	-----	70	6.5	-----

Monthly discharge of Silver Lake outlet near Kirkwood, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	70	0.1	39.8	2,450
November.....	24	2.4	7.74	461
December.....	16	2.2	7.77	478
January.....	4.2	.2	1.39	85.5
February.....	.2	.2	.20	11.1
March.....	.2	.1	.18	11.1
April.....	185	.1	84.1	5,000
May.....	175	3.0	85.4	5,250
June.....	70	.2	24.7	1,470
July.....	84	.1	15.1	928
August.....	70	6.5	38.4	2,360
September.....	10	.1	3.89	231
The year.....	185	.1	25.9	18,700

SILVER FORK OF SOUTH FORK OF AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.—In sec. 34, T. 11 N., R. 15 E., 2 miles above mouth, half a mile below China Flat Reservoir site, and 2 miles southeast of Kyburz, Eldorado County. Altitude, about 5,000 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August 16, 1924, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from cable or by wading.

CHANNEL AND CONTROL.—The channel is in solid rock with a pool at gage; control is solid rock and is permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.02 feet at 4 p. m. April 5 (discharge, 830 second-feet); minimum stage, from water-stage recorder, 1.12 feet at 6 p. m. July 18 (discharge, 12 second-feet).

1924-1926: Maximum stage recorded, 5.25 feet at 4 a. m. February 6, 1925 (discharge, 2,350 second-feet); minimum stage recorded, 1.12 feet July 18, 1926 (discharge, 12 second-feet).

ICE.—Stage-discharge relation affected by ice December 31 to January 4, January 13-14, 19-20, and 28-29.

DIVERSIONS.—None.

REGULATION.—Flow is regulated by storage at Twin and Silver Lakes.

ACCURACY.—Stage-discharge relation permanent. Water-stage recorder record good except October 25 to November 2 and July 4-10. Daily discharge ascertained by applying mean daily gage height to rating table except April 4, for which hourly discharge was averaged. For periods of no gage-height record or when stage-discharge relation was affected by ice, discharge estimated on basis of records for other stations. Records good.

Discharge measurements of Silver Fork of South Fork of American River near Kyburz, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 4.....	1.83	60	Apr. 17.....	3.41	414
Jan. 30.....	1.87	65	July 11.....	1.22	14

Daily discharge, in second-feet, of Silver Fork of South Fork of American River near Kyburz, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	82	64	116	56	38	74	202	568	238	118	87	128
2.....	77	70	124	56	35	81	171	568	230	132	84	126
3.....	81	64	73	56	34	81	158	604	223	121	98	126
4.....	85	62	50	56	47	88	226	625	204	120	113	132
5.....	87	57	43	56	52	106	696	632	174	124	112	131
6.....	92	54	41	56	46	118	442	474	165	123	115	131
7.....	88	68	37	56	45	131	442	351	173	123	113	132
8.....	68	68	41	55	42	124	391	259	185	95	110	134
9.....	57	57	42	55	43	113	308	245	187	40	108	132
10.....	34	56	42	54	44	94	305	226	173	20	107	118
11.....	17	53	51	55	42	92	308	173	182	17	107	116
12.....	15	54	47	54	42	104	335	182	151	17	108	116
13.....	20	42	40	55	40	121	396	198	96	18	91	120
14.....	44	26	69	88	40	156	414	223	80	15	94	120
15.....	40	26	77	62	37	182	463	247	74	14	96	120
16.....	43	48	74	61	36	185	474	264	81	13	102	120
17.....	57	42	58	61	36	187	423	228	87	13	116	123
18.....	60	38	56	61	36	142	362	242	89	13	120	123
19.....	63	37	55	63	73	129	343	267	88	15	121	123
20.....	63	36	56	95	51	149	391	295	85	25	126	123
21.....	58	37	74	107	41	174	428	292	84	28	128	121
22.....	54	66	54	85	36	165	442	409	91	32	126	121
23.....	58	66	53	84	34	194	452	391	101	19	129	121
24.....	78	66	56	68	34	228	506	324	102	17	131	110
25.....	60	66	62	63	36	204	531	247	101	36	129	104
26.....	57	81	62	68	42	187	506	228	110	38	126	102
27.....	55	81	51	68	54	183	495	187	102	20	128	101
28.....	60	81	46	76	66	182	518	165	102	18	128	100
29.....	63	63	45	150	-----	174	512	180	108	28	128	92
30.....	60	88	45	68	-----	160	506	202	112	38	126	89
31.....	57	-----	50	53	-----	200	-----	228	-----	77	128	-----

Monthly discharge of Silver Fork of South Fork of American River near Kyburz, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	92	15	59.1	3,630
November.....	88	26	57.2	3,400
December.....	124	37	57.7	3,550
January.....	150	53	66.8	4,110
February.....	73	34	42.9	2,380
March.....	228	74	145	8,920
April.....	696	158	405	24,100
May.....	632	165	314	19,300
June.....	238	74	133	7,910
July.....	132	13	49.3	3,030
August.....	131	84	114	7,010
September.....	134	89	118	7,020
The year.....	696	13	130	94,400

TWIN LAKES OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 18, T. 10 N., R. 18 E., 500 feet below main dam and outlet gate of Twin Lakes, Alpine County, and 1 mile east of Kirkwood, Amador County. Altitude, 7,900 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—September 19, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from a foot log across stream 400 feet below gage or by wading.

CHANNEL AND CONTROL.—Bed of stream smooth; permanent. Banks are high, clear, and not subject to overflow. Control is a concrete dam about 25 feet long, 2½ feet high, with a 12-inch crest, and lower in center than at ends. Zero flow, gage height 0.0 foot.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 1.84 feet May 22 (discharge, 157 second-feet); minimum discharge about 0.3 second-foot when gate was closed in October and December.

1922-1926: Maximum stage, from water-stage recorder, 1.86 feet June 14-17 and 19-23, 1925 (discharge, 160 second-feet); minimum discharge about 0.2 second-foot during part of each winter from 1922 to 1924.

ICE.—Control usually does not freeze although snow several feet deep collects on banks.

DIVERSIONS.—None.

REGULATION.—Regulated by gate in dam at Twin Lakes. There was 17,500 acre-feet of water in reservoir on September 30, 1925, and 9,000 acre-feet on September 30, 1926. See also Twin Lakes spillway, p. 340.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table except for days of large fluctuation, for which hourly discharge was averaged. Records good.

No discharge measurements were made during the year.

Daily discharge, in second-feet, of Twin Lakes outlet near Kirkwood, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.3	45	11	37	0.4	0.4	0.8	148	116	17	0.4	108
2.....	.3	40	.5	37	1.4	.4	.6	148	112	17	15	106
3.....	.3	24	.3	37	.4	.4	.6	147	96	67	36	116
4.....	.3	24	.3	37	.4	.4	.6	147	68	92	35	119
5.....	.4	23	.3	38	.4	.4	.6	147	54	96	41	119
6.....	.4	38	.3	39	.4	.4	.6	116	46	105	43	122
7.....	.5	39	8	39	.4	.4	.6	41	86	82	43	125
8.....	.5	35	13	39	.4	.4	.6	.4	86	.5	43	124
9.....	.5	31	12	40	.4	.4	.6	.4	82	.4	43	113
10.....	.5	28	26	40	.4	.4	.6	.4	83	.4	44	106
11.....	.4	25	24	41	.4	.4	.6	.6	92	.4	48	105
12.....	.4	10	23	42	.4	.4	.7	.5	44	.4	40	105
13.....	.4	.4	33	46	.4	.4	.8	.5	20	.4	32	104
14.....	.3	5.5	48	50	.4	.4	.8	.4	21	.4	43	106
15.....	.3	20	48	51	.4	.4	.8	.4	36	.4	48	106
16.....	.3	20	41	51	.4	.4	.7	.4	43	.4	59	105
17.....	.3	18	36	51	18	.4	.6	.4	48	.4	70	105
18.....	.3	19	36	51	29	.4	.6	.5	48	.4	75	105
19.....	.3	19	36	66	13	.4	.8	1.0	48	.4	78	105
20.....	.3	19	43	95	.4	.4	1.0	1.1	48	.4	83	105
21.....	.3	41	37	75	.4	.6	.7	42	54	.4	86	98
22.....	2.8	48	30	57	.4	.6	.8	157	65	.4	89	88
23.....	.3	48	32	52	.4	.8	.8	145	68	.4	92	87
24.....	25	45	39	48	.4	1.0	1.0	105	68	.4	92	86
25.....	15	58	39	48	.4	.8	1.1	78	24	.4	86	86
26.....	16	68	33	48	.4	.8	.8	56	.6	.4	92	94
27.....	25	68	25	54	.4	.8	.8	26	5.5	.4	102	80
28.....	30	59	25	59	.4	.8	.6	33	14	.4	102	79
29.....	30	42	24	28	-----	1.2	.7	60	17	.4	104	69
30.....	30	31	26	.4	-----	1.1	37	102	17	.4	105	.5
31.....	37	-----	38	.4	-----	1.1	-----	112	-----	.4	108	-----

NOTE.—To obtain total outflow from Twin Lakes add discharge over Twin Lakes spillway for May 20-29. (See p. 341.)

*Monthly discharge of Twin Lakes outlet near Kirkwood, Calif., for the year ending
September 30, 1926*

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	37	0.3	7.79	479
November.....	68	.4	33.0	1,960
December.....	48	.3	25.4	1,560
January.....	95	.4	45.1	2,770
February.....	29	.4	2.54	141
March.....	1.2	.4	.57	35.0
April.....	37	.6	1.93	115
May.....	157	.4	58.6	3,600
June.....	116	.6	53.7	3,200
July.....	105	.4	15.7	965
August.....	108	.4	63.8	3,920
September.....	125	.5	98.8	5,880
The year.....	157	.3	34.0	24,600

NOTE.—To obtain total outflow for year, add 319 acre-feet discharged over Twin Lakes spillway May 20-29.

TWIN LAKES SPILLWAY NEAR KIRKWOOD, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 22, T. 10 N., R. 17 E., at Twin Lakes Reservoir auxiliary dam about 1 mile southwest of Twin Lakes Reservoir main dam and about half a mile southeast of Kirkwood, Amador County. The gage is in Alpine County.

RECORDS AVAILABLE.—June 11, 1925, to September 30, 1926.

GAGE.—Staff gage fastened to large boulder on right bank, about 300 feet below spillway dam; read by caretaker at dam.

DISCHARGE MEASUREMENTS.—Made by wading about 80 feet above gage.

CONTROL.—Solid rock dike about 6 feet below gage. Point of zero flow, 0.00 foot.

EXTREMES OF DISCHARGE.—Maximum stage recorded, 1.40 feet May 21 and 22 (discharge, 39 second-feet); no flow most of year.

ACCURACY.—Stage-discharge relation permanent. Rating curve very well defined. Staff gage read to half-tenths once daily. Daily discharge ascertained by applying gage height to rating table. Records good.

*Discharge measurements of Twin Lakes spillway near Kirkwood, Calif., during the
year ending September 30, 1926*

Date	Gage height	Dis- charge	Date	Gage height	Dis- charge	Date	Gage height	Dis- charge
May 20.....	<i>Feet</i> 2.15	<i>Sec.-ft.</i> 123	May 20.....	<i>Feet</i> 1.85	<i>Sec.-ft.</i> 84	May 20.....	<i>Feet</i> 1.10	<i>Sec.-ft.</i> 17
Do.....	2.40	162	Do.....	1.68	68	Do.....	.88	8.8
Do.....	2.25	139	Do.....	1.55	53	Do.....	.30	1.8
Do.....	2.15	121	Do.....	1.45	45	Do.....	.69	6.3
Do.....	2.00	103	Do.....	1.28	30			

Daily discharge, in second-feet, of Twin Lakes spillway near Kirkwood, Calif., for the year ending September 30, 1926

Day	May	Day	May	Day	May
1.....		11.....		21.....	39
2.....		12.....		22.....	39
3.....		13.....		23.....	18
4.....		14.....		24.....	4.8
5.....		15.....		25.....	3.8
6.....		16.....		26.....	1.8
7.....		17.....		27.....	4.3
8.....		18.....		28.....	21
9.....		19.....		29.....	1.0
10.....		20.....	28	30.....	
				31.....	

NOTE.—No flow except May 20-29. Mean discharge for the period, 5.18 second-feet; run-off, 319 acre-feet.

EL DORADO CANAL NEAR KYBURZ, CALIF.

LOCATION.—In sec. 29, T. 11 N., R. 15 E., 400 feet below intake and 2 miles west of Kyburz, Eldorado County.

RECORDS AVAILABLE.—October 1, 1922, to September 30, 1926.

GAGE.—Water-stage recorder on left bank. Prior to July 15, 1924, record was obtained from a staff gage on left side of Perrin Creek flume, half a mile below intake.

DISCHARGE MEASUREMENTS.—Made from footbridge 150 feet below gage.

CHANNEL AND CONTROL.—Control is cross section and slope of canal, which is decomposed granite on bottom and one side and lined with boards on other side.

EXTREMES OF DISCHARGE.—1922-1926: Maximum mean daily discharge, 157 second-feet June 16 and July 2, 1926; canal empty at times.

ACCURACY.—Stage-discharge relation changed slightly on April 21 when canal was cleaned. Rating curves well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except for periods of regulation for which hourly discharge was averaged. Records excellent.

Canal diverts from left bank of South Fork of American River about 2 miles below Kyburz. The water is divided at forebay 20 miles below intake. Not more than 40 second-feet is sold to the El Dorado Water Co. from May 24 to September 24 and not more than 7 second-feet during remainder of year. This water is used for irrigation and public use at Placerville. The rest of the water is used for power by the Western States Gas & Electric Co. and returned to river in sec. 22, T. 11 N., R. 12 E.

Discharge measurements of El Dorado Canal near Kyburz, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 4.....	2.60	80	Apr. 17.....	3.66	143	July 11.....	3.80	157
Jan. 30.....	2.70	87	May 12.....	2.59	82			

Daily discharge, in second-feet, of El Dorado Canal near Kyburz, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	104	102	75	80	82	85	143	127	130	156	152	134
2	99	102	75	81	79	85	142	127	134	157	133	132
3	104	94	75	84	81	88	142	127	142	151	132	133
4	109	82	78	78	85	94	142	125	148	150	146	142
5	117	76	80	83	85	94	135	116	150	155	145	141
6	105	78	80	80	85	94	137	103	150	155	148	140
7	97	89	80	80	85	96	140	99	150	155	144	145
8	97	90	77	78	85	101	140	99	152	155	142	146
9	93	81	75	78	85	101	140	99	154	156	139	144
10	86	81	75	76	85	101	140	99	156	156	136	129
11	75	85	83	78	85	101	140	99	156	156	137	126
12	73	84	84	76	85	101	141	91	156	155	136	125
13	75	78	69	75	85	101	140	86	155	156	118	127
14	88	64	86	84	85	72	141	86	155	155	116	131
15	74	62	95	82	85	101	142	85	155	149	119	130
16	84	80	94	80	85	101	141	85	157	145	124	128
17	97	77	88	84	74	108	141	86	156	144	136	142
18	95	73	82	79	83	117	122	86	155	150	140	134
19	99	72	75	82	86	121	112	86	150	151	138	133
20	96	50	71	105	85	121	113	92	150	155	141	133
21	88	64	75	108	80	122	66	100	149	155	142	132
22	87	87	75	106	84	121	121	108	150	155	140	132
23	94	94	77	102	76	122	122	116	150	155	142	130
24	102	92	80	88	80	122	122	126	150	153	143	118
25	96	91	80	83	82	121	122	129	151	155	139	110
26	90	108	80	81	85	121	120	129	147	156	135	107
27	88	109	80	88	84	127	121	129	72	146	137	106
28	96	108	77	99	84	136	120	130	152	138	135	104
29	96	92	74	93	-----	141	125	130	155	140	136	98
30	93	82	72	85	-----	142	127	129	155	138	133	94
31	90	-----	74	85	-----	143	-----	130	-----	152	136	-----

Monthly discharge of El Dorado Canal near Kyburz, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	117	73	93.1	5,720
November	109	50	84.2	5,010
December	95	69	78.7	4,840
January	108	75	85.2	5,240
February	86	74	83.2	4,630
March	143	72	110	6,760
April	143	66	130	7,740
May	130	85	108	6,640
June	157	72	148	8,810
July	157	138	152	9,350
August	152	116	137	8,420
September	146	94	128	7,620
The year	157	50	112	80,800

ALDER CREEK NEAR WHITEHALL, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 36, T. 11 N., R. 14 E., three-fourths mile above mouth and 2 miles southeast of Whitehall, Eldorado County.

DRAINAGE AREA.—22.8 square miles (measured on topographic maps).

RECORDS AVAILABLE.—October 1, 1922, to September 30, 1926.

GAGE.—Water-stage recorder on right bank. Previous to July 23, 1924, record obtained from staff gage on right bank, 30 feet below recorder.

DISCHARGE MEASUREMENTS.—Made from foot log at gage or by wading.

CHANNEL AND CONTROL.—Bed of stream is smooth solid granite. Banks are steep and not subject to overflow. Water surface smooth and swift. Control, solid granite and permanent. The old flume trestle was removed from control November 6-8, 1925.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, from water-stage recorder, 2.79 feet at 10 p. m. April 7 (discharge, 263 second-feet); minimum stage, from water-stage recorder, 0.80 foot September 10–14 (discharge, 0.2 second-foot).

1922–1926: Maximum stage, from water-stage recorder, 4.95 feet at 3 a. m. February 6, 1925 (discharge, 715 second-feet); minimum discharge 0.1 second-foot August 28 to September 2, 1924.

ICE.—Not affected by ice during year.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed slightly when flume trestle was removed from control. Rating curves well defined. Water-stage recorder record excellent except October 10–27, when paper supply was exhausted. Daily discharge ascertained by applying mean daily gage height to rating table except January 29, for which hourly discharge was averaged, and October 10–27, for which it was estimated by comparison with record for Plum Creek near Riverton. Records excellent.

Discharge measurements of Alder Creek near Whitehall, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 8.....	1.00	1.4	Apr. 16.....	1.98	84	May 21.....	1.30	11
Jan. 29.....	1.71	47	May 12.....	1.44	23	July 10.....	.98	.5

Daily discharge, in second-feet, of Alder Creek near Whitehall, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.4	0.9	4.5	1.1	21	37	40	37	5.5	1.3	0.3	0.2
2.....	.4	1.0	12	1.1	17	39	39	34	5.5	1.1	.3	.2
3.....	.4	1.2	7	1.3	16	40	40	32	5	1.1	.3	.2
4.....	.4	1.2	4.5	1.1	43	40	55	34	4.8	1.0	.3	.2
5.....	.6	1.1	3.6	1.3	43	45	216	38	4.5	1.0	.3	.2
6.....	1.8	1.1	3.0	1.1	32	51	226	32	4.2	1.0	.3	.2
7.....	1.2	1.1	2.8	1.1	29	52	221	31	3.9	1.0	.3	.2
8.....	.8	1.1	2.2	1.0	25	57	248	29	4.2	1.0	.3	.2
9.....	.7	1.1	2.0	1.1	25	57	200	29	4.5	1.0	.3	.2
10.....	.7	1.3	1.7	1.0	27	50	167	26	3.9	1.0	.3	.2
11.....	.7	1.7	1.7	1.0	26	47	140	25	3.9	1.0	.3	.2
12.....	1.0	3.0	1.7	1.3	24	46	124	23	3.6	.9	.3	.2
13.....	.9	4.5	1.3	1.1	21	49	114	21	3.6	.8	.3	.2
14.....	.8	2.8	1.1	1.1	21	53	104	20	3.3	.8	.3	.2
15.....	.8	2.4	1.3	1.0	21	58	96	19	3.0	.7	.3	.2
16.....	.7	2.2	1.5	1.0	21	60	92	17	3.0	.6	.2	.2
17.....	.8	2.0	1.5	1.1	18	60	80	17	3.0	.5	.2	.2
18.....	.8	1.9	1.5	1.3	17	55	80	66	2.8	.5	.2	.2
19.....	.8	1.7	1.5	1.7	17	49	75	13	2.6	.4	.2	.2
20.....	.7	1.6	1.3	2.2	18	49	67	12	2.6	.4	.2	.2
21.....	.7	1.5	1.5	2.2	17	47	64	11	2.6	.4	.2	.2
22.....	.7	1.5	1.3	1.5	16	45	60	10	2.4	.4	.2	.3
23.....	.7	1.3	1.3	1.5	16	47	55	9.5	2.2	.4	.2	.2
24.....	.8	1.3	1.1	1.9	15	51	51	10	2.0	.4	.2	.2
25.....	.8	1.3	1.5	2.4	16	49	51	9	2.0	.3	.2	.2
26.....	.8	1.3	1.5	3.0	21	46	51	8	1.9	.3	.2	.2
27.....	.9	1.1	1.5	4.5	27	44	50	7.5	1.7	.3	.2	.2
28.....	.9	1.1	1.5	6	32	41	46	7	1.7	.3	.2	.2
29.....	.9	1.1	1.3	70	-----	40	44	6.5	1.5	.3	.2	.3
30.....	.9	2.2	1.3	23	-----	37	40	6	1.5	.3	.2	.3
31.....	.9	-----	1.1	25	-----	39	-----	5.5	-----	.3	.2	-----

Monthly discharge of Alder Creek near Whitehall, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1.8	0.4	0.79	48.6
November.....	4.5	.9	1.62	96.4
December.....	12	1.1	2.34	144
January.....	70	1.0	5.32	327
February.....	43	15	22.9	1,270
March.....	60	37	47.7	2,930
April.....	248	39	97.9	5,830
May.....	38	5.5	19.2	1,180
June.....	5.5	1.5	3.23	192
July.....	1.3	.3	.67	41.2
August.....	.3	.2	.25	15.4
September.....	.3	.2	.21	12.5
The year.....	248	.2	16.7	12,100

PLUM CREEK NEAR RIVERTON, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 33, T. 11 N., R. 14 E., one-fourth mile above crossing of El Dorado Canal, 500 feet above road to Western States Gas & Electric Co.'s camp, and about 4 miles southeast of Riverton, Eldorado County. Altitude, 4,100 feet.

DRAINAGE AREA.—7.0 square miles (measured on topographic maps).

RECORDS AVAILABLE.—November 1, 1922, to September 30, 1926.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from foot log or by wading.

CHANNEL AND CONTROL.—Bed of stream is solid rock. Banks high. Channel straight above gage and straight for 80 feet below gage where it curves to left. Control is solid rock; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 2.12 feet at 1 a. m. April 8 (discharge, 114 second-feet); minimum stage, from water-stage recorder, 0.10 foot August 1-3 (discharge, 0.1 second-foot).

1922-1926: Maximum stage recorded, 3.70 feet at 5 p. m. February 6, 1925 (discharge, 500 second-feet); minimum discharge, 0.1 second-foot July 3 to August 14, 1924, September 13-14, 1925, and August 1-3, 1926.

ICE.—No ice effect this year.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed slightly April 8. Rating curves well defined. Recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table, except January 29 and April 4, for which hourly discharge was averaged. Discharge interpolated November 4-7 and July 3-9, after comparing with records for Alder Creek near Whitehall. Records excellent.

Discharge measurements of Plum Creek near Riverton, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
Nov. 8.....	Feet 0.23	Sec.-ft. 0.5	Apr. 16.....	Feet 0.83	Sec.-ft. 12	July 10.....	Feet 0.14	Sec.-ft. 0.2
Jan. 29.....	1.06	19	May 12.....	.44	2.6			

Daily discharge, in second-feet, of Plum Creek near Riverton, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.6	1.9	0.8	8.5	16	2.8	3.8	1.2	0.4	0.1	0.2
2	.3	.7	3.6	.8	8	15	2.9	3.5	1.1	.3	.1	.2
3	.3	.8	2.3	.8	28	14	3.3	3.4	1.1	.3	.1	.2
4	.3	.8	1.6	.8	55	13	7.5	3.6	1.0	.3	.1	.2
5	.4	.8	1.4	.8	27	12	56	3.8	.9	.3	.1	.2
6	1.2	.7	1.2	.8	15	11	47	3.6	.9	.3	.2	.2
7	.6	.7	1.0	.8	10	11	54	3.5	.8	.2	.2	.2
8	.5	.6	.9	.7	8	12	83	3.6	.8	.2	.2	.2
9	.4	.6	.8	.7	6.5	13	53	3.5	.8	.2	.2	.2
10	.4	.6	.8	.8	8	11	38	3.4	.8	.2	.2	.2
11	.4	.7	.8	.7	11	9	30	2.9	.7	.2	.2	.2
12	.7	1.6	.7	.7	15	8	23	2.6	.6	.2	.2	.2
13	.6	1.8	.7	.7	19	7	18	2.4	.6	.2	.2	.2
14	.5	1.1	.6	.7	29	7	15	2.2	.6	.2	.2	.2
15	.5	.9	.6	.6	28	7	13	1.9	.6	.2	.2	.2
16	.4	.9	.6	.8	32	6.5	11	1.8	.6	.2	.2	.2
17	.5	.9	.6	.9	20	6.5	10	1.8	.6	.2	.2	.2
18	.5	.8	.9	.9	14	6	9.5	1.8	.5	.2	.2	.2
19	.5	.7	1.1	.8	16	5	9	1.7	.5	.2	.2	.2
20	.4	.7	.9	.9	26	5	8	1.6	.5	.2	.2	.2
21	.4	.6	.9	.9	20	4.6	7.5	1.6	.5	.2	.2	.2
22	.4	.6	.9	.8	15	4.4	7	1.6	.5	.2	.2	.2
23	.4	.6	.9	.8	13	4.0	6	1.6	.4	.2	.2	.2
24	.5	.6	.9	.8	11	4.0	6	1.6	.4	.2	.1	.2
25	.5	.6	.9	.8	12	3.9	5	1.6	.4	.2	.1	.2
26	.5	.5	.9	.8	14	3.6	4.8	1.5	.4	.2	.2	.2
27	.5	.5	.9	.8	16	3.4	4.7	1.5	.4	.2	.2	.2
28	.5	.5	.9	1.5	16	3.2	4.6	1.4	.4	.1	.2	.2
29	.5	.6	.9	29	-----	3.0	4.4	1.4	.4	.1	.2	.2
30	.5	1.4	.8	7	-----	2.8	4.1	1.3	.4	.1	.2	.2
31	.6	-----	.8	13	-----	2.8	-----	1.3	-----	.1	.2	-----

Monthly discharge of Plum Creek near Riverton, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	1.2	0.3	0.48	29.5
November	1.8	.5	.78	46.4
December	3.6	.6	1.05	64.6
January	29	.6	2.31	142
February	55	6.5	17.9	994
March	16	2.8	7.57	465
April	83	2.8	18.3	1,090
May	3.8	1.3	2.35	144
June	1.2	.4	.65	38.7
July	.4	.1	.21	12.9
August	.2	.1	.18	11.1
September	.2	.2	.20	11.9
The year	83	.1	4.21	3,050

SILVER CREEK AT UNION VALLEY, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 20, T. 12 N., R. 14 E., 1 mile below junction of North and Middle Forks of Silver Creek, 2,000 feet above proposed dam site near lower end of Union Valley, Eldorado County. Altitude, about 4,600 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—October 1, 1924, to September 30, 1926.

GAGE.—Water-stage recorder on left bank, installed October 14, 1924.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Channel is gravel, with long deep pool at gage. Control is solid rock outcrop about 300 feet below gage.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.60 feet at 8 p. m. April 5 (discharge, 1,420 second-feet); minimum stage, from water-stage recorder, 0.40 foot August 24–26 and September 9–16 (discharge, 2.5 second-feet).

1924–1926: Maximum stage, from well-defined mark in gage well, 11.0 feet on February 6, 1925 (discharge, 5,770 second-feet); minimum stage recorded, 0.40 foot August 24–26 and September 9–16, 1926 (discharge, 2.5 second-feet).

ICE.—Stage-discharge relation affected by ice January 6 to February 20.

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Recorder record excellent except October 29 and September 12–30, when paper supply was exhausted. Daily discharge ascertained by applying mean daily gage height to rating table except November 30 and April 3 and 4, for which hourly discharge was averaged. Discharge interpolated for October 29 and estimated for September 12–30 by comparison with record for South Fork of Silver Creek near Ice House. Discharge for January 6 to February 20 estimated, because of ice on control, from discharge measurements and by comparison with record for Silver Creek near Placerville. Records excellent except those for estimated periods, which are fair.

