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UNITED STATES DEPARTMENT OF THE INTERIOR

**SURFACE WATER SUPPLY**  
*of the* **UNITED STATES**  
**1932**

**PART 10**  
**THE GREAT BASIN**

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

**GEOLOGICAL SURVEY WATER-SUPPLY PAPER 735**

UNITED STATES DEPARTMENT OF THE INTERIOR

HAROLD L. ICKES, Secretary

GEOLOGICAL SURVEY

W. C. MENDENHALL, Director

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Water-Supply Paper 735

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# SURFACE WATER SUPPLY *of the* UNITED STATES 1932

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PART 10

THE GREAT BASIN

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Prepared in cooperation with the States of  
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## ILLUSTRATION

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FIGURE 1. Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car...	Page
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# SURFACE WATER SUPPLY OF THE GREAT BASIN

## 1932

### AUTHORIZATION AND SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made in streams in the United States during the year ending September 30, 1932.

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 method of utilizing the water resources.

#### *Annual appropriations for the fiscal year ending June 30, 1895-1932*

1895-----	\$12, 500. 00	1911-17---	\$150, 000. 00	1928-----	\$147, 000. 00
1896-----	24, 500. 00	1918-----	175, 000. 00	1929-----	270 500. 00
1897-99---	50, 000. 00	1919-----	148, 244. 10	1930-----	275 000. 00
1900-----	70, 000. 00	1920-----	175, 000. 00	1931-----	565 000. 00
1901-2----	100, 000. 00	1921-23---	180, 000. 00	1932-----	711. 000. 00
1903-6----	200, 000. 00	1924-25---	170, 000. 00	1933-----	600 000. 00
1907-----	150, 000. 00	1926-----	165, 000. 00		
1908-10---	100, 000. 00	1927-----	151, 000. 00		

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

Measurements of stream flow have been made at about 6,590 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1932, 2,790 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, 1931, and ending September 30, 1932. At the beginning of January in most parts of the United States much of the precipitation in

the preceding 3 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.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. 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, 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 non-recording gage, or the mean daily gage height obtained from a water-stage recorder graph.

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



gage-height graph and containing as an essential element the rating curve of the station.

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

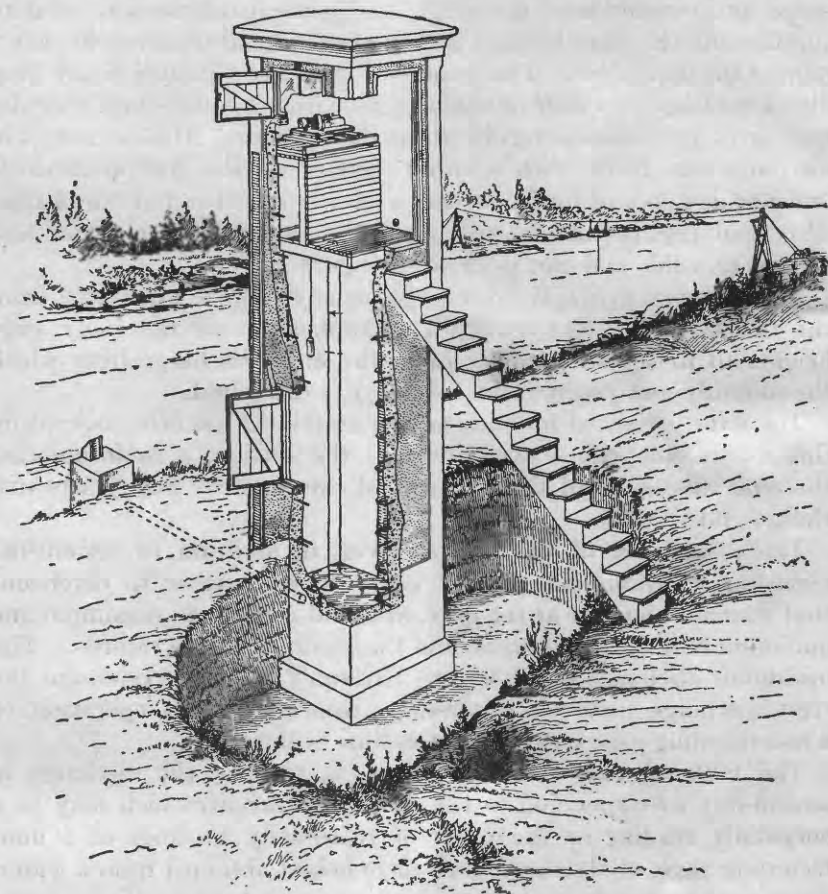


FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car.

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 records.

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

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

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

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

2. Sets of the reports may be consulted in the libraries of the principal cities 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, Maine, Statehouse.  
 Boston, Mass., 2500 Customhouse.  
 Hartford, Conn., 203 Federal Building.  
 Albany, N.Y., 603 State Public Works Building.  
 Trenton, N.J., 228 Federal Building.  
 Harrisburg, Pa., 492 Education 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.  
 Montgomery, 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., 632 State Office Building.  
 Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.  
 Topeka, Kans., State House.  
 Rolla, Mo., Rolla Building, Missouri School of Mines and Metallurgy.  
 Fort Smith, Ark., Post Office Building.  
 Austin, Tex., State Highway Building.  
 Santa Fe, N.Mex., State Capitol.  
 Tucson, Ariz., 210 Post Office Building.  
 Denver, Colo., 403 Post Office Building.  
 Salt Lake City, Utah, 303 Federal Building.  
 Idaho Falls, Idaho, 228 Federal Building.  
 Boise, Idaho, Federal Building.  
 Helena, Mont., 421 New Federal Building.

Tacoma, Wash., 406 Federal Building.  
 Portland, Oreg., 606 Post Office Building.  
 San Francisco, Calif., 303 Customhouse.  
 Los Angeles, Calif., 510 Eighth and Figueroa Building.  
 Honolulu, Hawaii, 225 Federal Building.

A list of the Geological Survey 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 6,590 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. 1	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.
W 726 to 739	do	1932.

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 1932. 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.

[For basins included see p. 5]

# PUBLICATIONS

Year	1	2	3	4	5	6	7	8	9	10	11	12-A	12-B	12-C
1899 <sup>a</sup>	35	35	36	36	36	36	37	37	37	38	38	38	38	38
1900 <sup>a</sup>	47	48	48	49	49	49	50	50	50	51	51	51	51	51
1901	65	65	65	65	65	65	66	66	66	66	66	66	66	66
1902	82	82	82	82	82	82	83	83	83	83	83	83	83	83
1903	97	97	98	98	98	98	99	99	99	100	100	100	100	100
1904	124	125	126	128	128	130	131	132	133	133	134	135	135	135
1905	165	166	167	169	170	172	173	174	175	176	177	178	178	178
1906	203	203	205	206	206	208	209	210	211	212	213	214	214	214
1907-8	201	202	203	204	204	206	207	208	209	210	211	212	212	212
1909	241	242	243	244	245	246	247	248	249	250	251	252	252	252
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	332	332
1913	351	352	353	354	355	356	357	358	359	360	361	362	362	362
1914	381	382	383	384	385	386	387	388	389	390	391	392	392	392
1915	401	402	403	404	405	406	407	408	409	410	411	412	412	412
1916	431	432	433	434	435	436	437	438	439	440	441	442	442	442
1917	451	452	453	454	455	456	457	458	459	460	461	462	462	462
1918	471	472	473	474	475	476	477	478	479	480	481	482	482	482
1919-20	501	502	503	504	505	506	507	508	509	510	511	512	512	512
1921	521	522	523	524	525	526	527	528	529	530	531	532	532	532
1922	541	542	543	544	545	546	547	548	549	550	551	552	552	552
1923	561	562	563	564	565	566	567	568	569	570	571	572	572	572
1924	581	582	583	584	585	586	587	588	589	590	591	592	592	592
1925	601	602	603	604	605	606	607	608	609	610	611	612	612	612
1926	621	622	623	624	625	626	627	628	629	630	631	632	632	632
1927	641	642	643	644	645	646	647	648	649	650	651	652	652	652
1928	661	662	663	664	665	666	667	668	669	670	671	672	672	672
1929	681	682	683	684	685	686	687	688	689	690	691	692	692	692
1930	691	692	693	694	695	696	697	698	699	700	701	702	702	702
1931	711	712	713	714	715	716	717	718	719	720	721	722	722	722
1932	721	722	723	724	725	726	727	728	729	730	731	732	732	732

<sup>a</sup> 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.  
<sup>b</sup> James River only.  
<sup>c</sup> Gallatin River.  
<sup>d</sup> Greene and Gunnison Rivers and Colorado River above Gunnison River.  
<sup>e</sup> Mohave River only.  
<sup>f</sup> Kings and Kerns Rivers and south Pacific slope basins.  
<sup>g</sup> 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.  
<sup>h</sup> Wissahickon and Schuylkill Rivers to James River.  
<sup>i</sup> Seloto River.  
<sup>j</sup> Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte River.  
<sup>k</sup> Tributaries of Mississippi River from east.  
<sup>l</sup> Lake Ontario and tributaries to St. Lawrence River proper.  
<sup>m</sup> Hudson Bay only.  
<sup>n</sup> New England rivers only.  
<sup>o</sup> Hudson River to Delaware River, inclusive.  
<sup>p</sup> Susquehanna River to Yackin River, inclusive.  
<sup>q</sup> Platte and Kansas Rivers.  
<sup>r</sup> The Great Basin in California, except Truckee and Carson River Basins.  
<sup>s</sup> Below junction with Gila River.  
<sup>t</sup> 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, Col. Walter E. Garrison, director, and Edward Hyatt, State engineer; in Idaho with the commissioner of reclamation, R. W. Faris; 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, and the city of Ogden; in Wyoming with the office of the State engineer, John A. Whiting.

Assistance in collecting records was rendered by Utah Power & Light Co. and city of Hyrum, Utah.

## DIVISION OF WORK

Data for stations in California (except the four stations listed below) 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, M. T. Wilson, A. C. Swanson, H. M. Orem, 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 Idaho (except those on Bear River) were collected and prepared for publication under the direction of Thomas R. Newell, district engineer, assisted by J. R. Throckmorton, E. G. Bailey, V. S. Haugse, P. R. Newell, Miss E. H. Haugse, and Miss Josephine Ruick.

Data for stations in Oregon were collected and computed by the State of Oregon under supervision of C. E. Stricklin, 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 stations in Utah, Nevada, and on Bear River at Harer, at Alexander, and near Weston, Idaho, Bridgeport Reservoir near Bridgeport, Calif., East Walker River near Bridgeport, Calif., West Walker River near Coleville, Calif., and Topaz Reservoir near Topaz, Calif., were collected and prepared for publication under the direction of A. B. Purton, district engineer, assisted by M. T. Wilson, F. M. Bell, F. N. Hansen, B. M. Tanner, V. R. Bennion, and Miss Lysle Christensen.

Data for the station in Wyoming were collected and prepared for publication under the direction of Robert Follansbee, district engineer, assisted by J. H. Baily, H. P. Eisenhuth, D. S. Jenkins, L. F. Hanks, M. C. Boyer, F. M. Roush, and Mrs. Elsie L. Yeatman.

The records were reviewed and the manuscript assembled by K. B. Nelson.

## 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 1932.

**EXTREMES.**—Maximum elevation during year, 4,199.35 feet May 15 to June 15 at Midlake gage; minimum, 4,197.8 feet Dec. 1 at Saltair gage.

1850–1932: 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 Southern Pacific Railroad Co.

*Gage height, in feet, of Great Salt Lake, Utah, 1931–32*

Day	Saltair	Mid-lake	Day	Saltair	Mid-lake	Day	Saltair	Mid-lake
Oct. 1.....	1.15	0.1	Feb. 1.....	1.3	0.15	June 1.....	2.5	1.35
Oct. 15.....	1.1	.0	Feb. 15.....	1.5	.35	June 15.....	2.5	1.35
Nov. 1.....	1.1	—1	Mar. 1.....	1.65	.4	July 1.....	2.35	1.25
Nov. 15.....	1.05	—1	Mar. 15.....	1.7	.5	July 15.....	2.15	1.0
Dec. 1.....	1.0	—15	Apr. 1.....	1.95	.75	Aug. 1.....	* 1.95	.65
Dec. 15.....	1.05	—15	Apr. 15.....	2.1	.85	Aug. 15.....	1.7	.5
Jan. 1.....	1.2	—1	May 1.....	2.2	1.15	Sept. 1.....	1.45	.35
Jan. 15.....	1.2	.1	May 15.....	2.4	1.35	Sept. 15.....	1.3	.1

\* 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  $3\frac{1}{2}$  miles northwest of Evanston.

DRAINAGE AREA.—645 square miles.

RECORDS AVAILABLE.—October 1913 to September 1932.

EXTREMES.—Maximum discharge during year, 2,500 second-feet May 22 (gage height, 5.74 feet); minimum, 2 second-feet Aug. 15–19.

1913–32: 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. 20 to Mar. 26, which were based on two discharge measurements and temperature records. Discharge July 31, Aug. 1, estimated. Some diversions for irrigation above station.

## Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1.....	6	23	}	}	}	110	195	491	805	587	11	49	
2.....	6	24					202	396	698	531	10	40	
3.....	6	25					195	421	662	447	10	32	
4.....	6	26					226	455	760	418	9	30	
5.....	5	27					223	443	874	351	8	28	
6.....	6	27	}	41	27	100	188	428	1,080	268	8	25	
7.....	6	29					190	368	930	217	7	25	
8.....	6	32					200	368	702	178	7	21	
9.....	6	37					217	435	599	139	6	17	
10.....	6	36					223	535	563	102	6	17	
11.....	6	31	}	}	}	60	292	653	547	102	6	17	
12.....	6	35					447	780	635	104	5	16	
13.....	6	34					595	974	869	104	4	16	
14.....	6	32					800	1,190	1,110	110	3	15	
15.....	7	41					658	1,320	1,220	104	3	14	
16.....	8	45	}	}	}	160	702	1,250	1,330	79	2	12	
17.....	10	40					785	1,240	1,200	76	2	11	
18.....	9	42					653	1,370	1,100	83	2	10	
19.....	10	41					487	1,530	913	72	2	10	
20.....	11	35					495	1,490	918	61	5	9	
21.....	15	}	}	}	}	260	503	1,600	996	55	6	10	
22.....	13						475	1,920	1,080	46	6	8	
23.....	11						316	1,600	1,210	37	5	8	
24.....	11						277	1,150	1,350	23	4	9	
25.....	10						241	1,140	1,570	22	3	10	
26.....	10	}	}	}	}	}	280	251	913	1,300	22	4	10
27.....	14						286	286	750	1,120	22	8	11
28.....	17						253	277	716	946	20	13	12
29.....	18						220	302	940	750	16	12	12
30.....	19						214	503	1,150	635	15	66	12
31.....	22						190		952		13	62	
Month							Maximum	Minimum	Mean	Run-off in acre-feet			
October.....							22	5	9.6	590			
November.....							45	23	31.2	1,860			
December.....									35	2,150			
January.....									35	2,150			
February.....									40	2,300			
March.....							286		158	9,720			
April.....							800	188	380	22,600			
May.....							1,920	368	934	57,400			
June.....							1,570	547	948	56,400			
July.....							587	13	143	8,790			
August.....							66	2	9.8	603			
September.....							49	8	17.2	1,020			
The year.....							1,920	2	228	166,000			

## BEAR RIVER AT HARER, IDAHO

LOCATION.—Water-stage recorder in NE¼ sec. 22, T. 14 S., R. 45 E., half a mile below mouth of Sheep Creek, three quarters of a 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 2,280 second-feet May 24 (gage height, 8.13 feet); minimum, 91 second-feet Oct. 9 (gage height, 2.65 feet).

1913-16, 1919-32: Maximum discharge, 3,860 second-feet June 2, 1920 (gage height, 10.51 feet); minimum, 60 second-feet Sept. 11, 1931 (gage height, 2.46 feet).

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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	124	106	110	120	140	310	472	1,620	1,520	369	285
2	96	122	105	110	125	145	365	472	1,490	1,430	369	285
3	98	122	105	110	125	145	385	480	1,410	1,290	373	268
4	96	122	105	110	125	140	470	514	1,410	1,140	396	254
5	95	122	105	110	123	138	565	594	1,430	978	373	251
6	95	122	105	105	125	140	609	662	1,410	814	340	244
7	95	122	105	105	125	145	598	686	1,440	738	298	251
8	93	122	105	110	125	150	610	694	1,410	682	274	254
9	91	124	105	110	125	160	582	706	1,390	710	264	257
10	96	124	105	110	125	170	514	762	1,400	682	257	254
11	100	124	105	110	125	180	506	842	1,410	650	248	251
12	105	124	105	110	125	170	506	902	1,380	650	235	251
13	104	120	105	110	125	160	510	970	1,320	650	235	251
14	102	120	105	110	120	150	480	1,040	1,270	682	232	248
15	100	120	105	110	120	165	518	1,140	1,160	678	228	244
16	100	120	105	110	120	190	558	1,310	1,150	638	228	241
17	102	120	105	110	120	150	626	1,400	1,260	594	222	238
18	102	120	105	110	120	160	682	1,600	1,420	562	216	232
19	104	115	105	110	115	180	698	1,770	1,460	542	213	228
20	107	115	105	110	110	205	718	1,860	1,570	530	210	228
21	113	115	105	115	110	230	714	2,000	1,700	502	207	228
22	116	115	105	115	110	250	706	2,040	1,700	472	201	225
23	120	115	105	115	115	215	662	2,170	1,660	458	192	222
24	120	115	105	110	120	205	646	2,280	1,590	449	192	210
25	120	110	105	110	120	210	574	2,250	1,540	434	189	207
26	120	110	105	110	120	220	522	2,150	1,480	419	186	207
27	126	110	105	110	120	210	510	2,050	1,470	407	192	213
28	124	110	105	115	125	245	476	1,990	1,500	407	207	216
29	130	110	105	120	135	275	461	1,910	1,630	404	213	219
30	130	110	105	120	-----	280	468	1,830	1,600	388	235	216
31	126	-----	105	120	-----	315	-----	1,750	-----	369	264	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	130	91	107	6,580
November	124	110	118	7,020
December	106	105	105	6,460
January	120	105	111	6,820
February	135	110	121	6,960
March	315	138	188	11,600
April	718	310	552	32,800
May	2,280	472	1,330	81,800
June	1,700	1,150	1,460	86,900
July	1,520	369	673	41,400
August	396	186	253	15,600
September	285	207	239	14,200
The year	2,280	91	438	318,000

## BEAR RIVER AT ALEXANDER, IDAHO

LOCATION.—Water-stage recorder in NW¼ 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 1,060 second-feet July 31, Aug. 2; minimum, 35 second-feet Mar. 2.

1911-16, 1919-32: Maximum discharge, 4,590 second-feet May 9, 1922; maximum gage height, 15.95 feet Dec. 11, 1919; minimum discharge, that of Mar. 2, 1932.

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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	276	91	169	110	306	103	342	458	6 <sup>31</sup>	536	1,050	356
2	251	155	200	195	308	35	420	458	6 <sup>34</sup>	505	1,060	288
3	280	193	160	183	319	117	482	458	6 <sup>31</sup>	505	912	301
4	259	186	183	142	262	147	586	458	6 <sup>34</sup>	488	638	259
5	259	182	162	163	224	144	764	453	6 <sup>31</sup>	542	735	271
6	219	204	109	164	244	38	794	458	5 <sup>34</sup>	536	720	328
7	193	179	216	222	106	105	854	458	4 <sup>33</sup>	517	728	338
8	204	208	203	200	208	116	928	464	4 <sup>31</sup>	523	779	338
9	208	259	157	120	211	114	954	464	4 <sup>31</sup>	529	854	447
10	208	306	185	151	169	108	801	511	4 <sup>47</sup>	482	794	493
11	99	263	175	172	148	109	678	567	4 <sup>34</sup>	333	794	370
12	179	234	178	168	191	108	786	562	4 <sup>31</sup>	499	816	536
13	206	186	79	214	175	39	904	624	3 <sup>31</sup>	692	912	536
14	158	182	167	218	123	189	936	678	3 <sup>34</sup>	651	854	548
15	196	175	202	174	225	151	928	685	4 <sup>34</sup>	598	1,000	536
16	182	146	171	173	317	98	912	699	4 <sup>39</sup>	579	1,020	482
17	175	271	158	165	243	129	839	658	5 <sup>39</sup>	536	937	436
18	58	200	132	206	334	189	757	618	4 <sup>39</sup>	658	879	319
19	238	226	166	143	283	297	706	624	4 <sup>33</sup>	523	839	542
20	186	201	77	173	232	624	631	658	4 <sup>33</sup>	560	839	476
21	155	198	205	169	104	493	624	692	5 <sup>42</sup>	612	912	476
22	84	101	153	178	185	319	586	706	5 <sup>1</sup>	658	832	471
23	182	226	163	178	239	293	567	618	4 <sup>39</sup>	678	801	498
24	130	222	162	167	148	284	560	529	4 <sup>33</sup>	794	801	360
25	162	216	86	222	191	276	493	536	5 <sup>1</sup>	895	809	246
26	172	222	103	122	103	276	458	548	505	928	779	442
27	238	139	161	241	107	276	436	579	5 <sup>36</sup>	962	678	419
28	215	201	217	236	81	280	361	624	536	1,000	586	378
29	182	141	169	167	140	271	361	644	5 <sup>39</sup>	1,050	612	400
30	189	250	115	165	-----	297	426	644	5 <sup>39</sup>	1,020	579	403
31	102	-----	167	173	-----	319	-----	638	-----	1,060	404	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	280	58	189	11,600
November	306	91	199	11,400
December	217	77	160	9,840
January	241	110	177	10,900
February	334	81	204	11,700
March	624	35	205	12,600
April	954	342	662	39,400
May	706	453	574	35,300
June	651	351	507	30,200
July	1,060	333	660	40,600
August	1,060	404	805	49,500
September	548	246	409	24,300
The year	1,060	35	396	287,000

## BEAR RIVER NEAR WESTON, IDAHO

LOCATION.—Water-stage recorder in SW¼ sec. 17, T. 16 S., R. 39 E., at Weston-Fairview highway bridge 3 miles east of Weston.

RECORDS AVAILABLE.—October 1919 to September 1932. Comparable records obtained near Preston, Idaho, October 1889 to January 1917.

EXTREMES.—Maximum mean daily discharge during year, 2,060 second-feet Apr. 16; minimum not recorded.

1919-32: 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.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	364						880	902	345	351	570	
2	331						860	1,040	324	330	546	
3	325						845	1,140	435	303	554	
4	376						965	1,180	417	279	546	
5	304						1,200	1,300	366	258	546	
6	215						1,330	1,280	466	220	542	
7	319						1,370	1,190	590	198	538	
8	268						1,420	1,140	650	190	566	
9	283						1,540	1,140	642	172	590	
10	319						1,510	1,230	562	192	594	
11	334						1,480	1,270	474	222	598	
12	228						1,480	1,320	490	220	610	
13	208						1,470	1,380	522	210	646	
14	304						1,660	1,420	542	384	674	
15	325						2,000	1,420	566	321	686	542
16	182	430	413	426	466	510	2,060	1,380	638	309	690	450
17	382						1,910	1,350	654	306		486
18	275						1,870	1,010	622	300		470
19	275						1,720	1,190	602	294		351
20	240						1,490	1,160	590	276		432
21	283						1,450	1,170	538	291		506
22	286						1,340	1,130	420	294		498
23	427						1,140	1,160	408	321		578
24	190						1,070	1,070	450	372	675	432
25	334						1,060	934	450	426		474
26	278						1,030	662	420	554		366
27	400						862	478	381	570		321
28	313						910	384	369	598		420
29	265						938	342	369	634		420
30	289						906	402	372	650		494
31	230							312		658		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	427	182	295	18,100
November			430	25,600
December			413	25,400
January			426	26,200
February			466	26,800
March			510	31,400
April	2,060	845	1,330	79,100
May	1,420	312	1,050	64,600
June	654	324	499	29,100
July	658	172	345	21,200
August			633	38,900
September			421	25,100
The year	2,060		566	412,000

## BEAR RIVER NEAR COLLINSTON, UTAH

LOCATION.—Water-stage recorder in W½ 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 4,550 second-feet May 16; minimum, 23 second-feet Oct. 4–19, July 30.

1889–1932: 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.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	236	576	207	1,350	845	2,250	2,590	1,060	592	24	372
2	24	701	737	248	1,820	1,050	2,620	2,490	1,100	358	24	884
3	24	387	781	851	1,010	975	1,890	2,560	672	192	26	924
4	23	562	766	822	1,300	1,120	2,160	2,920	565	35	26	55
5	23	480	725	546	1,500	699	2,610	3,100	1,260	40	26	184
6	23	275	908	513	569	500	2,450	3,490	1,440	151	26	886
7	23	431	1,130	1,060	442	1,580	2,640	3,850	2,040	230	26	1,000
8	23	262	688	664	1,030	1,600	2,420	3,610	1,900	285	26	948
9	23	594	818	479	847	1,200	2,430	3,520	2,110	250	26	375
10	23	430	643	969	913	1,330	1,440	3,370	2,110	100	26	30
11	23	531	690	829	1,340	1,190	2,220	3,490	1,960	210	26	28
12	23	943	487	904	1,290	1,200	2,550	3,930	1,770	271	26	28
13	23	428	633	1,050	1,050	600	2,560	4,070	1,700	246	200	28
14	23	534	660	693	680	1,100	2,900	4,200	1,830	28	28	28
15	23	542	843	559	1,410	1,010	3,700	4,390	1,710	30	26	28
16	23	479	849	595	886	1,350	3,990	4,550	1,630	29	26	28
17	23	637	534	654	1,140	1,670	3,630	4,520	1,760	30	26	28
18	23	654	419	492	522	1,520	3,800	4,130	1,856	29	26	28
19	23	624	392	786	531	2,070	3,480	3,700	1,830	588	26	28
20	177	618	596	779	1,060	4,070	3,340	3,420	1,800	491	171	28
21	506	974	497	794	574	4,480	3,700	3,340	1,770	223	26	28
22	791	574	635	648	595	4,470	3,620	3,540	1,596	24	26	28
23	534	679	471	559	617	3,750	3,370	3,480	1,200	24	26	28
24	643	671	897	1,010	798	2,890	2,700	3,480	1,280	24	26	249
25	166	426	592	588	506	3,020	2,520	3,320	1,270	24	26	28
26	831	507	1,230	661	420	2,670	2,630	2,800	1,060	24	26	26
27	582	824	890	976	989	1,310	2,430	2,240	1,050	24	161	26
28	554	805	668	708	291	2,350	2,580	3,180	610	24	26	26
29	433	670	555	740	448	2,220	2,830	1,290	574	24	26	26
30	262	969	995	873	-----	2,080	2,790	1,160	529	23	26	26
31	271	-----	1,130	1,040	-----	2,790	-----	1,030	-----	24	26	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	831	23	200	12,300
November	974	236	582	34,600
December	1,230	392	724	44,500
January	1,060	267	719	44,200
February	1,820	291	894	51,400
March	4,480	500	1,890	116,000
April	3,990	1,440	2,810	167,000
May	4,550	1,030	3,250	200,000
June	2,110	529	1,440	85,700
July	592	23	150	9,220
August	200	24	40.6	2,500
September	1,000	26	214	12,700
The year	4,550	23	1,070	780,000

## 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 1932. June 1896 to December 1912 at old station a quarter of a mile downstream; flow at present station plus that of tailrace comparable to flow at old station.

EXTREMES.—Maximum discharge during year, 1,200 second-feet May 22 (gage height, 5.25 feet); minimum, 8 second-feet several times in November and December.

1913-32: Maximum discharge (estimated), 2,000 second-feet Mar. 21, 1916 (gage height, 5.6 feet); minimum, 8 second-feet Dec. 11, 1915, and for several days in November and December 1931.

REMARKS.—Records fair Oct. 1 to May 25; good thereafter. 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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	10	8	12	12	12	20	186	720	545	32	14
2	9	10	8	12	12	12	37	263	630	511	42	14
3	9	10	8	12	12	12	37	314	545	474	45	14
4	9	10	10	12	12	12	19	369	525	440	46	13
5	9	8	9	12	12	12	19	459	650	390	39	13
6	9	8	9	12	13	12	19	373	690	341	33	13
7	9	8	9	12	13	12	18	337	630	300	29	13
8	9	8	9	12	13	12	18	373	545	280	30	13
9	9	8	10	12	17	12	18	432	545	255	30	13
10	9	8	9	12	14	12	18	486	545	238	24	13
11	9	8	9	12	11	12	21	580	605	223	24	13
12	9	8	9	13	11	12	26	635	650	207	22	13
13	9	8	9	12	11	11	36	710	630	181	19	14
14	9	9	9	13	11	11	125	809	675	184	16	36
15	9	9	9	12	11	14	150	790	770	157	16	14
16	9	9	10	13	11	11	150	745	820	135	16	14
17	9	10	10	12	11	11	192	745	790	148	15	14
18	9	10	10	12	10	11	201	820	770	123	15	14
19	9	11	10	12	10	20	178	870	770	112	15	15
20	9	9	11	12	10	33	189	954	745	101	15	14
21	9	8	10	12	10	22	150	1,020	740	85	15	14
22	9	8	10	12	11	20	123	1,110	740	82	14	15
23	9	8	10	13	11	15	114	900	750	70	16	14
24	9	8	11	12	11	15	94	750	770	66	15	14
25	9	8	11	12	12	17	107	690	760	56	26	14
26	9	8	11	12	11	17	145	615	745	52	14	14
27	9	8	11	12	11	15	142	515	735	40	16	14
28	9	8	11	12	11	17	128	479	695	40	17	14
29	9	8	11	12	12	18	118	565	635	40	15	14
30	10	8	11	12	-----	17	125	745	595	37	15	14
31	10	-----	11	12	-----	18	-----	740	-----	34	14	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	10	9	9.1	560
November	11	8	8.6	512
December	11	8	8.8	603
January	13	12	12.1	744
February	17	10	11.6	667
March	33	11	14.7	904
April	201	18	91.2	5,430
May	1,110	186	625	38,400
June	820	525	680	40,500
July	545	34	192	11,800
August	46	14	22.6	1,390
September	36	13	14.6	863
The year	1,110	8	141	102,000

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

LOCATION.—Water-stage recorder in NE¼ 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 1932.

REMARKS.—Records good. Flow is regulated by operation of power plant above gage. This canal diverts from right bank of Logan River in SE¼SW¼ 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 10 discharge measurements furnished by Utah Power & Light Co.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	59	58	56	57	62	65	88	178	180	186	186	182
2.....	60	59	57	64	62	64	94	178	182	186	186	183
3.....	60	57	63	62	60	68	126	180	180	186	186	182
4.....	61	57	68	55	51	63	143	177	180	186	186	183
5.....	61	55	71	55	59	62	142	180	180	186	188	183
6.....	59	55	63	59	63	63	137	180	180	186	186	178
7.....	59	56	58	66	61	69	129	180	180	186	186	177
8.....	60	57	62	65	58	66	130	180	180	186	186	174
9.....	59	57	65	63	49	63	129	180	180	188	186	171
10.....	58	56	62	59	63	64	130	180	180	188	186	165
11.....	59	57	61	62	61	63	147	180	182	189	186	162
12.....	60	61	61	65	57	60	165	180	180	188	186	162
13.....	60	62	60	60	58	65	172	180	180	184	186	159
14.....	59	63	55	55	58	59	139	180	182	186	186	128
15.....	59	64	51	50	57	53	143	180	182	186	186	156
16.....	60	69	46	57	56	63	177	180	180	186	184	158
17.....	60	68	54	64	56	65	172	180	180	186	184	160
18.....	60	66	71	64	53	70	171	180	180	186	184	160
19.....	60	61	68	62	52	79	176	180	182	186	183	160
20.....	60	63	65	61	53	80	177	180	182	188	180	160
21.....	61	63	68	59	60	91	178	180	182	188	176	159
22.....	61	59	70	54	61	95	178	180	180	188	180	156
23.....	62	58	63	51	61	92	177	180	180	188	186	153
24.....	64	57	61	47	57	91	177	180	180	186	186	154
25.....	63	56	61	46	57	94	177	180	180	186	169	154
26.....	64	59	61	49	58	92	177	180	183	186	178	153
27.....	62	60	60	61	59	85	177	180	186	184	177	150
28.....	60	62	62	63	60	84	180	180	177	186	178	150
29.....	61	61	62	63	65	88	180	180	184	186	184	149
30.....	58	58	57	63	-----	89	180	180	186	186	186	143
31.....	57	-----	50	62	-----	89	-----	180	-----	186	184	-----
Month	Maximum		Minimum		Mean		Run-off in		acre-feet			
October.....	64	57	60.2	3,700								
November.....	69	55	59.8	3,560								
December.....	71	46	61.0	3,750								
January.....	66	46	58.8	3,620								
February.....	65	49	58.2	3,350								
March.....	95	53	74.0	4,550								
April.....	180	88	156	9,280								
May.....	180	177	180	11,100								
June.....	186	177	181	10,800								
July.....	189	184	186	11,400								
August.....	186	169	184	11,300								
September.....	183	128	162	9,640								
The year.....	189	46	118	86,000								

## LOGAN, HYDE PARK &amp; SMITHFIELD CANAL NEAR LOGAN, UTAH

LOCATION.—Water-stage recorder in SE¼ 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 1932.

REMARKS.—Records good except those for estimated periods, which are fair. No diversions above gage. Flow regulated by head gates at diversion works. This canal diverts water from Logan River in NE¼NE¼ 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.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Avg.	Sept.
1.....	12	11						16	42	131	98	40
2.....	10	11						19	42	129	84	38
3.....	9	11						19	64	129	82	36
4.....	8	11						19	88	127	75	32
5.....	10	11						20	91	125	75	32
6.....	10	11						15	92	122	77	33
7.....	11	11						13	90	120	76	34
8.....	11	11						13	88	123	70	32
9.....	11	11					4	28	87	127	68	33
10.....	11	11						42	87	123	70	32
11.....	11	9						49	88	120	69	37
12.....	11	7						55	90	119	66	36
13.....	11	7						87	109	114	84	36
14.....		7						93	124	116	65	38
15.....		7			4			95	126	120	61	37
16.....		7	6	5		4		94	129	123	60	35
17.....		7						103	130	120	58	32
18.....		7					10	111	122	119	59	32
19.....		7					15	102	117	118	57	33
20.....		7					15	110	118	116	55	32
21.....							15	117	118	115	60	32
22.....	11						15	117	118	114	55	32
23.....							15	115	118	118	43	32
24.....							15	118	118	122	44	32
25.....							13	122	118	122	48	32
26.....		7										
27.....							11	119	117	120	52	32
28.....							11	117	117	120	61	31
29.....							11	115	122	115	67	30
30.....							11	106	126	108	55	31
31.....							10	42	129	107	54	30
								42		106	43	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....			10.8	664
November.....			8.4	500
December.....			6	369
January.....			5	307
February.....			4	230
March.....			4	246
April.....	15		7.8	464
May.....	122	13	72.0	4,430
June.....	130	42	104	6,190
July.....	131	106	120	7,380
August.....	98	43	63.6	3,910
September.....	40	30	33.5	1,990
The year.....	131		36.7	26,700



## BLACKSMITH FORK AT MUNICIPAL POWER PLANT NEAR HYRUM, UTAH

LOCATION.—Water-stage recorder in SE¼ 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.

DRAINAGE AREA.—153 square miles.

RECORDS AVAILABLE.—October 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 469 second-feet May 15 (gage height, 3.12 feet). Minimum flow, caused by regulator and estimated as 10 second-feet, occurred several times during year.

1929-32: Maximum discharge, that of May 15, 1932; minimum caused by regulation and estimated as 8 second-feet several times in 1931.

