UNITED STATES DEPARTMENT OF THE INTERIOR
RAY LYMAN WILBUR, Secretary
GEOLOGICAL SURVEY
W. C. MENDENHALL, Director

Water-Supply Paper 720

SURFACE WATER SUPPLY *of the* UNITED STATES 1931

PART 10
THE GREAT BASIN

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Prepared in cooperation with the States of
CALIFORNIA, NEVADA, OREGON, UTAH, and WYOMING

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SURFACE WATER SUPPLY OF THE GREAT BASIN, 1931

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, 1931.

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

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

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

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

Annual appropriations for the fiscal year ending June 30, 1895–1932

1895	$12,500.00	1908–1910	$100,000.00	1926	$165,000.00
1896	24,500.00	1911–1917	150,000.00	1927	151,000.00
1897–1899	50,000.00	1918	175,000.00	1928	147,000.00
1900	70,000.00	1919	148,244.10	1929	270,500.00
1901–2	100,000.00	1920	175,000.00	1930	275,000.00
1903–1906	200,000.00	1921–1923	180,000.00	1931	565,000.00
1907	150,000.00	1924–25	170,000.00	1932	711,000.00

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

Measurements of stream flow have been made at about 6,270 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1931, 2,660 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at

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

DEFINITION OF TERMS

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

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

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

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

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

The following terms not in common use are here defined:

"Stage-discharge relation," an abbreviation for the term "relation of gage height to discharge."

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

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1930, and ending September 30, 1931. At the beginning of January in most parts of the United States much of the precipitation in the preceeding three months is stored in the form of snow or ice, or

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

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a staff or chain gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. A typical gaging station, equipped with water-stage recorder and measuring cable and car, is shown in Figure 1.

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

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

The description of the station gives, in addition to statements regarding location and type of gage, information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded discharges, and the accuracy of the records. The maximum discharge given under "Extremes" does not represent the crest discharge unless a water-stage recorder was in operation or a nonrecording gage was read at the time of the crest.

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

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

In the table of monthly discharge the column headed "Maximum" gives the maximum daily discharge, and not the discharge

when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month. On this average flow are

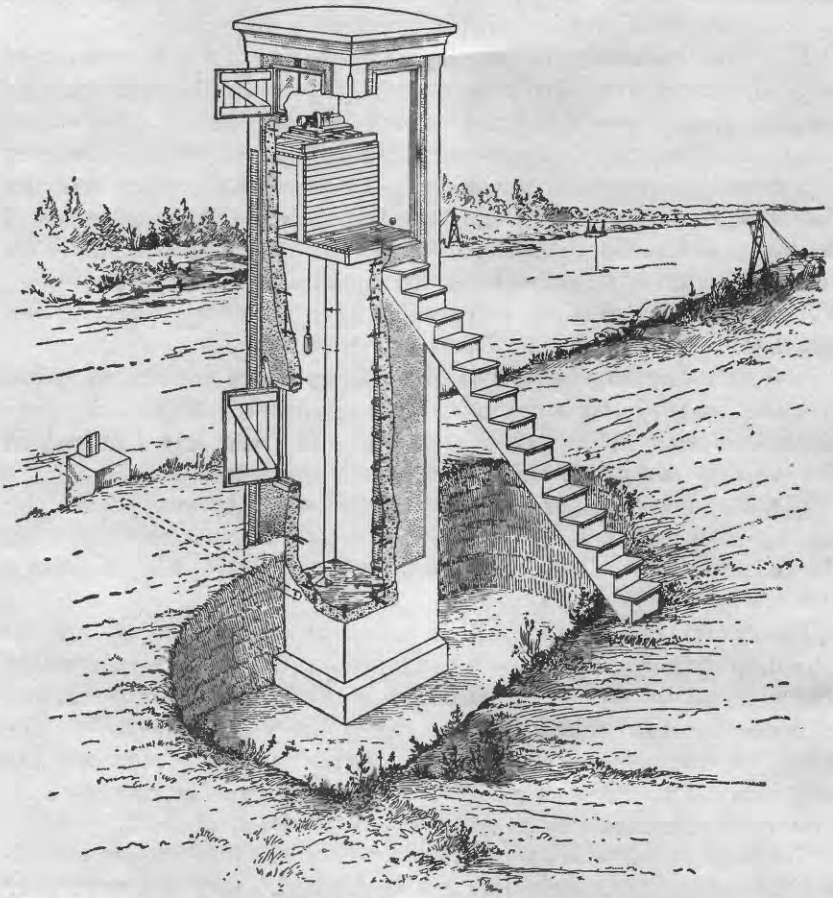

FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

based computations recorded in the remaining columns, which are defined on page 2.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

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

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that records are

accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," within 20 per cent or more.

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

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

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

PUBLICATIONS

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

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

Part 1. North Atlantic slope basins (St. John River to York River).
2. South Atlantic slope and eastern Gulf of Mexico basins (James River to Mississippi River).
3. Ohio River Basin.
4. St. Lawrence River Basin.
5. Hudson Bay and upper Mississippi River Basins.
6. Missouri River Basin.
7. Lower Mississippi River Basin.
8. Western Gulf of Mexico basins.
9. Colorado River Basin.

Part 10. The Great Basin.
11. Pacific slope basins in California.
12. North Pacific slope drainage basins in three parts:
A, Pacific slope basins in Washington and upper Columbia River Basin.
B, Snake River Basin.
C, Pacific slope basins in Oregon and lower Columbia River Basin.

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

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

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

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

Augusta, Me., Statehouse.
Boston, Mass., 2500 Customhouse.
Hartford, Conn., 318 State Office Building.
Albany, N. Y., 603 State Public Works Building.
Trenton, N. J., 710 Trenton Trust Building.
Harrisburg, Pa., Claster Building.
Charlottesville, Va., Brooks Museum, University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 220 Post Office Building.
Columbia, S. C., 801 National Loan & Exchange Bank Building.
Ocala, Fla., Post Office Building.
Tuscaloosa, Ala., Post Office Building.
Chattanooga, Tenn., 630 Power Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 319 Federal Building.
Urbana, Ill., 302 University New Agricultural Building.
Madison, Wis., 337N State Capitol.
St. Paul, Minn., 202 Old State Capitol.
Topeka, Kans., 23 Federal Building.
Rolla, Mo., Rolla Building, School of Mines and Metallurgy.
Fort Smith, Ark., Post Office Building.
Austin, Tex., State Capitol.
Santa Fe., N. Mex., State Capitol.
Tucson, Ariz., 210 Post Office Building.
Denver, Colo., 403 Post Office Building.
Salt Lake City, Utah, 313 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, Federal Building.
Helena, Mont., 416 Power Block.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 303 Customhouse.
Los Angeles, Calif., 751 South Figueroa Street, Room 510.
Honolulu, Hawaii, Territorial Office Building.

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

Stream-flow records have been obtained at about 6,270 points in the United States, and the data obtained have been published in the reports tabulated as follows.

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

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

Report	Character of data	Year
10th A, pt. 2	Descriptive information only	
11th A, pt. 2	Monthly discharge and descriptive information	1884 to Sept., 1890.
12th A, pt. 2	do	1884 to June 30, 1891.
13th A, pt. 3	Mean discharge in second-feet	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871 to 1893)	1888 to Dec. 31, 1893.
B 131	Descriptions, measurements, gage heights, and ratings	1893–94.
16th A, pt. 2	Descriptive information only	
B 140	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11	Gage heights (also gage heights for earlier years)	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895–96.
W 15	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)	1898.
W 35 to 39	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge	1899.
W 47 to 52	Descriptions, measurements, gage heights, and ratings	1900.
22d A, pt. 4	Monthly discharge	1900.
W 65, 66	Descriptions, measurements, gage heights, and ratings	1901.
W 75	Monthly discharge	1901.
W 82 to 85	Complete data	1902.
W 97 to 100	do	1903.
W 124 to 135	do	1904.
W 165 to 178	do	1905.
W 201 to 214	do	1906.
W 241 to 252	do	1907–8.
W 261 to 272	do	1909.
W 281 to 292	do	1910.
W 301 to 312	do	1911.
W 321 to 332	do	1912.
W 351 to 362	do	1913.
W 381 to 394	do	1914.
W 401 to 414	do	1915.
W 431 to 444	do	1916.
W 451 to 464	do	1917.
W 471 to 484	do	1918.
W 501 to 514	do	1919–20.
W 521 to 534	do	1921.
W 541 to 554	do	1922.
W 561 to 574	do	1923.
W 581 to 594	do	1924.
W 601 to 614	do	1925.
W 621 to 634	do	1926.
W 641 to 654	do	1927.
W 661 to 674	do	1928.
W 681 to 694	do	1929.
W 696 to 709	do	1930.
W 711 to 724	do	1931.

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

and are published under "Miscellaneous discharge measurements" at the end of each report in the same relative order as the regular gaging stations. An index of the reports containing records obtained prior to 1904 has been published in Water-Supply Paper 119.

The following table gives, by years and drainage basins, the numbers of the papers on surface-water supply published from 1899 to 1931. The data for any particular station will, as a rule, be found in the reports covering the years during which the station was maintained. For example, data from 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

Numbers of water-supply papers containing results of stream measurements, 1899–1931

[For basins included see p. 5.]

Year	1	2	3	4	5	6	7	8	9	10	11	12-A	12-B	12-C
1899 [a]	35	[b] 35, 36	36	36	36	[c] 36, 37	37	37	[d] 37, 38	38, [e] 39	38, [f] 39	38	38	38
1900 [g]	47, [h] 48	48	48, [i] 49	49	49	49, [j] 50	50	50	50	51	51	51	51	51
1901	65, 75	65, 75	65, 75	65, 75	[k] 65, 66, 75	66, 75	[k] 65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902	82	[b] 82, 83	83	[l] 82, 83	[k] 83, 85	84	[k] 83, 84	84	85	85	85	85	85	85
1903	97	[b] 97, 98	98	97	[k] 98, 99, [m] 100	99	[k] 98, 99	99	100	100	100	100	100	100
1904	[n] 124, [o] 125, [p] 126	[p] 126, 127	128	129	[k] 128, 130	130, [q] 131	[k] 128, 131	132	133	133, [r] 134	134	135	135	135
1905	[n] 165, [o] 166, [p] 167	[p] 167, 168	169	170	171	172	[k] 169, 173	174	175, [s] 177	176, [r] 177	177	178	178	[t] 177, 178
1906	[n] 201, [o] 202, [p] 203	[p] 203, 204	205	206	207	208	[k] 205, 209	210	211, [s] 213	212, [r] 213	213	214	214	214
1907–8	241	242	243	244	245	246	247	248	249	250, [r] 251	251	252	252	252
1909	261	262	263	264	265	266	267	268	269	270, [r] 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	601	502	503	504	505	506	507	508	509	510	511	512	513	514
1921	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1930	696	697	698	699	700	701	702	703	704	705	706	707	708	709
1931	711	712	713	714	715	716	717	718	719	720	721	722	723	724

[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 4.
[b] James River only.
[c] Gallatin River
[d] Green and Gunnison Rivers and Colorado River above junction with Gunnison River.
[e] Mohave River only.
[f] Kings and Kerns 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 4.
[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 River.
[k] Tributaries of Mississippi River 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] The Great Basin in California except Truckee and Carson River Basins.
[s] Below junction with Gila.
[t] Rogue, Umpqua, and Siletz Rivers only.

COOPERATION

The work was done under cooperative agreements with the several States as follows: In California with the department of public works, B. B. Meek, director until January, 1931, and Col. Walter E. Garrison, director thereafter, and Edward Hyatt, State engineer; in Nevada with the office of the State engineer, George W. Malone; in Oregon with the office of the State engineer, Charles E. Stricklin; in Utah with the office of the State engineer, George M. Bacon; in Wyoming with the office of the State engineer, John A. Whiting.

Assistance in collecting records was rendered by the United States Bureau of Reclamation, Utah Power & Light Co., and city of Hyrum, Utah.

DIVISION OF WORK

Data for stations in Utah, Idaho, and Nevada were collected and prepared for publication under the direction of A. B. Purton, district engineer, assisted by M. T. Wilson, F. M. Bell, J. A. Allis, J. B. Ringwood, F. N. Hansen, B. M. Tanner, V. R. Bennion, and Miss Lysle Christensen.

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, R. C. Briggs, Charles Leidl, Jesse Arnold, H. C. Troxell, Jarrett Oliver, A. C. Swanson, H. M. Oren, K. F. Schumacher, F. A. Johnson, H. C. McCreery, K. R. Melin, L. E. Bossen, B. C. Colby, R. S. Lord, J. E. Jones, Miss Helen C. Smith, Miss Marguerite A. Tynan, and Miss Nettie Braverman.

Data for stations in Oregon were collected and computed in the office of the Oregon State engineer and were reviewed, checked, and prepared for publication by G. H. Canfield, district engineer, assisted by K. N. Phillips and A. H. Williams.

Data for the station in Wyoming were collected and prepared for publication under the direction of Robert Follansbee, district engineer, assisted by J. H. Bailey, R. E. Cabell, D. S. Jenkins, and L. F. Hanks.

The records were reviewed and the manuscript assembled by C. E. Knox.

GAGING-STATION RECORDS

GREAT SALT LAKE BASIN

GAGES ON GREAT SALT LAKE

LOCATION.—Staff gages at Saltair, on southeast shore of lake, 15 miles west of Salt Lake City, and at Midlake, on Lucin cut-off of Southern Pacific Railroad, 30 miles west of Ogden, Weber County, Utah. Zero of Saltair gage is 4,196.8 feet above mean sea level; zero of Midlake gage is 4,198.0 feet above mean sea level.

RECORDS AVAILABLE.—September, 1875, to December, 1899; March to July, 1904; October, 1912, to September, 1931.

EXTREMES.—Maximum elevation during year, 4,200.45 feet Apr. 15 at Saltair gage; minimum, 4,198.2 feet Sept. 15 at Saltair gage.

1850–1931: Maximum elevation, 4,211.3 feet July 12, 1877; estimated maximum, 4,212.5 feet in 1868 (data furnished by Marcus E. Jones, Salt Lake City). Minimum, 4,195.7 feet in 1902 and 1905.

REMARKS.—Apparent inconsistencies in readings are probably largely due to the effect of wind, as the two gages are about 40 miles apart. Readings on Midlake gage are furnished by the Southern Pacific Railroad Co.

Gage height, in feet, of Great Salt Lake, Utah, 1930–31

Day	Gage height		Day	Gage height		Day	Gage height	
	Saltair	Midlake		Saltair	Midlake		Saltair	Midlake
Oct. 1	2.80	1.75	Feb. 1	3.25	2.10	June 1	3.30	2.10
Oct. 15	2.90	1.85	Feb. 15	3.30	2.15	June 15	3.10	1.90
Nov. 1	[a] 2.95	1.85	Mar. 1	3.55	2.25	July 1	2.70	1.60
Nov. 15	[a] 3.00	1.85	Mar. 15	3.50	2.35	July 15	2.50	1.35
Dec. 1	[a] 3.10	1.90	Apr. 1	3.50	2.40	Aug. 1	2.30	1.15
Dec. 15	[a] 3.10	1.90	Apr. 15	3.65	2.40	Aug. 15	2.00	0.90
Jan. 1	3.20	2.00	May 1	3.45	2.35	Sept. 1	1.75	0.60
Jan. 15	3.15	2.00	May 15	3.40	2.25	Sept. 15	1.40	0.35

[a] Estimated.

BEAR RIVER BASIN

BEAR RIVER NEAR EVANSTON, WYO.

LOCATION.—Water-stage recorder in sec. 1, T. 15 N., R. 121 W., 300 feet above highway bridge and 3½ miles northwest of Evanston.

DRAINAGE AREA.—645 square miles.

RECORDS AVAILABLE.—October, 1913, to September, 1931.

EXTREMES.—Maximum discharge during year, 815 second-feet May 17 (gage height, 3.58 feet); no flow July 24–28, Aug. 9–15, 28–31.

1913–1931: Maximum discharge, 3,690 second-feet June 14, 1921 (gage height, 6.35 feet); no flow during periods in 1924 and 1931.

REMARKS.—Records good except those for period of ice effect, Nov. 21 to Mar. 15, which were based on one discharge measurement and temperature records, and for periods Mar. 23–28, Apr. 6–11, June 7, 8, which were estimated.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	48	------		194	161	418	10	5	7
2	73	53	------		185	147	467	10	3	8
3	66	52	------	250	183	172	459	8	3	8
4	61	50	------		174	259	407	8	2	6
5	60	54	------		169	214	382	7	2	6
6	53	57	------		168	211	358	6	1	5
7	57	53	------		167	274	366	6	1	5
8	60	52	------	275	165	286	374	4	1	4
9	77	48	------		163	250	382	3	0	4
10	80	50	------		161	180	320	2	0	3
11	82	48	------		160	132	277	2	0	2
12	89	52	------		158	153	265	1	0	2
13	80	48	------	370	166	214	256	1	0	2
14	77	48	------		158	351	217	1	0	2
15	70	37	------		129	455	194	3	0	2
16	72	33	------	365	116	563	172	2	63	2
17	63	34	52	379	134	707	145	2	16	2
18	66	37	------	340	158	579	132	2	8	2
19	72	31	------	330	180	407	92	2	6	2
20	70	33	------	320	172	268	77	1	4	2
21	66		------	365	158	217	58	1	3	3
22	65		------	503	155	191	45	1	3	4
23	60		------	400	161	172	29	1	4	5
24	57		------	375	177	268	22	0	3	6
25	53	38	------	330	183	396	18	0	2	6
26	55		------	310	155	404	16	0	2	5
27	58		------	240	150	361	25	0	1	5
28	54		------	220	145	295	17	0	0	6
29	53		------	223	145	265	15	1	0	5
30	46		------	217	153	265	12	94	0	5
31	46	------	------	205	------	365	------	10	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	89	46	64 5	3,970
November	57	31	43.3	2,580
December	----------	----------	45.0	2,770
January	----------	----------	50.0	3,070
February	----------	----------	75.0	4,170
March	503	205	310	19,100
April	194	116	161	9,580
May	707	132	296	18,200
June	467	12	201	12,000
July	94	0	6.1	375
August	63	0	4.3	264
September	8	2	4.2	250
The year	707	0	105	76,300

BEAR RIVER AT HARER, IDAHO

LOCATION.—Water-stage recorder in NE. ¼ sec. 22, T. 14 S., R. 45 E., half a mile below mouth of Sheep Creek, three-fourths mile north of Harer siding on Oregon Short Line Railroad, and 6 miles east of Dingle.

DRAINAGE AREA.—2,780 square miles.

RECORDS AVAILABLE.—June, 1913, to September, 1916; January, 1919, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 440 second-feet Apr. 12 (gage height, 3.85 feet); minimum, 60 second-feet Sept. 11 (gage height, 2.46 feet).

1913-1916, 1919–1931: Maximum discharge, 3,860 second-feet June 2, 1920 (gage height, 10.51 feet); minimum, that of Sept. 11, 1931.

REMARKS.—Records good. Numerous diversions for irrigation above station. Records collected by Utah Power & Light Co. under general supervision of the Geological Survey in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	262	299	165	175	195	200	319	196	142	74	113	74
2	252	299	165	175	195	200	323	198	136	72	111	71
3	266	299	175	175	200	205	323	200	128	74	114	66
4	280	299	180	175	200	215	312	228	116	68	105	65
5	291	288	180	175	205	225	319	253	111	74	100	63
6	291	280	190	175	185	205	338	234	109	84	100	62
7	302	280	185	170	190	205	369	237	107	102	102	62
8	306	280	185	170	190	215	396	217	107	91	102	71
9	313	276	185	170	195	190	412	220	109	84	100	80
10	335	266	195	164	190	201	400	214	111	82	96	66
11	357	273	190	165	185	215	412	214	111	72	89	60
12	365	273	195	165	185	225	440	211	111	74	91	65
13	357	255	200	170	185	240	412	203	111	74	93	66
14	346	245	200	170	195	230	376	206	113	74	96	65
15	342	230	200	175	185	250	342	214	113	74	100	65
16	335	205	200	180	177	255	286	222	114	79	100	63
17	331	185	200	185	180	270	276	220	111	84	100	65
18	328	185	195	185	185	275	280	225	107	89	100	65
19	320	185	195	180	195	315	286	222	104	77	100	68
20	320	185	195	180	195	295	266	208	102	74	98	71
21	320	190	195	190	205	295	266	193	96	72	93	74
22	317	200	200	190	195	310	231	172	96	72	91	77
23	313	205	200	190	190	325	214	147	95	72	87	82
24	313	210	195	190	190	280	211	136	89	72	84	89
25	313	210	190	185	195	280	206	132	84	95	82	95
26	313	210	190	185	200	290	196	132	82	100	77	96
27	313	210	185	185	195	305	186	138	80	100	72	96
28	310	205	180	190	200	315	183	142	80	100	71	93
29	306	195	180	190	------	310	186	138	80	100	71	95
30	302	185	175	195	------	330	190	134	80	102	71	96
31	299	------	175	195	------	325	------	134	------	107	74	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	365	262	314	19,300
November	299	185	237	14,100
December	200	165	188	11,600
January	195	164	179	11,000
February	205	177	192	10,700
March	330	190	258	15,900
April	440	183	299	17,800
May	253	132	192	11,800
June	142	80	104	6,190
July	107	68	82.6	5,080
August	114	71	93 0	5,720
September	96	60	74 2	4,420
The year	440	60	184	134,000

BEAR RIVER AT ALEXANDER, IDAHO

LOCATION.—Water-stage recorder in NW. ¼ sec. 17, T. 9 S., R. 41 E., 600 feet downstream from Soda plant of Utah Power & Light Co., half a mile southeast of Alexander, and 5 miles below mouth of Soda Creek.

DRAINAGE AREA.—3,840 square miles.

RECORDS AVAILABLE.—March, 1911, to September, 1916; April, 1919, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 1,370 second-feet July 25; minimum, 152 second-feet Apr. 25.

1911–1916, 1919–1931: Maximum discharge, 4,590 second-feet May 9, 1922; maximum gage height, 15.95 feet Dec. 11, 1919; minimum discharge, 36 second-feet May 4, 1928.

REMARKS.—Records good. Numerous diversions for irrigation above station. Regulation caused by storage in Bear Lake Reservoir and operations at Soda power plant. Records collected by Utah Power & Light Co. under general supervision of the Geological Survey in connection with a Federal Power Commission project.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	470	297	453	347	263	215	399	267	598	1,160	1,060	879
2	638	288	447	356	362	271	447	284	678	1,170	824	1,010
3	486	375	420	267	453	271	409	276	644	1,050	1,080	678
4	529	415	375	276	427	251	415	271	631	678	1,120	735
5	347	505	370	319	453	230	306	276	579	713	1,070	779
6	426	631	409	310	457	284	464	284	685	988	1,070	713
7	399	592	361	394	465	276	470	284	453	1,060	1,040	1,000
8	394	458	394	420	244	259	529	280	592	1,020	1,070	962
9	399	338	453	370	468	315	488	284	678	1,030	862	706
10	420	436	517	319	456	488	464	280	699	1,040	1,030	644
11	493	366	415	436	426	375	488	399	692	1,080	1,070	605
12	293	523	426	453	426	293	347	420	631	1,070	1,060	692
13	420	493	482	351	404	328	366	436	678	1,130	1,030	529
14	375	476	342	351	420	315	390	366	529	1,170	988	678
15	404	409	380	436	263	251	394	431	794	1,190	847	612
16	404	319	458	499	394	404	394	458	887	1,250	573	511
17	399	394	361	380	415	310	338	351	895	1,240	665	426
18	420	415	404	255	385	470	280	644	854	1,190	816	476
19	284	426	385	306	409	375	172	771	847	1,210	904	415
20	415	442	447	453	447	333	162	720	779	1,220	879	226
21	380	351	399	469	431	328	251	598	638	1,230	895	338
22	447	324	482	502	409	342	288	631	904	1,310	879	342
23	505	271	458	481	493	380	533	644	904	1,260	624	347
24	499	390	394	374	409	404	246	464	870	1,200	824	421
25	560	415	319	288	380	470	152	658	937	1,370	862	400
26	351	409	351	476	301	529	169	644	1,020	1,170	824	342
27	579	385	390	489	310	458	193	651	862	1,270	720	212
28	692	399	431	519	263	370	222	692	706	1,220	750	275
29	536	366	476	557	-------	263	211	631	912	1,220	757	280
30	464	426	404	513	-------	356	226	458	954	1,020	493	306
31	385	-------	420	418	-------	361	-------	476	-------	1,050	735	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	692	284	446	27,400
November	631	271	411	24,500
December	517	319	414	25,500
January	557	255	399	24,500
February	493	244	394	21,900
March	529	215	341	21,000
April	529	152	334	19,900
May	771	267	462	28,400
June	1,020	453	751	44,700
July	1,370	678	1,130	69,500
August	1,120	493	885	54,400
September	1,010	212	551	32,800
The year	1,370	152	545	394,000

BEAR RIVER NEAR WESTON, IDAHO

LOCATION.—Water-stage recorder in SW. ¼ sec. 17, T. 16 S., R. 39 N., at Weston-Fairview highway bridge 3 miles east of Weston.

RECORDS AVAILABLE.—October, 1919, to September, 1931. Comparable records obtained near Preston, Idaho, October, 1889, to January, 1917.

EXTREMES.—Maximum mean daily discharge during year, 1,400 second-feet Aug. 6; minimum, 82 second-feet Apr. 29.

1919–1931: Maximum discharge, 6,100 second-feet May 8 or 9, 1928 (gage height, 12.1 feet); minimum, 80 second-feet Apr. 20, 1930.

REMARKS.—Records fair. West Cache Canal and numerous irrigation ditches divert above station. Regulation caused by storage in Bear Lake Reservoir and operation of power plants above gage. Records furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	885	865				446	705	260	328	748	766	1,150
2	540	825				454	570	94	510	598	850	715
3	635	318				530	590	198	490	570	1,020	582
4	1,140	500				502	630	148	522	874	1,140	665
5	715	595				379	606	182	574	1,290	1,180	700
6	408	815				760	482	138	530	826	1,400	635
7	480	520				518	558	148	255	680	880	760
8	635	966				470	790	106	482	940	998	670
9	680	560				349	784	172	450	910	772	665
10	840	272			760	685	705	166	458	984	998	1,080
11	680	815				502	730	182	442	989	991	730
12	895	820				904	570	134	482	952	1,250	655
13	516	890				622	391	190	566	1,150	1,390	626
14	492	705				550	462	242	630	1,040	856	550
15	600	910				614	558	292	558	940	1,110	598
16	775	715	697	687		570	598	310	502	670	940	645
17	595	480				518	578	409	514	832	910	424
18	745	900			760	618	490	340	725	874	1,180	470
19	595	710			730	570	228	554	766	784	772	412
20	524	760			778	660	349	502	685	802	1,160	376
21	590	850			790	614	618	490	685	1,070	1,130	424
22	508	640			510	874	178	586	502	1,380	1,040	446
23	660	400			820	438	84	376	490	1,060	934	430
24	790	760			700	534	174	340	1,080	1,260	665	364
25	825	740			550	880	182	370	1,140	850	862	458
26	595	820			438	622	140	680	790	970	760	388
27	655	310			650	736	94	730	850	892	736	403
28	1,000	680			574	886	248	298	880	1,060	1,140	313
29	615	790			-------	725	82	394	868	1,050	715	406
30	815	570			-------	546	126	754	1,110	874	650	406
31	850	-------			-------	562	-------	230	-------	814	570	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,140	408	683	42,200
November	966	272	683	40,600
December	----------	----------	697	42,900
January	----------	----------	687	42,200
February	----------	----------	722	40,100
March	904	349	607	37,000
April	790	82	443	26,400
May	754	94	323	19,900
June	1,140	255	627	37,400
July	1,380	570	927	56,800
August	1,400	570	960	59,000
September	1,150	313	572	34,000
The year	1,400	----------	663	478,000

BEAR RIVER NEAR COLLINSTON, UTAH

LOCATION.—Water-stage recorder in W. ½ sec. 34, T. 13 N., R. 2 W., 1 mile below Cutler plant of Utah Power & Light Co. at Wheelon railroad siding and 4 miles north of Collinston.

DRAINAGE AREA.—6,000 square miles.

RECORDS AVAILABLE.—July, 1889, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 1,720 second-feet Mar. 11; minimum, 23 second-feet Sept. 28.

1889–1931: Maximum discharge, 11,600 second-feet June 7-10, 1909 (gage height, 7.7 feet); practically no flow at midnight Aug. 5, 1920 (gage height, 0.42 foot).

REMARKS.—Records good. Numerous canals divert above station. Flow regulated by storage in reservoirs and operation of power plants above gage. Records furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	784	1,200	1,120	528	688	1,050	1,250	229	29	26	30	28
2	465	1,030	1,100	442	868	1,380	1,330	480	29	26	24	28
3	811	1,570	1,260	906	1,060	1,350	1,320	252	29	26	24	28
4	931	1,190	1,150	875	1,150	1,420	1,300	664	29	26	24	28
5	1,230	661	1,130	511	1,010	1,390	915	805	29	26	24	28
6	1,270	312	1,310	1,080	944	1,330	1,410	879	29	26	30	28
7	1,070	691	805	1,140	901	1,200	1,330	673	29	26	30	28
8	812	1,100	1,460	1,140	948	1,170	1,350	234	29	28	29	28
9	706	945	1,190	1,130	1,040	857	1,340	288	29	28	28	28
10	800	1,100	1,040	1,280	1,330	860	1,330	28	29	28	24	26
11	304	1,050	1,140	846	1,320	1,720	1,280	28	30	28	24	26
12	588	1,140	1,330	1,170	1,070	1,310	911	28	30	26	24	26
13	1,020	1,340	954	1,200	1,170	1,560	994	28	30	26	24	26
14	1,290	1,460	368	1,090	827	1,570	1,150	28	30	24	24	26
15	1,410	1,570	1,430	1,110	843	1,320	983	28	32	26	24	28
16	1,600	1,250	1,190	1,000	1,300	1,030	1,040	29	29	26	24	28
17	1,480	1,590	862	1,270	1,510	1,240	932	29	29	26	24	28
18	1,520	1,460	959	752	1,500	956	687	30	28	26	24	26
19	1,100	1,250	1,040	1,440	1,500	1,230	231	30	28	26	26	26
20	1,400	1,130	1,150	1,180	1,340	1,130	652	30	28	26	26	26
21	1,470	1,160	960	876	1,110	777	503	30	28	26	26	26
22	1,620	1,270	1,020	825	1,320	398	160	30	28	26	26	26
23	902	973	1,130	820	1,420	1,040	404	30	28	26	24	26
24	602	1,160	1,050	1,240	1,020	1,080	328	30	28	26	24	26
25	828	1,020	664	1,100	1,050	1,150	282	30	26	26	24	26
26	259	937	633	1,220	951	1,140	202	30	26	26	26	24
27	146	560	1,000	1,360	1,330	1,290	766	32	26	26	26	24
28	333	1,060	827	1,090	1,420	1,390	1,000	30	26	26	26	23
29	618	946	783	840	-------	1,210	456	30	26	26	28	24
30	774	670	699	820	-------	1,710	372	29	26	29	29	24
31	1,060	-------	566	1,040	-------	1,580	-------	29	-------	28	29	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,600	146	942	57,900
November	1,570	312	1,090	64,900
December	1,460	368	1,010	62,100
January	1,440	442	1,010	62,100
February	1,510	688	1,140	63,300
March	1,720	398	1,220	75,000
April	1,410	160	874	52,000
May	879	28	166	10,200
June	30	26	28.4	1,690
July	29	24	26.4	1,620
August	30	24	25.8	1,590
September	28	23	26.4	1,570
The year	1,720	23	627	454,000

LOGAN RIVER ABOVE STATE DAM, NEAR LOGAN, UTAH

LOCATION.—Water-stage recorder in sec. 36, T. 12 N., R. 1 E., at Logan plant of Utah Power & Light Co., 125 feet above confluence of tailrace with river and 2½ miles east of Logan.

DRAINAGE AREA.—218 square miles.

RECORDS AVAILABLE.—May, 1913, to September, 1931. June, 1896, to December, 1912, at old station one-fourth mile downstream; flow at present station plus that of tailrace comparable to flow at old station.

EXTREMES.—Maximum discharge during year, 125 second-feet May 28 (gage height, 2.67 feet); minimum, 9 second-feet Sept. 3.

1913–1931: Maximum discharge (estimated), 2,000 second-feet Mar. 21, 1916 (gage height, 5.6 feet); minimum, 8 second-feet Dec. 11, 1915.