Discharge measurements of Silver Creek at Union Valley, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 30.....	0.71	13	Apr. 19.....	2.90	348
Feb. 2.....	1.80	105	July 15.....	.60	7.6

Daily discharge, in second-feet, of Silver Creek at Union Valley, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	7	13	209	41	126	169	304	407	133	11	4.3	3.3
2.....	7	14	240	41	109	178	249	433	115	11	4.1	3.3
3.....	7	18	118	41	110	173	249	460	102	10	4.1	3.1
4.....	7	19	77	41	338	180	388	488	97	8.5	3.9	3.1
5.....	9.5	20	72	41	326	227	1,110	516	96	8.5	3.9	3.1
6.....	31	22	97	41	198	243	820	338	90	8	3.9	2.9
7.....	30	23	70	41	160	252	740	265	87	7	3.7	2.7
8.....	34	25	60	41	131	243	608	252	79	7	3.5	2.7
9.....	37	26	51	41	125	219	446	247	78	6.5	3.5	2.5
10.....	47	31	44	41	130	180	420	258	61	7	3.3	2.5
11.....	37	37	45	40	116	178	407	272	52	7	3.3	2.5
12.....	43	70	41	40	105	202	516	289	47	7.5	3.3	2.5
13.....	35	52	38	40	102	252	590	311	44	8.5	3.1	2.5
14.....	29	44	32	40	105	338	590	328	41	8.5	3.1	2.5
15.....	28	39	35	40	98	381	642	336	38	7.5	3.1	2.5
16.....	25	37	34	40	103	381	625	318	35	6.5	3.1	2.5
17.....	24	37	34	40	93	350	488	301	33	6.5	2.9	2.7
18.....	24	34	34	40	90	263	368	330	30	6	2.9	2.7
19.....	23	35	35	40	98	243	363	360	28	5.5	2.9	2.7
20.....	20	36	37	40	96	287	446	316	27	5.5	2.9	2.7
21.....	18	33	41	40	94	313	488	265	25	5	2.9	2.7
22.....	16	32	41	40	90	323	488	243	23	5	2.7	2.7
23.....	15	35	41	40	87	407	516	208	21	5	2.7	2.7
24.....	14	34	44	40	83	446	560	160	19	5	2.5	2.9
25.....	13	33	48	40	88	381	575	130	18	4.8	2.5	2.9
26.....	11	35	52	40	102	330	660	128	16	4.8	2.5	2.9
27.....	11	37	55	40	124	330	680	136	15	5	2.7	2.9
28.....	11	34	50	60	147	320	560	147	15	5	2.7	2.9
29.....	11	37	45	443	-----	301	488	156	14	5	2.7	2.9
30.....	12	195	44	206	-----	282	446	144	13	4.5	3.1	3.1
31.....	12	-----	41	169	-----	358	-----	126	-----	4.3	3.3	-----

Monthly discharge of Silver Creek at Union Valley, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	47	7	20.9	1,290
November.....	195	13	37.9	2,290
December.....	299	32	64.2	3,950
January.....	443	40	63.5	3,900
February.....	338	83	128	7,110
March.....	446	109	282	17,300
April.....	1,110	246	528	31,400
May.....	516	126	280	17,200
June.....	133	13	49.7	2,960
July.....	11	4.3	6.67	410
August.....	4.3	2.5	3.20	197
September.....	3.3	2.5	2.79	106
The year.....	1,110	2.5	122	88,100

SILVER CREEK NEAR PLACERVILLE, CALIF.

LOCATION.—In SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 13, T. 11 N., R. 12 E., one-fourth mile above mouth and 12 miles northeast of Placerville, Eldorado County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 23, 1921, to September 30, 1926.

GAGE.—Water-stage recorder in 14-inch pipe well and wooden shelter on right bank.

DISCHARGE MEASUREMENTS.—Made from cable 500 feet above gage or by wading.

CHANNEL AND CONTROL.—Solid rock and boulders; permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.96 feet at 10 p. m. April 5 (discharge, 2,250 second-feet); minimum stage, from water-stage recorder, -0.40 foot September 8-14 (discharge, 19 second-feet).

1921-1926: Maximum stage, from water-stage recorder, 12.0 feet 2 to 4 a. m. February 6, 1925 (discharge, 7,330 second-feet); minimum stage, from water-stage recorder, -0.76 foot at 6 a. m. September 9, 1924 (discharge, 10 second-feet).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation practically permanent. Rating curve well defined. Water-stage recorder clock stopped October 1-12, November 13 to December 14, January 29 to February 5, July 22 to September 1, and September 15-30. Staff gage read July 28. Daily discharge ascertained by applying mean daily gage height to rating table. During periods when clock was stopped discharge estimated by comparison with records for Silver Creek at Union Valley and South Fork of Silver Creek near Ice House. Record good except those for estimated periods, which are fair.

The following discharge measurements were made:

November 9, 1925: Gage height, 0.65 foot; discharge, 66 second-feet.

April 20, 1926: Gage height, 4.25 feet; discharge, 826 second-feet.

July 21, 1926: Gage height, -0.06 foot; discharge, 26 second-feet.

Daily discharge, in second-feet, of Silver Creek near Placerville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.
1.....	34	47	600	81	390	282	552	710	254	42	20
2.....	33	51	450	79	260	314	450	710	227	39	20
3.....	32	60	300	89	380	314	450	745	202	37	20
4.....	31	60	250	73	660	325	552	815	192	35	20
5.....	34	54	200	80	640	384	1,740	885	187	33	19
6.....	70	58	220	72	410	423	1,560	630	189	33	19
7.....	60	60	165	72	348	436	1,400	492	180	33	19
8.....	65	62	150	70	303	464	1,300	436	169	34	19
9.....	75	64	135	73	272	478	1,000	436	178	34	19
10.....	90	72	130	70	282	410	868	436	146	34	19
11.....	110	79	130	66	282	384	832	450	129	34	19
12.....	90	129	120	61	282	397	850	478	118	34	19
13.....	99	110	100	65	292	436	1,000	492	109	34	19
14.....	91	105	90	66	325	537	1,000	537	104	33	19
15.....	81	95	80	73	303	630	1,080	552	98	33	
16.....	76	90	82	63	325	646	1,080	552	92	32	
17.....	73	90	85	76	254	646	960	537	86	32	
18.....	72	85	97	70	245	522	710	522	82	32	
19.....	70	85	97	56	236	464	662	598	79	31	
20.....	66	85	88	60	236	492	745	582	77	30	
21.....	65	80	98	79	218	537	832	492	73	29	
22.....	61	90	94	79	202	537	868	450	69	29	20
23.....	58	90	91	70	188	630	815	397	65	28	
24.....	55	85	83	69	177	728	920	314	60	28	
25.....	54	85	98	66	175	662	920	263	59	27	
26.....	52	90	98	67	176	582	1,000	236	56	26	
27.....	50	90	102	65	202	567	1,080	236	54	26	
28.....	49	90	101	89	245	552	960	254	52	25	
29.....	47	90	90	700	-----	537	850	282	48	25	
30.....	47	350	90	520	-----	464	815	272	45	24	
31.....	47	-----	84	440	-----	582	-----	254	-----	23	-----

NOTE.—Daily discharge not ascertained Aug. 1-31 and Sept. 15-30. Mean discharge Sept. 15-30 estimated at 20 second-feet. See monthly table for estimated mean discharge for August.

Monthly discharge of Silver Creek near Placerville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	110	31	62.5	3,840
November.....	350	47	89.4	5,320
December.....	600	80	148	9,100
January.....	700	56	118	7,260
February.....	660	175	297	16,500
March.....	728	282	496	30,500
April.....	1,740	450	928	55,200
May.....	885	236	485	29,800
June.....	254	45	116	6,900
July.....	42	-----	31.3	1,920
August.....	-----	-----	22	1,350
September.....	-----	19	19.7	1,170
The year.....	1,740	-----	233	169,000

* Estimated.

SOUTH FORK OF SILVER CREEK AT ICE HOUSE, CALIF.

LOCATION.—In SW. $\frac{1}{4}$ sec. 1, T. 11 N., R. 14 E., 8 miles northeast of Riverton and 1 mile north of Ice House, Eldorado County, Calif. Altitude, about 5,300 feet.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—July 5 to October 15, 1922, and October 23, 1924, to September 30, 1926.

GAGE.—Water-stage recorder on left bank.

DISCHARGE MEASUREMENTS.—Made from cable or by wading.

CHANNEL AND CONTROL.—Channel and control solid granite, wide, flat, and smooth.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 2.72 feet at 10 p. m. April 5 (discharge, 326 second-feet); minimum stage during year, from water-stage recorder, 0.26 foot September 10-18 (discharge, 0.5 second-foot).

1924-1926: Maximum stage recorded, 3.87 feet at 7 a. m. February 6, 1925 (discharge, 785 second-feet); minimum stage recorded, 0.26 foot September 10-18, 1926 (discharge, 0.5 second-foot).

DIVERSIONS.—None.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Recorder record excellent except October 6-28, when paper supply was exhausted. Daily discharge ascertained by applying mean daily gage height to rating table, except November 30, for which hourly discharge was averaged. October 6-28 discharge estimated by comparison with record for Silver Creek at Union Valley. Discharge for period December 19 to March 1 was estimated because of ice from discharge measurements, climatic conditions, and by comparison with other stations. Records excellent except those for estimated periods, which are fair.

Discharge measurements of South Fork of Silver Creek at Ice House, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.
Oct. 29.....	0.48	4.1	Apr. 13.....	1.98	153
Feb. 3.....	.96	18	July 15.....	.52	7.8

Daily discharge, in second-feet, of South Fork of Silver Creek at Ice House, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.8	2.5	110	7	38	25	119	222	92	9	0.8	0.5
2.....	2.5	2.8	94	7	30	28	94	222	85	8	.8	.5
3.....	2.2	3.2	53	7	18	30	84	238	78	7	.7	.5
4.....	2.0	3.5	34	7	30	32	92	252	71	6.5	.7	.5
5.....	2.8	3.5	27	7	28	34	202	238	76	5.5	.7	.5
6.....	11	5	32	7	22	40	205	173	78	4.7	.7	.5
7.....	10	5.5	25	7	22	46	198	136	76	3.5	.7	.5
8.....	12	4.7	21	7	22	51	157	120	70	3.2	.7	.5
9.....	18	5	17	7	20	50	125	118	60	3.2	.7	.5
10.....	24	5	14	7	18	43	119	122	50	3.2	.7	.5
11.....	18	7.5	16	7	17	38	124	130	44	3.5	.7	.5
12.....	20	12	11	7	15	38	149	138	40	5	.6	.5
13.....	15	10	8.5	6	14	44	198	146	36	7	.6	.5
14.....	12	16	7.5	6	13	58	224	160	32	5.5	.6	.5
15.....	10	13	10	6	13	80	254	167	29	4.7	.6	.5
16.....	8	10	11	6	11	98	266	167	26	3.5	.6	.5
17.....	7	9	9.5	5	15	100	229	167	23	2.8	.6	.5
18.....	6	8.5	6.5	5	15	78	167	173	22	2.5	.6	.5
19.....	5	8.5	7	6	12	65	158	186	22	2.0	.6	.6
20.....	4	8	12	6	12	71	190	180	20	1.8	.6	.6
21.....	4	7.5	11	6	16	83	220	157	19	1.2	.6	.6
22.....	4	9.5	10	6	12	87	237	144	18	1.0	.6	.6
23.....	4	7.5	10	6	17	114	238	126	14	1.0	.6	.6
24.....	4	6.5	10	6	15	142	269	100	14	1.0	.6	.5
25.....	3	6.5	10	6	13	128	271	76	14	1.0	.6	.5
26.....	3	7.5	10	6	18	114	279	66	15	.9	.6	.6
27.....	3	7.5	11	6	23	114	295	69	15	.9	.5	.6
28.....	3	7	10	6	25	114	306	80	14	.9	.5	.6
29.....	3	7.5	10	46	-----	108	266	92	13	.8	.5	.6
30.....	3	38	9	43	-----	101	238	94	11	.8	.5	.6
31.....	2.8	-----	8	46	-----	130	-----	90	-----	.8	.5	-----

Monthly discharge of South Fork of Silver Creek at Ice House, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	24	2.0	7.39	454
November.....	38	2.5	8.27	492
December.....	110	6.5	20.5	1,260
January.....	46	5	10.1	621
February.....	38	11	18.7	1,040
March.....	142	25	73.7	4,530
April.....	306	84	199	11,800
May.....	252	66	147	9,040
June.....	92	11	39.2	2,330
July.....	9	.8	3.30	203
August.....	.8	.5	.63	38.7
September.....	.6	.5	.53	31.5
The year.....	306	.5	44.0	31,800

FINNON RESERVOIR OUTLET NEAR PLACERVILLE, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 16, T. 11 N., R. 11 E., at weir 400 feet below Finnon Reservoir, 10 miles northeast of Placerville, Eldorado County.

RECORDS AVAILABLE.—October 1, 1922, to September 30, 1926.

GAGE.—Vertical staff gage on left bank just above weir; read by reservoir caretaker.

DISCHARGE MEASUREMENTS.—Made by wading.

CHANNEL AND CONTROL.—Control is rectangular concrete weir with a sharp steel crest, end contracted. A deep pool above weir reduces velocity of approach.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 1.56 feet 8.20 a. m. to 7 p. m. March 2 (discharge, 55 second-feet); water is usually turned out of canal part of each day.

1922-1926: Maximum stage recorded, 2.60 feet for 3 hours March 21, 1925 (discharge, 106 second-feet); water is usually turned out of canal part of each day.

DIVERSIONS.—Water is diverted into Finnon Reservoir from One Eye Creek through One Eye ditch, and from Slab Creek through Summerfield ditch.

REGULATION.—Flow completely regulated by gates in dam at Finnon Reservoir.

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined.

Staff gage read to hundredths twice daily and before and after regulating gates. Mean daily discharge ascertained by weighting results obtained by applying gage height for part of a day to rating table. Records excellent.

Water flows down an unnamed creek to the Western States Gas & Electric Co.'s flume about half a mile above power house where it is used to develop power.

The following discharge measurement was made:

November 2, 1925: Gage height 0.01 foot; discharge, 0.2 second-foot.

Daily discharge, in second-feet, of Finnon Reservoir outlet near Placerville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	3.6	3.6	9	4.6	9	3.1	4.6	4.6	4.5	4.2
2	3.6	4.6	4.6	4.6	12	24	4.6	4.6	4.5	
3	3.6	4.6	4.6	4.6	12		4.6	4.6	4.5	
4	3.6	4.6	4.6	4.6	18		13	4.6	3.5	
5	3.6	4.6	4.6	4.6	12		28	4.6	3.5	
6	3.6	4.6	4.6	4.6	4.6		22	4.6	3.5	
7	3.6	4.6	4.6		4.6	4.6	14	4.6	3.5	
8	4.6	4.6	4.6	4.6	4.6	4.6	17	4.6	3.5	
9	4.6	4.6	4.6	3.6	4.6	4.6	6	4.6	3.5	
10	4.6	4.6	4.6	3.6	4.6	4.6	4.6	4.6	2.5	
11	4.6	4.6	4.6	3.6	12	4.6	4.6	4.6	5.5	
12	4.6	9	4.6	3.6	15	4.6	5.5	4.6		
13	4.6	4.6	4.6	3.6	15	4.6	5.5	4.6	2.5	
14	4.6	4.6	4.6	3.6	6	4.6	5.5	4.6	3.5	
15	4.6	4.6	4.6	3.6	14	4.6	5.5	4.6	3.5	
16	3.6	4.6	4.6	4.6	4.6	4.6	5.5	4.6	7.5	
17	3.6	4.6	4.6	4.6	4.6	4.6	5.5	4.6	8	
18	3.6	4.6	9	4.6	4.6	4.6	5.5	4.6	38	
19	3.6	4.6	4.6	4.6	13	4.6	5.5	4.6	38	
20	3.6	4.6	4.6	4.6	9	4.6	5.5	4.6	38	
21	3.6	4.6	4.6	4.6	4.6	4.6	5.5	4.6	38	
22	3.6	4.6	4.6	4.6	4.6	4.6	5.5	4.5	38	
23	3.6	4	4.6	4.6	4.6	4.6	5.5	4.5	11	
24	3.6	4.6	4.6	4.6	4.6	4.6	5.5	4.5		
25	3.6	4.6	4.6	4.6	4.6	4.6	5.5	4.5		
26	3.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5		
27	3.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5		
28	3.6		4.6	9	6	4.6	4.6	4.5		
29	3.6	3.6	4.6	9		4.6	4.6	4.5		
30	3.6	9	4.6	9		4.6	4.6			
31	3.6		4.6	12		4.6		4.5		

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

Monthly discharge of Finnon Reservoir outlet near Placerville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	4.6	3.6	3.86	237
November	9	.0	4.53	270
December	9	4.6	4.88	300
January	12	.0	4.89	301
February	18	4.6	7.93	440
March	24	.0	4.58	282
April	28	4.6	7.43	442
May	4.6	.0	4.42	272
June	38	.0	8.95	533
July	4.2	.0	.14	8.6
The year	38	.0	4.26	3,090

NOTE.—No flow during August and September.

WESTERN STATES GAS & ELECTRIC CO.'S FLUME NEAR CAMINO, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 25, T. 11 N., R. 11 E., 1 mile below diversion dam and 3 miles northwest of Camino, Eldorado County.

RECORDS AVAILABLE.—November 1, 1922, to September 30, 1926.

GAGE.—Float gage in a stilling well on right side of flume; read by flume walker.

DISCHARGE MEASUREMENTS.—Made from plank across flume at gage.

CHANNEL AND CONTROL.—Control is slope and cross section of flume below gage.

EXTREMES OF DISCHARGE.—1922-1926: Maximum mean daily discharge, 118 second-feet July 5-7, 10, 11, 13-15, and 17, 1925.

ACCURACY.—Stage-discharge relation changed on January 28. Rating curves fairly well defined. Staff gage read to quarter-tenths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table except January 29 to April 22, for which shifting-control method was used. Records good.

Water is diverted from South Fork of American River in NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 24, T. 11 N., R. 11 E., and is used to develop power in SW. $\frac{1}{4}$ sec. 20, T. 11 N., R. 11 E., just above mouth of Rock Creek where it is returned to river.

Discharge measurements of Western States Gas & Electric Co.'s flume near Camino, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 2.....	4.39	111	Apr. 23.....	4.34	104
Jan. 28.....	4.37	110	July 9.....	4.45	106

Daily discharge, in second-feet, of Western States Gas & Electric Co.'s flume near Camino, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	112	114	107	106	108	108	106	104	110	106	97	96
2.....	110	112	106	107	110	91	105	104	110	106	96	95
3.....	111	114	106	107	110	107	105	104	108	109	100	95
4.....	108	115	105	107	108	107	104	104	108	104	97	95
5.....	111	115	106	107	104	107	108	104	108	100	89	87
6.....	117	113	107	108	107	108	105	104	110	106	95	84
7.....	117	114	107	108	111	107	105	103	110	107	94	89
8.....	117	113	105	107	110	107	105	104	110	103	74	93
9.....	115	116	106	108	109	107	104	104	110	108	95	91
10.....	115	116	105	107	109	106	105	104	110	107	88	92
11.....	115	116	106	107	108	106	105	104	110	106	90	88
12.....	115	113	105	107	106	106	105	104	110	107	79	88
13.....	114	108	104	107	105	106	105	104	110	107	98	87
14.....	115	105	105	107	109	107	106	104	110	108	89	92
15.....	115	105	107	107	106	108	105	105	110	107	71	90
16.....	114	106	107	107	108	108	105	104	110	107	88	92
17.....	114	106	108	105	107	108	104	105	111	107	77	90
18.....	113	105	107	113	108	106	102	105	110	105	86	92
19.....	114	105	104	113	107	106	103	105	111	106	75	90
20.....	113	106	105	111	108	106	104	105	110	107	94	93
21.....	113	107	106	114	108	107	105	105	110	106	95	93
22.....	113	106	106	114	106	107	104	106	111	106	66	92
23.....	114	107	106	114	106	107	104	105	110	106	84	94
24.....	113	107	105	114	108	108	105	106	110	108	77	92
25.....	111	107	105	114	108	107	104	108	110	106	93	90
26.....	114	106	105	113	108	107	104	109	109	102	93	87
27.....	115	107	107	114	108	106	104	109	109	107	83	82
28.....	112	107	106	113	108	105	104	109	108	107	92	91
29.....	112	106	106	110	-----	105	104	109	109	105	85	91
30.....	110	107	106	102	-----	105	104	110	108	100	82	90
31.....	112	-----	106	107	-----	106	-----	110	-----	99	87	-----

Monthly discharge of Western States Gas & Electric Co.'s flume near Camino, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	117	108	113	6,950
November.....	116	105	109	6,490
December.....	108	104	106	6,520
January.....	114	102	109	6,700
February.....	111	104	108	6,000
March.....	108	91	106	6,520
April.....	108	102	105	6,250
May.....	110	103	105	6,460
June.....	111	108	110	6,550
July.....	109	99	106	6,520
August.....	100	66	87.4	5,370
September.....	96	82	90.7	5,400
The year.....	117	66	105	75,700

CACHE CREEK BASIN

CLEAR LAKE AT LAKEPORT, CALIF.

LOCATION.—At municipal wharf on north side of Third Street at Lakeport, Lake County.

RECORDS AVAILABLE.—February 25, 1913, to September 30, 1926.

GAGE.—Vertical staff fastened to piling at municipal wharf; read once a day by W. E. Smith.

EXTREMES OF STAGE.—Maximum stage recorded during year, 7.48 feet April 15; minimum stage recorded, 2.00 feet November 3-12.

1913-1926: Maximum stage recorded, 11.12 feet January 28, 1914; minimum stage recorded, -3.50 feet September 24-27, 1920.

COOPERATION.—Gage-height record furnished by Yolo Water & Power Co.

Daily gage height, in feet, of Clear Lake at Lakeport, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2.42	2.20	2.15	2.25	3.50	6.35	6.40	7.25	6.45	5.30	4.05	2.85
2.....	2.40	2.10	2.20	2.25	3.60	6.35	6.40	7.25	6.42	5.25	4.00	2.82
3.....	2.38	2.00	2.25	2.25	3.80	6.35	6.41	7.20	6.40	5.20	3.95	2.80
4.....	2.35	2.00	2.25	2.25	4.30	6.35	6.45	7.18	6.38	5.15	3.90	2.78
5.....	2.35	2.00	2.25	2.25	4.60	5.35	6.60	7.15	6.31	5.12	3.85	2.75
6.....	2.32	2.00	2.25	2.25	4.80	6.35	6.80	7.15	6.28	5.10	3.82	2.72
7.....	2.30	2.00	2.25	2.25	4.90	6.40	6.90	7.15	6.25	5.05	3.80	2.70
8.....	2.30	2.00	2.25	2.28	5.00	6.40	7.10	7.15	6.20	5.00	3.75	2.68
9.....	2.30	2.00	2.22	2.30	5.10	6.40	7.30	7.12	6.18	4.98	3.70	2.65
10.....	2.30	2.00	2.22	2.30	5.15	6.40	7.32	7.10	6.15	4.98	3.68	2.62
11.....	2.30	2.00	2.22	2.28	5.20	6.40	7.32	7.10	6.10	4.95	3.65	2.60
12.....	2.30	2.00	2.20	2.28	5.30	6.40	7.32	7.10	6.02	4.90	3.60	2.55
13.....	2.28	2.10	2.20	2.25	5.40	6.40	7.35	7.10	5.95	4.85	3.55	2.52
14.....	2.25	2.10	2.20	2.25	5.50	6.40	7.39	7.08	5.90	4.80	3.50	2.50
15.....	2.25	2.10	2.20	2.25	5.60	6.40	7.48	7.05	5.88	4.75	3.48	2.45
16.....	2.22	2.10	2.20	2.25	5.70	6.40	7.46	7.02	5.85	4.72	3.45	2.40
17.....	2.20	2.10	2.20	2.25	5.80	6.40	7.40	7.00	5.80	4.70	3.40	2.38
18.....	2.20	2.10	2.20	2.25	5.90	6.40	7.36	7.00	5.78	4.65	3.35	2.35
19.....	2.20	2.10	2.20	2.25	6.00	6.40	7.25	6.98	5.75	4.60	3.30	2.32
20.....	2.20	2.10	2.22	2.25	6.02	6.40	7.25	6.95	5.70	4.55	3.25	2.30
21.....	2.20	2.10	2.22	2.25	6.05	6.40	7.22	6.90	5.65	4.50	3.20	2.28
22.....	2.20	2.10	2.25	2.25	6.10	6.40	7.22	6.85	5.62	4.45	3.15	2.25
23.....	2.20	2.10	2.25	2.25	6.15	6.40	7.25	6.80	5.60	4.42	3.10	2.22
24.....	2.20	2.10	2.25	2.25	6.20	6.40	7.25	6.75	5.55	4.35	3.05	2.20
25.....	2.20	2.10	2.25	2.25	6.25	6.40	7.25	6.70	5.52	4.30	3.05	2.18
26.....	2.20	2.10	2.25	2.25	6.30	6.40	7.25	6.65	5.50	4.25	3.00	2.15
27.....	2.20	2.10	2.25	2.28	6.30	6.40	7.25	6.60	5.48	4.20	2.98	2.12
28.....	2.20	2.10	2.25	2.35	6.32	6.40	7.25	6.56	5.42	4.15	2.95	2.10
29.....	2.20	2.12	2.25	2.51	-----	6.40	7.25	6.52	5.38	4.12	2.92	2.10
30.....	2.20	2.15	2.25	2.51	-----	6.40	7.25	6.50	5.32	4.10	2.90	2.10
31.....	2.20	-----	2.25	3.00	-----	6.40	-----	6.48	-----	4.08	2.88	-----

CACHE CREEK AT YOLO, CALIF.

LOCATION.—800 feet above new highway bridge half a mile south of Yolo, Yolo County, in Río Jesús María grant, 1,000 feet above Southern Pacific Co.'s railroad bridge.

DRAINAGE AREA.—1,230 square miles.

RECORDS AVAILABLE.—January 1, 1903, to September 30, 1926.

GAGE.—Staff in four sections at site of old bridge. Changes have been made in the sections and locations, but original datum has been maintained. A water-stage recorder at same site and datum was used January 30 to February 23 and April 6–21. Gage read by Dorothy E. Bigelow.

DISCHARGE MEASUREMENTS.—Made from cable or by wading.

CHANNEL AND CONTROL.—Sand and gravel; somewhat shifting.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 18.4 feet 5 to 7 p. m. April 8 (discharge, 14,200 second-feet); no flow for several months.

1903–1926: Maximum stage recorded, 27.8 feet at 5 p. m. February 2, 1915 (discharge, 21,100 second-feet); no flow for periods in nearly every year.

DIVERSIONS.—Numerous ditches divert water for irrigation above station.

REGULATION.—At low water, channel is sometimes deepened at Lower Lake in order to increase the flow from lake.

ACCURACY.—Stage-discharge relation not permanent. Rating curves fairly well defined. Staff gage read to half-tenths twice daily. Water-stage recorder record good. Daily discharge ascertained by applying mean daily gage height to rating table except January 31, February 1, 5, 13, 14, and April 8, for which hourly discharge was averaged. Records fair.

Discharge measurements of Cache Creek at Yolo, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Feb. 4.....	8.38	5,060	Feb. 14.....	5.55	2,770	Mar. 16.....	0.52	118
Do.....	9.15	5,860	Feb. 15.....	2.82	1,160	Apr. 14.....	3.36	1,390
Feb. 6.....	4.55	2,080	Feb. 18.....	2.23	803	May 13.....	.03	1.9
Do.....	4.48	2,050						

Daily discharge, in second-feet, of Cache Creek at Yolo, Calif., for the year ending September 30, 1926

Day	Oct.	Jan.	Feb.	Mar.	Apr.	May	June
1.....	23		3,520	360	33	20	5
2.....	16		990	320	29	20	
3.....	27		3,250	285	29	15	
4.....	33		5,160	243	44	15	
5.....	33		5,380	185	680	15	
6.....	33		1,980	165	3,480	51	
7.....	33		1,180	160	2,280	65	
8.....	33		760	155	9,090	75	
9.....	33		455	149	8,080	71	
10.....	16		365	144	4,620	59	
11.....			222	138	3,340	32	
12.....			815	133	2,460	12	
13.....			4,420	128	1,330	2	
14.....			3,980	122	1,120		
15.....			1,550	117	870		
16.....			1,220	112	540		
17.....			970	110	690		
18.....			850	110	1,820		
19.....	16		735	110	2,240		
20.....			1,410	110	990		

Daily discharge, in second-feet, of Cache Creek at Yolo, Calif., during the year ending September 30, 1926—Continued

Day	Oct.	Jan.	Feb.	Mar.	Apr.	May	June
21.....	33		1,090	110	490		
22.....	33		910	100	350		
23.....	33		790	90	275		
24.....	33		630	90	234		
25.....	23		580	80	195		
26.....	23		440	74	186	180	
27.....	20		300	66	150	180	
28.....			360	61	126	180	
29.....		16		44	108	180	
30.....		478		36	95	35	
31.....		2,460		33		23	

NOTE.—No flow on days for which discharge is not given.

Monthly discharge of Cache Creek at Yolo, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	33	0	15.9	978
January.....	2,460	0	95.3	5,860
February.....	5,380	222	1,580	87,800
March.....	360	33	134	8,240
April.....	9,090	29	1,530	91,000
May.....	180	0	39.7	2,440
June.....	5	0	0.2	11.9
The year.....	9,090	0	272	196,000

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

PUTAH CREEK BASIN

PUTAH CREEK AT WINTERS, CALIF.

LOCATION.—Just below Southern Pacific Co.'s railroad bridge at Winters, Yolo County, in Río de los Putos grant.

DRAINAGE AREA.—654 square miles.

RECORDS AVAILABLE.—September 26, 1905, to September 30, 1926.

GAGE.—Staff in four sections, lower on right bank and upper three on left bank, 600 feet below bridge; read by Miss Frieda Sparks. Changes have been made in location and number of sections but original datum has been maintained. A recorder was used January 29 to February 6, February 12-14, and April 5-9.

DISCHARGE MEASUREMENTS.—Made from cable at gage or by wading.

CHANNEL AND CONTROL.—Sand and gravel; somewhat shifting. Two channels at low water.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 25.5 feet at 10 a. m. April 8 (discharge, about 24,500 second-feet); no flow October 1 to November 19 and July 23 to September 30.