REMARKS.—Records good. Flow may be affected by operations at power plant. Discharge estimated Nov. 22, 23, 29, Jan. 3-10.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	44	49	49	52	48	60	157	223	228	107	102	84
2.....	44	49	49	50	48	62	217	289	212	107	102	84
3.....	44	48	49	50	48	62	227	321	201	107	101	84
4.....	44	47	52	46	46	60	173	335	196	107	101	84
5.....	44	47	50	47	58	58	138	380	201	107	101	84
6.....	44	47	50	49	59	138	312	200	102	100	81	81
7.....	44	47	48	52	60	146	287	189	102	98	81	81
8.....	44	47	49	54	60	132	300	180	102	98	81	81
9.....	46	47	49	57	58	134	331	172	102	100	81	81
10.....	46	47	49	55	58	138	365	165	101	100	80	80
11.....	46	46	50	49	52	57	184	388	164	104	102	79
12.....	46	47	50	49	52	54	189	396	162	107	101	79
13.....	46	47	49	49	49	54	196	397	159	110	101	80
14.....	46	46	48	48	50	54	314	445	156	104	101	80
15.....	46	47	41	44	50	57	299	441	152	101	101	80
16.....	46	50	42	48	50	58	287	392	149	101	101	79
17.....	46	50	50	49	49	62	318	375	141	102	102	79
18.....	47	52	49	50	49	70	367	380	140	105	102	79
19.....	49	52	48	50	48	117	329	380	134	105	101	76
20.....	49	52	49	50	48	151	356	378	129	102	101	80
21.....	52	50	52	50	49	120	255	382	126	105	98	80
22.....	49	50	52	50	49	108	201	388	123	105	97	84
23.....	50	49	52	50	49	100	176	325	122	104	97	86
24.....	50	49	50	48	49	98	162	275	118	102	98	86
25.....	50	48	49	44	50	104	164	264	117	102	95	86
26.....	53	47	49	46	50	100	193	251	112	101	95	84
27.....	50	47	49	47	53	91	191	234	114	102	98	76
28.....	52	49	48	48	57	97	191	222	111	102	95	77
29.....	50	50	49	48	60	117	208	237	107	101	95	76
30.....	49	50	49	48	-----	104	200	235	110	101	94	76
31.....	49	-----	48	48	-----	110	-----	223	-----	101	90	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	53	44	47.3	2,910
November.....	52	46	48.4	2,880
December.....	52	41	48.9	3,010
January.....	52	44	48.6	2,990
February.....	60	46	50.6	2,910
March.....	151	54	80.0	4,920
April.....	367	132	212	12,600
May.....	445	222	327	20,100
June.....	228	107	153	9,100
July.....	110	101	104	6,400
August.....	102	90	99.0	6,090
September.....	86	76	80.0	4,810
The year.....	445	41	108	78,700

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

LOCATION.—Water-stage recorder in NE¼ 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 1932.

EXTREMES.—Maximum discharge during year, 787 second-feet May 14 (gage height, 4.10 feet); minimum not recorded.

1913-32: Maximum discharge, about 1,620 second-feet May 15, 1917 (gage height, 6.5 feet); minimum (estimated), 10 second-feet, caused by municipal power plant shutdown on July 23.

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

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	53			52	59	145	403	293	145	130	104
2	46	53			52	59	206	602	283	143	128	104
3	47	52			52	59	235	684	298	141	128	102
4	47	52			50	58	197	701	263	139	126	102
5	47	51		50	51	58	195	628	268	143	125	101
6	47	50			54	59	172	532	270	141	125	98
7	47	50			55	59	174	523	254	139	123	98
8	47	50		50	53	58	180	554	239	139	123	99
9	47	50		50	57	57	178	602	228	137	123	96
10	48	50		49	57	57	201	674	221	137	123	96
11	48	50		48	52	56	237	694	214	139	121	96
12	48	50		51	50	54	296	684	208	139	121	96
13	48	50		48	52	52	283	667	203	141	119	96
14	48	50			52	52	374	745	199	139	119	96
15	48	50			52	53	403	701	199	135	119	96
16	48	50	50	48	51	54	394	589	193	135	118	94
17	48	51			51	58	462	538	186	137	116	94
18	49	50			47	74	396	538	182	139	116	94
19	49	50		48	48	121	447	520	172	137	114	93
20	49	51		49	49	106	492	508	172	134	114	94
21	49	50		49	50	99	377	504	158	135	112	94
22	48			46	50	98	319	508	158	134	111	96
23	46				50	96	286	409	158	132	109	96
24	46				50	96	266	366	160	128	109	99
25	47				50	101	278	352	160	126	109	93
26	52	50		48	50	94	357	332	158	128	109	96
27	51				53	91	357	314	156	130	114	91
28	52				56	94	324	301	160	128	111	93
29	52				51	59	111	332	301	148	128	112
30	51			51			102	341	301	147	128	111
31	51			52		107		290		128	107	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	52	46	48.3	2,970
November	53		50.4	3,000
December			50	3,070
January			49.0	3,010
February	59	47	51.9	2,990
March	121	52	75.9	4,670
April	492	145	295	17,600
May	745	290	518	31,900
June	293	147	202	12,000
July	145	126	136	8,360
August	130	107	118	7,260
September	104	91	96.3	5,730
The year	745		141	103,000

## WEST SIDE CANAL NEAR COLLINSTON, UTAH

LOCATION.—Water-stage recorder in SW $\frac{1}{4}$  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 1932.

REMARKS.—Canal diverts from west side of Bear River in NW $\frac{1}{4}$ SW $\frac{1}{4}$  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.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	355	103	43					0	612	655	608	348
2	355	103	41					0	612	653	610	347
3	355	102	43					0	616	652	612	344
4	351	101	40					0	634	648	612	344
5	335	102	40					0	610	646	612	395
6	291	103	36				10	0	402	646	612	468
7	297	103	36	13				0	368	650	614	468
8	301	102	27					0	371	648	612	485
9	300	102	26					0	357	652	612	555
10	289	94	25					0	333	650	610	551
11	257	85						0	0	333	648	551
12	235	85						0	0	333	648	556
13	235	78						0	45	338	603	553
14	235	79						0	85	371	509	555
15	236	80					10	0	106	423	492	544
16	236	80						0	174	493	504	546
17	235	80						0	199	502	510	527
18	235	80						0	216	529	529	521
19	235	80						0	238	544	553	505
20	234	80						0	319	544	571	477
21	233	80	17					0	413	556	599	469
22	169	68						0	436	585	616	468
23	137	44						0	440	614	625	469
24	130	44						0	498	625	625	469
25	117	44			9			0	539	641	625	469
26	114	44						0	558	648	628	469
27	113	44						0	578	659	630	471
28	109	44						0	585	659	628	471
29	107	44						0	585	659	626	471
30	105	43						0	585	657	626	468
31	104							607		610	350	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	355	104	227	14,000
November	103	43	77.4	4,610
December	43		23.0	1,410
January			• 12.0	738
February			• 10.0	575
March			• 10.0	615
April		0	• 3.3	196
May	607	0		14,300
June	659	333	521	31,000
July	655	492	610	37,500
August	632	350	593	36,500
September	556	344	478	28,400
The year	659	0	234	170,000

• Estimated.

## HAMMOND (EAST SIDE) CANAL NEAR COLLINSTON, UTAH

LOCATION.—Water-stage recorder in SE¼ 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 1932.

REMARKS.—Canal diverts from west side of Bear River in NW¼SW¼ 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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	90	31	0	140	182	167	91
2	90	24	0	140	132	166	146
3	90	20	0	141	156	166	112
4	90	15	0	140	160	164	112
5	90	14	0	136	158	164	122
6	90	14	0	83	164	165	130
7	89	14	0	68	172	166	131
8	82	13	0	72	172	164	130
9	72	13	0	92	173	164	155
10	69	13	0	92	174	163	163
11	58	13	20	92	169	163	157
12	51	13	22	91	152	164	142
13	51	12	0	91	160	161	142
14	51	12	0	91	150	160	154
15	51	6	0	94	153	161	157
16	50	0	39	110	154	160	157
17	50	0	63	110	155	162	156
18	49	0	80	109	156	160	156
19	49	0	90	109	154	156	142
20	49	0	105	110	164	155	130
21	49	0	131	109	166	155	128
22	31	0	139	109	167	154	128
23	19	0	140	136	167	154	127
24	29	0	139	142	168	155	128
25	48	0	140	154	169	154	129
26	46	0	140	171	168	147	129
27	44	0	139	176	168	110	128
28	44	0	140	182	168	109	128
29	44	0	135	181	169	99	128
30	44	0	135	180	168	77	128
31	44	-----	140	-----	168	86	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet
October	90		19		58.2		3,580
November	31		0		7.6		452
May	140		0		62.5		3,840
June	182		68		122		7,260
July	182		132		163		10,000
August	167		77		150		9,220
September	163		91		136		8,090
The year	182		0		58.4		42,400

NOTE.—No flow during months omitted.

## MALAD RIVER BELOW SPRINGS NEAR MALAD, IDAHO

LOCATION.—Staff gage in sec. 22, T. 14 S., R. 35 E., 600 feet above old dam, 2 miles below source, 7 miles by stream above confluence with Little Malad River, and 5 miles west of Malad.

RECORDS AVAILABLE.—October 1931 to September 1932 (discontinued).

EXTREMES.—Maximum discharge during year, 13 second-feet Apr. 13, 14; maximum gage height, 1.57 feet May 21; minimum discharge, 4.4 second-feet, measured Nov. 3, estimated Oct. 1-31, Nov. 1, 2, 4, 5.

REMARKS.—Records fair except those estimated, which are poor. No regulation or diversion above station.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		* 4.4	4.9	7.7	9.3	10	11			* 8.0	6.9	7.9
2			4.9	7.7	9.3	10	11			8.1	6.7	8.1
3			4.4	5.0	7.7	9.3	10	12		8.1	6.8	8.1
4			* 4.4	5.3	7.7	9.3	10	12		8.3	6.8	8.1
5				5.3	7.8	9.3	10	12		8.3	6.8	8.1
6				5.3	7.8	9.3	10	12		8.3	6.9	8.1
7				5.6	7.8	9.3	10	12		8.4	6.9	8.1
8				5.9	7.8	9.5	10	12		8.4	6.7	8.1
9				5.9	7.9	9.5	10	12		8.4	6.8	7.9
10				6.0	7.9	9.5	10	12		8.5	6.8	7.9
11				6.0	8.1	9.5	10	12	* 11	8.5	6.8	7.9
12				6.0	8.3	9.5	10	12		8.0	6.9	7.9
13				6.0	8.3	9.5	11	13		7.9	6.9	7.9
14				6.1	8.3	9.8	11	13		7.7	6.9	7.9
15				6.1	8.3	9.8	11			7.7	7.1	7.9
16	* 4.4	* 4.8	6.3	8.4	9.8	11			* 8	7.6	7.1	7.9
17			6.3	8.4	9.8	11				7.6	7.1	7.7
18			6.5	8.6	9.8	11				7.6	7.2	7.7
19			6.5	8.6	9.8	11				7.7	7.4	7.7
20			6.7	8.8	9.8	11				7.4	7.4	7.3
21				6.8	8.8	9.8	11		8.9	7.2	7.5	7.2
22				7.1	8.8	9.8	11	* 11		6.8	7.5	7.3
23				7.1	8.9	9.8	11			6.8	7.5	7.4
24				7.1	9.0	9.8	11			6.6	7.7	7.5
25			5.0	7.2	9.0	9.8	11			6.7	7.7	7.7
26			5.0	7.2	9.0	9.8	11		* 8	6.7	7.7	7.8
27			5.0	7.2	9.0	10	11			6.7	7.7	7.7
28			5.0	7.2	9.0	10	11			6.8	7.7	7.5
29			4.9	7.3	9.0	10	11			6.8	7.7	7.4
30			4.9	7.5	9.0					6.8	7.7	7.5
31				7.5	9.3		11			6.9	7.7	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			4.4	271
November			4.74	282
December			6.32	389
January	9.3	7.7	8.41	517
February	10	9.3	9.64	554
March	11	10	10.6	652
April	13		11.5	684
May			9.96	612
June			8.0	476
July	8.5	6.6	7.59	467
August	7.7	6.7	7.19	442
September	8.1	7.2	7.77	462
The year	13		8.00	5,810

\* Estimated.

## LITTLE MALAD RIVER ABOVE ELKHORN RESERVOIR, NEAR MALAD, IDAHO

LOCATION.—Staff gage on line between secs. 35 and 36, T. 12 S., R. 34 E., 2 miles below mouth of Wright Creek, 2½ miles above Elkhorn Dam, and 14 miles northwest of Malad.

RECORDS AVAILABLE.—October 1931 to September 1932 (discontinued); August 1911 to August 1913 at approximately same location.

EXTREMES.—Maximum discharge during year, 21 second-feet Apr. 12 (gage height, 0.70 foot); minimum, 11 second-feet Oct. 1 to Nov. 16, Mar. 13 (gage height, 0.46 foot).

1911-13, 1931-32: Maximum discharge, 61 second-feet Aug. 2, 1912, Apr. 1, 1913; minimum, 11 second-feet Oct. 1 to Nov. 16, 1931, Mar. 13, 1932 (gage height, 0.46 foot).

REMARKS.—Records good except those estimated, which are fair. No regulation or diversions above station.

## Discharge, in second-feet, 1931-32

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

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....			11.0	676
November.....			11.5	684
December.....	12	12	12.0	738
January.....	13	12	12.4	762
February.....	13	12	12.5	719
March.....	17	11	13.6	836
April.....	21	15	17.3	1,030
May.....	18	16	17.2	1,060
June.....	18	13	16.0	952
July.....	16	13	14.1	867
August.....	14	13	13.4	824
September.....	13	12	12.9	768
The year.....	21		13.7	9,920

## WRIGHT CREEK NEAR DANIELS, IDAHO

LOCATION.—Staff gage in sec. 8, T. 12 S., R. 35 E., a quarter of a mile east and 2 miles north of Daniels, 3 miles above confluence with Little Malad River, and 20 miles northwest of Malad.

RECORDS AVAILABLE.—October 1931 to September 1932 (discontinued).

EXTREMES.—Maximum discharge during year, 8.2 second-feet Apr. 20 (gage height, 0.87 foot); minimum, 1.2 second-feet Oct. 1 to Nov. 24 (gage height, 0.24 foot).

REMARKS.—Records good except those estimated Oct. 1 to Nov. 7, Nov. 9–23, which are poor. Flow not regulated. Small diversions above station for irrigation.

## Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			° 1.4	° 1.6	° 1.8	2.2	4.5	° 5.2	5.3	3.4	2.5	1.7
2			1.4	1.8	1.7	2.0	4.6	5.3	4.8	4.1	2.4	1.8
3			1.4	1.9	1.8	1.8	° 4.4	° 5.7	4.8	° 4.0	2.3	1.7
4			° 1.4	° 1.9	1.8	° 1.8	4.1	6.1	4.7	3.8	2.2	° 1.8
5			1.4	1.9	° 1.8	1.7	4.5	5.8	° 5.2	3.8	2.2	1.8
6			° 1.6	1.9	1.8	° 1.9	5.2	5.2	5.7	3.8	2.4	1.8
7			1.8	1.9	° 1.8	2.1	4.1	4.6	6.3	3.6	° 2.5	1.7
8			° 1.8	° 2.0	° 1.8	2.0	° 4.0	4.8	5.6	3.6	2.6	1.6
9			1.8	2.0	1.8	1.9	4.0	° 5.0	6.7	3.6	2.6	1.7
10			1.8	° 2.0	° 1.8	1.9	5.4	5.1	5.8	° 3.5	2.4	1.7
11			1.8	° 1.9	1.8	1.8	6.8	5.2	5.3	3.4	2.3	° 1.7
12			1.8	° 1.9	° 1.8	° 2.1	6.6	5.3	° 5.1	3.9	2.2	1.7
13			° 1.7	° 1.8	1.8	° 2.3	° 6.5	5.6	4.9	4.2	2.3	1.4
14			1.6	° 1.8	° 1.7	2.6	6.4	5.7	4.7	3.6	° 2.0	1.4
15			1.6	° 1.7	° 1.6	° 2.6	° 6.2	° 5.7	4.9	3.6	1.8	1.4
16		1.2	1.2	1.6	° 1.7	1.5	2.5	6.1	5.7	4.7	3.5	1.8
17				° 1.6	° 1.6	° 1.4	2.6	° 6.1	5.3	4.7	° 3.4	1.8
18				1.6	1.6	1.4	3.1	6.1	5.4	4.1	3.4	° 1.4
19				1.6	° 1.6	° 1.4	3.9	5.8	5.7	° 4.2	3.2	1.8
20				° 1.6	1.5	1.4	3.1	8.2	5.6	4.2	3.1	1.8
21				1.7	° 1.6	° 1.6	2.9	6.7	5.3	4.1	2.8	° 1.8
22				1.8	1.6	1.7	3.0	6.1	° 5.3	3.9	2.8	1.8
23				° 1.8	1.6	° 1.8	2.4	5.8	5.3	3.6	2.8	1.7
24		1.2		1.8	° 1.6	1.8	3.2	5.8	5.2	3.6	° 3.0	1.7
25		1.3		° 1.8	1.7	° 1.9	3.0	6.1	5.2	3.4	3.2	° 1.7
26		1.3	1.9	1.8	° 2.0	2.6	6.6	5.1	° 3.2	3.1	1.4	1.7
27		° 1.4	2.0	° 1.8	2.1	° 2.6	° 6.4	4.9	2.9	2.7	1.8	1.7
28		1.4	° 2.0	° 1.8	2.1	2.6	6.2	4.7	2.6	2.6	° 1.8	1.7
29		° 1.4	2.0	1.8	2.1	2.9	5.7	° 4.7	2.7	2.8	1.8	1.7
30		1.5	1.3	1.9		3.1	5.2	4.7	2.6	2.6	1.8	1.8
31			° 1.5	° 1.8		3.3		4.5		° 2.6	1.7	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			1.20	74
November	1.5		1.24	74
December	2.0	1.3	1.67	103
January	2.0	1.5	1.77	109
February	2.1	1.4	1.75	101
March	3.9	1.7	2.50	154
April	8.2	4.0	5.67	337
May	6.1	4.5	5.25	323
June	6.7	2.6	4.48	267
July	4.2	2.6	3.34	205
August	2.6	1.4	2.02	124
September	1.8	1.4	1.63	97
The year	8.2		2.71	1,970

° Interpolated

° Field estimate.

## DEVIL CREEK NEAR MALAD, IDAHO

LOCATION.—Staff gage in sec. 8, T. 14 S., R. 36 E., 400 feet below dam site for proposed reservoir, half a mile northeast of St. John, 9 miles above confluence with Malad River, and 2½ miles northwest of Malad.

RECORDS AVAILABLE.—October 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 18 second-feet Apr. 5, 12, May 5; maximum gage height, 1.20 feet Apr. 5; minimum discharge, 0.9 second-foot Dec. 16–20, Jan. 2–13, 19, Feb. 14, 15, 29, Mar. 1–6, 10, 11, 15, 16 (gage height, 0.15 foot).

REMARKS.—Records good except those estimated Oct. 1–13, 15–31, Nov. 1, 2, 4–7, 9–22, which are poor. Stream receives part of Birch Creek water above station. Flow regulated by Evans Dividers (an irrigation diversion works) 3 miles upstream. Small diversions above station.

## Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		1.8	1.7	0.95	1.0	0.9	2.2	12	12	4.6	1.9	4.0
2			1.4	.9	1.1	.9	3.1	13	10	4.4	1.9	3.8
3		1.8	1.2	.9	1.2	.9	8.6	13	11	3.8	1.9	4.0
4			1.2	.9	1.2	.9	14	15	13	3.2	1.9	3.8
5		1.8	1.1	.9	1.1	.9	18	18	13	2.6	1.8	3.8
6			1.1	.9	1.0	.9	11	16	15	2.4	2.1	3.8
7		1.1	2.0	1.0	.9	1.0	8.9	14	11	2.4	1.9	3.8
8			3.0	1.0	.9	1.0	.95	12	11	2.4	1.8	3.8
9				1.0	.9	1.0	.95	12	10	2.4	1.7	4.4
10				1.0	.9	1.1	.9	15	16	2.4	1.8	4.1
11			3.0	.9	1.0	.9	17	16	9.6	2.6	1.8	2.8
12				1.0	.9	1.0	18	14	9.8	2.4	3.3	2.6
13				.9	.95	1.2	15	15	9.6	2.6	3.1	2.5
14		1.1		1.3	.95	.9	1.0	15	9.3	2.2	3.2	2.6
15			2.0	1.1	1.0	.9	.9	16	15	9.1	2.2	3.2
16				.9	1.0	.95	.9	13	15	8.9	2.1	3.1
17				.9	1.0	.95	.95	14	15	9.3	2.1	3.1
18				.9	.95	1.1	1.2	14	15	8.5	2.1	3.4
19		1.1		.9	.9	1.1	1.4	14	15	7.8	2.1	3.2
20			1.2	.9	1.0	1.1	1.5	15	15	7.8	2.1	3.2
21				.9	1.1	1.0	1.6	14	15	6.4	2.2	3.4
22				.95	1.0	.95	1.4	13	14	6.4	2.1	3.3
23			1.2	1.0	1.2	.95	1.3	15	14	6.1	2.1	3.6
24		1.4	1.2	1.0	1.2	.95	1.4	14	15	6.0	2.1	3.7
25			1.2	1.0	1.1	.95	1.5	13	15	6.4	2.1	2.7
26				1.1	.95	1.4	1.4	13	14	6.4	2.1	2.6
27			1.2	1.0	1.0	.95	1.3	14	13	7.0	2.1	2.8
28		1.8	1.2	1.0	1.0	.95	1.4	16	11	4.9	2.1	2.8
29			1.1	.95	.9	.9	1.6	15	12	4.9	2.2	3.1
30			1.1	1.0	1.0	.95	1.5	13	12	4.6	2.1	2.8
31			1.0	1.0	1.0	1.4	1.4	12		2.0	3.6	
Month								Maximum	Minimum	Mean	Run-off in acre-feet	
October										1.27	78	
November									1.1	1.80	107	
December								1.7	.9	1.06	65	
January								1.2	.9	.97	60	
February								1.2	.9	1.01	58	
March								1.6	.9	1.16	71	
April								18	2.2	13.2	786	
May								18	11	14.3	879	
June								15	4.6	8.83	525	
July								4.6	2.0	2.46	151	
August								3.7	1.7	2.73	168	
September								4.4	2.1	3.34	199	
The year								18	.9	4.34	3,150	

• Interpolated.

• Field estimate.



## DEEP CREEK ABOVE THIRD CREEK, NEAR MALAD, IDAHO

LOCATION.—Staff gage in sec. 21, T. 14 S., R. 37 E., a third of a mile above mouth of Third Creek, 14½ miles above confluence with Malad River, and 5 miles east of Malad.

RECORDS AVAILABLE.—October 1931 to September 1932 (discontinued).

EXTREMES.—Maximum discharge during year, 3.7 second-feet May 5, 6 (gage height 0.62 foot); minimum, 0.05 second-foot Aug. 24, 25 (gage height, 0.02 foot).

REMARKS.—Records good except those estimated, Oct. 1–12, 14–31, Nov. 1–3, 5–19, 21, 22, Sept. 30, which are poor. No regulation. Small diversions for irrigation above station.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0.15	0.25	0.2	0.4	2.6	2.4	1.7	0.3	0.2	0.15
2		0.15	.2	.25	.2	.4	3.6	2.4	1.4	.25	.2	.15
3			.2	.25	.2	.3	3.2	2.6	1.4	.25	.2	.15
4		.15	.2	.25	.2	.3	3.4	2.6	1.2	.25	.2	.15
5		.15	.2	.25	.2	.3	2.4		1.2	.25	.2	.15
6		.2	.2	.25	.2	.3	2.0	3.7	2.2	.25	.2	.2
7		.2	.2	.25	.2	.3	1.9	3.1	2.0	.25	.2	.15
8			.2	.25	.2	.3	1.7	3.1	1.7	.25	.2	.14
9		.2	.2	.25	.25	.3	1.6	3.1	1.6	.25	.2	.15
10			.2	.25	.25	.3	1.7	2.8	1.4	.2	.25	.2
11			.2	.25	.25	.3	1.6	2.6	1.3	.2	.2	.2
12			.2	.25	.25	.3	1.9	2.4	1.2	.3	.2	.2
13	.25	.15	.2	.25	.25	.3	2.0	2.3	1.0	.5	.15	.2
14			.2	.25	.25	.3	2.8	2.3	.95	.4	.2	.2
15			.15	.25	.25	.4	2.4	2.2	.95	.3		.2
16			.15	.25	.25	.4	2.3	2.0	1.0	.25	.15	.15
17			.15	.25	.25	.6	2.3	2.4	.95	.25	.15	.15
18		.1	.15	.25	.25	.8	2.2	2.2	.8	.25	.15	.2
19	.25		.15	.25	.25	1.2	2.0	1.7	.8	.25	.15	.2
20		.1	.15	.25	.25	1.2	3.1	1.7	1.0	.2	.15	.2
21		.1	.2	.25	.25	1.0	2.8	1.7	.7	.2	.15	.2
22		.1	.2	.25	.25	.8	2.3	2.0	.7	.2	.15	.2
23		.1	.2	.25	.25	.8	2.0	1.9	.7	.2	.15	.2
24	.2	.1	.2	.25	.25	.8	2.0	1.7	.7	.2	.05	.25
25		.25	.3	.25	.3	.95	2.0	2.0	.6	.2	.05	.25
26		.2	.3	.2	.3	.95	1.9	2.0	.6	.2	.15	.25
27		.2	.3	.2	.4	1.2	2.6	1.7	.6	.2	.2	.2
28		.2	.25	.2	.4	.95	2.8	1.6	.5	.2	.4	.2
29		.2	.25	.2	.4	1.2	2.3	1.6	.4	.6	.7	.2
30		.2	.25	.2		1.2	2.2	1.6	.3	.3	.2	.2
31			.25	.2		1.9		1.7		.25	.2	
Month	Maximum						Minimum		Mean		Run-off in acre-feet	
October	0.25						0.15		0.23		14	
November	.3						.2		.16		9.5	
December	.25						.2		.20		12	
January	.4						.3		.24		15	
February	1.9						.3		.26		15	
March	3.6						1.6		.67		41	
April	3.7						1.6		2.32		138	
May	2.2						.3		2.28		140	
June	.6						.05		1.05		62	
July	.7						.1		.28		16	
August	.25								.20		12	
September									.19		11	
The year	3.7						.05		.67		486	

• Interpolated.

## DEEP CREEK BELOW FIRST CREEK, NEAR MALAD, IDAHO

LOCATION.—Staff gage in sec. 7, T. 14 S., R. 37 E., immediately below proposed reservoir site, 1 mile north and  $3\frac{1}{2}$  miles east of Malad, and 12 miles by stream above confluence of Deep Creek and Malad River.

RECORDS AVAILABLE.—October 1931 to September 1932.

EXTREMES.—Maximum discharge during year, 64 second-feet May 14 (gage height, 3.00 feet); minimum, 1.0 second-foot Oct. 1 to Nov. 4.

REMARKS.—Records good except those estimated Oct. 1-12, 14-31, Nov. 1-3, 5-20, 22, which are poor. Small diversions above station. No regulation.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	1.0	1.0	1.1	1.5	2.7	3.2	11	39	29	10	5.6	3.6	
2			1.1	1.5	2.7	3.4	19	45	30	10	5.7	3.5	
3			1.1	1.9	2.9	3.5	20	48	26	9.8	5.8	3.4	
4			1.0	1.1	2.1	3.0	19	54	27	9.6	5.5	3.3	
5			1.2	1.2	2.3	3.0	18	61	27	9.6	5.4	3.4	
6	1.0	1.3	1.3	2.5	3.0	3.5	19	54	28	9.7	5.2	3.4	
7			1.5	1.3	2.6	3.0	3.6	18	54	29	9.3	5.2	3.5
8			1.2	2.6	3.1	3.7	19	54	30	9.4	5.1	3.4	
9			1.2	2.7	3.1	3.7	18	51	28	9.2	5.2	3.3	
10			1.5	1.3	2.7	3.1	3.8	20	56	28	8.9	4.8	3.1
11	1.0	1.4	1.2	2.6	3.1	3.8	21	58	28	9.3	4.8	3.2	
12			1.3	2.7	3.2	3.9	23	61	27	8.8	5.0	3.4	
13			1.4	2.8	3.4	3.9	25	59	26	8.9	5.1	3.5	
14			1.4	2.8	3.1	3.9	30	64	25	9.0	4.8	3.4	
15			1.4	2.7	3.0	4.0	33	63	24	8.9	4.6	3.3	
16	1.0	1.4	1.3	2.7	2.9	3.9	33	62	23	8.5	4.6	3.0	
17			1.3	2.7	2.9	4.2	39	61	21	8.1	4.3	3.1	
18			1.3	2.7	2.8	4.4	40	58	20	7.6	3.8	3.5	
19			1.3	2.8	2.8	5.0	43	60	19	7.6	4.0	3.4	
20			1.3	2.8	2.7	4.6	39	57	19	7.2	4.1	3.3	
21	1.0	1.4	1.4	2.8	2.9	4.6	43	57	18	6.9	3.9	3.2	
22			1.4	1.5	2.7	3.0	5.0	36	53	17	6.6	4.0	3.1
23			1.5	1.5	2.8	2.8	5.8	37	50	17	6.2	3.7	3.3
24			1.5	1.5	2.6	2.8	6.3	36	48	16	6.0	3.3	3.4
25			1.5	1.5	2.5	2.9	6.9	39	44	15	6.2	3.5	3.4
26	1.0	1.5	1.5	2.4	3.0	7.0	40	41	15	6.0	3.7	3.1	
27			1.4	1.5	2.4	2.9	6.9	39	37	14	5.8	3.6	2.9
28			1.4	1.5	2.5	2.9	7.7	39	38	13	5.5	3.6	3.0
29			1.4	1.5	2.6	3.0	8.0	35	36	12	5.8	3.4	3.0
30			1.1	1.5	2.7	7.8	36	35	11	6.1	3.5	3.1	
31	1.0	1.5	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
1			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
2			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
3			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
4			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
5			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
6			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
7			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
8			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
9			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
10			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
11			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
12			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
13			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
14			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
15			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
16			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
17			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
18			1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8	
19	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
20	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
21	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
22	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
23	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
24	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
25	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
26	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
27	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
28	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
29	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
30	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
31	1.5	2.7	9.2	30	30	5.5	3.8	3.8	3.8	3.8			
Month						Maximum	Minimum		Mean		Run-off in acre-feet		
October									1.0		61		
November									1.36		81		
December						1.5	1.1		1.34		82		
January						2.8	1.5		2.53		156		
February						3.4	2.7		2.96		170		
March						9.2	3.2		4.91		302		
April						43	11		29.6		1,760		
May						64	30		51.2		3,150		
June						30	11		22.1		1,320		
July						10	5.5		7.94		488		
August						5.8	3.3		4.47		275		
September						3.6	2.9		3.28		195		
The year						64			11.1		8,040		

## THIRD CREEK NEAR MALAD, IDAHO

LOCATION.—Staff gage in sec. 21, T. 14 S., R. 37 E., half a mile above confluence with Deep Creek and 5½ miles east of Malad.

RECORDS AVAILABLE.—October 1931 to September 1932 (discontinued).

EXTREMES.—Maximum discharge during year, 42 second-feet May 14 (gage height, 2.20 feet); no flow Oct. 1 to Mar. 31, Aug. 24 to Sept. 30.

REMARKS.—Records good except those estimated July 31 to Aug. 23, which are poor. Entire stream diverted to Deep Creek half a mile upstream, except during flood season.

*Discharge, in second-feet, 1931-32*

Day	Apr.	May	June	July	Aug.	Day	Apr.	May	June	July	Aug.
1-----	1.0	20	11	2.8	1	16-----	17	37	6.8	1.9	1
2-----	1.8	22	9.1	2.6		17-----	19	34	6.4	2.1	
3-----	2.8	25	8.4	2.6		18-----	21	33	5.8	2.1	
4-----	3.5	32	8.3	2.6		19-----	20	32	5.7	1.9	
5-----	2.8	33	8.4	2.6		20-----	20	25	5.8	1.7	
6-----	2.8	31	8.8	2.4		21-----	22	24	5.5	1.7	
7-----	2.6	28	8.7	2.4		22-----	20	23	5.4	1.2	
8-----	2.6	25	8.8	2.2		23-----	16	20	5.0	1.2	
9-----	2.8	25	8.2	2.2		24-----	14	19	4.9	.5	
10-----	2.8	32	8.0	2.2		25-----	12	16	4.6	.5	
11-----	3.9	37	7.7	2.4		26-----	12	15	4.2	.3	
12-----	5.0	39	7.3	2.4		27-----	13	15	3.7	.3	
13-----	6.4	40	6.9	2.3		28-----	14	15	3.6	.1	
14-----	12	42	6.8	2.5		29-----	13	14	3.2	.3	
15-----	14	39	6.7	2.3		30-----	14	12	2.9	.3	
						31-----		11		.1	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April-----	22	1.0	10.5	625
May-----	42	11	26.3	1,620
June-----	11	2.9	6.55	390
July-----	2.8	.1	1.70	105
August-----		0	.07	4.3
The year-----	42	0	3.77	2,740

NOTE.—No flow during months omitted.

## WEBER RIVER BASIN

## WEBER RIVER NEAR OAKLEY, UTAH

**LOCATION.**—Staff gage in NE¼ 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 1932.

**EXTREMES.**—Maximum mean daily discharge during year, 2,200 second-feet May 17 (gage height, 7.70 feet); minimum, 34 second-feet Oct. 7–10 (gage height, 4.22 feet).

1904–32: Maximum discharge, 4,000 second-feet July 6, 1907, June 5–7, 1909; minimum, 29 second-feet several days in September 1931 (gage height, 4.18 feet).

**REMARKS.**—Records fair. No large diversions above gage. Flow slightly regulated 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 one discharge measurement furnished by Weber River water commissioner.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	42				60	74	235	950	580	141	100
2	38	42				66	79	370	720	515	134	90
3	38	42				74	82	355	950	485	134	81
4	38	42				82	82	355	1,030	455	127	78
5	38	42				82	79	355	1,300	375	122	73
6	38	42				82	74	355	1,400	350	111	68
7	34	42				82	79	355	1,030	305	104	68
8	34	42				82	82	405	900	285	100	68
9	34	48				60	82	460	720	265	97	65
10	34	45				53	91	515	720	248	97	65
11	45	45				53	100	575	870	265	85	65
12	42	a 50				53	110	700	1,210	248	81	65
13	38	a 50				a 55	133	840	1,500	230	81	62
14	38	a 55				60	145	990	1,900	230	90	62
15	38	a 50				53	172	990	2,200	215	97	62
16	38		a 50	a 50		53	202	1,700	2,000	186	97	62
17	38					53	235	1,150	1,800	200	95	58
18	38					56	270	1,420	1,500	186	97	58
19	38				56	60	270	1,420	1,400	215	81	58
20	38					60	270	1,420	1,400	206	81	58
21	45					56	270	1,510	1,500	200	81	54
22	45					56	270	1,600	1,500	186	81	54
23	45	a 50				53	202	1,300	1,600	178	73	54
24	45				a 55	53	202	1,030	1,600	178	73	54
25	42				a 55	53	202	1,120	1,400	167	73	54
26	42				a 55	53	202	1,030	1,210	159	73	54
27	38				53	53	202	870	1,120	151	100	54
28	42				53	56	187	870		151	85	54
29	42				60	56	187	1,210	870	146	85	54
30	42					56	202	1,400	720	151	146	54
31	42					63		1,120		146	111	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	45	34	39.5	2,430
November		42	47.6	2,830
December			a 50	3,070
January			a 50	3,070
February			a 55	3,160
March	82	53	60.9	3,740
April	270	74	161	9,580
May	1,600	235	884	54,400
June	2,200	720	1,260	75,000
July	580	146	253	15,600
August	146	73	97.3	5,980
September	100	54	63.5	3,780
The year	2,200	34	252	183,000

• Estimated.