REMARKS.—Records fair. Water diverted from river and springs upstream for power, irrigation, and municipal supply. Flow regulated by operation of power plants above station. Gage-height record and results of several discharge measurements furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	20	14	13	14	14	13	17	13	13	11	10
2	17	19	14	14	14	13	14	15	14	13	11	10
3	60	19	15	14	14	13	12	61	14	13	11	9
4	26	19	15	13	14	14	12	66	14	14	11	10
5	17	19	14	13	14	13	13	38	14	14	11	10
6	20	19	14	14	13	13	13	17	14	14	11	10
7	22	19	14	14	14	13	15	52	14	13	10	10
8	22	18	14	14	13	13	25	20	14	14	10	10
9	22	19	17	13	13	14	20	16	14	14	10	10
10	22	19	14	12	14	14	16	15	14	14	10	10
11	22	19	14	13	14	14	14	16	14	12	10	10
12	22	19	15	14	13	14	14	17	14	12	10	10
13	22	19	14	14	13	14	19	22	14	12	10	10
14	22	16	15	14	15	14	15	37	14	12	10	10
15	22	14	14	14	13	14	14	52	14	12	10	10
16	22	14	14	15	13	14	14	56	14	12	10	10
17	22	15	15	14	12	15	22	69	14	12	10	10
18	21	15	14	15	13	15	22	43	14	12	10	10
19	21	14	14	14	12	14	25	23	13	12	10	10
20	21	14	14	14	12	15	19	17	13	12	10	10
21	21	14	14	14	12	15	14	18	14	11	10	10
22	21	15	14	15	14	15	17	47	14	11	10	10
23	21	14	14	14	13	17	17	51	14	11	10	10
24	21	15	14	15	13	14	14	14	13	11	10	10
25	21	15	14	15	13	14	15	15	13	11	10	10
26	21	14	14	14	14	14	14	17	13	11	10	10
27	21	14	14	15	13	14	14	17	13	11	10	10
28	21	14	15	14	13	14	14	15	13	11	10	10
29	20	14	14	14	-------	14	14	14	13	11	10	10
30	20	14	14	14	-------	13	17	14	13	12	10	11
31	20	-------	14	15	-------	13	-------	13	-------	12	10	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	60	17	22.3	1,370
November	20	14	16.4	976
December	17	14	14.3	879
January	15	12	14.0	861
February	15	12	13.3	739
March	17	13	14.0	879
April	25	12	16.0	952
May	69	13	29.2	1,800
June	14	13	13.7	815
July	14	11	12.2	750
August	11	10	10.2	627
September	11	9	10.0	595
The year	69	9	15.5	11,200

UTAH POWER & LIGHT CO.'S TAILRACE NEAR LOGAN, UTAH

LOCATION.—Water-stage recorder in NE. ¼ sec. 36, T. 12 N., R. 1 E., 100 feet below power house of Utah Power & Light Co. and 2½ miles east of Logan.
RECORDS AVAILABLE.—May, 1913, to September, 1931.
REMARKS.—Records good. Flow is regulated by operation of power plant above gage. This canal diverts from right bank of Logan River in SE. ¼ SW. ¼ sec. 29, T. 12 N., R. 2 E., for power development. Water is returned to river 125 feet below gaging station on Logan River above State dam. Gage-height record and results of 11 discharge measurements furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	93	87	87	72	71	73	130	184	92	74	62
2	110	92	91	87	72	72	78	148	184	92	74	62
3	38	93	88	87	73	72	73	160	182	93	72	62
4	100	93	91	85	73	72	73	168	182	93	74	62
5	109	94	89	83	76	72	68	174	176	92	72	62
6	105	94	91	82	74	70	76	181	174	92	71	61
7	103	91	89	80	77	70	83	181	164	91	71	61
8	103	88	85	81	72	68	87	182	160	89	71	60
9	112	92	81	79	72	72	96	182	158	87	72	58
10	114	89	86	78	74	68	96	174	155	86	71	57
11	110	94	87	78	74	69	96	167	149	85	72	57
12	109	94	89	77	76	76	89	170	144	85	72	57
13	112	93	88	78	76	74	105	181	140	85	70	57
14	109	92	88	78	71	73	110	184	137	80	72	57
15	101	89	88	78	74	69	110	185	134	76	70	57
16	100	88	85	78	76	71	102	185	128	77	75	57
17	98	91	86	79	73	73	92	185	131	78	73	57
18	97	91	91	79	72	74	86	185	130	78	73	57
19	96	89	89	78	72	79	92	185	120	76	71	57
20	97	87	85	77	71	76	102	185	119	73	70	60
21	98	82	82	76	71	76	116	179	117	73	66	60
22	97	88	78	76	67	76	105	149	112	74	64	62
23	96	88	72	77	72	80	107	144	106	74	63	62
24	96	92	81	77	70	78	109	182	101	73	63	63
25	100	91	81	73	69	74	103	184	101	72	62	63
26	100	87	81	71	72	73	102	184	101	72	62	62
27	100	86	80	72	72	73	97	184	101	70	62	61
28	101	88	78	72	71	77	89	184	100	71	62	61
29	101	87	80	72	------	73	100	182	98	70	62	60
30	98	87	82	72	------	73	109	182	97	74	61	59
31	93	------	85	72	------	73	------	182	------	78	62	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	114	38	100	6,150
November	94	82	90.1	5,360
December	91	72	85.0	5,230
January	87	71	78.0	4,800
February	77	67	72.6	4,030
March	80	68	73.1	4,490
April	116	68	94.1	5,600
May	185	130	175	10,800
June	184	97	136	8,090
July	93	70	80.7	4,960
August	75	61	68.7	4,220
September	63	57	59.8	3,560
The year	185	38	92.9	67,300

LOGAN, HYDE PARK & SMITHFIELD CANAL NEAR LOGAN, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 25, T. 12 N., R. 1 E., at concrete rating flume 1¼ miles below head of canal and 2½ miles east of Logan.

RECORDS AVAILABLE.—June, 1904, to December, 1907; January, 1909, to September, 1931.

REMARKS.—Records fair. No diversions above gage. Flow regulated by headgates at diversion works. This canal diverts water from Logan River in NE. ¼ NE. ¼ sec. 31, T. 12 N., R. 2 E., for irrigation and domestic use in territory north of Logan. Gage-height record furnished by Logan, Hyde Park & Smithfield Canal Co. Results of several discharge measurements furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	[a] 26							49	52	36	28	20
2	[a] 14							46	57	32	25	20
3	[a] 6							25	54	29	24	20
4	[a] 6							10	49	29	24	19
5	[a] 6							34	50	29	24	19
6	[a] 6							66	44	29	24	18
7	[a] 6							82	48	29	24	18
8								71	50	28	24	18
9								68	49	29	24	19
10							[a] 6	66	48	29	24	19
11			[b] 5					69	48	29	24	19
12		[b] 4						75	48	29	23	19
13				[b] 6				84	49	28	23	19
14	[a] 6							97	49	28	23	19
15								107	48	29	24	18
16								111	48	29	23	18
17								113	50	28	23	18
18							18	108	46	27	23	18
19					[b] 6		28	95	41	26	23	18
20							29	82	42	26	22	18
21							30	73	43	26	23	18
22							35	62	45	26	24	18
23							36	55	46	25	23	18
24							36	56	45	25	22	18
25							34	67	44	24	22	18
26	[a] 5					[b] 6	34	69	44	24	22	18
27							34	69	43	24	21	18
28							38	63	42	24	21	18
29							45	51	40	24	20	18
30							52	45	40	24	18	18
31								45		28	20	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	26		[a] 6.5	402
November			[a] 4	238
December			[a] 5	307
January			[a] 6	368
February			[a] 6	333
March			[a] 6	368
April	52		18.4	1,090
May	113	10	68.2	4,190
June	57	40	46.7	2,780
July	36	24	27.5	1,690
August	28	18	23.0	1,410
September	20	18	18.5	1,100
The year	113		19.7	14,300

[a] Estimated.
[b] Result of discharge measurement.

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

BLACKSMITH FORK AT MUNICIPAL POWER PLANT NEAR HYRUM, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 2, T. 10 N., R. 2 E., 200 feet below Hyrum municipal power plant, 1 mile above Left Fork, and 8½ miles east of Hyrum. Datum was raised 2.0 feet on Apr. 7, 1931.

DRAINAGE AREA.—153 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 133 second-feet Nov. 16 (gage height, 1.23 feet). Minimum flow, caused by regulation and estimated as 8 second-feet, occurred several times during year.

1929–1931: Maximum discharge, 250 second-feet Apr. 25, 1930 (gage height, 1.80 feet, present datum); minimum, same as for 1931.

REMARKS.—Records fair. Flow may be affected by operations at power plant.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.
1	57	67	------	------	52		68	60	50	47	48
2	59	66	------	------	52		77	57	50	47	48
3	59	66	------	------	52		92	57	53	48	47
4	57	66	------	------	52	54	101	55	50	47	48
5	57	66	------	------	53		95	55	48	48	47
6	55	66	63	------	53		90	55	49	54	47
7	55	66	------	------	53	54	88	54	43	52	46
8	58	66	------	------	53	62	88	53	55	50	46
9	59	64	------	------	53	55	82	53	49	52	46
10	63	64	------	------	53	54	76	53	49	49	44
11	64	64	------	------	53	53	74	53	49	49	43
12	67	64	------	------	52	52	68	53	48	49	43
13	66	64	------	------	52	52	59		49	49	44
14	64	63	------	------	52	53	62		49	52	46
15	64	63	------	------	51	53	64		48	50	46
16	67	63	------	63	51	53	67		48	50	46
17	66	67	------	------	50	53	67	52	49	50	46
18	67	63	------	------	50	53	67		49	49	46
19	67	62	------	------	52	54	64		49	48	46
20	67	59	------	------		54	67		48	48	46
21	53	59	------	------		54	70		49	48	46
22	68	59	------	------		48	68	52	48	48	47
23	71		------	------		58	67	52	49	48	47
24	70		------	53	52	66	64	53	48	47	50
25	70		------	------		62	59	53	49	47	50
26	70	59	------	------		62	58	52	50	44	49
27	68		------	------		60	64	52	48	46	48
28	67		------	55		60	64	52	49	44	49
29	67		------	------	------	60	60	53	48	46	48
30	67		------	55	------	63	59	52	64	47	47
31	67	------	------	------	------	------	60	------	57	47	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	71	53	63.7	3,920
November	------	------	62.6	3,720
December	------	------	[a] 57	3,500
January	------	------	[a] 56	3,440
February	------	------	52.0	2,890
March	------	------	[a] 56	3,440
April	------	------	55.7	3,310
May	101	58	71.3	4,380
June	------	------	56.6	3,370
July	64	43	49.7	3,060
August	54	44	48.4	2,980
September	50	43	46.7	2,780
The year	101	43	56.4	40,800

[a] Estimated.

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

BLACKSMITH FORK ABOVE UTAH POWER & LIGHT CO.'S DAM NEAR HYRUM, UTAH

LOCATION.—Water-stage recorder in NE. ¼ sec. 8, T. 10 N., R. 2 E., 1 mile above diversion dam, 3½ miles above power plant of Utah Power & Light Co., and 6 miles east of Hyrum.

DRAINAGE AREA.—260 square miles.

RECORDS AVAILABLE.—July, 1900, to December, 1902; November, 1913, to September, 1931.

EXTREMES.—Maximum discharge during year, 115 second-feet Oct. 22 (gage height, 1.69 feet); minimum (estimated), 10 second-feet, caused by municipal power plant shutdown on July 23.

1913–1931: Maximum discharge, about 1,620 second-feet May 15, 1917 (gage height, 6.5 feet); minimum, that of July 23, 1931.

REMARKS.—Records fair. No large diversions above station. Gage-height record and results of several discharge measurements furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	70	59		56	56	62	70	65	53	50	49
2	78	70	59		55	57	64	76	65	51	49	49
3	78	70	60		56	58	63	85	64	52	50	48
4	77	70	60		56	64	63	92	63	50	49	49
5	76	70	60		57	60	62	89	63	50	50	49
6	76	70	60		56	57	62	85	60	49	53	47
7	76	70	59	62	56	57	62	83	59	49	51	47
8	76	70	57		56	56	71	83	58	52	50	47
9	77	70	57		56	56	66	80	58	50	50	47
10	78	70	58		56	58	64	77	58	50	50	47
11	78	70	59		55	59	64	76	58	50	50	46
12	78	70	60		55	60	63	72	58	50	50	47
13	77	70	60	60	54	60	63	65	58	50	50	47
14	76	69	60	59	54	60	65	66	59	50	51	49
15	76	66	59	59	54	61	63	69	59	50	52	49
16	74	66	59	57	54	62	63	68	58	50	53	48
17	73	66	60	57	54	62	62	68	59	50	53	47
18	72	65	60	57	54	63	63	68	59	50	53	47
19	72	63	59	57	53	63	63	68	59	50	52	47
20	72	60	58	56	54	62	64	70	58	48	52	48
21	65	61	58	54	54	62	63	71	58	49	51	48
22	70	61		54	54	62	60	70	57	49	51	48
23	72	61		54	54	61	64	69	57	49	50	50
24	71	61		54	54	61	68	68	57	48	50	50
25	72	61		54	54	60	65	65	57	48	49	50
26	72	60	60	54	55	60	65	64	57	48	48	48
27	72	59		54	55	59	64	70	56	47	47	48
28	71	59		55	55	59	65	70	56	47	49	48
29	70	59		55	------	60	65	68	55	47	48	48
30	70	59		55	------	59	66	66	55	58	50	48
31	70	------		56	------	61	------	65	------	56	49	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	78	65	73.9	4,540
November	70	59	65.5	3,900
December	----------	----------	59.4	3,650
January	----------	54	58.2	3,580
February	57	53	54.9	3,050
March	64	56	59.8	3,680
April	71	60	63.9	3,800
May	92	64	72.8	4,480
June	65	55	58.8	3,500
July	58	47	50.0	3,070
August	53	47	50.3	3,090
September	50	46	48.0	2,860
The year	92	46	59.7	43,200

WEST SIDE CANAL NEAR COLLINSTON, UTAH

LOCATION.—Water-stage recorder in SW. ¼ sec. 27, T. 13 N., R. 2 W., at Wheelon siding on Oregon Short Line Railroad, 4,200 feet below Cutler Dam and 4 miles north of Collinston.

RECORDS AVAILABLE.—June, 1912, to September, 1931.

REMARKS.—Canal diverts from west side of Bear River in NW. ¼ SW. ¼ sec. 26, T. 13 N., R. 2 W., at same diversion dam as Hammond (East Side) Canal and Cutler power plant. Records furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	287	139	48	22	27	15	13	118	414	631	301	573
2	218	140	48	23	27	15	15	151	575	629	458	578
3	172	140	48	24	27	15	16	168	584	632	428	578
4	169	139	48	25	28	15	14	168	615	632	452	579
5	168	138	48	25	28	15	14	167	618	632	452	571
6	166	139	48	25	28	15	6	167	624	634	462	565
7	163	139	48	25	28	15	0	231	627	631	519	565
8	161	139	48	21	28	15	0	278	627	631	570	546
9	160	139	33	20	28	15	0	267	626	627	576	539
10	154	119	35	20	28	15	0	269	626	629	587	538
11	124	88	35	21	28	15	0	284	629	631	597	543
12	114	87	35	21	28	15	0	341	629	629	597	543
13	115	87	35	22	28	15	0	417	627	627	603	536
14	114	87	35	22	28	15	0	450	626	627	607	501
15	113	71	35	24	27	8	0	522	624	627	667	486
16	112	56	35	25	29	1	0	568	624	627	608	486
17	112	56	35	25	28	1	0	594	626	627	599	482
18	119	56	35	25	20	1	0	616	626	627	576	469
19	134	56	35	25	20	1	0	619	626	627	570	468
20	133	56	35	25	19	1	0	594	624	627	570	450
21	131	56	35	25	19	1	0	563	626	627	570	428
22	127	56	35	25	18	1	0	599	626	629	568	412
23	125	48	35	26	18	1	0	610	624	610	570	385
24	127	48	35	26	18	1	0	607	624	587	570	338
25	129	48	35	26	17	1	0	607	627	579	578	308
26	131	48	35	26	17	7	0	559	626	571	587	305
27	134	48	35	26	17	12	0	169	629	584	591	302
28	138	48	35	26	16	12	87	0	626	583	599	300
29	139	48	35	26	------	10	120	0	629	583	599	297
30	139	48	35	26	------	10	111	0	629	350	597	324
31	139	------	35	27	------	10	------	89	------	0	592	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	287	112	144	8,850
November	140	48	85.6	5,090
December	48	33	38.3	2,360
January	27	20	24.2	1,490
February	29	16	24.0	1,330
March	------	------	9.3	572
April	120	0	13.2	786
May	619	0	348	21,400
June	629	414	616	36,700
July	634	0	590	36,300
August	608	301	554	34,100
September	579	297	466	27,700
The year	634	0	244	177,000

HAMMOND (EAST SIDE) CANAL NEAR COLLINSTON, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 27, T. 13 N., R. 2 W., at Wheelon siding on Oregon Short Line Railroad, 3,600 feet below Cutler Dam and 4 miles north of Collinston.

RECORDS AVAILABLE.—June, 1912, to September, 1931.

REMARKS.—Canal diverts from west side of Bear River in NW. ¼ SW. ¼ sec. 26, T. 13 N., R. 2 W., at same diversion dam as West Side Canal and Cutler power plant. Records furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	51	33	0	70	111	167	146	138
2	39	33	0	84	124	166	148	138
3	41	33	0	96	126	166	141	148
4	41	33	0	95	143	166	137	154
5	41	33	0	93	144	166	134	149
6	39	33	0	93	146	166	147	140
7	37	10	0	91	145	167	158	140
8	37	0	0	92	146	167	158	140
9	37	0	0	94	146	167	156	140
10	38	0	0	95	146	167	159	140
11	35	0	0	95	146	167	161	140
12	33	0	0	112	144	165	161	140
13	33	0	0	129	137	165	162	139
14	33	0	0	132	136	164	162	138
15	33	0	0	133	137	164	156	137
16	32	0	0	141	144	164	160	139
17	31	0	0	158	150	164	160	140
18	31	0	0	159	157	164	161	139
19	31	0	0	159	158	164	159	139
20	30	0	0	159	162	162	159	131
21	29	0	0	159	162	162	158	123
22	29	0	0	159	162	161	140	118
23	29	0	0	150	162	160	151	110
24	29	0	0	143	165	154	153	109
25	30	0	0	143	167	153	153	109
26	31	0	0	137	167	153	153	107
27	32	0	0	110	167	152	153	92
28	33	0	26	101	167	152	154	92
29	33	0	68	104	167	153	154	91
30	33	0	72	104	167	118	151	91
31	33	-------	-------	103	-------	102	138	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	51	29	34.3	2,110
November	33	0	6.9	411
April	72	0	5.5	329
May	159	70	119	7,320
June	167	111	150	8,930
July	167	102	159	9,780
August	162	134	153	9,410
September	154	91	128	7,620
The year	167	0	63.4	45,900

NOTE.—No flow during months omitted.

WEBER RIVER BASIN

WEBER RIVER NEAR OAKLEY, UTAH

LOCATION.—Staff gage in NE. ¼ sec. 15, T. 1 S., R. 6 E., near mouth of canyon, 2 miles below South Fork of Weber River, 3 miles northeast of Oakley, and 6 miles above Beaver or Kamas Creek.

DRAINAGE AREA.—163 square miles.

RECORDS AVAILABLE.—October, 1904, to September, 1931.

EXTREMES.—Maximum discharge during year, 990 second-feet May 17 (gage height, 6.40 feet); minimum, 29 second-feet several days in September (gage height, 4.18 feet).

1904–1931: Maximum discharge, 4,000 second-feet July 6, 1907, June 5–7, 1909; minimum, that of September, 1931.

REMARKS.—Records good. No large diversions above gage. Flow regulated slightly by storage in Fish Lake and a small reservoir on Smith and Morehouse Creek. Total capacity of both reservoirs, about 1,500 acre-feet. Results of 3 discharge measurements furnished by Weber River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	133	75				47	53	133	575	117	58	34
2	133	70				46	53	133	545	110	53	34
3	133	70				45	45	145	575	103	53	31
4	133	70				45	53	167	504	99	48	31
5	121	70					58	172	449	99	45	31
6	110	65					61	202	449	99	48	31
7	110	65				[a] 45	65	270	405	95	53	31
8	110	65					99	270	380	89	53	31
9	121	61					79	235	365	110	48	29
10	121	61					79	235	310	83	45	29
11	121	61			53	45	89	235	290	70	42	29
12	121	61					99	252	278	65	42	29
13	121	61					99	405	256	65	42	29
14	121	61				[a] 49	99	515	242	65	38	29
15	121	45					95	635	228	61	45	29
16	117		[a] 50	[a] 55		53	99	721	209	61	48	31
17	110					53	89	990	190	58	45	31
18	103				61	53	99	840	172	58	42	29
19	99					53	103	515	158	58	42	29
20	99					53	103	416	148	53	42	38
21	95					53	103	355	150	53	42	38
22	95					56	126	310	128	48	42	38
23	95	[a] 50				61	133	395	119	48	38	38
24	89					61	121	515	117	45	38	42
25	89					61	121	735	133	45	38	42
26	83				53	58	110	668	150	42	38	38
27	83					31	110	471	150	42	38	38
28	79					45	110	380	133	42	38	38
29	75					53	133	380	121	42	34	38
30	75					53	133	449	121	53	34	38
31	75					53		563		65	34	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	133	75	106	6,520
November	75		57.0	3,390
December			[a] 50	3,070
January			[a] 55	3,380
February			[a] 55	3,050
March	61		49.8	3,060
April	133	45	94.0	5,590
May	990	133	410	25,200
June	575	117	268	15,900
July	117	42	69.1	4,250
August	58	34	43.4	2,670
September	42	29	33.4	1,990
The year	990	29	108	78,100

[a] Estimated.

WEBER RIVER NEAR COALVILLE, UTAH

LOCATION.—Water-stage recorder installed Mar. 22, 1931, in NE. ¼ sec. 20, T. 2 N., R 5 E., at river bridge above high water contour for Echo Reservoir, 1½ miles south of Coalville. Prior to Mar. 22, 1931, staff gage at same site was used.
DRAINAGE AREA.—438 square miles.
RECORDS AVAILABLE.—April, 1927, to September, 1931.
EXTREMES.—Maximum discharge during year, 649 second-feet May 17 (gage height, 2.32 feet); minimum, 14 second-feet several days in July (gage height, 0.10 foot).
1927–1931: Maximum discharge, 1,960 second-feet June 17, 1929 (gage height, 4.30 feet); minimum discharge, that of July, 1931.
REMARKS.—Records good. There are numerous irrigation diversions above and below station. Flow slightly regulated by two small reservoirs above station. Gage-height record and results of 3 discharge measurements furnished by Weber River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	139	134				79	106	63	338	21	33	20
2	175	134				106	108	65	327	20	32	19
3	161	134				118	96	76	327	18	30	19
4	170	134				134	94	105	296	18	28	19
5	148	134				86	97	89	274	20	28	19
6	152	130				68	101	87	283	20	31	18
7	157	126				92	103	106	259	25	36	18
8	170	122		[a] 90	[a] 100	73	126	134	239	26	35	18
9	170	122				96	112	141	259	28	34	16
10	194	122				82	99	130	242	34	32	14
11	204	122				114	94	120	220	36	31	17
12	199	126				143	97	106	204	32	31	18
13	185	126				130	99	116	197	31	31	18
14	175	130				139	106	185	177	26	31	18
15	170	110				139	92	274	152	24	33	18
16	166	106	[a] 90		106	170	87	404	132	22	32	18
17	157				110	189	86	518	114	21	31	18
18	166				122	194	69	489	101	22	30	19
19	166				134	166	65	348	81	22	29	19
20	170				108	143	62	320	69	20	29	23
21	170				103	148	58	283	62	19	30	24
22	166				103	148	52	209	54	18	31	26
23	166	[a] 100		[a] 100	118	122	58	164	40	17	30	29
24	157				76	112	96	209	34	16	28	29
25	161				130	108	130	316	30	16	25	31
26	166				110	92	120	383	21	15	24	31
27	152				106	84	87	360	21	14	24	32
28	148				96	105	78	280	23	14	21	36
29	139				------	103	72	245	24	16	21	36
30	134				------	101	69	248	23	21	21	33
31	134	------			------	103	------	300	------	52	21	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	204	134	164	10,100
November	134	----------	114	6,780
December	----------	----------	[a] 90	5,530
January	----------	----------	95.2	5,850
February	134	----------	104	5,780
March	194	68	119	7,320
April	130	52	90.6	5,390
May	518	63	222	13,600
June	338	21	154	9,160
July	36	14	22.7	1,400
August	36	21	29.1	1,790
September	36	14	22.4	1,330
The year	518	14	102	74,000

ated.

ECHO RESERVOIR AT ECHO, UTAH

LOCATION.—Temporary staff gages in NW. ¼ SW. ¼ sec. 30, T. 3 N., R. 5 E., near outlet works at left end of Echo Dam, one mile southeast of Echo, Utah.

RECORDS AVAILABLE.—October, 1930, to September, 1931.

REMARKS.—Echo Dam, constructed by the United States Bureau of Reclamation and completed in 1931, has an impounding capacity of 74,000 acre-feet. About 10,000 acre-feet was impounded in 1930 for emergency use before dam was entirely completed.

Daily contents, in acre-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	7,430	6,450	6,200	6,240	6,760	8,220	12,100	19,100	10,400	764	191
2	[a] 230	7,570	6,450	6,240	6,240	6,760	8,220	12,400	19,200	9,930	600	197
3	[a] 470	7,850	6,370	6,320	6,240	6,800	8,270	12,600	19,200	9,410	449	200
4	[a] 720	7,940	6,370	6,410	6,280	6,890	8,270	12,900	19,100	8,900	400	200
5	[a] 920	8,040	6,240	6,410	6,280	6,890	8,270	13,200	18,900	8,410	353	200
6	[a] 1,080	8,180	6,240	6,370	6,320	6,890	8,270	13,500	18,900	7,940	318	191
7	[a] 1,290	8,270	6,240	6,320	6,370	6,890	8,320	13,900	18,800	7,520	325	182
8	[a] 1,530	8,320	6,200	6,320	6,410	6,890	8,320	14,200	18,600	7,120	311	165
9	[a] 1,840	8,410	6,110	6,320	6,450	6,890	8,510	14,700	18,500	6,760	297	150
10	[a] 2,200	8,560	6,160	6,320	6,450	6,890	8,560	15,000	18,400	6,370	270	125
11	[a] 2,580	8,650	6,200	6,320	6,490	6,890	8,610	15,400	18,300	5,990	245	82
12	2,940	8,750	6,240	6,320	6,490	6,890	8,610	15,600	18,100	5,540	232	0
13	3,240	8,800	6,240	6,320	6,540	6,980	8,700	15,700	17,800	5,140	228	0
14	3,530	8,900	6,280	6,320	6,540	7,070	8,800	15,800	17,600	4,790	228	0
15	3,850	9,000	6,280	6,280	6,580	7,200	8,900	16,000	17,400	4,460	216	0
16	4,140	9,050	6,240	6,240	6,580	7,250	9,000	16,200	17,000	4,180	208	0
17	4,390	9,150	6,200	6,240	6,580	7,340	9,050	16,700	16,700	3,910	208	0
18	4,460	9,200	6,280	6,200	6,580	7,480	9,200	16,900	16,600	3,690	208	0
19	4,280	9,300	6,320	6,200	6,580	7,570	9,410	17,100	16,000	3,470	204	0
20	4,530	9,350	6,280	6,200	6,630	7,710	9,610	17,100	15,600	3,300	197	0
21	4,830	9,350	6,240	6,160	6,630	7,800	9,770	17,300	15,200	3,100	188	0
22	5,100	9,350	6,240	6,160	6,670	7,940	9,880	17,400	14,700	2,880	188	0
23	5,340	9,350	6,200	6,160	6,670	7,990	10,100	17,100	14,200	2,680	185	0
24	5,620	9,150	6,110	6,200	6,670	8,040	10,400	17,100	13,700	2,450	185	0
25	5,820	8,270	6,110	6,200	6,670	8,040	10,700	17,100	13,100	2,230	176	0
26	6,110	7,800	6,110	6,200	6,670	8,040	11,000	17,200	12,600	2,000	172	0
27	6,370	7,340	6,070	6,200	6,710	8,040	11,300	17,600	12,100	1,780	170	0
28	6,580	6,670	6,070	6,200	6,760	8,080	11,400	18,000	11,700	1,520	163	0
29	6,800	6,450	6,110	6,200	-------	8,130	11,700	18,300	11,300	1,310	165	0
30	6,980	6,450	6,110	6,200	-------	8,180	11,900	18,600	10,800	1,050	176	0
31	7,250	-------	6,160	6,200	-------	8,180	-------	18,900	-------	925	188	-------

WEBER RIVER AT ECHO, UTAH

LOCATION.—Water-stage recorder in NE. ¼ sec. 25, T. 3 N., R. 4 E., 600 feet above Echo Creek, 2,400 feet downstream from Echo Dam, and 3,200 feet southeast of Echo. About 600 feet downstream from former location of staff gage.

DRAINAGE AREA.—732 square miles.

RECORDS AVAILABLE.—April, 1927, to September, 1931.

EXTREMES.—1927–1931: Maximum discharge, 2,210 second-feet May 26, 1929; minimum discharge, 4 second-feet several days in May, 1931.

REMARKS.—Records good. Numerous irrigation diversions above and below station. One small diversion between gage and Echo Dam. Flow regulated by Echo Reservoir. Gage-height record and results of 8 discharge measurements furnished by Weber River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	169	60	146	97	120	122	130	6	305	270	142	23
2	108	60	184	97	120	122	130	5	329	270	133	23
3	80	60	184	97	120	122	130	5	351	286	97	23
4	82	104	184	120	120	124	130	5	369	280	61	23
5	87	104	167	135	120	124	130	5	369	270	56	24
6	90	104	150	135	120	124	130	4	358	255	52	29
7	92	104	150	135	120	124	130	4	351	244	52	29
8	90	104	150	135	120	124	132	4	351	232	50	28
9	53	104	126	135	120	128	128	4	336	232	51	27
10	53	104	104	135	120	135	124	4	319	244	53	29
11	53	104	116	135	120	135	124	4	322	250	50	29
12	53	104	128	135	120	135	124	75	322	258	46	27
13	54	106	128	135	120	135	116	147	315	238	43	24
14	55	106	128	135	120	141	94	189	305	211	46	23
15	55	106	128	135	120	164	85	258	305	192	48	23
16	53	104	128	135	122	184	99	326	309	174	43	23
17	54	104	128	135	122	195	70	351	275	151	41	23
18	290	104	128	135	122	179	28	393	214	131	41	24
19	290	104	128	135	122	160	17	417	326	127	41	25
20	58	104	128	135	122	148	18	344	319	131	41	28
21	60	130	128	128	122	148	18	267	319	131	41	31
22	60	162	128	120	122	139	11	276	315	129	41	34
23	60	174	128	120	122	137	6	302	329	131	40	37
24	60	323	118	120	122	130	7	305	336	135	38	37
25	60	427	108	120	122	137	7	340	333	135	37	37
26	60	413	108	120	122	130	7	340	315	133	33	37
27	60	413	103	120	122	104	8	229	289	131	30	38
28	60	362	97	120	122	108	8	147	283	129	31	41
29	60	208	97	120	------	130	8	147	276	135	25	41
30	60	146	97	120	------	130	8	147	273	142	22	40
31	60	------	97	120	------	130	------	211	------	135	23	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	290	53	83.2	5,120
November	427	60	157	9,340
December	184	97	130	7,990
January	135	97	126	7,750
February	122	120	121	6,720
March	199	104	137	8,420
April	132	6	71.9	4,280
May	417	4	170	10,500
June	369	214	317	18,900
July	286	127	191	11,700
August	142	22	49.9	3,070
September	41	23	29.3	1,740
The year	427	4	132	95,500

WEBER RIVER AT DEVILS SLIDE, UTAH

LOCATION.—Staff gage in SW. ¼ sec. 19, T. 4 N., R. 4 E., 500 feet downstream from highway bridge at Devils Slide and one-fourth mile below Lost Creek.
DRAINAGE AREA.—1,090 square miles.
RECORDS AVAILABLE.—February, 1905, to September, 1931.
EXTREMES.—Maximum discharge during year, 462 second-feet Nov. 25, 26; minimum, 21 second-feet Apr. 23.
1905–1931: Maximum discharge, 6,000 second-feet May 22, 1920; minimum, that of Apr. 23, 1931.
REMARKS.—Records good. Numerous diversions above station for irrigation and domestic use. Flow regulated by storage in Echo Reservoir. Results of one discharge measurement furnished by Weber River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	193	89	193	169	162	186	158	26	290	266	162	32
2	134	89	242	175	165	152	165	28	337	279	162	32
3	98	89	211	189	179	162	162	30	355	275	131	28
4	98	128	208	169	182	155	155	48	360	283	89	28
5	103	131	208	165	155	182	158	63	385	279	80	29
6	106	131	173	169	155	189	162	45	365	270	71	33
7	103	131	182	162	152	149	162	52	360	258	71	33
8	106	131	189	179	196	146	169	69	355	254	73	32
9	71	131	215	175	179	152	162	55	350	230	63	30
10	71	131	143	165	149	162	155	46	346	242	71	30
11	73	131	140	169	169	165	155	52	327	246	63	32
12	73	134	165	175	149	182	155	46	337	250	63	33
13	75	134	165	175	182	175	158	146	333	258	57	30
14	80	134	172	165	165	169	146	158	318	219	59	28
15	82	125	189	162	162	175	114	242	318	186	63	28
16	82	128	179	165	158	211	120	337	318	182	59	26
17	80	128	155	172	175	226	125	332	327	165	53	28
18	296	128	155	172	162	222	65	399	165	140	52	28
19	309	149	172	165	155	208	33	394	332	137	52	28
20	91	158	186	155	155	179	32	337	327	134	50	30
21	89	120	182	162	152	186	30	318	300	140	50	34
22	89	196	175	143	204	189	24	266	290	140	50	41
23	89	230	175	146	182	169	21	318	288	140	50	43
24	86	305	175	155	200	162	22	323	300	140	50	45
25	89	462	186	179	200	162	22	365	300	140	50	45
26	89	462	182	155	162	165	22	365	292	140	35	43
27	91	451	215	162	155	137	23	355	275	140	35	43
28	86	446	189	158	152	120	23	172	266	143	35	50
29	89	350	175	165	-------	155	23	169	266	143	35	52
30	89	204	172	155	-------	155	25	165	266	169	33	48
31	89	-------	172	149	-------	158	-------	169	-------	158	32	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	309	71	106	6,520
November	462	89	192	11,400
December	242	140	182	11,200
January	189	143	165	10,100
February	204	149	168	9,330
March	226	120	171	10,500
April	169	21	98.2	5,840
May	399	26	190	11,700
June	385	165	316	18,800
July	283	134	198	12,200
August	162	32	64.5	3,970
September	52	26	34.7	2,060
The year	462	21	157	114,000

WEBER RIVER AT GATEWAY, UTAH

LOCATION.—Water-stage recorder in NW. ¼ SW. ¼ sec. 27, T. 5 N., R. 1 E., 2,500 feet below mouth of Strawberry Creek, 800 feet below Union Pacific Railroad bridge, and 2,500 feet above section house at Gateway.

DRAINAGE AREA.—1,610 square miles.

RECORDS AVAILABLE.—June to September, 1919; July, 1920, to September, 1931. October, 1889, to July, 1903, at a station 1 mile downstream, known as Weber River near Uinta, Utah. Records are comparable.

EXTREMES.—Maximum discharge during year, 574 second-feet May 3 (gage height, 1.92 feet); minimum, 46 second-feet Sept. 6 (gage height, 0.36 foot).
1889–1903, 1919–1931: Maximum discharge, 7,980 second-feet May 31, 1896; minimum, that of Sept. 6, 1931.