1905-1926: Maximum stage recorded, 39.0 feet, from floodmarks at gage, December 31, 1913 (discharge, from extension of rating curve, about 60,000 second-feet); no flow during part of years ending September 30, 1913, 1914, 1918-1926.

DIVERSIONS.—There are several small diversions for irrigation above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changes at low and medium stages but seems fairly permanent for stages of 8.0 feet and over. Rating curves well defined below 16 feet and extended above. Staff gage read to half-tenths once a day. Record from recorder used during high water. Daily discharge ascertained by applying gage height to rating table except January 31, February 1, 4-5, and April 5-6, for which hourly discharge was averaged. Records fair.

Discharge measurements of Putah Creek at Winters, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Jan. 27-----	4.31	17	Feb. 6-----	10.52	3,250	May 13-----	4.90	136
Feb. 3-----	14.62	7,720	Feb. 13-----	15.75	9,310	June 1-----	4.19	48
Feb. 4-----	22.34	19,100	Feb. 16-----	9.14	2,200	June 8-----	4.02	32
Do-----	23.54	20,700	Feb. 18-----	7.44	1,040	June 22-----	3.82	15
Feb. 5-----	14.34	7,240	Mar. 16-----	5.15	195	July 6-----	3.63	4.0
Do-----	13.49	6,390	Apr. 15-----	7.01	914	July 20-----	3.48	.8

Daily discharge, in second-feet, of Putah Creek at Winters, Calif., for the year ending September 30, 1926

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1-----		14	20	7,500	495	109	204	46	7
2-----		11	20	2,370	455	102	192	43	5.5
3-----		11	20	7,500	455	102	181	43	3.0
4-----		8.5	20	16,800	415	142	170	38	3.0
5-----		8.5	20	8,000	380	9,400	170	38	3.0
6-----		8.5	20	3,210	330	8,080	160	34	4.0
7-----		11	20	1,720	330	3,170	160	34	3.0
8-----		11	17	1,120	315	16,300	160	29	3.0
9-----		11	17	850	315	7,140	151	29	3.0
10-----		11	17	755	285	3,010	151	29	3.0
11-----		14	17	755	255	2,090	142	29	3.0
12-----		14	17	2,940	242	1,600	142	25	3.0
13-----		14	17	8,230	228	1,290	134	25	2.6
14-----		14	17	3,570	204	1,120	125	25	2.6
15-----		14	17	1,790	204	905	125	23	2.0
16-----		14	17	2,000	192	755	109	23	1.4
17-----		14	20	1,240	181	665	102	21	1.0
18-----		17	20	950	181	620	95	21	.9
19-----		20	20	1,120	170	555	88	18	.8
20-----	0.5	20	20	3,210	170	495	82	18	.7
21-----	1.2	20	20	1,880	160	455	82	18	.4
22-----	2.0	20	20	1,410	160	415	76	14	.2
23-----	2.0	23	20	1,120	151	380	76	14	-----
24-----	1.2	23	17	955	142	345	72	14	-----
25-----	1.2	23	17	855	142	315	72	11	-----
26-----	1.2	20	17	805	134	285	69	11	-----
27-----	.5	20	17	755	134	255	69	8	-----
28-----	.5	20	23	575	117	242	64	8	-----
29-----	2.0	20	5,160	-----	117	228	58	8	-----
30-----	11	20	950	-----	109	216	53	8	-----
31-----		20	11,400	-----	109	-----	48	-----	-----

NOTE.—No flow Oct. 1 to Nov. 19 and July 23 to Sept. 30.

Monthly discharge of Putah Creek at Winters, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
November.....	11	0.0	0.78	46.4
December.....	23	8.5	15.8	972
January.....	11,400	17	581	35,700
February.....	16,800	575	3,000	167,000
March.....	495	109	236	14,500
April.....	16,300	102	2,030	121,000
May.....	204	48	116	7,130
June.....	46	8	23.5	1,400
July.....	7	0	1.81	111
The year.....	16,800	0	479	348,000

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

EEL RIVER BASIN

LAKE PILLSBURY AT HULLVILLE, CALIF.

LOCATION.—On section line between secs. 14 and 23, T. 18 N., R. 10 W., at Scott Dam on South Eel River, at Hullville, Calif.

RECORDS AVAILABLE.—October 1, 1922, to September 30, 1926.

GAGE.—Staff gage bolted to face of dam near right end; read by T. Betterton.

REGULATION.—Lake Pillsbury is a storage reservoir of Snow Mountain Water & Power Co. Water is released to operate power plant at Potter Valley and then wasted into a tributary of Russian River. Spillway gates, 10 feet high on dam, are used to increase storage. Crest of dam, elevation 1,900 feet; needle valve, elevation 1,815 feet.

EXTREMES OF STAGE.—Maximum stage recorded during year, 1,910.6 feet April 9; minimum stage recorded, 1,836.2 feet January 27.

ACCURACY.—Gage read to tenths twice daily.

Daily elevation, in feet, of Lake Pillsbury at Hullville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	883.0	871.6	860.8	851.3	869.5	904.0	906.0	910.2	907.4	901.4	893.8	884.2
2.....	882.6	871.2	862.4	850.8	871.6	904.2	906.0	910.2	907.2	901.2	893.6	883.8
3.....	882.4	870.8	862.6	850.3	876.4	904.6	905.9	910.1	907.0	901.0	893.4	883.4
4.....	882.0	870.4	862.4	849.9	889.2	904.8	905.9	910.1	906.8	900.6	893.0	883.1
5.....	881.6	870.1	862.2	849.4	898.8	905.0	906.2	910.1	906.7	900.5	892.8	882.8
6.....	881.4	869.7	861.8	849.0	902.4	905.2	907.3	910.1	906.6	900.2	892.4	882.4
7.....	880.9	869.3	861.6	848.4	904.3	905.4	908.0	910.0	906.4	900.1	892.2	882.1
8.....	880.6	868.9	861.2	847.6	905.3	905.6	910.3	910.0	906.2	900.0	891.8	881.8
9.....	880.2	868.4	860.8	847.0	905.5	905.7	910.6	909.9	906.0	899.8	891.6	881.4
10.....	879.8	868.2	860.4	846.2	905.4	905.8	910.0	909.9	905.8	899.6	891.2	881.1
11.....	879.4	867.8	859.9	845.6	905.3	905.9	910.1	909.9	905.6	899.2	891.0	880.8
12.....	879.0	867.6	859.4	844.8	905.5	906.0	910.0	909.8	905.4	899.0	890.6	880.4
13.....	878.6	867.2	858.9	844.0	905.8	906.0	910.2	909.8	905.2	898.8	890.4	880.0
14.....	878.2	866.9	858.4	843.2	905.8	906.0	910.2	909.7	905.0	898.6	890.0	879.6
15.....	877.9	866.5	857.9	842.4	905.8	906.1	910.1	909.6	904.8	898.2	889.8	879.2
16.....	877.6	866.2	857.4	841.6	906.4	906.2	910.1	909.5	904.5	898.0	889.4	878.8
17.....	877.2	866.0	857.0	840.8	906.5	906.2	910.2	909.4	904.4	897.7	889.1	878.5
18.....	876.8	865.8	856.5	840.0	906.4	906.3	910.2	909.4	904.2	897.4	888.8	878.1
19.....	876.4	865.4	856.4	839.2	906.6	906.3	910.2	909.2	904.0	897.2	888.6	877.7
20.....	876.1	865.0	856.2	838.4	905.6	906.3	910.1	909.2	903.8	896.8	888.2	877.3
21.....	875.8	864.6	855.8	838.0	904.4	906.3	910.1	909.0	903.6	896.6	887.8	876.9
22.....	875.4	864.2	855.6	837.8	903.6	906.3	910.0	908.8	903.4	896.4	887.6	876.6
23.....	875.1	863.8	855.6	837.5	903.0	906.3	910.2	908.6	903.2	896.0	887.2	876.2
24.....	874.7	863.4	855.4	837.2	902.6	906.2	910.2	908.5	903.0	895.8	886.9	875.7
25.....	874.3	863.0	855.0	836.8	902.6	906.2	910.2	908.4	902.9	895.4	886.6	875.4
26.....	874.0	862.6	854.6	836.6	903.0	906.2	910.2	908.2	902.7	895.2	886.2	874.9
27.....	873.6	862.1	854.2	836.2	903.3	906.2	910.2	908.2	902.4	895.0	885.8	874.6
28.....	873.2	861.6	853.6	837.4	903.6	906.2	910.2	908.0	902.2	894.8	885.6	874.1
29.....	872.8	861.2	853.1	851.2	-----	906.2	910.2	907.8	902.0	894.6	886.2	873.7
30.....	872.4	860.8	852.5	854.9	-----	906.1	910.2	907.6	901.7	894.3	884.8	873.3
31.....	872.0	-----	851.9	864.4	-----	906.1	-----	907.5	-----	894.2	884.4	-----

NOTE.—Add 1,000 feet to obtain sea-level elevation.

SOUTH EEL RIVER AT HULLVILLE, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 22, T. 18 N., R. 10 W., half a mile below Scott Dam and Lake Pillsbury, and half a mile west of Hullville, Lake County. Soda Creek enters half a mile below gage.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 14, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in concrete well and shelter on left bank.

DISCHARGE MEASUREMENT.—Made from cable just below gage or by wading.

CHANNEL AND CONTROL.—Bed of stream is sand and gravel, smooth, shifting.

Straight above and below gage. Right bank of low-water channel is a gravel bar. Left bank high and rocky. A flood channel on right bank is heavy gravel. Right bank of flood channel is high and permanent. Gravel bar between channels is covered with willows at edge of low-water channel. Control at low water is gravel and sand about 200 feet below gage. A large boulder 20 feet in diameter divides stream into two channels below control. Control for stages above 2 feet is 100 feet below gage. Left end is large boulders and permanent; right end sloping, composed of gravel and sand, and may shift.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 10.05 feet at 11.30 a. m. April 8 (discharge, 8,300 second-feet); minimum stage, from water-stage recorder, 0.27 foot at 6 p. m. January 30 (discharge, 1.7 second-feet, regulated by valve in Scott Dam).

1922-1926: Maximum stage recorded, 14.34 feet at 11.30 a. m. February 11, 1925 (discharge, 17,600 second-feet); minimum discharge, 0.1 second-foot at 5 a. m. September 9, 1924, regulated by valve in Scott Dam.

ICE.—Stage-discharge relation not affected by ice during year.

DIVERSIONS.—None.

REGULATION.—Completely regulated by gates in Scott Dam. There was 44,000 acre-feet of water in Lake Pillsbury on September 30, 1925, and 30,700 acre-feet on September 30, 1926.

ACCURACY.—Stage-discharge relation changed February 7 and April 8. Rating curves well defined. Water-stage recorder record excellent. Daily discharge ascertained by applying mean daily gage height to rating table except on days of large fluctuation, for which hourly discharge was averaged. Records excellent.

Discharge measurements of South Eel River at Hullville, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
June 5.....	2.36	242	June 5.....	2.18	188	June 5.....	2.84	368
Do.....	1.18	22	Do.....	3.04	443			

Daily discharge, in second-feet, of South Eel River at Hullville, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	259	273	250	251	2.0	178	206	211	237	270	250	270
2.....	259	273	150	231	4.1	164	204	202	237	262	253	267
3.....	256	273	220	193	13	167	206	190	239	262	253	267
4.....	262	273	220	190	176	169	209	185	232	190	253	171
5.....	294	270	218	195	69	173	147	242	227	229	253	264
6.....	300	273	226	223	188	175	100	264	242	237	253	264
7.....	300	273	231	242	645	178	107	253	259	237	253	190
8.....	300	270	248	265	1,050	182	2,740	245	259	237	256	264
9.....	300	270	256	259	1,230	201	2,200	221	259	242	270	264
10.....	300	268	268	256	1,200	201	1,700	204	256	250	270	177
11.....	291	265	273	254	932	201	1,080	204	256	256	270	262
12.....	288	262	273	254	778	206	748	204	242	264	270	262
13.....	276	259	270	248	806	249	630	206	259	264	267	259
14.....	270	254	270	245	817	232	630	206	256	264	267	256
15.....	268	254	270	240	828	196	603	206	256	264	262	256
16.....	268	254	268	256	888	196	453	214	165	264	259	207
17.....	268	254	265	265	905	178	400	216	165	264	196	256
18.....	256	251	256	259	894	171	414	229	253	262	259	253
19.....	248	248	237	226	1,790	206	422	211	235	262	256	253
20.....	245	248	218	172	3,110	216	394	242	253	259	256	250
21.....	248	245	181	80	2,220	214	375	248	253	256	256	250
22.....	248	242	168	115	1,630	206	252	248	253	256	256	248
23.....	248	240	168	110	1,260	206	194	242	181	256	264	248
24.....	251	237	179	104	800	206	234	234	170	253	267	248
5.....	259	242	215	102	444	187	248	234	170	253	276	248
26.....	268	279	251	101	276	158	253	237	259	253	276	245
27.....	270	279	273	98	238	173	250	237	267	160	273	245
28.....	270	273	270	37	216	201	245	237	279	159	270	242
29.....	270	270	270	5	-----	206	232	237	276	140	270	242
30.....	270	268	268	2.6	-----	206	221	237	276	145	270	242
31.....	273	-----	265	15	-----	206	-----	237	-----	250	206	-----

Monthly discharge of South Eel River at Hullville, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	300	245	270	16,600
November.....	279	237	261	15,500
December.....	273	150	239	14,700
January.....	265	2.6	177	10,900
February.....	3,110	2.0	836	46,400
March.....	249	158	194	11,900
April.....	2,740	100	537	32,000
May.....	264	185	225	13,800
June.....	279	165	239	14,200
July.....	270	140	240	14,800
August.....	276	196	258	15,900
September.....	270	171	246	14,600
The year.....	3,110	2.0	306	221,000

SOUTH EEL RIVER AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 30, T. 18 N., R. 11 W., at Van Arsdale Dam of Snow Mountain Water & Power Co., 5 miles north of Potter Valley, Mendocino County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 18, 1909, to September 30, 1926. (Monthly discharge only for 1909 to 1922.)

GAGE.—Water-stage recorder in pipe well and wooden shelter on left bank of equalizing reservoir about 800 feet above Van Arsdale Dam.

DISCHARGE MEASUREMENTS.—Measurements which were made in 1919 were made from a suspension bridge below dam.

CHANNEL AND CONTROL.—Control is Van Arsdale Dam. Average elevation of crest of dam is 0.07 foot above gage datum. At low water flashboards are placed on crest. Crest of flashboards is very uneven. Average elevation in 1926 was 4.20 feet. Length of crest about 286 feet. A sluice gate in bottom of dam is opened only when stage is rising rapidly or when reservoir is emptied. Reservoir is an enlargement of the natural stream, is about 400 feet wide, a mile or more long, and is fairly well filled with sand and aquatic plants.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 7.53 feet with 3.57 feet of flashboards on dam and sluice gate open at 3 p. m. April 8 (discharge, 8,060 second-feet). Maximum discharge, including flow through power house, 8,310 second-feet. Minimum discharge, wasted down South Eel River, about 2 second-feet on days for which daily discharge is not given.

1909–1926: Maximum discharge recorded, 39,900 second-feet, including flow through power house, February 24, 1917; minimum discharge not known, but 2 second-feet are required to be wasted through fish ladder at all times.

DIVERSIONS.—Water diverted from the equalizing reservoir at Van Arsdale Dam through a tunnel to the power house of Snow Mountain Water & Power Co. in Potter Valley and then wasted down a branch of Russian River. (See p. 363 for record of this diversion.)

REGULATION.—Low-water flow completely diverted to power house; about 2 second-feet wasted down South Eel River through fishway and sluice gate.

ACCURACY.—Stage-discharge relation permanent when flashboards are not on dam. Rating curve well defined. Gage-height record good. Daily discharge ascertained by applying hourly gage height to rating table after subtracting average height of flashboards from gage height. When sluice gate was open, 700 second-feet were added to give total daily discharge.

Records fair.

No discharge measurements were made during year.

Daily discharge, in second-feet, of South Eel River at Van Arsdale Dam near Potter Valley, Calif., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Mar.	Apr.	Day	Dec.	Jan.	Feb.	Mar.	Apr.
1.....	53		158	88		16.....			1,070		235
2.....	11		88	45		17.....			1,010		205
3.....			570	45		18.....			930		228
4.....			1,950	33		19.....			1,570		172
5.....			1,050	22		20.....			3,210		158
6.....			790	10	41	21.....			2,440		125
7.....			885	8	255	22.....			1,900		106
8.....			958	3	3,080	23.....			1,480		
9.....			1,100	6	2,660	24.....			930		
10.....			1,100	4	2,050	25.....			526		
11.....			972	6	908	26.....			320		
12.....			810	3	588	27.....			242		
13.....			930		410	28.....			138		
14.....			906		400	29.....		242			
15.....			986		380	30.....		8			
						31.....		642			

NOTE.—On days for which discharge is not given, 2 second-feet are allowed to waste down river through fishway.

Monthly discharge of South Eel River at Van Arsdale Dam, near Potter Valley, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2	2	2	123
November.....	2	2	2	119
December.....	53	2	3.94	242
January.....	642	2	30.6	1,880
February.....	3,210	88	1,040	57,800
March.....	88	2	10.4	640
April.....	3,080	2	401	23,900
May.....	2	2	2	123
June.....	2	2	2	119
July.....	2	2	2	123
August.....	2	2	2	123
September.....	2	2	2	119
The year.....	3,210	2	117	85,300

Combined daily discharge, in second-feet, of South Eel River and Snow Mountain Water & Power Co.'s tailrace near Potter Valley, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	282	239	309	244	392	345	254	253	260	270	236	264
2.....	272	208	283	208	312	302	254	248	267	268	254	260
3.....	272	256	264	244	818	251	258	259	264	262	260	262
4.....	265	258	266	194	2,200	271	247	262	262	251	266	245
5.....	274	262	260	257	1,300	278	254	255	266	236	258	266
6.....	272	259	220	256	1,030	268	289	259	246	264	264	267
7.....	272	232	261	255	1,110	254	505	259	268	266	265	244
8.....	268	238	265	240	1,200	267	3,310	259	272	268	243	242
9.....	269	270	260	256	1,320	271	2,900	243	268	268	256	264
10.....	280	257	264	247	1,840	270	2,290	259	270	262	254	236
11.....	256	258	235	260	1,140	248	1,130	195	271	242	258	238
12.....	264	254	257	276	1,080	265	816	250	272	265	263	252
13.....	257	253	224	286	1,170	303	654	248	252	262	262	230
14.....	270	258	254	268	1,140	272	642	247	274	262	264	252
15.....	250	251	256	262	1,240	274	624	254	274	260	248	268
16.....	258	279	254	257	1,320	245	477	238	200	268	260	244
17.....	242	270	256	256	1,260	273	447	252	192	252	222	273
18.....	242	264	257	256	1,190	278	456	252	270	237	277	228
19.....	253	250	254	186	1,820	242	448	261	240	265	272	261
20.....	253	266	233	168	3,410	258	432	256	263	264	267	270
21.....	252	260	256	154	2,670	244	402	257	264	269	292	272
22.....	254	249	262	146	2,140	247	345	215	246	266	256	274
23.....	251	260	194	136	1,730	246	236	244	186	262	268	270
24.....	250	184	266	109	1,170	242	260	264	188	262	276	273
25.....	232	241	250	108	773	244	237	260	192	254	273	272
26.....	248	241	254	108	498	236	244	264	268	260	272	256
27.....	250	258	244	108	433	240	246	260	260	182	282	265
28.....	254	253	258	192	370	239	247	258	272	196	275	232
29.....	258	244	200	476	-----	244	248	245	271	182	255	276
30.....	264	227	256	266	-----	248	250	249	272	174	265	266
31.....	248	-----	258	922	-----	242	-----	256	-----	259	244	-----

Combined monthly discharge of South Eel River and Snow Mountain Water & Power Co.'s tailrace, near Potter Valley, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	282	232	259	15, 900
November.....	279	184	250	14, 900
December.....	309	194	253	15, 600
January.....	922	108	245	15, 100
February.....	3, 410	312	1, 270	70, 500
March.....	345	236	262	16, 100
April.....	3, 310	236	647	38, 500
May.....	264	195	251	15, 400
June.....	274	186	252	15, 000
July.....	270	174	250	15, 400
August.....	292	222	262	16, 100
September.....	276	228	257	15, 300
The year.....	3, 410	108	364	264, 000

EEL RIVER AT SCOTIA, CALIF.

LOCATION.—In sec. 18, T. 1 N., R. 1 E., at Wildwood Bridge, half a mile north-east of Scotia, Humboldt County. Larabee Creek enters 14 miles above and Van Duzen River 7 miles below station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 15, 1910, to February 6, 1915; October 1, 1916, to September 30, 1926.

GAGE.—Staff gage in eight sections at highway bridge; read by Millard Barisdale.

DISCHARGE MEASUREMENTS.—Made from bridge or by wading.

CHANNEL AND CONTROL.—Solid rock and gravel; fairly permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 42.2 feet at 5.30 p. m. February 4 (discharge, 176,000 second-feet); minimum discharge, 35 second-feet at a gage height of 9.10 feet, occurring several days in September.

1911–1926: Maximum stage recorded, 55.5 feet February 2, 1915 (discharge, from extension of rating curve, about 290,000 second-feet); minimum discharge recorded, 10 second-feet at 6 p. m. August 12, 13, and 14, 1924.

DIVERSIONS.—Water is diverted from South Eel River at Van Arsdale Dam through a tunnel to power house of Snow Mountain Water & Power Co. and then wasted down a branch of Russian River at Potter Valley. (See p. 363 for record of this diversion.) About 6 second-feet is pumped intermittently from the river above station at Scotia for local use and lumbering.

ACCURACY.—Stage-discharge relation changed February 5. Rating curves fairly well defined. Staff gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

The following discharge measurements were made:

June 7, 1926: Gage height, 10.21 feet; discharge, 425 second-feet.

September 26, 1926: Gage height, 9.14 feet; discharge, 41 second-feet.

Daily discharge, in second-feet, of Eel River at Scotia, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	177	150	8,070	950	46,400	9,510	1,980	1,600	675	174	68	42
2.....	171	150	35,500	850	25,200	8,790	1,980	1,500	630	167	62	40
3.....	171	160	12,800	950	40,500	8,070	1,880	1,420	582	167	60	39
4.....	168	168	6,680	850	141,000	7,370	1,780	1,500	543	160	57	39
5.....	168	165	4,260	805	98,700	6,690	1,880	1,600	515	154	60	42
6.....	315	165	2,960	760	66,200	6,030	2,730	1,880	487	145	57	40
7.....	253	165	2,370	680	48,600	6,030	4,420	2,400	450	136	57	39
8.....	267	165	1,880	645	38,000	5,710	5,120	3,210	409	130	57	39
9.....	260	177	1,530	645	29,200	5,410	18,500	3,340	382	130	57	39
10.....	232	210	1,410	645	24,700	5,120	13,100	2,730	365	130	53	39
11.....	210	295	1,290	610	23,000	4,840	10,600	2,290	355	130	53	39
12.....	207	720	1,120	610	20,100	4,560	7,720	2,080	340	121	53	39
13.....	207	1,290	950	610	17,700	4,010	6,680	1,980	325	112	49	39
14.....	195	1,800	760	610	15,300	4,010	5,410	1,880	315	106	49	35
15.....	189	1,170	680	610	14,200	3,880	4,840	1,690	306	103	53	35
16.....	183	1,350	645	610	27,800	3,880	4,140	1,600	288	95	49	46
17.....	183	2,960	645	950	21,800	3,740	4,010	1,500	279	95	49	39
18.....	177	3,280	1,170	2,280	18,100	3,470	3,740	1,420	279	95	51	37
19.....	171	2,110	4,260	3,750	26,500	3,210	3,470	1,330	270	90	49	39
20.....	171	1,170	7,370	2,370	31,000	3,210	3,340	1,330	266	88	49	35
21.....	171	900	4,260	1,950	28,300	2,960	3,210	1,260	254	85	49	37
22.....	171	720	3,280	1,470	24,300	2,730	2,960	1,260	254	85	49	39
23.....	165	610	2,960	1,350	20,500	2,620	2,730	1,260	246	85	46	40
24.....	158	545	2,560	1,290	16,900	2,510	2,510	1,180	238	80	42	40
25.....	158	458	2,370	1,170	14,600	2,400	2,290	1,050	223	80	44	40
26.....	155	430	2,110	1,060	13,100	2,400	2,080	930	216	75	42	42
27.....	155	380	1,880	1,000	11,700	2,290	1,880	875	209	73	42	42
28.....	155	380	1,660	5,400	9,870	2,180	1,880	820	198	71	46	40
29.....	150	850	1,470	38,500	-----	2,080	1,780	820	195	68	49	53
30.....	155	2,560	1,290	32,500	-----	2,080	1,690	770	181	66	42	49
31.....	150	-----	1,120	66,200	-----	1,980	-----	720	-----	64	40	-----

Monthly discharge of Eel River at Scotia, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	315	150	188	11,600
November.....	3,280	150	855	50,900
December.....	35,500	645	3,910	240,000
January.....	66,200	610	5,570	342,000
February.....	141,000	9,570	32,600	1,810,000
March.....	9,510	1,980	4,310	265,000
April.....	18,500	1,690	4,340	258,000
May.....	3,340	720	1,590	97,800
June.....	675	181	342	20,400
July.....	174	64	108	6,640
August.....	68	40	51.1	3,140
September.....	53	35	40.1	2,390
The year.....	141,000	35	4,300	3,110,000

SNOW MOUNTAIN WATER & POWER CO.'S TAILRACE NEAR POTTER VALLEY, CALIF.

LOCATION.—In W. $\frac{1}{2}$ NW. $\frac{1}{4}$ sec. 6, T. 17 N., R. 11 W., at power house of Snow Mountain Water & Power Co., 3 miles northwest of Potter Valley, Mendocino County.

RECORDS AVAILABLE.—October 1, 1922, to September 30, 1926.

GAGE.—Water-stage recorder in stilling well on left bank of tailrace about 100 feet below power house.

DISCHARGE MEASUREMENTS.—Made from a plank across tailrace just below gage.

CHANNEL AND CONTROL.—Three individual tailraces from units Nos. 1, 3, and 4 converge into one tailrace just above gage. Bottom and sides of tailrace are concrete. Tailrace is rectangular, 12 feet wide, and 8 feet deep. Control is an 8 by 12 inch plank placed in weir guides to form a submerged weir.

EXTREMES OF DISCHARGE.—Maximum mean daily discharge during year, 301 second-feet March 13.

1922-1926: Maximum mean daily discharge, 317 second-feet October 10-13, 1922, and January 14, 1925.

DIVERSIONS.—Water may be diverted from tailrace above gage through two small ditches for irrigation in Potter Valley. Water was diverted at various times from June 19 to September 30 this year. Amount diverted is included in table of daily discharge.

REGULATION.—Completely regulated by operation at power plant.

ACCURACY.—Stage-discharge relation permanent. Rating curve very well defined. Water-stage recorder record excellent. Daily discharge ascertained by use of discharge integrator. Records good.

The following discharge measurement was made:

June 6, 1926: Gage height, 2.88 feet; discharge, 254 second-feet.

Daily discharge, in second-feet, of Snow Mountain Water & Power Co.'s tailrace near Potter Valley, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	280	237	256	242	234	257	252	251	258	268	234	262
2.....	270	206	272	206	224	257	252	246	265	266	262	258
3.....	270	254	262	242	248	206	256	257	262	260	258	260
4.....	263	256	264	192	246	238	245	260	260	249	264	243
5.....	272	260	258	255	246	256	252	253	264	234	256	264
6.....	270	257	218	254	236	258	248	257	244	262	262	265
7.....	270	230	259	253	228	246	250	257	266	264	263	242
8.....	266	236	263	238	244	264	228	257	270	266	241	240
9.....	267	268	258	254	222	265	241	241	266	266	264	262
10.....	278	255	262	245	242	266	242	257	268	260	252	234
11.....	254	256	233	258	170	242	228	193	269	240	256	236
12.....	262	252	255	274	265	282	228	248	270	263	261	250
13.....	255	251	222	284	244	301	244	246	250	260	260	228
14.....	268	256	252	266	238	270	242	245	272	260	262	250
15.....	248	249	254	260	252	272	244	252	272	258	246	266
16.....	256	277	252	255	250	243	242	236	198	266	258	242
17.....	240	268	254	254	250	271	242	250	190	250	220	271
18.....	240	262	255	254	258	276	228	250	268	235	275	226
19.....	251	248	252	184	253	240	276	259	238	263	270	259
20.....	251	264	231	166	204	256	274	254	261	262	265	268
21.....	250	258	254	152	234	242	277	255	262	267	290	270
22.....	252	247	260	144	242	245	239	213	244	264	264	272
23.....	249	258	192	134	250	244	234	242	184	260	266	268
24.....	248	182	264	107	242	240	258	262	186	260	274	271
25.....	230	239	248	106	247	242	235	258	190	252	271	270
26.....	246	239	252	106	178	234	242	262	266	258	270	254
27.....	248	256	242	106	191	238	244	258	258	180	280	263
28.....	252	251	256	190	232	237	245	256	270	194	273	230
29.....	256	242	198	234	-----	242	246	243	269	180	253	274
30.....	262	225	254	258	-----	246	248	247	270	172	263	264
31.....	246	-----	256	280	-----	240	-----	254	-----	257	242	-----

Monthly discharge of Snow Mountain Water & Power Co.'s tailrace near Potter Valley, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	280	230	257	15,800
November.....	277	182	248	14,800
December.....	272	192	249	15,300
January.....	284	106	215	13,200
February.....	265	170	235	13,100
March.....	301	206	252	15,500
April.....	277	228	246	14,000
May.....	262	193	249	15,300
June.....	272	184	250	14,900
July.....	268	172	248	15,200
August.....	280	220	260	16,000
September.....	274	226	255	15,200
The year.....	301	106	247	179,000

KLAMATH RIVER BASIN

WILLIAMSON RIVER BELOW SPRAGUE RIVER NEAR CHILOQUIN, OREG.