## WEBER RIVER NEAR COALVILLE, UTAH

LOCATION.—Water-stage recorder in NE¼ sec. 20, T. 2 N., R. 5 E., at river bridge above high-water contour for Echo Reservoir, 1½ miles south of Coalville.

DRAINAGE AREA.—438 square miles.

RECORDS AVAILABLE.—April 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 1,780 second-feet May 22 (gage height, 4.00 feet); minimum, 25 second-feet Oct. 10 (gage height, 0.08 foot).  
1927-32: Maximum discharge, 1,960 second-feet June 17, 1929 (gage height, 4.30 feet); minimum, 14 second-feet several days in July 1931 (gage height, -0.10 foot).

REMARKS.—Records good. Numerous irrigation diversions above and below station. About 16,000 acre-feet diverted from Weber River Basin into Provo River Basin May 10 to Aug. 4 through Weber-Provo and Shingle Creek diversions. Flow slightly regulated by two small reservoirs above station. Gage-height record and results of three discharge measurements furnished by Weber River water commissioner.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	34	49					235	356	930	344	76	79
2.....	35	49					332	456	780	306	73	82
3.....	35	49					472	505	762	247	72	73
4.....	34	49					510	550	840	227	71	68
5.....	32	50					500	580	960	184	67	71
6.....	30	48					302	425	1,200	166	63	64
7.....	30	45				110	302	410	972	147	59	58
8.....	31	48					344	540	738	130	59	57
9.....	32	59					306	600	630	113	57	58
10.....	27	59					324	685	595	105	57	57
11.....	33	66					356	804	630	115	55	57
12.....	32	59					380	912	798	108	51	51
13.....	30	59					384	997	1,050	115	50	51
14.....	29	64				111	445	1,120	1,300	107	51	51
15.....	28	72			90	115	450	1,210	1,430	98	51	49
16.....	30	72	70	70		111	458	1,160	1,450	86	49	49
17.....	30	70				119	520	1,170	1,370	100	48	47
18.....	31					128	555	1,240	1,290	98	50	43
19.....	40					177	535	1,330	1,180	86	49	44
20.....	38					279	625	1,340	1,160	73	44	42
21.....	38					201	635	1,410	1,220	72	39	44
22.....	35					187	500	1,660	1,210	76	39	45
23.....	32					177	396	1,480	1,190	81	35	53
24.....	33	70				177	356	1,190	1,190	79	34	58
25.....	34					177	332	1,160	1,030	79	33	62
26.....	39					166	360	1,000	900	81	38	59
27.....	47					150	414	900	822	73	66	59
28.....	53					172	392	846	605	79	56	59
29.....	53					214	400	1,020	550	81	55	58
30.....	47					179	340	1,210	432	92	102	59
31.....	48					175		1,090		82	79	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	53	27	35.5	2,180
November.....		45	62.6	3,720
December.....			70	4,300
January.....			70	4,300
February.....			90	5,180
March.....	279		143	8,790
April.....	635	25.5	415	24,700
May.....	1,660	356	946	58,200
June.....	1,450	432	974	58,000
July.....	344	72	123	7,560
August.....	102	33	55.7	3,420
September.....	82	42	56.9	3,390
The year.....	1,660	27	253	184,000

## ECHO RESERVOIR AT ECHO, UTAH

LOCATION.—Temporary staff gages in NW¼SW¼ sec. 30, T. 3 N., R. 5 E., near outlet works at left end of Echo Dam, 1 mile southeast of Echo.

RECORDS AVAILABLE.—October 1930 to September 1932.

REMARKS.—Echo Dam constructed by the United States Bureau of Reclamation and completed in 1931 has an impounding capacity of 74,000 acre-feet. Gage-height record furnished by Weber River water commissioner. Reservoir empty Oct. 1 to Dec. 3.

*Contents, in acre-feet, 1931-32*

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0	641	724	848	9,050	40,300	55,300	62,800	47,400	24,200
2.....	0	668	712	848	9,670	41,400	55,200	62,500	46,600	24,300
3.....	0	707	696	842	10,600	42,700	55,100	62,200	45,600	24,300
4.....	72	712	685	886	11,600	44,200	55,500	62,100	44,800	24,300
5.....	76	674	690	990	12,800	45,800	56,200	61,800	44,000	24,200
6.....	72	685	712	1,190	13,700	46,900	56,900	61,500	43,200	24,100
7.....	90	729	729	1,380	14,400	47,500	57,400	61,300	42,300	23,800
8.....	140	740	707	1,550	15,200	48,300	58,100	61,000	41,500	23,400
9.....	194	977	696	1,710	15,900	49,200	58,100	60,600	40,600	22,900
10.....	224	707	782	1,800	16,700	50,000	58,100	60,200	39,700	22,500
11.....	212	690	830	1,890	17,400	50,800	58,000	59,800	38,900	22,200
12.....	216	690	830	1,980	18,400	51,300	58,100	59,500	38,000	21,900
13.....	240	685	824	2,080	19,200	51,900	58,100	59,300	37,100	21,500
14.....	262	663	806	2,260	20,200	52,400	58,200	58,600	36,300	21,100
15.....	275	641	770	2,350	21,400	52,800	58,100	58,000	35,500	20,700
16.....	285	663	764	2,450	22,600	52,800	58,900	57,400	34,600	20,300
17.....	297	690	752	2,580	23,900	52,600	59,400	56,800	33,700	19,900
18.....	339	718	770	2,730	25,500	52,600	60,100	56,200	32,900	19,400
19.....	339	718	752	3,070	27,000	52,700	60,900	55,700	32,000	19,000
20.....	346	724	764	3,660	28,400	52,800	60,900	55,200	31,200	18,600
21.....	328	712	800	4,320	30,100	52,900	60,700	54,700	30,300	18,300
22.....	332	702	806	4,680	31,600	53,100	60,600	54,100	29,400	18,000
23.....	322	696	788	5,220	32,700	54,100	60,700	53,400	28,500	17,700
24.....	311	702	788	5,660	33,700	54,100	60,700	52,900	27,600	17,500
25.....	392	702	806	6,110	34,500	54,300	60,700	52,300	26,800	17,300
26.....	467	685	818	6,540	35,300	54,700	60,700	51,700	25,900	17,200
27.....	580	668	806	6,890	36,300	54,800	61,500	51,100	25,100	17,100
28.....	663	707	812	7,250	37,300	55,600	62,100	50,400	24,600	17,100
29.....	696	712	842	7,710	38,200	55,500	62,600	49,600	24,100	17,100
30.....	685	712	-----	8,220	39,300	55,300	62,900	48,900	24,100	17,100
31.....	663	724	-----	8,610	-----	55,500	-----	48,200	24,200	-----

## WEBER RIVER AT ECHO, UTAH

LOCATION.—Water-stage recorder in NE¼ 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.

DRAINAGE AREA.—732 square miles.

RECORDS AVAILABLE.—April 1927 to September 1932.

EXTREMES.—Maximum discharge during year, 1,870 second-feet May 22 (gage height, 5.20 feet); minimum, 4 second-feet Mar. 20 to Apr. 22.

1927-32: Maximum discharge, 2,210 second-feet May 23, 1929; minimum, 4 second-feet several times in May 1931, March, April 1932.

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 15 discharge measurements furnished by Weber River water commissioner.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	58				143	4	6	1,270	530	522	81
2	38	58				143	4	6	1,100	508	534	81
3	39	58				109	4	6	841	410	539	94
4	38	60				71	4	6	690	403	534	123
5	37	58				50	4	76	797	400	514	180
6	35	57				56	4	326	1,120	378	506	198
7	34	53				64	4	367	970	368	506	286
8	34	54				73	4	310	852	372	510	316
9	37	67				82	4	442	858	368	514	298
10	34	68				92	4	502	808	364	502	235
11	37	77				94	4	838	880	361	494	244
12	37	74				61	4	980	934	350	494	256
13	37	72				36	4	1,140	1,200	446	494	271
14	36	74				84	4	1,390	1,500	478	490	280
15	35	83				98	4	1,660	1,400	462	490	289
16	36	85	75	90	110	90	4	1,800	1,350	462	490	292
17	37	80				90	4	1,730	1,260	462	490	292
18	37	76				36	4	1,730	1,080	450	498	280
19	47					13	4	1,760	1,240	410	494	265
20	46					4	4	1,840	1,380	410	486	256
21	46					4	4	1,850	1,370	426	486	247
22	45					4	4	1,720	1,290	426	482	220
23	41					4	5	1,810	1,260	426	478	198
24	41					4	5	1,490	1,260	434	474	174
25	41	70				4	5	1,240	1,180	446	474	158
26	48					4	5	1,200	731	466	470	117
27	57					4	6	862	510	474	392	94
28	64					4	6	1,070	462	482	319	94
29	64					4	6	1,340	482	490	182	94
30	60					4	6	1,460	522	502	72	94
31	58					4		1,380		506	82	
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October						64	34	42.4	2,610			
November						85	53	68.4	4,070			
December								75	4,610			
January								90	5,530			
February								110	6,330			
March						143	4	49.5	3,040			
April						6	4	4.4	262			
May						1,850	6	1,040	64,000			
June						1,500	462	1,020	60,700			
July						530	350	434	26,700			
August						539	72	451	27,700			
September						316	81	203	12,100			
The year						1,850	4	300	218,000			

## WEBER RIVER AT DEVILS SLIDE, UTAH

LOCATION.—Staff gage in SW $\frac{1}{4}$  sec. 19, T. 4 N., R. 4 E., 500 feet downstream from highway bridge at Devils Slide and a quarter of a mile below Lost Creek.

DRAINAGE AREA.—1,090 square miles.

RECORDS AVAILABLE.—February 1905 to September 1932.

EXTREMES.—Maximum mean daily discharge during year, 2,440 second-feet May 16 (gage height, 4.26 feet); minimum, 40 second-feet Oct. 7, 8 (gage height, 0.61 foot).

1905-32: Maximum discharge, 6,000 second-feet May 22, 1920; minimum, 21 second-feet 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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	45	73	57	120	128	189	98	275	1,450	587	511	103
2.....	43	73	63	109	120	186	140	346	1,240	587	528	103
3.....	48	71	63	106	122	182	204	478	996	446	523	101
4.....	45	73	84	131	143	134	189	489	894	435	523	114
5.....	45	73	93	120	112	109	226	546	920	435	517	155
6.....	41	71	84	109	114	112	158	863	1,020	404	506	172
7.....	40	71	80	109	131	120	158	891	1,090	384	506	300
8.....	40	69	75	125	140	125	155	779	920	384	517	318
9.....	43	86	80	143	158	140	155	1,030	1,040	375	506	341
10.....	43	82	93	134	162	137	169	1,080	870	365	500	238
11.....	43	96	114	137	175	143	200	1,430	1,010	355	499	242
12.....	46	91	101	131	155	128	246	1,650	920	300	478	246
13.....	46	93	98	131	162	103	258	1,680	1,240	500	472	270
14.....	45	96	98	134	165	84	318	2,030	1,320	478	472	275
15.....	45	98	93	109	162	152	346	2,280	1,280	467	472	283
16.....	45	117	82	89	143	146	370	2,440	1,400	451	472	300
17.....	41	103	77	93	128	155	446	2,240	1,200	462	472	288
18.....	43	82	73	117	131	122	478	2,240	1,130	511	494	266
19.....	52	73	82	131	134	103	435	2,230	1,400	399	478	266
20.....	52	106	96	134	101	137	494	2,280	1,410	384	467	254
21.....	52	77	128	137	114	112	440	2,280	1,420	425	467	242
22.....	52	71	122	114	143	96	365	2,150	1,300	414	462	230
23.....	52	84	131	106	146	84	309	2,210	1,280	414	462	196
24.....	52	86	134	103	128	89	266	1,970	1,280	414	462	193
25.....	53	86	128	114	125	98	254	1,520	1,200	414	456	172
26.....	61	86	73	103	155	93	254	1,520	723	462	446	158
27.....	65	103	75	98	149	84	266	1,140	656	467	435	106
28.....	75	96	86	98	152	84	266	1,160	546	478	318	106
29.....	75	86	103	112	165	98	266	1,350	523	478	254	101
30.....	75	77	117	112	-----	89	258	1,760	593	517	120	98
31.....	71	-----	128	112	-----	91	-----	1,580	-----	517	114	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	75	40	50.8	3,120
November.....	117	69	85.0	5,060
December.....	134	57	93.9	5,770
January.....	143	89	117	7,190
February.....	175	101	140	8,050
March.....	189	84	120	7,380
April.....	494	98	273	16,200
May.....	2,440	275	1,480	91,000
June.....	1,450	523	1,080	64,300
July.....	587	300	442	27,200
August.....	528	114	448	27,500
September.....	341	98	208	12,400
The year.....	2,440	40	379	275,000



## WEBER RIVER AT GATEWAY, UTAH

LOCATION.—Water-stage recorder in NW¼SW¼ 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 1932.

October 1889 to July 1903 at station 1 mile downstream, known as Weber River near Uinta, Utah. Records are comparable.

EXTREMES.—Maximum discharge during year, 3,580 second-feet May 15 (gage height, 6.04 feet); minimum, 78 second-feet several times in October (gage height, 0.55 foot).

1889–1903, 1919–32: Maximum discharge, 7,980 second-feet May 31, 1896; minimum, 46 second-feet Sept. 6, 1931 (gage height, 0.36 foot).

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.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	129		197		236	668	788	1,960	698	585	243
2	81	126		156		240	866	1,150	1,770	710	595	233
3	81	126		156		194	908	1,250	1,540	692	606	223
4	81	126		167		173	776	1,320	1,320	656	595	230
5	79	124	150	207	170		692	1,430	1,320	662	580	246
6	79	124		194			585	1,480	1,560	639	560	266
7	79	124		164			570	1,520	1,730	612	565	344
8	79	124		167	197	160	595	1,530	1,380	595	570	381
9	81	126	156	179	236		617	1,830	1,380	580	575	419
10	83	129	145	182	274		774	2,080	1,220	622	560	446
11				179	270		770	2,470	1,260	634	565	442
12	83	132	142	182	286		878	2,790	1,250	634	565	437
13	83	137	153	182	253	161	920	2,950	1,450	628	590	437
14	85	134	145		246	185	1,290	3,300	1,600	628	565	437
15	87	139			246	223	1,260	3,490	1,740	580	565	442
16	89	148			240							
17	91	156		170	223	249	1,260	3,470	1,610	560	565	468
18	94	158			217	306	1,410	3,350	1,840	606	545	464
19	96	142			207	419	1,440	3,250	1,480	644	565	464
20	96	137			207	950	1,330	3,240	1,520	570	570	455
21	96	153		167		950	1,400	3,310	1,680	514	560	446
22			150									
23	98	148		167		500	1,350	3,270	1,660	536	560	446
24	100	134		170		381	1,110	3,150	1,580	532	550	428
25	102	134				332	968	2,860	1,540	527	536	402
26	102	137				372	848	2,640	1,500	532	536	397
27	100				225	460	752	2,130	1,430	532	532	381
28												
29	112			170		385	716	2,020	1,250	540	570	364
30	119	140				381	740	1,770	950	555	617	332
31	122					450	758	1,620	782	560	536	321
	129		148			446	830	1,870	722	560	486	298
	129		158			360	788	2,090	722	590	356	266
	134		197			482		2,000		590	280	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	134	79	95.2	5,850
November	158	124	136	8,090
December	197		151	9,280
January	207	156	173	10,600
February	274		216	12,400
March	950		326	20,000
April	1,440	570	928	55,200
May	3,490	788	2,300	141,000
June	1,960	722	1,420	84,500
July	710	514	597	36,700
August	617	280	548	33,700
September	468	223	372	22,100
The year	3,490	79	606	439,000

## WEBER RIVER NEAR PLAIN CITY, UTAH

**LOCATION.**—Chain gage in SE¼ 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 1932. Records obtained in 1904 by State engineer.

**EXTREMES.**—Maximum discharge during year, 5,800 second-feet May 16 (gage height, 18.38 feet); minimum discharge, 5 second-feet Aug. 25.

1904-32: 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. Discharge estimated Oct. 12, Nov. 11, Jan. 14, July 14. 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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	66	195	269	298	581	1,630	2,140	2,140	94	44	113
2	13	66	190	269	301	571	1,900	2,270	1,900	92	44	81
3	13	65	186	261	304	561	2,630	2,710	1,640	92	43	56
4	12	65	190	256	289	508	2,370	3,130	1,380	90	43	49
5	14	63	225	267	292	467	2,070	3,510	1,470	89	43	44
6	16	63	218	260	314	454	1,740	3,390	1,690	84	42	42
7	15	63	206	275	359	440	1,550	3,290	2,090	81	39	42
8	14	69	209	278	419	467	1,650	3,290	1,610	76	38	41
9	16	75	213	283	537	503	1,650	3,670	1,510	79	38	38
10	21	87	218	288	607	581	1,660	4,050	1,380	69	34	34
11	27	88	221	283	586	522	1,810	4,500	1,210	69	9	32
12	28	90	228	275	566	485	2,050	4,780	1,150	78	9	22
13	29	95	243	269	527	494	2,200	5,000	1,070	90	10	13
14	33	97	201	248	494	489	2,610	5,420	1,000	80	10	12
15	39	131	173	228	467	489	3,170	5,690	1,140	76	12	11
16	47	142	146	243	440	508	2,980	5,770	1,200	62	12	12
17	50	138	148	267	428	561	3,100	5,600	1,240	63	15	22
18	49	136	146	269	390	758	3,330	5,090	1,200	63	14	35
19	49	136	148	269	337	1,080	3,070	4,830	1,180	66	14	37
20	49	138	148	264	353	2,480	3,330	4,680	1,210	68	27	38
21	48	144	168	261	390	1,550	3,330	4,510	1,020	69	23	39
22	45	152	238	258	366	1,240	2,790	4,410	908	66	18	41
23	45	166	289	256	359	1,110	2,300	4,330	836	61	12	41
24	45	204	286	238	366	1,010	2,160	3,490	770	56	7	42
25	49	223	261	228	382	1,280	2,240	3,130	576	53	5	43
26	54	213	238	230	398	1,140	2,080	2,530	398	51	12	41
27	53	211	221	235	449	1,040	1,940	2,360	411	84	58	39
28	51	206	240	240	480	1,230	2,160	1,870	278	70	102	38
29	55	206	261	245	551	1,420	2,270	1,910	140	58	79	39
30	58	199	264	267	-----	1,120	2,110	2,290	120	53	18	39
31	62	-----	267	275	-----	1,110	-----	2,220	-----	44	158	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	62	12	35.9	2,210
November	223	63	127	7,560
December	289	146	212	13,000
January	283	228	260	16,000
February	607	289	415	23,900
March	2,480	440	847	52,100
April	3,330	1,550	2,330	139,000
May	5,770	1,870	3,740	230,000
June	2,140	120	1,130	67,200
July	94	44	71.8	4,410
August	181	5	38.5	2,370
September	113	11	39.2	2,330
The year	5,770	5	771	560,000

## CHALK CREEK AT COALVILLE, UTAH

LOCATION.—Water-stage recorder in SE¼ sec. 8, T. 2 N., R. 5 E., 300 feet above highway bridge in Coalville and a third of a mile above confluence with Weber River. 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 1932.

EXTREMES.—Maximum discharge during year, 603 second-feet May 14 (gage height, 2.83 feet); minimum, about 2 second-feet Oct. 1-9 (gage height, 0.42 foot).

1927-32: Maximum discharge, 696 second-feet May 4, 1929 (gage height, 4.0 feet); minimum, about 2 second-feet many days in September and Oct. 1-9, 1931.

REMARKS.—Records good. No diversions below station. Flow regulated by irrigation diversions above. Gage-height record and results of 13 discharge measurements furnished by Weber River water commissioner.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2	5	9	11	12	15	32	172	247	103	32	16
2.....	2	6	8	11	12	13	46	209	238	96	32	16
3.....	2	6	8	11	11	14	59	230	224	90	31	16
4.....	2	6	8		13	13	51	233	234	85	29	18
5.....	2	6	9		12	15	56	233	237	78	29	18
6.....	2	5	9	12	12	15	44	204	256	69	26	18
7.....	2	5	10		12	14	44	187	234	64	26	18
8.....	2	5	10		12	14	49	218	220	56	25	17
9.....	2	5	10		14	11	43	280	209	48	21	16
10.....	3	5	11	12	14	12	54	342	201	48	21	15
11.....	3	8	11	13	15	13	63	390	201	48	19	15
12.....	3	8	11	13	13	9	76	476	201	43	18	15
13.....	3	6	11		13	11	85	531	203	44	15	14
14.....	3	7	11		13	15	120	537	211	47	14	12
15.....	3	9	11		13	15	142	490	205	46	12	12
16.....	3	9	10	12		16	180	447	201	45	10	11
17.....	3	7	9		12	15	266	439	192	43	11	11
18.....	3	8	9			16	252	436	198	48	14	16
19.....	3	9	9	12		25	187	431	183	45	12	10
20.....	3	10	9	12		33	212	384	174	42	12	11
21.....	3	9	10	12	12	23	177	410	167	41	12	12
22.....	4	9	12	12	12	21	118	442	156	37	11	12
23.....	4	9	12	12	12	20	99	327	146	35	11	12
24.....	4	9	12		13	20	90	295	140	33	10	12
25.....	4	10	12	12	13	21	85	288	142	34	10	10
26.....	4	10	12		13	20	99	268	129	33	10	10
27.....	4	10	11	12	14	18	107	256	129	30	12	12
28.....	4	9	12	12	15	23	95	247	119	31	12	10
29.....	5	9	12	12	16	28	102	278	112	33	14	12
30.....	5	9	11	12		23	142	286	106	33	26	12
31.....	5		12	12		24		262		34	19	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5	2	3.1	191
November.....	10	5	7.6	452
December.....	12	8	10.4	640
January.....	13	11	12.0	738
February.....	16	11	12.8	736
March.....	33	9	17.6	1,080
April.....	266	32	106	6,310
May.....	537	172	330	20,300
June.....	256	104	187	11,180
July.....	103	30	50.4	3,100
August.....	32	10	17.9	1,100
September.....	18	10	13.4	797
The year.....	537	2	64.1	46,500

## LOST CREEK AT DEVILS SLIDE, UTAH

LOCATION.—Water-stage recorder in SE¼ sec. 19, T. 4 N., R. 4 E., a quarter of a 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 1932 at present site; February to December 1905 at a site 150 feet above mouth of creek (published as "Lost Creek near Croyden, Utah").

EXTREMES.—Maximum discharge during year, 765 second-feet May 14 (gage height, 3.70 feet); minimum, 2 second-feet Oct. 1-7.

1905, 1921-32: Maximum discharge, about 1,390 second-feet May 11, 1923 (gage height, 4.39 feet); minimum, that of October 1931.

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

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	4	4	6	17	22	68	197	158	36	12	13
2	2	4	4	8	17	22	86	268	150	40	13	13
3	2	4	4	11	16	22	121	400	139	35	14	13
4	2	4	4	10	14	17	121	415	133	32	13	14
5	2	4	4	10	16	22	123	448	129	29	12	14
6	2	4	4	11	18	23	113	385	129	26	11	13
7	2	4	4	14	21	24	111	349	127	25	10	14
8	3	4	4	14	21	26	113	400	123	25	10	12
9	3	4	4	14	23	26	119	478	117	25	10	13
10	3	4	4	14	25	25	131	544	108	27	10	14
11	3	4	4	14	22	26	150	608	95	25	10	14
12	3	5	4	16	22	21	185	678	90	24	10	13
13	3	5	4	14	21	18	202	695	81	22	9	11
14	3	5	4	10	20	23	250	748	62	21	9	10
15	3	5	4	8	20	26	277	712	54	21	9	10
16	3	5	4	8	17	26	299	618	53	19	9	10
17	3	5	4	8	16	27	382	548	53	20	9	10
18	3	5	4	8	14	29	397	520	54	21	9	10
19	3	5	4	14	13	38	367	514	62	20	8	11
20	3	5	4	16	11	52	403	478	62	19	8	10
21	3	5	4	16	13	52	349	469	60	19	10	11
22	3	5	4	12	17	49	279	424	52	17	9	10
23	3	5	4	11	17	46	237	343	45	18	9	9
24	3	5	4	10	17	47	206	304	42	19	10	9
25	3	5	4	8	17	50	190	277	37	16	10	9
26	4	4	4	8	17	49	192	242	41	16	10	9
27	4	4	4	8	18	49	199	216	44	16	11	9
28	4	4	4	8	20	52	192	194	37	16	11	9
29	4	4	5	8	22	59	185	180	37	16	14	10
30	4	4	5	9		58	180	171	37	14	16	10
31	4		5	14		59		162		13	16	

Month	Maximum	Minimum	Mean	Run off in acre-feet
October	4	2	3.0	184
November	5	4	4.5	268
December	5	4	4.1	252
January	16	6	11.0	675
February	25	11	18.0	1,040
March	59	17	35.0	2,150
April	403	68	208	12,400
May	748	162	419	25,800
June	158	37	80.4	4,780
July	40	13	22.3	1,370
August	16	8	10.7	658
September	14	9	11.2	666
The year	748	2	69.1	50,200

## SOUTH FORK OF OGDEN RIVER NEAR HUNTSVILLE, UTAH

LOCATION.—Water-stage recorder in SE¼ 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 1921 to September 1932.

EXTREMES.—Maximum discharge during year, 1,480 second-feet May 14 (gage height, 5.35 feet); minimum, 20 second-feet Nov. 25 (gage height, 0.24 foot).  
1921-32: Maximum discharge, that of May 14, 1932; minimum, that of Nov. 25, 1931.

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

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	32	33			60	236	368	348	94	50	42
2	29	32	35			59	362	554	320	90	48	41
3	29	31	33	33		56	370	708	302	85	46	40
4	29	31	34			52	305	760	295	82	46	38
5	29	31	35			51	282	788	292	79	45	37
6	29	31	36			51	230	672	285	77	44	37
7	30	31	37			51	226	620	268	74	43	38
8	30	32	34			51	241	725	249	70	42	38
9	30	33	32			53	254	852	231	68	42	38
10	30	32	30	31		51	298	1,000	218	68	41	38
11	32	32	30			49	350	1,120	205	68	40	38
12	31	31	29			49	566	1,170	200	68	39	38
13	31	30	29			50	434	1,220	196	68	38	38
14	31	31	30			51	560	1,360	192	67	38	38
15	30	31	31			55	569	1,240	190	64	38	38
16	30	33	31			65	590	1,060	186	63	37	38
17	30	33	32			67	672	1,000	180	62	37	38
18	30	34	32			86	648	1,000	178	63	37	37
19	30	31	31	35		195	587	976	170	66	37	37
20	30	33	32			219	648	890	162	62	36	38
21	31	30			38	153	533	844	153	59	36	38
22	31	29			39	144	392	760	144	57	35	39
23	32	33			39	116	325	* 700	140	56	34	39
24	31	29			39	116	275	* 600	142	53	34	39
25	31	30			40	116	266	* 500	130	53	34	39
26	35	34	* 30		42	108	300	440	124	53	36	39
27	33	33			44	110	298	410	116	53	48	39
28	33	33			52	125	288	378	110	52	45	39
29	33	29		33	60	137	288	375	106	52	46	39
30	32	33				128	292	375	98	52	52	39
31	32					156		362		52	46	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	35	26	30.8	1,890
November	34	26	31.6	1,880
December	37		31.5	1,940
January			* 32	1,970
February	60		39.4	2,270
March	219	49	91.3	5,610
April	672	226	390	23,200
May	1,360	362	770	47,300
June	348	98	198	11,800
July	94	52	65.5	4,030
August	52	34	41.0	2,520
September	42	37	38.5	2,290
The year	1,360		147	107,000

\* Estimated.

## 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 801 second-feet May 17. No flow for several periods.

1913-32: 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 computed from records of pump operation. Flow represents pumped outflow from Utah Lake and is controlled by operation of gates and pumping plant 800 feet above gage. Pumping records furnished by Utah Lake water commissioner.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Apr.	May	June	July	Aug.	Sept.
1.....	112	64	0	0	0	0	666	678	615	79
2.....	196	58	0	0	0	0	668	660	615	79
3.....	127	78	0	0	0	0	698	666	615	90
4.....	194	79	0	0	0	0	668	693	615	179
5.....	235	54	0	0	0	0	658	681	615	426
6.....	15	14	0	0	0	15	243	703	579	434
7.....	67	15	0	0	0	15	0	731	608	318
8.....	69	13	14	0	0	0	0	731	608	333
9.....	110	15	14	0	0	203	0	727	604	120
10.....	73	14	14	0	0	401	14	731	586	370
11.....	74	14	14	0	0	548	193	722	589	404
12.....	142	18	14	0	0	578	167	672	585	318
13.....	189	28	14	0	11	615	392	592	617	352
14.....	114	14	14	0	17	623	356	680	621	397
15.....	123	14	14	0	16	643	356	680	608	431
16.....	114	14	14	0	15	742	455	672	600	452
17.....	119	14	14	0	15	801	556	627	595	452
18.....	152	14	14	0	17	754	478	663	600	289
19.....	154	14	13	0	16	706	546	617	600	131
20.....	167	14	14	10	16	668	528	641	600	402
21.....	182	14	14	15	15	668	528	643	598	346
22.....	280	14	14	14	16	657	568	643	528	465
23.....	280	14	14	14	15	623	572	629	442	381
24.....	90	12	7	14	14	623	612	641	421	332
25.....	213	0	0	14	0	623	616	640	382	359
26.....	107	0	0	14	0	623	616	629	363	372
27.....	62	0	0	14	0	623	616	554	346	380
28.....	70	0	0	14	0	623	616	653	202	459
29.....	9	0	0	14	0	623	645	625	136	468
30.....	69	0	0	14	0	623	700	632	80	431
31.....	61	-----	0	14	-----	623	-----	519	80	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	280	9	128	7,870
November.....	79	0	20.5	1,220
December.....	14	0	7.4	455
January.....	15	0	5.3	326
April.....	17	0	6.1	363
May.....	801	0	459	28,200
June.....	700	0	458	27,300
July.....	731	519	657	40,400
August.....	621	80	505	31,100
September.....	468	79	335	19,000
The year.....	801	0	216	157,000

NOTE.—No flow during months omitted.

## SALT CREEK NEAR NEPHI, UTAH

LOCATION.—Staff gage in NW¼ 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 1932.

EXTREMES.—Maximum discharge during year, about 800 second-feet July 17 (gage height, 5.0 feet); minimum, 4 second-feet Nov. 21, 22.

1925-32: Maximum discharge, that of July 17, 1932; minimum, that of Nov. 21, 1931.

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

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	6	5			9	35	47	56	43	15	13
2	6	6	5			9	71	63	55	39	14	12
3	6	6	5			9	73	83	54	38	14	11
4	6	6	6			10	43	58	62	37	14	11
5	6	6	6			9	33	58	70	31	14	11
6	6	6	6		6	10	33	52	60	29	14	11
7	6	6	6			10	33	49	54	29	14	11
8	6	7	6			10	33	56	47	28	13	10
9	6	7	6			10	35	65	44	30	13	10
10	6	6	7			11	38	78	43	28	13	10
11	6	6	7			11	42	87	52	28	13	10
12	6	6	7			10	66	110	68	24	13	10
13	6	6	7			10	86	114	71	23	13	11
14	5	6				12	83	128	74	21	13	10
15	5	6				7	12	76	128	78	19	13
16	5	7		6	7	12	81	130	73	19	13	9
17	5	6			7	12	121	131	60	100	13	9
18	5	6			7	14	87	128	57	31	13	9
19	5	5			7	19	81	126	56	26	12	9
20	5	5			7	22	70	131	58	22	11	9
21	5	4	6		7	18	56	151	60	23	11	10
22	5	4			7	17	46	117	70	23	11	10
23	5	5			7	16	44	84	76	22	11	11
24	5	5			8	16	37	68	70	20	11	11
25	6	5			8	16	35	60	64	19	11	11
26	6	5			8	17	37	58	63	18	11	11
27	6	5			9	17	36	56	57	18	18	11
28	6	5			9	22	37	62	47	18	14	11
29	6	5			10	18	37	69	44	17	13	11
30	6	5				18	42	69	44	17	18	11
31	6					23		60		16	13	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	6	5	5.6	344
November	7	4	5.6	333
December			6.0	369
January			6.0	369
February	10		6.9	397
March	23	9	13.8	848
April	121	33	54.2	3,230
May	151	47	86.3	5,310
June	78	43	59.6	3,550
July	100	16	27.6	1,700
August	18	11	13.1	806
September	13	9	10.5	625
The year	151	4	24.6	17,900

## 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 200 feet above South Fork. Zero of gage used since June 4, 1931, is 1.06 feet higher than that of gage previously used.

DRAINAGE AREA.—600 square miles.

RECORDS AVAILABLE.—November 1911 to September 1932. Records have been obtained at various points below mouth of South Fork since 1890.

EXTREMES.—Maximum discharge during year, 1,860 second-feet May 23 (gage height, 4.88 feet); minimum, 85 second-feet Oct. 1, 5.

1911–32: Maximum discharge, 3,180 second-feet June 11, 1921 (gage height, 6.13 feet, referred to gage used prior to June 4, 1931); minimum, 62 second-feet Aug. 26, 27, Sept. 8–10, 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.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	103			206	240	376	295	851	346	277	226
2	94	98			200	226	422	309	761	346	260	226
3	89	98			190	233	525	368	693	346	253	233
4	94	103			178	193	525	398	734	368	253	233
5	85	107			213	226	501	453	892	338	246	219
6	94	112			216	219	414	429	1,210	338	246	206
7	94	112		180	219	233	376	414	1,020	324	27 <sup>a</sup>	206
8	89	117	198		226	246	383	379	914	324	226	200
9	94	219			426	267	391	414	770	309	226	200
10	103	145			433	253	376	453	752	302	219	200
11	103	156			327	246	398	581	717	338	219	193
12	103	174			320	206	437	669	851	324	219	193
13	103	156		177	274	219	453	784	1,060	353	219	193
14	107	156			267	233	501	910	1,130	331	276	193
15	107	168			236	246	549	1,180	1,280	317	219	187
16	103	168			200	267	501	1,150	1,320	309	206	187
17	103	162			165	274	525	1,240	1,260	295	193	168
18	103	162		180	203	302	485	1,400	1,000	406	193	168
19	107	187			206	383	493	1,460	824	338	193	162
20	117	219			200	693	469	1,460	761	309	193	162
21	112	219			213	445	637	1,380	734	302	206	162
22	107	162		187	226	361	493	1,680	770	302	270	162
23	128	213		162	200	331	391	1,680	797	274	193	156
24	117	181			203	361	353	1,150	896	295	193	162
25	112	193			216	429	309	1,120	905	295	193	162
26	112				213	376	331	985	815	295	193	162
27	107			170	216	338	338	882	725	274	27 <sup>a</sup>	156
28	112	200			219	346	346	815	637	274	233	162
29	112				240	477	346	761	509	267	276	162
30	112					414	309	1,000	383	338	377	162
31	107			187		331		980		281	270	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	128	85	104	6,400
November	219	98	163	9,700
December			200	12,300
January			178	10,900
February	433	165	236	13,600
March	693	193	310	19,100
April	637	309	432	25,700
May	1,680	295	877	53,900
June	1,320	383	866	51,500
July	406	267	318	19,600
August	317	193	224	13,800
September	260	162	185	11,000
The year	1,680	85	341	248,000

<sup>a</sup> Estimated.



## 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 a quarter of a mile above confluence with Provo River.

DRAINAGE AREA.—30 square miles.

RECORDS AVAILABLE.—November 1911 to September 1932.

EXTREMES.—Maximum discharge during year, 104 second-feet May 21; minimum, 17 second-feet Oct. 1-10, Nov. 3.

1911-32: Maximum discharge, 123 second-feet May 27, 1922; minimum, 14 second-feet Apr. 17, 1925.