REMARKS.—Records good. Numerous diversions for irrigation above and below station. Flow affected by storage in East Canyon Creek and Echo Reservoirs. Results of three discharge measurements furnished by Weber River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	318	170	300		206	206	264	264	303	292	244	63
2	292	172	300		212	212	270	270	344	295	257	57
3	260	172	299	190	212	218	253	416	339	292	247	55
4	247	196	270		212	221	244	449	365	299	228	54
5	257	206	267		215	212	240	393	383	284	215	51
6	331	206	237	180	212	212	253	379	383	277	209	49
7	339	202	231	180	212	215	270	356	379	270	202	48
8	335	206	221	190	215	212	314	322	374	264	199	49
9	318	202	257	220	218	218	303	281	370	247	193	49
10	311	206	234	220	215	228	295	247	356	253	184	55
11	314	206	234	210	215	234	295	228	352	257	181	57
12	299	206	234	220	212	274	303	199	361	260	193	58
13	257	206	234	230	209	281	318	206	365	260	193	58
14	212	206	224	230	212	300	326	209	344	240	196	58
15	212	199	209	200	215	315	284	260	335	228	190	60
16	199	206	234	200	218	330	270	322	331	221	187	58
17	196	215	231	200	212	344	274	352	335	209	178	57
18	224	202	224	220	215	352	264	411	253	206	181	58
19	379	187	212	220	218	335	231	425	331	199	181	62
20	264	193	218	210	218	307	209	490	326	202	178	63
21	212	196		190	215	311	193	421	314	199	175	65
22	199	209		210	212	314	184	356	311	196	178	73
23	199	224		190	212	277	178	370	303	190	134	73
24	193	240		200	212	264	199	379	311	193	88	73
25	206	280		220	215	264	199	379	314	196	81	75
26	199	484	215	212	218	260	206	383	318	193	75	75
27	190	500		209	221	237	234	374	307	202	72	81
28	187	500		206	212	234	253	264	299	228	68	84
29	178	400		199	------	231	244	237	292	234	63	82
30	172	300		199	------	240	257	234	292	257	62	81
31	170	------		202	------	250	------	231	------	247	65	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	339	170	247	15,200
November	500	170	243	14,500
December	300	----------	233	14,300
January	230	180	204	12,500
February	221	206	214	11,900
March	352	206	262	16,100
April	326	178	254	15,100
May	490	199	326	20,000
June	383	292	333	19,800
July	299	190	238	14,600
August	257	62	164	10,100
September	84	48	627	3,730
The year	500	48	232	168,600

WEBER RIVER NEAR PLAIN CITY, UTAH

LOCATION.—Chain gage in SE. ¼ sec. 5, T. 6 N., R. 2 W., at county highway bridge 6 miles above mouth, 1 mile south of Plain City, and 1 mile below mouth of Fourmile Creek.

DRAINAGE AREA.—2,060 square miles.

RECORDS AVAILABLE.—May, 1905, to September, 1931. Records obtained in 1904 by State engineer.

EXTREMES.—Maximum discharge during year, 577 second-feet Nov. 29 (gage height, 6.46 feet); minimum, 1 second-foot several days in August and September.

1905–1931: Maximum discharge, 7,580 second-feet June 6, 1909 (gage height, 19.1 feet); practically no flow during later part of several summers since 1915.

REMARKS.—Records fair. In summer practically entire flow of Weber River above station is diverted for irrigation. Flow is affected by storage in Echo and East Canyon Creek Reservoirs.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	256	206	338	195	298	351	400	127	6[illegible]	5	4	1
2	251	199	289	211	298	348	417	120	65	5	2	1
3	251	195	307	230	301	351	394	173	55	5	2	1
4	248	192	365	235	310	351	390	354	5[illegible]	5	2	1
5	248	209	361	238	329	348	397	324	3[illegible]	5	2	1
6	269	223	354	235	332	335	401	289	3[illegible]	5	2	1
7	322	218	348	238	335	335	409	278	3[illegible]	5	3	1
8	335	221	335	248	338	332	425	238	31	5	3	1
9	354	223	319	264	335	332	446	186	3[illegible]	5	2	1
10	368	221	313	275	332	329	468	156	2[illegible]	4	2	1
11	401	221	310	278	329	325	486	123	2[illegible]	4	2	1
12	390	223	304	283	332	348	481	156	2[illegible]	3	2	1
13	348	223	298	275	332	446	477	76	27	3	2	1
14	319	221	292	278	335	417	477	62	27	3	1	1
15	289	223	289	283	341	390	481	63	27	3	1	1
16	264	230	283	286	354	417	446	62	2[illegible]	4	1	1
17	256	283	281	289	368	446	372	56	2[illegible]	3	1	23
18	289	278	278	286	390	481	338	32	17	3	1	24
19	368	281	256	278	413	537	275	31	17	3	1	25
20	345	283	245	281	401	477	235	48	17	3	1	38
21	289	281	238	281	386	468	113	72	17	2	1	37
22	261	283	233	289	372	477	118	73	17	2	55	37
23	233	313	230	281	368	446	127	68	17	2	7	10
24	223	335	230	301	361	417	166	56	15	2	5	10
25	240	361	228	283	354	405	248	56	13	2	1	12
26	256	450	228	283	351	397	248	54	11	2	1	12
27	245	532	230	281	394	375	253	70	1[illegible]	2	2	14
28	235	557	230	278	361	365	201	107	9	2	1	15
29	218	577	228	283	------	354	166	89	8	2	1	14
30	209	413	225	289	------	368	140	69	6	2	1	14
31	199	------	206	295	------	379	------	65	------	3	1	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	401	199	283	17,400
November	577	192	289	17,200
December	365	206	280	17,200
January	301	195	269	16,500
February	413	298	348	19,300
March	537	325	392	24,100
April	486	113	333	19,800
May	354	31	120	7,380
June	65	6	25.8	1,540
July	5	2	3.4	206
August	55	1	3.6	224
September	38	1	10.0	595
The year	577	1	195	141,000

CHALK CREEK AT COALVILLE, UTAH

LOCATION.—Water-stage recorder installed Apr. 17, 1931, in SE. ¼ sec. 8, T. 2 N., R. 5 E., 300 feet above highway bridge in Coalville and one-third mile above confluence with Weber River. Staff gage at present site used Feb. 13 to Apr. 16, 1931. Old staff gage 300 feet below present site used prior to Feb. 13, 1931.

DRAINAGE AREA.—253 square miles.

RECORDS AVAILABLE.—October, 1904, to December, 1905; April, 1927, to September, 1931.

EXTREMES.—Maximum discharge during year, 83 second-feet May 15 (gage height, 1.36 feet; minimum, about 2 second-feet for many days in September. 1927–1931: Maximum discharge, 696 second-feet May 4, 1929 (gage height, 4.0 feet); minimum, that of September, 1931.

REMARKS.—Records fair. No large diversions below station. Flow regulated by irrigation diversions above. Gage-height record and results of discharge measurements furnished by Weber River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						12	20	25	23	3		3
2						12	24	27	22	3		2
3						12	23	31	18	3		2
4						20	21	41	17	3	2	2
5						8	24	42	15	4		2
6						15	26	49	13	4		2
7					[a] 17	23	31	66	13	5	2	2
8						9	42	62	11	5	3	2
9						23	37	54	11	5	3	2
10						18	31	43	10	5	3	2
11						16	29	38	9	5	3	2
12						23	29	47	8	4	3	2
13					12	16	31	48	6	4	2	2
14					14	16	31	56	6	3	8	2
15					17	20	29	68	7	3	3	2
16		[a] 16	[a] 10		18	17	28	52	9	3	3	2
17					11	23	29	54	9	3	3	2
18					17	23	31	52	6	3	3	2
19					17	23	33	38	6	3	2	2
20					17	21	33	35	6		2	2
21				16	17	26	30	32	6		2	2
22					10	29	30	34	7		2	2
23					11	29	27	34	6		2	2
24					11	21	28	36	6		2	2
25					16	28	26	38	6	3	2	2
26					13	11	23	37	6		2	2
27					18	9	23	37	7		2	2
28	25				18	15	23	36	3		2	2
29						18	25	35	3		2	2
30						18	24	28	3		2	2
31						18		27			2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			[a] 20	1,230
November			[a] 16	952
December			[a] 10	615
January			[a] 15	922
February			15.8	878
March	29	8	18.5	1,140
April	42	20	28.0	1,670
May	68	25	42.0	2,580
June	23	3	9.3	550
July			3.5	212
August	8	2	2.5	152
September	3	2	2.0	121
The year	68	2	15.2	11,000

[a] Estimated.

LOST CREEK AT DEVILS SLIDE, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 19, T. 4. N., R. 4 E., one-fourth mile above confluence with Weber River and half a mile east of Devils Slide.

DRAINAGE AREA.—228 square miles.

RECORDS AVAILABLE.—April, 1921, to September, 1931, at present site; February to December, 1905, at site 150 feet above mouth of creek (published as "Lost Creek near Croyden, Utah").

EXTREMES.—Maximum discharge during year, 54 second-feet May 8 (gage height, 1.10 feet); minimum, 3 second-feet Sept. 11–30.

1905, 1921–1931: Maximum discharge, about 1,390 second-feet May 11, 1923 (gage height, 4.39 feet); minimum, that of September, 1931.

REMARKS.—Records fair. Practically all of the water is diverted above gage during late irrigation season. Results of 3 discharge measurements furnished by Weber River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	25	12	11	19	23	24	19	24	12	8	5
2	8	24	12	11	19	23	25	22	24	12	8	4
3	8	25	11	11	19	23	25	22	23	12	8	4
4	8	24	12	11	19	24	25	38	23	12	8	4
5	8	24	12	13	19	20	26	45	23	11	8	4
6	8	24	12	14	20	20	27	42	23	10	8	4
7	8	23	12	15	23	21	28	45	23	10	8	4
8	8	22	12	16	24	19	30	51	23	11	8	4
9	8	22	12	16	23	23	31	46	22	10	8	4
10	8	22	12	16	22	22	31	41	22	10	8	4
11	8	22	12	16	22	20	33	43	22	9	7	3
12	8	22	13	16	22	22	34	39	20	9	7	3
13	9	22	14	16	22	22	35	35	19	9	7	3
14	11	21	16	15	22	22	35	28	21	8	7	3
15	13	20	15	14	23	22	31	32	20	8	7	3
16	14	21	15	16	24	22	26	33	19	8	6	3
17	15	22	16	17	23	22	17	31	18	8	6	3
18	16	20	16	17	23	22	14	31	18	9	6	3
19	17	18	16	16	24	22	14	30	18	9	6	3
20	17	16	14	15	23	22	15	30	17	9	5	3
21	17	16	14	16	23	23	14	37	16	8	5	3
22	19	16	14	16	22	24	14	33	16	8	5	3
23	19	16	13	17	22	24	14	32	16	8	5	3
24	19	16	13	17	23	24	14	31	16	8	5	3
25	19	16	13	16	23	24	14	30	16	8	5	3
26	20	16	12	16	24	24	14	27	14	8	5	3
27	22	14	12	17	24	20	14	27	13	8	5	3
28	22	13	11	17	23	24	16	26	13	8	5	3
29	24	12	11	17	------	24	17	25	12	8	4	3
30	24	12	11	16	------	24	18	25	12	9	4	3
31	24	------	11	17	------	24	------	25	------	9	4	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	24	8	14.1	867
November	25	12	19.5	1,160
December	16	11	12.9	793
January	17	11	15.3	941
February	24	19	22.1	1,230
March	24	19	22.4	1,380
April	35	14	22.5	1,340
May	51	19	32.9	2,020
June	24	12	18.9	1,120
July	12	8	9.2	566
August	8	4	6.3	387
September	5	3	3.4	200
The year	51	3	16.6	12,000

SOUTH FORK OF OGDEN RIVER NEAR HUNTSVILLE, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 12, T. 6 N., R. 2 E., half a mile below mouth of Magpie Creek, 1 mile above heading of Huntsville Mountain Canal, and 5½ miles east of Huntsville.

DRAINAGE AREA.—148 square miles.

RECORDS AVAILABLE.—March, 1931, to September, 1931.

EXTREMES.—Maximum discharge during year, estimated 170 second-feet May 5; minimum discharge, 25 second-feet (gage height, 0.30 feet) several times during September.

1921–1931: Maximum discharge, 1,450 second-feet May 10, 1923 (gage height, 5.4 feet); minimum, that of September, 1931.

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

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	38	36	36	37	40	45	104	50	32	29	27
2	40	38	34	36	37	40	45	110	49	31	28	27
3	40	38	37	36	37	40	45	120	48	30	27	27
4	40	38	38	37	37	42	45	150	47	30	27	26
5	40	38	39	37	37	39	55	170	46	30	28	26
6	40	38	38	37	37	41	65	165	45	30	29	26
7	40	38	37	37	37	40	76	160	44	30	29	26
8	40	38	34	37	37	40	83	153	44	29	28	26
9	43	37	40	37	38	40	72	146	43	29	27	26
10	43	37	39	38	38	40	72	133	42	29	27	26
11	42	37	39	38	39	40	77	120	40	28	27	26
12	41	37	38	39	40	44	87	110	40	28	27	27
13	40	38	38	39	40	42	95	107	39	28	27	27
14	40	40	38	39	40	42	92	105	38	28	29	27
15	40	35	36	39	40	42	91	103	37	28	27	27
16	40	40	39	39	40	42	87	101	37	28	27	28
17	39	39	39	39	40	44	92	97	37	28	27	28
18	39	39	40	40	40	47	102	91	37	28	27	28
19	39	34	39	40	40	49	102	83	35	28	27	29
20	39	35	37	40	40	47	99	84	35	27	27	31
21	39	42	36	40	41	47	94	79	34	27	27	31
22	39	39	43	40	40	47	94	76	34	27	27	31
23	40	39	40	40	40	46	90	68	34	27	27	32
24	40	39	39	40	41	46	92	65	34	27	27	32
25	40	38	37	40	41	46	86	63	33	27	26	30
26	40	39	36	39	41	45	82	62	33	27	26	30
27	40	40	36	39	42	45	81	61	32	27	27	29
28	40	40	35	39	40	44	83	60	32	27	27	30
29	39	38	35	38	------	44	90	58	32	28	27	29
30	39	38	35	38	------	44	99	56	32	32	27	29
31	38	------	35	38	------	44	------	53	------	30	27	------

Month	Maximum	Minimum	Mean	Run-off in acre feet
October	43	38	39.9	2,450
November	42	34	38.1	2,270
December	43	34	37.5	2,310
January	40	36	38.4	2,360
February	42	37	39.2	2,180
March	49	39	43.2	2,660
April	102	45	80.6	4,800
May	170	53	100	6,150
June	50	32	38.8	2,310
July	32	27	28.5	1,750
August	29	26	27.3	1,680
September	32	26	28.1	1,670
The year	170	26	45.0	32,600

JORDAN RIVER BASIN

JORDAN RIVER NEAR LEHI, UTAH

LOCATION.—Water-stage recorder in sec. 25, T. 5 S., R. 1 W., 800 feet below pumping station at outlet of Utah Lake and 4 miles southwest of Lehi.

DRAINAGE AREA.—2,570 square miles.

RECORDS AVAILABLE.—May to December, 1904; July, 1913, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 727 second-feet May 31 (gage height, 5.50 feet); no flow Feb. 24 to Apr. 3.

1913–1931: Maximum mean daily discharge, 1,370 second-feet June 8, 1923 (gage height, 7.78 feet); no flow for several short periods.

REMARKS.—Records fair. Discharge Oct. 1 to May 3 determined from pump records. Flow represents pumped outflow from Utah Lake and is controlled by operation of gates and pumping plant 800 feet above gage. Gage-height record furnished by W. A. Knight, water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.
1	135	92	84	80	77	0	383	715	679		
2	105	92	84	80	73	0	506	703	696		
3	92	92	84	80	77	0	556	708	625		
4	92	92	84	80	77	18	488	710	627		
5	92	92	77	77	76	18	484	713	684		
6	92	92	80	80	77	37	552	713	655		
7	92	92	80	80	76	19	543	708	693		
8	90	92	77	77	77	18	565	705	701		
9	92	92	92	80	73	18	669	703	703		
10	92	92	77	73	69	18	679	686	701		
11	92	73	80	80	73	18	653	672	672		
12	92	92	84	77	69	18	679	684	684		
13	92	92	84	77	69	18	686	713	693		
14	92	92	80	77	61	18	681	710	698		
15	80	92	80	77	61	18	681	708	674		
16	92	92	80	80	61	28	681	693	637		
17	92	80	92	77	54	28	681	618	611		
18	92	71	77	77	54	28	677	689	607		
19	92	124	80	77	61	37	686	689	556		
20	92	100	84	77	69	37	681	684	586		
21	92	92	84	77	66	54	681	689	616		
22	92	92	84	80	69	92	681	689	614		
23	92	92	80	77	69	92	686	689	572		
24	92	92	84	80	69	90	677	662	595		
25	92	92	80	77	0	63	625	686	543		
26	92	84	84	77	0	133	495	684	534		
27	92	84	84	77	0	368	598	681	579		
28	92	84	80	77	0	184	693	679	493		
29	87	84	84	77	-------	184	693	677	508		
30	92	80	80	77	-------	216	705	646	447		
31	92	-------	80	77	-------	-------	727	-------	445		-------
										e 290	e 100

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	135	87	93.2	5,730
November	124	71	90.1	5,360
December	92	77	82.1	5,050
January	80	73	77.9	4,790
February	77	0	59.2	3,290
April	368	0	62.3	3,710
May	727	383	628	38,600
June	715	618	690	41,100
July	703	445	617	37,900
August	----------	----------	e 290	17,800
September	----------	----------	e 100	5,950
The year	727	0	234	169,000

e Estimated.

NOTE.—No flow during March.

SALT CREEK NEAR NEPHI, UTAH

LOCATION.—Staff gage in NW. ¼ sec. 1, T. 13 S., R. 1 E., 50 feet below tailrace of Nephi municipal power plant, 100 feet above intake of Nephi Plaster Co.'s canal, 2½ miles below mouth of South Fork, and 3½ miles east of Nephi.

DRAINAGE AREA.—95 square miles.

RECORDS AVAILABLE.—April, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 336 second-feet July 30 (gage height, 3.28 feet); minimum, 5 second-feet several times in July.

1925–1931: Maximum discharge, about 600 second-feet Aug. 27, 1929 (gage height, 4.65 feet); minimum, that of July, 1931.

REMARKS.—Records fair. A few small diversions above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	9	8	7	9	8	8	22	17	7	22	14
2	11	9	8	7	9	8	8	22	17	7	16	10
3	11	9	8	8	9	8	8	25	17	8	12	10
4	11	9	8	8	9	7	8	25	17	7	12	10
5	11	9	8	8	9	7	8	26	17	7	11	9
6	11	9	8	8	9	7	8	29	16	7	11	9
7	11	9	7	9	9	8	8	31	16	7	11	9
8	10	9	7	9	9	8	8	28	16	7	11	8
9	11	9	8	9	9	8	8	25	16	7	11	8
10	11	9	8	9	9	8	8	23	15	6	10	7
11	11	9	8	9	9	8	8	23	14	6	10	7
12	11	9	9	9	9	8	8	25	14	6	9	7
13	11	9	8	9	9	7	9	29	13	6	25	7
14	11	9	8	9	9	8	9	39	12	6	23	7
15	11	9	7	9	9	7	9	44	12	5	12	7
16	11	9	7	9	8	7	9	38	12	5	14	7
17	10	9	7	8	8	7	12	37	12	6	12	7
18	10	8	7	8	8	8	13	36	11	6	11	7
19	10	8	7	8	8	9	14	25	11	6	10	7
20	10	8	7	8	8	8	15	22	10	6	59	7
21	10	8	7	8	8	7	15	20	10	6	14	7
22	10	8	7	9	8	7	16	20	10	6	17	7
23	9	8	7	9	8	7	17	20	10	6	11	7
24	9	7	7	8	8	7	22	21	10	6	10	7
25	9	7	7	8	8	7	21	21	9	6	10	7
26	9	8	7	8	8	7	17	20	9	6	10	7
27	9	8	7	8	8	7	18	17	9	5	10	7
28	9	8	7	8	8	7	19	17	8	5	10	7
29	9	8	7	8	------	7	20	16	8	113	10	7
30	9	8	7	8	------	7	22	17	8	138	13	7
31	9	------	7	8	------	7	------	17	------	24	16	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	11	9	10.2	627
November	9	7	8.5	506
December	8	7	7.4	455
January	9	7	8.3	510
February	9	8	8.5	472
March	9	7	7.5	461
April	22	8	12.4	738
May	44	16	25.2	1,550
June	17	8	12.5	744
July	138	5	14.5	892
August	59	9	14.3	879
September	14	7	7.8	464
The year	138	5	11.5	8,300

PROVO RIVER AT FORKS, UTAH

LOCATION.—Staff gage in sec. 26, T. 5 S., R. 3 E., at Vivian Park summer resort, just above Forks and 400 feet above South Fork. Auxiliary staff gage between regular gage and South Fork used June 4 to Sept. 30, 1931.

DRAINAGE AREA.—600 square miles.

RECORDS AVAILABLE.—November, 1911, to September, 1931. Records have been obtained at various points below mouth of South Fork since 1890.

EXTREMES.—Maximum discharge during year, 403 second-feet May 18 (gage height, 2.76 feet); minimum, 62 second-feet Oct. 26, 27, Sept. 8–10.

1911–1931: Maximum discharge, 3,180 second-feet June 11, 1921 (gage height, 6.13 feet); minimum, 62 second-feet in 1931.

REMARKS.—Records fair. Station is below diversions for irrigation in Heber Valley and above those in vicinity of Provo. Flow slightly regulated by small lakes at headwaters utilized as storage reservoirs. Results of several discharge measurements furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930-31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	257	276	257	276	238	238	205	138	150	110	100	89
2	283	276	250	304	232	250	205	146	145	105	100	89
3	318	270	297	326	232	244	205	138	140	103	95	65
4	341	270	297	244	232	244	210	146	146	101	93	65
5	333	276	300	232	238	238	210	142	146	97	93	65
6	326	276	300	263	238	227	210	142	151	97	93	65
7	333	263	290	238	238	227	221	146	146	93	93	65
8	333	257	238	244	238	210	210	150	157	89	93	62
9	322	257	250	270	238	238	195	163	160	89	89	62
10	341	257	244	270	238	232	200	159	157	89	89	62
11	326	244	270	270	232	244	200	138	151	89	78	65
12	333	244	276	244	232	270	205	138	151	89	82	65
13	326	250	290	244	238	244	176	138	151	89	82	65
14	330	263	290	238	238	244	195	218	129	89	75	65
15	330	250	276	215	238	244	150	290	135	85	82	75
16	326	257	290	215	244	244	154	308	129	85	78	68
17	318	311	283	238	238	250	134	337	129	85	78	75
18	318	304	283	244	238	244	134	364	124	83	82	71
19	311	276	276	238	250	257	130	297	115	82	85	75
20	304	270	276	190	244	238	130	238	124	82	85	75
21	297	297	276	215	244	238	122	195	119	82	85	78
22	297	290	250	215	244	244	126	174	119	78	85	85
23	297	297	232	238	244	232	138	167	115	78	85	85
24	290	300	263	238	244	205	172	163	119	85	78	89
25	283	297	257	195	250	205	146	172	105	82	68	82
26	290	300	221	215	250	210	138	195	119	82	62	82
27	290	286	221	250	270	185	150	185	119	78	62	85
28	290	297	198	263	250	195	146	167	105	82	65	105
29	283	294	192	250	-------	210	134	163	105	82	78	103
30	276	283	244	244	-------	210	138	159	105	89	78	85
31	276	-------	263	263	-------	200	-------	155	-------	95	89	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	341	257	309	19,000
November	311	244	276	16,400
December	300	192	263	16,200
January	326	190	245	15,100
February	270	232	241	13,400
March	270	185	231	14,200
April	221	122	170	10,100
May	364	138	188	11,600
June	160	105	131	7,800
July	110	78	88.5	5,440
August	100	62	83.2	5,120
September	105	62	75.6	4,500
The year	364	62	192	139,000

SOUTH FORK OF PROVO RIVER AT FORKS, UTAH

LOCATION.—Staff gage in sec. 26, T. 5 S., R. 3 E., at Vivian Park summer resort, just above Forks and one-fourth mile above confluence with Provo River.
DRAINAGE AREA.—30 square miles.
RECORDS AVAILABLE.—November, 1911, to September, 1931.
EXTREMES.—Maximum discharge during year, 27 second-feet Oct. 11–16; minimum, 16 second-feet Aug. 1–10.
1911–1931: Maximum discharge, 123 second-feet May 27, 1922; minimum 14 second-feet Apr. 17, 1925.
REMARKS.—Records fair. Station below all diversions. Flow regulated by diversions above. Results of several discharge measurements furnished by Utah Power & Light Co.

Daily and monthly discharge, in second-feet, 1930–31

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

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	27	25	25.9	1,590
November	26	25	25.2	1,500
December	25	25	25.0	1,540
January	25	25	25.0	1,540
February	26	23	24.2	1,340
March	25	22	23.3	1,430
April	23	19	20.3	1,210
May	22	17	19.9	1,220
June	20	17	18.1	1,080
July	23	17	18.6	1,140
August	20	16	17.7	1,090
September	19	17	17.6	1,050
The year	27	16	21.7	15,700

SEVIER LAKE BASIN

SEVIER RIVER NEAR KINGSTON, UTAH

LOCATION.—Water-stage recorder in NW. ¼ sec. 16, T. 30 S., R. 3 W., 1 mile west of Kingston and 2 miles above mouth of East Fork.

DRAINAGE AREA.—1,110 square miles.

RECORDS AVAILABLE.—June, 1914, to September, 1931.

EXTREMES.—Maximum discharge during year, 174 second-feet Aug. 15 (gage height, 1.50 feet); minimum, 5 second-feet July 17-20 (gage height, 0.56 foot).

1914–1931: Maximum discharge, 1,460 second-feet May 21, 1922 (gage height, 4.92 feet); minimum, that of July, 1931.

REMARKS.—Records good. Numerous diversions above station; none between gage and mouth of East Fork. Gage-height record and results of several discharge measurements furnished by Sevier River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	77	115		118	123	110	18	12	8	12	12
2	68	72	116		126	123	110	20	12	9	10	12
3	66	72	118	86	129	121	105	24	12	9	9	10
4	64	70	120		129	121	100	25	12	9	9	8
5	64	72	121	86	132	121	95	26	12	8	9	7
6	64	72	115		132	121	90	29	15	8	9	6
7	64	72	115		132	121	86	29	18	8	9	6
8	66	68	115	86	132	121	77	29	18	8	9	6
9	66	66	115		132	121	77	29	15	8	9	6
10	68	68			132	121	39	24	18	8	9	6
11	68	68		86			38	20	14	8	9	6
12	72	68				125	36	19	12	8	9	6
13	72	72			134		35	17	9	8	9	6
14	72	72					28	18	7	8	9	6
15	70	72		98		132	26	15	6	8	53	6
16	70	72			137	132	26	12	5	8	12	10
17	70					129	26	12	5	8	10	10
18	68			110		129	23	11	5	8	8	10
19	68			110	125	132	20	10	5	8	8	10
20	68	95	100	110		132	18	10	5	9	8	10
21	68			112		137	18	10	6	9	8	10
22	68			112	115	123	15	10	7	9	8	10
23	68	121		115	115	121	13	10	8	9	9	10
24	68			115	115	121	15	12	8	9	9	10
25	68			115	115	118	15	11	8	9	9	10
26	68	118		118	115	115	15	11	8	9	9	10
27	72			118	123	105	17	11	8	9	9	10
28	79			118	123	108	20	13	8	10	8	11
29	79			118	------	112	20	15	8	10	8	12
30	81			118	------	110	20	15	8	12	9	12
31	81	------		118	------	110	------	14	------	13	12	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	81	57	69.2	4,250
November			88.3	5,250
December	121		105	6,460
January			101	6,210
February			127	7,050
March	137	105	122	7,500
April	110	13	44.4	2,640
May	29	10	17.1	1,050
June	18	5	9.8	583
July	13	8	8.8	541
August	53	8	10.5	646
September	12	6	8.8	524
The year	137	5	59.0	42,700

PIUTE RESERVOIR NEAR MARYSVALE, UTAH

LOCATION.—Staff gage in NW. ¼ sec. 3, T. 29 S., R. 3 W., at Piute Dam, 11 miles south of Marysvale.
RECORDS AVAILABLE.—March, 1914, to September, 1931.
REMARKS.—Gage-height record furnished by Piute Reservoir & Irrigation Co. Capacity of reservoir, 90,000 acre-feet.

Daily contents, in acre-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	6,640	14,000	18,000	27,300	37,400	43,900	49,600	36,400	20,500	10,000	680
2	7,280	14,000	18,400	27,600	37,600	44,100	49,600	35,900	20,100	9,600	800
3	7,600	14,000	18,800	27,800	37,800	44,300	49,600	35,400	19,800	9,200	1,100
4	8,140	14,000	19,200	27,900	37,900	44,500	49,600	35,100	19,600	8,800	1,480
5	8,700	14,000	19,600	28,200	38,100	44,600	49,500	34,600	19,300	8,410	1,840
6	9,100	13,900	20,000	28,400	38,300	44,800	49,300	34,300	19,000	7,960	2,200
7	9,500	13,800	20,300	28,600	38,400	45,000	49,100	33,800	18,800	7,440	2,300
8	9,700	13,800	20,500	29,000	38,600	45,200	48,900	33,400	18,700	6,800	2,450
9	10,100	13,800	20,800	29,100	38,800	45,400	48,500	32,900	18,400	6,000	2,500
10	10,000	13,800	21,100	29,400	39,000	45,500	48,100	32,200	18,200	5,200	2,550
11	10,100	13,800	21,400	29,700	39,200	45,700	47,800	31,600	17,800	4,500	2,600
12	10,400	13,800	21,700	30,000	39,500	45,700	47,400	30,800	17,400	3,660	2,650
13	10,700	13,800	21,900	30,300	39,800	45,900	47,000	30,000	17,100	2,880	2,700
14	11,000	13,800	22,200	30,600	40,100	46,100	46,600	29,200	16,600	2,200	2,820
15	11,300	13,800	22,500	31,000	40,500	46,300	46,100	28,500	16,100	1,600	2,880
16	11,600	13,800	22,800	31,300	40,800	46,400	45,400	27,800	15,600	1,100	2,940
17	11,900	13,900	23,200	31,600	41,200	46,600	44,600	27,000	15,200	800	3,000
18	12,200	14,000	23,600	31,900	41,300	46,800	44,100	26,400	14,700	600	2,880
19	12,300	14,200	23,800	32,400	41,500	47,200	43,400	25,800	14,200	360	2,760
20	12,400	14,600	24,200	32,600	41,800	47,400	42,700	25,200	13,700	0	2,200
21	12,500	14,900	24,400	32,900	42,200	47,600	42,000	24,600	13,300	0	2,600
22	12,600	15,200	24,800	33,200	42,500	47,800	41,300	24,200	12,800	0	2,450
23	12,700	15,500	25,000	33,500	42,700	47,900	40,600	23,700	12,500	0	2,250
24	12,900	15,900	25,400	33,800	42,900	48,100	40,000	23,200	12,200	0	2,080
25	13,000	16,200	25,500	34,300	43,000	48,300	39,500	22,800	11,800	0	1,880
26	13,200	16,600	25,800	34,800	43,200	48,500	39,000	22,500	11,500	0	1,680
27	13,400	17,000	26,000	35,300	43,400	48,700	38,400	22,200	11,200	0	1,440
28	13,600	17,300	26,100	35,800	43,600	48,900	37,900	21,900	10,900	0	1,220
29	13,800	17,700	26,400	36,200	-------	49,100	37,400	21,800	10,500	0	950
30	13,900	-------	26,700	36,700	-------	49,300	36,900	21,400	10,300	100	780
31	14,000	-------	27,000	37,300	-------	49,500	-------	21,000	-------	520	480

NOTE.—Reservoir empty Sept. 1–30.

SEVIER RIVER BELOW PIUTE DAM, NEAR MARYSVALE, UTAH

LOCATION.—Water-stage recorder in sec. 34, T. 28 S., R. 3 W., 700 yards below dam of Piute Reservoir and 11 miles south of Marysvale.

DRAINAGE AREA.—2,440 square miles.

RECORDS AVAILABLE.—May to August, 1911; May, 1912, to September, 1931.

EXTREMES.—Maximum discharge during year, 655 second-feet June 12 (gage height, 1.90 feet); minimum stage, 0.65 foot several times during winter (estimated discharge, 6 second-feet).

1911–1931: Maximum discharge, 2,600 second-feet part of May 23, 24, 1922 (gage height, 4.45 feet); practically no flow when reservoir gates are closed.

REMARKS.—Records good. No diversion between gage and Piute Reservoir. Flow regulated by operation of gates in dam. Gage-height record and results of 10 discharge measurements furnished by Sevier River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	115	115	6	6	10	23	67	388	307	269	86	103
2	93	115	6	6	10	36	82	354	302	262	57	67
3	74	115	6	6	10	38	109	321	307	269	13	67
4	82	115	6	6	10	40	137	321	302	269	7	65
5	90	120	6	6	10	44	137	360	302	288	10	62
6	97	165	6	6	10	44	137	360	302	334	24	62
7	131	178	6	6	10	44	143	367	308	395	65	60
8	120	120	6	6	10	44	198	409	191	465	78	57
9	131	120	6	6	10	44	204	416	243	465	101	57
10	131	126	6	6	10	44	204	444	351	486	105	54
11	131	126	6	6	10	65	204	486	351	472	105	54
12	93	126	6	6	10	70	236	486	365	458	105	52
13	32	126	6	6	10	65	269	486	430	437	105	54
14	28	131	6	6	10	52	288	493	308	409	105	57
15	28	131	6	6	10	49	334	486	308	381	105	57
16	54	126	6	6	10	32	388	486	314	328	109	57
17	90	126	6	6	10	32	360	451	308	204	154	57
18	90	93	6	10	10	32	347	416	321	165	154	57
19	90	90	6	10	10	30	395	458	328	137	154	57
20	93	40	6	10	10	30	416	451	334	101	154	57
21	97	18	6	10	17	30	409	451	328	90	154	57
22	90	18	6	10	17	34	409	416	314	101	178	57
23	70	7	6	10	17	32	402	381	314	109	178	57
24	70	6	6	10	17	30	395	360	299	120	178	57
25	70	6	6	10	17	28	402	295	299	109	178	57
26	70	6	6	10	17	28	444	256	282	101	178	52
27	68	6	6	10	17	28	444	250	299	105	178	54
28	66	6	6	10	17	28	451	269	299	109	178	57
29	65	6	6	10	------	38	465	314	299	120	178	57
30	65	6	6	10	------	54	451	308	299	109	178	62
31	101	------	6	10	------	49	------	308	------	86	172	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	131	28	84.7	5,210
November	178	6	83 0	4,940
December	6	6	6	369
January	10	6	7.8	480
February	17	10	12.0	666
March	70	28	39.9	2,450
April	465	67	298	17,700
May	493	250	389	23,900
June	430	191	302	18,000
July	486	86	250	15,400
August	178	7	120	7,380
September	103	52	59.3	3,530
The year	493	6	138	100,000

SEVIER RIVER NEAR VERMILION, UTAH

LOCATION.—Water-stage recorder in NE. ¼ sec. 19, T. 22 S., R. 1 W., at highway bridge half a mile below Rockyford Dam, 2 miles northeast of Vermilion, and 4 miles above mouth of Lost Creek.