LOCATION.—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, Klamath County.

DRAINAGE AREA.—3,000 square miles (revised; measured on topographic and Forest Service maps).

RECORDS AVAILABLE.—June 25, 1917, to September 30, 1922, and August 31, 1923, to September 30, 1926.

GAGE.—Stevens continuous water-stage recorder on left bank.

DISCHARGE MEASUREMENTS.—Made from cable at gage.

CHANNEL AND CONTROL.—Rocky ledge and boulders; practically permanent; current somewhat uneven.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 3.67 feet at 8.30 a. m. February 11 (discharge, 1,560 second-feet); minimum stage, 2.09 feet at 4 a. m. May 30 (discharge, 356 second-feet).

1911-1926: Maximum discharge, about 7,000 second-feet April 27, 1917 (sum of discharges on that date at stations on Sprague River at Chiloquin, 4,490 second-feet, and Williamson River at Chiloquin, 2,500 second-feet); minimum stage recorded, 0.35 foot, old datum, at 6 a. m. October 14, 1921 (discharge, 320 second-feet).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—Modoc Point Canal diverts from Sprague River above station. Large areas of land are irrigated from river and its tributaries.

REGULATION.—Manipulation of gates of dams used for logging and irrigation on Sprague River causes considerable fluctuation at times at gage.

ACCURACY.—Stage-discharge relation changed slightly during high water of February and was unstable during October and November. Fairly well defined rating curves used December 1 to February 10 and February 11 to September 30; shifting-control method used October 1 to November 30. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting recorder graph. Records good, except for discharges below 400 or above 1,200 second-feet, for which they are fair.

Discharge measurements of Williamson River below Sprague River near Chiloquin, Oreg., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 30.....	2.60	601	Feb. 26.....	3.06	958	July 15.....	2.38	494
Dec. 8.....	2.72	673	Apr. 4.....	2.75	769	Sept. 5.....	2.37	471
Jan. 8.....	2.70	638	May 22.....	2.48	554			

Daily discharge, in second-feet, of Williamson River below Sprague River near Chiloquin, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	596	614	657	626	671	958	675	623	400	495	517	506
2.....	602	626	671	602	671	994	675	623	432	485	517	512
3.....	638	632	671	602	657	1,010	708	623	500	440	517	544
4.....	626	632	671	657	755	985	720	592	604	409	517	528
5.....	608	632	703	638	912	967	727	636	539	495	517	470
6.....	620	638	699	632	1,000	949	727	568	436	740	544	460
7.....	632	650	678	620	1,100	940	734	550	432	616	528	485
8.....	614	644	671	632	1,260	922	727	586	455	534	517	495
9.....	614	644	671	638	1,320	904	734	656	455	503	512	512
10.....	638	644	664	632	1,370	879	762	649	440	422	512	490
11.....	632	657	632	626	1,370	871	823	568	445	409	512	418
12.....	626	638	632	614	1,280	847	755	517	556	445	506	404
13.....	626	664	638	608	1,220	847	808	598	495	460	490	440
14.....	626	664	638	608	1,140	847	823	636	539	642	465	485
15.....	626	664	638	620	1,120	839	913	580	610	534	465	668
16.....	626	664	644	626	1,070	823	887	534	470	539	465	636
17.....	620	664	638	638	1,020	815	847	630	485	586	470	544
18.....	620	664	678	664	1,000	808	808	616	495	574	475	642
19.....	620	657	664	626	985	800	785	580	495	539	480	662
20.....	620	657	644	620	976	800	762	539	500	517	485	536
21.....	620	650	664	614	958	808	748	539	505	500	490	539
22.....	620	644	657	620	958	785	755	539	539	503	500	475
23.....	620	644	644	620	958	762	748	544	495	517	528	465
24.....	620	664	650	620	940	762	740	580	490	544	512	465
25.....	620	650	664	620	949	808	748	720	485	517	500	512
26.....	620	638	678	620	949	778	734	642	500	568	500	544
27.....	626	650	699	614	913	770	714	506	580	517	512	580
28.....	626	650	706	620	863	740	701	450	475	506	610	556
29.....	602	650	692	626	-----	755	662	440	480	506	649	544
30.....	608	657	692	626	-----	755	636	380	490	512	586	562
31.....	608	-----	657	644	-----	740	-----	388	-----	512	539	-----

Monthly discharge of Williamson River below Sprague River near Chiloquin, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	638	596	620	38,100
November.....	664	614	648	38,600
December.....	701	632	665	40,900
January.....	664	602	625	38,400
February.....	1,370	657	1,010	56,100
March.....	1,010	740	847	52,100
April.....	913	636	753	44,800
May.....	720	388	569	35,000
June.....	610	400	494	29,400
July.....	740	409	519	31,900
August.....	649	485	514	31,600
September.....	618	404	524	31,200
The year.....	1,370	388	647	468,000

UPPER KLAMATH LAKE NEAR KLAMATH FALLS, OREG.

LOCATION.—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 business center of Klamath Falls, Klamath County.

RECORDS AVAILABLE.—May 28, 1904, to September 30, 1926.

GAGE.—Gurley water-stage recorder used since November 10, 1923; zero of gage 4,135.93 feet above sea level. Gage readings from May 28, 1904, to August 19, 1905; were made on a vertical staff gage at Pelican Bay at upper end of lake; zero 4,137.78 feet above sea level. Gage readings from August 26, 1905, to November 9, 1923, refer to gage at Buena Vista Landing near lake outlet, zero 4,136.13 feet above sea level. Gage heights beginning October 1, 1917, reduced to a datum of 4,100 feet. All elevations refer to United States Bureau of Reclamation datum which is 1.56 feet below that of the United States Coast and Geodetic Survey.

EXTREMES OF STAGE.—Maximum stage recorded during year, 4,141.60 feet at 3 p. m. March 15; minimum stage recorded, 4,136.77 feet at 6 p. m. August 25.

1904-1926: Maximum stage, 4,144.98 feet (U. S. Bureau of Reclamation datum) about April 20, 1904, determined from high-water marks May 28, 1904; minimum stage recorded, 4,136.51 feet, October 28, 1924.

FLUCTUATION.—Gage heights are very much affected by wind. Water is lowered near outlet when the wind blows from the south and is raised as much above its normal level when the wind is in the opposite direction. There is a periodic oscillation when the wind blows for any length of time, with a period of about $2\frac{1}{2}$ hours.

REGULATION.—Water stored by dam at outlet of lake beginning April 15, 1919.

COOPERATION.—Gage-height records furnished by The California Oregon Power Co.

Daily elevation, in feet, of Upper Klamath Lake near Klamath Falls, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39.60	39.63	39.85	39.86	40.08	40.85	41.22	41.08	40.60	39.41	38.52	37.54
2	39.57	39.55	39.96	39.84	39.86	40.85	41.13	41.03	40.57	39.42	38.44	37.43
3	39.64	39.61	39.88	39.83	39.97	40.89	41.04	40.92	40.55	39.33	38.25	37.43
4	39.63	39.55	39.91	39.79	40.06	40.91	40.93	40.97	40.50	39.33	38.22	37.42
5	39.65	39.49	39.95	39.80	40.24	40.97	41.07	40.96	40.44	39.23	38.23	37.46
6	39.61	39.50	39.96	39.80	40.30	40.90	41.04	40.93	40.38	39.26	38.17	37.46
7	39.61	39.49	39.98	39.81	40.37	40.85	40.77	40.63	40.40	39.41	38.17	37.46
8	39.59	39.45	40.01	39.82	40.47	40.98	40.95	40.92	40.34	39.25	38.09	37.38
9	39.60	39.36	40.03	39.82	40.48	40.98	41.11	40.98	40.33	39.18	38.02	37.32
10	39.69	39.33	40.05	39.82	40.61	40.93	41.10	40.94	40.27	39.11	38.00	37.37
11	39.86	39.39	39.99	39.82	40.52	40.94	41.25	40.93	40.23	39.09	37.95	37.33
12	39.81	39.48	40.10	39.82	40.56	40.94	41.20	40.92	40.20	39.09	37.92	37.33
13	39.69	39.51	40.19	39.83	40.60	40.96	41.18	40.93	40.21	39.10	37.94	37.30
14	39.56	39.49	40.17	39.83	40.58	40.96	41.19	40.93	40.10	39.06	37.91	37.20
15	39.55	39.11	40.13	39.85	40.51	40.99	41.23	40.92	40.03	39.00	37.93	37.15
16	39.55	39.42	40.09	39.85	40.63	41.01	41.08	40.92	40.00	38.93	37.91	37.28
17	39.56	39.55	39.62	39.85	40.60	40.97	40.76	40.88	39.95	38.90	37.80	37.29
18	39.61	39.60	39.93	39.87	40.28	41.04	41.09	40.85	39.93	38.94	37.69	37.20
19	39.61	39.59	39.93	39.88	40.42	41.12	41.16	40.81	39.93	38.96	37.83	37.16
20	39.59	39.60	39.84	39.89	40.53	41.20	41.16	40.83	39.79	38.84	37.83	37.17
21	39.56	39.71	39.86	39.90	40.57	41.04	41.21	40.76	39.79	38.83	37.76	37.16
22	39.57	39.67	39.89	39.90	40.75	41.05	41.26	40.85	39.75	38.72	37.59	37.18
23	39.56	39.65	39.88	39.89	40.68	41.09	41.23	40.93	39.69	38.66	37.63	37.23
24	39.58	39.65	39.90	39.88	40.75	41.15	41.24	40.82	39.66	38.66	37.55	37.59
25	39.59	39.62	39.85	39.88	40.74	41.16	41.23	40.75	39.59	38.63	37.40	37.34
26	39.60	39.63	39.82	39.89	40.81	41.11	41.23	40.72	39.59	38.65	37.64	37.08
27	39.55	39.70	39.89	39.84	40.83	41.19	41.18	40.76	39.56	38.66	37.61	37.31
28	39.61	39.71	39.88	39.78	40.84	41.20	41.13	40.73	39.50	38.48	37.54	37.13
29	39.59	39.69	39.87	39.84	-----	41.17	41.07	40.72	39.46	38.43	37.48	37.23
30	39.57	39.72	39.87	39.97	-----	41.22	41.17	40.67	39.52	38.42	37.55	38.90
31	39.58	-----	39.87	40.01	-----	41.30	-----	40.64	-----	38.45	37.58	-----

NOTE.—Add 4,100 feet to reduce to sea level.

LINK RIVER AT KLAMATH FALLS, OREG.

LOCATION.—In NW. $\frac{1}{4}$ sec. 32, T. 38 S., R. 9 E., 200 yards above outlet of Keno Canal, three-eighths mile above county bridge over Link River at Klamath Falls, Klamath County, and 1 mile below outlet of Upper Klamath Lake.

DRAINAGE AREA.—3,800 square miles (revised; measured on topographic and Forest Service maps).

RECORDS AVAILABLE.—May 14, 1904, to September 30, 1926. The location of the station has been changed from time to time, but the records always represented the flow under the county bridge.

GAGE.—Stevens 8-day water-stage recorder on left bank above outlet of Keno Canal; inspected daily by an employee of the California Oregon Power Co.

DISCHARGE MEASUREMENTS.—Made from bridge; section deep, current sluggish at low water. To refer measurement made at bridge to station above outlet of Keno Canal the measured discharge at bridge is reduced by the measured or computed discharge of Keno Canal.

CHANNEL AND CONTROL.—Bed at bridge composed of mud and sand, with some boulders at left side. Rock and boulder riffle, a short distance below gage and above outlet of Keno Canal, forms practically permanent control.

EXTREMES OF DISCHARGE.—Maximum combined discharge of Link River and Keno Canal, 3,090 second-feet at 11 p. m. December 18; minimum combined discharge, 124 second-feet at 10 p. m. February 2.

1904-1926: Maximum stage 7.30 feet at gage at bridge May 12, 1904, determined May 15, 1904, from high-water marks (discharge, 9,400 second-feet); minimum discharge August 30, 1918, estimated at 22 second-feet from leakage and springs (gage height, 4.07 feet determined by leveling).

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—The main or "A" Canal of the Klamath project of the United States Bureau of Reclamation diverts water from Link River immediately below Upper Klamath Lake. No diversion prior to April 15. (See p. 392.) Keno Canal of California Oregon Power Co. diverts around the present gage, but the flow of the canal is included in the record for Link River. Some water is also diverted for irrigation from the tributaries to Upper Klamath Lake, but the total run-off is as yet only slightly affected.

REGULATION.—Water stored in Upper Klamath Lake by dam beginning April 15, 1919. Fluctuations of river caused by effect of wind on Upper Klamath Lake are much less than before dam was constructed.

ACCURACY.—Stage-discharge relation changed slightly on December 16. Two rating curves used, well defined above 200 second-feet. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table the mean daily gage height obtained by inspecting recorder graph or, for days of considerable fluctuation, by averaging results obtained by applying to rating table mean gage heights so obtained for shorter intervals and adding the flow in Keno Canal. Records good, except for days on which discharge was below 200 second-feet, for which they are poor.

COOPERATION.—Gage-height record furnished by California Oregon Power Co.

Discharge measurements of Link River at Klamath Falls, Oreg., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 29.....	1.98	1,690	Dec. 22.....	2.77	2,850	May 25.....	1.49	994
Dec. 9.....	1.59	1,220	Jan. 7.....	1.86	1,460	July 13.....	1.74	1,290
Dec. 17.....	2.71	2,670	Feb. 28.....	1.76	1,360	Sept. 3.....	1.63	1,160

Daily discharge, in second-feet, of Link River at Klamath Falls, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,430	1,320	1,050	924	224	1,320	936	954	916	1,040	1,180	996
2.....	1,060	1,390	551	1,460	190	1,300	877	661	1,030	966	1,020	1,040
3.....	901	1,270	558	1,450	187	1,350	1,020	882	965	994	940	1,040
4.....	892	1,350	699	1,450	189	1,338	1,010	737	1,300	966	980	1,040
5.....	1,140	1,899	596	1,450	241	1,350	1,230	721	1,300	686	886	902
6.....	2,060	1,390	556	1,430	300	1,330	770	557	1,210	1,060	970	1,140
7.....	1,880	1,010	656	1,360	306	1,070	728	549	1,320	796	928	1,140
8.....	1,640	777	609	1,360	944	883	787	477	1,320	749	983	1,140
9.....	1,440	853	730	1,230	1,300	702	1,050	569	1,260	960	921	962
10.....	1,440	1,060	992	1,070	1,320	890	1,310	510	970	669	966	1,140
11.....	627	1,320	1,030	1,220	1,200	1,000	1,310	568	951	837	1,010	1,130
12.....	1,140	1,320	750	1,420	1,530	867	1,290	640	949	834	961	652
13.....	1,450	1,330	601	1,110	1,830	438	881	675	969	953	968	1,130
14.....	1,240	1,380	844	1,170	1,720	338	738	637	975	987	928	1,130
15.....	915	839	2,100	820	1,860	915	965	591	977	871	954	1,140
16.....	1,000	1,350	2,760	1,220	1,880	1,020	1,090	605	938	828	973	1,100
17.....	914	1,440	2,660	1,020	1,880	1,060	1,120	609	981	967	1,010	1,110
18.....	926	1,440	2,930	1,120	1,810	972	1,020	618	987	996	995	1,120
19.....	1,420	1,430	3,010	1,080	1,840	1,010	1,030	629	895	983	987	1,120
20.....	1,400	1,440	2,940	1,180	1,800	1,070	1,020	628	979	989	1,020	1,120
21.....	1,400	982	2,740	1,420	1,330	813	1,060	628	1,040	1,290	986	1,140
22.....	1,550	1,030	2,750	1,410	1,340	1,260	908	599	1,090	1,270	992	1,130
23.....	1,670	1,150	2,750	1,330	1,330	895	736	598	1,100	1,260	1,000	1,130
24.....	1,670	1,380	2,750	1,270	891	803	791	591	1,290	1,060	1,050	1,150
25.....	1,550	1,370	2,750	1,310	533	310	962	572	1,330	1,010	952	1,130
26.....	1,670	534	2,270	873	698	302	1,320	597	932	1,140	966	1,120
27.....	1,660	1,010	1,450	725	996	471	1,350	587	1,060	996	1,010	1,090
28.....	1,690	1,070	1,270	619	1,340	854	1,320	614	1,050	884	611	853
29.....	1,660	592	1,050	434	-----	1,310	1,360	617	1,310	794	740	824
30.....	1,670	1,000	1,200	303	-----	1,310	1,240	583	1,010	969	939	852
31.....	1,490	-----	820	248	-----	1,020	-----	614	-----	1,030	1,020	-----

NOTE.—The flow of Keno Canal has been included in this table.

Monthly discharge of Link River at Klamath Falls, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2,060	627	1,370	84,200
November.....	1,440	534	1,170	69,600
December.....	3,010	551	1,560	95,900
January.....	1,460	248	1,110	68,200
February.....	1,880	187	1,100	61,100
March.....	1,350	302	954	58,700
April.....	1,360	728	1,040	61,900
May.....	954	477	626	38,500
June.....	1,330	895	1,080	64,300
July.....	1,290	669	962	59,200
August.....	1,180	611	963	59,200
September.....	1,140	652	1,060	63,100
The year.....	3,010	187	1,080	784,000

NOTE.—The flow of Keno Canal has been included in this table.

Combined monthly discharge of Link River and "A" Canal near Klamath Falls, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2, 090	627	1, 370	84, 200
November.....	1, 440	534	1, 170	69, 600
December.....	3, 010	551	1, 560	95, 900
January.....	1, 460	248	1, 110	68, 200
February.....	1, 880	187	1, 100	61, 100
March.....	1, 350	302	954	58, 700
April.....	2, 030	741	1, 210	72, 000
May.....	1, 670	1, 140	1, 280	78, 700
June.....	1, 990	1, 500	1, 720	102, 000
July.....	1, 930	1, 200	1, 560	95, 900
August.....	1, 670	967	1, 400	86, 100
September.....	1, 360	824	1, 190	70, 800
The year.....	3, 010	187	1, 300	943, 000

KLAMATH RIVER AT SPENCER BRIDGE, NEAR KENO, OREG.

LOCATION.—In SE. $\frac{1}{4}$ sec. 31, T. 39 S., R. 7 E., at Spencer Bridge, 1 mile below Spencer Creek, 6 miles below former station at Keno, and 18 miles west of Klamath Falls, Klamath County.

DRAINAGE AREA.—4,000 square miles (revised; measured on topographic and Forest Service maps).

RECORDS AVAILABLE.—October 7, 1913, to September 30, 1926. Records at Keno May 31, 1904, to December 31, 1913.

GAGE.—Stevens continuous water-stage recorder on right bank about 500 feet below bridge used since September 1, 1923; inspected by K. N. Phillips.

DISCHARGE MEASUREMENTS.—Made from upstream side of wagon bridge or by wading above bridge.

CHANNEL AND CONTROL.—Control is narrow channel, confined by rock crib and timbers of former bridge; practically permanent. Channel wide and smooth at gage and at measuring section.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.65 feet at 4 p. m. December 21 (discharge, 3,000 second-feet); minimum stage recorded, 0.85 foot at 5 p. m. February 2 (discharge, 390 second-feet).

1913-1926: Maximum stage recorded, 2.42 feet, original datum April 21, 1914 (discharge, 5,130 second-feet); minimum discharge, 371 second-feet June 14, 1924 (gage height, 0.97 foot). A stage of 15.3 feet (discharge, 9,250 second-feet) occurred at Keno station about May 10, 1904.

ICE.—Stage-discharge relation not affected by ice.

DIVERSIONS.—Only a small quantity of water diverted below Klamath Falls station. Practically all the flow of Lost River during the nonirrigating season is diverted into Klamath River below Klamath Falls by the Lost River diversion canal (p. 396).

REGULATION.—Water stored in Upper Klamath Lake by the California Oregon Power Co., beginning April 15, 1919. Some natural regulation due to effect of wind on the wide flat stretches of river above Keno.

ACCURACY.—Stage-discharge relation changed slightly below about 1,400 second-feet, evidently early in year. Rating curve well defined. Operation of water-stage recorder satisfactory. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting recorder graph. Records good.

Discharge measurements of Klamath River at Spencer Bridge, near Keno, Oreg., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Dec. 5.....	2.01	828	Dec. 22.....	5.59	3,010	July 12.....	2.03	763
Dec. 9.....	1.78	730	May 25.....	1.47	583	Sept. 2.....	2.47	994
Dec. 17.....	4.66	2,210	June 14.....	2.31	927			

Daily discharge, in second-feet, of Klamath River at Spencer Bridge, near Keno, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,530	1,590	1,110	1,110	482	1,360	1,140	1,180	660	1,010	1,060	988
2.....	1,470	1,690	1,040	1,260	450	1,470	1,060	965	840	988	1,140	965
3.....	1,240	1,530	840	1,470	465	1,470	1,010	840	920	965	920	1,010
4.....	1,110	1,470	760	1,530	465	1,530	1,140	820	1,080	988	965	1,010
5.....	1,080	1,470	800	1,530	465	1,530	1,260	840	1,180	942	965	965
6.....	1,590	1,470	720	1,590	450	1,530	1,140	780	1,160	820	900	1,010
7.....	1,830	1,410	720	1,590	435	1,470	1,040	700	1,140	920	920	1,060
8.....	1,890	1,110	700	1,590	500	1,360	942	800	1,210	780	920	1,110
9.....	1,710	1,060	720	1,470	1,010	1,060	1,010	622	1,210	780	942	1,110
10.....	1,650	1,110	820	1,410	1,260	1,110	1,210	640	1,010	880	920	1,010
11.....	1,410	1,310	942	1,360	1,310	1,160	1,310	622	942	740	942	1,080
12.....	1,140	1,410	920	1,410	1,360	1,240	1,360	605	900	800	888	920
13.....	1,410	1,470	800	1,360	1,650	1,040	1,260	622	880	840	920	942
14.....	1,530	1,470	740	1,410	1,710	760	1,080	640	942	906	942	1,040
15.....	1,260	1,360	1,080	1,210	1,770	760	942	640	965	920	965	1,040
16.....	1,140	1,310	1,960	1,140	1,830	1,010	1,080	622	965	840	942	1,060
17.....	1,080	1,470	2,220	1,260	1,960	1,110	1,260	622	942	820	988	1,080
18.....	965	1,470	2,420	1,260	1,960	1,180	1,160	640	920	880	965	1,110
19.....	1,240	1,530	2,720	1,310	1,890	1,110	1,160	640	965	942	888	1,110
20.....	1,360	1,530	2,880	1,260	1,960	1,160	1,140	640	988	965	1,010	1,080
21.....	1,410	1,360	2,960	1,410	1,770	1,260	1,140	640	988	1,040	988	1,140
22.....	1,470	1,310	2,960	1,530	1,590	1,110	1,140	622	1,040	1,140	1,010	1,110
23.....	1,650	1,110	2,960	1,530	1,530	1,210	988	622	1,010	1,160	988	1,160
24.....	1,710	1,310	2,960	1,470	1,470	1,110	900	640	1,140	1,040	1,010	1,160
25.....	1,710	1,410	2,960	1,530	1,060	860	900	622	1,210	988	965	1,160
26.....	1,710	1,180	2,960	1,360	860	622	1,180	622	1,080	1,080	965	1,160
27.....	1,710	988	2,490	1,210	840	535	1,260	622	1,010	988	965	1,160
28.....	1,770	1,110	2,090	1,010	1,210	622	1,310	605	1,040	965	942	1,140
29.....	1,770	1,080	1,660	900	-----	1,040	1,310	605	1,160	880	700	988
30.....	1,770	920	1,470	720	-----	1,240	1,310	622	1,060	860	760	880
31.....	1,770	-----	1,410	570	-----	1,140	-----	665	-----	920	920	-----

Monthly discharge of Klamath River at Spencer Bridge, near Keno, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	1,890	965	1,490	91,600
November.....	1,590	920	1,330	79,100
December.....	2,960	700	1,670	103,000
January.....	1,590	570	1,320	81,200
February.....	1,960	435	1,200	66,600
March.....	1,530	535	1,130	69,500
April.....	1,360	900	1,140	67,800
May.....	1,180	605	663	42,000
June.....	1,210	840	1,020	60,700
July.....	1,160	740	928	57,100
August.....	1,140	700	952	58,500
September.....	1,160	880	1,060	63,100
The year.....	2,960	435	1,160	840,000

KLAMATH RIVER NEAR COPCO, CALIF.

LOCATION.—In NW. $\frac{1}{4}$ sec. 31, T. 48 N., R. 4 W., a quarter of a mile above mouth of Fall Creek, $1\frac{1}{2}$ miles below the California Oregon Power Co.'s Copco No. 1 plant, just below tailrace of Copco No. 2 plant, and half a mile south of Copco post office, Siskiyou County, Calif.

DRAINAGE AREA.—4,300 square miles (measured on topographic and Forest Service maps).

RECORDS AVAILABLE.—October 1, 1923, to September 30, 1926.

GAGE.—Stevens 8-day water-stage recorder on right bank referred to vertical staff gage in well; inspected by operator at Fall Creek plant of the California Oregon Power Co.; Stevens continuous recorder used up to January 24, 1926.

DISCHARGE MEASUREMENTS.—Made from cable 20 feet above recorder.

CHANNEL AND CONTROL.—Bed composed of coarse gravel, some large boulders, and bedrock; practically permanent. Bank high with some brush. Channel straight above and below cable, bar 100 feet upstream causes swirls and angle at midstream at low stage.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 5.1 feet at 4 p. m. January 11 (discharge, 3,970 second-feet); minimum discharge due to occasional complete shutdown of plant at Copco, about 10 second-feet.

1924-1926: Maximum stage from recorder, 5.85 feet January 2, 1924 (discharge, 4,880 second-feet); minimum stage, that of 1926.

ICE.—None.

DIVERSIONS.—One small diversion on left bank around station.

REGULATION.—Discharge is regulated by storage in Upper Klamath Lake and the California Oregon Power Co.'s reservoir above plant at Copco No. 1. When no water is going over dam, discharge varies with load on power plant. Practically no pondage above diversion dam of Copco No. 2, but operation of radial gates may cause sudden fluctuation of short duration.

ACCURACY.—Stage-discharge relation changed above 380 second-feet on January 11. Rating curves used before and after change fairly well defined; relation curve of electrical output and discharge, well defined. Operation of water-stage recorder satisfactory except November 10, 15-25, December 29 to January 10, 19-20, 24-31. Daily discharge obtained with discharge integrator February 1 to July 2, July 19-24, August 9-15, and September 6-11; for remainder of year from the electrical output of power plant plus flow over spillway. Records good.

COOPERATION.—Records of gage height and electrical output furnished by California Oregon Power Co.

The following discharge measurements were made:

January 10, 1926: Gage height, 0.30 foot; discharge, 133 second-feet.

January 11, 1926: Gage height, 3.95 feet; discharge, 2,820 second-feet.

June 13, 1926: Gage height, 0.75 foot; discharge, 276 second-feet.