REMARKS.—Records fair. Discharge interpolated Dec. 5. Station below all diversions. Flow regulated by diversions above. Results of several discharge measurements furnished by Utah Power & Light Co.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	21	19	20	22	20	22	28	35	28	24	24
2	17	18	19	20	22	20	22	28	35	28	24	24
3	17	17	19	20	23	19	21	31	34	28	22	24
4	17	18	19	20	23	19	21	36	34	28	22	24
5	17	18	19	20	24	19	21	34	37	28	22	24
6	17	18	19	20	24	18	21	34	43	28	22	24
7	17	18	19	20	24	19	21	34	35	28	22	24
8	17	18	20	20	23	19	21	34	35	27	22	24
9	17	18	20	20	30	20	21	34	34	27	23	24
10	17	18	20	20	24	20	21	36	32	27	23	24
11	18	18	20	20	22	20	22	38	31	27	22	23
12	18	18	20	20	22	19	22	37	31	26	22	23
13	18	18	20	20	22	19	22	44	31	27	22	23
14	18	18	20	20	22	19	23	46	31	26	22	23
15	18	18	20	20	20	19	23	47	31	26	22	23
16	18	18	20	21	19	19	24	50	34	25	22	23
17	18	18	20	21	19	19	25	50	33	25	23	23
18	18	18	20	21	20	19	26	47	31	29	23	23
19	18	18	20	21	20	21	27	47	30	27	22	23
20	18	18	20	21	20	22	27	59	28	26	22	23
21	18	18	23	21	20	22	30	104	29	26	21	23
22	18	19	22	21	18	22	28	77	30	25	21	23
23	18	19	20	21	18	22	28	68	32	25	21	23
24	18	19	21	21	20	22	28	52	35	25	21	23
25	18	18	20	21	20	22	27	43	35	25	21	23
26	18	18	20	21	20	22	27	43	32	25	21	23
27	18	19	20	21	20	22	27	41	32	25	23	23
28	18	19	20	21	20	22	27	39	34	25	23	23
29	18	19	20	21	20	22	27	39	32	25	23	23
30	18	19	20	21	22	27	35	32	25	26	23	23
31	18	20	21	22	22	22	35	25	25	24	24	23

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	18	17	17.7	1,090
November	21	17	18.3	1,090
December	23	19	20.0	1,230
January	21	20	20.5	1,260
February	30	18	21.4	1,230
March	22	18	20.4	1,250
April	30	21	24.3	1,450
May	104	28	44.2	2,720
June	43	28	32.9	1,960
July	29	25	26.4	1,620
August	26	21	22.4	1,380
September	24	23	23.3	1,390
The year	104	17	24.3	17,700

## SEVIER LAKE BASIN

## SEVIER RIVER NEAR KINGSTON, UTAH

LOCATION.—Water-stage recorder in NW¼ 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 1932.

EXTREMES.—Maximum discharge during year not recorded; minimum, 12 second-feet Oct. 1-6 (gage height, 0.72 foot).

1914-32: Maximum discharge, 1,460 second-feet May 21, 1922 (gage height, 4.92 feet); minimum, 5 second-feet June 16-20, 1931 (gage height, 0.56 foot).

REMARKS.—Records fair. 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.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	20	43			162	135	121	* 563	143	* 39	162
2	12	20				149	155	132	* 552	143	* 36	* 298
3	12	21	* 35			140	158	140	* 530	135	* 33	* 298
4	12	23				135	165	171	519	129	* 30	* 298
5	12	24				123	158	215	* 519	123	26	86
6	12	25	33		* 46	121	152	219	* 563	115	24	83
7	13	26				158	140	230	* 552	108	23	75
8	14	28				168	137	215	* 497	102	20	66
9	14	28				177	146	198	* 454	102	20	53
10	14	28	* 33			168	158	188	* 433	108	19	49
11	14	28				158	174	174	433	140	21	
12	15	28				140	174	158	444	398	20	
13	16	28	33			121	174	188	413	558	18	
14	16	28				126	215	226	* 403	365	* 43	* 49
15	16	28				126	269	230	* 394	294	39	
16	16	28	* 33	* 45		132	269	285	* 374	253	39	
17	16	28				129	269	365	351	238	* 39	49
18	16	28				129	277	465	294	245	* 39	44
19	16					143	281	568	285	158	* 39	
20	16					177	281	612	285	149	* 39	
21	16		33	* 95		149	277	602	277	132	43	
22	18					132	269	596	223	100	32	
23	20		* 33			118	219	596	201	86	26	
24	20	* 35				126	191	558	181	77	* 26	* 44
25	20					152	165	519	155	75	* 26	
26	20					152	158	530	155	58	* 26	
27	19					135	184	* 546	152	49	* 742	
28	17		* 36			126	174	* 563	149	46	* 712	
29	16					132	* 143	568	143	46	607	
30	18					126	* 129	574	140	43	273	
31	19					121		574		* 41	219	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	20	12	15.7	965
November		20	29.6	1,760
December			34.2	2,100
January			45	2,770
February			74.7	4,300
March	177	118	140	8,610
April	281	129	193	11,500
May	612	121	365	22,400
June	563	140	354	21,100
July	558	41	154	9,470
August	742	13	108	6,640
September	298		79.4	4,720
The year	742	12	133	96,300

\* Estimated.

## PIUTE RESERVOIR NEAR MARYSVALE, UTAH

LOCATION.—Staff gage in NW¼ sec. 3, T. 29 S., R. 3 W., at Piute Dam, 11 miles south of Marysville.

RECORDS AVAILABLE.—March 1914 to September 1932.

REMARKS.—Gage-height record furnished by Piute Reservoir & Irrigation Co. Capacity of reservoir, 90,000 acre-feet.

*Contents, in acre-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		1,400	5,600	12,900	18,900	28,200	39,300	40,800	52,500	56,200	31,900	15,000
2.....		1,480	5,920	13,200	19,000	28,600	39,600	40,600	53,300	56,000	31,000	14,800
3.....		1,600	6,240	13,400	19,200	29,000	40,000	40,300	53,800	55,800	30,300	13,700
4.....		1,640	6,560	13,600	19,400	29,200	40,100	40,100	54,400	55,600	29,600	14,400
5.....		1,720	6,800	13,800	19,700	29,600	40,300	39,800	54,800	55,400	29,100	14,200
6.....		1,800	7,120	14,000	20,000	30,000	40,500	39,800	55,200	55,000	28,400	14,100
7.....		1,880	7,360	14,400	20,300	30,500	40,600	39,800	55,800	54,600	27,800	14,000
8.....		1,880	7,600	14,600	20,500	30,800	40,800	40,000	56,200	54,000	27,300	13,800
9.....		1,920	7,780	14,800	20,800	31,300	41,000	40,000	56,600	52,900	26,100	13,600
10.....		1,960	8,050	15,000	21,100	31,400	41,200	39,800	57,000	51,900	25,500	13,400
11.....		2,000	8,320	15,300	21,400	31,800	41,300	39,800	57,200	51,000	24,600	13,400
12.....		2,080	8,600	15,500	21,700	32,100	41,500	39,500	57,400	50,200	23,400	13,400
13.....		2,160	8,800	15,800	21,900	32,400	41,700	39,300	57,600	49,800	22,400	13,300
14.....		2,300	9,000	16,000	22,200	32,700	41,500	39,100	58,000	49,600	21,700	13,200
15.....		2,160	9,200	16,200	22,600	33,000	41,300	39,000	58,400	49,100	20,700	12,800
16.....		2,300	9,400	16,400	23,100	33,400	41,300	39,100	58,800	48,500	19,700	12,500
17.....	180	2,400	9,600	16,600	23,600	33,700	41,300	39,500	59,000	47,800	18,800	12,300
18.....	280	2,500	9,700	16,800	24,000	34,000	41,200	40,100	58,800	47,200	17,900	12,000
19.....	400	2,650	9,900	17,100	24,400	34,300	41,200	41,200	58,600	46,600	17,100	12,000
20.....	480	2,820	10,100	17,300	24,800	34,600	41,000	42,200	58,400	45,900	16,600	11,900
21.....	560	3,000	10,300	17,600	25,000	35,000	41,000	43,200	58,200	45,000	16,200	11,800
22.....	640	3,240	10,500	17,800	25,200	35,400	40,800	44,300	58,000	44,100	16,000	11,600
23.....	720	3,480	10,700	17,900	25,500	35,800	40,600	46,400	57,600	41,700	15,800	11,300
24.....	780	3,720	11,000	18,000	25,800	36,100	40,800	46,500	57,400	41,700	15,400	11,000
25.....	860	3,960	11,200	18,200	26,100	36,400	40,800	47,000	57,200	40,500	15,000	10,800
26.....	920	4,200	11,400	18,300	26,400	36,700	41,000	47,800	57,000	39,300	14,800	10,700
27.....	980	4,440	11,700	18,400	26,700	37,100	41,000	48,500	56,800	38,100	14,200	10,600
28.....	1,070	4,710	12,000	18,500	27,200	37,600	41,200	49,300	56,800	36,700	14,800	10,500
29.....	1,160	4,990	12,300	18,700	27,800	38,100	41,200	50,000	56,600	35,400	15,400	10,500
30.....	1,250	5,280	12,500	18,700	-----	38,400	41,200	50,800	56,400	34,200	15,500	10,400
31.....	1,340	-----	12,700	18,800	-----	38,800	-----	51,700	-----	33,000	15,400	-----

## 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 Marysville.

DRAINAGE AREA.—2,440 square miles.

RECORDS AVAILABLE.—May to August 1911; May 1912 to September 1932.

EXTREMES.—Maximum mean daily discharge during year, 851 second-feet July 9–11 (gage height, 2.37 feet). Minimum discharge, principally leakage, 4 second-feet (estimated) Nov. 27 to Mar. 30.

1911–32: Maximum discharge, 2,600 second-feet part of May 2<sup>d</sup> and 24, 1922 (gage height, 4.45 feet); practically no flow at times 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 7 discharge measurements furnished by Sevier River water commissioner.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	70	44					30	354	275	360	558	516
2.....	67	44					30	354	305	360	544	516
3.....	60	44					30	354	353	360	502	516
4.....	57	44					32	354	401	359	495	516
5.....	57	54					28	354	481	401	453	516
6.....	54	62					28	348	467	495	432	432
7.....	57	76					28	365	446	544	509	459
8.....	57	76					28	377	446	715	557	459
9.....	57	76					52	377	453	851	537	401
10.....	57	70					70	383	481	851	625	348
11.....	57	67					114	439	481	851	648	290
12.....	57	67					142	495	453	835	670	270
13.....	57	54					214	481	401	779	700	316
14.....	57	54					219	453	321	779	692	365
15.....	57	54					219	439	197	779	715	389
16.....	47	54	4	4		4	246	413	255	779	678	354
17.....	44	54					300	371	407	779	662	354
18.....	44	54					326	290	502	763	625	300
19.....	44	54					326	228	523	747	502	185
20.....	44	54					326	242	523	747	488	189
21.....	44	6					326	255	523	755	488	206
22.....	47	6					326	228	523	755	509	242
23.....	47	6					326	232	474	763	551	228
24.....	49	6					242	255	419	763	551	210
25.....	47	6					185	275	354	763	572	185
26.....	44	6					232	326	360	763	572	164
27.....	38						265	316	360	763	572	103
28.....	36	4					265	280	360	763	572	107
29.....	34						285	280	360	763	572	131
30.....	34						343	275	360	678	551	172
31.....	38					10		275		618	516	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	70	34	50.3	3,090
November.....	76	4	40.3	2,400
December.....			4	246
January.....			4	246
February.....			4	230
March.....	10		4.2	258
April.....	343	28	186	11,100
May.....	495	228	338	20,800
June.....	523	197	410	24,400
July.....	851	360	687	42,200
August.....	715	432	568	34,900
September.....	516	103	313	18,600
The year.....	851	4	218	158,000

## SEVIER RIVER NEAR VERMILION, UTAH

LOCATION.—Water-stage recorder in NE¼ 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 1932.

EXTREMES.—Maximum discharge during year, 290 second-feet Sept. 4 (gage height, 4.50 feet); minimum, about 2 second-feet Mar. 22-25, 28-31.

1914-31: 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 good. 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 7 discharge measurements furnished by Sevier River water commissioner.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	39	27		70	106	138	114	152	184	181	268
2	28	39		65	73	101	154	114	150	167	176	272
3	25	39			73	98	114	110	127	158	172	276
4	29	39		64	75	82	91	101	105	163	160	281
5	43	41	30	64	75	71	91	91	91	138	158	276
6	36	41		64	75	70	99	79	76	121	144	263
7	24	43	37		100	68	101	71	94	71	115	204
8	16	42			125	73	92	64	114	22	119	108
9	16	42			134	70	74	63	132	4	119	117
10	16	44			134	64	62	58	103	4	92	105
11	16	44	30		130	60	38	50	86	4	98	127
12	15	47			123	60	12	40	86	4	123	110
13	15	46		65	114	58	3	32	89	68	158	115
14	9	46	27		105	56	3	31	106	190	134	112
15	3	46			99	55	3	33	115	201	138	81
16	4	46			92	60	3	44	115	193	158	86
17	4	45			92	60	3	59	106	179	148	68
18	5	44	30			55	3	68	99	170	130	81
19	26					53	172	70	101	170	130	74
20	26			65		31	187	105	110	176	121	68
21	10	45		67	90	5	150	160	115	193	68	74
22	9		65			2	123	163	123	187	46	92
23	33		70			2	101	176	138	184	41	91
24	45		71			2	105	170	165	196	31	91
25	48	50	71	65	91	2	110	165	184	245	18	91
26	46		71		94	3	112	156	231	263	21	73
27	44		71	63	99	3	114	154	272	210	40	55
28	42	40	71		103	2	115	154	228	196	123	48
29	42		71		105	2	115	152	210	187	158	44
30	40		70	65		2	115	152	196	187	187	44
31	39		65			2		150		193	234	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	48	3	25.4	1,560
November			43.1	2,560
December			42.8	2,630
January			64.9	3,990
February	134	70	96.9	5,570
March	106	2	44.5	2,740
April	187	3	86.8	5,160
May	176	31	102	6,270
June	272	76	134	7,970
July	263	4	149	9,160
August	234	18	121	7,440
September	281	44	126	7,500
The year	281	2	86.2	62,600

\* Estimated.

## SEVIER RIVER BELOW SAN PITCH RIVER, NEAR GUNNISON, UTAH

LOCATION.—Water-stage recorder in NE¼ 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 1932.

EXTREMES.—Maximum discharge during year, 485 second-feet Feb. 9 (gage height, 2.53 feet); minimum, 44 second-feet Oct. 25.

1917-32: 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 is diverted above station during irrigation season. Flow regulated by operation of reservoirs and numerous irrigation diversions above. Gage-height record and results of 10 discharge measurements furnished by Sevier River water commissioner.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	58	a 100	a 120	131	242	92	200	233	212	248	239
2	105	56			a 133	239	129	159	233	212	239	284
3	95	56				230	260	159	233	209	215	302
4	91	56				215	230	159	209	212	200	309
5	89	56				203	194	148	176	206	185	316
6	95	58	101	129	135	176	176	139	164	191	167	320
7	99	62			156	164	167	126	153	173	164	316
8	93	62			220	162	162	114	142	156	150	302
9	81	67			362	162	156	104	134	94	139	224
10	79	69			380	162	148	104	129	63	153	188
11	77	77	65	a 110	312	164	134	109	139	59	148	176
12	77	83			270	156	124	119	129	54	126	162
13	73	81			257	142	111	129	116	54	139	153
14	69	83			242	139	102	126	126	68	153	132
15	65	85			230	137	92	182	134	121	182	129
16	65	103	a 65	101	a 210	137	87	239	156	179	153	129
17	64	107				137	71	218	156	200	188	134
18	54	105				142	88	239	162	212	197	119
19	52	107				145	83	239	153	212	176	116
20	54	105				170	111	221	137	212	170	121
21	58	a 90	a 120	89	194	170	212	227	121	212	170	119
22	60				194	121	230	264	106	212	153	129
23	56				200	114	221	302	109	212	126	150
24	54				209	104	224	245	111	212	116	150
25	46				230	102	197	236	132	215	106	153
26	62	a 90	141	a 100	239	116	197	242	156	221	97	150
27	65				242	129	261	227	182	274	74	139
28	62				248	129	288	209	227	278	85	109
29	56				251	119	274	188	221	254	148	97
30	56				111	242	206	194	248	182	92	92
31	56	a 105	a 93	121	104	227	227	227	248	212	212	212

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	105	46	71.4	4,390
November	107	56	81.8	4,870
December			96.7	5,950
January			108	6,640
February	380		217	12,500
March	242	102	153	9,410
April	288	71	169	10,100
May	302	104	187	11,500
June	233	106	159	9,480
July	278	54	183	11,300
August	248	74	160	9,840
September	320	92	182	10,800
The year	380	46	147	107,000

• Estimated.

## SEVIER BRIDGE RESERVOIR NEAR JUAB, UTAH

LOCATION.—Staff gage in NW¼ 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 1932.

REMARKS.—Reservoir capacity, 250,000 acre-feet. Gates closed and storage begun Oct. 24, but gage not read until Dec. 9. Gage not read Jan. 18–20, contents estimated. Gage-height record furnished by Consolidated Sevier Bridge Reservoir Co.

*Contents, in acre-feet, 1931–32*

Day	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	-----	18,000	26,100	40,000	49,200	54,000	25,200	18,300	3,220	0
2	0	-----	18,300	26,400	40,400	49,400	54,400	24,500	17,600	3,220	25
3	0	-----	18,600	26,700	41,000	49,700	54,400	24,200	16,900	3,220	764
4	0	-----	18,800	27,000	41,500	49,900	54,200	23,600	16,400	3,220	1,090
5	0	-----	19,000	27,300	41,800	50,300	54,200	23,100	15,800	3,070	1,430
6	0	-----	19,100	27,500	42,100	50,600	54,200	22,600	15,100	2,910	1,620
7	0	-----	19,300	27,700	42,500	50,900	53,500	22,100	14,000	2,840	2,000
8	0	-----	19,500	28,200	42,800	51,100	52,900	22,100	12,900	2,760	2,270
9	0	9,280	19,600	29,500	43,100	51,400	52,300	22,200	11,400	2,130	2,550
10	0	9,620	19,800	30,400	43,300	51,600	51,400	22,200	9,620	1,490	2,840
11	0	9,960	20,000	31,300	43,700	51,900	50,600	22,300	8,010	917	3,220
12	0	10,300	20,100	31,900	44,100	52,100	49,300	22,600	6,620	132	3,610
13	0	10,600	20,500	32,400	44,500	52,400	47,900	22,800	5,230	0	3,820
14	0	11,000	20,600	32,900	44,700	52,500	46,500	22,900	4,360	0	4,070
15	0	11,200	20,800	33,300	45,100	52,700	45,300	23,100	2,840	0	4,360
16	0	11,600	21,000	34,200	45,300	52,800	43,900	23,300	2,340	0	4,620
17	0	12,000	21,200	34,600	45,600	52,800	42,000	23,600	2,060	0	4,920
18	0	12,300	22,000	34,800	45,800	52,900	40,700	23,300	1,810	0	5,230
19	0	12,700	22,900	35,100	46,000	53,000	39,100	23,100	2,060	0	5,500
20	0	13,100	23,700	35,400	46,300	53,000	37,600	23,000	2,410	0	5,770
21	0	13,500	24,500	35,800	46,500	52,500	36,100	22,800	2,770	0	5,860
22	0	13,800	24,800	36,300	47,000	52,300	34,400	22,600	3,070	0	5,910
23	0	14,100	24,900	36,700	47,200	52,100	32,700	22,100	2,840	0	5,770
24	-----	14,600	25,000	37,000	47,600	52,300	31,300	21,500	2,770	0	5,590
25	-----	15,000	25,100	37,300	47,700	52,400	30,100	21,000	2,620	0	5,590
26	-----	15,400	25,200	37,900	47,800	52,400	29,200	20,500	2,480	0	5,540
27	-----	15,800	25,200	38,400	47,900	52,400	28,200	20,000	2,340	0	5,540
28	-----	16,300	25,300	38,900	48,200	52,500	27,500	19,600	2,200	0	5,540
29	-----	16,700	25,400	39,500	48,400	53,200	27,100	19,100	2,480	0	5,590
30	-----	17,200	25,600	-----	48,700	53,700	26,500	18,700	2,840	0	5,910
31	-----	17,600	25,800	-----	48,900	-----	26,000	-----	3,070	0	-----

## SEVIER RIVER NEAR JUAB, UTAH

LOCATION.—Water-stage recorder in NE¼ 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 1932.

EXTREMES.—Maximum discharge during year, 1,100 second-feet May 21 (gage height, 4.82 feet); minimum, about 2 second-feet Oct. 1-6, Oct. 25 to Jan. 31, seepage through dam.

1911-32: 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. Discharge estimated Oct. 1-6, Oct. 25 to Mar. 31. No diversions between this station and that near Gunnison. Flow regulated by gates in Sevier Bridge Dam. Gage-height record and results of four discharge measurements furnished by Sevier River water commissioner.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2						5	6	551	487	215	160
2	2						5	68	547	522	238	107
3	2						5	129	547	515	262	135
4	2						5	129	487	525	287	138
5	2						5	178	481	571	282	141
6	2						5	178	374	698	280	144
7	179						5	394	146	814	280	146
8	253						5	394	146	849	377	146
9	253						5	394	146	912	463	127
10	253						5	451	146	933	445	77
11	253						5	564	90	888	422	77
12	253						5	723	40	835	463	77
13	229						5	744	42	625	405	77
14	173						5	838	42	463	190	45
15	114						5	989	42	419	185	5
16	90	2	2	2	3	4	5	1,010	42	366	192	5
17	90						5	1,020	155	236	190	5
18	90						5	1,020	243	77	215	5
19	90						5	1,020	241	84	211	5
20	90						230	1,040	277	87	197	45
21	90						323	1,070	305	87	192	77
22	90						323	1,080	305	160	192	165
23	90						173	961	350	215	173	213
24	68						173	842	388	238	141	178
25	2						173	800	385	297	114	152
26	2						173	730	383	297	107	152
27	2						79	653	388	292	104	152
28	2						6	554	394	229	97	152
29	2						6	499	391	188	124	45
30	2						6	499	410	188	185	5
31	2							525		188	202	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	253	2	89.5	5,500
November			2	119
December			2	123
January			3	123
February			4	173
March				246
April	323	5	58.7	3,490
May	1,080	6	629	38,700
June	551	42	285	16,800
July	933	84	422	26,900
August	463	97	240	14,800
September	213	5	98.6	5,870
The year	1,080	2	154	112,000



## EAST FORK OF SEVIER RIVER NEAR KINGSTON, UTAH

LOCATION.—Water-stage recorder in SW¼ 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 1932. Recrds obtained 1½ miles above Rockyford Bridge March 1913 to April 1914; also three quarters of a mile north of Kingston May to September 1912.

EXTREMES.—Maximum discharge during year, 550 second-feet Aug. 22 (gage height, 4.48 feet); minimum not recorded.

1913-32: 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 seven discharge measurements furnished by Sevier River water commissioner.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29					24	14	132	193	193	48	199
2	16					27	15	135	193	190	45	256
3	17					27	17	137	193	184	45	249
4	11					25	21	139	187	184	45	242
5	11					26	22	151	182	182	45	236
6	10					25	22	147	193	177	48	229
7	14				16	25	21	166	196	174	48	226
8	14					26	19	199	193	171	48	223
9	14					26	19	202	190	171	51	219
10	14					25	20	204	182	171	51	210
11	14					25	20	207	179	171	51	196
12	14					24	20	207	177	190	48	187
13	14					24	19	207	174	190	42	182
14	14					25	18	187	179	182	45	177
15	14					25	18	199	179	182	45	171
16	14	20	16			25	18	223	179	179	48	161
17	15			16		25	20	232	179	164	48	182
18	16					24	24	232	177	159	56	126
19	17					24	21	249	171	156	193	99
20		17				26	24	256	176	114	193	17
21					18	22	24	242	179	69	223	12
22						26	132	232	171	62	406	12
23						24	128	210	177	59	361	12
24						29	126	199	179	52	226	12
25						29	128	199	177	50	216	12
26				14		27	128	196	179	50	213	12
27						22	128	193	176	51	246	12
28	18				14	18	130	193	179	50	278	12
29	18					18	130	190	179	50	338	12
30	20					18	132	187	179	50	232	12
31	21			16		15		193		50	202	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	29	10	16.0	984
November			20	1,190
December			16	984
January			16	984
February			17	979
March	29	15	24.2	1,490
April	132	14	52.6	3,130
May	256	132	196	12,100
June	199	166	186	11,100
July	193	50	132	8,120
August	406	42	135	8,300
September	256	12	129	7,680
The year	406	10	78.3	57,000

\*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 1932.

REMARKS.—Records fair. Gage was read about once weekly from Nov. 15 to Mar. 4; discharge estimated for intervening days and also for Mar. 22-27. 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 ten discharge measurements furnished by Sevier River water commissioner.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	28	27	38	15	6	7	3	36	58	33	60	28
2.....	34	27	38	15	6	7	3	36	51	40	46	28
3.....	41	27	38	14	6	10	3	36	56	34	35	29
4.....	36	23	38	14	6	16	3	36	61	27	39	29
5.....	30	19	38	14	6	16	3	48	60	40	29	29
6.....	28	19	38	13	6	16	3	56	60	65	30	29
7.....	39	19	38	13	7	16	3	56	49	77	29	29
8.....	53	19	38	12	7	16	3	56	43	79	16	28
9.....	51	19	38	12	7	16	5	60	36	79	5	27
10.....	47	19	38	12	7	16	7	69	45	76	25	28
11.....	46	18	38	11	7	15	17	72	60	79	35	25
12.....	50	18	38	11	7	15	28	73	60	82	26	24
13.....	52	18	38	11	7	15	34	74	60	88	24	25
14.....	54	18	38	11	7	15	34	75	49	80	24	27
15.....	54	18	38	10	7	15	34	75	45	73	61	26
16.....	54	18	38	10	7	15	31	60	45	73	68	25
17.....	54	18	38	10	7	15	20	46	45	74	67	23
18.....	47	18	38	10	7	15	25	48	43	75	65	12
19.....	35	18	38	10	7	15	30	49	42	68	67	25
20.....	34	18	38	10	7	6	34	45	42	65	66	30
21.....	14	18	16	10	7	0	37	31	42	53	61	30
22.....	0	18	16	9	7	0	32	23	55	47	59	31
23.....	0		16	9	7	3	32	17	64	47	58	30
24.....	0		16	9	7	7	33	21	56	47	57	30
25.....	8		16	9	7	7	33	29	50	23	55	30
26.....	8	37	16	8	7	7	35	25	28	19	56	30
27.....	8		16	8	7	7	36	25	0	46	60	30
28.....	8		16	8	7	7	36	20	30	65	65	30
29.....	22		16	8	7	7	36	22	34	63	35	30
30.....	27		16	7		7	36	32	33	67	30	30
31.....	27		16	7		7		47		63	28	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	54	0	31.9	1,960
November.....		18	24.3	1,450
December.....	38	16	30.2	1,860
January.....	15	7	10.6	652
February.....	7	6	6.8	391
March.....	16	0	10.8	664
April.....	37	3	22.3	1,330
May.....	75	17	45.1	2,770
June.....	64	0	46.7	2,780
July.....	88	19	59.6	3,660
August.....	68	5	44.5	2,740
September.....	31	12	27.6	1,640
The year.....	88	0	30.2	21,900

## BEAVER RIVER BASIN

## BEAVER RIVER NEAR BEAVER, UTAH

LOCATION.—Water-stage recorder in SE¼ sec. 18, T. 29 S., P. 6 W., a quarter of a 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 1932.

EXTREMES.—Maximum discharge during year, 570 second-feet May 21 (gage height, 5.77 feet); minimum, 6 second-feet Nov. 5 (gage height, 3.25 feet). 1914-32: Maximum discharge, 785 second-feet May 25, 1922 (gage height, 6.31 feet); minimum, about 5 second-feet Aug. 29, 1931 (gage height, 3.19 feet).

REMARKS.—Records good except those for estimated periods, Nov. 19-21, Nov. 23 to Feb. 20, which are fair. No irrigation diversions above station. Water diverted by Beaver River Power Co. but returned to stream several miles above gage. Flow slightly regulated by operation of power plants and storage in Kents Lake.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	16				25	24	54	196	96	39	25
2	19	16				21	32	75	191	98	37	25
3	17	16				19	37	95	180	90	36	26
4	15	16				18	38	88	163	88	35	25
5	14	14				17	34	80	153	82	33	24
6	14	14				17	31	69	153	81	31	22
7	14	16				17	29	65	136	78	30	23
8	14	16				17	33	63	127	84	28	22
9	13	17				19	35	68	120	80	27	21
10	15	14			15	18	40	80	118	78	27	21
11	15	16				17	50	102	177	96	28	20
12	17	15				16	59	120	151	110	28	21
13	14	15				17	63	136	161	75	29	20
14	16	15				17	66	165	178	70	29	19
15	16	14				16	72	209	183	75	29	19
16	16	15	13	12		17	84	250	178	80	29	17
17	16	12				17	93	306	161	77	27	18
18	16	12				18	96	363	147	77	27	19
19	21	12				22	93	411	149	73	27	18
20	22	11				24	95	411	144	68	26	18
21	22	11			16	20	77	470	142	70	24	18
22	22	10			17	19	65	374	142	66	24	19
23	18				17	19	55	284	149	60	24	23
24	18				17	19	54	290	147	55	22	23
25	18				17	22	52	290	142	53	22	18
26	18	12			18	21	50	281	170	49	22	19
27	16				19	18	45	290	171	50	36	20
28	16				20	19	44	290	110	50	31	19
29	18				22	19	44	284	170	46	24	21
30	17					17	44	241	172	49	24	23
31	16					19		209		42	25	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	22	13	16.6	1,020
November	17		13.6	809
December			13	799
January			12	738
February	22		16.0	920
March	25	16	18.7	1,150
April	96	24	54.5	3,240
May	470	54	210	12,900
June	196	92	146	8,690
July	110	42	72.5	4,460
August	39	22	28.4	1,750
September	26	17	20.9	1,240
The year	470		52.0	37,700

## BEAVER RIVER AT ADAMSVILLE, UTAH

LOCATION.—Water-stage recorder in S½ sec. 30, T. 29 S., R. 8 W., 100 yards below highway bridge on road from Milford to Beaver, a quarter of a mile above mouth of Indian Creek, and three quarters of a mile south of Adamsville.

DRAINAGE AREA.—272 square miles.

RECORDS AVAILABLE.—December 1913 to September 1932.

EXTREMES.—Maximum discharge during year, 455 second-feet Feb. 9 (gage height, 3.95 feet); no flow Oct. 1–31.

1913–32: 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.

## Discharge, in second-feet, 1931–32

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7				67	21	3	43	•10	13	13
2	9				57	16	2	37	12	11	12
3	8				50	13	2	36	10	10	11
4	8				41	11	2	36	8	12	8
5	8			• 30	40	8	3	26	6	• 11	9
6	8				42	8	6	84	9	• 10	8
7	11			33	41	2	8	54	• 10	10	8
8	14			48	40		10	36	• 11	10	7
9	18			196	38		8	29	12	10	7
10	18			181	39		7	25	• 30	10	6
11	18			69	38		7	22	46	9	6
12	18	• 25		52	33		7	18	135	10	6
13	19			43	36		12	18	77	9	6
14	19			39	35		13	20	29	7	6
15	20			43	33		28	18	29	6	6
16	21		• 25	41	35		49	21	26	6	7
17	23			40	34	• 1	70	24	24	8	8
18	23			38	32		126	18	30	8	9
19				36	32		198	16	20	6	8
20				33	34		190	18	14	8	6
21				• 34	40		215	15	13	8	6
22				• 35	36		224	14	12	8	7
23				• 36	33		129	18	13	6	12
24		• 23	26	38	32		108	14	12	6	11
25		26	26	73	32		119	13	13	4	8
26		26		117	31		103	10	14	6	11
27		26		76	31	3	94	8	13	38	11
28		26		80	31	16	80	6	13	28	11
29		26		80	31	10	87	• 6	14	20	12
30		26			30	5	67	• 8	19	14	12
31		• 26			30		53		15	11	
Month	Maximum			Minimum			Mean			Run-off in acre-feet	
November							7			1,080	
December							25.3			1,560	
January							25			1,540	
February	117						56.6			3,260	
March	67			30			37.2			2,290	
April	21						4.4			262	
May	224			2			65.5			4,030	
June	84			6			23.7			1,410	
July	135			6			22.5			1,380	
August	38			4			10.7			658	
September	13			6			8.6			512	
The year	224			0			24.8			18,000	

• Estimated.

NOTE.—No flow during October.

## BEAVER RIVER AT ROCKYFORD DAM, NEAR MINERSVILLE, UTAH

LOCATION.—Staff gage in NW¼ 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 1932.

EXTREMES.—Maximum discharge during year, 109 second-feet July 9–20 (gage height, 1.63 feet); minimum, 4 second-feet Oct. 24 to Feb. 21 (gage height, 0.78 foot).

1913–32: Maximum discharge, 727 second-feet June 10, 1921 (gage height, 3.53 feet); minimum (estimated), 0.3 second-foot Mar. 19, 20, 1914.

REMARKS.—Records good. Gage read about once weekly from Oct. 1 to Apr. 16, before and after every change in gate openings Apr. 17 to Sept. 30; discharge estimated for intervening days. No diversions between dam and gage. Flow regulated by operation of gates at Rockyford Dam. Gage-height record furnished by Beaver County Irrigation Co.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun?	July	Aug.	Sept.
1.....	5	4	4	4	4	5	9	78	94	34	44	41
2.....	5	4	4	4	4	5	9	78	94	34	44	41
3.....	5	4	4	4	4	6	9	81	94	34	44	33
4.....	5	4	4	4	4	6	9	80	94	12	44	18
5.....	5	4	4	4	4	6	9	70	94	31	44	18
6.....	5	4	4	4	4	6	9	65	89	68	44	11
7.....	5	4	4	4	4	6	9	65	89	78	44	10
8.....	5	4	4	4	4	6	9	58	75	106	44	10
9.....	5	4	4	4	4	6	9	54	73	109	53	10
10.....	5	4	4	4	4	6	9	54	70	109	70	10
11.....	5	4	4	4	4	7	9	62	64	109	70	10
12.....	5	4	4	4	4	7	9	64	64	109	73	10
13.....	5	4	4	4	4	7	10	64	64	109	78	10
14.....	5	4	4	4	4	7	10	64	64	109	78	10
15.....	5	4	4	4	4	7	10	62	64	109	68	10
16.....	5	4	4	4	4	7	10	58	64	109	47	10
17.....	5	4	4	4	4	8	10	62	63	109	50	10
18.....	5	4	4	4	4	8	18	65	60	109	50	10
19.....	5	4	4	4	4	8	43	66	60	109	50	10
20.....	5	4	4	4	4	8	60	62	60	109	26	10
21.....	5	4	4	4	4	8	65	62	60	102	42	10
22.....	5	4	4	4	5	8	65	62	60	80	46	10
23.....	5	4	4	4	5	8	65	63	46	80	46	10
24.....	4	4	4	4	6	8	65	76	61	80	46	10
25.....	4	4	4	4	7	9	69	80	69	80	46	10
26.....	4	4	4	4	7	9	60	92	73	80	46	10
27.....	4	4	4	4	6	9	39	94	73	70	46	10
28.....	4	4	4	4	6	9	43	94	44	52	46	10
29.....	4	4	4	4	6	9	44	94	34	54	46	10
30.....	4	4	4	4	-----	9	67	94	34	54	46	10
31.....	4	-----	4	4	-----	9	-----	94	-----	50	46	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5	4	4.7	289
November.....	4	4	4	238
December.....	4	4	4	246
January.....	4	4	4	248
February.....	7	4	4.6	265
March.....	9	5	7.3	449
April.....	69	9	28.7	1,710
May.....	94	54	71.5	4,400
June.....	94	34	67.9	4,040
July.....	109	12	80.2	4,930
August.....	78	26	50.5	3,110
September.....	41	10	13.4	797
The year.....	109	4	28.5	20,700

## SALTON SINK BASIN

## SALTON SEA

The present Salton Sea began to form in the bottom of Salton Sink in November 1904. It reached a maximum depth of 78.5 feet in February 1907, receded slowly to a depth of about 25 feet in 1921, and has fluctuated through a range of about 5 feet since 1921.