DRAINAGE AREA.—3,340 square miles.

RECORDS AVAILABLE.—July to September, 1912; July, 1914, to September, 1931.

EXTREMES.—1914–1931: Maximum discharge, 2,400 second-feet May 30, 1922 (gage height, about 8.1 feet); minimum, 1 or 2 second-feet (seepage only) when Rockyford gates are closed.

REMARKS.—Records fair. Entire flow usually diverted during low-water season. Flow past station at such times represents seepage and return flow from canals. Flow also regulated by dams and reservoirs above. Gage-height record and results of 8 discharge measurements furnished by Sevier River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	84	96		117	113	74	152	30	8	5	66
2	4	72	96	100	119	113	159	152	35	9	4	100
3	4	65	96		121	107	157	170	32	8	4	102
4	4	72	95		121	102	119	148	24	8	4	98
5	4	79	94	103	123	100	110	121	16	8	8	83
6	4	79	93	103	127	98	100	93	13	14	8	32
7	4	79	93		131	96	72	73	15	18	9	49
8	4	78	94		138	94	49	73	22	24	20	70
9	4	77	94		140	93	43	66	27	14	9	79
10	4	76	93	103	140	93	32	51	19	12	8	66
11	4	75	93		152	96	24	41	8	10	6	51
12	7	73	93		163	100	22	27	3	11	5	37
13	10	69	93		157	89	21	17	3	12	4	36
14	14	69	93		133	76	19	12	12	13	3	33
15	22	66	93	103	119	78	17	9	43	24	3	46
16	65	69	93	103	121	65	17	8	55	14	3	57
17	170	78			119	63	17	8	49	8	4	59
18	148	83		107	117	59	24	14	46	7	17	62
19	123	89			117	73	47	28	45	6	26	62
20	98	93			113	53	47	41	44	6	20	65
21	78			111	113	34	47	58	42	6	20	66
22	67			111	113	33	47	70	43	6	20	66
23	59	93	95	111	107	32	47	72	46	5	21	69
24	57			111	111		47	69	46	5	21	72
25	55			111	117		51	62	47	5	17	60
26	54	93		111	119	4	58	63	46	5	26	51
27	53	93		111	115		75	75	34	5	30	38
28	53	94		111	119		89	53	9	5	23	32
29	54	95		113	------		91	37	9	5	27	48
30	54	96	96	113	------	11	123	32	7	5	31	55
31	62	------	96	115	------	16	------	30	------	5	39	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	170	4	43.5	2,670
November	----------	65	82.0	4,880
December	----------	----------	94.5	5,810
January	----------	----------	106	6,520
February	163	107	125	6,940
March	100	----------	61.6	3,790
April	159	17	61.5	3,660
May	170	8	62.1	3,820
June	55	3	29.0	1,730
July	24	5	9.4	578
August	39	3	14.4	885
September	102	32	60.3	3,590
The year	170	3	62.0	44,900

SEVIER RIVER BELOW SAN PITCH RIVER, NEAR GUNNISON, UTAH

LOCATION.—Water-stage recorder in NE. ¼ sec. 14, T. 19 S., R. 1 W., 1,000 feet below mouth of San Pitch River and 3 miles west of Gunnison.
DRAINAGE AREA.—4,880 square miles.
RECORDS AVAILABLE.—October, 1917, to September, 1931.
EXTREMES.—Maximum discharge during year, 283 second-feet Feb. 8 (gage height, 1.95 feet); minimum, 31 second-feet July 22, 23.
1917–1931: Maximum discharge, 2,620 second-feet June 1, 1922 (gage height, 5.32 feet); minimum, 31 second-feet July 7, 1928, July 22, 23, 1931.
REMARKS.—Records fair. Most of flow diverted above station during irrigation season. Flow regulated by operation of reservoirs and numerous irrigation diversions above. Gage-height record and results of 11 discharge measurements furnished by Sevier River water commissioner.

Daily and monthly discharge, in second-feet, 1930-31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	158	158	196	180	212	206	99	164	89	54	56	69
2	152	169	198	178	222	206	121	186	77	56	54	85
3	158	173		175	234	206	158	191	79	58	50	111
4	154	169			247	206	191	222	87	60	60	119
5	137	169			259	201	196	209	89	54	64	121
6	133	171		180	273	191	186	186	83	52	62	115
7	131	175			280	177	160	173	81	54	58	95
8	133	175			280	177	152	164	79	54	54	105
9	133	175			280	182	129	144	77	54	54	115
10	129	173		184	280	186	115	127	77	54	62	111
11	133	173	195		280	191	103	115	71	54	62	107
12	133	173			280	191	101	103	65	48	56	97
13	133	173			280	186	99	103	62	44	54	91
14	133	173		182	280	182	99	93	62	41	54	89
15	137	169			280	180	93	83	58	37	65	89
16	139	171			280	177	79	77	54	39	69	93
17	152	186		180	256	173	73	83	73	44	65	93
18	228	193			222	171	69	87	73	46	65	77
19	237	193			225	167	67	91	73	43	65	89
20	220	193	193		228	162	71	95	73	41	77	101
21	198	196		175	228	158	73	99	67	35	81	99
22	184	198			220	150	69	101	65	31	85	97
23	175	198			206	119	89	101	64	31	83	103
24	171	198			193	109	99	103	65	52	81	103
25	167	196		171	191	105	115	107	65	50	81	105
26	164	196	188		198	109	127	107	73	52	73	105
27	162	196			203	105	135	111	71	52	65	99
28	162	196		190	206	101	156	129	67	62	60	99
29	160	193			-------	103	164	121	62	77	60	91
30	160	193			-------	103	160	105	56	56	58	89
31	158	-------	184		-------	99	-------	95	-------	56	56	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	237	129	159	9,780
November	198	158	182	10,800
December	-------	-------	192	11,800
January	-------	-------	181	11,100
February	280	191	244	13,600
March	206	99	161	9,900
April	196	67	118	7,000
May	222	77	125	7,690
June	89	54	71.2	4,240
July	77	31	49.7	3,060
August	85	54	64.2	3,950
September	121	69	98.7	5,870
The year	280	31	136	98,800

SEVIER BRIDGE RESERVOIR NEAR JUAB, UTAH

LOCATION.—Staff gage in NW. ¼ sec. 1, T. 17 S., R. 2 W., at dam of Consolidated Sevier Bridge Reservoir Co., 13 miles southwest of Juab.
RECORDS AVAILABLE.—January, 1914, to September, 1931.
REMARKS.—Gage-height record furnished by Consolidated Sevier Bridge Reservoir Co. Reservoir capacity, 250,000 acre-feet.

Daily contents, in acre-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	21,200	25,100	29,600	43,100	55,800	71,300	81,200	73,800	45,600	31,100	7,840
2	21,000	25,100	30,100	43,500	56,400	71,900	81,500	73,000	45,500	33,000	6,650
3	20,800	25,000	30,500	43,900	56,900	72,400	81,800	72,100	45,300	31,800	5,550
4	20,700	24,900	31,000	44,400	57,400	72,700	82,100	71,300	45,100	30,900	4,430
5	20,400	24,800	31,400	44,800	57,900	73,300	82,400	70,200	45,100	30,000	3,810
6	20,100	24,700	31,900	45,300	58,500	73,700	82,700	69,100	45,400	29,300	2,330
7	20,100	24,700	32,400	45,700	59,700	74,000	83,000	67,800	45,600	28,200	1,410
8	20,100	24,600	32,900	46,100	60,300	74,500	83,300	66,400	45,800	27,100	720
9	20,100	24,200	33,300	46,600	60,900	74,800	83,600	65,100	46,000	26,100	460
10	20,100	23,700	33,800	47,000	61,500	75,200	83,800	63,800	46,100	24,900	260
11	20,100	23,300	34,400	47,300	61,900	75,500	83,900	62,500	46,200	23,700	360
12	20,200	22,900	35,000	47,700	62,500	76,000	84,100	61,600	46,200	22,600	460
13	20,200	22,500	35,500	48,200	63,000	76,400	84,100	60,400	46,100	21,500	590
14	20,500	22,000	36,100	48,700	63,800	76,900	84,100	59,400	46,000	19,900	460
15	20,800	22,300	36,600	49,300	64,400	77,100	84,100	58,200	45,900	18,200	460
16	21,200	22,600	37,100	49,900	65,100	77,400	83,600	56,700	45,800	16,300	460
17	21,500	23,100	37,500	50,200	65,600	77,900	83,000	55,200	45,700	14,500	460
18	21,800	23,700	37,900	50,600	66,200	78,200	82,400	53,800	45,000	12,600	460
19	22,400	24,200	38,300	50,900	66,700	78,500	81,800	52,600	44,400	10,600	460
20	23,000	24,700	38,700	51,300	67,200	78,800	81,200	51,400	43,700	9,350	460
21	23,500	25,100	39,100	51,600	67,800	79,000	80,300	49,800	42,900	9,510	460
22	23,900	25,600	39,500	52,000	68,200	79,400	79,400	48,600	42,000	9,390	460
23	24,200	26,000	39,900	52,300	68,600	79,700	78,500	47,900	41,200	9,390	460
24	24,400	26,400	40,200	52,800	69,000	80,000	78,200	47,100	40,300	9,390	460
25	24,600	26,900	40,500	53,100	69,400	80,100	77,300	46,400	39,700	9,390	420
26	24,700	27,300	40,800	53,500	69,800	80,200	76,600	46,100	39,100	9,450	380
27	24,900	27,800	41,300	53,900	70,200	80,300	75,800	45,900	38,100	9,510	360
28	25,100	28,400	41,600	54,200	70,800	80,400	75,300	45,800	37,200	9,570	260
29	25,100	28,700	42,000	54,500	-------	80,600	75,000	45,800	36,300	9,620	30
30	25,100	29,200	42,300	54,800	-------	80,700	74,500	45,800	35,100	9,390	0
31	25,100	-------	42,600	55,200	-------	80,900	-------	45,700	-------	8,450	0

NOTE.—Reservoir empty during September.

SEVIER RIVER NEAR JUAB, UTAH

LOCATION.—Water-stage recorder in NE. ¼ sec. 2, T. 17 S., R. 2 W., 1,600 feet downstream from Sevier Bridge Dam and 13 miles southwest of Juab.
DRAINAGE AREA.—5,120 square miles.
RECORDS AVAILABLE.—September, 1911, to September, 1931.
EXTREMES.—1911–1931: Maximum discharge, 2,140 second-feet June 2, 1922 (gage height, 8.50 feet); practically no flow when reservoir gates are closed.
REMARKS.—Records fair. No diversions between this station and that near Gunnison. Flow regulated by gates in Sevier Bridge Dam. Gage-height record and results of 6 discharge measurements furnished by Sevier River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	264	201						524	183	662	363	87
2	281	201						638	177	621	396	89
3	291	201						641	137	583	400	108
4	291	201						728	100	577	348	139
5	291	232						812	57	550	339	145
6	232	264						809	16	527	309	142
7	168	264						892	16	537	241	128
8	174	336						961	16	577	183	115
9	162	396						892	16	617	165	126
10	156	396						823	16	662	121	131
11	159	396						763	68	655	87	131
12	159	391						704	121	644	89	123
13	108	386					43	704	121	665	98	113
14	47	270					91	763	121	746	108	113
15	47	67					212	834	121	830	105	110
16	51	26					324	827	121	870	103	113
17	49	27					383	827	237	852	103	118
18	49	24					383	820	381	806	105	113
19	49	23					383	798	404	636	105	108
20	51	23					383	784	438	286	105	115
21	51	21					383	780	461	139	105	121
22	51	20					418	686	461	100	108	123
23	96	20					444	537	458	78	110	123
24	153	20					444	473	455	31	110	123
25	137	20					444	382	452	31	108	123
26	128	20					444	283	483	31	105	12
27	128	20					444	229	508	31	103	12
28	162	20					444	171	505	31	96	12
29	201	20			------		418	171	567	174	87	12
30	201	20			------		383	171	655	383	87	12
31	201	------			------		------	171	------	370	87	------

[a] Estimated.

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	291	47	148	9,100
November	396	20	151	8,980
December	----------	----------	[a] 2	123
January	----------	----------	[a] 2	123
February	----------	----------	[a] 2	111
March	----------	----------	[a] 2	123
April	444	----------	216	12,900
May	961	171	632	38,900
June	655	16	262	15,600
July	870	31	461	28,300
August	400	87	161	9,900
September	145	12	101	6,010
The year	961	----------	180	130,000

EAST FORK OF SEVIER RIVER NEAR KINGSTON, UTAH

LOCATION.—Water-stage recorder in SW. ¼ sec. 13, T. 30 S., R. 3 W., 1 mile below highway bridge and 2 miles east of Kingston.

DRAINAGE AREA.—1,260 square miles.

RECORDS AVAILABLE.—April, 1914, to September, 1931. Records obtained 1½ miles above Rockyford Bridge March, 1913, to April, 1914; also three-fourths mile north of Kingston May to September, 1912.

EXTREMES.—Maximum discharge during year, 199 second-feet Oct. 1 (gage height, 3.64 feet); minimum, 3 second-feet Oct. 30 (gage height 2.43 feet). 1913–1931: Maximum discharge, about 2,000 second-feet Aug. 26, 1929; minimum, about 3 second-feet Oct. 27–30, 1930.

REMARKS.—Records fair. Station above all diversions in vicinity of Kingston. Flow regulated at Otter Creek Reservoir 8 miles above. Gage-height record and results of 8 discharge measurements furnished by Sevier River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	196	15				13	14	116	123	110	121	46
2	190	16				13	14	119	123	114	119	45
3	182	16				13	14	126	114	114	114	44
4	174	19				12	14	123	119	114	110	42
5	169	28				12	14	121	123	110	110	41
6	164	27				11	15	121	121	108	108	39
7	156	27				14	15	123	121	106	106	39
8	149	27				9	15	126	121	106	104	37
9	137	27			e 15	11	15	128	119	106	106	38
10	132	27				12	15	128	119	108	106	37
11	132	27				13	16	128	119	110	106	37
12	126	28				14	18	128	119	110	106	33
13	121	28				14	18	126	114	114	108	30
14	116	29				15	18	123	108	119	108	29
15	80	29				16	18	121	119	119	108	30
16	27	29	e 20	e 17	13	16	18	123	116	114	99	29
17	24				13	16	18	121	114	114	91	29
18	20				13	16	21	119	114	114	84	27
19	18				12	17	32	119	110	114	76	25
20	18				11	17	27	121	110	110	69	26
21	14				10	17	27	126	110	119	62	26
22	10				9	17	42	128	110	142	56	25
23	8	e 26			9	18	126	126	112	135	52	24
24	6				13	17	126	123	114	126	50	25
25	4				12	16	126	123	114	123	50	26
26	4				11	14	123	123	114	121	50	26
27	3				11	14	123	128	114	121	50	28
28	3				11	14	123	128	114	130	50	29
29	3				-------	14	121	128	114	126	48	28
30	3				-------	14	121	123	114	123	48	28
31	8	-------			-------	14	-------	121	-------	126	48	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	196	3	77.3	4,750
November	----------	----------	25.4	1,510
December	----------	----------	e 20	1,230
January	----------	----------	e 17	1,050
February	----------	9	13.3	739
March	18	9	14.3	879
April	126	14	46.9	2,790
May	128	116	124	7,620
June	123	108	116	6,900
July	142	106	117	7,190
August	121	48	84.6	5,200
September	46	24	32.3	1,920
The year	196	3	57.7	41,800

e Estimated.

ROCKYFORD CANAL NEAR VERMILION, UTAH

LOCATION.—Water-stage recorder in sec. 19, T. 22 S., R. 1 W., 300 feet below head of canal and 2 miles northeast of Vermilion.

RECORDS AVAILABLE.—July, 1914, to September, 1931.

REMARKS.—Records fair. Gage is a short distance below wasteway which returns surplus water to Sevier River. Flow regulated by head gates and wasteway. This canal diverts from Rockyford Reservoir on Sevier River at Vermilion. Water used for irrigation north of Vermilion. Gage-height record and results of 12 discharge measurements furnished by Sevier River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	30	44			20	26	46	34	75	35	43
2	51	30	43		23	20	26	41	34	82	40	26
3	53	30	42	28		20	28	34	39	84	40	24
4	53	33	42		23	20	31	51	45	83	44	23
5	53	37	42			20	38	50	42	83	39	9
6	52	38	42	23		20	38	17	52	83	40	2
7	54	39	41		23	20	50	0	52	83	36	3
8	53	39	41			20	72	4	57	86	42	3
9	54	39	40			20	80	27	64	86	56	3
10	54	39	40			20	89	33	76	77	46	3
11	54	38	40	24	23	20	88	36	74	46	48	3
12	54	37	40			20	78	42	72	62	49	3
13	54	37	40			20	72	50	72	76	44	3
14	54	37	40		22	20	67	57	65	64	55	3
15	53	37				20	65	57	57	80	46	3
16	46	37		25		19	65	57	60	78	46	3
17	46	39			21	18	63	52	59	59	52	3
18	46	40				18	62	46	50	55	46	3
19	46	42		21		18	61	33	37	40	42	3
20	40	42			20	18	61	29	37	44	44	3
21	35	42	38			18	61	29	36	43	44	18
22	28	42		17		18	54	29	30	41	44	38
23	28	42			20	18	55	41	25	36	43	31
24	28	42			20	13	54	46	25	38	44	34
25	28	42		19	20	0	39	36	25	33	49	37
26	28	42			20	0	40	32	25	32	55	37
27	28	44		21	20	0	46	32	22	34	55	38
28	28	44			20	0	51	32	30	35	52	37
29	28	44		21	------	0	51	32	48	35	54	33
30	28	44	35		------	5	48	33	51	35	55	32
31	28	------	35		------	29	------	33	------	34	53	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	54	28	43.1	2,650
November	44	30	38.9	2,310
December	------	------	* 39.3	2,420
January	------	------	* 22.5	1,380
February	------	------	21.6	1,200
March	29	0	15.9	978
April	89	26	55.3	3,290
May	57	0	36.7	2,260
June	76	22	46.8	2,780
July	86	32	58.8	3,620
August	56	35	46.4	2,850
September	43	2	16.8	1,000
The year	89	0	36.9	26,700

* Estimated.

BEAVER RIVER BASIN

BEAVER RIVER NEAR BEAVER, UTAH

LOCATION.—Water-stage recorder in SE. ¼ sec. 18, T. 29 S., R. 6 W., one-fourth mile above city diversion dam at mouth of canyon and 4½ miles east of Beaver.

DRAINAGE AREA.—82 square miles.

RECORDS AVAILABLE.—June to September, 1906; March, 1914, to September, 1931.

EXTREMES.—Maximum discharge during year, 156 second-feet May 6 (gage height, 4.52 feet); minimum, about 5 second-feet Aug. 29 (gage height, 3.19 feet).

1914–1931: Maximum discharge, 785 second-feet May 25, 1922 (gage height, 6.31 feet); minimum, that of Aug. 29, 1931.

REMARKS.—Records fair. No irrigation diversions above station. Water diverted by Beaver River Power Co. but returned to stream several miles above. Flow slightly regulated by operation of power plants and storage in Kents Lake.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	28			18	24	26	39	49	27	19	15
2	29	18			19		27	40	46	29	18	12
3	31	20			18		24	52	45	28	17	12
4	29	20			19		24	55	46	27	17	13
5	30	20			19	*24	27	70	48	27	19	13
6	29	20			19		31	90	45	27	18	13
7	29	19			19		39	95	43	24	17	12
8	29	19			19	24	35	70	41	19	16	11
9	29	20			20	21	32	70	41	19	15	11
10	29	22			20	22	37	73	41	19	14	10
11	31	21			20	21	40	73	40	19	15	10
12	29	22			20	21	39	75	38	17	15	10
13	31	21			20	20	38	75	37	19	14	11
14	30	23			22	20	36	72	34	19	19	11
15	28	22			23	20	36	72	32	18	16	13
16	25	22	*19	*18	23		36	77	31	17	16	11
17	26	22			22		40	78	31	17	17	12
18	25	20					46	72	30	18	14	11
19	25					*21	61	60	29	19	13	12
20	24				*22		61	54	27	19	14	14
21	25						50	51	27	17	17	15
22	24				22	24	53	49	27	16	17	14
23	22					22	52	49	24	15	14	14
24	24					20	45	52	24	16	13	12
25	23	*20				20	40	50	27	18	13	13
26	22				*22	19	39	53	31	19	13	12
27	22					19	38	58	31	22	13	13
28	21					19	38	53	29	19	13	13
29	20					19	39	50	27	19	12	13
30	19					19	38	49	27	22	16	13
31	18					19		50		24	15	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	31	18	26.0	1,600
November			20.3	1,210
December			*19	1,170
January			*18	1,110
February			20.8	1,160
March	24	19	21.4	1,320
April	61	24	38.9	2,310
May	95	39	62.1	3,820
June	49	24	34.9	2,080
July	29	15	20.5	1,260
August	19	12	15.5	953
September	15	10	12.3	732
The year	95	10	25.8	18,700

* Estimated.

BEAVER RIVER AT ADAMSVILLE, UTAH

LOCATION.—Water-stage recorder in S. ½ sec. 30, T. 29 S., R. 8 W., 100 yards below highway bridge on road from Milford to Beaver, one-fourth mile above mouth of Indian Creek, and three-fourths mile south of Adamsville.

DRAINAGE AREA.—272 square miles.

RECORDS AVAILABLE.—December, 1913, to September, 1931.

EXTREMES.—Maximum discharge during year, 72 second-feet Feb. 6 (gage height 2.10 feet); no flow July 6 to Sept. 30.

1913–1931: Maximum discharge, 796 second-feet May 23, 1920 (gage height, 4.85 feet); no flow during periods in 1924 and 1931.

REMARKS.—Records fair. No diversions between station and storage reservoir of Beaver County Irrigation Co. Several ditches above station supply Adamsville and Beaver districts. Flow practically all diverted during irrigation season.

Daily and monthly discharge, in second-feet, 1930-31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	13	26			51	45	3[illegible]	2		
2	13	32			56	43	2[illegible]	2		
3	14	36			53	45	2[illegible]	5		1
4	14	38			53	45	2[illegible]	5		
5	13	42			60	43	2[illegible]	2		
6	12	42			70	44	2[illegible]	1		0
7	11	41			68	43	22	2		0
8	10	39			65	41	1[illegible]	2		0
9	12	38			64	42	1[illegible]	2		0
10	23	38			60	40	1[illegible]	2		0
11	29	39		40	59	40	1[illegible]	2		0
12	34	39			56	40	12	3		0
13	34	38			52	40	1[illegible]	2		0
14	35	38			54	39	1[illegible]	2		0
15	35	38			62	39	1[illegible]	2		0
16	35		40		65	36	11	2	1	0
17	35				56	31	4	2		0
18	36				51	31	1	2		0
19	36				52	35	1	2		0
20	35				49	34	1	2		0
21	33			53	45	32	1	2		0
22	28			50	45	32	1	2		0
23	23	40		48	45	30	1	1		0
24	24			45	45	30	2	1		0
25	23			45	44	30	6	1		0
26	22			45	42	31	4	2		0
27	23			48	43	34	5	3		0
28	22			49	44	35	4	3		0
29	21			50	-------	36	3	2		0
30	21			48	-------	33	2	2		0
31	20	-------		44	-------	31	-------	1	-------	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	36	10	23.8	1,460
November	----------	26	38.8	2,310
December	----------	----------	40	2,460
January	----------	----------	42.7	2,630
February	70	42	53.9	2,990
March	45	30	37.1	2,280
April	31	1	11.4	678
May	5	1	2.1	129
June	----------	----------	1	60
July	----------	----------	.2	10
The year	70	0	20.8	15,000

NOTE.—No flow during months omitted.

BEAVER RIVER AT ROCKYFORD DAM, NEAR MINERSVILLE, UTAH

LOCATION.—Staff gage in NW. ¼ sec. 11, T. 30 S., R. 9 W., half a mile below Rockyford Dam and 4 miles east of Minersville.

DRAINAGE AREA.—512 square miles.

RECORDS AVAILABLE.—December, 1913, to September, 1931.

EXTREMES.—1913–1931: Maximum discharge, 727 second-feet June 10, 1921 (gage height, 353 feet); minimum (estimated), 0.3 second-foot Mar. 19, 20, 1914.

REMARKS.—Records good. No diversions between dam and gage. Flow regulated by operation of gates at Rockyford Dam. Gage-height record furnished by Beaver County Irrigation Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	8	7	6	6	9	11	64	48	81	46	21
2	8	8	7	6	6	9	11	75	52	81	44	21
3	8	8	7	6	6	9	11	76	53	81	44	21
4	8	8	8	6	7	10	11	91	50	81	41	21
5	8	8	8	6	7	10	11	101	48	81	38	21
6	8	8	8	6	7	10	11	102	53	81	38	10
7	8	8	8	6	7	10	11	106	55	81	35	6
8	8	8	8	6	7	10	11	107	55	81	31	6
9	8	8	8	6	7	10	11	107	55	81	29	6
10	8	8	8	6	7	10	11	107	55	81	29	6
11	8	8	8	6	7	11	11	104	55	81	29	6
12	8	8	8	6	8	11	11	103	55	81	28	6
13	8	8	8	6	8	11	11	103	55	53	28	6
14	8	8	8	6	8	11	42	103	55	39	27	6
15	8	8	8	6	8	11	52	102	55	39	27	6
16	8	8	8	6	8	11	36	91	55	40	27	6
17	8	8	8	6	8	11	36	80	55	40	27	6
18	8	8	8	6	8	12	36	79	55	42	27	5
19	8	8	8	6	9	12	36	75	55	42	27	5
20	8	8	8	6	9	12	36	64	58	40	25	5
21	8	8	8	6	9	12	36	62	59	39	24	6
22	8	8	8	6	9	12	36	62	59	39	22	6
23	8	8	8	6	9	12	36	57	60	44	22	6
24	8	8	8	6	9	12	36	53	69	46	22	6
25	8	8	8	6	9	12	36	48	69	46	22	6
26	8	8	8	6	9	12	36	44	69	44	22	6
27	8	7	8	6	9	12	36	43	69	44	22	6
28	8	7	8	6	9	12	36	43	70	44	21	6
29	8	7	8	6	------	12	36	43	81	44	21	6
30	8	7	8	6	------	12	36	43	81	47	21	6
31	8	------	8	6	------	12	------	46	------	47	21	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	8	8	8.0	492
November	8	7	7.9	470
December	8	7	7.9	486
January	6	6	6.0	369
February	9	6	7.9	439
March	12	9	11.0	676
April	52	11	25.9	1,540
May	107	43	76.9	4,730
June	81	48	58.8	3,500
July	81	39	57.8	3,550
August	46	21	28.6	1,760
September	21	5	8.5	506
The year	107	5	25.6	18,500

SALTON SEA BASIN

SNOW CREEK NEAR WHITEWATER, CALIF.

LOCATION.—Water-stage recorder in NW. ¼ sec. 33, T. 3 S., R. 3 E., 580 feet above intake of Southern Pacific Co.'s ditch and 3½ miles southwest of Whitewater.

RECORDS AVAILABLE.—July, 1921, to September, 1929; October, 1930, to September, 1931. No records available from October, 1929, to September, 1930, except for the amount diverted by the Southern Pacific Co.'s ditch.

REMARKS.—No diversions. No record Feb. 7–20. The record Oct. 1 to Dec. 31 was obtained in Southern Pacific Co.'s ditch but represents practically entire flow of stream. Record of daily discharge furnished by Southern Sierras Power Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.9	4.5	7.2	5.5	7	7.5	7	9.5	6	4.2	4.2	5.5
2	4.7	4.5	6.8	6	6.5	7.5	7.5	9.5	6	4.2	4.1	5.5
3	4.7	4.5	6.4	7	6.5	7	7.5	9	6	4.2	4.2	5.5
4	4.7	4.5	6.2	6	30	7	7	8.5	6	4.4	4.2	5.5
5	4.5	4.5	6.2	6	30	7	7	8.5	6	4.3	4.3	6.5
6	4.5	4.5	6.0	7	25	7	7	8.5	6	4.3	4.3	5.5
7	4.5	4.5	6.0	6	-------	7	7.5	8.5	6	4.3	4.3	6
8	4.7	4.9	5.8	7	-------	7	7.5	8	6	4.3	4.3	6
9	5.5	5.1	5.6	7	-------	7	7.5	8	6	4.3	4.3	6
10	5.5	5.3	5.6	6	-------	7	7	7.5	5.5	4.3	4.3	6
11	5.5	5.5	5.6	6	-------	7	7	7.5	5.5	4.3	4.6	6
12	5.1	5.3	5.5	6	-------	7	7	7.5	5.5	4.2	5	6
13	4.9	5.8	5.5	6	-------	7	7	7.5	5.5	4.2	5	5.5
14	4.9	6.6	5.8	5.5	-------	7	7	7.5	5	4.2	4.8	5.5
15	4.9	5.5	5.8	6	-------	6.5	7	7.5	5	4.2	4.8	5.5
16	4.9	5.8	5.8	6	-------	6.5	6.5	7.5	5	4.2	4.3	5.5
17	4.9	11.8	5.8	6	-------	6.5	6.5	7	5	4.2	4.3	5.5
18	4.7	10.5	5.8	6	-------	6.5	6.5	7	5	4.3	4.3	5.5
19	4.3	7.6	5.8	6	-------	7	6.5	7	5	4.2	4.3	5.5
20	4.3	6.6	5.8	6	-------	7	6.5	6.5	5	4.2	4.3	5.5
21	4.3	6.0	5.5	6	8.5	7	6.5	6.5	4.6	4.2	4.3	5.5
22	4.3	5.8	5.5	6	8.5	7.5	6.5	6.5	4.3	4.2	4.1	5
23	4.3	5.8	5.5	6	8	7.5	7	6.5	4.3	4.2	4.1	5
24	4.3	5.6	5.5	6	8	7.5	9	6.5	4.3	4.2	4.1	5
25	4.3	5.6	5.5	5.5	8	9.5	10	7	4.3	4.2	4.1	5.5
26	4.5	5.6	5.5	5.5	8	8.5	25	7.5	4.3	4.2	4.1	5.5
27	4.5	10.3	5.5	5.5	7.5	8	20	6.5	4.3	5.5	4.1	5.5
28	4.5	14.0	5.5	5.5	-------	7.5	12	6.5	4.3	5	5	5
29	4.5	9.9	5.5	5.5	-------	7.5	11	6.5	4.3	4.8	5	5
30	4.5	8.0	5.5	5.5	-------	7.5	10	6.5	4.2	4.8	5	5
31	4.5	-------	5.5	6.5	-------	7.5	-------	6	-------	4.6	5	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	5.5	4.3	4.68	288
November	14.0	4.5	6.48	386
December	7.2	5.5	5.79	356
January	7	5.5	6.02	370
March	9.5	6.5	7.24	445
April	25	6.5	8.57	510
May	9.5	6	7.44	457
June	6	4.2	5.14	306
July	5.5	4.2	4.35	267
August	5	4.1	4.42	272
September	6.5	5	5.53	329

FALLS CREEK NEAR WHITEWATER, CALIF.

LOCATION.—Water-stage recorder in NE. ¼ sec. 33, T. 3 S., R. 3 E., 3¼ miles southwest of Whitewater.
RECORDS AVAILABLE.—September, 1922, to August, 1931.
REMARKS.—No diversions. Record of daily discharge furnished by Southern Sierras Power Co.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	1.2	1.1	1.6	1.2	1.2	1.3	1.2	1.5	1.0	0.6	0.5
2	1.2	1.1	1.6	1.2	1.2	1.3	1.2	1.4	1.0	.6	.6
3	1.2	1.1	1.5	1.2	1.2	1.3	1.2	1.4	1.0	.5	.6
4	1.2	1.1	1.4	1.2	3.2	1.3	1.2	1.3	1.0	.5	.6
5	1.2	1.1	1.4	1.2	2.7	1.2	1.2	1.3	1.0	.5	.6
6	1.2	1.1	1.3	1.2	2.2	1.2	1.2	1.2	1.0	.5	.7
7	1.1	1.2	1.3	1.2	1.9	1.2	1.2	1.2	1.1	.5	.7
8	1.1	1.2	1.3	1.5	1.9	1.2	1.2	1.2	1.1	.5	.7
9	1.3	1.2	1.3	1.5	1.8	1.2	1.2	1.2	1.1	.5	.6
10	1.3	1.2	1.3	1.3	1.7	1.2	1.2	1.2	1.0	.5	.6
11	1.3	1.2	1.3	1.2	1.6	1.2	1.2	1.2	1.0	.5	.6
12	1.3	1.2	1.3	1.2	4.0	1.2	1.2	1.2	1.0	.6	.9
13	1.2	1.2	1.3	1.2	2.8	1.2	1.2	1.2	1.0	.6	.9
14	1.2	1.2	1.2	1.2	2.4	1.2	1.2	1.2	1.0	.6	.8
15	1.2	1.2	1.2	1.2	2.6	1.2	1.2	1.2	.9	.6	.7
16	1.2	1.2	1.2	1.2	2.2	1.2	1.2	1.2	.9	.6	.6
17	1.2	1.4	1.3	1.2	2.1	1.2	1.2	1.2	.9	.6	.6
18	1.1	1.7	1.3	1.2	1.9	1.2	1.2	1.2	.9	.5	.6
19	1.1	1.4	1.3	1.2	1.8	1.2	1.2	1.1	.9	.5	.6
20	1.1	1.3	1.3	1.2	1.8	1.2	1.2	1.1	.9	.5	.5
21	1.1	1.2	1.3	1.2	1.7	1.2	1.2	1.1	.9	.5	.5
22	1.1	1.2	1.3	1.2	1.6	1.2	1.2	1.0	.9	.4	.5
23	1.1	1.2	1.3	1.2	1.6	1.2	1.2	1.0	.9	.5	.5
24	1.1	1.2	1.3	1.2	1.5	1.3	1.2	1.1	.9	.5	.5
25	1.1	1.2	1.3	1.2	1.5	1.3	1.2	1.1	.9	.5	.5
26	1.1	1.2	1.3	1.2	1.5	1.3	1.5	1.2	1.0	.5	.5
27	1.1	1.5	1.3	1.2	1.5	1.4	2.1	1.2	.9	.6	.5
28	1.1	2.0	1.3	1.2	1.5	1.3	2.1	1.1	.8	.9	.9
29	1.1	1.6	1.3	1.2	------	1.2	1.8	1.0	.8	.6	------
30	1.1	1.6	1.3	1.2	------	1.2	1.6	1.0	.7	.6	------
31	1.1	------	1.3	1.2	------	1.2	------	1.0	------	.6	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1.3	1.1	1.16	71.3
November	2.0	1.1	1.28	76.2
December	1.6	1.2	1.32	81.2
January	1.5	1.2	1.22	75.0
February	4.0	1.2	1.95	108
March	1.4	1.2	1.23	75.6
April	2.1	1.2	1.30	77.4
May	1.5	1.0	1.18	72.6
June	1.1	.7	0.95	56.5
July	.9	.4	.55	33.8
August 1–28	.9	.5	.62	34.4
The period				762

NOTE.—No record Aug. 29 to Sept. 30.