Daily discharge, in second-feet, of Klamath River near Copco, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,700	625	1,200	976	670	1,480	1,360	1,160	960	1,280	317	1,220
2.....	1,750	1,540	1,350	2,020	960	1,480	1,480	590	1,350	1,160	1,160	1,630
3.....	1,670	1,540	1,440	888	485	1,540	1,480	1,400	1,470	450	1,180	1,710
4.....	1,040	1,750	1,026	2,400	1,240	1,640	345	1,040	1,400	346	1,250	1,600
5.....	2,380	1,800	1,000	2,680	1,700	1,550	1,000	760	1,280	396	1,250	400
6.....	1,720	1,700	1,370	1,710	1,330	1,650	1,770	940	385	1,200	1,240	575
7.....	1,410	1,660	1,020	1,540	1,330	875	1,320	840	1,270	1,240	1,060	1,420
8.....	1,600	1,180	1,060	1,510	1,480	1,340	1,850	910	1,460	1,450	429	1,360
9.....	1,800	1,750	1,440	1,980	2,380	1,640	2,100	530	1,400	1,050	1,270	570
10.....	1,380	1,750	1,240	180	2,290	1,620	1,340	810	1,390	900	1,240	1,480
11.....	530	1,930	1,190	1,990	1,840	1,360	305	940	1,510	438	1,200	1,380
12.....	1,700	1,640	698	2,260	1,680	1,690	1,190	790	870	1,330	1,280	476
13.....	1,710	1,760	650	1,750	2,000	1,680	1,230	980	435	1,570	1,280	1,420
14.....	1,790	963	2,020	393	1,460	385	1,600	1,000	1,360	1,410	1,060	1,470
15.....	1,830	515	2,800	1,300	1,740	1,640	1,440	780	1,360	1,260	450	1,460
16.....	1,700	1,640	2,850	1,720	1,900	1,410	1,300	450	1,470	1,310	1,310	1,420
17.....	1,760	1,640	2,760	1,430	1,870	1,580	1,620	880	1,600	1,250	1,330	1,360
18.....	1,350	1,850	2,770	1,400	1,800	1,580	490	840	1,370	379	1,340	1,340
19.....	2,260	1,850	2,720	2,130	1,600	1,730	1,240	790	1,770	1,210	1,300	379
20.....	1,800	1,890	1,900	1,880	1,580	745	1,160	790	320	1,170	1,180	1,380
21.....	1,760	1,720	2,810	2,040	670	340	1,230	860	1,350	1,200	1,230	1,430
22.....	1,650	727	2,890	1,840	1,060	1,470	1,530	505	1,400	1,230	451	1,350
23.....	1,670	1,770	2,810	877	1,380	1,110	1,380	345	1,210	1,240	1,230	1,430
24.....	1,500	1,710	2,810	196	1,380	1,080	1,590	955	1,260	1,150	1,270	1,380
25.....	1,160	1,770	2,810	1,460	1,560	1,200	710	885	1,180	329	1,150	1,060
26.....	2,010	540	2,200	1,420	1,840	1,430	1,590	1,160	1,250	1,240	1,170	275
27.....	1,830	1,580	493	1,470	1,670	1,510	1,650	1,060	340	1,230	1,040	1,080
28.....	1,920	1,330	1,930	1,470	1,160	705	1,480	1,060	1,260	1,370	951	1,170
29.....	1,550	121	2,470	512	-----	1,150	880	705	1,260	1,340	508	1,190
30.....	1,500	1,360	2,180	659	-----	1,500	425	1,360	1,340	1,410	1,300	1,350
31.....	1,160	-----	1,280	783	-----	1,180	-----	560	-----	1,570	1,250	-----

Monthly discharge of Klamath River near Copco, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	2,380	530	1,630	100,000
November.....	1,930	515	1,470	87,500
December.....	2,890	493	1,840	113,000
January.....	2,680	180	1,440	88,500
February.....	2,380	485	1,500	83,300
March.....	1,730	340	1,300	79,900
April.....	2,100	305	1,300	77,400
May.....	1,400	345	830	51,000
June.....	1,600	320	1,180	70,200
July.....	1,570	329	1,100	67,600
August.....	1,340	317	1,090	67,000
September.....	1,710	275	1,190	70,800
The year.....	2,890	180	1,320	956,000

KLAMATH RIVER NEAR REQUA, CALIF.

LOCATION.—In sec. 29, T. 13 N., R. 2 E., at Scofield Ferry, 9 miles above Requa, Del Norte County, and mouth of river, and 30 miles below mouth of Trinity River.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—December 25, 1910, to June 30, 1926, when station was discontinued.

GAGE.—Staff in four sections on right bank at ferry cable; read by S. A. McBeth.

DISCHARGE MEASUREMENTS.—Made from ferry cable.

CHANNEL AND CONTROL.—Gravel; fairly permanent. Banks are high and not subject to overflow.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period, 23.5 feet at 4.10 p. m. February 4 (discharge, about 102,000 second-feet); minimum stage recorded, 5.9 feet at 3 p. m. November 3 (discharge, 2,420 second-feet).

1911-1926: Maximum stage recorded, 33.3 feet at 1 p. m. February 2, 1915 (discharge, from extension of rating curve, about 173,000 second-feet); minimum stage recorded, 4.7 feet July 31 and August 1, 1924 (discharge, 1,340 second-feet).

DIVERSIONS.—Water is diverted for irrigation and power from main river and tributaries in Oregon and California.

REGULATION.—Regulation at California Oregon Power Co.'s plants has considerable effect upon stage.

ACCURACY.—Stage-discharge relation changed February 4. Rating curves well defined between 2,000 and 60,000 second-feet. Staff gage read to half-tenths once daily. Daily discharge ascertained by applying daily gage height to rating table. Records fair.

The following discharge measurements were made:

June 9, 1926: Gage height, 7.26 feet; discharge, 4,680 second-feet.

September 24, 1926: Gage height, 6.31 feet; discharge, 2,580 second-feet.

September 24, 1926: Gage height, 6.26 feet; discharge, 2,510 second-feet.

Daily discharge, in second-feet, of Klamath River near Requa, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1	3,600	3,820	8,360	8,680	27,900	17,500	10,800	10,100	5,040
2	3,600	3,600	9,000	10,600	39,700	17,000	10,800	10,100	5,040
3	3,820	2,420	9,640	15,200	59,700	16,600	10,800	11,200	5,040
4	3,600	2,560	9,640	18,500	102,000	16,200	11,200	11,900	4,780
5	3,820	3,600	9,960	14,400	89,700	15,700	11,600	10,100	4,520
6	4,280	4,040	9,320	9,000	73,700	15,200	11,600	9,780	4,520
7	4,280	4,040	8,680	6,500	72,300	15,200	12,300	9,100	4,520
8	4,280	4,040	7,400	6,200	66,700	15,200	12,700	8,760	4,520
9	4,280	4,040	7,100	5,900	61,100	14,800	13,100	8,760	4,520
10	4,280	4,040	6,800	5,620	52,000	14,800	13,900	8,440	4,000
11	4,280	4,280	6,500	5,620	42,700	15,200	15,700	8,440	4,000
12	4,280	4,540	6,200	5,620	38,500	15,200	18,400	8,120	4,000
13	4,280	5,900	6,200	5,620	33,700	14,800	20,600	8,120	4,000
14	4,280	7,100	5,900	5,900	27,900	15,200	22,000	8,120	4,000
15	4,280	7,720	5,620	6,200	26,900	15,200	18,400	8,120	4,000
16	4,280	8,040	5,620	6,200	26,400	15,700	15,700	7,800	3,760
17	4,280	10,600	7,400	6,200	25,400	15,700	13,500	7,480	3,760
18	4,280	16,400	9,320	6,200	24,900	15,700	12,300	7,480	3,540
19	4,280	13,200	9,960	5,620	24,400	15,700	12,300	7,480	3,540
20	4,280	7,400	11,300	6,200	22,900	13,900	12,300	7,160	3,540
21	4,040	7,400	12,000	7,100	22,400	13,500	12,300	6,840	3,540
22	4,040	8,040	12,800	9,000	22,000	13,100	12,300	6,200	3,540
23	4,040	10,600	14,000	8,360	21,600	12,700	12,300	5,600	3,330
24	4,040	30,700	15,600	7,720	21,100	12,300	11,900	5,320	3,130
25	4,040	22,600	14,400	6,500	20,200	11,900	11,900	5,040	3,130
26	2,560	17,200	12,800	5,340	19,300	11,600	11,600	5,040	3,130
27	4,040	13,200	11,300	6,800	18,400	11,200	11,600	4,780	2,940
28	3,820	9,640	9,000	8,680	18,000	10,800	11,200	5,040	2,940
29	3,820	9,000	8,040	10,600	-----	11,200	10,800	5,040	2,760
30	3,820	8,360	7,100	10,800	-----	10,800	10,500	5,320	2,760
31	3,820	-----	7,400	23,900	-----	10,800	-----	5,040	-----

Monthly discharge of Klamath River near Regua, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	4, 280	2, 560	4, 020	247, 000
November.....	30, 700	2, 420	8, 600	512, 000
December.....	15, 600	5, 620	9, 170	564, 000
January.....	23, 900	5, 340	8, 730	537, 000
February.....	102, 000	18, 000	39, 300	2, 180, 000
March.....	17, 500	10, 800	14, 200	373, 000
April.....	22, 000	10, 500	13, 200	786, 000
May.....	11, 900	4, 780	7, 610	468, 000
June.....	5, 040	2, 760	3, 860	230, 000
The period.....				6, 400, 000

NORTH FORK OF SPRAGUE RIVER NEAR BLY, OREG.

LOCATION.—1925: In NE $\frac{1}{4}$ sec. 4, T. 36 S., R. 14 E., one-fourth mile northeast of Amos Lundy ranch, $5\frac{1}{2}$ miles north of Bly, Klamath County. 1926: In NW $\frac{1}{4}$ sec. 2, T. 36 S., R. 14 E., about 2 miles below diversion point of Sprague River Irrigation Co.'s canal, and $9\frac{1}{2}$ miles northeast of Bly.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—April 18 to September 30, 1917; March 27 to July 31, 1918; April 1 to August 31, 1925; and April 1 to September 30, 1926, when station was discontinued.

GAGE.—Gages on left bank. Gage used in 1925 read by Amos Lundy; in 1926, by James McFerren. Gages used in 1917 and 1918 in sec. 35, T. 35 S., R. 14 E., near 1926 location.

DISCHARGE MEASUREMENTS.—Made by wading.

CHANNEL AND CONTROL.—Bed composed of gravel overlying hardpan; practically permanent. Channel very crooked; banks are not overflowed except at extremely high stages.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period April 1 to September 30, 1925, 4.96 feet April 16 (discharge, 580 second-feet); minimum stage recorded, 1.85 feet August 7 (discharge, 31 second-feet).

Maximum stage recorded during period April 1 to September 30, 1926, 1.74 feet in forenoon of April 11 (discharge, 98 second-feet); minimum stage recorded, 0.96 foot in forenoon of July 11 (discharge, 5 second-feet).

1917–18, 1925–26: Maximum discharge recorded, that of April 16, 1925; minimum discharge recorded, that of July 11, 1926.

DIVERSIONS.—Sprague River Irrigation Co.'s canal diverts water above both gages; practically no other diversion above station.

REGULATION.—None.

ACCURACY.—Stage-discharge relation permanent. Rating curves well defined.

In 1925 gage read to hundredths once a day during April and May and occasionally June to September. In 1926 gage read to hundredths twice a day April to July and once a day to September 30. Daily discharge ascertained by applying daily or mean daily gage height to rating table; discharge, for days or periods gage was not read, interpolated or estimated by comparison with records of South Fork of Sprague River. Records poor for long periods in 1925, for which discharge was estimated; otherwise good.

COOPERATION.—Records furnished by State engineer of Oregon.

Discharge measurements of North Fork of Sprague River near Bly, Oreg., during the years ending September 30, 1925 and 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
1925	Feet	Sec.-ft.	1925	Feet	Sec.-ft.	1926	Feet	Sec.-ft.
Apr. 3.....	2.59	78	May 22.....	4.52	411	Apr. 2.....	1.54	62
Apr. 19.....	3.78	232	June 23.....	2.15	61	May 23.....	1.12	11.2
May 18.....	3.44	174	Aug. 7.....	1.85	34	July 13.....	1.16	15.4
May 21.....	4.72	482	Sept. 26.....	1.96	35	Sept. 3.....	1.14	12.5

Daily discharge, in second-feet, of North Fork of Sprague River near Bly, Oreg., for the years ending September 30, 1925 and 1926

Day	1925					1926					
	Apr.	May	June	July	Aug.	Apr.	May	June	July	Aug.	Sept.
1.....	87	145	80	48	34	60	36	6	5	11	13
2.....	87	169		35		58	34	6		16	13
3.....	87	134		36		69	29	6		13	13
4.....	87	198		37		69	28	6		12	13
5.....	87	206		38		79		6		9	13
6.....	92	145	80	37	45	94		6	17	11	16
7.....	110	206		34		90	27	5		10	16
8.....	130	176		34		94		6		11	18
9.....	151	264				86		6		10	18
10.....	198	183				94		6		12	18
11.....	274	170	80		45	96	26	6	17	12	18
12.....	297					92	25	5		10	17
13.....	297					94	23	6		9	17
14.....	274	170					19			12	16
15.....	408						19			9	16
16.....	580		52		52	90	17	6	14	10	18
17.....	544	169					33			12	20
18.....	322	151					49			13	20
19.....	253	151					49	5		22	18
20.....	264	176		44			44	6		15	20
21.....	176	474	50		45	86	21		14	15	22
22.....	206	408				85	12			15	20
23.....	169	169				81	10			18	20
24.....	124	169				77	10	6		16	20
25.....	134	145				74	10			14	
26.....	145	169	50		45	64	9		14	16	19
27.....	119	163				54	10	6		16	
28.....	124	163				50	9			18	
29.....	92	169				43	8	6		15	
30.....	169	183				39	8			10	
31.....		114					7			10	13

NOTE.—Discharge estimated for periods of no gage-height record, which were Apr. 1, 2, 4, July 3, 4, Aug. 8, 9, 1925, and Apr. 1, May 24, July 12, Aug. 3, 4, Sept. 1, 2, 4, 9, 12-13, 1926, and all periods included by braces in both years.

Monthly discharge of North Fork of Sprague River near Bly, Oreg., for the years ending September 30, 1925 and 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1925				
April.....	580	87	203	12,100
May.....	474	114	188	11,600
June.....			72.1	4,290
July.....			42.3	2,600
August.....			41.8	2,570
The period.....				33,200
1926				
April.....	96	39	78.6	4,680
May.....	49	7	22.8	1,400
June.....	6	5	5.9	351
July.....	22	5	12.2	750
August.....	16	9	12.3	756
September.....	22	13	17.5	1,040
The period.....				8,980

SPRAGUE RIVER NEAR BEATTY, OREG.

LOCATION.—In NW. $\frac{1}{4}$ sec. 20, T. 36 S., R. 13 E., 2 miles above highway bridge on road from Yainax to Silver Lake, 4 miles above mouth of Sycan River, and 3 miles east of Beatty post office, Klamath County.

DRAINAGE AREA.—513 square miles.

RECORDS AVAILABLE.—April 19, 1912, to September 30, 1926, fragmentary; station discontinued September 30, 1926.

GAGE.—Vertical staff gage on left bank.

CHANNEL AND CONTROL.—Bed composed of sand and gravel; no defined control as stream is very sluggish for miles above and below gage; banks subject to overflow at a stage of about 5 feet, and considerable water may flow in a cut-off across a bend to right of station.

DISCHARGE MEASUREMENTS.—Made from cable about 100 feet below gage.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period April 1 to September 30, 1.87 feet April 13 (discharge, 258 second-feet); minimum stage recorded, 0.22 foot June 20 (discharge, 57 second-feet).

1912-1926: Maximum stage from water-stage recorder, 5.75 feet April 24, 1917 (discharge, 1,320 second-feet); minimum discharge, 57 second-feet June 30, 1924, and June 20, 1926. Discharge of 2,080 second-feet was recorded at a station 2 miles downstream, on May 21, 1904.

ICE.—Stage-discharge relation not seriously affected by ice, as stream is spring fed.

DIVERSIONS.—Considerable water is diverted near Bly for irrigation.

REGULATION.—None.

ACCURACY.—Stage-discharge relation somewhat unstable. Well-defined rating curves used April 1 to May 9 and June 20 to September 30; shifting-control method used May 17 to June 16. Gage read to hundredths, about twice a week on average. Daily discharge ascertained by applying daily gage height to rating table, and interpolating for days of no gage readings. Records fair.

COOPERATION.—Gage-height record obtained and records prepared by office of State engineer.

Discharge measurements of Sprague River near Beatty, Oreg., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
Apr. 1.....	<i>Feet</i> 1.24	<i>Sec.-ft.</i> 180	May 23.....	<i>Feet</i> 0.56	<i>Sec.-ft.</i> 76	Sept. 3.....	<i>Feet</i> 0.40	<i>Sec.-ft.</i> 78
Apr. 3.....	1.15	163	July 14.....	.40	77			

Daily discharge, in second-feet, of Sprague River near Beatty, Oreg., for the year ending September 30, 1926

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.		
1	169	139	66	64	72	77	16	206	125	62	75	67	85		
2	169		66	64		77	17		99	62					
3	169		64	64		77	18		88	60		63			
4	181		66	64		77	19								
5	220	139	66	64	72	77	20		57	88					
6		139				77	21		77		60	72			
7		157				72	22					64			
8		157				72	23								
9	151	72		80	24	181				64		88			
10	125				82					25			66		
11					85	26	72			66					
12					75	27				66					
13	258	70		85	28	139				66		88			
14	245	77			29					66					
15	232	77			30					66					
		75	31		66										

Monthly discharge of Sprague River near Beatty, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
April.....	258	139	200	11,900
May.....	157		109	6,700
June.....	66	57	62.4	3,710
July.....	77	64	70.0	4,300
August.....	72	62	67.2	4,130
September.....	88	77	83.7	4,980
The period.....				35,700

SPRAGUE RIVER AT MCCREADY RANCH, NEAR CHILOQUIN, OREG.

LOCATION.—In sec. 30, T. 34 S., R. 9 E., 200 yards north of house of F. F. McCready, 2 miles below McCready Spring, and 13 miles above Chiloquin, Klamath County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—July 10, 1920, to September 30, 1926.

GAGE.—Enamel-faced vertical staff on right bank, and auxiliary gage about $3\frac{1}{2}$ miles upstream by river. Gage reader, F. F. McCready.

DISCHARGE MEASUREMENTS.—Made at extreme low stages by wading near regular gage; at medium and high stages from cable 200 feet above gage.

CHANNEL AND CONTROL.—Bed composed of hardpan and pumice sand. One channel up to stage of 4 feet above which left bank is overflowed through numerous channels. No definite control. Irrigation dam $1\frac{1}{2}$ miles below gage, constructed in April, 1926, causes backwater in varying degree. Logs in booms and jams also affect stage-discharge relation.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 2.81 feet on auxiliary gage at 6 p. m. February 7 (discharge, 865 second-feet); river too low to read either gage May 26 and 27 (discharge, estimated about 50 second-feet).

1920–1926: Maximum stage recorded, 6.6 feet April 29, 1922 (discharge, 3,560 second-feet); minimum discharge recorded, that of May 26 and 27, 1926. For station 20 miles upstream near Yainax, about May 15, 1904, a discharge of 4,390 second-feet has been derived from high-water marks.

DIVERSIONS.—Considerable water diverted for irrigation, especially near Bly.

REGULATION.—Irrigation dam near Yainax regulates flow at times.

ACCURACY.—Stage-discharge relation unstable at both gages. For regular gage rating curve well defined October 1 to February 7 and fairly well defined thereafter; for auxiliary gage rating curve was fairly well defined. Regular gage read to hundredths once daily except during part of May; auxiliary gage read once daily December 16 to June 15 and occasionally thereafter. Observer's notes concerning channel obstructions are good. Daily discharge ascertained by applying daily gage reading to rating table as follows: At regular gage October 1 to December 9 and July 20 to September 8 and at auxiliary gage December 16, May 29, and July 15–19 (shifting-control method used October 24 to December 9, December 16–29, July 15–19, and September 1–8; mean discharge estimated December 10–15, May 12–16, and 26–27). Mean discharge for June, July 1–14, and September 9–30 computed by deducting inflow from Williamson River below Sprague River. Records for October to April, good; for remainder of year, poor.

Discharge measurements of Sprague River at McCready ranch, near Chiloquin, Oreg., during the year ending September 30, 1926

Date	Gage height		Discharge	Date	Gage height		Discharge
	Regular gage	Auxiliary gage			Regular gage	Auxiliary gage	
	<i>Feet</i>	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 30.....	1.39		253	Apr. 3.....	1.96	0.54	318
Dec. 8.....	1.89	0.59	300	May 23.....	1.00	.28	220
Jan. 9.....	1.63	.31	283	July 15.....	1.36	.18	190
Feb. 27.....	1.07	.22	243	Sept. 4.....	.34	.12	112

Daily discharge, in second-feet, of Sprague River at McCready ranch, near Chiloquin, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Sept.
1	265	265	265	268	286	400	304	313	190	190	175
2	326	285	265	259	268	420	295	313		190	168
3	285	285	285	313	322	400	313	295		182	122
4	265	285	348	268	470	400	313	268		175	115
5	265	285	326	286	520	380	313	322		182	122
6	265	285	305	259	700	380	322	331	200	175	152
7	305	285	305	277	865	360	295	360		175	182
8	305	285	295	268	810	360	360	340		175	205
9	305	285	305	268	755	360	360	295		175	
10	326	285		268	670	331	400	250		152	
11	305	246		277	595	331	420	268	208	145	
12	305	265	300	286	545	322	420			160	
13	305	285		295	470	322	445			145	
14	305	285		313	445	322	545	250		122	
15	326	326		304	400	331	495			122	
16	326	371	268	286	360	322	445		250	122	
17	326	348	340	268	340	322	400	241	200	130	
18	305	371	286	268	340	304	400	241	192	130	
19	305	371	277	268	331	304	400	208	192	138	
20	305	371	322	259	331	313	380	224	182	145	200
21	305	371	286	268	331	322	380	215	182	160	
22	305	371	277	259	331	322	380	215	182	152	
23	305	371	304	268	331	322	380	224	190	160	
24	305	371	304	259	331	331	380	420	190	160	
25	285	348	313	259	331	340	360	277	190	152	
26		246	322	259	322	322	340	50	190	160	
27		246	313	259	286	322	340	50	190	198	
28	266	246	313	259	360	322	322	164	190	309	
29		265	313	259		322	313	208	190	205	
30	246	265	295	268		313	313	200	190	175	
31	265		304	286		304		200	190	183	

Monthly discharge of Sprague River at McCready ranch, near Chiloquin, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	326	246	294	18, 100
November	371	246	306	18, 200
December	348	265	301	18, 500
January	313	259	273	16, 800
February	865	268	444	24, 700
March	420	304	340	20, 000
April	545	295	371	22, 100
May	420	50	250	15, 400
June			180	10, 700
July			197	12, 100
August	309	122	166	10, 200
September			188	11, 200
The year	865	50.	275	199, 000

* Derived from record on Williamson River below Sprague River.

SPRAGUE RIVER IRRIGATION CO.'S CANAL NEAR BLY, OREG.

LOCATION.—In NE. $\frac{1}{4}$ sec. 10, T. 36 S., R. 14 E., 5 miles north of Bly, Oreg.

RECORDS AVAILABLE.—April 27 to July 31, 1918; May 1 to September 30, 1925; and April 26 to September 30, 1926, when station was discontinued.

GAGE.—Vertical staff gage 500 feet below a conspicuous drop in canal; read by A. S. Conner in 1925 and by G. S. Boyd in 1926. Gage used in 1918, 2 $\frac{1}{2}$ miles below head gate in sec. 35, T. 35 S., R. 14 E.

CHANNEL AND CONTROL.—Canal is earth and rock; control shifts slightly.

DISCHARGE MEASUREMENTS.—Made by wading.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period May 1 to September 30, 1925, 2.18 feet June 20 and 22 (discharge, 35 second-feet). Maximum stage recorded during period April 26 to September 30, 1926, 2.19 feet on May 23 (discharge, 34 second-feet). Canal dry at times.

1918, 1925, and 1926: Maximum discharge recorded, that of June 20 and 22, 1925.

ACCURACY.—Stage-discharge relation changed slightly during winter. Rating curves fairly well defined. Staff gage read to hundredths once a day with a few missing days and periods. Daily discharge ascertained by applying daily gage height to rating table; discharge estimated or interpolated for days gage was not read. Records good except for estimated periods for which they are fair.

COOPERATION.—Records furnished by State engineer of Oregon.

Sprague River Irrigation Co.'s canal diverts from North Fork of Sprague River in NW. $\frac{1}{4}$ sec. 36, T. 35 S., R. 14 E. Small quantities of water are occasionally returned to river through four wasteways between intake and gage.

Discharge measurements of Sprague River Irrigation Co.'s canal near Bly, Oreg., during the years ending Sept. 30, 1925 and 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1925	Feet	Sec.-ft.	1925	Feet	Sec.-ft.	1926	Feet	Sec.-ft.
Apr. 2.....	0.52	1.4	Aug. 7.....	1.12	8.9	May 23.....	2.18	33.7
May 18.....	1.85	23.9	Sept. 26.....	.80	4.4	July 13.....	1.46	13.7
June 24.....	2.00	30.0				Sept. 3.....	1.59	15.9

Daily discharge, in second-feet, of Sprague River Irrigation Co.'s canal near Bly, Oreg., for the year ending September 30, 1925 and 1926

Day	1925					1926					
	May	June	July	Aug.	Sept.	Apr.	May	June	July	Aug.	Sept.
1.....	6	0	30	2	4		31	32	26	17	17
2.....	14	0	34	2			31	32	25	15	17
3.....	14	4	32				31	32	25	13	17
4.....	14	4	32				32	31	25	20	17
5.....	23	4	32	6				31	25	20	17
6.....	0	4	30		11			32	25	20	17
7.....	0	4	30	9			32	32	26	20	16
8.....	20	4	30	6				31	26	20	15
9.....	28	4	30	3				30	26	20	14
10.....	28	10	30				32	28	26	20	14
11.....	28	23	18		23		32	28	21	20	13
12.....	28	25	18				32	28	16	20	13
13.....	26	28	18				32	28	15	20	13
14.....	26	28	18				32	28	14	20	13
15.....	26	26	9				32	28	13	20	12
16.....	26	26	9	4	24		32	28	18	20	12
17.....	23	26	18				34	28	18	20	11
18.....	23	30	18				0	28	12	20	12
19.....	23	30	18				0	28	7	20	12
20.....	0	35	18				0	28	14	20	12
21.....	0	34	14		26		28	28	10	20	12
22.....	0	35	0				32	28	7	20	12
23.....	0	34	0	4			34	28	15	20	12
24.....	14	29	0	4			34	28	14	20	13
25.....	6	29	0	4			34	28	16	20	13
26.....	6	28	2		4	15	34	28	17	18	13
27.....	16	28				30	34	27	16	18	13
28.....	26	28				30	34	27	15	18	13
29.....	29	29	2	4		30	34	26	10	18	13
30.....	29	30				30	34	26	20	18	14
31.....	34						32		20	17	-----

NOTE.—Canal practically dry from some time in October, 1925, to about noon Apr. 26, 1926. Braced figures show estimated mean discharge for periods included. Daily discharge interpolated for frequent periods of 1 to 3 days at other times.

Monthly discharge of Sprague River Irrigation Co.'s canal near Bly, Oreg., during the years ending September 30, 1925 and 1926

Month	Discharge in second-feet .			Run-off in acre-feet
	Maximum	Minimum	Mean	
1925				
May	34	0	17.3	1,060
June	35	0	20.6	1,230
July	34	0	16.1	990
August	9	2	4.32	266
September	26		14.2	845
The period				4,400
1926				
April 26-30	30		27.0	268
May	34	0	29.3	1,800
June	32	26	28.8	1,710
July	26	7	18.2	1,120
August	20	13	19.1	1,170
September	17	12	13.7	815
The period				6,880

SOUTH FORK OF SPRAGUE RIVER NEAR BLY, OREG.

LOCATION.—In SE. $\frac{1}{4}$ sec. 6, T. 37 S., R. 15 E., 1,000 feet below head of Bly ditch, 3 miles southeast of Bly, Klamath County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—May 1 to October 18, 1925, and April 18 to September 30, 1926, station discontinued.

GAGE.—Vertical staff on left bank; read by O. W. Howard.

DISCHARGE MEASUREMENTS.—Made by wading or from footbridge.

CHANNEL AND CONTROL.—Bed composed of firmly packed gravel; fairly permanent; affected somewhat by aquatic growth. Channel very crooked; left bank high; right bank low, both being covered with willows.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period May 1 to October 18, 1925, 3.80 feet May 21 (discharge, 337 second-feet); minimum stage recorded, 0.64 foot September 6 (discharge, 5 second-feet). Maximum stage recorded during period April 18 to September 30, 1926, 1.20 feet April 18, 22, and 23 (discharge, 35 second-feet); minimum stage recorded, 0.31 foot on June 13, 15, 17, and 19 (discharge, 1.3 second-feet on June 13 and 15).

ICE.—None during periods of record.

DIVERSIONS.—Bly ditch is the only important diversion above. Water is occasionally diverted 800 feet above gage and 200 feet below Bly ditch intake into the East Side Slough for irrigation on Bell ranch; on April 2, 1926, the measured flow of this diversion around gage was 4.5 second-feet, but on May 24, 1926, it was dry.

REGULATION.—None.

ACCURACY.—Stage-discharge relation changed during winter; affected by growth of aquatic plants during September, 1925, and May 1 to June 20, 1926. Two fairly well defined rating curves used. Gage read to hundredths once daily during most of May and June, 1925, and April and May, 1926, and two or three times a week July to September, 1926. Daily discharge ascertained by applying daily gage reading to rating table. Shifting-control method used during September, 1925, and May 1 to June 20, 1926. Records fair.

COOPERATION.—Part of field data obtained by office of State engineer.

Discharge measurements of South Fork of Sprague River near Bly, Oreg., during the years ending September 30, 1925 and 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
1925	<i>Feet</i>	<i>Sec.-ft.</i>	1925	<i>Feet</i>	<i>Sec.-ft.</i>	1926	<i>Feet</i>	<i>Sec.-ft.</i>
Mar. 27.....	2.07	93	May 22.....	3.30	254	Apr. 2.....	1.14	31.7
Apr. 18.....	3.20	210	June 24.....	.96	19	May 24.....	*.57	4.3
May 18.....	2.18	93	Aug. 6.....	.71	8.8	July 14.....	.38	2.7
May 21.....	3.75	326	Sept. 26.....	.76	7.0	Sept. 3.....	.36	2.3

* Affected by aquatic growth.