Records of the stages of Salton Sea from November 1904 to February 1906 were obtained by the New Liverpool Salt Co. at their plant near the old Salton railway station. Records for March to May 1906 were obtained from a series of Government gages near the new Salton railway station. In June 1906 the Southern Pacific Co. installed a gage at the railroad trestle over Salt Creek and records were obtained in that vicinity by the Southern Pacific Co. the United States Weather Bureau, and the United States Geological Survey until May 1921, when the Southern Pacific Co. installed a gage opposite Durmid railway station. In April 1921 the Imperial Irrigation District began the collection of records using gages at Mullet Island, at mouth of Alamo River, at a point opposite Salton station, and since January 1925 at a point near Figtree John Spring, on the west shore of the sea.

All gages, except those used in the vicinity of Salt Creek during 1906 to 1921, are believed to have referred correctly to sea level. Corrections to readings made on the gages in the vicinity of Salt Creek have been based on inspections and leveling done during the years 1913 and 1919 to 1923. Hydrographs for all the records have been prepared and the elevations in the following table derived from a study of the graphs and the original readings. The elevations given are the stages on or about the first day of each month.

Records for the period November 1904 to September 1918 were published as depths of water in the annual water-supply papers for the years 1906 to 1918. All published depths for the period June 10, 1906, to September 30, 1918, are now believed to be about 2.5 feet too small, and those for May 12 to June 5, 1906, are subject to unknown error.

The bottom of the sea, or that part which first filled with water, is at elevation 273.5 feet below sea level, according to a reference made on October 4, 1905 by the New Liverpool Salt Co., to the Geological Survey bench mark at old Salton station. The maximum height was 195.0 feet below sea level in February and March 1907. The area of the water surface is 266 square miles when the sea is at elevation 250 feet below sea level, and 328 square miles when at elevation 240 feet below sea level.

*Monthly elevation, in feet, below sea level, 1904-32*

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1904-5	-----	273.5	272.9	272.7	271.3	269.7	268.8	267.7	266.5	264.4	266.0	257.9
1905-6	256.7	255.2	253.7	250.7	249.6	247.8	245.2	239.5	228.3	212.2	204.4	201.5
1906-7	200.7	199.4	199.6	198.4	195.6	195.0	195.1	195.4	195.9	196.3	196.4	196.8
1907-8	197.5	197.9	198.4	198.6	198.6	198.8	199.0	199.4	199.9	200.4	200.9	201.6
1908-9	202.3	203.0	203.3	203.5	203.6	203.7	204.0	204.2	204.7	205.0	205.7	205.7
1909-10	206.2	206.8	207.3	207.6	207.6	207.8	208.0	208.3	208.8	209.4	206.9	210.6
1910-11	211.2	211.8	212.1	212.5	212.7	212.8	212.9	213.3	213.8	214.4	214.7	215.1
1911-12	215.8	216.4	216.7	216.8	216.9	216.9	217.0	217.4	217.8	218.3	218.9	219.4
1912-13	220.1	220.5	220.7	220.9	221.1	221.0	221.2	221.6	222.0	222.5	223.0	223.5
1913-14	224.2	224.5	224.9	225.2	225.3	225.3	225.4	225.5	226.0	226.5	226.7	227.4
1914-15	228.3	228.6	228.7	228.8	228.9	229.1	229.4	229.7	230.1	230.5	231.1	231.7
1915-16	232.1	232.9	233.4	233.6	233.7	233.8	233.9	234.3	234.6	234.6	235.1	236.0
1916-17	236.6	237.1	237.6	237.9	238.0	238.1	238.3	238.4	238.6	238.7	239.1	239.5
1917-18	239.7	240.1	240.4	240.8	241.1	241.4	241.7	242.0	242.4	242.8	243.1	243.4
1918-19	243.8	244.2	244.4	244.8	245.1	245.5	245.8	246.2	246.5	246.7	247.0	247.3
1919-20	247.6	247.8	247.7	247.4	247.0	246.6	246.3	246.4	246.6	247.0	247.5	248.0
1920-21	248.5	248.9	249.0	248.7	248.4	248.2	248.1	248.3	248.5	248.9	249.3	249.5
1921-22	249.7	249.7	249.5	249.3	249.1	248.9	248.8	248.7	248.7	248.8	248.9	249.1
1922-23	249.4	249.7	249.9	249.9	249.6	249.3	248.9	248.9	249.1	249.4	249.7	249.9
1923-24	249.8	249.7	249.5	249.2	248.9	248.4	248.2	248.2	248.4	248.7	249.3	249.9
1924-25	250.4	250.7	250.6	250.3	250.0	249.7	249.6	249.6	249.7	249.9	250.3	250.5
1925-26	250.6	250.3	250.0	249.5	249.2	248.8	248.6	248.5	248.6	248.8	248.9	249.1
1926-27	249.3	249.2	248.7	247.7	247.0	246.5	246.2	246.3	246.7	246.9	247.1	247.2
1927-28	247.3	247.2	247.0	246.6	246.1	245.7	245.6	245.6	245.7	246.0	246.3	246.6
1928-29	246.8	246.8	246.7	246.5	246.2	246.0	245.8	245.7	245.7	245.8	245.9	246.1
1929-30	246.1	245.9	245.6	245.2	244.7	244.4	244.2	244.1	244.2	244.4	244.5	244.7
1930-31	244.9	244.9	244.6	244.3	243.7	243.1	243.0	242.9	243.0	243.2	243.6	243.9
1931-32	244.4	244.6	244.5	244.2	243.7	243.4	243.3	243.4	243.6	243.8	244.1	244.5

## SOUTHERN PACIFIC CO.'S DITCH NEAR WHITEWATER, CALIF.

LOCATION.—Water-stage recorder in NW¼ sec. 33, T. 3 S., R. 3 E., 200 feet below intake and 3½ miles southwest of Whitewater.

RECORDS AVAILABLE.—July 1921 to September 1927; October 1929 to September 1930; October 1931 to September 1932.

REMARKS.—Record of daily discharge furnished by Southern Sierras Power Co. Ditch diverts all low-water flow of Snow Creek. No records available for Snow Creek for year ending Sept. 30, 1932.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.7	4.8	6.1	9.9	11.7	12.5	11.9	11.9	12.1	15.0	10.3	6.7
2	6.5	4.8	5.9	9.3	12.5	12.1	12.3	12.5	12.1	15.7	10.1	6.7
3	5.7	4.8	5.3	8.7	9.3	11.4	12.3	12.3	12.3	15.5	10.1	6.3
4	5.3	4.8	4.9	8.3	8.1	11.2	12.1	11.9	12.5	14.8	10.1	6.1
5	5.1	4.8	5.1	8.1	7.9	10.6	12.1	11.4	14.1	14.6	10.1	6.1
6	5.1	4.8	5.1	7.9	12.1	10.3	11.9	11.2	15.7	14.3	10.1	6.1
7	5.0	4.8	5.1	7.7	18.8	10.3	11.4	11.2	17.4	14.3	9.7	6.1
8	5.1	5.5	5.9	7.5	23.8	10.3	11.4	11.0	17.1	14.6	9.5	5.9
9	5.1	5.1	11.4	7.1	16.4	10.3	11.2	11.4	17.4	14.8	9.3	5.9
10	5.3	5.1	6.5	6.7	7.9	10.6	11.2	11.9	17.6	14.8	8.7	5.9
11	5.2	5.5	5.7	6.7	2.7	10.6	11.4	12.8	17.6	14.3	8.5	5.7
12	5.1	5.7	5.7	7.3	4	10.3	11.4	13.9	17.9	13.4	8.5	5.7
13	5.0	5.4	5.9	7.5	3.6	10.1	13.9	14.3	17.6	12.5	8.3	5.7
14	5.0	5.3	6.0	7.5	5.1	9.9	14.6	15.2	17.6	11.9	8.3	5.7
15	4.9	7.3	6.0	7.9	4.6	9.9	13.2	15.7	18.4	11.9	8.1	5.7
16	4.9	6.5	5.8	7.7	4.4	9.7	13.2	15.9	17.1	11.9	7.9	5.7
17	4.8	6.1	5.9	6.5	4.2	9.9	13.4	16.4	16.9	11.9	7.7	5.7
18	5.0	5.8	6.3	6.5	5.1	10.3	13.6	16.2	16.9	12.1	7.9	5.5
19	5.3	5.5	8.1	6.5	5.1	12.1	13.6	15.7	16.9	11.7	7.7	5.7
20	5.3	5.5	8.8	6.7	6.3	12.8	13.6	15.2	17.1	11.2	7.3	5.5
21	5.1	6.6	11.0	6.3	6.3	11.7	12.8	15.2	17.1	11.4	7.1	5.3
22	5.1	6.5	10.6	6.3	9.3	11.0	12.1	14.1	17.1	11.9	7.1	5.3
23	5.0	6.1	8.7	6.1	12.3	10.8	11.7	13.4	16.9	12.1	6.9	5.3
24	5.0	5.9	7.9	5.9	12.1	11.0	11.0	13.2	16.9	11.4	6.9	5.3
25	4.9	5.9	8.7	5.9	11.9	11.7	11.0	13.2	16.7	10.8	6.9	5.3
26	4.9	5.8	8.6	5.9	12.3	11.9	11.2	13.4	15.9	11.4	6.9	5.3
27	4.9	6.8	7.5	5.9	12.8	11.4	11.2	13.6	15.2	12.3	7.1	5.3
28	4.9	6.6	15.0	5.9	13.2	11.4	11.0	13.2	14.8	11.7	7.1	5.3
29	4.8	6.3	20.9	5.7	13.2	11.7	11.0	12.8	14.8	11.7	6.9	5.3
30	4.7	6.2	13.2	5.7	-----	11.7	11.7	12.3	15.0	11.7	6.9	5.9
31	4.8	-----	11.0	6.1	-----	11.4	-----	12.1	-----	11.0	6.7	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	6.7	4.7	5.15	317
November	7.3	4.8	5.69	339
December	20.9	4.9	8.02	493
January	9.9	5.7	7.02	432
February	23.8	4	9.43	542
March	12.8	9.7	11.0	676
April	14.6	11.0	12.1	720
May	16.4	11.0	13.4	824
June	18.4	12.1	16.1	958
July	15.7	10.8	12.9	793
August	10.3	6.7	8.22	505
September	6.7	5.3	5.73	341
The year	23.8	4	9.56	6,940

• Estimated.

## PALM CANYON CREEK NEAR PALM SPRINGS, CALIF.

LOCATION.—Water-stage recorder in  $S\frac{1}{4}$  sec. 11, T. 5 S., R. 4 E., three quarters of a mile above Murray Canyon Creek and 6 miles south of Palm Springs.

DRAINAGE AREA.—94.0 square miles.

RECORDS AVAILABLE.—January 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 1,870 second-feet Feb. 9 (gage height, 3.42 feet); no flow for several months.

1930-32: Maximum discharge, 1,870 second-feet Feb. 9, 1932 (gage height, 3.42 feet); no flow for several months each year.

REMARKS.—Records fair. Discharge estimated Oct. 2, 3, Nov. 21, 22, 26, 27, Dec. 10-14, 16-27, 30, May 24 to June 6.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	15	0	0	5	24	58	12	4.8	2.3	0.1
2	1	0	0	3.9	86	46	12	4.5	2.3	.1
3	.2	0	0	2.4	40	38	12	4.8	2.3	.1
4	0	0	0	1.5	24	34	12	4.8	2.3	.1
5	0	0	0	1.7	20	34	12	5.6	2.3	.1
6	0	0	0	1.2	22	34	11	5.5	2.3	.2
7	0	0	0	1.2	24	32	11	5.5	2.3	.1
8	0	0	0	1.1	711	30	9.5	6.5	2.2	.2
9	0	0	6	1.1	1,210	30	9	5	2.0	.2
10	0	0	1.0	1.1	282	28	9	4.8	1.8	.2
11	0	0	.8	1.1	118	28	8	4.5	1.6	.2
12	0	0	.6	1.1	60	26	8	4.2	1.4	.1
13	0	0	.6	1.7	40	26	8	3.6	1.2	.1
14	0	0	.5	1.9	70	26	8	3.3	1.0	.1
15	0	0	.5	2.0	53	25	8	3.0	.9	0
16	0	0	.4	2.3	122	22	7.5	3.0	.8	0
17	0	0	.4	1.9	129	21	7.5	2.7	.7	0
18	0	0	.3	1.7	208	18	7.5	2.7	.6	0
19	0	0	.2	1.7	85	16	7.5	2.6	.5	0
20	0	0	.2	1.9	68	18	7.5	2.6	.4	0
21	0	2	.2	1.6	65	15	9	2.4	.3	0
22	0	3	.1	1.6	73	13	8	2.4	.3	0
23	0	0	.1	1.2	85	13	7.5	2.4	.3	0
24	0	0	.1	1.0	104	13	6.5	2.4	.3	0
25	0	0	.1	1.0	104	13	6	2.4	.2	0
26	0	2	.1	1.0	104	13	9.5	2.4	.2	0
27	0	1	.1	.9	73	14	8	2.4	.2	0
28	0	0	360	.6	63	14	6.5	2.4	.2	0
29	0	0	101	.4	63	13	5.5	2.4	.2	0
30	0	0	15	.3		12	5	2.4	.1	0
31	0		6	.4		12		2.4		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	15	0	0.522	32.1
November	3	0	.27	15.8
December	360	0	15.9	978
January	5	.3	1.53	94.1
February	1,210	20	142	8,170
March	58	12	23.7	1,460
April	12	5.0	8.62	513
May	6.5	2.4	3.56	219
June	2.3	.1	1.12	66.6
July	.2	0	.06	3.8
The year	1,210	0	15.9	11,600

NOTE.—No flow during months omitted.



## MOHAVE RIVER BASIN

## DEEP CREEK NEAR HESPERIA, CALIF.

LOCATION.—Water-stage recorder in SE¼ 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 1932.

EXTREMES.—Maximum discharge during year, 7,900 second-feet Feb. 9 (gage height, 11.30 feet); minimum, 0.1 second-foot Sept. 7-9, 12-15.

1929-32: Maximum discharge, 7,900 second-feet Feb. 9, 1932 (gage height, 11.30 feet); minimum, 0.1 second-foot Sept. 7-9, 13-15, 1932.

REMARKS.—Records good. Discharge estimated May 5, July 6, 7. Hesperia Water Co.'s canal diverts about 2 miles above station.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.8	3.0	6	44	80	297	288	152	35	8	0.8	0.3
2.....	1.0	3.0	6	36	60	248	304	165	34	8	.8	.3
3.....	1.3	3.7	6	30	40	232	270	163	30	7.5	.8	.3
4.....	1.3	3.8	6	26	40	196	259	148	37	6	.6	.4
5.....	1.1	4.9	6	25	40	174	248	132	32	5	.6	.2
6.....	1.0	3.3	6	24	59	184	227	115	34	5	.6	.2
7.....	1.0	3.3	6.5	24	163	196	206	120	33	4.9	.6	.1
8.....	.9	3.4	7.5	24	2,520	208	208	109	30	4.3	.6	.1
9.....	1.0	3.6	52	24	4,050	191	204	111	29	3.7	.5	.1
10.....	1.0	3.7	24	23	1,040	206	211	124	28	3.7	.5	.2
11.....	1.2	4.8	17	24	644	186	208	134	25	3.7	.4	.2
12.....	1.6	7.5	14	24	481	204	208	128	24	3.6	.4	.2
13.....	1.8	7	9.5	26	376	208	208	122	22	3.6	.4	.1
14.....	1.6	6	10	23	376	221	204	122	24	3.7	.4	.1
15.....	1.6	9	10	24	326	216	191	115	20	4.0	.4	.1
16.....	1.5	19	9	22	273	204	181	106	20	3.3	.4	.2
17.....	1.5	11	9.5	21	291	229	161	98	19	2.9	.3	.2
18.....	1.9	9	10	20	267	264	157	90	19	2.6	.3	.2
19.....	3.7	8.5	13	21	250	304	157	78	18	2.2	.3	.2
20.....	6.5	7.5	15	22	242	342	168	73	13	1.8	.3	.2
21.....	4.9	8	20	21	237	253	155	67	17	1.6	.3	.2
22.....	4.3	9.5	58	20	242	221	136	62	15	1.4	.3	.2
23.....	3.7	8	33	20	259	216	136	59	14	1.2	.3	.3
24.....	3.3	7.5	22	20	285	237	136	50	14	1.1	.3	.3
25.....	3.0	7.5	21	19	304	279	150	46	12	1.1	.3	.3
26.....	2.7	7.5	33	20	326	300	146	44	12	1.1	.2	.3
27.....	2.9	9.5	25	20	359	279	130	40	11	1.0	.2	.3
28.....	2.7	12	490	19	387	288	120	39	9	1.0	.3	.3
29.....	2.9	8.5	581	17	352	288	148	40	9.5	1.0	.3	.4
30.....	2.9	7.5	128	17	276	148	38	38	8.5	1.0	.3	.4
31.....	3.0	-----	65	19	-----	273	-----	36	-----	.9	.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	6.5	0.8	2.25	138
November.....	19	3.0	7.02	418
December.....	581	6	55.5	3,410
January.....	44	17	23.2	1,450
February.....	4,050	40	495	28,500
March.....	342	174	239	14,700
April.....	304	120	189	11,200
May.....	165	36	94.4	5,800
June.....	38	8.5	22.0	1,310
July.....	8	.9	3.22	198
August.....	.8	.2	.42	25.9
September.....	.4	.1	.23	13.7
The year.....	4,050	.1	92.6	67,100

## MOHAVE RIVER AT VICTORVILLE, CALIF.

LOCATION.—Water-stage recorder in NW¼SE¼ sec. 10, T. 5 N., R. 4 W., 500 feet above Bear Valley highway bridge at Victorville.

RECORDS AVAILABLE.—November 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 12,500 second-feet Feb. 9 (gage height, 7.10 feet); minimum, 15 second-feet Aug. 13 (gage height, 0.63 foot).

1930-32: Maximum and minimum discharges, same as given above.

REMARKS.—Records fair. Discharge estimated Feb. 10, 12, 21, 22, June 30, July 1-4, 8-11, 24, Aug. 9. Temporary summer station about 200 yards upstream used Oct. 1 to Dec. 1. Slight regulation by storage in Lake Arrowhead.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	33	34	43	46	489	251	90	32	22	2C	23
2	30	33	35	41	45	365	268	89	33	23	21	25
3	30	31	35	40	44	347	263	87	44	23	21	25
4	30	30	36	39	42	326	263	84	43	23	21	25
5	29	30	36	39	41	296	253	69	36	23	2C	26
6	30	30	36	39	40	288	245	64	34	22	2C	27
7	27	33	36	40	41	280	211	59	34	21	21	27
8	27	33	37	40	1,410	278	175	59	34	21	2C	25
9	28	33	39	40	7,830	273	160	52	37	22	2C	23
10	30	33	37	39	2,000	276	162	49	32	22	2C	23
11	30	30	35	39	1,010	261	180	49	25	23	21	22
12	30	31	35	39	730	251	162	51	22	23	1C	22
13	30	31	34	38	598	251	158	66	23	23	1C	23
14	31	33	35	38	491	246	148	59	22	23	1C	23
15	30	33	37	39	446	237	153	55	25	23	1C	22
16	33	34	37	40	342	229	134	55	26	21	1C	21
17	33	32	36	39	376	227	110	38	28	21	2C	21
18	33	31	37	39	356	241	104	29	27	19	2C	23
19	33	31	37	38	328	273	110	29	28	19	2C	27
20	33	33	36	39	305	293	101	33	23	23	2C	25
21	34	33	36	39	300	280	121	33	22	22	2C	25
22	34	33	38	39	325	241	121	29	25	20	2C	26
23	34	34	36	39	396	241	99	31	23	20	2C	25
24	34	34	36	39	404	249	87	28	26	20	1C	25
25	34	34	37	39	436	270	92	29	26	20	1C	25
26	33	36	37	40	470	288	101	28	25	20	1C	25
27	33	37	35	40	518	266	101	32	23	19	1C	25
28	33	38	39	40	534	263	93	36	22	20	2C	25
29	33	37	122	40	541	256	97	36	20	20	21	25
30	33	35	57	44	-----	246	92	36	21	22	22	25
31	33	-----	46	42	-----	244	-----	33	-----	21	2C	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	34	27	31.4	1,930
November	38	30	33.0	1,960
December	122	34	40.0	2,460
January	44	38	39.6	2,430
February	7,830	40	705	40,600
March	489	227	276	17,000
April	268	87	154	9,160
May	90	28	48.9	3,010
June	44	20	28.0	1,670
July	23	19	21.4	1,320
August	23	16	20.3	1,250
September	27	21	24.3	1,450
The year	7,830	16	116	84,200

## MOHAVE RIVER NEAR HODGE, CALIF.

LOCATION.—Water-stage recorder in SE¼SE¼ sec. 28, T. 9 N., R. 3 W., 2 miles north of Hodge post office.

RECORDS AVAILABLE.—October 1930 to September 1932.

EXTREMES.—Maximum discharge during year, about 8,900 second-feet Feb. 9 (gage height, 5.20 feet); no flow for several months.

1930-32: Maximum discharge, that of 1932; no flow for several months each year.

REMARKS.—Records fair. Flow subject to regulation and diversions. Discharge estimated Feb. 11, Mar. 1-4.

*Discharge, in second-feet, 1931-32*

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	Day	Dec.	Jan.	Feb.	Mar.	Apr.	May
1.....	0	14	34	450	207	68	16.....	0	17	497	212	132	26
2.....	0	14	27	400	207	64	17.....	4.8	12	448	212	123	21
3.....	0	16	28	360	212	66	18.....	4.8	16	469	217	117	18
4.....	0	23	28	322	204	64	19.....	8	18	402	220	112	14
5.....	0	18	22	306	194	62	20.....	7	15	378	228	110	10
6.....	0	20	22	288	187	60	21.....	7	22	366	238	112	0
7.....	0	17	20	298	182	55	22.....	7	26	366	225	119	0
8.....	0	17	36	285	175	48	23.....	7.5	24	350	212	102	0
9.....	0	20	4,140	280	163	43	24.....	8	17	350	210	93	0
10.....	0	20	2,400	264	161	36	25.....	12	28	402	212	90	0
11.....	0	21	1,500	262	154	26	26.....	9	24	420	220	92	0
12.....	0	18	712	241	149	17	27.....	10	24	390	223	92	0
13.....	0	16	608	233	143	38	28.....	14	22	448	212	90	0
14.....	0	15	539	233	143	45	29.....	14	22	497	212	81	0
15.....	0	18	469	215	141	27	30.....	26	23	-----	210	71	0
							31.....	28	24	-----	206	-----	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	28	0	5.39	331
January.....	28	12	19.4	1,190
February.....	4,140	20	564	32,400
March.....	450	298	255	15,700
April.....	212	71	139	8,270
May.....	68	0	26.1	1,600
The year.....	4,140	0	82.0	59,500

NOTE.—No flow during months omitted.

# MOHAVE RIVER BASIN

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## MOHAVE RIVER AT BARSTOW, CALIF.

LOCATION.—Water-stage recorder in SW¼SE¼ sec. 31, T. 10 N., R. 1 W., on United States highway 91 at Barstow.

RECORDS AVAILABLE.—November 1930 to September 1932.

EXTREMES.—Maximum discharge during year, 8,300 second-feet Feb. 9 (gage height, 3.95 feet); no flow during part of year.

1930-32: Maximum discharge, that of 1932; no flow during part of each year.

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

### Discharge, in second-feet, 1931-32

Day	Feb.	Mar.	Apr.	May	Day	Feb.	Mar.	Apr.	May
1	0	367	131	9	16	385	108	68	0
2	0	331	143	5	17	412	103	59	0
3	0	235	131	4.6	18	385	113	56	0
4	0	250	131	5.5	19	376	143	52	0
5	0	208	108	8	20	322	137	52	0
6	0	167	113	7	21	274	173	33	0
7	0	173	98	7	22	235	167	24	0
8	0	167	98	5	23	228	119	24	0
9	3,090	155	78	1.3	24	306	113	23	0
10	3,160	149	83	.6	25	266	119	17	0
11	986	149	88	0	26	306	137	18	0
12	431	137	83	0	27	298	167	16	0
13	358	113	73	0	28	358	173	18	0
14	376	108	63	0	29	349	137	21	0
15	349	143	68	0	30	131	16	0	0
					31	137			0
Month					Maximum	Minimum	Mean	Run-off in ac-ft	
February					3,160	0	457	26,300	
March					367	103	162	9,960	
April					143	16	66.2	3,940	
May					9	0	1.71	105	
The year					3,160	0	55.5	40,300	

NOTE.—No flow during months omitted.

## 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. Such measurements have been made since October 1930.

*Discharge measurements, in second-feet, of the middle Mohave River, 1931-32*

Date	Gaging station at Upper Narrows at Victorville, Calif.		Lower Narrows near Victorville, Calif.		Bryman, Calif.	
	Time	Dis- charge	Time	Dis- charge	Time	Dis- charge
Oct. 2	7:50 a.m.	29	9:35 a.m.	29	9:10 a.m.	17
Oct. 7	10:30 a.m.	27	11:40 a.m.	27	1:00 p.m.	13
Oct. 14	2:30 p.m.	30	1:40 p.m.	29	12:40 p.m.	25
Oct. 22	8:30 a.m.	33	9:45 a.m.	34	10:20 a.m.	28
Oct. 29	9:30 a.m.	33	10:15 a.m.	35	10:55 a.m.	37
Nov. 5	8:55 a.m.	30	9:30 a.m.	32	11:10 a.m.	31
Nov. 12	8:20 a.m.	31	9:10 a.m.	35	9:50 a.m.	30
Nov. 17	8:10 a.m.	32	8:50 a.m.	37	9:35 a.m.	33
Nov. 24	8:40 a.m.	34	9:25 a.m.	38	10:10 a.m.	35
Dec. 2	9:30 a.m.	35	10:15 a.m.	39	11:00 a.m.	39
Dec. 8	8:10 a.m.	37	9:00 a.m.	42	9:40 a.m.	41
Dec. 17	10:45 a.m.	36	11:15 a.m.	46	12:00 m.	45
Dec. 23	8:20 a.m.	36	8:55 a.m.	38	9:30 a.m.	42
Jan. 6	8:35 a.m.	39	9:20 a.m.	43	9:20 a.m.	48
Jan. 14	8:55 a.m.	38	9:35 a.m.	44	10:35 a.m.	47
Jan. 19	9:10 a.m.	38	9:50 a.m.	39	10:45 a.m.	47
Jan. 27	9:05 a.m.	40	10:05 a.m.	42	11:05 a.m.	47
Feb. 4	8:55 a.m.	42	10:30 a.m.	42	10:20 a.m.	48
May 10	12:50 p.m.	54	1:45 p.m.	52	2:40 p.m.	60
May 18	11:10 a.m.	31	1:10 p.m.	35	2:40 p.m.	36
May 25	11:25 a.m.	30	4:15 p.m.	29	3:20 p.m.	25
June 1	1:05 p.m.	30	2:35 p.m.	29	4:15 p.m.	28
June 7	1:10 p.m.	37	2:05 p.m.	32	-----	-----
June 15	11:25 a.m.	25	3:30 p.m.	21	2:30 p.m.	13
June 21	3:45 p.m.	21	4:25 p.m.	21	-----	0
June 29	10:40 a.m.	20	11:25 a.m.	19	-----	0
July 5	1:30 p.m.	19	2:40 p.m.	16	-----	0
July 13	10:25 a.m.	22	11:25 a.m.	20	-----	0
July 20	11:15 a.m.	22	12:15 p.m.	18	-----	0
July 28	9:45 a.m.	22	11:35 a.m.	18	-----	0
Aug. 4	12:35 p.m.	21	1:00 p.m.	20	-----	0
Aug. 10	9:00 a.m.	26	8:05 a.m.	27	-----	0
Aug. 18	7:45 a.m.	21	8:15 a.m.	13	-----	0
Aug. 25	6:55 a.m.	20	7:50 a.m.	19	-----	0
Sept. 1	9:45 a.m.	23	10:45 a.m.	20	-----	0
Sept. 7	1:35 p.m.	24	2:30 p.m.	23	-----	8.0
Sept. 13	10:35 a.m.	24	11:10 a.m.	19	-----	5.0
Sept. 21	11:30 a.m.	24	1:15 p.m.	19	2:15 p.m.	9.2
Sept. 29	11:20 a.m.	24	12:00 m.	25	-----	-----

*Discharge measurements, in second-feet, of the middle Mohave River, 1931-32—Con.*

Date	Helendale, Calif.		Wild, Calif.		Gaging station near Hodge, Calif.	
	Time	Dis-charge	Time	Dis-charge	Time	Dis-charge
Oct. 2.....		0		0		0
Oct. 7.....		0		0		0
Oct. 14.....		0		0		0
Oct. 22.....				0		0
Oct. 29.....	11:45 a.m.	23		0		0
Nov. 5.....	10:20 a.m.	18		0		0
Nov. 12.....	10:30 a.m.	28	11:10 a.m.	1.4		0
Nov. 17.....	10:10 a.m.	31	10:50 a.m.	6.1		0
Nov. 24.....	11:05 a.m.	44	4:35 p.m.	15		0
Dec. 2.....	11:40 a.m.	31	1:00 p.m.	22		0
Dec. 8.....	10:15 a.m.	33	10:55 a.m.	25		0
Dec. 17.....	1:45 p.m.	43	2:40 p.m.	40	4:10 p.m.	14
Dec. 23.....	11:10 a.m.	40	11:45 a.m.	30	1:40 p.m.	7.4
Jan. 6.....	11:00 a.m.	45	1:00 p.m.	45	1:45 p.m.	21
Jan. 14.....	11:45 a.m.	54	1:25 p.m.	50	3:00 p.m.	19
Jan. 19.....	1:00 p.m.	42	1:40 p.m.	40	2:40 p.m.	21
Jan. 27.....	1:20 p.m.	38	2:05 p.m.	40	3:10 p.m.	25
Feb. 4.....	11:20 a.m.	44	1:30 p.m.	39	2:40 p.m.	31
May 10.....					3:45 p.m.	37
May 18.....			5:30 p.m.	19	3:50 p.m.	16
May 25.....	2:30 p.m.	12		0		0
June 1.....	3:15 p.m.	14		0		0
June 7.....				0		0
June 15.....	1:40 p.m.	6.9		0		0
June 21.....		0		0		0
June 29.....		0		0		0
July 5.....		0		0		0
July 13.....		0		0		0
July 20.....		0		0		0
July 28.....		0		0		0
Aug. 4.....		0		0		0
Aug. 10.....		0		0		0
Aug. 18.....		0		0		0
Aug. 25.....		0		0		0
Sept. 1.....		0		0		0
Sept. 7.....		0		0		0
Sept. 13.....		0		0		0
Sept. 21.....		0		0		0
Sept. 29.....		0		0		0

\* Estimated.

## MOHAVE RIVER AT AFTON, CALIF.

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

RECORDS AVAILABLE.—December 1929 to September 1932.

EXTREMES.—Maximum discharge during year, 3,550 second-foot Feb. 10 (gage height, 4.70 feet); minimum, 0.1 second-foot July 23–26.

1929–32: Maximum and minimum discharges, same as given above.

REMARKS.—Records fair. Discharge estimated Feb. 14–16, 21–27, Mar. 7, 8, July 24, 25, Aug. 14. Numerous diversions from river above station.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	0.8	1.8	1.9	1.8	2.2	82	1.9	1.5	0.7	0.4	0.3	0.3
2.....	.9	1.8	2.0	1.9	2.2	87	1.9	1.5	.7	.3	.3	.3
3.....	.8	1.8	1.9	1.9	2.2	82	1.8	1.6	.8	.2	.3	.3
4.....	.8	1.9	1.9	1.9	2.2	27	1.9	1.4	.8	.2	.3	.4
5.....	.9	1.9	1.9	1.9	2.3	10	1.9	1.5	.7	.2	.3	.4
6.....	.9	1.8	1.9	2.0	2.3	4.8	1.9	1.6	.7	.2	.3	.4
7.....	.9	1.8	2.0	2.0	2.3	3.5	2.1	1.5	.7	.2	.2	.3
8.....	1.0	1.8	2.1	2.0	2.4	3.0	2.1	1.4	.7	.2	.2	.3
9.....	1.1	1.8	2.3	2.0	2.6	2.4	2.1	1.3	.7	.2	.3	.3
10.....	1.1	1.9	2.0	2.1	1,430	2.5	2.1	1.2	.6	.2	.3	.3
11.....	1.1	1.9	2.0	2.1	780	2.6	2.2	1.2	.6	.2	.2	.3
12.....	1.1	1.9	2.0	2.1	210	2.6	2.2	1.1	.5	.2	.3	.4
13.....	1.2	1.9	2.0	2.1	32	2.7	2.2	1.2	.5	.2	.3	.4
14.....	1.3	1.9	2.0	2.1	24	2.7	2.2	1.1	.4	.2	.3	.4
15.....	1.3	2.0	2.0	2.1	20	2.7	2.1	1.1	.4	.2	.2	.4
16.....	1.4	2.0	1.9	2.1	16	2.6	2.0	1.1	.4	.2	.2	.4
17.....	1.4	1.9	2.0	2.1	120	2.6	2.0	1.0	.5	.2	.2	.4
18.....	1.3	1.9	1.9	2.1	274	2.6	2.0	.9	.6	.2	.2	.4
19.....	1.3	1.9	2.0	2.1	176	2.5	1.8	1.0	.5	.2	.2	.4
20.....	1.3	1.9	2.0	2.1	16	2.4	1.8	1.0	.5	.2	.2	.4
21.....	1.3	2.0	2.0	2.1	16	2.4	1.9	.9	.4	.2	.2	.5
22.....	1.2	2.0	2.0	2.1	15	2.3	1.8	.9	.4	.2	.2	.5
23.....	1.1	2.0	2.0	2.2	14	2.3	1.8	1.0	.4	.1	.3	.5
24.....	1.1	2.0	1.9	2.2	13	2.2	1.8	1.0	.4	.1	.3	.6
25.....	1.2	2.0	1.9	2.3	12	2.0	1.8	1.0	.4	.1	.3	.7
26.....	1.4	2.0	1.9	2.3	11	2.0	1.8	.8	.4	.1	.2	.7
27.....	1.4	2.0	1.9	2.2	10	1.9	1.8	.6	.4	.7	.2	.7
28.....	1.5	1.9	2.0	2.3	8	1.8	1.8	.5	.4	.3	.3	.7
29.....	1.6	1.9	2.0	2.2	60	1.8	1.8	.6	.4	.2	.3	.9
30.....	1.6	2.0	1.9	2.2	-----	1.8	1.7	.7	.4	.3	.3	1.1
31.....	1.7	-----	1.9	2.2	-----	1.9	-----	.7	-----	.2	.3	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1.7	0.8	1.19	73.2
November.....	2.0	1.8	1.91	114
December.....	2.3	1.9	1.97	121
January.....	2.3	1.8	2.09	129
February.....	1,430	2.2	113	6,500
March.....	87	1.8	11.4	701
April.....	2.2	1.7	1.94	115
May.....	1.6	.5	1.09	67.0
June.....	.8	.4	.53	31.7
July.....	.7	.1	.22	13.5
August.....	.3	.2	.26	15.9
September.....	1.1	.3	.47	28
The year.....	1,430	.1	10.8	7,910

## WEST FORK OF MOHAVE RIVER NEAR HESPERIA, CALIF.

LOCATION.—Water-stage recorder in SE¼ 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 1932.

EXTREMES.—Maximum discharge during year, 6,000 second-feet Feb. 8 (gage height, 10.00 feet); no flow during several months.