PALM CANYON CREEK NEAR PALM SPRINGS, CALIF.

LOCATION.—Water-stage recorder in S. ½ sec. 11, T. 5 S., R. 4 E., three-fourths mile above Murray Canyon Creek and 6 miles south of Palm Springs.
DRAINAGE AREA.—94.0 square miles.
RECORDS AVAILABLE.—January, 1930, to September, 1931.
EXTREMES.—Maximum discharge during year, 31 second-feet Feb. 14 (gage height, 1.09 feet); no flow during several months.
1930–31: Maximum discharge (estimated), 180 second-feet Aug. 1, 1930 (gage height, 2.42 feet); no flow during several months each year.
REMARKS.—Records fair.

Daily and monthly discharge, in second-feet, 1930–31

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Aug.
1	0	0.2	0.1	1.4	0.8	0	0.1	0
2	0	.2	.1	1.5	.8	0	0	0
3	0	.2	0	1.6	.8	0	0	0
4	0	.2	0	2.8	.7	0	0	0
5	0	.1	.1	2.8	.7	0	0	0
6	0	.1	.1	2.1	6	0	0	0
7	0	.1	0	2.2	.6	0	0	0
8	0	.1	0	1.9	.5	0	0	0
9	0	.1	.1	1.8	.5	0	0	0
10	0	.1	.1	1.5	.5	0	0	0
11	0	.1	.1	1.0	.4	0	0	0
12	0	.1	.1	10	.3	0	0	0
13	0	.1	.1	9.5	.2	0	0	0
14	0	.1	.1	13	.2	0	0	0
15	0	.1	.1	13	.2	0	0	0
16	0	.1	.1	7.5	.2	0	0	0
17	0	.1	.1	5	.2	0	0	0
18	0	.1	.1	2.8	.2	0	0	0
19	.2	.1	.1	2.4	.2	0	0	0
20	.2	.1	.1	2.2	.2	0	0	0
21	.2	.1	0	1.7	0	0	0	0
22	.2	.1	0	1.5	0	0	0	0
23	.2	.1	.1	1.0	0	0	0	0
24	.2	.1	0	1.0	.1	0	0	0
25	.2	.1	0	.8	.2	.1	0	0
26	.2	.1	0	.8	0	.4	0	0
27	.2	.1	0	.8	0	.6	0	0
28	.2	.1	0	.8	0	.5	0	0
29	.2	.1	0	-------	0	.6	0	5
30	.2	.1	0	-------	0	.2	0	.2
31	-------	.1	0	-------	0	-------	-------	.1

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	0.2	0.2	0.08	4.8
December	.2	.1	.11	6.8
January	.1	0	.05	3.1
February	13	.8	3.37	187
March	.8	0	.29	17.8
April	.6	0	.08	4.8
May	.1	0	.003	.2
August	5	0	.17	10.5
The year	13	0	.33	236

NOTE.—No flow during months omitted.

MOHAVE RIVER BASIN

DEEP CREEK NEAR HESPERIA, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ sec. 18, T. 3 N., R. 3 W., half a mile above junction with West Fork of Mohave River and 8 miles southeast of Hesperia. Altitude about 3,050 feet.

DRAINAGE AREA.—137 square miles.

RECORDS AVAILABLE.—December, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 1,260 second-feet Apr. 26 (gage-height, 5.65 feet); minimum, 0.2 second-foot Aug. 6–10, 24–28, Sept. 1.

1929–1931: Maximum discharge, that of Apr. 26, 1931; minimum, 0.2 second-foot during several days in August and September, 1930 and 1931.

REMARKS.—Records good. Hesperia Water Co.'s canal diverts about 2 miles above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	6.5	16	8.5	12	19	13	65	7.5	1.6	0.7	0.2
2	1.0	6.5	14	8.5	8.5	18	13	55	6.5	1.5	.6	.3
3	1.1	6.5	12	13	21	18	13	48	6	1.3	.4	.3
4	1.0	6.5	11	11	356	18	12	43	5.5	1.3	.4	.5
5	.9	6.5	10	9.5	378	18	12	34	5.5	1.2	.3	.5
6	.8	6.5	13	10	169	19	12	29	6.5	1.2	.2	.5
7	.7	7	14	9.5	98	18	12	26	6.5	1.2	.2	.5
8	.7	7	10	11	79	18	11	24	6	1.2	.2	.4
9	.9	7	9.5	10	60	17	10	21	6.5	.9	.2	.4
10	5.5	6.5	9	9.5	48	16	10	19	6	1.0	.2	.3
11	7	6.5	8.5	8.5	40	16	9.5	18	5	.9	.4	.4
12	4.1	18	8.5	8.5	44	15	9.5	16	4.6	.9	.9	.4
13	2.6	13	8.5	9	39	16	9	15	4.1	.9	3.1	.4
14	1.8	12	8.5	9.5	38	15	9	14	3.4	1.0	1.3	.5
15	1.4	15	8.5	9	44	15	8.5	14	2.3	.9	.6	.6
16	4.4	17	8.5	8.5	50	15	8.5	13	2.2	.7	.4	.6
17	4.6	13	8.5	9	43	15	8	12	2.3	.6	.3	.6
18	4.5	55	8.5	8	37	15	7.5	11	2.4	.6	.3	.6
19	4.8	24	8	7.5	34	15	7.5	10	2.4	.6	.3	.7
20	4.6	16	8	8.5	33	15	6.5	9	2.9	.7	.3	.7
21	4.8	18	7.5	10	29	15	2.4	8.5	2.7	.8	.3	.7
22	4.8	16	7.5	9	26	16	2.2	8	2.7	.8	.3	.7
23	5	14	7	8.5	24	16	4.2	7.5	2.6	.8	.3	.7
24	4.8	12	8.5	11	23	17	135	7	2.4	.7	.2	.7
25	5	11	9.5	13	21	23	133	10	2.4	.7	.2	.7
26	5	8.5	9.5	12	20	21	370	30	2.3	.9	.2	.9
27	5	7	7.5	12	20	18	557	21	2.3	1.0	.2	1.2
28	5	49	6	11	19	16	271	16	2.2	1.1	.2	1.2
29	5.5	39	7	11	------	15	144	14	2.1	1.0	.3	.9
30	6	21	8.5	9.5	------	14	90	10	2.1	.9	.3	.8
31	6	------	8	17	------	14	------	8.5	------	.8	.3	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	7	0.7	3.55	218
November	55	6.5	15.0	893
December	16	6	9.32	573
January	17	7.5	10.0	615
February	378	8.5	64.8	3,600
March	23	14	16.6	1,020
April	557	2.2	63.7	3,790
May	65	7	20.5	1,260
June	7.5	2.1	3.93	234
July	1.6	.6	.96	59
August	9	.2	.72	44.3
September	1.2	.2	.60	35.7
The year	557	.2	1.71	12,300

MOHAVE RIVER AT VICTORVILLE, CALIF.

LOCATION.—Water-stage recorder in NW. ¼ SE. ¼ sec. 10, T. 5 N., R. 4 W., 500 feet above Bear Valley highway bridge at Victorville.
RECORDS AVAILABLE.—November, 1930, to September, 1931.
EXTREMES.—Maximum stage during period, 1.73 feet Apr. 27 (discharge, not determined); minimum, 18 second-feet Aug. 6 (gage height, 0.99 foot).
REMARKS.—Records fair. Temporary summer station about 200 yards upstream used Apr. 18 to Sept. 30. Slight regulation by storage in Lake Arrowhead.

Daily and monthly discharge, in second-feet, 1930–31

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	e 33	36	41	33	31	33	24	23	22	25
2	------	e 33	36	44	33	30	33	23	22	20	26
3	------	e 34	34	45	32	30	29	23	22	20	28
4	------	34	36	49	32	32	30	24	21	20	29
5	------	33	39	50	31	32	33	24	21	19	30
6	------	32	39	45	32	36	30	23	21	19	32
7	------	32	39	42	34	40	28	24	22	19	32
8	------	35	36	42	37	38	29	25	21	e 20	29
9	------	35	35	41	37	38	32	25	21	e 20	27
10	------	35	35	40	36	36	34	25	21	e 21	24
11	------	39	38	39	35	35	29	24	21	e 21	24
12	40	36	41	38	36	35	28	24	21	e 21	24
13	40	36	42	38	38	e 33	28	24	20	e 21	26
14	42	35	40	37	37	e 32	28	23	20	e 21	28
15	41	35	38	38	37	e 30	28	22	20	e 21	28
16	39	34	36	39	37	29	28	23	20	e 21	28
17	36	33	36	39	36	e 29	28	23	20	e 21	27
18	34	31	38	40	35	29	28	23	21	e 21	27
19	33	30	38	39	33	28	27	22	20	20	27
20	33	31	38	38	33	28	28	22	21	19	27
21	33	33	39	40	33	30	28	22	21	20	28
22	33	35	38	44	33	30	28	22	20	19	27
23	33	35	39	41	34	31	28	22	20	22	28
24	32	35	38	38	34	30	28	22	19	21	28
25	31	34	38	36	34	30	27	23	19	20	31
26	e 31	36	39	35	32	32	25	22	19	21	32
27	e 31	38	40	34	32	78	26	22	19	22	31
28	e 32	36	42	34	32	46	26	23	19	23	28
29	e 32	36	41	------	32	37	25	23	20	27	27
30	e 32	36	41	------	32	35	25	24	21	27	27
31	------	35	40	------	32	------	24	------	22	27	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November 12-30	42	31	34.6	1,300
December	39	30	34.4	2,120
January	42	34	38.2	2,350
February	50	34	40.2	2,230
March	38	31	34	2,090
April	78	28	34.3	2,040
May	34	24	28.4	1,750
June	25	22	23.1	1,370
July	23	19	20.6	1,270
August	27	19	21.2	1,300
September	32	24	27.8	1,650
The period				19,500

e Estimated.

MOHAVE RIVER NEAR HODGE, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ SE. ¼ sec. 28, T. 9 N., R. 3 W., 2 miles from Hodge post office.
RECORDS AVAILABLE.—October, 1930, to September, 1931.
EXTREMES.—Maximum discharge during year, 83 second-feet Apr. 28 (gage height, 1.88 feet); no flow for several months.
REMARKS.—Records fair. Flow subject to regulation and diversions.

Daily and monthly discharge, in second-feet, 1930–31

Day	Jan.	Feb.	Mar.	Apr.	May	Day	Jan.	Feb.	Mar.	Apr.	May
1	0	12	11	11	0.4	16	8	19	15	0	0
2	0	15	13	.2	0	17	6	19	13	0	0
3	0	21	19	0	0	18	7	19	7	0	0
4	0	35	19	0	0	19	7.5	23	4.2	0	0
5	0	23	9	0	0	20	5.5	16	10	0	0
6	0	29	13	0	0	21	9	16	7	0	0
7	0	29	16	0	0	22	4.2	15	5	0	0
8	0	29	13	0	0	23	6	19	7	0	0
9	0	26	21	0	0	24	11	18	7	0	0
10	0	27	11	0	0	25	8	18	12	0	0
11	[a] 2.0	24	11	0	0	26	10	18	1.2	0	0
12	[a] 7	27	6	0	0	27	11	18	5	0	0
13	[a] 7	29	6	0	0	28	12	10	3.2	23	0
14	[a] 6.5	33	8	0	0	29	13	-------	1.9	29	0
15	6.5	23	10	0	0	30	13	-------	9	13	0
						31	15	-------	13	-------	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
January	15	0	5.65	347
February	35	10	21.8	1,210
March	21	1.2	9.89	608
April	29	0	2.54	151
May	.4	0	.01	.6
The year	35	0	3.20	2,320

[a] Estimated.

NOTE.—No flow during months omitted.

MOHAVE RIVER AT BARSTOW, CALIF.

LOCATION.—Water-stage recorder in SW. ¼ SE. ¼ sec. 31, T. 10 N., R. 1 W., on United States highway 91 at Barstow.
RECORDS AVAILABLE.—November, 1930, to September, 1931.
REMARKS.—No flow during year. Considerable diversion for irrigation above station.

MIDDLE MOHAVE RIVER

For comparative purposes and in determining the gains and losses, discharge measurements were made on the same day at different points along the middle stretch of the Mohave River, as shown in the table below. The first of this series of measurements was made Oct. 3, 1930.

Discharge measurements, in second-feet, of the middle Mohave River, 1930–31

Date	Gaging station at Upper Narrows at Victorville, Calif.		Lower Narrows near Victorville, Calif.		Bryman, Calif.		Helendale, Calif.		Wild, Calif.		Gaging station near Hodge, Calif.	
	Time	Discharge	Time	Discharge	Time	Discharge	Time	Discharge	Time	Discharge	Time	Discharge
Oct. 3	4.15 p. m.	26	3.30 p. m.	25	----------	0	----------	0	----------	0	----------	0
10	2.10 p. m.	33	1.35 p. m.	27	12 m.	19	----------	0	----------	0	----------	0
15	4.20 p. m.	31	3.20 p. m.	30	12.45 p. m.	23	----------	0	----------	0	----------	0
25	1.30 p. m.	31	12.25 p. m.	33	10.15 a. m.	22	----------	0	----------	0	----------	0
Nov. 1	12.45 p. m.	33	12 m.	32	10.30 a. m.	27	9.00 a. m.	11	----------	0	----------	0
8	4.15 p. m.	31	3.30 p. m.	32	2.20 p. m.	29	1.15 p. m.	16	----------	0	----------	0
14	5.15 p. m.	41	4.20 p. m.	41	3.20 p. m.	30	2.15 p. m.	19	----------	0	----------	0
21	4.00 p. m.	33	3.10 p. m.	38	1.40 p. m.	27	11.50 a. m.	34	----------	0	----------	0
25	2.45 p. m.	31	1.40 p. m.	37	12 m.	30	11.00 a. m.	28	----------	0	----------	0
Dec. 4	4.00 p. m.	34	2.55 p. m.	43	2.00 p. m.	38	11.55 a. m.	29	11.05 a. m.	13	----------	0
12	8.50 a. m.	38	9.35 a. m.	35	11.00 a. m.	34	3.05 p. m.	34	3.55 p. m.	12	----------	0
18	8.05 a. m.	38	9.00 a. m.	43	10.00 a. m.	34	10.50 a. m.	33	12.20 p. m.	30	----------	0
24	8.15 a. m.	35	9.10 a. m.	37	10.05 a. m.	45	10.55 a. m.	29	11.40 a. m.	5	----------	0
31	----------	---	8.45 a. m.	41	9.45 a. m.	43	10.35 a. m.	31	11.15 a. m.	26	----------	0
Jan. 7	9.15 a. m.	39	10.05 a. m.	43	11.10 a. m.	46	----------	38	1.40 p. m.	28	----------	0
15	9.55 a. m.	36	10.45 a. m.	40	11.45 a. m.	44	4.05 p. m.	35	3.15 p. m.	35	2.15 p. m.	6.5
23	3.00 p. m.	38	2.20 p. m.	38	1.15 p. m.	38	11.55 a. m.	32	10.40 a. m.	18	9.55 a. m.	1.2
29	10.10 a. m.	40	11.40 a. m.	41	1.45 p. m.	46	2.45 p. m.	37	3.45 p. m.	28	5.15 p. m.	12
Feb. 6	5.20 p. m.	44	4.40 p. m.	49	4.00 p. m.	55	3.35 p. m.	47	2.50 p. m.	40	2.20 p. m.	29
13	8.20 a. m.	38	9.20 a. m.	46	10.50 a. m.	43	12.30 p. m.	44	1.20 p. m.	45	2.30 p. m.	30
19	9.15 a. m.	40	10.15 a. m.	41	11.50 a. m.	47	1.35 p. m.	35	2.15 p. m.	32	3.30 p. m.	26
27	8.35 a. m.	34	9.30 a. m.	34	11.00 a. m.	36	12.40 p. m.	35	1.30 p. m.	33	2.30 p. m.	20
Mar. 5	8.25 a. m.	31	9.25 a. m.	38	10.40 a. m.	33	1.00 p. m.	35	1.20 p. m.	23	2.15 p. m.	15
13	8.25 a. m.	39	10.00 a. m.	42	11.00 a. m.	36	11.50 a. m.	29	1.20 p. m.	17	2.05 p. m.	8
20	3.00 p. m.	33	2.00 p. m.	36	11.10 a. m.	35	10.00 a. m.	27	9.15 a. m.	19	8.30 a. m.	7
27	9.30 a. m.	32	10.30 a. m.	33	11.35 a. m.	30	1.40 p. m.	19	2.20 p. m.	16	3.00 p. m.	9
Apr. 2	9.20 a. m.	30	10.20 a. m.	32	11.15 a. m.	26	11.15 a. m.	20	1.50 p. m.	6	3.00 p. m.	0.2
10	8.55 a. m.	36	10.00 a. m.	39	11.00 a. m.	28	11.35 a. m.	13	----------	0	----------	0
16	8.45 a. m.	29	10.00 a. m.	33	11.00 a. m.	25	11.40 a. m.	14	----------	0	----------	0
24	----------	---	----------	---	11.00 a. m.	18	10.15 a. m.	4.3	----------	---	----------	---
29	10.00 a. m.	36	11.00 a. m.	45	12.10 p. m.	46	2.20 p. m.	40	3.00 p. m.	27	4.00 p. m.	21
May 6	10.25 a. m.	31	11.25 a. m.	26	1.10 p. m.	18	1.50 p. m.	6	----------	0	----------	0
14	9.50 a. m.	29	10.40 a. m.	25	11.15 a. m.	10	----------	0	----------	0	----------	0
21	8.40 a. m.	29	10.20 a. m.	26	1.15 p. m.	6.5	----------	0	----------	0	----------	0
26	4.10 p. m.	25	3.05 p. m.	20	2.05 p. m.	10	----------	0	----------	0	----------	0
June 3	10.50 a. m.	24	9.45 a. m.	18	8.40 a. m.	7	----------	0	----------	0	----------	0
9	2.45 p. m.	26	1.50 p. m.	22	1.05 p. m.	9	----------	0	----------	0	----------	0
16	2.30 p. m.	23	1.45 p. m.	20	12 m.	7	----------	0	----------	0	----------	0
22	2.15 p. m.	22	1.20 p. m.	22	1.00 p. m.	4.4	----------	0	----------	0	----------	0
29	10.45 a. m.	23	1.00 p. m.	23	12.55 p. m.	3.0	----------	0	----------	0	----------	0
July 6	3.15 p. m	21	3.05 p. m.	16	----------	0	----------	0	----------	0	----------	0
13	9.50 a. m.	21	10.40 a. m.	17	----------	0	----------	0	----------	0	----------	0
20	8.45 a. m.	21	9.30 a. m.	17	----------	0	----------	0	----------	0	----------	0
27	1.45 p. m.	19	1.00 p. m.	15	----------	0	----------	0	----------	0	----------	0
Aug. 3	1.35 p. m.	20	12.45 p. m.	16	----------	0	----------	0	----------	0	----------	0
11	9.50 a. m.	22	10.30 a. m.	19	----------	0	----------	0	----------	0	----------	0
18	4.10 p. m.	21	3.25 p. m.	21	----------	0	----------	0	----------	0	----------	0
25	3.20 p. m.	20	2.20 p. m.	21	----------	0	----------	0	----------	0	----------	0
Sept. 1	3.00 p. m.	26	2.25 p. m.	23	----------	0	----------	0	----------	0	----------	0
2	----------	---	----------	---	9.15 a. m.	16	----------	0	----------	0	----------	0
8	4.15 p. m.	28	3.40 p. m.	26	2.40 p. m.	16	----------	0	----------	0	----------	0
15	10.05 a. m.	29	11.25 a. m.	26	12.10 p. m.	7.5	----------	0	----------	0	----------	0
23	2.05 p. m.	27	1.25 p. m.	28	11.30 a. m.	11	----------	0	----------	0	----------	0

NOTE.—No flow at Barstow during the year. (See Mohave River at Barstow.)

MOHAVE RIVER AT AFTON, CALIF.

LOCATION.—Water-stage recorder in sec. 21, T. 11 N., R. 6 E., at Union Pacific Railroad bridge three-fourths mile from Afton.

RECORDS AVAILABLE.—December, 1929, to September, 1931.

EXTREMES.—Maximum discharge during year, 6.8 second-feet Aug. 12 (gage height, 1.66 feet); minimum, 0.6 second-foot Aug. 27 (gage height, 0.71 foot). 1929–1931: Maximum discharge, that of Aug. 12, 1931; minimum, 0.5 second-foot Aug. 13–18, 1930.

REMARKS.—Records fair. Discharge determined by interpolation between weekly gage readings Oct. 1–30. Numerous diversions from river above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.6	1.9	1.9	1.9	2.0	2.1	2.0	1.5	1.4	0.7	0.7
2	1.1	1.6	1.8	1.9	1.8	1.9	2.2	2.1	1.5	1.3	.7	.7
3	1.2	1.6	1.8	1.9	1.8	1.9	2.2	2.0	1.5	1.3	.7	.7
4	1.2	1.6	1.8	1.9	[a] 1.8	1.9	2.2	2.1	[a] 1.5	1.2	.8	.8
5	1.2	1.6	1.8	1.8	[a] 1.8	1.9	2.2	2.0	[a] 1.5	1.2	1.4	.7
6	1.2	1.6	1.8	1.9	[a] 1.9	1.8	2.1	2.0	[a] 1.5	1.3	.8	.7
7	1.2	1.7	1.8	1.9	[a] 1.9	1.8	2.0	2.1	[a] 1.5	1.2	.8	.7
8	1.2	1.7	1.8	2.0	1.9	1.8	2.1	2.0	[a] 1.5	1.2	.7	.7
9	1.7	1.7	1.8	1.9	1.9	1.8	2.0	2.0	[a] 1.5	1.2	.7	.7
10	1.5	1.7	1.8	1.9	1.9	1.9	2.0	1.9	1.5	1.1	.7	.8
11	1.4	1.7	1.8	1.9	1.9	1.9	2.0	1.9	1.5	1.1	.7	.8
12	1.4	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.5	1.1	1.9	.8
13	1.4	1.7	1.8	1.9	2.0	1.9	2.0	1.9	1.4	1.1	2.0	.8
14	1.4	1.7	1.8	1.9	2.0	1.9	2.0	1.9	1.4	1.1	.8	.8
15	1.4	1.7	1.8	1.9	2.0	1.9	2.0	1.8	1.4	1.0	.7	.8
16	1.4	1.7	1.8	1.9	1.9	1.9	2.0	1.8	1.4	1.0	.7	.7
17	1.4	1.7	1.8	1.9	1.9	2.0	2.0	1.8	1.4	1.0	.7	.7
18	1.4	1.7	1.8	1.9	2.0	1.9	2.0	1.8	1.4	1.0	.7	.7
19	1.4	1.7	1.8	1.9	2.0	1.9	2.1	1.8	1.4	1.0	.7	.8
20	1.4	1.8	1.8	1.9	2.0	1.9	2.1	1.8	1.4	1.0	.7	.8
21	1.4	1.8	1.9	2.0	2.0	2.0	2.1	1.7	1.4	.9	.7	.8
22	1.4	1.8	1.9	2.0	2.0	2.0	2.1	1.7	1.4	.9	.7	.8
23	1.5	1.8	1.9	2.0	2.0	2.0	2 2	1.7	1.4	.9	.7	.8
24	1.5	1.8	1.9	2.0	2.0	2.0	2.2	1.7	1.4	.9	.7	.8
25	1.5	1.8	1.9	2 0	2.0	1.8	2 0	1.6	1.4	.9	.7	.8
26	1.5	1.8	1.9	2.0	2.0	1.9	2.0	1.5	1.4	.9	.6	.8
27	1.5	1.8	1.9	1.9	2.0	1.9	1.8	1.5	1.4	.9	.6	.8
28	1.6	1.8	1.9	1.9	2.0	1.8	1.9	1.5	1.4	.9	.7	.8
29	1.6	1.8	1.9	1.9	-------	1.8	2.0	1.4	1.4	.8	.7	.8
30	1.6	1.9	1.9	1.9	-------	2 0	2.0	1.5	1.4	.8	.7	.8
31	1.6	-------	1.9	1.9	-------	2.0	-------	1.4	-------	.8	.7	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1.7	1.1	1.40	86.1
November	1.9	1.6	1.72	102
December	1.9	1.8	1.84	113
January	2.0	1.8	1.92	118
February	2.0	1.8	1.94	108
March	2.0	1.8	1.90	117
April	2.2	1.8	2.05	122
May	2.1	1.4	1.80	111
June	1.5	1.4	1.44	85.7
July	1.4	.8	1.05	64.6
August	2.0	.6	.81	49.8
September	.8	.7	.76	45.2
The year	2.2	.6	1.55	1,120

[a] Estimated.

WEST FORK OF MOHAVE RIVER NEAR HESPERIA, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ sec. 13, T. 3 N., R 4 W., at highway bridge half a mile above junction with Mohave River and 7 miles southeast of Hesperia. Altitude about 3,050 feet.

DRAINAGE AREA.—74.8 square miles.

RECORDS AVAILABLE.—January, 1930, to September, 1931.

EXTREMES.—Maximum discharge during year, 712 second-feet Apr. 26 (gage height, 3.75 feet); no flow during several months.

1930–31: Maximum discharge, that of Apr. 26, 1931; no flow during several months each year.

REMARKS.—Records good. Discharge estimated Dec. 21 to Jan. 7, Jan. 21–23, Mar. 4 to Apr. 23.

Daily and monthly discharge, in second-feet, 1930–31

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1	0	0.4	6	2.9	0.1	31	16	0	1.9	24	0.1	0.1	0.1
2	0	.3	4.3	2.7	.1	25	17	0	1.9	19	.1	.1	.1
3	0	.2	6	2.7	.1	18	18	0	1.9	17	.1	.1	0
4	0	.1	84	2.5	.1	13	19	0	1.8	16	.1	.1	0
5	0	.1	110	2.2	.1	10	20	0	1.8	13	.1	.1	0
6	0	.1	58	1.8	.1	7	21	.1	1.8	10	.1	.1	0
7	0	.1	30	1.6	.1	4	22	.1	1.8	4.8	.1	.1	0
8	0	2.0	26	1.3	.1	2.7	23	.1	1.8	4.0	.1	.1	0
9	0	2.4	23	1.0	.1	1.9	24	.1	1.8	4.0	.1	59	0
10	0	2.2	19	.6	.1	1.6	25	.1	1.8	4.0	.1	56	0
11	0	2.1	19	.4	.1	1.4	26	.2	1.8	4.0	.1	248	0
12	0	1.8	19	.2	.1	1.1	27	.2	1.6	3.6	.1	216	0
13	0	1.8	17	.1	.1	.7	28	.2	1.5	3.1	.1	95	0
14	0	1.8	18	.1	.1	.5	29	.2	1.5	------	.1	62	0
15	0	1.8	21	.1	.1	.2	30	.2	1.6	------	.1	41	0
							31	.3	5.5	------	.1	------	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December	0.3	0	0.58	3.6
January	5.5	.1	1.58	97.2
February	110	3.1	20.9	1,160
March	2.9	.1	.70	43
April	248	.1	26.0	1,550
May	31	0	3.82	235
The year	248	0	4.27	3,090

NOTE.—No flow during months omitted.

ANTELOPE VALLEY BASIN

ROCK CREEK NEAR VALYERMO, CALIF.

LOCATION.—Water-stage recorder in NE. ¼ sec. 20, T. 4 N., R. 9 W., 1¾ miles southeast of Valyermo. Altitude about 4,050 feet.
DRAINAGE AREA.—23.0 square miles.
RECORDS AVAILABLE.—January, 1923, to September, 1931.
EXTREMES.—Maximum discharge during year, 98 second-feet Apr. 26 (gage height, 2.20 feet); minimum, 2.1 second-feet July 4 (gage height, 1.0° feet).
1923–1931: Maximum discharge, 510 second-feet Feb. 16, 1927 (gage height, 3.70 feet); minimum, 1.2 second-feet Aug. 22, 1925.
REMARKS.—Records good. No diversions. Results of several discharge measurements furnished by Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	5	4.4	4.0	3.8	8	4.9	18	6.5	2.7	3.4	3.2
2	5	5	4.7	4.2	3.8	7.5	4.9	16	6.5	2.7	3.4	3.2
3	5	5	4.7	4.0	5.2	7.5	4.9	15	6	2.6	3.4	3.2
4	4.9	5	4.4	4.0	46	7	4.7	14	5.5	2.6	3.4	3.1
5	4.7	5	4.2	4.0	35	7	4.7	13	6	2.7	3.4	3.1
6	4.4	5	4.2	4.0	18	6.5	5	12	5.5	2.7	3.2	3.2
7	4.4	5	4.2	4.0	14	6.5	4.9	12	6	2.7	3.4	3.2
8	4.7	5	4.4	4.0	13	6.5	4.9	11	5.5	2.7	3.2	3.2
9	4.7	4.9	4.4	4.0	12	6.5	5.5	11	5.5	2.7	3.2	3.4
10	4.7	4.7	4.7	3.8	12	6.5	5.5	10	5.5	2.7	3.2	3.4
11	4.9	4.7	4.4	3.8	12	6.5	5.5	10	5.5	2.7	3.6	3.4
12	5	4.4	4.2	3.8	12	6.5	5.5	10	5	2.9	3.6	3.2
13	4.9	4.9	4.0	3.8	13	6.5	5.5	9.5	4.9	2.9	3.6	3.2
14	4.9	4.9	4.0	3.8	14	6.5	5	9.5	4.9	3.2	3.6	3.2
15	4.9	4.7	4.0	3.6	14	6.5	5	9	4.7	3.2	3.4	3.4
16	4.9	4.7	4.0	3.8	13	6.5	5	9	4.7	3.4	3.4	3.4
17	4.9	4.7	4.2	4.0	12	6.5	4.9	9	4.4	3.4	3.4	3.6
18	4.9	4.7	4.0	4.0	11	6.5	4.9	9	4.7	3.6	3.4	3.4
19	4.7	4.7	4.0	4.2	11	6.5	4.7	8.5	4.7	3.6	3.2	3.4
20	4.7	4.7	4.0	4.2	11	6.5	4.4	8.5	4.4	3.6	3.2	3.4
21	4.4	4.4	3.8	4.2	10	6	4.4	8.5	4.4	3.6	3.2	3.2
22	4.4	4.4	3.8	4.2	9.5	6	4.9	8.5	4.2	3.6	3.2	3.2
23	4.4	4.4	3.8	4.2	9	6	4.9	8	4.0	3.4	3.2	3.4
24	4.4	4.4	3.8	4.2	9	6	6	8	3.8	3.4	3.1	3.2
25	4.4	4.4	3.8	4.0	8.5	6	8.5	9	3.8	3.6	3.1	3.2
26	4.4	4.2	4.0	4.0	8.5	6	50	9	3.6	3.6	2.9	3.1
27	4.7	4.2	4.0	3.8	8	5.5	51	9	3.4	3.6	2.9	3.1
28	4.7	4.2	4.0	3.6	8	5.5	32	8.5	3.2	3.6	3.4	3.1
29	4.7	4.2	4.2	3.4	------	5.5	26	7.5	3.2	3.6	3.6	3.2
30	4.9	4.2	4.2	3.2	------	5	21	7	2.9	3.6	3.4	3.2
31	4.9	------	4.0	4.9	------	5	------	6.5	------	3.6	3.4	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	5	4.4	4.73	291
November	5	4.2	4.66	277
December	4.7	3.8	4.15	255
January	4.9	3.2	3.96	243
February	46	3.8	12.7	705
March	8	5	6.35	390
April	51	4.4	10.3	613
May	18	6.5	10.1	621
June	6.5	2.9	4.76	283
July	3.6	2.6	3.18	196
August	3.6	2.9	3.32	204
September	3.6	3.1	3.26	194
The year	51	2.6	5.90	4,270

LITTLE ROCK CREEK NEAR LITTLE ROCK, CALIF.

LOCATION.—Water-stage recorder about one-fourth mile above junction with Santiago Creek and 5 miles south of Little Rock, Los Angeles County.
DRAINAGE AREA.—49.0 square miles.
RECORDS AVAILABLE.—October, 1930, to September, 1931.
EXTREMES.—Maximum discharge during year, 430 second-feet Apr. 26 (gage height, 2.90 feet); no flow for several months.
REMARKS.—Entire record furnished by Palmdale Irrigation District and Los Angeles County Flood Control District.