Daily discharge, in second-feet, of South Fork of Sprague River near Bly, Oreg., for the year ending September 30, 1925 and 1926

Day	1925						1926					
	May	June	July	Aug.	Sept.	Oct.	Apr.	May	June	July	Aug.	Sept.
1.....	180	142	20	8	5			20	2.5	2.9	2.2	2.5
2.....	180	130	16	8	5			20				
3.....	180	119	12	8	5			24			2.3	2.6
4.....	194	119	12	8	5	7		22	1.8	2.8		
5.....	194	99	12	8	5			24		2.8	2.3	2.3
6.....	194	90	12	8	5			24				
7.....	194	74	12	8				22	1.9	2.6	2.5	
8.....	194	74	12	8				22	1.9		2.5	2.6
9.....	180	67	11	8				21	1.8	2.6		
10.....	167	67	11	8	5			20	1.6		2.3	
11.....	167	67	12	8		11		17	1.8	2.5		2.5
12.....	154	47	11	8				15		2.5		2.6
13.....	130	47	11	8				13	1.3		2.1	
14.....	124	44	11	8	5			11		2.5		2.8
15.....	114	41	11	8				9.2	1.3		1.8	
16.....	114	40	10	8				7.7		2.3		2.9
17.....	112	35	10	8				6.6	1.5		1.8	
18.....	109	32	10	8				6.3				3.1
19.....	99	32	10	8		10	35	6.3	1.5	2.2	2.1	3.1
20.....	143	30	13	6	6		35	6.0	1.6			
21.....	337	29	16	6				5.0		2.1		3.3
22.....	242	25	13	6			35	4.6	1.8		2.1	
23.....	210	22	13	7			35	4.5		2.1		
24.....	180	20	13	6			34	4.4	1.9			3.5
25.....	160	21	13	6			34	4.2			2.3	
26.....	145	22	11	6	7		34	3.8	1.9	2.1		3.5
27.....	145	22	10	6	7		34	3.4	1.9			
28.....	130	22	10	6	7		33	3.1		1.9	2.5	
29.....	124	20	10	6	7		32	3.0	2.1		2.6	3.7
30.....	99	20	10	6	7		28	2.8	2.1	1.9		
31.....	99		10	6				2.8				

NOTE.—Braced figures represent estimated or interpolated mean discharge for period indicated. Daily discharges interpolated for frequent periods of from 1 to 4 days at other times.

Monthly discharge of South Fork of Sprague River near Bly, Oreg., for the years ending September 30, 1925 and 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1925				
May.....	337	99	161	9,900
June.....	142	20	54.0	3,210
July.....	20	10	11.9	732
August.....	8	6	7.3	449
September.....	7	5	5.7	339
The period.....				14,600
1926				
April 18-30.....	35	28	33.8	871
May.....	24	2.8	11.6	713
June.....	2.5	1.3	1.79	107
July.....	2.9	1.9	2.39	147
August.....	2.6	1.8	2.24	138
September.....	3.7	2.3	2.93	174
The period.....				2,150

NOTE.—Mean discharge for June to September, 1926, is mean for days on which gage was read.

BLY CANAL NEAR BLY, OREG.

LOCATION.—In NW. $\frac{1}{4}$ sec. 8, T. 37 S., R. 15 E., 600 feet below head of ditch and 3 miles southeast of Bly, Klamath County.

RECORDS AVAILABLE.—May 1 to October 18, 1925, and April 22 to June 30, 1926; station discontinued.

GAGE.—Vertical staff on left bank; read by O. W. Howard.

DISCHARGE MEASUREMENTS.—Made by wading 200 feet above gage.

CHANNEL AND CONTROL.—Bed composed of earth and loose rock; fairly permanent. Channel fairly straight.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period May 1 to September 30, 1925, 2.68 feet May 21 (discharge, 32 second-feet); minimum stage recorded, 1.47 feet August 6–19 (discharge, 4 second-feet). Maximum stage recorded during period April 22 to June 30, 1926, 2.18 feet on May 5 and 6 (discharge, 17 second-feet). No record of summer minimum.

ACCURACY.—Stage-discharge relation practically permanent; affected by growth of aquatic plants June 22–30, 1926. Rating curve well defined. Staff gage read to hundredths generally once a day except July to September, 1925, when it is read one to three times a week. Daily discharge ascertained by applying daily gage reading to rating table; discharge for days gage was not read, estimated or interpolated. Records poor May 15, 1925, and June 15–30, 1925, because of uncertainties in gage-height record; otherwise, good.

COOPERATION.—Records furnished by State engineer of Oregon.

Bly Canal diverts from South Fork of Sprague River in NW. $\frac{1}{4}$ sec. 8, T. 37 S., R. 15 E., about 1,000 feet above gage on South Fork. It is used to irrigate land lying mostly along south side of South Fork and on both sides of Fishhole Creek, in the general vicinity of Bly.

Discharge measurements of Bly Canal near Bly, Oreg., during the years ending September 30, 1925 and 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
1925	Feet	Sec.-ft.	1925	Feet	Sec.-ft.	1926	Feet	Sec.-ft.
Mar. 26-----	1.17	1.6	Sept. 26-----	1.82	8.6	July 14-----	^a 1.53	3.4
May 8-----	2.07	15.0				Sept. 3-----	^a 1.76	4.4
May 21-----	2.60	294	1926					
June 24-----	2.09	146	Apr. 2-----	.78	.1			
Aug. 6-----	1.48	4.5	May 24-----	1.90	11.1			

* Affected by willows and aquatic plants.

Daily discharge, in second-feet, of Bly Canal near Bly Oreg., for the years ending September 30, 1925 and 1926

Day	1925						1926		
	May	June	July	Aug.	Sept.	Oct.	Apr.	May	June
1.....	9	7	15	6	10	8		13	9
2.....	9	6	15	6	10	8		13	9
3.....	9	6	15	6	10	8		13	9
4.....	9	5	14	5	10	8		14	9
5.....	10	7	14	5	10			17	8
6.....	10	7	13	4	10			17	7
7.....	10	7	9	4		8		17	7
8.....	8	7	9	4				17	7
9.....	10	9	9	4				15	7
10.....	11	8	8	4	10			15	7
11.....	11	7	8	4		8		14	7
12.....	12	15	9	4				13	7
13.....	11	15	8	4				12	7
14.....	10	14	8	4	10			15	7
15.....	10	14	8	4		8		17	7
16.....	9	13	8	4				15	7
17.....	10	13	8	4				14	7
18.....	11	18	8	4		7		14	7
19.....	10	17	7	4				14	7
20.....	17	18	8	6	9			13	7
21.....	32	18	11	6				13	7
22.....	18	18	10	6			9	12	7
23.....	18	17	10	11			9	12	7
24.....	17	14	9	11			7	11	6
25.....	13	16	9	11			8	11	6
26.....	10	17	9	11	9		8	11	6
27.....	10	17	8				8	10	6
28.....	9	17	8	10	9		8	10	6
29.....	8	17	8	10			8	9	6
30.....	7	16	7	10			8	9	6
31.....	7		6	10				9	

NOTE.—Canal practically dry from Oct. 18 to some time in April. Braced figures show estimated mean discharge for periods indicated. Daily discharge interpolated for many days on which gage was not read.

Monthly discharge of Bly Canal near Bly, Oreg., for the years ending September 30, 1925 and 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
1925				
May.....	32	7	11.5	707
June.....	18	5	12.7	756
July.....	15	6	9.5	584
August.....	11	4	6.3	387
September.....	10		9.5	565
October.....	8	0	4.6	283
The period.....				3,280
1926				
April 22-30.....	9	7	8.1	145
May.....	17	9	13.2	812
June.....	9	6	7.1	422
The period.....				1,380

MODOC POINT CANAL NEAR CHILOQUIN, OREG.

LOCATION.—In SE. $\frac{1}{4}$ sec. 3, T. 35 S., R. 7 E., at intake 1 mile south of Chiloquin, Klamath County.

RECORDS AVAILABLE.—June 14, 1915, to September 30, 1919, and irrigation seasons of 1920, 1921, and 1923 to 1926.

GAGE.—Vertical staff on left bank about 150 feet below head gates used beginning May 22, 1926. Inclined staff on left slope of concrete-lined section, about 100 feet below head gates used previously; read by C. Clark.

CHANNEL AND CONTROL.—Earth section of channel begins immediately below gage; bottom width, 10 feet; grade, 2.64 feet to the mile.

EXTREMES OF DISCHARGE.—Maximum discharge, 22 second-feet May 27 to June 13; canal dry during winter.

1915-1926: Maximum quantity diverted, 95 second-feet July 10, 1915. Most of water is turned back into river at first wasteway. Canal dry at times.

ACCURACY.—Stage-discharge relation unstable. Fairly well defined rating curve used April 25 to May 31; shifting-control method used thereafter. Gage read to hundredths once a day. Daily discharge ascertained by applying daily gage height to rating table. Records fair.

Modoc Point Canal of the United States Indian Service diverts water from Sprague River in SE. $\frac{1}{4}$ sec. 3, T. 35 S., R. 7 E. for irrigation of lands lying along shore of Upper Klamath Lake, east of lower course of Williamson River.

Discharge measurements of Modoc Point Canal near Chiloquin, Oreg., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
May 22.....	1.14	18.8	Sept. 5.....	1.15	17.6
July 15.....	1.34	16.8	Oct. 26.....	.08	.2

* Discharge estimated.

Daily discharge, in second-feet, of Modoc Point Canal near Chiloquin, Oreg., for the year ending September 30, 1926

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.....		18	21	20	18	18	16.....		15	21	17	20	18
2.....		19	21	20	18	18	17.....		15	21	18	20	18
3.....		19	22	20	18	18	18.....		0	21	18	20	18
4.....		19	22	20	17	18	19.....		20	21	18	20	16
5.....		19	22	20	16	18	20.....		20	21	18	20	16
6.....		19	22	20	16	18	21.....		20	20	19	20	16
7.....		19	22	20	15	18	22.....		19	20	19	20	16
8.....		19	22	20	18	18	23.....		20	20	18	20	16
9.....		18	22	17	20	18	24.....		20	20	18	20	16
10.....		15	22	17	19	17	25.....	18	20	20	19	20	16
11.....		15	22	16	20	17	26.....		20	20	20	20	16
12.....		15	22	17	20	17	27.....		22	21	18	20	16
13.....		15	22	18	20	17	28.....		22	21	17	20	16
14.....		15	21	18	20	18	29.....		22	21	17	18	16
15.....		15	21	17	20	18	30.....		22	21	17	18	16
							31.....		22		17	18	

Monthly discharge of Modoc Point Canal near Chiloquin, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
April 25-30.....			18.0	214
May.....	22	0	18.0	1,110
June.....	22	20	21.2	1,260
July.....	20	17	18.3	1,130
August.....	20	15	19.1	1,170
September.....	18	16	17.1	1,020
The period.....				5,900

WOOD RIVER AT FORT KLAMATH, OREG.

LOCATION.—In sec. 22, T. 33 S., R. 7½ E., at highway bridge one-fourth mile east of Fort Klamath, Klamath County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August 5, 1911, to September 30, 1926, with a few breaks in record and some periods for which gage heights only are available.

GAGE.—Vertical staff on downstream side of west abutment of new concrete highway bridge; datum in 1926 was 0.81 foot lower than that used previously; gage readers, Elva Moon and Harold Wimer.

DISCHARGE MEASUREMENTS.—Made from highway bridge.

CHANNEL AND CONTROL.—Clean gravel overlain with pumice sand, dunes of which may at times be observed moving downstream; likely to shift.

EXTREMES OF DISCHARGE.—Maximum stage during year, about February 10, not recorded; minimum stage recorded, 0.83 foot on several days in June, July, and August (discharge, 120 second-feet).

1911, 1913-1926: Maximum stage recorded, 4.0 feet November 23-25, 1921 (discharge estimated at 600 second-feet); minimum discharge that of 1926.

ICE.—Stage-discharge relation not affected by ice, as most of water comes from large springs a few miles above.

DIVERSIONS.—Considerable water is diverted above station, mostly in May and June, for watering hay lands.

REGULATION.—None.

ACCURACY.—Stage-discharge relation fairly permanent. Rating curve well defined; corrections for shifting-control method for November 14 to December 12 fairly well defined. Staff gage read to hundredths once daily. Daily discharge ascertained by applying gage height to rating table; discharge interpolated November 1 and September 16 and estimated December 13-31 and April 1-3. Records good except those for estimated periods, which are fair.

Discharge measurements of Wood River at Fort Klamath, Oreg., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	Feet	Sec.-ft.		Feet	Sec.-ft.		Feet	Sec.-ft.
Nov. 7.....	1.72	260	Feb. 28.....	1.65	245	July 16.....	0.85	123
Dec. 7.....	1.75	251	Apr. 5.....	1.61	238	Sept. 6.....	.95	139
Jan. 8.....	1.61	230	May 21.....	1.09	162			

Daily discharge, in second-feet, of Wood River at Fort Klamath, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Apr.	May	June	July	Aug.	Sept.
1	253	262	262	235	205	160	123	122	126
2	253	262	262		182	160	123	123	127
3	262	262	262		175	160	120	122	138
4	262	262	262		182	152	120	122	127
5	262	262	262		205	152	122	120	123
6	262	262	262	229	205	152	120	122	138
7	262	253	253	237	190	152	123	122	138
8	262	262	262	229	190	152	120	122	130
9	262	262	262	229	182	152	120	120	138
10	262	262	253	237	182	160	123	122	145
11	262	262	262	245	175	145	123	122	138
12	262	270	262	237	175	145	122	127	145
13	262	270	250	237	175	145	122	126	145
14	262	262		237	182	145	120	126	145
15	262	262		253	175	145	120	130	145
16	262	270		245	160	145	123	130	148
17	262	270		245	160	145	123	130	152
18	262	262	240	237	152	145	124	130	152
19	262	262		237	160	145	126	130	152
20	262	262		229	160	145	127	138	152
21	262	262		229	160	138	124	145	152
22	262	262		221	152	123	126	138	152
23	262	262	213	221	152	123	123	138	182
24	262	262		213	152	123	123	138	175
25	262	262		213	152	126	122	122	175
26	262	262		221	152	126	122	122	175
27	262	262		205	152	129	123	130	175
28	262	262	198	213	152	127	122	124	182
29	262	262		213	152	120	120	124	175
30	262	262		198	152	120	123	130	168
31	262	-----		-----	152	-----	123	127	-----

NOTE.—Braced figures show estimated mean discharge for periods indicated.

Monthly discharge of Wood River at Fort Klamath, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	262	253	261	16,000
November	270	253	263	15,600
December	-----	-----	251	15,400
January	-----	-----	* 225	13,800
February	-----	-----	* 250	13,900
March	-----	-----	* 230	14,100
April	253	198	229	13,600
May	205	152	169	10,400
June	160	120	142	8,450
July	127	120	122	7,500
August	145	120	127	7,810
September	182	123	150	8,930
The year	-----	120	201	146,000

* Estimated.

ANNA CREEK NEAR FORT KLAMATH, OREG.

LOCATION.—In sec. 36, T. 32 S., R. 6 E., at sawmill 3 miles below boundary of Crater Lake National Park and 6 miles northwest of Fort Klamath, Klamath County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 12, 1922, to September 30, 1926.

GAGE.—Vertical staff on left bank; read by J. E. Gribble.

DISCHARGE MEASUREMENTS.—Made from footbridge near gage or by wading.

CHANNEL AND CONTROL.—Gravel and cobbles, with some pumice sand and considerable accumulation of logs and drift.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 1.32 feet at 6 p. m. May 4 (discharge, 86 second-feet); minimum stage recorded, 0.79 foot September 25–27 (discharge, 35 second-feet). A somewhat smaller discharge may have occurred during ice period of December and January.

1923–1926: Maximum stage recorded, 2.40 feet May 28, 1925 (discharge, 175 second-feet); minimum discharge, 35 second-feet January 7, 1925, January 13, 1926, and September 25–27, 1926.

ICE.—Stage-discharge relation affected by ice during January, but gage was not being read.

DIVERSIONS.—None above station; much of the flow is diverted below for irrigation in the Wood River Valley.

REGULATION.—Regulated occasionally by operation of flashboards at log pond just above; gage readings at such times are not used.

ACCURACY.—Stage-discharge relation changed during winter. Two fairly well defined rating curves used. Gage read to hundredths once a day, except during April and May, when it was read twice a day most of the time. Daily discharge ascertained by applying daily gage readings to rating table. Records good.

Discharge measurements of Anna Creek near Fort Klamath, Oreg., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Nov. 7.....	0.90	47.2	Feb. 27.....	0.83	39.1	July 16.....	0.90	40.5
Dec. 7.....	.85	42.9	Apr. 4.....	.90	44.4	Sept. 7.....	.81	36.4
Jan. 8.....	.87	35.0	May 21.....	1.04	58			

Daily discharge, in second-feet, of Anna Creek near Fort Klamath, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1.....	53	50	39	64	49	44	41	37
2.....	53	50	42	64	49	42	42	37
3.....	53	50	44	64	48	43	42	37
4.....	53	50	51	80	48	44	42	36
5.....	53	50	44	70	48	45	42	36
6.....	53	47	44	64	48	46	42	36
7.....	53	47	46	62	47	48	42	36
8.....	53	50	46	52	46	46	42	36
9.....	53	50	46	55	45	45	42	37
10.....	53	50	48	58	45	44	41	37
11.....	53	50	51	54	46	44	41	37
12.....	53	50	44	54	46	45	41	36
13.....	53	47	48	56	46	46	40	36
14.....	50	47	53	58	46	44	39	36
15.....	50	47	56	54	45	41	39	36

Daily discharge, in second-feet, of Anna Creek near Fort Klamath, Oreg., for the year ending September 30, 1926—Continued

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
16.....	50	50	64	56	45	41	38	38
17.....	50	50	63	56	45	41	38	38
18.....	50	47	58	56	44	41	41	38
19.....	50	47	54	59	46	41	38	37
20.....	50	47	54	60	44	42	38	36
21.....	50	47	50	57	45	42	38	35
22.....	50	47	53	54	44	42	38	36
23.....	50	47	51	54	43	42	38	36
24.....	50	47	53	54	44	42	36	36
25.....	50	53	59	53	44	44	36	35
26.....	50	50	64	53	42	44	38	35
27.....	50	47	70	52	44	44	36	35
28.....	50	46	62	52	44	43	36	36
29.....	50	46	70	52	44	43	38	36
30.....	50	46	70	52	43	43	38	36
31.....	50			51		44	37	

Monthly discharge of Anna Creek near Fort Klamath, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	53	50	51.3	3,150
November.....	53	46	48.4	2,880
December.....			* 42.0	2,580
January.....			* 34.0	2,090
February.....			* 40.0	2,220
March.....			* 37.0	2,280
April.....	70	39	53.2	3,270
May.....	80	51	57.4	3,530
June.....	49	42	45.4	2,700
July.....	48	41	43.4	2,670
August.....	42	36	39.4	2,420
September.....	38	35	36.3	2,160
The year.....	80		44.0	32,000

* Estimated.

FOURMILE LAKE RESERVOIR NEAR ODESSA, OREG.

LOCATION.—In NW. $\frac{1}{4}$ sec. 9, T. 36 S., R. 5 E., at dam at outlet of Fourmile Lake, and about 15 miles northwest of Odessa, Klamath County.

RECORDS AVAILABLE.—June 14, 1923, to September 30, 1926, occasional readings.

GAGE.—Vertical staff on gate tower of dam, reading elevations above sea level, company datum; read by employees of Mount Pitt Irrigation Co.

EXTREMES OF STAGE.—Maximum stage recorded during year, 5,993.95 feet April 23–25 (contents, 8,495 acre-feet); minimum storage estimated at 450 acre-feet September 15.

1923–1926: Maximum stage recorded, 5,998.10 feet June 24 and 25, 1925 (contents, 11,682 acre-feet); minimum stage, that of 1926.

DIVERSIONS.—Water released from reservoir is diverted a few hundred feet below dam into Cascade Canal, which conveys it across the Cascade Range divide into the drainage basin of Fish Lake, the source of North Fork of Little Butte Creek. The following amounts were released from dam: April 1–30, 477 acre-feet; May, 3,420 acre-feet; June, 2,810 acre-feet; July 1–21, 440 acre-feet; total, 7,150 acre-feet.

Stage and contents of Fourmile Lake Reservoir near Odessa, Oreg., for the year ending September 30, 1926

Date	Gage height	Contents	Gain or loss during month	Date	Gage height	Contents	Gain or loss during month
	<i>Feet</i>	<i>Acre-ft.</i>	<i>Acre-ft.</i>		<i>Feet</i>	<i>Acre-ft.</i>	<i>Acre-ft.</i>
Oct. 2.....	5,990.06	5,867	-----	May 31.....	5,988.50	4,886	-3,433
Nov. 28.....	5,990.25	5,990	-----	June 30.....	5,982.63	1,427	-8,459
Jan. 13.....	* 5,991.00	6,475	-----	July 31.....	-----	* 770	-657
Feb. 13.....	* 5,992.00	7,141	-----	Aug. 31.....	-----	* 630	-140
Mar. 13.....	5,992.75	7,655	-----	Sept. 30.....	-----	* 470	-160
Apr. 1.....	5,993.25	8,002	-----	The year.....	-----	-----	-5,390
Apr. 30.....	5,993.70	8,319	+317				

* Estimated.

CASCADE CANAL NEAR FISH LAKE, OREG.

LOCATION.—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, and 24 miles east of Lake Creek, Jackson County.

RECORDS AVAILABLE.—Seasons of 1924 to 1926.

GAGE.—Vertical staff on left bank of canal at the Cascade Range divide, just below Dry Creek flume. Water-stage recorder used May 26 to July 19.

DISCHARGE MEASUREMENTS.—Made from footbridge near gage.

CHANNEL AND CONTROL.—Canal section excavated in gravel and heavy material; practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage recorded during period April 22 to July 18, 1.60 feet at 5 a. m. June 19 (discharge, 41 second-feet). Canal dry at times.

1924–1926: Maximum stage recorded, 1.72 feet on August 6, 7, 9, and 10, 1924 (discharge, 42 second-feet).

ACCURACY.—Stage-discharge relation permanent. Rating curve well defined. Staff gage read once or twice a day to hundredths April 22 to July 19; operation of water-stage recorder satisfactory May 26 to July 19. Daily discharge ascertained by applying to rating table mean daily gage height obtained as follows: April 22 to May 25, mean of daily readings; May 26 to July 18, by inspection of recorder graph. Records good.

COOPERATION.—Gage-height record furnished by Public Water Co.

Cascade Canal diverts water from Fourmile Creek in the Klamath River Basin, about 100 yards below Fourmile Lake, in sec. 9, T. 36 S., R. 5 E., and extends about 10 miles to the Cascade divide, from which the water flows in an excavated channel for about $1\frac{1}{2}$ miles to the edge of a lava field into which it sinks. Meter measurements made just above the sinks show the relation of the flow at this point to that at the divide and indicate a loss of about 2 second-feet up to a total flow of 20 second-feet, and of about 10 per cent for larger discharges.

Discharge measurements of Cascade Canal near Fish Lake, Oreg., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Apr. 27.....	0.68	6.03	May 24.....	1.50	35.6	June 23.....	1.43	32.0
Apr. 28.....	.86	10.4	June 10.....	1.54	37.8	July 2.....	.76	7.83
Apr. 30.....	1.10	19.1						

Discharge measurements of Cascade Canal above lava beds near Fish Lake, Oreg., during the year ending September 30, 1926

Date	Dis-charge	Date	Dis-charge	Date	Dis-charge
	<i>Sec.-ft.</i>		<i>Sec.-ft.</i>		<i>Sec.-ft.</i>
Apr. 27.....	3.60	June 10.....	34.3	July 2.....	7.06
Apr. 28.....	6.99	Do.....	34.2		

Daily discharge, in second-feet, of Cascade Canal near Fish Lake, Oreg., for the year ending September 30, 1926

Day	Apr.	May	June	July	Day	Apr.	May	June	July
1.....		24	37	9.9	16.....		34	40	2.8
2.....		29	38	7.6	17.....		34	40	2.1
3.....		31	38	6.1	18.....		34	40	1.0
4.....		32	38	5.0	19.....		35	40	
5.....		32	38	4.0	20.....		35	40	
6.....		31	38	3.4	21.....		35	38	
7.....		31	38	4.2	22.....	2.3	35	32	
8.....		31	38	4.0	23.....	2.2	36	30	
9.....		30	38	4.4	24.....	2.2	36	27	
10.....		31	38	3.5	25.....	4.4	36	23	
11.....		31	38	2.5	26.....	5.9	36	22	
12.....		33	38	2.9	27.....	6.6	36	19	
13.....		33	39	2.9	28.....	11	37	15	
14.....		33	40	2.5	29.....	13	38	13	
15.....		33	40	3.5	30.....	19	38	12	
					31.....		37		

Monthly discharge of Cascade Canal near Fish Lake, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
April.....	19	0	2.22	132
May.....	38	24	33.5	2,060
June.....	40	12	33.5	1,990
July.....	9.9	0	2.33	143
The period.....				4,320

"A" CANAL AT KLAMATH FALLS, OREG.

LOCATION.—In NE. $\frac{1}{4}$ sec. 30, T. 38 S., R. 9 E., about 300 feet below head gates of canal and 1 mile northwest of Klamath Falls, Klamath County.

RECORDS AVAILABLE.—Irrigation seasons, 1911–1926. Some water was diverted for three or four years prior to 1911, but no record was kept.

GAGE.—Water-stage recorder on right bank.

DISCHARGE MEASUREMENTS.—Made from private bridge at Bureau of Reclamation headquarters, about 1 mile downstream; earth section.

CHANNEL AND CONTROL.—Trapezoidal concrete lined section, 13.5 feet wide on the bottom and 12 feet deep, with side slopes of $\frac{1}{2}$ to 1. A partly destroyed weir at entrance to tunnel, about 1,200 feet downstream, may become partly submerged at high stages.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 9.88 feet at noon June 11 (discharge, 746 second-feet); canal dry October 1 to April 5 and September 21–30.

1911–1926: Maximum stage from water-stage recorder, 10.72 feet June 27, 1925 (discharge, 800 second-feet).

ACCURACY.—Stage-discharge relation unstable during most of season. Well-defined rating curve used April 7–20, shifting-control method thereafter. Operation of recorder satisfactory, daily gage height ascertained by inspecting recorder graph. Discharge ascertained by applying daily gage height to rating table. Records good.

COOPERATION.—Records furnished by United States Bureau of Reclamation.

“A” Canal diverts water from Link River immediately below outlet of Upper Klamath Lake, in NE. $\frac{1}{4}$ sec. 30, T. 38 S., R. 9 E., for irrigating lands east of Klamath River on both sides of Lost River. Most of the return waters reach Lost River.

Discharge measurements of “A” Canal at Klamath Falls, Oreg., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Apr. 10.....	3.50	15.4	Apr. 29.....	9.50	690	July 6.....	8.08	519
Apr. 19.....	4.88	83.3	May 17.....	9.05	642	July 23.....	9.07	677
Apr. 23.....	6.84	280	May 25.....	8.57	583	Aug. 13.....	7.96	503
Apr. 26.....	7.90	428	June 5.....	8.90	621	Aug. 30.....	6.85	335
Apr. 27.....	8.28	504	June 30.....	8.47	568	Sept. 14.....	5.83	215

Daily discharge, in second-feet, of “A” Canal at Klamath Falls, Oreg., for the year ending September 30, 1926

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.....		715	585	559	486	248	16.....	51	643	682	623	431	209
2.....		723	600	572	633	240	17.....	83	643	669	651	421	201
3.....		709	612	534	596	239	18.....	82	668	647	659	382	191
4.....		716	624	523	588	228	19.....	77	687	641	661	384	176
5.....		697	622	523	564	221	20.....	131	668	631	620	386	46
6.....	6	704	622	523	549	220	21.....	233	641	629	598	363	-----
7.....	13	698	641	513	537	217	22.....	254	636	631	638	326	-----
8.....	17	665	668	513	505	197	23.....	268	620	627	672	336	-----
9.....	17	638	711	523	493	178	24.....	297	600	604	713	336	-----
10.....	20	629	729	529	496	199	25.....	369	594	598	719	316	-----
11.....	25	629	742	527	493	210	26.....	437	602	606	707	346	-----
12.....	25	659	736	522	493	200	27.....	522	610	569	688	362	-----
13.....	32	678	729	563	511	201	28.....	587	645	530	668	356	-----
14.....	36	678	707	579	498	214	29.....	668	637	541	651	342	-----
15.....	42	662	695	616	465	218	30.....	688	614	559	618	334	-----
							31.....		587		640	292	-----

Monthly discharge of “A” Canal at Klamath Falls, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
April.....	688	0	166	9,880
May.....	723	587	655	40,200
June.....	742	530	640	38,100
July.....	719	513	601	37,000
August.....	635	292	439	27,000
September.....	248	0	135	8,030
The period.....				160,000

KENO CANAL AT KLAMATH FALLS, OREG.

LOCATION.—In NE. $\frac{1}{4}$ sec. 31, T. 38 S., R. 9 E., 200 feet above penstock to west side plant of the California Oregon Power Co., a quarter of a mile above Link River bridge at Klamath Falls, Klamath County, Oreg.

RECORDS AVAILABLE.—October 1, 1923, to September 30, 1926.

GAGE.—Vertical staff gage on left bank of canal; integrating watt-hour meter and indicating watt-meter in power house. Read by employees of the California Oregon Power Co.

DISCHARGE MEASUREMENTS.—Made from footbridge at gage. The measured discharge in second-feet is referred to the load in kilowatts.

CHANNEL AND CONTROL.—Smooth earth bottom, high banks, and swift, even current at measuring section. Stage is controlled by load on turbines of power plant and stage-discharge relation is unstable.