1930-32: Maximum discharge, that of Feb. 8, 1932; no flow during several months each year.

REMARKS.—Records good. Discharge estimated Nov. 27, 28.

*Discharge, in second-feet, 1931-32*

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1.	0	0	56	325	231	38	20	2.0
2.	0	0	56	234	205	37	19	1.8
3.	0	0	44	123	192	37	19	3.4
4.	0	0	35	93	170	36	18	4.8
5.	0	0	30	78	155	33	18	3.4
6.	0	0	26	85	146	30	18	2.8
7.	0	0	24	133	134	30	18	2.6
8.	0	0	24	1,360	122	29	18	2.0
9.	0	28	24	2,630	118	28	16	1.2
10.	0	16	25	782	113	28	14	.9
11.	0	10	24	433	106	27	12	.6
12.	0	9	28	331	98	25	10	.5
13.	0	8	31	308	92	23	9.5	.4
14.	0	4.9	25	243	89	21	9	.3
15.	0	6	24	211	89	19	9	.3
16.	0	8.5	20	196	85	18	7.5	.3
17.	0	8.5	19	202	80	17	7	.3
18.	0	6	17	182	76	16	6	.3
19.	0	3.1	18	174	75	15	5	.2
20.	0	8.1	17	178	78	27	5	.2
21.	0	7.5	15	182	68	39	6	.2
22.	0	38	15	201	64	32	7	.1
23.	0	29	14	209	57	26	6.5	.1
24.	0	25	14	205	53	26	5.5	.1
25.	0	27	14	218	50	29	5	.1
26.	0	43	13	239	48	34	4.4	.1
27.	.1	31	13	250	48	34	3.7	0
28.	.1	260	13	250	45	30	3.0	0
29.	0	269	13	248	44	26	3.0	0
30.	0	96	13	-----	43	23	3.4	0
31.	-----	70	21	-----	41	-----	2.2	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November.....	0.1	0	0.007	0.4
December.....	269	0	32.5	2,000
January.....	56	13	23.4	1,440
February.....	2,630	78	355	20,400
March.....	231	41	97.3	5,980
April.....	39	15	27.8	1,650
May.....	20	2.2	9.93	611
June.....	4.8	0	.97	57.7
The year.....	2,630	0	44.3	32,100

NOTE.—No flow during months omitted.



## ANTELOPE VALLEY BASIN

## ROCK CREEK NEAR VALYERMO, CALIF.

LOCATION.—Water-stage recorder in NE¼ sec. 20, T. 4 N., R. 9 W., 1¼ miles southeast of Valyermo. Altitude, about 4,050 feet.

DRAINAGE AREA.—23.0 square miles.

RECORDS AVAILABLE.—January 1923 to September 1932.

EXTREMES OF DISCHARGE.—Maximum discharge during year, 251 second-feet Feb. 8 (gage height, 4.15 feet); minimum, 2.4 second-feet Nov. 1 (gage height, 1.06 feet).

1923-32: Maximum discharge, 510 second-feet Feb. 16, 1927 (gage height, 3.70 feet); minimum, 1.2 second-feet Aug. 22, 1925.

REMARKS.—Records good. Discharge estimated Sept. 18-2°. No diversions. Results of several discharge measurements furnished by Los Angeles County Flood Control District.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.2	2.6	3.6	13	10	53	46	33	46	22	15	11
2.....	3.6	2.8	3.6	12	7.5	49	48	35	46	22	15	11
3.....	3.4	2.9	3.6	11	7	46	48	36	48	21	15	11
4.....	3.4	3.0	3.6	10	7	44	47	34	45	20	15	11
5.....	3.0	2.9	3.6	10	7	42	47	33	45	20	15	10
6.....	3.0	2.9	3.4	9.5	8	42	45	33	44	20	15	10
7.....	3.0	2.8	3.2	9.5	10	41	44	33	42	20	13	10
8.....	3.0	2.8	3.9	9	128	41	43	34	41	18	13	9.5
9.....	3.2	2.9	5	9	154	40	43	36	40	18	13	9
10.....	3.2	2.9	4.1	8.5	88	40	43	39	40	17	13	8.5
11.....	3.0	3.0	4.1	8.5	60	40	44	40	39	17	13	8.5
12.....	2.9	2.9	4.1	8.5	51	39	45	43	39	17	12	8.5
13.....	2.8	2.8	4.1	8.5	45	39	47	43	37	18	12	8.5
14.....	2.9	2.9	4.1	8	42	39	49	45	36	17	12	8.5
15.....	2.9	3.9	4.1	8	38	39	48	45	34	17	11	8.5
16.....	2.9	3.2	3.9	8	38	39	46	46	33	17	12	8
17.....	3.0	3.0	3.9	7.5	36	40	45	46	33	17	12	8
18.....	3.2	2.9	3.6	7.5	35	41	44	47	32	17	12	8
19.....	3.2	2.8	3.6	7.5	32	45	43	46	31	16	12	8
20.....	3.0	2.8	3.6	7.5	28	46	44	47	30	17	12	8
21.....	2.9	2.8	5	7.5	26	43	41	47	30	16	12	7.5
22.....	3.0	2.8	5.5	7.5	25	40	37	46	28	16	12	7.5
23.....	3.0	2.9	5.5	7.5	28	37	36	46	28	16	11	7.5
24.....	3.0	3.0	5	7.5	31	37	35	46	28	15	11	7.5
25.....	3.0	3.2	7	7	36	39	36	46	26	15	11	7.5
26.....	3.0	3.4	6	7	41	38	35	46	26	15	12	7.5
27.....	2.9	3.6	5.5	7	48	40	34	46	26	15	12	7.5
28.....	2.9	3.6	20	6.5	52	41	32	47	24	15	12	7.5
29.....	2.8	3.6	26	6.5	54	44	32	46	24	15	12	11
30.....	2.6	3.6	17	6.5	-----	45	32	46	22	15	12	10
31.....	2.6	-----	14	7.5	-----	45	-----	46	-----	15	12	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3.6	2.6	3.02	186
November.....	3.9	2.6	3.04	181
December.....	26	3.2	6.23	383
January.....	13	6.5	8.35	513
February.....	154	7	40.4	2,320
March.....	53	37	41.7	2,560
April.....	49	32	42.0	2,500
May.....	47	33	42.0	2,580
June.....	48	22	34.8	2,070
July.....	22	15	17.3	1,060
August.....	15	11	12.6	775
September.....	11	7.5	8.82	525
The year.....	154	2.6	21.6	15,700

## LITTLE ROCK CREEK NEAR LITTLE ROCK, CALIF.

LOCATION.—Water-stage recorder about a quarter of a 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 1932.

EXTREMES.—Maximum discharge during year, 2,200 second-feet Feb. 8; no flow several months.

1930-32: Maximum discharge, that of Feb. 8, 1932; no flow part of each year.

REMARKS.—Entire record furnished by Palmdale Irrigation District and Los Angeles County Flood Control District.

*Discharge, in second-feet, 1931-32*

Day	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	0	16	11	105	70	29	11	3.0	2.0
2.....	.3	13	10	96	69	31	11	2.8	2.0
3.....	.5	11	8	91	68	31	13	2.6	2.0
4.....	.7	9.5	7	84	66	29	12	2.4	2.0
5.....	.8	8.5	6.5	76	66	26	11	2.3	2.0
6.....	.8	7.5	9	76	60	25	10	2.2	2.0
7.....	.9	6.5	42	77	55	25	9.5	2.0	1.8
8.....	1.0	6.5	579	77	54	24	8.5	2.0	1.7
9.....	3.0	6.5	830	70	52	24	8	2.0	1.6
10.....	2.8	6.5	323	71	54	24	7	2.0	1.4
11.....	1.6	6.5	144	64	56	26	6.5	2.0	1.2
12.....	1.4	7	96	64	57	26	6.5	2.0	1.1
13.....	1.1	8.5	78	61	61	26	6.5	2.0	1.0
14.....	1.2	7	67	63	62	26	6.5	2.0	.8
15.....	1.1	7	56	59	61	25	6.5	2.0	.6
16.....	1.2	6.5	52	56	59	24	6.5	2.0	.5
17.....	1.1	5.5	49	59	56	22	6.5	2.0	.4
18.....	1.2	6.5	46	67	54	21	6	2.0	.2
19.....	1.6	6	41	76	54	20	6	2.0	.1
20.....	3.4	6	42	84	57	18	6	2.0	0
21.....	6	6	45	70	49	18	5	2.0	0
22.....	12	5.5	48	61	39	17	5	2.0	0
23.....	7.5	5.5	57	57	35	16	4.8	2.0	0
24.....	5.5	4.2	62	61	33	16	4.4	2.0	0
25.....	5.5	5.5	73	70	33	15	4.4	2.0	0
26.....	9	5	87	69	33	14	4.2	2.0	0
27.....	6	5	107	69	30	14	4.0	2.0	0
28.....	88	4.4	116	69	30	13	3.8	2.0	0
29.....	87	4.6	114	69	28	13	3.6	2.0	0
30.....	34	4.8	-----	66	28	12	3.2	2.0	0
31.....	20	5.5	-----	64	-----	12	-----	2.0	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
December.....	88	0	9.88	608
January.....	16	4.2	6.90	424
February.....	830	6.5	111	6,380
March.....	105	56	71.0	4,370
April.....	70	28	51.0	3,030
May.....	31	12	21.4	1,320
June.....	13	3.2	6.90	411
July.....	3.0	2.0	2.11	130
August.....	2.0	0	.79	48.4
The year.....	830	0	23.0	16,700

NOTE.—No flow during months omitted.

## OWENS LAKE BASIN

## OWENS RIVER NEAR ROUND VALLEY, CALIF.

LOCATION.—Water-stage recorder in SE¼ 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 618 second-feet July 2; minimum, 58 second-feet Dec. 29.

1903-23, 1927-32: 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. Daily-discharge record furnished by city of Los Angeles.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	101	110	120	144	145	321	104	196	595	229	143
2	99	99	92	132	149	141	334	101	199	618	232	145
3	93	97	94	123	153	141	368	107	232	604	229	135
4	95	97	89	130	158	134	362	106	259	591	226	135
5	95	97	86	133	155	141	368	136	276	574	226	139
6	93	99	75	136	160	138	300	136	220	544	229	135
7	93	99	83	136	179	136	300	136	228	518	223	131
8	95	99	93	132	179	134	315	101	278	500	206	133
9	95	94	105	130	175	134	315	100	252	487	206	135
10	95	101	94	139	171	138	315	102	238	480	198	135
11	100	101	98	136	167	138	315	101	265	460	188	137
12	97	92	93	124	163	139	330	101	278	428	184	139
13	97	97	86	88	158	141	334	110	298	398	182	141
14	97	99	102	130	158	143	235	110	322	377	177	137
15	97	104	93	132	158	147	192	110	325	348	177	137
16	97	92	80	151	158	153	170	123	322	323	168	135
17	97	115	91	151	151	158	145	134	317	312	165	131
18	98	111	114	138	151	166	136	151	331	301	159	125
19	112	101	112	147	147	181	126	170	328	289	152	131
20	101	121	107	141	138	210	124	175	362	284	152	127
21	101	110	119	136	141	183	154	181	400	268	143	127
22	99	92	112	132	140	179	172	188	442	266	139	131
23	92	90	114	126	139	179	154	175	469	260	143	137
24	90	92	117	126	138	205	154	168	487	260	143	137
25	94	99	122	124	138	252	154	164	483	260	145	135
26	90	113	100	134	139	246	128	175	400	260	147	139
27	102	113	119	119	138	243	128	188	400	250	143	149
28	101	101	94	124	138	246	119	205	520	244	161	154
29	102	114	58	129	139	264	110	198	558	244	159	149
30	102	112	83	134	139	288	107	198	614	235	147	168
31	104	-----	114	139	-----	303	-----	198	-----	232	152	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	112	90	97.4	5,990
November	121	90	102	6,070
December	122	58	98.4	6,050
January	151	88	131	8,060
February	179	138	152	8,740
March	303	134	179	11,000
April	368	107	226	13,400
May	205	100	144	8,850
June	614	196	345	20,500
July	618	232	381	23,400
August	232	139	178	10,900
September	168	125	138	8,210
The year	618	58	181	131,000

• Estimated.

## OWENS RIVER AT PLEASANT VALLEY, NEAR BISHOP, CALIF.

LOCATION.—Water-stage recorder in NW¼ 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 972 second-feet July 3; minimum, 111 second-feet Nov. 22.

1918-32: Maximum mean daily discharge, 1,210 second-feet June 21, 1918; minimum, 77 second-feet Aug. 25, 27, 1931.

REMARKS.—Diversions from tributaries above station. Discharge estimated July 14, 15. Daily-discharge record furnished by city of Los Angeles.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	122	126	130	165	157	193	370	143	278	890	389	202
2-----	126	125	126	183	161	193	381	142	288	946	365	206
3-----	122	126	137	171	151	182	438	140	341	972	351	195
4-----	122	131	132	160	178	175	424	150	370	963	382	188
5-----	121	134	122	174	197	187	436	152	343	923	358	190
6-----	125	137	114	189	205	184	354	154	326	875	346	183
7-----	124	137	131	192	233	180	350	155	332	851	346	184
8-----	125	138	142	190	233	182	368	145	323	805	330	189
9-----	125	137	153	187	242	184	366	140	340	770	312	194
10-----	125	137	139	194	212	186	368	143	380	758	293	196
11-----	124	138	148	194	197	187	368	143	435	715	278	196
12-----	126	132	131	198	183	190	366	146	460	647	274	194
13-----	122	138	121	128	195	194	348	164	498	605	270	192
14-----	125	131	155	160	196	187	284	170	523	558	263	190
15-----	126	150	131	176	187	192	249	176	520	511	259	189
16-----	129	131	115	177	203	196	228	184	541	463	246	187
17-----	130	142	138	186	200	199	198	192	538	445	244	184
18-----	134	142	168	186	200	208	184	224	546	437	232	176
19-----	151	133	170	198	198	224	175	241	550	435	219	180
20-----	148	166	166	196	190	265	169	242	580	435	217	176
21-----	145	142	206	196	190	238	164	249	662	417	206	172
22-----	140	111	170	182	190	225	164	258	721	402	198	172
23-----	130	116	160	176	188	225	160	241	778	407	200	178
24-----	128	118	168	172	187	247	166	232	813	405	203	179
25-----	130	120	190	172	194	289	160	228	845	417	206	178
26-----	127	132	154	182	198	287	169	246	887	419	208	179
27-----	127	141	176	176	199	287	171	275	870	413	210	193
28-----	132	131	192	132	196	291	160	293	840	407	213	204
29-----	130	133	131	181	196	323	150	293	857	405	208	202
30-----	128	133	128	193	-----	339	144	293	903	399	200	221
31-----	127	-----	168	197	-----	349	-----	278	-----	397	209	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	151	121	129	7,930
November-----	156	111	133	7,910
December-----	206	114	149	9,160
January-----	198	128	179	11,000
February-----	242	151	195	11,200
March-----	349	175	225	13,800
April-----	438	144	268	15,900
May-----	293	140	201	12,400
June-----	903	278	556	33,100
July-----	972	397	597	36,700
August-----	389	198	266	16,400
September-----	221	172	189	11,200
The year-----	972	111	257	187,000

## 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 721 second-feet July 12; minimum, 136 second-feet July 19.

1906-32: 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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	270	298	332	313	290	302	339	171	312	442	483	310
2.....	274	276	331	315	301	305	352	164	311	442	482	215
3.....	270	225	335	309	270	306	367	161	322	442	483	207
4.....	270	199	336	305	256	308	378	161	320	442	492	202
5.....	264	194	333	294	256	305	420	159	368	442	501	200
6.....	262	212	332	289	277	301	430	156	403	427	501	207
7.....	264	253	332	297	301	295	438	155	394	440	505	236
8.....	267	285	327	300	331	292	402	153	382	446	505	243
9.....	267	296	332	301	386	288	370	152	369	460	501	214
10.....	272	292	344	299	421	285	377	142	363	498	501	205
11.....	274	296	354	299	457	283	370	140	348	583	500	200
12.....	278	296	354	311	398	283	368	146	358	721	501	198
13.....	282	297	360	312	375	278	374	152	389	601	495	198
14.....	282	297	346	303	371	277	383	162	425	601	488	198
15.....	276	302	344	267	358	276	368	183	452	562	481	200
16.....	279	303	362	276	340	266	322	201	446	462	472	213
17.....	282	291	364	279	353	266	282	216	445	407	462	219
18.....	285	290	359	289	360	270	253	232	453	251	453	224
19.....	300	294	362	294	356	280	231	256	438	136	450	230
20.....	274	297	377	297	346	282	216	270	413	280	446	234
21.....	298	295	385	301	333	287	202	292	412	246	441	236
22.....	302	302	393	299	320	305	199	287	440	237	436	228
23.....	297	292	402	291	310	295	193	297	463	216	430	220
24.....	297	272	368	289	298	281	188	296	465	207	424	204
25.....	296	277	376	284	286	277	185	299	442	206	416	196
26.....	294	295	379	286	292	285	186	297	457	207	412	208
27.....	294	303	389	285	294	309	189	301	457	207	405	224
28.....	296	308	415	289	296	312	195	309	453	208	399	233
29.....	297	327	438	272	297	313	189	327	448	416	391	250
30.....	298	330	431	263	-----	312	178	327	446	433	385	270
31.....	300	-----	344	282	-----	326	-----	324	-----	442	374	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	302	262	283	17,400
November.....	330	194	283	16,800
December.....	438	327	362	22,300
January.....	315	263	293	18,000
February.....	457	256	329	18,900
March.....	326	266	292	18,000
April.....	438	178	298	17,700
May.....	327	140	222	13,600
June.....	465	311	406	24,200
July.....	721	136	391	24,000
August.....	505	374	450	28,200
September.....	310	196	221	13,200
The year.....	721	136	320	232,000

## ROCK CREEK AT SHERWIN HILL, NEAR BISHOP, CALIF.

LOCATION.—Water-stage recorder in SW¼ 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 142 second-feet June 27; minimum, 5.5 second-feet Nov. 12.

1922-32: Maximum mean daily discharge, 162 second-feet June 17, 1927; minimum, 1.8 second-feet Jan. 6-7, 1930.

REMARKS.—No diversions. Discharge estimated Dec. 16, Jan. 16-18, Feb. 3, 4. Daily-discharge record furnished by city of Los Angeles.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8	8	8.5	20	8.5	10	14	18	40	119	56	23
2.....	7.5	8	9	18	12	9.5	16	19	45	116	49	23
3.....	7.5	8	9	16	12	9.5	15	19	55	120	46	23
4.....	7	8.5	8	18	12	8.5	15	18	57	127	45	22
5.....	7	8.5	9.5	16	12	9.5	14	16	53	125	44	21
6.....	7	8.5	9.5	14	14	9.5	13	17	51	122	43	20
7.....	7	8.5	10	12	12	9.5	14	18	49	120	43	19
8.....	7	8.5	8.5	12	14	9.5	14	18	48	113	43	18
9.....	7	8	8.5	12	14	9.5	14	20	50	112	43	18
10.....	7	8	9.5	12	12	9.5	15	22	52	106	44	18
11.....	7	8.5	11	12	13	9.5	16	26	62	103	44	17
12.....	7	5.5	12	12	10	9.5	16	29	74	95	42	17
13.....	7	6.5	12	21	16	9.5	17	31	81	95	39	17
14.....	7	7.5	11	32	14	9.5	16	34	84	78	37	17
15.....	7	8	10	39	14	9.5	17	38	82	72	36	16
16.....	7	6	9.5	34	12	9.5	18	40	81	63	34	16
17.....	7	11	9	29	14	10	18	45	79	56	32	16
18.....	7	8	9	25	12	11	18	51	76	56	31	16
19.....	8.5	10	9	20	12	11	19	50	73	57	30	16
20.....	9	12	9.5	12	11	11	18	52	78	56	29	16
21.....	9	7.5	9.5	12	11	9	16	53	83	54	27	16
22.....	9	8	8.5	12	10	9.5	16	48	97	54	26	16
23.....	8.5	8.5	9	12	10	11	16	42	112	57	26	16
24.....	8.5	9	11	12	9.5	12	17	40	119	61	25	16
25.....	8	9.5	11	12	9.5	12	16	42	123	65	25	15
26.....	8	10	9.5	11	9.5	12	16	46	133	66	25	15
27.....	8	10	11	8	9.5	12	16	52	142	65	26	16
28.....	8	11	9.5	14	9.5	12	16	54	140	60	25	16
29.....	8	13	12	11	9.5	12	16	51	130	58	25	17
30.....	8	9.5	12	9.5	12	12	18	46	123	58	24	17
31.....	8	-----	18	9	-----	13	-----	42	-----	58	24	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	9	7	7.63	469
November.....	13	5.5	8.72	519
December.....	18	8	10.1	621
January.....	39	8	16.4	1,010
February.....	16	8.5	11.7	673
March.....	13	8.5	10.4	640
April.....	19	13	16	952
May.....	54	16	35.4	2,180
June.....	142	40	82.4	4,900
July.....	127	54	82.5	5,070
August.....	56	24	35.1	2,160
September.....	23	15	17.6	1,050
The year.....	142	5.5	27.9	20,200

## 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 1930 to September 1932.

EXTREMES.—Maximum mean daily discharge during year, 143 second-feet June 28; minimum, 11 second-feet Oct. 5, 7, 8, Nov. 3.

1903-23, 1930-32: Maximum discharge, 360 second-feet Jan. 25, 1914 (gage height, 5.0 feet); minimum, 8.5 second-feet July 23-25, 1931.

REMARKS.—Water diverted above station for irrigation. Discharge estimated July 16-18. Record of daily discharge furnished by city of Los Angeles.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12	14	20	32	22	22	17	16	49	123	61	24
2.....	12	14	19	32	22	22	16	16	56	126	54	23
3.....	12	11	20	30	20	21	16	15	66	128	47	22
4.....	12	15	19	27	24	20	16	16	67	132	46	20
5.....	11	15	19	30	26	22	17	17	62	130	48	20
6.....	12	16	19	29	33	22	16	18	61	122	49	19
7.....	11	16	20	30	50	22	15	18	61	122	48	20
8.....	11	16	21	30	50	22	15	19	56	116	46	21
9.....	13	15	21	30	50	21	15	20	61	112	39	23
10.....	14	16	20	30	30	21	15	18	62	108	38	22
11.....	15	16	22	30	28	20	15	19	67	102	35	23
12.....	15	14	20	30	26	20	14	23	72	98	36	24
13.....	15	14	19	18	27	20	15	29	76	91	35	24
14.....	15	15	20	19	27	20	15	32	78	83	33	24
15.....	14	16	20	21	24	20	14	38	77	72	32	23
16.....	14	13	20	22	26	19	14	38	77	67	32	22
17.....	14	16	21	24	25	17	14	37	75	61	33	23
18.....	13	16	22	25	25	15	15	44	68	56	34	23
19.....	14	16	22	26	25	16	16	48	66	50	32	23
20.....	15	19	25	25	24	16	15	48	71	54	31	22
21.....	15	16	42	23	24	15	15	49	77	51	29	20
22.....	15	13	25	24	23	15	16	47	88	53	27	20
23.....	14	14	22	22	22	16	16	43	103	56	25	19
24.....	14	15	24	23	22	15	18	42	110	59	23	20
25.....	14	16	36	24	22	16	18	42	115	60	22	20
26.....	14	18	22	23	22	15	19	45	121	63	22	21
27.....	13	18	24	22	22	16	18	52	131	62	21	22
28.....	13	19	59	21	22	17	18	54	143	58	22	23
29.....	13	19	30	24	22	17	16	55	133	58	22	24
30.....	14	19	24	23	-----	16	16	52	123	60	24	25
31.....	14	-----	30	23	-----	17	-----	49	-----	62	24	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	15	11	13.	830
November.....	19	11	15.7	934
December.....	59	16	24.1	1,480
January.....	32	18	25.5	1,570
February.....	50	20	27.1	1,560
March.....	22	15	18.5	1,140
April.....	19	14	15.8	940
May.....	55	15	34.2	2,100
June.....	143	46	82.4	4,900
July.....	132	50	83.7	5,150
August.....	61	21	34.5	2,120
September.....	25	16	22.0	1,310
The year.....	143	11	33.1	24,000

## PINE CREEK AT DIVISION BOX NEAR BISHOP, CALIF.

**LOCATION.**—Water-stage recorder in NW¼ sec. 19, T. 6 S., R. 31 E., a quarter of a mile above division box and forks of creek, 4 miles west of Round Valley, and 13 miles northwest of Bishop.

**DRAINAGE AREA.**—37.9 square miles.

**RECORDS AVAILABLE.**—October 1921 to September 1932.

**EXTREMES.**—Maximum mean daily discharge during year, 275 second-feet June 25; minimum, 13 second-feet Jan. 27, 28.

1922-32: 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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	18	16	16	20	16	16	18	20	62	230	109	48
2.....	17	16	16	19	16	16	18	20	69	230	103	46
3.....	17	16	16	18	16	16	18	22	66	270	103	46
4.....	17	15	16	18	17	16	18	22	63	220	104	45
5.....	17	16	16	17	18	16	18	23	62	178	105	44
6.....	17	16	16	17	18	16	18	22	61	185	104	42
7.....	17	16	16	16	18	16	18	24	60	190	101	41
8.....	17	16	16	16	18	16	18	25	63	205	100	40
9.....	17	16	16	16	18	16	18	27	76	196	94	40
10.....	17	16	16	16	17	16	19	30	92	195	88	39
11.....	17	16	16	16	17	16	19	36	111	180	82	38
12.....	17	15	16	16	16	16	19	43	125	157	80	37
13.....	17	15	15	16	16	16	20	51	132	143	77	36
14.....	17	15	15	16	16	16	20	56	145	134	75	34
15.....	17	16	15	16	16	16	20	61	139	129	72	33
16.....	17	15	15	17	16	16	20	68	141	127	69	33
17.....	17	16	15	16	16	16	20	94	145	126	67	32
18.....	18	16	16	16	16	17	21	93	149	122	62	32
19.....	18	16	16	16	16	18	22	80	160	116	62	32
20.....	18	16	16	16	16	18	22	81	176	113	61	32
21.....	17	16	16	16	16	18	21	77	202	115	57	32
22.....	17	14	16	16	15	18	20	67	235	118	54	32
23.....	16	14	16	16	15	18	20	62	240	120	52	32
24.....	16	14	16	16	15	19	20	61	267	119	52	31
25.....	16	15	17	15	15	19	19	67	275	118	52	30
26.....	16	16	17	15	15	19	19	87	251	115	52	30
27.....	16	16	17	13	16	20	18	95	225	113	52	32
28.....	16	16	16	13	16	20	18	87	248	115	52	33
29.....	16	16	15	14	16	19	18	70	205	118	52	32
30.....	16	16	17	15	-----	19	19	62	220	115	51	33
31.....	16	-----	20	16	-----	20	-----	61	-----	113	49	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	18	16	16.8	1,030
November.....	16	14	15.6	928
December.....	20	15	16.1	990
January.....	20	13	16.1	990
February.....	18	15	16.3	938
March.....	20	16	17.2	1,060
April.....	22	18	19.2	1,140
May.....	95	20	54.6	3,360
June.....	275	60	149	8,870
July.....	270	113	152	9,350
August.....	109	49	74.0	4,550
September.....	48	30	36.2	2,150
The year.....	275	13	48.7	35,400



## 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 264 second-feet June 26; minimum, 0.1 second-foot Oct. 5-8.

1903-23; 1930-32: 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. Discharge estimated Feb. 26-29, May 17, June 22, 23. Record of daily discharge furnished by city of Los Angeles.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	1.8	3.2	4.9	5.0	3.0	2.4	0.5	14	171	46	6.5
2	.2	1.7	3.2	6	4.4	3.0	2.2	.5	20	183	42	7
3	.2	1.4	3.4	5.5	3.4	2.8	2.1	.2	24	202	34	6
4	.2	1.7	3.2	4.4	3.6	2.8	2.1	.2	29	188	35	5
5	.1	1.9	3.4	5.5	4.9	2.6	1.4	.3	23	188	32	4.2
6	.1	1.9	3.5	6	8.5	2.6	1.0	.4	20	196	27	3.5
7	.1	1.9	4.1	6	21	2.6	1.0	1.3	24	182	28	3.3
8	.1	1.9	4.0	6.5	16	2.8	1.2	1.9	28	166	26	3.7
9	.2	1.8	4.2	7	18	2.8	1.3	1.7	46	169	23	3.5
10	.5	2.2	3.8	8	8	2.7	1.5	5.5	75	163	18	3.0
11	.6	2.2	4.1	8.5	6	2.7	1.3	2.8	99	142	17	2.7
12	.5	2.3	3.6	15	5	2.7	1.1	2.5	137	116	17	2.5
13	.2	2.4	3.0	4.5	4.6	2.7	1.4	2.5	137	110	19	2.5
14	.4	2.6	3.2	3.8	4.2	2.7	1.5	2.2	109	90	18	2.4
15	.3	2.8	3.4	4.0	4.0	1.9	1.8	1.3	131	82	17	2.4
16	.3	2.5	3.4	4.2	4.7	1.8	2.1	1.3	105	74	14	2.4
17	.4	2.6	3.7	4.2	4.8	1.8	2.4	8.5	109	68	12	2.4
18	.9	2.1	4.6	4.7	4.8	1.9	2.5	16	139	69	7	2.4
19	1.7	1.3	4.7	5.5	4.5	2.7	1.8	8	122	63	5.5	2.7
20	1.3	1.3	5	5.5	4.1	3.2	1.7	6	151	57	5	3.0
21	1.3	1.3	10	4.7	4.0	2.7	1.8	5	189	48	5	2.7
22	1.3	1.1	6.5	4.9	3.9	3.2	1.8	5.5	199	44	5	3.0
23	1.3	1.7	5.5	4.5	3.8	2.7	1.3	3.5	108	46	3.5	3.3
24	1.2	2.4	5.5	4.5	3.7	2.8	1.8	2.3	23	45	3.8	4.4
25	1.3	2.8	10	4.7	3.6	2.5	1.3	3.0	23	44	4.4	5.5
26	1.3	2.8	5.5	4.9	3.4	1.7	1.2	6	234	54	5	5
27	1.3	3.0	5	4.7	3.3	2.4	.5	21	23	53	7	6.5
28	1.3	3.2	11	4.0	3.2	3.8	.5	19	23	53	7.5	7.5
29	1.8	3.2	10	4.7	3.1	3.0	.5	16	176	55	6.5	6.5
30	2.1	3.2	5.5	4.6	-----	2.8	.4	16	158	56	5	5
31	1.8	-----	4.9	4.2	-----	4.0	-----	16	-----	52	7.5	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	2.1	0.1	0.79	48.8
November	3.2	1.1	2.17	129
December	11	3.0	4.97	306
January	15	3.8	5.49	338
February	21	3.1	5.91	340
March	4.0	1.7	2.69	165
April	2.5	.4	1.50	89.3
May	21	.2	5.71	351
June	264	14	114	6,780
July	202	44	104	6,400
August	46	3.5	16.2	996
September	7.5	2.4	4.02	239
The year	264	.1	22.3	16,200

**MONO LAKE BASIN****MONO LAKE NEAR MONO LAKE, CALIF.**

LOCATION.—Staff gage in SE¼NE¼ sec. 31, T. 2 N., R. 26 E., 2 miles south of Mono Lake post office.

RECORDS AVAILABLE.—June 1912 to September 1932 (fragmentary).

EXTREMES.—1912-32: Maximum stage, 13.55 feet July 18, 1919; minimum, 3.62 feet Oct. 20, 1931.

REMARKS.—Gage-height record furnished by United States Forest Service.

*Gage height, in feet, 1931-32*

Oct. 20.....	3.62	June 13.....	4.09
Apr. 1.....	3.95	July 18.....	3.95
May 14.....	3.99	Aug. 20.....	3.90

**WALKER LAKE BASIN****WALKER LAKE NEAR HAWTHORNE, NEV.**

LOCATION.—Staff gage in NW¼ sec. 1, T. 8, N., R. 29 E., at bathing pier of Hawthorne naval ammunition depot, 6 miles northwest of Hawthorne.

RECORDS AVAILABLE.—August 1928 to September 1932.

EXTREMES.—Maximum elevation recorded, 4,050.2 feet Aug. 8, 1928; minimum, 4,036.0 feet, Sept. 24, 1932.

In 1909 (date unknown) elevation of the lake was 4,083 feet, determined during topographic survey by the United States Geological Survey.

REMARKS.—Records furnished by United States Navy Department.

*Elevation, in feet, 1931-32*

Oct. 1.....	4,038.9	Mar. 1.....	4,037.4
Oct. 31.....	4,038.35	Mar. 31.....	4,037.05
Dec. 1.....	4,038.0	May 25.....	4,037.25
Dec. 31.....	4,037.8	June 7.....	4,037.2
Feb. 1.....	4,037.65	Sept. 24.....	4,037.0

NOTE.—Elevations refer to mean sea level.

## BRIDGEPORT RESERVOIR NEAR BRIDGEPORT, CALIF.

LOCATION.—Elevation determined at Bridgeport Dam in SE¼ sec. 34, T. 6 N., R. 25 E., 4½ miles north of Bridgeport.

RECORDS AVAILABLE.—October 1931 to September 1932.

REMARKS.—Gage-height record and capacity table furnished by Walker River Irrigation District. Capacity of reservoir, 42,500 acre-feet.

*Contents, in acre-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	321	351	776	2,520	5,080	7,740	18,200	19,300	18,100	35,300	39,400	29,500
2	321	377	816	2,590	5,150	7,980	19,000	19,400	18,000	36,200	39,000	29,200
3	321	407	836	2,700	5,260	8,180	20,000	19,400	18,000	37,300	38,700	28,800
4	318	438	895	2,780	5,370	8,440	20,000	19,400	18,100	38,000	38,400	28,500
5	314	474	942	2,850	5,440	8,640	21,200	19,400	18,200	38,700	38,400	28,100
6	314	509	989	2,920	5,520	8,840	21,300	19,600	18,300	39,400	38,300	27,700
7	314	509	1,020	2,970	5,560	9,050	21,100	19,600	18,400	40,000	38,200	27,200
8	318	497	1,070	3,060	5,600	9,260	21,000	19,600	18,700	40,400	38,000	26,700
9	321	486	1,100	3,130	5,640	9,540	20,700	19,600	18,900	40,800	37,900	26,400
10	321	474	1,160	3,210	5,680	9,820	20,600	19,600	19,000	41,200	37,600	26,000
11	314	462	1,200	3,290	5,720	10,100	20,500	19,600	19,300	41,900	37,200	25,600
12	311	462	1,259	3,340	5,760	10,400	20,400	19,500	19,700	42,300	36,900	25,300
13	308	450	1,300	3,420	5,800	10,600	20,500	19,500	20,400	42,500	36,500	25,100
14	314	438	1,360	3,480	5,920	10,900	20,400	19,500	20,500	42,200	36,100	24,800
15	318	416	1,410	3,570	6,040	11,100	20,400	19,500	21,100	41,900	35,700	24,500
16	318	394	1,480	3,630	6,120	11,400	20,400	19,500	21,400	42,000	35,300	24,000
17	318	394	1,520	3,720	6,240	11,700	20,400	19,600	21,700	42,000	34,900	23,600
18	314	386	1,590	3,780	6,380	12,000	20,400	19,500	22,200	42,000	34,500	23,200
19	318	377	1,640	3,900	6,460	12,400	20,400	19,500	22,700	41,900	34,300	23,000
20	321	377	1,680	3,960	6,540	12,800	20,400	19,400	23,200	41,900	33,900	22,600
21	321	377	1,760	4,050	6,640	13,200	20,200	19,300	23,800	41,800	33,300	22,100
22	321	411	1,830	4,180	6,680	13,400	20,000	19,000	24,700	41,300	33,000	21,800
23	324	450	1,880	4,250	6,820	13,800	19,800	18,700	25,500	41,200	32,600	21,400
24	324	486	1,950	4,380	6,940	14,000	19,500	18,500	26,500	41,200	32,200	21,200
25	324	509	2,040	4,480	7,030	14,600	19,300	18,400	27,600	41,000	31,700	21,100
26	321	555	2,090	4,580	7,120	15,000	19,300	18,400	29,000	40,800	31,200	20,900
27	318	602	2,170	4,640	7,220	15,300	19,300	18,300	30,200	40,700	31,000	20,800
28	321	650	2,230	4,740	7,360	15,600	19,300	18,300	31,700	40,400	30,700	21,000
29	318	689	2,310	4,820	7,500	15,900	19,300	18,300	33,000	40,100	30,500	21,000
30	321	727	2,370	4,900	-----	16,300	19,300	18,200	34,100	40,000	30,100	21,100
31	331	-----	2,450	4,960	-----	17,100	-----	18,000	-----	39,700	29,800	-----

## EAST WALKER RIVER NEAR BRIDGEPORT, CALIF.

LOCATION.—Staff gage in SW $\frac{1}{4}$ NE $\frac{1}{4}$  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 1932. July 1911 to September 1914 at site  $1\frac{1}{2}$  miles upstream.