Daily and monthly discharge, in second-feet, 1930–31

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	0	1.5	0.9	9.5	6.5	4.4	31	2.3	0.3
2	0	1.2	1.1	6.5	6	4.2	24	2.2	.3
3	0	1.1	1.4	6.5	5.5	4.0	20	2.0	.3
4	0	1.0	1.4	195	5.5	3.8	16	1.9	.2
5	0	1.0	1.7	114	5.5	3.6	13	2.0	.2
6	0	1.0	2.0	48	5.5	3.4	11	2.3	.2
7	0	.9	1.7	30	5	3.2	10	2.2	.2
8	0	.9	1.9	26	5	3.0	9	2.2	.1
9	0	.9	2.2	21	4.8	2.8	8	2.2	.1
10	0	.8	1.7	18	4.8	2.6	7.5	1.9	.1
11	0	.8	1.5	17	4.6	2.6	7	1.7	.1
12	0	.8	1.5	24	4.6	2.4	6.5	1.5	.1
13	0	.8	1.5	24	4.4	2.4	6	1.4	.1
14	0	.8	1.6	26	4.4	2.3	5.5	1.2	.1
15	0	.8	1.6	25	4.2	2.3	5.5	1.1	.1
16	0	.8	1.5	21	4.2	2.2	5	1.0	.1
17	0	.8	1.5	19	4.0	2.2	4.8	1.0	.1
18	0	.8	1.5	17	4.0	2.0	4.4	1.0	.1
19	0	.8	1.6	16	4.0	2.0	4.0	.9	.1
20	0	.8	1.6	15	4.2	1.9	3.6	.7	.1
21	0	.8	1.6	13	4.2	1.9	3.4	.6	.1
22	0	.8	1.6	11	4.2	1.7	3.0	.5	.1
23	0	.8	1.7	11	4.4	1.7	2.8	.5	.1
24	0	.8	2.2	9.5	4.4	30	3.0	.4	0
25	0	.8	3.4	9	4.6	21	8.5	.4	0
26	0	.9	3.0	8	4.6	145	9.5	.5	0
27	0	.9	2.4	7	4.8	120	7	.4	0
28	.9	.9	2.2	7	4.8	70	5.5	.3	0
29	2.0	.9	2.0	-------	5	52	4.6	.3	0
30	1.6	.9	2.0	-------	5	40	3.6	.3	0
31	-------	.9	6	-------	4.6	-------	2.8	-------	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	2.0	0	0.15	8.9
December	1.5	.8	.89	54.7
January	6	.9	1.92	118
February	195	6.5	26.9	1,490
March	6.5	4.0	4.75	292
April	145	1.7	18.0	1,070
May	31	2.8	8.24	507
June	2.3	.3	1.23	73.2
July	.3	0	.11	6.8
The year	195	0	5.01	3,620

NOTE.—No flow during months omitted.

OWENS LAKE BASIN

OWENS RIVER NEAR ROUND VALLEY, CALIF.

LOCATION.—Water-stage recorder in SE. ¼ sec. 10, T. 6 S., R. 31 E., below Sheep Bridge, 700 feet above mouth of Rock Creek, and 2 miles north of Round Valley.

DRAINAGE AREA.—About 450 square miles.

RECORDS AVAILABLE.—August, 1903, to September, 1923; April, 1927, to September, 1931.

EXTREMES.—Maximum mean daily discharge, 170 second-feet Apr. 25; minimum, 56 second-feet July 15–17.

1903–1923, 1927–1931: Maximum discharge, 1,190 second-feet June 30, 1907 (gage height, 4.0 feet); minimum, 5.4 second-feet Feb. 13, 1923.

REMARKS.—No diversions above station. Record of daily discharge furnished by the city of Los Angeles.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	138	141	117	138	153	128	112	103	88	68	62	76
2	136	141	118	138	143	128	108	98	82	66	64	74
3	135	141	119	120	143	133	108	87	81	70	67	74
4	136	139	121	118	153	139	110	84	84	71	69	74
5	138	138	123	118	156	133	110	87	93	67	78	83
6	138	131	124	115	153	128	112	86	109	74	83	80
7	138	127	122	115	148	130	108	80	98	75	75	72
8	132	125	120	115	151	130	108	82	88	71	63	66
9	127	125	118	115	153	126	108	80	93	64	63	72
10	154	123	118	113	148	125	104	86	86	63	59	77
11	146	125	120	113	146	130	101	86	88	59	58	85
12	146	132	120	113	143	131	98	86	82	62	64	94
13	146	134	122	115	148	146	95	82	86	63	75	112
14	134	130	124	115	146	138	90	88	80	63	81	131
15	136	130	118	115	148	129	95	87	75	56	80	149
16	132	132	115	115	143	129	95	86	75	56	78	107
17	133	154	111	115	136	124	89	86	75	56	76	89
18	137	127	103	113	135	136	86	84	78	61	74	86
19	136	123	95	111	139	126	83	84	75	64	71	88
20	138	122	89	111	127	124	81	82	80	64	65	83
21	138	124	94	111	125	126	81	82	84	72	65	85
22	139	125	91	111	124	122	75	87	80	79	66	86
23	139	115	87	118	124	120	80	88	77	75	63	86
24	139	125	86	120	128	115	118	84	74	71	58	90
25	136	122	84	120	126	126	170	93	74	79	61	93
26	141	122	84	118	126	115	155	131	87	79	58	99
27	141	122	84	120	124	115	162	107	81	78	58	100
28	141	127	81	118	126	115	127	99	74	72	58	97
29	141	125	83	124	-------	114	106	95	72	69	58	92
30	141	122	83	133	-------	114	93	95	72	66	74	93
31	141	-------	92	161	-------	114	-------	98	-------	59	77	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	154	127	138	8,480
November	154	115	129	7,680
December	124	81	105	6,460
January	161	111	119	7,320
February	156	124	140	7,780
March	146	114	126	7,750
April	170	75	106	6,310
May	131	80	89.8	5,520
June	109	72	82.4	4,900
July	79	56	67.5	4,150
August	83	58	67.8	4,170
September	149	66	89.8	5,340
The year	170	56	105	75,900

OWENS RIVER AT PLEASANT VALLEY, NEAR BISHOP, CALIF.

LOCATION.—Water-stage recorder in NW. ¼ sec. 24, T. 6 S., R. 31 E., 1,000 feet above Owens River Canal intake and 8 miles northwest of Bishop.

DRAINAGE AREA.—596 square miles.

RECORDS AVAILABLE.—March, 1918, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 202 second-feet Jan. 31; minimum, 77 second-feet Aug. 25, 27.

1918–1931: Maximum mean daily discharge, 1,210 second-feet June 21, 1918; minimun, that of Aug. 25, 27, 1931.

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

Daily and monthly discharge, in second-feet, 1930-31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	175	156	159	162	194	163	139	141	114	90	83	105
2	173	157	159	169	184	164	a 139	136	117	94	87	104
3	167	156	156	154	178	168	a 139	129	107	95	95	105
4	163	157	159	152	184	166	a 139	125	111	97	95	105
5	158	160	160	153	185	165	a 139	121	124	97	104	113
6	154	160	159	154	183	157	a 139	118	145	96	111	114
7	152	160	156	155	179	160	139	116	137	99	101	101
8	148	160	153	155	179	161	136	117	126	91	90	96
9	148	162	153	155	180	159	136	a 117	129	89	92	97
10	169	163	155	153	180	160	133	a 117	130	87	89	99
11	170	159	155	155	180	160	126	a 118	120	85	85	104
12	162	159	152	155	177	162	121	a 118	119	84	94	106
13	160	165	156	155	184	169	123	118	118	87	111	107
14	159	163	156	155	180	162	119	122	115	86	116	112
15	159	159	154	150	177	156	121	126	113	79	111	148
16	157	162	159	150	177	154	124	122	107	80	103	129
17	152	183	154	152	175	153	115	119	100	83	111	114
18	155	163	152	152	178	154	113	118	111	88	97	114
19	155	153	152	152	178	148	113	114	108	105	94	115
20	155	156	145	153	167	147	113	115	113	99	92	115
21	153	158	140	152	162	147	109	115	110	102	91	116
22	153	159	129	152	160	145	108	117	110	105	94	116
23	153	149	131	156	160	144	115	116	a 113	95	91	114
24	151	162	130	160	163	143	148	113	a 109	94	87	115
25	151	158	131	157	163	152	188	123	105	100	77	120
26	151	159	132	155	162	144	182	154	105	101	80	142
27	157	160	133	155	161	142	191	138	a 102	96	77	134
28	153	165	134	157	163	142	164	128	a 98	94	80	128
29	156	164	136	160	-------	143	149	123	a 94	91	87	a 121
30	156	160	138	168	-------	141	134	122	a 90	86	99	a 120
31	155	-------	146	202	-------	139	-------	121	-------	85	110	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	175	148	157	9,650
November	183	149	160	9,520
December	160	129	148	9,100
January	202	150	157	9,650
February	194	160	175	9,720
March	169	139	154	9,470
April	191	108	135	8,030
May	154	113	122	7,500
June	145	90	114	6,780
July	105	79	92.3	5,680
August	116	77	94.6	5,820
September	148	96	114	6,780
The year	202	77	135	97,700

a Estimated.

OWENS RIVER NEAR BIG PINE, CALIF.

LOCATION.—Water-stage recorder in sec. 2, T. 11 S., R. 34 E., at Charlies Butte, 11 miles southeast of Big Pine.

DRAINAGE AREA.—1,930 square miles.

RECORDS AVAILABLE.—September, 1906, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 506 second-feet Mar. 27; minimum, 7 second-feet Mar. 9.

1906–1931: Maximum discharge, about 3,220 second-feet Jan. 26, 1914 (gage height, 11.2 feet); minimum, 6 second-feet June 5, 1930.

REMARKS.—Diversions above station from river and tributaries. Daily-discharge record furnished by city of Los Angeles.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	287	200	240	369	398	383	340	336	297	270	253	8
2	303	197	234	388	434	387	307	327	296	267	248	8
3	308	196	232	413	434	387	302	319	296	266	248	8
4	304	198	238	436	423	388	304	313	294	263	251	173
5	299	266	309	432	425	388	304	307	291	259	253	362
6	296	347	357	434	429	220	296	299	294	259	257	357
7	294	382	375	434	427	24	296	293	295	260	270	356
8	292	391	378	436	427	10	307	279	294	257	267	383
9	290	394	378	436	425	7	304	282	289	257	266	330
10	290	392	378	436	427	18	292	283	266	252	265	267
11	302	392	384	396	432	273	393	281	275	252	265	243
12	316	394	387	310	434	315	296	281	287	247	257	240
13	315	400	387	293	436	441	291	278	[a] 291	242	313	238
14	315	396	391	289	434	[a] 430	288	278	[a] 295	243	270	240
15	318	392	389	289	438	[a] 420	287	273	299	241	264	242
16	320	374	387	279	434	[a] 410	284	275	290	238	285	239
17	321	369	386	273	434	[a] 402	271	276	290	232	294	246
18	321	374	387	271	430	[a] 394	269	276	284	224	294	238
19	325	390	384	266	424	[a] 387	267	269	285	233	293	238
20	327	373	378	265	421	[a] 380	267	275	278	237	288	238
21	329	312	382	263	419	382	266	275	270	240	285	228
22	331	248	373	260	407	382	263	277	272	240	273	236
23	333	236	362	260	403	397	294	275	283	244	265	232
24	335	230	355	261	397	486	318	279	281	249	264	236
25	266	224	355	274	400	500	294	279	279	258	263	238
26	253	232	357	339	399	504	296	281	281	266	260	249
27	197	234	350	388	393	506	311	288	276	279	253	257
28	194	236	353	393	385	450	318	297	281	288	247	273
29	192	241	344	396	------	369	332	288	277	282	237	268
30	192	245	344	398	------	344	338	289	276	279	255	267
31	196	------	359	389	------	348	------	289	------	273	229	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	335	192	289	17,800
November	400	196	308	18,300
December	391	232	352	21,600
January	436	260	347	21,300
February	438	385	420	23,300
March	506	7	346	21,300
April	340	263	296	17,600
May	336	269	288	17,700
June	299	266	285	17,000
July	288	224	255	15,700
August	313	229	266	16,400
September	383	[a] 8	238	14,200
The year	506	7	307	222,000

[a] Estimated.

ROCK CREEK AT SHERWIN HILL, NEAR BISHOP, CALIF.

LOCATION.—Water-stage recorder in SW. ¼ sec. 29, T. 5 S., R. 31 E., at Sherwin Hill, 3 miles above Pine Creek and 14 miles northwest of Bishop.

DRAINAGE AREA.—52.6 square miles.

RECORDS AVAILABLE.—August, 1922, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 27 second-feet June 6; minimum, 4.6 second-feet Nov. 15.

1922–1931: Maximum mean daily discharge, 162 second-feet June 17, 1927; minimum, 1.8 second-feet Jan. 6, 7, 1930.

REMARKS.—No diversions. Daily-discharge record furnished by city of Los Angeles.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	9	9.5	10	10	9.5	10	14	13	11	13	12
2	9.5	9	9.5	10	10	9.5	10	14	14	10	9	13
3	11	8.5	9	11	9.5	9	9.5	14	19	9.5	9	12
4	10	8.5	9.5	13	9.5	9.5	9.5	15	20	9.5	9	13
5	9.5	9	9.5	11	9.5	8	10	16	26	9.5	9.5	14
6	9.5	9	8.5	9.5	9.5	8	9.5	16	27	9	11	13
7	8.5	9	8	9.5	9	9	10	18	25	9	13	12
8	8.5	9	9.5	9.5	9.5	8.5	10	20	19	8.5	13	12
9	9.5	9	11	9.5	9	8.5	10	21	18	9	13	10
10	11	9	11	11	9.5	9	10	20	16	13	12	10
11	9	8.5	10	11	9.5	9.5	10	14	14	14	11	10
12	9.5	8.5	9.5	9	9.5	9.5	10	13	13	14	12	9.5
13	9.5	9.5	9.5	9	9.5	9	9.5	13	13	13	12	9.5
14	9.5	8.5	9.5	9.5	9.5	9.5	9.5	16	13	10	12	10
15	9.5	4.6	9	9	9.5	9.5	9.5	24	13	10	12	12
16	9	11	9.5	10	9.5	9.5	9.5	24	12	9	13	10
17	9	9.5	8.5	8.5	9.5	9	10	21	12	10	11	9.5
18	9	8	8.5	11	9.5	9.5	10	16	13	11	12	9
19	8.5	11	8.5	12	10	9.5	10	16	12	11	11	8.5
20	8.5	11	8.5	9	9	9.5	11	16	12	12	10	8
21	9	10	8.5	9.5	10	10	10	16	11	11	9.5	7.5
22	9	9.5	9	9.5	9.5	10	11	14	14	11	8.5	7.5
23	9	10	9	9.5	9.5	9.5	12	14	9.5	8	7.5	7.5
24	9	11	9	9.5	10	9.5	12	14	9	8	7	8
25	9	10	9	9	10	9	13	14	9.5	8.5	6.5	9.5
26	8.5	10	9.5	9.5	10	8.5	14	14	10	8.5	7	8
27	8.5	10	9.5	9.5	10	9	14	14	10	8.5	7	8
28	8.5	10	10	9.5	9.5	9	14	13	11	9	7	7.5
29	9	10	10	9.5	------	8.5	14	12	12	9.5	11	8
30	9	9.5	10	9.5	------	9	14	12	12	9.5	14	8
31	9	------	10	11	------	9.5	------	12	------	10	13	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	11	8.5	9.24	568
November	11	4.6	9.30	553
December	11	8	9.34	574
January	13	8.5	9.92	610
February	10	9	9.59	533
March	10	8	9.16	563
April	14	9.5	10.8	643
May	24	12	15.8	972
June	27	9	14.4	857
July	14	8	10.1	621
August	14	6.5	10.5	646
September	14	7.5	9.88	588
The year	27	4.6	10.7	7,730

ROCK CREEK NEAR ROUND VALLEY, CALIF.

LOCATION.—Water-stage recorder in sec. 9, T. 6 S., R. 31 E., a short distance above mouth of Pine Creek and 2 miles northwest of Round Valley.

DRAINAGE AREA.—About 96 square miles.

RECORDS AVAILABLE.—August, 1903, to September, 1923; April, 193[illegible], to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 30 second-feet Jan. 31; minimum, 8.5 second-feet July 23–25.

1903–1923, 1930–31: Maximum discharge, 360 second-feet Jan. 25, 1914 (gage height, 5.0 feet); minimum, that of July 23–25, 1931.

REMARKS.—Water diverted above station for irrigation. Record of daily discharge furnished by city of Los Angeles.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	17	18	a 17	25	21	12	15	15	10	9	11
2	12	17	a 19	21	21	21	12	13	12	10	9	11
3	12	17	a 19	19	21	17	13	13	12	11	9	10
4	13	18	a 19	19	21	16	14	14	14	14	9	10
5	13	a 18	a 20	20	21	15	15	14	17	15	9	10
6	13	17	a 20	22	19	15	14	9.5	19	12	9.5	10
7	12	a 17	20	20	18	17	14	11	16	11	9.5	10
8	a 13	a 17	20	21	19	15	14	11	14	10	9.5	10
9	a 14	a 17	21	20	19	12	13	12	13	10	10	10
10	14	a 16	22	20	19	13	11	13	12	10	9.5	9.5
11	14	16	22	21	19	12	9.5	10	13	9.5	10	10
12	14	16	21	20	19	13	10	9.5	11	11	10	10
13	15	a 16	21	20	20	14	10	9.5	12	11	11	10
14	a 15	16	20	20	17	14	11	9.5	14	10	11	10
15	15	14	19	18	16	15	12	14	16	10	10	12
16	15	21	21	19	16	14	11	15	12	9.5	10	12
17	15	21	17	16	17	13	11	13	12	9	10	11
18	15	16	18	16	17	14	10	14	12	9.5	10	11
19	14	15	18	18	17	12	10	14	12	9	10	11
20	15	18	16	19	15	12	9.5	15	11	9	9.5	11
21	15	19	13	19	17	13	9.5	15	12	9	9.5	11
22	15	20	13	19	17	14	9.5	12	11	9	9.5	10
23	15	18	14	20	18	14	14	12	11	8.5	9.5	10
24	15	18	14	20	21	15	14	12	11	8.5	9.5	10
25	14	19	16	19	20	15	14	14	11	8.5	9.5	11
26	16	18	16	20	21	13	15	12	12	9	9.5	12
27	17	20	17	19	21	13	20	11	11	9.5	9.5	11
28	16	20	17	19	20	15	16	10	12	9	9.5	11
29	17	20	14	19	-------	15	14	11	12	9	9.5	11
30	17	18	9.5	21	-------	15	15	13	11	9.5	10	12
31	17	-------	13	30	-------	14	-------	14	-------	9	11	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	17	12	14.5	892
November	21	15	17.7	1,050
December	22	9.5	17.7	1,090
January	30	16	19.7	1,210
February	25	15	19.0	1,060
March	21	12	14.6	898
April	20	9.5	12.6	750
May	15	9.5	12.4	762
June	19	11	12.8	762
July	15	8.5	9.97	613
August	11	9	9.71	597
September	12	9.5	10.6	631
The year	30	8.5	14.2	10,300

a Estimated.

PINE CREEK AT DIVISION BOX NEAR BISHOP, CALIF.

LOCATION.—Water-stage recorder in NW. ¼ sec. 19, T. 6 S., R. 31 E., one-fourth mile above division box and forks of creek, 4 miles west of Pound Valley, and 13 miles northwest of Bishop.

DRAINAGE AREA.—37.9 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 55 second-feet May 17; minimum, 12 second-feet several days in December, January, February.

1922–1931: Maximum mean daily discharge, 286 second-feet June 20, 1922; minimum, 11 second-feet Jan. 8–10, 12, 13, 1930.

REMARKS.—No diversions. Daily-discharge record furnished by city of Los Angeles.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	15	15	13	13	14	13	28	43	24	19	21
2	16	15	15	13	12	14	13	30	44	23	18	18
3	17	15	14	13	12	13	14	31	43	23	18	18
4	17	15	14	13	12	13	15	34	41	23	18	19
5	17	15	14	13	12	13	15	38	40	22	22	19
6	16	15	14	13	12	13	15	44	39	22	26	19
7	16	15	14	13	12	13	14	50	37	22	26	18
8	16	14	14	13	12	13	15	46	35	21	24	18
9	15	14	14	13	12	13	15	44	35	20	20	17
10	16	14	14	13	12	13	16	48	34	20	18	18
11	16	14	13	12	12	13	16	49	33	20	21	17
12	16	14	13	12	12	13	16	49	33	20	24	17
13	16	14	14	12	12	13	15	53	32	19	26	16
14	16	14	14	12	12	13	15	46	32	18	29	18
15	16	14	14	12	12	14	16	46	32	18	29	[a] 18
16	16	15	13	13	12	14	16	52	33	18	28	[a] 17
17	16	15	13	13	12	14	17	55	32	18	26	[a] 16
18	16	14	13	13	12	14	19	54	30	18	24	[a] 15
19	16	14	13	13	12	13	22	47	28	18	23	[a] 15
20	16	16	13	13	12	13	24	44	26	17	22	[a] 14
21	16	16	12	13	12	13	27	44	25	18	21	[a] 13
22	16	16	12	12	13	14	28	43	23	18	20	13
23	16	16	12	12	13	14	28	41	21	18	20	13
24	16	16	13	12	13	14	26	40	21	19	20	13
25	16	15	13	12	13	14	24	40	21	21	19	18
26	16	15	13	12	13	14	24	40	21	23	18	18
27	15	15	13	12	14	14	24	37	26	23	18	18
28	15	15	13	12	14	14	22	36	26	22	18	18
29	15	15	13	12	------	14	23	38	26	21	18	18
30	15	15	13	13	------	13	25	40	25	20	19	18
31	15	------	13	13	------	13	------	42	------	19	20	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	17	15	15.8	972
November	16	14	14.8	881
December	15	12	13.4	824
January	13	12	12.6	775
February	14	12	12.4	689
March	14	13	13.5	830
April	28	13	19.1	1,140
May	55	28	42.9	2,640
June	44	21	31.6	1,880
July	24	17	20.2	1,240
August	29	18	21.7	1,330
September	21	13	16.9	1,010
The year	55	12	19.6	14,200

PINE CREEK NEAR ROUND VALLEY, CALIF.

LOCATION.—Water-stage recorder in sec. 9, T. 6 S., R. 31 E., 600 feet above junction with Rock Creek and 2 miles northwest of Round Valley.

DRAINAGE AREA.—About 58 square miles.

RECORDS AVAILABLE.—August, 1903, to September, 1923; April, 1930, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 6.5 second-feet Jan. 31; minimum, 0.1 second-foot many days in April, July to September.

1903–1923, 1930–31: Maximum discharge, 370 second-feet June 22, 1911; minimum, 0.1 second-foot Aug. 13, 1920, May 23, 1930, and many days in 1931.

REMARKS.—Water diverted above station for irrigation. Records of daily discharge furnished by city of Los Angeles.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	0.9	3.2	1.8	4.9	0.7	0.2	0.2	1.2	0.7	0.1	0.1
2	1.0	1.0	3.2	2.6	4.2	.5	.2	.2	1.5	.9	.1	.3
3	1.0	1.8	3.5	2.4	3.2	.7	.2	.2	1.0	.3	.1	.6
4	.9	1.8	3.2	2.2	4.2	.8	.2	.2	1.1	.4	.1	2.5
5	.5	2.1	3.2	1.8	4.2	.8	.3	.5	1.6	.2	.1	1.3
6	.5	2.1	3.2	2.4	3.0	.5	.2	1.7	2.3	.1	.1	.2
7	.5	2.1	3.2	2.2	3.0	.5	.2	1.6	2.8	.4	.1	.2
8	.9	2.1	3.2	2.6	3.0	.5	.2	1.0	1.5	.1	.1	.1
9	1.0	1.8	3.5	2.4	2.6	.3	.2	1.4	2.5	.1	.1	.1
10	2.6	1.5	4.5	2.2	2.6	.3	.2	2.6	1.6	.1	.1	.1
11	2.4	1.3	4.5	2.4	2.6	.4	.1	1.3	1.2	.1	.1	.1
12	2.6	1.3	3.5	2.4	2.6	.8	.1	1.5	1.4	.1	.1	.1
13	2.6	1.5	2.9	2.4	2.6	1.0	.1	1.4	1.6	.1	.1	.1
14	2.9	1.5	2.1	2.6	2.6	1.1	.1	.6	1.6	.1	.1	2
15	2.6	1.5	2.1	2.4	2.6	1.0	.1	.5	1.6	.1	.1	.4
16	2.6	2.1	2.6	2.4	2.4	.9	.1	.3	[a] 1.5	.1	.1	.2
17	2.6	1.8	2.4	2.2	2.2	.8	.1	.2	[a] 1.3	.1	.1	.2
18	2.9	1.5	2.1	1.8	2.4	.4	.2	.6	[a] 1.1	.1	.1	.2
19	2.9	1.3	2.1	1.8	2.4	.4	.3	.8	[a] .9	.1	.1	.2
20	3.2	1.5	2.1	2.2	1.8	.4	.6	1.5	[a] .7	.1	.3	.2
21	3.5	1.5	1.5	2.2	1.1	.5	1.8	1.7	[a] .5	.1	.2	.2
22	2.4	2.9	1.3	2.4	.8	.8	.7	1.4	.3	.1	.1	.3
23	1.3	2.6	1.2	2.6	.9	.8	.6	.7	.3	.1	.2	.2
24	1.2	2.6	1.0	2.4	.9	.4	1.2	.2	.4	1.0	.1	.3
25	1.0	2.6	1.0	2.4	.9	.4	.8	.1	.3	1.5	.1	.4
26	1.0	2.9	1.2	2.4	1.8	.4	.6	.8	.6	.8	.1	.6
27	1.0	2.9	1.2	2.4	1.4	.4	.8	1.0	.5	.1	.1	.6
28	1.0	2.9	1.3	2.6	.8	.4	.4	1.2	.3	.1	.1	.6
29	1.0	2.9	1.5	2.6	-------	.4	.3	1.5	.5	.1	.1	.4
30	.9	3.2	1.5	2.6	-------	.4	.2	1.6	.5	.1	.1	.4
31	.9	-------	1.5	6.5	-------	.4	-------	1.8	-------	.1	.1	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3.5	0.5	1.69	104
November	3.2	.9	1.98	118
December	4.5	1.0	2.40	148
January	6.5	1.8	2.46	151
February	4.9	.8	2.42	134
March	1.1	.3	.58	35.7
April	1.8	.1	.38	22.6
May	2.6	.1	.98	60.3
June	2.8	.3	1.14	67.8
July	1.5	.1	.27	16.6
August	.3	.1	.11	6.8
September	2.5	.1	.38	22.6
The year	6.5	.1	1.23	887

[a] Estimated.

MONO LAKE BASIN

MONO LAKE NEAR MONO LAKE, CALIF.

LOCATION.—Staff gage in SE. ¼ NE. ¼ sec. 31, T. 2 N., R. 26 E., 2 miles south of Mono Lake post office.
RECORDS AVAILABLE.—June, 1912, to September, 1931 (fragmentary).
EXTREMES.—1912–1931: Maximum stage, 13.55 feet July 18, 1919; minimum, 3.66 feet Sept. 14, 1931.
REMARKS.—Gage-height record furnished by United States Forest Service.

Gage height, in feet, 1930–31

Oct. 13	5.13	Apr. 17	5.00	Aug. 8	4.34
Nov. 23	5.00	May 19	4.99	Sept. 14	3.66
Dec. 9	4.96	June 23	4.77		

WALKER LAKE BASIN

WALKER LAKE NEAR HAWTHORNE, NEV.

LOCATION.—Staff gage bolted to cliff on west shore in sec. 5, T. 9 N., R. 29 E., 1 mile north of Cottonwood Creek and 12 miles northwest of Hawthorne.
RECORDS AVAILABLE.—August, 1928, to September, 1931.
EXTREMES.—1928–1931: Maximum elevation recorded, 4,050.2 feet Aug. 8, 1928; minimum, 4,039.4 feet Sept. 1, 1931.
In 1909 (date unknown) the elevation of the lake was 4,083 feet, determined during topographic survey by the United States Geological Survey.

Elevation, in feet

1930		1931	
Oct. 2	4,042.15	Jan. 30	4,041.3
Oct. 9	4,042.05	Feb. 28	4,041.2
Oct. 15	4,042	Mar. 31	4,041.1
Oct. 23	4,041.85	Apr. 30	4,040.9
Oct. 29	4,041.75	May 29	4,040.7
Nov. 5	4,041.65	June 30	4,040.4
Dec. 1	4,041.3	July 20	4,040.05
Dec. 31	4,041.45	Aug. 1	4,039.85
		Sept. 1	4,039.4

NOTE.—Elevations refer to mean sea level. On Mar. 11, 1927, the elevation was 4,054.7 feet and on Mar. 13, 1928, it was 4,051.8 feet—both elevations determined by United States Indian Service.

EAST WALKER RIVER NEAR BRIDGEPORT, CALIF.

LOCATION.—Water-stage recorder in SW. ¼ NE. ¼ sec. 34, T. 6 N., R. 25 E., 1,500 feet downstream from Bridgeport Reservoir, 5 miles north of Bridgeport, and 10 miles above Sweetwater Creek.

DRAINAGE AREA.—362 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1931. July, 1911, to September, 1914, at site 1½ miles upstream.

REMARKS.—Records good. Considerable areas of meadow and pasture irrigated near Bridgeport. Flow regulated by Bridgeport Reservoir of Walker River Irrigation District; capacity, 42,000 acre-feet. Contents, Oct. 1 and Sept. 30, 40 and 321 acre-feet, respectively. Maximum contents, 11,200 acre-feet Mar. 20. Gage-height record and results of several discharge measurements furnished by Walker River Irrigation District.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	7	6	6	6	7	31	34	125	78	51	31
2	6	8	6	6	6	7	31	34	125	78	42	31
3	7	7	6	6	6	7	30	34	141	78	42	31
4	7	7	6	6	6	7	28	57	141	93	42	13
5	7	7	6	6	6	7	28	57	141	93	42	15
6	7	7	6	6	6	7	28	57	124	93	31	15
7	8	7	6	6	6	7	28	84	124	96	31	15
8	8	7	6	6	6	7	28	84	124	94	31	15
9	8	7	6	6	6	9	28	84	102	93	31	14
10	8	7	6	6	6	9	26	107	102	93	29	14
11	8	7	6	6	6	9	25	125	136	107	22	13
12	8	7	6	6	6	13	33	124	132	107	24	14
13	8	7	6	6	6	19	42	134	132	107	24	15
14	8	7	6	6	6	19	42	145	132	105	24	16
15	8	7	6	6	6	19	42	145	115	130	24	20
16	9	7	6	6	6	19	42	165	113	130	24	22
17	8	7	6	6	7	19	42	165	94	130	24	22
18	7	7	6	6	7	19	42	165	79	125	24	18
19	7	6	6	6	7	19	38	165	69	124	24	13
20	7	6	6	6	7	19	34	165	66	105	31	15
21	7	6	6	6	7	26	34	169	75	105	31	15
22	7	6	6	6	7	35	34	169	75	94	31	15
23	7	6	6	6	7	35	34	132	75	94	31	17
24	7	6	6	6	7	35	34	132	75	93	31	18
25	7	6	6	6	7	35	10	132	88	93	47	22
26	7	6	6	6	7	35	10	132	88	90	47	22
27	8	6	6	6	7	35	10	132	88	79	47	20
28	7	6	6	6	7	34	10	124	78	51	31	18
29	7	6	6	6	------	34	26	118	75	51	30	18
30	7	6	6	6	------	31	53	118	78	53	30	18
31	7	------	6	6	------	31	------	125	------	51	30	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	9	6	7.4	451
November	8	6	6.6	394
December	6	6	6.0	369
January	6	6	6.0	369
February	7	6	6.4	356
March	35	7	19.8	1,220
April	53	10	30.8	1,830
May	169	34	117	7,190
June	141	66	104	6,190
July	130	51	94.0	5,780
August	51	22	32.4	1,990
September	31	13	18.2	1,080
The year	169	6	37.5	27,200

WALKER RIVER NEAR WABUSKA, NEV.

LOCATION.—Water-stage recorder in SE. ¼ sec. 16, T. 15 N., R. 26 E., on Walker River Indian Reservation, 6½ miles east of Wabuska.

RECORDS AVAILABLE.—October, 1929, to September, 1931; July, 1902, to July, 1908, at railroad bridge 4½ miles upstream; January, 1920, to September, 1929, at Parker ranch, 1½ miles upstream.

EXTREMES.—Maximum mean daily discharge during year, 36 second-feet May 9 (gage height, 1.05 feet); no flow July 6 to Sept. 30.

1920–1931: Maximum discharge, 2,220 second-feet June 8, 1922; no flow at times in 1924, 1925, 1931.

REMARKS.—Records furnished by United States Indian Service. Station below all diversions except for the Indian reservation. Regulated by storage in reservoirs above station; also by diversions.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	10	11	30		29	12	12	16	10	2
2	12	11	30		26	12	11	16	21	2
3	15	11	30		26	11	11	17	40	1
4	20	11	30		26	11	10	23	30	1
5	16	11	30		33	11	11	25	22	1
6	12	11	30		33	11	10	19	19	0
7	10	11	30		30	11	10	24	19	0
8	9	10	30		30	11	10	24	22	0
9	8	10	30		27	12	10	36	21	0
10	8	10	20		26	12	10	32	22	0
11	8	10	23		25	11	10	30	19	0
12	8	10	23		25	11	10	28	18	0
13	8	10	30		22	11	10	28	21	0
14	8	30	30		22	11	10	27	18	0
15	8	20			19	10	10	26	13	0
16	8	17		22	19	10	10	21	13	0
17	8	17			15	10	10	16	13	0
18	8	17			14	11	10	17	12	0
19	8	17			12	10	10	18	18	0
20	8	17			14	10	10	21	18	0
21	8	17			15	10	10	20	12	0
22	8	17			15	10	10	18	10	0
23	8	17	30		15	10	11	16	9	0
24	8	17			14	10	12	14	8	0
25	8	20			12	10	12	15	8	0
26	9	21			12	10	13	16	6	0
27	10	23			12	10	15	13	4	0
28	10	20			12	10	16	13	4	0
29	10	30			-------	10	16	12	3	0
30	10	30			-------	10	17	12	2	0
31	10	-------		32	-------	10	-------	11	-------	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	20	8	9.6	590
November	30	10	16.1	958
December	----------	----------	29.2	1,800
January	----------	----------	22.3	1,370
February	33	12	20.7	1,150
March	12	10	10.6	652
April	17	10	11.2	666
May	36	11	20.1	1,240
June	40	2	15.2	904
July	2	0	0.2	14
The year	40	0	12.9	9,340

NOTE.—No flow during months omitted.