EXTREMES OF DISCHARGE.—Not possible to determine maximum momentary discharge. Maximum daily discharge 261 second-feet on June 27, February 8, 10, and 25; output, 18,600 kilowatt hours; no record of minimum.

DIVERSIONS.—Spillway from canal to river 300 feet above power plant was in use during part or all of 157 days during year, but the total waste probably did not exceed 3,000 acre-feet and has been disregarded.

REGULATION.—The flow is controlled by gates at head of canal which are regulated to supply water for power plant, the load on which is nearly constant and not subject to sudden variations.

ACCURACY.—Kilowatt-discharge relation changed for discharge in excess of 190 second-feet on December 20, when turbine and draft tube were cleaned, and debris removed. Turbine again cleaned May 30, and obstructions removed which had been accumulating for about two months. Curves of relation used as follows: October 1 to December 20, fairly well defined; for December 21 to September 30, well defined (applied indirectly April 1 to May 29). Integrating watt-hour meter read once daily at midnight to hundredths of kilowatt hours. Records good.

COOPERATION.—Gage-height and integrating watt-hour records furnished by California Oregon Power Co.

Keno 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 NE. $\frac{1}{4}$ sec. 31.

Discharge measurements of Keno Canal at Klamath Falls, Oreg., during the year ending September 30, 1926

Date	Electrical output	Gage height	Dis-charge	Date	Electrical output	Gage height	Dis-charge
	<i>Kilowatts</i>	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Kilowatts</i>	<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 28.....	650	4.32	240	Dec. 22.....	700	3.98	242.
Dec. 5.....	690	4.23	252	Jan. 7.....	750	4.05	250
Dec. 6.....	408	3.82	159	Feb. 28.....	765	4.18	258.
Do.....	99	2.84	90	May 24.....	695	3.80	245
Do.....	511	4.07	186	July 13.....	710	3.80	234
Dec. 9.....	700	4.22	253	Sept. 2.....	705	3.86	239

Daily discharge, in second-feet, of Keno Canal at Klamath Falls, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	236	236	246	247	149	251	238	251	248	227	237	230
2.	251	246	179	247	152	235	235	249	246	230	237	230
3.	246	236	208	247	149	251	235	248	247	227	235	226
4.	246	246	188	243	149	251	234	248	239	225	235	224
5.	241	246	246	243	194	251	238	249	243	224	236	224
6.	226	246	221	251	256	251	234	248	241	226	233	219
7.	221	246	251	243	256	251	229	249	245	237	233	217
8.	221	236	251	243	261	235	234	249	243	243	233	217
9.	226	236	251	251	251	251	241	251	243	239	226	215
10.	231	246	251	243	261	235	238	254	243	235	198	213
11.	241	246	251	251	251	251	241	260	240	233	231	207
12.	251	246	257	251	251	251	241	250	240	232	233	208
13.	257	251	251	243	239	251	241	246	240	233	232	207
14.	257	251	251	251	251	251	241	258	237	233	232	205
15.	251	236	241	251	251	235	241	249	236	233	232	206
16.	251	246	236	243	251	235	239	242	235	232	231	195
17.	236	246	216	235	251	251	231	242	236	237	228	195
18.	257	246	226	235	243	251	237	232	237	237	212	197
19.	257	246	226	235	235	235	237	250	237	239	214	195
20.	236	251	160	251	243	251	236	249	236	235	211	188
21.	241	251	224	239	251	251	238	245	233	233	213	203
22.	251	246	231	251	243	235	241	242	232	232	200	208
23.	241	246	227	201	251	251	238	243	235	235	222	208
24.	236	246	227	224	251	233	241	235	232	240	224	213
25.	251	246	227	256	261	246	212	234	230	237	214	211
26.	236	236	227	251	256	241	247	234	232	239	220	206
27.	236	251	239	261	251	243	249	236	232	236	232	202
28.	236	251	247	256	256	240	245	236	230	236	232	202
29.	236	246	243	209	-----	237	251	236	228	236	225	213
30.	246	236	247	158	-----	239	251	193	228	239	227	188
31.	246	-----	247	176	-----	240	-----	247	-----	240	228	-----

Monthly discharge of Keno Canal at Klamath Falls, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October	257	221	242	14,900
November	251	236	245	14,600
December	257	160	232	14,300
January	261	158	238	14,600
February	261	149	234	13,000
March	251	233	245	15,100
April	251	212	238	14,200
May	260	193	244	15,000
June	248	228	237	14,100
July	243	224	234	14,400
August	237	198	226	13,900
September	230	188	209	12,400
The year	261	149	235	170,000

LOST RIVER DIVERSION CANAL NEAR OLENE, OREG.

LOCATION.—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, 4 miles below Olene, Klamath County.

RECORDS AVAILABLE.—May 1, 1912, to September 30, 1926.

GAGE.—Water-stage recorder on right bank about 100 yards below spillway from the C-G Canal, beginning May 4, 1923; vertical staffs showing height of water in pond back of head gates and in canal below gates also read once a day.

CHANNEL AND CONTROL.—Wide shallow canal, excavated in sand and silt; backwater from Klamath River extends practically to head of canal.

DISCHARGE MEASUREMENTS.—Made from a footbridge a short distance below head gate or from wagon bridge at gage.

EXTREMES OF DISCHARGE.—Maximum discharge during year, 146 second-feet at noon March 2 (gage height, from water-stage recorder, 1.90 feet). Canal dry February 2–27.

1912–1926: Maximum discharge recorded, 508 second-feet February 28, 1914; minimum discharge, canal dry.

DIVERSIONS.—Beginning in June, 1922, water has been wasted from C-G Canal into diversion canal, amount of which has been estimated. Beginning May 4, 1923, station was located below wasteway.

ACCURACY.—Stage-discharge relation at recorder site unstable on account of varying backwater from Klamath River and growth of aquatic plants; shifting-control method used. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting recorder graph. Discharge interpolated or estimated December 10–14, February 1 and 28, Mar. 19–21, 24–28, and September 22–26. Records fair.

COOPERATION.—Records furnished by the United States Bureau of Reclamation, Klamath project.

Lost River diversion canal diverts from Lost River in SW. $\frac{1}{4}$ sec. 29, T. 39 S., R. 10 E., and discharges into Klamath River in SW. $\frac{1}{4}$ sec. 17, T. 39 S., R. 9 E. The discharge of Lost River during the nonirrigation season has been diverted into the Klamath beginning in 1912 to assist in the reclamation of the bed of Tule Lake.

Discharge measurements of Lost River diversion canal near Olene, Oreg., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Oct. 26.....	2.04	94.1	Jan. 7.....	1.68	102	June 8.....	2.27	64.9
Nov. 3.....	2.13	109	Mar. 29.....	1.33	82.5	July 13.....	2.93	74.6
Dec. 9.....	1.79	100	May 14.....	1.72	67.0	Aug. 6.....	2.51	54.5
Dec. 18.....	1.83	100	May 24.....	2.34	86.2	Aug. 31.....	2.43	47.4
Jan. 6.....	1.68	101						

Daily discharge, in second-feet, of Lost River diversion canal near Olene, Oreg., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	97	114	104	104	50	145	92	0	79	80	120	36
2.....	94	113	109	102		146	92	25	98	76	84	15
3.....	91	108	108	103		145	91	84	92	98	81	8
4.....	88	94	108	102		143	93	104	81	103	82	8
5.....	88	83	107	102		141	92	117	74	92	68	8
6.....	93	82	106	102		139	92	114	74	67	54	24
7.....	96	84	104	102		136	92	132	69	63	53	34
8.....	100	86	103	102		133	91	131	63	64	68	32
9.....	102	86	103	101		129	90	113	61	66	68	40
10.....	103	88	103	100		120	90	106	54	81	76	36
11.....	102	92	103	100		125	93	97	64	98	78	38
12.....	99	95	102	100		125	94	88	76	95	72	38
13.....	100	102	102	99		126	93	76	81	81	98	39
14.....	99	109	102	99		125	92	76	99	68	95	38
15.....	98	110	102	98		126	91	96	100	56	92	29
16.....	99	108	96	99		126	90	101	90	48	90	37
17.....	98	108	98	99		126	91	102	90	56	90	36
18.....	96	106	101	99		126	98	88	102	67	92	36
19.....	96	102	105	100		125	103	86	118	56	84	35
20.....	96	102	110	99		124	103	99	118	53	81	35
21.....	95	103	111	98		122	102	84	108	69	86	36
22.....	95	103	114	99		120	101	83	108	56	76	36
23.....	95	102	115	99		118	101	85	110	49	72	40
24.....	95	102	116	99		118	101	83	113	53	69	50
25.....	95	102	117	99		118	98	75	117	76	64	70
26.....	95	101	118	98		100	102	66	114	88	48	70
27.....	95	99	112	99	72	81	79	62	106	78	47	70
28.....	100	100	117	98		81	57	59	100	74	39	69
29.....	104	101	116	100		81		71	94	88	40	67
30.....	110	102	113	101		88		78	86	85	40	64
31.....	114		110	102		92		68		82	42	

Monthly discharge of Lost River diversion canal near Olene, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	114	88	97.7	6,010
November.....	114	82	99.6	5,930
December.....	118	96	108	6,640
January.....	104	98	100	6,150
February.....	72	0	4.4	244
March.....	146	81	121	7,440
April.....	103	0	86.8	5,160
May.....	132	0	85.5	5,260
June.....	118	54	91.3	5,430
July.....	103	48	73.1	4,490
August.....	120	39	72.2	4,440
September.....	70	8	39.5	2,350
The year.....	132	0	82.2	59,500

JENNY CREEK NEAR COPCO, CALIF.

LOCATION.—In sec. 35, T. 48 N., R. 5 W., 200 yards above highway, half a mile above mouth, 2½ miles west of Fall Creek power house and Copco post office, Siskiyou County.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—November 1, 1922, to September 30, 1926.

GAGE.—Stevens 8-day water-stage recorder on left bank, inspected by power plant operator or G. A. Grieve.

DISCHARGE MEASUREMENTS.—Made from footbridge at gage or by wading nearby; channel rough.

CHANNEL AND CONTROL.—Boulders and heavy gravel, practically permanent.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 4.59 feet at 2 p. m. February 4 (discharge, 649 second-feet); minimum stage recorded, 0.20 foot August 13-15 (discharge, zero).

1923-1926: Maximum stage from water-stage recorder, 6.24 feet on February 4, 1925 (discharge, 1,110 second-feet; minimum stage recorded, that of August 13-15, 1926.

ICE.—Apparently no ice effect.

DIVERSIONS.—Run-off of Keene Creek, a tributary of Jenny Creek, is stored in Hyatt Prairie Reservoir and diverted about 2 miles below dam over divide into Bear Creek Basin by Talent Irrigation District. Practically no irrigation within the basin. Two small ditches divert water around gage.

ACCURACY.—Stage-discharge relation permanent during year; affected by leaves on control September 29-30. Rating curve fairly well defined. Operation of water-stage recorder satisfactory October 1 to May 20 except as stated in footnote to table of daily discharge; gage read to hundredths once daily May 21 to September 30. Daily discharge ascertained by applying to rating table daily gage reading or mean daily gage height obtained from recorder graph by inspection; shifting-control method used September 29-30. Records good except those for periods of estimated discharge, which are fair.

COOPERATION.—Gage-height record furnished by California Oregon Power Co.

The following discharge measurement was made:

June 13, 1926: Gage height, 0.64 foot; discharge estimated, 4.0 second-feet.

Daily discharge, in second-feet, of Jenny Creek near Copco, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.5	8.5	18	10	73	78		10	2.0	1.3	0.7	2.6
2	8.5	8.5	42		48	80	30	10	1.8	1.5	.6	2.6
3	8.5	9.4	27	18	44	80		10	1.8	1.0	.6	2.3
4	8.8	10	18		313				1.8	2.1	.6	2.0
5	8.8	9.1	14		256				1.5	2.1	.3	2.0
6	12	8.8	14	26	188			14	5.8	2.3	.4	2.0
7	14	9.1	12	22	180				5.4	2.7	.2	2.0
8	12	8.8	12	16	180	68	55		4.7	3.1	.2	2.0
9	11	8.8	13	15	190				4.2	3.3	.2	2.0
10	10	8.8		14	266			14	2.7	3.4	.1	2.0
11	10	11		14	171				2.1	4.0	.1	2.0
12	9.7	18	14	16	118	56			2.1	4.4	.1	2.0
13	9.7	18		13	91	55	40		2.3	4.2	.0	1.8
14	9.7	14		14	83	57			3.1	4.0	.0	1.8
15	9.4	13		16	101	58		11	3.3	3.7	.0	2.0
16	9.4	12	16	16	99	58			3.1	3.1	.1	2.0
17	9.4	12	14	17	69	55	30		2.8	2.8	.3	2.4
18	9.4	13	14	16	71	53			3.1	2.8	.8	3.1
19	9.4	14	14	15	68	51	23		2.8	2.4	1.5	3.7
20	9.4	12	14	13	71	49	22		1.5	2.3	1.5	3.6
21	9.4	11	14	16	62	48	21	7.6	1.5	2.1	1.5	3.6
22	9.4	9.1	29	23	67	44	20	7.0	1.5	2.1	1.5	3.4
23	9.1	8.8	46	23	69	42	19	6.6	1.3	2.0	1.4	3.4
24	9.1	9.4	49	21	70	41	18	6.6	1.5	2.1	1.3	4.4
25	9.1	9.7	33	16	133	38	16	6.4	1.5	2.1	1.3	5.4
26	9.1	9.4	23	13	105	33	14	6.2	1.3	2.1	1.5	5.2
27	9.1	9.7	18	16	91	31	12	6.2	1.0	2.0	1.5	5.0
28	9.1	9.4	17	28	86	30	12	5.8	1.5	2.0	1.8	4.4
29	8.8	9.7	15	139		28	12	4.0	1.3	2.0	2.0	5.0
30	8.5	13	14	58		28	11	2.3	1.4	2.0	2.3	5.2
31	8.5		12	95		28		2.0		2.0	2.8	

NOTE.—Water-stage recorder not operating satisfactorily Dec. 7-8, 10-15, Jan. 2-5, Feb. 9, Mar. 2, 3-11, 31 to Apr. 13, May 1, 4-9, 11-20; staff gage not read May 29. Discharge Dec. 7-8, Feb. 9, Mar. 2, 31, Apr. 1-18, May 1, and 4-9, estimated by comparison with records of near-by streams; discharge for other periods interpolated. Braced figures show estimated mean discharge for periods indicated.

Monthly discharge of Jenny Creek near Copco, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	14	8.5	9.57	588
November.....	18	8.5	10.9	649
December.....	49	12	19.2	1,180
January.....	139	10	24.9	1,530
February.....	313	44	120	6,660
March.....		28	53.7	3,300
April.....		11	31.8	1,890
May.....		2.0	9.64	593
June.....	5.8	1.0	2.39	142
July.....	4.4	1.0	2.55	157
August.....	2.8	.0	.88	54
September.....	5.4	1.8	3.03	180
The year.....	313	.0	23.4	16,900

HYATT PRAIRIE RESERVOIR NEAR ASHLAND, OREG.

LOCATION.—In SW. $\frac{1}{4}$ sec. 16, T. 39 S., R. 3 E., at dam of Talent Irrigation District and practically over location of former station on Keene Creek, 3 miles north of Ashland-Klamath Falls highway, and 20 miles east of Ashland, Jackson County.

RECORDS AVAILABLE.—December 27, 1922, to September 30, 1926.

GAGE.—Vertical staff on outside of gate tower, graduated to read elevations above sea level; read about once a week October to May, and daily June to August, by employees of Talent Irrigation District.

EXTREMES OF STAGE.—Maximum stage recorded during year, 5,006.15 feet March 31, April 13 and 18 (Contents, 8,502 acre-feet); minimum stage recorded, 4,981.80 feet August 4 (contents, 2 acre-feet).

1923-1926: Maximum stage recorded, 5,007.55 feet June 13 and 16, 1925 (contents, 9,478 acre-feet); minimum stage recorded, that of August 4, 1926.

DIVERSIONS.—Water turned out of reservoir and diverted about 2 miles below dam through Keene Creek Canal into headwaters of Bear Creek, Rogue River drainage basin, April 1 to August 4.

COOPERATION.—Gage-height record furnished by Talent Irrigation District.

Monthly contents, in acre-feet, of Hyatt Prairie Reservoir near Ashland, Oreg., for the year ending September 30, 1926

Date	Stage	Contents	Gain or loss during month	Date	Stage	Contents	Gain or loss during month
	<i>Feet</i>	<i>Acre-feet</i>	<i>Acre-feet</i>		<i>Feet</i>	<i>Acre-feet</i>	<i>Acre-feet</i>
Oct. 31.....		a 6,480	—20	May 31.....	5,004.50	7,403	—977
Nov. 30.....		a 6,610	+130	June 30.....	4,998.40	3,900	—3,503
Dec. 31.....		a 6,980	+370	July 31.....	4,985.90	200	—3,700
Jan. 31.....		a 7,180	+200	Aug. 31.....		a 150	—50
Feb. 28.....	5,005.20	7,862	+682	Sept. 30.....		a 200	+50
Mar. 31.....	5,006.15	8,502	+640				
Apr. 30.....		a 8,380	—122	The year.....			—6,300

* Contents for October to January and for April interpolated from gage readings made once a week; for August and September, estimated.

KEENE CREEK CANAL NEAR ASHLAND, OREG.

LOCATION.—In NW. $\frac{1}{4}$ sec. 29, T. 39 S., R. 3 E., 400 feet above short tunnel through the Cascade divide, 2 miles north of Ashland-Klamath Falls highway, and 16 miles southeast of Ashland, Jackson County.

RECORDS AVAILABLE.—June 17, 1923, to September 30, 1926.

GAGE.—Stevens 8-day water-stage recorder on right bank; inspected by ditch walker employed by Talent Irrigation District.

DISCHARGE MEASUREMENTS.—Made from footbridge at gage.

CHANNEL AND CONTROL.—Concrete-lined section several hundred feet above and 10 feet below gage. Riffle caused by break in grade at end of concrete lining 10 feet below gage is partial control.

EXTREMES OF DISCHARGE.—Maximum stage during period, from water-stage recorder, 2.12 feet at 1 a. m. July 18 (discharge, 75 second-feet). Canal dry at times.

1923-1926: Maximum discharge, that of 1926.

ICE.—None.

DIVERSIONS.—None above gage.

ACCURACY.—Stage-discharge relation somewhat unstable. Rating curves used were fairly well defined December 28 to April 5, and well defined May 25 to August 8. Gage read about once a week December 28 to March 31. Operation of water-stage recorder satisfactory April 1 to August 8. Daily discharge ascertained by applying to rating table mean daily gage height obtained by inspecting recorder graph or from daily gage reading. Records for December to March, poor; for April and May, fair; and for June to August, good.

COOPERATION.—Gage-height record furnished by Talent Irrigation District.

Keene Creek Canal diverts from Keene Creek in SE. $\frac{1}{4}$ sec. 20, T. 39 S.; R. 3 E., water released from Hyatt Prairie Reservoir, about 2 miles upstream, and delivers it through a 400-foot tunnel under the divide into head of Sampson Creek, a tributary of Emigrant Creek, whence it is diverted onto lands of the Talent Irrigation District. Flow December to March was inflow to Keene Creek below Hyatt Prairie Reservoir, stored water being released April 1 to August 4.

Discharge measurements of Keene Creek Canal near Ashland, Oreg., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Apr. 1.....	0.80	12.8	June 23.....	2.00	68.2	July 18.....	2.10	73.3
May 25.....	.89	14.3	July 12.....	1.99	66.0	July 24.....	.64	5.29
June 14.....	1.88	61.4						

Daily discharge, in second-feet, of Keene Creek Canal near Ashland, Oreg., for the year ending September 30, 1926

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1					13	10	16	67	8.8
2					13	10	22	68	7.1
3		3.8			13	10	24	69	2.8
4				2.0	13	11	25	68	1.0
5					13	12	25	68	.6
6			6.4		13	12	29	67	.3
7				1.2	13	11	36	68	.2
8					12	11	38	69	.1
9					7.6	12	40	68	
10		1.8			7.3	12	44	68	
11				1.0	8.8	11	40	67	
12					7.9	11	54	67	
13					6.7	11	58	67	
14			1.8	.9	5.4	12	60	67	
15					5.1	11	61	67	
16					4.8	11	62	67	
17		1.8		.8	4.8	11	63	72	
18					4.8	11	66	73	
19					5.1	11	67	68	
20					5.1	11	67	55	
21			2.8	.6	4.8	11	67	5.4	
22					4.8	11	68	1.6	
23					4.8	11	68	1.3	
24		3.8			4.3	14	67	4.8	
25					4.6	14	67	6.1	
26				.6	4.6	15	68	6.1	
27					4.6	14	68	6.1	
28	3.8		4.8		7.0	14	68	7.1	
29					8.5	15	68	8.1	
30		1.8			10	15	68	9.8	
31				3.0		16		9.5	

Monthly discharge of Keene Creek Canal near Ashland, Oreg., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
December			* 3.0	184
January			* 2.5	154
February			* 4.0	222
March			1.09	67
April	13	4.3	7.81	465
May	16	10	12.0	738
June	68	16	52.5	3,120
July	73	1.3	45.7	2,810
August	8.8	0	.67	41
The year	73	0	10.8	7,800

* Estimated.

NOTE.—No flow during October, November, and September.

SHASTA RIVER NEAR MONTAGUE, CALIF.

LOCATION.—In N. $\frac{1}{2}$ NE. $\frac{1}{4}$ sec. 33, T. 45 N., R. 6 W., at highway bridge $1\frac{1}{4}$ miles southwest of Montague, Siskiyou County. Little Shasta River enters 1 mile above and Yreka Creek $5\frac{1}{2}$ miles below station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August 24, 1911, to September 30, 1913; September 20, 1916, to June 30, 1922; and April 7, 1923, to September 30, 1926.

GAGE.—Water-stage recorder on right bank, installed June 26, 1923.

DISCHARGE MEASUREMENTS.—Made from highway bridge or by wading.

CHANNEL AND CONTROL.—Small boulders and gravel; fairly permanent. Banks are subject to overflow during very high water.

EXTREMES OF DISCHARGE.—Maximum stage during year, from water-stage recorder, 6.44 feet at 1 a. m. April 9 (discharge, 1,160 second-feet); minimum stage, from water-stage recorder, 2.30 feet at 8 p. m. May 29 (discharge, 1.8 second-feet).

1911-1926: Maximum stage recorded, 14.9 feet at 7 p. m. February 11, 1925 (discharge, 5,700 second-feet); minimum discharge, 1.0 second-feet at 9 a. m. July 11, 1925.

DIVERSIONS.—The Dwinell ditch diverts about 30 second-feet 2 miles above gage, and the Grenada ditch diverts about 40 second-feet 12 miles above. There are numerous other diversions, by gravity and by pumping.

REGULATION.—Considerable diurnal fluctuation at gage due to irrigation above. Some water diverted for irrigation probably returns to river above gage.

ACCURACY.—Stage-discharge relation changed April 10. Rating curve before change well defined, after change fairly well defined. Water-stage recorder record good. Clock stopped several times and some gage-height record lost. Daily discharge ascertained by applying mean daily gage height to rating table except April 8 and 9, for which hourly discharge was averaged. Discharge interpolated for periods during which clock stopped except February 2-5, for which it was estimated. Records good.

Discharge measurements of Shasta River near Montague, Calif., during the year ending September 30, 1926

Date	Gage height	Discharge	Date	Gage height	Discharge	Date	Gage height	Discharge
	<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>		<i>Feet</i>	<i>Sec.-ft.</i>
Apr. 6.....	2.66	16	Apr. 9.....	5.85	948	Apr. 10.....	4.31	410
Apr. 8.....	2.87	40	Do.....	5.62	868	Do.....	4.26	370
Do.....	2.92	43	Do.....	5.26	754	May 22.....	2.67	12
Do.....	3.00	53	Do.....	5.10	648.	Do.....	2.57	12

Daily discharge, in second-feet, of Shasta River near Montague, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	122	142	226	208	409	193	12	24	11	11	95	20
2.....	115	145	237	214	400	197	9.5	27	10	11	9	15
3.....	118	147	284	220	400	200	7.5	30	4.0	11	7.5	14
4.....	122	158	295	226	550	204	7.5	33	12	13	12	10
5.....	127	158	260	228	500	207	12	36	20	18	13	10
6.....	147	155	234	226	490	211	20	46	16	17	14	9
7.....	158	158	220	223	456	197	22	43	13	42	12	8.5
8.....	158	161	214	220	476	189	197	40	9.5	20	11	18
9.....	155	161	211	217	403	191	834	37	8.5	13	13	23
10.....	150	158	208	214	403	183	358	34	7.5	17	14	24
11.....	145	161	208	211	456	169	188	31	14	20	25	28
12.....	145	172	208	211	390	155	181	28	22	15	12	46
13.....	145	180	205	205	322	132	128	25	12	14	8.5	49
14.....	145	177	200	203	286	122	103	23	9	17	8.5	56
15.....	145	175	197	203	275	122	88	21	10	12	15	65
16.....	142	169	197	208	269	115	72	20	12	6.5	15	62
17.....	142	166	200	208	260	113	74	18	15	9	11	62
18.....	139	166	203	205	246	118	79	17	18	13	12	66
19.....	137	166	214	205	231	115	72	13	16	13	9.5	67
20.....	137	166	220	203	240	115	57	12	14	13	13	68
21.....	139	166	223	211	240	115	50	8.5	20	11	10	70
22.....	140	166	237	214	234	116	44	14	12	11	12	71
23.....	142	166	243	211	232	117	38	27	9	13	13	73
24.....	142	172	237	211	230	118	32	27	6	15	7.5	73
25.....	142	172	231	208	228	118	22	21	4.0	12	14	74
26.....	142	172	226	205	183	104	20	11	14	12	19	73
27.....	142	172	223	200	186	90	22	21	12	13	21	74
28.....	142	177	220	205	190	72	18	4.9	11	14	18	78
29.....	142	180	214	205	-----	35	18	3.4	9.5	12	33	78
30.....	142	205	205	346	-----	20	21	5.5	8	11	26	78
31.....	142	-----	205	292	-----	12	-----	17	-----	11	26	-----

Monthly discharge of Shasta River near Montague, Calif., for the year ending September 30, 1926

Month	Discharge in-second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	158	115	140	8,610
November.....	205	142	166	9,880
December.....	295	197	223	13,700
January.....	346	200	220	13,500
February.....	550	183	328	18,200
March.....	211	12	134	8,240
April.....	834	7.5	93.6	5,570
May.....	46	3.4	23.2	1,430
June.....	22	4.0	12.0	714
July.....	42	6.5	14.2	873
August.....	33	7.5	14.3	879
September.....	78	8.5	48.8	2,900
The year.....	834	3.4	117	84,500

TRINITY RIVER AT LEWISTON, CALIF.

LOCATION.—In NE. $\frac{1}{4}$ sec. 19, T. 33 N., R. 8 W., at highway bridge at Lewiston, Trinity County, and 9 miles below Stewarts Fork. Indian Creek enters 6 miles below station.

DRAINAGE AREA.—Not measured.

RECORDS AVAILABLE.—August 28, 1911, to September 30, 1926.

GAGE.—Vertical staff in two sections on left bank at bridge; lower section fastened to pile 10 feet above bridge; upper section fastened to downstream end of bridge abutment. Gage read by R. N. Phillips.

DISCHARGE MEASUREMENTS.—Made from bridge at gage or by wading.

CHANNEL AND CONTROL.—Small boulders and gravel; practically permanent. Banks are subject to overflow at extremely high water.

EXTREMES OF DISCHARGE.—Maximum stage recorded during year, 12.8 feet at 6.30 p. m. April 8 (discharge, 17,100 second-feet); minimum stage recorded, 1.76 feet August 15–19 (discharge, 67 second-feet).

1911–1926: Maximum stage recorded, 16.7 feet at 12.30 p. m. January 2, 1914 (discharge, from extension of rating curve, about 26,900 second-feet); minimum stage recorded, 1.40 feet at 6 p. m. July 30, 1924 (discharge, 23 second-feet).

DIVERSIONS.—Water is diverted above station for irrigation, placer mining, and power development.

REGULATION.—None.

ACCURACY.—Stage-discharge relation did not change during year. Rating curve well defined. Gage read to hundredths twice daily. Daily discharge ascertained by applying mean daily gage height to rating table. Records good.