REMARKS.—Records good. Considerable areas of meadow and pasture irrigated near Bridgeport. Flow regulated by Bridgeport Reservoir. Gage-height record and results of one discharge measurement furnished by Walker River Irrigation District.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	6	6	6	6	6	84	44	217	125	260	267
2	18	7	6	6	6	6	102	44	219	169	269	267
3	26	7	6	6	6	6	102	44	219	232	253	267
4	26	6	6	6	6	6	102	44	204	237	239	267
5	26	6	6	6	6	6	117	44	189	237	244	267
6	20	6	6	6	6	6	150	44	189	237	244	267
7	18	27	6	6	6	6	200	44	161	239	228	267
8	20	31	6	6	6	6	200	44	143	239	219	262
9	22	31	6	6	6	6	200	54	143	239	217	262
10	25	31	6	6	6	6	200	78	154	212	230	246
11	25	31	6	6	6	6	200	124	169	221	246	232
12	23	36	6	6	6	6	183	158	175	230	244	232
13	20	36	6	6	6	6	173	161	195	267	255	232
14	18	36	6	6	6	6	173	175	206	292	267	262
15	21	36	6	6	6	6	173	195	206	299	269	232
16	20	36	6	6	6	6	173	210	206	265	269	232
17	21	36	6	6	6	6	173	232	191	265	269	232
18	21	36	6	6	6	6	173	309	183	265	269	232
19	22	36	6	6	6	6	173	322	183	239	284	232
20	22	36	6	6	6	6	173	342	183	228	292	230
21	22	10	6	6	6	6	173	363	185	257	294	230
22	22	7	6	6	6	6	173	322	185	299	294	228
23	22	7	6	6	6	6	165	322	185	292	289	193
24	22	7	6	6	6	6	160	296	187	239	312	169
25	22	7	6	6	6	6	139	296	160	223	325	169
26	22	7	6	6	6	6	122	294	143	234	304	169
27	22	7	6	6	6	6	101	267	124	248	277	107
28	22	7	6	6	8	6	78	223	124	255	267	42
29	22	7	6	6	8	6	59	217	124	244	267	33
30	22	6	6	6	6	6	47	217	124	241	269	31
31	17	6	6	6	6	33	217	217	244	267	267	267

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	26	17	21.6	1,330
November	36	6	19.5	1,160
December	6	6	6.0	369
January	6	6	6.0	369
February	8	6	6.1	351
March	33	6	6.9	424
April	200	47	148	8,810
May	363	44	185	11,400
June	219	124	176	10,500
July	299	125	242	14,900
August	325	217	266	16,400
September	267	31	211	12,600
The year	363	6	108	78,600

## WALKER RIVER NEAR WABUSKA, NEV.

LOCATION.—Water-stage recorder in SE¼ sec. 16, T. 15 N., R. 26 E., on the Walker River Indian Reservation, 6½ miles east of Wabuska.

RECORDS AVAILABLE.—October 1929 to September 1932; 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, 1,250 second-feet June 29 (gage height, 3.28 feet); no flow Oct. 1 to Nov. 6.

1920-32: Maximum discharge, 2,220 second-feet June 8, 1922; no flow at times in 1924, 1925, and 1931.

REMARKS.—Records good. Gage-height record and results of ten discharge measurements 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.

## Discharge, in second-feet, 1931-32

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	* 3		20	112	14	67	40	1, 130	40	55
2	0	* 3		20	123	15	57	30	1, 060	37	55
3	0	* 3		20	109	16	48	29	1, 000	36	48
4	0	* 3	* 40	17	89	24	50	36	945	34	45
5	0	* 3		15	84	24	50	45	945	36	43
6	0	* 3		19	71	32	47	48	840	43	42
7	1	* 3		30	65	40	42	63	690	48	39
8	* 1	* 3	40	173	61	48	36	55	528	43	32
9	* 1	* 3	37	222	54	50	33	52	453	36	32
10	* 1	* 3	30	152	50	50	30	52	345	36	29
11	1	* 4	17	139	47	48	33	59	296	37	34
12	1	* 4		121	43	33	29	71	244	39	47
13	1	* 4	* 15	104	42	26	48	82	185	40	50
14	1	* 4		115	40	20	139	77	129	36	42
15	1	* 3		101	40	15	123	57	96	34	42
16	2	* 3	14	82	39	15	109	57	77	33	43
17	2	* 3	15	77	39	13	54	61	65	33	47
18	2	* 2	20	77	37	13	36	118	57	33	37
19	2	2	29	77	36	13	25	222	50	32	36
20	2	2	23	52	33	33	26	28	52	29	34
21	2	3	23	47	30	48	24	357	54	33	33
22	2		33	43	27	65	24	445	52	32	33
23	2	* 10	47	42	26	61	23	55	50	32	33
24	* 3		55	42	22	57	27	740	47	43	47
25	* 3		26	48	19	61	43	945	45	57	45
26	* 3	26	26	61	17	77	57	970	43	40	36
27	* 3		26	67	15	101	57	1, 150	43	36	34
28	* 3	* 30	26	82	15	118	57	1, 230	43	33	34
29	* 3		26	84	16	101	67	1, 250	43	33	34
30	* 3		26	20	14	77	71	1, 230	43	36	34
31		40	20		14		61		42	48	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	3	0	1.5	91
December		2	9.4	578
January		14	29.0	1, 780
February	222	15	74.1	4, 260
March	123	14	46.1	2, 830
April	118	13	43.6	2, 590
May	139	23	51.4	3, 160
June	1, 250	29	347	20, 600
July	1, 130	42	313	19, 200
August	57	29	37.4	2, 300
September	55	29	39.8	2, 370
The year	1, 250	0	82.4	59, 800

\* Estimated.

NOTE.—No flow during October.

## WALKER RIVER AT SCHURZ, NEV.

LOCATION.—Staff gage in sec. 36, T. 13 N., R. 28 E., at 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 1932.

EXTREMES.—Maximum discharge during year, about 1,250 second-feet June 30 (gage height, 6.00 feet); minimum, about 1 second-foot for several periods.

1913-32: 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.—Records fair. Discharge estimated June 20 to July 13. Station is below all diversions. Flow regulated by Twin Lakes, Bridgeport, Poor Lake, and Topaz Lake Reservoirs; also by irrigation diversion.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
1	1	1	2	2	2	79	1	18	1	1,100	2	2
2	1	1	1	2	2	115	1	8	1	1,000	3	3
3	1	1	1	2	1	154	1	7	1	950	3	2
4	1	1	1	2	1	144	1	6	2	900	3	2
5	1	1	2	2	1	123	1	7	1	850	3	2
6	1	1	2	2	10	109	1	6	1	700	3	2
7	1	1	2	4	26	91	1	5	1	600	2	2
8	1	1	2	6	51	76	1	3	1	450	2	1
9	1	1	2	25	172	68	1	2	1	350	3	1
10	1	1	2	19	325	64	1	1	1	300	3	1
11	1	1	2	18	205	55	1	1	1	250	2	2
12	1	1	2	12	181	49	1	1	1	200	2	3
13	1	1	2	2	154	47	1	1	1	150	2	3
14	1	1	2	1	133	45	1	2	2	123	1	4
15	1	1	2	1	109	43	1	71	3	93	2	4
16	1	1	2	1	89	43	1	55	1	59	2	3
17	1	1	2	1	30	40	1	44	1	18	2	3
18	1	1	2	1	52	37	1	3	2	3	2	3
19	1	1	2	1	81	35	1	1	2	6	2	3
20	1	1	2	1	95	34	1	1	50	7	3	3
21	1	1	2	1	93	32	1	1	100	6	1	3
22	1	1	2	1	66	30	1	1	150	5	1	2
23	1	1	2	1	45	22	1	1	200	5	1	3
24	1	2	2	1	43	18	1	1	250	6	1	4
25	1	2	2	1	37	12	1	1	300	5	1	5
26	1	2	2	1	43	9	1	1	800	6	1	6
27	1	1	2	1	49	6	1	1	900	3	1	6
28	1	2	2	1	55	3	32	1	1,000	3	1	5
29	1	2	2	2	66	1	50	1	1,100	3	2	5
30	1	2	2	2	-----	1	32	1	1,200	3	2	4
31	1	-----	2	2	-----	1	-----	1	-----	3	1	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1	1	1.0	61
November	2	1	1.2	71
December	2	1	1.9	117
January	25	1	3.8	234
February	325	1	76.4	4,390
March	154	1	51.2	3,150
April	50	1	4.7	280
May	71	1	8.2	504
June	1,200	1	202	12,000
July	1,100	3	263	16,200
August	3	1	1.9	117
September	6	1	3.1	184
The year	1,200	1	51.4	37,300

## WEST WALKER RIVER NEAR COLEVILLE, CALIF.

LOCATION.—Water-stage recorder in NE¼ 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 1932. October 1902 to July 1908 at a site half a mile upstream.

EXTREMES.—Maximum discharge during year, 2,020 second-feet June 26 (gage height, 5.60 feet); minimum, 10 second-feet Nov. 12 (gage height, 1.30 feet). 1915–32: 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 is 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.

*Discharge, in second-feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1	22	30	* 35	40			212	314	€32	1,250	238	
2	22	30	40	40			223	356	740	1,220	235	
3	22	30	38	39		* 60	218	328	€38	1,190	250	
4	21	29	38	40	* 70		218	295	€38	1,080	268	
5	21	30	38				218	283	€50	980	238	
6	21	31	34			61	212	289	€54	950	226	
7	21	31	36		91	62	212	298	776	950	215	
8	21	31				66	212	362	€66	920	210	
9	21	28				70	220	475	1,000	920	198	
10	22	29			* 80	70	235	626	1,220	920	172	
11	23	29				72	283	860	1,270	758	148	67
12	24	21	* 35			73	310	956	1,310	566	136	64
13	25	26				76	* 310	956	1,270	505	124	62
14	25	26			75	75	* 320	1,070	1,310	460	121	63
15	25	21				73	317	1,060	1,220	460	118	60
16	26	31				75	* 350	1,060	1,180	460		60
17	26	39				76	380	1,180	1,160	480		60
18	26	32		* 45	* 70	88	* 400	1,230	1,160	485	* 100	59
19	27	27				116	420	1,090	1,200	416		59
20	28		40			120	* 400	1,120	1,300	376		58
21	29		36			106	* 350	974	1,470	376		57
22	30		35		66	104	* 300	764	1,600	388		57
23	28		36			100	274	704	1,420	396	* 90	58
24	27	30	43			108	218	806	1,400	338		59
25	28		39		* 60	126	* 225	974	1,620	310		57
26	32		27			126	232	1,080	1,660	331		62
27	30		22			135	* 240	1,150	1,620	342		69
28	30	33	26		54	148	* 250	1,130	1,470	304	* 80	66
29	31	33	26		55	144	* 260	806	1,180	289		62
30	31	* 35	32			151	271	704	1,260	274		62
31	30		36			188		680		253		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	32	21	25.6	1,570
November	35	21	29.7	1,770
December	43	22	35.0	2,180
January			44.3	2,720
February			70.0	4,030
March	188		93.8	5,770
April	420	212	276	16,400
May	1,230	283	773	47,600
June	1,660	632	1,180	70,200
July	1,250	253	611	37,600
August	268		140	8,610
September			57	3,810
The year	1,660	21	279	202,000

\* Estimated.

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

LOCATION.—Water-stage recorder in SE¼ sec. 17, T. 10 N., R. 23 E., at Hoyer 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 1932.

Records obtained 3¼ miles downstream December 1917 to May 1924.

EXTREMES.—Maximum mean daily discharge during year, 1,460 second-feet June 29 (gage height, 9.43 feet); minimum not recorded.

1924-32: 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 is regulated by storage in Poor Lake and Topaz Lake Reservoirs. Gage-height record furnished by Walker River Irrigation District.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	20					80	298	645	1,280		
2	25	17					90	342	652	1,210		
3	24	17					90	374	680	1,220		
4	24	17					94	351	665	1,130		
5	23	17					148	342	632	1,090		
6	23	16					160	349	623	1,030		
7	24	24					158	349	520	1,010		
8	24	27					160	342	565	913		
9	24	28					165	391	568	818		
10	26	29					165	466	688	798		
11	27	30				35	158	628	742	780		
12	27	30					130	690	778	670		
13	27	30					133	700	758	546		
14	27	30					130	695	685	501		
15	27						132	611	712	475		
16	26		20	20	30		152	599	872	365	240	160
17	26						198	601	855	402		
18	27						332	668	895	492		
19	29	30					378	655	907	520		
20	29						402	616	1,020	508		
21	31						378	611	1,050	499		
22	31					39	387	529	1,210	479		
23	30	30				39	361	702	1,410	448		
24	28	29				46	378	755	1,390	444		
25	28	24				48	380	692	1,370	431		
26	28	22				49	336	638	1,350	446		
27	28	26				50	328	675	1,380	459		
28	29	24				50	296	695	1,400	499		
29	29	17				50	286	570	1,460	495		
30	29	20				51	290	499	1,390	459		
31	30					55		455		462		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	31	23	26.9	1,650
November		16	25.5	1,520
December			20	1,230
January			20	1,230
February			30	1,730
March	55		39.1	2,400
April	402	80	229	13,600
May	755	298	545	33,500
June	1,460	520	929	55,300
July	1,280	365	674	41,400
August			340	20,900
September			160	9,520
The year	1,460	16	253	184,000



## TOPAZ RESERVOIR NEAR TOPAZ, CALIF.

LOCATION.—Elevations obtained near outlet works of Topaz Reservoir, in sec. 28, T. 10 N., R. 22 E., 6 miles north of Topaz.

RECORDS AVAILABLE.—October 1931 to September 1932.

REMARKS.—Gage-height record and capacity table furnished by Walker River Irrigation District. Alkali Lake was converted into a storage reservoir by diverting water through a feeder canal from West Walker River and construction of outlet works through a low saddle in rim of lake. Alkali Lake occupied the bottom of a large natural depression about 3 miles from West Walker River. Contents shown represent usable contents only and not total quantity of water in reservoir.

*Contents, in acre-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	645	492	1,420	4,360	7,670	12,900	18,800	19,200	31,400	44,400	39,600	23,800
2.....	645	537	1,450	4,450	8,010	13,200	19,000	19,100	31,000	44,400	39,200	23,200
3.....	645	583	1,510	4,600	8,240	13,400	19,200	19,000	31,000	44,400	38,700	22,600
4.....	645	630	1,580	4,710	8,800	13,600	19,300	18,900	31,100	44,400	38,000	22,100
5.....	645	676	1,630	4,770	8,880	13,800	19,400	18,900	31,800	44,400	37,500	21,500
6.....	645	737	1,680	4,850	9,050	14,000	19,400	18,700	32,700	44,500	37,000	21,300
7.....	630	707	1,740	4,920	9,210	14,200	19,400	18,700	33,300	44,400	36,400	21,200
8.....	630	676	1,800	4,990	9,340	14,400	19,400	18,600	33,700	44,400	36,000	21,000
9.....	630	645	1,850	5,100	9,500	14,600	19,400	18,700	34,500	44,300	35,400	20,500
10.....	630	645	1,890	5,240	9,770	14,800	19,400	18,700	35,200	44,300	34,800	20,100
11.....	645	630	1,940	5,400	10,000	15,100	19,500	18,300	36,200	44,300	34,300	19,800
12.....	645	630	1,990	5,550	10,300	15,400	19,800	18,300	37,300	44,200	33,800	19,400
13.....	614	630	2,050	5,790	10,400	15,600	20,000	18,700	38,600	44,200	33,300	19,000
14.....	583	630	2,110	6,030	10,500	15,700	20,300	19,700	40,000	44,200	32,800	18,600
15.....	568	630	2,160	6,200	10,700	15,900	20,600	20,900	41,400	44,200	32,400	18,300
16.....	553	630	2,200	6,280	10,800	16,000	20,700	21,800	41,500	44,200	32,000	18,100
17.....	537	645	2,260	6,360	10,800	16,200	21,200	22,800	42,000	44,200	31,600	17,800
18.....	522	660	2,330	6,450	11,100	16,300	21,100	23,800	41,600	44,100	31,100	17,600
19.....	507	660	2,400	6,530	11,200	16,500	21,100	24,800	43,700	44,000	30,700	17,300
20.....	492	660	2,450	6,640	11,300	16,700	21,000	25,700	44,100	43,800	30,200	17,100
21.....	476	691	2,610	6,830	11,500	16,900	20,900	26,600	44,400	43,500	29,700	16,900
22.....	461	753	2,750	6,860	11,600	17,100	20,800	27,500	44,600	43,200	29,200	16,700
23.....	461	814	2,890	6,900	11,700	17,300	20,500	26,600	44,500	42,900	28,300	16,500
24.....	461	876	3,040	6,960	11,800	17,400	20,100	25,800	44,500	42,700	27,600	16,300
25.....	461	953	3,420	7,040	12,000	17,500	19,700	26,800	44,400	42,400	27,200	16,100
26.....	476	1,030	3,450	7,120	12,100	17,600	19,800	28,000	44,400	42,200	26,700	15,900
27.....	476	1,110	3,480	7,230	12,300	17,800	19,700	28,800	44,500	42,000	26,300	16,000
28.....	476	1,180	3,830	7,290	12,400	18,000	19,700	28,000	44,500	41,800	25,800	15,700
29.....	476	1,260	4,060	7,390	12,600	18,100	19,400	30,600	44,800	41,500	25,300	15,700
30.....	476	1,350	4,140	7,480	-----	18,300	19,400	31,300	44,600	41,000	24,900	15,700
31.....	476	-----	4,220	7,560	-----	18,500	-----	31,900	-----	40,500	24,300	-----

## HUMBOLDT-CARSON SINK BASIN

## CARSON RIVER BASIN

## 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 2,200 second-feet May 20 (gage height, 8.13 feet); minimum not recorded.

1911-32: 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. Discharge estimated July 10-31. Records of daily discharge furnished by Truckee-Carson Irrigation District.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	11	43	239	180	596	582	416	1,090	1,320	18	18
2	5	11	46	304	153	617	670	535	1,040	1,320		
3	5	11	42	259	138	721	764	720	1,110	1,300		
4	4	12	46	206	132	454	753	687	1,190	1,260		
5	4	12	52	192	150	470	684	594	1,300	1,140		
6	5	13	64	185	176	475	624	502	1,480	1,000		
7	5	12	60	188	328	421	538	471	1,510	881		
8	5	12	61	186	668	424	514	528	1,280	764		
9	5	12	63	183	982	434	511	724	1,250	680		
10	5	12	68	186	721	403	523	908	1,340	600		
11	5	12	67	195	666	391	607	1,100	1,370	500		
12	6	13	61	226	613	379	677	1,320	1,460	400		
13	6	13	67	253	494	382	695	1,590	1,580	300		
14	6	13	96	228	388	398	738	1,900	1,590	200		
15	6	14	99	210	381	398	749	1,990	1,700	100		
16	6	14	71	197	333	396	724	2,060	1,880	50		
17	6	16	89	222	244	384	835	2,090	1,770	10		
18	6	17	94	222	301	371	896	2,110	1,650	10		
19	6	18	92	239	268	429	827	2,170	1,490	10		
20	6	24	104	245	244	588	876	2,200	1,460	10		
21	6	29	116	241	227	681	923	2,010	1,530	10		
22	6	33	87	230	263	560	768	1,940	1,610	10		
23	6	34	82	215	263	474	647	1,630	1,730	10		
24	6	34	92	199	233	432	578	1,260	1,720	10		
25	5	34	111	192	272	437	517	1,220	1,590	10		
26	7	36	166	192	284	502	485	1,350	1,640	10		
27	10	38	155	192	351	482	471	1,430	1,690	10		
28	9	39	166	199	391	466	464	1,590	1,750	10		
29	10	41	263	197	479	535	426	1,770	1,670	10		
30	10	42	261	197	-----	585	394	1,520	1,440	10		
31	10	-----	201	208	-----	560	-----	1,190	-----	10		

Month	Maximum	Minimum	Mean	Run off in acre-feet
October	10	4	6.2	381
November	42	11	21.1	1,260
December	263	42	99.5	6,120
January	304	183	214	13,200
February	982	132	356	20,500
March	681	371	479	26,500
April	923	394	649	38,600
May	2,200	416	1,340	82,400
June	1,880	1,040	1,500	89,300
July	1,320	10	386	23,700
August	-----	-----	18.0	1,110
September	-----	-----	18.0	1,070
The year	2,200	-----	423	307,000

## 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 1932.

EXTREMES.—Maximum discharge during year, 2,580 second-feet June 22 (gage height, 6.72 feet); minimum, 7 second-feet Oct. 2 (gage height, 0.97 foot).

1902-6, 1911-32: Maximum discharge, 4,300 second-feet Mar. 3, 1921 (gage height, 8.6 feet); minimum, 2 second-feet Aug. 25-28, 1931.

REMARKS.—Records good except those for periods estimated, which are fair. Water diverted for irrigation of about 150,000 acres above station.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8	11				41	760	813	1,280	1,780	146	32
2.....	7	12				42	1,080	802	1,260	1,630	124	30
3.....	8	12				41	1,060	835	1,240	1,580	117	30
4.....	8	11				44	1,150	846	1,200	1,470	107	28
5.....	9	12				44	1,130	926	1,340	1,270	98	27
6.....	8	12			20	48	1,000	938	1,520	1,180	87	28
7.....	9	12				51	835	1,000	1,750	962	82	26
8.....	11	12				53	802	1,020	1,900	879	74	26
9.....	12	13				59	780	1,040	1,970	760	70	24
10.....	12	12				63	791	1,090	1,920	710	63	23
11.....	11	12				70	802	1,090	2,020	630	61	24
12.....	9	12				77	813	1,100	2,080	601	57	23
13.....	10	10			32	77	835	1,090	1,970	630	53	24
14.....	10	9			39	74	802	1,110	1,900	730	50	25
15.....	11	10			38	82	824	1,180	1,890	650	45	25
16.....	9	9	10	10	39	87	835	1,200	2,060	564	44	26
17.....	10	10			38	95	835	1,220	2,210	554	44	27
18.....	11	9			37	117	802	1,200	2,400	592	41	26
19.....	10				36	184	760	1,260	2,350	601	39	26
20.....	10				37	271	860	1,340	2,370	564	37	27
21.....	11				38	301	835	1,480	2,510	467	34	26
22.....	9				37	295	813	1,720	2,580	410	33	27
23.....	12				34	295	802	1,920	2,380	366	32	27
24.....	11				36	339	813	1,940	2,350	313	30	28
25.....	12	9			37	442	835	1,820	2,290	289	28	27
26.....	12				38	458	868	1,760	2,210	266	28	28
27.....	12				38	426	879	1,690	2,160	244	27	28
28.....	11				39	527	868	1,590	2,110	223	30	30
29.....	12				41	640	857	1,480	2,030	198	31	28
30.....	12					620	879	1,340	1,950	175	32	28
31.....	12					660		1,330		167	31	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	12	7	10.3	633
November.....	12		10.3	613
December.....			10	615
January.....			10	615
February.....	41		30.1	1,730
March.....	660	41	214	13,200
April.....	1,150	760	865	51,500
May.....	1,940	802	1,260	77,500
June.....	2,580	1,200	1,970	117,000
July.....	1,780	167	692	42,500
August.....	146	27	57.3	3,520
September.....	32	23	26.8	1,590
The year.....	2,580	7	429	311,000

## 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 1932 (fragmentary).

EXTREMES.—Maximum discharge not recorded; no flow Oct. 1 to Feb. 29.

1896–1922, 1924–32: Maximum discharge, 3,050 second-feet May 12, 1897 (gage height, 12.0 feet); no flow during periods in 1905, 1915, 1918–20, 1931, 1932.

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

*Discharge, in second-feet, 1931–32*

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	20	140		553	605	393	-----
2.....	50	136		566		373	-----
3.....	80	136		572		351	-----
4.....	93	144		595		334	-----
5.....	97	149		658		324	-----
6.....	98	157		671		308	-----
7.....	76	163		678		292	-----
8.....	70	169		682		274	-----
9.....	66	151		682		254	-----
10.....	64	131		692	680	242	-----
11.....	62	115	380	675		225	-----
12.....	60	118		615		211	-----
13.....	58	153		618		200	-----
14.....	48	196		648		190	-----
15.....	43	230		654		177	-----
16.....	42	227		682		163	-----
17.....	38	211		685		153	-----
18.....	34	185		685	716	142	-----
19.....	30	198		685	710	134	-----
20.....	38	220		685	713	131	-----
21.....	49	213		685	699		-----
22.....	55	202		682	665		59
23.....	66	171	396	688	641		-----
24.....	90	136	407	692	615		-----
25.....	129	205	410	685	595		-----
26.....	148		489	678	566	100	-----
27.....	134		528	648	519		-----
28.....	118	270	528	634	477		-----
29.....	106		528	602	450		-----
30.....	133		534	579	427		-----
31.....	133		544	-----	410		-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
March.....	148	• 20	75.1	4,620			
April.....		115	187	11,100			
May.....			410	25,200			
June.....	692	553	652	38,800			
July.....		410	635	39,000			
August.....	393	-----	193	11,900			
September.....		-----	• 55	3,270			
The year.....		0	184	134,000			

• Estimated.

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 1932.

EXTREMES.—Maximum mean daily discharge during year, 1,490 second-feet June 16; no flow Oct. 1 to Feb. 15.

1896–1922, 1923–32; 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.

## Discharge, in second-feet, 1931–32

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.		23	460	217	440			
2.		103	600	238	460			
3.		380	712	252	472			
4.		440	500	262	480			
5.		440	448	352	600			
6.		500	380	420	892			
7.		520	320	420	1,080			
8.	0	560	262	420	1,010			
9.		600	228	420	938			
10.		1,280	238	440	816			
11.		1,350	273	488	776			
12.		1,380	312	520	* 800			
13.		1,160	320	560	* 850			
14.		1,140	320	604	915			
15.		1,160	320	622	* 1,200			
16.		1,180	300	645	1,490	* 300	* 15	* 5
17.		1,140	300	690	* 1,400			
18.	* 1	1,140	280	699	* 1,300			
19.		1,140	273	726	1,230			
20.		1,160	262	735	* 1,200			
21.	3	888	262	879	* 1,100			
22.	3	825	262	1,010	* 1,000			
23.	6	540	262	938	1,060			
24.	8	472	262	712	* 1,200			
25.	12	380	245	592	* 1,100			
26.	17	186	238	400	1,060			
27.	21	156	217	259	* 1,000			
28.	* 21	150	210	252	938			
29.	* 22	138	195	280	* 900			
30.		114	195	312	848			
31.		107		400				

Month	Maximum	Minimum	Mean	Run-off in acre-feet
February	22	0	4.1	236
March	1,380	23	669	41,100
April	712	195	315	18,700
May	1,010	217	509	31,300
June	1,490	440	952	56,600
July			* 300	18,400
August			* 15	922
September			* 5	298
The year	1,490	0	231	168,000

\* Estimated.

NOTE.—No flow during months omitted.

## HUMBOLDT RIVER BASIN

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## MARTIN CREEK NEAR PARADISE VALLEY, NEV.

LOCATION.—Water-stage recorder in SE¼NE¼ 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 1932.

EXTREMES.—Maximum mean daily discharge during year, about 350 second-feet Mar. 19; minimum, 3 second-feet Oct. 25 to Nov. 2.

1921-32: 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 one discharge measurement furnished by Little Humboldt River water commissioner.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	3	5	•7	7	8	274	123	118	•50	7	7
2	4	3	5	•7	7	8	252	128		33	•7	7
3	5	4	5	•7	7	8	182	151	•122	19	•7	7
4	5	4	5	7	7	8	159	140			7	7
5	5	4	5	7	7	8	143	138			7	7
6	6	5	5	7	7	9	117	130	127	•19	7	7
7	6	5	5	7	7	9	114	134			7	7
8	6	5	6	7	7	13	118	140		20	7	7
9	7	5	6	7	7	17	122	164		17	7	7
10	7	•5	6	7	7	19	142	182	•122	14	7	7
11	7	•5	6	7	7	18	172	199			7	7
12	7	•5	6	7	7	15	183	218	118		7	7
13	7	•5		7	7	15	179	246	124		7	7
14	7			7	7	16	179	268	•130		7	7
15	7	7		7	7	17	157	238	•140	•12	7	7
16	6	5		7	7	18	157	207	149		7	7
17	6	7		7	7	23	141	189	•140		7	7
18	5	7		7	7	89	135	199	130		7	7
19	5	6		7	7	•350	138	199	121	11	7	7
20	5	7		7	7	•230	133	199	•110		7	7
21	4	5	•6	7	7	•120	114	208	102	•10	7	7
22	4	5		7	7	•100	104	176			7	7
23	4	5		7	8	•80	94	•150	•88		7	7
24	4	5		7	8	•150	88	•135		8	7	7
25	3	5		7	8	•150	104	•125			7	7
26	3	5		7	8	•110	123	•120	74		7	7
27	3	5		7	8	•120	112	•119		•7	7	7
28	3	5		7	8	•130	108	•119	•65		7	7
29	3	5		7	8	130	112	118			7	7
30	3	5		7		126	114	118			7	7
31	3			7		208		•118			7	

Month	Maximum	Minimum	Mean	Run-off in ac-ft
October	7	3	5.0	307
November	7	3	5.1	304
December			5.8	357
January	7	7	7.0	430
February	8	7	7.2	414
March	350	8	74.9	4,610
April	274	88	142	8,450
May	268	118	164	10,100
June			110	6,550
July			14.0	861
August	7	7	7.0	430
September	7	7	7.0	417
The year	•350	3	45.8	33,200

• Estimated.

COTTONWOOD CREEK NEAR PARADISE VALLEY, NT<sup>7</sup>.

LOCATION.—Staff gage in SW¼ sec. 3, T. 42 N., R. 39 E., at Case ranch, 5 miles northwest of Paradise Valley.

RECORDS AVAILABLE.—May 1925 to September 1932.

EXTREMES.—Maximum discharge during year, 183 second-feet Mar. 19 (gage height, 5.80 feet); no flow Oct. 1–30, Sept. 9–30.

1925–32: Maximum discharge, that of Mar. 19, 1932; no flow for periods during practically every year.

REMARKS.—Records fair. Discharge estimated Nov. 1 to Feb. 29, July 28 to Sept. 8. Two small diversions above station.

*Discharge, in second-feet, 1931–32*

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					1	24	27	22	18		
2					1	28	27	22	15		
3					1	24	28	24	15		
4					1	24	30	27	15		
5					1	21	28	28	11		0.5
6					4	19	28	24	10		
7					6	19	30	24	9		
8					11	20	41	27	8		0
9					5	22	41	27	8		0
10					8	25	45	27	8		0
11					10	30	41	28	8		0
12					8	30	43	32	8		0
13					5	34	47	34	8		0
14					6	35	43	30	6		0
15					10	34	40	53	5		0
16	0.5	0.5	0.5	0.5	9	35	41	47	5	0.5	0
17					16	32	43	45	5		0
18					78	33	45	43	4		0
19					141	35	45	36	5		0
20					32	30	45	36	4		0
21					22	24	45	30	3		0
22					20	24	38	28	3		0
23					22	21	30	27	3		0
24					28	20	30	27	2		0
25					24	22	30	28	2		0
26					18	21	28	28	1		0
27					20	21	28	22	1		0
28					22	22	27	21	1		0
29					17	24	27	21	1		0
30					17	26	24	21	1		0
31					22		24		1		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November			0.5	30
December			.5	31
January			.5	31
February			.5	29
March	141	1	18.9	1,160
April	35	19	26.0	1,550
May	47	24	35.1	2,160
June	53	21	29.6	1,760
July	18	1	6.3	387
August			.5	31
September		0	.13	8
The year	141	0	9.9	7,180

NOTE.—No flow during October.

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

**LOCATION.**—Staff gage and weir in SE¼ 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 1932.

**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 SW¼ 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, 1931-32*

Sept. 10.....	27	Sept. 21.....	26
Sept. 11.....	39	Sept. 22.....	26
Sept. 12.....	39	Sept. 23.....	20
Sept. 13.....	31	Sept. 24.....	14
Sept. 14.....	27	Sept. 25.....	14
Sept. 15.....	27	Sept. 26.....	14
Sept. 16.....	27	Sept. 27.....	14
Sept. 17.....	19	Sept. 28.....	14
Sept. 18.....	16	Sept. 29.....	19
Sept. 19.....	16	Sept. 30.....	26
Sept. 20.....	23	Oct. 1.....	6

**NOTE.**—Total discharge Sept. 10 to Oct. 1, 1932, 960 acre-feet. No flow Oct. 1, 1931, to Sept. 9, 1932.

**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 adjustments 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 1932.

**REMARKS.**—Records furnished by United States Indian Service. Reductions to mean sea level datum by United States Geological Survey.

*Elevation, in feet, above mean sea level, 1931-32*

Oct. 28.....	3,831.6	June 21.....	3,831.3
Dec. 15.....	3,831.2	July 6.....	3,831.2
Jan. 22.....	3,831.0	July 29.....	3,830.9
Feb. 17.....	3,830.9	Aug. 15.....	3,830.6
Apr. 15.....	3,830.8	Sept. 17.....	3,830.1
May 18.....	3,831.0		



## LAKE TAHOE AT TAHOE, CALIF.

**LOCATION.**—Staff gage in NW¼ sec. 7 (erroneous section published in previous reports), T. 15 N., R. 17 E., near outlet of lake at Tahoe. Zero of gage is 6,220.0 feet above mean sea level; rim of lake (natural control of outlet), 6,223.0 feet; sill of outlet gates below natural control, 6,219.0 feet.

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

**RECORDS AVAILABLE.**—1900 to September 1932.

**EXTREMES.**—Maximum stage during year, 4.57 feet July 7, 8; minimum, 1.79 feet Dec. 8.

1900–1932: Maximum stage, 11.26 feet July 14, 15, 17, 18, 1907; minimum, 1.79 feet Dec. 8, 1931.

**REMARKS.**—Gage read to hundredths once daily. See "Truckee River at Tahoe, Calif." Record furnished by Truckee-Carson Irrigation District.