WALKER RIVER AT SCHURZ, NEV.

LOCATION.—Staff gage in sec. 36, T. 13 N., R. 28 E., 50 feet below Southern Pacific Railroad bridge at Schurz, 3 miles above Walker Lake, and 6 miles below diversion dam of Walker River Indian Reservation.

DRAINAGE AREA.—2,850 square miles.

RECORDS AVAILABLE.—July, 1913, to September, 1931.

EXTREMES.—Maximum discharge during year, 91 second-feet Jan. 31, Feb. 1 (gage height, 1.80 feet); practically no flow for periods in August and September.

1913–1931: Maximum discharge, 2,530 second-feet June 8, 9, 1914 (gage height, 11.0 feet); practically no flow for periods during nearly every year.

REMARKS.—No discharge measurements made during year but measurements made in 1932 indicate that there has been no change in the stage-discharge relation. Station is below all diversions. Flow regulated by Twin Lakes, Bridgeport, Poor Lake, and Topaz Lake Reservoirs; also by irrigation diversion.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	3	10	2	91	2	2	2	2	2		
2	2	3	10	2	75	2	2	2	2	2		
3	2	3	20	2	62	2	2	2	2	2		
4	2	3	28	2	62	2	2	3	2	2		
5	2	3	10	3	67	4	2	2	2	2		
6	2	3	12	4	51	7	2	3	2			
7	2	3	8	10	52	5	2	3	2			
8	2	3	10	22	46	3	2	3	2			
9	2	3	11	31	40	3	2	3	2			
10	2	3	8	35	26	2	2	2	2			
11	2	3	8	35	21	2	2	2	2			
12	2	4	5	29	12	2	2	2	2			
13	2	4	10	28	8	2	2	5	2			
14	2	5	14	26	3	2	2	4	2			
15	2	5	9	27	3	2	2	4	2			
16	2	5	10	36	2	2	2	4	2		[1]	
17	2	6	7	43	2	2	2	3	2			
18	2	5	5	44	2	2	2	2	2	[1]		
19	2	5	5	42	2	2	2	2	2			
20	2	5	5	38	2	2	2	2	2			
21	2	5	4	36	2	2	2	2	2			
22	2	5	3	31	2	2	2	2	2			
23	2	5	2	40	2	2	2	2	2			
24	2	5	2	35	2	2	2	2	2			
25	2	6	2	37	2	2	2	2	2			
26	2	9	2	46	2	2	2	2	2			
27	3	11	2	38	2	2	2	2	2			
28	3	18	2	42	2	2	2	2	2			
29	3	16	2	47	------	2	2	2	2			
30	3	21	2	48	------	2	2	2	2			
31	3	------	2	61	------	2	------	2	------		------	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3	2	2.2	133
November	21	3	5.9	353
December	28	2	7.4	456
January	61	2	29.7	1,830
February	91	2	23.0	1,280
March	7	2	2.4	147
April	2	2	2.0	119
May	5	2	2.5	153
June	2	2	2.0	119
July	------	------	1.2	71
August	------	------	[1]	61
September	------	------	[1]	60
The year	91	------	6.6	4,780

[1] Estimated.

WEST WALKER RIVER NEAR COLEVILLE, CALIF.

LOCATION.—Water-stage recorder in NE. ¼ sec. 28, T. 8 N., R. 23 E., immediately below Rock Creek (Ross Canyon), at head of Antelope Valley, 5 miles southeast of Coleville and 10 miles below East Fork.

DRAINAGE AREA.—245 square miles.

RECORDS AVAILABLE.—June, 1915, to September, 1931. October, 1902, to July, 1908, at site half a mile upstream.

EXTREMES.—Maximum discharge during year, 870 second-feet May 7 (gage height, 3.93 feet); minimum, 5 second-feet Aug. 27 (gage height, 1.20 feet). 1915–1931: Maximum discharge, 2,710 second-feet June 12, 1921 (gage height, 5.74 feet); minimum, 5 second-feet Dec. 3, 1924, Aug. 27, 1931.

REMARKS.—Records good. Station above all diversions except one small canal 1½ miles upstream, which diverts a maximum of 3 second-feet. Very slight regulation from storage in Poor Lake Reservoir, 17 miles upstream, capacity unknown.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	37	38	26	37	37	88	412	332	74	32	21
2	50	36	38	27	36	38	100	490	310	70	32	19
3	51	37	37	28	36	39	100	511	278	65	33	19
4	52	36	35	29	37	43	109	559	247	62	36	20
5	50	36	33	30	38	42	111	635	247	70	34	26
6	47	35	31	30	37	35	125	743	260	70	32	21
7	46	34	33	31	35	42	162	695	223	60	30	20
8	44	35	32	32	36	43	180	471	223	55	28	19
9	44	35	37	33	36	37	176	495	220	56	27	19
10	44	34	38	34	36	44	196	548	208	50	27	20
11	44	32	35	37	37	46	188	594	198	43	26	21
12	46	33	32	34	38	39	157	565	186	42	30	22
13	47	39	37		39	43	142	495	183	38	35	21
14	45	28	26	32	39	38	129	395	173	34	45	21
15	43	30	28		34	43	129	425	183	32	34	23
16	42	44	36	35	36	43	140	537	253	34	30	21
17	42	43	25	35	37	44	190	582	237	37	29	19
18	42	37	33	33	36	56	223	516	201	39	27	17
19	42	30	34	29	43	62	247	382	173	42	28	17
20	41	35	25	28	37	59	272	370	157	43	25	19
21	41	42	35	28	33	65	279	395	149	45	24	19
22	40	40	34	31	33	77	324	391	137	44	23	20
23	40	38	32	36	37	82	276	343	131	45	22	22
24	40	39		34	38	91	235	343	127	46	20	23
25	39	38	30	34	36	76	212	395	115	43	19	23
26	36	38		34	38	74	215	354	113	39	18	25
27	33	44		34	37	68	232	335	104	37	14	25
28	34	43	29	34	36	64	259	332	95	35	17	24
29	34	37	28	34	-------	58	310	403	91	34	17	23
30	35	37	27	34	-------	64	374	370	84	33	23	24
31	36	-------	26	36	-------	70	-------	354	-------	32	23	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	52	33	42.6	2,620
November	44	28	36.7	2,180
December	38	25	32.1	1,970
January	37	26	32.1	1,970
February	39	33	36.7	2,040
March	91	35	53.6	3,300
April	374	88	196	11,700
May	743	332	466	28,700
June	332	84	188	11,200
July	74	32	46.7	2,870
August	45	14	27.1	1,670
September	26	17	21.1	1,260
The year	743	14	98.6	71,500

WEST WALKER RIVER AT HOYE BRIDGE, NEAR WELLINGTON, NEV.

LOCATION.—Water-stage recorder in SE. ¼ sec. 17, T. 10 N., R. 23 E., at Hoye Bridge, 2 miles above head of Saroni Canal and 4 miles southwest of Wellington.

DRAINAGE AREA.—504 square miles.

RECORDS AVAILABLE.—April to August, 1910; March, 1924, to September, 1931. Records obtained 3¼ miles downstream December, 1917, to May, 1924.

EXTREMES.—Maximum discharge during year, 685 second-feet May 7 (gage height, 6.77 feet); minimum, 9 second-feet Mar. 9 (gage height, 2.90 feet).

1924–1931: Maximum mean daily discharge, 1,520 second-feet June 18, 1927 (gage height, 10.05 feet); minimum, 6 second-feet Dec. 19, 1925 (gage height, 2.49 feet).

REMARKS.—Records fair. Station below all diversions in Antelope Valley and above all diversions in Smith Valley. Flow regulated by storage in Poor Lake and Topaz Lake Reservoirs. Gage-height record and results of 3 discharge measurements furnished by Walker River Irrigation District.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	22				10	34	278	323	157	56	21
2	34	22				10	29	368	321	155	57	20
3	30	22				14	27	466	294	148	54	20
4	27	23				17	25	444	290	148	54	20
5	24	24				15	25	479	270	164	51	20
6	23	24				13	25	558	254	165	49	20
7	22	25				11	26	638	246	207	42	19
8	22	25				10	31	535	223	240	38	17
9	21	25				11	35	464	192	202	37	17
10	23	22				16	36	440	178	196	36	17
11	25	20				22	49	435	157	187	35	16
12	25	18				24	48	438	127	171	35	15
13	24	19				24	48	416	126	150	36	14
14	23	28				27	54	386	120	135	37	14
15	24	20	[a] 16	[a] 15		27	57	328	120	126	35	18
16	24	23				27	56	401	132	120	32	17
17	25	28				30	55	435	178	115	32	14
18	26	28				30	52	473	152	106	31	13
19	26	28				34	55	449	106	100	29	14
20	25	27				34	62	418	97	96	28	15
21	24	22				36	83	376	103	94	30	16
22	23	17				33	240	383	102	96	29	18
23	23	20				31	202	388	102	90	27	23
24	23	22				30	122	346	109	73	27	25
25	22	22			20	36	228	332	120	64	25	28
26	22	20			19	41	224	342	121	55	24	28
27	22	16			16	39	232	332	122	51	22	29
28	22	17			12	40	246	313	122	49	22	27
29	22	17				42	238	330	116	56	21	25
30	23	17				38	244	353	132	56	21	25
31	23					36		340		49	22	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	43	21	24.7	1,520
November	28	16	22.1	1,320
December			[a] 16	984
January			[a] 15	922
February			[a] 20	1,110
March	42	10	26.1	1,600
April	246	25	96.3	5,730
May	638	278	409	25,100
June	323	97	168	10,000
July	240	49	123	7,560
August	57	21	34.6	2,130
September	29	13	19.5	1,160
The year	638	10	81.8	59,100

[a] Estimated.

HUMBOLDT-CARSON SINK BASIN

CARSON RIVER BASIN

EAST FORK OF CARSON RIVER NEAR MARKLEEVILLE, CALIF.

LOCATION.—Staff gage in NE. ¼ sec. 27, T. 10 N., R. 20 E., at Hangmans Bridge 100 feet below mouth of Indian Creek and 2 miles east of Markleeville. Altitude, about 5,500 feet.

RECORDS AVAILABLE.—November, 1910, to September, 1931 (fragmentary).

REMARKS.—Records fair. Flow partly regulated by storage. No diversions. Gage-height record furnished by United States Forest Service.

Daily discharge, in second-feet, 1930–31

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1							
2		148					
3	76				56		
4					56		
5			412		50	40	
6	62		412				
7							
8	50						
9				412	45		
10							
11					36		
12			364		32		
13			348		32		
14					40	36	
15	48		348	128			
16	50		380				
17				212			
18			318				
19							
20		236					
21		236	274	128		32	24
22			260				
23				212			
24							
25							
26						21	
27						16	
28						19	24
29				76		21	
30				76			
31							

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

CARSON RIVER NEAR FORT CHURCHILL, NEV.

LOCATION.—Water-stage recorder in sec. 5, T. 16 N., R. 23 E., 1 mile west of Clifton station on Mound House-Churchill branch of Southern Pacific Railroad 9 miles west of Fort Churchill and 10 miles east of Dayton.

DRAINAGE AREA.—1,200 square miles.

RECORDS AVAILABLE.—April, 1911, to September, 1931.

EXTREMES.—Maximum mean daily discharge during year, 625 second-feet Apr. 29 (gage height, 4.79 feet); minimum, 3 second-feet Sept. 1–18.

1911–1931: Maximum discharge, 6,150 second-feet Jan. 26, 1914 (gage height, 11.5 feet); no flow during periods in nearly every year since 1923.

REMARKS.—Carson and Dayton Valleys are irrigated above station. Records of daily discharge furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	47	127	97	148	117	75	620	114	22	5	3
2	13	47	120	114	152	112	74	590	120	17	5	3
3	12	50	122	139	154	112	82	560	100	17	5	3
4	13	50	124	142	155	112	90	560	80	17	5	3
5	13	51	125	139	159	114	94	477	64	17	4	3
6	15	51	124	132	169	115	80	423	53	17	4	3
7	19	51	122	130	169	114	78	425	43	15	4	3
8	20	51	115	130	154	106	62	415	38	13	4	3
9	21	51	108	130	142	100	53	324	38	13	4	3
10	22	52	106	129	141	98	51	263	37	13	4	3
11	22	58	105	120	141	94	51	253	35	11	4	3
12	27	64	109	114	132	93	51	248	35	11	4	3
13	28	70	110	117	144	94	52	198	35	11	4	3
14	31	78	112	122	152	93	52	167	33	11	4	3
15	37	83	114	124	148	90	51	187	32	13	4	3
16	38	89	110	124	152	82	52	187	32	13	4	3
17	39	106	106	127	146	78	55	218	33	17	4	3
18	41	159	102	137	139	75	55	204	30	15	4	3
19	43	198	98	134	134	80	54	192	28	13	4	4
20	46	169	94	130	129	110	54	161	29	11	4	5
21	46	137	84	130	132	130	53	144	26	11	4	5
22	46	124	84	125	129	120	52	124	26	11	4	7
23	45	122	86	134	124	120	53	114	25	11	4	7
24	44	122	87	152	120	114	68	97	25	11	4	7
25	44	122	89	183	122	112	321	90	25	11	4	7
26	45	120	90	179	124	134	336	110	24	11	4	6
27	45	119	91	163	122	130	333	154	22	11	4	6
28	46	122	93	155	122	115	535	177	21	11	4	5
29	54	125	94	150	-------	108	625	165	21	11	4	5
30	53	129	94	146	-------	102	620	146	22	10	4	5
31	53	-------	96	144	-------	93	-------	122	-------	10	4	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	54	12	33.4	2,050
November	198	47	93.9	5,590
December	127	84	105	6,460
January	183	97	135	8,300
February	169	120	141	7,830
March	134	75	105	6,460
April	625	51	142	8,450
May	620	90	262	16,100
June	120	21	41.5	2,470
July	22	10	13.1	806
August	5	4	4.1	253
September	7	3	4.1	244
The year	625	3	89.8	65,000

MARKLEEVILLE CREEK AT MARKLEEVILLE, CALIF.

LOCATION.—Staff gage in SE. ¼ sec. 21, T. 10 N., R. 20 E., at highway bridge at Markleeville, three-fourths mile below junction with Pleasant Valley Creek. Altitude, about 5,500 feet.

RECORDS AVAILABLE.—November, 1910, to September, 1931 (fragmentary).

REMARKS.—Records fair. Irrigation diversions and storage above station. Gage-height record furnished by United States Forest Service.

Daily discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Apr.	May	June	July	Day	Oct.	Nov.	Apr.	May	June	July
1	8			190	46		16			104	129	70	
2	6.5		70	200	46		17			129		50	
3	6.5		72		38		18		15	144	116	42	
4	6.5		68	210	42	32	19		18		98		
5				220	42	28	20			144	92		
6	6	6.5		210			21			162	92		
7				200			22				92		
8			98	171			23				81		
9			104	162	38		24						
10			116		32		25				98		
11			116	153	28		26				86		
12				144	32		27				81		
13			81	153		35	28						
14		9	81	171			29					32	
15			92	153	23		30						
							31						

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

HUMBOLDT RIVER BASIN

HUMBOLDT RIVER AT PALISADE, NEV.

LOCATION.—Chain gage in sec. 36, T. 32 N., R. 51 E., at highway bridge at Palisade, 100 feet below Southern Pacific Railroad bridge and 1 mile above mouth of Pine Creek.

DRAINAGE AREA.—5,010 square miles.

RECORDS AVAILABLE.—November, 1902, to October, 1906; July, 1911, to September, 1931.

EXTREMES.—Maximum discharge during year, 216 second-feet May 24 (gage height, 2.77 feet); minimum, 2 second-feet Aug. 25–28.

1902–1906, 1911–1931: Maximum discharge, 4,300 second-feet Mar. 3, 1921 (gage height, 8.6 feet); minimum, that of August, 1931.

REMARKS.—Records fair. Water diverted for irrigation in valleys above station.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	42			42	130	196	97	8	8		6
2	29	41			45	133	186	91	8	9		5
3	33	40			47	137	182	94	8	10		5
4	38	34			52	141	173	91	6	10		4
5	45	31			57	148	173	94	6	10		4
6	41	28			58	133	182	97	8			4
7	40	29			60	133	173	80	7		[a] 4	4
8	38	33			58	137	169	83	8			4
9	38	34			64	141	160	73	7			4
10	40	33		[a] 35	68	152	148	64	8			4
11	38	36			75	164	160	53	6			5
12	41	38			78	164	164	47	8			5
13	42	41			80	156	173	37	7			5
14	44	44			91	160	160	31	6			6
15	42	48			100	164	148	24	7		6	6
16	41	53	[a] 35		106	169	144	22	6		5	7
17	42	48			115	177	133	18	7		4	6
18	41	47			112	186	126	16	7	[a] 5	3	7
19	44	42			109	191	130	16	6		3	8
20	42	41			112	210	112	16	6		3	8
21	41	38		40	112	200	115	18	5		3	9
22	42	36		42	109	191	109	16	6		3	10
23	40	37		41	109	206	112	18	5		3	11
24	40	36		41	106	216	119	18	5		3	11
25	41			42	109	210	119	15	5		2	9
26	38			41	115	200	112	12	5		2	8
27	40	[a] 35		42	119	196	106	12	4		2	8
28	42			41	122	196	103	12	5		2	7
29	41			41	-------	200	100	11	4		3	8
30	40			40	-------	200	97	9	4		4	8
31	41	-------		41	-------	206	-------	9	-------		7	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	45	27	39.7	2,440
November	53	28	38 0	2,260
December	-------	-------	[a] 35	2,150
January	-------	-------	37.2	2,290
February	122	42	86.8	4,820
March	216	130	172	10,600
April	196	97	143	8,510
May	97	9	41.7	2,560
June	8	4	6.3	372
July	-------	-------	5.7	350
August	-------	-------	3.7	226
September	11	4	6.5	388
The year	216	-------	51.1	37,000

[a] Estimated.

HUMBOLDT RIVER NEAR OREANA, NEV.

LOCATION.—Water-stage recorder in sec. 2, T. 28 N., R. 32 E., 2 miles above highway bridge near J. J. McCarthy ranch and 2 miles southwest of Oreana.

DRAINAGE AREA.—13,800 square miles.

RECORDS AVAILABLE.—January, 1896, to December, 1909; September, 1910, to September, 1922; September, 1924, to September, 1931 (fragmentary).

EXTREMES.—Maximum discharge during period Mar. 19 to June 30, 117 second-feet May 11; practically no flow during parts of June.

1896–1922, 1924–1931: Maximum discharge, 3,050 second-feet May 12, 1897 (gage height, 12.0 feet); no flow during periods in 1905, 1915, 1918-1920, 1931.

REMARKS.—Records fair. Station above all diversions for Lovelock district but considerable water is diverted above station for irrigation and storage. Flow affected by operation of reservoirs of Humbolt-Lovelock Irrigation, Light & Power Co. near Humboldt. Results of 5 discharge measurements furnished by Humboldt River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

Day	Mar.	Apr.	May	June	Day	Mar.	Apr.	May	June
1	0	58	38	8	16	0	59	57	4
2	0	59	39	6	17	0	54	42	4
3	0	60	39	6	18	0	46	35	5
4	0	62	84	5	19	6	39	30	6
5	0	67	112	4	20	44	32	26	4
6	0	74	113	4	21	54	31	26	2
7	0	76	110	3	22	55	40	22	0
8	0	75	108	3	23	58	36	19	0
9	0	74	108	2	24	58	35	16	0
10	0	74	112	1	25	59	35	19	0
11	0	69	113	0	26	52	35	15	0
12	0	68	113	0	27	60	40	15	0
13	0	67	90	0	28	63	41	13	0
14	0	66	76	0	29	66	39	12	0
15	0	63	68	0	30	66	39	10	0
					31	62	------	8	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 19–31	66	6	54.8	1,410
April	76	31	53.8	3,200
May	113	8	54.5	3,350
June	8	0	2.2	133
The period	113	0	----------	8,090

NOTE.—No flow during months omitted.

SOUTH FORK OF HUMBOLDT RIVER NEAR ELKO, NEV.

LOCATION.—Staff gage in sec. 30, T. 33 N., R. 55 E., at ranch half a mile below highway bridge, half a mile above head of canyon, and 10 miles southwest of Elko.

DRAINAGE AREA.—1,150 square miles.

RECORDS AVAILABLE.—August, 1896, to September, 1922; October, 1923, to September, 1931.

EXTREMES.—Maximum discharge during year, 51 second-feet Mar. 10; no flow May 16–18, June 11 to Sept. 30.

1896–1922, 1923–1931: Maximum discharge, 2,400 second-feet Jan. 26, 1914; no flow during periods in nearly every year since 1915.

REMARKS.—Records fair. Station below all diversions except those of Hunter & Banks ranch, 3 miles downstream.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Mar.	Apr.	May	June
1	12	28		32	40	3
2	12	28		32	45	5
3	12	28		32	44	5
4	13	28		32	44	4
5	13	28	30	30	44	6
6	13	28		30	43	5
7	13	29		30	42	4
8	14	30	44	28	41	4
9	14	30	48	27	40	3
10	14	30	48	26	36	1
11	15	30	44	26	33	
12	19	30	44	26	27	
13	20	30	43	26	17	
14	21	15	42	30	12	
15	23		43	32	2	
16	23		44	32	0	
17	23		42	32	0	
18	23		42	33	0	
19	23		40	34	1	
20	23		41	34	3	
21	23		36	35	3	0
22	23	20	34	36	3	
23	24		32	37	3	
24	25		32	37	3	
25	25		30	37	1	
26	25		30	37	1	
27	26		30	36	2	
28	26		31	36	2	
29	27		33	36	2	
30	27		32	37	2	
31	28		32		3	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	28	12	20.1	1,240
November	30		23.7	1,410
December			a 20	1,230
January			a 20	1,230
February			a 25	1,390
March	48		38.4	2,240
April	37	26	32.3	1,920
May	45	0	17.4	1,070
June	6	0	1.3	79
The year	48	0	18.3	11,800

a Estimated.

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

MARTIN CREEK NEAR PARADISE VALLEY, NEV.

LOCATION.—Water-stage recorder in SE. ¼ NE. ¼ sec. 11, T. 42 N., R. 40 E., 1½ miles above Silver State flour mill and 8 miles northeast of Paradise Valley.

RECORDS AVAILABLE.—October, 1921, to September, 1931.

EXTREMES.—Maximum discharge during year, 106 second-feet Mar. 18 (gage height, 5.20 feet); minimum, 4 second-feet several days in July, August, September.

1921–1931: Maximum discharge, about 1,000 second-feet Feb. 21 or 22, 1927 (gage height, about 12 feet); minimum discharge, 2 second-feet Sept. 1–9, 1928.

REMARKS.—Records fair. No diversions above gage. Results of 19 discharge measurements furnished by Little Humbolt River water commissioner.

Daily and monthly discharge, in second-feet, 1930–31

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

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			[a] 8	492
November			[a] 8	476
December			[a] 5	307
January			[a] 6	369
February	14	8	10.0	555
March	28	8	12.8	787
April	20	10	14.0	833
May	22	9	14.7	904
June			6.4	381
July			4.6	283
August			[a] 4	246
September			4.7	280
The year	28		8.2	5,910

[a] Estimated.

COTTONWOOD CREEK NEAR PARADISE VALLEY, NEV.

LOCATION.—Staff gage in SW. ¼ sec. 3, T. 42 N., R. 39 E., at Case ranch, 5 miles northwest of Paradise Valley.

RECORDS AVAILABLE.—May, 1925, to September, 1931.

EXTREMES.—Maximum discharge during year, 18 second-feet Nov. 16 (gage height, 4.45 feet); no flow for several months.

1925–1931: Maximum discharge, 120 second-feet Mar. 25, 1928; no flow for periods during practically every year.

REMARKS.—Records fair. Two small diversions above station.

Daily and monthly discharge, in second-feet, 1930–31

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

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3	1	2.0	120
November	18	1	3.5	206
December	1	1	1.0	61
January	1	1	1.0	61
February	3	1	1.2	67
March	6	1	2.2	137
April	3	1	2.5	150
May	3	2	2.3	141
June	2	0	0.7	44
The year	18	0	1.4	987

NOTE.—No flow during months omitted.

HUMBOLDT-LOVELOCK IRRIGATION, LIGHT & POWER CO.'S FEEDER CANAL NEAR MILL CITY, NEV.

LOCATION.—Water-stage recorder in SW. ¼ sec. 29, T. 33 N., R. 35 E., one-fourth mile below head of canal and 2 miles north of Mill City.

RECORDS AVAILABLE.—February, 1914, to September, 1931.

REMARKS.—Records fair. Flow regulated by head gates. Canal diverts from Humboldt River in NW. ¼ sec. 29, T. 33 N., R. 35 E., for storage in Taylor-Pitt Reservoirs near Humboldt. Water is returned to river during irrigation season about 3 miles west of Humboldt, through Humboldt-Lovelock Irrigation, Light & Power Co.'s outlet canal and carried in natural channel to head gates of canals serving Lovelock district.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	40	30				
2						
3	42					15
4						
5	28	30				
6			31		21	13
7	24					14
8		30				16
9						18
10	28					
11						18
12					21	
13	31					
14					21	18
15						0
				25		0
16	34				21	0
17		30				0
18					20	0
19						0
20	38					0
21					18	0
22						0
23	36					0
24					17	0
25	34					0
26		30				0
27		30	31			0
28	32	29			17	0
29		29				0
30		29				0
31						0

Month	Mean	Run-off in acre-feet	Month	Mean	Run-off in acre-feet
October	32.7	2,010	February	19.8	1,100
November	29.9	1,780	March	7.3	449
December	*30	1,840			
January	*25	1,540	The year		8,720

* Estimated.

NOTE.—No flow during months omitted

HUMBOLDT-LOVELOCK IRRIGATION, LIGHT & POWER CO.'S OUTLET CANAL NEAR HUMBOLDT, NEV.

LOCATION.—Staff gage and weir in SE. ¼ sec. 30, T. 32 N., R. 33 E., at outlet of lower Taylor-Pitt Reservoir, 2½ miles west of Humboldt.

RECORDS AVAILABLE.—February, 1914, to September, 1920; October, 1921, to September, 1931.

REMARKS.—Records good. Flow regulated by reservoir outlet gates a few hundred feet upstream. Canal conducts stored water released from Taylor-Pitt Reservoirs to Humboldt River in SW. ¼ sec. 31, T. 32 N., R. 33 E., for irrigation in Lovelock Valley, several miles downstream. Gage-height record furnished by Humboldt-Lovelock Irrigation, Light & Power Co.

Daily discharge, in second-feet, 1930–31

May 3	50	May 8	80	May 13	44
4	80	9	80	14	44
5	80	10	80	15	20
6	80	11	78	16	1
7	80	12	50		

NOTE.—Total discharge May 3–16, 1,680 acre-feet. No flow Oct. 1 to May 2 and May 17 to Sept. 30.

PYRAMID AND WINNEMUCCA LAKES BASIN

PYRAMID LAKE NEAR NIXON, NEV.

LOCATION.—Elevations since 1904 determined by spirit leveling at points at south end of lake adjacent to General Land Office Bench Mark No. 1, which is top of iron post in forks of road about 900 feet north of the quarter section corner of secs. 29 and 30, T. 23 N., R. 23 E., and 4½ miles west of Pyramid Lake Sanatorium, at Nixon. Elevation of Bench Mark No. 1 is 3,882.258 feet above mean sea level, based on 1912 adjustment of heights of bench marks along the precise level lines of the United States Coast and Geodetic Survey. Location of observations prior to 1904 unknown.

RECORDS AVAILABLE.—Occasional elevations 1867 to September, 1931.

REMARKS.—Elevations prior to 1890 obtained from United States Geological Survey Monograph II, by I. C. Russell, probably made by barometric leveling. Elevations 1890 and 1891 from United States Geological Survey topographic maps. Elevations since 1904 furnished by United States Indian Service from its own observations and from United States Bureau of Reclamation and court records. Reductions to mean sea level datum by United States Geological Survey.

Elevation, in feet above mean sea level, 1867–1931

Month	Year	Elevation	Month	Year	Elevation	Month	Year	Elevation
	1867	3,881	July	1915	3,861	March	1928	3,844.1
	1871	3,890		1917	3,860.8	April	1928	3,844.5
September	1882	3,871	August	1922	3,855.6	April	1928	3,844.6
	1890	3,880	September	1922	3,855.0	June	1928	3,844.5
	1891	3,883	March	1924	3,853.4	June	1928	3,844.1
	1904	3,861	June	1926	3,847.9	July	1928	3,843.9
April	1909	3,868.6	January	1927	3,845.2	July	1928	3,843.9
July	1911	3,869.1	April	1927	3,845.4	August	1928	3,843.5
August	1911	3,868.9	May	1927	3,845.5	September	1928	3,843.1
August	1911	3,868.4	June	1927	3,845.7	October	1928	3,842.7
September	1911	3,868.1	June	1927	3,846.0	May	1929	3,841.0
October	1911	3,867.3	July	1927	3,845.7	June	1929	3,840.8
June	1912	3,866	July	1927	3,845.6	September	1929	3,839.2
July	1913	3,864	August	1927	3,845.3	March	1930	3,838.0
February	1914	3,863.6	September	1927	3,844.9	June	1930	3,837.4
July	1914	3,865.8	October	1927	3,844.2	May	1931	3,834.9

LAKE TAHOE AT TAHOE, CALIF.

LOCATION.—Staff gage in SE. ¼ sec. 6, T. 15 N., R. 17 E., near outlet of lake at Tahoe. Zero of gage is 6,220 feet above mean sea level. Mean low-water elevation of lake is 6,226.0 feet.

DRAINAGE AREA.—519 square miles (including water surface of lake, 193 square miles).

RECORDS AVAILABLE.—1900 to September, 1931.

EXTREMES.—Maximum stage during year, 3.59 feet June 17; minimum, 2.36 feet Sept. 30.

1900–1931: Maximum stage, 11.26 feet July 14, 15, 17, 18, 1907; minimum, that of Sept. 30, 1931.

REMARKS.—See table of daily discharge for Truckee River at Tahoe, Calif., page 85, for record of water pumped from lake Oct. 1 to Nov. 16. Gage height record furnished by Truckee-Carson Irrigation District.

Daily gage height, in feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.53	3.16	3.14	3.00	3.02	3.04	3.08	3.31	3.57	3.46	3.23	2.86
2	3.50	3.16	3.14	3.06	3.02	3.03	3.08	3.33	3.56	3.46	3.22	2.86
3	3.49	3.15	3.14	3.07	3.02	3.03	3.08	3.34	3.56	3.45	3.21	2.85
4	3.49	3.14	3.13	3.06	3.03	3.03	3.08	3.35	3.56	3.45	3.20	2.84
5	3.48	3.14	3.12	3.07	3.06	3.02	3.08	3.36	3.55	3.45	3.20	2.82
6	3.46	3.13	3.12	3.06	3.06	3.01	3.08	3.37	3.56	3.44	3.19	2.80
7	3.46	3.12	3.11	3.06	3.06	3.00	3.08	3.38	3.56	3.44	3.17	2.78
8	3.43	3.11	3.10	3.07	3.06	2.99	3.08	3.39	3.56	3.43	3.15	2.75
9	3.41	3.10	3.10	3.06	3.06	2.98	3.09	3.40	3.56	3.42	3.14	2.72
10	3.39	3.09	3.10	3.05	3.06	2.98	3.09	3.40	3.56	3.41	3.12	2.69
11	3.37	3.08	3.09	3.04	3.07	2.99	3.09	3.41	3.55	3.40	3.11	2.66
12	3.37	3.07	3.08	3.03	3.07	3.02	3.08	3.42	3.55	3.39	3.10	2.64
13	3.36	3.14	3.09	3.02	3.06	3.03	3.09	3.43	3.54	3.38	3.10	2.62
14	3.35	3.14	3.08	3.01	3.07	3.03	3.09	3.44	3.54	3.37	3.09	2.60
15	3.33	3.12	3.07	3.01	3.10	3.03	3.09	3.45	3.54	3.35	3.08	2.59
16	3.31	3.17	3.06	3.02	3.10	3.03	3.09	3.45	3.54	3.34	3.07	2.57
17	3.30	3.24	3.04	3.03	3.09	3.04	3.10	3.46	3.59	3.33	3.06	2.56
18	3.29	3.25	3.03	3.02	3.08	3.08	3.10	3.45	3.58	3.33	3.04	2.53
19	3.29	3.25	3.02	3.01	3.10	3.11	3.09	3.44	3.57	3.32	3.03	2.51
20	3.28	3.24	3.01	3.01	3.09	3.13	3.09	3.44	3.56	3.32	3.01	2.49
21	3.27	3.23	3.00	3.00	3.08	3.12	3.10	3.44	3.55	3.32	2.99	2.48
22	3.27	3.20	2.99	3.00	3.07	3.12	3.10	3.44	3.53	3.31	2.97	2.44
23	3.26	3.17	2.98	3.04	3.07	3.12	3.17	3.44	3.52	3.31	2.96	2.44
24	3.24	3.16	2.98	3.04	3.06	3.12	3.19	3.43	3.51	3.31	2.95	2.42
25	3.23	3.16	2.98	3.03	3.05	3.11	3.19	3.50	3.51	3.31	2.94	2.41
26	3.21	3.16	2.96	3.03	3.05	3.11	3.20	3.55	3.51	3.30	2.92	2.41
27	3.21	3.16	2.95	3.03	3.06	3.11	3.27	3.55	3.50	3.29	2.91	2.40
28	3.20	3.15	2.95	3.03	3.05	3.10	3.28	3.55	3.49	3.28	2.90	2.39
29	3.19	3.15	2.94	3.03	-------	3.09	3.29	3.55	3.48	3.27	2.89	2.38
30	3.18	3.15	2.93	3.03	-------	3.08	3.31	3.56	3.47	3.26	2.88	2.36
31	3.17	-------	2.92	3.02	-------	3.08	-------	3.57	-------	3.24	2.87	-------

TRUCKEE RIVER AT TAHOE, CALIF.

LOCATION.—Staff gage in NW. ¼ sec. 7, T. 15 N., R. 17 E., at Tahoe, just below dam at outlet of Lake Tahoe.

DRAINAGE AREA.—519 square miles.

RECORDS AVAILABLE.—July, 1895, to February, 1896; June, 1900, to September, 1931.

EXTREMES.—1895–96, 1900–1931: Maximum mean daily discharge, 1,340 second-feet July 13–20, 1907 (gage height, 4.3 feet); no flow during parts of 1900, 1901, 1914, 1918–1931.