Discharge measurements of Trinity River at Lewiston, Calif., during the year ending September 30, 1926

Date	Gage height	Dis-charge	Date	Gage height	Dis-charge
May 1.....	Feet 5.63	Sec.-ft. 2,900	Aug. 20.....	Feet 1.82	Sec.-ft. 79
Do.....	5.58	2,830	Do.....	1.82	80

Daily discharge, in second-feet, of Trinity River at Lewiston, Calif., for the year ending September 30, 1926

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	258	183	2,020	450	1,350	2,130	2,240	2,860	805	206	88	90
2.....	258	189	3,120	450	1,180	2,240	2,020	2,730	805	202	88	90
3.....	258	198	870	430	2,990	2,130	2,130	2,480	772	198	84	90
4.....	254	195	1,020	410	11,100	2,130	2,130	2,730	772	195	84	90
5.....	242	195	870	400	5,320	2,240	2,130	2,600	772	195	84	86
6.....	254	195	740	400	5,150	2,360	2,240	2,240	740	189	81	84
7.....	373	198	740	400	6,030	2,240	8,100	1,920	708	189	79	81
8.....	350	195	708	382	5,320	2,360	16,200	1,720	675	189	75	75
9.....	310	202	675	382	3,950	2,360	10,390	1,530	615	189	73	75
10.....	290	254	555	360	3,950	2,360	7,130	1,440	555	186	71	73
11.....	270	324	500	355	3,810	2,240	5,850	1,440	528	177	70	73
12.....	254	490	500	355	2,860	1,920	4,990	1,350	495	165	70	73
13.....	254	410	528	355	2,240	1,920	4,530	1,440	470	165	70	71
14.....	235	342	480	319	2,130	2,130	4,530	1,530	445	165	70	73
15.....	234	306	450	314	2,360	3,120	4,680	1,530	430	160	67	70
16.....	226	342	435	314	2,130	3,120	4,830	1,530	410	149	67	70
17.....	216	382	440	310	1,920	2,860	4,680	1,530	382	136	67	73
18.....	216	364	500	350	1,720	2,130	4,230	1,530	373	128	67	73
19.....	206	355	500	355	2,020	2,020	3,390	1,530	373	126	67	73
20.....	206	342	500	355	2,240	1,920	2,860	1,440	360	124	75	77
21.....	209	310	528	319	2,130	1,820	2,990	1,440	350	114	75	82
22.....	195	310	450	310	1,820	1,720	2,860	1,260	319	112	73	84
23.....	198	302	445	310	1,530	2,020	2,860	1,180	302	110	73	88
24.....	195	298	500	310	1,530	2,130	2,860	1,020	294	110	73	88
25.....	189	290	528	302	1,620	2,130	2,860	940	274	105	73	88
26.....	189	256	528	286	1,720	2,130	3,120	940	262	101	77	88
27.....	186	298	528	294	2,020	2,130	4,090	905	254	101	81	84
28.....	186	302	500	373	2,130	1,920	3,950	870	242	101	81	34
29.....	183	500	500	870	-----	2,020	3,390	940	230	101	81	86
30.....	186	940	485	980	-----	2,130	3,250	838	220	94	86	84
31.....	189	-----	450	1,530	-----	2,240	-----	805	-----	86	92	-----

Monthly discharge of Trinity River at Lewiston, Calif., for the year ending September 30, 1926

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
October.....	373	183	235	14,400
November.....	940	183	317	18,900
December.....	3,120	435	697	42,900
January.....	1,530	286	430	26,400
February.....	11,100	1,180	3,010	167,000
March.....	3,120	1,720	2,200	135,000
April.....	16,200	2,020	4,390	261,000
May.....	2,860	805	1,560	95,900
June.....	805	220	474	28,200
July.....	206	86	147	9,040
August.....	92	67	76.2	4,680
September.....	90	70	80.5	4,790
The year.....	16,200	67	1,120	808,000

MISCELLANEOUS DISCHARGE MEASUREMENTS

Measurements of stream flow in the Pacific slope basins in California at points other than gaging stations are listed in the following table:

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1926

Streams south of San Francisco Bay

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Dis-charge
				Feet	Sec.-ft.
Feb. 6	San Diego River.....	Pacific Ocean.....	Just above junction with Boulder Creek near Lakeside, Calif.		4.3
6	do.....	do.....	El Capitan dam site near Lakeside, Calif.		2.1
Apr. 13	do.....	do.....	do.....	1.30	187
15	do.....	do.....	do.....	.80	107
May 15	do.....	do.....	do.....		6.7
22	do.....	do.....	do.....		1.2
30	do.....	do.....	do.....		1.4
June 5	do.....	do.....	do.....		.6
12	do.....	do.....	do.....		.5
20	do.....	do.....	do.....		.3
27	do.....	do.....	do.....		.2
July 3	do.....	do.....	do.....		.2
10	do.....	do.....	do.....		.1
17	do.....	do.....	do.....		.1
23	do.....	do.....	do.....		.04
30	do.....	do.....	do.....		.04
Aug. 6	do.....	do.....	do.....		.04
13	do.....	do.....	do.....		.02
20	do.....	do.....	do.....		.03
27	do.....	do.....	do.....		.04
Sept. 3	do.....	do.....	do.....		.03
10	do.....	do.....	do.....		.01
17	do.....	do.....	do.....		.2
24	do.....	do.....	do.....		.2
May 15	do.....	do.....	Lakeside, Calif.	4.40	1.2
15	do.....	do.....	Riverview near Lakeside, Calif.		.3
22	do.....	do.....	do.....		.1
Feb. 6	Cuyamaca Water Co.'s flume.	Diverts from San Diego River.	South Fork of San Diego River near Alpine, Calif.	.82	7.8
6	do.....	do.....	Chocolate Creek near Lakeside, Calif.	.80	8.0
Oct. 11	do.....	do.....	Grossmont, Calif.	.38	2.0
Feb. 6	do.....	do.....	do.....	1.03	14.1
Apr. 20	do.....	do.....	do.....	1.18	18.3
June 30	do.....	do.....	do.....	.52	4.1
Apr. 12	South Fork of San Diego River.	San Diego River.....	Siphon of Cuyamaca Water Co., near Alpine, Calif.	17.75	26
Feb. 6	Cuyamaca Water Co.'s South Fork flume.	South Fork of San Diego River.	Intake near Alpine, Calif.		1.0
Apr. 15	do.....	do.....	do.....	.82	7.3
May 28	do.....	do.....	do.....	.29	1.0
Apr. 8	San Vicente Creek.	San Diego River.....	Foster, Calif.		467
12	do.....	do.....	300 feet below bridge near Lakeside, Calif.		69
15	do.....	do.....	do.....		35
21	do.....	do.....	do.....		13
May 15	do.....	do.....	Near Foster, Calif.		.6
22	do.....	do.....	do.....		.2
Feb. 6	La Mesa ditch.	Diverts from San Diego River.	Intake near La Mesa, Calif.	1.68	13.9
May 16	Santa Ysabel Creek.	San Dieguito River...	Near Escondido, Calif.	6.18	25
23	do.....	do.....	do.....	6.17	22
30	do.....	do.....	do.....	6.30	14
June 6	do.....	do.....	do.....	6.22	11
13	do.....	do.....	do.....	6.18	7.4
20	do.....	do.....	do.....	6.15	6.1
27	do.....	do.....	do.....	6.17	2.2
July 3	do.....	do.....	do.....	6.14	2.4
10	do.....	do.....	do.....	6.05	1.5
17	do.....	do.....	do.....	6.06	.3
23	do.....	do.....	do.....	6.06	.2
30	do.....	do.....	do.....	6.06	.1

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1926—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>
Aug. 6	Santa Ysabel Creek	San Dieguito River	Near Escondido, Calif.	6.06	0.04
13	do	do	do		.01
20	do	do	do		.01
27	do	do	do		.0
May 16	Guejito Creek	Santa Ysabel Creek	do		.1
16	Santa Maria Creek	do	do		.1
Apr. 5	Murrieta Creek	Santa Margarita River	300 feet above gage near Temecula, Calif.	1.60	62
July 2	Spring Brook	Santa Ana River	Mouth at Riverside, Calif.		4.2
12	do	do	do		3.8
23	do	do	do		3.4
31	do	do	do		3.6
Aug. 13	do	do	do		3.0
25	do	do	do		3.1
Sept. 8	do	do	do		11
17	do	do	do		2.7
Oct. 15	Upper Haines Creek diversion.	Diverts from Haines Creek.	Upper sand box near Tujunga, Calif.	1.56	.05
Nov. 3	do	do	do	.22	.05
Jan. 14	do	do	do	1.60	.06
Feb. 8	do	do	do	1.60	.09
Mar. 5	do	do	do	1.68	.12
May 21	do	do	do	1.74	.11
July 7	do	do	do	1.62	.05
Aug. 5	do	do	do	1.58	0.04
23	do	do	do	1.56	.08
Sept. 2	do	do	do	1.56	.04
Oct. 15	Lower Haines Creek diversion.	do	Lower tunnel below gaging station on Haines Creek near Tujunga, Calif.	1.56	.07
Nov. 3	do	do	do	1.58	.08
Jan. 14	do	do	do	1.60	.10
Feb. 8	do	do	do	1.62	.10
Mar. 5	do	do	do	1.68	.15
May 21	do	do	do	1.74	.16
July 7	do	do	do	1.62	.12
Aug. 5	do	do	do	1.58	.10
23	do	do	do	1.56	.08
Sept. 2	do	do	do	1.56	.10

Kern River Basin

Oct. 22	Salmon Creek	Kern River	Gaging station near Kernville, Calif.	1.29	2.2
Nov. 21	do	do	do	1.17	.9
Dec. 15	do	do	do	1.27	1.9
Jan. 27	do	do	do	1.26	1.9
Feb. 21	do	do	do	1.52	5.0
Apr. 26	do	do	do	2.10	14
May 20	do	do	do	1.62	6.6
June 25	do	do	do	1.16	.9
July 21	do	do	do	.97	.8
Sept. 21	do	do	do	1.18	.6
Jan. 22	Ranger ditch	Diverts from Kern River.	About 1 mile below Kernville, Calif.		.8
28	do	do	do		3.9

Tulare Lake Basin

Mar. 27	South Fork of Tule River.	Tule River	Gaging station near Porterville, Calif.	1.53	15
Apr. 9	do	do	do	2.10	64
June 22	do	do	do	1.18	4.4
Sept. 22	do	do	do	.76	.8

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1926—Continued

San Joaquin River Basin

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Sept. 8	South Fork of San Joaquin River.	San Joaquin River	Blaney Meadows		37
Oct. 20	do.	do.	Above Florence Lake Reservoir.		47
2	Hooper Creek	South Fork of San Joaquin River.	Near trail crossing, about $\frac{1}{4}$ mile above mouth.		2.4
Nov. 7	do.	do.	do.		4.2
Dec. 5	do.	do.	do.		3.3
Jan. 7	do.	do.	do.		1.6
Feb. 8	do.	do.	do.		1.8
Mar. 19	do.	do.	do.		2.5
May 30	do.	do.	do.		31
June 27	do.	do.	do.		13
July 29	do.	do.	do.		4.1
Sept. 2	do.	do.	do.		2.1
Dec. 2	Rube Creek	do.	At Cassidy Meadow trail; altitude about 6,500 feet.		2.8
Jan. 12	do.	do.	do.		1.6
May 14	do.	do.	do.		11
June 24	do.	do.	do.		2.3
July 18	do.	do.	do.		1.1
Oct. 6	Iron Creek	North Fork of San Joaquin River.	At former gaging station, at mouth.	6.05	4.7
Nov. 4	do.	do.	do.	6.03	3.8
Dec. 4	do.	do.	do.	6.17	7.8
Jan. 7	do.	do.	do.	* 5.99	1.7
23	do.	do.	do.	* 5.88	1.3
Feb. 6	do.	do.	do.	* 5.93	2.4
21	do.	do.	do.	* 5.94	2.4
Mar. 5	do.	do.	do.	6.14	7.2
Apr. 5	do.	do.	do.	6.27	14
27	do.	do.	do.	7.40	143
May 5	do.	do.	do.	6.96	56
31	do.	do.	do.	6.68	36
June 1	do.	do.	do.	6.75	35
29	do.	do.	do.	6.15	6.8
July 1	do.	do.	do.	6.09	5.6
Aug. 2	do.	do.	do.	5.84	1.4
10	do.	do.	do.	5.80	.7
Sept. 3	do.	do.	do.	5.72	.5
Oct. 3	Cora Lakes Creek	do.	At mouth		.03
Nov. 4	do.	do.	do.		.5
Dec. 5	do.	do.	do.		1.2
Jan. 24	do.	do.	do.		.3
Feb. 6	do.	do.	do.		1.1
Mar. 6	do.	do.	do.		4.7
29	do.	do.	do.		19
May 31	do.	do.	do.		13
June 29	do.	do.	do.		.4
Oct. 6	West Fork of Granite Creek.	Granite Creek	At gaging station 1 mile above East Fork.	2.52	2.6
Nov. 2	do.	do.	do.	2.98	8.1
Dec. 3	do.	do.	do.	3.65	24
Jan. 11	do.	do.	do.	* 3.30	6.7
20	do.	do.	do.	* 3.26	4.3
Feb. 2	do.	do.	do.	* 4.36	6.7
17	do.	do.	do.	* 4.18	13
Mar. 2	do.	do.	do.	* 4.10	23
20	do.	do.	do.	4.02	39
Apr. 1	do.	do.	do.	4.75	87
26	do.	do.	do.	7.65	695
May 7	do.	do.	do.	5.23	115
24	do.	do.	do.	5.15	119
June 2	do.	do.	do.	5.01	104
22	do.	do.	do.	3.24	15
July 2	do.	do.	do.	2.72	6.9
Aug. 4	do.	do.	do.	2.05	.2
29	do.	do.	do.		.0
Oct. 5	do.	do.	At gaging station $\frac{1}{2}$ mile above East Fork.	3.58	1.8
Nov. 2	do.	do.	do.	4.02	11
Dec. 3	do.	do.	do.	4.55	35
Jan. 20	do.	do.	do.	* 4.38	3.9

* Stage-discharge relation affected by ice.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1926—Continued

San Joaquin River Basin—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Feb. 2	West Fork of Granite Creek.	Granite Creek.....	At gaging station $\frac{1}{2}$ mile above East Fork.	6.50	7.5
28	do	do	do	5.84	23
Mar. 2	do	do	do	5.63	22
22	do	do	do	4.80	56
Apr. 1	do	do	do	5.10	95
25	do	do	do	6.90	548
May 7	do	do	do	5.39	138
24	do	do	do	5.31	124
June 2	do	do	do	5.28	116
22	do	do	do	4.19	15
July 2	do	do	do	3.83	4.8
Aug. 4	do	do	do	3.18	.1
28	do	do	do		.0
Oct. 5	East Fork of Granite Creek.	do	At gaging station $1\frac{1}{4}$ miles above mouth.	3.92	.4
Nov. 2	do	do	do	4.42	5.7
Dec. 2	do	do	do	4.48	7.2
Jan. 11	do	do	do	4.43	2.8
19	do	do	do	4.67	3.9
Feb. 1	do	do	do	4.25	3.0
16	do	do	do	4.50	5.6
Mar. 2	do	do	do	4.51	8.6
20	do	do	do	4.76	16
Apr. 2	do	do	do	5.12	38
26	do	do	do	6.55	332
May 8	do	do	do	5.45	64
26	do	do	do	5.45	67
June 3	do	do	do	5.38	57
23	do	do	do	4.40	5.2
July 2	do	do	do	4.05	1.1
Aug. 4	do	do	do	3.43	.1
Sept. 10	do	do	do		.0
Oct. 1	Jackass Creek	San Joaquin River	At gaging station $\frac{1}{2}$ mile above West Fork.	1.40	1.2
4	do	do	do	1.38	1.2
8	do	do	do	1.48	1.6
12	do	do	do	1.72	4.6
15	do	do	do	1.78	5.3
21	do	do	do	1.75	4.6
24	do	do	do	1.66	3.6
27	do	do	do	1.60	2.6
Nov. 1	do	do	do	1.54	2.2
5	do	do	do	1.58	2.5
8	do	do	do	1.60	2.6
13	do	do	do	1.78	5.2
18	do	do	do	1.59	2.5
Dec. 1	do	do	do	1.66	3.5
5	do	do	do	1.88	7.7
31	do	do	do	1.60	2.4
Jan. 1	do	do	do	1.59	2.4
14	do	do	do	1.46	1.8
30	do	do	do	1.60	3.2
Feb. 1	do	do	do	1.59	3.2
14	do	do	do	1.79	5.8
23	do	do	do	1.79	5.5
Mar. 3	do	do	do	2.02	11
31	do	do	do	3.37	76
Apr. 1	do	do	do	3.26	67
20	do	do	do	4.42	170
May 13	do	do	do	3.41	77
June 5	do	do	do	2.36	19
19	do	do	do	1.90	7.3
July 4	do	do	do	1.56	2.3
Aug. 7	do	do	do	1.37	1.0
Sept. 9	do	do	do	1.23	.9
Oct. 1	West Fork of Jackass Creek.	Jackass Creek	At gaging station $\frac{1}{2}$ mile above mouth.	1.88	1.2
4	do	do	do	1.85	1.3
8	do	do	do	1.90	1.6
12	do	do	do	2.08	3.9
15	do	do	do	1.96	2.3
21	do	do	do	1.90	1.3
25	do	do	do	1.90	1.5
27	do	do	do	1.90	1.4

* Stage-discharge relation affected by ice.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1926—Continued

San Joaquin River Basin—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Nov. 1	West Fork of Jackass Creek.	Jackass Creek.	At gaging station $\frac{1}{2}$ mile above mouth.	1.90	1.6
5	do.	do.	do.	1.94	1.8
8	do.	do.	do.	1.93	1.6
13	do.	do.	do.	1.96	2.1
18	do.	do.	do.	1.92	1.7
Dec. 1	do.	do.	do.	1.94	2.0
5	do.	do.	do.	1.96	1.9
31	do.	do.	do.	1.94	1.9
Jan. 1	do.	do.	do.	1.94	1.8
14	do.	do.	do.	1.93	1.8
31	do.	do.	do.	2.14	5.0
Feb. 1	do.	do.	do.	2.15	5.3
14	do.	do.	do.	2.31	8.3
23	do.	do.	do.	2.22	6.7
Mar. 3	do.	do.	do.	2.35	9.5
31	do.	do.	do.	2.20	6.4
Apr. 1	do.	do.	do.	2.23	6.9
20	do.	do.	do.	2.38	9.6
May 12	do.	do.	do.	2.22	6.9
June 5	do.	do.	do.	2.04	3.1
19	do.	do.	do.	1.99	2.9
July 4	do.	do.	do.	1.92	2.0
Aug. 7	do.	do.	do.	1.82	.9
Sept. 9	do.	do.	do.	1.77	.9
Oct. 8	Chiquito Creek.	San Joaquin River	At gaging station $\frac{1}{2}$ mile above Cabin Creek.	.76	4.3
Nov. 1	do.	do.	do.	.84	6.5
27	do.	do.	do.	.81	4.7
Dec. 2	do.	do.	do.	.95	7.7
15	do.	do.	do.	.88	5.0
Jan. 2	do.	do.	do.	.72	4.1
17	do.	do.	do.	.80	4.8
27	do.	do.	do.	.78	4.2
Feb. 6	do.	do.	do.	.98	9.8
16	do.	do.	do.	.96	7.2
22	do.	do.	do.	.96	7.5
Mar. 3	do.	do.	do.	1.28	17
28	do.	do.	do.	2.00	41
Apr. 5	do.	do.	do.	1.82	48
24	do.	do.	do.	3.63	303
May 9	do.	do.	do.	2.31	90
19	do.	do.	do.	2.57	113
June 5	do.	do.	do.	1.62	36
17	do.	do.	do.	1.27	19
July 6	do.	do.	do.	.90	8.3
Aug. 4	do.	do.	do.	.56	2.6
8	do.	do.	do.	.52	2.3
Sept. 10	do.	do.	do.	.40	1.4
Oct. 9	Mugler Creek	Chiquito Creek	At mouth.		.3
26	do.	do.	do.		.8
Nov. 27	do.	do.	do.		.8
Dec. 15	do.	do.	do.		.9
Jan. 2	do.	do.	do.		.8
17	do.	do.	do.		.9
Feb. 9	do.	do.	do.		2.1
17	do.	do.	do.		1.6
22	do.	do.	do.		2.1
Mar. 4	do.	do.	do.		3.4
28	do.	do.	do.		16
Apr. 5	do.	do.	do.		15
May 19	do.	do.	do.		20
June 10	do.	do.	do.		6.3
July 6	do.	do.	do.		1.7
Sept. 10	do.	do.	do.		.2
Oct. 9	Beasore Creek	do.	do.		1.0
26	do.	do.	do.		2.3
Nov. 27	do.	do.	do.		2.8
Dec. 15	do.	do.	do.		2.7
Jan. 2	do.	do.	do.		4.2
17	do.	do.	do.		2.5
Feb. 9	do.	do.	do.		5.2
17	do.	do.	do.		4.8
22	do.	do.	do.		7.5
Mar. 4	do.	do.	do.		9.4
28	do.	do.	do.		58

* Stage-discharge relation affected by ice.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1926—Continued

San Joaquin River Basin—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Apr. 5	Beasore Creek	Chiquito Creek	At mouth		59
May 19	do.	do.	do.		43
June 10	do.	do.	do.		12
July 6	do.	do.	do.		2.8
Sept. 10	do.	do.	do.		.6
Oct. 8	West Fork of Chiquito Creek	do.	About 1½ miles above mouth.		1.4
25	do.	do.	do.		1.6
Nov. 25	do.	do.	do.		2.6
Dec. 16	do.	do.	do.		3.8
Jan. 26	do.	do.	do.		3.1
Feb. 18	do.	do.	do.		9.6
21	do.	do.	do.		12
Mar. 5	do.	do.	do.		53
29	do.	do.	do.		25
May 20	do.	do.	do.		9.5
June 9	do.	do.	do.		
Apr. 20	Stevenson Creek	San Joaquin River	2,500 feet above water-stage recorder, at Shaver, Calif.		16
July 13	Cherry Creek	Tuolumne River	At mouth near Early Intake, Calif.		12
22	Cherry Canal	Diverts from Cherry Creek	100 feet below tunnel No. 1½ near Early Intake, Calif.	3.35	126
Sept. 4	do.	do.	do.		3.57
July 14	do.	do.	200 feet above tunnel No. 2.	4.43	149
14	do.	do.	200 feet below tunnel No. 2½.	4.43	150
22	do.	do.	do.	4.00	126
Sept. 4	do.	do.	do.	3.98	143
July 14	do.	do.	Between tunnels Nos. 3 and 4.	4.50	147
14	do.	do.	200 feet below tunnel No. 4.	4.50	144
22	do.	do.	do.	4.02	123
Sept. 4	do.	do.	do.	4.30	142
Feb. 4	Duck Creek	Littlejohn Creek	Farmington, Calif.	4.14	54
1	Jahant Slough	Mokelumne River	At State highway near Acampo, Calif.		5

Sacramento River Basin

Oct. 1	Pit River	Sacramento River	At highway bridge at Pittville, Calif.		1.2
8	do.	do.	do.		1.1
15	do.	do.	do.		1.2
22	do.	do.	do.		2
Jan. 6	do.	do.	1½ miles below Pit No. 3 dam.		24
6	do.	do.	2 miles below Pit No. 3 dam.		31
Nov. 5	do.	do.	SE. ¼ sec. 5, T. 35 N., R. 1 W., above Hatchet Creek.	5.03	2,180
Mar. 15	do.	do.	do.	5.83	2,980
Apr. 27	do.	do.	do.	5.71	2,700
30	South Fork of Pit River	Pit River	Sec. 12, T. 39 N., R. 13 E., below West Valley Creek.	1.58	120
Sept. 15	do.	do.	do.	.53	12
14	Canyon Creek	do.	Near Alturas, Calif., in sec. 32, T. 41 N., R. 11 E.		1.8
Apr. 29	Ash Creek	do.	Sec. 29, T. 39 N., R. 10 E., near Adin, Calif.	.58	16
Sept. 14	do.	do.	do.	.54	14
28	do.	do.	do.	.58	15
28	do.	do.	do.	.58	16
16	Willow Creek	Ash Creek	Sec. 27, T. 38 N., R. 9 E., 6 miles above mouth near Adin, Calif.		5.6
28	do.	do.	do.		5.2
16	Widow Valley Creek	Pit River	Sec. 26, T. 39 N., R. 6 E., near Lookout, Calif.		4.7
28	do.	do.	do.		4.1
Apr. 13	Hat Creek	do.	Above Fitzpatrick ranch near Carbon, Calif.	1.64	409
21	Salmon Creek	do.	Sec. 2, T. 36 N., R. 3 E., near Cayton, Calif.		44

• Estimated.

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1926—Continued

Sacramento River Basin—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Apr. 14	Burney Creek	Pit River	SW. ¼ sec. 11, T. 34 N., R. 2 E., 300 feet below junction of East and West Forks.	2.43	78
14	do.	do.	SW. ¼ sec. 19, T. 35 N., R. 3 E., ¼ mile southwest of Burney, Calif.	2.92	97
15	do.	do.	Sec. 28, T. 37 N., R. 3 E., ¼ mile below Burney Falls, 10 miles north of Burney, Calif.	2.01	188
16	do.	do.	do.	1.97	171
16	Rock Creek	do.	NE. ¼ sec. 34, T. 37 N., R. 2 E., 450 feet above Henderson Trail crossing, 7 miles southwest of Cayton, Calif.	1.40	40
Dec. 13	Canyon Creek	South Fork of Yuba River.	NW. ¼ sec. 8, T. 18 N., R. 12 E., ¼ mile below Bowman Dam, Calif.	3.37	409
16	do.	do.	do.	3.48	413
20	do.	do.	do.	3.06	280
31	do.	do.	do.	1.94	115
Jan. 1	do.	do.	do.	1.28	59
3	do.	do.	do.	1.09	38
4	do.	do.	do.	1.07	36
8	do.	do.	do.	1.02	31
16	do.	do.	do.	.97	25
21	do.	do.	do.	.99	28
27	do.	do.	do.	1.01	26
Feb. 17	do.	do.	do.	1.60	80
23	do.	do.	do.	1.44	59
Mar. 8	do.	do.	do.	2.14	117
23	do.	do.	do.	2.39	158
Apr. 7	do.	do.	do.	4.50	661
July 11	do.	do.	Measured in North Bloomfield ditch, as all water was in the ditch.		26
Aug. 1	do.	do.	do.		19
10	do.	do.	do.		15
25	do.	do.	do.		13
Sept. 4	do.	do.	do.		13
13	do.	do.	do.		14

Klamath River Basin

Nov. 10	Big Spring Creek	Williamson River in Klamath Marsh.	100 feet below head, in sec. 16, T. 30 S., R. 8 E.		11.2
10	do.	do.	Below tributary on Lenz ranch, sec. 22, T. 30 S., R. 8 E.		11.6
July 17	do.	do.	do.		4.5
17	Scott Creek Canal	Diverts from Scott Creek.	Above junction with Sand Creek Canal.		3.0
17	Sand Creek Canal	Diverts from Sand Creek.	Above junction, in sec. 14, T. 31 S., R. 7 E.		2.6
Nov. 2	Shakespeare Creek	Williamson River	In or near sec. 14, T. 34 S., R. 7 E.		10.8
6	Spring Creek	do.	In NE. ¼ sec. 9, T. 34 S., R. 7 E., near Chiloquin, Oreg.		310
Dec. 7	do.	do.	do.		289
Feb. 27	do.	do.	do.		281
May 22	do.	do.	do.		283
July 16	do.	do.	In NE. ¼ sec. 9, T. 34 S., R. 7 E., near Chiloquin, Oreg., including canal.		273
Sept. 6	do.	do.	do.		270
July 14	Fivemile Creek	Sprague River	At old gaging station, in sec. 34, T. 35 S., R. 13 E.		17.6
Sept. 4	do.	do.	do.		17.5
May 24	Brown Creek	do.	At road crossing, sec. 14, T. 36 S., R. 12 E., including canal.		4.6
July 15	do.	do.	do.		3.9

Miscellaneous discharge measurements in Pacific slope basins in California during the year ending September 30, 1926—Continued

Klamath River Basin—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
July 14	Sycan River.....	Sprague River.....	Old gaging station, SE. $\frac{1}{4}$ sec. 8, T. 35 S., R. 12 E.	<i>Feet</i> 0.41	<i>Sec.-ft.</i> 2.6
Sept. 4	do.....	do.....	do.....	.42	2.7
July 15	Whiskey Creek.....	do.....	At bridge in sec. 19, T. 36 S., R. 12 E.		10.0
Sept. 4	do.....	do.....	do.....		11.2
Oct. 31	McCreedy Spring.....	do.....	In sec. 25, T. 34 S., R. 8 E.		45.8
Nov. 7	Wood River.....	Upper Klamath Lake.	In sec. 3, T. 33 S., R. 7 $\frac{1}{2}$ E., above Sun Creek and below springs near Fort Klamath.		208
9	Fort Creek.....	Wood River.....	One-fourth mile below head in sec. 23, T. 33 S., R. 7 $\frac{1}{2}$ E.		61
9	do.....	do.....	At Dalles-California highway crossing in sec. 26, T. 33 S., R. 7 $\frac{1}{2}$ E., including canal.		89
Feb. 28	do.....	do.....	do.....		92
Apr. 4	do.....	do.....	do.....		80
May 22	do.....	do.....	do.....		79
July 16	do.....	do.....	do.....		78
Sept. 6	do.....	do.....	do.....		79
Nov. 6	Crooked Creek Springs	Crooked Creek.....	At fish hatchery in sec. 1, T. 34 S., R. 7 $\frac{1}{2}$ E.		25.9
Apr. 4	Sevenmile Creek.....	Upper Klamath Lake.	At bridge, sec. 36, T. 33 S., R. 6 E.	2.50	81
Sept. 6	do.....	do.....	At bridge, sec. 36, T. 33 S., R. 6 E., including canal.	1.50	45.5
Apr. 8	Shasta River.....	Klamath River.....	Jones ranch near Edgewood, Calif.	5.70	862
8	do.....	do.....	do.....	5.65	877
Jan. 2	Little Shasta River.....	Shasta River.....	At bridge near southwest corner sec. 34, T. 45 N., R. 5 W., California.	1.46	15.4

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