*Gage height, in feet, 1931–32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.35	2.05	1.85	2.39	2.58	2.76	2.86	3.09	3.74	4.50	4.36	3.96
2	2.33	2.05	1.84	2.39	2.58	2.75	2.87	3.10	3.75	4.52	4.36	3.96
3	2.32	2.04	1.83	2.38	2.57	2.75	2.87	3.11	3.76	4.53	4.35	3.95
4	2.31	2.03	1.82	2.38	2.56	2.74	2.88	3.12	3.78	4.54	4.35	3.94
5	2.29	2.03	1.81	2.37	2.58	2.74	2.88	3.13	3.80	4.55	4.34	3.93
6	2.27	2.03	1.80	2.36	2.69	2.74	2.89	3.14	3.82	4.56	4.34	3.93
7	2.25	2.02	1.80	2.35	2.74	2.73	2.89	3.15	3.84	4.57	4.34	3.92
8	2.24	2.02	1.79	2.35	2.76	2.73	2.89	3.17	3.87	4.57	4.33	3.90
9	2.22	2.00	1.80	2.35	2.81	2.73	2.90	3.18	3.89	4.56	4.30	3.89
10	2.21	1.99	1.80	2.34	2.82	2.73	2.91	3.20	3.92	4.55	4.27	3.88
11	2.20	1.97	1.83	2.34	2.82	2.73	2.92	3.22	3.94	4.54	4.24	3.88
12	2.19	1.95	1.84	2.39	2.82	2.73	2.93	3.25	3.99	4.52	4.23	3.87
13	2.19	1.94	1.84	2.40	2.82	2.73	2.94	3.29	4.01	4.50	4.22	3.86
14	2.18	1.93	1.86	2.39	2.81	2.73	2.95	3.33	4.04	4.50	4.20	3.86
15	2.18	2.00	1.84	2.42	2.80	2.73	2.96	3.36	4.13	4.49	4.19	3.85
16	2.17	1.99	1.84	2.42	2.80	2.73	2.96	3.39	4.17	4.49	4.17	3.85
17	2.16	2.02	1.83	2.43	2.79	2.73	2.97	3.42	4.19	4.49	4.16	3.84
18	2.15	2.04	1.82	2.43	2.79	2.73	2.98	3.45	4.21	4.48	4.15	3.83
19	2.14	2.03	1.82	2.42	2.77	2.75	2.99	3.47	4.23	4.48	4.14	3.82
20	2.13	2.01	1.82	2.42	2.76	2.79	3.02	3.50	4.25	4.47	4.14	3.81
21	2.12	1.98	1.84	2.40	2.75	2.80	3.02	3.53	4.28	4.47	4.13	3.79
22	2.11	1.95	1.85	2.39	2.75	2.81	3.02	3.56	4.31	4.47	4.11	3.78
23	2.15	1.98	1.89	2.38	2.75	2.81	3.03	3.59	4.38	4.46	4.10	3.77
24	2.13	1.92	2.02	2.37	2.75	2.82	3.04	3.61	4.35	4.46	4.09	3.76
25	2.12	1.91	2.06	2.36	2.75	2.83	3.05	3.63	4.37	4.45	4.08	3.75
26	2.14	1.90	2.08	2.38	2.75	2.83	3.06	3.66	4.40	4.45	4.07	3.74
27	2.13	1.90	2.19	2.37	2.76	2.84	3.07	3.68	4.43	4.44	4.05	3.73
28	2.11	1.89	2.33	2.37	2.76	2.84	3.08	3.69	4.45	4.43	4.03	3.70
29	2.09	1.87	2.35	2.37	2.76	2.84	3.08	3.70	4.47	4.41	4.01	3.68
30	2.07	1.86	2.36	2.38	-----	2.85	3.08	3.72	4.49	4.39	3.99	3.67
31	2.06	-----	2.39	2.42	-----	2.86	-----	3.73	-----	4.38	3.97	-----

## TRUCKEE RIVER AT TAHOE, CALIF.

LOCATION.—Staff gage in NW¼ 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 1932.

EXTREMES.—Maximum mean daily discharge during year, 172 second-feet July 16, 17; no flow most of year.

1895-96, 1900-1932: Maximum mean daily discharge, 1,340 second-feet July 13-20, 1907; no flow during parts of 1900, 1901, 1914, 1918-32.

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

*Discharge, in second-feet, 1931-32*

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1.....	0	141	67	11.....	112	115	56	21.....	167	95	45
2.....	0	141	67	12.....	127	113	55	22.....	167	91	44
3.....	0	139	66	13.....	126	111	53	23.....	164	89	42
4.....	0	139	64	14.....	132	107	53	24.....	164	87	41
5.....	0	137	63	15.....	146	105	52	25.....	162	86	13
6.....	0	137	63	16.....	172	102	52	26.....	162	84	0
7.....	0	137	61	17.....	172	100	51	27.....	160	81	0
8.....	61	134	59	18.....	169	98	50	28.....	157	78	0
9.....	84	128	57	19.....	169	96	48	29.....	152	74	0
10.....	86	121	56	20.....	167	96	47	30.....	148	71	0
								31.....	146	68	----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
July.....	172	0	112	6,890
August.....	141	68	106	6,520
September.....	67	0	44.2	2,630
The year.....	172	0	22.1	16,000

NOTE.—No flow during months omitted.

## 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 1932. September 1899 to August 1912 at Nevada-California State line, 3 miles downstream.

**EXTREMES.**—Maximum mean daily discharge during year, 2,950 second-feet May 13; minimum, 42 second-feet Oct. 15, 16.

1899-1932: 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.

*Discharge, in second-feet, 1931-32*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	77	72	82	255	165	208	1,670	1,420	991	812	294	128
2.....	77	75	89	246	172	261	1,700	1,540	991	950	312	131
3.....	77	77	97	225	186	208	1,380	1,330	1,020	805	312	151
4.....	75	80	72	233	202	194	1,330	1,250	1,250	694	307	151
5.....	72	75	66	213	202	197	1,210	1,160	1,650	628	298	145
6.....	70	72	68	206	210	204	1,190	1,180	1,330	529	281	117
7.....	70	72	94	198	225	220	1,140	1,270	1,200	483	276	114
8.....	75	75	100	229	242	239	1,160	1,480	1,270	438	272	114
9.....	77	75	97	238	238	243	1,230	1,650	1,380	483	260	111
10.....	77	72	75	221	242	239	1,360	2,000	1,490	438	264	109
11.....	72	75	87	210	233	239	1,580	2,450	1,590	411	276	109
12.....	70	64	75	217	210	251	1,740	2,860	1,770	401	281	109
13.....	57	70	100	221	242	268	1,750	2,950	1,700	390	281	106
14.....	46	66	100	210	221	272	1,720	2,830	1,720	375	276	106
15.....	42	72	84	238	217	276	1,750	2,460	1,750	370	272	104
16.....	42	80	108	225	210	298	1,840	2,440	1,600	390	268	104
17.....	46	108	125	217	202	326	1,680	2,500	1,470	380	260	104
18.....	64	94	125	210	198	411	1,640	2,360	1,330	365	260	104
19.....	66	75	116	206	202	667	1,780	2,100	1,290	345	239	104
20.....	66	100	119	194	202	762	1,610	2,110	1,270	335	161	125
21.....	68	80	122	179	202	628	1,340	2,070	1,270	321	154	131
22.....	72	70	119	176	198	553	1,150	1,740	1,320	312	151	131
23.....	122	57	114	179	194	518	1,040	1,540	1,240	303	148	131
24.....	148	75	144	183	179	667	1,020	1,600	1,160	289	145	131
25.....	92	84	148	194	179	879	1,040	1,680	1,210	281	145	128
26.....	108	97	151	213	183	856	934	1,600	1,210	276	142	142
27.....	92	89	154	206	198	894	886	1,780	1,170	268	142	134
28.....	84	94	116	194	221	918	849	1,750	1,070	264	142	122
29.....	80	77	122	190	242	1,110	934	1,340	910	255	139	111
30.....	75	72	238	190	-----	1,120	1,100	1,080	798	303	134	109
31.....	75	-----	250	179	-----	1,340	-----	999	-----	307	131	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	148	42	75.3	4,630
November.....	108	57	78.1	4,650
December.....	250	66	115	7,070
January.....	255	176	210	12,900
February.....	242	165	207	11,900
March.....	1,340	194	497	30,600
April.....	1,840	840	1,360	80,900
May.....	2,950	999	1,820	112,000
June.....	1,770	798	1,310	78,000
July.....	950	255	426	26,200
August.....	312	131	227	14,000
September.....	151	104	121	7,200
The year.....	2,950	42	537	390,000

## ABERT LAKE BASIN

CHEWAUCAN RIVER ABOVE CONN DITCH, NEAR PAISLEY, OREG.

**LOCATION.**—Water-stage recorder in SW $\frac{1}{4}$  sec. 27, T. 33 S., R. 18 E., at bridge 20 feet below power plant of R. R. Severin, 700 feet above diversion dam of Conn Ditch, a quarter of a mile below mouth of Mill Creek, and 2 $\frac{1}{2}$  miles west of Paisley. Water-stage recorder at different datum 200 feet downstream used prior to June 24, 1932. Different control for old and new gages.

**DRAINAGE AREA.**—266 square miles.

**RECORDS AVAILABLE.**—April to September 1912; May 1924 to September 1932. 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, 970 second-feet Mar. 19 (gage height, 2.85 feet, at gage used prior to June 24); minimum (estimated), 1 second-foot Aug. 8, Sept. 5, 9.

1905-7, 1909-21, 1924-32: Maximum discharge (estimated), 4,000 second-feet Nov. 23, 1909 (gage height, 9.40 feet at gage and datum used at that time); stream frozen, no flow, Dec. 7, 1927.

**REMARKS.**—Records good except those estimated, which are fair. Low-water flow partly regulated by power plant above station. About 160 acres are irrigated above station. Records furnished by State engineer.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	26	22	* 25	30		256	318	285	61	22	18
2	16	25	25	* 25			278	336	302	56	20	18
3	16	26	26	* 25			226	358	289	52	20	* 18
4	16	25	* 24	25		* 56	202	354	250	52	19	* 17
5	17	25	* 23		* 26		168	310	234	50	18	17
6	17	23	* 22				146	336	246	48	18	16
7	18	22	23	* 29		61	140	377	210	45	17	17
8	18	* 24	25		30	* 78	129	405	192	44	16	16
9	17	25	* 24			* 96	138	450	185	* 42	16	16
10	17	25	* 23			* 114	152	525	183	* 40	16	16
11	17	23	22	36		131	181	575	185	38	17	15
12	17	25				110	212	640	188	41	17	16
13	17	26				119	237	692	181	38	17	16
14	17	* 26		* 30		140	270	720	177	37	* 18	16
15	17	* 26				146	255	665	170	36	18	16
16	18	* 25				152	293	600	159	33	16	16
17	18	25	* 26	30		210	264	555	146	33	16	17
18	* 19	21		32		503	246	595	135	33	16	17
19	20			32	* 34	858	293	585	129	34	16	17
20	20					415	237	565	121	32	15	18
21	20			* 27		246	200	545	119	30	* 16	18
22	32					207	185	430	112	28	16	19
23	48	* 21	28			181	170	381	106	27	16	19
24	36		28			285	179	354	100	26	16	18
25	32		26	25		253	202	331	88	25	16	18
26	44	23				183	212	314	86	24	16	20
27	29	25				188	270	310	83	23	16	20
28	29	25		* 30		240	322	322	77	22	17	20
29	29	25			65	210	274	* 302	80	* 22	17	20
30	28	20	* 25			192	278	281	68	* 22	17	20
31	28	* 25				217		278		* 22	18	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	48	16	22.7	1,400
November	26		23.3	1,390
December			25.0	1,540
January			28.8	1,770
February			33.1	1,900
March	858		189	11,600
April	322	129	221	13,200
May	720	278	446	27,400
June	302	68	163	9,700
July	61	22	36.0	2,210
August	22	15	17.1	1,050
September	20	15	17.5	1,040
The year	858	15	102	74,200

\* Estimated.

## SILVER LAKE BASIN

## SILVER CREEK NEAR SILVER LAKE, OREG.

LOCATION.—Water-stage recorder in SW $\frac{1}{4}$  sec. 28, T. 28 S., R. 14 E., 1 $\frac{1}{2}$  miles below diversion dam of Silver Lake Irrigation District, 1 $\frac{1}{2}$  miles southwest of Silver Lake post office, and 3 miles above mouth of Bridge Creek. Gage datum lowered 1.00 foot May 24, 1932.

DRAINAGE AREA.—221 square miles.

RECORDS AVAILABLE.—December 1904 to March 1907; January 1909 to September 1932 (incomplete).

EXTREMES.—Maximum discharge during year, 44 second-feet Apr. 17 (gage height, about 1.38 feet, former datum); no flow Oct. 1–21, Sept. 13.

1904–7, 1909–32: Maximum discharge, 910 second-feet Nov. 23, 1909 (gage height, 7.40 feet, present datum); no flow July 5 to Oct. 21, 1931, Sept. 13, 1932.

REMARKS.—Records fair to Apr. 20; good thereafter. Silver Lake Irrigation District Canal ordinarily diverts water above gages during irrigation season. Diversion dam 1 $\frac{1}{2}$  miles above gage impounds about 800 acre-feet; also storage in Thompson Valley Reservoir. Records furnished by State engineer.

## Discharge, in second-feet, 1931–32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							9	35	22	24	3.4	2.6
2							20	38	22	22	3.2	2.5
3							26	38	22	23	2.9	2.4
4		2.0					28	37	22	24	2.8	2.4
5							30	35	22	24	2.8	2.4
6						1.0	31	34	22	24	2.7	2.4
7		2.2					33	36	21	22	2.7	2.4
8		2.3					34	39	21	22	2.7	2.4
9		2.4					34	41	22	22	2.7	2.5
10		2.2					34	41	21	20	2.7	2.5
11	0	2.4					33	39	22	20	2.6	2.5
12		1.9				1.5	31	39	24	16	2.5	1.8
13		2.1				2.0	30	39	22	14	2.5	.8
14		2.4				2.5	36	40	22	14	2.4	2.0
15		2.4			1.0	3.0	37	42	22	13	2.4	2.4
16		2.4	1.0	0.5		3.2	39	41	22	13	2.4	2.4
17		2.6				3.6	43	39	22	12	2.4	2.4
18		2.5				4.2	42	39	22	12	2.3	2.4
19		2.6				6.1	41	39	25	12	2.3	2.3
20		2.6				6.1	39	39	24	12	2.3	2.3
21		2.5				5.9	38	38	24	12	2.3	2.4
22						5.5	38	37	24	12	2.2	2.4
23						5.7	33	36	24	8.8	2.5	2.4
24						5.9	26	40	22	2.3	2.6	2.4
25						5.3	28	34	22	4.2	2.5	2.4
26	2.0	2.0				5.3	30	27	22	4.2	2.6	2.4
27						5.2	34	27	22	3.9	2.6	2.4
28						5.1	38	26	23	3.5	2.5	2.4
29						5.3	35	23	24	3.5	2.5	2.4
30						5.5	33	22	24	3.5	2.6	2.4
31						5.9		24		3.5	2.5	
Month					Maximum	Minimum	Mean	Run-off in acre-feet				
October						0	0.65	40				
November					2.6		2.18	130				
December							1.0	61				
January							.5	31				
February							1.0	58				
March					6.1		3.35	266				
April					43	9.0	32.8	1,950				
May					42	22	35.6	2,190				
June					25	20	22.3	1,330				
July					24	2.3	13.8	848				
August					3.4	2.2	2.88	159				
September					2.6	.9	2.33	139				
The year					43	0	9.83	7,140				

\* Estimated.

## SILVER LAKE IRRIGATION DISTRICT CANAL NEAR SILVER LAKE, OREG.

LOCATION.—Staff gage in NE¼ 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 to 1932.

EXTREMES.—Maximum discharge during year, 33 second-feet June 10, 22-25, July 6-9, 12; no flow at times.

1923-28, 1930-32: Maximum discharge, 60 second-feet June 26-29, 1923; no flow during most of each year.

REMARKS.—Records fair. Discharge estimated Apr. 9-13, 15-19. Canal diverts from Silver Creek water released from storage in Thompson Valley Reservoir. Records furnished by State engineer.

*Discharge, in second-feet, 1931-32*

Day	Apr.	May	June	July	Day	Apr.	May	June	July
1.....	0	9	30	29	16.....	1.2	28	0	28
2.....	0	10	29	30	17.....	2	28	1	25
3.....	0	11	29	30	18.....	3	28	5	23
4.....	0	11	29	30	19.....	3	28	19	23
5.....	0	11	28	30	20.....	3	28	29	19
6.....	0	11	28	33	21.....	3	28	32	19
7.....	0	11	28	33	22.....	9	28	33	21
8.....	0	11	30	33	23.....	4	28	33	22
9.....	.5	11	32	33	24.....	5	28	33	21
10.....	1.2	12	33	30	25.....	5	30	33	21
11.....	1.2	12	0	28	26.....	6	32	32	21
12.....	1.2	13	0	30	27.....	6	29	30	9
13.....	1.2	13	0	28	28.....	8	28	30	0
14.....	1.2	13	0	28	29.....	7	29	30	0
15.....	1.2	28	0	28	30.....	9	28	30	0
					31.....		30		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April.....	9	0	2.73	162
May.....	32	9	20.8	1,280
June.....	33	0	22.2	1,320
July.....	33	0	22.7	1,400
- The year.....			5.73	4,160

NOTE.—No flow during months omitted.

## MALHEUR AND HARNEY LAKES BASIN

## SILVIES RIVER NEAR BURNS, OREG.

LOCATION.—Water-stage recorder in or near SE¼ 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 1932.

EXTREMES.—Maximum discharge during year, 1,080 second-feet Apr. 15 (gage height, 10.63 feet); minimum, 1.2 second-feet Sept. 19.

1903-6, 1908-32: Maximum discharge, 4,730 second-feet Apr. 15, 1904 (gage height, 17.12 feet, original datum); minimum, 0.1 second-foot Sept. 6-12, 1931.

REMARKS.—Records good except those estimated, Nov. 13-22, 24-30, Dec. 1 to Mar. 14, which are poor. Large area on headwaters of Silvies River irrigated with flood water. Records furnished by State engineer.

## Discharge, in second-feet, 1931-32

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	5.4					624	710	134	14	3.7	2.9
2	3.6	5.4					780	710	138	12	3.7	3.0
3	3.3	5.4					942	780	138	9.7	3.6	3.2
4	2.5	5.2					1,000	827	152	8.9	3.4	3.0
5	2.6	5.2					1,000	827	126	8.4	3.3	3.0
6		5.2					1,000	737	121	8.4	3.2	2.9
7	2.6	5.2				26	827	660	112	8.4	3.2	2.7
8	2.6	5.2					684	567	112	8.0	3.2	2.7
9	2.6	5.2					684	523	97	6.8	3.0	2.7
10	2.6	5.2					710	479	90	6.4	9.3	2.6
11	2.6	5.2					795	435	83	5.7	8.4	1.9
12	2.6	5.2					924	385	78	5.7	4.7	1.5
13	2.9		10				1,020	375	71	5.9	4.5	1.4
14	2.9						1,060	345	69	6.2	4.2	1.6
15	3.3					84	1,060	305	71	5.9	3.7	1.8
16				10			93	1,040	305	71	7.6	3.4
17	3.2						139	1,000	295	57	5.9	3.2
18	3.4	5.2					446	942	275	50	5.7	2.9
19	3.6						780	907	256	48	5.7	2.7
20	3.4						710	924	238	48	5.4	2.6
21							457	827	247	43	5.2	2.5
22	5.2						405	737	256	34	5.0	2.5
23	6.4	5.2					365	660	256	33	4.7	2.4
24	7.2						395	612	256	32	4.0	2.4
25	5.7						567	684	238	27	11	2.3
26							457	710	198	25	5.7	2.3
27	5.9	5.0					446	795	166	23	4.5	2.5
28	5.4		12				534	827	137	17	3.7	2.6
29							589	795	162	16	3.3	2.6
30	5.9						534	765	180	15	3.7	2.6
31	5.7						534		180		3.6	2.9
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October	7.2		2.4		3.88		239					
November					5.17		308					
December					• 10		615					
January					• 10		615					
February					• 20		1,150					
March	730				255		15,700					
April	1,060		612		844		50,200					
May	827		157		398		24,500					
June	188		15		76.0		4,520					
July	14		3.3		6.62		407					
August	9.3		2.3		3.47		213					
September	3.7		1.2		2.49		148					
The year	1,060		1.2		136		98,600					

• Estimated.

## ALVORD LAKE BASIN

## TROUT CREEK NEAR DENIO, OREG.

LOCATION.—Water-stage recorder in SW¼ sec. 26, T. 39 S., R. 36 E., 0.4 mile above bridge at mouth of canyon, 5 miles east of Trout Creek ranch, and 14 miles northeast of Denio. Gage datum lowered 0.5 foot June 15, 1932.

RECORDS AVAILABLE.—March 1911 to March 1912; April 1922 to November 1923; April 1925 to September 1932 (incomplete).

EXTREMES.—Maximum discharge during period, 217 second-feet May 14 (gage height, about 4.3 feet, datum used after June 15); minimum, 1.2 second-feet Sept. 17.

1911–12, 1922–23, 1925–32: Maximum discharge, 235 second-feet May 18, 1927 (gage height, 4.05 feet, present datum); probably no flow at times.

Maximum known stage, 6.0 feet (caused by cloudburst, date not known).

REMARKS.—Records good except those for Apr. 1 to June 14, July 11–31, which are poor. Discharge estimated Apr. 2, 3, 5–10, 21, May 21, 22, 24–29, Aug. 3. Some water is diverted for irrigating small ranch fields above station; large area irrigated below mouth of canyon. Records furnished by State engineer.

*Discharge, in second-feet, 1932*

Day	Apr.	May	June	July	Aug.	Sept.
1.....	19	70	56	24	3.6	2.5
2.....	24	78	54	24	2.9	2.2
3.....	28	80	52	22	3.0	2.2
4.....	33	77	58	21	3.1	2.1
5.....		70	59	18	2.9	1.9
6.....	30	65	58	17	2.9	1.6
7.....		75	59	16	2.8	1.5
8.....		75	56	12	2.5	1.6
9.....		94	54	10	2.6	2.2
10.....		118	55	9.4	2.8	2.1
11.....	27	133	58	9.4	2.9	1.9
12.....	31	154	61	8.7	2.8	1.8
13.....	43	205	60	9.4	2.6	1.9
14.....	54	217	64	9.4	2.1	1.6
15.....	56	193	56	8.3	1.6	1.4
16.....	63	148	56	4.8	1.6	1.4
17.....	60	148	53	2.8	1.6	1.4
18.....	55	148	48	4.3	1.6	1.4
19.....	48	159	47	7.1	1.5	1.5
20.....	55	159	45	7.7	1.6	1.6
21.....	54	136	44	5.9	1.5	1.8
22.....	54	112	43	7.7	1.5	2.1
23.....	46	89	42	9.0	1.4	2.2
24.....	44	}	39	7.7	1.4	2.1
25.....	49		37	6.8	1.5	2.2
26.....	51		76	36	6.5	1.8
27.....	54		35	5.9	2.5	2.5
28.....	60		31	5.3	2.8	2.6
29.....	63		28	4.6	2.8	2.6
30.....	63	64	27	4.6	2.8	2.6
31.....		59		4.3	2.6	
Month	Maximum	Minimum	Mean	Run-off in acre-feet		
April.....	63	19	43.8	2,610		
May.....	217	59	109	6,700		
June.....	64	27	49.0	2,920		
July.....	24	2.8	10.1	621		
August.....	3.6	1.4	2.31	142		
September.....	2.6	1.4	1.97	117		
The period.....				13,100		

NOTE.—No record Oct. 1 to Mar. 31.



## 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, 1932, are listed in the following table:

*Miscellaneous discharge measurements in the Great Basin during the year ending Sept. 30, 1932*

## Bear River Basin

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
				Feet	Sec.-ft.
Oct. 26	Bear River	Great Salt Lake	Sec. 6, T. 12 S., R. 44 E., at Utah Power & Light Co.'s gaging station at Pesadero siding, 6 miles northwest of Montpelier, Idaho.	5.57	95.1
29	do.	do.	NE¼ sec. 30, T. 9 S., R. 42 E., at Utah Power & Light Co.'s gaging station 3 miles south of Soda Springs, Idaho.	.52	147
30	do.	do.	Sec. 26, T. 13 S., R. 40 E., immediately below junction of Oneida tailrace with river near Mink Creek, Idaho.	2.05	250
29	Last Chance Canal	Bear River	NW¼ sec. 31, T. 9 S., R. 41 E., near head of canal 3 miles northeast of Grace, Idaho.	3.25	67.1
30	West Cache Canal	do.	SW¼NW¼ sec. 17, T. 16 S., R. 39 E., at Utah Power & Light Co.'s gaging station 100 feet upstream from Weston-Fairview road, 2 miles east of Weston, Idaho.	8.38	21.5
Apr. 26	Left Fork of Blacksmith Fork	Blacksmith Fork	SE¼ sec. 3, T. 10 N., R. 2 E., at highway bridge 500 feet above confluence with Blacksmith Fork and 7½ miles east of Hyrum, Utah.		118
Nov. 25	Malad River	Bear River	Sec. 5, T. 14 N., R. 3 W., 1 mile east of Portage, Utah.		34.5
Jan. 21	do.	do.	do.		49.5
Mar. 26	do.	do.	do.		333
Apr. 9	do.	do.	do.		59.1
May 21	do.	do.	do.		46.4
July 3	do.	do.	do.		21.9
Nov. 8	Dairy Creek	Malad River	Sec. 36, T. 11 S., R. 34 E., 23 miles northwest of Malad, Idaho.		* 1.2
24	do.	do.	do.		* .1
Mar. 29	do.	do.	do.	.38	2.88
Apr. 10	do.	do.	do.	.53	5.52
May 20	do.	do.	do.	.23	1.27
July 2	do.	do.	do.		2.55
Aug. 25	do.	do.	do.		1.37
Mar. 26	Devil Creek (below Evans dividers).	do.	Sec. 35, T. 13 S., R. 36 E., 3 miles northeast of Malad, Idaho.		5.14
Apr. 13	do.	do.	do.		21.4
May 20	do.	do.	do.		14.9
July 1	do.	do.	do.		4.92
Aug. 24	do.	do.	do.		1.01
Jan. 22	Spring Creek (below Evans dividers).	Devil Creek	Sec. 35, T. 13 S., R. 36 E., 3 miles northeast of Malad, Idaho.		6.14
Mar. 26	do.	do.	do.		2.01
Apr. 13	do.	do.	do.		17.0
May 20	do.	do.	do.		11.9
July 1	do.	do.	do.		7.51
Aug. 24	do.	do.	do.		6.00

\* Estimated.

*Miscellaneous discharge measurements in the Great Basin during the year ending September 30, 1932—Continued*  
**Curlew (Deep) Creek Basin**

Date	Stream	Tributary to or diverting from—	Locality	Gaging height	Discharge
Nov. 19	Curlew Creek (below Holbrook Springs).	Great Salt Lake.....	Sec. 13, T. 15 S., R. 32 E., 2 miles south of Holbrook, Idaho.	-----	31.8
Apr. 14	do.....	do.....	do.....	-----	30.4
May 23	do.....	do.....	do.....	-----	26.6
July 4	do.....	do.....	do.....	-----	27.5
Nov. 19	Curlew Creek.....	do.....	Sec. 10, T. 14 N., R. 8 W., 1 mile west of Snowville, Utah.	-----	11.2
Apr. 16	do.....	do.....	do.....	-----	15.4
May 23	do.....	do.....	do.....	-----	15.0
July 4	do.....	do.....	do.....	-----	7.53

**Weber River Basin**

Aug. 23	Smith & Morehouse Creek.	Weber River.....	Sec. 12, T. 1 S., R. 7 E., 1,000 feet above Smith & Morehouse Reservoir, about 10½ miles east of Oakley, Utah.	-----	4.44
23	do.....	do.....	Sec. 1, T. 1 S., R. 7 E., a quarter of a mile below Smith & Morehouse Reservoir, 11 miles east of Oakley, Utah.	-----	17.9
May 26	East Canyon Creek.....	do.....	SW¼ sec. 23, T. 2 N., R. 3 E., at water commissioner's gaging station half a mile above East Canyon Creek Reservoir, Utah.	1.37	112
June 28	do.....	do.....	do.....	.87	28.7
July 9	do.....	do.....	do.....	.74	18.4
Aug. 16	do.....	do.....	do.....	.69	16.4
Oct. 2	North Fork of Ogden River.	Ogden River.....	NE¼ sec. 1, T. 7 N., R. 1 W., ¾ miles northwest of Liberty, Utah.	1.12	4.5

**Jordan River Basin**

July 19	American Fork.....	Utah Lake.....	NE¼ sec. 26, T. 4 S., R. 2 E., at Utah Power & Light Co.'s gaging station 1,000 feet above intake at upper plant and 10 miles northeast of American Fork, Utah.	3.57	96.1
2	Little Cottonwood Creek.	Jordan River.....	SE¼ sec. 2, T. 3 S., R. 1 E., at bridge below old Murray power plant, Utah.	-----	116
2	do.....	do.....	NE¼ sec. 34, T. 2 S., R. 1 E., at gaging station near second bridge below Old Murray power plant, Utah.	—, 44	106
14	Cottonwood Creek.....	do.....	NE¼ sec. 25, T. 2 S., R. 1 E., 100 feet above diversion weirs at mouth of canyon, about 10 miles southeast of Salt Lake City, Utah.	.97	87.1
14	do.....	do.....	Near center of sec. 23, T. 2 S., R. 1 E., half a mile southeast of Knudsen's corner, about 9 miles southeast of Salt Lake City, Utah.	-----	55.7
June 21	Discharge from Salt Lake City artesian wells.	Cottonwood Creek.....	At wasteway flume and head house at corner of Ninth East and Forty-eighth South Streets, Salt Lake City, Utah.	.97	10.7

*Miscellaneous discharge measurements in the Great Basin during the year ending Sept. 30, 1932—Continued*

**Farmington Creek Basin**

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
May 17	Farmington Creek.....	Great Salt Lake.....	SW $\frac{1}{4}$ sec. 18, T. 3 N., R. 1 E., at State highway bridge in Farmington, Utah.	-----	122

**Sevier Lake Basin**

June 28	Sevier River.....	Sevier Lake.....	Gaging station in SE $\frac{1}{4}$ sec. 28, T. 36 S., R. 5 W., at county bridge at Hatch, Utah.	2.02	289
July 20	do.....	do.....	do.....	1.48	201
June 12	Ephraim Creek.....	San Pitch River.....	NE $\frac{1}{4}$ sec. 14, T. 17 S., R. 3 E., below tailrace at municipal power plant $2\frac{1}{2}$ miles southeast of Ephraim, Utah.	.35	73.2
July 26	do.....	do.....	do.....	.45	63.4
July 7	do.....	do.....	do.....	.18	24.7

**Beaver River Basin**

Feb. 26	Beaver River.....	Sevier River.....	SE $\frac{1}{4}$ sec. 24, T. 29 S., R. 6 W., below tailrace at upper power plant, 9 miles east of Beaver, Utah.	-----	13.4
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**Salton Sink Basin**

Aug. 16	Whitewater River.....	Salton Sea.....	Whitewater, Calif.....	-----	19
Sept. 8	do.....	do.....	do.....	-----	17
Mar. 1	Murray Canyon.....	Palm Canyon Creek.....	Junction with Palm Canyon Creek, 5 miles south of Palm Springs, Calif.	-----	22
7	do.....	do.....	do.....	-----	11
14	do.....	do.....	do.....	-----	7.6
21	do.....	do.....	do.....	-----	7.4
28	do.....	do.....	do.....	-----	6.2
Apr. 4	do.....	do.....	do.....	-----	4.7
11	do.....	do.....	do.....	-----	4.1
18	do.....	do.....	do.....	-----	3.8
28	do.....	do.....	do.....	-----	3.0
May 9	do.....	do.....	do.....	-----	2.0
23	do.....	do.....	do.....	-----	.8
June 7	do.....	do.....	do.....	-----	.5
Mar. 1	Andreas Canyon Creek.....	do.....	Junction with Palm Canyon Creek, 4 miles south of Palm Springs, Calif.	-----	9.9
7	do.....	do.....	do.....	-----	7
14	do.....	do.....	do.....	-----	6
21	do.....	do.....	do.....	-----	4.8
28	do.....	do.....	do.....	-----	4.2
Apr. 4	do.....	do.....	do.....	-----	3.0
11	do.....	do.....	do.....	-----	2.4
18	do.....	do.....	do.....	-----	1.9
28	do.....	do.....	do.....	-----	1.3
May 9	do.....	do.....	do.....	-----	.04
Mar. 1	Tahquitz Creek.....	do.....	Palm Springs, Calif.....	-----	13
7	do.....	do.....	do.....	-----	8.7
14	do.....	do.....	do.....	-----	8.5
21	do.....	do.....	do.....	-----	13
28	do.....	do.....	do.....	-----	21
Apr. 4	do.....	do.....	do.....	-----	27
11	do.....	do.....	do.....	-----	29
18	do.....	do.....	do.....	-----	39
28	do.....	do.....	do.....	-----	26
May 9	do.....	do.....	do.....	-----	30
23	do.....	do.....	do.....	-----	48
June 7	do.....	do.....	do.....	-----	28
21	do.....	do.....	do.....	-----	17
July 5	do.....	do.....	do.....	-----	7.3
18	do.....	do.....	do.....	-----	3.7

<sup>a</sup> Furnished by Sevier River water commissioner.

*Miscellaneous discharge measurements in the Great Basin during the year ending Sept. 30, 1932—Continued***Mohave River Basin**

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
Feb. 10	Mohave River.....	Great Basin.....	Hesperia Crossing, near Hesperia, Calif.	-----	1,550
12	do.....	do.....	Verde Crossing, Calif.	-----	522
May 4	do.....	do.....	2½ miles below Hodge, Calif.	-----	48
Apr. 21	do.....	do.....	Daggett Bridge, near Daggett, Calif.	-----	2.0
27	do.....	do.....	Forks of road in SW¼ sec. 2, T. 9 N., R. 2 E., 4½ miles east of Yermo, Calif.	-----	1.6
Oct. 21	Appleton Land & Water Co. Canal.	Deep Creek.....	Opposite gaging station on Deep Creek, near Hesperia, Calif.	-----	2.5
June 27	Punch Bowl Creek.....	Antelope Valley.....	At junction with Rock Creek, Calif.	-----	.1

**Humboldt-Carson Sink Basin**

May 23	Humboldt River.....	Humboldt-Carson Sink.	Near center of sec. 35, T. 37 N., R. 59 E., at water commissioner's gaging station near Deeth, Nev.	3.40	*200
June 2	do.....	do.....	do.....	2.95	*159
21	do.....	do.....	do.....	3.16	*162
24	do.....	do.....	do.....	2.56	*116
30	do.....	do.....	do.....	1.68	*77
May 22	Marys River.....	Humboldt River.....	Sec. 35, T. 37 N., R. 59 E., at water commissioner's gaging station at Deeth, Nev.	3.21	*200
29	do.....	do.....	do.....	2.00	*80.7
June 2	do.....	do.....	do.....	1.92	*78.8
24	do.....	do.....	do.....	1.26	*34.6
30	do.....	do.....	do.....	1.11	*27.1
May 20	Starr Creek.....	do.....	Near center of sec. 35, T. 37 N., R. 59 E., at water commissioner's gaging station near mouth of creek.	3.10	*150
26	do.....	do.....	do.....	2.55	*78.9
June 2	do.....	do.....	do.....	2.50	*64.3
5	do.....	do.....	do.....	3.56	*276
15	do.....	do.....	do.....	3.82	*357
May 24	North Fork of Humboldt River.	Humboldt River.....	In sec. 3, T. 35 N., R. 57 E., at water commissioner's gaging station at bridge on United States highway 40 near Halleck, Nev.	1.90	*240
June 2	do.....	do.....	do.....	1.70	*181
23	do.....	do.....	do.....	1.50	*124
May 23	Susie Creek.....	do.....	Sec. 18, T. 38 N., R. 53 E., at water commissioner's gaging station at United States highway 40 crossing near Carlin, Nev.	.45	*12.3
June 5	do.....	do.....	do.....	.27	*5.02
14	do.....	do.....	do.....	.05	*0.4
May 23	Maggie Creek.....	do.....	Sec. 26, T. 33 N., R. 52 E., at former gaging station "Maggie Creek at Carlin, Nev."	2.32	*83.0
June 5	do.....	do.....	do.....	1.75	*27.3
23	do.....	do.....	do.....	2.28	*14.2
29	do.....	do.....	do.....	2.02	*3.70

\*Furnished by Humboldt River water commissioner.

\*New gage.



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