REMARKS.—Flow regulated by operation of gates in dam at Lake Tahoe. Flow from Oct. 1 to Nov. 16 pumped from Lake Tahoe. Daily discharge record furnished by Truckee-Carson Irrigation District.

Daily discharge, in second-feet, 1929–1931

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	June	July	Aug.	Sept.
1929-30										
1	85	79	82	0	4	18	0	151	143	265
2	54	70	84	0	4	18	0	151	141	278
3	52	85	81	0	4	18	0	189	135	283
4	52	85	72	0	4	20	0	216	130	291
5	54	85	79	0	4	24	0	216	128	304
6	58	78	81	1	4	27	0	216	126	302
7	70	67	82	2	5	28	0	216	124	291
8	81	68	79	2	5	28	0	216	123	257
9	82	78	61	2	5	28	0	213	121	262
10	76	76	63	2	5	27	0	209	119	267
11	76	69	25	2	5	27	0	207	121	270
12	85	67	0	3	5	28	0	202	117	288
13	79	71	0	3	3	28	0	200	113	283
14	76	79	0	3	0	29	0	193	112	294
15	73	79	0	3	0	30	0	193	110	294
16	81	79	0	4	0	30	0	195	107	280
17	71	81	0	4	0	13	0	191	102	283
18	66	81	0	5	3	0	0	184	100	267
19	65	79	0	5	2	0	0	180	95	247
20	72	79	0	6	0	0	0	176	92	273
21	76	61	1	5	0	0	0	174	107	280
22	76	73	2	5	0	0	0	17[illegible]	159	283
23	78	69	2	5	0	0	23	169	211	288
24	81	74	1	5	0	0	128	165	237	288
25	82	73	1	5	0	0	175	165	260	286
26	84	77	0	5	0	0	175	161	265	288
27	85	85	0	5	0	0	175	157	265	245
28	67	84	0	5	8	0	179	151	278	0
29	66	82	0	5	------	0	200	149	283	26
30	67	82	0	4	------	0	186	147	286	169
31	68	------	0	4	------	0	------	145	270	------

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1930-31													
1	59	51	2	0	0	0	16	48	27	1	0	1	0
2	59	42	2	1	0	0	17	49	0	0	0	1	0
3	56	49	2	1	0	0	18	50	0	0	0	1	1
4	48	51	2	1	0	0	19	49	0	0	0	1	0
5	48	49	2	1	1	0	20	52	0	0	0	1	0
6	49	49	2	1	1	0	21	50	0	0	0	1	0
7	41	49	1	1	1	0	22	49	0	0	0	1	0
8	56	50	1	1	1	0	23	49	0	0	0	1	0
9	45	49	1	1	1	0	24	49	0	0	0	1	0
10	48	51	1	1	1	0	25	48	0	0	0	1	1
11	48	50	1	0	1	0	26	49	2	0	0	1	1
12	48	51	1	0	1	0	27	47	2	0	0	1	1
13	48	45	1	0	1	0	28	45	2	0	0	1	1
14	51	47	1	0	1	0	29	51	2	0	0	------	0
15	51	40	1	0	1	0	30	50	2	0	0	------	0
							31	50	------	0	0	------	0

Monthly discharge, in second-feet, of Truckee River at Tahoe, Calif., 1929–1931

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929–30				
October	85	52	72.2	4,440
November	85	61	76.5	4,550
December	84	0	25.7	1,580
January	6	0	3.22	198
February	8	0	2.50	139
March	30	0	13.6	836
June	200	0	41.4	2,460
July		145	183	11,300
August	286	92	161	9,900
September	304	0	258	15,400
The year	304	0	70.0	50,800
1930–31				
October	59	41	49.7	3,060
November	51	0	25.3	1,510
December	2	0	.71	43.7
January	1	0	.29	17.8
February	1	0	.86	47.8
March	1	0	.16	9.8
The year	59	0	6.47	4,690

NOTE.—No flow during months omitted. Records for year ending Sept. 30, 1930, supersede those published in Water-Supply Paper 705, because of a revision of the records from July 10 to Sept. 30, 1930.

TRUCKEE RIVER AT ICELAND, CALIF.

LOCATION.—Water-stage recorder in sec. 36, T. 18 N., R. 17 E., above dam of National Ice Co. at Iceland.

DRAINAGE AREA.—937 square miles.

RECORDS AVAILABLE.—August, 1912, to September, 1931. September, 1899, to August, 1912, at Nevada-California State line, 3 miles downstream.

EXTREMES.—1899–1931: Maximum mean daily discharge, 15,300 second-feet Mar. 18, 1907; minimum, 40 second-feet Jan. 19, 20, 1925.

REMARKS.—Flow regulated by operation of gates in dam at Lake Tahoe. Daily discharge record furnished by Truckee-Carson Irrigation District.

Daily and monthly discharge, in second-feet, 1929–1931

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1929-30												
1	189	134	138	158	174	278	1,050	996	745	474	214	324
2	147	140	138	153	193	278	1,120	1,040	677	463	211	328
3	132	142	134	158	205	273	1,200	1,140	697	468	203	342
4	134	145	132	174	212	265	1,170	1,010	773	485	269	338
5	134	145	128	286	241	273	1,220	989	897	457	291	352
6	134	145	124	146	234	265	1,300	973	1,000	430	291	362
7	136	140	128	146	253	282	1,400	897	1,080	398	291	342
8	145	134	130	136	278	273	1,540	909	1,080	388	282	324
9	147	138	295	164	282	273	1,470	745	1,000	373	196	314
10	140	145	1,020	177	309	287	1,320	711	958	362	207	324
11	140	136	736	230	286	328	1,180	704	981	347	269	328
12	140	134	888	230	286	373	1,200	738	1,000	373	291	338
13	140	152	1,200	209	413	378	1,430	852	966	324	278	342
14	140	160	750	199	408	352	1,300	904	889	314	260	347
15	134	187	556	202	351	333	1,240	889	845	305	235	342
16	136	207	723	230	366	328	1,160	897	845	295	214	338
17	140	219	463	270	371	314	1,140	1,100	773	282	199	338
18	134	170	435	266	397	333	1,160	1,080	677	273	188	333
19	130	147	435	241	457	446	1,240	1,160	644	265	177	305
20	130	157	356	237	491	497	1,430	1,350	574	265	167	333
21	136	157	291	230	413	581	1,540	1,300	502	260	167	328
22	140	152	257	223	446	677	1,640	1,170	463	256	192	342
23	136	187	237	209	435	837	1,720	1,070	424	260	305	338
24	138	157	212	212	381	950	1,700	1,260	419	256	383	347
25	140	155	205	209	342	1,080	1,510	1,380	508	243	413	342
26	140	134	189	202	318	1,180	1,430	1,300	491	239	424	347
27	140	136	177	193	332	1,170	1,250	1,250	474	231	413	347
28	140	142	164	180	318	1,280	1,160	1,160	463	227	430	199
29	130	142	156	183	------	1,340	1,080	1,090	463	223	419	85
30	130	144	158	174	------	1,120	1,010	966	463	219	408	125
31	134	------	164	183	------	1,070	------	823	------	211	342	------

Daily and monthly discharge, in second-feet, of Truckee River at Iceland, Calif., 1929–1931—Continued

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.
1930-31												
1	243	170	101	80	122	183	401	651	229	72	49	60
2	146	211	104	77	119	151	469	753	213	70	49	62
3	131	170	96	77	114	165	391	768	198	68	53	62
4	131	188	96	77	111	194	354	753	165	66	55	64
5	128	184	96	87	108	217	349	753	168	62	55	66
6	121	184	85	89	114	198	407	731	172	60	51	66
7	125	181	78	94	102	213	469	679	161	60	49	64
8	104	181	76	97	108	213	469	583	148	62	47	64
9	125	153	88	108	105	233	475	609	144	60	46	62
10	118	153	96	114	102	210	440	583	132	57	46	66
11	125	153	99	116	105	202	423	550	125	55	46	68
12	131	157	99	114	108	168	407	518	116	55	49	70
13	134	196	107	114	111	179	380	493	108	53	60	70
14	131	170	91	116	114	179	344	518	108	51	62	70
15	131	192	80	114	116	190	334	616	100	51	62	70
16	128	309	93	114	116	213	364	512	206	51	62	75
17	131	287	66	128	108	277	407	475	259	49	62	82
18	128	153	61	119	111	888	440	418	213	47	60	82
19	128	118	73	122	128	694	487	374	179	47	55	84
20	128	118	66	122	116	500	481	319	151	47	53	87
21	128	121	66	122	116	524	481	310	132	47	51	84
22	128	131	66	119	119	550	563	310	116	47	51	87
23	128	118	73	116	122	475	464	319	108	47	51	94
24	128	104	73	151	135	423	440	300	100	53	53	92
25	128	104	76	148	161	339	446	644	92	53	55	89
26	128	101	78	122	154	296	506	784	87	49	53	92
27	134	118	78	114	168	272	630	583	84	47	53	87
28	134	112	78	108	176	255	583	374	82	46	55	80
29	131	93	78	114	------	238	602	310	80	46	57	77
30	134	91	80	114	------	259	665	286	77	47	60	75
31	134	------	91	119	------	319	------	268	------	47	60	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929-30				
October	189	130	139	8,550
November	219	134	153	9,100
December	1,200	124	359	22,100
January	286	136	200	12,300
February	491	174	328	18,200
March	1,340	265	571	35,100
April	1,720	1,010	1,310	78,000
May	1,380	704	1,020	62,700
June	1,080	419	726	43,200
July	485	211	321	19,700
August	430	167	278	17,100
September	362	85	316	18,800
The year	1,720	85	477	345,000
1930-31				
October	243	104	132	8,120
November	309	91	157	9,340
December	107	61	83.5	5,130
January	151	77	111	6,820
February	176	102	121	6,720
March	888	151	304	18,700
April	665	334	456	27,100
May	784	268	521	32,000
June	259	77	142	8,450
July	72	46	53.9	3,310
August	62	46	53.9	3,310
September	94	60	75.0	4,460
The year	888	46	184	133,000

NOTE.—Records for year ending Sept. 30, 1930, supersede those published in Water-Supply Paper 705, because of a revision of the records from Mar. 1 to Sept. 30, 1930.

ABERT LAKE BASIN

CHEWAUCAN RIVER ABOVE CONN DITCH, NEAR PAISLEY, OREG.

LOCATION.—Water-stage recorder in SW. ¼ sec. 27, T. 33 S., R. 18 E., 200 feet below power plant of R. R. Severin, 500 feet above diversion dam of Conn Ditch, one-fourth mile below mouth of Mill Creek, and 2½ miles above Paisley.

DRAINAGE AREA.—266 square miles.

RECORDS AVAILABLE.—April to September, 1912; May, 1924, to September, 1931. Records at stations giving practically same yearly run-off are available January, 1905, to December, 1907; January, 1909, to September, 1921.

EXTREMES.—Maximum discharge during year, 210 second-feet Apr. 1 (gage height, 1.14 feet); minimum (estimated), less than 1 second-foot Dec. 22–30. 1912, 1924–1931: Maximum discharge, 1,450 second-feet May 17, 1927 (gage height, 3.69 feet); stream frozen, no flow, Dec. 7, 1927.

REMARKS.—Records good except those below 20 second-feet and those for periods when discharge was estimated, which are fair. About 160 acres is irrigated above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	25			34	40	162	108	33	19	10	9
2	29	24			37	44	134	117	31	17	10	9
3	26	25			37	51	94	111	30	17	10	9
4	26	25			31	54	96	108	29	16	10	10
5	25	26		a 14	33	44	88	106	28	16	10	10
6	24	24			a 33	34	90	106	28	14	10	13
7	25	24			a 34	40	113	104	26	14	10	16
8	26	29			34	37	100	98	28	14	10	19
9	26	30			37	44	98	92	34	14	9	17
10	25	29		19	37	34	106	86	34	14	10	17
11	24	26		20	40	44	111	88	28	15	11	16
12	26	28		21	a 41	54	a 106	84	25	14	11	16
13	29	29		24	a 37	48	100	79	24	14	11	14
14	28	21		25	34	42	90	84	22		11	14
15	28	18		24	34	38	79	88	26		10	14
16	26	15	a 10	26	a 33	44	88	77	34	a 14	9	14
17	28			28	31	56	100	68	36		9	14
18	28			24	30	56	100	61	34		8	14
19	27			22	a 34	56	a 99	58	31		8	15
20	26			20	a 38	73	98	54	26	13	8	16
21	25			19	40	96	96	52	26	13	8	15
22	26				a 41	108	102	48	26	13	9	14
23	26				42	88	94	44	25	13	8	14
24	25	a 16		a 28	a 39	88	92	43	22	13	a 8	14
25	25				36	66	90	42	21	13	9	15
26	24				38	61	96	42	19	13	9	16
27	24			42	36	64	96	38	19	11	9	16
28	a 23			44	37	56	104	36	20	10	9	14
29	22			46	------	49	106	34	21	10	9	15
30	26			37	------	66	106	33	19	10	9	15
31	28	------		30	------	92	------	36	------	11	9	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	29	22	26.0	1,600
November	30	----------	20.7	1,230
December	----------	----------	a 10.0	615
January	46	----------	23.8	1,460
February	42	30	36.0	2,000
March	108	34	57.0	3,500
April	162	79	101	6,010
May	117	33	71.8	4,410
June	36	19	26.8	1,590
July	19	10	13.7	842
August	11	8	9.4	578
September	19	9	14.1	839
The year	162	----------	34.1	24,700

a Estimated.

SILVER LAKE BASIN

SILVER CREEK NEAR SILVER LAKE, OREG.

LOCATION.—Water-stage recorder in SW. ¼ sec. 28, T. 28 S., P. 14 E., 1½ miles below diversion dam of Silver Lake Irrigation District, 1½ miles southwest of Silver Lake post office, and 3 miles above mouth of Bridge Creek. At times record is obtained at staff gage in spillway flume at diversion dam in NE. ¼ sec. 5, T. 29 S., R. 14 E.

DRAINAGE AREA.—221 square miles.

RECORDS AVAILABLE.—December, 1904, to March, 1907; January, 1909, to September, 1931 (incomplete).

EXTREMES.—Maximum discharge during year, 16 second-feet May 14 (gage height, 0.78 foot); no flow July 5 to Sept. 30.

1904–1907, 1909–1931. Maximum discharge, 910 second-feet Nov. 23, 1909 (river gage height, 6.40 feet); no flow July 5 to Sept. 30, 1931.

REMARKS.—Records fair except those estimated, which are poor. Silver Lake Irrigation District Canal ordinarily diverts water above gages during irrigation season; no water was diverted in 1931. Diversion dam 1½ miles above gage impounds about 800 acre-feet; also storage in Thompson Valley Reservoir. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1		1.5				1.0	6.1	8.2	7.5	1.2
2		1.5				1.0	10	8.5	6.1	1.1
3		1.5				1.0	8.5	8.8	4.9	.8
4	[a] 1.4	1.5					8.2	8.5	3.9	.1
5		1.5					7.0	9.0	2.9	0
6		1.6	[a] 1.5				4.2	9.6	2.1	0
7		1.6					4.2	10	1.9	0
8	1.5	1.6					4.5	10	1.4	0
9	1.5	1.6					4.5	12	1.2	0
10	1.5	1.6					4.4	11	1.1	0
11	1.5	1.6				[a] 2.5	4.5	10	.9	0
12	1.5	1.6					4.7	11	1.2	0
13	1.5	1.7	1.7				4.9	11	1.2	0
14	1.5	1.7	1.6				4.9	11	1.4	0
15	1.5	1.7		[a] .5	[a] 1.0		5.1	11	1.6	0
16	1.5	1.8					6.1	11	1.8	0
17	1.5	1.7					3.4	10	2.2	0
18	1.5	1.7					3.4	11	2.6	0
19	1.5	1.6					3.6	14	2.4	0
20	1.6	1.6	[a] 1.5				3.4	14	2.3	0
21	1.6	1.7				3.8	3.6	14	2.1	0
22	1.6	1.7				3.8	3.1	13	1.8	0
23	1.5	1.7				3.9	6.8	14	1.7	0
24	1.6					3.9	7.0	13	1.4	0
25	1.5		15			4.0	7.0	12	1.2	0
26	15	[a] 1.5	10			4.0	6.8	11	1.1	0
27	1.5					4.0	5.9	10	1.0	0
28	1.5					4.2	5.3	10	1.0	0
29	1.5		[a] 1.5		------	3.9	7.2	9.9	1.0	0
30	1.5				------	2.8	8.0	9.0	1.1	0
31	1.5	------			------	3.2	------	8.2	------	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1.6	----------	1.49	92
November	1.8	----------	1.59	95
December	15	----------	2.22	136
January	----------	----------	[a] .5	31
February	----------	----------	[a] 1.0	56
March	4.2	1.0	2.81	173
April	10	3.4	5.61	334
May	14	8.2	10.8	664
June	7.5	0.9	2.13	127
July	1.2	0	.10	6.1
The year	15	0	2.36	1,710

[a] Estimated.

NOTE.—No flow during months omitted.

SILVER LAKE IRRIGATION DISTRICT CANAL NEAR SILVER LAKE, OREG.

LOCATION.—Staff gage in NE. ¼ sec. 5, T. 29 S., R. 14 E., at diversion dam of Silver Lake Irrigation District, 2½ miles southwest of Silver Lake post office.
RECORDS AVAILABLE.—Irrigation seasons, 1922 to 1928, 1930, 1931.
EXTREMES.—No flow during 1931.

1923–1928, 1930–31: Maximum discharge, 60 second-feet June 26–29, 1923; no flow during most of each year.

REMARKS.—Canal diverts from Silver Creek water released from storage in Thompson Valley Reservoir; no water diverted in 1931. Records furnished by State engineer of Oregon.

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MALHEUR AND HARNEY LAKES BASIN

SILVIES RIVER NEAR BURNS, OREG.

LOCATION.—Water-stage recorder in or near SE. ¼ sec. 25, T. 21 S., R. 29 E., 1 mile below dam site for proposed lower Silvies Reservoir and 11 miles northwest of Burns. Staff gage in sec. 7, T. 22 S., R. 30 E., at Parker ranch sometimes used during winter.

DRAINAGE AREA.—940 square miles.

RECORDS AVAILABLE.—May, 1903, to July, 1906; December, 1908, to September, 1931.

EXTREMES.—Maximum discharge during year, 214 second-feet Apr. 8 (gage height, 3.94 feet); minimum, 0.1 second-foot Sept. 6–12.

1903–1906, 1908–1931: Maximum discharge, 4,730 second-feet Apr. 15, 1904 (gage height, 17.12 feet, original datum); minimum, that of Sept. 6–12, 1931.

REMARKS.—Records fair. Discharge estimated May 9. Large area on headwaters of Silvies River irrigated with flood water. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1930–31

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	8.0	7.8	32	42	55	164	37	8 9	5.7	0.4	0.4
2	8.0	8.0	7.8	31	41	56	200	39	8 9	5.1	.3	.3
3	7.2	8.0	8.2	27	39	62	191	42	7.8	5.1	.6	.2
4	6.6	8.2	8.6	28	40	68	173	41	7.2	6.0	.4	.2
5	6.2	8.0	8.8	29	41	68	173	37	6 6	4.8	.3	.2
6	6.4	8.0	9.0	33	42	62	191	34	5 7	4.0	.3	.2
7	6.4	8.0	9.6	44	44	65	209	30	5 1	3.4	.4	.1
8	6.6	8.2	9.9	55	45	78	209	29	4 5	3.1	2.9	.1
9	7.0	8.6	8.8	42	45	75	186	26	4 5	2.7	2.1	.1
10	7.0	9.0	8.8	32	42	68	155	23	4.5	2.3	1.8	.1
11	7.8	8.6	9.0	24	41	65	137	23	4 5	2.2	1.6	.1
12	7.6	8.6	9.3	22	39	68	116	23	4.5	1.9	1.7	1.0
13	6.8	8.6	9.6	22	35	75	112	22	4 3	1.8	1.7	1.9
14	6.2	8.2	11	22	32	104	160	21	4 2	1.4	1.5	2.0
15	6.6	8.6	11	23	29	116	132	22	5 1	1.3	1.6	2.0
16	8.6	8.6	12	26	30	108	128	23	7.8	1.3	1.7	2.0
17	8.0	9.6	13	27	32	108	124	22	11	1.2	1.6	2.1
18	8.4	9.0	14	33	39	160	120	20	11	.8	1.8	2.3
19	8.2	8.8	15	39	41	160	108	19	9 6	.6	1.7	2.3
20	9.0	8.8	16	45	41	137	89	19	7.5	1.5	1.5	2.7
21	8.4	9.3	17	47	43	128	86	18	7.2	2.0	1.4	3.5
22	8.2	9.9	18	49	45	132	67	17	6 9	1.4	1.2	2.7
23	8.4	9.9	19	52	47	137	51	17	6 6	1.2	1.2	2.7
24	8.2	9.0	23	53	47	128	68	16	5 7	1.0	1.2	2.9
25	8.2	8.2	23	52	49	128	67	15	5 1	2.6	.8	2.9
26	8.2	7.8	28	52	50	120	68	14	4 8	2.3	.5	3.1
27	8.2	7.6	27	53	54	112	62	12	4 5	1.5	.4	3.2
28	7.6	7.4	28	52	55	104	59	11	4 5	1.0	.3	3.1
29	7.8	7.6	28	52	------	96	54	11	6 6	.6	.3	2.7
30	7.4	7.6	29	49	------	86	46	10	6.0	.5	.6	2.4
31	7.4	------	31	45	------	108	------	10	------	.5	.6	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	9.0	6.2	7.52	462
November	9.9	7.4	8.46	503
December	31	7.8	15.4	947
January	53	22	38.5	2,370
February	55	29	41.8	2,320
March	160	55	98.0	6,030
April	209	46	124	7,380
May	42	10	22.7	1,400
June	11	4.2	6.37	379
July	6.0	.5	2.28	140
August	2.9	.3	1.11	68
September	3.5	.1	1.65	98
The year	209	.1	30.5	22,100

ALVORD LAKE BASIN

TROUT CREEK NEAR DENIO, OREG.

LOCATION.—Water-stage recorder in SW. ¼ sec. 26, T. 39 S., R. 36 E., 800 feet above bridge at mouth of canyon, 5 miles east of Trout Creek ranch, and 14 miles northeast of Denio.

RECORDS AVAILABLE.—March, 1911, to March, 1912; April, 1922, to November, 1923; April, 1925, to September, 1931 (incomplete).

EXTREMES.—Maximum discharge during period, 46 second-feet May 2 (gage height, 1.99 feet); probably no flow at times from Sept. 1 to 19.

1911–12, 1922–23, 1925–1931: Maximum discharge, 235 second-feet May 18, 1927 (gage height, 3.55 feet); practically no flow at times in 1929, 1930, and 1931.

REMARKS.—Records poor. Some water diverted for irrigating small ranch field above station; large area irrigated below mouth of canyon. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1931

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		6.6	15	3.1	3.3	0.4	
2		6.8	20	3.1	3.8	.5	
3		7.6	18	3.5	3.3	.5	
4		7.6	13	3.5	2.9	.5	[a] 0.1
5		7.2	13	3.6	2.8	.5	
6		7.6	12		2.4	.5	
7		11	11		2.1	.5	.2
8		7.8	9.8	[a] 3.2	1.9	.4	
9		7.2	9.5		2.0	.4	
10		8.6	8.8		2.1	.5	
11		8.1	8.3	2.8	1.7	.4	
12		6.4	7.8		1.5	.5	
13		4.8	7.4	[a] 5.0	1.2	.5	[a] .1
14		3.8	7.6		1.0	.4	
15		3.5	7.6		.8	.4	
16		3.6	6.8		.7	.4	
17		3.6	6.2	6.8	.7	.4	
18		5.3	6.0	6.6	[a] .7	.4	
19		2.6	5.4	6.2	[a] .6	.4	.2
20		2.5	5.8	5.8	.6	.4	.9
21		2.8	5.8	5.4	.6	.4	1.0
22		4.1	4.8	4.8	.6	.4	1.2
23		4.8	4.1	4.6	.5	.4	1.3
24		4.8	4.2	4.9	.5	.4	1.4
25		4.9	4.1	4.9	[a] .5	.3	1.3
26		4.9	3.8	4.2	[a] .4		1.3
27		7.0	3.2	3.9	.4		1.1
28		13	2.9	3.6	.4	[a] .2	1.0
29		16	3.1	3.3	.4		.9
30		15	2.5	3.3	.5		.8
31	6.0		2.8		.5	.2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April	16	2.5	6.65	396
May	20	2.5	7.75	477
June			4.30	256
July	3.8	.4	1.34	82
August	.5	.2	.39	24
September	1.4		.48	29
The period				1,260

[a] Estimated.

NOTE.—No record, Oct. 1 to Mar. 30.

MISCELLANEOUS DISCHARGE MEASUREMENTS

Discharge measurements of streams in the Great Basin made at points other than regular gaging stations during the year ending September 30, 1931, are listed in the following table:

Miscellaneous discharge measurements in the Great Basin during the year ending September 30, 1931

Bear River Basin

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
Nov. 6	Bear River	Great Salt Lake	Sec. 6, T. 12 S., R. 44 E., at Utah Power & Light Co.'s gaging station at Pescadero Siding, 6 miles northwest of Montpelier, Idaho.	6.72	359
7	do	do	NE. ¼ sec. 30, T. 9 S., R. 42 E., at Utah Power & Light Co.'s gaging station, 3 miles south of Soda Springs, Idaho.	1.10	413
8	do	do	Sec. 26, T. 13 S., R. 40 E., immediately below junction of Oneida tailrace with river near Mink Creek, Idaho.	2.99	618
5	Montpelier Preston Canal.	Bear River	SW. ¼ sec. 6, T. 14 S., R. 45 E., 1 mile below canal heading, in Idaho.	------	2.4
5	Pegleg Canal	do	NW. ¼ sec. 7, T. 14 S., R. 45 E., three-fourths mile below canal heading, in Idaho.	4.52	16.4
5	Bear Lake Outlet Canal.	Bear Lake	Sec. 8, T. 14 S., R. 44 E., at Utah Power & Light Co.'s gaging station 1,000 ft. downstream from dike, near Paris, Idaho.	13.40	117

Jordan River Basin

Dec. 9	Utah & Salt Lake Canal.	Jordan River	Upper rating flume NE. ¼ sec. 10, T. 4 S., R. 1 W., Utah.	3.46	75
Apr. 12	do	do	do	.90	[a].2
Mar. 19	Big Cottonwood Creek.	do	NW. ¼ sec. 6, T. 2 S., R. 1 E., at State Street Bridge 1 mile north of Murray, Utah.	------	39.2

Beaver River Basin

Sept. 25	Beaver River	Sevier River	SE. ¼ sec. 24, T. 29 S., R. 6 W., below tailrace at upper power plant 9 miles east of Beaver, Utah.	------	11.8

[a] Estimated.

Miscellaneous discharge measurements in the Great Basin during the year ending September 30, 1931—Continued

Sevier Lake Basin

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
May 27	Sevier River	Sevier Lake	Gaging station in SE. ¼ sec. 28, T. 36 S., R. 5 W., at county bridge at Hatch, Utah.	0.72	[b] 62.7
June 23	do	do	do	.56	[a] 42.5
July 18	do	do	do	.50	[b] 37.1
Aug. 16	do	do	do	.58	[b] 36.8
Sept. 16	do	do	do	.58	[b] 35.5
May 28	do	do	Gaging station in sec. 29, T. 31 S., R. 4 W., 2½ miles above mouth of Pine Creek and 8 miles southwest of Circleville, Utah.	2.00	[b] 40.2
June 23	do	do	do		[b] 22.8
July 17	do	do	do		[b] 25.8
Sept. 16	do	do	do	1.86	[b] 29.3
May 16	Ephraim Creek	San Pitch River	NE. ¼ sec. 14, T. 17 S., R. 3 E., below tailrace at municipal power plant 2½ miles southeast of Ephraim, Utah.		61.0
25	do	do	do	3.98	73.0
25	do	do	do	4.11	104
June 8	do	do	do	3.67	56.0
15	do	do	do	3.59	34.7
22	do	do	do	3.53	22.7
27	do	do	do	4.41	20.9
July 3	do	do	do	4.28	13.6
14	do	do	do	4.26	9.9

Salton Sea Basin

Oct. 20	San Felipe Creek	Salton Sink	At highway bridge near Julian, Calif.		2.5

Mohave River Basin

Apr. 27	Mohave River	Great Basin	Hesperia crossing near Hesperia, Calif.		219
Dec. 18	do	do	SE. ¼ sec. 3, T. 9 N., R. 2 E., 4½ miles east of Yermo, Calif.		1.5
Mar. 19	do	do	do		1.7
Dec. 11	East Fork of West Fork of Mohave River.	Mohave River	At highway bridge on Horse Thief Canyon road near Hesperia, Calif.		1.8
Feb. 3	do	do	do		7
16	do	do	do		23
Apr. 8	do	do	do		.2
28	do	do	do		75
30	do	do	do		36
May 5	do	do	do		12
19	do	do	do		1.2
Dec. 18	Van Dyke Ditch	do	At highway crossing at Daggett, Calif.		2.7

[a] Estimated.
[b] Furnished by Sevier River water commissioner.

Miscellaneous discharge measurements in the Great Basin during the year ending September 30, 1931—Continued

Humboldt-Carson Sink Basin

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
May 16	Markleeville Creek.	East Fork of Carson River.	Old gaging-station site above Markleeville, Calif.	1.04	58
Apr. 3	Little Humboldt River.	Humboldt River.	Gaging station in NE. ¼ sec. 19, T. 41 N., R. 41 E., 300 ft. south of Humboldt Hot Springs and 11 miles south east of Paradise Valley, Nev.	-------	[c] 3.3
16	----do----	----do----	----do----	-------	[c] 7.0
22	----do----	----do----	----do----	2.38	[c] 17.4
27	----do----	----do----	----do----	2.28	[c] 15.6
29	----do----	----do----	----do----	2.32	[c] 16.5
May 1	----do----	----do----	----do----	2.29	[c] 16.3
3	----do----	----do----	----do----	2.28	[c] 16.5
5	----do----	----do----	----do----	2.30	[c] 16.8
7	----do----	----do----	----do----	2.28	[c] 16.1
9	----do----	----do----	----do----	2.24	[c] 15.8
10	----do----	----do----	----do----	2.22	[c] 14.2
12	----do----	----do----	----do----	2.18	[c] 14.7
15	----do----	----do----	----do----	1.90	[c] 10.2
17	----do----	----do----	----do----	2.02	[c] 11.4
21	----do----	----do----	----do----	2.02	[c] 11.4
23	----do----	----do----	----do----	2.02	[c] 10.9
27	----do----	----do----	----do----	2.00	[c] 10.2
29	----do----	----do----	----do----	1.92	[c] 9.6
June 3	----do----	----do----	----do----	1.92	[c] 7.9
5	----do----	----do----	----do----	2.00	[c] 8.1
9	----do----	----do----	----do----	2.00	[c] 9.5
14	----do----	----do----	----do----	2.05	[c] 7.9
17	----do----	----do----	----do----	2.15	[c] 10.4
21	----do----	----do----	----do----	2.15	[c] 10.4
27	----do----	----do----	----do----	2.15	[c] 8.5
July 1	----do----	----do----	----do----	2.1	[c] 8.3
8	----do----	----do----	----do----	2.1	[c] 8.0
10	----do----	----do----	----do----	2.1	[c] 8.2
12	----do----	----do----	----do----	2.1	[c] 8.3
14	----do----	----do----	----do----	2.1	[c] 7.9
17	----do----	----do----	----do----	2.12	[c] 8.4
19	----do----	----do----	----do----	2.18	[c] 8.3
24	----do----	----do----	----do----	2.25	[c] 7.9
26	----do----	----do----	----do----	2.3	[c] 7.8
28	----do----	----do----	----do----	2.25	[c] 8.5

Malheur and Harney Lakes Basin

May 28	Rattlesnake Creek	Harney Valley	Harney, Oreg.	-------	0
28	Soldier Creek	----do----	Burns-Harney road, Oreg.	-------	0
28	Cow Creek [d]	----do----	Harney-Crane road, Oreg.	-------	0
28	Rock Creek	----do----	----do----	-------	0
28	Buchanan Creek	----do----	----do----	-------	0
28	Curtis Creek	----do----	----do----	-------	0
June 3	Mens Creek	----do----	----do----	-------	0
3	Crow Camp Creek	----do----	----do----	-------	0
Aug. 22	Sod House Cold Spring.	Donner und Blitzen River.	NW. ¼ SE. ¼ sec. 35, T. 26 S., R. 31 E., Oreg.	-------	9.13
July 28	Little Sizemore Warm Spring.	Warm Springs Creek.	NW. ¼ SE. ¼ sec. 15, T. 27 S., R. 29 E., Oreg.	-------	.92
28	Big Sizemore Warm Spring.	----do----	SE. ¼ SE. ¼ sec. 9, T. 27 S., R., 29 E., Oreg.	-------	2.58
June 2	Silver Creek	Harney Lake	Near Double O ranch, Oreg.	-------	0
July 24	Crane Creek Warm Springs.	Warm Springs Creek.	NW. ¼ NW. ¼ sec. 9, T. 27 S., R. 29 E., Oreg.	-------	13
22	Basque Warm Springs.	Warm Springs Creek.	SW. ¼ SW. ¼ sec. 31, T. 26 S., R. 29 E., Oreg.	-------	2.70
22	Warm Springs	----do----	SE. ¼ NE. ¼ sec. 34, T. 26 S., R. 28 E., Oreg.	-------	4.02
21	Double O Warm Springs.	----do----	NE. ¼ NW. ¼ sec. 36, T. 26 S., R. 28 E., Oreg.	-------	3.85
May 29	Roadland Warm Spring.	Sagehen Creek	SW. ¼ sec. 11, T. 24 S., R. 30 E., Oreg.	-------	.75
27	Sagehen Creek [e]	West Fork	Burns-Double O ranch road, Oreg.	-------	.75
27	Silvies River	Malheur Lake	4 mi. above Burns, Oreg., just below diversion dam; total of river and diversion.	-------	9.06

[c] Furnished by Little Humboldt River water commissioner.
[d] From spring in sec. 14, T. 22 S., R. 32½ E.
[e] From spring in sec. 11, T. 24 S., R. 30 E.

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